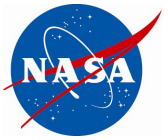
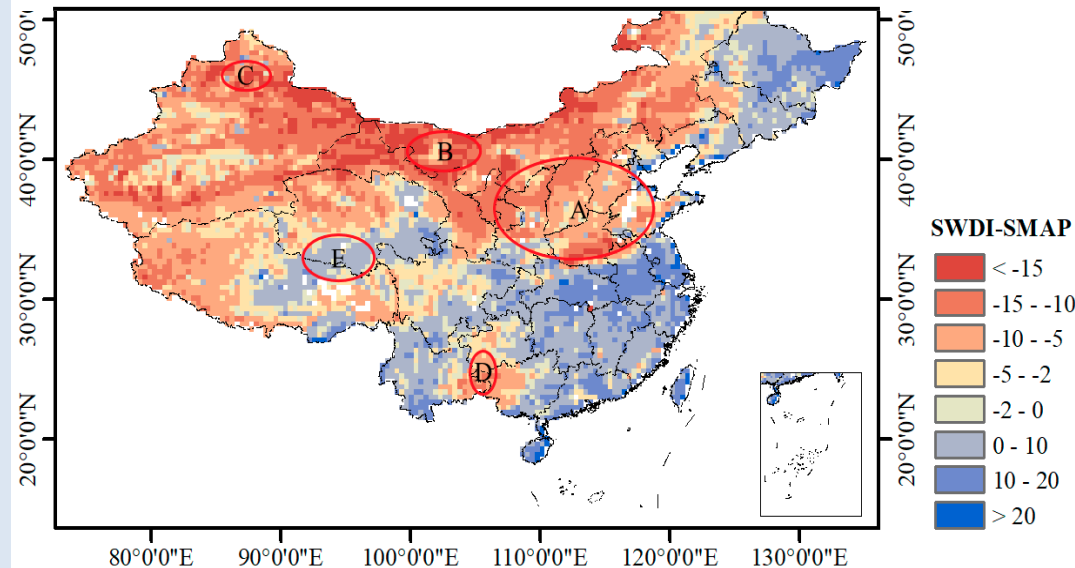


SMAP-Derived Soil Water Deficit Index tracks Agricultural Drought in China



Problem: Agriculture drought has a severe impact on global food production; there is a need of accurate satellite data for global monitoring.

Finding: The SMAP-Derived Soil Water Deficit Index (SWDI-SMAP) is compared with the atmospheric water deficit (AWD) and vegetation health index (VHI). Spatial distribution of the SWDI-SMAP across China for the month of June 2016 (regions A–E denote representative areas with drought differences between the SWDI-SMAP and VHI. There are severe and extreme drought in region A-C and moderate drought in region D on the SWDI-SMAP; however, the drought conditions are much lighter, or there is no drought, on the VHI.



Impact: The SWDI-SMAP has a good overall performance on drought monitoring.

Bai, Cui, Chen, Yu, Mao, Meng, Cai, 2018: Assessment of the SMAP-derived soil water deficit index as an agricultural drought index in China. *Remote Sensing*.