

6th Annual Young Scientist Symposium on Atmospheric Research

Sponsored by:



Hosted by the FORT Collins Atmospheric Scientists (FORTCAST) AMS local chapter

and the American Association for Aerosol Research (AAAR) CSU chapter

Schedule of Events

- 8:00 a.m. **Registration and breakfast**
ATS Main Building, Room 100
Poster Set-up
ATS West, Room 121 (seminar room)
- 8:40 a.m. **Welcome** by YSSAR 2016 planning committee
- 9:00 a.m. **Session 1**
- 9:00 a.m. Jonathan Martinez, CSU: *Inner core structure and rapid intensification of Hurricane Patricia observed during TCI 2015*
- 9:15 a.m. Yixing Shao, CSU: *Atmospheric Reactive Nitrogen in Rocky Mountain National Park*
- 9:30 a.m. Kevin Kacan, UW: *Diagnosing the Microphysical and Dynamical Effects of Mixed-Phase Hydrometeors in Convective Storms Using a Bin Microphysics Model*
- 9:45 a.m. Shelby Mason, CU: *Effects of Climate Oscillations on Burning Index Variability in the United States*
- 10:00 a.m. **Coffee break/Poster Session**

11:15 a.m. **Session 2**

- 11:15 a.m. Jennie Bukowski, CSU: *Climatological Thermodynamic and Aerosol Variability over the Maritime Continent*
- 11:30 a.m. Logan Wright, CU: *Separating Atmospheric and Surface Contributions in Hyperspectral Imager for the Coastal Ocean Scenes using Informed Non-Negative Matrix Factorization*
- 11:45 a.m. Darcy Jacobson, UW: *A statistical comparison of hydrometeor characteristics measured by two optical array probes during PACMICE*
- 12:00 p.m. Josh Pettit, CU: *Effects of the September 2005 Solar Flares and Solar Proton Events on the Middle Atmosphere*

12:15 p.m. **Lunch**

ATS Main Building, 1st Floor Weather Lab

1:00 p.m. **Keynote Address - Robert Simmon, Planet Labs**

1:45 p.m. **Coffee Break/Networking**

2:15 p.m. **Session 3**

- 2:15 p.m. Rachel Severson, CSU: *`countyweather`: An R package for accessing and aggregating weather time series datasets by U.S. county*
- 2:30 p.m. Brody Fuchs, CSU: *Impacts of lightning channel locations in thunderstorms*
- 2:45 p.m. Mingxuan Wu, UW: *Dust vertical and horizontal distributions simulated by CESM and compared with CALIPSO observations*
- 3:00 p.m. Jessica Tomaszewski, CU: *Do wind turbines pose roll hazards to light aircraft?*

3:15 p.m. **Break**

3:25 p.m. **Session 4**

- 3:25 p.m. Megan Bela, NOAA ESRL: *Microphysical and chemical processes affecting wet removal of soluble trace gases in deep convection observed over the central U.S.*
- 3:40 p.m. Jungmin Park, CSU: *Controls on the redistribution of coastal zone aerosols in convective clouds associated with sea breeze circulations*
- 3:55 p.m. Sara Lynn Fults, UW: *Aerosol Measurements During Central Chilean Orographic Precipitation Experiment*
- 4:10 p.m. Benjamin Trabling, CSU: *Hurricane Observations Using Long-Range Lightning Detection Networks*

4:25 pm Conclusion

Social Event (starting around 4:35 p.m.)

Poster Presentations

- Steven Brey, CSU *There's the smoke, where's the fire? A regional analysis of smoke transport pathways based on 8 years of HMS smoke and fire location data*
- Hong Chen, CU *Using Aircraft Observations to Improve Passive Remote Sensing of Clouds in the Arctic*
- Trenton Davis, CSU *Spatial Extent of Lightning and its Effects on the Convective Transport of Nitrogen Oxides*
- Rachel Edie, CSU *Determining VOC flux by correlation with methane: Accurate or Not?*
- Spencer Faber, UW *A Method for Calculating Liquid Water Content from the Nevzorov Probe That Incorporates Dry Heat Loss Calibrations*
- Jeff France, CU *The 5-day wave as a trigger for early onset of polar mesospheric clouds*
- Adrianna Hackett, CU *On the identification of elevated stratopause events*
- Anna Hodshire, CSU *The role of MSA in particle growth and the aerosol direct and indirect effects*
- Jakob Lindaas, CSU *Investigating the effects of aged wildfire smoke on photochemistry in the Northern Front Range of Colorado*
- Rob Nelson, CSU *Total Column Water Vapor from OCO-2*
- Katelyn O'Dell, CSU *Investigating the Reduction of Measurement Variability with a New Disdrometer Sampling Method*
- Benjamin Toms, CSU *Academic Entrepreneurship: Students Lead the Way*
- Derek Weber, CSU *Volatile Organic Compound (VOC) Concentrations in the Northern Colorado Front Range and the Potential Impact of Future Oil and Natural Gas Activities in the Area*
- Meilin Yan, CSU *Fine particulate matter pollution and human mortality in Beijing, China: An investigation of acute relative risks, shape of the concentration-response curve, and acute impacts, 2009–2012*