

LANCE: NASA Near Real-Time Data and Imagery

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Satellite Remote Sensing of Dust, Fires, Smoke, and Air Quality, July 10-12, 2018



LANCE


LANCE: NASA NEAR REAL-TIME DATA AND IMAGERY

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Land, Atmosphere Near real-time Capability for EOS (LANCE)



The Land, Atmosphere Near real-time Capability for EOS (LANCE) supports users interested in monitoring a wide variety of natural and man-made phenomena.

Near Real-Time (NRT) data and imagery from the AIRS, AMSR2, LIS (ISS), MISR, MLS, MODIS, MOPITT, OMI, OMPS, and VIIRS instruments are available much quicker than routine processing allows. Most data products are available within 3 hours from satellite observation. NRT imagery are generally available 3-5 hours after observation.

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[Hazards and Disasters](#)

Data

- [Download Near Real-Time Data](#)
- [Near Real-Time versus Standard Products](#)
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- [FIRMS:Fire/Hotspot data | Email Alerts](#)

Imagery

<https://earthdata.nasa.gov/earth-observation-data/near-real-time>



Browse Image

More GIBS Resources

- [Available Imagery Products](#)
- [GIBS API for Developers](#)
- [Map Library Usage](#)
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GIBS Related Links

- [Worldview](#)
- [Land, Atmosphere Near real-time Capability for EOS](#)
- [Earthdata Search](#)

Global Imagery Browse Services (GIBS)

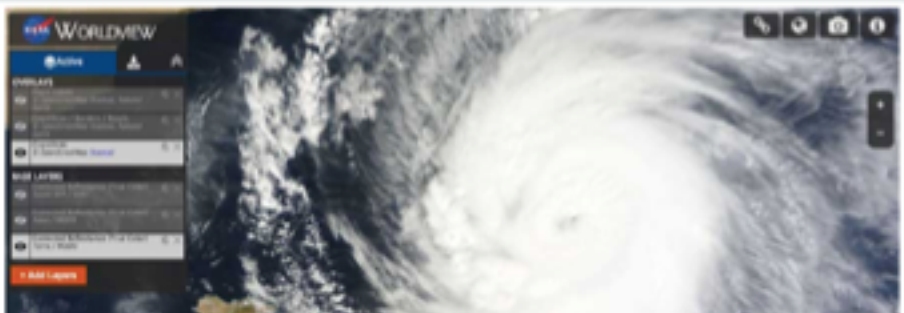
Visually explore the past and present of our dynamic planet through the **Global Imagery Browse Services (GIBS)**. GIBS provides quick access to over 600 satellite imagery products, covering every part of the world. Most imagery is available within a few hours after satellite overpass, some products span almost 30 years, and the imagery can be rendered in your own web client or GIS application.

NASA EOSDIS Global, Full Resolution Imagery

NASA EOSDIS GIBS provides full resolution visual representations of NASA Earth science data in a free, open, and interoperable manner. Through responsive and highly available web services, it enables interactive exploration of data to support a wide range of applications including scientific research, applied sciences, natural hazard monitoring, and outreach.

Quick and Easy Access to Imagery

Quickly access satellite imagery of every part of the world in near real-time. Many products are available within 3-5 hours of being observed. The imagery archive is also being expanded to include more historical products along with those from newly




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Rapid Response

Earth Observation Data » LANCE: NASA Near Real-Time Data and Imagery » **Rapid Response**

Data

Disciplines: 

Rapid Response

[Worldview](#)

[Global Imagery Browse Services \(GIBS\)](#)

[MODIS Subsets](#)



[MODIS Near Real-Time Images](#) 

[VIIRS/Suomi-NPP Near Real-Time Images](#) 

Rapid Response



Rapid Response will be replaced in the Fall of 2018. Find out more about each individual service below.
If you have any questions or comments, please contact support@earthdata.nasa.gov.

