

China GEO Data Publishing-Repository-Sharing Management

Prof. LIU Chuang, As. Prof. SHI Ruixiang

**China GEO Data Publishing Center
WDS on GCdataPR**

**Editorial Office of Global Change Research Data Publishing and
Repository, Institute of Geographical Sciences and Natural Resources
Research, Chinese Academy of Sciences**

**23 October 2017, Data Management Site Event, XIV GEO Plenary,
Washington D.C. USA**

Content

- 1. Introduction to the GCdataPR**
- 2. Data Publishing Management**
- 3. Data Repository Management**
- 4. Data Sharing Management**
- 5. New Milestone of China Scientific Data Sharing History**

1 Introduction to the GCdataPR:

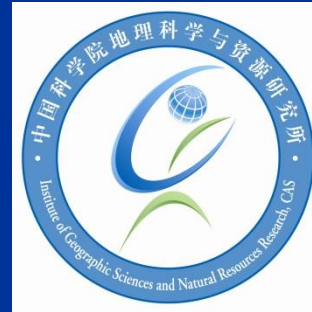
Global Change Research Data Publishing & Repository



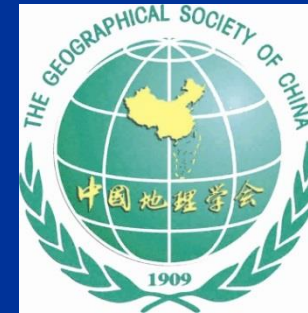
<http://www.geodoi.ac.cn>

DOI: 10.3974/ ISSN 2096-3645

Co-sponsored by



&



DOI:10.3974 Data Publishing Center Data Provider & Broker

Regular
Member

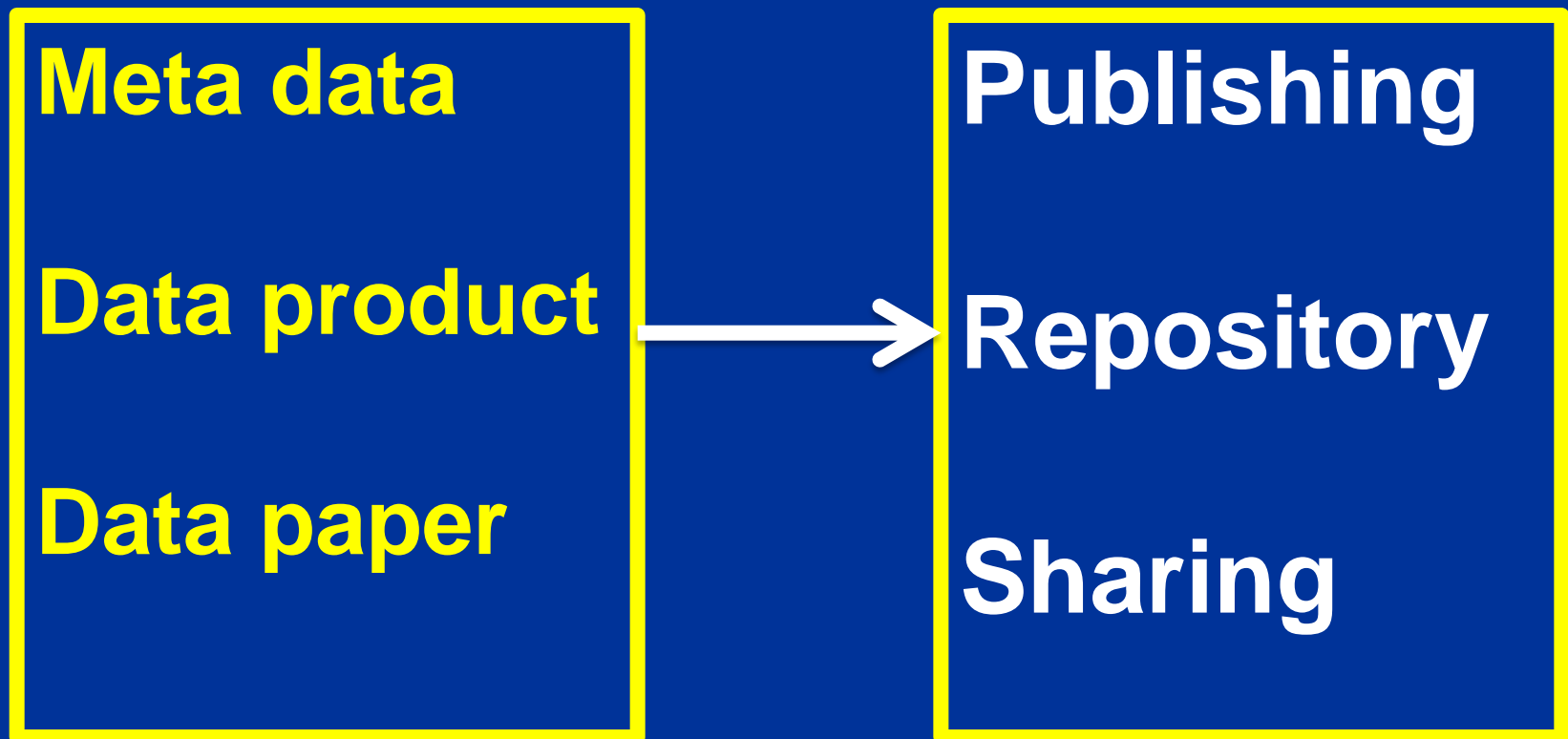
CODATA-PASTD
Data Infrastructure

Data Citation Index
(Clarivate Analytics)

1 Introduction to the GCdataPR:

Global Change Research Data Publishing & Repository

Basic Principle of GCdataPR:

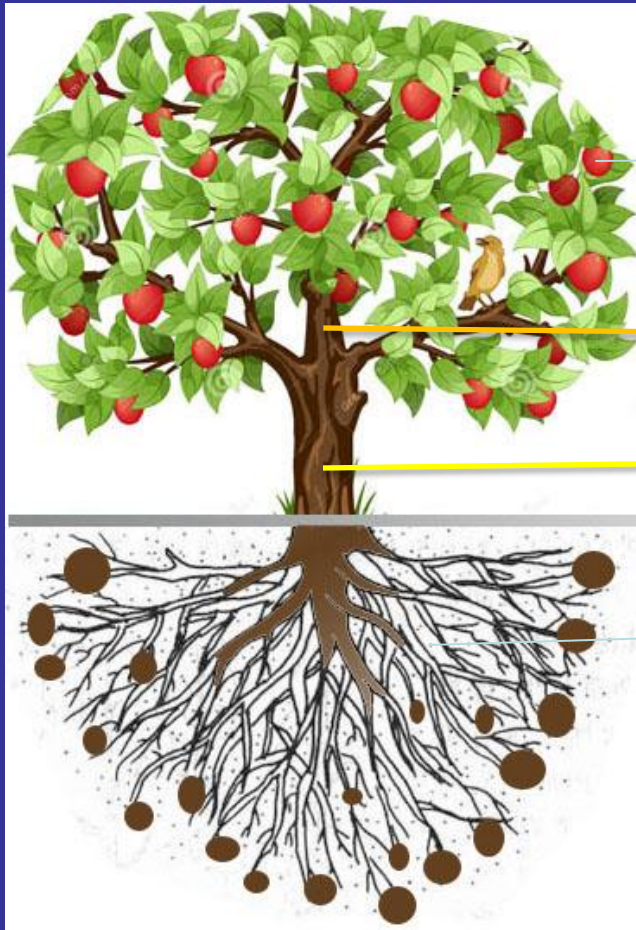


1 Introduction to the GCdataPR: Global Change Research Data Publishing & Repository

One management system, including:

- Two Editorial Boards
 - (1) Editorial Board for *Global Change Research Data Publishing & Repository*
 - (2) Editorial Board for *Journal of Global Change Data & Discovery*
- One Editorial Office

2. Data Publishing Management: why we need data publishing?



Users for Discoveries

Data sharing system

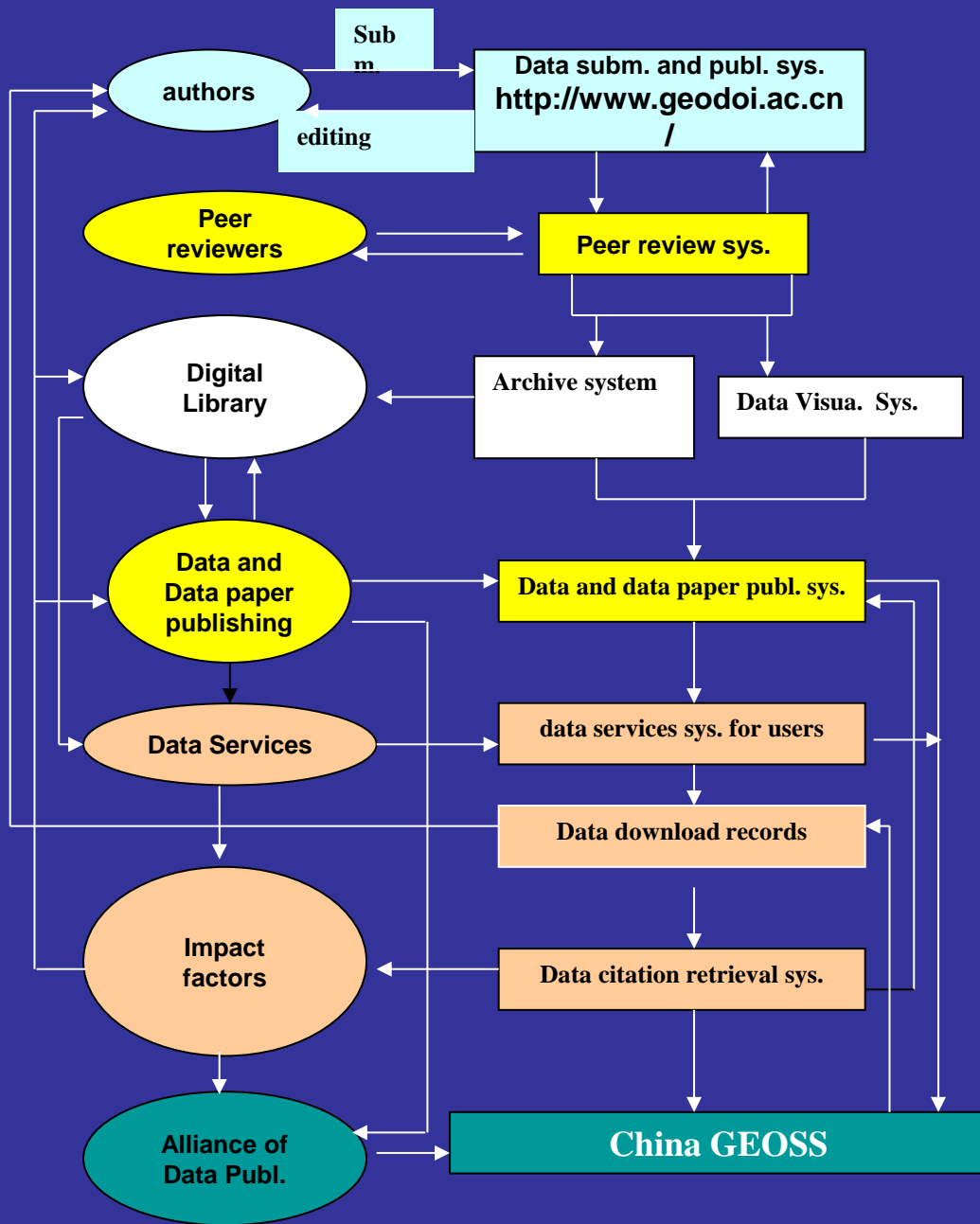
Data publishing

Data producers: Data products

2. Data Publishing Management

2-1. Term of Data Publishing:

**Metadata, Data Product
and Data Paper publishing
Together**



2-2. Data Publishing & Repository Procedure and Flowchart

2-3. Author(s): Conditions of Submission

(1) The data, metadata, data paper are original;

(2) The data, metadata, data paper do not contain any unlawful, scandalous, libelous, obscene, or otherwise objectionable information;

Author(s): Conditions of Submission

(3) The dataset author (s) agree to give the following right or license to the GCdataPR:

- Publish the metadata, data product(s) and data paper(s) in either or both printed format or digital format in any media, including internet;
- Host and transfer the deliver and service right;
- Maintain online or mirror sites which include the metadata, data paper and dataset (in part or as a whole)

(4) The dataset author (s) agree not to grant any other DOI publisher the exclusive right to publish the dataset and data paper again.

2-4. Data Quality Control – Peer Review



Pretend to play Yu

In Qi dynasty, the King named Xuan enjoyed listening Yu, preferred 300 Yus together. A man named Nanguo pretended to play, Xuan approved him to join the team and pay him more. When Xuan died, new king named Min preferred one by one, Nanguo escaped.

滥竽充数： 齐宣王命令人吹竽，必三百人。南郭请为王吹竽，宣王说之，廩食以数百人。宣王死，湣王立，好一一听之，处士逃。 《韩非子·内储说上》

2. Data Publishing Management

2-5. DOIs

One research data product, two DOIs:
one for metadata-data product, one for data paper

Chen,J.,Liao,A.P.,Chen,L.J.,et al.. Artificial Land Surface Dataset at 30 m Resolution (2010) (GlobeLand30_ATS2010) , ***Global Change Research Data Publishing & Repository***,
DOI:10.3974/geodb.2014.02.02.V1

Chen,J.,Liao,A.P.,Chen,L.J.,et al..Content and Composition of Global Artificial Land Surface Dataset at 30 m Resolution (2010). ***Journal of Global Change Data & Discovery***. 2017.1(2):136-148 .
DOI:10.3974/geodp.2017.02.02 .

3. Data Repository Management

Data Archive for Long Term Preservation

3-1. Data Format: kmz, shp, tif, hdf, img,

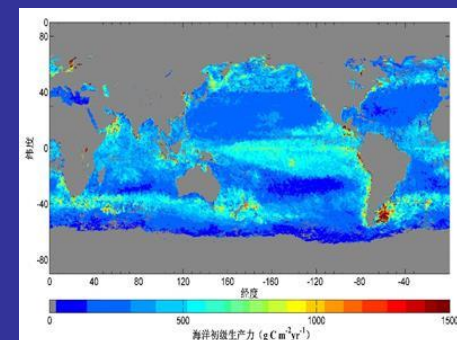
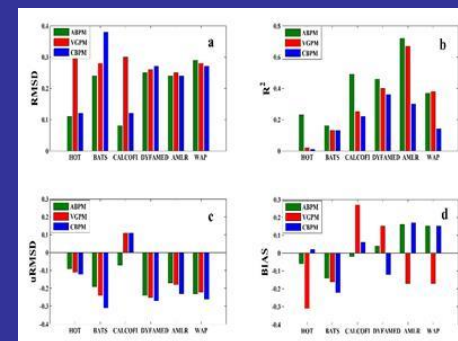
3-2. Data Files and data size

3-3. Long Term Repository: Library (IGSNRR/CAS)

Monthly Datasets of Global Marine NPP at 9 km Based on MODIS and ABPM Model (2003-2012)

Data Product:

ID	Data Name	Data Size	Operation
1	AttachFile1.xlsx	102.32kb	DownLoad
2	AttachFile2.xlsx	11.57kb	DownLoad
3	AttachFile3.xlsx	37.63kb	DownLoad
4	GlobalMarineABMP_NPP_2003.rar	40640.70kb	DownLoad
5	GlobalMarineABMP_NPP_2004.rar	40753.94kb	DownLoad
6	GlobalMarineABMP_NPP_2005.rar	40869.83kb	DownLoad
7	GlobalMarineABMP_NPP_2006.rar	40851.41kb	DownLoad
8	GlobalMarineABMP_NPP_2007.rar	40710.86kb	DownLoad
9	GlobalMarineABMP_NPP_2008.rar	40631.96kb	DownLoad
10	GlobalMarineABMP_NPP_2009.rar	40678.70kb	DownLoad
11	GlobalMarineABMP_NPP_2010.rar	40909.45kb	DownLoad
12	GlobalMarineABMP_NPP_2011.rar	41102.81kb	DownLoad
13	GlobalMarineABMP_NPP_2012.rar	40822.93kb	DownLoad



4. Data Sharing Management

4-1. Data Sharing Policy:

- (1) *Data* are **openly** available and can be **free** downloaded via the Internet;
- (2) End users are encouraged to use *Data* subject to **citation**
- (3) Users, who are by definition also value-added service providers, are welcome to redistribute *Data* subject to **written permission** from the GCdataPR Editorial Office and the issuance of a *Data* redistribution license.
- (4) If *Data* are used to compile new datasets, the '**ten per cent principal**' should be followed such that *Data* records utilized should not surpass **10%** of the new dataset contents, while sources should be clearly noted in suitable places in the new dataset.

