

Weekly Report

RAMMB / CIRA
Cooperative Research Program Division (CoRP)
STAR/NESDIS
National Oceanic and Atmospheric Administration (NOAA)

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Products and Applications

VIIRS Fire Temperature RGB at 375 m resolution: An algorithm has been developed to downscale the VIIRS moderate resolution 2.25 μm band (M-11) to imagery band resolution, allowing for the production of the Fire Temperature RGB at 375 m resolution, instead of the normal 750 m resolution. As an update to an earlier report on this product, this algorithm is now running in near-realtime at GINA using direct broadcast data, where geoTIFF images are being delivered to users throughout the Alaska Region. Images are available at the following URL: <http://hippy.gina.alaska.edu/distro/cira-fire/> (POC: C. Seaman, CIRA, J. Cable and C. Dierking, GINA; curtis.seaman@colostate.edu; jay@alaska.edu; cfdierking@alaska.edu) Funding: JPSS

GEO-XO Project: This week saw the kick-off meeting of a NOAA funded project exploring the use of a reflective band near 0.9 μm for GEO-XO. Team members include Louie Grasso, Yoo-Jeong Noh, Jack Dostalek, Curtis Seaman, John Forsythe, Renate Brummer, and Chris Kummerow, who is the PI of the project. Federal collaboration includes Bill Line and Dan Lindsey who serves as a NOAA collaborator. (POC: Lewis Grasso, Jack.Dostalek, Yoo-Jeong Noh, Curtis Seaman, John Forsythe Renate Brummer, CIRA, and Bill Line CoRP/RAMMB, Dan Lindsey NOAA/NESDIS GOES-R Program Scientist; Lewis.Grasso@colostate.edu, Jack.Dostalek@colostate.edu, Yoo-Jeong.Noh@colostate.edu, Curtis.Seaman@colostate.edu, John.Forsythe@colostate.edu, Christian.Kummerow@colostate.edu, Renate.Brummer@colostate.edu, bill.line@noaa.gov, Dan.Lindsey@noaa.gov) Funding: NOAA

New AWIPS Geocolor Testing: B Line and D Molenaar worked with the TOWR-S team to install a new process for CIRA Geocolor creation and display in CIRA AWIPS. The new method reduces internet bandwidth, creates the full resolution Geocolor product, and allows for viewing of Geocolor in all GOES sectors. The process is being tested at CIRA, and feedback provided back to the TOWR-S team. This new AWIPS Geocolor method will soon be applied to NWS AWIPS. See Figure below. (POC: B. Line, CoRP/RAMMB; D. Molenaar, CIRA, bill.line@noaa.gov, Debra.Molenaar@colostate.edu) Funding: PDRA

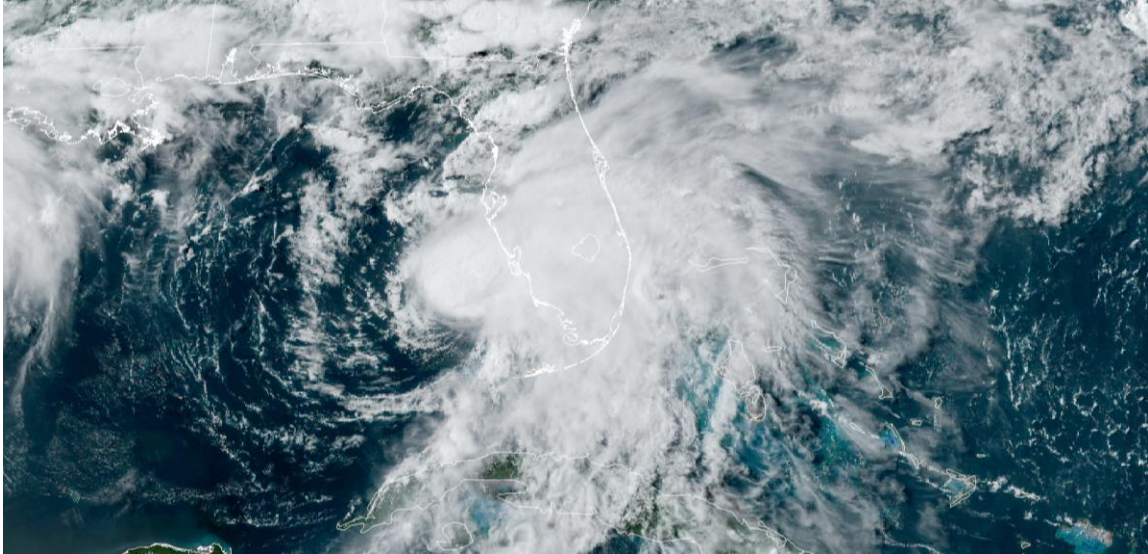


Figure: CIRA Geocolor capture of Tropical Storm Elsa from 6 July 2021 created in CIRA AWIPS using the new Geocolor processing method.

