



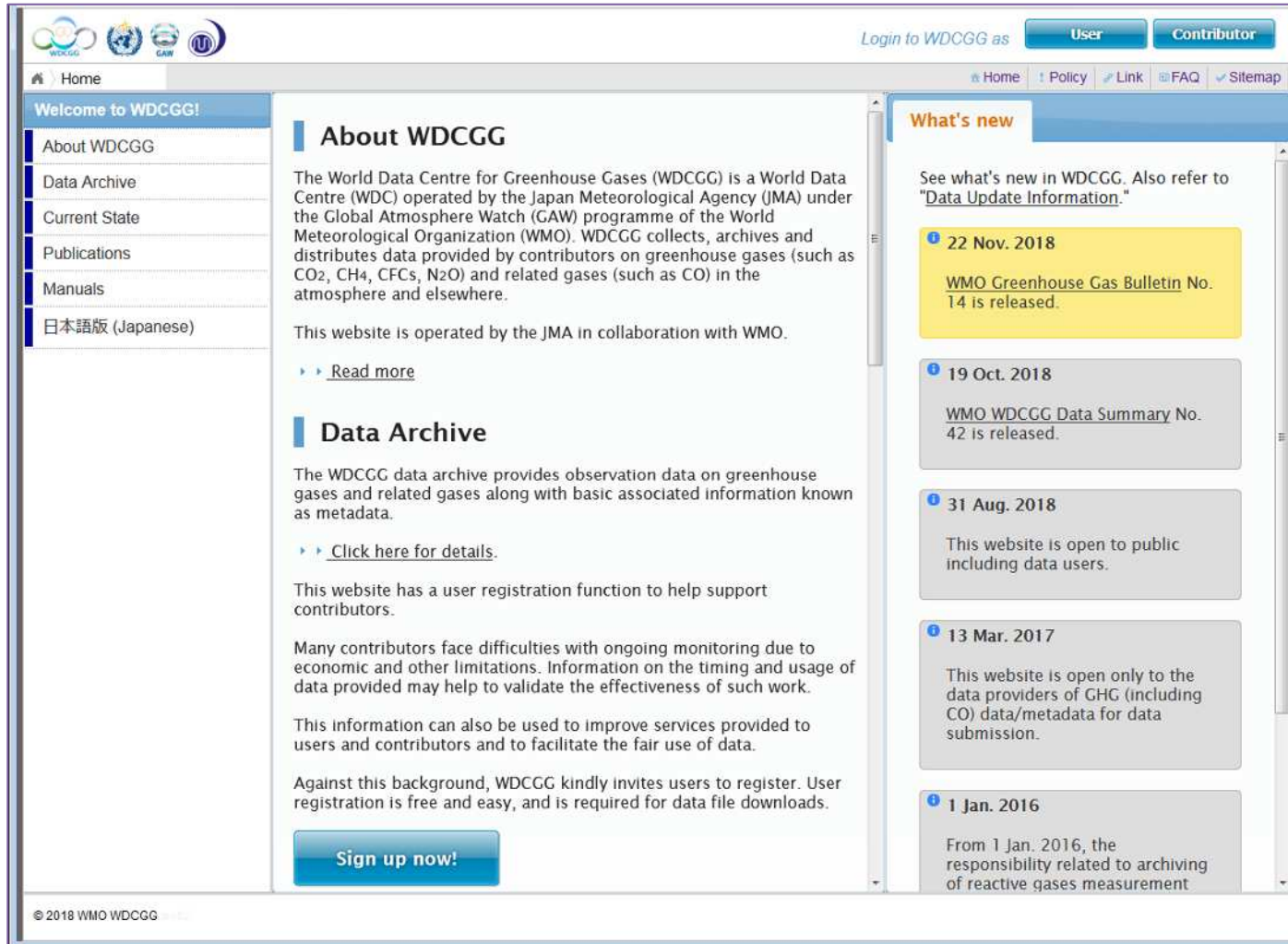
New WDCGG Website

Mikio Ueno
Japan Meteorological Agency (JMA)

ET-WDC telecon, 12 December 2018.

New WDCGG website started on 31 August, 2018

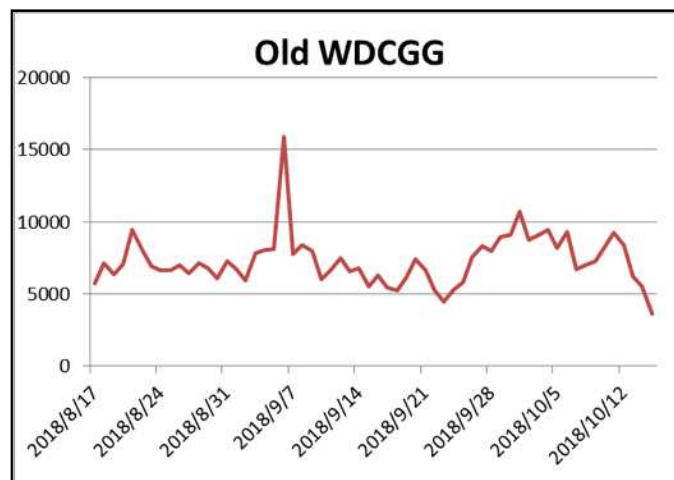
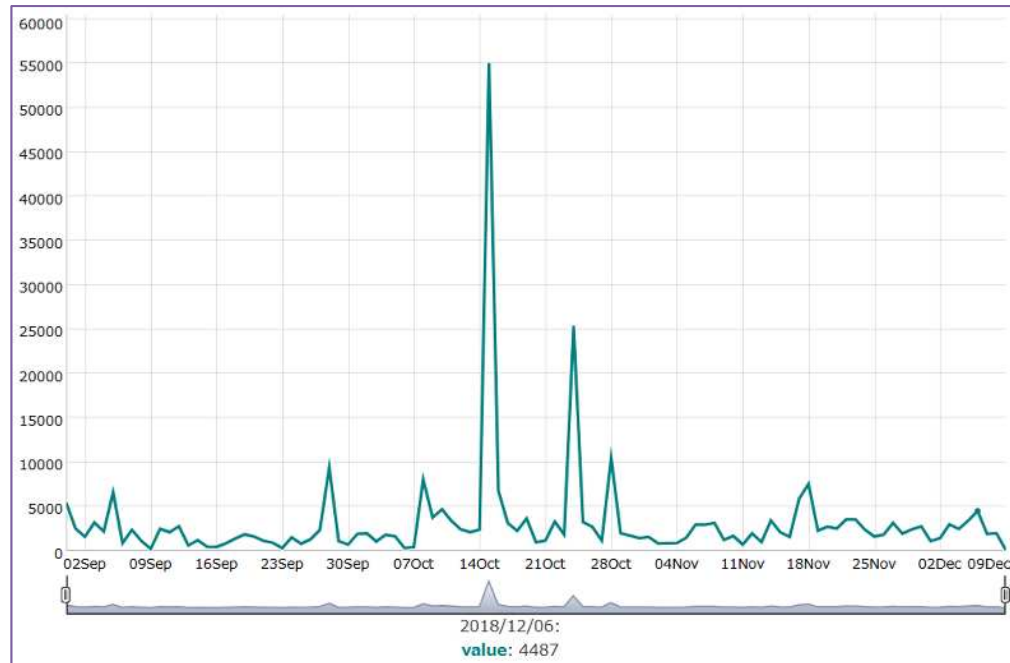
URL <https://gaw.kishou.go.jp/>



