



# WIS Monitoring

## JMA's WIS Monitoring Common Dashboard

JMA Workshop on WIS Implementation

December 8, 2016

Yasutaka Hokase (JMA)

# Dashboard?

Speed

RPM (Tachometer)

Total distance

Fuel usage

Fuel cost [km/L]

Battery usage



# Dashboard for WIS system monitoring?

Number of data & products  
in GISC cache

Size of data & products in GISC cache

Total metadata records

Network usage

GISC portal availability

Sub Network usage

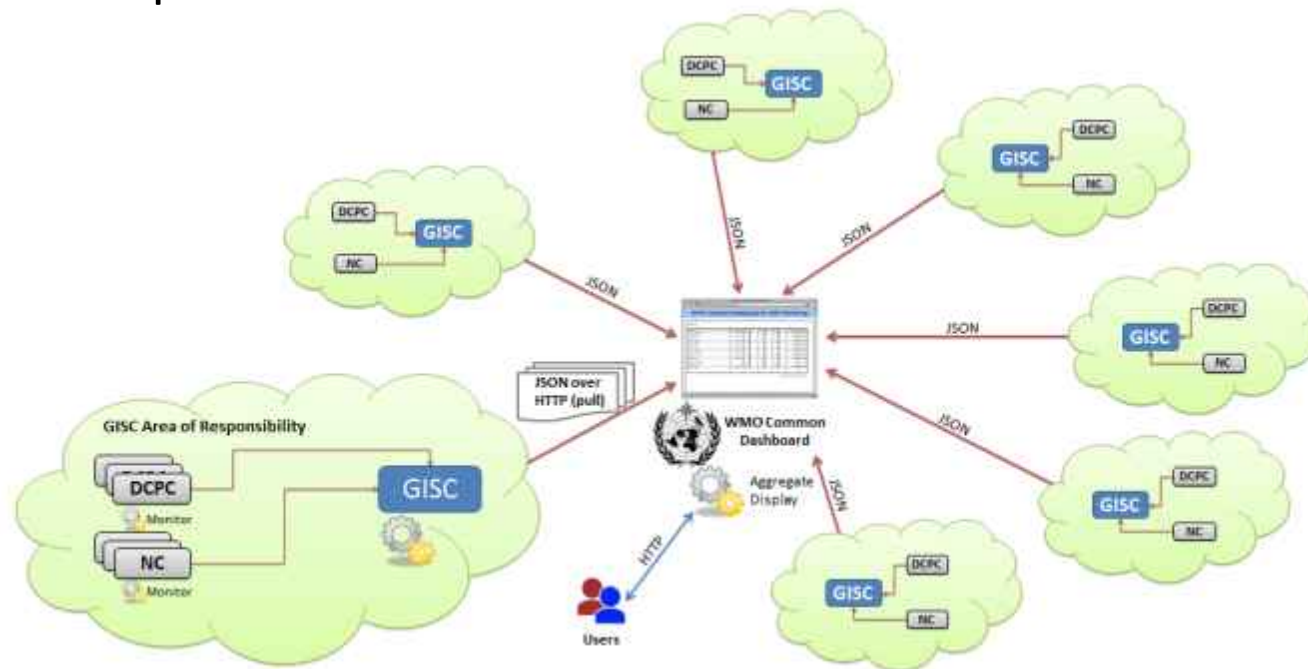


Dashboard for all the WIS Centres' system monitoring?



# Dashboard?

- WIS Monitoring Common Dashboard (WCD) – allows people to see monitoring information of multiple WIS Centres comprehensively. All the information on dashboard are constituted of JSON messages provided by GISCs.
- Monitoring information are pulled from GISCs all around the world as JSON messages. The information are aggregated, stored and displayed in this centralized web portal with time-series graphs and globe map.



# Dashboard prototypes

- Currently three voluntary GISCs (Beijing, Brasilia, Tokyo) are providing monitoring dashboard respectively as a prototype.
- In order to make WIS Monitoring operational officially, at least 2 dashboards are required.

GISC Brasilia's



GISC Tokyo's



GISC Beijing's



# Menu



## Contents of JMA's dashboard

**Links to other monitoring sites** – Include CMA's dashboard, INMET's dashboard, DWD's Metadata Sync Monitor, WMO's WIS wiki and more.

# GISC Status Table



**Service availability** – Distribution system, WIS portal, catalogue synchronization.

**Time series graphs** – WIS Core Network usage, the number of WIS catalogue records and the number and the size of data and products stored in GISC cache.

