Proposal of new interface for metadata input at the WDCGG website

Mayu YAMAMOTO,
Teruo KAWASAKI,
Hiroshi KOIDE
WDCGG@Japan Meteorological Agency

GGMT, Scripps, La Jolla, Sep. 17, 2015
1. WDCGG’s Recent Activities

2. Proposal of new interface for metadata input at the WDCGG website
Workshop on Future Directions of GAW Data Management
10-11 August 2015, Zürich, Switzerland
e.g., VOC chapter enhancement in Data Summary

2013 VOC chapter started for ethane
2014 ethane and propane
2015 GAW and non-GAW data
e.g., VOC chapter enhancement in Data Summary


WDCGG archive (GAW)

EMEP archive (Non-GAW)

UCI flask sampling network (GAW)
1. WDCGG’s Recent Activities

2. Proposal of new interface for metadata input at the WDCGG website
Why reform?

- Financial pressure to GHG measurements
- Model and Assimilation
- Cyber Infrastructure
- Stabilize the WDCGG services

Our ultimate goal

- To serve better to users and contributors alike
Make WDCGG better

- Improvement/stabilization
- Feedback
- User Registration
- Data Products
- New Data Submission via WEB
- New Database/New Dataflow
Data Submission

• Submission entire historical dataset
  – To avoid discrepancy between Laboratories and Data Centre due to
    • WMO scale migration
    • Internal re-calibration

• One-to-one correspondence between data and metadata
  – Meta-dataset has its own version
Synchronization

• When WDCGG moves on to a new system, is it possible for Contributors to submit entire historical data?

Reflecting
- WMO scale migration
- Internal re-calibration

Better Synchronization

Maintained Original data

Archived data
New Data Submission

Login > Data and metadata submission

Step 1 Before Submission
Please read the WDCGG submission guide carefully before submission.
- WDCGG Format
- WDCGG Metadata

Step 2 Submission
Start Data & Metadata Submission

Step 3 After Submission
WDCGG will contact you shortly after data processing.

#This is subject to a major change.##
New Data Submission

**Step 1: Select**

Please click the checkbox next to the gas species you would like to submit and then click the "Next" button.

- **Aircraft Observation of Atmospheric Trace Gases by JMA (AIA-JMA)**
  - ch4(aircraft-flask)
  - co2(aircraft-flask)
  - co(aircraft-flask)
  - n2o(aircraft-flask)

- **Minamitorishima (MNIM-JMA)**
  - ch4(surface-institu)
  - co2(surface-institu)
  - co(surface-institu)
  - o3(surface-institu)

- **Ryori (RJO-JMA)**
  - ccl4(surface-institu)
  - cfc11(surface-institu)
  - cfc12(surface-institu)
  - ch3cl(surface-institu)
  - ch3(co2(surface-institu)
  - co2(surface-institu)
  - co(surface-institu)
  - o3(surface-institu)

- **Syowa Station (SYO-JMA)**
  - o3(surface-institu)

- **Tsuchihashi (TKSH-JMA)**
  - o3(surface-institu)

- **Yonagunjima (YON-JMA)**
  - ch4(surface-institu)
  - co2(surface-institu)
  - co(surface-institu)
  - o3(surface-institu)
### New Data Submission

#### Metadata Input

You can edit your metadata here. First, click a "Edit" button. Then, fill out the form.

<table>
<thead>
<tr>
<th>No</th>
<th>Metadata</th>
<th>Required</th>
<th>Updated</th>
<th>Edit</th>
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<tr>
<td>3</td>
<td>Contact Person</td>
<td>✓</td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Scientific Aim</td>
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Please save your work before you take a break. If you don’t save your work, you will lose all unsaved data.

[Save]

[Next >]
New Data Submission

You can edit your metadata here. First, click a "Edit" button. Then, fill out the form.

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Observation of Atmospheric trace gases by JMA(AOA-JMA)

Minamitorishima(MNM-JMA)

Ryori(RYO-JMA)
## New Data Submission

### Before

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<tr>
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</table>
# Current Metadata Edit Form

## 1. Parameter(s)

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<tr>
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<td>click here</td>
<td>Yukio Fukuyama</td>
</tr>
<tr>
<td>CFCs</td>
<td>(continuous)</td>
<td>CFCs (Ryori)</td>
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<tr>
<td>CH3CCL3</td>
<td>(continuous)</td>
<td>CH3CCL3 (Ryori)</td>
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Click here to view the Measurement Information Edit Form.
New Data Submission

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<td>15</td>
<td>Description</td>
<td></td>
<td></td>
<td>Edit</td>
</tr>
</tbody>
</table>

Please save your work before you take a break. If you don't save your work, you will lose all unsaved data.
New Data Submission

Step 4: Data Upload

**Data Upload**

Limit: 10MB?
Allowed extensions: csv, txt, dat, xls, xlsx, prn, zip, tar.