The screenshot displays the homepage of the new WDCGG website. At the top, there are logos for WDCGG, WMO, GAW, and JMA. A navigation bar includes 'Home', 'Policy', 'Link', 'FAQ', and 'Sitemap'. A login section for 'WDCGG as' offers 'User' and 'Contributor' buttons. A left sidebar contains a 'Welcome to WDCGG!' message and a menu with links to 'About WDCGG', 'Data Archive', 'Current State', 'Publications', 'Manuals', and a '日本語版 (Japanese)' link. The main content area is divided into three sections: 'About WDCGG', 'Data Archive', and 'What's new'. The 'About WDCGG' section explains the center's role and provides a 'Read more' link. The 'Data Archive' section describes the data provided and includes a 'Click here for details' link and a 'Sign up now!' button. The 'What's new' section features a list of recent updates, with the most recent being '22 Nov. 2018' where 'WMO Greenhouse Gas Bulletin No. 14' was released. The footer contains the copyright notice '© 2018 WMO WDCGG'.

Old WDCGG website was closed on 30 November, 2018

Access to WDCGG Website (31 August, 2018-)





1. Web interface

ET-WDC telecon, 12 December 2018.

WDCGG Homepage

About WDCGG

- History
- Statistics
- etc.

Data Archive

- Search
- Map
- List

Publications

- Data Summary
- GHG Bulletin
- etc.

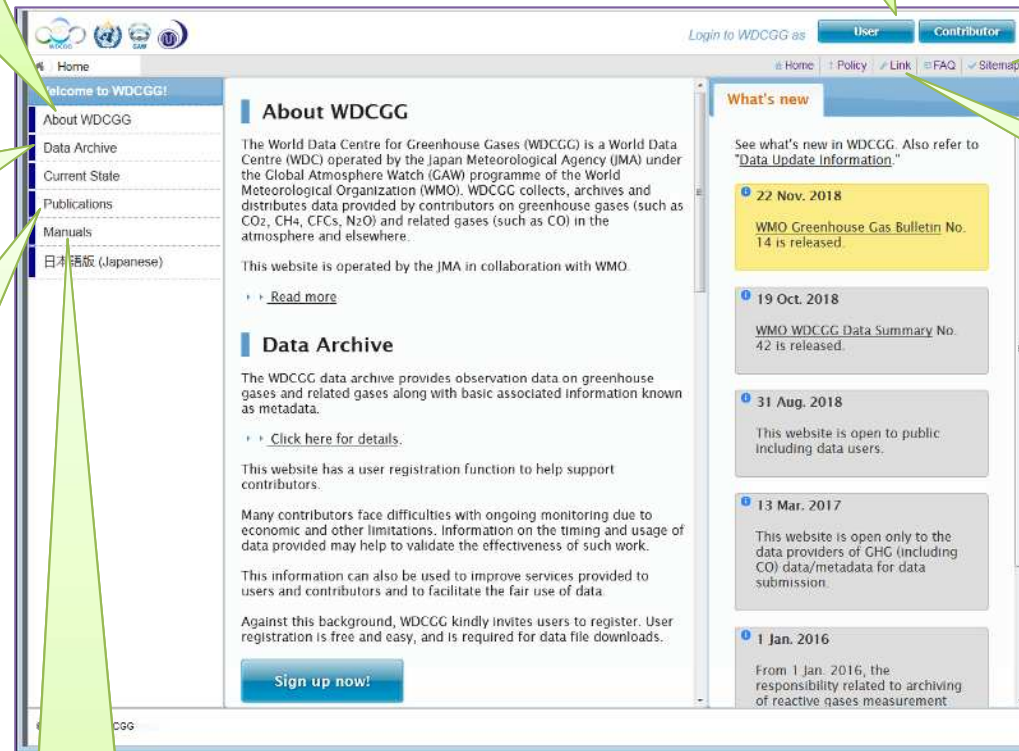
Manuals

- Contributor
- User

Login

Sitemap

Related Links



URL

<https://gaw.kishou.go.jp/>

About WDCGG - Statistics -

WDCGG GAW

Login to WDCGG as [User](#) [Contributor](#)

About WDCGG [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

About WDCGG Activities History About GAW **Statistics**

This page shows the recent statistics based on data available on the WDCGG website.

Contributor

	Total
Contributors and Collaborators	132
Contributors (Data Submitters)	68

▶ ▶ [Click here](#) for details.

Station/Mobile

	Station	Mobile	Total
Station	170	33	203
Station <i>(Contributors in consideration)</i>	221	35	256

▶ ▶ [Click here](#) for details.

Gas species

	Total
Gas species (data available)	55

▶ ▶ [Click here](#) for details.

Country/territory

▶ REGION I (Africa)

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Contributor
68

Station
Fixed: 170
Mobile: 33
Total: 203

Gas species
55

Country/Territory
53

(as of 11 December 2018)

Data Search - List -

The screenshot shows the WDCGG Data Search interface. At the top, there are logos for WDCGG, GAW, and the University of Vienna. The page title is "Data Search" and the user is logged in as "User". The navigation menu includes "Home", "Policy", "Link", "FAQ", and "Sitemap". The main content area has three tabs: "Search", "Map", and "List". A yellow banner at the top of the main content area asks "Have you completed registration?" and notes that registration is needed to download data files. A "CSV" button is visible in the top right of this banner. Below the banner, the section "Data Available at the Station(s) below:" is titled "List (gas species)". This section contains a grid of buttons for various gas species, including CO₂, CH₄, N₂O, SF₆, SO₂F₂, NF₃, COS, ¹³CH₄, ¹³CO₂, C¹⁸O₂, CH₃D, CCl₄, CH₃CCl₃, CFC-113, CFC-12, CFC-11, CFC-115, CFC-114, CFC-13, HCFC-141b, HCFC-142b, HCFC-22, HFC-125, HFC-23, HFC-152a, HFC-236fa, HFC-245fa, HFC-227ea, HFC-365mfc, HFC-134a, HFC-143a, HFC-32, HFC-4310mee, PFC-116, PFC-218, PFC-14, PFC-318, CBrClF₂, CBrF₃, C₂Br₂F₄, CO, CHCl₃, CH₃Cl, CH₂Cl₂, CH₃I, CH₃Br, CH₂Br₂, C₂HCl₃, C₂Cl₄, CHBr₃, H₂, ¹⁴CO₂, ²²²Rn, ⁷Be, and TIC. Below this grid, the section "GAW Global (32)" is titled "List (stations)". There is a search input field with the placeholder text "Search by a keyword: (start typing)". At the bottom, a table header is visible with columns: GAW, Country, WMO, Latitude, Longitude, and Elevation. The footer contains the copyright notice "© 2018 WMO WDCGG" and the page number "6".

WDCGG GAW

Login to WDCGG as [User](#) [Contributor](#)

Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

Have you completed registration?
Registration is needed to download data files. [CSV](#)

Data Available at the Station(s) below: **List (gas species)**

CO ₂	CH ₄	N ₂ O	SF ₆	SO ₂ F ₂	NF ₃	COS	¹³ CH ₄
¹³ CO ₂	C ¹⁸ O ₂	CH ₃ D	CCl ₄	CH ₃ CCl ₃	CFC-113	CFC-12	CFC-11
		CFC-115	CFC-114	CFC-13	HCFC-141b	HCFC-142b	HCFC-22
HFC-125	HFC-23	HFC-152a	HFC-236fa	HFC-245fa	HFC-227ea	HFC-365mfc	HFC-134a
HFC-143a	HFC-32	HFC-4310mee	PFC-116	PFC-218	PFC-14	PFC-318	CBrClF ₂
CBrF ₃	C ₂ Br ₂ F ₄	CO	CHCl ₃	CH ₃ Cl	CH ₂ Cl ₂	CH ₃ I	CH ₃ Br
CH ₂ Br ₂	C ₂ HCl ₃	C ₂ Cl ₄	CHBr ₃	H ₂	¹⁴ CO ₂	²²² Rn	⁷ Be
TIC							

GAW Global (32) **List (stations)**

Search by a keyword:

GAW	Country	WMO	Latitude	Longitude	Elevation
-----	---------	-----	----------	-----------	-----------

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Data Search - List -

WDCGG GAW WMO

Login to WDCGG as [User](#) [Contributor](#)

Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

GAW Global (32)

List (stations)

Search by a keyword:

GAW ID	Station	Contributor	Country /territory	WMO Region	Latitude (north: +; south: -)	Longitude (east: +; west: -)	Elevation (m a.s.l.)	Gas Species
ABP	Arembepe	NOAA INPE	Brazil	REGION III (South America)	-12.7666664124	-38.1666679382	0	CO2 CH4 N2O SF6 13CO2 C18O2 CO
ALT	Alert	NOAA CSIRO ECCC	Canada	REGION IV (North and Central America)	82.4991455078	-62.3415260315	210	CO2 CH4 N2O SF6 13CH4 13CO2 C18O2 CCl4 CH3CCl3 CFC-113 CFC-12 CFC-11 HCFC-141b HCFC-142b HCFC-22 HFC-152a HFC-134a CBrClF2 CO CH3Cl CH2Cl2 CH3Br C2Cl4 H2
AMS	Amsterdam Island	NOAA LSCE	France	REGION I (Africa)	-37.7983016968	77.5378036499	70	CO2 CH4 CO
ASK	Assekrem	NOAA ONM	Algeria	REGION I (Africa)	23.2666664124	5.6333332062	2710	CO2 CH4 N2O SF6 13CO2 C18O2 CO H2
BKT	Bukit Kototabang	NOAA BMKG	Indonesia	REGION V (South-West Pacific)	-0.2019443959	100.3180541992	864	CO2 CH4 N2O SF6 13CO2 C18O2 CO
BRW	Barrow (AK)	NOAA	United States of America	REGION IV (North and Central America)	71.3230133057	-156.6114654541	11	CO2 CH4 N2O SF6 13CH4 13CO2 C18O2 CCl4 CH3CCl3 CFC-113 CFC-12 CFC-11 HCFC-141b HCFC-142b HCFC-22 HFC-152a HFC-134a CBrClF2 CBrF3 CO CH3Cl CH2Cl2 CH3Br C2Cl4 H2
								CO2 CH4 N2O SF6 SO2F2 NF3 13CH4 13CO2 C18O2 CCl4 CH3CCl3 CFC-113 CFC-12 CFC-11

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Data Search - example (Pallas, CO2) -

WDCGG GAW

Login to WDCGG as [User](#) [Contributor](#)

Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

GAW Global (32)

Search by a keyword:

List (stations)

GAW ID	Station	Contributor	Country /territory	WMO Region	Latitude (north: +; south: -)	Longitude (east: +; west: -)	Elevation (m a.s.l.)	Gas Species
PAL	Pallas	NOAA FMI	Finland	REGION VI (Europe)	67.9736099243	24.1158332825	550	CO2 CH4 N2O SF6 13CO2 C18O2 CO
PYR	Nepal Climate Observatory - Pyramid	UNIURB	Nepal	REGION II (Asia)	27.9577999115	86.8149032593	5079	SO2F2 COS CCl4 CH3CCl3 CFC-113 CFC-12 CFC-11 CFC-115 CFC-114 HCFC-141b HCFC-142b HCFC-22 HFC-125 HFC-152a HFC-365mfc HFC-134a HFC-143a HFC-32 PFC-218 PFC-318 CBrClF2 CBrF3 CHCl3 CH3Cl CH2Cl2 CH3I CH3Br CH2Br2 C2HCl3 C2Cl4 CHBr3

GAW Regional (110)

Search by a keyword:

GAW ID	Station	Contributor	Country /territory	WMO Region	Latitude (north: +; south: -)	Longitude (east: +; west: -)	Elevation (m a.s.l.)	Gas Species
ADR	Adrigole	AGAGE	Ireland	REGION VI (Europe)	51.6800003052	-9.7299995422	50	N2O CCl4 CH3CCl3 CFC-12 CFC-11
AMY	Anmyeon-do	NOAA KMA	Republic of Korea	REGION II (Asia)	36.5383338928	126.3300018311	46	CO2 CH4 N2O SF6 13CH4 CFC-113 CFC-12 CFC-11 CO
			New					

