

AGENDA OVERVIEW

	Tuesday 18th	Wednesday 19th	Thursday 20th	Friday 21st
	Operational Centre's plans	Methods	Climate and reanalysis applications	Non atmos/ocean coupling
8h45	Registration	Introduction	Introduction	Introduction
9h		Travis Sluka U. of Maryland	Robert Tardif Univ. of Washington	Mark Buehner Env Canada
9h15	Welcome by Marc Pontaud CNRM			
9h30	Estelle De Coning WMO	Alicia Karspeck NCAR	Shuheii Masuda JAMSTEC	Clara Draper NASA
9h45	Tom Hamill NOAA			
10h	Patrick Laloyaux ECMWF	Sergey Frolov NRL	Xiasong Yang GFDL	Christoph Keller NASA
10h15				Akhilesh Nair IIT
10h30	Xingren Wu NCEP	Andrea Storto CMCC	Francois Counillon NERSC/ U of Bergen	Ayansina Ayanlade O A U
10h45		Aneesh Subramanian U. of Oxford		Virendra Goswami IIT
11h	coffee break	coffee break	coffee break	coffee break
11h15	Yosuke Fujii JMA	Teams break out: Methods, Modeling, and Error Estimation	Teams break out: "Prediction and Reanalysis"	Teams break out: "Observations, Metrics, and Software"
11h30	Yonghong Yin BOM			
11h45	Daniel Lea UK MetOffice			
12h	lunch			
12h15	lunch	lunch	lunch	lunch
12h30	lunch	lunch	lunch	lunch
12h45	lunch	lunch	lunch	lunch
13h45	lunch	Daniel Lea U.K. Met Office	afternoon introduction	afternoon introduction
14h	Santha Akella NASA	Craig Bishop NRL	Malaquias Peña NCEP	Plenary Discussion: "Review of Team Breakout Session, workshop recommendations for metrics and future software design"
14h15		Xiangbo Feng Univ. of Reading	Hiroaki Tatebe JAMSTEC	
14h30		Polly Smith Univ. of Reading	Yiguo Wang NERSC	
14h45		Arthur Vidard INRIA	James While UK MetOffice	
15h	coffee break	coffee break	coffee break	coffee break
15h15	coffee break	coffee break	coffee break	coffee break
15h30	Nancy Collins NCAR	Amos Lawless Alison Fowler U. of Reading	Sebastian Brune U. of Hamburg	Plenary Discussion: "Review of TPOS-2020, and workshop recommendations for future observing system design"
15h45		Naila Raboudi KAUST	Hugues Goosse U. Cath. de Louvain	
16h	Fei Zheng	Lars Nerger Alfred Wegener Institute	Renping Lin IAP	End of workshop
16h15		Matthew Carrier NRL	Kuan-Jen Lin Nat. Central U.	
16h30	Discussion introduction	Discussion introduction	Discussion introduction	
16h45	Plenary Discussion: "Gaps in the overall science for effective Coupled Data Assimilation."	Plenary Discussion: "Review of Team Breakout Sessions, workshop recommendations for future modeling and data assimilation systems."	Plenary Discussion: "Review of Team Breakout Session, workshop recommendations for future prediction and reanalysis systems."	
18h				



