

ECMWF/ H-SAF and HEPEX Workshops on coupled hydrology

3-7 November 2014



Programme

H-SAF WORKSHOP

Monday 3 November 2014

13:00-13:40	Registration	
13:30-13:40	Workshop information	Patricia de Rosnay and Clement Albergel (ECMWF)
13:40-13:50	Welcome	Jean-Noel Thépaut (ECMWF)
13:50-14:05	Welcome H-SAF Project Manager	Luigi De Leonibus (CNMCA)
14:05-14:35	H-SAF and link to EUMETSAT satellite programme	Lothar Schueller (EUMETSAT)

Soil Moisture Session

Chairs: Joaquín Muñoz Sabater (ECMWF) and Sebastian Hahn (TU Wien)

14:35-15:05	The role of soil moisture for land surface-atmosphere interaction processes	Bob Su (University of Twente)
15:05-15:35	Information Content of ASCAT Soil Moisture Data	Wolfgang Wagner (GEO/TU Wien)
15:35-16:30	<i>Coffee break and posters</i>	
16:30-17:00	Impact of different resampling methods on soil moisture and preparations for the SCA instrument	Sebastian Hahn (TU Wien)
17:00-17:30	Assimilation of H-SAF soil moisture products for hydrological modelling in Mediterranean catchments	Christian Massari (CNR/IRPI)
17:30-18:00	Cross validation of satellite product over France through their integration into a land surface model	Jean-Christophe Calvet (Météo-France)
18:00-19:00	<i>Ice-Breaker</i>	

Tuesday 4 November 2014

Soil Moisture Session continued

09:00-09:30	Global monitoring of root zone soil moisture from scatterometer data assimilation : methodology and validation	Clément Albergel (ECMWF)
09:30-10:00	Assimilation of satellite soil moisture data in a distributed hydrological model: impact on the hydrological cycle in some Italian basins	Simone Gabellani (CIMA foundation)
10:00-11:00	Coffee break and posters	

Precipitation Session**Chairs: Alan Geer (ECMWF), Chris Kidd (GSFC) and Francesco Zauli (CNMCA)**

11:00-11:30	Estimating precipitation from surface and satellite systems: managing expectation	Chris Kidd (NASA/GSFC, University of Maryland)
11:30-12:00	Passive microwave precipitation retrieval: potentials, challenges, and future perspectives within H-SAF	Giulia Panegrossi (ISAC - CNR Institute of Atmospheric Sciences and Climate)
12:00-12:30	H-SAF Passive microwave precipitation retrieval algorithms: current status overview and analysis of results	Paolo Sanò (CNR-ISAC)
12:30-13:00	The H-SAF future developments on Convective Precipitation Retrieval	Davide Melfi (CNMCA)
13:00-14:00	Lunch Break	
14:00-14:30	Assimilating precipitation-related observations into global NWP models	Alan Geer (ECMWF)
14:30-15:00	The activity of validation	Gianfranco Vulpiani (Department of Civil Protection)
15:00-15:30	Hydrological validation of H-SAF Precipitation Product on Polish basins from different regions (lowland, upland, mountainous catchments)	Michal Kasina (Institute of Meteorology and Water Management)
15:30-16:00	Coffee Break. Optional visit of computer hall.	
16:00-16:30	Hydrological validation of H-SAF Precipitation Products -Case study Mai/June flood 2013 in Central Europe	Peter Krahe (Federal Institute of Hydrology)
16:30-17:00	The use of HSAF products in Weather Warning System	Massimiliano Morucci (Italia Air Force - National Weather Service)
17:00-17:30	Introduction of radar data quality control procedure in Poland and its impact on validation of H-SAF precipitation products	Bozena Lapeta (IMGW)
17:30-18:00	HSAF GV network systems	Federico Porcù (UniFe)
19:30	Workshop dinner offered by ECMWF	

Wednesday 5 November 2014

Snow Session

Chair: Matias Takala (FMI) and Anton Beljaars (ECMWF)

