WIGOS Workshop on Data Quality Monitoring and Incident Management

Aims and Expected Outcomes

As part of the ongoing revision of the performance monitoring for the Global Observing System and the WIGOS Quality Management activities, ECMWF and WMO propose to hold a joint Workshop on Observational Data Quality Monitoring over 10-12 December 2014 in Geneva. The workshop will focus on the modernisation of the NWP-based monitoring of data availability, observational data quality and on the development of a framework and procedures for the identification, documentation and rectification of various issues revealed by this type of monitoring.

This is considered to be a critical activity under the WIGOS Implementation Plan (Activity 5, Quality Management) and it also has relevance to the terms of reference and work plans for several WIGOS and CBS Expert and Task Teams, including: ICT-IOS/ET-SBO, ICT-WIGOS and its Task Team on WIGOS Quality Management (TT-WQM), IPET-WIFI and its Sub-Group on Quality Management (SG-QM) and ICT-DPFS.

While the scope of this workshop will be limited to the NWP-based monitoring of the conventional (non-satellite) components of the GOS in relation to the production of the deliverables, this work and the resulting outcomes may serve as a model for other components of WIGOS and the GOS. Therefore, the workshop should more widely revise and consider current best practice in the area of quality monitoring and incident management for observing systems.

Aims:

1. Revise and update the requirements of NWP centers for monitoring and reporting of data quality of surface-based observing systems of the GOS.

For land, surface-based systems of the GOS:

2. Revise and update the structure and the procedural and regulatory framework for monitoring and reporting of data availability and quality.
3. Revise and update the structure and procedural framework for incident identification, documentation and rectification.
4. Identification of a lead center (or centres) for data availability, quality monitoring and incident management.

Topics:

1. Modernization of the observational data quality monitoring system.
2. Real/near-real time reporting structures and mechanisms.
3. Quality evaluation leading to quality improvement.
4. Fault management with feedback mechanisms.

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Outcomes

1. Improved and modernised monitoring and incident management system for GOS.
2. Development of a data availability and quality monitoring & management template that might subsequently be applied to other WIGOS observing system components.
3. Improved quality and availability of data derived from the GOS.
4. Improved and updated regulatory framework relating to data quality management.

Deliverables:

1. Proposed WIGOS procedures and regulations for NWP-based monitoring of data availability and data quality for the surface-based observing systems of the GOS, to be included in the relevant WMO regulatory material .

For the land, surface-based component of the GOS:

2. Proposed updated structure and procedures for monitoring by designated Centers and WMO Members.
3. Proposed structure and procedures for incident management (identification, documentation and rectification) by designated centers and Members, to be included in the relevant WMO regulatory material.
4. Road map for the implementation of the proposed framework for data quality monitoring and incident management.

Participants:

20 – 25 experts; representatives of:

1. Existing global and regional observations monitoring centres
2. ICG-WIGOS, TT-WQM, ICT-DPFS, IPET-WIFI/SG-QM, ET-SBO, GCOS
3. observing systems program managers
4. Lead Centers (land surface observations)
5. Representatives of other TCs: CCL, CAeM, JCOMM (SOT & DBCP)
6. Representative of Secretariat: D/OBS, C/WPO, C/OSD, C/DRMM, SO/ARO, D/WRS
7. RA Obs representatives