

Weekly Report

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

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Date of Submission: 05 May 2023
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Products and Applications

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

Awards and Recognition

CSU Walter Scott, Jr., College of Engineering (WSCOE) Faculty and Staff Awards: CSU/Electrical & Computer Engineering and CIRA employee Prof. Imme Ebert-Uphoff won the 2022-2023 *WSCOE Outstanding Researcher Award*. Together with other WSCOE awards, the award was officially presented by Professor David McLean, Dean of WSCOE, on 18 April 2023, at an All-College Meeting. To mention only a few of Prof. Imme Ebert-Uphoff's accomplishments: she is Co-PI and Lead of the CSU proposal team for the NSF funded *AI Institute: Artificial Intelligence for Environmental Sciences (AI2ES)*; she has established a nationally recognized Machine Learning (ML)/Artificial Intelligence (AI) research program at CIRA with focus on developing trustworthy AI methods to solve problems in atmospheric science; she is PI on several other AI projects; and she has attracted excellent graduate students and Postdocs to work with CIRA. Her outstanding research accomplishments and exceptionally dedicated service to WSCOE make her an invaluable member of our CSU and CIRA research community. Congratulations to Imme for winning this prestigious award. (POC: R. Brummer, CIRA, Renate.Brummer@colostate.edu). Research Funding Source: NOAA/NESDIS and NSF).



Figure: Prof. Imme Ebert-Uphoff receives the 2022-2023 WSCOE Outstanding Researcher Award from Prof. David McLean, Dean of CSU's WSCOE

Media Interactions and Requests

Blog Posts and Social Media

Travel, Workshops, Conferences, and Meeting Reports

AMS Fire and Forest Meteorology Meeting: J. Haley presented “Sensitivity of the WRF-SFIRE Model to Changes in Fuel Moisture Content” at the AMS Fire and Forest Meteorology Conference on May 2. This presentation analyzed forecast errors for eight major wildfire events across the Western U.S. that were initialized using airborne IR perimeters and satellite active fire detections. It was found that when the fuel moisture content drops below 10%, small changes in the moisture content can produce large changes in forecast fire rate-of-spread. (POC: J. Haley, CIRA, James.Haley@colostate.edu, Funding: NOAA BIL).

Government Accountability Office Artificial Intelligence in Environmental Modeling Meeting: A. Schumacher participated in a virtual 3-day GAO Meeting of Experts on the Assessment of the Use of Artificial Intelligence (AI) in Environmental Modeling of Wildfires, Severe Storms, Hurricanes, and Flooding. This meeting of experts engaged those working in this cross-cutting space to discuss the needs, challenges, and opportunities related to AI applications to environmental modeling of hazards. The discussion from this forum will be used to inform GAO's Technology Assessment to assess AI technologies applied to modeling of wildfires, severe storms, hurricanes, and floods, including opportunities and challenges. (POC: A. Schumacher, CIRA,

Andrea.Schumacher@colostate.edu, Funding: CIRA Societal Impacts)

Training and Education activities

JPSS Teletraining this week: J. Torres (CIRA) led a 'VIIRS Active Fires' teletraining session on 3 May 2023: 4 National Weather Service (NWS) users from WFO Blacksburg, VA, attended the session. The teletraining session student guide can be accessed online: https://rammb2.cira.colostate.edu/trainings/visit/training_sessions/viirs-active-fires/.

(POC: J. Torres, CIRA, Jorel.Torres@colostate.edu , Funding: JPSS).

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

Other