A Big Earth Data Platform for Three Poles

**Mechanical responses data of debris flow flexible protection system based on back analysis**

1、Description

After the debris flow flexible protection system intercepts the debris flow disaster, the UAV tilt photography is carried out on the disaster slope. After the three-dimensional model of the slope is established with the help of terrain reconstruction software such as context capture, the protection process is inversely calculated, and the mechanical response history of each component of the structure is obtained through calculation, so as to obtain the wire rope tension, steel column internal force, system buffer distance The residual protection height of the system, the deformation of energy dissipator and the deformation of steel column provide a reference for the performance evaluation and optimization design of the protection system.

2、Keywords

Theme：Debris flow,erosion,flexible protection system,Geomorphology,Other
Discipline：Terrestrial Surface
Places：Sichuan
Time：2019-2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：49.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.0 | - |
| west：102.0 | - | east：103.0 |
| - | south：30.0 | - |

5、Time frame:2019-12-30 16:00:00+00:00--2021-12-30 16:00:00+00:00

6、Reference method

References to data:

QI Xin . Mechanical responses data of debris flow flexible protection system based on back analysis. A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2721692022

References to articles:

7、Supporting project information

Comprehensive prevention and control technology of wide gentle and narrow steep gully debris flow in strong earthquake area

8、Data resource provider

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