Joint International Surface Working Group and Satellite Applications Facility on Land Surface Analysis Workshop

IPMA, Lisbon, 26-28 June 2018

Program

26 Jun		
14:00	**Opening - Welcome & Objectives of Workshop**	
Session 1: Selected Topical Talks		
14:10	Camille Birman	Recent developments on land surface analysis for NWP at Météo France
14:30	Martin Lange	Developments in surface analysis schemes at DWD .
14:50	Sujay Kumar	Characterizing the systematic and random errors in soil moisture estimates from land surface models and satellite retrievals
15:10	***Coffee Break***	
15:40	Na-Yeon Park presented by: Jun-Dong Park	Current Status and Future plan of KMA Satellite Products for Hydrology Applications
16:00	Joaquín Muñoz-Sabater	ERA5-Land: an improved version of the ERA5 reanalysis land component
16:20	Isabel Trigo	LSA-SAF: now and in the future.
16:50	**Plenary 1: Goals for ISWG**	
17:00	**Poster Session & Welcome Drinks**	
18:30	**Adjourn**	

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Session 2: Land Surface Modeling and Assimilation		
9:00	Clement Albergel	ERA-5 and ERA-Interim driven ISBA land surface model simulations and reanalysis: Which one performs better?
9:20	Gianpaolo Balsamo	Review of satellite-based remote sensing and in-situ observations to inform Earth Surface Modelling
9:40	Emanuel Dutra	Land surface downscaling using a spatially and temporally varying lapse rate
10:00	***Coffee Break & Continued Poster Viewing***	
10:30	Min Huang	Improving air quality modeling on process level via better representation of the land surface states
10:50	Yasutaka Ikuta	Assimilation of Satellite Soil Moisture Content in Operational Local NWP System at JMA
Session 3: Assimilation Methods		
11:10	Jean-Christophe Calvet	Sequential assimilation of Copernicus vegetation products for better constraining soil-plant parameters and variables in the ISBA land surface model
11:30	Yohei Sawada	Ecohydrological Land Analysis: Assimilating satellite microwave observations into a land surface model to simultaneously simulate soil moisture and vegetation dynamics
11:50	Tomas Landelius	Towards a 3D EnKF for surface data assimilation of raw satellite radiances
12:10	***Lunch & Group Photo***	
13:10	Cristina Lupu	Surface skin temperature and its impact on satellite data assimilation at ECMWF
13:30	Samantha Pullen	Land surface data assimilation at the Met Office and developments in snow depth analysis
13:50	Zied Sassi	Study of satellite observations synergy in order to improve surface temperature in NWP
Session 4: Climate Services and User Requirements		
14:10	Gabriel Lellouch	Long-term archives of land surface albedo products through the EUMETSAT/LSA-SAF: product portfolio and project development plans
14:30	Javier García-Haro	The LSA-SAF vegetation suite: FVC, LAI and FAPAR
14:50	Frank-Michael Goettsche	Derived Land Surface Temperature (DLST) product for MSG/SEVIRI
15:10	***Coffee Break & Poster Viewing***	
15:30	Benjamin Bechtel	The full temperature cycle – towards a combined annual and diurnal temperature model
15:50	Bostjan Muri	Usage of LSA SAF Products for Expert End-Users and Their Potential Applications in Specific Weather Situations
16:10	Carlos Jimenez	All-weather land surface temperature estimates from microwave satellite observations, over several decades and real time: methodology and comparison with infrared estimates

16:30	Elizabeth Good	The EUSTACE project: delivering global, daily information on surface air temperature
16:50	Maria Jose Escorihuela	Low Frequency Passive Microwave User Requirement Consolidation Study
17:10	Darren Ghent	Lessons learned from ESA Due GlobTemperature and plans for ESA LST CCI
17:30	**Plenary 2: Requirements for Climate and Assimilation Science**	
18:00	**Adjourn**	

