



PaperData Updates : Integrated VOspace, Registry and DOI services

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PaperData V2.0 - A Persistent Data Repository for Journal Papers

- Adding DOI services in PaperData V2.0

China-VO 中国虚拟天文台 Telescope Data Tools Cloud Public

Dashboard Instances MyVOSpace PaperData Regions Templates Events

PaperData - planetarium

Filter by All Domain Setting Upload File Parent Folder New Folder

Path: /

FileType	Name	Size	modified time	Actions
Folder	adass2014	4KB	2015-04-22	doi X [icon] [icon] [icon]
Folder	svn	4KB	2018-09-15	doi X [icon] [icon] [icon]
Folder (doi)	wwt	4KB	2019-05-06	doi X [icon] [icon] [icon]
Folder	中文测试	4KB	2015-06-17	doi X [icon] [icon] [icon]
File	Administrative_Guide.pdf	1MB	2015-04-22	doi X [icon] [icon] [icon]
File	AdobeIllustratorCS5.1_setup.142353881.0.7z	1GB	2018-07-12	doi X [icon] [icon] [icon]
File	SVMMModel.java	243B	2015-09-22	doi X [icon] [icon] [icon]



Digital Objects and PIDs

Digital Objects	IVOID	DOI	Notes
Registry	✓		VO Registry
Organisation	✓		Institutions, Observatories, Data Centers
Equipment	✓		Telescopes
Datasets	✓	✓	Astronomical datasets, Data releases
Data Service	✓		VO data access service
Paper data	✓	✓	Paper related data
Documents		✓	Documents, papers
Images		✓	Images
Audio & Video		✓	Audio & Video
Software		✓	Software
Course		✓	Open Course
Other digital resources		✓	

PIDs Syntax by China-VO

✓ DOI

Prefix Suffix



Syntax: **doi://10.12149/10000**

- **10.12149**: DOI of **C**hinese **A**stronomical **D**ata **C**enter (CAsDC)
- **10000**: Serial number, start from 10000

✓ PaperData ID

<http://paperdata.china-vo.org/>

[LastName.FirstName/Year/Journal/
PaperTitle/filename](http://paperdata.china-vo.org/LastName.FirstName/Year/Journal/PaperTitle/filename)

✓ IVOID

ivo://<authority><path> ?<query>#<fragment>

Registry part

local part

表 3-1 中国虚拟天文台标识符

authority	说明	格式
China-VO	中国虚拟天文台	ivo://China-VO
China-VO/CAsDC	数据中心	ivo://China-VO/CAsDC
China-VO/data	数据集(组)	ivo://China-VO/data/lamost/dr1/v1
China-VO/paperdata	论文数据	ivo://China-VO/paperdata/10002
China-VO/P	HiPS	ivo://China-VO/P/BASS/DR1/images
China-VO/EPO	科普资源	ivo://China-VO/EPO
registry	注册服务	ivo://China-VO/registry
services	服务列表	ivo://China-VO/services
telescope	望远镜	ivo://China-VO/telescope/lamost
site	站点	ivo://China-VO/site/xinglong
TAP	TAP 服务	ivo://China-VO/service/tap
SCS	锥形检索	ivo://China-VO/service/conesearch
VOSpace	VOSpace 服务	ivo://China-VO/service/vospace



To get a DOI / IVOID

1. Upload Data Objects to PaperData

2. Apply for DOI from PaperData

3. Fill in Metadata

If Rejected

4. Quality Audit by CAsDC

5. If Approved, Assign a DOI / IVOID

China-VO

Metadata

- Based on DataCite metadata schema and VOResource schema

Home

China-VO 中国虚拟天文台 VO Resource Data China-VO

*** Title**

Subtitle
Resource subtitle Resource shortname, max 16 character

*** Created**

*** Updated**

*** Status**

*** Authors**

[+ Add another author](#)

*** Contact**

Version
Resource version, e.g. *version 1*



Metadata

Resource version, e.g. *version 1*

*** Subject**

*** Description**

*** Application Reason**

Facility
The observatory or facility used to collect the data contained or managed by this resource

