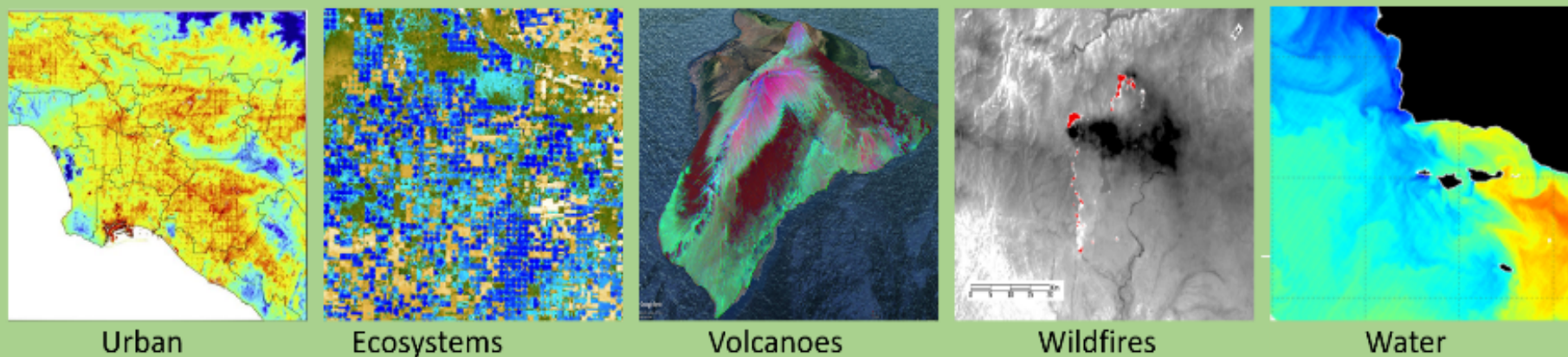
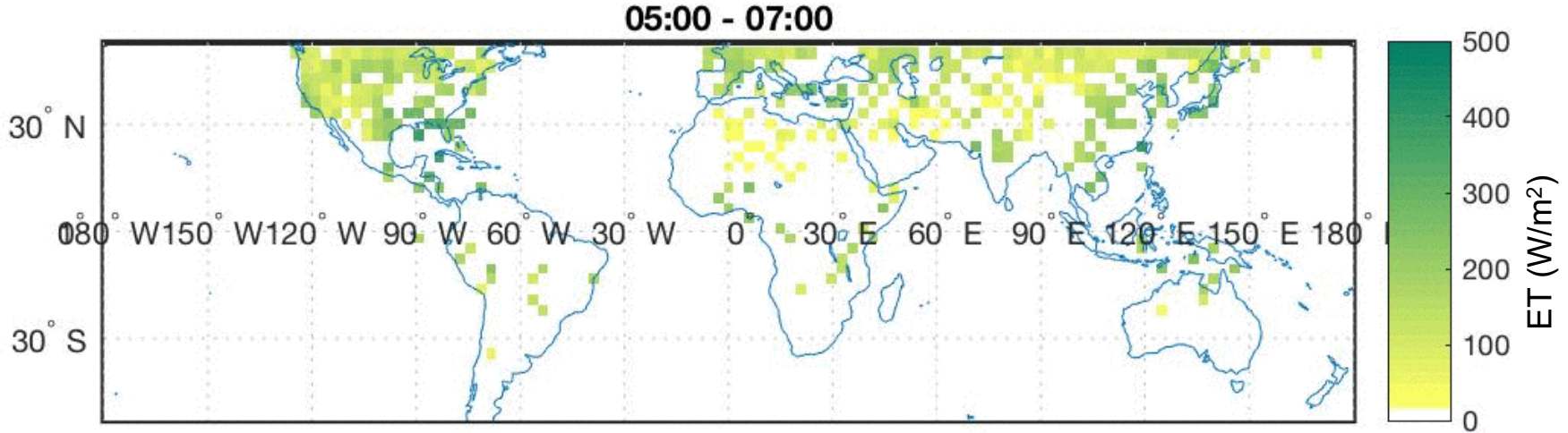
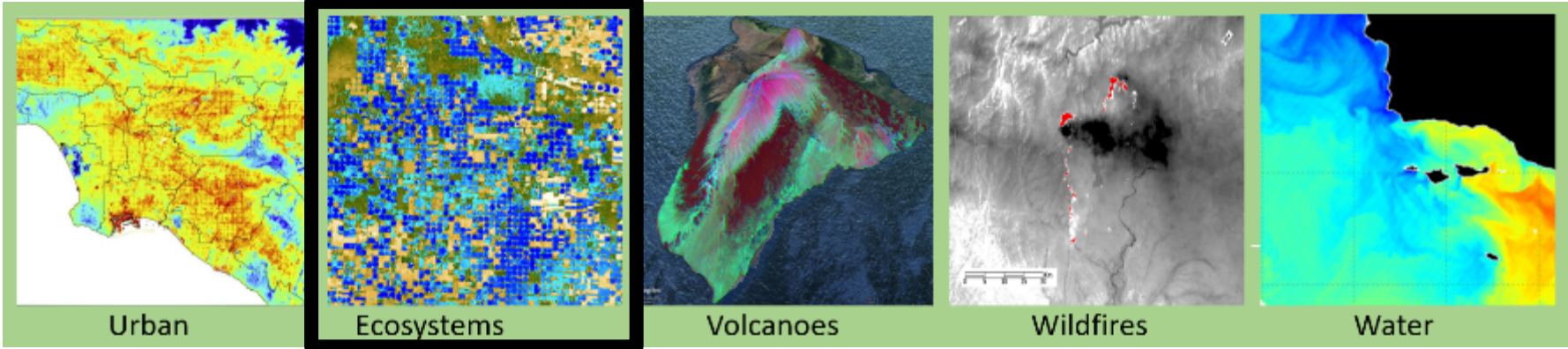


SCIENCE



ECOSTRESS demo

Kerry Cawse-Nicholson, and the ECOSTRESS Team
Jet Propulsion Laboratory, California Institute of Technology



Average evapotranspiration at local time for June – August, 2019.

