

National Aeronautics and
Space Administration

EARTHDATA

The Web Unification Project

Andi Thomas

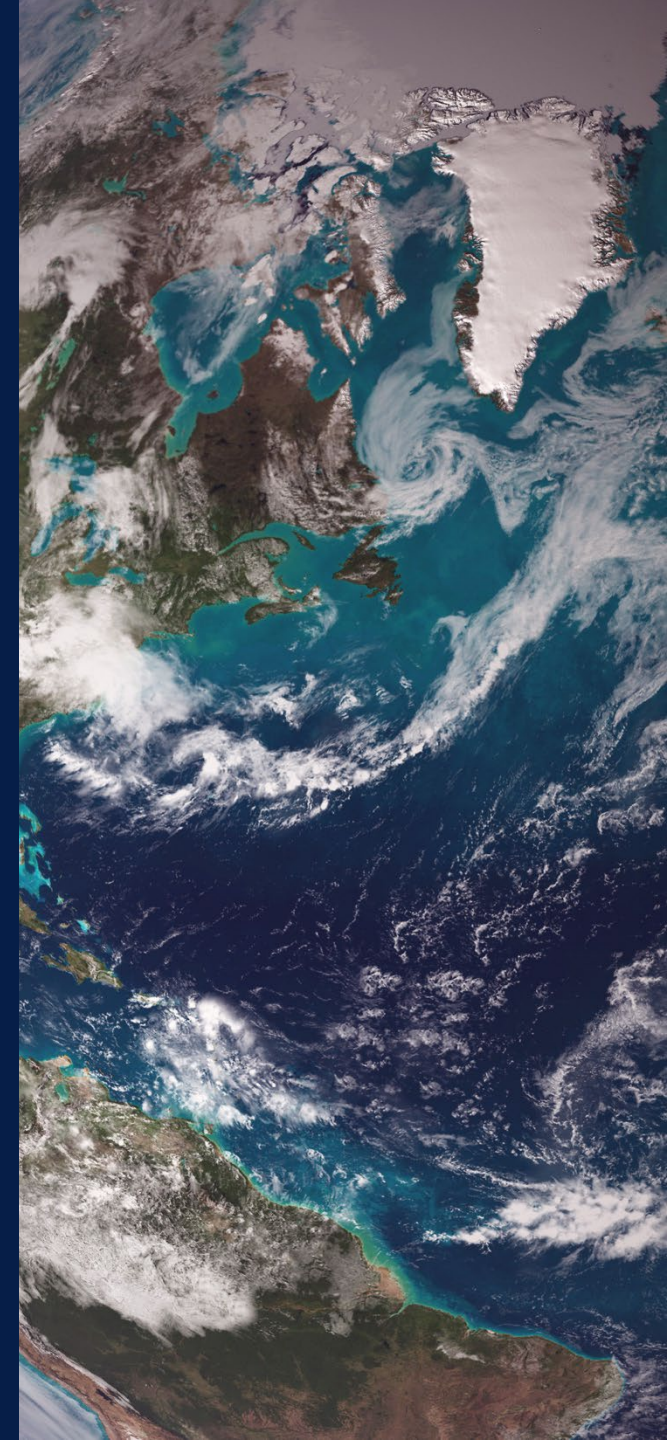
Project Manager

Web Strategy and Communications Team



Agenda/Table of Contents

1. Who am I?
2. Why: Setting the Stage
3. What: The Web Unification Project
4. Where: Demo of the New Site
5. Time for Questions



Hello, I am Andi Thomas



Manager for the Web Strategy and Communications Team



Background in remote sensing and GIS
Trained communicator and project manager

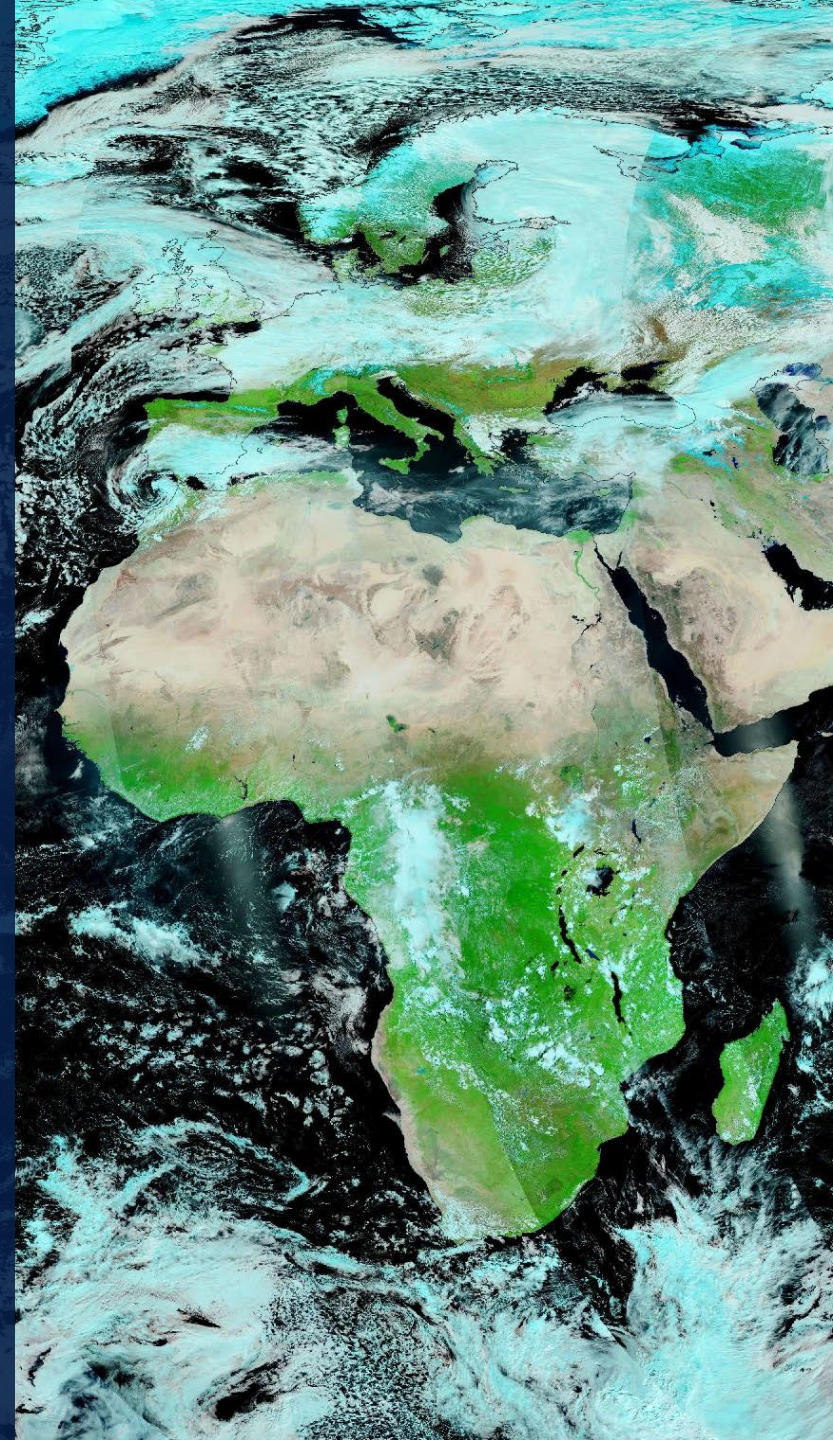


Fulltime mom, wife, altruist
Parttime reader, horseman, runner (usually in that order)



National Aeronautics and
Space Administration

Setting the stage for the Web Unification Project



Earth Science Data Systems Program



NASA's Earth Science Data Systems (ESDS) Program oversees the entire Earth science data life cycle and facilitates unrestricted access to the data researchers, managers, and governments need to understand and protect our planet.

