Upper Yangtze River Scientific Data Center

**9 km SMA soil moisture data in Southwest China (2015-2022)**

1、Description

This enhanced Level-3 (L3) soil moisture product provides a composite of daily estimates of global land surface conditions retrieved by the Soil Moisture Active Passive (SMAP) radiometer. This product is a daily composite of SMAP Level-2 (L2) soil moisture which is derived from SMAP Level-1C (L1C) interpolated brightness temperatures. Backus-Gilbert optimal interpolation techniques are used to extract information from SMAP antenna temperatures and convert them to brightness temperatures, which are posted to the 9 km Equal-Area Scalable Earth Grid, Version 2.0 (EASE-Grid 2.0) in a global cylindrical projection. As of 2021, the data are also posted to the Northern Hemisphere EASE-Grid 2.0, an azimuthal equal-area projection.

2、Keywords

Theme：Soil,Soil moisture,microwave remote sensing,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：globe, southwest china  
Time：2015-2022

3、Data details

1.Scale：None

2.Projection：

3.Filesize：213504.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：35.0 | - |
| west：96.0 | - | east：113.0 |
| - | south：20.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

P. O’NEILL P. O’neill . 9 km SMA soil moisture data in Southwest China (2015-2022). Upper Yangtze River Scientific Data Center, 2022

References to articles:

O'Neill, P. E., S. Chan, E. G. Njoku, T. Jackson, R. Bindlish, J. Chaubell, and A. Colliander. (2021). SMAP Enhanced L3 Radiometer Global and Polar Grid Daily 9 km EASE-Grid Soil Moisture, Version 5 [Data Set]. Boulder, Colorado USA. NASA National Snow and Ice Data Center Distributed Active Archive Center. https://doi.org/10.5067/4DQ54OUIJ9DL. Date Accessed 10-05-2022.

7、Supporting project information

8、Data resource provider

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