Provided by: Dr. Kerry Cawse-Nicholson



Large Swath + High Spatial Res. + High Accuracy = Sig. Science Advances



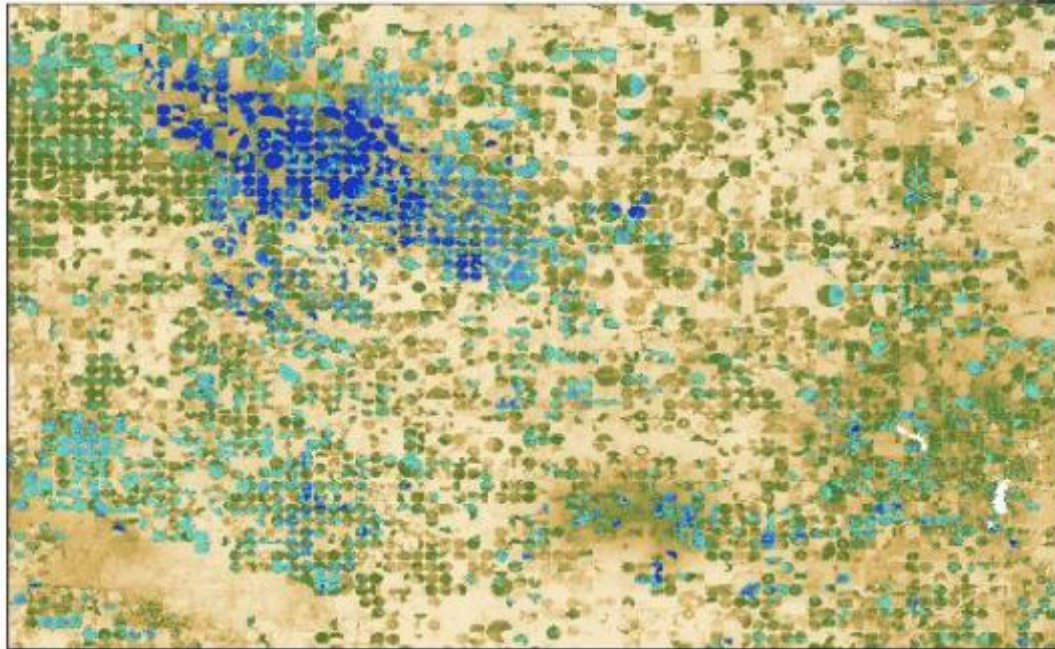
ECOSTRESS L3 (ET PT-JPL) 2018-07-29 18:19 CDT

70m pixels

400km swath

1-7 day revisit

Diurnal sampling



0.02 g H₂O s⁻¹ m⁻²

0.16 g H₂O s⁻¹ m⁻²

Provided by: Dr. Joshua Fisher



Products



Level	Product	Format	Resolution
1b	Radiance*	hdf5	70m
1b	Geolocation	hdf5	70m
1b	Mapped radiance**	hdf5	70m
2	Land surface temperature	hdf5	70m
2	Emissivity*	hdf5	70m
3	Evapotranspiration: PT-JPL	hdf5	70m
3	Evapotranspiration: ALEXI	hdf5	30m
4	Evaporative Stress Index: PT-JPL	hdf5	70m
4	Evaporative Stress Index: ALEXI	hdf5	30m
4	Water Use Efficiency	hdf5	70m

*6 bands until May 15, 2019; thereafter 3 bands

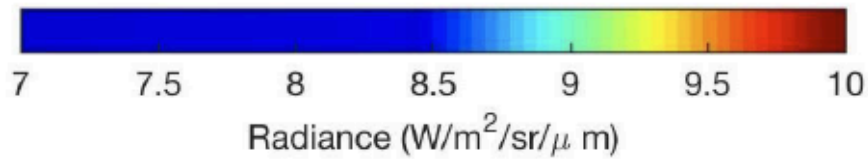
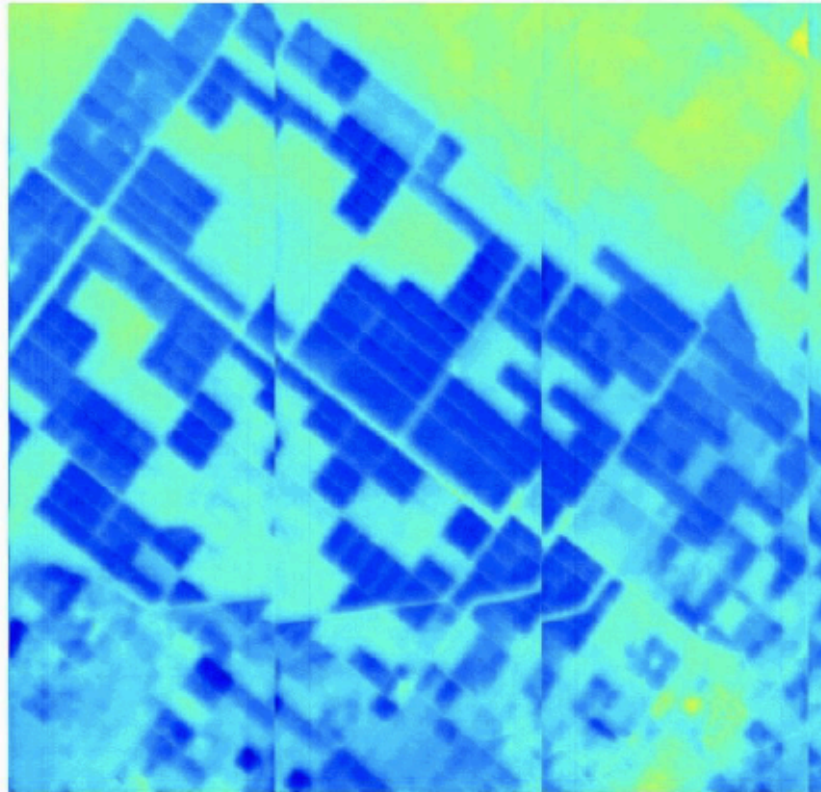
**Gridded data product



