A Big Earth Data Platform for Three Poles

**One belt, one road, key node area,inter-annual change process data of built-up areas (1985-2018)**

1、Description

The change of urban built-up area reflects the development of the city, so the information extraction of the change process of built-up area is an important prerequisite for the study of urban development and regional economy. This data set contains the annual change information of the built-up area of key nodes from 1985 to 2018, with a resolution of 30m. Using the combined method of supervision classification and time consistency check, the three key nodes of Hambantota, Yangon and Dhaka are used as the study area to determine the change from the non-built-up area to the built-up area. Pixels in built-up areas are defined as more than 50% impervious. The year of transition (from non-built-up area to built-up area) can be identified from the pixel value, ranging from 34 (year: 1985) to 1 (year: 2018). For example, the built-up area in 1990 can be displayed with a pixel value greater than 29. After monotonous conversion from non-built-up area to built-up area, the data set is consistent in time.

2、Keywords

Theme：Remote Sensing Product,Remote Sensing Technology
Discipline：Remote Sensing Technology
Places：Pan third pole
Time：year by year, 1985-2018

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.82MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：24.0 | - |
| west：81.0 | - | east：97.0 |
| - | south：6.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIU Linzhi, LING Feng. One belt, one road, key node area,inter-annual change process data of built-up areas (1985-2018). A Big Earth Data Platform for Three Poles, 2021

References to articles:

Gong, P., Li, X., Wang, J., Bai, Y., Chen, B., Hu, T., ... & Zhou, Y. (2020). Annual maps of global artificial impervious area (GAIA) between 1985 and 2018. Remote Sensing of Environment, 236, 111510.

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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