



World Data Centre for Greenhouse Gases (WDCGG)

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WDCGG's Action Targets

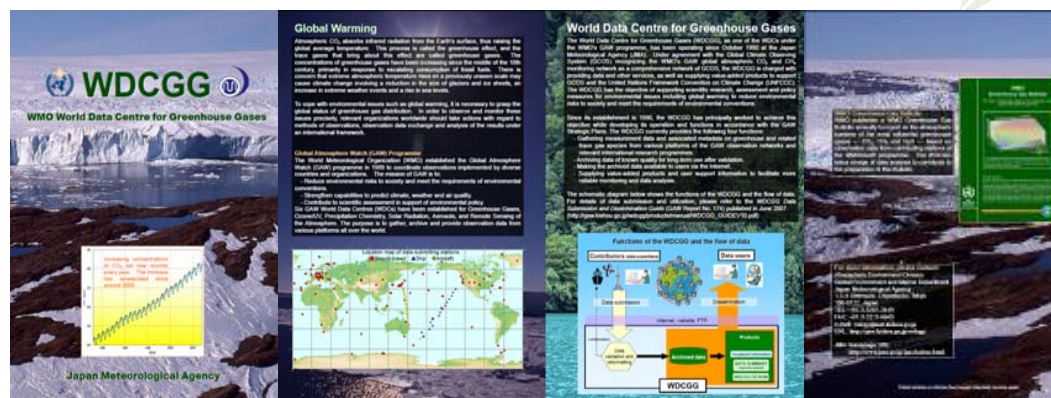
with its Recent Achievements

- ▶ **Interaction with the contributors**
- ▶ **Meeting the needs of data users**
- ▶ **Follow-up to scientific advice**
- ▶ **Harmonization with WDCs-GAWSIS**
- ▶ **In-house infrastructure and capacity**

Interaction with the Contributors

at GAW stations and others

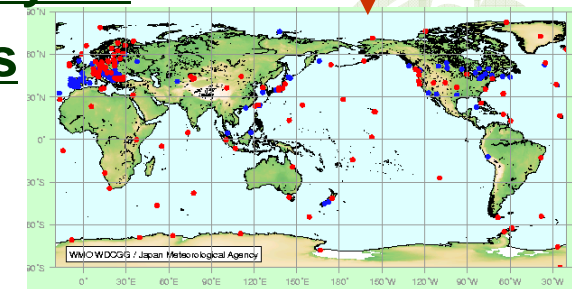
- ▶ Receipt of data and metadata
 - new web interface (revised in July 2007)
 - leaflet (produced in July 2008)
- ▶ “Data Submission and Dissemination Guide”
 - published as GAW Report No. 174 (June 2007)
 - relevance to GAW data management policy



Example of Metrics for WDCGG's Activity

The WDCGG archives 1170 data sets for different contributors, station, species and methods (as of 30 September 2008).

