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The Shuttle Imaging Radar B (SIR-B) Experiment Report

Jo Bea Cimino
Benjamin Holt
Annie Holmes Richardson

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National Aeronautics and Space Administration

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California Institute of Technology
Pasadena, California

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16. Abstract

The primary objective of the SIR-B experiment was to acquire multiple-incidence-angle radar imagery of a variety of Earth's surfaces to better understand the effects of imaging geometry on radar backscatter. A complementary objective was to map extensive regions of particular interest. Under these broad objectives, many specific scientific experiments were defined by the 43 SIR-B Science Team members, including studies in the areas of geology, vegetation, radar penetration, oceanograpny, image analysis, and calibration technique development. Approximately 20% of the planned digital data were collected, meeting approximately 40% of the scientific objectives.

This report is an overview of the SIR-B experiment and includes the science investigations, hardware design, mission scenario, mission operations, events of the actual mission, astronaut participation, data products (including auxiliary data), calibrations, and a summary of the actual coverage. Also included are several image examples.

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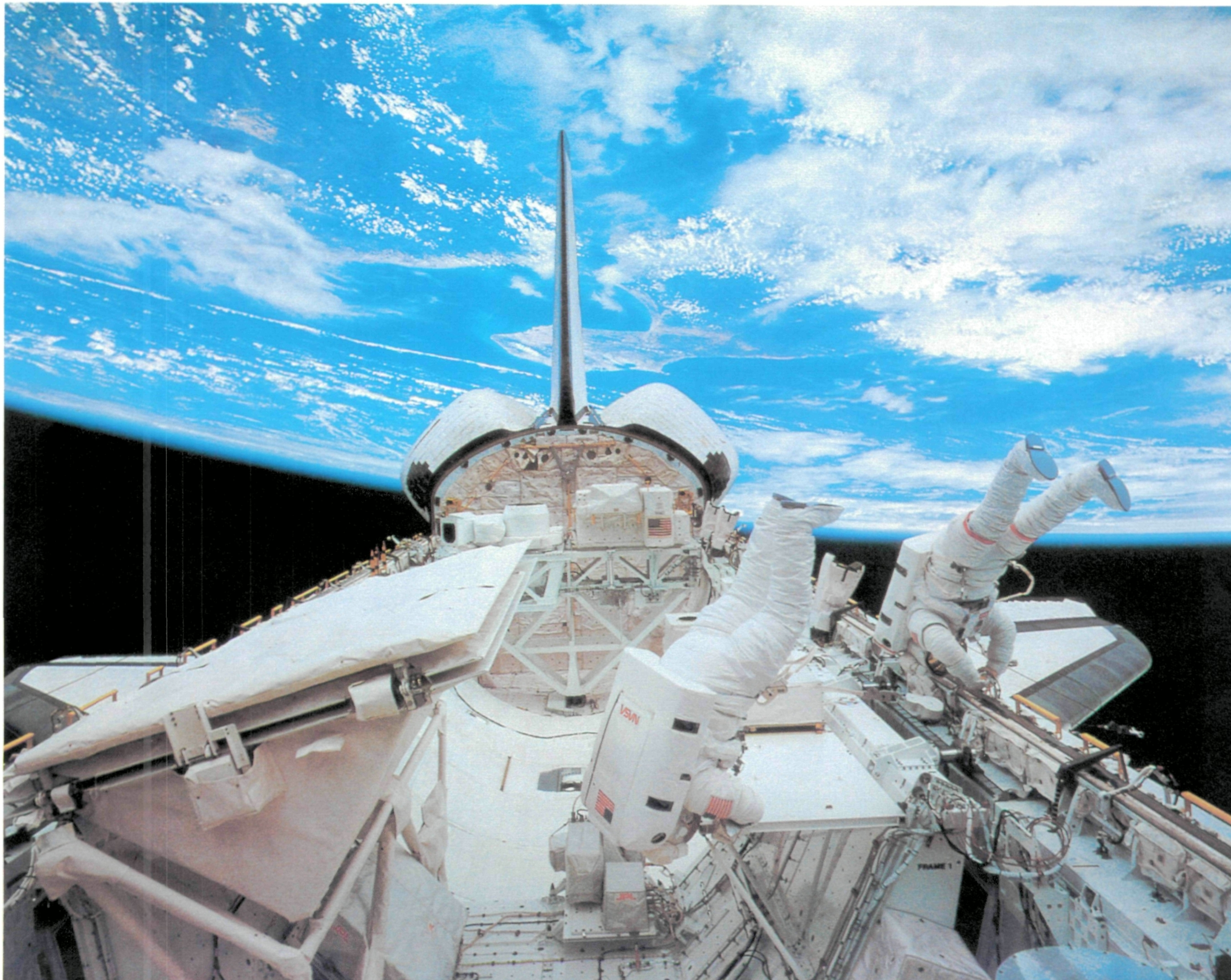
FRAME 1

The Shuttle Imaging Radar B (SIR-B) Experiment Report

Overleaf: During Flight 41-G of the Space Shuttle Challenger, Astronauts Kathy Sullivan (foreground) and David Leestma perform extravehicular activities. With Earth at the top of the picture, the stowed SIR-B antenna appears to the left of Kathy Sullivan.

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This experiment would never have been as successful scientifically if not for the efforts of our 43 SIR-B Science Team members and their 200 coinvestigators who participated in the planning and ground-truth collection before and during the flight, and are now in the process of analyzing the imagery. We greatly appreciate the help of Dorothy Quinlan in managing the contracts at JPL for these team members. We would also like to thank Tommy Thompson for supporting many of the SIR-B experiments with aircraft data collection.

Our acknowledgments of efforts after the flight go to John Curlander and his team, including Kon Leung, Ken Vines, Shirley Pang, Amy Pang, Jim Weirick, and John Gilbert, for the digital data processing; Tom Andersen and Bi Trinh for the optical processing; Cathy LeVine, Lisa Barge, and Jan Heyada for image processing; Annie Richardson and Gina Nelson for data library coordination and data distribution; Michele Vogt and Elizabeth Smith for coördinating team members' requests; and the Photography Group for their assistance. We would like to give particular thanks to Kathy Banwart, our SIR-B secretary, who has kept things flowing smoothly, Sue Salas, for her wonderful displays, and Jurrie van der Woude and the Public Information Office for their assistance in releasing the data.

We would also like to acknowledge the people at Goddard Space Flight Center, where the digital SIR-B data were recorded, and at Kennedy Space Center, where the SIR-B hardware was integrated onto the shuttle and launched.

And finally, we would like to thank David Fulton and Mary Fran Buehler of the Documentation Section for their assistance in the preparation of this report.

Charles Elachi
SIR-B Principal Investigator

JoBea Cimino
SIR-B Experiment Scientist

Abstract

The primary objective of the SIR-B experiment was to acquire multiple-incidence-angle radar imagery of a variety of Earth's surfaces to better understand the effects of imaging geometry on radar backscatter. A complementary objective was to map extensive regions of particular interest. Under these broad objectives, many specific scientific experiments were defined by the 43 SIR-B Science Team members, including studies in the areas of geology, vegetation, radar penetration, oceanography, image analysis, and calibration technique development. Approximately 20% of the planned digital data were collected, meeting approximately 40% of the scientific objectives.

This report is an overview of the SIR-B experiment and includes the science investigations, hardware design, mission scenario, mission operations, events of the actual mission, astronaut participation, data products (including auxiliary data), calibration, and a summary of the actual coverage. Also included are several image examples.

Contents

Tables

I. Introduction and Overview

The launch of Shuttle Imaging Radar B (SIR-B) was another step in NASA's evolutionary radar program to develop a multifrequency, multiple-incidence-angle, multipolarization imaging radar system (Figure 1-1).

The program began in 1978 (Figure 1-2) with the launch of Seasat—a free-flying, Earth-orbiting, synthetic-aperture radar (Figure 1-3). This instrument provided the first synoptic radar imagery of Earth's surface. Not only was the experiment a success technologically, but the imagery returned provided a new means of studying and observing Earth's surface.

The program advanced in November 1981 (Figure 1-2) with the launch of the second space shuttle. Aboard this shuttle were the first Office of Space and Terrestrial Applications (OSTA-1) payload, which included SIR-A, the first shuttle-based imaging radar (Figure 1-4), and other Earth-observing instruments. The main objective of the SIR-A experiment was to further our understanding of the radar signatures of geologic features by acquiring radar data over a variety of geologic regions. A complementary objective was assessment of the shuttle as a scientific platform for Earth observations.

Seasat and SIR-A were fixed-parameter sensors: their look angles (measured from nadir) of 20 deg and 47 deg, respectively, were constant. A comparison of imagery acquired over the same area by each of these sensors demonstrates that image intensity is a function of the incidence angle of the radar beam at the surface. In general, the response of the radar is controlled by topography at lower incidence angles and surface roughness (or the average size of rocks and vegetation) at larger incidence angles (Figure 1-5). It follows, then, that a collection of imagery acquired at various incidence angles could be the basis of a new means of classifying surface features.

This was the inspiration for the development of a multilook-angle radar system. SIR-B was an upgraded version of SIR-A in that it had a mechanically tiltable antenna; this feature allowed data acquisition at various incidence angles from 15 to 65 deg with a nominal 6-deg elevation beamwidth. Like Seasat and SIR-A, SIR-B was an L-band (23-cm) HH-polarized radar (Figure 1-6); SIR-B's variable-incidence-angle capability, however, allowed a specific area to be imaged with a variety of incidence angles on successive days (Figure 1-7). These images were then registered and used to produce curves of backscatter as a function of incidence angle for various terrain types (Figure 1-5). These characteristic backscatter curves were in turn used to classify the terrain. Stereo imaging was also achieved with the multiple-incidence-angle mode. In principle, it would be possible to map regions (Figure 1-8) from a mosaic of images that varied only slightly in the incidence angle of each swath. Because of power problems in the SIR-B antenna during flight, however, this experiment was only partially successful.

The SIR-B experiment was launched aboard Flight 41-G of the Space Shuttle Challenger (Figure 1-2) into a nominally circular orbit with an inclination of 57 deg and an average altitude of 360 km for the first 20 orbits, 257 km for the next 29 orbits, and 224 km for the duration of the mission. At an altitude of 224 km, the orbit configuration allowed an approximate 1-day repeat cycle with a small westward drift. This orbit configuration allowed SIR-B to image a given site at several different incidence angles (one angle each day) during the mission (Figure 1-9).

The SIR-B instrument was mounted on the third OSTA pallet, OSTA-3, which also carried the Feature Identification and Location Experiment (FILE), and the Measurement of Air Pollution From Satellites (MAPS) (Figure 1-10). In addition to the

OSTA-3 pallet, Challenger carried the Large Format Camera (LFC) and the Hydrazine Fuel Transfer Experiment, both mounted on a mission peculiar equipment support structure (MPESS), and the Earth Radiation Budget Satellite (ERBS).

NASA announced the selection of a team of 43 investigators to participate in the SIR-B experiment. The SIR-B investigations included studies in the Earth sciences as well as those on the characteristics of the radar system itself. These investigations were selected primarily because they would gain maximum benefit from the unique characteristics of the SIR-B radar. Of those chosen, 13 were from foreign countries. Many of the experiments performed by United States investigators were carried out in foreign countries with the cooperation of collaborators from those countries.

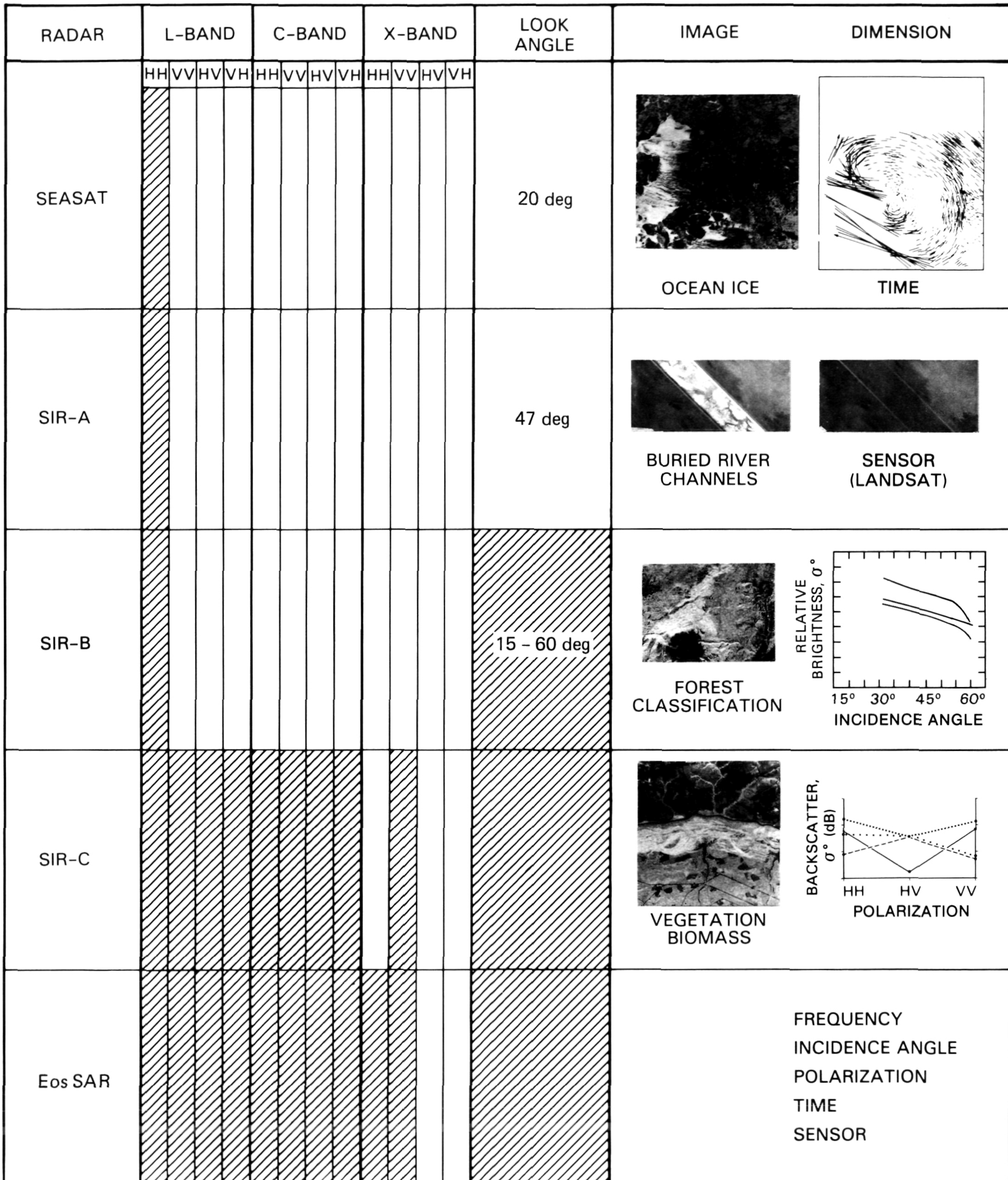


Figure 1-1. Evolution of the NASA imaging radar program

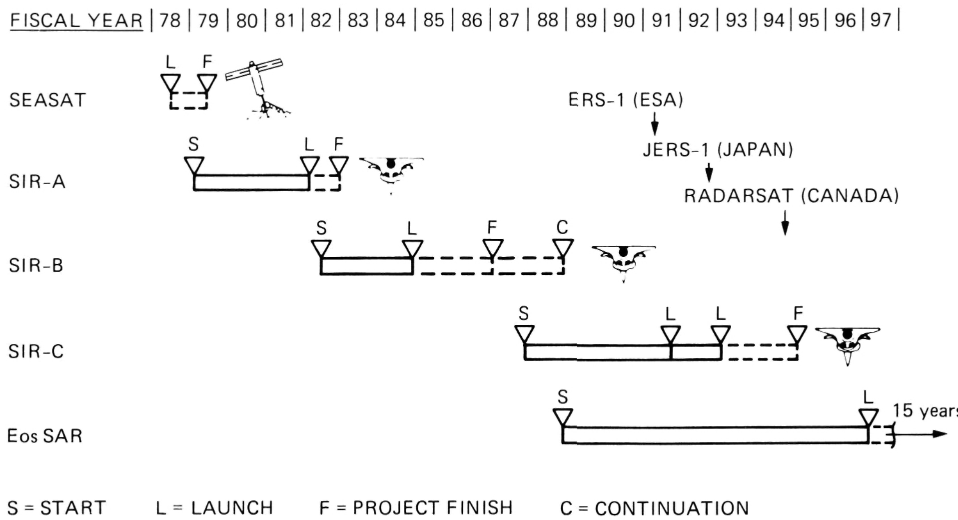


Figure 1-2. Spaceborne imaging radar schedule

SYSTEM CHARACTERISTICS

FREQUENCY:	1.275 GHz
WAVELENGTH:	23.5 cm (L-BAND)
POLARIZATION:	HH
LOOK ANGLE:	20 deg

IMAGE CHARACTERISTICS

SWATH WIDTH:	100 km
AZIMUTH RESOLUTION:	25 m
RANGE RESOLUTION:	25 m
NUMBER OF LOOKS:	4

INSTRUMENT COMPONENTS

TRANSMITTER/RECEIVER
ANTENNA

INSTRUMENT CHARACTERISTICS

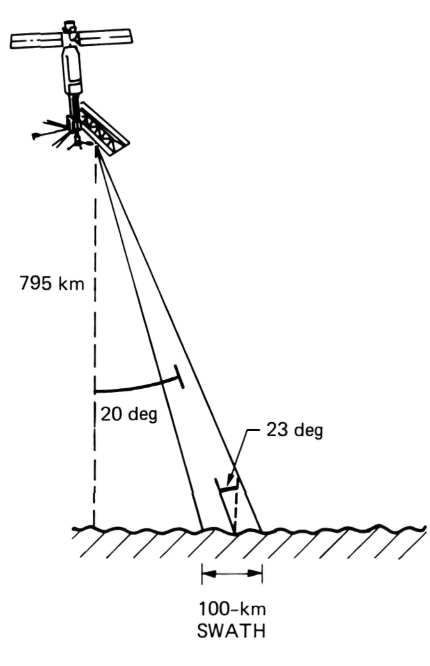
PEAK POWER:	1 kW
ANTENNA DIMENSIONS:	10.8 x 2.16 m
BANDWIDTH:	19 MHz
DATA RATE:	110 Mbits/s

DATA COLLECTION

DIGITAL DATA:	40 h
TOTAL COVERAGE:	100 million km^2
PROCESSING:	OPTICAL AND DIGITAL

ORBIT CHARACTERISTICS

ALTITUDE:	795 km
INCLINATION:	108 deg



MISSION

LAUNCH DATE:	JUNE 27, 1978
MISSION DURATION:	3.3 mo
VEHICLE:	SEASAT

Figure 1-3. Seasat SAR

SYSTEM CHARACTERISTICS

FREQUENCY:	1.278 GHz
WAVELENGTH:	23.5 cm (L-BAND)
POLARIZATION:	HH
LOOK ANGLE:	47 deg

IMAGE CHARACTERISTICS

SWATH WIDTH:	50 km
AZIMUTH RESOLUTION:	40 m
RANGE RESOLUTION:	40 m
NUMBER OF LOOKS:	6

INSTRUMENT COMPONENTS

TRANSMITTER/RECEIVER
ANTENNA
OPTICAL RECORDER

INSTRUMENT CHARACTERISTICS

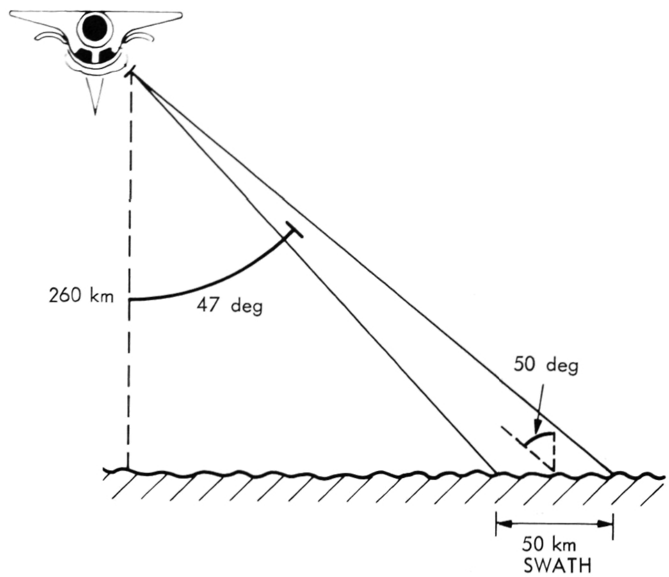
PEAK POWER:	1 kW
ANTENNA DIMENSIONS:	9.4 x 2.16 m
BANDWIDTH:	6 MHz

DATA COLLECTION

OPTICAL DATA:	8 h
TOTAL COVERAGE:	10 million km^2
PROCESSING:	OPTICAL

ORBIT CHARACTERISTICS

ALTITUDE:	260 km
INCLINATION:	38 deg



MISSION

LAUNCH DATE:	NOVEMBER 12, 1981
MISSION DURATION:	2.4 days
VEHICLE:	COLUMBIA
FLIGHT:	STS-2

Figure 1-4. Shuttle Imaging Radar A (SIR-A)

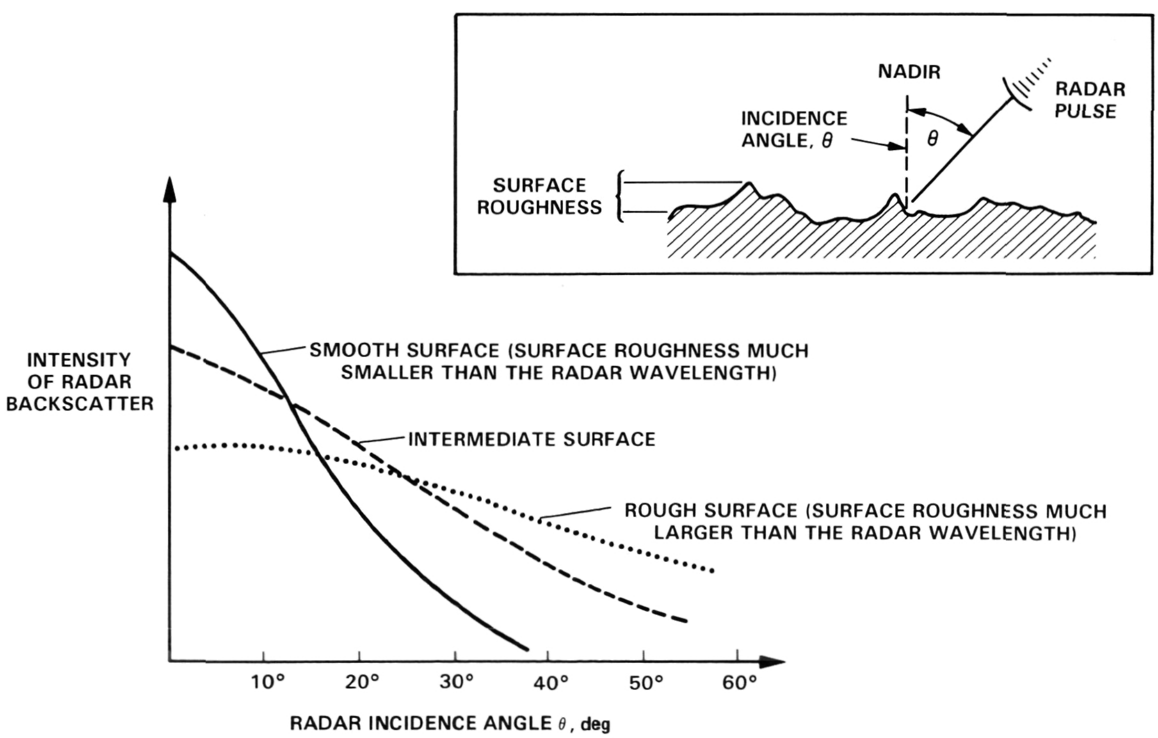


Figure 1-5. Radar backscatter as a function of incidence angle

SYSTEM CHARACTERISTICS

FREQUENCY:	1.282 GHz
WAVELENGTH:	23.4 cm (L-BAND)
POLARIZATION:	HH
LOOK ANGLES:	15 TO 60 deg

IMAGE CHARACTERISTICS

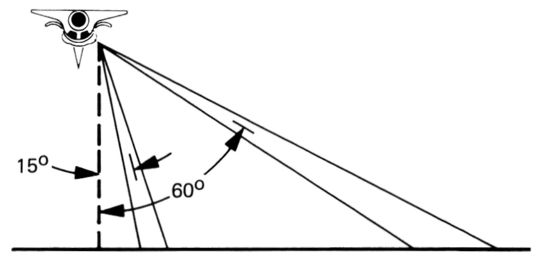
SWATH WIDTH:	20 TO 40 km
AZIMUTH RESOLUTION:	25 m
RANGE RESOLUTION:	58 TO 17 m
NUMBER OF LOOKS:	4

INSTRUMENT COMPONENTS

TRANSMITTER/RECEIVER
ANTENNA (MECHANICALLY TILTABLE AND FOLDING)
DIGITAL-DATA HANDLING SUBSYSTEM (DDHS)
HIGH-DATA-RATE RECORDER (HDRR)
OPTICAL RECORDER (OR)

INSTRUMENT CHARACTERISTICS

PEAK POWER:	1 kW
ANTENNA DIMENSIONS:	10.8 x 2.16 m
BANDWIDTH:	12 MHz
DATA RATE:	30.35 Mbits/s (THROUGH HDRR)
SAMPLING:	3 TO 6 bits/sample



DATA COLLECTION

OPTICAL DATA:	8 h
DIGITAL DATA:	7 h
TOTAL COVERAGE:	5 million km^2
PROCESSING:	DIGITAL AND OPTICAL

ORBIT CHARACTERISTICS

ALTITUDE:	354,257,224 km
INCLINATION:	57 deg

MISSION

LAUNCH DATE:	OCTOBER 5, 1984
MISSION DURATION:	8.3 days
VEHICLE:	CHALLENGER
FLIGHT:	41-G

Figure 1-6. Shuttle Imaging Radar B (SIR-B)

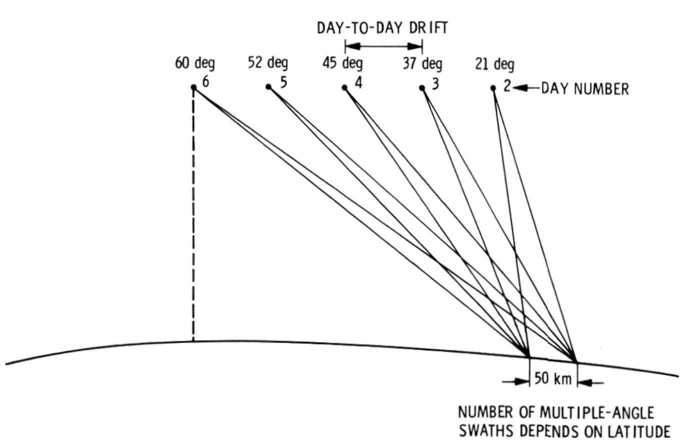


Figure 1-7. Multiple incidence angles, stereo mode

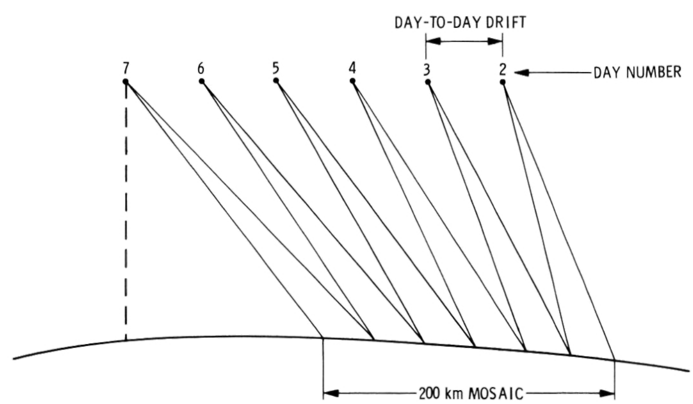


Figure 1-8. Mapping mode

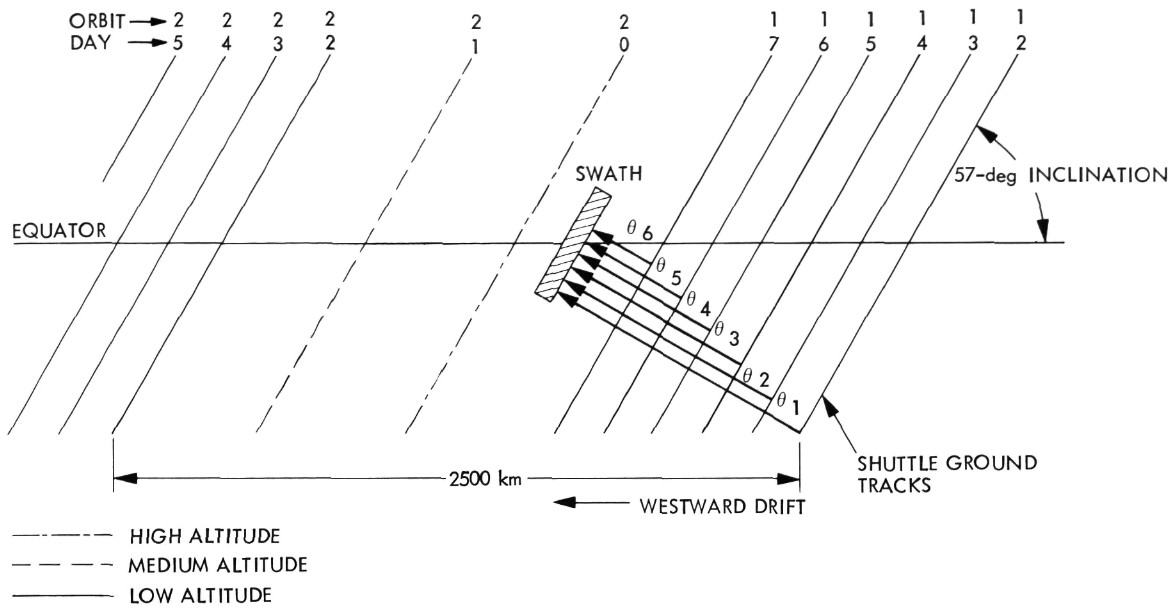


Figure 1-9. Mission scenario

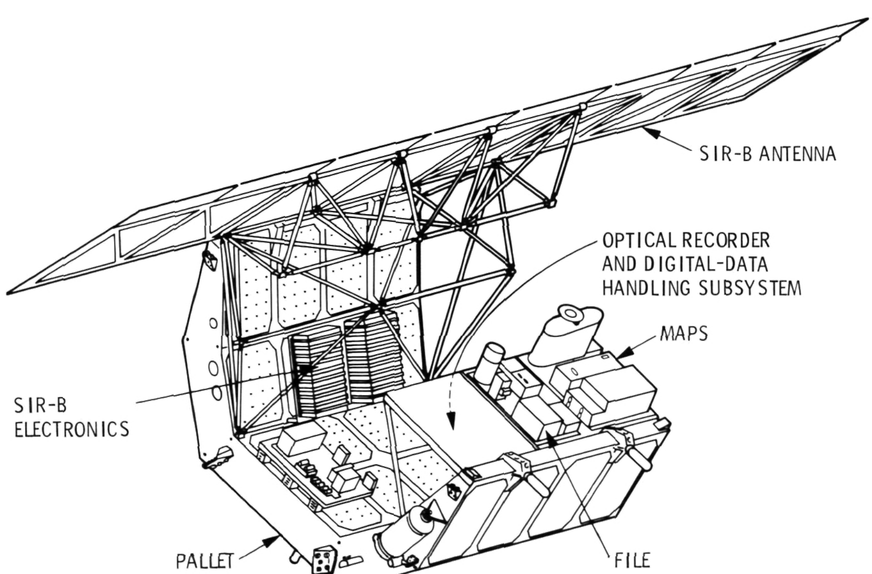


Figure 1-10. OSTA-3 pallet

II. Science Requirements

The science requirements for the SIR-B System were established both to satisfy the objectives of the investigators and to keep the experiment within cost constraints. These requirements were defined by the SIR-B Imaging Radar Science Working Group in 1982 (Ref. 2-1) and are summarized below.

A. Incidence Angles

The most important requirement for SIR-B was to acquire multiple-incidence-angle data. By mechanically tilting the SIR-B antenna with each pass over a specific target, the multiple-incidence-angle character of extended surfaces could be studied.

Acquisition of such data with a nearly constant incidence angle across the swath width can be achieved only from space. Because of their lower altitudes, aircraft systems acquiring even a 10-km swath will produce variations in incidence angle of as much as 41 deg from the near to the far edge of the swath (Figure 2-1).

The minimum SIR-B requirement for range of incidence angles was 15 to 60 deg, with no more than a 3-deg variation from the center of the swath to either edge.

B. Frequency

The radar frequency selected was L-band or 1282 MHz, because this frequency required no modification of the SIR-A System.

C. Polarization

Horizontal polarization was used for both the transmit and receive directions of the antenna subsystem, again because this required no modification of the SIR-A System. The cross-polarization components were required to be at least 20 dB lower than the direct components.

D. Along-Track Resolution and Looks

The minimum ground-resolution requirement of the system along the spacecraft track (azimuth) was 25 m with four-look processing.

Four-look processing takes an average of the quadrants of each pixel. This averaging process decreases image graininess, which is a side effect of the backscatter from the coherent radar signal. The smoother image that results is at the cost of resolution.

E. Cross-Track Resolution

The minimum slant range resolution requirement was 15 m. This resulted in the minimum cross-track (range) resolution shown in Figure 2-2.

F. Swath Width

The minimum swath width required for SIR-B was 40 km without calibration and 25 km with calibration (6 bits required),

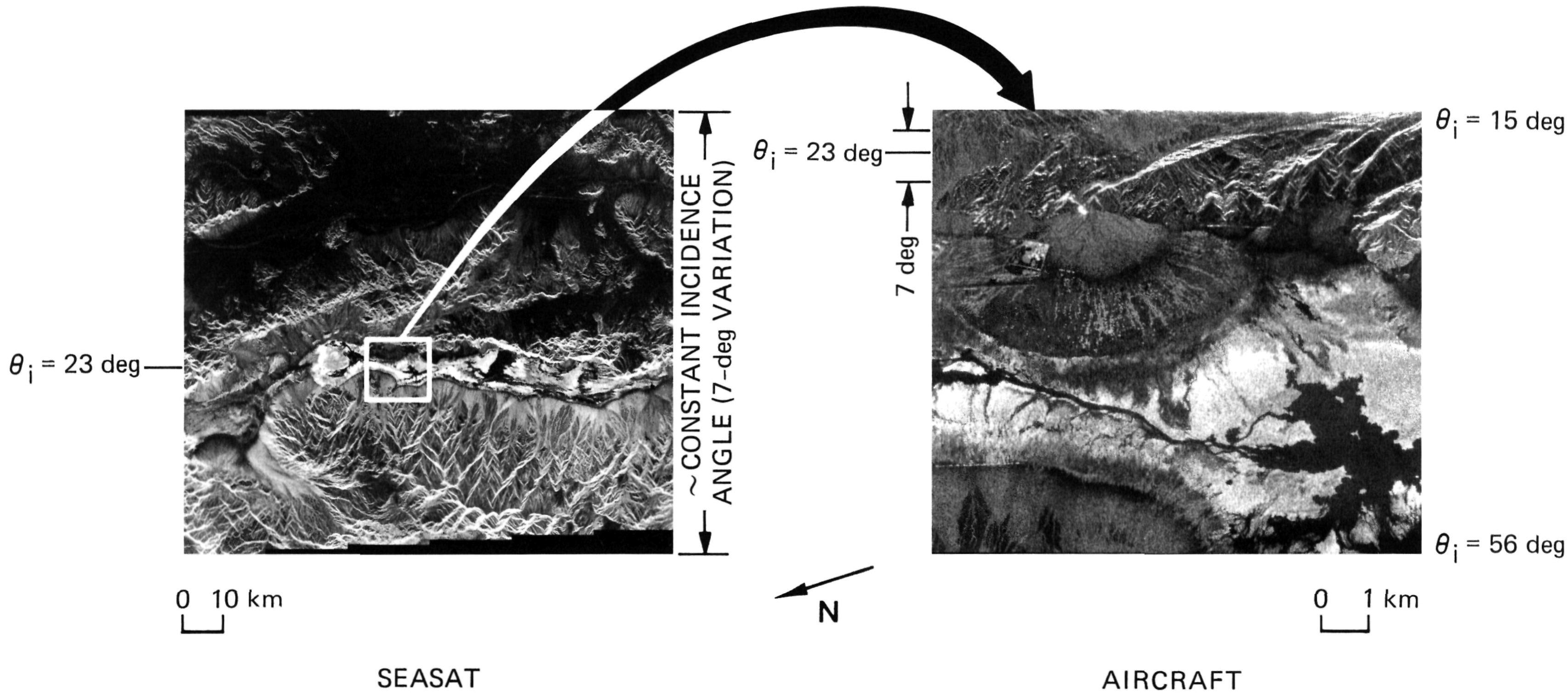


Figure 2-1. Incidence-angle variation across the swath: L-band, HH polarization

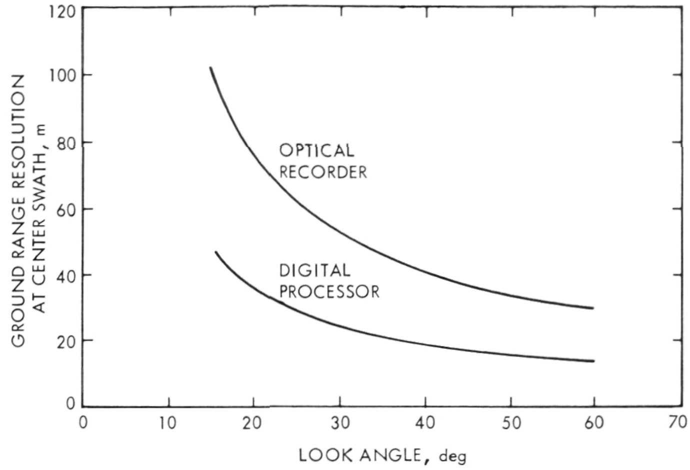


Figure 2-2. Cross-track resolution vs look angle

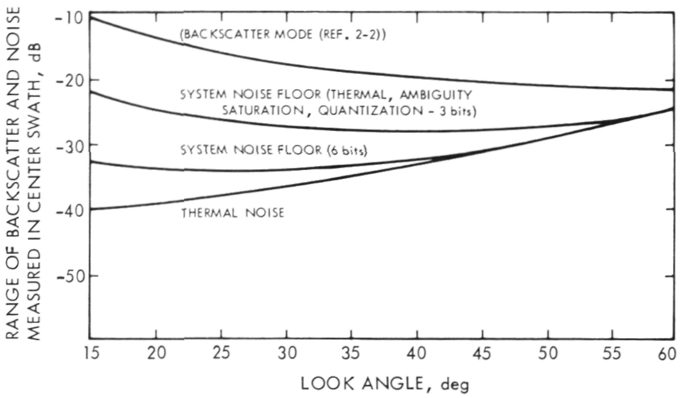


Figure 2-3. Range of backscatter and noise measured in center of swath vs look angle

to assure that swaths acquired on different days overlapped. For the mapping mode, the maximum possible swath (at least 50 km) was desired. During the planning phase of his experiment, the investigator was able to select imaging parameters that optimized swath or other variables for a specific experiment.

G. Cross-Section Measurement Range

The system was required to image distributed targets over the backscatter signal range shown in Figure 2-3. The required minimum instantaneous dynamic range, defined as the set of radar cross sections of an extended target over which the radar system was linear at a given gain state, was 15 dB for the multiple-incidence-angle mode and 20 dB for the calibration mode. The mapping mode had no dynamic range requirement. For a specular reflector occupying a single resolvable element, the required minimum instantaneous dynamic range capability was 60 dB. The minimum signal-to-noise ratio (SNR) across the swath was required to be 3 dB for the mapping mode and 8 dB for the multiple-incidence-angle mode, with or without calibration. The analog-to-digital converter (ADC) saturation-to-signal ratio requirement was 3 dB for the mapping mode and 6 dB and 9 dB for the multiple-incidence-angle mode, without and with calibration, respectively.

H. Radar Gain

To maintain the maximum SNR, the gain of the receiver was required to be selectable as a function of look angle and expected target backscatter. The required gain range with eight antenna panels was 33 dB.

I. Data System

Digital data were required from the SIR-B System; these data were needed to provide a greater degree of calibration than that available from an optical system. This greater degree of calibration, in turn, allowed comparison of multiple-incidence-angle images acquired on successive days of the mission. The optical system inherited from SIR-A was also flown to acquire mapping mode imagery and as a backup for the new digital system.

J. Experimental Imaging Modes

As a test of the new imaging capabilities, some imagery in experimental imaging modes was acquired by the SIR-B System. These modes included:

(1) Squint mode.

(2) Stare mode.

(3) Variable squint mode.

K. Ancillary Data

A significant emphasis was placed on the collection of ancillary data for calibration and ground-truth verification.

III. The Science Investigations

The SIR-B investigations (Figure 3-1) included studies in geology, radar penetration, vegetation, oceanography, atmospheric science, and cartography, as well as studies on the characteristics of the radar system itself. A list of the investigators and their experiments is given in Table 3-1.

These investigations were selected primarily because they most fully exploited the unique characteristics of the SIR-B radar. Of those chosen, 13 were in foreign countries including Australia, Canada, the Federal Republic of Germany, Japan, The Netherlands, New Zealand, Sweden, and the United

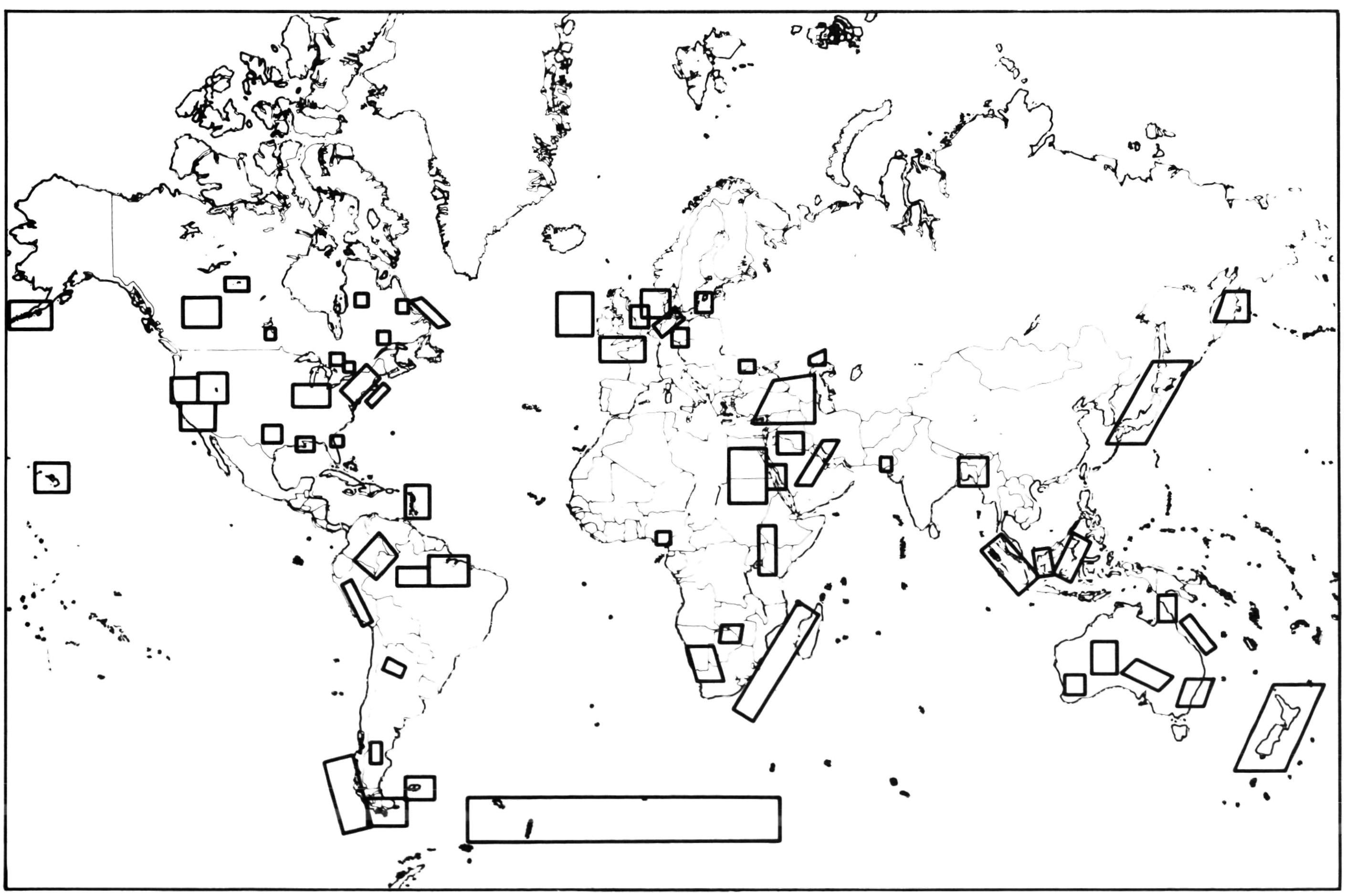


Figure 3-1. SIR-B sites (premission plan)

Table 3-1. Team members: their collaborators and investigations

Team member and affiliation	Collaborator and affiliation	Investigation
C. Elachi, Team Leader and Principal Investigator Jet Propulsion Laboratory, California Institute of Technology Pasadena, California		
T. D. Allan Institute of Oceanographic Sciences Surrey, England	T. Guymer Institute of Oceanographic Sciences Surrey, England P. Muller Imperial College London, England	"The Interpretation of SIR-B Imagery of Surface Waves and Other Oceanographic Features Near the United Kingdom Using In-Situ and Meteorological Satellite Data"
W. Alpers Universitüt Hamburg Federal Republic of Germany	K. Richter Deutsches Hydrographisches Institut Hamburg, Federal Republic of Germany H. Hühnerfuss Institut für Organische Chemie and Biochemie Hamburg, Federal Republic of Germany	"SAR Imaging Mechanisms of Ocean Surface Waves"
E. P. W. Attema Delft University of Technology Delft, The Netherlands	P. Binnenkade National Aerospace Laboratory Amsterdam, The Netherlands Th. A. de Boer Centre of Agrobiological Research Wageningen, The Netherlands J. J. Gerbrands Delft University of Technology Delft, The Netherlands A. R. P. Janse and L. Stroosnijder Agricultural University of Wageningen Wageningen, The Netherlands G. P. de Loor Physics Laboratory TNO Den Haag, The Netherlands J. Stolp Stiboka Wageningen Wageningen, The Netherlands	"ROVE Calibration and Inverse Scattering Experiment"
R. C. Beal The Johns Hopkins Applied Physics Laboratory Laurel, Maryland	A. Goldfinger, D. Irvine, F. Monaldo, and D. Tilley The Johns Hopkins Applied Physics Laboratory Laurel, Maryland R. Shuchman, D. Lyzenga, and J. Lyden Environmental Research Institute of Michigan Ann Arbor, Michigan P. Deleonibus and C. Rufenach National Oceanic and Atmospheric Administration Washington, D.C.	"The Spatial Evolution of the Directional Wave Spectrum in the Southern Ocean: Its Relationship to Extreme Waves in the Agulhas Current"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
G. L. Berlin U.S. Geological Survey Flagstaff, Arizona	M. A. Tarabzouni and Z. M. N. Munshi Saudi Arabian National Center for Science and Technology Riyadh, Saudi Arabia P. S. Chavez U. S. Geological Survey Flagstaff, Arizona	"Application of SIR-B Data for Ground Water Exploration in the Arabian Shield and Sand Drift Monitoring in the An Nafud and Al Jafurah Fringe Areas, Kingdom of Saudi Arabia"
A. L. Bloom Cornell University Ithaca, New York	M. R. Strecker and E. J. Fielding Cornell University Ithaca, New York	"Tectonic, Volcanic, and Climatic Geomorphology Study of the Sierras Pampeanas Andes, Northwestern Argentina"
M. L. Bryan Jet Propulsion Laboratory Pasadena, California	T. Dunne and J. Richey University of Washington Seattle, Washington J. Melack and D. Simonett University of California Santa Barbara, California G. Woodwell Marine Biological Laboratory Woods Hole, Massachusetts	"Deforestation, Flood Plain Dynamics, and Carbon Biogeochemistry in the Amazon Basin"
N. L. Bryans Electronics Research Laboratory Adelaide, South Australia	S. J. Anderson Electronics Research Laboratory Adelaide, South Australia	"Investigations Involving Corner Reflector Arrays, Signal Processing, and Oceanographic Studies"
F. Carsey Jet Propulsion Laboratory Pasadena, California	B. Holt Jet Propulsion Laboratory Pasadena, California S. Martin and D. A. Rothrock University of Washington Seattle, Washington W. F. Weeks U.S. Army Cold Regions Research and Engineering Laboratory Hanover, New Hampshire V. Squire Scott Polar Research Institute Cambridge, England	"Southern Ocean Sea-Ice Morphology and Kinematics"
M. A. Collins Department of Scientific and Industrial Research Lower Hutt, New Zealand	P. J. Oliver Department of Scientific and Industrial Research Lower Hutt, New Zealand G. R. Cochrane Auckland University Auckland, New Zealand J. Cole Victoria University Wellington, New Zealand	"New Zealand SIR-B Science Investigations"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
M. A. Collins (cont)	D. S. Coombs University of Otago Dunedin, New Zealand	
	E. J. Barnes New Zealand Oceanographic Institute Wellington, New Zealand	
	N. P. Ching New Zealand Forest Service Wellington, New Zealand	
	R. L. Bennets Ministry of Agriculture and Fisheries Darfield, New Zealand	
	P. J. Stephens Ministry of Works and Development Palmerstown North, New Zealand	
	A. K. Laing New Zealand Meteorological Services Wellington, New Zealand	
T. H. Dixon Jet Propulsion Laboratory Pasadena, California	L. Roth Jet Propulsion Laboratory Pasadena, California	"SIR-B Analysis of the Precambrian Shield of Sudan and Egypt: Penetration Studies and Subsurface Mapping"
	R. J. Stern University of Texas at Dallas Richardson, Texas	
	D. C. Almond University of Khartoum Khartoum, Sudan	
	A. Kroner Johannes Gutenberg University Mainz, West Germany	
	E. M. El Shazly Atomic Energy Establishment Cairo, Egypt	
T. G. Farr Jet Propulsion Laboratory Pasadena, California	A. L. Albee, D. L. Evans, and J. E. Solomon Jet Propulsion Laboratory Pasadena, California	"Quantitative Use of Multiincidence Angle SAR for Geologic Mapping"
	M. I. Daily Mobil Field Research Laboratory Dallas, Texas	
	T. I. Labotka University of Tennessee Knoxville, Tennessee	
	M. O. Smith University of Washington Seattle, Washington	

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
J. P. Ford Jet Propulsion Laboratory Pasadena, California	F. F. Sabins Chevron Oil Field Research Co. La Habra, California P. Asmoro National Coordinating Agency for Survey and Mapping Cibinong-Bogor, Indonesia	"Geologic Mapping of Indonesian Rainforest with Analysis of Multiple SIR-B Incidence Angles"
N. Fugono Radio Research Laboratories Tokyo, Japan	Y. Furuhama, T. Takasugi, K. Okamoto, M. Fujita, S. Yoshikado, H. Masuko, T. Shinozuka, H. Inomata, I. Shiro, M. Ichinose, and H. Ohyama Radio Research Laboratories Tokyo, Japan	"Remote Sensing of Rice Fields and Sea Pollution by SIR-B"
D. Garofalo, E. Segal, and D. Hlavka Earth Satellite Corporation Chevy Chase, Maryland	J. N. Cooper, J. R. Everett, L. J. Warnick, L. H. Wynn, C. Sheffield, M. Ruth, R. Perrine, and K. Estep Earth Satellite Corporation Chevy Chase, Maryland	"Evaluation of SIR-B Data for Identifying Rainfall Event Occurrence and Intensity"
R. M. Goldstein Jet Propulsion Laboratory Pasadena, California	F. K. Li Jet Propulsion Laboratory Pasadena, California	"SIR-B Interferometric Topography"
A. L. Gray Canada Centre for Remote Sensing Ottawa, Canada	J. Princz, C. E. Livingstone, R. K. Hawkins, and M. Wong Canada Centre for Remote Sensing Ottawa, Canada	"Use of SIR-B Multiincidence Angle Imagery to Study Iceberg Detectability and Offshore Ocean Feature Extraction"
J. W. Head Brown University Providence, Rhode Island	P. J. Mouginis-Mark Univeristy of Hawaii Honolulu, Hawaii S. H. Zisk Haystack Observatory Westford, Massachusetts R. A. F. Grieve and A. R. Peterfreund Brown University Providence, Rhode Island K. D. Sullivan Johnson Space Center Houston, Texas	"Geological, Structural, and Geomorphological Analyses from SIR-B"
D. N. Held Jet Propulsion Laboratory Pasadena, California	F. T. Ulaby University of Kansas Center for Research, Inc. Lawrence, Kansas	"Amplitude Calibration Experiment for SIR-B"
R. M. Hoffer Purdue University West Lafayette, Indiana	M. E. Bauer, L. L. Biehl, and R. P. Mroczynski Purdue University West Lafayette, Indiana	"Microwave and Optical Remote Sensing of Forest Vegetation"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
F. R. Honey, R. A. Perry, and C. Nilsson Commonwealth Scientific and Industrial Research Organization Wembley, Australia	C. J. Simpson Bureau of Mineral Resources Organization Canberra City, Australia J. Huntington, R. Horvitz, and G. Byrne Commonwealth Scientific and Industrial Research Organization Wembley, Australia	"Evaluation of SIR-B Imagery for Geologic and Geomorphic Mapping, Hydrology, and Oceanography in Australia"
M. L. Imhoff Goddard Space Flight Center Greenbelt, Maryland	C. H. Vermillion Goddard Space Flight Center Greenbelt, Maryland F. A. Khan Space Research and Remote Sensing Organization Dacca, Bangladesh	"The Use of Digital Spaceborne SAR Data for the Delineation of Surface Features Indicative of Malaria Vector Breeding Habits"
W. H. Johnson University of Illinois Urbana, Illinois	N. K. Bleuer and G. S. Fraser Indiana State Geological Survey Bloomington, Indiana S. M. Totten Hanover College Hanover, Indiana	"Interlobate Comparison of Glacial-Depositional Style as Evidenced by Small-Relief Glacial Landscape Features in Illinois, Indiana, and Ohio Utilizing SIR-B"
V. H. Kaupp University of Arkansas Fayetteville, Arkansas	W. P. Waite and H. C. MacDonald University of Arkansas Fayetteville, Arkansas P. J. Mouginis-Mark University of Hawaii Honolulu, Hawaii S. H. Zisk Haystack Observatory Westford, Massachusetts	"Evaluation of the L-Band Scattering Characteristics of Volcanic Terrain in Aid of Lithologic Identification, Assessment of SIR-B Calibration, and Development of Planetary Geomorphic Analogs"
G. E. Keyte Royal Aircraft Establishment Farnborough, England	B. C. Barber, M. B. Barnes, and G. C. White Royal Aircraft Establishment Farnborough, England M. Bagg Admirality Underwater Weapons Establishment Portland, England B. d'Olier City of London Polytechnic London, England N. Lynn Royal Navy College Greenwich, England	"The Investigation of Selected Oceanographic Applications of Spaceborne Synthetic-Aperture Radar"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
M. Kobrick Jet Propulsion Laboratory Pasadena, California	J. Raggam Institute for Image Processing and Computer Graphics Graz, Austria	"SIR-B Cartography and Stereo Topographic Mapping Experiment"
	F. Leberl and G. Domik Vexcel Corporation Boulder, Colorado	
	R. Welch University of Georgia Athens, Georgia	
	H. Carr and J. Hammak U. S. Naval Observatory Washington, D.C.	
	V. Kaupp, H. C. MacDonald, and W. P. Waite University of Arkansas Fayetteville, Arkansas	
	J. Curlander and S. P. Synnott Jet Propulsion Laboratory Pasadena, California	
B. N. Koopmans International Institute for Aerial Survey and Earth Sciences Enschede, The Netherlands	D. van der Zee, A. Th. Verstappen, T. Woldai, and H. Hoschititzky International Institute for Aerial Survey and Earth Sciences Enschede, The Netherlands	"Monitoring of the Tidal Dynamics of the Dutch Wadden Sea by SIR-B"
P. D. Lowman Goddard Space Flight Center Greenbelt, Maryland	H. W. Blodget and W. J. Webster Goddard Space Flight Center Greenbelt, Maryland	"Structural Investigation of the Grenville Province by Radar and Other Imaging and Nonimaging Sensors"
	S. Pala and V. H. Singhroy Ontario Centre for Remote Sensing Toronto, Canada	"Structural Investigation of the Canadian Shield by Orbital Radar and Landsat"
	V. R. Slaney RADARSAT Project Office Ottawa, Canada	
R. K. Moore University of Kansas Center for Research, Inc. Lawrence, Kansas	W. J. Pierson City University of New York New York, New York	"Studies of Coastal Mesoscale Winds Using SIR-B"
R. K. Moore University of Kansas Center for Research. Inc. Lawrence, Kansas	V. S. Frost University of Kansas Center for Research, Inc. Lawrence, Kansas	"Information for Space-Radar Designers: Required Dynamic Ranges vs. Resolution and Antenna Calibration Using the Amazon Rain Forest"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
J. F. Paris Jet Propulsion Laboratory Pasadena, California	B. N. Rock Jet Propulsion Laboratory Pasadena, California S. Y. Hsu Susquehanna Resources and Environment, Inc. Johnson City, New York	"Development and Evaluation of Techniques for Using Combined Microwave and Optical Image Data for Vegetation Studies"
J. T. Parr The Analytic Sciences Corporation Reading, Massachusetts	R. V. Sailor The Analytic Sciences Corporation Reading, Massachusetts	"Investigation of SIR-B Images for Lithologic Mapping"
H. Ramapriyan Goddard Space Flight Center Greenbelt, Maryland	C. W. Murray, J. P. Strong, and H. W. Blodget Goddard Space Flight Center Greenbelt, Maryland	"Automatic Terrain Elevation Mapping and Registration"
J. A. Richards University of New South Wales Kensington, Australia	B. C. Forster, A. K. Milne, G. R. Taylor, and J. C. Trinder University of New South Wales Kensington, Australia	"Australian Multiexperimental Assessment of SIR-B (AMAS)"
G. G. Schaber U. S. Geological Survey Flagstaff, Arizona	J. F. McCauley, C. S. Breed, and M. J. Grolier U. S. Geological Survey Flagstaff, Arizona B. Issawi Egyptian Geological Survey and Mining Authority Cario, Egypt C. V. Haynes University of Arizona Tucson, Arizona W. McHugh GAI Consultants Monroeville, Pennsylvania A. Walker U.S. Geological Survey Reston, Virginia R. Blom Jet Propulsion Laboratory Pasadena, California	"Application and Calibration of the Subsurface Mapping Capability of SIR-B in Desert Regions"
A. J. Sieber Deutsche Forschungs–und Versuchsanstalt für Luft–und Raumfahrt Federal Republic of Germany	Ph. Hartl University of Stuttgart Federal Republic of Germany R. Haydn University of Munich Federal Republic of Germany G. Hildebrandt University of Freiburg Federal Republic of Germany	"German Radar Observation Shuttle Experiment (ROSE)"

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
A. J. Sieber (cont)	G. Konecny University of Hannover Federal Republic of Germany	
	R. Muhlfeld Federal Institute for Geoscience and Natural Resources Federal Republic of Germany	
D. S. Simonett University of California Santa Barbara, California	A. H. Strahler City University of New York New York, New York	"The Extension of an Invertible Coniferous Forest Canopy Reflectance Model Using SIR-B and Landsat Data"
E. P. Szuszczewicz and P. Rodriguez Naval Research Laboratory Washington, D.C.	M. A. Abdu and J. H. A. Sobral Instituto de Pesquisas Espaciais São Paulo, Brazil	"An Investigation of Ionospheric Irregularity Effects on SIR-B Image Processing and Information Extraction"
	J. Jost Johnson Space Center Houston, Texas	
	B. M. Reddy National Physical Laboratory New Delhi, India	
	C. Rino Stanford Research Institute Menlo Park, California	
	M. Singh Sachs/Freeman Associates, Inc. Bowie, Maryland	
	R. Woodman Instituto Geofisico del Peru Lima, Peru	
J. V. Taranik University of Nevada Reno, Nevada	D. B. Slemmons, E. J. Bell, M. Borengasser, T. P. Lugaski, H. Vreeland, P. Vreeland, E. Kleiner, F. F. Peterson, and H. Kleiforth University of Nevada Reno, Nevada	"Analysis of SIR-B Radar Illumination Geometry for Depth of Penetration and Surface Feature and Vegetation Detection, Nevada and California"
M. N. Toksoz Massachusetts Institute of Technology Cambridge, Massachusetts	G. H. Pettengill, P. Ford, and L. Gulen Massachusetts Institute of Technology Cambridge, Massachusetts	"Delineation of Major Geological Structures in Turkey Using SIR-B Data"
F. T. Ulaby University of Kansas Center for Research, Inc. Lawrence, Kansas	A. K. Fung and M. C. Dobson University of Kansas Center for Research, Inc. Lawrence, Kansas	"Evaluation of Radar Response to Land Surfaces and Volumes: Examination of Theoretical Models, Target Statistics, and Applications"
	J. Cihlar Canada Centre for Remote Sensing Ottawa, Canada	

Table 3-1 (contd)

Team member and affiliation	Collaborator and affiliation	Investigation
P. Ulriksen Institute of Technology Lund, Sweden	H. Ottersten National Defense Research Institute Sweden	"Ground Truth for SIR-B Images Obtained by SIR System 8 Impulse Radar"
	C. G. Borg Swedish Space Corporation Solna, Sweden	
	S. Axelsson SAAB–Scania Linköping, Sweden	
	B. Ekengren Ericsson Radio System Mölndal, Sweden	
J. R. Wang Goddard Space Flight Center Greenbelt, Maryland	J. C. Shiue, J. T. Schmugge, and P. Cuddapah Goddard Space Flight Center Greenbelt, Maryland	"Remote Sensing of Soil Moisture"
	T. J. Jackson U. S. Department of Agriculture Beltsville, Maryland	
	T. Mo Computer Sciences Corporation Silver Spring, Maryland	
R. S. Winokur Office of Naval Research Arlington, Virginia	J. R. Apel and R. F. Gasparovic The Johns Hopkins Applied Physics Laboratory Laurel, Maryland	"SAR Internal Wave Signature Experiment"

Kingdom. Many of the experiments performed by United States team members occurred in foreign countries with the cooperation of collaborators from those countries, which included Argentina, Bangladesh, Botswana, Brazil, Egypt, India, Indonesia, Peru, Saudi Arabia, and Turkey. Two investigations were carried out in foreign oceans—one along both the Agulhas Current off the southeast coast of Africa and the currents off the southwest coast of Chile, and the other in the South Atlantic Ocean off the coast of Antarctica. Many investigations were also performed in the United States by participants from a variety of universities, companies, and NASA centers.

A. Geology

SIR-B imagery was used for structural mapping and to define geologic boundaries and the limits of glaciation (Figure 3-2).

A number of experiments in geology were conducted to assess the usefulness of multiple-incidence-angle synthetic-aperture radar (SAR) data for lithologic mapping (Farr and Parr) and the delineation of textural and structural features (Kaupp). Areas of primary interest for these studies included Hawaii and the Western United States. SIR-B data were also used to delineate subtle boundaries between geologic regions in Argentina, where the boundary between active and inactive volcanism was mapped (Bloom), and to determine the boundary between the Churchill, Superior, and Grenville Provinces in the Canadian Shield (Lowman). The extent of Wisconsinan glaciation in Illinois, Indiana, and Ohio (Johnson) and Pleistocene glaciation in Argentina (Bloom) were investigated, and impact craters in the Canadian Shield were mapped (Head). The radar signatures of exposed craters are being used to further characterize poorly exposed craters. Coverage was planned over the more rugged terrain in Turkey where the data were to have been used to map extensions of the North and East Anatolian faults (Toksoz). These data, however, were not acquired. In New Zealand, imagery along the Alpine Fault on the boundary between the Pacific and the Indian-Australian Plates was used to map structural features in this densely vegetated region (Collins).

Figure 3-2. SIR-B science investigations: geologic mapping

B. Radar Penetration

The exciting discovery with SIR-A of the buried dry-river channels in Egypt has focused interest upon characterization of this radar-penetration phenomenon (Figure 3-3). For this reason, the SIR-B experiment placed great emphasis on extending the coverage of the western deserts of Egypt and Sudan, as well as other hyperarid areas including southwest Africa, India, China, central Australia, and the western coasts of Peru (Schaber). These penetration studies reached east of the Nile (Dixon) to the Precambrian Shield, where frequent outcrops of basement rocks provide landmarks for coregistration of the SIR-B data with Landsat data.

Radar penetration was also studied in semiarid regions, such as those in the United States along the Nevada/California border (Taranik) and in California's Mojave desert (Farr), and others in central Australia (Richards). The relative effects of vegetation cover, surface-cover characteristics, and soil moisture on the data are being assessed. Penetration by the radar was also expected in a limestone plain called the "Great Alvar" on the island of Öland in the Baltic Sea (Ulriksen). Potential penetration sites were measured with an impulse radar system to verify the penetration. In addition, penetration studies were extended to Saudi Arabia where the SIR-B data were used as subsurface indicators for fault detection and groundwater prospecting in the Arabian Shield (Berlin).

C. Vegetation

SIR-B investigations of vegetation included both forests and agriculture (Figure 3-4). Equatorial rain forests in Sumatra and Kalimantan were imaged with the primary objective of geologically mapping these cloud-shrouded, inaccessible areas (Ford). Multiple-incidence data collected over Bangladesh are being used to quantify the signatures of tropical rain forests as a function of imagery geometry and to assess the penetration of dense vegetation canopies (Imhoff). The Bangladesh data will also be used to assess the potential of such data for the delineation of malaria-mosquito breeding areas.

In the tamer forests of the United States, two team members are assessing the radar signatures of forested areas as a function of incidence angle. In the Klamath National Forest of northern California, a coniferous forest canopy is being studied (Simonett), and several well-defined, operationally managed deciduous forest stands outside of Jacksonville, Florida, are being assessed (Hoffer) in an attempt to identify and characterize forest-cover types and condition classes. Clear cutting in the Amazon forest is difficult to monitor on the ground, but is easily traced on radar imagery. The forests around the Amazon River in central Brazil were a primary target for a quantitative assessment of the potential in multiple-incidence-angle imagery for determining the location, areal extent, and rate of deforestation (Bryan).

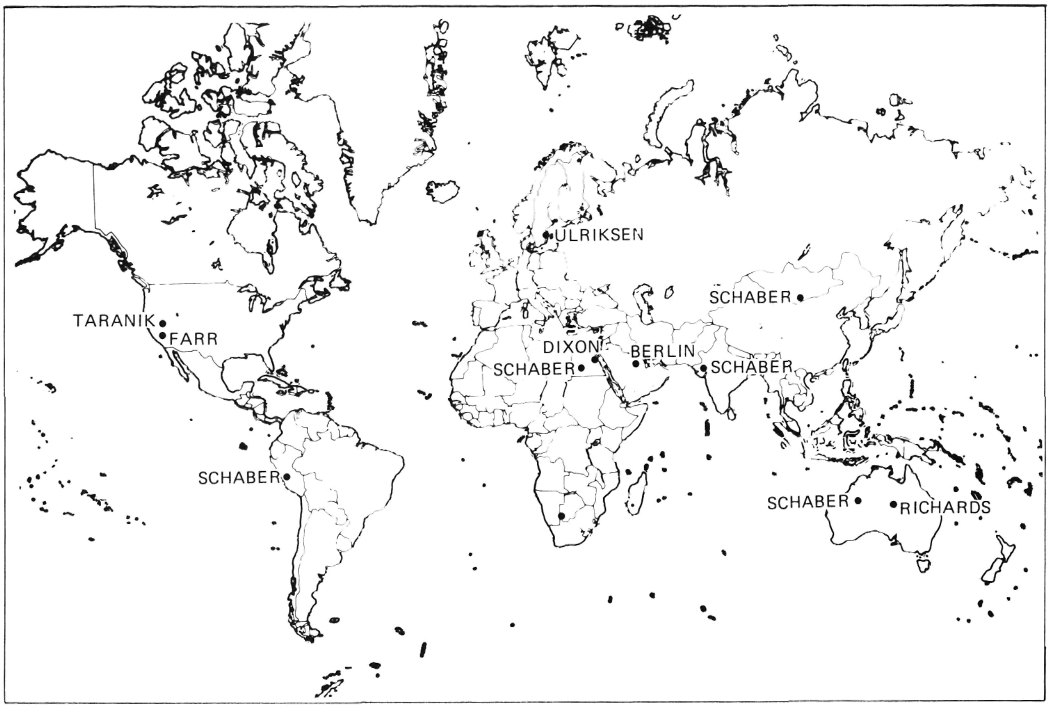


Figure 3-3. SIR-B science investigations: radar penetration

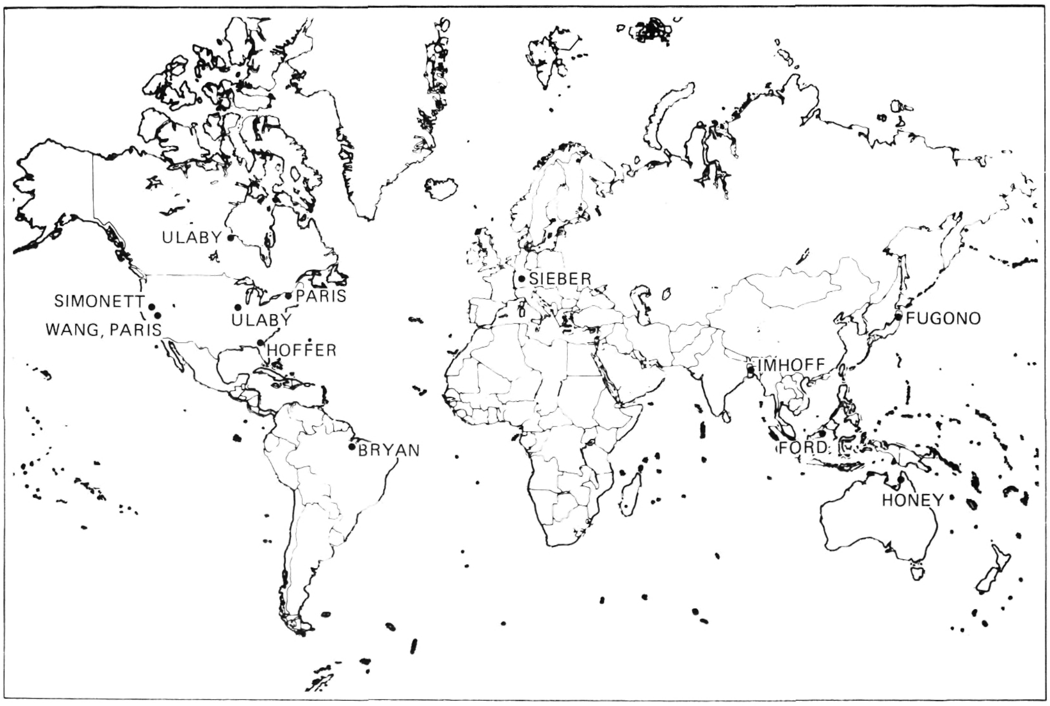


Figure 3-4. SIR-B science investigations: volume scattering in vegetation canopies

Several very extensive investigations of the radar signatures of agricultural areas were planned as part of the overall SIR-B experiment. The microwave-scattering characteristics of rice fields were examined in Japan (Fugono), and large crews at two "supersites," one in Illinois (Ulaby) and the other near Freiburg, Germany (Sieber), collected extensive ground-truth data as SIR-B imaged the sites. The agricultural supersite in Illinois was also imaged simultaneously by the Jet Propulsion Laboratory's aircraft imaging radar and scatterometer. A site in the Central Valley of California was used to study both agriculture (Paris) and soil moisture by irrigating several fields to different extents during the SIR-B mission (Wang). Similar studies were conducted in Canada (Ulaby) and on the east coast of the United States (Paris). In addition, forests in northern Australia were imaged by SIR-B in an attempt to determine the grade of bauxite beneath the forest stands (Honey).

D. Oceanography and Sea Ice

Oceanography experiments were concentrated off the east coast of the U.S., off Europe in the North Atlantic and the North Sea, and off the coasts of Chile, South Africa, Australia, and New Zealand (Figure 3-5). Two team members from England (Keyte and Allan) investigated a number of ocean features including internal waves, currents, bathymetric features, and ocean waves; they used ships, buoys, and satellites to monitor the sea surface during the SIR-B overflights. The characteristics of ocean wave imagery were also studied in the North Sea off the coast of Germany (Alpers). During the SIR-B overflight, directional ocean-wave spectra were acquired simultaneously by ships and the German North Sea Research Platform.

Tidal erosion and sedimentation along the Waddensea coast of the northern Netherlands cause continual change in the ocean bottom configuration and constant remodeling of the coastal regions. SIR-B data collected at several intervals during the tidal cycle are being used to study these effects (Koopmans).

An experiment was conducted off the east coast of New Zealand to increase our understanding of the interaction of the Southland Current with the East Cape Current (Collins). Nearby, off the east coast of Australia, the ability of SIR-B to delineate various ocean features—including currents, internal waves, and bottom topography—was the focus of another experiment (Honey).

Two investigations (Fugono and Alpers) were designed to determine the radar signatures of oil spills, which were simu-

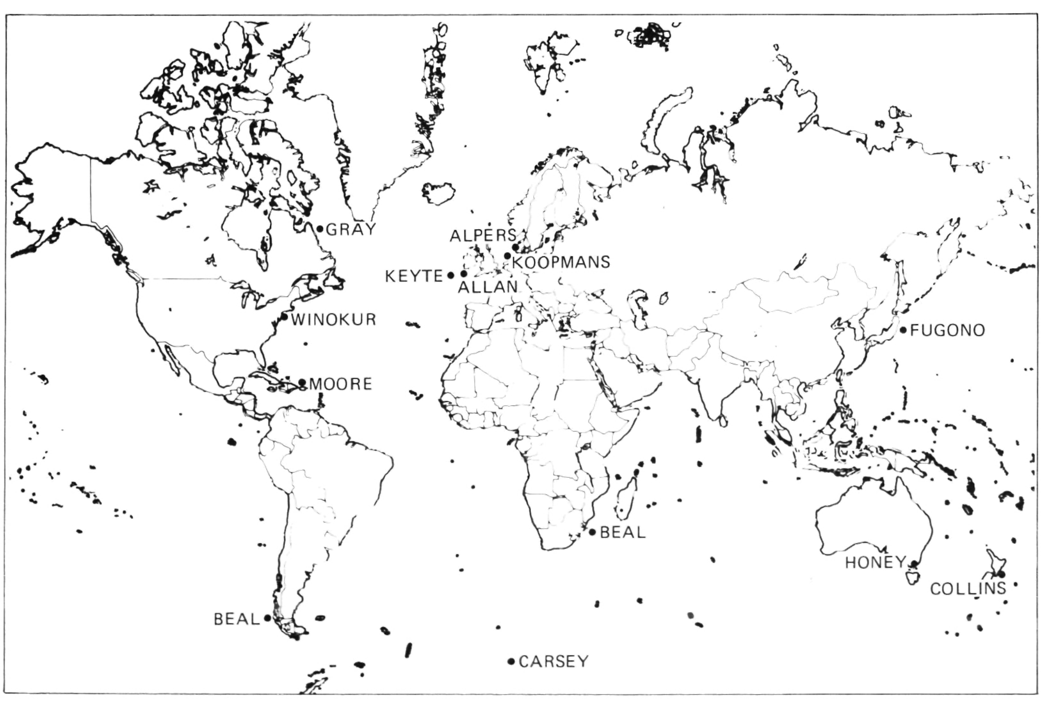


Figure 3-5. SIR-B science investigations: oceanography and sea ice

lated during the SIR-B overflight by nonpolluting alcohol dropped into the ocean from airplanes.

Two United States team members also performed extensive oceanography experiments. Beal conducted one investigation off the southwestern coast of Chile, a region known to have high ocean waves. The directional wave spectra obtained from the SAR at a variety of incidence angles were compared to aircraft measurements and to a global ocean-wave forecast model. Beal also made a study of the Agulhas Current, which runs along the southeast tip of Africa. This region has long been notorious for extreme waves that reach heights greater than 20 m and threaten ships. The second United States ocean experiment was conducted off the New York Bight in the Atlantic Ocean (Winokur). The basic hydrodynamic mechanisms responsible for internal waves were investigated. Theories and models used to predict internal-wave signatures from ocean and radar parameters were tested. Similar studies by Winokur were to be conducted off the coast of Southern California, but the necessary data were not acquired.

The Seasat SAR demonstrated the potential of spaceborne imaging radar for monitoring sea ice. Two team members proposed to further assess this capability with emphasis on feature identification as a function of illumination geometry. Carsey studied sea ice in the Southern Ocean north of Antarctica to obtain specific assessments of pack morphology, ice-drift speed, and ice deformation. It was Gray's intent to examine iceberg detectability and reconnaissance as a function of ocean condition. His investigation focused on areas off the east coast of Canada along the Grand Banks, the Scotian Shelf, and the Labrador Coast, and he planned to use aircraft data collected simultaneously with the SIR-B data; however, no SIR-B data were acquired for this experiment.

An experiment to develop a methodology for the use of SAR in space to determine constant windpatterns was performed by Moore, who used SIR-B data gathered from the Caribbean. These data were also used to quantify and determine the nature of coastal-scale variability in mesoscale winds.

E. Atmospheric Science

Investigations conducted with SIR-B were not limited to the surface of Earth.

It is believed that the ionosphere may have some effect on radar imagery acquired at the SIR-B operating frequency. To verify this theory, the effects of ionospheric irregularities on SAR processing and information extraction are being investigated (Szuszczewicz). A worldwide network of ground radars was used to measure the state of the ionosphere at the times of SIR-B imaging.

The utility of SIR-B data for the detection and measurement of rainfall and the potential application of spaceborne radar imagery to improvements of existing rainfall models were also investigated (Garofalo).

F. Cartography

Multiple-incidence-angle radar imagery can be used in a stereo mode for cartographic, topographic, and thematic mapping. Two investigations (Kobrick and Ramapriyan) assessed the optimum radar illumination geometry for stereoscopic analysis and future radar mapping missions.

The surface relief of featureless plains and the gentle slopes of alluvial fans, however, are difficult to detect using stereo techniques, but they can be observed with interferometric methods that provide high-resolution elevation data. Radar signals from separate passes that cross at very shallow angles were used to provide the equivalent of an interferometer (Goldstein).

G. Radar Characteristics

A step toward a fully calibrated radar system was taken with a number of calibration experiments conducted during the SIR-B mission. As part of one experiment (Held), a calibrator that provided a reference signal was added to the SIR-B hardware. Such variables as antenna pattern, spacecraft attitude, transmitter power, receiver gain, system linearity, and SAR correlator effects were considered. Because of cable failure, this calibration technique did not succeed; however, some calibration studies were carried out using ground-truth measurements, the aircraft SAR, and a truck-mounted scatterometer from the University of Michigan. To further verify the calibration of SIR-B, an airborne scatterometer underflew SIR-B, but the corresponding SIR-B imagery was not acquired.

Knowledge of the antenna pattern is essential to any calibration experiment. This pattern is being measured using radar data collected along a swath that crossed the Amazon forest in Brazil—a relatively uniform area (Moore).

Corner reflectors were also used in an attempt to calibrate the SIR-B radar. Corner reflectors located along an airstrip in Japan and large antennas at the Kashima Radio Research Laboratories near Tokyo were used to establish the relationship between image intensity and radar backscatter, to evaluate the resolution characteristics of SIR-B, and to investigate the side-lobe characteristics (Fugono). Several very large corner reflectors were placed in Australia to calibrate the radar and to provide a surveyed point target for reference in a number of other investigations (Bryans), but again the corresponding radar data were not acquired.

IV. The SIR-B System and Hardware Design

SIR-B was the second generation of synthetic-aperture-radar (SAR) experiments to fly on the shuttle. As such, the system owed much to its predecessor, SIR-A, which was flown on the Space Transportation System-2 (STS-2) in the fall of 1981. Several new features were incorporated into the original SIR-A design to make SIR-B a more sophisticated instrument for experimentation.

The SIR-B SAR System (Figure 4-1) consisted of an antenna, sensor electronics, a digital-data handling subsystem (DDHS), an onboard high-data-rate recorder (HDRR), an optical recorder (OR), and a ground-data processing system. The SAR system generated a fine-resolution radar map in range (across track) by coding the transmitted pulse and in azimuth (along track) by focusing the coherent radar returns during the data processing. The following sections describe the upgraded SIR-B hardware and system designs, the performance of the SIR-B hardware during the mission, and the performance of the shuttle systems on which SIR-B depended.

A. The Upgraded Design

The improvements of SIR-A needed to produce SIR-B included

(1) Addition of a tilt mechanism to permit pointing the antenna beam (in 1-deg increments) to any selectable look angle between 15 and 60 deg.

(2) Addition of an eighth panel to the antenna to improve performance at incidence angles up to 60 deg (SIR-A had a fixed look angle of 47 deg).

(3) Redesign of the antenna support structure to permit folding the array to reduce its stowed size.

(4) Addition of a digital-data handling subsystem to acquire calibrated SAR imagery.

(5) Increase of the bandwidth from 6 to 12 MHz to improve resolution by a factor of two.

(6) Addition of a calibration subsystem to improve radiometric calibration.

The SIR-B hardware is pictured in Figure 4-2 and described in Table 4-1. The sections that follow provide details of the hardware and summarize the improvements in system performance that resulted from the upgrades of SIR-A.

1. Antenna

Extensive redesign of the antenna provided mechanical tilt that allowed look angles to vary from 15 to 60 deg relative to nadir (Figure 4-3); this feature made multiple-incidence-angle imagery possible. Tilt was accomplished through antenna-control electronics and motor mechanisms.

In addition, the increase in the number of antenna panels from seven to eight made the overall SIR-B antenna dimensions 10.74 by 2.16 m. This increase in area provided additional antenna directivity and an improvement in azimuth ambiguity levels. With the addition of the antenna panel and the tilt capability, a new corporate feed system was necessary. The fold capability reduced the stowed size of the antenna in the launch configuration and made more room in the cargo bay for other payloads (Figure 4-4).

The modified antenna system consisted of the support truss, the tilt truss (including the antenna panels and the RF feed system), and two electronics boxes for control of the antenna. When stowed, the forward leaf (two panels) was sandwiched between the aft leaf (three panels) and the fixed center portion of the antenna (also three panels), as shown in Figure 4-4. Once the spacecraft was oriented with the Z axis

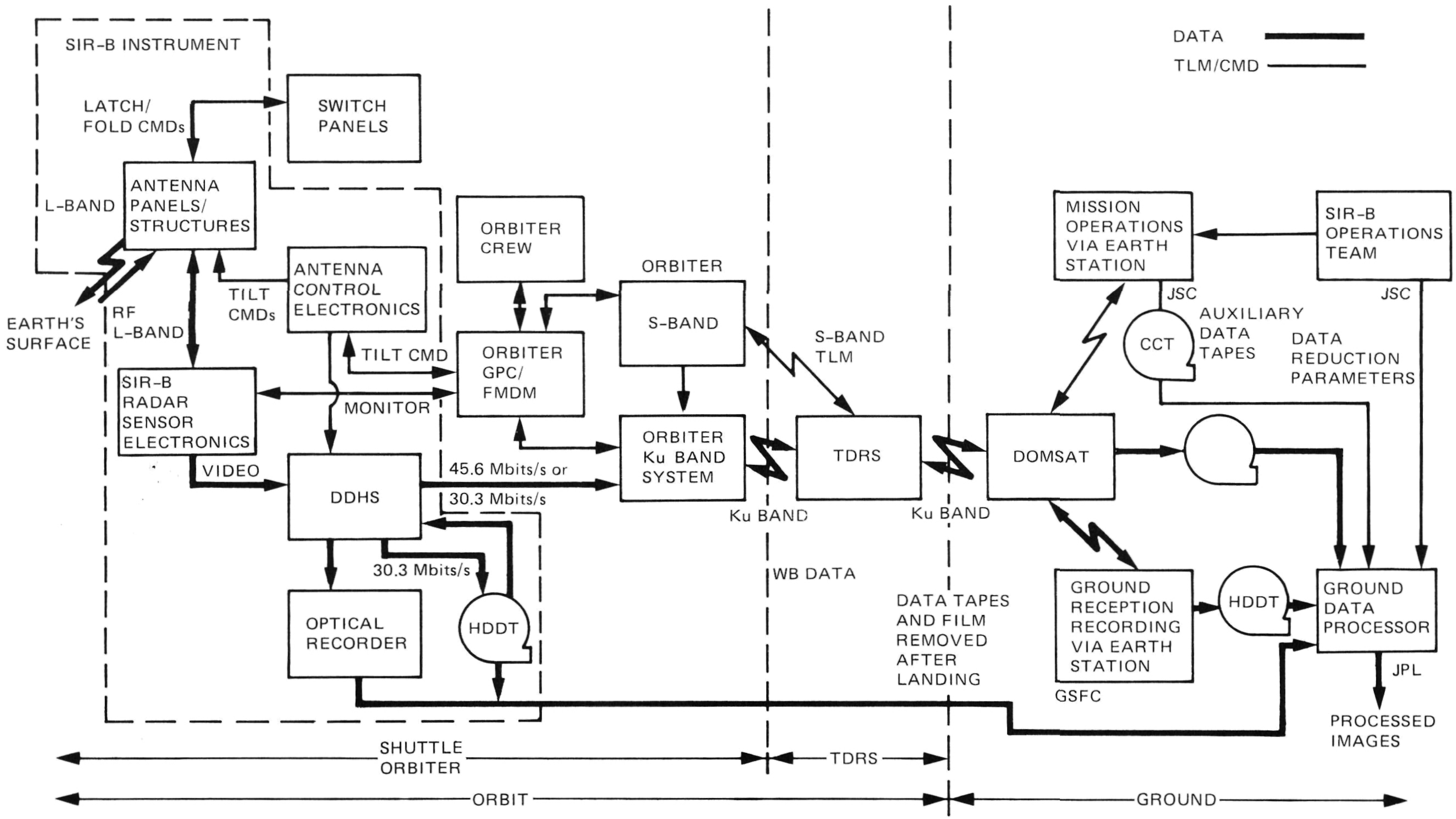
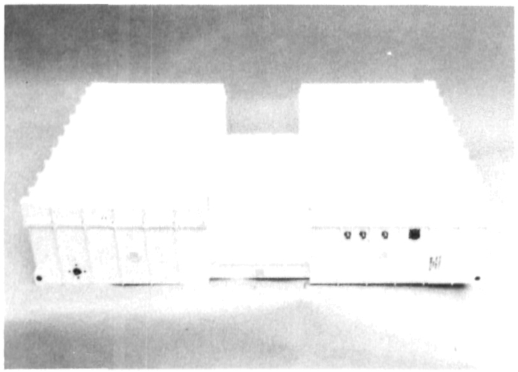
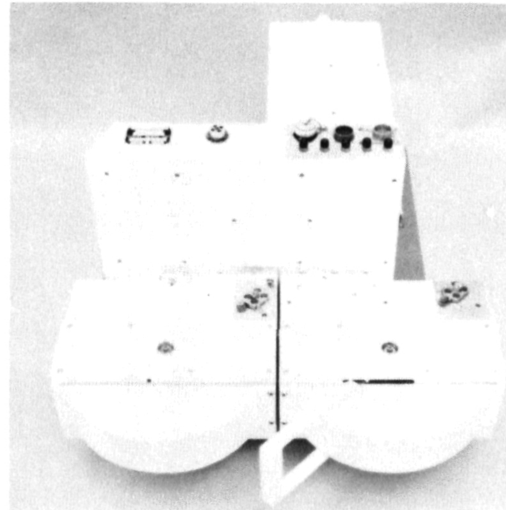


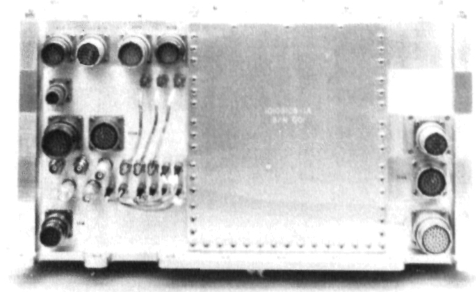
Figure 4-1. The SIR-B end-to-end system



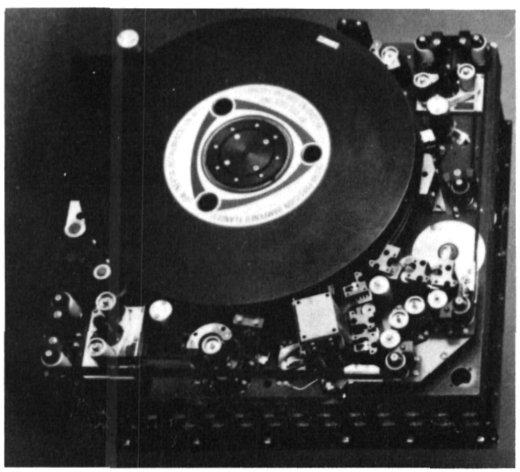
SENSOR ELECTRONICS



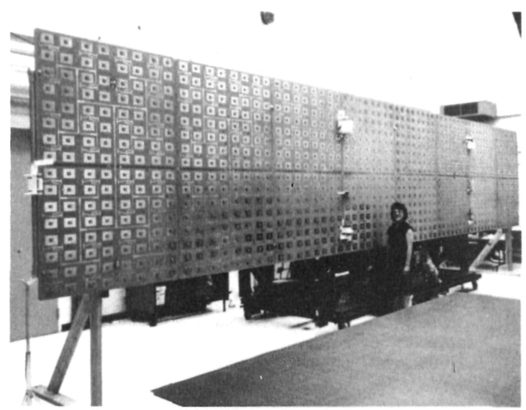
OPTICAL RECORDER

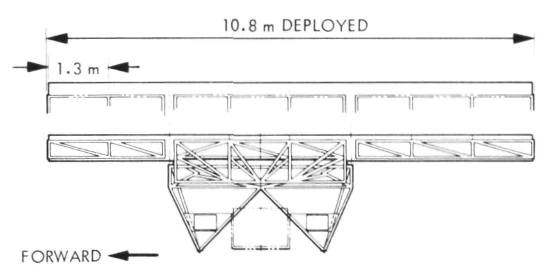


DIGITAL DATA
HANDLING SYSTEM



ONBOARD HIGH-DATA-RATE
RECORDER





ANTENNA

Figure 4-2. Flight hardware

Table 4-1. Hardware characteristics

Subsystem	Dimensions, m	Power, W	Weight, kg
Antenna	4.3 × 2.2 stowed 10.74 × 2.2 deployed	60	275
Digital-data handling subsystem	0.47 × 0.27 × 0.26	145	27
Sensor electronics	1.22 × 0.86 × 0.28	597	144
Optical recorder	1.07 × 0.74 × 0.41	138	71
High-data-rate recorder	0.48 × 0.48 × 0.21	116	37.7 (includes tape)
High-data-rate-recorder interface unit	0.25 × 0.18 × 0.11	20	4.5

in local vertical to Earth (i.e., the cargo bay faced Earth), the leaves were deployed and the antenna could be commanded to any angle between 15 and 60 deg in 1-deg increments. The angle of the antenna could be determined to within a few tenths of a degree by using the down-linked telemetry.

2. Digital-Data System

The main component of SIR-B's new digital-data system was the digital-data handling subsystem (DDHS), which digitized the offset video signal from the sensor electronics receiver. The sampled data were buffered and the range samples were formatted at a selectable number of bits per sample into a serial data stream. The DDHS consists of an analog-to-digital converter, buffers, and a data formatter (Figure 4-5).

By adding the DDHS, data could be sent to the ground receiving station at White Sands, New Mexico, via the Tracking and Data Relay Satellite (TDRS). Data were sent from the DDHS to the shuttle Ku-band antenna and transmitted via TDRS to the White Sands Ground Station. The data rate through the TDRS was 45 Mbits/s, limited by the Ku-band system on the shuttle (Figure 4-6).

Only one Tracking and Data Relay Satellite System (TDRSS) was in orbit at the time of the SIR-B mission, allowing direct access over only North and South America, Europe, and Africa, so a digital high-data-rate recorder (HDRR) was mounted in the aft flight deck of the shuttle. Once recorded, these data could later be transmitted through the TDRS or stored on tape onboard the shuttle. A total of seven tapes was carried for the flight.

The DDHS on the pallet in the payload bay and the HDRR inside the crew compartment were separated by over 30.5 m (100 ft). To interface with the HDRR, SIR-B was constrained to the use of already existing cables, which spanned the orbiter bay. Encoding the signal to be transmitted and decoding the received signal were accomplished via the newly designed HDRR interface unit (I/U) positioned next to the HDRR in the aft flight deck. The HDRR I/U also provided a compatible interface with the HDRR for both record and playback data and clock signals (Figure 4-7).

Because the data-rate capacity of the recorder was limited, the digital data had to be recorded at 30 Mbits/s. This resulted in a reduction by one third in the swath width of the imagery.

Once received at White Sands, the SIR-B data were sent to the Goddard Space Flight Center (GSFC) in Greenbelt, Maryland, using the DOMSAT link. There they were recorded on high-density digital tapes (HDDTs). Backup HDDTs were also made at the ground station in White Sands and the Mission Control Center (MCC) in Houston, Texas. During the mission, several of the HDDTs were flown to JPL from JSC for quick-look processing and engineering checks.

A digital-data formatter was also added to enhance the flexibility of the SIR-B System and improve the final image product. This device featured a selectable number of bits per sample ranging incrementally from 3 to 6, which made it possible to trade off dynamic range for swath width given the two fixed data rates of 45 Mbits/s via TDRS or 30 Mbits/s for the onboard recorder. This new digital system provided significantly more dynamic range than the 2.5 bits available to the SIR-A optical system (Figure 4-8).

Figure 4-9 illustrates the dependence of the swath width on the look angle for various system parameters. At low look angles, the swath was limited by the signal-to-noise ratio (SNR); at large look angles, it was limited by the data rate that could be accommodated by the data link. The SNR-limited swath was defined as that for which the mean backscatter was 8 dB above the noise. The data-rate-limited swath was determined by the number of bits per sample (bps) and the pulse repetition frequency (PRF), and was the maximum swath that could be transmitted through the 45-Mbit/s Ku-band data link of the orbiter.

3. Sensor Electronics

The radar sensor electronics inherited from SIR-A consisted of the L-band transmitter, the receiver, the logic and control electronics, and the power converter.

a. Transmitter. This unit generated a high-power (1-kW), linearly swept FM (down-chirp), coded, RF pulse centered at 1282 MHz with a duration of 30.4 μs. The signal was derived from a stable local oscillator (STALO).

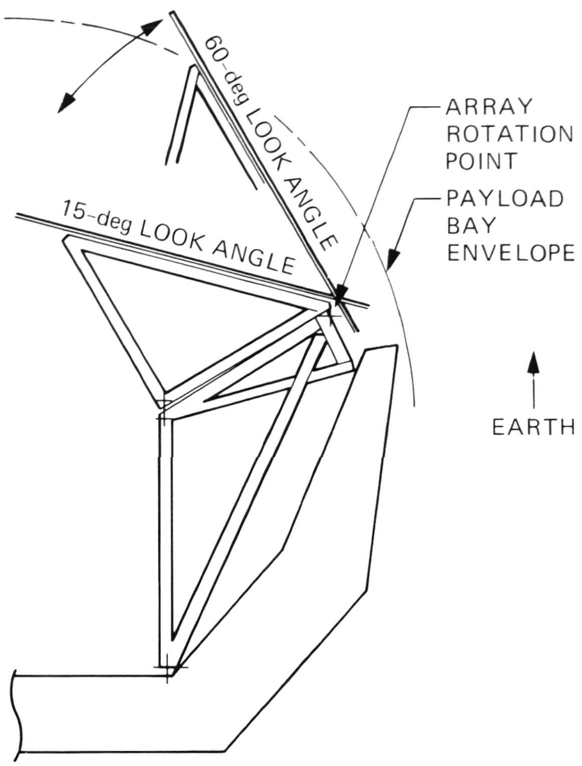


Figure 4-3. Mechanical rotation of the antenna

Upgrade of the transmitter included an increased bandwidth and a newly designed tone calibrator (Figure 4-10). The SIR-B range bandwidth was increased from 6 to 12 MHz, improving range resolution by a factor of 2. To achieve this improvement, a new surface acoustic wave (SAW) dispersive delay line (DDL) with 12-MHz dispersion was incorporated into the chirp generator. The retriggered chirp became disabled and was replaced with a continuous wave (CW) calibrator, which injected a tone at any of four power levels (-100 to -64 dBm) into the front end of the receiver.

b. Receiver. The receiver subsystem filtered, range-gated, amplified, and down-converted the return echo into two video signals. A variable-gain amplifier controlled the instrument's sensitivity, compensated for the antenna pattern, and maintained a relatively constant amplitude in the first output signal, which was sent to the optical recorder. The second video output signal was routed directly to the DDHS, where it was digitized and sent either directly to the ground or to the onboard HDRR.

The receiver within the sensor electronics was upgraded by augmenting the number of gain levels from 8 to 16 (Figure 4-11). A fourth gain control bit was added to allow selection of any one of the 16 gain states (56 to 101 dB). The lower eight gain states were implemented by switching in a 24-dB attenuator. This allowed reception of the expected higher return-signal strengths at steeper incident angles. The wider bandwidth of the return signal required retuning several filters in the heterodyned receiver.

c. Logic and control electronics. This unit controlled all operating modes for the radar, and included a sequencer made up of sets of radar parameters loaded prior to launch. For a given operating mode, one of the parameter sets could be accessed with a single ground command.

The logic and control (L&C) electronics unit was upgraded to control many more modes and augment the status monitoring capability of SIR-B. Eight pulse-repetition frequencies (PRFs) were added to the eight PRFs of *SIR-A* (Figure 4-12); the 16 PRFs ranged from 1248 to 1824 Hz. A synchronous-event transmitter and receiver, which produced a composite 30-MHz clock and a data window trigger for the DDHS, was also added.

d. Power converter. Power distribution was upgraded with in-line fuses to protect the new DDHS from current surges in the dc power (Figure 4-13). The auxiliary power converter was modified to provide ready access to the NiCd cells, which were the standby power source for the sequencer memory. These cells were located in a separate assembly for easy removal for recharging in the event of a launch delay (Figure 4-14).

4. Optical Recorder

The optical recorder (OR) itself was not upgraded, although a low-pass filter (LPF) was added in front of the OR video input to present a more compatible 6-MHz bandwidth signal (Figure 4-15).

5. Other Modifications

The thermal blankets were modified for easier access during pallet integration; along with modification of the sensor electronics internal cabling, the system cabling was redesigned and fabricated to allow the change in interfaces among the OR, DDHS, antenna, and sensor electronics (Figure 4-16).

B. Performance of SIR-B Hardware During the Mission

The SIR-B flight hardware, with the exception of the antenna subsystem, performed nominally during the STS 41-G mission. Although the antenna subsystem experienced several anomalies, almost 7 h of digital SAR data and 8 h of optical SAR data were collected during the mission. The antenna problems have been corrected for future SIR flights.

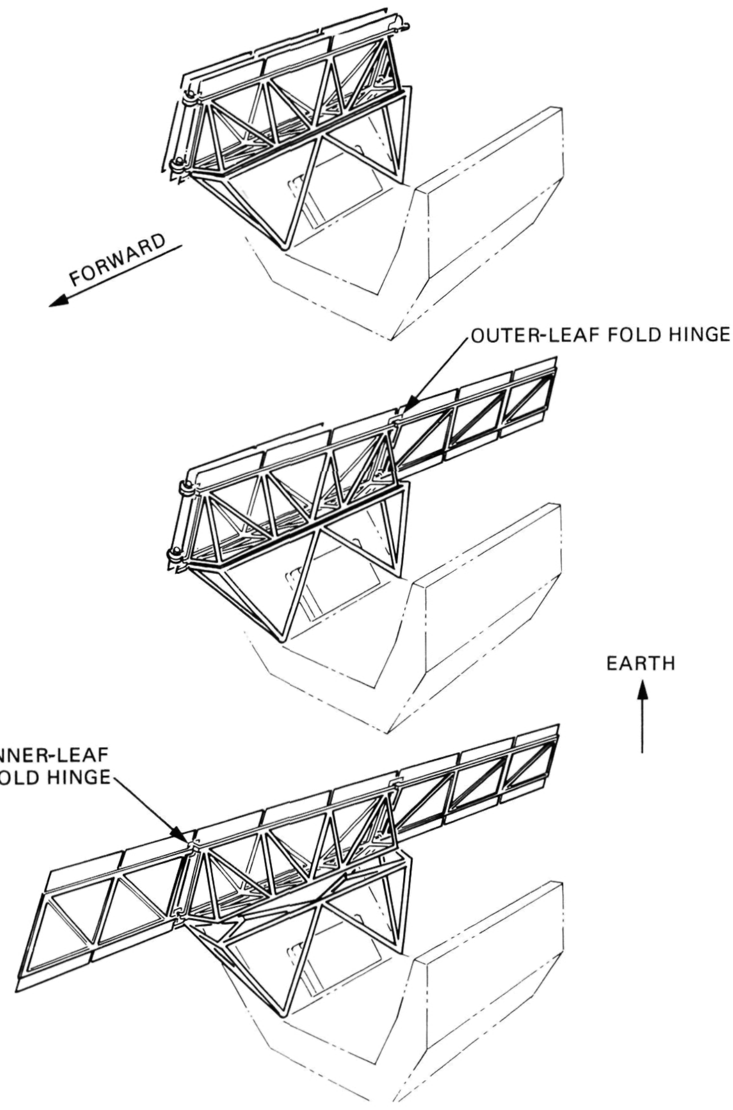


Figure 4-4. Antenna deployment

1. Antenna

The antenna was successfully commanded to various tilt angles over 160 times. The tilt-angle readout via the flex multiplexer/demultiplexer (FMDM) generally agreed to within 1 deg of the commanded angle.

Anomalies occurred during the first deployment and stowage of the antenna, but the second and third deployments and stowages were successful.

Anomalies experienced by the antenna subsystem included a reduction of RF output power, oscillation of the structure upon initial deployment, initial failure to stow the outer leaf, and failure to trip the tilt-top microswitch.

a. **Reduced RF power output**. The reduction in RF output power was caused by RF voltage breakdown in the antenna corporate feed system. As a result, approximately one-seventh of the predicted RF power was radiated by the antenna panels, and as much as six-sevenths of the power was absorbed in the antenna feed cable. Receiver gain was increased by either 9 or 12 dB, depending on the magnitude of the premission value, to compensate for this reduction in radiated power. Postflight inspection revealed the presence of a foreign metallic particle imbedded in the Teflon dielectric of the connector of the main antenna cable at the sensor electronics interface (Figure 4-17).

Although the RF power breakdown drastically reduced antenna gain, directivity was not altered, as evident from the

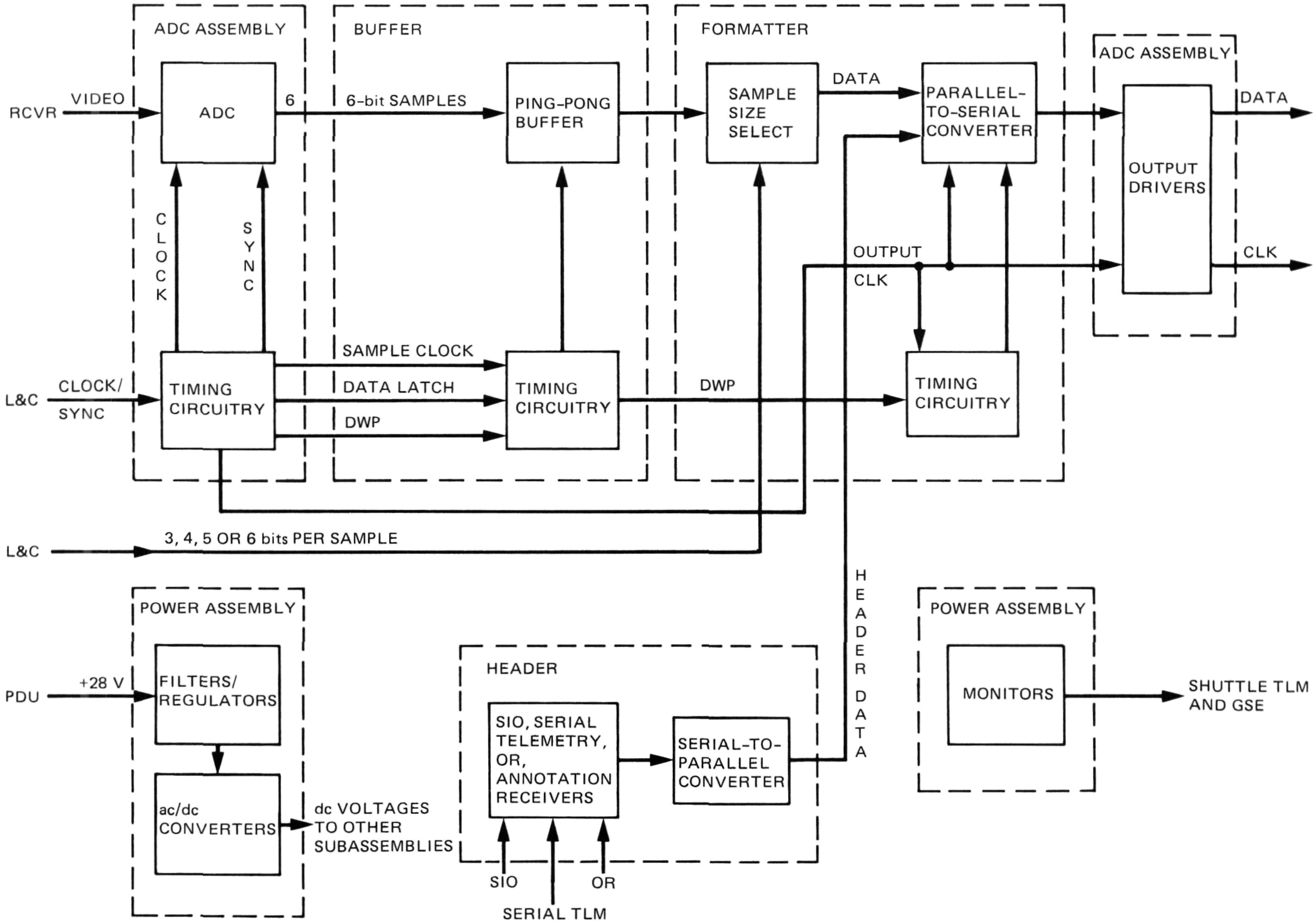


Figure 4-5. Digital-data handling subsystem

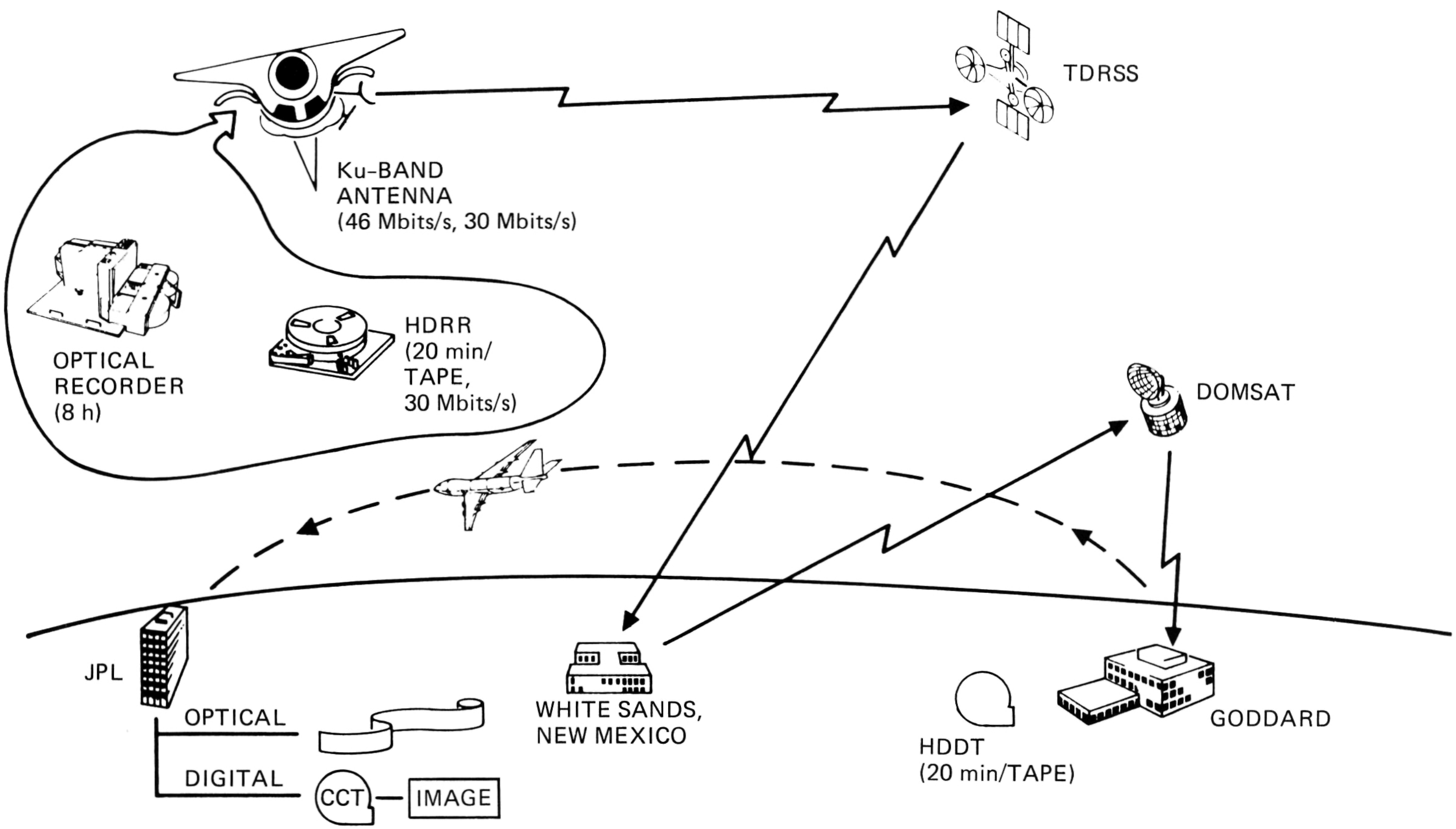


Figure 4-6. Data flow

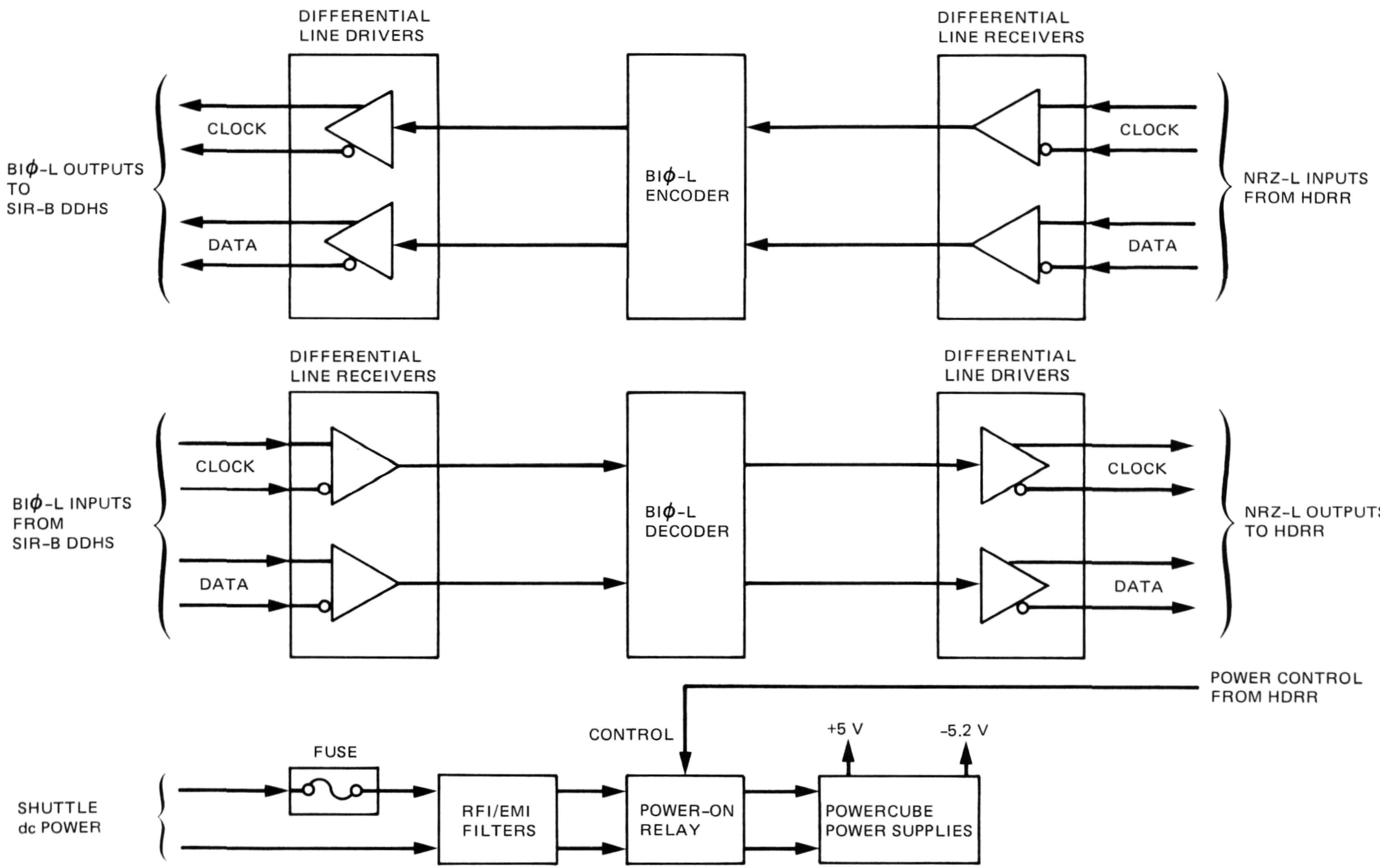


Figure 4-7. HDRR interface unit

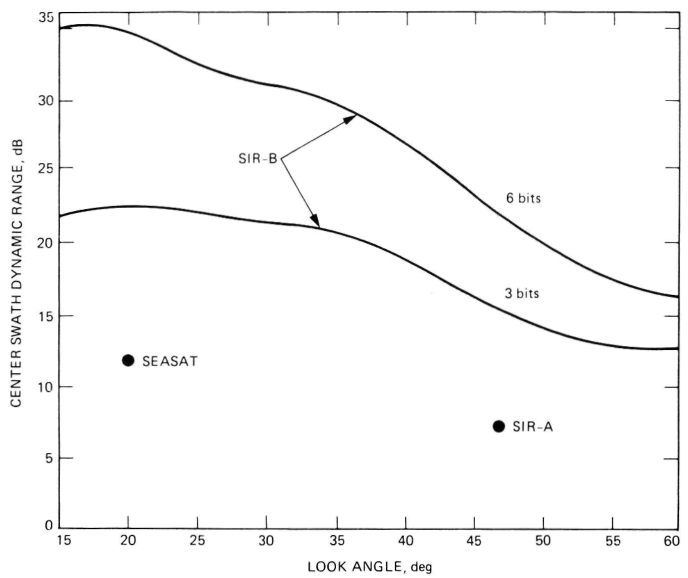


Figure 4-8. System dynamic range

comparison in Figure 4-18: part (a) of this figure is preflight calibration data of the azimuth pattern, and part (b) is recorded azimuth pattern data collected as the shuttle passed over several ground receivers during the RF power breakdown.

The entire corporate feed system has been inspected and analyzed for RF power breakdown; components susceptible to this breakdown have been redesigned. The redesigned feed system has undergone extensive RF power/thermal vacuum tests prior to reinstallation on the antenna structure.

b. Oscillations. At initial deployment of the antenna outer leaf, an unexpected mechanical oscillation of the antenna structure occurred. Postflight investigations revealed that during the Kennedy Space Center (KSC) integration closeout, the tilt drive mechanism was inadvertently preloaded in the deployment direction. This preloading caused the antenna to move away from the hard stops as the tilt latch was released; in turn, the mechanical system oscillated in reaction to deployment of the antenna leaves. To preclude these oscillations on future flights, integration procedures will be revised: the drives will be preloaded in the stowage direction and a crew procedure alert will verify a tilt stowage position of 15 deg prior to deployment.

c. The failure to stow. During the initial stowing of the antenna outer leaf, the Remote Manipulator System (RMS) arm (Figure 4-19) was needed to assist in this operation. Postflight inspection showed the outer- and inner-leaf cups and cones were misaligned (Figure 4-20) and the outer-leaf stowage microswitch roller had been contaminated, which greatly increased friction. As a result, the cup and cone combinations have been redesigned for greater adjustment capability, the outer-leaf microswitch has been removed, and the latch claw has been reworked to increase its capture range.

d. Failure of the tilt-top microswitch. The tilt-top interlock was designed to prevent the tilt motor from driving continuously in the up direction. During the mission, this microswitch was erroneously thought to have failed, because the tilt-top talk back never indicated positively; however, postflight inspection revealed that thermal distortion had caused misalignment of the striker bar, which, therefore, never contacted the microswitch. This tilt-top interlock has been removed and reliance placed on the clutch to prevent loading of the motor. The redundant tilt-angle readout will indicate a continuously running motor during either automatic or manual tilt.

2. Digital-Data Handling Subsystem

The DDHS performed nominally during the mission. Only the first data take was routed directly to the shuttle Ku-band data link at 45 Mbits/s before failure of the Ku-band antenna drive forced rerouting of all data to the onboard HDRR at 30 Mbits/s. The digitally recorded data were either saved on tape or dumped to the ground via TDRS, with the shuttle in a TDRS tracking attitude. The shuttle state vector/attitude data from the shuttle's serial input/output (SIO) interface was imbedded in the DDHS header data, and these data were used for preprocessing the digital imagery.

During thermal vacuum testing at JPL, the DDHS baseplate temperature and operate-current monitor circuitry failed and thus were never calibrated prior to flight. The monitors were reworked prior to shipment to KSC, but during the flight, the onboard lower fault detection and enunciation (FDA) limit for the DDHS baseplate temperature was eliminated since the temperature read constantly lower than even the input coolant loop temperature. The DDHS operate current also read low at 3.5 A throughout the mission, probably due to lack of calibration.

There were other minor anomalies. The antenna tilt-angle readout to the DDHS fluctuated as much as one degree, and the antenna tilt most significant bit (MSB) sometimes read as "F" for several frames instead of "7." Digital processing personnel reported that the frame counter data in the DDHS header was not reset to zero upon application of DDHS operate power from the standby mode. The PRF readout in the header sometimes went to 1540 Hz for a couple of consecutive frames due to a possible bit latchup. This PRF data is subcommutated in the engineering serial telemetry stream from the sensor L&C.

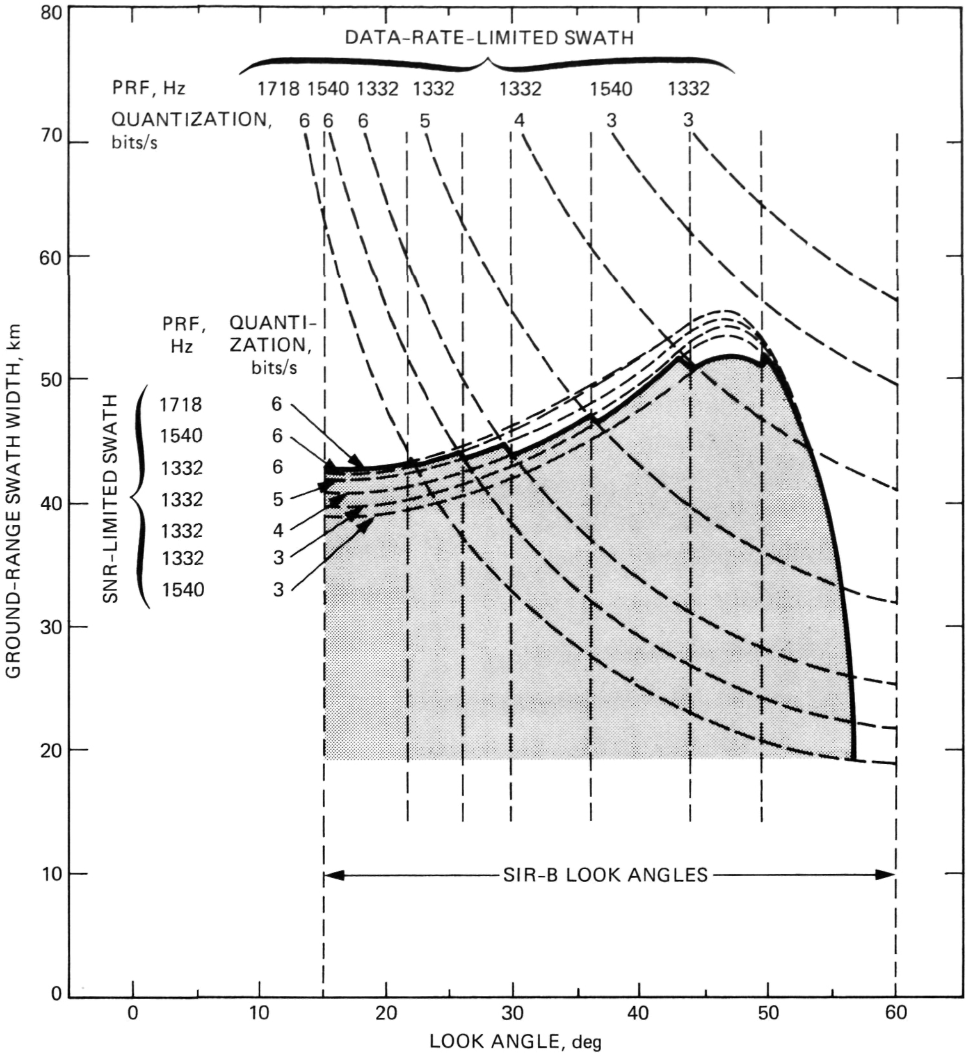


Figure 4-9. The dependence of swath width on look angle

3. High-Data-Rate Recorder

The HDRR also performed nominally during the mission. The Ku-band antenna anomaly caused all DDHS data to be routed to the HDRR. During launch, one tape was mounted on the recorder at the 50% mark, and the six additional tapes were stored for later use.

At the end of the mission, the data on the seven tapes were transcribed to compatible tapes on the Thorn-EMI ground recorder. This transcription at KSC was delayed because of incompatibility among the KSC unit tester, the flight Odetics recorder, and the Thorn-EMI recorder. After transcription, the seven Thorn-EMI tapes were shipped to JPL in October 1984, and analysis of the tapes showed a bit-error rate of approximately 1×10^{-6}.

During the first day in flight, the crew reported the HDRR to be noisy when in either fast-forward or fast-rewind mode. The crew then improvised acoustic insulation of the recorder, which had to be temporarily removed during the tape change-outs. The HDRR I/U performed successfully throughout the mission.

4. Sensor Electronics

a. Transmitter. The transmitter performed nominally during the mission. The ferrite circulator, designed to protect the transmitter amplifiers, proved its value as high RF power from the breakdown in the antenna cable interface reflected back into the sensor electronics throughout the entire mission: as much as six-sevenths of the transmitted power was reflected.

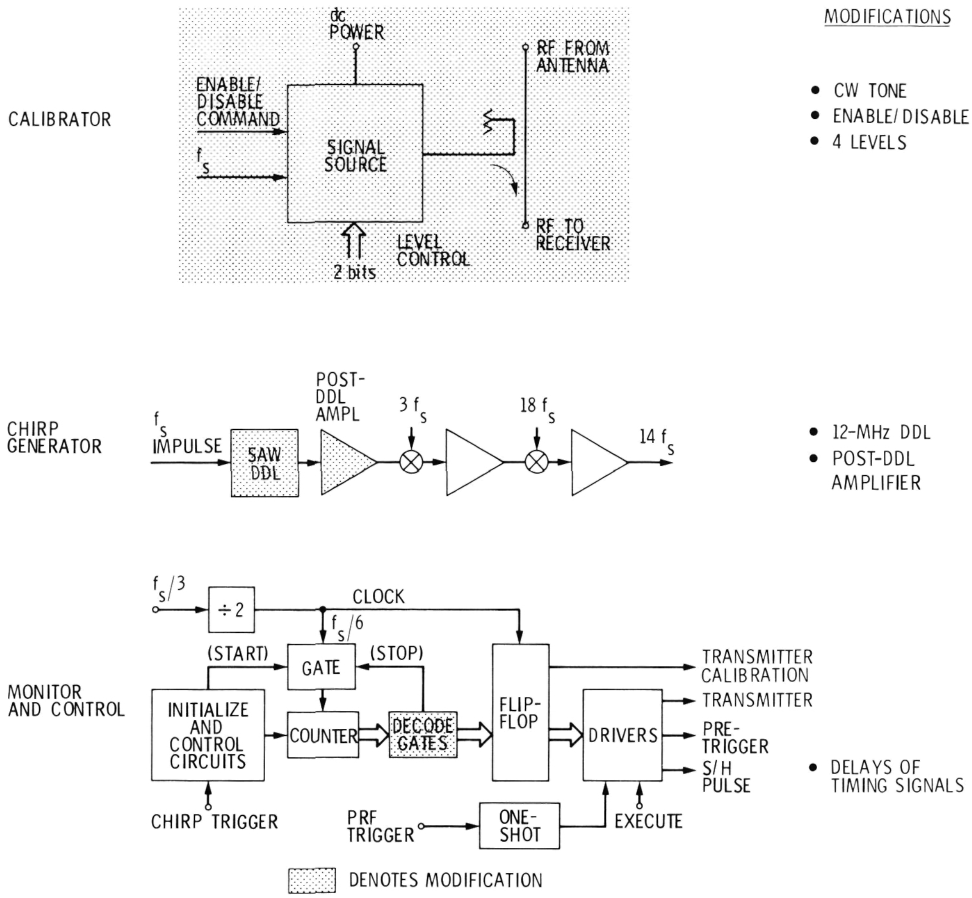


Figure 4-10. Upgrade of the SIR-A transmitter

There were other consequences of the RF power breakdown as well. The calibrator performed nominally, although the power levels were commanded to be 12 dB lower than originally planned, to prevent saturation of the receiver. As stated previously, gain was increased by either 9 or 12 dB, depending on the magnitude of the premission value, to compensate for the reduced RF output power of the antenna. The shape of the transmitted chirp was altered significantly; Figure 4-21(a) shows the preflight spectral shape of the transmitted chirp and Figure 4-21(b) shows the spectral shape of the raw data taken over the Indian Ocean on the first engineering data take. Another result of the RF output power reduction was the anomalous readings of the transmitter forward and reverse power monitors: both monitors read abnormally high because the RF power breakdown caused reflection of high RF power back to the monitors.

b. Receiver. The receiver performance was also nominal throughout the mission. The receiver protection circuitry worked well despite the reflection of high RF power from the antenna terminals. Return signals from the antenna were routed through a ferrite circulator to the receiver input, which contained a high-power, PIN diode switch that disconnected the receiver input from the circulator during the transmit event and connected the circulator to a high-power load, thus preventing accidental damage to the sensitive circuits of the first stage of the receiver low-noise amplifier. One indication of the increase in reflected power to the high-power load was the abnormally high readings of the radar baseplate temperature transducer located on the case of the high-power load. Nominally, the load would handle less than 30 W of peak reflected RF power; however, the RF breakdown caused as much as 20 to 30 times this amount, which resulted in heating of the unit. After discovery of the reduction in RF output power, the receiver gains were commanded typically 9 dB higher; over 80% of the data takes used receiver gain levels of 92 dB or higher. This resulted in reception of interference from ground and airborne radar systems, which contaminated the SIR-B signal data. The sensitivity time control (STC), which coarsely compensated for the range antenna pattern, was used during only 8% of the optically recorded data takes, unlike the SIR-A data takes that used it constantly.

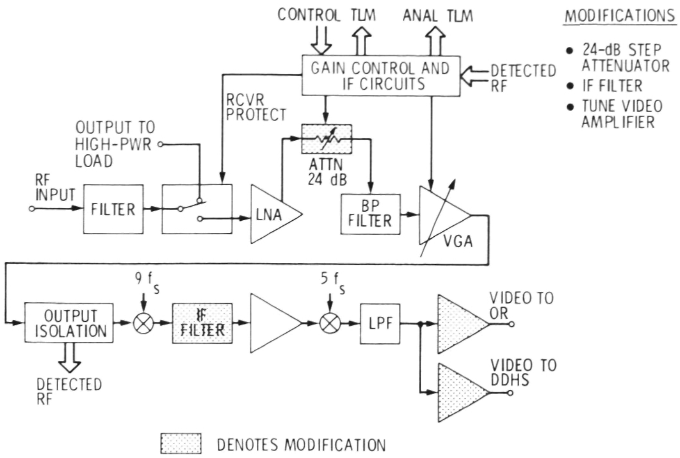


Figure 4-11. Upgrade of the SIR-A receiver

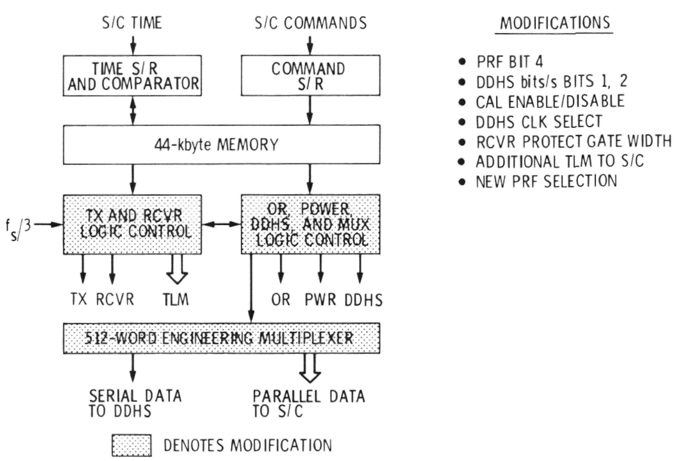


Figure 4-12. Upgrade of the SIR-A logic and control

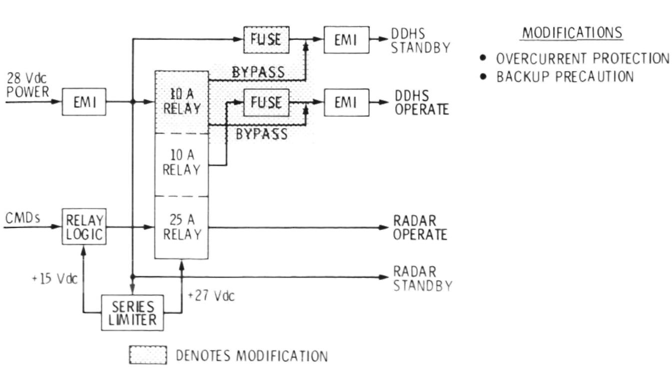


Figure 4-13. Upgrade of SIR-A power distribution

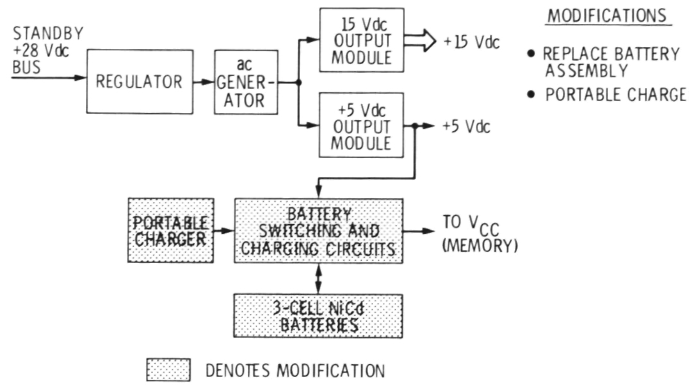


Figure 4-14. Upgrade of the SIR-A memory battery

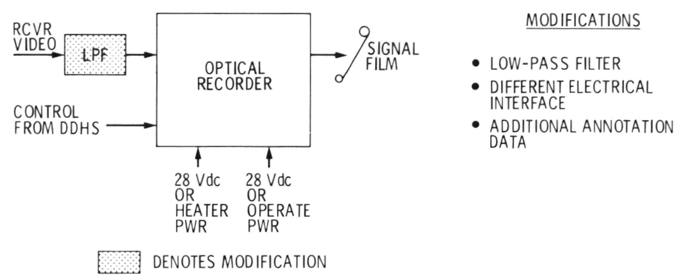


Figure 4-15. Upgrade of the SIR-A recorder

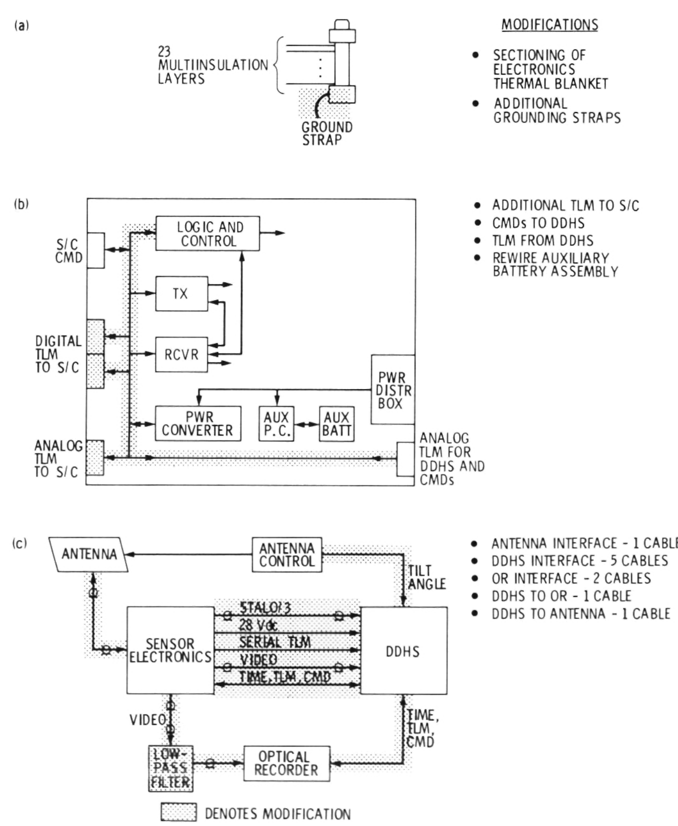


Figure 4-16. Additional upgrades: (a) thermal blankets; (b) sensor wiring harness; (c) system cabling

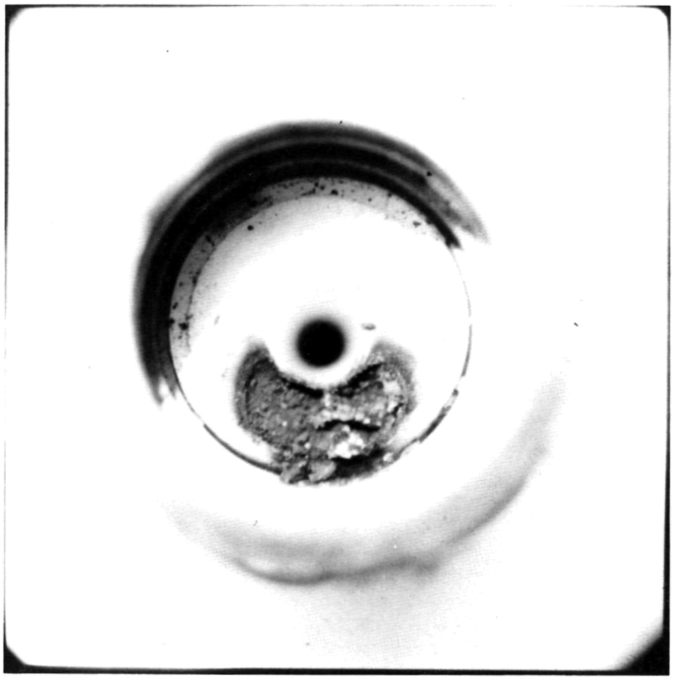


Figure 4-17. Cause of the RF voltage breakdown in the antenna feed cable

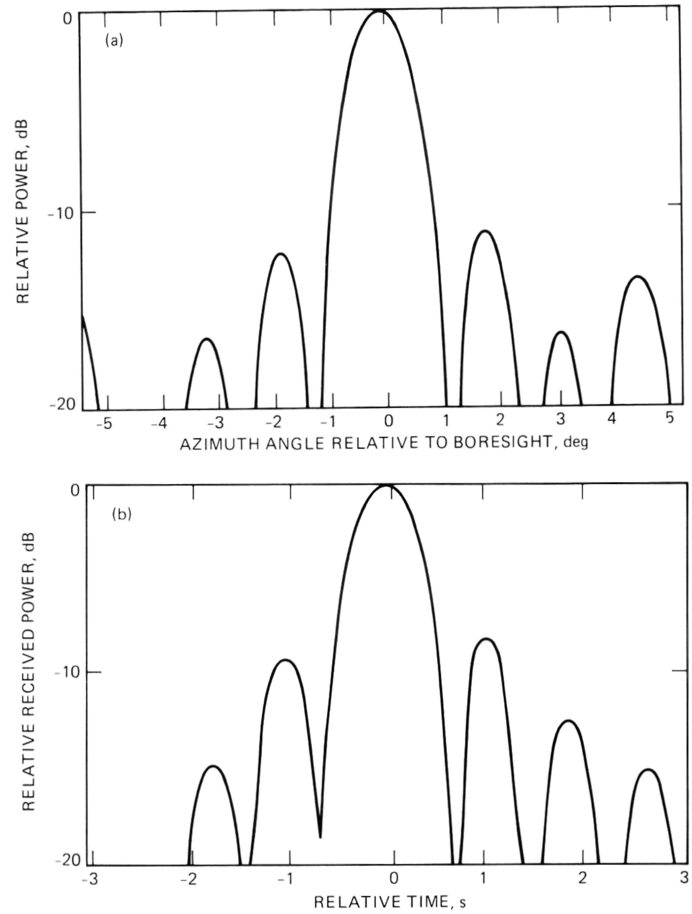


Figure 4-18. Antenna directivity before and during the RF power breakdown: (a) preflight azimuth antenna pattern; (b) ground recording of antenna pattern during data take 82.2

c. Logic and control. With the possible exception of the OR time-code circuitry, the L&C performed nominally. The L&C received GMT from the pallet timing buffer, decoded the GMT, and sent a time code to the OR to be recorded on one of the five data-annotation channels along the edge of the OR signal film. Postflight analysis of the signal film revealed anomalous time-code information.

