

SPG Touchstone

Earth Science Data Systems
Standards Process Group



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SPG supports Decadal Survey Missions

In this issue of the SPG Touchstone, we update you on the activities of the NASA Earth Science Data Systems (ESDS) Standards Process Group (SPG). Further information on these and all SPG topics can be found on our website at (<http://www.esdswg.org/spg/>).

Meetings

The NASA Earth Science Data Systems (ESDS) Standards Process Group (SPG) met in July 2009 at the ESIP Federation summer meeting in Santa Barbara, CA. The SPG meeting consisted of a web services technical session. Six invited speakers gave presentations describing systems that provide web services to the science community and their approaches and experiences. The discussion of these systems was focused on the use of two different protocols - REST and SOAP. A concluding general discussion explored the strengths of each approach and consideration of possible future activities of the SPG in this arena.

The SPG also met at the annual ESDS Working Groups Conference in October 2009 in Wilmington, DE. The main focus of this meeting was to meet and interact with the data system management for the upcoming **NASA Decadal Survey (DS) missions**. The tier 1 missions that were represented at the meeting were **SMAP, DESDnyI, CLARREO, and ICESAT-2**. The goals of the discussions included: define the barriers to using the endorsed standards by the DS teams; identify the core standards for the DS mission data systems; identify the standards gaps where standards are needed; what are the SPG actions needed to support the DS mission data systems; how the DS teams can participate in and support the SPG; and, discuss the use of a reference architecture for the DS mission data systems. Much was learned on both sides and resulting collaboration is already in progress.

Further details of the presentations and discussions in these and past meetings can be found on our website under "SPG Work Area" and "Past Events".

New Standards Submissions

Over the past year the SPG has processed a number of submissions for consideration as NASA Earth Science standards. Currently under review are: the GCMD SERF, ICARTT file format, ECHO metadata model, and the NetCDF CF metadata conventions. Three technical notes have been submitted and accepted, pertaining to OGC CS/W and WCS Protocols, and lessons-learned experiences on WCS Server design/implementation and the creation of AURA file format guidelines. Two other Tech notes are in process, including Provenance with DIS and Mapping HDF5 to DAP2.

We invite members of the earth science data system community to support our process by proposing and recommending standards for consideration by the SPG. Areas that have been identified as particularly interesting to the community over the last year include web services (e.g. REST, SOAP), catalog services (e.g. OGC CSW), metadata standards (e.g. ISO 19115), visualization standards (e.g. KML), file formats (e.g. NetCDF4), and interface standards (e.g. DAP v4).

Please check our website and contact us to help provide the standards, tools and experiences that support the use and exploitation of the wealth of NASA earth science data.

When do we meet?

The SPG holds monthly telecons to discuss the progress of our activities. We also meet together twice a year to hear from other members of the Earth science community with potential input into the standards process, to discuss ongoing reviews, and to work with other ESDS groups. We invite all who might be interested to join us in our efforts to promote and carry out this important work. Please check our website (<http://www.esdswg.org/spg/>) for the times and places during the year when there will be opportunities to meet with us.

Contact information

If you have any questions, you are welcome to contact any of the following:

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Current Standards and Technical Notes (see <http://www.esdswg.net/spg/docindexfolder>)

RFC	Title	Rev.	Class	Status	Errata
001	Charter of the ESDS Standards Process Group	2	Technical Note	Final	None
002	The ESDS Standards Process	2	Technical Note	Final	None
003	Instructions to Authors	2	Technical Note	Final	None
004	The Data Access Protocol -- DAP 2.0	1.1	Standard	Final	None
005	OpenGIS ® Web Map Service Version 1.3	1	Technical Note	Final	None
006	OpenGIS ® Web Map Service Version 1.1.1	1	Standard	Final	None
007	HDF 5	1	Standard	Final	None
008	HDF EOS 5	1	Standard	Final	None
009	Aura Guidelines Technical Note	1	Technical Note	Final	None
010	Backtrack Orbit Search Algorithm Technical Note	1	Technical Note	Final	None
011	NetCDF Classic	1	Standard	Final	None
012	GCMD Directory Interchange Format (DIF)	1	Standard	Final	None
013	GCMD Service Entry Resource Format (SERF)	0.1	Standards Track	Draft	None
014	Interoperability between OGC CS/W and WCS Protocols	1	Technical Note	Final	None
015	Provenance within Data Interoperability Standards	0.1	Tech Note Track	Draft	None
016	Lessons Learned Re. WCS Server Design and Implementation	1	Technical Note	Final	None
017	Mapping HDF5 to DAP2	0.1	Tech Note Track	Draft	None
018	Creating File Format Guidelines: The Aura Experience	1	Technical Note	Final	None
019	ICARTT File Format Standards	0.1	Standards Track	Draft	None
020	ECHO Metadata Standard	0.1	Standards Track	Draft	None
021	NetCDF Climate and Forecast (CF) Metadata Conventions	0.1	Standards Track	Draft	None