Direct Broadcast Software Packages
ITWG Technical Subgroup:
Update on Topics from ITSC-19

ITSC-20 Lake Geneva, 29 October 2015
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ITSC-19 Attendees (20)

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Topics from ITSC-19

1. Q: Is there a cloud type product available in any of the software packages?
A: CLAVR-X/CSPP and MAIA/AAPP contain cloud type products for AVHRR, VIIRS, and MODIS (check the documentation).

*Current status: No further action.*

2. Q: Would it be helpful to fold IAPP into CSPP to add features such as install documentation, test data, pre-compiled binaries, etc.?
A: There was interest from DWD/CMSAF and some users of AAPP.
Action: Incorporate IAPP into the CSPP family (Liam Gumley).

*Current status: IAPP was released under CSPP in April 2015. See poster 3p.03 by Geoff Cureton.*

3. Q: Is there a Clear Air Turbulence product available for MODIS?
A: SSEC may have created such a product in the past.
Action: SSEC will provide information to the group (Kathy Strabala).

*Current status: CAT products for MODIS have been demonstrated (e.g., downslope mountain wave detection using 6.7 micron) but it is unclear whether they are suitable or feasible for DB implementation.*
3. Issue: NSMC could provide additional features with it’s FY-3 DB software including: source code, regular calibration LUT updates, input data documentation, and test data for verification.

Action: Request the above items from NSMC (Nigel Atkinson and Liam Gumley).

*Current status: Test data is now included with each release. No source code yet. Some calibration LUT updates but not very often. Still need documentation on input data formats and frequencies/polarization etc., preferably before launch of new satellites.*

4. Q: What would the DB community like to see regarding schedule for updated software packages?

A: No definitive answer was decided.

*Current status: No further action.*

5. Q: What would the DB community like to have for new products not currently supported by packages including AAPP, IMAPP, CSPP, etc.

A: No definitive answer was decided.

*Current status: No further action.*
6. Issue: AAPP Level 1B is typically stored in binary format. It would be useful to also provide an option for a format such as HDF5 or netCDF4.

Action: Create an implementation plan for self-describing data formats in AAPP (Nigel Atkinson).

Current status: AAPP 7.8 (Dec 2014) included software tools to convert all the AAPP L1C and L1D formats, and AVHRR L1B, to HDF5.

7. Q: Will the same software, LUTs, ancillary data, file formats be used for JPSS-1 sensors as are used today for SNPP sensors?

A: Mitch Goldberg says that there will be common software for VIIRS, CrIS, and ATMS available to the DB community.

Action: Verify that there will be common software, file formats, ancillary data etc. (to the extent possible) for SNPP and JPSS-1 (Mitch Goldberg).

Current status: The current JPSS software development for Block 2.0 has the same software, data formats, and LUT formats for SNPP and JPSS-1.
8. Issue: IASI-NG will launch in 2021. What is the plan for providing DB software to create L1B products from IASI-NG?

Action: Request EUMETSAT to ensure that DB software for IASI-NG L1B is available in a timely fashion, define what platforms will be supported, define what formats will be created etc. (Dieter Klaes).

Current status: At the CSPP/IMAPP Users Group Meeting in Darmstadt (April 2015), EUMETSAT stated that DB software support for Metop-SG is in the planning stage.

9. Issue: GCOM-W1 has a direct broadcast capability. It would be helpful for the DB community to (a) have continuous access to GCOM-W1 AMSR2 data via DB to provide continuation of AMSR-E capability, and (b) have access to software for processing the AMSR2 DB data.

Action: Promote this item to the PSWG (Done).

Current status: GCOM-W1 direct broadcast is turned on over certain regions (including CONUS). AMSR2 processing software was obtained by NOAA from JAXA and tested successfully. Software has not been publicly released.

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10. Issue: The group noted the new development of a CSPP GEO capability for GOES-R. The group strongly endorses this effort and encourages NOAA to make it available to the DB community in a timely fashion.

**Current status:** *CSPP GEO is going strong; see posters at ITSC-20 in session 3.*

11. Issue: Meteorological satellite agencies should be encouraged to provide routine global unencrypted DB capability and accompanying processing software for both existing and new systems and sensors.

Action: Promote this item to the PSWG (Done).

**Current status:** *No further action.*

12. Issue: The group looks forward to the expected launch of Meteor-M N2 and strongly encourages the availability of both DB data and accompanying sufficient documentation and software to allow real-time processing of imager and sounder data.

Action: Promote this item to the PSWG (Done).

**Current status:** *Meteor-M N2 is in orbit. Initial report on product evaluation was provided at ITSC-20 by Roshydromet. We still need documentation on transmission and data formats, and software to decode and process data.*