Whisk-push

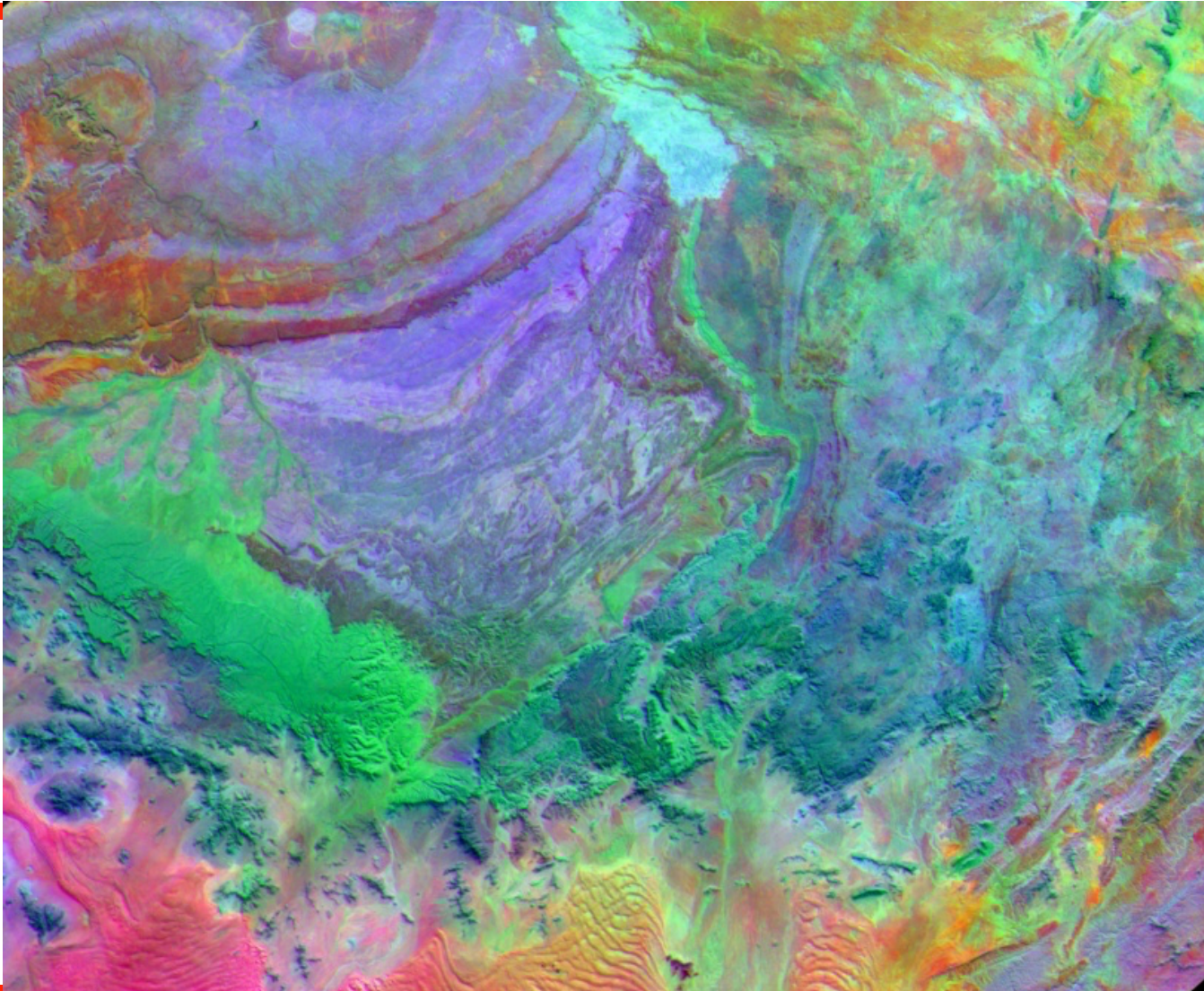


ECOSTRESS 10.5 μ m band





Sample Images





Geolocation tools



- ENVI geolocation
- MATLAB griddata
- Python pyresample
- Prepackaged tools
 - <https://ecostress.jpl.nasa.gov/data>
 - <https://lpdaac.usgs.gov/tools/data-prep-scripts/>



How to get data – ecostress.jpl.nasa.gov/data



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Data

Get ECOSTRESS Data

[NASA Land Processes Distributed Active Archive Center \(LP DAAC\)](#)



[NASA Earthdata - "ECOSTRESS" Search](#)



[LP DAAC subsetting tool - AppEEARS](#)

Click on:

"point samples"
or
"area samples"



[USGS Earth Explorer](#)

- Select "Data Sets" tab
- Click NASA LP DAAC collections
- Select "ECOSTRESS"



« October 2019 »

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Upcoming Events

ARSET's first lightning style training - Online Webinar
Nov 20, 2019 12:00 PM - 01:00 PM — Online

ECOSTRESS Science and Applications Team Meeting
Feb 12, 2020 - Feb 14, 2020

[Upcoming events...](#)

Data Products

All data products are available by signing up for the [Community of Practice / Early Adopters program](#)

Algorithm Theoretical Basis Documents (ATBDs)

[ATBDs Summary Table](#)

Product Specification Documents (PSDs)

[PSDs Summary Table](#)

Radiometer Spectral Response Functions (SRF)

[SRF Graph](#)



How to get data – earthdata.nasa.gov



NASA (National Aeronautics and Space Administration) [US | <https://earthdata.nasa.gov>

EARTHDATA Find a DAAC

EARTHDATA Powered by EOSDIS

ABOUT DATA COLLABORATE LEARN

ECOSTRESS

ATMOSPHERE CALIBRATED RADIANCE & SOLAR RADIANCE CRYOSPHERE HUMAN DIMENSIONS LAND OCEAN

ACCESS NASA EARTH SCIENCE DATA

NASA's data policy ensures that all NASA data are available fully, openly, and without restrictions. [Here's what this means to you.](#)

FIND DATA VISUALIZE DATA GETTING STARTED



How to get data



NASA (National Aeronautics and Space Administration) [US] | <https://earthdata.nasa.gov/search?q=ECOSTRESS>

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ECOSTRESS

Search results for ECOSTRESS

12 Matching Datasets

[View all results in Earthdata Search](#)

Dataset Name	Identifier	Granules
ECOSTRESS Evaporative Stress Index dis-ALEXI USDA Daily L4 Global 30m V001	ECO4ESIALEXIU v001 - LP DAAC	40 granules
ECOSTRESS Evaporative Stress Index PT-JPL Daily L4 Global 70m V001	ECO4ESIPTJPL v001 - LP DAAC	12168 granules
ECOSTRESS Water Use Efficiency Daily L4 Global 70m V001	ECO4WUJE v001 - LP DAAC	12170 granules

About 78 Matching Results

- [LP DAAC - ECOSTRESS Workshop Opportunity](#)
<https://lpdaac.usgs.gov/news/ecostress-workshop-opportunity/>
Site Search **ECOSTRESS** Workshop Opportunity Homepage News **ECOSTRESS** Workshop Opportunity...Radiometer Experiment on Space Station (**ECOSTRESS**) will measure the temperature of
- [LP DAAC - Working with ECOSTRESS Evapotranspiration Data](#)
<https://lpdaac.usgs.gov/resources/e-learning/working-ecostress-evapotranspiration-data/>
General Site Search Working with **ECOSTRESS** Evapotranspiration Data Tutorial...Resources E-Learning Working with **ECOSTRESS** Evapotranspiration Data Details:
- [LP DAAC - Release of ECOSTRESS Level 1B products](#)
<https://lpdaac.usgs.gov/news/release-ecostress-level-1b-products/>
Release of **ECOSTRESS** Level 1B products Homepage News Release of **ECOSTRESS** Level 1B...Radiometer Experiment on Space Station (**ECOSTRESS**) Level 1B Version 1 data products
- [LP DAAC - Release of ECOSTRESS Higher Level Products](#)
<https://lpdaac.usgs.gov/news/release-ecostress-higher-level-products/>



How to get data



← → ↻ <https://search.earthdata.nasa.gov/search?q=ECOSTRESS&ac=true> ☆ ○ 🗨️ 🔴

EARTHDATA Find a DAAC

EARTHDATA Search

Browse Collections

Features

- Map Imagery
- Near Real Time
- Customizable

Keywords

Platforms

Instruments

Organizations

Projects

Processing levels

ECOSTRESS

Earthdata Login

12 Matching Collections

Sort by: Relevance Only include collections with granules Include non-EOSDIS collections

Tip: Add + collections to your project to compare and download their data.

ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 70m V001 ⓘ +
23,355 Granules • 2014-01-01 ongoing • The ECOSystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) mission measures the temperature of plants to better understand how much water plants need and how they respond to stress. ECOSTRESS is attached to the International...
ECO2LSTE v001 - LP DAAC

ECOSTRESS Attitude Daily L1B Global 70m V001 ⓘ +
3,911 Granules • 2014-01-01 ongoing • The ECOSystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) mission measures the temperature of plants to better understand how much water plants need and how they respond to stress. ECOSTRESS is attached to the International Space...
ECO1BATT v001 - LP DAAC

ECOSTRESS Geolocation Daily L1B Global 70m V001 ⓘ +
23,418 Granules • 2014-01-01 ongoing • The ECOSystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) mission measures the temperature of plants to better understand how much water plants need and how they respond to stress. ECOSTRESS is attached to the International...
ECO1BGEO v001 - LP DAAC

ECOSTRESS Resampled Radiance Daily L1B Global 70m V001 ⓘ +



How to get data



https://search.earthdata.nasa.gov/search/granules?p=C1534729776-LPDAAC_ECS&q=ECOSTRESS&ac=true&t=155658091414!!

