A Big Earth Data Platform for Three Poles

**Heat wave vulnerability data set of 34 key nodes in 2015**

1、Description

Vulnerability refers to a property of the system that is susceptible to changes in structure and function due to the system's sensitivity to internal and external disturbances and its lack of ability to respond, that is, the ability of the region to cope with disasters to reduce losses when heat waves occur. This dataset is based on the pan-third pole regional road network data, GDP data, medical facility spatial distribution data, vegetation coverage data, and water distribution data as basic data,and takes 2015 as the base year. The Euclidean Metric calculation method is adopted to determine the spatial distribution of road networks, water and medical facilities in the area. The distance from roads, water bodies, medical facilities, GDP, and vegetation coverage are used as evaluation indicators. The equal-weight overlapping addition is used to evaluate the vulnerability of heat waves at each node. In order to eliminate the impact of unit differences, the data of each index layer is normalized before the evaluation.Finally, the vulnerability level of each node is divided by the natural Jenks method.

2、Keywords

Theme：Atmospheric remote sensing products,Atmosphere Remote Sensing  
Discipline：Atmosphere,Others  
Places：Pan-Third Pole  
Time：2015

3、Data details

1.Scale：70000000

2.Projection：

3.Filesize：6144.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：85.0 | - |
| west：12.0 | - | east：-165.0 |
| - | south：-12.0 | - |

5、Time frame:2015-01-15 08:00:00+00:00--2016-01-14 08:00:00+00:00

6、Reference method

References to data:

GE Yong, LIU Qingsheng, YANG Fei. Heat wave vulnerability data set of 34 key nodes in 2015. A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2704262020

References to articles:

Carrão, H., Naumann, G., & Barbosa, P. (2016). Mapping global patterns of drought risk: An empirical framework based on sub-national estimates of hazard, exposure and vulnerability. Global Environmental Change, 39, 108–124. https://doi.org/https://doi.org/10.1016/j.gloenvcha.2016.04.012.

7、Supporting project information

8、Data resource provider

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