



IWW10 Charge to working groups

WG1: Methods - chaired by Régis Borde and Steve Wanzong

WG2: Data assimilation - chaired by Lars-Peter Riishojgaard and Iliana Genkova



Charge to working groups

IWWG feedback (WG1 and 2)

1.1 Thoughts on IWWG web site

a. Format and content

b. Suggestions for improvements

- AMV derivation information from all centres
- NWP tab
- Training tab
- MISR and hyperspectral products pages
- Earlier IWW proceedings online
- Review of objectives
- More resources for collaborative projects e.g. information on how to take part in inter-comparison, links to results etc.
- Others?

1.2 Feedback on IWW10 meeting format, more plenary discussions good or bad?



WG2:

- *Website considered useful, few specific recommendations for improvements*
 - *Needs to be widely visible if purpose is to advertise IWWG and its work; links from JCSDA and other organizations*
- *Participants in favor of new Workshop format with additional plenary discussions during meeting*
 - *Leave more time for questions/discussion in connection with talks*
 - *Should we charge someone with leading off the discussion in a more formal way?*



Charge to working groups

AMV assimilation (WG2)

3.1 Treating winds as layers (CGMS-37, R37.20)

- a. Who is investigating?
- b. How best to set the layer width?
- c. Should the layer be centred or offset from assigned pressure?

3.2 Other NWP improvements (CGMS-37, R37.20)

- a. Individual observation errors (e.g. Met Office IWW9)
- b. Allowing for correlated error in assimilation (ECMWF talk)
- c. Other ideas?

3.3 AMV impact in NWP (CGMS-37, R37.20)

- a. Share results of adjoint and/or data denial studies
- b. Further coordinated efforts? Focus on next WMO Impact Workshop 2012 (held every 4 yr)
- c. What verification metrics to use?

3.4 More centres contributing to NWP SAF AMV usage pages

3.5 Mesoscale AMVs (CGMS-37 R37.20, discussed in PD3)



WG2:

- **3.1; Met Office, ECMWF (and/or IG), CIMSS will continue investigation of layer winds**
- 3.2
 - Met Office (and perhaps ECMWF) will continue investigating individual obs errors; state-dependent temperature errors could be used to generate state-dependent height assignment errors
 - ECMWF will work on correlated obs errors



WG2:

- **3.3 Broad support for coordinated impact experiments targeted for completion for 11th IWW and 6th WMO GOS Impact Workshop, both during first half of 2012**
 - Three-month data denial experiments desired (but we will take what we can get)
 - Common definitions of observation classes, regions, diagnostic quantities, etc.
 - Adjoint sensitivity where implemented
 - Resolution?
 - ECMWF, Met Office, JCSDA/NCEP, DWD, JMA, Meteo-France (and others?) will coordinate on period and other details via email during the coming weeks



WG2:

- 3.4 Met Office open to adding usage information from non SAF members
 - JCSDA, JMA, EC will provide their information to NWP SAF (MF)



Charge to working groups

NWP SAF AMV monitoring feedback (WG1 and 2)

5.1 Feedback on 4th analysis

- a. Feedback on recent changes (buttons, investigations section)
- b. Thoughts on development options:
 - Add Hovmoeller plots to monthly monitoring
 - Participation from other NWP centres (Low priority?)
 - Add real-time monitoring
 - Add summaries of AMV events e.g. derivation updates, bad days in monitoring
 - Page providing background to Met Office AMV system capabilities

5.2 Ideas for future investigations

- Best-fit pressure statistics
- Collaborative follow-up of specific features
- Any requests?



WG2:

- 5.1 Report considered useful
 - No specific recommendations for enhancement
- 5.2 Discussion about standing waves (tracking of features that do not move with mean flow); could be subject of future investigations



Charge to working groups

NWP SAF scatterometer monitoring feedback (WG1 and 2)

6.1 Thoughts on ongoing developments – new map and scatter plots (similar to AMVs), more plots for ERS-2 and WindSat, more regional monitoring

6.2 Future design choices

- a. Are there other types of plots you would like to see?
- b. Are time-series of mean distance to cone useful given differences in normalisation?
- c. Should we plot used data, all data, or both?
- d. Add more plots from other NWP centres?



WG2:

- 6.1 (Use NWP SAF to share information about data usage)
 - NRL has information on their website; will be made public (when?)
 - Information about Windsat usage requested
 - Discussion about polarization vs. horizontal resolution trade-off; input to post-EPS decision; no specific recommendation from WG2



Charge to working groups

Reprocessing (WG1 and 2)

- 7.1 Check status of plans to reprocess wind data. Encourage wide participation by producers.
- 7.2 Check what reanalyses are being run and when
- 7.3 Seek IWW10 support for scatterometer reprocessing (ERS-1/2, QuikScat and ASCAT).



WG2

- 7.1 and 7.2
 - ECMWF and EUMETSAT requesting EC FP7 funding for reprocessing observations for next major reanalysis
 - KNMI may reprocess scatterometer winds; currently no funding available
 - No current reprocessing plans in the US
- 7.3 Should IWWG formally endorse the idea of reprocessing all scatterometer observations?



Charge to working groups

Surface winds (WG1 and 2)

8.1 Get update on future sources of surface wind data

- Metop
- Oceansat-2
- Impact of NPOESS cancellation on Windsat-type follow-on
- Seek IWW10 support to assist negotiations with SOA/CNSA and Roshydromet/Roscosmos for HY-2A, Meteor-M3
- Others?

8.2 Discuss priorities for post-EPS scatterometer – trade-offs may exist in obtaining more extreme winds (> 30 m/s by adding HH polarisation) or higher resolution (more power in VV polarisation).

8.3 Support and suggestions for inter-calibration

8.4 Experiences with SAF code, suggestions for improvements?



WG2:

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- **8.1 WG2 suggests that the IWWG requests access to all space-based surface wind measurements in near real time**



Charge to working groups

MISR / DWL / hyperspectral (WG1 and 2)

9. MISR

- a. What are the limitations/potential of MISR winds?
- b. What are the key issues to move towards operational use?
- c. Where should we focus future effort?
- d. Should we support constellation of MISR-like instruments?

10. DWL

- a. What are the latest plans for post ADM-Aeolus DWL missions?
- b. Plans to use DWL operationally and for validation....

11. Hyperspectral

- a. Seek IWW10 support to continue effort to track single level derived moisture fields
- b. Consider advantages/disadvantage and ways to evaluate following options:
 - track single level derived moisture fields
 - track features in radiance space, consider improved CSWV operators
 - assimilate clear sky radiances directly



WG2:

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- 9 (MISR)
 - Impact of MISR winds needs to be revisited in view of results shown at 10th IWWG and progress in LOS assimilation; JCSDA plans to do experiments
 - New 70 km product targeted
 - Little hope of getting MISR in near-time; experimental results will be useful for future mission
 - Should IWWG endorse future “MISR-like” missions for winds purposes?



WG2:

- 10. ADM currently scheduled to launch late 2011
- 11. Should IWWG endorse a US hyperspectral GEO sounder for winds purposes?