A Big Earth Data Platform for Three Poles

**Assessment of geological hazard susceptibility in Hehuang valley of Qinghai Province (2010-2017)**

1、Description

The data of this paper include: (1) impact factor data: 90m resolution DEM data, China 1 ∶ 250000 grade 1, grade 3, grade 4 and grade 5 River classification data set, which are from the international scientific data mirror website of computer network information center of Chinese Academy of Sciences（ http://www.gscloud.cn ); The spatial distribution data of 1 ∶ 1000000 vegetation types in China (1971-2000), 1 ∶ 500000 geological map of Qinghai Province, 1 ∶ 4000000 geomorphologic map of China and road map of Qinghai Province were obtained from the resource and environmental science data center of Chinese Academy of Sciences（ http://www.resdc.cn ); The annual average rainfall data (1971-2000) is from China Meteorological science data sharing service network（ http://www.data.ac.cn ); The fault data are Holocene active faults, which are derived from the research results of Dong Zhiping (1992)（(2) Geological disaster data: the historical geological disaster data (1 ∶ 100000) is from the geological environment monitoring station of Qinghai Province; The provincial data of major geological hazards are from the Department of natural resources of Qinghai Province（ http://zrzyt.qinghai.gov.cn )。(3) Basic data: the population data comes from the results of the sixth census of the National Bureau of statistics in 2010; The 1:250000 County digital administrative division map of Qinghai Province is from the national basic geographic information center（ http://www.ngcc.cn )。 In this paper, the information model and entropy method are used to calculate the landslides, landslides, debris flows and comprehensive susceptibility index of Hehuang Valley, so as to regionalize the study area. The information model is used to determine the susceptibility index of landslides and landslides. In the evaluation of geological hazard susceptibility, the information model takes the disaster point as the evaluation object, and the influence factor of geological hazard is the evaluation index of the model. The closeness between the model and the research object is evaluated by calculating the contribution degree of each factor. The higher the information is, the higher the susceptibility coefficient is.

2、Keywords

Theme：Tectonics
Discipline：Solid earth
Places：Hehuang Valley, Qinghai Province
Time：2010-2017

3、Data details

1.Scale：None

2.Projection：

3.Filesize：4.13MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.87 | - |
| west：100.38 | - | east：103.07 |
| - | south：35.01 | - |

5、Time frame:2009-12-31 16:00:00+00:00--2017-12-30 16:00:00+00:00

6、Reference method

References to data:

HOU Guangliang. Assessment of geological hazard susceptibility in Hehuang valley of Qinghai Province (2010-2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2712762021

References to articles:

7、Supporting project information

Foundation of Qinghai Provincial Key Laboratory of Geospatial Information Technology and Application

8、Data resource provider

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