Contents of the JPL Distributed Active Archive Center (DAAC) Archive

Version 2-91

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Ruby A. Lassanyi
Editors

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Jet Propulsion Laboratory
California Institute of Technology
Pasadena, California

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Abstract

The Distributed Active Archive Center (DAAC) archive at the Jet Propulsion Laboratory (JPL) includes satellite data sets for the ocean sciences and global-change research to facilitate multidisciplinary use of satellite ocean data. Parameters include sea-surface height, surface-wind vector, sea-surface temperature, atmospheric liquid water, and surface pigment concentration. The JPL DAAC is an element of the Earth Observing System Data and Information System (EOSDIS) and will be the United States distribution site for Ocean Topography Experiment (TOPEX)/POSEIDON data and metadata.
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Introduction

This publication is a description of the data contained in the archive of the Distributed Active Archive Center (DAAC) for physical oceanography at the Jet Propulsion Laboratory (JPL), California Institute of Technology.

Formerly the National Aeronautics and Space Administration (NASA) Ocean Data System (NODS), the JPL DAAC is one element of the Earth Observing System Data and Information System (EOSDIS). As in the past, our mission is to archive and distribute data relevant to the physical state of the oceans. The goals of the JPL DAAC are to serve the needs of the oceanographic and geophysical sciences research communities and to provide data in support of interdisciplinary research. The primary means of achieving these goals are through the acquisition, compilation, processing, and distribution of data obtained from spaceborne and conventional instruments and by producing and distributing higher-level data products.

As we move from an era of discipline-specific science to one of multidisciplinary science in the study of the Earth system, the JPL DAAC endeavors to provide increasing data services to the broad research community.

This publication reflects these changes through the addition of data sets beyond those reported previously. As new data are added to the JPL DAAC holdings, this publication will be updated. The JPL DAAC data holdings are also described in the NODS_DATA bulletin board on OMNET as well as in the NASA Master Directory, an on-line directory of data maintained by the NASA Goddard Space Flight Center.

Please contact the JPL DAAC regarding details of data-set granularity, available distribution media, and formats. Questions about the JPL DAAC, requests for data, or suggestions are welcomed. Some of the referenced documentation may be obtained from the open literature. Other reports that are not commonly available may be obtained from the JPL DAAC. Please contact us at the addresses or phone numbers listed on the following page.
Jet Propulsion Laboratory
Attention: Ruby Lassanyi
M/S 300-320
4800 Oak Grove Drive
Pasadena, CA 91109, U.S.A.

NODS.JPL on OMNET
STANS::RAL on SPAN

818-354-0906 (Ruby Lassanyi)
818-354-6980 (Elizabeth Smith)

TELEX: 675429 (Attention: Ruby Lassanyi)
FAX: 818-393-6720 (Attention: Ruby Lassanyi)
### Sea-Surface Height

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Geos-3 Altimeter</strong></td>
<td>data type: Geophysical data record</td>
<td>coverage: 14 April 1975–1 December 1978, global</td>
</tr>
<tr>
<td></td>
<td></td>
<td>smallest granule: Specific periods and regions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data set volume: 170 MB</td>
</tr>
<tr>
<td>2. <strong>Seasat Altimeter</strong></td>
<td>data type: Sensor data record</td>
<td>coverage: 7 July 1978–10 October 1978, global</td>
</tr>
<tr>
<td></td>
<td></td>
<td>smallest granule: 1 orbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data set volume: 440 MB</td>
</tr>
<tr>
<td>3. <strong>Seasat Altimeter</strong></td>
<td>data type: Geophysical data record</td>
<td>coverage: 7 July 1978–10 October 1978, global</td>
</tr>
<tr>
<td></td>
<td></td>
<td>smallest granule: Specific periods and regions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data set volume: 350 MB = 14 tapes</td>
</tr>
<tr>
<td>4. <strong>Geosat Altimeter</strong></td>
<td>data type: Zlotnicki-Fu interpolated along track</td>
<td>coverage: 6 November 1986–26 September 1989, global</td>
</tr>
<tr>
<td></td>
<td></td>
<td>smallest granule: Specific periods and regions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data set volume: 560 MB = 6 tapes</td>
</tr>
</tbody>
</table>
Surface-Wind Vector (and Sigma-Naught)

1. **Seasat Scatterometer**
   - data type: Sensor data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: 1 orbit
   - data set volume: 8000 MB

2. **Seasat Scatterometer**
   - data type: Geophysical data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: Specific periods and regions
   - data set volume: 340 MB

3. **Seasat Scatterometer**
   - data type: Carsey and Pihos gridded, 100-km-by-100-km, polar, daily, unattenuated, sigma-naught statistics (mean, standard deviation, minimum, maximum)
   - coverage: 7 July 1978–10 October 1978, north and south polar grids
   - smallest granule: Entire data set (1 tape)
   - data set volume: 149 MB
4. Seasat Scatterometer

data type: Wentz forward and aft sigma-naught data collocated into 50-km-by-50-km cells

coverage: 7 July 1978–10 October 1978, global

smallest granule: 6 days (1 tape)

data set volume: 1767 MB = 16 tapes


5. Seasat Scatterometer

data type: Atlas et al. dealiased, gridded, 100-km-by-100-km, surface-wind vectors (SASS 1 algorithm with atmospheric general circulation model)

coverage: 7 July 1978–10 October 1978, global

smallest granule: Entire data set (2 tapes, binary; 4 tapes, EBCDIC)

data set volume: 635 MB


6. Seasat Scatterometer

data type: Wentz, Atlas, and Freilich dealiased, gridded, 100-km-by-100-km, surface-wind vectors (SASS 2 algorithm)

coverage: 7 July 1978–10 October 1978, global

smallest granule: Entire data set (2 tapes)

data set volume: 258 MB

7. **Seasat Scatterometer**

- **data type:** JPL-UCLA-AES dealiased, gridded, 1-degree-by-1-degree, 6-hourly, surface-wind vectors (SASS 1 algorithm)
- **coverage:** 6 September 1978–20 September 1978, global
- **smallest granule:** Entire data set (1 tape)
- **data set volume:** 54 MB

8. **Seasat Scatterometer**

- **data type:** Chelton et al. gridded, 2.5-degree-by-2.5-degree, monthly, surface-wind vector (from Atlas et al. dealiased, surface-wind vectors; see Surface-Wind Vector, page 6, item 5)
- **coverage:** 7 July 1978–10 October 1978, global
- **smallest granule:** One month, global (1 tape)
- **data set volume:** 0.5 MB
9. DMSP Special-Sensor Microwave Imager

data type: Atlas 6-hourly, surface-wind vectors (directions assigned) at SSM/I data locations
coverage: July 1987–June 1988, global
smallest granule: One month, global (1 tape)
data set volume: 450 MB = 11 tapes
reference:

10. Atlas Gridded, Surface-Wind Analysis

data type: Atlas gridded, 2-degree-latitude-by-2.5-degree-longitude, 6-hourly, surface-wind analysis combining SSM/I winds, ship, and buoy reports and model first-guess winds
coverage: July 1987–June 1988, global
smallest granule: One month, global (1 tape)
data set volume: 450 MB = 11 tapes
reference:
### 11. Atlas Gridded, Averaged SSM/I Wind Observations

<table>
<thead>
<tr>
<th>data type:</th>
<th>Atlas gridded, 2-degree-latitude-by-2.5-degree-longitude, 5-day and monthly averaged, surface-wind vectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>coverage:</td>
<td>July 1987–June 1988, global</td>
</tr>
<tr>
<td>smallest granule:</td>
<td>Entire data set (2 tapes)</td>
</tr>
<tr>
<td>data set volume:</td>
<td>12 MB = 2 tapes</td>
</tr>
</tbody>
</table>
Surface-Wind Speed

1. **Geos-3 Altimeter**
   - data type: Geophysical data record
   - coverage: 14 April 1975–1 December 1978, global
   - smallest granule: Specific periods and regions
   - data set volume: 170 MB

2. **Seasat Altimeter**
   - data type: Sensor data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: 1 orbit
   - data set volume: 440 MB

3. **Seasat Altimeter**
   - data type: Geophysical data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: Specific periods and regions
   - data set volume: 350 MB
4. **Seasat Scanning**, **Multichannel Microwave Radiometer**
- Data type: Sensor data record
- Coverage: 7 July 1978–10 October 1978, global
- Smallest granule: 1 orbit
- Data set volume: 5680 MB

