

WIS Monitoring

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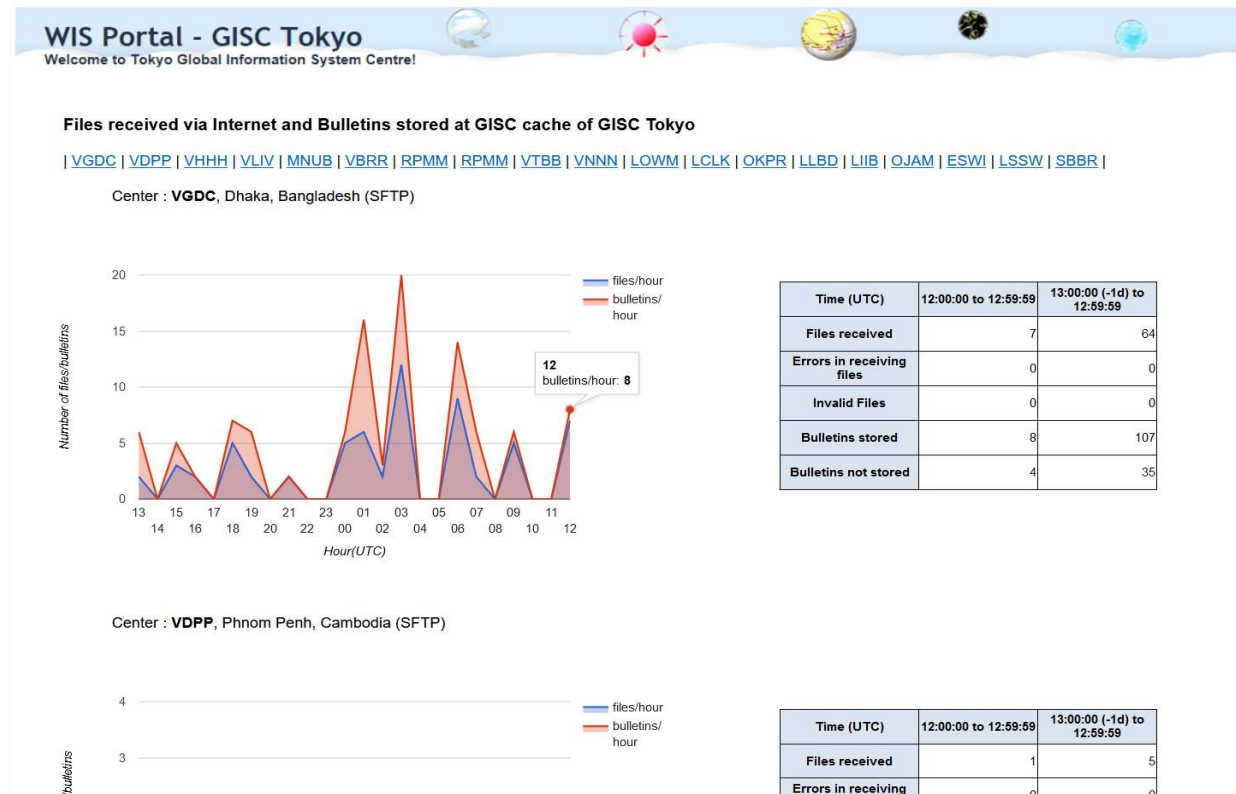
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WIS Monitoring