EARTHDATA Find a DAAC -

ECOSTRESS

Earthdata Login

ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 70m V001 [View Details](#)

23,355 Granules [Add to project](#)

Download All 23,355 Granules

Sort by: Start Date, Newest First Granule Search: Search Single of Multiple Granule IDs... [Granule Filters](#)

Showing 20 of 23,355 matching granules Search Time: 0.9s

<p>ECOSTRESS_L2_LSTE_07439_008_2019 1028T155419_0600_01.h5</p> <p>START 2019-10-28 15:54:19 END 2019-10-28 15:59:19</p>	<p>ECOSTRESS_L2_LSTE_07439_007_2019 1028T155327_0600_01.h5</p> <p>START 2019-10-28 15:53:27 END 2019-10-28 15:58:27</p>	<p>ECOSTRESS_L2_LSTE_07439_006_2019 1028T155235_0600_01.h5</p> <p>START 2019-10-28 15:52:35 END 2019-10-28 15:57:35</p>	<p>ECOSTRESS_L2_LSTE_07439_005_2019 1028T155143_0600_01.h5</p> <p>START 2019-10-28 15:51:43 END 2019-10-28 15:56:43</p>
<p>ECOSTRESS_L2_LSTE_07439_004_2019 1028T155051_0600_01.h5</p> <p>START 2019-10-28 15:50:51 END 2019-10-28 15:55:51</p>	<p>ECOSTRESS_L2_LSTE_07439_003_2019 1028T154959_0600_01.h5</p> <p>START 2019-10-28 15:49:59 END 2019-10-28 15:54:59</p>	<p>ECOSTRESS_L2_LSTE_07439_002_2019 1028T154907_0600_01.h5</p> <p>START 2019-10-28 15:49:07 END 2019-10-28 15:54:07</p>	<p>ECOSTRESS_L2_LSTE_07439_001_2019 1028T154815_0600_01.h5</p> <p>START 2019-10-28 15:48:15 END 2019-10-28 15:53:15</p>
<p>ECOSTRESS_L2_LSTE_07438_016_2019 1028T151349_0600_01.h5</p> <p>START 2019-10-28 15:13:49 END 2019-10-28 15:18:49</p>	<p>ECOSTRESS_L2_LSTE_07438_010_2019 1028T141844_0600_01.h5</p> <p>START 2019-10-28 14:18:44 END 2019-10-28 14:23:44</p>	<p>ECOSTRESS_L2_LSTE_07438_009_2019 1028T141752_0600_01.h5</p> <p>START 2019-10-28 14:17:52 END 2019-10-28 14:22:52</p>	<p>ECOSTRESS_L2_LSTE_07438_007_2019 1028T141534_0600_01.h5</p> <p>START 2019-10-28 14:15:34 END 2019-10-28 14:20:34</p>

MONTH

ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 7...

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How to get data



https://search.earthdata.nasa.gov/search/granules?p=C1534729776-LPDAAC_ECS&q=ECOSTRESS&sb=14.819921493530273%2C37.56266566310566%2C15.29574966...

EARTHDATA Find a DAAC

ECOSTRESS

Rectangle: SW: 37.56267, 14.81992 NE: 37.93316, 15.29575

Palermo Messina Catania Licata

Monte Etna

Ionian Sea

30 km 20 mi

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ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 70m V001 [View Details](#)

126 Granules [Add to project](#)

Download All 126 Granules

Sort by: Start Date, Newest First Granule Search: Search Single of Multiple Granule IDs... [Granule Filters](#)

Showing 20 of 126 matching granules Search Time: 0.9s

ECOSTRESS_L2_LSTE_07309_005_2019_1020T062747_0600_01.h5 START 2019-10-20 06:27:48 END 2019-10-20 06:32:48	ECOSTRESS_L2_LSTE_07252_011_2019_016T143527_0600_01.h5 START 2019-10-16 14:35:27 END 2019-10-16 14:40:27	ECOSTRESS_L2_LSTE_07248_004_2019_1016T080520_0600_01.h5 START 2019-10-16 08:05:19 END 2019-10-16 08:10:19	ECOSTRESS_L2_LSTE_07141_001_2019_009T103158_0600_01.h5 START 2019-10-09 10:31:59 END 2019-10-09 10:36:59
ECOSTRESS_L2_LSTE_07126_005_2019_008T112023_0600_01.h5 START 2019-10-08 11:20:23 END 2019-10-08 11:25:23	ECOSTRESS_L2_LSTE_07019_007_2019_001T134635_0600_01.h5 START 2019-10-01 13:46:38 END 2019-10-01 13:51:38	ECOSTRESS_L2_LSTE_06958_009_2019_0927T152435_0600_01.h5 START 2019-09-27 15:24:35 END 2019-09-27 15:29:35	ECOSTRESS_L2_LSTE_06958_008_2019_0927T152342_0600_01.h5 START 2019-09-27 15:23:45 END 2019-09-27 15:28:45
ECOSTRESS_L2_LSTE_06947_002_2019_0926T224235_0600_01.h5 	ECOSTRESS_L2_LSTE_06886_011_2019_0923T001939_0600_01.h5 	ECOSTRESS_L2_LSTE_06840_011_2019_0920T010816_0600_01.h5 	ECOSTRESS_L2_LSTE_06836_005_2019_0919T183824_0600_01.h5

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ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 7...

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How to get data



https://search.earthdata.nasa.gov/search/granules?p=C1534729776-LPDAAC_ECS&q=ECOSTRESS&sb=14.812265396118162%2C37.56209263932428%2C15.282737731...

EARTHDATA Find a DAAC

ECOSTRESS

Rectangle: SW: 37.56209, 14.81227 NE: 37.9... Start: 2019-08-01 00:00:00 End: 2019-10-29 23:59:59

Apply Clear

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ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 70m V001 View Details

126 Granules Add to project

Download All 126 Granules

Sort by: Start Date, Newest First Granule Search: Search Single of Multiple Granule IDs... Granule Filters

Showing 20 of 126 matching granules Search Time: 0.9s

<p>ECOSTRESS_L2_LSTE_07309_005_2019_1020T062747_0600_01.h5</p> <p>START 2019-10-20 06:27:48</p> <p>END 2019-10-20 06:32:48</p>	<p>ECOSTRESS_L2_LSTE_07252_011_2019_016T143527_0600_01.h5</p> <p>START 2019-10-16 14:35:27</p> <p>END 2019-10-16 14:40:27</p>	<p>ECOSTRESS_L2_LSTE_07248_004_2019_1016T080520_0600_01.h5</p> <p>START 2019-10-16 08:05:19</p> <p>END 2019-10-16 08:10:19</p>	<p>ECOSTRESS_L2_LSTE_07141_001_2019_009T103158_0600_01.h5</p> <p>START 2019-10-09 10:31:59</p> <p>END 2019-10-09 10:36:59</p>
<p>ECOSTRESS_L2_LSTE_07126_005_2019_008T112023_0600_01.h5</p> <p>START 2019-10-08 11:20:23</p> <p>END 2019-10-08 11:25:23</p>	<p>ECOSTRESS_L2_LSTE_07019_007_2019_001T134635_0600_01.h5</p> <p>START 2019-10-01 13:46:38</p> <p>END 2019-10-01 13:51:38</p>	<p>ECOSTRESS_L2_LSTE_06958_009_2019_0927T152435_0600_01.h5</p> <p>START 2019-09-27 15:24:35</p> <p>END 2019-09-27 15:29:35</p>	<p>ECOSTRESS_L2_LSTE_06958_008_2019_0927T152342_0600_01.h5</p> <p>START 2019-09-27 15:23:45</p> <p>END 2019-09-27 15:28:45</p>
<p>ECOSTRESS_L2_LSTE_06947_002_2019_0926T224235_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06886_011_2019_0923T001939_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06840_011_2019_0920T010816_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06836_005_2019_0919T183824_0600_01.h5</p>

MONTH: ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 7...

