

Scientific Research data archiving in Resources and Environment fields of 973 Program

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Outline

- I. Background
- II. Data archiving policy of 973 program
- III. Implementation and Main progress



I. Background

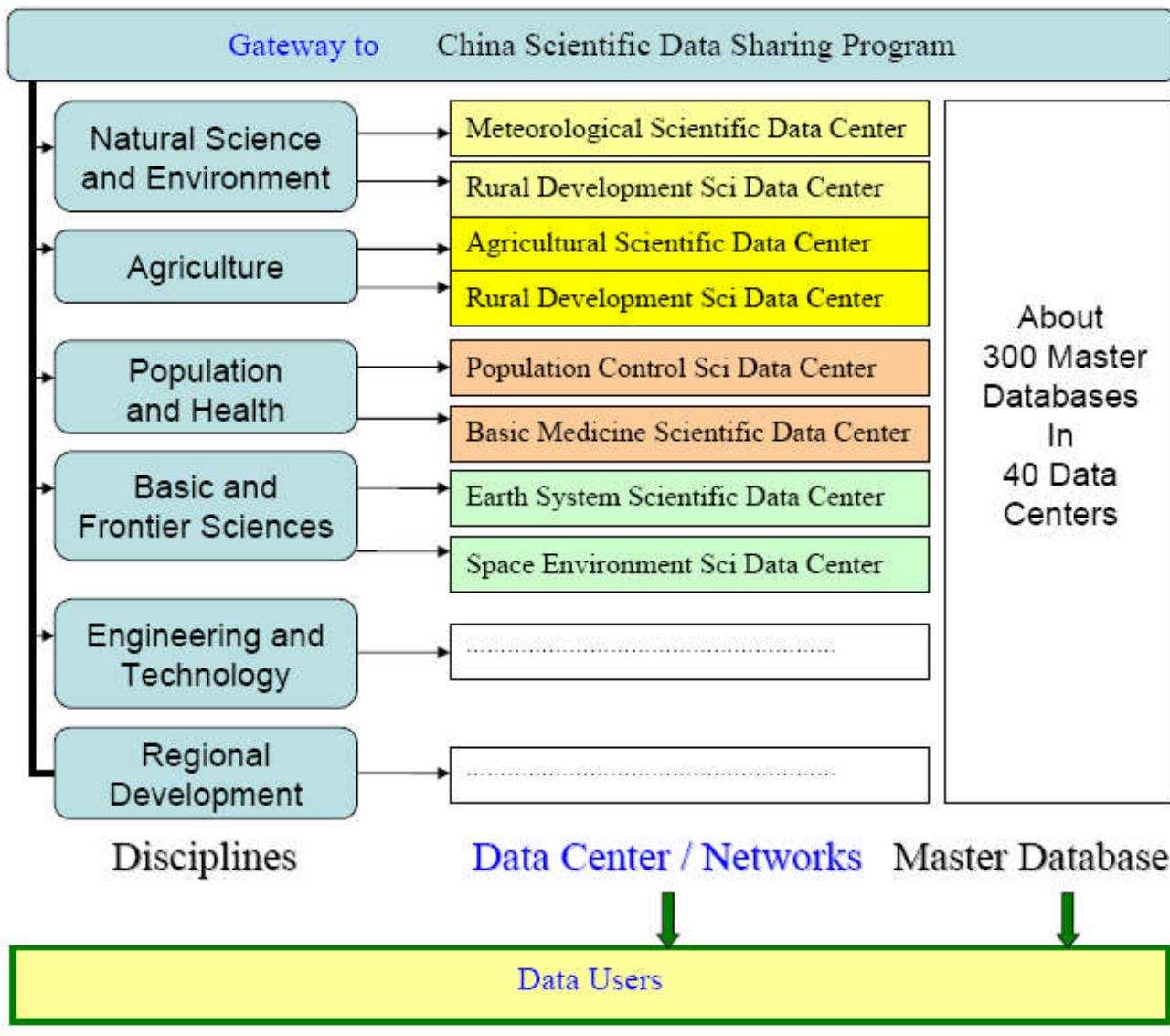


Scientific research data derived from different agencies by means of national funding mainly can be divided into two types:

- ▶ in-situ data from different departments, such as CMA, CEA, SOA, MLR, etc.
- ▶ Scientific research data from interdisciplinary research agencies, such as CAS, CAAS, CAF, etc.



Scientific Data Sharing Program



(1) Data Sharing Policy and Rules

- National level
 - Add scientific data sharing section to China Scientific and Technological Progress Law
- MOST and Participant departments
 - 40 rules and regulations on data sharing made by relevant departments in various domains
 - For example, Meteorology Data Sharing Management Specification Published by CMA.

(2) Standardization

- Develop 32 standards and criteria, 23 have been completed
- Based on the top design, relevant departments have made 81 data management standards in various industries and domains

(3) Establish large of Accessible Databases through Data Integration

- Till the middle of 2008, integrated 3616 databases, available datasets online accumulated to over 35.5TB
 - In situ and long term monitoring data in departments, e.g., Meteorology, Seismology, Oceanography, Water resources, Survey and Mapping, Land resources, etc.
 - Scientific research data in interdisciplinary, inter-departments fields, e.g., Agriculture, Forestry, Earth System Science, Human Health, etc.

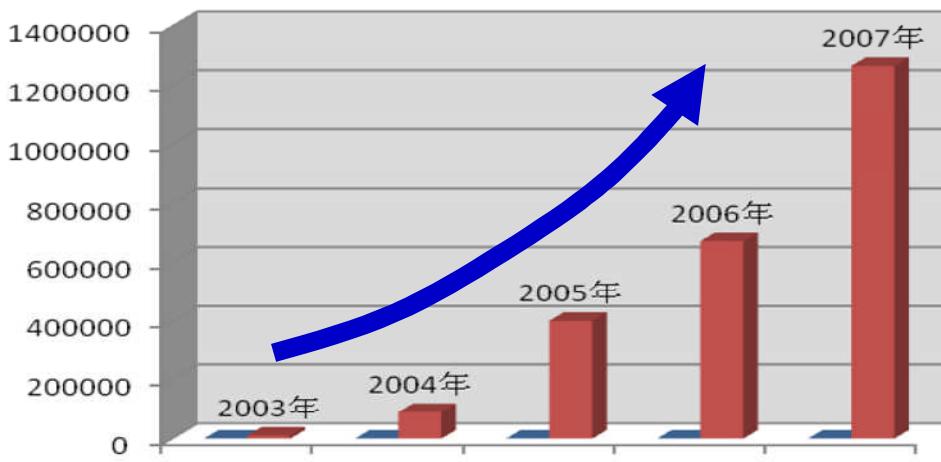
(4) Services Effect

- With incomplete statistics, by the middle of 2008:
 - The number of accessing users: over 17 million totally
 - Registered users: over 77 thousands
 - Downloaded data volume: over 24TB
 - Supported more than 1500 research projects and engineering. (e.g., Qinghai-Tibet plateau railway, Manned Space Flight, etc.)

E.g., User of Data Sharing Network of Earth System Science

From 2004 to the end of 2008,

- Registered Users: 35,000. Homepage Visitors: 5,815,901
- Customized services for more than 3,866 people
- Customized services for more than 600 Projects and engineering



SDSP promotes scientific data sharing in China in the past 6 years, especially for the scientific data derived from national departments and interdisciplinary agencies. While, scientific research projects or program data's archiving and sharing are weak correspondingly.



After investigation in different data sharing centers or networks, National Basic Research Program (973) are selected as the pilot for scientific data archiving and sharing.

Fields in 973 program

- ▶ Agriculture
- ▶ Energy
- ▶ Information
- ▶ **Resource and Environment**
- ▶ Population and Health
- ▶ Materials
- ▶ Synthesis and Frontier Science



- ▶ In March, 2008, MOST published the specification for “National Basic Research Program (973) Data Archiving Management on Resources and Environment Field”
- ▶ Establish the Data Archiving Center based on LREIS (State key lab of Resources and Environment Information System)



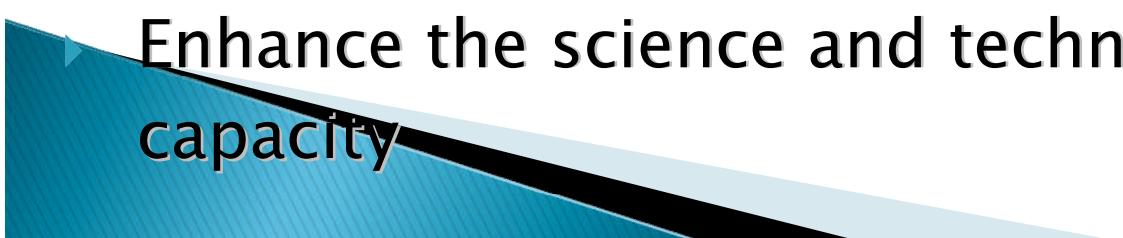
II. Data archiving policy of 973 program data archiving



