



## **SMOS SMAP synergisms**

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In early April 2014, the SMOS mission will have been in the air for almost 4 years and a half, and SMAP ready to start in November almost exactly 5 years after SMOS. Since its launch, SMOS has given many opportunities for breaking new grounds. And with its active system, SMAP is bound also to cover new grounds.

Shortly after launch, first global maps of soil moisture ever measured from space were produced by SMOS. Since then, the achieved accuracy has continuously improved to match the requirements. The long term trends of surface moisture can now be closely linked to precipitation regime, and SMOS results have been successfully used in response to extreme events.

On the other hand, ocean salinity results have also improved dramatically. Here again, some amazing results regarding river plumes or fresh water pools related to precipitation have been obtained. They have been compared and used in a synergistic way with Aquarius data (launched in June 2011).

At last, new applications have been imagined in various fields such as of sea ice thickness, or hurricane winds.

This presentation will give an extensive status of the mission, emphasizing the many lessons learned and demonstrating some outstanding results. Some perspectives on the mission and future missions will also be given with a particular focus with the synergisms with SMAP data and how we intend to build a seamless data record of soil moisture from SMOS to SMAP.