Review of ITSC-20 actions/recommendations

Action PSWG-1

Nigel Atkinson and Nathalie Selbach to update the list of software packages on the PSWG web page by May 2018.

Action PSWG-2

KMA and SSEC to come up with a plan to make the GK-2A software available to DB users.

Recommendation PSWG-1 to EUMETSAT

EUMETSAT Data Policy be clarified in order to allow distribution of real-time IASI L1 data.

Recommendation PSWG-2 to CSPP team and other DB users

Work with the NPROVS team to allow evaluations of DB-sourced real-time products.

Recommendation PSWG-3 to DB data users

Any DB data users interested in the provision of software to generate their own wind products should contact the CSPP team to register their interest.

Review of ITSC-20 actions/recommendations (2)

Action PSWG-3

NCEP to clarify requirements on VIIRS cloud products within the CrIS FOV, and to discuss with the AAPP and CSPP teams the possible implementation in DBNet.

Recommendation PSWG-4 to Agencies

In order to allow GEO imager low latency applications, agencies should consider providing GEO rebroadcast geolocation data and other metadata in a format suitable for use during the acqusition of the scan sequence.

Topics suggested by ITSC co-chairs

New and future data.

Recommendation PSWG-5 to CMA
> Provide the Space to Ground Interface document for FY-3D as soon as possible, to allow station manufacturers to prepare their systems in advance of the release of software and data products.

Pre-launch preparations.

Recommendation PSWG-6 to agencies
> Pre-launch test datasets should be provided, well before launch, in order to allow software development teams (e.g., AAPP, OPS-LRS, CSPP) to test Direct Broadcast processing software before satellite launch.

Extensions to DBNet.

Recommendation PSWG-7 to stations participating in DBNet
> Consider contributing FY-3 sounder data to the DBNet system. For FY-3C this means MWHS-2 and IRAS; for FY-3D, it will be MWHS-2, MWTS-2 and HIRAS.

Recommendation PSWG-8 to NOAA and the CSPP team
> Support the creation of VIIRS products for nowcasting, similar to the existing MODIS products.

Recommendation PSWG-9 to NOAA
> Where possible, provide historical LUTs that are compatible with the latest version of the CSPP SDR processing software.

Recommendation PSWG-10 to NOAA
> Consider improving the CLASS interface to allow scripted retrieval of historic data.

Topics suggested by ITSC co-chairs (2)

User notification.

Recommendation PSWG-11 to CMA
Consider implementing a subscription-based anomaly/event notification service, similar to that provided by NOAA and EUMETSAT.

Use of hyperspectral data. Updates for NOAA-20 are also being worked on. It was noted that for NOAA-20 *all* CrIS FOVs will be available on direct broadcast. For S-NPP, only 7 out of the 9 are available, though this is being re-considered. Also VIIRS M7 may be reinstated.

Validation.

Recommendation PSWG-12 to data users
Users should note that L2 profile datasets for validation are available from the NPROVS team, and are encouraged to use them (contact Tony Reale or Lihang Zhou).

Visualisation. Several initiatives were noted.

RFI.

Recommendation PSWG-13 to DB station operators
Report instances of RFI (including reception problems) to Richard Kelly. If you are unsure whether specific problems are due to RFI, SSEC is available to help by analysing data samples.

Issues for software developers

Recommendation PSWG-14 to software providers
   Release source code for both L1 and L2 packages, in order to ensure maximum take-up of the software.

Recommendation PSWG-15 to software providers
   Provide advance information on plans for implementing new operating system versions and new hardware requirements.

CGMS High Level Priority Plan

1.4.1: Provide for dissemination of satellite derived data and products in one of the four established formats (HRIT, BUFR/GRIB, NetCDF 4 and HDF 5).

Discussion of BUFR, GRIB, NetCDF4, etc.

1.4.2: Develop efficient standardized data handling for high-resolution imaging and hyperspectral instruments, employing novel methods like dissemination of hyperspectral infrared data based on Principal Component Analysis.

Action PSWG-4
Nigel Atkinson to look at the CrIS PC product and compare the implementation with that used for IASI.

1.4.3: Facilitate the transition to new direct broadcast systems

Recommendation PSWG-16 to EUMETSAT
Provide the Metop-SG space to ground interface document, when it is available.

Recommendation PSWG-17 to NOAA
NOAA to provide information to the GRB community on downlink and software requirements for GOES-S (due for launch March 2018). Support for CSPP-GEO should be continued for GOES-S.

CGMS High Level Priority Plan (2)

3.3.3: Conduct an intercomparison study between the different methods to derive level 2 data from infrared hyperspectral sounders, recognising that there are several software packages available that utilize AIRS/IASI/CrIS data.

Recommendation PSWG-18 to researchers involved in L2 studies
Continue to publish the results of L2 comparisons, particularly those that involve NPROVS, and report to future ITSC meetings.

4.2.1: Continue to foster optimum use of satellite data for weather forecasting, climate applications, and environmental assessments including hazardous events such as volcanic ash and flooding.

The CSPP team continue to hold several workshops per year, in different parts of the world, that cover these topics. The PSWG supports these initiatives.