RU-267

DRAFT FINAL REPORT

PROVISION OF REMOTE SENSING DATA AND ANALYSIS TO THE OUTER CONTINENTAL SHELF ENVIRONMENTAL ASSESSMENT PROGRAM

by

W.J. Stringer

Contract 84-ABC-00107

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TABLE OF CONTENTS

	Page
ABSTRACT	1
INTRODUCTION	2
DATA ACQUISITION	3
a. Landsat	3
b. NOAA/AVHRR Imagery	4
c. Side-Looking Airborne Radar (SLAR)	5
d. Passive Microwave Imagery	6
e. Synthetic Aperture Radar (satellite borne)	7
f. Digital Data	8
ARCHIVING ACTIVITIES	9
a. Introduction	9
b. Archive Management	11
DISSEMINATION OF INFORMATION AND PRODUCTS	13
DATA ANALYSIS	15
a. Ice Conditions in Bering Strait	15
b. Case Histories of Ice Motion Events Correlated with Meteorological Events, Particularly in Terms of Ridge Building and Polynya Formation	17
c. Large Scale Ice Events - Beaufort Sea Ice Movement	18
d. Statistical Characterization of Summertime Beaufort Sea Ice Distribution and Concentration	18
e. Chukchi Sea Ice Behavior	18

LIST OF APPENDICES

APPENDIX I — CATALOG OF LOW CLOUD-COVER LANDSAT SCENES OF ALASKA

APPENDIX II — CATALOG OF NOAA SATELLITE IMAGERY

APPENDIX III — SELECTION OF CORRESPONDENCE BETWEEN RESEARCH UNITS REQUESTING REMOTE SENSING ASSISTANCE

APPENDIX IV — MESOSCALE NOWCASTING OF SEA ICE MOVEMENT THROUGH THE BERING STRAIT WITH A DESCRIPTION OF MAJOR DRIVING FORCES

APPENDIX V — NOWCASTING SEA ICE MOVEMENT THROUGH THE BERING STRAIT

APPENDIX VI — OBSERVATIONS OF DOUBLE ARCH FORMATION IN THE BERING STRAIT

APPENDIX VII — A STUDY OF POSSIBLE METEOROLOGICAL INFLUENCES ON POLYNYA SIZE

APPENDIX VIII — ICE MOVEMENT IN THE EASTERN BEAUFORT SEA RELATED TO WIDENING OF THE CAPE BATHURST POLYNYA

APPENDIX IX — ICE MOVEMENT IN THE NEARSHORE REGION OF lHE EASTERN BEAUFORT SEA AS MEASURED FROM LANDSAT IMAGERY

APPENDIX X — CHARACTERIZATION OF SUMMERTIME ICE CONDITIONS IN THE ALASKAN BEAUFORT SEA

APPENDIX XI — STATISTICAL DESCRIPTION OF THE SUMMERTIME ICE EDGE IN THE CHUKCHI SEA

ABSTRACT

This report describes work performed toward meeting several objectives identified by the National Oceanic and Atmospheric Administration to be of value toward their overall objective of supplying the Minerals Management Service with Alaskan offshore environmental data. The duties of the research unit under the contract reported here center on the acquisition of satellite imagery and its utilization for case-specific and statistical analyses of offshore environmental conditions, particularly those involving sea ice. Specific analysis topics reported are: ice conditions in Bering Strait, case histories of ice motion events correlated with meteorological events, large scale ice events--Beaufort Sea ice movement and statistical characterization of summertime sea ice distribution and concentration. Although some of the results pertaining to these topics are described in the body of this report, most of the results are contained in a series of eight reports and publications attached as appendices.

INTRODUCTION

Several aspects of the environmental assessment of the Alaskan Outer Continental Shelf involve analyses of large scale events or processes. The history of the Outer Continental Shelf Environmental Assessment Program (OCSEAP) has shown that it has not always been possible to anticipate which of these events or processes will be pertinent to various phases of the leasing decision process. Many of these studies, however, require a historical data base. Clearly, it is impossible in many cases to construct such data bases in a short time after the need for a particular type of information is identified. In somes cases, particularly data needs involving sea ice, snow, oceanic sediment transport and flooding, satellite imagery has been proven capable of providing a statistical data base over the past decade. This contract called for the collection and archival of remotely-sensed data in order to maintain . that data base and dissemination of that data as required to OCSEAP investigators. In addition, the contract called for analysis of remotely-sensed data in meeting several specific research objectives.

The report which follows consists of a narrative report outlining how the various objectives were met and a series of appendices which either contain detailed information (in the case of data acquisition; archival and dissemination) or specific scientific reports (in the case of the specific research objectives).

DATA ACQUISITION

This objective calls for acquisition of a variety of data products which may be of value to OCSEAP investigators or the Minerals Management Serivce staff or NOAA staff associated with OCSEAP. These acquisitions during this contract have been as follows:

Landsat. During this contractwe have acquired 252 Landsat scenes of potential use to OCSEAP investigators. We have been particularly fortunate in that we operate our own Landsat image processing facility; otherwise we would have acquired far fewer images. The reason for this is that worldwide Landsat data acquisition has been altered. Rather than using ground stations to record data on tape (following which the tape was mailed to the Goddard Space Flight Center), Landsat now uses TDRS (Tracking and Data Relay Satellite) to transfer Landsat data to the Goddard Center. Worldwide data collection will require a network of 3 TDRS (all in geostationary orbits). Unfortunately, at present there is only one TDRS with the result that some of the world is not covered by Landsat, including Alaska. Although the recording equipment has been removed from the NOAA Fairbanks ground station, it can still receive Landsat imagery (but not record the data so that it will end up in the Sioux Falls USGS data center). Our image processing equipment records up *to* 20 Landsat scenes (of 4 single wavelength bands each) in disc storage. The images can then be digitally enhanced, enlarged and recorded at high resolution on film for archival purposes. It is also possible to make a quick copy color image shortly after data acquisition. Appendix I lists our current Landsat holdings.

NOAA/AVHRR Imagery. We have acquired NOAA/Advanced Very High Resolution Radiometer images of OCSEAP study areas during this contract. The images cost the contract $10 each. We have a standing order with the Gilmore Creek NOAA image acquisition facility for daily (if reasonably cloud free) coverage of the Alaska OCS areas. Only rarely does this require only one image. However, because of cloudiness, images are not always acquired every day. The average image acquisition rate during this contract has been .46 images per day. Both visual band and thermal infrared (IR) band imagery have been acquired, but rarely simultaneously because of the cost. The chief reason this imagery is acquired is to provide data regarding ice conditions. During the part of the year that the sun is above the horizon in the areas of interest at the time of satellite pass, visual band data are acquired. When the sun is below the horizon, thermal IR imagery is acquired. These data are filed by day in chronological order. Appendix II is a copy of our accessions list for these imagery.

The imagery described above are high quality film transparencies. The NOAA weather service actually acquires all imagery obtained by the AVHRR instrument. They are recorded in positive paper print format (considerably degraded from the transparency format, but still usable for most purposes). The Weather Service sends us this imagery when they are through with it for analysis purposes. We file these prints as well. They are useful for some analysis purposes and for indicating what data was recorded on the multitude (up to 52 images per day) ofAVHRR imagery we simply cannot afford to purchase and archive. Based on this information we have at times decided to order reproductions of some of these images from the NOAA data center in Washington, D.C. (For instance, Pace, RU 670, was able to see the

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
54/21	40302-19122	5/14/83	45	*
54/21	50186-19124	9/13/84	50	
54/	50100-19111	6/09184	15	*
54/.	50196-19131	9/13/84	30	
. . . .				
55/19	40613-19152	3/20/84	5	*
55/21	40117-19164	11/10/82	15	
5S/21	40341-19184	6/22183	30	
55/21	40389-19181	8/09/83	15	
55/21	40613-19162	3/20/84	30	
55/22	40117-19171	11/10/82	10	
55/22	40613-19164	3120/84	30	
56/14	40284-19220	4/26/83	10	*
56/19	40284-19240	4/26/83	0	
56/20	40300-19242	5/12/83	20	*
56/20	40364-19242	7/15/83	15	
56/20	50514-19243	7/28/85	30	*
56/21	40284-19245	4126/83	0	
56/21	40300-19244	5/12/83	20	*
56/21	40364-19245	7/15/83	30	
56/	50514-19245	7/20/85	40	*
56	40284-19252	4/26183	5	
.57/19	40355-19301	7/06/83	20	
57/19	40419-19295	9/08/83	30	
5?/19	50169-19301	8/17/84	0	
5?/20	40355-19304	7/06183	20	
5?/20	40419-19302	9/08/83	15	
5?/21	40419-19304	9/08/83	20	
58/19	50112-19350	6/21/84	30	*
58/19	50208-19364	9/25184	2	
59/18	40113-19400	11/06/82	25	
59/10	40289-19421	5/01/83	40	
59/18	40353-19421	7/04/83	50	
59/18	40785-19372	9108/84	10	*
59/19	40113-19402	11/06/82	15	
59/19	40289-19424	5/01/83	40	
59/19	40353-19423	7104/83	40	
59/	40417-19421	9/06183	30	
5S	40721-19375	7/06/84	20	*
59/	40785-19374	9/00/84	40	*
59/19	40801-193?4	9124/84	20	*
60/18	40408-19475	8/28/83	20	
60/18	50142-19472	7/21/84	0	*
60/18	50190-19484	9/07/84	40	*
60/19	40408-19482	8/28183	30	
,60/19	50190-19490	9/07/84	50	
. . .				
61/07	40751-19451	8/05/84	40	*
61/08	50149-19500	7/28/84	10	*
61/09	40751-19460	8/05/84	30″	*
61/09	50149-19502	7/28184	10	*
61/09	50213-19512	9/30/84	‘0	*
61/10	50149-19505	7/28/84	10	*
61/10	50197-19514	9/14/84	50	*
61/11	40751-19464	8105/84	50	*
61/11	50197-19520	9/14/84	20	*
61/12	50197-19523	9/14/84	10	*
61/12	50213-19523	9/30/84	30	*
61/13	50085-19504	5125/84	5	*
61/14	40799-19480	9122/84	40	*
61/15	40799-19482	9/22/84	5	*
61/16	40?99-19485	9/22/84	30	*
61/17	40751-19491	8/05/84	20	*
61/17	40799-19491	9/22/84	20	*
61/18	40399-19540	8/19/83	30	
61/18	40751-19493	8/05′/84	0	*
61/18	40799-19494	9/22/84	0	*
61/18	50149-19535	7/28/84	40	
61/18	50181-19544	8129/84	50	
61/19	40399-19541	8/19/83	20	*
61/19	40799-19500	9/22/84	0	*
61/19	50165-19545	8/13/84	20	
62/03	40694-19502	6109/84	0	*
62/04	40694-19504	6/09/84	15	*
62/05	40694-19511	6/09/84	15	*
62/06	40694-19513	6/09/84,10		*
62/07	40694-19520	6/09/84	0	*
62/08	40694-195?2	6/09184	40	*
62/16	40278-19595	4/20/83	50	*
62/16	40438-19594	9/27/83	0	*
62/16	50204-20002	9(21/84	40	*
62/17	40438-20001	9/27183	0	
62/17	50108-19585	6/17/84	30	*
62/17	50156-20000	8/04184	50	*
62/18	40326-20004	6/07183	20	
62/18	50108-19572	6/17/84	10	*
62/18	50204-20010	9/21/84	15	
63/09	50083-20012	5/23/84	0	*
63/12	40317-20041	5/29/83	0	*
63/17	40285-20063	4/27/83	5	
63/17	40365-20062	7/16/83	30	
63/18	40285-20070	4/26/83	20	
63/18	40365-20065	7/16/83	50	
63/18	40381-20063	8/01/83	40	
63/18	40413-20063	9/02/83	20	
64/08	50394-20094	3/30/85	20	*
64/09	50394-20101	3/30185	20	*
64/n	40948-20052	2/18/85	10	*
64/11	50442-20104	5/17/85	50	*
64/12	40948-20055	2/18/85	35	*
64/12	40980-20054	3/22/85	25	*

needed for an OCSEAP study. Purchase of the data in paper print format would be almost as expensive as purchase in film format and the data quality would be less than in film format. The entire collection of analyzed maps can be purchased for around $500. These would be useful as maps of ice conditions as well as guides to areas covered by the individual SLAR films. Therefore, we suggest that in the future this research unit acquires and archives this data set and later acquires original films as required by OCSEAP studies.

Passive Microwave Imagery. Currently the civilian satellites (Landsat, NOAA) do not have the ability to record and transmit to earth passive microwave imagery. However, the Defense Meteorological Satellite Program (DMSP) satellites do record this data and it is archived by the Navy. This data is available if needed by OCSEAP investigators. The chief utility of this data has been to determine the ice edge location during cloudy weather (the resolution is 25 km) and provide some information about ice concentration. This utilization is described in the U.S. Navy publication, Handbook for Sea Ice Analysis and Forecasting, (Stringer et al., 1984). Because its utility is chiefly limited to ice edge identification, we have not sought to archive this data set as it would be rather expensive (on the order of $10-$20 per day). Instead, we have archived the U.S. Navy ice charts which are derived (in part) from this data set.

Starting in mid 1986, through a cooperative agreement between the NOAA Weather Service and the U.S. Air Force, the Alaska Weather Serivce will have DMSP imagery available in paper print format (the Weather Service will not acquire the data in film format). This research unit should attempt to negotiate the acquisition of DMSP imagery after they have used it. (As described above, we have a

similar arrangement by which we currently acquire copies of NOAA AVHRR imagery in paper print format.) Film format data would contain considerably more 'information but it does not appear that it will be available.

Synthetic Aperture Radar (satellite borne). The Geophysical Institute and the National Aeronautics and Space Administration are currently negotiating a memorandum of understanding under which the Geophysical Institute will operate the North American receiving station for Synthetic Aperture Radar (SAR) imagery acquired by the European Space Agency's ERS-1 and the Canadian Radarsat. The planning phase of this cooperative project is well underway with a target date of 1989 for an operating ground station.

The operational plan for the ground station is to acquire and process the raw data on a daily basis so that imagery of each day's satellite pass is available within a few. hours of data acquisition. The principal investigator of this proposal has been identified by the university as the scientific coordinator for image processing.

Meanwhile, we have archived the small amount of SEASATSAR that NASA has processed and released. SEASAT operated for a very short time in 1978 (a considerably shorter time than its planned lifetime). A good deal of digital data of OCSEAP study areas was acquired. However, the process of compiling an image" from this digital data is quite lengthy and NASA has only compiled images for specific studies. The data was acquired in late summer and early fall (before freeze-Up). We have maps and schedules of the SAR footprint as it crossed Alaska. Our policy has been to negotiate with NASA for processed SEASAT SAR when and if it is needed by an OCSEAP investigator.

