

GOES-R and JPSS Satellite Data and Tools Available through Cloud Service Providers

Sunday, January 28, 2024

AGENDA

Short Course description: Participants will learn how to access GOES-R and JPSS satellite data and use the tools available from the three Cloud Service Providers (CSP): Microsoft Azure, Google Cloud, and Amazon Web Services (AWS). Each CSP will present where the data is, how to access the data, and the tools available to process, display, and analyze GOES-R and JPSS satellite data and products. A case study allowing hands-on experience will include investigating a severe weather event using the GOES-R and JPSS satellite data and products on the CSP platforms. At the end of the short course, participants will have developed a familiarity in accessing the satellite data and products from the cloud for prediction, monitoring and/or research.

Time EASTERN TIME	Session Title	Instructors
8:00-8:30 AM ET	Coffee, network, confirm everyone has access to any necessary files and answer any questions	Hybrid
8:30 AM ET	Introductions/Course Summary	Sherrie Morris, STC for GOES-R Program Office Gary McWilliams, STC for JPSS Program Office
8:35 AM ET	NOAA Open Data Dissemination (NODD) – Open Data Access to NOAA Satellite Data	Adrienne Simonson, Director, NODD
8:45 AM ET	Geostationary Earth Observations (GEO) Program	Dr. Dan Lindsey, NOAA/NESDIS, GOES-R Program Scientist
9:00 AM ET	Low Earth Orbit (LEO) Observations Program	Dr. Satya Kalluri, NOAA/NESDIS, Program Scientist for LEO and JPSS Programs
9:15 AM ET	GOES-R Series and JPSS Satellites: User Engagement	Jeremy Goldstein (GST for LEO/JPSS) Steve Superczynski (GEO/GOES-R)
9:45 AM ET	JPSS and GOES-R Satellite Data in Google Cloud & Google Cloud Tools <ul style="list-style-type: none">Interactive hands-on exercise using Google tools and the Collaboratory site	Tyler Russell, Technical Program Manager, Google Research Adler Santos, Engineering Lead, Google Cloud Datasets
10:45 AM ET	COFFEE BREAK	

11:00 AM ET	GOES-R and JPSS Satellite Data in Microsoft Azure <ul style="list-style-type: none"> Interactive hands-on exercise using Microsoft Azure Tools and the Collaborative Planetary Computer site 	Tom Augspurger, Data Scientist/Engineer, Microsoft Azure
12:00 PM ET	LUNCH	
1:00 PM ET	GOES-R and JPSS Satellite Data in Amazon Open Data <ul style="list-style-type: none"> Interactive hands-on exercise using select AWS Tools and the Sagemaker Studio site 	Chris Stoner, Open Environmental Data Lead, AWS Open Data
2:00 PM ET	COFFEE BREAK	
2:15 PM ET	Hands-on Training: Analyzing JPSS and GOES-R Data Using Jupyter Notebook	Mya Sears, NCICS Outreach/Engagement Specialist Jenny Dissen, NCICS Engagement Lead
3:35 PM ET	Course Wrap Up	Sherrie Morris, STC for GOES-R Program Office Gary McWilliams, STC for JPSS Program Office
3:45 PM ET	Adjourn	

Acronyms in order of appearance:

GOES-R: Geostationary Operational Environmental Satellites-R Series

JPSS: Joint Polar Satellite System

CSP: Cloud Service Providers

STC: Science and Technology Corporation

NOAA: National Oceanic and Atmospheric Administration

NODD: NOAA Open Data Dissemination

NESDIS: National Environmental Satellite Data and Information Service

GEO: Geostationary Earth Observations

LEO: Low Earth Orbit

GST: Global Science and Technology

AWS: Amazon Web Services

NCICS: North Carolina Institute for Climate Studies