4-2. Data sharing platform: www.geodoi.ac.cn

PR data GC Global Change Research Data Publishing & Repository
—Metadata, Data Products and Data Papers

Chinese | English

Home | Submission | Data List | Search | Policy | Documents | Authors | Order | About Us | Rankings | Sign In | Register

Instructions for Author(s)

Statistics
Datasets Published: **321**
On line Datasets: **109.41** GB
Total authors (Co...): **602**
Author Affiliation : **152**
Authors from : **11** countries
Visitors: **611,439**
Data Users (IP) : **33,644**
Users from : **73** countries
Data Files
Downloaded : **117,064**
Data Downloaded: **2,394.37** GB

Networking in Top
doi
10.3974

News More

- A New Milestone of Sci. Data Sharing in China 2017-09-10
- GCdataPR: An Outstanding Case in Big Data in China 2017-09-10
- Capacity Building on Data Management in Indian 2017-09-10
- Claim Scientific Discovery with both Paper & Data 2016-03-18

Datasets Pub. Editor-in-Chief: LIU Chuang More

Dataset Title: Boundary Data of the Dongjiang...
DOI: 10.3974/geodb.2017.03.20.V1
Published: Oct. 2017
Author(s): XU Jie ,XIAO Yu* ,XI...
Key Words: Dongjiang Lake,Basin...

Dataset Title: Anomaly Dataset of PAR, TEM an...
DOI: 10.3974/geodb.2017.03.19.V1
Published: Oct. 2017
Author(s): LI Jing ,LIU Qinhuo ...
Key Words: The Belt and Road,Ve...

Dataset Title: The Drought Degree and Its Imp...
DOI: 10.3974/geodb.2017.03.18.V1
Published: Oct. 2017
Author(s): WU Jianjun ,YANG Jia...
Key Words: drought,vegetation,S...

Dataset Title: Potential Solar Power Generati...
DOI: 10.3974/geodb.2017.03.17.V1
Published: Oct. 2017
Author(s): ZHANG Qian ,XIN Xiao...

J. Global Change Data & Discovery

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Sponsors : IGSNRR/CAS, GSC
Editor-in-Chief : GE Quansheng
Pub. & Dis. : GCdataPR

No.1,Vol.2,2017

Statistics
Total : **65** Data Papers : **109**

Current Issue More>>

2017.1(2):121-135 Zhang,L.F.,Sun,X.J.,Zhang,X.,et al.
A Multi-Dimensional Data Format (MDD) and Analysis Tool
[PDF\(276\)](#) [RICH HTML\(212\)](#) [DATASET\(1319\)](#)

2017.1(2):136-148 Chen,J.,Liao,A.P.,Chen,L.J.,et al.
Content and Composition of Global Artificial Land Surface Dataset at 30 m Resolution (2010)
[PDF\(247\)](#) [RICH HTML\(177\)](#) [DATASET\(8577\)](#)

2017.1(2):149-156 Tao, Z., Zhou, X., Ma, S.

ISSN 2096-3645
CN 10-1493/P

Journal of Global Change 全球变化数据学报
Data & Discovery

Vol.1 No.1 · March 2017

Inaugural Editorial
GCdataPR: Infrastructure for Data Publishing & Sharing
Data Sharing Principles in Developing Countries
Global Change Research Program of P. R. China
Global Dataset of Land Surface Water at 30m
A Time Series Land Ecosystem Dataset for China
Polar Datasets
Three Glacial Lakes Data at the Foot of Mt. Everest

1990 1995 2000 2005 2010

ISSN 2096-3645
9 772096 364175

Institute of Geographic Sciences and Natural Resources Research, CAS
Geographical Society of China

4-3 Data Sharing Statistics



Statistics

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Total authors (Co_..) : **602**

Author Affiliation : **152**

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Data Files

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Data Downloaded: **2,394.37**

GB

Current Issue

[More >](#)

2017.1(2):121-135 Zhang,L.F.,Sun,X.J.,Zhang,X.,et al.
A Multi-Dimensional Data Format (MDD) and Analysis Tool

[PDF\(273 \)](#) [RICH HTML\(209 \)](#) [DATASET\(1290 \)](#)

2017.1(2):136-148 Chen,J.,Liao,A.P.,Chen,L.J.,et al.
Content and Composition of Global Artificial Land Surface Dataset at 30 m Resolution (2010)

[PDF\(245 \)](#) [RICH HTML\(176 \)](#) [DATASET\(8537 \)](#)

2017.1(2):149-156 Tao, Z., Zhou, X., Ma, S.
Monthly Datasets of Global Marine NPP at 9 km Based on MODIS and ABPM Model (2003-2012)

[PDF\(156 \)](#) [RICH HTML\(120 \)](#) [DATASET\(3160 \)](#)

2017.1(2):157-164 Lin,L.N.,Wang,YJ.,Zhang,J.,et al.
Hydrologic CTD Dataset Obtained through Chinese Antarctic Expeditions

[PDF\(158 \)](#) [RICH HTML\(125 \)](#) [DATASET\(2133 \)](#)

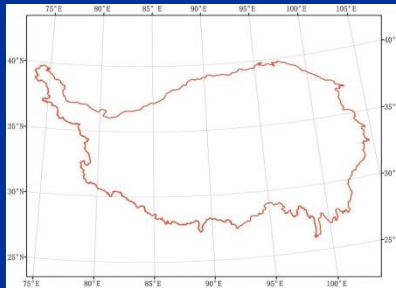
2017.1(2):165-169 Nie,S.Y.,Xiao,W.S.,Wang,R.J.
Terrigenous Components Dataset of Sediment Core ANT28-D1-7 from Bransfield Strait-Antarctic Peninsula

