

Notes from CAT-II Meeting Tuesday April 21, 2009

Name of RFC representative in attendance:

APRFC	Scott Lindsey
MBRFC	Tom Gurss
NCRFC	Mike DeWeese
MARFC	Peter Ahnert
OHRFC	Tom Adams
LMRFC	Dave Reed
SERFC	John Feldt
WGRFC	Bob Corby
CBRFC	Michelle Schmidt

CAT members present:

CNRFC	Rob Hartman
NWRFC	Harold Opitz
ABRFC	Billy Olsen
NERFC	Rob Shedd

Also present:

Jon Roe, Chief, OHD HSEB
Chris Dietz, OHD HSEB, CHPS Project Manager
Randy Rieman, OCWWS HSD
Mark Glaudemans, OHD HSEB
Edwin Welles, Deltares

Document reference: "Baseline Operational Capability II For CAT RFCs", Version 20090414, distributed by Rob Hartman via the cat_2 infolist.

Agenda:

1. Review requirement for NWSRFS pre-processors in CHPS
 - 1.1. Context: the need to "wrap" NWSRFS pre-processors for CHPS was discussed again at the recent CAT meeting. It is seen as a fall-back position only until we can come up with the right solution. There are numerous reasons to avoid this

option if possible. Our goal for these discussions is to identify the necessary resources (e.g. Deltares, OHD) to apply to software development activities.

- 1.2. FEWS contains many pieces of the pre-processor functions, with the exception of the filling-in of missing station data. Some FEWS pre-processor capabilities are described in the "Software Migration Mapping" document, available via the CHPS web page. Mountain Mapper fills in missing data; but we're not sure about availability of documentation. DailyQC also provides this functionality, and documentation is available. MarkG will distribute. "Missing data" was stated as an essential requirement for APRFC, due to the coarseness of the grids. The issue is there can be no point data in some grid cells. Finer grid resolutions are a resource problem due to the size of APRFC's domain. The NWS should provide adequate computing resources but has not to date. As APRFC's partner ("buddy") Harold agreed to work with Scott to address these issues.
- 1.3. Approach: last resort (plan C) will be to continue using NWSRFS to generate mean areals for CHPS. Fall-back position (plan B) is to "wrap" the pre-processors in CHPS. Optimal plan (plan A) is to come up with a good approach for all RFCs; it will likely involve writing new or enhancing existing software upstream of CHPS. Recommendation is to let the CAT bear the brunt of the pain as they work their way through this issue. The CAT will develop techniques/methods and best practices, which they will share with the CAT-II as they are developed.
2. Section 17 (Calibration): there was confusion about the term "post-BOC II". It refers to the target release, not the timeframe to begin activities. Agreed to change it to "non-BOC II". OHD HSEB has already assigned an analyst to the project; a prototype capability should be ready for delivery early next year. No software will be delivered as part of the baseline until the CAT-II go into parallel operations. The "team" referred to in the BOC-II document has not really been formed yet, although there have been a few early discussions.
3. Continue discussion of the referenced BOC-II document
 - 3.1. Section 20 Training:
 - Each RFC will be required to develop its own parallel operations plan. The CAT can provide a "template" based on its own examples. Comparisons can be carried out using some standard techniques to a limited extent, but in general the success criteria must be judged at the local level due to the varying hydrologic regimes.
 - Deltares is looking into standard ways to evaluate the forcings using FEWS directly (currently using spreadsheet-based statistics). Probably won't require additional training other than is covered under Migration training already. Migration training for CAT-II will be in ~Feb 2010 (one year after CAT completed its own).
 - 3.2. Section 21 Configuration Tools:
 - 21A – example is migration scripts. Scripts help RFCs in converting their segments – front-end need for manual interaction is significantly reduced.
 - 21B – RFCs should become familiar with XML. An XML editor is most useful for format checking; a good schema is also essential (FEWS PI-XML is very well defined). OHD is not currently pursuing a national XML editor for use on CHPS; AWIPS has yet to come up with one. It's difficult to find an editor which is free (or low cost) and is available on Linux.
 - Chris requested that the reference to "Deltares and/or Deltares USA" be changed to "Deltares" – it's too difficult keeping up with which parts of Deltares are doing which pieces of the project!