Of the 1024 available sequencer-memory locations, 96 were reserved for engineering test sequences used during integration tests, and the remaining 928 were used for flight sequences. Postflight tests at KSC indicated that the memory was intact. During day 4 of flight operations, two SIR-B sequences were inadvertently commanded at the same time; this triggered a transmitter lock-out condition. The L&C circuitry used this built-in protection to prevent activation of the operate bus and transmitter in the incorrect sequence; thus, one more protective measure for SIR-B was successful.

d. Power converter and distribution. The SIR-B power converter and power distribution experienced no problems during the flight. During operations, dc current spikes that correlated with the SIR-B transmitter turn-on times were reported. Turn-on transients were expected; the measured dc bus transients during electromagnetic interference (EMI) testing at JPL showed them to be well within specifications.

5. Optical Recorder

The prototype optical recorder from the Apollo 17 Lunar Sounder Program was modified for SIR-A and reflown on SIR-B. Over 17 years old, the OR survived the severe launch and landing vibration environment without any damage. During preflight integration tests at KSC, the "OR Film Running" monitor failed. A decision was made not to disturb the integration schedule, but fly the OR as it was and use updating of the "OR Film Remaining" monitor as an indication of proper OR operation. The monitor will be reworked prior to a reflight. During the mission, all 1097 m (3600 ft) of film were used, although the reduced RF output power severely affected the quality of optical data. The small dynamic range of the OR required high receiver gains even with full RF output power. When the RF output power was drastically reduced, many of the echo returns dropped below the OR dynamic range – far below the film noise. There were over 55 OR data takes, many of which were taken when the TDRS data link was unavailable and the full HDRR tape could not be changed or dumped.

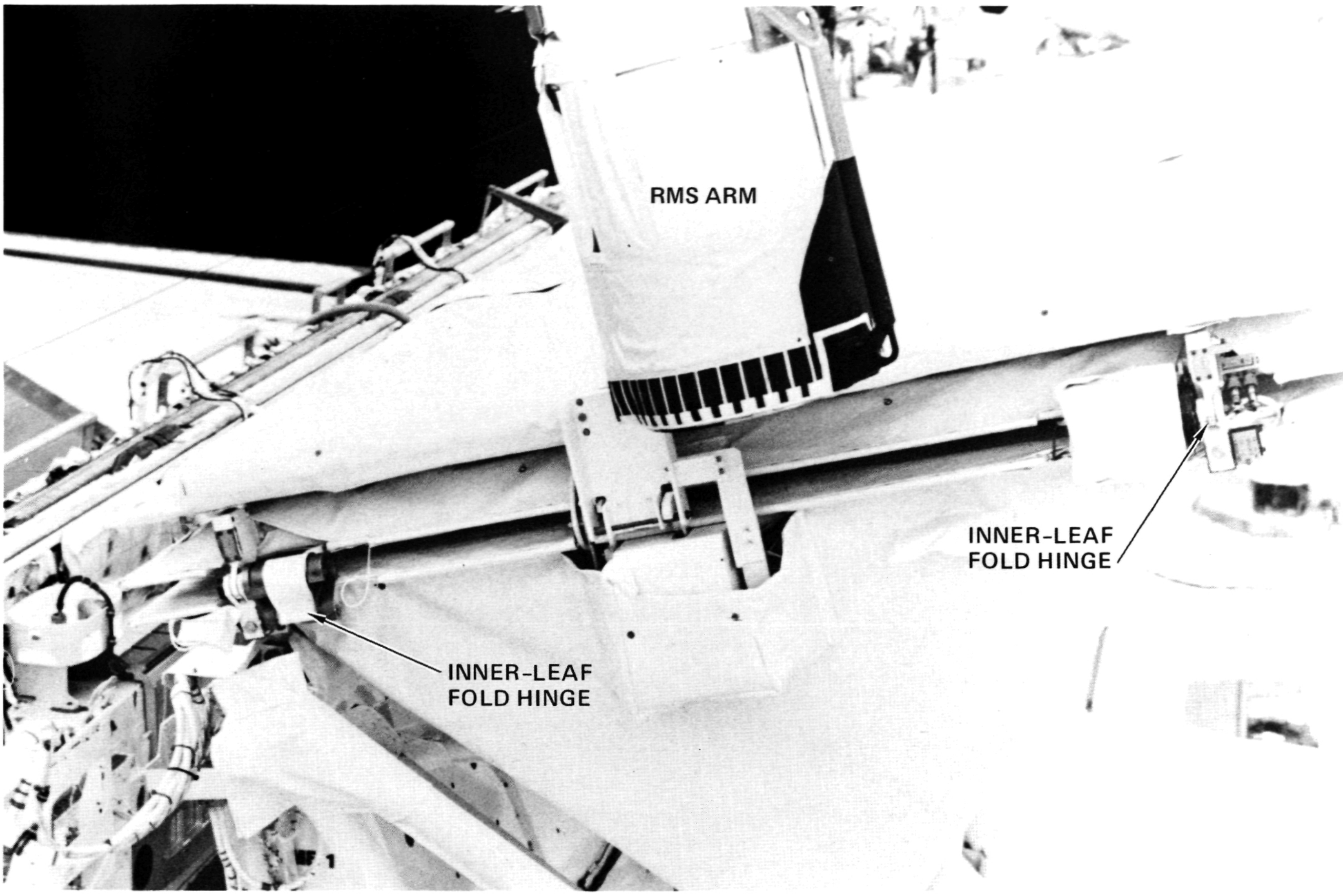


Figure 4-19. RMS stowing of the antenna outer leaf

C. Performance of the Support and Shuttle Systems During the Mission

SIR-B depended on a number of systems including the Ku-band antenna; the TDRS; the orbiter power supply; command systems; status monitors; shuttle cooling systems; timing, attitude, and state vectors; and ground recorders. The following sections summarize the performance of these systems.

1. Ku-Band Antenna

During its unwrap after the first data take, the Ku-band antenna oscillated uncontrollably, turning from one extreme limit to the other. The crew removed power to the antenna drive, stabilized the antenna in a fixed position, and maneuvered the whole shuttle to articulate the Ku-band antenna toward the TDRS. During the EVA on day 7, the crew checked for obstructions that might have prevented folding the SIR-B antenna (Figure 4-22) and pinned the Ku-band antenna into the stow position to allow data acquisition even after the EVA.

2. TDRS

On flight day 4, ground communication with the TDRS was lost for 12 h and 42 min because of an operator error at White Sands.

3. Power

The dc power supplied by the orbiter varied from 29.6 to 30.6 V at the sensor electronics. These voltages were well within the designed tolerance of 24 to 32 V. Although the power supplied directly to the optical recorder was not monitored, the fact that all of the film was recorded indicated that no OR power problems existed. Similarly, the SIR-B antenna did not experience any difficulties from the ac and dc power routed directly to it. As mentioned previously, dc spikes on the orbiter power buses were reported early in the mission.

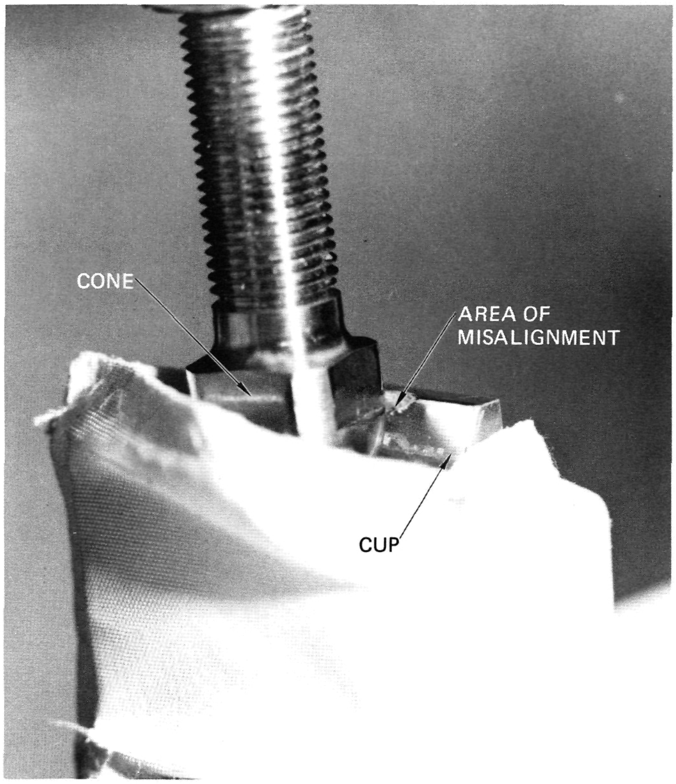


Figure 4-20. Cup and cone misalignment

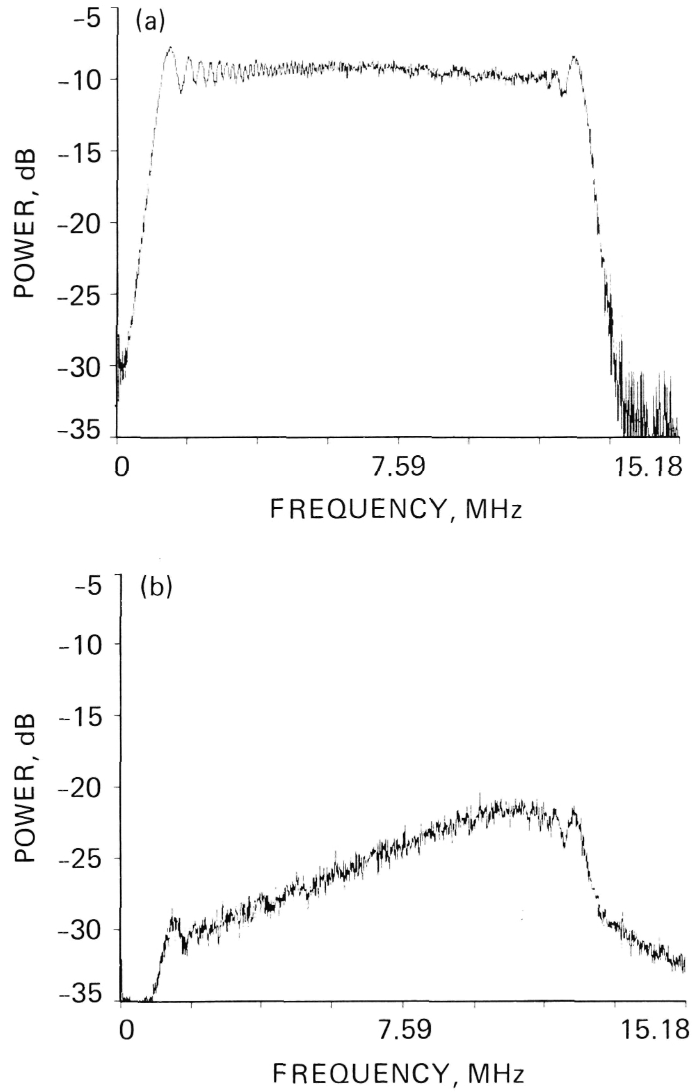


Figure 4-21. Transmitter chirp spectra: (a) preflight; (b) flight day 1, data take 8.4

These spikes coincided with the SIR-B transmitter turn-on times and were expected.

4. Command

Four methods of command were available for the SIR-B experiment. The primary mode was real-time commands (RTCs) sent to configure the radar for each data take; these commands could be initiated with either another RTC or a stored program command (SPC).

Commands could also be sent through the SIR-B preprogrammed internal sequencer. A ground command turned the sequencer on and gave instructions to locate that point in the sequencer memory where execution was to begin. The sequencer continued to send out commands until a sequencer-off command from the ground signaled the end of a parameter set.

A new method of command—the Payload Control Sequencer (PCS)—was used for the first time on this flight. PCS is basically a set of predefined sequences that can be called up at any time, given a start time, and stored for future execution. Once the sequence timed out (began executing), the PCS issued one parallel 16-bit command word each second until a stop command was sent. Up to ten sequences could be enabled (waiting to time out) at any time, but only one sequence sent commands to the electronics at any given time.

Finally, the crew had the capability to command the experiment from on board using any of these methods.

All four methods of commanding were used during the mission and performed nominally. The only command anomalies experienced were operator related, such as mislabeling a panel buffer, activating two PCS sequences simultaneously, and inadvertantly commanding two internal SIR-B sequences on at the same time.

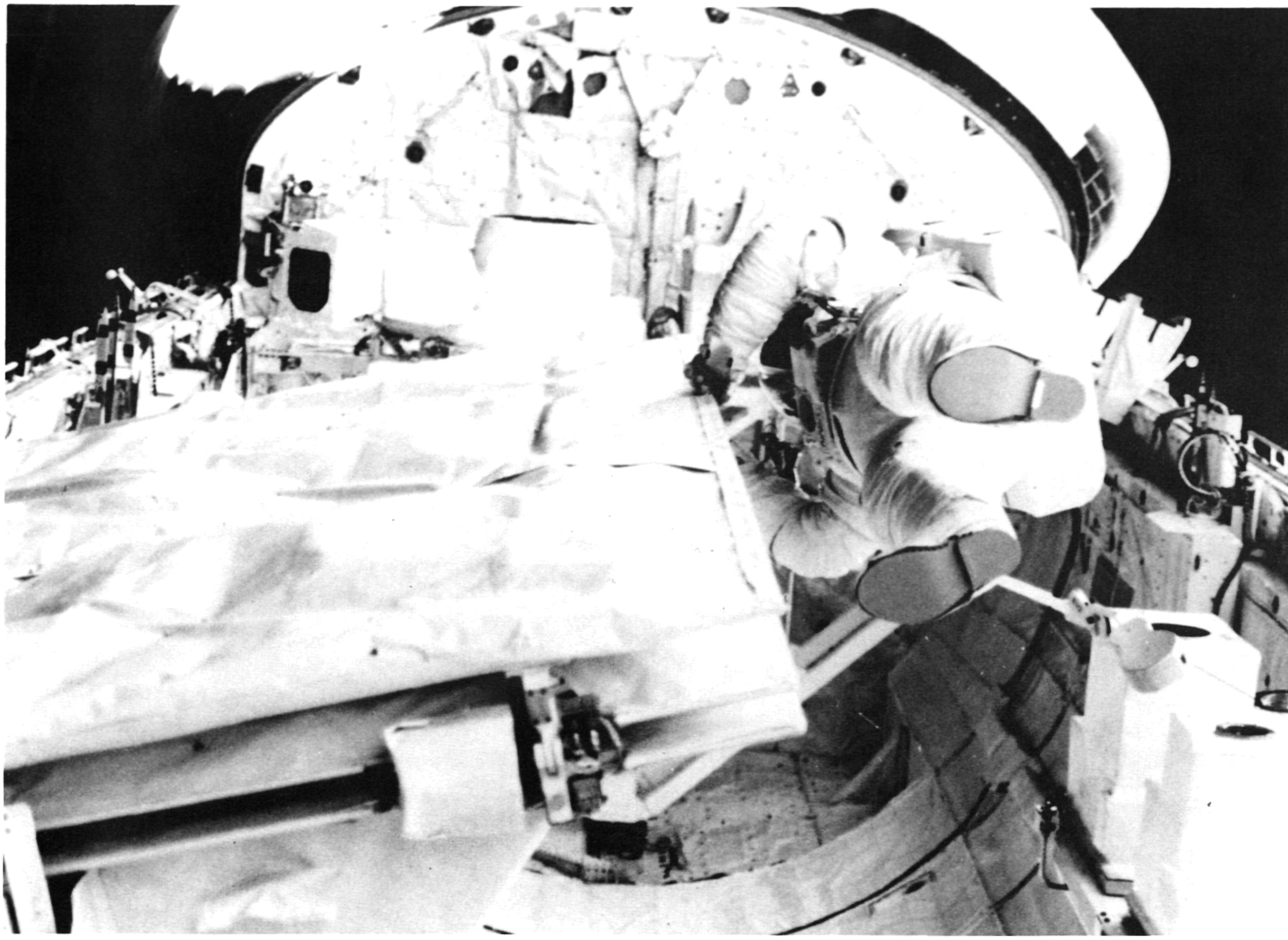


Figure 4-22. Astronauts inspecting the SIR-B antenna

5. Status Monitors

Downlinks from the orbiter allowed the JPL team to monitor the health of the instrument and the efficacy of the data takes. The analog and discrete status monitors functioned through the FMDM and the shuttle general-purpose computer (GPC) and performed nominally. Several observed out-of-limit conditions were attributed to the scarcity of preflight calibration data. On two separate occasions, limits were reached that sounded onboard alerts. The first awoke the crew on flight day 4: it was an over-current alarm caused by an inadvertent command that activated two SIR-B sequences simultaneously. The second alert was caused by heavy use of the optical recorder during crew sleep; this resulted in a rise of recorder temperature above the levels expected with nominal operations. Neither alert signaled a significant problem, but the over-current alarm did result in the omission of several data takes.

6. Cooling

The active cooling system used by the sensor electronics and the DDHS performed nominally. Although problems with the flash evaporator system early in the mission did cause some problems for other payloads, only slightly higher temperatures were observed at the radar. The temperatures for the sensor electronics were 12°C ± 11°C; the optical recorder, 25°C ± 19°C; and the DDHS, 6°C ± 9°C. Passive cooling for the optical recorder was inadequate during the extremely high number of operational duty cycles while the HDRR was not available and the TDRS data link was lost. For the antenna, passive cooling was adequate.

7. Timing

The GMT timing signals from the orbiter to the sensor electronics and DDHS were satisfactory. The GMT was included in the DDHS header data and displayed on the GSE in real time at JSC. During one integration test at KSC, the timing signal from the orbiter was not received at the pallet, and the loss was not discovered until the test was in progress. In subsequent tests, the DDHS was activated early to verify proper functioning of the timing signal.

8. Attitude and State Vectors

The shuttle attitude and state vectors obtained periodically from the JSC Flight Dynamics Officer were crucial inputs for the JPL mission planners in determining the orbiter's exact location at any given time. These data were transferred over the SIO line, and successfully received and included in the DDHS header. During integration testing with the orbiter at KSC, there was no provision for realistic state vector and attitude data and, of course, no opportunity to interpret this data prior to flight. Problems were encountered in the interpretation of SIO attitude data after the mission, but the Postflight Attitude and Trajectory History (PATH) tape containing postmission refined ephemeris data has been interpreted, and this tape has been used to adjust the azimuth window during data processing at JPL. While processing the data, attitude pointing errors of greater than 2 deg of squint angle and of 1 to 2 deg of roll angle have been detected.

9. Ground Recorders

The Thorn-EMI recorders at GSFC performed well during the mission. Selected tapes were sent to JPL during the mission for assessing the quality of the end data product. Images were processed during the shuttle flight, and the first SIR-B image photo products arrived at JSC on flight day 3. JPL GSE was used at both JSC and GSFC to monitor the quality of the SIR-B data in the read-while-write mode. As the data were recorded on tape, the GSE received the same data on the playback line, regenerated the video signal, and displayed radar parameters stripped from the header data. In addition, the quality of the data through the TDRSS link was monitored by calculating the header bit-error rate.

10. Backup Tape Recording

During the mission, backup high-density data tapes were recorded at White Sands on recorders that were incompatible with the Thorn-EMI ground recorders at GSFC. Therefore, all data from White Sands were sent through Domsat to GSFC immediately after they were received (Figure 4-6).

These archival data were recorded on Thorn-EMI recorders within the Spacelab Data Processing Facility (SLDPF) at GSFC. Backup tapes were also recorded at JSC. After the flight, JPL received copies of the 26 HDDTs from GSFC; analysis showed the bit-error rate to be between 10^{-5} and 10^{-4} for the early mission tapes, and between 10^{-6} and 10^{-5} for the rest of the mission.

V. Calibration

A. Radiometric Calibration

Absolute calibration requires a known relationship between the radar scattering coefficient and the image intensity. An ideal system would possess the following linear relationship:

$$I = K\sigma^0$$

where I is the image intensity, K is a known constant of proportionality, and σ^0 is the radar scattering coefficient. If the constant K is unknown but stable to a few tenths of a dB over a period of days or months, the system is calibrated on a relative scale so that changes in the backscattering coefficient of the scene produce a proportional change in image intensity. For land areas, no existing models require an absolute calibration, but all of them require a good relative calibration, i.e., to a few tenths of a dB. Since SAR images are acquired by a coherent system, coherent noise or speckle may degrade the calibration of an individual pixel; however, by incoherent or multilook averaging, this speckle can be reduced. SAR calibration can be further degraded by inaccuracies in antenna pointing, uncertainty in such system parameters as transmitted power, antenna pattern, and receiver gain, and by such environmental factors as ionospheric scintillation and Faraday rotation.

In this discussion, the term "radiometric calibration" refers only to uncertainties in the system parameters (e.g., transmitted power and antenna pattern). It does not include errors due to speckle or system saturation effects such as those produced by bright targets.

An analysis has been made of the relative radiometric calibration expected of the SIR-B System. This includes an assessment of errors due to uncertainties in transmitter power, antenna gain, shuttle roll, slant-range position, and received power. At a 40-deg look angle, this analysis predicts a worst-case calibration of ±2.2 dB at the swath edges and ±0.8 dB at the swath center; the predicted best-possible relative calibration is ±0.6 dB.

The effects of speckle noise on the radiometric calibration have not been included in the above analysis. Speckle noise is a random process that can be modeled as a Rayleigh distribution. For the four-look SIR-B image, the speckle alone will produce a backscatter variance of 3 dB. The only effective way to reduce this variance is with spatial integration. The variance will decrease proportionally with the square root of the number of spatially integrated resolution cells. To meet a ±0.5-dB relative calibration requirement, a uniform region of about 5 to 10 resolution cells would be integrated. This would give good relative calibration, although it would degrade the resolution to 200 to 400 m.

B. Geometric Calibration

Geometric calibration refers to the absolute location accuracy of an image pixel and the geometric fidelity of the final image product. The sources of error in azimuth location include the platform position (along-track), data timing, and platform velocity. In range, errors result from uncertainties in platform position (cross-track), sensor hardware performance (timing and STALO frequency), ionospheric group delay, and platform velocity (cross-track). Table 5-1 summarizes the expected geometric calibration for SIR-B. The minimum and maximum columns are derived from the refined postflight ephemeris data and the real-time data, respectively.

The largest error occurs at near-nadir look angles and is primarily due to uncertainty in the radial components of position and velocity. The overall error in absolute location using the high-precision postflight ephemeris is 220 m at 15 deg and 114 m at 60 deg. This ephemeris may not be available for all orbits and will not meet the stated accuracies if attitude maneuvers were conducted on the orbits before or after the desired time. In addition, these accuracies are relative to an assumed geoid model. Any deviation from the assumed geoid will result in an additional cross-track location error.

Table 5-2 illustrates the image registration error resulting from uncertainties in pixel location. For the high-precision ephemeris case, the cross-track misregistration will be less than one pixel, assuming a terrain without significant relief. This registration error is greater at near-nadir look angles due to the increasing location error.

Table 5-1. Expected SIR-B geometric calibration

Error source, RSS total	Location error, m			
	Look angle, max		Look angle, min	
	15 deg	60 deg	15 deg	60 deg
Azimuth	1608	2591	60	79
Range	4145	1894	212	83
Overall	4446	3209	220	114

Table 5-2. Cross-track registration error

Look angle, deg	Range location error, m	Pixel spacing error, %	Misregistration, m
15	4145 (max)	6.5	3250 (max)
60	1894 (max)	0.1	50 (max)
15	212 (min)	0.02	10 (min)
60	83 (min)	0.0	0 (min)

C. Corner Reflectors

A corner reflector is a passive device that reflects the incoming radar signal directly back to the sensor. Corner reflectors can be used for direct location of a target within an image or, with proper surveying, as stereo control points. This location information can then be used to correct shuttle ephemeris data and further refine baselines for radargrammetry. Buried corner reflectors can be used to verify subsurface penetration of the radar signal. Corner reflectors of a known radar cross section (i.e., its size as described below) can be used to generate calibrated backscatter curves and help determine system performance. Corner reflectors were deployed by nearly half of the SIR-B investigators for the purposes described above.

Because of the variable incidence angle of SIR-B, several factors had to be considered for successful corner reflector deployment. The radar cross section of the reflector, the backscatter from surrounding terrain, the resolution cell size, and the overall noise floor of the system all depend upon the angle of incidence of the radar signal. Typically, corner reflectors were of the trihedral type with 1.5- to 3-m legs (Figure 13-5(a)). Because of the reduced signal-to-noise ratio of the system, the best corner reflector location data were obtained where the background scattering coefficient was very low. (Ref. 5-1.)

D. Transponders

A transponder is an active radar device that receives the incoming radar signal, amplifies it a known amount, and retransmits the signal back to the sensor. Also known as an active radar calibrator (ARC), the device can be used for positioning, as a calibrator, and for measuring attenuation of the radar signal. The main advantage of an ARC over a corner reflector is its precisely known radar cross section (which can be varied); this makes the ARC most suitable for calibration of the radar signal. In addition, the signal strength at the ARC can be recorded to determine antenna pattern, pulse width, and other engineering parameters of the system. The compact size of the transponder makes measurement of attenuation through a canopy of soil much easier than if a corner reflector were used.

E. Receivers

Passive receivers were also deployed during the SIR-B mission to monitor radar signal strength. Inexpensive and very portable, these receivers were built for the SIR-B mission by the University of Stuttgart, West Germany; they monitored the antenna pattern and measured attenuation through canopies and soils (Figure 13-5). Up to 10 of these receivers could be controlled by a small computer, which also recorded the signal levels for later analysis. These devices are probably the most practical and cost-effective way to measure radar signal strength quantitatively.

F. Calibration Experiments

Radiometric calibration experiments were to have been a very important part of the SIR-B mission, extending the measurements of spaceborne radar imagery quantitatively. However, quantitative measurements rely on the stability of the radar system that provides the imagery. As previously described, the transmitted power of SIR-B did not remain constant, precluding the true calibration of the system. However, several attempts were made to perform relative analyses using what data were available. One such experiment was performed by investigators at the University of Michigan and is discussed below.

G. External Calibration of SIR-B Imagery With Area-Extended and Point Targets—A Study by the University of Michigan

Data takes on two ascending orbits of SIR-B over an agricultural test site in west-central Illinois were used to establish end-to-end transfer functions for conversion of the digital numbers on the 8-bit image to values of the radar backscattering coefficient $\sigma^0(m^2/m^2)$ in dB. The transfer function for each data take was defined by the SIR-B response to an array of six calibrated point targets of known radar cross section (transponders) and to a large number of area-extended targets also with known radar cross section as measured by externally calibrated, truck-mounted scatterometers. The radar cross section of each transponder at the SIR-B center frequency was measured on an antenna range as a function of the local angle of incidence; two truck-mounted scatterometers observed 20 to 80 agricultural fields daily at 1.6 GHz with HH polarization and at azimuth viewing angles and incidence angles equivalent to those of the SIR-B.

The form of the transfer function is completely defined by the SIR-B receiver and the incoherent averaging procedure incorporated into the production of the standard SIR-B image product. Assuming that the processing properly accounts for the antenna gain, all transfer function coefficients are known except those of the thermal noise power and a system "constant" that has been shown to vary as a function of uncommanded changes in the effective SIR-B transmit power.

For each orbital pass, the SIR-B thermal noise was estimated from surface areas expected to yield specular reflection, and the system constant was determined for each area on the SIR-B image containing a target of known radar cross section. Both the point targets and the area-extended targets were found to yield nearly identical results with a mean difference of approximately 0.1 dB. For a given date, the standard error of the estimate for the system constant as derived by this method was found to vary from ±0.85 dB to ±1.35 dB. The interpass variance of the transfer functions was found to be related to the observed variance of the effective SIR-B transmit power. Application of the system transfer functions to SIR-B imagery permitted realization of science objectives by allowing comparison of multidate imagery on a common basis.

Five of the six transponders also operated as calibrated receivers. For each of six data takes, two ascending and four descending, the receivers were distributed over an area extending approximately 20 km in both range and azimuth directions. For each SIR-B data take, each receiver recorded the time history of a voltage proportional to the incident power density at the ground. The observed azimuth beam form appeared to be nominal with respect to specifications.

Preliminary analysis of the range pattern, which could not be ascertained in a direct fashion with statistical confidence, indicates that the pattern may be nominal provided that the true antenna boresight is estimated to an accuracy of ±2 deg via preliminary estimates of the STS ephemeris.

Pulse-to-pulse variation of P_t was not observed. Observed fluctuations in range-averaged digital numbers (±0.5 dB) cannot be unequivocably ascribed to variance in P_t and may be caused by the true scene variance. The uncommanded loss of effective transmit power, which has been attributed to arcing, was found to average 7.1 dB and varied from pass to pass by approximately 3 dB.

In spite of variance in the SIR-B transmit power, end-to-end transfer functions generated from either point targets or area-extended targets were found to yield close agreement (within 0.1 dB) for a given pass. Variance in the transfer coefficients established by either method were found to be within the confidence intervals expected from fading considerations. Pass-to-pass changes in the transfer coefficients agree with observed differences in SIR-B transmit power.

In view of these findings, it is concluded that targets of known cross section can be readily and effectively used to provide transfer functions for orbital SAR. The use of area-extended targets for this purpose yields the most satisfactory results. However, the use of point targets is far simpler and may be the preferred alternative for many situations. In either case, it is important to make use of more than one target in order to reduce uncertainties related to fading, target deployment, or measurement errors of the radar cross section of the target. In addition, the siting of point targets and their cross sections relative to that of their backgrounds must be carefully considered to optimize performance. Finally, because of uncertainty in the projected swath location for shuttle-based missions, calibration targets should be broadly distributed in the range direction to ensure inclusion of several targets within the image swath (Ref. 5-2).

VI. Data Processing

The SIR-B processing systems reduce digital and optical data into imagery. Their functions are discussed in this section and have been outlined by Curlander (Ref. 6-1).

All SIR-B digital and optical data acquired—with the exception of those digital data acquired in the experimental modes—have been processed. A premission plan to produce quick-look imagery from the digital data on the optical processing system was not implemented because of the reduced amount of digital data acquired.

A. Digital System Design

1. Algorithm

The processing algorithm implemented on the SIR-B digital processor is depicted in Figure 6-1; it uses the frequency-domain fast-correlation approach. The data (range echoes) are first compressed in the range dimension by correlating range-line data with a replica of the range chirp. The range-compressed data are then corner-turned to make them accessible in the azimuth dimension. Azimuth compression is then performed by correlating the azimuth data with azimuth reference functions bearing the appropriate Doppler characteristics. Range-migration effects in the azimuth data are compensated for in the azimuth frequency domain through range-cell selection and interpolation. Correlations in both the range and the azimuth dimensions are performed efficiently with fast Fourier transforms (FFTs). Doppler parameters required for the azimuth reference functions are obtained by refining the initial Doppler estimates; these estimates are derived from the engineering data in the data header. Autofocus and clutterlock techniques are employed to attain the necessary Doppler accuracies.

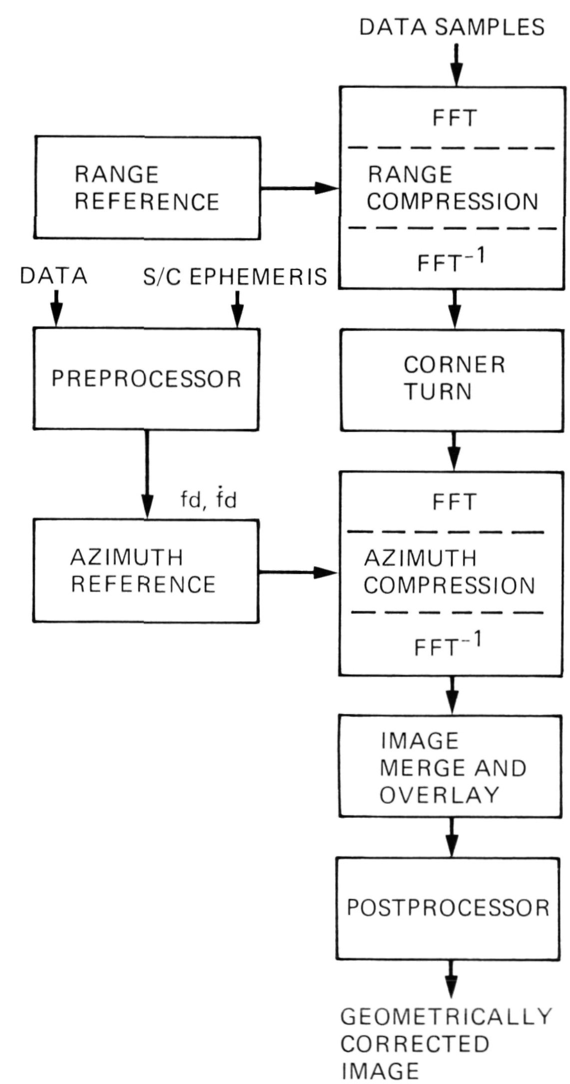


Figure 6-1. JPL digital processing of SAR data

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a. **Range-correlation module.** The purpose of the range-correlation module is to perform range compression on the input range line echoes to achieve the necessary range-cell resolution. Range-line data are taken into the module where each range sample is first unpacked from 3, 4, 5, or 6 bits per sample into 38-bit floating point words. A forward FFT is then applied to each block of 4000 range lines, and the result is circularly shifted to take away the range offset. The range reference function is multiplied with the result before an inverse FFT is taken. This accomplishes the range-compression operation. The range-compressed data are packed into 1536 complex output samples with the real and imaginary parts occupying 8 bits each (8 bits I and 8 bits Q). The data are now ready for the corner-turn module.

b. **Corner-turn module.** The compressed data from the range-correlation module are still oriented in a range-line fashion. To facilitate azimuth processing, the data need to be transposed so they can be easily accessed in the azimuth dimension. The SIR-B processor performs the data corner-turn operation in two phases, similar to the performance of the Seasat-IDP (Ref. 6-2). Two phases are necessary because the SEL 32/77 minicomputer is constrained by a 512-kbyte memory. During phase I, the range-compressed data are partially corner-turned and stored in prescribed locations on a disk. In phase II, the data on the disk are read back into the core in a prescribed sequence to accomplish the corner-turning operation. The now transposed, azimuth-oriented lines in the array processors are unpacked from their complex format. After a forward FFT is taken, the frequency-domain azimuth lines are repacked into 8 bits I and 8 bits Q and stored on disk.

c. **Azimuth-correlation module.** Azimuth correlation is performed also in the frequency domain. After the forward FFT, the azimuth lines are called into the host computer (SEL) where coarse (integer range-cell) range-migration correction takes place. The data are then input to the array processors where they are unpacked. The four-point range-cell interpolation is then performed in the array processors to achieve the fine (fractional range-cell) range-migration compensation so that the range-migration curve in the data is more precisely followed. The range-migration-compensated azimuth spectral line is then divided into four parts around the Doppler centroid, with each part corresponding to one of the four azimuth looks. The four individual subspectra are then properly centered and multiplied with their respective azimuth reference functions. Inverse FFTs are then taken of each of the four individual subspectra to produce complex image pixels for each of the four looks. These complex image-pixel data are then detected and their intensities are packed for storage on disk.

d. **Multilook overlay module.** To reduce speckling effects, the four individual looks for each scene are collected in an overlay memory in core and then added to compose the resulting four-look image.

e. **Autofocus and clutterlock.** To accurately follow the Doppler parameter changes in the data, autofocus and clutterlock techniques are employed to refine the coarse Doppler estimates derived from the shuttle engineering data in the raw data header. Similar techniques have been used with the Seasat-IDP. With the clutterlock technique, the correct Doppler centroid is obtained by determining the balance point of the azimuth spectral energies of looks one and two versus looks three and four. With the autofocus technique, the correct Doppler frequency rate is determined by observing the image pixel match (along azimuth) between look one and look four data of the same scene. These processes are usually performed iteratively until certain convergence criteria for the Doppler parameters are attained. For the SIR-B processor, improved versions of the Seasat-IDP autofocus and clutterlock processes are implemented. The current version of clutterlock has the capability to distinguish pulse-repetition-frequency (PRF) ambiguities during Doppler centroid determination, thus eliminating the potential problem of locking onto a Doppler frequency that is an integer number of PRFs away from the true Doppler centroid. PRF ambiguity is an especially common problem for SIR-B data due to the relatively large pointing error as compared to the free-flyer Seasat. Other improvements include using a larger data sample size and implementing autoregression techniques for faster and more accurate Doppler parameter convergence.

2. Data Flow

The SIR-B processor data flow is illustrated in Figure 6-2. The SIR-B raw range-line data on high-density digital tapes (HDDTs) are input to the processor. The packed input data first go through the input processor where the engineering data in the data header of each range line are read and decoded into useful information concerning the shuttle orbit and attitude as well as the SAR instrument. The SAR data are then stored on disk files. A portion of the data is analyzed to determine the overall data quality through bit-error rate checks, histograms and range spectrum plots, and signal-to-noise ratio estimates. Preprocessing is then activated whereby a subset of the SAR data is taken for the autofocus and clutterlock processes. These procedures generate refined Doppler parameters to facilitate reference-function generation. The main image formation process then takes place using the pregenerated reference functions. The output four-look image pixels are then rectified from slant to ground range as well as azimuth deskewed in the postprocessing. The resulting image data on disk files are then recorded on computer compatible

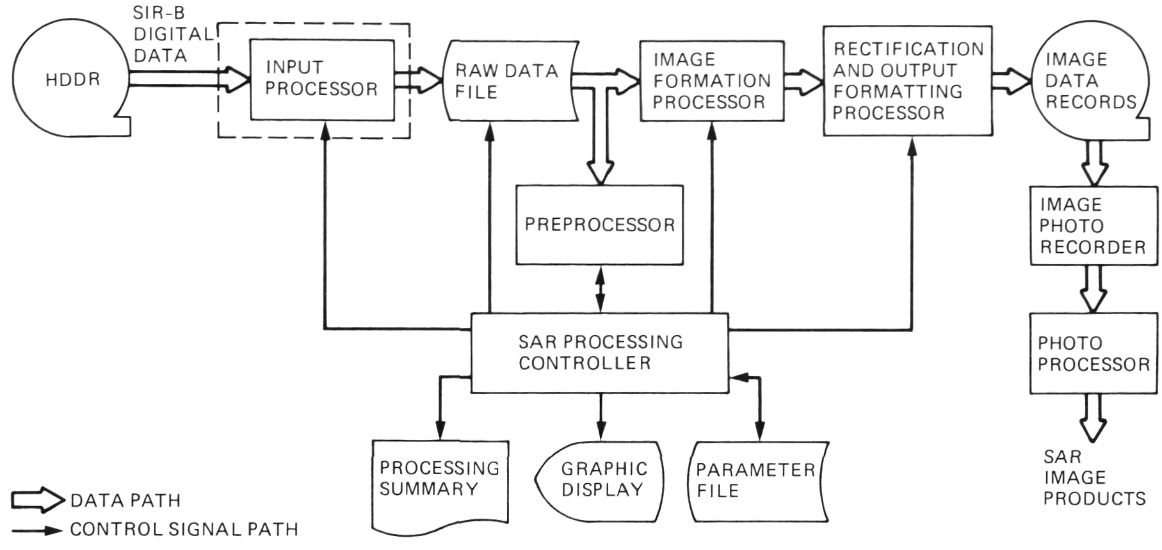

Figure 6-2. SIR-B digital-data processor functional block diagram

tapes (CCTs) and subsequently presented in the form of photographic products.

Throughout the SIR-B processing (except correlation), full precision (32-bit floating point in the SEL and 38-bit floating point in the array processors (APs)) is maintained to preserve accuracies in arithmetic computations. The data are properly scaled and packed (in either 8I/8Q or 8-bit amplitude or intensity) for input/output and storage to reduce data-transfer rate and data-storage requirements.

3. Hardware Configuration

Figure 6-3 shows the hardware configuration diagram of the SIR-B processor. In addition to the usual console, line printer, CRT terminals, and card reader associated with the host minicomputer (SEL 32/77), there are graphic display and recording devices (GENESCO G-6011 and MATRIX 3000) for displaying and recording data analysis results as well as images at selectable resolution. The input data (on HDDT) are read by an EMI 9000 SL high-density digital recorder (HDDR), and from the recorder pass through a custom interface unit to disk storage. Besides looking for the correct time code, the interface unit checks for synchronization codes so the raw data can be stored on disk files in the proper range-line format. There are four data disks in addition to one systems disk, one scratch file disk, and two spare disks, all of them CDC 9766 300-Mbyte storage module devices (SMDs). The intensive vector arithmetic operations are performed by three array processors (FPS AP-120 Bs) arranged in parallel. There is an additional array processor unit on line in parallel, but it is used principally as a spare. Four tape drives are included in the processor system. Three (Kennedy 9300) are of the 800/1600-bit/in. variety and the fourth is a tridensity 800/1600/6250-bit/in. unit (Kennedy 9400). The image recording is performed by the Optronics Image Recording Device (P1500). It is set up to write 8000 X 8000 8-bit pixel frames at a 25-μm pixel size. Its input is image data recorded on CCTs; it writes these data on 20.3- X 25.4-cm (8- X 10-in.) film negatives. The photoprocessing work is performed apart from the SIR-B processor system at the JPL photolaboratory. The main processor components—the SEL, the APs, the EMI input interface, and the disks—are housed in a climate-controlled environment with an independent supply of chilled and filtered air. The ac power to the processor is also regulated by a power conditioner (Topaz M5-AD100) to eliminate occasional surges and sags in the powerline voltage.

4. Software Configuration

The SIR-B processor software is arranged in basically two types of software modules: the processor control modules and the correlator modules. The processor control modules include executive programs that initiate processing parameter set-up, preprocessing, processing, and postprocessing, as well as programs that manage input parameter files and processing logs. There is also a superexecutive program that oversees all the individual control modules. The correlator modules consist of all the SAR data-processing applications programs that actually perform the range and azimuth compression, data corner-turn, reference-function generation, and multilook overlay, as well as autofocus, clutterlock, and postprocessing.

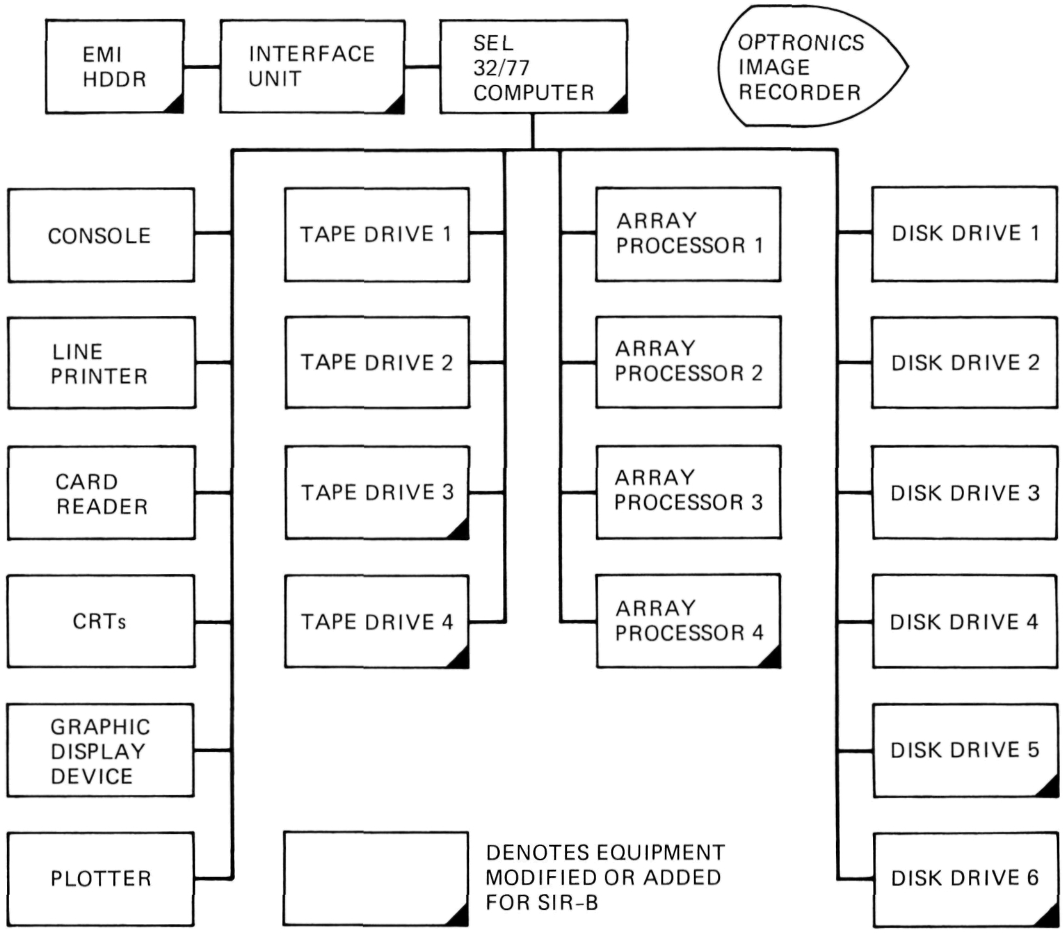

Figure 6-3. SIR-B digital processor hardware block diagram

B. Digital System Operation

The digital processor system operation is described in detail in Ref. 6-3. Before each processing run, a check of the system hardware is made to be certain all the necessary hardware components are available and ready. The system is then configured by setting up the HDDR and input interface with the correct operating parameters and locating the starting point on the HDDT. The proper operations parameters are also entered into the processor parameter file. Next, the proper amount of raw signal data is transferred onto the disk at a slowdown rate of 8:1 and via the input interface and host computer; the header data are decoded. The processor can then be set up for automatic correlation of a predetermined number of image frames from preprocessing through post-processing. Currently, with the narrow swath width of the SIR-B data, which is about 30 km due to the loss of the 45.5-Mbit/s real-time high-data-rate link during the mission, a maximum of 15 images can be set up each time for processing in this automatic mode. The 15-image maximum is due to the limited raw-data storage capability of the disk units.

C. Digital System Capability

1. Raw Data

A total of 6.5 h of usable digital SAR data was acquired during the SIR-B mission. The majority of the data was recorded on board the shuttle at the 30.3-Mbit/s rate before the data were downlinked or carried back to Earth. This was a result of the failure of the real-time high-data-rate link early in the mission. The SIR-B antenna cable problems also impacted the effective swath width and reduced the signal-to-noise ratio of the collected data. Analysis showed the SNR ranged from essentially no measurable echo to levels as high as 14 dB. The median SNR was 3 dB. The bit-error rate of the raw data through the data link was on the order of 10^{-5} based on sync-word and frame-count statistics, with 85% of the data better than 10^{-6}. Despite this less-than-desirable quality of the raw data, the processor is able to produce images close to specifications, except for a few data takes where interference from active alien radar sources was present.

Because the received SAR signal strength of the SIR-B data was marginal, the presence of any transmitting radars in the record window easily overwhelmed the SAR data. As a matter of fact, in many instances, the interfering signal was so strong that the interference patterns on the image completely obliterated the underlying image features (Figure 6-4). Since the operating frequency and duty cycle of these unknown radars was not fixed, a simple frequency-domain notch filter implemented in the range correlator was not adequate to minimize their effect for all cases and was computationally expensive. A time-domain interference filter (Ref. 6-4) was incorporated into the processor to alleviate the interference problem. The time-domain interference filter makes use of the fact that normal SAR echo returns do not have wide variations in amplitude from one range line to the next. This slow-varying amplitude characteristic is exploited by comparing current range-line amplitude with that of the previous lines. Any large, sudden fluctuations in range-line amplitude can be attributed to the reception of alien radar signals, and that range-line is replaced with reference data; this concept is illustrated in Figure 6-5. A comparison of Figure 6-4 with Figure 6-6 demonstrates the effectiveness of the interference filter in improving image quality.

2. Processor Throughput and Production Rate

The throughput rate of the SIR-B processor is roughly 1/360 of the real-time rate. The throughput rate is higher than

Figure 6-4. Interference patterns that obliterate image features

(a)

(b)

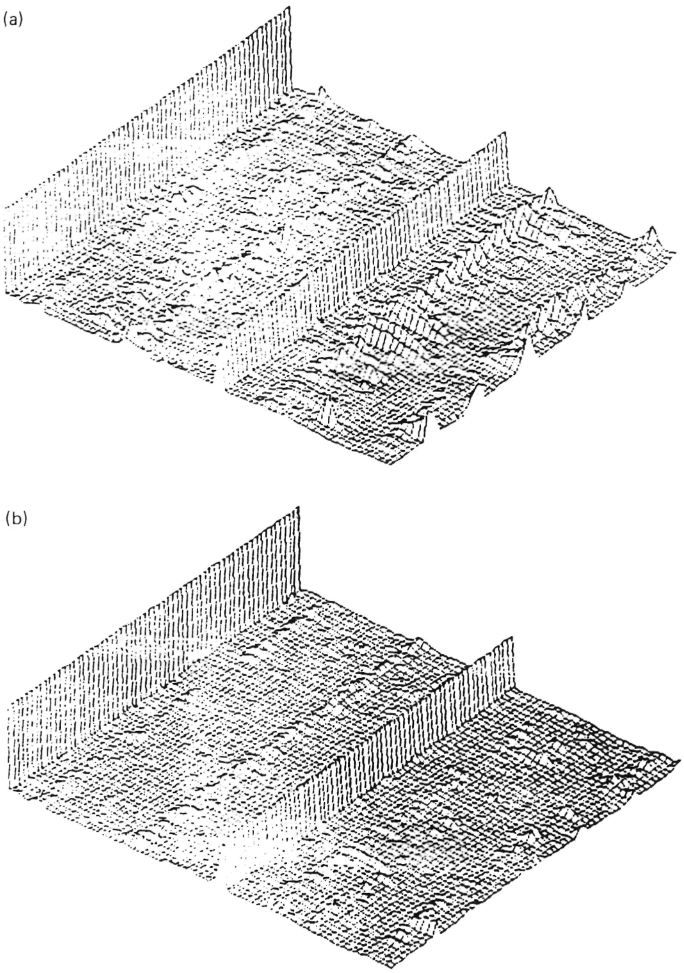

Figure 6-5. Range echo-return waveform: (a) corrupted by an alien radar signal; (b) after filtering the data

anticipated largely because of the reduced swath width, which was a result of reduced signal strength and lower data rate. The processor operated for about 16 h a day, 6 days a week, from shuttle launch to mid-October 1986. It produced on the average 12 images (one for each 80 km along track) a day. A shared attached memory module was incorporated into the postprocessing system to further facilitate system throughput and simplify software. A total of about 3,000 images has been correlated. This is essentially the complete digital data set.

3. Image Corrections

a. Geometric correction. The SIR-B processor offers the option of presenting the output image in one of two formats: a raw, distorted image with natural pixel spacing, or an image geometrically corrected to a ground plane with uniform pixel spacing. The option with geometric correction essentially converts the image from slant-plane to ground-plane projection and assumes a smooth, oblate ellipsoid as the Earth model. It corrects for image skew resulting from Earth rotation during the imaging period and Doppler mismatch in the azimuth-phase reference function.

The geometric-correction algorithm (Ref. 6-5) operates under the correlation executive to appear as a final step in the processing. It requires the following inputs: the uncorrected image data, the shuttle position and velocity vectors, the slant range to the near edge of the image, the Doppler parameters used in the reference function, the target latitude, and the output pixel spacing desired. The algorithm determines such parameters as the incidence angle, swath velocity, and image skew angle prior to performing two one-dimensional interpolations (optimized for throughput using the array processor) and generating the final image product.

The system has produced image products within the specification of less than 0.1 percent misregistration relative to a map base. The output is in standard byte-pixel format and the processing time required to correct a 50- by 100-km SIR-B image is less than 5 min.

b. Radiometric correction. The SIR-B processor contains a set of software routines incorporated into the executive and designed to perform a relative radiometric correction for errors induced by the sensor or the environment. This correction is optional.

The radiometric correction process is entirely automated and requires as input these radar parameters: look angle, roll angle, data window position, and incidence angle; access to the signal data at various stages of the correlation is also required. The algorithm essentially corrects the following distortions: (1) two-way elevation antenna-pattern modulation, (2) differential slant-range attenuation cross-swath, (3) differential resolution cell-size cross-swath, and (4) receiver-gain variation frame-to-frame or pass-to-pass. The algorithm uses a prestored nominal elevation pattern for the SIR-B antenna that is essentially a sinc-squared function with a phase shift as follows:

$$G_R = [\text{sinc}\,(a - 0.3\pi) + \text{sinc}\,(a + 0.3\pi)]^2 \cos(\theta - \theta_0)$$

where

$$a = \pi L_R \sin(\theta - \theta_0)/T$$

θ_0 = antenna boresight – roll

L_R = antenna height

T = radar wavelength

The receiver-gain variation is determined from preflight thermal-vacuum test measurements prestored in the computer

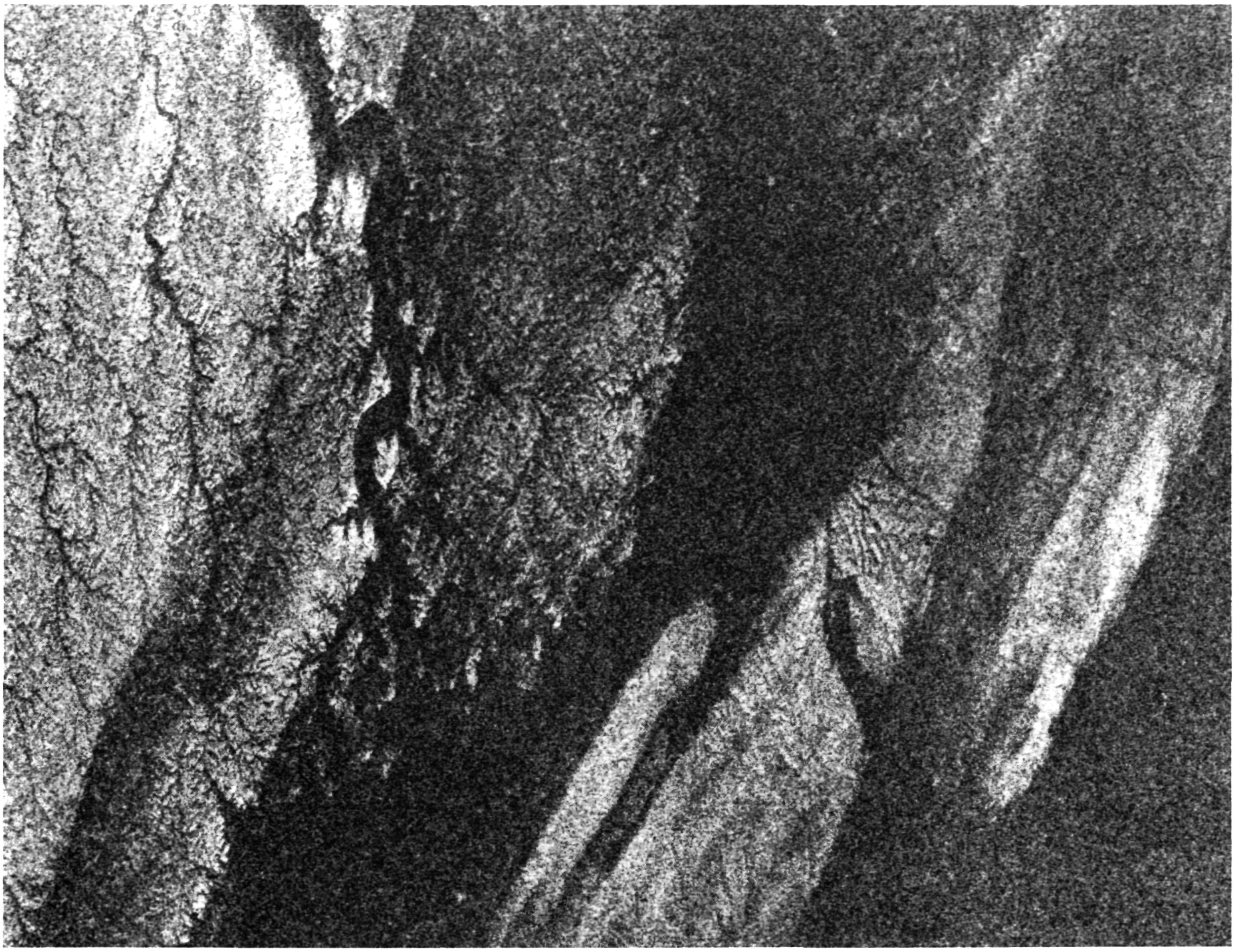

Figure 6-6. The image of Figure 6-4 produced from filtered raw data

for the 3- and 4-bit/s data and uses the calibration tone (caltone) injected into the signal data for the 5- and 6-bit/s cases. After transfer to the processor, the caltone estimate is performed on the raw signal data by the coherent summation of 1- X 1-kbyte blocks of data at three places in the raw data set. (The discrete FFT bin in which the caltone resides is set to zero during range compression to remove the effects of the caltone.) The antenna-pattern modulation is determined as a function of cross-track pixel number by

$$\theta(I) = \cos\left[\left(h + R_{en}\right)^2 + \left(R_N + \frac{CI}{f_s}\right)^2 - R_{et}^2\right] \Big/ \left[2\left(R_{en} + h\right) \cdot \left(R_n + \frac{CI}{f_s}\right)\right]$$

where

R_N = range to the near edge of the swath

h = sensor altitude

R_{en}, R_{et} = earth radius at nadir and target, respectively

C = speed of light

f_s = sampling frequency

I = cross-track pixel (complex sample) number

From this antenna pattern, truncation of the raw data can be based on a prespecified dropoff from peak signal-to-noise ratio (e.g., 15 dB). The algorithm then generates a full set of correction coefficients prior to preprocessing.

Calculation of the differential slant-range attenuation is based on information located in the header data.

The radar geometry is used to correct the size of the resolution cell-swath (near to far), thus normalizing energy for each cell.

The preprocessor produces a low-resolution image with full radiometric correction, and a histogram of this image data is used to determine the stretch factor used on the standard image product. The stretch is a scalar multiplication used to produce output imagery with a mean intensity value of 80 (on a 0 to 255 scale). This factor is incorporated into the set of correction coefficients, and the actual image correction occurs during the azimuth correction by scaling the azimuth reference functions. It was necessary to perform the corrections at this early stage rather than in the 8-bit detected image since the signal data for SIR-B were at times so weak that severe degradation in image quality would have resulted from the quantization noise. This procedure allows corrections to be performed on the floating point numbers before truncation.

4. PATH Tape Incorporation

The Postflight Attitude and Trajectory History (PATH) tape contains the precise orbiter parameters for the entire SIR-B mission. A subset of the PATH tape's data has been written to the disk files PATHFILE and EPHEMERIS on the SEL 32/77. PATHFILE primarily contains the orbit number, GMT, and the orbiter state vector in the Aries mean of 1950 Cartesian coordinate systems; the EPHEMERIS file contains the orbiter attitude in the UVW local body coordinate system (Ref. 6-6). The time interval of the PATHFILE data records is approximately 4 min. EPHEMERIS contains the attitude data for the entire mission in approximately 10.5-s intervals. The time intervals of these files were chosen to preserve the integrity of the SIR-B PATH data as well as limit the size of the disk file. The program that extracts data from PATHFILE and EPHEMERIS scans the entire file for the times closest to the user input time and performs an eight-point interpolation to obtain an estimate of the orbiter data requested. The PATH data has been incorporated into the SIR-B digital processor as of April 1985. The use of PATH data has improved the accuracy of the image location calculation and the Doppler parameter predicts.

5. Mosaicking and Geocoding

An automated postprocessing system has been developed to produce multiframe mosaics (merging images in the along-track direction, adjacent cross-track swaths, or ascending and descending passes). This system requires no operator intervention or tie-point identification. The average location error is three pixels (at 50-m pixel spacing) in range and in azimuth. It requires approximately fifteen minutes to produce a 3000- X 3000-pixel mosaic. The ability to produce geocoded images has also been incorporated into the postprocessing system (Ref. 6-7) so that an image can be displayed in selected cartographic projections (Figure 6-7). The Universal Transverse Mercator and the Polar Stereographic Projections are the options.

6. Dates of Postflight Upgrades to the Processor

The software changes and dates of the changes that have been incorporated into the processor after the flight are described in Table 6-1. Perhaps the most important dates of

Table 6-1. Postflight upgrades

Date	Version No.	Changes to SIR-B software
10/05/84 to 11/22/84	1.2	Implemented changes to scale factor for radiometric correction (SCAF). SCAF on image header and menufile is (SCAF)**2.
03/22/85	1.3	Implemented precise center-time determination from azimuth reference size and PRF.
04/01/85	1.4	Implemented the "Aries Mean of 50" coordinate system ephemeris data from PATHFILE.
04/04/85	1.5	Implemented interference filter to processor.
05/02/85	1.6	Change assumed GMT delay value from 0.440 s to 1.000 s.
05/09/85	1.7	Corrected deskew pixel number on ground-range image.
06/13/85	1.8	Defined SCAF as 1.0 on image header and menufile if image was processed with no radiometric correction.
07/08/85	2.1	No changes made to software. Software version number changed to reflect the initiation of a standard procedure for software modifications.
07/15/85	2.2	Incorporated current software version number into image tape header and menu tape.
08/30/85	2.3	(a) Incorporated the PATH tape's attitude data for improved initial Doppler parameter estimates. (b) Added new items (59 to 61) to image tape header record and menu tape. (c) Left item 10 ("Pixelsize") on image tape header record and menu tape blank for *slant* range data.

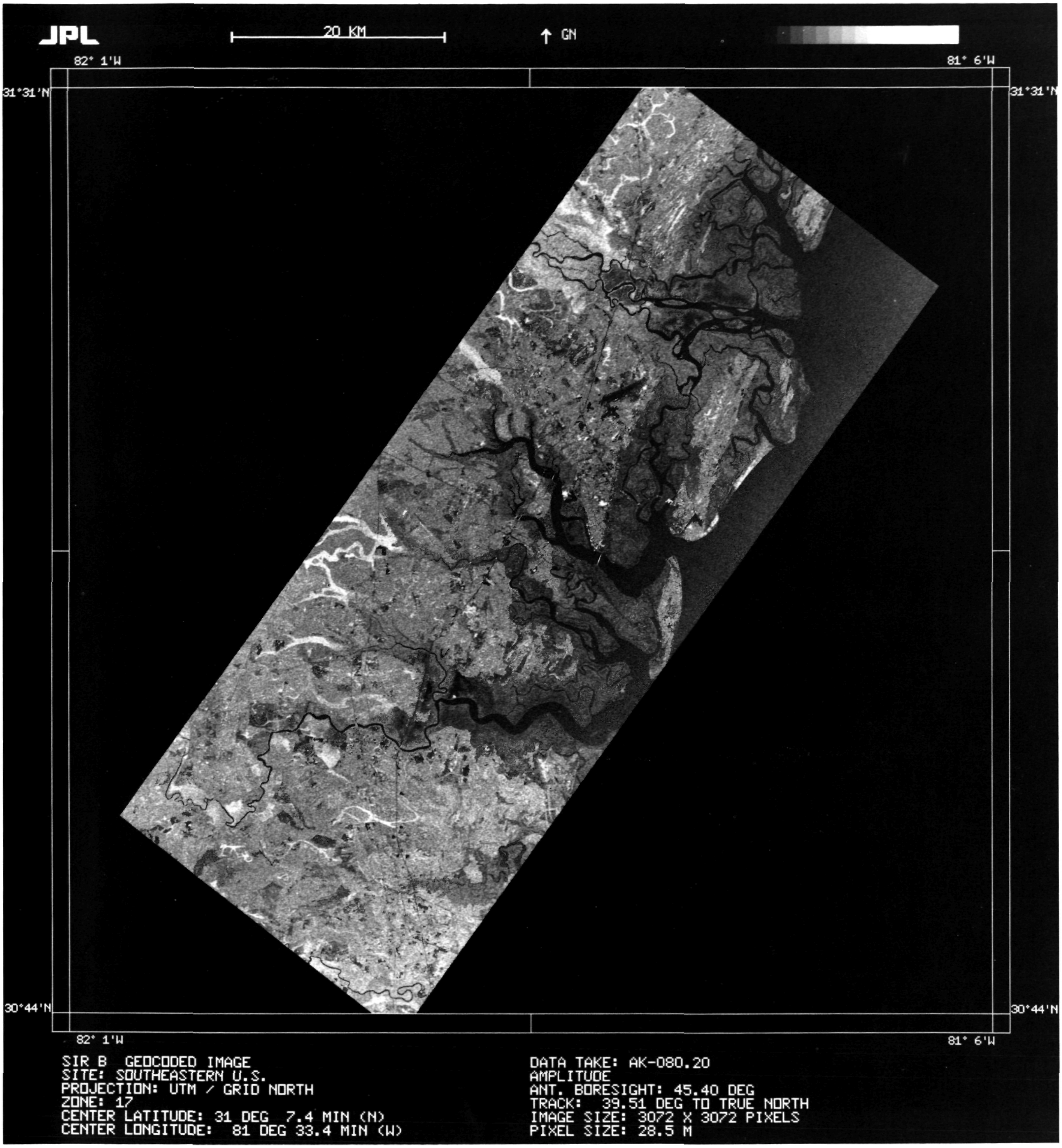

Figure 6-7. Geocoded image of the southeastern coast of the United States from data take 80.2

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upgrades concern the incorporation of PATH-tape ephemeris and attitude information. Imagery processed before these dates are subject to substantial errors in location, timing accuracy, and estimates of Doppler frequency.

7. Additional Upgrades

The following upgrades are in progress or have been completed and incorporated in processor software version 2.4:

(1) Map projection processing.

(2) Roll-error refinement with echo-tracker-module option.

(3) Single-look-image option.

(4) Range-compressed data scaled to avoid saturation.

(5) SNR added to antenna pattern.

(6) Indication on image label of whether image is processed with or without radiometric correction.

(7) Range-compressed scale factor added to menu file.

(8) Roll-error refinement flag added to menu file.

8. Image Characteristics

The characteristics of the digital imagery are given in Table 6-2. All processed data are written on CCTs, and, with the Optronics Image Recording Device (P1500), on 20.3- × 25.4-cm (8- × 10-in.) film negatives. Each image is specified by a data-take number followed by a scene number, whose order reflects the correlation date rather than sequential time. The image tape consists of a header record that describes the radar and processing, and provides image parameters, a gray scale, the image data, and annotation (see Section XI for format details).

Table 6-2. Digital-image characteristics

Parameter	Range	Azimuth
Resolution, m	17 to 57	25
Peak side-lobe ratio, dB	−25	−25
Integrated side-lobe ratio, dB	−21	−21
Pixel spacing, m	12.5	12.5
Looks	1	4
Image dimensions, km	15 to 60	90
Relative misregistration accuracy,[a] %	0.1	0.1
Pixel location error,[a] m	100	100
Radiometric format	8 bits/sample, intensity	
Dynamic range at corner turn,[b] dB	48	

[a]Relative to terrain variation and ephemeris uncertainty.

[b]Truncate data after range compression to 8I/8Q.

D. Digital System Performance

1. Performance vs Requirements

The processor performance has been measured under a controlled environment by simulation. The findings were reported in Ref. 6-8. In actual operation, the processor exceeded all image production requirements. In terms of image quality, it is difficult to ascertain the exact processor performance because the data lacked strong point targets; however, processed image data for two corner reflectors (CRs) in data take 87.2, scene 2 (Hokkaido, Japan), were analyzed for resolution at 3 dB, as shown in Table 6-3. This limited analysis may not conclusively determine the actual performance of the processor; however, it does demonstrate that the approximate performance was near the predicted values.

Table 6-3. Resolution as determined from corner reflectors in Hokkaido, Japan

Parameter	Predicted, 3-dB width	Measured 3-dB width CR No. 2	Measured 3-dB width CR No. 6
Slant range, m	15.1	16.9	13.9
Azimuth, m	27.8	33.4	29.3

2. Current System Status

The processor system reliability has been very good to date with only about 5% unscheduled downtime, mostly due to HDDR malfunctions. However, the image recording device (which is not required for image-data generation) has been malfunctioning between 15 and 20% of the time. With the production rate reduced to 6 images a day (down from 12 images a day), reliability of the system should improve, especially in the reading of CCT digital data onto film.

3. The SAR Data Cataloging System

As part of the total processor system, an on-line SAR data cataloging system (SDCS) has been developed on a Digital Equipment Corporation (DEC) VAX-785 computer at JPL. The SDCS is a menu-driven, hierarchical system providing the user with direct access to information relating to JPL SAR missions. The current version of the SDCS contains complete information for only the SIR-B mission and partial information for the Seasat mission. Future versions will contain data for both completed and planned spaceborne and airborne SAR experiments.

The SIR-B main menu of the SDCS provides ground-track and processed imagery information as well as menus that enable the user to request the correlation of specific scenes and/or the transfer to CCT of raw signal data. Ground tracks can be displayed graphically on any of several on-line maps, provided the user has access to a DEC VT-100 or VT-100 emulating terminal. The user can also search the data base for imaging opportunities during a mission over a specific target by inputting a latitude and longitude.

For each digitally processed image, a record containing all of the shuttle, radar, processing, and image parameters is sorted in the data base. Any of these parameters can be viewed on-line or written to file in a user-designed report format.

Because the SDCS is menu-driven, the user is not required to have any programming experience or a priori knowledge of the data base structure. Users must, however, have a valid account on the JPL "Madvax" computer. Complete information regarding the SDCS is presented in Ref. 6-9.

E. Optical Processing System

SIR-B optical processing was a two-fold task of data reduction. The first task was data reduction of the 1098 m (3600 ft) of signal film produced by the in-flight optical recorder. The second task was the proposed reduction of the digital data to an optical format. The optical format would have provided a low-resolution, quick-look subset of the data to aid in the selection of areas to be digitally processed. However, this format was not implemented because of a smaller than planned volume of acquired digital data.

1. System Description

To accommodate the optical data-processing task, the optical correlator originally used for the SIR-A data reduction was employed (Ref. 6-10). This correlator was modified (Figure 6-8) to accommodate the added feature of multiple look angles. The modification was primarily the addition of two lenses after the SIR-A azimuth telescope.

The photometric parameters established for the SIR-A project were kept essentially intact for SIR-B, i.e., the signal film, Kodak RAR 3493, was to be processed for a gamma of 1.70, a base plus fog no greater than 20 density units, and, at the intersection of the "tow" and the straight-line portion of the curve (a region corresponding to the ideal maximum density from the optical recorder), a density of 0.65 was to be achieved. Originally planned processing techniques for optimizing the correction of latent image degradation and ambient environmental effects were later abandoned because of problems that occurred while loading the film on the shuttle.

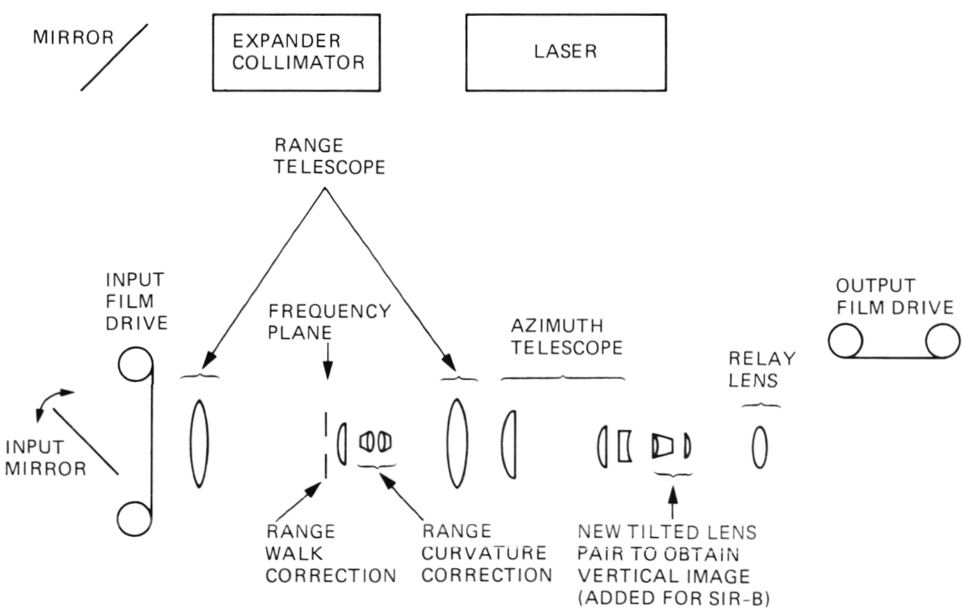

Figure 6-8. Optical correlator system

2. Flight Recorder Optical Processing

The optical-film cassette, loaded with 1098 m (3,600 ft) of signal film, was removed from the orbiter on October 27, 1984, and placed in its protective carrying case and sealed. The case was received at Los Angeles International Airport and transported to JPL for processing. After the Versamat 11CM film processor that had been certified prior to launch was retested to assure accurate processing, the carrying case was opened and the film cassette removed under darkroom conditions. A short strip of the exposed signal film that contained test wedges for checking the processing was then removed. Once the proper photometric properties were achieved, the decision was made to proceed with the signal-film development. Initially, the film was removed in 91.5-m (300-ft) segments and developed. From these segments, master positive copies were generated and optically correlated. As confidence grew, the length of the signal film removed for developing was increased to 152.4 m (500 ft); the last segment processed was 457.3 m (1500 ft) long. Photometric corrections were made only in selected cases where the SNR was so noticeably poor that the master positives were made with an increased system gamma. Final analysis indicates that at least 70% of the data suffered from reduced SNR. Some of this was to be expected as a direct function of using various incidence angles. All SIR-B optical data correlation was completed by August 16, 1985; the result was 57 data takes or 475 minutes of data.

3. Optical-Image Characteristics

The characteristics of the optical images produced by both the flight recorder optical data and the proposed optical survey processing of digital data are shown in Table 6-4. Imagery was written onto continuous strips of 13-cm (5-in.) film at a nominal scale of 1:500,000 (see Section XI.B for a full description of the format).

Table 6-4. Optical-image characteristics

Parameter	Recorder	Survey
Ground-range resolution, m	30 to 100	30 to 100
Resolution, m	50 with 4 looks	40 with 6 looks
Geometric accuracy	Not applicable	<3% relative misregistration
Dynamic range, dB	12	12

VII. Mission Design

The primary objective of the SIR-B mission was to acquire multiple-incidence-angle radar data of selected targets. This necessitated the design of a specific orbit with a day-to-day drift rate that enabled repeated viewing of these targets. Swath location and antenna pointing were critical where simultaneous ground-truth collection occurred. Inasmuch as targets were located on both sides of the shuttle's ground track, maneuvers were necessary to place the antenna in either a north-looking or south-looking position. Access to TDRS was also critical for data recording. Details of the mission design, the options allowed, and several experimental imaging modes are described in this section.

To accommodate the complex planning requirements for the SIR-B mission, special software called Shuttle Mission Design and Operations Software (SMDOS) (Ref. 7-1) was designed. This software provided primarily the capability of orbit propagation, the accurate display and targeting of investigators' sites, the determination of access to the TDRS antenna for data downlinking, and the generation of the updated SIR-B Command Plan, which was then transferred to SIR-B Mission Operations (see Section VIII). The SMDOS was used extensively for preflight orbit design, data-acquisition planning, and retargeting during mission operations.

A. Orbital Parameters

Launched October 5, 1984, at 279:11:03:00 GMT, the SIR-B radar was flown in a near-circular orbit of 57 deg inclination. This inclination provided viewing of much of Asia, Europe, and North America, and all of South America, Africa, and Australia.

To acquire multiple-incidence-angle data, an altitude was selected that provided a nearly exact 1-day repeat-cycle orbit (Figure 1-9). The final designed altitude of 224 km was several kilometers higher than that required for an exact 1-day repeat cycle, so the shuttle nadir tracks drifted slowly to the west each day. This meant that a target on the east side of an ascending nadir track, for example, could be imaged by a progressively larger look angle each day. Also, by changing the look angle slightly from day to day, longitudinally continuous regional images suitable for mosaicking could be acquired. The orbital equator crossing was also designed primarily to maximize the viewing of multiple-angle study targets.

Other mission requirements made three orbital altitudes necessary. The Earth Radiation Budget Satellite (ERBS) was deployed from the shuttle during the first day of the flight; this required a high-altitude orbit of 354 km. Then, to acquire the selected equatorial node crossing and improve global accessibility for the MAPS experiment, an intermediate altitude of 257 km was required for orbits 23 to 33 on flight day 2. Finally, during orbit 33, the altitude was lowered to 224 km, where it was maintained for the rest of the mission. The actual orbital elements for orbits 2, 21, and 34 are listed in Table 7-1.

The orbit had to cross the equator at specific longitudinal points (nodes) to optimize coverage of the study sites. As mentioned, this provided both multiple look-angle imaging of a particular site and, with coverage from adjacent swaths, the images necessary for large-scale mapping. Longitudes of the ascending orbital nodes throughout the mission were defined before the mission (Table 7-2). If the actual node crossings differed by more than a quarter of a degree in longitude, an optional, daily trim burn was made to reset the crossings.

B. Orbit Accuracy

Because the SIR-B data of necessity were recorded on the 30-Mbit/s HDRR, many of the SIR-B radar swaths for data

Table 7-1. Mean orbital elements for Flight 41-G[a]

Parameter	Orbit		
	2	21	34
Time, GMT	279:11:53 to 280:19:47	280:19:47 to 281:11:45	281:11:45 to 287:15:25
Semimajor axis (a), km (nm)	6732 (3635)	6635 (3583)	6602 (3565)
Inclination (i), deg	57.19	57.20	57.16
Eccentricity (e)	0.00046	0.00092	0.00076
Orbital height at equator, km (nm)	354 (191)	257 (139)	224 (121)

[a]See Mission Timeline, Section IX, for more details.

Table 7-2. Nodes of equator crossings

Orbit	Longitude of the ascending node, °E
39	106.93
55	105.45
71	104.05
87	102.72
103	101.48
119	100.32
135	99.24

takes with high bits per sample were as narrow as 15 km. This meant that orbit and pointing tolerances had to be kept small to accurately aim the radar beam at a particular site. Before the flight, it was felt that keeping the shuttle altitude within 1.5 km of the planned altitude, maintaining shuttle attitudes to within 0.1 deg deadband, and pointing the radar to the nearest degree look angle would be sufficient to guarantee viewing sites. However, some sites were missed during the flight, as will be discussed later.

For premission planning, Johnson Space Center (JSC) provided the SIR-B operations team with a tape file (called "supertape") containing planned shuttle orbit-position data for every minute of the flight. During the mission, the SIR-B operations team was updated with real-time state vectors once a day. When Orbital Maneuvering Subsystem (OMS) burns occurred, the state vectors were provided approximately 3 h after the burns. These vectors were then used to generate a new updated ephemeris, which was compared to the premission ephemeris to determine if the position of the shuttle had changed significantly enough to warrant changes in the radar setup parameters. After the mission, JSC provided a Postflight Attitude and Trajectory History (PATH) tape (similar to the "supertape"), which contained the refined mission ephemeris or best position knowledge of the shuttle during the SIR-B mission.

The SMDOS reproduced the premission supertape information to within 0.1 deg of latitude and longitude and 0.5 km of altitude (Ref. 7-2). However, the PATH tape differed from the SMDOS by as much as 10 to 15 km in crosstrack and 2 to 3 km in altitude. Variations in altitude of this magnitude resulted in errors in look-angle and data-window-position selection large enough to affect accurate targeting. This difference between real-time and actual ephemeris information coupled with the use of integer look angles was enough to cause a few sites to be missed or at least mispositioned in the swath (Ref. 7-3).

Information gathered after the flight of 41-G indicates that some state vectors given to SIR-B were propagations of vectors previously propagated and contained no new information. There are indications that state vectors may have been miscopied from the display screens, and several hours often passed between the request and the acquisition of these vectors, causing the SIR-B team to be late in delivering its revised Command Plans.

More accurate premission ephemeris information, as well as the determination and subsequent commanding of the radar look angle to within 0.1 deg, are refinements needed on future missions to guarantee imaging sites with narrow SAR swaths.

C. Shuttle Attitudes and TDRS Access

Four primary shuttle attitudes were selected for SIR-B data acquisition, as shown in Figure 7-1; these attitudes were color-coded for convenience. From the two main attitudes of nose forward, –ZLV, and tail forward, –ZLV, a simple roll of 90 deg enabled a change from north viewing to south viewing of the shuttle ground track. Such a maneuver took 9 min while a change from tail forward to nose forward, and vice versa, took 15 min. The other experiments, such as LFC, MAPS, and FILE, were able to acquire data only in the –ZLV attitudes. In addition, LFC required the nose-forward attitude for correct operation of its film-motion-compensation mechanisms.

Most of the digital data acquired by SIR-B during the OSTA-3 flight were to be sent to the ground through the TDRS system. There was one Ku-band TDRS antenna on the shuttle mounted in the payload bay; therefore, in the nose forward, –ZLV attitude, TDRS could be accessed only about 30% of the time because of blockage by the orbiter itself. Figure 7-2 shows TDRS access in each of the above attitudes

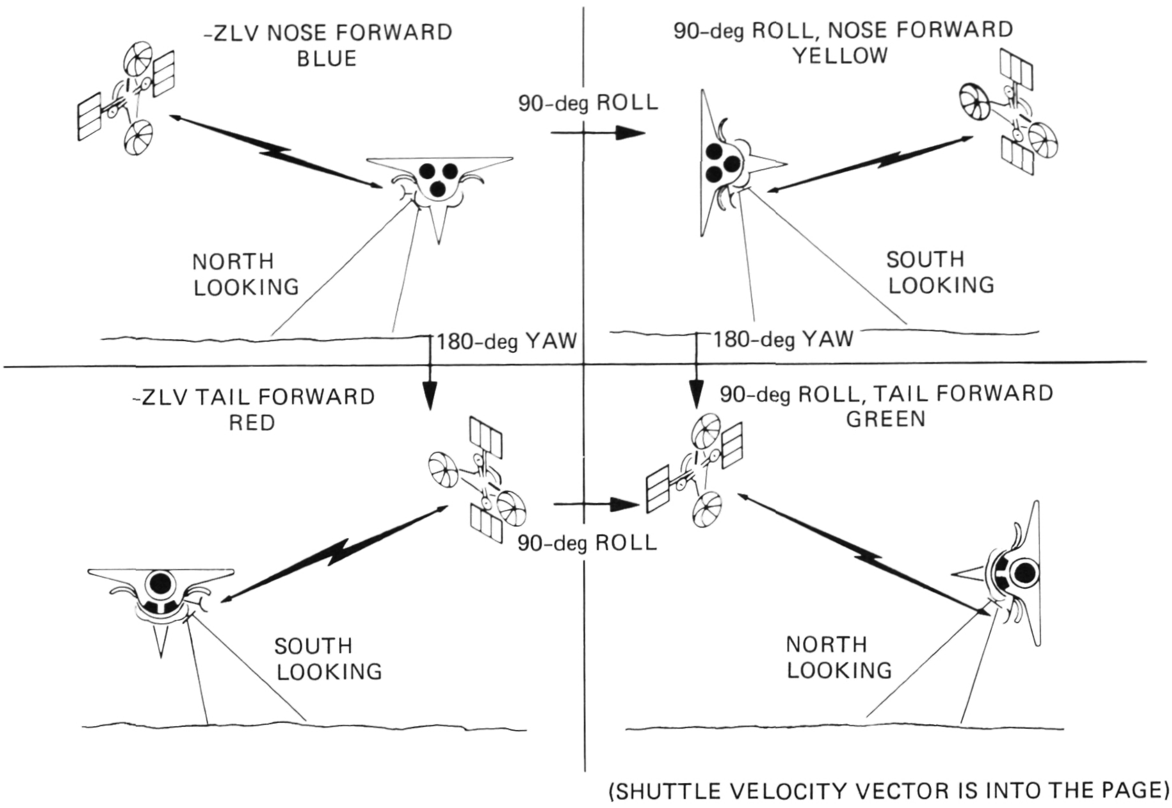

Figure 7-1. The primary shuttle attitudes for SIR-B data acquisition

for a 24-h period (16 orbits) at a 224-km altitude with one TDRS in orbit.

Careful premission analysis of TDRS access was accomplished with SMDOS by incorporating a diagram of shuttle blockage of the Ku-band TDRS antenna (Figure 7-3). By placing this blockage pattern (shaded areas) into a space-and-time reference frame, tracks that represented TDRS access during any selected shuttle orbit and attitude could be plotted onto the diagram. Restrictions to TDRS access included the physical limitations of the TDRS viewing horizon as well as blockage by the shuttle itself. Four shuttle attitudes for a single orbit are traced on the figure with the directions of flight indicated. Each dot inside the highlighted yellow attitude trace indicates one minute of time. If an orbital trace crossed the line marked "antenna wrap," the Ku-band antenna had to be unwrapped 360 deg to continue transmission.

Orbital times of access were then incorporated into the mission SIR-B data-acquisition plan. In a few instances, especially the two rolled attitudes, important improvements in TDRS access were obtained by minor adjustments in degrees of roll.

D. Attitude Stability

Based on a study of the PATH tape, shuttle attitude stability was kept within ±0.01 deg of any required attitude with a ±0.02-deg/s angular rate (Ref. 7-4). This did not affect the ability to successfully view sites or correlate the data. Although the shuttle was capable of much tighter deadbands (at the expense of increased propellant usage), propellant was at a premium because of the many attitude changes required throughout the mission. From this attitude study, inconsistencies were revealed in the calculation of angular velocity on the PATH tape and a correction was proposed. Because of inconsistencies, caution must be used in attitude studies that use the PATH tape.

E. Experimental Imaging Modes

1. Squint-Mode Imagery

The squint mode provides a means of classifying scenes that have a strong azimuthally dependent radar signature, such as plowed fields with a row-direction modulation. This mode also provides the capability to detect scenes whose fading

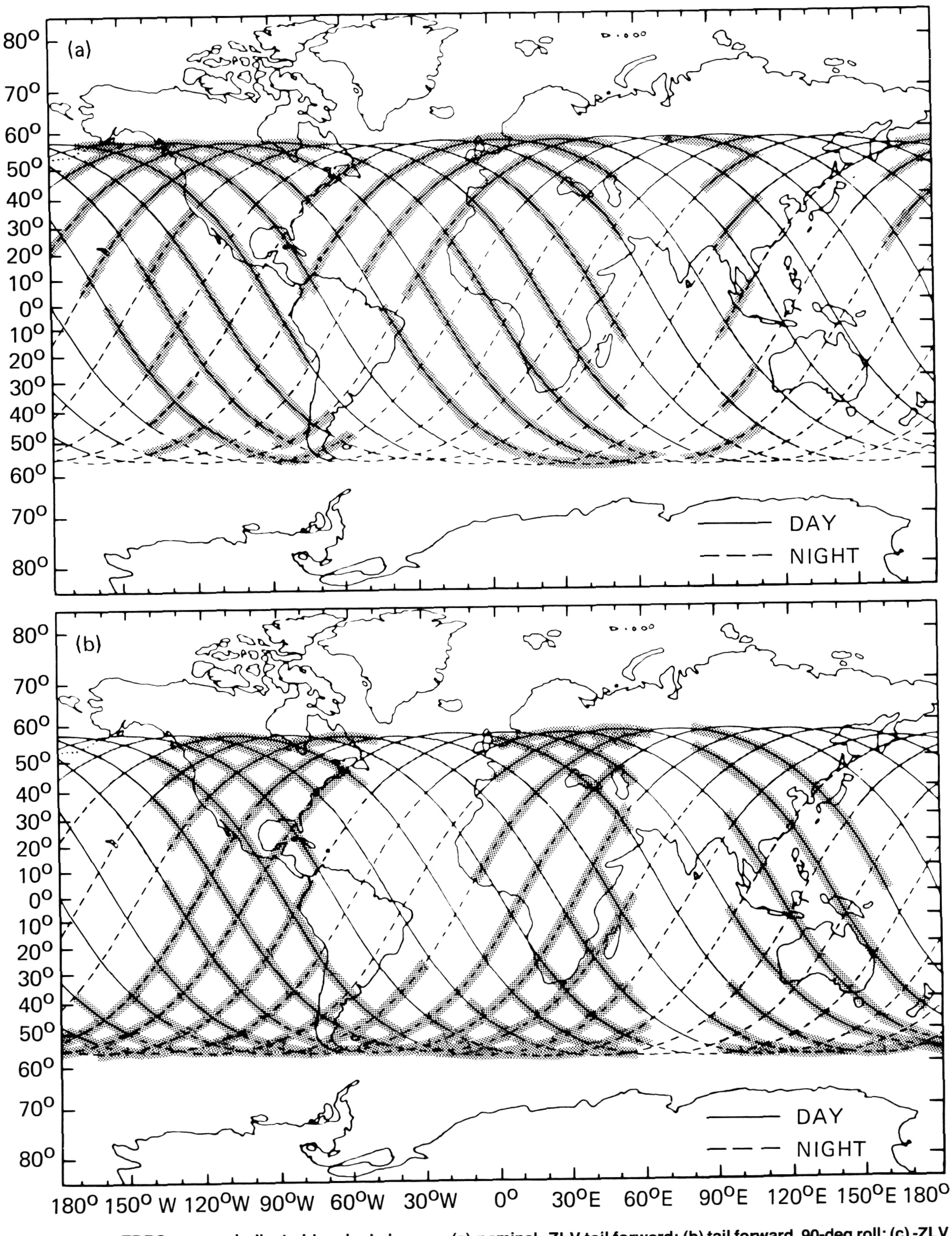

Figure 7-2. TDRS access indicated by shaded areas: (a) nominal -ZLV tail forward; (b) tail forward, 90-deg roll; (c) -ZLV nose forward; (d) nose forward, 90-deg roll

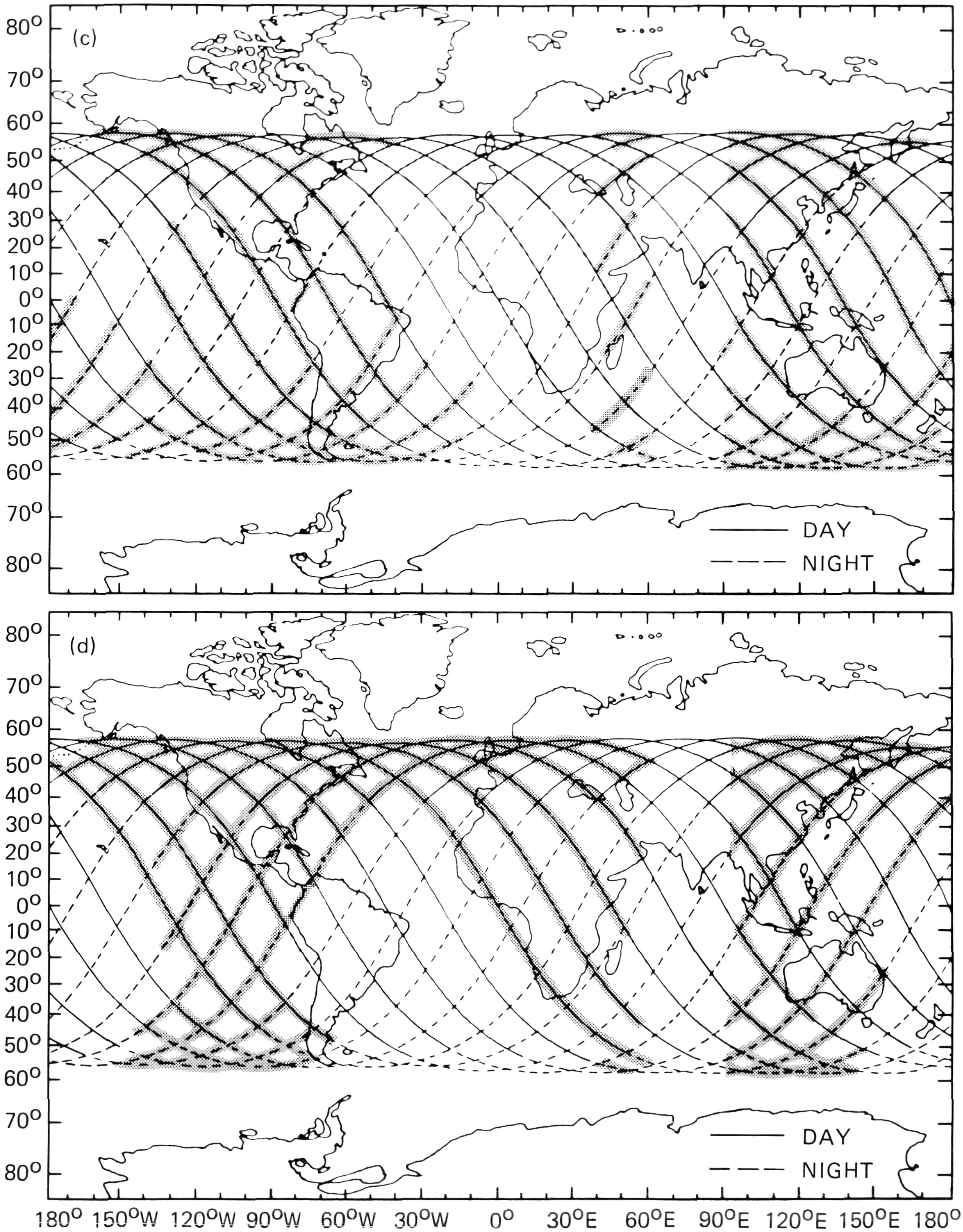

Figure 7-2 (contd)

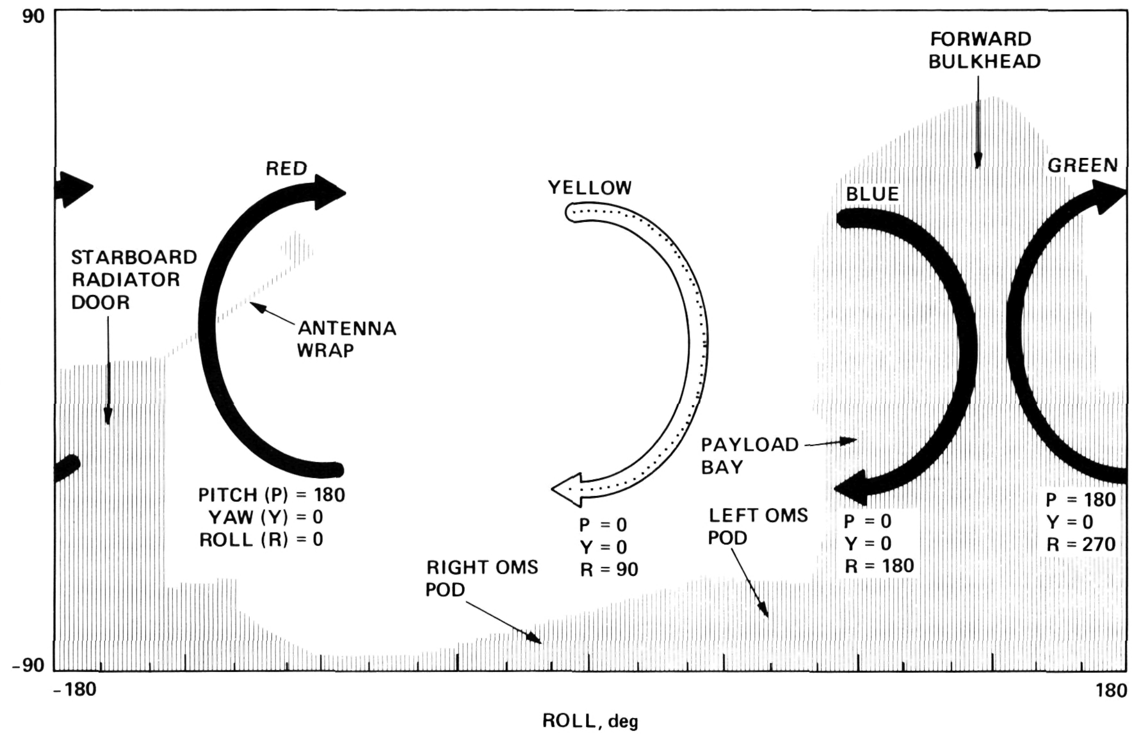

Figure 7-3. Shuttle blockage of the Ku-band TDRS antenna

pattern has a null in one azimuth direction but produces a bright return at other directions. In addition, from a fixed orbit, the squint mode can be used to image a given target at a specific incidence angle by adjusting the azimuth angle. This will be very important in the Earth Observing System (Eos) era when the SAR and another instrument must acquire their imagery simultaneously at a specific off-nadir angle. Squint-mode imagery is acquired by yawing and pitching the shuttle to a fixed azimuth angle (Figure 7-4).

In the premission plan, four squint-mode passes were anticipated for Canada. The planned squint (azimuth) and look angles are given in Table 7-3.

Because of the many problems during the mission, only data take 35.4 with a look angle of 49 deg and a squint angle of 65 deg was retained. However, because of the low quality of the data obtained, processing the data to useful imagery was not possible.

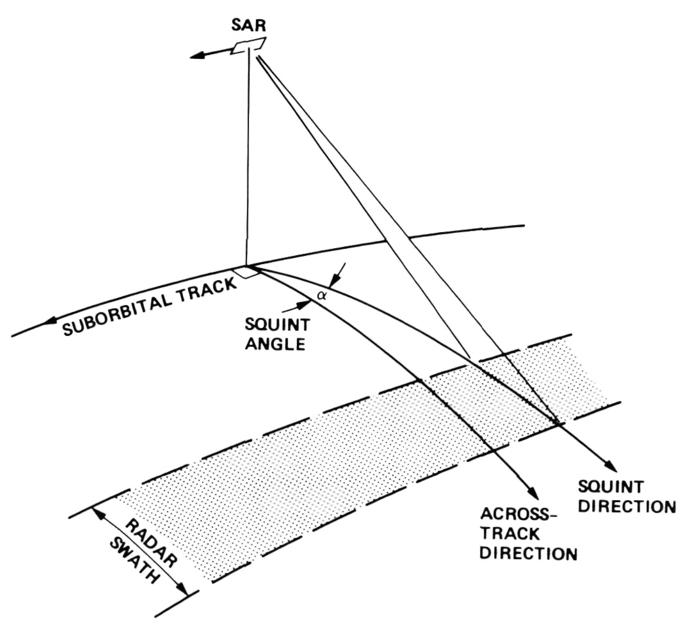

Figure 7-4. Squint mode

2. Stare-Mode Imaging

The SAR stare mode uses an increased time of acquisition while over a target to increase the number of looks (and thereby reduce speckle noise) at a fixed resolution. To acquire stare-mode imagery, the shuttle performed a controlled, continuous pitch maneuver that kept a target in the antenna pattern for a much longer period of time than that provided by the normal side-looking mode. This maneuver is illustrated in

Table 7-3. Squint-mode passes over Canada

Data take	Angle, deg				
	Look	Squint	Roll	Yaw	Pitch
34.5	49	65	105	319	18
51.4	49	30	270	202	335
67.4	49	45	95	17	345
83.4	49	−36	96	339	17

Figure 7-5, although the depicted azimuth angle sweep is greatly exaggerated. The planned shuttle maneuvers for data take 99.4 are described in Table 7-4. The actual stare-mode maneuver was accomplished by pitching the shuttle 180 deg starting from a nose forward, +ZLV attitude. The pitch rate increased throughout the first 180 deg to a maximum rate when the shuttle reached the −ZLV attitude.

For SIR-B, there is a practical limit on the number of degrees of pitch that can be processed in a single image. For a maneuver greater than ±3 deg, the change in range from spacecraft to target is appreciable and the image cannot be processed.

Although it is also theoretically possible to improve the azimuth resolution using the stare mode, it is computationally easier and potentially more useful to employ the increased synthetic-aperture length to increase the number of looks and

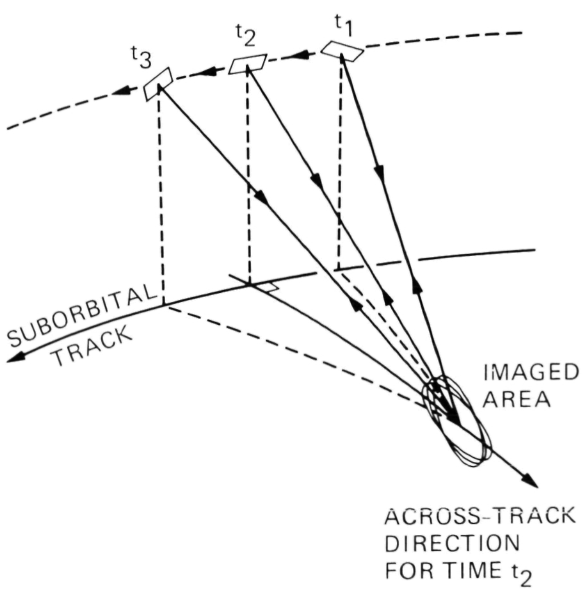

Figure 7-5. Stare mode (multiple looks) by pitching the shuttle

Table 7-4. Planned stare-mode maneuvers for data take 99.4

Mission elapsed time	Remarks	Maneuver[a]		Event
6/02:23:00	Track target	LVLH	R+ 0	Stare
6/02:28:00			P+240 Y+ 0	Start attitude
6/02:29:00	Rotation	Rotation Start Attitude	R+180 P+316 Y+303	Stare Rotation
6/02:29:30	Select vernier jets			Stare Rotation
6/02:31:00	Select normal jets			Stare Rotation
6/02:31:00	Stop	Inertial	R+233 P+ 64 Y+ 25	Stop rotation

[a] R = roll
P = pitch
Y = yaw
+ = positve roll, pitch or yaw
LV = local vertical
LH = local horizontal

maintain the resolution at 25 m in azimuth. This technique has the potential to produce images with 15 to 20 looks, which would greatly reduce the speckle and enhance the radiometric quality of the imaging. Although data take 99.4 was deleted, the stare-mode maneuver was accomplished during data take 115.4 using the shuttle maneuvers given in Table 7-4. A post-flight analysis of the attitude and trajectory history revealed, however, that the intended target was actually missed (Ref. 7-5). Further analysis of the radar signal data showed a SNR of essentially zero, which prohibited processing of the data to image form.

3. Variable-Squint-Mode Imaging

During orbit 116 of the SIR-B mission, a variable-squint maneuver was performed over the southern Atlantic Ocean during which SAR data were recorded while the shuttle rotated at a constant yaw rate about the vertical axis. The purpose of this data collection was to view over a range of azimuthal angles an area of the ocean that was as statistically homogeneous as possible, to determine if ocean-wave directional spectra and surface wind speed and direction could be measured accurately.

The variable-squint pass began in a nearly "red" attitude (−ZLV, tail forward), slightly forward of broadside, and progressed through more than 60 deg of yaw in a counterclockwise direction at a rate of 0.2 deg/s. The look angle was 25 deg. Because of allocation constraints on the tape recorder, only 5 min of data were collected. Ideally, this maneuver should be done at a faster yaw rate (at least 1.0 deg/s), and through 180 to 360 deg of yaw to view as reduced an area of ocean as possible through two broadside and one forward azimuthal orientations.

In principle, several types of oceanographic information can be derived from this variable-squint-mode data after various forms of processing; this principle is being investigated by experiment. In a nonimaging mode, for instance, sequential one-dimensional wave-directional spectra at different angles can be derived after range compression of each pulse. The detailed spacecraft attitude data needed to calculate the look direction for each pulse are contained in the PATH tape.

After image formation, which requires a range-walk correction, two-dimensional wave spectra can be generated from short image segments at different angles. These wave spectra are used to extract a measurement of the total received radar power as a function of incidence angle; this value can be used to infer wind speed and direction.

To date, a subset of the acquired data has been analyzed in the nonimaging mode, but no surface waves were detected in the wave spectra.

VIII. Mission Operations

Mission operations included all phases of the SIR-B experiment carried out during the flight. Responsibilities were spread among three general areas: the Mission Control Center (MCC) at Johnson Space Center (JSC) in Houston, Texas; the Spacelab Data Processing Facility (SLDPF) at Goddard Space Flight Center in Greenbelt, Maryland; and the team members' ground-experiment locations in different parts of the world. The functions of the SIR-B Mission Operations Team were (1) to control the SIR-B hardware by execution of the commands necessary to carry out the experiment; (2) to monitor the health of SIR-B hardware and associated ground-support equipment (GSE) during the flight and to identify any anomalies in GSE operation; (3) to modify the preflight plan in response to anomalies or unique, unpredicted science opportunities arising during the flight; and (4) to coordinate operation of SIR-B with the simultaneous ground experiments. These functions were performed by the SIR-B Mission Operations Team continuously during the flight. Organization of the team is shown in Figure 8-1.

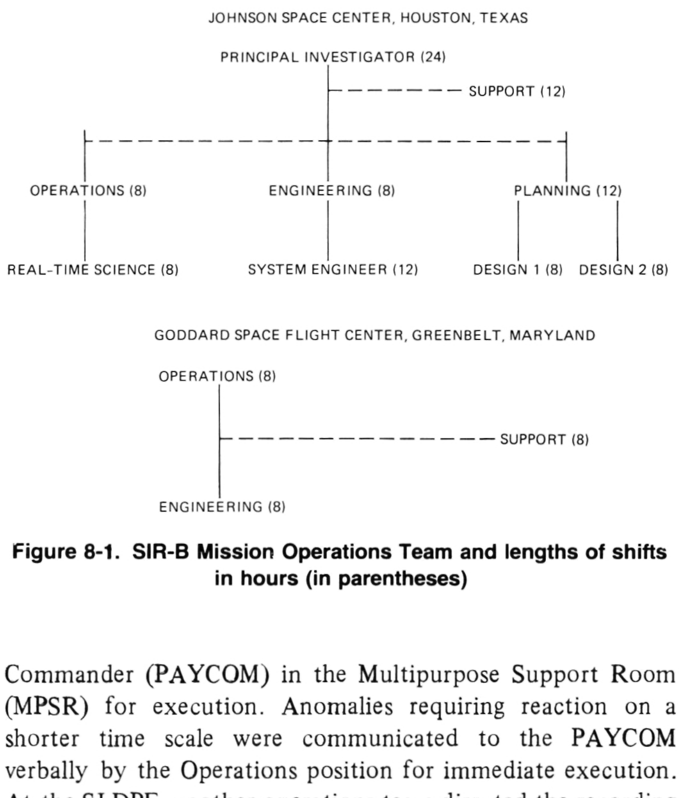

Figure 8-1. SIR-B Mission Operations Team and lengths of shifts in hours (in parentheses)

At the MCC, progress of the flight, hardware status, and status of the concurrent ground experiments were monitored by (respectively) the SIR-B Operations lead, the Engineer, and the Real-Time Science staff in the Payload Operations Control Center (POCC) (Figure 8-2). Deviations from the preflight plan observed by any of these personnel were reported to both the Planning and System Engineering staffs, who made appropriate modifications to the preflight plan. Meanwhile, updated shuttle ephemeris information in the form of state vectors was transferred from the MCC to the two Design staff who propagated future shuttle orbital positions. Modifications in response to anomalies and updated orbital information were then combined by Planning and passed to Design (Figure 8-1) for creation of an updated Command Plan. Every 24 h a revised Command Plan was transferred to the JSC Payload Commander (PAYCOM) in the Multipurpose Support Room (MPSR) for execution. Anomalies requiring reaction on a shorter time scale were communicated to the PAYCOM verbally by the Operations position for immediate execution. At the SLDPF, another operations team directed the recording of data from the shuttle Ku-band data link and shipped the data back to JPL. All positions were staffed 24 h per day for the duration of the flight on either 8- or 12-h shifts with 1 h allowed for the transfer between shifts.

A. Commanding

The SIR-B preflight plan was assembled at JPL using a predicted ephemeris ("supertape") that gave an estimated shuttle

Figure 8-2. Payload Operations Control Center

position as a function of time for the entire flight. This plan, the SIR-B Activity Plan or SBAP, was converted into the command words necessary to execute it and was loaded into PAYCOM computers prior to launch. The PAYCOM staff then generated a Command Plan by integrating the SIR-B commands with the commands of the other instruments and verifying their compatibility with other shuttle systems. For each set of commands corresponding to a single data take (a "data take" is that period of time during which the radar transmitter and receiver are turned on), one of several command routes had to be chosen and the commands translated into the language appropriate for that route. Anticipation of shuttle anomalies as well as limited preflight knowledge of the actual shuttle ephemeris made it necessary to create the capability to modify the Command Plan in near-real time, and a set of computer programs titled SMDOS (Shuttle Mission Design and Operations Software) were used to accomplish replanning quickly. This software used shuttle state vectors passed to the SIR-B team by the MCC and desired science changes as inputs to revise the Activity and Command Plan files. The Command Plan file was transmitted electronically to the PAYCOM computers. As a backup to this system, a phone line to a JPL main-frame computer accessing similar programs was available.

B. Replanning

A key element throughout the SIR-B mission was the quick and efficient reaction to changes that affected the data acquisition strategy. These changes included orbital deviations from trim burns, which kept the orbiter altitude within limits, and attitude timeline changes (see Section IX for definition of "timeline"), which usually resulted from the requirement to track TDRS, although these changes were sometimes made to accommodate other requirements such as solar limb observations or press conferences.

Most changes were anticipated 6 to 18 h in advance—a reasonable cushion for the careful consideration of any contemplated action. However, there were events that provided no lead time for response, such as communications problems that delayed or even precluded a data take, and tape management problems, where tape ran out prematurely or a fresh tape had not been loaded when expected.

Long-term (24-h) replanning, usually in reaction to loss in the Ku-band link, was accomplished in two parts. First, a strategy was mapped that reprioritized targets and made the best use of resources (e.g., tape recorder time and command access); this strategy used the best information available for orbiter timeline and position and took into account the success (or perceived success) of previous data takes in any particular series. Once a baseline for action had been established, the task of modifying the SIR-B timeline and radar parameters commenced. The start and stop times for some planned data takes were modified and others were deleted altogether. The best available orbital predictions were used to calculate new look angles using the planning routines of the SMDOS. Data window positions and PRFs were then selected using lookup routines in the SMDOS. To complicate matters, a partial failure of the antenna feed system resulted in a very weak signal being received at the antenna. System Engineering (Figure 8-1) compensated for this by boosting the receiver gains by either 9 or 12 dB, depending on the magnitude of the premission value. All of this information was then incorporated into the updated radar Command Plan.

In summary, 98% of all data takes planned for SIR-B were changed because of various problems during the flight and differences between the premission and actual ephemeris. For SIR-A, 99% of all data takes were changed. The important "worst-case" lesson learned for future shuttle SAR missions is the probability that all data takes will change.

C. Monitoring

Two digital data streams were available to the SIR-B team during the flight. The first was the Payload Parameter Frame (PPF) data available through the low-rate S-band downlink, and the second was data taken from the high-rate Ku-band downlink. Instrument data were recorded from both sources and particular subsets of the data were graphically displayed on monitors. Software to review the data during its acquisition was used to flag apparent anomalies.

Some PPF data were redundant with the data displayed by JSC on the MCC screens. These data were sent to the User Room by wire and read and archived by logging computers for the entire mission. Displays of echo sample gate and data window position were created by these same computers and used to verify the correct setup of the radar parameters in real time.

Ku-band data were received in the MCC and split into header and radar echoes by dedicated hardware known as bench checkout equipment (BCE). The BCE created an analog display of the radar echoes and passed header data along to the logging computers for display and archiving. An additional feature of the logging computers—a real-time display that used state vectors obtained from Ku-band headers and radar parameters obtained from PPF data to show current swath position on a world map—was not used because of the failure of the TDRS Ku-band link.

D. Recommendations

The mission operations aspect of the SIR-B experiment required flexible replanning due to both expected inaccuracies in the preflight ephemeris and unexpected occurrences external to the payload. Both SIR-A and SIR-B have shown that it is possible to react constructively to both expected and unexpected anomalies during a flight and replan the experiment accordingly. All the recommendations in this section are centered on further improvements of this capability.

The first suggestion is to increase the capacity of the command system, which was severely overloaded because of the complexity of the instrument. The use of the Payload Control Sequencer (PCS) greatly simplified SIR-B commanding. Therefore, to ease the problem of command, it is recommended that the PCS be used for future SAR flights that use the MCC/PAYCOM command system. As an alternate solution, a new command system could be implemented, one that allows the experiment operations team direct command of their instrument in real time from the POCC at JSC or from a remote command center.

The crew of Flight 41-G was a great help in the operation of SIR-B. Many data takes were commanded from the ground with their help, and all tape changes on the onboard high-data-rate tape recorder (HDRR) were accomplished by them. It would be possible to increase the efficiencies of LOS commanding (LOS is the period during which there is a loss of signal between the shuttle and the MCC), tape management, and documentation with the addition of 24-h operations and payload specialists in direct communication with the payload operations teams. Mission Specialists on Flight 41-G dedicated as much time as possible to operation of SIR-B and the HDRR, but a capability for more complex operations on board as well as direct communication between the crew and the ground, which payload specialists would provide, would improve both commanding and tape management.

A final recommendation is to improve the quality and transfer of ephemeris information between the MCC and the POCC. This includes increasing the frequency and accuracy of updates, reducing the delay of information transfer, and implementing an electronic link between the MCC and the POCC for the transfer of state vectors.

Table 9-1 (contd)

Event	Time (MET)	Time (GMT)	Comments
Off-load tape No. 1	0:23:00	280:10:03	Data takes 10.4, 12.6, 14.2, and 14.8
IMU alignment	1:00:00	280:11:03	
Canada activity	1:01:18 to 1:02:03	280:12:21 to 280:13:06	Attitude for orbiter glow and atmospheric emissions experiment (Oglow)
SIR-B antenna stowage	1:05:03	280:16:06	RMS arm completed latching after latch motor failed to drive antenna closed; antenna remained closed until low altitude orbit; lost planned data takes 21.2 through 32.4
IMU alignment	1:07:45	280:18:48	
OMS burn	1:08:09	280:19:12	Adjustment of orbit to 257 km (139 nmi) apogee
OMS burn	1:08:50	280:19:53	Adjustment of circularized orbit at 257 km (139 nmi)
LFC stellar calibration	1:10:40	280:21:43	
IMU alignment	1:22:37	281:09:40	
OMS burn	2:00:19	281:11:22	Adjustment of orbit to 224 km (121 nmi) apogee
OMS burn	2:01:05	281:12:08	Adjustment to circularize orbit at 224 km (121 nmi)
Data dump 34.8	2:02:36	281:13:39	Shuttle maintains tracking of TDRS by varying attitude; stored data and downlinked intermittent dropouts; data takes 17.4, 17.5, and 18.6
SIR-B antenna open	2:02:42	281:13:45	
Data dump 36.2	2:05:35	281:16:38	Shuttle TDRS tracking; data takes 35.2, 35.4, 35.6, and 35.61
Data dump 37.2	2:07:03	281:18:06	Shuttle TDRS tracking; data takes 36.6 and 37.2
Data dump 38.1	2:08:36	281:19:39	Shuttle TDRS tracking; data takes 37.6, 38.1, and 38.11
Data dump 39.6	2:11:43	281:22:46	Shuttle TDRS tracking; data takes 39.2, 39.4, and 39.6
Off-load tape No. 2	2:23:00	282:10:03	Data takes 43.2, 43.5, 44.8, 45.2, and 46.2
IMU alignment	2:23:44	282:10:47	
Trim burn	3:01:35	282:12:38	
Loss of TDRS capability	3:02:00	282:13:03	Mispositioning of star tracker prevented downlink of data takes for 12 h 42 min
Off-load tape No. 3	3:03:22	282:14:25	Data takes 48.4, 49.2, 50.2, 50.21, 50.4, and 51.4
Canada activity	3:03:45 to 3:04:22	282:14:48 to 282:15:05	Sun photometer Earth atmosphere measurement (SPEAM)
SIR-B antenna transmitter feed system	3:04:00	282:15:03	Gain settings increased to compensate for loss of 6 to 10 dB in transmitter power due to short in antenna cable
Canada activity	3:05:14 to 3:05:55	282:16:17 to 282:16:58	SPEAM

IX. Mission Timeline

The SIR-B Mission timeline is a chronology—expressed in both mission elapsed time (MET) and Greenwich Mean Time (GMT)—of all major mission activities, events, and spacecraft attitudes that affected the final SIR-B data acquisition scenario. This information is compiled from SIR-B Mission Activities Notes, the Mission Evaluation Report (Ref. 9-1), and the Mission Report (Ref. 9-2), and is summarized in Table 9-1.

Table 9-1. Mission timeline

Event	Time (MET)	Time (GMT)	Comments
Lift off	0:00:00	279:11:03	October 5, 1984, Kennedy Space Center
OMS burn	0:00:10:30	279:11:13:30	Adjustment of orbit to 354 km (191 nmi) apogee; 57- deg inclination adjustment to circularize orbit at 354 km
OMS burn	0:00:22:52	279:11:25:52	
Payload bay doors opened	0:01:25	279:12:28	
Payload activation			
LFC	0:01:35	279:12:38	
SIR-B	0:01:37	279:12:40	
FILE	0:01:39	279:12:42	
MAPS	0:01:40	279:12:43	
Deploy SIR-B antenna	0:10:10	279:21:13	No transmission until ERBS released
ERBS release	0:11:15	279:22:18	Planned release 0:08:30; delayed due to difficulties in solar-array deployment; lost planned data takes 8.2 through 10.3
SIR-B engineering data take 8.4	0:11:55:20	279:22:58:20	Direct downlink via TDRS at 46 Mbits/s; tested gain; shuttle Ku-band antenna problems start after the 360-deg rotational unwrap of the antenna wires from the antenna shaft
Lost TDRS Ku-band capability	0:12:51	279:23:54	Shuttle Ku-band antenna out of control, which prevented lock-up with TDRS; crew deactivated drive motor
First SIR-B digital take 10.4	0:15:17	280:02:20	Acquired on tape – original plan via TDRS
First SIR-B optical take 14.3	0:20:35	280:07:38	As original plan

Table 9-1 (contd)

Event	Time (MET)	Time (GMT)	Comments
Canada activity	3:06:47 to 3:07:22	282:17:50 to 282:18:25	Cold soak
Off-load tape No. 4	3:08:15	282:19:18	Data takes 51.8, 53.2, and 54.1
IMU alignment	3:10:08	282:21:11	
Off-load tape No. 5	3:22:10	283:09:13	Data takes 55.2, 55.4, 56.4, 56.41, and 59.6
IMU alignment	3:23:35	283:10:38	
Attitude timeline purged	4:00:00 to 4:02:58	283:11:03 to 283:14:01	Several maneuvers mistakenly deleted; data takes 65.2, 65.21, 66.4, and 66.5 missed targets
Data dump 67.2	4:03:18	283:14:21	Shuttle TDRS tracking; data takes 66.2, 66.4, and 67.2
Press conference	4:04:22	283:15:25	Live video from shuttle via TDRS
Data dump 69.2	4:06:13	283:17:16	Shuttle TDRS tracking; data takes 64.2, 64.21, 65.21, 67.8, and 68.6
IMU alignment	4:09:58	283:21:01	
Data dump 73.2	4:12:30	283:23:33	Shuttle TDRS tracking; data takes 70.1, 70.4, 71.2, 71.4, 72.4, and 72.5
Radar system shutdown	4:17:53 to 4:20:00	284:04:56 to 284:07:03	Overheating of optical recorder enabled alarm and caused temporary shutdown; deleted planned data takes 77.4, 77.5, 77.6, 78.2, 78.4, and 78.5
IMU alignment	4:23:15	284:10:18	
Trim burn	5:00:28	284:11:31	
Data dump 82.4	5:01:39	284:12:42	Shuttle TDRS tracking; data takes 80.2, 80.21, 81.2, 81.3, 81.4, and 82.2
Data dump 84.2	5:04:44	284:15:47	Shuttle TDRS tracking; data takes 74.3, 75.6, 76.6, 76.8, 77.2, 83.8, and 84.2
Data dump 85.2	5:06:15	284:17:18	Shuttle TDRS tracking; data takes 84.6, and 85.2
Data dump 86.1	5:07:54	284:18:57	Shuttle TDRS tracking; data take 86.1
IMU alignment	5:09:39	284:20:42	
Data dump 89.3	5:12:12	284:23:15	Shuttle TDRS tracking; data takes 86.6, 87.2, 87.4, 88.2, and 88.4
Last optical data take 89.4	5:13:02	285:00:05	Fully recorded film reel
Off-load tape No. 6	5:21:30	285:08:31	Data takes 90.3, 91.2, 91.5, 92.8, 93.2, 94.2, and 94.4
IMU alignment	5:22:56	285:09:57	
SIR-B antenna stowage	6:02:56	285:13:59	Revised stowage procedure successful using both drive motors

Table 9-1 (contd)

Event	Time (MET)	Time (GMT)	Comments
EVA activity	6:03:00 to 6:07:00	285:14:03 to 285:18:03	Sullivan-Leestma spacewalk/refueling test; pinned Ku-band antenna into stow position; inspected SIR-B antenna latches
SIR-B antenna open	6:07:30	285:18:33	
Data dump 103.2	6:08:41	285:19:44	Shuttle TDRS tracking; data takes 96.2, 96.21, 96.4, 97.2, 97.4, 97.5, 98.2, 98.3, and 99.2
IMU alignment	6:09:18	285:20:21	
Data dump 105.2	6:11:58	285:23:01	Shuttle TDRS tracking; data takes 104.2, 104.4, 104.5, 104.6, and 105.2
Data dump 112.2	6:22:55	286:09:58	Shuttle TDRS tracking; data takes 105.4, 106.3, 107.2, 108.8, 110.2, 110.4, and 112.4
Data dump 114.2	7:00:36	286:11:39	Shuttle TDRS tracking; dumped previously off-loaded tape No. 6; data takes 90.3, 91.2, 91.5, 92.8, 93.2, 94.2, and 94.4
Canada activity	7:01:27	286:12:30	SPEAM
Data dump 115.4	7:02:25	286:13:28	Shuttle TDRS tracking; data takes 115.2 and 115.4
Conference	7:05:09	286:16:12	Live conference with President Reagan via TDRS
Data dump 117.2	7:05:44	286:16:47	Shuttle TDRS tracking; data takes 116.2, 116.4, 116.6, and 117.4
Off-load tape No. 6	7:08:00	286:19:03	Data takes 115.8, 118.2, 118.3, 118.5, and 118.6
End SIR-B data acquisition	7:09:35	286:20:38	Data take 120.2
Off-load tape No. 7	7:10:00	286:21:00	Data takes 119.4, 113.3, 119.6, and 120.2
SIR-B antenna stowage	7:10:03	286:21:06	Final closing before crew sleep period
End payload deactivation	8:00:30	287:11:33	MAPS, FILE, LFC
Close payload bay doors	8:01:16	287:12:19	
Deorbit	8:04:26	287:15:29	
Landing	8:05:30	287:16:33	October 13, 1984: first landing of a shuttle at Kennedy Space Center

X. Astronaut Participation

(Adapted from a report by Astronaut Kathy Sullivan)

A. Premission

At present, flight-crew participation in the planning for a complex shuttle science mission, such as OSTA-3, begins 18 to 24 months prior to launch with the designation of a flight-crew representative. This representative is a consultant to the payload team in such areas as flight operations and training, and a source of knowledge about the payload for the astronaut office. This role was particularly valuable in preparing the SIR-B antenna for operation.

Another key element in flight preparation is the development of guidelines that govern operations during the mission. The guidelines define, for example, SIR-B operations in the event of any one of various antenna mechanism malfunctions; they include also the crew timeline (Crew Activity Plan, or CAP).

B. Inflight

Flight-crew responsibilities for nominal SIR-B operations involved four tasks: orbiter maneuvering (maintenance of the attitude timeline), radar antenna operations (deploying and stowing the antenna), entry and enabling of the orbiter Payload Control Sequencer (PCS) computer sequences, and changeout of high-data-rate recorder (HDRR) data tapes. The attitude timeline and PCS tasks were essentially continuous, while HDRR tape changes were required only once per day and antenna management only occasionally.

1. Attitude Timeline

The attitude timeline actually executed during the 8.5 days of Flight 41-G contained 148 maneuvers. The architecture of the orbiter's automatic maneuvering software (Universal Pointing) and the on-orbit autopilot made such elaborate attitude timelines very labor intensive. Two autopilot modes could be defined in the computer at any given time and interchanged via a single pushbutton; redefining autopilot characteristics was done by keystroke entries (14 parameters maximum) to a specific display. The autopilot switchover could be made only manually; therefore, to switch to a tighter deadband rate, crew input was required at both the beginning of each maneuver and at the end. In addition, the Universal Pointing software allowed entry of only the current maneuver (tracking the center of the Earth to maintain the payload bay pointed to the Earth counted as a maneuver) and one future maneuver. This meant that the crew was only one step ahead on attitude timeline tasks. The result of a timeline like this was the full occupation of one or two people—who often had only a few minutes between events—with manipulation of the autopilot configuration and the entry of maneuver data.

2. SIR-B Antenna Operations

During the 14 months prior to launch, representatives of Ball Aerospace, JPL, the JSC Payloads Office, and the flight crew held many working sessions to ensure a correct and thorough understanding of the Antenna System and its orbiter interfaces.

The antenna was controlled from a panel in the orbiter's aft flight deck; the panel was designed for use with the orbiter's electromechanical systems. Panel indicators for the nominal deploy and stow of the antenna were depicted graphically in the flight procedures, which were developed to present all instructions in extremely concise terms to facilitate efficient and reliable operation. As a further aid, a cue card was constructed to mount over the switches on the panel and mask the orbiter switch numbers with the proper antenna function names.

Several hundred antenna-angle changes occurred during the course of the mission, many of these during crew sleep periods. These changes were accomplished with an automatic antenna-angle control circuit in concert with the PCS sequences. An on-board ability to back up the automatic system with manual positioning was also available, but proved unnecessary.

Two noteworthy anomalies occurred during antenna operations. In the first, preload forces in the antenna introduced during final ground rigging did not allow firm seating of the movable portion of the structure on all of the stow-position hardpoints. About 10 h into the flight, the initial deployment of the outer leaf induced strong oscillations of the entire antenna structure. As recorded on the intercom tapes, a remark from the aft flight deck compared this movement to that which preceded destruction of the Tacoma Narrows Bridge. To stiffen and stabilize the structure, deployment of the inner leaf began as soon as possible. This procedure successfully damped the oscillations and no abnormal dynamics were observed on any subsequent deploy cycles.

The second anomaly occurred on flight day (FD) 2 while stowing the antenna for an orbit-adjust burn. During the stow, the outer leaf would not latch completely. This failure to mate the STOW microswitch on the leaf made all attempts at closing the leaf and tilt latches impossible. After repeated attempts, the RMS arm was used to push the leaf down to the full stow position (Figure 4-19). Because of this problem, a decision was made to leave the antenna closed during the intermediate-altitude phasing portion of the flight (a duration of almost 24 h). Redeployment occurred on FD3.

For reasons of safety, the Flight Rules concerning the SIR-B antenna permitted powering only one of the two parallel, redundant motors at a time. Furthermore, as a precondition to allowing the antenna to remain open past extravehicular activity (EVA), two independent means of stowing the antenna for landing were required. After the experience on FD2, it was not clear that *any* means existed to stow the antenna unassisted; EVA day loomed as possibly the final day of radar operations.

The prospect of reduced SIR-B coverage prompted further effort to discover a solution to this problem. Two contingency plans for stowing the antenna were discussed: (1) operating both motors simultaneously to speed up the leaf motion, and (2) pyrotechnically releasing the motors from their shafts to allow spring actuators to close the array. The latter option would be a one-time only solution; once the pyrotechnic devices were fired, they could not be recharged for a second pyrotechnic motor release, and the SIR-B experiment would terminate. So, prior to EVA, the former option was chosen, put into effect, and it succeeded.

With this demonstration of unassisted stow capability, and with the RMS as backup and an EVA inspection that confirmed there was no obvious problem with the antenna's mechanisms, post-EVA deployment of the antenna for further data takes was allowed.

3. Payload Control Supervisor

SIR-B made use of a new capability in the orbiter's software: PCS sequences. These were essentially user-defined subroutines that reside in the orbiter's computer. They provided a payload-dedicated command ability for data takes not under tracking station or satellite coverage, and allowed crew control (as a backup to ground command) of many more radar system parameters than would have been possible otherwise.

From a crew perspective, PCS operations were a buffer of selected, time-tagged sequences. They were analogous to the attitude timeline task, except that the larger PCS buffer (six slots for SIR-B) allowed the crew to get ahead of the timeline, thus freeing these people for other tasks.

The sequence selections and start times for each flight day were uplinked from Mission Control with morning teleprinter message traffic. When necessary, the various constants required for executing each sequence could also be entered; in practice, the ground also uplinked these directly to the appropriate memory locations prior to sequence start.

4. High-Data-Rate Recorder Operations

One of the significant SIR-B crew duties was the timely and efficient change of tapes in the HDRR on a daily or twice-daily basis; the HDRR was mounted in the orbiter's aft flight deck area. With the appropriate equipment prepared in advance, tape changes were routinely made in flight in 15 min or less. The only operational difficulty arose when the POCC's tape-usage plans were modified in response to the orbiter's Ku-band antenna malfunction (Subsection C below). Remounting and reusing tapes created labeling problems that grew almost too complex to be accommodated by the preflight plans and agreements. Proper care by both the ground and flight teams, however, avoided any costly confusion on the last two days of the mission.

C. Inflight Maintenance of the Ku-Band Antenna

Early in the flight, a gimbal drive motor in the orbiter's Ku-band antenna, the space-to-ground link for SIR-B digital

An especially significant contribution to the SIR-B experiment was made through these efforts. Here, the ability to monitor surface and meteorological changes in essentially real-time was crucial to an understanding of the radar signature. The crew observed, reported verbally, and wrote down for subsequent debriefings the extent and apparent thickness of snow cover over the Canadian Shield and ice cover in the Southern Ocean. Ironically, many principal investigators, when asked prior to the mission about the value of these observations, were rather indifferent to the idea of such "simple" data.

F. Summary and Recommendation

In the opinion of the flight crew, Flight 41-G was an outstanding success. Although several problems compromised the productivity of the science mission, the data return was nonetheless impressive. The amount of high-quality data obtained testifies to the value of a properly trained and equipped crew in space, working with ground controllers and investigators as a team. The time and effort required to design, plan, practice, and execute this mission were clearly justified.

The planning for future missions like that of Flight 41-G will benefit from the lessons learned here, and similar lessons learned through the Skylab and Spacelab experiences. The key question is essentially how to best integrate human talents and scientific operations in space. Because Earth-looking experiments flying at low altitudes have a rapid rate of passage across target sites, current instruments must be operated in "cookbook" fashion, i.e., according to a preplanned list of ON and OFF times. A promising area of development might be the design of interactive "look-ahead" targeting systems that would allow the operator to see what was coming and point or configure the sensor accordingly. This would certainly be useful for sensors with narrow fields of view.

Finally, the increasing level of human activity in orbit envisaged for the 21st century should encourage Earth scientists to reconsider the value of direct human observations. Such observations by a geologist, for instance, are a collection of impressions on many scales that will provide a unique enhancement of the interpretation and integration of diverse data sets.

data, developed a short that prevented control of the antenna's position. This short was not apparent to the crew until they were asked by the ground team to observe the antenna. After consideration, it was decided to freeze the antenna in one position by disconnecting the cable that powered the control box. This procedure required dismantling the lockers and wall panels in the aft starboard area of the middeck. The entire crew was involved in one way or another over the course of several hours, but the procedure was successful. It was then necessary to reassemble the disrupted middeck to provide sufficient space for operations.

Thereafter, pointing the Ku-band antenna toward the TDRSS was performed by maneuvering the orbiter, rather than by pointing the dish alone. This new mode of operation had, of course, extreme effects on the data-take planning.

The inability to control the position of the Ku-band dish by normal means had another consequence: uncertainty that the antenna could be stowed in a position that would allow safe closing of the orbiter's payload doors. To ensure—well before entry day—that the doors could be safely closed, an EVA procedure was developed by the astronauts and the EVA-support personnel on the ground.

The plan required first that the antenna be manually swung back inboard close to its normal stow position; this was accomplished by an EVA crew member outboard of the starboard longeron. Another crew member positioned in the middeck area then secured the antenna with locking pins. Because the control-box power cable had to be reconnected, another dismantling of the middeck was necessary to gain access to the control box. In addition, a jumper cable had to be fabricated to allow power to a single circuit in the connector. The entire EVA procedure was successful, although there was a moment of consternation when it was discovered that instructions from the ground had resulted in a female-to-female connection!

One other consequence of the Ku-band antenna failure deserves note. As new data-take plans were put into effect, the operating duty cycle of the optical recorder (OR) rose considerably.

The orbiter's computers monitored several OR parameters, including film temperature. In the course of many preflight discussions about the true criticality of the high- and low-limit values the computer would annunciate, the lead SIR-B crew member gained a good feel for how "hard" or "soft" each warning limit was in reality.

Therefore, when one night—during a long data take and while the TDRSS suffered LOS—the computer signaled an OR temperature in excess of the programmed limit, there was an on-board ability to assess the situation: it was decided to override the published malfunction procedure. This judgment call allowed the data take to continue. Happily, the temperature leveled off 2 deg below the limit, and the data take was completed. This incident highlights the good preflight planning and good teamwork that can equip a flight crew to be participating members of an experiment team. In the absence of such understandings, the crew is obliged to execute hard-copy procedures.

D. Extravehicular Activity

In light of the problems with both the Ku and the SIR-B antennas, there was concern about redeploying either antenna after the EVA when there would be no manual backup available. For this reason, the EVA originally scheduled for FD5 was conducted on FD7, to allow the maximum operating time for SIR-B.

The successes in stowing both the Ku and SIR-B antennas were achieved through EVA with hands-on manipulation of the flight hardware and close-up visual inspections. These successes in turn provided the confidence needed to redeploy both antennas and allow operation of the SIR-B antenna beyond the EVA. The added life gained for the SIR-B antenna was largely the result of preflight experience in operating the SIR-B System during testing.

E. Ancillary Activities

One of the greatest pleasures for crews on-orbit is the view they have of their home planet. Each flight crew is briefed on 20 to 30 sites around the world where various scientific groups have an interest in obtaining hand-held photographs and/or real-time observations of the geology, oceanography, or meteorology of these areas. On Flight 41-G, which was in many ways a "mission to Earth," the significance of these activities and the interest of the entire crew were increased significantly.

The list of sites, along with an independent list submitted by the SIR-B team, was divided five ways before the flight so that each crew member had a group of sites on which to concentrate preflight study efforts. This division of labor, however, did not restrict photography of the sites to specific crew members, and all the site documentation was available for study by all concerned. The results were a good understanding by the entire crew of which geographic areas were important, and detailed knowledge by one member of the best orbit to obtain the types of photos requested. Because the sites passed by quite rapidly, the strategy for photography had to be solid *before* the vehicle entered the target area.