Rapid Response is the precursor to [Worldview](#). Rapid Response has been providing global swath imagery from the [Moderate Resolution Imaging Spectroradiometer \(MODIS\)](#)  since 2001. Rapid Response [MODIS Subsets](#) and [Near Real-Time \(Orbit Swath\) Images](#)  are still available for long-term users and those with relatively slow internet access. [Learn more about Rapid Response...](#)

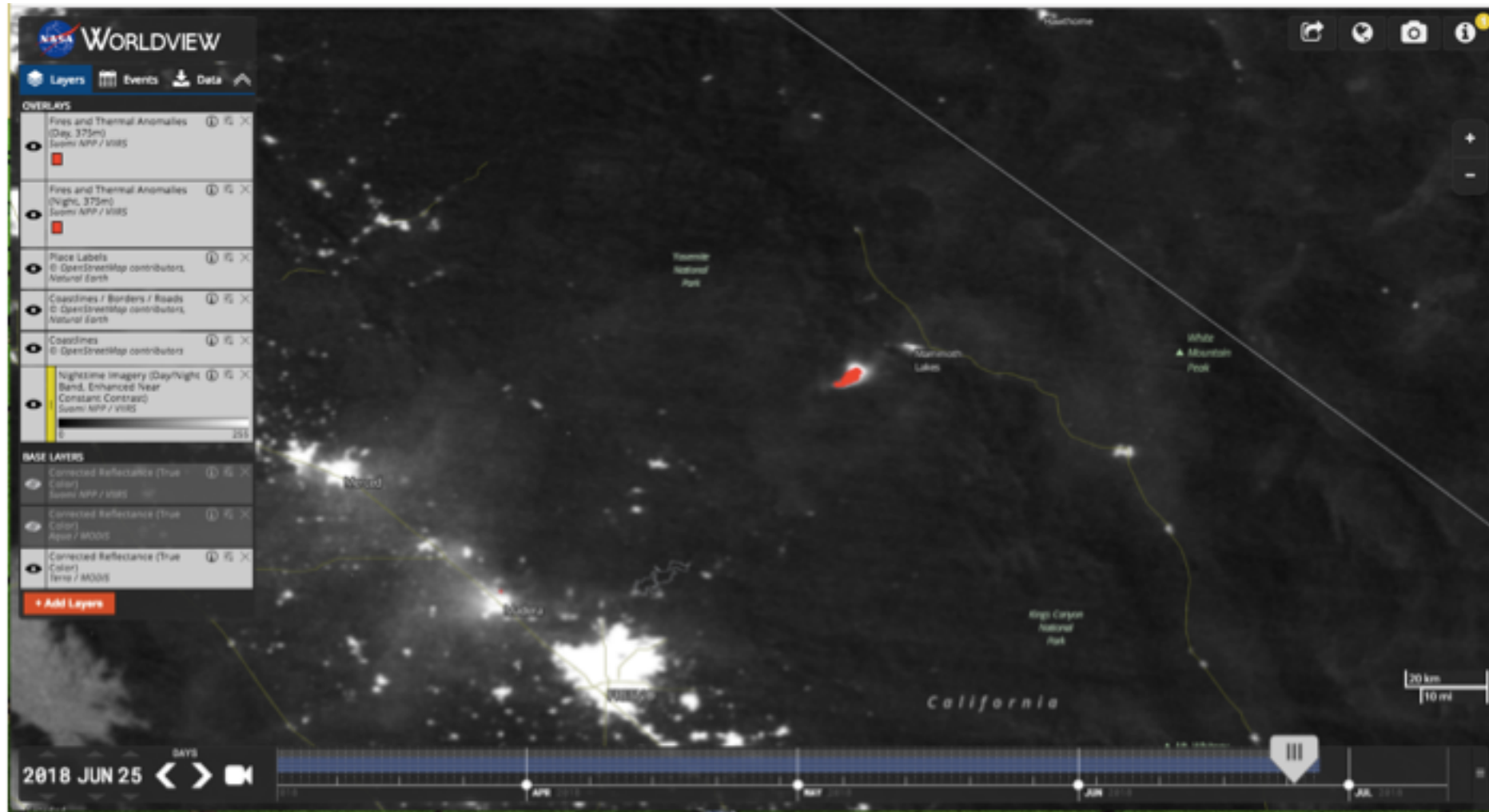
Worldview builds on the success of Rapid Response, it provides more functionality from a range of satellite instruments. If bandwidth is not an issue, we encourage users to try Worldview.