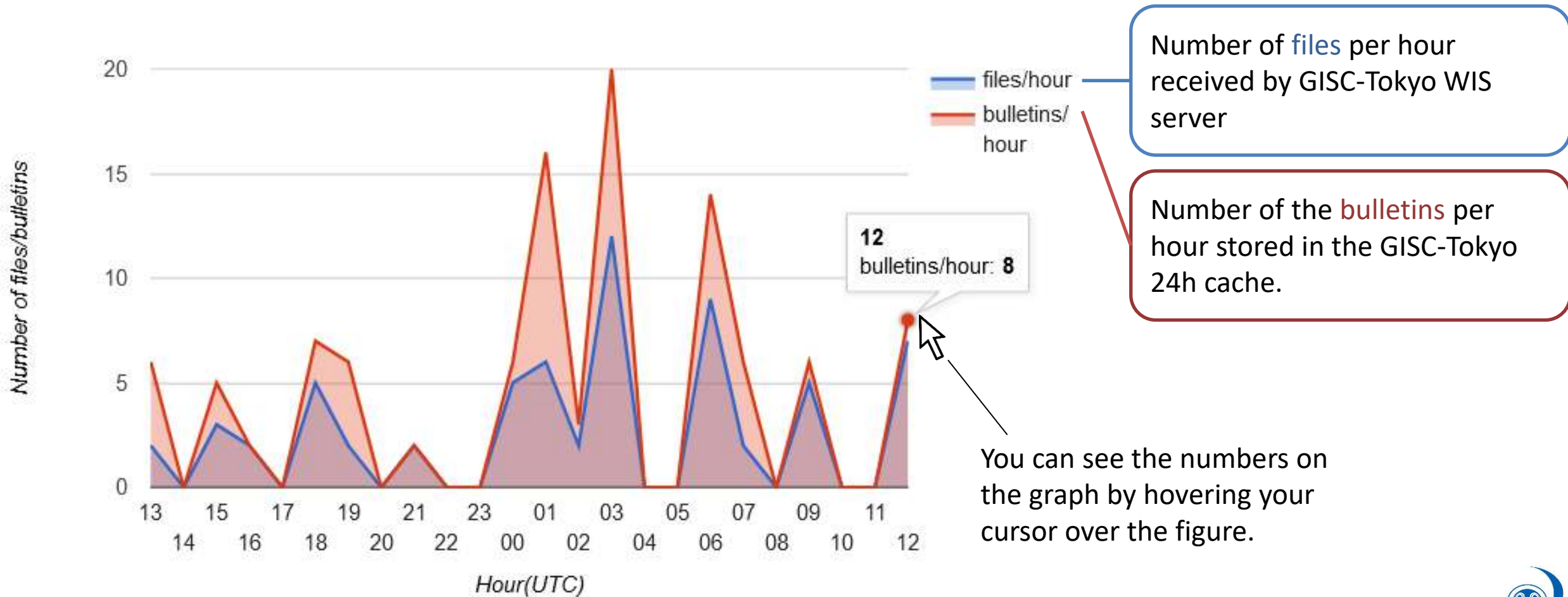
Monitoring page on GISC Tokyo Portal

<https://www.wis-jma.go.jp/iwgmonitor/iwgmonitor.jsp>

- Files received via Internet and Bulletins stored in GISC Tokyo 24h cache



<https://www.wis-jma.go.jp/iwgmonitor/iwgmonitor.jsp>



<https://www.wis-jma.go.jp/iwgmonitor/iwgmonitor.jsp>

Time (UTC)	12:00:00 to 12:59:59	13:00:00 (-1d) to 12:59:59
Files received	7	64
Errors in receiving files	0	0
Invalid Files	0	0
Bulletins stored	8	107
Bulletins not stored	4	35

files/hour

bulletins/
hour

- Duplication with GTS (received later than GTS)
- Invalid TTAAiiCCCC header, format, date, and so on
- Unsupported BUFR master table version numbers (problem in JMA's app)



WIS Monitoring

GISC Watch Activity

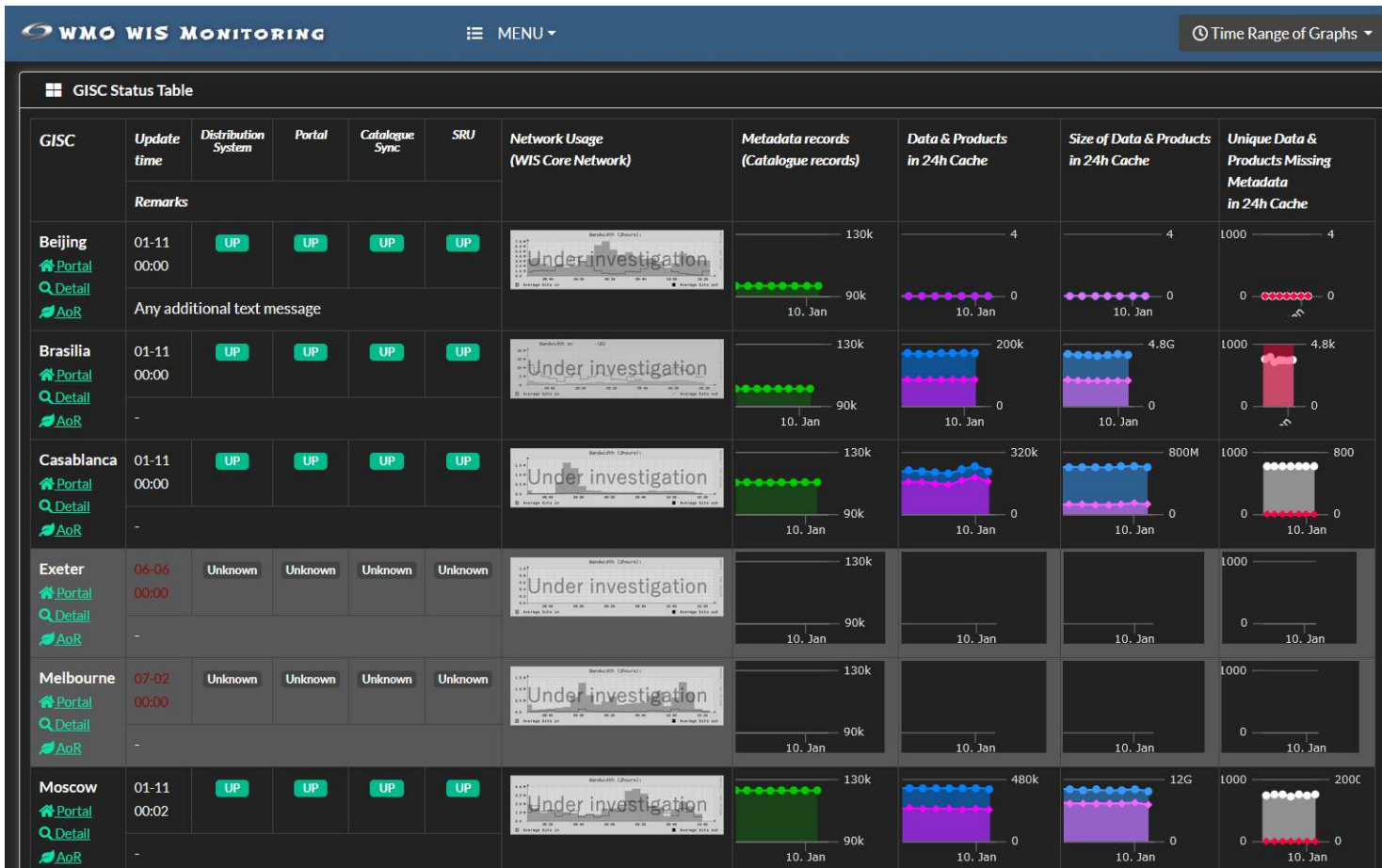
GISC Watch Activity

- There are 15 GISCs.
- Each GISC generates and publishes the JSON message with information such as reporting time, metadata, 24-hour cache, connectivity to other GISCs and so on.
- An application, WMO Common Dashboard (WCD), operated by GISC Tokyo and Beijing respectively, retrieves and consumes JSON messages.
- GISC Watch roster is created in advance.
- On-duty GISC checks status of a service of each GISC and so on with WCD for 15 days.
- The GISC currently on duty sends the hand-over-report to the next GISC.

Background of GISC Watch

- To ensure providing sufficient WIS service globally, the procedure of GISC monitoring was developed by TT-GISC2017 (Nov.), and then pre-operational phase of the GISC Watch has started from the 1st of May 2018.
- After a year the Eighteenth WMO Congress (Cg-18, June 2019) approved relevant updates to Manual on WIS (WMO No.1060) and Guide to WIS (WMO No.1061) in its Resolution 57 (Cg-18) to become operational officially.

<https://www.wis-jma.go.jp/wcd/v1/top.html>



- The top page shows the status of each GIS service.
- Unfortunately, some GISCs are out of service.

https://www.wis-jma.go.jp/wcd/v1/gisc_availability.html

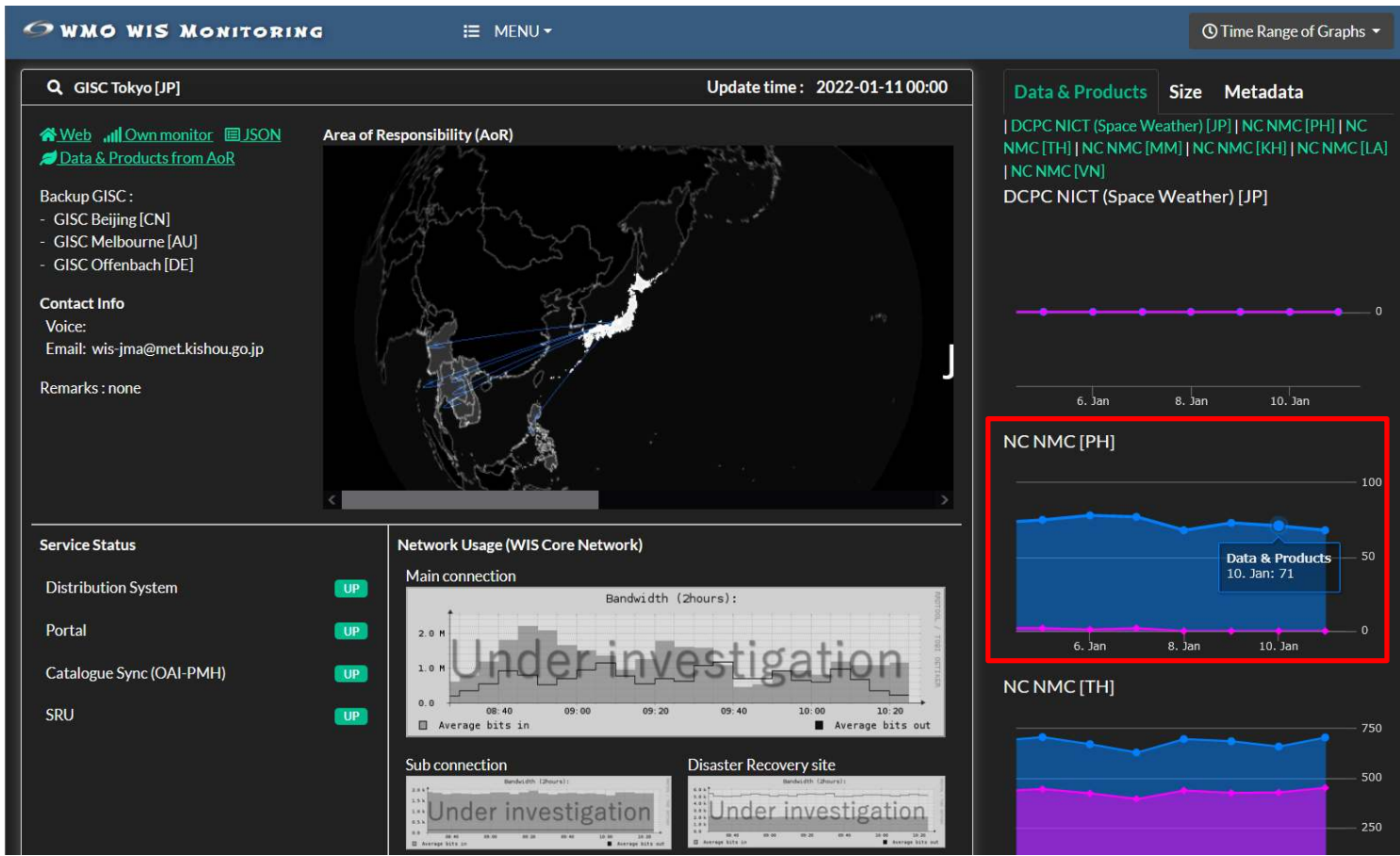
WMO WIS MONITORING MENU

Response Time[sec] of GISCs' OAI-PMH

Reported Reporting \	Report time	Beijing	Brasilia	Casablanca	Exeter	Jeddah	Melbourne	Moscow	New Delhi	Offenbach	Pretoria	Seoul	Tehran	Tokyo	Toulouse	Washington
Beijing	01-11 10:30	N/A	2.37	0.79	NoRes	NoRes	NoRes	0.54	NoRes	0.64	NoRes	0.52	1.26	0.37	0.59	NoRes
Brasilia	01-11 10:38	3.06	N/A	NoRes	NoRes	NoRes	NoRes	0.65	NoRes	1.35	2.53	2.48	2.86	2.01	0.86	1.70
Casablanca	01-11 10:30	2.45	2.81	N/A	---	NoRes	NoRes	0.39	NoRes	NoRes	3.15	1.46	0.60	NoRes	0.31	NoRes
Exeter	06-04 23:50	Unknown	Unknown	Unknown	N/A	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	---
Melbourne	07-02 16:10	Unknown	Unknown	Unknown	Unknown	Unknown	N/A	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
Moscow	01-11 10:20	0.58	0.51	0.18	NoRes	NoRes	NoRes	N/A	NoRes	0.18	NoRes	0.64	0.18	0.95	0.14	NoRes
Offenbach	01-11 10:20	1.89	1.27	1.00	NoRes	NoRes	NoRes	0.82	NoRes	N/A	3.40	1.56	1.09	3.56	1.87	NoRes
Seoul	01-11 10:30	0.59	1.36	0.68	NoRes	NoRes	NoRes	1.61	NoRes	1.13	2.23	N/A	0.74	0.35	1.80	0.75
Tokyo	01-11 10:10	1.18	0.68	0.56	NoRes	NoRes	NoRes	0.45	NoRes	2.10	1.08	1.21	NoRes	N/A	0.50	0.59
Toulouse	01-11 10:19	0.86	1.25	0.14	NoRes	NoRes	NoRes	0.15	NoRes	0.21	1.69	0.87	0.20	2.07	N/A	NoRes

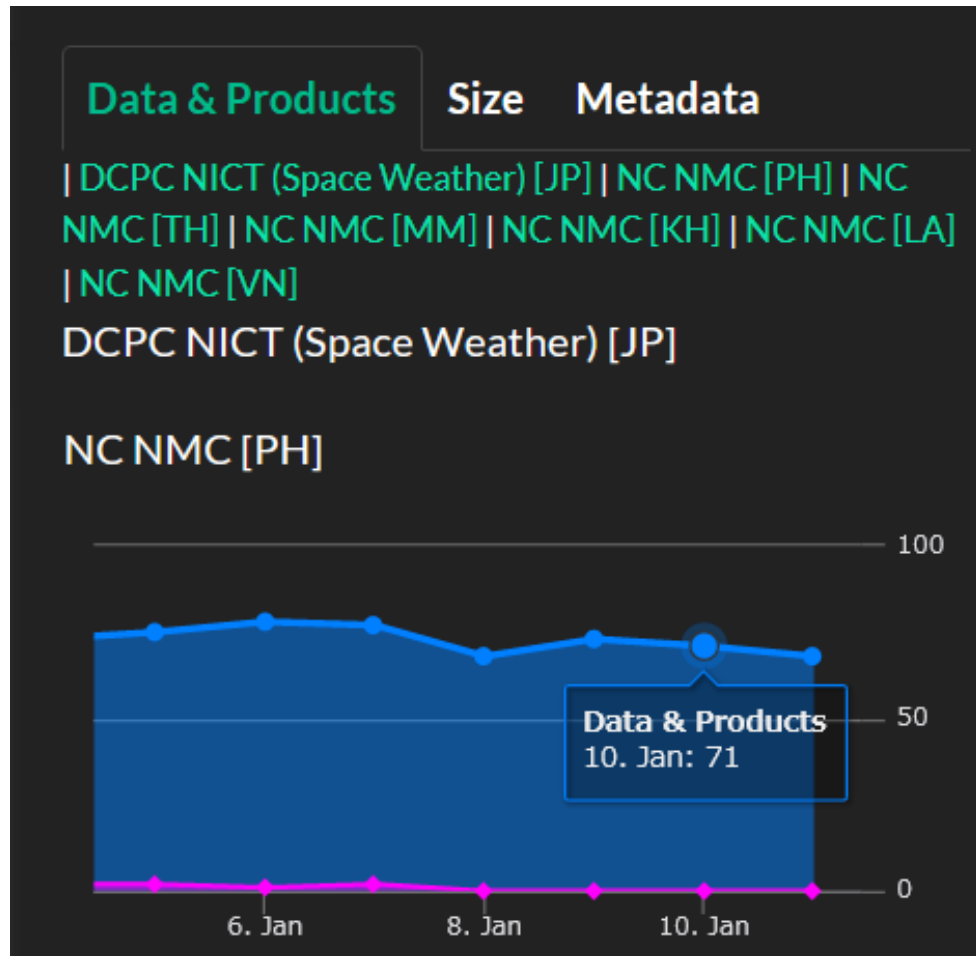
- This page shows the connectivity matrix for each GISC service.
- Unfortunately, some GISCs are out of service.

https://www.wis-jma.go.jp/wcd/v1/detail_GISC-Tokyo- JP .html



- This page shows the status of GISC Tokyo.
- The number of the files stored in 24-hour cache for each GISC Tokyo's AoR is also shown.


https://www.wis-jma.go.jp/wcd/v1/detail_GISC-Tokyo- JP .html




- Data & Product
 - The number of the files stored in 24-hour cache is shown.
 - with metadata
 - without metadata
- Size
 - Sorry, you cannot check file size.
- Metadata
 - The number of metadata registered/not registered.

<http://mon.wis.cma.cn/WCD/>

- WCD Operated by CMA

 **WIS Monitoring Common Dashboard**

 Events Announcement:

GISC	Status	Network Usage (WIS Core Network)	Metadata records	Data&Products in 24h Cache	Size of 24h Cache (Bytes)
Beijing 2022-01-16 00:00:00 Portal Detail	Portal ✔ 12ms		96744	0	0
	Distribution ✔ --ms				
	OAI Provider ✔ 1ms				
	SRU ✔ 1ms				
Brasilia 2022-01-16 00:00:00 Portal Detail	Portal ✔ 1723ms		101301	85192	198360637
	Distribution ✔ --ms				
	OAI Provider ✔ 422ms				
	SRU ✔ 422ms				
Casablanca 2022-01-16 00:00:00 Portal Detail	Portal ✔ 1286ms		110860	56694	491089345
	Distribution ✔ --ms				
	OAI Provider ✔ 637ms				
	SRU ✔ 643ms				
Exeter 2021-06-06 00:00:00 Portal Detail	Portal ✔ --ms		0	0	0
	Distribution ✔ --ms				
	OAI Provider ✔ --ms				
	SRU ✔ --ms				
Melbourne 2021-07-02 00:00:00 Portal Detail	Portal ✔ --ms		107968	127507	1606828360
	Distribution ✔ --ms				
	OAI Provider ✔ --ms				
	SRU ✔ --ms				
	Portal ✔ 1372ms				



WIS Monitoring

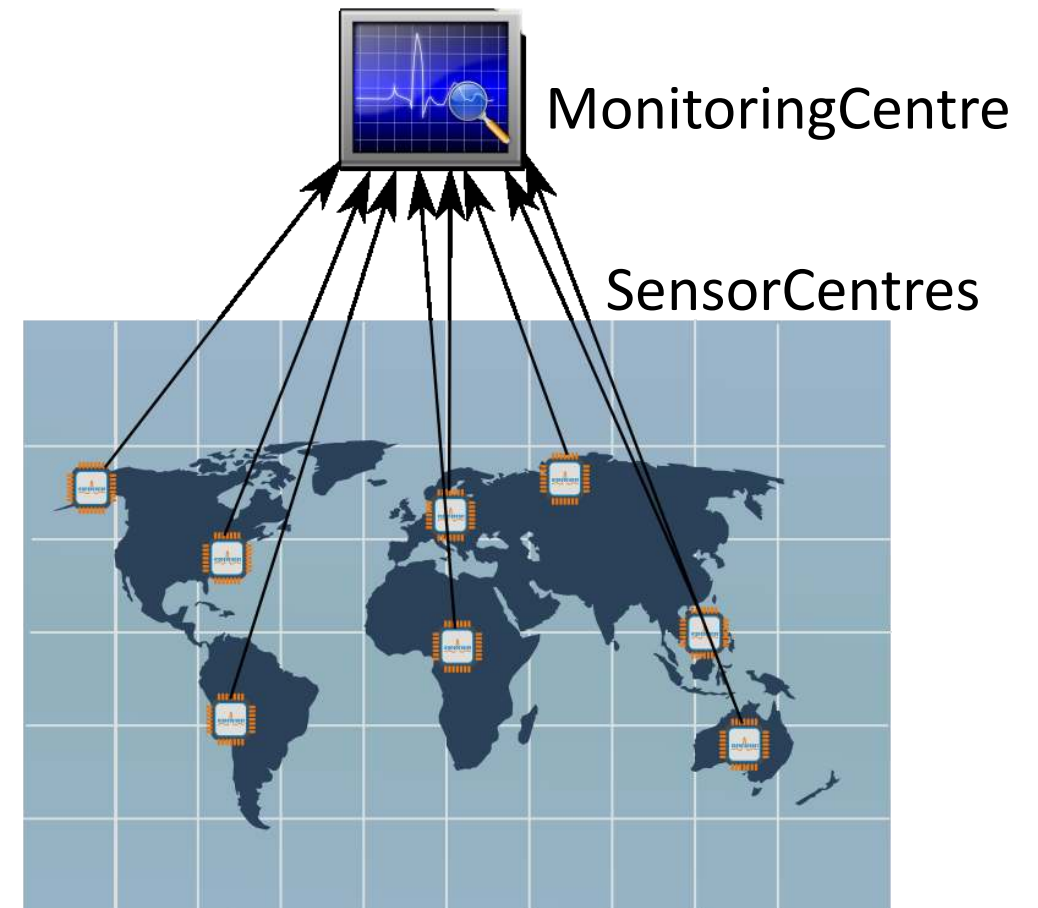
New WIS Monitoring

New WIS Monitoring

- SC-IMT has set up a TT-WISMon under the ET-OM
 - SC-IMT: Standing Committee on Information Management and Technology
 - ET-OM: Expert Team on Operations and Monitoring
 - TT-WISMon: Task Team on WIS Monitoring
- TT-WISMon is now working on the design of the new WIS monitoring.

Sketch of New WIS monitoring

- Two types of centers
 - 1 (or 2) MonitoringCentre
 - Reliable and representative SensorCentres
- SensorCentres generate reports from data with (open source) software and send the reports to MonitoringCentre.



New WIS monitoring

- Details are not decided yet.
 - Transfer protocol,
 - Format of the report,
 - Creation interval,
 - Participation of NCs and DCPCs,
 - and so on ...

New WIS monitoring

- TT-WISMon is working in coordination with TT-WDQMS and TT-GISC on the development of monitoring tools and monitoring procedure for WDQMS etc.
 - WDQMS: WIGOS Data Quality Monitoring System
 - WIGOS: WMO Integrated Global Observing System
- Targets of Monitoring
 - TT-WDQMS: NWP - Data quality and availability
 - TT-WISMon: WIS - System performance and data delivery status

WDQMS Monitoring

- <https://wdqms.wmo.int/>

The screenshot shows the WIGOS Data Quality Monitoring System (WDQMS) webtool interface. At the top, there are logos for WMO and ECMWF, and the title "WIGOS Data Quality Monitoring System". Below the title, there are navigation links: "Home", "Monitoring", "Database status", "About", and "Support". The main content area features a welcome message: "Welcome to the WIGOS Data Quality Monitoring System (WDQMS) webtool". It states that the webtool is a resource developed by WMO to monitor the performance of all WIGOS observing components. For more information, it directs users to click [here](#). It also mentions that two modules are currently available for the WIGOS monitoring:

- Near-real-time NWP monitoring of the Global Observing System networks**
 - Surface land observations (Availability & Quality)
 - Upper-air land observations (Availability & Quality)
- Monitoring of the Global Climate Observing System networks**
 - Surface land observations (Availability & Completeness)
 - Upper-air land observations (Availability & Quality)

Each of these four categories is represented by a small map showing global observation networks with colored dots indicating data points.

