A Big Earth Data Platform for Three Poles

**Relative wetness index dataset in Pan-Third Pole (2011-2015)**

1、Description

Water scarcity，food crises and ecological deterioration caused by drought disasters are a direct threat to food security and socio-economic development. Improvement of drought disaster risk assessment and emergency management is now urgently required. This article describes major scientific and technological progress in the field of drought disaster risk assessment. Drought is a worldwide natural disaster that has long affected agricultural production as well as social and economic activities. Frequent droughts have been observed in the Belt and Road area, in which much of the agricultural land is concentrated in fragile ecological environment. The relative moisture index is the difference between the precipitation in a certain period of time and the potential evapotranspiration in the same period and then divided by the potential evapotranspiration in the same period.The precipitation data comes from the downscaling of the TRMM/GPM satellite precipitation data, and the potential evapotranspiration is estimated using the Thornthwaite method. For detailed algorithm, please refer to "National Standard for Meteorological Drought of China" (GB/T 20481-2017). The data only covers 34 key node areas along the Belt and Road.

2、Keywords

Theme：Extreme drought,Natural Disaster  
Discipline：Human-nature Relationship  
Places：Pan-Third Pole  
Time：2011-2015

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1060.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：82.0 | - |
| west：12.0 | - | east：180.0 |
| - | south：-11.0 | - |

5、Time frame:2011-01-07 16:00:00+00:00--2016-01-06 16:00:00+00:00

6、Reference method

References to data:

WU Hua. Relative wetness index dataset in Pan-Third Pole (2011-2015). A Big Earth Data Platform for Three Poles, 2020

References to articles:

Zhang, Q., Zou, X., & Xiao, F. (2006). Classification of meteorological droughts. Standards Press of China Tech. Rep. GB/T20481-2006, 17.

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: WU Hua  
unit: Institute of Geographic Sciences and Natural Resources Research, CAS  
email: wuhua@igsnrr.ac.cn