To help users, the imagery have been organized into 10 application categories to assist users in monitoring and analyzing a variety of natural and man-made [hazards and disasters](#) (e.g. ash plumes and fires).

<https://earthdata.nasa.gov/earth-observation-data/near-real-time/rapid-response>



Worldview



<https://worldview.earthdata.nasa.gov/>



Download Near Real-Time Data

The screenshot shows the Earthdata website interface. At the top left is the NASA Earthdata logo, "Powered by EOSDIS". The top navigation bar includes links for "ABOUT", "DATA", "COMMUNITY", and "RESOURCES". A search bar is located in the top right. The main content area has a breadcrumb trail: "Earth Observation Data > LANCE: NASA Near Real-Time Data and Imagery > Download Near Real-Time Data".

Data
Disciplines:

Related Content
[Wildfire in Portugal](#)
[2017 NASA Space Apps Challenge Global Award Finalists Announced](#)
[Webinar: Discover and Access NASA's Earth Science Data with Earthdata Search](#)
[Reverb is Retiring](#)

Download Near Real-Time Data

IMPORTANT! Due to new NASA Policies, FTP download links will be switched off in June 2018. Users have a limited time to convert all scripts and other methods of access to using HTTPS. Please see individual instrument download pages for more information.

Register with [Earthdata Login](#) to start downloading data. Select [Near Real-Time \(NRT\)](#) products from the tables below.

- Subscribe to the [LANCE Users mailing list](#) to receive general updates about LANCE. If you wish to receive information about specific instrument data issues, [subscribe to the relevant list\(s\)](#).
- [Data outages and known issues](#)
- [Near Real-Time versus Standard Products](#)
- [Disclaimer](#)
- [Citation](#)

<https://earthdata.nasa.gov/earth-observation-data/near-real-time/download-nrt-data>



MODIS Data

Data

Disciplines:  

Download Near Real-Time Data

[Advanced Microwave Scanning Radiometer 2 \(AMSR2\)](#)

[Atmospheric Infrared Sounder \(AIRS\)](#)

[Lightning Imaging Sensor on ISS \(ISS LIS\)](#)

[Microwave Limb Sounder \(MLS\)](#)

[Moderate Resolution Imaging Spectroradiometer \(MODIS\)](#)

[Measurements of Pollution in the Troposphere \(MOPITT\)](#)

[Multi-angle Imaging SpectroRadiometer \(MISR\)](#)

Moderate Resolution Imaging Spectroradiometer (MODIS)



IMPORTANT: Switch to HTTPS -- NRT FTP

This was originally planned for mid-June has been delayed until mid-July

Please note: The FTP to HTTPS change has been delayed by a month. The NRT3 and NRT4 FTP servers will switch to HTTPS in mid-July 2018. All users are advised to keep using ftp download as before to acquire nrt data from both NRT3 and NRT4 servers. Instructions for accessing NRT data via HTTPS will be sent to all users in due course.

