

CMM 2022 Short Course
Joint Satellite Data
Lake Applications
Sunday, August 7, 2022

Short Course description: This short course will provide participants an opportunity to use readily available tools to process, display, and analyze GOES-R, JPSS, and other environmental satellite data products in lake application scenarios. The participants will learn how satellite observations and other data products are applied to a variety of lakes, ranging through different lake widths/depths, tropical and mid/higher latitude lakes, as well as winter and summer examples. Satellite subject matter experts will lead hands-on exercises using regional lake case studies and provide participants an opportunity to produce imagery and analyze data such as lake surface water temperature, algal blooms, meteotsunamis, snow/ice, and convection initiations and thunderstorms over the lakes.

Time CENTRAL TIME	Session Title	Instructors
8:00 AM CT	Coffee, network and prepare for hands-on	All
8:30 AM CT	Introductions, connect with those who are virtual and in person	Sherrie Morris, STC contractor for GOES-R Program Office, Gary McWilliams, STC contractor for JPSS Program Office
8:40 AM CT	GOES-R Series and JPSS Satellites Data, Products and Capabilities	Dr. Andy Heidinger, NOAA/NESDIS, GEO Senior Scientist Dr. Satya Kalluri, NOAA/NESDIS, JPSS Program Scientist
9:10 AM CT	Satellite Lake Data and Products	Scott Lindstrom, CIMSS Andrea VanderWoude, GLERL and CoastWatch Mark Kulie, NOAA/NESDIS Rachel Albrecht, Universidade de São Paulo
10:10 AM CT	Break	
10:25 AM CT	Lake Products: Lake surface temperatures, algal blooms, meteotsunamis	Andrea VanderWoude, GLERL and CoastWatch Scott Lindstrom, CIMSS
11:00 AM CT	Case Studies Hands-on Exercises: Lake surface temperatures, algal blooms, meteotsunamis	Andrea VanderWoude, GLERL and CoastWatch Scott Lindstrom, CIMSS

12:00 PM CT	Lunch	
1:00 PM CT	Convection Initiations and Thunderstorms Over the Lakes	Rachel Albrecht, Universidade de São Paulo
1:30PM CT	Case Studies Hands-on Exercises: Convection Initiations and Thunderstorms Over the Lakes	Rachel Albrecht, Universidade de São Paulo Scott Lindstrom, CIMSS
2:30 PM CT	Compare/Contrast Lake Products in WMO RA III and WMO RA IV	TBD
3:00 PM CT	Participant groups present results of hands-on exercises	Participant Groups
3:30 PM CT	Wrap up and Survey	Sherrie Morris, STC contractor for GOES-R Program Office, Gary McWilliams, STC contractor for JPSS Program Office
3:45 PM CT	End of Course	

Acronyms in order of appearance:

CMM: Collective Madison Meeting

STC: Science and Technology Corporation

GOES-R: Geostationary Operational Environmental Satellites-R Series

JPSS: Joint Polar Satellite System

NOAA: National Oceanic and Atmospheric Administration

NESDIS: National Environmental Satellite Data and Information Service

CIMSS: Cooperative Institute for Meteorological Satellite Studies

GLERL: NOAA's Great Lakes Environmental Research Laboratory

ABI: Advanced Baseline Imager instrument on GOES-R satellites

VIIRS: Visible Infrared Imaging Radiometer Suite instrument on JPSS