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How to get data



https://search.earthdata.nasa.gov/search/granules?p=C1534729776-LPDAAC_ECS&q=ECOSTRESS&sb=14.812265396118162%2C37.56209263932428%2C15.282737731...

EARTHDATA Find a DAAC - Earthdata Login

ECOSTRESS

Rectangle: SW: 37.56209, 14.81227 NE: 37.94467, 15.28274

Start: 2019-08-01 00:00:00 Stop: 2019-10-29 23:59:59

35 Granules Add to project Download All 35 Granules

Sort by: Start Date, Newest First Granule Search: Search Single of Multiple Granule IDs... Granule Filters

Showing 20 of 35 matching granules Search Time: 1.1s

<p>ECOSTRESS_L2_LSTE_07309_005_2019_1020T062747_0600_01.h5</p> <p>START 2019-10-20 06:27:48</p> <p>END 2019-10-20 06:32:48</p>	<p>ECOSTRESS_L2_LSTE_07252_011_20191_016T143527_0600_01.h5</p> <p>START 2019-10-16 14:35:27</p> <p>END 2019-10-16 14:40:27</p>	<p>ECOSTRESS_L2_LSTE_07248_004_2019_1016T080520_0600_01.h5</p> <p>START 2019-10-16 08:05:19</p> <p>END 2019-10-16 08:10:19</p>	<p>ECOSTRESS_L2_LSTE_07141_001_20191_009T103158_0600_01.h5</p> <p>START 2019-10-09 10:31:59</p> <p>END 2019-10-09 10:36:59</p>
<p>ECOSTRESS_L2_LSTE_07126_005_20191_008T112023_0600_01.h5</p> <p>START 2019-10-08 11:20:23</p> <p>END 2019-10-08 11:25:23</p>	<p>ECOSTRESS_L2_LSTE_07019_007_20191_001T134635_0600_01.h5</p> <p>START 2019-10-01 13:46:38</p> <p>END 2019-10-01 13:51:38</p>	<p>ECOSTRESS_L2_LSTE_06958_009_2019_0927T152435_0600_01.h5</p> <p>START 2019-09-27 15:24:35</p> <p>END 2019-09-27 15:29:35</p>	<p>ECOSTRESS_L2_LSTE_06958_008_2019_0927T152342_0600_01.h5</p> <p>START 2019-09-27 15:23:45</p> <p>END 2019-09-27 15:28:45</p>
<p>ECOSTRESS_L2_LSTE_06947_002_2019_0926T224235_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06886_011_2019_0923T001939_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06840_011_2019_0920T010816_0600_01.h5</p>	<p>ECOSTRESS_L2_LSTE_06836_005_2019_0919T183824_0600_01.h5</p>

MONTH: ECOSTRESS Land Surface Temperature and Emissivity Daily L2 Global 7...
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AppEEARS - lpdaacsvc.cr.usgs.gov/appeears/



← → ↻ <https://lpdaacsvc.cr.usgs.gov/appeears/> ☆

EARTHDATA Other DAACs ▾

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Welcome to AppEEARS!

Application for **E**xtracting and **E**xploring **A**nalysis **R**eady **S**amples (**A**pp**EEARS**)

The Application for Extracting and Exploring Analysis Ready Samples (**A**pp**EEARS**) offers a simple and efficient way to access and transform geospatial data from a variety of federal data archives. **A**pp**EEARS** enables users to subset **geospatial datasets** using spatial, temporal, and band/layer parameters. Two types of sample requests are available: **point samples** for geographic coordinates and **area samples** for spatial areas via vector polygons. Sample requests submitted to **A**pp**EEARS** provide users not only with data values, but also associated quality data values. Interactive visualizations with summary statistics are provided for each sample within the application, which allow users to preview and interact with their samples before downloading their data. Get started with a sample request using the Extract option above, or visit the [Help page](#) to learn more.

National Aeronautics and Space Administration

science for a changing world
United States Geological Survey

Land Processes Distributed Active Archive Center

National Snow and Ice Data Center Distributed Active Archive Center

Socioeconomic Data and Applications Center

ORNL DAAC
DISTRIBUTED ACTIVE ARCHIVE CENTER FOR BIOGEOCHEMICAL DYNAMICS
Oak Ridge National Laboratory Distributed Active Archive Center



AppEEARS



https://lpdaacsvc.cr.usgs.gov/appeears/

EARTHDATA Other DAACs

USGS AppEEARS Extract Explore Help

Area Sample
Point Sample

Welcome to AppEEARS!

Application for **Extracting** and **Exploring** Analysis Ready Samples (**AppEEARS**)

The Application for Extracting and Exploring Analysis Ready Samples (**AppEEARS**) offers a simple and efficient way to access and transform geospatial data from a variety of federal data archives. **AppEEARS** enables users to subset **geospatial datasets** using spatial, temporal, and band/layer parameters. Two types of sample requests are available: **point samples** for geographic coordinates and **area samples** for spatial areas via vector polygons. Sample requests submitted to **AppEEARS** provide users not only with data values, but also associated quality data values. Interactive visualizations with summary statistics are provided for each sample within the application, which allow users to preview and interact with their samples before downloading their data. Get started with a sample request using the Extract option above, or visit the [Help page](#) to learn more.

National Aeronautics and Space Administration

USGS science for a changing world United States Geological Survey

LPdaac Land Processes Distributed Active Archive Center

NSIDC National Snow and Ice Data Center Distributed Active Archive Center

SEDAC Socioeconomic Data and Applications Center

ORNL DAAC DISTRIBUTED ACTIVE ARCHIVE CENTER FOR BIOGEOCHEMICAL DYNAMICS Oak Ridge National Laboratory Distributed Active Archive Center



AppEEARS



← → ↻ https://lpdaacsvc.cr.usgs.gov/appears/task/point

EARTHDATA Other DAACs

USGS AppEEARS Extract Explore Help

Extract Point Sample

Enter a name to identify your sample

Etna

Upload coordinates from a file

Drop a CSV file containing the coordinates or [click here](#) to select the file. Coordinates can also be entered manually in the uploaded coordinates box.

The CSV file can contain up to 4 columns separated by commas with each coordinate on a separate line.

1. ID (optional) - uniquely identifies the coordinate
2. Category (optional) - label to group common coordinates
3. Latitude - latitude in decimal degrees (-90 to 90)
4. Longitude - longitude in decimal degrees (-180 to 180)

Uploaded coordinates (ID, Category, Lat, Long): 1

37.751, 14.9934

Start Date: 05-01-2019

End Date: 10-03-2019

Is Date Recurring?

