

# REPORT FROM THE WORKING GROUP ON VERIFICATION AND QUALITY INDICATORS (WG III)

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The working group on Verification and Quality Indices discussed the three following major areas:

Recommendations of the Working Group III from the 4<sup>th</sup> International Winds Workshop

- Statistics against other data sources
- Combined use, research and development of QI/RFF

CGMS actions and recommendations

- Action 27.21 NWP SAF proposal: Monitoring statistics on the Internet
- Discuss convergence toward one set of quality control flags
- Expanded use of geometric approaches (e.g. stereo) for height validation purposes

Issues raised at the 5<sup>th</sup> International Winds Workshop

- Model-to-Model statistics
- Statistics from other monitoring centres
- QI/RFF as observation errors
- Table of error characteristics assigned to AMVs at different NWP centres
- CGMS statistics

After a lively and constructive discussion on the above-mentioned topics the Working Group (III) decided to divide the recommendations in to two groups namely Monitoring/Verification and Quality Indices. With respect to Monitoring and Verification the WG III agreed on the following recommendations:

- 1) The table of observation errors currently accessible via the CGMS home page should be maintained. Furthermore it should be completed with the errors assigned to other types of upper air observation and more NWP centres should be included.
- 2) The monitoring results maintained by the NWP SAF were found valuable and should be completed with statistics for all operational satellite tracked winds.
- 3) The NWP SAF should propose a way to present information on background errors to the WEB for the next Workshop.
- 4) Other NWP centres, not currently contributing to the NWPSAF monitoring, were encouraged to publish their own monitoring statistics and provide a link to the NWPSAF monitoring page.
- 5) It was recommended to provide a link from the WMO and CGMS monitoring pages to the NWP SAF WEB page.
- 6) Recognising the value of the WMO maintained CGMS statistics the WGII recommends WMO to facilitate an easy input of the statistical tables on the WEB-site.
- 7) EUMETSAT to provide a paper to CGMS on modified contents of the CGMS statistics including e.g. stratification of the data in speed classes.

With respect to Quality Indices the WGIII concluded the following:

- 8) All data providers should strive to implement quality control procedures equivalent to the combined UW-CIMSS RFF and EUMETSAT QI scheme.
- 9) EUMETSAT and UW-CIMSS should make their QI-schemes readily available to all operational data providers as stand alone s/w packages.
- 10) NWP centres should work on methods to utilise the information given by the RFF and QI schemes and therefore the move to the use of BUFR data.
- 11) Data providers to provide information on height assignment methods and their accuracy and to develop methods to provide statistics on height assignment accuracy, e.g.:
  - inter-comparisons on methods
  - alternative methods
  - alternative observations (e.g. R/S, Lidar)
- 12) Continue the development of new and improved Quality Control schemes that do not make assumptions on atmospheric balance, e.g. current schemes are tuned towards large scale synoptic flow and are therefore not optimal for mesoscale features or extreme weather conditions (e.g. hurricanes).

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