A Big Earth Data Platform for Three Poles

**Prediction of Maize yield in Zhangye Basin in the Northern foot of Qilian Mountains (2001-2015)**

1、Description

The dataset of Maize yield in Zhangye Basin in the Northern foot of Qilian Mountains (2001-2015) is obtained by downscaling the actual maize yield data based on the simulation results of Hydrological-Ecological Integrated watershed Flow Model (HEIFLOW). HEIFLOW is a three-dimensional distributed eco-hydrological coupling model, integrating the Precipitation-Runoff Modeling System (PRMS) with the Modular Groundwater Flow Model (MODFLOW) and several ecological modules, which can completely describe the hydrological cycle and vegetation ecological process of the basin. For the modeling details of generating this data, please refer to Han et al. (2021), and for the technical details of HEIFLOW model, please refer to Han et al. (2021), Tian et al. (2018), and sun et al. (2018)

2、Keywords

Theme：Farmland
Discipline：Terrestrial Surface
Places：Heihe River Basin
Time：2001-2015

3、Data details

1.Scale：None

2.Projection：

3.Filesize：12.7MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.9 | - |
| west：99.02 | - | east：100.88 |
| - | south：38.7 | - |

5、Time frame:2000-12-31 16:00:00+00:00--2015-12-30 16:00:00+00:00

6、Reference method

References to data:

ZHENG Yi , HAN Feng , TIAN Yong . Prediction of Maize yield in Zhangye Basin in the Northern foot of Qilian Mountains (2001-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2719622021

References to articles:

Han, F., Zheng, Y., & Tian, Y., et al. (2021). Accounting for field-scale heterogeneity in the ecohydrological modeling of large arid river basins: Strategies and relevance. Journal of Hydrology, 595, 126045.

7、Supporting project information

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

8、Data resource provider

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