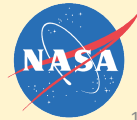




# Portal Study Report

## CEOS 2010 Plenary Action 24-3

**Brian Killough** - NASA, CEOS SEO  
Agenda Item #12



## CEOS and GEO Portal Study Summary

- **CEOS Action:** (Plenary 2010, Action 24-3): CEOS Chair to work with the SEO, outgoing and incoming CEO and GEO Secretariat to study possibilities for rationalisation of the multiplicity of portals provided by CEOS in support of GEO.
- **Key Study Questions**
  - What are the objectives, capabilities and content of each portal?
  - Are there common or unique features among portals?
  - What are the portal economic investments for development and maintenance?
  - What is a representative set of high-level needs of CEOS data/information users? Can these be a basis for standards and can all portals accommodate these needs?
  - What are the advantages and disadvantages of having multiple portals?
  - What are the current plans of GEO and the GCI, and how might CEOS and this study impact or modify these plans?

# Schedule, Portals and Team

## Schedule

- Dec 7 - Report #1, Proposed Action Plan
- Jan 10 - SEO preliminary assessment of non-GEO and GEO portals
- Jan 20 - Team telecon #1
- Feb 16-17 - Side Meeting in Washington
- May 24 - Report to SIT-26
- **Continue up to CEOS Plenary .....**



## Portals

### "Community" Portals

- Land Surface Imaging (LSI) Constellation Portal
- Atmospheric Composition (AC) Constellation Portal
- Calibration/Validation Portal
- Forest Carbon Tracking (FCT) Portal
- AVISO Portal (Ocean Topography Altimetry)
- RADS Portal (Radar Altimeter Database)

### "Super" Portals

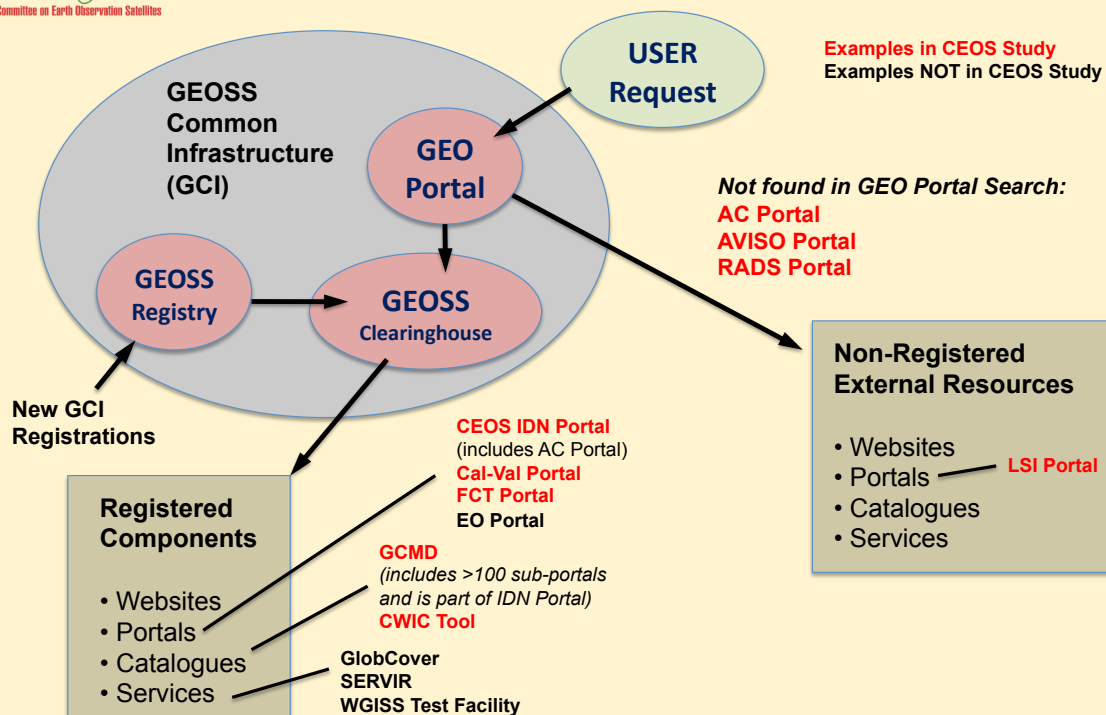
- GEO Portal (part of the GEOSS Common Infrastructure - GCI)
- CEOS International Directory Network (IDN) Portals

