Slide 1

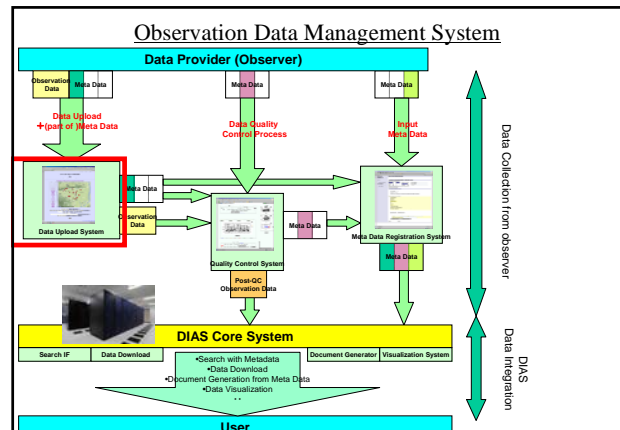**AMY Data
Upload and Quality Control System**

Eiji Ikoma*, *Katsunori Tamagawa**
Hiroko Kinutani*, Tetsu Ohta***
and
Masaru Kitsuregawa**, Toshio Koike*,***

The University of Tokyo
*Earth Observation Data Integration and Fusion Research Initiative, UT
**Institute of Industrial Science, UT
***Department of Civil Engineering, UT

Slide 2

Observation Data Management System

Slide 3

Observation Data
Upload System

Eiji Ikoma
Katsunori Tamagawa, Hiroko Kinutani,
Tetsu Ohta, Toshio Koike, Masaru Kitsuregawa

Slide 4

On-line Data Upload

- Observers have sent their own data to data administrators with the means of e-mail or mail before.
- However, by these methods, there were lots of problem, like the point that the file format and meta information are not unified, the point which requires much time and effort to send the data for observers, and also processing take lots of time, etc..
- So, we have started to develop on-line data upload system for AMY data, which is in cooperation with Data Quality Control System, Meta-Data Registration System, and Data Archiving System.

Slide 5

Data Upload System

- Observers can upload observation data and input some Metadata on Web Interface consisted of 4 steps.
- On each step, observers need to input some information about the data.
- Easy Operation and Quick Response.
- This system has some function which **reduce** the complicatedness of upload process

Slide 6

Login Page

- Username and Password are required.
- Each observation site manager has it own (unique) username and password.

STEP1
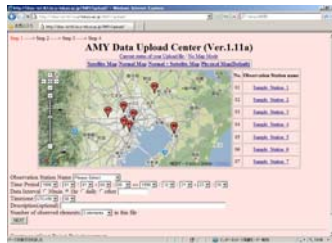
- Observation Point(Map/List)
- Time Period
- Data Interval
- Timezone
- Description (optional)
- Num. of observed elements

STEP2

- Observation Data
  - Choose from pulldown menu
- Sensor height
- Orientation(op.)
- Unit
- Missing value
- Description(op.)

1. Copy from No.1 to all
2. Unit = Input Automatically when you choose observation data
3. Copy from former inputted data
4. Modify the num of observation data
5. Upload from prepared csv file

STEP3

- Upload observation Data(File).
- Confirmation of metada inputted at STEP1,2.

STEP 4
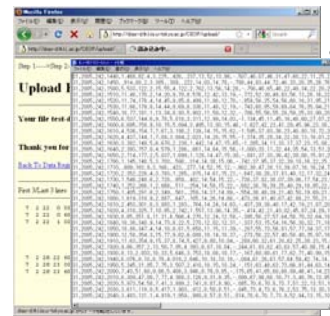
- Confirmation of
  - local path of uploaded file
  - contents of the file (first/last 3lines and all lines when you require)
  - All metadata inputted at STEP1,2,3

After STEP 4

- Our system send the confirmation message to observer by e-mail.
- Inputted metadata are stored in our Upload system --- Observer can use at next time.
- Observation data is loaded to Quality Control System

