A Big Earth Data Platform for Three Poles

**Digital elevation model of China (1KM)**

1、Description

DEM is the English abbreviation of Digital Elevation Model, which is the important original data of watershed topography and feature recognition.DEM is based on the principle that the watershed is divided into cells of m rows and n columns, the average elevation of each quadrilateral is calculated, and then the elevation is stored in a two-dimensional matrix.Since DEM data can reflect local topographic features with a certain resolution, a large amount of surface morphology information can be extracted through DEM, which includes slope, slope direction and relationship between cells of watershed grid cells, etc..At the same time, the surface flow path, river network and watershed boundary can be determined according to certain algorithm.Therefore, to extract watershed features from DEM, a good watershed structure pattern is the premise and key of the design algorithm.  
Elevation data map 1km data formed according to 1:250,000 contour lines and elevation points in China, including DEM, hillshade, Slope and Aspect maps.  
Data set projection:  
Two projection methods:  
 Equal Area projection Albers Conical Equal Area (105, 25, 47)   
 Geodetic coordinates WGS84 coordinate system

2、Keywords

Theme：Aspect,Digital elevation model,Topography,Slope,The shadow of the mountain   
Discipline：Terrestrial Surface  
Places：China  
Time：2000

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：977.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：53.9 | - |
| west：73.2 | - | east：135.5 |
| - | south：17.8 | - |

5、Time frame:None--None

6、Reference method

References to data:

TANG Guoan. Digital elevation model of China (1KM). A Big Earth Data Platform for Three Poles, 2019

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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