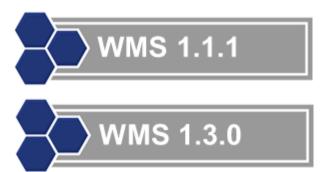
Towards a Web MetOcean Model Map Service (WM³S) profile of WMS



This is great ...

... but we are still confused

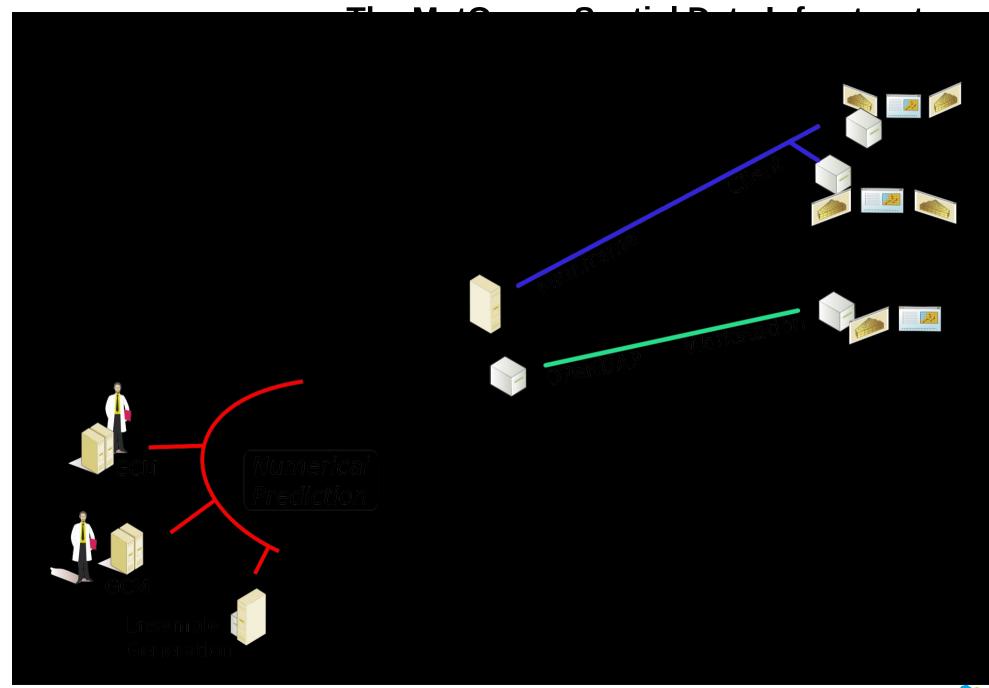
What a mess ...





WMS?







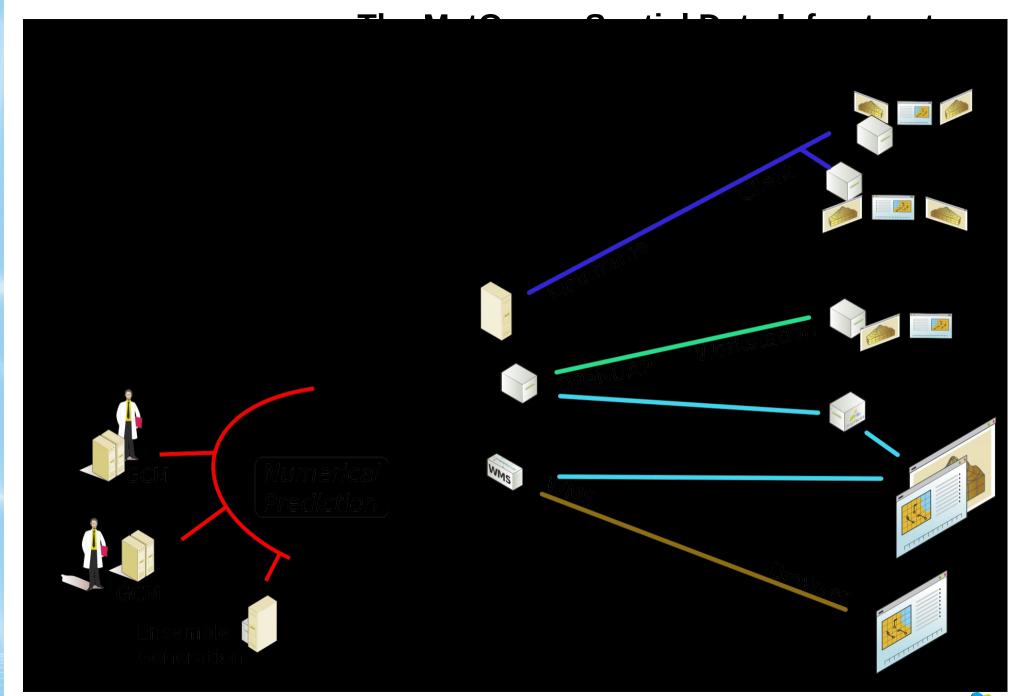
Third Workshop on the use of GIS/OGC standards in Meteorology 15-17 November 2010, UK Met Office, Exeter

