

The Diagnostic Dataset of Damaged Vegetation Restoration Based on Phenology
Information

Data Documentation

I. Dataset/atlas content features

i. Abstract

(The Abstract is an overview of the contents of the dataset/atlas.)

The diagnostic data of damaged vegetation restoration can reflect plant restoration status in time, and provides some effective support for disaster recovery and reconstructions of affected vegetation. This dataset is produced by the spatial distribution of damaged vegetation and corresponding plant phenology data, which use the dynamic threshold method to monitor whether the damaged vegetation is restored or not. The dataset covers the whole of Hunan province, which includes 101 counties and the spatial resolution of which is 250 meters. What's more, the diagnostic result of vegetation restoration is from 2008 to 2015, the pixel value of which represents the vegetation restoration status. The dataset contributes to forest resource management and related scientific research.

ii. Elements (content fields)

(The list describes the feature items (content fields) contained in the dataset/atlas. The code dictionary table should be given if the element is a code, and the meaning of the code should be indicated. Each data file (layer) should be described accordingly if the datasets/atlas have multiple data files (layers).)

Table 1 Description of data element content

Data name	Item (field)	Field name in Chinese	Field measure unit	Field code description	Remarks
anhuxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Anhua county, diagnosis is of damaged vegetation restoration in 2015
anrenxian_update				-3: non forest -2: undetected area -1: damaged forest but	Anren county, diagnosis is of damaged vegetation

				unrestored 0: undamaged forest 5: damaged forest and restoration	restoration in 2015
anxiangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Anxiang county, diagnosis of damaged vegetation restoration in 2015
baojingxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Baojing county, diagnosis of damaged vegetation restoration in 2015
chalingxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and	Chaling county, diagnosis of damaged vegetation restoration in 2015

				restoration	
changdeshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Changde city area, diagnosis of damaged vegetation restoration in 2015
changningshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Changning county, diagnosis of damaged vegetation restoration in 2015
changshashixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Changsha city area, diagnosis of damaged vegetation restoration in 2015
changshaxian_update				-3: non forest -2:	Changsha county,

				undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	diagnosis of damaged vegetation restoration in 2015
chengbumiaozuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Twon Miao autonomous county, diagnosis of damaged vegetation restoration in 2015
chenxixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Chenxi county, diagnosis of damaged vegetation restoration in 2015
chenzhoushishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored	Chenzhou city area, diagnosis of damaged vegetation

				0: undamaged forest 5: damaged forest and restoration	restoration in 2015
cilixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Cili county, diagnosis of damaged vegetation restoration in 2015
daoxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Dao county, diagnosis of damaged vegetation restoration in 2015
donganxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Dongan county, diagnosis of damaged vegetation restoration in 2015

dongkouxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Dongkou county, diagnosis of damaged vegetation restoration in 2015
fenghuangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Fenghuang county, diagnosis of damaged vegetation restoration in 2015
guiyangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Guiyang county, diagnosis of damaged vegetation restoration in 2015
guizhouxian_update				-3: non forest -2: undetected area	Guidong county, diagnosis of damaged

				-1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	vegetation restoration in 2015
guzhangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Guzhang county, diagnosis of damaged vegetation restoration in 2015
hanshouxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Huashou county, diagnosis of damaged vegetation restoration in 2015
hengdongxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest	Hengdong county, diagnosis of damaged vegetation restoration in

				5:damaged forest and restoration	2015
hengnanxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Hengnan county, diagnosis of damaged vegetation restoration in 2015
hengyangshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Hengyang city area, diagnosis of damaged vegetation restoration in 2015
hengyangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Hengyang county, diagnosis of damaged vegetation restoration in 2015
hongjiangshi_update				-3: non forest	Hongjiang

				-2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	county, diagnosis is of damaged vegetation restoration in 2015
huaihuashishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Huaihua city area, diagnosis is of damaged vegetation restoration in 2015
huarongxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Huarong county, diagnosis is of damaged vegetation restoration in 2015
huayuanxian_update				-3: non forest -2: undetected area -1: damaged forest but	Huayuan county, diagnosis is of damaged vegetation

				unrestored 0: undamaged forest 5: damaged forest and restoration	restoration in 2015
huitongxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Huitong county, diagnosis of damaged vegetation restoration in 2015
jiahexian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Jiahe county, diagnosis of damaged vegetation restoration in 2015
jianghuayaozuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Jianghua Yao autonomous county, diagnosis of damaged vegetation restoration in

				restoration	2015
jiangyongxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Jiangyong county, diagnosis of damaged vegetation restoration in 2015
jingzhoumiaozudongzuzhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Jingzhou Miao autonomous county, diagnosis of damaged vegetation restoration in 2015
jinshishi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Jinshi county, diagnosis of damaged vegetation restoration in 2015
jishoushi_update				-3: non forest -2:	Jishou county, diagnosis

