

XDC MARCH 2005 MONTHLY REPORT

1. LOOKING AHEAD

NSA:

SGP:

TWP:

XDC:

ARM WEBPAGE: Several tasks in support of the new Archive shopping cart application for ACRF data products.

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

EXTERNAL DATA STREAMS: Reviewing all external data streams with the Science Working Groups in the upcoming months using reports generated by the Archive from BODS. Plan to review measurement descriptions entered in BODs for consistency across data streams. Reorganize links to XDS docs to fit new shopping cart application.

IOP SPECIAL DATA: ARM needs to make a decision on how to store these data permanently at the regular ARM Archive. Currently the special data datasets are stored **ONLY** on the IOP Browse Tool.

MANUS:

NAURU:

DARWIN:

DMF:

SDS:

EOP:

2. IOPS AND CAMPAIGNS

3. NEW INSTRUMENTS AND DATA STREAMS

NSA:

SGP:

TWP:

XDC:

DATASETS SUBMITTED TO THE IOP BROWSER THROUGH THE XDC:

NSA MPACE 2004: Managed the following data in the IOP area:

- bahrmann-metar- added final data
- demott-cfdc- added final data
- eloranta-hrs1 – added final data
- kok-cvi – added final data
- long-sfcflux – added final data
- mather-par1 – added final data
- zak-sonde – added final data
- ameriflux-sfcflux- added as auxiliary IOP data
- satellite-nasa – added links as auxiliary IOP data
- synoptic-maps – added as auxiliary IOP data

OSC CRYSTAL FACE 2002: Managed the following data in the IOP area :

- mather-par1
- albrecht-radar94
- schneider-noapco

Note: very little documentation currently exists for this IOP

SGP2004: Updated main readme file with IAP IOP.

DMF:

4. ACCOMPLISHMENTS

NSA:

SGP:

TWP:

XDC:

ACRF WEB: Installed AIA Web service on XDC development and production servers to make the ARM Web/DB services completely independent, increase redundancy, and increase reliability and availability. Installed a new virtual host environment so Archive/Web integration development can proceed on schedule.

OK MESONET: The 30 minute soil moisture data ingest was updated by Min Liang to process the sgpokmX1.b1 data stream. While updating the BODS some inconsistencies were discovered. All data prior to October 2002 was not properly QA'd and was dropped. In addition the Soil Water Potential variable was dropped since it can be calculated from the Sensor Temperature Rise variable. See BCR-01001 for complete discussion. Data are currently available from the Archive for time period 20021001 – 20040930 (sgp30okmX1.b1).

DQA – DATA QUALITY ASSESSMENT REPORT SYSTEM: Completed ECO-00460 “Modify the Data Quality Analysis Report tool e-mail distribution lists. Submitted and completed BCR-01014 to install all upgrades from ECO-00460.

DMF:

SDS:

EOP:

5. MEETINGS

NSA:

SGP:

TWP:

XDC:

Rick Wagener, Kathy Doty, Ma Lynn and Alice Cialella traveled to Daytona Beach, FL to attend the ARM Science Team Meeting March 14 – 18, 2005 and presented the following posters:

[External Data Stream Review](#)

Wagener, R., Ma, L., Gregory, L., Tichler, J., Horwedel, B., and Cialella, A.

[Improved Method for Searching ACRF Data Quality and Problem Report Databases](#)

Doty, K. and Wagener, R.

[Improvements to and Status of the Data Quality Health and Status \(DQ Hands\) System](#)

Kehoe, K., Sonntag, K., Moore, S., Hughes, G., Doty, K., Zaman, M., Burkholder, B., Shafer, C., and Pepler, R.

Alice Cialella traveled to Baltimore, MD to attend USDA's Carbon Sequestration Symposium March 21 – 24, 2005.

EOP:

DMF:

SDS:

6. ISSUES

NSA:

SGP:

TWP:

GENERAL:

MANUS:

NAURU:

DARWIN:

XDC:

ETA MODEL DATA: ETA model data is under review. Discussions are underway to determine whether to ingest or terminate the data stream. Currently seeking more information about the dataset to facilitate a solution. See ECR-00476 for details.

