



Using the ESA's ASAR GM radar instrument to map physical soil properties (case study over Australia)

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A quantitative and qualitative comparison was made between a suite of physical soil parameters derived from the Australian Soil Resources Information System (ASRIS) and backscattering characteristics calculated from the Advanced Synthetic Aperture radar Global Mode (ASAR GM) on ESA's ENVISAT satellite. Based on the results opportunities were identified to map soil physical properties over areas with limited vegetation cover, and to further improve the retrieval of soil moisture content from radar remote sensing.