A Big Earth Data Platform for Three Poles

**Computed tomography (CT) scan dataset of vegetation-soil-rock three-dimensional spatial structure of typical watersheds in Qilian Mountains (2021)**

1、Description

1) Data content: CT scan dataset of vegetation-soil-rock three-dimensional spatial structure of typical watersheds in Qilian Mountains, the data includes the volume density of moss layers at different depths, soil macroporosity and soil gravel volume density data in typical watersheds of Qilian Mountains; 2) Data Source and processing method: The moss layer and the undisturbed soil column with a depth of 30 cm under the moss cover were collected in a typical small watershed of the Qilian Mountains, and the moss layer and the undisturbed soil column were scanned with an industrial X-ray three-dimensional microscope; 3) Data quality description: The resolution of moss layer is 40 μm, and the resolution of undisturbed soil column is 68 μm; 4) Data application results and prospects: CT scan data set of vegetation-soil-rock three-dimensional spatial structure of typical small watersheds in Qilian Mountains is suitable for ecological restoration, water resources management and utilization in Qilian Mountains. It is of great significance and can provide basic data and theoretical support for elaborating the water conservation function and mechanism of the Qilian Mountains.

2、Keywords

Theme：soil moisture,Soil,Vegetation,Soil physical properties,Picea crassifolia,Hydrology  
Discipline：Terrestrial Surface,Others  
Places：Qilian Mountains  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.2MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.17 | - |
| west：100.31 | - | east：100.32 |
| - | south：38.16 | - |

5、Time frame:2021-06-30 16:00:00+00:00--2022-07-31 03:59:59+00:00

6、Reference method

References to data:

HU Xia . Computed tomography (CT) scan dataset of vegetation-soil-rock three-dimensional spatial structure of typical watersheds in Qilian Mountains (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2726572022

References to articles:

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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