

June 2011



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USGS TO HOST WGISS 31 IN SIOUX FALLS, SOUTH DAKOTA

BY LYNDON OLESON, USGS

The upcoming meeting of WGISS 31, planned for June 13-17, 2011 will be hosted by the USGS Earth Resources Observation and Science (EROS) Center in Sioux Falls, South Dakota.

Sioux Falls, the largest city in the state of South Dakota, is located in the north central plains region of the continental United States. Chartered in 1854, along the banks of the Big Sioux River near the falls that inspired its name, Sioux Falls has grown to become a major medical, banking, academic, and cultural center for the region that includes eastern South Dakota, southwest Minnesota, and northwest Iowa. The Sioux Falls metropolitan area holds a population of over 225,000.

The state of South Dakota offers geographic diversity—from the agricultural wealth of its eastern part, through the open range lands of the central part, to the picturesque mountains of the Black Hills in the western part of the state. South Dakota is home to the famous Mount Rushmore rock sculpture in the Black Hills near Rapid City about 400 miles west of Sioux Falls.

The USGS EROS Center was opened in 1971, as part of the USGS contribution to the joint program between NASA and USGS to promote space-based remote sensing applications in Earth resources management. Beginning with the launch of Landsat 1 in 1972, EROS has been the focal-point for community access to the series of Landsat missions to follow. EROS has a multidisciplinary staff of over 650 government and contractor scientists, engineers, and technicians. EROS holds the world's largest civilian collection of space and aircraft imagery of the Earth's land surface, including more than 50 million images representing over 4 petabytes of data acquired from satellites, and over 8 million aerial photographs.



USGS last hosted WGISS in May of 2001

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MEET THE INTERNS!

Nataki Duncan

I'm Nataki Duncan, a senior at Eleanor Roosevelt High School in Greenbelt, MD. I first heard of this internship through my sister, Folami. She would tell me of the computer programs she learned to use and how her computer skills were developing. Although it was intense work, she knew it would help her in her future career in public health. Naturally, I did not want to follow Folami's lead, but I was interested in learning about Earth science and computer programs. This focus could prove to be a vital part of my career path in the medical field—as global health is a world wide issue that can benefit from research using NASA satellite data sets. Since I have been at Goddard Space Flight Center, I have edited publications and references in a wide range of fields for the IDN. I identified data sets and services related to the health-related data and services portal that was displayed for Global Health Day on April 7th. I look forward to doing more!



Amber Reddick-Smith

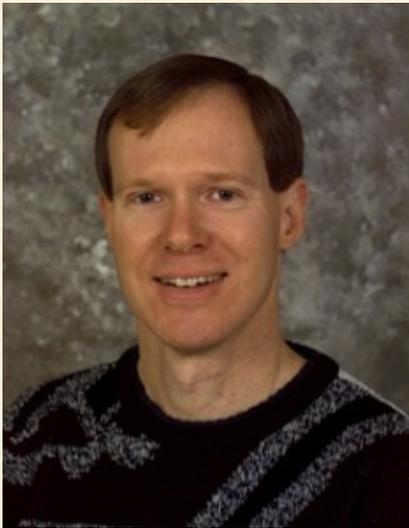
I'm Amber Reddick-Smith, a senior at Eleanor Roosevelt High School in Greenbelt, MD. I heard about the internship through a friend and never thought I would be one of the students chosen to work at Goddard Space Flight Center. I really do appreciate the opportunity and know I will gain useful experience and knowledge during this internship. Although I plan on studying Business Management and Mass Communication, I believe this internship will enhance my experience with computer programming and broaden my horizon for other subjects, such as Earth science from space. During my days working with the GCMD, I've made alterations to the publication field in the Directory Interchange Format (DIFs) entries to attain ISO 19115 compliance for that field and also worked on data service keyword definitions. Like Nataki, I look forward to working on various tasks.





THE CEOS WGISS PURGE ALERT SERVICE

BY JOHN FAUNDEEN, ARCHIVIST, USGS



John Faundeen, USGS

More than 15 years ago Helen Wood from the National Oceanic and Atmospheric Administration (NOAA) made the following announcement: “The Committee on Earth Observation Satellites (CEOS), an international framework for coordinating all space-borne Earth observation missions, has established a ‘Purge Alert’ service to help ensure the long-term preservation of valuable Earth observation data. We encourage you to participate in this initiative that enables data archive managers to: 1) advise other archives of Earth observation data holdings scheduled to be destroyed and 2) offer these data to other archive centers. We realize that it is the responsibility of all agencies holding data to assess the relative value of their holdings and their requirements for long-term maintenance of those holdings. Sometimes an agency must make the decision to purge data that could be important to help meet the mission requirements of another agency. The CEOS Working Group on Information Systems and Services (WGISS) finds that in this continuing process of assessment, it is helpful to share our information and findings with other data managers before data are purged. Thus, as a community, “we can make wiser decisions about purging and transferring archival data.”

This Purge Alert service continues to be supported by WGISS, allowing both CEOS participating organizations and those outside of CEOS to inform the Earth observation community of any impending intentions to purge a dataset that may be of interest to another party. This service assists in maintaining the **life of records**, as well as in finding new and viable homes for datasets. The Purge Alert system was originally activated for Shuttle Hand-Held Photography, Apollo Photography, Landsat Return Beam Vidicon, Multispectral Scanner, and Thematic Mapper records.

Originally supported by NOAA, later by the European Space Agency, the service is currently sponsored by the U.S. Geological Survey as part of its CEOS support. To initiate an alert, send the details of the dataset, along with the expected date of purge to: purgealert@wgiss.ceos.org

Questions about the CEOS WGISS Purge Alert service can be directed to John Faundeen (faundeen@usgs.gov).

UN-SPIDER'S SPACE AID RESOURCE PAGE CONTRIBUTES TO INFORMATION AND DATA FLOW AFTER EARTHQUAKE AND TSUNAMI IN JAPAN

BY LORANT CZARAN, UN, AND NATALIE EPLER, UN



Lorant Czaran

Satellite images and maps are vital for damage assessment and for supporting the response and relief work after a disaster. This held true when on 11 March 2011, an earthquake of magnitude 9 struck the north eastern coast of Japan and triggered tsunami warnings in numerous countries across the Pacific basin. The resulting tsunami had devastating effects along the Japanese coast. The United Nations Office for Outer Space Affairs, through its UN-SPIDER Programme, proactively coordinated with its established networks to provide relevant information about the availability of pre- and post-disaster space-based data on the devastating event. The UN-SPIDER global network includes the established UN-SPIDER Regional Support Offices and the nominated National Focal Points in the Pacific region, as well as a number of leading providers of space-based information and social media resources around the world.

Immediately upon receiving the news about the earthquake, UN-SPIDER staff contacted the Programme's international partners and established a SpaceAid resource page on its Knowledge Portal (<http://www.un-spider.org>). This page included information about the availability of space-based rapid mapping products, further institutional links to other mapping products and geodata, geo-links and databases, as well as space-based resources, i.e., satellite imagery. It also included information on products made available by value-adding institutions such as the Crisis Information Center of the German Aerospace Center (DLR/ZKI), the Regional Service of Image Treatment and Remote Sensing (SERTIT), through mechanisms such as the International Charter, Space and Major Disasters and Sentinel Asia, as well as other governmental and non-governmental sources. For select sensors, pre- and post-disaster primary imagery was shared with the response community. In addition, web links of tsunami warning centres, situation reports, and media sources were provided. UN-SPIDER also created a Google Earth KML of areas that would potentially be affected by resulting tsunami waves in the Pacific Basin, based on NOAA forecasts. All of this work was done within a few hours after the disaster, providing valuable support to the response community by publicizing their efforts and results in a timely manner.



Natalie Epler

Disaster	Region	Date
Flood	Cambodia Delta, Nambida	28/03/2011
Earthquake, Tsunami	Honshu, all Japan coastline	11/03/2011
Earthquake	Southeastern Iran	20/10/2010

As the effects of the earthquake and tsunami on the Fukushima Daiichi nuclear power plant became clear, UN-SPIDER also increased cooperation with staff of the International Atomic Energy Agency (IAEA) by means of exchanging data and by sharing information. In this particular context, UN-SPIDER supported possible monitoring activities related to the threat of nuclear fall-out and its possible effects on Japan and on neighbouring countries in the Pacific region.

