时空三极环境大数据平台

**青藏高原及周边地区孕灾、致灾、承灾数据集**

英文标题：Multi-scale dataset of environment and element-at-risk for the Qinghai-Tibet Plateau

1、摘要

青藏高原及周边地区孕灾、致灾、承灾数据集包含了地貌数据、归一化植被指数数据、年均气温与降雨数据、承灾价值等级数据，覆盖656万平方公里的范围。该数据集主要是为了进行灾害、风险评价而准备。由于覆盖范围巨大，地貌数据采用了150m空间分辨率，其他数据采用了1000m空间分辨率。地貌、植被指数、气温降雨数据主要通过加工开源数据生产，承灾价值等级数据为叠加计算生产，综合考虑了人口数据、夜间灯光指数、建筑物、地表覆被类型。

2、关键词

主题关键词：降水,地形,温度,植被,地貌  
学科关键词：大气,陆地表层  
地点关键词：Qinghai-Tibet Plateau  
时间关键词：无

3、数据细节

1.比例尺：None

2.投影：None

3.文件大小：18450.0MB

4.数据格式：None

4、空间范围

|  |  |  |
| --- | --- | --- |
| - | 北：46.106587 | - |
| 西：66.285139 | - | 东：106.628417 |
| - | 南：21.645312 | - |

5、时间范围1969-12-31 16:00:00+00:00--2020-12-31 16:00:00+00:00

6、引用方式

数据的引用:

唐晨晓. 青藏高原及周边地区孕灾、致灾、承灾数据集. 时空三极环境大数据平台, 2022.[TANG Chenxiao. Multi-scale dataset of environment and element-at-risk for the Qinghai-Tibet Plateau. A Big Earth Data Platform for Three Poles, 2022]

文章的引用:

Copernicus Climate Change Service (C3S). (2017). ERA5: Fifth generation of ECMWF atmospheric reanalyses of the global climate. Copernicus Climate Change Service Climate Data Store (CDS), (date of access), https://cds.climate.copernicus.eu/cdsapp#!/home  
  
Lamarche, C., Santoro, M., Bontemps, S., d’Andrimont, R., Radoux, J., Giustarini, L., Brockmann, C., Wevers, J., Defourny, P., & Arino, O. (2017). Compilation and validation of SAR and optical data products for a complete and global map of inland/ocean water tailored to the climate modeling community. Remote Sensing, 9(1), p.36.  
  
WorldPop (www.worldpop.org - School of Geography and Environmental Science, University of Southampton; Department of Geography and Geosciences, University of Louisville; Departement de Geographie, Universite de Namur) and Center for International Earth Science Information Network (CIESIN), Columbia University. (2018). Global High Resolution Population Denominators Project - Funded by The Bill and Melinda Gates Foundation (OPP1134076). https://dx.doi.org/10.5258/SOTON/WP00647  
  
Elvidge, C.D, Zhizhin, M., Ghosh, T., Hsu, F.C, & Taneja, J. (2021). Annual time series of global VIIRS nighttime lights derived from monthly averages:2012 to 2019. Remote Sensing, 13(5), p.922, doi:10.3390/rs13050922  
  
Japan Aerospace Exploration Agency. (2021). ALOS World 3D 30 meter DEM. V3.2, Jan 2021. Distributed by OpenTopography. https://doi.org/10.5069/G94M92HB  
  
Fick, S.E., & Hijmans, R.J. (2017). WorldClim 2: new 1‐km spatial resolution climate surfaces for global land areas. International journal of climatology, 37(12), 4302-4315.

7、资助项目信息

第二次青藏高原综合科学考察研究

8、数据资源提供者

姓名: 唐晨晓  
单位: 中国科学院、水利部成都山地灾害与环境研究所  
电子邮件: c.tang@imde.ac.cn