

Monday 5

Dynamical & Physical Processes in ARs

Session chair: Anna Wilson

Notice: Time is relative to 1300 UTC



Moderators	Tin	Type	Abstract ID	Last Name	First Name	Institution	Abstract title
Anna Wilson & Irina Gorodetskaya	0:00	Intro Remarks		Ralph	Marty	CW3E, Scripps Institution of Oceanography, UC San Diego, USA	
	0:15	Keynote		Wernli	Heini	ETH Zurich	On the relationship between warm conveyor belts and atmospheric rivers, a dynamics perspective
	0:35	Talk/01	IARCS/013	Bosart	Lance F.	University at Albany/SUNY Department of Atmospheric and Environmental Science, State University of New York	Linked Extreme Weather Events over the Western United States during February 2019 Resulting from North Pacific Rossby Wave Breaking
	0:41	Talk/02	IARCS/011	Suchithra	Sundaram	Independent Researcher, India	The role of Indian Summer Monsoon and North West Pacific atmospheric rivers in modifying the North American Summer Monsoon
	0:47	Talk/03	IARCS/036	Weijenborg	Chris	University of Bergen, Norway	Diabatic Intensification along Atmospheric Rivers: A Pathway for Cyclone Clustering?
	0:53	Talk/04	IARCS/049	Zhang	Zhenhai	CW3E, Scripps Institution of Oceanography, UC San Diego, USA	The Influence of Antecedent Atmospheric River Conditions on Extratropical Cyclogenesis
	0:59	Talk/05	IARCS/093	Moore	Benjamin	NOAA Physical Sciences Laboratory, Boulder, Colorado, USA	Dynamics of long-duration heavy precipitation events linked to atmospheric rivers in the western and central United States
	1:05	Discussion					
	1:20	Break					
	1:25	Talk/06	IARCS/109	McMurdie	Lynn	University of Washington, Department of Atmospheric Sciences, USA	The Role of Warm Rain Processes in Atmospheric River Events during the Olympic Mountains Experiment (OLYMPEX)
	1:31	Talk/07	IARCS/028	DeLaFrance	Andrew	University of Washington, USA	Ice microphysical processes in winter storms encountering complex terrain
	1:36	Talk/08	IARCS/030	Martinez-Claros	Jose	New Mexico Institute of Mining and Technology, USA	Vorticity and Thermodynamics in a Gulf of Mexico Atmospheric River
	1:41	Talk/09	IARCS/087	Thurnherr	Iris	Institute for Atmospheric and Climate Science, ETH Zürich, Switzerland	The role of air-sea fluxes for the water vapour isotope signals in the cold and warm sector of extratropical cyclones over the Southern Ocean
	1:46	Talk/10	IARCS/113	Brugman	Melinda M.	Environment and Climate Change Canada, Canada	Sudden Shifts and Trends of Atmospheric Rivers Since the last Ice Age in the Northeastern Pacific Implied by Stable Isotopes in Precipitation
	1:51	Discussion					
2:10	Break						
Mike Warner & Raul Valenzuela	2:15	Lightning/01	IARCS/040	Goldenson	Naomi	UCLA, USA	Applying Semi-Supervised Learning to Infer Drivers Associated with West Coast Atmospheric Rivers
	2:17	Lightning/02	IARCS/116	Hosseinpour	Farnaz	Desert Research Institute, Reno, Nevada, USA	A New Look Atmospheric Rivers from an Energy Perspective
	2:19	Lightning/03	IARCS/061	De Luna	Michelle	California State University, Los Angeles Jet Propulsion Laboratory	Tropical Atmospheric Rivers
	2:21	Lightning/04	IARCS/104	Michaelis	Allison	Center for Western Weather and Water Extremes, Scripps Institution of Oceanography	Diabatic Contributions to the Formation of Mesoscale Frontal Waves and Modulation of Atmospheric River Events Along the U.S. West Coast
	2:23	Lightning/05	IARCS/001	Vicencio Veloso	Jose Miguel	Dirección Meteorológica de Chile	Analysis of an extreme precipitation event in the Atacama Desert on January 2020 and its relationship to humidity advection along the Southeast Pacific
	2:25	Lightning/06	IARCS/108	Ryoo	Ju-Mee	NASA Ames Research Center, USA	Terrain Trapped Airflows and Precipitation Variability during an Atmospheric River Event
	2:27	Lightning/07	IARCS/102	Cobb	Alison	Center for Western Weather and Water Extremes, Scripps Institution of Oceanography	Atmospheric river sectors: Definition and characteristics observed using dropsondes from 2014-2020 CalWater and AR Recon
	2:29	Lightning/08	IARCS/095	Chyhareva	Anastasiia	National Antarctic Scientific Center, Ukraine	Cloud and precipitation microphysics during atmospheric river events at the Antarctic Peninsula
	2:31	Lightning/09	IARCS/027	Walbroel	Andreas	University of Cologne, Germany	Benefit of microwave remote sensing for analysing the thermodynamic structure of Atmospheric Rivers
	2:33	Discussion					
	2:53	Transition/Closing Remarks/Break					
3:00	Break out room discussion						