A number of relief and response websites identified the UN-SPIDER resource page as a major information and data source, as the Programme continued to work with data providers and value-adders to ensure the flow of information. Triggered by the impact of the event and by an increased use of social media, the number of visitors to this dedicated page rose sharply within the first two weeks after the event. While institutions and mechanisms such as the Center for Satellite Based Crisis Information of DLR and the International Charter focused on data acquisition and processing, UN-SPIDER, due to its networking and coordination capacities and thorough set-up of the resource page, was able to make the results of their work available to the wider disaster management community in a timely manner. As data availability increased during the hours and days after the disaster, more contributions were made by satellite providers, which in turn increased the value being added for those retrieving information from the resource page.

For further information visit <http://www.un-spider.org/japan-pacific>

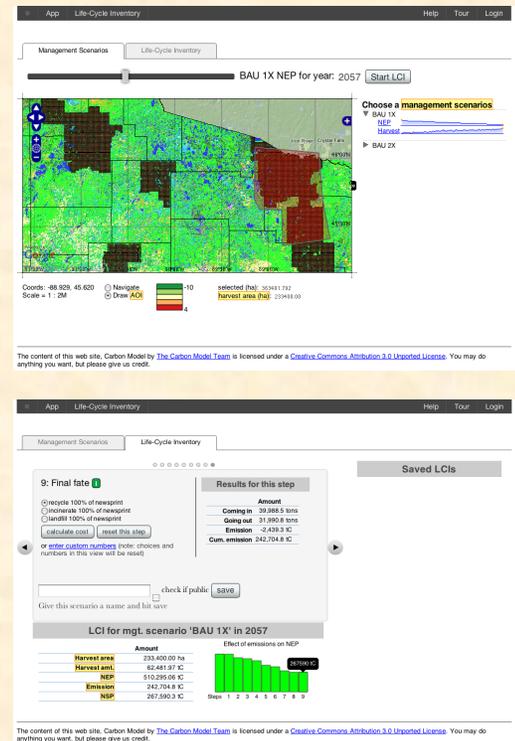
THE IMPORTANCE OF “SUSTAINABLE AGRICULTURE” HIGHLIGHTED DURING SCIENTISTS’ VISIT TO GODDARD

BY ALICIA ALEMAN & LOLA OLSEN, IDN

In March, Lola Olsen and IDN staff members, Alicia Aleman and Stephanie Grebas, met with researchers from the Carbon Model Team, University of Wisconsin-Madison to discuss the availability of data for sustainable agriculture.

Dr. Tom Gower, Professor of Forest Ecosystem Ecology, and team-members, Puneet Kishor and Scott Peckham have been developing a web application to deliver modeling and life cycle inventory tools from the lab to practitioners and policy makers in the field and office.

Gower and Kishor are also involved in an effort to develop a program to assist sustainable agriculture through the integration of data from industrial, geological, and biological ecosystems. Data requirements for such a program are vast. The IDN may be able to assist in this effort by providing a subset view of the IDN’s holdings through the creation of a “virtual subset” of data entries of interest (a portal), which would represent their program. Efforts are in the early stages, and we anticipate learning more about how the IDN can play a role in facilitating sustainability science.



GCMD/IDN WILL BE REPRESENTED AT THE UPCOMING SUMMER ESIP MEETING

BY TYLER STEVENS, IDN

Tyler Stevens will be representing the GCMD/IDN at the Federation of Earth Science Information Partners (ESIP) meeting in Santa Fe, New Mexico this summer, July 12-15. The GCMD/IDN has collaborated with ESIP for over fifteen years and has been a Type 1 partner since 2005. Through the GCMD/IDN, we regularly participate in ESIP cluster activities relating to climate, data visualization, information quality, information technology and interoperability, and products/services.