Objective

- ▶ Draw up and publish the scientific program data archiving, management and sharing rules
- ▶ Establish the mechanism for scientific program data resources accumulation, management and services
- ▶ Enhance scientific program management capacity
- ▶ Add value of the scientific data derived from the national scientific program
- ▶ Regulate the benefits relationship among data producers, managers and data users

Enhance the science and technology innovation capacity

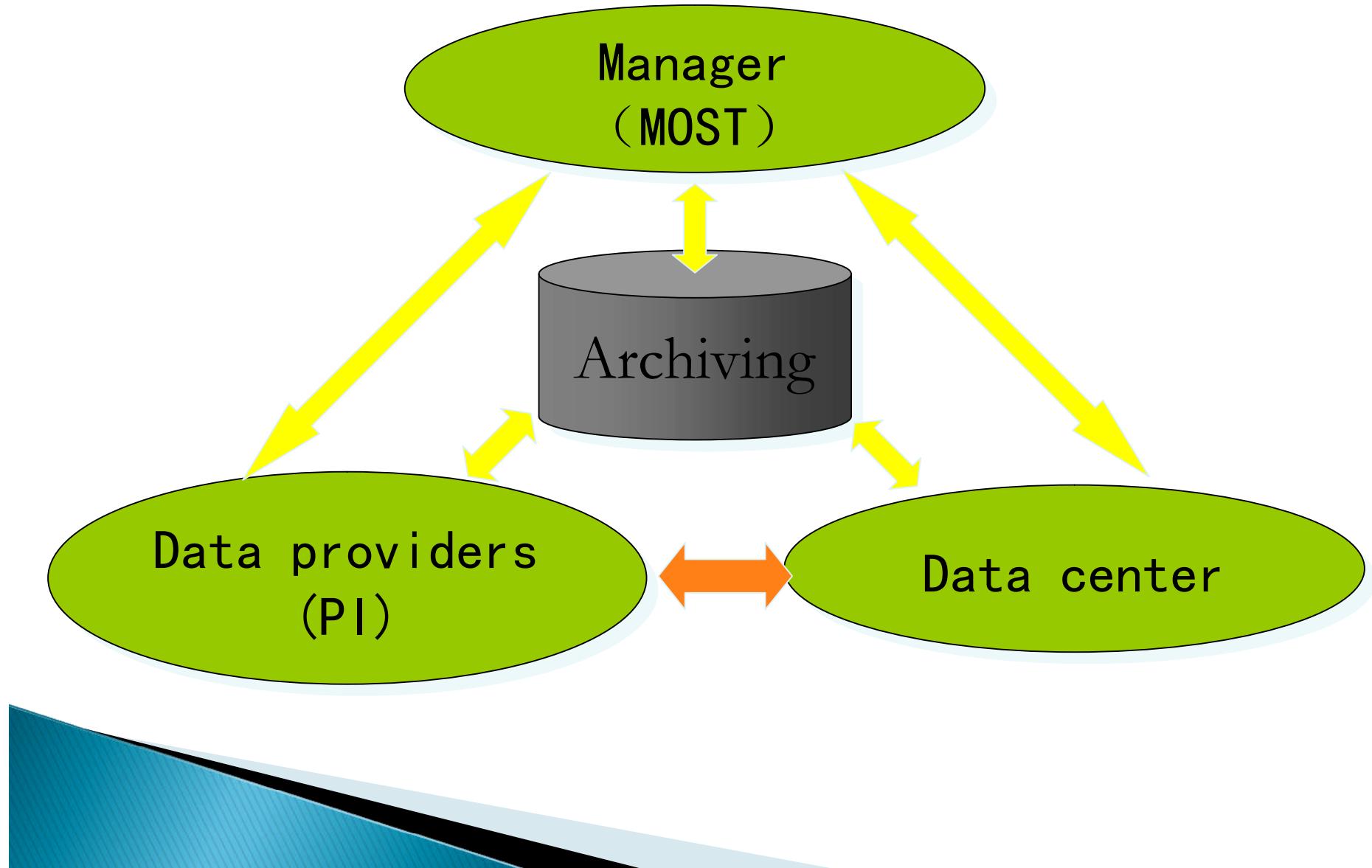


Data archiving and management specification for 973 program in resources and environment fields