[PDF\(104 \)](#) [RICH HTML\(117 \)](#) [DATASET\(2585 \)](#)

4-4. Data Sharing Network: Acting Locally, Networking Globally

- Networking dataset to DOI

Dataset



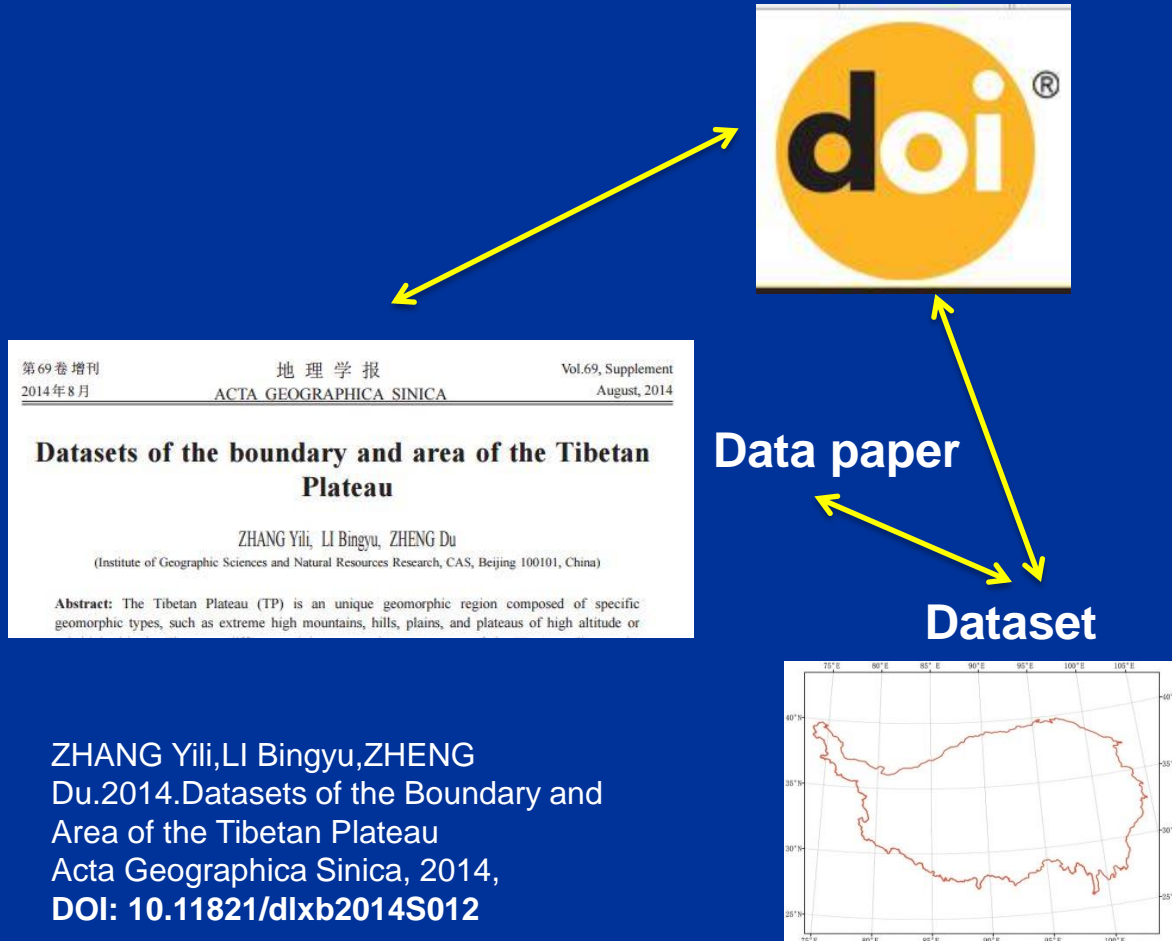
ZHANG Yili,LI Bingyu,ZHENG Du.2014.Datasets of the Boundary and Area of the Tibetan Plateau (DBATP) ,

Dataset with ID



ZHANG Yili,LI Bingyu,ZHENG Du.2014.Datasets of the Boundary and Area of the Tibetan Plateau (DBATP) , Global Change Research Data Publishing & Repository,DOI:10.3974/geodb .2014.01.12.V1

