WIGOS Data Quality Monitoring System (WDQMS)

How to provide quality performance reports





WMO OMM

World Meteorological Organization
Organisation météorologique mondiale

Quality performance reports

- RWCs should provide monthly quality performance reports to the WDQMS NFPs of the corresponding RA or subregion by email and should also make them available online.
- Future WDQMS monthly performance reports will supersede the current lead centre reports.
- Monthly reports should be generated automatically by the WDQMS web tool (providing quality performance summaries country and station) and the incident management ticket system tool (providing summaries about the incident management tickets raised, closed, in progress).
- Semester performance reports could include more detailed results than monthly performance reports.



Content of the quality performance reports

- The reports should describe the monthly station performances compared to WDQMS performance targets and should contain:
 - Total number of raised incident tickets within the evaluated period (for example, per month) and per country.
 - Total number of observations per station received in the month compared to the total number expected, according to the schedule on international exchange as declared in OSCAR/Surface.
 - Furthermore, the overall network performance for data availability should be provided on a monthly basis.
 - Monthly average timeliness (delay between nominal observation time and reception time at a WIGOS Monitoring Centre's database) per station as well as the number of reports that have been received with a significant delay according to the targets.
 - Furthermore, the overall network performance for timeliness will be provided on a monthly basis.

Content of the WDQMS quality performance reports (cont.)

- Quality performance reports should further contain performance figures on accuracy:
 - Monthly arithmetic averages of daily pressure, temperature, wind and relative humidity, root mean squares of differences from O-B NWP comparison results for each station
 - Monthly percentages of gross errors compared to the total number of all single observations for each variable and station.
 - Furthermore, the overall network performance for data accuracy should be provided on a monthly basis.
- Sorted station performances by listing station, with suspect records first, followed by stations with non-suspect records, grouped by country and network.
- The content of the quality performance reports might evolve after feedback from Members using the reports.

MMO OMV

Thank you

Tanja.Kleinert@dwd.de https://community.wmo.int/activity-areas/wigos



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale