A Big Earth Data Platform for Three Poles

**1:250000 DEM map of the middle reaches of Heihe River (2005-2007)**

1、Description

DEM (digital elevation model) is the abbreviation of digital elevation model, which is an important original data for watershed terrain and feature recognition. The principle of DEM is to divide the watershed into M rows and N columns of quadrilateral (cell), calculate the average elevation of each quadrilateral, and then store the elevation in a two-dimensional matrix. Because DEM data can reflect the local terrain features of a certain resolution, a large amount of surface morphology information can be extracted by DEM, which includes the slope, slope direction and the relationship between cells of watershed grid unit [7]. At the same time, the surface water flow path, river network and watershed boundary can be determined by certain algorithm. Therefore, to extract basin features from DEM, a good basin structure model is the premise and key of the design algorithm.

2、Keywords

Theme：Digital elevation model,Topography
Discipline：Terrestrial Surface
Places：Heihe River Basin, Middle Reaches of Heihe River Basin
Time：2005-2007

3、Data details

1.Scale：1

2.Projection：4326

3.Filesize：5.0MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.3 | - |
| west：96.1 | - | east：104.2 |
| - | south：37.7 | - |

5、Time frame:2005-01-13 20:13:00+00:00--2008-01-12 20:13:00+00:00

6、Reference method

References to data:

XU Zongxue, HU Litang. 1:250000 DEM map of the middle reaches of Heihe River (2005-2007). A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2708152016

References to articles:

胡立堂. (2014). 黑河干流中游地区地表水和地下水集成模拟与应用. 北京师范大学学报(自然科学版). 50(5) : 563-569.

胡立堂，王忠静，田伟. (2013). 干旱内陆河区地表水和地下水集成模型与应用研究[M]. 北京：中国水利水电出版社.

7、Supporting project information

8、Data resource provider

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