



ERA-Interim/Land: A global land surface reanalysis dataset

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ERA-Interim/Land is a global land-surface reanalysis dataset covering the period 1979–2010 recently made publicly available from ECMWF. It describes the evolution of soil moisture, soil temperature and snowpack. ERA-Interim/Land is the result of a single 32-year simulation with the latest ECMWF land surface model driven by meteorological forcing from the ERA-Interim atmospheric reanalysis and precipitation adjustments based on monthly GPCP v2.1 (Global Precipitation Climatology Project). The horizontal resolution is about 80km and the time frequency is 3-hourly. ERA-Interim/Land includes a number of parameterization improvements in the land surface scheme with respect to the original ERA-Interim dataset, which makes it more suitable for climate studies involving land water resources. The quality of ERA-Interim/Land is assessed by comparing with ground-based and remote sensing observations. In particular, estimates of soil moisture, snow depth, surface albedo, turbulent latent and sensible fluxes, and river discharges are verified against a large number of site measurements. ERA-Interim/Land provides a global integrated and coherent estimate of soil moisture and snow water equivalent, which can also be used for the initialization of numerical weather prediction and climate models. Current plans for the extension and improvements of ERA-Interim/Land in the framework of future reanalyses will be briefly presented.

References and dataset download information at:

<http://www.ecmwf.int/en/research/climate-reanalysis/era-interim/land>