

XDC APRIL 2010 MONTHLY REPORT

3. LOOKING AHEAD

XDC:

WEBSERVER: Evaluate performance issues with new web design. Need to consider alternate configurations with load-balanced servers and new DB machines with more memory. **Update:** *Attached hardware requirements and specifications for review and ordering to ECO-786. Next: Order HW in May/June.*

ACRF SECURITY: Improve security at ACRF Web sites containing sensitive information (See ECO-612 and ECO-563). SSL Certificates are in place. LDAP servers are running at BNL and ANL and the BNL server is getting any updates from the PeopleDB and is replicating those updates to the ANL server. **Update:** *Examined options for Single-Signon application, and settled on the open-source Jasig Central Authentication Service. Next: Develop applications, e.g.: PeopleDB profile editor, IT VLAN and work towards implementing a single sign-on system.*

AMF Ancillary Facility Data for China: Make data available before STM. **Update:** *Completed the data for the first deployment site (Zhangye, Western China), Additional data for the second deployment (Xianghe) have been delivered to the XDC. Next: Complete metadata for data delivered.*

WEB SYSTEM: Generate usage statistics for all web pages; analyze trend over ACRF whole period of existence. **Update:** *Installed new version of webalyzer and enabled GeoDB feature to get a more reliable picture of the geographical distribution of our web-visitors, submitted initial results for review by Rolanda and Jim Mather, ran statistics over entire period of record (1997 to present). Next: Automate statistics to update on a weekly basis and publish to <http://www.arm.gov/usage/> and equivalently for all the other virtual hosts.*

ASP FC DATA: Merge past ASP data into the FC metadata system. **Update:** *Archive upgraded FC data-storage system, will easily accommodate ASP data. Next: Meet with Stephen Springston, the archivist of the ASP data, to review data content and define PMTs for documentation. This is currently a low priority.*

VISST: Satellite based retrievals of cloud and radiation properties by Pat Minnis' group at NASA/Langley using the VISST (Visible Infrared Solar-Infrared Split Window Technique) algorithm will be available soon for Darwin, Manus and Nauru. The data streams are both pixel-level (4-km) retrievals and averages on a 0.3 or 0.5

degree latitude-longitude grid. ***Update:** Data have been delivered to the Archive. **Next:** VISST-derived gridded and pixel cloud and radiation products from MTSAT available soon. Data usage notes and documentation updates, and news-item announcement.*

XDC Documentation: Update details on all XDC activities and prepare status update for Jim Mather's visit in May.

CSPHOT ARRA Instruments: Many issues with currently deployed instruments. May need to accelerate their refurbishment/recalibration by swapping in the new ARRA instruments when they arrive. ***Next:** ARRA instruments to arrive in several separate shipments in May and June, will be shipped via SGP to Aeronet for pre-deployment calibration. Laurie Gregory, Richard Wagener, and Lynn Ma to visit Aeronet operation at NASA GSFC at the end of July to discuss various deployment/calibration options and instrument maintenance issues.*

5. NEW INSTRUMENTS AND DATA STREAMS

XDC:

VISST: VISST-derived gridded cloud and radiation products from the GOES9 satellite are available through the Archive for Darwin, Manus and Nauru for May 2003 through October 2005 (twpvisst###gridg09v3minnisX1.c1, where ### = dar, man, nau).

GOES13: The GOES12 satellite was replaced by the GOES13 satellite on April 14 (sgpgoes13X1.a1, sgpgoes13visX1.a1 now available).

DATASETS SUBMITTED TO THE FIELD CAMPAIGN BROWSER THROUGH THE XDC:

AAF DATA- Continued receiving final data for the RACORO FC:
<http://www.arm.gov/campaigns/aaf2009aafcloud/>

6. ACCOMPLISHMENTS

XDC:

DQA: The Data Quality Assessment tool for the DQ Office to summarize DQA reports submitted by DQO analysts was successfully placed into production. Feedback

was immediate and very positive.

GOOGLE: The Google Mini (the replacement for the Google Search Appliance) has been installed into production, including the new SSL certificate. (See BCR-01591.)

WEB USAGE STATS: Web usage statistics for the following web hosts are now available. The usage statistics are run on a weekly basis.

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

<http://education.arm.gov/usage>

<http://www.db.arm.gov/usage>

<http://www.xdc.arm.gov/usage>

<http://stm.arm.gov/usage>

<http://asr.science.energy.gov/usage>

7. MEETINGS

XDC:

VAP DQ Meeting: A. Cialella, K. Doty, L. Gregory, M. Liang, L. Ma, A. Tilp, and R. Wagener attended the VAP Data Quality meeting via video and teleconferencing April 28 and 29 at PNL. Overall assessment of this video conferencing experiment was very positive. It allowed a number of people to participate that are less inclined to travel for personnel reasons, and we saved quite a few gallons of fossil fuel.

8. ISSUES

XDC:

AOS/MAOS: XDC folks met with Stephen Springston's folks to assist with new instruments, ingests and data issues that are upcoming.

CSPHOT & SUOMINET MENTORSHIP: Continue to monitor Cimel issues. Updating ingest for level 2, version 2 Data. The collection routines on all Cimels have been upgraded (BCR-01623). Unit #252 is being re-installed in Barrow after calibration. Unit #99 at Graciosa is being replaced with unit #98 (DQPR 2403). The Nauru instrument is having problems with the sensor head (DQPR 2397). Continue to review and consult on ARRA purchase (ECO-00765). The ARRA CSPHOT IRRR has been submitted. Three new ARRA Cimels are arriving in May, with 3 more expected in June. The XDC is planning to meet with Aeronet in July. Details on individual Cimel issues are available in the IMMS report <http://www.db.arm.gov/IMMS/>.

LDAP: Configuring LDAP production server for implementing a single sign-on. Installed and configured Tomcat. Configuring Jasig Central Authentication Service.

SSL CERTIFICATES: Renewed SSL certificates for www.arm.gov and www.db.arm.gov. Installed new SSL certificates for ldap.xdc.arm.gov and faster.arm.gov.

TDMA: The TDMA data have been officially announced, though we are still awaiting the TDMA handbook. Work on one of four new ingests based on the new TDMA-APS data sample received is continuing. Waiting on new data for size distribution, hygroscopic, CCN and new TDMS/APS. See ECO-00587, BCR-01491.

DQPR/PIFCARDQR: Work progressing well on requests for additions and bug fixes to the DQPR2 system. Only a few issues remain. Waiting for feedback on 'DQPR Activity and Comment History Summary' tool requested by Rick Wagener. (See EWO-13212 for additional information).

NWS SOUNDINGS: Received quality controlled high resolution sounding data for December 2009. The following data streams are available through the ARM Archive:

nsa06snwsupabrwX1.00, nsa06snwsupabrwX1.b1

sgp06snwsupaddcX1.00, sgp06snwsupaddcX1.b1

sgp01snwsupaounX1.00, sgp01snwsupaounX1.b1

sgp01snwsupatopX1.00, sgp01snwsupatopX1.b1

FILE TRANSFER STATS: The XDC sent 11,644 files with a volume of ~258 GB this month.