A Big Earth Data Platform for Three Poles

**Grain size distribution of soil particles dataset of the Heihe basin**

1、Description

The source data of this data set comes from the 1:1 million soil map of China (Shi et al., 2004) and 8595 soil sections in the second Soil Census. The polygonal connection method is used to connect the soil profile with the soil map to obtain the soil sand, silt and clay content map. The distance between the profile and the map spot, the number of soil profiles and the information of soil classification are taken into account. Please refer to related papers and web pages for specific instructions.  
Data characteristics   
Projection: GCS\_Krasovsky\_1940   
Coverage: Heihe River Basin   
Resolution: 0.00833 degrees (about one kilometer)   
Data format: FLT, tiff   
Value range: 0% - 100%   
Document description   
Floating point grid files include:   
Sand1.flt, clay1.flt - content of sand and clay in the surface layer (0-30cm).   
Sand2.flt, clay2.flt - sand and clay content in the bottom layer (30-100cm).   
Psd.hdr – header file:   
Ncols - number of columns   
Nrows - number of rows   
Xllcorner - lower left latitude   
Yllcorner - lower left longitude   
Cellsize - cell size   
NoData\_Value – null   
byteorder - LSBFIRST, Least Significant Bit First   
TIFF grid files include:   
Sand 1.tif, clay 1.tif - the content of sand and clay in the surface layer (0-30cm).   
Sand 2.tif, clay 2.tif - sand and clay content in the bottom layer (30-100cm).   
For data details, please refer to: http://globalchange.bnu.edu.cn/research/soil

2、Keywords

Theme：土壤质地, 土壤  
Discipline：Soil Science  
Places：Heihe River Basin  
Time：2010

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：23.74MB

4.Data format：栅格

4、Space scope

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

5、Time frame:2018-11-26 18:50:21+00:00--2018-11-26 18:50:21+00:00

6、Reference method

References to data:

SHANGGUAN Wei, DAI Yongjiu. Grain size distribution of soil particles dataset of the Heihe basin. A Big Earth Data Platform for Three Poles, doi:10.11888/Soil.tpdc.2705892013

References to articles:

Shangguan, W., Y. Dai, B. Liu, A. Ye, and H. Yuan (2012), A soil particle-size distribution dataset for regional land and climate modelling in China, Geoderma, 171-172, 85-91. doi:10.1016/j.geoderma.2011.01.013

7、Supporting project information

国际科技合作与交流专项项目

8、Data resource provider

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