A Big Earth Data Platform for Three Poles

**Simulated soil temperature and moisture in the Babao River Basin**

1、Description

The ground temperature, moisture and ice content at various depth (0 cm, 4 cm, 10 cm, 20 cm, 40 cm, 80 cm, 120 cm, 160 cm, 240 cm, 400 cm, 600 cm, 900 cm, 1200 cm, 1400 cm, 1500 cm) was generated through the SHAW model, which was evaluated by observations at AWS stations and WSN in the study area and could be used in research relevant on soil freezing and thawing.

2、Keywords

Theme：Ice content,Soil,Soil water content,Ground temperature,Frozen Ground
Discipline：Terrestrial Surface,Cryosphere
Places：Upper reaches of Heihe River
Time：2013-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：4600.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.4 | - |
| west：100.0 | - | east：101.3 |
| - | south：37.6 | - |

5、Time frame:2013-09-01 08:00:00+00:00--2015-01-16 08:00:00+00:00

6、Reference method

References to data:

ZHANG Yanlin. Simulated soil temperature and moisture in the Babao River Basin. A Big Earth Data Platform for Three Poles, doi:10.11888/Soil.tpdc.2703732020

References to articles:

Zhang, Y.L., Li, X., Cheng, G.D., Jin, H.J., Yang, D.W., Flerchinger, GN, Chang, X.L., Wang, X., & Liang, J. (2018). Influences of Topographic Shadows on the Thermal and Hydrological Processes in a Cold Region Mountainous Watershed in Northwest China. Journal of Advances in Modeling Earth Systems, 10, 1439-1457, doi: 10.1029/2017MS001264.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: ZHANG Yanlin
unit:
email: zhangyanl02@163.com