

Met Ocean SLD/SE Activities

Making WMO and ICAO Symbologies more widely available

Chris Little, EGOWS, Toulouse, 2011-06-08



This presentation covers the following areas

- Introduction & Background
- Met Ocean Domain Working Group
- Symbologies
- What next?
- Questions and answers



Introduction & Background

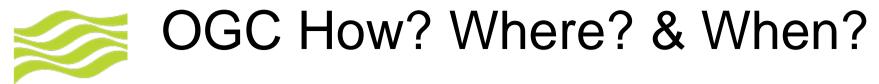


- Open Geospatial Consortium http://opengeospatial.org
- Non-profit making
- Standards setting http://opengeospatial.org/standards
- Global: European members> American, Far East increasing
- >400 members http://opengeospatial.org/ogc/members
 - Industry
 - Government bodies
 - Academia
 - Individuals



OGC What?

- **tOffice** OGC Engineering Reports, Discussion papers
 - OGC Best Practices
 - OGC Standards :
 - GML Geographical Mark-up Language
 - Web services for maps: WFS, WMS, WCS, etc
 - Observations & Measurements
 - 3D, Etc
 - Then ISO Standards:
 - 191xx
 - Etc
 - Then WMO can use them, willing or not (Inspire)



Met Office • TC - Technical Conference, 4 days every 3 months

- Toulouse Sept 2010 Météo-France
- Sydney Dec 2010
- Bonn Mar 2011 UN
- Taiwan June 2011

• SWG - Standards Working Groups, ~24,

- - Fast track to ISO, short lived, 'vertical'
- DWG Domain Working Groups, ~27
 - - Cross-cutting, longer lived, 'horizontal'
- IE Interoperability Experiments
 - 6 monthly cycle, strict IPR
- Management structure, OAB, open & closed



Where does OGC fit in the 'standards' world? (Why)

ISO/ CEN /

Nations

Domains: Object / Abstract Models, Content, Vocabulary Software Interfaces: Instantiate Domain and De jure into Infrastructure

OGC

IETF / W3C

Infrastructure: WSDL, UDDI, SOAP, XML

IP, ftp, TCP



T

De Facto

De Jure

Domain

Office



Met Ocean Domain Working Group



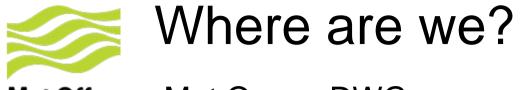
OGC Met Ocean DWG

Met Office

- 2007: ECMWF 11th Workshop on Meteorological Operational Systems
 - recommended:
- 2008: ECMWF-OGC Workshop on Use of GIS/OGC Standards in Meteorology
 - recommended:
 - Establish OGC Met Domain WG now Met-Ocean DWG
 - Establish WMO-OGC Memorandum of Understanding covers Hydrology
 - Develop WMS meteorological profile
 - Develop core models and registries
 - Interoperability test beds for met. data & visualization OGC web services



- Open Wiki, open mailing list, community established
- Options for WMS profile identified
- Conceptual modelling active
- Met Ocean DWG and Hydro DWG collaboration starting
- Météo-France participation in OGC IE Test bed
- Contributing to 2D vs 4D debate in OGC
- Realised importance of O&M, Sensor Web
- Clearer view of importance of other standards E.g. 3D
- Timescales: Doppler red-shift / shift to right



Met Office • Met Ocean DWG:

- Wiki open to all
- Mailing list open to all
- Other communities have adopted similar approach
- NMSs took part in OGC Interoperability Experiments
 - Heavyweight (Money, Contracts & IPR)
 - Prefer in-community informal approach (EGOWS!)
- Significant changes to OGC standards happening
 - 2 year timescale
- WMO should actively own its IPR & audit processes



- Held at Met Office, Exeter, November 2010
- 3 full working groups:
 - Conceptual Modelling Jeremy Tandy (17.5 people)
 - WMS & IE Marie-Françoise Voidrot (11.5 people)
 - Portrayal Chris Little (7.5 people)
- 3 smaller, shorter groups:
 - WCS Stephan Sieman (4.5 people)
 - Architecture & Strategy ?? (2.5 people)
 - Outreach & Education ?? (0)

• Little progress on raising awareness of O&M to community



SLD/SE & Portrayal Objectives

- Make Met Ocean Symbologies and Layer Styles readily available to industry and institutions (WMO & ICAO)
- Help WMO establish formal ultimate ownership of the styles in a modern digital way (registries, audit trail, etc)
- Contribute to the Portrayal and SLD/SE roadmap
- Do above by OGC TC Bonn, March 2011



Symbologies



- Samples on open MetOcean Wiki: SVG, PDF, GIF, PNG, etc
 - Grouped by topology (points, lines, areas)
 - More examples in the pipeline
- WMO & ICAO source documents linked from Wiki
- WMO Secretariat and Chair of relevant technical expert agreed to proposal
- To be Done:
 - SVG of ALL ~400 symbols, with fallback bitmaps or low-res
 - Rules in a Registry
 - Authentication Chain



- MetOcean DWG Home
 <u>http://external.opengis.org/twiki_public/bin/view/</u>
 <u>MetOceanDWG/WebHome</u>
- SLD/SE stuff <u>http://external.opengis.org/twiki_public/MetOce</u> <u>anDWG/FeatureAndCoveragePortrayal</u>
- Accumulated Samples
 <u>http://external.opengis.org/twiki_public/MetOce</u>
 <u>anDWG/WMOandICAOstyles</u>



What next?



Volunteers wanted!

- SVG definitive symbols (~400) on Wikimedia
 - With fall backs
 - Only comprehensive set is VERY low res, not SVG
- Registry paper for WMO action being prepared
 - Parameter lists
 - CRS/map projections
 - Schemas
 - Styles
 - Etc
- Clarify WMO IPR with Creative Commons



Questions & answers