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Data Search - example (Pallas, CO2) -

The screenshot shows the WDCGG Data Search interface. At the top, there are logos for WDCGG, GAW, and a university logo. The page title is "Data Search". There are navigation links for Home, Policy, Link, FAQ, and Sitemap. A search bar is present with tabs for Search, Map, and List. A yellow banner asks if the user has completed registration, with a link to "Registration" and a "CSV" button. Below this, the search results for "CO2 (2)" are displayed. A search box contains the text "(start typing)". The results table has columns for DL, Favorite, Station/Mobile ID, Country, Contributor, Data (with a color scale from 300 to 450 ppm), Metadata, and Platform Sampling Type Buffer. Two results are shown for Pallas, Finland: one from NOAA (surface flask ccgg) and one from FMI (surface insitu data1). A hand cursor is pointing at the "view" button for the FMI result.

Have you completed registration?
 Registration is needed to download data files.

CO₂ (2)

Search by a keyword: (start typing)

DL	Favorite	Station/Mobile (GAW ID, Country) *: Mobile	Contributor	Data			Metadata	Platform Sampling Type Buffer	
				ev	hr	da			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	NOAA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	view	click	surface flask ccgg
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	FMI	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	view	click	surface insitu data1

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Data Search - example (Pallas, CO2) -

WDCGG (World Data Centre for Greenhouse Gases) - Mozilla Firefox

https://gaw.kishou.go.jp/search/graph/co2_pal_surface-insitu_25_9999-9999_monthly.txt
(25: FMI, 9999: data1, 9999: default)

co2_pal_surface-insitu_25_9999-9999_monthly.txt

440
420
400
380
360
340
320
300

2000 2010

close

420 450

Metadata		Platform Sampling Type Buffer
view	click	surface flask ccgg
view	click	surface insitu data1

DL Favorite

Search by a key

Have you completed registration?

Registration i

CSV

WDCGG GAW U

Login to WDCGG as User Contributor

Data Search Home Policy Link FAQ Sitemap

Search Map List

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Data Search - example (Pallas, CO2) -

WDCGG GAW

Login to WDCGG as [User](#) [Contributor](#)

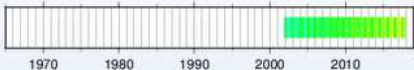
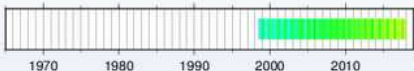
Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

Have you completed registration?
[Registration](#) is needed to download data files. [CSV](#)

CO2 (2)

Search by a keyword:

DL	Favorite	Station/Mobile (GAW ID, Country) <i>*: Mobile</i>	Contributor	Data				Platform Sampling Type Buffer	
				ev	hr	da	mo		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	NOAA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="button" value="view"/> <input type="button" value="click"/>	surface flask ccgg
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	FMI	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="button" value="view"/> <input type="button" value="click"/>	surface insitu data1

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Data Search - example (Pallas, CO2) -

WDCGG GAW U Login to WDCGG as [User](#) [Contributor](#)

Data Search > File [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

CO2 _ PAL _ surface - insitu _ FMI _ data1

[Contact](#) **[Observation](#)** [Reference\(s\)](#) [Gallery](#)

Search by a keyword:

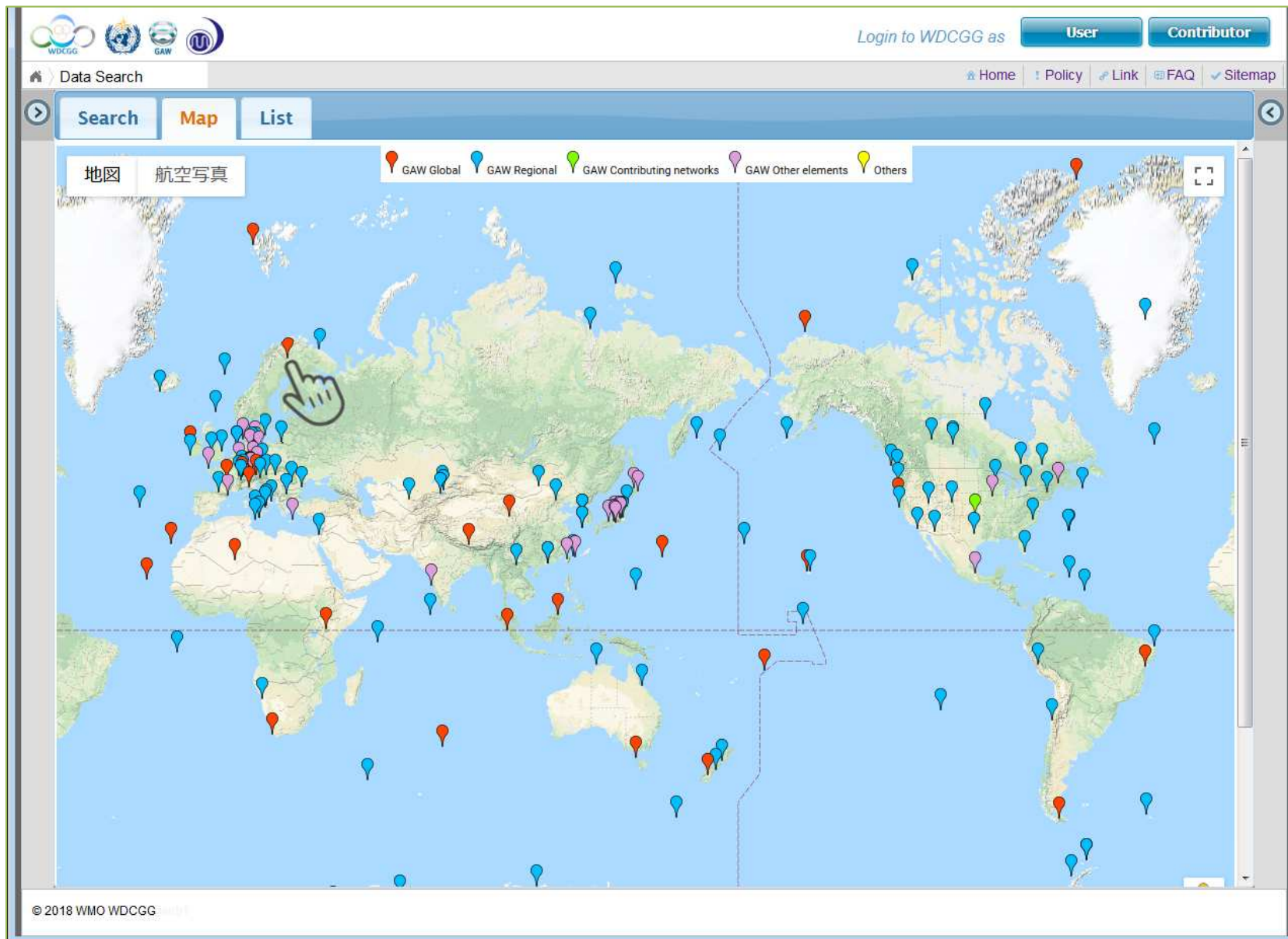
Collaborator(s)	
Aim of Observation	▶ Background observation
Data Time zone	▶ UTC+02:00
Unit	▶ ppm
Calibration Scale	▶ 9999-12-31 00:00:00 - 9999-12-31 23:59:59: WMO CO2 X2007
Instruments(s)	<ul style="list-style-type: none"> ▶ 1998-07-01 00:00:00 - 2000-04-10 23:59:59: LI-6262 (Li-Cor Inc.)(NDIR) ▶ 2000-04-11 00:00:00 - 2005-08-18 23:59:59: LI-6252 (Li-Cor Inc.)(NDIR) ▶ 2005-08-19 00:00:00 - 2006-07-07 23:59:59: LI-6262 (Li-Cor Inc.)(NDIR) ▶ 2006-07-08 00:00:00 - 2009-01-26 23:59:59: LI-7000 (Li-Cor Inc.)(NDIR) ▶ 2009-01-27 00:00:00 - 2011-12-16 23:59:59: G1301 (Picarro)(CRDS) ▶ 2011-12-17 00:00:00 - 2012-06-10 23:59:59: G2401 (Picarro)(CRDS) ▶ 2012-06-11 00:00:00 - 2012-07-31 23:59:59: G1301 (Picarro)(CRDS) ▶ 2012-08-01 00:00:00 - 2012-10-17 23:59:59: LI-7000 (Li-Cor Inc.)(NDIR) ▶ 2012-10-18 00:00:00 - 9999-12-31 23:59:59: G2401 (Picarro)(CRDS)
Intake Height above ground level	▶ 9999-12-31 00:00:00 - 9999-12-31 23:59:59: 7 (m)
Sampling Frequency	▶ 1 minute
Measurement Calibration	<p>▶ Three working standards, a reference gas and a "target" gas cylinders are calibrated against a set of seven WMO/CCL station standards five to six times a year. This is made at the station with the system that is normally measuring ambient concentration. Analyser is calibrated against the working standards every 2.5 hours. Reference gas is measured every 7.5 hours together with a target cylinder.</p> <p>Each cylinder is measured for four minutes, and the last minute average is used in further calculations. Calibration of working standards (+reference and target) is made in pyramid fashion, with pyramid run through ca. 6-7 times (i.e. 12-14 measurements/cylinder).</p> <p>The CRDS system has one working standard (WS) cylinder, and one target (T) cylinder. WS cylinder is measured ca. 4 times a day, and T cylinder once a day. WS cylinder readings are used to compensate analyzer drift (response changes).</p> <p>Station standards (7 WMO/CCL cylinders) have been calibrated at the station several times against newer sets of WMO/CCL standards. Current scale is based on 2018 recalibrated set of 4 cylinders.</p> <p>The two systems gave very similar results, in 2010 the average difference between hourly mean values was 0.00 ppm with</p>

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Data Search - Map -

The screenshot displays the WDCGG Data Search Map interface. At the top left, there are logos for WDCGG, GAW, and the University of Tokyo. To the right, there is a login section with the text "Login to WDCGG as" and two buttons: "User" and "Contributor". Below the logos, there is a navigation bar with "Data Search" and a home icon, and a secondary navigation bar with "Home", "Policy", "Link", "FAQ", and "Sitemap". The main interface features three tabs: "Search", "Map" (which is highlighted), and "List". Below the tabs, there are two buttons: "地图" (Map) and "航空写真" (Aerial Photo). A legend at the top of the map area identifies five categories of stations: "GAW Global" (red pin), "GAW Regional" (blue pin), "GAW Contributing networks" (green pin), "GAW Other elements" (purple pin), and "Others" (yellow pin). The map itself shows a world map with numerous pins of these colors distributed across all continents. At the bottom left of the map area, there is a copyright notice: "© 2018 WMO WDCGG".

Data Search - example (Pallas) -



Data Search - example (Pallas) -

The screenshot displays the WDCGG Data Search interface. At the top, there are logos for WDCGG, GAW, and the University of Vienna. The page title is "Data Search". On the right, there are buttons for "Login to WDCGG as" with "User" and "Contributor" options. Below the title, there are navigation links: Home, Policy, Link, FAQ, and Sitemap. The main content area has tabs for "Search", "Map", and "List". The "Map" tab is active, showing a world map with numerous colored pins. A legend at the top of the map identifies the pin colors: red for GAW Global, blue for GAW Regional, green for GAW Contributing networks, purple for GAW Other elements, and yellow for Others. A hand cursor is hovering over a red pin in the Arctic region, with a tooltip that says "Pallas x". The map also includes a search bar with the text "地图" and "航空写真". At the bottom left, there is a copyright notice: "© 2018 WMO WDCGG".

Data Search - example (Pallas) -

WDCGG GAW U

Login to WDCGG as [User](#) [Contributor](#)

Data Search Station/Mobile [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

Station Mobile

PAL Map

GAW ID	PAL
Station name	Pallas
GAW category	GAW Global
WMO region	REGION VI (Europe)
Country/territory	Finland
Address 1	Finnish Meteorological Institute (FMI) P.O. BOX 503 FI-00101 HELSINKI FINLAND
Address 2	
Address 3	
Latitude (north: +; south: -)	67.9736099243
Longitude (east: +; west: -)	24.1158332825
Elevation (m a.s.l.)	560
Timezone	UTC+02:00
Category	fixed station
Gawsis	https://gawsis.meteoswiss.ch/GAWSIS//index.html#/search/station/stationReportDetails/454
Climate Zone	Dfc (Snow climate, fully humid, cool summer)
Website	http://fmigaw.fmi.fi/
Status	Operational
Description	Most of the stations at Pallas that are part of the global station Pallas-Sodankylä are located within the Pallas-Yllästunturi National Park, inside the northern boreal forest zone. The Pallas area is free of large local and regional pollution sources with the nearest town, Muonio with some 2500 inhabitants, being 19 km to the west. The second-nearest town, Kittilä, with 6000 inhabitants, is 46 km to the south-east. The main station, Sammaltunturi (67°58'N 24°07'E, 560 m a.s.l.) is on top of a fjeld (a subarctic hill), ca. 300 m above the surrounding area and some 100 m above the tree line. The vegetation on the fjeld top consists mainly of low vascular plants, moss, and lichen. The region is hilly with the highest elevations of 600-800 m within 3-6 km from the station. The sectors 180°-330° and 100-130° are very open. Also part of this global station is the observatory Sodankylä (67°22'N 26°38'E, 178 m a.s.l.).
Contributor(s)	FMI NOAA
Gas Species	CO2 CH4 N2O SF6 13CO2 C18O2

