



Research Data Sharing  
without barriers

RDA Fifth Plenary Session: Large Scale Data Projects meet RDA

# National Earth System Science Data Sharing Platform of China



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地球系统科学数据共享平台

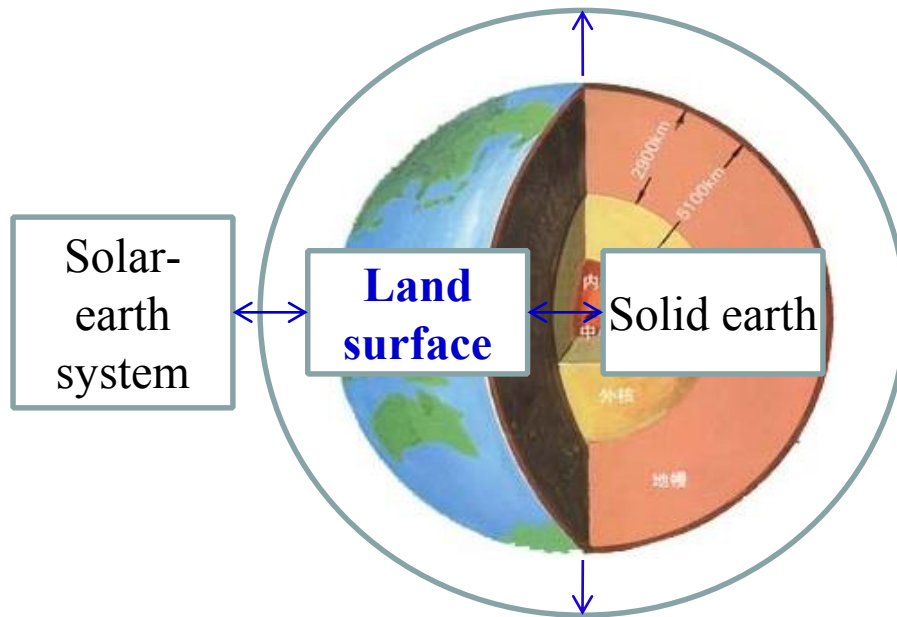
Data Sharing Infrastructure of Earth System Science

# 1. Data service network of Geodata.cn

National Earth System Science Data Sharing Platform of China (Geodata.cn) launched in 2003 is one of the platforms for National Science and Technology Infrastructure Program (NSTI).



## 2. Data Resources of Geodata.cn

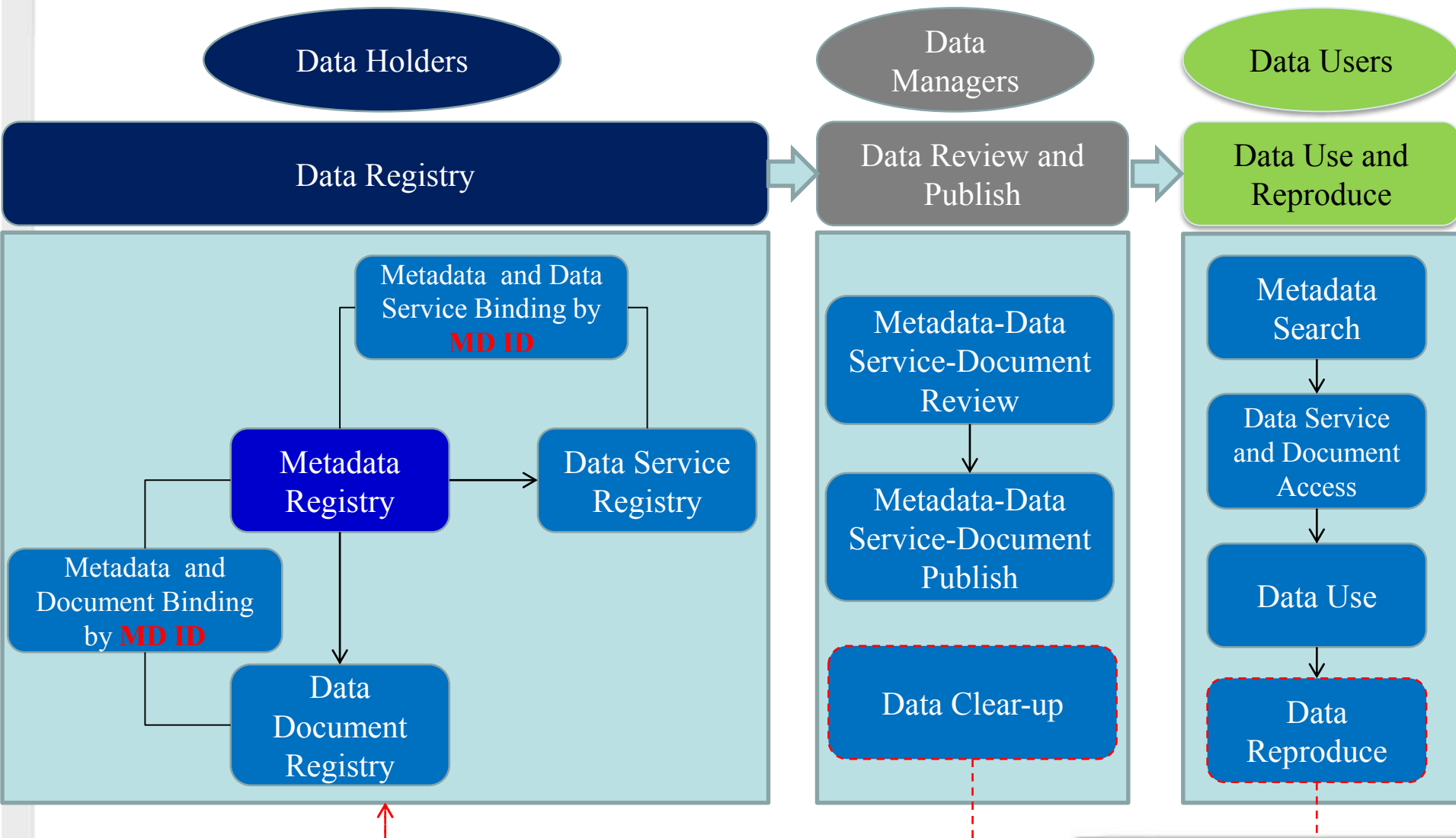


### Total data volume: 54.66TB

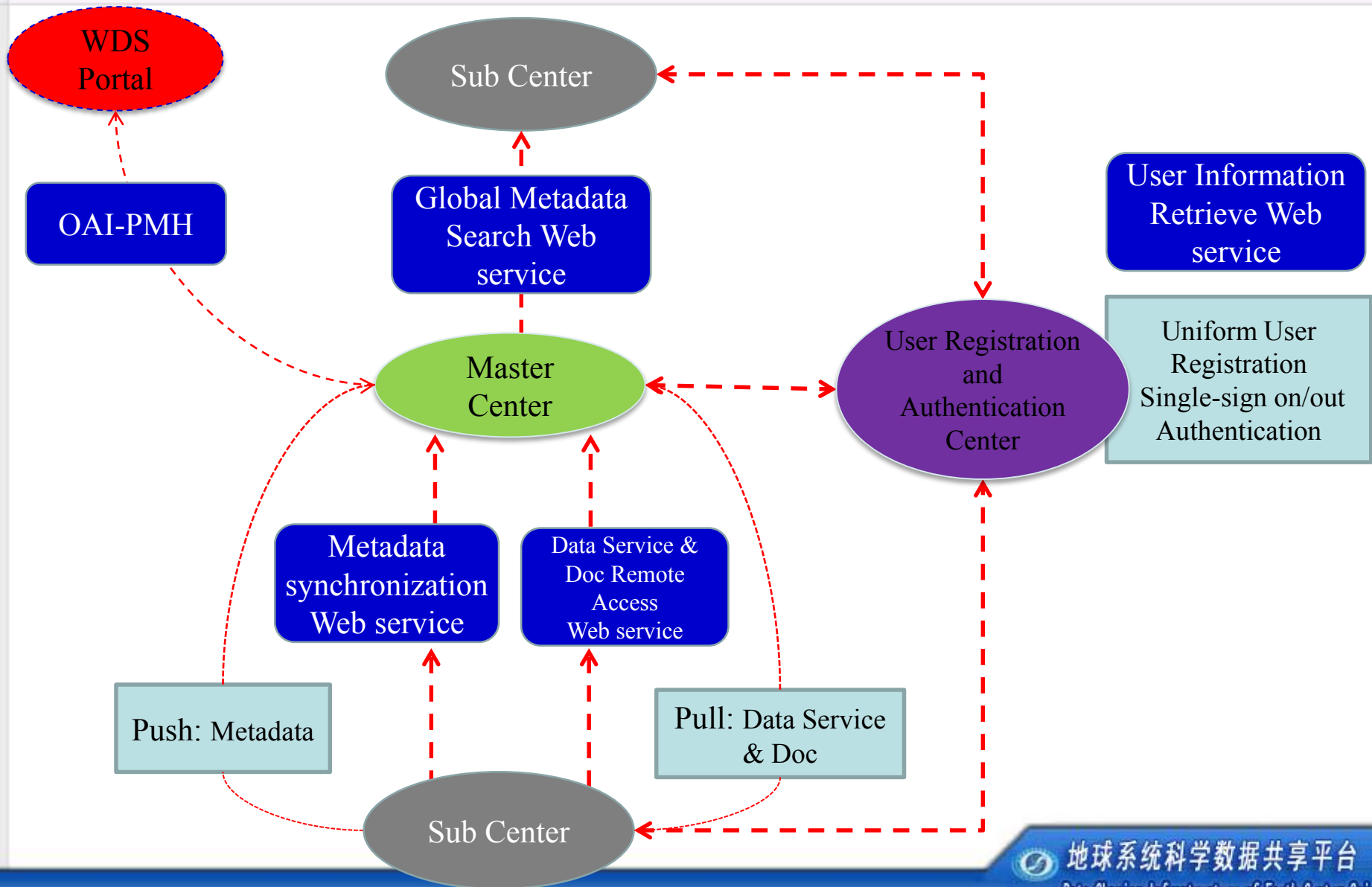
- National level datasets of key variables and parameters of Earth, such as ionosphere, temperature, precipitation, radiation, ecosystem, land cover, soil, wetland, desert, glacier, permafrost, geomagnetic, as well as social and economic development indexes
- Typical regional integrated database, such as Qinghai-Tibet Plateau, Loess Plateau, Yangtze River delta, Yellow River delta, South China Sea etc.