- ▶ There are 9 chapters in the specification.
 - data archiving organization
 - archive data content
 - Project data plan
 - data archiving work flow
 - data management work flow
 - rights and interests protection
 - supervise and credit management
 - supplementary articles



Duties in archiving activities



MOST

Charge for data archiving organization:

- ▶ draw up the management specifications or rules
- ▶ Identify the data archiving center
- ▶ examine and approve data archival plan
- ▶ supervise and review the data archiving and sharing



Project PIs and their host agency

Charge for data accumulation and submission:

- ▶ draw up the data archiving and management plan
- ▶ submit the data to archiving center
- ▶ obey the uniform standards for all archiving data
- ▶ review the data quantity and quality



Data center

Charge for the data archiving implementation:

- ▶ collect the project data standards or specifications
- ▶ provide consultation for data archiving plan
- ▶ receive and archive data
- ▶ review the data quality and quantity
- ▶ daily work for data management and sharing

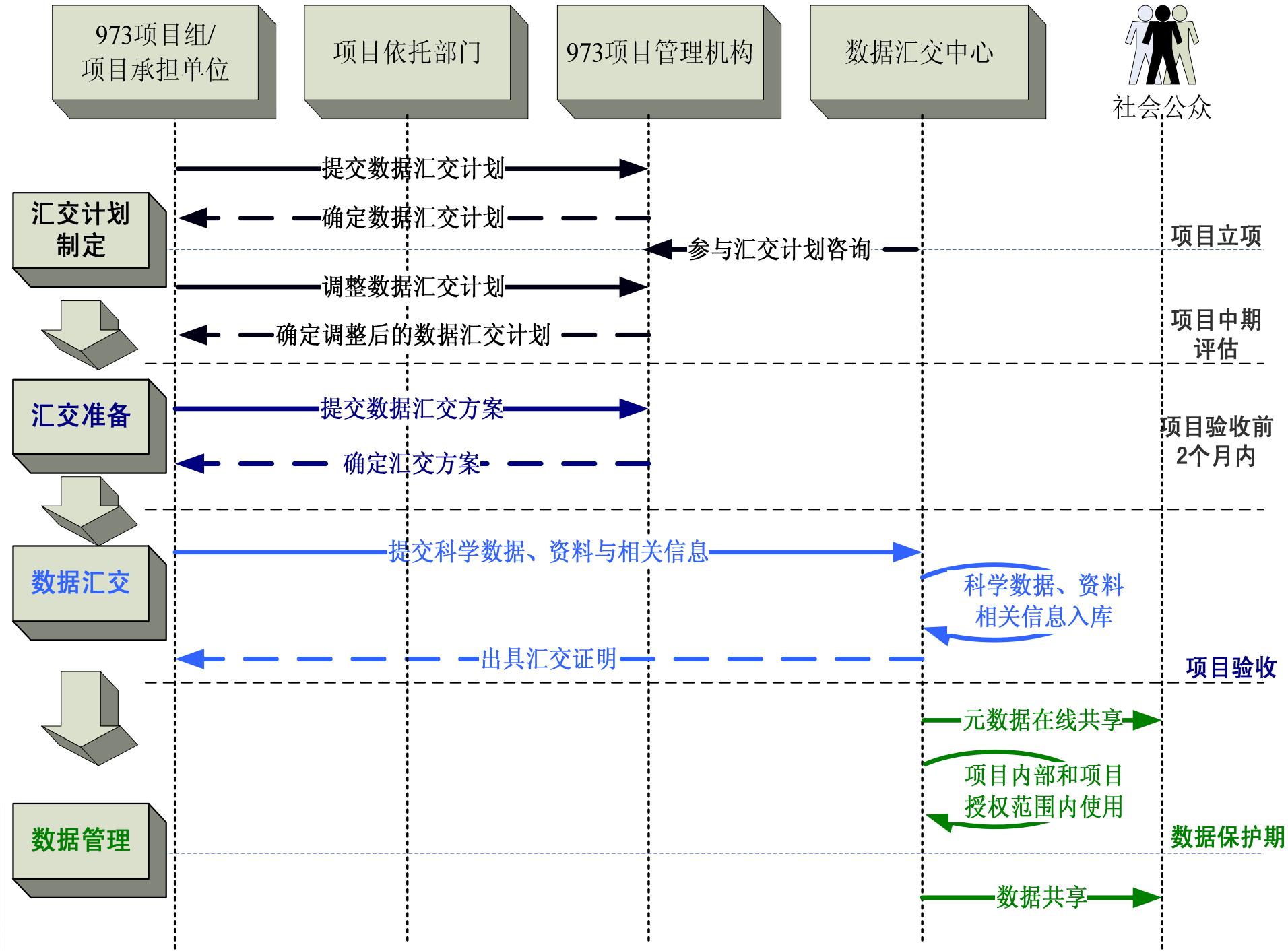


III. Implementation and Main progress



Kick Off Conference in April 3, 2008





1. 620GB data sets have been archived

- ▶ By the end of Oct. 2008, 24 projects submitted their research datasets to archiving center
- ▶ All the data accumulated to 620GB, including 862 datasets.



2. 23 on-going projects submitted their data archiving plan

- ▶ about 180 research task teams in 23 projects submitted their data archiving plan
- ▶ They will be the basis for data archiving when the project finished



国家重点基础研究发展计划资源环境领域

项目数据汇交计划

(参考格式)

国家重点基

项目编号:

项目名称: 东北

项目承担单位 (

国家重点基

项目编号:

项目名称: 东北

项目承担单位 (

项目编号: 2004CB418500

项目名称: 东北老工业基地环境污染形成机理与生态修复研究

项目承担单位 (盖章): 中国科学院沈阳应用生态研究所

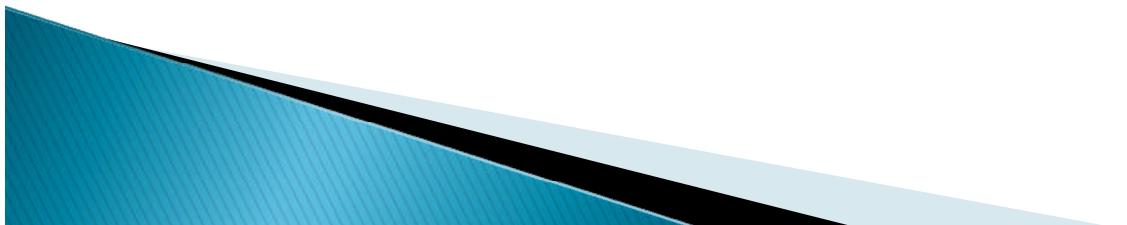