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Data Search - example (Pallas, CO2) -

WDCGG GAW

Login to WDCGG as [User](#) [Contributor](#)


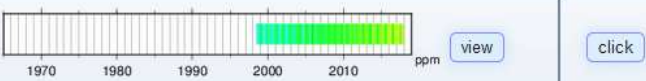
Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

Have you completed registration?
[Registration](#) is needed to download data files. [CSV](#)

CO2 (2)

Search by a keyword:

DL	Favorite	Station/Mobile (GAW ID, Country) <i>*: Mobile</i>	Contributor	Data				Platform Sampling Type Buffer
				ev	hr	da	mo	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	NOAA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 1970 1980 1990 2000 2010 ppm view click	surface flask ccgg
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pallas (PAL, Finland)	FMI	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	 1970 1980 1990 2000 2010 ppm view click	surface insitu data1

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Data Search - Search by parameters -

The screenshot displays the WDCGG Data Search interface. At the top, there are logos for WDCGG, GAW, and other organizations. The navigation bar includes 'Login to WDCGG as' with 'User' and 'Contributor' buttons, and links for 'Home', 'Policy', 'Link', 'FAQ', and 'Sitemap'. The main content area has tabs for 'Search', 'Map', and 'List'. Below the tabs, a message states: 'Use this function to search WDCGG archive data.' The search parameters are listed as follows:

GAWID	Select options
Station/Mobile	Select options
WMO Region	Select options
Country/territory	Select options
Station Category	Select options
Platform	Select options
Gas Species	Select options
Sampling Type	Select options
Organization	Select options

A 'Search' button is located at the bottom left of the form.

Data Search - Example (Pallas) -

The screenshot shows the WDCGG Data Search interface. At the top, there are logos for WDCGG, GAW, and the UN. On the right, there are login buttons for 'User' and 'Contributor'. Below the logos, the page title is 'Data Search' and there are navigation links for 'Home', 'Policy', 'Link', 'FAQ', and 'Sitemap'. The main content area has three tabs: 'Search', 'Map', and 'List'. Below the tabs, there is a heading 'Use this function to search WDCGG archive data.' followed by a list of search filters. The 'Station/Mobile' filter is selected, showing '1 selected'. The 'WMO Region' filter is active, with a search box containing 'palla' and a list of results including 'Pallas(PAL)'. Other filters include 'Country/territory', 'Station Category', 'Platform', 'Gas Species', 'Sampling Type', and 'Organization'. A 'Search' button is located at the bottom left of the filter area.

WDCGG GAW UN

Login to WDCGG as [User](#) [Contributor](#)

Data Search [Home](#) [Policy](#) [Link](#) [FAQ](#) [Sitemap](#)

[Search](#) [Map](#) [List](#)

Use this function to search WDCGG archive data.

GAWID

Station/Mobile **1 selected**

WMO Region Filter: [Check all](#) [Uncheck all](#)

Pallas(PAL)

Country/territory

Station Category

Platform

Gas Species

Sampling Type

Organization

[Search](#)

Related Links & Sitemap

The screenshot shows the WDCGG website interface. At the top, there are logos for WDCGG, GAW, and WMO. Navigation links include Home, Policy, Link, FAQ, and Sitemap. The main content area is titled 'Related Links' and features a world map with callouts for various data centres: Aerosols and Reactive Gases (Norway), Solar Radiation (Russian Fed.), Ozone and UV Radiation (Canada), Remote Sensing of the Atmosphere (Germany), Greenhouse Gases and related gases (Japan), and Precipitation Chemistry (USA). Below the map is a list of these centres with their full names and locations. Further down are sections for 'Other GAW Links' and 'Other Related Links'. A 'Sitemap' overlay is visible on the right side, listing categories like 'What's new', 'About WDCGG', 'Policy', 'Link', 'FAQ', 'How to use', 'Registration', 'Login', 'Data', 'Current State', and 'Publications'.

Related Links

GAW World Data Centres

- World Ozone and Ultraviolet Data Centre (WOUDC) [↗](#), Canada
- World Data Centre for Precipitation Chemistry (WDCPC) [↗](#), USA
- World Data Centre for Aerosols (WDCA) [↗](#), Norway
- World Data Centre for Reactive Gases (WDCRG) [↗](#), Norway
- World Radiation Data Centre (WRDC) [↗](#), Russian Federation
- World Data Centre for Remote Sensing of the Atmosphere (WDC-RSAT) [↗](#), Germany, Germany

Other GAW Links

- Global Atmosphere Watch (GAW) [↗](#), WMO Secretariat, Switzerland
- GAW Station Information System (GAWSIS) [↗](#), Switzerland
- Ozone Mapping Centre [↗](#), Greece
- Quality Assurance/Science Activity Centre for Asia and the South-West Pacific [↗](#), Japan
- Quality Assurance/Science Activity Centre for the Americas [↗](#), USA
- World Calibration Centre for Surface Ozone, Carbon Monoxide and Methane [↗](#), Switzerland

Other Related Links

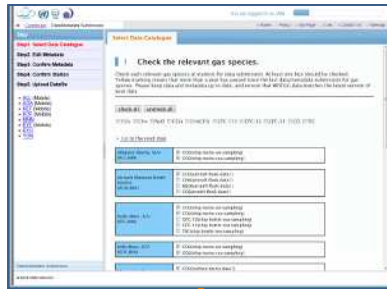
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2. Major change of procedures

