ATMOSPHERIC SCIENCE DATA CENTER

NASA ASDC Distributed Active Archive Center (DAAC)

Earth Venture Sub-Orbital Support Team

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ACTIVATE Science Team Meeting

ASDC's Role in ACTIVATE

- Sole post project data portal for distribution of data products
  - Active stewardship
  - High public visibility to broad user communities
  - User support
- Responsible for long-term preservation and stewardship
- ACTIVATE data holdings
  - Archive the latest versions of publication quality data, including observational, derived, and value-added data products
  - Contextual information to facilitate data use by research community at large
  - Documentation to maintain reprocessing capability and openness
- Assign DOIs to data products tailored to support manuscript and presentation development

Data Archival Update

- ASDC has completed ingest, archival, and distribution of all currently available publication quality data for all deployments
- Data is available through all the ASDC's search mechanisms (which will be highlighted later in the presentation)
- Complete periodic checks of field repository for newly updated or publication quality data

Data Organization and DOIs

- DOIs are assigned at the project level and collection level
- Project level DOI (all ACTIVATE observational, derived and value-added data products): 10.5067/SUBORBITAL/ACTIVATE/DATA001

Data Organization and DOIs

- Data collections and associated DOIs:
  - ACTIVATE_Aerosol_AircraftInSitu_Falcon_Data_1 Collection:
    - In-situ observations of aerosol microphysical, optical, and chemical properties
    - DOI: 10.5067/ASDC/ACTIVATE_Aerosol_AircraftInSitu_Falcon_Data_1
  - ACTIVATE_Cloud_AircraftInSitu_Falcon_Data_1 Collection:
    - In-situ observations of cloud physical, optical, and chemical properties
    - DOI: 10.5067/ASDC/ACTIVATE_Cloud_AircraftInSitu_Falcon_Data_1
  - ACTIVATE_TraceGas_AircraftInSitu_Falcon_Data_1 Collection:
    - In-situ observations of O3, CH4, CO, and CO2
    - DOI: 10.5067/ASDC/ACTIVATE_TraceGas_AircraftInSitu_Falcon_Data_1
  - ACTIVATE_MetNav_AircraftInSitu_Falcon_Data_1 Collection:
    - Navigational parameters, temperature, water vapor, and 3-D winds
    - DOI: 10.5067/ASDC/ACTIVATE_MetNav_AircraftInSitu_Falcon_Data_1

Data Organization and DOIs

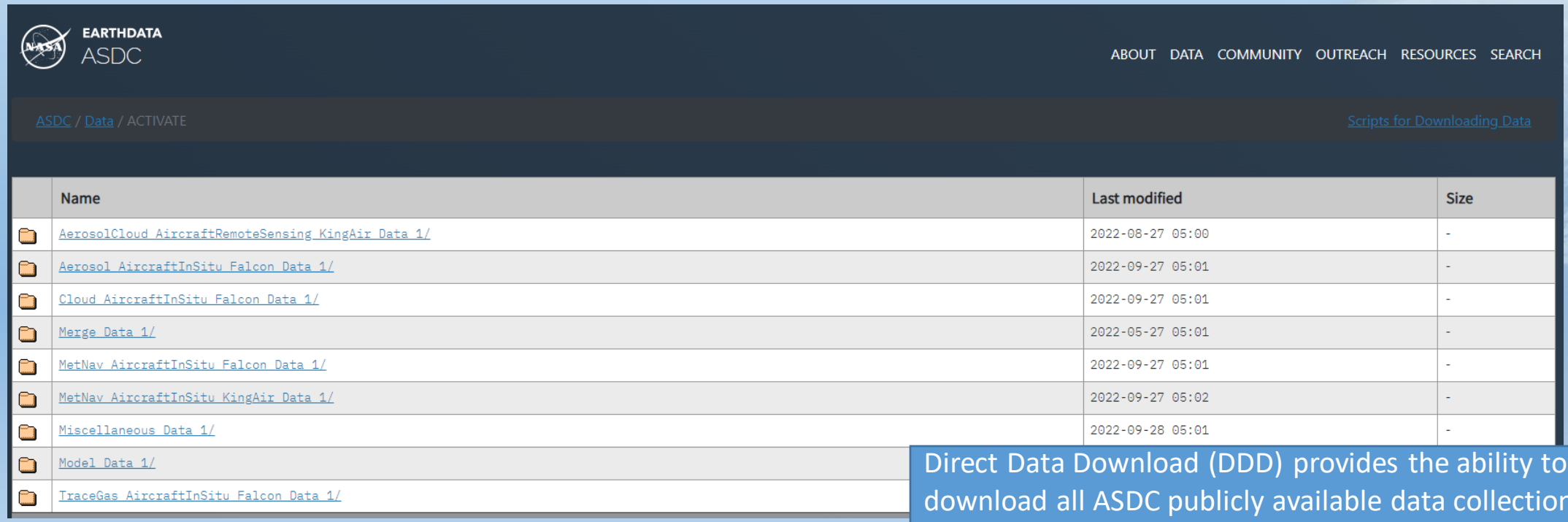
- Data collections and associated DOIs:
  - ACTIVATE_MetNav_AircraftInSitu_KingAir_Data_1 Collection:
    - Navigational Parameters, dropsondes
    - DOI: 10.5067/ASDC/ACTIVATE_Aerosol_AircraftInSitu_Falcon_Data_1
  - ACTIVATE_AerosolCloud_AircraftRemoteSensing_Falcon_KingAir_1 Collection:
    - RSP and HSRL remote sensing of cloud and aerosol properties
    - DOI: 10.5067/ASDC/ACTIVATE_AerosolCloud_AircraftRemoteSensing_KingAir_Data_1