09:00-09:30	Outlook for satellite-derived snow products	Edward Kim (NASA)
09:30-10:00	Current state of snow remote sensing observations, future direction and remaining challenges	Melody Sandells (Reading University)
10:00-10:30	Ensemble Stream Flow Forecasts through the Data Assimilation of H-SAF Snow Products	Aynur Sensoy (Anadolu University)
10:30-11:00	Coffee Break	
11:00-11:30	Using satellite-derived snow information in NWP: assessing products for assimilation into the Met Office UK forecasting model	Samantha Pullen (UKMO)
11:30-12:00	The use of H-SAF snow products on mountainous areas	Zuhal Akyürek (Middle East Technical University)
12:00-12:30	H-SAF Snow products and their use in applications	Matias Takala (FMI)
12:30-13:00	ECMWF Snow data assimilation	Patricia de Rosnay (ECMWF)
13:00-14:00	Lunch Break	

Joint H-SAF HEPEX session

Chairs: Davide Melfi (CNMCA) and Florian Pappenberger (ECMWF)

14:00-14:15	HEPEX introduction to H-SAF	Fredrik Wetterhall (ECMWF)
14:15-14:45	Use of HSAF in HEPEX system (The European Flood Awareness System)	Peter Salamon (JRC)
14:45-15:15	H-SAF introduction to HEPEX	Flavio Gattari (Telespazio)
15:15-15:45	Coffee Break. Optional visit of computer hall.	
15:45-16:15	Assimilation of H-SAF Snow Water Equivalent and Soil Moisture products into the rainfall-runoff model HBV	Dmytro Lisniak (BfG)
16:15-16:45	Agricultural Drought Monitoring based on remote sensing data and the use of ECMWF data to support FAO Global Information and Early Warning System (GIEWS)	Oscar Rojas (Food and Agriculture Organization of United Nations (FAO))

Thursday 6 November 2014

Joint H-SAF HEPEX session

09:00-09:30	WMO's Expectations on Applications of Satellite Information to Hydrology and Water Resources	Julius Wellens-Mensah (WMO)
09:30-10:00	Assimilating H-SAF Snow Product Data (snow coverage, snow water equivalent and soil moisture) into a rainfall-runoff conceptual model	Dirk Schwanenberg (University Duisburg-Essen and Deltares)
10:00-10:20	The value of hydrological ensemble predictions for reservoir inflow management	Maria-Helena Ramos (IRSTEA)
10:20-10:50	<i>Coffee break</i>	
10:50-11:10	Improved understanding of flood extremes	Hannah Cloke (Reading University, FRIEND network)
11:10-12:10	Sessions summary and concluding H-SAF workshop	

HEPEX Workshop**Chair: Maria-Helena Ramos (IRSTEA)**

14:10-14:30	Current and future developments in high resolution ensemble forecasting at the Flood Forecasting Centre	Adrian Wynn (Flood Forecasting Centre, Met Office)
14:30-15:00	Assimilation of snow data in ensemble streamflow prediction	Kristie Franz (Iowa State University)
15:00-15:30	Snow assimilation for river streamflow	Yuqiong Liu (NASA)
15:30-16:00	<i>Coffee Break and posters. Optional visit of computer hall.</i>	
16:30-17:00	Assimilation of satellite observations into hydrological forecasting	Albert van Dijk (Australian National University)
17:00-17:30	Calibration in hydrology	Luis Samaniego (Helmholtz Centre for Environmental Research – UFZ)

Friday 7 November 2014

Chair: Kristie Franz (Iowa State University)

09:00-09:30	Post-processing ECMWF precipitation and temperature ensemble reforecasts for operational hydrologic forecasting at various spatial scales	Jan Verkade (i. Deltares; ii. Rijkswaterstaat River Forecasting Service iii. Delft University of Technology)
09:30-10:00	Operational hydrometeorological forecasting activities of the Australian Bureau of Meteorology	Tom Pagano (Australian Bureau of Meteorology)
10:30-11:30	<i>Coffee Break and posters</i>	
11:30-12:00	Data assimilation of flood inundation	Patrick Matgen (Lippmann)
12:00-12:30	OpenDA/Discharge assimilation	Albrecht Weerts (Deltares)
12:45	<i>Lunch and departure</i>	