A Big Earth Data Platform for Three Poles

**Watershed boundary of the Yellow River upstream (2012)**

1、Description

I. Overview
The Yellow River is the second longest river in our country. The problem of the Yellow River's sediment has attracted the attention of people all over the world. The watershed is an important natural unit. Using the SRTM-DEM and ASTER-GEDEM data sets as the data source, under the ArcGIS software platform, the method of combining river burning method and river scalar method is used to extract the upper reaches of the Yellow River basin. The boundary of the basin from the source area of ​​the Yellow River to the upper reaches of the Yellow River in Hekou Town.
Ⅱ. Data processing description
Using SRTM-DEM and ASTER-GDEM issued by the United States as data sources, under the ArcGIS software platform, the method of combining river burning method and river scalar method was used to extract the upper reaches of the Yellow River basin. Because the ratio of the rivers from the Three Lakes Estuary to Hekou Town is extremely small, there is a certain error in the boundary of the basin.
Ⅲ. Data content description
The map is stored in ArcGIS and .shp files. The river basin boundary spans five provinces (autonomous regions) of Qinghai, Sichuan, Gansu, Ningxia, and Inner Mongolia, with a total area of ​​55.06 × 104 km2.
Ⅳ. Data usage description
Watershed boundary is an important natural unit for hydrology, soil erosion, and non-point source pollution research. By extracting watershed boundaries, the migration range of soil erosion and non-point source pollution can be delineated.

2、Keywords

Theme：Division,River basin regional
Discipline：Human-nature Relationship
Places：The upstream of the Yellow River
Time：2012

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：2.37MB

4.Data format：shp

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.0 | - |
| west：95.0 | - | east：112.0 |
| - | south：37.0 | - |

5、Time frame:2011-05-08 02:00:00+00:00--2012-05-10 02:00:00+00:00

6、Reference method

References to data:

XUE Xian, DU Heqiang. Watershed boundary of the Yellow River upstream (2012). A Big Earth Data Platform for Three Poles, 2015

References to articles:

7、Supporting project information

the National Basic Research Program of China

8、Data resource provider

name: XUE Xian
unit:
email: xianxue@lzb.ac.cn

name: DU Heqiang
unit:
email: dilikexue119@163.com