ACTIVATE 2022 Data Workshop Webinar

The purpose of this data workshop webinar is to introduce anyone new to airborne field data about how to access and visualize data. This session will be interactive and expose participants to Python, which is becoming increasingly important for data analysis. Please refer to our first open data workshop summarizing the instrument datasets and the mission concept: https://asdc.larc.nasa.gov/news/activate-2021-open-data-workshop

Webinar Title: Introduction: From Data Repository to Initial Figures
Time: 1200-1400 EDT on 19 July 2022

Tentative Agenda

a. Mission Overview: Science, Instruments, Data Files
b. Google Colaboratory
   i. Install Google Colaboratory environment.
   ii. Set up Google Drive to place the data that will be downloaded in the next step.
c. ACTIVATE Data Archive
   i. Demonstrate how to download data for one ACTIVATE research flight.
d. Activity: Python3 Dictionaries
   i. Demonstrate what Python3 dictionaries are and what their advantages are.
e. Activity: In Situ Data
   i. Demonstrate how to plot surface area concentration of aerosol particles derived from in situ data.
f. Activity: Remote Sensing Data
   i. Demonstrate how to plot lidar-derived aerosol particle extinction coefficient
   ii. Demonstrate how to do a qualitative visual comparison of lidar and polarimeter derived aerosol optical thickness.
g. Activity: Comparing Flight Tracks
   i. Examine spatial collocation achieved between the two aircraft during an ACTIVATE flight.

Registration: Email Mary Kleb (mary.m.kleb@nasa.gov) to register by 12 July 2022. Webex information and further instructions will be provided after then and no later than 17 July 2022.

This webinar will be recorded and available for public access at a website to be determined which we will post directions to on our project website: https://activate.larc.nasa.gov