

'2nd PAZ Polarimetric Radio Occultations User Workshop'

Agenda

NOTE 1: In Asia, some times correspond to the next day, indicated as⁺¹.

NOTE 2: Remote presentations indicated in [blue](#), to check it is not too late/early for them.

DAY 1: Nov 28, 2023				
Time LA	Time EU	Time Beijing	Presenter:	Topic/Title:
Overview and updates from Agencies [chair: Joe Turk]				
7:00-7:10	16:00-16:10	23:00-23:10	M. Belló (AEE)	Opening Comments
7:10-7:30	16:10-16:30	23:10-23:30	E.Cardellach (ICE-CSIC, IEEC)	The GNSS PRO technique and in-orbit demonstration aboard PAZ
7:30-7:50	16:30-16:50	23:30-23:50	L.Cucurull (NOAA)	Evaluation and optimization of new observations under NOAA's Quantitative Observing System Assessment Program (QOSAP)
7:50-8:10	16:50-17:10	23:50-24:10	M. Murphy (GMAO, NASA)	Current utilization of GNSS-RO observations at NASA's GMAO and the potential for Polarimetric RO in the future
8:10-8:30	17:10-17:30	24:10-24:30	T. Burger (ESA)	ESA activities in support of GNSS PRO
8:30-8:40	17:30-17:40	24:30-24:40	GROUP PHOTO (both remote participants and in person)	
8:40-9:00	17:40-18:00	24:40-01:00 ⁺¹	BREAK	
Data processing status [chair: John Braun and Jan-Peter Weiss]				
9:00-9:20	18:00-18:20	01:00 ⁺¹ -01:20 ⁺¹	R. Padullés (ICE-CSIC, IEEC)	Status of the Polarimetric RO data processing at ICE-CSIC/IEEC
9:20-9:40	18:20-18:40	01:20 ⁺¹ -01:40 ⁺¹	K.-N. Wang (JPL)	JPL data processing status
9:40-10:00	18:40-19:00	01:40 ⁺¹ -02:00 ⁺¹	Doug Hunt (UCAR)	Recovery of thermodynamic RO products from PRO data
Efforts in GNSS PRO for NWP [chair: Lidia Cucurull]				
10:00-10:05	19:00-19:05	02:00 ⁺¹ -02:05 ⁺¹	E. Cardellach / R.Padullés (ICE-CSIC,	Introduction to the Multi-center exercise for PAZ NWP simulations and comparisons

			IEEC)	
10:05-10:25	19:05-19:25	02:05 ⁺¹ -02:25 ⁺¹	BREAK	
10:25-10:45	19:25-19:45	02:25 ⁺¹ -02:45 ⁺¹	M. Murphy (GMAO, NASA)	WRF Simulations of Atmospheric Rivers
10:45-11:05	19:45-20:05	02:45 ⁺¹ -03:05 ⁺¹	S.-Y. Chen (NCU)/B.Kuo (UCAR)	WRF Simulations of Tropical Cyclones
11:05-11:25	20:05-20:25	03:05 ⁺¹ -03:25 ⁺¹	R. Padullés (ICE-CSIC, IEEC)	Results of the multi-center exercise
11:25-11:45	20:25-20:45	03:25 ⁺¹ -03:45 ⁺¹	D. Hotta (JMA)/K. Lonitz (ECMWF)	GNSS PRO Forward Operator
11:45-12:05	20:45-21:05	03:45 ⁺¹ -04:05 ⁺¹	B. Johnson (UCAR/JCSDA)	JCSDA developments supporting polarimetric RO simulations for data assimilation applications
LUNCH BREAK				
13:00-14:00	21:00-22:00	04:00 ⁺¹ -05:00 ⁺¹	DISCUSSIONS: Towards the use of GNSS PRO in NWP	
17:00-?			Suggested time for enjoying dinner in small groups, various restaurants along Lake Street (see Food and Dining below), or downtown Pasadena	

DAY 2: Nov 29, 2023				
Time LA	Time EU	Time Beijing	Presenter:	Topic/Title:
Commercial GNSS PRO [chair: Ramon Padullés]				
7:00-7:20	16:00-16:20	23:00-23:20	V. Nguyen (Spire Global)	Initial polarimetric RO results from Spire's nanosatellite constellation
7:20-7:40	16:20-16:40	23:20-23:40	R. Kursinski (PlanetIQ)	Dual linear polarization GNSS RO measurements at PlanetIQ in 2024
7:40-8:00	16:40-17:00	23:40-24:00	D. Masters (Muon Space)	Muon Space satellites and payloads
Scientific Talks Part-1 [chair: Terry Kubar]				
8:00-8:20	17:00-17:20	24:00-24:20	Supported Students	What would I do with GNSS PRO data?
8:20-8:40	17:20-17:40	24:20-24:40	N. Gaussiat (Meteo-France)	Use of polarimetric observations at Météo France: state of the art and perspectives
8:40-	17:40-	24:40-	P. Kirstetter (U.	Multi-Radar Multi-Sensor (MRMS) for weather

9:00	18:00	01:00 ⁺¹	Oklahoma)	and precipitation
9:00-9:20	18:00-18:20	01:00 ⁺¹ -01:20 ⁺¹	A.Paz (ICE-CSIC, IEEC)	Co-location and validation of PAZ observations with polarimetric weather radars
9:20-9:40	18:20-18:40	01:20 ⁺¹ -01:40 ⁺¹	D. Wu (GSFC, NASA)	Ice cloud observations from mm and submm-wave radiometry/polarimetry and possible connections with PRO
9:40-10:00	18:40-19:00	01:40 ⁺¹ -02:00 ⁺¹	BREAK	
Scientific Talks Part-2 [chair: Dong Wu]				
10:00-10:20	19:00-19:20	02:00 ⁺¹ -02:20 ⁺¹	T. Emmenegger (UCLA)	An assessment of entrainment and precipitation onset over the tropical pacific in observations and CMIP6 models
10:20-10:40	19:20-19:40	02:20 ⁺¹ -02:40 ⁺¹	F.J. Turk (JPL)	Moisture in the Lower Free Troposphere and Observational Strategies for Obtaining Vertical Profiles In and Near Convection
10:40-11:00	19:40-20:00	02:40 ⁺¹ -03:00 ⁺¹	T. Kubar (JPL, UCLA)	Relationships Between Deep Convection and Tropospheric Layers Using Polarimetric Radio Occultation Data
11:00-11:20	20:00-20:20	03:00 ⁺¹ -03:20 ⁺¹	J. Katona (Yale, JPL)	Cluster analysis of PRO and liquid & ice water paths from GPM microwave data
11:20-11:40	20:20-20:40	03:20 ⁺¹ -03:40 ⁺¹	Y.-L. Chen (U. Hawaii)	Impacts of data assimilation of GPSRO and unconventional data on the prediction of a Kona Storm over the Hawaiian Islands
11:40-12:00	20:40-21:00	03:40 ⁺¹ -04:00 ⁺¹	BREAK	
12:00-12:45	21:00-21:45	04:00 ⁺¹ -04:45 ⁺¹	DISCUSSIONS: Future applications of GNSS PRO and role of commercial providers	
12:45-13:00	21:45-22:00	04:45 ⁺¹ -05:00 ⁺¹	WRAP UP AND CONCLUSIONS	
14:30-16:00			Caltech Walking Tour (for local attendees)	