Why WMS?

- Current system works
 - Production
 - Use
- use WCS?
- benefit from CSW?
- others?

- Web is cool
- INSPIRE
- Start simple







Third Workshop on the use of GIS/OGC standards in Meteorology 15-17 November 2010, UK Met Office, Exeter

WMS!



How WMS?

What maps to provide?

How to provide the maps?

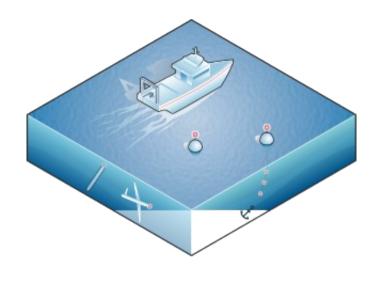


Observations

- **METAR**
- Station Reports
- Ship / Buoy sensors
- Balloon soundings
- Profiles
- Satellite
- Radar

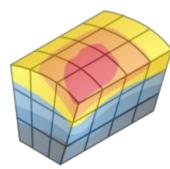


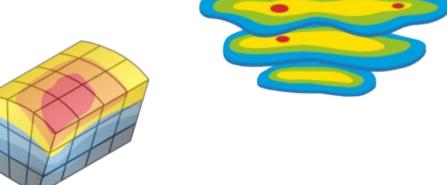






- **General Circulation Models**
- Ensemble

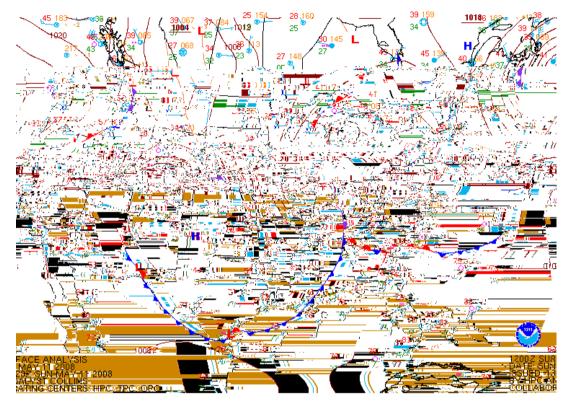






Observations

- METAR
- Station Reports
- Ship / Buoy sensors
- Balloon soundings
- Profiles
- Satellite
- Radar