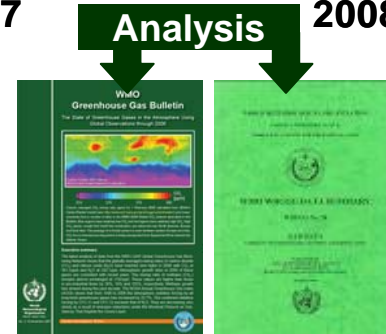
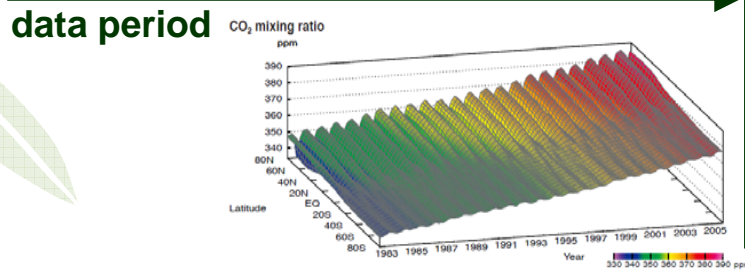
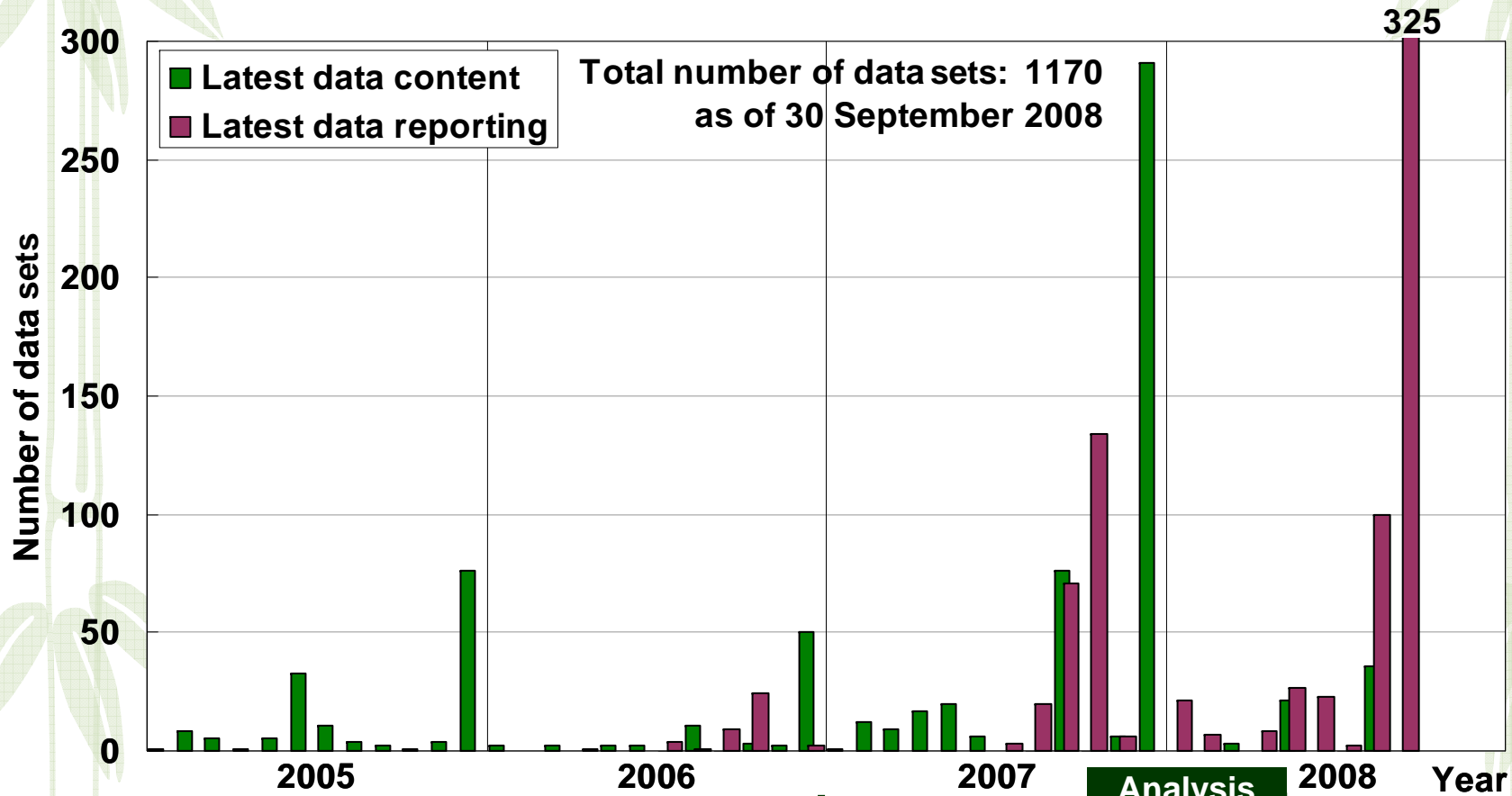
- ▶ 879 (75%): data or metadata updated or added within one year
- ▶ 653 (56%): data updated or added within one year
- ▶ 541 (46%): metadata updated or added within one year
- ▶ 357 (30%): containing observations within one year
- ▶ 553 (47%): same as above but within two years
- ▶ 734 (63%): Scale and calibration are explained
- ▶ 757 (65%): Data flags are indicated
- ▶ All data files have reference to the contact person's e-mail address.



