A Big Earth Data Platform for Three Poles

**WATER: Dataset of ground truth measurements synchronizing with the airborne WiDAS mission in the A'rou foci experimental area on Jul. 7, 2008**

1、Description

The dataset of ground truth measurements synchronizing with the airborne WiDAS mission was obtained in No. 1, 2 and 3 quadrates of the A'rou foci experimental area on Jul. 7, 2008. The quadrates were divided into 4×4 subsites, with each one spanning a 30×30 m2 plot. Observation items included:
 (1) spectrum of stellera, whin and pasture by ASD FieldSpec (350～2 500 nm) from BNU, with 20% reference board. Raw data were binary files direct from ASD (by ViewSpecPro), which were recorded daily in detail, and pre-processed data on reflectance were in .txt format.
 (2) photosynthesis of stellera , whin and pasture by LI-6400. The data were archived in Excel format.
 (3) surface temperature by the handheld infrared thermometer. 25 corner points of each subsite were chosen and acquisition time, the soil temperature measured three times and the land cover types were archived.
 Six files were included, the stellera spectrum of diverse coverage, spectrum data for 60% and 65% coverage, stellera photos, photosynthesis, the infrared temperature synchronizing with the airplane, and WiDAS images (resolution: 1.25m, 7.5m and 10m).

2、Keywords

Theme：Surface radiation temperature,Leaf area index,Terrain spectrometer,Vegetation,Earth SurFace Processes,Spectral measurement,Terrestrial Surface Remote Sensing
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：46464.2MB

4.Data format：EXCEL

4、Space scope

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

5、Time frame:2018-11-28 10:47:01.521866+00:00--2018-11-28 10:47:01.521871+00:00

6、Reference method

References to data:

WATER: Dataset of ground truth measurements synchronizing with the airborne WiDAS mission in the A'rou foci experimental area on Jul. 7, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0011.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