A Big Earth Data Platform for Three Poles

**Soil erosion and its influencing factors in the Mid-Yarlung Tsangpo River Region (2001-2015)**

1、Description

The erosivity calculation of rainfall and snow melt runoff based on the revised universal soil loss equation (RUSLE) is improved by comprehensively using the observed sediment transport, meteorological and remote sensing data. Based on the improved RUSLE model, the soil erosion rate of the Mid-Yarlung Tsangpo River Region is calculated, and the spatial distribution of multi-year average rainfall runoff erosivity factor, soil erodibility factor, slope length and slope steepness factor, vcover management factor, ssupport practice factor and soil erosion rate are obtained. The data set analyzes the phenomena of "less water and more sediment" in Nianchu River Basin and "more water and less sediment" in Lhasa River Basin, which can provide theoretical support for regional soil and water conservation.

2、Keywords

Theme：Soil,Soil erosion  
Discipline：Terrestrial Surface  
Places：soil erosion, Mid-Yarlung Tsangpo River Region  
Time：2001-2015

3、Data details

1.Scale：None

2.Projection：UTM

3.Filesize：5.62MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：30.49 | - |
| west：87.05 | - | east：92.67 |
| - | south：28.24 | - |

5、Time frame:2000-12-31 16:00:00+00:00--2015-12-31 03:59:59+00:00

6、Reference method

References to data:

WANG Li , ZHANG Fan. Soil erosion and its influencing factors in the Mid-Yarlung Tsangpo River Region (2001-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2723972022

References to articles:

Wang, L., Zhang, F.\*, Fu, S., Shi, X., Chen, Y., Jagirani, M.D., & Zeng, C. (2020). Assessment of Soil Erosion Risk and Its Response to Climate Change in the Mid-Yarlung Tsangpo River Region. Environmental Science and Pollution Research, 27, 607-621.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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