A Big Earth Data Platform for Three Poles

**Integrated multi-hazard population risk in the peri-Himalayan and Asian water tower regions (2021)**

1、Description

This data uses a landslide hazard risk assessment model consisting of four modules: landslide hazard causative factors, landslide susceptibility model, exposed population and population casualty rate. The module of hazard-causing factors includes DEM, slope, rainfall, temperature, snow cover, GDP, and vegetation cover factors. The landslide hazard susceptibility model is a statistical analysis using a logistic regression model to obtain landslide susceptibility probability values. The population exposure module uses the landslide susceptibility values overlaid with population data. The population casualty rate module is based on the ratio of historical landslide casualties to the population exposed to landslides during the same period. Finally, by substituting the 2020 population data, the exposed population under different levels of landslide hazard susceptibility is calculated and multiplied with the historical period landslide hazard population casualty rate to assessIntegrated multi-hazard population risk in the peri-Himalayan and Asian water tower regions

2、Keywords

Theme：Population,affected population,risk,Natural Disaster,Comprehensive disaster risk  
Discipline：Human-nature Relationship  
Places：Asia water Tower District, Himalayas  
Time：2021

3、Data details

1.Scale：200

2.Projection：WGS84

3.Filesize：61.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：70.0 | - | east：110.0 |
| - | south：20.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

WANG Ying. Integrated multi-hazard population risk in the peri-Himalayan and Asian water tower regions (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2722452022

References to articles:

7、Supporting project information

8、Data resource provider

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