A Big Earth Data Platform for Three Poles

**Dataset of soil erosion intensity with 1km resolution in Pan-TEP 65 countries (2015)**

1、Description

1) The dataset includes the raster data of soil erosion intensity in Pan-Third Pole 65 countries.2) The data of soil erosion intensity are obtained by using the Chinese soil loss equation (CSLE). The formula of soil erosion prediction model includes rainfall erosivity factor, soil erodibility factor, slope length factor, slope factor, vegetation cover and biological measure factor, engineering measure factor and tillage measure factor. Rainfall erodibility factors are calculated from the daily rainfall data by the US Climate Prdiction Center (CPC); soil erodibility factors are calculated by 250 m soil grid data; engineering measure factors are calculated based on vegetation cover, land use and rainfall erosivity ratio; tillage measure factors haven't been considered yet, and the default value is 1; slope length factors and slope factors are obtained by resampling after calculating 30 m elevation data; vegetation coverage and biological measures factors are obtained by combining fractional vegetation cover with land use data and rainfall erodibility proportionometer. The fractional vegetation cover is calculated by MODIS vegetation index products through pixel dichotomy. 3) Compared with the data of soil erosion intensity in the same region in the same year, there is no significant difference and the data quality is good.4) the data of soil erosion intensity is of great significance for studying the present situation of soil erosion in Pan third polar 65 countries and better implementation of the development policy of the Silk Road Economic Belt and the 21st-Century Maritime Silk Road.

2、Keywords

Theme：Soil erosion,Soil reosion,Natural Disaster,Environment Pollution and Control  
Discipline：Human-nature Relationship  
Places：PTPE 65 countris  
Time：2014.1-2015.12

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：839.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：82.0 | - |
| west：0.0 | - | east：180.0 |
| - | south：-10.0 | - |

5、Time frame:2014-07-08 08:00:00+00:00--2016-07-06 08:00:00+00:00

6、Reference method

References to data:

ZHANG Wenbo. Dataset of soil erosion intensity with 1km resolution in Pan-TEP 65 countries (2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Disas.tpdc.2702222019

References to articles:

刘宝元, 郭索彦, 李智广, 谢云, 张科利, 刘宪春. (2013). 中国水力侵蚀抽样调查. 中国水土保持, 10, 26-34.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: ZHANG Wenbo  
unit: Beijing Normal University  
email: wenbozhang@bnu.edu.cn