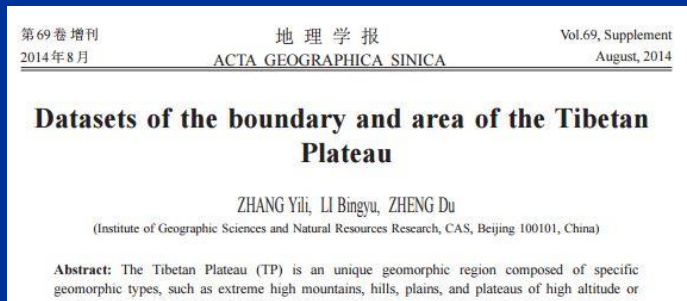
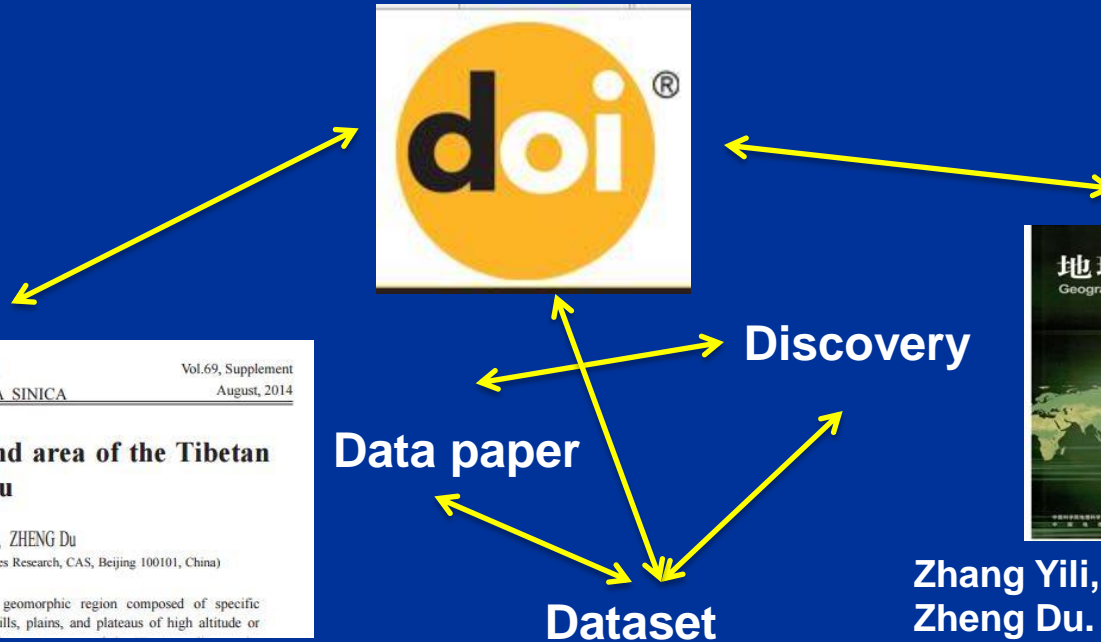
- Networking dataset to data paper and DOI



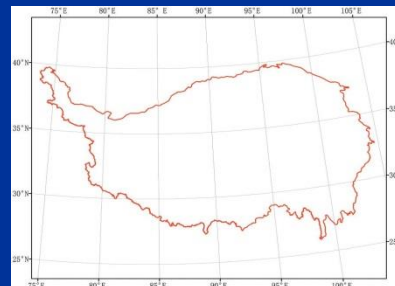
ZHANG Yili,LI Bingyu,ZHENG Du.2014.Datasets of the Boundary and Area of the Tibetan Plateau Acta Geographica Sinica, 2014, DOI: 10.11821/dlxb2014S012

ZHANG Yili,LI Bingyu,ZHENG Du.2014.Datasets of the Boundary and Area of the Tibetan Plateau (DBATP) ,Global Change Research Data Publishing & Repository,DOI:10.3974/geodb.2014.01.12.V1

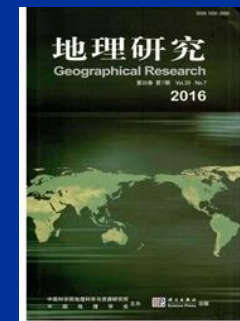
- Networking dataset to data paper, discovery publications and DOI



ZHANG Yili, LI Bingyu, ZHENG Du. 2014. Datasets of the Boundary and Area of the Tibetan Plateau. *Acta Geographica Sinica*, 2014, DOI: [10.11821/dlxb2014S012](https://doi.org/10.11821/dlxb2014S012)