Our Goals



Maintain a high level of service for the production and stewardship of science-quality data



Evolve our data systems for the next generation of missions, data sources, and user needs



Lead advanced technology to maximize the value of complex Earth science data for decision-making and fundamental research



Leverage diverse, global, Earth science communities to accelerate scientific discovery

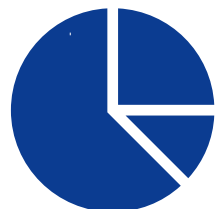
Data Archive Summary

Website



Website Sessions
(Google Analytics)

2.23 Million



Unique
Datasets

18,045

Archive



Average Archive Growth

91.64 Terabytes/Day



Total Archive
Volume in Cloud Only

44.25 Petabytes



Total Archive Volume
Including in Cloud

102.5 Petabytes

Users



End User Average
Distribution Volume

315.4 Terabytes/Day



End User Distribution
Files from Cloud Only

526 Million



End User Distribution
Files Including from Cloud

3504.9 Million



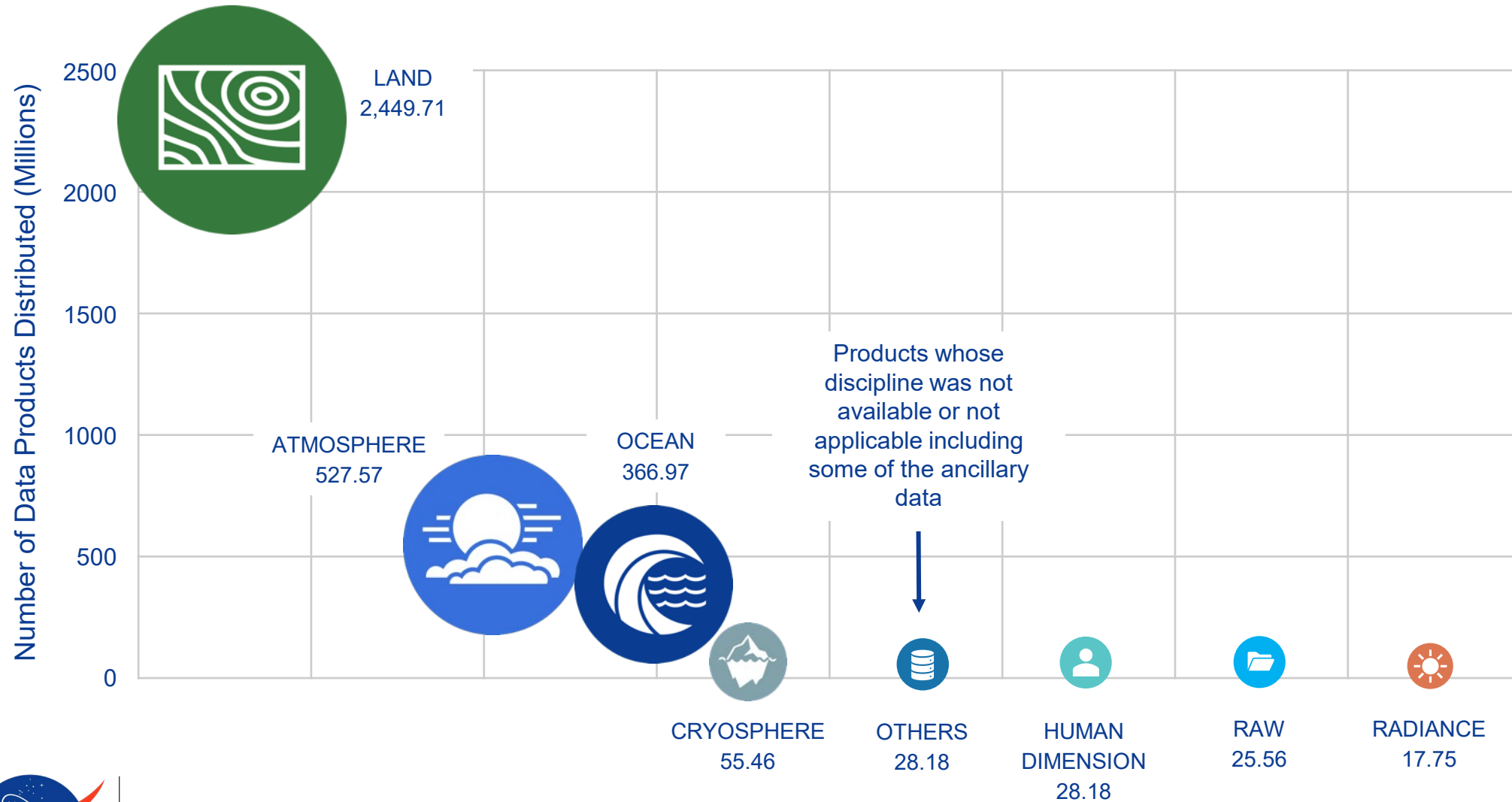
Distinct Users of EOSDIS
Data & Services
(Google Analytics)

5.01 Million



National Aeronautics and
Space Administration

FY23 Number of Data Products Distributed by Discipline





NASA's Distributed Active Archive Centers (DAACs)