*** Format**

*** Data Size**
File size



Quality Audit

- Requirements
 - Paper has been accepted
 - Metadata is complete and true
 - ...
- Check by CAsDC administrators



Automatically generated XML

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<doi_batch version="1.0.0">
  ▼<head>
    <doi_batch_id>20190513115410</doi_batch_id>
    <timestamp>20190513115410</timestamp>
    ▼<depositor>
      <name>Chinese Astronomical Data Center</name>
      <email_address>support@china-vo.org</email_address>
    </depositor>
    <registrant>Chinese Astronomical Data Center</registrant>
  </head>
  ▼<body>
    ▼<science_data>
      ▼<database language="en">
        ▼<contributors>
          <person_name sequence="first" contributor_role="author"/>
          <person_name sequence="additional" contributor_role="author"/>
          <organization sequence="first" contributor_role="author">www</organization>
        </contributors>
        ▼<titles>
          <title>www</title>
        </titles>
        <description>www</description>
        ▼<publisher>
          <publisher_name>Chinese Astronomical Data Center</publisher_name>
          ▼<publisher_place>
            20A Datun Road, Chaoyang District, Beijing, China, 100101
          </publisher_place>
        </publisher>
        ▼<doi_data>
          <doi>10.12149/100058</doi>
          <timestamp>20190513115410</timestamp>
          ▼<resource>
            <![CDATA[ https://registry.china-vo.org/resource/100058 ]]>
          </resource>
        </doi_data>
      </database>
      ▼<dataset dataset_type="record">
        ▼<contributors>
          <person_name sequence="first" contributor_role="author"/>
          <person_name sequence="additional" contributor_role="author"/>
          <organization sequence="first" contributor_role="author">www</organization>
        </contributors>
        ▼<titles>
          <title>www</title>
        </titles>
        ▼<creation_date>
          <year>2019</year>
          <month>5</month>
          <day>13</day>
        </creation_date>
        ▼<publication_date>
          <year>0</year>
        </publication_date>
        ▼<update_date>
          <year>2019</year>
          <month>5</month>
          <day>13</day>
        </update_date>
        <item_number>100059</item_number>
        <description>www</description>
        <format MimeType="application/fits"/>
        ▼<doi_data>
          <doi>10.12149/100059</doi>
          <timestamp>20190513115410</timestamp>
          ▼<resource>
            <![CDATA[ https://registry.china-vo.org/resource/100059 ]]>
          </resource>
        </doi_data>
      </dataset>
    </science_data>
  </body>
</doi_batch>
```



DOI Landing Page