中华人民共和国科学技术部制

2008年0月20日

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3、complete a serial of data management standards or specifications

- ▶ Project data archiving plan
- ▶ Data archiving report
- ▶ Metadata standard
- ▶ Document format
- ▶ Data quality review report etc.



4. Established the data management and sharing environment

- ▶ Data storage space: 20 TB
- ▶ 3 data servers
- ▶ Disc tank
- ▶ hot backup system



5. Established Data sharing and service platform

Functions:

- ▶ For Data manager: data archiving process management, data archiving report and project data plan management
- ▶ For Data provider: data submit on line, data review and preview
- ▶ For Data user: data query, search, retrieve, preview and access



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Data Archive & Sharing Network for Resource and Environment Projects of 973 Program

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[\[数据汇交工作动态\]](#) [\[资环领域综合新闻\]](#)

- 数据汇交中心参加973项目课题验收会 10-23
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最新发布数据

- 1 重庆万州区勘察滑坡数据库
- 2 重庆万州区监测预警滑坡数据库
- 3 重庆万州区治理滑坡数据库
- 4 重庆云阳宝塔滑坡考察数据集
- 5 重庆万州区滑坡考察数据集

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热点访问数据

- 1 长三角主要水体沉积物中多环芳..
- 2 重庆万州区滑坡考察数据集
- 3 重庆万州区勘察滑坡数据库
- 4 西藏林周基性岩脉年代学和地球..
- 5 珠三角主要水体沉积物中多溴联..

数据搜索

搜 索

1999-2001年立项项目

- 青藏高原形成演化及其环境、资源效应
- 我国重大气候和天气灾害形成机理和预测理论的研究

2004-2006年立项项目

- 我国南方致洪暴雨监测与预测的理论和方法研究
- 活动地块边界带的动力过程与强震预测

汇交数据统计



Data submission on line

songj 退出登录

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填写元数据信息 (* 为必填项)

* 来源项目

* 所属课题

— 数据集信息 —

* 数据集名称

* 关键词

* 摘要

* 数据集时间 至

* 数据集格式 版本

Work in next step

- ▶ Promote data services for public
- ▶ Popularize data archiving in all national scientific research programs
- ▶ Perfect data quality review and data archiving mechanism



Thanks!