A federated approach to data management

Land Process DAAC

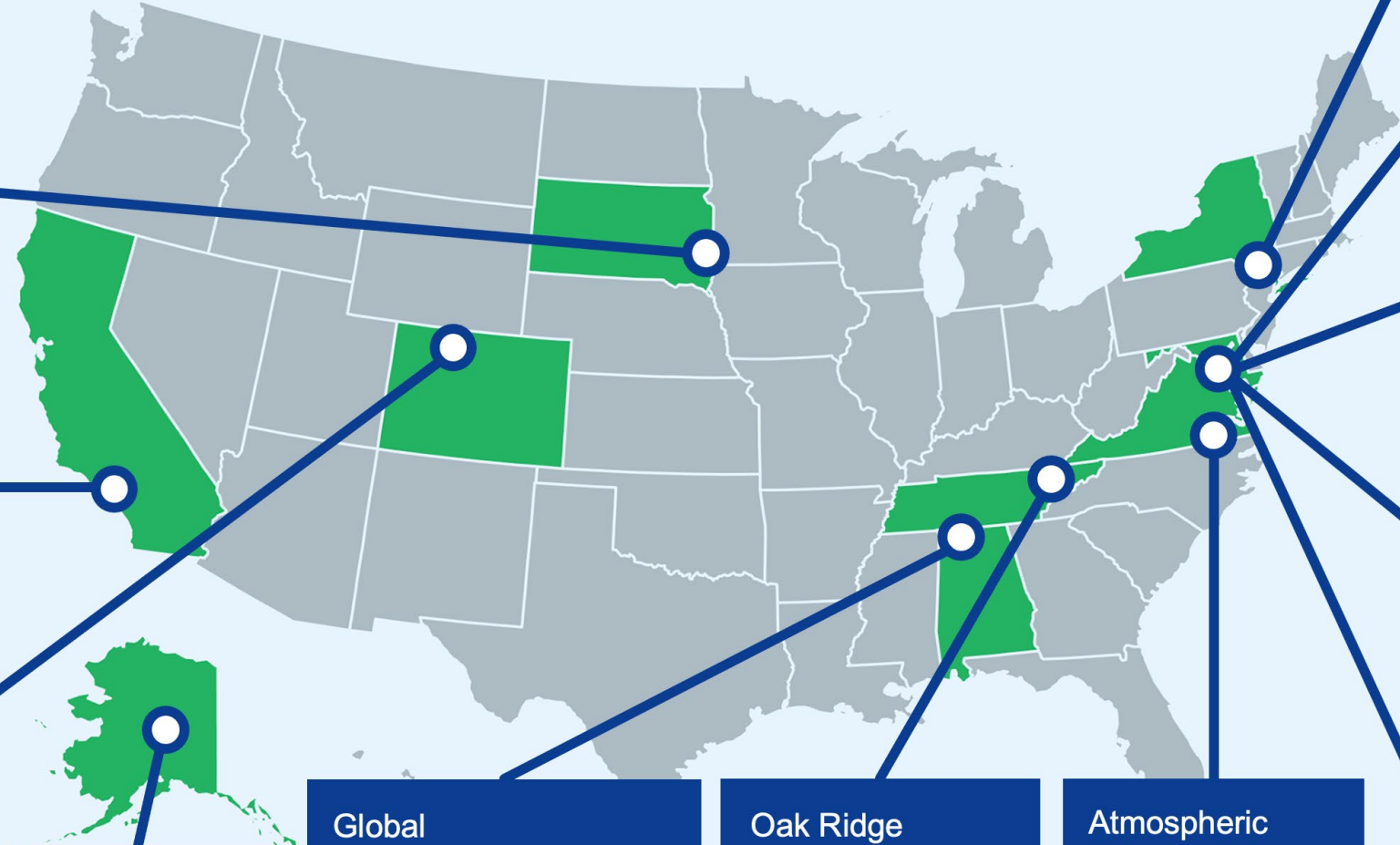
Land Cover, Surface Reflectance, Radiance, Temperature, Topography, Vegetation Indices

Physical Oceanography DAAC

Gravity, Sea Surface Temperature, Ocean Winds, Ocean Surface Topography, Sea Surface Salinity, Ocean Circulation

National Snow and Ice Data Center DAAC

Frozen Ground, Glaciers, Ice Sheets, Sea Ice, Snow, Soil Moisture, Cryosphere, Climate Interactions



Alaska Satellite Facility DAAC

Synthetic Aperture Radar (SAR) Products

Global Hydrometeorology Resource Center DAAC

Hazardous Weather, Lightning, Tropical Cyclones, Storm-Induced Hazards

Oak Ridge National Laboratory DAAC

Biogeochemical Dynamics, Ecological Data, Environmental Processes

Atmospheric Science Data Center

Radiation Budget, Clouds, Aerosols, Tropospheric Composition

Socioeconomic Data and Applications Center

Human Interactions, Land Use, Environmental Sustainability, Geospatial Data

Ocean Biology DAAC

Ocean Color, Sea Surface Temperature, Sea Surface Salinity

Crustal Dynamics Data Information System

Space Geodesy, Solid Earth

Goddard Earth Sciences Data and Information Services Center

Global Precipitation, Solar Irradiance, Atmospheric Composition and Dynamics, Global Modeling

Level 1 and Atmosphere Archive and Distribution System DAAC

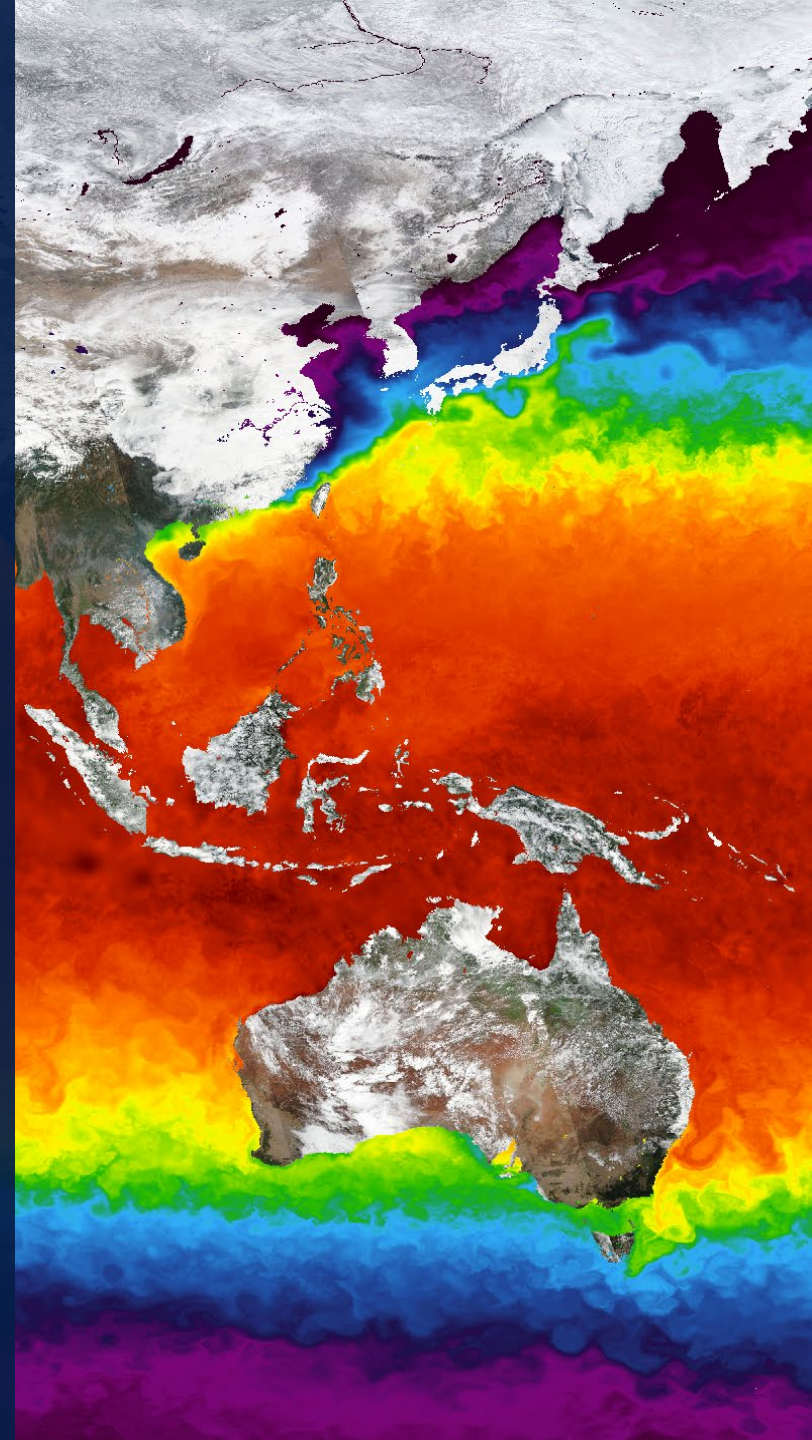
MODIS Level-1 and Atmosphere Data Products



EARTHDATA

The Web Unification Project

What is it? What should I expect?