Confirmation Message by e-mail
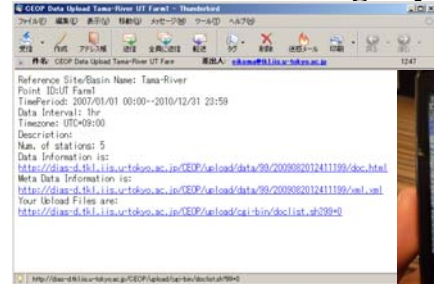
For Administrators (e-mail to mobile-phone)

After STEP 4

- Our system send the confirmation message to observer by e-mail.
- Inputted metadata are stored in our Upload system --- Observer can use at next time.
- Observation data is loaded to Quality Control System

List of uploaded file

List of Uploaded File (Ver.1.10a)

You can check your uploaded file here.
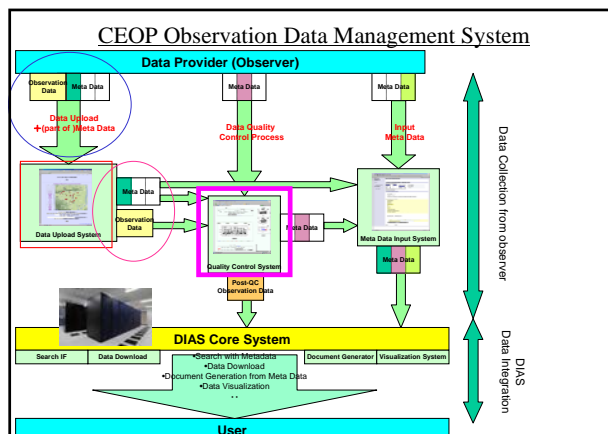
- Data Download
- Check metadata
- Delete uploaded data

Upload Status of Data

(automatically updated per every access)

Upload Status for CEOP(RID=01…25)

as of *Thu Aug 20 11:27:56 JST 2009*

Now calculating.
RID= 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25.
Done.

CEOP Observation Data Management System

AMY Observation Data
Quality Control (QC) System

Eiji Ikoma, Katsunori Tamagawa,
Tetsu Ohta, Kenji Taniguchi,
Toshio Koike, Masaru Kitsuregawa

