

Development of WIS Monitoring



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WIS Workshop in 2014
18th-20th Nov. 2014, in JMA HQ

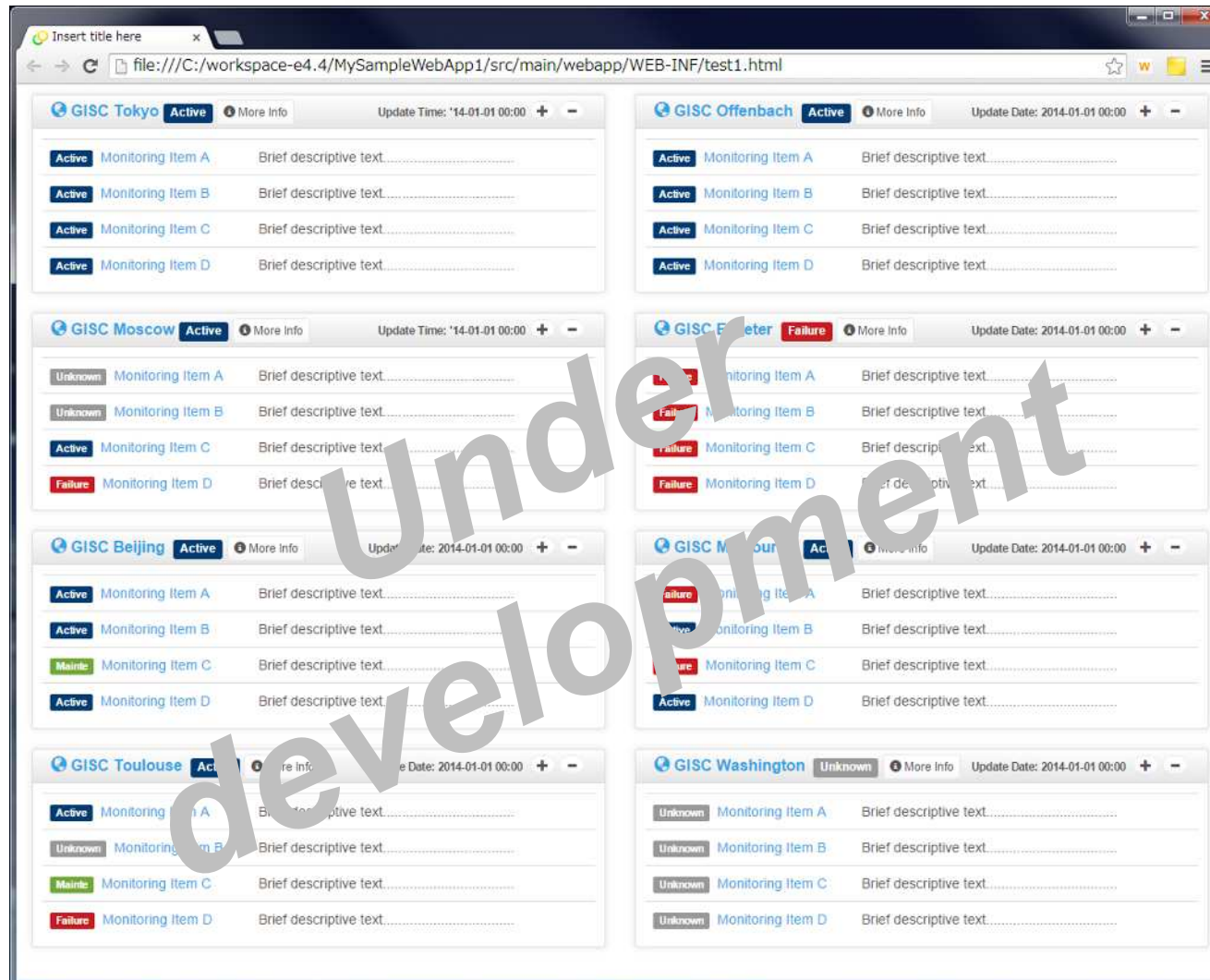


JMA's development progress

- TT-GISC (WIS Centre's Task Team on GISCs) is working on development and pilot test of WIS monitoring
- JMA is developing its own prototype of WIS monitoring page.
- JMA is developing the two pages below
 - Global view of dashboard
showing status of several GISCs
 - Local view of dashboard
showing details of GISC Tokyo



Global view of dashboard (Mock-up) showing the status of several GISCs



update date & time of GISC's JSON including status information

GISC's name
(Link to GISC's portal web site)

GISC's total status

Link to a local monitoring view of this GISC

Expand & collapse buttons

The screenshot shows a web interface for 'GISC Toulouse'. The header bar contains a globe icon, the text 'GISC Toulouse', a status button labeled 'Active', a 'More Info' button with an information icon, and an 'Update Date: 2014-01-01 00:00' label followed by expand (+) and collapse (-) buttons. Below the header is a table with four rows of monitoring items. Each row has a status button (Active, Unknown, Mainte, Failure), a name ('Monitoring Item A' through 'D'), and a 'Brief descriptive text' field. A large bracket on the left side of the table is labeled 'Drill down tab to show detail of the item'. Brackets at the bottom of the table identify the status button as 'Status of each item', the name as 'Name of monitoring item', and the text field as 'Brief descriptive text of each item'.

Status	Name	Brief descriptive text
Active	Monitoring Item A	Brief descriptive text.....
Unknown	Monitoring Item B	Brief descriptive text.....
Mainte	Monitoring Item C	Brief descriptive text.....
Failure	Monitoring Item D	Brief descriptive text.....

Drill down tab to show detail of the item

Status of each item

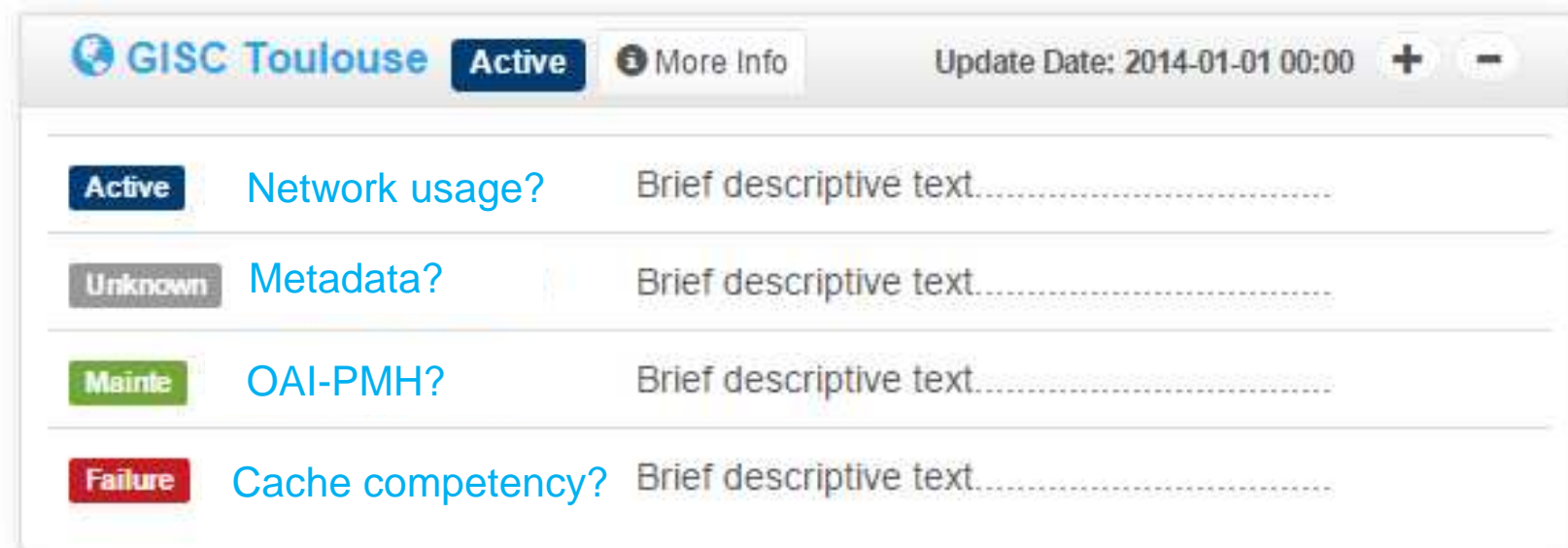
Name of monitoring item

Brief descriptive text of each item



What should we monitor ?

What do users want to know status of ?




The screenshot shows a web dashboard titled "GISC Toulouse". It has a header bar with the title, an "Active" status button, a "More Info" link, and an "Update Date: 2014-01-01 00:00" with expand/collapse icons. Below the header is a table with four rows of monitoring items. Each row has a status button, a question, and a text field for a brief description.

Status	Question	Brief descriptive text
Active	Network usage?	Brief descriptive text.....
Unknown	Metadata?	Brief descriptive text.....
Mainte	OAI-PMH?	Brief descriptive text.....
Failure	Cache competency?	Brief descriptive text.....

What the dashboard displays will be discussed in the task team hereafter.
The points would be as below.

- “meet user expectations”
- “cost effectiveness”
- “standardization of measuring method”



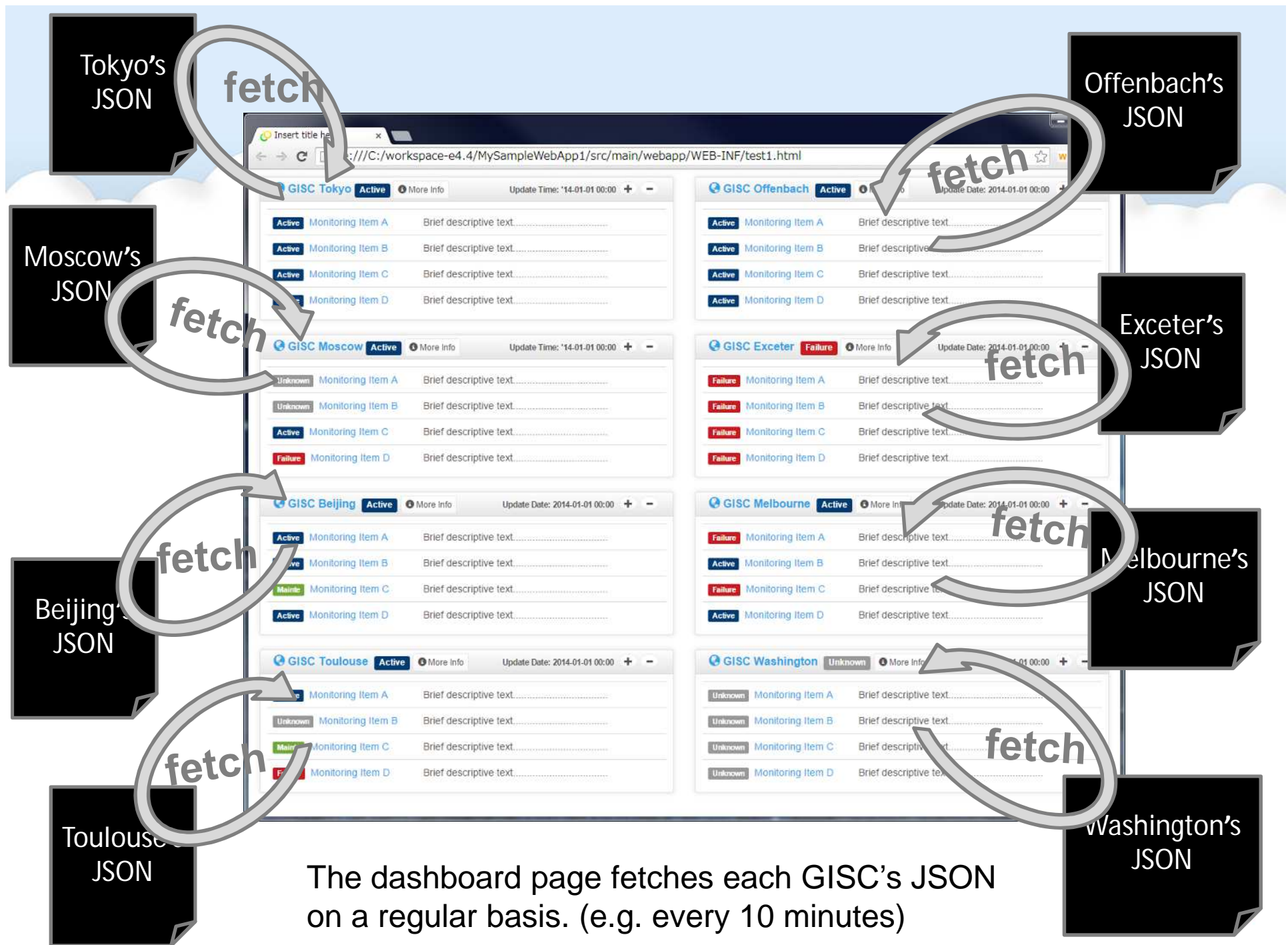
 Active More Info Update Date: 2014-01-01 00:00		
Active	Monitoring Item A	Brief descriptive text.....
Unknown	Monitoring Item B	Brief descriptive text.....
Mainte	Monitoring Item C	Brief descriptive text.....
Failure	Monitoring Item D	Brief descriptive text.....

fetch

Toulouse's JSON

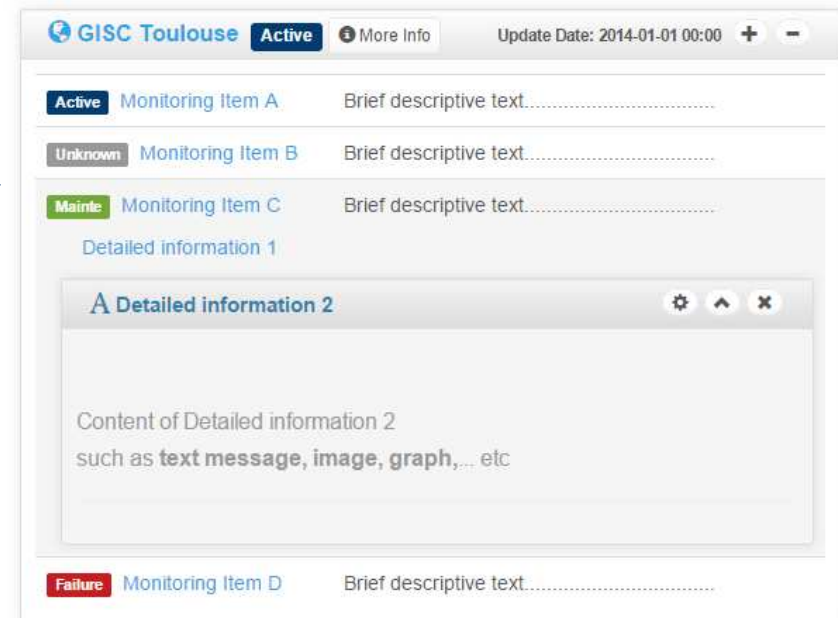
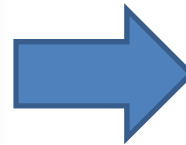
```
{
  "centre": "GISC Toulouse",
  "status": "Active",
  "date": "2014-01-01 00:00",
  "Monitoring Item A": {
    "status": "Active",
    "text-msg": "Brief descriptive text.....",
    "detail info 1": ".....",
    "detail info 2": ".....",
    omitted
  },
  "Monitoring Item B": {
    "status": "Unknown",
    "text-msg": "Brief descriptive text.....",
  },
  "Monitoring Item C": {
    "status": "Mainte",
    "text-msg": "Brief descriptive text.....",
  },
  "Monitoring Item D": {
    "status": "Failure",
    "text-msg": "Brief descriptive text.....",
  }
}
```

The logical place of JSON is each GISC.
GISC's JSON includes each status information.



The dashboard page fetches each GIS's JSON on a regular basis. (e.g. every 10 minutes)

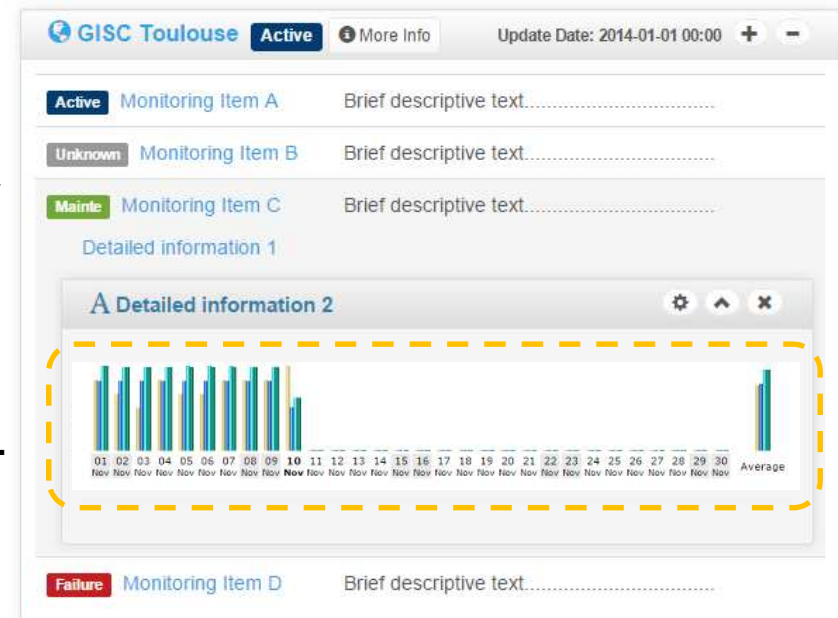
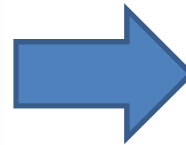
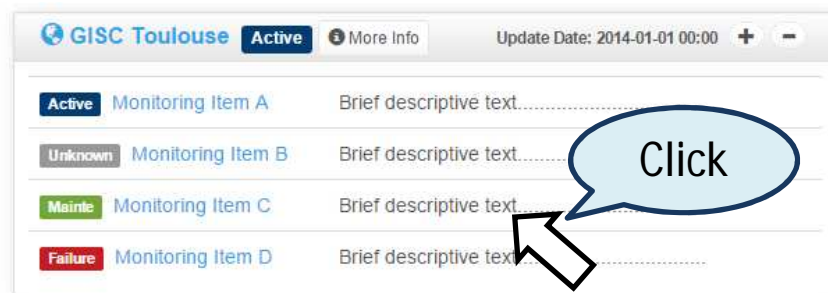
Drill down tab to get more detailed information



```
"Monitoring Item C": {  
  "status": "Mainte",  
  "text-msg": "Brief descriptive text.....",  
  "detail info 1": ".....",  
  "detail info 2": "Content of Detailed information 2 .....",  
},
```



Detailed information

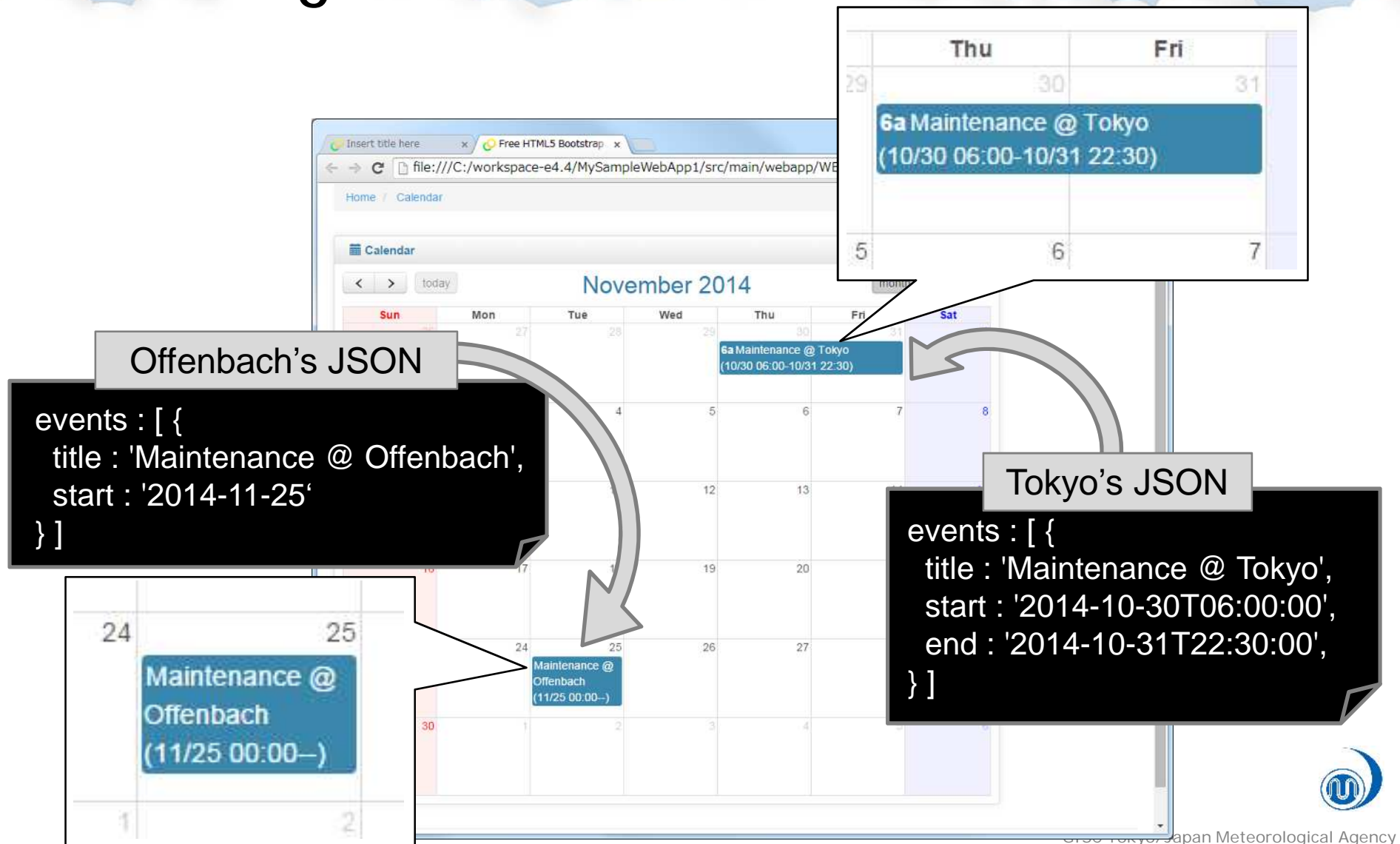


For example, time-series graph
which shows historical records of metric values.

```
"time-series of item C": {  
  "09UTC": "49",  
  "10UTC": "67",  
  "11UTC": "54",  
  "12UTC": "71",  
  "13UTC": "46",  
  "14UTC": "38",  
  ...  
},
```



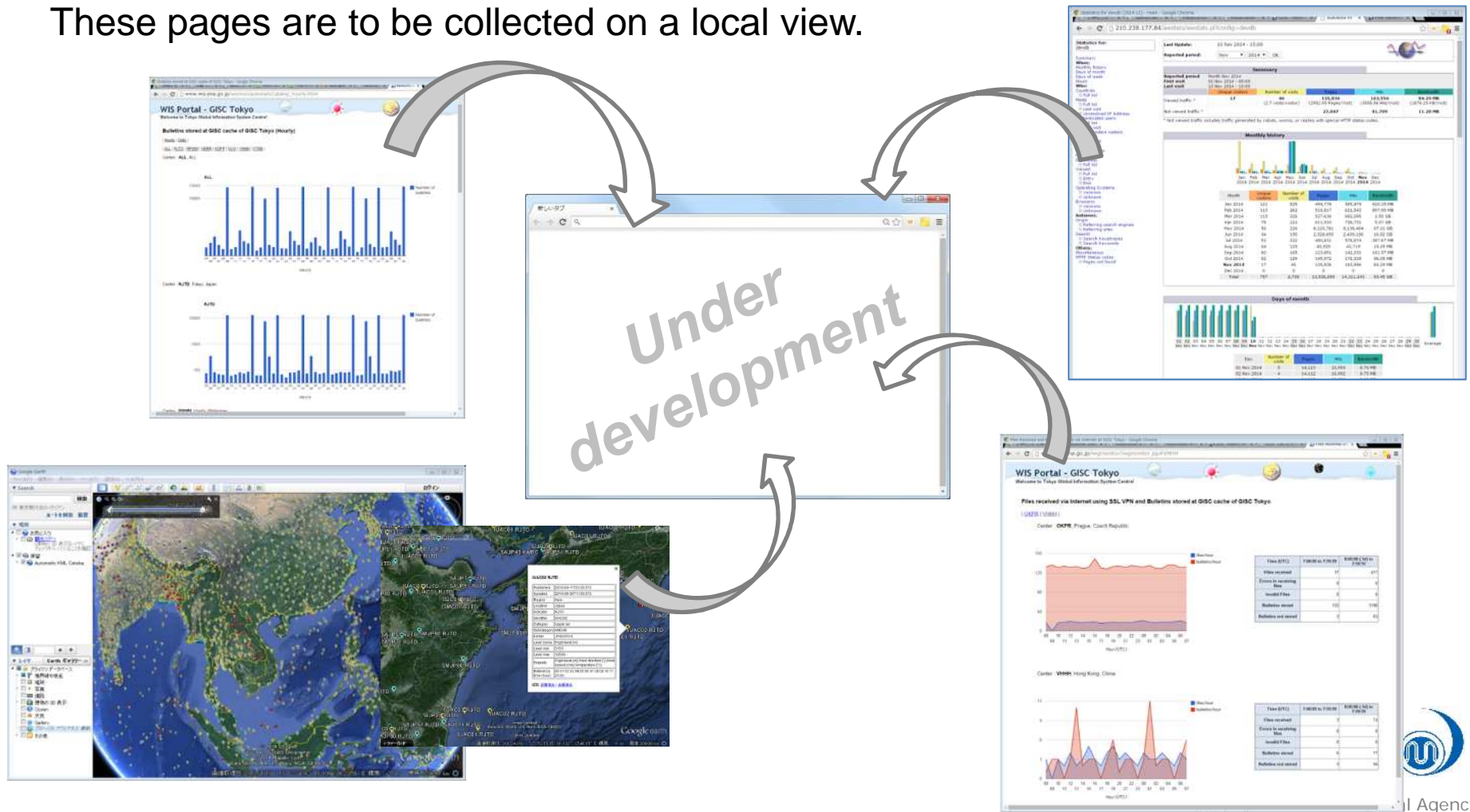
Common Calendar showing maintenance schedule of GISCs



Local view of GISC Tokyo

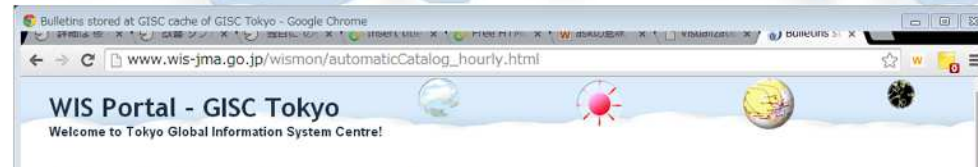
Specialized monitoring page for GISC Tokyo

Some monitoring pages which JMA has already developed are scattered.
Others are to be developed hereafter.
These pages are to be collected on a local view.

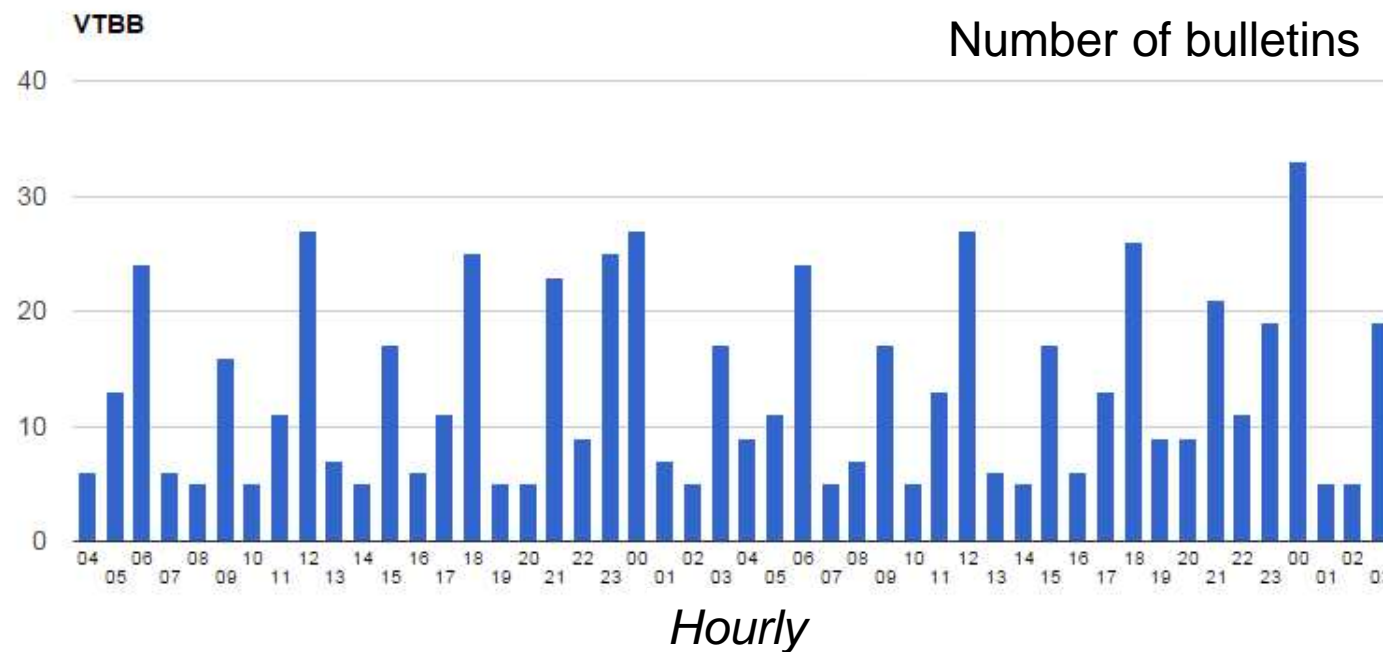


Monitoring NC/DCPC implement

Bulletins stored at GISC Tokyo's cache



Center : **VTBB**, Bangkok, Thailand

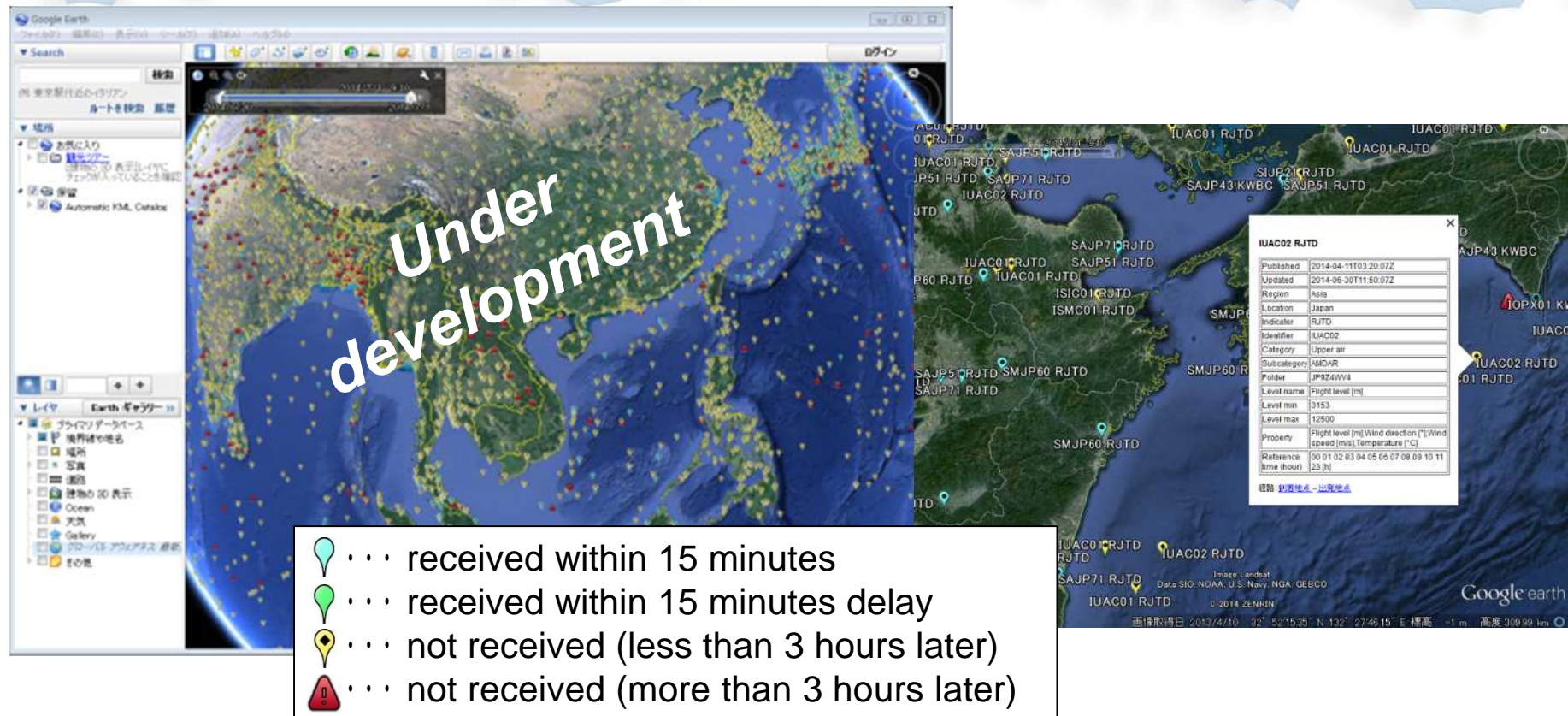


http://www.wis-jma.go.jp/wismon/automaticCatalog_hourly.html



Monitoring NC/DCPC implement

Statistics of incoming data to Tokyo



Information includes:

- Map display of geographical distribution of observing stations from which a report is received
- Statistics of incoming data to Tokyo



Pilot test

- The pilot implementation of WIS monitoring is to include **at least two GISCs, one DCPC and one NC**. (ICT-ISS asked TT-GISC.)
- Aiming to have a demonstration by March 2015.
- The pilot should report by September 2015.



Contribution of DCPC/NC to pilot test

The details will follow later.

- User feedback

For example

- Proposal of additional item we should monitor
- Comment or proposal of Layout & UI improvement