Selected coordinates

Lat: 49.219 Lon: 53.789

Add coordinates using the tool. View coordinate details by clicking the markers on the map.

Upload coordinates

Enter coordinates

Scroll down

Select coordinates



AppEEARS



4. Longitude - longitude in decimal degrees (-180 to 180)

Start Date: 05-01-2019
End Date: 10-03-2019
 Is Date Recurring?

Selected coordinates

Lat: 25.172 Lon: -13.570

Add coordinates using the tool. View coordinate details by clicking the markers on the map.

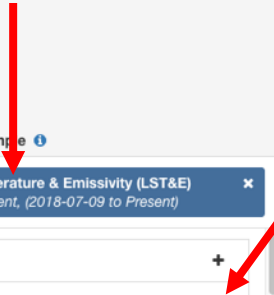
Select the layers to include in the sample

ECOSTRESS Land Surface Temperature & Emissivity (LST&E) ECO2LSTE.001, 70m, ISS-dependent, (2018-07-09 to Present)	
<input type="checkbox"/> SDS_Emis1	+
<input type="checkbox"/> SDS_Emis1_err	+
<input type="checkbox"/> SDS_Emis2_err	+
<input type="checkbox"/> SDS_Emis3	+

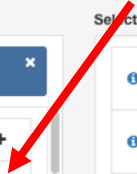
Select layers

<input type="checkbox"/> SDS_LST	70m, ISS-dependent	-
<input type="checkbox"/> SDS_Emis2	70m, ISS-dependent	-
<input type="checkbox"/> SDS_Emis4	70m, ISS-dependent	-
<input type="checkbox"/> SDS_Emis5	70m, ISS-dependent	-

Search for data products.
Here, I typed
ECOSTRESS LST



Add to list





AppEEARS



https://pdaacsvc.cr.usgs.gov/appeears/task/point

EARTHDATA Other DAACs

USGS AppEEARS Extract Explore Help

The point sample request was successfully submitted. An email notification will be delivered once the request is complete.

Extract Point Sample

Enter a name to identify your sample

Etna

Upload coordinates from a file

Drop a CSV file containing the coordinates into this box. Coordinates can also be entered into the coordinates box.

The CSV file can contain up to 4 coordinates per line. Each coordinate should be on a separate line.

1. ID (optional) - uniquely identifies the request
2. Category (optional) - label to describe the request
3. Latitude - latitude in decimal degrees
4. Longitude - longitude in decimal degrees

Start Date

05-01-2019

Is Date Recurring?

email

Hello,

Thank you for using AppEEARS! Your request [Etna](#) has been submitted. You can monitor the request using the link below.

Explore: <https://pdaacsvc.cr.usgs.gov/appeears/explore>

This is a system generated email. Please do not reply to it. If you have any questions, contact LP DAAC User Services using the contact information below. Please provide your Request Name and ID when referencing your order.

Request Details:

Name: Etna
 Id: 2fd3cca4-f711-4904-9d4d-c2440755e21e
 Start Date: 05-01-2019
 End Date: 10-03-2019
 Layers: SDS_LST (ECO2LSTE.001)
 SDS_Emis2 (ECO2LSTE.001)
 SDS_Emis4 (ECO2LSTE.001)
 SDS_Emis5 (ECO2LSTE.001)

Documentation:

The documentation for AppEEARS can be found at <https://lpdaac.usgs.gov/help>.

Hello,

Thank you for using AppEEARS! Your request [Etna area](#) has been submitted. You can monitor the request using the link below.

Explore: <https://pdaacsvc.cr.usgs.gov/appeears/explore>

This is a system generated email. Please do not reply to it. If you have any questions, contact LP DAAC User Services using the contact information below. Please provide your Request Name and ID when referencing your order.

Request Details:

Name: Etna area
 Id: 2a0d8c98-c30b-4edd-8f99-bfc6dc72e63a
 Start Date: 08-01-2019
 End Date: 10-28-2019
 Layers: SDS_Emis2 (ECO2LSTE.001)
 SDS_Emis4 (ECO2LSTE.001)
 SDS_Emis5 (ECO2LSTE.001)
 SDS_LST (ECO2LSTE.001)

Documentation:

The documentation for AppEEARS can be found at <https://pdaacsvc.cr.usgs.gov/appeears/help>.



AppEEARS – point sample



Browser address bar: <https://lpdaacsvc.cr.usgs.gov/appears/view/228ee293-792f-4afe-9507-8712bf5d4a03>

EARTHDATA | Other DAACs

USGS AppEEARS | Extract | Explore | Help

View Point Sample

Request: Etna ▼

Start Date:	05-01-2019	End Date:	10-03-2019
Layers:	SDS_LST (ECO2LSTE.001) SDS_Emis2 (ECO2LSTE.001) SDS_Emis4 (ECO2LSTE.001) SDS_Emis5 (ECO2LSTE.001)	Coordinates:	37.751, 14.9934
Request Id:	228ee293-792f-4afe-9507-8712bf5d4a03		

[Download](#)

Temporal Comparison | **Layer Comparison** | **Categorical Overview**

Site:

Layer:

Select a site and view coordinate details by clicking the markers on the map.

Time Series

Dates Selected: All Add Line 🔍

Date (Approx.)	Value
2019-05-01	0.95
2019-05-15	0.97
2019-06-01	0.96
2019-06-15	0.93
2019-07-01	0.95
2019-07-15	0.94
2019-08-01	0.96
2019-08-15	0.97
2019-09-01	0.95
2019-09-15	0.93
2019-10-01	0.96
2019-10-03	0.97



AppEEARS – point sample



← → ↻ https://pdaacsvc.cr.usgs.gov/appears/view/228ee293-792f-4afe-9507-8712bf5d4a03



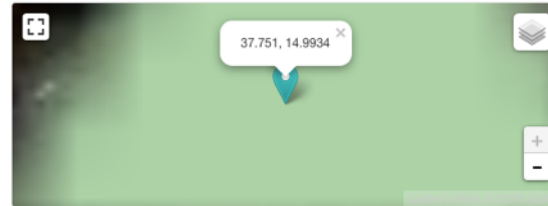
AppEEARS

Extract ▾ Explore Help ▾



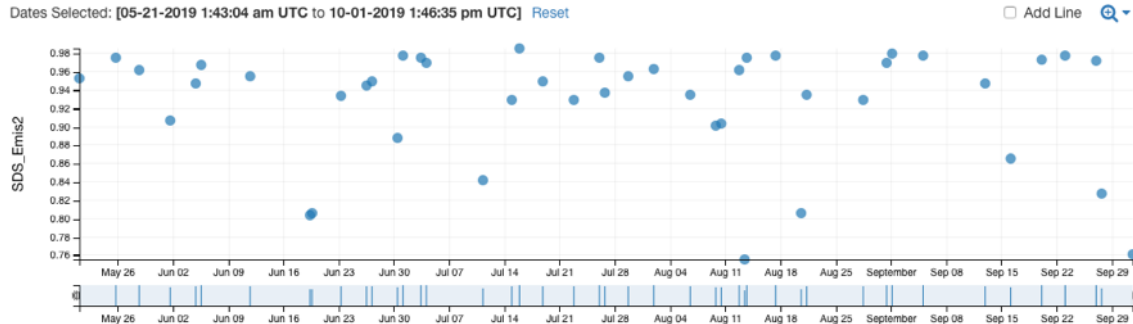
Temporal Comparison **Layer Comparison** Categorical Overview