Digital Data. Almost all these image data sets are available in digital tape format. However, the cost is quite high (the tape for one Landsat scene costs $660). Therefore, it would not be cost effective to acquire imagery in this format unless an OCSEAP investigator has a need for a specific image. Landsat and NOAA AVHRR digital data can currently be processed at the United States Geological Survey (USGS) remote sensing facility in Anchorage. The microwave data are processed by the Navy in Monterey, California. The DMSP archives digital tapes of imagery from their satellites including the microwave band data. The format is similar to that of NOAA AVHRR imagery. If it would be useful to an OCSEAP investigator, these tapes could be obtained and analyzed at the USGS facility in Anchorage. The University of Alaska-Fairbanks is currently installing a data processing system so that analysis of Landsat digital tapes will be possible here as well.

Most OCSEAP studies using satellite imagery have made use of the repetitive coverage afforded by the satellite data to perform overview and statistical studies. These studies have made use of the large quantity of imagery stored in film and print format. Digital image processing is expensive and therefore only feasible when one or a few images require processing as part of a study.

As this report is being written we are undertaking a project for Martin (RU 660) which may ultimately require digital image processing. He requires an updated map with accurate latitude and longitude of the Yukon Delta in order to plot field data.

ARCHIVING ACTIVITIES

Introduction. OCSEAP investigations frequently require data depicting environmental conditions within their study areas. These conditions may include the configuration of drift ice upon the ocean, ocean sediment plumes, the timing of springtime over-ice flooding by north slope rivers, the actual configuration of river deltas (as opposed by older maps), the thermal regime of the ocean, and many other data which can be provided by comprehensive image coverage.

Very often OCSEAP investigations require these data very quickly to fill data gaps or answer questions raised during data analysis. Because of this, it is necessary to archive remotely-sensed data in such a way that retrieval is simple yet comprehensive and timely.

In partial fulfillment of this contract we have maintained an archive of remotely-sensed Alaskan data in image format. The data sets contained include:

1) Landsat. We currently have on file approximately 12,500 Landsat scenes of Alaska and adjacent waters. This forms the most complete file of hard-copy Landsat images in the state, and possibly of any regional center anywhere in the world. Each print is backed up with a file negative from which prompt reproductions may be made in our photographic laboratory, when time is important. The Landsat file is maintained current by routine acquisitions of low cloud-cover Landsat images, now mostly obtained through our own Quick-Look program which generates high-quality images from the real-time downlink data from Landsat. The Landsat archive is maintained first by order of image path and row grid locations and then by date within that

file. Thus a search for comprehensive data of a specific location is performed instantaneously and the search for an image at a particular date can be accomplished within a minute. Currently this filing system fills twelve, 4-drawer filing cabinets and has a replacement value currently estimated at $5 million. The standard procedure has been to collect data in all Landsat bands (i.e., 2 visual and 2 near infrared bands) in the form of 1:1,000,000 scale paper prints and negative transparencies at the same scale.

2) NOAA AVHRR Imagery. This data set consists of daily NOAA weather satellite transparencies from 1974 to present, forming about 17,500 images to date. A file of selected NOAA AVHRR tapes is also maintained, as well as several years of daily acquisition of DMSP (Defense Meteorological Satellite Program) transparencies

The AVHRR archive is maintained in order-of Julian day (i.e., . one file folder containing all that day's images, both visual band and thermal infrared band). The reason for this is that only a few images are collected each day and taken together; they cover the entire study area.

Because of *cost* of acquisition ($10 each), only one high quality transparency is acquired on the average for each day. However, we also receive and archive all paper prints of each day's satellite coverage of Alaska (up to four to six daily satellite passes). The high quality film transparencies are acquired within a few hours of the satellite pass, while the paper prints are sent to us by the Weather Service in Anchorage some time later. We have not found a great demand for these paper prints. However, they cost us nothing to acquire and serve as a record of data which was on the images we could not afford to acquire. Should we find by this means that an

OCSEAP investigator needs data we have not archived routinely, we can either take it from these paper prints or acquire the original transparency from the NOAA archive in Washington, D.C.

3) Side-Looking Airborne Radar (SLAR). This data set consists of all radar imagery acquired by OCSEAP and the Ice Centre Environment Canada imagery we have purchased thus far. The data are filed by date in film and paper print format.

4) Aerial Photography. Although archival of aerial photography is not called for in this contract, some OCSEAP investigators have found our high-altitude photography to be useful to their projects. This data set consists of 63,000 frames of 9X9" color and color-infrared transparencies of the entire state, including coastal areas in mid-to-late summer. Some coastal areas were photographed two or three times over the span of a decade. This data set is filed by flightline and the flightlines are identified by means of numbered strips placed on a large map covering an entire wall.

5) NOAA/Navy Ice Charts. These charts are produced weekly by the NOAA/Navy Joint Ice Center, Suitland, Maryland. They contain comprehensive ice data including ice edge information based on passive microwave imagery. These charts cover the entire Alaskan study area and are filed in chronological order since 1972.

Archive Management. The Geophysical Institute Archive has been manned from 6:30 AM to 5:00 PM Local Fairbanks Time. These hours make possible the placing of orders from researchers further east before normal business hours in Fairbanks.

As images are received for inventory they are given a visual analysis to determine whether the image quality was maintained and

whether features of known interest to OCSEAP investigators can be seen. Additionally, the images are inspected for indications of any unusual features in oceanic areas which should be brought to the attention of OCSEAP investigators,

The archivist maintains the data files and monitors the flow of materials sent to the photographic laboratory for processing. The archivist also prepares data inventories of acquisitions. For instance, our Landsat holdings are listed both in terms of Landsat path and row as well as NOAA image identification number. The inventory also contains information concerning cloud cover and image quality as well as the number and type of image products archived. These inventories are available to OCSEAP investigators upon request.

DISSEMINATION OF INFORMATION AND PRODUCTS

This objective calls for the provision of imagery and special products to other OCSEAP investigators, and MMS and NOAA staffs. There are many aspects to this requirement, An OCSEAP investigator or staff person may simply require an image illustrating a concept or oceanic process. An investigator in the field may require an image or information from an image immediately after its acquisition. An investigator may require data analyzed from a series of satellite images. An investigator may require image enhancement to bring out information concerning some process of interest. Or special photographic products such as map overlays may be required to allow data sets to be compared directly.

Simple requests for images "illustrating processes, etc. have been filled within a day or two of the time when the request was received. This has usually involved a data search and a small amount of photographic processing. Many requests for reduced data have been filled through the reports we have prepared based on previous data analysis of imagery. We have performed these services free of charge to OCSEAP subject to the aggregate limit described below.

More complex requests either have involved extensive data searches, involved data handling or unusual photographic processing. These requests are more time consuming and expensive to fill.

Under the provisions of this contract we were to fill such requests at a rate of $50 per request, up to an aggregate of *$1,000.* Requests over this amount were to be negotiated through OCSEAP. It quickly became apparent that we were more likely to receive a few requests for somewhat extensive help rather than many requests for a single image or two. Rather than

bother OCSEAP with several negotiations and delay of products to investigators, we decided to simply fill requests as long as the cost did not appear outrageous. Appendix III contains a selection of correspondence between this research unit and research units requesting remote sensing assistance. No record was made of telephone conversations related to this service. A check of purchase orders and internal work orders reveals that the direct cost of providing this service was $1,604. We recommend that the policy on remote sensing assistance in the future be:

Occasional requests for image data products whose cost to this research unit is less than $250 per request would be filled at no cost to the user. This service would be performed up to an aggregate cost of $3,000 for all research unit requests combined. The receipt of single requests beyond $250 or an aggregate cost of all provided - imagery exceeding $3,000 would initiate a request for a review of the situation by the Alaska Office of OCSEAP.

DATA ANALYSIS

Ice Conditions in Bering Strait. There were several aspects to this study. However, they were all derived from a comprehensive analysis of ice motions through Bering Strait measured from sequential images from the NOAA AVHRR (Advanced Very High Resolution Radiometer). The results are largely described in published papers which have been attached to this report as appendices IV, V, and VI. These are as follows:

a. Mesoscale Nowcasting of Sea Ice Movement Through the Bering Strait with a Description of Major Driving Forces, Kozo, T.L., Stringer, W.J., and Torgerson, L.J., Status reviewed, revised and to be published in Monthly Weather Review. (manuscript attached}.

b. Nowcasting Sea Ice Movement through the Bering Strait, Kozo, T.L., Stringer, W.J., and Torgerson, L.J., Status reviewed and accepted for presentation and publication in the proceedings of the 5th International Symposium and' Exhibit on Offshore Mechanics and Arctic Engineering, Tokyo, Japan, April 13-17, 1986.

c. Observations of Double Arch Formation in the Bering Strait, Torgerson, L.J. and Stringer, W.J., Status reviewed and published in Geophysical Research Letters, Vol. 12, No. 10, October 1985.

We have not yet published the results of the comprehensive analysis of net ice flux through Bering Strait. However, we have the results and they can be summarized as follows:

Winter Season	Net Flux (km)	Estimated Uncertainty	Direction
74-75	1165	8%	south
75-76	660	12%	south
76-77	695	9%	south
77-78	161	50%	south
78-79	266	37%	north
79-80	251	24%	south
80-81	398	22%	south
81-82	315	37%	north
82-83	1036	1 0%	south
83-84	783	6.4%	south

These results indicate that normally, the net flux of ice through Bering Strait is southward from the Chukchi Sea into the Bering Sea. The average net southward flux is 644 km with a standard deviation of 56%. On two years out of ten, we observed a net northward flux. The average value was 290 km with a standard deviation of 12%. However, while in the former case the standard deviation could reflect the variability of the southward movement, the small standard deviation in the case of northward ice motion cannot be taken too seriously because of the very small data set. The significance of these data is that although the net ice motion through Bering Strait is usually southward, occasionally it is northward, transporting ice from the Bering Sea into the Chukchi Sea. We have not yet been able to examine these results in terms of climatological conditions.

Case Histories of Ice Motion Events Correlated with Meteorological Events, Particularly in Terms of Ridge Building and Polynya Formation.

We have completed a major report on polynya formation in the Bering and Chukchi Seas. This report is attached as an Appendix VII.

We also performed a study relating summertime ice motions at the pack ice edge with locally measured winds. These results are currently in rough draft form. However, they can be summarized as follows:

Pack ice edge ice motions are not highly correlated with locally measured winds, either in terms of speed or direction. There are several possible reasons for this:

1) There are a number of factors which modify winds between shore and the pack ice edge. These factors include land breeze and orographic effects. Thus, winds measured at the shore may not be representative of winds at the pack ice edge.

2) There is often an along-shore current resulting from interaction of the wind forcing on the water surface with the shoreline configuration. This current may be quite strong and in a considerably different direction than one would expect from wind forcing over an unbounded ocean.

3) Layering of waters with varying salinities resulting from melting ice in summertime can result in what are, in effect, very shallow seas. . In these cases, moving ice experiences significantly greater water drag than if the ice were located in deep water.

This experience suggests that attempts to simply use local winds to predict motions of ice floes near the ice edge in summertime will have widely varying amounts of success, and that a more complex model is required.

Large Scale Ice Events - Beaufort Sea Ice Movement

1) We have completed a study of Beaufort Sea wintertime ice movement as indicated by widening of the Cape Bathurst Polynya at the eastern end of the Beaufort Sea. This report is attached as Appendix VIII.

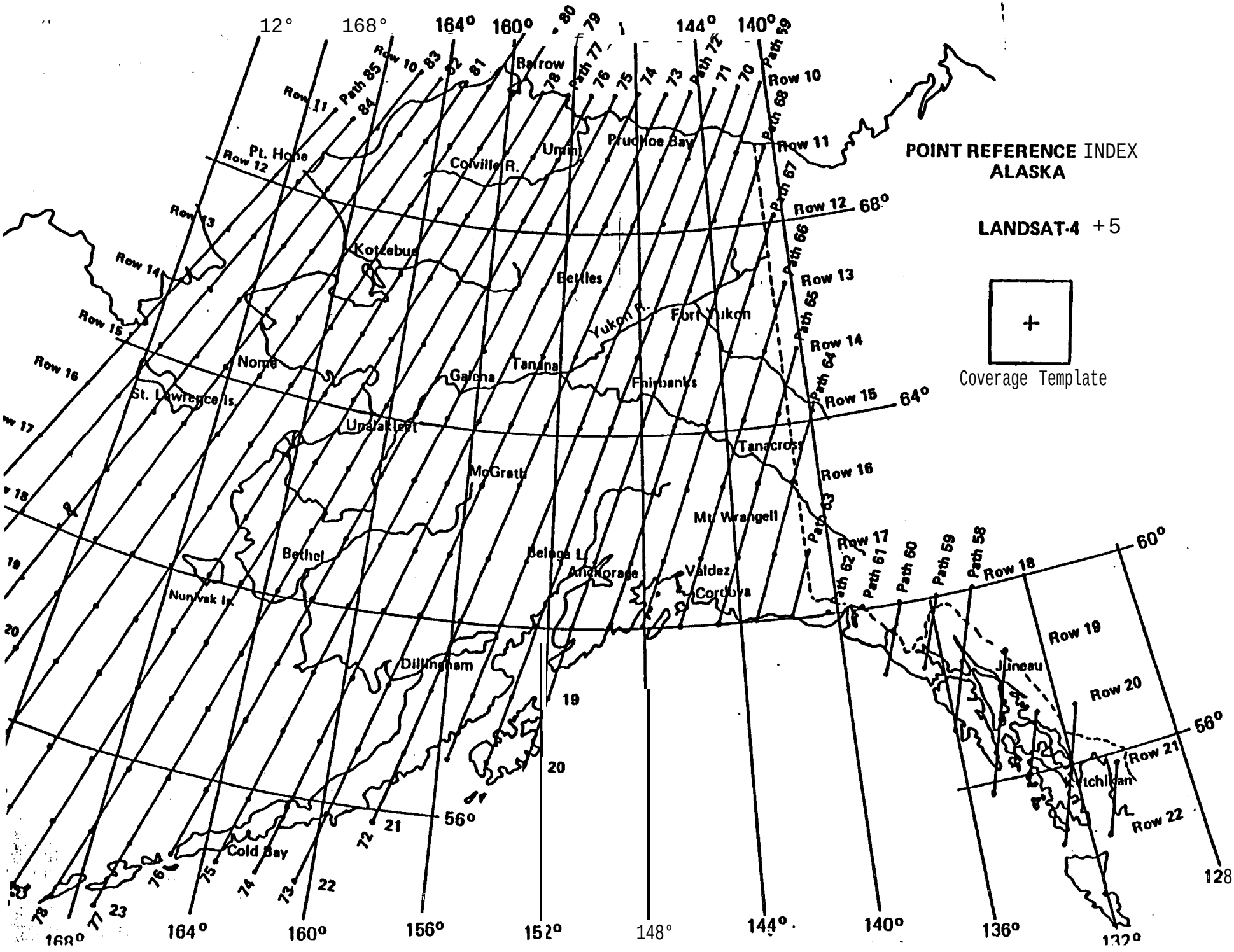
2) We have completed a study of Beaufort Sea ice movement as measured from successive Landsat images. This report is attached as Appendix IX.