Auto-Refresh in SLIDER: SLIDER now includes an auto-refresh feature (pictured below). When checked, SLIDER will periodically check to see if new data is available and, if so, will load the new imagery. More information about SLIDER releases can always be found on the [Release Notes page](#). (POC: M. Niznik and K. Micke CIRA, matthew.niznik@colostate.edu, kevin.micke@colostate.edu; Funding: GOES-R)

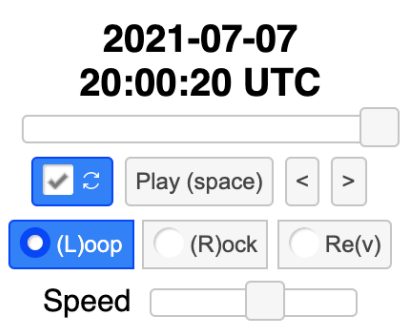


Figure: The top of the SLIDER controls showing the new auto-refresh button (checked in blue to the left of Play and above Loop).

Awards and Recognition

Publications

Media and Outreach

Workshops, Conferences, and Meetings

Training and Education

January through June International Training Summary: During the past six months, CIRA coordinated with the NCEP/WPC International Desks and the World Meteorological Organization (WMO) VLab Centers of Excellence in Barbados, Costa Rica, Brazil, and Argentina, to conduct 6 monthly bilingual (English and Spanish) Regional Focus Group (RFG) sessions and 4 special topic sessions. We also coordinated with NESDIS’s Satellite International Training Working Group and many other international organizations to organize and conduct a 5-day virtual training in early April hosted by Colombia. All training connects instructors, researchers, forecasters, and weather enthusiasts and enables them to view geostationary and low earth orbiting imagery and products, share information on seasonal weather patterns, hurricanes, severe weather, flooding, volcanic eruptions, and other significant events. The figure below shows the number of participants for the various sessions and events. The combined RFG and special sessions attracted over 600 participants from 32 countries. Over 100 additional people participated in the Colombia / WMO Regional Associations III/IV training event. <https://rammb.cira.colostate.edu/training/rmtc/focusgroup/> (POC: B. Connell, E. Sanders, CIRA, Bernie.Connell@colostate.edu, Erin.Sanders@colostate.edu, Funding: GOES, JPSS, and NWS)

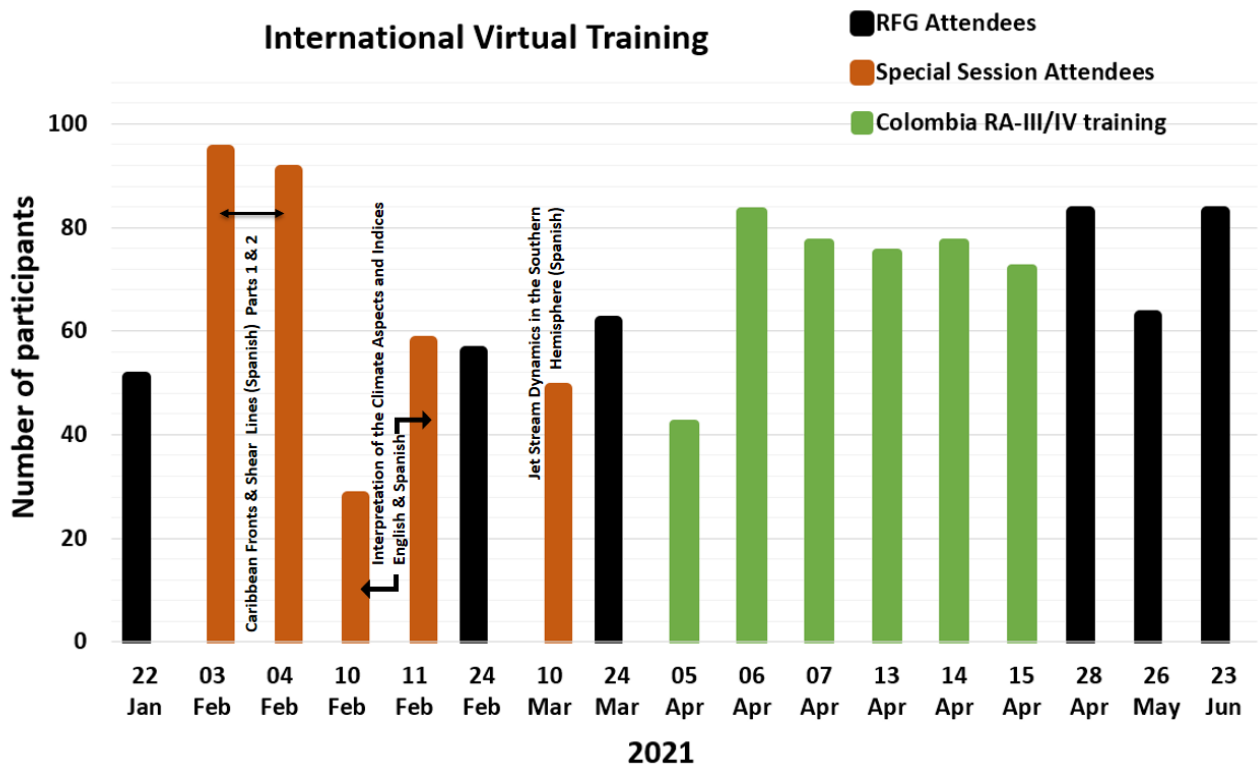


Figure 1. This graph shows attendance at sessions conducted by CIRA, NOAA, and collaborating partners in support of training offered through the WMO-Coordination Group for Meteorological Satellites Virtual Laboratory from January through June 2021. Special events discussed during the May and June RFG sessions include the eruption of La Soufriere on the island of St. Vincent and a severe weather event over Barbados.