PROGRAMME

Tuesday 18 October 2016

Operational Centre's plans

8h45-09h15	Registration
9h15-09h30	Welcome by Marc Pontaud
9h30-9h45	Estelle De Coning: WMO World Weather Research Programme strategic plans for 2016-2023.
9h45-10h00	Tom Hamill: World Meteorological Organization Interests in Coupled Data Assimilation
10h00-10h30	Patrick Laloyaux: CERA-20C: The ECMWF coupled assimilation system for climate reanalysis
10h30-11h00	Xingren Wu: Development of the NCEP Unified Global Coupled System for Weather and Climate Prediction
11h00-11h15	coffee break
11h15-11h45	Yosuke Fujii: Development of a Coupled Atmosphere-Ocean Data Assimilation System in JMA/MRI
11h45-12h15	Yonghong Yin: The Bureau of Meteorology Coupled Data Assimilation System for ACCESS-S
12h15-12h45	Daniel Lea: Met Office implementation of a demonstration operational weakly coupled DA system
12h45-14h00	lunch
14h00-14h30	Santha Akella: Skin SST assimilation using GEOS-ADAS
14h30-14h45	Craig Bishop: The Local Ensemble Tangent Linear Model: an enabler for coupled model 4DVAR
14h45-15h00	Hans Ngodok: Development of a coupled Atmosphere-Ocean 4DVAR system
15h00-15h30	coffee break
15h30-16h00	Nancy Collins: A Generic Implementation of Strongly-Coupled Assimilation in the Data Assimilation Research Testbed Community Facility
16h00-16h30	Fei Zheng: Improved ensemble-mean forecasting of ENSO events by a zero-mean stochastic error model of an intermediate coupled model
16h30-16h45	Discussion introduction
16h45-18h00	Plenary discussion: "Gaps in the overall science for effective Coupled Data Assimilation."
18h00-20h00	Icebreaker - Courtesy of Centre National de Recherches Météorologiques

Wednesday 19 October 2016

	Methods
8h45-09h00	Introduction
9h00-09h30	Travis Sluka: A strongly coupled ocean-atmosphere EnKF for the Climate Forecasting System v2
9h30-10h00	Alicia Karspeck: The CESM-DART ocean-atmosphere ensemble coupled data assimilation system in weakly and strongly coupled configurations.
10h00-10h30	Sergey Frolov: Is interface solver a way forward for complex coupled systems?
10h30-10h45	Andrea Storto: Strongly coupled data assimilation experiments with a full OGCM and an atmospheric boundary layer model: preliminary results
10h45-11h00	Aneesh Subramanian: Tropical climate variability and model error estimation in a weakly coupled data assimilation system (DART/CESM)
11h00-11h30	coffee break
11h30-12h30	Teams break out : Methods, Modeling, and Error Estimation
12h30-13h45	lunch
13h45-14h00	Daniel Lea: Large-scale error covariances for the ocean component of historical coupled reanalysis
14h00-14h15	Craig Bishop: The Local Ensemble Tangent Linear Model: an enabler for coupled model 4DVAR
14h15-14h30	Xiangbo Feng: Ensemble spreads and coupled error covariances at different time scales from CERA-20C
14h30-14h45	Polly Smith: An ensemble-variational data assimilation approach for the estimation of coupled atmosphere-ocean forecast error covariances
14h45-15h00	Arthur Vidard: Improving coupled model solution mathematical consistency through data assimilation.
15h00-15h30	coffee break
15h30-15h45	Amos Lawless, Alison Fowler: Coupled atmosphere-ocean variational data assimilation in the presence of model error
15h45-16h00	Naila Raboudi: Ensemble Kalman Filtering with One-Step-Ahead Smoothing for Efficient Data Assimilation into One-Way Coupled Models
16h00-16h15	Lars Nerger: Building Ensemble-Based Data Assimilation Systems for Coupled Models
16h15-16h30	Matthew Carrier: Coupled Ocean-Acoustic Adjoint Sensitivity: Implications for Coupled DA
16h30-16h45	Discussion introduction
16h45-18h00	Plenary discussion: "Review of Team Breakout Sessions, workshop recommendations for future modeling and data assimilation systems."