WEB UNIFICATION

Earth Science Data Systems Program

In response to the federal IDEA Act, by December 2026 all ESDS-funded public facing web properties are planned to migrate into a single domain.



Our Mission

improve discoverability and findability of Earth science data

provide consistent identity across platforms

build efficient pathways for users to access data and information

- optimizing for all users
- continuing support for experienced power users
- onboarding new users

reduce vulnerabilities by strengthening security

determine website usability, eliminate redundancy

maximize the effectiveness of communication efforts

Migration Groups

**Group A
Fall
2024**

SEDAC
<https://sedac.ciesin.columbia.edu/>

GHRC
<https://ghrc.nsstc.nasa.gov/home/>

IMPACT
<https://impact.earthdata.nasa.gov/>

ASF DAAC
<https://asf.alaska.edu/>

**Group B
Spring
2025**

CDDIS
<https://cddis.nasa.gov/>

ORNL DAAC
<https://daac.ornl.gov/>

LP DAAC
<https://lpdaac.usgs.gov/>

**Group C
Spring
2026**

PO.DAAC
<https://podaac.jpl.nasa.gov/>

SLC Portal
<https://sealevel.nasa.gov/>

OB.DAAC
<https://oceancolor.gsfc.nasa.gov/>

SeaDAS
<https://seadas.gsfc.nasa.gov/>

**Group D
Winter
2026**

NSIDC
<https://nsidc.org/data/data-programs/nsidc-daac>

LAADS DAAC
<https://ladsweb.modaps.eosdis.nasa.gov/>

LANCE
<https://lance.modaps.eosdis.nasa.gov/>

GES DISC
<https://disc.gsfc.nasa.gov/>

ASDC
<https://asdc.larc.nasa.gov/>

SIPS
<https://omisips1.omisips.eosdis.nasa.gov/sipslogin.md>

CASEI
<https://impact.earthdata.nasa.gov/casei/>

Socioeconomic Data and Applications Center (SEDAC DAAC))

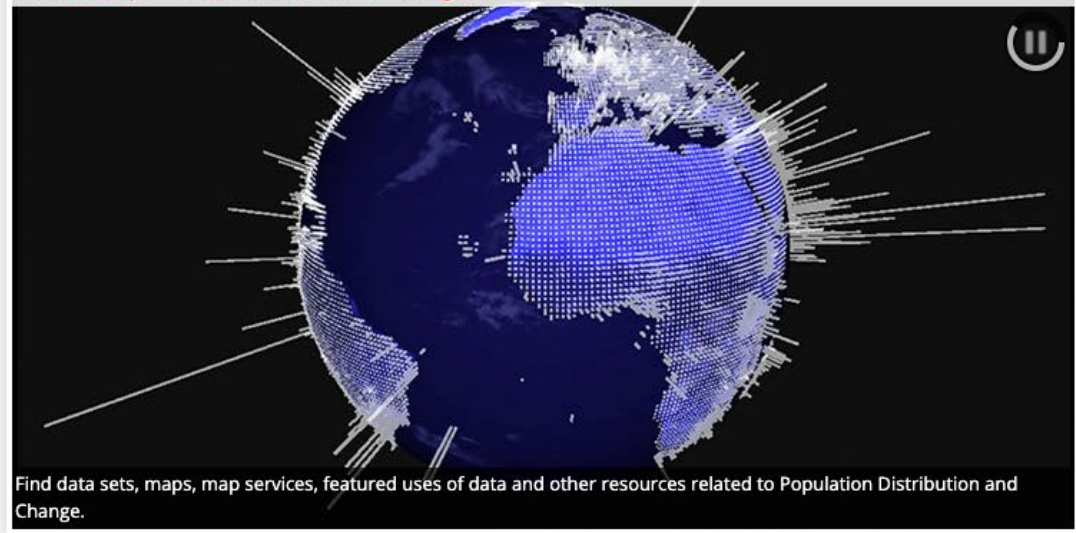
Focused on Human Interactions, Land Use, Environmental Sustainability, and Geospatial Data



In the Spotlight

Data Citations | Follow Us: [Twitter] [Facebook] [YouTube] [LinkedIn] | Share: [Twitter] [Facebook]

Theme - Population Distribution and Change



Find data sets, maps, map services, featured uses of data and other resources related to Population Distribution and Change.



Featured Data Sets

Delta Urban-Rural Population and Land Area Estimates, v1 (1990, 2000, 2014, 2015)
Low Elevation Coastal Zone (LECZ)

- Overview
- Download
- Documents

To provide country-level estimates of populations and land

Global Urban Polygons and Points Dataset (GUPPD), v1 (1975–2030)
Urban Spatial Data

- Overview
- Download
- Documents

To validate and expand upon JRC's Urban Centre Database (UCDB) to

News

- Annual NASA User Satisfaction Survey
- CIESIN Author Wins Population Association of America Poster Award
- CIESIN Associate Director Wins

Global Hydrometeorology Resource Center (GHRC DAAC)

Focused on Hazardous Weather, Lightning, Tropical Cyclones, Storm Induced Hazards

GHRC PORTAL

RSS SSMIS Ocean Product Grids Daily from DMSP F17 NetCDF V7



GHRC Portal

The GHRC Search Portal is powered by Earthdata Search and provides access to only GHRC data.

SCIENCE FOCUS AREAS


- LIGHTNING
- HURRICANES
- STORM-INDUCED HAZARDS

DATA ITEMS

- FIND DATA
- MICRO ARTICLES
- DATA RECIPES

ABOUT GHRC

The mission of the GHRC DAAC is to provide a comprehensive active archive of both data and knowledge augmentation services with a focus on hazardous weather, its governing dynamical and physical processes, and associated applications. Within this broad mandate, GHRC will focus on lightning, tropical cyclones and storm-induced hazards through integrated collections of satellite, airborne, and in-situ data sets.



