A Big Earth Data Platform for Three Poles

**Digital soil mapping dataset of soil texture in the Heihe river basin (2012-2014)**

1、Description

The American system classification is used as the standard of soil particle classification. The source data of this data set comes from the soil profile data integrated by the major research plan integration project of Heihe River Basin (soil data integration and soil information product generation of Heihe River Basin, 91325301). The prediction method is mainly based on the soil landscape model. The basic theory of the model is the classic soil genesis theory. The model regards the soil as the product of the comprehensive effects of climate, topography, parent material, biology and time.
Scope: Heihe River Basin;
Projection: WGS · 1984 · Albers;
Spatial resolution: 100M;
Data format: TIFF;
Data content: spatial distribution of soil clay, silt and sand content
Prediction method: enhanced regression tree
Environmental variables: main soil forming factors

2、Keywords

Theme：Soil,Soil texture
Discipline：Terrestrial Surface
Places：Heihe River Basin
Time：2012-2014

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：472.0MB

4.Data format：黑河流域数字土壤制图产品（第二版）：土壤质地数据集

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.687 | - |
| west：97.0667 | - | east：101.99 |
| - | south：37.6893 | - |

5、Time frame:2012-01-07 16:00:00+00:00--2015-01-07 03:59:59+00:00

6、Reference method

References to data:

ZHANG Ganlin. Digital soil mapping dataset of soil texture in the Heihe river basin (2012-2014). A Big Earth Data Platform for Three Poles, doi:10.11888/Soil.tpdc.2705922017

References to articles:

Song, X.D., Brus, D.J., Liu, F., Li, D.C., Zhao, Y.G., Yang, J.L., Zhang, G.L. (2016). Mapping soil organic carbon content by geographically weighted regression: A case study in the Heihe River Basin, China. Geoderma, 261, 11–22.

Song, X.D., Brus, D.J., Liu, F., Li, D.C., Zhao, Y.G., Yang, J.L., Zhang, G.L. (2016). Mapping soil organic carbon content by geographically weighted regression: A case study in the Heihe River Basin, China. Geoderma, 261: 11–22.

Yang, R.M., Zhang, G.L, Liu, F., Lu, Y.Y., Yang, F., Yang, F., Yang, M., Zhao, Y.G., Li, D.C. (2016). Comparison of boosted regression tree and random forest models for mapping topsoil organic carbon concentration in an alpine ecosystem. Ecological Indicators, 60, 870–878.

7、Supporting project information

8、Data resource provider

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