Upload Data file

Name
E-mail
Submit

< Back
Make WDCGG better
Data Products (file format)

Current

New

Text

netCDF

NOAA ObsPack?
**Data Products** (text format for delivery)

### Current

**C01 TITLE:** CO2 hourly mean data

**C02 FILE NAME:** ryo239n00.jma.as.cn.co2.nl.hr2013.dat

**C03 DATA FORMAT:** Version 1.0

**C04 TOTAL LINES:** 5120

**C05 HEADER LINES:** 32

**C06 DATA VERSION:** 201307

**C07 STATION NAME:** Ryori

**C08 STATION CATEGORY:** Regional

**C09 OBSERVATION CATEGORY:** Air sampling observation at a stationary platform

**C10 COUNTRY/TERRITORY:** Japan

**C11 CONTRIBUTOR:** JMA

**C12 LATITUDE:** 39.03

**C13 LONGITUDE:** 141.82

**C14 ALTITUDE:** 260

**C15 NUMBER OF SAMPLING HEIGHTS:** 1

**C16 SAMPLING HEIGHTS:** 20

**C17 CONTACT POINT:** y-fukuyama@met.kishou.go.jp

**C18 PARAMETER:** CO2

**C19 COVERING PERIOD:** 2013-01-01 2013-07-31

**C20 TIME INTERVAL:** hourly

**C21 MEASUREMENT UNIT:** ppm

**C22 MEASUREMENT METHOD:** NDIR

**C23 SAMPLING TYPE:** continuous

**C24 TIME ZONE:** Local time UTC+9

**C25 MEASUREMENT SCALE:** WMO X2007 scale

---

### New

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**C24 TIME ZONE:** Local time UTC+9

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### Text

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### NetCDF / NOAA ObsPack

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</table>
Make WDCGG better

Feedback

User Registration
Feedback to contributors

• Download user information

> Contributor

Simple user registration is necessary

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Affiliation / Nationality</th>
<th>Purpose</th>
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</table>

– Survey conducted by Oksana
– Discussion at last Transcom meeting in 2012 Nanjing

• Statistical information for each Laboratory and Contributor
User Registration

WDCGG Registration Form

Please fill out the registration form.

* : required

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<td>Calibration for satellites</td>
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<td>Model validation and assimilation</td>
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<td>Others</td>
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If you agree with the GAW Data Policy, place a check mark.

☐ I agree with the GAW data policy.*
User’s Benefit

## This is subject to a major change. ##

### Your Download History

Please select at least one file to make a list of contact persons.

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<th>Contact</th>
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### TO(BCC)

*****@*****.******, *****@*****.******, *****@*****.******

### Mail Sample

Following is the latest ambitious trial email by a young scientist as a sample (modified from original). You might adjust this as needed.

Subject: Offer of Co-authorship about *** data

Dear WDCGG data providers,

I am ***, and am working on an inverse modeling closely collaborating with ***.

Now, I would like to inform you that we are preparing a presentation for *** meeting to be held at *** in next month and for this we will use your data downloaded from WDCGG in an inverse analysis....

This work cannot be achieved without globally distributed data and we very appreciate your great efforts on measurements and making data available. Therefore, we would like to invite you ALL to the co-authors.

Because there would be limited space, probably we need to compact the co-author list in the title. Therefore, we are thinking

SAMPLE

## This is subject to a major change. ##
Provider’s Benefit

SAMPLE

##This is subject to a major change.##
# These are subject to a major change.
Road Map 2014-2017

2014
- New WDCGG
- Operation as usual

2015
- New format
- Web interface prototype
- Preparing Draft
- GGMT-2015/SAG-GHG
- Consultation

2016
- metadata item
- New Database
- Beta version
- Release!

2017
- Data migration
- Data migration
- Release!
- GGMT-2017/SAG-GHG
- Consultation
- System/Data frozen
WDCs for GHG and RG

- WDCGG covers also Reactive Gases
- Reactive Gas species are being transferred to NILU, Norway