

AWCI Data Integration

-Data Upload, QC, Metadata Registration,
and Data Download System-

IIS = IT Team

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Prof. Koike's Lab.

Masaru Kitsuregawa* and Toshio Koike**

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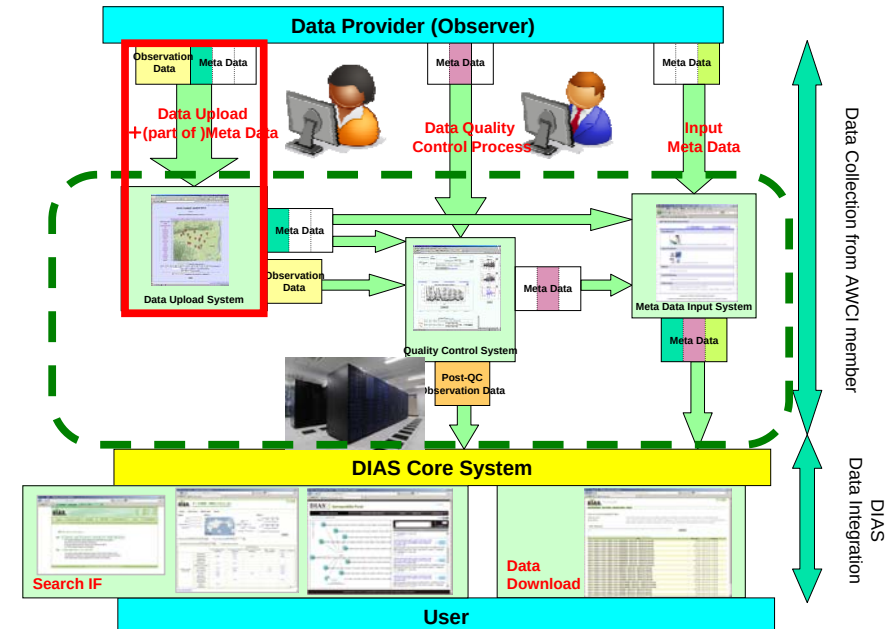


Our Mission and Goal

- Raw Data Collecting
- Quality Controlling
- Meta Data Collecting



Downloadable

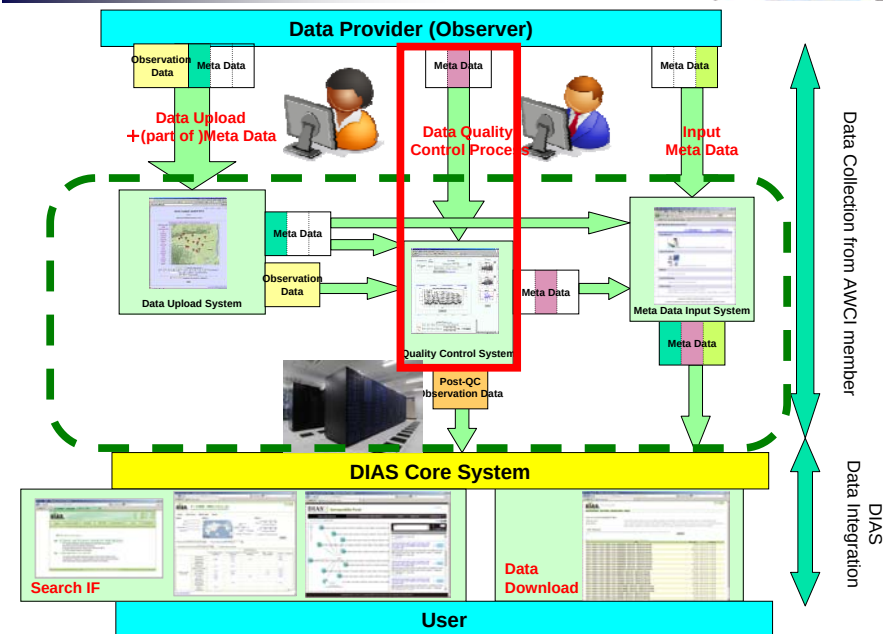


Data Archiving Status of Each Country (as of 101004)



Station Name	Data Uploading	Quality Controlling	Document Metadata	Obs. Data Metadata
Bangladesh	Complete	Ongoing		
Bhutan	Complete	Ongoing		
Cambodia	Complete	Complete	Complete	Ongoing
India	Complete	Complete	Complete	
Indonesia	Complete	Complete	Complete	
Japan	Complete	Complete	Complete	Complete
Korea	Complete	Complete	Complete	Complete
Lao PDR	Ongoing			
Malaysia	Ongoing			
Mongolia	Complete	Ongoing		
Myanmar	Complete	Complete	Complete	Complete
Nepal	Complete	Complete	Complete	Complete
Pakistan	Complete	Ongoing		
Philippines	Complete	Ongoing		
Sri Lanka	Complete	Complete	Complete	Complete
Thailand	Complete	Complete	Complete	Complete
Uzbekistan	Complete	Complete	Complete	Ongoing
Vietnam	Complete	Complete	Complete	Complete

7th ICG/AWCI Tokyo 2010



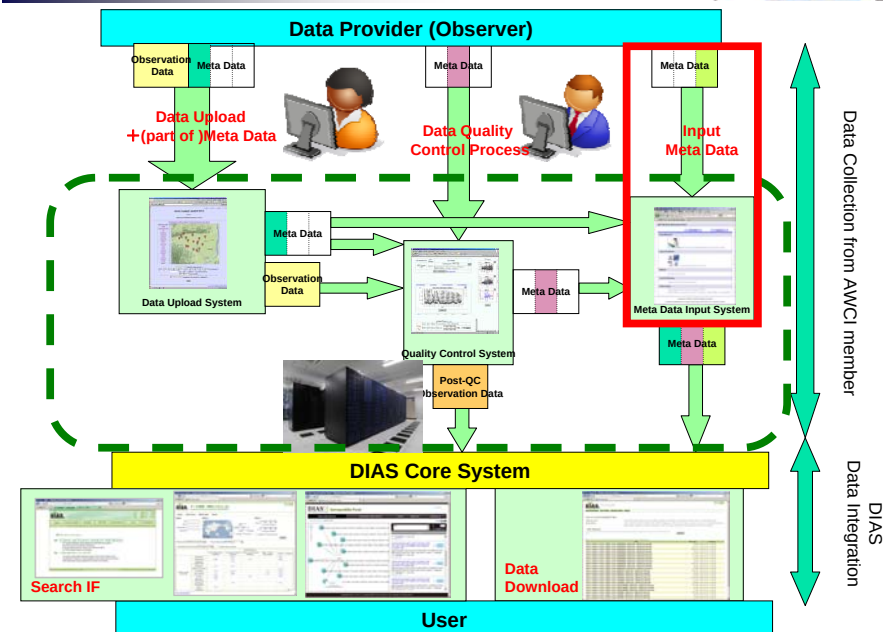
7

Data Archiving Status of Each Country (as of 101004)



