# Data set of extreme climate events in China-Russian border area

## Data Documentation

## I. Dataset/atlas content features

### i. Abstract

Based on the daily air temperature, precipitation and other multi-source data of meteorological stations, the percentile threshold method is used to calculate the extremely low temperature, high temperature and precipitation days of each meteorological station. The spatial distribution characteristics of extreme weather events are obtained by using Kriging interpolation.

The data set shows the extremely low temperature, high temperature and precipitation days in the adjacent regions of China and Russia: Heilongjiang Province and the coastal border region. It helps users to understand the temporal and spatial distribution of extreme weather events in this region, and provides a reference and basis for users and further research.

### ii. Elements (content fields)

Table 1 Description of data element content

| Data name | Item (field) | Field name in Chinese | Field measure unit | Field code description | Remarks |
|---|---|---|---|---|---|
| Extreme weather event | Value | Days | | Number of days of extreme weather events | |
| Meteorological station | Value | Dot, longitude, latitude | | The location of the meteorological station | |

### iii. Temporal cover

1999-2010

### iv. Spatial cover

Heilongjiang Province、Primorsky krai

## II. Subject/industry scope of dataset/atlas

### i. Subject scope

Earth science

### ii. Industry scope

Extreme climate

### iii. Other classifications (optional)

## III. Accuracy of dataset/atlas

### i. Time frequency

10 years

### ii. Spatial reference, accuracy, and granularity

Spatial reference: GCS_WGS_1984

Accuracy: 1 time

Spatial resolution: 1 km

Granularity: station

## IV. Dataset/atlas storage management

### i. Data quantity

164 MB

### 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

Based on the daily air temperature, precipitation and other multi-source data of meteorological stations, the data sets of extremely low temperature, high temperature and precipitation days of each meteorological station are calculated by using percentile threshold method and Kriging interpolation.

### ii. Data sources (condition selection)

Daily temperature and precipitation data of meteorological stations

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

The data sets of extremely low temperature, high temperature and precipitation days of each meteorological station are calculated by using percentile threshold method and Kriging interpolation.

## 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)

Contact Information for Service：

Name: Service group of Disaster Risk Reduction Knowledge Service System of IKCEST

Address：A11 Datun Road, Chaoyang District, Beijing

Zip Code：100101

E-mail: ikcest-drr@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)

“Data set of extreme climate events in China-Russian border area” owned by institute of geographic sciences and natural resources research, CAS.

### ii. Reference method of the dataset/atlas

Data set of extreme climate events in China-Russian border area. Disaster Risk Reduction Knowledge Service of International Knowledge Centre for Engineering Sciences and Technology (IKCEST) under the Auspices of UNESCO,2020.12.13. URL

### iii. Usage contacts of the datasets/atlas

Contact person

Name: Service group of Disaster Risk Reduction Knowledge Service System of IKCEST

Mailing address: A11 Datun Road, Chaoyang District, Beijing

Zip code: 100101
E-mail：ikcest-drr@lreis.ac.cn

## VIII. Others (optional)

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

| Data documentation author information | | | | |
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