Weibo DataSet related to the Earthquake in Tangshan, China (2020)

Data Documentation

I. Dataset/atlas content features

i. Abstract

This dataset is Weibo Data related to the earthquake on July 12, 2020 in Tangshan, China. Using web crawlers and Weibo API, original Weibo messages were collected with "earthquake" as the keyword. The following information was extracted: user ID, timestamp (i.e., the time when the message was posted), text (i.e., the text message posted by a user), and location information. Then sentiment index was calculated by 'Tencent' natural language processing (NLP) API. The data format is Excel. The spatial scope is China. The temporal range is from 00:00 to 24 :00 on July 12, 2020. There are 10,528 Weibo texts.

ii. Elements (content fields)

There are totally 4 fields in the dataset, whose meaning is as follows:

"ID": Weibo text serial number

"UserLoaction": the user location of Weibo text

"Create_Time": Weibo text release time

"Text": Weibo text

iii. Temporal cover

00:00 to 24 :00 on July 12, 2020

iv. Spatial cover

The spatial range of this dataset is China.

II. Subject/industry scope of dataset/atlas

i. Subject scope

Geography .

ii. Industry scope

Disaster Risk Reduction

iii. Other classifications (optional)

(Other categories can be applied, but should reflect the dataset/atlas characteristics.)

III. Accuracy of dataset/atlas

i. Time frequency

ii. Spatial reference, accuracy, and granularity

IV. Dataset/atlas storage management

i. Data quantity

9.31MB

ii. Type format

Excel

iii. Update management

Irregular updating

V. Quality control of the dataset/atlas

i. Production mode

Data acquisition and preprocessing are carried out by means of network crawler, regular expression and natural language processing. The 'Tencent' natural language processing (NLP) platform is used to calculate sentiment index

ii.   Data sources (condition selection)

The dataset is collected or downloaded from the internet. The results are classified by sorting data.

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

Acquisition method: On July 12, 2020, an earthquake with magnitude 5.1 occurred in Guye District, Tangshan City, Hebei Province, with a focal depth of 10 km. Using web crawlers and Weibo API, original Weibo messages were collected with "earthquake" as the keyword with timestamps between 00:00 and 24:00 on July 12. The following information was extracted: user ID, timestamp (i.e., the time when the message was posted), text (i.e., the text message posted by a user), and location information.

Processing method: The original Weibo texts contain interference information, for instance, http hyperlink, spaces, punctuation marks, hashtag, and @user. Text filtering is necessary to eliminate noise and improve the efficiency of word segmentation. These types of interference information were removed by the regular expression operations ('re' module) in Python. Very short Weibo texts (less than four words) and duplicated Weibo texts were deleted.

VI.   Sharing and usage method of the dataset/atlas

i.   Sharing methods and restrictions

Fully opened sharing

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

The dataset can be read by ArcGIS software and Microsoft office.

VII. Intellectual property rights of the dataset/atlas

i.   Property rights (optional)

The property of the dataset belongs to the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences.

ii.   Reference method of the dataset/atlas

Weibo DataSet related to the earthquake in Tangshan, China (2020). Disaster Risk Reduction Knowledge Service of International Knowledge Centre for Engineering Sciences and Technology (IKCEST) under the Auspices of UNESCO, 2020.9.19.

iii.   Usage contacts of the datasets/atlas

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

Address: A11 Datun Road, Chaoyang District, Beijing .

Postcode: 100101

Telephone: 010-64889048-8006

Email: ikcest-drr@lreis.ac.cn

VIII.   Others (optional)

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

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