

Working Group on Data Assimilation and Numerical Weather Prediction

Update since ITSC-23

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Aims and Scope

- The aim of the Working Group on Data Assimilation and Numerical Weather Prediction is to increase the impact of satellite data in NWP.
- The group considers sounding instruments currently in orbit that build on the "TOVS heritage", such as ATOVS, SSMI/S, ATMS, FY3-MWS, AIRS, IASI and CrIS. Also MW Imagers such as GMI, AMSR2, MWRI, etc
- The group achieves its goals by exchanging ideas and information on new techniques and progress and by providing a means of communication between NWP centres, satellite agencies and other groups engaged in work with satellite data.
- Via an active email list (google group)

Actions Since Last Meeting

The majority of actions (18 in total) are closed. Thanks to those in the WG who supplied information etc. We will focus on those that are ongoing

- **Action DA/NWP 22-13 on WG Members** : Share impact assessment results for FY-3E with the group and CMA as soon as possible after data becomes available, in particular to provide evidence for support of the early morning orbit. *We will discuss this at the WG meeting.*
- **ACTION DA/NWP 23-9 on WG members** Forward any results of studies for the use of Hyper IR MW-only or MW+SW channels to the working group . *WG supported decision to retain LW on SNPP CRIS, but it is very instructive to see if progress has been made at ITSC24 on use of SW*

Actions Since Last Meeting continued

- **ACTION DA/NWP 23-17** on WG members to review Space Agency contacts page on the website.
Welcome updates
- **ACTION DA/NWP 23-18 on WG members:** Provide impact recent LAM study references to WG co-chairs for inclusion on the website *Welcome updates. Rollover to next meeting*

Activities since Last Meeting

- *Roger Randriamampianina* organised and led a presentation/discussion on methods to perform bias correction in LAMs. Mixture of approaches. Comparison table between centres in the minutes
- A series of online discussions were held to address questions posed by NOAA SAT group on future plans for sounders.
- Three science meetings:
 - How do we handle satellite observations as model scales reduce?
 - How to progress obs error covariance estimation
 - How do we handle increasing volumes of satellite observations?

Thanks to the moderators in the meetings and those that took minutes – full minutes available at https://groups.ssec.wisc.edu/groups/itwg/nwp/science_meetings

We welcome ideas for future meetings.

- And finally .. The agenda for this weeks working group meeting can be found here <https://groups.ssec.wisc.edu/groups/itwg/nwp/itsc24-meeting-agenda>