Our QC System

- First version of our QC System was developed for CEOP Data in 2004.
- Ver.1(2004-2005) for → Ver.2(2005-2006) → Ver.3(2007-)
- 13site(Ver.1)→ 25site(Ver.2)→Ver.3.xxx
  - *Ver3.00(for JICA=3 sites, 12 stations.,),*
  - *Ver3.01a(for AWCI=18 sites, 291 stations.),*
  - *Ver3.01c(for CEOP=25 sites, 76 stations.)*
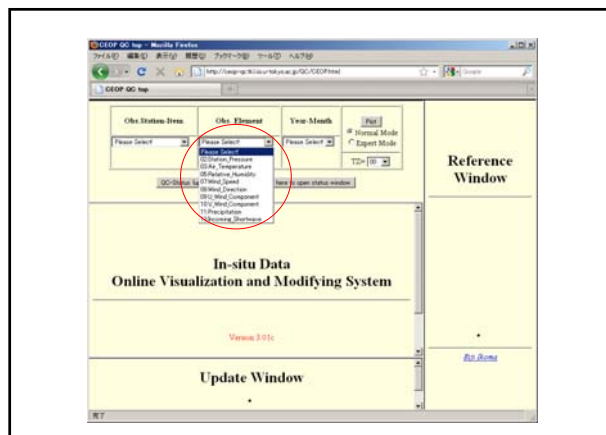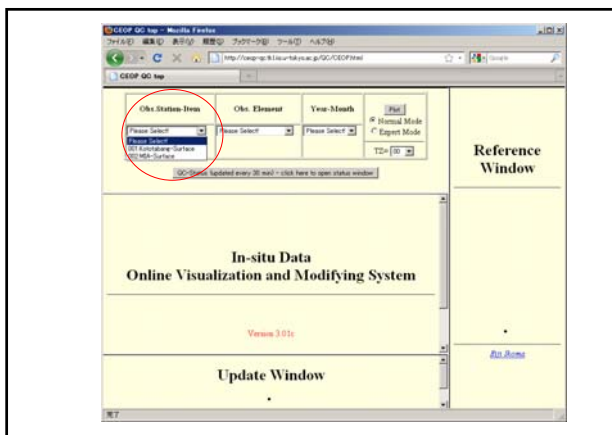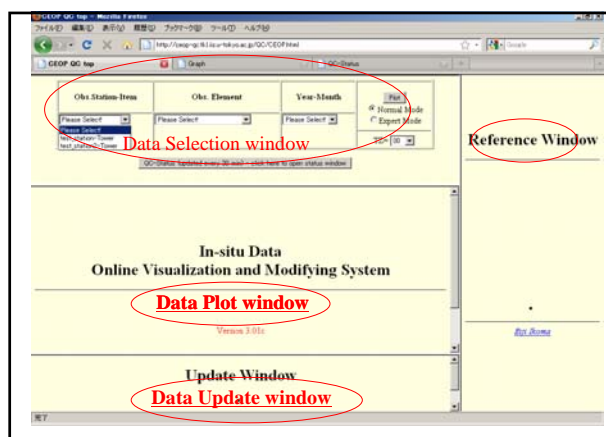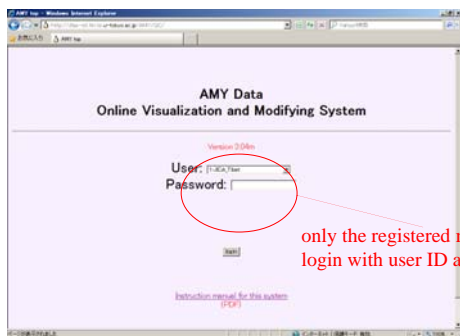 - *Ver3.03m(for AMY) are now running*
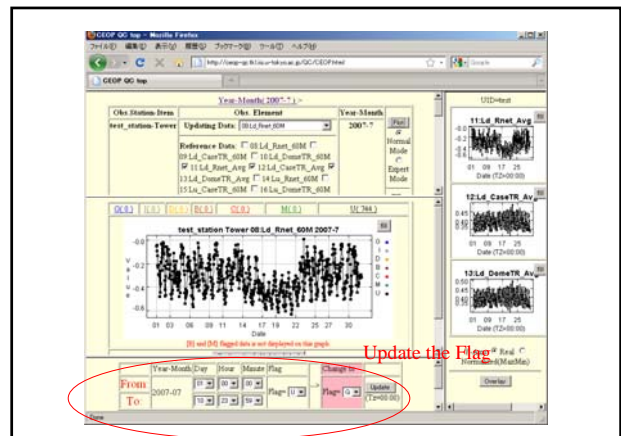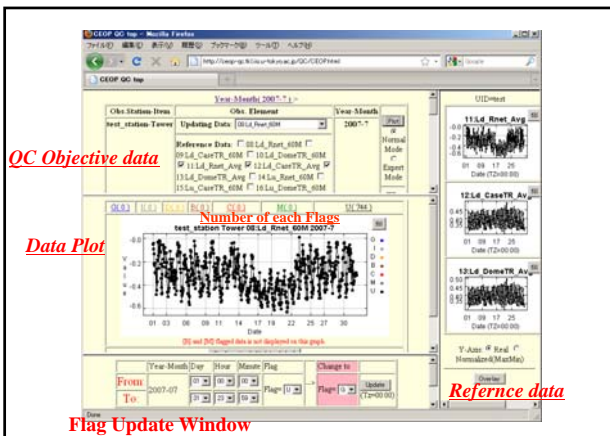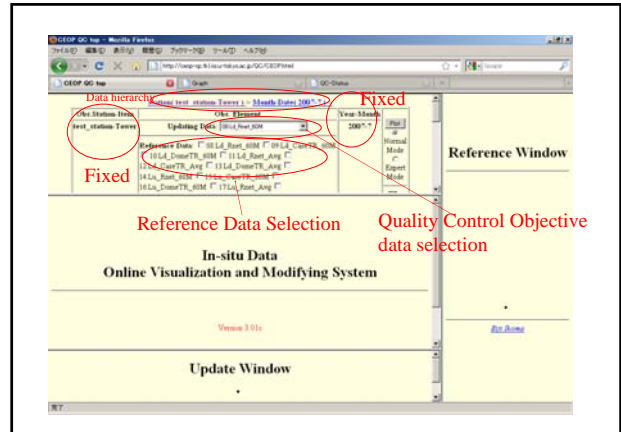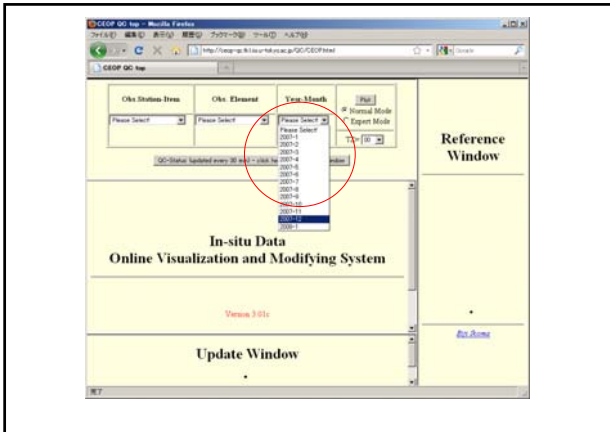- We are operating QC-V3 system for AMY Data.