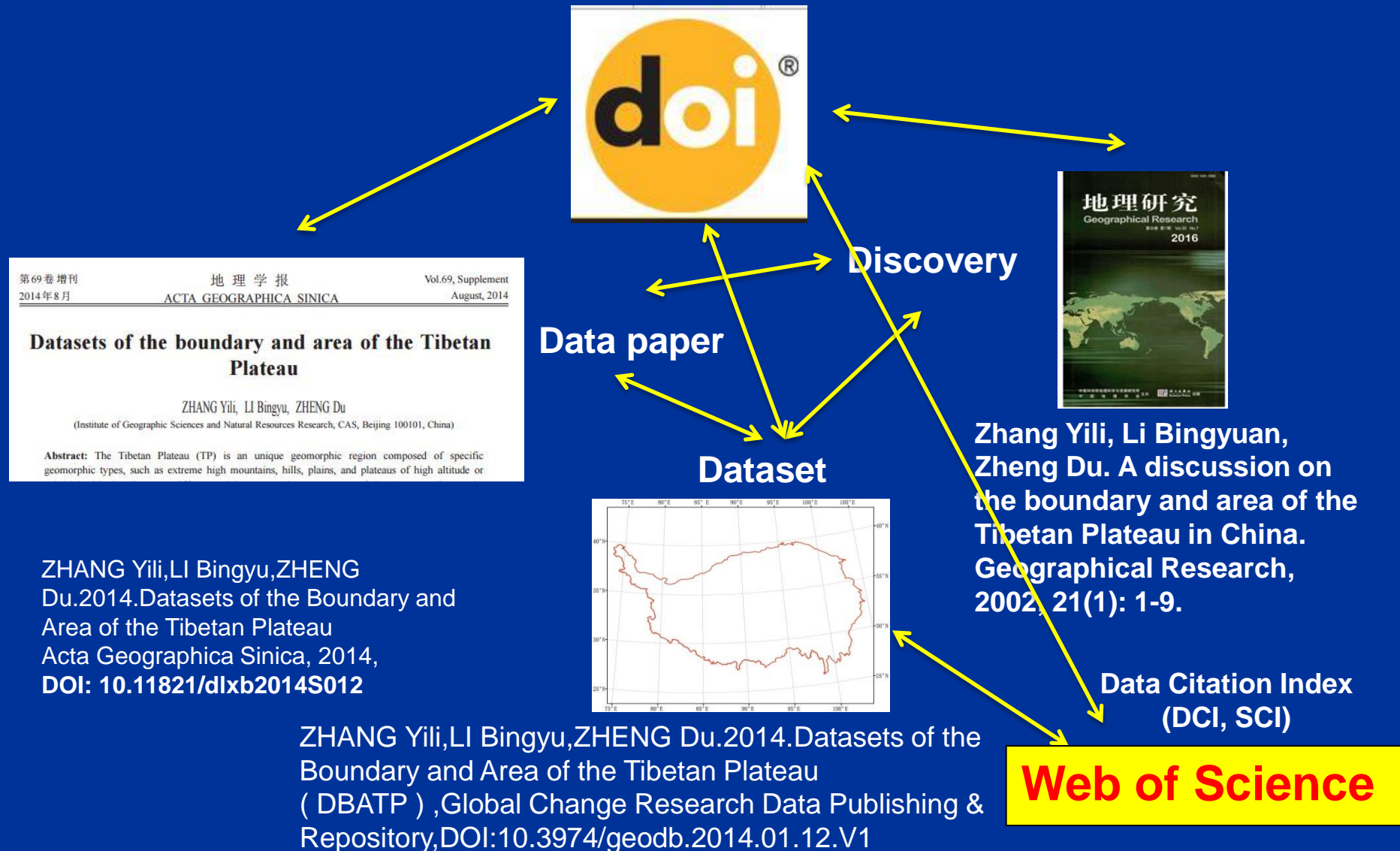


ZHANG Yili, LI Bingyu, ZHENG Du. 2014. Datasets of the Boundary and Area of the Tibetan Plateau (DBATP), Global Change Research Data Publishing & Repository, DOI: [10.3974/geodb.2014.01.12.V1](https://doi.org/10.3974/geodb.2014.01.12.V1)

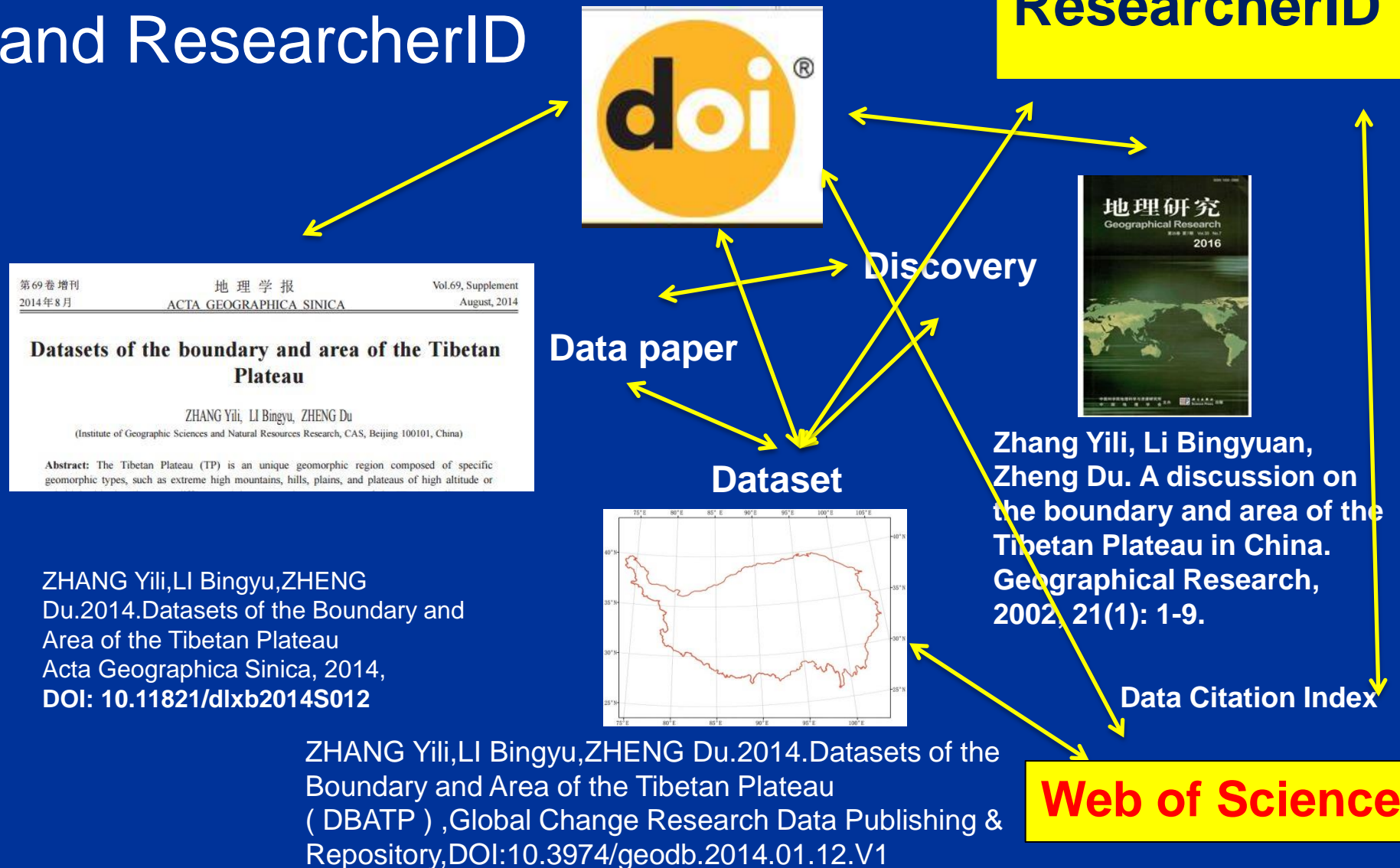


Zhang Yili, Li Bingyuan, Zheng Du. A discussion on the boundary and area of the Tibetan Plateau in China. *Geographical Research*, 2002, 21(1): 1-9.