Statistical Characterization of Summertime Beaufort Sea Ice Distribution and Concentration

We have completed a report describing average and dominant ice concentrations in the Beaufort Sea during the summer. This report is attached as Appendix X.

Chukchi Sea Ice Behavior

We recently completed a statistical characterization of the Chukchi Sea ice edge for the United States Department of Energy. The data products generated suggested that the configuration of the summertime ice edge in the northern Chukchi Sea was determined in part by bathymetrically-steered currents. We thought this would be useful information to OCSEAP and utilized some of this contract's time analyzing this effect, adding the results to the DOE Report but giving credit to the OCSEAP contract. This report is attached here as Appendix XI.


POINT REFERENCE INDEX
ALASKA
LANDSAT-4 +5
Coverage Template
Barrow
Pt. Hope
Colville R.
Umiat
Prudhoe Bay
Kotzebue
Bettles
Yukon R.
Fort Yukon
Nome
Galena
Tanana
Fairbanks
St. Lawrence Is.
Unalakleet
Tanacross
McGrath
Mt. Wrangell
Bethel
Beluga L.
Anchorage
Valdez
Cordova
Nunivak Is.
Dillingham
Juneau
Ketchikan
Cold Bay
Row 10
Row 11
Row 12
Row 13
Row 14
Row 15
Row 16
Row 17
Row 18
Row 19
Row 20
Row 21
Row 22
Path 59
Path 58
Path 60
Path 61
Path 62
Path 63
Path 64
Path 65
Path 66
Path 67
Path 68
Path 69
Path 70
Path 71
Path 72
Path 73
Path 74
Path 75
Path 76
Path 77
Path 78
Path 79
Path 80
Path 81
Path 82
Path 83
Path 84
Path 85
12°
168°
164°
160°
156°
152°
148°
144°
140°
136°
132°
128
68°
64°
60°
56°

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE 10	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
54/21	40302-19122	5/14/83	45	*
54/21	50186-19124	9/13/84	50	
54/	50100-19111	6/09/84	15	*
54/ .	50196-19131	9/13/84	30	
5"5/19	40613-19152	3/20/84	5	*
55/21	40117-19164	11/10/82	15	
5S/21	40341-19184	6122183	30	
55/21	40389-19181	8/09/83	15	
55/21	40619-19162	3120/84	30	
55/22	40117-19171	11/10/82	10	
55/22	40613-19164	3/20/84	30	
56/14	40284-19220	4/26/83	10	*
56/19	40284-19240	4126183	0	
56/20	40300-19242	5/12/83	20	*
56/20	40364-19242	7/15/83	15	
56/20	50514-19243	7/28/85	30	*
56/21	40284-19245	4126/83	0	
56/21	40300-19244	5/12/83	20	*
56/21	40364-19245	7/15183	30	
56/-"	50514-19245	7/28/85	40	*
56	40284-19252	4/26/83	5	
57/19	40355-19301	7/06183	20	
57/19	40419-19295	9/08/83	30	
57/19	50169-19301	8/17/84	0	
57/20	403s5-19304	7/06/83	20	
57/20	40419-19302	9108183	15	
57/21	40419-19304	9/08/83	20	
58/19	50112-19350	6/21/84	30	*
58/19	50208-19364	9/25/84	2	
59/18	40113-19400	11/06/82	25	
59/18	40289-19421	5/01/83	40	
59/18	40353-19421	7/04/83	50	
59/18	40785-19372	9108I84	10	*
59/19	40113-19402	11/06/82	15	
59/19	40289-19424	5/01/83	40	
59/19	40353-19423	7104/83	40	
59/	40417-19421	9/06/83	30	
59	40721-19375	?/06/84	20	*
59/	40?85-19374	9/08/84	40	*
59/19	40801-19374	9/24184	20	*
60/18	40408-19475	8/28183	20	
60/18	50142-19472	7/21/84	0	*
60/18	50190-19484	9/07/84	40	*
60/19	40408-19402	8/20183	30	
.,60/19	50190-19490	9/07/84	50	
61/07	40751-19451	8/05/84	40	*
61/08	$0149-19500	7/28104	10	*
61/09	40751-19460	8/05/84	30-	*
61/09	50149-19502	7/28/84	10	*
61/09	50213-19512	9/30/84	"0	*
61/10	50149-19505	7/28/84	10	*
61/10	50197-19514	9/14/84	50	*
61/11	40751-19464	8/05/84	50	*
61/11	50197-19520	9/14/84	20	*
61/12	50197-19523	9/14/84	10	*
61/12	50213-19523	9/30/84	30	*
61/13	50085-19504	5/25/84	5	*
61/14	40799-19480	9/22/84	40	*
61/15	40799-19482	9/22/84	5	*
61/16	40799-19485	9/22/84	30	*
61/17	40751-19491	8/05/84	20	*
61/17	40799-19491	9/22184	20	*
61/18	40399-19540	8/19/83	30	
61/18	40751-19493	8/05/84	0	*
61/18	40799-19494	9/22/84	0	*
61/18	50149-19535	7/28/84	40	
61/18	50181-19544	8/29/84	50	
61/19	40399-19541	8/19/83	20	*
61/19	40799-19500	9/22184	0	*
61/19	50165-19545	8/13/84	20	
62/03	40694-19502	6109/84	0	*
62/04	40694-19504	6/09/84	15	*
62/05	40694-19511	6109/04	15	*
62/06	40694-19513	6/09/84	10	*
62/07	40694-19520	6/09/04	0	*
62/08	40694-195?2	6/09/84	40	*
62/16	40278-19595	4/20/83	50	*
62/16	40438-19594	9/27/83	0	*
62/16	59204-20002	9/21/84	40	*
62/17	40438-20001	9/27183	0	
62/17	50108-19585	6/17/84	30	*
62/17	50156-20000	8/04/84	50	*
62/18	40326-20004	6/07/83	20	
62/18	50108-19572	6/17/84	10	*
62/18	50204-20010	9/21/84	15	
63/09	50083-20012	5/23/84	o	*
63/12	40317-20041	5/29/83	0	*
63/17	40285-20063	4/27/83	5	
63/17	40365-20062	7/16/83	30	
63/18	40285-20070	4/26/83	20	
63/18	40365-20065	7/16/83	50	
63/18	40381-20063	8/01/83	40	
63/18	40413-20063	9/02/83	20	
64/08	50394-20094	3/30/85	20	*
64/09	50394-20101	3/30/85	20	*
64/11	40948-20052	2/18/85	10	*
64/11	50442-20104	5117/85	50	*
64/12	40948-20055	2/18/85	35	*
64/12	40980-20054	3/22)85	25	*

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE T D	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
64/12	50394-20112	3/30/85	20	*
64/13	40980-20060	3/22/85	0	*
64/13	50394-20114	3/30/85	0	*
64/'	40980-20063	3/22/85	0	*
64.	50394-20121	3/30/85	15	*
64/1.	40356-20115	7/07183	50	
64/15	40372-20114	7/23/83	40	
64/15	40980-20065	3/22/85	0	*
64/15	50442-20121	5/17/85	0	*
64/16	40372-20121	7/23/83	50	
64/16	40980-20072	3/22/85	0	*
64/17	40324-20123	6/05/83	20	
64/17	4034.0-20124	6/21/83	45	
64/17	40356-20124	7/07/83	20	
64/17	40372-20123	7/23/83	10	
64/17	40980-20074	3/22/85	0	*
64/17	50090-20105	5/30/84	20	
64/17	50442-20130	5/17/85	0	*
64/18	40308-20125	5/20183	20	
64/18	40324-20130	6/05/83	10	
64/18	40340-20131	6/21/83	50	
64/18	40372-20125	7/23/83	40	
64/18	50154-20124	8/02/84	20	
65.-	50081-20105	5/21/84	20	*
65/06	50097-20125	6/06184	0	*
65/07	50097-20131	6/06/84	0	*
65/08	S0097-20133	6/06/84	0	*
65/09	40779-20105	9/02/84	20	*
65/09	50097-20140	6/06/84	5	*
65/10	40779-20111	9/02/84	40	*
65/11	40699-20115	6/14/84	50	*
6S/11	40779-20113	9/02/84	0	*
65/11	50081-20143	5/21/84	0	*
65/12	50385-20173	3/21/85	0	*
65/13	50385-20175	3/21/85	0	*
65/14	40251-20172	3/24/83	0	
65/14	40283-20174	4/25/83	0	
65/14	40475-20170	11/03/83	40	*
65/14	50385-20182	3/21/85	o	*
65/15	40251-20174	3/24/83	0	
65/15	40283-20181	4/25/83	1	
65/15	40475-20172	11/03/83	15	
65	50385-20184	3/21/85	0	*
"65.	50449-20182	5/24/85	0	*
65/16	40043-20152	8/20/82	20	*
65/16	40107'-20162	10/31/82	25	
65/16	40251-20180	3/2*/83	0	
6S/16	40283-20183	4/25/83	0	
65/16	40331-20182	6/12/83	40	
65/16	40363-20182	7/14/83	50	
65/16	40459-20181	10/18/83	50	
65/16	40475-20175	11/03/83	20	
65/16	50049-20155	4/19/84	40	
65/16	S038S-20190	3/21/85	0	*
65/16	50449-20184	S/24/85	0	*
65/17	40027-20153	8/12/82	10	
65/17	40043-20154	8/28/82	50	*
65/17	40091-20164	10/15/82	20	
65/17	40107-20164	10/31/82	15	
65/17	40251-20183	3/24/83	35	
65/17	40283-20185	4/25183	5	
65/17	40299-20185	5/11/83	0	
65/17	40363-20105	7/14/83	50	
65/17	40395-20181	8/15/83	20	
65/17	40459-20183	10/18/83	20	
65/17	S0193-20190	9/10/84	0	*
65/17	50385-20193	3/21/85	40	*
65/17	50449-20191	5/24185	0	*
65/18	40027-20155	8/12/82	0	*
65/18	40091-20171	10/15/82	0	
65/18	40283-20192	4/25/83	10	
65/18	40363-20191	7/14/83	50	
65/18	40395-20184	8/15/83	15	
65/18	50193-20193	9/10/84	10	*
65/20	40613-19155	3/20/84	10	
66/03	50184-20194	9/01/84	50	*
66/08	40802-20164	9/25/84	5	*
66/08	50184-20214	9/01/84	15	*
66/09	40802-20170	9/25/84	10	*
66/09	50184-20220	9/01/84	0	*
66/10	40802-20172	9/25184	10	*
66/10	50184-20222	9/01/84	30	*
66/11	40338-20224	6/19/83	10	*
66/11	40354-20224	7/05/83	0	*
66/11	40802-20175	9/25/84	0	*
66/11	S0184-20225	9/01/84	20,	*
66/12	40338-20230	6/19/83	40	*
66/12	40354-20231	7/05/83	0	*
66/13	40338-20233	6/19/83	S0	
66/13	40354-20233	7/05/83	20	
66/14	40290-20235	5102/83"	40	
66/14	40354-20235	7/05/83	45	
66/14	41042-20185	5/23185	0	*
66/14	50072-20213	5/12/86,	50	
66/14	S0184-20240	9/01/84	20	
66/1S	40354-20241	7/05/83	50.	
66/15	41042-20191	5/23/85	5"*	
66/15	50072-20220	5/12/84	30	
66/15	50184-20243	9/01/84	3S	
66/16	40354-20244	7/05/83'	50	
66/16	41042-20194	5/23/85	5-*	
66/16	50072-20222	5/12/84	0	
66/17	40050-20221	9/04/82	0	
66/17	40338-20250	6/19/83	40	
66/17	40418-20244	9/07/83	50	*
66/17	40626-20222	4/02184	10	
66/17	41042-20200	5/23185	0	*
66/17	50088-20231	5/28/84	40	

(C=AVAILABLE IN COLOR)
(D=DIGITAL MAGNETIC TAPE AVAILABLE)

PATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS
66/17	50184-20252	9/01/84	40	
66/18	40050-20224	9/04/82	10	
66/18	40370-20252	7/21/83	30	
66/	,40418-20251	9/07/83	30	
66/	50072-20231	5/12/84	40	
66/18	50136-20242	7/13/84	30	
66/18	50184-20254	9/01/84	35	
67/07	50079-20251	5/19/84	5	*
67/08	50079-20253	5/19/84	0	*
67/09	50079-20260	5/19/84	0	*
67/10	50079-20262	5/19/84	5	*
67/11	60345-20270	6/26/83	0	*
67/11	41129-20224	8/18/85	50	*
67/n	50079-20265	5119/84	0	*
67/11	50159-20284	8/07/84	50	*
67/11	50207-20290	9/24184	0	*
67/12	40345-20292	6/26183	10	
67/12	50079-20271	5/19/84	5	
67/12	501S9-20285	8/07/84	20	
67/12	50191-20293	9/08/84	5	
67/12	50207-20293	9/24/84	0	
67/13	40345-20294	6/26/83	10	
67	50079-20273	5/19/84	50	
67/	50191-20295	9/08/84	0	
67/13	50207-20295	9/24/84	0	
67/14	40345-20300	6/26/83	30	
67/14	40361-20300	7/12/83	50	
67/14	40425-20295	9/14/83	50	
67/14	50159-20294	8/07/84	20	
67/14	50191-20302	9/08/84	30	
67/14	50207-20302	9/24/84	0	
67/15	40025-20270	8/10/82	50	*
67/15	40345-20303	6/26/83	15	
67/15	40377-20301	7/28/83	20	
67/15	50159-20301	8/07/84	50	
67/15	50191-20304	9/08184	5	
67/15	50207-20304	9/24/84	40	
67/16	40377-20303	7/28/83	40	
67/16	50159-20303	8/07/84	50	
67/17	40041-20275	8/26/82	25	*
67/17	40297-20311	5/09/83	0	
67/17	40377-20310	7/28183	30	
67	50079-20291	5/19/84	50	*
67/	40121-20295	11/14/82	30	
67/18	40121-20300	11/14/82	40	*
67/18	50079-20293	5/19/84	5	*
68/10	40320-20342	6/01/83	0	*
68/10	40656-20311	5/05/84	30	*
68/11	40240-20342	3/13/83	50	
68/11	40320-20345	6/01/83	0	
68/11	40336-20350	6/17/83	45	
68/11	40352-20350	7/03/83	5	
68/11	40400-20343	8/20/83	40	
68/11	40656-20313	5/02/84	40	*
68/11	41088-20293	7/08/85	40.	*
68/11	50054-20322	4/24/84	5	
68/11	50102-20332	6/11/84	40	
68/12	40320-20351	6/01/83	50	
68/12	40352-20353	7/03183	40	
68/12	41088-20295	7/08/85	0	*
68/12	50054-20324	4/24/84	0	
68/13	40288-20355	4/30/83	70	
68/13	40304-20354	5/16/83	5	
68/13	41088-20302	7/08/85	40	*
68/13	50054-20331	4/24/84	0	
68/14	50054-20333	4/24/84	0	
68/14	50198-20363	9/15/84	40	
68/15	40240-20355	3/13/83	0	
68/15	40288-20364	4/30/83	50	
68/15	40304-20363	5/16/83	30	
68/15	40320-20362	6/01/83	50	
68/15	50054-20335	4/24/84	10	
68/15	50134-20352	7/13/84	40	
68/15	50614-20353	11/05/85	0	*
68/16	40112-20344	11/05/82	30	*
68/16	40288-20370	4130183	5	
68/16	40448-20364	10/07/83	10	
68/16	41216-20283	11/13/85	10	*
68/16	50054-20342	4/24/84	10	'-"
68/16	50070-20344	5/10/84	30	
68/17	40048-20343	9/02/82	20	*
68/17	40112-20351	11/11/82	35	*
68/17	40224-20364	2/25/83	5	
68/17	40240-20364	3/13183	20	
68/17	40288-20373	4/30/83	20	
68/17	40336-20372	6/17/83	30	
68/17	40352-20372	7103/83	20	
68/17	40448-20371	10/07/83	5	
68/17	41216-20290	11/13/85	0	*
68/17	50054-20344	4/24/84	20	
68/17	50070-20350	5/10/84	0	
68/17	50166-20372	8/14/84	45	
68/17	50182-20374	8/30/84	30	
68/18	40048-20350	9/02/82	40	*
68/18	40208-20371	2/09/83	0	
68/18	40224-20371	2/25183	50	
68/18	40288-20375	4/30/83	10	
68/18	40336-20375	6/17/83	30	
68/18	40352-20375	7/03/83	20	C
68/18	40448-20373	10/07/83	0	
68/18	41216-20292	11/13/85	0	*
68/18	50054-20351	4(24/84	0	
68/18	50070-20352	5/10/84	0	
68/18	50166-20374	8/14/84	5	
68/18	50534-20373	8/17/85	30	*
68/19	40224-221?3	2/25/83	o	*
68/19	40448-20380	10/07/83	5	*
68/20	40224-22125	2/25/83	30	*

CLOUD SPECIAL (C=AVAILABLE IN COLOR) '

'ATH/ROW SCENE ID DATE AC(2 COVER PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)

69/05 50093-20370 6/02/84 50 *
69/05 50461-20391 6/05/0S 5 *
69/0[illegible] 50093-20372 6/02/84 O *
69. 50093-20375 6/02184 20 *
69/[illegible] 40759-20350 8/13/84 30 *
69/08 50093-20381 6/02/84 30 *
69/08 50205-20402 9/22/04 50 *
69/09 40039-20371 8124/%2 40 *
69/09 40?59-20352 0/13/84 "40 *
69/09 50093-20384 6/02/84 20 *
69/09 50205-20405 9/22/84 40 *
69/09 50461-20404 " 6/05/85 50 *
69/10 40455-20403 10/14/83 20
69/10 40615-20382 3/22/84 10
69/10 40759-20354 8/13/84 50 *
69/10 50077-20384 5/17184 5
69/10 50093-20390 6/02/84 10
69/10 50109-20392 6118184 20 *
69/10 50125-20393 7/04/84. 30
69/10 50365-20412 3/01/85 O *
69/10 50461-20410 6/05/05 50
69/10 50461-20411 6/05/85 50 *
69/" 40279-20411 4/21/83 20
69 40295-20411 5/07/83 50
69/[illegible] 40311-20405 5/23/83-4>
69/11 40359-20411 7}10/83 50
69/11 40407-20404 8/27/83 50
69/11 40439-20410 9/28/83 50
69/11 40455-20405 10/14/83 30
69/11 40615-20385 3/22/84 30
69/11 40759-20361 8/13/84 O *
69/n 40791-20362 9/14/84 5 *
69/11 41047-20360 5/28/85 10 *
69/11 41047-20360 5/28/85 10 *
69/11 50077-20390 .5/17/84 15
69/11 50093-20393 6/02/84 30
69/11 50109-20394 6/18/84 40 *
69/11 50125-20400 7/04/84 30 *
69/11 50205-20413 .9/22/84 50
69/11 50365-20415 3/01/85 O *
69/11 50461-20413 6/05/85"20 *
69/12 40231-20405 3/04/83 20
69 ' ' 40279-20414 4/21/83 5
69 40295-20413 5/0?/83 O
69/12 40311-20412 5/23/%3 O
69/12 40343-20414 6124/83 10
69/12 40359-20413 7/10/83 40
69/12 40375-20412 7/26/83 50
69/12 40615-20391 3/22/84 15
69/12 40791-20364 9/14/84 50 *
69/12 41047-20363 5/28/85 10 *
69/12 50077-20393 5/17/84 20
69/12 50205-20415 9/22184 20
69/12 50365-20421 3/01/85 O *
69/12 50461-20415 6/05/05 35 *
69/13 40231-20411 3/04/83 O
69/13 40279-20420 4/21/83 2.0
69/13 40295-20420 5/07/83 30,
69/13 40311-20414 5/23/83 O
69/13 40343-20420 6/24183 10
69/13 40359-20420 7/10/83 20
69/13 40615-20393 3/22/84 30
69/13 41063-20364 6/13/85 40 *
69/13 50077-20395 5/17/84 30
69/13 5012S-20404 7/04/84 40
69/13 50205-20422 9/22/84 O
69/13 50365-20424 3/01/85 30 *
69/14 40023-20390 8/08/82 50
69/14 40231-20414 3/04/83 O
69/14 40279-20423 4/21/83 10
69/14 40295-20422 5/07/83 10
69/14 40343-20423 6/24/83 15
69/14 40359-20422 7/10/83 40
69/14 50077-20401 5/17/84 30
69/14 50109-20410 6/18/84 30 *
69/14 5020S-20424 9/22/84 O
69/14 50461-20424 6/06/85 40 *
69/15 40023-20392 8108/80 50
69/15 40039-20393 8/24/82 50
69/15 40231-20420 3/04/83 O
69/15 40263-20424 4/05183 40
69/15 40279-20425 4/21/83 15
69/15 40295-20424 5/07/83 25
69/15 40343-20425 .6/24/83 10
69/15 40455-20423 10/14/83 30
69/15 40487-20415 11/15/83 50 *
69/15 50077-20404 5/17/84 20
69/15 50109-20412 6/19/84 20 *
69/15 50205-20430 9/22/84 O
69/16 40279-20431 4/21/83 20.
69/16 40295-20431 5/07/83 10
69/16 40343-20431 6/24/83 40
69/16 40407-20424 8/27/83 40
69/16 40455-20425 10/14/83 30
69/16 40615-20405 3/22/84 O
69/16 50077-20410 5/17/84 O
69/16 "50109-20414 6/18/84 O *
69/16 50205-20433 9/22184 O
69/17 40279-20434 4/21/83 25' '
69/17 40295-20433 5/07/83 10..
69/17 40327-20433 6/08/83 20
69/17 40407-20431 8/27/83 10 C
69/17 40455-20432 10/14/83 40
69/17 40615-20411 3/22/84 O
69/17 50077-20413 5/17/84 40
69/17 50093-20415 6/02/84 30
69/17 50109-20424 6/18/84 50 *
69/17 50125-20422 7/04/84 30
69/17 50205-20435 9/22/84 40

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

PATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE:
69/17	50461-20435	6/05/85	45 *	
69/18	40215-20432	2/16/83	15	
69/18	4029S-20440	5/07/83	5	
69	40327-20435	6/08/83	40	
69,	40407-20433	8127/83	10 C	
69/18	40615-20413	3/22/84	0	
69/18	50093-20421	6/02/84	15	
69/18	50109-20432	6/18/84	40 *	
69/18	50125-20424	7/04/84	20	
69/19	40295-20442	5/07/83	25 *	
69/19	40407-20435	8/27/83	0	
69/19	40615-20420	3/22/84	50	
69/19	50093-20424	6/02/84	0 C	
69/20	40119-20430	11/12/82	50	
69/20	40327-20444	6/08/83	50	
69/20	40407-20442	8/27183	0	
69/20	50093-20430	6/02/84	0	
69/21	40407-20444	8/27/83	0 *	
70/02	40654-20402	4/30/84	20	
70/05	41054-20395	6/04/85	0 *	
70/06	40654-20415	4/30/84	50	
70/[illegible]	50212-20463	9/29/84	50 *	
70	40030-20431	8/15/82	40 *	
70/[illegible]	50212-20465	.9/29/84	30 *	
70/10	40030-20434	8/15/82	30 *	
70/10	40238-20461	3/11/83	0	
70/10	40270-20470	4/12/83	5	
70/10	40302-20465	5/.14/83	5	
70/10	40334-20470	6/15/83	10	
70/10	40590-20450	2/26/84	10	
70/10	40606-20445	3/13/84	0	
70/10	50068-20443	5108/84	30 *	
70/10	50244-20471	10/31/84	0 *	
70/11	40238-20464	3/11/83	0	
70/11	40270-20472	4/12/83	0	
70/11	40302-20471	5/14/83	50	
70/11	40318-20470	5/30/83	50 *	
70/11	40334-20472	6/15/83	50	
70/11	40398-20465	8/18/83	50	
70/11	40S90-20453	2/26/84	20	
70/11	40654-20435	4/30/84	40	
70/[illegible]	40958-20423	2/28/85	10 *	
70	41054-20421	6/04/85	30 *	
70/[illegible]	50068-20450	5/08/84	10 *	
70/11	50196-20474	9/13/84	20 *	
70/11	50244-20473	10/31/84	o *	
70/11	50452-20474	5/27/85	30 *	
70/12	40302-20474	5/14/83	0	
70/12	40318-20473	5/30/83	40	
70/12	40302-20473	8/02/83	50	
70/12	40398-20471	8/18/83	50	
70/12	40590-20455	2/26/84	0	
70/12	40606-20453	3/13/84	40	
70/12	40654-20441	4/30/84	40	
70/12	40958-20425	2/28185	0 *	
70/12	41054-20424	6/04/85	30 *	
70/12	41134-20413	8/23/85	50 *	
70/12	50164-20474	8/12/84	15	
70/12	50244-20475	10/31/84	0 *.	
70/12	50356-20482	2/20/85	30 *	
70/13	40302-20480	5/14183	0	
70/13	40318-20475	5/30/83	50	
70/13	40382-20475	8/02/83	30	
70/13	40398-20473	8/18/83	25	
70/13	40590-20461	2/26/84	5	
70/13	40606-20460	3/13/84	5	
70/13	40622-20453	3/29/84	40	
70/13	40654-20444	4/30/84	20	
70/13	40958-20432	2/28/85	0 *	
70/13	41054-20430	6/04185	30 *	
70/13	50164-20480	8/12/84	5	
70/13	50244-20482	10/31/84	0 *	
70/13	50356-20485	2/20/85	0 *	
70/13	50452-20483	5/27/85	10 *	
70/14	40302-20483	5/14/83	40	
70/14	40318-20482	5/30/83	50	
70/14	40350-20483	7/01/83	40	
70/14	40398-20480	8/18/83	50	
70/14	40590-20464	2126/84	20	
70/14	40606-20462	3/13/84	10	
70/14	40622-20460	3/29/84	20	
70/14	40654-20450	4130/84	30 .	
70/14	40958-20434	2/28/85	0 *	
70/14	50100-20470	6/06/84	50 *	
70/14	50164-20483	8/12/84	5	
70/14	50244-20484	10/31/84	0 *	
70/14	50356-20491	2/20/85	0 *	
70/14	50452-20485	5/27/85	0 *	
70/15	40590-20470	2/26/84	10	
70/15	40606-20465	3/13/84	10	
70/15	40622-20462	3/29184	10	
70/15	40654-20453	4/30/84	50	
70/15	40958-20440	2/28/85	0 *	
70/15	50116-20474	6/25/84	40 *	
70/15	'50164-20485	8/12/84	10	
70/15	50180-20491	8/28/84	30	
70/15	50244-20490	10/31/84	0 *	
70/15	50356-20493	2/20/85	30 *	
70/15	50452-20492	5/27/85	30 *	
70/16	40382-20490	8/02/83	40	
70/16	40398-20484	8/18/83	50	
70/16	40606-20471	3/13/84	10	
70/16	40958,20443	2/28185	0 *	
70/16	50164-20491	8/12/84	15	
70/16	50180-20493	8/28184	5	
70/16	50356-20500	2/20185	40 *	
70/16	50452-20494	5/27/85	0 *	
70/17	40126-20481	11/19/82	50 *	
70/17	40382-20493	8102/83	30	

