Weekly Report

CIRA
STAR/NESDIS
National Oceanic and Atmospheric Administration (NOAA)

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Products and Applications

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

Awards and Recognition

Media Interactions and Request

Blog Posts and Social Media

Travel, Workshops, Conferences, and Meeting Reports

Meeting with ICECHIP hail scientist: Stephanie Ortland (CIRA) visited NCAR's Foothills Laboratory on August 29, 2025 in Boulder, Colorado. The goal of the meeting was to learn about hail analysis techniques and discuss future research collaborations with Anthony Bernal Ayala, a hail expert and postdoctoral research scientist with Janus-I Science Inc. stationed at NCAR. S. Ortland and A. Bernal Ayala hope to submit a proposal combining A. Bernal Ayala's expertise in hailstone analysis with S. Ortland's experience with satellite, radar, and AI. In addition to fostering relationships between CIRA, NCAR, and Janus-I Science Inc., S. Ortland saw hailstones collected during the ICECHIP field campaign, which are kept in a cold room at -5°F. (POC: Stephanie Ortland, CIRA, stephanie.ortland@colostate.edu)

Stephanie Ortland holding a hailstone collected during the ICECHIP campaign in the cold room

at NCAR's foothills laboratory.

Invited Presentation for the Australian Bureau of Meteorology: Chuck White gave an invited presentation about work from a recent CIRA publication entitled "Emulating Daytime ABI Cloud Optical Properties at Night With Machine Learning" in the Himawari Community of Practice quarterly meeting run by the Australian Bureau of Meteorology. The presentation detailed a neural network approach for estimating nighttime cloud optical properties from several geostationary imagers and was found to significantly outperform current operational approaches. There were approximately 40 scientists in attendance from the Bureau of Meteorology, the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Geoscience Australia, and a number of Australian universities. (POC: Chuck White, CIRA, charles.white@colostate.edu, Funding: NOAA, Office of Naval Research).

Training and Education activities

Satellite Book Club Seminar on *GeoColor* and Advanced *GeoColor*: Curtis Seaman (CIRA) gave this week's Satellite Book Club Seminar, titled, "From True Color to *GeoColor* and Beyond". The talk focused on recent improvements to the original *GeoColor* algorithm and highlighted new Advanced *GeoColor* products that we are working to implement into AWIPS. The talk also included recent advancements in the development of high-quality True Color imagery from the current generation of geostationary satellites. The Advanced *GeoColor* products discussed include: *GeoSST* (*GeoColor* + Sea Surface Temperature), *GeoFire* (*GeoColor* + Fire Temperature RGB), *GeoDEBRA* (*GeoColor* + DEBRA Dust detection algorithm), and *GeoSnow* (*GeoColor* + nighttime snow mask). The audience included over 70 attendees from across the research-2-operations spectrum. A recording of the session has been posted on YouTube here: https://www.youtube.com/watch?v=8TsmYTMLtJY (POC: Curtis Seaman, CIRA, curtis.seaman@colostate.edu, Funding: GOES-R)

Retirement of Bernie Connell: After 30 years at CIRA, Senior Research Associate Dr. Bernie Connell celebrated her retirement at CIRA on 4 September 2025. Connell supported forecasters, managers and decision makers with training on satellite products in the national and international communities during her time at Colorado State University. Steve Miller's comments: *"Bernie has always been a strong champion for the core values we continue to share across our CIRA community—access, inclusion, equity, respect, professionalism and a trust that is earned through a demonstrated, sustained and sincere commitment to uplifting the people of our field and to supporting each other. When it comes to training our community's users of satellite information (both domestic and international partners), Bernie has led a powerful and effective team. I have great confidence in those who will continue and expand upon her work, having learned from one of the very best."*
Theresa Barosh (CSU/ATS and CIRA Science Writer/Communications Specialist) posted a story about Bernie Connell's long CIRA/CSU career at: https://www.cira.colostate.edu/science-stories/education-perspectives-celebrating-three-decades-at-cira/ . (POC: Renate Brummer, renate.brummer@colostate.edu)

Bernie Connell's retirement party at CIRA on 4 September 2025 (photo credit Theresa Barosh).

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

Other