

## **Soil Moisture Remote Sensing: Status and Outlook**

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**Abstract.** Satellite-based passive microwave sensors have been available for thirty years and provide the basis for soil moisture monitoring and mapping. The approach has reached a level of maturity that is now limited primarily by technology and funding. This is a result of extensive research and development that began in earnest in the 1970s and by the late 1990s provided the basis and direction needed to support two dedicated satellite missions; Soil Moisture Ocean Salinity (SMOS) and Soil Moisture Active passive (SMAP). The status and contributions of these missions will be reviewed focusing on current challenges to interpretation and validation. New satellite projects planned for the next 5 years will presented in the context of data continuity and expanded applications.