A Big Earth Data Platform for Three Poles

**Risk assessment dataset of storm surge disasters at hundred meters scale of Pan-third pole critical node region (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 disaster risk and vulnerability of storm surge in each unit are extracted and calculated using100 meter grid as evaluation unit, such as historical intensity of tide level frequency of storm historic arrival, historical loss, population density, land cover type, etc. The comprehensive index of storm surge disaster risk is constructed, and the risk index of storm surge is obtained by using the weighted method. Finally, the storm surge risk index is normalized to 0-1, which can be used to evaluate the risk level of storm surge in each assessment unit.At the same time, the data set includes the corresponding risk index, exposure index and vulnerability assessment results.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：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:2018-01-06 16:00:00+00:00--2019-01-05 16:00:00+00:00

6、Reference method

References to data:

Risk assessment dataset of storm surge disasters at hundred meters scale of Pan-third pole critical node region (2018). A Big Earth Data Platform for Three Poles, 2020

References to articles:

殷杰. (2011). 中国沿海台风风暴潮灾害风险评估研究. 华东师范大学.

7、Supporting project information

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

8、Data resource provider