

# **Op61. SMOS Space Mission Barcelona Expert Centre**

## **MUNICIPALITY**

Barcelona

## **PROJECT DESCRIPTION**

For the first time the SMOS (Soil Moisture and Ocean Salinity) satellite of the European Space Agency (ESA) is carrying out global and systematic observations from space of soil moisture over the continents and the superficial salinity over the oceans. This is an international mission with strong protagonism of Barcelona researchers, in scientific and technological aspects alike.

In 2007, the Higher Council for Scientific Research (CSIC) and the Technical University of Catalonia (UPC) established the SMOS Barcelona Expert Centre in Radiometric Calibration and Ocean Salinity (SMOS-BEC) to bring together the efforts of Catalan groups involved in the mission. From the launch of the satellite in November 2009, the SMOS-BEC researchers have been working to improve the processing of data measurements in order to increase quality and achieve the mission's proposed objectives. This includes instrument calibration systems (microwave interferometric radiometer), the correction of image reconstruction methods (low-level processing) and algorithms for transforming radiometric measurements into oceanic salinity values. During 2010 very important advances have been made in this truly pioneering methodology.

## **WEBSITE FOR REFERENCE**

[www.smos-bec.icm.csic.es](http://www.smos-bec.icm.csic.es)

## **PERSON IN CHARGE OF THE PROJECT**

Jordi Font i Ferré, Research professor at CSIC, scientific co-leader of the SMOS mission and president of the SMOS Barcelona Expert Centre.