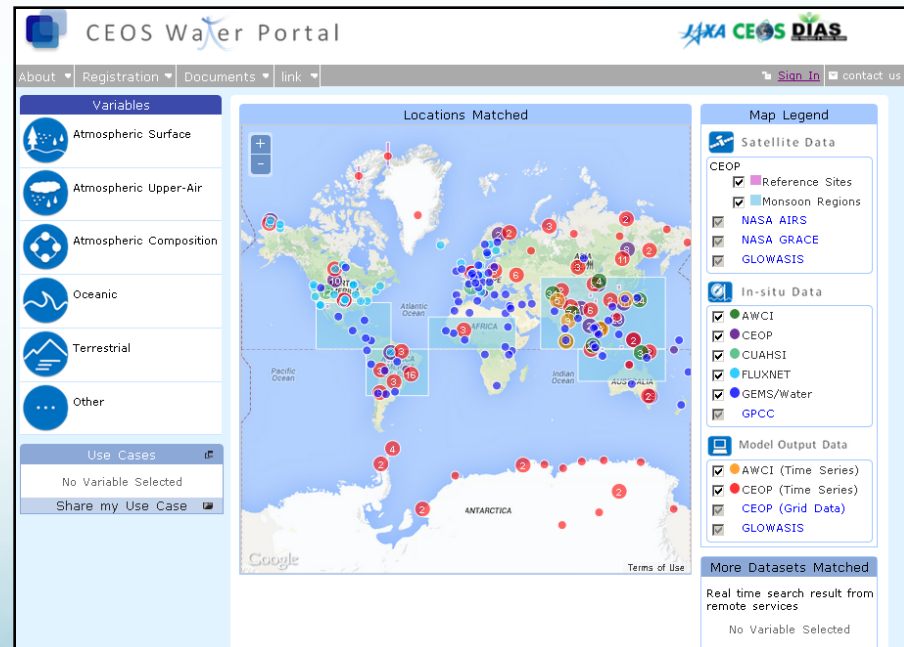


CEOS Water Portal Overview and Status Update

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Moscow, Russia

JAXA
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1. Overview (just a reminder...)
2. Updates
 - a. New Data Partners
 - b. New Architecture Development
3. Future Plan



The screenshot displays the CEOS Water Portal interface. At the top, it features the CEOS logo and navigation links for 'About', 'Registration', 'Documents', and 'link'. A 'Sign In' button and 'contact us' link are also present. The main content area is divided into several sections:

- Variables:** A list of categories including Atmospheric Surface, Atmospheric Upper-Air, Atmospheric Composition, Oceanic, Terrestrial, and Other.
- Use Cases:** A section with 'No Variable Selected' and a 'Share my Use Case' button.
- Locations Matched:** A world map showing numerous data points (red, blue, green, and purple) with numbers indicating the count of matches for each location. The map includes labels for the Pacific Ocean, Atlantic Ocean, Indian Ocean, and Antarctica.
- Map Legend:** A panel on the right side of the map, divided into 'Satellite Data' and 'In-situ Data'. It includes checkboxes for 'Reference Sites', 'Monsoon Regions', 'NASA AIRS', 'NASA GRACE', 'GLOWASIS', 'AWCI', 'CEOP', 'CUAHSI', 'FLUXNET', 'GEMS/Water', and 'GPCC'. Below this, there is a 'Model Output Data' section with checkboxes for 'AWCI (Time Series)', 'CEOP (Time Series)', 'CEOP (Grid Data)', and 'GLOWASIS'.
- More Datasets Matched:** A section at the bottom right stating 'Real time search result from remote services' and 'No Variable Selected'.

