

# XDC NOVEMBER 2006 MONTHLY REPORT

## 1. LOOKING AHEAD

**NSA:**

**SGP:**

**TWP:**

**XDC:**

**PI DATA PRODUCTS:** Prepare for an increase in PI Data Products on the IOP system (ECR-00599).

**WEB SERVER:** Upgrade the ARM Web/database servers to prepare for the RSS newsfeed.

**PROBLEM REPORTING FORMS:** Need to develop detailed requirements for problem reporting forms (ECO-545).

MANUS:

NAURU:

DARWIN:

**DMF:**

**SDS:**

**EOP:**

## 2. IOPS AND CAMPAIGNS

### 3. NEW INSTRUMENTS AND DATA STREAMS

**NSA:**

**SGP:**

**TWP:**

**XDC:** VISST derived pixel-level products from GOES satellites provided by Patrick Minnis of the Atmospheric Sciences Division of NASA Langley Research Center (<http://www.arm.gov/xds/static/visst.stm>). The data are available for 200003 and 200509 through 200610.

#### DATASETS SUBMITTED TO THE IOP BROWSER THROUGH THE XDC:

PI-DATASETS- (No new datasets added this month.)

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

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

<http://iop.archive.arm.gov/arm-iop/2005/amf/masrad/kollias-94GHz/>

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

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/beringer-sfcflux/>

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/jakob-sonde/>

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/long-sfcflux/>

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/mather-pars/>

[http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/mcfarquhar-proteus\\_micro/](http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/mcfarquhar-proteus_micro/)

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/minnett-maeri/>

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/whiteway-lidar/>

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

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

SPECIAL-DATA-

Updated the Albany RSS data:

<http://iop.archive.arm.gov/arm-iop/0special-data/asrc-rss/rss105/langley/2006/>

SGP IAP 2006: (No new updates.)

**DMF:**

#### **4. ACCOMPLISHMENTS**

**NSA:**

**SGP:**

**TWP:**

**XDC:**

NASA LANGLEY VISST PRODUCT: VISST Pixel data (sgpvisstpx04gkkv2minnisX1.c1, where kk=8,10,11) is ready for Archive. See New Data Streams section above.

STM INVITATIONS: The Science Team Meeting invitation list for 2007 ARM STM was completed. Open Office's mail merge function was used to generate the invitation letter and labels for the 2007 ARM STM. The invitations will be mailed out early next month.

CSPHOT: CSPHOT at Nauru was replaced with a new unit that gets power from ARCS and is land-linked for data transfer.

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## **5. MEETINGS**

**NSA:**

**SGP:**

**TWP:**

**XDC:** (No travel meetings this month.)

**EOP:**

**DMF:**

**SDS:**

## **6. ISSUES**

**NSA:**

**SGP:**

**TWP:**

GENERAL:

MANUS:

NAURU:

DARWIN:

**XDC:**

**ARM POSTER SUBMISSION:** Work began on the ARM Poster Submission system. PHP and Sybase DB were used this year and it runs more efficiently. Users may submit a

poster abstract with some new features. Currently admin can accept or reject the submission. If accepted it will appear in the proceeding publications. Additional admin tools will be developed as necessary.

ARM/ACRF USERS MAP: Work began on creating a distribution map of the ARM/ACRF users for 2006, with a breakdown of ARM funded versus non-funded users.

PEOPLE DATABASE: Modifications and improvements began on the People DB (ECO-563). Initial modifications include creating a unique user name for each user. A new user management capability is ready for review, which includes ability to change username, password, and other profile info such as name, affiliation, address, etc. (No new work this month.)

GOOGLE AUTHENTICATION: Continue to work with Brad Perkins of LANL and Google support to implement password protection for the Google Search Results over the BCR/ECR index (EWO-11962).

WEBTRENDS: Running Google Analytics in test mode, which will provide reports based on our web server logs. Need to see if this is a suitable replacement for the webtrends server, which is currently not operable. This will not be a suitable replacement.

BARROW RADIOMETER: Working on documentation (BoDS. External Data Stream Page), and updating code to add another variable from 8/13/2006 to present (will not effect the release of prior data). The data stream is named nsanoaaradbrwX1.b1 and will be available soon.

