

ITSC-18 NWP Working Group Action Items Review

Working group members: Niels Bormann (co-chair, ECMWF), Andrew Collard (co-chair, NCEP), José Aravequia (CPTEC), Bjarne Amstrup (DMI), Fabrizio Baordo (ECMWF), William Campbell (NRL), Luis De Gonçalves (CPTEC), Enza Di Tomaso (ECMWF), Nadia Fourrié (Météo-France), Stéphanie Guedj (Météo France), Wei Han (CMA), Min-Jeong Kim (NCEP), Yoonjae Kim (KMA), Thomas King (NESDIS), Christina Köpken-Watts (DWD), Dirceu Herdies (CPTEC), Jung-Rim Lee (KMA), Jun Li (UW Madison), Magnus Lindskog (SMHI), Zhiquan Liu (NCAR), Cristina Lupu (ECMWF), Pauline Martinet (Météo France), Akira Okagaki (JMA), Kozo Okamoto (JMA & ECMWF), Ed Pavelin (Met Office), Roger Randrianmampianina (OMSZ & met.no), Indira Rani (NCMRWF), Harald Schyberg (Norw.Met.Inst.), Bruna Silveira (CPTEC), Yi Song (NESDIS), Robert Tubbs (Met Office), Gilles Verner (EC), Anaïs Vincensini (Météo France)

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13 Action Items

17 Recommendations

DA/NWP-1 Polar Orbiting Constellation

- ITSC Co-chairs: Bring the following recommendations to the attention of CGMS:
- The constellation of at least three orbits (early morning, morning, and afternoon), each with full sounding capabilities (IR and MW), should be maintained. The overpass times of operational satellites with sounding capability (IR and MW) should be coordinated between agencies to maximize coverage (including, e.g., China, India).
- GCOM-W data should be made available to the international NWP user community in real time and in BUFR.
- Consider, as part of the cost of satellite programs, providing computational and personnel resources *targeted at operational NWP centres* to optimise the public's return on investment from these expensive measurement systems.

Done – via report to CGMS

DA/NWP-2 Remapping ATMS

- NWP Centres: Share results regarding remapping ATMS data with the NWP community via the NWP WG list.
 - ECMWF and Met Office results were sent to the email list on 3 December 2012

Ongoing

DA/NWP-3 Effect of long-term trend on reconstructed radiances.

- Tom King (NESDIS): Consider the investigation of time series of AIRS reconstruction scores to determine effects from long term trends.

Ongoing

DA/NWP-4 Information on PC Compression

- Andrew Collard: To collect pertinent information relevant to the use of PC compression on a web page under the NWP WG website.

Done, but can be expanded

DA/NWP-5 Sharing of satellite DA information

- NWP Centres: Continue to provide information on instrument channels assimilated and their observation error for inclusion in the NWP Working Group Pages.
 - Contributions received from:
 - Sweden, Korea, Australia, France, UK, Germany, Italy, ECMWF, USA (NCEP), Japan.
 - Remember to include new sounders: e.g., ATMS, CrIS, MetOp-B

Done, but ongoing

DA/NWP-5 Sharing of satellite DA information contd.

- Some centres provide raw input files containing more detailed information on satellite usage, e.g., 2012_NCEP_Satellite_Useage.txt excerpted below:

```
!sensor/instr/sat  chan iuse  error  ermax  var_b  var_pg
airs281SUBSET_aqua  6   -1  1.200  3.500  10.00  0.000
airs281SUBSET_aqua  7    1  1.500  3.500  10.00  0.000
airs281SUBSET_aqua  10  -1  1.400  3.500  10.00  0.000
airs281SUBSET_aqua  11  -1  1.400  3.500  10.00  0.000
airs281SUBSET_aqua  15   1  1.400  3.500  10.00  0.000
airs281SUBSET_aqua  16  -1  1.400  3.500  10.00  0.000
airs281SUBSET_aqua  17  -1  1.400  3.500  10.00  0.000
```


DA/NWP-6 NWP WG

Regional DA Pages

- NWP Centres: Send additions to the content on the NWP Working Group regional data assimilation page to Roger Randriamampianina (roger@met.hu)

Ongoing

DA/NWP-7/8 NWP SAF Monitoring Website

- Bob Tubbs (Met Office): E-mail the NWP Working Group with the NWP SAF monitoring website and to request further information on its use from NWP Working Group members.

Done

- Bob Tubbs (Met Office): Check the links of the NWP Working Group monitoring website are consistent with those on the NWP SAF monitoring page, before the NWP working group monitoring website gets replaced with a link to the NWP SAF monitoring page

Done

DA/NWP-9 Radio Frequency Interference (RFI)

- NWP Working Group Members: If you have evidence of RFI, please send these to Niels Bormann (niels.bormann@ecmwf.int) for inclusion on the NWP Working Group RFI web page
 - A link to a very nice website of Remote Sensing Systems has been kindly provided by Peter Schluessel and included on the RFI web-page.

Ongoing

DA/NWP-10 SSMI/S Quality Control and Bias Correction Experiences

- NWP WG Co-chairs: Set up an SSMI/S web page with information on quality control and bias correction experiences
- NWP WG members: Contribute to this page

Started

DA/NWP-11/12 Bias Correction Inter-comparison Exercise

- Roger Randriamampianina: E-mail the NWP Working Group with a proposal for a bias-correction intercomparison exercise. This will cover both regional and global data assimilation models.

Done

- NWP Centres: To consider Roger's proposals and to provide feedback and data as appropriate.

**To be discussed
in WG**

DA/NWP-13 Updated Channel Characteristics

- ITSC Members: If you have estimates of revised channel characteristics resulting from post-launch diagnostics, please e-mail these to Paul van Delst (paul.vandelst@noaa.gov).

Ongoing

Possible Topics for Consideration in the Working Group

- The global observing system and gap mitigation
- Efficient representation of hyper-spectral radiances (esp. in anticipation of geostationary hyperspectral sounders).
Dissemination and assimilation.
- Bias correction inter-comparison
- New data and pre-launch preparations
- User notification and monitoring
- Radiative transfer requirements
- Cloudy radiance data assimilation
- Instrument characterisation, cross-characterisation and validation.
- Use and characterisation of correlated observation errors.