				<p>undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>is of damaged vegetation restoration in 2015</p>
lanshanxian_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>Lanshan county, diagnosis of damaged vegetation restoration in 2015</p>
leiyangshi_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>Leiyang county, diagnosis of damaged vegetation restoration in 2015</p>
lengshuijiangshi_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p>	<p>Lengshuijiang county, diagnosis of damaged vegetation</p>

				0: undamaged forest 5: damaged forest and restoration	restoration in 2015
lengshuitanqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Lengshu itan county, diagnosis of damaged vegetation restoration in 2015
lianyuanshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Lianyuanshi county, diagnosis of damaged vegetation restoration in 2015
lilingshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Lilingshi county, diagnosis of damaged vegetation restoration in 2015

linlixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Linli county, diagnosis of damaged vegetation restoration in 2015
linwuxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Linwu county, diagnosis of damaged vegetation restoration in 2015
linxiangshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Linxiang county, diagnosis of damaged vegetation restoration in 2015
liuyangshi_update				-3: non forest -2: undetected area	Liuyang county, diagnosis of damaged

				-1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	vegetat ion restora tion in 2015
lixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Lixian county, diagnos is of damaged vegetat ion restora tion in 2015
longhuixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Longhui county, diagnos is of damaged vegetat ion restora tion in 2015
longshanxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest	Longsha n county, diagnos is of damaged vegetat ion restora tion in

				5:damaged forest and restoration	2015
loudishishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Loudi city area, diagnosis of damaged vegetation restoration in 2015
luxixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Luxi county, diagnosis of damaged vegetation restoration in 2015
mayangmiaozuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Mayang Miao autonomous county, diagnosis of damaged vegetation restoration in 2015
miluoshi_update				-3: non forest	Miluo county,

				-2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	diagnosis of damaged vegetation restoration in 2015
nanxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Nan county, diagnosis of damaged vegetation restoration in 2015
ningxiangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Ningxiang county, diagnosis of damaged vegetation restoration in 2015
ningyuanxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Ningyuan county, diagnosis of damaged vegetation restoration in 2015

				unrestored 0: undamaged forest 5: damaged forest and restoration	ion restoration in 2015
pingjiangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Pingjiang county, diagnosis of damaged vegetation restoration in 2015
qidongxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Qidong county, diagnosis of damaged vegetation restoration in 2015
qiyangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and	Qiyang county, diagnosis of damaged vegetation restoration in 2015

				restoration	
ruanjiangshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yuanjiang county, diagnosis of damaged vegetation restoration in 2015
ruanlingxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yuanling county, diagnosis of damaged vegetation restoration in 2015
ruchengxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Rucheng county, diagnosis of damaged vegetation restoration in 2015
sangzhixian_update				-3: non forest -2:	Sangzhi county, diagnosis

				<p>undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>is of damaged vegetation restoration in 2015</p>
shaodongxian_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>Shaodong county, diagnosis of damaged vegetation restoration in 2015</p>
shaoshanshi_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p> <p>0: undamaged forest</p> <p>5: damaged forest and restoration</p>	<p>Shaoshan county, diagnosis of damaged vegetation restoration in 2015</p>
shaoyangshishixiaqu_update				<p>-3: non forest</p> <p>-2: undetected area</p> <p>-1: damaged forest but unrestored</p>	<p>Shaoyang city area, diagnosis of damaged vegetation</p>

				0: undamaged forest 5: damaged forest and restoration	restoration in 2015
shaoyangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Shaoyang county, diagnosis of damaged vegetation restoration in 2015
shimenxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Shimen county, diagnosis of damaged vegetation restoration in 2015
shuangfengxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Shuangfeng county, diagnosis of damaged vegetation restoration in 2015

shuangpaixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Shuangpai county, diagnosis of damaged vegetation restoration in 2015
suiningxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Suining county, diagnosis of damaged vegetation restoration in 2015
taojiangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Taojiang county, diagnosis of damaged vegetation restoration in 2015
taoyuanxian_update				-3: non forest -2: undetected area	Taoyuan county, diagnosis of damaged

				-1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	vegetation restoration in 2015
tongdaodongzuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Tongdao Dong autonomous county, diagnosis of damaged vegetation restoration in 2015
wangchengxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Wangcheng county, diagnosis of damaged vegetation restoration in 2015
wugangshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest	Wugang county, diagnosis of damaged vegetation restoration in 2015

				5:damaged forest and restoration	
xiangtanshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Xiangtan city area, diagnosis of damaged vegetation restoration in 2015
xiangtanxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Xiangtan county, diagnosis of damaged vegetation restoration in 2015
xiangxiangshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5:damaged forest and restoration	Xiangxiang county, diagnosis of damaged vegetation restoration in 2015
xiangyinxian_update				-3: non forest	Xiangyin