CLOUD SPECIAL (C=AVAILARLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
70/17	40398-20491	8/18/83	5	
70/17	40958-20445	2/28/85	30	*
70/17	50164-20494	8/12/84	5	
70/17	50356-20502	2/20/85	10	*
70/	50452-20500	5/27/85	20	*
70/	40110-20480	11/03/82	30	*
70/18	40382-20495	8/02/83	20	
70/18	40398-20493	8/18/83	10	
70/18	40958-20452	2/28/85	0	*
70/18	41134-20435	8/23/85	35	*
70/18	50164-20500	8/12/84	0	
70/19	40110-20483	11/03/82	5	*
70/19	40382-20501	8/02/83	30	
70/19	40398-20500	8/18183	30	
70/19	40958-20454	2/28/85	0	*
70/20	40110-20484	11/03/82	20	
70/20	40398-20502	8/18/83	"45	
70/20	40958-20460	2/28/85	0	*
70/20	41134-20444	8/23/85	40	*
70/20	50164-20505	8/12/84	20	
71/08	40805-20473	9128/84	20	*
71/08	50203-20524	9/20/84	30	*
71/	40085-20503	10/09/82	50	*
71	40261-20523	4/03/83	45	*
71/	50203-20530	9/20/84	40	*
71/10	40021-20495	8/06/82	0	*
71/10	40085-20505	10/09/82	50	*
71/10	40261-20525	4103/83	40	*
71/10	40357-20531	7108/83	10	
71/10	40629-20502	4105/84	40	
71/10	50075-20510	5/15/84	5	
71/10	50203-20533	9/20/84	30	
71/10	50251-20531	11/07/84	20	*
71/10	50459-20533	6/03/85	50	*
71/10	50523-20530	8/06/85	40	*
71/10	50S71-20523	9/23/85	20	*
71/11	40021-20501	8/06/82	20	
71/11	40229-20525	3/02/83	30	
71/11	40261-20532	4/03/83	0	
71/11	40277-20533	4/19/83	35	
71/11	40293-20533	5/05/83	10	
71/11	40341-20533	6/22/83	40	
tl'--	40357-20533	7/08/83	30	C
71	40789-20484	9/12/84	30	*
71/	41045-20483	5/26/85	0	*
71/11	50075-20512	5/15/84	0	
71/11	50123-20521	7/02/84	30	
71/11	50251-20533	11/07/84	5	*
71/11	S0459-20535	6/03/85	0	*
71/11	50523-20533	8/06/85,	5	*
71/11	50571-20525	9/23/85	5	*
71/12	40229-20531	3/0?/83	0	
71/12	40277-20535	4/19183	10	*
71/12	40341-20540	6/22/83	50	
71/12	40629-20510	4/05184	20	
71/12	40773-20490	8/27/84	40	*
71/12	41045-20485	5/26/85	1.5	*
71/12	50075-20514	5/15/84	0	
71/12	50123-20524	7/02/84	25	
71/12	50203-20541	9/20/84	30	
71/12	50251-20540	11/07/84	0	*
71/12	50459-20541	6/03/85	0	*
71/12	50523-20535	8/06/85	5,0	*
71/13	40021-20505	8/06/82	30	
71/13	40229-20533	3/02/83	0	
71/13	40261-20541	4103/83	0	
71/13	40277-20542	4/19/83	40	*
71/13	40293-20542	5/05/83	20	
71/13	40341-20542	6122/83	30	
71/13	40773-20493	8/27/84	5	*
71/13	50075-20521	5115/84	0	
71/13	50123-20530	7/02/84	10	
71/13	50187-20543	9/04/84	50	
71/13	50203-20544	9120/84	20	
71/13	50459-20544	6/03/85	,50	*
71/13	50523-20542	8/06/85	10	*
71/14	40021-20512	8106/82	30	
71/14	40229-20540	3102/83	30	
71/14	40261-20543	4/03/83	0	
71/14	40293-20544	5105/83	30	
71/14	40341-20545	6/22183	5	
71/14	40357-20544	7/08/83	40	
71/14	40629-20515	4/05/84	40	
71/14	40805-20495	9/28/84	0	*
71/14	41045-20494	5/26185	20	*
71/14	50075-20523	5/15/84	0	
71/14	50187-20550	9/04/84	40	
71/14	50203-20550	9/20/84	40	
71/15	40021-20514	8/06/82	30	
71/15	40229-20542	3102/83	30	
71/15	40261-20545	4103/83	0	*
71/15	40341-20551	6/22/83	30	
71/15	40805-20501	9/28/84	0	*
71/15	41045-20500	5/26/85	10	*
71/15	50075-20530	5/15/84	20	
71/15	50123-20535	7/02/84	30	
71/15	50187-20552	9/04/84	30	
71/16	40229-20545	3/02/83	o	
71/16	40261-20552	4/03/83	30	
71/16	40293-20553	5105/83	45	
71/16	41045-20503	5/26/85	30	*
71/16	50091-20534	5/31/84	15	
71/16	50187-20555	9/04/84	40	
71/17	40229-20551	3/02/83	0	
71/17	41205-20475	11/02/85	50	*
71/17	50187-20561	9/04/84	50	
71/18	40229-20553	3/02/83	35	
71/18	40389-20555	8/09183	50	
71/18	50603-20552	10/25/85	SO	*

ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVEI?	SPECIAL PRODUCTS (C=AVAILABLE IN COLOR) (D=DIGITAL MAGNETIC TAPE AVAILABLE)
71/19,	40277-20564	4/19/83	30 *	
71/19	50091-20550	5/31/84	15	
71/19	50187-20570	9/04/84	30	
71/	50203-20570	9/20/84	30	
71,	41045-20520	5/26/85	30 *	
71/20	50091-20552	5/31/84	5-	
71/20	50187-20572	9/04/84	0	
71/21	50187-20575	9/04/84	0 *	
72/08	50194-20584	9/11/84	0 *	
72/09	402S2-20584	3125/83	0 *	
72/09	40268-20585	4/10/83	0 *	
72/09	50194-20591	9/11/84	40 *	
72/10	40092-20571	10/16/82	10	
72/10	40236-20583	3/09/83	0	
72/10	402S2-20590	3/25/83	5	
72/10	40268-20592	4/10/83	0	
72/10	40300-20591	5/12/83	5	
72/10	40380-20590	7/31/83	20	
72/10	40620-20565	3/27/84	10	
72/10	41004-20541	4/15/85	40 *	
72/10	50242-20593	10/29/84	50 *	
72/11	40236-20585	3/09/83	50	
72	40252-20593	3/25/83	0 *	
72,	40300-20594	5/12/83	5	
72/11	40316-20593	5/28/83	0	
72/11	40332-20594	6/13/83	40	
72/11	40380-20593	7/31/83	20	
72/11	4.1004-20544	4/15/85	40 *	
72/11	50194-21000	9/09/84	50	
72/12	40252-20595	3/25/83	0	
72/12	40300-21000	5/12/83	0	
72/12	40316-20595	5/28/83	0 C	
72/12	40380-20595	7(31/83	50	
72/12	41004-20550	4/15/85	0 *	
72/12	50194-21002	9/11/84	30	
72/12	50242-21002	10/29/84	20 *	
72/13	40252-21001	3/25/83	0	
72/13	40300-21003	5/12/83	0	
72/13	40316-21001	5/28/83	0	
72/13	50242-21004	10/29/84	0 *	
72/14	40252-21003	3/25/83	0	
72/14	40252-21003	3/25/83	0	
72	40268-21005	4/10/83	5	
72,	40284-21010	4/26/83	5	
72/14	40300-21005	5/12/83	5	
72/14	40316-21004	5/28/83	10	
72/14	40380-21004	7/31/83	40	
72/14	50194-21011	9/11/84	40	
72/14	50242-21010	10/29/84	0 *	
72/15	40252-21010	3/25/83	2	
72/15	40268-21011	4/10/83	40	
72/15	40284-21012	4/26/83	2	
72/15	40300-21011	5/12/83	5	
72/15	40316-21010	5/28/83	10	
72/15	40332-21012	6/13/83	40	
72/15	50242-21013	10/29184	0 *	
72/16	40236-21005	3109/83	.“0	
72/16	40252-21012	3/25/83	10	
72/17	40124-21002	11/17/82	40 *	
72/18	40140-21011	12/03/82	0 *	
72/18	40172-21012	1/04/83	20 *	
72/19	40124-21011	11/17/82	50 *	
72/19	40140-21014	12/03/82	5 *	
72/19	40236-21021	3/09/83	0 *	
72/19	40380-21024	7/31/83	50	
72/19	50178-21031	8/26/84	40	
72/20	40108-21011	11/01/82	25 *	
72/20	40124-21014	11/17/82	50	
72/20	40140-21020	12/03/82	20 *	
72/20	40236-21023	3/09/83	0 *	
72/20	41004-20581	4/15/85	0 *	
72/20	50178-20133	8/26/84	50	
72/21	40124-210?0	11/17/82	35	
72/21	40140-21022	12/03/82	30	
73/09	40227-21042	2/28/83	0 *	
73/10	40051-21024	9/02/82	5 *	
73/10	40227-21045	2/28/83	0	
73/10	40291-21053	5/03/83	10	
73/10	40323-21052	6/04/83	0	
73/10	40355-21053	7/06/83	10	
73/10	40371-21052	7/22/83	.0	
73/10	40387-21050	8/07/83	50	
73/10	40675-21014	5/21/84	0	
73/10	40691-21011	6/06”/84	0 *	
73/10	50073-21031	5/13/84	50	
73/10	50089-21034	5/29/84	50 *	
73/10	50105-21040	6/14/84	40	
73/10	50185-21054	9102/84	20	
73/10	50617-21042	11/08/85	30 *	
73/n	40051-21031	9/02/82	40 *	
73/11	40227-21051	2/28/83	10	
73/11	40291-21060	5/03/83	30	
73/11	40675-21020	5/21/84-	10	
73/11	40691-21013	6106/84	20 *	
73/11	40707-21011	6/22/84	50 *	
73/11	41059-21004	6/09/85	30 *	
73/11	50073-21034	5/13/84	30	
73/11	50089-21040	5/29/84	30	
73/11	50105-21042	6/14/84	15	
73/11	50185-21061	9/02/84	40	
73/11	50617-21044	11/08/85	20 *	
73/12	40227-Z1053	2128/83	0	
73/12	40291-21062	5/03/83	30	
73/12	40339-21062	6120/83	40	
73/12	40371-21061	7/22/83	50	
73/12	50105-21045	6/14/84	40	
73/12	50185-21063	9/02/84	0	
73/12	50553-21055	9/05/85	0 *	

(C=AVAILABLE IN COLOR) .
(D=DIGITAL MAGNETIC TAPE AVAILABLE)

ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS				
73/12	50617-21050	11/08/85	30	*	73/19	50185-21092	9/02/84	20
73/13	40291-21064	5/03/83	60		73/20	40019-21054	8/04/82	5
73/13	40307-21063	5/19/83	0		73/20	40179-21084	1/11/83	5 *
73/13	40339-21064	6/20/83	30		73/20	50041-21065	4/11/84	40
73/'	40371-21063	7122/83	50		73/20	50153-21090	8/01/84	0
73,	%1059-21013	6/06/85	50	*	73/20	50185-21094	9/02/84	15
73/13	50041-21040	4/n/84	0		73/21	40179-21090	1/11/83	50 *
73/13	50185-21070	9/02184	35		73/21	50041-21071	4/11/84	50
73/13	50553-21061	9/05/85	15	*	73/21	50105-21082	6/14/84	40
73/13	50617-21053	11/08/85	35	*	73/21	50185-21101	9102/84	45
73/14	40227-21062	2/28/83	30		73/22	40179-21092	1/11/83	25 *
73/14	40291-21071	5/03./83	50					
73/14	4030?-21065	5/19/83	40		74/08	40250-21103	3/23/83	0 *
73/14	4033%21071	6/20/83	30		74/09	40250-21110	3/23/83	0 *
73/14	"40355-21071	7/06/83	5	C	74/09	40378-21110	7/29/83	0 *
73/14	40371-21070	7/22/83	50		74/10	40234-21105	3/07/83	0
73/14	40579-21052	2/15/84	15	*	74/10	40250-21112	3/23/83	30
73/14	50041-21043	4/11/84	0		74/10	40298-21114	5/10/83	80
73/14	50073-21045	5/13/84	30		74/10	40346-21114	6/27/83	50.
73/14	50137-21060	7/16/84	20		74/10	40378-21113	7129/83	10
73/14	50185-21072	9/02/84	40		74/10	40682-21074	5128/84	50
73/14	50617-21055	11/08/85	0	*	74/10	40698-21072	6/13/84	20
73/15	40339-21073	6/20/83	50		74/10	50080-21094	5/20184	40
73/15	40371-21072	7/22/83	50		74/10	50144-21105	7/23184	20
73/	40579-21054	2/15/84	20	*	74/11	40234-21111	3/07/83	0
73,	50041-21045	4/11/84	0		74/11	40250-21114	3/23/83	0
73/15.	50073-21051	5/13/84	5		74/n	40298-21120	5/10/83'	30
73/15"	50137-21063	7/16/84	5		74/11	40346-21121	6/27/83	30
73/15	50185-21074	9102/84	30		74/11	40682-21080	5128/84	20
73/15	50553-21070	9/05/85	15	*	74/11	40698-21075	6/13/84	15
73/15	50617-21062	11/08/85	0	*	74/11	50112-21104	6/21/84	25 *
73/16	40371-21075	7/22/83	50		74/12	40250-21120	3/23/83	0
73/16	50041-21051	4/11/84	0		74/12	40298-21123	5/10/83	0
73/16	50073-21054	5/13/84	5		74/12	40346-21123	6/27/83	50
73/16	50185-21081	9/02/84	20		74/12	40698-21080	6/13/84	20 *
73/16	50553-21073	9/05/85	45	*	74/12	40730-21075	7/15/84	30 *
73/17	401.79-21072	1/11/83	5	*	74/12	50624-21111	11/15/85	3 0 *
73/17	40371-21081	7/22/83	50		74/13	40234-21120	3/07/83	30
73/17	40419-21080	9/08/83	50		74/13	40250-221?3	3/23/83	0
73/17	40483-21072	11/11/83	20		74/13	40298-21125	5/10/83	0
73/17	50041-21054	4/11/84	10		74/13	40330-21125	6/11/83	40
73/17	50073-21060	5/13/84	o		74/13	40346-21130	6/27/83	40
73/17'	50185-21083	9/02/84	20		74/13	40730-21081	7/15/84	30 *
73/18	40179-21075	1/11/83	5	*	74/13	41146-21062	9/04/85	30 *
73.	40307-21083	5/19/83	40		74/13	50624-21113	11/15/85	0 *
73,	40419-21082	9/08183	50		74/14	40250-22125	3/23/83	25 . . .
73/18	50041-21060	4/11/84	o		74/14	40298-21131	5/10/83	0
73/18	50073-21062	5/13/84	o		74/14	40330-21131	6/n/83	20
73/18	50185-21090	9/02/84	20		74/14	40346-21132	6/27/83	20
73/19	40019-21052	8/04/82	10		74/14	50192-21133	9/09/84	40
73/19	40179-21081	1/11/83	0	*	74/14	50624-21120	11/15/85	0 *
73/19	40307-21085	5/19/83	35	*	74/15	40250-21132	3/23/83	0
73/19	40819-21041	10/12/84	3	*	74/15	40298-21134	5/10/83	0
73/19	50041-21063	4/11/84	10		74/15	40330-21134	6/11/83	50
73/19	50073-21065	5113/84	40		74/15	40346-21134	6/27/83	50