Features of our QC system

- Web-based UI (required only Web browser)
- Easy-to-use and light operation
- Data management mechanism for each user authority
- Post-QC Data download support system
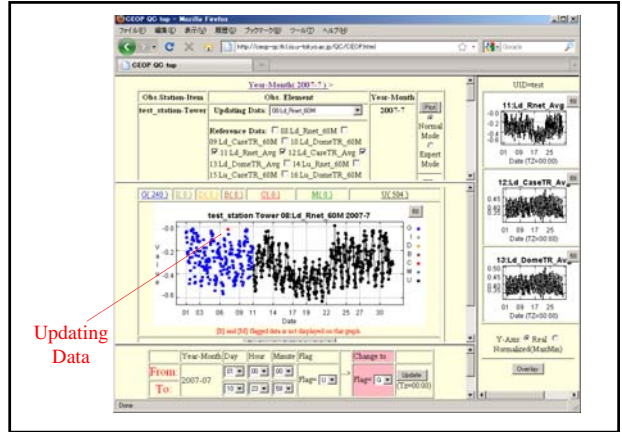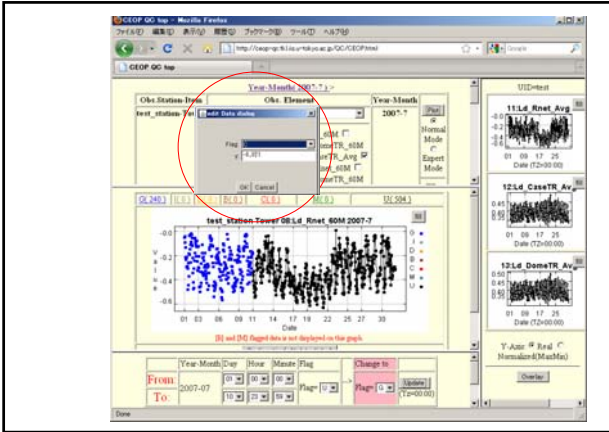- Progress Management system for Data Manager

Outline of QC Process

Data center (UT) — Site Manager

Pre-check the dataset — Data Upload System — Observed Raw Data

Database

QC Tools
- Data selection
- Data plot
- Point out (Error & Noise)
- Update Data, flag
- Format Conversion