<http://waterportal.ceos.org>

CEOS 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. Dataset Search

- Category Search/Map Search
- Connecting to 11 data centers

2. Dataset Access

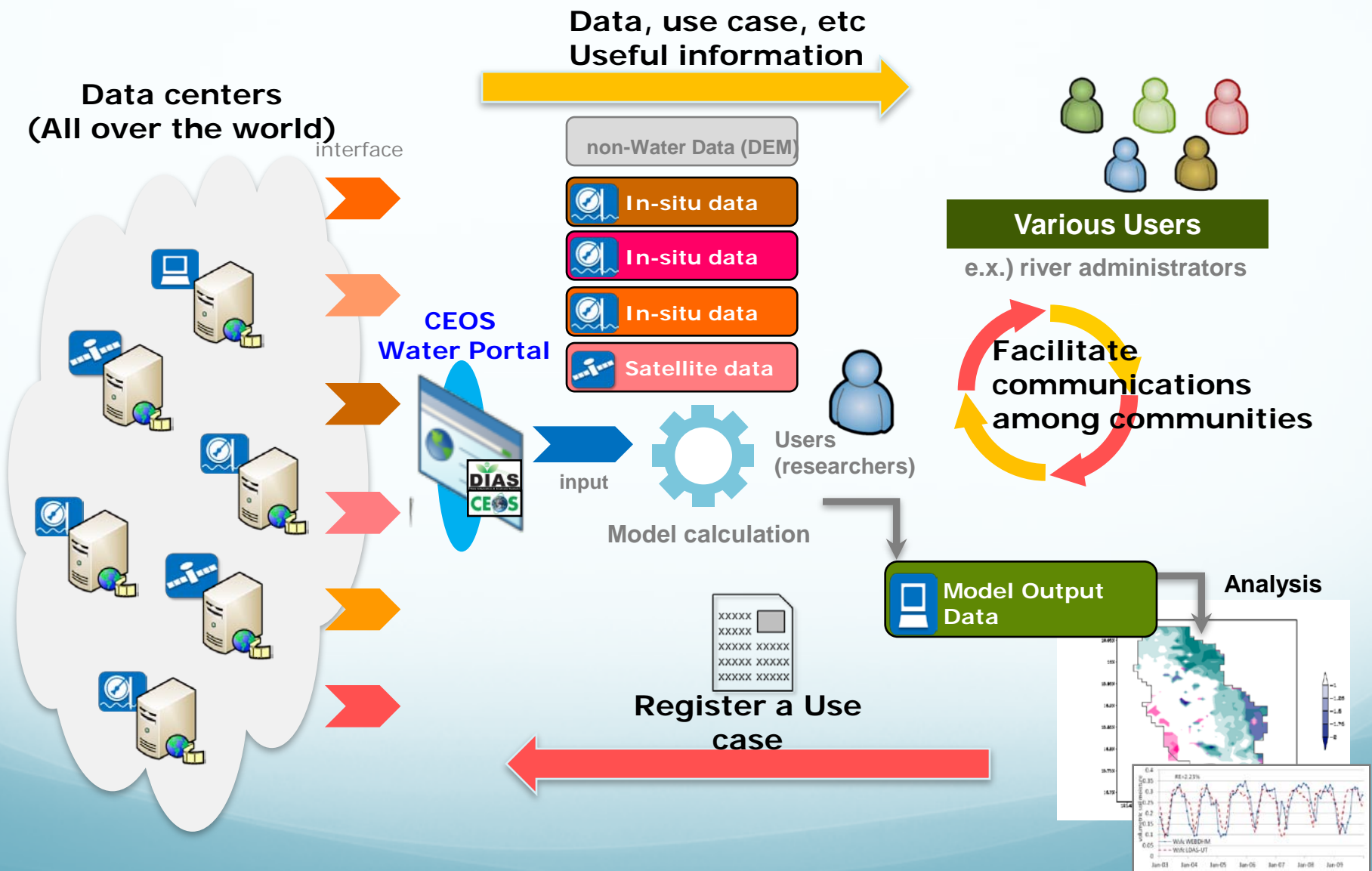
- Data Subset (time, variables)
- Data Visualization (GIF image)
- Data Download/Format conversion (NetCDF, ascii, GRIB (MOLTS only))