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)			
74/15	5(3192-21140	9/09/84	40		75/11	40609-21160	3/16/84 10.
74/16	40250-21134	3/23/83	20		75/11	40753-21131	a/07/84 5
74/16	40266-21140	4/08/83	30		75/11	41041-21131	5/22/85 30 *
74/16	40290-21140	5/10/83	75		'75/11	41089-21124	7/09/85 30"*
74/	40330-21140	6/11/83	40		75/11	50135-21171	7/14/84 50
74/	40346-21141	6/27/83	50		75/11	50183-21183	8/31/84 10
74/16	41194-21062	10(22/85	30 *		75/11	50455-21183	5/30/85 O *
74/17	40266-21142	4/08/83	o		75/12	40305-21183	5/17/83 O
74/17	40330-21143	6/11/83	50		75/12	40465-21181	10/24/83 30 *
74/17	41194-21064	10/22/85	O *		75/12	40609-21162	3/16/84 20
74/17	50048-21115	4/1.8/84	20		75/12	40673-21145	5/19/84 5 *
74/17	50096-21125	6/05/84	40		75/12	40753-21134	8107/84 20 *
74/18	40266-21145	4/08/83	10		75/12	41041-21134	5/22/85 O *
74/18	40330-21145	6/11/83	50		75/12	50183-21185	8/31/84 O
74/18	40394-21142	8/14/83	40		75/12	50599-21174	10/21/85 40 *
74/18	41146-21002	9/04/85	5 *		75/13	40305-21185	5/17/83 O
74/18	41194-21071	10/22/85	O *		75/13	40337-21190	6/18/83 35
74/18	50048-21121	4/18/84	O		75/13	41041-21140	5/22/85 O *
74/18	50608-21135	10/30/85	O *		75/13	50039-21162	4/09/84 25
74/19	40330-21151	6/11/83	50 *		75/13	50071-21164	5/11/84 30
74/19	41194-21073	10/22/85	40 *		75/13	50135-21175	7114184 40
74/19	50608-21141	10/30/85	30 *		75/13	50183-21192	8/31/84 o
74/20	40490-21143	11/18/83	30		75/13	50599-21181	10/21/85 O *
74/21	40106-21152	1/18/83	25		75/14	40305-21192	5/17/83 O
74	40490-21150	11/18/83	35		75/14	40337-21193	6/18/83 50
74/. .	50112-21144	6/21/84	50 *		75/14	40353-21193	7/04/83 40 C
74/22	50112-21150	6/21/84	50 *		75/14	40481-21184	11/09/83 50
					75/14	41041-21143	5/22/85 o *
75/06	40673-21123	5/19/84	15 *		75/14	50039-21165	4109/84 20
75/07	40673-21125	5/19/84	O *		75/14	50071-21171	5/11/84 50 *
75/08	40673-21132	5/19/84	O *		75/14	50135-21182	7114/84 13
75/08	41089-21113	7/09/85	O *		75/14	50183-21194	8/31/84 O
75109	40241-21165	3/14/83	O *		75/14	50599-21183	10/21/85 O *
75/09	40321-21174	6/02/83	15 *		75/15	40305-21194	5/17/83 20
75/09	40609-21151	3/16/84	O *		75/15	40337-21195	6/18/83 50
75/09	40673-21134	5/19/84	o		75/15	40353-21195	7/04/83 40
75/09	41089-21120	7/09/85	O *		75/15	40465-21192	10/24/83 35
75/09	50183-21174	8/03/84	O *		75/15	40481-21191	11/09/83 30 *
75/10	40241-21171	3/04/83	20		75/15	41041-21145	5/22/85 O *
75/10	40289-21175	5/01/83	20		75/15	50039-21171	4/09/84 O
75/10	40321-21174	6/02/83	50		75/15	50071-21173	5/11/84 O
75/10	40337-21175	6/18/83	30		75/15	50183-21200	8/31/84 30
75/10	40353-21175	7(04/83	10		75/15	50199-21201	9/16/84 30
75/10	40369-21174	7/20/83	50		75/15	50599-21190	10/21/85 O *
75	4046"5-21173	10/24/83	40 *		75/16	40305-21200	5/17/83 40
75/ .	40609-21154	3/16/84	O		75/16	40337-21202	6/18/83 50
75/10	40625-21151	4/01/84	50		75/16	40465-21195	10/24/83 10
75/10	40673-21140	5/19/84	50		75/16	40753--21152	8/07/84 20 *
75/10	40753-21125	8/07/84	O		75/16	41041-21151	5/22/85 O *
75/10	41089-21122	7/09/85	20 *		75/16	50039-21174	4/09/84 O
75/10	50103-21162	6/12/84	50		75/16	50071-21175	5/11/84 O
75/10	50183-21181	8/31/84	O		75/16	50199-21203	9/16/84 30
75/11	40321-21180	6/02/83	50		75/16	50599-21192	10/21/85 O *
75/11	40353-21182	7/04183	30		75/17	40145-21192	12/08/82 45 *
75/11	40465-21175	10/24/83	35 *		75/17	40305-21203	5/17/83 90

(C=AVAILABLE IN COLOR)
(D=DIGITAL MAGNETIC TAPE AVAILABLE)

ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS
75/17	40337-21204	6/18/83	50	
75/17	40465-21201	10/24/83	10	
75/17	40753-21154	8/07/84	40	*
75/17	41041-21154	5/22/85	0	*
75/	50039-21180	4/09/84	0	
75/	50055-21180	4/25/84	0	
75/17	50071-21182	5/11/84	o	
75/17	50199-21210"	9/16/84	50	
75/17	50599-21194	10/21/85	25	*
75/18	40145-21195	12/08/82	15	*
75/18	40465-21204	10/24/83	40	
75/18	41041-21160	5/22/85	0	*
75/18	50039-21182	4/09/84	0	
75/18	50055-21182	4/25/84	0	
75/18	50071-21184	5/11/84	0	
75/19	40145-21201	12/08/82	15	*
75/19	40353-21213	7/04/83	40	
75/19	40465-21210	10/24/83	50	
75/19	50055-21185	4/25184	10	
75/19	50199-21214	9/16/84	25	
75/21	50071-21195	5/11/84	40	
75/22	40145-21212	12/08/82	50	*
76/	50078-21211	5/18/84	0	*
76	50206-21234	9/23/84	50	*
76/	40040-21203	8/25/82	0	
76/09	50078-21213	5/18/84	0	*
76/09	50206-21240	9/23/84	0	*
76/10	40040-21205	8/25/82	40	
76/10	40248-21233	3/21/83	30	
76/10	40296-21240	5/08/83	50	
76/10	40344-21241	6/25/83	10	
76/10	50206-21243	9/23/84	2	
76/10	50542-21234	8/25/85	20	*
76/11	40296-21242	5/08/83	0	
76/11	40312-21241	5/24/83	30	
76/11	40344-21243	6/25/83	0	C
76/11	50046-21215	4/16184	30	
76/11	50078-21222	5/18/84	30	
76/11	50206-21244	9/23/84,	2	
76/12	40296-21245	5/08/83	5	
76/12	40344-21245	6/25/83	40	
76/12	41125-21184	8/17/85	50	*
76/	50078-21224	5/18/84	10	
76	50158-21243	8/06/84	10	
76/	40296-21251	5/08/83	0	
76/13	40312-21245	5/24/83	45	
76/13	40344-21252	6/25/83	10	C
76/13	40936-21202	2/06/85	30	*
76/13	41128-21190	8/17/85	10	*
76/13	50078-21231	5/18/84	50	
76/13	50094-21233	6/03/84	15	
76/13	50158-21245	8/06/84	30	
76/13	50446-21253	5/21/85	0	*
76/14	40104-21233	10/28182	50	
76/14	40296-21254	5/08/83	2	
76/14	40344-21254	6/25/83	10	C
76/14	40936-21204	2/06/85	.0	*
76/14	50078-21233	5/18/84	30	
76/14	50158-21252	8/06/84	15	
76/14	50190-21255	9/07/84	40	
76/14	50446-21260	5/21/85	0	*
76/15	40296-21260	5/08/83	.2	
76/15	40344-21260	6/25/83	40	
76/15	40840-21?10	11/02/84	0	*
76/15	40936-21210	2/06/85	20	*
76/15	50078-21235	5118/84	50	
76/15	50094-21242	6/03/84	15	
76/15	50158-21254	8/06/84	30	
76/15	50446-21262	5/21/85	0	*
76/16	40168-21251	12/31/82	50	*
76/16	40296-21262	5/08/83	10	
76/16	40408-21260	8/28/83	50	
76/16	40840-21212	11/02/84	0	*
76/16	40936-21213	2/06/85	30	*
76/16	50078-21242	5/18/84	25	
76/16	50094-21244	6/03/84	10	
76/16	50446-21265	5/21/85	0	*
76/17	40168-21254	12/31/82	25	*
76/17	40296-21265	5/08/83	5	
76/17	40408-21262	8/28/83	15	
76/17	40472-21261	10/31/83	10	
76/17	40840-21214	11/02/84	0	*
76/17	50046-21241	4/16/84	30	
76/17	50078-21244	5/18/84	45	
76/17	50446-21271	5/21/85	0	*
76/18	40136-21260	11/29/82	10	*
76/18	40216-21264	2/17/83	0	
76/18	40296-21271	5/08/83	30	
76/18	40408-21265	8128/83	40	
76/18	40472-21264	10/31/03	15	
76/18	49840-21221	11/02/84	0	*
76/18	40936-21222	2106/85	50	*
76/18	50046-21243	4/16/84	20	
76/18	50094-21253	6/03/84	10	
76/18	50446-21273	5/21/8'5	0	*
76/19	40296-21274	5/08/83	50	*
76/19	40840-21223	11/02/84	0	*
76/19	50046-21250	4/16/84	40	
76/19	50078-21253	5/18/84	30	
76/19	50094-21255	6/03/84	0	
76/20	40184-21271	1/16/83	40	
76/21	40184-21274	1/16/83	30'-"	
76/21	40360-21282	7/11/83	20	
76/22	40184-21280	1/16/83	30	
76/22	40360-21205	7/11/83	40	
76/22	40936-21235	2/06/85	50	*"
7?/04	41023-21225	5/04/85	40	*
77/05	41023-21231	5 /04/85	40	*

ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS (C=AVAILABLE IN COLOR) (D=DIGITAL MAGNETIC TAPE AVAILABLE)
77/06	41023-21234	5/04/85	10	*
77/06	41135-21222	8/24/85	0	*
77/07	41023-21240	5/04/85	0	*
77/07	41135-21224	8/24/85	10	*
77/	40271-21293	4/13/83	o	*
77/	41023-212"43	5/04/85	50	*
77/08	41135-21231	8/24/85	50	*
77/09	40239-21291	3/12/83	0	*
77/09	40271-21295	4/13/83	0	*
77/09	40319-21293	5/31/83	0	*
77/09	40815-21245	10/08/84	50	*
77/10	40239-21293	3/12/83	-3	
77/10	40271-21301	4/13/83	0,	
77/10	40319-21300	5/31/83	50	
77/10	40623-21273	3/30184	40	
77/10	50053-21273	4123/84	30	
77/10	50101-21284	6/10/84	40	
77/10	50117-21285	6/26184	10	*
77/10	50165-21301	8/13/84	35	
77/10	50245-21302	11/01/84	40	*
77/11	40271-21304	4/13/83	0	
77/11	41023-21254	5/04185	40	*
77/11	50053-21275	4/23/84	0	*
77/11	50101-21290	6/10/84	30	
77A	50181-21305	8/29184	30	
77/ .	40271-21310	4/13/83	o	
77/12	40303-21310	5/15/83	30	*
77/12	50181-21311	8/29/84	0	
77/13	40271-21312	4/13/83	50	
77/13	40303-21312	5/15/83	0	
77/13	50085-21293	5/25/84	20	
77/13	50117-21300	6/26184	30	*
77/13	50181-21314	8/29/84	20	
77/13	50245-21313	11/01/84	30	*
77/14	30772-20433	4/15/80	0	
77/14	40271-21315	4/13/83	45	
77/14	40303-21314	5/15/83	5	
77/14	41039-21265	5/20185	30	*
77/14	50053-21290	4/23184	30	*
77/14	50117-21303	6/26184	5	*
77/14	50181-21320	8/29/84	50	
77/14	50245-21320	11/01/84	0	*
77/15	40271-21321	4/13/83	10	
77/15	40303-21320	5/15483	50	
77	,41039-21271	5/20/85	50	*
77/ .	50053-21293	4/23/84	0	
77/15	50117-21305	6/26184	45	*
77/15	50181-21323	8/29/84	50	
77/15	50245-20322	11/01/84	0	*
77/15	50245-21322	11/01/84	0	
77/16	40271-21324	4/13/83	10	
77/16	40623-21300	3/30/84	30	
77/16	41039-21273	5/20/85	30	*
77/16	50053-21300	4/23/84	0	
77/16	5(3245-21325	11/01/84	0	*
77/17	40111-21304	11/04/82	40	*
77/17	40271-21330	4/13183	0	
77/17	40623-21302	3/30/84	30	
77/17	40815-21280	10/08/84	20	*
77/17	41039-21280	5/20/85	40	*
77/17	50053-21302	4123184	20	
77/17	50117-21314	6/26184	10	*
77/17	50181-21331	8/29/84	30	
77/17	50245-21331	11/01/84	0	*
77/18	40111-21311	11/04/82	45	*
77/18	40239-21324	3/12/83	13	
77/18	40271-21332	4/13/03	o	
77/18	40335-21332	6/16/83	40	
77/18	40815-21282	10/08/84	20	*
77/18	41039-21282	5/20/85	10	*
77/18	50117-21320	6/26/84	0	
77/18	50181-21334	8/29/84	20	
77/18	50245-21333	11/01/84	30	*
77/19	50053-21310	4/23/84	0	*
77/22	40127-21333	11/20/82	30	
77/23	40127-21335	11/20/82	30	
77/23	50181-21354	8/29/84	40	
78/08	50588-21345	10/10/85	10	*
78/09	50044-21332	4/14/84	40	*
78/09	50076-21340	5/16/84	50	*
78/09	50108-21343	6/17/84	20	*
78/09	50124-21344	7/03/84	5	*
78/09	50588-21351	10/10/85	0	*
78/10	40230-21354	3/03/83	40	
78/10	40294-21362	5/06/83	10	
78/10	40358-21362	7109/83	30	
78/10	41190-21285	10/18/85	50	*
78/10	50076-21341	5/16/84	20	
78/10	50092-21344	6/01/84	40	
78/10	50108-21350	6/17184	25	*
78/10	50124-21351	7/03/84	0	
78/11	40358-21365	7/09/83	50	
78/n	50108-21352	6/17/84	5	*
78/11	50124-21353	7/03/84	0	
78/n	50396-21373	4/01/85	20	*
78/11	50604-21355	10/26/85	35	*
78/12	40278-21371	4/20/83	5	
78/12	40310-21365	5/22183	0	
78/12	40358-21371	7/09103	40	
78/12	41190-21293	10/18/85	30	*
78/12	41222-21283	11/19/85	30	*
78/12	50092-213S3	6/01/84	15	
78/12	50124-21355	7/03/84	30	
78/12	50396-2.1375	4/01/85	10	*
78/13	40310-21372	5/22/83	0	
78/13	40358-21374	7/09/83	30	*
78/13	40438-21372	9/27/83	50	
78/13	41190-21300	10/18/85	2	*
78/13	41222-21290	11/19/85	0	*