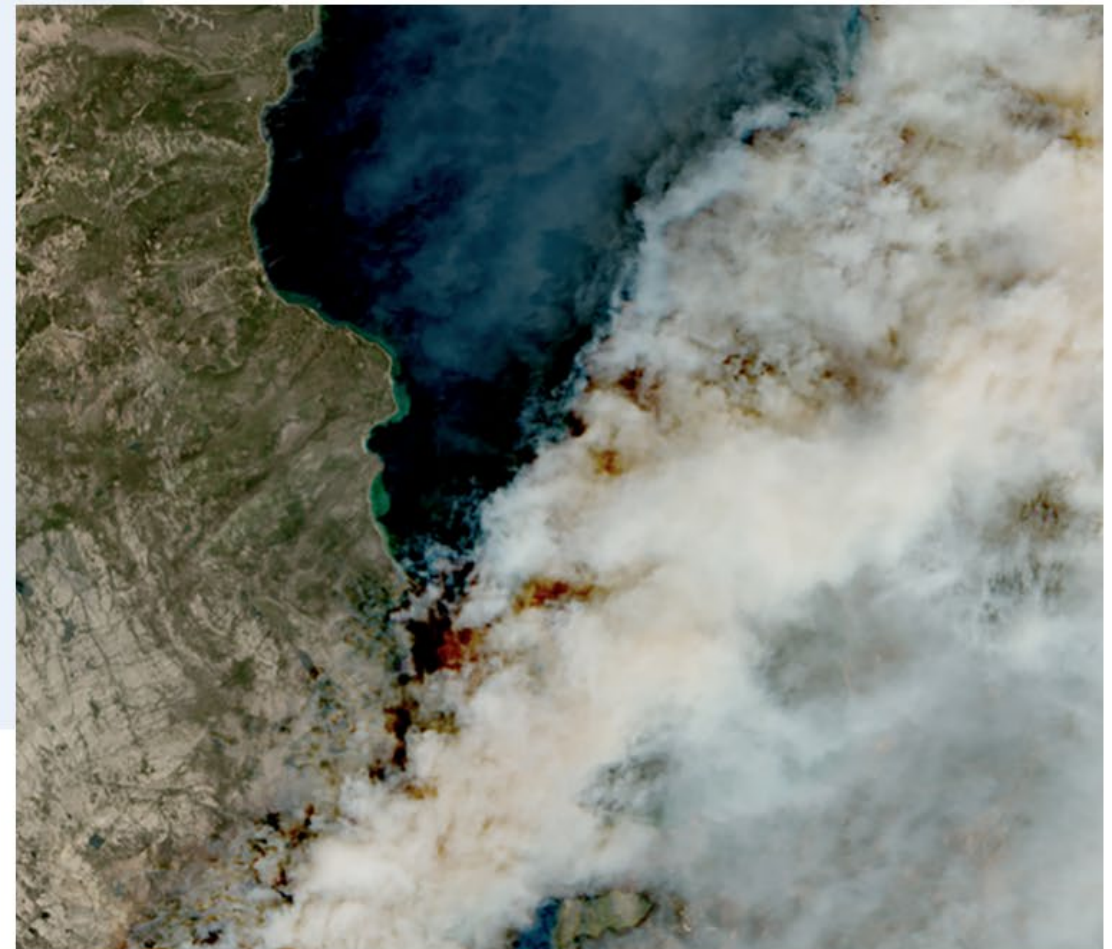
feedback

<https://search.earthdata.nasa.gov/search?portal=ghrc>



Expanding open science

Earth observations are a key component which facilitates scientific progress. IMPACT prototypes the latest technologies to support new science and applications from Earth observation data.



Alaska Satellite Facility (ASF DAAC) Focused on Synthetic Aperture Radar

Alaska Satellite Facility

(907) 474-5041 [✉ uso@asf.alaska.edu](mailto:uso@asf.alaska.edu) [📍 2156 Koyukuk Drive, Fairbanks, AK 99775](#)

[X](#) [f](#) [📺](#) [in](#)



SAR DAAC

Vertex

Services ▾

Ground Stations ▾

Training

GeoData Cooperative

About ▾

Contact

Search...



Training



Tracking



Datasets



Services



Notices

[Get Started](#)

[Find Data](#)

[Use Data](#)

Alaska Satellite Facility

What's New

SIR-C NEW

The current Earthdata website



Your Gateway to NASA Earth Observation Data

The Earth Science Data Systems (ESDS) Program provides full and open access to NASA's collection of Earth science data for understanding and protecting our home planet. Begin your Earthdata exploration by clicking on any of the discipline icons above.

- [Get Started](#)
- [Find Data](#)
- [Use Data](#)

Data Pathfinders

New to using NASA Earth science data? Our Data Pathfinders will help you chart a path through the process of selecting data products and



Migration Groups



SEDAC
<https://sedac.ciesin.columbia.edu/>

GHRC
<https://ghrc.nsstc.nasa.gov/home/>

IMPACT
<https://impact.earthdata.nasa.gov/>

ASF DAAC
<https://asf.alaska.edu/>



CDDIS
<https://cdis.nasa.gov/>

ORNL DAAC
<https://daac.ornl.gov/>

LP DAAC
<https://lpdaac.usgs.gov/>



PO.DAAC
<https://podaac.jpl.nasa.gov/>

SLC Portal
<https://sealevel.nasa.gov/>

OB.DAAC
<https://oceancolor.gsfc.nasa.gov/>

SeaDAS
<https://seadas.gsfc.nasa.gov/>



NSIDC
<https://nsidc.org/data/data-programs/nsidc-daac>

LAADS DAAC
<https://ladsweb.modaps.eosdis.nasa.gov/>

LANCE
<https://lance.modaps.eosdis.nasa.gov/>

GES DISC
<https://disc.gsfc.nasa.gov/>

ASDC
<https://asdc.larc.nasa.gov/>

SIPS
<https://omisips1.omisips.eosdis.nasa.gov/sipslogin.md>

CASEI
<https://impact.earthdata.nasa.gov/casei/>

Crustal Dynamics Data Information System (CDDIS DAAC) Focused on Space Geodesy and Solid Earth



National Aeronautics and
Space Administration

CDDIS

NASA's Archive of Space Geodesy Data

[Home](#) [About CDDIS](#) [Data and Products](#) [Techniques](#) [Programs](#) [Publications](#) [Citing our Data](#) [CDDIS Text Search](#)

[Background](#)

[Citing our data](#)

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Background of the CDDIS



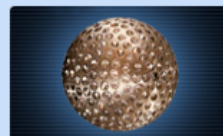
The Crustal Dynamics Data Information System (CDDIS) was initially developed to provide a central data bank for NASA's [Crustal Dynamics Project \(CDP\)](#). The system continues to support the space geodesy and geodynamics community through NASA's [Space Geodesy Project](#) as well as NASA's [Earth Science Division](#). The CDDIS was established in 1982 as a dedicated data bank to archive and distribute space

geodesy related data sets. Today, the CDDIS archives and distributes mainly Global Navigation Satellite Systems (GNSS, currently Global Positioning System GPS and GLObal NAVigation Satellite System GLONASS), laser ranging (both to artificial satellites, SLR, and lunar, LLR), Very Long Baseline Interferometry (VLBI), and Doppler Orbitography and Radio-positioning Integrated by Satellite (DORIS) data for an ever increasing user community of geophysicists.

The CDDIS is located at NASA's [Goddard Space Flight Center](#) in Greenbelt, MD.

The CDDIS has served as a global data center for the International GNSS Service ([IGS](#)) since 1992. The CDDIS also actively supports the International Laser Ranging Service ([ILRS](#)), the International VLBI Service for Geodesy and Astrometry ([IVS](#)), International DORIS Service ([IDS](#)), and the International Earth Rotation and Reference Systems Service ([IERS](#)) as a global data center.

To learn more about these space geodetic techniques and their respective CDDIS data holdings, click on the images below.



Land Processes Distributed Active Archive Center (LP DAAC) Focused on Land Cover, Surface Reflectance, Radiance Temperature, Topography, Vegetation Indices

The LP DAAC website is currently experiencing technical difficulties loading images and media. We appreciate your patience while we resolve this issue. 