5. **Seasat Scanning**, **Multichannel Microwave Radiometer**
- Data type: Geophysical data record
- Coverage: 7 July 1978–10 October 1978, global
- Smallest granule: Specific periods and regions
- Data set volume: 170 MB

6. **DMSP Special-Sensor Microwave Imager**
- Data type: Wentz geophysical tapes, daily, 25-km-by-25 km cells of wind speed
- Coverage: July 1987–December 1988, global
- Smallest granule: Two weeks, global (1 tape)
- Data set volume: 2758 MB = 35 tapes
7. **DMSP Special-Sensor Microwave Imager**

- **data type:** Wentz SSM/I collocated with Geosat
- **coverage:** July 1987–December 1989, global
- **smallest granule:** Entire data set (1 tape)
- **data set volume:** 150 MB = 1 tape
Surface-Wind Stress Vector

1. **Seasat Scatterometer**
   - data type: Chelton et al. gridded, 2.5-degree-by-2.5-degree, monthly, wind stress (from Atlas et al. dealiased, surface-wind vectors; see Surface-Wind Vector, page 6, item 5)
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: One month, global (1 tape)
   - data set volume: 0.5 MB
Integrated Water Vapor

1. **Seasat Scanning, Multichannel Microwave Radiometer**
   - data type: Sensor data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: 1 orbit
   - data set volume: 5680 MB

2. **Seasat Scanning, Multichannel Microwave Radiometer**
   - data type: Geophysical data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: Specific periods and regions
   - data set volume: 170 MB

3. **NOAA Tiros Operational Vertical Sounder**
   - data type: Emery et al. gridded, 1-degree-by-1-degree, weekly, vertically integrated water vapor
   - coverage: 1 January 1987–16 August 1987, global
   - smallest granule: Entire data set (1 tape)
   - data set volume: 4 MB
4. **DMSP Special-Sensor Microwave Imager**
data type: Emery et al. gridded, 1-degree-by-1-degree, weekly, vertically integrated water vapor
coverage: 15 July 1987–16 August 1987, global
smallest granule: Entire data set (1 tape)
data set volume: 4 MB

5. **DMSP Special-Sensor Microwave Imager**
data type: Wentz geophysical tapes, daily, 25-km-by-25-km cells of integrated water vapor
coverage: July 1987–December 1988, global
smallest granule: Two weeks, global (1 tape)
data set volume: 2758 MB = 35 tapes

6. **Fleet Numerical Oceanographic Center**
data type: Wet and dry tropospheric corrections as applied to the Zlotnicki-Fu Geosat altimeter data (see Sea-Surface Height, page 3, item 4)
coverage: 8 November 1986–28 December 1988, global
smallest granule: Entire data set (2 tapes)
data set volume: 284 MB
<table>
<thead>
<tr>
<th><strong>7. DMSP Special-Sensor Microwave Imager</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>data type:</td>
</tr>
<tr>
<td>Wentz SSM/I collocated with Geosat</td>
</tr>
<tr>
<td>coverage:</td>
</tr>
<tr>
<td>July 1987–December 1989, global</td>
</tr>
<tr>
<td>smallest granule:</td>
</tr>
<tr>
<td>Entire data set (1 tape)</td>
</tr>
<tr>
<td>data set volume:</td>
</tr>
<tr>
<td>150 MB = 1 tape</td>
</tr>
<tr>
<td>reference:</td>
</tr>
</tbody>
</table>
Atmospheric Liquid Water

1. **Seasat Scanning, Multichannel Microwave Radiometer**
   - data type: Sensor data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: 1 orbit
   - data set volume: 5680 MB

2. **Seasat Scanning, Multichannel Microwave Radiometer**
   - data type: Geophysical data record
   - coverage: 7 July 1978–10 October 1978, global
   - smallest granule: Specific periods and regions
   - data set volume: 170 MB