The theme of the upcoming meeting is focused on data and information quality. As a GCMD/IDN representative, Tyler will be participating in the information quality session, where we will discuss best practices for evaluating quality measures in data products. We plan to seek feedback on proposed changes to the quality field in the DIF, because data quality is important for determining appropriate data sets for users’ needs. A poster will be presented to illustrate the data quality information that is represented in the DIF and how we can best guide users in providing beneficial quality information at the discovery level for a data set. In addition, Tyler will give a presentation during the teacher workshop on “Utilizing the GCMD for Discovering Science Related Educational and Outreach Materials”. More information on the summer meeting is available at http://wiki.esipfed.org/index.php/Summer_2011_Meeting.

AN AMAZING JOURNEY INTO WORLD HEALTH: WORLD HEALTH ORGANIZATION (WHO) DAY RECOGNIZED

BY THE IDN

BY NATAKI DUNCAN, STUDENT

Within the first week that I started working at Goddard Space Flight Center, I suddenly was faced with a huge responsibility. I was assigned to locate data sets and services related to world health to be featured on the GCMD's website for this year's World Health Day.

This year's theme was "Antimicrobial Resistance: No Action Today, No Cure Tomorrow." Based on everyone's comments about the lack of health-related datasets, I was a bit skeptical of being able to add to the GCMD's inventory on human health. However, to my surprise, I was able to find eight SERFs (services) that would be beneficial for WHO Day and thereafter. Among these were lectures on "Antimicrobial Resistance and Public Health", accessible from a website that offers annual datasets related to AIDS, based on several factors, and an interactive table that allows users to find mortality rates and disease prevention, based on the prevalence of the disease.



With the SERFs I found, Monica Holland, designed and created an excellent webpage with several featured links. The GCMD proved to have more health-related datasets and services than anyone thought, and we plan to continue the focus on world health. To see what was found, visit: <http://gcmd.nasa.gov/Resources/whatsnew/index.html>

THE MIGHTY HOAN

"GOES FOR MILES AND MILES AND MILES"

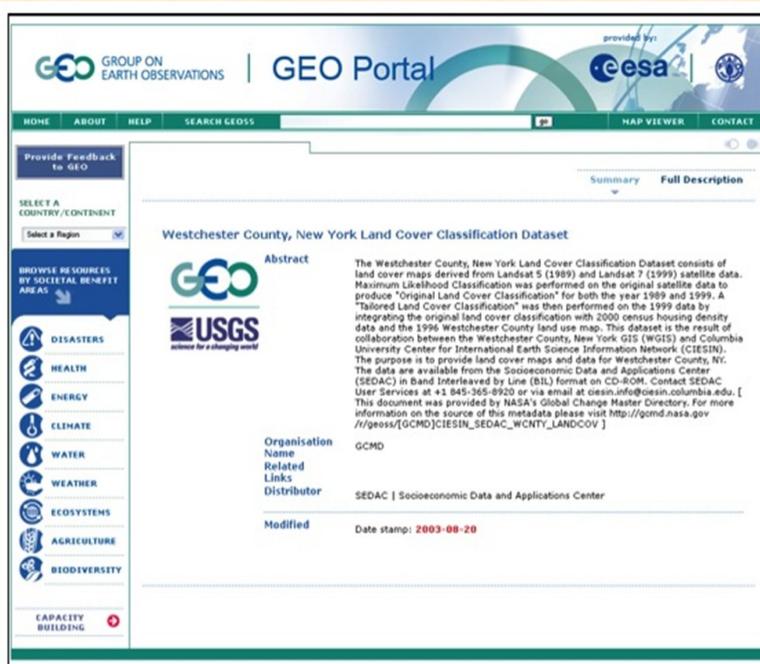


Hoan

Hoan-Vu Tran-Ho appears to be leading the pack, despite multitasking during the run. His dedication in preparing the IDN Catalog Service for the Web (CS/W) protocol to support GEOSS has been admirable. Even more admirable are his work ethics, his dedication to the task, his kindness to everyone, and his focus on accurate and effective coding practices.

