A Big Earth Data Platform for Three Poles

**WATER: Dataset of ground truth measurement synchronizing with Envisat ASAR in the A'rou foci experimental area on Jun. 19, 2008**

1、Description

The dataset of ground truth measurement synchronizing with Envisat ASAR was obtained in No. 1, 2 and 3 quadrates of the A'rou foci experimental area on Jun. 19, 2008. GPR observations were also carried out in one sampling strip.
 The Envisat ASAR data were in AP mode and VV/VH polarization combinations, and the overpass time was approximately at 11:17 BJT. Simultaneous with the satellite overpass, numerous ground data were collected, the soil temperature, soil volumetric moisture, the loss tangent, soil conductivity, and the real part and the imaginary part of soil complex permittivity were acquired by the POGO soil sensor, and the mean soil temperature from 0-5cm by the probe thermometer. Those provide reliable ground data for retrieval and validation of the surface temperature and evapotranspiration from remote sensing approaches.
 Four files were included, ASAR data, No. 1, 2 and 3 quadrates data.

2、Keywords

Theme：Electrical conductivity,Soil,Soil temperature,Soil moisture/Water content,Terrestrial Surface Remote Sensing,Ground verification information
Discipline：Terrestrial Surface
Places：Heihe River Basin, the cold region hydrology experimental area in the upper reaches, A'rou flight zone
Time：2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：563.8MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.078 | - |
| west：100.411 | - | east：100.55 |
| - | south：38.015 | - |

5、Time frame:2008-07-17 08:00:00+00:00--2008-07-17 08:00:00+00:00

6、Reference method

References to data:

HAN Xujun, GE Chunmei. WATER: Dataset of ground truth measurement synchronizing with Envisat ASAR in the A'rou foci experimental area on Jun. 19, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0010.db2013

References to articles:

7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project
National Program on Key Basic Research Project (973 Program

8、Data resource provider

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