

XDC MARCH 2006 MONTHLY REPORT

1. LOOKING AHEAD

NSA:

SGP:

TWP:

XDC:

PEOPLE DATABASE: Modifications and improvements to the People DB (ECO-563).

PROBLEM REPORTING FORMS: Need to develop detailed requirements (ECO-545).

XDC QUICKLOOKS: Provide variables and data range or plotting code to the Archive to produce quicklooks for the external data streams.

MANUS:

NAURU:

DARWIN:

DMF:

SDS:

EOP:

2. IOPS AND CAMPAIGNS

3. NEW INSTRUMENTS AND DATA STREAMS

NSA:

SGP:

TWP:

XDC:

OMI: The Ozone Monitoring Instrument (OMI) data are available in netCDF from the Archive (gecomiX1.a1). Please see the XDC documentation for more information at <http://www.arm.gov/xds/static/omi.stm>. These data are available from 200410 to the present.

CMDL AOS: The following AOS (Aerosol Observing System) data streams are available in netCDF from the Archive. Please see <http://www.arm.gov/instruments/instrument.php?id=aos> for details.

sgpcmdlaosC1.c1, sgpcmdlaosavgC1.c1, sgpcmdlaosfithC1.c1
nsacmdlaosC1.c1, nsacmdlaosavgC1.c1, nsacmdlaosfithC1.c1
nimcmdlaosM1.c1, nimcmdlaosavgM1.c1, nimcmdlaosfithM1.c1
pyecmdlaosM1.c1, pyecmdlaosavgM1.c1, pyecmdlaosfithM1.c1

DATASETS SUBMITTED TO THE IOP BROWSER THROUGH THE XDC:

PI-DATASETS- (No new data this month.)

BETA-DATA- (No new data this month.)

SPECIAL-DATA- Continued to add data from the updated (hardware and software) AERI instrument. Needs to be compared to C1 system for several months.

<http://iop.archive.arm.gov/arm-iop/0special-data/turner-aeri/>

Updated Langley documentation for the RSS105 data from Albany

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

Moved TOGA COARE data to the special-data area. There may be renewed interest in this dataset after the TWP/ICE campaign.

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

NSA MPACE 2004:

Added Total Sky Imager data

<http://iop.archive.arm.gov/2004/nsa/mpace/morris-tsi/>

Continued to update Tooman's proteus documentation to provide a listing of files available offline from the Archive.

http://iop.archive.arm.gov/arm-iop/2004/nsa/mpace/tooman-proteus/request_other_data/

NSA AIRS VALIDATION 2006: Transferred March b1 data to the IOP area.

SGP IAP 2006: Uploaded data for January 2006.

SGP AIRS VALIDATION 2006: Transferred March b1 data to the IOP area.

SGP PGS 2005: Updated pflx data.

<http://iop.archive.arm.gov/2005/sgp/pgs/fischer-pflx/>

TWP AIRS VALIDATION 2005: Transferred March b1 data to the IOP area.

DMF:

4. ACCOMPLISHMENTS

NSA:

SGP:

TWP:

XDC:

TOMS/OMI INGEST: The TOMS (Total Ozone Mapping Spectrometer) datastream has been replaced with OMI (Ozone Monitoring Instrument) data. Data processing began this month (ECO 00553)- see NEW DATA STREAMS section above.

FIELD CAMPAIGN WEB DESIGN: New and improved Field Campaign Web pages were installed into production this month.

SERVER HARDWARE UPGRADES: Upgraded the XDC development environment and production environment to SEEM 3 and Solaris 10.

DMF:

SDS:

EOP:

5. MEETINGS

NSA:

SGP:

TWP:

XDC: *Rick Wagener, *Kathy Doty, Laurie Gregory and *Alice Cialella attended the ARM STM in Albuquerque, NM March 27- 31, 2006 and presented two posters:

<http://www.arm.gov/publications/proceedings/conf16/P00185.stm>

<http://www.arm.gov/publications/proceedings/conf16/P00074.stm>

EOP:

DMF:

SDS:

6. ISSUES

NSA:

SGP:

TWP:

GENERAL:

MANUS:

NAURU:

DARWIN:

XDC:

BARROW RADIOMETER: Began work on an ingest to convert Barrow surface radiation data (Ells Dutton) from ASCII to netCDF.

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 this month to run more quickly and efficiently.

PHP VULNERABILITY: Work has begun on reducing the vulnerability in ARM PHP applications. The Research Highlights and People DB PHP Web applications have been updated. Data, Instruments, Measurements, and Education/Ask a Scientist are in review. Updated the IMMS and DQA systems to remove the “register_globals” vulnerability (EWO-11609). (No new work this month.)