from WDCGG website

‘within one year’: on 1 October 2007 or later

Annual Cycle of Observation, Reporting and Analysis



Meeting the Needs of Data Users

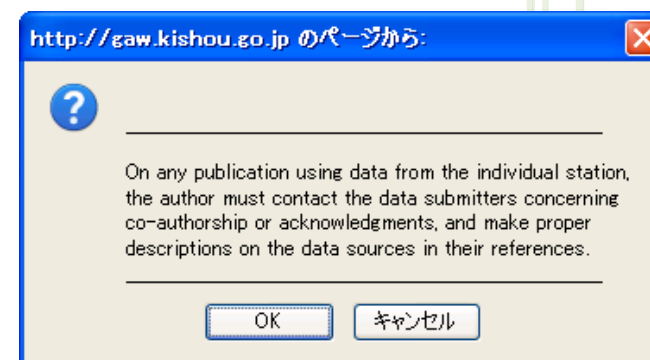
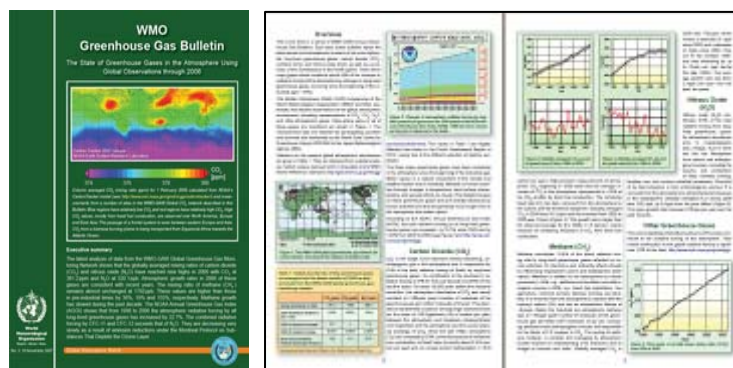
from policy makers, scientists and others

► Improving the web site

- search function (traceability, etc.)
- alert message on data policy

► Updating the products

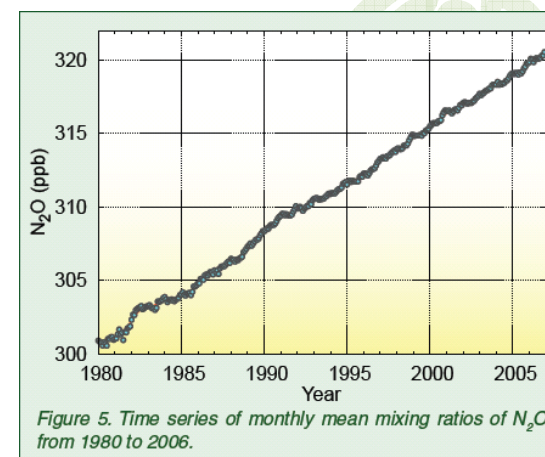
- Data Summary and CD-ROM
- WMO Greenhouse Gas Bulletin