*Not considered ... Climate Diagnostics, Data Democracy*

## Team

- NASA SEO: Brian Killough, Shelley Stover, Kim Keith
- CEO: Tim Stryker (USGS), Kerry Sawyer (NOAA)
- Ivan Petiteville (Ex-CEO, ESA)
- SIT: Osamu Ochiai (JAXA)
- **WGISS/WADC**: Pakorn Apaphant (GISTDA), Lynn Oleson (USGS), Chris Lynnes (NASA), Lola Olsen (NASA), Frank Lindsay (NASA)
- Hilcea Ferreira, Marcia Helveringa (ex-CEOS Chair, INPE)
- Symbios: George Dyke, Stephen Ward
- To be added later ...**
- GEO: Mirko Albani (GEO, ESA), George Purcivall (GEO, contract)

# GEO and CEOS Portal Architecture



## Community Portals

### Navigation and Content Analysis

Portal Name	Portal Background and Instructions	Mission and Instrument Information	External Links to Data	Direct Data Access	Comments
LSI Portal Land Surface Imaging	2	3	2	0	Initial entry page less intuitive than secondary entry page. Excellent mission and instrument information. Data access tools good - links to data centers, search tools and sample data.
AC Portal Atmospheric Composition	2	1	0	1	Confusing navigation and unclear what datasets are used. Lacking mission information. Direct data access possible via several sources but links hard to find.
FCT Portal Forest Carbon Tracking	2	0	0	0	Some background information on GEO FCT task. There is a task-relevant tool (National Demonstrators Browser) with limited instructions for use. No links to data but allows views of integrated products.
Calibration and Validation Portal	2	3	0	1	Large number of menu links and sublinks. Good mission and instrument background. Unclear what is offered upon registration. Registration does not give immediate data access.
RADS Portal Radar Altimetry	3	0	0	3	Very intuitively organized portal. Lacking mission and instrument information. Direct data access quick and easy. Two software tools, but unclear of their use.
AVISO Ocean Topography Altimetry	1	3	0	3	Purpose of this portal is not clear from home page. Mission and instrument information good. Data access clear and effective.

0 - The portal does not exhibit this capability.

1 - The portal intends to exhibit this capability, but it does not do so effectively (difficult to find/use/understand functionality).

2 - The portal exhibits this capability, but it could use a few organizational/aesthetic improvements/updates.

3 - The portal exhibits this capability in a user-friendly, functional, effective way.

## CEOS IDN Portal

### Navigation and Content Analysis

- The CEOS IDN is considered a “Super Portal” due to its extensive data sets and sub-portal structure.
- The CEOS IDN Portal was originally a GEO portal prototype. The IDN Portal links to the NASA GCMD (Global Master Change Directory) with over 23,000 data sets and >100 community portals (including the CEOS AC Portal).
- An analysis of the IDN for CEOS was completed ...
  - 46 of 119 (39%) of current CEOS missions have data in IDN
  - 2220 data sets from current CEOS missions in IDN
  - 79% of the IDN data sets are from NASA (7) and NOAA (13)
  - 13 of 30 CEOS agencies have data in IDN
- Navigation of the IDN can be complex for the common user, but the data content is extensive.

## GEO Portal

### Navigation and Content Analysis

- Navigation difficult due to ambiguous terminology and “clutter”
- Search results are often numerous. Difficult to narrow results toward intended desire (i.e., broken links and poor descriptions)
- Improved categorization would help (i.e., linkage to Mission, Instruments and Measurements – MIM, climate variables, etc.). Relevance rankings for search results would also indicate better matches.
- The SEO created a You-Tube video ([geoportal-user.mov](#)) of a typical GEO Portal navigation experience to display these points.

## GCI Registration Process

- There are NO good instructions for the GCI registration process. Who are the users, how do they search, and what are the definitions of “components” versus “services” ?
- CEOS has experience with GCI registration since it registered 40+ data sets in 2008 to 2010 from the CEOS IP. Unfortunately, limited dataset information from CEOS agencies has made the process difficult.
- A more formalized GCI registration process and example templates would be helpful to users (i.e., CEOS, agencies, portal managers, etc).
- It is likely that the new GEO UIC “Sprint to Plenary” initiative will develop new GCI registration guidelines to support more efficient access to GCI datasets.

- Extend this study until the CEOS Plenary (November 2011).
- Conduct in-depth interviews with community portal developers and GEO.
- Work with WGISS to coordinate findings and recommendations. WADC has recently developed papers on “Data Discovery and Access” and a general “Portal White Paper”.
- Develop a set of standards or requirements for CEOS community portals to improve navigation and effectiveness.
- Develop a set of recommendations for the GEO Portal (navigation) and GCI registration process (definitions and templates).
- Support the CEOS SIT to register CEOS datasets and community portals in the GEO GCI and report status for all CEOS missions.