

# XDC JULY 2007 MONTHLY REPORT

## 1. LOOKING AHEAD

**NSA:**

**SGP:**

**TWP:**

**XDC:**

AVP: Add 'AVP' to the pre-proposal Web form.

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

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

MANUS:

NAURU:

DARWIN:

**DMF:**

**SDS:**

**EOP:**

## 2. IOPS AND CAMPAIGNS

### **3. NEW INSTRUMENTS AND DATA STREAMS**

**NSA:**

**SGP:**

**TWP:**

**XDC:**

#### 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/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/>

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

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

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

**DMF:**

### **4. ACCOMPLISHMENTS**

**NSA:**

**SGP:**

**TWP:**

**XDC:**

DEVELOPER'S MEETING: The XDC hosted the ARM Developer's meeting at BNL July 10 – 12, 2007. The meeting minutes can be found at <http://wiki.arm.gov> under Engineering.

**DMF:**

**SDS:**

**EOP:**

## **5. MEETINGS**

**NSA:**

**SGP:**

**TWP:**

**XDC:**

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

ESNET MEETING: Alice attended the DOE EsNet Meeting in D.C. July 26 and 27.

**EOP:**

**DMF:**

**SDS:**

## **6. ISSUES**

**NSA:**

**SGP:**

**TWP:**

GENERAL:

MANUS:

NAURU:

DARWIN:

**XDC:**

SWAWT: Installed basic swawt installation for ingest processing on XDC Linux machine.

TDMA: Work has resumed again 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 data format has been finalized. Currently awaiting new data.

CRN: Minor change made allowing for missing data to be included into the daily files. The change will reduce manual fetching and reprocessing.

WEBSERVICES: Min presented Web Services (SOAP Server) with Perl and LDAP for Authentication and Authorization at the developer's meeting.

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.

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: There is a new request to add 'Working Group' to the Research Highlights Application. The user will need to submit the Working Group along with the category. 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: (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](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: The look of the Germany AMF instrument locations as a custom map using Google API scripting language in development was approved at the Developer's Meeting. (See ECO-00523.)

SITE DRIVING DIRECTIONS: Driving directions for the SGP for dry weather and all weather routes have been redraw and updated in google maps. When finalized the map will be added to the ARM sites web page. Next up the other ACRF site driving directions.

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.

FIELD CAMPAIGN DATA: Began adding some additional options to the Field Campaign metadata assignment tool for ease of use.

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: (No new soundings this month.)

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

XDC DOCUMENTATION: (No new documentation this month.)

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

FILE TRANSFER: The XDC sent 12,568 files with a volume of ~483 GB this month (3 weeks).

**DMF:**

**SDS:**

**EOP:**

GENERAL:

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7. SPENDING REPORT:

(Report sent under separate cover.)