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Indonesia	Complete	Complete	Complete	
Japan	Complete	Complete	Complete	Complete
Korea	Complete	Complete	Complete	Complete
Lao PDR	Ongoing			
Malaysia	Ongoing			
Mongolia	Complete	Ongoing		
Myanmar	Complete	Complete	Complete	Complete
Nepal	Complete	Complete	Complete	Complete
Pakistan	Complete	Ongoing		
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Uzbekistan	Complete	Complete	Complete	Ongoing
Vietnam	Complete	Complete	Complete	Complete

7th ICG/AWCI Tokyo 2010

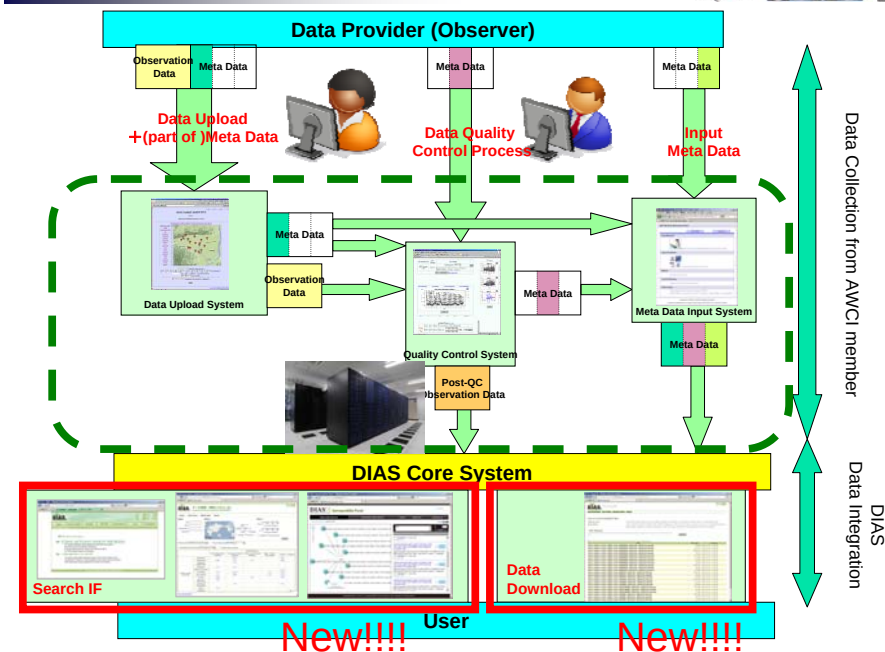


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Korea	Complete	Complete	Complete	Complete
Lao PDR	Ongoing			
Malaysia	Ongoing			
Mongolia	Complete	Ongoing		
Myanmar	Complete	Complete	Complete	Complete
Nepal	Complete	Complete	Complete	Complete
Pakistan	Complete	Ongoing		
Philippines	Complete	Ongoing		
Sri Lanka	Complete	Complete	Complete	Complete
Thailand	Complete	Complete	Complete	Complete
Uzbekistan	Complete	Complete	Complete	Ongoing
Vietnam	Complete	Complete	Complete	Complete

7th ICG/AWCI Tokyo 2010



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Presentation

- Data Upload(Ikoma)
- Quality Control(Ikoma)
- Meta-Data Input(Kinutani)
- Search Interface(Ono - presented by Kinutani)
- Data Download(Kinutani)

New!!!!

AWCI Observation Data Upload System

Eiji Ikoma

Data Upload System

- Observers can upload observation data and input some Metadata on Web Interface consisted of 4 steps.
- On each step, observers need to input some information about the data.
- This system has lots of function which **reduce** the complicatedness of upload process
- Users can manage their own uploaded data

Login Page

- Username and Password are required.
- Each observation site manager has its own (unique) username and password.
- Link (Instruction Manual, Attention, etc...) and Information

STEP1

- Observation Point(Map/List)
- Time Period
- Data Interval
- Timezone
- Description (optional)
- Num. of observed elements

STEP2

- Observation Data
 - Choose from pulldown menu
- Sensor height
- Orientation(op.)
- Unit
- Missing value
- Description(op.)

- Download each/all data
- Check meta-data
- Delete uploaded data

AWCI Data Upload System

- In detail, please refer my presentation @ 5th AWCI ICG on Dec.2009
- Or, check the documentation on the toppage of AWCI Data Upload System.

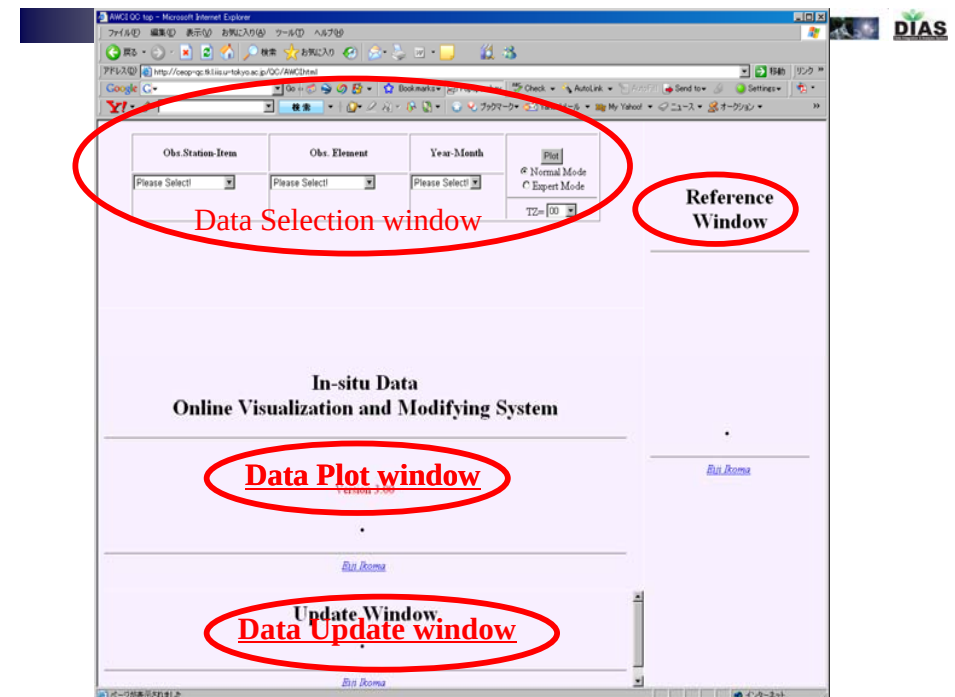
*Upload Process is almost finished for this term.
Thank you for your cooperation!*

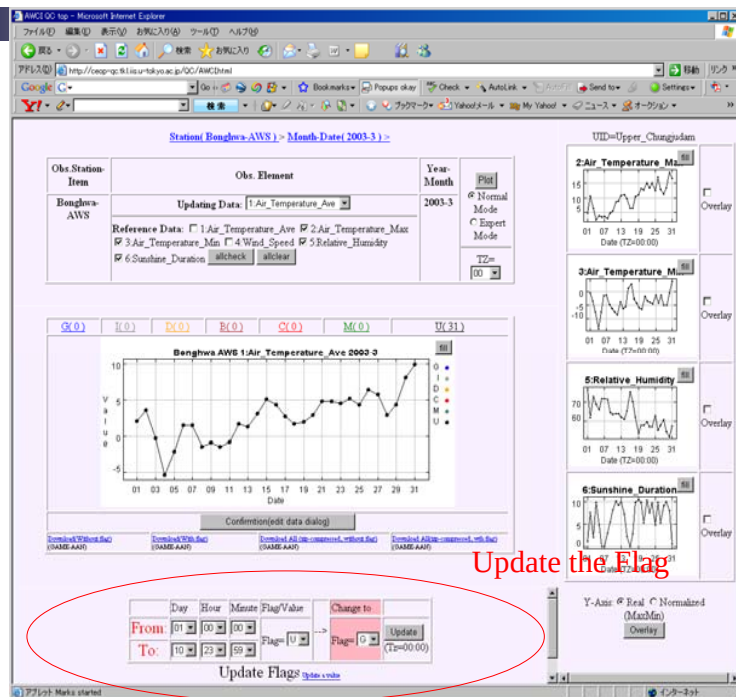
AWCI Data **Quality Control** System

Eiji Ikoma

Our Data Quality Control System

- First version of our QC system was developed in 2002.
- Ver.0.x(2002-2003) → Ver.1(2004-2005) → Ver.2(2005-2006) → Ver.3(2007-)
- Web based UI, Easy-to-use and light operation
- Post-QC Data Download, Progress management system is also available
- Ver 3.03a are now running for AWCI(2009-)





AWCI-QC System Ver3.03a

- Ver3.03a is now running, 16 sites's data are loaded and open to each observer.
- New 2 functions are available from Ver3.03a based on user's request.
 - Move to Next/Previous time period
 - Handling observation data in a year unit

AWCI Data Quality Control System

- In detail, please refer my presentation @ 6th AWCI ICG on Mar.2010
- Or, check the documentation on the toppage of AWCI QC System.
- 11site = complete, 5 site = ongoing
- Please finish QC Process **ASAP**, and proceed to MetaData Input process.

Thank you for your cooperation!

Presentation

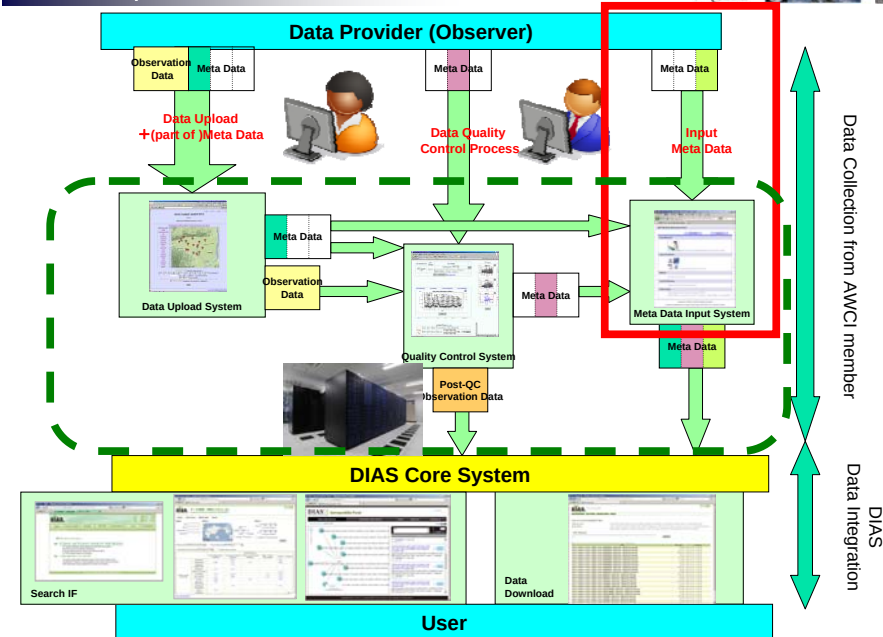
- Data Upload(Ikoma)
- Quality Control(Ikoma)
- Meta-Data Input(Kinutani)
- Search Interface(Ono - presented by Kinutani)
- Data Download(Kinutani)

AWCI Data, Metadata & Data Integration

October 6th, 2010

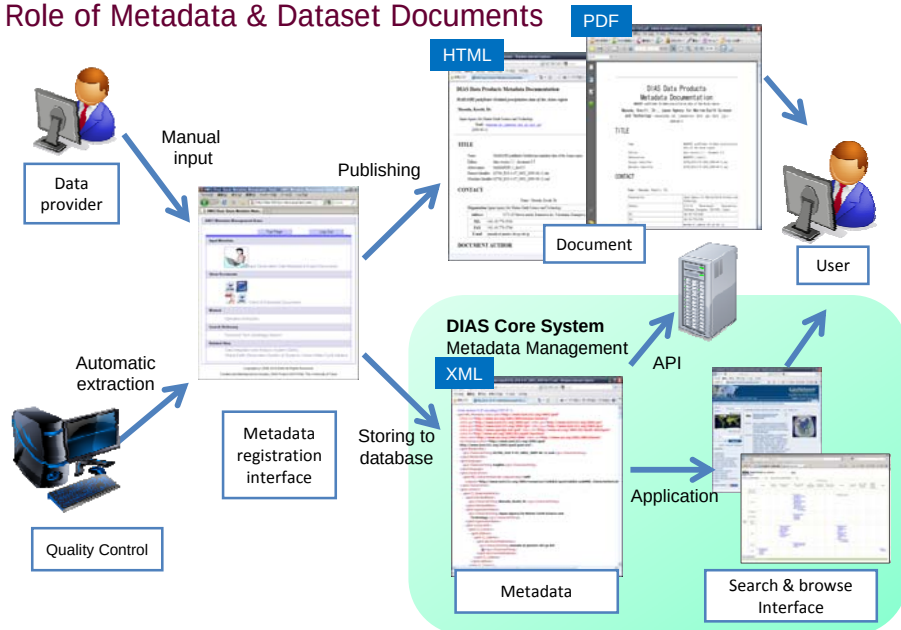
Hiroko Kinutani*, Eiji Ikoma*,
Katsunori Tamagawa[†], Tetsu Ohta[†],
Toshihiro Nemoto*, Masafumi Ono*,
Toshiyuki Shimizu[#]
Masaru Kitsuregawa* and Toshio Koike[†]