QC Web Interface

Quality Control

Use Own research purpose

Unified Format Dataset — DIAS Core System

QC-V3 Toppage

AMY Data
Online Visualization and Modifying System

Version 2.04n

User:
Password:

only the registered member can login with user ID and password

Data Selection window

Reference Window

In-situ Data
Online Visualization and Modifying System

Data Plot window

Version 3.01z

Update Window
Data Update window

G:Good
I : Interpolated
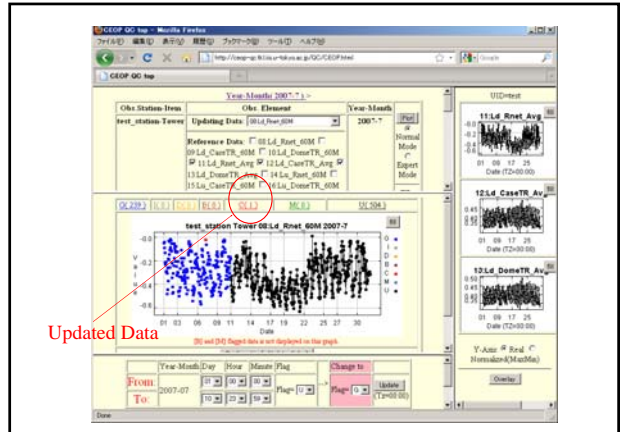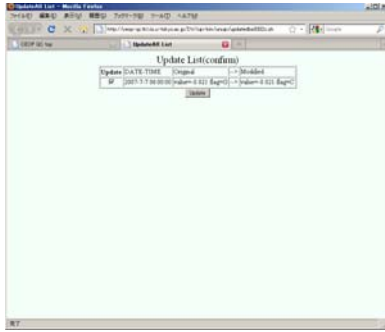**D: Dubious/Questionable**
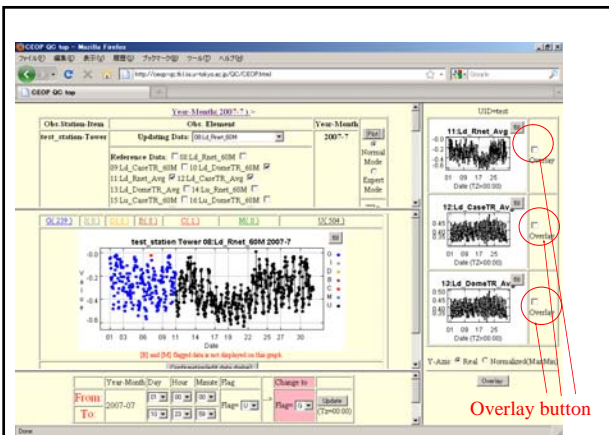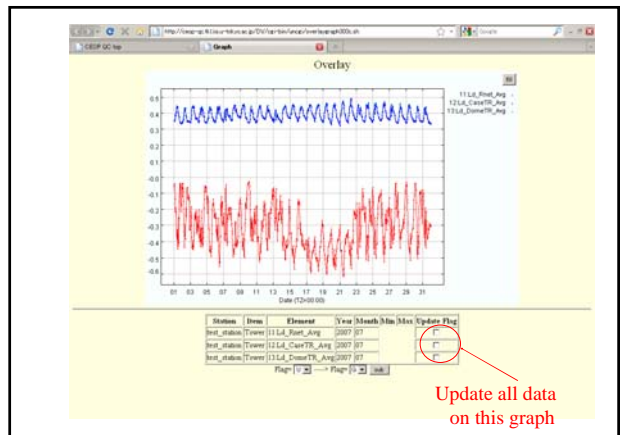**B: Bad**
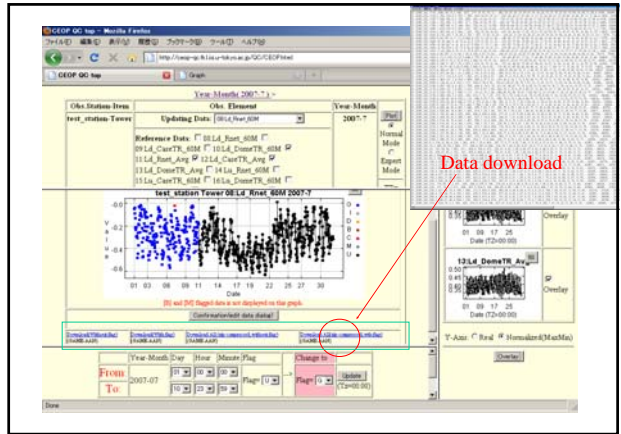**C: Abnormal value**
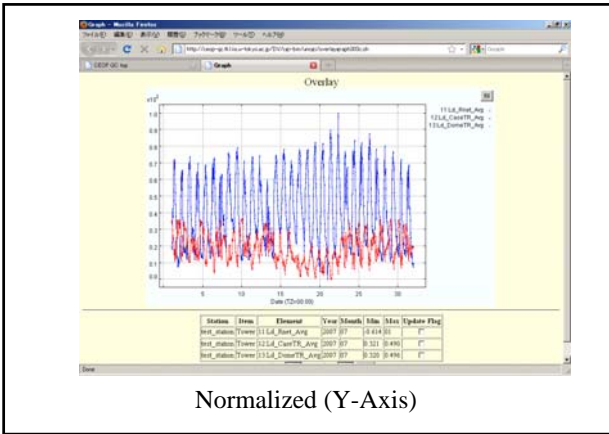**M: Missing**
**U: Unchecked**

