

XDC SEPTEMBER 2007 MONTHLY REPORT

1. LOOKING AHEAD

NSA:

SGP:

TWP

XDC:

ACRF SECURITY: Improve security at ACRF Web sites containing sensitive information.

PUBLIST: Convert PubList in text format to php database Web application.

NCEP GRIB2 FORMAT: Prepare for change in NCEP grib format starting at the end of Jan. 2008. The new format will reduce the size of RUC, ETA and GFS data significantly.

MANUS:

NAURU:

DARWIN:

DMF:

SDS:

EOP:

2. IOPS AND CAMPAIGNS

3. NEW INSTRUMENTS AND DATA STREAMS

NSA:

SGP:

TWP:

XDC:

VISST: The new data are satellite based retrievals of cloud and radiation properties by Pat Minnis' group at NASA/Langley using the newest version (v3) of the VISST (Visible Infrared Solar-Infrared Split Window Technique) algorithm. Please see <http://www.arm.gov/xds/static/visst.stm> for more information.

sgpvisstgridkkv3minnisX1.c1, sgpvisstpx04gkkv3minnisX1.c1, where kk=08,11

DATASETS SUBMITTED TO THE IOP BROWSER THROUGH THE XDC:

BETA-DATA- (No new datasets added this month.)

AMF IOP-DATA- (No new datasets added/modified this month.)

TWP IOP DATA- Added or updated the following IOP datasets:

<http://iop.archive.arm.gov/arm-iop/2007/twp/airs/lesht-sonde/>

SGP IOP DATA- Added or updated the following IOP datasets:

<http://iop.archive.arm.gov/arm-iop/2007/sgp/airs/lesht-sonde/>

<http://iop.archive.arm.gov/arm-iop/2007/sgp/clasic/tobin-sonde/>

<http://iop.archive.arm.gov/arm-iop/2006/sgp/mwr/cadeddu-mwr/>

NSA IOP DATA- Added the following IOP dataset:

<http://iop.archive.arm.gov/arm-iop/2007/nsa/airs/lesht-sonde/>

SPECIAL-DATA: (No new datasets added this month.)

SGP IAP 2006: (No new datasets added this month.)

PI DATA: Updated the following PI dataset:

<http://iop.archive.arm.gov/arm-iop/0pi-data/kiedron/rss105/langley/>

DMF:

4. ACCOMPLISHMENTS

NSA:

SGP:

TWP:

XDC:

AVP: Added AVP as a “site” choice for PI’s submitting pre-proposals (EWO-12236/BCR-01413).

NWS HIGH RES SOUNDINGS: The netCDF ingest was modified this month to accommodate both the original 6 second soundings and the new 1 second soundings. See <http://www.arm.gov/xds/static/nwsupa.stm> for additional information.

PIF/CAR/DQR: Provided a method for modifying previously reviewed DQRs (BCR-01187).

DMF:

SDS:

EOP:

5. MEETINGS

NSA:

SGP:

TWP:

XDC:

Rick Wagener traveled to the Aerosol Working Group Meeting in Madison, WI, September 17-19, 2007.

EOP:

DMF:

SDS:

6. ISSUES

NSA:

SGP:

TWP:

GENERAL:

MANUS:

NAURU:

DARWIN:

XDC:

CSPHOT & SUOMINET: As part of pseudo-mentorship, obtained status information and tracked down problems for all ARM Cimels. Working on a contact & procedure document for maintenance and troubleshooting. Issued DQPRs for various problems. Looking at setting up remote access and connecting Cimel's to DSView. (BCR-01333,

BCR-00634, ECR-00627). More details on individual Cimel issues available in the IMMS report <http://www.db.arm.gov/IMMS/>. Also trying to get raw radiances from CSPHOT for comparison with NIMFR for DQ purposes.

CIMEL SUNPHOTOMETER (CSPHOT): See Instrument Status report for updates on communication and operating mode modifications. Several users requested netCDF data prior to STM. Doing yearly ingest still makes sense for archiving reasons, but work is still on hold. Aeronet processing status uncertain.

TDMA: Work has resumed on providing the Texas A & M Tandem Differential Mobility Analyzer aerosol data in netCDF. A preliminary netCDF file containing size distributions has been created. The ingest is being updated to handle multiple input and output data sets. Currently awaiting new data. Rick spoke to Don Collins at AWG meeting. Data for 2005 should be forthcoming. See ECO-00587 for additional details.

WEBSERVICES: SOAP Services was set up for providing mail list information. Sherman at PNNL confirmed he could get the data through the test scripts. (No additional work this month.)

