

XDC JUNE 2007 MONTHLY REPORT

1. LOOKING AHEAD

NSA:

SGP:

TWP:

XDC:

DEVELOPER'S MEETING: The XDC will host the ARM Developer's meeting at BNL July 10 – 12, 2007.

IT MEETING: Laurie and Rick will attend the IT meeting at the SGP July 24 – 26 to prepare for taking on CSPHOT and SuomiNet responsibilities.

MANUS:

NAURU:

DARWIN:

DMF:

SDS:

EOP:

2. IOPS AND CAMPAIGNS

3. NEW INSTRUMENTS AND DATA STREAMS

NSA:

SGP:

TWP:

XDC:

NOAACRN: Hourly rain gauge data for the SGP site from the NOAA Climate Reference Network (sgp60noaacrnX1.b1) are available from 2002-03-12 to the present. Please see <http://www.arm.gov/xds/static/noaacrn.stm> for more information.

DATASETS SUBMITTED TO THE IOP BROWSER THROUGH THE XDC:

PI-DATASETS- (PI data products are now managed fully by Robin Perez at the DMF.)

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/>

http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/mech-microwave_profiler/

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/hoeller-linet/>

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/caddedu-mwr/>

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

<http://iop.archive.arm.gov/arm-iop/2007/sgp/iasi/revercomb-sonde/>

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

NSA IOP DATA- Setup the following IOP datasets:

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

<http://iop.archive.arm.gov/arm-iop/2006/nsa/mpace/xie-klein-forcing/>

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

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

DMF:

4. ACCOMPLISHMENTS

NSA:

SGP:

TWP:

XDC:

NOAARAD: NOAA/ESRL GMD (National Oceanic and Atmospheric Administration / Earth System Research Laboratory, Global Monitoring Division) provides surface radiation data from Barrow, AK, part of a long-term surface solar irradiance monitoring network of globally remote sites ([G-Rad](#)). Data are available from 1976-02-18 to present. See <http://www.arm.gov/xds/static/noaarad.stm> for further information.

NOAACRN: The Climate Reference Network ingest and collection scripts for both NSA and the two new SGP Stillwater locations have been installed on production. Data for NSA is available at the Archive from Aug 2002 to the present and from Mar 2002 to the present for the SGP Stillwater sites. See ECO-296 and <http://www.arm.gov/xds/static/noaacrn.stm> for further information.

ABRFC: The Arkansas-Red Basin River Forecast Center hourly precipitation data has been merged into daily files (sgpabrfcprecipX1.c1). The daily data are available from March 2007 to the present. The backlog data will be reprocessed in the upcoming months. Please see <http://www.arm.gov/xds/static/abrfc.stm> for more information.

ECMWF: Added convective precipitation (m) and large scale precipitation (m) to ECMWF full model data. These two variables are now available in the ECMWF data stream starting January, 2006. See <http://www.arm.gov/xds/static/ecmwf.stm> for further information.

GOOGLE BOX: The new Google Search Appliance has been successfully installed into production.

DMF:

SDS:

EOP:

5. MEETINGS

NSA:

SGP:

TWP:

XDC: (No meetings this month.)

EOP:

DMF:

SDS:

6. ISSUES

NSA:

SGP:

TWP:

GENERAL:

MANUS:

NAURU:

DARWIN:

XDC:

ACRF METRICS: Derived the percentage of funded users for July. 1, 2006 through June 30, 2007 and the percentage of funded Archive users for the same time period. Created a table that matches the Archive user id with the People Database id.

TDMA: Work has resumed again on providing the Texas A & M Tandem Differential Mobility Analyzer aerosol data in netCDF.

WEBSERVICES: Set up Web Services (SOAP Server) with Perl. Provided a simple prototype Web Services with Perl for discussion in upcoming Developer's Meeting.

OPENLDAP: Configured and set up OpenLDAP for Authentication and Authorization in preparation for the upcoming Developer's Meeting. See ECO-00563. It will replace the current Apace/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.

SUOMINET: Suominet is in the process of upgrading their Bernese software. Upgraded version of gec30sumoigpsX1.c1 and sgp30suomigpsX1.c1 data streams are now available. We are still waiting for back-processed data.

RESEARCH HIGHLIGHTS: Fixed several bugs in the Research Highlights Web Application. 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: (No additional work this month.)

PEOPLE DATABASE: (No additional work this month.)

MTSAT WEB APPLICATION: MTSAT composite images are available through (http://www.xdc.arm.gov/data_viewers/twpmatsat_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: Decisions about the look of the Germany AMF instrument locations as a custom map using Google API scripting language in development will be made at the upcoming Developer's Meeting.

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 ingests still makes sense for archiving reasons, but work is still on hold. Aeronet processing status uncertain.

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.

DQPR, DQA: (No current tasks.)

SARS: (No current tasks.)

PI DATA PRODUCTS: Continued work in support of ECO-00599 "Handling of PI Data Products" creating a preliminary set of metadata assignment/viewing/modifying tools.

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.

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.)

NWS SOUNDINGS: High resolution soundings from UCAR for Sept. 2006 through April 2007 have been sent to the ARM Archive. The six second soundings changed to one second for the Norman, OK site, which will require modifications to the ingest to update the global attributes and the documentation.

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

XDC DOCUMENTATION: Updated the NOAA CRN, NOAA RAD, ECMWF and ABRFC documentation pages:

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

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

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

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

TERASCAN: Terascan was installed on the production and development Linux servers.

SERVER HARDWARE UPGRADES: (No new upgrades this month.)

FILE TRANSFER: The XDC sent 45,745 files with a volume of ~586 GB this month.

DMF:

SDS:

EOP:

GENERAL:

NSA:

SGP:

TWP:

7. SPENDING REPORT:

(Report sent under separate cover.)