

## SUW2017 PROGRAM

Monday February 27<sup>th</sup>

14:00 – 14:30 Registration

14:30 – 14:40 Welcome by **Philippe Bougeault**, Météo-France

14:40 – 14:45 **Patrick Le Moigne**. Practical aspects

14:45 – 15:00 **Patrick Le Moigne**. Introduction to SURFEX

Session 1: SURFEX in an NWP environment for short term to seasonal forecasting

**Convener Jean-François Mahfouf**

15:00 – 15:20 **Patrick Samuelsson**. HIRLAM NWP activities connected to use and development of SURFEX

15:20 – 15:40 **Rafiq Hamdi**. On the use of SURFEX as a new land surface scheme for the limited area NWP model ALARO

15:40 – 16:00 **Constantin Ardilouze**. Reconsidering the role of soil moisture in summer predictability over Europe

16:00 – 16:30 Coffee break

Session 2: snow modelling

**Convener Patrick Samuelsson**

16:30 – 16:50 **Hanneke Luijting**. Regional Snow Modeling in Norway with SURFEX/Crocus

16:50 – 17:10 **Vincent Vionnet**. Snowpack modeling in the French mountains driven by short-range high-resolution weather forecasts

17:10 – 17:30 **Deborah Verfaillie**. Numerical simulations of snow on ski slopes using SURFEX/ISBA-Crocus-RESORT

17:30 – 17:50 **Mariken Homleid and Trygve Aspelien**. From D95 to Explicit snow scheme - experiences from offline and plans for NWP

Session 3: Poster session

17:50 – 17:55 **Patrick Le Moigne**. Presentation of posters

- Global evaluation of the ISBA-CTRIP continental hydrological system used in the CNRM-CM6 climate model for the next CMIP6 exercise. **Bertrand Decharme**
- Modelling Glaciers in the ALADIN-HIRLAM NWP System. **Emily Gleeson**
- Implementation and evaluation of the impact of a lake model in the French CNRM-CM global climate model. **Patrick Le Moigne**
- Hydrological applications using remotely sensed data with SURFEX-CTRIP for the upcoming joint CNES-NASA SWOT mission. **Aaron Boone**

18:00 – 19:30 Ice Breaker and poster session

Tuesday February 28<sup>th</sup>

Session 4: land surface modelling: water, energy and carbon cycles

**Convener Bertrand Decharme**

09:00 – 09:20 **Sébastien Garrigues**. Uncertainties in simulated evapotranspiration from SURFEX/ISBA-A-gs over a 15-year Mediterranean crop succession

09:20 – 09:40 **Aaron Boone**. An overview of the new Multi-Energy-Balance ISBA option in SURFEX

09:40 – 10:00 **Xavier Morel**. Simulating the carbon, water, energy budgets and greenhouse gas emissions of arctic soils with the ISBA land surface model

10:00 – 10:20 **Christine Delire**. The updated land carbon cycle in SURFEXv8

10:20 – 10:50 Coffee Break

Session 5: Urban surface processes and climate

**Convener Valery Masson**

10:50 – 11:10 **Emilie Redon**. New developments on the radiative scheme, energetic balance and air flow in TEB canyons with trees

11:10 – 11:30 **Gabriella Zsebehazi**. Using SURFEX to investigate urban climate in Hungarian cities

11:30 – 11:50 **Robert Schotter**. Evaluation of the simulated spatio-temporal variability of the anthropogenic heat flux in the agglomeration of Toulouse, France

11:50 – 12:10 **Xenia Laffaille**. Improvement of the hydrological component of the urban hydro-microclimate model TEB-Hydro

12:10 – 14:00 Lunch

Session 6: water surfaces

**Convener Patrick Le Moigne**

14:00 – 14:20 **Ekaterina Kurzeneva**. Details around lake model FLake in SURFEX and HARMONIE

14:20 – 14:40 **Rui Salgado**. On the use of FLAKE in SURFEX coupled to Meso-NH

14:40 – 15:00 **Yurii Batrak**. SICE: simple sea ice scheme. Possibilities and limitations

15:00 – 15:20 **Cindy Lebeaupin-Brossier**. Coupling NEMO to AROME via the SURFEX-OASIS interface: Development and application to the HyMeX SOPs in the Western Mediterranean region

15:20 – 15:50 Coffee Break

Session 7: Hydrology

**Convener Pierre Etchevers**

15:50 – 16:10 **Béatrice Vincendon**. Using SURFEX for flash flood forecasting within HYMEX program

16:10 – 16:30 **François Besson**. Operational hydro-meteorological monitoring and forecasts over France using the SAFRAN-SURFEX-MODCOU model chain

16:30 – 16:50 **François Moussu**. Small farms dams modelling in highly anthropized basins : case of the Garonne catchment in the South-West of France

16:50 – 17:10 **Camille Szczypta**. Setup and first evaluation of the coupled hydro-meteorological MESCAN-SURFEX-CTRIP modelling system over Europe

**Convener Béatrice Vincendon**

17:10 – 17:30 **Juan Carlos Sanchez Perrino**. Implementation of water table dynamics in SURFEX based on explicit diffusion equations

20:00 Dinner

Wednesday March 1<sup>st</sup>

Session 7: hydrology (continued)

**Convener Béatrice Vincendon**

09:00 – 09:20 **Jeanne Colin**. Simulating aquifers and floodplains in a global climate model : evaluation and impact

09:20 – 09:40 **Rémy Bonnet**. Development of hydro-meteorological reconstructions over France with the ISBA-MODCOU model.

Session 8: Satellite data applications with SURFEX

**Convener Rafiq Hamdi**

09:40 – 10:00 **Stéphanie Faroux**. ECOCLIMAP - Second Generation

10:00 – 10:20 **Kevin Lau**. Urban Database in High-density Cities and its Role in Numerical Modelling

10:20 – 10:50 Coffee Break

10:50 – 11:10 **Clément Albergel**. Towards a satellite driven land surface model using SURFEX modelling platform  
Offline Data Assimilation: an assessment of the method over Europe and the Mediterranean basin

11:10 – 11:30 **Simon Munier**. Disaggregation of satellite-derived Leaf Area Index per vegetation type and assimilation into the SURFEX platform

11:30 – 11:50 **Jean-Christophe Calvet**. Integration of satellite data into SURFEX for better monitoring agricultural droughts

11:50 – 12:10 **Jordi Etchanchu**. Influence of Multi-Temporal High Resolution Remote Sensing Products on Simulated Hydrometeorological Variables in the south-west of France

12:10 – 12:30 **Delphine Leroux**. Comparing SURFEX photosynthesis simulations to remotely sensed fluorescence observations at European scale

12:30 Workshop Closure

Although only the name of the speaker is given, works presented during the workshop are collaborative.