

Annual Seminar 2019

Subseasonal and seasonal forecasting: recent progress and future prospects



2-5 September 2019

Monday 2 September

12:30-13:15	Registration and coffee	<i>Weather Room</i>
13:15-13:30	Welcome and opening	Andy Brown (Director of Research, ECMWF)
Session 1: Basis for predictability at the extended and seasonal range		CHAIR: Magdalena Alonso Balmaseda (ECMWF)
13:30-13:45	Introduction and arrangements	Magdalena Alonso Balmaseda (ECMWF)
13:45-14:45	The basis for predictability	Brian Hoskins (Imperial College)
14:45-15:35	Taming the butterfly effect to reach subseasonal and seasonal predictability	Roberto Buizza (Scuola Universitaria Superiore Sant'Anna Pisa)
15:35-16:00	<i>Coffee break</i>	<i>Lobby</i>
16:00-16:50	Predictability associated with teleconnections from tropical phenomena	Franco Molteni
Session 2: Physical processes, modelling and initialization requirements		CHAIRS: Tim Stockdale and Gianpaolo Balsamo (ECMWF)
16:50-17:40	The complexity of ENSO and its impacts: lessons learnt from initialized predictions	Magdalena Alonso Balmaseda (ECMWF)
17:40-18:00	Express poster presentations	
18:00	<i>Drinks and poster viewing</i>	<i>Lobby/Weather Room</i>

Tuesday 3 September

Session 2: Physical processes, modelling and initialization requirements		CHAIRS: Tim Stockdale and Gianpaolo Balsamo (ECMWF)
09:10-10:00	The Madden-Julian Oscillation	Steven Woolnough (University of Reading)
10:00-10:50	Multi-scale impacts of extratropical ocean on the atmosphere	Hisashi Nakamura (University of Tokyo)
10:50-11:20	<i>Coffee break</i>	<i>Lobby</i>

11:20-12:10	Land surface as a predictability driver in subseasonal and seasonal forecasts	Emanuel Dutra (University of Lisbon)
12:10-13:10	TBC	SteffenTietsche (ECMWF)
13:00-14:00	Lunch break	
14:00-14:50	The role of atmospheric composition in the predictability at the S2S scale	Angela Benedetti (ECMWF)
14:50-15:40	The role of the stratosphere for sub-seasonal to seasonal forecasting	Daniela Domeisen (ETH)
15:40-16:00	Coffee break	
		Lobby
16:00-16:50	Atmospheric teleconnections, the North Atlantic Oscillation and long-range forecasts of European winters	Adam Scaife (Met Office)
16:50-17:30	Poster viewing	
		Lobby/Weather Room

Wednesday 4 September

Session 3: System design		CHAIR: Frederic Vitart (ECMWF)
09:10-10:00	Seasonal forecasting systems: present and future	Tim Stockdale (ECMWF)
10:00-10:50	Multi-week/seasonal prediction for agricultural applications in Australia	Oscar Alves (BoM)
10:50-11:20	Coffee break	
		Lobby
11:20-12:10	The US Navy's extended-range prediction system with high-resolution ocean and ice models	Carolyn Reynolds (NRL)
12:10-13:00	Impacts of Assimilating NASA's Unique Observations in GEOS-S2S and the Importance of Model Complexity: Some Examples	Steve Pawson (NASA)
13:00-14:00	Lunch break	
Session 4: Detecting and exploiting skill		CHAIR: Antje Weisheimer Vitart (ECMWF)
14:00-14:50	TBC	David Stephenson (University of Exeter)
14:50-15:40	Comparing the predictability and skill of subseasonal forecasts	Timothy delSole (GMU)
15:40-16:00	Coffee break	
		Lobby
16:00-16:50	Predicting high impact weather events beyond the medium range	Laura Ferranti (ECMWF)
16:50-17:40	Ensemble subsampling in (sub-)seasonal forecasting	Joahanna Baehr (University of Hamburg)
17:40	Drinks and posters	
19:00	Seminar dinner	

Thursday 5 September

Session 5: Multi model databases for advancing science and applications		CHAIR: Laura Ferranti (ECMWF)
--	--	--------------------------------------

09:10-10:00	What did we learn from the S2S database?	Frederic Vitart (ECMWF)
10:00-10:50	Bridging the Gap between Weather and Climate using Multi-Model Ensembles	Kathleen Pegion (COLA-GMU)
10:50-11:20	<i>Coffee break</i>	<i>Lobby</i>
11:20-12:10	Seasonal forecast data and information: the providers' perspective from the Copernicus Climate Change Service	Anca Brookshaw (ECMWF)
12:10-13:00	Subseasonal and seasonal climate forecast applications	Francisco Doblas Reyes (BSC)
13:00-14:00	<i>Lunch break</i>	
14:00-14:50	Using causal discovery algorithms to evaluate Troposphere-Stratosphere linkages in reanalyses and modelling experiments	Marlene Kretschmer (PIK-Postdam)
14:50-15:40	Where our science ambitions meet computing and data handling limitations	Peter Bauer (ECMWF)
15:40	Adjourn	