Follow-up to Scientific Advice

from SAG-GHG in September 2007 at Helsinki

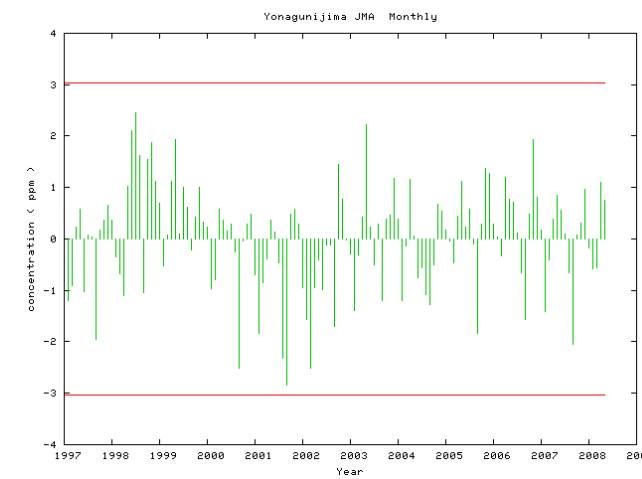
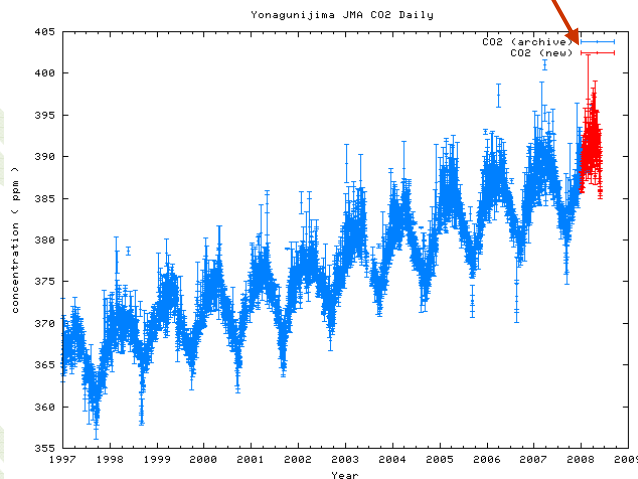
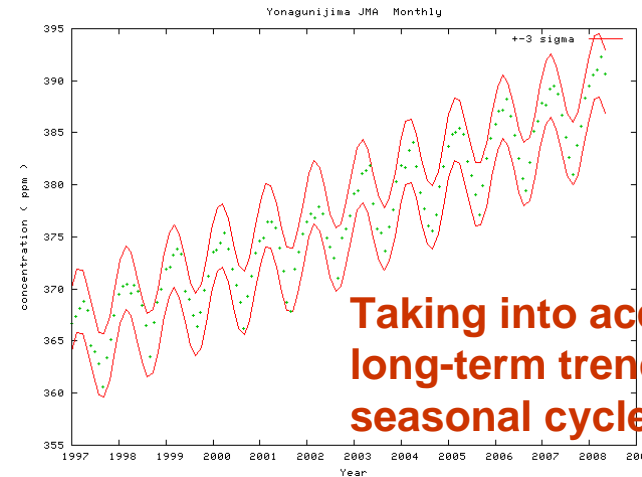
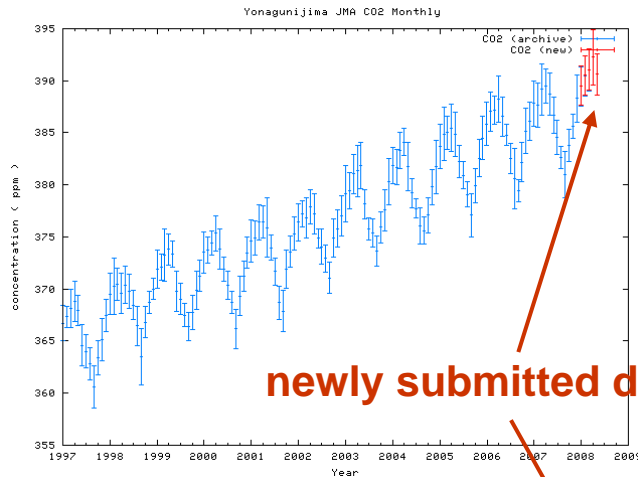
- ▶ Documenting traceability to WMO standard scales
 - Calibration records against the WMO standard
 - Scaling factors for different standards
- ▶ Basic quality check (screening) of submitted data
- ▶ Contributors' consent & recognition for products
- ▶ Improving analysis for global N₂O
- ▶ Near-real-time GHG data delivery
 - One week to one month timescales for diagnostics purposes