XI. Data Products

This section describes in detail the digital and optical data products, their formats, and where the data can be obtained. SIR-B digital data are designated by data-take number and scene number; optical data are designated by data-take number only.

A. Digital Data Format

1. Film Negatives

The standard SIR-B image-film original negative (IFON), is a 20.3- × 25.4-cm (8- × 10-in.) black and white transparency. A same-size image-film master positive (IFMP) and contact print are made from the original negative. The positive is used to produce duplicate negatives. These negatives, along with a print, are the standard photographic products distributed. The photographic products present the imagery at a nominal scale of 1:500,000; the pixel size is 12.5 m. The photographs also contain scene annotation, the JPL logo, a gray scale, and km-scale records (Figure 11-1).

2. Image Tapes

Digitally correlated image data are written to 9-track, 1600-bit/in., 2400- or 3600-ft computer-compatible tapes

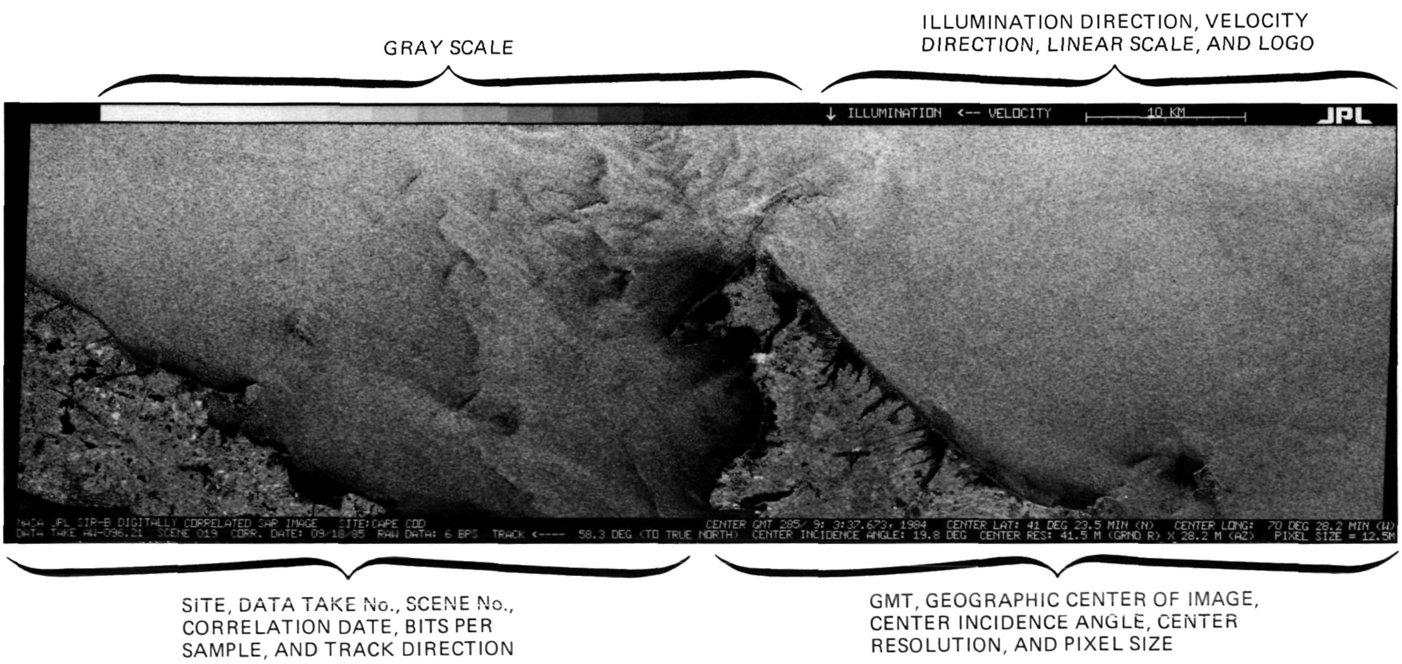

Figure 11-1. Annotation for the photographic products.

(CCTs). An image consists of azimuth records (lines) made up of 32-bit words and four image samples per word (an 8-bit pixel and one pixel per sample). For a given image, all azimuth records are the same length. The total number of records is a function of the radar parameters.

In addition to image data, annotation is included in the image-tape file. Each image data file consists of a header record, the JPL logo, gray scale and km-scale records, image data records, and annotation records. The single header record at the present contains 61 items in ASCII format consisting of annotation parameters, image parameters, shuttle parameters, and radar parameters (Table 11-1). The JPL logo and the gray scale and km-scale records occupy 84 characters following the header record. The JPL logo and shuttle velocity vector are placed as shown in Figure 11-2; their positions vary with radar look direction (north or south) and shuttle orbit direction (ascending or descending). The gray scale contains 16 levels

Table 11-1. Header description

Description	No. of bytes	Byte location	Remarks
Annotation parameters			
NASA JPL SIR-B digitally correlated SAR image	45	1 to 50	Title
Data take HH-XX.XXX Scene XXX	30	51 to 85	Identification of data
Center GMT DDD/HH:MM:SS.SSS, 1984	33	86 to 123	Center time of image
Corr. date: XX/XX/XX	20	124 to 148	
Center lat: XX deg XX.X min (N/S)	31	149 to 184	Center pixel in range and azimuth
Center long: XXX deg XX.X min (W/E)	33	185 to 222	
Site: (name of target area)	52	223 to 276	
Center res: XX.X M (GRND R) X XX.X M (AZ)	41	277 to 320	
Raw data: X bps	15	321 to 340	Number of bits per sample
Pixel size = XX.XM	18	341 to 363	Distance between two pixels; 1 pixel = 8 bits
Center incidence angle: XX.X deg	32	364 to 400	
Track ⟶ XXX.XX deg (to true north)	37	401 to 442	
Shuttle parameters			
X position: SXXXX.XXX km	24	443 to 470	For image center
Y position: SXXXX.XXX km	24	471 to 498	For image center
Z position: SXXXX.XXX km	24	499 to 526	For image center
X velocity: SXXXX.XXX m/s	25	527 to 555	For image center
Y velocity: SXXXX.XXX m/s	25	556 to 584	For image center
Z velocity: SXXXX.XXX m/s	25	585 to 613	For image center
Near slant range: XXX.XX km	27	614 to 645	Slant range to near edge
Earth radius at target: XXXX.XX km	34	646 to 684	
Shuttle altitude: XXX.XX km	27	685 to 716	
Roll: XXX.X deg	15	717 to 736	Attitude at center time
Yaw: XXX.X deg	14	737 to 755	Attitude at center time
Pitch: XXX.X deg	16	756 to 776	Attitude at center time

Table 11-1 (contd)

Description	No. of bytes	Byte location	Remarks
Radar parameters			
Gain: XXX.XX dB	15	777 to 796	Receiver gain
PRF: XXXX.X Hz	14	797 to 815	Pulse repetition frequency
CAL level: X	12	816 to 832	Calibrator level setting
Bore angle: XXX.X deg	21	833 to 858	Antenna boresight with respect to –ZLV
Data window position: XX	24	859 to 887	In 64ths of interpulse period
Data rate: XX.X MHz	19	888 to 911	Downlink rate
Image parameters			
Number of samples per line = XXXX	33	912 to 949	Number of pixels per image line
Total number of lines = XXXX	28	950 to 982	Total number of image lines
FD coeff. across track: FD:A = SXXXX.XX, FD:B = SXXXX.XX, FD:C = SXXXX.XX Hz[a]	75	983 to 1062	Coefficients used to calculate doppler frequency
FDDOT coeff. across track: FR:D = SXXXX.XXX, FR:E = SXXXX.XX, FR:F = SXXXX.XX Hz/s[a]	80	1063 to 1144	Coefficients used to calculate doppler frequency rate
FDDOT coeff. along track: FR:A1 = SXXXX.XX, FR:A2 = SXXXX.XX, FR:A3 = SXXXX.XX Hz/s[a]	82	1145 to 1228	Coefficients used to calculate doppler frequency rate
Earth radius at nadir: XXXX.XX km	33	1229 to 1266	
Azimuth skew: SXXXX pixels	26	1267 to 1297	Along-track distance image is shifted to account for Earth's rotation
LAT(NE): XX deg SS.S min (N/S)	28	1298 to 1330	Latitude of near-early corner of image
LON(NE): XXX deg XX.X min (W/E)	29	1331 to 1364	Longitude of near-early corner of image
LAT(NL): XX deg XX.X min (N/S)	28	1365 to 1397	Latitude of near-late corner of image
LON(NL): XXX deg XX.X min (W/E)	29	1398 to 1431	Longitude of near-late corner of image
LAT(FE): XX deg XX.X min (N/S)	28	1432 to 1464	Latitude of far-early corner of image
LON(FE): XXX deg XX.X min (W/E)	29	1465 to 1498	Longitude of far-early corner of image

[a]The FD and FDDOT coefficients are scaled to preserve significant digits. To get the true values, perform the following multiplications:

$FDA = FDA^{-7}$	$FRD = FRD^{-7}$	$FRA1 = FRA1^{-7}$
$FDB = FDB^{-3}$	$FRE = FRE^{-3}$	$FRA2 = FRA2^{-3}$
$FDC = FDC$	$FRF = FRF$	$FRA3 = FRA3^{-3}$

Table 11-1 (contd)

Description	No. of bytes	Byte location	Remarks
LAT(FL): XX deg XX.X min (N/S)	28	1499 to 1531	Latitude of far-late corner of image
LON(FL): XXX deg XX.X min (W/E)	29	1532 to 1565	Longitude of far-late corner of image
CAL tone EST: XXX.XX dB	23	1566 to 1593	Estimate of calibration level from coherent summation of 128 range lines
BER: SXX.XX dB	14	1594 to 1612	Bit-error-rate estimate of raw data
Start time: DDD/HH:MM:SS	24	1613 to 1641	Starting time of raw data transfer
Starting sample No. = XXXX	26	1642 to 1672	Number of samples to skip before processing
Scale factor: XXX.XX dB	23	1673 to 1700	Constant to scale image for radiometric correction
FR azimuth increment flag = X	29	1701 to 1734	
Blocks per FDDOT azimuth increment = XX	38	1735 to 1777	
Lines per reference update = XX	31	1778 to 1813	
Samples per slant range image line = XXXX	41	1814 to 1859	
Number of slant range image records = XXXX	42	1860 to 1906	
Signal-to-noise ratio = SXX.XX dB	33	1907 to 1943	
Noise = SXX.XX dB	17	1944 to 1965	
Processor software version XX.X	31	1966 to 2001	
Squint angle = SXX.XX deg	24	2002 to 2030	
Swath velocity = XX.XXXX km/sec	30	2031 to 2061	
Ground range pixel size: XX.XM (RNG), XX.XM (AZ)	48	2062 to 2114	
(Not used)	7	2115 to 2142	

of intensity ranging in value from 0 to 255. The kilometer scale ranges from 0 to 10 km. The number of image data records are variable depending on the swath width, and each record contains one azimuth line. The annotation records contain 100 records arranged in two lines of 206 characters each (Table 11-2).

3. Menu Tape

Each digital correlation results in an entry to a menu file. Each entry includes the header record data, a four-digit request number, which is the basis for image-tape identification, and a field for any remarks. The menu file is periodically written to CCT for transfer to the main SIR-B data base. A hard-copy printout of the menu information (Figure 11-3) is included as a standard distribution product.

4. Catalog

The image catalog is a report of all SIR-B digitally processed images. Each image is designated by a three-digit scene number and a four-digit request number, both of which form the basis

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Table 11-2. Digital-image annotation description

Description	No. of characters
Annotation Line 1	
NASA JPL SIR-B digitally correlated SAR image	45
Site (name of target area)	52
Center GMT DDD/HH:MM:SS.SSS, 1984	33
Center lat: XX deg XX.X min (N)	31
Center long: XXX deg XX.X min (E)	33
Annotation Line 2	
Data take HH-XXX.XX scene XXX	30
Corr. date: XX/XX/XX	20
Raw data: X bps	15
Track ⟶ XXX.X deg (to true north)	37
Center incidence angle: XX.X deg	32
Center res: XX.X M (GRND R) X XX.X M (AZ)	41
Pixel size = XX.XM	18

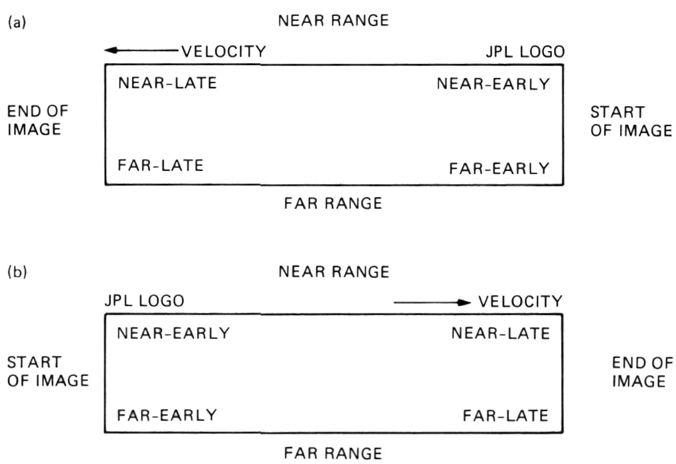


Figure 11-2. Placement of JPL logo and shuttle velocity vector on image: (a) for both a south-looking/descending orbit and a north-looking/ascending orbit; (b) for both a south-looking/ascending orbit and a north-looking/descending orbit.

for image-tape identification. The scene number was originally designed to represent the order in which a frame was processed from a given data take. Thus the first scene processed from a data take was scene 001 the second scene 002 and so on. Using this method, scenes 001 and 002 of a data take could be processed from different sections of the data take and so be geographically removed from one another. It was also originally intended that the scene number be the only number needed to identify any digitally processed frame. However, because of human error, some scene numbers were repeated. To uniquely identify a frame, then, the user is cautioned to cite not only the scene number, but the request number, the start time (GMT), and the correlation date as well.

The catalog consists of the images sorted by the start time in GMT and shows the proper geographical sequence of scenes for any particular data take. It also lists the request number, series and data take, scene number, a general site name, the latitude and longitude of the center of the frame, and the processing date. Negative numbers refer to south latitude or west longitude. Updated versions of the catalog can be obtained by special request from:

JPL SIR-B Data Center
M.S. 300-233
Jet Propulsion Laboratory
California Institute of Technology
4800 Oak Grove Drive
Pasadena, California 91109
Telephone: (818) 354-2386

or

National Space Science Data Center
Request Coordination
NASA/Goddard Space Flight Center
Code 601.4
Greenbelt, Maryland 20771
Telephone: (301) 344-6695

It should be noted that the catalog lists all images that have been processed, but does not refer to the quality of the data. The catalog is reproduced in Appendix C.

B. Optical Data Format

The optically correlated original negatives are presented on 13-cm (5-in.) continuous roll film at a nominal scale of 1:500,000 (Figure 11-4). The swath width is always 50 km and the resolution approximately 40 m or less depending on the look angle. A same-size strip contact print is produced from each negative for reference purposes only.

C. Data Distribution

During the first year after the flight, team members received digitally processed imagery of their experiment sites. Digitally processed data may be acquired for public use in accordance

```
IMAGE IDENTIFICATION PARAMETERS

SITE NAME: CAPE COD
START TIME (GMT):   285/09:03:29
CENTER TIME (GMT):  285/09:03:37.673
DATA TAKE-SCENE NO.:    AW-096.21 - 019     REQUEST NUMBER: 2362
CORRELATION DATE:  09/18/85
TRACK (DEG TO TRUE NORTH):  58.3
CENTER LAT/LONG:          41 Deg 23.5 Min  /  -70 Deg 28.2 Min
COORDINATES FOR THE FOUR CORNERS OF THE IMAGE --
NEAR EARLY LAT/LONG:   41 Deg  1.8 Min  /  -70 Deg 43.5 Min
NEAR LATE LAT/LONG:    41 Deg 35.6 Min  /  -70 Deg   .2 Min
FAR EARLY LAT/LONG:    41 Deg 11.4 Min  /  -70 Deg 56.1 Min
FAR LATE LAT/LONG:     41 Deg 45.3 Min  /  -70 Deg 12.9 Min

SHUTTLE PARAMETERS FOR DT AW-096.21 SCENE 19, RN 2362

ALTITUDE:  229.00 KM
X POSITION:      380.087 KM    \
Y POSITION:     4989.031 KM    |   State vector
Z POSITION:     4300.945 KM    |      is for
X VELOCITY:   -5814.141 M/S    |   image center
Y VELOCITY:   -3109.736 M/S    |
Z VELOCITY:     4115.336 M/S   /
ROLL:  279.0 Deg
YAW:        .0 Deg
PITCH: 180.0 Deg
SQUINT ANGLE:    1.11  DEG
SWATH VELOCITY:    7.2587  KM/SEC

RADAR PARAMETERS FOR DT AW-096.21 SCENE 19, RN 2362

RECEIVER GAIN:                86.67 DB     PRF:  1539.8  Hz
BORE ANGLE:                   59.9 Deg     DATA WINDOW POSITION:  30
CALIBRATOR LEVEL SETTING:   2              DOWNLINK RATE:   30.4 MHz

RAW DATA CHARACTERISTICS

RAW DATA:  6
CALIBRATION LEVEL ESTIMATE:              92.76
BIT ERROR RATE:  -55.39 DB
SIGNAL TO NOISE RATIO:             12.82
NOISE:   42.65 DB
```

```
PROCESSING PARAMETERS FOR DT AW-096.21 SCENE 19, RN 2362

STARTING SAMPLE NO.:    59   LINES PER REF. UPDATE:    8
DOPPLER FREQUENCY ACROSS TRACK:
         FD:A=          .00 Hz
         FD:B=       250.51 Hz
         FD:C=       224.69 Hz
DOPPLER FREQUENCY RATE ACROSS TRACK:
         FR:D=          .00 Hz/S
         FR:E=       -73.97 Hz/S
         FR:F=      1952.34 Hz/S
DOPPLER FREQUENCY RATE UPDATE ALONG TRACK:
         FR:A1=         .00 Hz/S
         FR:A2=         .00 Hz/S
         FR:A3=         .00 Hz/S
Update of Doppler frequency rate along track was not needed for this image.

OUTPUT IMAGE CHARACTERISTICS FOR DT AW-096.21 SCENE 19, RN 2362

EARTH RADIUS AT NADIR:             6368.95 KM
EARTH RADIUS AT TARGET:  6368.82 KM
CENTER INCIDENCE ANGLE:  19.8 Deg
AZIMUTH SKEW:     -46 Pixels
SCALE FACTOR:    61.37
CENTER RESOLUTION (GROUND RANGE x AZIMUTH):  41.5 M x 28.2 M
PIXEL SIZE:  12.5 M
GROUND RANGE PIXEL SIZE (RANGE, AZIMUTH):    29.1 M,   18.9 M
SLANT RANGE TO NEAR EDGE:  239.68 KM
NO. SAMPLES/SLANT RANGE IMAGE LINE:            4608
NO. SLANT RANGE IMAGE RECORDS:   874
NO. SAMPLES PER IMAGE LINE:            7012
NO. OF IMAGE LINES:  1994

REMARKS REGARDING IMAGE FOR DT AW-096.21 SCENE 19, RN 2362

REMARKS: None
```

Figure 11-3. Digitally correlated imagery menu tape.

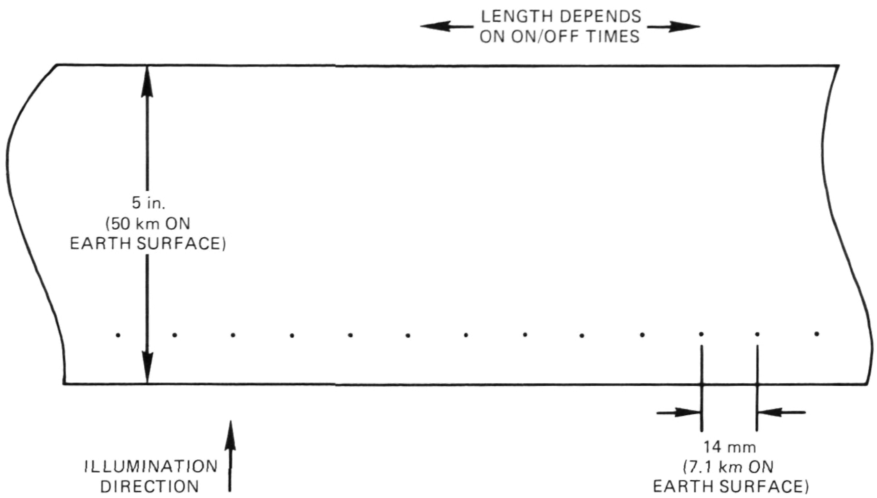


Figure 11-4. Optically processed data format

with the Land Remote Sensing Act of 1984 from the National Space Science Data Center (NSSDC) (see Subsection XI.A.4) as it becomes available. Standard products are prints, duplicate negatives, image tapes, and the menu printout. Because of their generally low quality, optically processed data are distributed only in special cases upon request to JPL (see Subsection XI.A.4).

Any questions concerning product format, cost, and turnaround time should also be directed to NSSDC.

XII. Ancillary Data

To assure the successful interpretation of the SIR-B imagery, it was necessary to acquire ancillary data from in-situ field measurements and other remote sensing instruments. For studies dealing with rapidly changing phenomena (such as those in hydrology and of the oceans and vegetation), these data had to be obtained simultaneously with SIR-B data acquisition. The SIR-B Science Team members played a significant and essential role in acquiring this ancillary data.

A. Field Measurements

Because over many areas the characteristics of radar backscatter are unknown, and because SAR response is sensitive to transient features such as soil moisture and surface waves, interpretation of remotely sensed imagery is often confused, and the positive identification of features in the imagery is often difficult. For these reasons, SAR-image analysis benefits particularly from direct field measurements made during the time of the spacecraft overflight.

Agricultural experiments benefit from measurements of crop height and health, crop classification in specific areas, soil and canopy moisture measurements, leaf-area index and biomass measurements, and observations of soil type and understory. These data help bind interpretation of the imagery, and allow the reasonable extension of classifications into areas not directly sampled on the ground.

Oceanography experiments use shipborne and buoy measurements to monitor wave heights and power spectra, as well as wind and wave direction and speed. Tidal levels are monitored and coastal phenomena observed. Again, in this way it is possible to directly interpret image features by comparing known ground phenomena with their manifestation on the imagery.

Hydrology and surface-penetration experiments make use of direct field observations, especially soil-moisture-content measurements. These values, when considered in the light of optical and radar image comparisons, can help limit the depth of penetration by the radar.

Geologic experiments are, in most cases, less dependent on simultaneous surface observations, since the time scale of most activity is slow enough to permit measurements and mapping many months to many years hence. However, there are situations that justify concurrent measurements, especially where dynamic phenomena occur or where surface moisture is expected to impact data interpretation. Imagery of volcanic events or mudflows, flooding, and seismically active regions are easier to interpret if ground observations are made at the time of acquisition. Snow cover can also be an important factor in image interpretation.

Thirty-one of the 43 SIR-B investigators conducted concurrent field observations in 6 continents and 18 countries. Study areas included agricultural, geologic, hydrologic, and oceanographic sites. In addition, corner reflectors and active radar transponders were employed in many areas to aid in the location and calibration of imagery. Passive radar receivers were also used to measure signal strength at the surface, at positions beneath the surface, and beneath various vegetation canopies.

One of the problems encountered when conducting simultaneous field observations was ensuring that the measurements were being made in the correct area. Of course there are premission predicts of image location and accuracy, but the dynamic nature of a shuttle mission makes these predictions subject to drastic changes. Field measurements are typically collected over relatively small areas. The larger the area measured, the more likely that at least a portion of that area will lie within the imagery collected. Therefore, wherever possible, it is important to set up a ground site that will be minimally impacted by crosstrack errors in the shuttle's position.

Communication is a key element in the successful collection of concurrent field data. Knowledge of the most current orbit position allows field teams to reposition, if necessary, to optimize their measurements. Of course the pointing ability of the radar gives some flexibility to orbital position, but the driving factor remains orbit uncertainty. One partial solution to this problem is field measurements conducted the day after the imagery is collected and after the absolute position of the imagery is known. This allows effective use of ground instrumentation, especially that used for certain geologic and forestry applications.

B. Landsat Thematic Mapper

As part of the SIR-B experiment, NASA offered Landsat data to interested investigators. The seven-band thematic mapper (TM) data have been available only from Landsats 4 and 5, and most of those data were gathered by Landsat 5. The data cover the optical, infrared, and thermal regions of the spectrum at 30-m spatial resolution.

Landsat TM images were requested by many SIR-B investigators as corollary data in the interpretation of the radar imagery. Geology investigators, especially those working in desert regions, used the data to assess features on the radar imagery that were not apparent on the optical imagery; the appearance of these features implied the possibility of penetration. In addition, lithologies and structures discernable on the Landsat imagery were compared with the radar information to assess the capabilities of the microwave imagery.

For vegetation experiments, the infrared TM bands in combination with the radar data were used to aid crop classification over wide areas. Of course this information is most useful when the optical data are concurrent with the radar data, since only then can direct comparisons be made without fear of interference from changing surface conditions.

Prior to the mission, several hundred TM quads (one-quarter of a full scene as designated by path and row in the Landsat World Reference System) were requested by JPL for distribution to the SIR-B team; most of these quads had timing and cloud-cover constraints. After the mission, when the actual radar ground tracks were calculated, many of these requests were deleted because concurrent SIR-B data were lacking, while other requests were added because knowledge of the areas actually covered increased.

C. JPL Aircraft Radar Operations

The SIR-B radar observations were complemented by multi-polarization observations by the NASA/JPL aircraft radar. The aircraft radar, like SIR-B, had an L-band wavelength and used synthetic-aperture radar techniques to obtain imagery with relatively fine resolution. The aircraft radar interlaced vertically and horizontally polarized transmitter pulses and recorded all four possible combinations of linear polarization (HH-HV-VH-VV) simultaneously. The aircraft radar output was a digital image of a 10- × 10-km scene with about 10- × 10-m surface resolution. The aircraft radar was flown on the NASA/Ames CV-990 Airborne Laboratory, which provided a nominal 200- to 250-m/s (400- to 500-knot) velocity over the ground. The aircraft parameters are summarized in Table 12-1.

The airborne radar observed a number of SIR-B targets across the United States commencing on September 10, 1984 (25 days before launch), to October 24, 1984 (11 days after landing). The geographic locations of the aircraft sites are listed in Table 12-2 and shown in Figure 12-1. Many of the geologic targets in the western United States were observed before and after the shuttle mission, while vegetation targets in the eastern United States were observed between September 10 and 14, 1984. During the shuttle mission, the CV-990 was

Table 12-1. NASA/JPL aircraft SAR radar parameters

Parameter	Value
Radar Parameter	
Radar frequency, MHz	1225 (L-band)
Wavelength, cm	24.6
Pulse length, μs	4.9
Bandwidth, MHz	19.3
Transmitter polarization	Horizontal and vertical, interlaced
Received polarizations	HH, HV, VV, VH
Nominal altitude, km (ft)	6.0 to 12.0 (20,000 to 40,000)
Nominal velocity, m/s (knots)	200 to 250 (400 to 500)
Optical-sweep time, μs	55
Optical-sweep film width, mm	25
Digital Image Parameters	
Azimuth pixel spacing, m	11
Azimuth resolution, m	13
Number of azimuth lines	1024
Number of looks	4
Slant-range pixel spacing, m	7.5
Slant-range resolution, m	7.9
Ground-range pixel spacing, m	15 at 30 deg; 9.8 at 50 deg
Number of range cells	927
Look-angle range, deg	0 to 60

Table 12-2. CV-990 aircraft underflights

Date	Deployment	Target	Investigator	No. of runs
9/10/84	Moffett Field, Calif., to Houston, Tex.	Meteor Crater, Ariz.	J. Head and P. Mouginis-Mark	4
		Tucson, Ariz.	T. Farr	1
9/14/84	Houston, Tex., to McGuire AFB, N.J.	Jacksonville Forest, Fla.	R. Hoffer	6
9/20/84	McGuire AFB, N.J., to Duluth, Minn.	Conn. and N.Y.	J. Paris	7
9/26/84	Moffett Field, Calif., to Moffett Field	Mt. Shasta, Calif.	D. Simonett	6
		Medicine Lake, Calif.	V. Kaupp	4
		Northern Calif.	T. Farr	2
9/28/84	Moffett Field, Calif., to Moffett Field	Candelaria, Nev.	J. Taranik	5
		Goldfield, Nev.	T. Parr	3
		Raisin City, Calif.	J. Paris	2
10/8/84 to 10/12/84	Topeka, Kans., to Topeka	Macomb, Ill.	D. Held and F. Ulaby	30
10/17/84	Moffett Field, Calif., to Moffett Field	Raisin City, Calif.	J. Paris and D. Held	4
10/19/84	Moffett Field, Calif., to Moffett Field	Raisin City, Calif.	J. Paris	5
10/24/84	Moffett Field, Calif., to Moffett Field	Glass Mountain, Calif.	D. Simonett	6
		Mt. Shasta, Calif.	D. Simonett	6
		Bistatic experiment over lava flows, Calif.	R. Goldstein	1

stationed in Topeka, Kansas; from there it flew to make a number of SAR observations of the supersite near Macomb, Illinois (for the investigations of Ulaby and Held), and bistatic observations of several midwestern cities. Since the aircraft observations were completed, some 80 CV-990 digital images were generated at JPL.

The entire SIR-B Underflight Expedition between August 16 and November 6, 1984, consisted of 27 data flights for 28 NASA users. In total, some 120 digital images were produced for all users. This expedition was the largest ever conducted by the NASA/JPL aircraft radar.

D. Large Format Camera

The Large Format Camera (LFC) employed on the Shuttle Challenger's flight in October 1984 resembles an airborne mapping camera, but it is four times larger (Ref. 12-1). This camera was composed of four main parts: a lens cone, a film magazine, electronics, and a gas supply (Figure 12-2). Including the film and nitrogen for cooling, it weighed 429.6 kg. The system was motion compensated, meaning that as the shuttle flew, the film moved in a direction opposite to that of the spacecraft, thus removing the blur of a normal camera system. However, this implied that the camera could be operated in only one shuttle orientation, payload bay to the earth, nose forward.

Several types of film were used in the LFC: Plus-X Aerocon (negative film), Panatomic-X Aerocon (negative film), high-definition aerial (negative film), high-definition aerochrome infrared (positive film), and aerial color (positive film). All of these types of film were spliced together to create one roll for the mission film load.

Figure 12-1. Aircraft SAR sites observed during the fall-1984 SIR-B underflight expedition

The color and black-and-white positives produced by this camera are 22.9 X 45.7 cm. To calculate the number of kilometers enclosed in one LFC frame, it is necessary to know the altitude at which the picture was taken. Lengthwise, the number of kilometers covered was 1.5 X altitude, and widthwise, the number of kilometers covered was 0.75 X altitude. For example, at an altitude of 220 km, an LFC frame covered an area 330 X 165.5 km. A total of 2,246 frames was collected during the mission.

An 80% overlap exists between consecutive LFC frames, meaning that an object appearing in one frame will also be seen in the next four frames. For stereo viewing, it has been determined that using every other frame in a consecutive set of frames produces the best stereo pair for general purposes.

The LFC was mounted in the payload bay on the Mission Peculiar Equipment Support Structure (MPESS) and operated by telemetered commands sent to the camera electronics assembly from the Payload Operations Control Center (POCC).

The LFC imagery was used by several investigators to aid in the interpretation of the radar imagery (Figure 12-3). For example, stereo pairs were used by A. Bloom in the interpretation of geologic structures in Argentina. The LFC imagery also provided exact shuttle-location information for M. Kobrick in his radargrammetry experiments.

E. Hand-Held Photography

Two types of cameras were used by the 41-G flight crew for hand-held photography. The first, a NASA-modified Hasselblad 500 EL/M 70-mm camera (Figure 12-4), was equipped with three lenses: a Zeiss 50-mm CF Distagen 4.0, a 100-mm CF Planar 3.5, and a 250-mm CF Sonar 5.6. Kodak Ektachrome 64 Professional 5017 film was used to create color positives measuring 70 X 70 mm. A total of 2,082 frames was collected during the 8-day mission.

The second type was a Linhof Aero Technika 45 (Figure 12-5). The lenses used on this camera were a Linhof 90-mm Super Angular 5.6 and a 250-mm Tele-Arlon 5.6. The film used was 12.5-cm (5-in.) Kodak Ektachrome 64 Professional film 5017. This camera produced 397 frames of 13.3- X 10-cm color positives.

Both the scale and the resolution vary on the photographs taken by hand-held cameras. For nadir-looking photographs, resolution and field of view vary with shuttle altitude and the size of the lens used. For non-nadir-looking photographs, the resolution decreases and the field of view increases at large off-

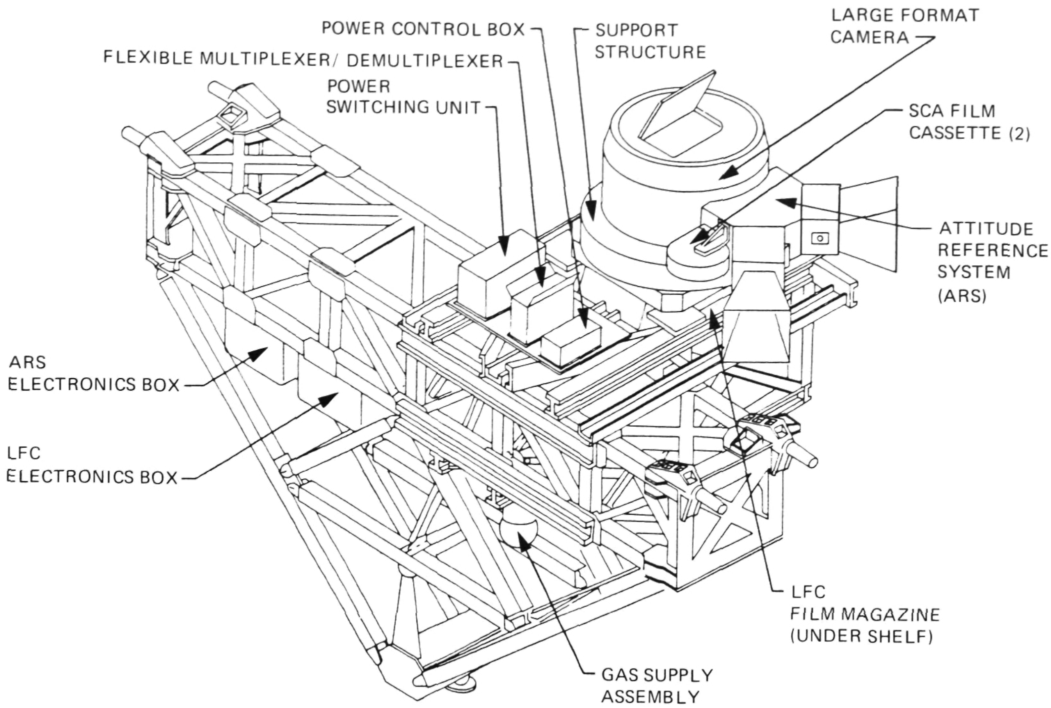


Figure 12-2. Diagram of LFC on MPESS

nadir angles. Figure 12-6 shows the placement of the windows in the shuttle through which hand-held photography was performed. In the -ZLV (payload-bay-to-Earth) and rolled (wing-to-Earth) attitudes, excellent hand-held photography was acquired simultaneously with SIR-B data acquisition during daylight passes (descending orbit tracks).

Several crew briefings were given by the SIR-B Science Team before the mission, and extensive maps and information about high-priority targets were provided for the training notebook. After the mission, the SIR-B Science Team was briefed by the crew on their observations of Earth. In addition, Dr. Kathryn Sullivan briefed the team members on selected observations made by herself and other crew members. Although the team members' interest in crew photography was not great before the mission, there was considerable post-mission interest when the team members tried to interpret their SAR imagery. Even during the short 8-day mission, surface cover changed significantly in some locations, and in some situations the hand-held photography was used to document the change. For example, the photograph in Figure 12-7 was used to help discriminate ice and ocean in the radar data.

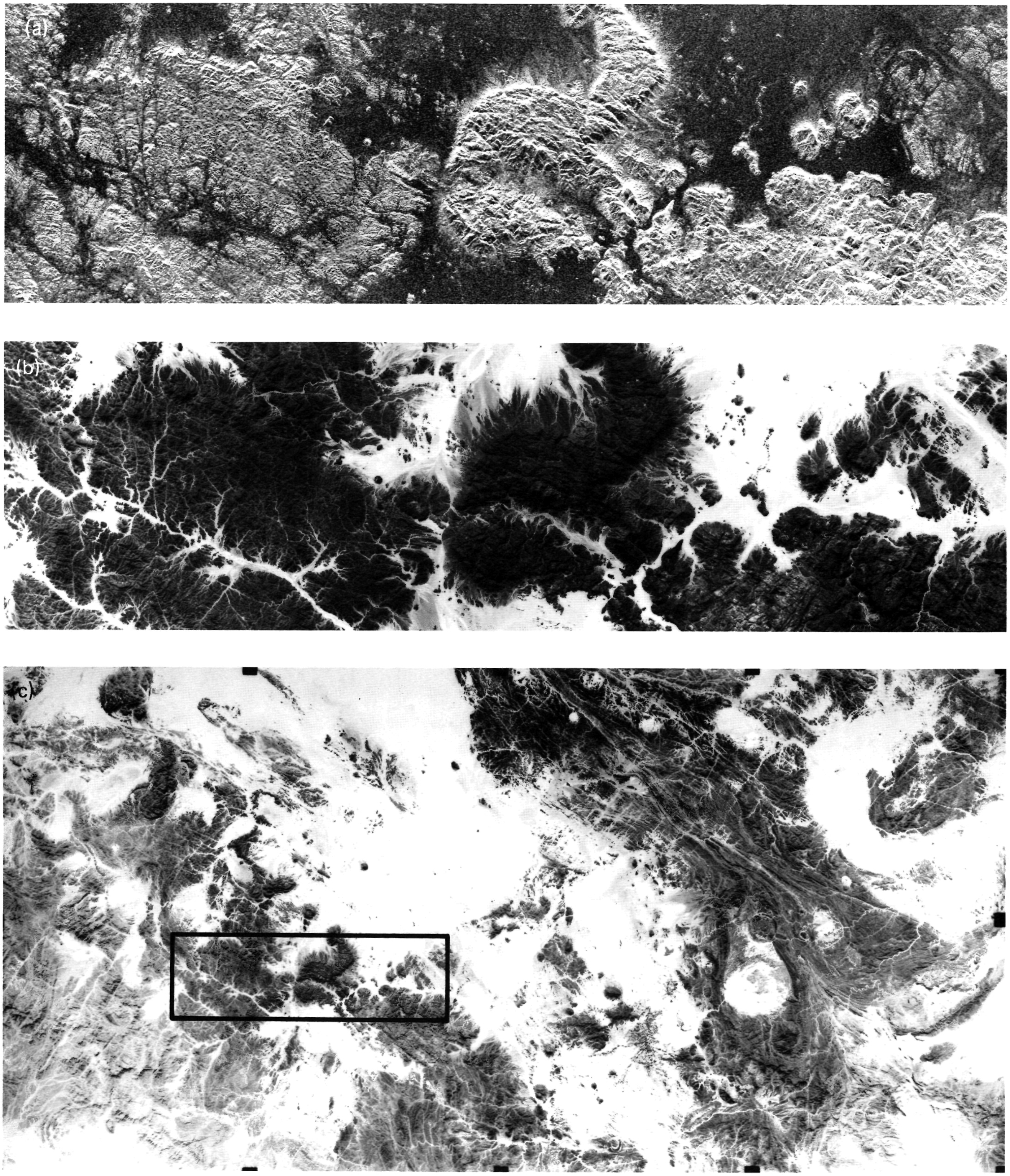


Figure 12-3. SIR-B and LFC images of the Red Sea hills in Sudan: (a) SIR-B data take 97.5, scene 12; (b) an enlarged portion of an LFC image showing the area (a) taken by SIR-B; (c) the original LFC image from which (b) (boxed) was taken.

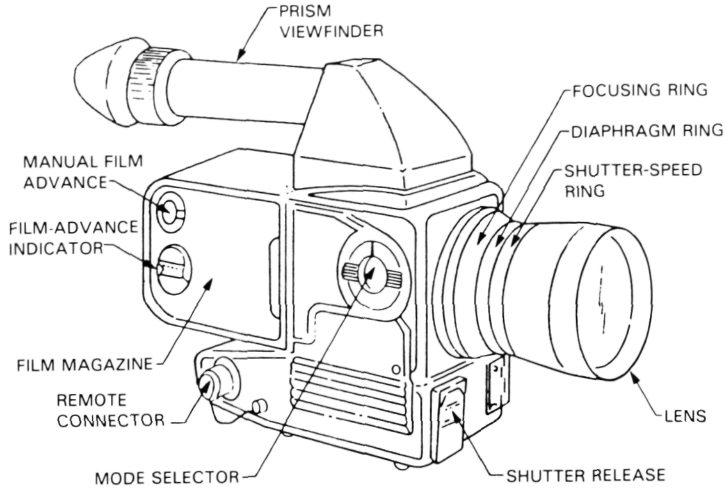


Figure 12-4. NASA-modified Hasselblad 500 EL/M camera

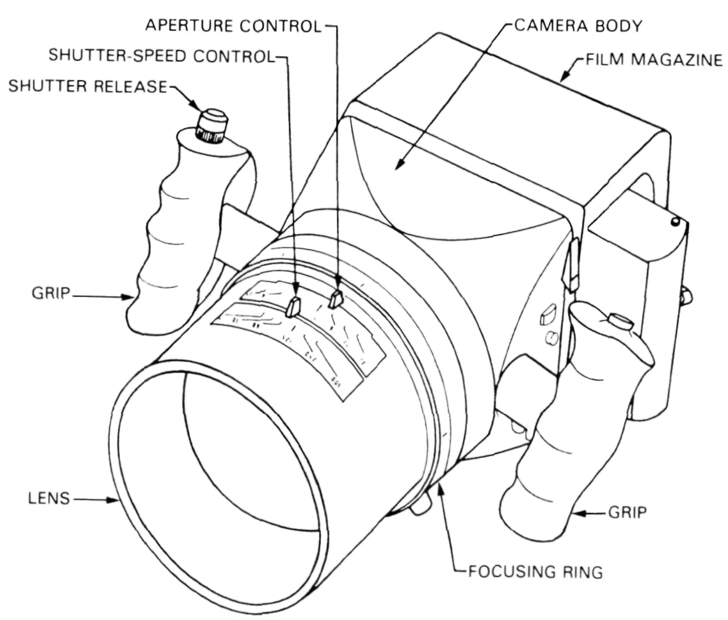


Figure 12-5. NASA-modified Linhof Aero Technika 45 camera

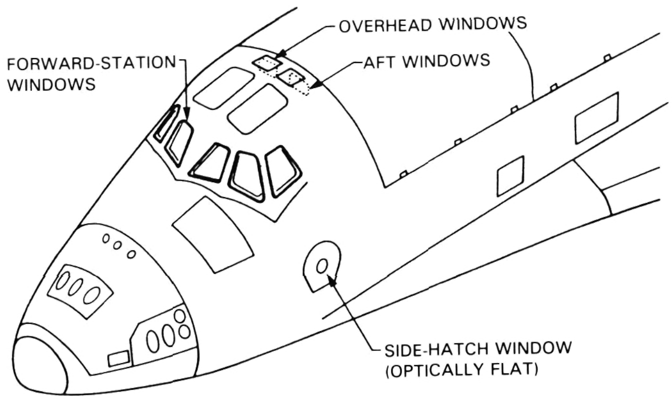


Figure 12-6. Location of windows in the shuttle orbiter

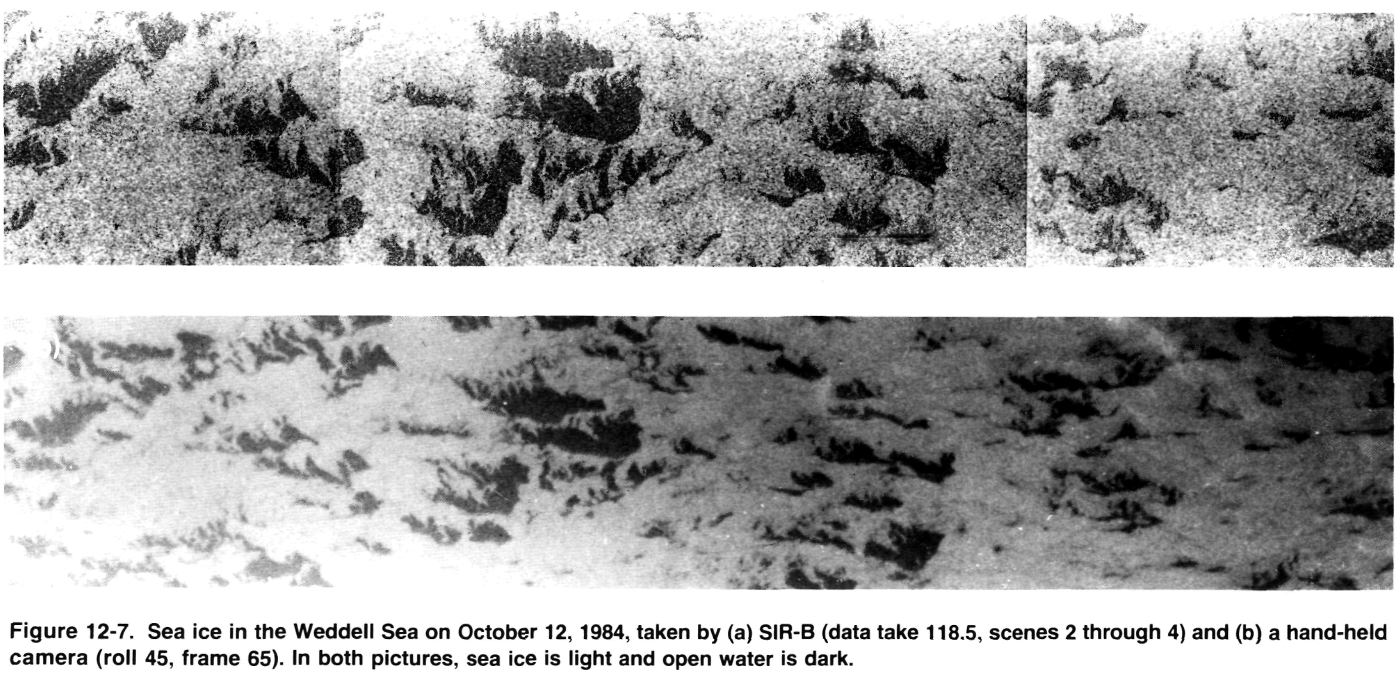


Figure 12-7. Sea ice in the Weddell Sea on October 12, 1984, taken by (a) SIR-B (data take 118.5, scenes 2 through 4) and (b) a hand-held camera (roll 45, frame 65). In both pictures, sea ice is light and open water is dark.

XIII. Image Examples

A number of SIR-B experiments were successfully completed in spite of the many difficulties during the SIR-B mission. This section provides five examples of some of the key results from the SIR-B mission; they include the use of multiple-incidence-angle data for vegetation classification and stereotopographic mapping. Also included are data of transient ocean features for which data collection had not originally been planned and data for experiments designed to demonstrate the ability of the radar to penetrate vegetation canopies and arid terrain.

A. Radar Stereomapping: Mount Shasta, California

(Adapted from an article (Ref. 13-1) by F. Leberl, G. Domik, J. Raggam, and M. Kobrick).

The ability of SIR-B to image targets at different incidence angles on successive days of the mission made SIR-B ideal for a radar stereomapping experiment. Therefore, an effort was mounted to collect sets of images of geologic sites that were previously well-mapped so that a systematic stereo experiment could be performed. The objective was to determine the optimum incidence-angle combination for both visual interpretation of a geologic site and topographic mapping.

The overall plan for stereomapping analysis involves reduction of the data by three independent techniques: the use of a conventional stereoplotter modified to incorporate radar geometry, the use of a state-of-the-art analytical (or hybrid) analog/digital stereoplotter that incorporates the stereogeometry through software, and computer image processing for automatic cross-correlation of the images. Results from these three coordinated approaches were compared in an attempt to determine the extent to which the results are technique-dependent and, therefore, the true fundamental accuracy achievable with radar stereo data.

The image example given here is the result of the stereo-reduction technique using the hybrid stereoplotter for the Mount Shasta test site in northern California. The Mount Shasta data are a key SIR-B multiple-angle data set because of the available topographic ground truth (1:62,500-scale contour maps and U.S.G.S. digital data derived from 1:250,000-scale maps), as well as geologic interest in the site.

Thirty-two ground points were identified on each of three images (Figure 13-1) and located on the maps. This permitted reduction of three stereomodels (generated using all three combinations of the three image pairs) and the establishment of an order of magnitude for the achievable point-positioning accuracy, although the data range was insufficient to determine optimum incidence-angle combinations.

The overall procedure for stereomapping on a photogrammetric analytical stereoplotter has been described in general terms by Raggam and Leberl (Ref. 13-2). The procedure steps through a stereomodel setup and subsequent real-time data acquisition. The stereomodel setup consists of three steps: a so-called "inner orientation;" a separate "resection in space" for each image of a stereopair; and a least-squares adjustment of both images simultaneously, using ground control points and additional orientation points. Once this is completed, the operator can begin to collect, in real time, ground coordinates of arbitrary points of the stereomodel.

Table 13-1 compares the root-mean-square errors of ground points to predicted values obtained by applying the propagation of image resolution limits into the object coordinates. It is immediately evident that the largest intersection angle does not produce the best accuracies since the quality of the relevant image at a 57-deg look angle off nadir is poorer than that of other images.

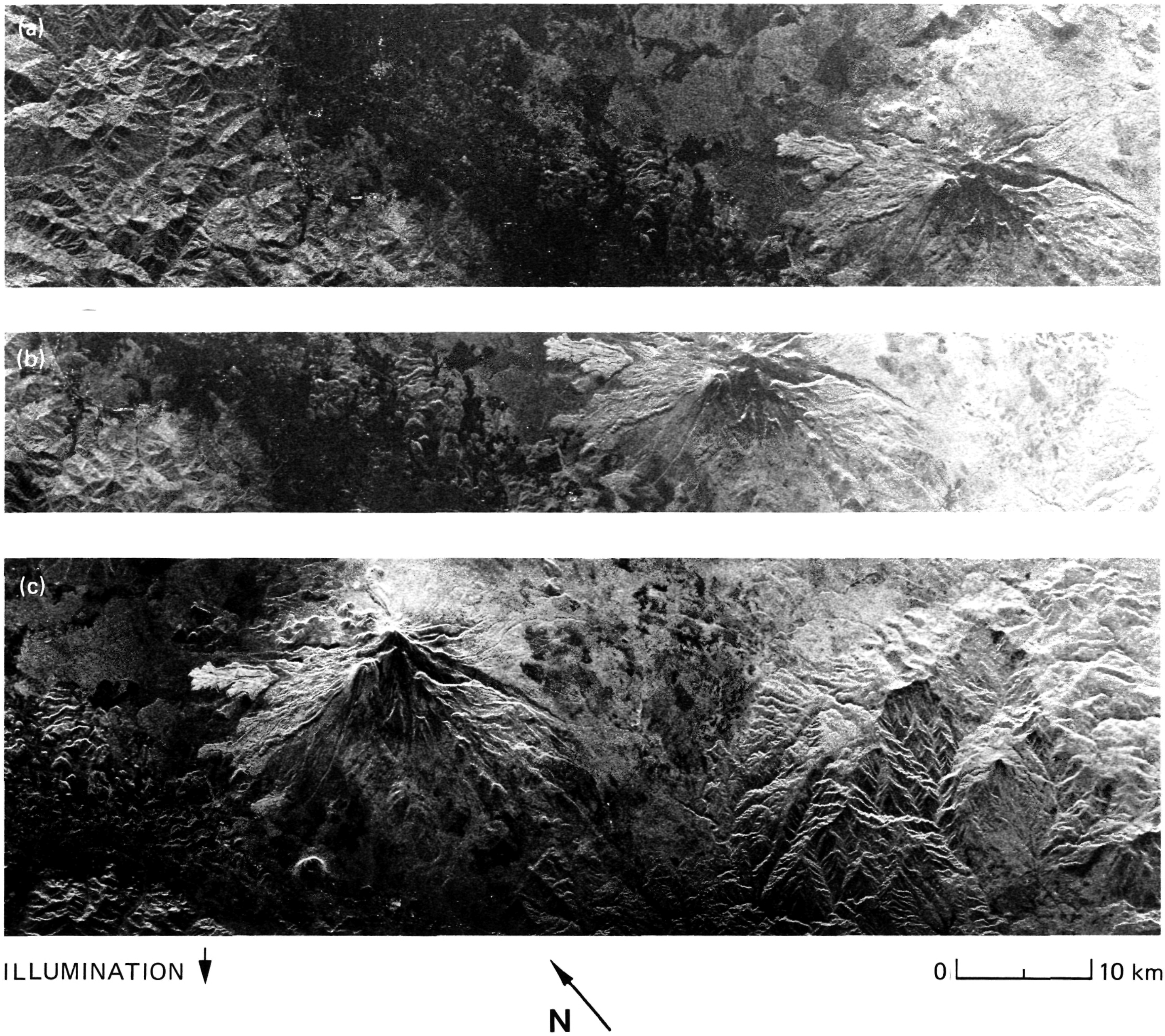


Figure 13-1. SIR-B images of Mount Shasta at look angles of (a) 57 deg, (b) 51 deg, and (c) 28 deg. These images were used to generate topographic maps and perspective views.

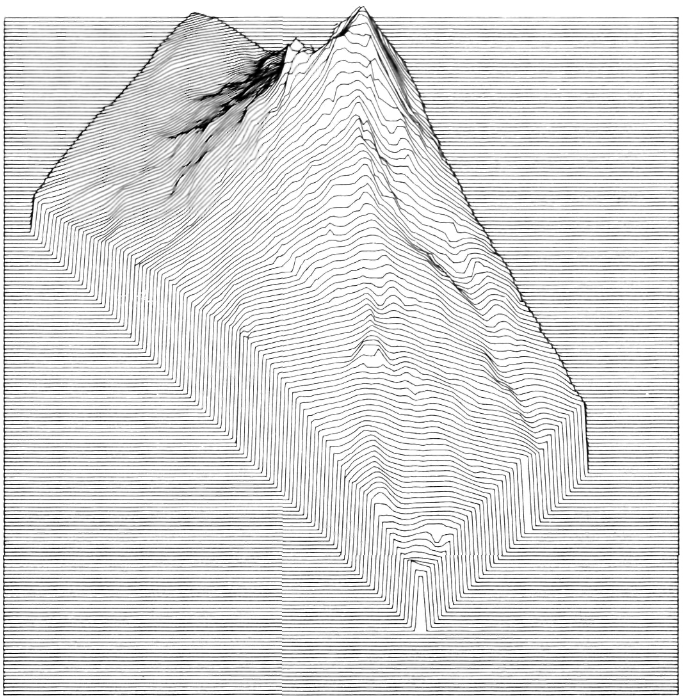
Table 13-1. Predicted stereoradar coordinate errors[a]

Look angle, deg	Look angle, deg	Intersection angle, deg	Error of height, m	Error of position, m
51	57	6	77	56
28	51	23	16	19
28	57	28	14	15

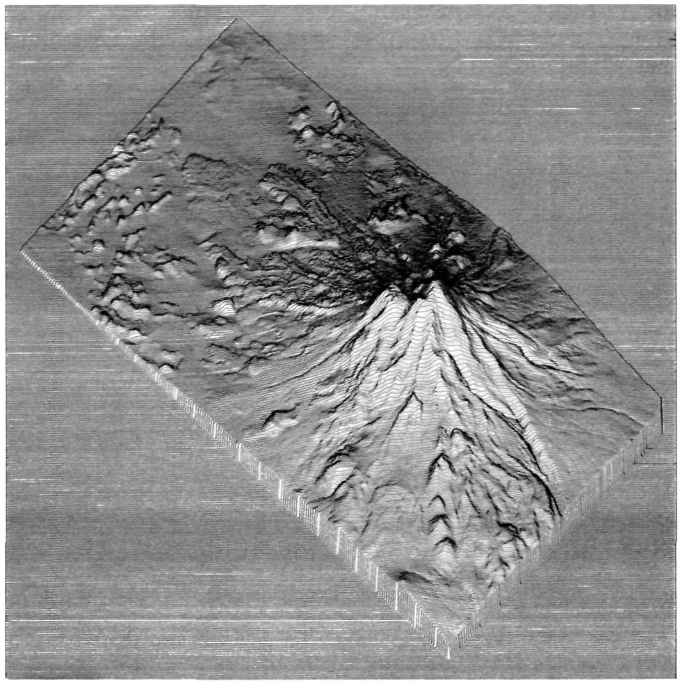
[a]The predicted accuracy is better than that actually achieved.

In addition to this accuracy study, a digital elevation model (DEM) was generated from the stereoradar models (Figure 13-2 (a)) and from the map (Figure 13-2(b)), and a difference model was plotted as shown in Figure 13-2(c). A plot of computed contours is shown in Figure 13-3. The difference DEM has an error of 62 m. A series of perspective views of the DEM, with radar image brightness superimposed and coded in color, was also generated (Figure 13-4).

(a)



(b)



(c)

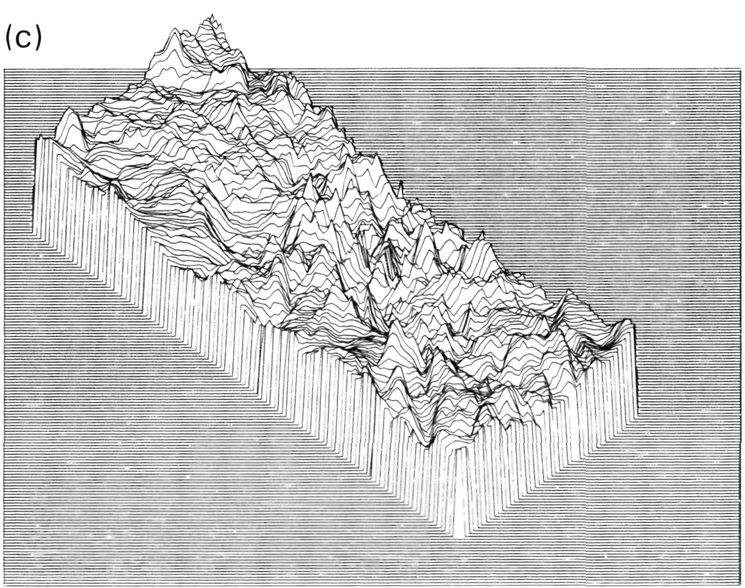


Figure 13-2. To quantitatively assess the accuracy of the digital data generated by SAR, the following products were generated: (a) a DEM from the SIR-B radar stereopair of 51-deg and 28-deg look angles off nadir at a grid interval of 150 m, (b) a DEM at a raster interval of 30 m from 1:62,500-scale maps, and (c) a difference model of the two DEMs at a mesh size of 150 m.

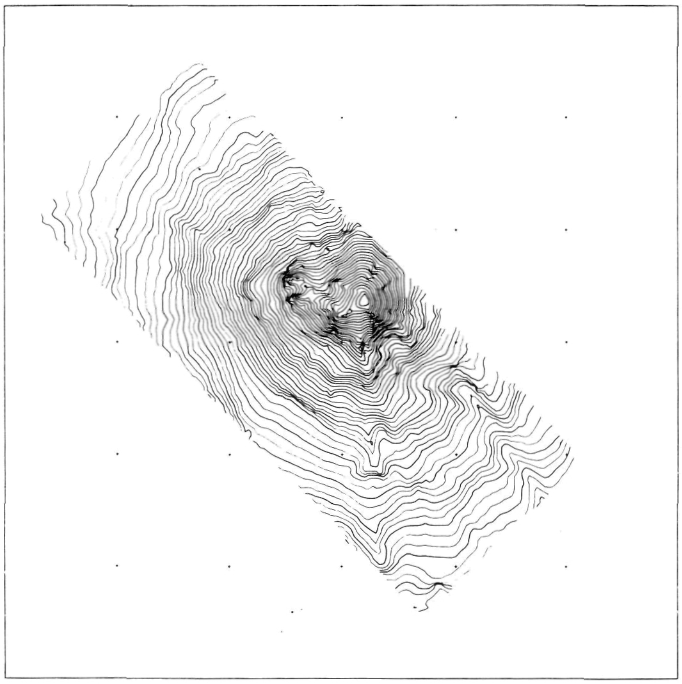


Figure 13-3. A contour plot at an interval of 200 m produced from the SIR-B stereomodel at the 51-deg/28-deg look angles

B. Imaging of Tropical Vegetation Canopies: Bangladesh

(Adapted from an article (Ref. 13-3) by M. Imhoff, M. Story, C. Vermillion, F. Khan, and F. Polcyn).

The use of radar sensors for the survey and mapping of coastal forested ecosystems is potentially of great benefit. In particular, spaceborne radar data may provide crucial information concerning land use, land cover, surface hydrology, and topography for vector-borne disease-control programs. In many areas of the globe, where continual or seasonal cloud cover limit synoptic coverage from optical sensors, radar sensors can penetrate the cloud cover to reveal surface conditions during periods of inclement weather. The use of L-band radar remote sensing for operational forest assessment, however, has been hampered by a lack of understanding of the complex interactions that take place between the target ecosystems and the radar. These interactions tend to produce images where many of the response characteristics cannot be fully interpreted or positively related to vegetation features of interest to forestry research or applications. To a certain extent, this can be attributed to an incomplete understanding of the ability of L-band radars to penetrate vegetation layers. The mechanics of the penetration-attenuation phenomenon, the extent of penetration, and the effects of incidence angle are all subjects of one SIR-B investigation that took place in a Bangladesh forest.

The Sundarbans Forest Reserve is a seasonally submerged evergreen mangrove forest on a series of islands at the mouth of the Ganges river system as the system enters the Bay of Bengal. Although many diverse species of trees and plant life exist in the Sundarbans, it is primarily characterized by the preponderance of two major tree types: Gewa (*Excoecaria agallocha*) and Sundri (*Heritiera minor Syn. H. fomes*), as described in Ref. 13-4. The forest floor is devoid of rock formations and consists of a uniform silty clay loam. At a macroscale, the topography of the forest is nearly flat, with the exception of a tendency for the canals and rivers to aggrade, thus forming a concave shape where the higher ground occurs at the island rim and the lower ground lies in the interior.

On a microscale, however, or a scale comparable to that of a 25- X 25-m pixel cell, the forest floor shows considerable variation within a range of a few meters in height across the areal extent of a typical island in the group. This microrelief is caused by the combined action of aggradation or sedimentation, which is caused by seasonal variations in water level, and the sediment trapping effect, which is caused by communities of vegetation. Since the accretion of soil is a prerequisite for mangrove growth, these two factors form an important synergistic process in the development of the island geomorphology and health of the mangrove ecosystem. In addition, a typical mangrove forest floor is covered with millions of vertically oriented roots or pneumatophores, which function to supply oxygen to the trees at high tides of the ocean. These pneumatophores can vary in length from a few centimeters to over a meter, depending upon the amplitudes of the tides at the topographic position of each tree.

SIR-B acquired a multiple-incidence-angle data set over these mangrove jungles of Southern Bangladesh through the heavy cloud cover. The radar data for each pass were calibrated using active radar calibrators (ARCs) and passive corner reflectors (Figure 13-5(a)) located on the test site.

Ground-truth information used in this study consisted of 1:30,000-scale black-and-white and color IR aerial photography, 1:30,000 Forest Survey Maps, tide schedule information, a 1200-m topographic survey transect, and canopy data collected during site visits (Figure 13-5(b)). The topographic transect profile was acquired using a standard leveling survey delineated on an aerial photograph. Elevation measures were made every 30 m for a distance of 1200 m. The elevations were tied to a tide-level gauge that recorded the tide level in centimeters above and below 0. Tide levels during the radar data acquisition were recorded directly from the gauge and transcribed onto the transect profile.

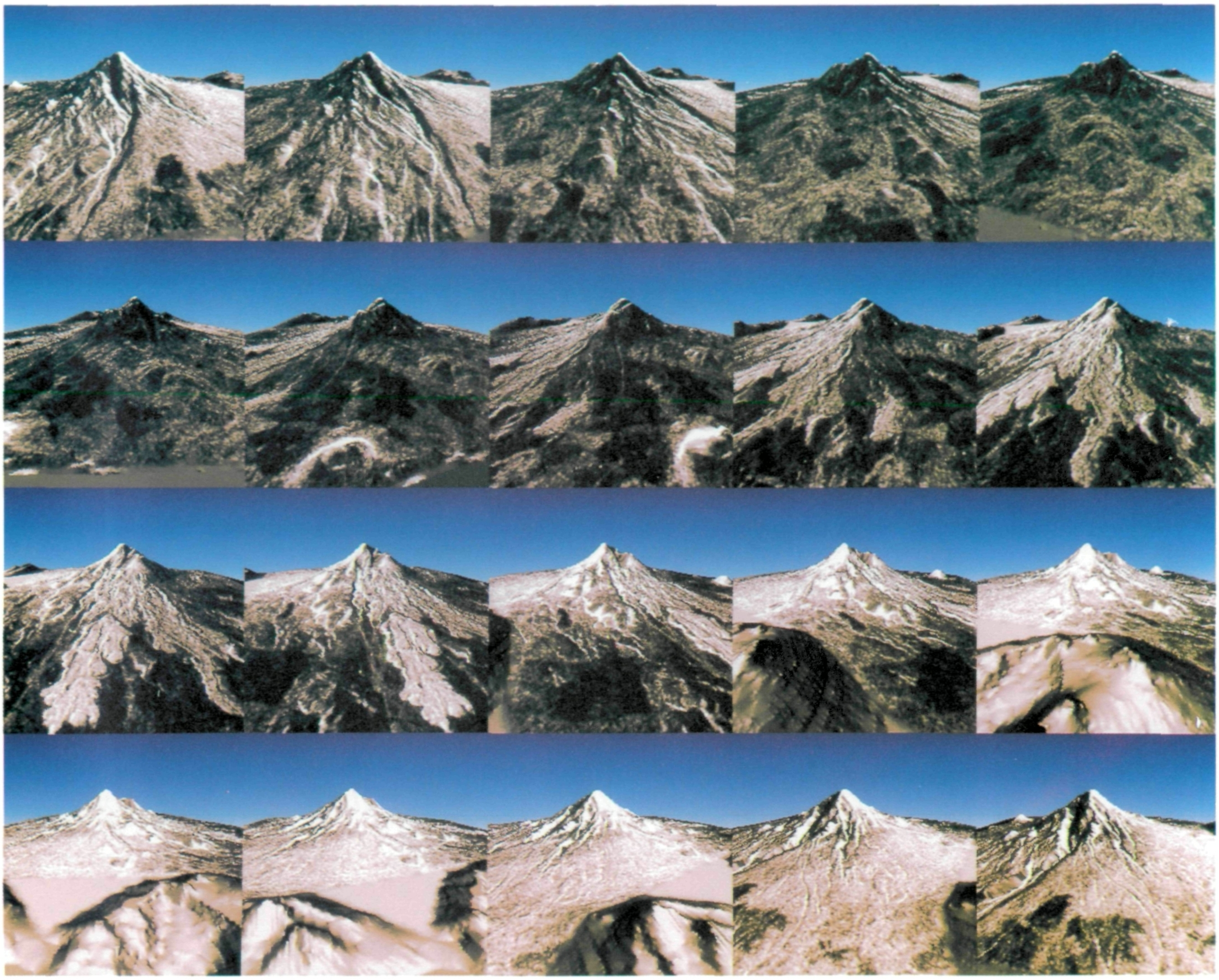


Figure 13-4. Computer-generated perspective views of Mount Shasta

The three digital-radar images acquired by the SIR-B over the test site were at different incidence angles (Figure 13-6). Once coregistered, the three images were compared to one another and to the corroborative data through correlation analysis. The radar image patterns were then compared to the forest map data.

In this study, the L-band radar penetrated the 12.5-m mangrove forest canopy at all angles of incidence. Pools of standing water can be located on all radar-image data sets, and a relative topographic contour of the forest floor can be discerned as a function of tidal inundation. From an applied perspective, this characteristic of L-band radar remote sensing can be a valuable tool for the mapping and monitoring of mangrove and other wetland ecosystems, as well as for the mapping of flood boundaries beneath vegetation canopies.

C. Imaging of Transient Ocean Features: Hurricane Josephine

(Adapted from an article (Ref. 13-5) by B. Holt and F. Gonzalez).

Radar images of ocean surface waves near hurricane Josephine were acquired with SIR-B on October 12, 1984, as a target of opportunity. Analyses of the directional ocean-wave spectra derived from the imagery along the 600-km image track reveal the presence of at least two dominant wave sys-

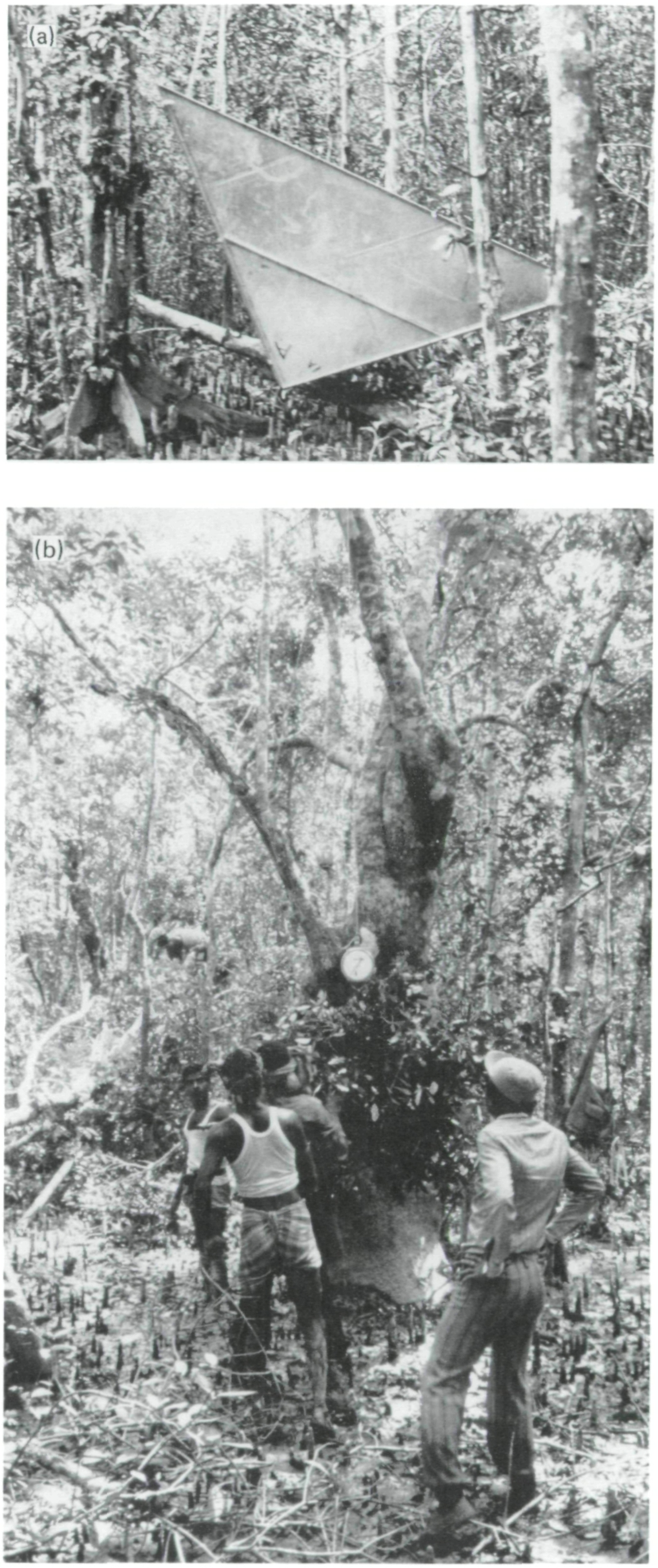


Figure 13-5. Test-site preparations: (a) passive corner reflector in place and (b) on-site canopy inspection

tems that undergo significant spatial variations in wavelength and direction.

Both satellite and airborne imaging radar systems, with their ability to penetrate clouds and produce high-resolution data, have been used to study surface wave fields generated by hurricanes, the most complex condition for wave-generation studies because of the rapidly changing and curving wind fields (Refs. 13-6, 13-7, 13-8, and 13-9). These studies confirmed that the surface waves with the longest wavelength were generated near the area of maximum winds, the right-rear quadrant with respect to the direction of the moving hurricanes. Synoptic observations of the wave-number vector field near hurricanes, such as those provided by imaging radars, are particularly valuable, and can also be used, for example, as test cases for intercomparison studies for wave prediction models (Ref. 13-6).

Imaging radar data were acquired near hurricane Josephine from 16:31 to 16:33 GMT on October 12, 1984 (orbit 117). The resultant radar swath lay ahead and to the east of the hurricane at an approximate 45-deg angle to the storm track, with the closest approach at about 16:31:40 GMT and about 90 km northeast of the hurricane center (Figure 13-7). The SIR-B data were obtained during the period of maximum hurricane intensity when the peak wind values were 90 knots.

An image taken from the Geostationary Operational Environmental Satellite (GOES) shows Josephine extending along the Atlantic coastline off Cape Hatteras (Figure 13-8). Simultaneous with the radar acquisition, a hand-held photograph of Josephine from an exciting perspective was obtained by astronauts (Figure 13-9). The storm center can be seen clearly in each image.

The radar imagery (Figure 13-10) reveals the presence of at least two dominant wave systems. One system is seen along the entire radar swath propagating north and northeast away from the storm track with a fan-shaped directional distribution. Another wave system appears to be roughly aligned in the direction of the local cyclonic wind and propagating northwest and west in the upper portion of the radar track. These waves decrease in wavelength from north to south, disappear altogether at a point nearest the hurricane center, and then reappear in the southernmost portion of the radar imagery propagating east. This lack of signal in a portion of the imagery does not appear to be related to either azimuth falloff due to the orbital motion of the ocean surface during that time the target is in the radar beam or to limitations imposed by the finite resolution of SIR-B; rather, it may accurately reflect the chaotic nature of the winds and waves and the lack of a fully developed sea in the region nearest the hurricane.

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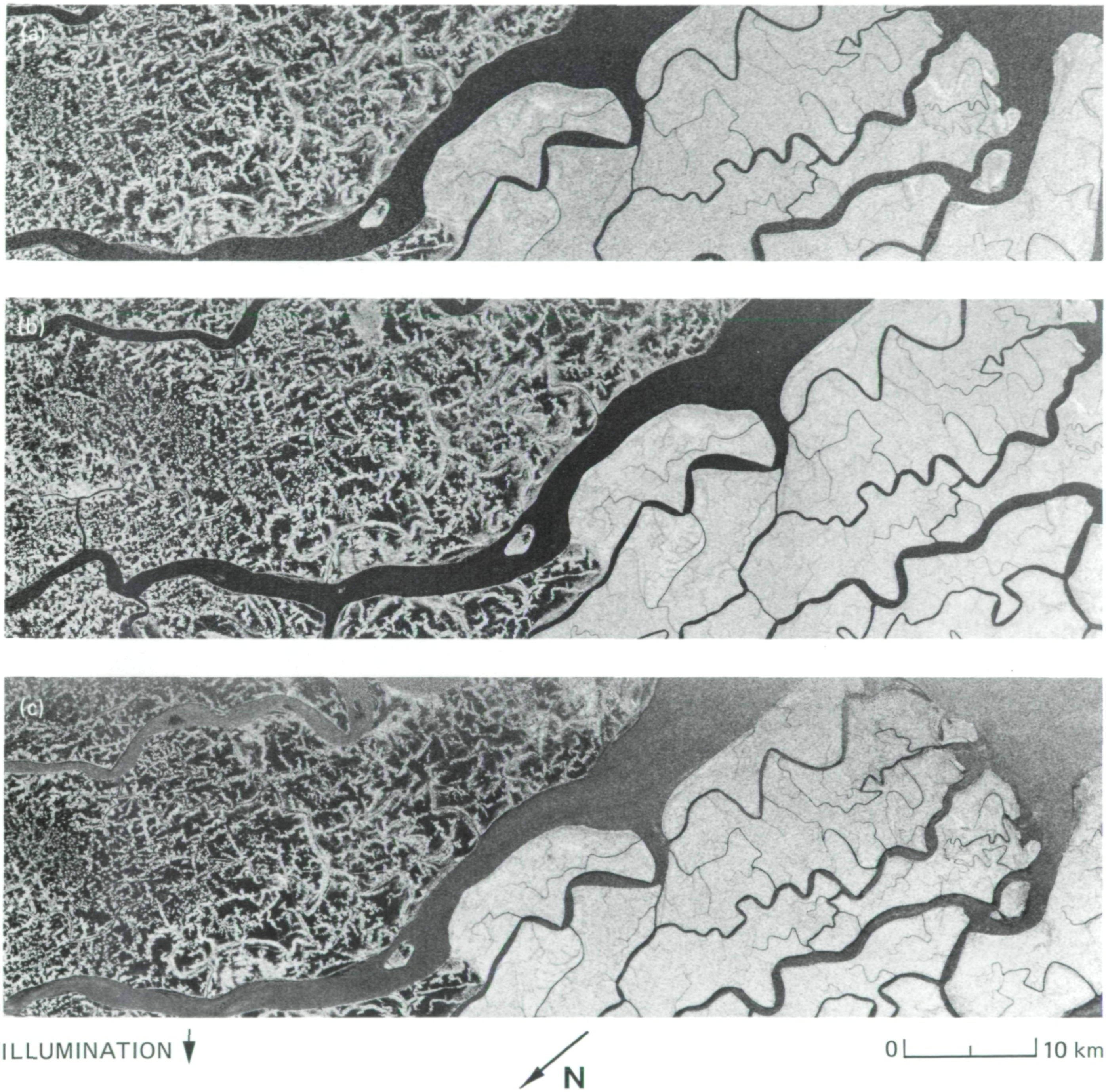

Figure 13-6. These SIR-B images of southern Bangladesh were acquired on (a) October 11 at an incidence angle of 58 deg, (b) October 12 at 45 deg, and (c) October 13 at 26 deg, local time. The scenes begin in the south (right) at the Sundarbans Mangrove Forest at the Bay of Bengal and progress northeast to the densely populated agricultural areas south of the Ganges river. Open-water areas such as the Bay of Bengal, the Bola River (at the center of each image), and flood-irrigated agriculture appear as dark areas. Bright areas in the water of the lower image were caused by storm-induced turbulence. The brighter, homogeneous patterns in the south are mangrove forests, which are a valuable wood and paper-pulp resource for Bangladesh.

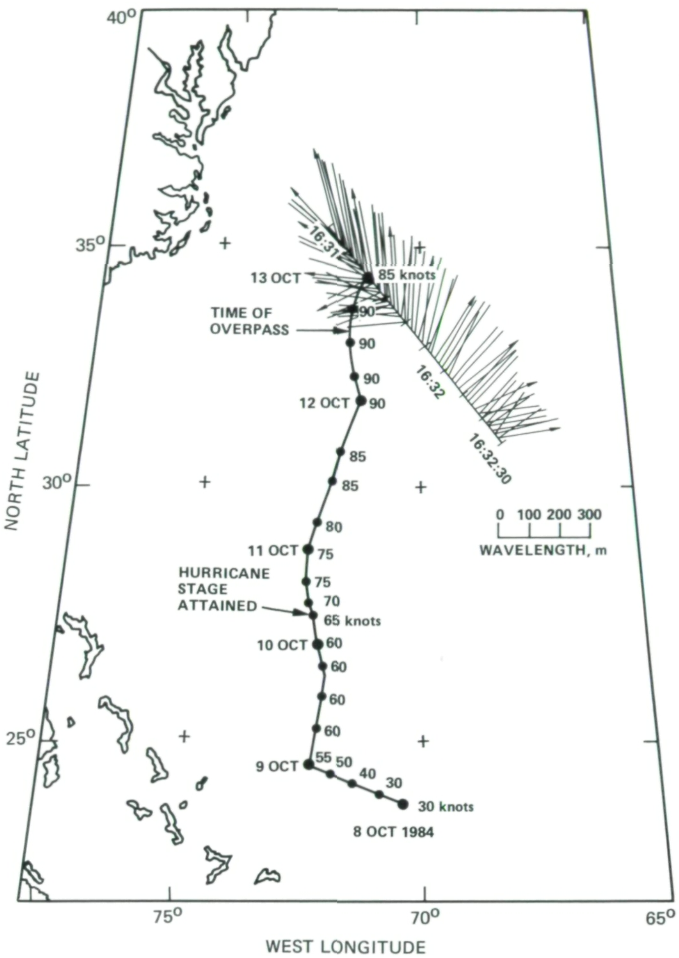

Figure 13-7. A partial track of hurricane Josephine (October 8 to 13, 1984) with maximum wind speeds (in knots) indicated for the storm center at 6-h intervals, and the track of SIR-B radar imagery (October 12, 1984) with times of acquisition indicated. Wavelengths and directions of dominant wave systems are displayed along the radar track. Arrows indicate general propagation direction of neighboring waves.

D. Multiple-Incidence-Angle Imaging: Argentina

(Adapted from an article (Ref. 13-10) by J. B. Cimino, A. Brandani, D. Casey, J. Rabassa, and S. Wall).

One of the primary goals of the SIR-B experiment was to use multiple-incidence-angle radar imaging to distinguish different terrain types through their characteristic backscatter signatures. This goal was accomplished in several locations, including the Chubut Province of Southern Argentina. A total of four data swaths were obtained on descending passes; the coverage of this multiple-angle-image set extends across South America. The locations for the acquisitions were selected exactly to provide the maximum number and range of incidence angles.

The images discussed here are from a portion of this descending multiple-angle set, with one image taken from each swath; the specific coverage of these images is near the border between Argentina and Chile on the east side of the Andes. The four images were acquired on consecutive days with incidence angles of 33.0, 44.7, 53.7, and 59.4 deg from the vertical (Figure 13-11). The center latitude and longitude of the site are 43°20′S and 71°27′W, respectively, near a ridge named Cordón la Grasa. This region is along a climatic gradient between the subantarctic forests of the Andes and the Patagonian steppe; this zone produces a highly diversified sequence of contrasting forest ecosystems. The ecological diversity is increased by the temperature and rainfall gradients, which are the results of elevation changes from the bottom of the glacial valleys (600 to 800 m) to the tree line (1400 to 1500 m).

Several different forest belts with sharp limits exist along the mountain slopes, changing not only in species composition but also in structure of the dominant tree species (Ref. 13-11). For instance, while along the bottom of the western slopes of the Pre-Cordillera there is an open forest of ñire (*Nothofagus antartica*) mixed with maiten (*Maytenus boaria*), laura (*Schinus patagonicus*), and several species of *Berberis* up to an elevation of about 1000 m, on the slopes above is a pure ñire forest to about 1150 m elevation. Above the ñire up to the tree line at about 1450 m elevation, lenga (*Nothofagus pumilio*), which thrives on the more moist conditions of the higher elevations, dominates. Above the tree line, a community of alpine vegetation exists.

Since detailed ecological maps of the Cordón la Grasa region are essentially nonexistent, the first task in analyzing the images was to generate a map of the vegetation units. Aerial photographs and ground-truth data were used to generate the map shown in Figure 13-12(a).

To assess visually the value of a multiple-incidence-angle image set over that of a single image for vegetation classification, a color composite was then generated (Figure 13-12(b)). Registered and geometrically corrected digital images from three of the four acquisitions of the Cordón la Grasa area were used to produce the composite by assigning the 33.0-deg incidence-angle image (data take 56.4) a blue color, the 44.7-deg image (data take 72.4) a green color, and the 59.4-deg image (data take 104.4) a red color; the composite clearly delineates the vegetation units shown on the map (Figure 13-12(a)).

Although SIR-B was designed as a calibrated system, images from the resulting data set resist quantitative interpretation because the breakdown in the insulation of the cabling con-

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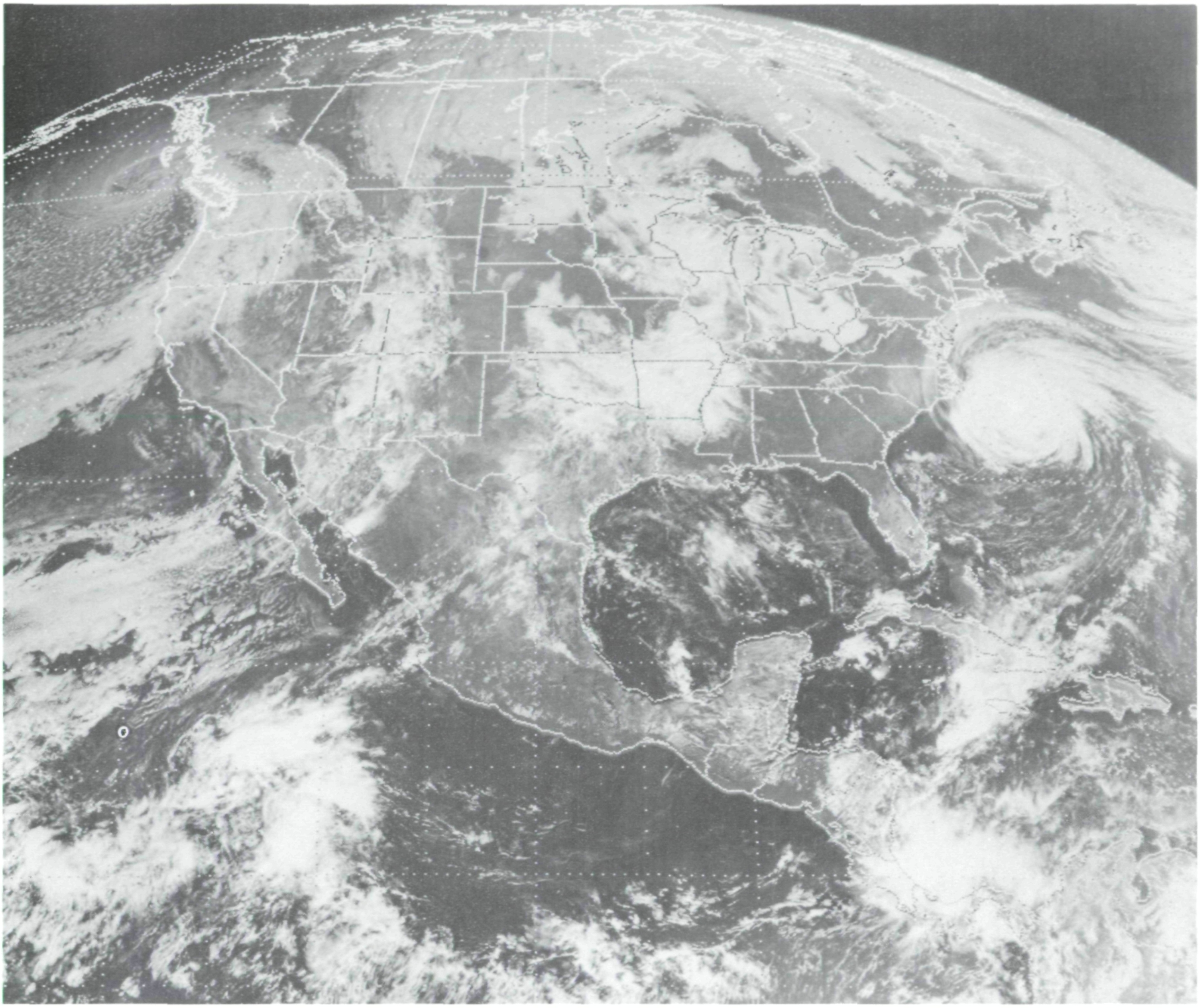

Figure 13-8. GOES image of hurricane Josephine taken October 12, 1984, at 16:30 GMT

necting the transmitter/receiver unit to the antenna caused the transmitted power to vary unpredictably as data were collected. Since there was no effective way to measure transmitted power, there was no reference signal to the target, and extraction of absolute backscatter curves from the images is impossible.

In quantitative interpretation, then, day-to-day variations in transmitted power are compensated by the use of ratios—that is, all multiple-angle data are presented in terms of brightness relative to a reference unit (unit 8 of Figure 13-12(a)). The resulting curves of relative brightness versus incidence angle (Figure 13-13) describe in a more quantitative fashion the results displayed in the color composite (Figure 13-12 (b)). The lenga forest has a significantly stronger response at the smaller incidence angles than the surrounding ñire forest. At 59 deg, the curves of the lenga and ñire forests on the west side of Cordón la Grasa converge. The ñire forests on the east and west sides of Cordón la Grasa have very similar responses at the three smallest incidence angles. The regenerated ñire (unit 3) have a slightly lower response than the other ñire forests. At the largest incidence angle, however, the ñire on the west side of Cordón la Grasa have a much stronger response than the low ñire forests (unit 8) on the east side.

Figure 13-9. Hand-held photograph of hurricane Josephine taken by astronauts on October 12, 1984, at 16:31 GMT

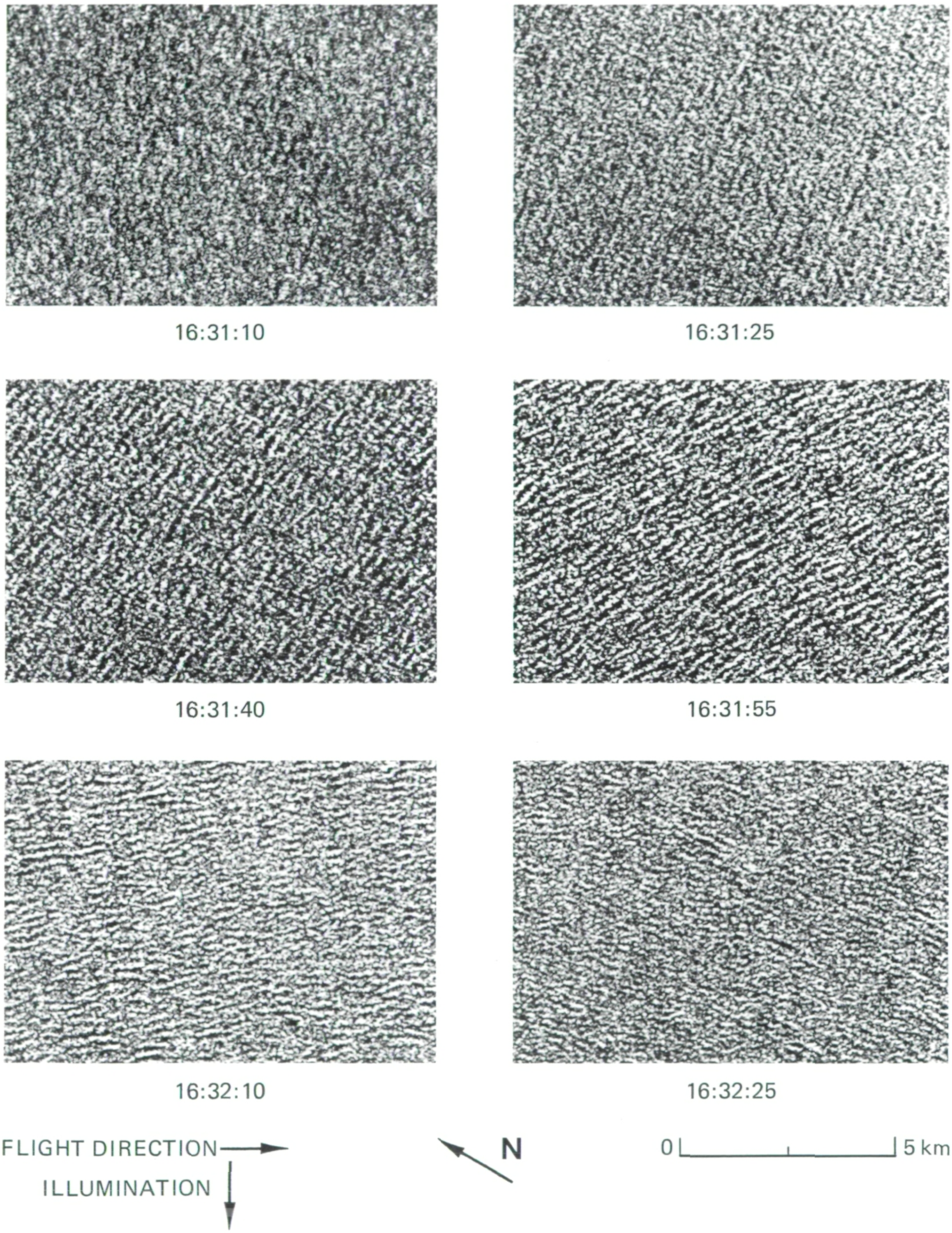

Figure 13-10. Enlargements of SIR-B radar imagery of surface waves near hurricane Josephine (data take 117.4). Each image covers an area of 7 × 10 km and is centered in the radar swath at the time (GMT) indicated.

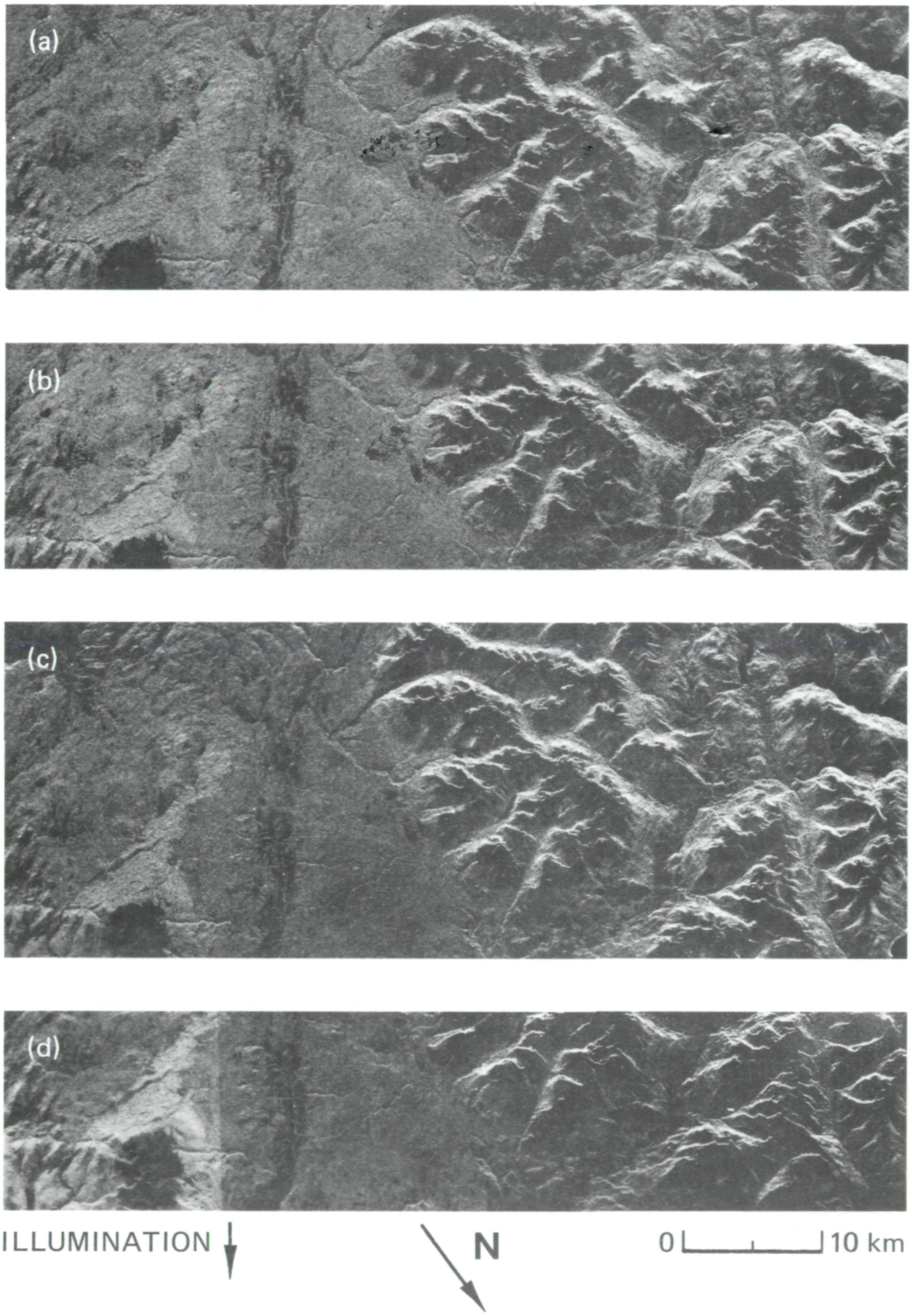

Figure 13-11. SIR-B images of the Cordón la Grasa region: (a) data take 104.4, scene 006, at a center incidence angle of 59.4 deg; (b) data take 88.4, scene 008, at a center incidence angle of 53.7 deg; (c) data take 72.4, scene 001, at a center incidence angle of 44.7 deg; (d) data take 56.4, scenes 010 and 009, at a center incedince angle of 33.0 deg

Finally, any pair of multiple-incidence-angle images may be used to generate a topographic map using stereoradargrammetric techniques. The six pairs possible from the four images of the Cordón la Grasa data set were used to generate six maps. The accuracy of these maps could then be determined as a function of image-pair incidence angles (Ref. 13-12). One of the maps generated was coregistered with the three-color composite image; this image could then be displayed in three

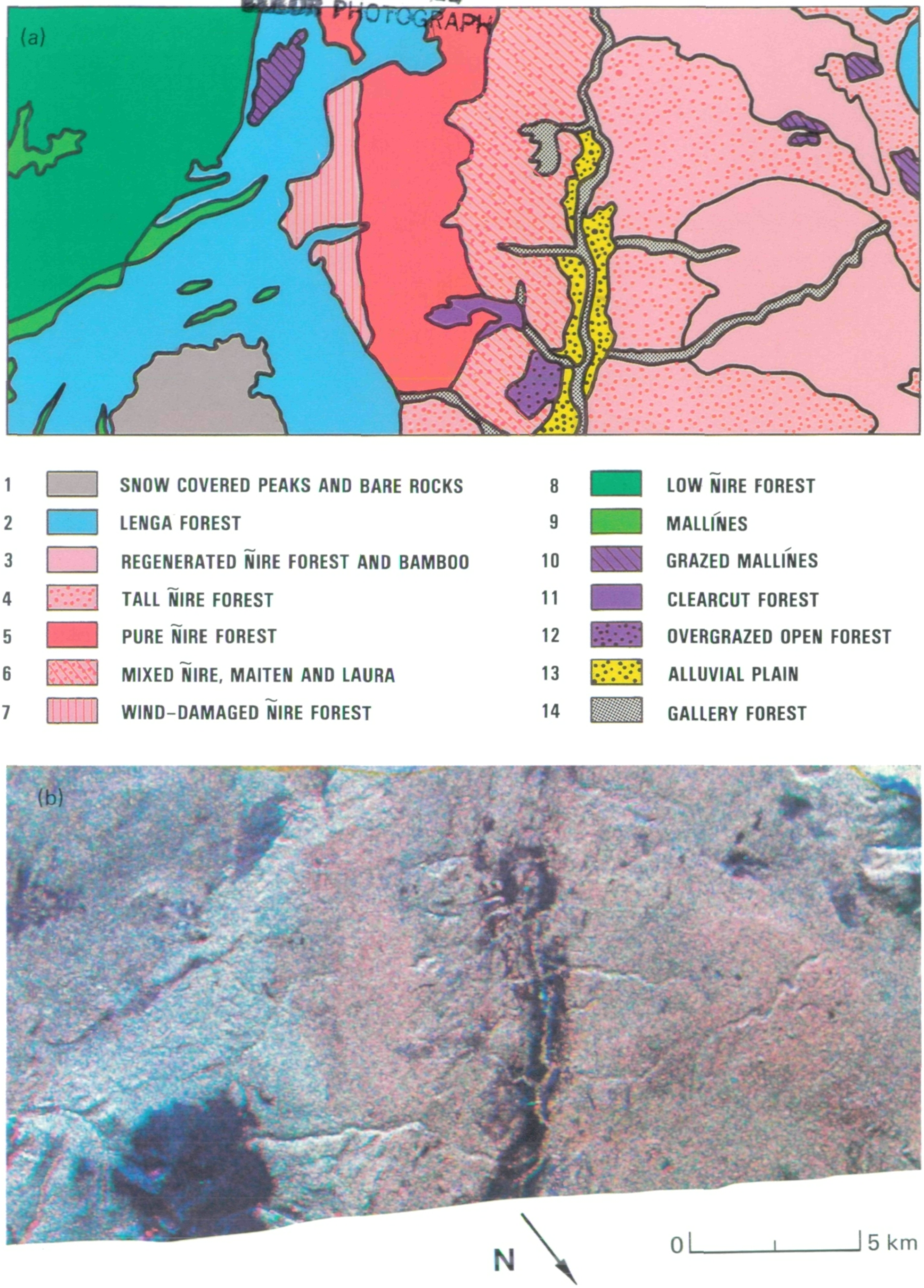

Figure 13-12. Vegetation discrimination from SIR-B multiple-incidence-angle imagery: (a) vegetation map of the Cordón la Grasa region showing the forest units; (b) color composite of SIR-B images where the variation in color indicates differences in the backscatter of the forest units as a function of incidence angle

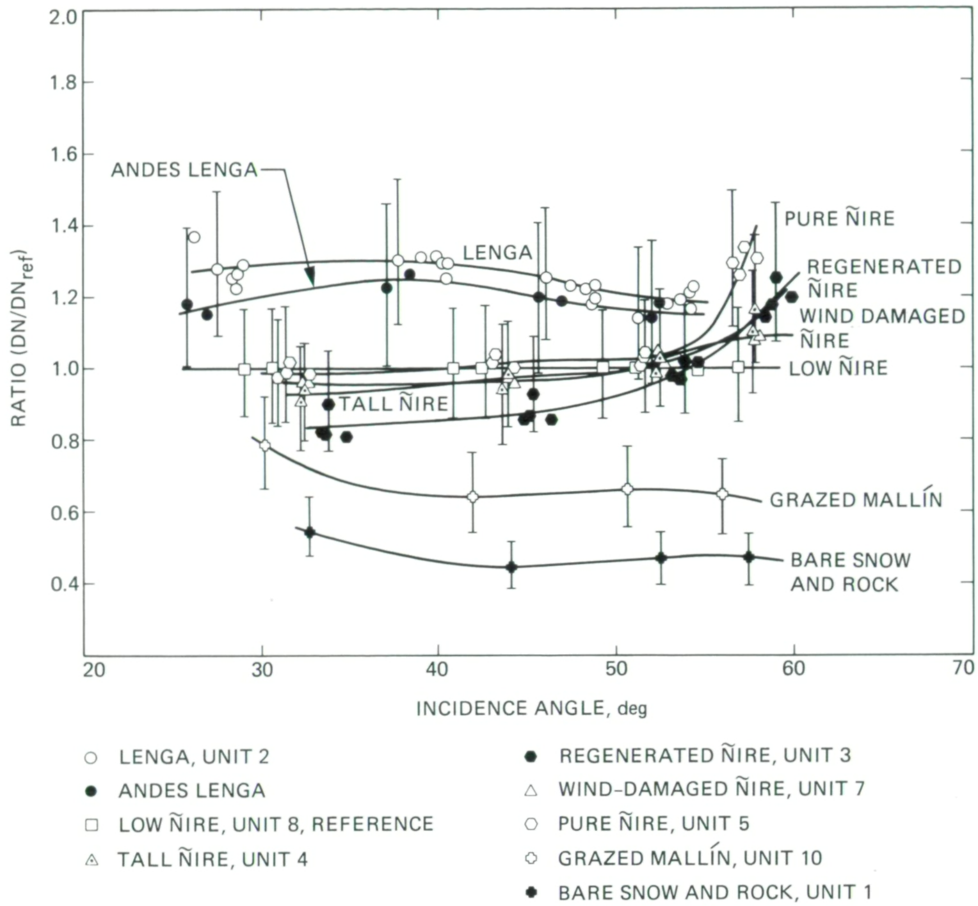

Figure 13-13. Relative brightness as a function of local incidence angle

dimensions from any perspective (Figure 13-14). Such displays are a valuable aid to ecologists in determining factors that control ecosystem boundaries in mountain regions.

The results of this work indicate that various forest species and various structures of a single species may be discriminated using multiple-incidence-angle radar imagery. Therefore, it is also essential to consider the variation in backscatter due to a variable incidence angle when analyzing and comparing data collected at varying frequencies and polarizations.

E. Microwave Penetration Experiment in the Mojave Desert, Nevada

(Adapted from an article (Ref. 13-13) by T. Farr, C. Elachi, P. Hartl, and K. Chowdhury).

A unique and valuable feature of imaging radars is their ability to penetrate arid surfaces and image features otherwise hidden by sand. This capability was first discovered in 1981 from images obtained by SIR-A over the Western Desert of Egypt and Sudan. These images revealed relic fluvial channels and other geologic features buried by a meter or more of sand (Ref. 13-14). Calculations showed that particle-size frequency distribution of the sandy soil, lack of clays, extremely low moisture conditions, and the SIR-A sensor parameters all contributed to this penetration (Refs. 13-15 and 13-16).

Quantitative measurements of microwave attenuation in soils have been made mostly with laboratory apparatus in which the soil was packed into a waveguide (Ref. 13-17). The objective for the SIR-B experiment was the direct measurement of microwave attenuation in natural soils as a function of moisture content, in support of concurrent searches for buried features in SIR-B images.

SIR-B was designed to produce radar images for a variety of studies, and the radar signals lent themselves nicely to this

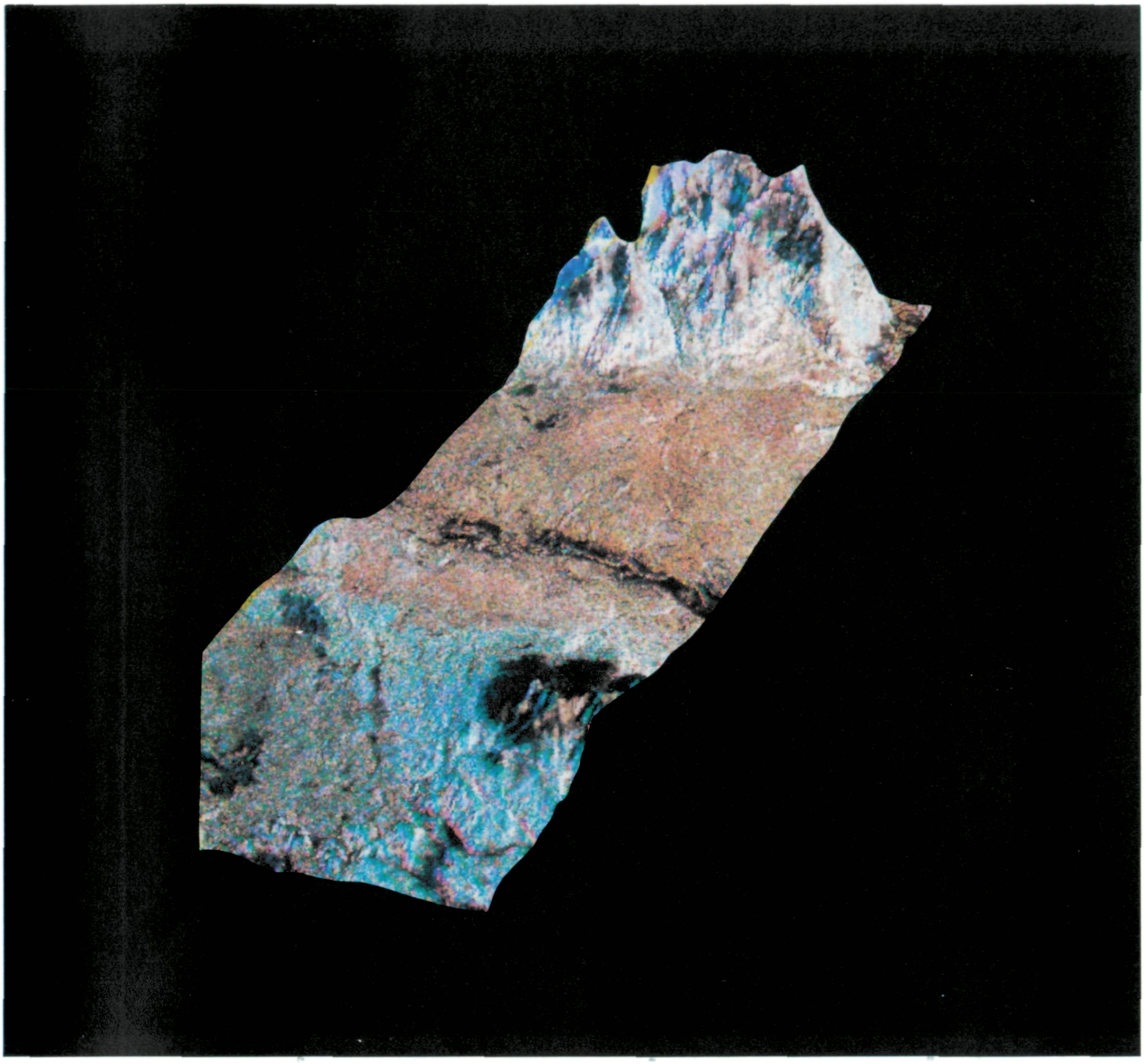

Figure 13-14. Three-dimensional display of the Cordón la Grasa region

study, which was made with the use of receivers buried at different depths at two sites in the Nevada desert near Hawthorne.

Site A was about 10 km east of the town of Mina, Nevada, and site B was about 10 km south of Mina. The areas were chosen because several parallel and crossing passes of SIR-B were planned there. The area is arid with an average 250 mm of precipitation per year. Rainfall for June through September 1984 averaged 11 mm per month at Hawthorne. The last rain recorded at Hawthorne before the flight was 1 mm on September 19. Thus, it was expected that some microwave penetration of the soils could be observed.

The receivers, built at the University of Stuttgart, were designed to be compact and rugged enough for field use. The antenna, receiver electronics, and power supply were housed

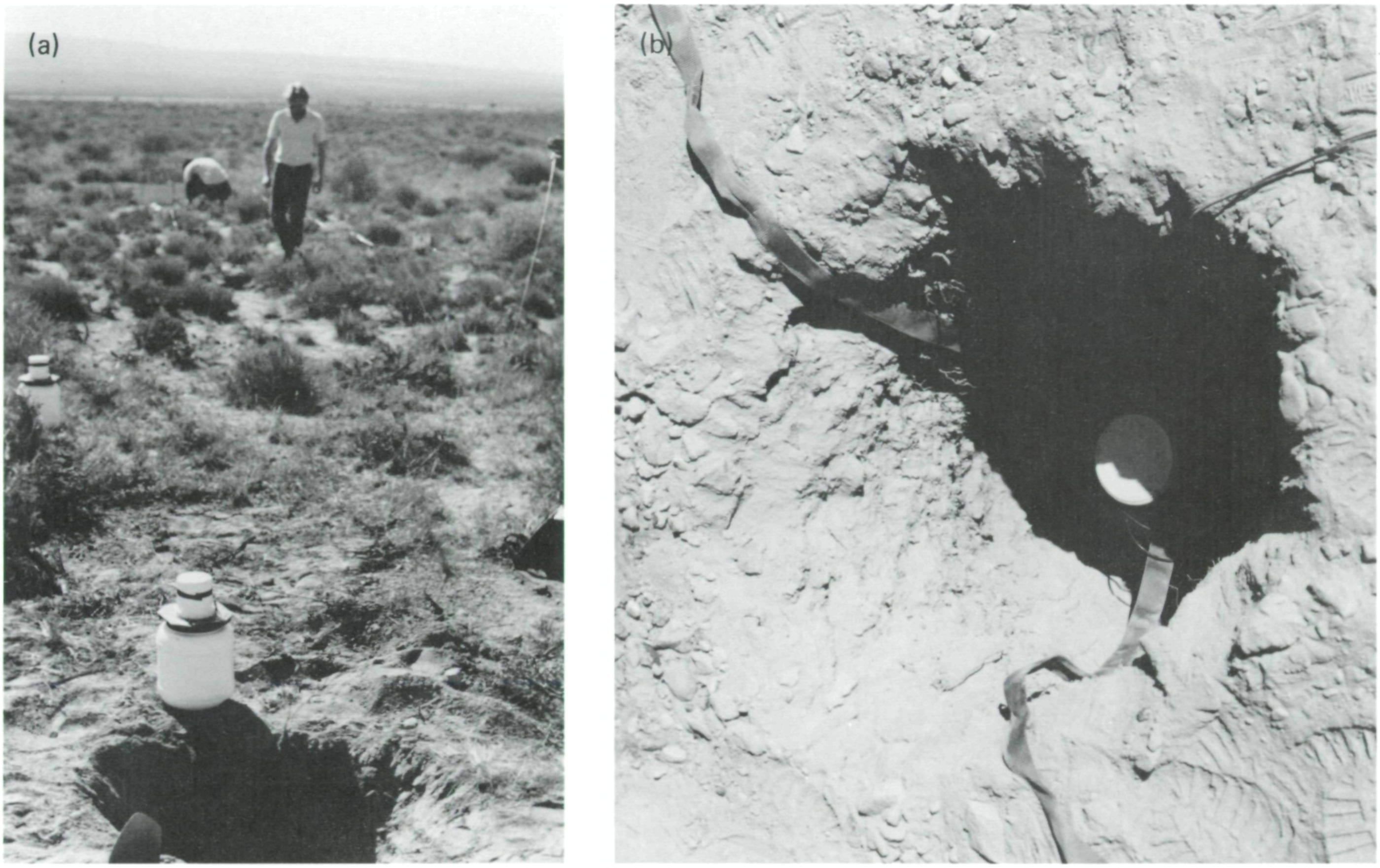

Figure 13-15. Preparations for the microwave penetration experiment. (a) South view of the terrain typical to this study. In the foreground is a receiver in its protective case. The antenna is in the upper housing and a ground plane separates it from the electronics below. The data collection unit can be glimpsed beside the crouching figure in the background. (b) A receiver in place just prior to burial.

in plastic containers (Figure 13-15). Signals were sent to and from the receivers via optical-fiber cables. The receivers were controlled and data stored by a hand-held computer through an analog-to-digital converter (ADC) interface.

After reception by the buried antenna, the received power was converted to a dc voltage. This dc voltage was then applied to a voltage-controlled oscillator, and the resulting frequency was sent via the optical-fiber cable to the ADC and an 8-bit counter in the controller. The output of the counter represented the power density at the receiver after the measured gain pattern of the receiver antenna was factored in. This output was sampled in 100-ms increments for about 2.5 min and stored in computer memory.

The recorded data were output on paper tape as a function of time. Each chart was then composed of the reproduction of the azimuth antenna pattern of SIR-B as the shuttle flew overhead and the attenuation of the transmitted power according to the deployment mode of the individual receiver (Figure 13-16). Analysis of the attenuated power as a function of burial depth at each site produced estimates of skin depth. At the two sites in Nevada, the skin depth ranged from 0.7 to 1.7 m, even though the soil moisture was much higher than that found in hyperarid regions of the world.

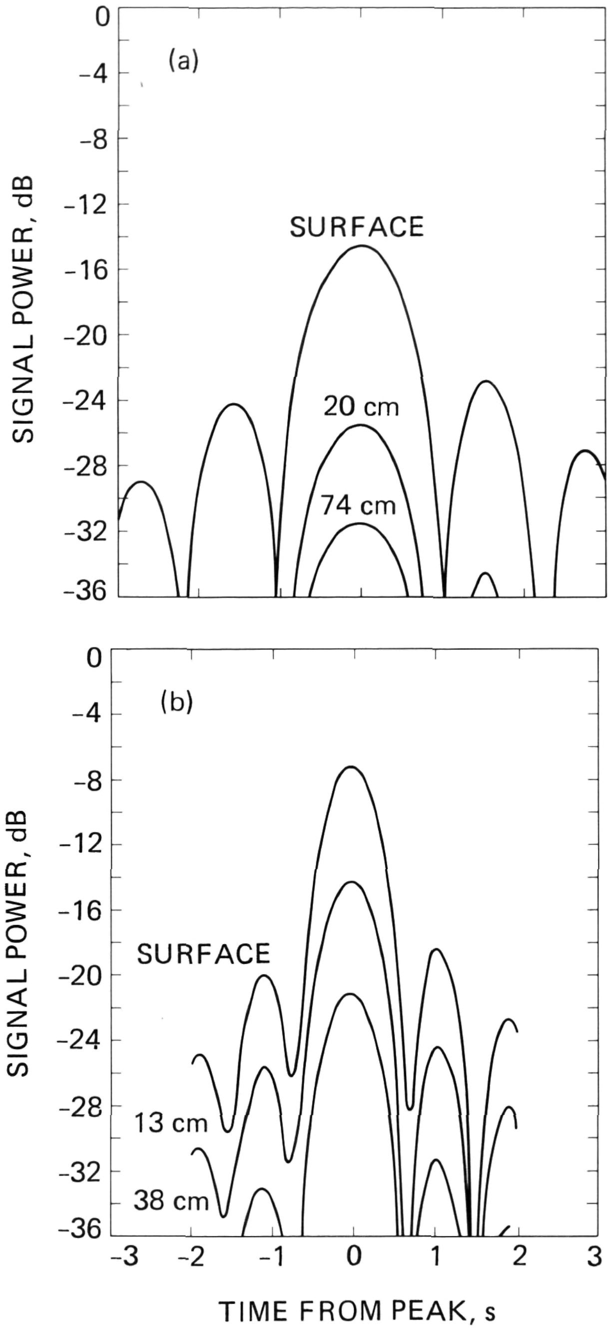

Figure 13-16. Received data as a function of time. **The uppermost curve on each graph was compiled from data collected by receivers deployed above the surface, and the lower curves from data collected at the depths indicated. (a) From data take 55.4, site A. Note the relatively wide azimuth antenna pattern, which was a result of the large incidence angle and the fact that the site was about 2 deg off the center of the radar beam. (b) From data take 87.4, site B. The narrower pattern was the result of a small incidence angle.**

XIV. SIR-B Coverage

SIR-B acquired approximately 7 h of data; coverage included all continents except Antarctica. Figure 14-1 is a summary of the coverage with data takes indicated. Figures 14-2 through 14-8 show the coverage in more detail. In all of these figures, the center of the swath is shown. Swath lengths are exact; swath widths are not indicated and vary from data take to data take.

Table 14-1 lists each data take, its geodetic latitude and longitude at the center of the data window, the shuttle altitude in 10-s intervals (by GMT and MET), and any estimates of SNR. Also included are the incidence and look angles; the shuttle roll, pitch, and yaw angles; the attitude color code; the number of bits per sample; the average swath width; and the primary area of coverage.

