**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=WlVuYzRaRXJJa01TemptCT2ndkFQQT09  
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/arvBvXLoK

*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 Submaranian - 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)*