Historical mean wind speed monitoring data set for The Belt and Road (1989-2018)

Data Documentation

I. Dataset/atlas content features

i. Abstract

The data set is calculated and interpolated by weather station data. The meteorological site data comes from NOAA, which includes data such as temperature, wind speed, and precipitation. The research team processes the daily weather station data into monthly data, and then interpolates through Kriging to form raster data covering the entire study area.

The dataset shows monthly average wind speed in South and Southeast Asia, providing a reference for users and further research.

ii. Elements (content fields)

Table 1 Description of data element content

| Data name | Item (field) | Field name in | Field measure | Field code | Remarks |
|-----------|--------------|---------------|---------------|-------------|---------|
| | | Chinese | unit | description | |
| WDSP_MEAN | Value | 月平均风速 | Mile/second | | |

iii. Temporal cover

1989-2018

iv. Spatial cover

South Asia: India, Bangladesh, Pakistan, Sri Lanka, Nepal, Bhutan; Southeast Asia: Indonesia, Thailand, Malaysia, Philippines, Vietnam, Myanmar, Cambodia, Laos.

II. Subject/industry scope of dataset/atlas

i. Subject scope

Earth science

ii. Industry scope

Disaster prevention and mitigation, ecological environment, land and resources, climate change, tourism, regional economic and social development

iii. Other classifications (optional)

III. Accuracy of dataset/atlas

i. Time frequency

1 month

ii. Spatial reference, accuracy, and granularity

Spatial reference: GCS WGS 1984

Accuracy: 1 time

Spatial resolution: 0.1 degree * 0.1 degree

Granularity: station

IV. Dataset/atlas storage management

i. Data quantity

2160.64MB

ii. Type format

The data set is stored on hard disk, and the data structure type is raster data.

iii. Update management

Updated from time to time.

V. Quality control of the dataset/atlas

i. Production mode

The data set is calculated and interpolated from meteorological station data.

ii. Data sources (condition selection)

NOAA Meteorological Station Data

iii. Methods of the data acquisition and processing (condition selection)

The research team processed the daily weather station data into monthly data, and then interpolated by Kriging to form raster data covering the entire study area.

VI. Sharing and usage method of the dataset/atlas

i. Sharing methods and restrictions

Fully shared

ii. Contact information of the sharing service (condition selection)

The service is as follows:

Name: Yang fei

Mailing address: A11 Datun Road, Chaoyang District, Beijing

Zip code: 100101

E-mail: yangfei@lreis.ac.cn

iii. Conditions and methods of usage

Use ArcGIS, ENVI and other software to open.

VII. Intellectual property rights of the dataset/atlas

i. Property rights (optional)

"Historical mean wind speed monitoring data set for The Belt and Road (1989-2018)" owned by institute of geographic sciences and natural resources research, CAS.

ii. Reference method of the dataset/atlas

Historical mean wind speed monitoring data set for The Belt and Road(1989-2018). Disaster Risk Reduction Knowledge Service of International Knowledge Centre for Engineering Sciences and Technology (IKCEST) under the Auspices of UNESCO,2020.05.28. http://drr.ikcest.org/info/9291e

iii. Usage contacts of the datasets/atlas

Contact person Name: Yang fei

Mailing address: All Datun Road, Chaoyang District, Beijing

Zip code: 100101

E-mail: yangfei@lreis.ac.cn

VIII. Others (optional)

In addition to the above, other information must also be explained.

| Data documentation author information | | | | | | | | |
|---------------------------------------|---------------|-------------|------------|--|--|--|--|--|
| Data documentation author | Jianming Meng | Update time | 2020.05.20 | | | | | |

| Organization | Institute of geographic sciences and natural resources research, CAS. | | | | |
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