Thursday 20 October 2016

Climate and reanalysis applications	
8h45-09h00	Introduction
9h00-9h30	Robert Tardif: A multiple timescale coupled atmosphere-ocean data assimilation strategy
9h30-10h00	Shuhei Masuda: Interannual-to-pentadal climate prediction by using a four-dimensional variational coupled data assimilation system
10h00-10h30	Xiasong Yang: A coupled data assimilation system with assimilating surface pressure data
10h30-11h00	Francois Counillon: The Norwegian Climate Prediction Model for seasonal-to-decadal time scale: from weakly to strongly coupled ocean and sea-ice data assimilation
11h00-11h30	coffee break
11h30-12h30	Teams break out: "Prediction and Reanalysis"
12h30-13h45	lunch
13h45-14h00	afternoon introduction
14h00-14h15	Malaquias Peña: EnKF perturbations in coupled models for subseasonal predictions
14h15-14h30	Hiroaki Tatebe: Centennial climate reanalysis using a climate model MIROC with LETKF system
14h30-14h45	Yiguo Wang: Weakly coupled assimilation of temperature and salinity profiles into the Norwegian Climate Prediction Model with ensemble data assimilation
14h45-15h00	James While: Variational bias correction of Sea Surface Temperature observations for coupled data assimilation
15h00-15h30	coffee break
15h30-15h45	Sebastian Brune: Weakly coupled assimilation for decadal prediction with MPI-ESM
15h45-16h00	Hugues Goosse: Southern Ocean variability over the last centuries in coupled data assimilation experiments with particle filtering
16h00-16h15	Renping Lin: Applications of ocean data assimilation into a coupled climate model to East Asian summer monsoon simulations
16h15-16h30	Kuan-Jen Lin: Impact of air-sea interaction on TC forecast: A case study of typhoon Fanapi 2010
16h30-16h45	Discussion introduction
16h45-18h00	Plenary Discussion: "Review of Team Breakout Session, workshop recommendations for future prediction and reanalysis systems."
20h00-22h30	Conference diner at the Cardailhac Restaurant, 21 Rue Perchepinte, 31000 Toulouse (Courtesy of ERACLIM2)



Friday 21 October 2016

Non atmos/ocean coupling

8h45-09h00	Introduction
9h00-9h30	Mark Buehner: Sea Ice Data Assimilation for Coupled Prediction at ECC
9h30-10h00	Clara Draper: Incorporating land surface observations into reanalyses: NASA GMAO's MERRA-2, and beyond
10h00-10h15	Christoph Keller: Development of a multispecies data assimilation framework for tropospheric chemistry in the NASA GEOS-5 model
10h15-10h30	Akhilesh Nair: Coupling Radiative Transfer Observation Operator with Land Surface Model for Assimilating Microwave Tb over India
10h30-10h45	Ayansina Ayanlade: Remote sensing data application in assessing seasonality land surface temperature in tropical cities
10h45-11h00	Virendra Goswami: Development of computational correlation predicting models (ccpm) for detoxification of green house gases through physico_chemical properties of solid catalysts'.
11h00-11h30	coffee break
11h30-12h15	Teams break out: "Observations, Metrics, and Software"
12h30-13h45	lunch
13h45-14h00	afternoon introduction
14h00-15h00	Plenary Discussion: "Review of Team Breakout Session, workshop recommendations for metrics and future software design"
15h00-15h15	coffee break
15h15-16h00	Plenary Discussion: "Review of TPOS-2020, and workshop recommendations for future observing system design"
16h00-16h15	End of workshop

POSTERS

Benjamin MENETRIER (CNRM): Optimized localization to filter ensemble-based covariances, applied to a coupled system.

Patricia de Rosnay (ECMWF): ECMWF land-atmosphere weakly coupled assimilation for Numerical Weather Prediction: status and perspectives.

Linlin Qi (IAM): Application Studies of Using "HY-2" Altimeter Wave Data in Ensemble Optimal Interpolation Method.

Eric de Boisseson (ECMWF): Evolution of the ocean in the CERA-20C coupled climate reanalysis.

Takashi Mochizuki (JAMSTEC): Multiyear climate prediction with initialization- based on 4D-Var coupled data assimilation.

Jean-Francois Mahfouf (CNRM): Current practice at Météo-France on land data assimilation for Numerical Weather Prediction.

Olivier Coopmann (CNRM): Towards a strengthening of the coupling of Numerical Weather Prediction (NWP) and Chemistry Transport Models (CTM) to improve the retrieval of thermodynamic fields from infra-red passive sounders.