Table 14-1. SIR-B digital-data takes

Datatake: 8.4
Attitude: Blue — Look Angle: 24.0 — Roll: 180
Bits/sample: 3 — Incidence Angle: 25.4 — Pitch: 0
Area: S INDIAN OCEAN — Average Swath Width: 65 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
279 22 59 10	0 11 56 10	-37 20 48	46 15 30	359.1		
279 22 59 20	0 11 56 20	-36 52 39	46 47 14	359.0		
279 22 59 30	0 11 56 30	-36 24 20	47 18 35	358.8		
279 22 59 40	0 11 56 40	-35 55 52	47 49 33	358.7		
279 22 59 50	0 11 56 50	-35 27 15	48 20 07	358.5		
279 23 00 00	0 11 57 00	-34 58 28	48 50 18	358.3		
279 23 00 10	0 11 57 10	-34 29 32	49 20 07	358.2		
279 23 00 20	0 11 57 20	-34 00 27	49 49 32	358.0		
279 23 00 30	0 11 57 30	-33 31 13	50 18 34	357.8		
279 23 00 40	0 11 57 40	-33 01 49	50 47 13	357.7		
279 23 00 50	0 11 57 50	-32 32 16	51 15 29	357.5		Gain Changes
279 23 01 00	0 11 58 00	-32 02 34	51 43 22	357.3		Gain Changes
279 23 01 10	0 11 58 10	-31 32 47	52 11 01	357.2		Gain Changes
279 23 01 20	0 11 58 20	-31 02 52	52 38 21	357.0		Gain Changes
279 23 01 30	0 11 58 30	-30 32 49	53 05 21	356.9		Gain Changes
279 23 01 40	0 11 58 40	-30 02 38	53 32 00	356.7		Gain Changes
279 23 01 50	0 11 58 50	-29 32 19	53 58 19	356.6		Gain Changes
279 23 02 00	0 11 59 00	-29 01 52	54 24 18	356.4		Gain Changes

Datatake: 10.4
Attitude: Blue — Look Angle: 47.0 — Roll: 180
Bits/sample: 3 — Incidence Angle: 50.4 — Pitch: 0
Area: ARABIA/IRAQ/IRAN — Average Swath Width: 44 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 02 20 00	0 15 17 00	20 25 46	36 51 19	353.2	0	
280 02 20 10	0 15 17 10	20 58 31	37 12 22	353.4		Noise
280 02 20 20	0 15 17 20	21 31 14	37 33 35	353.5		Noise
280 02 20 30	0 15 17 30	22 03 53	37 54 59	353.6		Noise
280 02 20 40	0 15 17 40	22 36 29	38 16 34	353.7		
280 02 20 50	0 15 17 50	23 09 02	38 38 19	353.8	0	
280 02 21 00	0 15 18 00	23 41 32	39 00 15	354.0		
280 02 21 10	0 15 18 10	24 13 58	39 22 22	354.1	1	
280 02 21 20	0 15 18 20	24 46 22	39 44 40	354.2		
280 02 21 30	0 15 18 30	25 18 42	40 07 08	354.4		
280 02 21 40	0 15 18 40	25 51 00	40 29 47	354.5		
280 02 21 50	0 15 18 50	26 23 14	40 52 36	354.6		
280 02 22 00	0 15 19 00	26 55 25	41 15 36	354.8		
280 02 22 10	0 15 19 10	27 27 32	41 38 49	354.9		
280 02 22 20	0 15 19 20	27 59 35	42 02 18	355.0	0	Interference
280 02 22 30	0 15 19 30	28 31 33	42 26 03	355.2		Interference
280 02 22 40	0 15 19 40	29 03 25	42 50 04	355.3		Interference
280 02 22 50	0 15 19 50	29 35 14	43 14 21	355.5		Interference
280 02 23 00	0 15 20 00	30 06 57	43 38 53	355.6		Interference
280 02 23 10	0 15 20 10	30 38 35	44 03 42	355.8		Interference
280 02 23 20	0 15 20 20	31 10 09	44 28 46	355.9	0	Interference
280 02 23 30	0 15 20 30	31 41 38	44 54 06	356.1		Interference
280 02 23 40	0 15 20 40	32 13 02	45 19 42	356.2		Interference
280 02 23 50	0 15 20 50	32 44 21	45 45 34	356.4		Interference
280 02 24 00	0 15 21 00	33 15 35	46 11 41	356.6		Interference
280 02 24 10	0 15 21 10	33 46 41	46 38 15	356.7	0	
280 02 24 20	0 15 21 20	34 17 41	47 05 08	356.9		
280 02 24 30	0 15 21 30	34 48 35	47 32 20	357.0		
280 02 24 40	0 15 21 40	35 19 23	47 59 51	357.2		
280 02 24 50	0 15 21 50	35 50 06	48 27 40	357.4		
280 02 25 00	0 15 22 00	36 20 42	48 55 49	357.5	0	

Datatake: 12.6
Attitude: Blue — Look Angle: 33.0 — Roll: 180.0
Bits/sample: 6 — Incidence Angle: 35.1 — Pitch: 0
Area: USSR/JAPAN/PACIFIC — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 04 15 50	0 17 12 50	49 48 30	133 48 28	364.6	0	
280 04 16 00	0 17 13 00	49 24 45	134 34 23	364.6		
280 04 16 10	0 17 13 10	49 00 41	135 19 32	364.5		Interference
280 04 16 20	0 17 13 20	48 36 18	136 03 57	364.4	4	Interference
280 04 16 30	0 17 13 30	48 11 36	136 47 36	364.3		
280 04 16 40	0 17 13 40	47 46 34	137 30 29	364.1		
280 04 16 50	0 17 13 50	47 21 14	138 12 38	364.0	6	Interference
280 04 17 00	0 17 14 00	46 55 34	138 54 01	363.9		Interference
280 04 17 10	0 17 14 10	46 29 51	139 34 24	363.8		Interference
280 04 17 20	0 17 14 20	46 03 54	140 14 14	363.7		Interference
280 04 17 30	0 17 14 30	45 37 43	140 53 29	363.6		Interference
280 04 17 40	0 17 14 40	45 11 17	141 32 11	363.5	0	
280 04 17 50	0 17 14 50	44 44 36	142 10 20	363.4		
280 04 18 00	0 17 15 00	44 17 42	142 47 54	363.3		
280 04 18 10	0 17 15 10	43 50 33	143 24 56	363.1		
280 04 18 20	0 17 15 20	43 23 09	144 01 23	363.0	4	Interference
280 04 18 30	0 17 15 30	42 55 32	144 37 17	362.9	3	Interference
280 04 18 40	0 17 15 40	42 27 39	145 12 38	362.8		
280 04 18 50	0 17 15 50	41 59 33	145 47 24	362.7		
280 04 19 00	0 17 16 00	41 31 12	146 21 38	362.5		
280 04 19 10	0 17 16 10	41 02 48	146 55 26	362.4		
280 04 19 20	0 17 16 20	40 34 14	147 28 44	362.3		
280 04 19 30	0 17 16 30	40 05 28	148 01 31	362.2	0	
280 04 19 40	0 17 16 40	39 36 32	148 33 46	362.1		
280 04 19 50	0 17 16 50	39 07 24	149 05 31	361.9		
280 04 20 00	0 17 17 00	38 38 05	149 36 45	361.8	0	

Datatake: 14.2
Attitude: Blue — Look Angle: 37.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 39.5 — Pitch: 0
Area: FRANCE/GRMNY/LITH — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 07 04 00	0 20 01 00	48 01 09	-4 52 44	361.7		Interference
280 07 04 10	0 20 01 10	48 26 23	-4 10 11	361.9		Interference
280 07 04 20	0 20 01 20	48 51 17	-3 26 50	362.1		Interference
280 07 04 30	0 20 01 30	49 15 51	-2 42 43	362.2		Interference
280 07 04 40	0 20 01 40	49 40 04	-1 57 49	362.3		Interference
280 07 04 50	0 20 01 50	50 03 58	-1 12 08	362.5		Interference
280 07 05 00	0 20 02 00	50 27 31	-0 25 40	362.6	0	Interference
280 07 05 10	0 20 02 10	50 50 54	0 21 24	362.8	2	Interference
280 07 05 20	0 20 02 20	51 13 52	1 09 20	362.9		Interference
280 07 05 30	0 20 02 30	51 36 27	1 58 07	363.1		Interference
280 07 05 40	0 20 02 40	51 58 38	2 47 44	363.2		Interference
280 07 05 50	0 20 02 50	52 20 25	3 38 12	363.3		Interference
280 07 06 00	0 20 03 00	52 41 48	4 29 30	363.5		Interference
280 07 06 10	0 20 03 10	53 02 47	5 21 39	363.6	1	Interference
280 07 06 20	0 20 03 20	53 23 22	6 14 39	363.7		Interference
280 07 06 30	0 20 03 30	53 43 33	7 08 30	363.8		Interference
280 07 06 40	0 20 03 40	54 03 20	8 03 11	364.0	0	Interference
280 07 06 50	0 20 03 50	54 22 43	8 58 43	364.1		Interference
280 07 07 00	0 20 04 00	54 41 42	9 55 06	364.2		Interference
280 07 07 10	0 20 04 10	55 00 13	10 52 29	364.3	1	Interference
280 07 07 20	0 20 04 20	55 18 11	11 50 43	364.4	1	Interference
280 07 07 30	0 20 04 30	55 35 36	12 49 48	364.5		Interference
280 07 07 40	0 20 04 40	55 52 29	13 49 43	364.6	2	Interference
280 07 07 50	0 20 04 50	56 08 50	14 50 30	364.8		Interference
280 07 08 00	0 20 05 00	56 24 38	15 52 07	364.9	5	Interference
280 07 08 10	0 20 05 10	56 39 53	16 54 34	365.0		Interference
280 07 08 20	0 20 05 20	56 54 37	17 57 53	365.1		Interference
280 07 08 30	0 20 05 30	57 08 47	19 02 02	365.1		Interference
280 07 08 40	0 20 05 40	57 22 25	20 07 02	365.2		
280 07 08 50	0 20 05 50	57 35 31	21 12 53	365.3		
280 07 09 00	0 20 06 00	57 48 04	22 19 34	365.4		
280 07 09 10	0 20 06 10	57 59 52	23 27 01	365.5		
280 07 09 20	0 20 06 20	58 11 03	24 35 17	365.6	0	
280 07 09 30	0 20 06 30	58 21 38	25 44 23	365.6		
280 07 09 40	0 20 06 40	58 31 36	26 54 18	365.7	4	

Datatake: 14.8
Attitude: Blue — Look Angle: 46.0 — Roll: 180
Bits/Sample: 4 — Incidence Angle: 49.3 — Pitch: 0
Area: PACIFIC/PERU/BRAZIL — Average Swath Width: 25 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 08 14 00	0 21 11 00	-19 38 28	-80 13 29	353.8		
280 08 14 10	0 21 11 10	-19 06 50	-79 51 10	353.7		
280 08 14 20	0 21 11 20	-18 35 09	-79 29 00	353.6		
280 08 14 30	0 21 11 30	-18 03 23	-79 06 59	353.5	0	
280 08 14 40	0 21 11 40	-17 31 34	-78 45 07	353.3		
280 08 14 50	0 21 11 50	-16 59 40	-78 23 25	353.2		
280 08 15 00	0 21 12 00	-16 27 43	-78 01 51	353.1		
280 08 15 10	0 21 12 10	-15 55 43	-77 40 27	353.0		
280 08 15 20	0 21 12 20	-15 23 38	-77 19 12	352.9		
280 08 15 30	0 21 12 30	-14 51 29	-76 58 06	352.8		
280 08 15 40	0 21 12 40	-14 19 17	-76 37 09	352.7		
280 08 15 50	0 21 12 50	-13 47 01	-76 16 21	352.6		
280 08 16 00	0 21 13 00	-13 14 41	-75 55 42	352.5	0	

280 08 16 10	0 21 13 10	-12 42 18	-75 35 10	352.4		
280 08 16 20	0 21 13 20	-12 09 52	-75 14 44	352.3		
280 08 16 30	0 21 13 30	-11 37 23	-74 54 23	352.2	3	
280 08 16 40	0 21 13 40	-11 04 52	-74 34 08	352.2		
280 08 16 50	0 21 13 50	-10 32 19	-74 13 59	352.1		
280 08 17 00	0 21 14 00	-9 59 43	-73 53 55	352.0		
280 08 17 10	0 21 14 10	-9 27 04	-73 33 57	351.9	3	
280 08 17 20	0 21 14 20	-8 54 23	-73 14 05	351.9		
280 08 17 30	0 21 14 30	-8 21 39	-72 54 19	351.8		
280 08 17 40	0 21 14 40	-7 48 53	-72 34 38	351.7		
280 08 17 50	0 21 14 50	-7 16 04	-72 15 03	351.7	2	
280 08 18 00	0 21 15 00	-6 43 13	-71 55 34	351.6		
280 08 18 10	0 21 15 10	-6 10 21	-71 36 05	351.6	3	
280 08 18 20	0 21 15 20	-5 37 27	-71 16 40	351.5		
280 08 18 30	0 21 15 30	-5 04 31	-70 57 20	351.5	3	
280 08 18 40	0 21 15 40	-4 31 34	-70 38 04	351.4		
280 08 18 50	0 21 15 50	-3 58 34	-70 18 52	351.4		
280 08 19 00	0 21 16 00	-3 25 32	-69 59 44	351.4		

Datatake: 17.4
Attitude: Blue — Look Angle: 21.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 22.3 — Pitch: 0
Area: UK/BELGIUM — Average Swath Width: 27 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 11 49 20	1 00 46 20	56 45 20	-7 02 28	366.4		
280 11 49 30	1 00 46 30	56 33 48	-5 56 48	366.4		
280 11 49 40	1 00 46 40	56 21 42	-4 51 53	366.4		
280 11 49 50	1 00 46 50	56 09 02	-3 47 44	366.3		
280 11 50 00	1 00 47 00	55 55 47	-2 44 19	366.3		
280 11 50 10	1 00 47 10	55 41 57	-1 41 39	366.2		
280 11 50 20	1 00 47 20	55 27 34	-0 39 43	366.2		
280 11 50 30	1 00 47 30	55 12 36	0 21 26	366.1		
280 11 50 40	1 00 47 40	54 57 03	1 21 51	366.1		
280 11 50 50	1 00 47 50	54 40 56	2 21 31	366.0		
280 11 51 00	1 00 48 00	54 24 15	3 20 27	366.0		
280 11 51 10	1 00 48 10	54 07 14	4 18 24	365.9		
280 11 51 20	1 00 48 20	53 49 44	5 15 32	365.8		
280 11 51 30	1 00 48 30	53 31 43	6 11 51	365.8		No Data
280 11 51 40	1 00 48 40	53 13 13	7 07 21	365.7		No Data
280 11 51 50	1 00 48 50	52 54 12	8 02 03	365.6		
280 11 52 00	1 00 49 00	52 34 42	8 55 56	365.6		
280 11 52 10	1 00 49 10	52 14 56	9 48 59	365.5		
280 11 52 20	1 00 49 20	51 54 44	10 41 13	365.4		
280 11 52 30	1 00 49 30	51 34 06	11 32 39	365.3		
280 11 52 40	1 00 49 40	51 13 03	12 23 15	365.2		
280 11 52 50	1 00 49 50	50 51 34	13 13 03	365.1		

Datatake: 17.5
Attitude: Blue — Look Angle: 34.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 36.2 — Pitch: 0
Area: SYRIA/IRAQ/ARABIA — Average Swath Width: 33 km — Yaw: 0.0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 11 58 50	1 00 55 50	35 27 45	36 36 30	361.0		
280 11 59 00	1 00 56 00	34 57 25	37 04 58	360.8		
280 11 59 10	1 00 56 10	34 26 42	37 33 07	360.7		
280 11 59 20	1 00 56 20	33 55 56	38 00 55	360.6		
280 11 59 30	1 00 56 30	33 25 08	38 28 22	360.5		
280 11 59 40	1 00 56 40	32 54 16	38 55 28	360.3		
280 11 59 50	1 00 56 50	32 23 22	39 22 13	360.2		
280 12 00 00	1 00 57 00	31 52 25	39 48 36	360.1		
280 12 00 10	1 00 57 10	31 21 26	40 14 39	360.0		
280 12 00 20	1 00 57 20	30 50 23	40 40 21	359.8		
280 12 00 30	1 00 57 30	30 19 18	41 05 41	359.7		
280 12 00 40	1 00 57 40	29 48 10	41 30 41	359.6		
280 12 00 50	1 00 57 50	29 17 00	41 55 20	359.5		
280 12 01 00	1 00 58 00	28 45 47	42 19 37	359.3		
280 12 01 10	1 00 58 10	28 14 11	42 43 55	359.2		
280 12 01 20	1 00 58 20	27 42 31	43 08 00	359.1		
280 12 01 30	1 00 58 30	27 10 47	43 31 52	359.0		
280 12 01 40	1 00 58 40	26 39 00	43 55 31	358.9		
280 12 01 50	1 00 58 50	26 07 08	44 18 58	358.7		
280 12 02 00	1 00 59 00	25 35 12	44 42 12	358.6		
280 12 02 10	1 00 59 10	25 03 12	45 05 13	358.5		
280 12 02 20	1 00 59 20	24 31 09	45 28 01	358.4		
280 12 02 30	1 00 59 30	23 59 01	45 50 37	358.3		No Data
280 12 02 40	1 00 59 40	23 26 49	46 13 00	358.2		No Data
280 12 02 50	1 00 59 50	22 54 34	46 35 10	358.1		No Data
280 12 03 00	1 01 00 00	22 22 14	46 57 07	358.0		
280 12 03 10	1 01 00 10	21 49 53	47 19 00	357.9		
280 12 03 20	1 01 00 20	21 17 29	47 40 42	357.8		
280 12 03 30	1 01 00 30	20 45 02	48 02 14	357.7		
280 12 03 40	1 01 00 40	20 12 31	48 23 36	357.6		
280 12 03 50	1 01 00 50	19 39 58	48 44 47	357.5		
280 12 04 00	1 01 01 00	19 07 21	49 05 48	357.4		
280 12 04 10	1 01 01 10	18 34 43	49 26 45	357.3		

Datatake: 18.6
Attitude: Red — Look Angle: 20.0 — Roll: 0
Bits/sample: 3 — Incidence Angle: 21.2 — Pitch: 180
Area: NEW ZEALAND — Average Swath Width: 35 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
280 14 14 30	1 03 11 30	-39 45 36	175 49 15	359.2		
280 14 14 40	1 03 11 40	-39 17 09	176 22 10	359.0		
280 14 14 50	1 03 11 50	-38 48 43	176 55 05	358.9	2	
280 14 15 00	1 03 12 00	-38 20 17	177 28 00	358.7		

Datatake: 35.6
Attitude: YYY — Look Angle: 35.0 — Roll: 85
Bits/sample: 6 — Incidence Angle: 36.4 — Pitch: 0
Area: ANGOLA/SW AFRICA — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 15 15 00	2 04 12 00	-15 11 13	13 19 38	222.8		
281 15 15 10	2 04 12 10	-15 45 01	13 40 33	222.9	1	
281 15 15 20	2 04 12 20	-16 18 45	14 01 37	223.0		
281 15 15 30	2 04 12 30	-16 52 26	14 22 50	223.1	2	
281 15 15 40	2 04 12 40	-17 26 05	14 44 12	223.2		
281 15 15 50	2 04 12 50	-17 59 41	15 05 43	223.3	1	
281 15 16 00	2 04 13 00	-18 33 14	15 27 24	223.4		
281 15 16 10	2 04 13 10	-19 06 47	15 49 09	223.5	5	
281 15 16 20	2 04 13 20	-19 40 16	16 11 05	223.6		
281 15 16 30	2 04 13 30	-20 13 41	16 33 12	223.7		
281 15 16 40	2 04 13 40	-20 47 02	16 55 31	223.8		
281 15 16 50	2 04 13 50	-21 20 20	17 18 00	224.0	0	
281 15 17 00	2 04 14 00	-21 53 34	17 40 40	224.1	4	
281 15 17 10	2 04 14 10	-22 26 44	18 03 31	224.2		
281 15 17 20	2 04 14 20	-22 59 51	18 26 33	224.3		
281 15 17 30	2 04 14 30	-23 32 53	18 49 45	224.5	1	
281 15 17 40	2 04 14 40	-24 05 52	19 13 09	224.6		
281 15 17 50	2 04 14 50	-24 38 48	19 36 44	224.7	1	
281 15 18 00	2 04 15 00	-25 11 39	20 00 30	224.9		
281 15 18 10	2 04 15 10	-25 44 27	20 24 30	225.0		
281 15 18 20	2 04 15 20	-26 17 09	20 48 46	225.2		
281 15 18 30	2 04 15 30	-26 49 46	21 13 19	225.3		
281 15 18 40	2 04 15 40	-27 22 17	21 38 08	225.5		
281 15 18 50	2 04 15 50	-27 54 43	22 03 13	225.6		
281 15 19 00	2 04 16 00	-28 27 03	22 28 34	225.8	6	
281 15 19 10	2 04 16 10	-28 59 17	22 54 12	225.9	7	
281 15 19 20	2 04 16 20	-29 31 26	23 20 06	226.1		
281 15 19 30	2 04 16 30	-30 03 29	23 46 16	226.2	2	
281 15 19 40	2 04 16 40	-30 35 26	24 12 42	226.4	2	
281 15 19 50	2 04 16 50	-31 07 18	24 39 25	226.5		
281 15 20 00	2 04 17 00	-31 39 05	25 06 24	226.7	4	
281 15 20 10	2 04 17 10	-32 10 41	25 33 52	226.9	6	
281 15 20 20	2 04 17 20	-32 42 11	26 01 39	227.0		
281 15 20 30	2 04 17 30	-33 13 34	26 29 47	227.2	7	
281 15 20 40	2 04 17 40	-33 44 50	26 58 14	227.3		
281 15 20 50	2 04 17 50	-34 15 59	27 27 01	227.5		
281 15 21 00	2 04 18 00	-34 47 02	27 56 07	227.7		
281 15 21 10	2 04 18 10	-35 17 53	28 25 45	227.8		
281 15 21 20	2 04 18 20	-35 48 36	28 55 45	228.0		

Datatake: 36.6
Attitude: Red — Look Angle: 55.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 57.9 — Pitch: 180
Area: AUSTRALIA — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 17 14 00	2 06 11 00	-35 28 36	132 17 45	230.8		
281 17 14 10	2 06 11 10	-34 57 01	132 46 25	230.7		
281 17 14 20	2 06 11 20	-34 25 19	133 14 44	230.6		
281 17 14 30	2 06 11 30	-33 53 31	133 42 45	230.4		
281 17 14 40	2 06 11 40	-33 21 37	134 10 25	230.3		
281 17 14 50	2 06 11 50	-32 49 37	134 37 47	230.2		

Table 14-1 (contd)

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 17 15 00	2 06 12 00	-32 17 30	135 04 48	230.1		
281 17 15 10	2 06 12 10	-31 45 15	135 31 22	229.9		
281 17 15 20	2 06 12 20	-31 12 54	135 57 40	229.8		
281 17 15 30	2 06 12 30	-30 40 29	136 23 41	229.7		
281 17 15 40	2 06 12 40	-30 07 59	136 49 27	229.6		
281 17 15 50	2 06 12 50	-29 35 24	137 14 56	229.5		
281 17 16 00	2 06 13 00	-29 02 45	137 40 10	229.3		
281 17 16 10	2 06 13 10	-28 30 01	138 05 07	229.2		
281 17 16 20	2 06 13 20	-27 57 12	138 29 49	229.1		
281 17 16 30	2 06 13 30	-27 24 18	138 54 14	229.0		Interference
281 17 16 40	2 06 13 40	-26 51 20	139 18 23	228.9		Interference
281 17 16 50	2 06 13 50	-26 18 17	139 42 17	228.8		Interference
281 17 17 00	2 06 14 00	-25 45 09	140 05 54	228.7		Interference
281 17 17 10	2 06 14 10	-25 11 56	140 29 18	228.6		Interference
281 17 17 20	2 06 14 20	-24 38 40	140 52 32	228.4		Interference
281 17 17 30	2 06 14 30	-24 05 21	141 15 35	228.3		Interference
281 17 17 40	2 06 14 40	-23 31 59	141 38 28	228.2		Interference
281 17 17 50	2 06 14 50	-22 58 35	142 01 09	228.1		
281 17 18 00	2 06 15 00	-22 25 07	142 23 40	228.0		
281 17 18 10	2 06 15 10	-21 51 37	142 46 01	227.9		
281 17 18 20	2 06 15 20	-21 18 03	143 08 11	227.8		
281 17 18 30	2 06 15 30	-20 44 27	143 30 10	227.8	1	
281 17 18 40	2 06 15 40	-20 10 48	143 51 59	227.7		
281 17 18 50	2 06 15 50	-19 37 06	144 13 36	227.6	1	
281 17 19 00	2 06 16 00	-19 03 22	144 35 04	227.5		
281 17 19 10	2 06 16 10	-18 29 35	144 56 28	227.4		
281 17 19 20	2 06 16 20	-17 55 47	145 17 44	227.3	2	
281 17 19 30	2 06 16 30	-17 21 55	145 38 51	227.2		
281 17 19 40	2 06 16 40	-16 48 02	145 59 50	227.2		
281 17 19 50	2 06 16 50	-16 14 06	146 20 40	227.1	0	
281 17 20 00	2 06 17 00	-15 40 07	146 41 22	227.0		
281 17 20 10	2 06 17 10	-15 06 09	147 02 03	227.0		
281 17 20 20	2 06 17 20	-14 32 10	147 22 37	226.9		
281 17 20 30	2 06 17 30	-13 58 08	147 43 05	226.8		
281 17 20 40	2 06 17 40	-13 24 06	148 03 26	226.8		
281 17 20 50	2 06 17 50	-12 50 02	148 23 41	226.7		
281 17 21 00	2 06 18 00	-12 15 56	148 43 50	226.7		
281 17 50 50	2 06 47 50	54 14 51	-92 54 36	235.2		
281 17 51 00	2 06 48 00	53 56 57	-91 55 23	235.1		
281 17 51 10	2 06 48 10	53 38 32	-90 57 03	235.0		Interference
281 17 51 20	2 06 48 20	53 19 36	-89 59 36	234.9		Interference
281 17 51 30	2 06 48 30	53 00 10	-89 03 01	234.8		Interference
281 17 51 40	2 06 48 40	52 40 13	-88 07 18	234.6		Interference
281 17 51 50	2 06 48 50	52 19 45	-87 12 27	234.5		Interference
281 17 52 00	2 06 49 00	51 58 47	-86 18 29	234.4		Interference
281 17 52 10	2 06 49 10	51 37 24	-85 25 29	234.2	10	
281 17 52 20	2 06 49 20	51 15 38	-84 33 17	234.1		
281 17 52 30	2 06 49 30	50 53 31	-83 41 54	234.0		Interference
281 17 52 40	2 06 49 40	50 31 02	-82 51 19	233.8		
281 17 52 50	2 06 49 50	50 08 10	-82 01 33	233.7	15	
281 17 53 00	2 06 50 00	49 44 57	-81 12 35	233.5		
281 17 53 10	2 06 50 10	49 21 22	-80 24 25	233.4		
281 17 53 20	2 06 50 20	48 57 25	-79 37 03	233.2		
281 17 53 30	2 06 50 30	48 33 06	-78 50 30	233.1		
281 17 53 40	2 06 50 40	48 08 25	-78 04 45	232.9		
281 17 53 50	2 06 50 50	47 43 22	-77 19 48	232.8	12	
281 17 54 00	2 06 51 00	47 17 57	-76 35 40	232.6		
281 17 54 10	2 06 51 10	46 52 15	-75 52 17	232.5		
281 17 54 20	2 06 51 20	46 26 17	-75 09 34	232.3		
281 17 54 30	2 06 51 30	46 00 05	-74 27 28	232.2		
281 17 54 40	2 06 51 40	45 33 37	-73 46 02	232.0		
281 17 54 50	2 06 51 50	45 06 54	-73 05 14	231.8		
281 17 55 00	2 06 52 00	44 39 56	-72 25 05	231.7		
281 17 55 10	2 06 52 10	44 12 42	-71 45 35	231.5		
281 17 55 20	2 06 52 20	43 45 14	-71 06 43	231.3		
281 17 55 30	2 06 52 30	43 17 30	-70 28 30	231.2		Interference
281 17 55 40	2 06 52 40	42 49 31	-69 50 56	231.0		Interference
281 17 55 50	2 06 52 50	42 21 16	-69 14 00	230.8		Interference
281 17 56 00	2 06 53 00	41 52 47	-68 37 44	230.7		Interference
281 17 56 10	2 06 53 10	41 24 11	-68 01 48	230.5		Interference
281 17 56 20	2 06 53 20	40 55 23	-67 26 26	230.3	0	Interference
281 17 56 30	2 06 53 30	40 26 22	-66 51 37	230.2		Interference
281 17 56 40	2 06 53 40	39 57 09	-66 17 22	230.0		Interference
281 17 56 50	2 06 53 50	39 27 43	-65 43 41	229.8		Interference
281 17 57 00	2 06 54 00	38 58 05	-65 10 33	229.6		Interference

Datatake: 37.2
Attitude: BBB | Look Angle: 31.0 | Roll: 180
Bits/sample: 6 | Incidence Angle: 32.3 | Pitch: 0
Area: CANADA/US | Average Swath Width: 22 km | Yaw: 0.5

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 17 44 50	2 06 41 50	57 49 54	-135 00 03	237.2		Ambiguity
281 17 45 00	2 06 42 00	57 56 32	-133 48 13	237.3	10	Ambiguity
281 17 45 10	2 06 42 10	58 02 27	-132 35 57	237.3	10	Ambiguity
281 17 45 20	2 06 42 20	58 07 39	-131 23 15	237.3		Ambiguity
281 17 45 30	2 06 42 30	58 12 08	-130 10 07	237.2		Ambiguity
281 17 45 40	2 06 42 40	58 15 54	-128 56 33	237.2	10	Ambiguity
281 17 45 50	2 06 42 50	58 18 57	-127 42 33	237.2		Ambiguity
281 17 46 00	2 06 43 00	58 21 16	-126 28 07	237.2		Ambiguity
281 17 46 10	2 06 43 10	58 22 46	-125 13 26	237.2	10	
281 17 46 20	2 06 43 20	58 23 31	-123 58 56	237.2		Ambiguity
281 17 46 30	2 06 43 30	58 23 32	-122 44 38	237.1		
281 17 46 40	2 06 43 40	58 22 48	-121 30 31	237.1		
281 17 46 50	2 06 43 50	58 21 19	-120 16 35	237.1	12	
281 17 47 00	2 06 44 00	58 19 06	-119 02 51	237.0		
281 17 47 10	2 06 44 10	58 16 07	-117 49 19	237.0		
281 17 47 20	2 06 44 20	58 12 25	-116 35 57	237.0	8	Interference
281 17 47 30	2 06 44 30	58 07 57	-115 22 47	236.9		Interference
281 17 47 40	2 06 44 40	58 02 45	-114 09 49	236.9	10	Interference
281 17 47 50	2 06 44 50	57 56 48	-112 57 02	236.8		Interference
281 17 48 00	2 06 45 00	57 50 06	-111 44 26	236.7		Interference
281 17 48 10	2 06 45 10	57 42 35	-110 32 12	236.7	10	Interference
281 17 48 20	2 06 45 20	57 34 26	-109 20 40	236.6		Interference
281 17 48 30	2 06 45 30	57 25 37	-108 09 49	236.5		Interference
281 17 48 40	2 06 45 40	57 16 08	-106 59 41	236.5		
281 17 48 50	2 06 45 50	57 06 00	-105 50 14	236.4		
281 17 49 00	2 06 46 00	56 55 13	-104 41 29	236.3		
281 17 49 10	2 06 46 10	56 43 47	-103 33 27	236.2	6	
281 17 49 20	2 06 46 20	56 31 41	-102 26 06	236.2		Interference
281 17 49 30	2 06 46 30	56 18 55	-101 19 27	236.1		Interference
281 17 49 40	2 06 46 40	56 05 31	-100 13 29	236.0		Interference
281 17 49 50	2 06 46 50	55 51 27	-99 08 14	235.9		Interference
281 17 50 00	2 06 47 00	55 36 43	-98 03 41	235.8		Interference
281 17 50 10	2 06 47 10	55 21 22	-97 00 07	235.7		Interference
281 17 50 20	2 06 47 20	55 05 31	-95 57 26	235.6		Interference
281 17 50 30	2 06 47 30	54 49 08	-94 55 37	235.5		Interference
281 17 50 40	2 06 47 40	54 32 15	-93 54 40	235.4	8	Interference

Datatake: 37.6
Attitude: Red | Look Angle: 30.0 | Roll: 0
Bits/sample: 6 | Incidence Angle: 31.2 | Pitch: 180
Area: AUSTRALIA/INDONESIA | Average Swath Width: 22 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 18 45 00	2 07 42 00	-27 41 14	113 32 51	229.5		
281 18 45 10	2 07 42 10	-27 08 50	113 57 47	229.4		
281 18 45 20	2 07 42 20	-26 36 21	114 22 31	229.2		
281 18 45 30	2 07 42 30	-26 03 48	114 47 02	229.1		
281 18 45 40	2 07 42 40	-25 31 11	115 11 20	229.0	0	
281 18 45 50	2 07 42 50	-24 58 30	115 35 25	228.9		Squint=-11.15
281 18 46 00	2 07 43 00	-24 25 44	115 59 17	228.8	5	Squint=-8.068
281 18 46 10	2 07 43 10	-23 52 52	116 22 50	228.7	5	Squint=-6.008
281 18 46 20	2 07 43 20	-23 19 56	116 46 13	228.6		Squint=-2.093
281 18 46 30	2 07 43 30	-22 46 57	117 09 24	228.5	8	Squint=-0.345
281 18 46 40	2 07 43 40	-22 13 54	117 32 25	228.4		Squint= 1.123
281 18 46 50	2 07 43 50	-21 40 48	117 55 16	228.3		
281 18 47 00	2 07 44 00	-21 07 38	118 17 55	228.2		
281 18 47 10	2 07 44 10	-20 34 24	118 40 23	228.1		
281 18 47 20	2 07 44 20	-20 01 07	119 02 41	228.0		
281 18 47 30	2 07 44 30	-19 27 46	119 24 48	227.9		
281 18 47 40	2 07 44 40	-18 54 21	119 46 44	227.8		
281 18 47 50	2 07 44 50	-18 20 53	120 08 29	227.7		
281 18 48 00	2 07 45 00	-17 47 21	120 30 04	227.6		
281 18 48 10	2 07 45 10	-17 13 48	120 51 31	227.5		
281 18 48 20	2 07 45 20	-16 40 12	121 12 52	227.5		
281 18 48 30	2 07 45 30	-16 06 34	121 34 05	227.4		
281 18 48 40	2 07 45 40	-15 32 53	121 55 12	227.3		
281 18 48 50	2 07 45 50	-14 59 11	122 16 13	227.2	3	
281 18 49 00	2 07 46 00	-14 25 26	122 37 06	227.2		Interference
281 18 49 10	2 07 46 10	-13 51 39	122 57 53	227.1		Interference
281 18 49 20	2 07 46 20	-13 17 50	123 18 33	227.0		Interference
281 18 49 30	2 07 46 30	-12 43 59	123 39 06	227.0		Interference
281 18 49 40	2 07 46 40	-12 10 06	123 59 33	226.9		Interference
281 18 49 50	2 07 46 50	-11 36 10	124 19 52	226.8		Interference
281 18 50 00	2 07 47 00	-11 02 12	124 40 05	226.8		Interference
281 18 50 10	2 07 47 10	-10 28 15	125 00 18	226.7		Interference
281 18 50 20	2 07 47 20	-9 54 16	125 20 27	226.7	10	Squint=-1.081
281 18 50 30	2 07 47 30	-9 20 16	125 40 31	226.6		
281 18 50 40	2 07 47 40	-8 46 15	126 00 30	226.6	-10	

Table 14-1 (contd)

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 18 50 50	2 07 47 50	-8 12 12	126 20 24	226.6		
281 18 51 00	2 07 48 00	-7 38 08	126 40 14	226.5		

Datatake: 38.1
Attitude: Blue — Look Angle: 17.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 17.6 — Pitch: 0
Area: CANADA/US — Average Swath Width: 26 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 19 20 00	2 08 17 00	53 07 52	-114 34 10	234.9		
281 19 20 10	2 08 17 10	52 49 27	-113 36 59	234.8	5	
281 19 20 20	2 08 17 20	52 30 35	-112 40 36	234.7		
281 19 20 30	2 08 17 30	52 11 18	-111 45 03	234.6	12	
281 19 20 40	2 08 17 40	51 51 36	-110 50 19	234.4		
281 19 20 50	2 08 17 50	51 31 28	-109 56 23	234.3	12	
281 19 21 00	2 08 18 00	51 10 54	-109 03 16	234.2		
281 19 21 10	2 08 18 10	50 49 55	-108 10 58	234.1		
281 19 21 20	2 08 18 20	50 28 30	-107 19 29	233.9	10	
281 19 21 30	2 08 18 30	50 06 40	-106 28 49	233.8		
281 19 21 40	2 08 18 40	49 44 24	-105 38 58	233.6		
281 19 21 50	2 08 18 50	49 21 42	-104 49 55	233.5		
281 19 22 00	2 08 19 00	48 58 35	-104 01 42	233.3		
281 19 22 10	2 08 19 10	48 35 07	-103 14 18	233.2		
281 19 22 20	2 08 19 20	48 11 20	-102 27 37	233.0		
281 19 22 30	2 08 19 30	47 47 15	-101 41 37	232.9	15	
281 19 22 40	2 08 19 40	47 22 51	-100 56 20	232.7		
281 19 22 50	2 08 19 50	46 58 09	-100 11 45	232.6		
281 19 23 00	2 08 20 00	46 33 09	-99 27 52	232.4		
281 19 23 10	2 08 20 10	46 07 49	-98 44 41	232.3		
281 19 23 20	2 08 20 20	45 42 12	-98 02 13	232.1		
281 19 23 30	2 08 20 30	45 16 16	-97 20 27	232.0		
281 19 23 40	2 08 20 40	44 50 01	-96 39 23	231.8		
281 19 23 50	2 08 20 50	44 23 28	-95 59 01	231.6	13	
281 19 24 00	2 08 21 00	43 56 36	-95 19 21	231.5		
281 19 24 10	2 08 21 10	43 29 30	-94 40 20	231.3		
281 19 24 20	2 08 21 20	43 02 12	-94 01 51	231.1		
281 19 24 30	2 08 21 30	42 34 41	-93 23 55	231.0		Interference
281 19 24 40	2 08 21 40	42 06 56	-92 46 32	230.8		Interference
281 19 24 50	2 08 21 50	41 38 59	-92 09 42	230.6	15	
281 19 25 00	2 08 22 00	41 10 50	-91 33 25	230.5		
281 19 25 10	2 08 22 10	40 42 27	-90 57 40	230.3		Interference
281 19 25 20	2 08 22 20	40 13 52	-90 22 28	230.1		
281 19 25 30	2 08 22 30	39 45 04	-89 47 49	229.9	10	
281 19 25 40	2 08 22 40	39 16 03	-89 13 43	229.8		
281 19 25 50	2 08 22 50	38 46 49	-88 40 09	229.6		
281 19 26 00	2 08 23 00	38 17 22	-88 07 08	229.4		
281 19 26 10	2 08 23 10	37 47 50	-87 34 24	229.3		
281 19 26 20	2 08 23 20	37 18 07	-87 02 09	229.1		
281 19 26 30	2 08 23 30	36 48 14	-86 30 21	228.9		
281 19 26 40	2 08 23 40	36 18 10	-85 59 02	228.8		
281 19 26 50	2 08 23 50	35 47 55	-85 28 11	228.6		
281 19 27 00	2 08 24 00	35 17 29	-84 57 48	228.4		
281 19 27 10	2 08 24 10	34 46 59	-84 27 40	228.2	5	
281 19 27 20	2 08 24 20	34 16 20	-83 57 57	228.1		
281 19 27 30	2 08 24 30	33 45 32	-83 28 38	227.9		
281 19 27 40	2 08 24 40	33 14 35	-82 59 43	227.7		
281 19 27 50	2 08 24 50	32 43 29	-82 31 13	227.6		
281 19 28 00	2 08 25 00	32 12 14	-82 03 07	227.4		

Datatake: 38.11
Attitude: Blue — Look Angle: 17.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 17.6 — Pitch: 0
Area: CARIBBEAN — Average Swath Width: 30 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 19 28 00	2 08 25 00	32 08 02	-82 09 28	227.4		
281 19 28 10	2 08 25 10	31 36 43	-81 41 38	227.2	18	
281 19 28 20	2 08 25 20	31 05 17	-81 14 06	227.1		
281 19 28 30	2 08 25 30	30 33 46	-80 46 51	226.9		Interference
281 19 28 40	2 08 25 40	30 02 09	-80 19 54	226.7		Interference
281 19 28 50	2 08 25 50	29 30 26	-79 53 15	226.6		Interference
281 19 29 00	2 08 26 00	28 58 38	-79 26 54	226.4		Interference
281 19 29 10	2 08 26 10	28 26 44	-79 00 50	226.3		Interference
281 19 29 20	2 08 26 20	27 54 44	-78 35 03	226.1		Interference
281 19 29 30	2 08 26 30	27 22 38	-78 09 35	226.0		Interference
281 19 29 40	2 08 26 40	26 50 27	-77 44 24	225.8		Interference
281 19 29 50	2 08 26 50	26 18 10	-77 19 30	225.7		
281 19 30 00	2 08 27 00	25 45 47	-76 54 55	225.5		
281 19 30 10	2 08 27 10	25 13 12	-76 30 28	225.4	12	
281 19 30 20	2 08 27 20	24 40 33	-76 06 14	225.2		
281 19 30 30	2 08 27 30	24 07 50	-75 42 12	225.1		
281 19 30 40	2 08 27 40	23 35 03	-75 18 23	224.9		
281 19 30 50	2 08 27 50	23 02 13	-74 54 46	224.8		
281 19 31 00	2 08 28 00	22 29 19	-74 31 21	224.7		
281 19 31 10	2 08 28 10	21 56 20	-74 08 09	224.5		
281 19 31 20	2 08 28 20	21 23 18	-73 45 10	224.4		
281 19 31 30	2 08 28 30	20 50 12	-73 22 22	224.3		
281 19 31 40	2 08 28 40	20 17 02	-72 59 47	224.1		
281 19 31 50	2 08 28 50	19 43 49	-72 37 25	224.0	8	
281 19 32 00	2 08 29 00	19 10 31	-72 15 15	223.9		
281 19 32 10	2 08 29 10	18 37 11	-71 53 09	223.8		
281 19 32 20	2 08 29 20	18 03 48	-71 31 12	223.7		
281 19 32 30	2 08 29 30	17 30 21	-71 09 26	223.6		
281 19 32 40	2 08 29 40	16 56 51	-70 47 49	223.4		
281 19 32 50	2 08 29 50	16 23 17	-70 26 23	223.3		
281 19 33 00	2 08 30 00	15 49 40	-70 05 06	223.2	0	

Datatake: 39.2
Attitude: Yellow — Look Angle: 44.0 — Roll: 90
Bits/sample: 6 — Incidence Angle: 46.0 — Pitch: 0
Area: JAPAN — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 20 30 50	2 09 27 50	28 15 29	128 12 30	230.6		
281 20 31 00	2 09 28 00	28 46 41	128 39 21	230.7		
281 20 31 10	2 09 28 10	29 17 46	129 06 31	230.8		Ambiguity
281 20 31 20	2 09 28 20	29 48 44	129 33 59	231.0		Ambiguity
281 20 31 30	2 09 28 30	30 19 35	130 01 45	231.1	-10	
281 20 31 40	2 09 28 40	30 50 18	130 29 51	231.2	5	
281 20 31 50	2 09 28 50	31 20 54	130 58 14	231.4		
281 20 32 00	2 09 29 00	31 51 23	131 26 57	231.5	-10	Ambiguity
281 20 32 10	2 09 29 10	32 21 45	131 55 58	231.6		
281 20 32 20	2 09 29 20	32 51 56	132 25 25	231.8	7	
281 20 32 30	2 09 29 30	33 21 57	132 55 17	231.9		
281 20 32 40	2 09 29 40	33 51 47	133 25 33	232.0	5	
281 20 32 50	2 09 29 50	34 21 28	133 56 15	232.2		
281 20 33 00	2 09 30 00	34 50 58	134 27 21	232.3		
281 20 33 10	2 09 30 10	35 20 17	134 58 53	232.4	7	
281 20 33 20	2 09 30 20	35 49 27	135 30 49	232.6		
281 20 33 30	2 09 30 30	36 18 26	136 03 10	232.7		
281 20 33 40	2 09 30 40	36 47 14	136 35 56	232.8	5	
281 20 33 50	2 09 30 50	37 15 53	137 09 08	232.9		
281 20 34 00	2 09 31 00	37 44 21	137 42 44	233.1	-10	
281 20 34 10	2 09 31 10	38 12 32	138 16 58	233.2		
281 20 34 20	2 09 31 20	38 40 31	138 51 41	233.3		
281 20 34 30	2 09 31 30	39 08 18	139 26 53	233.5		
281 20 34 40	2 09 31 40	39 35 52	140 02 34	233.6		
281 20 34 50	2 09 31 50	40 03 15	140 38 43	233.7		

Datatake: 39.4
Attitude: Yellow — Look Angle: 57.0 — Roll: 90
Bits/sample: 5 — Incidence Angle: 60.2 — Pitch: 0
Area: WESTERN US — Average Swath Width: 21 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 20 51 50	2 09 48 50	43 42 01	-125 59 13	232.5	-10	
281 20 52 00	2 09 49 00	43 18 11	-125 17 14	232.3	2	
281 20 52 10	2 09 49 10	42 53 55	-124 35 54	232.2		
281 20 52 20	2 09 49 20	42 29 23	-123 55 07	232.0		
281 20 52 30	2 09 49 30	42 04 35	-123 14 53	231.9	1	
281 20 52 40	2 09 49 40	41 39 31	-122 35 12	231.7		
281 20 52 50	2 09 49 50	41 14 11	-121 56 04	231.5	2	
281 20 53 00	2 09 50 00	40 48 35	-121 17 29	231.4	3	
281 20 53 10	2 09 50 10	40 22 43	-120 39 26	231.2	1	
281 20 53 20	2 09 50 20	39 56 35	-120 01 56	231.0		
281 20 53 30	2 09 50 30	39 30 11	-119 24 59	230.9	-10	
281 20 53 40	2 09 50 40	39 03 31	-118 48 35	230.7		
281 20 53 50	2 09 50 50	38 36 35	-118 12 43	230.5	-10	
281 20 54 00	2 09 51 00	38 09 23	-117 37 24	230.3		
281 20 54 10	2 09 51 10	37 41 58	-117 02 33	230.2		
281 20 54 20	2 09 51 20	37 14 21	-116 28 06	230.0		
281 20 54 30	2 09 51 30	36 46 32	-115 54 06	229.8	3	
281 20 54 40	2 09 51 40	36 18 32	-115 20 31	229.7		
281 20 54 50	2 09 51 50	35 50 20	-114 47 22	229.5	-10	
281 20 55 00	2 09 52 00	35 21 57	-114 14 38	229.3	1	No Data
281 20 55 10	2 09 52 10	34 53 22	-113 42 20	229.1		No Data
281 20 55 20	2 09 52 20	34 24 36	-113 10 28	229.0		
281 20 55 30	2 09 52 30	33 55 38	-112 39 01	228.8	3	

281 20 55 40	2 09 52 40	33 26 28	-112 08 00	228.6	-10	
281 20 55 50	2 09 52 50	32 57 07	-111 37 24	228.5		
281 20 56 00	2 09 53 00	32 27 35	-111 07 15	228.3	2	
281 20 56 10	2 09 53 10	31 57 57	-110 37 20	228.1		
281 20 56 20	2 09 53 20	31 28 08	-110 07 47	227.9	-10	
281 20 56 30	2 09 53 30	30 58 11	-109 38 37	227.8		
281 20 56 40	2 09 53 40	30 28 03	-109 09 49	227.6		
281 20 56 50	2 09 53 50	29 57 45	-108 41 24	227.4	2	
281 20 57 00	2 09 54 00	29 27 18	-108 13 22	227.3		

Datatake: 39.6
Attitude: Blue — Look Angle: 52.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 54.5 — Pitch: 0
Area: ECUADOR/PERU/BOLIV — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
281 21 06 50	2 10 03 50	-0 00 44	-81 11 24	221.7		
281 21 07 00	2 10 04 00	-0 35 14	-80 51 36	221.7		
281 21 07 10	2 10 04 10	-1 09 37	-80 31 49	221.7	2	
281 21 07 20	2 10 04 20	-1 43 54	-80 12 05	221.7		
281 21 07 30	2 10 04 30	-2 18 05	-79 52 23	221.8		
281 21 07 40	2 10 04 40	-2 52 09	-79 32 43	221.8		
281 21 07 50	2 10 04 50	-3 26 07	-79 13 04	221.8		
281 21 08 00	2 10 05 00	-3 59 58	-78 53 28	221.8		
281 21 08 10	2 10 05 10	-4 34 01	-78 33 41	221.9	5	
281 21 08 20	2 10 05 20	-5 08 03	-78 13 50	221.9		
281 21 08 30	2 10 05 30	-5 42 03	-77 53 54	222.0		
281 21 08 40	2 10 05 40	-6 16 01	-77 33 53	222.0		
281 21 08 50	2 10 05 50	-6 49 57	-77 13 48	222.1		
281 21 09 00	2 10 06 00	-7 23 51	-76 53 39	222.1	6	
281 21 09 10	2 10 06 10	-7 57 43	-76 33 25	222.2		
281 21 09 20	2 10 06 20	-8 31 32	-76 13 07	222.2		
281 21 09 30	2 10 06 30	-9 05 20	-75 52 44	222.3		
281 21 09 40	2 10 06 40	-9 39 06	-75 32 17	222.4		
281 21 09 50	2 10 06 50	-10 12 50	-75 11 45	222.4	4	
281 21 10 00	2 10 07 00	-10 46 32	-74 51 09	222.5		
281 21 10 10	2 10 07 10	-11 20 10	-74 30 22	222.6		
281 21 10 20	2 10 07 20	-11 53 46	-74 09 30	222.7	4	
281 21 10 30	2 10 07 30	-12 27 19	-73 48 31	222.7		
281 21 10 40	2 10 07 40	-13 00 49	-73 27 26	222.8		
281 21 10 50	2 10 07 50	-13 34 17	-73 06 15	222.9	1	
281 21 11 00	2 10 08 00	-14 07 42	-72 44 58	223.0		
281 21 11 10	2 10 08 10	-14 41 04	-72 23 33	223.1		
281 21 11 20	2 10 08 20	-15 14 22	-72 01 59	223.2		
281 21 11 30	2 10 08 30	-15 47 36	-71 40 14	223.3		
281 21 11 40	2 10 08 40	-16 20 47	-71 18 20	223.4		
281 21 11 50	2 10 08 50	-16 53 53	-70 56 16	223.5		
281 21 12 00	2 10 09 00	-17 26 55	-70 34 01	223.7	1	
281 21 12 10	2 10 09 10	-17 59 53	-70 11 37	223.8		
281 21 12 20	2 10 09 20	-18 32 47	-69 49 03	223.9		
281 21 12 30	2 10 09 30	-19 05 37	-69 26 19	224.0		
281 21 12 40	2 10 09 40	-19 38 23	-69 03 25	224.1		
281 21 12 50	2 10 09 50	-20 11 05	-68 40 21	224.3	-10	
281 21 13 00	2 10 10 00	-20 43 43	-68 17 08	224.4		
281 21 13 10	2 10 10 10	-21 16 14	-67 53 36	224.5		
281 21 13 20	2 10 10 20	-21 48 40	-67 29 53	224.7		
281 21 13 30	2 10 10 30	-22 21 01	-67 05 57	224.8		
281 21 13 40	2 10 10 40	-22 53 18	-66 41 50	224.9		
281 21 13 50	2 10 10 50	-23 25 30	-66 17 30	225.1		
281 21 14 00	2 10 11 00	-23 57 37	-65 52 58	225.2		
281 21 14 10	2 10 11 10	-24 29 36	-65 28 06	225.4	3	
281 21 14 20	2 10 11 20	-25 01 29	-65 03 00	225.5		
281 21 14 30	2 10 11 30	-25 33 17	-64 37 40	225.6		
281 21 14 40	2 10 11 40	-26 04 59	-64 12 06	225.8		
281 21 14 50	2 10 11 50	-26 36 35	-63 46 17	225.9		
281 21 15 00	2 10 12 00	-27 08 06	-63 20 14	226.1		

Datatake: 43.2
Attitude: Blue — Look Angle: 34.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 35.4 — Pitch: 0
Area: SUDAN/EGYPT — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 02 22 10	2 15 19 10	15 56 58	24 27 24	227.5		
282 02 22 20	2 15 19 20	16 30 39	24 48 31	227.5	0	
282 02 22 30	2 15 19 30	17 04 17	25 09 46	227.6		
282 02 22 40	2 15 19 40	17 37 52	25 31 11	227.7		
282 02 22 50	2 15 19 50	18 11 24	25 52 45	227.8		
282 02 23 00	2 15 20 00	18 44 53	26 14 28	227.9		
282 02 23 10	2 15 20 10	19 18 19	26 36 19	228.0	1	
282 02 23 20	2 15 20 20	19 51 42	26 58 20	228.1		
282 02 23 30	2 15 20 30	20 25 02	27 20 30	228.2		
282 02 23 40	2 15 20 40	20 58 19	27 42 48	228.3		
282 02 23 50	2 15 20 50	21 31 33	28 05 16	228.4	0	
282 02 24 00	2 15 21 00	22 04 44	28 27 53	228.5		
282 02 24 10	2 15 21 10	22 37 52	28 50 40	228.7		
282 02 24 20	2 15 21 20	23 10 54	29 13 42	228.8		
282 02 24 30	2 15 21 30	23 43 52	29 36 57	228.9		
282 02 24 40	2 15 21 40	24 16 46	30 00 26	229.0		
282 02 24 50	2 15 21 50	24 49 35	30 24 08	229.1		
282 02 25 00	2 15 22 00	25 22 20	30 48 05	229.2	2	
282 02 25 10	2 15 22 10	25 55 00	31 12 15	229.4		
282 02 25 20	2 15 22 20	26 27 36	31 36 39	229.5	5	
282 02 25 30	2 15 22 30	27 00 08	32 01 17	229.6		
282 02 25 40	2 15 22 40	27 32 35	32 26 08	229.7	5	
282 02 25 50	2 15 22 50	28 04 57	32 51 14	229.9	0	
282 02 26 00	2 15 23 00	28 37 15	33 16 33	230.0	5	
282 02 26 10	2 15 23 10	29 09 25	33 42 15	230.1		
282 02 26 20	2 15 23 20	29 41 28	34 08 13	230.2		
282 02 26 30	2 15 23 30	30 13 26	34 34 27	230.4	6	
282 02 26 40	2 15 23 40	30 45 19	35 00 58	230.5		
282 02 26 50	2 15 23 50	31 17 06	35 27 45	230.6		
282 02 27 00	2 15 24 00	31 48 47	35 54 49	230.8	0	

Datatake: 43.5
Attitude: Blue — Look Angle: 40.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 41.8 — Pitch: 0
Area: PACIFIC — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 03 24 00	2 16 21 00	-55 19 26	-92 26 10	236.3		
282 03 24 10	2 16 21 10	-55 20 27	-91 17 45	236.4	0	
282 03 24 20	2 16 21 20	-55 20 46	-90 09 32	236.4		
282 03 24 30	2 16 21 30	-55 20 25	-89 01 29	236.4		
282 03 24 40	2 16 21 40	-55 19 22	-87 53 36	236.4		
282 03 24 50	2 16 21 50	-55 17 38	-86 45 55	236.5		
282 03 25 00	2 16 22 00	-55 15 12	-85 38 24	236.5		
282 03 25 10	2 16 22 10	-55 12 05	-84 31 04	236.5		
282 03 25 20	2 16 22 20	-55 08 17	-83 23 54	236.5		
282 03 25 30	2 16 22 30	-55 03 48	-82 16 55	236.5		
282 03 25 40	2 16 22 40	-54 58 38	-81 10 07	236.5		
282 03 25 50	2 16 22 50	-54 52 46	-80 03 30	236.5		
282 03 26 00	2 16 23 00	-54 46 13	-78 57 03	236.5		
282 03 26 10	2 16 23 10	-54 39 05	-77 51 32	236.5	0	
282 03 26 20	2 16 23 20	-54 31 18	-76 46 25	236.4		
282 03 26 30	2 16 23 30	-54 22 51	-75 41 42	236.4	1	
282 03 26 40	2 16 23 40	-54 13 44	-74 37 22	236.4		
282 03 26 50	2 16 23 50	-54 03 59	-73 33 25	236.4	3	
282 03 27 00	2 16 24 00	-53 53 33	-72 29 52	236.4	0	

Datatake: 44.8
Attitude: Blue — Look Angle: 56.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 59.1 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 05 00 00	2 17 57 00	-45 43 10	-73 58 47	234.6	1	
282 05 00 10	2 17 57 10	-45 21 01	-73 13 46	234.5		
282 05 00 20	2 17 57 20	-44 58 32	-72 29 20	234.4		
282 05 00 30	2 17 57 30	-44 35 44	-71 45 27	234.3		
282 05 00 40	2 17 57 40	-44 12 35	-71 02 09	234.2	0	
282 05 00 50	2 17 57 50	-43 49 06	-70 19 24	234.1		
282 05 01 00	2 17 58 00	-43 25 17	-69 37 13	234.0		
282 05 01 10	2 17 58 10	-43 01 09	-68 55 37	233.8		
282 05 01 20	2 17 58 20	-42 36 40	-68 14 34	233.7		
282 05 01 30	2 17 58 30	-42 11 51	-67 34 05	233.6		
282 05 01 40	2 17 58 40	-41 46 43	-66 54 10	233.5		
282 05 01 50	2 17 58 50	-41 21 14	-66 14 48	233.4		
282 05 02 00	2 17 59 00	-40 55 26	-65 36 01	233.3		

Table 14-1 (contd)

Datatake: 45.2
Attitude: Blue — Look Angle: 50.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 52.5 — Pitch: 0
Area: FRANCE/GERMANY — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 05 29 40	2 18 26 40	46 54 52	5 45 03	234.5	2	
282 05 29 50	2 18 26 50	47 21 24	6 27 04	234.6		
282 05 30 00	2 18 27 00	47 47 39	7 09 50	234.7		
282 05 30 10	2 18 27 10	48 13 37	7 53 20	234.8		
282 05 30 20	2 18 27 20	48 39 19	8 37 36	234.9	2	
282 05 30 30	2 18 27 30	49 04 44	9 22 36	235.0		
282 05 30 40	2 18 27 40	49 29 52	10 08 21	235.1		
282 05 30 50	2 18 27 50	49 54 43	10 54 50	235.3		
282 05 31 00	2 18 28 00	50 19 18	11 42 05	235.4	0	

Datatake: 46.2
Attitude: Blue — Look Angle: 22.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 22.9 — Pitch: 0
Area: ATLANTIUK/DENMARK — Average Swath Width: 29 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 06 58 40	2 19 55 40	45 50 29	-14 50 36	234.5		
282 06 58 50	2 19 55 50	46 16 15	-14 08 17	234.7		
282 06 59 00	2 19 56 00	46 41 43	-13 25 16	234.8		
282 06 59 10	2 19 56 10	47 07 00	-12 41 49	234.9		
282 06 59 20	2 19 56 20	47 31 56	-11 57 34	235.0		
282 06 59 30	2 19 56 30	47 56 30	-11 12 32	235.1		
282 06 59 40	2 19 56 40	48 20 44	-10 26 42	235.2		
282 06 59 50	2 19 56 50	48 44 36	-9 40 05	235.3		
282 07 00 00	2 19 57 00	49 08 07	-8 52 40	235.4		
282 07 00 10	2 19 57 10	49 31 17	-8 04 28	235.5		
282 07 00 20	2 19 57 20	49 54 06	-7 15 28	235.6		
282 07 00 30	2 19 57 30	50 16 34	-6 25 41	235.7		
282 07 00 40	2 19 57 40	50 38 40	-5 35 07	235.8		
282 07 00 50	2 19 57 50	51 00 26	-4 43 45	235.9		
282 07 01 00	2 19 58 00	51 21 50	-3 51 35	236.0		
282 07 01 10	2 19 58 10	51 42 43	-2 58 47	236.1		
282 07 01 20	2 19 58 20	52 03 07	-2 05 07	236.2		
282 07 01 30	2 19 58 30	52 23 02	-1 10 35	236.3		
282 07 01 40	2 19 58 40	52 42 27	-0 15 12	236.3		
282 07 01 50	2 19 58 50	53 01 23	0 41 02	236.4		
282 07 02 00	2 19 59 00	53 19 49	1 38 09	236.5		
282 07 02 10	2 19 59 10	53 37 47	2 36 07	236.6		
282 07 02 20	2 19 59 20	53 55 15	3 34 57	236.6		
282 07 02 30	2 19 59 30	54 12 13	4 34 39	236.7		
282 07 02 40	2 19 59 40	54 28 43	5 35 12	236.7		
282 07 02 50	2 19 59 50	54 44 43	6 36 37	236.8		
282 07 03 00	2 20 00 00	55 00 13	7 38 54	236.9		
282 07 03 10	2 20 00 10	55 14 57	8 41 49	236.9		
282 07 03 20	2 20 00 20	55 29 07	9 45 32	237.0		
282 07 03 30	2 20 00 30	55 42 42	10 50 02	237.0		
282 07 03 40	2 20 00 40	55 55 44	11 55 20	237.0		
282 07 03 50	2 20 00 50	56 08 10	13 01 25	237.1		
282 07 04 00	2 20 01 00	56 20 03	14 08 19	237.1		

Datatake: 48.4
Attitude: Red — Look Angle: 44.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 46.1 — Pitch: 180
Area: UK/BELGIUM — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 10 05 50	2 23 02 50	54 41 16	-2 51 52	236.7		
282 10 06 00	2 23 03 00	54 35 28	-1 46 11	236.6		
282 10 06 10	2 23 03 10	54 29 00	-0 40 51	236.6		
282 10 06 20	2 23 03 20	54 21 53	0 24 07	236.5		
282 10 06 30	2 23 03 30	54 14 06	1 28 45	236.5		Interference
282 10 06 40	2 23 03 40	54 05 40	2 33 01	236.4		Interference
282 10 06 50	2 23 03 50	53 56 35	3 36 57	236.3		Interference
282 10 07 00	2 23 04 00	53 46 50	4 40 31	236.2		Interference
282 10 07 10	2 23 04 10	53 36 35	5 43 08	236.2		
282 10 07 20	2 23 04 20	53 25 43	6 45 13	236.1		
282 10 07 30	2 23 04 30	53 14 14	7 46 47	236.0		Interference
282 10 07 40	2 23 04 40	53 02 09	8 47 50	235.9		Interference
282 10 07 50	2 23 04 50	52 49 26	9 48 21	235.8		
282 10 08 00	2 23 05 00	52 36 07	10 48 20	235.7		
282 10 08 10	2 23 05 10	52 22 23	11 47 22	235.6		

Datatake: 49.2
Attitude: GGG — Look Angle: 29.0 — Roll: 285
Bits/sample: 6 — Incidence Angle: 30.2 — Pitch: 180
Area: MIDWEST US — Average Swath Width: 22 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 11 22 00	3 00 19 00	36 16 53	-95 05 17	231.9	8	
282 11 22 10	3 00 19 10	36 47 14	-94 34 28	232.0	6	
282 11 22 20	3 00 19 20	37 17 23	-94 03 11	232.2		
282 11 22 30	3 00 19 30	37 47 22	-93 31 24	232.3		
282 11 22 40	3 00 19 40	38 17 10	-92 59 09	232.4		
282 11 22 50	3 00 19 50	38 46 47	-92 26 24	232.6	8	
282 11 23 00	3 00 20 00	39 16 13	-91 53 10	232.7		
282 11 23 10	3 00 20 10	39 45 27	-91 19 27	232.8	6	
282 11 23 20	3 00 20 20	40 14 31	-90 45 16	232.9	8	
282 11 23 30	3 00 20 30	40 43 25	-90 10 35	233.1		
282 11 23 40	3 00 20 40	41 12 07	-89 35 25	233.2		
282 11 23 50	3 00 20 50	41 40 38	-88 59 46	233.3	8	
282 11 24 00	3 00 21 00	42 08 58	-88 23 37	233.5		
282 11 24 10	3 00 21 10	42 37 00	-87 46 42	233.6	2	
282 11 24 20	3 00 21 20	43 04 49	-87 09 13	233.7		
282 11 24 30	3 00 21 30	43 32 24	-86 31 09	233.8	6	
282 11 24 40	3 00 21 40	43 59 47	-85 52 32	234.0	10	
282 11 24 50	3 00 21 50	44 26 57	-85 13 20	234.1		
282 11 25 00	3 00 22 00	44 53 54	-84 33 34	234.2	0	

Datatake: 50.2
Attitude: BBB — Look Angle: 50.0 — Roll: 339
Bits/sample: 5 — Incidence Angle: 52.5 — Pitch: 54
Area: WEST-MIDWEST US — Average Swath Width: 44 km — Yaw: 181

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 12 48 00	3 01 45 00	27 45 34	-126 43 49	229.9		
282 12 48 10	3 01 45 10	28 18 09	-126 19 05	230.0		
282 12 48 20	3 01 45 20	28 50 39	-125 54 02	230.2		
282 12 48 30	3 01 45 30	29 23 04	-125 28 41	230.3		
282 12 48 40	3 01 45 40	29 55 22	-125 03 02	230.4	0	
282 12 48 50	3 01 45 50	30 27 35	-124 37 04	230.6		
282 12 49 00	3 01 46 00	30 59 42	-124 10 48	230.7		
282 12 49 10	3 01 46 10	31 31 43	-123 44 13	230.8		
282 12 49 20	3 01 46 20	32 03 39	-123 17 19	231.0		
282 12 49 30	3 01 46 30	32 35 28	-122 50 08	231.1	0	
282 12 49 40	3 01 46 40	33 07 12	-122 22 37	231.2		
282 12 49 50	3 01 46 50	33 38 51	-121 54 48	231.4		
282 12 50 00	3 01 47 00	34 10 23	-121 26 41	231.5		

Datatake: 51.8
Attitude: YYY — Look Angle: 17.0 — Roll: 105
Bits/sample: 5 — Incidence Angle: 17.6 — Pitch: 0
Area: AUSTRALIA — Average Swath Width: 23 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 15 24 50	3 04 21 50	-42 43 52	141 10 17	233.9		
282 15 25 00	3 04 22 00	-42 16 22	141 47 59	233.8		
282 15 25 10	3 04 22 10	-41 48 32	142 24 57	233.6	12	
282 15 25 20	3 04 22 20	-41 20 31	143 01 25	233.5		
282 15 25 30	3 04 22 30	-40 52 18	143 37 22	233.3		
282 15 25 40	3 04 22 40	-40 23 54	144 12 49	233.2	14	
282 15 25 50	3 04 22 50	-39 55 18	144 47 46	233.1		
282 15 26 00	3 04 23 00	-39 26 30	145 22 12	232.9		
282 15 26 10	3 04 23 10	-38 57 31	145 56 08	232.8	12	
282 15 26 20	3 04 23 20	-38 28 20	146 29 34	232.6		
282 15 26 30	3 04 23 30	-37 58 57	147 02 30	232.5	8	
282 15 26 40	3 04 23 40	-37 29 22	147 34 55	232.4		
282 15 26 50	3 04 23 50	-36 59 36	148 06 51	232.2	9	
282 15 27 00	3 04 24 00	-36 29 38	148 38 16	232.1		
282 15 27 10	3 04 24 10	-35 59 33	149 09 18	232.0	8	
282 15 27 20	3 04 24 20	-35 29 19	149 39 58	231.8		
282 15 27 30	3 04 24 30	-34 58 57	150 10 17	231.7		
282 15 27 40	3 04 24 40	-34 28 27	150 40 13	231.5	9	
282 15 27 50	3 04 24 50	-33 57 49	151 09 46	231.4		
282 15 28 00	3 04 25 00	-33 27 03	151 38 58	231.3		
282 15 28 10	3 04 25 10	-32 56 09	152 07 47	231.1		
282 15 28 20	3 04 25 20	-32 25 07	152 36 14	231.0	10	
282 15 28 30	3 04 25 30	-31 53 56	153 04 19	230.9		
282 15 28 40	3 04 25 40	-31 22 38	153 32 01	230.7		
282 15 28 50	3 04 25 50	-30 51 11	153 59 22	230.6	10	
282 15 29 00	3 04 26 00	-30 19 37	154 26 20	230.5		

282 15 29 10	3 04 26 10	-29 47 58	154 53 07	230.3	10	
282 15 29 20	3 04 26 20	-29 16 13	155 19 35	230.2		
282 15 29 30	3 04 26 30	-28 44 21	155 45 45	230.1		
282 15 29 40	3 04 26 40	-28 12 22	156 11 35	229.9		
282 15 29 50	3 04 26 50	-27 40 17	156 37 06	229.8		
282 15 30 00	3 04 27 00	-27 08 04	157 02 18	229.7		

Datatake: 53.2
Attitude: BBB — Look Angle: 31.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 32.3 — Pitch: 0
Area: CANADA YAW .544 — Average Swath Width: 23 km — Yaw: 359.4

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 17 27 50	3 06 24 50	57 58 51	-134 52 38	238.6		
282 17 28 00	3 06 25 00	58 04 34	-133 40 12	238.6	6	
282 17 28 10	3 06 25 10	58 09 34	-132 27 12	238.6		
282 17 28 20	3 06 25 20	58 13 50	-131 14 03	238.6	5	
282 17 28 30	3 06 25 30	58 17 22	-130 00 47	238.6		
282 17 28 40	3 06 25 40	58 20 08	-128 47 23	238.6	7	
282 17 28 50	3 06 25 50	58 22 10	-127 33 52	238.6		
282 17 29 00	3 06 26 00	58 23 27	-126 20 12	238.6		
282 17 29 10	3 06 26 10	58 24 00	-125 06 24	238.6		
282 17 29 20	3 06 26 20	58 23 47	-123 52 29	238.6	8	
282 17 29 30	3 06 26 30	58 22 50	-122 38 26	238.6		
282 17 29 40	3 06 26 40	58 21 08	-121 24 14	238.6		
282 17 29 50	3 06 26 50	58 18 42	-120 09 55	238.6		
282 17 30 00	3 06 27 00	58 15 31	-118 55 29	238.5	8	
282 17 30 10	3 06 27 10	58 11 30	-117 41 28	238.5		
282 17 30 20	3 06 27 20	58 06 47	-116 27 59	238.5	7	
282 17 30 30	3 06 27 30	58 01 21	-115 15 00	238.4		
282 17 30 40	3 06 27 40	57 55 14	-114 02 33	238.4		
282 17 30 50	3 06 27 50	57 48 24	-112 50 38	238.3	7	
282 17 31 00	3 06 28 00	57 40 51	-111 39 13	238.3		
282 17 31 10	3 06 28 10	57 32 37	-110 28 20	238.2		
282 17 31 20	3 06 28 20	57 23 40	-109 17 58	238.2		
282 17 31 30	3 06 28 30	57 14 00	-108 08 08	238.1		
282 17 31 40	3 06 28 40	57 03 39	-106 58 48	238.1	7	
282 17 31 50	3 06 28 50	56 52 35	-105 50 00	238.0		
282 17 32 00	3 06 29 00	56 40 49	-104 41 43	237.9		
282 17 32 10	3 06 29 10	56 28 33	-103 34 38	237.9	5	
282 17 32 20	3 06 29 20	56 15 38	-102 28 16	237.8		
282 17 32 30	3 06 29 30	56 02 05	-101 22 36	237.7		
282 17 32 40	3 06 29 40	55 47 53	-100 17 40	237.6	6	
282 17 32 50	3 06 29 50	55 33 02	-99 13 26	237.6		
282 17 33 00	3 06 30 00	55 17 32	-98 09 56	237.5		
282 17 33 10	3 06 30 10	55 01 40	-97 07 34	237.4		
282 17 33 20	3 06 30 20	54 45 13	-96 06 02	237.3		
282 17 33 30	3 06 30 30	54 28 13	-95 05 20	237.2	-10	

Datatake: 54.1
Attitude: Blue — Look Angle: 34.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 35.4 — Pitch: 0
Area: MIDWEST US — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 19 02 50	3 07 59 50	53 49 58	-115 21 46	236.7		
282 19 03 00	3 08 00 00	53 31 15	-114 23 53	236.6	3	
282 19 03 10	3 08 00 10	53 12 03	-113 26 53	236.5		
282 19 03 20	3 08 00 20	52 52 21	-112 30 45	236.4	3	
282 19 03 30	3 08 00 30	52 32 09	-111 35 31	236.3		
282 19 03 40	3 08 00 40	52 11 28	-110 41 09	236.2		
282 19 03 50	3 08 00 50	51 50 17	-109 47 40	236.1	2	
282 19 04 00	3 08 01 00	51 28 36	-108 55 04	236.0		
282 19 04 10	3 08 01 10	51 06 42	-108 03 15	235.8		
282 19 04 20	3 08 01 20	50 44 23	-107 12 16	235.7	2	
282 19 04 30	3 08 01 30	50 21 40	-106 22 09	235.6		
282 19 04 40	3 08 01 40	49 58 31	-105 32 52	235.4		
282 19 04 50	3 08 01 50	49 34 57	-104 44 27	235.3		
282 19 05 00	3 08 02 00	49 10 59	-103 56 52	235.2		
282 19 05 10	3 08 02 10	48 46 40	-103 10 08	235.0	2	
282 19 05 20	3 08 02 20	48 22 04	-102 24 06	234.9		
282 19 05 30	3 08 02 30	47 57 11	-101 38 47	234.8		
282 19 05 40	3 08 02 40	47 32 01	-100 54 10	234.6	3	
282 19 05 50	3 08 02 50	47 06 33	-100 10 16	234.5		
282 19 06 00	3 08 03 00	46 40 48	-99 27 05	234.3	3	
282 19 06 10	3 08 03 10	46 14 45	-98 44 36	234.2	4	
282 19 06 20	3 08 03 20	45 48 26	-98 02 50	234.1		
282 19 06 30	3 08 03 30	45 21 48	-97 21 46	233.9		
282 19 06 40	3 08 03 40	44 54 54	-96 41 25	233.8	6	
282 19 06 50	3 08 03 50	44 27 42	-96 01 47	233.6	8	
282 19 07 00	3 08 04 00	44 00 13	-95 22 51	233.5		
282 19 07 10	3 08 04 10	43 32 36	-94 44 20	233.3		
282 19 07 20	3 08 04 20	43 04 45	-94 06 27	233.2		
282 19 07 30	3 08 04 30	42 36 39	-93 29 11	233.0	8	
282 19 07 40	3 08 04 40	42 08 18	-92 52 33	232.8		
282 19 07 50	3 08 04 50	41 39 43	-92 16 32	232.7		
282 19 08 00	3 08 05 00	41 10 54	-91 41 09	232.5	4	
282 19 08 10	3 08 05 10	40 41 53	-91 06 17	232.4		
282 19 08 20	3 08 05 20	40 12 42	-90 31 54	232.2	6	
282 19 08 30	3 08 05 30	39 43 22	-89 57 58	232.1		
282 19 08 40	3 08 05 40	39 13 51	-89 24 30	231.9	6	
282 19 08 50	3 08 05 50	38 44 11	-88 51 30	231.7		
282 19 09 00	3 08 06 00	38 14 21	-88 18 57	231.6		
282 19 09 10	3 08 06 10	37 44 20	-87 46 53	231.4		
282 19 09 20	3 08 06 20	37 14 10	-87 15 16	231.3	8	
282 19 09 30	3 08 06 30	36 43 50	-86 44 06	231.1		
282 19 09 40	3 08 06 40	36 13 20	-86 13 25	230.9		
282 19 09 50	3 08 06 50	35 42 40	-85 43 11	230.8	9	
282 19 10 00	3 08 07 00	35 11 50	-85 13 25	230.6		
282 19 10 10	3 08 07 10	34 40 56	-84 43 53	230.5		
282 19 10 20	3 08 07 20	34 09 53	-84 14 45	230.3	7	
282 19 10 30	3 08 07 30	33 38 42	-83 46 01	230.2		
282 19 10 40	3 08 07 40	33 07 23	-83 17 41	230.0		
282 19 10 50	3 08 07 50	32 35 55	-82 49 44	229.8		
282 19 11 00	3 08 08 00	32 04 19	-82 22 12	229.7	5	
282 19 11 10	3 08 08 10	31 32 41	-81 54 49	229.5		
282 19 11 20	3 08 08 20	31 00 55	-81 27 47	229.4	0	
282 19 11 30	3 08 08 30	30 29 03	-81 01 04	229.2		
282 19 11 40	3 08 08 40	29 57 04	-80 34 41	229.1		
282 19 11 50	3 08 08 50	29 24 58	-80 08 38	228.9	1	
282 19 12 00	3 08 09 00	28 52 45	-79 42 55	228.8		

Datatake: 55.2
Attitude: Yellow — Look Angle: 53.0 — Roll: 90
Bits/sample: 6 — Incidence Angle: 55.8 — Pitch: 0
Area: JAPAN — Average Swath Width: 12 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 20 14 50	3 09 11 50	31 20 59	130 44 28	231.5	2	Interference
282 20 15 00	3 09 12 00	31 51 04	131 13 43	231.7		Interference
282 20 15 10	3 09 12 10	32 21 00	131 43 21	231.8		Interference
282 20 15 20	3 09 12 20	32 50 47	132 13 21	232.0		Interference
282 20 15 30	3 09 12 30	33 20 25	132 43 42	232.1	3	Interference
282 20 15 40	3 09 12 40	33 49 53	133 14 26	232.3		Interference
282 20 15 50	3 09 12 50	34 19 13	133 45 31	232.4	1	
282 20 16 00	3 09 13 00	34 48 23	134 16 59	232.5		
282 20 16 10	3 09 13 10	35 17 24	134 48 49	232.7	3	
282 20 16 20	3 09 13 20	35 46 12	135 21 09	232.8	0	Interference
282 20 16 30	3 09 13 30	36 14 48	135 53 57	233.0		Interference
282 20 16 40	3 09 13 40	36 43 10	136 27 15	233.1		
282 20 16 50	3 09 13 50	37 11 20	137 01 02	233.3	2	Interference
282 20 17 00	3 09 14 00	37 39 16	137 35 17	233.4	0	
282 20 17 10	3 09 14 10	38 07 00	138 10 02	233.5		
282 20 17 20	3 09 14 20	38 34 31	138 45 16	233.7		
282 20 17 30	3 09 14 30	39 01 49	139 20 59	233.8		
282 20 17 40	3 09 14 40	39 28 53	139 57 10	234.0		
282 20 17 50	3 09 14 50	39 55 45	140 33 51	234.1	3	
282 20 18 00	3 09 15 00	40 22 24	141 11 01	234.2		
282 20 18 10	3 09 15 10	40 48 44	141 48 52	234.4		
282 20 18 20	3 09 15 20	41 14 48	142 27 16	234.5	0	
282 20 18 30	3 09 15 30	41 40 38	143 06 12	234.6		
282 20 18 40	3 09 15 40	42 06 13	143 45 40	234.8		
282 20 18 50	3 09 15 50	42 31 34	144 25 41	234.9		
282 20 19 00	3 09 16 00	42 56 39	145 06 14	235.0		

Datatake: 55.4
Attitude: Yellow — Look Angle: 51.0 — Roll: 90
Bits/sample: 5 — Incidence Angle: 53.6 — Pitch: 0
Area: WESTERN US/MEXICO — Average Swath Width: 14 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 20 35 00	3 09 32 00	43 26 53	-125 29 28	234.4		
282 20 35 10	3 09 32 10	43 02 06	-124 48 37	234.2	3	
282 20 35 20	3 09 32 20	42 37 03	-124 08 18	234.1		
282 20 35 30	3 09 32 30	42 11 45	-123 28 32	233.9		
282 20 35 40	3 09 32 40	41 46 12	-122 49 17	233.8	3	
282 20 35 50	3 09 32 50	41 20 23	-122 10 35	233.6		
282 20 36 00	3 09 33 00	40 54 18	-121 32 24	233.5		

Table 14-1 (contd)

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 20 36 10	3 09 33 10	40 27 58	-120 54 46	233.3	3	
282 20 36 20	3 09 33 20	40 01 22	-120 17 41	233.2		
282 20 36 30	3 09 33 30	39 34 30	-119 41 07	233.0	1	
282 20 36 40	3 09 33 40	39 07 24	-119 05 05	232.9		
282 20 36 50	3 09 33 50	38 40 01	-118 29 36	232.7	0	
282 20 37 00	3 09 34 00	38 12 23	-117 54 39	232.6		
282 20 37 10	3 09 34 10	37 44 35	-117 20 18	232.4		
282 20 37 20	3 09 34 20	37 16 36	-116 46 22	232.2		
282 20 37 30	3 09 34 30	36 48 25	-116 12 51	232.1	0	
282 20 37 40	3 09 34 40	36 20 03	-115 39 44	231.9	1	
282 20 37 50	3 09 34 50	35 51 29	-115 07 03	231.8	1	
282 20 38 00	3 09 35 00	35 22 44	-114 34 46	231.6	0	
282 20 38 10	3 09 35 10	34 53 48	-114 02 55	231.5		
282 20 38 20	3 09 35 20	34 24 41	-113 31 28	231.3		
282 20 38 30	3 09 35 30	33 55 22	-113 00 26	231.1		
282 20 38 40	3 09 35 40	33 25 51	-112 29 50	231.0	1	
282 20 38 50	3 09 35 50	32 56 10	-111 59 38	230.8	0	
282 20 39 00	3 09 36 00	32 26 17	-111 29 51	230.7		
282 20 39 10	3 09 36 10	31 56 19	-111 00 20	230.5	2	
282 20 39 20	3 09 36 20	31 26 13	-110 31 12	230.4		
282 20 39 30	3 09 36 30	30 55 56	-110 02 26	230.2	1	
282 20 39 40	3 09 36 40	30 25 31	-109 34 03	230.1		
282 20 39 50	3 09 36 50	29 54 56	-109 06 02	229.9	2	
282 20 40 00	3 09 37 00	29 24 12	-108 38 23	229.8		

Datatake: 56.4
Attitude: Blue — Look Angle: 32.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 33.3 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 16 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 22 31 00	3 11 28 00	-40 20 29	-75 43 43	233.0		
282 22 31 10	3 11 28 10	-40 48 05	-75 07 27	233.1		
282 22 31 20	3 11 28 20	-41 15 24	-74 30 34	233.3		
282 22 31 30	3 11 28 30	-41 42 28	-73 53 04	233.4		
282 22 31 40	3 11 28 40	-42 09 15	-73 14 57	233.5		
282 22 31 50	3 11 28 50	-42 35 47	-72 36 14	233.7		
282 22 32 00	3 11 29 00	-43 02 02	-71 56 54	233.8		
282 22 32 10	3 11 29 10	-43 28 02	-71 16 58	234.0		
282 22 32 20	3 11 29 20	-43 53 46	-70 36 24	234.1		
282 22 32 30	3 11 29 30	-44 19 13	-69 55 14	234.3		
282 22 32 40	3 11 29 40	-44 44 25	-69 13 27	234.4		
282 22 32 50	3 11 29 50	-45 09 21	-68 31 04	234.5		
282 22 33 00	3 11 30 00	-45 34 01	-67 48 03	234.7		
282 22 33 10	3 11 30 10	-45 58 13	-67 04 15	234.8		
282 22 33 20	3 11 30 20	-46 22 07	-66 19 47	234.9		
282 22 33 30	3 11 30 30	-46 45 41	-65 34 39	235.1		
282 22 33 40	3 11 30 40	-47 08 56	-64 48 51	235.2		
282 22 33 50	3 11 30 50	-47 31 52	-64 02 23	235.3		
282 22 34 00	3 11 31 00	-47 54 29	-63 15 15	235.4		
282 22 34 10	3 11 31 10	-48 16 35	-62 27 15	235.6		
282 22 34 20	3 11 31 20	-48 38 19	-61 38 31	235.7		
282 22 34 30	3 11 31 30	-48 59 40	-60 49 03	235.8		
282 22 34 40	3 11 31 40	-49 20 39	-59 58 52	235.9		
282 22 34 50	3 11 31 50	-49 41 15	-59 07 57	236.0		
282 22 35 00	3 11 32 00	-50 01 29	-58 16 19	236.1		

Datatake: 56.41
Attitude: Blue — Look Angle: 40.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 41.7 — Pitch: 0
Area: SOUTH ATLANTIC — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
282 22 51 00	3 11 48 00	-37 10 52	31 05 03	232.8	0	Interference
282 22 51 10	3 11 48 10	-36 42 00	31 37 48	232.7		Interference
282 22 51 20	3 11 48 20	-36 12 59	32 10 09	232.5		Interference
282 22 51 30	3 11 48 30	-35 43 48	32 42 05	232.4		Interference
282 22 51 40	3 11 48 40	-35 14 27	33 13 38	232.2	0	Interference
282 22 51 50	3 11 48 50	-34 44 57	33 44 47	232.1		
282 22 52 00	3 11 49 00	-34 15 17	34 15 32	232.0		
282 22 52 10	3 11 49 10	-33 45 27	34 45 53	231.8	0	
282 22 52 20	3 11 49 20	-33 15 28	35 15 50	231.7		
282 22 52 30	3 11 49 30	-32 45 18	35 45 23	231.5		
282 22 52 40	3 11 49 40	-32 14 59	36 14 32	231.4		Interference
282 22 52 50	3 11 49 50	-31 44 31	36 43 17	231.2		
282 22 53 00	3 11 50 00	-31 13 53	37 11 39	231.1	0	
282 22 53 10	3 11 50 10	-30 43 06	37 39 42	231.0		
282 22 53 20	3 11 50 20	-30 12 13	38 07 29	230.8		Interference
282 22 53 30	3 11 50 30	-29 41 13	38 34 57	230.7		
282 22 53 40	3 11 50 40	-29 10 06	39 02 08	230.6	0	
282 22 53 50	3 11 50 50	-28 38 52	39 29 01	230.4		
282 22 54 00	3 11 51 00	-28 07 32	39 55 37	230.3	0	
282 22 54 10	3 11 51 10	-27 36 04	40 21 55	230.1		
282 22 54 20	3 11 51 20	-27 04 30	40 47 55	230.0		
282 22 54 30	3 11 51 30	-26 32 50	41 13 38	229.9		
282 22 54 40	3 11 51 40	-26 01 02	41 39 03	229.8		Interference
282 22 54 50	3 11 51 50	-25 29 08	42 04 10	229.6		
282 22 55 00	3 11 52 00	-24 57 06	42 29 00	229.5		
282 22 55 10	3 11 52 10	-24 25 02	42 53 43	229.4	1	
282 22 55 20	3 11 52 20	-23 52 52	43 18 10	229.2	0	
282 22 55 30	3 11 52 30	-23 20 36	43 42 23	229.1	5	
282 22 55 40	3 11 52 40	-22 48 15	44 06 21	229.0	3	
282 22 55 50	3 11 52 50	-22 15 47	44 30 04	228.9		
282 22 56 00	3 11 53 00	-21 43 14	44 53 33	228.8	4	

Datatake: 59.6
Attitude: Blue — Look Angle: 35.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 36.5 — Pitch: 0
Area: PACIFIC — Average Swath Width: 14 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 03 09 00	3 16 06 00	-55 04 46	-80 22 04	237.8		
283 03 09 10	3 16 06 10	-54 55 55	-79 16 59	237.8	1	

Datatake: 64.2
Attitude: Blue — Look Angle: 56.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 59.1 — Pitch: 0
Area: EASTERN US — Average Swath Width: 26 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 09 32 50	3 22 29 50	26 41 07	-84 58 12	229.4		
283 09 33 00	3 22 30 00	27 14 05	-84 34 06	229.5		
283 09 33 10	3 22 30 10	27 46 57	-84 09 46	229.7		
283 09 33 20	3 22 30 20	28 19 46	-83 45 12	229.8		
283 09 33 30	3 22 30 30	28 52 29	-83 20 24	229.9		
283 09 33 40	3 22 30 40	29 25 08	-82 55 23	230.1		
283 09 33 50	3 22 30 50	29 57 42	-82 30 07	230.2		
283 09 34 00	3 22 31 00	30 30 12	-82 04 38	230.4		
283 09 34 10	3 22 31 10	31 02 34	-81 38 44	230.5		
283 09 34 20	3 22 31 20	31 34 51	-81 12 33	230.6		
283 09 34 30	3 22 31 30	32 07 03	-80 46 04	230.8		
283 09 34 40	3 22 31 40	32 39 09	-80 19 19	230.9		
283 09 34 50	3 22 31 50	33 11 10	-79 52 17	231.1		
283 09 35 00	3 22 32 00	33 43 05	-79 24 57	231.2		
283 09 35 10	3 22 32 10	34 14 51	-78 57 06	231.4		

Datatake: 64.21
Attitude: Blue — Look Angle: 42.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 43.9 — Pitch: 0
Area: ATLANTIC — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 09 35 10	3 22 32 10	33 29 08	-77 46 10	231.4		
283 09 35 20	3 22 32 20	34 00 31	-77 17 55	231.5		
283 09 35 30	3 22 32 30	34 31 45	-76 49 15	231.7		
283 09 35 40	3 22 32 40	35 02 51	-76 20 10	231.8		
283 09 35 50	3 22 32 50	35 33 48	-75 50 40	232.0		Interference
283 09 36 00	3 22 33 00	36 04 37	-75 20 45	232.1		Interference
283 09 36 10	3 22 33 10	36 35 17	-74 50 25	232.3		Interference
283 09 36 20	3 22 33 20	37 05 48	-74 19 40	232.4		Interference
283 09 36 30	3 22 33 30	37 36 11	-73 48 30	232.6		
283 09 36 40	3 22 33 40	38 06 25	-73 16 56	232.7		
283 09 36 50	3 22 33 50	38 36 31	-72 44 56	232.9		
283 09 37 00	3 22 34 00	39 06 28	-72 12 32	233.0		
283 09 37 10	3 22 34 10	39 36 11	-71 39 31	233.2		
283 09 37 20	3 22 34 20	40 05 44	-71 06 01	233.3		
283 09 37 30	3 22 34 30	40 35 06	-70 32 04	233.5		
283 09 37 40	3 22 34 40	41 04 18	-69 57 39	233.6		
283 09 37 50	3 22 34 50	41 33 20	-69 22 45	233.8		
283 09 38 00	3 22 35 00	42 02 12	-68 47 23	233.9		

Table 14-1 (contd)

Datatake: 65.21
Attitude: Yellow — Look Angle: 31.0 — Roll: 90
Bits/sample: 4 — Incidence Angle: 32.2 — Pitch: 0
Area: EGYPT/SUDAN — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 11 30 10	4 00 27 10	28 16 32	28 28 04	229.5		
283 11 30 20	4 00 27 20	27 44 51	28 54 07	229.3		Interference
283 11 30 30	4 00 27 30	27 13 05	29 19 54	229.2		Interference
283 11 30 40	4 00 27 40	26 41 14	29 45 26	229.0		Interference
283 11 30 50	4 00 27 50	26 09 16	30 10 43	228.9		Interference
283 11 31 00	4 00 28 00	25 37 13	30 35 44	228.7		Interference
283 11 31 10	4 00 28 10	25 05 05	31 00 30	228.6		
283 11 31 20	4 00 28 20	24 32 51	31 25 01	228.5		
283 11 31 30	4 00 28 30	24 00 31	31 49 16	228.3		
283 11 31 40	4 00 28 40	23 28 06	32 13 16	228.2		
283 11 31 50	4 00 28 50	22 55 35	32 37 01	228.1		
283 11 32 00	4 00 29 00	22 22 58	33 00 30	227.9		
283 11 32 10	4 00 29 10	21 50 19	33 23 56	227.8		Interference
283 11 32 20	4 00 29 20	21 17 36	33 47 11	227.7		
283 11 32 30	4 00 29 30	20 44 47	34 10 13	227.5		Interference
283 11 32 40	4 00 29 40	20 11 54	34 33 04	227.4		Interference
283 11 32 50	4 00 29 50	19 38 56	34 55 43	227.3		Interference
283 11 33 00	4 00 30 00	19 05 54	35 18 10	227.2		Interference

Datatake: 66.2
Attitude: Green — Look Angle: 39.0 — Roll: 270
Bits/sample: 5 — Incidence Angle: 40.7 — Pitch: 180
Area: WESTERN US — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 12 33 40	4 01 30 40	35 14 36	-121 05 46	231.9		
283 12 33 50	4 01 30 50	35 45 26	-120 36 02	232.1		
283 12 34 00	4 01 31 00	36 16 07	-120 05 53	232.2		
283 12 34 10	4 01 31 10	36 46 40	-119 35 19	232.4		
283 12 34 20	4 01 31 20	37 17 04	-119 04 20	232.5		
283 12 34 30	4 01 31 30	37 47 19	-118 32 56	232.6		
283 12 34 40	4 01 31 40	38 17 26	-118 01 07	232.8		
283 12 34 50	4 01 31 50	38 47 24	-117 28 54	232.9		
283 12 35 00	4 01 32 00	39 17 13	-116 56 15	233.1		
283 12 35 10	4 01 32 10	39 46 47	-116 22 57	233.2		
283 12 35 20	4 01 32 20	40 16 11	-115 49 10	233.4		
283 12 35 30	4 01 32 30	40 45 24	-115 14 54	233.5		
283 12 35 40	4 01 32 40	41 14 27	-114 40 09	233.7		
283 12 35 50	4 01 32 50	41 43 19	-114 04 55	233.8		
283 12 36 00	4 01 33 00	42 12 01	-113 29 12	233.9		

Datatake: 66.4
Attitude: Red — Look Angle: 25.0 — Roll: 0
Bits/sample: 6 — Incidence Angle: 26.0 — Pitch: 180
Area: N ATLANTIC — Average Swath Width: 21 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 12 52 00	4 01 49 00	48 15 51	-19 07 00	235.8		
283 12 52 10	4 01 49 10	47 53 13	-18 19 41	235.7		Interference
283 12 52 20	4 01 49 20	47 30 16	-17 33 03	235.6		
283 12 52 30	4 01 49 30	47 07 01	-16 47 05	235.4		
283 12 52 40	4 01 49 40	46 43 26	-16 01 49	235.3		
283 12 52 50	4 01 49 50	46 19 31	-15 17 12	235.2		Interference
283 12 53 00	4 01 50 00	45 55 18	-14 33 17	235.0		Interference
283 12 53 10	4 01 50 10	45 30 45	-13 50 03	234.9		
283 12 53 20	4 01 50 20	45 05 54	-13 07 29	234.8		Interference
283 12 53 30	4 01 50 30	44 40 43	-12 25 36	234.6		
283 12 53 40	4 01 50 40	44 15 13	-11 44 24	234.5		
283 12 53 50	4 01 50 50	43 49 24	-11 03 52	234.3		
283 12 54 00	4 01 51 00	43 23 15	-10 24 01	234.2		Interference
283 12 54 10	4 01 51 10	42 56 58	-9 44 36	234.0		Interference
283 12 54 20	4 01 51 20	42 30 25	-9 05 48	233.9		Interference
283 12 54 30	4 01 51 30	42 03 35	-8 27 35	233.7		
283 12 54 40	4 01 51 40	41 36 29	-7 49 59	233.6		
283 12 54 50	4 01 51 50	41 09 07	-7 13 00	233.4		

Datatake: 67.8
Attitude: Red — Look Angle: 36.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 37.5 — Pitch: 180
Area: AUSTRALIA — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 15 04 00	4 04 01 00	-53 15 32	121 36 21	236.4		
283 15 04 10	4 04 01 10	-52 55 35	122 32 24	236.3		
283 15 04 20	4 04 01 20	-52 35 14	123 27 37	236.2		
283 15 04 30	4 04 01 30	-52 14 28	124 21 59	236.1		
283 15 04 40	4 04 01 40	-51 53 19	125 15 30	236.0		
283 15 04 50	4 04 01 50	-51 31 45	126 08 11	235.9	1	
283 15 05 00	4 04 02 00	-51 09 47	127 00 00	235.8		
283 15 05 10	4 04 02 10	-50 47 25	127 50 59	235.7		
283 15 05 20	4 04 02 20	-50 24 38	128 41 08	235.6		
283 15 05 30	4 04 02 30	-50 01 28	129 30 25	235.5		
283 15 05 40	4 04 02 40	-49 37 53	130 18 52	235.3	1	
283 15 05 50	4 04 02 50	-49 13 54	131 06 28	235.2		
283 15 06 00	4 04 03 00	-48 49 31	131 53 13	235.1	1	
283 15 06 10	4 04 03 10	-48 24 49	132 39 09	235.0		
283 15 06 20	4 04 03 20	-47 59 50	133 24 23	234.9		
283 15 06 30	4 04 03 30	-47 34 34	134 08 55	234.7		
283 15 06 40	4 04 03 40	-47 09 02	134 52 46	234.6		
283 15 06 50	4 04 03 50	-46 43 12	135 35 54	234.5		
283 15 07 00	4 04 04 00	-46 17 06	136 18 21	234.4		
283 15 07 10	4 04 04 10	-45 50 43	137 00 06	234.2		
283 15 07 20	4 04 04 20	-45 24 03	137 41 09	234.1		
283 15 07 30	4 04 04 30	-44 57 06	138 21 30	234.0		
283 15 07 40	4 04 04 40	-44 29 53	139 01 09	233.9		
283 15 07 50	4 04 04 50	-44 02 22	139 40 07	233.7	1	
283 15 08 00	4 04 05 00	-43 34 35	140 18 23	233.6		
283 15 08 10	4 04 05 10	-43 06 41	140 56 15	233.5		
283 15 08 20	4 04 05 20	-42 38 34	141 33 32	233.3		
283 15 08 30	4 04 05 30	-42 10 13	142 10 12	233.2		
283 15 08 40	4 04 05 40	-41 41 38	142 46 16	233.0	2	
283 15 08 50	4 04 05 50	-41 12 49	143 21 43	232.9		
283 15 09 00	4 04 06 00	-40 43 46	143 56 34	232.8		
283 15 09 10	4 04 06 10	-40 14 31	144 30 51	232.6		
283 15 09 20	4 04 06 20	-39 45 06	145 04 42	232.5	2	
283 15 09 30	4 04 06 30	-39 15 32	145 38 05	232.3	7	
283 15 09 40	4 04 06 40	-38 45 49	146 11 01	232.2		
283 15 09 50	4 04 06 50	-38 15 56	146 43 30	232.1	7	Interference
283 15 10 00	4 04 07 00	-37 45 53	147 15 31	231.9		
283 15 10 10	4 04 07 10	-37 15 41	147 47 06	231.8		
283 15 10 20	4 04 07 20	-36 45 19	148 18 13	231.6		
283 15 10 30	4 04 07 30	-36 14 48	148 48 54	231.5	6	
283 15 10 40	4 04 07 40	-35 44 07	149 19 07	231.4	6	
283 15 10 50	4 04 07 50	-35 13 16	149 48 53	231.2		
283 15 11 00	4 04 08 00	-34 42 16	150 18 12	231.1		
283 15 11 10	4 04 08 10	-34 11 12	150 47 17	230.9		
283 15 11 20	4 04 08 20	-33 40 00	151 16 00	230.8	12	
283 15 11 30	4 04 08 30	-33 08 40	151 44 20	230.7		
283 15 11 40	4 04 08 40	-32 37 12	152 12 16	230.5	0	
283 15 11 50	4 04 08 50	-32 05 36	152 39 50	230.4		
283 15 12 00	4 04 09 00	-31 33 52	153 07 00	230.2		Interference
283 15 12 10	4 04 09 10	-31 02 06	153 34 01	230.1		Interference
283 15 12 20	4 04 09 20	-30 30 13	154 00 43	230.0		
283 15 12 30	4 04 09 30	-29 58 14	154 27 06	229.8		
283 15 12 40	4 04 09 40	-29 26 08	154 53 10	229.7		
283 15 12 50	4 04 09 50	-28 53 56	155 18 55	229.6		
283 15 13 00	4 04 10 00	-28 21 37	155 44 20	229.5		

Datatake: 70.1
Attitude: Blue — Look Angle: 47.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 49.2 — Pitch: 0
Area: MIDWEST US — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 18 50 00	4 07 47 00	45 14 38	-96 57 45	234.0	3	
283 18 50 10	4 07 47 10	44 46 52	-96 18 31	233.8		
283 18 50 20	4 07 47 20	44 18 53	-95 39 52	233.7		
283 18 50 30	4 07 47 30	43 50 43	-95 01 48	233.5		
283 18 50 40	4 07 47 40	43 22 21	-94 24 18	233.4		
283 18 50 50	4 07 47 50	42 53 47	-93 47 23	233.2		
283 18 51 00	4 07 48 00	42 25 00	-93 11 02	233.1		
283 18 51 10	4 07 48 10	41 56 02	-92 35 16	232.9		
283 18 51 20	4 07 48 20	41 26 51	-92 00 04	232.8		
283 18 51 30	4 07 48 30	40 57 29	-91 25 26	232.6	5	
283 18 51 40	4 07 48 40	40 27 54	-90 51 24	232.5		

283 18 51 50	4 07 48 50	39 58 07	-90 17 55	232.3		
283 18 52 00	4 07 49 00	39 28 08	-89 45 01	232.2		
283 18 52 10	4 07 49 10	38 58 03	-89 12 24	232.0		
283 18 52 20	4 07 49 20	38 27 47	-88 40 15	231.9		
283 18 52 30	4 07 49 30	37 57 21	-88 08 36	231.7		
283 18 52 40	4 07 49 40	37 26 45	-87 37 25	231.6		
283 18 52 50	4 07 49 50	36 55 57	-87 06 45	231.4		
283 18 53 00	4 07 50 00	36 25 00	-86 36 33	231.3		

Datatake: 70.4
Attitude: YYY — Look Angle: 25.0 — Roll: 105
Bits/sample: 2 — Incidence Angle: 26.0 — Pitch: 0
Area: S INDIAN OCEAN — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 19 25 00	4 08 22 00	-58 10 17	13 38 52	237.9		
283 19 25 10	4 08 22 10	-58 13 37	14 52 55	237.9	9	
283 19 25 20	4 08 22 20	-58 16 13	16 06 56	237.9		
283 19 25 30	4 08 22 30	-58 18 03	17 20 53	237.9		No Data
283 19 25 40	4 08 22 40	-58 19 09	18 34 48	237.9		No Data
283 19 25 50	4 08 22 50	-58 19 30	19 48 40	237.9		No Data
283 19 26 00	4 08 23 00	-58 19 05	21 02 29	237.9		No Data
283 19 26 10	4 08 23 10	-58 17 56	22 16 16	237.9		No Data
283 19 26 20	4 08 23 20	-58 16 02	23 29 59	237.9		No Data
283 19 26 30	4 08 23 30	-58 13 23	24 43 40	237.9		No Data
283 19 26 40	4 08 23 40	-58 09 59	25 57 18	237.9		No Data
283 19 26 50	4 08 23 50	-58 05 50	27 10 54	237.9		No Data
283 19 27 00	4 08 24 00	-58 00 56	28 24 26	237.9		No Data
283 19 27 10	4 08 24 10	-57 55 21	29 36 53	237.8		No Data
283 19 27 20	4 08 24 20	-57 49 02	30 48 59	237.8		
283 19 27 30	4 08 24 30	-57 42 00	32 00 43	237.8	9	
283 19 27 40	4 08 24 40	-57 34 13	33 12 07	237.7	9	
283 19 27 50	4 08 24 50	-57 25 43	34 23 11	237.7		
283 19 28 00	4 08 25 00	-57 16 29	35 33 53	237.7		

Datatake: 71.2
Attitude: YYY — Look Angle: 57.0 — Roll: 105
Bits/sample: 6 — Incidence Angle: 60.2 — Pitch: 0
Area: JAPAN — Average Swath Width: 13 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 19 59 40	4 08 56 40	35 46 44	134 40 33	232.3		
283 19 59 50	4 08 56 50	36 15 05	135 13 51	232.5		
283 20 00 00	4 08 57 00	36 43 11	135 47 34	232.6		
283 20 00 10	4 08 57 10	37 11 01	136 21 40	232.8		
283 20 00 20	4 08 57 20	37 38 36	136 56 11	232.9		
283 20 00 30	4 08 57 30	38 05 56	137 31 05	233.1		
283 20 00 40	4 08 57 40	38 33 01	138 06 24	233.2		
283 20 00 50	4 08 57 50	38 59 50	138 42 07	233.4		
283 20 01 00	4 08 58 00	39 26 24	139 18 14	233.5		
283 20 01 10	4 08 58 10	39 52 50	139 55 16	233.6		
283 20 01 20	4 08 58 20	40 19 02	140 32 52	233.8	3	
283 20 01 30	4 08 58 30	40 45 02	141 11 01	233.9		
283 20 01 40	4 08 58 40	41 10 48	141 49 43	234.1	0	
283 20 01 50	4 08 58 50	41 36 21	142 28 58	234.2		
283 20 02 00	4 08 59 00	42 01 41	143 08 47	234.3		

Datatake: 71.4
Attitude: YYY — Look Angle: 41.0 — Roll: 105
Bits/sample: 5 — Incidence Angle: 42.8 — Pitch: 0
Area: WESTERN US — Average Swath Width: 27 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 20 20 30	4 09 17 30	37 59 43	-117 40 51	232.6	1	
283 20 20 40	4 09 17 40	37 31 19	-117 07 09	232.4		
283 20 20 50	4 09 17 50	37 02 43	-116 33 53	232.3		
283 20 21 00	4 09 18 00	36 33 56	-116 01 04	232.1	5	
283 20 21 10	4 09 18 10	36 04 58	-115 28 41	231.9		
283 20 21 20	4 09 18 20	35 35 49	-114 56 44	231.8		
283 20 21 30	4 09 18 30	35 06 28	-114 25 14	231.6	3	
283 20 21 40	4 09 18 40	34 36 56	-113 54 10	231.5	5	
283 20 21 50	4 09 18 50	34 07 12	-113 23 33	231.3	-10	
283 20 22 00	4 09 19 00	33 37 17	-112 53 22	231.2		

Datatake: 72.4
Attitude: Blue — Look Angle: 43.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 44.9 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 31 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 22 13 40	4 11 10 40	-38 21 35	-78 33 17	232.4		
283 22 13 50	4 11 10 50	-38 49 34	-77 58 29	232.5	-10	
283 22 14 00	4 11 11 00	-39 17 20	-77 23 10	232.7		
283 22 14 10	4 11 11 10	-39 44 53	-76 47 20	232.8		
283 22 14 20	4 11 11 20	-40 12 13	-76 10 59	232.9		
283 22 14 30	4 11 11 30	-40 39 19	-75 34 08	233.1		
283 22 14 40	4 11 11 40	-41 06 13	-74 56 45	233.2		
283 22 14 50	4 11 11 50	-41 32 53	-74 18 52	233.4	5	
283 22 15 00	4 11 12 00	-41 59 19	-73 40 28	233.5		
283 22 15 10	4 11 12 10	-42 25 24	-73 01 19	233.7	0	
283 22 15 20	4 11 12 20	-42 51 13	-72 21 35	233.8	1	
283 22 15 30	4 11 12 30	-43 16 45	-71 41 16	233.9		
283 22 15 40	4 11 12 40	-43 42 02	-71 00 22	234.1	5	
283 22 15 50	4 11 12 50	-44 07 04	-70 18 53	234.2	2	
283 22 16 00	4 11 13 00	-44 31 49	-69 36 50	234.3	-10	

Datatake: 72.5
Attitude: Blue — Look Angle: 24.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 24.9 — Pitch: 0
Area: S ATLANTIC/S INDIAN — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
283 22 30 00	4 11 27 00	-48 39 12	13 23 59	235.4		
283 22 30 10	4 11 27 10	-48 16 52	14 11 59	235.3	5	
283 22 30 20	4 11 27 20	-47 54 12	14 59 18	235.2		
283 22 30 30	4 11 27 30	-47 31 12	15 45 56	235.1		
283 22 30 40	4 11 27 40	-47 07 53	16 31 52	235.0	8	
283 22 30 50	4 11 27 50	-46 44 14	17 17 07	234.9		
283 22 31 00	4 11 28 00	-46 20 15	18 01 40	234.7		
283 22 31 10	4 11 28 10	-45 55 57	18 45 32	234.6	12	
283 22 31 20	4 11 28 20	-45 31 19	19 28 42	234.5		
283 22 31 30	4 11 28 30	-45 06 21	20 11 11	234.3		
283 22 31 40	4 11 28 40	-44 41 04	20 52 59	234.2		
283 22 31 50	4 11 28 50	-44 15 27	21 34 05	234.1		
283 22 32 00	4 11 29 00	-43 49 31	22 14 29	233.9	8	
283 22 32 10	4 11 29 10	-43 23 19	22 54 19	233.8		
283 22 32 20	4 11 29 20	-42 56 53	23 33 35	233.7	8	
283 22 32 30	4 11 29 30	-42 30 14	24 12 17	233.5		
283 22 32 40	4 11 29 40	-42 03 20	24 50 26	233.4		
283 22 32 50	4 11 29 50	-41 36 12	25 28 02	233.3	12	
283 22 33 00	4 11 30 00	-41 08 50	26 05 03	233.1		
283 22 33 10	4 11 30 10	-40 41 14	26 41 32	233.0		
283 22 33 20	4 11 30 20	-40 13 24	27 17 26	232.8	12	
283 22 33 30	4 11 30 30	-39 45 21	27 52 47	232.7		
283 22 33 40	4 11 30 40	-39 17 03	28 27 35	232.6		
283 22 33 50	4 11 30 50	-38 48 31	29 01 49	232.4	12	
283 22 34 00	4 11 31 00	-38 19 45	29 35 29	232.3		
283 22 34 10	4 11 31 10	-37 50 54	30 08 54	232.1		
283 22 34 20	4 11 31 20	-37 21 51	30 41 51	232.0	12	
283 22 34 30	4 11 31 30	-36 52 36	31 14 19	231.8		
283 22 34 40	4 11 31 40	-36 23 10	31 46 18	231.7		
283 22 34 50	4 11 31 50	-35 53 33	32 17 50	231.5	10	
283 22 35 00	4 11 32 00	-35 23 44	32 48 53	231.4		

Datatake: 74.3
Attitude: Blue — Look Angle: 30.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 31.2 — Pitch: 0
Area: PACIFIC — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 01 19 00	4 14 16 00	-54 25 55	-88 03 24	237.3	1	
284 01 19 10	4 14 16 10	-54 36 14	-86 58 31	237.3		
284 01 19 20	4 14 16 20	-54 45 52	-85 53 15	237.4		
284 01 19 30	4 14 16 30	-54 54 50	-84 47 36	237.4	2	
284 01 19 40	4 14 16 40	-55 03 08	-83 41 35	237.4		
284 01 19 50	4 14 16 50	-55 10 45	-82 35 10	237.5	2	
284 01 20 00	4 14 17 00	-55 17 41	-81 28 24	237.5		
284 01 20 10	4 14 17 10	-55 23 57	-80 21 14	237.6	-10	
284 01 20 20	4 14 17 20	-55 29 32	-79 13 42	237.6		
284 01 20 30	4 14 17 30	-55 34 27	-78 05 48	237.6		
284 01 20 40	4 14 17 40	-55 38 41	-76 57 30	237.6		
284 01 20 50	4 14 17 50	-55 42 15	-75 48 50	237.6		

Table 14-1 (contd)

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 01 21 00	4 14 18 00	-55 45 08	-74 39 48	237.7		
284 01 21 10	4 14 18 10	-55 47 15	-73 31 11	237.7		
284 01 21 20	4 14 18 20	-55 48 40	-72 22 26	237.7		
284 01 21 30	4 14 18 30	-55 49 23	-71 13 32	237.7		
284 01 21 40	4 14 18 40	-55 49 24	-70 04 29	237.7		
284 01 21 50	4 14 18 50	-55 48 43	-68 55 18	237.7		
284 01 22 00	4 14 19 00	-55 47 20	-67 45 57	237.7		
284 01 22 10	4 14 19 10	-55 45 14	-66 37 24	237.7	-10	

Datatake: 75.6
Attitude: Blue — Look Angle: 30.0 — Roll: 180
Bits/sample: 6 — Incidence Angle: 31.2 — Pitch: 0
Area: PACIFIC — Average Swath Width: 18 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 02 51 00	4 15 48 00	-55 55 10	-90 01 03	237.7	5	
284 02 51 10	4 15 48 10	-55 52 49	-88 51 43	237.7		
284 02 51 20	4 15 48 20	-55 49 46	-87 42 44	237.7		
284 02 51 30	4 15 48 30	-55 46 03	-86 34 07	237.6		
284 02 51 40	4 15 48 40	-55 41 38	-85 25 51	237.6	5	
284 02 51 50	4 15 48 50	-55 36 34	-84 17 58	237.6		
284 02 52 00	4 15 49 00	-55 30 48	-83 10 26	237.6	5	
284 02 52 10	4 15 49 10	-55 24 22	-82 03 15	237.5		
284 02 52 20	4 15 49 20	-55 17 15	-80 56 27	237.5	5	
284 02 52 30	4 15 49 30	-55 09 27	-79 50 00	237.5		
284 02 52 40	4 15 49 40	-55 00 58	-78 43 55	237.4		
284 02 52 50	4 15 49 50	-54 51 49	-77 38 12	237.4		
284 02 53 00	4 15 50 00	-54 41 59	-76 32 50	237.3	-10	
284 02 53 10	4 15 50 10	-54 31 38	-75 28 32	237.3		
284 02 53 20	4 15 50 20	-54 20 39	-74 24 48	237.2		

Datatake: 76.6
Attitude: Blue — Look Angle: 22.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 22.8 — Pitch: 0
Area: JAPAN — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 03 45 50	4 16 42 50	38 04 18	133 45 43	232.5	7	
284 03 46 00	4 16 43 00	37 34 37	134 18 06	232.4		
284 03 46 10	4 16 43 10	37 04 47	134 50 02	232.2		
284 03 46 20	4 16 43 20	36 34 46	135 21 31	232.1	10	
284 03 46 30	4 16 43 30	36 04 35	135 52 32	231.9		
284 03 46 40	4 16 43 40	35 34 13	136 23 05	231.8		
284 03 46 50	4 16 43 50	35 03 42	136 53 12	231.6		
284 03 47 00	4 16 44 00	34 33 00	137 22 50	231.5		
284 03 47 10	4 16 44 10	34 02 15	137 52 16	231.3	10	
284 03 47 20	4 16 44 20	33 31 20	138 21 18	231.2		
284 03 47 30	4 16 44 30	33 00 18	138 49 57	231.0		
284 03 47 40	4 16 44 40	32 29 07	139 18 12	230.9		
284 03 47 50	4 16 44 50	31 57 48	139 46 04	230.7		
284 03 48 00	4 16 45 00	31 26 20	140 13 33	230.6	-10	

Datatake: 76.8
Attitude: Blue — Look Angle: 42.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 43.9 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 26 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 04 25 40	4 17 22 40	-48 06 05	-78 27 16	235.4		
284 04 25 50	4 17 22 50	-47 44 39	-77 39 06	235.3		
284 04 26 00	4 17 23 00	-47 22 51	-76 51 37	235.1		
284 04 26 10	4 17 23 10	-47 00 41	-76 04 50	235.0	-10	
284 04 26 20	4 17 23 20	-46 38 08	-75 18 44	234.9		
284 04 26 30	4 17 23 30	-46 15 13	-74 33 20	234.8		
284 04 26 40	4 17 23 40	-45 51 55	-73 48 37	234.7		
284 04 26 50	4 17 23 50	-45 28 14	-73 04 35	234.5		
284 04 27 00	4 17 24 00	-45 04 11	-72 21 14	234.4	6	
284 04 27 10	4 17 24 10	-44 39 58	-71 38 27	234.3	2	
284 04 27 20	4 17 24 20	-44 15 25	-70 56 18	234.2		
284 04 27 30	4 17 24 30	-43 50 32	-70 14 48	234.0	3	
284 04 27 40	4 17 24 40	-43 25 21	-69 33 57	233.9	3	
284 04 27 50	4 17 24 50	-42 59 51	-68 53 44	233.8		
284 04 28 00	4 17 25 00	-42 34 01	-68 14 11	233.6		

Datatake: 80.2
Attitude: Green — Look Angle: 44.0 — Roll: 270
Bits/sample: 4 — Incidence Angle: 46.0 — Pitch: 180
Area: EASTERN US — Average Swath Width: 29 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 09 16 00	4 22 13 00	26 00 26	-85 31 45	228.8		
284 09 16 10	4 22 13 10	26 33 14	-85 07 41	228.9	-10	
284 09 16 20	4 22 13 20	27 05 56	-84 43 19	229.1		
284 09 16 30	4 22 13 30	27 38 32	-84 18 40	229.2		
284 09 16 40	4 22 13 40	28 11 03	-83 53 45	229.3	-10	
284 09 16 50	4 22 13 50	28 43 29	-83 28 33	229.5	8	
284 09 17 00	4 22 14 00	29 15 50	-83 03 04	229.6		
284 09 17 10	4 22 14 10	29 48 05	-82 37 18	229.8		
284 09 17 20	4 22 14 20	30 20 14	-82 11 16	229.9	10	
284 09 17 30	4 22 14 30	30 52 18	-81 44 56	230.1		Noise
284 09 17 40	4 22 14 40	31 24 17	-81 18 20	230.2		Noise
284 09 17 50	4 22 14 50	31 56 11	-80 51 27	230.3	2	Noise
284 09 18 00	4 22 15 00	32 27 59	-80 24 18	230.5	3	Noise
284 09 18 10	4 22 15 10	32 59 36	-79 56 40	230.6		Noise
284 09 18 20	4 22 15 20	33 31 07	-79 28 43	230.8		Noise
284 09 18 30	4 22 15 30	34 02 32	-79 00 26	230.9	3	Noise
284 09 18 40	4 22 15 40	34 33 49	-78 31 48	231.1		Noise
284 09 18 50	4 22 15 50	35 05 00	-78 02 51	231.2		Noise
284 09 19 00	4 22 16 00	35 36 04	-77 33 35	231.4		Noise
284 09 19 10	4 22 16 10	36 06 56	-77 03 44	231.5	3	Noise
284 09 19 20	4 22 16 20	36 37 40	-76 33 30	231.7		
284 09 19 30	4 22 16 30	37 08 16	-76 02 52	231.8		

Datatake: 80.21
Attitude: Green — Look Angle: 36.0 — Roll: 270
Bits/sample: 5 — Incidence Angle: 37.5 — Pitch: 180
Area: ATLANTIC — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 09 19 30	4 22 16 30	36 50 45	-75 36 45	231.8		
284 09 19 40	4 22 16 40	37 21 04	-75 05 38	232.0		
284 09 19 50	4 22 16 50	37 51 12	-74 34 03	232.1		
284 09 20 00	4 22 17 00	38 21 11	-74 01 59	232.3		
284 09 20 10	4 22 17 10	38 50 59	-73 29 27	232.4	-10	
284 09 20 20	4 22 17 20	39 20 38	-72 56 28	232.6		
284 09 20 30	4 22 17 30	39 50 06	-72 23 00	232.7		
284 09 20 40	4 22 17 40	40 19 24	-71 49 03	232.9		
284 09 20 50	4 22 17 50	40 48 32	-71 14 39	233.0	-10	
284 09 21 00	4 22 18 00	41 17 30	-70 39 47	233.2		

Datatake: 81.2
Attitude: Red — Look Angle: 53.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 55.7 — Pitch: 180
Area: MIDWEST US — Average Swath Width: 39 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 10 46 50	4 23 43 50	29 22 40	-99 01 09	230.5		
284 10 47 00	4 23 44 00	29 53 26	-98 33 22	230.6		
284 10 47 10	4 23 44 10	30 24 04	-98 05 16	230.8		
284 10 47 20	4 23 44 20	30 54 34	-97 36 51	230.9	2	
284 10 47 30	4 23 44 30	31 24 56	-97 08 06	231.1		
284 10 47 40	4 23 44 40	31 55 10	-96 39 02	231.2	3	
284 10 47 50	4 23 44 50	32 25 17	-96 09 37	231.4		
284 10 48 00	4 23 45 00	32 55 15	-95 39 54	231.5	3	
284 10 48 10	4 23 45 10	33 25 00	-95 09 39	231.7	4	
284 10 48 20	4 23 45 20	33 54 35	-94 39 00	231.8		
284 10 48 30	4 23 45 30	34 24 00	-94 07 59	232.0		
284 10 48 40	4 23 45 40	34 53 16	-93 36 35	232.1	5	
284 10 48 50	4 23 45 50	35 22 23	-93 04 48	232.3		
284 10 49 00	4 23 46 00	35 51 19	-92 32 37	232.4	4	
284 10 49 10	4 23 46 10	36 20 00	-91 59 51	232.6		
284 10 49 20	4 23 46 20	36 48 30	-91 26 39	232.7		
284 10 49 30	4 23 46 30	37 16 48	-90 53 00	232.9	4	
284 10 49 40	4 23 46 40	37 44 55	-90 18 54	233.0		
284 10 49 50	4 23 46 50	38 12 51	-89 44 22	233.2		
284 10 50 00	4 23 47 00	38 40 35	-89 09 24	233.3	-10	

Datatake: 81.3
Attitude: Red — Look Angle: 43.0 — Roll: 0
Bits/sample: 3 — Incidence Angle: 45.0 — Pitch: 180
Area: CANADA — Average Swath Width: 49 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 10 53 50	4 23 50 50	48 33 17	-73 37 46	236.4	-10	
284 10 54 00	4 23 51 00	48 53 48	-72 47 40	236.5	5	
284 10 54 10	4 23 51 10	49 13 53	-71 56 51	236.6		
284 10 54 20	4 23 51 20	49 33 34	-71 05 18	236.7	5	
284 10 54 30	4 23 51 30	49 52 49	-70 13 02	236.8		
284 10 54 40	4 23 51 40	50 11 40	-69 20 03	236.9	6	
284 10 54 50	4 23 51 50	50 30 05	-68 26 21	237.0		
284 10 55 00	4 23 52 00	50 48 05	-67 31 55	237.1	5	
284 10 55 10	4 23 52 10	51 05 26	-66 36 45	237.2		
284 10 55 20	4 23 52 20	51 22 18	-65 40 52	237.3	5	
284 10 55 30	4 23 52 30	51 38 40	-64 44 16	237.4		
284 10 55 40	4 23 52 40	51 54 34	-63 46 56	237.5		
284 10 55 50	4 23 52 50	52 09 58	-62 48 52	237.5	3	
284 10 56 00	4 23 53 00	52 24 53	-61 50 05	237.6	-10	

Datatake: 81.4
Attitude: Red — Look Angle: 52.0 — Roll: 0
Bits/sample: 3 — Incidence Angle: 54.6 — Pitch: 180
Area: LIBYA/EGYPT — Average Swath Width: 38 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 11 12 00	5 00 09 00	31 32 56	21 54 21	230.8		
284 11 12 10	5 00 09 10	31 02 40	22 23 04	230.6		
284 11 12 20	5 00 09 20	30 32 15	22 51 30	230.5		
284 11 12 30	5 00 09 30	30 01 44	23 19 37	230.3		
284 11 12 40	5 00 09 40	29 31 04	23 47 26	230.2		
284 11 12 50	5 00 09 50	29 00 18	24 14 57	230.0		
284 11 13 00	5 00 10 00	28 29 23	24 42 10	229.9	-10	
284 11 13 10	5 00 10 10	27 58 22	25 09 05	229.7	-10	
284 11 13 20	5 00 10 20	27 27 12	25 35 42	229.6	-10	
284 11 13 30	5 00 10 30	26 55 56	26 02 01	229.4		
284 11 13 40	5 00 10 40	26 24 31	26 28 02	229.3		
284 11 13 50	5 00 10 50	25 52 59	26 53 45	229.1		
284 11 14 00	5 00 11 00	25 21 20	27 19 10	229.0		
284 11 14 10	5 00 11 10	24 49 38	27 44 24	228.8		
284 11 14 20	5 00 11 20	24 17 49	28 09 23	228.7	-10	
284 11 14 30	5 00 11 30	23 45 54	28 34 06	228.6		
284 11 14 40	5 00 11 40	23 13 53	28 58 34	228.4		
284 11 14 50	5 00 11 50	22 41 45	29 22 45	228.3		
284 11 15 00	5 00 12 00	22 09 32	29 46 41	228.2	-10	

Datatake: 82.2
Attitude: Blue — Look Angle: 22.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 22.8 — Pitch: 0
Area: US — Average Swath Width: 28 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 12 16 00	5 01 13 00	32 12 15	-124 14 22	226.2	4	
284 12 16 10	5 01 13 10	32 43 37	-123 46 24	226.3		
284 12 16 20	5 01 13 20	33 14 49	-123 18 03	226.4		
284 12 16 30	5 01 13 30	33 45 53	-122 49 18	226.6	8	
284 12 16 40	5 01 13 40	34 16 48	-122 20 09	226.7		
284 12 16 50	5 01 13 50	34 47 35	-121 50 35	226.8	8	
284 12 17 00	5 01 14 00	35 18 12	-121 20 38	227.0	5	
284 12 17 10	5 01 14 10	35 48 41	-120 50 16	227.1		
284 12 17 20	5 01 14 20	36 19 01	-120 19 30	227.2	5	
284 12 17 30	5 01 14 30	36 49 12	-119 48 20	227.4		
284 12 17 40	5 01 14 40	37 19 14	-119 16 46	227.5		
284 12 17 50	5 01 14 50	37 49 08	-118 44 48	227.6		
284 12 18 00	5 01 15 00	38 18 53	-118 12 26	227.8		
284 12 18 10	5 01 15 10	38 48 23	-117 39 25	227.9	4	
284 12 18 20	5 01 15 20	39 17 42	-117 05 55	228.0		
284 12 18 30	5 01 15 30	39 46 50	-116 31 58	228.2		
284 12 18 40	5 01 15 40	40 15 48	-115 57 32	228.3	3	
284 12 18 50	5 01 15 50	40 44 35	-115 22 38	228.4		
284 12 19 00	5 01 16 00	41 13 11	-114 47 15	228.6		
284 12 19 10	5 01 16 10	41 41 30	-114 11 10	228.7	3	
284 12 19 20	5 01 16 20	42 09 36	-113 34 32	228.8	4	
284 12 19 30	5 01 16 30	42 37 30	-112 57 22	229.0		
284 12 19 40	5 01 16 40	43 05 11	-112 19 40	229.1	5	
284 12 19 50	5 01 16 50	43 32 39	-111 41 24	229.3	-10	
284 12 20 00	5 01 17 00	43 59 55	-111 02 37	229.5		

Datatake: 83.8
Attitude: Red — Look Angle: 49.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 51.4 — Pitch: 180
Area: AUSTRALIA — Average Swath Width: 15 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 14 51 00	5 03 48 00	-44 24 25	139 28 16	232.3		
284 14 51 10	5 03 48 10	-43 56 08	140 06 12	232.2		
284 14 51 20	5 03 48 20	-43 27 39	140 43 36	232.0		
284 14 51 30	5 03 48 30	-42 58 58	141 20 27	231.9		
284 14 51 40	5 03 48 40	-42 30 07	141 56 46	231.7	-10	
284 14 51 50	5 03 48 50	-42 01 03	142 32 31	231.5		
284 14 52 00	5 03 49 00	-41 31 49	143 07 44	231.4		
284 14 52 10	5 03 49 10	-41 02 22	143 42 23	231.2		
284 14 52 20	5 03 49 20	-40 32 45	144 16 30	231.1	-10	
284 14 52 30	5 03 49 30	-40 02 56	144 50 04	230.9		
284 14 52 40	5 03 49 40	-39 32 55	145 23 06	230.7		
284 14 52 50	5 03 49 50	-39 02 43	145 55 34	230.6	3	
284 14 53 00	5 03 50 00	-38 32 20	146 27 30	230.4		
284 14 53 10	5 03 50 10	-38 01 53	146 59 10	230.2	3	
284 14 53 20	5 03 50 20	-37 31 16	147 30 23	230.1		
284 14 53 30	5 03 50 30	-37 00 31	148 01 09	229.9	3	
284 14 53 40	5 03 50 40	-36 29 36	148 31 26	229.8		
284 14 53 50	5 03 50 50	-35 58 31	149 01 16	229.6	3	
284 14 54 00	5 03 51 00	-35 27 18	149 30 38	229.4		
284 14 54 10	5 03 51 10	-34 56 00	149 59 48	229.3	3	
284 14 54 20	5 03 51 20	-34 24 35	150 28 33	229.1		
284 14 54 30	5 03 51 30	-33 53 01	150 56 56	228.9	3	
284 14 54 40	5 03 51 40	-33 21 20	151 24 54	228.8	1	
284 14 54 50	5 03 51 50	-32 49 31	151 52 30	228.6		
284 14 55 00	5 03 52 00	-32 17 34	152 19 42	228.4	-10	

Datatake: 84.2
Attitude: Red — Look Angle: 56.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 59.1 — Pitch: 180
Area: CANADA — Average Swath Width: 21 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 15 24 00	5 04 21 00	52 48 40	-120 52 48	233.4		
284 15 24 10	5 04 21 10	52 57 57	-119 50 24	233.5		
284 15 24 20	5 04 21 20	53 06 34	-118 47 41	233.5		
284 15 24 30	5 04 21 30	53 14 33	-117 44 37	233.5		
284 15 24 40	5 04 21 40	53 21 53	-116 41 14	233.6		
284 15 24 50	5 04 21 50	53 28 33	-115 37 30	233.6		
284 15 25 00	5 04 22 00	53 34 35	-114 33 27	233.6		
284 15 25 10	5 04 22 10	53 39 58	-113 29 03	233.7		
284 15 25 20	5 04 22 20	53 44 41	-112 24 20	233.7		
284 15 25 30	5 04 22 30	53 48 46	-111 19 16	233.7		
284 15 25 40	5 04 22 40	53 52 12	-110 13 53	233.7		

Datatake: 84.6
Attitude: Red — Look Angle: 36.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 37.5 — Pitch: 180
Area: AUSTRALIA — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 16 24 00	5 05 21 00	-31 20 22	129 05 38	228.2		
284 16 24 10	5 05 21 10	-30 48 33	129 32 29	228.0		
284 16 24 20	5 05 21 20	-30 16 38	129 59 04	227.8		
284 16 24 30	5 05 21 30	-29 44 38	130 25 23	227.7		
284 16 24 40	5 05 21 40	-29 12 32	130 51 25	227.5		
284 16 24 50	5 05 21 50	-28 40 21	131 17 11	227.4		
284 16 25 00	5 05 22 00	-28 08 04	131 42 40	227.2		
284 16 25 10	5 05 22 10	-27 35 41	132 07 53	227.1		
284 16 25 20	5 05 22 20	-27 03 13	132 32 50	226.9		
284 16 25 30	5 05 22 30	-26 30 39	132 57 30	226.8		
284 16 25 40	5 05 22 40	-25 58 00	133 21 54	226.6		
284 16 25 50	5 05 22 50	-25 25 15	133 46 01	226.5		
284 16 26 00	5 05 23 00	-24 52 24	134 09 52	226.3		
284 16 26 10	5 05 23 10	-24 19 30	134 33 31	226.2	1	
284 16 26 20	5 05 23 20	-23 46 32	134 56 58	226.0	3	
284 16 26 30	5 05 23 30	-23 13 31	135 20 15	225.9		
284 16 26 40	5 05 23 40	-22 40 26	135 43 22	225.7	1	
284 16 26 50	5 05 23 50	-22 07 18	136 06 18	225.6		
284 16 27 00	5 05 24 00	-21 34 06	136 29 03	225.5		
284 16 27 10	5 05 24 10	-21 00 51	136 51 37	225.3		Interference

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 16 27 20	5 05 24 20	-20 27 33	137 14 01	225.2		
284 16 27 30	5 05 24 30	-19 54 11	137 36 15	225.1	-10	
284 16 27 40	5 05 24 40	-19 20 46	137 58 18	225.0		
284 16 27 50	5 05 24 50	-18 47 17	138 20 10	224.8	1	
284 16 28 00	5 05 25 00	-18 13 45	138 41 51	224.7	5	
284 16 28 10	5 05 25 10	-17 40 09	139 03 24	224.6		
284 16 28 20	5 05 25 20	-17 06 31	139 24 49	224.5		
284 16 28 30	5 05 25 30	-16 32 51	139 46 07	224.4		
284 16 28 40	5 05 25 40	-15 59 08	140 07 19	224.3		
284 16 28 50	5 05 25 50	-15 25 24	140 28 24	224.2		
284 16 29 00	5 05 26 00	-14 51 37	140 49 21	224.1		
284 16 29 10	5 05 26 10	-14 17 48	141 10 12	224.0		
284 16 29 20	5 05 26 20	-13 43 57	141 30 56	223.9		
284 16 29 30	5 05 26 30	-13 10 04	141 51 33	223.8		
284 16 29 40	5 05 26 40	-12 36 08	142 12 03	223.7		Interference
284 16 29 50	5 05 26 50	-12 02 10	142 32 27	223.6		Interference
284 16 30 00	5 05 27 00	-11 28 10	142 52 43	223.5		Interference
284 16 30 10	5 05 27 10	-10 54 11	143 12 59	223.4		
284 16 30 20	5 05 27 20	-10 20 10	143 33 11	223.3		
284 16 30 30	5 05 27 30	-9 46 08	143 53 18	223.3		
284 16 30 40	5 05 27 40	-9 12 04	144 13 20	223.2		
284 16 30 50	5 05 27 50	-8 37 59	144 33 18	223.1		
284 16 31 00	5 05 28 00	-8 03 53	144 53 10	223.0		
284 16 31 10	5 05 28 10	-7 29 46	145 13 03	223.0		
284 16 31 20	5 05 28 20	-6 55 38	145 32 51	222.9		
284 16 31 30	5 05 28 30	-6 21 30	145 52 37	222.9		
284 16 31 40	5 05 28 40	-5 47 20	146 12 18	222.8		
284 16 31 50	5 05 28 50	-5 13 09	146 31 57	222.8		
284 16 32 00	5 05 29 00	-4 38 57	146 51 31	222.7		

Datatake: 85.2
Attitude: Blue — Look Angle: 34.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 35.4 — Pitch: 0
Area: CANADA/US — Average Swath Width: 25 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 16 57 20	5 05 54 20	57 36 36	-113 34 52	233.4		
284 16 57 30	5 05 54 30	57 27 39	-112 24 03	233.3		
284 16 57 40	5 05 54 40	57 18 02	-111 13 55	233.3		
284 16 57 50	5 05 54 50	57 07 45	-110 04 29	233.2		
284 16 58 00	5 05 55 00	56 56 49	-108 55 45	233.2		
284 16 58 10	5 05 55 10	56 45 14	-107 47 43	233.1		
284 16 58 20	5 05 55 20	56 32 58	-106 40 22	233.1		
284 16 58 30	5 05 55 30	56 20 03	-105 33 43	233.0		
284 16 58 40	5 05 55 40	56 06 28	-104 27 45	233.0		
284 16 58 50	5 05 55 50	55 52 14	-103 22 30	232.9		
284 16 59 00	5 05 56 00	55 37 20	-102 17 56	232.8		
284 16 59 10	5 05 56 10	55 22 02	-101 14 31	232.8		
284 16 59 20	5 05 56 20	55 06 09	-100 11 56	232.7		
284 16 59 30	5 05 56 30	54 49 40	-99 10 11	232.6		
284 16 59 40	5 05 56 40	54 32 36	-98 09 15	232.6		
284 16 59 50	5 05 56 50	54 14 56	-97 09 09	232.5		
284 17 00 00	5 05 57 00	53 56 42	-96 09 52	232.4		
284 17 00 10	5 05 57 10	53 37 58	-95 11 38	232.3		
284 17 00 20	5 05 57 20	53 18 48	-94 14 16	232.2		
284 17 00 30	5 05 57 30	52 59 12	-93 17 46	232.1		
284 17 00 40	5 05 57 40	52 39 10	-92 22 08	232.0		
284 17 00 50	5 05 57 50	52 18 41	-91 27 22	231.9		
284 17 01 00	5 05 58 00	51 57 47	-90 33 27	231.9		
284 17 01 10	5 05 58 10	51 36 26	-89 40 25	231.8		
284 17 01 20	5 05 58 20	51 14 39	-88 48 14	231.7		
284 17 01 30	5 05 58 30	50 52 27	-87 56 55	231.6		
284 17 01 40	5 05 58 40	50 29 48	-87 06 28	231.4		
284 17 01 50	5 05 58 50	50 06 43	-86 16 53	231.3		
284 17 02 00	5 05 59 00	49 43 11	-85 28 09	231.2		
284 17 02 10	5 05 59 10	49 19 29	-84 40 06	231.1		
284 17 02 20	5 05 59 20	48 55 25	-83 52 51	231.0		
284 17 02 30	5 05 59 30	48 30 59	-83 06 25	230.9		
284 17 02 40	5 05 59 40	48 06 11	-82 20 47	230.8		
284 17 02 50	5 05 59 50	47 41 01	-81 35 58	230.7		
284 17 03 00	5 06 00 00	47 15 30	-80 51 57	230.5		
284 17 03 10	5 06 00 10	46 49 42	-80 08 40	230.4		
284 17 03 20	5 06 00 20	46 23 39	-79 26 02	230.3		
284 17 03 30	5 06 00 30	45 57 21	-78 44 03	230.2		
284 17 03 40	5 06 00 40	45 30 48	-78 02 43	230.1		
284 17 03 50	5 06 00 50	45 04 00	-77 22 02	229.9		
284 17 04 00	5 06 01 00	44 36 56	-76 41 59	229.8		
284 17 04 10	5 06 01 10	44 09 37	-76 02 35	229.7		
284 17 04 20	5 06 01 20	43 42 03	-75 23 50	229.6		
284 17 04 30	5 06 01 30	43 14 14	-74 45 44	229.4		
284 17 04 40	5 06 01 40	42 46 10	-74 08 16	229.3		
284 17 04 50	5 06 01 50	42 17 50	-73 31 27	229.2		
284 17 05 00	5 06 02 00	41 49 15	-72 55 17	229.0		
284 17 05 10	5 06 02 10	41 20 34	-72 19 28	228.9		Interference
284 17 05 20	5 06 02 20	40 51 41	-71 44 12	228.8		
284 17 05 30	5 06 02 30	40 22 35	-71 09 30	228.6		
284 17 05 40	5 06 02 40	39 53 17	-70 35 22	228.5		
284 17 05 50	5 06 02 50	39 23 46	-70 01 47	228.4		
284 17 06 00	5 06 03 00	38 54 02	-69 28 46	228.2		
284 17 06 10	5 06 03 10	38 24 13	-68 56 02	228.1		
284 17 06 20	5 06 03 20	37 54 14	-68 23 48	228.0		
284 17 06 30	5 06 03 30	37 24 04	-67 52 03	227.8		
284 17 06 40	5 06 03 40	36 53 44	-67 20 47	227.7		
284 17 06 50	5 06 03 50	36 23 14	-66 50 00	227.6		
284 17 07 00	5 06 04 00	35 52 33	-66 19 42	227.4		

Datatake: 86.1
Attitude: Blue — Look Angle: 56.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 59.1 — Pitch: 0
Area: CANADA/US/VENZLA — Average Swath Width: 16 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 18 30 00	5 07 27 00	53 16 28	-111 07 57	231.6		
284 18 30 10	5 07 27 10	52 53 49	-110 14 16	231.5		
284 18 30 20	5 07 27 20	52 30 50	-109 21 27	231.4		
284 18 30 30	5 07 27 30	52 07 30	-108 29 31	231.3		
284 18 30 40	5 07 27 40	51 43 49	-107 38 28	231.2		
284 18 30 50	5 07 27 50	51 19 47	-106 48 18	231.1	0	
284 18 31 00	5 07 28 00	50 55 24	-105 59 01	231.0		
284 18 31 10	5 07 28 10	50 30 31	-105 10 53	230.9		
284 18 31 20	5 07 28 20	50 05 21	-104 23 32	230.8		
284 18 31 30	5 07 28 30	49 39 53	-103 36 56	230.6		
284 18 31 40	5 07 28 40	49 14 09	-102 51 08	230.5		
284 18 31 50	5 07 28 50	48 48 06	-102 06 05	230.4		
284 18 32 00	5 07 29 00	48 21 47	-101 21 49	230.3	0	
284 18 32 10	5 07 29 10	47 55 10	-100 38 19	230.2		
284 18 32 20	5 07 29 20	47 28 15	-99 55 35	230.1		
284 18 32 30	5 07 29 30	47 01 04	-99 13 37	229.9		
284 18 32 40	5 07 29 40	46 33 34	-98 32 26	229.8	0	
284 18 32 50	5 07 29 50	46 05 48	-97 52 01	229.7		
284 18 33 00	5 07 30 00	45 37 44	-97 12 23	229.6		
284 18 33 10	5 07 30 10	45 09 26	-96 33 24	229.4		
284 18 33 20	5 07 30 20	44 40 57	-95 55 00	229.3	1	
284 18 33 30	5 07 30 30	44 12 16	-95 17 11	229.2		
284 18 33 40	5 07 30 40	43 43 23	-94 39 57	229.0	2	
284 18 33 50	5 07 30 50	43 14 20	-94 03 18	228.9		
284 18 34 00	5 07 31 00	42 45 05	-93 27 14	228.8		
284 18 34 10	5 07 31 10	42 15 38	-92 51 45	228.7		
284 18 34 20	5 07 31 20	41 46 00	-92 16 51	228.5	2	
284 18 34 30	5 07 31 30	41 16 11	-91 42 31	228.4		
284 18 34 40	5 07 31 40	40 46 10	-91 08 47	228.3		
284 18 34 50	5 07 31 50	40 15 58	-90 35 38	228.1		
284 18 35 00	5 07 32 00	39 45 34	-90 03 03	228.0		
284 18 35 10	5 07 32 10	39 15 04	-89 30 43	227.9	2	
284 18 35 20	5 07 32 20	38 44 24	-88 58 51	227.7		
284 18 35 30	5 07 32 30	38 13 33	-88 27 28	227.6		
284 18 35 40	5 07 32 40	37 42 33	-87 56 35	227.5		
284 18 35 50	5 07 32 50	37 11 22	-87 26 10	227.3	2	
284 18 36 00	5 07 33 00	36 40 02	-86 56 14	227.2		
284 18 36 10	5 07 33 10	36 08 37	-86 26 44	227.1		
284 18 36 20	5 07 33 20	35 37 05	-85 57 35	226.9		
284 18 36 30	5 07 33 30	35 05 27	-85 28 47	226.8	2	
284 18 36 40	5 07 33 40	34 33 43	-85 00 19	226.7		
284 18 36 50	5 07 33 50	34 01 52	-84 32 12	226.6	3	
284 18 37 00	5 07 34 00	33 29 55	-84 04 26	226.4		
284 18 37 10	5 07 34 10	32 57 52	-83 37 01	226.3		
284 18 37 20	5 07 34 20	32 25 42	-83 09 56	226.2	2	
284 18 37 30	5 07 34 30	31 53 26	-82 43 12	226.1		
284 18 37 40	5 07 34 40	31 21 03	-82 16 49	225.9		
284 18 37 50	5 07 34 50	30 48 35	-81 50 46	225.8	0	
284 18 38 00	5 07 35 00	30 15 59	-81 25 04	225.7		
284 18 38 10	5 07 35 10	29 43 20	-80 59 38	225.6		
284 18 38 20	5 07 35 20	29 10 36	-80 34 26	225.5		
284 18 38 30	5 07 35 30	28 37 47	-80 09 29	225.3		Noise
284 18 38 40	5 07 35 40	28 04 55	-79 44 46	225.2	0	Noise
284 18 38 50	5 07 35 50	27 31 58	-79 20 17	225.1		Noise
284 18 39 00	5 07 36 00	26 58 57	-78 56 02	225.0	2	
284 18 39 10	5 07 36 10	26 25 51	-78 32 02	224.9		
284 18 39 20	5 07 36 20	25 52 41	-78 08 17	224.8		
284 18 39 30	5 07 36 30	25 19 27	-77 44 45	224.7		Noise

284 18 39 40	5 07 36 40	24 46 08	-77 21 28	224.6		Noise
284 18 39 50	5 07 36 50	24 12 46	-76 58 25	224.5		Noise
284 18 40 00	5 07 37 00	23 39 18	-76 35 37	224.4		Noise
284 18 40 10	5 07 37 10	23 05 52	-76 12 53	224.3		Noise
284 18 40 20	5 07 37 20	22 32 22	-75 50 20	224.2		
284 18 40 30	5 07 37 30	21 58 49	-75 27 59	224.1		
284 18 40 40	5 07 37 40	21 25 13	-75 05 49	224.0		
284 18 40 50	5 07 37 50	20 51 34	-74 43 50	223.9	2	
284 18 41 00	5 07 38 00	20 17 51	-74 22 03	223.9		
284 18 41 10	5 07 38 10	19 44 05	-74 00 25	223.8		
284 18 41 20	5 07 38 20	19 10 17	-73 38 54	223.7		
284 18 41 30	5 07 38 30	18 36 27	-73 17 30	223.6		
284 18 41 40	5 07 38 40	18 02 35	-72 56 14	223.5		
284 18 41 50	5 07 38 50	17 28 41	-72 35 04	223.5		
284 18 42 00	5 07 39 00	16 54 46	-72 14 02	223.4		
284 18 42 10	5 07 39 10	16 20 49	-71 53 06	223.3	0	
284 18 42 20	5 07 39 20	15 46 50	-71 32 18	223.3		
284 18 42 30	5 07 39 30	15 12 49	-71 11 37	223.2	0	
284 18 42 40	5 07 39 40	14 38 46	-70 51 02	223.2		
284 18 42 50	5 07 39 50	14 04 42	-70 30 35	223.1		
284 18 43 00	5 07 40 00	13 30 36	-70 10 15	223.1		
284 18 43 10	5 07 40 10	12 56 27	-69 50 01	223.0		
284 18 43 20	5 07 40 20	12 22 18	-69 29 49	223.0		
284 18 43 30	5 07 40 30	11 48 08	-69 09 41	222.9		
284 18 43 40	5 07 40 40	11 13 58	-68 49 37	222.9		
284 18 43 50	5 07 40 50	10 39 48	-68 29 36	222.9	1	
284 18 44 00	5 07 41 00	10 05 37	-68 09 38	222.8		
284 18 44 10	5 07 41 10	9 31 25	-67 49 44	222.8		
284 18 44 20	5 07 41 20	8 57 13	-67 29 53	222.8		
284 18 44 30	5 07 41 30	8 23 01	-67 10 06	222.8		
284 18 44 40	5 07 41 40	7 48 48	-66 50 23	222.8		
284 18 44 50	5 07 41 50	7 14 35	-66 30 42	222.7		
284 18 45 00	5 07 42 00	6 40 21	-66 11 06	222.7		
284 18 45 10	5 07 42 10	6 06 07	-65 51 27	222.7	2	
284 18 45 20	5 07 42 20	5 31 52	-65 31 51	222.7		
284 18 45 30	5 07 42 30	4 57 37	-65 12 17	222.7		
284 18 45 40	5 07 42 40	4 23 21	-64 52 44	222.7		
284 18 45 50	5 07 42 50	3 49 05	-64 33 14	222.7		
284 18 46 00	5 07 43 00	3 14 48	-64 13 46	222.8		
284 18 46 10	5 07 43 10	2 40 16	-63 54 02	222.8		
284 18 46 20	5 07 43 20	2 05 38	-63 34 15	222.8		
284 18 46 30	5 07 43 30	1 30 56	-63 14 25	222.8	0	

Datatake: 86.6
Attitude: YYY — Look Angle: 43.0 — Roll: 105
Bits/sample: 5 — Incidence Angle: 44.9 — Pitch: 0
Area: INDONESIA — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 19 27 50	5 08 24 50	-11 30 48	98 09 45	223.7		
284 19 28 00	5 08 25 00	-10 56 46	98 29 59	223.6		
284 19 28 10	5 08 25 10	-10 22 43	98 50 08	223.5		
284 19 28 20	5 08 25 20	-9 48 39	99 10 12	223.4		
284 19 28 30	5 08 25 30	-9 14 34	99 30 13	223.3		
284 19 28 40	5 08 25 40	-8 40 27	99 50 09	223.3		
284 19 28 50	5 08 25 50	-8 06 19	100 10 00	223.2		
284 19 29 00	5 08 26 00	-7 32 10	100 29 47	223.1		
284 19 29 10	5 08 26 10	-6 58 02	100 49 36	223.1		
284 19 29 20	5 08 26 20	-6 23 53	101 09 21	223.0		
284 19 29 30	5 08 26 30	-5 49 43	101 29 04	223.0		
284 19 29 40	5 08 26 40	-5 15 33	101 48 45	222.9		
284 19 29 50	5 08 26 50	-4 41 22	102 08 22	222.9		
284 19 30 00	5 08 27 00	-4 07 10	102 27 57	222.8		
284 19 30 10	5 08 27 10	-3 32 55	102 47 25	222.8		
284 19 30 20	5 08 27 20	-2 58 39	103 06 48	222.8		
284 19 30 30	5 08 27 30	-2 24 21	103 26 08	222.7		
284 19 30 40	5 08 27 40	-1 50 02	103 45 24	222.7		
284 19 30 50	5 08 27 50	-1 15 41	104 04 35	222.7		
284 19 31 00	5 08 28 00	-0 41 19	104 23 43	222.7		

Datatake: 87.2
Attitude: YYY — Look Angle: 26.0 — Roll: 105
Bits/sample: 6 — Incidence Angle: 27.0 — Pitch: 0
Area: SEA OF JAPAN — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 19 43 00	5 08 40 00	38 37 52	132 30 47	228.6	2	
284 19 43 10	5 08 40 10	39 06 28	133 05 00	228.7		
284 19 43 20	5 08 40 20	39 34 50	133 39 46	228.9		
284 19 43 30	5 08 40 30	40 02 58	134 15 06	229.0	4	
284 19 43 40	5 08 40 40	40 30 52	134 51 00	229.1		
284 19 43 50	5 08 40 50	40 58 31	135 27 27	229.3	5	
284 19 44 00	5 08 41 00	41 25 56	136 04 28	229.4		
284 19 44 10	5 08 41 10	41 53 07	136 42 03	229.5	6	
284 19 44 20	5 08 41 20	42 20 04	137 20 11	229.7	6	
284 19 44 30	5 08 41 30	42 46 46	137 58 53	229.8		
284 19 44 40	5 08 41 40	43 13 14	138 38 09	229.9		
284 19 44 50	5 08 41 50	43 39 29	139 17 58	230.1	7	
284 19 45 00	5 08 42 00	44 05 28	139 58 21	230.2		
284 19 45 10	5 08 42 10	44 31 09	140 39 41	230.3		
284 19 45 20	5 08 42 20	44 56 35	141 21 40	230.4	8	
284 19 45 30	5 08 42 30	45 21 44	142 04 20	230.6		
284 19 45 40	5 08 42 40	45 46 38	142 47 41	230.7		
284 19 45 50	5 08 42 50	46 11 17	143 31 41	230.8	10	
284 19 46 00	5 08 43 00	46 35 40	144 16 22	230.9	-10	

Datatake: 87.4
Attitude: YYY — Look Angle: 29.0 — Roll: 105
Bits/sample: 5 — Incidence Angle: 30.1 — Pitch: 0
Area: W US/MEXICO — Average Swath Width: 28 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 20 01 00	5 08 58 00	44 48 22	-127 20 39	230.6	-10	
284 20 01 10	5 08 58 10	44 23 02	-126 39 10	230.5		
284 20 01 20	5 08 58 20	43 57 26	-125 58 16	230.3	4	
284 20 01 30	5 08 58 30	43 31 34	-125 17 56	230.2	-10	
284 20 01 40	5 08 58 40	43 05 28	-124 38 10	230.1		
284 20 01 50	5 08 58 50	42 39 06	-123 58 59	230.0	12	
284 20 02 00	5 08 59 00	42 12 29	-123 20 22	229.8	12	
284 20 02 10	5 08 59 10	41 45 31	-122 42 28	229.7	10	
284 20 02 20	5 08 59 20	41 18 21	-122 05 04	229.6		
284 20 02 30	5 08 59 30	40 50 57	-121 28 12	229.5		
284 20 02 40	5 08 59 40	40 23 20	-120 51 52	229.3	10	
284 20 02 50	5 08 59 50	39 55 31	-120 16 02	229.2		
284 20 03 00	5 09 00 00	39 27 29	-119 40 44	229.1	8	
284 20 03 10	5 09 00 10	38 59 14	-119 05 57	228.9	5	
284 20 03 20	5 09 00 20	38 30 46	-118 31 41	228.8		Interference
284 20 03 30	5 09 00 30	38 02 06	-117 57 57	228.7		Interference
284 20 03 40	5 09 00 40	37 33 12	-117 24 44	228.5	3	Interference
284 20 03 50	5 09 00 50	37 04 06	-116 52 02	228.4		Interference
284 20 04 00	5 09 01 00	36 34 47	-116 19 51	228.3		Interference
284 20 04 10	5 09 01 10	36 05 18	-115 48 01	228.1		Interference
284 20 04 20	5 09 01 20	35 35 41	-115 16 33	228.0		Interference
284 20 04 30	5 09 01 30	35 05 55	-114 45 29	227.9	3	
284 20 04 40	5 09 01 40	34 36 00	-114 14 47	227.7		Interference
284 20 04 50	5 09 01 50	34 05 56	-113 44 29	227.6	3	Interference
284 20 05 00	5 09 02 00	33 35 44	-113 14 34	227.5		Interference
284 20 05 10	5 09 02 10	33 05 22	-112 45 02	227.3		
284 20 05 20	5 09 02 20	32 34 51	-112 15 53	227.2	3	Interference
284 20 05 30	5 09 02 30	32 04 12	-111 47 07	227.1	6	Interference
284 20 05 40	5 09 02 40	31 33 24	-111 18 44	226.9		
284 20 05 50	5 09 02 50	31 02 26	-110 50 44	226.8		Interference
284 20 06 00	5 09 03 00	30 31 20	-110 23 07	226.7		
284 20 06 10	5 09 03 10	30 00 10	-109 55 41	226.6		
284 20 06 20	5 09 03 20	29 28 52	-109 28 34	226.4	6	
284 20 06 30	5 09 03 30	28 57 27	-109 01 46	226.3		
284 20 06 40	5 09 03 40	28 25 54	-108 35 18	226.2		
284 20 06 50	5 09 03 50	27 54 14	-108 09 09	226.1		
284 20 07 00	5 09 04 00	27 22 26	-107 43 20	225.9	7	
284 20 07 10	5 09 04 10	26 50 35	-107 17 40	225.8		
284 20 07 20	5 09 04 20	26 18 38	-106 52 16	225.7	6	
284 20 07 30	5 09 04 30	25 46 34	-106 27 08	225.6		
284 20 07 40	5 09 04 40	25 14 25	-106 02 17	225.5		
284 20 07 50	5 09 04 50	24 42 09	-105 37 43	225.4	5	
284 20 08 00	5 09 05 00	24 09 46	-105 13 25	225.2		