LP DAAC

The Land Processes Distributed Active Archive Center (LP DAAC) is one of several discipline-specific data centers within the NASA Earth Observing System Data and Information System (EOSDIS). The LP DAAC is located at the USGS Earth Resources Observation and Science (EROS) Center in Sioux Falls, South Dakota.

[Learn More](#)

Migration Groups



SEDAC
<https://sedac.ciesin.columbia.edu/>

GHRC
<https://ghrc.nsstc.nasa.gov/home/>

IMPACT
<https://impact.earthdata.nasa.gov/>

ASF DAAC
<https://asf.alaska.edu/>



CDDIS
<https://cddis.nasa.gov/>

ORNL DAAC
<https://daac.ornl.gov/>

LP DAAC
<https://lpdaac.usgs.gov/>



PO.DAAC
<https://podaac.jpl.nasa.gov/>

SLC Portal
<https://sealevel.nasa.gov/>

OB.DAAC
<https://oceancolor.gsfc.nasa.gov/>

SeaDAS
<https://seadas.gsfc.nasa.gov/>



NSIDC
<https://nsidc.org/data/data-programs/nsidc-daac>

LAADS DAAC
<https://ladsweb.modaps.eosdis.nasa.gov/>

LANCE
<https://lance.modaps.eosdis.nasa.gov/>

GES DISC
<https://disc.gsfc.nasa.gov/>


ASDC
<https://asdc.larc.nasa.gov/>

SIPS
<https://omisips1.omisips.eosdis.nasa.gov/sipslogin.md>


CASEI
<https://impact.earthdata.nasa.gov/casei/>

Physical Oceanography Distributed Active Archive Center (PO.DAAC) Focused on Gravity, Ocean Winds, Sea Surface Temperature, Ocean Surface Topography, Sea Surface Salinity, Circulation

EARTHDATA | Other DAACs ▾

 Jet Propulsion Laboratory
California Institute of Technology

podaac
Physical Oceanography Distributed Active Archive Center

Follow Us 

HOME FIND DATA ACCESS DATA RESOURCES ABOUT HELP CLOUD DATA

▼ Data Search

2024-07-18

**CYGNSS Level 3 Daily Watermask V3.2
(2021-2024)**



New PO.DAAC animation now available!

UC Berkeley CYGNSS Level 3 Daily RAWC Watermask Version 3.2

Water Land No Data

scroll for more

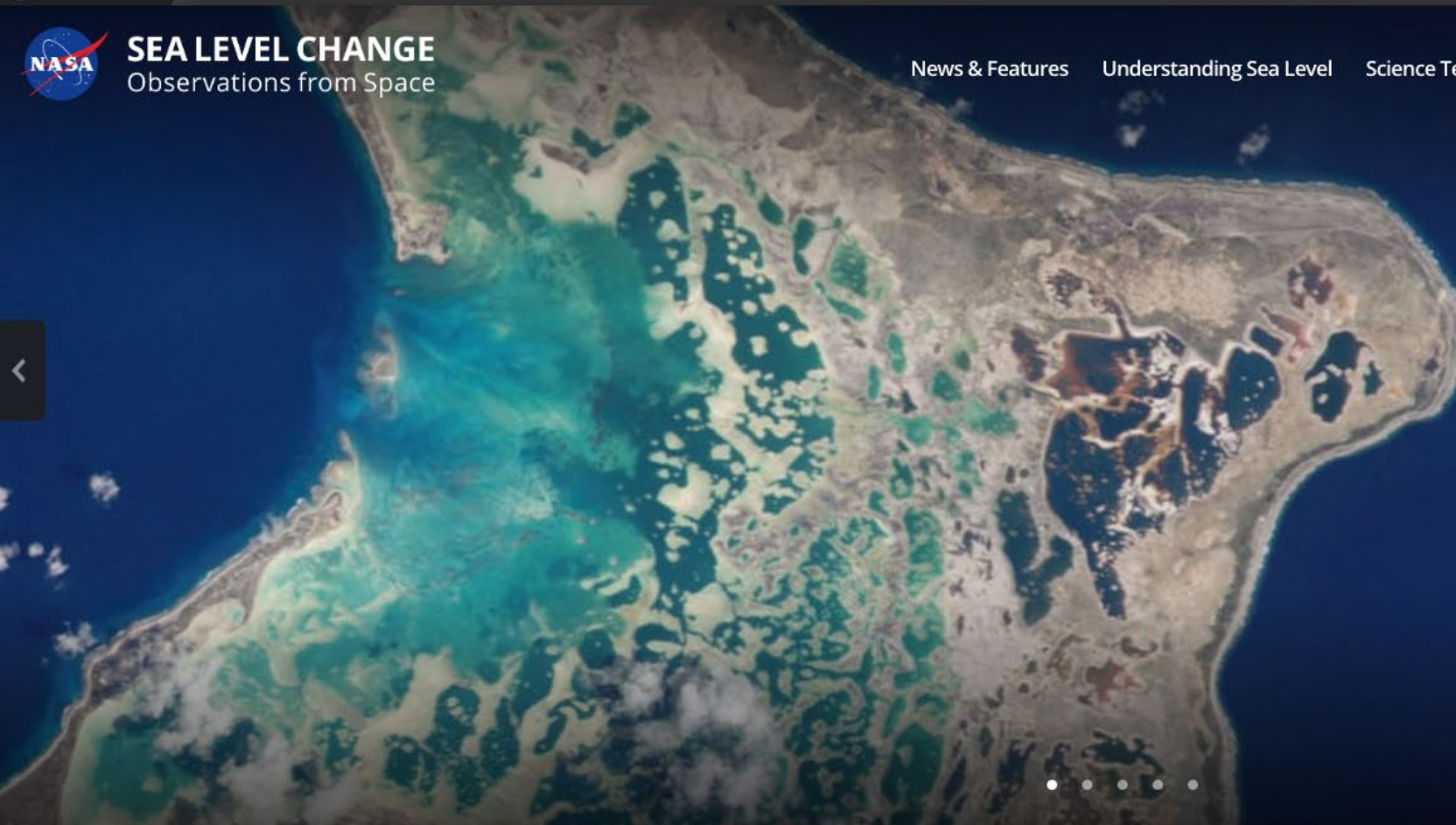
Science Disciplines

Sea Level Change Portal

EARTHDATA

 **SEA LEVEL CHANGE**
Observations from Space

[News & Features](#) [Understanding Sea Level](#) [Science Team](#) [Climate Tools](#) [Analysis Tools](#) [Science to Action](#) [Resources](#)



NASA Sea Level Team Examines an Island Nation at Risk

The Kiribati island group will face rapidly increasing flood risk in coming decades as sea levels rise, says a recent report by the NASA Sea Level Change Team.

