Upper Yangtze River Scientific Data Center

**AMSR-E/2 Soil Moisture Data Set for 25km in Southwest China (2002-2020)**

1、Description

This data set contains satellite-retrieved geophysical parameter files generated from the Advanced Microwave Scanning Radiometer - Earth Observing System (AMSR-E) instrument on the National Aeronautics and Space Administration (NASA) Aqua satellite and the Advanced Microwave Scanning Radiometer 2 (AMSR2) sensor on the JAXA GCOM-W1 satellite. The geophysical parameters include daily air surface temperature, fractional open water cover estimates, vegetation optical depth, surface volumetric soil moisture, and atmosphere total column precipitable water vapor. The global retrievals were derived over land for non-precipitating, non-snow, and non-ice covered conditions.The spatial resolution of soil moisture is 25KM, covering the whole world, and the temporal resolution is 1 day.

2、Keywords

Theme：Microwave remote sensing,Surface Freeze-thaw Cycle/state Remote Sensing,Terrestrial Surface Remote Sensing,Soil Moisture Product
Discipline：Terrestrial Surface,Cryosphere
Places：Southwest China, World
Time：2002-2022

3、Data details

1.Scale：None

2.Projection：

3.Filesize：32508.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：25.0 | - |
| west：96.0 | - | east：113.0 |
| - | south：20.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

JINYANG DU Jinyang Du . AMSR-E/2 Soil Moisture Data Set for 25km in Southwest China (2002-2020). Upper Yangtze River Scientific Data Center, 2022

References to articles:

Du, J. and J. S. Kimball. (2021). Daily Global Land Parameters Derived from AMSR-E and AMSR2, Version 3 [Data Set]. Boulder, Colorado USA. NASA National Snow and Ice Data Center Distributed Active Archive Center. https://doi.org/10.5067/WPXUQ72A4484. Date Accessed 09-27-2022.

Du, J., J. S. Kimball, L. A. Jones, Y. Kim, J. Glassy, and J. D. Watts. 2017. A global satellite environmental data record derived from AMSR-E and AMSR2 microwave earth observations . Earth System Science Data . 9. DOI: 10.5194/essd-9-791-2017.

7、Supporting project information

8、Data resource provider

name: JINYANG DU Jinyang Du
unit: Numerical Terradynamic Simulation Group (NTSG) The University of Montana
email: jinyang.du@ntsg.umt.edu