

XDC JUNE 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 (ECO-786). **Update:** *Storage systems and network equipment ordered. Next: Configure security device, install storage systems, order Sun servers.*

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. Update: Summer student completed metadata for AAF datasets. Awaiting approval and database implementation.*

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. **Next:** *Data usage notes and documentation updates, and news-item announcement.*

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. **Update:** *3 of 6 new CSPHOTs arrived in*

May, were at Aeronet in June for calibration. Remainder expected in July. Next: Two will be ready in July to be shipped to TWP Darwin and Manus. One to be integrated into AMF2 for StormVEX deployment in Sept. 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:

GOES13: The upper tropospheric humidity data (including a 0.5 degree gridded data) derived from the GOES13 satellite, are available at the Archive from 20100414 to the present. The new data replace the sgpgoes12uth since GOES13 replaced GOES12 on April 14, 2010. (sgpgoes13uthX1.c1, sgpgoes13uthgridX1.c1)

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:

WEB: Added a '-f' option when publishing from development to production to overwrite files on production even if they are newer (See BCR-01653). Implemented new access control method for restricted content based on group membership, e.g. scienceboard, using individual authentication and a revised password change form.

PEOPLE DB: New tools to improve email-list management. A new summary web page and review page were added to the PeopleDB admin tools. See ECR-00795, BCR-01660 for more details. <https://www.arm.gov/people/pw/email-list-summary>

TDMA HANDBOOK: Don Collins provided what he has so far and it has been published to the web.

CSPHOT HANDBOOK: Major revisions promised for FY10 were completed and new handbook was published. Additional revisions related to cloud mode operational changes and new ARRA instruments to be forthcoming following the July meeting at Aeronet.

8. ISSUES

XDC:

CSPHOT & SUOMINET MENTORSHIP: Continue to monitor Cimel issues. Updating ingest for level 2, version 2 Data. Unit #99 was sent back to Aeronet for calibration. The Nauru instrument is having problems with channel 340 (DQPR 2397). Continue to review and consult on ARRA purchase (ECO-00765). Two of the ARRA Cimels have been calibrated and are to be sent to TWP to go to Manus and Darwin. A third Cimel is in the process of calibration and will be sent to AMF2. Working on setting up Aeronet sites. Three new Cimels are expected in July. 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/>.

FC METADATA: Making very good progress on assigning metadata to field campaign datasets from the recent past, including ISDAC, HFE AAF, and RACORO.

AOS/MAOS: Alice and summer student, Sasha, met with Stephen Springston to define a path forward for AOS ingest development at the DMF.

LDAP: Configuring LDAP production server for implementing a single sign-on. Testing a new login interface on development using the ARM template.

GOOGLE SEARCH: Created a 'Publications' collection on the Google mini, as per R. Jundt's request, which serves results from www.arm.gov/publications only.

TDMA: The new TDMA-APS ingest is completed, but needs a review before being tested on development. Work on three new TDMA-APS size distribution ingests is underway. Waiting on new data (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).

Discussions with DQO about using DQA and DQPR tool to capture VAP weekly reports. Justin will submit an ECR soon.

NWS SOUNDINGS: Received quality controlled high resolution sounding data for March 2010. 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 13,872 files with a volume of ~337 GB this month.