Contributor: data & metadata submission procedure

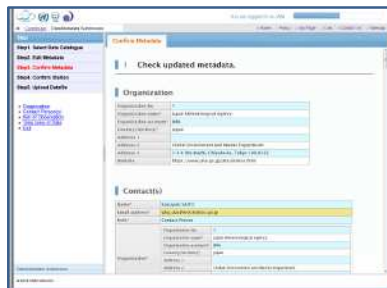
1. Select station(s) & gas species



2. Edit metadata



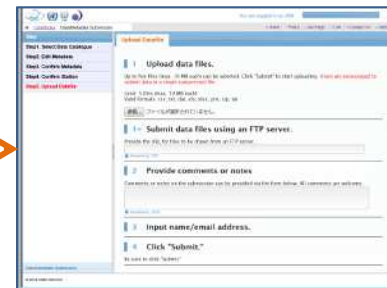
3. Check metadata



4. Check station info.



5. Upload data files



Step 1 Introduction

WDCGG has introduced a new data format for the provision of information to users. Accordingly, we would like to ask you to change the data format for submission. For more information on submitting data/metadata, see:

- WDCGG Contributor Manual

The 5 data/metadata submission steps:

1. Select station and gas species for data submission
2. Edit metadata
3. Check metadata
4. Check station information from CAWSIS / Update Mobile station Information from WDCGG
5. Upload data files

Read the WDCGG Contributor Manual carefully before submitting data/metadata.

Step 2 Submission

Data and corresponding metadata are required for data submission. Have them ready beforehand. To start, click "Start Data & Metadata Submission."

Step 3 After Submission

WDCGG will contact you once data processing is complete. For more information on confirmation, see:

ATTENTION CONTRIBUTORS
To download data except your data, you should login as data user.

User Registration is needed to download data files

WDCGG GAW U

Login to WDCGG as [User](#) [Contributor](#)

Home Policy Link FAQ Sitemap

Read before registering

Be sure to read the information below before registering.

Why register?

This website requires user registration to help WDCGG respond to contributors' requests. Information on users' data downloads is recorded.

Many contributors face difficulties with ongoing monitoring due to economic and other limitations. Information on the timing and usage of data provided may help to validate the effectiveness of such work.

WDCGG also needs to maintain awareness regarding data collected and improve its service to users and contributors. Fair use of such data is also enhanced via the requirement for user registration.

Provision of information on user names/organizations and email addresses facilitates communication and collaboration with contributors, who reserve the right to know who is using the data they provide. User information will not be distributed or used for other purposes.

Steps for registration

- Step1: Fill out the registration form.
- Step2: Submit the form.
- Step3: Look out for an email containing an activation code.
- Step4: Access the URL with the activation code to complete registration.

Users will be accredited once registration is complete.

[Get started](#)

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Registered users: 213
(Country)
China: 60
Japan: 30
U.S.A.: 21
Germany: 15
Rep. of Korea: 10
Russia: 10
(as of 10 December 2018)

feedback: download information to the contributor

user registration

user name
email address

Data Download Information

JMA's Download Information (As of "12/12/2018")

The content of grey cells is not currently available to the public.

Attention:

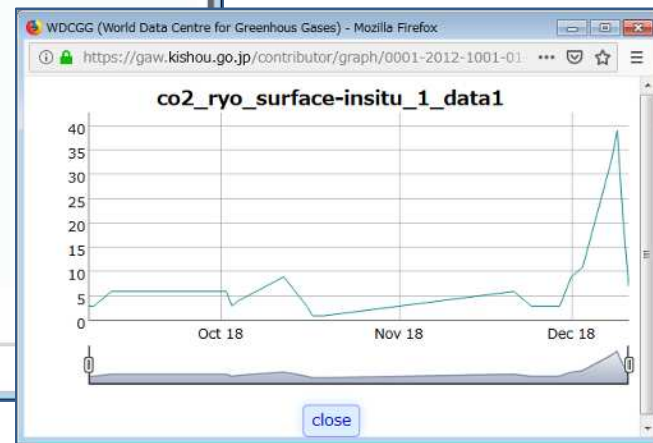
This page contains users' personal information. Be sure to read the WDCGG Privacy Policy carefully. Such information must be used exclusively for the intended purposes. Your understanding is appreciated.

Search by a keyword: ryori

GAW ID	Station/Mobile	Gas Species	Sampling Type	Buffer	CSV	Graph
RYO	Ryori	CO2	insitu	data1	csv	view
RYO	Ryori	CH4	insitu	data1	csv	view
RYO	Ryori	N2O	insitu	data1	csv	view
RYO	Ryori	CCl4	insitu	data1	csv	view
RYO	Ryori	CH3CCl3	insitu	data1	csv	view
RYO	Ryori	CFC-113	insitu	data1	csv	view
RYO	Ryori	CFC-12	insitu	data1	csv	view
RYO	Ryori	CFC-11	insitu	data1	csv	view
RYO	Ryori	CO	insitu	data1	csv	view

ATTENTION CONTRIBUTORS
To download data except your data, you should login as a data user.

JMA
© 2018 WMO WDCGG



data file format

Old

```

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
(An omission)
C30 COMMENT:
C31
C32 DATE TIME DATE TIME CO2 ND SD F CS REM
2013-01-01 01:00 9999-99-99 99:99 401.78 105 0.119 -7 0 -99999999
2013-01-01 02:00 9999-99-99 99:99 401.20 101 0.195 -7 0 -99999999
    
```

Header part
Fixed (32 lines)

Data part
Different formats by platform

New

```

# ----->>>>
# Data Set Name : co2_mnm_surface-insitu_19_9999_HourlyData
# Data_Set_Version : 2014-04-18
#
# GLOBAL ATTRIBUTES
#
# site_code : MNM
# site_gaw_id : MNM

# header_lines : 180
#
# VARIABLE ATTRIBUTES
#
# site_code:long_name : site_name_abbreviation.
# site_code:comment : Site code is an abbreviation for the sampling site name.

#
#
#
#
#
# VARIABLE ORDER
#
# site_code year month day hour minute second year month day hour minute second
value value_unc nvalue latitude longitude altitude elevation intake_height instrument
Ocflag measurement_method scale flask_no
MNM 1992 12 31 15 0 -9 -9 -9 -9 -9 -9 -999.999 -999.999 0 24.28520012 153.9812927
28 8 20 8 0 9 3 -9
MNM 1992 12 31 16 0 -9 -9 -9 -9 -9 -9 -999.999 -999.999 0 24.28520012 153.9812927
28 8 20 8 0 9 3 -9
    
```

Header part
Flexible

(An omission)

Data part
Same format



3. Historical reactive gas data

Historical Reactive Gas Data

Close

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 - Reactive gas data
 - About GAW
- How to use
 - Contributor / User Manuals
 - Glossary
 - Metadata List
- Registration
 - User
 - Contributor
- Data
 - Data Search
 - Data Update Information
- Current State
- Publications
 - WDCGG Guide

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About WDCGG Activities **History** About GAW Statistics

History

The World Data Centre for Greenhouse Gases (WDCGG) was established at JMA in October 1990. The seven currently active GAW WDCs cover greenhouse gases, ozone/UV, precipitation chemistry, aerosols, reactive gases, solar radiation and remote sensing of the atmosphere.