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.) Discovered that the TWP MTSAT visible channel has incorrect data around 13:30Z-15:30Z. The scanner was programmed to avoid damage by accidentally pointing straight at the sun. See DQR D061016.6 for more details, which was updated this month with an end date for data problem.

ICRCCM-1 DATA: The Web site is currently under review.

**INSTRUMENT MAPS:** Began work to add the Central Facility Instrument layout map to the ACRF GIS, after receiving updates from Dan Rusk. Purchased an aerial photo in digital format on which to overlay instruments.

**GOOGLE MAPS:** Added ACRF site location data (from the DSDB) to the development ARM Web page, under the sites tab. Clicking on the SGP marker now zooms into all the SGP facilities with pop-up window markers. Clicking on the CF marker brings you to a zoomed aerial photo of the CF, which will be replaced by an updated instrument map of the CF. Modified the API code this month to accommodate Internet Explorer's handling of polylines, such as the SGP boundary box.

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

**CIMEL DATA TRANSFER:** Work began on using the Internet for Cimel data transfer rather than the GOES satellite uplink due to undetected transmitter failures (at SGP) and low sun angle (at NSA). Planning to move the land-linked Cimel to the optical trailer near SWS. Unit returned from Aeronet. Computer will be hooked up in early December. See ECO-00555 for additional details.

**CIMEL SUNPHOTOMETER:** There have been problems and updates to the Cimel Sun-Photometer data. There was a satellite transmitter problem at the SGP Cimel from 5/7/05 – 9/14/05 (P050920.1). Also Aeronet has implemented a new algorithm on all sites. Data will need to be reprocessed. Some changes in processing have been proposed (P050923.1). A BCR will follow.

**GLOBAL FORECAST SYSTEM (GFS) NCEP DATA:** Work began on the visualizations for the GFS data stream. Working with the Archive to provide GFS quicklooks. NCEP GFS data from Dec 2005 through May 2006 are at the Archive. After Dec additional points were added to include the Niamey site. The coordinates of 25 points form a 5x5 matrix with 1-degree resolution. The ingest was modified to include the new points. See ECO-00477. A bug was fixed in the GFS ingest and data reprocessed for June through August, 2006. Visualizations are on hold due to higher priority work.

**ETA AND GFS MODEL DATA:** Working on subsetting GFS data. See ECR-00476 and ECO-00532 for details.

CGI WEB SERVICES: Looking into providing more security for remote database connections through Web Services. (No additional work this month.)

IMMS, DQPR, DQA: (No update this month.)

IOP METADATA TOOL: (No update this month.)

SAR (SITE ACCESS REQUEST) SYSTEM: Work associated with establishing processes and procedures to reduce the risk of exposing Personal Identification Information (PII) related to Foreign National applications through the SAR system has been completed on development (EWO-11859). Waiting for closure of BCR.

SGP IAP: Lynn is working with Annette Koontz to install the CMDL IAP ingest and review data (BCR-00989). New fieldnames have been generated, and sample output files have been sent to for review. Annette has begun working on the ingest for data format prior to March 2006. The format changed after that and will require a separate ingest. Annette has begun work again and is testing the ingest.

AMERIFLUX: (ECR-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 is reviewing algorithms. We may download processed as well as raw data.

NSA CRN RAINGAUGE: Public ftp access is now available, but for only a small subset of data that we requested and only for data from mid-August forward. An alternative method will have to be used to fetch the data. Data from pre-August 2006 is not yet available. Obtained feedback to go ahead with a smaller subset of data. Additional stations may also be added, if approved. (No change this month.)

NWS SOUNDINGS: Received August and September high resolution soundings from UCAR (nsa06snwsupabrwX1, sgp06snwsupaddcX1, sgp06snwsupatopX1, sgp06snwsupaounX1).

IOP DOCUMENTATION: (On hold due to illness.)

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

XDC DOCUMENTATION: Added NOAA surface radiometer and VISST cloud products documentation:

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

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

SERVER HARDWARE UPGRADES: (No new upgrade work this month.)

TWP KWAJ AVHRR: Processed data for 20061001 – 20061016.

FILE TRANSFER: The XDC sent 15,994 files with a volume of ~502 GB in October.

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7. ONGOING XDC ENGINEERING TASKS