

SURFEXv8.0 in CNRM-CM6

- FLAKE for lake temperatures and fluxes (LeMoigne et al. 2016)
- ECUMEv6 for sea fluxes (Bellamari et al., in prep)
- GELATO-1D for sea-ice fluxes
- ISBA-DF-ES
 - DF (14 layers; Boone et al. 2000 ; Decharme et al 2013)
 - ES (12 layers; Boone and Etchevers 2001; Decharme et al. 2016)
 - Soil/aquifer coupling done between SURFEX and TRIP (Vergnes et al. 2014)
 - Inundation infiltration, evaporation and precipitation interception (Decharme et al. 2012)
- ISBA-Ags-CC for the earth system version of CNRM-CM (Seferian et al. 2016)
- Coupling with OASIS3-MCT (Voldoire et al., in prep.)
- TRIPv2 (will be rename “CTRIP” for CNRM version of the TRIP river routing model)
 - Streamflow variable velocity (Decharme et al. 2011)
 - Dynamic aquifer (Vergnes et al. 2012)
 - Inundation from dynamic floodplains (Decharme et al. 2012)

In progress for this spring:

- XIOS server (should be included in SFXv8.1)
 - parallel i/o
 - netcdf format
 - on-line post processing
- Improvement of land-use routines: tested but must be evaluated more in depth
- Fire forest dynamic
- Daily or monthly nudging for soil moisture (Wg) and snow mass (Wn)

2016 – 2017 plans at GMGEC :

- MEB evaluation at the global scale (off-line and in-line)
- Discretization of soil carbon reservoirs + methane fluxes (Xavier Morel thesis)
- ...