

[ESIP Winter Meeting Plenary Session](#) [1]

Submitted by superadmin on Sun, 2012-12-02 19:38 Tuesday, January 8, 2013 - 08:30 to 10:15
Tuesday, January 8, 2013 - 10:30 to 12:00

Event: [Winter Meeting 2013](#) [2]

Session Type: [Plenary](#) [3]

Expertise Level: [Beginner](#) [4]

Collaboration Area: [Data Preservation](#) [5]

[Energy and Climate](#) [6]

[Information Technology and Interoperability](#) [7]

Abstract/Agenda:

Jan 8, 8:30-10:15

Welcome, Karl Benedict - ESIP President

Kathy Jacobs, USGCRP, OSTP

Ann Bartuska, USDA

Jan 8, 10:30-12:00

Managing Large-Scale International Climate Datasets and Enhancing Their Use, Ghassem Asrar, WMO, World Climate Research Program

Global and regional Earth observations are used for a wide range of applications including monitoring of the climate system, input for simulations of climate variability and change, studies of impacts, adaptation and vulnerabilities of natural and managed ecosystems to climate variability and change, development and management of human activities (e.g. transportation, energy, tourism, health), and management of risks associated with climate and high impact weather extremes. These datasets are also being used increasingly to develop, initialise and evaluate numerical models for environmental prediction and projection on a wide range of time and space scales, and in global reanalyses activities. Thus, the community using these datasets is far larger than the scientists who prepare and analyse them for their own studies. Users need authoritative information on quality, maturity and error characteristics, and appropriate documentation of the underlying assumptions and methodologies used to produce these datasets, to ensure their proper interpretation and use in the intended applications.

Within the Earth/climate system community there are several modelling efforts such the Coupled Model Intercomparison (CMIP5), Coordinated Regional Downscaled Experiment (CORDEX), and four major international reanalysis projects that are also producing unprecedented volumes of seasonal, decadal and centennial climate simulations from the regional to global levels. These simulations are the main source of information about future climate/environmental conditions that are used in science-based environmental assessments such the stratospheric ozone depletion/recovery, fresh water availability and change, energy production and consumption in response to climate variability and change.

The work on preparing and publishing the observational data sets have been carried out independent of the model-based simulations until recently and until the advent of data assimilation and reanalysis. Quite often the format, error characteristics and documentation associated with observational data records are significantly different from model-based ones which have made their intercomparison and analysis very difficult even for the experts who produce such data sets. To overcome these difficulties, the World Climate Research Programme (WCRP) and the Global Climate Observing System (GCOS) have been urging agencies and organizations that sponsor the development of these datasets to support and fund the international expert groups who develop these datasets to ensure their adequate characterization and documentation in a consistent and compatible manner. Under the auspices of the GCOS and WCRP and in partnership with space

ESIP Winter Meeting Plenary Session


Published on Commons (<https://commons.esipfed.org>)


agencies, we have been hosting a series of workshops to promote such principles and to encourage grass-root efforts world wide.

We will share the latest progress and some early results from these efforts with the meeting participants. For example, two key areas of focus have been the need to identify indices of maturity and uncertainty in order to convey some information on the strengths and weaknesses of datasets, and the need to promote and support the conduct of independent assessments of datasets as part of the continuing process of evaluation. The first issue on maturity indices is aimed at enhancing the dialogue between users and producers of datasets, and the second issue recognises that, while self-assessments are invariably carried out by dataset producers, assessments by independent experts markedly enhance the utility and encourage improvements in datasets. An outcome of these efforts is the commencement of an inventory on the status of climate datasets with the objective of supporting the activities of both dataset producers and users. We will also provide a brief overview of the Earth System Grid Framework (ESGF) that is being promoted and used internationally as a unifying concept for greater coordination in producing, archiving, distributing and analysis of these large scale data sets during the ensuing decade.

Kit Batten, USAID

Attachments/Presentations:  [Batten-ESIP-GCC PPT-Jan 2013 final.pptx](#) [8]

 [ESIP1-8-12-aw2_Jacobs.pptx](#) [9]

 [ESIP Winter Meeting 010813Bartuska.pptx](#) [10]

 [ESIP Federation_TalkV4_Asrar.ppt](#) [11]

Creative Common License: Creative Commons Attribution 3.0 License

Teaser: The opening #ESIPfed plenary addresses new challenges for building actionable intelligence on climate impacts from earth data resources

Keywords: [National Climate Assessment](#) [12]

[GEO](#) [13]

[USAID](#) [14]

[USDA](#) [15]

[USGCRP](#) [16]

[WMO](#) [17]

Source URL: <https://commons.esipfed.org/node/766>

Links

[1] <https://commons.esipfed.org/node/766>

[2] <https://commons.esipfed.org/taxonomy/term/464>

[3] <https://commons.esipfed.org/session-type/plenary>

[4] <https://commons.esipfed.org/taxonomy/term/260>

[5] <https://commons.esipfed.org/collaboration-area/data-preservation>

[6] <https://commons.esipfed.org/collaboration-area/energy-and-climate>

[7] <https://commons.esipfed.org/collaboration-area/information-technology-and-interoperability>

[8] <https://commons.esipfed.org/sites/default/files/Batten-ESIP-GCC%20PPT-Jan%202013%20final.pptx>

[9] https://commons.esipfed.org/sites/default/files/ESIP1-8-12-aw2_Jacobs.pptx

[10]

<https://commons.esipfed.org/sites/default/files/ESIP%20Winter%20Meeting%20010813Bartuska.pptx>

[11] https://commons.esipfed.org/sites/default/files/ESIP%20Federation_TalkV4_Asrar.ppt

[12] <https://commons.esipfed.org/taxonomy/term/623>

[13] <https://commons.esipfed.org/tags/geo>

[14] <https://commons.esipfed.org/taxonomy/term/624>

[15] <https://commons.esipfed.org/taxonomy/term/625>

[16] <https://commons.esipfed.org/taxonomy/term/626>

[17] <https://commons.esipfed.org/taxonomy/term/627>

