A Big Earth Data Platform for Three Poles

**Test data on consolidation characteristics and bearing capacity of debris flow buried sediments in earthquake areas of China (2019-2021)**

1、Description

Based on a large number of field investigations and laboratory tests, according to the physical parameters of different debris flow deposits on site, the viscosity range of debris flow slurry and the solid particle gradation of debris flow are determined. Through the test, the water and soil ratio of slurry in different viscosity range is determined, and debris flow slurry with different viscosity is configured according to the water and soil ratio. Through the screening test, the solid particle gradation of debris flow is determined. Considering the different combinations of three factors of debris flow slurry viscosity, solid ratio and particle gradation, the debris flow siltation bodies in different states are manually configured, and the bearing capacity test of debris flow siltation bodies is carried out to study the consolidation characteristics and temporal and spatial variation characteristics of bearing capacity of debris flow siltation bodies with different viscosity, solid ratio and particle gradation.

2、Keywords

Theme：Engineering Geology,Debris Flow,Geologic Hazard  
Discipline：Solid earth  
Places：laboratory model experiments  
Time：2019-2021., post-seismic

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.52MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.71 | - |
| west：102.85 | - | east：103.73 |
| - | south：30.75 | - |

5、Time frame:2018-12-31 16:00:00+00:00--2021-12-30 16:00:00+00:00

6、Reference method

References to data:

LIU Bin , CHEN Hongkai , SU Na , XU Linrong . Test data on consolidation characteristics and bearing capacity of debris flow buried sediments in earthquake areas of China (2019-2021). A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2721972022

References to articles:

7、Supporting project information

Dynamic characteristics of wide gently-channelized and narrow steeply-channelized debris flows in strong earthquake area

8、Data resource provider

name: CHEN Hongkai   
unit: Zaozhuang University  
email: mr.jiaopeng@163.com  
  
name: SU Na   
unit: Central South University  
email: 82289112@qq.com  
  
name: XU Linrong   
unit: Central South University  
email: lrxu@csu.edu.cn  
  
name: LIU Bin   
unit: Zaozhuang University  
email: 18263723708@163.com