ATH/ROW	SCENE ID	OATE ACQ	CLOUD COVER	SPECIAL PRODUCTS					
78/13	50044-21345	4/14/84	30	*	78/23	40182-21405	1/14/83	50	
78/13	50092-21355	6/01/84	0						
78/13	50108-21361	6117/84	5	*	79/05	41069-21352	6/19/85	0	*
78/13	50124-21362	7/03/84	50		79/06	41069-21354	6/19/85	0	*
78/	50396-21382	4/01/85	0	*	79/07	41069-21360	6/19/85	0	*
78/	50404-21363	10/26/85	0	*	79/08	41069-21363	6/19/85	0	*
78/14	40182-21372	1/14/83	0	*	79/08	41085-21362	7/05/85	20	*
78/14	40214-21372	2/15/83	0		79109	40029-21382	8/14/82	20	*
78/14	40438-21375	9127/83	30		79/09	40237-21412	3/10/83	0	*
78/14	50044-21352	4/14/84	0	*	79/09	40301-21421	5/13/83	0	*
78/14	50092-21361	6/01/84	0		79/09	40445-21420	10/14/83	50	*
78/14	50108-21363	6/17/84	15	*	79/09	41069-21365	6/19/85	30	*
78/14	50124-21364	7103/84	50		79/09	41085-21364	7/05/85	0	*
78/14	50396-21384	4101/85	0	*	79/10	40237-21415	3/10183	0	
78/14	50604-21370	10/26/85	0	*	79/10	40301-21423	5/13/83	10	
78/15	40182-21374	l/14183	0	*	79/10	40317-21422	5/29/83	30	
78/15	40230-21374	3/03/83	50		79/10	40381-21422	8/01/83	40	
78/15	40278-21382	4/20/83	5		79/10	40397-21420	8/17/83	40	
78/15	40294-21382	5/06/83	10		79/10	40445-21422	10/04/83	50	
78/15	40326-21382	6/07/83	40		79/10	40621-21400	3/28/84	10	
78/15	40438-21381	9/27183	50		79/10	41085-21371	7/05/85	0	*
78/15	41222-21294	11/19/85	0	*	79/10	41117-21363	8/06/85	45	*
78/15	50044-21354	4/14184	20		79/10	50051-21400	4/21/84	50	*
78/15	50092-21364	6/01184	0		79/n	40237-21421	3/10/83	0	
78	50108-21370	6/17184	25	*	79/n	40301-21425	5/13/83	70	
70/ . .	50124-21371	7/03/84	40		79/11	40317-21424	5/29/83	0	
78/15	50204-21384	9/21/84	30		79/n	40381-21424	8/01/83	50	
78/15	50396-21390	4/01/85	0	*	79/11	50051-21402	4/21/84	30	*
78/15	50604-21372	10/23/85	.20	*	79/12	40237-21423	3110/83	0	
78/16	40182-21381	1/14/83	0	*	79/12	40301-21432	5/13/83	10	
78/16	40278-21385	4120183	45		79/12	40317-.21431	5/29/83	0	
78/16	40294-21385	5/06/83	10		79/12	40461-21430	10/20183	40	
78/16	40326-21384	6/07/83	20		79/12	50051-21404	4/21/84	0	*
78/16	41222-21301	11/19/85	0	*	79/12	50211-21434	9128/84	20	
78/16	50044-21361	4/14/84	10		79/13	40237-21430	3/10/83	20	
78/16	50092-21370	6/01/84	0		79/13	40301-21434	5/13/83	0	
78/16	50108-21372	6117/84	20	*	79/13	40317-21433	S/29/83	15	
78/16	50124-21373	7/03/84	50		79/13	40461-21432	10/20/83	0	
78/16	50204-21390	9/21/84	0		79/13	40573-21400	2/09/84	0	*
78/16	50396-21393	4/01/85	0	*	79/13	S0083-21415	5/23/84	0	
78/17	40182-21383	1/14/83	0	*	79/13	50099-21421	6/08/84	15	*
78/17	40294-21391	5/06/83	30		79/13	50131-21423	7/10/84	20	
78/17	40326-21391	6/07/83	0		79/13	50211-21440	9/28/84	30	
78/'7	50044-21363	4/14/84	10		79/14	40237-21432	3/10/83	35	
78	50092-21373	6/01184	1		79/14	40301-21440	S113/83	5	
78/..	50108-21374	6117/84	50	*	79/14	40317-21435	5/29/83	40	
78/17	50204-21393	9/21/84	0		79/14	40461-21435	10/20/83	40	
78/17	50396-21395	4/01/85	0	*	79/14	40573-21422	2/09/84	30	*
78/18	40182-21390	1/14/83	25	*	79/14	41085-21384	7/05/85	45	*
78/18	40278-21393	4/20/83	20	*	79/14	50083-21421	S123/84-	15	
78/18	40294-21393	5/06/83	45		79/14	50163-21440	8/11/84	30	
78/18	40326-21393	6/07/83	0		79/14	50179-21442	8/27184	50	
78/18	50092-21375	6/01/84	0		79/15	40237-21435	3/10/83	0	
78/18	50204-21395	9121/84	0		79/15	40301-21443	S/13/83	50	
78/18	50396-21402	4/01/85	20	*	79/15	40317-21441	5/29/83	50	

(C=AVAILABLE IN COLOR) "
(D=DIGITAL MAGNETIC TAPE AVAILABLE)

CLOUD SPECIAL (C=AVAILARLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
79/15	40461-21441	10/20/83	50	
79/15	40573-21425	2/09/84	50	*
79/15	40973-21394	3/15/85	0	*
79/15	41085-21391	7/05/85	0	*
79/	50083-21424	5/23/84	0	
79,	S0099-21430	6108/84	20	
79/1>	50163-21442	8/11/84	15	
79/15	50179-21445	8127/84	40	
79/16	40237-21441	3/10/83	20	
79/16	40285-21450	4/27/83	90	
79/16	40301-21445	5/13/83	50	
79/16	40333-21450	6/14/83	50	
79/16	40573-21431	2/09/84	10	
79/16	40973-21400	3/15/85	30	*
79/16	41085-21393	7/05/85	0	*
79/16	50083-21430	5/23/84	30	
79/16	50099-21432	$/08/84	20	
79/16	50179-21451	8/27184	0	
79/17	40237-21443	3/10783	10	
79/17	40301-21452	5/13/83	50	
79/17	40333-21452	6/14/83	50	
79/17	40573-21433	2/09/84	5	
79/17	50179-21453	8/27/84	30	
79/17	50211-21454	9/2a/84	0	
79	40333-21455	6/14/83	30	
79,	50211-21460	9/28184	30	
79/19	40189-21453	1/21/83	20	*
79/20	40189-21455	1/21/83	25	*
80/08	40356-21480	7107/83	20	*
80/09	40228-21474	3/01/83	o	*
80/09	40260-21401	4102/83	45	*
80/09	40292-21483	5/04/83	0	*
80/09	40356-21483	7107/83	30	*
80/09	40372-21482	7123103	0	*
80/09	40612-21460	3/19/84	10	*
80/09	41180-21405	10/16/85	50	*
80/09	50074-21461	5/14/84	30	*
80/09	50122-21470	7/01/84	25	*
80/10	40020-21452	8/05/82	30	*
80/10	40228-21480	3/01/83	0	
80/10	40260-21483	4/02/83	40	
80/10	40292-21485	5/04/83	50	
80/10	40308-21483	5/20/83	40	
80	40372-21484	7/23183	0	
80,	40612-21463	3/19/84	10	
80/10	50074-21464	5/14/84	30	*
80/10	50122-21473	7/01/84	0	
80/11	40356-21491	7/07/83	30	
80/11	40372-21490	7/23/83	20	C
80/11	40612-21465	3119/84	50	
80/11	50074-21470	5/14/84	0	*
80/11	50122-21475	7/01/84	50	
80/12	40308-21492	5/20/83	10	
80/12	4$)372-21492	7/23/83	50	
80/12	40612-21471	3/19/84	20	
80/12	50042-21465	4/12/84	o"	
80/12	50074-21472	5/14/84	o	*
80/12	50090-21474	5/30184	25	
80/13	40084-21474	10/08/82	20	*
80/13	40308-21494	5/20183	0	
80/13	40340-21500	6/21/83	40	
80/13	40372-21495	7/23/83	30	C
80/13	50042-21472	4/12/84	10	'
80/13	50074-21474	5/14/84	0	
80/13	50090-21481	5/30/84	0	
80/13	50106-21483	6/15/84	50	
80/13	50122-21484	7/01/84	5	
80/13	50570-21492	9/22/85	50	*
80/14	40260-21501	4/02/83	40	
80/14	40308-21501	5/20/83	0	
80/14	50042-21474	4/12/84	o	
80/14	50074-21481	5/14/84	o	
80/14	50090-21483	5/30/84	o	
80/14	50122-21490	7/01/84	0	
80/14	50570-21494	9/22/85	20	*
80/15	40180-21495	1/12/83	0	*
80/15	40260-21503	4/02/83	30	
80/15	40308-21503	5/20/83	60	
80/15	40340-21505	6/21/83	20	
80/15	40612-21483	3/19/84	o	
80/15	40964-21455	3/06/85	50	*
80/15	50042-21481	4/12/84	20	
80/15	50074-21483	5/14/84	10	
80/15	50090-21490	5/30/84	0	
80/15	50122-21493	7/01/84	o	
80/15	50378-21513	3/14/85	40	*
80/15	50570-21500	9/22185	20	*
80/16	40180-21502	1/12/83	5	*
80/16	40260-21510	4/02/83	20	*
80/16	40612-21485	3119/84	0	
80/16	40964-21461	3/06/85	60	*
80/16	50042-21483	4/12/84	o	
80/16	50074-21485	5/14/84	50	
80/16	50090-21492	5/30/84	0	
80/16	50122-21495	7/01/84	0	
80/16	50378-21515	3/14/85	30	*
80/17	40180-21504	1/12/83	15	*
80/17	40340-21514	6/21/83	10	
80/17	40612-21491	3/19/84	20	
80/17	50042-21485	4/12/84	20	
80/17	50090-21494	5/30/84	0	
80/17	50122-21501	7/01/84	o	
80/18	40180-21510	1/12/83	50	*
80/18	40340-21520	6/21/83	20	
80/18	50090-21501	5130/84	0	*
80/18	50106-21503	6/15/84	40	*
80/20	40388-21522	8108/83	30	*
80/20	40612-21502	3119/84	50	*

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)
81/03	41163-21451	9/21/85	40	*
81/07	41115-21474	8/04/85	30	*
81/08	41115-21480	8/04/85	5	*
81/08	41163-21472	9/21/85	50	*
81/"	50049-21513	4/19/84	30	*
81.	50577-21532	9/29/85	40	*
81/0-	40251-21541	3/24/83	0	*
81/09	40299-21543	5/11/83	0	*
81/09	40379-21542	7/30/83	0	*
81/09	40459-21541	10/18/83	5	*
81/09	40955-21494	2/25/85	30	*
81/09	41115-21482	8/04/85	0	*
81/09	50049-21515	4/19/84	50	*
81/09	50417-21550	4122/85	0	*
81/09	50497-21544	7/11/85	0	*
81/09	50577-21535	9/29/85	35	*
81/10	40091-21525	10/15/82	10	
81/10	40251-21543	3/24/83	20	
81/10	40299-21545	5/11/83	.0	
81/10	40955-21500	2/25/85	40	*
81/10	41115-21485	8/04/85	15	*
81/10	50049-21522	4/19/84	40	
81/10	50417-20552	4/22/85	0	*
81/10	50497-21551	7/11/85	30	*
81	40091-21531	10/15/82	0	
81.	40251-21550	3/24/83	0	
81/11	40299-21552	5/11/83	0	
81/11	40955-21503	2/25/85	30	*
81/11	41115-2"1491	8/04/85	5	*
81/11	50417-21555	4/22/85	30	*
81/11	50497-21553	7/11/85	30	*
81/12	40251-21552	"3/24/83	0	
81/12	40299-21554	5/11/83	0	
81/12	40331-21554	6/12/83	45	
81/12	40363-21554	7/14/83	50	
81/12	40459-21552	10/18/83	15	
81/12	409.55-21505	2/25/85	0	*
81/12	41115-21493	8/04/85	20	*
81/12	50049-21530	4/19/84	0	
81/12	50417-21561	4/22/85	0	*
81/12	50497-21560	7/11/85	50	*
81/13	40219-21553	2/20/83	0	
81/13	40251-21555	3/24/83	0	
81/13	40299-21560	5/11/83	0	
81	40315-21555	5/27/83	0	*
81	40459-21555	10/18/83	10	
81/13	40955-21511	2/25/85	0	*
81/13	41115-21500	8/04/85	20	*
81/13	50497-21562	7/11/85	45	*
81/14	40219-21555	2/20/83	5	
81/14	40251-21561	3/24/83	0	
81/14	40299-21563	5/11/83	0	
81/14	40315-21561	5}27/83	50	*
81/14	40331-21563	6/12/83	10	
81/14	40459-21561	10/18/83	40	
81/14	40955-21514	2/25/85	30	*
81/14	41115-21502	8/04/85	50	*
81/14	50497-21564	7/11/85	30	*
81/15	40219-21562	2120/83	3	
81/15	40251-21563	3/24/83	0	
81/15	40299-21565	5/11/83	5	
81/15	40331-21565	6/12/83	10	
81/15	40459-21563	10/18/83	20	
81/15	40955-21520	2/25/85	50	*
81/15	41163-21500	9/21/85	40	*
81/15	50049-21542	4/19/84	40	
81/15	50417-21572	4/22/85	0	*
81/16	40251-21570	3124/83	50	*
81/16	40299-21572	5/11/83	40	*
81/16	40331-21572	6/12/83	40	*
81/16	41163-21503	9/21/85	30	*
81/16	50049-21544	4/19/84	0	
81/16	50417-21575	4/22/85	20	*
82/09	40274-22005	4116/83	3	*
82/09	40290-22005	5/02/83	0	*
82/10	40274-22011	4/16/83	5	
82/10	40290-22011	5/02/83	20	
82/10	50184-22012	9/01/84	10	
82/11	40274-22013	4/16/83	5	
82/11	40290-22013	5/02/83	20	
82/11	50120-22001	6/29/84	10	
82/11	50184-22015	9/01/84	0	
82/12	40274-22020	4/16/83	30	
82/12	40290-22020	5/02/83	50	
82/12	50120-22004	6129/84	5	
82/12.	50136-22005	7/15/84	15	
82/12	50184-22021	9/01/84	35	
82/13	40274-22022	4/16/83	25	
82/13	50088-22003	5/28/84	40	*
82/13	50120-22010	6/29/84	0	
82/13	50136-22011	7/15/84	0	
82/14	40274-22024	4116/83	40	
82/14	50088-22005	5128184	50	
82/14	50120-22012	6/29184	20	
82/14	50136-22014	7/15/84	0	
82/15	40274-22031	4/16/83	5	
82/15	50088-22012	5/28/84	40	
82/16	40274-22033	4/16/83	25	*
82/16	50088-22014	5/28/84	15	
82/16	50120-22021	6129/84	0	
82/17	50088-22020	5/28/84	40	""-
82/24	41170-21593	9/28/85	35.	*
83/08	50079-22043	5/19/84	0	*
83/09	40345-22070	6/26/83	30	*
83/09	40377-22064	7/28/83	0'	*
83/09	40457-22063	10/16/83	40	
83/09	41001-22020	4/12/85	0	*
83/09	50079-22045	5/19 /84	5	

