A Big Earth Data Platform for Three Poles

**Monitoring of water level and flow velocity and analysis of Froude number and flow process (2021)**

1、Description

Data content: monitoring of water level and flow velocity of dam break, and analysis of Froude number and flow process  
Data source: the data collection place is Sichuan. The experimental analysis was mainly completed in Sichuan University and Chengdu Ruyi Instrument Co., Ltd. The instruments used include high-speed camera, wave altimeter, electronic pressure measuring tube, pressure sensor, mechanical timer, etc. The collection time is 2021.  
Acquisition method: observe the process of field large-scale dam burst test through multiple high-speed cameras, wave altimeters, total head pressure sensors, mechanical timers and other instruments.  
Data quality description: relevant sensors were arranged in the field test, and real-time process dynamic observation was carried out. A total of 6 large-scale test conditions were observed, including water level and flow rate observation at 400 points. Then, Froude number and flow process were calculated and analyzed through flow rate and water level.

2、Keywords

Theme：Hydrological hazards,Natural Disaster,Disaster,multi-disasters  
Discipline：Human-nature Relationship  
Places：Qinghai Tibet Plateau  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.95MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：0.0 | - |
| west：0.0 | - | east：0.0 |
| - | south：0.0 | - |

5、Time frame:2020-12-31 16:00:00+00:00--2021-09-30 03:59:59+00:00

6、Reference method

References to data:

NIU Zhipan . Monitoring of water level and flow velocity and analysis of Froude number and flow process (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2720392022

References to articles:

7、Supporting project information

Catastrophic mechanisms and risk control of disastrous landslides in the Tibetan Plateau

8、Data resource provider

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