4th Workshop on the Use of GIS/OGC Standards in Meteorology

Summmary, Conclusions & Recommendations

ECWMF, Reading, UK, 2013-03-06

General Summary
(shout if you disagree)

OGC Met Ocean DWG established for 4 years:

- Now 1st class, respected, community citizens in OGC
- Requirements acknowledged in many SWGs
- OGC altered processes & attitudes in response
- About 10 NHMS members:
  - Need a just few more, for critical mass
  - more (enthusiatic!) volunteers
- 4D+ view rather than 2D+Layers starting to prevail
- Commercial Off The Shelf versus Open Source?

Technical summary - WMS

- WMS1.3 Best Practice more or less finished
  - Stable content, editorial work left
  - Need implementation testing
  - To extend to Profile or Standard: only needs tests
  - Extend for climatological time
    - Ad hoc Temporal DWG started
  - Re-use in other standards
  - Some progress on SLD/SE

Technical summary - Modelling

- Conceptual modelling
  - Good basis on Observations & Measurements
  - Both abstract & implementation models
  - Appropriate Authority scopes & registers
  - Strongly typed versus Weakly typed Schemas understood
  - Very good progress (RC2) for Aviation Domain
  - Can start extending to other application domains
  - Relevant experts engaged and working!

Technical Summary - WCS

- WCS 2.0 MODWG Extension works started:
  - Application Profile, rather than Best Practice
    - Follow EO-WCS approach
    - Address: ensembles, time, ‘corridors’, tiles
  - Encoding formats
    - GRIB2 TBD
    - Data tiling TBD may be separate standard
  - 4D+ not 2D+Layers
  - Demanding Timescale planned
- WCS may be better than WFS or SWE for some MODWG use cases
  - Harmonization potential

Technical Summary - Inspire

- Download services: WFS, Atom agreed
  - WCS, SOS possible
  - FTP, OpenDAP, JSON/RDF possible
- View services: WMS, WMTS agreed
- Conceptual technical inconsistency with MetCE
- Need for hierarchical DAR metadata
- Varied scope of parameters, locations, times
- Environmental reporting and Inspire overlap
- In pipeline: maritime, noise, e-government, EULF, etc

Technical Summary - Other

- WMO Integrated Global Observing System happening (WIGOS)
  - Requirements for obs metadata being defined
  - Perhaps need for O&M/SWE workshop next year?
  - Crowd sourcing obs (WOW) altering landscape
- SWE good experiences out-of-the-box in MF
- CSW3.0 dropped ISO23950+SRU1.3
  - WMO or Met Ocean DWG to lead?

Recommendations - Inspire

- Download services: develop technical guidelines for: WCS.
  - SOS TG being developed elsewhere
  - other solutions...
- Explore DAR Metadata hierarchies/granularity
  - WMO expert Task Team
- View services: understand and clarify current activities over Layers, WMTS.
- Share Implementation experiences & plans:
  - Which parameters, locations, times?
  - Which users?
  - Clarify whether Alarms/Authoritative Voice in scope?
- JRC set up wiki, mailing list, issue tracker, link to MODWG
- JRC will investigate MetCE & Inspire logical model inconsistency

Recommendations -WCS

- Implement WCS MODWG Extension plan
- Get involved this year!
- High(est?) priority
- Make Temporal Ad Hoc wiki & mailing list open
- Ensure the MODWG WCS Extension meets Inspire requirements
- Ensure WCS GMLCOV and O&M framework are used consistently
  - Guidance document needed
- Advertise implementations on Coverages & MODWG wikis

Recommendations – Other 1

- WMS1.3 Implement BP and test at:
  - 2013-06 EGOWS
  - Advertise at 2013-09 FOSS4G (paper deadline 2013-04-21)
- CSW
  - Requirement for CSW to interoperate beyond geospatial communities
  - Document some use cases
  - Build expertise
  - Keep ISO23950+SRU1.3 alive in OGC
- Metadata
  - WMO expert Task Team will give guidance on Granularity

Recommendations – Other 2

- Temporal: gather information:
  - WKTCRS
  - CRS Name Type Specification
  - Imagery
  - NetCDF-CF modelling
- Use cases for WMS2.0 and support actively
- 5th Workshop
  - 2014!
  - Where?
    - DWD?
    - FMI or DMI?
    - NCAR
    - US NWS?