Data Organizations and DOIs

- Data collections and associated DOIs:
  - ACTIVATE_Miscellaneous_Data_1 Collection:
    - Camera forward cloud masks
    - DOI: 10.5067/ASDC/SUBORBITAL/ACTIVATE_Miscellaneous_Data_1
  - ACTIVATE_Merge_Data_1 Collection:
    - Project generated merge files
    - DOI: 10.5067/ASDC/ACTIVATE_Merge_Data_1
  - ACTIVATE_Model_Data_1 Collection:
    - MERRA-2 Reanalysis Model Data
    - DOI: 10.5067/ASDC/SUBORBITAL/ACTIVATE_Model_Data_1

Data Distribution Options: ASDC Website/DDD

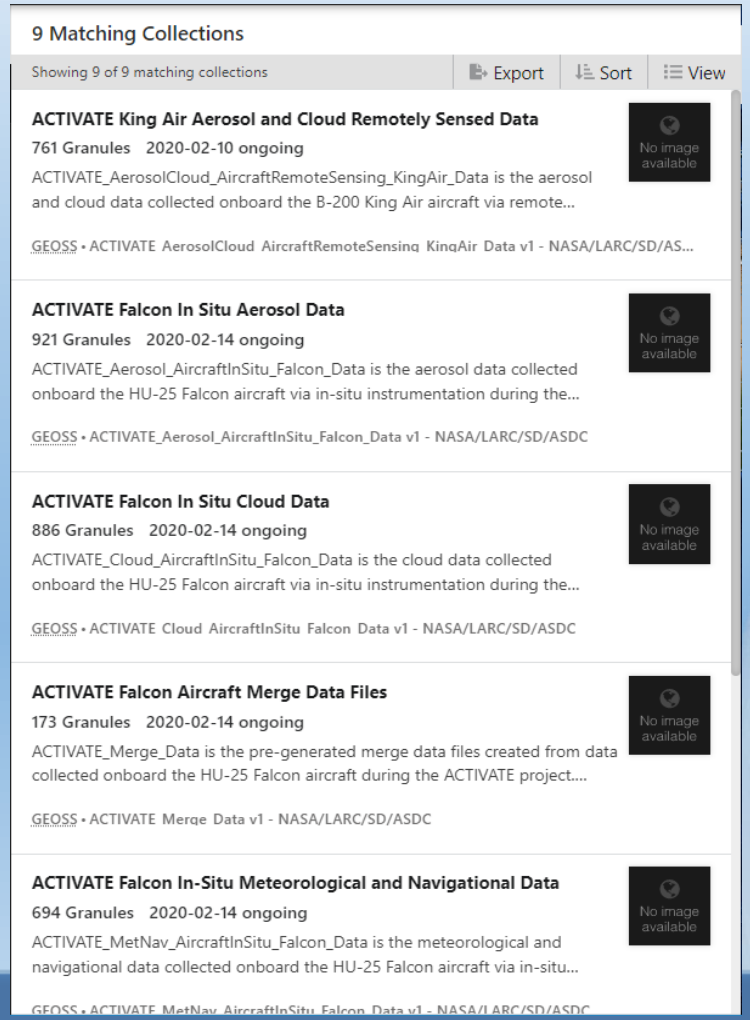
- ACTIVATE Direct Data Download

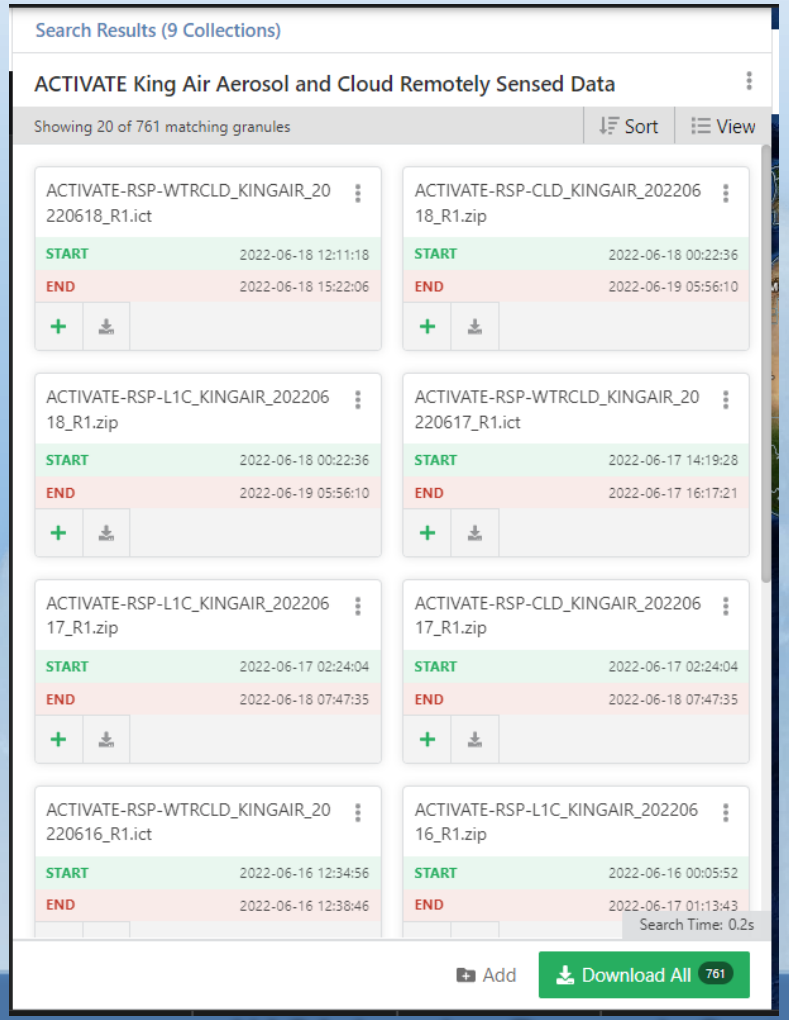


Direct Data Download (DDD) provides the ability to access and download all ASDC publicly available data collections via https; Scripts for downloading data are available

