A Big Earth Data Platform for Three Poles

**Dataset for vulnerability assessment of the disaster bearing body of the extensive third pole (2018)**

1、Description

On the basis of the global tropical cyclone track dataset, the global disaster events and losses dataset, the global tide level observation dataset and DEM data, coastline distribution data, land cover information, population and other related data of the Belt and Road, indicators related to the vulnerability of storm surge in each unit are extracted and calculated using 100 meter grid as evaluation unit, such as population density, land cover type, etc. The comprehensive index of storm surge vulnerability is constructed, and the vulnerability index of storm surge is obtained by using the weighted method. Finally, the storm surge vulnerability index is normalized to 0-1, which can be used to evaluate the vulnerability level of storm surge in each assessment unit.  
The key nodes data set only contains 11 nodes which have risks (Chittagong port, Bangladesh; Kyaukpyu Port, Myanmar; Kolkata, India; Yangon Port, Myanmar; Karachi, Pakistan; Dhaka, Bangladesh; Mumbai, India; Hambantota Port, Sri Lanka; Bangkok, Thailand; China-Myanmar Oil and Gas Pipeline; Jakarta-Bandung High-speed Railway).

2、Keywords

Theme：Meteorological hazards,Natural Disaster  
Discipline：Atmosphere,Human-nature Relationship  
Places：Pan-Third Pole  
Time：2018

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1530.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：51.0 | - |
| west：11.0 | - | east：109.0 |
| - | south：2.0 | - |

5、Time frame:2018-01-04 08:00:00+00:00--2019-01-03 08:00:00+00:00

6、Reference method

References to data:

DONG Wen. Dataset for vulnerability assessment of the disaster bearing body of the extensive third pole (2018). A Big Earth Data Platform for Three Poles, 2020

References to articles:

石先武,国志兴,张尧,方佳毅,胡可嘉,刘钦政. (2016). 风暴潮灾害脆弱性研究综述. 地理科学进展(7期), 889-897..

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: DONG Wen  
unit:   
email: dongwen01@radi.ac.cn