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A-Train Datalist - A New GES DISC Service to Allow One-Stop Shopping for A-Train Data

NASA/Goddard EARTH SCIENCES DATA and INFORMATION SERVICES CENTER (GES DISC)

Data & Other (SS)-03

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Abstract

The currently available services at the Goddard Earth Sciences Data Information Services Center (GES DISC) only allow users to select variables from a single data set at a time. Because entire variables from a data set are often displayed, user selection of variables of interest can be overwhelming.

At the American Geophysical Union(AGU) 2016 Fall Meeting, GES DISC unveiled a new service called "Datalist": a collection of predefined or user-defined data variables from one or more archived data sets. Our science support team has been curating Datalists and providing added value to the user community.

Originally known as "Afternoon Constellation", A-Train includes six currently on polar-orbiting Earth observation satellites: OCO-2, GCOM-W1, Aqua, CALIPSO, CloudSat, and Aura, which travel a few minutes apart from each other. This constellation arrangement has enabled coordinated science observations further forming comprehensive pictures of Earth weather and climate that are readily for use in crucial studies such as climate change.

GES DISC Datalists are based on the software architecture of the new GES DISC website (also unveiled at the AGU 2016 Fall Meeting). The GES DISC science support team has created a Datalist to support the A-Train Data Depot (ATDD). Using pre-defined Datalist should hopefully save users significant effort in their data searches.

Challenges

o New users to Earth science do not know where to start
o Societal Benefit Areas require multiple data sets and multiple variables
o Existing GES DISC services limitation
- Only allow users to select variables from a single data set at a time
- Display too many variables from a data set, making user selection of variables of interest difficult

https://disc-beta.gsfc.nasa.gov/uui

Solution

o GES DISC's new **data collection** service
- o Data Collection comes from predefined Project (e.g., ATDD)
o GES DISC's new **datalist** service
- o Datalist is a collection of predefined or user-defined **data variables** from one or more archived data sets

Search and Result

GES DISC new Homepage

Key in "ATDD"

Find predefined Project "ATDD"

Subsetting

One available GES DISC datalist with keyword "ATDD"

Please check our other Poster (by Ding et al) to find A Train colocated capability from GES DISC

Data Collection Landing Page

MAC021S1: MODIS/Aqua Calibrated Radiances 1km 5-Min 1B Wide Swath Subset along CloudSat

Data Access
Mirador

All Available Access

Product Summary   Data Citation   Documentation

Shortname: MAC021S1
Longname: MODIS/Aqua Calibrated Radiances 1km 5-Min 1B Wide Sw
Version: 006
Format: HDF-4
Temporal Coverage: 2006-08-01 to present
File Size: 10.5 MB per file
Data Resolution
Spatial   1 km x 1 km

Project Summary Dataset Citation Documentation

Subsetting

3 variable(s) selected

Select All
M2I1NXLFO.5.12.4.0.5x0.625 (19800101-present)
- Surface layer height
- Surface specific humidity
M2T1NXSLV.5.12.4.0.5x0.625 (19800101-present)
- Air temperature at 2 meters
- Air temperature at 10 meters
- Dew point temperature at 2 meters
- Eastward wind at 2 meters
- Eastward wind at 10 meters
- Eastward wind at 50 meters
- Northward wind at 2 meters
- Northward wind at 10 meters
- Northward wind at 50 meters
- Wet bulb temperature at 2 meters
M2T3NPTRB.5.12.4.0.5x0.625xL42 (19
- Richardson number from Louis

Currently support L3/L4 subsetting

Subsetting L2 is under development

Datalist Landing Page

DL_ATDD: MODIS/Aqua and OMI/Aura Cloud/Aerosol Level 2 along CloudSat-Collocated Subset Data List V1

The goal of this data list is primarily to facilitate access to satellite remote sensing data related to studies of Cloud Microphysics, and Cloud-Aerosol Interactions. The data lists points to Cloud and Aerosol retrievals from various MODIS data that are within ~100 km across the CloudSat track, that are part of the A-Train Data Depot. The MODIS/Aqua collocation processing, archive and distribution are curated by the A-Train Data Depot at the NASA Goddard DAAC.

While these data are also applicable in a broader sense of Cloud and Aerosol studies, it's strength lies in the fact that it is subset into a narrow swath strictly collocated with the Cloud Profiling Radar on the CloudSat satellite, and the Cloud-Aerosol Lidar with Orthogonal Polarization (CALIOP) on the CALIPSO satellite. Since Aqua, CloudSat and CALIPSO are flying in the tightly-controlled A-Train formation o ...more

Data Access
Search
Mirador
EARTHDATA Search

All Available Access

Product Summary   Data Citation   Documentation

Shortname: DL_ATDD
Longname: MODIS/Aqua and OMI/Aura Cloud/Aerosol Level 2 along CloudSat-Collocated Subset Data List V1
DOI: DL_ATDD
Version: 1
Format: Varies by collection and subsetting selections
Spatial Coverage: -180.0,-90.0,180.0,90.0
Temporal Coverage: 2000-01-01 to present
File Size:

Data Download

Data File Links for Wind Energy Datalist

Selected Options

Results (found data in range from 2016-02-17 to 2017-01-31):

Download links for   [Instructions for downloading]   Page 1 / 65

README Document
MERRA2_400.inst1_2d_lfo_Nx.20160217.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160218.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160219.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160220.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160221.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160222.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160223.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160224.nc4.nc
MERRA2_400.inst1_2d_lfo_Nx.20160225.nc4.nc

First   Previous   1 2 3 4 5 6 7 8 9 10 ... Next   Last

One Stop Shopping

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