A review of microwave interferometric radiometry in remote sensing

Radio Science has recently published "Microwave interferometric radiometry in remote sensing: An invited historical review" by M. Martín-Neira, D. M. LeVine, Y. Kerr, N. Skou, M. Peichl, A. Camps, I. Corbella, M. Hallikainen, J. Font, J. Wu, S. Mecklenburg, and M. Drusch. The paper (*Radio Science*, volume 49, issue 6, pages 415–449, June 2014, DOI: 10.1002/2013RS005230) is led by Manuel Martín-Neira, the SMOS instrument (MIRAS) principal engineer, and is co-authored by three SMOS-BEC members: Adriano Camps, Ignasi Corbella and Jordi Font. We copy below the paper's abstract:

The launch of the Soil Moisture and Ocean Salinity (SMOS) mission on 2 November 2009 marked a milestone in remote sensing for it was the first time a radiometer capable of acquiring wide field of view images at every single snapshot, a unique feature of the synthetic aperture technique, made it to space. The technology behind such an achievement was developed, thanks to the effort of a community of researchers and engineers in different groups around the world. It was only because of their joint work that SMOS finally became a reality. The fact that the European Space Agency, together with CNES (Centre National d'Etudes Spatiales) and CDTI (Centro para el Desarrollo Tecnológico e Industrial), managed to get the project through should be considered a merit and a reward for that entire community. This paper is an invited historical review that, within a very limited number of pages, tries to provide insight into some of the developments which, one way or another, are imprinted in the name of SMOS.

This image of the first ESA ground tests of a MIRAS

demonstrator was selected for the cover of the Radio Science issue. The online version of the paper can be seen at http://onlinelibrary.wiley.com/doi/10.1002/2013RS005230/full