20:00	**Workshop Dinner**

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Session 5: Soil moisture, surface fluxes, radiative products		
9:00	Susanne Mecklenburg	The contribution of L-band observations to characterising land-atmosphere interactions
9:20	Moritz Link	Comparison of SMOS, SMAP, ASCAT and AMSR2 Level-1 data in terms of their soil moisture information content
9:40	Rolf Reichle	Improving the SMAP Level-4 Soil Moisture Product: The Good, the Bad, and the Ugly
10:00	***Coffee Break & Poster Viewing***	
10:30	Jostein Blyverket	Towards creating a ESA CCI Level 4 root zone soil moisture product using land surface data assimilation
10:50	Nicolas Ghilain	LSA-SAF ET&SF – version 2: an improved monitoring of evapotranspiration & surface heat fluxes thanks to the assimilation of vegetation and land surface temperature
11:10	Kaniska Mallick	Evapotranspiration mapping across an aridity gradient in conterminous US by combining thermal remote sensing with Penman-Monteith and Shuttleworth-Wallace model
11:30	***Lunch***	
Session 6: Land surface temperature, Forward Modeling and Emissivity		
12:50	Chu-Yong Chung	Surface products of GK-2A
13:10	Bob Su	Microwave observation and modelling of radiative and heat-water transfer processes on the Tibetan Plateau
13:30	Tim Hultberg	A linear programming (LP) approach to the retrieval of hyperspectral infrared surface emissivity
13:50	**Plenary 3: Coordination of Land Observations & Workshop Closing**	
14:40	**End of Workshop**	

Posters

P1	Caglar Kucuk	Towards Understanding Dynamics between Vegetation and Secondary Water Resources in Semi-Arid Regions via Remote Sensing
P2	Joseph Santanello	The Importance and Current Limitations of Planetary Boundary Layer (PBL) Retrieval from Space for Land-Atmosphere Interactions Studies
P3	David Stevens	Land surface model performances with high resolution earth observation data
P4	Emanuel Dutra	Impact of snow data assimilation on river discharge
P5	Donghyun Jin	The Snow/Sea-ice detection based Dynamic Wavelength Warping method using Himawari-8/AHI data
P6	Jae-Hyun Ryu	Evaluation of drought impact under different agricultureal managements in South and North Korea using satellite remote sensing
P7	Kyeong-Sang Lee	Estimation of Land Surface Albedo from Himawari-8/AHI data
P8	Kyung-Ae Park	Development of Sea Surface Temperature Retrieval Algorithm for Geo-KOMPSAT-2A/Advanced Meteorological Imager
P9	Kyung-Ae Park	Development of Sea Surface Currents Retrieval Algorithm for Geo-KOMPSAT-2A/Advanced Meteorological Imager
P10	Young-Heon Jo	Four Potential Observations of Ocean Environment Changes Using GK-2A
P11	Anke Duguay-Tetzlaff	Regional Land Fluxes TCDR within the EUMETSAT Climate Monitoring SAF: Surface Radiation Budget
P12	José Miguel Barrios	Daily Evapotranspiration at sub-kilometer spatial resolution by combining surface energy balance modelling and statistical downscaling
P13	Alirio Arboleda	An improved version of the LSA-SAF evapotranspiration and new surface heat fluxes products
P14	Chloe Vincent	Evolution of the LSA-SAF surface albedo products derived from METOP/AVHRR and MSG/SEVIRI
P15	Gabriel Lellouch	Recent advances in the retrieval of solar surface irradiance from EUM satellite data in the LSA-SAF project
P16	Javier García-Haro	Operational LSA SAF 10-day SEVIRI/MSG GPP product (MGPP): overall performance and inter-comparison with similar products
P17	João Paulo Martins	All weather LST product comparison
P18	Freya Aldred	Climate change and Urban Heat Islands
P19	Youn-Young Choi	Development of GK-2A land surface temperature retrieval algorithm using Himawari-8/AHI
P20	Robert Knuteson	A new global infrared emissivity dataset: Combined ASTER MODIS Emissivity of Land (CAMEL)
P21	Virgílio Bento	An assessment of the contribution of moisture (VCI) and temperature (TCI) condition to vegetation health index (VHI)
P22	Weidong Xu	Major advance in geostationary fire radiative power (FRP) retrieval over Asia and Australia stemming from use of Himawari-8 AHIm
P23	Julia Stoyanova	Joint use of Meteorological Modeling and LSA SAF products for diagnoses and forecast of vegetation state and fire danger over South-eastern Europe
P24	Chris Mannaerts	ITC experiences with LSASAF data steam uses in the African education and research context.
P25	Maria José Monteiro	An Iberian tailor-made operational high-resolution hourly near-surface analysis using the ALADIN system


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