3. **DMSP Special-Sensor Microwave Imager**
   - data type: Wentz geophysical tapes, daily, 25-km-by-25-km cells of atmospheric liquid water
   - coverage: July 1987–December 1988, global
   - smallest granule: Two weeks, global (1 tape)
   - data set volume: 2758 MB = 35 tapes
4. DMSP Special-Sensor Microwave Imager

data type: Wentz SSM/I collocated with Geosat
coverage: July 1987–December 1989, global
smallest granule: Entire data set (1 tape)
data set volume: 150 MB = 1 tape
Sea-Surface Temperature

1. Seasat Scanning, Multichannel Microwave Radiometer
   data type: Sensor data record
   coverage: 7 July 1978–10 October 1978, global
   smallest granule: 1 orbit
   data set volume: 5680 MB

2. Seasat Scanning, Multichannel Microwave Radiometer
   data type: Geophysical data record
   coverage: 7 July 1978–10 October 1978, global
   smallest granule: Specific periods and regions
   data set volume: 170 MB

3. Seasat Visible and Infrared Radiometer
   data type: Sensor data record
   coverage: 7 July 1978–10 October 1978, global
   smallest granule: 1 orbit
   data set volume: 2400 MB
4. TIROS-N/NOAA Advanced, Very-High-Resolution Radiometer

data type: U. Miami/RSMAS gridded, 18-km-by-18-km, weekly, interpolated, multichannel sea-surface temperature

coverage: October 1981–June 1990, global

smallest granule: Specific regions and weekly

data set volume: 4760 MB = 34 tapes; 1 tape = 12 weeks


(c) NASA Ocean Data System (1990), "A User’s Guide to the NOAA AVHRR MCSST Data Set Produced by The University of Miami/School of Marine and Atmospheric Science," Unpublished Manuscript.
Sea-Ice Extent/Concentration

1. **Seasat Scanning, Multichannel Microwave Radiometer**

   data type: Carsey and Pihos gridded, 100-km-by-100-km, polar, daily, brightness-temperature statistics (mean, standard deviation, minimum, maximum)

   coverage: 7 July 1978–10 October 1978, north and south polar grids

   smallest granule: Entire data set (1 tape)

   data set volume: 70 MB

IMAGIC

IMAGIC is an image processing software package for the Apple Macintosh and was written by Charles Norris and William Emery, Colorado Center for Astrodynamics Research, Campus Box 431, University of Colorado, Boulder, CO 80309.

IMAGIC is useful for working with any type of data that can be viewed as two-dimensional images. Though written primarily to process satellite-derived imagery, IMAGIC can also be used for visualization of numerical data and for medical image processing.

IMAGIC runs on any Apple Macintosh computer with a color monitor. This includes the Macintosh II, Macintosh IIx, Macintosh IIcx, and the new Macintosh IIci. The program requires that your Macintosh be running System 6.0 or later. Two megabytes of RAM and a hard disk are also recommended.
CD-ROM Technical Information

The JPL DAAC has compiled a set of references to help those receiving data products on CD-ROM learn more about CD-ROM technology, hardware requirements, and availability. The references are taken from the following sources:

1) "The Voyager Uranus Imaging CD-ROMs" by Eric Elaison of the U.S. Geological Survey, Flagstaff, AZ and Michael Martin of the Planetary Data System (PDS) at the Jet Propulsion Laboratory, Pasadena, CA. This document was produced by the PDS and is available from JPL/NODS at the address given in the Introduction, page 2.

2) CD-ROM EndUser, a monthly magazine published by DDRI, 6609 Rosecroft Place, Falls Church, VA 22043-1828, (703) 241-2131.
## Contents of the JPL Distributed Active Archive Center (DAAC) Archive

The Distributed Active Archive Center (DAAC) archive at the Jet Propulsion Laboratory (JPL) includes satellite data sets for the ocean sciences and global-change research to facilitate multidisciplinary use of satellite ocean data. Parameters include sea-surface height, surface-wind vector, sea-surface temperature, atmospheric liquid water, and surface pigment concentration. The JPL DAAC is an element of the Earth Observing System Data and Information System (EOSDIS) and will be the United States distribution site for Ocean Topography Experiment (TOPEX)/POSEIDON data and metadata.

### Key Words
- Biological Oceanography
- Dynamic Oceanography
- Meteorology and Climatology
- Physical Oceanography

### Distribution Statement
Unlimited/Unclassified