- 3.3. Section 23 NWSRFS Techniques:
 - Most RFCs have submitted their list of Techniques, but the list doesn't give Edwin the information he really needs to conduct his analysis. Edwin will work with JoeO to come up with a mechanism to identify the techniques which will be required for CHPS (where they will become run-time options).
 - When Edwin has the information he needs, he'll post an email to the cat_2 list for review/confirmation.
4. Rob Hartman will update and distribute the BOC-II document based on discussions from this meeting.
5. Chris will distribute notes from this meeting.
6. **Next meeting: Tuesday April 28 at 11:00 am EDT**

Action Number/Item	Who	Notes
C2-03102009-01: Capture changes to BOC-II from this meeting; distribute updated version of BOC-II document	Rob Hartman	Closed (updated version emailed on 3/10/09 to cat_2 infolist)
C2-03102009-02: Distribute "matrix" from the OHD ("national") Forcings Team, which describes CAT strategy/requirements for transition to CHPS in the absence of NWSRFS pre-processors	Harold Opitz	Closed (matrix emailed on 3/10/09 to cat_2 infolist)
C2-03102009-03: Each CAT-II RFC to prepare initial version of their entry for the Forcings "matrix"	CAT-II attendees	Closed (all responses received via email by 3/24/09)
C2-03102009-04: Get statement from Deltares whether FEWS has capability to identify sensitive/proprietary data that must be excluded from external reports (BOC requirement)	Harold Opitz	Closed (email exchanged on 3/17/09). Update 3/24/09: Chris to send to CAT-IIs the answer from Deltares for this AI
C2-03102009-05: Distribute notes from this meeting to the cat_2 infolist	Chris Dietz	Closed (emailed on 3/10/09 to cat_2 infolist)
C2-03172009-01: Distribute notes from this meeting to the cat_2 infolist	Chris Dietz	Closed (emailed on 3/20/09 to cat_2 infolist)
C2-03242009-01: distribute to all of the CAT-IIs instructions (also script?) originally developed by Joe Ostrowski for the purpose of identifying NWSRFS operations in active use	Chris Dietz	Closed (emailed on 3/25/09 to cat_2 infolist)
C2-03242009-02: review list of operations to make sure they're accurate; please notify RobH if any critical operations are missing	All CAT-IIs	Closed (emails received)

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C2-03242009-03: review list of operations in BOC-II doc to make sure it matches the original script output we gathered	Chris Dietz	Closed (emails received)
C2-03242009-04: update (correct, complete) the Software Migration Mapping document; distribute the updated version to the cat_2 infolist	Deltares/Edwin Welles	Open.
C2-03242009-05: Compile and distribute to the CAT-II a matrix showing every RFC's response for AI # C2-03102009-03	OHD/TBD	Closed. Sent via email by Mark Glaudemans to cat_2 infolist on 3/27/2009
C2-03242009-06: Time series output from HL-RDHM must ingestible into CHPS; HSMB will define a format (e.g., SHEF) for said HL-RDHM output and change the HL-RDHM software accordingly	OHD/HSMB	Open.
C2-03242009-07: For agenda April 7 meeting: report from NERFC on their investigation into a replacement HWG process.	Rob Shedd	Closed. Presented as part of the 4/9/09 monthly briefing.
C2-040720090-01: Find out status of Baseflow implementation in OHD (incl MODs)	Chris Dietz	Closed. Now irrelevant, since no RFC uses BASEFLOW.
C2-040720090-02: Check to see if cat_2 infolist is working correctly. NCRFC reports not receiving some mailings.	Chris Dietz	Closed per email from Mike DeWeese on 4/22/09.
C2-041420090-01: Send out an email on preparing for CHPS prototype hardware IP addresses	Randy Rieman	Open
C2-041420090-02: Send out documentation to cat_2 infolist on ER approach/procedures for RFC site backup	George McKillop	Closed by email to cat_2 infolist on 4/20/09.
C2-041420090-03: Send list of Techniques used to Chris (including esp)	CAT-II	Closed (OBE).
C2-041420090-04: Let Chris know if you use IHABBS and if so, which version	CAT-II	Open

Action Number/Item	Who	Notes
C2-04212009-01: Forward to the cat_2 list documentation on DailyQC's algorithm to fill in missing station data.	Mark Glaudemans	Open
C2-04212009-02: Come up with an alternative mechanism to define Techniques that are in operational use at all RFCs; solicit results from all RFCs	Deltares/Edwin, Joe Ostrowski	Open