A Big Earth Data Platform for Three Poles

**Dataset of land resources vulnerability from 1995 to 2015 in Central Asia (V1.0)**

1、Description

Aiming at sustainable agriculture and food production in Central Asia, the vulnerability of land resources is investigated from the view of exploitation risk of land resources. The evaluation indices of land resources for farmland include topographic factors (such as elevation and slope), land use type, soil texture, etc. The evaluation indices of sustainable agriculture include GDP per capita, grain production per capita, growth rate of agricultural economy, urbanization rate, natural growth rate of population, soil organic matter content, etc. The evaluation indices above which can indicate the properties of land resources directly are used as the evaluation indices of land resources vulnerability. Further, the weighted average of these indices is taken as the land resources vulnerability. The land resources vulnerability is one element of land resources exploitation risk, and the weights of land resources vulnerability evaluation indices are determined with multiple linear regression when the land resources exploitation risk is evaluated. The datasets include land resources vulnerabilities in 1995s (1992-1996), 2000s (1997-2001), 2005s (2002-2006), 2010s (2007-2011), 2015s (2012-2017) and 1995-2015 with a spatial resolution of 0.5°×0.5°. It is expected to provide basic information for agricultural production and land resources exploitation in five countries in Central Asia.

2、Keywords

Theme：Land Resources,Risk  
Discipline：Human-nature Relationship  
Places：Pan-third pole  
Time：1992-2017

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.048MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：56.0 | - |
| west：46.0 | - | east：88.0 |
| - | south：35.0 | - |

5、Time frame:1991-12-31 16:00:00+00:00--2017-12-30 16:00:00+00:00

6、Reference method

References to data:

HUANG Farong, LI Lanhai. Dataset of land resources vulnerability from 1995 to 2015 in Central Asia (V1.0). A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2710632020

References to articles:

于水, 陈迪桃, 黄法融, 李兰海. (2020). 中亚农业水资源脆弱性空间格局及分区研究,中国农业资源与区划, 41(4), 11-20.

7、Supporting project information

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

8、Data resource provider

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