

New ocean products available!

Since March 5th 2013, SMOS-BEC distributes new level 3 and level 4 products derived from level 2 data processed by ESA

The SMOS data used to compute the new level 3 and level 4 Ocean products come from level 2 (L2) Ocean Salinity User Data Product (UDP) and Ocean Salinity Data Analysis Product (DAP). These UDP and DAP files are generated by ESA and include geophysical parameters, a theoretical estimate of their accuracy, and flags and descriptors for the product quality for three different roughness models. These new products developed by BEC are based on the roughness model described in [Guimbard et al IEEETrans. Geosci. Remote Sens. \(2012\)](#).

What's new?

The new maps have been created using an **improved filtering technique** over L2 products. Also the resolution has been modified: current maps are generated at **0.25 degree resolution** (rather than 1 degree resolution as for the previous products). The **variety of averaging periods** has also been increased: three days, nine days (generated every three days), monthly, seasonal, and annual averages (see [SMOS-BEC Ocean and Land Products Description](#) for additional information) are now available.

Additionally, all the products are provided separately according to the orbit pass type: **ascending**, **descending** and **mixed**.



Detail of the mouths of the rivers Mississippi, Orinoco and Amazon. Lower image using old resolution (1.00 degree). Upper image with the new one (0.25 degree). Images from 9-day binned map corresponding to period August 9-17 2011

What do we serve?

Ocean products currently served by BEC can be divided into three main groups:

– Near real time products

These products are derived from L2 products generated by ESA in near real time. [Available from 2012.](#)

– Reprocessed products

Derived from L2 products generated by ESA reprocessing campaigns. These products are expected to be of better quality than the near real time products and substitute them as they are generated. [Available data from 2010 to 2011](#)

– Auxiliary products

These are products derived from external sources, required for the generation of level 4 products. Currently we provide [daily singularity exponents maps](#) from 2010

BEC provides the same kind of products for both the real time and the reprocessed data streams: level 3 **binned** and **optimal interpolation** products, and level 4 **fused** products using singularity analysis techniques

How do we serve?

We serve all our products in netCDF format through a [THREDDS service](#). BEC research products are freely distributed, but registration is required to download them. Registered users interested in automatically downloading some netCDF products can use our [getBEC](#) bash script.

[Click here to Register!](#)

To display and interact with the produced maps, please use the BEC [Web Map Server](#).

The BEC Team