A Big Earth Data Platform for Three Poles

**Modeling ecohydrological processes and spatial patterns in the upstream of the Heihe river basin (1960-2014) V3.0**

1、Description

The output data of the distributed eco hydrological model (gbehm) in the upper reaches of Heihe River includes the spatial distribution data series of 1-km grid. Region: Heihe River (Yingluo gorge), Beida River (Binggou new land), temporal resolution: Monthly Scale, spatial resolution: 1km, period: 1960-2014.
Data include precipitation, evapotranspiration, runoff depth, soil volume water content (0-100cm).
All data are in ASCII format. Please refer to the basin.asc file in the reference directory for the spatial range of the basin.
Projection parameters of model results: sphere\_Arc\_Info\_Lambert\_Azimuthal\_Equal\_Area

2、Keywords

Theme：Soil,Runoff,Precipitation,Evapotranspiration,Hydrology,Soil moisture/Water content
Discipline：Terrestrial Surface
Places：Heihe River Basin, Upper Reaches of Heihe Basin
Time：1960-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：116.0MB

4.Data format：ASCII

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：96.0 | - | east：102.0 |
| - | south：37.0 | - |

5、Time frame:1960-01-16 08:00:00+00:00--2015-01-15 19:59:59+00:00

6、Reference method

References to data:

YANG Dawen. Modeling ecohydrological processes and spatial patterns in the upstream of the Heihe river basin (1960-2014) V3.0. A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.9966.2013.db2017

References to articles:

Gao, B., Qin, Y., Wang, Y., Yang, D., Zheng Y. (2016). Modeling Ecohydrological Processes and Spatial Patterns in the Upper Heihe Basin in China. Forests, 7(1), DOI:10.3390/f7010010

Gao, B., Yang, D., Qin, Y., Wang, Y., Li, H., Zhang, Y., & Zhang, T. (2018). Change in Frozen grounds and Its Effect on Regional Hydrology in the Upper Heihe Basin, on the Northeastern Qinghai-Tibetan Plateau. The Cryosphere. 12(2), 657-673.

Qin Y, Lei H, Yang D, Gao B, Wang Y, Cong Z, Fan W. Long-term change in the depth of seasonally frozen ground and its ecohydrological impacts in the Qilian Mountains, northeastern Tibetan Plateau. Journal of Hydrology, 2016, 542C:204-221

7、Supporting project information

8、Data resource provider

name: YANG Dawen
unit:
email: yangdw@tsinghua.edu.cn