

XDC OCTOBER 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 gridded cloud and radiation products derived 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>).

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.)

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

<http://iop.archive.arm.gov/arm-iop/2005/amf/masrad-aop/strawa-cadenza/>

<http://iop.archive.arm.gov/arm-iop/2006/twp/twp-ice/tooman-proteus/>

SPECIAL-DATA-

Completed reorganization of toga-coare IOP data in special-data area

<http://iop.archive.arm.gov/arm-iop/0special-data/toga-coare/>

Reorganized the Carbon Flask data from Margaret Torn

<http://iop.archive.arm.gov/arm-iop/0special-data/carbon-flasks-sgp/>

SGP IAP 2006: Added IAP data for August - September, 2006

<http://iop.archive.arm.gov/arm-iop/2006/sgp/iap/200608/>

<http://iop.archive.arm.gov/arm-iop/2006/sgp/iap/200609/>

DMF:

4. ACCOMPLISHMENTS

NSA:

SGP:

TWP:

XDC:

VISST: NASA Langley VISST gridded product completed and sent to the Archive (see New Data Streams section above for further information).

AOS QUICKLOOKS: Set up web pages for AOS Health and Status Quick Looks, including SGP, NSA (Barrow), and AMF Aerosol Properties Plots and IOP Plots at the SGP.

http://www.xdc.arm.gov/data_viewers/aos/

DMF:

SDS:

EOP:

5. MEETINGS

NSA:

SGP:

TWP:

XDC: Rick Wagener traveled to the West Coast for the Cloud Modeling and Parameterization Working Group Meeting and the Aerosol Working Group Meeting Oct. 30 – Nov 2, 2006.

EOP:

DMF:

SDS:

6. ISSUES

NSA:

SGP:

TWP:

GENERAL:

MANUS:

NAURU:

DARWIN:

XDC:

STM INVITATIONS: Began work on the Science Team Meeting invitation list for 2007 ARM STM. Administrators can easily add new person or remove person from the list.
<http://stm.arm.gov/admin/invitation.php>

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

NASA LANGLEY VISST PRODUCT: Due to the large number of files, the data need to be concatenated. Released concatenation process for pixel data under test mode. The data will not be available until late November due to reprocessing for updated calibration and narrowband-to-broadband coefficients information (ECR-00442.)

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. Added MD5 encrypted password field this month.

GOOGLE STATISTICS: The format of the Google statistics has been finalized (EWO-11791).

GOOGLE AUTHENTICATION: Running some authentication tests with Brad Perkins of LANL 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. (No change this month.)

BARROW RADIOMETER: The ingest has been released for testing on development.

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.) Discovered this month 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.

ICRCCM-1 DATA: Continued work on capturing the input requirements for ICRCCM-1, including all historical correspondences, publications and reports, and results for longwave, and shortwave clear-sky and cloudy conditions, as well as aerosols. All the information is now included on the site and continues to be rearranged and fine tuned. It will be available through the IOP Browse Tool Web site. (No additional work this month.)

INSTRUMENT MAPS: Began work to add the Central Facility Instrument layout map to the ACRF GIS, after receiving updates from Dan Rusk. Created a Niamey, Niger map (png) for use in publications, etc. Looking into adding a link to it on the AMF Niger Web page.

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. The AMF site location marker for Heselbach, Germany was added this month. <http://dev.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. 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. A problem with the battery voltage of the Nauru CSPHOT is being tracked in DQPR-721. Solar panels to be replaced during the November reset visit.

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 MODEL DATA: Looking into archiving an ETA analysis dataset for the NSA to replace the data we have been collecting, which is large and in GRIB format. Currently considering NCL software utility to convert data and reviewing variable names. See ECR-00476 and EC0-00532 for details.

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).

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. (No additional work this month.)

AMERIFLUX: (ECR-00288). All Ameriflux data for Alaska have been downloaded to the Special Data area of the IOP Browse Tool. Will begin process to download near real time data for the Alaskan sites through automated ftp.

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.

NWS SOUNDINGS: (No new data this month.)

IOP DOCUMENTATION: Joyce Tichler continues to enter and modify existing metadata for IOPs. She also continues to update documentation and reorganize past IOPs on the IOP machine.

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

XDC DOCUMENTATION: (No new XDC documentation this month.)

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

TWP KWAJ AVHRR: Processed data for 20060901 – 20060930.

FILE TRANSFER: The XDC sent 18,055 files with a volume of ~600 GB in October.

DMF:

SDS:

EOP:

GENERAL:

NSA:

SGP:

TWP:

7. ONGOING XDC ENGINEERING TASKS