Networking dataset to data paper, discovery publications, DOI and DCI



Networking dataset to data paper, discovery publications, DOI, DCI and ResearcherID



Networking dataset to data paper, discovery publications, DOI, DCI, authors, and GEOSS

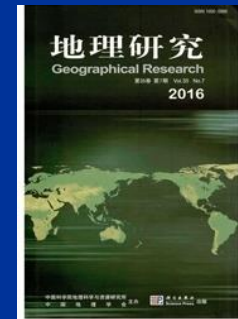
ResearcherID



Discovery

Data paper

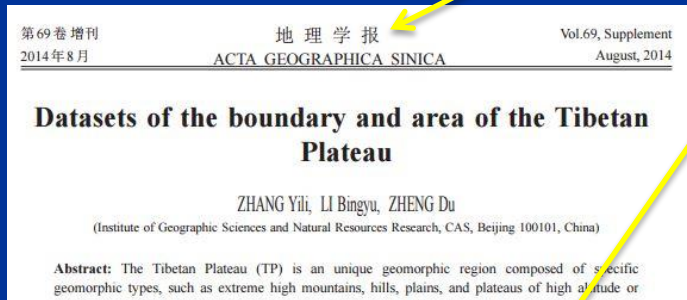
Dataset



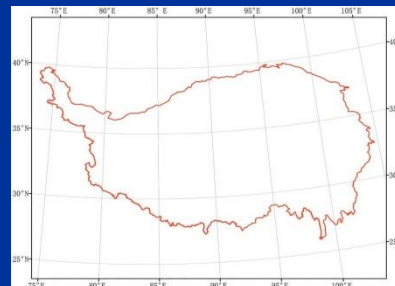
Zhang Yili, Li Bingyuan, Zheng Du. A discussion on the boundary and area of the Tibetan Plateau in China. *Geographical Research*, 2002, 21(1): 1-9.

Data Citation Index

Web of Science



ZHANG Yili, LI Bingyu, ZHENG Du. 2014. Datasets of the Boundary and Area of the Tibetan Plateau. *Acta Geographica Sinica*, 2014, DOI: 10.11821/dlxb2014S012



ZHANG Yili, LI Bingyu, ZHENG Du. 2014. Datasets of the Boundary and Area of the Tibetan Plateau (DBATP), Global Change Research Data Publishing & Repository, DOI:10.3974/geodb.2014.01.12.V1

Decision Making references



4-5: Data publishing and sharing partners

36 Journals joined the GCdataPR data publishing and sharing partner team



4-6: Initiative of Capacity Building in 100 Universities on Global Change Data Publishing & Sharing



Infrastructure for Data Publishing and Sharing in/for/with Developing Countries



**Global Change Data
Publishing And Sharing**



**Capacity Building in
100 Universities**

The 7th stop

Organizer: Bureau of International Co-operation Chinese Academy of Sciences

Host: Institute of Geographic Sciences and Natural Resources Research/CAS

Sponsors: GSC | Bureau of Science Communication Chinese Academy of Sciences

Supportor: CODATA

Experts Group: Principle Experts Group on Science Communication for Geography of The World

Time: 9:00–12:00 October 20, 2017

Venue: Conference Room 2321, IGSNRR, CAS



5. New Milestone of China Scientific Data Sharing History



**(1) 1994: Sun Shu's
report**

**Problems of China
scientific data
sharing**

**(Sun Shu, Vice
President of NSFCC)**

5. New Milestone of China Scientific Data Sharing History



(2) 2003: National Scientific Data Sharing Program launched Led by XU Guanhua, Minister of MOST

5. New Milestone of China Scientific Data Sharing History

- “It is a New Milestone of Scientific Data Sharing in China!” Professor XU Guanhua, the Former Minister of MOST (29 June 2017).
- Prof. LIU Chuang’s Award of Outstanding Geographer of China (2017)

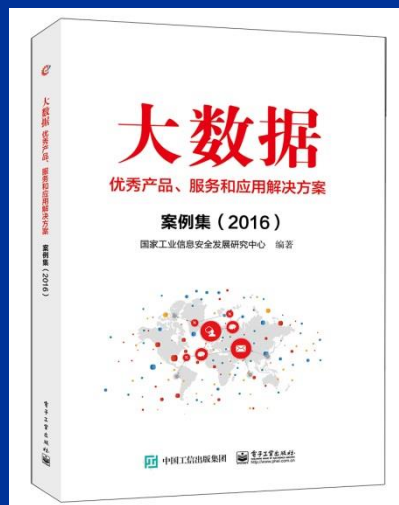


Prof. LIU Chuang was invited by the President of the United Nations General Assembly's to have a speech on Data Sharing in Developing Countries



The President of the United Nations General Assembly's Informal Interactive Consultations on WSIS+10, ECOSOC Chamber, United Nations Headquarters, New York, 2 July 2015

GCdataPR: An Outstanding Case in “Excellent Products, Services and Applications of Big Data in China”



GCdataPR was awarded the Top 50 of Excellent Products, Services and Applications of Big Data in China (Only one in Science and Education communities) and the Data Standardization and Governance Award.

-- Big Data Expo 2017

Dr. Shi, R.X. Associate Chief Editor of GCdataPR took the certificate of Data Governance and Practical Contribution Award on behalf of IGSNRR/CAS in Big Data Expo 2017.

Conclusion

- A. Data publishing and full-open-free sharing in developing countries are crucial for innovative development and reaching SDGs.
- B. Peer Review Data Publishing is the most advantage way to encourage scientists to be evolved in full and open research data.
- C. Networking local datasets into the global systems will benefit both scientists and society
- D. The GCdataPR will provide a trusted infrastructure on data publishing, repository and sharing in the global scale, especially for developing countries.