

Arctic System Change Workshop

April 9-12, 2018

National Center for Atmospheric Research - Mesa Lab, Boulder, CO

Monday, April 9: Changes occurring in the Arctic system

8:00 Shuttle bus pick up at hotel

8:30 *Coffee*

8:45am-10:00am Plenary Session, Marika Holland, Chair

8:45 Welcome - Organizing committee

9:00 Julienne Stroeve Observed changes in Arctic sea ice

9:20 Mike Steele Changes in the Arctic Ocean: A story in T, S, and V

9:40 Alexandra Jahn Simulated Arctic sea ice and ocean change

10:00 *Break*

10:30am-12:30pm Plenary Session, Twila Moon, Chair

10:30 Ted Schuur Observed Arctic land change

10:50 David Lawrence Modeling Arctic terrestrial processes and feedbacks

11:10 Bea Csatho Observed land ice change

11:30 Sophie Nowicki Simulated land ice change

11:50 Mark Serreze Observed atmosphere and water cycle change

12:10 Paul Kushner Simulated Arctic atmospheric circulation change

12:30 *Lunch (NCAR Cafeteria)*

2:00 Panel discussion on morning topics (morning speakers and session chairs)

2:30 Science Highlight Exchange (Poster session)

5:15 *Adjourn*

5:30 Shuttle bus back to hotel

Tuesday, April 10: Local factors affecting Arctic system change

8:00 Shuttle bus pick up at hotel

8:30 *Coffee*

9:00am-10:10am Plenary Session, Ted Schuur, Chair

9:00 Intro/Updates on Days Activities – organizing committee

- 9:10 Bruno Tremblay Ocean heat fluxes and rapid sea ice decline
- 9:30 Mary-Louise Timmermans Consequences of a warming Arctic Ocean
- 9:50 Melinda Webster Changing snow on sea ice
- 10:10 *Break*
- 10:40-12:00 Plenary Session, Don Perovich, Chair
- 10:40 Merritt Turetsky Observed wetland and aquatic change
- 11:00 Steven Cavallo Upcoming atmospheric observations and science
- 11:10 Tristan L'Ecuyer A New Satellite Mission to Improve Arctic
Surface Energy and Mass Budgets
- 11:20 Marco Tedesco Surface and atmospheric drivers of recent Greenland
mass balance changes: new insights and challenges'
- 11:40 2-minute "speed talks" (1 slide, 2 minutes, 6 Talks)
Chip Miller, Clara Burgard, Ed Blockley, Nicole Schlegel, Shad O'Neel, Ute
Herzfeld
- 12:00 Panel discussion (Morning speakers and session chairs)
- 12:30 *Lunch (NCAR Cafeteria)*
Informal lunch discussion on science engagement with the public, policy makers, etc.
- 2:00 Break out groups (6 groups: Outer Damon, Inner Damon, Chapman Room,
Main Seminar Room, ML-680, Cafeteria)
- 3:15 *Break*
- 3:45 Break out group report out and discussion
- 4:45 Summary discussion
- 5:00 *Adjourn*
- 5:30 Shuttle bus return to hotel

Wednesday, April 11: Coupled interactions and feedbacks in the Arctic

- 8:00 Shuttle bus pick up at hotel
- 8:30 Coffee
- 8:45am-10:20am Plenary Session, Jennifer Kay, Chair
- 8:45 Intro/Updates on Days Activities – organizing committee
- 9:00 Cecilia Bitz Feedback in the marginal ice zone from wave-ice

- interactions
- 9:20 Abby Swann Quantifying the role that terrestrial ecosystems play in Earth's climate
- 9:40 Don Perovich Light in the ice-ocean system
- 10:00 2-minute "speed talks" (1 slide, 2 minutes, 6 talks)
Amy Solomon, Jennifer Francis, Twila Moon, Diana Gergel, Alek Petty, Yongfei Zhang
- 10:20 *Break*
- 10:50am-12:10pm Plenary Session, Jan Lenaerts, Chair
- 10:50 Jennifer Kay The atmospheric boundary layer response to sea ice loss
- 11:10 Mark Flanner Importance of surface forcing and feedback in the stable polar atmosphere
- 11:30 Irina Overeem Fjords in Flux: Downstream Impacts of Greenland Melt
- 11:50 2-minute "speed talks" (1 slide, 2 minutes, 6 talks)
Amelie Simon, Xiyue (Sally) Zhang, Simon Pendleton, Libby Barnes, Ed Blanchard-Wrigglesworth, Vladimir Romanovsky
- 12:10 Panel discussion (Morning plenary speakers and session chairs)
- 12:30 *Lunch (NCAR Cafeteria)*
- 2:00 Break out groups (6 groups: Outer Damon, Inner Damon, Chapman Room, Main Seminar Room, ML-680, Cafeteria)
- 3:15 *Break*
- 3:45 Break out group report out and discussion
- 4:45 Summary discussion
- 5:00 *Adjourn*
- 5:30 Shuttle bus return to hotel

Thursday, April 12: Summary and wrap up

- 8:00 Shuttle bus pick up from hotel
- 8:30 Coffee
- 8:45 Update on days activities – organizing committee
- 9:00 Synthesizing across the Arctic system

10:15 *Break*

10:45 Synthesizing across the Arctic system

11:30 *Lunch*

1:00 Discussion of meeting outcomes/ next steps

2:00 Formal Meeting Adjourns, Meeting rooms available for informal discussions

2:30 Shuttle bus return to hotel