Datatake: 88.2
Attitude: Blue — Look Angle: 55.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 57.9 — Pitch: 0
Area: BANGLDSH/INDIA/CHIN — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 21 04 00	5 10 01 00	15 41 24	85 45 53	223.3		
284 21 04 10	5 10 01 10	16 15 22	86 06 38	223.4		
284 21 04 20	5 10 01 20	16 49 18	86 27 32	223.5		
284 21 04 30	5 10 01 30	17 23 11	86 48 33	223.6	-10	
284 21 04 40	5 10 01 40	17 57 02	87 09 43	223.6		
284 21 04 50	5 10 01 50	18 30 50	87 31 00	223.7		

284 21 05 00	5 10 02 00	19 04 35	87 52 26	223.8		
284 21 05 10	5 10 02 10	19 38 18	88 14 00	223.9	10	
284 21 05 20	5 10 02 20	20 11 58	88 35 42	224.0		
284 21 05 30	5 10 02 30	20 45 36	88 57 32	224.1		
284 21 05 40	5 10 02 40	21 19 11	89 19 30	224.2	3	
284 21 05 50	5 10 02 50	21 52 43	89 41 37	224.2		
284 21 06 00	5 10 03 00	22 26 13	90 03 51	224.3		
284 21 06 10	5 10 03 10	22 59 39	90 26 24	224.4	2	
284 21 06 20	5 10 03 20	23 33 02	90 49 07	224.6		
284 21 06 30	5 10 03 30	24 06 22	91 12 02	224.7	0	
284 21 06 40	5 10 03 40	24 39 39	91 35 07	224.8		
284 21 06 50	5 10 03 50	25 12 53	91 58 24	224.9	3	
284 21 07 00	5 10 04 00	25 46 05	92 21 51	225.0	-10	

Datatake: 88.4
Attitude: Blue — Look Angle: 51.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 53.6 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 17 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
284 21 56 30	5 10 53 30	-38 01 02	-79 09 24	231.8		
284 21 56 40	5 10 53 40	-38 28 46	-78 34 27	231.9		
284 21 56 50	5 10 53 50	-38 56 15	-77 58 59	232.1	-10	
284 21 57 00	5 10 54 00	-39 23 31	-77 22 59	232.2		
284 21 57 10	5 10 54 10	-39 50 32	-76 46 29	232.4		
284 21 57 20	5 10 54 20	-40 17 19	-76 09 27	232.6		
284 21 57 30	5 10 54 30	-40 43 53	-75 31 55	232.7		
284 21 57 40	5 10 54 40	-41 10 12	-74 53 51	232.9		
284 21 57 50	5 10 54 50	-41 36 17	-74 15 16	233.0	-10	
284 21 58 00	5 10 55 00	-42 02 08	-73 36 10	233.1	3	
284 21 58 10	5 10 55 10	-42 27 36	-72 56 19	233.3	4	
284 21 58 20	5 10 55 20	-42 52 47	-72 15 53	233.4		
284 21 58 30	5 10 55 30	-43 17 42	-71 34 53	233.6	-10	
284 21 58 40	5 10 55 40	-43 42 20	-70 53 17	233.7		
284 21 58 50	5 10 55 50	-44 06 42	-70 11 06	233.9		
284 21 59 00	5 10 56 00	-44 30 47	-69 28 21	234.0	-10	

Datatake: 90.3
Attitude: Blue — Look Angle: 25.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 26.0 — Pitch: 0
Area: PACIFIC — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 01 02 00	5 13 59 00	-55 03 55	-87 36 57	237.0		
285 01 02 10	5 13 59 10	-55 13 08	-86 30 29	237.1		
285 01 02 20	5 13 59 20	-55 21 39	-85 23 41	237.1	12	
285 01 02 30	5 13 59 30	-55 29 29	-84 16 35	237.2		
285 01 02 40	5 13 59 40	-55 36 37	-83 09 09	237.2	10	
285 01 02 50	5 13 59 50	-55 43 03	-82 01 25	237.2		
285 01 03 00	5 14 00 00	-55 48 48	-80 53 21	237.3		
285 01 03 10	5 14 00 10	-55 53 52	-79 44 57	237.3	10	
285 01 03 20	5 14 00 20	-55 58 13	-78 36 15	237.3		
285 01 03 30	5 14 00 30	-56 01 54	-77 27 14	237.3		
285 01 03 40	5 14 00 40	-56 04 52	-76 17 53	237.3		
285 01 03 50	5 14 00 50	-56 07 09	-75 08 13	237.3	10	
285 01 04 00	5 14 01 00	-56 08 45	-73 58 14	237.3	0	

Datatake: 91.2
Attitude: Blue — Look Angle: 29.0 — Roll: 180
Bits/sample: 3 — Incidence Angle: 30.1 — Pitch: 0
Area: LIBYA/EGYPT — Average Swath Width: 33 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 01 33 00	5 14 30 00	22 26 52	24 39 28	224.3	2	
285 01 33 10	5 14 30 10	22 59 56	25 02 29	224.4		
285 01 33 20	5 14 30 20	23 32 56	25 25 44	224.5		
285 01 33 30	5 14 30 30	24 05 50	25 49 14	224.6		
285 01 33 40	5 14 30 40	24 38 40	26 12 58	224.7		
285 01 33 50	5 14 30 50	25 11 25	26 36 56	224.8	1	
285 01 34 00	5 14 31 00	25 44 05	27 01 09	224.9	0	
285 01 34 10	5 14 31 10	26 16 40	27 25 36	225.1		
285 01 34 20	5 14 31 20	26 49 11	27 50 17	225.2	2	
285 01 34 30	5 14 31 30	27 21 37	28 15 13	225.3	2	
285 01 34 40	5 14 31 40	27 53 58	28 40 23	225.4		
285 01 34 50	5 14 31 50	28 26 14	29 05 48	225.6		
285 01 35 00	5 14 32 00	28 58 26	29 31 27	225.7		

Datatake: 91.5
Attitude: Blue — Look Angle: 25.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 26.0 — Pitch: 0
Area: PACIFIC — Average Swath Width: 33 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 02 34 00	5 15 31 00	-56 03 01	-88 53 26	237.3	10	
285 02 34 10	5 15 31 10	-55 59 05	-87 44 02	237.2		
285 02 34 20	5 15 31 20	-55 54 29	-86 35 05	237.2	12	
285 02 34 30	5 15 31 30	-55 49 13	-85 26 35	237.2		
285 02 34 40	5 15 31 40	-55 43 17	-84 18 32	237.1	12	
285 02 34 50	5 15 31 50	-55 36 40	-83 10 57	237.1		
285 02 35 00	5 15 32 00	-55 29 24	-82 03 49	237.0		
285 02 35 10	5 15 32 10	-55 21 27	-80 57 08	237.0		
285 02 35 20	5 15 32 20	-55 12 50	-79 50 54	236.9	10	
285 02 35 30	5 15 32 30	-55 03 33	-78 45 07	236.9		
285 02 35 40	5 15 32 40	-54 53 36	-77 39 48	236.8		
285 02 35 50	5 15 32 50	-54 42 58	-76 34 55	236.8	8	
285 02 36 00	5 15 33 00	-54 31 41	-75 30 30	236.7	0	

Datatake: 92.8
Attitude: Blue — Look Angle: 31.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 32.3 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 21 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 04 09 00	5 17 06 00	-46 58 50	-75 44 26	234.0	7	
285 04 09 10	5 17 06 10	-46 35 20	-74 59 15	233.9	12	
285 04 09 20	5 17 06 20	-46 11 31	-74 14 43	233.7		
285 04 09 30	5 17 06 30	-45 47 25	-73 30 49	233.6	10	
285 04 09 40	5 17 06 40	-45 23 00	-72 47 33	233.4		
285 04 09 50	5 17 06 50	-44 58 18	-72 04 55	233.3		
285 04 10 00	5 17 07 00	-44 33 18	-71 22 56	233.1	8	
285 04 10 10	5 17 07 10	-44 07 59	-70 41 35	233.0	5	
285 04 10 20	5 17 07 20	-43 42 23	-70 00 52	232.8	3	
285 04 10 30	5 17 07 30	-43 16 29	-69 20 48	232.7		
285 04 10 40	5 17 07 40	-42 50 17	-68 41 21	232.5	4	
285 04 10 50	5 17 07 50	-42 23 47	-68 02 33	232.4		
285 04 11 00	5 17 08 00	-41 56 59	-67 24 24	232.2	4	

Datatake: 93.2
Attitude: Blue — Look Angle: 18.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 18.7 — Pitch: 0
Area: FRANCE/GERMANY — Average Swath Width: 33 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 04 38 00	5 17 35 00	44 17 57	1 18 37	229.8	10	
285 04 38 10	5 17 35 10	44 44 40	1 58 36	230.0	12	
285 04 38 20	5 17 35 20	45 11 04	2 39 19	230.1		
285 04 38 30	5 17 35 30	45 37 09	3 20 45	230.2	12	
285 04 38 40	5 17 35 40	46 02 56	4 02 53	230.4		
285 04 38 50	5 17 35 50	46 28 25	4 45 45	230.5		
285 04 39 00	5 17 36 00	46 53 35	5 29 20	230.6	12	
285 04 39 10	5 17 36 10	47 18 26	6 13 38	230.7		
285 04 39 20	5 17 36 20	47 42 58	6 58 39	230.9	10	
285 04 39 30	5 17 36 30	48 07 12	7 44 22	231.0		
285 04 39 40	5 17 36 40	48 31 08	8 30 49	231.1		
285 04 39 50	5 17 36 50	48 54 44	9 17 59	231.2	12	
285 04 40 00	5 17 37 00	49 18 02	10 05 53	231.4		

Datatake: 94.2
Attitude: Blue — Look Angle: 26.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 27.0 — Pitch: 0
Area: N ATLANTIC — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 06 07 00	5 19 04 00	44 48 32	-21 09 04	230.0	0	
285 06 07 10	5 19 04 10	45 15 14	-20 28 41	230.1		
285 06 07 20	5 19 04 20	45 41 38	-19 47 34	230.2	6	
285 06 07 30	5 19 04 30	46 07 43	-19 05 42	230.4		
285 06 07 40	5 19 04 40	46 33 29	-18 23 06	230.5		
285 06 07 50	5 19 04 50	46 58 56	-17 39 46	230.6	6	
285 06 08 00	5 19 05 00	47 24 04	-16 55 41	230.8		
285 06 08 10	5 19 05 10	47 48 54	-16 10 52	230.9		
285 06 08 20	5 19 05 20	48 13 24	-15 25 19	231.0	5	
285 06 08 30	5 19 05 30	48 37 36	-14 39 01	231.1		
285 06 08 40	5 19 05 40	49 01 29	-13 51 59	231.2		

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 06 08 50	5 19 05 50	49 25 03	-13 04 12	231.4	6	
285 06 09 00	5 19 06 00	49 48 19	-12 15 42	231.5		

Datatake: 94.4
Attitude: Blue | Look Angle: 40.0 | Roll: 180
Bits/sample: 3 | Incidence Angle: 41.7 | Pitch: 0
Area: INDONESIA | Average Swath Width: 48 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 06 37 00	5 19 34 00	3 07 32	113 28 09	223.4	4	
285 06 37 10	5 19 34 10	2 32 33	113 48 07	223.4	6	
285 06 37 20	5 19 34 20	1 57 41	114 08 03	223.4		
285 06 37 30	5 19 34 30	1 22 54	114 27 56	223.4	6	
285 06 37 40	5 19 34 40	0 48 13	114 47 46	223.4		
285 06 37 50	5 19 34 50	0 13 37	115 07 34	223.4	8	
285 06 38 00	5 19 35 00	-0 20 51	115 27 20	223.5		
285 06 38 10	5 19 35 10	-0 55 15	115 47 03	223.5		
285 06 38 20	5 19 35 20	-1 29 33	116 06 43	223.5	6	
285 06 38 30	5 19 35 30	-2 03 45	116 26 21	223.6		
285 06 38 40	5 19 35 40	-2 37 51	116 45 56	223.6	0	
285 06 38 50	5 19 35 50	-3 11 52	117 05 29	223.6		
285 06 39 00	5 19 36 00	-3 45 46	117 24 59	223.7		
285 06 39 10	5 19 36 10	-4 19 52	117 44 43	223.7	0	
285 06 39 20	5 19 36 20	-4 53 56	118 04 29	223.8		
285 06 39 30	5 19 36 30	-5 27 59	118 24 17	223.8		
285 06 39 40	5 19 36 40	-6 02 01	118 44 07	223.9		
285 06 39 50	5 19 36 50	-6 36 01	119 04 00	224.0	0	
285 06 40 00	5 19 37 00	-7 10 01	119 23 54	224.0		

Datatake: 96.2
Attitude: GGG | Look Angle: 28.0 | Roll: 279
Bits/sample: 4 | Incidence Angle: 29.1 | Pitch: 180
Area: EASTERN US | Average Swath Width: 30 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 08 59 00	5 21 56 00	27 23 36	-84 35 46	225.2	3	
285 08 59 10	5 21 56 10	27 55 58	-84 10 39	225.3		
285 08 59 20	5 21 56 20	28 28 13	-83 45 13	225.5		
285 08 59 30	5 21 56 30	29 00 22	-83 19 28	225.6	10	
285 08 59 40	5 21 56 40	29 32 24	-82 53 25	225.7		
285 08 59 50	5 21 56 50	30 04 20	-82 27 03	225.8	12	
285 09 00 00	5 21 57 00	30 36 09	-82 00 22	226.0		
285 09 00 10	5 21 57 10	31 07 52	-81 33 22	226.1		
285 09 00 20	5 21 57 20	31 39 28	-81 06 04	226.2	8	
285 09 00 30	5 21 57 30	32 10 58	-80 38 27	226.4		
285 09 00 40	5 21 57 40	32 42 21	-80 10 32	226.5		
285 09 00 50	5 21 57 50	33 13 38	-79 42 17	226.6	12	
285 09 01 00	5 21 58 00	33 44 48	-79 13 44	226.8	0	Noise

Datatake: 96.21
Attitude: GGG | Look Angle: 21.0 | Roll: 279
Bits/sample: 6 | Incidence Angle: 21.8 | Pitch: 180
Area: ATLANTIC | Average Swath Width: 25 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 09 01 00	5 21 58 00	33 34 52	-78 58 26	226.8	12	
285 09 01 10	5 21 58 10	34 05 49	-78 29 27	226.9		
285 09 01 20	5 21 58 20	34 36 37	-78 00 02	227.0		
285 09 01 30	5 21 58 30	35 07 15	-77 30 12	227.2		
285 09 01 40	5 21 58 40	35 37 44	-76 59 56	227.3		
285 09 01 50	5 21 58 50	36 08 03	-76 29 14	227.4	12	
285 09 02 00	5 21 59 00	36 38 12	-75 58 06	227.6		
285 09 02 10	5 21 59 10	37 08 12	-75 26 33	227.7		
285 09 02 20	5 21 59 20	37 38 02	-74 54 34	227.8	12	
285 09 02 30	5 21 59 30	38 07 43	-74 22 09	228.0		
285 09 02 40	5 21 59 40	38 37 14	-73 49 18	228.1		
285 09 02 50	5 21 59 50	39 06 35	-73 16 02	228.3	10	
285 09 03 00	5 22 00 00	39 35 47	-72 42 20	228.4		
285 09 03 10	5 22 00 10	40 04 42	-72 07 56	228.5	2	
285 09 03 20	5 22 00 20	40 33 27	-71 33 02	228.7	10	
285 09 03 30	5 22 00 30	41 01 59	-70 57 38	228.8		
285 09 03 40	5 22 00 40	41 30 21	-70 21 43	228.9	10	
285 09 03 50	5 22 00 50	41 58 30	-69 45 17	229.1		
285 09 04 00	5 22 01 00	42 26 29	-69 08 22	229.2		

Datatake: 96.4
Attitude: Red | Look Angle: 56.0 | Roll: 0
Bits/sample: 3 | Incidence Angle: 59.0 | Pitch: 180
Area: SAUDI ARABIA | Average Swath Width: 40 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 09 28 00	5 22 25 00	23 20 14	49 37 16	225.3		
285 09 28 10	5 22 25 10	22 48 13	50 01 40	225.2	0	
285 09 28 20	5 22 25 20	22 16 06	50 25 53	225.1		
285 09 28 30	5 22 25 30	21 43 54	50 49 53	225.0		
285 09 28 40	5 22 25 40	21 11 38	51 13 42	224.9		
285 09 28 50	5 22 25 50	20 39 17	51 37 18	224.8		
285 09 29 00	5 22 26 00	20 06 50	52 00 43	224.7	0	
285 09 29 10	5 22 26 10	19 34 19	52 23 56	224.6		
285 09 29 20	5 22 26 20	19 01 43	52 46 57	224.5		
285 09 29 30	5 22 26 30	18 29 02	53 09 46	224.4		
285 09 29 40	5 22 26 40	17 56 16	53 32 24	224.3	0	Ambiguity
285 09 29 50	5 22 26 50	17 23 25	53 54 49	224.2	1	
285 09 30 00	5 22 27 00	16 50 29	54 17 03	224.1		

Datatake: 97.2
Attitude: Yellow | Look Angle: 30.0 | Roll: 90
Bits/sample: 5 | Incidence Angle: 31.2 | Pitch: 0
Area: MIDWEST US | Average Swath Width: 28 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 10 32 00	5 23 29 00	38 35 18	-93 02 31	228.4	11	
285 10 32 10	5 23 29 10	39 03 13	-92 26 47	228.6		
285 10 32 20	5 23 29 20	39 31 08	-91 51 04	228.7	9	
285 10 32 30	5 23 29 30	39 59 02	-91 15 21	228.9		
285 10 32 40	5 23 29 40	40 26 57	-90 39 37	229.0		
285 10 32 50	5 23 29 50	40 54 52	-90 03 54	229.1	10	
285 10 33 00	5 23 30 00	41 22 46	-89 28 11	229.3	0	

Datatake: 97.4
Attitude: Blue | Look Angle: 40.0 | Roll: 180
Bits/sample: 5 | Incidence Angle: 41.7 | Pitch: 0
Area: FRANCE/ITALY | Average Swath Width: 29 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 10 48 00	5 23 45 00	51 45 35	0 01 56	231.8	4	
285 10 48 10	5 23 45 10	51 23 17	0 53 50	231.7	2	
285 10 48 20	5 23 45 20	51 00 38	1 44 55	231.6	2	
285 10 48 30	5 23 45 30	50 37 39	2 35 12	231.5	4	
285 10 48 40	5 23 45 40	50 14 18	3 24 41	231.4		Ambiguity
285 10 48 50	5 23 45 50	49 50 37	4 13 21	231.2		Ambiguity
285 10 49 00	5 23 46 00	49 26 35	5 01 13	231.1	4	
285 10 49 10	5 23 46 10	49 02 11	5 48 16	231.0		
285 10 49 20	5 23 46 20	48 37 27	6 34 31	230.9	4	
285 10 49 30	5 23 46 30	48 12 23	7 19 58	230.8		
285 10 49 40	5 23 46 40	47 46 57	8 04 36	230.7		
285 10 49 50	5 23 46 50	47 21 10	8 48 26	230.6		
285 10 50 00	5 23 47 00	46 55 03	9 31 28	230.4	5	

Datatake: 97.5
Attitude: Blue | Look Angle: 50.0 | Roll: 180
Bits/sample: 4 | Incidence Angle: 52.4 | Pitch: 0
Area: EGYPT/SUDAN | Average Swath Width: 26 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 10 57 00	5 23 54 00	26 07 21	32 18 24	225.1	2	
285 10 57 10	5 23 54 10	25 34 17	32 42 10	225.0		
285 10 57 20	5 23 54 20	25 01 10	33 05 46	224.9		
285 10 57 30	5 23 54 30	24 28 00	33 29 10	224.8	0	
285 10 57 40	5 23 54 40	23 54 47	33 52 23	224.7		
285 10 57 50	5 23 54 50	23 21 31	34 15 25	224.6	1	
285 10 58 00	5 23 55 00	22 48 11	34 38 16	224.5		
285 10 58 10	5 23 55 10	22 14 48	35 00 56	224.4	2	
285 10 58 20	5 23 55 20	21 41 23	35 23 24	224.3		
285 10 58 30	5 23 55 30	21 07 54	35 45 41	224.2		
285 10 58 40	5 23 55 40	20 34 22	36 07 47	224.1		
285 10 58 50	5 23 55 50	20 00 47	36 29 42	224.0	2	
285 10 59 00	5 23 56 00	19 27 08	36 51 25	223.9		

Table 14-1 (contd)

Datatake: 98.2
Attitude: Red — Look Angle: 42.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 43.8 — Pitch: 180
Area: WESTERN-MIDWEST US — Average Swath Width: 29 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 11 58 50	6 00 55 50	32 04 15	-121 28 16	226.8	0	
285 11 59 00	6 00 56 00	32 34 39	-120 58 55	227.0		
285 11 59 10	6 00 56 10	33 04 56	-120 29 11	227.1		
285 11 59 20	6 00 56 20	33 35 06	-119 59 02	227.2		
285 11 59 30	6 00 56 30	34 05 08	-119 28 29	227.4		
285 11 59 40	6 00 56 40	34 35 03	-118 57 33	227.5	5	
285 11 59 50	6 00 56 50	35 04 50	-118 26 12	227.6	3	
285 12 00 00	6 00 57 00	35 34 31	-117 54 27	227.8		
285 12 00 10	6 00 57 10	36 03 42	-117 22 25	227.9	3	
285 12 00 20	6 00 57 20	36 32 40	-116 50 01	228.1		
285 12 00 30	6 00 57 30	37 01 24	-116 17 15	228.2		
285 12 00 40	6 00 57 40	37 29 54	-115 44 07	228.3	2	
285 12 00 50	6 00 57 50	37 58 11	-115 10 36	228.5	2	
285 12 01 00	6 00 58 00	38 26 15	-114 36 44	228.6		

Datatake: 98.3
Attitude: Red — Look Angle: 25.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 26.0 — Pitch: 180
Area: NORTH ATLANTIC — Average Swath Width: 33 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 12 18 00	6 01 15 00	47 02 59	-19 22 47	231.1		
285 12 18 10	6 01 15 10	46 38 27	-18 39 21	231.0	7	
285 12 18 20	6 01 15 20	46 13 55	-17 55 54	230.8		

Datatake: 99.2
Attitude: Red — Look Angle: 28.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 29.1 — Pitch: 180
Area: HAWAII — Average Swath Width: 32 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 13 23 00	6 02 20 00	17 24 17	-156 38 13	223.5	4	
285 13 23 10	6 02 20 10	17 57 35	-156 16 21	223.6		
285 13 23 20	6 02 20 20	18 30 50	-155 54 18	223.6		
285 13 23 30	6 02 20 30	19 04 00	-155 32 04	223.7		
285 13 23 40	6 02 20 40	19 37 06	-155 09 39	223.8		
285 13 23 50	6 02 20 50	20 10 07	-154 47 02	223.9		
285 13 24 00	6 02 21 00	20 43 05	-154 24 14	224.0		
285 13 24 10	6 02 21 10	21 15 58	-154 01 14	224.1		
285 13 24 20	6 02 21 20	21 48 48	-153 38 04	224.2		

Datatake: 104.2
Attitude: Blue — Look Angle: 44.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 45.9 — Pitch: 0
Area: BANGLDSH/INDIA/CHIN — Average Swath Width: 26 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 20 47 00	6 09 44 00	17 30 13	86 48 51	223.3		
285 20 47 10	6 09 44 10	18 03 56	87 10 14	223.3		
285 20 47 20	6 09 44 20	18 37 36	87 31 46	223.4		
285 20 47 30	6 09 44 30	19 11 13	87 53 28	223.5		
285 20 47 40	6 09 44 40	19 44 46	88 15 20	223.6	0	
285 20 47 50	6 09 44 50	20 18 16	88 37 21	223.7		
285 20 48 00	6 09 45 00	20 51 42	88 59 31	223.8		
285 20 48 10	6 09 45 10	21 25 05	89 21 51	223.9		
285 20 48 20	6 09 45 20	21 58 24	89 44 20	224.0	10	
285 20 48 30	6 09 45 30	22 31 40	90 06 59	224.1	8	
285 20 48 40	6 09 45 40	23 04 53	90 29 47	224.2		
285 20 48 50	6 09 45 50	23 38 02	90 52 44	224.3		
285 20 49 00	6 09 46 00	24 11 08	91 15 51	224.4	3	
285 20 49 10	6 09 46 10	24 44 09	91 39 22	224.5	10	
285 20 49 20	6 09 46 20	25 17 07	92 03 07	224.6		
285 20 49 30	6 09 46 30	25 50 01	92 27 05	224.7	9	
285 20 49 40	6 09 46 40	26 22 52	92 51 16	224.8		
285 20 49 50	6 09 46 50	26 55 38	93 15 41	225.0		
285 20 50 00	6 09 47 00	27 28 21	93 40 20	225.1		

Datatake: 104.4
Attitude: Blue — Look Angle: 56.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 59.1 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 22 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 21 38 50	6 10 35 50	-37 43 39	-79 46 28	231.3	0	
285 21 39 00	6 10 36 00	-38 11 07	-79 11 20	231.4		
285 21 39 10	6 10 36 10	-38 38 22	-78 35 43	231.6	0	
285 21 39 20	6 10 36 20	-39 05 23	-77 59 36	231.7		
285 21 39 30	6 10 36 30	-39 32 10	-77 23 00	231.9		
285 21 39 40	6 10 36 40	-39 58 44	-76 45 54	232.0	0	
285 21 39 50	6 10 36 50	-40 25 04	-76 08 19	232.2		
285 21 40 00	6 10 37 00	-40 51 11	-75 30 15	232.3	0	
285 21 40 10	6 10 37 10	-41 17 01	-74 51 34	232.5	0	
285 21 40 20	6 10 37 20	-41 42 34	-74 12 18	232.6		
285 21 40 30	6 10 37 30	-42 07 48	-73 32 24	232.8	2	
285 21 40 40	6 10 37 40	-42 32 44	-72 51 55	232.9	0	
285 21 40 50	6 10 37 50	-42 57 21	-72 10 49	233.1	3	
285 21 41 00	6 10 38 00	-43 21 40	-71 29 07	233.2		
285 21 41 10	6 10 38 10	-43 45 41	-70 46 49	233.4	3	
285 21 41 20	6 10 38 20	-44 09 23	-70 03 55	233.5		
285 21 41 30	6 10 38 30	-44 32 47	-69 20 24	233.6	0	
285 21 41 40	6 10 38 40	-44 55 52	-68 36 17	233.8		
285 21 41 50	6 10 38 50	-45 18 39	-67 51 33	233.9		
285 21 42 00	6 10 39 00	-45 41 08	-67 06 14	234.0		
285 21 42 10	6 10 39 10	-46 03 06	-66 20 08	234.1		
285 21 42 20	6 10 39 20	-46 24 42	-65 33 24	234.3		
285 21 42 30	6 10 39 30	-46 45 55	-64 46 01	234.4		
285 21 42 40	6 10 39 40	-47 06 47	-63 57 59	234.5	0	
285 21 42 50	6 10 39 50	-47 27 16	-63 09 18	234.6		
285 21 43 00	6 10 40 00	-47 47 24	-62 19 59	234.7		

Datatake: 104.5
Attitude: Blue — Look Angle: 25.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 26.0 — Pitch: 0
Area: SOUTH ATLANTIC — Average Swath Width: 27 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 21 48 00	6 10 45 00	-56 02 39	-33 33 44	236.8	8	
285 21 48 10	6 10 45 10	-56 05 37	-32 23 55	236.8		
285 21 48 20	6 10 45 20	-56 07 51	-31 14 10	236.8	11	
285 21 48 30	6 10 45 30	-56 09 24	-30 04 29	236.8		
285 21 48 40	6 10 45 40	-56 10 13	-28 54 53	236.8		
285 21 48 50	6 10 45 50	-56 10 19	-27 45 20	236.8	12	
285 21 49 00	6 10 46 00	-56 09 43	-26 35 53	236.8		
285 21 49 10	6 10 46 10	-56 08 25	-25 26 29	236.8		
285 21 49 20	6 10 46 20	-56 06 23	-24 17 10	236.8		
285 21 49 30	6 10 46 30	-56 03 39	-23 07 56	236.7		
285 21 49 40	6 10 46 40	-56 00 12	-21 58 45	236.7		
285 21 49 50	6 10 46 50	-55 56 02	-20 49 39	236.7	10	
285 21 50 00	6 10 47 00	-55 51 09	-19 40 37	236.7		
285 21 50 10	6 10 47 10	-55 45 38	-18 32 33	236.6		
285 21 50 20	6 10 47 20	-55 39 26	-17 24 48	236.6	8	
285 21 50 30	6 10 47 30	-55 32 32	-16 17 22	236.6		
285 21 50 40	6 10 47 40	-55 24 56	-15 10 16	236.5	5	
285 21 50 50	6 10 47 50	-55 16 39	-14 03 29	236.5		
285 21 51 00	6 10 48 00	-55 07 41	-12 57 02	236.4		Noise
285 21 51 10	6 10 48 10	-54 58 10	-11 51 35	236.4	4	Noise
285 21 51 20	6 10 48 20	-54 48 00	-10 46 39	236.3		
285 21 51 30	6 10 48 30	-54 37 11	-9 42 15	236.3	0	
285 21 51 40	6 10 48 40	-54 25 43	-8 38 22	236.2	2	
285 21 51 50	6 10 48 50	-54 13 36	-7 34 59	236.1	3	
285 21 52 00	6 10 49 00	-54 00 50	-6 32 08	236.1		

Datatake: 104.6
Attitude: Blue — Look Angle: 40.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 41.7 — Pitch: 0
Area: S INDIAN OCEAN — Average Swath Width: 19 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 21 59 50	6 10 56 50	-35 37 37	28 34 55	229.9		
285 22 00 00	6 10 57 00	-35 08 16	29 06 23	229.7		
285 22 00 10	6 10 57 10	-34 38 47	29 37 24	229.6		
285 22 00 20	6 10 57 20	-34 09 08	30 07 58	229.4		
285 22 00 30	6 10 57 30	-33 39 20	30 38 07	229.2		
285 22 00 40	6 10 57 40	-33 09 23	31 07 48	229.1	0	
285 22 00 50	6 10 57 50	-32 39 17	31 37 04	228.9		

Table 14-1 (contd)

285 22 01 00	6 10 58 00	-32 09 02	32 05 53	228.7	0	
285 22 01 10	6 10 58 10	-31 38 35	32 34 36	228.6		
285 22 01 20	6 10 58 20	-31 07 58	33 02 58	228.4		
285 22 01 30	6 10 58 30	-30 37 11	33 30 59	228.3	0	
285 22 01 40	6 10 58 40	-30 06 15	33 58 39	228.1		
285 22 01 50	6 10 58 50	-29 35 08	34 25 59	227.9	0	
285 22 02 00	6 10 59 00	-29 03 52	34 52 58	227.8		
285 22 02 10	6 10 59 10	-28 32 35	35 19 46	227.6		
285 22 02 20	6 10 59 20	-28 01 11	35 46 16	227.4		
285 22 02 30	6 10 59 30	-27 29 40	36 12 29	227.3		
285 22 02 40	6 10 59 40	-26 58 01	36 38 24	227.1	0	
285 22 02 50	6 10 59 50	-26 26 15	37 04 01	227.0		
285 22 03 00	6 11 00 00	-25 54 22	37 29 20	226.8	0	

Datatake: 105.2
Attitude: Blue | Look Angle: 40.0 | Roll: 180
Bits/sample: 3 | Incidence Angle: 41.7 | Pitch: 0
Area: INDIA/PAKISTAN | Average Swath Width: 48 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 22 17 00	6 11 14 00	21 05 40	66 52 50	223.8	0	
285 22 17 10	6 11 14 10	21 39 00	67 15 13	223.9		
285 22 17 20	6 11 14 20	22 12 16	67 37 50	224.0		
285 22 17 30	6 11 14 30	22 45 28	68 00 39	224.1		
285 22 17 40	6 11 14 40	23 18 36	68 23 42	224.2	1	
285 22 17 50	6 11 14 50	23 51 40	68 46 58	224.3	0	
285 22 18 00	6 11 15 00	24 24 40	69 10 27	224.4	2	
285 22 18 10	6 11 15 10	24 57 37	69 34 10	224.5	2	
285 22 18 20	6 11 15 20	25 30 29	69 58 05	224.6		Interference
285 22 18 30	6 11 15 30	26 03 17	70 22 14	224.7	1	
285 22 18 40	6 11 15 40	26 36 01	70 46 35	224.8		
285 22 18 50	6 11 15 50	27 08 41	71 11 10	225.0	1	
285 22 19 00	6 11 16 00	27 41 17	71 35 58	225.1		
285 22 19 10	6 11 16 10	28 13 45	72 01 05	225.2	0	
285 22 19 20	6 11 16 20	28 46 06	72 26 26	225.3		
285 22 19 30	6 11 16 30	29 18 23	72 52 02	225.4	1	
285 22 19 40	6 11 16 40	29 50 33	73 17 52	225.6		
285 22 19 50	6 11 16 50	30 22 39	73 43 57	225.7	2	
285 22 20 00	6 11 17 00	30 54 39	74 10 17	225.8	2	
285 22 20 10	6 11 17 10	31 26 31	74 37 07	226.0	3	
285 22 20 20	6 11 17 20	31 58 17	75 04 17	226.1	3	
285 22 20 30	6 11 17 30	32 29 57	75 31 46	226.2	8	
285 22 20 40	6 11 17 40	33 01 31	75 59 34	226.4		
285 22 20 50	6 11 17 50	33 32 58	76 27 42	226.5	9	

Datatake: 105.4
Attitude: Blue | Look Angle: 34.0 | Roll: 180
Bits/sample: 3 | Incidence Angle: 35.4 | Pitch: 0
Area: SAUDI ARABIA | Average Swath Width: 38 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
285 23 44 00	6 12 41 00	14 32 06	40 34 09	223.0		
285 23 44 10	6 12 41 10	15 05 53	40 54 56	223.1		
285 23 44 20	6 12 41 20	15 39 38	41 15 52	223.2	1	
285 23 44 30	6 12 41 30	16 13 20	41 36 57	223.2		
285 23 44 40	6 12 41 40	16 47 00	41 58 11	223.3		
285 23 44 50	6 12 41 50	17 20 37	42 19 34	223.4	0	
285 23 45 00	6 12 42 00	17 54 12	42 41 05	223.5	6	
285 23 45 10	6 12 42 10	18 27 44	43 02 46	223.5		
285 23 45 20	6 12 42 20	19 01 14	43 24 35	223.6	3	
285 23 45 30	6 12 42 30	19 34 41	43 46 34	223.7	2	
285 23 45 40	6 12 42 40	20 08 05	44 08 41	223.8		
285 23 45 50	6 12 42 50	20 41 27	44 30 57	223.9	0	
285 23 46 00	6 12 43 00	21 14 47	44 53 23	224.0		
285 23 46 10	6 12 43 10	21 47 59	45 16 03	224.1	0	Interference
285 23 46 20	6 12 43 20	22 21 08	45 38 53	224.2		Interference
285 23 46 30	6 12 43 30	22 54 14	46 01 54	224.3	0	
285 23 46 40	6 12 43 40	23 27 15	46 25 05	224.4	5	
285 23 46 50	6 12 43 50	24 00 13	46 48 27	224.5		
285 23 47 00	6 12 44 00	24 33 07	47 12 00	224.6	3	

Datatake: 106.3
Attitude: Blue | Look Angle: 20.0 | Roll: 180
Bits/sample: 5 | Incidence Angle: 20.8 | Pitch: 0
Area: PACIFIC | Average Swath Width: 29 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 00 44 00	6 13 41 00	-55 05 53	-90 56 59	236.6		
286 00 44 10	6 13 41 10	-55 16 20	-89 50 56	236.6		
286 00 44 20	6 13 41 20	-55 26 06	-88 44 30	236.7		
286 00 44 30	6 13 41 30	-55 35 11	-87 37 40	236.7		
286 00 44 40	6 13 41 40	-55 43 34	-86 30 27	236.8		
286 00 44 50	6 13 41 50	-55 51 16	-85 22 50	236.8		
286 00 45 00	6 13 42 00	-55 58 16	-84 14 49	236.8		
286 00 45 10	6 13 42 10	-56 04 35	-83 06 24	236.9		
286 00 45 20	6 13 42 20	-56 10 13	-81 57 36	236.9		
286 00 45 30	6 13 42 30	-56 15 09	-80 48 24	236.9		
286 00 45 40	6 13 42 40	-56 19 24	-79 38 49	236.9		
286 00 45 50	6 13 42 50	-56 22 57	-78 28 49	236.9		
286 00 46 00	6 13 43 00	-56 25 49	-77 18 26	237.0		

Datatake: 107.2
Attitude: Blue | Look Angle: 50.0 | Roll: 180
Bits/sample: 3 | Incidence Angle: 52.4 | Pitch: 0
Area: CHAD/LIBYA | Average Swath Width: 35 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 01 12 50	6 14 09 50	14 55 40	16 52 21	222.9	0	
286 01 13 00	6 14 10 00	15 29 34	17 13 07	223.0		
286 01 13 10	6 14 10 10	16 03 26	17 33 59	223.1	0	
286 01 13 20	6 14 10 20	16 37 16	17 54 56	223.1		
286 01 13 30	6 14 10 30	17 11 03	18 15 59	223.2		
286 01 13 40	6 14 10 40	17 44 49	18 37 08	223.3	0	
286 01 13 50	6 14 10 50	18 18 32	18 58 21	223.4		
286 01 14 00	6 14 11 00	18 52 12	19 19 41	223.4	0	
286 01 14 10	6 14 11 10	19 25 52	19 41 19	223.5		
286 01 14 20	6 14 11 20	19 59 29	20 03 07	223.6		
286 01 14 30	6 14 11 30	20 33 04	20 25 05	223.7		
286 01 14 40	6 14 11 40	21 06 37	20 47 12	223.8		
286 01 14 50	6 14 11 50	21 40 08	21 09 28	223.9		
286 01 15 00	6 14 12 00	22 13 37	21 31 54	224.0	0	
286 01 15 10	6 14 12 10	22 46 59	21 54 31	224.1		
286 01 15 20	6 14 12 20	23 20 16	22 17 19	224.2		
286 01 15 30	6 14 12 30	23 53 30	22 40 16	224.3		
286 01 15 40	6 14 12 40	24 26 40	23 03 24	224.4	0	
286 01 15 50	6 14 12 50	24 59 46	23 26 41	224.5		
286 01 16 00	6 14 13 00	25 32 49	23 50 09	224.6		

Datatake: 108.8
Attitude: Blue | Look Angle: 19.0 | Roll: 180
Bits/sample: 5 | Incidence Angle: 19.7 | Pitch: 0
Area: CHILE/ARGENTINA | Average Swath Width: 41 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 03 51 00	6 16 48 00	-48 06 39	-77 42 55	234.0		
286 03 51 10	6 16 48 10	-47 42 33	-76 58 06	233.8		
286 03 51 20	6 16 48 20	-47 18 28	-76 13 18	233.7		
286 03 51 30	6 16 48 30	-46 54 22	-75 28 29	233.6		
286 03 51 40	6 16 48 40	-46 30 16	-74 43 41	233.4		
286 03 51 50	6 16 48 50	-46 06 11	-73 58 52	233.3		
286 03 52 00	6 16 49 00	-45 42 05	-73 14 04	233.2		

Datatake: 110.2
Attitude: Blue | Look Angle: 21.0 | Roll: 180
Bits/sample: 5 | Incidence Angle: 21.8 | Pitch: 0
Area: N ATLANTIC | Average Swath Width: 35 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 05 51 00	6 18 48 00	48 59 55	-14 34 02	231.0	12	
286 05 51 10	6 18 48 10	49 23 15	-13 46 04	231.1		
286 05 51 20	6 18 48 20	49 46 09	-12 57 17	231.3		
286 05 51 30	6 18 48 30	50 08 38	-12 07 40	231.4	12	
286 05 51 40	6 18 48 40	50 30 41	-11 17 14	231.5		
286 05 51 50	6 18 48 50	50 52 19	-10 25 58	231.6		
286 05 52 00	6 18 49 00	51 13 30	-9 33 53	231.7		
286 05 52 10	6 18 49 10	51 34 16	-8 40 58	231.8	12	
286 05 52 20	6 18 49 20	51 54 37	-7 47 13	231.9		
286 05 52 30	6 18 49 30	52 14 31	-6 52 39	232.0	10	

286 05 52 40	6 18 49 40	52 34 00	-5 57 16	232.1		
286 05 52 50	6 18 49 50	52 53 03	-5 01 03	232.2		
286 05 53 00	6 18 50 00	53 11 41	-4 04 00	232.3	10	

Datatake: 110.4
Attitude: Blue | Look Angle: 50.0 | Roll: 180
Bits/sample: 3 | Incidence Angle: 52.4 | Pitch: 0
Area: INDONESIA | Average Swath Width: 35 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 06 18 00	6 19 15 00	7 47 31	110 22 46	222.7		
286 06 18 10	6 19 15 10	7 13 14	110 42 19	222.7		
286 06 18 20	6 19 15 20	6 38 59	111 01 53	222.7		
286 06 18 30	6 19 15 30	6 04 46	111 21 29	222.6		
286 06 18 40	6 19 15 40	5 30 34	111 41 07	222.6		
286 06 18 50	6 19 15 50	4 56 25	112 00 46	222.6		
286 06 19 00	6 19 16 00	4 22 17	112 20 26	222.6		
286 06 19 10	6 19 16 10	3 48 10	112 40 09	222.6		
286 06 19 20	6 19 16 20	3 14 06	112 59 52	222.6		
286 06 19 30	6 19 16 30	2 40 03	113 19 38	222.6		
286 06 19 40	6 19 16 40	2 06 02	113 39 25	222.7		
286 06 19 50	6 19 16 50	1 32 03	113 59 13	222.7		
286 06 20 00	6 19 17 00	0 58 05	114 19 03	222.7		
286 06 20 10	6 19 17 10	0 23 28	114 38 49	222.7		
286 06 20 20	6 19 17 20	-0 11 18	114 58 35	222.7		
286 06 20 30	6 19 17 30	-0 46 16	115 18 20	222.8		
286 06 20 40	6 19 17 40	-1 21 23	115 38 06	222.8		
286 06 20 50	6 19 17 50	-1 56 41	115 57 51	222.8		
286 06 21 00	6 19 18 00	-2 32 09	116 17 36	222.9		

Datatake: 112.4
Attitude: Yellow | Look Angle: 50.0 | Roll: 90
Bits/sample: 3 | Incidence Angle: 52.4 | Pitch: 0
Area: SAUDI ARABIA | Average Swath Width: 39 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 09 09 00	6 22 06 00	27 35 18	45 41 33	225.7	0	
286 09 09 10	6 22 06 10	27 03 58	46 07 47	225.5		
286 09 09 20	6 22 06 20	26 32 32	46 33 46	225.4		
286 09 09 30	6 22 06 30	26 00 59	46 59 30	225.3	0	
286 09 09 40	6 22 06 40	25 29 20	47 25 01	225.2		
286 09 09 50	6 22 06 50	24 57 34	47 50 17	225.1		
286 09 10 00	6 22 07 00	24 25 42	48 15 18	224.9	0	
286 09 10 10	6 22 07 10	23 53 44	48 40 05	224.8		
286 09 10 20	6 22 07 20	23 21 39	49 04 38	224.7		
286 09 10 30	6 22 07 30	22 49 28	49 28 56	224.6		
286 09 10 40	6 22 07 40	22 17 11	49 53 00	224.5		
286 09 10 50	6 22 07 50	21 44 47	50 16 50	224.4		
286 09 11 00	6 22 08 00	21 12 17	50 40 25	224.3		
286 09 11 10	6 22 08 10	20 39 46	51 03 54	224.2	0	
286 09 11 20	6 22 08 20	20 07 10	51 27 11	224.1		
286 09 11 30	6 22 08 30	19 34 30	51 50 15	224.0		
286 09 11 40	6 22 08 40	19 01 44	52 13 08	223.9	0	
286 09 11 50	6 22 08 50	18 28 54	52 35 48	223.8		
286 09 12 00	6 22 09 00	17 55 59	52 58 16	223.7		

Datatake: 113.3
Attitude: Red | Look Angle: 41.0 | Roll: 0
Bits/sample: 5 | Incidence Angle: 42.8 | Pitch: 180
Area: LIBYA/EGYPT/SUDAN | Average Swath Width: 25 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 10 36 30	6 23 33 30	32 19 14	19 55 54	226.6	2	
286 10 36 40	6 23 33 40	31 48 47	20 24 48	226.5	1	
286 10 36 50	6 23 33 50	31 18 12	20 53 22	226.4	1	
286 10 37 00	6 23 34 00	30 47 29	21 21 37	226.2		
286 10 37 10	6 23 34 10	30 16 33	21 49 30	226.1		
286 10 37 20	6 23 34 20	29 45 31	22 17 05	226.0	0	
286 10 37 30	6 23 34 30	29 14 23	22 44 23	225.8		
286 10 37 40	6 23 34 40	28 43 08	23 11 22	225.7		
286 10 37 50	6 23 34 50	28 11 46	23 38 03	225.6		
286 10 38 00	6 23 35 00	27 40 19	24 04 26	225.5		
286 10 38 10	6 23 35 10	27 08 45	24 30 31	225.3		
286 10 38 20	6 23 35 20	26 37 04	24 56 18	225.2		
286 10 38 30	6 23 35 30	26 05 17	25 21 47	225.1		
286 10 38 40	6 23 35 40	25 33 24	25 46 58	225.0		
286 10 38 50	6 23 35 50	25 01 24	26 11 51	224.8		
286 10 39 00	6 23 36 00	24 29 18	26 36 26	224.7		
286 10 39 10	6 23 36 10	23 57 04	27 00 52	224.6	1	
286 10 39 20	6 23 36 20	23 24 46	27 25 07	224.5	0	
286 10 39 30	6 23 36 30	22 52 22	27 49 10	224.4		
286 10 39 40	6 23 36 40	22 19 55	28 13 02	224.3	0	
286 10 39 50	6 23 36 50	21 47 22	28 36 41	224.2		
286 10 40 00	6 23 37 00	21 14 45	29 00 09	224.1		
286 10 40 10	6 23 37 10	20 42 04	29 23 25	224.0	0	
286 10 40 20	6 23 37 20	20 09 17	29 46 29	223.9		
286 10 40 30	6 23 37 30	19 36 27	30 09 22	223.8	0	
286 10 40 40	6 23 37 40	19 03 31	30 32 02	223.7		
286 10 40 50	6 23 37 50	18 30 31	30 54 31	223.6		
286 10 41 00	6 23 38 00	17 57 26	31 16 48	223.5		
286 10 41 10	6 23 38 10	17 24 21	31 38 58	223.4		
286 10 41 20	6 23 38 20	16 51 11	32 00 58	223.3		
286 10 41 30	6 23 38 30	16 17 58	32 22 47	223.2		
286 10 41 40	6 23 38 40	15 44 42	32 44 26	223.1		
286 10 41 50	6 23 38 50	15 11 22	33 05 54	223.1	1	
286 10 42 00	6 23 39 00	14 37 58	33 27 12	223.0		
286 10 42 10	6 23 39 10	14 04 32	33 48 30	222.9		
286 10 42 20	6 23 39 20	13 31 02	34 09 40	222.8	1	
286 10 42 30	6 23 39 30	12 57 28	34 30 42	222.8		
286 10 42 40	6 23 39 40	12 23 52	34 51 37	222.7	3	
286 10 42 50	6 23 39 50	11 50 12	35 12 24	222.6		
286 10 43 00	6 23 40 00	11 16 28	35 33 04	222.6	3	

Datatake: 115.2
Attitude: Red | Look Angle: 46.0 | Roll: 0
Bits/sample: 5 | Incidence Angle: 48.1 | Pitch: 180
Area: HAWAII | Average Swath Width: 17 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 13 05 00	7 02 02 00	16 07 18	-157 27 33	223.4		
286 13 05 10	7 02 02 10	16 40 34	-157 05 46	223.5		
286 13 05 20	7 02 02 20	17 13 45	-156 43 48	223.6		
286 13 05 30	7 02 02 30	17 46 52	-156 21 39	223.7		
286 13 05 40	7 02 02 40	18 19 54	-155 59 19	223.8		
286 13 05 50	7 02 02 50	18 52 52	-155 36 48	223.8		
286 13 06 00	7 02 03 00	19 25 45	-155 14 05	223.9	5	
286 13 06 10	7 02 03 10	19 58 33	-154 51 12	224.0		
286 13 06 20	7 02 03 20	20 31 17	-154 28 07	224.1		
286 13 06 30	7 02 03 30	21 03 56	-154 04 51	224.2		
286 13 06 40	7 02 03 40	21 36 31	-153 41 24	224.4	0	
286 13 06 50	7 02 03 50	22 09 01	-153 17 46	224.5		
286 13 07 00	7 02 04 00	22 41 27	-152 53 57	224.6	0	
286 13 07 10	7 02 04 10	23 13 46	-152 29 48	224.7		
286 13 07 20	7 02 04 20	23 46 01	-152 05 25	224.8		
286 13 07 30	7 02 04 30	24 18 10	-151 40 49	224.9		
286 13 07 40	7 02 04 40	24 50 14	-151 15 59	225.0		
286 13 07 50	7 02 04 50	25 22 13	-150 50 56	225.2	0	
286 13 08 00	7 02 05 00	25 54 07	-150 25 39	225.3		

Datatake: 115.8
Attitude: Red | Look Angle: 35.0 | Roll: 0
Bits/sample: 3 | Incidence Angle: 36.4 | Pitch: 180
Area: AUSTRALIA | Average Swath Width: 38 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 14 18 00	7 03 15 00	-36 29 58	144 25 17	228.9		
286 14 18 10	7 03 15 10	-35 59 19	144 55 38	228.7		
286 14 18 20	7 03 15 20	-35 28 33	145 25 38	228.6	1	
286 14 18 30	7 03 15 30	-34 57 40	145 55 16	228.4		
286 14 18 40	7 03 15 40	-34 26 39	146 24 33	228.3	1	
286 14 18 50	7 03 15 50	-33 55 31	146 53 29	228.1		
286 14 19 00	7 03 16 00	-33 24 16	147 22 04	228.0	1	
286 14 19 10	7 03 16 10	-32 52 53	147 50 18	227.8		
286 14 19 20	7 03 16 20	-32 21 23	148 18 10	227.6	1	
286 14 19 30	7 03 16 30	-31 49 46	148 45 41	227.5	2	
286 14 19 40	7 03 16 40	-31 18 02	149 12 51	227.3		

Datatake: 116.2
Attitude: Red | Look Angle: 48.0 | Roll: 0
Bits/sample: 3 | Incidence Angle: 50.3 | Pitch: 180
Area: CANADA | Average Swath Width: 37 km | Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 14 56 10	7 03 53 10	49 42 44	-75 54 36	232.0		
286 14 56 20	7 03 53 20	49 23 56	-75 02 30	231.9		
286 14 56 30	7 03 53 30	49 04 44	-74 11 07	231.8		

286 14 56 40	7 03 53 40	48 45 07	-73 20 25	231.7	4	
286 14 56 50	7 03 53 50	48 25 07	-72 30 24	231.6		
286 14 57 00	7 03 54 00	48 04 42	-71 41 05	231.5		
286 14 57 10	7 03 54 10	47 43 52	-70 52 28	231.4	3	
286 14 57 20	7 03 54 20	47 22 39	-70 04 32	231.3	3	
286 14 57 30	7 03 54 30	47 01 01	-69 17 18	231.2	4	
286 14 57 40	7 03 54 40	46 38 59	-68 30 45	231.1		
286 14 57 50	7 03 54 50	46 16 33	-67 44 54	231.0	4	
286 14 58 00	7 03 55 00	45 53 43	-66 59 45	230.9		
286 14 58 10	7 03 55 10	45 30 39	-66 15 07	230.7		
286 14 58 20	7 03 55 20	45 07 14	-65 31 09	230.6	0	
286 14 58 30	7 03 55 30	44 43 28	-64 47 49	230.5		
286 14 58 40	7 03 55 40	44 19 21	-64 05 07	230.4	0	
286 14 58 50	7 03 55 50	43 54 53	-63 23 05	230.3	0	
286 14 59 00	7 03 56 00	43 30 04	-62 41 42	230.1		

Datatake: 116.6
Attitude: Red — Look Angle: 57.0 — Roll: 0
Bits/sample: 5 — Incidence Angle: 60.1 — Pitch: 180
Area: AUSTRALIA — Average Swath Width: 16 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 15 53 00	7 04 50 00	-17 31 53	138 40 38	223.6		
286 15 53 10	7 04 50 10	-16 57 54	139 01 35	223.4	0	
286 15 53 20	7 04 50 20	-16 23 54	139 22 26	223.3	0	
286 15 53 30	7 04 50 30	-15 49 53	139 43 12	223.2		
286 15 53 40	7 04 50 40	-15 15 52	140 03 53	223.2		
286 15 53 50	7 04 50 50	-14 41 49	140 24 29	223.1	0	
286 15 54 00	7 04 51 00	-14 07 46	140 44 59	223.0		
286 15 54 10	7 04 51 10	-13 33 42	141 05 23	222.9		
286 15 54 20	7 04 51 20	-12 59 37	141 25 43	222.8	0	
286 15 54 30	7 04 51 30	-12 25 31	141 45 57	222.7	2	
286 15 54 40	7 04 51 40	-11 51 24	142 06 06	222.6	1	
286 15 54 50	7 04 51 50	-11 17 16	142 26 09	222.6		
286 15 55 00	7 04 52 00	-10 43 08	142 46 07	222.5	0	
286 15 55 10	7 04 52 10	-10 08 57	143 06 06	222.4		
286 15 55 20	7 04 52 20	-9 34 46	143 26 01	222.4		
286 15 55 30	7 04 52 30	-9 00 33	143 45 52	222.3		
286 15 55 40	7 04 52 40	-8 26 20	144 05 40	222.2	0	
286 15 55 50	7 04 52 50	-7 52 05	144 25 24	222.2		
286 15 56 00	7 04 53 00	-7 17 49	144 45 05	222.1	0	

Datatake: 117.4
Attitude: YYY — Look Angle: 25.0 — Roll: 0
Bits/sample: 4 — Incidence Angle: 25.9 — Pitch: 0
Area: N ATLANTIC — Average Swath Width: 30 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 16 31 00	7 05 28 00	35 57 24	-72 39 35	227.6	8	
286 16 31 10	7 05 28 10	35 27 33	-72 08 29	227.4	10	
286 16 31 20	7 05 28 20	34 57 34	-71 37 45	227.3		
286 16 31 30	7 05 28 30	34 27 26	-71 07 24	227.2		
286 16 31 40	7 05 28 40	33 57 10	-70 37 24	227.0	8	
286 16 31 50	7 05 28 50	33 26 46	-70 07 46	226.9		
286 16 32 00	7 05 29 00	32 56 13	-69 38 30	226.7	8	
286 16 32 10	7 05 29 10	32 25 32	-69 09 36	226.6		
286 16 32 20	7 05 29 20	31 54 42	-68 41 04	226.5	0	

Datatake: 118.2
Attitude: Blue — Look Angle: 53.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 55.8 — Pitch: 0
Area: CANADA — Average Swath Width: 27 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 17 54 00	7 06 51 00	54 04 15	-116 46 36	232.0	3	
286 17 54 10	7 06 51 10	53 43 07	-115 50 21	231.9		
286 17 54 20	7 06 51 20	53 21 36	-114 55 00	231.8	1	
286 17 54 30	7 06 51 30	52 59 42	-114 00 33	231.7		
286 17 54 40	7 06 51 40	52 37 25	-113 07 00	231.6	0	
286 17 54 50	7 06 51 50	52 14 44	-112 14 20	231.5		
286 17 55 00	7 06 52 00	51 51 40	-111 22 35	231.4		
286 17 55 10	7 06 52 10	51 28 12	-110 31 43	231.3		
286 17 55 20	7 06 52 20	51 04 22	-109 41 45	231.2		
286 17 55 30	7 06 52 30	50 40 08	-108 52 41	231.1	0	
286 17 55 40	7 06 52 40	50 15 30	-108 04 31	231.0		

Datatake: 118.3
Attitude: Blue — Look Angle: 35.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 36.4 — Pitch: 0
Area: CARIBN/VENZLA/BRZIL — Average Swath Width: 24 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 18 04 00	7 07 01 00	24 20 58	-81 56 56	224.4	1	
286 18 04 10	7 07 01 10	23 48 00	-81 33 26	224.3		
286 18 04 20	7 07 01 20	23 14 58	-81 10 08	224.2	3	
286 18 04 30	7 07 01 30	22 41 52	-80 47 00	224.1	4	
286 18 04 40	7 07 01 40	22 08 43	-80 24 03	224.0		
286 18 04 50	7 07 01 50	21 35 30	-80 01 18	223.9	0	
286 18 05 00	7 07 02 00	21 02 14	-79 38 43	223.8		
286 18 05 10	7 07 02 10	20 28 54	-79 16 19	223.7		
286 18 05 20	7 07 02 20	19 55 31	-78 54 07	223.6	1	
286 18 05 30	7 07 02 30	19 22 03	-78 32 05	223.5		
286 18 05 40	7 07 02 40	18 48 33	-78 10 14	223.4		
286 18 05 50	7 07 02 50	18 14 58	-77 48 35	223.3	5	
286 18 06 00	7 07 03 00	17 41 20	-77 27 06	223.2	1	
286 18 06 10	7 07 03 10	17 07 43	-77 05 39	223.2		
286 18 06 20	7 07 03 20	16 34 03	-76 44 20	223.1		
286 18 06 30	7 07 03 30	16 00 20	-76 23 08	223.0		
286 18 06 40	7 07 03 40	15 26 35	-76 02 02	222.9		
286 18 06 50	7 07 03 50	14 52 48	-75 41 04	222.9		
286 18 07 00	7 07 04 00	14 18 58	-75 20 13	222.8		
286 18 07 10	7 07 04 10	13 45 06	-74 59 29	222.7		
286 18 07 20	7 07 04 20	13 11 12	-74 38 53	222.7		
286 18 07 30	7 07 04 30	12 37 15	-74 18 23	222.6		
286 18 07 40	7 07 04 40	12 03 16	-73 58 00	222.5		
286 18 07 50	7 07 04 50	11 29 14	-73 37 45	222.5		
286 18 08 00	7 07 05 00	10 55 10	-73 17 36	222.4	5	
286 18 08 10	7 07 05 10	10 21 08	-72 57 25	222.4		
286 18 08 20	7 07 05 20	9 47 05	-72 37 19	222.4		
286 18 08 30	7 07 05 30	9 13 01	-72 17 17	222.3	6	
286 18 08 40	7 07 05 40	8 38 56	-71 57 20	222.3		
286 18 08 50	7 07 05 50	8 04 50	-71 37 26	222.2	4	
286 18 09 00	7 07 06 00	7 30 43	-71 17 38	222.2		
286 18 09 10	7 07 06 10	6 56 30	-70 58 01	222.2		
286 18 09 20	7 07 06 20	6 22 18	-70 38 23	222.2	3	
286 18 09 30	7 07 06 30	5 48 07	-70 18 44	222.2		
286 18 09 40	7 07 06 40	5 13 56	-69 59 03	222.1		
286 18 09 50	7 07 06 50	4 39 47	-69 39 20	222.1	5	
286 18 10 00	7 07 07 00	4 05 38	-69 19 36	222.1		
286 18 10 10	7 07 07 10	3 31 30	-68 59 51	222.1		
286 18 10 20	7 07 07 20	2 57 23	-68 40 04	222.1		
286 18 10 30	7 07 07 30	2 23 16	-68 20 16	222.1		
286 18 10 40	7 07 07 40	1 49 11	-68 00 26	222.1	6	
286 18 10 50	7 07 07 50	1 15 06	-67 40 35	222.1		
286 18 11 00	7 07 08 00	0 41 02	-67 20 43	222.1		
286 18 11 10	7 07 08 10	0 06 28	-67 00 57	222.2		
286 18 11 20	7 07 08 20	-0 28 14	-66 41 13	222.2	6	
286 18 11 30	7 07 08 30	-1 03 04	-66 21 30	222.2		
286 18 11 40	7 07 08 40	-1 38 03	-66 01 49	222.2		
286 18 11 50	7 07 08 50	-2 13 10	-65 42 08	222.3		
286 18 12 00	7 07 09 00	-2 48 25	-65 22 28	222.3		
286 18 12 10	7 07 09 10	-3 22 48	-65 02 46	222.3	5	
286 18 12 20	7 07 09 20	-3 57 03	-64 43 04	222.4		
286 18 12 30	7 07 09 30	-4 31 09	-64 23 22	222.4		
286 18 12 40	7 07 09 40	-5 05 05	-64 03 41	222.5		
286 18 12 50	7 07 09 50	-5 38 53	-63 43 59	222.5		
286 18 13 00	7 07 10 00	-6 12 32	-63 24 17	222.6		

Datatake: 118.5
Attitude: Yellow — Look Angle: 50.0 — Roll: 90
Bits/sample: 4 — Incidence Angle: 52.5 — Pitch: 0
Area: S OCEAN — Average Swath Width: 23 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 18 31 00	7 07 28 00	-58 36 16	-1 04 21	235.6		
286 18 31 10	7 07 28 10	-58 46 03	0 08 15	235.6		
286 18 31 20	7 07 28 20	-58 55 06	1 21 20	235.7		
286 18 31 30	7 07 28 30	-59 03 23	2 34 52	235.7		
286 18 31 40	7 07 28 40	-59 10 55	3 48 53	235.7		
286 18 31 50	7 07 28 50	-59 17 43	5 03 21	235.8		
286 18 32 00	7 07 29 00	-59 23 45	6 18 17	235.8		
286 18 32 10	7 07 29 10	-59 29 02	7 33 40	235.8		
286 18 32 20	7 07 29 20	-59 33 34	8 49 32	235.8	0	
286 18 32 30	7 07 29 30	-59 37 21	10 05 51	235.9		
286 18 32 40	7 07 29 40	-59 40 23	11 22 38	235.9		

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 18 32 50	7 07 29 50	-59 42 40	12 39 53	235.9		
286 18 33 00	7 07 30 00	-59 44 12	13 57 35	235.9		
286 18 33 10	7 07 30 10	-59 44 53	15 14 16	235.9		
286 18 33 20	7 07 30 20	-59 44 48	16 30 59	235.9	0	
286 18 33 30	7 07 30 30	-59 43 55	17 47 44	235.9		
286 18 33 40	7 07 30 40	-59 42 16	19 04 31	235.9		
286 18 33 50	7 07 30 50	-59 39 50	20 21 20	235.9		
286 18 34 00	7 07 31 00	-59 36 38	21 38 11	235.8	0	
286 18 34 10	7 07 31 10	-59 32 40	22 54 12	235.8		
286 18 34 20	7 07 31 20	-59 27 55	24 10 00	235.8		
286 18 34 30	7 07 31 30	-59 22 25	25 25 35	235.8		
286 18 34 40	7 07 31 40	-59 16 07	26 40 57	235.7		
286 18 34 50	7 07 31 50	-59 09 04	27 56 06	235.7	0	
286 18 35 00	7 07 32 00	-59 01 14	29 11 02	235.7		

Datatake: 118.6
Attitude: Yellow — Look Angle: 50.0 — Roll: 90
Bits/sample: 3 — Incidence Angle: 52.4 — Pitch: 0
Area: INDONESIA — Average Swath Width: 34 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 18 54 00	7 07 51 00	-6 04 24	99 23 40	222.1		
286 18 54 10	7 07 51 10	-5 29 39	99 43 34	222.1		
286 18 54 20	7 07 51 20	-4 55 03	100 03 22	222.0		
286 18 54 30	7 07 51 30	-4 20 36	100 23 05	222.0		
286 18 54 40	7 07 51 40	-3 46 18	100 42 43	222.0		
286 18 54 50	7 07 51 50	-3 12 09	101 02 15	221.9		
286 18 55 00	7 07 52 00	-2 38 09	101 21 41	221.9		
286 18 55 10	7 07 52 10	-2 04 18	101 41 02	221.9		
286 18 55 20	7 07 52 20	-1 30 35	102 00 18	221.9		
286 18 55 30	7 07 52 30	-0 57 02	102 19 28	221.9		
286 18 55 40	7 07 52 40	-0 23 37	102 38 32	221.8		
286 18 55 50	7 07 52 50	0 09 37	102 57 31	221.8		
286 18 56 00	7 07 53 00	0 42 44	103 16 25	221.8		

Datatake: 119.4
Attitude: Blue — Look Angle: 25.0 — Roll: 180
Bits/sample: 5 — Incidence Angle: 26.0 — Pitch: 0
Area: WESTERN US — Average Swath Width: 20 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 19 26 00	7 08 23 00	44 42 00	-126 22 02	230.0	0	Noise
286 19 26 10	7 08 23 10	44 14 54	-125 43 11	229.9	12	Noise
286 19 26 20	7 08 23 20	43 47 47	-125 04 21	229.7		Noise
286 19 26 30	7 08 23 30	43 20 41	-124 25 31	229.6	8	Noise
286 19 26 40	7 08 23 40	42 53 35	-123 46 40	229.5		Noise

Datatake: 119.6
Attitude: Blue — Look Angle: 52.0 — Roll: 180
Bits/sample: 3 — Incidence Angle: 54.6 — Pitch: 0
Area: CHILE/ARGENTINA — Average Swath Width: 38 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 19 48 00	7 08 45 00	-25 47 06	-71 18 23	226.8	0	
286 19 48 10	7 08 45 10	-26 18 42	-70 52 43	227.0		
286 19 48 20	7 08 45 20	-26 50 11	-70 26 43	227.1	0	
286 19 48 30	7 08 45 30	-27 21 32	-70 00 25	227.3	0	
286 19 48 40	7 08 45 40	-27 52 45	-69 33 48	227.4		
286 19 48 50	7 08 45 50	-28 23 52	-69 06 52	227.6		
286 19 49 00	7 08 46 00	-28 54 50	-68 39 38	227.7		
286 19 49 10	7 08 46 10	-29 25 42	-68 12 04	227.9		
286 19 49 20	7 08 46 20	-29 56 26	-67 44 11	228.0		
286 19 49 30	7 08 46 30	-30 27 02	-67 16 00	228.2	1	
286 19 49 40	7 08 46 40	-30 57 31	-66 47 30	228.3		
286 19 49 50	7 08 46 50	-31 27 53	-66 18 41	228.5	1	
286 19 50 00	7 08 47 00	-31 58 07	-65 49 33	228.7		

Datatake: 120.2
Attitude: Blue — Look Angle: 26.0 — Roll: 180
Bits/sample: 4 — Incidence Angle: 27.0 — Pitch: 0
Area: BANGLDSH/INDIA/CHIN — Average Swath Width: 30 km — Yaw: 0

GMT	MET	Latitude	Longitude	Altitude	SNR	Comments
286 20 29 00	7 09 26 00	16 24 32	86 04 23	222.8	3	
286 20 29 10	7 09 26 10	16 58 11	86 25 45	222.9	3	
286 20 29 20	7 09 26 20	17 31 46	86 47 16	223.0	4	
286 20 29 30	7 09 26 30	18 05 17	87 08 57	223.0	6	
286 20 29 40	7 09 26 40	18 38 44	87 30 47	223.1		
286 20 29 50	7 09 26 50	19 12 08	87 52 47	223.2		
286 20 30 00	7 09 27 00	19 45 28	88 14 57	223.3	5	
286 20 30 10	7 09 27 10	20 18 45	88 37 16	223.4		
286 20 30 20	7 09 27 20	20 51 58	88 59 44	223.5	4	
286 20 30 30	7 09 27 30	21 25 07	89 22 22	223.6		
286 20 30 40	7 09 27 40	21 58 13	89 45 10	223.7	7	
286 20 30 50	7 09 27 50	22 31 15	90 08 07	223.8	5	
286 20 31 00	7 09 28 00	23 04 13	90 31 14	223.9		
286 20 31 10	7 09 28 10	23 37 10	90 54 33	224.1	3	
286 20 31 20	7 09 28 20	24 10 01	91 18 08	224.2		
286 20 31 30	7 09 28 30	24 42 47	91 41 58	224.3	3	
286 20 31 40	7 09 28 40	25 15 29	92 06 03	224.4	8	
286 20 31 50	7 09 28 50	25 48 05	92 30 24	224.5		
286 20 32 00	7 09 29 00	26 20 36	92 55 00	224.7	6	
286 20 32 10	7 09 29 10	26 53 02	93 19 52	224.8		
286 20 32 20	7 09 29 20	27 25 23	93 44 59	224.9	7	
286 20 32 30	7 09 29 30	27 57 38	94 10 21	225.0		
286 20 32 40	7 09 29 40	28 29 49	94 35 59	225.2	6	
286 20 32 50	7 09 29 50	29 01 54	95 01 52	225.3		
286 20 33 00	7 09 30 00	29 33 54	95 28 00	225.4		
286 20 33 10	7 09 30 10	30 05 45	95 54 31	225.6		
286 20 33 20	7 09 30 20	30 37 30	96 21 18	225.7	5	
286 20 33 30	7 09 30 30	31 09 08	96 48 23	225.8		
286 20 33 40	7 09 30 40	31 40 40	97 15 45	226.0	6	
286 20 33 50	7 09 30 50	32 12 05	97 43 25	226.1		
286 20 34 00	7 09 31 00	32 43 24	98 11 21	226.2	4	
286 20 34 10	7 09 31 10	33 14 36	98 39 45	226.4		
286 20 34 20	7 09 31 20	33 45 39	99 08 33	226.5	5	
286 20 34 30	7 09 31 30	34 16 33	99 37 44	226.7	9	
286 20 34 40	7 09 31 40	34 47 18	100 07 19	226.8		
286 20 34 50	7 09 31 50	35 17 54	100 37 18	226.9	2	
286 20 35 00	7 09 32 00	35 48 21	101 07 41	227.1	5	
286 20 35 10	7 09 32 10	36 18 39	101 38 28	227.2		
286 20 35 20	7 09 32 20	36 48 48	102 09 38	227.4		
286 20 35 30	7 09 32 30	37 18 48	102 41 13	227.5	4	
286 20 35 40	7 09 32 40	37 48 39	103 13 11	227.7	4	
286 20 35 50	7 09 32 50	38 18 21	103 45 33	227.8		
286 20 36 00	7 09 33 00	38 47 54	104 18 18	227.9		
286 20 36 10	7 09 33 10	39 17 12	104 51 48	228.1	1	
286 20 36 20	7 09 33 20	39 46 19	105 25 46	228.2	2	
286 20 36 30	7 09 33 30	40 15 16	106 00 15	228.4		
286 20 36 40	7 09 33 40	40 44 02	106 35 12	228.5	1	
286 20 36 50	7 09 33 50	41 12 37	107 10 39	228.6	1	
286 20 37 00	7 09 34 00	41 41 01	107 46 36	228.8	1	
286 20 37 10	7 09 34 10	42 09 21	108 23 39	228.9		
286 20 37 20	7 09 34 20	42 37 32	109 01 22	229.1	0	
286 20 37 30	7 09 34 30	43 05 35	109 39 45	229.2	0	
286 20 37 40	7 09 34 40	43 33 29	110 18 48	229.4	0	
286 20 37 50	7 09 34 50	44 01 14	110 58 31	229.5	0	
286 20 38 00	7 09 35 00	44 28 50	111 38 55	229.6	0	

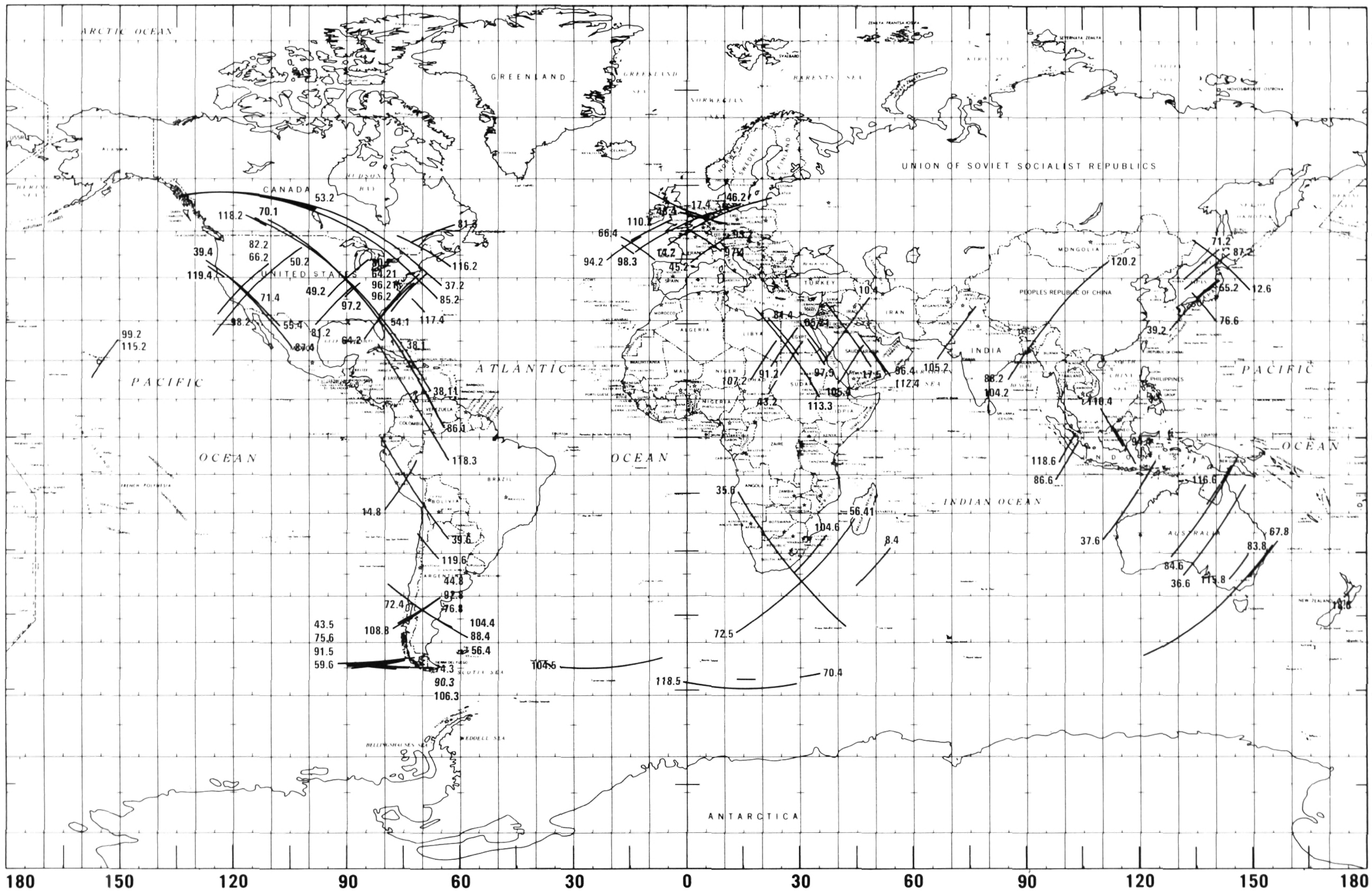

Figure 14-1. A summary of SIR-B world coverage

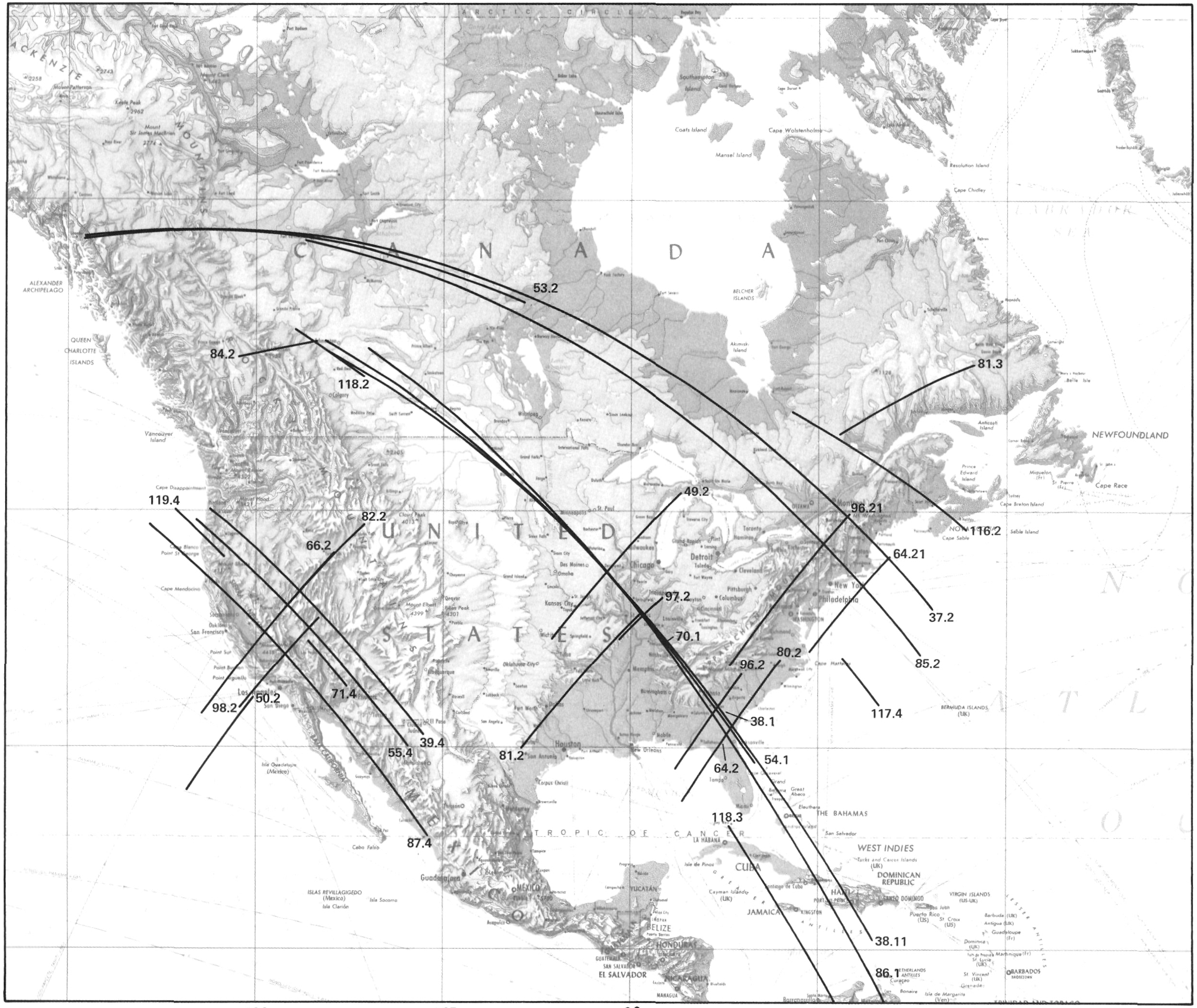

Figure 14-2. SIR-B coverage: United States and Canada

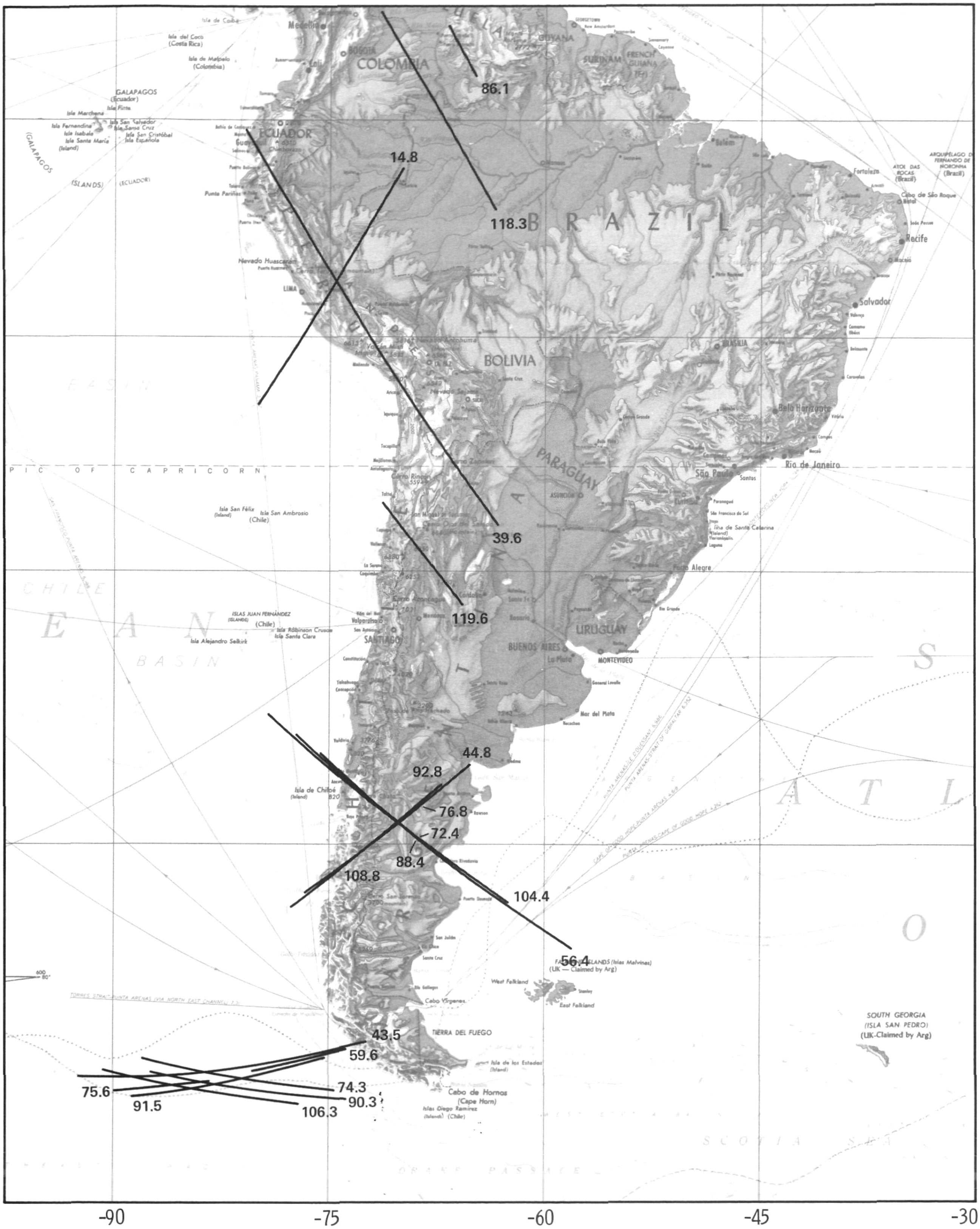

Figure 14-3. SIR-B coverage: South America

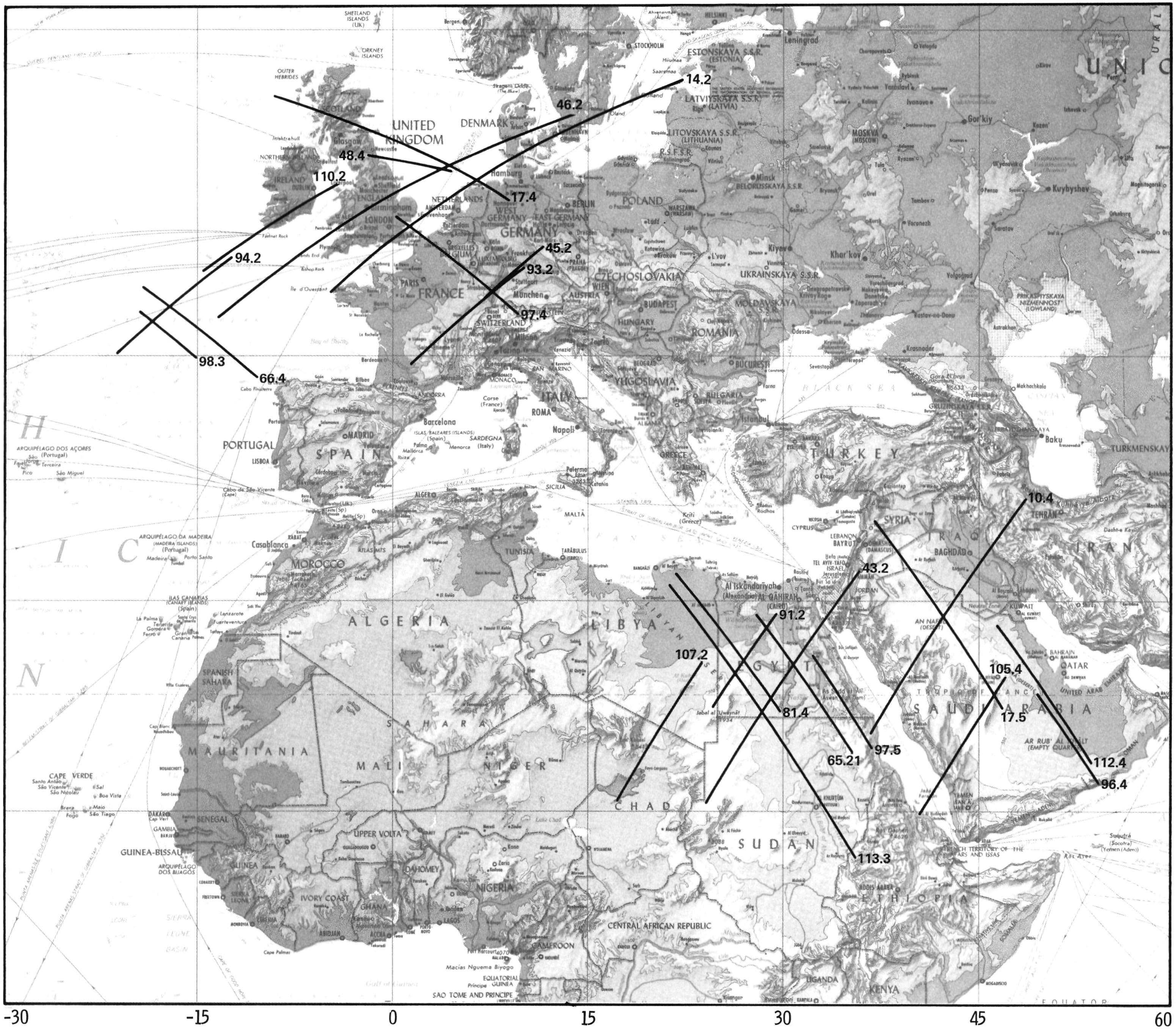

Figure 14-4. SIR-B coverage: Europe and North Africa

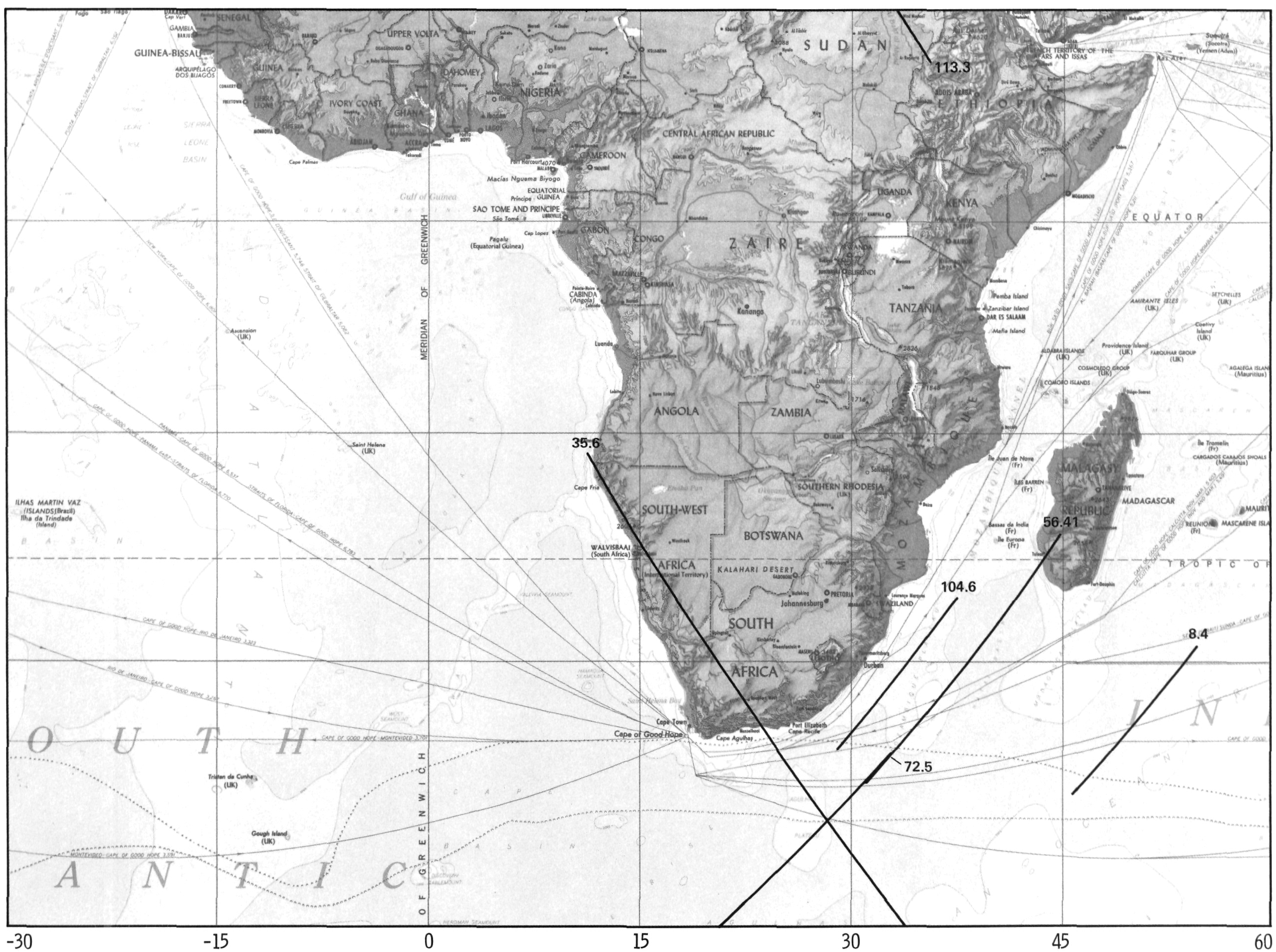

Figure 14-5. SIR-B coverage: South Africa

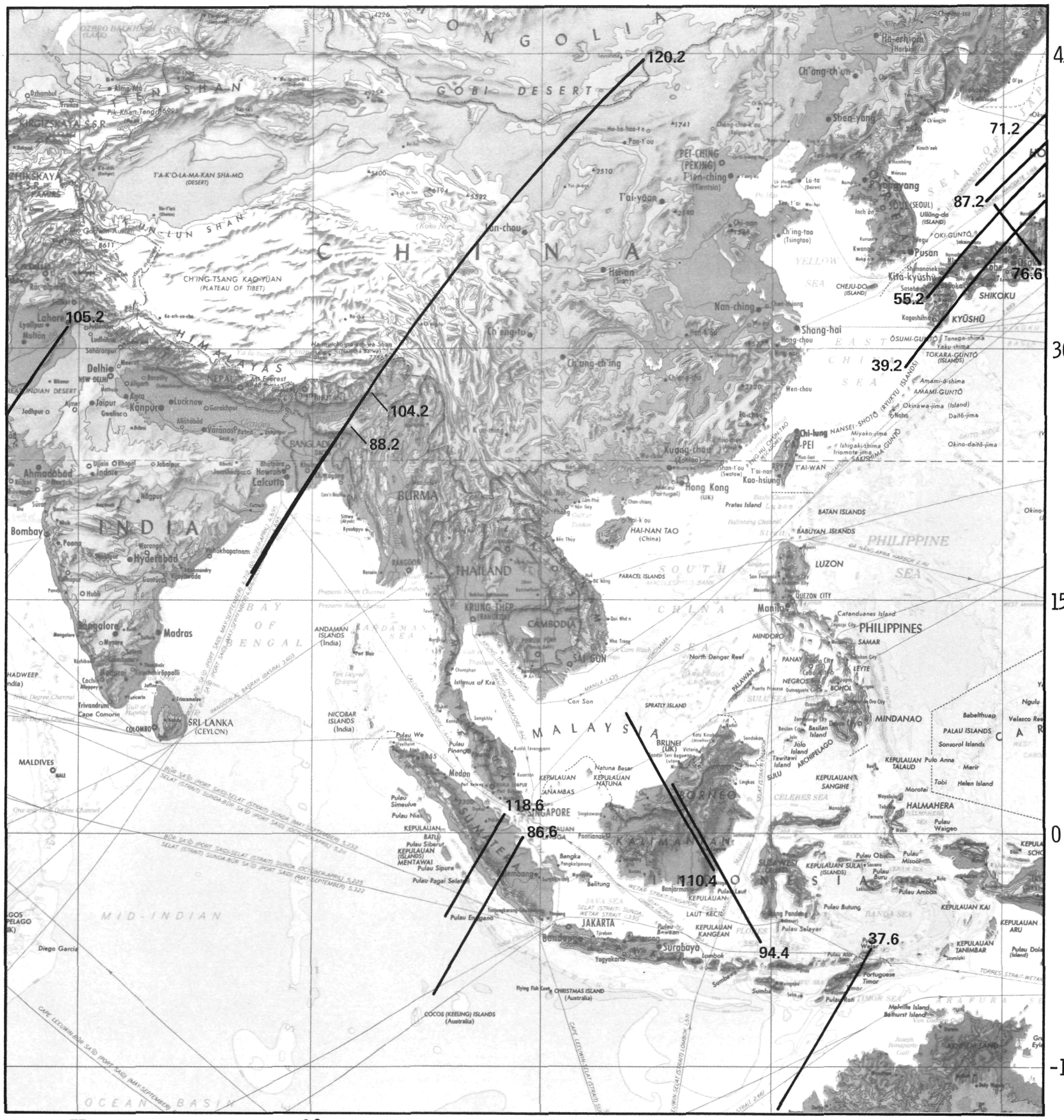

Figure 14-6. SIR-B coverage: Southeast Asia and Indonesia

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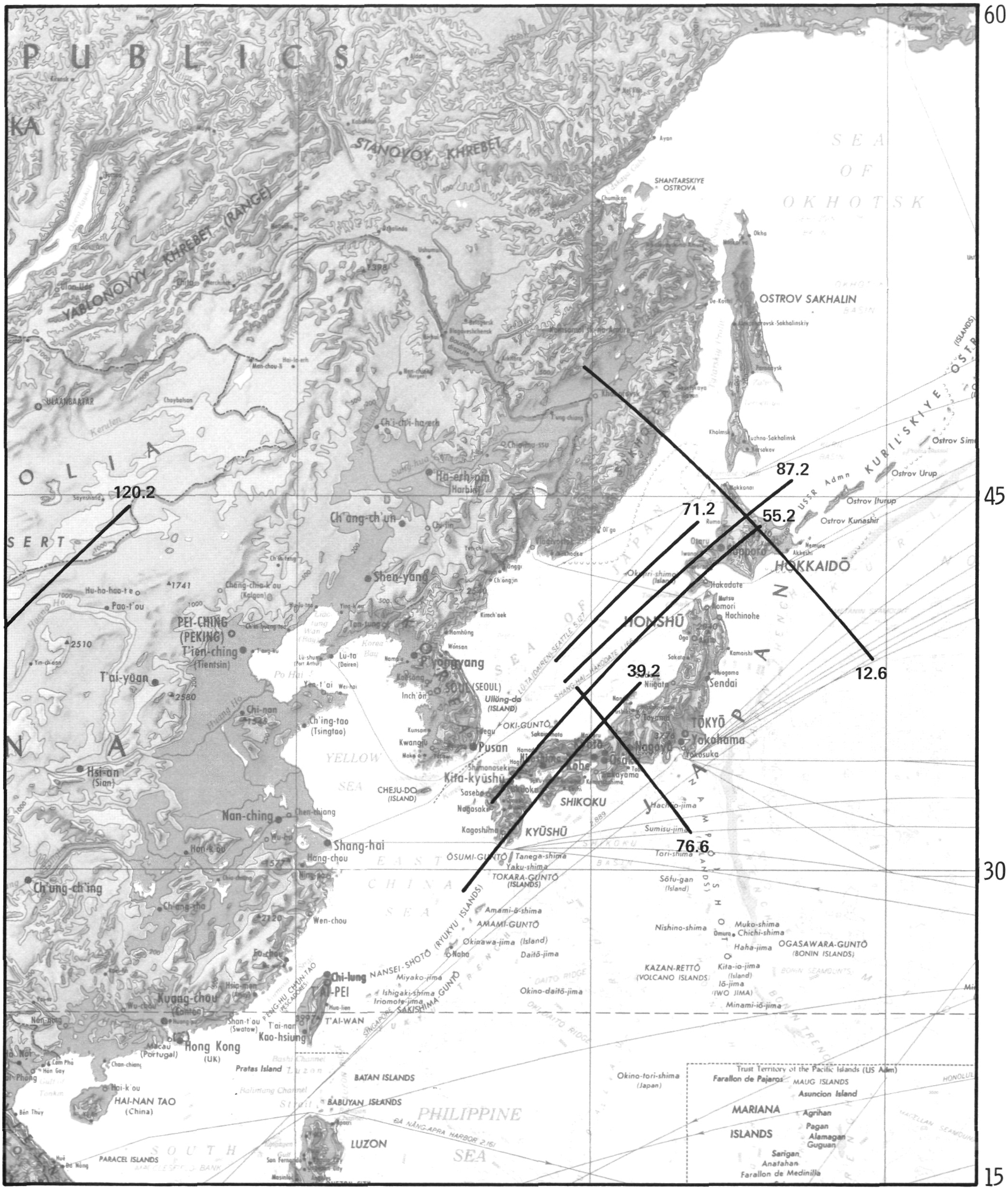

Figure 14-7. SIR-B coverage: Japan

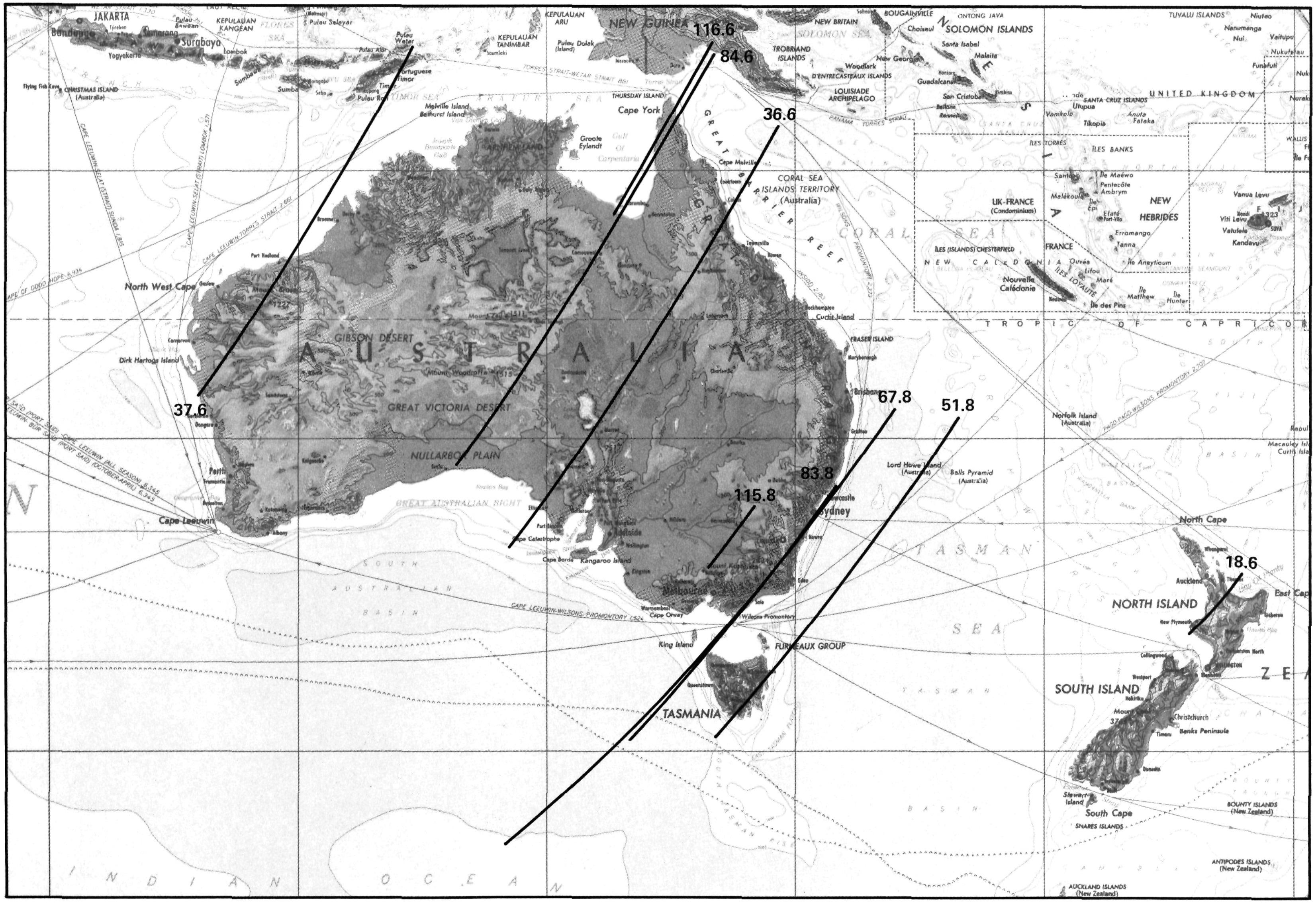

Figure 14-8. SIR-B coverage: Australia and New Zealand

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Appendix A
Glossary

ADC	analog-to-digital converter
ANAL	analog
AP	array processor
ARC	active radar calibrator
BCE	bench checkout equipment
biϕ	biphase
bps	bits per sample
CAL	calibration
CAP	Crew Activity Plan
CCT	computer compatible tape
CLK	clock
CMD	command
DDHS	digital-data handling subsystem
DDL	dispersive delay line
DEM	digital elevation model
DOMSAT	Domestic Satellite
DWP	data window position
EMI	electromagnetic interference
Eos	Earth Observing System
ERBS	Earth Radiation Budget Satellite
EVA	extravehicular activity
FD	flight day
FFT	fast Fourier transform
FILE	Feature Identification and Location Experiment
FMDM	flex multiplexer/demultiplexer
f_s	stable local oscillator frequency
GOES	Geostationary Operational Environmental Satellite
GMT	Greenwich Mean Time
GPC	general-purpose computer (on the shuttle)
GSE	ground support equipment
GSFC	Goddard Space Flight Center
HDDR	high-density digital recorder
HDDT	high-density digital tape
HDRR	high-data-rate tape recorder
HH	polarization (horizontal transmit, horizontal receive)
HV	polarization (horizontal transmit, vertical receive)
IDP	interim digital processor (at JPL)
IMU	inertial measurement unit
I/U	interface unit
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
L&C	logic and control
LFC	Large Format Camera
LNA	low-noise amplifier
LPF	low-pass filter
LOS	loss of signal
MAPS	Measurement of Air Pollution From Satellites
MCC	Mission Control Center
MET	mission elapsed time
MPESS	Mission Peculiar Equipment Support Structure
MPSR	Multipurpose Support Room
MUX	multiplexer
NASA	National Aeronautics and Space Administration
NRZ-L	nonreturn to zero level
OMS	orbital maneuvering system
OR	optical recorder
OSSA	Office of Space Science and Applications
OSTA	Office of Space and Terrestrial Applications (now OSSA)
PATH	Postflight Attitude and Trajectory History
PAYCOM	Payload Commander
P.C.	power converter
PCS	Payload Control Sequencer
PDU	power distribution unit
POCC	Payload Operations Control Center
PPF	payload parameter frame
PRF	pulse repetition frequency
PWR	power

RCVR	receiver
RFI	radio-frequency interference
RMS	Remote Manipulator System
RSS	root sum square
RTC	real-time command
SAR	synthetic-aperture radar
SAW	surface acoustic wave
SBAP	SIR-B Activity Plan
S/C	spacecraft
SDCS	SAR data cataloging system
SIO	serial input/output
SIR	shuttle imaging radar
SLDPF	Spacelab Data Processing Facility (at GSFC)
SMDOS	Shuttle Mission Design and Operations Software
SNR	signal-to-noise ratio
SPC	stored program command
SPEAM	Sun photometer Earth atmosphere measurement
S/R	shift register
STALO	stable local oscillator
STC	sensitivity time control
STS	space transportation system
TDRS	Tracking and Data Relay Satellite
TDRSS	Tracking and Data Relay Satellite System
TLM	telemetry
TM	thematic mapper (Landsat 4)
TX	transmitter
U.S.G.S.	United States Geological Survey
V_{CC}	collector voltage
VGA	variable-gain amplifier
VV	polarization (vertical transmit, vertical receive)
WB	wideband
ZLV	Z-axis local vertical

Appendix B
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Appendix C
Catalog of Processed SIR-B Imagery

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OH-008.40	004	279/23:00:58	INDIAN OCEAN	-31 Deg 45.4 Min	51 Deg 58.1 Min	05/07/85	1593
OH-008.40	005	279/23:01:09	INDIAN OCEAN	-31 Deg 12.3 Min	52 Deg 28.4 Min	05/07/85	1594
OH-008.40	006	279/23:01:20	INDIAN OCEAN	-30 Deg 39.2 Min	52 Deg 58.3 Min	05/07/85	1595
OH-008.40	002	279/23:01:39	INDIAN OCEAN	-29 Deg 40.3 Min	54 Deg 09.5 Min	10/06/84	0001
OH-008.40	001	279/23:01:55	INDIAN OCEAN	-28 Deg 51.7 Min	54 Deg 50.9 Min	10/06/84	0002
OH-010.40	004	280/02:20:14	SAUDI ARABIA	21 Deg 41.1 Min	37 Deg 38.6 Min	01/04/85	0666
OH-010.40	005	280/02:20:24	SAUDI ARABIA	22 Deg 15.1 Min	38 Deg 01.0 Min	01/04/85	0667
OH-010.40	006	280/02:20:35	SAUDI ARABIA	22 Deg 49.1 Min	38 Deg 23.6 Min	01/04/85	0668
OH-010.40	007	280/02:20:45	SAUDI ARABIA	23 Deg 23.9 Min	38 Deg 46.8 Min	01/04/85	0669
OH-010.40	008	280/02:20:56	SAUDI ARABIA	23 Deg 57.9 Min	39 Deg 09.7 Min	01/04/85	0670
OH-010.40	009	280/02:21:06	SAUDI ARABIA	24 Deg 31.8 Min	39 Deg 32.8 Min	01/04/85	0671
OH-010.40	010	280/02:21:17	SAUDI ARABIA	25 Deg 05.5 Min	39 Deg 56.1 Min	01/04/85	0672
OH-010.40	011	280/02:21:27	SAUDI ARABIA	25 Deg 39.3 Min	40 Deg 19.6 Min	01/04/85	0673
OH-010.40	012	280/02:21:37	SAUDI ARABIA	26 Deg 14.0 Min	40 Deg 44.2 Min	01/04/85	0674
OH-010.40	013	280/02:21:48	SAUDI ARABIA	26 Deg 47.0 Min	41 Deg 07.7 Min	01/04/85	0675
OH-010.40	014	280/02:21:58	SAUDI ARABIA	27 Deg 19.8 Min	41 Deg 31.4 Min	01/04/85	0676
OH-010.40	015	280/02:22:09	SAUDI ARABIA	27 Deg 54.1 Min	41 Deg 56.4 Min	01/04/85	0677
OH-010.40	016	280/02:22:14	SAUDI ARABIA	28 Deg 16.4 Min	42 Deg 13.3 Min	10/07/85	2416
OH-010.40	017	280/02:22:25	SAUDI ARABIA	28 Deg 49.7 Min	42 Deg 38.2 Min	10/07/85	2417
OH-010.40	018	280/02:22:35	SAUDI ARABIA	29 Deg 23.5 Min	43 Deg 03.7 Min	10/07/85	2418
OH-010.40	019	280/02:22:46	SAUDI ARABIA	29 Deg 56.6 Min	43 Deg 29.1 Min	10/07/85	2419
OH-010.40	020	280/02:22:56	SAUDI ARABIA	30 Deg 29.6 Min	43 Deg 54.7 Min	10/07/85	2420
OH-010.40	021	280/02:23:07	SAUDI ARABIA	31 Deg 02.6 Min	44 Deg 20.7 Min	10/07/85	2421
OH-010.40	022	280/02:23:17	SAUDI ARABIA	31 Deg 35.2 Min	44 Deg 46.8 Min	10/07/85	2422
OH-010.40	023	280/02:23:28	SAUDI ARABIA	32 Deg 08.0 Min	45 Deg 13.4 Min	10/07/85	2423
OH-010.40	024	280/02:23:38	SAUDI ARABIA	32 Deg 41.9 Min	45 Deg 41.3 Min	10/11/85	2424
OH-010.40	025	280/02:23:49	SAUDI ARABIA	33 Deg 14.5 Min	46 Deg 08.6 Min	10/11/85	2425
OH-010.40	026	280/02:23:59	SAUDI ARABIA	33 Deg 47.0 Min	46 Deg 36.2 Min	10/11/85	2426
OH-010.40	027	280/02:24:10	SAUDI ARABIA	34 Deg 19.4 Min	47 Deg 04.2 Min	10/11/85	2427
OH-010.40	001	280/02:24:13	TURKEY	34 Deg 20.3 Min	47 Deg 04.6 Min	10/28/84	0128
OH-010.40	002	280/02:24:23	TURKEY	34 Deg 52.6 Min	47 Deg 33.0 Min	10/28/84	0129
OH-010.40	003	280/02:24:34	TURKEY	35 Deg 24.8 Min	48 Deg 01.8 Min	10/28/84	0130
OH-012.60	011	280/04:15:51	NORTHERN JAPAN	49 Deg 27.6 Min	134 Deg 30.5 Min	06/13/85	1848
OH-012.60	012	280/04:16:01	NORTHERN JAPAN	49 Deg 02.0 Min	135 Deg 18.4 Min	06/13/85	1849
OH-012.60	013	280/04:16:12	NORTHERN JAPAN	48 Deg 36.1 Min	136 Deg 05.4 Min	06/13/85	1850
OH-012.60	014	280/04:16:23	NORTHERN JAPAN	48 Deg 10.0 Min	136 Deg 51.3 Min	06/13/85	1851
OH-012.60	015	280/04:16:33	NORTHERN JAPAN	47 Deg 29.7 Min	137 Deg 18.9 Min	06/13/85	1852
OH-012.60	026	280/04:16:33	NORTHERN JAPAN	47 Deg 42.7 Min	137 Deg 38.0 Min	07/31/85	2193
OH-012.60	016	280/04:16:44	NORTHERN JAPAN	47 Deg 16.6 Min	138 Deg 21.3 Min	06/13/85	1853
OH-012.60	017	280/04:16:53	NORTHERN JAPAN	46 Deg 52.4 Min	139 Deg 00.3 Min	06/14/85	1854
OH-012.60	001	280/04:17:00	WAKKANAI,JAPAN	46 Deg 15.9 Min	139 Deg 57.4 Min	04/09/85	1379
OH-012.60	002	280/04:17:11	WAKKANAI,JAPAN	46 Deg 08.2 Min	140 Deg 09.1 Min	04/09/85	1380
OH-012.60	003	280/04:17:21	WAKKANAI,JAPAN	45 Deg 40.3 Min	140 Deg 51.1 Min	04/09/85	1381
OH-012.60	028	280/04:17:31	WAKKANAI,JAPAN	45 Deg 13.0 Min	141 Deg 31.0 Min	05/11/86	2847
OH-012.60	004	280/04:17:32	WAKKANAI,JAPAN	45 Deg 12.1 Min	141 Deg 32.3 Min	04/09/85	1382
OH-012.60	005	280/04:17:42	WAKKANAI,JAPAN	44 Deg 43.6 Min	142 Deg 12.9 Min	04/09/85	1383
OH-012.60	029	280/04:17:42	WAKKANAI,JAPAN	44 Deg 44.6 Min	142 Deg 11.5 Min	05/11/86	2848
OH-012.60	006	280/04:17:53	WAKKANAI,JAPAN	43 Deg 54.7 Min	143 Deg 20.3 Min	04/10/85	1384
OH-012.60	030	280/04:17:53	WAKKANAI,JAPAN	44 Deg 15.9 Min	142 Deg 51.4 Min	05/11/86	2849
OH-012.60	018	280/04:17:59	NORTHERN JAPAN	43 Deg 57.9 Min	143 Deg 15.9 Min	06/14/85	1855
OH-012.60	019	280/04:18:10	NORTHERN JAPAN	43 Deg 28.8 Min	143 Deg 54.6 Min	06/14/85	1856
OH-012.60	020	280/04:18:21	NORTHERN JAPAN	42 Deg 59.5 Min	144 Deg 32.7 Min	06/14/85	1857
OH-012.60	021	280/04:18:31	NORTHERN JAPAN	42 Deg 30.0 Min	145 Deg 10.2 Min	06/14/85	1858
OH-012.60	022	280/04:18:42	NORTHERN JAPAN	42 Deg 00.3 Min	145 Deg 47.1 Min	06/14/85	1859
OH-012.60	023	280/04:18:53	NORTHERN JAPAN	41 Deg 30.3 Min	146 Deg 23.4 Min	06/14/85	1860
OH-012.60	024	280/04:19:03	NORTHERN JAPAN	41 Deg 00.2 Min	146 Deg 59.2 Min	06/14/85	1861
OH-012.60	025	280/04:19:14	NORTHERN JAPAN	40 Deg 29.8 Min	147 Deg 34.3 Min	06/14/85	1862
OH-012.60	007	280/04:19:23	NORTHERN JAPAN	39 Deg 49.7 Min	147 Deg 47.5 Min	05/30/85	1763
OH-012.60	027	280/04:19:24	NORTHERN JAPAN	39 Deg 39.2 Min	148 Deg 31.2 Min	09/03/85	2329
OH-012.60	008	280/04:19:34	NORTHERN JAPAN	39 Deg 31.4 Min	148 Deg 39.9 Min	05/30/85	1764
OH-012.60	009	280/04:19:45	NORTHERN JAPAN	39 Deg 00.4 Min	149 Deg 13.6 Min	05/30/85	1765

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OH-012.60	010	280/04:19:55	NORTHERN JAPAN	38 Deg 29.6 Min	149 Deg 46.4 Min	07/31/85	1766
OH-014.20	013	280/07:04:00	ENGLISH CHANNEL	48 Deg 25.5 Min	-4 Deg 13.8 Min	01/25/85	0814
OH-014.20	014	280/07:04:16	ENGLISH CHANNEL	49 Deg 05.5 Min	-3 Deg 03.3 Min	01/25/85	0815
OH-014.20	039	280/07:04:20	ENGLISH CHANNEL	49 Deg 15.8 Min	-2 Deg 44.4 Min	06/22/85	1921
OH-014.20	015	280/07:04:27	ENGLISH CHANNEL	49 Deg 33.0 Min	-2 Deg 13.1 Min	01/25/85	0816
OH-014.20	040	280/07:04:32	ENGLISH CHANNEL	49 Deg 43.0 Min	-1 Deg 53.9 Min	06/22/85	1922
OH-014.20	016	280/07:04:38	ENGLISH CHANNEL	50 Deg 00.1 Min	-1 Deg 21.8 Min	01/25/85	0817
OH-014.20	041	280/07:04:43	ENGLISH CHANNEL	50 Deg 09.9 Min	-1 Deg 02.4 Min	06/22/85	1923
OH-014.20	017	280/07:04:50	ENGLISH CHANNEL	50 Deg 26.7 Min	0 Deg 29.6 Min	01/25/85	0818
OH-014.20	042	280/07:04:54	ENGLISH CHANNEL	50 Deg 36.2 Min	0 Deg 10.2 Min	06/22/85	1924
OH-014.20	018	280/07:05:01	ENGLISH CHANNEL	50 Deg 53.0 Min	0 Deg 23.6 Min	01/25/85	0819
OH-014.20	043	280/07:05:05	ENGLISH CHANNEL	51 Deg 02.3 Min	0 Deg 43.2 Min	06/22/85	1925
OH-014.20	019	280/07:05:12	ENGLISH CHANNEL	51 Deg 18.8 Min	1 Deg 17.9 Min	01/25/85	0820
OH-014.20	044	280/07:05:17	ENGLISH CHANNEL	51 Deg 27.9 Min	1 Deg 37.7 Min	06/22/85	1926
OH-014.20	020	280/07:05:23	ENGLISH CHANNEL	51 Deg 44.2 Min	2 Deg 13.1 Min	01/25/85	0821
OH-014.20	045	280/07:05:28	ENGLISH CHANNEL	51 Deg 52.9 Min	2 Deg 33.2 Min	06/22/85	1927
OH-014.20	021	280/07:05:35	ENGLISH CHANNEL	52 Deg 09.1 Min	3 Deg 09.5 Min	01/25/85	0822
OH-014.20	046	280/07:05:39	ENGLISH CHANNEL	52 Deg 17.6 Min	3 Deg 29.7 Min	06/22/85	1928
OH-014.20	022	280/07:05:46	ENGLISH CHANNEL	52 Deg 33.5 Min	4 Deg 06.9 Min	01/25/85	0823
OH-014.20	047	280/07:05:50	ENGLISH CHANNEL	52 Deg 41.8 Min	4 Deg 27.4 Min	06/22/85	1929
OH-014.20	023	280/07:05:57	ENGLISH CHANNEL	52 Deg 57.4 Min	5 Deg 05.4 Min	01/25/85	0824
OH-014.20	030	280/07:05:59	NETHERLANDS	53 Deg 00.5 Min	5 Deg 13.6 Min	06/04/85	1810
OH-014.20	048	280/07:06:02	ENGLISH CHANNEL	53 Deg 04.7 Min	5 Deg 24.3 Min	06/22/85	1930
OH-014.20	024	280/07:06:08	ENGLISH CHANNEL	53 Deg 20.8 Min	6 Deg 05.0 Min	01/25/85	0825
OH-014.20	031	280/07:06:11	NETHERLANDS	53 Deg 23.8 Min	6 Deg 13.2 Min	06/04/85	1811
OH-014.20	049	280/07:06:13	ENGLISH CHANNEL	53 Deg 27.9 Min	6 Deg 24.1 Min	06/22/85	1931
OH-014.20	032	280/07:06:22	NETHERLANDS	53 Deg 46.5 Min	7 Deg 13.9 Min	06/04/85	1812
OH-014.20	050	280/07:06:24	ENGLISH CHANNEL	53 Deg 50.6 Min	7 Deg 25.0 Min	06/22/85	1932
OH-014.20	033	280/07:06:33	NETHERLANDS	54 Deg 08.3 Min	8 Deg 14.8 Min	06/04/85	1813
OH-014.20	034	280/07:06:44	NETHERLANDS	54 Deg 30.0 Min	9 Deg 17.7 Min	06/04/85	1814
OH-014.20	035	280/07:06:56	NETHERLANDS	54 Deg 51.0 Min	10 Deg 21.8 Min	06/04/85	1815
OH-014.20	036	280/07:07:07	NETHERLANDS	55 Deg 11.2 Min	11 Deg 25.9 Min	06/04/85	1816
OH-014.20	037	280/07:07:16	NETHERLANDS	55 Deg 28.3 Min	12 Deg 23.2 Min	06/08/85	1817
OH-014.20	038	280/07:07:28	NETHERLANDS	55 Deg 47.6 Min	13 Deg 30.5 Min	06/08/85	1818
OH-014.20	001	280/07:07:30	OLAND, SWEDEN	55 Deg 55.1 Min	13 Deg 57.4 Min	01/19/85	0787
OH-014.20	002	280/07:07:41	OLAND, SWEDEN	56 Deg 11.6 Min	14 Deg 58.4 Min	01/19/85	0788
OH-014.20	003	280/07:07:52	OLAND, SWEDEN	56 Deg 31.2 Min	16 Deg 16.2 Min	01/19/85	0789
OH-014.20	029	280/07:07:57	OLAND, SWEDEN	56 Deg 35.3 Min	16 Deg 33.1 Min	05/13/85	1592
OH-014.20	004	280/07:08:04	OLAND, SWEDEN	56 Deg 46.7 Min	17 Deg 20.4 Min	01/19/85	0790
OH-014.20	005	280/07:08:15	OLAND, SWEDEN	57 Deg 03.0 Min	18 Deg 32.5 Min	01/19/85	0791
OH-014.20	006	280/07:08:26	OLAND, SWEDEN	57 Deg 18.7 Min	19 Deg 45.7 Min	01/19/85	0792
OH-014.20	007	280/07:08:37	OLAND, SWEDEN	57 Deg 32.6 Min	20 Deg 55.1 Min	01/19/85	0793
OH-014.20	008	280/07:08:49	OLAND, SWEDEN	57 Deg 46.8 Min	22 Deg 10.4 Min	01/19/85	0794
OH-014.20	025	280/07:08:50	RUSSIA	57 Deg 47.4 Min	22 Deg 14.1 Min	05/02/85	1530
OH-014.20	009	280/07:09:00	OLAND, SWEDEN	58 Deg 00.2 Min	23 Deg 26.6 Min	01/19/85	0795
OH-014.20	026	280/07:09:01	RUSSIA	58 Deg 00.7 Min	23 Deg 30.1 Min	05/02/85	1531
OH-014.20	010	280/07:09:11	OLAND, SWEDEN	58 Deg 13.4 Min	24 Deg 47.3 Min	01/19/85	0796
OH-014.20	027	280/07:09:12	RUSSIA	58 Deg 13.2 Min	24 Deg 47.2 Min	05/02/85	1532
OH-014.20	011	280/07:09:22	OLAND, SWEDEN	58 Deg 25.1 Min	26 Deg 05.5 Min	01/19/85	0797
OH-014.20	028	280/07:09:24	RUSSIA	58 Deg 24.9 Min	26 Deg 05.1 Min	05/02/85	1533
OH-014.20	012	280/07:09:33	OLAND, SWEDEN	58 Deg 36.0 Min	27 Deg 24.4 Min	01/19/85	0798
OH-014.80	001	280/08:15:35	PERU	-14 Deg 11.4 Min	-76 Deg 31.2 Min	10/26/84	0113
OH-014.80	019	280/08:15:39	PERU	-13 Deg 47.9 Min	-76 Deg 15.8 Min	06/13/85	1821
OH-014.80	002	280/08:15:46	PERU	-13 Deg 37.2 Min	-76 Deg 09.2 Min	10/26/84	0114
OH-014.80	025	280/08:15:48	PERU	-13 Deg 18.6 Min	-75 Deg 57.1 Min	01/30/86	2602
OH-014.80	003	280/08:15:56	PERU	-13 Deg 02.8 Min	-75 Deg 47.3 Min	10/26/84	0115
OH-014.80	026	280/08:15:59	PERU	-12 Deg 44.2 Min	-75 Deg 35.2 Min	01/30/86	2603
OH-014.80	004	280/08:16:06	PERU	-12 Deg 26.0 Min	-75 Deg 24.1 Min	03/16/85	1172
OH-014.80	027	280/08:16:10	PERU	-12 Deg 09.5 Min	-75 Deg 13.4 Min	01/30/86	2604
OH-014.80	005	280/08:16:17	PERU	-11 Deg 51.5 Min	-75 Deg 02.5 Min	03/16/85	1173
OH-014.80	028	280/08:16:20	PERU	-11 Deg 35.0 Min	-74 Deg 51.8 Min	01/30/86	2605

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OH-014.80	006	280/08:16:27	PERU	-11 Deg 17.0 Min	-74 Deg 41.0 Min	03/16/85	1174
OH-014.80	029	280/08:16:31	PERU	-11 Deg 00.5 Min	-74 Deg 30.4 Min	01/30/86	2606
OH-014.80	007	280/08:16:38	PERU	-10 Deg 42.4 Min	-74 Deg 19.6 Min	03/16/85	1175
OH-014.80	030	280/08:16:42	PERU	-10 Deg 25.9 Min	-74 Deg 09.0 Min	01/30/86	2607
OH-014.80	008	280/08:16:49	PERU	-10 Deg 07.7 Min	-73 Deg 58.3 Min	03/16/85	1176
OH-014.80	009	280/08:16:59	PERU	-9 Deg 33.1 Min	-73 Deg 37.1 Min	03/16/85	1177
OH-014.80	010	280/08:17:10	PERU	-8 Deg 58.3 Min	-73 Deg 16.1 Min	03/16/85	1178
OH-014.80	011	280/08:17:20	PERU	-8 Deg 23.5 Min	-72 Deg 55.1 Min	03/16/85	1179
OH-014.80	012	280/08:17:31	PERU	-7 Deg 48.7 Min	-72 Deg 34.2 Min	03/16/85	1180
OH-014.80	013	280/08:17:42	PERU	-7 Deg 13.9 Min	-72 Deg 13.4 Min	03/16/85	1181
OH-014.80	014	280/08:17:52	PERU	-6 Deg 39.0 Min	-71 Deg 52.7 Min	03/16/85	1182
OH-014.80	015	280/08:18:03	PERU	-6 Deg 04.0 Min	-71 Deg 32.1 Min	03/16/85	1183
OH-014.80	016	280/08:18:14	PERU	-5 Deg 29.0 Min	-71 Deg 11.5 Min	03/16/85	1184
OH-014.80	017	280/08:18:24	PERU	-4 Deg 54.0 Min	-70 Deg 51.0 Min	03/16/85	1185
OH-014.80	018	280/08:18:35	PERU	-4 Deg 19.0 Min	-70 Deg 30.6 Min	03/16/85	1186
OH-017.40	001	280/11:49:17	U.K./NORTH SEA	56 Deg 36.5 Min	-6 Deg 12.0 Min	01/28/85	0847
OH-017.40	002	280/11:50:07	U.K./NORTH SEA	55 Deg 29.4 Min	0 Deg 48.5 Min	01/28/85	0848
OH-017.40	003	280/11:50:18	U.K./NORTH SEA	55 Deg 12.8 Min	0 Deg 19.6 Min	01/28/85	0849
OH-017.40	004	280/11:50:30	U.K./NORTH SEA	54 Deg 55.7 Min	1 Deg 26.3 Min	01/28/85	0850
OH-017.40	005	280/11:50:41	U.K./NORTH SEA	54 Deg 37.9 Min	2 Deg 31.9 Min	01/28/85	0851
OH-017.40	006	280/11:50:52	U.K./NORTH SEA	54 Deg 19.5 Min	3 Deg 36.6 Min	01/28/85	0852
OH-017.40	007	280/11:51:03	U.K./NORTH SEA	54 Deg 00.5 Min	4 Deg 40.3 Min	01/28/85	0853
OH-017.40	008	280/11:51:09	NORTH SEA	53 Deg 52.6 Min	5 Deg 04.9 Min	05/23/85	1707
OH-017.40	013	280/11:51:51	NORTH SEA	52 Deg 34.6 Min	8 Deg 55.5 Min	11/15/85	2495
OH-017.40	009	280/11:51:52	NORTH SEA	52 Deg 33.2 Min	8 Deg 59.3 Min	05/28/85	1750
OH-017.40	017	280/11:51:54	NORTH SEA	52 Deg 30.4 Min	9 Deg 06.9 Min	02/12/86	2627
OH-017.40	010	280/11:52:03	NORTH SEA	52 Deg 10.7 Min	9 Deg 59.0 Min	05/28/85	1751
OH-017.40	014	280/11:52:03	NORTH SEA	52 Deg 11.0 Min	9 Deg 58.4 Min	11/15/85	2496
OH-017.40	015	280/11:52:14	NORTH SEA	51 Deg 48.6 Min	10 Deg 55.7 Min	11/15/85	2497
OH-017.40	011	280/11:52:15	NORTH SEA	51 Deg 47.9 Min	10 Deg 57.5 Min	05/28/85	1752
OH-017.40	016	280/11:52:25	NORTH SEA	51 Deg 25.7 Min	11 Deg 52.1 Min	11/15/85	2498
OH-017.40	012	280/11:52:26	NORTH SEA	51 Deg 25.0 Min	11 Deg 53.8 Min	05/28/85	1753
OH-017.50	006	280/11:58:50	SAUDI ARABIA	35 Deg 04.0 Min	36 Deg 59.6 Min	07/03/85	2015
OH-017.50	007	280/11:59:01	SAUDI ARABIA	34 Deg 31.7 Min	37 Deg 29.4 Min	07/03/85	2016
OH-017.50	008	280/11:59:12	SAUDI ARABIA	33 Deg 59.3 Min	37 Deg 58.8 Min	07/03/85	2017
OH-017.50	009	280/11:59:22	SAUDI ARABIA	33 Deg 27.4 Min	38 Deg 27.2 Min	07/03/85	2018
OH-017.50	010	280/11:59:33	SAUDI ARABIA	32 Deg 54.8 Min	38 Deg 55.8 Min	07/03/85	2019
OH-017.50	011	280/11:59:44	SAUDI ARABIA	32 Deg 22.0 Min	39 Deg 24.1 Min	07/03/85	2020
OH-017.50	012	280/11:59:52	SAUDI ARABIA	31 Deg 54.8 Min	39 Deg 47.2 Min	07/03/85	2021
OH-017.50	013	280/12:00:03	SAUDI ARABIA	31 Deg 21.8 Min	40 Deg 14.8 Min	07/03/85	2022
OH-017.50	014	280/12:00:14	SAUDI ARABIA	30 Deg 48.7 Min	40 Deg 42.1 Min	07/03/85	2023
OH-017.50	015	280/12:00:24	SAUDI ARABIA	30 Deg 15.5 Min	41 Deg 09.1 Min	07/03/85	2024
OH-017.50	001	280/12:00:30	SAUDI ARABIA	29 Deg 52.8 Min	41 Deg 27.8 Min	10/31/84	0151
OH-017.50	016	280/12:00:35	SAUDI ARABIA	29 Deg 42.2 Min	41 Deg 35.8 Min	07/03/85	2025
OH-017.50	005	280/12:00:40	SAUDI ARABIA	29 Deg 22.1 Min	41 Deg 52.0 Min	03/27/85	1303
OH-017.50	002	280/12:00:41	SAUDI ARABIA	29 Deg 19.4 Min	41 Deg 54.3 Min	10/31/84	0152
OH-017.50	017	280/12:00:46	SAUDI ARABIA	29 Deg 08.8 Min	42 Deg 02.1 Min	07/03/85	2026
OH-017.50	003	280/12:00:51	SAUDI ARABIA	28 Deg 45.8 Min	42 Deg 20.5 Min	10/31/84	0153
OH-017.50	018	280/12:00:56	SAUDI ARABIA	28 Deg 35.3 Min	42 Deg 28.2 Min	07/03/85	2027
OH-017.50	019	280/12:01:07	SAUDI ARABIA	28 Deg 01.8 Min	42 Deg 54.0 Min	07/03/85	2028
OH-017.50	020	280/12:01:15	SAUDI ARABIA	27 Deg 35.3 Min	43 Deg 14.0 Min	07/04/85	2029
OH-017.50	021	280/12:01:24	SAUDI ARABIA	27 Deg 06.7 Min	43 Deg 35.5 Min	07/04/85	2030
OH-017.50	022	280/12:01:40	SAUDI ARABIA	26 Deg 16.2 Min	44 Deg 12.8 Min	07/04/85	2031
OH-017.50	023	280/12:01:51	SAUDI ARABIA	25 Deg 41.0 Min	44 Deg 38.4 Min	07/04/85	2032
OH-017.50	024	280/12:02:02	SAUDI ARABIA	25 Deg 07.1 Min	45 Deg 02.8 Min	07/04/85	2033
OH-017.50	025	280/12:02:13	SAUDI ARABIA	24 Deg 33.0 Min	45 Deg 27.0 Min	07/04/85	2034
OH-017.50	026	280/12:02:59	SAUDI ARABIA	22 Deg 02.3 Min	47 Deg 10.9 Min	07/04/85	2035
OH-017.50	027	280/12:03:10	SAUDI ARABIA	21 Deg 27.9 Min	47 Deg 34.0 Min	07/04/85	2036
OH-017.50	028	280/12:03:21	SAUDI ARABIA	20 Deg 53.7 Min	47 Deg 56.7 Min	07/04/85	2037
OH-017.50	029	280/12:03:31	SAUDI ARABIA	20 Deg 19.1 Min	48 Deg 19.4 Min	07/04/85	2038
OH-017.50	030	280/12:03:42	SAUDI ARABIA	19 Deg 44.5 Min	48 Deg 42.0 Min	07/04/85	2039

