Workshop on Airborne Radiometry for Water Vapor and Liquid Water Retrievals
September 23-24, 2014
NCAR Foothills Laboratory

Tuesday, September 23, FL1-2198 (EOL Atrium)

9-9:15 Opening Remarks

Welcome and logistics: Julie Haggerty, Vanda Grubišić

Workshop objectives: Paquita Zuidema

National Science Foundation perspectives and interests: Linnea Avallone

Session 1: Requirements for Airborne Water Vapor and Liquid Measurements in Select Research Areas

9:15-9:35 Boundary Layer Research: Paquita Zuidema, U of Miami

9:35-9:55 Free-Tropospheric and Hurricane Research: Chris Davis, NCAR

9:55-10:15 Gravity Wave Research : Dave Fritts, CORA

Session 2: Existing Airborne Radiometry Capabilities

10:15-10:30 Existing Radiometer Capabilities on the FAAM aircraft: Stuart Fox, UK Met Office

10:30-10:45 Break

10:45-11:05 The Wyoming King Air and Mixed-Phase Clouds: Zhien Wang, U of Wyoming

11:05-11:25 Capabilities of the HAMP HALO microwave package and first results of the NARVAL campaign: Emiliano Orlandi, U of Cologne

11:25-11:40 Current and Historical Airborne Radiometer Measurements from NCAR aircraft: Julie Haggerty, NCAR

11:40-12:00 Discussion

12:00-1:00 Lunch (provided)

Session 3: Instrumentation

1:00-1:15 Overview of NSF-NCAR Airborne Platforms: Jorgen Jensen

1:15-1:35 Benefits and Drawbacks of Thermodynamics Phase and Liquid Water Path Retrievals from Passive Shortwave Spectrometry: Sebastian Schmidt, U of Colorado

1:35-1:55 Airborne G-Band Water Vapor Radiometer: James Mead, ProSensing

1:55-2:15 Profiling Radiometer for Atmospheric and Cloud Observations (PRACO): Marian Klein, BEST

2:15-2:35 Simulated Water Vapor Profile Retrievals from High-Altitude Aircraft using a 183-GHz Radiometer: William Read, Boon Lim, and Alan Tanner, JPL

2:35-2:55 Upper-troposphere and lower-stratosphere water vapor retrievals from the 1400 and 1900 nm water vapor bands: Bruce Kindel (U of Colorado), Peter Pilewskie, Sebastian Schmidt, T. Thornberry, A. Rollins, and T. Bui

2:55-3:15 High Altitude Monolithic Microwave Integrated Circuit (MMIC) Sounding Radiometer *(*HAMSR*):* Shannon Brown, JPL

3:15-3:35 break

3:35-3:55 Airborne Water Vapor Science, Radiometer Requirements and Capabilities: Al Gasiewski, U of Colorado

3:55-4:15 How the DOE ARM experience can help airborne water vapor and liquid water radiometry: Maria Cadeddu, Argonne National Lab

4:15-4:35 Ground-based microwave radiometer development: Marta Nelson, Radiometrics

4:35-5:15 Discussions

6:30 Optional group dinner (location tbd)

Wednesday, September 24, Research Aviation Facility (10802 Airport Ct., Broomfield)

8:00-8:30 Breakfast (provided)

8:30-9:30 Aircraft tour at the Research Aviation Facility (all)

9:30-12:30 Executive Committee session (invited participants only)

12:30 Adjourn