Updating Data

Confirmation for update

Updated Data

Overlay button

Update all data
on this graph

Normalized (Y-Axis)
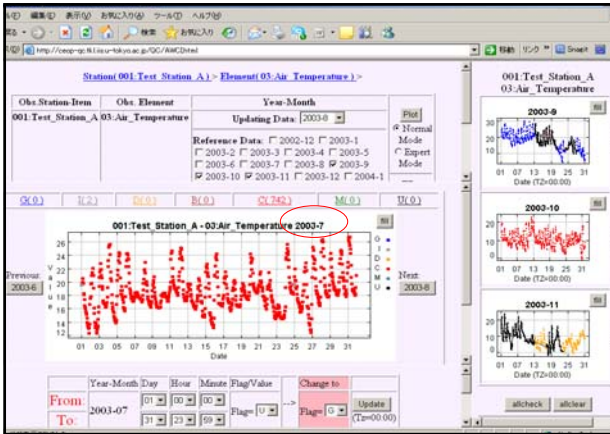

Data download

Move to Next/Previous time period

- On Graph window, "Next" and "Previous" button are added.
- Users can move to next/previout time period by clicking this button.
- If you reach to the end/first of the observation term, no button are displayed.
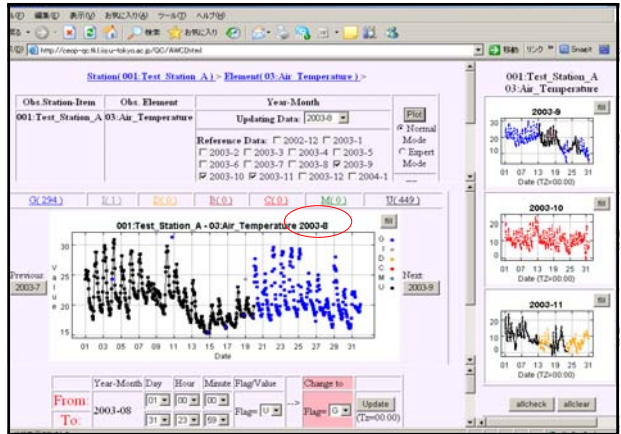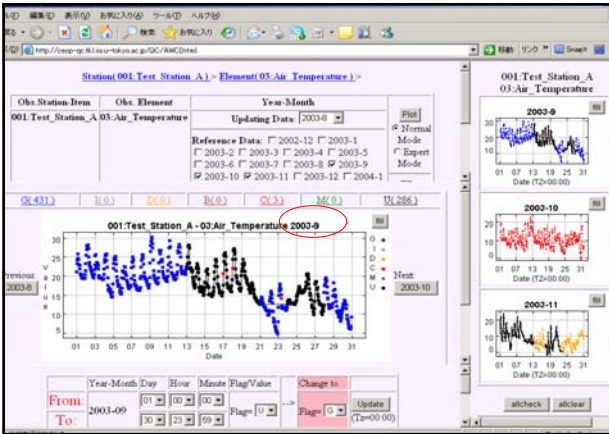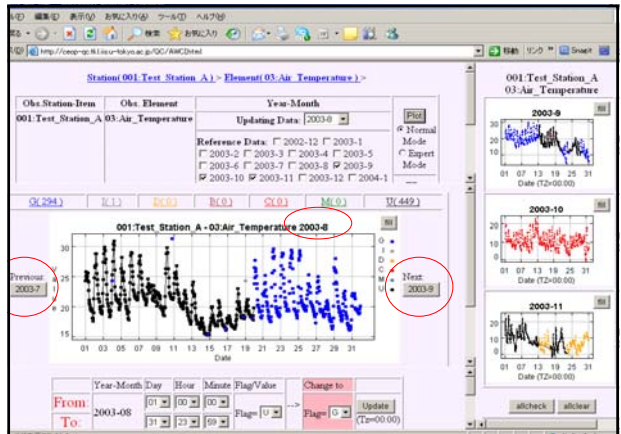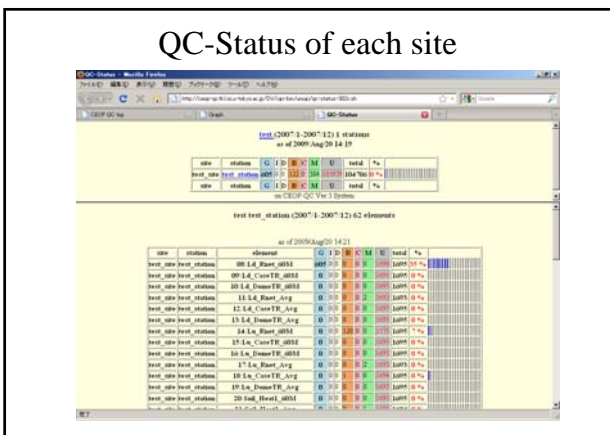
Generate Time series graph from select window directly

- On select window, New check box "Time Series" is available.
- If user check here, time series graph is displayed without operating on reference window.
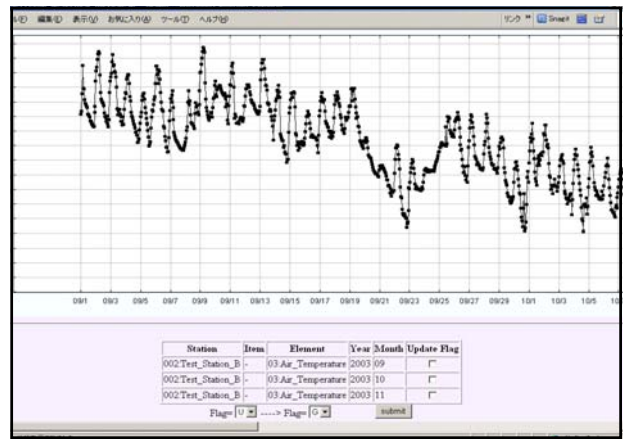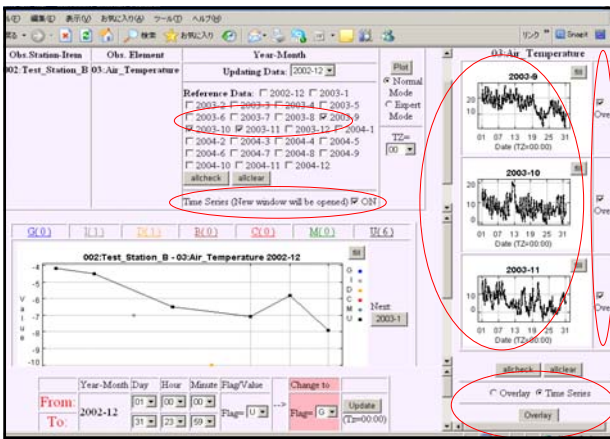
QC-Status of each site

Status Report for Administrator(all sites)

Observation Data Management System