



CEOS Water Portal Overview and Status Update

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CEOS Contents



1. Overview (just a reminder...)
2. Updates
New Architecture Development
3. Future Plan
4. Demo



1. Overview

1.1 Concept

- CEOS Water Portal is ;
 - A distributed data system component of DIAS (Data Integrated Analysis System)-Program
 - To provide “[Easy to Access](#)” service to users
 - To provide access to a whole variety of hydrological data and water relevant data scattered over the world
 - To [connect the existing components](#) like data centers, scientists and wide users.
- Multiple types of data are available such as;
 - In-situ data
 - Satellite data
 - Model output data





1. Overview

1.2 Services



1. Dataset Search

- Category Search/Map Search
- Connecting to 11 data centers and 2 catalog broker system

2. Dataset Access

(Depend on the Server side function,
ex. OPeNDAP server)

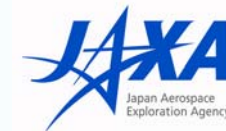
- Data Subset (time, variables)
- Data Download/Format conversion (NetCDF, ascii, GRIB (Modeloutput only))

3. Sharing Use Case

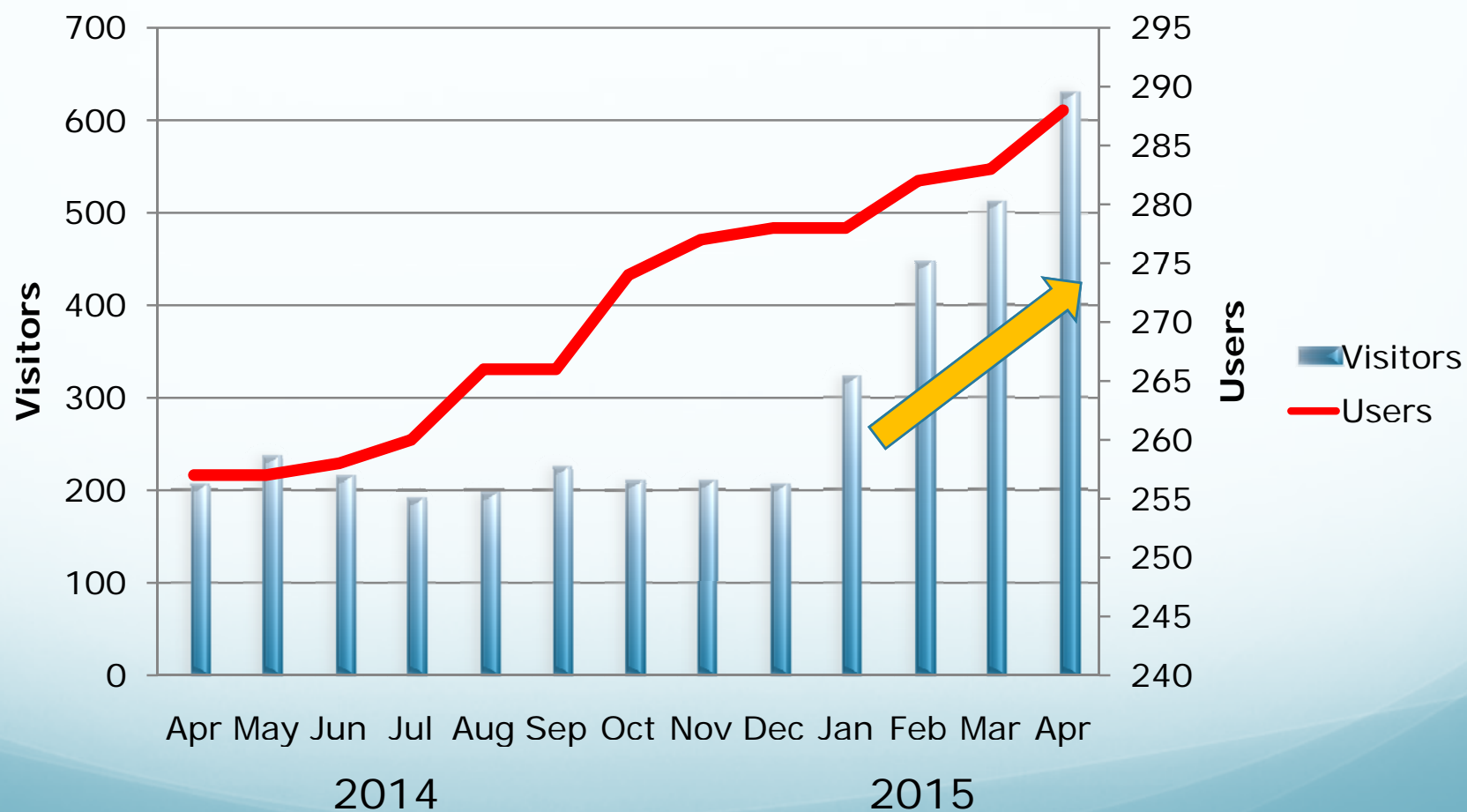
- Use Case registration/browsing



Visitors & Users

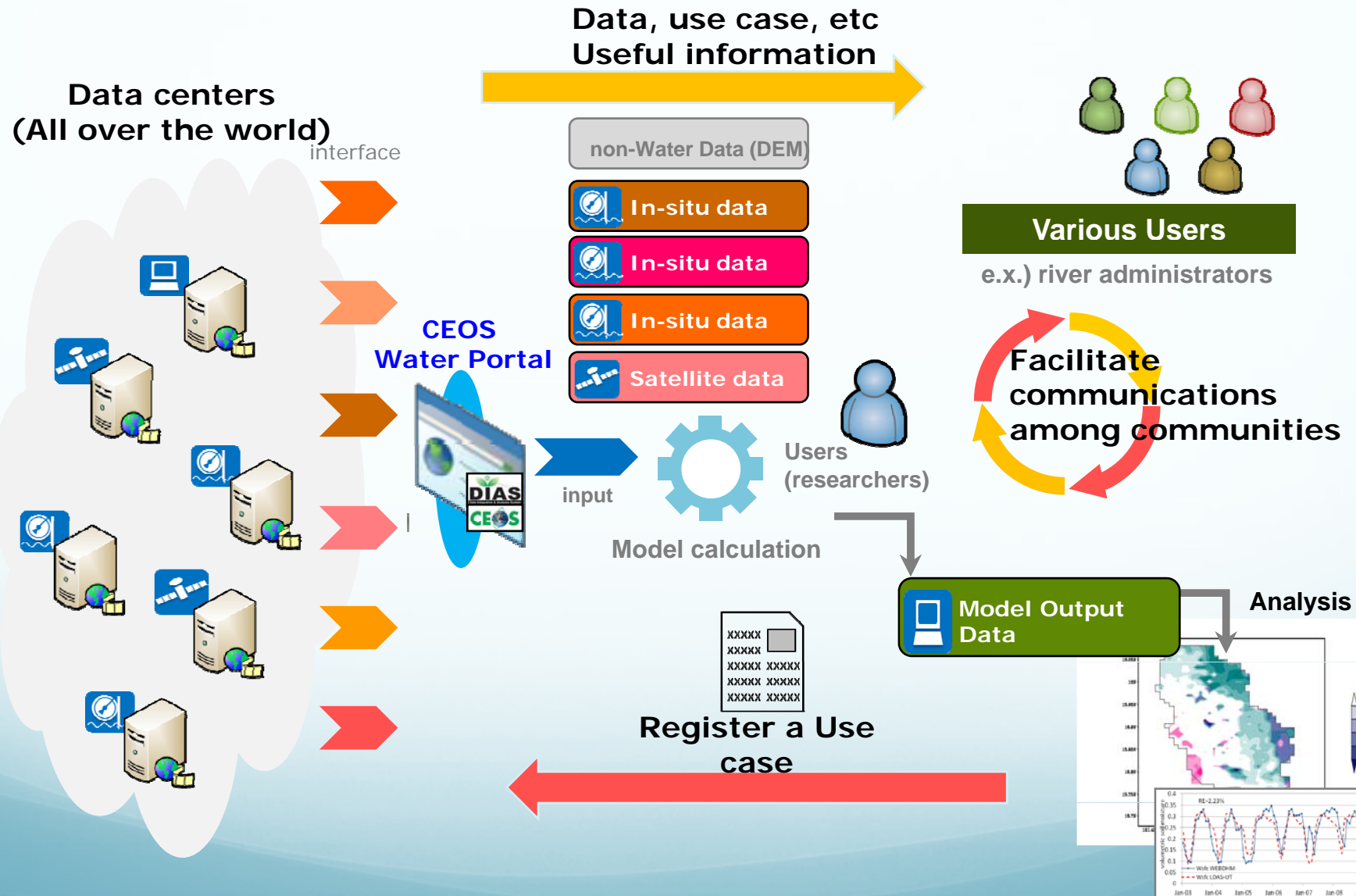


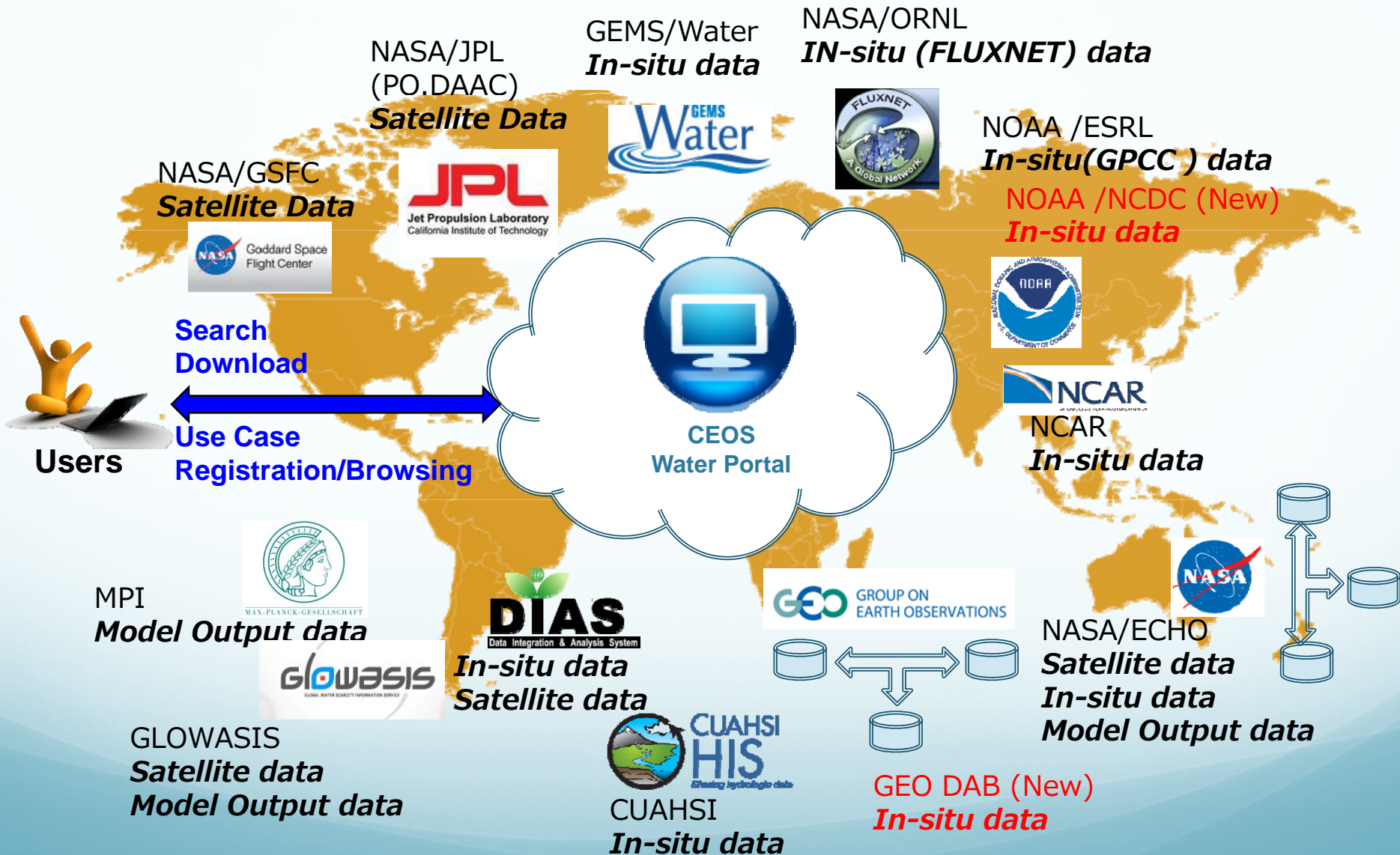
- New CEOS water portal site has been available from May 12th, 2015.
- Registration User is around 290.



