A Big Earth Data Platform for Three Poles

**WATER: Dataset of ground truth measurements for snow synchronizing with MODIS in the Binggou watershed foci experimental area on Mar. 14, 2008**

1、Description

The dataset of ground truth measurements for snow synchronizing with MODIS was obtained in the Binggou watershed foci experimental area on Mar. 14, 2008. Those provide reliable data for snow-cover extent mapping and the retrieval of the snow surface temperature from MODIS remote sensing approaches.
 Observation items included:
 (1) Snow parameters including the snow surface temperature, the snow-soil interface temperature, the land surface (ground surface) temperature by the handheld infrared thermometer, the snow layer temperature by the probe thermometer, snow depth by the ruler, snow density by the snow shovel, the snow grain size by the handheld microscope and the snow surface temperature synchronizing with MODIS.
 (2) Snow albedo by the total radiometer in BG-A from 11:10-13:24 on Mar. 14, 2008.
 (3) The snow spectrum by the portable ASD (Xinjiang Meteorological Administration) synchronizing with MODIS in BG-A and BG-I.
 Two files including raw data and the preprocessed data were archived.

2、Keywords

Theme：Spectral characteristics of Snow,Albedo,Snow/ice temperature,Snow depth,Snow,Snow particle size,Snow density,Terrestrial Surface Remote Sensing,Ground verification information
Discipline：Terrestrial Surface,Cryosphere
Places：Heihe River Basin, the cold region hydrology experimental area in the upper reaches, Dadongshu pass, ice-channel watershed encryption observation area
Time：2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：215.3MB

4.Data format：EXCEL

4、Space scope

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

5、Time frame:2008-03-25 16:00:00+00:00--2008-03-25 16:00:00+00:00

6、Reference method

References to data:

DOU Yan, BAI Yunjie, XU Zhen, MA Zhongguo, GE Chunmei, BAI Yanfen, LIANG Ji, SHU Lele, ZHANG Pu, LIU Yan, WANG Xufeng, MA Mingguo, LI Hongyi, GU Juan, CHANG Cun, HAO Xiaohua. WATER: Dataset of ground truth measurements for snow synchronizing with MODIS in the Binggou watershed foci experimental area on Mar. 14, 2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0083.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

name: GE Chunmei
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: gechm@lzb.ac.cn

name: HAO Xiaohua
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: haoxh@lzb.ac.cn

name: WANG Xufeng
unit: Cold and Arid Regions Environmental and Engineering Research Institute, CAS
email: wangxufeng@lzb.ac.cn

name: MA Mingguo
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: mmg@lzb.ac.cn

name: GU Juan
unit:
email:

name: ZHANG Pu
unit:
email:

name: LIANG Ji
unit:
email: leung@lzb.ac.cn

name: LI Hongyi
unit:
email: lihongyi@lzb.ac.cn

name: CHANG Cun
unit:
email:

name: MA Zhongguo
unit:
email:

name: BAI Yanfen
unit:
email:

name: SHU Lele
unit:
email:

name: XU Zhen
unit:
email:

name: DOU Yan
unit:
email:

name: BAI Yunjie
unit:
email: baiyj27@163.com

name: LIU Yan
unit:
email: