A Big Earth Data Platform for Three Poles

**90-meter resolution geological hazard risk map of the Himalayas and Asia Water Tower (2021)**

1、Description

This data set collates and collects various geological hazard points, topographic relief, landslide, elevation, land use and other influencing factors, with a resolution of 90m. The above factor layers and sample data are used to obtain the risk grade map with random forest. Data sets / atlas are mainly generated by: raw data (investigation, collection and purchase, etc.), processing data (calculation and simulation). The data source is downloaded from the open source website with an accuracy of 90m. The data is downloaded from the open source website and calculated in spider with their own random forest code. The training set is 80% and the test set is 20%. Open it with a computer that can run ArcGIS.

2、Keywords

Theme：Geological hazards,risk,Natural Disaster
Discipline：Human-nature Relationship
Places：Asia water Tower District, Tibetan Plateau himalaya
Time：Until November 2021

3、Data details

1.Scale：None

2.Projection：GCS\_China\_Geodetic\_Coordinate\_System\_2000

3.Filesize：65.2MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：46.1 | - |
| west：70.84 | - | east：106.61 |
| - | south：21.15 | - |

5、Time frame:None--None

6、Reference method

References to data:

YANG Wentao. 90-meter resolution geological hazard risk map of the Himalayas and Asia Water Tower (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2726932021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

name: YANG Wentao
unit: 北京林业大学水土保持学院
email: 526553254@qq.com