CEOS 1. Overview

1.3 Goal







1. Overview

1.5 Available Data List (1/2)

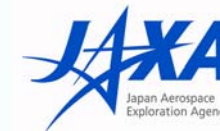


Data Partners	Data Types	Variables	Server type	Server Locations
CEOP	Satellite	PR, TMI, AMSR, AMSR-E, MODIS, GLI, SSMI, VISSR	Hyrax	University of Tokyo (Japan)
	Model (MOLTS)	surface pressure, skin temperature, precipitation amount in hour, brightness temperature surface, specific humidity, u-component of wind, v-component of wind, etc	THREDDS	MPI (Germany)
	Model (Grid ded)	Air pressure, surface air pressure, air temperature, precipitation rate, snowfall amount, etc	Jblob	MPI (Germany)
	In-situ	Surface Meteorological and Radiation Data Set Flux Data Set Soil Temperature and Soil Moisture Data Set Meteorological Tower Data Set	http link	NCAR (USA)
AWCI	Model (MOLTS)	surface pressure, skin temperature, precipitation amount in hour, brightness temperature surface, specific humidity, u-component of wind, v-component of wind, etc	THREDDS	MPI (Germany)
	In-situ	Precipitation amount, River discharge, River water level, etc	Hyrax	University of Tokyo (Japan)
NASA	Satellite	Airs level 3 data	Hyrax	NASA (GSFC)
NOAA (GPCC)	In-situ	Precipitation data	THREDDS	NOAA (USA)



1. Overview

1.5 Available Data List (2/2)



Data Partners	Data Types	Variables	Server type	Server Locations
NASA	Satellite	GRACE Level 3 data	THREDDS	NASA/JPL(PO.D ACC)
FLUXNET	In-situ	FLUX data Fluxes of carbon dioxide, water vapor, and energy exchange, etc	THREDDS	NASA (ORNL DAAC)
GEMS/Water	In-situ	Instantaneous Discharge , Dissolved Oxygen , Temperature, etc	WFS	GEMS/Water (CANADA)
GLOWASIS	Satellite Model(Gridded)	Precipitation, Air temperature	THREDDS	Deltares (Netherland)
ECHO Broker Service	In-situ Satellite Model	Various types of data via ECHO broker	OpenSearch	NASA (GSFC)
CUAHSI	In-situ	precipitation, humidity, discharge, oxygen, etc	REST/WaterML2, WaterOneFlow/WaterML1	CUAHSI (USA)
GEO DAB/GRDC	In-situ	River Discharge via GEO DAB	OpenSearch	GEO
NOAA/NCDC	In-situ	Air temperature, Precipitation, Air Pressure	THREDDS	NOAA/NCDC

(NEW)



