

New release of 1-km SMOS soil moisture over European and Mediterranean countries

Dear users,

First, we hope that you and your family are doing well in these challenging days.

We are pleased to announce the latest version (v5.0) of cloud-free BEC SMOS (Soil Moisture and Ocean Salinity) L4 soil moisture maps at 1 km covering Europe, the northern-most countries of Africa and western Russia. These maps are obtained from the synergy of:

- SMOS L1C brightness temperature,
- Terra MODIS (Moderate Resolution Imaging Spectroradiometer) NDVI (Normalized Difference Vegetation Index), and
- ECMWF (European Center for Medium Weather Forecast) skin temperature.

The use of an adaptive window allows the downscaling algorithm to be applied over any non-frozen region of the world, regardless of the size of the region to be processed, and its spatial climatic variability. The BEC SMOS L3 soil moisture is used as a benchmark.

As a novelty,

daily and 3-day L4 soil moisture maps are distributed in two different modes:

- Near Real-Time maps provided with a latency of only 2 days,
- Reprocessed maps provided with a latency of 3-4 weeks.

The reprocessed mode contains the series of all maps since June 2010.



Additionally, nomenclature and metadata of the latest version (v3.0) of global SMOS L3 soil moisture have been revised and updated.

A detailed explanation of both L3 and L4 algorithms and the resulting products is included in [BEC SMOS Soil Moisture Products Description](#). Please, do not hesitate to contact us in case you have any question or comment at smos-bec@icm.csic.es. Your feedback is most welcome!

Enjoy the products!

The BEC team