The University of Tokyo (*IIS, [†]Civil Eng.)
Kyoto University [#]



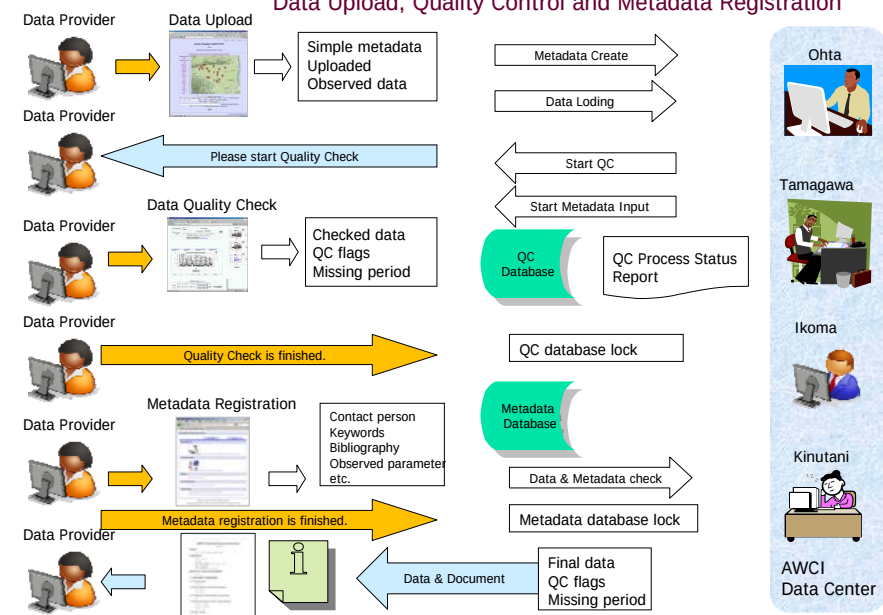
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Role of Metadata & Dataset Documents



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Operation Flow of Data Upload, Quality Control and Metadata Registration



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AWCI Data Upload, QC, Metadata Retistration System

1. Data Upload+(part of)Metadata

Observation parameter, period, unit, etc.



2. Data Quality Control

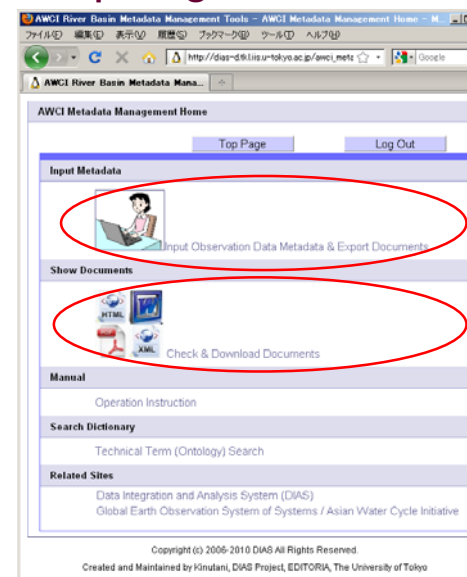


3. Metadata registration & Document Creation 1 metadata per station



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Top Page http://dias-d.tkl.iis.u-tokyo.ac.jp/awci_metadata/



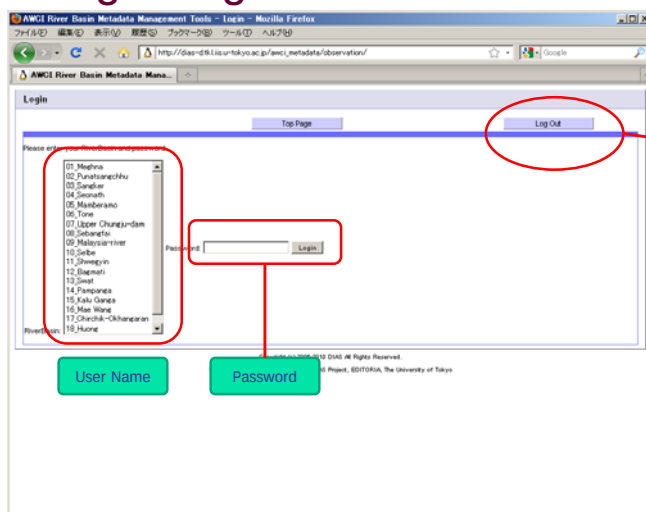
■ Please start from this page.

1 Input metadata of each station, and export documents.

2 Display the list of the documents created before.

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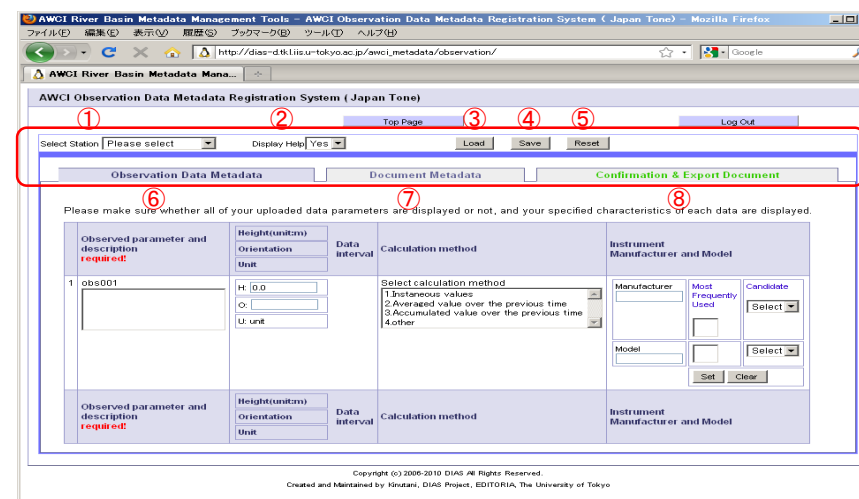
Login Page



When you finish your work, Click "Log Out".

