Workshop on Predictability, dynamics and applications research using the TIGGE and S2S ensembles

#TIGGEandS2S

2 - 5 April 2019

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All times are BST

Programme

Tuesday, 2 April 2019		
13:15-13:45	***Registration***	***Weather Room***
13:45-14:15	Introduction	Florian Pappenberger (ECMWF)
Session 1	**Predictability and dynamics**	**Chair - John Methven (University of Reading)**
14:15-14:45	Flow-dependent predictability of wintertime Euro-Atlantic weather regimes in medium-range forecasts	Mio Matsueda (Center for Computational Sciences, University of Tsukuba)
14:45-15:15	The role of stratosphere-troposphere coupling in sub-seasonal to seasonal prediction using the S2S database	Andrew Charlton-Perez (University of Reading)
15:15-15:30	Stratospheric influences on subseasonal predictability of European energy-industry-relevant parameters	Dominik Büeler (Karlsruhe Institute of Technology)
15:30-16:00	***Coffee break***	**Weather Room**
Session 1 continued	**Predictability and dynamics**	**Chair - Frederic Vitart (ECMWF)**
16:00-16:15	Understanding predictability of the MJO in S2S enesemble	Shuyi Chen (University of Washington)
16:15-16:30	MJO Impact on Temperature Extremes over Australia during Austral Spring	Harry Hendon (Bureau of Meteorology)

16:30-16:45	Extratropical predictability from the Quasi-Biennial Oscillation and the MJO in S2S models	Chaim Garfinkel (Hebrew University)
16:45-17:00	Intra-seasonal and Seasonal Variability of the Northern Hemisphere Extra-tropics	Cristiana Stan (GMU)
17:00-17:15	Subseasonal Forecast Skill over the Northern Polar Region in Three Operational S2S Systems	Hai Lin (Environment and Climate Change Canada)
17:15-19:15	***Posters and drinks reception***	**Lobby/Weather Room**
Wednesday, 3 April 2019		
Session 2	**Database Technical Development**	**Chair - Richard Mladek (ECMWF)**
09:00-09:25	The technical development of the TIGGE and S2S databases	Manuel Fuentes (ECMWF)
09:25-09:45	TIGGE and S2S status and developments at CMA	Xing Hu and FeiFei Yang (China Meteorological Administration)
09:45-10:15	The S2S Data Base in IRI Data Library: Maprooms and online analysis tools	Andrew Robertson (International Research Institute for Climate and Society)
10:15-10:30	Ensemble forecasting at ECMWF	Martin Leutbecher (ECMWF)
10:30-10:45	The global ICON-EPS: a contribution to TIGGE?	Michael Denhard (Deutscher Wetterdienst)
10:45-11:45	***Coffee break***	**Weather Room**
Session 2 continued	**Database Technical Development**	**Chair - Manuel Fuentes (ECMWF)**
11:45-12:00	An Assessment of Predictability and Prediction of NCEP GEFS for Subseasonal Forecast	Yuejian Zhu (EMC/NCEP/NWS/NOAA)
12:00-12:15	Using the S2S Database to Evaluate the Performance of the Navy Earth System Prediction Capability (ESPC) Ensemble	Matthew Janiga (Naval Research Laboratory)
Session 3	**Prediction and verification**	**Chair - Manuel Fuentes (ECMWF)**
12:15-12:45	Receiver Operating Characteristic (ROC) curves	Tilmann Gneiting (Heidelberg Institute for Theoretical Studies)
12:45-13:00	A verification framework for South American sub-seasonal precipitation predictions	Caio Coelho (CPTEC/INPE)
13:00-14:00	***Lunch break***	

