

**Land degradation data set along the China-Mongolia Railway (Mongolia section)****Data Documentation****I. Dataset/atlas content features****i. Abstract**

This data set is the distribution data of land degradation along the China-Mongolia Railway (Mongolia section) from 1990 to 2010 and from 1990 to 2015. It mainly records the types of land degradation and restoration, as well as the characteristics of spatial and temporal distribution, with a total of 18 vector files. They were collected and organized by the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. And it can provide important basis for monitoring and prevention of land degradation disaster.

**ii. Elements (content fields)**

This dataset was named as “Land degradation data set along the China-Mongolia Railway (Mongolia section)”, which included 2 data files. There are mainly 2 data name for different years and they are described as table 1.

Table 1 Description of data element content

Data name	Item (field)	Field name in Chinese	Field measure unit	Field code description	Remarks
Land degradation	Land degradation types				
Land restoration	Land restoration types				

**iii. Temporal cover**

1990-2010, and 1990-2015.

**iv. Spatial cover**

Along the China-Mongolia railway (Mongolia section).

**II. Subject/industry scope of dataset/atlas****i. Subject scope**

Basic Disaster information

**ii. Industry scope**

Environmental and Textile

**iii. Other classifications (optional)****III. Accuracy of dataset/atlas****i. Time frequency**

10 and 15 years.

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

This dataset used the WGS1984 coordinate system. The spatial resolution is 30 meters.

**IV. Dataset/atlas storage management****i. Data quantity**

The volume of the dataset is 267 MB.

**ii. Type format**

This dataset was stored in hard disk with formats of “.shp”.

**iii. Update management**

Unscheduled update.

**V. Quality control of the dataset/atlas**

**i. Production mode**

Based on multi-source remote sensing image data, we adopted object-oriented classification method to obtain land cover data products of 1990, 2010 and 2015 along the China-Mongolia railway (Mongolia section) with a spatial resolution of 30 meters. Based on the obtained land cover interpretation data, the forest, meadow and typical grassland, which obviously did not have land degradation, were combined and classified into areas without land degradation, and the information of features such as desert grassland, bare land, sandy land and desert were extracted separately. Under the support of GIS spatial analysis module, respectively 1990 and 2010, 1990 and 2015 the third phase of land cover data stack operations, to build the transfer matrix of land cover, land degradation and land recovery type system. Finally, land degradation and land restoration data along the China-Mongolia Railway (Mongolia section) with a spatial resolution of 30 meters were obtained from 1990-2010 and 1990-2015.

**ii. Data sources (condition selection)**

The original data was from the USGS official website.

**VI. Sharing and usage method of the dataset/atlas**

**i. Sharing methods and restrictions**

Full and open sharing.

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

Online link address:

Contact Information for Service:

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

Address: 11A, Datun Road, Chaoyang District, Beijing, 100101, China, Institute of Geographic Sciences and Natural Resources Research, CAS.

Zip Code: 100101

E-mail: ikcestdrr@lreis.ac.cn

**iii. Conditions and methods of usage**

This dataset can be opened using ArcGIS.

**VII. Intellectual property rights of the dataset/atlas**

**i. Property rights (optional)**

Intellectual property of the dataset belonged to Institute of Geographic Sciences and Natural Resources Research, CAS.

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

Land degradation data set along the China-Mongolia Railway (Mongolia section). Disaster Risk Reduction Knowledge Service of International Knowledge Centre for Engineering Sciences and Technology (IKCEST) under the Auspices of UNESCO, 2020.08.29.

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

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**VIII. Others (optional)**

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

Data documentation author information			
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