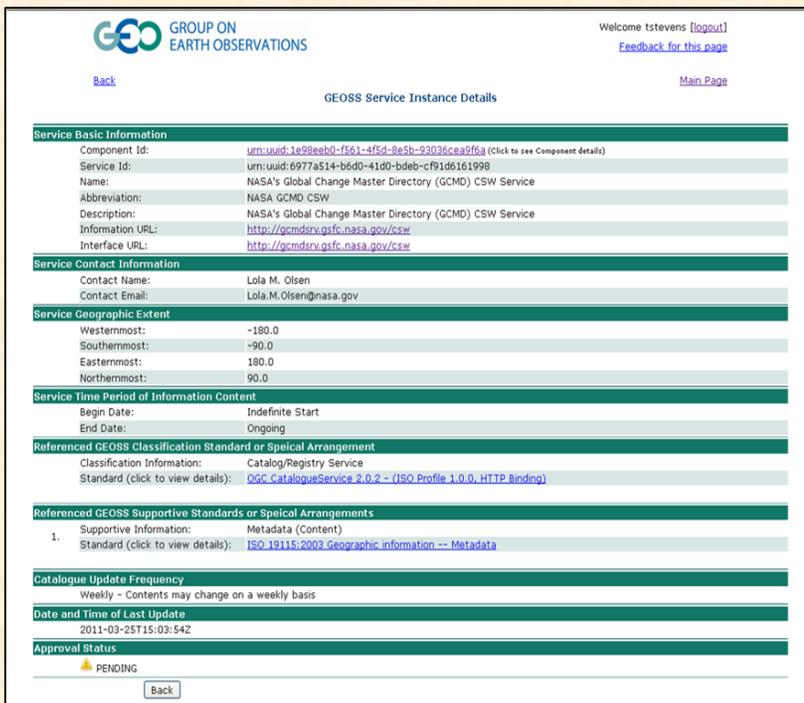
STATUS OF THE IDN'S CONTRIBUTION TO GEOSS

BY MICHAEL MORAHAN & TYLER STEVENS, IDN



In a previous edition of the CEOS IDN Newsletter, an IDN representative reported that the group was developing a GeoNetwork Catalog Service for the Web (CSW). One goal was to integrate CSW within the IDN to establish a dedicated server architecture to serve NASA's metadata to the Global Earth Observation System of Systems (GEOSS). The service has been registered in the GEOSS registry system and is being advertised in GEOSS. The IDN's service is now developed and has been tested with the GEOSS Clearinghouse. Other groups interested in registering their services in GEOSS can do so at <https://geossregistries.info/geosspub/>.

GCMD/IDN data set description within the GEO portal



The GEOSS Clearinghouse started harvesting the NASA "DIF" data set descriptions through the GCMD/IDN's CSW service on March 24, 2011. These "DIF" data set descriptions are now searchable in the GEO Portal. The portal displays the abstract of the data set to the users with a URL that links back to the GCMD/IDN. Here, the user can find more information about the IDN, the selected DIF metadata entry, and a link to the data, if available.

Harvesting should occur on a weekly basis and will continue until the GEOSS Clearinghouse has implemented distributed searching. In the future, CEOS partner metadata holdings could be open to GEOSS through the CSW "distributed" functionality or through CEOS and partner agreements.

GEOSS Service Registration System

THE IDN IS HOT:

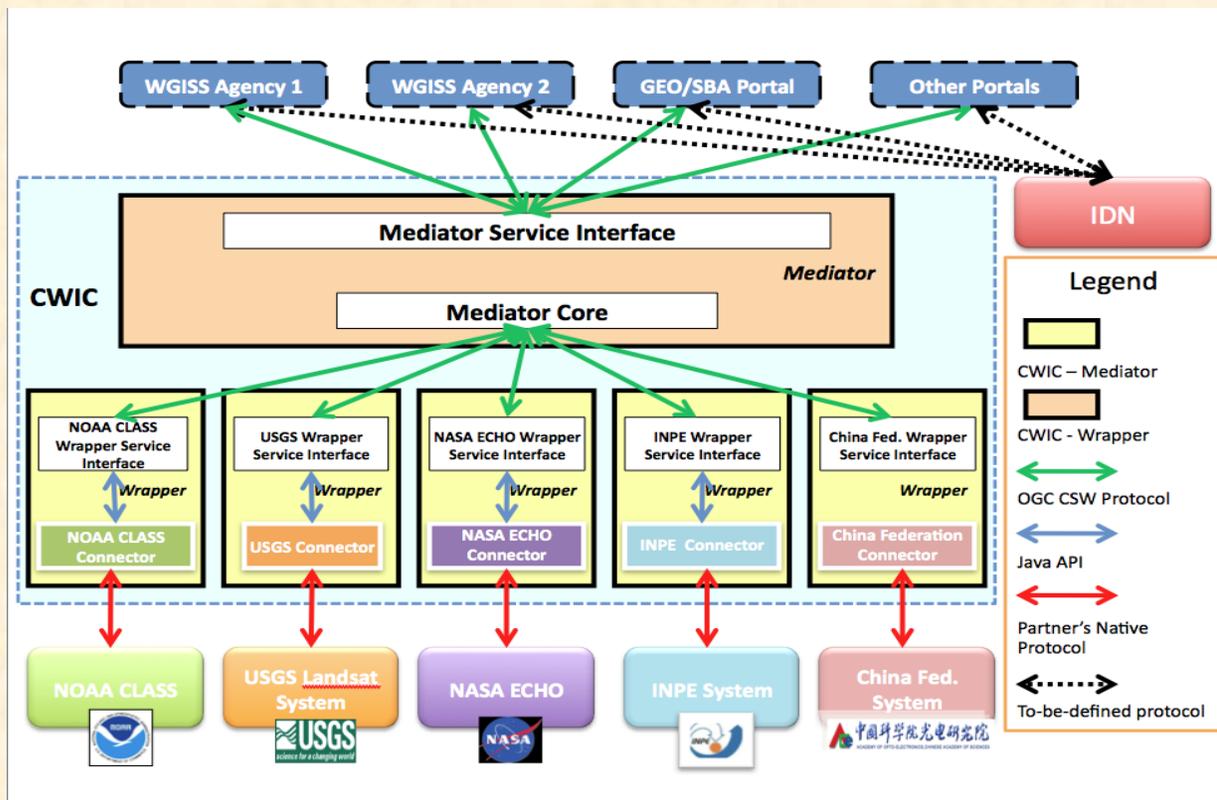
A REPORT OF THE CEOS-GEO 2011 ACTIONS WORKSHOP

BY SATOKO H. MIURA, JAXA

The CEOS-GEO workshop was held in Arlington, Virginia on February 16-17, 2011. The objective of the workshop was twofold: 1) to consolidate the list of 2011 CEOS actions in support of the 2009-2011 GEO Work Plan prior to the 26th CEOS Strategic Implementation Team (SIT-26) meeting and 2) to formulate CEOS input to GEO for the GEO 2012-2015 Work Plan. The Water Portal, WADC, and CWIC have been designated as WGISS leading actions.

On the 2nd day, we discussed the contribution to the GCI. IDN lead, Lola Olsen, presented an update on the sharing status of the CEOS content. At this time, GEOSS does not have the capability to share content through the GCI using the distributed CSW search. Therefore, the CEOS content is being “harvested”. We are hopeful that the GCI capability will soon be available to support the “distributed” search, which would allow the content to remain on the IDN server to assure access to the most current entries. The SIT Chair team introduced the idea of the “CEOS campaign to provide metadata to the GCI” and demonstrate the great expectations for the IDN to play a key role. This topic will be further discussed at the upcoming SIT-26 meeting, and further direction will be shown to WGISS. At the upcoming WGISS-31 meeting, we will engage in a discussion session on “Portals, GCI, IDN, and others”, according to the SIT direction.

IDN'S ROLE IN CWIC



Courtesy of CSISS George Mason University, Yuqi Bai

ALWAYS ADDING ACRONYMS

BY ALICIA ALEMAN, IDN

“Pronounceable” acronyms ease the recall of the CEOS organizations.