The LAMOST Data Release One

LAMOST Team¹

[2015-05-07T00:00:00Z](#)

The Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST) is a Chinese national scientific research facility operated by the National Astronomical Observatories, Chinese Academy of Sciences. It is special reflecting Schmidt telescope with 4000 fibers in a field of view of 20 deg² in the sky. Until July 2013, LAMOST has completed its pilot survey which was launched on October 2011 and ended on June 2012, and the first year of its regular survey which was initiated on September 2012. After this two survey phase, we totally obtain 2,204,696 spectra, which consist of stars, galaxies, quasars and other unknown type.

Affiliations

¹ National Astronomical Observatories, Chinese Academy of Sciences

Footprint

Identifier

Publication date:
2015-05-07T00:00:00Z

Update date:
2015-05-07T00:00:00Z

DOI:
[DOI: 10.12149/10001](#)

VO Identifier:
[ivo://China-VO/datapaper/10001](#)

Summary

Data type:
Catalog,Spectra

Date type:
FITS

Size:
1500MB

Versions

Version1
10.12149/100002 2014-01-01

The Large Sky Area Multi-Object Fiber Spectroscopic Telescope

Chinese Virtual Observatory

[2018-05-11T12:00:00Z](#)

The Large Sky Area Multi-Object Fiber Spectroscopic Telescope (LAMOST), as one of the National Major Scientific Projects undertaken by the Chinese Academy of Science, is a special quasi-meridian reflecting Schmidt telescope located in Xinglong Station of national Astronomical Observatory, China (a national facility open to the astronomical community). After being approved by National Development and Reform Commission on Oct.1997, LAMOST began construction on Sep. 2001 and finished on Oct. 2008. LAMOST project smoothly passed the national acceptance on Jun. 2009. LAMOST optical system consists of a reflecting Schmidt Ma at the northern end, a spherical primary mirror Mb at the southern end and a focal surface in between. Mb has a size of 6.67m×6.05m, which consists of 37 hexagonal spherical sub-mirrors, each of them having a diagonal diameter of 1.1m and a thickness of 75mm. Ma is 5.72m×4.40m, which consists of 24 hexagonal plane sub-mirrors, each of them having a diagonal diameter of 1.1m and a thickness of 25 mm. Both the primary mirror and the focal surface are fixed on their ground bases, and the reflecting corrector tracks the motion of celestial objects. Hence, the celestial objects are observed around their meridian passages. As shown in figure 2, the light collected is reflected from Ma to Mb, again reflected by Mb and forms image of the observed sky on the focal surface. The light of individual objects is fed into the front ends of optical fibers accurately positioned on the focal