3. Sharing Use Case

- Use Case registration/browsing

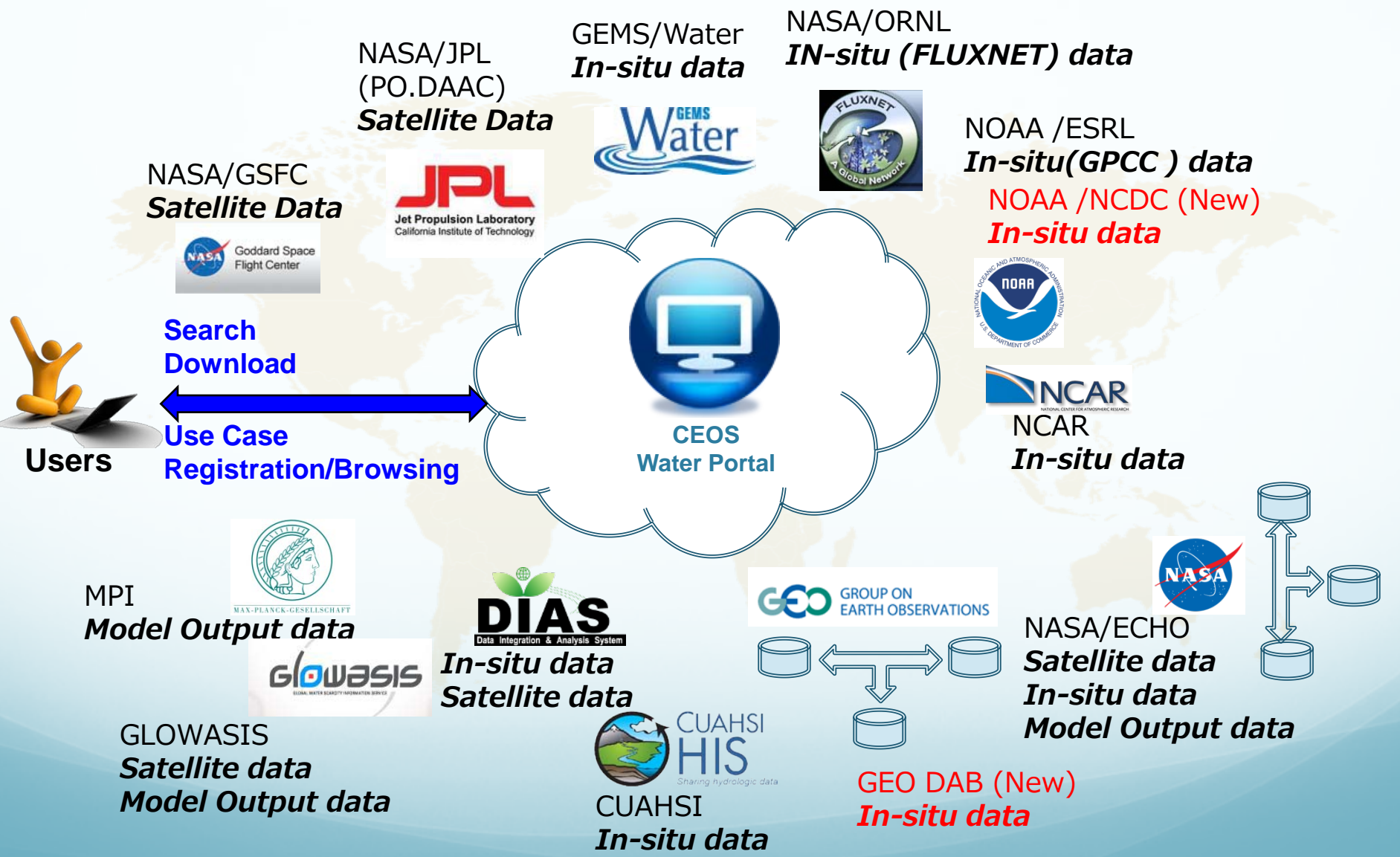
CEOS 1. Overview

1.3 Goal



1. Overview

1.4 Data Partners



NASA/JPL
(PO.DAAC)
Satellite Data

GEMS/Water
In-situ data

NASA/ORNL
IN-situ (FLUXNET) data

NASA/GSFC
Satellite Data

NOAA /ESRL
In-situ(GPCC) data

NOAA /NCDC (New)
In-situ data

**Search
Download**

**Use Case
Registration/Browsing**

**CEOS
Water Portal**

**NCAR
In-situ data**

MPI
Model Output data

DIAS
Data Integration & Analysis System
**In-situ data
Satellite data**

GEO GROUP ON
EARTH OBSERVATIONS

NASA/ECHO
**Satellite data
In-situ data
Model Output data**

GLOWASIS
**Satellite data
Model Output data**

**CUAHSI
HIS**
Sharing hydrologic data
**CUAHSI
In-situ data**

**GEO DAB (New)
In-situ data**

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 (Gridded)	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)

Data Partners	Data Types	Variables	Server type	Server Locations
NASA	Satellite	Airs level 3 data	Hyrax	NASA (GSFC)
NOAA (GPCC)	In-situ	Precipitation data	THREDDS	NOAA (USA)
NASA	Satellite	GRACE Level 3 data	THREDDS	NASA/JPL(PO .DACC)
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(Grid ded)	Precipitation, Air temperature	THREDDS	Deltares (Netherland)
ECHO Broker Service	In-situ Satellite Model	Various types of data via ECHO broker	http link	NASA (GSFC)
CUAHSI	In-situ	precipitation, humidity, discharge, oxygen, etc	REST/WaterML2, WaterOneFlow/ WaterML1	CUAHSI (USA)