SARS: Kathy submitted ECR-00475 "Improvements to the Site And Computer Access System" and it is in progress. She is waiting for closure on BCR-01013 "SARS-minor textural change".

ACRF WEB: Working on modifications to both the DQA and IMMS applications to be able to provide a link on the ACRF Instrument Web pages to these systems. The link will bring the user to the latest report (DQA or IMMS) for the particular instrument of the instrument page being reviewed. New design is in development for the Research Highlights. See EWO-11297 for details.

SGP IAP: Lynn is working with Annette Koontz to install the CMDL IAP ingest and review data (BCR-00989).

PT REYES: A BCR was submitted to begin collecting CMDL AOS data for Pt. Reyes AMF (BCR-01033). An EWO was submitted to provide MOLTS data for Pt. Reyes (EWO – 11306). Alice is beginning to collect geographic data for the area.

NSA AVHRR: Picking up and processing the raw data using bbftp. Lynn is working on the 2004 backlog data. Currently 200408 – 200412 have been processed.

TWP GOES9 SATELLITE COMPOSITES: The new program to generate true color composite images for GOES9, which is similar to SGP GOES8/12, is completed and under review (ECO-00450). No change this month.

AMERIFLUX: Received flux data for Atqasuk (awaiting Barrow) for the period of the MPACE field campaign and delivered to the IOP Browse Tool (see IOP section above). Next step is to set up ongoing data retrieval from AMERIFLUX for the NSA (ECR-00288).

NSA/SGP SONDES: The modifications to the code from Gary Hughes (MRC) for converting high resolution sounding data (from NCAR) in ASCII format to netCDF format to ARM standards are completed (see ECO-00457 and BCR-01020). The ingest will go into production next month.

RAMAN LIDAR: Updated ingest code to include information about manual power tweaks found in the log files, which are converted to netCDF (see BCR-01011).

CSPHOT: The ingest and the collection script has been released for CSPHOT data. New data streams for Darwin and NSA will soon be available (BCR-01012, EWO-11214).

NSA CRN RAINGAGE: The ingest development for collecting the Climate Reference Network (CRN) Rain gage data is ongoing (ECO-00296). Awaiting feedback regarding netCDF variables to include from interested parties.

BIRTH OF A DATA STREAM (BODs): Entered the following data streams via spreadsheets:

NWS Upper Air Soundings

GOES9 Composites

XDC DOCUMENTATION: Updated documentation for the following:

GOES – added process to convert from albedo units and brightness temperatures to radiances.

OK Mesonet – changes in 30 minute averaged soil moisture files

NWS Upper Air Soundings- new data streams that are converted from ASCII not netCDF

GOES9 Composites – added information

CSPHOT – added data streams for NSA and Darwin

ETA Model Data – added information on NCEP original names for eta model data

IOP DOCUMENTATION: Joyce Tichler continues to review contents of IOP web pages for clarity and completeness.

SERVER HARDWARE UPGRADES: Configuration of the RAID storage array and terminal server for the new XDC hardware continues. The XDC network switch was replaced and the upgrade to Gigabit Ethernet completed. All XDC systems were configured for the expanded range of IP addresses. During the IP address space expansion for the .xdc.arm.gov subnet a lack of coordination with ES/Net caused a 3 hr. outage of XDC/Web/DB services.

SGP RUC: An ECR was submitted for a RUC 40km Data Sub-setting Utility (software tool) for the ARM SGP CART Site (ECR/ECO-00405). No new progress this month.

TWP MANUS PROCESSED AVHRR: NOAA-17 2003 Kwajalein Hovmuller diagrams under XDC review. Processing NOAA-16, 2004.

TWP NAURU PROCESSED AVHRR: NOAA-17 2003 Kwajalein Hovmuller diagrams under XDC review. Processing NOAA-16, 2004.

TWP KWAJ AVHRR: Processed data covering 20050101 – 20050228.

TWP GRIB ECMWF: Processed data covering 20050201 – 20050228.

DMF:

SDS:

EOP:

GENERAL:

NSA:

SGP:

TWP:

7. ONGOING XDC ENGINEERING TASKS