

## **Data Set of Heat Wave Frequency in South and Southeast Asia (1989-2018)**

### **Data Documentation**

#### **I. Dataset/atlas content features**

##### **i. Abstract**

The data set is calculated and interpolated from meteorological station data. Meteorological station data come from NOAA, including temperature, wind speed, precipitation and other data. The research team called the phenomenon that the maximum temperature of a station exceeded 35 degrees C for three consecutive days as a heat wave process, and then obtained the heat wave frequency of each station, and then formed the grid data covering the whole research area through Kriging interpolation.

The data set shows the frequency of heat wave occurrence and its temporal and spatial characteristics, which provides a reference and basis for users and further research.

##### **ii. Elements (content fields)**

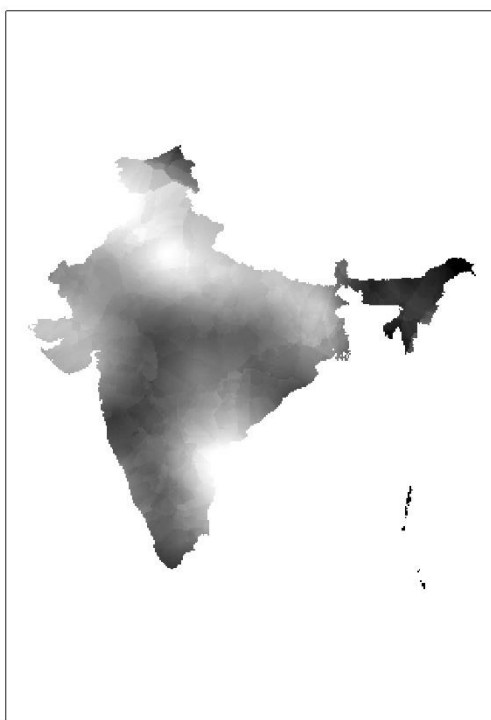


Fig.1 Example

The data set divides 30 years into six stages, averaging data every five years. The area with high gray value is the high value area, and the area with low gray value is the low value area.

##### **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**

Heat wave service

**iii. Other classifications (optional)**

**III. Accuracy of dataset/atlas**

**i. Time frequency**

5 years

**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**

13.1MB

**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 team called a heat wave process when the maximum temperature of a site exceeded 35 C for three consecutive days, and then obtained the frequency of heat waves at each site, and then formed the grid data covering the whole research area through 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)**

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)**

“Data Set of Heat Wave Frequency in South and Southeast Asia” owned by institute of geographic sciences and natural resources research, CAS.

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

Data set of heat wave frequency in South and Southeast Asia(1989-2018). Disaster Risk Reduction Knowledge Service of International Knowledge Centre for Engineering Sciences and Technology (IKCEST) under the Auspices of UNESCO,2019.5.23. <http://drr.ikcest.org/info/901ef>.

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

Contact person

Name: Yang fei

Mailing address: A11 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			
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