Introduction to NASA Goddard Space Flight Center(GSFC) Data and Information Services Center(GES DISC)

Presentation Topics:

1)Quick overview of types of Data, Services and Tools at the GES DISC

2) Tour of GES DISC website

http://disc.sci.gsfc.nasa.gov

3)Giovanni Demo: http://disc.sci.gsfc.nasa.gov/giovanni

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About GES DISC

- Located within the Goddard Space Flight Center(GSFC) in Greenbelt, Maryland
- Provides access to wide range of global climate data, concentrated primarily in areas of atmospheric composition, atmospheric dynamics, global precipitation, and solar irradiance.
- The data center supports data from many heritage and EOS missions including Aqua, Aura, SORCE, TRMM, UARS and Earth Probe (TOMS).
- The GES DISC also provides data subsetting, exploration, visualization and access services

For assistance contact: GES DISC User Services, Goddard Space Flight Center

Phone: 301-614-5224, Fax: 301-614-5268

E-mail: help-disc@listserv.gsfc.nasa.gov

URL: http://disc.sci.gsfc.nasa.gov

Quick Tour of the GES DISC site

About Giovanni

Giovanni provides data about: atmospheric aerosols (dust, haze, smoke, ash),clouds, phytoplankton, precipitation, water vapor , atmospheric chemistry and ozone

Giovanni stands for:

GES DISC, Interactive, Online ,Visualization, ANd, aNalysis, Infrastructure

Primary Features include:

- An interactive map for region-of-interest selection;
- A menu of available data products;
- A calendar menu for time-period selection;
- A menu of visualization options;
- Visualization-specific options (color palette, axis values)
- Menu of output options

URL- http://giovanni.sci.gsfc.nasa.gov

Giovanni Exercise

Precipitation

- Make maps and time-series of flood events
- Make maps and time-series of droughts
- Create rainfall accumulation storm tracks
- Determine average regional rainfall
- Examine variability (El Niño)

Air Quality

- Investigate transport of wildfire smoke
- Investigate sources of pollution
- Examine dust storm transport and frequency
- Characterize regional fire impact
- Observe volcanic plumes

Oceanography

- Determine productive zones
- Examine seasonal patterns
- Make maps and time-series of seasonal blooms
- Investigate El Niño effects
- Make time-series in coastal areas
- Find major current systems

Ozone, NO_2, SO_2

- Map the annual Antarctic ozone hole
- Examine trends in the Arctic
- Watch the movement of volcanic plumes
- Examine pollution effects

The sky's the limit (almost)

Giovanni also has data regarding:

- **snowfall,**
- **winds,**
- **soil moisture,**
- **advanced meteorological parameters,**
- **atmospheric profiles,**
- **water vapor,**
- **clouds,**
- **trace chemical species in the atmosphere,**
- **solar irradiation and energy…**

… offering numerous possibilities to examine the Earth

Links and Places of Interest

- GES DISC: http://disc.sci.gsfc.nasa.gov/
- Mirador: http://mirador.gsfc.nasa.gov/
- Giovanni: http://giovanni.gsfc.nasa.gov/

@nasa_gesdisc, @nasa_giovanni

Facebook Group:

- NASA Giovanni: Remote Sensing Data Analysis

In closing….

There are twelve NASA Earth Observing System Data and Information Systems (EOSDIS) Data Centers that manage, archive and distribute datasets within a different Earth science discipline. You have received an overview of only 4 of the 12.

http://nasadaacs.eos.nasa.gov

Please visit us at the NASA Booth for more information!!

Feel free to contact me with questions at any time:

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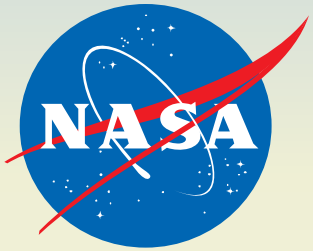
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