MODIS Data

[Collection 6.1 MODIS/Terra and MODIS/Aqua](#)

[Collection 6.1 MODIS/Terra and MODIS/Aqua Combined](#)

[Collection 6 MODIS/Terra and MODIS/Aqua](#)

[Collection 6 MODIS/Terra and MODIS/Aqua Combined](#)

FTP download: [nrt3.modaps.eosdis.nasa.gov](ftp://nrt3.modaps.eosdis.nasa.gov) or [nrt4.modaps.eosdis.nasa.gov](ftp://nrt4.modaps.eosdis.nasa.gov)

Directory path for C6: `allData/6/<product>/<year>/<dataday>` or `allData/6/<product>/Recent`

Directory path for C6.1: `allData/61/<product>/<year>/<dataday>` or `allData/61/<product>/Recent`

<https://earthdata.nasa.gov/earth-observation-data/near-real-time/download-nrt-data/modis-nrt>



MODIS Aerosol Data

Data Download



Browse AOD Image



Product Information



L2 Aerosol, 5-Min Swath 10km	MOD04_L2	0.38	L2 Aerosol Browse	04	10.5067/MODIS/MOD04_L2.NRT.061
L2 Aerosol, 5-Min Swath 3km	MOD04_3K	1.18	N/A		10.5067/MODIS/MOD04_3K.NRT.061




EARTHDATA Login














- Must have EARTHDATA login &
- Add '[Near Real-Time \(NRT\)](#)' to your approved apps



NRT FTP Server

Index of /allData/61/MOD04_L2/2018/175/

 [parent directory]

	Name	Size	Date Modified
	MOD04_L2.A2018175.0000.061.NRT.hdf	865 kB	6/23/18, 4:51:00 PM
	MOD04_L2.A2018175.0000.061.NRT.hdf.met	23.4 kB	6/23/18, 4:51:00 PM
	MOD04_L2.A2018175.0005.061.NRT.hdf	2.3 MB	6/23/18, 5:33:00 PM
	MOD04_L2.A2018175.0005.061.NRT.hdf.met	23.4 kB	6/23/18, 5:34:00 PM
	MOD04_L2.A2018175.0010.061.NRT.hdf	1.2 MB	6/23/18, 5:33:00 PM
	MOD04_L2.A2018175.0010.061.NRT.hdf.met	23.4 kB	6/23/18, 5:33:00 PM
	MOD04_L2.A2018175.0015.061.NRT.hdf	4.3 MB	6/23/18, 5:37:00 PM
	MOD04_L2.A2018175.0015.061.NRT.hdf.met	23.4 kB	6/23/18, 5:37:00 PM
	MOD04_L2.A2018175.0020.061.NRT.hdf	4.6 MB	6/23/18, 5:35:00 PM
	MOD04_L2.A2018175.0020.061.NRT.hdf.met	23.4 kB	6/23/18, 5:35:00 PM
	MOD04_L2.A2018175.0025.061.NRT.hdf	3.8 MB	6/23/18, 5:35:00 PM
	MOD04_L2.A2018175.0025.061.NRT.hdf.met	23.4 kB	6/23/18, 5:35:00 PM
	MOD04_L2.A2018175.0030.061.NRT.hdf	4.8 MB	6/23/18, 5:36:00 PM

ftp://nrt4.modaps.eosdis.nasa.gov/allData/61/MOD04_L2/2018/175/



Tools

Data

[ASDC DAAC](#) [ASF DAAC](#) [GES DISC](#)
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[User Profile: Dr. Róisín Commane](#)

[Discover and Access Landsat Analysis Ready Data \(ARD\) from the USGS Archive](#)

More Resources

Data Tools

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The EOSDIS [Distributed Active Archive Centers \(DAACs\)](#) provide center-unique tools for functions such as searching and subsetting data. The links provided in the category tables below list and describe some of these available data-handling and service tools. The tools are grouped loosely into broad categories that indicate the primary function of each tool, for example, data handling, visualization and analysis, search and order, etc.

- [Search and Order Tools](#)
- [Data Handling Tools](#)
- [Subsetting and Filtering Tools](#)
- [Geolocation, Reprojection, and Mapping Tools](#)
- [Data Visualization & Analysis Tools](#)

<https://earthdata.nasa.gov/earth-observation-data/tools>

