



Interactive lakes in the ECMWF Integrated Forecasting System

Balsamo Gianpaolo

ECMWF

From Spring 2015 the operational global weather forecasting system at ECMWF includes a prognostic state evolution for inland water bodies, which is based on the FLake parametrization used at DWD (Mironov et al. 2010).

The roadmap to operational deployment and the originalities of this implementation will be described. Those include the treatment of all sub-grid and resolved lakes, reservoirs, rivers and shallow coastal waters and their initialization with the available Near-Real-Time remote-sensing information or via retrospective offline simulations obtained in reanalysis mode. Perspectives for further developments (e.g. treatment of fractional freezing) will be also briefly presented.

Co-authors: Gianpaolo Balsamo, Emanuel Dutra, Irina Sandu, Souhail Boussetta, Anton Beljaars