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OH-017.50	031	280/12:03:53	SAUDI ARABIA	19 Deg 09.9 Min	49 Deg 04.4 Min	07/04/85	2040
OH-018.60	001	280/14:14:37	ALPINE FAULT	-39 Deg 01.4 Min	176 Deg 33.3 Min	11/01/84	0157
OH-018.60	002	280/14:14:48	ALPINE FAULT	-38 Deg 29.7 Min	177 Deg 08.3 Min	11/01/84	0158
X1-035.60	001	281/15:15:00	MOLOPO/AGULHAS	-15 Deg 40.1 Min	13 Deg 37.4 Min	03/02/85	1072
X1-035.60	002	281/15:15:11	MOLOPO/AGULHAS	-16 Deg 15.3 Min	13 Deg 59.4 Min	03/02/85	1073
X1-035.60	003	281/15:15:21	MOLOPO/AGULHAS	-16 Deg 50.9 Min	14 Deg 21.8 Min	03/02/85	1074
X1-035.60	004	281/15:15:31	MOLOPO/AGULHAS	-17 Deg 26.2 Min	14 Deg 44.2 Min	03/02/85	1075
X1-035.60	078	281/15:15:31	MOLOPO/AGULHAS	-17 Deg 25.5 Min	14 Deg 43.9 Min	06/15/85	1863
X1-035.60	005	281/15:15:40	AGULHAS/MOLOPO	-17 Deg 54.6 Min	15 Deg 02.4 Min	03/05/85	1088
X1-035.60	006	281/15:15:50	AGULHAS/MOLOPO	-18 Deg 29.8 Min	15 Deg 25.1 Min	03/05/85	1089
X1-035.60	007	281/15:16:01	AGULHAS/MOLOPO	-19 Deg 05.0 Min	15 Deg 47.9 Min	03/05/85	1090
X1-035.60	008	281/15:16:11	AGULHAS/MOLOPO	-19 Deg 40.1 Min	16 Deg 11.0 Min	03/05/85	1091
X1-035.60	009	281/15:16:22	AGULHAS/MOLOPO	-20 Deg 15.2 Min	16 Deg 34.2 Min	03/05/85	1092
X1-035.60	010	281/15:16:32	AGULHAS/MOLOPO	-20 Deg 50.2 Min	16 Deg 57.6 Min	03/05/85	1093
X1-035.60	011	281/15:16:43	AGULHAS/MOLOPO	-21 Deg 25.1 Min	17 Deg 21.1 Min	03/05/85	1094
X1-035.60	012	281/15:16:53	AGULHAS/MOLOPO	-22 Deg 00.0 Min	17 Deg 44.9 Min	03/05/85	1095
X1-035.60	013	281/15:17:00	MOLOPO/AGULHAS	-22 Deg 21.7 Min	17 Deg 59.9 Min	03/02/85	1076
X1-035.60	014	281/15:17:10	MOLOPO/AGULHAS	-22 Deg 56.5 Min	18 Deg 24.0 Min	03/02/85	1077
X1-035.60	015	281/15:17:21	MOLOPO/AGULHAS	-23 Deg 31.2 Min	18 Deg 48.3 Min	03/02/85	1078
X1-035.60	016	281/15:17:31	MOLOPO/AGULHAS	-24 Deg 05.8 Min	19 Deg 12.9 Min	03/02/85	1079
X1-035.60	017	281/15:17:42	MOLOPO/AGULHAS	-24 Deg 40.4 Min	19 Deg 37.7 Min	03/02/85	1080
X1-035.60	018	281/15:17:52	MOLOPO/AGULHAS	-25 Deg 14.8 Min	20 Deg 02.7 Min	03/02/85	1081
X1-035.60	019	281/15:18:03	MOLOPO/AGULHAS	-25 Deg 49.2 Min	20 Deg 28.0 Min	03/02/85	1082
X1-035.60	020	281/15:18:13	MOLOPO/AGULHAS	-26 Deg 23.5 Min	20 Deg 53.5 Min	03/02/85	1083
X1-035.60	021	281/15:18:24	MOLOPO/AGULHAS	-26 Deg 57.7 Min	21 Deg 19.3 Min	03/02/85	1084
X1-035.60	022	281/15:18:34	MOLOPO/AGULHAS	-27 Deg 31.8 Min	21 Deg 45.4 Min	03/02/85	1085
X1-035.60	023	281/15:18:45	MOLOPO/AGULHAS	-28 Deg 05.8 Min	22 Deg 11.8 Min	03/02/85	1086
X1-035.60	024	281/15:18:55	MOLOPO/AGULHAS	-28 Deg 39.7 Min	22 Deg 38.4 Min	03/02/85	1087
X1-035.60	025	281/15:19:00	AGULHAS/MOLOPO	-28 Deg 54.5 Min	22 Deg 50.1 Min	03/06/85	1106
X1-035.60	026	281/15:19:10	AGULHAS/MOLOPO	-29 Deg 28.2 Min	23 Deg 17.3 Min	03/06/85	1107
X1-035.60	027	281/15:19:21	AGULHAS/MOLOPO	-30 Deg 01.9 Min	23 Deg 44.7 Min	03/06/85	1108
X1-035.60	028	281/15:19:31	AGULHAS/MOLOPO	-30 Deg 35.4 Min	24 Deg 12.4 Min	03/06/85	1109
X1-035.60	029	281/15:19:42	AGULHAS/MOLOPO	-31 Deg 08.9 Min	24 Deg 40.5 Min	03/06/85	1110
X1-035.60	030	281/15:19:52	AGULHAS/MOLOPO	-31 Deg 42.2 Min	25 Deg 08.9 Min	03/06/85	1111
X1-035.60	031	281/15:20:00	AGULHAS/MOLOPO	-32 Deg 06.7 Min	25 Deg 30.1 Min	03/07/85	1112
X1-035.60	032	281/15:20:11	AGULHAS/MOLOPO	-32 Deg 39.8 Min	25 Deg 59.2 Min	03/07/85	1113
X1-035.60	033	281/15:20:21	AGULHAS/MOLOPO	-33 Deg 12.7 Min	26 Deg 28.6 Min	03/07/85	1114
X1-035.60	034	281/15:20:32	AGULHAS/MOLOPO	-33 Deg 45.5 Min	26 Deg 58.5 Min	03/07/85	1115
X1-035.60	035	281/15:20:42	AGULHAS/MOLOPO	-34 Deg 18.2 Min	27 Deg 28.7 Min	03/07/85	1116
X1-035.60	036	281/15:20:53	AGULHAS/MOLOPO	-34 Deg 50.8 Min	27 Deg 59.4 Min	03/07/85	1117
X1-035.60	055	281/15:21:00	AGULHAS	-35 Deg 13.4 Min	28 Deg 21.0 Min	03/23/85	1242
X1-035.60	056	281/15:21:10	AGULHAS	-35 Deg 45.7 Min	28 Deg 52.4 Min	03/23/85	1243
X1-035.60	057	281/15:21:21	AGULHAS	-36 Deg 17.8 Min	29 Deg 24.3 Min	03/23/85	1244
X1-035.60	058	281/15:21:31	AGULHAS	-36 Deg 49.8 Min	29 Deg 56.5 Min	03/23/85	1245
X1-035.60	059	281/15:21:42	AGULHAS	-37 Deg 21.6 Min	30 Deg 29.3 Min	03/23/85	1246
X1-035.60	060	281/15:22:00	AGULHAS	-38 Deg 20.4 Min	31 Deg 21.9 Min	03/23/85	1247
X1-035.60	061	281/15:22:11	AGULHAS	-38 Deg 51.5 Min	31 Deg 55.8 Min	03/23/85	1248
X1-035.60	062	281/15:22:21	AGULHAS	-39 Deg 22.7 Min	32 Deg 30.5 Min	03/23/85	1249
X1-035.60	063	281/15:22:32	AGULHAS	-39 Deg 53.5 Min	33 Deg 05.5 Min	03/23/85	1250
X1-035.60	064	281/15:22:42	AGULHAS	-40 Deg 24.3 Min	33 Deg 41.2 Min	03/23/85	1251
X1-035.60	065	281/15:22:53	AGULHAS	-40 Deg 54.9 Min	34 Deg 17.6 Min	03/23/85	1252
X1-035.60	067	281/15:23:00	AGULHAS	-41 Deg 16.2 Min	34 Deg 43.5 Min	03/25/85	1274
X1-035.60	066	281/15:23:03	AGULHAS	-41 Deg 25.1 Min	34 Deg 54.4 Min	03/23/85	1253
X1-035.60	068	281/15:23:10	AGULHAS	-41 Deg 46.3 Min	35 Deg 20.7 Min	03/25/85	1275
X1-035.60	069	281/15:23:21	AGULHAS	-42 Deg 16.4 Min	35 Deg 58.8 Min	03/25/85	1276
X1-035.60	070	281/15:23:31	AGULHAS	-42 Deg 46.0 Min	36 Deg 37.1 Min	03/25/85	1277
X1-035.60	071	281/15:23:42	AGULHAS	-43 Deg 15.4 Min	37 Deg 16.3 Min	03/25/85	1278
X1-035.60	072	281/15:24:01	AGULHAS	-44 Deg 09.0 Min	38 Deg 30.2 Min	03/25/85	1279
X1-035.60	073	281/15:24:12	AGULHAS	-44 Deg 37.7 Min	39 Deg 11.3 Min	03/25/85	1280
X1-035.60	074	281/15:24:22	AGULHAS	-45 Deg 06.2 Min	39 Deg 53.1 Min	03/25/85	1281
X1-035.60	075	281/15:24:33	AGULHAS	-45 Deg 34.3 Min	40 Deg 35.6 Min	03/25/85	1282

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
X1-035.60	076	281/15:24:43	AGULHAS	-46 Deg 02.2 Min	41 Deg 18.9 Min	03/25/85	1283
X1-036.60	013	281/17:15:49	QUEENSLAND, AUSTRALIA	-29 Deg 18.3 Min	137 Deg 29.2 Min	08/30/85	2307
X1-036.60	014	281/17:16:00	QUEENSLAND, AUSTRALIA	-28 Deg 44.0 Min	137 Deg 55.5 Min	08/30/85	2308
X1-036.60	015	281/17:16:11	QUEENSLAND, AUSTRALIA	-28 Deg 09.5 Min	138 Deg 21.4 Min	08/30/85	2309
X1-036.60	016	281/17:16:21	QUEENSLAND, AUSTRALIA	-27 Deg 35.0 Min	138 Deg 47.1 Min	08/30/85	2310
X1-036.60	017	281/17:16:32	QUEENSLAND, AUSTRALIA	-27 Deg 00.4 Min	139 Deg 12.5 Min	08/30/85	2311
X1-036.60	018	281/17:16:42	QUEENSLAND, AUSTRALIA	-26 Deg 25.7 Min	139 Deg 37.7 Min	08/30/85	2312
X1-036.60	019	281/17:16:51	QUEENSLAND, AUSTRALIA	-25 Deg 54.8 Min	139 Deg 59.8 Min	09/01/85	2313
X1-036.60	020	281/17:17:02	QUEENSLAND, AUSTRALIA	-25 Deg 20.0 Min	140 Deg 24.5 Min	09/01/85	2314
X1-036.60	021	281/17:17:13	QUEENSLAND, AUSTRALIA	-24 Deg 45.1 Min	140 Deg 48.9 Min	09/01/85	2315
X1-036.60	022	281/17:17:23	QUEENSLAND, AUSTRALIA	-24 Deg 10.1 Min	141 Deg 13.1 Min	09/01/85	2316
X1-036.60	023	281/17:17:34	QUEENSLAND, AUSTRALIA	-23 Deg 35.1 Min	141 Deg 37.1 Min	09/01/85	2317
X1-036.60	024	281/17:17:44	QUEENSLAND, AUSTRALIA	-23 Deg 00.0 Min	142 Deg 00.9 Min	09/01/85	2318
X1-036.60	001	281/17:17:50	CANEFIELDS, AUSTRALIA	-22 Deg 38.6 Min	142 Deg 15.3 Min	09/19/85	2232
X1-036.60	002	281/17:18:01	CANEFIELDS, AUSTRALIA	-22 Deg 03.4 Min	142 Deg 38.8 Min	09/19/85	2233
X1-036.60	003	281/17:18:11	CANEFIELDS, AUSTRALIA	-21 Deg 28.3 Min	143 Deg 01.9 Min	09/19/85	2234
X1-036.60	004	281/17:18:22	CANEFIELDS, AUSTRALIA	-20 Deg 53.1 Min	143 Deg 25.0 Min	09/19/85	2235
X1-036.60	005	281/17:18:30	CANEFIELDS, AUSTRALIA	-20 Deg 24.9 Min	143 Deg 43.3 Min	08/09/85	2236
X1-036.60	006	281/17:18:41	CANEFIELDS, AUSTRALIA	-19 Deg 49.5 Min	144 Deg 06.1 Min	08/09/85	2237
X1-036.60	007	281/17:18:52	CANEFIELDS, AUSTRALIA	-19 Deg 14.1 Min	144 Deg 28.7 Min	08/09/85	2238
X1-036.60	008	281/17:19:02	CANEFIELDS, AUSTRALIA	-18 Deg 38.6 Min	144 Deg 51.1 Min	08/09/85	2239
X1-036.60	009	281/17:19:13	CANEFIELDS, AUSTRALIA	-18 Deg 03.1 Min	145 Deg 13.4 Min	08/09/85	2240
X1-036.60	010	281/17:19:23	CANEFIELDS, AUSTRALIA	-17 Deg 27.6 Min	145 Deg 35.6 Min	08/09/85	2241
X1-036.60	011	281/17:19:34	CANEFIELDS, AUSTRALIA	-16 Deg 52.0 Min	145 Deg 57.7 Min	08/09/85	2242
X1-036.60	012	281/17:19:44	CANEFIELDS, AUSTRALIA	-16 Deg 16.4 Min	146 Deg 19.6 Min	08/09/85	2243
AO-037.20	087	281/17:44:53	CANADA	57 Deg 58.1 Min	-133 Deg 28.2 Min	06/03/85	1805
AO-037.20	088	281/17:45:04	CANADA	58 Deg 04.1 Min	-132 Deg 11.9 Min	06/03/85	1806
AO-037.20	089	281/17:45:14	CANADA	58 Deg 09.3 Min	-130 Deg 55.2 Min	06/03/85	1807
AO-037.20	090	281/17:45:25	CANADA	58 Deg 13.8 Min	-129 Deg 38.1 Min	06/03/85	1808
AO-037.20	091	281/17:45:35	CANADA	58 Deg 17.3 Min	-128 Deg 20.7 Min	06/03/85	1809
AO-037.20	008	281/17:45:42	CANADA	58 Deg 19.3 Min	-127 Deg 36.2 Min	12/06/84	0437
AO-037.20	009	281/17:45:52	CANADA	58 Deg 21.6 Min	-126 Deg 18.4 Min	12/06/84	0438
AO-037.20	082	281/17:45:53	CANADA	58 Deg 21.6 Min	-126 Deg 07.2 Min	05/24/85	1697
AO-037.20	010	281/17:46:03	CANADA	58 Deg 23.1 Min	-125 Deg 00.4 Min	12/06/84	0439
AO-037.20	083	281/17:46:04	CANADA	58 Deg 23.0 Min	-124 Deg 49.2 Min	05/24/85	1698
AO-037.20	011	281/17:46:13	CANADA	58 Deg 23.8 Min	-123 Deg 42.8 Min	12/04/84	0440
AO-037.20	084	281/17:46:14	CANADA	58 Deg 23.5 Min	-123 Deg 31.2 Min	05/24/85	1699
AO-037.20	012	281/17:46:24	CANADA	58 Deg 23.6 Min	-122 Deg 24.6 Min	12/04/84	0441
AO-037.20	085	281/17:46:25	CANADA	58 Deg 23.2 Min	-122 Deg 13.2 Min	05/24/85	1700
AO-037.20	013	281/17:46:34	CANADA	58 Deg 22.6 Min	-121 Deg 06.5 Min	12/04/84	0442
AO-037.20	086	281/17:46:35	CANADA	58 Deg 22.0 Min	-120 Deg 55.2 Min	05/24/85	1701
AO-037.20	092	281/17:46:44	CANADA	58 Deg 20.4 Min	-119 Deg 47.6 Min	06/03/85	1781
AO-037.20	015	281/17:46:55	CANADA	58 Deg 18.0 Min	-118 Deg 30.7 Min	12/04/84	0444
AO-037.20	016	281/17:47:06	CANADA	58 Deg 14.5 Min	-117 Deg 13.2 Min	12/04/84	0445
AO-037.20	093	281/17:47:15	CANADA	58 Deg 10.2 Min	-116 Deg 00.1 Min	06/18/85	1908
AO-037.20	018	281/17:47:27	CANADA	58 Deg 05.1 Min	-114 Deg 39.1 Min	12/04/84	0447
AO-037.20	019	281/17:47:37	CANADA	57 Deg 59.2 Min	-113 Deg 22.6 Min	12/04/84	0448
AO-037.20	094	281/17:47:46	CANADA	57 Deg 52.8 Min	-112 Deg 14.5 Min	07/02/85	2008
AO-037.20	095	281/17:47:57	CANADA	57 Deg 45.4 Min	-110 Deg 59.1 Min	07/02/85	2009
AO-037.20	096	281/17:48:07	CANADA	57 Deg 37.2 Min	-109 Deg 44.2 Min	07/02/85	2010
AO-037.20	097	281/17:48:18	CANADA	57 Deg 28.2 Min	-108 Deg 29.9 Min	07/02/85	2011
AO-037.20	098	281/17:48:28	CANADA	57 Deg 18.4 Min	-107 Deg 16.3 Min	07/02/85	2012
AO-037.20	099	281/17:48:39	CANADA	57 Deg 07.9 Min	-106 Deg 03.3 Min	07/02/85	2013
AO-037.20	100	281/17:48:49	CANADA	56 Deg 56.7 Min	-104 Deg 51.1 Min	07/02/85	2014
AO-037.20	035	281/17:49:00	CANADA	56 Deg 44.5 Min	-103 Deg 38.5 Min	04/19/85	1437
AO-037.20	036	281/17:49:10	CANADA	56 Deg 31.9 Min	-102 Deg 27.9 Min	04/19/85	1438
AO-037.20	037	281/17:49:21	CANADA	56 Deg 18.5 Min	-101 Deg 18.0 Min	04/19/85	1439
AO-037.20	038	281/17:49:31	CANADA	56 Deg 04.4 Min	-100 Deg 09.0 Min	04/19/85	1440
AO-037.20	039	281/17:49:42	CANADA	55 Deg 49.7 Min	-99 Deg 00.9 Min	04/19/85	1441
AO-037.20	040	281/17:49:52	CANADA	55 Deg 34.3 Min	-97 Deg 53.7 Min	04/19/85	1442
AO-037.20	041	281/17:50:03	CANADA	55 Deg 18.2 Min	-96 Deg 47.4 Min	04/19/85	1443

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AO-037.20	042	281/17:50:13	CANADA	55 Deg 01.6 Min	-95 Deg 42.0 Min	04/19/85	1444
AO-037.20	043	281/17:50:24	CANADA	54 Deg 44.3 Min	-94 Deg 37.6 Min	04/19/85	1445
AO-037.20	044	281/17:50:34	CANADA	54 Deg 26.3 Min	-93 Deg 33.7 Min	04/19/85	1446
AO-037.20	045	281/17:50:45	CANADA	54 Deg 07.8 Min	-92 Deg 31.1 Min	04/19/85	1447
AO-037.20	046	281/17:50:55	CANADA	53 Deg 48.8 Min	-91 Deg 29.4 Min	04/19/85	1448
AO-037.20	047	281/17:51:06	CANADA	53 Deg 13.9 Min	-89 Deg 43.3 Min	04/20/85	1449
AO-037.20	048	281/17:51:16	CANADA	53 Deg 08.9 Min	-89 Deg 28.5 Min	04/20/85	1450
AO-037.20	049	281/17:51:27	CANADA	52 Deg 48.2 Min	-88 Deg 29.8 Min	04/20/85	1451
AO-037.20	050	281/17:51:37	CANADA	52 Deg 10.7 Min	-86 Deg 49.2 Min	04/20/85	1452
AO-037.20	051	281/17:51:48	CANADA	52 Deg 05.3 Min	-86 Deg 35.1 Min	04/20/85	1453
AO-037.20	052	281/17:51:58	CANADA	51 Deg 43.1 Min	-85 Deg 39.2 Min	04/20/85	1454
AO-037.20	053	281/17:52:09	CANADA	51 Deg 03.3 Min	-84 Deg 03.9 Min	04/20/85	1455
AO-037.20	054	281/17:52:19	CANADA	50 Deg 57.6 Min	-83 Deg 50.6 Min	04/20/85	1456
AO-037.20	055	281/17:52:30	CANADA	50 Deg 34.0 Min	-82 Deg 57.5 Min	04/20/85	1457
AO-037.20	056	281/17:52:40	CANADA	49 Deg 52.0 Min	-81 Deg 27.0 Min	04/20/85	1458
AO-037.20	057	281/17:52:51	CANADA	49 Deg 45.9 Min	-81 Deg 14.3 Min	04/20/85	1459
AO-037.20	058	281/17:53:01	CANADA	49 Deg 21.1 Min	-80 Deg 23.9 Min	04/20/85	1460
AO-037.20	059	281/17:53:12	CANADA	48 Deg 56.0 Min	-79 Deg 34.3 Min	04/20/85	1461
AO-037.20	060	281/17:53:22	CANADA	48 Deg 30.4 Min	-78 Deg 45.7 Min	04/20/85	1462
AO-037.20	061	281/17:53:33	CANADA	48 Deg 04.5 Min	-77 Deg 57.9 Min	04/20/85	1463
AO-037.20	062	281/17:53:43	CANADA	47 Deg 38.5 Min	-77 Deg 11.2 Min	04/20/85	1464
AO-037.20	063	281/17:53:54	CANADA	47 Deg 11.9 Min	-76 Deg 25.0 Min	04/20/85	1465
AO-037.20	064	281/17:54:04	CANADA	46 Deg 44.9 Min	-75 Deg 39.6 Min	04/20/85	1466
AO-037.20	065	281/17:54:15	CANADA	46 Deg 17.7 Min	-74 Deg 54.9 Min	04/20/85	1467
AO-037.20	020	281/17:54:25	MONTREAL, CANADA	45 Deg 50.8 Min	-74 Deg 11.4 Min	12/12/84	0527
AO-037.20	066	281/17:54:25	CANADA	45 Deg 50.1 Min	-74 Deg 11.1 Min	04/20/85	1468
AO-037.20	003	281/17:54:27	W. MONTREAL, QUEBEC	45 Deg 46.9 Min	-74 Deg 05.3 Min	10/08/84	0008
AO-037.20	001	281/17:54:34	QUEBEC, CANADA	45 Deg 28.3 Min	-73 Deg 36.5 Min	10/07/84	0006
AO-037.20	021	281/17:54:35	MONTREAL,CANADA	45 Deg 24.7 Min	-73 Deg 31.0 Min	12/12/84	0528
AO-037.20	067	281/17:54:36	CANADA	45 Deg 22.2 Min	-73 Deg 28.0 Min	04/20/85	1469
AO-037.20	068	281/17:54:46	CANADA	44 Deg 54.1 Min	-72 Deg 45.6 Min	04/20/85	1470
AO-037.20	005	281/17:54:48	VERMONT	44 Deg 49.8 Min	-72 Deg 38.5 Min	10/10/84	0013
AO-037.20	069	281/17:54:57	CANADA	44 Deg 25.6 Min	-72 Deg 04.0 Min	04/20/85	1471
AO-037.20	006	281/17:55:00	VERMONT/NEW HAMP.	44 Deg 17.4 Min	-71 Deg 51.4 Min	10/10/84	0014
AO-037.20	022	281/17:55:00	VERMONT/MAINE	44 Deg 12.2 Min	-71 Deg 44.6 Min	03/19/85	1225
AO-037.20	070	281/17:55:07	CANADA	43 Deg 56.9 Min	-71 Deg 23.0 Min	04/20/85	1472
AO-037.20	023	281/17:55:10	VERMONT/MAINE	43 Deg 43.4 Min	-71 Deg 03.9 Min	03/19/85	1226
AO-037.20	007	281/17:55:12	NEW HAMPSHIRE/MAINE	43 Deg 44.7 Min	-71 Deg 05.2 Min	10/10/84	0026
AO-037.20	002	281/17:55:16	NEW HAMPSHIRE	44 Deg 09.9 Min	-71 Deg 40.6 Min	10/08/84	0007
AO-037.20	004	281/17:55:17	MAINE COASTLINE	43 Deg 30.3 Min	-70 Deg 45.3 Min	10/09/84	0022
AO-037.20	071	281/17:55:18	CANADA	43 Deg 28.2 Min	-70 Deg 43.1 Min	04/22/85	1473
AO-037.20	081	281/17:55:19	CANADA	43 Deg 25.8 Min	-70 Deg 39.9 Min	05/08/85	1579
AO-037.20	026	281/17:55:25	NEW YORK BIGHT	43 Deg 03.1 Min	-70 Deg 09.0 Min	03/20/85	1227
AO-037.20	072	281/17:55:28	CANADA	42 Deg 58.9 Min	-70 Deg 03.5 Min	04/22/85	1474
AO-037.20	027	281/17:55:35	NEW YORK BIGHT	42 Deg 33.7 Min	-69 Deg 29.9 Min	03/20/85	1228
AO-037.20	073	281/17:55:39	CANADA	42 Deg 29.4 Min	-69 Deg 24.5 Min	04/22/85	1475
AO-037.20	028	281/17:55:46	NEW YORK BIGHT	42 Deg 03.9 Min	-68 Deg 51.4 Min	03/20/85	1229
AO-037.20	074	281/17:55:49	CANADA	41 Deg 59.7 Min	-68 Deg 46.2 Min	04/22/85	1476
AO-037.20	029	281/17:55:56	NEW YORK BIGHT	41 Deg 34.3 Min	-68 Deg 14.0 Min	03/20/85	1230
AO-037.20	075	281/17:56:00	CANADA	41 Deg 29.7 Min	-68 Deg 08.5 Min	04/22/85	1477
AO-037.20	030	281/17:56:07	NEW YORK BIGHT	41 Deg 04.1 Min	-67 Deg 36.8 Min	03/20/85	1231
AO-037.20	076	281/17:56:10	CANADA	40 Deg 59.5 Min	-67 Deg 31.4 Min	04/22/85	1478
AO-037.20	031	281/17:56:17	NEW YORK BIGHT	40 Deg 33.7 Min	-67 Deg 00.1 Min	03/20/85	1232
AO-037.20	077	281/17:56:21	CANADA	40 Deg 29.1 Min	-66 Deg 54.9 Min	04/22/85	1479
AO-037.20	032	281/17:56:28	NEW YORK BIGHT	40 Deg 03.2 Min	-66 Deg 24.2 Min	03/20/85	1233
AO-037.20	078	281/17:56:31	CANADA	39 Deg 58.5 Min	-66 Deg 19.0 Min	04/22/85	1480
AO-037.20	033	281/17:56:38	NEW YORK BIGHT	39 Deg 32.3 Min	-65 Deg 48.7 Min	03/20/85	1234
AO-037.20	079	281/17:56:42	CANADA	39 Deg 27.7 Min	-65 Deg 43.6 Min	04/22/85	1481
AO-037.20	034	281/17:56:49	NEW YORK BIGHT	39 Deg 01.3 Min	-65 Deg 13.8 Min	03/20/85	1235
AO-037.20	080	281/17:56:52	CANADA	38 Deg 56.7 Min	-65 Deg 08.7 Min	04/22/85	1482
N1-037.60	016	281/18:45:00	HAMERSLEY-N/W SHELF	-25 Deg 53.6 Min	111 Deg 47.9 Min	03/12/85	1148

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
N1-037.60	017	281/18:45:11	HAMERSLEY-N/W SHELF	-25 Deg 19.4 Min	112 Deg 14.3 Min	03/12/85	1149
N1-037.60	018	281/18:45:21	HAMERSLEY-N/W SHELF	-24 Deg 45.1 Min	112 Deg 40.4 Min	03/12/85	1150
N1-037.60	019	281/18:45:32	HAMERSLEY-N/W SHELF	-24 Deg 10.7 Min	113 Deg 06.3 Min	03/12/85	1151
N1-037.60	031	281/18:45:41	HAMERSLEY-N/W SHELF	-23 Deg 32.5 Min	113 Deg 36.9 Min	09/21/85	2220
N1-037.60	020	281/18:45:42	HAMERSLEY-N/W SHELF	-23 Deg 36.2 Min	113 Deg 31.9 Min	03/12/85	1152
N1-037.60	032	281/18:45:52	HAMERSLEY-N/W SHELF	-22 Deg 57.9 Min	114 Deg 02.2 Min	09/21/85	2221
N1-037.60	021	281/18:45:53	HAMERSLEY-N/W SHELF	-23 Deg 01.7 Min	113 Deg 57.3 Min	03/12/85	1153
N1-037.60	033	281/18:46:01	HAMERSLEY-N/W SHELF	-22 Deg 29.7 Min	114 Deg 21.8 Min	09/21/85	2222
N1-037.60	022	281/18:46:04	HAMERSLEY-N/W SHELF	-22 Deg 27.0 Min	114 Deg 22.4 Min	03/12/85	1154
N1-037.60	034	281/18:46:12	HAMERSLEY-N/W SHELF	-21 Deg 56.6 Min	114 Deg 45.1 Min	09/21/85	2244
N1-037.60	035	281/18:46:23	HAMERSLEY-N/W SHELF	-21 Deg 25.1 Min	115 Deg 06.8 Min	09/10/85	2245
N1-037.60	036	281/18:46:32	HAMERSLEY-N/W SHELF	-20 Deg 54.8 Min	115 Deg 27.9 Min	09/10/85	2246
N1-037.60	037	281/18:46:43	HAMERSLEY-N/W SHELF	-20 Deg 20.9 Min	115 Deg 51.4 Min	09/10/85	2247
N1-037.60	046	281/18:46:53	HAMERSLEY-N/W SHELF	-19 Deg 47.5 Min	116 Deg 14.4 Min	09/30/85	2396
N1-037.60	047	281/18:47:04	HAMERSLEY-N/W SHELF	-19 Deg 12.0 Min	116 Deg 38.6 Min	09/30/85	2397
N1-037.60	048	281/18:47:15	HAMERSLEY-N/W SHELF	-18 Deg 36.2 Min	117 Deg 02.7 Min	09/30/85	2398
N1-037.60	049	281/18:47:25	HAMERSLEY-N/W SHELF	-18 Deg 00.7 Min	117 Deg 26.3 Min	09/30/85	2399
N1-037.60	050	281/18:47:37	HAMERSLEY-N/W SHELF	-17 Deg 20.2 Min	117 Deg 53.1 Min	10/01/85	2400
N1-037.60	051	281/18:47:48	HAMERSLEY-N/W SHELF	-16 Deg 44.1 Min	118 Deg 16.7 Min	10/01/85	2401
N1-037.60	052	281/18:47:59	HAMERSLEY-N/W SHELF	-16 Deg 09.2 Min	118 Deg 39.3 Min	10/01/85	2402
N1-037.60	053	281/18:48:09	HAMERSLEY-N/W SHELF	-15 Deg 33.7 Min	119 Deg 02.1 Min	10/01/85	2403
N1-037.60	054	281/18:48:20	HAMERSLEY-N/W SHELF	-14 Deg 56.6 Min	119 Deg 25.7 Min	10/02/85	2404
N1-037.60	055	281/18:48:31	HAMERSLEY-N/W SHELF	-14 Deg 21.0 Min	119 Deg 48.2 Min	10/02/85	2405
N1-037.60	056	281/18:48:42	HAMERSLEY-N/W SHELF	-13 Deg 45.3 Min	120 Deg 10.6 Min	10/02/85	2406
N1-037.60	057	281/18:48:52	HAMERSLEY-N/W SHELF	-13 Deg 09.6 Min	120 Deg 32.8 Min	10/02/85	2407
N1-037.60	058	281/18:49:03	HAMERSLEY-N/W SHELF	-12 Deg 31.9 Min	120 Deg 56.1 Min	10/03/85	2408
N1-037.60	059	281/18:49:14	HAMERSLEY-N/W SHELF	-11 Deg 55.8 Min	121 Deg 18.3 Min	10/03/85	2409
N1-037.60	060	281/18:49:25	HAMERSLEY-N/W SHELF	-11 Deg 19.9 Min	121 Deg 40.2 Min	10/03/85	2410
N1-037.60	061	281/18:49:35	HAMERSLEY-N/W SHELF	-10 Deg 43.9 Min	122 Deg 02.0 Min	10/03/85	2411
N1-037.60	062	281/18:49:46	HAMERSLEY-N/W SHELF	-10 Deg 08.7 Min	122 Deg 23.1 Min	10/05/85	2412
N1-037.60	063	281/18:49:57	HAMERSLEY-N/W SHELF	-9 Deg 32.4 Min	122 Deg 44.9 Min	10/05/85	2413
N1-037.60	064	281/18:50:07	HAMERSLEY-N/W SHELF	-8 Deg 56.7 Min	123 Deg 06.2 Min	10/05/85	2414
N1-037.60	065	281/18:50:15	LOMBLEN,INDONESIA	-8 Deg 28.2 Min	123 Deg 23.2 Min	11/12/85	1889
N1-037.60	038	281/18:50:16	LOMBLEN, INDONESIA	-8 Deg 24.8 Min	123 Deg 25.2 Min	09/04/85	2268
N1-037.60	039	281/18:50:36	TIMOR, INDONESIA	-8 Deg 30.3 Min	126 Deg 09.6 Min	08/14/85	2269
N1-037.60	040	281/18:50:47	TIMOR, INDONESIA	-7 Deg 54.1 Min	126 Deg 30.7 Min	08/14/85	2270
KI-038.10	038	281/19:20:34	MIDWEST, U. S.	51 Deg 45.3 Min	-110 Deg 35.3 Min	01/21/86	2571
KI-038.10	039	281/19:20:46	MIDWEST, U. S.	51 Deg 22.9 Min	-109 Deg 36.2 Min	01/21/86	2572
KI-038.10	040	281/19:20:57	MIDWEST, U. S.	50 Deg 59.1 Min	-108 Deg 36.0 Min	01/18/86	2573
KI-038.10	041	281/19:21:08	MIDWEST, U. S.	50 Deg 35.7 Min	-107 Deg 38.9 Min	01/18/86	2574
KI-038.10	042	281/19:21:19	MIDWEST, U. S.	50 Deg 10.8 Min	-106 Deg 40.6 Min	01/21/86	2575
KI-038.10	043	281/19:21:31	MIDWEST, U. S.	49 Deg 46.3 Min	-105 Deg 45.4 Min	01/21/86	2576
KI-038.10	044	281/19:21:40	MIDWEST, U. S.	49 Deg 23.8 Min	-104 Deg 56.5 Min	01/22/86	2577
KI-038.10	045	281/19:21:52	MIDWEST, U. S.	48 Deg 58.5 Min	-104 Deg 03.1 Min	01/22/86	2578
KI-038.10	046	281/19:22:03	MIDWEST, U. S.	48 Deg 32.7 Min	-103 Deg 10.7 Min	01/22/86	2579
KI-038.10	047	281/19:22:14	MIDWEST, U. S.	48 Deg 06.4 Min	-102 Deg 19.3 Min	01/22/86	2580
KI-038.10	048	281/19:22:25	MIDWEST, U. S.	47 Deg 39.8 Min	-101 Deg 28.7 Min	01/22/86	2581
KI-038.10	049	281/19:22:34	MIDWEST, U. S.	47 Deg 15.6 Min	-100 Deg 44.3 Min	01/23/86	2582
KI-038.10	050	281/19:22:46	MIDWEST, U. S.	46 Deg 48.2 Min	-99 Deg 55.4 Min	01/23/86	2583
KI-038.10	051	281/19:22:57	MIDWEST, U. S.	46 Deg 20.5 Min	-99 Deg 07.5 Min	01/23/86	2584
KI-038.10	007	281/19:22:59	MIDWEST, U.S.	43 Deg 35.5 Min	-94 Deg 49.5 Min	10/16/85	2452
KI-038.10	008	281/19:23:11	MIDWEST, U.S.	45 Deg 44.9 Min	-98 Deg 08.0 Min	10/16/85	2453
KI-038.10	009	281/19:23:22	MIDWEST, U.S.	45 Deg 16.4 Min	-97 Deg 22.0 Min	10/16/85	2454
KI-038.10	010	281/19:23:33	MIDWEST, U.S.	44 Deg 47.4 Min	-96 Deg 36.7 Min	10/16/85	2455
KI-038.10	011	281/19:23:44	MIDWEST, U.S.	44 Deg 16.0 Min	-95 Deg 48.9 Min	10/31/85	2456
KI-038.10	012	281/19:23:56	MIDWEST, U.S.	43 Deg 46.4 Min	-95 Deg 05.2 Min	10/31/85	2457
KI-038.10	013	281/19:24:07	MIDWEST, U.S.	43 Deg 16.4 Min	-94 Deg 22.3 Min	10/31/85	2458
KI-038.10	014	281/19:24:18	MIDWEST, U.S.	42 Deg 46.5 Min	-93 Deg 40.6 Min	11/04/85	2459
KI-038.10	015	281/19:24:29	MIDWEST, U.S.	42 Deg 16.1 Min	-92 Deg 59.2 Min	11/04/85	2460
KI-038.10	001	281/19:24:40	ILLINOIS	41 Deg 40.6 Min	-92 Deg 22.5 Min	11/28/84	0375
KI-038.10	016	281/19:24:40	MIDWEST, U.S.	41 Deg 45.4 Min	-92 Deg 18.5 Min	11/04/85	2461

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
KI-038.10	002	281/19:24:51	ILLINOIS	41 Deg 09.4 Min	-91 Deg 42.5 Min	11/28/84	0376
KI-038.10	017	281/19:24:51	MIDWEST, U.S.	41 Deg 14.4 Min	-91 Deg 38.4 Min	11/04/85	2462
KI-038.10	003	281/19:25:02	ILLINOIS	40 Deg 38.0 Min	-91 Deg 03.2 Min	11/28/84	0377
KI-038.10	018	281/19:25:03	MIDWEST, U.S.	40 Deg 40.8 Min	-90 Deg 56.1 Min	11/06/85	2463
KI-038.10	052	281/19:25:10	ILLINOIS	40 Deg 17.9 Min	-90 Deg 28.0 Min	03/21/86	2697
KI-038.10	004	281/19:25:13	ILLINOIS	40 Deg 06.4 Min	-90 Deg 24.6 Min	11/28/84	0378
KI-038.10	019	281/19:25:14	MIDWEST, U.S.	40 Deg 09.2 Min	-90 Deg 17.4 Min	11/06/85	2464
KI-038.10	005	281/19:25:24	ILLINOIS	39 Deg 34.5 Min	-89 Deg 46.6 Min	11/28/84	0379
KI-038.10	020	281/19:25:25	MIDWEST, U.S.	39 Deg 37.4 Min	-89 Deg 39.3 Min	11/06/85	2465
KI-038.10	006	281/19:25:35	ILLINOIS	39 Deg 02.4 Min	-89 Deg 09.2 Min	11/28/84	0380
KI-038.10	021	281/19:25:35	MIDWEST, U.S.	39 Deg 05.8 Min	-89 Deg 02.4 Min	11/06/85	2466
KI-038.10	022	281/19:25:47	MIDWEST, U.S.	38 Deg 33.5 Min	-88 Deg 25.5 Min	11/06/85	2467
KI-038.10	023	281/19:25:58	MIDWEST, U.S.	38 Deg 01.0 Min	-87 Deg 49.1 Min	11/06/85	2468
KI-038.10	024	281/19:26:09	MIDWEST, U.S.	37 Deg 28.3 Min	-87 Deg 13.4 Min	11/06/85	2469
KI-038.10	025	281/19:26:19	MIDWEST, U.S.	36 Deg 54.9 Min	-86 Deg 40.1 Min	11/08/85	2470
KI-038.10	026	281/19:26:31	MIDWEST, U.S.	36 Deg 21.8 Min	-86 Deg 05.4 Min	11/08/85	2471
KI-038.10	027	281/19:26:42	MIDWEST, U.S.	35 Deg 48.5 Min	-85 Deg 31.2 Min	11/08/85	2472
KI-038.10	028	281/19:26:53	MIDWEST, U.S.	35 Deg 15.0 Min	-84 Deg 57.6 Min	11/08/85	2473
KI-038.10	029	281/19:27:02	MIDWEST, U.S.	34 Deg 46.9 Min	-84 Deg 32.4 Min	11/13/85	2474
KI-038.10	030	281/19:27:13	MIDWEST, U.S.	34 Deg 13.0 Min	-83 Deg 59.7 Min	11/13/85	2475
KI-038.10	031	281/19:27:24	MIDWEST, U.S.	33 Deg 38.9 Min	-83 Deg 27.5 Min	11/13/85	2476
KI-038.10	032	281/19:27:35	MIDWEST, U.S.	33 Deg 04.6 Min	-82 Deg 55.8 Min	11/13/85	2477
KI-038.10	033	281/19:27:46	MIDWEST, U.S.	32 Deg 30.3 Min	-82 Deg 24.5 Min	11/13/85	2482
KI-038.10	033	281/19:27:46	MIDWEST,U.S.	32 Deg 30.7 Min	-82 Deg 24.9 Min	12/08/85	2478
KI-038.11	001	281/19:28:01	S.E. U.S./WEST INDIES	31 Deg 40.7 Min	-81 Deg 45.4 Min	12/11/85	2479
KI-038.10	053	281/19:28:05	S.E. UNITED STATES	31 Deg 26.1 Min	-81 Deg 32.4 Min	04/14/87	2991
KI-038.11	002	281/19:28:12	MIDWEST,U.S.	31 Deg 06.1 Min	-81 Deg 14.9 Min	12/11/85	2480
KI-038.11	003	281/19:28:23	MIDWEST,U.S.	30 Deg 31.9 Min	-80 Deg 45.4 Min	12/11/85	2481
KI-038.11	004	281/19:28:34	MIDWEST,U.S.	29 Deg 55.5 Min	-80 Deg 16.5 Min	12/11/85	2482
KI-038.11	005	281/19:28:43	WEST INDIES AREA	29 Deg 26.1 Min	-79 Deg 49.7 Min	12/16/85	2543
KI-038.11	006	281/19:28:55	WEST INDIES AREA	28 Deg 50.9 Min	-79 Deg 20.7 Min	12/16/85	2544
KI-038.11	007	281/19:29:06	WEST INDIES AREA	28 Deg 15.6 Min	-78 Deg 52.0 Min	12/16/85	2545
KI-038.11	008	281/19:29:17	WEST INDIES AREA	27 Deg 40.2 Min	-78 Deg 23.7 Min	12/16/85	2546
KI-038.11	009	281/19:29:28	WEST INDIES AREA	27 Deg 04.7 Min	-77 Deg 55.7 Min	12/16/85	2547
KI-038.11	010	281/19:29:39	WEST INDIES AREA	26 Deg 29.0 Min	-77 Deg 28.1 Min	12/16/85	2548
KI-038.11	011	281/19:29:50	WEST INDIES AREA	25 Deg 53.3 Min	-77 Deg 00.8 Min	12/16/85	2549
KI-038.11	013	281/19:29:58	WEST INDIES AREA	25 Deg 24.8 Min	-76 Deg 39.2 Min	02/06/87	2957
KI-038.11	012	281/19:30:01	WEST INDIES AREA	25 Deg 17.5 Min	-76 Deg 33.7 Min	12/16/85	2550
KI-038.11	014	281/19:30:09	WEST INDIES AREA	24 Deg 50.9 Min	-76 Deg 13.9 Min	02/06/87	2958
KI-038.11	015	281/19:30:21	WEST INDIES AREA	24 Deg 12.9 Min	-75 Deg 45.9 Min	02/06/87	2959
KI-038.11	016	281/19:30:32	WEST INDIES AREA	23 Deg 36.8 Min	-75 Deg 19.7 Min	02/06/87	2960
KI-038.11	017	281/19:30:40	WEST INDIES AREA	23 Deg 07.7 Min	-74 Deg 58.7 Min	02/11/87	2961
KI-038.11	018	281/19:30:52	WEST INDIES AREA	22 Deg 31.5 Min	-74 Deg 33.0 Min	02/11/87	2962
KI-038.11	019	281/19:31:02	WEST INDIES AREA	21 Deg 56.2 Min	-74 Deg 08.2 Min	02/11/87	2963
KI-038.11	020	281/19:31:14	WEST INDIES AREA	21 Deg 18.8 Min	-73 Deg 42.2 Min	02/11/87	2964
KI-038.11	021	281/19:31:22	WEST INDIES AREA	20 Deg 51.7 Min	-73 Deg 23.6 Min	02/21/87	2965
KI-038.11	022	281/19:31:33	WEST INDIES AREA	20 Deg 16.2 Min	-72 Deg 59.4 Min	02/12/87	2966
KI-038.11	023	281/19:31:44	WEST INDIES AREA	19 Deg 39.6 Min	-72 Deg 34.7 Min	02/12/87	2967
KI-038.11	024	281/19:31:55	WEST INDIES AREA	19 Deg 02.9 Min	-72 Deg 10.3 Min	02/12/87	2968
KI-038.11	025	281/19:32:06	WEST INDIES AREA	18 Deg 26.2 Min	-71 Deg 46.0 Min	02/12/87	2969
KI-038.11	026	281/19:32:17	WEST INDIES AREA	17 Deg 49.6 Min	-71 Deg 22.1 Min	02/12/87	2970
KI-038.11	027	281/19:32:26	WEST INDIES AREA	17 Deg 16.3 Min	-71 Deg 00.5 Min	02/21/87	2971
KI-038.11	028	281/19:32:38	WEST INDIES AREA	16 Deg 39.6 Min	-70 Deg 36.9 Min	02/21/87	2972
KI-038.11	029	281/19:32:49	WEST INDIES AREA	15 Deg 59.9 Min	-70 Deg 16.3 Min	02/21/87	2973
HJ-039.20	014	281/20:30:52	JAPAN	28 Deg 43.0 Min	128 Deg 35.3 Min	04/24/85	1485
HJ-039.20	018	281/20:30:53	JAPAN COAST	28 Deg 45.4 Min	128 Deg 37.4 Min	01/13/86	2564
HJ-039.20	015	281/20:31:02	JAPAN	29 Deg 14.1 Min	129 Deg 02.4 Min	05/01/85	1486
HJ-039.20	019	281/20:31:03	JAPAN COAST	29 Deg 17.9 Min	129 Deg 05.6 Min	01/13/86	2565
HJ-039.20	016	281/20:31:13	JAPAN	29 Deg 47.9 Min	129 Deg 32.1 Min	04/24/85	1487
HJ-039.20	020	281/20:31:13	JAPAN COAST	29 Deg 48.1 Min	129 Deg 32.3 Min	01/15/86	2566
HJ-039.20	021	281/20:31:24	JAPAN COAST	30 Deg 20.3 Min	130 Deg 01.2 Min	01/15/86	2567

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
HJ-039.20	001	281/20:31:35	KAGOSHIMA, JAPAN	30 Deg 58.1 Min	130 Deg 36.3 Min	11/28/84	0300
HJ-039.20	002	281/20:31:45	KAGOSHIMA, JAPAN	31 Deg 29.9 Min	131 Deg 06.0 Min	11/28/84	0301
HJ-039.20	003	281/20:31:56	KAGOSHIMA, JAPAN	32 Deg 01.6 Min	131 Deg 36.1 Min	11/28/84	0302
HJ-039.20	004	281/20:32:06	KAGOSHIMA, JAPAN	32 Deg 34.9 Min	132 Deg 08.3 Min	11/21/84	0303
HJ-039.20	005	281/20:32:17	KAGOSHIMA, JAPAN	33 Deg 06.2 Min	132 Deg 39.1 Min	11/21/84	0304
HJ-039.20	006	281/20:32:27	KAGOSHIMA, JAPAN	33 Deg 37.4 Min	133 Deg 10.4 Min	11/21/84	0305
HJ-039.20	007	281/20:32:38	KAGOSHIMA, JAPAN	34 Deg 08.3 Min	133 Deg 42.1 Min	11/21/84	0306
HJ-039.20	017	281/20:32:47	KAGOSHIMA, JAPAN	34 Deg 31.7 Min	134 Deg 05.9 Min	05/07/85	1529
HJ-039.20	008	281/20:32:48	KAGOSHIMA, JAPAN	34 Deg 39.2 Min	134 Deg 14.2 Min	11/21/84	0307
HJ-039.20	009	281/20:32:58	KAGOSHIMA, JAPAN	35 Deg 09.8 Min	134 Deg 46.8 Min	11/21/84	0308
HJ-039.20	010	281/20:33:09	KAGOSHIMA, JAPAN	35 Deg 40.3 Min	135 Deg 19.9 Min	11/21/84	0309
HJ-039.20	011	281/20:33:19	KAGOSHIMA, JAPAN	36 Deg 10.5 Min	135 Deg 53.4 Min	11/21/84	0310
HJ-039.20	012	281/20:33:30	KAGOSHIMA, JAPAN	36 Deg 40.6 Min	136 Deg 27.3 Min	11/21/84	0311
HJ-039.20	013	281/20:33:40	KAGOSHIMA, JAPAN	37 Deg 10.4 Min	137 Deg 01.8 Min	11/21/84	0312
HJ-039.20	022	281/20:33:46	JAPAN COAST	37 Deg 26.2 Min	137 Deg 19.9 Min	01/16/86	2568
AL-039.40	014	281/20:51:49	MT. SHASTA	43 Deg 20.8 Min	-125 Deg 17.7 Min	04/30/85	1519
AL-039.40	015	281/20:51:59	MT. SHASTA	42 Deg 55.5 Min	-124 Deg 34.2 Min	04/30/85	1520
AL-039.40	007	281/20:52:00	CALIFORNIA/NEVADA	42 Deg 53.9 Min	-124 Deg 31.7 Min	01/18/85	0930
AL-039.40	008	281/20:52:10	CALIFORNIA/NEVADA	42 Deg 28.3 Min	-123 Deg 49.2 Min	01/18/85	0931
AL-039.40	016	281/20:52:10	MT. SHASTA	42 Deg 29.8 Min	-123 Deg 51.5 Min	04/30/85	1521
AL-039.40	017	281/20:52:20	MT. SHASTA	42 Deg 03.7 Min	-123 Deg 09.3 Min	04/30/85	1522
AL-039.40	009	281/20:52:21	CALIFORNIA/NEVADA	42 Deg 02.4 Min	-123 Deg 07.3 Min	01/18/85	0786
AL-039.40	001	281/20:52:30	SHASTA	41 Deg 17.1 Min	-123 Deg 08.3 Min	10/18/84	0074
AL-039.40	019	281/20:52:31	SHASTA	41 Deg 37.0 Min	-122 Deg 27.4 Min	06/12/85	1846
AL-039.40	041	281/20:52:34	SHASTA	41 Deg 26.6 Min	-122 Deg 11.2 Min	01/15/86	2569
AL-039.40	040	281/20:52:39	MT. SHASTA	41 Deg 14.0 Min	-121 Deg 51.8 Min	11/13/85	2428
AL-039.40	002	281/20:52:40	SHASTA	40 Deg 50.9 Min	-122 Deg 27.6 Min	10/18/84	0075
AL-039.40	020	281/20:52:41	SHASTA	41 Deg 10.4 Min	-121 Deg 46.5 Min	06/12/85	1847
AL-039.40	021	281/20:52:49	CALIFORNIA/NEVADA	40 Deg 49.1 Min	-121 Deg 14.7 Min	06/26/85	1949
AL-039.40	018	281/20:52:50	EAST OF SHASTA	40 Deg 45.5 Min	-121 Deg 09.2 Min	12/07/85	1776
AL-039.40	022	281/20:53:00	CALIFORNIA/NEVADA	40 Deg 22.0 Min	-120 Deg 34.9 Min	06/26/85	1950
AL-039.40	023	281/20:53:10	CALIFORNIA/NEVADA	39 Deg 54.5 Min	-119 Deg 55.7 Min	06/26/85	1951
AL-039.40	024	281/20:53:21	CALIFORNIA/NEVADA	39 Deg 26.8 Min	-119 Deg 17.1 Min	06/26/85	1952
AL-039.40	025	281/20:53:31	CALIFORNIA/NEVADA	38 Deg 58.8 Min	-118 Deg 39.0 Min	06/26/85	1953
AL-039.40	004	281/20:53:36	CALIFORNIA/NEVADA	38 Deg 26.0 Min	-119 Deg 00.1 Min	10/22/84	0095
AL-039.40	005	281/20:53:46	CALIFORNIA/NEVADA	37 Deg 58.0 Min	-118 Deg 23.1 Min	10/22/84	0096
AL-039.40	006	281/20:53:57	CALIFORNIA/NEVADA	37 Deg 29.8 Min	-117 Deg 46.5 Min	10/22/84	0097
AL-039.40	010	281/20:54:09	CALIFORNIA/NEVADA	37 Deg 19.1 Min	-116 Deg 30.6 Min	01/27/85	0831
AL-039.40	011	281/20:54:19	CALIFORNIA/NEVADA	36 Deg 50.1 Min	-115 Deg 55.0 Min	01/27/85	0832
AL-039.40	012	281/20:54:29	CALIFORNIA/NEVADA	36 Deg 20.8 Min	-115 Deg 20.0 Min	01/27/85	0833
AL-039.40	013	281/20:54:40	CALIFORNIA/NEVADA	35 Deg 51.3 Min	-114 Deg 45.5 Min	01/27/85	0834
AL-039.40	026	281/20:54:49	CALIFORNIA/NEVADA	35 Deg 21.2 Min	-114 Deg 10.9 Min	06/27/85	1954
AL-039.40	027	281/20:55:27	CALIFORNIA/NEVADA	33 Deg 31.2 Min	-112 Deg 10.5 Min	06/27/85	1955
AL-039.40	028	281/20:55:37	CALIFORNIA/NEVADA	33 Deg 02.1 Min	-111 Deg 40.2 Min	06/27/85	1956
AL-039.40	029	281/20:55:48	CALIFORNIA/NEVADA	32 Deg 29.4 Min	-111 Deg 06.6 Min	06/27/85	1957
AL-039.40	030	281/20:55:59	CALIFORNIA/NEVADA	31 Deg 58.3 Min	-110 Deg 35.4 Min	06/27/85	1958
AL-039.40	031	281/20:56:09	CALIFORNIA/NEVADA	31 Deg 27.1 Min	-110 Deg 04.6 Min	06/27/85	1959
AL-039.40	036	281/20:56:14	MEXICO	31 Deg 10.2 Min	-109 Deg 48.0 Min	09/19/85	2365
AL-039.40	032	281/20:56:19	CALIFORNIA/NEVADA	30 Deg 56.5 Min	-109 Deg 34.9 Min	06/27/85	1960
AL-039.40	037	281/20:56:25	MEXICO	30 Deg 38.8 Min	-109 Deg 17.9 Min	09/19/85	2366
AL-039.40	033	281/20:56:30	CALIFORNIA/NEVADA	30 Deg 25.0 Min	-109 Deg 04.9 Min	06/27/85	1961
AL-039.40	038	281/20:56:35	MEXICO	30 Deg 07.2 Min	-108 Deg 48.1 Min	09/19/85	2367
AL-039.40	034	281/20:56:40	CALIFORNIA/NEVADA	29 Deg 53.3 Min	-108 Deg 35.2 Min	06/27/85	1962
AL-039.40	039	281/20:56:46	MEXICO	29 Deg 35.5 Min	-108 Deg 18.7 Min	09/19/85	2368
AL-039.40	035	281/20:56:51	CALIFORNIA/NEVADA	29 Deg 21.4 Min	-108 Deg 05.9 Min	06/27/85	1963
AF-039.60	001	281/21:06:53	ECUADOR COASTLINE	0 Deg 35.1 Min	-80 Deg 51.6 Min	10/09/84	0019
AF-039.60	031	281/21:06:58	SOUTH AMERICA	0 Deg 47.2 Min	-80 Deg 45.0 Min	07/17/85	2113
AF-039.60	032	281/21:07:09	SOUTH AMERICA	-1 Deg 24.7 Min	-80 Deg 23.5 Min	07/17/85	2114
AF-039.60	002	281/21:07:12	ECUADOR	-1 Deg 41.3 Min	-80 Deg 13.6 Min	10/09/84	0020
AF-039.60	033	281/21:07:20	SOUTH AMERICA	-2 Deg 02.2 Min	-80 Deg 01.9 Min	07/17/85	2115
AF-039.60	003	281/21:07:24	GUAYAQUIL, ECUADOR	-2 Deg 22.7 Min	-79 Deg 49.8 Min	10/09/84	0021

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AF-039.60	034	281/21:07:31	SOUTH AMERICA	-2 Deg 39.6 Min	-79 Deg 40.4 Min	07/17/85	2116
AF-039.60	035	281/21:07:42	SOUTH AMERICA	-3 Deg 17.0 Min	-79 Deg 18.7 Min	07/17/85	2117
AF-039.60	004	281/21:07:47	ECUADOR MOUNTAINS	-3 Deg 40.8 Min	-79 Deg 04.6 Min	10/09/84	0023
AF-039.60	036	281/21:07:53	SOUTH AMERICA	-3 Deg 54.5 Min	-78 Deg 57.0 Min	07/17/85	2118
AF-039.60	005	281/21:07:59	ECUADOR MOUNTAINS	-4 Deg 22.1 Min	-78 Deg 40.6 Min	10/10/84	0024
AF-039.60	037	281/21:08:03	SOUTH AMERICA	-4 Deg 28.7 Min	-78 Deg 37.1 Min	07/18/85	2119
AF-039.60	006	281/21:08:12	PERU	-5 Deg 03.4 Min	-78 Deg 16.5 Min	10/10/84	0025
AF-039.60	038	281/21:08:14	SOUTH AMERICA	-5 Deg 06.1 Min	-78 Deg 15.3 Min	07/18/85	2120
AF-039.60	039	281/21:08:25	SOUTH AMERICA	-5 Deg 43.4 Min	-77 Deg 53.4 Min	07/18/85	2121
AF-039.60	040	281/21:08:36	SOUTH AMERICA	-6 Deg 20.9 Min	-77 Deg 31.4 Min	07/18/85	2122
AF-039.60	041	281/21:08:47	SOUTH AMERICA	-6 Deg 58.1 Min	-77 Deg 09.4 Min	07/18/85	2123
AF-039.60	042	281/21:08:58	SOUTH AMERICA	-7 Deg 35.4 Min	-76 Deg 47.3 Min	07/18/85	2124
AF-039.60	030	281/21:09:01	PERU	-7 Deg 45.6 Min	-76 Deg 41.1 Min	06/05/85	1820
AF-039.60	013	281/21:09:02	PERU	-7 Deg 54.6 Min	-76 Deg 35.5 Min	10/23/84	0031
AF-039.60	043	281/21:09:08	SOUTH AMERICA	-8 Deg 09.3 Min	-76 Deg 27.0 Min	07/20/85	2125
AF-039.60	014	281/21:09:13	PERU	-8 Deg 31.8 Min	-76 Deg 13.2 Min	10/23/84	0032
AF-039.60	044	281/21:09:19	SOUTH AMERICA	-8 Deg 46.5 Min	-76 Deg 04.7 Min	07/20/85	2126
AF-039.60	015	281/21:09:24	PERU	-9 Deg 08.5 Min	-75 Deg 51.1 Min	10/23/84	0033
AF-039.60	045	281/21:09:30	SOUTH AMERICA	-9 Deg 23.6 Min	-75 Deg 42.3 Min	07/20/85	2127
AF-039.60	046	281/21:09:41	SOUTH AMERICA	-10 Deg 00.5 Min	-75 Deg 19.9 Min	07/20/85	2128
AF-039.60	047	281/21:09:52	SOUTH AMERICA	-10 Deg 37.5 Min	-74 Deg 57.3 Min	07/20/85	2129
AF-039.60	048	281/21:10:03	SOUTH AMERICA	-11 Deg 14.5 Min	-74 Deg 34.6 Min	07/20/85	2130
AF-039.60	049	281/21:10:14	SOUTH AMERICA	-11 Deg 51.4 Min	-74 Deg 11.7 Min	07/20/85	2131
AF-039.60	050	281/21:10:25	SOUTH AMERICA	-12 Deg 28.2 Min	-73 Deg 48.7 Min	07/20/85	2132
AF-039.60	051	281/21:10:36	SOUTH AMERICA	-13 Deg 05.0 Min	-73 Deg 25.6 Min	07/20/85	2133
AF-039.60	052	281/21:10:47	SOUTH AMERICA	-13 Deg 41.9 Min	-73 Deg 02.1 Min	07/20/85	2134
AF-039.60	053	281/21:10:58	SOUTH AMERICA	-14 Deg 18.6 Min	-72 Deg 38.7 Min	07/20/85	2135
AF-039.60	054	281/21:11:09	SOUTH AMERICA	-14 Deg 55.2 Min	-72 Deg 15.1 Min	07/20/85	2136
AF-039.60	055	281/21:11:20	SOUTH AMERICA	-15 Deg 29.1 Min	-71 Deg 53.1 Min	07/20/85	2137
AF-039.60	056	281/21:11:31	SOUTH AMERICA	-16 Deg 05.5 Min	-71 Deg 29.1 Min	07/20/85	2138
AF-039.60	057	281/21:11:42	SOUTH AMERICA	-16 Deg 41.9 Min	-71 Deg 05.0 Min	07/20/85	2139
AF-039.60	010	281/21:11:50	PERU	-17 Deg 16.5 Min	-70 Deg 41.6 Min	10/12/84	0037
AF-039.60	011	281/21:12:01	PERU	-17 Deg 52.7 Min	-70 Deg 17.2 Min	10/12/84	0038
AF-039.60	012	281/21:12:12	PERU/CHILE	-18 Deg 28.8 Min	-69 Deg 52.5 Min	10/12/84	0039
AF-039.60	058	281/21:12:23	SOUTH AMERICA	-19 Deg 00.1 Min	-69 Deg 31.2 Min	07/20/85	2140
AF-039.60	007	281/21:12:35	CHILE	-19 Deg 44.2 Min	-69 Deg 00.1 Min	10/12/84	0034
AF-039.60	059	281/21:12:36	ARGENTINA	-19 Deg 42.0 Min	-69 Deg 01.9 Min	07/20/85	2141
AF-039.60	008	281/21:12:46	BOLIVIA	-20 Deg 20.0 Min	-68 Deg 34.8 Min	10/12/84	0035
AF-039.60	060	281/21:12:47	ARGENTINA	-20 Deg 17.9 Min	-68 Deg 36.5 Min	07/20/85	2142
AF-039.60	061	281/21:12:58	ARGENTINA	-20 Deg 53.8 Min	-68 Deg 10.9 Min	07/20/85	2143
AF-039.60	009	281/21:12:59	BOLIVIA	-20 Deg 55.8 Min	-68 Deg 09.2 Min	10/12/84	0036
AF-039.60	062	281/21:13:05	ARGENTINA	-21 Deg 17.2 Min	-67 Deg 54.0 Min	06/07/86	2902
AF-039.60	016	281/21:13:07	ARGENTINA	-21 Deg 33.9 Min	-67 Deg 41.5 Min	02/11/85	0920
AF-039.60	026	281/21:13:07	ARGENTINA	-21 Deg 20.8 Min	-67 Deg 51.4 Min	06/05/85	1822
AF-039.60	063	281/21:13:16	ARGENTINA	-21 Deg 52.8 Min	-67 Deg 28.0 Min	06/07/86	2903
AF-039.60	017	281/21:13:18	ARGENTINA	-22 Deg 09.5 Min	-67 Deg 15.4 Min	02/11/85	0921
AF-039.60	027	281/21:13:18	ARGENTINA	-21 Deg 56.4 Min	-67 Deg 25.3 Min	06/05/85	1823
AF-039.60	064	281/21:13:27	ARGENTINA	-22 Deg 28.4 Min	-67 Deg 01.7 Min	06/07/86	2904
AF-039.60	018	281/21:13:29	ARGENTINA	-22 Deg 44.9 Min	-66 Deg 49.0 Min	02/11/85	0922
AF-039.60	028	281/21:13:29	ARGENTINA	-22 Deg 31.0 Min	-66 Deg 59.8 Min	06/05/85	1824
AF-039.60	065	281/21:13:38	ARGENTINA	-23 Deg 03.9 Min	-66 Deg 35.1 Min	06/07/86	2905
AF-039.60	019	281/21:13:40	ARGENTINA	-23 Deg 20.3 Min	-66 Deg 22.3 Min	02/11/85	0923
AF-039.60	029	281/21:13:40	ARGENTINA	-23 Deg 06.4 Min	-66 Deg 33.2 Min	06/05/85	1825
AF-039.60	066	281/21:13:49	ARGENTINA	-23 Deg 39.1 Min	-66 Deg 08.4 Min	06/07/86	2906
AF-039.60	020	281/21:13:51	ARGENTINA	-23 Deg 55.6 Min	-65 Deg 55.4 Min	02/11/85	0924
AF-039.60	067	281/21:14:00	ARGENTINA	-24 Deg 14.5 Min	-65 Deg 41.2 Min	06/07/86	2907
AF-039.60	021	281/21:14:02	ARGENTINA	-24 Deg 30.6 Min	-65 Deg 28.2 Min	02/11/85	0925
AF-039.60	068	281/21:14:11	ARGENTINA	-24 Deg 49.7 Min	-65 Deg 13.7 Min	06/07/86	2908
AF-039.60	022	281/21:14:13	ARGENTINA	-25 Deg 05.8 Min	-65 Deg 00.6 Min	02/11/85	0926
AF-039.60	069	281/21:14:22	ARGENTINA	-25 Deg 24.7 Min	-64 Deg 45.9 Min	06/07/86	2909
AF-039.60	023	281/21:14:24	ARGENTINA	-25 Deg 40.7 Min	-64 Deg 32.8 Min	02/11/85	0927

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AF-039.60	070	281/21:14:31	ARGENTINA	-25 Deg 53.4 Min	-64 Deg 22.8 Min	06/11/86	2910
AF-039.60	024	281/21:14:35	ARGENTINA	-26 Deg 15.6 Min	-64 Deg 04.5 Min	02/11/85	0928
AF-039.60	071	281/21:14:42	ARGENTINA	-26 Deg 28.3 Min	-63 Deg 54.4 Min	06/11/86	2911
AF-039.60	025	281/21:14:46	ARGENTINA	-26 Deg 50.2 Min	-63 Deg 36.0 Min	02/11/85	0929
AF-039.60	072	281/21:14:53	ARGENTINA	-27 Deg 02.9 Min	-63 Deg 25.8 Min	06/11/86	2912
D1-043.20	024	282/02:21:52	SUDAN	15 Deg 29.4 Min	24 Deg 11.0 Min	08/28/85	2297
D1-043.20	025	282/02:22:03	SUDAN	16 Deg 04.7 Min	24 Deg 33.0 Min	08/28/85	2298
D1-043.20	026	282/02:22:13	SUDAN	16 Deg 40.1 Min	24 Deg 55.3 Min	08/28/85	2299
D1-043.20	027	282/02:22:23	SUDAN	17 Deg 13.6 Min	25 Deg 16.5 Min	08/29/85	2300
D1-043.20	028	282/02:22:34	SUDAN	17 Deg 48.9 Min	25 Deg 39.0 Min	08/29/85	2301
D1-043.20	029	282/02:22:44	SUDAN	18 Deg 24.1 Min	26 Deg 01.7 Min	08/29/85	2302
D1-043.20	030	282/02:22:55	SUDAN	18 Deg 59.2 Min	26 Deg 24.5 Min	08/29/85	2303
D1-043.20	001	282/02:23:00	EGYPT	19 Deg 16.1 Min	26 Deg 35.1 Min	12/01/84	0405
D1-043.20	002	282/02:23:10	EGYPT	19 Deg 51.2 Min	26 Deg 58.2 Min	12/01/84	0406
D1-043.20	003	282/02:23:21	EGYPT	20 Deg 26.2 Min	27 Deg 21.5 Min	12/01/84	0407
D1-043.20	004	282/02:23:31	EGYPT	21 Deg 00.9 Min	27 Deg 44.8 Min	12/01/84	0408
D1-043.20	005	282/02:23:42	EGYPT	21 Deg 35.8 Min	28 Deg 08.4 Min	12/01/84	0409
D1-043.20	006	282/02:23:52	EGYPT	22 Deg 10.6 Min	28 Deg 32.2 Min	12/01/84	0410
D1-043.20	007	282/02:24:03	EGYPT	22 Deg 45.0 Min	28 Deg 56.0 Min	12/01/84	0411
D1-043.20	008	282/02:24:13	EGYPT	23 Deg 19.7 Min	29 Deg 20.3 Min	12/01/84	0412
D1-043.20	009	282/02:24:24	EGYPT	23 Deg 54.3 Min	29 Deg 44.8 Min	12/01/84	0413
D1-043.20	010	282/02:24:34	EGYPT	24 Deg 28.9 Min	30 Deg 09.5 Min	12/01/84	0414
D1-043.20	011	282/02:24:45	EGYPT	25 Deg 03.3 Min	30 Deg 34.4 Min	12/01/84	0415
D1-043.20	012	282/02:24:55	EGYPT	25 Deg 37.7 Min	30 Deg 59.6 Min	12/01/84	0416
D1-043.20	013	282/02:25:05	EGYPT	26 Deg 15.1 Min	31 Deg 27.3 Min	02/20/85	1013
D1-043.20	014	282/02:25:15	EGYPT	26 Deg 49.3 Min	31 Deg 53.1 Min	02/20/85	1014
D1-043.20	015	282/02:25:26	EGYPT	27 Deg 23.4 Min	32 Deg 19.1 Min	02/20/85	1015
D1-043.20	016	282/02:25:33	EGYPT	27 Deg 39.2 Min	32 Deg 31.7 Min	02/21/85	1016
D1-043.20	017	282/02:25:44	EGYPT	28 Deg 16.0 Min	33 Deg 00.3 Min	02/21/85	1017
D1-043.20	018	282/02:25:54	EGYPT	28 Deg 49.8 Min	33 Deg 27.1 Min	02/21/85	1018
D1-043.20	019	282/02:26:05	EGYPT	29 Deg 23.4 Min	33 Deg 54.0 Min	02/21/85	1019
D1-043.20	020	282/02:26:15	EGYPT	29 Deg 57.1 Min	34 Deg 21.4 Min	02/21/85	1020
D1-043.20	021	282/02:26:26	EGYPT	30 Deg 30.6 Min	34 Deg 49.1 Min	02/21/85	1021
D1-043.20	022	282/02:26:36	EGYPT	31 Deg 04.0 Min	35 Deg 17.2 Min	02/21/85	1022
D1-043.20	023	282/02:26:47	EGYPT	31 Deg 37.1 Min	35 Deg 45.4 Min	02/21/85	1023
SA-043.50	001	282/03:24:00	CHILE	-55 Deg 20.2 Min	-91 Deg 39.3 Min	02/22/85	1024
SA-043.50	002	282/03:24:11	CHILE	-55 Deg 20.7 Min	-90 Deg 26.4 Min	02/22/85	1025
SA-043.50	003	282/03:24:21	CHILE	-55 Deg 20.5 Min	-89 Deg 13.5 Min	02/22/85	1026
SA-043.50	004	282/03:24:32	CHILE	-55 Deg 19.5 Min	-88 Deg 00.6 Min	02/22/85	1027
SA-043.50	005	282/03:24:43	CHILE	-55 Deg 17.6 Min	-86 Deg 47.8 Min	02/22/85	1028
SA-043.50	006	282/03:24:54	CHILE	-55 Deg 15.0 Min	-85 Deg 35.2 Min	02/22/85	1029
SA-043.50	007	282/03:25:04	CHILE	-55 Deg 11.6 Min	-84 Deg 22.7 Min	02/22/85	1030
SA-043.50	008	282/03:25:15	CHILE	-55 Deg 07.4 Min	-83 Deg 10.8 Min	02/22/85	1031
SA-043.50	009	282/03:25:26	CHILE	-55 Deg 02.4 Min	-81 Deg 58.5 Min	02/22/85	1032
SA-043.50	010	282/03:25:36	CHILE	-54 Deg 56.7 Min	-80 Deg 47.0 Min	02/22/85	1033
SA-043.50	011	282/03:25:47	CHILE	-54 Deg 50.1 Min	-79 Deg 35.7 Min	02/22/85	1034
SA-043.50	012	282/03:25:58	CHILE	-54 Deg 42.8 Min	-78 Deg 24.9 Min	02/22/85	1035
SA-043.50	013	282/03:26:08	CHILE	-54 Deg 34.3 Min	-77 Deg 10.1 Min	02/27/85	1060
SA-043.50	014	282/03:26:19	CHILE	-54 Deg 25.4 Min	-76 Deg 00.3 Min	02/27/85	1061
SA-043.50	015	282/03:26:29	CHILE	-54 Deg 15.8 Min	-74 Deg 51.1 Min	02/27/85	1062
SA-043.50	016	282/03:26:40	CHILE	-54 Deg 05.5 Min	-73 Deg 42.4 Min	02/27/85	1063
SA-043.50	017	282/03:26:51	CHILE	-53 Deg 54.5 Min	-72 Deg 34.4 Min	02/27/85	1064
AC-044.80	013	282/04:59:54	RIO PICO	-45 Deg 38.7 Min	-73 Deg 45.2 Min	03/22/85	1238
AC-044.80	001	282/05:00:00	RIO PICO	-45 Deg 23.7 Min	-73 Deg 14.0 Min	12/06/84	0463
AC-044.80	002	282/05:00:11	RIO PICO	-44 Deg 59.6 Min	-72 Deg 26.2 Min	12/06/84	0464
AC-044.80	003	282/05:00:21	RIO PICO	-44 Deg 35.1 Min	-71 Deg 39.2 Min	12/06/84	0465
AC-044.80	014	282/05:00:32	RIO PICO	-44 Deg 11.7 Min	-70 Deg 56.2 Min	03/22/85	1239
AC-044.80	005	282/05:00:43	RIO PICO	-43 Deg 45.2 Min	-70 Deg 07.6 Min	12/06/84	0467
AC-044.80	006	282/05:00:54	RIO PICO	-43 Deg 19.5 Min	-69 Deg 22.6 Min	12/06/84	0468
AC-044.80	007	282/05:01:04	RIO PICO	-42 Deg 53.2 Min	-68 Deg 37.7 Min	12/06/84	0469
AC-044.80	008	282/05:01:15	RIO PICO	-42 Deg 26.9 Min	-67 Deg 54.2 Min	12/06/84	0470

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AC-044.80	009	282/05:01:26	RIO PICO	-41 Deg 55.4 Min	-67 Deg 16.8 Min	12/06/84	0471
AC-044.80	015	282/05:01:36	RIO PICO	-41 Deg 35.7 Min	-66 Deg 33.5 Min	03/22/85	1240
AC-044.80	011	282/05:01:47	RIO PICO	-41 Deg 06.0 Min	-65 Deg 47.5 Min	12/06/84	0473
AC-044.80	016	282/05:01:47	RIO PICO	-41 Deg 08.1 Min	-65 Deg 51.0 Min	06/20/85	1897
AC-044.80.	017	282/05:01:57	RIO PICO	-40 Deg 40.4 Min	-65 Deg 09.9 Min	06/20/85	1898
AC-044.80	012	282/05:01:58	RIO PICO	-40 Deg 42.4 Min	-65 Deg 12.4 Min	12/06/84	0474
AB-045.20	001	282/05:29:49	FREIBURG, GERMANY	47 Deg 46.1 Min	7 Deg 05.9 Min	11/09/84	0221
AB-045.20	007	282/05:29:57	FREIBURG, GERMANY	48 Deg 11.8 Min	7 Deg 48.4 Min	02/13/85	0179
AB-045.20	002	282/05:29:59	FREIBURG, GERMANY	48 Deg 13.6 Min	7 Deg 51.7 Min	11/09/84	0222
AB-045.20	008	282/05:30:00	FREIBURG, GERMANY	48 Deg 13.2 Min	7 Deg 51.2 Min	08/04/85	2213
AB-045.20	003	282/05:30:10	FREIBURG, GERMANY	48 Deg 40.8 Min	8 Deg 38.3 Min	11/09/84	0223
AB-045.20	009	282/05:30:11	FREIBURG, GERMANY	48 Deg 40.3 Min	8 Deg 37.7 Min	08/04/85	2214
AB-045.20	004	282/05:30:18	FREIBURG, GERMANY	49 Deg 01.2 Min	9 Deg 14.1 Min	11/20/84	0218
AB-045.20	010	282/05:30:21	FREIBURG, GERMANY	49 Deg 07.1 Min	9 Deg 25.0 Min	08/04/85	2215
AB-045.20	005	282/05:30:28	FREIBURG, GERMANY	49 Deg 27.7 Min	10 Deg 02.3 Min	11/20/84	0219
AB-045.20	011	282/05:30:32	FREIBURG, GERMANY	49 Deg 33.5 Min	10 Deg 13.3 Min	08/04/85	2216
AB-045.20	006	282/05:30:39	FREIBURG, GERMANY	49 Deg 53.9 Min	10 Deg 51.3 Min	11/20/84	0220
Z1-046.20	009	282/06:58:45	CROSSOVER	46 Deg 32.1 Min	-13 Deg 42.9 Min	11/20/84	0190
Z1-046.20	040	282/06:58:49	CROSSOVER	46 Deg 37.2 Min	-13 Deg 31.0 Min	02/26/86	2647
Z1-046.20	010	282/06:58:56	CROSSOVER	46 Deg 56.5 Min	-12 Deg 53.6 Min	11/20/84	0191
Z1-046.20	041	282/06:59:00	CROSSOVER	47 Deg 04.1 Min	-12 Deg 46.6 Min	02/26/86	2648
Z1-046.20	011	282/06:59:06	CROSSOVER	47 Deg 23.2 Min	-12 Deg 06.6 Min	11/20/84	0275
Z1-046.20	042	282/06:59:11	CROSSOVER	47 Deg 30.5 Min	-11 Deg 59.6 Min	02/26/86	2649
Z1-046.20	043	282/06:59:21	CROSSOVER	47 Deg 56.6 Min	-11 Deg 11.7 Min	02/26/86	2650
Z1-046.20	044	282/06:59:32	CROSSOVER	48 Deg 22.4 Min	-10 Deg 22.9 Min	02/26/86	2651
Z1-046.20	007	282/06:59:36	BUOY 2, ATLANTIC	48 Deg 35.9 Min	-9 Deg 51.9 Min	11/02/84	0186
Z1-046.20	045	282/06:59:42	NORTH ATLANTIC	48 Deg 47.3 Min	-9 Deg 34.3 Min	02/27/86	2652
Z1-046.20	008	282/06:59:47	BUOY 2, ATLANTIC	49 Deg 01.2 Min	-9 Deg 01.8 Min	11/02/84	0187
Z1-046.20	046	282/06:59:53	NORTH ATLANTIC	49 Deg 12.3 Min	-8 Deg 43.8 Min	02/27/86	2653
Z1-046.20	012	282/06:59:57	NORTH ATLANTIC	49 Deg 31.7 Min	-8 Deg 05.1 Min	01/16/85	0764
Z1-046.20	047	282/07:00:04	NORTH ATLANTIC	49 Deg 36.9 Min	-7 Deg 52.5 Min	02/27/86	2654
Z1-046.20	013	282/07:00:08	NORTH ATLANTIC	49 Deg 56.1 Min	-7 Deg 13.0 Min	01/16/85	0765
Z1-046.20	048	282/07:00:14	NORTH ATLANTIC	50 Deg 01.1 Min	-7 Deg 00.2 Min	02/27/86	2655
Z1-046.20	014	282/07:00:18	NORTH ATLANTIC	50 Deg 20.0 Min	-6 Deg 19.9 Min	01/16/85	0766
Z1-046.20	049	282/07:00:24	NORTH ATLANTIC	50 Deg 23.5 Min	-6 Deg 09.9 Min	02/28/86	2656
Z1-046.20	015	282/07:00:29	NORTH ATLANTIC	50 Deg 43.4 Min	-5 Deg 26.0 Min	01/16/85	0767
Z1-046.20	050	282/07:00:35	NORTH ATLANTIC	50 Deg 46.9 Min	-5 Deg 15.9 Min	02/28/86	2657
Z1-046.20	016	282/07:00:40	NORTH ATLANTIC	51 Deg 06.4 Min	-4 Deg 31.1 Min	01/16/85	0768
Z1-046.20	051	282/07:00:46	NORTH ATLANTIC	51 Deg 09.7 Min	-4 Deg 21.0 Min	02/28/86	2658
Z1-046.20	017	282/07:00:50	NORTH ATLANTIC	51 Deg 29.0 Min	-3 Deg 35.3 Min	01/16/85	0769
Z1-046.20	052	282/07:00:56	NORTH ATLANTIC	51 Deg 32.1 Min	-3 Deg 25.0 Min	02/28/86	2659
Z1-046.20	018	282/07:01:01	NORTH ATLANTIC	51 Deg 49.2 Min	-2 Deg 34.6 Min	01/17/85	0770
Z1-046.20	053	282/07:01:07	NORTH ATLANTIC	51 Deg 54.0 Min	-2 Deg 28.2 Min	02/28/86	2660
Z1-046.20	019	282/07:01:12	NORTH ATLANTIC	52 Deg 10.5 Min	-1 Deg 37.7 Min	01/17/85	0771
Z1-046.20	054	282/07:01:18	NORTH ATLANTIC	52 Deg 15.4 Min	-1 Deg 30.4 Min	02/28/86	2661
Z1-046.20	020	282/07:01:22	NORTH ATLANTIC	52 Deg 31.8 Min	0 Deg 38.4 Min	01/17/85	0772
Z1-046.20	021	282/07:01:33	NORTH ATLANTIC	52 Deg 52.3 Min	0 Deg 21.3 Min	01/17/85	0773
Z1-046.20	001	282/07:01:40	BATHYMETRY	53 Deg 02.7 Min	0 Deg 49.0 Min	11/01/84	0162
Z1-046.20	037	282/07:01:40	ENGLAND	52 Deg 58.4 Min	0 Deg 33.3 Min	12/08/85	2540
Z1-046.20	002	282/07:01:51	BATHYMETRY	53 Deg 22.4 Min	1 Deg 50.1 Min	11/01/84	0163
Z1-046.20	038	282/07:01:51	ENGLAND	53 Deg 18.2 Min	1 Deg 34.1 Min	12/08/85	2541
Z1-046.20	003	282/07:02:01	BATHYMETRY	53 Deg 41.6 Min	2 Deg 52.0 Min	11/01/84	0164
Z1-046.20	039	282/07:02:01	ENGLAND	53 Deg 37.4 Min	2 Deg 35.9 Min	12/08/85	2542
Z1-046.20	027	282/07:02:10	NORTH SEA	53 Deg 54.0 Min	3 Deg 38.1 Min	03/03/85	1096
Z1-046.20	028	282/07:02:21	NORTH SEA	54 Deg 12.2 Min	4 Deg 41.7 Min	03/03/85	1097
Z1-046.20	004	282/07:02:28	NORTH SEA	54 Deg 27.0 Min	5 Deg 31.4 Min	11/02/84	0168
Z1-046.20	029	282/07:02:32	NORTH SEA	54 Deg 29.7 Min	5 Deg 46.3 Min	03/03/85	1098
Z1-046.20	005	282/07:02:39	NORTH SEA	54 Deg 44.0 Min	6 Deg 36.7 Min	11/02/84	0169
Z1-046.20	030	282/07:02:42	NORTH SEA	54 Deg 46.6 Min	6 Deg 51.8 Min	03/03/85	1099
Z1-046.20	006	282/07:02:49	NORTH SEA	55 Deg 00.6 Min	7 Deg 42.9 Min	11/02/84	0170
Z1-046.20	031	282/07:02:53	NORTH SEA	55 Deg 02.9 Min	7 Deg 58.2 Min	03/03/85	1100

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
Z1-046.20	022	282/07:03:00	DENMARK	55 Deg 18.4 Min	9 Deg 03.8 Min	01/27/85	0826
Z1-046.20	032	282/07:03:03	NORTH SEA	55 Deg 18.4 Min	9 Deg 05.7 Min	03/03/85	1101
Z1-046.20	023	282/07:03:11	DENMARK	55 Deg 33.3 Min	10 Deg 12.1 Min	01/27/85	0827
Z1-046.20	033	282/07:03:14	NORTH SEA	55 Deg 33.4 Min	10 Deg 13.8 Min	03/03/85	1102
Z1-046.20	024	282/07:03:21	DENMARK	55 Deg 47.6 Min	11 Deg 21.2 Min	01/27/85	0828
Z1-046.20	034	282/07:03:25	NORTH SEA	55 Deg 47.8 Min	11 Deg 22.9 Min	03/03/85	1103
Z1-046.20	025	282/07:03:30	DENMARK	55 Deg 58.7 Min	12 Deg 18.7 Min	01/27/85	0829
Z1-046.20	035	282/07:03:35	NORTH SEA	56 Deg 01.3 Min	12 Deg 33.1 Min	03/03/85	1104
Z1-046.20	026	282/07:03:41	DENMARK	56 Deg 11.8 Min	13 Deg 29.3 Min	01/27/85	0830
Z1-046.20	036	282/07:03:46	NORTH SEA	56 Deg 14.1 Min	13 Deg 43.9 Min	03/03/85	1105
U1-048.40	008	282/10:05:50	NORTH SEA	54 Deg 38.0 Min	-2 Deg 13.7 Min	05/26/85	1719
U1-048.40	001	282/10:06:00	NORTH SEA	54 Deg 30.2 Min	0 Deg 52.9 Min	03/17/85	1202
U1-048.40	022	282/10:06:00	NORTH SEA	54 Deg 31.5 Min	-1 Deg 05.9 Min	06/25/85	1934
U1-048.40	009	282/10:06:01	NORTH SEA	54 Deg 31.0 Min	-1 Deg 00.9 Min	05/26/85	1720
U1-048.40	002	282/10:06:11	NORTH SEA	54 Deg 22.4 Min	0 Deg 19.4 Min	03/17/85	1203
U1-048.40	023	282/10:06:11	NORTH SEA	54 Deg 23.9 Min	0 Deg 06.5 Min	06/25/85	1935
U1-048.40	010	282/10:06:12	NORTH SEA	54 Deg 23.0 Min	0 Deg 14.4 Min	05/26/85	1721
U1-048.40	003	282/10:06:22	NORTH SEA	54 Deg 13.8 Min	1 Deg 31.2 Min	03/17/85	1204
U1-048.40	024	282/10:06:22	NORTH SEA	54 Deg 15.4 Min	1 Deg 18.4 Min	06/25/85	1936
U1-048.40	011	282/10:06:23	NORTH SEA	54 Deg 14.4 Min	1 Deg 26.4 Min	05/26/85	1722
U1-048.40	004	282/10:06:33	NORTH SEA	54 Deg 04.7 Min	2 Deg 40.4 Min	03/17/85	1205
U1-048.40	025	282/10:06:33	NORTH SEA	54 Deg 06.2 Min	2 Deg 29.8 Min	06/25/85	1937
U1-048.40	012	282/10:06:34	NORTH SEA	54 Deg 05.1 Min	2 Deg 37.8 Min	05/26/85	1723
U1-048.40	005	282/10:06:44	NORTH SEA	53 Deg 54.6 Min	3 Deg 50.9 Min	03/17/85	1206
U1-048.40	026	282/10:06:44	NORTH SEA	53 Deg 56.1 Min	3 Deg 40.5 Min	06/25/85	1938
U1-048.40	013	282/10:06:45	NORTH SEA	53 Deg 55.3 Min	3 Deg 46.3 Min	05/26/85	1724
U1-048.40	006	282/10:06:55	NORTH SEA	53 Deg 43.7 Min	5 Deg 00.8 Min	03/17/85	1207
U1-048.40	027	282/10:06:55	NORTH SEA	53 Deg 45.4 Min	4 Deg 50.7 Min	06/25/85	1939
U1-048.40	014	282/10:06:56	NORTH SEA	53 Deg 44.4 Min	4 Deg 56.4 Min	05/26/85	1725
U1-048.40	028	282/10:07:06	NORTH SEA	53 Deg 33.8 Min	6 Deg 00.2 Min	06/25/85	1940
U1-048.40	015	282/10:07:07	NORTH SEA	53 Deg 32.8 Min	6 Deg 05.9 Min	05/26/85	1726
U1-048.40	029	282/10:07:17	NORTH SEA	53 Deg 21.5 Min	7 Deg 09.0 Min	06/25/85	1941
U1-048.40	016	282/10:07:18	NORTH SEA	53 Deg 20.6 Min	7 Deg 14.0 Min	05/26/85	1727
U1-048.40	030	282/10:07:28	NORTH SEA	53 Deg 08.5 Min	8 Deg 17.1 Min	06/25/85	1942
U1-048.40	017	282/10:07:29	NORTH SEA	53 Deg 07.5 Min	8 Deg 22.1 Min	05/26/85	1728
U1-048.40	031	282/10:07:39	NORTH SEA	52 Deg 54.7 Min	9 Deg 24.9 Min	06/25/85	1943
U1-048.40	018	282/10:07:40	NORTH SEA	52 Deg 53.7 Min	9 Deg 29.4 Min	05/26/85	1729
U1-048.40	019	282/10:07:49	NORTH SEA	52 Deg 41.5 Min	10 Deg 26.0 Min	05/30/85	1730
U1-048.40	032	282/10:07:50	NORTH SEA	52 Deg 40.3 Min	10 Deg 31.5 Min	06/25/85	1944
U1-048.40	033	282/10:08:01	NORTH SEA	52 Deg 25.1 Min	11 Deg 37.3 Min	06/25/85	1945
U1-048.40	020	282/10:08:02	NORTH SEA	52 Deg 23.2 Min	11 Deg 45.4 Min	05/26/85	1731
AJ-049.20	027	282/11:22:59	ILLINOIS	39 Deg 40.1 Min	-91 Deg 25.9 Min	09/05/86	2943
AJ-049.20	004	282/11:23:00	ILLINOIS	39 Deg 59.1 Min	-91 Deg 04.0 Min	02/19/85	1010
AJ-049.20	005	282/11:23:11	ILLINOIS	40 Deg 30.0 Min	-90 Deg 27.3 Min	02/19/85	1011
AJ-049.20	015	282/11:23:12	ILLINOIS	40 Deg 16.9 Min	-90 Deg 42.7 Min	08/10/85	2249
AJ-049.20	025	282/11:23:12	ILLINOIS	40 Deg 17.3 Min	-90 Deg 42.3 Min	03/07/86	2675
AJ-049.20	006	282/11:23:21	ILLINOIS	41 Deg 00.6 Min	-89 Deg 50.1 Min	02/19/85	1012
AJ-049.20	016	282/11:23:23	ILLINOIS	40 Deg 47.7 Min	-90 Deg 05.7 Min	08/10/85	2250
AJ-049.20	026	282/11:23:23	ILLINOIS	40 Deg 48.0 Min	-90 Deg 05.3 Min	03/07/86	2676
AJ-049.20	018	282/11:23:31	ILLINOIS	41 Deg 12.2 Min	-89 Deg 35.6 Min	09/15/85	2349
AJ-049.20	007	282/11:23:32	MIDWEST U.S.	41 Deg 11.7 Min	-89 Deg 36.3 Min	03/30/85	1318
AJ-049.20	017	282/11:23:34	MIDWEST U.S.	41 Deg 18.2 Min	-89 Deg 28.1 Min	08/10/85	2251
AJ-049.20	019	282/11:23:42	MIDWEST U.S.	41 Deg 42.5 Min	-88 Deg 57.6 Min	09/15/85	2350
AJ-049.20	008	282/11:23:43	MIDWEST U.S.	41 Deg 42.6 Min	-88 Deg 57.4 Min	03/30/85	1319
AJ-049.20	009	282/11:23:53	MIDWEST U.S.	42 Deg 12.2 Min	-88 Deg 19.4 Min	03/30/85	1320
AJ-049.20	020	282/11:23:53	MIDWEST U.S.	42 Deg 12.6 Min	-88 Deg 18.9 Min	09/15/85	2351
AJ-049.20	021	282/11:24:03	MIDWEST U.S.	42 Deg 42.4 Min	-87 Deg 39.6 Min	09/15/85	2352
AJ-049.20	010	282/11:24:04	MIDWEST U.S.	42 Deg 42.1 Min	-87 Deg 40.1 Min	03/30/85	1321
AJ-049.20	011	282/11:24:14	MIDWEST U.S.	43 Deg 10.9 Min	-86 Deg 58.9 Min	03/30/85	1322
AJ-049.20	022	282/11:24:14	MIDWEST U.S.	43 Deg 12.0 Min	-86 Deg 59.6 Min	09/15/85	2353
AJ-049.20	012	282/11:24:25	MIDWEST U.S.	43 Deg 41.0 Min	-86 Deg 19.4 Min	03/30/85	1323

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AJ-049.20	023	282/11:24:25	MIDWEST U.S.	43 Deg 41.3 Min	-86 Deg 18.9 Min	09/15/85	2354
AJ-049.20	024	282/11:24:35	MIDWEST U.S.	44 Deg 09.6 Min	-85 Deg 36.6 Min	09/15/85	2355
AJ-049.20	013	282/11:24:36	MIDWEST U.S.	44 Deg 09.3 Min	-85 Deg 37.0 Min	03/30/85	1324
AJ-049.20	014	282/11:24:46	MIDWEST U.S.	44 Deg 38.2 Min	-84 Deg 55.0 Min	03/30/85	1325
AM-050.20	001	282/12:48:00	CALIFORNIA COAST	27 Deg 32.1 Min	-124 Deg 41.7 Min	12/07/84	0475
AM-050.20	002	282/12:48:10	CALIFORNIA COAST	28 Deg 05.7 Min	-124 Deg 14.9 Min	12/07/84	0476
AM-050.20	003	282/12:48:21	CALIFORNIA COAST	28 Deg 39.3 Min	-123 Deg 47.8 Min	12/07/84	0477
AM-050.20	004	282/12:48:31	CALIFORNIA COAST	29 Deg 12.7 Min	-123 Deg 20.4 Min	12/07/84	0478
AM-050.20	005	282/12:48:42	CALIFORNIA COAST	29 Deg 46.1 Min	-122 Deg 52.7 Min	12/07/84	0479
AM-050.20	006	282/12:48:52	CALIFORNIA COAST	30 Deg 19.3 Min	-122 Deg 24.6 Min	12/07/84	0480
AM-050.20	007	282/12:49:03	CALIFORNIA COAST	30 Deg 52.4 Min	-121 Deg 56.2 Min	12/07/84	0481
AM-050.20	008	282/12:49:13	CALIFORNIA COAST	31 Deg 25.3 Min	-121 Deg 27.4 Min	12/07/84	0482
AM-050.20	013	282/12:49:13	CALIFORNIA COAST	31 Deg 11.1 Min	-121 Deg 38.7 Min	04/23/85	1483
AM-050.20	009	282/12:49:24	CALIFORNIA COAST	31 Deg 58.2 Min	-120 Deg 58.3 Min	12/07/84	0483
AM-050.20	014	282/12:49:24	CALIFORNIA COAST	31 Deg 44.6 Min	-121 Deg 09.3 Min	04/25/85	1488
AM-050.20	010	282/12:49:34	CALIFORNIA COAST	32 Deg 30.9 Min	-120 Deg 28.8 Min	12/07/84	0484
AM-050.20	015	282/12:49:34	CALIFORNIA COAST	32 Deg 17.3 Min	-120 Deg 39.9 Min	04/25/85	1489
AM-050.20	011	282/12:49:45	CALIFORNIA COAST	33 Deg 03.4 Min	-119 Deg 58.9 Min	12/07/84	0485
AM-050.20	016	282/12:49:45	CALIFORNIA COAST	32 Deg 49.9 Min	-120 Deg 10.1 Min	04/25/85	1490
AM-050.20	012	282/12:49:55	CALIFORNIA COAST	33 Deg 35.8 Min	-119 Deg 28.6 Min	12/07/84	0486
AM-050.20	017	282/12:49:55	CALIFORNIA COAST	33 Deg 22.3 Min	-119 Deg 40.0 Min	04/25/85	1491
AM-050.20	018	282/12:50:06	CALIFORNIA COAST	34 Deg 14.6 Min	-119 Deg 40.0 Min	04/25/85	1492
P2-051.80	001	282/15:25:00	BASS STRAIT	-41 Deg 36.4 Min	142 Deg 44.4 Min	12/27/84	0629
P2-051.80	027	282/15:25:03	BASS STRAIT	-41 Deg 51.3 Min	142 Deg 24.3 Min	05/07/85	1581
P2-051.80	002	282/15:25:11	BASS STRAIT	-41 Deg 05.3 Min	143 Deg 24.2 Min	12/27/84	0630
P2-051.80	028	282/15:25:14	BASS STRAIT	-41 Deg 20.2 Min	143 Deg 04.3 Min	05/07/85	1582
P2-051.80	003	282/15:25:23	BASS STRAIT	-40 Deg 33.9 Min	144 Deg 03.5 Min	12/27/84	0631
P2-051.80	029	282/15:25:25	BASS STRAIT	-40 Deg 49.0 Min	143 Deg 43.7 Min	05/07/85	1583
P2-051.80	004	282/15:25:34	BASS STRAIT	-40 Deg 02.3 Min	144 Deg 41.7 Min	12/27/84	0632
P2-051.80	030	282/15:25:36	BASS STRAIT	-40 Deg 17.5 Min	144 Deg 22.6 Min	05/07/85	1584
P2-051.80	005	282/15:25:45	BASS STRAIT	-39 Deg 30.4 Min	145 Deg 19.5 Min	12/27/84	0633
P2-051.80	031	282/15:25:47	BASS STRAIT	-39 Deg 43.4 Min	145 Deg 03.3 Min	05/08/85	1586
P2-051.80	006	282/15:25:56	BASS STRAIT	-38 Deg 58.2 Min	145 Deg 56.7 Min	12/27/84	0634
P2-051.80	032	282/15:25:59	BASS STRAIT	-39 Deg 11.4 Min	145 Deg 40.7 Min	05/08/85	1587
P2-051.80	007	282/15:26:07	BASS STRAIT	-38 Deg 26.0 Min	146 Deg 33.3 Min	12/27/84	0635
P2-051.80	033	282/15:26:10	BASS STRAIT	-38 Deg 39.2 Min	146 Deg 17.7 Min	05/08/85	1588
P2-051.80	008	282/15:26:18	BASS STRAIT	-37 Deg 53.5 Min	147 Deg 09.5 Min	12/27/84	0636
P2-051.80	034	282/15:26:21	BASS STRAIT	-38 Deg 06.8 Min	146 Deg 54.0 Min	05/08/85	1589
P2-051.80	009	282/15:26:29	BASS STRAIT	-37 Deg 20.7 Min	147 Deg 45.1 Min	12/27/84	0637
P2-051.80	035	282/15:26:32	BASS STRAIT	-37 Deg 33.9 Min	147 Deg 29.5 Min	05/08/85	1590
P2-051.80	037	282/15:26:36	BASS STRAIT	-37 Deg 22.5 Min	147 Deg 41.9 Min	05/18/85	1646
P2-051.80	010	282/15:26:40	BASS STRAIT	-36 Deg 47.7 Min	148 Deg 20.0 Min	12/27/84	0638
P2-051.80	036	282/15:26:43	BASS STRAIT	-37 Deg 01.3 Min	148 Deg 05.0 Min	05/08/85	1591
P2-051.80	038	282/15:26:47	BASS STRAIT	-36 Deg 49.5 Min	148 Deg 16.8 Min	05/18/85	1647
P2-051.80	011	282/15:26:51	BASS STRAIT	-36 Deg 14.4 Min	148 Deg 54.4 Min	12/27/84	0639
P2-051.80	039	282/15:26:58	BASS STRAIT	-36 Deg 16.4 Min	148 Deg 51.4 Min	05/18/85	1648
P2-051.80	013	282/15:27:00	SYDNEY, AUSTRALIA	-35 Deg 45.2 Min	149 Deg 24.1 Min	12/27/84	0641
P2-051.80	012	282/15:27:02	BASS STRAIT	-35 Deg 40.9 Min	149 Deg 28.2 Min	12/27/84	0640
P2-051.80	040	282/15:27:09	BASS STRAIT	-35 Deg 43.1 Min	149 Deg 25.3 Min	05/18/85	1649
P2-051.80	014	282/15:27:11	SYDNEY, AUSTRALIA	-35 Deg 11.7 Min	149 Deg 57.7 Min	12/27/84	0642
P2-051.80	041	282/15:27:20	BASS STRAIT	-35 Deg 09.5 Min	149 Deg 58.7 Min	05/18/85	1650
P2-051.80	015	282/15:27:23	SYDNEY, AUSTRALIA	-34 Deg 37.9 Min	150 Deg 30.5 Min	12/27/84	0643
P2-051.80	042	282/15:27:31	BASS STRAIT	-34 Deg 35.8 Min	150 Deg 31.7 Min	05/18/85	1651
P2-051.80	016	282/15:27:34	SYDNEY, AUSTRALIA	-34 Deg 03.9 Min	151 Deg 03.3 Min	12/27/84	0644
P2-051.80	043	282/15:27:42	BASS STRAIT	-34 Deg 02.1 Min	151 Deg 04.3 Min	05/18/85	1652
P2-051.80	017	282/15:27:45	SYDNEY, AUSTRALIA	-33 Deg 29.9 Min	151 Deg 35.6 Min	12/27/84	0645
P2-051.80	044	282/15:27:53	BASS STRAIT	-33 Deg 27.8 Min	151 Deg 36.1 Min	05/18/85	1653
P2-051.80	018	282/15:27:56	SYDNEY, AUSTRALIA	-32 Deg 55.5 Min	152 Deg 06.9 Min	12/27/84	0646
P2-051.80	045	282/15:28:04	BASS STRAIT	-32 Deg 53.8 Min	152 Deg 07.9 Min	05/18/85	1654
P2-051.80	019	282/15:28:07	SYDNEY, AUSTRALIA	-32 Deg 21.3 Min	152 Deg 38.0 Min	12/27/84	0647
P2-051.80	046	282/15:28:15	BASS STRAIT	-32 Deg 19.1 Min	152 Deg 38.5 Min	05/18/85	1655

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
P2-051.80	020	282/15:28:18	SYDNEY, AUSTRALIA	-31 Deg 46.8 Min	153 Deg 08.9 Min	12/27/84	0648
P2-051.80	047	282/15:28:28	BASS STRAIT	-31 Deg 39.4 Min	153 Deg 13.6 Min	05/18/85	1656
P2-051.80	021	282/15:28:29	SYDNEY, AUSTRALIA	-31 Deg 12.1 Min	153 Deg 39.3 Min	12/27/84	0649
P2-051.80	048	282/15:28:37	BASS STRAIT	-31 Deg 08.1 Min	153 Deg 41.2 Min	05/19/85	1657
P2-051.80	022	282/15:28:38	SYDNEY, AUSTRALIA	-30 Deg 41.6 Min	154 Deg 05.5 Min	01/03/85	0650
P2-051.80	023	282/15:28:49	SYDNEY, AUSTRALIA	-30 Deg 06.5 Min	154 Deg 34.9 Min	01/03/85	0651
P2-051.80	049	282/15:28:49	BASS STRAIT	-30 Deg 33.3 Min	154 Deg 11.2 Min	05/19/85	1658
P2-051.80	024	282/15:29:00	SYDNEY, AUSTRALIA	-29 Deg 31.4 Min	155 Deg 04.1 Min	01/03/85	0652
P2-051.80	050	282/15:29:00	BASS STRAIT	-29 Deg 57.8 Min	154 Deg 39.8 Min	05/19/85	1659
P2-051.80	051	282/15:29:11	BASS STRAIT	-29 Deg 23.3 Min	155 Deg 09.8 Min	05/19/85	1660
P2-051.80	052	282/15:29:22	BASS STRAIT	-28 Deg 48.0 Min	155 Deg 38.5 Min	05/19/85	1661
P2-051.80	053	282/15:29:33	BASS STRAIT	-28 Deg 12.1 Min	156 Deg 06.1 Min	05/19/85	1662
P2-051.80	054	282/15:29:44	BASS STRAIT	-27 Deg 36.6 Min	156 Deg 34.1 Min	05/19/85	1663
P2-051.80	055	282/15:29:55	BASS STRAIT	-27 Deg 01.0 Min	157 Deg 01.9 Min	05/19/85	1664
AO-053.20	035	282/17:27:50	CANADA	58 Deg 04.0 Min	-133 Deg 46.5 Min	07/12/85	2089
AO-053.20	036	282/17:28:01	CANADA	58 Deg 09.3 Min	-132 Deg 29.8 Min	07/12/85	2090
AO-053.20	037	282/17:28:11	CANADA	58 Deg 13.8 Min	-131 Deg 12.6 Min	07/12/85	2091
AO-053.20	001	282/17:28:21	CANADA	58 Deg 20.0 Min	-129 Deg 14.5 Min	12/05/84	0449
AO-053.20	002	282/17:28:31	CANADA	58 Deg 22.4 Min	-127 Deg 56.6 Min	12/05/84	0450
AO-053.20	003	282/17:28:42	CANADA	58 Deg 24.1 Min	-126 Deg 38.5 Min	12/05/84	0451
AO-053.20	004	282/17:28:52	CANADA	58 Deg 24.8 Min	-125 Deg 20.6 Min	12/05/84	0452
AO-053.20	021	282/17:28:52	CANADA	58 Deg 23.5 Min	-126 Deg 09.6 Min	05/24/85	1702
AO-053.20	005	282/17:29:03	CANADA	58 Deg 24.8 Min	-124 Deg 02.4 Min	12/05/84	0453
AO-053.20	022	282/17:29:03	CANADA	58 Deg 23.9 Min	-124 Deg 51.6 Min	05/24/85	1703
AO-053.20	006	282/17:29:19	CANADA	58 Deg 23.2 Min	-122 Deg 06.4 Min	12/05/84	0454
AO-053.20	023	282/17:29:19	CANADA	58 Deg 23.0 Min	-122 Deg 51.7 Min	05/23/85	1704
AO-053.20	007	282/17:29:29	CANADA	58 Deg 21.1 Min	-120 Deg 48.4 Min	12/05/84	0455
AO-053.20	024	282/17:29:30	CANADA	58 Deg 21.3 Min	-121 Deg 33.8 Min	05/23/85	1705
AO-053.20	008	282/17:29:40	CANADA	58 Deg 18.1 Min	-119 Deg 30.6 Min	12/05/84	0456
AO-053.20	025	282/17:29:40	CANADA	58 Deg 18.8 Min	-120 Deg 16.1 Min	05/23/85	1706
AO-053.20	026	282/17:29:57	CANADA	58 Deg 13.1 Min	-118 Deg 10.1 Min	06/18/85	1909
AO-053.20	010	282/17:30:09	CANADA	58 Deg 05.1 Min	-115 Deg 48.8 Min	12/05/84	0458
AO-053.20	011	282/17:30:20	CANADA	57 Deg 59.0 Min	-114 Deg 32.3 Min	12/05/84	0459
AO-053.20	012	282/17:30:31	CANADA	57 Deg 52.1 Min	-113 Deg 16.3 Min	12/05/84	0460
AO-053.20	027	282/17:30:40	CANADA	57 Deg 48.8 Min	-112 Deg 54.9 Min	07/12/85	2081
AO-053.20	028	282/17:30:51	CANADA	57 Deg 40.8 Min	-111 Deg 39.7 Min	07/12/85	2082
AO-053.20	029	282/17:31:01	CANADA	57 Deg 32.1 Min	-110 Deg 25.1 Min	07/12/85	2083
AO-053.20	030	282/17:31:12	CANADA	57 Deg 22.6 Min	-109 Deg 11.1 Min	07/12/85	2084
AO-053.20	031	282/17:31:22	CANADA	57 Deg 12.4 Min	-107 Deg 57.8 Min	07/12/85	2085
AO-053.20	032	282/17:31:33	CANADA	57 Deg 01.4 Min	-106 Deg 45.2 Min	07/12/85	2086
AO-053.20	033	282/17:31:43	CANADA	56 Deg 49.8 Min	-105 Deg 34.0 Min	07/12/85	2087
AO-053.20	034	282/17:31:54	CANADA	56 Deg 37.4 Min	-104 Deg 22.9 Min	07/12/85	2088
AO-053.20	013	282/17:32:00	CANADA	56 Deg 28.5 Min	-103 Deg 34.0 Min	02/23/85	1036
AO-053.20	014	282/17:32:10	CANADA	56 Deg 14.9 Min	-102 Deg 24.3 Min	02/23/85	1037
AO-053.20	015	282/17:32:21	CANADA	56 Deg 00.6 Min	-101 Deg 15.4 Min	02/23/85	1038
AO-053.20	016	282/17:32:31	CANADA	55 Deg 45.1 Min	-100 Deg 05.1 Min	02/23/85	1039
AO-053.20	017	282/17:32:42	CANADA	55 Deg 29.4 Min	-98 Deg 58.1 Min	02/23/85	1040
AO-053.20	018	282/17:32:52	CANADA	55 Deg 13.2 Min	-97 Deg 52.0 Min	02/23/85	1041
AO-053.20	019	282/17:33:03	CANADA	54 Deg 56.3 Min	-96 Deg 46.9 Min	02/23/85	1042
AO-053.20	020	282/17:33:13	CANADA	54 Deg 38.8 Min	-95 Deg 42.7 Min	02/23/85	1043
AO-053.20	038	282/17:33:19	CANADA	54 Deg 30.9 Min	-95 Deg 15.0 Min	07/12/85	2092
KI-054.10	050	282/19:02:47	CANADA	53 Deg 38.9 Min	-114 Deg 47.8 Min	01/31/86	2608
KI-054.10	051	282/19:02:51	CANADA	53 Deg 31.3 Min	-114 Deg 24.7 Min	02/03/86	2609
KI-054.10	059	282/19:02:52	CANADA	53 Deg 31.1 Min	-114 Deg 24.0 Min	02/15/86	2631
KI-054.10	001	282/19:03:06	MELFORT	52 Deg 48.2 Min	-112 Deg 14.8 Min	12/03/84	0417
KI-054.10	052	282/19:03:07	CANADA	53 Deg 01.9 Min	-112 Deg 58.5 Min	01/31/86	2610
KI-054.10	056	282/19:03:07	CANADA	53 Deg 01.9 Min	-112 Deg 58.5 Min	02/12/86	2628
KI-054.10	002	282/19:03:17	MELFORT	52 Deg 25.4 Min	-111 Deg 13.1 Min	12/03/84	0418
KI-054.10	053	282/19:03:18	CANADA	52 Deg 39.5 Min	-111 Deg 56.2 Min	01/31/86	2611
KI-054.10	057	282/19:03:18	CANADA	52 Deg 39.5 Min	-111 Deg 56.1 Min	02/12/86	2629
KI-054.10	003	282/19:03:29	MELFORT	52 Deg 02.0 Min	-110 Deg 12.5 Min	12/03/84	0419

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
KI-054.10	054	282/19:03:29	CANADA	52 Deg 16.5 Min	-110 Deg 55.0 Min	01/31/86	2612
KI-054.10	058	282/19:03:29	CANADA	52 Deg 16.5 Min	-110 Deg 55.0 Min	02/12/86	2630
KI-054.10	060	282/19:03:39	CANADA	51 Deg 54.8 Min	-109 Deg 59.6 Min	02/15/86	2632
KI-054.10	004	282/19:03:40	MELFORT	51 Deg 38.0 Min	-109 Deg 13.0 Min	12/03/84	0420
KI-054.10	055	282/19:03:40	CANADA	51 Deg 52.9 Min	-109 Deg 54.8 Min	01/31/86	2613
KI-054.10	005	282/19:03:51	MELFORT	51 Deg 13.5 Min	-108 Deg 14.5 Min	12/03/84	0421
KI-054.10	061	282/19:03:51	CANADA	51 Deg 30.8 Min	-109 Deg 00.5 Min	02/15/86	2633
KI-054.10	056	282/19:03:52	CANADA	51 Deg 28.8 Min	-108 Deg 55.8 Min	01/31/86	2614
KI-054.10	029	282/19:04:07	CANADA	50 Deg 54.0 Min	-107 Deg 34.5 Min	06/06/85	1826
KI-054.10	062	282/19:04:08	CANADA	50 Deg 53.7 Min	-107 Deg 33.8 Min	02/15/86	2634
KI-054.10	030	282/19:04:19	CANADA	50 Deg 27.9 Min	-106 Deg 36.3 Min	06/06/85	1827
KI-054.10	031	282/19:04:35	CANADA	49 Deg 51.9 Min	-105 Deg 19.6 Min	06/06/85	1828
KI-054.10	035	282/19:04:35	MINNESOTA/IOWA	49 Deg 51.9 Min	-105 Deg 19.6 Min	08/20/85	2286
KI-054.10	036	282/19:04:46	MINNESOTA/IOWA	49 Deg 24.1 Min	-104 Deg 23.0 Min	08/20/85	2287
KI-054.10	037	282/19:05:16	MINNESOTA/IOWA	48 Deg 12.8 Min	-102 Deg 06.8 Min	08/20/85	2288
KI-054.10	038	282/19:05:28	MINNESOTA/IOWA	48 Deg 02.6 Min	-101 Deg 48.2 Min	08/20/85	2289
KI-054.10	039	282/19:05:39	MINNESOTA/IOWA	47 Deg 13.5 Min	-100 Deg 22.0 Min	08/20/85	2290
KI-054.10	040	282/19:05:51	MINNESOTA/IOWA	46 Deg 43.2 Min	-99 Deg 31.1 Min	08/20/85	2291
KI-054.10	046	282/19:05:58	MINNESOTA/IOWA	46 Deg 24.3 Min	-99 Deg 00.3 Min	09/01/85	2319
KI-054.10	041	282/19:06:14	MINNESOTA/IOWA	45 Deg 43.9 Min	-97 Deg 56.2 Min	08/20/85	2292
KI-054.10	042	282/19:06:25	MINNESOTA/IOWA	45 Deg 14.0 Min	-97 Deg 10.4 Min	08/20/85	2293
KI-054.10	043	282/19:06:36	MINNESOTA/IOWA	44 Deg 43.7 Min	-96 Deg 25.5 Min	08/20/85	2294
KI-054.10	044	282/19:06:48	MINNESOTA/IOWA	44 Deg 13.3 Min	-95 Deg 41.5 Min	08/20/85	2295
KI-054.10	045	282/19:06:59	MINNESOTA/IOWA	43 Deg 42.4 Min	-94 Deg 58.1 Min	08/20/85	2296
KI-054.10	007	282/19:07:42	ILLINOIS	41 Deg 16.5 Min	-91 Deg 44.2 Min	12/02/84	0423
KI-054.10	063	282/19:07:53	ILLINOIS	41 Deg 08.0 Min	-91 Deg 37.8 Min	03/08/86	2686
KI-054.10	008	282/19:07:54	ILLINOIS	40 Deg 44.0 Min	-91 Deg 04.9 Min	12/02/84	0424
KI-054.10	047	282/19:08:04	ILLINOIS	40 Deg 36.2 Min	-90 Deg 59.5 Min	11/24/85	2520
KI-054.10	009	282/19:08:05	ILLINOIS	40 Deg 11.2 Min	-90 Deg 26.2 Min	12/02/84	0425
KI-054.10	064	282/19:08:05	ILLINOIS	40 Deg 35.5 Min	-90 Deg 58.7 Min	03/08/86	2687
KI-054.10	066	282/19:08:07	ILLINOIS	40 Deg 27.4 Min	-90 Deg 49.1 Min	03/13/86	2695
KI-054.10	010	282/19:08:16	ILLINOIS	39 Deg 38.3 Min	-89 Deg 48.3 Min	12/02/84	0426
KI-054.10	048	282/19:08:16	ILLINOIS	40 Deg 03.5 Min	-90 Deg 21.0 Min	11/24/85	2521
KI-054.10	065	282/19:08:16	ILLINOIS	40 Deg 02.8 Min	-90 Deg 20.2 Min	03/08/86	2688
KI-054.10	011	282/19:08:27	ILLINOIS	39 Deg 05.1 Min	-89 Deg 10.9 Min	12/02/84	0427
KI-054.10	049	282/19:08:27	ILLINOIS	39 Deg 30.5 Min	-89 Deg 43.2 Min	11/24/85	2522
KI-054.10	012	282/19:08:39	ILLINOIS	38 Deg 31.7 Min	-88 Deg 34.1 Min	12/02/84	0428
KI-054.10	013	282/19:08:42	ILLINOIS	38 Deg 21.7 Min	-88 Deg 23.3 Min	12/03/84	0429
KI-054.10	014	282/19:08:53	ILLINOIS	37 Deg 48.0 Min	-87 Deg 47.2 Min	12/03/84	0430
KI-054.10	015	282/19:09:04	ILLINOIS	37 Deg 14.1 Min	-87 Deg 11.8 Min	12/03/84	0431
KI-054.10	013	282/19:09:11	KY./TENN./GEORGIA	37 Deg 20.1 Min	-87 Deg 21.7 Min	04/13/85	1404
KI-054.10	016	282/19:09:16	ILLINOIS	36 Deg 40.2 Min	-86 Deg 37.1 Min	12/03/84	0432
KI-054.10	014	282/19:09:22	KY./TENN./GEORGIA	36 Deg 46.1 Min	-86 Deg 46.8 Min	04/13/85	1405
KI-054.10	017	282/19:09:27	ILLINOIS	36 Deg 05.9 Min	-86 Deg 02.7 Min	12/03/84	0433
KI-054.10	015	282/19:09:33	KY./TENN./GEORGIA	36 Deg 11.9 Min	-86 Deg 12.3 Min	04/13/85	1406
KI-054.10	018	282/19:09:38	ILLINOIS	35 Deg 31.4 Min	-85 Deg 28.9 Min	12/03/84	0434
KI-054.10	016	282/19:09:44	KY./TENN./GEORGIA	35 Deg 37.6 Min	-85 Deg 38.5 Min	04/13/85	1407
KI-054.10	019	282/19:09:49	ILLINOIS	34 Deg 56.8 Min	-84 Deg 55.6 Min	12/03/84	0435
KI-054.10	017	282/19:09:56	KY./TENN./GEORGIA	35 Deg 03.1 Min	-85 Deg 05.1 Min	04/13/85	1408
KI-054.10	020	282/19:10:01	ILLINOIS	34 Deg 22.0 Min	-84 Deg 22.7 Min	12/03/84	0436
KI-054.10	018	282/19:10:07	KY./TENN./GEORGIA	34 Deg 28.3 Min	-84 Deg 32.2 Min	04/13/85	1409
KI-054.10	019	282/19:10:18	KY./TENN./GEORGIA	33 Deg 53.5 Min	-83 Deg 59.9 Min	04/13/85	1410
KI-054.10	020	282/19:10:29	KY./TENN./GEORGIA	33 Deg 18.4 Min	-83 Deg 27.9 Min	04/13/85	1411
KI-054.10	021	282/19:10:40	KY./TENN./GEORGIA	32 Deg 43.2 Min	-82 Deg 56.4 Min	04/13/85	1412
KI-054.10	022	282/19:10:40	KY./TENN./GEORGIA	32 Deg 44.9 Min	-82 Deg 57.9 Min	04/15/85	1413
KI-054.10	023	282/19:10:51	KY./TENN./GEORGIA	32 Deg 09.5 Min	-82 Deg 26.8 Min	04/15/85	1414
KI-054.10	024	282/19:11:02	KY./TENN./GEORGIA	31 Deg 34.0 Min	-81 Deg 56.1 Min	04/15/85	1415
KI-054.10	025	282/19:11:14	KY./TENN./GEORGIA	30 Deg 58.4 Min	-81 Deg 25.8 Min	04/15/85	1416
KI-054.10	026	282/19:11:25	KY./TENN./GEORGIA	30 Deg 22.6 Min	-80 Deg 55.9 Min	04/15/85	1417
KI-054.10	027	282/19:11:36	KY./TENN./GEORGIA	29 Deg 46.7 Min	-80 Deg 26.4 Min	04/15/85	1418
KI-054.10	028	282/19:11:47	KY./TENN./GEORGIA	29 Deg 10.6 Min	-79 Deg 57.3 Min	04/15/85	1419

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
HJ-055.20	006	282/20:14:44	JAPAN	31 Deg 28.3 Min	130 Deg 50.0 Min	03/09/85	1128
HJ-055.20	007	282/20:14:55	JAPAN	32 Deg 00.8 Min	131 Deg 23.0 Min	03/09/85	1129
HJ-055.20	008	282/20:15:06	JAPAN	32 Deg 34.3 Min	131 Deg 54.9 Min	03/09/85	1130
HJ-055.20	009	282/20:15:17	JAPAN	33 Deg 07.1 Min	132 Deg 28.1 Min	03/09/85	1131
HJ-055.20	010	282/20:15:28	JAPAN	33 Deg 39.6 Min	133 Deg 01.7 Min	03/09/85	1132
HJ-055.20	011	282/20:15:39	JAPAN	34 Deg 12.0 Min	133 Deg 35.8 Min	03/09/85	1133
HJ-055.20	012	282/20:15:50	JAPAN	34 Deg 44.1 Min	134 Deg 10.4 Min	03/09/85	1134
HJ-055.20	013	282/20:16:01	JAPAN	35 Deg 16.0 Min	134 Deg 45.5 Min	03/09/85	1135
HJ-055.20	014	282/20:16:12	JAPAN	35 Deg 47.7 Min	135 Deg 21.1 Min	03/09/85	1136
HJ-055.20	015	282/20:16:23	JAPAN	36 Deg 19.1 Min	135 Deg 57.2 Min	03/09/85	1137
HJ-055.20	016	282/20:16:34	JAPAN	36 Deg 50.4 Min	136 Deg 33.9 Min	03/09/85	1138
HJ-055.20	017	282/20:16:45	JAPAN	37 Deg 21.3 Min	137 Deg 11.2 Min	03/09/85	1139
HJ-055.20	018	282/20:16:53	JAPAN	37 Deg 42.5 Min	137 Deg 37.1 Min	03/15/85	1163
HJ-055.20	019	282/20:17:04	JAPAN	38 Deg 13.0 Min	138 Deg 15.4 Min	03/15/85	1164
HJ-055.20	020	282/20:17:15	JAPAN	38 Deg 43.3 Min	138 Deg 54.2 Min	03/15/85	1165
HJ-055.20	021	282/20:17:26	JAPAN	39 Deg 13.1 Min	139 Deg 33.4 Min	03/15/85	1166
HJ-055.20	026	282/20:17:26	AKITA AREA,JAPAN	39 Deg 06.5 Min	139 Deg 24.4 Min	07/18/86	2938
HJ-055.20	001	282/20:17:27	AKITA AREA,JAPAN	39 Deg 36.6 Min	140 Deg 07.1 Min	11/26/84	0355
HJ-055.20	027	282/20:17:37	AKITA AREA,JAPAN	39 Deg 36.1 Min	140 Deg 04.0 Min	07/18/86	2939
HJ-055.20	002	282/20:17:38	AKITA AREA,JAPAN	40 Deg 06.0 Min	140 Deg 47.5 Min	11/26/84	0356
HJ-055.20	003	282/20:17:49	AKITA AREA,JAPAN	40 Deg 35.1 Min	141 Deg 28.6 Min	11/26/84	0357
HJ-055.20	028	282/20:17:49	AKITA AREA,JAPAN	40 Deg 05.8 Min	140 Deg 44.9 Min	07/18/86	2940
HJ-055.20	004	282/20:18:00	AKITA AREA,JAPAN	41 Deg 03.9 Min	142 Deg 10.4 Min	11/26/84	0358
HJ-055.20	029	282/20:18:00	AKITA AREA,JAPAN	40 Deg 35.1 Min	141 Deg 26.2 Min	07/18/86	2941
HJ-055.20	005	282/20:18:11	AKITA AREA,JAPAN	41 Deg 32.4 Min	142 Deg 52.8 Min	11/26/84	0359
HJ-055.20	030	282/20:18:11	AKITA AREA,JAPAN	41 Deg 03.9 Min	142 Deg 08.0 Min	07/18/86	2942
HJ-055.20	022	282/20:18:18	JAPAN	41 Deg 30.4 Min	142 Deg 47.5 Min	03/15/85	1167
HJ-055.20	023	282/20:18:29	JAPAN	41 Deg 58.6 Min	143 Deg 30.7 Min	03/15/85	1168
HJ-055.20	024	282/20:18:40	JAPAN	42 Deg 26.5 Min	144 Deg 14.6 Min	03/15/85	1169
HJ-055.20	025	282/20:18:51	JAPAN	42 Deg 54.1 Min	144 Deg 59.1 Min	03/15/85	1170
AL-055.40	032	282/20:35:04	SHASTA	42 Deg 53.6 Min	-124 Deg 31.8 Min	06/20/85	1899
AL-055.40	001	282/20:35:05	SHASTA	42 Deg 34.0 Min	-123 Deg 59.0 Min	11/04/84	0183
AL-055.40	002	282/20:35:16	SHASTA	42 Deg 05.7 Min	-123 Deg 14.7 Min	11/04/84	0184
AL-055.40	033	282/20:35:16	SHASTA	42 Deg 25.3 Min	-123 Deg 46.5 Min	06/20/85	1900
AL-055.40	003	282/20:35:27	SHASTA	41 Deg 36.7 Min	-122 Deg 30.6 Min	11/04/84	0185
AL-055.40	034	282/20:35:27	SHASTA	41 Deg 56.6 Min	-123 Deg 02.1 Min	06/20/85	1901
AL-055.40	035	282/20:35:38	SHASTA	41 Deg 27.5 Min	-122 Deg 18.3 Min	06/20/85	1902
AL-055.40	004	282/20:35:39	SHASTA	41 Deg 06.5 Min	-121 Deg 46.0 Min	11/06/84	0188
AL-055.40	036	282/20:35:49	SHASTA	40 Deg 58.1 Min	-121 Deg 35.3 Min	06/20/85	1903
AL-055.40	005	282/20:35:50	SHASTA	40 Deg 37.1 Min	-121 Deg 03.7 Min	11/05/84	0189
AL-055.40	009	282/20:35:58	CALIFORNIA / NEVADA	40 Deg 10.7 Min	-120 Deg 26.8 Min	01/20/85	0799
AL-055.40	010	282/20:36:09	CALIFORNIA / NEVADA	39 Deg 41.5 Min	-119 Deg 46.8 Min	01/20/85	0800
AL-055.40	011	282/20:36:20	CALIFORNIA / NEVADA	39 Deg 11.1 Min	-119 Deg 06.3 Min	01/20/85	0801
AL-055.40	012	282/20:36:32	CALIFORNIA / NEVADA	38 Deg 51.7 Min	-118 Deg 39.8 Min	01/20/85	0802
AL-055.40	013	282/20:36:38	CALIFORNIA / NEVADA	38 Deg 35.5 Min	-118 Deg 18.4 Min	01/20/85	0803
AL-055.40	014	282/20:36:49	CALIFORNIA / NEVADA	38 Deg 06.9 Min	-117 Deg 41.9 Min	01/20/85	0804
AL-055.40	015	282/20:37:00	CALIFORNIA / NEVADA	37 Deg 21.0 Min	-116 Deg 47.8 Min	01/20/85	0805
AL-055.40	016	282/20:37:12	CALIFORNIA / NEVADA	36 Deg 49.4 Min	-116 Deg 10.1 Min	01/20/85	0806
AL-055.40	017	282/20:37:23	CALIFORNIA / NEVADA	36 Deg 17.5 Min	-115 Deg 33.0 Min	01/20/85	0807
AL-055.40	046	282/20:37:32	SOUTHWEST U.S.	36 Deg 14.7 Min	-115 Deg 31.2 Min	07/16/86	2932
AL-055.40	018	282/20:37:34	SOUTHWEST U.S.	35 Deg 45.2 Min	-114 Deg 56.3 Min	01/20/85	0808
AL-055.40	047	282/20:37:44	SOUTHWEST U.S.	35 Deg 42.5 Min	-114 Deg 54.7 Min	07/16/86	2933
AL-055.40	019	282/20:37:45	SOUTHWEST U.S.	35 Deg 13.0 Min	-114 Deg 20.4 Min	01/20/85	0809
AL-055.40	048	282/20:37:55	SOUTHWEST U.S.	35 Deg 09.9 Min	-114 Deg 18.6 Min	07/16/86	2934
AL-055.40	020	282/20:37:57	SOUTHWEST U.S.	34 Deg 35.8 Min	-113 Deg 39.6 Min	01/20/85	0810
AL-055.40	021	282/20:38:08	SOUTHWEST U.S.	34 Deg 07.5 Min	-113 Deg 09.9 Min	01/20/85	0811
AL-055.40	022	282/20:38:19	SOUTHWEST U.S.	33 Deg 34.5 Min	-112 Deg 35.5 Min	01/20/85	0812
AL-055.40	023	282/20:38:30	SOUTHWEST U.S.	33 Deg 01.6 Min	-112 Deg 01.9 Min	01/20/85	0813
AL-055.40	006	282/20:38:39	SILVER BELL, AZ	32 Deg 40.2 Min	-111 Deg 40.3 Min	11/07/84	0201
AL-055.40	007	282/20:38:51	SILVER BELL, AZ	31 Deg 32.9 Min	-110 Deg 34.4 Min	11/07/84	0202
AL-055.40	008	282/20:39:02	SILVER BELL, AZ	31 Deg 32.9 Min	-110 Deg 34.4 Min	11/07/84	0203

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AL-055.40	041	282/20:39:09	MEXICO	31 Deg 29.0 Min	-110 Deg 32.3 Min	12/02/85	2535
AL-055.40	037	282/20:39:10	CALIFORNIA/NEVADA	31 Deg 25.6 Min	-110 Deg 29.0 Min	06/28/85	1964
AL-055.40	042	282/20:39:21	MEXICO	30 Deg 55.0 Min	-110 Deg 00.0 Min	12/02/85	2536
AL-055.40	038	282/20:39:22	CALIFORNIA/NEVADA	30 Deg 51.6 Min	-109 Deg 56.7 Min	06/28/85	1965
AL-055.40	043	282/20:39:32	MEXICO	30 Deg 20.7 Min	-109 Deg 28.1 Min	12/02/85	2537
AL-055.40	039	282/20:39:33	CALIFORNIA/NEVADA	30 Deg 17.3 Min	-109 Deg 24.9 Min	06/28/85	1966
AL-055.40	044	282/20:39:43	MEXICO	29 Deg 46.3 Min	-108 Deg 56.7 Min	12/02/85	2538
AL-055.40	040	282/20:39:44	CALIFORNIA/NEVADA	29 Deg 42.9 Min	-108 Deg 53.5 Min	06/28/85	1967
AL-055.40	045	282/20:39:48	MEXICO	29 Deg 30.0 Min	-108 Deg 41.9 Min	12/02/85	2539
AG-056.40	004	282/22:31:00	RIO PICO	-41 Deg 08.7 Min	-74 Deg 37.0 Min	02/09/85	0932
AG-056.40	005	282/22:31:11	RIO PICO	-41 Deg 39.1 Min	-73 Deg 55.0 Min	02/09/85	0933
AG-056.40	006	282/22:31:22	RIO PICO	-42 Deg 09.2 Min	-73 Deg 12.4 Min	02/09/85	0934
AG-056.40	029	282/22:31:31	RIO PICO	-42 Deg 00.2 Min	-73 Deg 28.7 Min	05/30/85	1757
AG-056.40	007	282/22:31:34	RIO PICO	-42 Deg 39.3 Min	-72 Deg 28.6 Min	02/09/85	0935
AG-056.40	030	282/22:31:42	RIO PICO	-42 Deg 30.1 Min	-72 Deg 45.5 Min	05/30/85	1758
AG-056.40	008	282/22:31:45	RIO PICO	-43 Deg 08.7 Min	-71 Deg 44.5 Min	02/09/85	0936
AG-056.40	028	282/22:31:45	RIO PICO (FULL SWATH)	-42 Deg 43.1 Min	-72 Deg 26.2 Min	03/22/85	1255
AG-056.40	031	282/22:31:53	RIO PICO	-42 Deg 59.6 Min	-72 Deg 01.6 Min	05/30/85	1759
AG-056.40	009	282/22:31:56	RIO PICO	-43 Deg 37.8 Min	-70 Deg 59.6 Min	02/09/85	0937
AG-056.40	032	282/22:31:56	RIO PICO	-43 Deg 08.4 Min	-71 Deg 48.4 Min	05/31/85	1777
AG-056.40	036	282/22:32:00	RIO PICO	-43 Deg 18.1 Min	-71 Deg 33.6 Min	10/23/86	2945
AG-056.40	035	282/22:32:06	RIO PICO (SLANT RANGE)	-43 Deg 34.4 Min	-71 Deg 08.4 Min	05/10/86	2839
AG-056.40	010	282/22:32:07	RIO PICO	-44 Deg 07.1 Min	-70 Deg 13.0 Min	02/09/85	0938
AG-056.40	033	282/22:32:08	RIO PICO	-43 Deg 37.5 Min	-71 Deg 03.5 Min	05/31/85	1778
AG-056.40	011	282/22:32:19	RIO PICO	-44 Deg 35.5 Min	-69 Deg 26.5 Min	02/09/85	0939
AG-056.40	012	282/22:32:30	RIO PICO	-45 Deg 03.5 Min	-68 Deg 39.2 Min	02/09/85	0940
AG-056.40	013	282/22:32:41	RIO PICO	-45 Deg 31.1 Min	-67 Deg 51.0 Min	02/09/85	0941
AG-056.40	002	282/22:32:44	RIO PICO	-45 Deg 34.8 Min	-67 Deg 44.5 Min	11/04/84	0181
AG-056.40	014	282/22:32:52	RIO PICO	-45 Deg 36.6 Min	-67 Deg 41.3 Min	02/09/85	0942
AG-056.40	003	282/22:32:55	RIO PICO	-46 Deg 01.9 Min	-66 Deg 55.4 Min	11/04/84	0182
AG-056.40	016	282/22:33:00	RIO PICO	-46 Deg 16.8 Min	-66 Deg 27.8 Min	02/10/85	0944
AG-056.40	015	282/22:33:03	RIO PICO	-46 Deg 25.1 Min	-66 Deg 12.2 Min	02/09/85	0943
AG-056.40	017	282/22:33:11	RIO PICO	-46 Deg 43.3 Min	-65 Deg 37.4 Min	02/10/85	0945
AG-056.40	018	282/22:33:22	RIO PICO	-47 Deg 09.4 Min	-64 Deg 46.0 Min	02/10/85	0946
AG-056.40	019	282/22:33:34	RIO PICO	-47 Deg 37.2 Min	-63 Deg 49.6 Min	02/10/85	0947
AG-056.40	020	282/22:33:45	RIO PICO	-48 Deg 02.3 Min	-62 Deg 56.5 Min	02/10/85	0948
AG-056.40	021	282/22:33:56	RIO PICO	-48 Deg 27.0 Min	-62 Deg 02.4 Min	02/10/85	0949
AG-056.40	022	282/22:34:07	RIO PICO	-48 Deg 51.2 Min	-61 Deg 07.2 Min	02/10/85	0950
AG-056.40	023	282/22:34:19	RIO PICO	-49 Deg 14.8 Min	-60 Deg 11.3 Min	02/10/85	0951
AG-056.40	024	282/22:34:30	RIO PICO	-49 Deg 37.9 Min	-59 Deg 14.4 Min	02/10/85	0952
AG-056.40	025	282/22:34:41	RIO PICO	-49 Deg 58.7 Min	-58 Deg 21.1 Min	02/10/85	0953
AG-056.40	026	282/22:34:52	RIO PICO	-50 Deg 20.8 Min	-57 Deg 22.4 Min	02/10/85	0954
S2-056.41	001	282/22:50:59	AGULHAS	-36 Deg 44.1 Min	31 Deg 37.8 Min	07/22/85	2152
S2-056.41	002	282/22:51:11	AGULHAS	-36 Deg 12.0 Min	32 Deg 13.6 Min	07/22/85	2153
S2-056.41	003	282/22:51:22	AGULHAS	-35 Deg 39.8 Min	32 Deg 48.8 Min	07/22/85	2154
S2-056.41	004	282/22:51:33	AGULHAS	-35 Deg 13.3 Min	33 Deg 16.2 Min	07/22/85	2155
S2-056.41	005	282/22:51:44	AGULHAS	-34 Deg 40.6 Min	33 Deg 50.5 Min	07/22/85	2156
S2-056.41	006	282/22:51:55	AGULHAS	-34 Deg 07.8 Min	34 Deg 24.3 Min	07/22/85	2157
S2-056.41	007	282/22:52:04	AGULHAS	-33 Deg 41.3 Min	34 Deg 51.0 Min	07/23/85	2158
S2-056.41	008	282/22:52:15	AGULHAS	-33 Deg 08.1 Min	35 Deg 24.0 Min	07/23/85	2159
AG-056.40	034	282/22:52:26	AGULHAS (SLANT RANGE)	-32 Deg 32.9 Min	35 Deg 58.2 Min	05/10/86	2838
S2-056.41	009	282/22:52:26	AGULHAS	-32 Deg 34.8 Min	35 Deg 56.4 Min	07/23/85	2160
S2-056.41	010	282/22:52:37	AGULHAS	-31 Deg 58.0 Min	36 Deg 31.8 Min	07/23/85	2161
S2-056.41	011	282/22:52:48	AGULHAS	-31 Deg 24.2 Min	37 Deg 03.3 Min	07/23/85	2162
S2-056.41	012	282/22:52:59	AGULHAS	-30 Deg 50.3 Min	37 Deg 34.5 Min	07/23/85	2163
S2-056.41	013	282/22:52:59	AGULHAS	-30 Deg 45.1 Min	37 Deg 39.9 Min	02/20/86	2635
S2-056.41	014	282/22:53:10	AGULHAS	-30 Deg 11.0 Min	38 Deg 10.5 Min	02/20/86	2636
S2-056.41	015	282/22:53:21	AGULHAS	-29 Deg 42.9 Min	38 Deg 34.5 Min	02/20/86	2637
S2-056.41	016	282/22:53:33	AGULHAS	-29 Deg 08.6 Min	39 Deg 04.5 Min	02/20/86	2638
S2-056.41	017	282/22:53:44	AGULHAS	-28 Deg 30.5 Min	39 Deg 37.3 Min	02/20/86	2639
S2-056.41	018	282/22:53:55	AGULHAS	-27 Deg 55.8 Min	40 Deg 06.5 Min	02/20/86	2640