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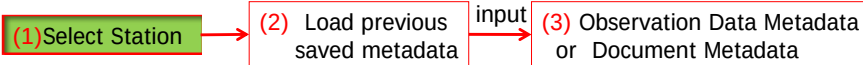
1. Input Metadata Page



(1)Select Station → (2)Load previous saved metadata input → (3) Observation Data Metadata or Document Metadata

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1.Input Metadata Page



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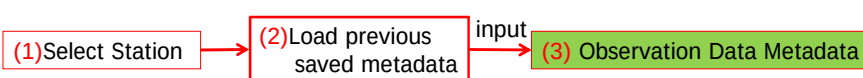
1.Input Metadata Page



There are metadata input boxes related to observed parameters.

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1.Input Metadata Page



These boxes are displaying the instrument & model which is registered in this system.

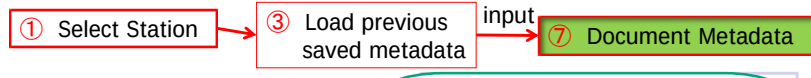
These boxes are displaying the instrument & model which is most specified in the other Station on the same basin.

Input boxes

Recommendation boxes

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1.Input Metadata Page



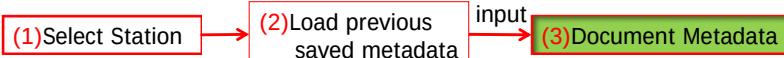
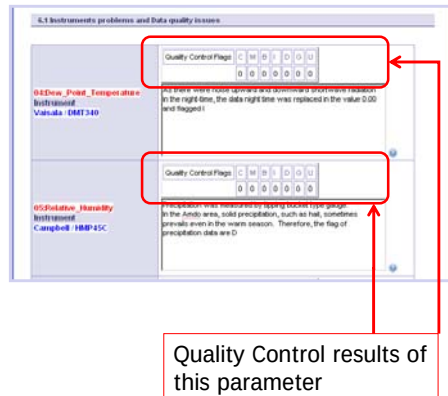
Improvement!!

The sentences you entered the last time and sample description will be displayed.

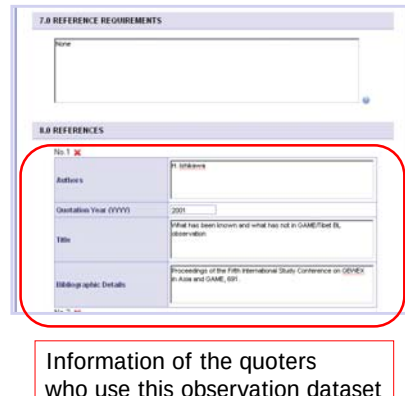
When you click these buttons, sample description will be displayed.

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1.Input Metadata Page

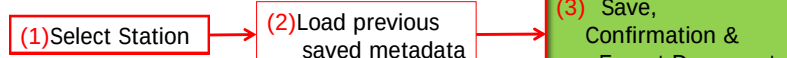
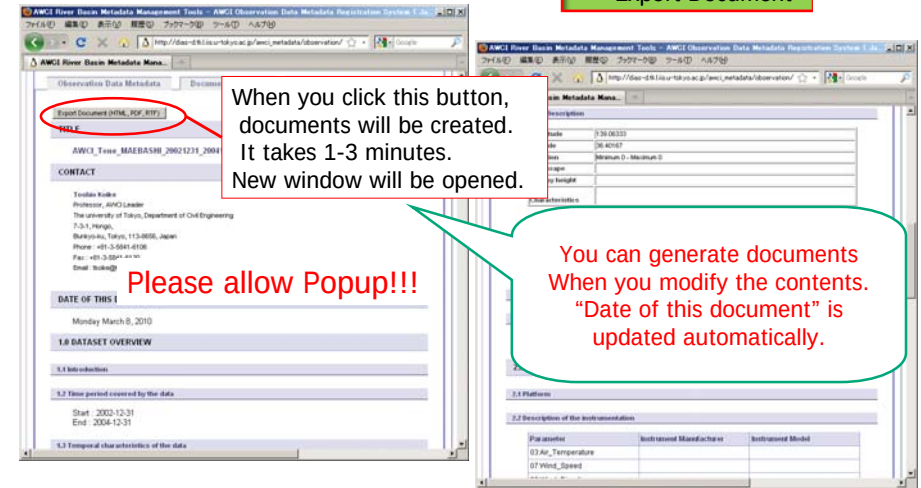
Quality Control results of this parameter



Information of the quaters who use this observation dataset

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1.Input Metadata Page

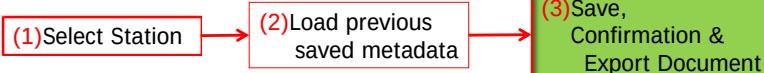
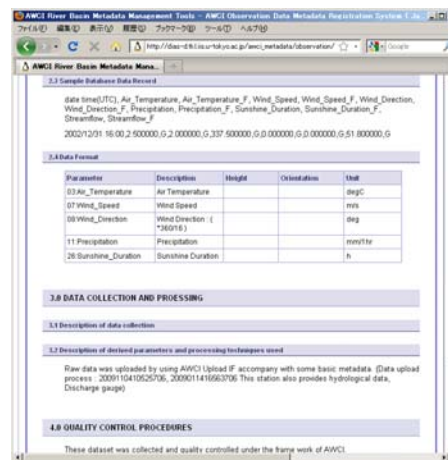
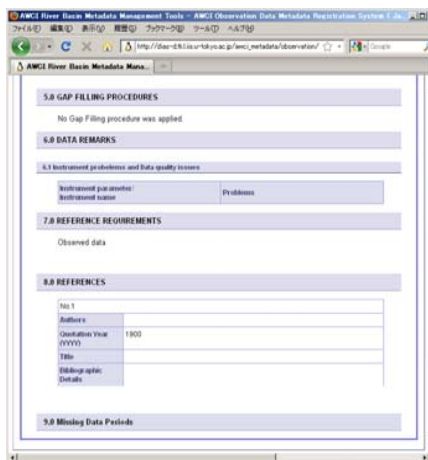
When you click this button, documents will be created. It takes 1-3 minutes. New window will be opened.

Please allow Popup!!!

You can generate documents When you modify the contents. "Date of this document" is updated automatically.