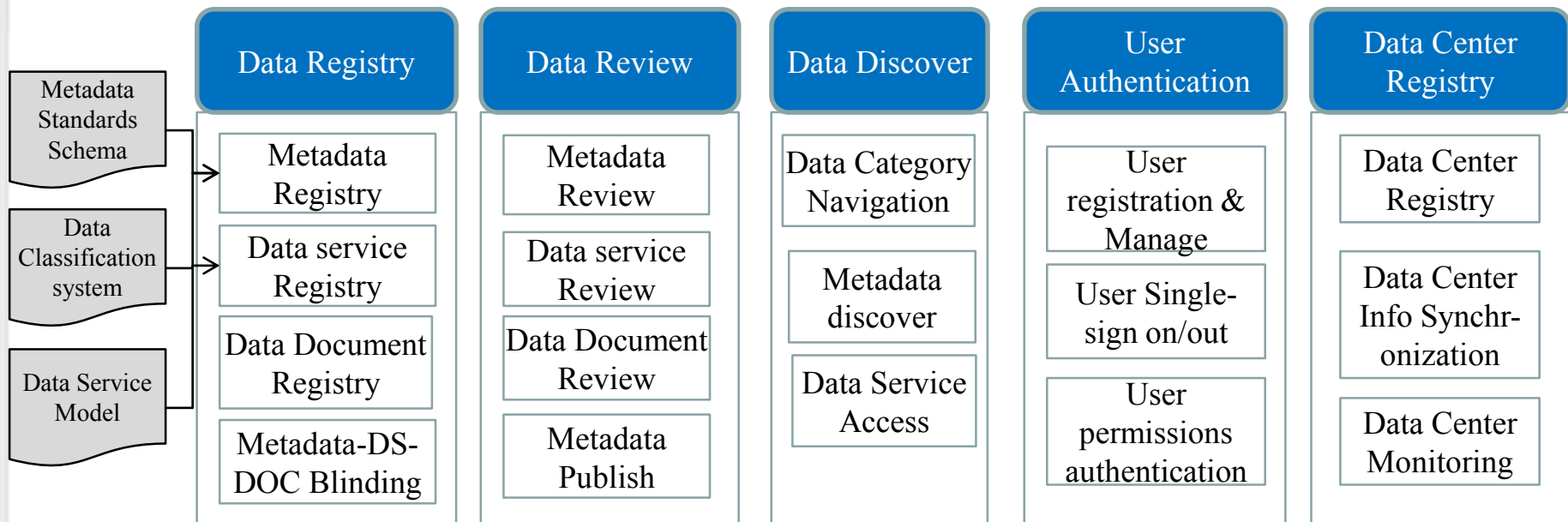
### 3. Data sharing flow of Geodata.cn



### 3. Distributed Centers Interoperability of Geodata.cn



# 4. Essential Components and Interfaces of Geodata.cn



## Web Interfaces

Global Metadata Search Web service

Metadata synchronization Web service

Data Service & Doc Remote Access Web service

User Information Retrieve Web service

## Data Sharing Policy

Data Sources Selection Rules

Data Sharing Service Rules

Data Citation Rules...

## Data Sharing Technical Specification

Data Classification and Coding

Core Metadata and Expand Specification

Data Service Interface Specification...

## 5. Relationship of Geodata.cn and RDA

**Geodata.cn** is dedicated to integrating and sharing geo-data to support Earth system science and global change related research and education activities in China.

Data sharing policy  
and specification

Data resources  
integration and publish

Software development  
and interoperability

User service, data  
mining and reproduce

Outputs supporting  
and guiding  
Geodata.cn

Use case for RDA

Participate in  
RDA actions

Provide a big change for  
Geodata.cn to cooperate  
with other agencies and  
programs around the world

**RDA** is building bridges to overcome the hurdles for easy data access, data sharing and interoperability by facilitating collaboration between experts from all over the world belonging to different disciplines and organisations.

Working  
Groups

DFT, DTR, PIT, PP, MDR, Data Citation, MDR Interoperability  
, Data Categories & Codes, Certification, Data Publication.....

Interest  
Groups

Semantics, PIDs, MD, Provenance, BD Analytics, Preservation, Data  
Fabric, Publishing, Clouds in Dev. Countries.....



## 6. Some answers of this session required questions

- **Are any of the first WG results have relevance for your work? Which RDA groups are working towards solutions that are relevant for your work?**

Almost results of the first RDA WG are relevant to Geodata.cn work, such as DFT for data organization and semantic search, DTR for data automatically access, PID and PIT for data citation and publication. If the results can be more detailed further, they will play more roles for Geodata.cn.

- **Are there results that you urgently need that you would work towards with others in the RDA?**

Geodata.cn now is conducting geo-data ontology and data linked, data mining and analyze online, data citation and publication etc. research. We urgently hope to work together with RDA (DFIG, DFT, MSD, BD Analytics, Clouds in Dev. Countries) to quickly seek the best solutions.

- **Is cross-border (countries, disciplines, etc.) data exchange and re-use relevant and an issue in your environment?**

Yes. Geodata.cn have conducted data exchange with WDS, University of Maryland, some institutes of RAS and MAS, ICIMOD(International Centre for Integrated Mountain Development), GCMD(Global Change Master Directory). Cross-border data exchange and Global level datasets making are key issues of Geodata.cn.





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# Thanks for your attention



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