a. New Data Partners

a. NOAA/NCDC

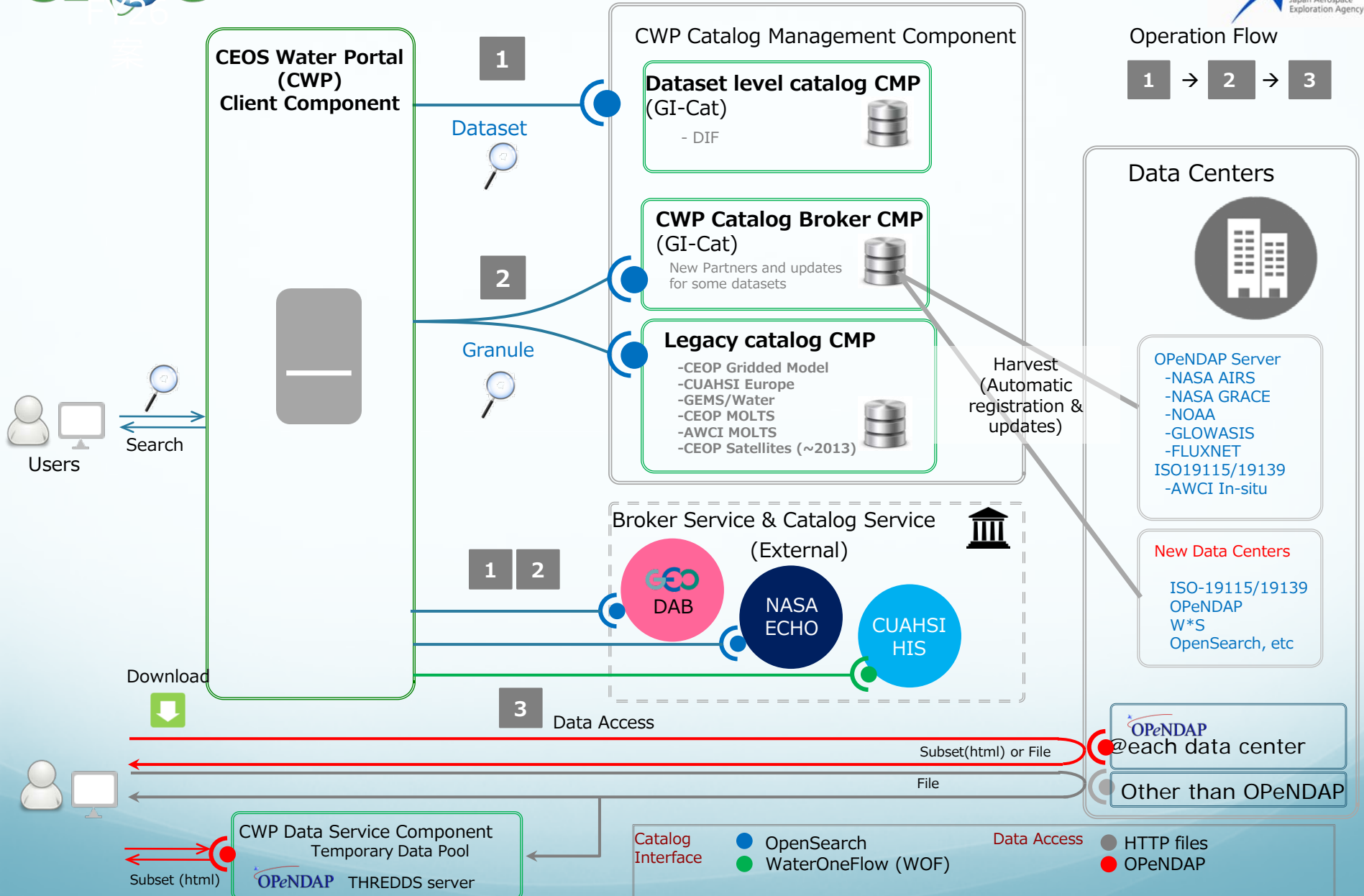
- Climate data (Various types of data is available)
- We are hearing to scientists about the high priority data
 - [Quality Controlled Local Climatological Data \(QCLCD\)](#)
 - [Cooperative Observer Network \(COOP\)](#)
 - [Climate Normals](#)
 - [U.S. Historical Climatology Network \(USHCN\)](#)
 - [Global Historical Climatology Network \(GHCN\)](#)
 - [Global Summary of the Day \(GSOD\)](#)
 - [U.S. Climate Reference Network \(USCRN\)](#)
 - [Global Observing Systems Information Center \(GOSIC\)](#)
 - [Integrated Surface Database \(ISD\)](#)
 - [Automated Surface Observing Systems \(ASOS\)](#)
 - [Automated Weather Observing System \(AWOS\)](#)
 - [Solar Radiation](#)
 - [National Weather Service Text Narrative and Product Archive](#)
 - [Statewide/Regional Divisional Temperature/Drought/Degree Days](#)
 - [Solar Radiation](#)
 - [National Weather Service Text Narrative and Product Archive](#)
 - [Statewide/Regional Divisional Temperature/Drought/Degree Days](#)
 - [Climate At A Glance](#)
 - [World War II Era Data](#)
 - [Hourly/15-Minute Precipitation Data and Frequency Atlas](#)
 - [Annual Climatological Summaries](#)

CEOS 2. Updates

a. New Data Partners

b. GEO DAB (Data Access Broker)

- Connecting with GEOWOW via GEO DAB
- Most important data is River Discharge





- a. Synergy with other component of DIAS
 - How ?
- b. User Authentication Function
 - SSO among DIAS

Discussion has just started.

Thank you!

CEOS WaterPortal “Ban-zai !”
(ばんざい！)