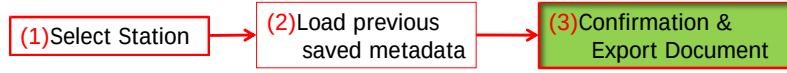
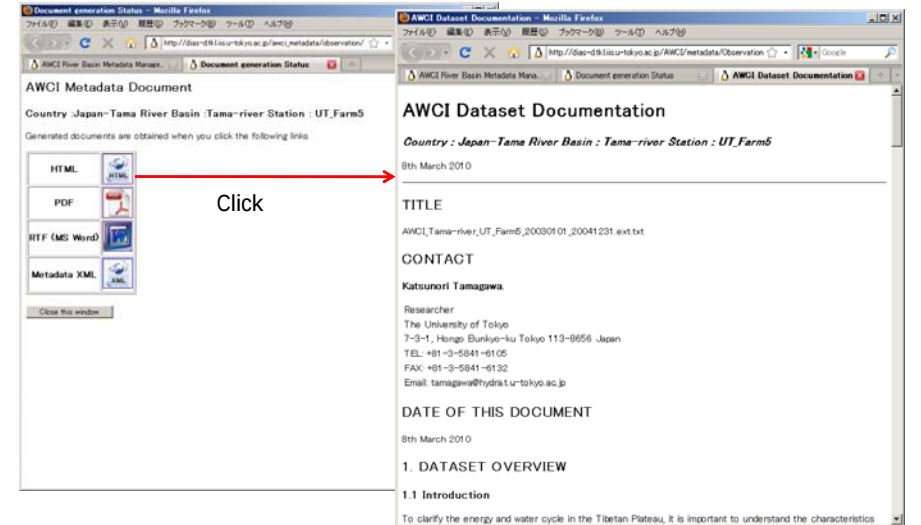
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1.Input Metadata Page

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1.Input Metadata Page

Click

Click

You can generate documents When you modify the contents. "Date of this document" is updated automatically.

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2. Show Document Page

AWCI Observation Metadata Document List 0.2 Japan-Tama / Tama-river

Top Page Log Out

Metadata Document List 99.Japan-Tama

Show document list

Click

You will display or download the document when you click the icon.

Station File name

AWCI Observation Metadata Document List 0.4 Myanmar / Shwegyin

Created:

Metadata Document List 11.Myanmar

Show document list

Station	File name	HTML	PDF	MS Word	Metadata XML
1 Shwegyin	AWCI_Shweygyn_Shweygyn_20030101_20041231.xls				

Data Download

After quality checked data is passed to this system, you can download your data from here.

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Log Out Page

AWCI River Basin Metadata Manager

Log Out

You are authenticated.

User Name: 06_Tone

Log Out will log you out.

Click

Go to Top Page

Top Page

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AWCI River Basin Metadata Manager

Log Out

You are not logged in.

Go to Top Page

Top Page

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DIAS Data Integration

DIAS Data Integration

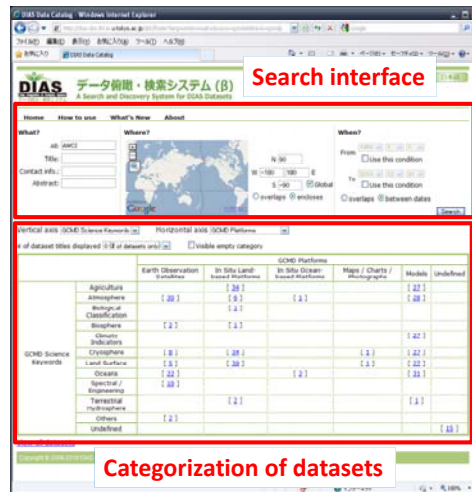
- DIAS <http://www.editoria.u-tokyo.ac.jp/dias/english/index.html>
- DIAS Data disclosure Site http://www.editoria.u-tokyo.ac.jp/dias/link/portal/english_index.html
- Search tools
 - DIAS Dataset Catalog <http://dias-dss.tkl.iis.u-tokyo.ac.jp/ddc/finder?lang=en>
 - DIAS Interoperability Portal <http://dias.csis.u-tokyo.ac.jp/op/en/>
- Data Download via Search tools



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DIAS Dataset Catalog (A Search and Discovery System)

<http://dias-dss.tkl.iis.u-tokyo.ac.jp/ddc/finder?lang=en>



List of datasets

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DIAS Dataset Catalog (A Search and Discovery System)

<http://dias-dss.tkl.iis.u-tokyo.ac.jp/ddc/finder?lang=en>

Search function

- Select categories : GEOSS SBAs (Water)XGCMD Platform(In Situ Land-based Platforms)
- Input keywords : AWCI
- Specify geographical range : South East Asia
- Specify observation period : overlaps 2003/1/1-2004/12/31

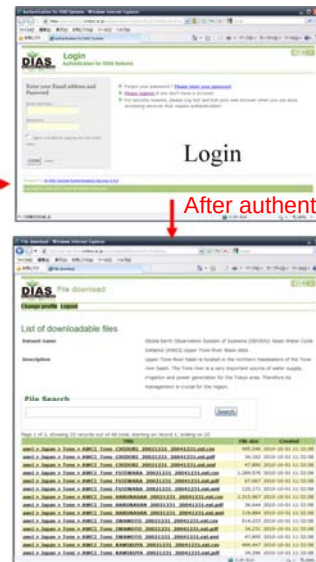
60

DIAS Dataset Catalog (A Search and Discovery System)

<http://dias-dss.tkl.iis.u-tokyo.ac.jp/ddc/finder?lang=en>



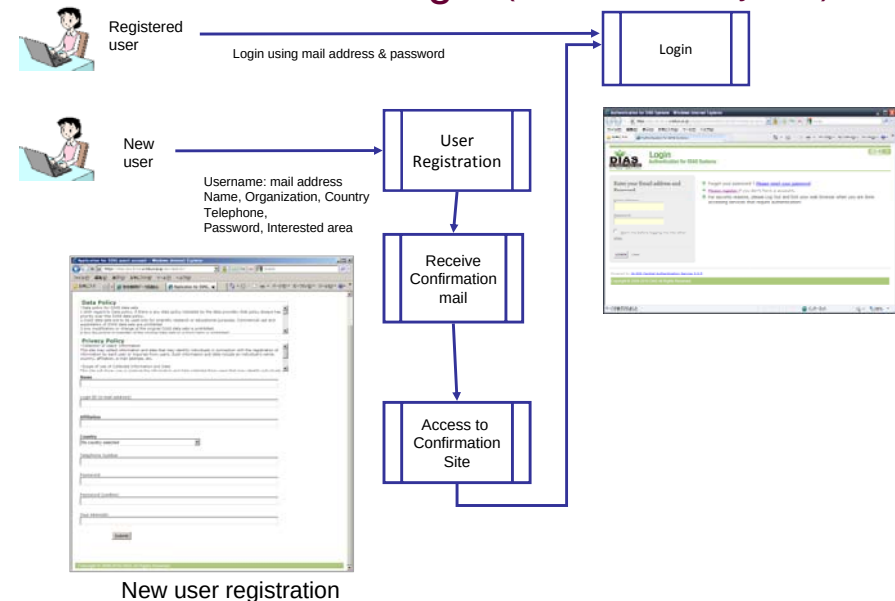
Dataset document



List of downloadable files

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Data Download:Login (Authentication System)



New user registration

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Data Download : After authentication