ACIG	(pronounced as A-CIG)	Atmospheric Composition Interest Group
CBERS	(pronounced as C-BERS)	China-Brazil Earth Resources Satellite
CS/W	(pronounced by letter)	Catalog Services for Web
CWIC	(pronounced as “quick”)	CEOS WGISS Integrated Catalog
EO	(pronounced by letter)	Earth Observation
FCI	(pronounced by letter)	Forest Carbon Tracking
GCI	(pronounced by letter)	GEOSS Common Infrastructure
GEOSS	(pronounced as Gee-Oos)	Global Earth Observation System of Systems
GISTDA	(pronounced as Gist’-Da)	Thailand Space Agency
INPE	(pronounced as In’-Pe)	Instituto Nacional de Pesquisas Espaciais (National Institute for Space Research Brazil)
NSMC	(pronounced by letter)	National Satellite Meteorological Center
SANSA	(pronounced as SAN-SAH)	South Africa National Space Agency
SIT	(pronounced as “sit”)	Strategic Implementation Team
WCRP	(pronounced by letter)	World Climate Research Program
WADC	(pronounced as WAD-C)	WGISS Architecture and Data Contributions
WGCV	(pronounced by letter)	Working Group Collaboration and Validation
WGISS	(pronounced as Wig-Is)	Working Group on Information Systems and Services

CAN YOU NAME THE PARTICIPANTS FROM WGISS-12?



- | | | | |
|-----|-----|-----|-----|
| 1. | 14. | 27. | 40. |
| 2. | 15. | 28. | 41. |
| 3. | 16. | 29. | 42. |
| 4. | 17. | 30. | 43. |
| 5. | 18. | 31. | 44. |
| 6. | 19. | 32. | 45. |
| 7. | 20. | 33. | 46. |
| 8. | 21. | 34. | 47. |
| 9. | 22. | 35. | 48. |
| 10. | 23. | 36. | 49. |
| 11. | 24. | 37. | 50. |
| 12. | 25. | 38. | |
| 13. | 26. | 39. | |

KEN McDONALD HONORED AT RETIREMENT EVENT ON 21 JANUARY 2011

BY LOLA OLSEN, IDN



Ken McDonald, served the CEOS community for several decades both for NASA and NOAA. He was recently honored at a joyous event (especially for him) in Silver Spring, MD. When I think of Ken, I think of someone who is “free and open” and also competent and organized. When I think about the concept that data needs to be: “free and open”, I contemplate just how much Ken fits the picture of “data” itself. I found it amazingly easy to liken him to the fine aspects of “data”. Therefore, I dedicate this conceptual likeness of Ken “as data” to Ken McDonald.

1. You are “free and open”.
2. You support the growth of knowledge.
3. You are flexible, as you have never allowed change to be negative.
4. You function at the highest level of quality and have created the “model” of near-perfect person.
5. You exude validity.
6. You are generous— with copious volumes of valid values.
7. You represent your own database of positivity.
8. When you meet someone for the first time, the “sample” data is ‘what one gets’. It remains for a lifetime, and it is good.
9. You have a data warehouse—with “boatloads” of data to entertain during downtime.
10. You have avoided memory leaks and data loss.
11. You pass the integration test.
12. Your processing speed is rapid, because your life is organized, and the values are clear.
13. You archive kindness.
14. Your “data recovery” potential is excellent, as you capitalize on running on multiple platforms.
15. You are easy to “track”, because we know you are where you say you are.
16. Your warehouse is rich, full, and organized.
17. Your “attributes” are clear.
18. You can be easily “read”, because you are transparent and honest.
19. You are quantifiable and qualitatively superior.
20. You can be “processed” with total transparency.
21. You have served us well as a ‘one-stop-shop’ for wisdom and knowledge needs.
22. You are “Data that one can trust!!”
23. You served as our “Lieutenant Commander Data” in our own “Star Trek” Universe. —————>
24. You played a BIG role in data management; therefore, you can be classified as a “Big Endian” in your format styling or alternatively as “Little Endian” because you are “Ken MacDonald”. (Thanks to Mick Wilson who inquired where Ken stood on the Big/Little Endian choice.)

