A Big Earth Data Platform for Three Poles

**WATER: Dataset of ground truth measurement synchronizing with MODIS in the Biandukou foci experimental area on Mar. 12, 2008**

1、Description

The dataset of ground truth measurement synchronizing with MODIS was obtained in C1, G1 and B2 of the Biandukou foci experimental area on Mar. 12, 2008. Observation items included:  
 (1) the surface temperature by the handheld infrared thermometer in C1, G1 and B2 from 11:30 to 12:15. The underlying surface was the deep plowed land, the rape stubble and the grassland.  
 (2) the gravimetric soil moisture (soil samples from 0-1cm, 1-3cm, 3-5cm, 5-10cm and 10-20cm) by the microwave drying method.  
 (3) the frost depth by the chopstick and the ruler. The soil was considered frozen when it was hard and with ice crystal. The land cover type photos were archived.  
 Four data files were archived, MODIS data, C1 (the land cover type, the surface temperature and the vegetation parameters), G1 ( the surface temperature, the frost depth and the soil moisture) and B2 (the surface temperature, the frost depth and the soil moisture) data.

2、Keywords

Theme：Near infrared remote sensing,Soil,Depth of soil freezing,Surface radiation temperature,Earth SurFace Processes,Remote Sensing Technology,Visible remote sensing,Soil moisture/Water content  
Discipline：Terrestrial Surface,Remote Sensing Technology  
Places：Heihe River Basin, the cold region hydrology experimental area in the upper reaches, closed observation area of Biandoukou  
Time：2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：27.5MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.312 | - |
| west：100.881 | - | east：101.036 |
| - | south：38.192 | - |

5、Time frame:2008-03-26 00:00:00+00:00--2008-03-26 00:00:00+00:00

6、Reference method

References to data:

PAN Jinmei, CHANG Sheng, YIN Xiaojun, ZHANG Zhiyu, LIU Zhigang, REN Huazhong, LIANG Xingtao, ZHENG Yue, CHE Tao, ZHAO Shaojie, Zhou Ji, QU Ying, PENG Danqing, Zhao Tianjie, ZHANG Yongpan, LIU Chenzhou, Fang Qian. WATER: Dataset of ground truth measurement synchronizing with MODIS in the Biandukou foci experimental area on Mar. 12, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0025.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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