[Full story](#)

GLOBAL MEAN SEA LEVEL
↑ 104.7 mm since 1993

OCEAN MASS
↑ 2 ± 0.3 mm/yr

STERIC HEIGHT
↑ 1.3 ± 0.2 mm/yr

GREENLAND ICE MASS CHANGE
↓ 267 ± 21 Gt/yr

ANTARCTICA ICE MASS CHANGE
↓ 139 ± 39 Gt/yr

Advancing NASA Sea Level Science and

Ocean Biology Distributed Active Archive Center (OB.DAAC)

Focuses on Ocean color, sea surface temperature, sea surface salinity

EARTHDATA

Other DAACs ▾



ABOUT ▾ DATA ▾ RESOURCES ▾ TOOLS ▾ COMMUNITY ▾ GALLERY FORUM

Quick Links ▾



OCEAN BIOLOGY DAAC

Ocean Biology DAAC

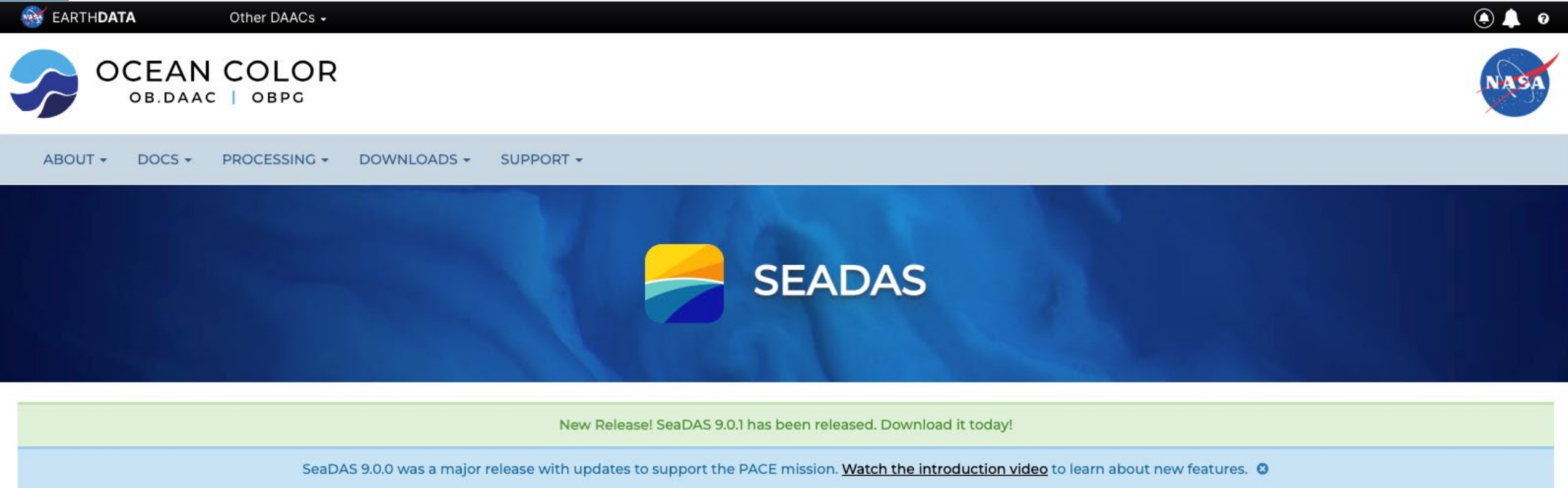
Overview

The OBPG serves as a Distributed Active Archive Center (DAAC) for satellite Ocean Biology (OB) data produced or collected under NASA's Earth Observing System Data and Information System (EOSDIS), including those from historical missions and partner space organizations and is a member of the [World Data System \(WDS\)](#). This website thus serves as the primary data access portal to the NASA OB.DAAC. The links below provide a variety of methods to access the holdings of the OB.DAAC, including visual browsers that enable point-and-click access by [data levels](#) and direct access for bulk download. In agreement with partner organizations, some data access requires [user registration](#) to enable better tracking of usage metrics.

Data Management

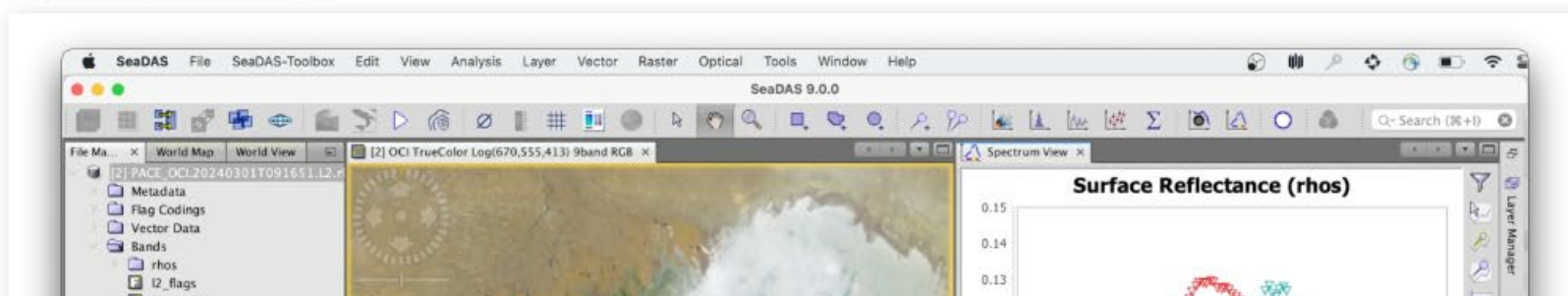
The data management plan describes the acquisition, generation, management, archive and distribution of science data products generated by the Ocean Data Processing System (ODPS). For a detailed description of science data products, data flows, supported sensors, and data availability, archiving and distribution, please refer to the [plan document](#).

Sea Data Analysis Software (SeaDAS)



The Official NASA/OB.DAAC Data Analysis Software

Last update: SeaDAS 9.0.1 (May 14, 2024)



Features

- » Visualization
- » Science Processing
- » Statistics

Migration Groups



SEDAC
<https://sedac.ciesin.columbia.edu/>

GHRC
<https://ghrc.nsstc.nasa.gov/home/>

IMPACT
<https://impact.earthdata.nasa.gov/>

ASF DAAC
<https://asf.alaska.edu/>



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<https://cddis.nasa.gov/>

ORNL DAAC
<https://daac.ornl.gov/>

LP DAAC
<https://lpdaac.usgs.gov/>



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<https://podaac.jpl.nasa.gov/>

SLC Portal
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LAADS DAAC
<https://ladsweb.modaps.eosdis.nasa.gov/>

LANCE
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GES DISC
<https://disc.gsfc.nasa.gov/>

ASDC
<https://asdc.larc.nasa.gov/>

SIPS
<https://omisips1.omisips.eosdis.nasa.gov/sipslogin.md>

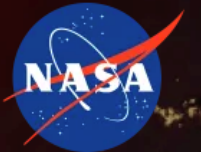
CASEI
<https://impact.earthdata.nasa.gov/casei/>

National Snow and Ice Data Center (NSIDC) DAAC

Focuses on Snow, sea ice, glaciers, ice sheets, ice shelves, frozen ground, soil moisture, cryosphere, climate interactions

NASA National Snow and Ice Data Center Distributed Active Archive Center (NSIDC DAAC)

Enabling researchers and data users to better understand how changes in the cryosphere impact our planet.