				-2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	county, diagnosis of damaged vegetation restoration in 2015
xinhuangdongzuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Xinhuang Dong autonomous county, diagnosis of damaged vegetation restoration in 2015
xinhuaxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Xinhua county, diagnosis of damaged vegetation restoration in 2015
xinningxian_update				-3: non forest -2: undetected area -1: damaged forest but	Xinning county, diagnosis of damaged vegetation

				unrestored 0: undamaged forest 5: damaged forest and restoration	restoration in 2015
xinshaoxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Xinshao county, diagnosis of damaged vegetation restoration in 2015
xintianxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Xintian county, diagnosis of damaged vegetation restoration in 2015
xupuxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Xupu county, diagnosis of damaged vegetation restoration in 2015

				restoration	
yanlingxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yanling county, diagnosis is of damaged vegetation restoration in 2015
yiyangshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yiyang city area, diagnosis is of damaged vegetation restoration in 2015
yizhangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yizhang county, diagnosis is of damaged vegetation restoration in 2015
yongshunxian_update				-3: non forest -2:	Yongshun county,

				undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	diagnosis of damaged vegetation restoration in 2015
yongxingxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yongxin county, diagnosis of damaged vegetation restoration in 2015
yongzhoushishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yongzhou city area, diagnosis of damaged vegetation restoration in 2015
youxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored	You county, diagnosis of damaged vegetation restoration

				0: undamaged forest 5: damaged forest and restoration	tion in 2015
yueyangshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yueyang city area, diagnosis of damaged vegetation restoration in 2015
yueyangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Yueyang county, diagnosis of damaged vegetation restoration in 2015
zhangjiajieshishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Zhangji ajie city area, diagnosis of damaged vegetation restoration in 2015

zhijiangdongzuzizhixian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Zhijiang Dong autonomous county, diagnosis of damaged vegetation restoration in 2015
zhongfangxian_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Zhongfang county, diagnosis of damaged vegetation restoration in 2015
zhuzhoushishixiaqu_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Zhuzhou city area, diagnosis of damaged vegetation restoration in 2015
zhuzhouxian_update				-3: non forest -2: undetected area	Zhuzhou county, diagnosis of damaged

				-1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	vegetation restoration in 2015
zixingshi_update				-3: non forest -2: undetected area -1: damaged forest but unrestored 0: undamaged forest 5: damaged forest and restoration	Zixing county, diagnosis of damaged vegetation restoration in 2015

iii. Temporal cover

(Temporal cover means the time information of the dataset/atlas content that can be recorded as a time point or a time period (start time and end time).)

The dataset is the diagnosed result of damaged vegetation restoration on 2015.

iv. Spatial cover

(The spatial information of the dataset/atlas includes the location description information or the latitude and longitude coordinates (latitude and longitude data should follow the format of degree, minute and second). It can be a single location or a spatial range (latitude and longitude coordinates in the upper left and lower right corners).

The dataset covers the whole Hunan province, which includes 101 county-level administrative units.

II. Subject/industry scope of dataset/atlas

i. Subject scope

(The subject classification of the dataset/atlas is based on the “Subject Classification and Code (GB/T 13745-2008)”. The general requirements of a primary classification or a number of auxiliary classifications should reach the second level of classification, and may also reach the third level of classification.)

Earth science

ii. Industry scope

(The industry classification of the dataset/atlas is based on the “Industry Classification of National Economy and Code Table (GB/T 4754-2002)”. The general requirements of a primary classification or a number of auxiliary classifications should reach the second level of classification, and may also reach the third level of classification.)

Natural science research and experiment development

iii. Other classifications (optional)

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

III. Accuracy of dataset/atlas

i. Time frequency

(Time frequency is the representation content of datasets/atlas' time frequency, such as multi-year average, average, monthly, daily, yearly, month by month, day or hour.)

The time frequency is yearly.

ii. Spatial reference, accuracy, and granularity

(This part is the spatial reference, accuracy, and granularity of datasets/atlas. The spatial reference includes coordinate system, projection mode, elevation system, etc. Spatial accuracy means the vector data scale or raster data resolution, etc. Spatial granularity is in accordance with the continent, the state, province, county, and other divisions.)

The spatial reference is Albers Equal Area Conic; spatial resolution is 250m; county;

IV. Dataset/atlas storage management

i. Data quantity

(Data quantity means dataset/atlas' data volume (in MB) or record number (for monitoring data or table data).)

The data quantity is 1.01MB.

ii. Type format

(Type format means dataset/atlas storage medium (paper and electronic media, including CD, hard disk, server, etc.), structure type (text, table, vector, raster, etc.), and its specific format and version.)