New Satellite Liaison Blog Post: A blog post titled “Canada Wildfires and PyroCb” was recently published. The post highlights GOES and VIIRS imagery and products used to capture large wildfires in British Columbia, Canada, including wildfire hot spots and associated smoke plumes, pyrocumulus, and lightning. See Figure below. The link to the post can be found [here](#). (POC: B. Line, CoRP/RAMMB, bill.line@noaa.gov) Funding: PDRA

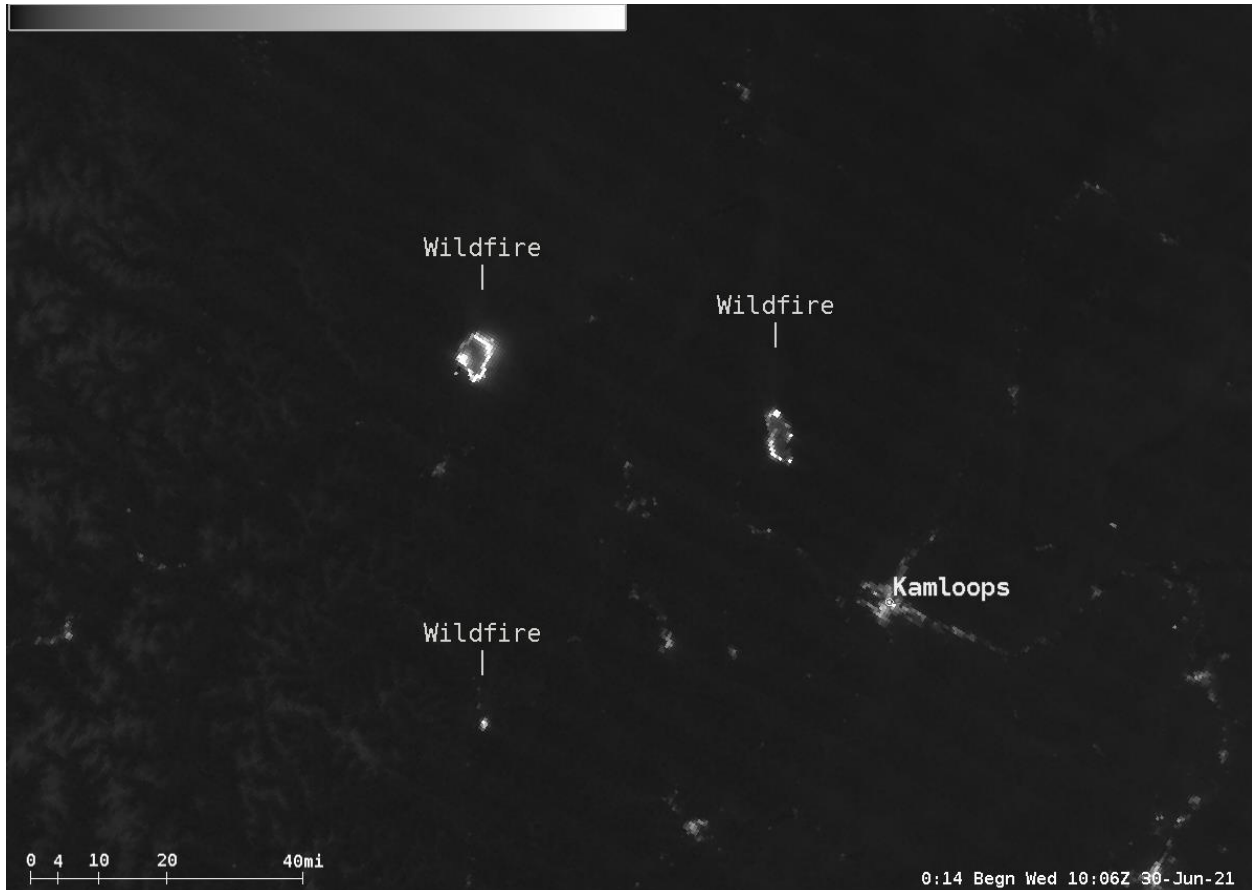


Figure: 1006 UTC 30 Jun 2021 VIIRS Near Constant Contrast product capturing the light associated with three wildfires overnight in British Columbia, Canada.

Other