CLOUD SPECIAL (C=AVAILABLE IN COLOR)

ATH/ROW	SCENE ID	DATE ACQ	COVER	PRODUCTS (D=DIGITAL MAGNETIC TAPE AVAILABLE)				
83/09	50415-22072	4120/85	O	*				
83/10	40089-22050	10/13/82	50		84/09	40240-22122	3/13/83	50 *
83/10	40297-22072	5/09/83	10		84/09	4044a-22125	10/07/83	50
83/10	40329-22071	6/10/83	10		84/09	40464-22124	10/23/83	20
83/	40345-22072	6126/83	10		84/09	50086-22111	5/26184	10 *
83/	40377-22070	7128/83	20		84/10	40240-22125	3/13/83	O *
83/10	40425-22070	9/14/83	50		84/10	40464-22130	10/23/83	30
83/10	50063-22044	5/03/84	30	*	84/10	50086-22113	5/26/84	10
83/10	50415-22075	4/20/85	10	*	84/11	40224-22131	2/2S/83	30
03/11	40217-22071	2/18/83	O	*	84/11	40240-22131	3/13183	O
83/11	40297-22074	5/09/83	o		84/11	40304-22134	5/16/83	5
83/11	40329-22074	6/10/83	0		84/11	40464-22133	10/23/83	50
83/11	40345-22075	6/26/83	10		84/11	50054-22111	4/24/84	40 *
83/11	404S7-22072	10/16/83	55		84/11	50134-22124	7/13/84	O
83/11	50063-20051	5/03/84	35	*	84/11	50406-22142	4/11/85	20 *
83/11	50079-22054	5/19/84	40		84/12	40224-22134	2/25/83	30
83/12	40217-22073	2/18/83	O	*	84/12	40240-22133	3/13/83	10
83/12	"40249-22074	3/22/83	40		84/12	40304-22141	5/16/83	O
83/12	40297-22080	5/09/83	O		84/12	40352-22142	7/03/83	30
83/12	40329-22080	6/10/83	O		84/12	40464-2213S	10/23/83	50
83/12	40345-22081	6/26/83	50		84/12	50054-22114	4/24/84	o *
83/12	40457-22075	10/16/83	20		84/12	50134-22131	7/13/84	o
83/12	50063-22053	5/03/84	50	*	84/12	50406-22145	4/11/85	O *
83/1?	50079-22060	5/19/84	5		84/12	50470-22143	6/14/85	40 *
83,	50415-22084	4/20/85	O	*	84/13	40304-22143	5/16/83	5 *
83/ .	40185-22075	1/17/83	30	*	84/13	40464-22141	10/23/83	50
83/13	40217-22075	2/18/83	O		84/13	50406-22151	4/11/85	o *
83/13	40297-22083	5/0S/83	O		84/13	50470-22150	6/14/85	40 *
83/13	40329-22083	6/10/83	O		84/14	40304-22150	5/16/83	10 *
83/13	50415-22090	4/20/85	O	*	84/14	40464-22144	10/23/83	50
83/14	40185-22081	1/17/83	40	*	84/14	50054-22122	4124/84	40
83/14	40217-22082	2/18/83	10		84/14	50134-22135	7/13184	O
83/14	40297-22085	5/09/83	O		84/14	50150-22143	7/29184	30
83/14	40329-22085	6/10/83	10		84/14	50406-22153	4/11/85	O *
83/14	41001-22040	4/12/85	40	*	84/15	40304-22152	5/16/83	50
83/14	50047-22061	4/17/84	50	*	84/15	40400-22145	8/20/83	50
83/14	50063-22062	5/03/84	50	*	84/15	50134-22142	7/13/84	5
83/14	50095-22071	6104184	10		84/15	50406-22160	4/11/85	o *
83/14	50415-22092	4120/85	O	*	84/16	40400-22152	8/20/83	O *
83/15	40153-22075	12/16/82	10	*	84/16	50054-22131	4/24/84	50
83/15	40185-22083	1/17/83	50	*				
83/15	40217-22084	2/18/83	5		85/09	40087-22170	10/11/82	50
83/15	40297-22091	5/09/83	40		85/09	40231-22183	3/04[83	O *
83/1?	40329-22091	6/10/83	10		85/09	40615-22165	3/22/83	O
83	50415-22095	4/20/85	50	*	85/09	41015-22142	4126/85	30 *
83/	40089-22072	10/13/82	5		85/09	50061-22163	5/01/84	o *
83/16	40185-22090	i/17/83	50		85/09	50109-22175	6/18/84	25 *
83/16	40217-22091	2/18/83	35	*	85/10	40231-221%5	3/04/83	O *
83/16	5004?-22070	4/17/84	30	*	85/10	40439-22193	9/28/83	20 *
83/16	50063-22071	5/03/84	50	*	85/10	40615-22172	3/22/84	O
83/16	50079-22074	5/19/84	15		85/10	50045-22170	4/15/84	40
83/17	40217-22093	2/18/83	O	*	85/10	50061-22170	5/01/84	O *
83/18	50047-22075	4/17184	30	*	85/10	50109-22181	6/18/84	5 *
83/18	5o079-220a2	5/19/84	40		'85/11	40231-22192	3/04/83	20
83/18	50175-22104	8/23/84	O		85/11	40279-22201	4/21/83	10 ,

ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS (C=AVAILABLE IN COLOR) (D=DIGITAL MAGNETIC TAPE AVAILABLE)
85/11	40343-22201	6/24/83	30	
85/11	40615-22174	3/22/84	0	
85/11	40951-22151	2/21/85	0	*
85/11	50045-22172	4/15/84	30	
851	50061-22172	5/01/84	0	*
85.	50109-22184	6/18/84	0	*
85/12	40231-22194	3/04/83	0	
85/12	40279-22203	4/21/83	60	
85/12	40295-22203	5107/83	5	
85/12	40343-22203	6/24/83	30	
85/12	40951-22153	2/21/85	10	*
85/12	50045-22175	4/15/84	40	
85/12	50061-22175	5/01/84	0	*
85/12	50093-22184	6/02/84	25	*
85/12	50109-22190	6/id/84	o	*
85/13	40231-22200	3/04/83	0	*
85/13	40295-22205	5/07/83	0	*
,85/13	40439-22204	9/28/83	40	*
85/13	40615-22183	3/22/84	0	
85/13	40951-22160	2/21/85	10	*
85/13	41111-22150	7/31/85	40	*
85/13	50045-22181	4/15/84	0	
85/13	50061-22181	5/01/84	0	*
85/13	50109-22193	6/18/84	0	*
85/	50141-22200	7/20/84	50	
85.	50157-22203	8/05/84	3	
85/14	40231-22203	3/04/83	0	*
85/14	40295-22212	5/07/83	o	*
85/14	40487-22202	11/15/83	40	
85/14	40615-22185	3/22/84	o	
85/14	40951-22162	2/21/85	10	*
85/14	41111-22152	7/31/85	20	*
85/14	50045-22184	4/15/84	o	
85/14	50061-22183	5/01/84	0	*
85/14	50109-22195	6/18/84	0	*
85/14	50157-22205	8/05/84	5	
85/15	4029S-22214	5/07/83	30	*
85/15	40615-22192	3/22/84	0	
85/15	40951-22164	2/21/85	10	*
85/İ5	41111-22155	7/31/85	20	*
85/15	50045-22190	4/15/84	o	
85/15	50061-22190	5/01/84	0	*
85/15	50109-22201	6/18/84	0	*
85/15	50189-22215	9/06/84	20	
85	40615-22194	3/22/84	15	
85.	50045-22192	4/15/84	20	
85/17	40295-22223	5/07/83	90	
85/17	50045-22195	4/15/84	o	
85/17	50061-22194	5/01/84	40	*
85/18	50045-22201	4/15/84	50	
85/18	50061-22201	5/01/84	0	*
86/08	40070-22223	10/02/82	10	
86/09	50420-22255	4/25/85	0	*
86/13	50516-22270	7/30/85	15	*
86/14	50516-22273	7/30/85	5	*
88/12	50514-22390	7/28/85	0	*
88/13	50514-22393	7/28/85	30	*
88/15	40092-22380	10/16/82	40	
91/10	40465-22562	10/24/83	50,	
91/11	40465-22564	10/24/83	50	
91/11	40481-22562	11/09/83	50	
91/11	50487-22572	7/01/85	20	*
91/12	40465-22571	10/24/83	0	*
91/12	50487-22574	7/01/85	30	*
92/09	40104-23002	10/28/82	50	*
92/10	40104-23005	lo/2a/82	40	*
93/08	40639-23050	4/15/84	40	*
93/09	40463-23082	10/22/83	so	*
93/09	40623-23060	3/30/84	0	
93/09	40639-23052	4115/84	5	
93/09	40655-23051	5/01/84	SO	*
93/09	40671-23045	5/17/84	10	
93/09	50053-23060	4123/84	0	
93/10	40623-23063	3/30/84	0	
93/10	40639-23055	4/15/84	0	*
93/10	40671-23052	5/17/84	15	
93/10	50053-23063	--4-423/84	0	
93/11	40463-23090	10/22/83	40	
93/11	40639-23061	4/15/84	0	*
93/11	40671-23054	5/17/84	50	
93/11	50053-23065	4/23/84	30	
93/11	50069-23071	5/09/84	30	
93/12	40463-23093	10/22/83	30	*
93/12	40639-23064	4/15/84	o	*
93/12	40671-23061	5/17/84	5	*
93/12	50069-23073	5/09/84	5	*
93/13	40463-23100	10/22/83	0	*
93/13	40639-23070	4/15/84	0	*
93/13	40671-23063	5/17/84	5	*
94/06	50044-23110	4/14/84	50	*
94/08	40646-23111	4/22/84	30	*
94/09	40646-23113	4/22/84	30	*
94/10	40630-23122	4/06/84	0	*
94/10	50044-23124	4/14/84	40	*
94/11	40630-23125	4/06/84	0	*
94/11	50044-23130	4'/14/84	50	*
94/12	40630-23131	4/06/84	0	*
94/13	40630-23134	4/06/84	0	*
95/06	40621-23172	3/28/84	20	*
95/07	40621-23174	3/28/84	50	*
95/07	50067-23175	5/07/84	15	*
95/08	40621-23181	3/28/84	20	*
95/08	40637-23172	4/13/84	30	*

'ATH/ROW	SCENE ID	DATE ACQ	CLOUD COVER	SPECIAL PRODUCTS	'(C=AVAILARLE IN COLOR) (D=DIGITAL MAGNETIC TAPE AVAILABLE)
95/08	5006?-231.81	5/07/84	50	*	
95/09	40621-23183	3128/84	0		
95/09	50051-23182	4/21/84	0		
95/10	40621-23185	3/28/84	0		
95/"	50051-23185	4/21/84	0		
954	50067-23190	5/07/84	40	*	
95/11	40461-23213	10/20/83	50		
95/11	40621-23192	3/28/84	0		
95/11	50051-23191	4/21/84	0		
95/12	40461-23215	10/20/83	0	*	
95/12	40621-23194	3128/84	0	*	
95/12	50051-23192	4/21/84	0	*	
95/13	40461-23222	10/20./83	0	*	
95/13	40621-23200	3/20/84	0	*	
95/13	50051-23195	4/21/84	o	*	
96/09	50074-23250	5/14/84	o		
96/10	50074-23252	5/14/84	0		
96/11	40644-23244	4/20/84	30		
96/12	40644-23250	4120/84	40	*	
97/08	50417-23333	4/22/85	0	*	
97/10	40971-23285	3/13/85	o	*	
97/12	40971-23294	3/13/85	50	*	
97	40971-23300	3/13/85	30	*	
97.	40971-23303	3/13/85	0	*	
97/15	40-9.71-23305 .	3/13/85	0	* - -	
97/16	40971-23312	3/13/85	30	*	
97/17	40971-23314	3/13/85	50	*	
97/18	40971-23320	3/13/85	0	*	
98/13	40946-23361	2/16/85	0	*	
98/14	40946-23364	2116/85	10	*	
98/15	40946-23370	2/16/85	0	*	
98/16	40946-23373	2/16/85	40	*	
98/17	40946-23375	2/16/85	35	*	