A Big Earth Data Platform for Three Poles

**1 km resolution biodiversity data set of Qinghai Tibet Plateau (2000-2020)**

1、Description

Biodiversity is the sum of the ecological complex formed by organisms and their environment and various ecological processes related to it. It is expressed at all organizational levels of the life system, including genetic diversity, species diversity and ecosystem diversity. The higher the habitat quality, the better the biological habitat environment and the higher the biodiversity. In some studies, the habitat quality index was used to characterize biodiversity (Xiao Qiang et al. 2014). Habitat quality index (HQ) is a dimensionless comprehensive index to evaluate the habitat suitability and habitat degradation degree of regional land use types. Cultivated land, roads, towns and rivers are used as habitat stress factors to form sensitivity parameters. For the production of biodiversity products, the biodiversity modeling of ecosystem in national barrier area is studied based on land use data and invest model. Invest model has the advantages of less input data, large output data and quantitative analysis of abstract ecosystem service functions. It is an important means of biodiversity assessment at present. Based on the actual situation of land use in the Qinghai Tibet Plateau, five land use types with great impact of human activities, paddy field, dry land, urban land, rural residential area and other construction land, are selected as threat factors. Taking the land use data as the input variable of the invest model, the land biodiversity of the Qinghai Tibet Plateau with a resolution of 1 km from 2000 to 2020 is estimated based on the parametric model.

2、Keywords

Theme：Biological Resources,Species diversity  
Discipline：Human-nature Relationship  
Places：Qinghai-Tibet Plateau  
Time：2000-2020

3、Data details

1.Scale：None

2.Projection：Albers

3.Filesize：101.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.78 | - |
| west：73.48 | - | east：104.63 |
| - | south：25.99 | - |

5、Time frame:None--None

6、Reference method

References to data:

WANG Xiaofeng. 1 km resolution biodiversity data set of Qinghai Tibet Plateau (2000-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2723072022

References to articles:

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: WANG Xiaofeng  
unit:   
email: wangxf@chd.edu.cn