EXPLORE

ABOUT NSIDC DAAC

LATEST STORIES

DATA UPDATES

CITATION POLICIES

Open access NASA data for your research and studies

The NASA National Snow and Ice Data Center Distributed Active Archive Center (NSIDC DAAC) distributes cryosphere and related geophysical data from NASA Earth-observing satellite missions, airborne campaigns, and field observations. These data can be used to study topics relating to snow cover, sea ice,

Level 1 and Atmosphere Archive and Distribution System (LAADS) DAAC Focuses on MODIS Level 1 and atmosphere products



LAADS DAAC Migrates to the Cloud
Learn more.

Your Source for Level-1 and Atmospheric Data
Providing Access to Global Science Data Projects

[View Data](#) [Find Data](#)



Land, Atmosphere Near real-time Capability for Earth observations (LANCE) Focuses on delivering near real-time data



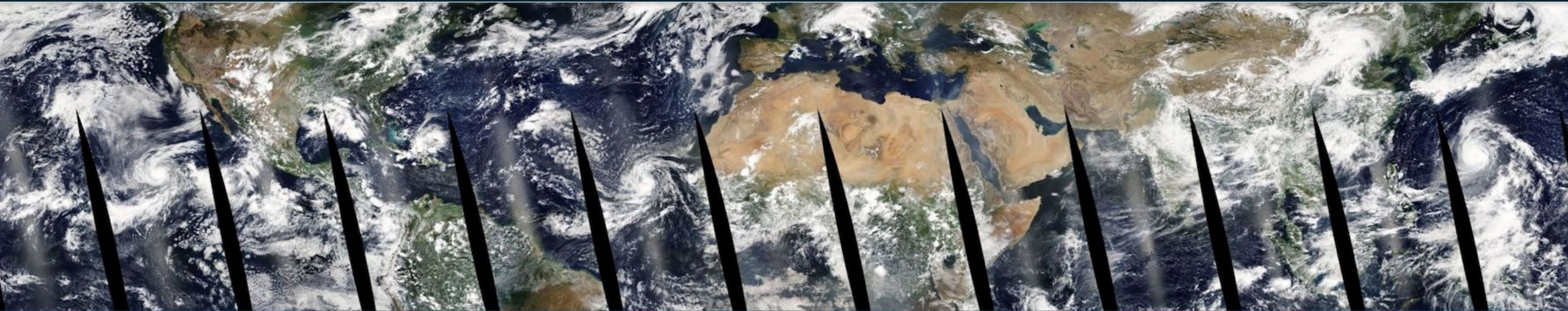
LANCE-MODIS AND VIIRS-LAND NEAR REAL-TIME DATA

About

News

Data

Feedback



LANCE-MODIS AND VIIRS-LAND NEAR REAL-TIME DATA

MODIS ⓘ

VIIRS ⓘ

Imagery ⓘ

NASA's [Land, Atmosphere Near-real-time Capability for EOS \(LANCE\)](#) leverages existing satellite data processing systems in order to provide data and imagery available from select instruments (currently AIRS, AMSR2, ISS LIS, MISR, MLS, MODIS, MOPITT, OMI, OMPS, and VIIRS). Most data products are available within 3 hours of satellite observation. These data meet the timely needs of applications such as numerical weather and climate prediction, forecasting and monitoring natural hazards, agriculture, air quality and disaster relief.

Both the LANCE-MODIS and LANCE VIIRS-Land elements are provided by the [MODIS Adaptive Processing System \(MODAPS\)](#) operated by the GSFC



Goddard Earth Sciences Data and Information Services Center (GES DISC)

Focuses on atmospheric composition, atmospheric dynamics, global precipitation, solar irradiance

EARTHDATA | Find a DAAC

GES DISC

Atmospheric Composition, Water & Energy Cycles and Climate Variability

⚠️ 14 Feedback Cloud Migration Help [Login](#) [My Dashboard](#)

Explore...

Data Collections Enter search (e.g., rainfall, GPM, TRMM_3B42) 📅 📖 🔍

[Browse Data by Category](#) [Visualize Data](#) [Access GIS](#)

The GES DISC migration to the cloud is happening now. [Learn more about it!](#)

Archive Size: 6,775.690 TB
Archived Data Files: 236,412,153
Files Distributed*: 5,002,530,102

Atmospheric Science Data Center (ASDC)

Focuses on radiation budget, clouds, aerosols, and tropospheric composition

 EARTHDATA

Other DAACs ▾

Feedback



| Atmospheric Science Data Center

Search the ASDC site...



[ABOUT](#)

[DATA](#)

[COMMUNITY](#)

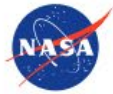
[OUTREACH](#)

[RESOURCES](#)



Catalog of Archived Suborbital Earth Science Investigations (CASEI)

Focuses on inventory of NASA's airborne and field campaigns for Earth Science



NASA | CASEI

[EXPLORE](#) [GLOSSARY](#) [ABOUT](#) [FAQS](#) [CONTACT](#)

Catalog of Archived Suborbital Earth Science Investigations

An inventory of NASA's airborne and field campaigns for Earth Science

[Explore CASEI](#)

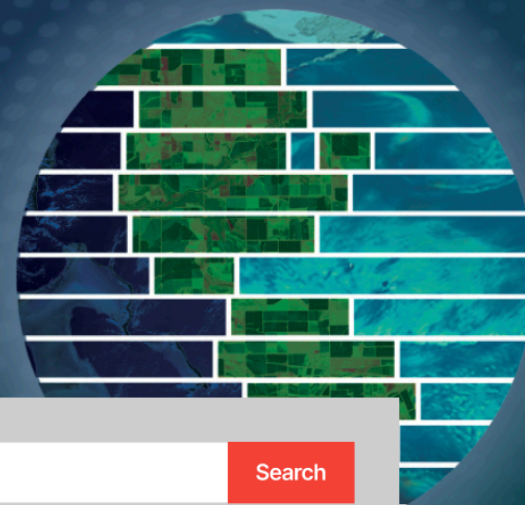
DATA SHORTCUT

[Go directly to a campaign, platform, or instrument →](#)



Your Gateway to NASA Earth Observation Data

The Earth Science Data Systems (ESDS) Program provides full and open access to NASA's collection of Earth science data for understanding and protecting our home planet.



Q Search for keywords, datasets, topics, and more... Search

- Data Catalog** →











Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.
- Data Tools** →

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.
- Data Alerts and Outages** →

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.

Browse Data by Topic

Connect to data through specific topics curated to support a wide range of scientific investigations.

- | | | | |
|---|--|---|--|
|  <p>Atmosphere</p> |  <p>Biosphere</p> |  <p>Climate Indicators</p> |  <p>Cryosphere</p> |
|  <p>Human Dimensions</p> |  <p>Land Surface</p> |  <p>Ocean</p> |  <p>Solid Earth</p> |
|  <p>Sun-Earth Interactions</p> |  <p>Terrestrial Hydrosphere</p> | | |

Trending Subtopics

- Air Mass Density →
- Wildfire →
- Hurricane →
- Ocean Waves →
- Sea Surface Temperature →

Resources

- Web Unification Project page:
<https://www.earthdata.nasa.gov/esds/web-unification-project>
- Web Unification Project Frequently Asked Questions:
<https://forum.earthdata.nasa.gov/viewtopic.php?t=5329>
- IDEA Act: <https://www.congress.gov/bill/115th-congress/house-bill/5759>



EARTHDATA

earthdata.nasa.gov

Thank You for Watching