OPENLDAP: LDAP will replace the current Apache/mod_perl authentication and authorization and provide better performance, reliability and scalability. It will also help when we move to Single Sign-On (SSO) plan. Currently configured Kerberos for securing LDAP. Need to figure out a way to solve the problem of one machine with multiple host names. Probably need to re-configure DNS. (No additional work this month.)

SSL CERTIFICATE: Rick inquired about getting a SSL certificate issued from ESnet; no response yet.

EDUCATION WEB SITE: Fixed two high risk vulnerabilities in the education application. See EWO-12277 for details.

RESEARCH HIGHLIGHTS: Added ‘Working Group’ to the Research Highlights Application. The user will need to submit the Working Group along with the category. A sort function for ‘Working Group’ was also added. The application is under review (see EWO-12055).

XDC METRICS: Looking into installing ARM system metrics at the XDC. (No additional work this month.)

ARM POSTER SUBMISSION AND ADMINISTRATION: (No work this month.)

WEB SERVER: Kathy and Min began migrating the DB Web server on Solaris to the new DB Web server on Linux. Initial focus is on Kathy's DB applications.

PEOPLE DATABASE: Began work for creating a unique username in PeopleDB. See BCR-01418 for details. Added admin tools to add or remove a user from the 2008 Science Team Meeting invitation list.

MTSAT WEB APPLICATION: MTSAT composite images are available through (http://www.xdc.arm.gov/data_viewers/twpmtsat_composite). Currently working on new web application to handle all the composite images for NSA, SGP, TWP GOES and TWP MTSAT. The application has been modified to run more quickly and efficiently. (It will go into production when web servers are installed on new production machine.)

GOOGLE MAPS: Discovered another way to bring in custom maps that automatically adjusts to zoom level. Modifying API code accordingly for sites that have custom maps. Also removed the right hand side bar and replaced it with map legend to allow more room for map itself.

<http://www.arm.gov/sites>

SITE DRIVING DIRECTIONS: Driving directions for the SGP for dry weather and all weather routes have been completed:

<http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=117547051592647775333.0004348d2d1a78039bd54&ll=36.450008,-96.740112&spn=1.608334,2.570801&z=9&om=1>

Driving directions for the NSA/Barrow site have been completed:

<http://maps.google.com/maps/ms?ie=UTF8&hl=en&t=k&msa=0&msid=117547051592647775333.000439cd0584915e73f7b&ll=%3E71.310709,-156.700272&spn=0.062377,0.239983&z=12&om=1>

GLOBAL FORECAST SYSTEM (GFS) NCEP DATA: Visualizations are on hold due to higher priority work. (No additional work this month.)

ETA AND GFS MODEL DATA: Updated ECO-00532 with requested changes to header. Data stream is still being reviewed. See ECR-00476 and ECO-00532 for further details.

FIELD CAMPAIGN DATA: Continued working on EWO-11875- Link to past field campaign web pages for each site.

DQPR, DQA: (No current tasks.)

SARS: Completed updates to SAR system to support changing roles for the NSA site (EWO-12271)..

PI DATA PRODUCTS: Continued work in support of ECO-00599 “Handling of PI Data Products”.

ARM METADATA: Continued work on an application similar to the current IOP metadata system and the PI Products system being built, to potentially be used to support general ARM data stream metadata assignments and modifications. (No additional work this month.)

AMERIFLUX: (ECO-00288). Began process to download near real time data for the Alaskan sites through automated ftp. Working with Joe Verfaillie to provide algorithms for UCSD processed data. Dave Cook reviewed the algorithms. Joe has reworked the equations incorporating Dave’s suggestions. He is working on organizing the data and documentation. (No additional work this month.)

VISST: A backlog of data for 2001 arrived from NASA/Langley and continues to be processed.

NWS SOUNDINGS: Processed high resolution soundings for May, June, and July 2007. Note: The Norman, OK station switched to the Radiosonde Replacement System (RRS), which includes an increase in the sounding resolution from 6 seconds to 1 second.

BIRTH OF A DATA STREAM (BODS): (No new BODS this month.)

XDC DOCUMENTATION: Updated documentation for the NWS upper air soundings to include the new 1 second soundings for Norman, OK:

<http://www.arm.gov/xds/static/nwsupa.stm>

SERVER HARDWARE UPGRADES: Two new disk arrays were installed on XDC servers. These arrays were configured for remote access using the terminal server.

Installing RAIDwatch software for remote management of the new disk arrays. The vendor has addressed the problem we were having and has supplied a new version. That solved the problem and the software is currently being installed on the disks.

FILE TRANSFER: The XDC sent 14,596 files with a volume of ~631 GB this month.

DMF:

SDS:

EOP:

GENERAL:

NSA:

SGP:

TWP:

7. SPENDING REPORT:

(Report sent under separate cover.)