

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

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ITSC-19 Attendees (20)

Jerome Lafeuille, Liam Gumley, Nathalie Selbach, Nigel Atkinson, Anna Booton, Kathy Strabala, Graeme Martin, Rebecca Cintineo, Pascale Roquet, Katerina Melnik, Geoff Cureton, Ashim Kumar Mitra, Scott Mindock, Su-Hyun Jung, Jeong-Sik Kim, Jae-Dong Jang, Dieter Klaes, Kelvin Brentzel, Akira Okagaki, Mitch Goldberg

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.

Topics from ITSC-19

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.

Topics from ITSC-19

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.

Topics from ITSC-19

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.

Topics from ITSC-19

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.