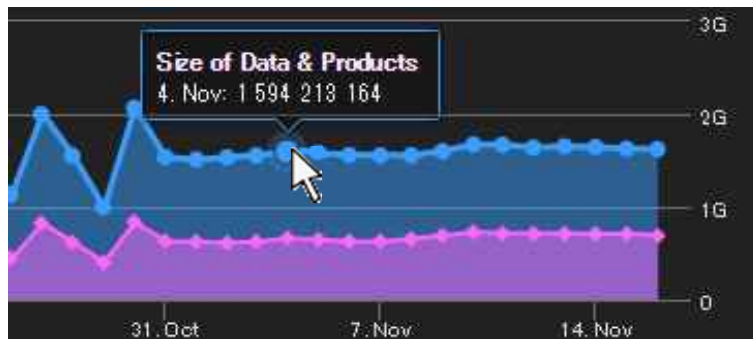
**Access to detail** – Each row provides links to the GISC's portal, detail monitoring information of the GISC and WIS Centres in its area of responsibility (AoR).



# Time Series Graphs



**Selectable time range** – The time range of time series graphs can be changed to show short or long term fluctuation.

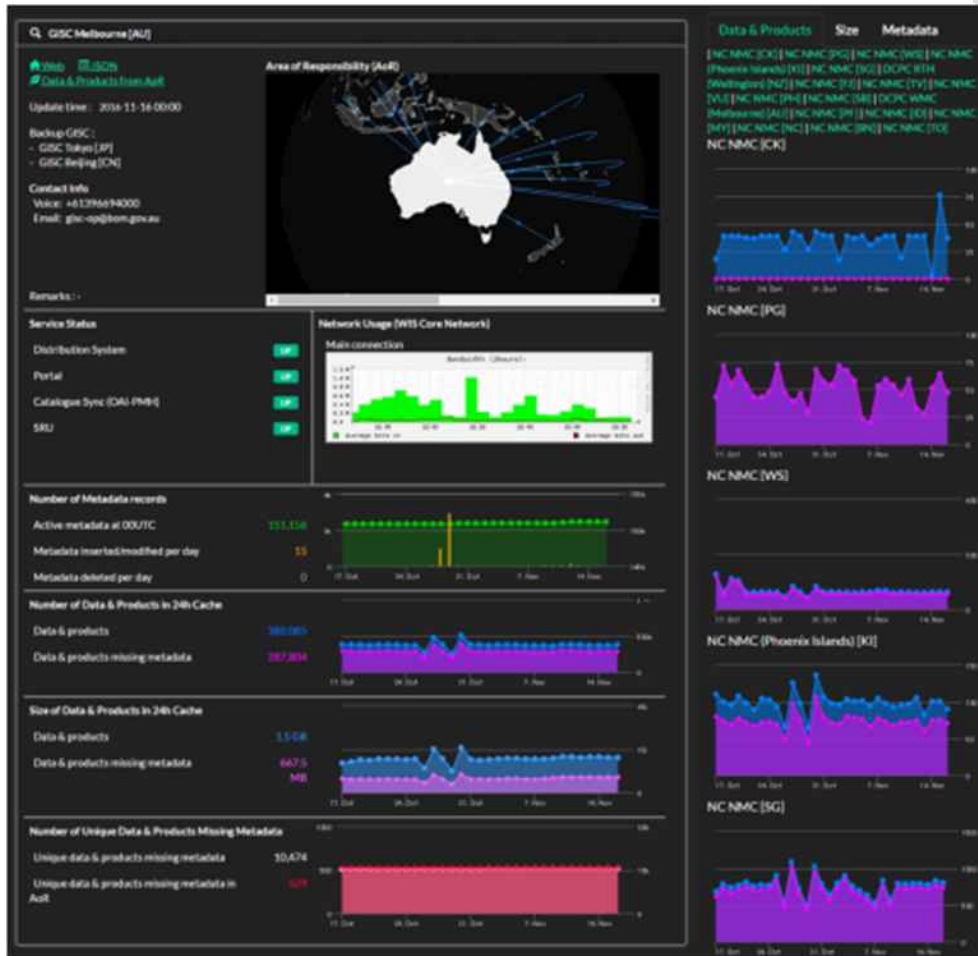


**Tooltip** – The tooltip appears when hovering over a point in a series. The tooltip shows the values of the point and the name of the monitoring item.



