

Weekly Report

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

Submitted by: Austin Boone
Prepared by: RAMMB/CIRA contributors
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Products and Applications

Awards and Recognition

Publications (Citation: followed by a short Summary: (Why & so what), & detailed summary):

Blog Posts and Social Media

New Satellite Liaison Blog Post: Bill Line published a blog post titled “Canadian Smoke and Blowing ?”. The post leverages GOES, VIIRS, and Sentinel-2 imagery to determine the sources of plumes of lofted aerosols over parts of Canada and north-central US. See Figure below. The link to the post can be found [here](#). (POC: B. Line, CoRP/RAMMB, bill.line@noaa.gov) Funding: PDRA

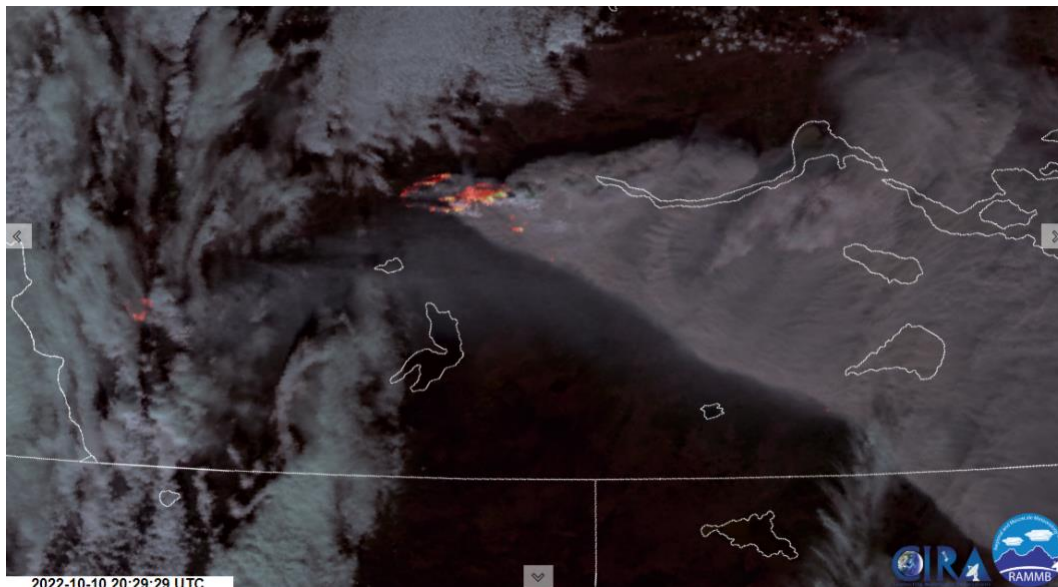


Figure: 10 Oct 2022 VIIRS Geocolor + Fire Temperature RGB Image combo of large wildfire complex and associated smoke plume in Northwest Territories, Canada. Wildfire smoke from these fires extended into the northern US.

Hurricane Ian Imagery Featured on 60 Minutes National Broadcast: Dakota Smith worked with a producer from the nationally broadcast program “60 Minutes” to create a unique video used on-air. This animation included CIRA Global Lightning Mapper imagery overlaid onto visible imagery. The producer initially found this imagery through the Satellite Library and contacted Dakota through the site’s contact form. The video can be seen at the attached [Google Drive link](#). (POC: D. Smith, CIRA, dakota.smith@colostate.edu) Funding: GOES-R.

Travel, Workshops, Conferences, and Meeting Reports

CIRA participation in NOAA/NASA ROSES Science Review: Three CIRA Principal Investigators presented their latest NOAA ROSES GOES-R (Year 2) research results at the NOAA/NASA ROSES Science Review, held in College Park, Maryland, on 12-13 October 2022. Research topics presented were: “GeoRing-ProxyVisible Satellite Imagery - Turning Night Into Day with Machine Learning” (G. Chirokova), “Assimilation of GOES-R Latent Heating in FV3 using Machine Learning” (K. Hilburn) and “Advanced Concepts Enabling Situational and Hazards Awareness via Imagery” (S. Miller). (POC: R. Brummer, CIRA, renete.brummer@colostate.edu). Funding: NESDIS GOES-R

WMO-CGMS VLab Management Group Meeting: Bernie Connell participated in the 10th meeting of the World Meteorological Organization-Coordination Group for Meteorological Satellites VLab Management Group held at EUMETSAT in Darmstadt, Germany, 26-30 September. The Virtual Laboratory for Training and Education in Satellite Meteorology (VLab) is a global network of 13 specialized training centres and 9 meteorological satellite operators working together to improve the utilisation of data and products from meteorological and environmental satellites. The meeting allowed partners from all six WMO Regional Associations to discuss training successes and challenges and plan a strategy for the next four years. As a current WMO VLab co-chair, Bernie contributed to the organization of the meeting and presented on NOAA and CIRA International Training Activities. (POC: B. Connell, CIRA, Bernie.Connell@colostate.edu, Funding: GOES, JPSS, and NWS)



The diverse group of participants attending the WMO VLab Management Group Meeting at EUMETSAT in Darmstadt, Germany.

Training and Education activities

FDTD Satellite Applications Webinar: Dan Bikos coordinated with S. Lindstrom (CIMSS) and B. Motta (NOAA/NWS/OCLO/FDTD) to deliver a Forecast Decision Training Division (FDTD) Satellite Applications webinar on 12 October 2022. The webinar was led by Douglas Kahn (NWS WFO Cleveland, OH) and titled “Use of the Modified SHERBE Parameter To Identify Tornadic HSLC Environments - An Examination of the October 21, 2021 Event Over OH/PA”. The webinar was attended by 8 NWS offices (mostly WFOs). All FDTD Satellite Applications webinars are recorded and made available for viewing at: https://rammb.cira.colostate.edu/training/visit/satellite_chat/ and also made available on the NOAA CLC. (POC: D. Bikos, CIRA, Dan.Bikos@colostate.edu) Funding: VISIT / SHyMet

JPSS Presentation at WFO Winter Staff Meeting: J. Torres (CIRA) presented on ‘JPSS Product Applications for NWS Users’ at the WFO-Grand Junction, CO Winter Staff Meeting. The presentation covered the following topics: a JPSS overview, a variety of JPSS applications, showed how JPSS complements geostationary data, and how users can access the data online and in AWIPS-II. The presentation also highlighted the satellite training materials and resources available for NWS users. User feedback was collected during the question/answer session afterwards. (POC: J. Torres, CIRA, Jorel.Torres@colostate.edu) Funding: JPSS.

Future Meetings and Events (dates, meeting/event, location, staff involved)

RGB Developers and Users Workshop: A hybrid workshop focused on the red/green/blue (RGB) satellite image composites that are used in weather and significant event applications will occur October 18 – 20. It is co-hosted by CIRA, NOAA, EUMETSAT, and WMO and the in-person component will be at CIRA in Fort Collins, Colorado. NOAA NWS forecasters have adopted the use of RGB displays from the GOES-16/17 ABI in addition to VIIRS and other platforms, and international colleagues continue to develop new RGBs from instruments such as the Himawari AHI and learn new RGB applications from various platforms. The primary goal of this workshop will be to share knowledge on RGB applications. Participants include users, developers, and trainers with RGB expertise from the U.S. and internationally. https://www.cira.colostate.edu/conferences/rgb_workshop/ (POC: B. Connell, CIRA, Bernie.Connell@colostate.edu, Funding: GOES)

Other