A Big Earth Data Platform for Three Poles

**ASTER GDEM data in the Heihe River Basin (2009)**

1、Description

The data set includes ASTER GDEM data and its Mosaic.  
ASTER Global DEM (ASTER GDEM) is a Global digital elevation data product jointly released by NASA and Japan's ministry of economy, trade and industry (METI) on June 29, 2009. The DEM data is based on the observation results of NASA's new earth observation satellite TERRA.It is produced by the ASTER(Advanced Space borne Thermal Emission and Reflection Radio meter) sensor, which collects 1.3 million stereo image data, covering more than 99% of the earth's land surface.The data has a horizontal accuracy of 30 m (95% confidence) and an elevation accuracy of 7-14 m (95% confidence).This data is the third global elevation data, which is significantly higher than previous SRTM3 DEM and GTOPO30 data.  
We from NASA's web site (http://wist.echo.nasa.gov/api) to download the data of heihe river basin, and through the data center to distribute.The data distributed by the center completely retains the original appearance of the data without any modification to the data.If users need details about ASTER GDEM preparation process, please refer to the data documents of metadata connections, or visit http://www.ersdac.or.jp/GDEM/E/3.html or directly from https://lpdaac.usgs.gov/ reading and ASTER Global DEM related documents.  
ASTER GDEM is divided into several data blocks of 1×1 degree in distribution, and the distribution format is zip compression format. Each compressed file includes three files. The file naming format is as follows:  
 ASTGTM\_NxxEyyy\_dem.tif  
 ASTGTM\_NxxEyyy\_num.tif  
 reademe.pdf  
 Where xx is the starting latitude and yyy is the starting longitude.\_dem. Tif is the dem data file, \_num. Tif is the data quality file, and reademe is the data description file.  
In order to facilitate users to use the data, on the basis of the fractional ASTER GDEM data, we splice fractional SRTM data to prepare the ASTER GDEM Mosaic map of the black river basin, which retains all the original features of ASTER GDEM without any resamulation.   
This data includes two files: heihe\_aster\_gdem\_mosaic\_dem.img Heihe\_Aster\_GDEM\_Mosaic\_num. Img  
The data is stored in the format of Erdas image, where the file \_dem.img is the dem data file and the file \_num. Img is the data quality file.

2、Keywords

Theme：Digital elevation model,Topography  
Discipline：Terrestrial Surface  
Places：Heihe River Basin  
Time：2009

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：4683.79MB

4.Data format：栅格数据

4、Space scope

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

5、Time frame:2009-01-15 03:55:00+00:00--2010-01-14 03:55:00+00:00

6、Reference method

References to data:

National Aeronautics and Space Administration. ASTER GDEM data in the Heihe River Basin (2009). A Big Earth Data Platform for Three Poles, 2013

References to articles:

7、Supporting project information

8、Data resource provider

name: National Aeronautics and Space Administration  
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email: NONE