Site:
 Layer:

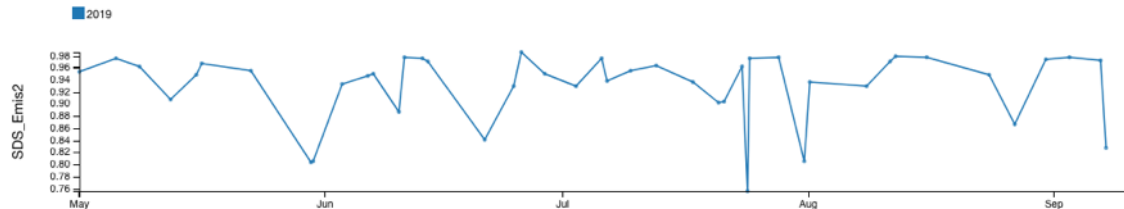


Select a site and view coordinate details by clicking the markers on the map.

Time Series



Stacked Time Series





AppEEARS – area sample



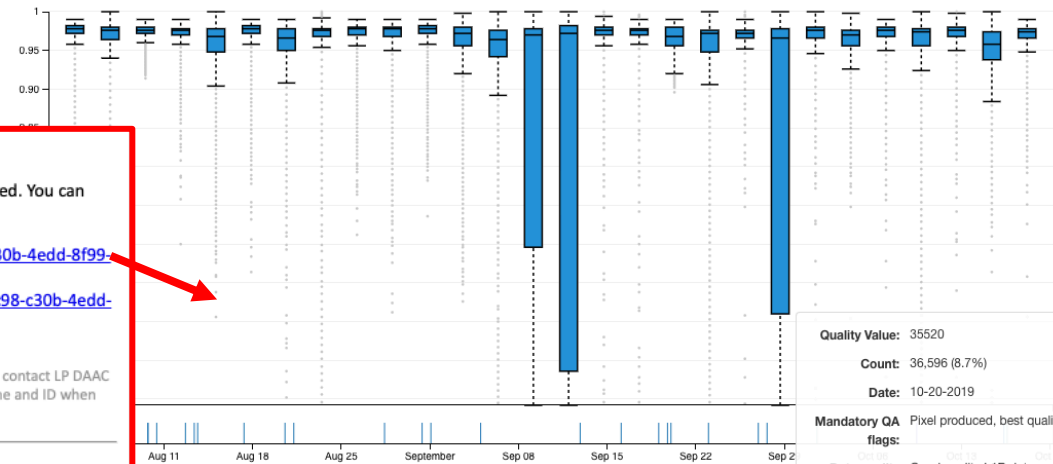
https://lpdaacsvc.cr.usgs.gov/appears/view/2a0d8c98-c30b-4edd-8f99-bfc6dc72e63a



AppEEARS

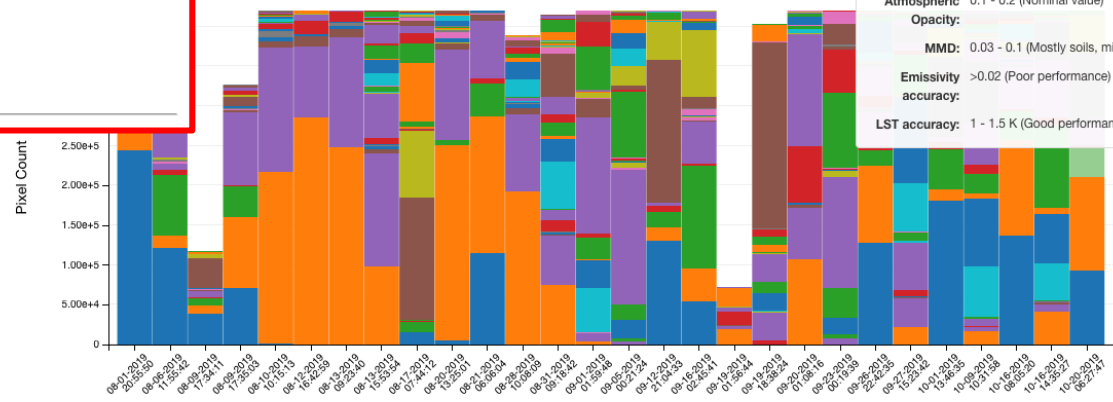
Extract Explore Help

Dates Selected: All



Quality Value:	35520
Count:	36,596 (8.7%)
Date:	10-20-2019
Mandatory QA flags:	Pixel produced, best quality
Data quality flag:	Good quality L1B data
Cloud/Ocean Flag:	Not set. Please check ECOSTRESS GEO and CLOUD products for this information.
Iterations:	Fast
Atmospheric Opacity:	0.1 - 0.2 (Nominal value)
MMD:	0.03 - 0.1 (Mostly soils, mixed pixel)
Emissivity accuracy:	>0.02 (Poor performance)
LST accuracy:	1 - 1.5 K (Good performance)

QA Stats for SDS_QC



Hello,

Thank you for using AppEEARS! Your request [Etna area](#) has been processed. You can explore and download the request using the links below.

