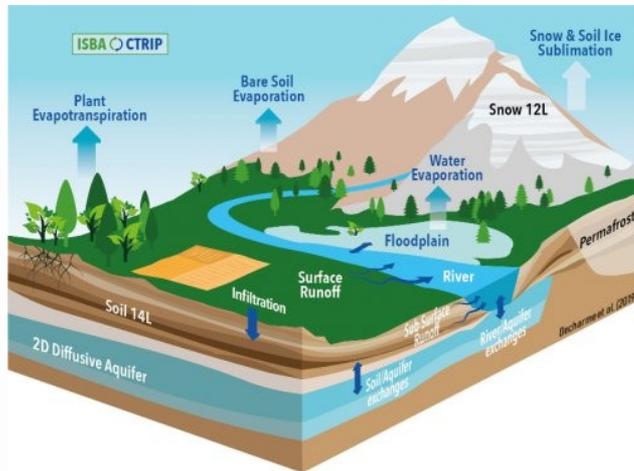


Climate and atmospheric composition research at CNRM, staff ~90 :

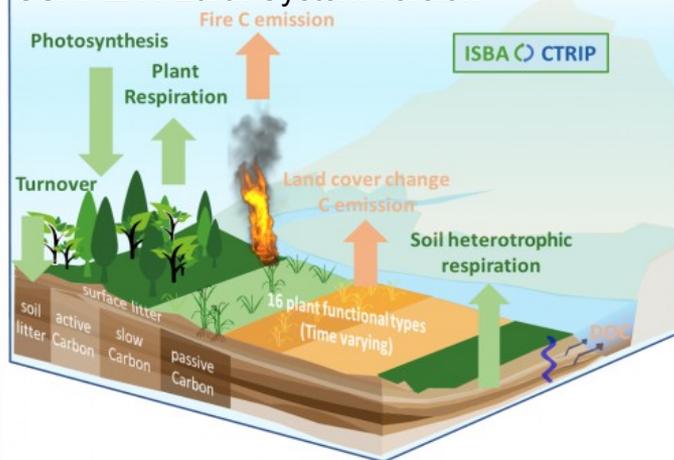
- climate variability, past and future climate change, global and regional (from 2.5 to 100 km horizontal resolution). Climate sensitivity, D&A, impacts and climate change mitigation
- climate predictability – research and operational activities (from subseasonal to seasonal)
- atmospheric composition (regional / global), research and development of several air quality operational configurations

Climate risks

Land-surface platform (SURFEX) - physical core



SURFEX : Earth System version



Modelling Tools :

- Climate : CMIP6 AOGCM CNRM-CM6-1 (ARPEGE-SURFEX-NEMO ~1°), CNRM-ESM2-1 : interactive aerosols (incl. black carbon due to wildfires), 3D stratospheric chemistry
- Air quality : MOCAGE (from 0.1° to 1° resolution)
- Urban climate : TEB (~100 m resolution)

Climate Risks Studies :

- Mostly focused on mainland France and overseas (but not only !)
- High precipitation events, big convective cells, tropical cyclones, water resources, heatwaves, droughts, impact of climate change on air quality, urban heat islands...
- several topics addressed at CNRM have connections with wildfires (seasonal prediction with an ESM, atmospheric composition, carbon fluxes...)

An aerial photograph of a town, likely in a mountainous region, is shown from a high angle. The town is surrounded by green hills and is partially obscured by thick, white clouds. Overlaid on the bottom left of the image is a white weather map showing isobars (lines of equal atmospheric pressure) and wind vectors (arrows). The isobars are labeled with values such as 1010, 1015, 1020, 1025, 1030, 1035, and 1040. The wind vectors indicate a flow pattern around the town. The background of the entire image is a deep blue gradient, with a stylized sun and cloud graphic in the top left corner.

Thank you !