A Big Earth Data Platform for Three Poles

**WATER: Dataset of ground truth measurements for snow synchronizing with the airborne PHI mission in the Binggou watershed foci experimental area (Mar. 24, 2008)**

1、Description

The dataset of ground truth measurements for snow synchronizing with the airborne PHI mission was obtained in the Binggou watershed foci experimental area on Mar. 24, 2008.
 Observation items included:
 (1) Snow density, snow complex permittivity, snow volumetric moisture and snow gravimetric moisture by the Snowfork in BG-A.
 (2) Snow parameters as the snow surface temperature by the handheld infrared thermometer, the snow layer temperature by the probe thermometer, the snow grain size by the handheld microscope, and snow density by the aluminum case in BG-A1, BG-A2, BG-B, BG-D, BG-E and BG-F5 (three sampling units each) from 11:11-12:35 (BJT) with the airplane overpass. 64 points were selected by four groups.
 (3) Snow albedo by the total radiometer in BG-A.
 (4) The snow spectrum by ASD (Xinjiang Meteorological Administration) in BG-A11
 Two files including raw data and preprocessed data were archived.

2、Keywords

Theme：Albedo,Snow area,Snow depth,Terrain spectrometer,Snow,Snow particle size,Snow density,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface,Cryosphere
Places：Heihe River Basin, the cold region hydrology experimental area in the upper reaches, ice-channel watershed encryption observation area
Time：2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：55.1MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.18839 | - |
| west：100.096381 | - | east：100.286566 |
| - | south：38.01113 | - |

5、Time frame:2008-04-13 00:00:00+00:00--2008-04-13 00:00:00+00:00

6、Reference method

References to data:

SHU Lele, ZHANG Pu, LIU Yan, ZHU Shijie, WANG Xufeng, MA Mingguo, WANG Jianhua, LI Hongyi, GU Juan, QU Wei, CHANG Cun, JIANG Tenglong, HAO Xiaohua, XIAO Pengfeng , REN Jie, DOU Yan, LI Hua, FANG Li, LIU Zhigang, WU Yueru, XU Zhen, MA Zhongguo, GE Chunmei, LIANG Xingtao, LI Zhe, LIANG Ji. WATER: Dataset of ground truth measurements for snow synchronizing with the airborne PHI mission in the Binggou watershed foci experimental area (Mar. 24, 2008). A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0090.db2013

References to articles:

郝晓华, 王建, 车涛, 张璞, 梁继, 李弘毅, 李哲, 白云洁, 白艳芬. 祁连山区冰沟流域积雪分布特征及其属性观测分析. 冰川冻土, 2009, 31(2): 284-292.

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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