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
S2-056.41	019	282/22:54:05	AGULHAS	-27 Deg 25.3 Min	40 Deg 31.5 Min	02/22/86	2641
S2-056.41	020	282/22:54:17	AGULHAS	-26 Deg 50.4 Min	41 Deg 00.1 Min	02/22/86	2642
S2-056.41	021	282/22:54:28	AGULHAS	-26 Deg 14.8 Min	41 Deg 28.7 Min	02/22/86	2643
S2-056.41	022	282/22:54:39	AGULHAS	-25 Deg 39.6 Min	41 Deg 56.6 Min	02/22/86	2644
S2-056.41	023	282/22:54:50	AGULHAS	-25 Deg 01.0 Min	42 Deg 27.0 Min	02/22/86	2645
S2-056.41	024	282/22:55:01	AGULHAS	-24 Deg 25.6 Min	42 Deg 54.2 Min	02/22/86	2646
AG-056.41	034	282/22:55:09	MADAGASCAR	-24 Deg 00.2 Min	43 Deg 13.2 Min	06/19/85	1904
AG-056.41	035	282/22:55:21	MADAGASCAR	-23 Deg 24.6 Min	43 Deg 39.9 Min	06/19/85	1905
AG-056.41	036	282/22:55:32	MADAGASCAR	-22 Deg 48.9 Min	44 Deg 06.4 Min	06/19/85	1906
AG-056.41	037	282/22:55:43	MADAGASCAR	-22 Deg 13.1 Min	44 Deg 32.6 Min	06/19/85	1907
SA-059.60	001	283/03:08:52	TIERRA DEL FUEGO	-55 Deg 05.6 Min	-80 Deg 30.2 Min	03/09/85	1126
SA-059.60	002	283/03:09:03	TIERRA DEL FUEGO	-54 Deg 57.6 Min	-79 Deg 15.7 Min	03/09/85	1127
AK-064.20	010	283/09:32:49	SOUTHEASTERN U.S.	27 Deg 11.7 Min	-84 Deg 37.2 Min	11/17/85	2499
AK-064.20	011	283/09:33:00	SOUTHEASTERN U.S.	27 Deg 46.2 Min	-84 Deg 11.8 Min	11/17/85	2500
AK-064.20	001	283/09:33:20	GULF OF MEXICO	29 Deg 40.9 Min	-82 Deg 41.0 Min	11/27/84	0366
AK-064.20	012	283/09:33:20	SOUTHEASTERN U.S.	28 Deg 52.4 Min	-83 Deg 22.1 Min	11/17/85	2501
AK-064.20	002	283/09:33:30	GULF OF MEXICO	30 Deg 15.2 Min	-82 Deg 14.3 Min	11/27/84	0367
AK-064.20	013	283/09:33:31	SOUTHEASTERN U.S.	29 Deg 26.7 Min	-82 Deg 55.8 Min	11/17/85	2502
AK-064.20	003	283/09:33:41	FLORIDA	30 Deg 49.4 Min	-81 Deg 47.2 Min	11/27/84	0368
AK-064.20	014	283/09:33:41	SOUTHEASTERN U.S.	30 Deg 02.1 Min	-82 Deg 28.3 Min	11/18/85	2503
AK-064.20	022	283/09:33:47	FLORIDA (SLANT RANGE)	30 Deg 15.1 Min	-82 Deg 18.2 Min	06/19/86	2901
AK-064.20	004	283/09:33:51	FLORIDA	31 Deg 23.4 Min	-81 Deg 19.9 Min	11/27/84	0369
AK-064.20	023	283/09:33:51	SOUTHEASTERN U.S.	30 Deg 34.5 Min	-82 Deg 02.8 Min	02/22/87	2974
AK-064.20	015	283/09:33:52	SOUTHEASTERN U.S.	30 Deg 36.3 Min	-82 Deg 01.4 Min	11/18/85	2504
AK-064.20	005	283/09:34:02	SOUTHEASTERN U.S.	31 Deg 57.4 Min	-80 Deg 52.1 Min	11/27/84	0370
AK-064.20	024	283/09:34:02	SOUTHEASTERN U.S.	31 Deg 08.5 Min	-81 Deg 35.7 Min	02/22/87	2975
AK-064.20	016	283/09:34:03	SOUTHEASTERN U.S.	31 Deg 10.1 Min	-81 Deg 34.3 Min	11/18/85	2505
AK-064.20	021	283/09:34:09	GEORGIA	31 Deg 32.6 Min	-81 Deg 16.2 Min	05/24/86	2888
AK-064.20	006	283/09:34:12	SOUTHEASTERN U.S.	32 Deg 31.2 Min	-80 Deg 24.0 Min	11/27/84	0371
AK-064.20	017	283/09:34:13	SOUTHEASTERN U.S.	31 Deg 44.1 Min	-81 Deg 06.8 Min	11/18/85	2506
AK-064.20	007	283/09:34:23	SOUTHEASTERN U.S.	33 Deg 05.7 Min	-79 Deg 55.0 Min	11/28/84	0372
AK-064.20	018	283/09:34:24	SOUTHEASTERN U.S.	32 Deg 18.0 Min	-80 Deg 38.8 Min	11/19/85	2507
AK-064.20	008	283/09:34:33	SOUTHEASTERN U.S.	33 Deg 39.3 Min	-79 Deg 26.2 Min	11/28/84	0373
AK-064.20	019	283/09:34:34	SOUTHEASTERN U.S.	32 Deg 51.8 Min	-80 Deg 10.5 Min	11/19/85	2508
AK-064.20	009	283/09:34:44	SOUTHEASTERN U.S.	34 Deg 12.9 Min	-78 Deg 57.0 Min	11/28/84	0374
AK-064.20	020	283/09:34:45	SOUTHEASTERN U.S.	33 Deg 25.4 Min	-79 Deg 41.9 Min	11/19/85	2509
AK-064.21	009	283/09:35:09	N.Y. BIGHT	34 Deg 37.2 Min	-78 Deg 28.0 Min	11/21/85	2510
AK-064.21	010	283/09:35:20	N.Y. BIGHT	35 Deg 10.7 Min	-77 Deg 57.7 Min	11/21/85	2511
AW-064.21	011	283/09:35:30	ATLANTIC COASTLINE	35 Deg 44.5 Min	-77 Deg 26.7 Min	12/17/85	2512
AW-064.21	012	283/09:35:41	ATLANTIC COASTLINE	36 Deg 17.8 Min	-76 Deg 55.6 Min	12/17/85	2513
AW-064.21	013	283/09:35:52	ATLANTIC COASTLINE	36 Deg 07.8 Min	-75 Deg 18.0 Min	12/17/85	2514
AK-064.21	014	283/09:36:03	N.Y. BIGHT	36 Deg 40.8 Min	-74 Deg 45.5 Min	11/21/85	2515
AK-064.21	015	283/09:36:13	N.Y. BIGHT	37 Deg 12.0 Min	-74 Deg 14.0 Min	11/21/85	2516
AK-064.21	016	283/09:36:24	N.Y. BIGHT	37 Deg 44.3 Min	-73 Deg 40.8 Min	11/21/85	2517
AW-064.21	001	283/09:36:33	NEW YORK BIGHT	39 Deg 03.6 Min	-72 Deg 13.3 Min	11/16/84	0258
AK-064.21	017	283/09:36:35	N.Y. BIGHT	38 Deg 16.5 Min	-73 Deg 07.2 Min	11/21/85	2518
AW-064.21	002	283/09:36:44	NEW YORK BIGHT	39 Deg 35.3 Min	-71 Deg 38.2 Min	11/16/84	0259
AW-064.21	003	283/09:36:54	NEW YORK BIGHT	40 Deg 06.9 Min	-71 Deg 02.6 Min	11/16/84	0260
AW-064.21	004	283/09:37:04	NORTH ATLANTIC	39 Deg 47.4 Min	-71 Deg 27.7 Min	08/13/85	2263
AW-064.21	005	283/09:37:15	NORTH ATLANTIC	40 Deg 18.8 Min	-70 Deg 51.9 Min	08/13/85	2264
AW-064.21	006	283/09:37:26	NORTH ATLANTIC	40 Deg 50.0 Min	-70 Deg 15.6 Min	08/13/85	2265
AW-064.21	007	283/09:37:36	NORTH ATLANTIC	41 Deg 21.2 Min	-69 Deg 38.5 Min	08/13/85	2266
AW-064.21	008	283/09:37:47	NORTH ATLANTIC	41 Deg 51.9 Min	-69 Deg 00.9 Min	08/13/85	2267
V2-065.21	001	283/11:30:15	EGYPT	28 Deg 56.4 Min	31 Deg 19.5 Min	02/24/85	1044
V2-065.21	002	283/11:30:25	EGYPT	28 Deg 22.6 Min	31 Deg 46.5 Min	02/24/85	1045
V2-065.21	003	283/11:30:36	EGYPT	27 Deg 48.6 Min	32 Deg 13.2 Min	02/24/85	1046
V2-065.21	004	283/11:30:46	EGYPT	27 Deg 14.6 Min	32 Deg 39.5 Min	02/24/85	1047
V2-065.21	005	283/11:30:57	EGYPT	26 Deg 40.5 Min	33 Deg 05.6 Min	02/24/85	1048
V2-065.21	006	283/11:31:08	EGYPT	26 Deg 06.2 Min	33 Deg 31.5 Min	02/24/85	1049
V2-065.21	007	283/11:31:18	EGYPT	25 Deg 32.0 Min	33 Deg 57.0 Min	02/24/85	1050
V2-065.21	008	283/11:31:29	EGYPT	24 Deg 57.6 Min	34 Deg 22.3 Min	02/24/85	1051

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Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
V2-065.21	009	283/11:31:39	EGYPT	24 Deg 23.1 Min	34 Deg 47.4 Min	02/24/85	1052
V2-065.21	010	283/11:31:47	EGYPT	23 Deg 59.4 Min	35 Deg 04.4 Min	02/26/85	1053
V2-065.21	011	283/11:31:57	EGYPT	23 Deg 24.8 Min	35 Deg 29.1 Min	02/26/85	1054
V2-065.21	012	283/11:32:08	EGYPT	22 Deg 50.0 Min	35 Deg 53.5 Min	02/26/85	1055
V2-065.21	013	283/11:32:18	EGYPT	22 Deg 15.3 Min	36 Deg 17.7 Min	02/26/85	1056
V2-065.21	014	283/11:32:29	EGYPT	21 Deg 40.5 Min	36 Deg 41.7 Min	02/26/85	1057
V2-065.21	015	283/11:32:40	EGYPT	21 Deg 02.9 Min	37 Deg 07.2 Min	02/26/85	1058
V2-065.21	016	283/11:32:50	EGYPT	20 Deg 27.9 Min	37 Deg 30.8 Min	02/26/85	1059
AM-066.20	026	283/12:33:19	CALIFORNIA	34 Deg 35.4 Min	-121 Deg 42.9 Min	07/16/86	2926
AM-066.20	027	283/12:33:30	CALIFORNIA	35 Deg 09.5 Min	-121 Deg 10.8 Min	07/16/86	2927
AM-066.20	001	283/12:33:39	RAISIN CITY, CA	36 Deg 37.7 Min	-119 Deg 40.9 Min	10/30/84	0266
AM-066.20	011	283/12:33:39	RAISIN CITY,CA	35 Deg 37.8 Min	-120 Deg 43.6 Min	04/31/85	1526
AM-066.20	028	283/12:33:41	CALIFORNIA	35 Deg 43.6 Min	-120 Deg 38.1 Min	07/16/86	2928
AM-066.20	021	283/12:33:49	CALIFORNIA COAST	36 Deg 10.2 Min	-120 Deg 12.1 Min	03/09/86	2681
AM-066.20	002	283/12:33:50	RAISIN CITY,CA	37 Deg 11.4 Min	-119 Deg 06.9 Min	10/30/84	0267
AM-066.20	012	283/12:33:50	RAISIN CITY,CA	36 Deg 11.8 Min	-120 Deg 10.5 Min	04/31/85	1527
AM-066.20	020	283/12:33:50	RAISIN CITY,CA	36 Deg 11.2 Min	-120 Deg 11.1 Min	07/17/85	2080
AM-066.20	013	283/12:33:53	RAISIN CITY,CA	36 Deg 22.5 Min	-119 Deg 59.9 Min	05/15/85	1632
AM-066.20	015	283/12:33:57	RAISIN CITY,CA	36 Deg 34.7 Min	-119 Deg 47.7 Min	05/16/85	1639
AM-066.20	003	283/12:34:01	RAISIN CITY,CA	37 Deg 44.9 Min	-118 Deg 32.3 Min	11/19/84	0268
AM-066.20	022	283/12:34:01	CALIFORNIA COAST	36 Deg 44.0 Min	-119 Deg 38.5 Min	03/09/86	2682
AM-066.20	014	283/12:34:03	RAISIN CITY,CA	36 Deg 50.0 Min	-119 Deg 32.4 Min	05/15/85	1633
AM-066.20	010	283/12:34:09	RAISIN CITY,CA	37 Deg 09.5 Min	-119 Deg 12.6 Min	04/17/85	1436
AM-066.20	004	283/12:34:12	WHITE MOUNTAINS, CA	38 Deg 18.2 Min	-117 Deg 57.1 Min	11/19/84	0269
AM-066.20	023	283/12:34:12	CALIFORNIA COAST	37 Deg 17.6 Min	-119 Deg 04.3 Min	03/09/86	2683
AM-066.20	005	283/12:34:23	WHITE MOUNTAINS, CA	38 Deg 51.3 Min	-117 Deg 21.4 Min	11/19/84	0270
AM-066.20	024	283/12:34:23	CALIFORNIA COAST	37 Deg 50.8 Min	-118 Deg 29.8 Min	03/09/86	2684
AM-066.20	029	283/12:34:33	WHITE MOUNTAINS,CA.	38 Deg 23.6 Min	-117 Deg 55.1 Min	08/06/86	2935
AM-066.20	006	283/12:34:34	WHITE MOUNTAINS, CA	39 Deg 24.2 Min	-116 Deg 45.1 Min	11/19/84	0271
AM-066.20	025	283/12:34:34	CALIFORNIA COAST	38 Deg 24.1 Min	-117 Deg 54.6 Min	03/09/86	2685
AM-066.20	007	283/12:34:45	NEVADA	39 Deg 56.7 Min	-116 Deg 08.5 Min	11/19/84	0272
AM-066.20	008	283/12:34:56	NEVADA	40 Deg 29.2 Min	-115 Deg 31.0 Min	11/19/84	0273
AM-066.20	009	283/12:35:07	NEVADA	41 Deg 01.4 Min	-114 Deg 52.9 Min	11/19/84	0274
AM-066.20	016	283/12:35:16	CALIFORNIA/NEVADA	40 Deg 33.9 Min	-115 Deg 28.9 Min	07/12/85	2076
AM-066.20	017	283/12:35:28	CALIFORNIA/NEVADA	41 Deg 06.1 Min	-114 Deg 50.8 Min	07/12/85	2077
AM-066.20	018	283/12:35:39	CALIFORNIA/NEVADA	41 Deg 38.0 Min	-114 Deg 11.9 Min	07/12/85	2078
AM-066.20	019	283/12:35:50	CALIFORNIA/NEVADA	42 Deg 09.7 Min	-113 Deg 32.5 Min	07/12/85	2079
AM-066.40	019	283/12:51:59	NORTH ATLANTIC	49 Deg 34.4 Min	-16 Deg 55.7 Min	10/14/85	2439
AM-066.40	001	283/12:52:00	NORTH ATLANTIC	48 Deg 37.4 Min	-14 Deg 53.8 Min	02/03/85	0896
AM-066.40	020	283/12:52:10	NORTH ATLANTIC	49 Deg 09.6 Min	-16 Deg 04.6 Min	10/14/85	2440
AM-066.40	002	283/12:52:11	NORTH ATLANTIC	48 Deg 11.6 Min	-14 Deg 04.7 Min	02/03/85	0897
AM-066.40	003	283/12:52:21	NORTH ATLANTIC	47 Deg 45.5 Min	-13 Deg 16.3 Min	02/03/85	0898
AM-066.40	021	283/12:52:21	NORTH ATLANTIC	48 Deg 44.3 Min	-15 Deg 14.3 Min	10/14/85	2441
AM-066.40	022	283/12:52:31	NORTH ATLANTIC	48 Deg 18.7 Min	-14 Deg 24.9 Min	10/14/85	2442
AM-066.40	004	283/12:52:32	NORTH ATLANTIC	47 Deg 18.9 Min	-12 Deg 29.3 Min	02/03/85	0899
AM-066.40	005	283/12:52:42	NORTH ATLANTIC	46 Deg 51.8 Min	-11 Deg 42.8 Min	02/03/85	0900
AM-066.40	023	283/12:52:42	NORTH ATLANTIC	47 Deg 52.7 Min	-13 Deg 36.4 Min	10/14/85	2443
AM-066.40	006	283/12:52:53	NORTH ATLANTIC	46 Deg 24.7 Min	-10 Deg 56.9 Min	02/03/85	0901
AM-066.40	024	283/12:52:54	NORTH ATLANTIC	47 Deg 22.0 Min	-12 Deg 41.2 Min	10/16/85	2444
AM-066.40	007	283/12:53:04	NORTH ATLANTIC	45 Deg 57.2 Min	-10 Deg 12.1 Min	02/03/85	0902
AM-066.40	025	283/12:53:05	NORTH ATLANTIC	46 Deg 55.3 Min	-11 Deg 54.4 Min	10/16/85	2445
AM-066.40	008	283/12:53:14	NORTH ATLANTIC	45 Deg 29.2 Min	-9 Deg 27.9 Min	02/03/85	0903
AM-066.40	026	283/12:53:16	NORTH ATLANTIC	46 Deg 28.1 Min	-11 Deg 08.5 Min	10/16/85	2446
AM-066.40	009	283/12:53:25	NORTH ATLANTIC	45 Deg 01.0 Min	-8 Deg 44.4 Min	02/03/85	0904
AM-066.40	027	283/12:53:26	NORTH ATLANTIC	46 Deg 00.7 Min	-10 Deg 23.4 Min	10/16/85	2447
AM-066.40	028	283/12:53:35	NORTH ATLANTIC	45 Deg 36.8 Min	-9 Deg 45.2 Min	10/14/85	2448
AM-066.40	010	283/12:53:36	NORTH ATLANTIC	44 Deg 32.2 Min	-8 Deg 01.5 Min	02/03/85	0905
AM-066.40	011	283/12:53:46	NORTH ATLANTIC	44 Deg 03.4 Min	-7 Deg 19.5 Min	02/03/85	0906
AM-066.40	029	283/12:53:46	NORTH ATLANTIC	45 Deg 08.8 Min	-9 Deg 01.5 Min	10/14/85	2449
AM-066.40	012	283/12:53:57	NORTH ATLANTIC	43 Deg 34.4 Min	-6 Deg 38.1 Min	02/03/85	0907
AM-066.40	030	283/12:53:57	NORTH ATLANTIC	44 Deg 40.4 Min	-8 Deg 18.5 Min	10/14/85	2450

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AM-066.40	031	283/12:54:07	NORTH ATLANTIC	44 Deg 10.9 Min	-7 Deg 37.4 Min	10/14/85	2451
AM-066.40	013	283/12:54:08	NORTH ATLANTIC	43 Deg 05.7 Min	-5 Deg 58.7 Min	02/03/85	0908
AM-066.40	016	283/12:54:17	NORTH ATLANTIC	43 Deg 46.3 Min	-6 Deg 59.7 Min	06/11/85	1842
AM-066.40	014	283/12:54:18	NORTH ATLANTIC	42 Deg 36.0 Min	-5 Deg 18.8 Min	02/03/85	0909
AM-066.40	017	283/12:54:27	NORTH ATLANTIC	43 Deg 16.1 Min	-6 Deg 20.1 Min	06/11/85	1843
AM-066.40	015	283/12:54:29	NORTH ATLANTIC	42 Deg 07.6 Min	-4 Deg 41.5 Min	02/03/85	0910
AM-066.40	018	283/12:54:38	NORTH ATLANTIC	42 Deg 46.6 Min	-5 Deg 40.0 Min	06/11/85	1844
P4-067.80	004	283/15:08:01	BASS STRAIT	-42 Deg 02.9 Min	142 Deg 26.7 Min	01/02/85	0654
P4-067.80	005	283/15:08:12	BASS STRAIT	-41 Deg 31.4 Min	143 Deg 06.1 Min	01/02/85	0655
P4-067.80	006	283/15:08:22	BASS STRAIT	-40 Deg 59.6 Min	143 Deg 44.9 Min	01/02/85	0656
P4-067.80	007	283/15:08:33	BASS STRAIT	-40 Deg 27.6 Min	144 Deg 23.0 Min	01/02/85	0657
P4-067.80	008	283/15:08:44	BASS STRAIT	-39 Deg 55.4 Min	145 Deg 00.5 Min	01/02/85	0658
P4-067.80	009	283/15:08:55	BASS STRAIT	-39 Deg 22.9 Min	145 Deg 37.3 Min	01/02/85	0659
P4-067.80	010	283/15:09:06	BASS STRAIT	-38 Deg 50.3 Min	146 Deg 13.6 Min	01/02/85	0660
P4-067.80	011	283/15:09:17	BASS STRAIT	-38 Deg 17.4 Min	146 Deg 49.3 Min	01/02/85	0661
P4-067.80	012	283/15:09:28	BASS STRAIT	-37 Deg 44.3 Min	147 Deg 24.4 Min	01/02/85	0662
P4-067.80	016	283/15:09:29	SYDNEY, AUSTRALIA	-37 Deg 42.9 Min	147 Deg 26.0 Min	02/14/85	0955
P4-067.80	024	283/15:09:29	SYDNEY/BASS STRAIT	-39 Deg 00.8 Min	145 Deg 54.5 Min	05/23/85	1688
P4-067.80	013	283/15:09:39	BASS STRAIT	-37 Deg 11.0 Min	147 Deg 59.0 Min	01/02/85	0663
P4-067.80	017	283/15:09:40	SYDNEY, AUSTRALIA	-37 Deg 09.6 Min	148 Deg 00.5 Min	02/14/85	0956
P4-067.80	025	283/15:09:40	SYDNEY/BASS STRAIT	-38 Deg 28.0 Min	146 Deg 30.4 Min	05/23/85	1689
P4-067.80	014	283/15:09:50	BASS STRAIT	-36 Deg 37.6 Min	148 Deg 33.1 Min	01/02/85	0664
P4-067.80	018	283/15:09:51	SYDNEY, AUSTRALIA	-36 Deg 36.1 Min	148 Deg 34.6 Min	02/14/85	0957
P4-067.80	026	283/15:09:51	SYDNEY/BASS STRAIT	-37 Deg 55.1 Min	147 Deg 05.6 Min	05/23/85	1690
P4-067.80	015	283/15:10:01	BASS STRAIT	-36 Deg 03.9 Min	149 Deg 06.6 Min	01/02/85	0665
P4-067.80	019	283/15:10:02	SYDNEY, AUSTRALIA	0 Deg 00.0 Min	0 Deg 00.0 Min	02/13/85	0958
P4-067.80	027	283/15:10:02	SYDNEY/BASS STRAIT	-37 Deg 18.9 Min	147 Deg 43.8 Min	05/23/85	1691
P4-067.80	036	283/15:10:02	SYDNEY, AUSTRALIA	-37 Deg 22.0 Min	147 Deg 40.2 Min	10/11/85	2433
P4-067.80	020	283/15:10:13	SYDNEY, AUSTRALIA	0 Deg 00.0 Min	0 Deg 00.0 Min	02/13/85	0959
P4-067.80	028	283/15:10:13	SYDNEY/BASS STRAIT	-36 Deg 45.6 Min	148 Deg 17.9 Min	05/23/85	1692
P4-067.80	037	283/15:10:13	SYDNEY, AUSTRALIA	-36 Deg 48.7 Min	148 Deg 14.4 Min	10/11/85	2434
P4-067.80	021	283/15:10:24	SYDNEY, AUSTRALIA	0 Deg 00.0 Min	0 Deg 00.0 Min	02/13/85	0960
P4-067.80	029	283/15:10:24	SYDNEY/BASS STRAIT	-36 Deg 12.0 Min	148 Deg 51.6 Min	05/23/85	1693
P4-067.80	038	283/15:10:24	SYDNEY, AUSTRALIA	-36 Deg 15.2 Min	148 Deg 48.1 Min	10/11/85	2435
P4-067.80	030	283/15:10:34	SYDNEY/BASS STRAIT	-35 Deg 41.4 Min	149 Deg 21.6 Min	05/23/85	1694
P4-067.80	022	283/15:10:35	SYDNEY, AUSTRALIA	0 Deg 00.0 Min	0 Deg 00.0 Min	02/13/85	0961
P4-067.80	039	283/15:10:35	SYDNEY, AUSTRÁLIA	-35 Deg 41.4 Min	149 Deg 21.3 Min	10/11/85	2436
P4-067.80	023	283/15:10:46	SYDNEY, AUSTRALIA	-33 Deg 46.7 Min	151 Deg 17.0 Min	02/13/85	0962
P4-067.80	031	283/15:10:46	SYDNEY/BASS STRAIT	-35 Deg 04.6 Min	149 Deg 57.2 Min	05/23/85	1695
P4-067.80	040	283/15:10:46	SYDNEY, AUSTRALIA	-35 Deg 07.6 Min	149 Deg 54.0 Min	10/11/85	2437
P4-067.80	024	283/15:10:57	SYDNEY, AUSTRALIA	-33 Deg 12.2 Min	151 Deg 48.2 Min	02/13/85	0963
P4-067.80	032	283/15:10:57	SYDNEY/BASS STRAIT	-34 Deg 30.5 Min	150 Deg 29.4 Min	05/23/85	1696
P4-067.80	041	283/15:10:57	SYDNEY, AUSTRALIA	-34 Deg 33.5 Min	150 Deg 26.3 Min	10/11/85	2438
P4-067.80	001	283/15:11:06	N.S.W., AUSTRALIA	-32 Deg 52.7 Min	152 Deg 05.6 Min	11/20/84	0003
P4-067.80	002	283/15:11:17	N.S.W., AUSTRALIA	-32 Deg 18.0 Min	152 Deg 36.1 Min	11/20/84	0004
P4-067.80	003	283/15:11:28	N.S.W., AUSTRALIA	-31 Deg 43.2 Min	153 Deg 06.2 Min	11/20/84	0005
P4-067.80	016	283/15:11:35	TASMAN SEA	-32 Deg 31.7 Min	152 Deg 17.1 Min	06/08/85	1829
P4-067.80	028	283/15:11:39	SYDNEY, AUSTRALIA	-32 Deg 24.1 Min	152 Deg 23.4 Min	07/30/85	2183
P4-067.80	017	283/15:11:46	TASMAN SEA	-31 Deg 57.0 Min	152 Deg 47.4 Min	06/08/85	1830
P4-067.80	029	283/15:11:50	SYDNEY, AUSTRALIA	-31 Deg 49.4 Min	152 Deg 53.6 Min	07/30/85	2184
P4-067.80	018	283/15:11:57	TASMAN SEA	-31 Deg 22.1 Min	153 Deg 17.2 Min	06/08/85	1831
P4-067.80	030	283/15:12:01	SYDNEY, AUSTRALIA	-31 Deg 15.2 Min	153 Deg 22.8 Min	07/30/85	2185
P4-067.80	019	283/15:12:08	TASMAN SEA	-30 Deg 47.1 Min	153 Deg 46.7 Min	06/08/85	1832
P4-067.80	031	283/15:12:12	SYDNEY, AUSTRALIA	-30 Deg 39.5 Min	153 Deg 52.8 Min	07/30/85	2186
P4-067.80	020	283/15:12:19	TASMAN SEA	-30 Deg 12.0 Min	154 Deg 15.8 Min	06/08/85	1833
P4-067.80	032	283/15:12:21	SYDNEY, AUSTRALIA	-30 Deg 05.5 Min	154 Deg 21.1 Min	07/30/85	2187
P4-067.80	025	283/15:12:27	TASMAN SEA	-29 Deg 46.3 Min	154 Deg 36.8 Min	06/10/85	1834
P4-067.80	033	283/15:12:32	SYDNEY, AUSTRALIA	-29 Deg 30.3 Min	154 Deg 49.8 Min	07/30/85	2188
P4-067.80	026	283/15:12:38	TASMAN SEA	-29 Deg 11.0 Min	155 Deg 05.3 Min	06/10/85	1835
P4-067.80	034	283/15:12:43	SYDNEY, AUSTRALIA	-28 Deg 54.9 Min	155 Deg 18.1 Min	07/30/85	2189
P4-067.80	027	283/15:12:49	TASMAN SEA	-28 Deg 35.5 Min	155 Deg 33.4 Min	06/10/85	1836

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
P4-067.80	035	283/15:12:54	SYDNEY, AUSTRALIA	-28 Deg 19.4 Min	155 Deg 46.0 Min	07/30/85	2190
NN-068.60	018	283/16:39:55	AUSTRALIA	-33 Deg 10.6 Min	125 Deg 59.6 Min	03/30/87	2979
NN-068.60	001	283/16:40:00	CENTRAL AUSTRALIA	-31 Deg 29.9 Min	127 Deg 35.3 Min	02/15/85	0979
NN-068.60	019	283/16:40:06	CENTRAL AUSTRALIA	-32 Deg 37.4 Min	126 Deg 30.3 Min	03/30/87	2980
NN-068.60	002	283/16:40:11	CENTRAL AUSTRALIA	-30 Deg 56.8 Min	128 Deg 04.9 Min	02/15/85	0980
NN-068.60	020	283/16:40:17	CENTRAL AUSTRALIA	-32 Deg 04.1 Min	127 Deg 00.5 Min	03/30/87	2981
NN-068.60	003	283/16:40:21	CENTRAL AUSTRALIA	-30 Deg 23.5 Min	128 Deg 34.0 Min	02/15/85	0981
NN-068.60	021	283/16:40:27	CENTRAL AUSTRALIA	-31 Deg 30.8 Min	127 Deg 30.4 Min	03/30/87	2982
NN-068.60	004	283/16:40:32	CENTRAL AUSTRALIA	-29 Deg 50.1 Min	129 Deg 02.7 Min	02/15/85	0982
NN-068.60	022	283/16:40:38	CENTRAL AUSTRALIA	-30 Deg 56.1 Min	128 Deg 00.9 Min	04/01/87	2983
NN-068.60	005	283/16:40:43	CENTRAL AUSTRALIA	-29 Deg 16.5 Min	129 Deg 31.2 Min	02/15/85	0983
NN-068.60	023	283/16:40:49	CENTRAL AUSTRALIA	-30 Deg 22.4 Min	128 Deg 30.0 Min	04/01/87	2984
NN-068.60	006	283/16:40:53	CENTRAL AUSTRALIA	-28 Deg 42.8 Min	129 Deg 59.2 Min	02/15/85	0984
NN-068.60	024	283/16:41:00	CENTRAL AUSTRALIA	-29 Deg 48.8 Min	128 Deg 58.7 Min	04/01/87	2985
NN-068.60	007	283/16:41:04	CENTRAL AUSTRALIA	-28 Deg 09.0 Min	130 Deg 27.0 Min	02/15/85	0985
NN-068.60	025	283/16:41:10	CENTRAL AUSTRALIA	-29 Deg 16.5 Min	129 Deg 25.7 Min	03/30/87	2986
NN-068.60	008	283/16:41:14	CENTRAL AUSTRALIA	-27 Deg 35.1 Min	130 Deg 54.4 Min	02/15/85	0986
NN-068.60	026	283/16:41:21	CENTRAL AUSTRALIA	-28 Deg 42.8 Min	129 Deg 53.5 Min	03/30/87	2987
NN-068.60	009	283/16:41:25	CENTRAL AUSTRALIA	-27 Deg 01.2 Min	131 Deg 21.6 Min	02/15/85	0987
NN-068.60	027	283/16:41:31	CENTRAL AUSTRALIA	-28 Deg 09.1 Min	130 Deg 21.0 Min	03/30/87	2988
NN-068.60	017	283/16:41:35	CENTRAL AUSTRALIA	-28 Deg 36.6 Min	131 Deg 43.0 Min	06/01/85	1773
NN-068.60	028	283/16:41:42	CENTRAL AUSTRALIA	-27 Deg 35.2 Min	130 Deg 48.2 Min	03/30/87	2989
NN-068.60	011	283/16:41:46	CENTRAL AUSTRALIA	-25 Deg 52.7 Min	132 Deg 14.9 Min	02/15/85	0989
NN-068.60	012	283/16:41:48	CENTRAL AUSTRALIA	-27 Deg 57.9 Min	132 Deg 14.6 Min	01/09/85	1819
NN-068.60	029	283/16:41:49	CENTRAL AUSTRALIA	-27 Deg 12.8 Min	131 Deg 05.9 Min	04/02/87	2990
KI-070.10	001	283/18:50:56	ILLINOIS	40 Deg 54.6 Min	-91 Deg 14.5 Min	10/19/84	0042
KI-070.10	019	283/18:51:00	ILLINOIS	42 Deg 03.0 Min	-92 Deg 45.0 Min	03/12/86	2693
KI-070.10	002	283/18:51:07	ILLINOIS	40 Deg 23.1 Min	-90 Deg 38.4 Min	10/19/84	0043
KI-070.10	003	283/18:51:17	ILLINOIS	39 Deg 51.3 Min	-90 Deg 02.8 Min	10/19/84	0044
KI-070.10	017	283/18:51:27	ILLINOIS	40 Deg 44.0 Min	-91 Deg 11.3 Min	03/07/86	2677
KI-070.10	001	283/18:51:28	ILLINOIS	39 Deg 19.2 Min	-89 Deg 27.5 Min	10/29/84	0116
KI-070.10	009	283/18:51:30	ILLINOIS	40 Deg 35.2 Min	-91 Deg 01.2 Min	06/26/85	1948
KI-070.10	020	283/18:51:35	ILLINOIS	40 Deg 20.4 Min	-90 Deg 44.3 Min	03/19/86	2696
KI-070.10	018	283/18:51:38	ILLINOIS	40 Deg 12.5 Min	-90 Deg 35.4 Min	03/07/86	2678
KI-070.10	002	283/18:51:39	ILLINOIS	38 Deg 47.1 Min	-88 Deg 53.0 Min	10/27/84	0117
KI-070.10	010	283/18:51:41	ILLINOIS	40 Deg 05.2 Min	-90 Deg 27.3 Min	07/15/85	1718
KI-070.10	008	283/18:51:43	ILLINOIS	39 Deg 56.6 Min	-90 Deg 17.6 Min	05/23/85	1685
KI-070.10	003	283/18:51:49	ILLINOIS	38 Deg 14.8 Min	-88 Deg 19.1 Min	10/27/84	0118
KI-070.10	011	283/18:51:54	ILLINOIS	39 Deg 23.7 Min	-89 Deg 41.3 Min	09/06/85	2331
KI-070.10	007	283/18:51:55	KENTUCKY/TENNESSEE	39 Deg 17.5 Min	-89 Deg 34.4 Min	04/25/85	1493
KI-070.10	012	283/18:52:04	ILLINOIS	38 Deg 55.8 Min	-89 Deg 11.3 Min	09/06/85	2332
KI-070.10	013	283/18:52:18	ILLINOIS	38 Deg 12.2 Min	-88 Deg 23.5 Min	09/06/85	2333
KI-070.10	014	283/18:52:29	ILLINOIS	37 Deg 39.8 Min	-87 Deg 50.2 Min	09/06/85	2334
KI-070.10	015	283/18:52:40	ILLINOIS	37 Deg 07.2 Min	-87 Deg 17.3 Min	09/06/85	2335
KI-070.10	016	283/18:52:50	ILLINOIS	36 Deg 34.4 Min	-86 Deg 45.0 Min	09/06/85	2336
AS-070.40	006	283/19:24:58	SOUTH OCEAN	-58 Deg 00.2 Min	14 Deg 14.2 Min	06/20/86	2916
AS-070.40	004	283/19:25:00	SOUTH OCEAN	-58 Deg 08.2 Min	18 Deg 10.7 Min	11/21/84	0255
AS-070.40	005	283/19:25:00	SOUTH OCEAN	-58 Deg 01.2 Min	14 Deg 44.4 Min	05/29/85	1687
AS-070.40	013	283/19:25:01	SOUTH OCEAN	-58 Deg 01.6 Min	14 Deg 45.0 Min	07/29/86	2931
AS-070.40	014	283/19:25:05	SOUTH OCEAN	-56 Deg 04.8 Min	15 Deg 29.4 Min	10/23/86	2948
AS-070.40	014	283/19:25:05	SOUTH OCEAN	-56 Deg 04.8 Min	15 Deg 29.4 Min	10/23/86	2948
AS-070.40	007	283/19:25:06	SOUTH OCEAN	-58 Deg 03.3 Min	15 Deg 31.1 Min	06/20/86	2917
AS-070.40	008	283/19:25:16	SOUTH OCEAN	-58 Deg 05.2 Min	16 Deg 28.1 Min	06/21/86	2918
AS-070.40	009	283/19:27:14	SOUTH OCEAN	-57 Deg 36.4 Min	30 Deg 57.4 Min	06/21/86	2919
AS-070.40	001	283/19:27:20	SOUTH OCEAN	-57 Deg 10.7 Min	35 Deg 03.0 Min	10/30/84	0142
AS-070.40	010	283/19:27:25	SOUTH OCEAN	-57 Deg 28.9 Min	32 Deg 12.7 Min	06/21/86	2920
AS-070.40	002	283/19:27:31	SOUTH OCEAN	-56 Deg 59.8 Min	36 Deg 22.4 Min	10/30/84	0143
AS-070.40	011	283/19:27:36	SOUTH OCEAN	-57 Deg 20.2 Min	33 Deg 30.3 Min	06/21/86	2921
AS-070.40	003	283/19:27:41	SOUTH OCEAN	-56 Deg 49.1 Min	37 Deg 34.5 Min	10/30/84	0144
AS-070.40	012	283/19:27:46	SOUTH OCEAN	-57 Deg 11.1 Min	34 Deg 44.0 Min	06/21/86	2922
HJ-071.20	002	283/19:59:47	JAPAN	36 Deg 20.2 Min	135 Deg 16.9 Min	05/06/85	1566

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
HJ-071.20	003	283/19:59:58	JAPAN	36 Deg 50.0 Min	135 Deg 52.7 Min	05/06/85	1567
HJ-071.20	004	283/20:00:08	JAPAN	37 Deg 19.6 Min	136 Deg 29.0 Min	05/06/85	1568
HJ-071.20	005	283/20:00:19	JAPAN	37 Deg 49.0 Min	137 Deg 05.9 Min	05/06/85	1569
HJ-071.20	006	283/20:00:30	JAPAN	38 Deg 18.1 Min	137 Deg 43.3 Min	05/06/85	1570
HJ-071.20	007	283/20:00:40	JAPAN	38 Deg 46.9 Min	138 Deg 21.3 Min	05/06/85	1571
HJ-071.20	008	283/20:00:51	JAPAN	39 Deg 15.5 Min	138 Deg 59.8 Min	05/06/85	1572
HJ-071.20	001	283/20:00:55	OHGATA MURA	39 Deg 22.5 Min	139 Deg 37.7 Min	10/24/84	0101
HJ-071.20	009	283/20:01:02	JAPAN	39 Deg 43.9 Min	139 Deg 38.9 Min	05/06/85	1573
HJ-071.20	002	283/20:01:06	OHGATA MURA	39 Deg 39.7 Min	140 Deg 29.8 Min	10/24/84	0102
HJ-071.20	010	283/20:01:12	JAPAN	40 Deg 11.9 Min	140 Deg 18.7 Min	05/06/85	1574
HJ-071.20	003	283/20:01:16	OHGATA MURA	40 Deg 07.2 Min	141 Deg 09.6 Min	10/24/84	0103
HJ-071.20	011	283/20:01:22	JAPAN	40 Deg 38.4 Min	140 Deg 57.2 Min	05/06/85	1575
HJ-071.20	012	283/20:01:33	JAPAN	41 Deg 05.7 Min	141 Deg 38.0 Min	05/06/85	1576
HJ-071.20	013	283/20:01:44	JAPAN	41 Deg 34.2 Min	142 Deg 21.6 Min	05/06/85	1577
HJ-071.20	014	283/20:01:55	JAPAN	42 Deg 01.0 Min	143 Deg 03.8 Min	05/06/85	1578
AL-071.40	001	283/20:20:31	CALIFORNIA/NEVADA	37 Deg 28.9 Min	-117 Deg 03.1 Min	09/25/85	0911
AL-071.40	002	283/20:20:42	CALIFORNIA/NEVADA	36 Deg 59.0 Min	-116 Deg 28.4 Min	09/25/85	0912
AL-071.40	003	283/20:20:52	CALIFORNIA/NEVADA	36 Deg 28.8 Min	-115 Deg 54.3 Min	09/25/85	0913
AL-071.40	004	283/20:21:03	CALIFORNIA/NEVADA	35 Deg 57.9 Min	-115 Deg 19.9 Min	09/20/85	0914
AL-071.40	005	283/20:21:13	CALIFORNIA/NEVADA	35 Deg 27.3 Min	-114 Deg 46.8 Min	09/20/85	0915
AL-071.40	006	283/20:21:24	CALIFORNIA/NEVADA	34 Deg 56.6 Min	-114 Deg 14.0 Min	09/20/85	0916
AL-071.40	007	283/20:21:34	CALIFORNIA/NEVADA	34 Deg 25.5 Min	-113 Deg 41.6 Min	09/20/85	0917
AL-071.40	008	283/20:21:44	CALIFORNIA/NEVADA	33 Deg 54.4 Min	-113 Deg 09.8 Min	09/20/85	0918
AL-071.40	009	283/20:21:55	CALIFORNIA/NEVADA	33 Deg 23.2 Min	-112 Deg 38.4 Min	09/20/85	0919
AG-072.40	004	283/22:13:44	RIO PICO	-38 Deg 49.0 Min	-77 Deg 57.2 Min	04/07/85	1357
AG-072.40	005	283/22:13:54	RIO PICO	-39 Deg 17.9 Min	-77 Deg 20.4 Min	04/07/85	1358
AG-072.40	006	283/22:14:05	RIO PICO	-39 Deg 46.7 Min	-76 Deg 43.1 Min	04/07/85	1359
AG-072.40	007	283/22:14:15	RIO PICO	-40 Deg 15.2 Min	-76 Deg 05.2 Min	04/07/85	1360
AG-072.40	008	283/22:14:26	RIO PICO	-40 Deg 43.5 Min	-75 Deg 26.6 Min	04/07/85	1361
AG-072.40	009	283/22:14:36	RIO PICO	-41 Deg 11.3 Min	-74 Deg 47.7 Min	04/07/85	1362
AG-072.40	010	283/22:14:47	RIO PICO	-41 Deg 39.0 Min	-74 Deg 08.0 Min	04/07/85	1363
AG-072.40	011	283/22:14:57	RIO PICO	-42 Deg 06.4 Min	-73 Deg 27.7 Min	04/07/85	1364
AG-072.40	012	283/22:15:07	RIO PICO	-42 Deg 33.5 Min	-72 Deg 46.8 Min	04/07/85	1365
AG-072.40	013	283/22:15:18	RIO PICO	-43 Deg 00.4 Min	-72 Deg 05.2 Min	04/07/85	1366
AG-072.40	018	283/22:15:24	RIO PICO (SLANT RANGE)	-43 Deg 18.4 Min	-71 Deg 40.1 Min	05/10/86	2840
AG-072.40	001	283/22:15:25	RIO PICO	-43 Deg 21.4 Min	-71 Deg 35.3 Min	11/02/84	0165
AG-072.40	017	283/22:15:25	RIO PICO	-43 Deg 20.9 Min	-71 Deg 36.1 Min	06/01/85	1779
AG-072.40	019	283/22:15:27	RIO PICO	-43 Deg 26.0 Min	-71 Deg 28.0 Min	12/03/86	2946
AG-072.40	014	283/22:15:28	RIO PICO	-43 Deg 26.9 Min	-71 Deg 23.0 Min	04/07/85	1367
AG-072.40	002	283/22:15:36	RIO PICO	-43 Deg 47.7 Min	-70 Deg 52.6 Min	11/02/84	0166
AG-072.40	015	283/22:15:39	RIO PICO	-43 Deg 53.1 Min	-70 Deg 40.1 Min	04/07/85	1368
AG-072.40	003	283/22:15:46	RIO PICO	-44 Deg 13.6 Min	-70 Deg 09.3 Min	11/02/84	0167
AG-072.40	016	283/22:15:49	RIO PICO	-44 Deg 19.0 Min	-69 Deg 56.5 Min	04/07/85	1369
OS-072.50	004	283/22:30:00	AGULHAS	-48 Deg 26.3 Min	14 Deg 02.0 Min	04/25/85	1494
OS-072.50	005	283/22:30:11	AGULHAS	-48 Deg 02.3 Min	14 Deg 52.7 Min	04/25/85	1495
OS-072.50	006	283/22:30:21	AGULHAS	-47 Deg 38.0 Min	15 Deg 42.6 Min	04/25/85	1496
OS-072.50	007	283/22:30:32	AGULHAS	-47 Deg 13.1 Min	16 Deg 31.8 Min	04/25/85	1497
OS-072.50	008	283/22:30:42	AGULHAS	-46 Deg 48.0 Min	17 Deg 20.1 Min	04/25/85	1498
OS-072.50	009	283/22:30:53	AGULHAS	-46 Deg 22.8 Min	18 Deg 06.9 Min	04/26/85	1499
OS-072.50	010	283/22:31:04	AGULHAS	-45 Deg 56.9 Min	18 Deg 53.6 Min	04/26/85	1500
OS-072.50	011	283/22:31:14	AGULHAS	-45 Deg 30.6 Min	19 Deg 39.5 Min	04/26/85	1501
OS-072.50	012	283/22:31:25	AGULHAS	-45 Deg 04.0 Min	20 Deg 24.7 Min	04/26/85	1502
OS-072.50	013	283/22:31:35	AGULHAS	-44 Deg 37.0 Min	21 Deg 09.1 Min	04/26/85	1503
OS-072.50	014	283/22:31:46	AGULHAS	-44 Deg 09.7 Min	21 Deg 52.9 Min	04/26/85	1504
OS-072.50	015	283/22:32:03	AGULHAS	-43 Deg 24.6 Min	23 Deg 02.6 Min	04/30/85	1505
OS-072.50	016	283/22:32:14	AGULHAS	-42 Deg 56.5 Min	23 Deg 44.4 Min	04/30/85	1506
OS-072.50	017	283/22:32:25	AGULHAS	-42 Deg 28.1 Min	24 Deg 25.6 Min	04/30/85	1507
OS-072.50	018	283/22:32:35	AGULHAS	-41 Deg 59.4 Min	25 Deg 06.1 Min	04/30/85	1508
OS-072.50	019	283/22:32:46	AGULHAS	-41 Deg 30.4 Min	25 Deg 45.9 Min	04/30/85	1509
OS-072.50	020	283/22:32:57	AGULHAS	-41 Deg 01.2 Min	26 Deg 25.2 Min	04/30/85	1510
OS-072.50	021	283/22:33:07	AGULHAS	-40 Deg 31.7 Min	27 Deg 03.8 Min	04/30/85	1511

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OS-072.50	022	283/22:33:18	AGULHAS	-40 Deg 01.8 Min	27 Deg 42.3 Min	04/30/85	1512
OS-072.50	023	283/22:33:29	AGULHAS	-39 Deg 31.7 Min	28 Deg 19.6 Min	04/30/85	1513
OS-072.50	024	283/22:33:39	AGULHAS	-39 Deg 01.5 Min	28 Deg 56.4 Min	04/30/85	1514
OS-072.50	025	283/22:33:50	AGULHAS	-38 Deg 31.1 Min	29 Deg 32.7 Min	04/30/85	1515
OS-072.50	026	283/22:34:00	AGULHAS	-37 Deg 59.4 Min	30 Deg 07.1 Min	04/30/85	1516
OS-072.50	027	283/22:34:11	AGULHAS	-37 Deg 28.5 Min	30 Deg 42.2 Min	04/30/85	1517
S3-072.50	001	283/22:34:20	AGULHAS	-37 Deg 05.8 Min	31 Deg 08.4 Min	10/29/84	0136
OS-072.50	028	283/22:34:22	AGULHAS	-36 Deg 57.3 Min	31 Deg 16.7 Min	04/30/85	1518
S3-072.50	002	283/22:34:31	AGULHAS	-36 Deg 34.6 Min	31 Deg 42.6 Min	10/29/84	0137
S3-072.50	003	283/22:34:41	AGULHAS	-36 Deg 03.2 Min	32 Deg 16.4 Min	10/29/84	0138
SB-074.30	001	284/01:19:00	CHILE/ARGENTINA	-54 Deg 33.5 Min	-87 Deg 15.4 Min	12/19/84	0585
SB-074.30	019	284/01:19:00	CHILE/ARGENTINA	-54 Deg 36.3 Min	-87 Deg 18.1 Min	03/13/85	1155
SB-074.30	002	284/01:19:10	CHILE/ARGENTINA	-54 Deg 43.7 Min	-86 Deg 07.7 Min	12/19/84	0586
SB-074.30	020	284/01:19:10	CHILE/ARGENTINA	-54 Deg 46.6 Min	-86 Deg 10.4 Min	03/13/85	1156
SB-074.30	003	284/01:19:21	CHILE/ARGENTINA	-54 Deg 53.1 Min	-84 Deg 59.5 Min	12/19/84	0587
SB-074.30	021	284/01:19:21	CHILE/ARGENTINA	-54 Deg 55.9 Min	-85 Deg 02.0 Min	03/13/85	1157
SB-074.30	004	284/01:19:31	CHILE/ARGENTINA	-55 Deg 01.9 Min	-83 Deg 50.6 Min	12/19/84	0588
SB-074.30	022	284/01:19:31	CHILE/ARGENTINA	-55 Deg 04.7 Min	-83 Deg 52.9 Min	03/13/85	1158
SB-074.30	005	284/01:19:42	CHILE/ARGENTINA	-55 Deg 09.9 Min	-82 Deg 41.3 Min	12/19/84	0589
SB-074.30	023	284/01:19:42	CHILE/ARGENTINA	-55 Deg 12.7 Min	-82 Deg 43.5 Min	03/13/85	1159
SB-074.30	006	284/01:19:52	CHILE/ARGENTINA	-55 Deg 17.2 Min	-81 Deg 31.5 Min	12/19/84	0590
SB-074.30	024	284/01:19:52	CHILE/ARGENTINA	-55 Deg 20.0 Min	-81 Deg 33.7 Min	03/13/85	1160
SB-074.30	007	284/01:20:03	CHILE/ARGENTINA	-55 Deg 23.8 Min	-80 Deg 20.6 Min	12/19/84	0591
SB-074.30	025	284/01:20:03	CHILE/ARGENTINA	-55 Deg 26.8 Min	-80 Deg 22.7 Min	03/13/85	1161
SB-074.30	008	284/01:20:13	CHILE/ARGENTINA	-55 Deg 29.6 Min	-79 Deg 10.6 Min	12/19/84	0592
SB-074.30	026	284/01:20:13	CHILE/ARGENTINA	-55 Deg 32.5 Min	-79 Deg 12.6 Min	03/13/85	1162
SB-074.30	029	284/01:20:16	CHILE/ARGENTINA	-55 Deg 31.1 Min	-78 Deg 52.6 Min	11/14/85	2483
SB-074.30	009	284/01:20:32	CHILE/ARGENTINA	-55 Deg 38.5 Min	-76 Deg 58.4 Min	12/20/84	0593
SB-074.30	030	284/01:20:33	CHILE/ARGENTINA	-55 Deg 37.6 Min	-76 Deg 59.8 Min	11/13/85	2484
SB-074.30	010	284/01:20:43	CHILE/ARGENTINA	-55 Deg 42.0 Min	-75 Deg 47.0 Min	12/20/84	0594
SB-074.30	031	284/01:20:43	CHILE/ARGENTINA	-55 Deg 41.4 Min	-75 Deg 48.3 Min	11/13/85	2485
SB-074.30	011	284/01:20:53	CHILE/ARGENTINA	-55 Deg 45.0 Min	-74 Deg 35.3 Min	12/20/84	0595
SB-074.30	032	284/01:20:54	CHILE/ARGENTINA	-55 Deg 44.2 Min	-74 Deg 36.5 Min	11/13/85	2486
SB-074.30	012	284/01:21:04	CHILE/ARGENTINA	-55 Deg 47.0 Min	-73 Deg 23.5 Min	12/20/84	0596
SB-074.30	033	284/01:21:04	CHILE/ARGENTINA	-55 Deg 43.7 Min	-73 Deg 24.3 Min	11/13/85	2487
SB-074.30	013	284/01:21:14	CHILE/ARGENTINA	-55 Deg 48.4 Min	-72 Deg 11.6 Min	12/20/84	0597
SB-074.30	034	284/01:21:15	CHILE/ARGENTINA	-55 Deg 47.8 Min	-72 Deg 12.5 Min	11/13/85	2488
SB-074.30	014	284/01:21:25	CHILE/ARGENTINA	-55 Deg 49.2 Min	-70 Deg 59.6 Min	12/20/84	0598
SB-074.30	028	284/01:21:25	CHILE/ARGENTINA	-55 Deg 45.7 Min	-70 Deg 59.0 Min	03/23/85	1241
SB-074.30	035	284/01:21:25	CHILE/ARGENTINA	-55 Deg 48.4 Min	-71 Deg 00.4 Min	11/13/85	2489
SB-074.30	015	284/01:21:35	CHILE/ARGENTINA	-55 Deg 48.9 Min	-69 Deg 47.6 Min	12/20/84	0599
SB-074.30	036	284/01:21:36	CHILE/ARGENTINA	-55 Deg 48.2 Min	-69 Deg 41.9 Min	11/14/85	2490
SB-074.30	016	284/01:21:46	CHILE/ARGENTINA	-55 Deg 48.0 Min	-68 Deg 35.6 Min	12/20/84	0600
SB-074.30	037	284/01:21:47	CHILE/ARGENTINA	-55 Deg 47.2 Min	-68 Deg 29.9 Min	11/14/85	2491
SB-074.30	017	284/01:21:56	CHILE/ARGENTINA	-55 Deg 46.3 Min	-67 Deg 23.7 Min	12/20/84	0601
SB-074.30	038	284/01:21:57	CHILE/ARGENTINA	-55 Deg 42.9 Min	-67 Deg 18.1 Min	11/14/85	2492
SB-074.30	039	284/01:21:57	CHILE/ARGENTINA	-55 Deg 42.8 Min	-67 Deg 17.3 Min	01/07/87	2949
SB-074.30	018	284/01:22:00	TIERRA DEL FUEGO	-55 Deg 46.4 Min	-66 Deg 58.0 Min	02/28/85	1071
SB-074.30	027	284/01:22:05	TIERRA DEL FUEGO	-55 Deg 45.2 Min	-66 Deg 23.6 Min	03/22/85	1237
SA-075.60	001	284/02:51:00	CHILE	-55 Deg 53.4 Min	-89 Deg 10.9 Min	03/16/85	1187
SA-075.60	002	284/02:51:11	CHILE	-55 Deg 50.2 Min	-87 Deg 55.1 Min	03/16/85	1188
SA-075.60	003	284/02:51:22	CHILE	-55 Deg 46.2 Min	-86 Deg 39.5 Min	03/16/85	1189
SA-075.60	004	284/02:51:33	CHILE	-55 Deg 41.5 Min	-85 Deg 23.6 Min	03/16/85	1190
SA-075.60	005	284/02:51:44	CHILE	-55 Deg 35.8 Min	-84 Deg 08.8 Min	03/16/85	1191
SA-075.60	006	284/02:51:55	CHILE	-55 Deg 29.3 Min	-82 Deg 54.3 Min	03/16/85	1192
SA-075.60	007	284/02:52:06	CHILE	-55 Deg 22.0 Min	-81 Deg 40.0 Min	03/16/85	1193
SA-075.60	008	284/02:52:17	CHILE	-55 Deg 13.8 Min	-80 Deg 26.5 Min	03/16/85	1194
SA-075.60	009	284/02:52:28	CHILE	-55 Deg 04.9 Min	-79 Deg 13.6 Min	03/16/85	1195
SA-075.60	010	284/02:52:39	CHILE	-54 Deg 54.2 Min	-77 Deg 54.1 Min	03/16/85	1196
SA-075.60	011	284/02:52:50	CHILE	-54 Deg 43.6 Min	-76 Deg 42.5 Min	03/16/85	1197
SA-075.60	012	284/02:53:01	CHILE	-54 Deg 32.2 Min	-75 Deg 31.5 Min	03/16/85	1198

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
G3-076.60	001	284/03:46:00	OIL POLLUTION, JAPAN	37 Deg 07.7 Min	134 Deg 42.6 Min	11/23/84	0327
G3-076.60	002	284/03:46:11	OIL POLLUTION, JAPAN	36 Deg 34.5 Min	135 Deg 17.3 Min	11/23/84	0328
G3-076.60	003	284/03:46:22	OIL POLLUTION, JAPAN	36 Deg 01.1 Min	135 Deg 51.4 Min	11/23/84	0329
G3-076.60	004	284/03:46:34	OIL POLLUTION, JAPAN	35 Deg 21.3 Min	136 Deg 36.3 Min	12/20/84	0330
OG-076.60	015	284/03:46:43	OIL POLLUTION, JAPAN	34 Deg 35.7 Min	137 Deg 19.9 Min	09/03/85	2330
G3-076.60	005	284/03:46:44	OIL POLLUTION, JAPAN	34 Deg 53.9 Min	136 Deg 58.2 Min	11/23/84	0331
G3-076.60	006	284/03:46:55	OIL POLLUTION, JAPAN	34 Deg 20.0 Min	137 Deg 30.8 Min	11/23/84	0332
G3-076.60	013	284/03:46:55	OIL POLLUTION, JAPAN	34 Deg 23.0 Min	137 Deg 32.3 Min	04/02/85	1345
G3-076.60	007	284/03:47:06	OIL POLLUTION, JAPAN	33 Deg 45.7 Min	138 Deg 02.8 Min	11/23/84	0333
G3-076.60	014	284/03:47:06	OIL POLLUTION, JAPAN	33 Deg 48.9 Min	138 Deg 04.6 Min	04/02/85	1346
G3-076.60	008	284/03:47:17	OIL POLLUTION, JAPAN	33 Deg 11.5 Min	138 Deg 34.5 Min	11/23/84	0334
G3-076.60	009	284/03:47:28	OIL POLLUTION, JAPAN	32 Deg 37.0 Min	139 Deg 05.8 Min	11/23/84	0335
G3-076.60	010	284/03:47:39	OIL POLLUTION, JAPAN	32 Deg 02.4 Min	139 Deg 36.7 Min	11/23/84	0336
G3-076.60	011	284/03:47:50	OIL POLLUTION, JAPAN	31 Deg 27.8 Min	140 Deg 07.3 Min	11/23/84	0337
AC-076.80	009	284/04:25:46	RIO PICO	-47 Deg 27.0 Min	-77 Deg 27.7 Min	02/28/85	1068
AC-076.80	010	284/04:25:57	RIO PICO	-47 Deg 02.8 Min	-76 Deg 35.8 Min	02/28/85	1069
AC-076.80	011	284/04:26:08	RIO PICO	-46 Deg 38.1 Min	-75 Deg 44.7 Min	02/28/85	1070
AC-076.80	006	284/04:26:40	RIO PICO	-45 Deg 31.8 Min	-73 Deg 10.2 Min	02/27/85	1065
AC-076.80	007	284/04:26:51	RIO PICO	-45 Deg 06.8 Min	-72 Deg 24.8 Min	02/27/85	1066
AC-076.80	008	284/04:27:01	RIO PICO	-44 Deg 41.5 Min	-71 Deg 40.2 Min	02/27/85	1067
AC-076.80	001	284/04:27:03	RIO PICO	-44 Deg 38.3 Min	-71 Deg 34.9 Min	10/19/84	0077
AC-076.80	002	284/04:27:13	RIO PICO	-44 Deg 12.6 Min	-70 Deg 51.0 Min	10/19/84	0078
AC-076.80	003	284/04:27:24	RIO PICO	-43 Deg 46.5 Min	-70 Deg 07.8 Min	10/19/84	0079
AC-076.80	004	284/04:27:30	RIO PICO	-43 Deg 31.1 Min	-69 Deg 42.7 Min	12/05/84	0461
AC-076.80	005	284/04:27:40	RIO PICO	-43 Deg 04.6 Min	-69 Deg 00.5 Min	12/05/84	0462
AC-076.80	012	284/04:27:46	RIO PICO	-42 Deg 49.3 Min	-68 Deg 36.6 Min	03/22/85	1236
AK-080.20	001	284/09:16:49	FLORIDA	29 Deg 05.1 Min	-83 Deg 12.3 Min	11/11/84	0233
AK-080.20	002	284/09:16:59	FLORIDA	29 Deg 38.9 Min	-82 Deg 45.5 Min	11/11/84	0234
AK-080.20	017	284/09:17:09	FLORIDA (SLANT RANGE)	30 Deg 11.0 Min	-82 Deg 22.0 Min	06/05/86	2900
AK-080.20	003	284/09:17:10	FLORIDA	30 Deg 12.5 Min	-82 Deg 18.4 Min	11/11/84	0235
AK-080.20	004	284/09:17:14	SOUTHEASTERN U.S.	30 Deg 34.8 Min	-82 Deg 00.2 Min	09/12/85	2337
AK-080.20	018	284/09:17:14	SOUTHEASTERN U.S.	30 Deg 34.1 Min	-82 Deg 00.9 Min	02/23/87	2976
AK-080.20	005	284/09:17:25	SOUTHEASTERN U.S.	31 Deg 08.2 Min	-81 Deg 32.7 Min	09/12/85	2338
AK-080.20	019	284/09:17:25	SOUTHEASTERN U.S.	31 Deg 07.4 Min	-81 Deg 33.4 Min	02/23/87	2977
AK-080.20	016	284/09:17:32	SOUTHEASTERN U.S.	31 Deg 28.4 Min	-81 Deg 15.8 Min	05/24/86	2889
AK-080.20	006	284/09:17:35	SOUTHEASTERN U.S.	31 Deg 41.5 Min	-81 Deg 04.8 Min	09/12/85	2339
AK-080.20	007	284/09:17:46	SOUTHEASTERN U.S.	32 Deg 14.7 Min	-80 Deg 36.5 Min	09/12/85	2340
AK-080.20	010	284/09:17:53	SOUTHEASTERN U.S.	32 Deg 39.0 Min	-80 Deg 15.5 Min	09/13/85	2343
AK-080.20	008	284/09:18:10	SOUTHEASTERN U.S.	33 Deg 26.8 Min	-79 Deg 23.8 Min	09/12/85	2341
AK-080.20	009	284/09:18:21	SOUTHEASTERN U.S.	33 Deg 59.8 Min	-78 Deg 54.5 Min	09/12/85	2342
AK-080.20	011	284/09:18:30	SOUTHEASTERN U.S.	34 Deg 31.1 Min	-78 Deg 25.5 Min	09/13/85	2344
AK-080.20	012	284/09:18:41	SOUTHEASTERN U.S.	35 Deg 03.7 Min	-77 Deg 55.3 Min	09/13/85	2345
AK-080.20	013	284/09:18:51	SOUTHEASTERN U.S.	35 Deg 36.0 Min	-77 Deg 24.7 Min	09/13/85	2346
AK-080.20	014	284/09:19:02	SOUTHEASTERN U.S.	36 Deg 08.0 Min	-76 Deg 53.2 Min	09/13/85	2347
AK-080.20	015	284/09:19:19	SOUTHEASTERN U.S.	37 Deg 14.4 Min	-76 Deg 19.7 Min	09/15/85	2348
AW-080.21	001	284/09:19:59	NEW YORK BIGHT	38 Deg 42.8 Min	-73 Deg 42.7 Min	11/11/84	0236
AW-080.21	002	284/09:20:09	NEW YORK BIGHT	39 Deg 14.0 Min	-73 Deg 08.1 Min	11/11/84	0237
AW-080.21	003	284/09:20:20	NEW YORK BIGHT	39 Deg 45.2 Min	-72 Deg 33.1 Min	11/11/84	0238
AW-080.21	009	284/09:20:22	EAST COAST, U.S.	39 Deg 55.7 Min	-72 Deg 17.2 Min	08/14/85	2248
AW-080.21	006	284/09:20:25	EAST COAST, U.S.	40 Deg 03.4 Min	-72 Deg 08.5 Min	03/10/85	1145
AW-080.21	007	284/09:20:35	EAST COAST, U.S.	40 Deg 34.1 Min	-71 Deg 32.5 Min	03/10/85	1146
AW-080.21	008	284/09:20:46	EAST COAST, U.S.	41 Deg 04.7 Min	-70 Deg 56.0 Min	03/10/85	1147
AJ-081.20	021	284/10:46:50	TEXAS	29 Deg 39.4 Min	-98 Deg 40.5 Min	09/02/85	2320
AJ-081.20	022	284/10:47:01	TEXAS	30 Deg 11.6 Min	-98 Deg 11.2 Min	09/02/85	2321
AJ-081.20	023	284/10:47:12	TEXAS	30 Deg 43.7 Min	-97 Deg 41.5 Min	09/02/85	2322
AJ-081.20	024	284/10:47:22	TEXAS	31 Deg 15.6 Min	-97 Deg 11.4 Min	09/02/85	2323
AJ-081.20	025	284/10:47:33	TEXAS	31 Deg 47.3 Min	-96 Deg 41.0 Min	09/02/85	2324
AJ-081.20	026	284/10:47:43	TEXAS	32 Deg 18.9 Min	-96 Deg 10.1 Min	09/02/85	2325
AJ-081.20	009	284/10:47:50	ARKANSAS/MISSOURI	32 Deg 44.6 Min	-95 Deg 44.4 Min	04/02/85	1331
AJ-081.20	010	284/10:48:00	ARKANSAS/MISSOURI	33 Deg 15.8 Min	-95 Deg 12.9 Min	04/02/85	1332
AJ-081.20	011	284/10:48:11	ARKANSAS/MISSOURI	33 Deg 46.8 Min	-94 Deg 40.9 Min	04/02/85	1333

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AJ-081.20	012	284/10:48:21	ARKANSAS/MISSOURI	34 Deg 17.7 Min	-94 Deg 08.5 Min	04/01/85	1329
AJ-081.20	013	284/10:48:32	ARKANSAS/MISSOURI	34 Deg 48.3 Min	-93 Deg 35.7 Min	04/01/85	1330
AJ-081.20	014	284/10:48:43	ARKANSAS/MISSOURI	35 Deg 18.8 Min	-93 Deg 02.4 Min	04/01/85	1331
AJ-081.20	015	284/10:48:53	ARKANSAS/MISSOURI	35 Deg 49.6 Min	-92 Deg 28.0 Min	04/01/85	1332
AJ-081.20	016	284/10:49:04	ARKANSAS/MISSOURI	36 Deg 19.6 Min	-91 Deg 53.8 Min	04/01/85	1333
AJ-081.20	017	284/10:49:14	ARKANSAS/MISSOURI	36 Deg 49.5 Min	-91 Deg 19.0 Min	04/01/85	1334
AJ-081.20	018	284/10:49:25	ARKANSAS/MISSOURI	37 Deg 19.1 Min	-90 Deg 43.8 Min	04/01/85	1335
AJ-081.20	001	284/10:49:35	INDIANA	37 Deg 45.7 Min	-90 Deg 11.6 Min	11/21/84	0122
AJ-081.20	019	284/10:49:35	ARKANSAS/MISSOURI	37 Deg 48.5 Min	-90 Deg 08.0 Min	04/01/85	1336
AJ-081.20	002	284/10:49:45	INDIANA	38 Deg 14.7 Min	-89 Deg 35.6 Min	10/27/84	0123
AJ-081.20	020	284/10:49:46	ARKANSAS/MISSOURI	38 Deg 17.6 Min	-89 Deg 31.7 Min	04/01/85	1337
JG-081.30	001	284/10:53:51	CANADA	48 Deg 49.2 Min	-72 Deg 59.3 Min	05/20/85	1666
JG-081.30	002	284/10:54:02	CANADA	49 Deg 10.3 Min	-72 Deg 06.6 Min	05/20/85	1667
JG-081.30	003	284/10:54:12	CANADA	49 Deg 30.9 Min	-71 Deg 13.0 Min	05/20/85	1668
JG-081.30	004	284/10:54:22	CANADA	49 Deg 51.2 Min	-70 Deg 18.3 Min	05/20/85	1669
JG-081.30	005	284/10:54:33	CANADA	50 Deg 10.8 Min	-69 Deg 23.2 Min	05/20/85	1670
JG-081.30	006	284/10:54:43	CANADA	50 Deg 29.9 Min	-68 Deg 27.2 Min	05/20/85	1671
JG-081.30	007	284/10:54:54	CANADA	50 Deg 48.6 Min	-67 Deg 30.2 Min	05/20/85	1672
JG-081.30	008	284/10:55:04	CANADA	51 Deg 06.7 Min	-66 Deg 32.7 Min	05/20/85	1673
JG-081.30	009	284/10:55:15	CANADA	51 Deg 24.3 Min	-65 Deg 34.4 Min	05/20/85	1674
JG-081.30	010	284/10:55:25	CANADA	51 Deg 41.3 Min	-64 Deg 34.9 Min	05/20/85	1675
JG-081.30	011	284/10:55:36	CANADA	51 Deg 57.8 Min	-63 Deg 35.0 Min	05/20/85	1676
JG-081.30	012	284/10:55:46	CANADA	52 Deg 13.6 Min	-62 Deg 34.4 Min	05/20/85	1677
V3-081.40	001	284/11:14:17	EGYPT	24 Deg 03.5 Min	28 Deg 20.8 Min	11/09/84	0230
V3-081.40	004	284/11:14:25	SUDAN	23 Deg 37.9 Min	28 Deg 40.6 Min	11/12/84	0239
V3-081.40	002	284/11:14:27	EGYPT	23 Deg 29.9 Min	28 Deg 46.7 Min	11/09/84	0231
V3-081.40	005	284/11:14:35	SUDAN	23 Deg 04.2 Min	29 Deg 06.2 Min	11/12/84	0240
V3-081.40	003	284/11:14:38	EGYPT	22 Deg 56.2 Min	29 Deg 12.2 Min	11/09/84	0232
V3-081.40	006	284/11:14:46	SUDAN	22 Deg 30.4 Min	29 Deg 31.5 Min	11/12/84	0241
AM-082.20	006	284/12:15:44	CALIFORNIA/NEVADA	31 Deg 52.1 Min	-124 Deg 24.4 Min	02/03/85	0874
AM-082.20	007	284/12:15:44	CALIFORNIA/NEVADA	31 Deg 52.1 Min	-124 Deg 24.4 Min	02/03/85	0875
AM-082.20	032	284/12:15:51	CALIFORNIA COAST	32 Deg 08.7 Min	-124 Deg 11.0 Min	01/24/86	2585
AM-082.20	049	284/12:15:53	CALIFORNIA/NEVADA	32 Deg 20.6 Min	-124 Deg 05.2 Min	03/04/86	2665
AM-082.20	008	284/12:15:55	CALIFORNIA/NEVADA	32 Deg 25.5 Min	-123 Deg 54.7 Min	02/03/85	0876
AM-082.20	033	284/12:16:01	CALIFORNIA COAST	32 Deg 42.1 Min	-123 Deg 41.2 Min	01/24/86	2586
AM-082.20	050	284/12:16:04	CALIFORNIA/NEVADA	32 Deg 53.8 Min	-123 Deg 37.2 Min	03/04/86	2666
AM-082.20	009	284/12:16:06	CALIFORNIA/NEVADA	32 Deg 58.9 Min	-123 Deg 24.8 Min	02/03/85	0877
AM-082.20	034	284/12:16:12	CALIFORNIA COAST	33 Deg 15.4 Min	-123 Deg 11.2 Min	01/24/86	2587
AM-082.20	051	284/12:16:15	CALIFORNIA/NEVADA	33 Deg 27.0 Min	-123 Deg 06.9 Min	03/04/86	2667
AM-082.20	010	284/12:16:16	CALIFORNIA/NEVADA	33 Deg 31.9 Min	-122 Deg 54.3 Min	02/03/85	0878
AM-082.20	035	284/12:16:23	CALIFORNIA COAST	33 Deg 48.4 Min	-122 Deg 40.6 Min	01/24/86	2588
AM-082.20	052	284/12:16:25	CALIFORNIA/NEVADA	33 Deg 59.9 Min	-122 Deg 36.1 Min	03/04/86	2668
AM-082.20	011	284/12:16:27	CALIFORNIA/NEVADA	34 Deg 05.0 Min	-122 Deg 23.6 Min	02/03/85	0879
AM-082.20	036	284/12:16:33	CALIFORNIA COAST	34 Deg 21.2 Min	-122 Deg 09.6 Min	01/24/86	2589
AM-082.20	053	284/12:16:36	CALIFORNIA/NEVADA	34 Deg 31.8 Min	-122 Deg 05.9 Min	03/06/86	2669
AM-082.20	012	284/12:16:38	CALIFORNIA/NEVADA	34 Deg 37.8 Min	-121 Deg 52.2 Min	02/03/85	0880
AM-082.20	037	284/12:16:44	CALIFORNIA COAST	34 Deg 54.0 Min	-121 Deg 38.2 Min	01/24/86	2590
AM-082.20	054	284/12:16:46	CALIFORNIA/NEVADA	35 Deg 04.8 Min	-121 Deg 34.0 Min	03/12/86	2670
AM-082.20	013	284/12:16:48	CALIFORNIA/NEVADA	35 Deg 10.5 Min	-121 Deg 20.5 Min	02/03/85	0881
AM-082.20	038	284/12:16:54	CALIFORNIA COAST	35 Deg 29.2 Min	-121 Deg 07.9 Min	01/26/86	2591
AM-082.20	055	284/12:16:57	CALIFORNIA/NEVADA	35 Deg 37.3 Min	-121 Deg 01.9 Min	03/12/86	2671
AM-082.20	014	284/12:16:59	CALIFORNIA/NEVADA	35 Deg 43.0 Min	-120 Deg 48.4 Min	02/03/85	0882
AM-082.20	039	284/12:17:05	CALIFORNIA COAST	36 Deg 01.6 Min	-120 Deg 35.5 Min	01/26/86	2592
AM-082.20	001	284/12:17:06	RAISIN CITY, CA.	35 Deg 54.9 Min	-120 Deg 35.0 Min	11/06/84	0177
AM-082.20	056	284/12:17:08	CALIFORNIA/NEVADA	36 Deg 09.6 Min	-120 Deg 29.4 Min	03/12/86	2672
AM-082.20	031	284/12:17:10	RAISIN CITY,CA	36 Deg 14.6 Min	-120 Deg 16.8 Min	06/12/85	1845
AM-082.20	028	284/12:17:14	RAISIN CITY,CA	36 Deg 26.0 Min	-120 Deg 12.7 Min	04/02/85	1343
AM-082.20	040	284/12:17:16	CALIFORNIA	36 Deg 33.7 Min	-120 Deg 02.7 Min	01/26/86	2593
AM-082.20	002	284/12:17:17	RAISIN CITY, CA.	36 Deg 27.2 Min	-120 Deg 02.2 Min	11/06/84	0178
AM-082.20	057	284/12:17:18	CALIFORNIA/NEVADA	36 Deg 41.7 Min	-119 Deg 56.4 Min	03/12/86	2673
AM-082.20	030	284/12:17:20	RAISIN CITY,CA	36 Deg 42.7 Min	-119 Deg 49.2 Min	05/10/85	1580

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AM-082.20	003	284/12:17:25	WHITE MTNS, CA.	36 Deg 52.4 Min	-119 Deg 36.2 Min	11/07/84	0174
AM-082.20	029	284/12:17:25	RAISIN CITY,CA	36 Deg 58.1 Min	-119 Deg 39.5 Min	04/02/85	1344
AM-082.20	041	284/12:17:26	CALIFORNIA	37 Deg 05.7 Min	-119 Deg 29.5 Min	01/26/86	2594
AM-082.20	058	284/12:17:29	CALIFORNIA/NEVADA	37 Deg 13.6 Min	-119 Deg 23.1 Min	03/12/86	2674
AM-082.20	004	284/12:17:36	WHITE MTNS, CA.	37 Deg 24.3 Min	-119 Deg 02.5 Min	11/07/84	0175
AM-082.20	042	284/12:17:37	CALIFORNIA	37 Deg 37.5 Min	-118 Deg 57.7 Min	01/26/86	2595
AM-082.20	059	284/12:17:38	CALIFORNIA/NEVADA	37 Deg 41.7 Min	-118 Deg 53.1 Min	03/11/86	2689
AM-082.20	072	284/12:17:45	WHITE MOUNTAINS,CA.	38 Deg 02.5 Min	-118 Deg 30.5 Min	08/06/86	2936
AM-082.20	005	284/12:17:46	WHITE MTNS, CA.	37 Deg 56.1 Min	-118 Deg 28.3 Min	11/07/84	0176
AM-082.20	043	284/12:17:46	CALIFORNIA/NEVADA	38 Deg 05.5 Min	-118 Deg 27.3 Min	01/29/86	2596
AM-082.20	060	284/12:17:49	CALIFORNIA/NEVADA	38 Deg 13.4 Min	-118 Deg 18.6 Min	03/11/86	2690
AM-082.20	044	284/12:17:57	CALIFORNIA/NEVADA	38 Deg 37.0 Min	-117 Deg 52.4 Min	01/29/86	2597
AM-082.20	061	284/12:17:59	CALIFORNIA/NEVADA	38 Deg 43.4 Min	-117 Deg 43.3 Min	04/01/86	2691
AM-082.20	016	284/12:18:08	CALIFORNIA/NEVADA	39 Deg 05.8 Min	-117 Deg 12.6 Min	02/02/85	0884
AM-082.20	045	284/12:18:08	CALIFORNIA/NEVADA	39 Deg 08.2 Min	-117 Deg 17.1 Min	01/29/86	2598
AM-082.20	062	284/12:18:10	CALIFORNIA/NEVADA	39 Deg 14.7 Min	-117 Deg 09.7 Min	04/01/86	2692
AM-082.20	017	284/12:18:18	CALIFORNIA/NEVADA	39 Deg 37.0 Min	-116 Deg 36.7 Min	02/02/85	0885
AM-082.20	046	284/12:18:18	CALIFORNIA/NEVADA	39 Deg 39.3 Min	-116 Deg 41.1 Min	01/29/86	2599
AM-082.20	063	284/12:18:21	CALIFORNIA/NEVADA	39 Deg 46.2 Min	-116 Deg 33.0 Min	04/01/86	2727
AM-082.20	018	284/12:18:29	CALIFORNIA/NEVADA	40 Deg 07.4 Min	-116 Deg 00.8 Min	02/02/85	0886
AM-082.20	047	284/12:18:29	CALIFORNIA/NEVADA	40 Deg 10.2 Min	-116 Deg 04.6 Min	01/29/86	2600
AM-082.20	064	284/12:18:31	CALIFORNIA/NEVADA	40 Deg 17.0 Min	-115 Deg 56.4 Min	04/01/86	2728
AM-082.20	019	284/12:18:40	CALIFORNIA/NEVADA	40 Deg 38.1 Min	-115 Deg 23.8 Min	02/02/85	0887
AM-082.20	048	284/12:18:40	CALIFORNIA/NEVADA	40 Deg 40.8 Min	-115 Deg 27.5 Min	01/29/86	2601
AM-082.20	065	284/12:18:42	CALIFORNIA/NEVADA	40 Deg 46.5 Min	-115 Deg 20.5 Min	04/24/86	2786
AM-082.20	020	284/12:18:50	CALIFORNIA/NEVADA	41 Deg 08.6 Min	-114 Deg 46.2 Min	02/02/85	0888
AM-082.20	066	284/12:18:52	CALIFORNIA/NEVADA	41 Deg 16.9 Min	-114 Deg 42.7 Min	04/24/86	2787
AM-082.20	021	284/12:19:01	CALIFORNIA/NEVADA	41 Deg 39.2 Min	-114 Deg 07.4 Min	02/02/85	0889
AM-082.20	067	284/12:19:02	CALIFORNIA/NEVADA	41 Deg 45.7 Min	-114 Deg 06.0 Min	04/26/86	2788
AM-082.20	022	284/12:19:11	CALIFORNIA/NEVADA	42 Deg 09.2 Min	-113 Deg 28.5 Min	02/02/85	0890
AM-082.20	068	284/12:19:13	CALIFORNIA/NEVADA	42 Deg 15.6 Min	-113 Deg 26.9 Min	04/26/86	2789
AM-082.20	023	284/12:19:22	CALIFORNIA/NEVADA	42 Deg 39.0 Min	-112 Deg 49.0 Min	02/02/85	0891
AM-082.20	069	284/12:19:24	CALIFORNIA/NEVADA	42 Deg 45.3 Min	-112 Deg 47.1 Min	04/26/86	2790
AM-082.20	024	284/12:19:33	CALIFORNIA/NEVADA	43 Deg 10.3 Min	-112 Deg 12.6 Min	02/02/85	0892
AM-082.20	070	284/12:19:34	CALIFORNIA/NEVADA	43 Deg 14.7 Min	-112 Deg 06.8 Min	04/26/86	2791
AM-082.20	025	284/12:19:43	CALIFORNIA/NEVADA	43 Deg 39.5 Min	-111 Deg 31.6 Min	02/02/85	0893
AM-082.20	071	284/12:19:45	CALIFORNIA/NEVADA	43 Deg 43.8 Min	-111 Deg 25.8 Min	04/26/86	2792
AM-082.20	026	284/12:19:54	CALIFORNIA/NEVADA	44 Deg 08.3 Min	-110 Deg 50.0 Min	02/02/85	0894
P4-083.80	023	284/14:50:51	BASS STRAIT	-44 Deg 29.8 Min	139 Deg 22.4 Min	05/21/85	1686
P4-083.80	004	284/14:51:00	AUSTRALIA	-43 Deg 59.3 Min	140 Deg 03.9 Min	01/05/85	0678
P4-083.80	005	284/14:51:11	AUSTRALIA	-43 Deg 28.0 Min	140 Deg 45.1 Min	01/05/85	0679
P4-083.80	006	284/14:51:22	AUSTRALIA	-42 Deg 56.5 Min	141 Deg 25.5 Min	01/05/85	0680
P4-083.80	007	284/14:51:33	AUSTRALIA	-42 Deg 24.7 Min	142 Deg 05.2 Min	01/05/85	0681
P4-083.80	008	284/14:51:44	AUSTRALIA	-41 Deg 52.7 Min	142 Deg 44.3 Min	01/05/85	0682
P4-083.80	009	284/14:51:55	AUSTRALIA	-41 Deg 20.5 Min	143 Deg 22.7 Min	01/05/85	0683
P4-083.80	010	284/14:52:06	AUSTRALIA	-40 Deg 48.0 Min	144 Deg 00.4 Min	01/05/85	0684
P4-083.80	011	284/14:52:17	AUSTRALIA	-40 Deg 15.3 Min	144 Deg 37.5 Min	01/05/85	0685
P4-083.80	012	284/14:52:28	AUSTRALIA	-39 Deg 42.4 Min	145 Deg 14.0 Min	01/05/85	0686
P4-083.80	013	284/14:52:39	AUSTRALIA	-39 Deg 09.6 Min	145 Deg 49.6 Min	01/05/85	0687
P4-083.80	014	284/14:52:50	AUSTRALIA	-38 Deg 36.3 Min	146 Deg 24.9 Min	01/05/85	0688
P4-083.80	015	284/14:53:01	AUSTRALIA	-38 Deg 02.8 Min	146 Deg 59.7 Min	01/05/85	0689
P4-083.80	016	284/14:53:12	BASS STRAIT	-37 Deg 35.8 Min	147 Deg 26.7 Min	05/21/85	1679
P4-083.80	017	284/14:53:23	BASS STRAIT	-37 Deg 02.0 Min	148 Deg 00.5 Min	05/21/85	1680
P4-083.80	018	284/14:53:34	BASS STRAIT	-36 Deg 28.1 Min	148 Deg 33.7 Min	05/21/85	1681
P4-083.80	019	284/14:53:45	BASS STRAIT	-35 Deg 54.2 Min	149 Deg 06.3 Min	05/21/85	1682
P4-083.80	020	284/14:53:56	BASS STRAIT	-35 Deg 19.9 Min	149 Deg 38.5 Min	05/21/85	1683
P4-083.80	021	284/14:54:07	BASS STRAIT	-34 Deg 45.5 Min	150 Deg 10.3 Min	05/21/85	1684
P4-083.80	001	284/14:54:13	SYDNEY	-34 Deg 05.6 Min	149 Deg 57.2 Min	10/21/84	0089
P4-083.80	002	284/14:54:24	SYDNEY	-33 Deg 31.1 Min	150 Deg 28.5 Min	10/21/84	0090
P4-083.80	003	284/14:54:35	SYDNEY	-32 Deg 56.4 Min	150 Deg 59.3 Min	10/21/84	0091
AN-084.20	001	284/15:23:58	CANADA	52 Deg 51.4 Min	-120 Deg 36.6 Min	05/06/86	2829

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AN-084.20	002	284/15:24:09	CANADA	53 Deg 00.8 Min	-119 Deg 31.3 Min	05/06/86	2830
AN-084.20	003	284/15:24:19	CANADA	53 Deg 09.5 Min	-118 Deg 25.5 Min	05/06/86	2831
AN-084.20	004	284/15:24:28	CANADA	53 Deg 16.9 Min	-117 Deg 25.3 Min	05/08/86	2832
AN-084.20	005	284/15:24:39	CANADA	53 Deg 24.3 Min	-116 Deg 18.6 Min	05/08/86	2833
AN-084.20	006	284/15:24:49	CANADA	53 Deg 31.0 Min	-115 Deg 11.7 Min	05/08/86	2834
AN-084.20	007	284/15:25:00	CANADA	53 Deg 37.0 Min	-114 Deg 04.3 Min	05/08/86	2835
AN-084.20	008	284/15:25:10	CANADA	53 Deg 42.4 Min	-112 Deg 55.3 Min	05/08/86	2836
AN-084.20	009	284/15:25:21	CANADA	53 Deg 46.8 Min	-111 Deg 48.7 Min	05/08/86	2837
AU-084.60	035	284/16:23:53	SOUTHERN AUSTRALIA	-31 Deg 20.7 Min	129 Deg 04.6 Min	07/15/85	2093
AU-084.60	036	284/16:24:04	SOUTHERN AUSTRALIA	-30 Deg 47.4 Min	129 Deg 32.8 Min	07/15/85	2094
AU-084.60	037	284/16:24:14	SOUTHERN AUSTRALIA	-30 Deg 13.9 Min	130 Deg 00.7 Min	07/15/85	2095
AU-084.60	038	284/16:24:25	SOUTHERN AUSTRALIA	-29 Deg 39.7 Min	130 Deg 28.8 Min	07/15/85	2096
AU-084.60	039	284/16:24:35	SOUTHERN AUSTRALIA	-29 Deg 06.0 Min	130 Deg 56.0 Min	07/15/85	2097
AU-084.60	040	284/16:24:46	SOUTHERN AUSTRALIA	-28 Deg 32.2 Min	131 Deg 22.9 Min	07/15/85	2098
AU-084.60	041	284/16:24:56	SOUTHERN AUSTRALIA	-27 Deg 58.4 Min	131 Deg 49.4 Min	07/15/85	2099
AU-084.60	042	284/16:25:07	SOUTHERN AUSTRALIA	-27 Deg 24.4 Min	132 Deg 15.7 Min	07/15/85	2100
AU-084.60	043	284/16:25:17	SOUTHERN AUSTRALIA	-26 Deg 50.3 Min	132 Deg 41.7 Min	07/15/85	2101
AU-084.60	044	284/16:25:28	SOUTHERN AUSTRALIA	-26 Deg 16.5 Min	133 Deg 07.2 Min	07/15/85	2102
AU-084.60	045	284/16:25:38	SOUTHERN AUSTRALIA	-25 Deg 42.2 Min	133 Deg 32.7 Min	07/15/85	2103
AU-084.60	046	284/16:25:49	SOUTHERN AUSTRALIA	-25 Deg 07.8 Min	133 Deg 57.9 Min	07/15/85	2104
AU-084.60	004	284/16:25:53	AMADEUS, AUSTRALIA	-24 Deg 52.5 Min	134 Deg 09.6 Min	11/02/84	0171
AU-084.60	005	284/16:26:03	AMADEUS, AUSTRALIA	-24 Deg 18.0 Min	134 Deg 34.5 Min	11/02/84	0172
AU-084.60	006	284/16:26:14	AMADEUS, AUSTRALIA	-23 Deg 43.4 Min	134 Deg 59.2 Min	11/02/84	0173
AU-084.60	047	284/16:26:23	QUEENSLAND,AUSTRALIA	-23 Deg 14.4 Min	135 Deg 19.1 Min	07/16/85	2105
AU-084.60	048	284/16:26:34	QUEENSLAND,AUSTRALIA	-22 Deg 39.7 Min	135 Deg 43.3 Min	07/16/85	2106
AU-084.60	049	284/16:26:44	QUEENSLAND,AUSTRALIA	-22 Deg 04.9 Min	136 Deg 07.3 Min	07/16/85	2107
AU-084.60	050	284/16:26:55	QUEENSLAND,AUSTRALIA	-21 Deg 30.1 Min	136 Deg 31.1 Min	07/16/85	2108
AU-084.60	051	284/16:27:05	QUEENSLAND,AUSTRALIA	-20 Deg 55.2 Min	136 Deg 54.7 Min	07/16/85	2109
AU-084.60	007	284/16:27:15	HENBURY, AUSTRALIA	-20 Deg 14.2 Min	137 Deg 22.7 Min	01/07/85	0690
AU-084.60	052	284/16:27:16	QUEENSLAND,AUSTRALIA	-20 Deg 20.2 Min	137 Deg 18.2 Min	07/16/85	2110
AU-084.60	008	284/16:27:26	HENBURY, AUSTRALIA	-19 Deg 39.2 Min	137 Deg 45.9 Min	01/07/85	0691
AU-084.60	009	284/16:27:36	HENBURY, AUSTRALIA	-19 Deg 04.1 Min	138 Deg 09.0 Min	01/07/85	0692
AU-084.60	010	284/16:27:47	HENBURY, AUSTRALIA	-18 Deg 28.9 Min	138 Deg 31.8 Min	01/07/85	0693
AU-084.60	011	284/16:27:57	HENBURY, AUSTRALIA	-17 Deg 53.7 Min	138 Deg 54.5 Min	01/07/85	0694
AU-084.60	012	284/16:28:08	HENBURY, AUSTRALIA	-17 Deg 18.4 Min	139 Deg 17.1 Min	01/07/85	0695
AU-084.60	013	284/16:28:18	HENBURY, AUSTRALIA	-16 Deg 43.1 Min	139 Deg 39.5 Min	01/07/85	0696
AU-084.60	014	284/16:28:29	HENBURY, AUSTRALIA	-16 Deg 07.7 Min	140 Deg 01.8 Min	01/07/85	0697
AU-084.60	015	284/16:28:39	HENBURY, AUSTRALIA	-15 Deg 32.3 Min	140 Deg 23.9 Min	01/07/85	0698
AU-084.60	016	284/16:28:50	HENBURY, AUSTRALIA	-14 Deg 56.5 Min	140 Deg 46.1 Min	01/07/85	0699
AU-084.60	017	284/16:29:00	HENBURY, AUSTRALIA	-14 Deg 21.1 Min	141 Deg 07.9 Min	01/07/85	0700
AU-084.60	018	284/16:29:10	CENTRAL AUSTRALIA	-13 Deg 49.0 Min	141 Deg 27.1 Min	03/18/85	1208
AU-084.60	001	284/16:29:15	WEIPA	-13 Deg 37.3 Min	141 Deg 34.8 Min	10/31/84	0154
AU-084.60	019	284/16:29:20	CENTRAL AUSTRALIA	-13 Deg 13.5 Min	141 Deg 48.8 Min	03/18/85	1209
AU-084.60	002	284/16:29:25	WEIPA	-13 Deg 01.7 Min	141 Deg 56.4 Min	10/31/84	0155
AU-084.60	020	284/16:29:31	CENTRAL AUSTRALIA	-12 Deg 37.9 Min	142 Deg 10.3 Min	03/18/85	1210
AU-084.60	003	284/16:29:36	WEIPA	-12 Deg 26.1 Min	142 Deg 17.8 Min	11/03/84	0156
AU-084.60	021	284/16:29:41	CENTRAL AUSTRALIA	-12 Deg 02.3 Min	142 Deg 31.7 Min	03/18/85	1211
AU-084.60	022	284/16:29:52	CENTRAL AUSTRALIA	-11 Deg 26.6 Min	142 Deg 53.1 Min	03/18/85	1212
AU-084.60	023	284/16:30:02	CENTRAL AUSTRALIA	-10 Deg 50.9 Min	143 Deg 14.3 Min	03/18/85	1213
AU-084.60	024	284/16:30:10	CENTRAL AUSTRALIA	-10 Deg 25.5 Min	143 Deg 29.4 Min	03/19/85	1214
AU-084.60	025	284/16:30:20	CENTRAL AUSTRALIA	-9 Deg 49.8 Min	143 Deg 50.5 Min	03/19/85	1215
AU-084.60	026	284/16:30:31	CENTRAL AUSTRALIA	-9 Deg 14.0 Min	144 Deg 11.5 Min	03/19/85	1216
AU-084.60	027	284/16:30:41	CENTRAL AUSTRALIA	-8 Deg 38.3 Min	144 Deg 32.5 Min	03/19/85	1217
AU-084.60	028	284/16:30:52	CENTRAL AUSTRALIA	-8 Deg 02.5 Min	144 Deg 53.3 Min	03/19/85	1218
AU-084.60	029	284/16:31:02	CENTRAL AUSTRALIA	-7 Deg 26.7 Min	145 Deg 14.2 Min	03/19/85	1219
AU-084.60	030	284/16:31:13	CENTRAL AUSTRALIA	-6 Deg 50.9 Min	145 Deg 34.9 Min	03/19/85	1220
AU-084.60	031	284/16:31:23	CENTRAL AUSTRALIA	-6 Deg 15.0 Min	145 Deg 55.7 Min	03/19/85	1221
AU-084.60	032	284/16:31:30	CENTRAL AUSTRALIA	-5 Deg 52.7 Min	146 Deg 08.6 Min	03/20/85	1222
AU-084.60	033	284/16:31:40	CENTRAL AUSTRALIA	-5 Deg 16.8 Min	146 Deg 29.2 Min	03/20/85	1223
AU-084.60	034	284/16:31:51	CENTRAL AUSTRALIA	-4 Deg 41.0 Min	146 Deg 49.8 Min	03/20/85	1224
AO-085.20	022	284/16:56:48	CANADA	57 Deg 49.6 Min	-116 Deg 17.1 Min	07/05/85	2041

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AO-085.20	023	284/16:57:20	CANADA	57 Deg 26.5 Min	-112 Deg 34.3 Min	07/05/85	2042
AO-085.20	056	284/16:57:20	CANADA	57 Deg 28.3 Min	-112 Deg 34.5 Min	07/10/85	2075
AO-085.20	024	284/16:57:31	CANADA	57 Deg 17.4 Min	-111 Deg 14.7 Min	07/05/85	2043
AO-085.20	025	284/16:57:42	CANADA	57 Deg 05.8 Min	-109 Deg 56.7 Min	07/05/85	2044
AO-085.20	026	284/16:57:53	CANADA	56 Deg 53.4 Min	-108 Deg 39.7 Min	07/05/85	2045
AO-085.20	027	284/16:58:05	CANADA	56 Deg 40.1 Min	-107 Deg 23.5 Min	07/05/85	2046
AO-085.20	028	284/16:58:16	CANADA	56 Deg 26.0 Min	-106 Deg 08.2 Min	07/05/85	2047
AO-085.20	029	284/16:58:27	CANADA	56 Deg 11.1 Min	-104 Deg 53.9 Min	07/05/85	2048
AO-085.20	030	284/16:58:38	CANADA	55 Deg 55.5 Min	-103 Deg 40.9 Min	07/05/85	2049
AO-085.20	031	284/16:58:49	CANADA	55 Deg 39.1 Min	-102 Deg 28.6 Min	07/05/85	2050
AO-085.20	032	284/16:59:01	CANADA	55 Deg 22.0 Min	-101 Deg 17.3 Min	07/05/85	2051
AO-085.20	033	284/16:59:12	CANADA	55 Deg 04.1 Min	-100 Deg 07.2 Min	07/05/85	2052
AO-085.20	034	284/16:59:21	CANADA	54 Deg 48.3 Min	-99 Deg 08.4 Min	07/07/85	2053
AO-085.20	035	284/16:59:33	CANADA	54 Deg 29.2 Min	-98 Deg 00.2 Min	07/07/85	2054
AO-085.20	036	284/16:59:44	CANADA	54 Deg 09.3 Min	-96 Deg 53.2 Min	07/07/85	2055
AO-085.20	037	284/16:59:55	CANADA	53 Deg 48.9 Min	-95 Deg 47.2 Min	07/07/85	2056
AO-085.20	038	284/17:00:06	CANADA	53 Deg 28.0 Min	-94 Deg 43.1 Min	07/07/85	2057
AO-085.20	039	284/17:00:18	CANADA	53 Deg 06.2 Min	-93 Deg 39.3 Min	07/07/85	2058
AO-085.20	040	284/17:00:29	CANADA	52 Deg 43.9 Min	-92 Deg 36.7 Min	07/07/85	2059
AO-085.20	041	284/17:00:40	CANADA	52 Deg 21.0 Min	-91 Deg 35.1 Min	07/07/85	2060
AO-085.20	042	284/17:00:50	CANADA	52 Deg 01.5 Min	-90 Deg 44.8 Min	07/08/85	2061
AO-085.20	043	284/17:01:01	CANADA	51 Deg 37.6 Min	-89 Deg 45.2 Min	07/08/85	2062
AO-085.20	044	284/17:01:12	CANADA	51 Deg 13.2 Min	-88 Deg 46.8 Min	07/08/85	2063
AO-085.20	045	284/17:01:23	CANADA	50 Deg 48.2 Min	-87 Deg 49.5 Min	07/08/85	2064
AO-085.20	046	284/17:01:34	CANADA	50 Deg 22.8 Min	-86 Deg 53.1 Min	07/08/85	2065
AO-085.20	047	284/17:01:46	CANADA	49 Deg 56.8 Min	-85 Deg 57.9 Min	07/08/85	2066
AO-085.20	048	284/17:01:55	CANADA	49 Deg 33.7 Min	-85 Deg 10.2 Min	07/09/85	2067
AO-085.20	049	284/17:02:07	CANADA	49 Deg 06.9 Min	-84 Deg 16.8 Min	07/09/85	2068
AO-085.20	050	284/17:02:18	CANADA	48 Deg 39.7 Min	-83 Deg 24.5 Min	07/09/85	2069
AO-085.20	051	284/17:02:29	CANADA	48 Deg 12.0 Min	-82 Deg 33.1 Min	07/09/85	2070
AO-085.20	052	284/17:02:40	CANADA	47 Deg 43.9 Min	-81 Deg 42.6 Min	07/09/85	2071
AO-085.20	053	284/17:02:50	CANADA	47 Deg 20.8 Min	-81 Deg 02.2 Min	07/10/85	2072
AO-085.20	054	284/17:03:01	CANADA	46 Deg 52.0 Min	-80 Deg 13.5 Min	07/10/85	2073
AO-085.20	055	284/17:03:10	CANADA	46 Deg 26.9 Min	-79 Deg 32.1 Min	07/15/85	2074
AO-085.20	001	284/17:03:23	BANCROFT	45 Deg 52.6 Min	-78 Deg 35.6 Min	10/31/84	0145
AO-085.20	002	284/17:03:34	BANCROFT	45 Deg 22.7 Min	-77 Deg 49.5 Min	10/31/84	0146
AO-085.20	003	284/17:03:45	BANCROFT	44 Deg 52.4 Min	-77 Deg 04.1 Min	10/31/84	0147
AO-085.20	021	284/17:03:56	NEW YORK	44 Deg 25.7 Min	-76 Deg 26.9 Min	06/24/85	1933
AO-085.20	007	284/17:04:08	NEW YORK	43 Deg 50.9 Min	-75 Deg 35.9 Min	11/20/84	0148
AO-085.20	008	284/17:04:19	NEW YORK	43 Deg 19.7 Min	-74 Deg 53.0 Min	11/20/84	0149
AO-085.20	009	284/17:04:30	NEW YORK	42 Deg 48.3 Min	-74 Deg 10.9 Min	11/20/84	0150
AO-085.20	004	284/17:04:38	NEW YORK	42 Deg 27.1 Min	-73 Deg 43.1 Min	11/01/84	0159
AO-085.20	005	284/17:04:49	CONNECTICUT	41 Deg 55.5 Min	-73 Deg 02.9 Min	11/01/84	0160
AO-085.20	006	284/17:05:00	CONNECTICUT	41 Deg 24.5 Min	-72 Deg 25.3 Min	11/01/84	0161
AO-085.20	010	284/17:05:00	NEW YORK BIGHT	41 Deg 20.8 Min	-72 Deg 20.7 Min	01/26/85	0836
AO-085.20	011	284/17:05:11	NEW YORK BIGHT	40 Deg 51.1 Min	-71 Deg 44.6 Min	01/26/85	0837
AO-085.20	012	284/17:05:22	NEW YORK BIGHT	40 Deg 15.6 Min	-71 Deg 02.4 Min	01/26/85	0838
AO-085.20	013	284/17:05:34	NEW YORK BIGHT	39 Deg 42.6 Min	-70 Deg 24.2 Min	01/26/85	0839
AO-085.20	014	284/17:05:45	NEW YORK BIGHT	39 Deg 09.4 Min	-69 Deg 46.7 Min	01/26/85	0840
AO-085.20	015	284/17:05:56	NEW YORK BIGHT	38 Deg 36.0 Min	-69 Deg 09.8 Min	01/26/85	0841
AO-085.20	016	284/17:06:07	NEW YORK BIGHT	38 Deg 02.5 Min	-68 Deg 33.6 Min	01/26/85	0842
AO-085.20	017	284/17:06:19	NEW YORK BIGHT	37 Deg 28.7 Min	-67 Deg 57.9 Min	01/26/85	0843
AO-085.20	018	284/17:06:30	NEW YORK BIGHT	36 Deg 54.7 Min	-67 Deg 22.7 Min	01/26/85	0844
AO-085.20	019	284/17:06:41	NEW YORK BIGHT	36 Deg 20.6 Min	-66 Deg 48.3 Min	01/26/85	0845
AO-085.20	020	284/17:06:52	NEW YORK BIGHT	35 Deg 46.2 Min	-66 Deg 14.2 Min	01/26/85	0846
KI-086.10	014	284/18:30:20	CANADA	52 Deg 06.9 Min	-108 Deg 23.3 Min	03/30/85	1306
KI-086.10	015	284/18:30:31	CANADA	51 Deg 41.5 Min	-107 Deg 28.8 Min	03/30/85	1307
KI-086.10	016	284/18:30:42	CANADA	51 Deg 15.7 Min	-106 Deg 35.4 Min	03/30/85	1308
KI-086.10	017	284/18:30:52	CANADA	50 Deg 49.7 Min	-105 Deg 43.5 Min	03/30/85	1309
KI-086.10	018	284/18:31:03	CANADA	50 Deg 23.1 Min	-104 Deg 52.1 Min	03/30/85	1310
KI-086.10	019	284/18:31:14	CANADA	49 Deg 56.0 Min	-104 Deg 01.7 Min	03/30/85	1311

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
KI-086.10	020	284/18:31:25	CANADA	49 Deg 29.1 Min	-103 Deg 13.0 Min	03/30/85	1312
KI-086.10	021	284/18:31:35	CANADA	49 Deg 01.3 Min	-102 Deg 24.5 Min	03/30/85	1313
KI-086.10	026	284/18:31:40	NORTH/SOUTH DAKOTA	48 Deg 52.2 Min	-102 Deg 08.5 Min	04/09/85	1370
KI-086.10	022	284/18:31:46	CANADA	48 Deg 33.2 Min	-101 Deg 36.9 Min	03/30/85	1314
KI-086.10	027	284/18:31:51	NORTH/SOUTH DAKOTA	48 Deg 24.0 Min	-101 Deg 21.4 Min	04/09/85	1371
KI-086.10	023	284/18:31:57	CANADA	48 Deg 04.7 Min	-100 Deg 50.0 Min	03/30/85	1315
KI-086.10	028	284/18:32:01	NORTH/SOUTH DAKOTA	47 Deg 55.5 Min	-100 Deg 35.0 Min	04/09/85	1372
KI-086.10	024	284/18:32:07	CANADA	47 Deg 35.9 Min	-100 Deg 04.2 Min	03/30/85	1316
KI-086.10	029	284/18:32:12	NORTH/SOUTH DAKOTA	47 Deg 27.2 Min	-99 Deg 50.4 Min	04/09/85	1373
KI-086.10	025	284/18:32:18	CANADA	47 Deg 06.9 Min	-99 Deg 19.2 Min	03/30/85	1317
KI-086.10	030	284/18:32:23	NORTH/SOUTH DAKOTA	46 Deg 58.2 Min	-99 Deg 05.8 Min	04/09/85	1374
KI-086.10	031	284/18:32:34	NORTH/SOUTH DAKOTA	46 Deg 28.7 Min	-98 Deg 22.0 Min	04/09/85	1375
KI-086.10	032	284/18:32:44	NORTH/SOUTH DAKOTA	45 Deg 59.0 Min	-97 Deg 38.9 Min	04/09/85	1376
KI-086.10	033	284/18:32:55	NORTH/SOUTH DAKOTA	45 Deg 29.0 Min	-96 Deg 56.7 Min	04/09/85	1377
KI-086.10	034	284/18:33:06	NORTH/SOUTH DAKOTA	44 Deg 58.7 Min	-96 Deg 15.2 Min	04/09/85	1378
KI-086.10	032	284/18:34:18	ILLINOIS	41 Deg 27.3 Min	-91 Deg 53.1 Min	05/04/85	1560
KI-086.10	051	284/18:34:28	ILLINOIS	40 Deg 57.4 Min	-91 Deg 19.3 Min	03/07/86	2679
KI-086.10	033	284/18:34:29	ILLINOIS	40 Deg 55.3 Min	-91 Deg 16.9 Min	05/04/85	1561
KI-086.10	036	284/18:34:34	ILLINOIS	40 Deg 39.4 Min	-90 Deg 59.3 Min	06/25/85	1946
KI-086.10	052	284/18:34:39	ILLINOIS	40 Deg 25.2 Min	-90 Deg 43.6 Min	03/07/86	2680
KI-086.10	034	284/18:34:40	ILLINOIS	40 Deg 23.0 Min	-90 Deg 41.2 Min	05/04/85	1562
KI-086.10	037	284/18:34:45	ILLINOIS	40 Deg 07.1 Min	-90 Deg 23.9 Min	06/25/85	1947
KI-086.10	011	284/18:34:46	ILLINOIS	39 Deg 54.7 Min	-90 Deg 10.4 Min	03/16/85	1199
KI-086.10	038	284/18:34:48	ILLINOIS	39 Deg 57.7 Min	-90 Deg 13.9 Min	08/01/85	2194
KI-086.10	035	284/18:34:51	ILLINOIS	39 Deg 50.6 Min	-90 Deg 06.2 Min	05/04/85	1563
KI-086.10	012	284/18:34:57	ILLINOIS	39 Deg 22.0 Min	-89 Deg 35.8 Min	03/16/85	1200
KI-086.10	013	284/18:35:07	ILLINOIS	38 Deg 49.2 Min	-89 Deg 01.7 Min	03/16/85	1201
KI-086.10	039	284/18:38:29	JAMAICA	28 Deg 19.6 Min	-79 Deg 51.0 Min	08/01/85	2195
KI-086.10	040	284/18:38:40	JAMAICA	27 Deg 44.3 Min	-79 Deg 24.8 Min	08/01/85	2196
KI-086.10	041	284/18:38:50	JAMAICA	27 Deg 10.5 Min	-78 Deg 60.0 Min	08/03/85	2197
KI-086.10	042	284/18:39:01	JAMAICA	26 Deg 35.1 Min	-78 Deg 34.3 Min	08/03/85	2198
KI-086.10	043	284/18:39:12	JAMAICA	25 Deg 59.7 Min	-78 Deg 09.0 Min	08/03/85	2199
KI-086.10	044	284/18:39:23	JAMAICA	25 Deg 24.3 Min	-77 Deg 44.0 Min	08/03/85	2200
KI-086.10	045	284/18:39:33	JAMAICA	24 Deg 48.7 Min	-77 Deg 19.1 Min	08/03/85	2201
KI-086.10	046	284/18:39:44	JAMAICA	24 Deg 13.0 Min	-76 Deg 54.4 Min	08/03/85	2202
KI-086.10	047	284/18:39:55	JAMAICA	23 Deg 37.4 Min	-76 Deg 30.1 Min	08/03/85	2203
KI-086.10	048	284/18:40:06	JAMAICA	23 Deg 01.6 Min	-76 Deg 05.9 Min	08/03/85	2204
KI-086.10	049	284/18:40:16	JAMAICA	22 Deg 25.7 Min	-75 Deg 41.9 Min	08/03/85	2205
KI-086.10	050	284/18:40:27	JAMAICA	21 Deg 49.9 Min	-75 Deg 18.2 Min	08/03/85	2206
KI-086.10	039	284/18:41:27	HAITI AREA	18 Deg 25.3 Min	-73 Deg 06.7 Min	08/07/85	2229
KI-086.10	053	284/18:42:29	CARIBBEAN SEA	14 Deg 56.3 Min	-70 Deg 58.4 Min	04/18/86	2764
KI-086.10	054	284/18:42:40	CARIBBEAN SEA	14 Deg 19.9 Min	-70 Deg 36.5 Min	04/18/86	2765
KI-086.10	055	284/18:42:51	CARIBBEAN SEA	13 Deg 43.6 Min	-70 Deg 14.8 Min	04/18/86	2766
KI-086.10	056	284/18:43:02	CARIBBEAN SEA	13 Deg 07.1 Min	-69 Deg 53.1 Min	04/18/86	2767
KI-086.10	057	284/18:43:12	CARIBBEAN SEA	12 Deg 30.7 Min	-69 Deg 31.5 Min	04/18/86	2768
KI-086.10	058	284/18:43:23	CARIBBEAN SEA	11 Deg 54.1 Min	-69 Deg 10.0 Min	04/18/86	2769
KI-086.10	059	284/18:43:34	VENEZUELA	11 Deg 14.3 Min	-68 Deg 46.6 Min	04/19/86	2770
KI-086.10	060	284/18:43:45	VENEZUELA	10 Deg 37.7 Min	-68 Deg 25.2 Min	04/19/86	2771
KI-086.10	061	284/18:43:56	VENEZUELA	10 Deg 01.1 Min	-68 Deg 03.9 Min	04/19/86	2772
KI-086.10	062	284/18:44:07	VENEZUELA	9 Deg 24.5 Min	-67 Deg 42.7 Min	04/19/86	2773
KI-086.10	063	284/18:44:17	VENEZUELA	8 Deg 47.9 Min	-67 Deg 21.6 Min	04/19/86	2774
KI-086.10	064	284/18:44:28	VENEZUELA	8 Deg 11.2 Min	-67 Deg 00.5 Min	04/19/86	2775
KI-086.10	001	284/18:44:35	BRAZIL	7 Deg 33.6 Min	-66 Deg 38.4 Min	12/18/84	0564
KI-086.10	065	284/18:44:37	VENEZUELA	7 Deg 39.2 Min	-66 Deg 42.1 Min	04/21/86	2776
KI-086.10	002	284/18:44:46	BRAZIL	6 Deg 57.0 Min	-66 Deg 17.4 Min	12/18/84	0565
KI-086.10	066	284/18:44:48	VENEZUELA	7 Deg 02.6 Min	-66 Deg 21.0 Min	04/21/86	2777
KI-086.10	003	284/18:44:56	BRAZIL	6 Deg 20.3 Min	-65 Deg 56.4 Min	12/18/84	0566
KI-086.10	067	284/18:44:59	VENEZUELA	6 Deg 25.6 Min	-65 Deg 59.9 Min	04/21/86	2778
KI-086.10	004	284/18:45:07	BRAZIL	5 Deg 43.0 Min	-65 Deg 35.1 Min	12/18/84	0567
KI-086.10	068	284/18:45:10	VENEZUELA	5 Deg 49.0 Min	-65 Deg 38.9 Min	04/21/86	2779
KI-086.10	005	284/18:45:18	BRAZIL	5 Deg 06.4 Min	-65 Deg 14.2 Min	12/18/84	0568

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
KI-086.10	069	284/18:45:20	VENEZUELA	5 Deg 12.2 Min	-65 Deg 17.9 Min	04/21/86	2780
KI-086.10	006	284/18:45:29	BRAZIL	4 Deg 29.7 Min	-64 Deg 53.3 Min	12/18/84	0569
KI-086.10	070	284/18:45:31	VENEZUELA	4 Deg 35.6 Min	-64 Deg 57.0 Min	04/21/86	2781
KI-086.10	007	284/18:45:39	BRAZIL	3 Deg 53.1 Min	-64 Deg 32.4 Min	12/18/84	0570
KI-086.10	071	284/18:45:41	BRAZIL	3 Deg 60.0 Min	-64 Deg 36.7 Min	04/22/86	2782
KI-086.10	008	284/18:45:50	BRAZIL	3 Deg 16.6 Min	-64 Deg 11.6 Min	12/18/84	0571
KI-086.10	072	284/18:45:52	BRAZIL	3 Deg 23.3 Min	-64 Deg 15.8 Min	04/22/86	2783
KI-086.10	009	284/18:46:01	BRAZIL	2 Deg 40.4 Min	-63 Deg 51.0 Min	12/18/84	0572
KI-086.10	073	284/18:46:03	BRAZIL	2 Deg 47.1 Min	-63 Deg 55.2 Min	04/22/86	2784
KI-086.10	010	284/18:46:11	BRAZIL	2 Deg 03.7 Min	-63 Deg 30.1 Min	12/18/84	0573
KI-086.10	074	284/18:46:14	BRAZIL	2 Deg 10.5 Min	-63 Deg 34.3 Min	04/22/86	2785
HI-086.60	003	284/19:27:58	SUMATERA	-10 Deg 42.5 Min	98 Deg 38.5 Min	03/25/86	2709
HI-086.60	004	284/19:28:09	SUMATERA	-10 Deg 08.3 Min	98 Deg 58.5 Min	03/25/86	2710
HI-086.60	005	284/19:28:19	SUMATERA	-9 Deg 32.5 Min	99 Deg 19.6 Min	03/25/86	2711
HI-086.60	006	284/19:28:30	SUMATERA	-8 Deg 55.6 Min	99 Deg 41.2 Min	03/25/86	2712
HI-086.60	007	284/19:28:40	SUMATERA	-8 Deg 19.8 Min	100 Deg 02.1 Min	03/25/86	2713
HI-086.60	008	284/19:28:50	SUMATERA	-7 Deg 43.1 Min	100 Deg 23.5 Min	03/27/86	2714
HI-086.60	009	284/19:29:01	SUMATERA	-7 Deg 07.2 Min	100 Deg 44.3 Min	03/27/86	2715
HI-086.60	010	284/19:29:12	SUMATERA	-6 Deg 31.6 Min	101 Deg 04.8 Min	03/27/86	2716
HI-086.60	011	284/19:29:22	SUMATERA	-5 Deg 55.7 Min	101 Deg 25.5 Min	03/27/86	2717
HI-086.60	012	284/19:29:33	SUMATERA	-5 Deg 19.7 Min	101 Deg 46.2 Min	03/27/86	2718
HI-086.60	013	284/19:29:43	SUMATERA	-4 Deg 43.7 Min	102 Deg 06.8 Min	03/27/86	2719
HI-086.60	014	284/19:29:54	SUMATERA	-4 Deg 07.8 Min	102 Deg 27.5 Min	03/28/86	2720
HI-086.60	015	284/19:30:04	SUMATERA	-3 Deg 31.8 Min	102 Deg 48.0 Min	03/28/86	2721
HI-086.60	016	284/19:30:15	SUMATERA	-2 Deg 55.7 Min	103 Deg 08.7 Min	03/28/86	2722
HI-086.60	017	284/19:30:25	SUMATERA	-2 Deg 19.7 Min	103 Deg 29.3 Min	03/28/86	2723
HI-086.60	018	284/19:30:36	SUMATERA	-1 Deg 43.8 Min	103 Deg 49.8 Min	03/28/86	2724
HI-086.60	019	284/19:30:46	SUMATERA	-1 Deg 07.9 Min	104 Deg 10.4 Min	03/28/86	2725
HI-086.60	001	284/19:30:52	SUMATERA	-0 Deg 36.6 Min	104 Deg 28.8 Min	12/30/84	0653
HI-086.60	020	284/19:30:57	SUMATERA	0 Deg 31.9 Min	104 Deg 30.9 Min	03/28/86	2726
HJ-087.20	001	284/19:45:08	HOKKAIDO, JAPAN	44 Deg 45.9 Min	141 Deg 04.3 Min	11/26/84	0352
HJ-087.20	002	284/19:45:19	HOKKAIDO, JAPAN	45 Deg 12.6 Min	141 Deg 49.1 Min	11/26/84	0353
HJ-087.20	004	284/19:45:19	HOKKAIDO, JAPAN	45 Deg 14.0 Min	141 Deg 50.1 Min	05/07/85	1585
HJ-087.20	003	284/19:45:29	HOKKAIDO, JAPAN	45 Deg 39.0 Min	142 Deg 34.7 Min	11/26/84	0354
AL-087.40	047	284/20:00:59	CALIFORNIA/NEVADA	44 Deg 30.2 Min	-126 Deg 50.0 Min	07/01/85	2005
AL-087.40	048	284/20:01:10	CALIFORNIA/NEVADA	44 Deg 03.0 Min	-126 Deg 06.2 Min	07/01/85	2006
AL-087.40	049	284/20:01:20	CALIFORNIA/NEVADA	43 Deg 35.5 Min	-125 Deg 23.1 Min	07/01/85	2007
AL-087.40	018	284/20:01:28	MT. SHASTA	43 Deg 15.2 Min	-124 Deg 52.0 Min	04/31/85	1523
AL-087.40	019	284/20:01:39	MT. SHASTA	42 Deg 47.2 Min	-124 Deg 10.1 Min	04/31/85	1524
AL-087.40	020	284/20:01:49	MT. SHASTA	42 Deg 18.8 Min	-123 Deg 28.9 Min	04/31/85	1525
AL-087.40	021	284/20:02:00	MT. SHASTA	41 Deg 48.4 Min	-122 Deg 45.8 Min	06/12/85	1838
AL-087.40	001	284/20:02:01	MT. SHASTA	41 Deg 48.3 Min	-122 Deg 46.0 Min	10/18/84	0059
AL-087.40	022	284/20:02:11	MT. SHASTA	41 Deg 19.5 Min	-122 Deg 05.9 Min	06/12/85	1839
AL-087.40	002	284/20:02:12	MT. SHASTA	41 Deg 19.4 Min	-122 Deg 06.2 Min	10/18/84	0060
AL-087.40	003	284/20:02:22	MT. SHASTA	40 Deg 50.3 Min	-121 Deg 27.0 Min	10/18/84	0061
AL-087.40	023	284/20:02:22	MT. SHASTA	40 Deg 50.3 Min	-121 Deg 26.7 Min	06/12/85	1840
AL-087.40	024	284/20:02:32	MT. SHASTA	40 Deg 20.9 Min	-120 Deg 48.0 Min	06/12/85	1841
AL-087.40	034	284/20:02:32	CALIFORNIA/NEVADA	40 Deg 20.9 Min	-120 Deg 48.0 Min	06/29/85	1985
AL-087.40	035	284/20:02:43	CALIFORNIA/NEVADA	39 Deg 51.1 Min	-120 Deg 10.0 Min	06/29/85	1986
AL-087.40	050	284/20:02:44	MT. SHASTA	39 Deg 46.7 Min	-120 Deg 04.3 Min	09/25/85	2379
AL-087.40	036	284/20:02:54	CALIFORNIA/NEVADA	39 Deg 21.2 Min	-119 Deg 32.6 Min	06/29/85	1987
AL-087.40	004	284/20:03:07	CALIFORNIA/NEVADA	38 Deg 44.9 Min	-118 Deg 48.2 Min	10/19/84	0040
AL-087.40	066	284/20:03:17	CALIFORNIA/NEVADA	38 Deg 12.8 Min	-118 Deg 10.2 Min	08/06/86	2937
AL-087.40	005	284/20:03:18	CALIFORNIA/NEVADA	38 Deg 14.5 Min	-118 Deg 12.1 Min	10/19/84	0041
AL-087.40	006	284/20:03:28	CALIFORNIA/NEVADA	37 Deg 44.4 Min	-117 Deg 37.6 Min	11/29/84	0381
AL-087.40	007	284/20:03:39	CALIFORNIA/NEVADA	37 Deg 13.6 Min	-117 Deg 02.5 Min	11/29/84	0382
AL-087.40	008	284/20:03:49	CALIFORNIA/NEVADA	36 Deg 42.6 Min	-116 Deg 28.0 Min	11/29/84	0383
AL-087.40	009	284/20:04:00	CALIFORNIA/NEVADA	36 Deg 11.3 Min	-115 Deg 53.9 Min	11/29/84	0384
AL-087.40	010	284/20:04:11	CALIF/NEV/ARIZ	35 Deg 39.8 Min	-115 Deg 20.3 Min	11/29/84	0385
AL-087.40	011	284/20:04:21	CALIF/NEV/ARIZ	35 Deg 08.2 Min	-114 Deg 47.2 Min	11/29/84	0386
AL-087.40	012	284/20:04:32	ARIZONA	34 Deg 36.4 Min	-114 Deg 14.7 Min	11/29/84	0387

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AL-087.40	013	284/20:04:42	ARIZONA	34 Deg 04.4 Min	-113 Deg 42.6 Min	11/29/84	0388
AL-087.40	014	284/20:04:53	ARIZONA	33 Deg 32.2 Min	-113 Deg 10.9 Min	11/29/84	0389
AL-087.40	015	284/20:05:04	ARIZONA	32 Deg 59.9 Min	-112 Deg 39.5 Min	11/29/84	0390
AL-087.40	046	284/20:05:13	ARIZONA	32 Deg 28.0 Min	-112 Deg 09.1 Min	07/01/85	1998
AL-087.40	016	284/20:05:14	ARIZONA	32 Deg 29.0 Min	-112 Deg 06.2 Min	11/29/84	0391
AL-087.40	017	284/20:05:25	ARIZONA/MEXICO	31 Deg 54.7 Min	-111 Deg 38.2 Min	11/29/84	0392
AL-087.40	051	284/20:05:29	MEXICO	31 Deg 38.3 Min	-111 Deg 22.9 Min	09/27/85	2381
AL-087.40	025	284/20:05:35	CALIFORNIA/NEVADA	31 Deg 20.2 Min	-111 Deg 06.5 Min	07/01/85	1999
AL-087.40	052	284/20:05:40	MEXICO	31 Deg 05.4 Min	-110 Deg 53.0 Min	09/27/85	2382
AL-087.40	026	284/20:05:46	CALIFORNIA/NEVADA	30 Deg 47.2 Min	-110 Deg 36.8 Min	07/01/85	2000
AL-087.40	053	284/20:05:51	MEXICO	30 Deg 32.2 Min	-110 Deg 23.5 Min	09/27/85	2383
AL-087.40	027	284/20:05:57	CALIFORNIA/NEVADA	30 Deg 14.0 Min	-110 Deg 07.4 Min	07/01/85	2001
AL-087.40	054	284/20:06:01	MEXICO	29 Deg 59.0 Min	-109 Deg 54.3 Min	09/27/85	2384
AL-087.40	028	284/20:06:07	CALIFORNIA/NEVADA	29 Deg 40.7 Min	-109 Deg 38.5 Min	07/01/85	2002
AL-087.40	055	284/20:06:12	MEXICO	29 Deg 25.6 Min	-109 Deg 25.5 Min	09/27/85	2385
AL-087.40	029	284/20:06:18	CALIFORNIA/NEVADA	29 Deg 07.3 Min	-109 Deg 09.9 Min	07/01/85	2003
AL-087.40	056	284/20:06:23	MEXICO	28 Deg 52.2 Min	-108 Deg 57.1 Min	09/27/85	2386
AL-087.40	030	284/20:06:29	CALIFORNIA/NEVADA	28 Deg 33.7 Min	-108 Deg 41.6 Min	07/01/85	2004
AL-087.40	057	284/20:06:33	MEXICO	28 Deg 18.5 Min	-108 Deg 28.9 Min	09/27/85	2387
AL-087.40	038	284/20:06:40	CALIFORNIA/NEVADA	27 Deg 56.3 Min	-108 Deg 10.7 Min	06/29/85	1989
AL-087.40	058	284/20:06:44	MEXICO	27 Deg 44.8 Min	-108 Deg 01.2 Min	09/27/85	2388
AL-087.40	039	284/20:06:51	CALIFORNIA/NEVADA	27 Deg 22.5 Min	-107 Deg 43.1 Min	06/29/85	1990
AL-087.40	059	284/20:06:53	MEXICO	27 Deg 14.5 Min	-107 Deg 36.6 Min	09/30/85	2389
AL-087.40	040	284/20:07:02	CALIFORNIA/NEVADA	26 Deg 48.5 Min	-107 Deg 15.8 Min	06/29/85	1991
AL-087.40	060	284/20:07:04	MEXICO	26 Deg 40.5 Min	-107 Deg 09.4 Min	09/30/85	2390
AL-087.40	041	284/20:07:12	CALIFORNIA/NEVADA	26 Deg 14.5 Min	-106 Deg 48.9 Min	06/29/85	1992
AL-087.40	061	284/20:07:15	MEXICO	26 Deg 06.5 Min	-106 Deg 42.5 Min	09/30/85	2391
AL-087.40	042	284/20:07:23	CALIFORNIA/NEVADA	25 Deg 40.3 Min	-106 Deg 22.2 Min	06/29/85	1993
AL-087.40	062	284/20:07:25	MEXICO	25 Deg 32.3 Min	-106 Deg 16.0 Min	09/30/85	2392
AL-087.40	043	284/20:07:34	CALIFORNIA/NEVADA	25 Deg 06.0 Min	-105 Deg 55.8 Min	06/29/85	1994
AL-087.40	063	284/20:07:36	MEXICO	24 Deg 57.9 Min	-105 Deg 49.6 Min	09/30/85	2393
AL-087.40	044	284/20:07:44	CALIFORNIA/NEVADA	24 Deg 31.6 Min	-105 Deg 29.7 Min	06/29/85	1995
AL-087.40	064	284/20:07:47	MEXICO	24 Deg 23.6 Min	-105 Deg 23.6 Min	09/30/85	2394
AL-087.40	045	284/20:07:55	CALIFORNIA/NEVADA	23 Deg 57.2 Min	-105 Deg 03.9 Min	06/29/85	1996
AL-087.40	065	284/20:07:57	MEXICO	23 Deg 49.1 Min	-104 Deg 57.8 Min	09/30/85	2395
I3-088.20	001	284/21:04:40	BANGLADESH	18 Deg 25.2 Min	87 Deg 26.7 Min	12/10/84	0487
I3-088.20	002	284/21:04:50	BANGLADESH	19 Deg 00.8 Min	87 Deg 49.2 Min	12/10/84	0488
I3-088.20	003	284/21:05:01	BANGLADESH	19 Deg 36.3 Min	88 Deg 11.8 Min	12/10/84	0489
I3-088.20	004	284/21:05:11	BANGLADESH	20 Deg 11.6 Min	88 Deg 34.5 Min	12/10/84	0490
I3-088.20	005	284/21:05:22	BANGLADESH	20 Deg 47.0 Min	88 Deg 57.5 Min	12/10/84	0491
I3-088.20	006	284/21:05:32	BANGLADESH	21 Deg 29.9 Min	89 Deg 25.9 Min	08/05/85	2217
I3-088.20	006	284/21:05:33	BANGLADESH	21 Deg 22.4 Min	89 Deg 20.6 Min	12/10/84	0492
I3-088.20	007	284/21:05:43	BANGLADESH	21 Deg 58.1 Min	89 Deg 44.2 Min	12/10/84	0493
I3-088.20	007	284/21:05:43	BANGLADESH	22 Deg 05.2 Min	89 Deg 49.2 Min	08/05/85	2218
I3-088.20	014	284/21:05:43	BANGLADESH- LOOK 2	22 Deg 03.4 Min	89 Deg 48.2 Min	06/14/86	2915
I3-088.20	008	284/21:05:54	BANGLADESH	22 Deg 33.3 Min	90 Deg 07.7 Min	12/10/84	0494
I3-088.20	009	284/21:06:04	BANGLADESH	23 Deg 08.6 Min	90 Deg 31.4 Min	12/10/84	0495
I3-088.20	010	284/21:06:15	BANGLADESH	23 Deg 43.5 Min	90 Deg 55.2 Min	12/10/84	0496
I3-088.20	011	284/21:06:25	BANGLADESH	24 Deg 18.6 Min	91 Deg 19.4 Min	12/10/84	0497
I3-088.20	012	284/21:06:36	BANGLADESH	24 Deg 53.5 Min	91 Deg 43.6 Min	12/10/84	0498
I3-088.20	013	284/21:06:46	BANGLADESH	25 Deg 28.5 Min	92 Deg 08.2 Min	12/10/84	0499
AG-088.40	011	284/21:56:37	RIO PICO	-38 Deg 35.2 Min	-78 Deg 30.9 Min	04/23/85	1484
AG-088.40	001	284/21:57:10	RIO PICO	-40 Deg 12.8 Min	-76 Deg 18.5 Min	12/15/84	0540
AG-088.40	002	284/21:57:20	RIO PICO	-40 Deg 40.6 Min	-75 Deg 39.4 Min	12/15/84	0541
AG-088.40	003	284/21:57:31	RIO PICO	-41 Deg 08.1 Min	-74 Deg 59.8 Min	12/15/84	0542
AG-088.40	004	284/21:57:41	RIO PICO	-41 Deg 35.6 Min	-74 Deg 19.1 Min	12/15/84	0543
AG-088.40	005	284/21:57:52	RIO PICO	-42 Deg 02.5 Min	-73 Deg 38.2 Min	12/15/84	0544
AG-088.40	012	284/21:57:55	RIO PICO	-42 Deg 01.7 Min	-73 Deg 40.1 Min	05/30/85	1760
AG-088.40	006	284/21:58:02	RIO PICO	-42 Deg 29.2 Min	-72 Deg 56.7 Min	12/15/84	0545
AG-088.40	013	284/21:58:05	RIO PICO	-42 Deg 28.4 Min	-72 Deg 58.5 Min	05/30/85	1761
AG-088.40	007	284/21:58:13	RIO PICO	-42 Deg 55.6 Min	-72 Deg 14.4 Min	12/15/84	0546

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AG-088.40	014	284/21:58:16	RIO PICO	-42 Deg 54.8 Min	-72 Deg 16.3 Min	05/30/85	1762
AG-088.40	017	284/21:58:22	RIO PICO (FULL SWATH)	-43 Deg 11.7 Min	-71 Deg 48.7 Min	09/06/85	2276
AG-088.40	008	284/21:58:23	RIO PICO	-43 Deg 21.6 Min	-71 Deg 31.5 Min	12/15/84	0547
AG-088.40	015	284/21:58:23	RIO PICO	-43 Deg 14.1 Min	-71 Deg 44.6 Min	06/01/85	1780
AG-088.40	019	284/21:58:23	RIO PICO (SLANT RANGE)	-43 Deg 12.1 Min	-71 Deg 47.4 Min	05/10/86	2841
AG-088.40	020	284/21:58:25	RIO PICO	-43 Deg 18.9 Min	-71 Deg 36.2 Min	10/23/86	2947
AG-088.40	018	284/21:58:29	RIO PICO	-43 Deg 29.0 Min	-71 Deg 19.8 Min	09/25/85	2380
AG-088.40	009	284/21:58:34	RIO PICO	-43 Deg 35.1 Min	-70 Deg 34.2 Min	12/15/84	0548
AG-088.40	010	284/21:58:44	RIO PICO	-44 Deg 12.8 Min	-70 Deg 03.7 Min	12/15/84	0549
AG-088.40	016	284/21:58:51	RIO PICO	-44 Deg 22.5 Min	-69 Deg 47.0 Min	07/01/85	1997
SB-090.30	004	285/01:02:00	CHILE	-55 Deg 09.9 Min	-86 Deg 54.4 Min	05/09/85	1597
SB-090.30	005	285/01:02:11	CHILE	-55 Deg 19.2 Min	-85 Deg 43.8 Min	05/09/85	1598
SB-090.30	016	285/01:02:11	CHILE	-55 Deg 19.2 Min	-85 Deg 43.7 Min	06/17/85	1879
SB-090.30	006	285/01:02:21	CHILE	-55 Deg 27.7 Min	-84 Deg 32.3 Min	05/09/85	1599
SB-090.30	017	285/01:02:21	CHILE	-55 Deg 27.7 Min	-84 Deg 32.5 Min	06/17/85	1880
SB-090.30	007	285/01:02:32	CHILE	-55 Deg 35.5 Min	-83 Deg 20.6 Min	05/09/85	1600
SB-090.30	018	285/01:02:32	CHILE	-55 Deg 35.4 Min	-83 Deg 20.8 Min	06/17/85	1881
SB-090.30	008	285/01:02:43	CHILE	-55 Deg 42.4 Min	-82 Deg 08.5 Min	05/09/85	1601
SB-090.30	019	285/01:02:43	CHILE	-55 Deg 42.4 Min	-82 Deg 08.4 Min	06/17/85	1882
SB-090.30	020	285/01:02:53	CHILE	-55 Deg 48.6 Min	-80 Deg 55.8 Min	06/17/85	1883
SB-090.30	009	285/01:02:55	CHILE	-55 Deg 49.9 Min	-80 Deg 40.2 Min	05/10/85	1602
SB-090.30	021	285/01:03:04	CHILE	-55 Deg 54.0 Min	-79 Deg 42.9 Min	06/17/85	1884
SB-090.30	010	285/01:03:06	CHILE	-55 Deg 55.1 Min	-79 Deg 27.2 Min	05/10/85	1603
SB-090.30	001	285/01:03:09	CHILE	-55 Deg 56.5 Min	-79 Deg 11.7 Min	11/13/84	0251
SB-090.30	022	285/01:03:15	CHILE	-55 Deg 58.7 Min	-78 Deg 29.4 Min	06/17/85	1885
SB-090.30	011	285/01:03:17	CHILE	-55 Deg 59.5 Min	-78 Deg 13.8 Min	05/10/85	1604
SB-090.30	002	285/01:03:20	CHILE	-56 Deg 00.8 Min	-77 Deg 58.4 Min	11/13/84	0252
SB-090.30	023	285/01:03:25	CHILE	-56 Deg 02.5 Min	-77 Deg 15.8 Min	06/17/85	1886
SB-090.30	012	285/01:03:27	CHILE	-56 Deg 03.2 Min	-77 Deg 00.0 Min	05/10/85	1605
SB-090.30	024	285/01:03:36	CHILE	-56 Deg 05.5 Min	-76 Deg 02.0 Min	06/17/85	1887
SB-090.30	013	285/01:03:38	CHILE	-56 Deg 06.0 Min	-75 Deg 46.2 Min	05/10/85	1606
SB-090.30	025	285/01:03:46	CHILE	-56 Deg 07.7 Min	-74 Deg 47.9 Min	06/17/85	1888
SB-090.30	014	285/01:03:49	CHILE	-56 Deg 08.1 Min	-74 Deg 32.2 Min	05/10/85	1607
D4-091.20	001	285/01:31:30	CHAD	17 Deg 50.2 Min	21 Deg 41.1 Min	10/15/84	0048
D4-091.20	002	285/01:31:41	CHAD	18 Deg 25.9 Min	22 Deg 04.2 Min	10/15/84	0049
D4-091.20	003	285/01:31:51	CHAD - LIBYA	19 Deg 01.5 Min	22 Deg 27.4 Min	10/15/84	0050
D4-091.20	015	285/01:32:00	EGYPT	19 Deg 37.9 Min	22 Deg 50.3 Min	03/23/85	1256
D4-091.20	016	285/01:32:11	EGYPT	20 Deg 13.4 Min	23 Deg 13.9 Min	03/23/85	1257
D4-091.20	017	285/01:32:21	EGYPT	20 Deg 48.9 Min	23 Deg 37.7 Min	03/23/85	1258
D4-091.20	018	285/01:32:32	EGYPT	21 Deg 24.0 Min	24 Deg 01.5 Min	03/23/85	1259
D4-091.20	019	285/01:32:42	EGYPT	21 Deg 59.4 Min	24 Deg 25.7 Min	03/23/85	1260
D4-091.20	020	285/01:32:53	EGYPT	22 Deg 34.6 Min	24 Deg 50.1 Min	03/23/85	1261
D4-091.20	004	285/01:33:00	LIBYA	22 Deg 50.0 Min	25 Deg 01.2 Min	10/15/84	0051
D4-091.20	005	285/01:33:11	EGYPT	23 Deg 25.2 Min	25 Deg 25.9 Min	10/15/84	0052
D4-091.20	014	285/01:33:22	EGYPT	24 Deg 02.6 Min	25 Deg 52.5 Min	10/19/84	0076
D4-091.20	006	285/01:33:35	EGYPT	24 Deg 45.4 Min	26 Deg 23.1 Min	10/17/84	0062
D4-091.20	007	285/01:33:46	EGYPT	25 Deg 20.4 Min	26 Deg 48.6 Min	10/17/84	0063
D4-091.20	008	285/01:33:56	EGYPT	25 Deg 55.2 Min	27 Deg 14.3 Min	10/17/84	0064
D4-091.20	009	285/01:34:06	EGYPT	26 Deg 26.9 Min	27 Deg 38.0 Min	10/17/84	0065
D4-091.20	010	285/01:34:17	EGYPT	27 Deg 01.6 Min	28 Deg 04.2 Min	10/17/84	0066
D4-091.20	011	285/01:34:27	EGYPT	27 Deg 36.2 Min	28 Deg 30.7 Min	10/17/84	0067
D4-091.20	012	285/01:34:37	EGYPT	28 Deg 07.6 Min	28 Deg 55.2 Min	10/17/84	0068
D4-091.20	013	285/01:34:48	EGYPT	28 Deg 42.0 Min	29 Deg 22.2 Min	10/17/84	0069
SA-091.50	015	285/02:33:33	CHILE	-56 Deg 08.8 Min	-91 Deg 14.6 Min	06/15/85	1864
SA-091.50	003	285/02:33:44	CHILE	-56 Deg 06.0 Min	-89 Deg 55.7 Min	05/13/85	1608
SA-091.50	004	285/02:33:55	CHILE	-56 Deg 02.5 Min	-88 Deg 42.0 Min	05/13/85	1609
SA-091.50	017	285/02:33:55	CHILE	-56 Deg 02.7 Min	-88 Deg 46.9 Min	06/15/85	1866
SA-091.50	018	285/02:34:05	CHILE	-55 Deg 58.5 Min	-87 Deg 32.4 Min	06/15/85	1867
SA-091.50	005	285/02:34:06	CHILE	-55 Deg 58.2 Min	-87 Deg 28.5 Min	05/13/85	1610
SA-091.50	006	285/02:34:15	CHILE	-55 Deg 53.6 Min	-86 Deg 21.4 Min	05/19/85	1611
SA-091.50	019	285/02:34:16	CHILE	-55 Deg 53.5 Min	-86 Deg 19.2 Min	06/15/85	1868