The GAW network is officially recognized as contributing to the atmospheric composition domain (for CO₂, CH₄ and other gases) of the Global Climate Observing System (GCOS), which supports research and systematic observation under the United Nations Framework Convention on Climate Change (UNFCCC). Under the GCOS-GAW Agreement of October 2006, WDCGG is charged with data management and provision of value-added products on these gas species in order to facilitate more reliable monitoring and data analysis.

In October 2002, WDCGG took over the role of the World Data Centre for Surface Ozone (WDCSO) from the Norwegian Institute for Air Research (NILU).

However, on 1 January 2016, responsibility for archiving of reactive-gas observation data (other than for CO) was officially transferred to the newly established World Data Centre for Reactive Gases (WDCRG) ^{en} hosted by NILU.

Reactive gas data submitted to WDCGG before 1 January 2016 are being migrated to WDCRG. For the time being, those historical data are available from here.

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Historical Reactive Gas Data

The screenshot shows a web browser window with the URL https://gaw.kishou.go.jp/static/publications/dvd/dvd_08/menu/d. The page title is "WMO Global Atmosphere Watch World Data Centre for Greenhouse Gases". On the left, there is a "GAW" logo and a navigation menu with "Data Policy" and "Data" buttons. The main content area features a horizontal strip of small images and a table of links for reactive gases:

O₃	VOCs	SO₂
NO_x	NO	NO₂
NO_y	ROOH	PAN
H₂O₂	Meteorological Data	

Below the table, a notice states: "Reactive gas data submitted to WDCGG before 1 January 2016 are being migrated to WDCRG. For the time being, those historical data are available from above." A link is provided: [Data file name format and data format \(excerpt of the GAW Report No. 188\)](#). At the bottom, the page is operated by the Japan Meteorological Agency in collaboration with the World Meteorological Organization, with logos for both organizations.

Historical Reactive Gas Data - example (VOCs) -




GAW

WMO Global Atmosphere Watch

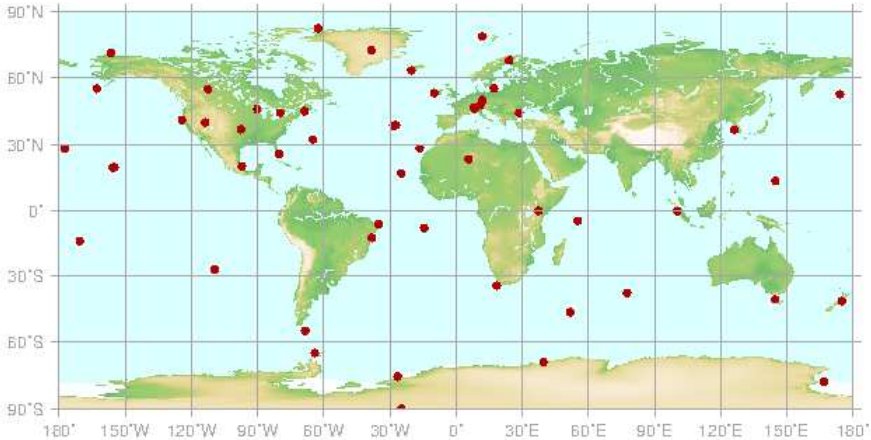
World Data Centre
for Greenhouse Gases

[Data Policy](#)

[Data](#)



- VOCs -

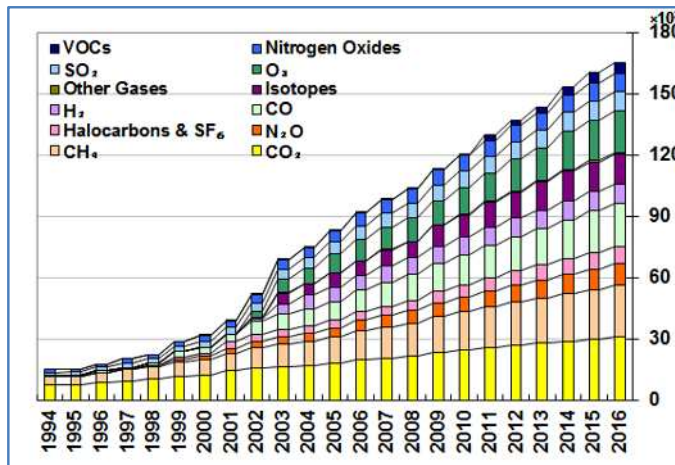


Clickable Map of VOCs Stations

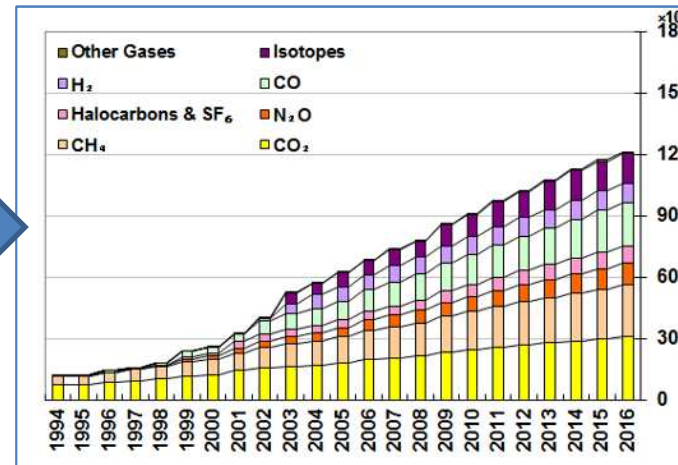
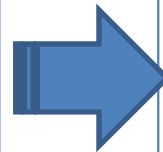
Station	Country/ Territory	Location	Contributor
<i>Region I (Africa)</i>			
Amsterdam Island	France	37.80°S 77.53°E 55m	LSCE
Ascension Island	United Kingdom of Great Britain and Northern Ireland	7.92°S 14.42°W 54m	NOAA/ESRL
Assekrem	Algeria	23.27°N 5.63°E 2710m	NOAA/ESRL

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Data amount at WDCGG



Data amount (fixed stations) (old)



Data amount (fixed stations) (new)