The dataset is stored as a hard disk, and the data structure type is a raster TIF file.

iii. Update management

(Dataset/atlas update plan: the data provider should indicate whether there is a data update plan, and if necessary, specify the update frequency and the person responsible for it. The information of the person responsible for updating management includes institute name, name of the person responsible, contact information (mailing address, telephone, and e-mail), and other relevant information.)

No update plan

V. Quality control of the dataset/atlas

i. Production mode

(The production mode of the dataset/atlas mainly includes raw data (field monitoring, investigation survey, test analysis, experimental test, acquisition, and similar data) and processing data (electronic, digital, integrated conversion, standardized processing, computational simulation, and similar data).)

Based on the spatial distribution of damaged vegetation, the dynamic threshold method was used to compare various phenology parameters before and after disaster. If the phenological parameters were Revert to the pre-disaster level, the damaged vegetation was judged as that one restored.

ii. Data sources (condition selection)

(The source, accuracy of the raw data, and scope of application for the raw data collected, purchased, exchanged, and shared and the data generated by processing must be explained. You may leave this blank and indicate "self-built" when the dataset is the first-hand observation data.)

Phenological parameter dataset is extracted from MODIS/EVI time series data using Timesat software.

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

(For the data of collection, monitoring, testing, processing, must explain the collection and the processing

methods. The specifications include the equipment, standards, and methods for data acquisition, monitoring, testing, and usage and methods and models (the model origin and parameters) or software of processing, calculation method, and the methods (standards, etc.) of error control and processing. The data provider may leave this blank and just indicate “raw data, without processing” when the dataset is the original acquisition without any processing.)

MODIS / EVI datasets were downloaded from the MODIS website. Based on the Timesat software platform, the SVI filtering algorithm was used to filter the EVI time series data to extract the related phenological parameters. The parameters of the phenology are different from the damage before and after the damage. Using dynamic threshold method diagnose whether post-disaster phenological parameters are reverted to pre-disaster level of those or not. If the selected phenological parameters are restored to the pre-disaster level, the damaged vegetation is restored.

VI. Sharing and usage method of the dataset/atlas

i. Sharing methods and restrictions

(The sharing method can be one of three possible types: full and open sharing, agreement sharing, and temporarily unshared. Full and open sharing is when the user can freely access the dataset/atlas. Agreement sharing means obtaining a dataset/atlas after signing a shared agreement with an application for the responsible party or a delegated regulatory agency. Temporarily unshared means that the data cannot be accessed at present or only be shared after the approval of the management department. Agreement sharing needs to explain the specific requirements, while temporarily unshared needs to explain the reasons and the limit of the open time.)

Temporarily not shared before 2017/12/31, fully shared after 2017/12/31

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

(Full and open sharing need to provide an online link address or a service contact. Protocol sharing needs to provide the time and contact information of the service. The data provider may leave this blank and just indicate “service provided by the collection management institute” if the dataset/atlas is only served by the collection management institution.)

The service is as follows:

Name: Wang xuecheng

Mailing address: Chaoyang District, Beijing Datun Road on the 11th

Zip code: 100101

E-mail: wangxc.15s@igsnr.ac.cn

iii. Conditions and methods of usage

(The environmental conditions when to use the datasets/atlas should be provided, including the necessary software tools, hardware requirements, and operation of the steps, methods, or precautions.)

VII. Intellectual property rights of the dataset/atlas

i. Property rights (optional)

(The dataset/atlas property ownership information includes the property owner contact information.)

“The diagnostic dataset of damaged vegetation restoration based on phenology information” owned by institute of geographic sciences and natural resources research, CAS.

ii. Reference method of the dataset/atlas

(Dataset/atlas usage statement and citation: (i) usage statement refers to identify the dataset/atlas used in the user’s research results text, while (ii) citation refers to identify the dataset/atlas used in the references of the research results, or list must be referenced published papers or monographs closely related to the dataset/atlas. It can be in either Chinese or English form or only in Chinese.)

(The usage statement can follow the following method: <Dataset/atlas name> from Disaster Risk Reduction Knowledge Service System of International Knowledge Center for Engineering Sciences and Technology (IKCEST) “<Project name (number)>”; reference method is recommended to take the following method: <Dataset/atlas property owner name> (can be multiple, sorted by contribution size, separated by “;”). <Organization name> (can be multiple, sorted by contribution size, separated by “;”). <Dataset/atlas name>. <Generation time>. When actually written, “<>” is replaced by a specific value.)

iii. Usage contacts of the datasets/atlas

(The contact persons or agencies, who curate the data and provide a data sharing service, should be listed, including their name, address, postcode, telephone, and e-mail).

Contact person

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VIII. thers (optional)

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

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