# Detail Information

GISC detail page

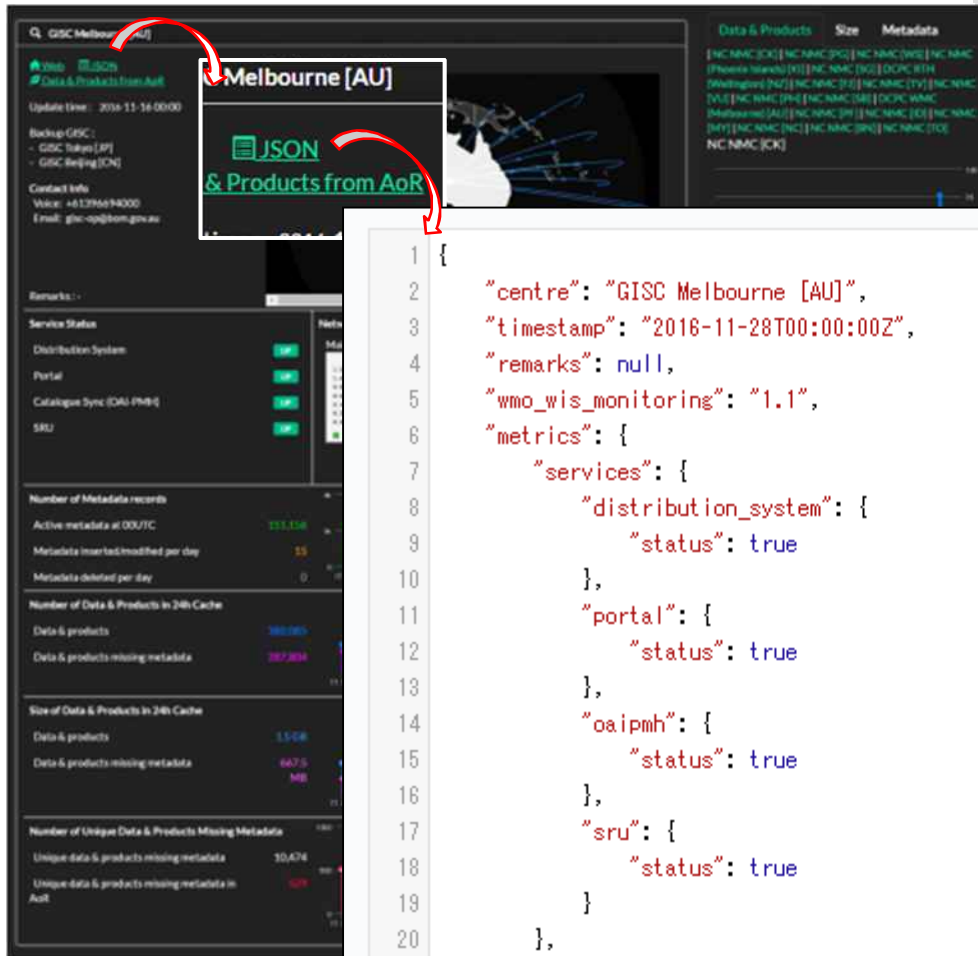


WIS Centres in GISC's area of responsibility

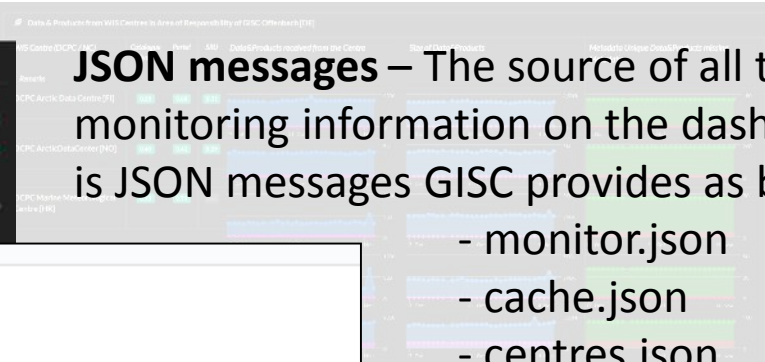
**GISC detail** – shows the GISC's area of responsibility (AoR) map, backup GISC, contact information as well as all monitoring information with larger graphs. In addition, it shows the number and the size of data and products received from WIS centres in the AoR on the right side.

# Detail Information

GISC detail page



WIS Centres in GISC's area of responsibility



**JSON messages** – The source of all the monitoring information on the dashboard is JSON messages GISC provides as below:

- monitor.json
- cache.json
- centres.json
- (events.json)

```
1 {
2   "centre": "GISC Melbourne [AU]",
3   "timestamp": "2016-11-28T00:00:00Z",
4   "remarks": null,
5   "wmo_wis_monitoring": "1.1",
6   "metrics": {
7     "services": {
8       "distribution_system": {
9         "status": true
10      },
11     "portal": {
12       "status": true
13     },
14     "oaipmh": {
15       "status": true
16     },
17     "sru": {
18       "status": true
19     }
20   },
21   "cache_24h": {
22     "number_of_unique_products_missing_metadata_AoR": 531,
```