Select a file

Download dialog

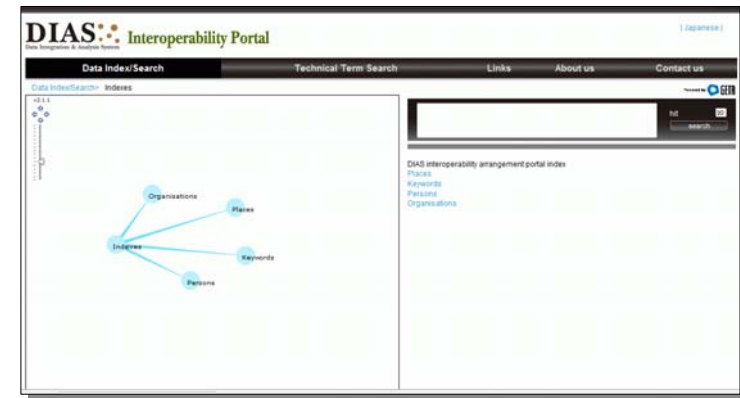
Data policy for the dataset

Agree & start downloading

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DIAS Interoperability portal

- DIAS Interoperability portal provides **data/metadata search**, **technical term search** and **visualization of relations among dataset** to very large-scale and wide variety of earth observation data registered in the DIAS core system.
- <http://dias.csis.u-tokyo.ac.jp/op/en/>

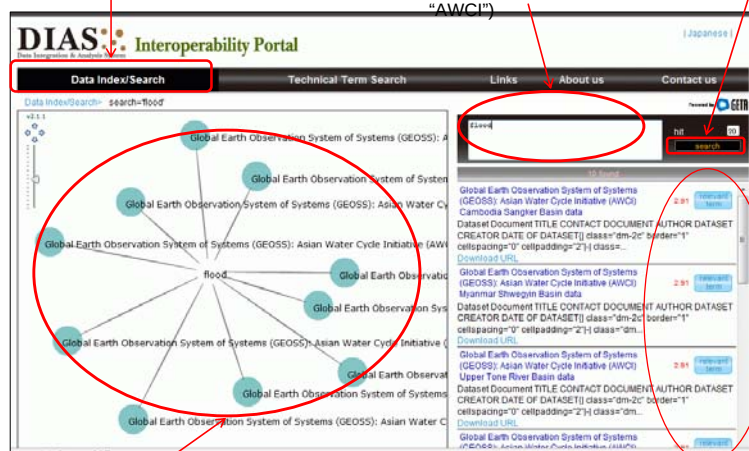


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Data Index/Search (basic keyword search)

- Users can search DIAS dataset by using basic keyword search function.

- ① Select "Data Index/Search" tab
- ② Input keywords (ex. "flood" or "AWCI")
- ③ Push "search"



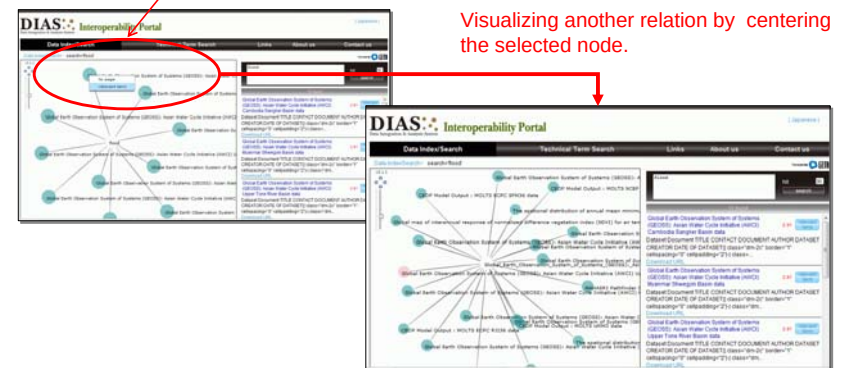
④ Visualizing dataset related to the input keyword

⑤ Similarity score

Data Index/Search (advanced search)

- In addition, users can find more interesting dataset in DIAS core system by tracing ontology network.
- For example, after searching with the keyword **'flood'** and selecting relevant term on the node **'AWCI tone river basin data'**, you can find **'CEOP Model Output'** or **'high-resolution (10 km) Reanalysis downscaled data over Japan'**.

Click a node and select 'relevant term' in popup menu.



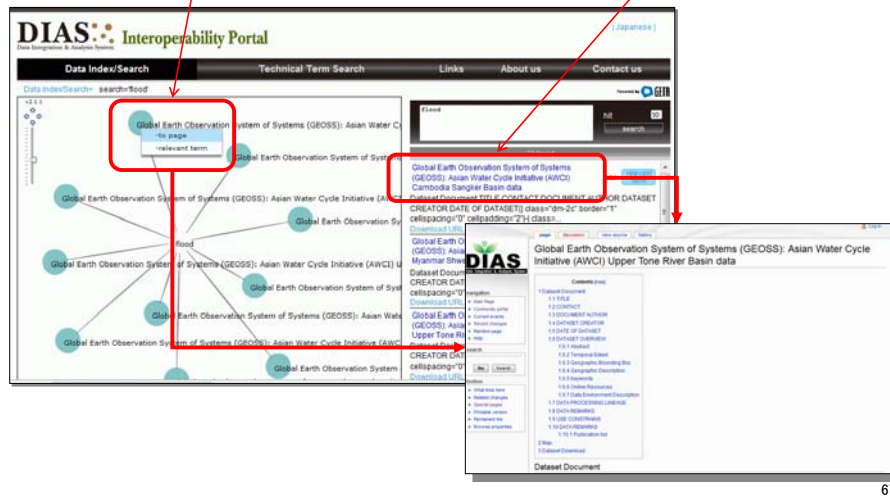
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Link to the DIAS metadata document

- DIAS Interoperability portal links to DIAS metadata included in Wiki System.

Case1: Click on a node and select "to page" in popup menu.

Case2: Click on a title in the list view.



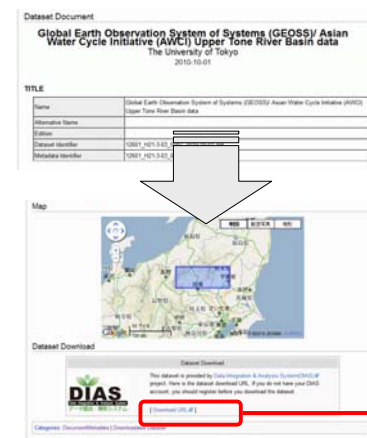
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Data Download

- There is the linkage to the DIAS data download system in the bottom of metadata description.

Authentication System

DIAS metadata document



Before authentication



After authentication

Data Download System



Already authorized

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Technical Term Search

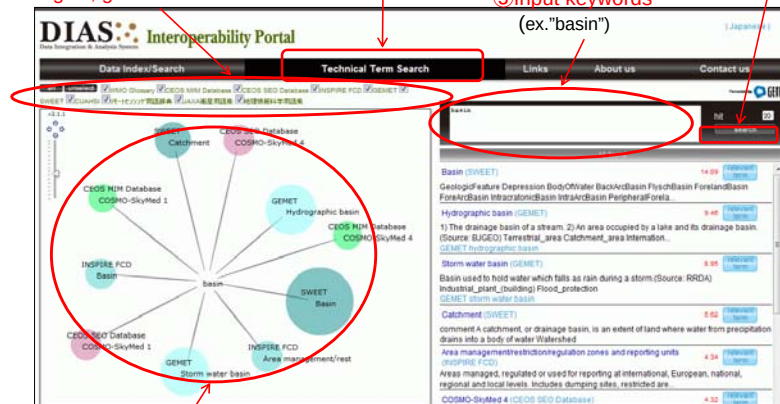
- Users can check the definition of terms by using 'technical term search' function.

①Select "Technical Term Search" tab

②Select targets in list of ontologies, terminologies, glossaries and dictionaries.

③Input keywords (ex. "basin")

④Push "search"



⑤Visualizing terms in each dictionaries related to the input keyword

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Imported vocabulary resources

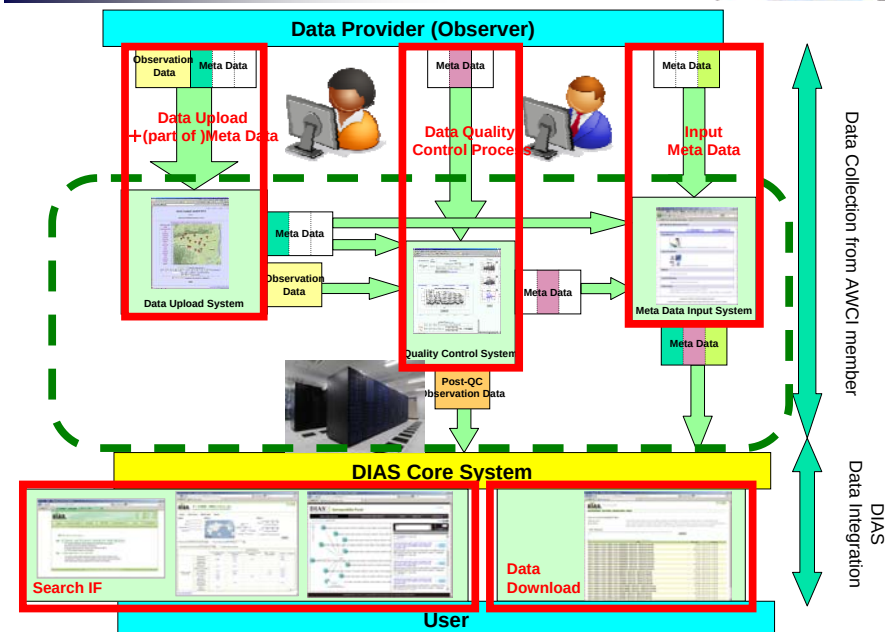
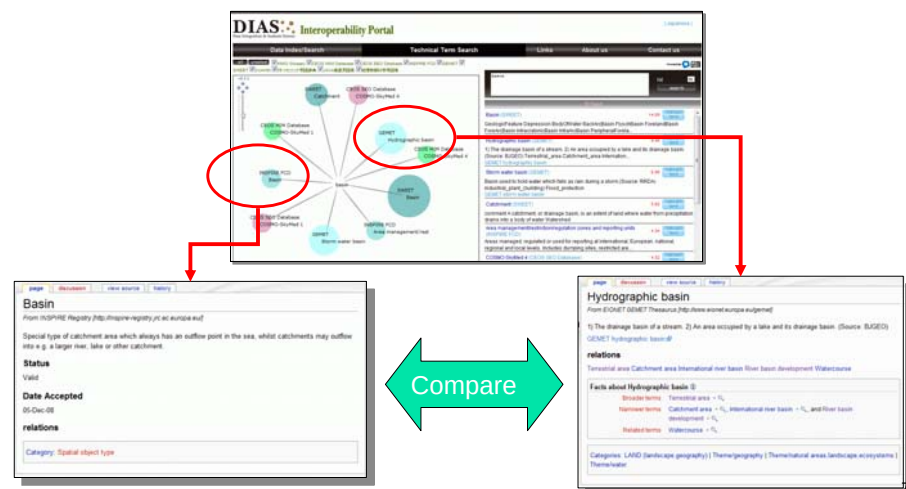
- We have imported the following resources in DIAS Interoperability portal. Properly, we get permissions for our fair use from original resource providers.

No.	Name	Language	Data format
1	WMO Glossary	English	Web pages
2	CEOS Missions, Instruments and Measurements(MIM) Database	English	MS Excel
3	CEOS Systems Engineering Office(SEO)	English	MS Excel
4	GEMET (General Multilingual Environmental Thesaurus)	English	RDF
5	INSPIRE((Infrastructure for Spatial Information in the European Community) Feature Concept Dictionary	English	Web pages
6	NASA SWEET	English	OWL
7	CUAHSI (Consortium of Universities for the Advancement of Hydrologic Science)	English	OWL
8	JAXA用語集 (JAXA glossary)	Japanese	Web pages
9	リモートセンシング用語集 (remote sensing glossary for Japanese RS academic society)	Japanese	Books (paper media)
10	GIS学会用語集 (GIS glossary for Japanese GIS academic society)	Japanese	MS Word

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Comparing term definitions

- In this function, user can compare the definition of terms.
 - For example, after searching with the keyword 'basin' and then selecting 'to page' on the node 'basin' in INSPIRE (Infrastructure for Spatial Information in the European Community) and 'Hydrographic basin' in GEMET (GEneral Multilingual Environmental Thesaurus), you can understand the difference between both resources.



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Japan	Complete	Complete	Complete	Complete
Korea	Complete	Complete	Complete	Complete
Lao PDR	Ongoing			
Malaysia	Ongoing			
Mongolia	Complete	Ongoing		
Myanmar	Complete	Complete	Complete	Complete
Nepal	Complete	Complete	Complete	Complete
Pakistan	Complete	Ongoing		
Philippines	Complete	Ongoing		
Sri Lanka	Complete	Complete	Complete	Complete
Thailand	Complete	Complete	Complete	Complete
Uzbekistan	Complete	Complete	Complete	Ongoing
Vietnam	Complete	Complete	Complete	Complete