surface, and then transferred into the spectrographs fixed in the room underneath, to be dispersed into spectra and recorded on the CCD detectors, respectively and simultaneously. The overall concept and key technical innovations makes it a unique astronomical instrument in combining a large aperture with a wide field of view. The available large focal surface accommodates up to 4000 fibers, by which the collected light of distant and faint celestial objects down to 20.5 magnitudes is fed into the spectrographs, promising a very high spectrum acquiring rate of several ten-thousands of spectra per night.

Identifier

Publication date:
2018-05-11T12:00:00Z

Update date:
2018-05-11T12:00:00Z

DOI:
[DOI: 10.12149/4000](#)

VO Identifier:
[ivo://China-VO/LAMOST](#)



















Reference URL
<http://www.lamost.org>

Data Security

- Once a DOI is issued, no change of content/deletion allowed

Filter by MyDOI Domain Setting Upload File Parent Folder New Folder

PATH: /

FileType	Name	Size	modified time	Actions
	adass2014	4KB	2015-04-22	    
	wwt	4KB	2019-05-06	    
	Administrative_Guide.pdf	1MB	2015-04-22	    

China-VO

Versioning

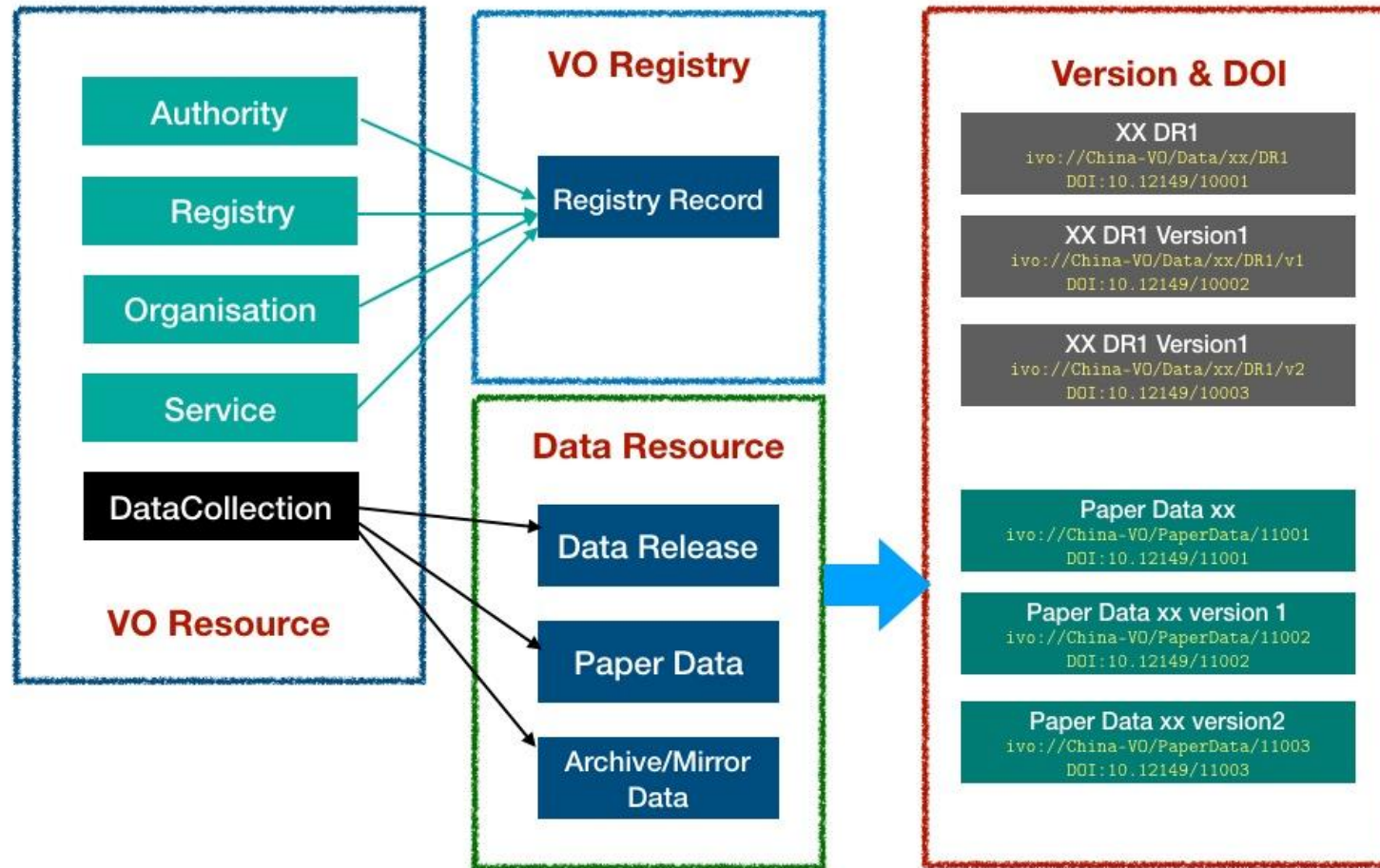
- Different DOI for each version of a data object, also a DOI for all versions

The screenshot displays the metadata page for 'The LAMOST Data Release One' on the China-VO website. The page is organized into several sections:

- Header:** China-VO logo and '中国虚拟天文台' (China Virtual Observatory).
- Navigation:** 'VO Resource', 'Data', 'Help', and 'China-VO' links.
- Title:** 'The LAMOST Data Release One'.
- Author:** 'LAMOST Team' with a superscript '1' and a timestamp '2015-05-07T00:00:00Z'.
- Description:** A paragraph describing the LAMOST telescope and its survey phases.
- Affiliations:** A box containing '1. National Astronomical Observatories, Chinese Academy of Sciences'.
- Identifier:** A box containing 'Publication date: 2015-05-07T00:00:00Z', 'Update date: 2015-05-07T00:00:00Z', 'DOI: 10.12149/10001' (highlighted in green), and 'VO Identifier: vo://China-VO/datapaper/10001' (highlighted in red).
- Summary:** A box containing 'Data type: Catalog, Spectra', 'Date type: FITS', and 'Size: 1500MB'.
- Versions:** A box containing a table with one entry: 'Version1' with DOI '10.12149/100002' and date '2014-01-01'.



VOResource and DOI



<https://registry.china-vo.org/resource/11001>



Persistent Repositories for AAS Journals

- China-VO Paper Data Repository

<http://paperdata.china-vo.org/>

- In comply with the basic requirement and can serve as one of the Persistent Repositories for AAS Journals

<https://github.com/AASJournals/Tutorials/blob/master/Repositories/UsingRepositories.md>

