The Validated (Version 2) SMAP Level 4 Carbon Product

Integrating SMAP and other satellite observations with NASA GMAO assimilation system inputs to quantify net ecosystem carbon exchange and underlying environmental controls.

Improved understanding of global carbon and climate interactions enabled by new operational daily estimates of net ecosystem CO₂ exchange and component carbon fluxes, surface soil organic carbon (SOC) stocks and environmental controls (EC), with detailed data quality diagnostics at 1-9km resolution.

Estimated surface SOC stocks for April, 2016 highlighting finer (1-km) scale soil carbon patterns for two selected sub-regions. The L4_C data are posted to a 9-km global grid while preserving sub-grid scale information from 1-km processing.