

SURFEX system

Numerous applications of Météo-France such as numerical weather prediction, climate simulations, off-line simulations or data assimilation, use models which aim is to simulate the evolution of surface characteristics over natural areas, towns, lakes or seas. For these different surface types, specific models like ISBA or TEB have been developed at CNRM (French national center for meteorological research). More recently, a one-dimensional model has been developed for sea/ocean surfaces, to represent the ocean mixing layer. In addition, Flake model has been introduced into SURFEX system in order to improve the computation of fluxes over lakes and also to better simulate surface temperature. SURFEX gathers all surface modules and proposes a simple interface to treat the exchanges between a given surface and its corresponding atmosphere.