ICRCCM-1 DATA: Continued locating shortwave and longwave ICRCCM modeled output data and standard atmospheric profiles in anticipation of making them available through the IOP Browse Tool Web site. Bob Ellingson and Warren Wiscombe have provided numerous key papers to include in the reference section. Ultimately the modeled output data and profiles will reside on the “special-data” section of the IOP Browse Tool.

INSTRUMENT MAPS: Continued to retrieve new and updated datasets for the SGP site, i.e. digital elevation model data, satellite data, aerial photographs, soil data, land use/land cover data. It was determined that the resolution of the GPS locations for the instruments at the SGP site is not at a fine enough detail to plot them accurately on a fine resolution GIS map. An ECR will be submitted next month.

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). See ECO-00555 for additional details. (No additional work this month.)

GLOBAL FORECAST SYSTEM (GFS) NCEP DATA: Work began on the visualizations for the GFS data stream. Working with the Archive to provide GFS quicklooks. We received NCEP GFS data from Dec, 2005 through Feb, 2006. 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.

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.

RSS105: RSS 105 processed data are now available through the ARM Archive. (Old rss-102 and rss-103 data will remain on the IOP Browse Tool, since the file format is different from rss-105.)

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. We have picked up new sample data from NCEP and are currently comparing the files to those files collected at Penn State to see if they will be suitable. See ECR-00476 for details. (Nothing new this month.)

TWP RAIN GAUGE DATA: An hourly global precipitation dataset (TD3505) provided through the National Climatic Data Center includes two stations each for Manus and Nauru. A BCR was submitted (BCR-00522) to track the discussion and determine whether this dataset is what is needed. NCDC has provided the ascii data back to 2003 free of charge via their Web interface. Currently matching the data with the NCDC documentation, with difficulty. NCDC has been contacted for assistance but has not responded. Began discussions with the BoM to instead get their precip data for Manus and Nauru.

IOP SPECIAL DATA: Moved “dummy” IOP entries in development into production for data under the special-data area of the IOP so they can be included in data searches. Next step is to add pi-instruments and metadata for each.

SAR (SITE ACCESS REQUEST) SYSTEM: Finished some additional changes on EWO-11451: Review Policy for Foreign National Cyber Access to ACRF systems. Plans are to install updated system into production in April.

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 will start work on ingest modifications for the IAP in mid April.

AMERIFLUX: Received flux data for Barrow (Atqasuk already received) for the period of the MPACE field campaign and delivered to the IOP Browse Tool. There was only rudimentary quality control on the data, though (during this time of year it is difficult for accurate eddy flux measurements) and it was suggested by the data deliverer that the data be additionally QC'd. Currently no one is available to do that QC (ECR-00288). No response from ECR request to re-evaluate the need for collecting AMERIFLUX data. With the interest shown at the STM, we will redouble efforts to collect these data.

NSA CRN RAINGAUGE: An issue arose with automatically pulling the data from the NCDC Web site. Now ftp is not expected to be available until May to work this out. Awaiting feedback from NOAA/CRN on availability of public ftp site. Meanwhile the CRN code is in the standard ARM ingest format. It has been released for testing (ECO-00296). The ingest is on hold, waiting for availability of public ftp access from NOAA/CRN, which is still tentatively scheduled for the end of May.

NWS SOUNDINGS: QC'd high resolution soundings were received for January 2006 from NCAR. Both the netCDF and raw data have been sent to the ARM Archive (nsa06snwsupabrwX1, sgp06snwsupaddcX1, sgp06snwsupaounX1, sgp06snwsupatopX1).

IOP DOCUMENTATION: Joyce Tichler continues to enter metadata for IOPs
BIRTH OF A DATA STREAM (BODS): (No BODS submitted this month.)

XDC DOCUMENTATION: Entered XDC documentation for the new Ozone Monitoring Instrument (OMI). Since OMI replaces TOMS added end date to TOMS documentation.

SERVER HARDWARE UPGRADES: Migration of LINUX systems to the new backup server and client software upgrades were completed. The Legato backup system is now fully operational and the old backup system removed from service. A new tape library is on order. Had to order replacement hardware to rescue data from a failing TB storage system on the new XDC development server.

TWP MANUS PROCESSED AVHRR: Continued processing NOAA-16 2005 data. Sent 2005 Hovmuller diagrams for NOAA_17 to the ARM Archive.

TWP NAURU PROCESSED AVHRR: Continued processing NOAA-16 2005 data. Sent 2005 Hovmuller diagrams for NOAA_17 to the ARM Archive.

TWP KWAJ AVHRR: Processed data for 20060201 – 20060228.

DMF:

SDS:

EOP:

GENERAL:

NSA:

SGP:

TWP:

7. ONGOING XDC ENGINEERING TASKS

