<u>Changes of water volume and lake area in the Hongjiannao Lake, Northern Shaanxi from 1970 to 2005</u>

Data Documentation

I. Dataset content features

i. Abstract

The datasets are Changes of water volume and lake area in the Hongjiannao Lake, Northern Shaanxi from 1970 to 2005, which mainly record changes of water volume and lake area in the Hongjiannao Lake, Northern Shaanxi,. They are collected and organized by Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. There are totally 48 data files. There are 7 excel tables, 1 vector file, 15 .jpg format images, 21 .emf format images, 2 .png format images, and 2 .wmf format images. They can be used to study the change of lakes in Hongjiannao, northern Shaanxi from 1970 to 2005, and government decision-making.

ii. Elements (content fields)

The datasets are named as "Changes of water volume and lake area in the Hongjiannao Lake, Northern Shaanxi from 1970 to 2005", which include 48 data files. There are mainly 3 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	Field measure	Field code	Remarks			
		Chinese	unit	description				
Changes of								
water volume								
in the			100 million					
Hongjiannao	Water volume reduction	水量减少	cubic meters					
Lake,								
Northern								
Shaanxi from								
Changes of								
water volume								
in the			100 million					
Hongjiannao	Water volume	水量	cubic meters					
Lake,								
Northern								
Shaanxi from								
Changes of								
lake area in								
the								
Hongjiannao	lake area	湖泊面积	square					
Lake,			kilometer					
Northern								
Shaanxi								

iii. Temporal cover

Time of the dataset ranged from 1970 to 2005.

iv. Spatial cover

The datasets cover all of the Hongjiannao Lake, Northern Shaanxi.

II. Subject/industry scope of dataset/atlas

i. Subject scope

Environmental sciences, regional sustainable development, geography.

ii. Industry scope

Resource and environmental monitoring.

iii. Other classifications (optional)

III. Accuracy of dataset/atlas

i. Time frequency

Yearly

ii. Spatial reference, accuracy, and granularity

The dataset is test data without spatial reference and the minimal granularity of the dataset is Hongjiannao Lake.

IV. Dataset/atlas storage management

i. Data quantity

The volume of the dataset is 1.72 MB.

ii. Type format

The dataset is stored in hard disk with formats of .png, .jpg, excel, .shp, .emf, wmf.

iii. Update management

Unscheduled update.

V. Quality control of the dataset/atlas

i. Data sources (condition selection)

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

First, download the remote sensing image of the study area. Then, the remote sensing image is preprocessed. Classify it and extract water information. In order to obtain information on water bodies in various years, area statistics, water volume calculations, etc. Comparing the water area of each year and the amount of water, we finally concluded that the change of lakes in Hongjiannao Lake in northern Shaanxi..

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: Yuan Yuelei

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

Zip Code: 100101

E-mail: wdc-rre@lreis.ac.cn

iii. Conditions and methods of usage

The dataset can be read by Picture software and .Microsoft Office Excel.

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

Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. Changes of water volume and lake area in the Hongjiannao Lake, Northern Shaanxi. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences [Establishment organization], 2007. World Data Center for Renewable Resources and Environment [Communication agency], 2017-2-14.

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.

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