# NASA Tools for Remote-Sensing in Ecology Research

Workshop 2: NASA Tools for Remote-Sensing in Ecology Research

95th Annual ESA Meeting, Workshop 2, July 31, 2010, 9 a.m.-12 p.m.

# Workshop Wrap Up

- ORNL DAAC, MODIS Land Products Subsets Tools (MLPST) and Spatial Data Access Tool (SDAT)
- SEDAC, Data Products and Terra Viva Data Viewer
- GES DISC, GIOVANNI
- LPDAAC, Products & Services
- Affiliated Workshop: WK 13- How to Prepare Ecological Data Sets for Effective Analysis and Sharing

  http://eco.confex.com/eco/techprogram/S5744.HTM
- Twelve EOSDIS Data Centers

Jennifer Brennan, NASA EOSDIS Outreach Lead, Jennifer.L.Brennan@nasa.gov ,

Phone: 301-352-4628

# ORNL DAAC - MLPST and SDAT

- ORNL DAAC for biogeochemical dynamics, http://daac.ornl.gov

  **Mission: assemble, distribute, and provide data services for a comprehensive archive of terrestrial biogeochemistry and ecological dynamics observations and models to facilitate research, education, and decision-making in support of NASA's Earth science**

  ORNL DAAC User Services Office, uso@daac.ornl.gov

  Bob Cook, ORNL DAAC Chief Scientist, cookrb@ornl.gov

  Bruce Wilson, ORNL DAAC Manager, wilsonbe@ornl.gov

- MODIS Land Products Subsetting Tools (MLPST), http://daac.ornl.gov/MODIS/modis.shtml

  Suresh Santhana Vannan, Lead Developer, santhanavans@ornl.gov

- Spatial Data Access Tool (SDAT) – http://daac.ornl.gov/spatial_data_access.shtml

  Suresh Santhana Vannan, Lead Developer, santhanavans@ornl.gov

# SEDAC Data Products and Terra Viva Data Viewer

- Socioeconomic Data and Applications Center (SEDAC), http://sedac.ciesin.columbia.edu

  **Mission: develop and deliver information products and services that support the integration of socioeconomic and earth science data and to serve as an "information gateway" between the earth sciences and social sciences**

  SEDAC User Services, http://sedac.custhelp.com/cgi-bin/sedac.cfg/php/enduser/home.php?p_sid=KB81j86k

  Malanding Jaiteh, mjaiteh@ciesin.columbia.edu

- Terra Viva Data Viewer, http://sedac.ciesin.columbia.edu/terraVivaUserWeb

- SEDAC Dataset Catalog, http://sedac.ciesin.columbia.edu/gateway/databya-z.html

# GES DISC and GIOVANNI

- Goddard Space Flight Center (GSFC) Data and Information Services Center (GES DISC), http://disc.sci.gsfc.nasa.gov

  **Provides: access to a wide range of global climate data, concentrated primarily in area of atmospheric composition, atmospheric dynamics, global precipitation, and solar irradiance**

  **Supports: data from many heritage and EOS missions including Aqua, Aura, SORCE, TRMM, UARS, and Earth Probe (TOMS)**

  GES DISC User Services, GSFC, help-disc@listserv.gsfc.nasa.gov

  Jennifer Brennan, Jennifer.L.Brennan@nasa.gov

- **G**ES DISC **I**nteractive **O**nline **V**isualization **AN**d a**N**alysis **I**nfrastructure (GIOVANNI), http://giovanni.gsfc.nasa.gov

# LPDAAC Products and Services

- Land Processes Distributed Active Archive Center (LPDAAC), http://lpdaac.usgs.gov

  **Mission: process, archive, and distribute land data and products derived from the Earth Observing System (EOS) sensors; ASTER and MODIS from Terra, and MODIS from Aqua**

  LP DAAC User Services, LPDAAC@usgs.gov

  Tom Maiersperger, tmaiersperger@usgs.gov

- ASTER Products: https://lpdaac.usgs.gov/lpdaac/products/aster_products_table
- MODIS Products: https://lpdaac.usgs.gov/lpdaac/products/modis_products_table
- Ways to Get Data: https://lbdaac.usgs.gov/lpdaac/get_data
- LP DAAC Tools: https://lpdaac.usgs.gov/lpdaac/tools

# Affiliated Workshop: How to Prepare Ecological Data Sets for Effective Analysis and Sharing

- WK 13 – How to Prepare Ecological Data Sets for Effective Analysis and Sharing

  http://eco.confex.com/eco/techprogram/S5744.HTM

- Sunday, August 1, 2010: 2:00 PM-5:00 PM, 415, David L. Lawrence Convention Center

- Organized by Bob Cook, ORNL

**Sunday, August 1, 2010: 2:00 PM-5:00 PM**
**415, David L Lawrence Convention Center**
**WK 13 - How to Prepare Ecological Data Sets for Effective Analysis and Sharing**

Ecologists spend considerable time conducting field studies and experiments. The products of these efforts are primarily research papers, but an often overlooked product is the data themselves. Effectively organized data can streamline current and future analysis. In addition, well-designed data products can be used by you and your colleagues to address questions that were not necessarily part of the original study (e.g., meta-analysis). Sponsors recognize the importance of data products and some are requiring data management plans to maximize the effectiveness of research funding beyond the lifetime of individual projects. The purpose of this workshop is to provide guidance on fundamental data management practices that investigators should perform during the course of data collection to improve the usability of their data sets. The target audience is graduate students, post-docs, and researchers who are actively compiling data. Faculty members who would like to include exercises on best practices for preparing data as part of their curricula are encouraged to attend. Topics covered will include data structure, quality control, and documentation. We will also discuss the elements of an effective data management plan for use in grant proposals and project planning. Workshop participants must bring their own laptop to participate in hands-on activities and are encouraged to bring their own data sets, which instructors will assist in organizing. By following the practices taught in this workshop, your data will be less prone to error, more efficiently structured for analysis, and more readily understandable for any future questions that they might help address.

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| **Organizer:** | Robert Cook, Oak Ridge National Laboratory |
| **Co-organizers:** | Viv Hutchison, US Geological Survey<br>Stephanie Hampton, National Center for Ecological Analysis and Synthesis<br>Tammy Beaty, Oak Ridge National Laboratory |
| **Speakers:** | William Michener, University of New Mexico<br>Bruce Wilson, Oak Ridge National Laboratory<br>Suresh SanthanaVannan, Oak Ridge National Laboratory |

See more of Workshop

See more of The 95th ESA Annual Meeting (August 1 -- 6, 2010)

# 12 EOSDIS Data Centers

- There are twelve NASA Earth Observing System Data and Information Systems (EOSDIS) Data Centers that manage, archive, and distribute data products within unique Earth science disciplines: http://nasadaacs.eos.nasa.gov

  Please visit us at the NASA booth for more information (Booth # 613)

- NASA EOSDIS Outreach Lead, Jennifer Brennan

  Jennifer.L.Brennan@nasa.gov

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