A Big Earth Data Platform for Three Poles

**Heihe river basin boundary**

1、Description

1、 The basin boundary of Heihe River Basin is based on the high-precision digital elevation model (DEM), which is obtained by using GIS hydrological analysis function analysis, and refers to remote sensing image, topographic map, ground investigation and previous research results. The surface catchment area of Heihe River basin covers an area of about 255000 km2, starting from the middle section of Qilian Mountains in the south, the Gobi Altai Mountains in Mongolia in the north, the Mazong mountains in the West and the Yabulai mountains in the East. Compared with the traditional Heihe River Basin, the new basin has increased Badain Jilin desert, Guizi lake, the northern part of Mazong mountain and the southern foot of Altai Mountain in Outer Mongolia Gobi.
Explanation: the nanshihe River and beishihe River are the rivers formed by the leakage of the alluvial fan of Shule River. They form an independent hydrological unit (Huahai basin water systems) with Ganhaizi as the end lake, together with youYou River, Baiyang River and duanshankou river. The relationship between the hydrological unit and the Heihe River Basin is greater than that between the hydrological unit and the Shule River, which should be regarded as a part of the Heihe River Basin. Considering the current situation of modern water resources utilization, Beishi river has been directly connected with the main stream of Shule River through artificial transformation, and it is an important channel for water transmission from Shule River to Ganhaizi, and has become an important tributary of Shule River in fact. Under the influence of a series of water conservancy projects, the surface hydraulic connection between youyou River, Baiyang River and Shule River is far greater than that between youyou River and TaoLai river.
2、 Revised boundary of Yellow River Commission in Heihe River Basin
On the basis of the Heihe River basin boundary revised by the Yellow River Water Conservancy Commission of the Ministry of water resources in 2005, the revised boundary of Heihe River Basin is obtained by using high-precision digital elevation model (DEM), reference remote sensing image, 1:100000 topographic map, ground investigation and other data. The basin boundary is about 76000 km2, among which the upper Qilian mountain middle section boundary is extracted strictly according to the ridge line by using DEM according to the GIS hydrological analysis function, and the lower north boundary is divided according to the boundary line according to the international convention.
3、 Study area boundary of Heihe River Basin
According to the extended study area generated by the basin boundary of Heihe River Basin, it is mainly for the demand of model data input.
The above three boundaries are to provide a unified study area boundary for the planned project of Heihe River Basin. It is suggested to use the revised boundary of Heihe River Basin yellow Committee as the core study area boundary.

2、Keywords

Theme：Division,Main function division,Natural division
Discipline：Human-nature Relationship
Places：Heihe River Basin
Time：2013

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：2.56MB

4.Data format：shp

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.5 | - |
| west：95.5 | - | east：104.5 |
| - | south：37.5 | - |

5、Time frame:2018-11-30 10:50:03+00:00--2018-11-30 10:50:03+00:00

6、Reference method

References to data:

WU Lizong. Heihe river basin boundary. A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.225.2013.db2014

References to articles:

7、Supporting project information

8、Data resource provider

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