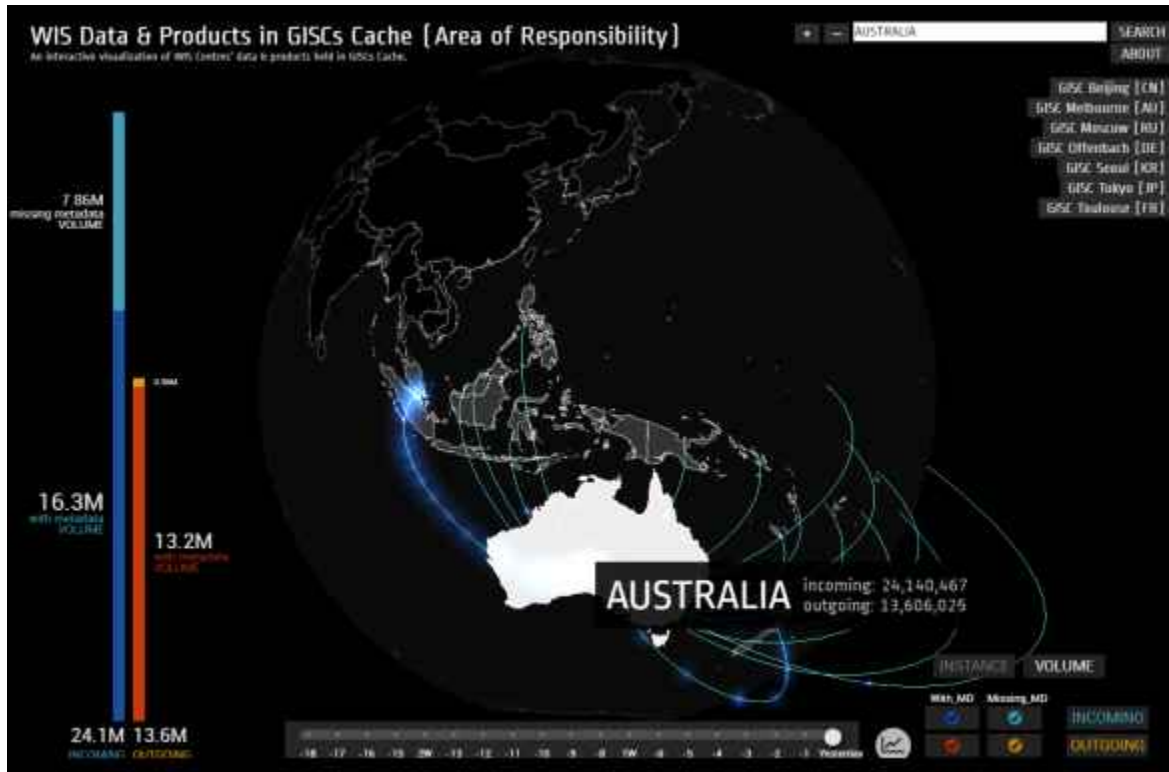
Time monitor





# WIS Map


The original prototype was produced by INMET (<http://www.inmet.gov.br/wismonitor>).  
This is a collaboration between INMET and JMA.

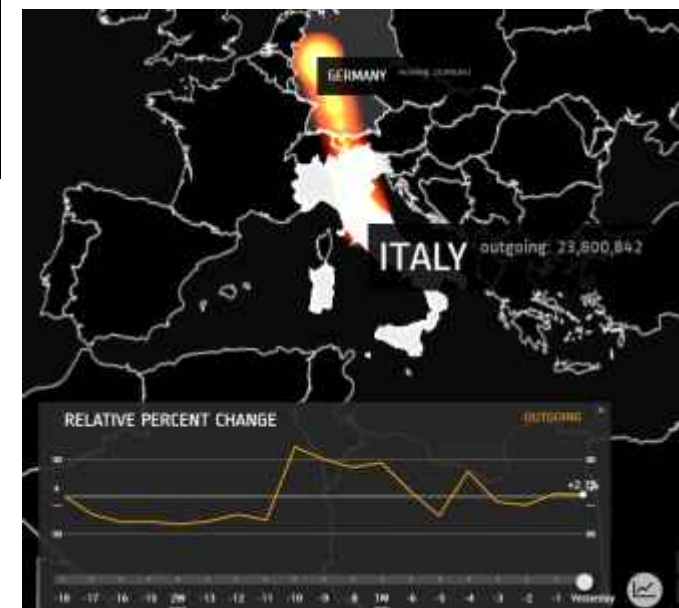


**Visualization** – The number (Instance) and the size (Volume) of WIS Centres' data and products held in GISC 24-hour cache.

**Vectorial resizing** – The globe map can be rescaled by mouse dragging.

**Country (NC / DCPC)** – Click any country to monitor which GISC the country is submitting data and products to directly or indirectly via RTH.

**Relative percent change graph** – Click  button to pop up the time-series graph which shows the relative percent change of past 18 days.





Link to JMA's WIS Common Dashboard:  
<http://www.wis-jma.go.jp/wcd/v1/top.html>

*If you have any suggestions/questions, feel free to contact me.*

*Yasutaka Hokase  
hokase@met.kishou.jp*