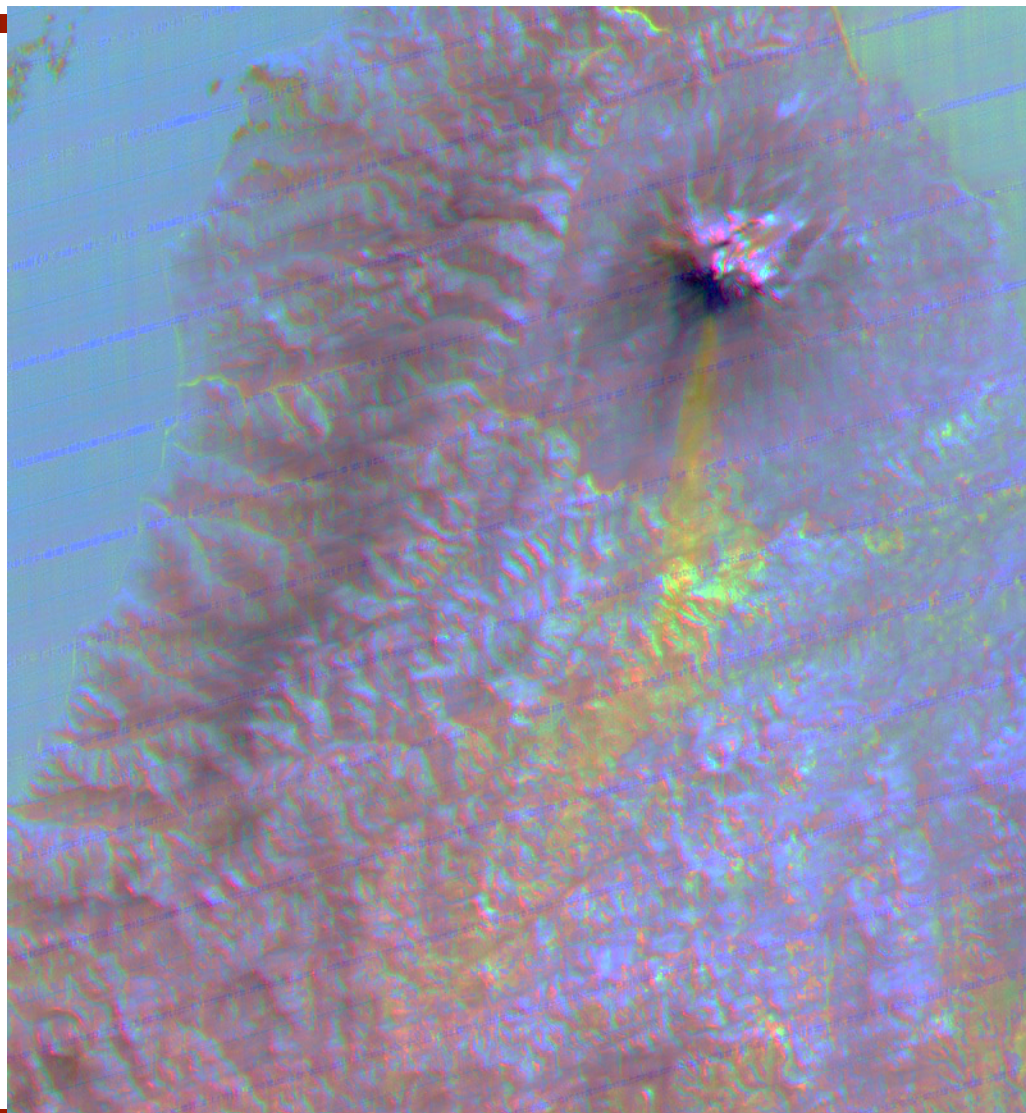
Explore: <https://lpdaacsvc.cr.usgs.gov/appears/view/2a0d8c98-c30b-4edd-8f99-bfc6dc72e63a>

Download: <https://lpdaacsvc.cr.usgs.gov/appears/download/2a0d8c98-c30b-4edd-8f99-bfc6dc72e63a>

This is a system generated email. Please do not reply to it. If you have any questions, contact LP DAAC User Services using the contact information below. Please provide your Request Name and ID when referencing your order.

Request Details:

Name: Etna area
 Id: 2a0d8c98-c30b-4edd-8f99-bfc6dc72e63a
 Start Date: 08-01-2019
 End Date: 10-28-2019
 Layers: SDS_Emis2 (ECO2LSTE.001)
 SDS_Emis4 (ECO2LSTE.001)
 SDS_Emis5 (ECO2LSTE.001)
 SDS_LST (ECO2LSTE.001)



Decorrelation stretch of
bands (5,4,2) in RGB.

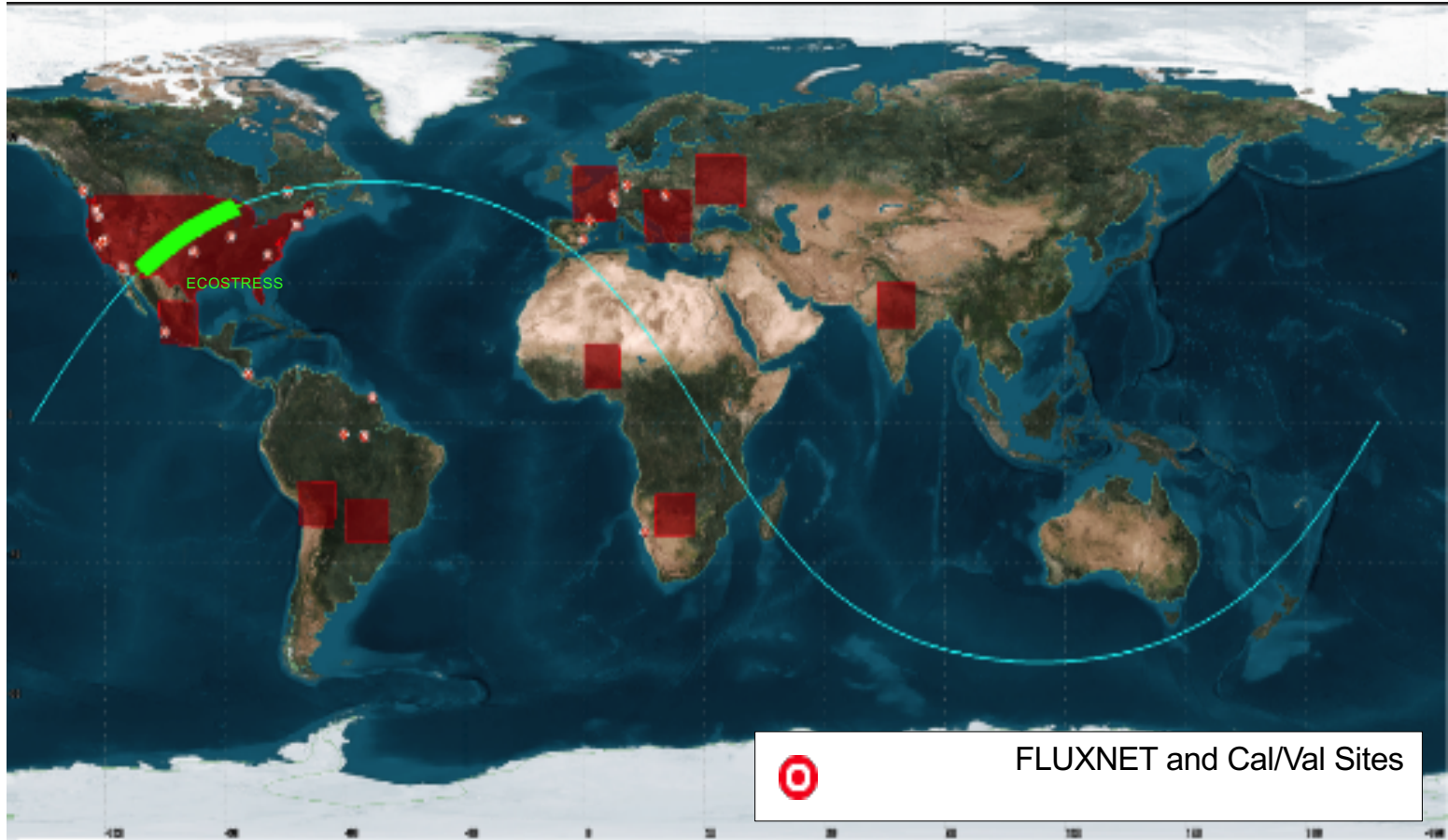
Yellow: SO₂ plumes

Red: ash

Blue: water



Data Product Acquisition and Archive Status



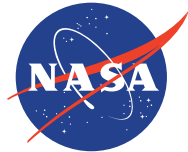
ECOSTRESS proposed acquisitions ~ 70 per day



ECOSTRESS Actual Coverage (as of March 12, 2019)



All data acquired by ECOSTRESS. Note: only data over proposed target areas have been processed.



Jet Propulsion Laboratory
California Institute of Technology

jpl.nasa.gov