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
SA-091.50	020	285/02:34:26	CHILE	-55 Deg 47.7 Min	-85 Deg 06.4 Min	06/15/85	1869
SA-091.50	007	285/02:34:27	CHILE	-55 Deg 47.3 Min	-85 Deg 02.2 Min	05/13/85	1612
SA-091.50	021	285/02:34:37	CHILE	-55 Deg 40.8 Min	-83 Deg 50.8 Min	06/15/85	1870
SA-091.50	008	285/02:34:38	CHILE	-55 Deg 40.7 Min	-83 Deg 49.8 Min	05/13/85	1613
SA-091.50	001	285/02:34:43	CHILE	-55 Deg 37.7 Min	-83 Deg 18.1 Min	11/13/84	0253
SA-091.50	009	285/02:34:48	CHILE	-55 Deg 33.2 Min	-82 Deg 37.3 Min	05/13/85	1614
SA-091.50	022	285/02:34:48	CHILE	-55 Deg 33.4 Min	-82 Deg 38.8 Min	06/15/85	1871
SA-091.50	002	285/02:34:54	CHILE	-55 Deg 30.0 Min	-82 Deg 06.4 Min	11/13/84	0254
SA-091.50	010	285/02:34:59	CHILE	-55 Deg 25.0 Min	-81 Deg 25.8 Min	05/13/85	1615
SA-091.50	023	285/02:34:59	CHILE	-55 Deg 25.2 Min	-81 Deg 27.3 Min	06/15/85	1872
SA-091.50	024	285/02:35:09	CHILE	-55 Deg 16.2 Min	-80 Deg 15.9 Min	06/15/85	1873
SA-091.50	011	285/02:35:10	CHILE	-55 Deg 16.1 Min	-80 Deg 14.8 Min	05/13/85	1616
SA-091.50	012	285/02:35:20	CHILE	-55 Deg 06.3 Min	-79 Deg 04.1 Min	05/13/85	1617
SA-091.50	025	285/02:35:20	CHILE	-55 Deg 06.6 Min	-79 Deg 05.6 Min	06/15/85	1874
SA-091.50	013	285/02:35:31	CHILE	-54 Deg 55.9 Min	-77 Deg 54.3 Min	05/13/85	1618
SA-091.50	026	285/02:35:31	CHILE	-54 Deg 56.1 Min	-77 Deg 55.8 Min	06/15/85	1875
SA-091.50	027	285/02:35:41	CHILE	-54 Deg 45.0 Min	-76 Deg 46.5 Min	06/15/85	1876
SA-091.50	014	285/02:35:42	CHILE	-54 Deg 44.8 Min	-76 Deg 45.2 Min	05/13/85	1619
SA-091.50	028	285/02:35:52	CHILE	-54 Deg 33.1 Min	-75 Deg 38.0 Min	06/15/85	1877
AC-092.80	004	285/04:09:00	RIO PICO	-46 Deg 39.9 Min	-75 Deg 06.7 Min	01/30/85	0865
AC-092.80	005	285/04:09:11	RIO PICO	-46 Deg 13.2 Min	-74 Deg 16.5 Min	01/30/85	0866
AC-092.80	006	285/04:09:22	RIO PICO	-45 Deg 46.2 Min	-73 Deg 27.2 Min	01/30/85	0867
AC-092.80	007	285/04:09:34	RIO PICO	-45 Deg 18.7 Min	-72 Deg 38.7 Min	01/30/85	0868
AC-092.80	008	285/04:09:45	RIO PICO	-44 Deg 50.8 Min	-71 Deg 51.1 Min	01/30/85	0869
AC-092.80	009	285/04:09:56	RIO PICO	-44 Deg 22.5 Min	-71 Deg 04.3 Min	01/30/85	0870
AC-092.80	001	285/04:09:58	RIO PICO	-44 Deg 18.6 Min	-70 Deg 57.9 Min	10/05/85	0056
AC-092.80	002	285/04:10:10	RIO PICO	-43 Deg 49.9 Min	-70 Deg 12.0 Min	10/05/85	0057
AC-092.80	003	285/04:10:21	RIO PICO	-43 Deg 20.8 Min	-69 Deg 26.8 Min	10/05/85	0058
AC-092.80	010	285/04:10:32	RIO PICO	-42 Deg 48.5 Min	-68 Deg 38.1 Min	01/30/85	0871
AC-092.80	011	285/04:10:44	RIO PICO	-42 Deg 18.8 Min	-67 Deg 54.6 Min	01/30/85	0872
AC-092.80	012	285/04:10:55	RIO PICO	-41 Deg 48.7 Min	-67 Deg 11.9 Min	01/30/85	0873
AB-093.20	008	285/04:37:55	FRANCE - GERMANY	44 Deg 29.6 Min	1 Deg 36.0 Min	04/07/86	2729
AB-093.20	009	285/04:38:07	FRANCE - GERMANY	44 Deg 58.8 Min	2 Deg 20.7 Min	04/07/86	2730
AB-093.20	010	285/04:38:18	FRANCE - GERMANY	45 Deg 27.6 Min	3 Deg 06.0 Min	04/07/86	2731
AB-093.20	011	285/04:38:29	FRANCE - GERMANY	45 Deg 56.2 Min	3 Deg 52.3 Min	04/07/86	2732
AB-093.20	012	285/04:38:40	FRANCE - GERMANY	46 Deg 24.2 Min	4 Deg 39.2 Min	04/07/86	2733
AB-093.20	013	285/04:38:51	FRANCE - GERMANY	46 Deg 52.1 Min	5 Deg 27.2 Min	04/07/86	2734
AB-093.20	013	285/04:39:01	FRANCE/GERMANY	47 Deg 18.9 Min	6 Deg 14.9 Min	04/08/86	2735
AB-093.20	001	285/04:39:02	FREIBURG, GERMANY	47 Deg 14.7 Min	6 Deg 19.0 Min	11/09/84	0224
AB-093.20	002	285/04:39:13	FREIBURG, GERMANY	47 Deg 42.0 Min	7 Deg 08.5 Min	11/09/84	0225
AB-093.20	014	285/04:39:13	FRANCE/GERMANY	47 Deg 46.0 Min	7 Deg 04.7 Min	04/08/86	2736
AB-093.20	004	285/04:39:20	FREIBURG, GERMANY	48 Deg 04.0 Min	7 Deg 47.7 Min	02/14/85	0180
AB-093.20	005	285/04:39:20	FREIBURG, GERMANY	48 Deg 01.7 Min	7 Deg 44.8 Min	08/04/85	2207
AB-093.20	003	285/04:39:24	FREIBURG, GERMANY	48 Deg 08.9 Min	7 Deg 58.9 Min	11/09/84	0226
AB-093.20	015	285/04:39:24	FRANCE/GERMANY	48 Deg 12.7 Min	7 Deg 55.2 Min	04/08/86	2737
AB-093.20	006	285/04:39:32	FREIBURG, GERMANY	48 Deg 28.2 Min	8 Deg 36.0 Min	08/04/85	2208
AB-093.20	016	285/04:39:35	FRANCE/GERMANY	48 Deg 39.0 Min	8 Deg 46.8 Min	04/08/86	2738
AB-093.20	007	285/04:39:40	FREIBURG, GERMANY	48 Deg 49.4 Min	9 Deg 18.2 Min	08/05/85	2209
AB-093.20	017	285/04:39:45	FRANCE/GERMANY	49 Deg 04.1 Min	9 Deg 37.9 Min	04/08/86	2739
Z4-094.20	007	285/06:06:55	NORTH ATLANTIC	45 Deg 00.3 Min	-20 Deg 51.5 Min	02/03/86	2615
Z4-094.20	008	285/06:07:06	NORTH ATLANTIC	45 Deg 28.5 Min	-20 Deg 08.0 Min	02/03/86	2616
Z4-094.20	004	285/06:07:11	N. ATLANTIC	45 Deg 39.8 Min	-19 Deg 51.4 Min	11/14/84	0245
Z4-094.20	009	285/06:07:17	NORTH ATLANTIC	45 Deg 56.4 Min	-19 Deg 23.7 Min	02/03/86	2617
Z4-094.20	005	285/06:07:22	N. ATLANTIC	46 Deg 07.6 Min	-19 Deg 06.8 Min	11/14/84	0246
Z4-094.20	010	285/06:07:27	NORTH ATLANTIC	46 Deg 23.9 Min	-18 Deg 38.7 Min	02/03/86	2618
Z4-094.20	006	285/06:07:32	N. ATLANTIC	46 Deg 35.1 Min	-18 Deg 21.5 Min	11/14/84	0247
Z4-094.20	011	285/06:07:36	NORTH ATLANTIC	46 Deg 45.2 Min	-18 Deg 03.0 Min	02/10/86	2619
Z4-094.20	012	285/06:07:46	NORTH ATLANTIC	47 Deg 12.2 Min	-17 Deg 16.6 Min	02/10/86	2620
Z4-094.20	013	285/06:07:57	NORTH ATLANTIC	47 Deg 38.8 Min	-16 Deg 29.3 Min	02/10/86	2621
Z4-094.20	001	285/06:08:03	NO. ATLANTIC - BUOY 2	47 Deg 52.4 Min	-16 Deg 06.0 Min	11/16/84	0248
Z4-094.20	014	285/06:08:07	NORTH ATLANTIC	48 Deg 02.9 Min	-15 Deg 45.2 Min	02/11/86	2622

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
Z4-094.20	002	285/06:08:14	NO. ATLANTIC - BUOY 2	48 Deg 18.6 Min	-15 Deg 17.4 Min	11/16/84	0249
Z4-094.20	015	285/06:08:17	NORTH ATLANTIC	48 Deg 28.9 Min	-14 Deg 56.3 Min	02/11/86	2623
Z4-094.20	003	285/06:08:24	NO. ATLANTIC - BUOY 2	48 Deg 44.3 Min	-14 Deg 28.0 Min	11/16/84	0250
Z4-094.20	016	285/06:08:28	NORTH ATLANTIC	48 Deg 54.4 Min	-14 Deg 06.6 Min	02/11/86	2624
Z4-094.20	017	285/06:08:38	NORTH ATLANTIC	49 Deg 21.1 Min	-13 Deg 11.4 Min	02/11/86	2625
Z4-094.20	018	285/06:08:49	NORTH ATLANTIC	49 Deg 45.8 Min	-12 Deg 19.8 Min	02/11/86	2626
K4-094.40	027	285/06:36:51	KALIMANTAN	3 Deg 14.6 Min	113 Deg 24.0 Min	12/03/85	2523
K4-094.40	001	285/06:37:00	KALIMANTAN, BORNEO	2 Deg 34.1 Min	113 Deg 49.1 Min	01/03/85	0617
K4-094.40	028	285/06:37:01	KALIMANTAN	2 Deg 38.4 Min	113 Deg 44.1 Min	12/03/85	2524
K4-094.40	002	285/06:37:10	KALIMANTAN, BORNEO	1 Deg 58.0 Min	114 Deg 09.4 Min	01/03/85	0618
K4-094.40	029	285/06:37:12	KALIMANTAN	2 Deg 02.6 Min	114 Deg 05.0 Min	12/03/85	2525
K4-094.40	003	285/06:37:21	KALIMANTAN, BORNEO	1 Deg 22.2 Min	114 Deg 30.1 Min	01/03/85	0619
K4-094.40	030	285/06:37:22	KALIMANTAN	1 Deg 26.6 Min	114 Deg 25.5 Min	12/03/85	2526
K4-094.40	004	285/06:37:31	KALIMANTAN, BORNEO	0 Deg 46.1 Min	114 Deg 50.7 Min	01/03/85	0620
K4-094.40	031	285/06:37:33	KALIMANTAN	0 Deg 48.3 Min	114 Deg 47.7 Min	12/05/85	2527
K4-094.40	026	285/06:37:38	BORNEO	0 Deg 31.2 Min	114 Deg 57.5 Min	11/08/85	2429
K4-094.40	025	285/06:37:41	BORNEO	0 Deg 21.0 Min	115 Deg 03.5 Min	08/29/85	2306
K4-094.40	005	285/06:37:42	KALIMANTAN, BORNEO	0 Deg 10.1 Min	115 Deg 11.0 Min	01/03/85	0621
K4-094.40	032	285/06:37:44	KALIMANTAN	0 Deg 12.9 Min	115 Deg 07.9 Min	12/05/85	2528
K4-094.40	006	285/06:37:47	KALIMANTAN, BORNEO	0 Deg 07.0 Min	115 Deg 20.8 Min	01/04/85	0628
K4-094.40	033	285/06:37:55	KALIMANTAN	0 Deg 23.7 Min	115 Deg 28.6 Min	12/05/85	2529
K4-094.40	013	285/06:37:57	KALIMANTAN, BORNEO	0 Deg 41.5 Min	115 Deg 39.4 Min	01/25/85	0835
K4-094.40	007	285/06:38:02	KALIMANTAN, BORNEO	0 Deg 57.9 Min	115 Deg 50.2 Min	01/03/85	0622
K4-094.40	034	285/06:38:05	KALIMANTAN	0 Deg 59.0 Min	115 Deg 49.1 Min	12/05/85	2530
K4-094.40	008	285/06:38:12	KALIMANTAN, BORNEO	-1 Deg 33.9 Min	116 Deg 10.8 Min	01/03/85	0623
K4-094.40	035	285/06:38:15	KALIMANTAN	-1 Deg 35.3 Min	116 Deg 09.9 Min	11/28/85	2531
K4-094.40	044	285/06:38:15	KALIMANTAN	-1 Deg 33.2 Min	116 Deg 09.1 Min	08/01/86	2929
K4-094.40	009	285/06:38:23	KALIMANTAN, BORNEO	-2 Deg 09.8 Min	116 Deg 31.4 Min	01/03/85	0624
K4-094.40	045	285/06:38:25	KALIMANTAN	-2 Deg 09.1 Min	116 Deg 29.7 Min	08/01/86	2930
K4-094.40	036	285/06:38:26	KALIMANTAN	-2 Deg 11.2 Min	116 Deg 30.5 Min	11/28/85	2532
K4-094.40	010	285/06:38:33	KALIMANTAN, BORNEO	-2 Deg 45.6 Min	116 Deg 52.2 Min	01/03/85	0625
K4-094.40	037	285/06:38:37	JAVA SEA	-2 Deg 47.1 Min	116 Deg 51.1 Min	11/28/85	2533
K4-094.40	011	285/06:38:44	KALIMANTAN, BORNEO	-3 Deg 21.5 Min	117 Deg 12.7 Min	01/03/85	0626
K4-094.40	038	285/06:38:47	JAVA SEA	-3 Deg 22.9 Min	117 Deg 11.8 Min	11/28/85	2534
K4-094.40	012	285/06:38:55	KALIMANTAN, BORNEO	-3 Deg 57.4 Min	117 Deg 33.4 Min	01/03/85	0627
K4-094.40	014	285/06:38:59	ARAFARA SEA	-4 Deg 04.9 Min	117 Deg 36.3 Min	08/06/85	2223
K4-094.40	015	285/06:39:10	ARAFARA SEA	-4 Deg 40.9 Min	117 Deg 56.9 Min	08/06/85	2224
K4-094.40	016	285/06:39:21	ARAFARA SEA	-5 Deg 16.5 Min	118 Deg 17.9 Min	08/06/85	2225
K4-094.40	017	285/06:39:31	ARAFARA SEA	-5 Deg 52.3 Min	118 Deg 38.7 Min	08/06/85	2226
K4-094.40	018	285/06:39:42	ARAFARA SEA	-6 Deg 28.1 Min	118 Deg 59.6 Min	08/06/85	2227
K4-094.40	019	285/06:39:52	ARAFARA SEA	-7 Deg 04.0 Min	119 Deg 20.3 Min	08/06/85	2228
AK-096.20	004	285/08:58:52	SOUTHEASTERN U.S.	27 Deg 24.7 Min	-84 Deg 33.8 Min	09/23/85	2369
AK-096.20	005	285/08:59:02	SOUTHEASTERN U.S.	27 Deg 58.9 Min	-84 Deg 06.7 Min	09/23/85	2370
AK-096.20	006	285/08:59:13	SOUTHEASTERN U.S.	28 Deg 33.4 Min	-83 Deg 39.9 Min	09/23/85	2371
AK-096.20	001	285/08:59:23	FLORIDA	29 Deg 03.4 Min	-83 Deg 14.8 Min	10/28/84	0131
AK-096.20	007	285/08:59:24	SOUTHEASTERN U.S.	29 Deg 07.7 Min	-83 Deg 12.4 Min	09/23/85	2372
AK-096.20	002	285/08:59:34	FLORIDA	29 Deg 37.8 Min	-82 Deg 47.5 Min	10/28/84	0132
AK-096.20	008	285/08:59:34	SOUTHEASTERN U.S.	29 Deg 41.7 Min	-82 Deg 44.5 Min	09/23/85	2373
AK-096.20	003	285/08:59:44	FLORIDA	30 Deg 11.9 Min	-82 Deg 19.5 Min	10/28/84	0133
AK-096.20	012	285/08:59:44	FLORIDA (SLANT RANGE)	30 Deg 11.0 Min	-82 Deg 22.0 Min	06/04/86	2899
AK-096.20	009	285/08:59:45	SOUTHEASTERN U.S.	30 Deg 15.6 Min	-82 Deg 16.4 Min	09/23/85	2374
AK-096.20	010	285/09:00:01	SOUTHEASTERN U.S.	31 Deg 03.6 Min	-81 Deg 30.3 Min	09/24/85	2375
AK-096.20	013	285/09:00:01	SOUTHEASTERN U.S.	31 Deg 03.6 Min	-81 Deg 30.3 Min	02/23/87	2978
AK-096.20	014	285/09:00:01	SOUTHEASTERN U.S.	31 Deg 03.5 Min	-81 Deg 30.2 Min	04/16/87	2992
AK-096.20	011	285/09:00:04	SOUTHEASTERN U.S.	31 Deg 16.0 Min	-81 Deg 19.5 Min	11/22/85	2493
AW-096.21	025	285/09:00:52	EAST COAST,U.S.	33 Deg 37.0 Min	-78 Deg 54.1 Min	12/30/85	2553
AW-096.21	003	285/09:01:00	N./S. CAROLINA	33 Deg 59.1 Min	-78 Deg 31.6 Min	11/22/84	0313
AW-096.21	026	285/09:01:03	EAST COAST,U.S.	34 Deg 09.9 Min	-78 Deg 23.2 Min	12/30/85	2554
AW-096.21	004	285/09:01:11	NORTH CAROLINA	34 Deg 32.1 Min	-78 Deg 00.6 Min	11/22/84	0314
AW-096.21	027	285/09:01:14	EAST COAST,U.S.	34 Deg 42.7 Min	-77 Deg 51.8 Min	12/30/85	2555
AW-096.21	005	285/09:01:21	NORTH CAROLINA	35 Deg 04.7 Min	-77 Deg 28.9 Min	11/22/84	0315

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AW-096.21	028	285/09:01:24	EAST COAST,U.S.	35 Deg 15.2 Min	-77 Deg 19.9 Min	12/30/85	2556
AW-096.21	006	285/09:01:32	NORTH CAROLINA	35 Deg 37.4 Min	-76 Deg 57.1 Min	11/22/84	0316
AW-096.21	029	285/09:01:35	EAST COAST,U.S.	35 Deg 48.6 Min	-76 Deg 48.9 Min	12/30/85	2557
AW-096.21	017	285/09:01:40	NORTH CAROLINA	36 Deg 09.6 Min	-76 Deg 28.4 Min	12/12/84	0422
AW-096.21	007	285/09:01:42	NORTH CAROLINA	36 Deg 09.6 Min	-76 Deg 24.2 Min	11/22/84	0317
AW-096.21	030	285/09:01:46	EAST COAST,U.S.	36 Deg 20.8 Min	-76 Deg 16.1 Min	12/30/85	2558
AW-096.21	008	285/09:01:53	NEW YORK BIGHT	36 Deg 41.9 Min	-75 Deg 51.3 Min	11/22/84	0318
AW-096.21	031	285/09:01:56	EAST COAST,U.S.	36 Deg 53.2 Min	-75 Deg 42.4 Min	12/31/85	2559
AW-096.21	009	285/09:02:04	NEW YORK BIGHT	37 Deg 14.2 Min	-75 Deg 17.4 Min	11/22/84	0319
AW-096.21	032	285/09:02:07	EAST COAST,U.S.	37 Deg 25.1 Min	-75 Deg 08.6 Min	12/31/85	2560
AW-096.21	010	285/09:02:15	NEW YORK BIGHT	37 Deg 46.1 Min	-74 Deg 43.0 Min	11/22/84	0320
AW-096.21	033	285/09:02:18	EAST COAST,U.S.	37 Deg 56.7 Min	-74 Deg 34.3 Min	12/31/85	2561
AW-096.21	011	285/09:02:25	NEW YORK BIGHT	38 Deg 17.7 Min	-74 Deg 08.5 Min	11/22/84	0321
AW-096.21	034	285/09:02:28	EAST COAST,U.S.	38 Deg 28.1 Min	-73 Deg 59.6 Min	12/31/85	2562
AW-096.21	012	285/09:02:36	NEW YORK BIGHT	38 Deg 49.3 Min	-73 Deg 33.6 Min	11/22/84	0322
AW-096.21	035	285/09:02:39	EAST COAST,U.S.	38 Deg 59.3 Min	-73 Deg 24.3 Min	12/31/85	2563
AW-096.21	001	285/09:02:41	NEW YORK BIGHT	39 Deg 04.2 Min	-73 Deg 17.3 Min	10/26/84	0134
AW-096.21	002	285/09:02:51	NEW YORK BIGHT	39 Deg 33.2 Min	-72 Deg 43.2 Min	10/26/84	0135
AW-096.21	021	285/09:02:59	NEW YORK BIGHT	39 Deg 58.7 Min	-72 Deg 14.9 Min	09/18/85	2364
AW-096.21	022	285/09:02:59	NORTH ATLANTIC COAST	39 Deg 58.5 Min	-72 Deg 15.2 Min	11/01/85	2430
AW-096.21	013	285/09:03:00	NORTH ATLANTIC COAST	39 Deg 59.2 Min	-72 Deg 12.7 Min	11/22/84	0323
AW-096.21	018	285/09:03:08	NORTH ATLANTIC COAST	40 Deg 25.0 Min	-71 Deg 43.3 Min	08/15/85	2271
AW-096.21	023	285/09:03:10	NORTH ATLANTIC COAST	40 Deg 28.2 Min	-71 Deg 37.0 Min	11/01/85	2431
AW-096.21	014	285/09:03:11	NORTH ATLANTIC COAST	40 Deg 30.0 Min	-71 Deg 35.9 Min	11/22/84	0324
AW-096.21	024	285/09:03:16	NORTH ATLANTIC COAST	40 Deg 47.4 Min	-71 Deg 15.7 Min	12/17/85	2551
AW-096.21	015	285/09:03:21	NORTH ATLANTIC COAST	41 Deg 00.6 Min	-70 Deg 58.5 Min	11/22/84	0325
AW-096.21	019	285/09:03:29	CAPE COD,MA	41 Deg 23.5 Min	-70 Deg 28.2 Min	09/18/85	2362
AW-096.21	016	285/09:03:32	NORTH ATLANTIC COAST	41 Deg 31.0 Min	-70 Deg 20.5 Min	11/22/84	0326
AW-096.21	020	285/09:03:40	CAPE COD,MA	41 Deg 53.6 Min	-69 Deg 49.6 Min	09/18/85	2363
UE-096.40	020	285/09:27:51	SAUDI ARABIA	23 Deg 12.7 Min	49 Deg 44.1 Min	08/15/85	2272
UE-096.40	021	285/09:28:02	SAUDI ARABIA	22 Deg 38.1 Min	50 Deg 10.4 Min	08/15/85	2273
UE-096.40	022	285/09:28:13	SAUDI ARABIA	22 Deg 04.3 Min	50 Deg 35.8 Min	08/15/85	2274
UE-096.40	023	285/09:28:23	SAUDI ARABIA	21 Deg 29.9 Min	51 Deg 01.2 Min	08/15/85	2275
UE-096.40	025	285/09:28:31	SAUDI ARABIA	21 Deg 03.9 Min	51 Deg 20.3 Min	08/16/85	2277
UE-096.40	026	285/09:28:42	SAUDI ARABIA	20 Deg 29.4 Min	51 Deg 45.4 Min	08/16/85	2278
UE-096.40	027	285/09:28:52	SAUDI ARABIA	19 Deg 54.8 Min	52 Deg 10.2 Min	08/16/85	2279
UE-096.40	014	285/09:29:00	UBAR	19 Deg 32.6 Min	52 Deg 25.9 Min	07/23/85	2146
UE-096.40	028	285/09:29:03	SAUDI ARABIA	19 Deg 22.0 Min	52 Deg 33.4 Min	08/17/85	2280
UE-096.40	015	285/09:29:10	UBAR	18 Deg 57.8 Min	52 Deg 50.4 Min	07/23/85	2147
UE-096.40	029	285/09:29:13	SAUDI ARABIA	18 Deg 47.2 Min	52 Deg 57.9 Min	08/17/85	2281
UE-096.40	016	285/09:29:20	UBAR	18 Deg 23.4 Min	53 Deg 14.4 Min	07/24/85	2148
UE-096.40	030	285/09:29:24	SAUDI ARABIA	18 Deg 12.2 Min	53 Deg 22.1 Min	08/17/85	2282
UE-096.40	017	285/09:29:31	UBAR	17 Deg 48.4 Min	53 Deg 38.4 Min	07/24/85	2149
UE-096.40	031	285/09:29:34	SAUDI ARABIA	17 Deg 37.2 Min	53 Deg 46.1 Min	08/17/85	2283
UE-096.40	018	285/09:29:42	UBAR	17 Deg 12.9 Min	54 Deg 02.6 Min	07/23/85	2150
UE-096.40	032	285/09:29:45	SAUDI ARABIA	17 Deg 02.1 Min	54 Deg 09.9 Min	08/17/85	2284
UE-096.40	019	285/09:29:53	UBAR	16 Deg 37.8 Min	54 Deg 26.2 Min	07/23/85	2151
UE-096.40	033	285/09:29:56	SAUDI ARABIA	16 Deg 27.0 Min	54 Deg 33.5 Min	08/17/85	2285
AJ-097.20	010	285/10:31:52	MISSOURI	38 Deg 35.5 Min	-93 Deg 02.8 Min	09/03/85	2327
AJ-097.20	011	285/10:32:03	MISSOURI	39 Deg 06.7 Min	-92 Deg 25.0 Min	09/06/85	2328
AJ-097.20	001	285/10:32:08	ILLINOIS	39 Deg 22.2 Min	-92 Deg 05.6 Min	10/22/84	0086
AJ-097.20	005	285/10:32:17	ILLINOIS	39 Deg 45.8 Min	-91 Deg 36.4 Min	05/19/85	1665
AJ-097.20	002	285/10:32:19	ILLINOIS	39 Deg 52.8 Min	-91 Deg 27.2 Min	10/22/84	0087
AJ-097.20	007	285/10:32:25	ILLINOIS	40 Deg 08.1 Min	-91 Deg 07.9 Min	08/10/85	2252
AJ-097.20	012	285/10:32:29	ILLINOIS	40 Deg 19.6 Min	-90 Deg 53.0 Min	03/04/86	2662
AJ-097.20	003	285/10:32:30	ILLINOIS	40 Deg 23.1 Min	-90 Deg 48.1 Min	10/22/84	0088
AJ-097.20	013	285/10:32:30	ILLINOIS	40 Deg 20.5 Min	-90 Deg 51.9 Min	03/12/86	2694
AJ-097.20	008	285/10:32:36	ILLINOIS	40 Deg 38.4 Min	-90 Deg 28.4 Min	08/10/85	2253
AJ-097.20	004	285/10:32:43	ILLINOIS/WISCONSIN	41 Deg 02.5 Min	-89 Deg 56.2 Min	03/13/85	1171
AJ-097.20	009	285/10:32:47	ILLINOIS	41 Deg 08.4 Min	-89 Deg 48.3 Min	08/10/85	2254
AJ-097.20	006	285/10:32:49	WISCONSIN	41 Deg 14.3 Min	-89 Deg 40.3 Min	06/18/85	1896

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
VF-097.40	005	285/10:47:59	ENGLISH CHANNEL	51 Deg 26.0 Min	0 Deg 48.9 Min	06/18/85	1890
VF-097.40	006	285/10:48:10	ENGLISH CHANNEL	51 Deg 02.0 Min	1 Deg 43.4 Min	06/18/85	1891
VF-097.40	007	285/10:48:21	ENGLISH CHANNEL	50 Deg 37.5 Min	2 Deg 36.9 Min	06/18/85	1892
VF-097.40	008	285/10:48:31	ENGLISH CHANNEL	50 Deg 12.7 Min	3 Deg 29.3 Min	06/18/85	1893
VF-097.40	009	285/10:48:42	ENGLISH CHANNEL	49 Deg 47.4 Min	4 Deg 20.9 Min	06/18/85	1894
VF-097.40	010	285/10:48:53	ENGLISH CHANNEL	49 Deg 21.7 Min	5 Deg 11.6 Min	06/18/85	1895
VF-097.40	001	285/10:48:59	FREIBURG, GERMANY	49 Deg 04.8 Min	5 Deg 45.1 Min	10/20/84	0080
VF-097.40	002	285/10:49:10	FREIBURG, GERMANY	48 Deg 38.4 Min	6 Deg 34.4 Min	10/20/84	0081
VF-097.40	003	285/10:49:20	FREIBURG, GERMANY	48 Deg 11.6 Min	7 Deg 22.8 Min	10/20/84	0082
VF-097.40	004	285/10:49:29	FREIBURG, GERMANY	47 Deg 49.7 Min	8 Deg 01.4 Min	11/08/84	0211
VF-097.40	011	285/10:49:29	FREIBURG, GERMANY	47 Deg 50.6 Min	7 Deg 58.7 Min	08/04/85	2210
VF-097.40	012	285/10:49:40	FREIBURG, GERMANY	47 Deg 23.3 Min	8 Deg 45.5 Min	08/04/85	2211
VF-097.40	013	285/10:49:51	FREIBURG, GERMANY	46 Deg 55.6 Min	9 Deg 31.5 Min	08/04/85	2212
V4-097.50	004	285/10:57:11	SUDAN/EGYPT	24 Deg 54.0 Min	33 Deg 12.2 Min	12/19/84	0574
V4-097.50	005	285/10:57:22	SUDAN/EGYPT	24 Deg 19.2 Min	33 Deg 36.6 Min	12/19/84	0575
V4-097.50	006	285/10:57:32	SUDAN/EGYPT	23 Deg 44.4 Min	34 Deg 00.8 Min	12/19/84	0576
V4-097.50	001	285/10:57:42	EGYPT/SUDAN	23 Deg 17.9 Min	34 Deg 19.1 Min	11/07/84	0198
V4-097.50	007	285/10:57:43	SUDAN/EGYPT	23 Deg 08.8 Min	34 Deg 25.4 Min	12/19/84	0577
V4-097.50	002	285/10:57:52	EGYPT/SUDAN	22 Deg 42.9 Min	34 Deg 43.0 Min	11/07/84	0199
V4-097.50	008	285/10:57:53	SUDAN/EGYPT	22 Deg 33.8 Min	34 Deg 49.2 Min	12/19/84	0578
V4-097.50	003	285/10:58:03	EGYPT/SUDAN	22 Deg 07.9 Min	35 Deg 06.7 Min	11/07/84	0200
V4-097.50	009	285/10:58:04	SUDAN/EGYPT	21 Deg 58.9 Min	35 Deg 12.8 Min	12/19/84	0579
V4-097.50	010	285/10:58:14	SUDAN/EGYPT	21 Deg 23.7 Min	35 Deg 36.2 Min	12/19/84	0580
V4-097.50	011	285/10:58:22	SUDAN/EGYPT	20 Deg 58.4 Min	35 Deg 53.0 Min	12/20/84	0581
V4-097.50	012	285/10:58:32	SUDAN/EGYPT	20 Deg 23.1 Min	36 Deg 16.1 Min	12/20/84	0582
V4-097.50	013	285/10:58:43	SUDAN/EGYPT	19 Deg 47.9 Min	36 Deg 39.0 Min	12/20/84	0583
V4-097.50	014	285/10:58:53	SUDAN/EGYPT	19 Deg 12.6 Min	37 Deg 01.8 Min	12/20/84	0584
AM-098.20	013	285/11:58:53	CALIFORNIA/NEVADA	32 Deg 33.5 Min	-120 Deg 58.2 Min	04/05/85	1347
AM-098.20	014	285/11:59:03	CALIFORNIA/NEVADA	33 Deg 05.0 Min	-120 Deg 27.4 Min	04/05/85	1348
AM-098.20	024	285/11:59:03	CALIFORNIA/NEVADA	33 Deg 06.5 Min	-120 Deg 28.5 Min	03/04/86	2663
AM-098.20	015	285/11:59:14	CALIFORNIA/NEVADA	33 Deg 36.3 Min	-119 Deg 56.1 Min	04/05/85	1349
AM-098.20	025	285/11:59:14	CALIFORNIA/NEVADA	33 Deg 37.8 Min	-119 Deg 57.3 Min	03/04/86	2664
AM-098.20	016	285/11:59:24	CALIFORNIA/NEVADA	34 Deg 07.3 Min	-119 Deg 24.7 Min	04/05/85	1350
AM-098.20	017	285/11:59:35	CALIFORNIA/NEVADA	34 Deg 38.3 Min	-118 Deg 52.6 Min	04/05/85	1351
AM-098.20	001	285/11:59:45	DEATH VALLEY,CA	35 Deg 10.9 Min	-118 Deg 20.6 Min	10/24/84	0083
AM-098.20	018	285/11:59:45	CALIFORNIA/NEVADA	35 Deg 09.1 Min	-118 Deg 20.1 Min	04/05/85	1352
AM-098.20	002	285/11:59:55	DEATH VALLEY,CA	35 Deg 41.5 Min	-117 Deg 47.6 Min	10/24/84	0084
AM-098.20	026	285/12:00:03	DEATH VALLEY,CA	36 Deg 04.0 Min	-117 Deg 23.2 Min	07/15/86	2923
AM-098.20	023	285/12:00:04	DEATH VALLEY,CA	36 Deg 05.3 Min	-117 Deg 21.7 Min	05/01/85	1528
AM-098.20	003	285/12:00:06	DEATH VALLEY,CA	36 Deg 11.9 Min	-117 Deg 14.2 Min	10/24/84	0085
AM-098.20	005	285/12:00:12	DEATH VALLEY,CA	36 Deg 29.7 Min	-116 Deg 54.3 Min	11/15/84	0261
AM-098.20	027	285/12:00:13	DEATH VALLEY,CA	36 Deg 33.1 Min	-116 Deg 50.7 Min	07/16/86	2924
AM-098.20	004	285/12:00:18	DEATH VALLEY,CA	36 Deg 46.0 Min	-116 Deg 35.8 Min	10/30/84	0100
AM-098.20	019	285/12:00:24	CALIFORNIA/NEVADA	37 Deg 02.6 Min	-116 Deg 14.2 Min	04/06/85	1353
AM-098.20	028	285/12:00:24	DEATH VALLEY,CA	37 Deg 04.5 Min	-116 Deg 14.9 Min	07/15/86	2925
AM-098.20	020	285/12:00:34	CALIFORNIA/NEVADA	37 Deg 32.5 Min	-115 Deg 39.3 Min	04/06/85	1354
AM-098.20	021	285/12:00:45	CALIFORNIA/NEVADA	38 Deg 02.2 Min	-115 Deg 04.0 Min	04/06/85	1355
AM-098.20	022	285/12:00:55	CALIFORNIA/NEVADA	38 Deg 31.7 Min	-114 Deg 28.0 Min	04/06/85	1356
W4-098.30	001	285/12:18:07	NORTH ATLANTIC	46 Deg 26.7 Min	-18 Deg 12.7 Min	01/28/85	0854
W4-098.30	002	285/12:18:17	NORTH ATLANTIC	46 Deg 01.3 Min	-17 Deg 26.2 Min	01/28/85	0855
AP-099.20	013	285/13:22:48	HAWAII	17 Deg 09.2 Min	-156 Deg 48.2 Min	05/25/86	2890
AP-099.20	014	285/13:22:58	HAWAII	17 Deg 44.2 Min	-156 Deg 25.2 Min	05/25/86	2891
AP-099.20	004	285/13:23:00	HAWAII	17 Deg 55.6 Min	-156 Deg 18.8 Min	02/13/85	0964
AP-099.20	015	285/13:23:09	HAWAII	18 Deg 19.3 Min	-156 Deg 02.0 Min	05/25/86	2892
AP-099.20	005	285/13:23:10	HAWAII	18 Deg 30.8 Min	-155 Deg 56.0 Min	02/13/85	0965
AP-099.20	001	285/13:23:14	HAWAII (SOUTH POINT)	18 Deg 37.5 Min	-155 Deg 52.4 Min	10/16/84	0053
AP-099.20	016	285/13:23:20	HAWAII	18 Deg 54.2 Min	-155 Deg 38.6 Min	05/25/86	2893
AP-099.20	006	285/13:23:21	HAWAII	19 Deg 05.7 Min	-155 Deg 32.6 Min	02/13/85	0966
AP-099.20	011	285/13:23:21	HAWAII (SLANT RANGE)	18 Deg 58.0 Min	-155 Deg 37.4 Min	05/10/86	2842
AP-099.20	022	285/13:23:23	HAWAII	19 Deg 08.0 Min	-155 Deg 30.7 Min	02/05/87	2951
AP-099.20	002	285/13:23:24	HAWAII (KILAUEA)	19 Deg 12.4 Min	-155 Deg 28.9 Min	10/16/84	0054

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AP-099.20	017	285/13:23:29	HAWAII	19 Deg 27.2 Min	-155 Deg 16.4 Min	05/28/86	2894
AP-099.20	007	285/13:23:31	HAWAII	19 Deg 40.5 Min	-155 Deg 09.0 Min	02/13/85	0967
AP-099.20	012	285/13:23:31	HAWAII (SLANT RANGE)	19 Deg 32.9 Min	-155 Deg 13.9 Min	05/10/86	2843
AP-099.20	023	285/13:23:34	HAWAII	19 Deg 42.9 Min	-155 Deg 07.1 Min	02/05/87	2952
AP-099.20	003	285/13:23:35	HAWAII (HILO BAY)	19 Deg 47.1 Min	-155 Deg 05.3 Min	10/16/84	0055
AP-099.20	018	285/13:23:40	HAWAII	20 Deg 02.0 Min	-154 Deg 52.6 Min	05/28/86	2895
AP-099.20	008	285/13:23:42	HAWAII	20 Deg 15.3 Min	-154 Deg 45.3 Min	02/13/85	0968
AP-099.20	019	285/13:23:51	HAWAII	20 Deg 36.8 Min	-154 Deg 28.7 Min	05/28/86	2896
AP-099.20	009	285/13:23:53	HAWAII	20 Deg 50.0 Min	-154 Deg 21.3 Min	02/13/85	0969
AP-099.20	020	285/13:24:01	HAWAII	21 Deg 11.4 Min	-154 Deg 04.6 Min	05/28/86	2897
AP-099.20	010	285/13:24:03	HAWAII	21 Deg 24.3 Min	-153 Deg 57.3 Min	02/13/85	0970
AP-099.20	021	285/13:24:11	HAWAII COAST	21 Deg 46.6 Min	-153 Deg 39.6 Min	06/04/86	2898
I4-104.20	001	285/20:48:03	BANGLADESH	21 Deg 31.7 Min	89 Deg 25.8 Min	10/21/84	0092
I4-104.20	004	285/20:48:10	BANGLADESH	22 Deg 00.7 Min	89 Deg 45.5 Min	06/21/85	1910
OI-104.20	015	285/20:48:10	BANGLADESH- LOOK 2	21 Deg 57.4 Min	89 Deg 43.3 Min	06/14/86	2914
I4-104.20	002	285/20:48:13	BANGLADESH	22 Deg 06.5 Min	89 Deg 49.3 Min	10/21/84	0093
I4-104.20	015	285/20:48:13	BANGLADESH	22 Deg 08.3 Min	89 Deg 50.7 Min	02/05/87	2953
I4-104.20	005	285/20:48:21	BANGLADESH	22 Deg 35.4 Min	90 Deg 09.1 Min	06/21/85	1911
I4-104.20	003	285/20:48:24	BANGLADESH	22 Deg 41.3 Min	90 Deg 13.0 Min	10/21/84	0094
I4-104.20	006	285/20:48:31	BANGLADESH	23 Deg 10.1 Min	90 Deg 33.0 Min	06/21/85	1912
I4-104.20	007	285/20:48:42	BANGLADESH	23 Deg 44.6 Min	90 Deg 57.0 Min	06/21/85	1913
I4-104.20	008	285/20:48:52	BANGLADESH	24 Deg 19.1 Min	91 Deg 21.3 Min	06/21/85	1914
I4-104.20	009	285/20:49:03	BANGLADESH	24 Deg 53.6 Min	91 Deg 45.9 Min	06/21/85	1915
I4-104.20	010	285/20:49:13	BANGLADESH	25 Deg 28.0 Min	92 Deg 10.6 Min	06/21/85	1916
I4-104.20	011	285/20:49:24	BANGLADESH	26 Deg 02.4 Min	92 Deg 35.7 Min	06/21/85	1917
I4-104.20	012	285/20:49:34	BANGLADESH	26 Deg 36.6 Min	93 Deg 01.0 Min	06/21/85	1918
I4-104.20	013	285/20:49:44	BANGLADESH	27 Deg 10.8 Min	93 Deg 26.5 Min	06/21/85	1919
I4-104.20	014	285/20:49:55	BANGLADESH	27 Deg 44.9 Min	93 Deg 52.4 Min	06/21/85	1920
AG-104.40	018	285/21:38:40	RIO PICO	-37 Deg 34.4 Min	-80 Deg 00.8 Min	03/23/85	1262
AG-104.40	019	285/21:38:51	RIO PICO	-38 Deg 03.6 Min	-79 Deg 23.8 Min	03/23/85	1263
AG-104.40	020	285/21:39:01	RIO PICO	-38 Deg 32.6 Min	-78 Deg 46.3 Min	03/23/85	1264
AG-104.40	021	285/21:39:12	RIO PICO	-39 Deg 01.6 Min	-78 Deg 07.9 Min	03/23/85	1265
AG-104.40	022	285/21:39:23	RIO PICO	-39 Deg 30.2 Min	-77 Deg 29.0 Min	03/23/85	1266
AG-104.40	023	285/21:39:33	RIO PICO	-39 Deg 58.2 Min	-76 Deg 50.0 Min	03/23/85	1267
AG-104.40	024	285/21:39:44	RIO PICO	-40 Deg 26.4 Min	-76 Deg 09.8 Min	03/23/85	1268
AG-104.40	025	285/21:39:55	RIO PICO	-40 Deg 54.0 Min	-75 Deg 29.3 Min	03/23/85	1269
AG-104.40	001	285/21:40:00	RIO PICO	-41 Deg 06.4 Min	-75 Deg 10.8 Min	11/30/84	0393
AG-104.40	002	285/21:40:11	RIO PICO	-41 Deg 33.6 Min	-74 Deg 29.4 Min	11/30/84	0394
AG-104.40	003	285/21:40:21	RIO PICO	-42 Deg 00.4 Min	-73 Deg 47.4 Min	11/30/84	0395
AG-104.40	004	285/21:40:32	RIO PICO	-42 Deg 27.1 Min	-73 Deg 04.5 Min	11/30/84	0396
AG-104.40	027	285/21:40:34	RIO PICO	-42 Deg 30.2 Min	-72 Deg 59.7 Min	07/17/85	2111
AG-104.40	005	285/21:40:43	RIO PICO	-42 Deg 53.3 Min	-72 Deg 21.2 Min	11/30/84	0397
AG-104.40	028	285/21:40:45	RIO PICO	-42 Deg 56.4 Min	-72 Deg 16.2 Min	07/17/85	2112
AG-104.40	006	285/21:40:53	RIO PICO	-43 Deg 19.2 Min	-71 Deg 37.2 Min	11/30/84	0398
AG-104.40	026	285/21:40:53	RIO PICO	-43 Deg 57.9 Min	-70 Deg 29.0 Min	06/15/85	1837
AG-104.40	029	285/21:40:53	RIO PICO (FULL SWATH)	-43 Deg 14.3 Min	-71 Deg 45.7 Min	10/31/85	1878
AG-104.40	030	285/21:40:53	RIO PICO (SLANT RANGE)	-43 Deg 14.3 Min	-71 Deg 45.7 Min	05/11/86	2846
AG-104.40	031	285/21:40:55	RIO PICO	-43 Deg 19.2 Min	-71 Deg 37.4 Min	10/23/86	2944
AG-104.40	007	285/21:41:04	RIO PICO	-43 Deg 44.9 Min	-70 Deg 52.2 Min	11/30/84	0399
AG-104.40	008	285/21:41:15	RIO PICO	-44 Deg 10.0 Min	-70 Deg 06.8 Min	11/30/84	0400
AG-104.40	009	285/21:41:25	RIO PICO	-44 Deg 34.8 Min	-69 Deg 20.8 Min	11/30/84	0401
AG-104.40	010	285/21:41:36	RIO PICO	-44 Deg 59.3 Min	-68 Deg 33.8 Min	11/30/84	0402
AG-104.40	011	285/21:41:47	RIO PICO	-45 Deg 23.3 Min	-67 Deg 46.3 Min	11/30/84	0403
AG-104.40	012	285/21:41:57	RIO PICO	-45 Deg 46.9 Min	-66 Deg 58.1 Min	11/30/84	0404
AG-104.40	013	285/21:42:05	RIO PICO	-46 Deg 05.5 Min	-66 Deg 19.1 Min	03/10/85	1140
AG-104.40	014	285/21:42:16	RIO PICO	-46 Deg 28.3 Min	-65 Deg 29.5 Min	03/10/85	1141
AG-104.40	015	285/21:42:26	RIO PICO	-46 Deg 50.8 Min	-64 Deg 39.2 Min	03/10/85	1142
AG-104.40	016	285/21:42:37	RIO PICO	-47 Deg 12.7 Min	-63 Deg 48.2 Min	03/10/85	1143
AG-104.40	017	285/21:42:48	RIO PICO	-47 Deg 34.3 Min	-62 Deg 56.4 Min	03/10/85	1144
AS-104.50	001	285/21:48:00	SO. OCEAN	-56 Deg 08.2 Min	-32 Deg 52.4 Min	12/08/84	0500
AS-104.50	002	285/21:48:11	SO. OCEAN	-56 Deg 11.0 Min	-31 Deg 34.3 Min	12/08/84	0501

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AS-104.50	003	285/21:48:22	SO. OCEAN	-56 Deg 12.9 Min	-30 Deg 16.1 Min	12/08/84	0502
AS-104.50	004	285/21:48:34	SO. OCEAN	-56 Deg 13.9 Min	-28 Deg 57.2 Min	12/08/84	0503
AS-104.50	005	285/21:48:45	SO. OCEAN	-56 Deg 14.0 Min	-27 Deg 38.9 Min	12/08/84	0504
AS-104.50	006	285/21:48:55	SO. OCEAN	-56 Deg 13.3 Min	-26 Deg 28.5 Min	12/08/84	0505
AS-104.50	007	285/21:49:06	SO. OCEAN	-56 Deg 11.7 Min	-25 Deg 10.2 Min	12/08/84	0506
AS-104.50	008	285/21:49:17	SO. OCEAN	-56 Deg 09.2 Min	-23 Deg 52.1 Min	12/08/84	0507
AS-104.50	009	285/21:49:29	SO. OCEAN	-56 Deg 05.8 Min	-22 Deg 34.2 Min	12/08/84	0508
AS-104.50	010	285/21:49:40	SO. OCEAN	-56 Deg 01.5 Min	-21 Deg 16.4 Min	12/08/84	0509
AS-104.50	011	285/21:49:51	SO. OCEAN	-55 Deg 56.2 Min	-19 Deg 59.1 Min	12/08/84	0510
AS-104.50	012	285/21:50:02	SO. OCEAN	-55 Deg 47.3 Min	-18 Deg 42.9 Min	12/08/84	0511
AS-104.50	013	285/21:50:12	SOUTH OCEAN	-55 Deg 41.0 Min	-17 Deg 32.7 Min	05/27/85	1733
AS-104.50	014	285/21:50:24	SOUTH OCEAN	-55 Deg 33.3 Min	-16 Deg 16.7 Min	05/27/85	1734
AS-104.50	015	285/21:50:35	SOUTH OCEAN	-55 Deg 24.7 Min	-15 Deg 01.3 Min	05/27/85	1735
AS-104.50	016	285/21:50:46	SOUTH OCEAN	-55 Deg 15.3 Min	-13 Deg 46.1 Min	05/27/85	1736
AS-104.50	017	285/21:50:57	SOUTH OCEAN	-55 Deg 05.0 Min	-12 Deg 31.9 Min	05/27/85	1737
AS-104.50	018	285/21:51:09	SOUTH OCEAN	-54 Deg 53.9 Min	-11 Deg 18.3 Min	05/27/85	1738
AS-104.50	019	285/21:51:20	SOUTH OCEAN	-54 Deg 42.0 Min	-10 Deg 05.4 Min	05/27/85	1739
AS-104.50	020	285/21:51:31	SOUTH OCEAN	-54 Deg 29.3 Min	-8 Deg 53.4 Min	05/27/85	1740
AS-104.50	021	285/21:51:42	SOUTH OCEAN	-54 Deg 15.9 Min	-7 Deg 42.1 Min	05/27/85	1741
AS-104.50	022	285/21:51:54	SOUTH OCEAN	-54 Deg 01.7 Min	-6 Deg 31.7 Min	05/27/85	1742
S5-104.60	001	285/21:59:42	AGULHAS	-35 Deg 36.6 Min	28 Deg 37.0 Min	07/24/85	2164
S5-104.60	002	285/21:59:54	AGULHAS	-35 Deg 04.1 Min	29 Deg 11.6 Min	07/24/85	2165
S5-104.60	003	285/22:00:05	AGULHAS	-34 Deg 31.3 Min	29 Deg 45.8 Min	07/24/85	2166
S5-104.60	004	285/22:00:16	AGULHAS	-33 Deg 58.4 Min	30 Deg 19.4 Min	07/24/85	2167
S5-104.60	005	285/22:00:32	AGULHAS	-33 Deg 07.5 Min	31 Deg 10.2 Min	07/27/85	2168
S5-104.60	006	285/22:00:42	AGULHAS	-32 Deg 35.5 Min	31 Deg 34.3 Min	07/27/85	2169
S5-104.60	007	285/22:00:53	AGULHAS	-32 Deg 04.9 Min	32 Deg 10.5 Min	07/27/85	2170
S5-104.60	008	285/22:01:04	AGULHAS	-31 Deg 31.3 Min	32 Deg 42.0 Min	07/27/85	2171
S5-104.60	010	285/22:01:12	AGULHAS	-31 Deg 05.4 Min	33 Deg 05.9 Min	07/27/85	2173
S5-104.60	009	285/22:01:15	AGULHAS	-30 Deg 57.4 Min	33 Deg 13.2 Min	07/27/85	2172
S5-104.60	011	285/22:01:24	AGULHAS	-30 Deg 31.4 Min	33 Deg 36.8 Min	07/27/85	2174
S5-104.60	012	285/22:01:35	AGULHAS	-29 Deg 57.2 Min	34 Deg 07.3 Min	07/27/85	2175
S5-104.60	013	285/22:01:46	AGULHAS	-29 Deg 22.8 Min	34 Deg 37.4 Min	07/27/85	2176
S5-104.60	014	285/22:01:57	AGULHAS	-28 Deg 48.3 Min	35 Deg 07.1 Min	07/27/85	2177
S5-104.60	015	285/22:02:06	AGULHAS	-28 Deg 17.3 Min	35 Deg 33.5 Min	07/28/85	2178
S5-104.60	016	285/22:02:18	AGULHAS	-27 Deg 42.6 Min	36 Deg 02.5 Min	07/28/85	2179
S5-104.60	017	285/22:02:29	AGULHAS	-27 Deg 07.7 Min	36 Deg 31.2 Min	07/28/85	2180
S5-104.60	018	285/22:02:40	AGULHAS	-26 Deg 32.6 Min	36 Deg 59.6 Min	07/28/85	2181
S5-104.60	019	285/22:02:51	AGULHAS	-25 Deg 57.5 Min	37 Deg 27.6 Min	07/28/85	2182
S5-104.60	020	285/22:02:56	AGULHAS	-25 Deg 39.5 Min	37 Deg 41.8 Min	08/07/85	2219
SI-105.20	001	285/22:18:13	GODPUHR	25 Deg 34.9 Min	70 Deg 01.5 Min	10/23/84	0028
SI-105.20	002	285/22:18:23	GODPUHR	26 Deg 09.5 Min	70 Deg 26.9 Min	10/23/84	0029
SI-105.20	003	285/22:18:34	GODPUHR	26 Deg 43.9 Min	70 Deg 52.4 Min	10/23/84	0030
SI-105.20	004	285/22:18:48	GODPUHR	27 Deg 35.0 Min	71 Deg 29.7 Min	02/08/85	0752
SI-105.20	005	285/22:18:58	GODPUHR	28 Deg 09.2 Min	71 Deg 56.0 Min	02/08/85	0753
SI-105.20	006	285/22:19:09	GODPUHR	28 Deg 43.4 Min	72 Deg 22.7 Min	02/08/85	0754
SI-105.20	016	285/22:19:18	GODPUHR	29 Deg 14.6 Min	72 Deg 45.1 Min	01/13/87	2950
SI-105.20	007	285/22:19:19	GODPUHR	29 Deg 17.4 Min	72 Deg 49.6 Min	02/08/85	0755
SI-105.20	016	285/22:19:19	GODPUHR	29 Deg 14.7 Min	72 Deg 49.5 Min	01/08/87	2950
SI-105.20	008	285/22:19:27	GODPUHR	29 Deg 41.7 Min	73 Deg 09.1 Min	01/14/85	0756
SI-105.20	009	285/22:19:38	GODPUHR	30 Deg 15.5 Min	73 Deg 36.6 Min	01/14/85	0757
SI-105.20	010	285/22:19:48	GODPUHR	30 Deg 49.2 Min	74 Deg 04.4 Min	01/14/85	0758
SI-105.20	011	285/22:19:59	GODPUHR	31 Deg 22.8 Min	74 Deg 32.6 Min	01/14/85	0759
SI-105.20	012	285/22:20:09	GODPUHR	31 Deg 56.3 Min	75 Deg 01.1 Min	01/14/85	0760
SI-105.20	013	285/22:20:20	GODPUHR	32 Deg 29.6 Min	75 Deg 29.9 Min	01/14/85	0761
SI-105.20	014	285/22:20:30	GODPUHR	33 Deg 02.8 Min	75 Deg 59.1 Min	01/14/85	0762
SI-105.20	015	285/22:20:41	GODPUHR	33 Deg 35.9 Min	76 Deg 28.8 Min	01/14/85	0763
B5-105.40	007	285/23:44:30	SAUDI ARABIA	16 Deg 46.7 Min	41 Deg 59.3 Min	01/10/85	0705
B5-105.40	008	285/23:44:41	SAUDI ARABIA	17 Deg 23.5 Min	42 Deg 22.6 Min	01/10/85	0706
B5-105.40	009	285/23:44:52	SAUDI ARABIA	18 Deg 00.2 Min	42 Deg 46.1 Min	01/10/85	0707
B5-105.40	010	285/23:45:03	SAUDI ARABIA	18 Deg 36.9 Min	43 Deg 09.7 Min	01/10/85	0708

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
B5-105.40	011	285/23:45:14	SAUDI ARABIA	19 Deg 13.5 Min	43 Deg 33.5 Min	01/10/85	0709
B5-105.40	012	285/23:45:25	SAUDI ARABIA	19 Deg 50.0 Min	43 Deg 57.5 Min	01/10/85	0710
B5-105.40	013	285/23:45:35	SAUDI ARABIA	20 Deg 26.7 Min	44 Deg 21.8 Min	01/10/85	0711
B5-105.40	014	285/23:45:46	SAUDI ARABIA	21 Deg 03.1 Min	44 Deg 46.2 Min	01/10/85	0712
B5-105.40	015	285/23:45:57	SAUDI ARABIA	21 Deg 39.5 Min	45 Deg 10.8 Min	01/10/85	0713
B5-105.40	016	285/23:46:08	SAUDI ARABIA	22 Deg 15.7 Min	45 Deg 35.6 Min	01/10/85	0714
B5-105.40	017	285/23:46:19	SAUDI ARABIA	22 Deg 51.9 Min	46 Deg 00.7 Min	01/10/85	0715
B5-105.40	001	285/23:46:25	SAUDI ARABIA	23 Deg 05.5 Min	46 Deg 07.8 Min	11/08/84	0215
B5-105.40	018	285/23:46:30	SAUDI ARABIA	23 Deg 28.1 Min	46 Deg 26.0 Min	01/10/85	0716
B5-105.40	002	285/23:46:36	SAUDI ARABIA	23 Deg 41.6 Min	46 Deg 33.2 Min	11/08/84	0216
B5-105.40	003	285/23:46:47	SAUDI ARABIA	24 Deg 17.6 Min	46 Deg 58.8 Min	11/08/84	0217
B5-105.40	019	285/23:46:55	SAUDI ARABIA	24 Deg 50.3 Min	47 Deg 24.6 Min	01/10/85	0717
SB-106.30	009	286/00:43:56	CHILE	-55 Deg 08.5 Min	-90 Deg 34.0 Min	05/17/85	1640
SB-106.30	010	286/00:44:07	CHILE	-55 Deg 19.0 Min	-89 Deg 24.7 Min	05/17/85	1641
SB-106.30	011	286/00:44:18	CHILE	-55 Deg 28.9 Min	-88 Deg 14.8 Min	05/17/85	1642
SB-106.30	012	286/00:44:36	CHILE	-55 Deg 44.1 Min	-86 Deg 12.9 Min	05/17/85	1643
SB-106.30	003	286/00:44:46	CHILE	-55 Deg 54.2 Min	-84 Deg 47.7 Min	05/03/85	1534
SB-106.30	013	286/00:44:46	CHILE	-55 Deg 52.0 Min	-85 Deg 01.5 Min	05/17/85	1644
SB-106.30	004	286/00:44:56	CHILE	-56 Deg 01.1 Min	-83 Deg 35.8 Min	05/03/85	1535
SB-106.30	014	286/00:44:57	CHILE	-55 Deg 59.1 Min	-83 Deg 49.6 Min	05/17/85	1645
SB-106.30	001	286/00:44:58	CHILE	-55 Deg 59.9 Min	-83 Deg 43.2 Min	11/14/84	0256
SB-106.30	005	286/00:45:07	CHILE	-56 Deg 07.3 Min	-82 Deg 23.4 Min	05/03/85	1536
SB-106.30	002	286/00:45:08	CHILE	-56 Deg 06.5 Min	-82 Deg 31.0 Min	11/14/84	0257
SB-106.30	006	286/00:45:17	CHILE	-56 Deg 10.9 Min	-81 Deg 25.6 Min	05/03/85	1537
SB-106.30	007	286/00:45:28	CHILE	-56 Deg 15.7 Min	-80 Deg 12.6 Min	05/03/85	1538
SB-106.30	008	286/00:45:39	CHILE	-56 Deg 19.8 Min	-78 Deg 59.3 Min	05/03/85	1539
D5-107.20	001	286/01:12:50	EGYPT	15 Deg 28.3 Min	17 Deg 11.9 Min	03/26/85	1284
D5-107.20	002	286/01:13:01	EGYPT	16 Deg 03.9 Min	17 Deg 33.8 Min	03/26/85	1285
D5-107.20	003	286/01:13:11	EGYPT	16 Deg 39.4 Min	17 Deg 55.7 Min	03/26/85	1286
D5-107.20	004	286/01:13:22	EGYPT	17 Deg 15.0 Min	18 Deg 17.9 Min	03/26/85	1287
D5-107.20	005	286/01:13:32	EGYPT	17 Deg 50.4 Min	18 Deg 40.1 Min	03/26/85	1288
D5-107.20	006	286/01:13:43	EGYPT	18 Deg 25.9 Min	19 Deg 02.5 Min	03/26/85	1289
D5-107.20	007	286/01:13:50	EGYPT	18 Deg 50.6 Min	19 Deg 18.3 Min	02/27/85	1290
D5-107.20	008	286/01:14:00	EGYPT	19 Deg 26.0 Min	19 Deg 41.0 Min	02/27/85	1291
D5-107.20	009	286/01:14:11	EGYPT	20 Deg 01.3 Min	20 Deg 03.8 Min	02/27/85	1292
D5-107.20	010	286/01:14:21	EGYPT	20 Deg 36.3 Min	20 Deg 26.7 Min	02/27/85	1293
D5-107.20	011	286/01:14:32	EGYPT	21 Deg 11.5 Min	20 Deg 49.9 Min	02/27/85	1294
D5-107.20	012	286/01:14:39	EGYPT	21 Deg 30.7 Min	21 Deg 02.6 Min	02/28/85	1295
D5-107.20	013	286/01:14:49	EGYPT	22 Deg 05.9 Min	21 Deg 26.1 Min	02/28/85	1296
D5-107.20	014	286/01:15:00	EGYPT	22 Deg 40.9 Min	21 Deg 49.8 Min	02/28/85	1297
D5-107.20	015	286/01:15:10	EGYPT	23 Deg 15.9 Min	22 Deg 13.7 Min	02/28/85	1298
D5-107.20	016	286/01:15:21	EGYPT	23 Deg 50.8 Min	22 Deg 37.7 Min	02/28/85	1299
D5-107.20	017	286/01:15:31	EGYPT	24 Deg 25.7 Min	23 Deg 02.1 Min	02/28/85	1300
D5-107.20	018	286/01:15:42	EGYPT	25 Deg 00.5 Min	23 Deg 26.6 Min	02/28/85	1301
D5-107.20	019	286/01:15:52	EGYPT	25 Deg 35.2 Min	23 Deg 51.4 Min	02/28/85	1302
AC-108.80	008	286/03:50:59	RIO PICO	-47 Deg 51.8 Min	-77 Deg 08.1 Min	09/16/85	2356
AC-108.80	001	286/03:51:00	RIO PICO	-47 Deg 46.7 Min	-77 Deg 11.7 Min	11/26/84	0360
AC-108.80	002	286/03:51:10	RIO PICO	-47 Deg 22.2 Min	-76 Deg 23.0 Min	11/26/84	0361
AC-108.80	009	286/03:51:10	RIO PICO	-47 Deg 26.9 Min	-76 Deg 19.7 Min	09/16/85	2357
AC-108.80	003	286/03:51:21	RIO PICO	-46 Deg 57.3 Min	-75 Deg 35.1 Min	11/26/84	0362
AC-108.80	010	286/03:51:21	RIO PICO	-47 Deg 01.7 Min	-75 Deg 32.1 Min	09/16/85	2358
AC-108.80	004	286/03:51:31	RIO PICO	-46 Deg 32.1 Min	-74 Deg 48.0 Min	11/26/84	0363
AC-108.80	007	286/03:51:31	RIO PICO (FULL SWATH)	-46 Deg 34.6 Min	-74 Deg 43.1 Min	03/22/85	1254
AC-108.80	011	286/03:51:31	RIO PICO	-46 Deg 33.0 Min	-74 Deg 48.8 Min	09/16/85	2359
AC-108.80	005	286/03:51:42	RIO PICO	-46 Deg 06.5 Min	-74 Deg 01.7 Min	11/26/84	0364
AC-108.80	012	286/03:51:42	RIO PICO	-46 Deg 10.2 Min	-73 Deg 59.2 Min	09/16/85	2360
AC-108.80	013	286/03:51:52	RIO PICO	-45 Deg 43.9 Min	-73 Deg 14.0 Min	09/16/85	2361
AC-108.80	006	286/03:51:53	RIO PICO	-45 Deg 40.6 Min	-73 Deg 16.1 Min	11/26/84	0365
Z5-110.20	001	286/05:51:00	NORTH ATLANTIC	49 Deg 26.5 Min	-13 Deg 44.6 Min	12/17/84	0550
Z5-110.20	002	286/05:51:10	NORTH ATLANTIC	49 Deg 50.7 Min	-12 Deg 53.2 Min	12/17/84	0551
Z5-110.20	003	286/05:51:21	NORTH ATLANTIC	50 Deg 14.5 Min	-12 Deg 00.9 Min	12/17/84	0552

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
Z5-110.20	004	286/05:51:31	NORTH ATLANTIC	50 Deg 37.9 Min	-11 Deg 07.8 Min	12/17/84	0553
Z5-110.20	005	286/05:51:42	NORTH ATLANTIC	51 Deg 00.8 Min	-10 Deg 13.7 Min	12/17/84	0554
Z5-110.20	006	286/05:51:53	NORTH ATLANTIC	51 Deg 23.3 Min	-9 Deg 18.7 Min	12/17/84	0555
Z5-110.20	007	286/05:52:03	NORTH ATLANTIC	51 Deg 45.2 Min	-8 Deg 22.9 Min	12/17/84	0556
Z5-110.20	008	286/05:52:14	NORTH ATLANTIC	52 Deg 06.7 Min	-7 Deg 26.0 Min	12/17/84	0557
Z5-110.20	009	286/05:52:24	NORTH ATLANTIC	52 Deg 27.6 Min	-6 Deg 28.4 Min	12/17/84	0558
Z5-110.20	010	286/05:52:35	NORTH ATLANTIC	52 Deg 48.1 Min	-5 Deg 29.6 Min	12/17/84	0559
K5-110.40	003	286/06:18:00	KALIMANTAN	7 Deg 10.7 Min	110 Deg 44.4 Min	01/15/85	0737
K5-110.40	004	286/06:18:10	KALIMANTAN	6 Deg 34.8 Min	111 Deg 05.0 Min	01/15/85	0738
K5-110.40	005	286/06:18:21	KALIMANTAN	5 Deg 58.9 Min	111 Deg 25.6 Min	01/15/85	0739
K5-110.40	006	286/06:18:31	KALIMANTAN	5 Deg 23.0 Min	111 Deg 46.2 Min	01/15/85	0740
K5-110.40	007	286/06:18:42	KALIMANTAN	4 Deg 47.2 Min	112 Deg 06.7 Min	01/15/85	0741
K5-110.40	008	286/06:18:52	KALIMANTAN	4 Deg 21.7 Min	112 Deg 46.6 Min	01/15/85	0742
K5-110.40	009	286/06:19:03	KALIMANTAN	3 Deg 35.0 Min	112 Deg 47.9 Min	01/15/85	0743
OK-110.40	019	286/06:19:12	BORNEO & KALIMANTAN	3 Deg 17.9 Min	112 Deg 57.3 Min	03/18/86	2698
K5-110.40	010	286/06:19:13	KALIMANTAN	2 Deg 59.1 Min	113 Deg 08.4 Min	01/15/85	0744
OK-110.40	020	286/06:19:23	BORNEO & KALIMANTAN	2 Deg 42.1 Min	113 Deg 17.8 Min	03/18/86	2699
K5-110.40	011	286/06:19:24	KALIMANTAN	2 Deg 23.3 Min	113 Deg 28.9 Min	01/15/85	0745
K5-110.40	012	286/06:19:34	KALIMANTAN	1 Deg 47.5 Min	113 Deg 49.3 Min	01/15/85	0746
OK-110.40	021	286/06:19:34	BORNEO & KALIMANTAN	2 Deg 05.2 Min	113 Deg 38.8 Min	03/21/86	2700
OK-110.40	022	286/06:19:44	BORNEO & KALIMANTAN	1 Deg 29.3 Min	113 Deg 59.3 Min	03/21/86	2701
K5-110.40	013	286/06:19:45	KALIMANTAN	1 Deg 11.6 Min	114 Deg 09.8 Min	01/15/85	0747
K5-110.40	014	286/06:19:55	KALIMANTAN	0 Deg 35.7 Min	114 Deg 30.2 Min	01/15/85	0748
OK-110.40	023	286/06:19:55	BORNEO & KALIMANTAN	0 Deg 53.5 Min	114 Deg 19.7 Min	03/21/86	2702
OK-110.40	024	286/06:20:05	BORNEO & KALIMANTAN	0 Deg 17.6 Min	114 Deg 40.2 Min	03/21/86	2703
K5-110.40	015	286/06:20:06	KALIMANTAN	0 Deg 00.1 Min	114 Deg 50.7 Min	01/15/85	0749
K5-110.40	018	286/06:20:06	BORNEO	0 Deg 13.2 Min	114 Deg 42.4 Min	08/29/85	2304
K5-110.40	016	286/06:20:16	KALIMANTAN	0 Deg 35.9 Min	115 Deg 11.2 Min	01/15/85	0750
OK-110.40	025	286/06:20:16	BORNEO & KALIMANTAN	0 Deg 20.8 Min	115 Deg 02.2 Min	03/22/86	2704
K5-110.40	017	286/06:20:27	KALIMANTAN	-1 Deg 11.7 Min	115 Deg 31.7 Min	01/15/85	0751
OK-110.40	026	286/06:20:27	BORNEO & KALIMANTAN	0 Deg 56.6 Min	115 Deg 22.7 Min	03/22/86	2705
K5-110.40	001	286/06:20:30	BORNEO	-1 Deg 16.3 Min	115 Deg 34.3 Min	10/26/84	0104
OK-110.40	027	286/06:20:37	BORNEO & KALIMANTAN	-1 Deg 32.4 Min	115 Deg 43.2 Min	03/22/86	2706
K5-110.40	002	286/06:20:40	BORNEO	-1 Deg 52.0 Min	115 Deg 54.9 Min	10/26/84	0105
OK-110.40	028	286/06:20:47	KALIMANTAN	-2 Deg 06.5 Min	116 Deg 02.8 Min	07/21/86	2793
OK-110.40	028	286/06:20:48	BORNEO & KALIMANTAN	-2 Deg 08.2 Min	116 Deg 03.8 Min	03/22/86	2707
K5-110.40	003	286/06:20:51	BORNEO	-2 Deg 27.8 Min	116 Deg 15.5 Min	10/26/84	0106
UE-112.40	005	286/09:08:51	SAUDI ARABIA	27 Deg 32.2 Min	45 Deg 44.9 Min	06/28/85	1968
UE-112.40	006	286/09:09:01	SAUDI ARABIA	26 Deg 59.2 Min	46 Deg 12.6 Min	06/28/85	1969
UE-112.40	007	286/09:09:12	SAUDI ARABIA	26 Deg 26.0 Min	46 Deg 40.0 Min	06/28/85	1970
UE-112.40	008	286/09:09:22	SAUDI ARABIA	25 Deg 52.7 Min	47 Deg 07.0 Min	06/28/85	1971
UE-112.40	009	286/09:09:31	SAUDI ARABIA	25 Deg 23.4 Min	47 Deg 30.5 Min	06/29/85	1972
UE-112.40	010	286/09:09:42	SAUDI ARABIA	24 Deg 49.9 Min	47 Deg 57.0 Min	06/29/85	1973
UE-112.40	011	286/09:09:53	SAUDI ARABIA	24 Deg 16.3 Min	48 Deg 23.3 Min	06/29/85	1974
UE-112.40	012	286/09:10:03	SAUDI ARABIA	23 Deg 42.6 Min	48 Deg 49.2 Min	06/29/85	1975
UE-112.40	013	286/09:10:14	SAUDI ARABIA	23 Deg 08.8 Min	49 Deg 14.9 Min	06/29/85	1976
UE-112.40	014	286/09:10:24	SAUDI ARABIA	22 Deg 34.8 Min	49 Deg 40.4 Min	06/29/85	1977
UE-112.40	015	286/09:10:35	SAUDI ARABIA	22 Deg 00.8 Min	50 Deg 05.6 Min	06/29/85	1978
UE-112.40	016	286/09:10:45	SAUDI ARABIA	21 Deg 26.7 Min	50 Deg 30.5 Min	06/29/85	1979
UE-112.40	017	286/09:10:56	SAUDI ARABIA	20 Deg 52.5 Min	50 Deg 55.3 Min	06/29/85	1980
UE-112.40	018	286/09:11:06	SAUDI ARABIA	20 Deg 18.2 Min	51 Deg 19.8 Min	06/29/85	1981
UE-112.40	001	286/09:11:17	UBAR	19 Deg 52.9 Min	51 Deg 37.4 Min	10/18/84	0070
UE-112.40	002	286/09:11:26	UBAR	19 Deg 11.7 Min	52 Deg 06.5 Min	06/28/85	0071
UE-112.40	019	286/09:11:29	UBAR	19 Deg 01.8 Min	52 Deg 13.3 Min	07/23/85	2144
UE-112.40	003	286/09:11:38	UBAR	18 Deg 44.1 Min	52 Deg 25.4 Min	10/18/84	0072
UE-112.40	020	286/09:11:40	UBAR	18 Deg 25.7 Min	52 Deg 38.3 Min	07/23/85	2145
UE-112.40	004	286/09:11:48	UBAR	18 Deg 09.5 Min	52 Deg 49.1 Min	10/18/84	0073
V5-113.30	017	286/10:35:57	MERGA-KHARGA	33 Deg 31.5 Min	18 Deg 46.0 Min	02/17/85	1003
V5-113.30	018	286/10:36:07	MERGA-KHARGA	32 Deg 59.8 Min	19 Deg 17.3 Min	02/17/85	1004
V5-113.30	019	286/10:36:16	MERGA-KHARGA	32 Deg 34.2 Min	19 Deg 42.2 Min	02/19/85	1005
V5-113.30	042	286/10:36:21	NORTHERN AFRICA	32 Deg 17.1 Min	19 Deg 58.9 Min	05/14/86	2850

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
V5-113.30	020	286/10:36:26	MERGA-KHARGA	32 Deg 02.2 Min	20 Deg 12.8 Min	02/19/85	1006
V5-113.30	043	286/10:36:32	NORTHERN AFRICA	31 Deg 45.0 Min	20 Deg 29.2 Min	05/14/86	2851
V5-113.30	021	286/10:36:37	MERGA-KHARGA	31 Deg 30.0 Min	20 Deg 43.0 Min	02/19/85	1007
V5-113.30	044	286/10:36:43	NORTHERN AFRICA	31 Deg 12.5 Min	20 Deg 59.5 Min	05/14/86	2852
V5-113.30	022	286/10:36:47	MERGA-KHARGA	30 Deg 58.4 Min	21 Deg 12.2 Min	02/19/85	1008
V5-113.30	045	286/10:36:53	NORTHERN AFRICA	30 Deg 40.1 Min	21 Deg 29.1 Min	05/14/86	2853
V5-113.30	023	286/10:36:58	MERGA-KHARGA	30 Deg 26.0 Min	21 Deg 41.6 Min	02/19/85	1009
V5-113.30	029	286/10:37:00	MERGA-KHARGA	30 Deg 19.7 Min	21 Deg 47.3 Min	02/16/85	0990
V5-113.30	046	286/10:37:03	NORTHERN AFRICA	30 Deg 07.6 Min	21 Deg 58.3 Min	05/15/86	2854
V5-113.30	030	286/10:37:10	MERGA-KHARGA	29 Deg 47.2 Min	22 Deg 16.2 Min	02/16/85	0991
V5-113.30	047	286/10:37:14	NORTHERN AFRICA	29 Deg 34.9 Min	22 Deg 27.2 Min	05/15/86	2855
V5-113.30	031	286/10:37:21	MERGA-KHARGA	29 Deg 14.4 Min	22 Deg 44.8 Min	02/16/85	0992
V5-113.30	048	286/10:37:25	NORTHERN AFRICA	29 Deg 01.6 Min	22 Deg 56.2 Min	05/15/86	2856
V5-113.30	032	286/10:37:31	MERGA-KHARGA	28 Deg 41.2 Min	23 Deg 13.5 Min	02/16/85	0993
V5-113.30	049	286/10:37:35	NORTHERN AFRICA	28 Deg 27.3 Min	23 Deg 25.5 Min	05/17/86	2857
V5-113.30	033	286/10:37:42	MERGA-KHARGA	28 Deg 08.1 Min	23 Deg 41.5 Min	02/16/85	0994
V5-113.30	050	286/10:37:46	NORTHERN AFRICA	27 Deg 54.4 Min	23 Deg 53.2 Min	05/17/86	2858
V5-113.30	034	286/10:37:53	MERGA-KHARGA	27 Deg 35.0 Min	24 Deg 09.2 Min	02/16/85	0995
V5-113.30	051	286/10:37:57	NORTHERN AFRICA	27 Deg 21.2 Min	24 Deg 20.8 Min	05/17/86	2859
V5-113.30	035	286/10:38:03	MERGA-KHARGA	27 Deg 01.7 Min	24 Deg 36.5 Min	02/16/85	0996
V5-113.30	052	286/10:38:07	NORTHERN AFRICA	26 Deg 49.6 Min	24 Deg 46.5 Min	05/15/86	2860
V5-113.30	036	286/10:38:14	MERGA-KHARGA	26 Deg 28.4 Min	25 Deg 03.5 Min	02/16/85	0997
V5-113.30	053	286/10:38:17	NORTHERN AFRICA	26 Deg 16.2 Min	25 Deg 13.4 Min	05/15/86	2861
V5-113.30	037	286/10:38:24	MERGA-KHARGA	25 Deg 54.9 Min	25 Deg 30.2 Min	02/16/85	0998
V5-113.30	054	286/10:38:28	NORTHERN AFRICA	25 Deg 42.2 Min	25 Deg 40.4 Min	05/15/86	2862
V5-113.30	038	286/10:38:35	MERGA-KHARGA	25 Deg 21.8 Min	25 Deg 56.2 Min	02/16/85	0999
V5-113.30	055	286/10:38:38	NORTHERN AFRICA	25 Deg 07.8 Min	26 Deg 07.4 Min	05/16/86	2863
V5-113.30	039	286/10:38:45	MERGA-KHARGA	24 Deg 48.2 Min	26 Deg 22.3 Min	02/16/85	1000
V5-113.30	056	286/10:38:49	NORTHERN AFRICA	24 Deg 33.8 Min	26 Deg 33.6 Min	05/16/86	2864
V5-113.30	040	286/10:38:56	MERGA-KHARGA	24 Deg 14.4 Min	26 Deg 48.2 Min	02/16/85	1001
V5-113.30	057	286/10:39:00	NORTHERN AFRICA	24 Deg 00.0 Min	26 Deg 59.3 Min	05/16/86	2865
V5-113.30	041	286/10:39:06	MERGA-KHARGA	23 Deg 40.5 Min	27 Deg 13.8 Min	02/16/85	1002
V5-113.30	001	286/10:39:10	EGYPT/SUDAN	23 Deg 32.1 Min	27 Deg 17.7 Min	11/14/84	0192
V5-113.30	058	286/10:39:10	NORTHERN AFRICA	23 Deg 26.1 Min	27 Deg 24.8 Min	05/16/86	2866
V5-113.30	002	286/10:39:20	EGYPT/SUDAN	22 Deg 58.1 Min	27 Deg 43.0 Min	11/14/84	0193
V5-113.30	059	286/10:39:21	NORTHERN AFRICA	22 Deg 52.0 Min	27 Deg 50.1 Min	05/16/86	2867
V5-113.30	003	286/10:39:31	EGYPT/SUDAN	22 Deg 23.9 Min	28 Deg 08.0 Min	11/14/84	0194
V5-113.30	060	286/10:39:31	NORTHERN AFRICA	22 Deg 17.8 Min	28 Deg 15.2 Min	05/16/86	2868
V5-113.30	004	286/10:39:41	EGYPT/SUDAN	21 Deg 49.8 Min	28 Deg 32.9 Min	11/14/84	0195
V5-113.30	061	286/10:39:42	NORTHERN AFRICA	21 Deg 43.4 Min	28 Deg 40.1 Min	05/16/86	2869
V5-113.30	005	286/10:39:52	EGYPT/SUDAN	21 Deg 15.7 Min	28 Deg 57.7 Min	11/14/84	0196
V5-113.30	062	286/10:39:52	NORTHERN AFRICA	21 Deg 09.1 Min	29 Deg 04.7 Min	05/16/86	2870
V5-113.30	009	286/10:40:00	MERGA-KHARGA	20 Deg 44.9 Min	29 Deg 21.6 Min	02/15/85	0971
V5-113.30	063	286/10:40:03	NORTHERN AFRICA	20 Deg 34.5 Min	29 Deg 29.2 Min	05/16/86	2871
V5-113.30	010	286/10:40:10	MERGA-KHARGA	20 Deg 10.4 Min	29 Deg 45.9 Min	02/15/85	0972
V5-113.30	064	286/10:40:12	NORTHERN AFRICA	20 Deg 02.1 Min	29 Deg 51.8 Min	05/17/86	2872
V5-113.30	011	286/10:40:21	MERGA-KHARGA	19 Deg 35.9 Min	30 Deg 09.9 Min	02/15/85	0973
V5-113.30	065	286/10:40:23	NORTHERN AFRICA	19 Deg 27.6 Min	30 Deg 15.7 Min	05/17/86	2873
V5-113.30	012	286/10:40:31	MERGA-KHARGA	19 Deg 01.6 Min	30 Deg 33.3 Min	02/15/85	0974
V5-113.30	066	286/10:40:34	NORTHERN AFRICA	18 Deg 52.9 Min	30 Deg 39.5 Min	05/17/86	2874
V5-113.30	013	286/10:40:42	MERGA-KHARGA	18 Deg 26.9 Min	30 Deg 56.9 Min	02/15/85	0975
V5-113.30	067	286/10:40:44	NORTHERN AFRICA	18 Deg 18.2 Min	31 Deg 03.1 Min	05/17/86	2875
V5-113.30	014	286/10:40:53	MERGA-KHARGA	17 Deg 52.2 Min	31 Deg 20.3 Min	02/15/85	0976
V5-113.30	068	286/10:40:55	NORTHERN AFRICA	17 Deg 43.4 Min	31 Deg 26.4 Min	05/17/86	2876
V5-113.30	015	286/10:41:03	MERGA-KHARGA	17 Deg 17.5 Min	31 Deg 43.5 Min	02/15/85	0977
V5-113.30	069	286/10:41:05	NORTHERN AFRICA	17 Deg 08.5 Min	31 Deg 49.6 Min	05/17/86	2877
V5-113.30	070	286/10:41:12	NORTHERN AFRICA	16 Deg 44.3 Min	32 Deg 05.6 Min	05/19/86	2878
V5-113.30	016	286/10:41:14	MERGA-KHARGA	16 Deg 42.6 Min	32 Deg 06.5 Min	02/15/85	0978
V5-113.30	006	286/10:41:22	SHAHEINAB, SUDAN	16 Deg 19.1 Min	32 Deg 20.5 Min	11/13/84	0242
V5-113.30	071	286/10:41:23	NORTHERN AFRICA	16 Deg 09.3 Min	32 Deg 28.5 Min	05/19/86	2879
V5-113.30	007	286/10:41:32	SHAHEINAB, SUDAN	15 Deg 44.1 Min	32 Deg 43.3 Min	11/13/84	0243

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
V5-113.30	072	286/10:41:33	NORTHERN AFRICA	15 Deg 34.2 Min	32 Deg 51.3 Min	05/19/86	2880
V5-113.30	008	286/10:41:43	SHAHEINAB, SUDAN	15 Deg 09.1 Min	33 Deg 06.0 Min	11/13/84	0244
V5-113.30	073	286/10:41:44	NORTHERN AFRICA	14 Deg 59.0 Min	33 Deg 13.9 Min	05/19/86	2881
V5-113.30	074	286/10:41:54	NORTHERN AFRICA	14 Deg 23.9 Min	33 Deg 36.4 Min	05/19/86	2882
V5-113.30	075	286/10:42:05	NORTHERN AFRICA	13 Deg 48.6 Min	33 Deg 58.7 Min	05/19/86	2883
V5-113.30	076	286/10:42:15	NORTHERN AFRICA	13 Deg 13.4 Min	34 Deg 20.8 Min	05/21/86	2884
V5-113.30	077	286/10:42:26	NORTHERN AFRICA	12 Deg 38.1 Min	34 Deg 42.8 Min	05/21/86	2885
V5-113.30	078	286/10:42:37	NORTHERN AFRICA	12 Deg 02.7 Min	35 Deg 04.8 Min	05/21/86	2886
V5-113.30	079	286/10:42:47	NORTHERN AFRICA	11 Deg 27.4 Min	35 Deg 26.5 Min	05/21/86	2887
AP-115.20	003	286/13:04:48	HAWAII	15 Deg 49.7 Min	-157 Deg 39.8 Min	05/25/85	1709
AP-115.20	004	286/13:05:00	HAWAII	16 Deg 26.4 Min	-157 Deg 15.8 Min	05/25/85	1710
AP-115.20	005	286/13:05:11	HAWAII	17 Deg 03.0 Min	-156 Deg 51.6 Min	05/25/85	1711
AP-115.20	006	286/13:05:22	HAWAII	17 Deg 39.5 Min	-156 Deg 27.2 Min	05/25/85	1712
AP-115.20	007	286/13:05:33	HAWAII	18 Deg 16.0 Min	-156 Deg 02.6 Min	05/25/85	1713
AP-115.20	008	286/13:05:44	HAWAII	18 Deg 52.3 Min	-155 Deg 37.8 Min	05/25/85	1714
AP-115.20	023	286/13:05:44	HAWAII	18 Deg 55.0 Min	-155 Deg 35.9 Min	02/05/87	2955
AP-115.20	001	286/13:05:45	HAWAII	18 Deg 58.3 Min	-155 Deg 33.7 Min	05/04/85	1558
AP-115.20	001	286/13:05:45	HAWAII	18 Deg 59.5 Min	-155 Deg 32.7 Min	10/25/84	0098
AP-115.20	021	286/13:05:46	HAWAII (SLANT RANGE)	18 Deg 58.7 Min	-155 Deg 33.4 Min	05/14/86	2844
AP-115.20	009	286/13:05:55	HAWAII	19 Deg 28.7 Min	-155 Deg 12.7 Min	05/25/85	1715
AP-115.20	002	286/13:05:56	HAWAII	19 Deg 35.7 Min	-155 Deg 07.6 Min	10/25/84	0099
AP-115.20	024	286/13:05:56	HAWAII	19 Deg 31.2 Min	-155 Deg 10.9 Min	02/05/87	2956
AP-115.20	002	286/13:05:57	HAWAII	19 Deg 34.6 Min	-155 Deg 08.6 Min	05/04/85	1559
AP-115.20	022	286/13:05:57	HAWAII (SLANT RANGE)	19 Deg 35.0 Min	-155 Deg 08.3 Min	05/14/86	2845
AP-115.20	010	286/13:06:06	HAWAII	20 Deg 04.9 Min	-154 Deg 47.4 Min	05/25/85	1716
AP-115.20	011	286/13:06:17	HAWAII	20 Deg 41.0 Min	-154 Deg 22.0 Min	05/25/85	1717
AP-115.20	012	286/13:06:26	HAWAII	21 Deg 12.7 Min	-153 Deg 59.4 Min	05/29/85	1743
AP-115.20	013	286/13:06:38	HAWAII	21 Deg 48.6 Min	-153 Deg 33.5 Min	05/29/85	1744
AP-115.20	014	286/13:06:49	HAWAII	22 Deg 24.4 Min	-153 Deg 07.3 Min	05/29/85	1745
AP-115.20	015	286/13:07:00	HAWAII	23 Deg 00.1 Min	-152 Deg 40.9 Min	05/29/85	1746
AP-115.20	016	286/13:07:11	HAWAII	23 Deg 35.7 Min	-152 Deg 14.2 Min	05/29/85	1747
AP-115.20	017	286/13:07:22	HAWAII	24 Deg 11.2 Min	-151 Deg 47.2 Min	05/29/85	1748
AP-115.20	018	286/13:07:33	HAWAII	24 Deg 46.6 Min	-151 Deg 19.9 Min	05/29/85	1749
AP-115.20	019	286/13:07:40	HAWAII	25 Deg 08.5 Min	-151 Deg 02.8 Min	05/30/85	1755
AP-115.20	020	286/13:07:52	HAWAII	25 Deg 46.7 Min	-150 Deg 32.7 Min	05/30/85	1756
OO-115.80	001	286/14:17:40	AUSTRALIA	-37 Deg 05.6 Min	143 Deg 49.8 Min	12/12/84	0529
OO-115.80	002	286/14:17:51	AUSTRALIA	-36 Deg 32.1 Min	144 Deg 23.8 Min	12/12/84	0530
OO-115.80	003	286/14:18:02	AUSTRALIA	-35 Deg 58.5 Min	144 Deg 57.4 Min	12/12/84	0531
OO-115.80	004	286/14:18:13	AUSTRALIA	-35 Deg 24.8 Min	145 Deg 30.3 Min	12/12/84	0532
OO-115.80	005	286/14:18:24	AUSTRALIA	-34 Deg 50.8 Min	146 Deg 02.8 Min	12/12/84	0533
OO-115.80	006	286/14:18:35	AUSTRALIA	-34 Deg 16.6 Min	146 Deg 34.9 Min	12/12/84	0534
OO-115.80	007	286/14:18:46	AUSTRALIA	-33 Deg 42.4 Min	147 Deg 06.5 Min	12/12/84	0535
OO-115.80	008	286/14:18:57	AUSTRALIA	-33 Deg 07.8 Min	147 Deg 37.4 Min	12/12/84	0536
OO-115.80	009	286/14:19:08	AUSTRALIA	-32 Deg 33.2 Min	148 Deg 08.3 Min	12/12/84	0537
OO-115.80	010	286/14:19:19	AUSTRALIA	-31 Deg 58.5 Min	148 Deg 38.5 Min	12/12/84	0538
OO-115.80	011	286/14:19:30	AUSTRALIA	-31 Deg 23.6 Min	149 Deg 08.4 Min	12/12/84	0539
OO-116.20	005	286/14:56:06	CANADA	49 Deg 34.7 Min	-75 Deg 29.0 Min	05/14/85	1620
OO-116.20	006	286/14:56:17	CANADA	49 Deg 14.7 Min	-74 Deg 34.5 Min	05/14/85	1621
OO-116.20	007	286/14:56:27	CANADA	48 Deg 54.2 Min	-73 Deg 40.7 Min	05/14/85	1622
OO-116.20	008	286/14:56:38	CANADA	48 Deg 33.1 Min	-72 Deg 47.5 Min	05/14/85	1623
OO-116.20	009	286/14:56:48	CANADA	48 Deg 11.7 Min	-71 Deg 55.3 Min	05/14/85	1624
OO-116.20	001	286/14:56:52	CHARLEVOIX,CANADA	48 Deg 07.0 Min	-71 Deg 44.4 Min	11/07/84	0204
OO-116.20	010	286/14:56:59	CANADA	47 Deg 49.8 Min	-71 Deg 03.8 Min	05/14/85	1625
OO-116.20	002	286/14:57:02	CHARLEVOIX,CANADA	47 Deg 45.1 Min	-70 Deg 53.2 Min	11/07/84	0205
OO-116.20	022	286/14:57:07	CHARLEVOIX,QUEBEC	47 Deg 32.0 Min	-70 Deg 23.1 Min	10/11/85	2415
OO-116.20	011	286/14:57:10	CANADA	47 Deg 25.1 Min	-70 Deg 07.7 Min	05/15/85	1626
OO-116.20	003	286/14:57:13	CHARLEVOIX,CANADA	47 Deg 22.7 Min	-70 Deg 02.9 Min	11/07/84	0206
OO-116.20	012	286/14:57:21	CANADA	47 Deg 02.3 Min	-69 Deg 18.0 Min	05/15/85	1627
OO-116.20	013	286/14:57:31	CANADA	46 Deg 39.1 Min	-68 Deg 28.9 Min	05/15/85	1628
OO-116.20	014	286/14:57:42	CANADA	46 Deg 15.6 Min	-67 Deg 40.7 Min	05/15/85	1629
OO-116.20	015	286/14:57:52	CANADA	45 Deg 51.6 Min	-66 Deg 53.1 Min	05/15/85	1630

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
OO-116.20	016	286/14:58:03	CANADA	45 Deg 27.2 Min	-66 Deg 06.3 Min	05/15/85	1631
OO-116.20	017	286/14:58:14	CANADA	44 Deg 59.9 Min	-65 Deg 15.5 Min	05/16/85	1634
OO-116.20	018	286/14:58:25	CANADA	44 Deg 34.8 Min	-64 Deg 30.3 Min	05/16/85	1635
OO-116.20	019	286/14:58:35	CANADA	44 Deg 09.3 Min	-63 Deg 45.7 Min	05/16/85	1636
OO-116.20	020	286/14:58:46	CANADA	43 Deg 26.6 Min	-63 Deg 20.4 Min	05/16/85	1637
OO-116.20	021	286/14:58:56	CANADA	43 Deg 17.3 Min	-62 Deg 18.6 Min	05/16/85	1638
AU-116.60	001	286/15:53:00	WEIPA/NEW GUINEA	-17 Deg 08.8 Min	138 Deg 55.6 Min	12/11/84	0512
AU-116.60	002	286/15:53:11	WEIPA/NEW GUINEA	-16 Deg 31.4 Min	139 Deg 18.7 Min	12/11/84	0513
AU-116.60	003	286/15:53:22	WEIPA/NEW GUINEA	-15 Deg 54.0 Min	139 Deg 41.5 Min	12/11/84	0514
AU-116.60	004	286/15:53:33	WEIPA/NEW GUINEA	-15 Deg 15.6 Min	140 Deg 05.0 Min	12/11/84	0515
AU-116.60	005	286/15:53:44	WEIPA/NEW GUINEA	-14 Deg 38.1 Min	140 Deg 27.6 Min	12/11/84	0516
AU-116.60	006	286/15:53:55	WEIPA/NEW GUINEA	-14 Deg 00.7 Min	140 Deg 50.1 Min	12/11/84	0517
AU-116.60	007	286/15:54:06	WEIPA/NEW GUINEA	-13 Deg 23.9 Min	141 Deg 12.0 Min	12/11/84	0518
AU-116.60	008	286/15:54:17	WEIPA/NEW GUINEA	-12 Deg 46.4 Min	141 Deg 34.3 Min	12/11/84	0519
AU-116.60	009	286/15:54:28	WEIPA/NEW GUINEA	-12 Deg 08.8 Min	141 Deg 56.5 Min	12/11/84	0520
AU-116.60	010	286/15:54:39	WEIPA/NEW GUINEA	-11 Deg 31.1 Min	142 Deg 18.7 Min	12/11/84	0521
AU-116.60	011	286/15:54:50	WEIPA/NEW GUINEA	-10 Deg 53.5 Min	142 Deg 40.7 Min	12/11/84	0522
AU-116.60	012	286/15:55:01	WEIPA/NEW GUINEA	-10 Deg 15.9 Min	143 Deg 02.6 Min	12/11/84	0523
AU-116.60	013	286/15:55:12	WEIPA/NEW GUINEA	-9 Deg 38.4 Min	143 Deg 24.3 Min	12/11/84	0524
AU-116.60	014	286/15:55:23	WEIPA/NEW GUINEA	-9 Deg 00.7 Min	143 Deg 46.1 Min	12/11/84	0525
AU-116.60	015	286/15:55:34	WEIPA/NEW GUINEA	-8 Deg 29.7 Min	144 Deg 04.0 Min	12/11/84	0526
AR-117.40	009	286/16:30:57	HURRICANE JOSEPHINE	35 Deg 40.9 Min	-72 Deg 23.1 Min	05/25/85	1708
AR-117.40	010	286/16:30:59	HURRICANE JOSEPHINE	35 Deg 32.0 Min	-72 Deg 13.6 Min	08/12/85	2255
AR-117.40	005	286/16:31:03	HURRICANE JOSEPHINE	35 Deg 25.2 Min	-72 Deg 05.8 Min	11/15/84	0262
AR-117.40	011	286/16:31:10	HURRICANE JOSEPHINE	35 Deg 00.6 Min	-71 Deg 41.1 Min	08/12/85	2256
AR-117.40	006	286/16:31:13	HURRICANE JOSEPHINE	34 Deg 53.8 Min	-71 Deg 33.3 Min	11/15/84	0263
AR-117.40	012	286/16:31:21	HURRICANE JOSEPHINE	34 Deg 29.1 Min	-71 Deg 08.9 Min	08/12/85	2257
AR-117.40	007	286/16:31:24	HURRICANE JOSEPHINE	34 Deg 22.2 Min	-71 Deg 01.2 Min	11/15/84	0264
AR-117.40	013	286/16:31:31	HURRICANE JOSEPHINE	33 Deg 57.3 Min	-70 Deg 37.1 Min	08/12/85	2258
AR-117.40	008	286/16:31:34	HURRICANE JOSEPHINE	33 Deg 50.4 Min	-70 Deg 29.6 Min	11/15/84	0265
AR-117.40	014	286/16:31:42	HURRICANE JOSEPHINE	33 Deg 25.4 Min	-70 Deg 05.8 Min	08/12/85	2259
AR-117.40	001	286/16:31:45	JOSEPHINE, N. ATLANTIC	33 Deg 18.5 Min	-69 Deg 58.4 Min	11/08/84	0207
AR-117.40	004	286/16:31:45	JOSEPHINE, N. ATLANTIC	31 Deg 41.8 Min	-68 Deg 27.3 Min	11/08/84	0210
AR-117.40	015	286/16:31:52	HURRICANE JOSEPHINE	32 Deg 53.4 Min	-69 Deg 34.9 Min	08/12/85	2260
AR-117.40	002	286/16:31:55	JOSEPHINE, N. ATLANTIC	32 Deg 46.4 Min	-69 Deg 27.6 Min	11/08/84	0208
AR-117.40	016	286/16:32:03	HURRICANE JOSEPHINE	32 Deg 21.1 Min	-69 Deg 04.5 Min	08/12/85	2261
AR-117.40	003	286/16:32:06	JOSEPHINE, N. ATLANTIC	32 Deg 14.2 Min	-68 Deg 57.3 Min	11/08/84	0209
AR-117.40	017	286/16:32:13	HURRICANE JOSEPHINE	31 Deg 48.7 Min	-68 Deg 34.4 Min	08/12/85	2262
AR-117.40	010	286/16:32:16	HURRICANE JOSEPHINE	31 Deg 38.3 Min	-68 Deg 24.8 Min	05/28/85	1754
KI-118.20	001	286/17:54:54	CANADA	51 Deg 19.9 Min	-111 Deg 16.9 Min	03/23/85	1270
KI-118.20	002	286/17:55:04	CANADA	51 Deg 13.9 Min	-109 Deg 57.9 Min	03/25/85	1271
KI-118.20	003	286/17:55:15	CANADA	50 Deg 48.6 Min	-109 Deg 06.2 Min	03/25/85	1272
KI-118.20	004	286/17:55:26	CANADA	50 Deg 22.9 Min	-108 Deg 15.5 Min	03/25/85	1273
MC-118.30	059	286/18:03:34	JAMAICA	25 Deg 19.7 Min	-82 Deg 40.3 Min	06/01/85	1782
MC-118.30	060	286/18:03:45	JAMAICA	24 Deg 45.3 Min	-82 Deg 15.2 Min	06/01/85	1783
MC-118.30	061	286/18:03:55	JAMAICA	24 Deg 10.8 Min	-81 Deg 50.4 Min	06/01/85	1784
MC-118.30	062	286/18:04:06	JAMAICA	23 Deg 36.2 Min	-81 Deg 25.8 Min	06/01/85	1785
MC-118.30	063	286/18:04:16	JAMAICA	23 Deg 01.5 Min	-81 Deg 01.5 Min	06/01/85	1786
MC-118.30	064	286/18:04:27	JAMAICA	22 Deg 26.8 Min	-80 Deg 37.3 Min	06/01/85	1787
MC-118.30	065	286/18:04:37	JAMAICA	21 Deg 52.2 Min	-80 Deg 13.5 Min	06/01/85	1788
MC-118.30	066	286/18:04:48	JAMAICA	21 Deg 17.3 Min	-79 Deg 49.8 Min	06/01/85	1789
MC-118.30	067	286/18:04:58	JAMAICA	20 Deg 42.3 Min	-79 Deg 26.2 Min	06/01/85	1790
MC-118.30	068	286/18:05:40	JAMAICA	18 Deg 21.7 Min	-77 Deg 53.7 Min	06/02/85	1791
MC-118.30	001	286/18:05:45	JAMAICA	18 Deg 02.9 Min	-77 Deg 40.9 Min	10/30/84	0139
MC-118.30	069	286/18:05:51	JAMAICA	17 Deg 46.4 Min	-77 Deg 31.1 Min	06/02/85	1792
MC-118.30	002	286/18:05:55	JAMAICA	17 Deg 27.6 Min	-77 Deg 18.4 Min	10/30/84	0140
MC-118.30	070	286/18:06:01	JAMAICA	17 Deg 11.1 Min	-77 Deg 08.6 Min	06/02/85	1793
MC-118.30	003	286/18:06:06	JAMAICA	16 Deg 50.8 Min	-76 Deg 58.6 Min	10/30/84	0141
MC-118.30	024	286/18:06:10	COLOMBIA/BRAZIL	16 Deg 42.6 Min	-76 Deg 50.5 Min	04/10/85	1385
MC-118.30	071	286/18:06:12	JAMAICA	16 Deg 35.7 Min	-76 Deg 46.2 Min	06/02/85	1794
MC-118.30	025	286/18:06:20	COLOMBIA/BRAZIL	16 Deg 07.2 Min	-76 Deg 28.3 Min	04/10/85	1386

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
MC-118.30	072	286/18:06:22	JAMAICA	16 Deg 00.4 Min	-76 Deg 24.0 Min	06/02/85	1795
MC-118.30	026	286/18:06:31	COLOMBIA/BRAZIL	15 Deg 31.8 Min	-76 Deg 06.2 Min	04/10/85	1387
MC-118.30	073	286/18:06:33	JAMAICA	15 Deg 24.9 Min	-76 Deg 01.9 Min	06/02/85	1796
MC-118.30	027	286/18:06:41	COLOMBIA/BRAZIL	14 Deg 56.5 Min	-75 Deg 44.3 Min	04/10/85	1388
MC-118.30	074	286/18:06:43	JAMAICA	14 Deg 49.6 Min	-75 Deg 40.0 Min	06/02/85	1797
MC-118.30	028	286/18:06:52	COLOMBIA/BRAZIL	14 Deg 21.0 Min	-75 Deg 22.4 Min	04/10/85	1389
MC-118.30	075	286/18:06:54	JAMAICA	14 Deg 14.1 Min	-75 Deg 18.2 Min	06/02/85	1798
MC-118.30	082	286/18:06:54	JAMAICA	14 Deg 12.3 Min	-75 Deg 17.1 Min	07/31/85	2191
MC-118.30	085	286/18:06:59	CARIBBEAN SEA	13 Deg 55.6 Min	-75 Deg 06.4 Min	04/29/86	2794
MC-118.30	029	286/18:07:02	COLOMBIA/BRAZIL	13 Deg 45.5 Min	-75 Deg 00.7 Min	04/10/85	1390
MC-118.30	076	286/18:07:04	JAMAICA	13 Deg 38.5 Min	-74 Deg 56.5 Min	06/02/85	1799
MC-118.30	083	286/18:07:05	JAMAICA	13 Deg 36.7 Min	-74 Deg 55.4 Min	07/31/85	2192
MC-118.30	086	286/18:07:10	CARIBBEAN SEA	13 Deg 20.0 Min	-74 Deg 44.8 Min	04/29/86	2795
MC-118.30	030	286/18:07:13	COLOMBIA/BRAZIL	13 Deg 10.1 Min	-74 Deg 39.2 Min	04/10/85	1391
MC-118.30	077	286/18:07:15	JAMAICA	13 Deg 03.2 Min	-74 Deg 35.0 Min	06/02/85	1800
MC-118.30	087	286/18:07:20	CARIBBEAN SEA	12 Deg 44.6 Min	-74 Deg 23.4 Min	04/29/86	2796
MC-118.30	031	286/18:07:23	COLOMBIA/BRAZIL	12 Deg 34.5 Min	-74 Deg 17.7 Min	04/10/85	1392
MC-118.30	078	286/18:07:25	JAMAICA	12 Deg 27.6 Min	-74 Deg 13.6 Min	06/02/85	1801
MC-118.30	088	286/18:07:31	CARIBBEAN SEA	12 Deg 08.9 Min	-74 Deg 01.9 Min	04/29/86	2797
MC-118.30	032	286/18:07:35	COLOMBIA/BRAZIL	11 Deg 53.7 Min	-73 Deg 53.3 Min	04/11/85	1393
MC-118.30	079	286/18:07:36	JAMAICA	11 Deg 52.0 Min	-73 Deg 52.2 Min	06/02/85	1802
MC-118.30	089	286/18:07:41	CARIBBEAN SEA	11 Deg 33.5 Min	-73 Deg 40.7 Min	04/29/86	2798
MC-118.30	033	286/18:07:46	COLOMBIA/BRAZIL	11 Deg 18.1 Min	-73 Deg 32.0 Min	04/11/85	1394
MC-118.30	080	286/18:07:46	JAMAICA	11 Deg 16.6 Min	-73 Deg 31.1 Min	06/02/85	1803
MC-118.30	090	286/18:07:52	CARIBBEAN SEA	10 Deg 57.8 Min	-73 Deg 19.5 Min	04/29/86	2799
MC-118.30	034	286/18:07:56	COLOMBIA/BRAZIL	10 Deg 42.4 Min	-73 Deg 10.8 Min	04/11/85	1395
MC-118.30	081	286/18:07:57	JAMAICA	10 Deg 40.9 Min	-73 Deg 09.9 Min	06/02/85	1804
MC-118.30	091	286/18:08:01	COLOMBIA	10 Deg 25.6 Min	-73 Deg 00.4 Min	04/30/86	2800
MC-118.30	035	286/18:08:07	COLOMBIA/BRAZIL	10 Deg 06.9 Min	-72 Deg 49.8 Min	04/11/85	1396
MC-118.30	092	286/18:08:12	COLOMBIA	9 Deg 49.8 Min	-72 Deg 39.3 Min	04/30/86	2801
MC-118.30	036	286/18:08:17	COLOMBIA/BRAZIL	9 Deg 31.2 Min	-72 Deg 28.7 Min	04/11/85	1397
MC-118.30	093	286/18:08:22	COLOMBIA	9 Deg 14.1 Min	-72 Deg 18.3 Min	04/30/86	2802
MC-118.30	037	286/18:08:28	COLOMBIA/BRAZIL	8 Deg 55.4 Min	-72 Deg 07.8 Min	04/11/85	1398
MC-118.30	094	286/18:08:32	COLOMBIA	8 Deg 40.0 Min	-71 Deg 58.3 Min	05/01/86	2803
MC-118.30	043	286/18:08:40	COLOMBIA/BRAZIL	8 Deg 14.3 Min	-71 Deg 43.8 Min	04/16/85	1420
MC-118.30	095	286/18:08:43	COLOMBIA	8 Deg 04.2 Min	-71 Deg 37.5 Min	05/01/86	2804
MC-118.30	044	286/18:08:50	COLOMBIA/BRAZIL	7 Deg 38.5 Min	-71 Deg 23.0 Min	04/16/85	1421
MC-118.30	096	286/18:08:53	COLOMBIA	7 Deg 28.3 Min	-71 Deg 16.6 Min	05/01/86	2805
MC-118.30	045	286/18:09:01	COLOMBIA/BRAZIL	7 Deg 02.7 Min	-71 Deg 02.2 Min	04/16/85	1422
MC-118.30	097	286/18:09:04	COLOMBIA	6 Deg 52.4 Min	-70 Deg 55.8 Min	05/01/86	2806
MC-118.30	046	286/18:09:11	COLOMBIA/BRAZIL	6 Deg 26.8 Min	-70 Deg 41.4 Min	04/16/85	1423
MC-118.30	098	286/18:09:14	COLOMBIA	6 Deg 16.5 Min	-70 Deg 35.1 Min	05/01/86	2807
MC-118.30	047	286/18:09:22	COLOMBIA/BRAZIL	5 Deg 50.9 Min	-70 Deg 20.7 Min	04/16/85	1424
MC-118.30	099	286/18:09:25	COLOMBIA	5 Deg 40.7 Min	-70 Deg 14.4 Min	05/01/86	2808
MC-118.30	048	286/18:09:32	COLOMBIA/BRAZIL	5 Deg 15.1 Min	-70 Deg 00.1 Min	04/16/85	1425
MC-118.30	100	286/18:09:34	COLOMBIA	5 Deg 08.0 Min	-69 Deg 55.6 Min	05/01/86	2809
MC-118.30	049	286/18:09:44	COLOMBIA/BRAZIL	4 Deg 35.5 Min	-69 Deg 37.4 Min	04/16/85	1426
MC-118.30	101	286/18:09:45	COLOMBIA	4 Deg 32.6 Min	-69 Deg 35.3 Min	05/01/86	2810
MC-118.30	050	286/18:09:54	COLOMBIA/BRAZIL	3 Deg 59.6 Min	-69 Deg 16.8 Min	04/16/85	1427
MC-118.30	102	286/18:09:55	COLOMBIA	3 Deg 56.2 Min	-69 Deg 14.5 Min	05/01/86	2811
MC-118.30	051	286/18:10:05	COLOMBIA/BRAZIL	3 Deg 23.8 Min	-68 Deg 56.3 Min	04/16/85	1428
MC-118.30	103	286/18:10:06	COLOMBIA	3 Deg 20.7 Min	-68 Deg 54.2 Min	05/01/86	2812
MC-118.30	106	286/18:10:11	BRAZIL	3 Deg 02.8 Min	-68 Deg 43.9 Min	05/03/86	2815
MC-118.30	052	286/18:10:25	COLOMBIA/BRAZIL	2 Deg 12.3 Min	-68 Deg 18.8 Min	04/16/85	1429
MC-118.30	104	286/18:10:26	BRAZIL	2 Deg 10.5 Min	-68 Deg 17.4 Min	05/01/86	2813
MC-118.30	084	286/18:10:29	COLOMBIA/BRAZIL	1 Deg 58.1 Min	-68 Deg 10.7 Min	08/29/85	2305
MC-118.30	053	286/18:10:36	COLOMBIA/BRAZIL	1 Deg 36.4 Min	-67 Deg 58.3 Min	04/16/85	1430
MC-118.30	105	286/18:10:36	BRAZIL	1 Deg 34.6 Min	-67 Deg 56.9 Min	05/01/86	2814
MC-118.30	054	286/18:10:46	COLOMBIA/BRAZIL	1 Deg 00.5 Min	-67 Deg 37.8 Min	04/16/85	1431
MC-118.30	107	286/18:10:47	BRAZIL	0 Deg 58.0 Min	-67 Deg 36.0 Min	05/03/86	2816
MC-118.30	055	286/18:10:57	COLOMBIA/BRAZIL	0 Deg 24.4 Min	-67 Deg 17.2 Min	04/17/85	1432

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
MC-118.30	108	286/18:10:58	BRAZIL	0 Deg 22.1 Min	-67 Deg 15.5 Min	05/03/86	2817
MC-118.30	056	286/18:11:07	COLOMBIA/BRAZIL	0 Deg 11.5 Min	-66 Deg 56.7 Min	04/17/85	1433
MC-118.30	109	286/18:11:08	BRAZIL	0 Deg 13.7 Min	-66 Deg 55.0 Min	05/03/86	2818
MC-118.30	057	286/18:11:18	COLOMBIA/BRAZIL	0 Deg 47.4 Min	-66 Deg 36.2 Min	04/17/85	1434
MC-118.30	110	286/18:11:19	BRAZIL	0 Deg 49.1 Min	-66 Deg 34.8 Min	05/03/86	2819
MC-118.30	058	286/18:11:28	COLOMBIA/BRAZIL	-1 Deg 23.2 Min	-66 Deg 15.7 Min	04/17/85	1435
MC-118.30	111	286/18:11:29	BRAZIL	-1 Deg 25.4 Min	-66 Deg 14.0 Min	05/03/86	2820
MC-118.30	001	286/18:11:32	AMAZON	-1 Deg 39.4 Min	-66 Deg 06.0 Min	10/26/84	0110
MC-118.30	112	286/18:11:36	BRAZIL	-1 Deg 50.5 Min	-65 Deg 59.6 Min	05/06/86	2821
MC-118.30	002	286/18:11:42	AMAZON	-2 Deg 15.3 Min	-65 Deg 45.4 Min	10/26/84	0111
MC-118.30	001	286/18:11:43	BRAZIL	-2 Deg 17.0 Min	-65 Deg 44.4 Min	10/28/84	0125
MC-118.30	113	286/18:11:47	BRAZIL	-2 Deg 26.3 Min	-65 Deg 39.1 Min	05/06/86	2822
MC-118.30	002	286/18:11:53	BRAZIL	-2 Deg 52.8 Min	-65 Deg 23.9 Min	10/28/84	0126
MC-118.30	003	286/18:11:53	AMAZON	-2 Deg 51.1 Min	-65 Deg 24.9 Min	10/26/84	0112
MC-118.30	114	286/18:11:57	BRAZIL	-3 Deg 02.2 Min	-65 Deg 18.5 Min	05/06/86	2823
MC-118.30	003	286/18:12:04	BRAZIL	-3 Deg 28.6 Min	-65 Deg 03.3 Min	10/28/84	0127
MC-118.30	115	286/18:12:08	BRAZIL	-3 Deg 38.0 Min	-64 Deg 57.9 Min	05/06/86	2824
MC-118.30	038	286/18:12:10	BRAZIL	-3 Deg 44.9 Min	-64 Deg 54.3 Min	04/13/85	1399
MC-118.30	116	286/18:12:18	BRAZIL	-4 Deg 13.9 Min	-64 Deg 37.2 Min	05/06/86	2825
MC-118.30	039	286/18:12:20	BRAZIL	-4 Deg 20.7 Min	-64 Deg 33.7 Min	04/13/85	1400
MC-118.30	117	286/18:12:29	BRAZIL	-4 Deg 49.6 Min	-64 Deg 16.5 Min	05/06/86	2826
MC-118.30	040	286/18:12:32	BRAZIL	-5 Deg 00.1 Min	-64 Deg 10.9 Min	04/13/85	1401
MC-118.30	118	286/18:12:35	BRAZIL	-5 Deg 12.0 Min	-64 Deg 03.5 Min	05/06/86	2827
MC-118.30	041	286/18:12:42	BRAZIL	-5 Deg 35.8 Min	-63 Deg 50.1 Min	04/13/85	1402
MC-118.30	119	286/18:12:46	BRAZIL	-5 Deg 47.7 Min	-63 Deg 42.8 Min	05/06/86	2828
MC-118.30	042	286/18:12:53	BRAZIL	-6 Deg 11.5 Min	-63 Deg 29.3 Min	04/13/85	1403
AS-118.50	025	286/18:30:51	SOUTH OCEAN	-58 Deg 36.9 Min	-1 Deg 02.7 Min	04/12/86	2740
AS-118.50	001	286/18:31:00	SOUTH OCEAN	-58 Deg 45.2 Min	0 Deg 01.1 Min	01/07/85	0701
AS-118.50	024	286/18:31:00	SOUTH OCEAN	-58 Deg 45.7 Min	0 Deg 02.9 Min	11/01/85	2432
AS-118.50	026	286/18:31:02	SOUTH OCEAN	-58 Deg 47.1 Min	0 Deg 13.8 Min	04/12/86	2741
AS-118.50	002	286/18:31:11	SOUTH OCEAN	-58 Deg 55.4 Min	1 Deg 23.0 Min	01/07/85	0702
AS-118.50	027	286/18:31:12	SOUTH OCEAN	-58 Deg 56.6 Min	1 Deg 31.3 Min	04/12/86	2742
AS-118.50	003	286/18:31:21	SOUTH OCEAN	-59 Deg 04.6 Min	2 Deg 45.5 Min	01/07/85	0703
AS-118.50	028	286/18:31:23	SOUTH OCEAN	-59 Deg 05.2 Min	2 Deg 49.2 Min	04/12/86	2743
AS-118.50	004	286/18:31:31	SOUTH OCEAN	-59 Deg 12.4 Min	4 Deg 04.1 Min	01/07/85	0704
AS-118.50	029	286/18:31:33	SOUTH OCEAN	-59 Deg 12.9 Min	4 Deg 07.2 Min	04/12/86	2744
AS-118.50	005	286/18:31:42	SOUTH OCEAN	-59 Deg 19.4 Min	5 Deg 22.5 Min	01/09/85	0718
AS-118.50	030	286/18:31:44	SOUTH OCEAN	-59 Deg 19.9 Min	5 Deg 26.3 Min	04/12/86	2745
AS-118.50	006	286/18:31:52	SOUTH OCEAN	-59 Deg 25.6 Min	6 Deg 42.2 Min	01/09/85	0719
AS-118.50	031	286/18:31:54	SOUTH OCEAN	-59 Deg 26.0 Min	6 Deg 45.5 Min	04/12/86	2746
AS-118.50	007	286/18:32:03	SOUTH OCEAN	-59 Deg 30.9 Min	8 Deg 02.4 Min	01/09/85	0720
AS-118.50	032	286/18:32:05	SOUTH OCEAN	-59 Deg 31.3 Min	8 Deg 05.6 Min	04/12/86	2747
AS-118.50	008	286/18:32:13	SOUTH OCEAN	-59 Deg 35.6 Min	9 Deg 28.9 Min	01/09/85	0721
AS-118.50	033	286/18:32:14	SOUTH OCEAN	-59 Deg 35.4 Min	9 Deg 19.2 Min	04/15/86	2748
AS-118.50	009	286/18:32:24	SOUTH OCEAN	-59 Deg 39.2 Min	10 Deg 49.9 Min	01/09/85	0722
AS-118.50	034	286/18:32:25	SOUTH OCEAN	-59 Deg 39.0 Min	10 Deg 40.0 Min	04/15/86	2749
AS-118.50	010	286/18:32:34	SOUTH OCEAN	-59 Deg 43.0 Min	11 Deg 59.8 Min	01/12/85	0723
AS-118.50	035	286/18:32:35	SOUTH OCEAN	-59 Deg 41.8 Min	12 Deg 00.4 Min	04/15/86	2750
AS-118.50	011	286/18:32:44	SOUTH OCEAN	-59 Deg 41.5 Min	13 Deg 21.9 Min	01/12/85	0724
AS-118.50	036	286/18:32:46	SOUTH OCEAN	-59 Deg 43.8 Min	13 Deg 21.5 Min	04/15/86	2751
AS-118.50	012	286/18:32:55	SOUTH OCEAN	-59 Deg 42.6 Min	14 Deg 43.3 Min	01/12/85	0725
AS-118.50	037	286/18:32:56	SOUTH OCEAN	-59 Deg 44.8 Min	14 Deg 41.9 Min	04/15/86	2752
AS-118.50	013	286/18:33:05	SOUTH OCEAN	-59 Deg 42.8 Min	16 Deg 04.7 Min	01/12/85	0726
AS-118.50	038	286/18:33:07	SOUTH OCEAN	-59 Deg 45.1 Min	16 Deg 03.3 Min	04/15/86	2753
AS-118.50	014	286/18:33:16	SOUTH OCEAN	-59 Deg 42.1 Min	17 Deg 26.2 Min	01/12/85	0727
AS-118.50	039	286/18:33:17	SOUTH OCEAN	-59 Deg 44.4 Min	17 Deg 23.9 Min	04/15/86	2754
AS-118.50	015	286/18:33:27	SOUTH OCEAN	-59 Deg 40.5 Min	18 Deg 51.6 Min	01/11/85	0728
AS-118.50	040	286/18:33:28	SOUTH OCEAN	-59 Deg 42.9 Min	18 Deg 45.1 Min	04/15/86	2755
AS-118.50	016	286/18:33:37	SOUTH OCEAN	-59 Deg 38.0 Min	20 Deg 12.8 Min	01/11/85	0729
AS-118.50	041	286/18:33:39	SOUTH OCEAN	-59 Deg 40.3 Min	20 Deg 13.9 Min	04/16/86	2756
AS-118.50	017	286/18:33:48	SOUTH OCEAN	-59 Deg 34.7 Min	21 Deg 33.3 Min	01/11/85	0730

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
AS-118.50	042	286/18:33:50	SOUTH OCEAN	-59 Deg 37.0 Min	21 Deg 34.8 Min	04/16/86	2757
AS-118.50	018	286/18:33:58	SOUTH OCEAN	-59 Deg 30.6 Min	22 Deg 54.4 Min	01/11/85	0731
AS-118.50	043	286/18:34:00	SOUTH OCEAN	-59 Deg 32.8 Min	22 Deg 54.7 Min	04/16/86	2758
AS-118.50	019	286/18:34:09	SOUTH OCEAN	-59 Deg 25.6 Min	24 Deg 14.2 Min	01/11/85	0732
AS-118.50	044	286/18:34:11	SOUTH OCEAN	-59 Deg 27.8 Min	24 Deg 14.9 Min	04/16/86	2759
AS-118.50	020	286/18:34:19	SOUTH OCEAN	-59 Deg 19.7 Min	25 Deg 34.5 Min	01/11/85	0733
AS-118.50	045	286/18:34:21	SOUTH OCEAN	-59 Deg 22.1 Min	25 Deg 32.8 Min	04/17/86	2760
AS-118.50	021	286/18:34:30	SOUTH OCEAN	-59 Deg 13.0 Min	26 Deg 53.8 Min	01/11/85	0734
AS-118.50	046	286/18:34:32	SOUTH OCEAN	-59 Deg 15.4 Min	26 Deg 52.0 Min	04/17/86	2761
AS-118.50	022	286/18:34:40	SOUTH OCEAN	-59 Deg 05.4 Min	28 Deg 12.6 Min	01/11/85	0735
AS-118.50	047	286/18:34:42	SOUTH OCEAN	-59 Deg 07.9 Min	28 Deg 10.4 Min	04/17/86	2762
AS-118.50	023	286/18:34:51	SOUTH OCEAN	-58 Deg 57.1 Min	29 Deg 30.3 Min	01/11/85	0736
AS-118.50	048	286/18:34:53	SOUTH OCEAN	-58 Deg 59.6 Min	29 Deg 28.5 Min	04/17/86	2763
HI-118.60	001	286/18:54:00	SUMATERA	-5 Deg 32.7 Min	99 Deg 42.6 Min	01/18/85	0774
HI-118.60	002	286/18:54:11	SUMATERA	-4 Deg 56.3 Min	100 Deg 03.4 Min	01/18/85	0775
HI-118.60	003	286/18:54:21	SUMATERA	-4 Deg 19.9 Min	100 Deg 24.2 Min	01/18/85	0776
HI-118.60	004	286/18:54:32	SUMATERA	-3 Deg 43.5 Min	100 Deg 45.0 Min	01/18/85	0777
HI-118.60	005	286/18:54:42	SUMATERA	-3 Deg 07.1 Min	101 Deg 05.8 Min	01/18/85	0778
HI-118.60	006	286/18:54:53	SUMATERA	-2 Deg 30.7 Min	101 Deg 26.6 Min	01/18/85	0779
HI-118.60	007	286/18:55:04	SUMATERA	-1 Deg 54.5 Min	101 Deg 47.3 Min	01/18/85	0780
HI-118.60	013	286/18:55:04	SUMATERA	-2 Deg 01.1 Min	101 Deg 43.0 Min	03/28/85	1304
HI-118.60	015	286/18:55:04	SUMATERA	-2 Deg 05.9 Min	101 Deg 40.0 Min	06/01/85	1767
HI-118.60	008	286/18:55:14	SUMATERA	-1 Deg 18.1 Min	102 Deg 08.1 Min	01/18/85	0781
HI-118.60	014	286/18:55:15	SUMATERA	-1 Deg 28.3 Min	102 Deg 01.5 Min	05/04/85	1564
HI-118.60	016	286/18:55:15	SUMATERA	-1 Deg 29.6 Min	102 Deg 00.8 Min	06/01/85	1768
HI-118.60	009	286/18:55:25	SUMATERA	0 Deg 41.8 Min	102 Deg 28.8 Min	01/18/85	0782
HI-118.60	017	286/18:55:26	SUMATERA	0 Deg 53.2 Min	102 Deg 21.6 Min	06/01/85	1769
HI-118.60	010	286/18:55:36	SUMATERA	0 Deg 05.0 Min	102 Deg 49.9 Min	01/18/85	0783
HI-118.60	018	286/18:55:36	SUMATERA	0 Deg 16.9 Min	102 Deg 42.3 Min	06/01/85	1770
HI-118.60	011	286/18:55:46	SUMATERA	0 Deg 31.3 Min	103 Deg 10.7 Min	01/18/85	0784
HI-118.60	019	286/18:55:47	SUMATERA	0 Deg 19.5 Min	103 Deg 03.1 Min	06/01/85	1771
HI-118.60	020	286/18:55:55	SUMATERA	0 Deg 48.3 Min	103 Deg 19.6 Min	06/01/85	1772
HI-118.60	012	286/18:55:57	SUMATERA	1 Deg 07.6 Min	103 Deg 31.5 Min	01/18/85	0785
AL-119.40	001	286/19:26:00	NORTHERN CALIFORNIA	44 Deg 14.3 Min	-125 Deg 38.3 Min	12/17/84	0560
AL-119.40	002	286/19:26:11	NORTHERN CALIFORNIA	43 Deg 45.6 Min	-124 Deg 56.3 Min	12/17/84	0561
AL-119.40	003	286/19:26:21	NORTHERN CALIFORNIA	43 Deg 16.8 Min	-124 Deg 14.9 Min	12/17/84	0562
AL-119.40	004	286/19:26:32	NORTHERN CALIFORNIA	42 Deg 47.6 Min	-123 Deg 34.2 Min	12/17/84	0563
AF-119.60	004	286/19:48:00	ARGENTINA	-26 Deg 15.8 Min	-70 Deg 55.2 Min	01/29/85	0856
AF-119.60	005	286/19:48:10	ARGENTINA	-26 Deg 48.8 Min	-70 Deg 28.0 Min	01/29/85	0857
AF-119.60	006	286/19:48:21	ARGENTINA	-27 Deg 21.7 Min	-70 Deg 00.4 Min	01/29/85	0858
AF-119.60	007	286/19:48:31	ARGENTINA	-27 Deg 54.5 Min	-69 Deg 32.6 Min	01/29/85	0859
AF-119.60	008	286/19:48:42	ARGENTINA	-28 Deg 27.1 Min	-69 Deg 04.4 Min	01/29/85	0860
AF-119.60	009	286/19:48:53	ARGENTINA	-28 Deg 59.6 Min	-68 Deg 35.9 Min	01/29/85	0861
AF-119.60	010	286/19:49:03	ARGENTINA	-29 Deg 32.0 Min	-68 Deg 07.0 Min	01/29/85	0862
AF-119.60	001	286/19:49:12	PIC DE PAULO, ARG.	-29 Deg 54.7 Min	-67 Deg 46.5 Min	10/29/84	0107
AF-119.60	002	286/19:49:22	PIC DE PAULO, ARG.	-30 Deg 26.8 Min	-67 Deg 17.0 Min	10/29/84	0108
AF-119.60	003	286/19:49:33	PIC DE PAULO, ARG.	-30 Deg 58.8 Min	-66 Deg 47.2 Min	10/29/84	0109
AF-119.60	011	286/19:49:43	ARGENTINA	-31 Deg 33.4 Min	-66 Deg 14.2 Min	01/29/85	0863
AF-119.60	012	286/19:49:53	ARGENTINA	-32 Deg 05.0 Min	-65 Deg 43.6 Min	01/29/85	0864
I5-120.20	037	286/20:28:38	BANGLADESH/OCEAN	15 Deg 42.1 Min	85 Deg 39.3 Min	05/04/85	1540
I5-120.20	038	286/20:28:49	BANGLADESH/OCEAN	16 Deg 17.9 Min	86 Deg 01.8 Min	05/04/85	1541
I5-120.20	039	286/20:29:00	BANGLADESH/OCEAN	16 Deg 53.8 Min	86 Deg 24.4 Min	05/04/85	1542
I5-120.20	040	286/20:29:21	BANGLADESH	18 Deg 06.8 Min	87 Deg 11.1 Min	05/04/85	1543
I5-120.20	041	286/20:29:32	BANGLADESH	18 Deg 42.4 Min	87 Deg 34.2 Min	05/04/85	1544
I5-120.20	001	286/20:29:40	BANGLADESH	19 Deg 07.9 Min	87 Deg 50.8 Min	11/18/84	0288
I5-120.20	002	286/20:29:51	BANGLADESH	19 Deg 43.5 Min	88 Deg 14.2 Min	11/18/84	0289
I5-120.20	003	286/20:30:01	BANGLADESH	20 Deg 19.0 Min	88 Deg 37.8 Min	11/18/84	0290
I5-120.20	061	286/20:30:11	BANGLADESH	20 Deg 53.9 Min	89 Deg 01.3 Min	08/08/85	2230
I5-120.20	004	286/20:30:12	BANGLADESH	20 Deg 54.5 Min	89 Deg 01.6 Min	11/18/84	0291
I5-120.20	005	286/20:30:22	BANGLADESH	21 Deg 30.0 Min	89 Deg 25.6 Min	11/18/84	0292
I5-120.20	062	286/20:30:22	BANGLADESH	21 Deg 29.3 Min	89 Deg 25.3 Min	08/08/85	2231

Series/ Datatake	Scene No.	Start Time GMT	Site Name	Center Latitude	Center Longitude	Corr. Date	Request No.
I5-120.20	064	286/20:30:29	BANGLADESH	21 Deg 53.7 Min	89 Deg 42.0 Min	09/24/85	2376
I5-120.20	006	286/20:30:33	BANGLADESH	22 Deg 05.3 Min	89 Deg 49.8 Min	11/18/84	0293
I5-120.20	068	286/20:30:33	BANGLADESH- LOOK 2	22 Deg 04.2 Min	89 Deg 48.1 Min	06/14/86	2913
I5-120.20	065	286/20:30:40	BANGLADESH	22 Deg 29.0 Min	90 Deg 06.3 Min	09/24/85	2377
I5-120.20	007	286/20:30:44	BANGLADESH	22 Deg 40.5 Min	90 Deg 14.2 Min	11/18/84	0294
I5-120.20	066	286/20:30:51	BANGLADESH	23 Deg 04.2 Min	90 Deg 30.8 Min	09/24/85	2378
I5-120.20	008	286/20:30:54	BANGLADESH	23 Deg 15.7 Min	90 Deg 38.8 Min	11/18/84	0295
I5-120.20	009	286/20:31:05	BANGLADESH	23 Deg 50.8 Min	91 Deg 03.7 Min	11/18/84	0296
I5-120.20	010	286/20:31:16	BANGLADESH	24 Deg 25.7 Min	91 Deg 28.7 Min	11/18/84	0297
I5-120.20	011	286/20:31:26	BANGLADESH	24 Deg 59.3 Min	91 Deg 53.1 Min	11/30/84	0298
I5-120.20	012	286/20:31:37	BANGLADESH	25 Deg 34.2 Min	92 Deg 18.7 Min	11/30/84	0299
I5-120.20	036	286/20:31:45	BANGLADESH	26 Deg 00.3 Min	92 Deg 38.0 Min	11/29/84	0287
I5-120.20	042	286/20:31:55	BANGLADESH	26 Deg 36.6 Min	93 Deg 04.7 Min	05/26/86	1545
I5-120.20	042	286/20:31:55	BANGLADESH/INDIA	26 Deg 36.3 Min	93 Deg 05.2 Min	05/04/85	1545
I5-120.20	043	286/20:32:06	BANGLADESH/INDIA	27 Deg 10.9 Min	93 Deg 31.5 Min	05/04/85	1546
I5-120.20	044	286/20:32:17	BANGLADESH/INDIA	27 Deg 45.4 Min	93 Deg 58.2 Min	05/04/85	1547
I5-120.20	045	286/20:32:27	BANGLADESH/INDIA	28 Deg 19.8 Min	94 Deg 25.1 Min	05/04/85	1548
I5-120.20	046	286/20:32:38	BANGLADESH/INDIA	28 Deg 53.9 Min	94 Deg 52.3 Min	05/04/85	1549
I5-120.20	047	286/20:32:49	BANGLADESH/INDIA	29 Deg 28.1 Min	95 Deg 19.9 Min	05/04/85	1550
I5-120.20	048	286/20:32:59	BANGLADESH/INDIA	30 Deg 02.2 Min	95 Deg 47.8 Min	05/04/85	1551
I5-120.20	055	286/20:33:10	INDIA/CHINA	30 Deg 38.0 Min	96 Deg 16.9 Min	05/04/85	1552
I5-120.20	056	286/20:33:21	INDIA/CHINA	31 Deg 11.8 Min	96 Deg 45.6 Min	05/04/85	1553
I5-120.20	057	286/20:33:32	INDIA/CHINA	31 Deg 45.4 Min	97 Deg 14.7 Min	05/04/85	1554
I5-120.20	058	286/20:33:42	INDIA/CHINA	32 Deg 18.8 Min	97 Deg 44.0 Min	05/04/85	1555
I5-120.20	059	286/20:33:53	INDIA/CHINA	32 Deg 52.3 Min	98 Deg 13.7 Min	05/04/85	1556
I5-120.20	013	286/20:34:00	CHINA	33 Deg 13.6 Min	98 Deg 33.0 Min	11/17/84	0276
I5-120.20	014	286/20:34:11	CHINA	33 Deg 46.8 Min	99 Deg 03.4 Min	11/17/84	0277
I5-120.20	015	286/20:34:21	CHINA	34 Deg 19.9 Min	99 Deg 34.2 Min	11/17/84	0278
I5-120.20	016	286/20:34:32	CHINA	34 Deg 52.9 Min	100 Deg 05.5 Min	11/17/84	0279
I5-120.20	017	286/20:34:43	CHINA	35 Deg 25.7 Min	100 Deg 37.2 Min	11/17/84	0280
I5-120.20	018	286/20:34:53	CHINA	35 Deg 58.3 Min	101 Deg 09.3 Min	11/17/84	0281
I5-120.20	019	286/20:35:04	CHINA	36 Deg 30.8 Min	101 Deg 42.0 Min	11/17/84	0282
I5-120.20	020	286/20:35:14	CHINA	37 Deg 03.1 Min	102 Deg 15.1 Min	11/17/84	0283
I5-120.20	021	286/20:35:25	CHINA	37 Deg 35.2 Min	102 Deg 48.7 Min	11/17/84	0284
I5-120.20	022	286/20:35:36	CHINA	38 Deg 07.0 Min	103 Deg 22.8 Min	11/17/84	0285
I5-120.20	063	286/20:35:44	CHINA	38 Deg 32.2 Min	103 Deg 52.2 Min	09/02/85	2326
I5-120.20	024	286/20:35:59	CHINA	39 Deg 15.9 Min	104 Deg 39.0 Min	11/28/84	0340
I5-120.20	025	286/20:36:10	CHINA	39 Deg 48.3 Min	105 Deg 16.1 Min	11/25/84	0341
I5-120.20	026	286/20:36:21	CHINA	40 Deg 19.0 Min	105 Deg 52.2 Min	11/25/84	0342
I5-120.20	027	286/20:36:32	CHINA	40 Deg 57.7 Min	106 Deg 38.6 Min	12/20/84	0343
I5-120.20	028	286/20:36:42	CHINA	41 Deg 20.5 Min	107 Deg 06.8 Min	11/25/84	0344
I5-120.20	029	286/20:36:52	CHINA	41 Deg 49.2 Min	107 Deg 42.9 Min	12/07/84	0345
I5-120.20	030	286/20:37:03	CHINA	42 Deg 19.3 Min	108 Deg 21.7 Min	12/07/84	0346
I5-120.20	031	286/20:37:14	CHINA	42 Deg 50.7 Min	109 Deg 03.3 Min	11/25/84	0347
I5-120.20	032	286/20:37:25	CHINA	43 Deg 27.3 Min	109 Deg 53.1 Min	12/13/84	0348
I5-120.20	033	286/20:37:36	CHINA	43 Deg 56.6 Min	110 Deg 34.1 Min	12/13/84	0349
I5-120.20	034	286/20:37:46	CHINA	44 Deg 18.8 Min	111 Deg 06.0 Min	11/25/84	0350
I5-120.20	035	286/20:37:57	CHINA	44 Deg 54.5 Min	111 Deg 58.7 Min	12/13/84	0351
I5-120.20	060	286/20:38:07	CHINA	45 Deg 14.9 Min	112 Deg 34.9 Min	05/04/85	1557