Data Distribution Options: Earthdata Search

Explore and retrieve data via collections

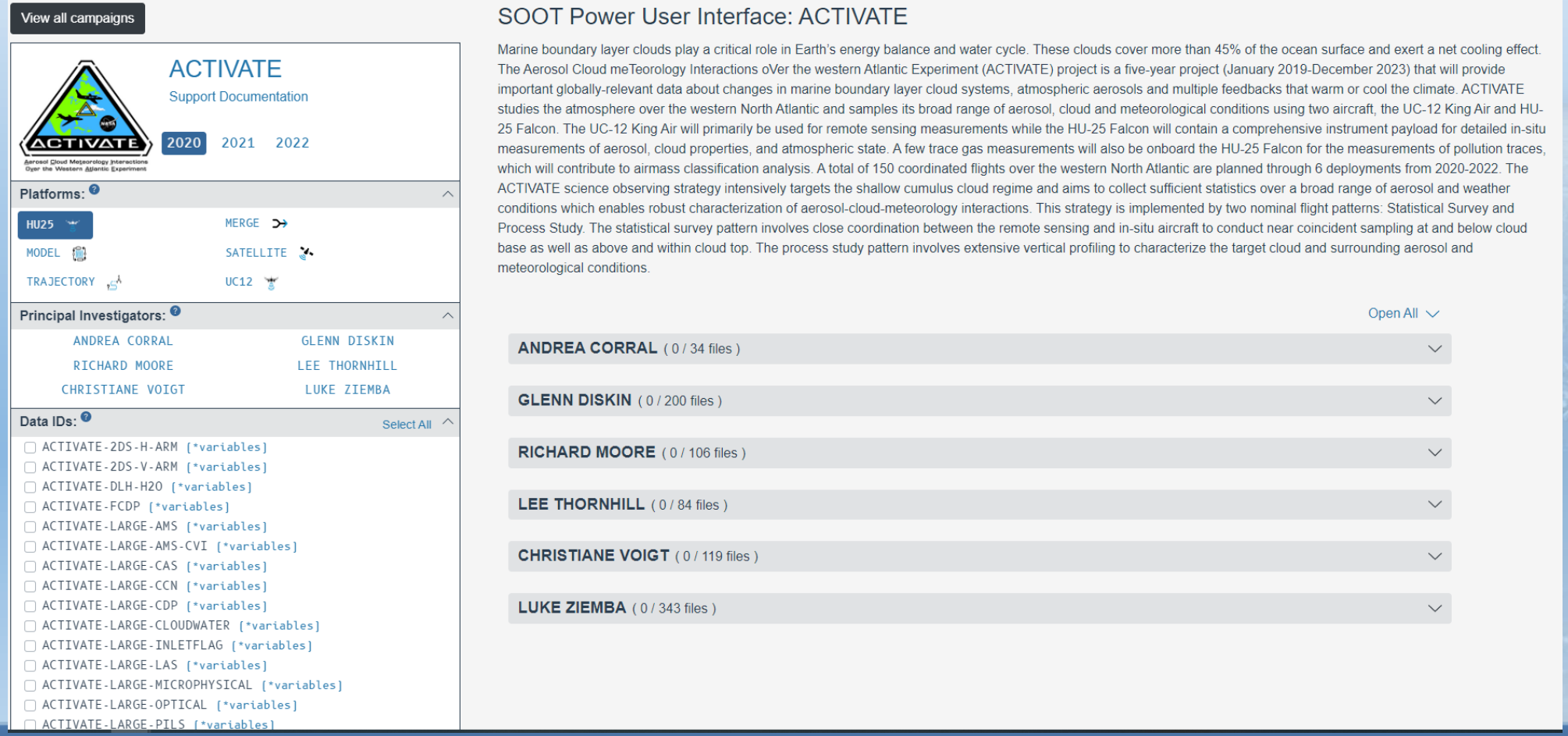




Atmospheric Science Data Center

NASA Langley Research Center
Hampton, VA

Data Distribution Options: SOOT

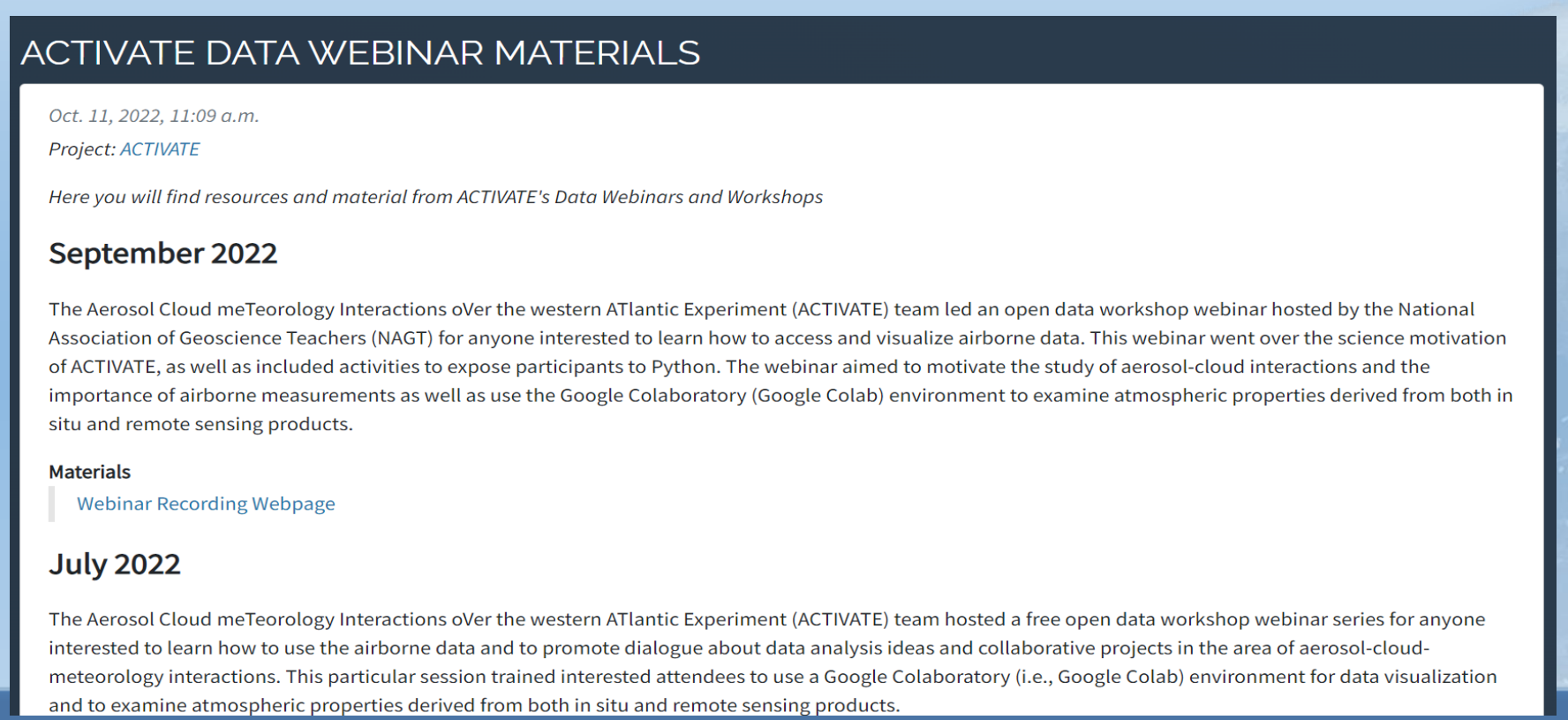


Outreach Materials

- ASDC creates outreach materials to support the discovery of ACTIVATE data
- Materials include:
  - ACTIVATE Microarticle (campaign overview)
  - Armin Sorooshian Researcher Profile
  - Hosting materials for ACTIVATE data webinars: ACTIVATE Webinar Materials
- Documenting ACTIVATE Publications

ACTIVATE Data Webinars

- Support ACTIVATE Data Webinars
- Host data webinar materials: ACTIVATE Webinar Materials



ACTIVATE DATA WEBINAR MATERIALS

Oct. 11, 2022, 11:09 a.m.

Project: ACTIVATE

Here you will find resources and material from ACTIVATE's Data Webinars and Workshops

September 2022

The Aerosol Cloud meTeorology Interactions oVer the western ATlantic Experiment (ACTIVATE) team led an open data workshop webinar hosted by the National Association of Geoscience Teachers (NAGT) for anyone interested to learn how to access and visualize airborne data. This webinar went over the science motivation of ACTIVATE, as well as included activities to expose participants to Python. The webinar aimed to motivate the study of aerosol-cloud interactions and the importance of airborne measurements as well as use the Google Colaboratory (Google Colab) environment to examine atmospheric properties derived from both in situ and remote sensing products.

Materials

> Webinar Recording Webpage

July 2022

The Aerosol Cloud meTeorology Interactions oVer the western ATlantic Experiment (ACTIVATE) team hosted a free open data workshop webinar series for anyone interested to learn how to use the airborne data and to promote dialogue about data analysis ideas and collaborative projects in the area of aerosol-cloud-meteorology interactions. This particular session trained interested attendees to use a Google Colaboratory (i.e., Google Colab) environment for data visualization and to examine atmospheric properties derived from both in situ and remote sensing products.

Contact Us

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Earthdata Forum