Numerical Prediction

- General Circulation Models
- Ensemble



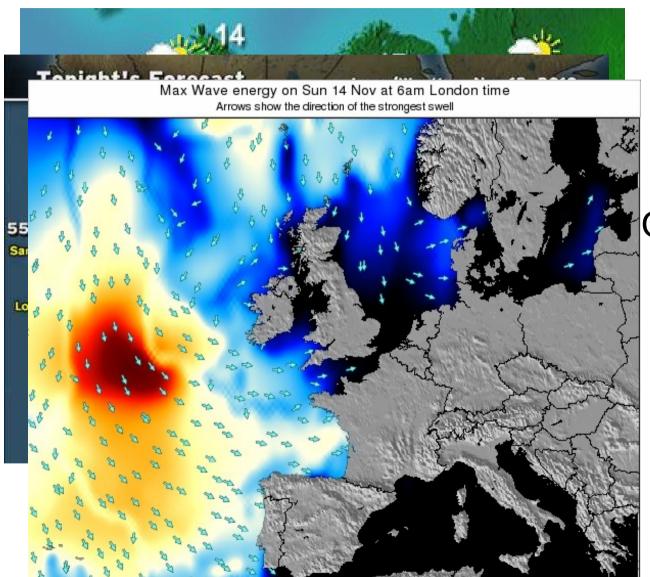
Producer View

- Observations
 - METAR
 - Station Reports
 - Ship / Buoy sensors
 - Balloon soundings
 - Profiles
 - Satellite
 - Radar
- Numerical Prediction
 - General Circulation Models
 - Ensemble

User View

- Past
- Present
- Near Future
- Longer Future
- General Public
- Domain Worker
- Meteorologist
 - Forecaster
 - Modeler





User View

General Public



User View

- Farminu: Day-degrees (D°)
- Disaster: Cumulative rainfall

•

Domain Worker

Use-Cases!



Producer View

- Observations
 - METAR
 - Station Reports
 - Ship / Buoy sensors
 - Balloon soundings
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User View

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Goal ► Accumulate 20 examples: need, map, source data.



How to Provide the Maps?

Design:

- WMS Endpoints
 - Number
 - Persistence
- WMS setup
 - Declaration
 - Content structure
 - Style support

Evaluation:

Client use

- Discovery
- Available layers
- Layer parameters

Semantics

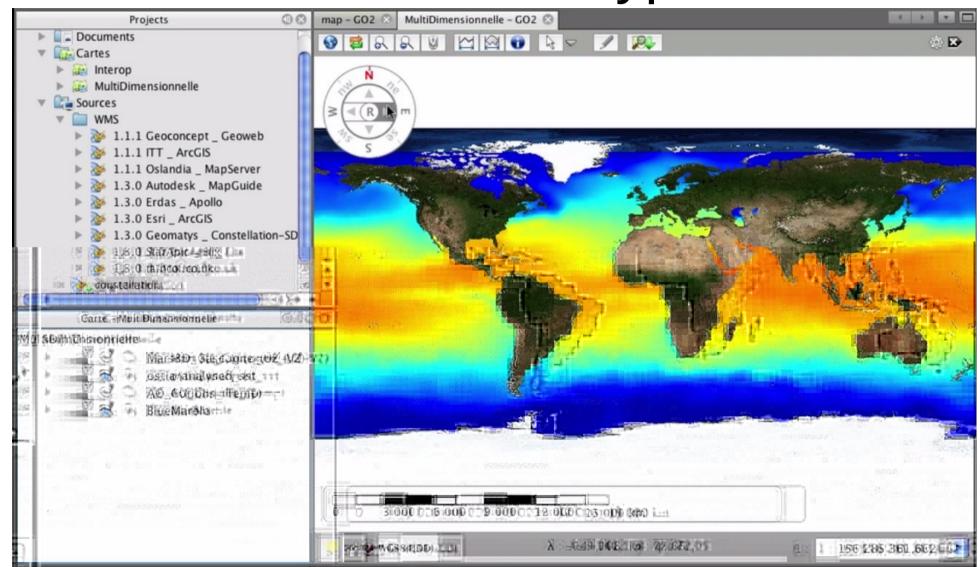
- Metadata
- Convention

Handling

Update cycle



WMS IE Prototype





WMS Endpoints

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WMS Capabilities



WMS Layer structure

• Flat



WMS Layer structure

• Flat



WMS Layer structure

- Flat
- Nested



WMS Layer structure

- Flat
- Nested



WMS Layer structure

- Flat
- Nested
- Dimensional

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</Dimensions>
    </Layer>
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How to Provide the Maps?

Design:

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 - Style support

Evaluation:

Client use

- Discovery
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- Layer parameters

Semantics

- Metadata
- Convention

Handling

Update cycle

Goal ► Work through each and evaluate



The WM³S Profile