WMO Greenhouse Gas Bulletin No. 3, 2007

Example of On-Receipt Quality Check

Check with the contributor for questions, if any



**Consistency with past data
(visual check)**

**Statistical feasibility
(3-sigma threshold)**

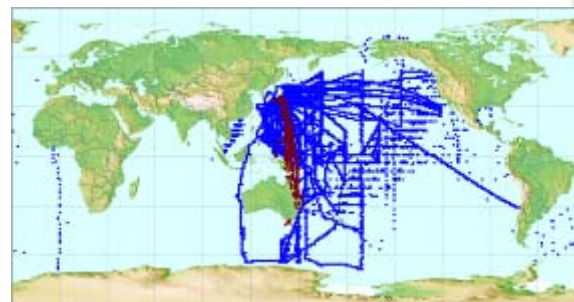
In-house Infrastructure and Capacity

at the Japan Meteorological Agency (JMA)

▶ Data from mobile platforms

(104 / 1170 data sets)

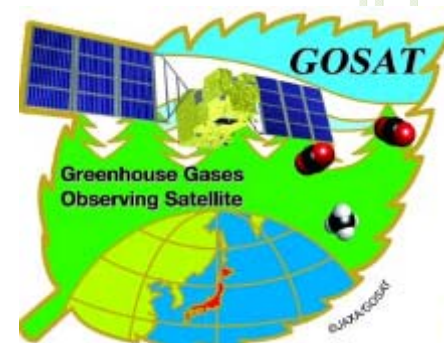
- Ships
- Aircraft (e.g. JAL between Japan and Australia)



▶ Retrieval data from satellite sensors

(no data reported so far)

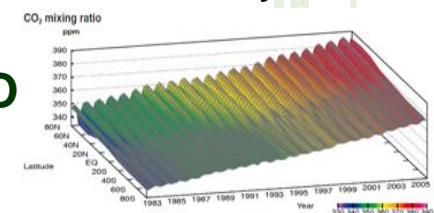
- GOSAT (to be launched in early 2009)



Courtesy of JAXA

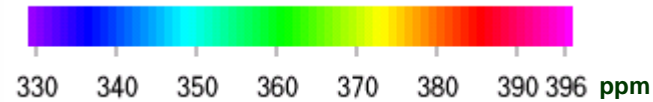
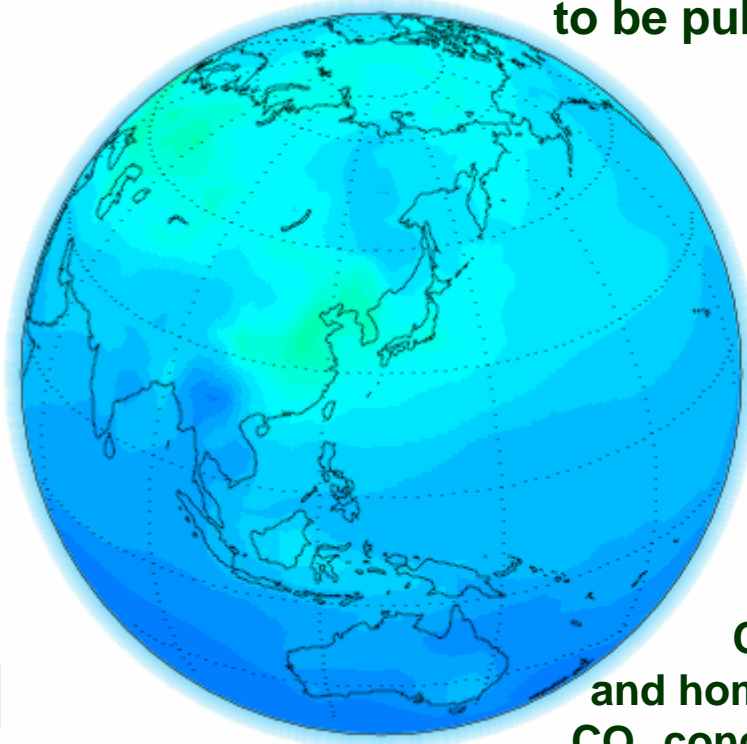
▶ Global analysis and 3D grid products

