

2013 Observations Planning Workshop

ECMWF, Reading, 3rd – 4th July 2013

Observations Programme Management Team

Agenda Item 4: What has to be monitored?

- Which data characteristics should be monitored?
EUCOS currently monitors:
 - Availability
 - Quantity
 - Completeness of record
 - Vertical extent,
 - Timeliness
 - Accuracy (in terms of comparison against model)
 - Compliance with observing standards (e.g. reduced slp or slp as read)
 - Internal consistency
 - Validity of location
 - Correctness of data formats
 - Keeping record of changes (sensors, location, formatting,...)
 - Transparency on data processing before message generation

Agenda Item 5: What are the appropriate metrics for monitoring the aforementioned characteristics?

- Availability
 - What are the appropriate periods for reference?
(e.g. Expecting 24 hourly SYNOP data per 24 hours or expecting X SYNOP messages per week, ...)
 - When to notify obs provider of missing data?
 - When X% of data are missing for Y hours!?

Agenda Item 5: What are the appropriate metrics for monitoring the aforementioned characteristics?

Accuracy/ Uncertainty

- WMO OSCAR database states certain ,uncertainty‘ requirements
 - How to measure uncertainty ,of the day‘ of a particular obs site?
 - RMSE against model (Obs – Mod) as best estimate of ,uncertainty‘?

Agenda Item 6: Any special items concerning special meteorological variables?

- What about monitoring accuracy of radar derived precipitation data, satellite data?
 - Bernard Urban
 - Possibilities for monitoring of backscatter profiles from ceilometers and lidars.

Metadata

Specification of WIGOS data requirements

Single point for station/fault Information

- Upload area for everybody
- Central webpage providing links to relevant monitoring pages

Monitoring workshops

- Training

Setting of thresholds (tuning)

(when to notify obs providers about issues:

- Missing data
- Erroneous data

Storing back monitoring information into Obs databases?

- Archive of QM information in a separate database?

Governance

TOR
Documentation

Automisation of fault reporting

(alarm)

Which data characteristics should be monitored? Prioritisation

- Availability
- Timeliness
- Accuracy
- Compliance with observing Standards (e.g. validity of BUFR Messages)

Exchange of feedback files

International exchange (need for common format)
Aim: increase consistency

Access to data quality information/ Frequency of reporting

- Emergency email alerts
- Forum for Friday afternoon problems
- Real time only!?
- Monthly?
- Annually?

Reporting of overall system performance

(not only lists with suspicious data)

- Quantity monitoring
- Timeliness
- Accuracy/ Uncertainty

Lead Centres/ Monitoring Centres

- Minimum skill-set!?
- E.g. must have PGE capability!?
- Fitness of purpose tests?

Questions and comments?

Contact Details

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