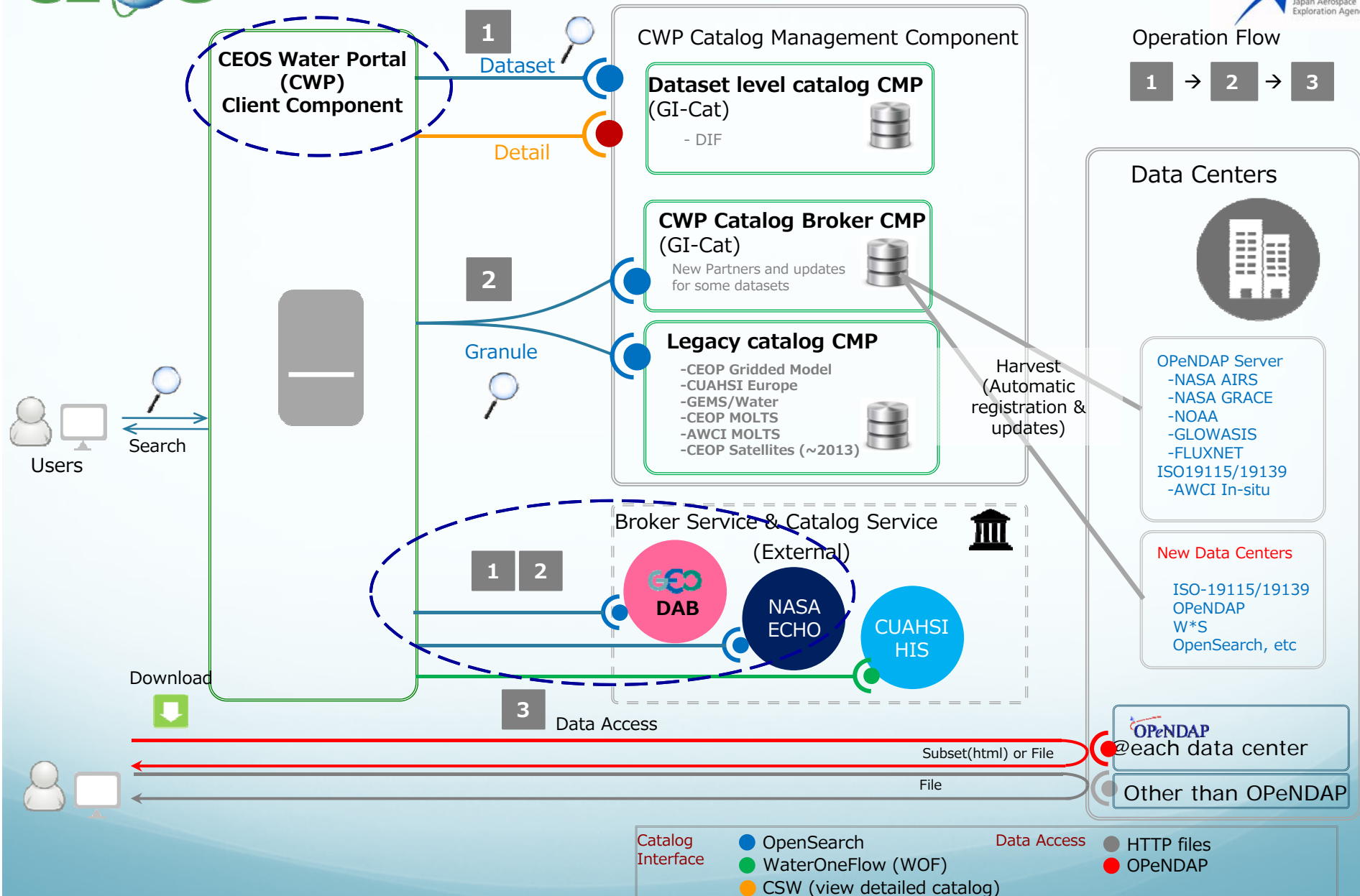
2. Updates

New Architecture Development

- Purposes

- a. Less time and labors on adding data partners
- b. Integrated operation flow (search -> download)
- c. Easier operation

Operation Flow



a. Integrated with DIAS Catalog system

- Develop the common dataset level catalog database
- Use GI-cat software

b. Changing the User Authentication Function

- SSO among DIAS

DIAS will take over the Water portal system operation at FY2016.



4. Demonstration

New CEOS Water portal