Session 3 continued	Prediction and verification	Chair - Laura Ferranti (ECMWF)
14:00-14:15	Spread of global 2-meter temperature analyses: disentangling forecast systematic errors from mis-estimation of ensemble spread	Tom Hamill (NOAA ESRL PSD)
14:15-14:30	Use of TIGGE/Global Ensembles in Tropical Cyclone Research and Operational Forecasts	Helen Titley (Met Office)
14:30-14:45	Achieving seamless verification across sub-seasonal time scales from weather to climate	Paul Dirmeyer (George Mason University)
14:45-15:00	Uncertainties in Extended-Range Precipitation Forecasts: Model Biases or Predictability Limits	Mingyue Chen (Climate Prediction Center/NCEP/NWS/NOAA)
15:00-15:15	Ensemble Prediction and Predictability of Extreme Weather via Circulation Regimes	Kathleen Pegion (George Mason University)
15:15-15:45	***Coffee break***	**Weather Room**
Session 3 continued	**Prediction and verification**	**Chair - David Richardson (ECMWF)**
15:45-16:00	Ensemble forecasts for the midlatitudes on sub-seasonal time scales (10-60 days): exploring new products for predicting Atlantic-European weather regimes	Christian M. Grams (IMK-TRO, Karlsruhe Institute of Technology (KIT))
16:00-16:15	Prospects for subseasonal sea ice prediction at both poles	Lorenzo Zampieri (Alfred Wegener Institute)
16:15-16:30	Assessment of prediction skill for sub-seasonal rainfall variability over Brazil in ensemble-based prediction systems	Amulya Chevuturi (NCAS)
16:30-16:45	Predicting Sudden Stratospheric Warming 2018 and its Climate Impacts with a Multi-Model Ensemble	Alexey Karpechko (Finnish Meteorological Institute)
16:45-17:00	A zonal component of monsoons and the variability in the strength of the Madden-Julian Oscillation events	Samson Hagos (Pacific Northwest National Laboratory)
17:00-19:00	Poster session	
19:00-21:00	***Workshop dinner***	**ECMWF Restaurant**

Thursday, 4 April 2019		
Session 4	**Prediction and Verification Multi-model approaches to prediction**	**Chair - Craig Bishop (NRL)**
09:00-09:30	Ensemble Tropical Cyclone Forecast Performance and Prediction of Ensemble Forecast Error	James Goerss (SAIC, NRL Monterey)
09:30-10:00	Multi-model Prediction on Subseasonal Timescales at the US NOAA Climate Prediction Center: Approaches to Calibration and the Identification of Forecasts of Opportunity	Daniel Collins (NOAA Climate Prediction Center)
10:00-10:15	Isotonic Distributional Regression (IDR): A powerful nonparametric calibration technique	Johanna Ziegel (University of Bern)
10:15-10:30	A Bayesian framework for postprocessing multi-ensemble weather forecasts	Clair Barnes (Department of Statistical Science, University College London)
10:30-10:45	Benefits of a multimodel approach for forecasting precipitation over New Caledonia (SW Pacific) at S2S timescales	Damien Specq (Météo-France)
10:45-11:15	***Coffee break***	**Weather Room**
Session 4 continued	**Prediction and Verification Multi-model approaches to prediction**	**Chair - Mark Rodwell (ECMWF)**
11:15-11:30	Subseasonal Prediction of European Summer Heat Waves in the S2S Hindcast Ensembles	Ole Wulff (ETH Zurich)
11:30-11:45	Experimental subseasonal forecasting of atmospheric river variations for western N. America during Winters 2017-2018 and 2018-2019	Michael DeFlorio (Center for Western Weather and Water Extremes)
Session 5	**Application studies**	**Chair - Mark Rodwell (ECMWF)**
12:00-12:30	Quantifying and attributing predictable signals on sub-seasonal timescales	Dan Rowlands (Citadel)
12:30-12:45	Digiscape: A one-platform solution for seasonal climate integration into Agriculture.	Jaclyn Brown (CSIRO Agriculture and Food)
12:45-13:00	A flood alert system for Switzerland based on integrated water vapor fluxes	Jonas Bhend (MeteoSwiss)
13:00-14:00	***Lunch break***	
14:00-14:15	***Description of working groups***	***Lecture Theatre***
14:15-15:30	***Working groups***	

15:30-16:30	***Posters and coffee break***	**Lobby/Weather Room**
16:30-18:00	***Working groups***	
Friday, 5 April 2019		
Session 5 continued	**Application studies**	**Chair - Andrew Robertson (IRI)**
09:00-09:30	Transmuting S2S forecasts into applications	Ángel G. Muñoz (IRI - Columbia University)
09:30-09:45	The S2S4E project, sub-seasonal to seasonal climate predictions for energy	Andrea Manrique-Suñén (Barcelona Supercomputing Center)
09:45-10:00	Drought Monitoring and Prediction Using Sub-Seasonal Predictions	Yuhei Takaya (MRI/JMA)
10:00-10:15	Developing capacity of Southeast Asian countries to apply subseasonal-to-seasonal forecasts in impact forecasting tools	Thea Turkington (Meteorological Service Singapore)
10:15-10:30	Subseasonal forecasting for the telecommunication network	David Brayshaw (University of Reading)
10:30-11:00	***Coffee break***	**Weather Room**
11:00-12:00	***Working groups***	
12:00-13:00	***Plenary session***	***Lecture Theatre***