- WDCGG's global analysis for CO₂, CH₄ and CO (technical paper to be published as a GAW report)
- JMA's global analysis of CO₂ distribution and fluxes (to be made available as a product of JMA in February 2009)

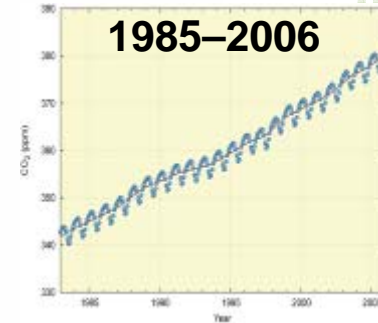
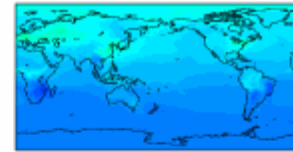


JMA's Analysis on Global CO₂ Distributions and Fluxes

to be published in February 2009 as a product of JMA

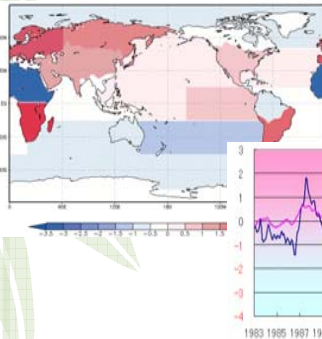


1985 - 01
(Year - Month)



Continuous and homogeneous CO₂ concentrations

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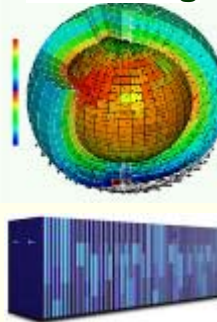


Emissions and removals of CO₂ from land and ocean

Meteorology



Modelling



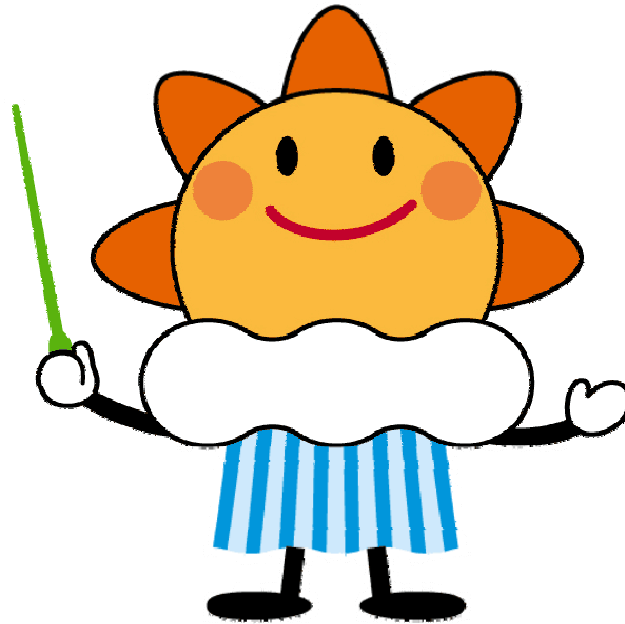
Observational data for CO₂



A priori fixed emission and absorption

Thank you.

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謝

Большое Спасибо.