

AR Recon Workshop 2022

Monday – Wednesday Oct 24-26, 2022, times in Pacific Time
Scripps Seaside Forum

Zoom Link:

<https://ucsd.zoom.us/j/893941952?pwd=WIVuYzRaRXJJa01TemtCT2dndkFQQT09>

Meeting ID: 893 941 952

Password: 130368

Call-in: +1 669 219 2599 US (San Jose)

Find your local number: <https://ucsd.zoom.us/u/arvBvXL0K>

Times are inclusive of presentation and questions/discussion

Monday, October 24, 2022

08:00 – 08:30 AM: Arrival & coffee

Session 1: Opening Remarks

08:30 – 09:00 AM: Opening remarks, Welcome
Marty Ralph, CW3E; Vijay Tallapragada, NCEP

- *Goals of the meeting; RAOP framework*

Session 2: Observations

Moderator: Anna Wilson, CW3E

09:00 – 09:30 AM: Air Force C130
Major Christopher Dyke, 53rd Weather Recon Squadron

09:30 – 10:00 AM: NOAA G-IV
Ashley Lundry, NOAA AOC

10:00 – 10:30 AM: ARO Working Group Update, ARO Update and Plans for AR Recon 2023
Jennifer Haase, SIO and Bing Cao, SIO

10:30 – 11:00 AM: *Break*

11:00 – 11:15 AM: AR Recon Buoy Deployments Update and Future Plans
Anna Wilson, CW3E

11:15 – 11:45 PM: CW3E Field Observations Updates and Plans for AR Recon 2023
Ava Cooper, CW3E

11:45 – 12:15 PM: Windborne
John Dean, Windborne

12:15 – 1:30 PM: Lunch Break

1:30 – 1:45 PM: Office of Marine and Aviation Operations Perspective
Rear Admiral Nancy Hann (OMAO) - virtual

Session 3: Expanding AR Recon Panel Discussions

Discussion foci: challenges, logistics, on-call vs on-station, resource dependencies

1:45 – 2:45 PM: Expanding AR Recon Geography to East Coast
Moderators: Vijay Tallapragada (NCEP), Anna Wilson/Jay Cordeira (CW3E)

2:45 – 3:45 PM: Expanding AR Recon Season
Moderators: Chad Hecht/Minghua Zheng (CW3E)

Session 4: Summary of the Day, Reception, and Poster Session

3:45 – 4:00 PM: Poster Lightning Round
Moderators: Anna Wilson/Jason Cordeira, CW3E

4:00 – 6:30 PM: Reception and Poster Session

Poster Lead Authors

Jason Cordeira

Jennifer Haase

Allison Michaelis

Aneesh Subramanian

Rui Sun

Anna Wilson

Tuesday, October 25, 2022

- 08:00 – 08:30 AM: Arrival & coffee
08:30 – 9:00 AM: Welcome & Goals for the Day

Session 5A: Modeling, DA and Impact Studies

Moderator: Minghua Zheng (CW3E)

- 09:00 – 09:15 AM: Modeling, DA, and Impact studies at NCEP
Vijay Tallapragada
- 09:15 – 09:30 AM: Predictability of Atmospheric Rivers and Associated Winter Precipitation over Northwest USA using NOAA NCEP GEFSv12 reforecast
Murali Malasala (NCEP) - virtual
- 09:30 – 09:45 AM: Atmospheric River Analysis and Forecast System (AR-AFS): Atmospheric River Reconnaissance 2022 Dropsonde Data Impact Study
Keqin Wu (NCEP) - virtual
- 09:45 – 10:30 AM: Modeling, DA, and Impact studies at CW3E
Luca Delle Monache, Minghua Zheng
- 10:30 – 11:00 AM: *Break*
- 11:00 – 11:30 AM: Modeling, DA, and Impact studies at NRL
Jim Doyle, Carolyn Reynolds - virtual
- 11:30 – 11:40 PM: An Overview of Modeling, DA, and Impact studies at ECMWF
David Lavers
- 11:40 – 12:00 PM: Discussion

12:00 – 1:30 PM: Lunch Break

Session 5B: Modeling, DA and Impact Studies, continued

Moderator: Xingren Wu (NCEP)

- 1:30 – 2:00 PM: Modeling, DA, and Impact studies at NCAR
Chris Davis
- 2:00 – 2:30 PM: Modeling, DA, and Impact studies at UC Boulder: Argo floats
Donata Giglio - virtual
- 2:30 – 3:00 PM: *Break*
- 3:00 – 3:30 PM: Modeling, DA, and Impact studies at UC Boulder: Buoy Observations
Aneesh Subramanian - virtual
- 3:30 – 4:30 PM: Panel Discussion on the Future of Modeling and DA
Moderators: Minghua Zheng (CW3E)/Xingren Wu (NCEP)

Wednesday, October 26, 2022

08:00 – 08:30 AM: Arrival & coffee
08:30 – 09:00 AM: S2S Briefing
Mike DeFlorio (CW3E)

Session 6: Scientific Advances in Physical Process Understanding

Moderator: Jason Cordeira (CW3E)

09:00 – 10:00 AM: NAWDIC updates and discussion
Christian Grams (KIT), Andreas Schaefer (DLR), Shira Raveh-Rubin (WIS) - virtual

10:00 – 10:30 AM: Jet stream
David Lavers (ECMWF), Ryan Torn (SUNY Albany)

10:30 – 11:00 AM: *Break*

11:00 – 11:30 AM: Dropsonde Observations of the Stable Marine Boundary Layer in Atmospheric Rivers and Decoupling from the Ocean Surface Through Downward Heat Flux
Matthew Simpson (CW3E)

11:30 – 12:00 PM: Discussion

12:00 – 1:30 PM: Lunch Break

Session 7: Forecasting and Sensitivity Strategies

1:30 – 3:00 PM: Panel Discussion on Forecasting and Sensitivity Strategies
Moderators: Chad Hecht/Jason Cordeira (CW3E)
Begin with short 5-10 minute talks from:

- *Chad Hecht/Jason Cordeira (CW3E) – Essential Atmospheric Structures*
- *Jim Doyle (NRL) – Adjoint Sensitivity - virtual*
- *Xingren Wu (NCEP) – Ensemble Sensitivity*
- *Ryan Torn (SUNY Albany) – Ensemble Sensitivity*

3:00 – 3:30 PM: *Break*

Session 8: Closing

3:30 – 4:00 PM: Open discussion and next steps
Moderators: Anna Wilson/Jason Cordeira (CW3E)