

Data Submission to the World Data Centre for Reactive Gases

Martin Steinbacher

Empa, Laboratory for Air Pollution/Environmental Technology, Dübendorf,
Switzerland

Training of KMD staff, Duebendorf, 28 June till 02 July 2018

World Data Centre for Greenhouse Gases

The typical new data submission procedure in WDCGG was as following:

- 1) An application letter from contributor side to WMO to be registered as a GAW station.
- 2) GAWID registration in GAWSIS (<https://gawsis.meteoswiss.ch/>)
- 3) Data submission (by email attached or other means) and Metadata registration via WDCGG web form.
- 4) Pre-publication check by the contributor with a temporarily pages in WDCGG
- 5) After your check, data will be published.

World Data Centre for Reactive Gases



<http://www.gaw-wdcr.org/>

Info

GAW World Data Centre for Reactive Gases (WDCRG)



The World Data Centre for Reactive Gases (WDCRG) is the data repository and archive for reactive gases of the World Meteorological Organisation's (WMO) [Global Atmosphere Watch \(GAW\) programme](#). The WDCRG was established January 1, 2016 and takes over the responsibility of this part of the GAW programme after Japan Meteorological Agency (which will continue to host the World Data Centre on Greenhouse Gases (WDCGG)).

The first ordinary reporting deadline of data is by end 2016 (data for 2015).

The reactive gases to be hosted at WDCRG are: SO₂, Oxidized nitrogen species, Ozone (tropospheric) and VOCs (list to be extended as additional variables are added to the monitoring efforts).

To browse for data submitted to WDCRG, please visit <http://ebas.nilu.no>, then select "GAW-WDCRG" in the "Framework" filter on the top left.

GAW-WDCRG will be utilizing the EBAS data infrastructure at NILU, and the procedures and formats etc will follow the same approach as for GAW-WDCA, EMEP and ACTRIS (the old formats used for submission to GAW-WDCGG are not valid).

Below is some initial information, and for comments and questions, please contact Kjetil Tørseth (... kt ... @ ... nilu.no ...)

- [Instructions and templates for data submissions are found at: http://ebas-submit.nilu.no.](http://ebas-submit.nilu.no)
- The meta-data requirements and formats differ significantly from the previous requirements of the WDCGG, so we encourage data originators to resubmit their historic time series to provide the most updated and fully documented dataset possible (a direct transfer of historic data from WDCGG will result in datasets which do not contain the appropriate set of meta-data, and further there would be large difficulties in keeping track of potential more recent revisions should the data already exist in EBAS through submissions to other relevant programmes).
- Please note that one can submit the full time series in one submission (provided that essential meta-data are consistent), so reporting of historic data will not require much additional effort.
- As NILU hosts databases for several projects and programmes, the meta-data are used to document the association of data to these, and further to regulate the access to data, tracking data use etc. For this reason, data originators MUST as part of their metadata specifically indicate to which programme the data are reported. One can list several affiliations at once, and as such report the same dataset to multiple databases (e.g. "GAW-WDCRG EMEP ACTRIS" to assign data to these three programmes). Reactive gases data intended for GAW must have the Project association (Line 5 of the data header) "GAW-WDCRG" (data reported in near-real-time need to have the Project association "GAW-WDCRG_NRT". Further instructions will be provided to data originators who wish to implement NRT dataflow (contact pe...@...nilu.no).

World Data Centre for Reactive Gases

<http://ebas-submit.nilu.no/>

Submit Data

Data Policy

Standard Operating Procedures

Near real-time data submissions

Software Tools

Submit Data

General introduction

Getting started

Reporting Templates

List of Data flags

General introduction

The EBAS atmospheric database, originally designed for the [European Monitoring and Evaluation Programme \(EMEP\)](#), archives today data on atmospheric composition from ground stations around the globe as well as aircraft platforms. Co-operating frameworks and projects include:

- [The Convention on Long-Range Transboundary Air Pollution - EMEP](#)
- [The WMO Global Atmosphere Watch Programme](#)
- [The Arctic Monitoring and Assessment Programme \(AMAP\)](#)
- [The EU-project Aerosols, Clouds, and Trace gases Research InfraStructure Network \(ACTRIS\)](#)

Data providers benefit from improved data dissemination through EBAS with an increased number of collaborations. Data submitted to EBAS are protected by a [fair-use data policy](#) while some projects/programmes requests a more restrictive data policy. The association of data to projects thus defines the associated data policy.

Submission Format

Data submitted to EBAS need to be formatted in the EBAS NASA-Ames format by the data provider. The EBAS NASA-Ames format is based on the ASCII text NASA-Ames 1001 format, but contains additional metadata specifications ensuring proper documentation, and is designed to be easily understandable (see [reasoning behind this setup](#)). This page provides links to data reporting templates for reporting data to EBAS.

Submission Procedure

The normal mode of submitting data to EBAS is the regular, annual data submission (see left margin, top). The deadline for a submission depends on the framework or project the dataset is associated with. EBAS also offers advanced data reporting that establishes complete traceability of the measurement and data analysis process. Participation in the advanced data reporting scheme is voluntary unless required by the associated project or framework. The usual steps for submitting data for the first time include:

1. **Initial contact with EBAS:** Please establish the initial contact with EBAS by writing an e-mail to ebas@nilu.no. In your mail, please indicate the station you are intending to report data for. If your station is part of the Global Atmosphere Watch programme, please also provide us the GAW station ID (if you wish to register a new GAW site, please follow the instructions available at <https://gawsis.meteoswiss.ch>). See also the GAW Implementation Plan for further details: <http://www.wmo.int/pages/prog/arep/gaw/documents/IPFinalDraftMay11.pdf>
2. **IDs:** We will provide three further IDs: 1) the EBAS station code; 2) the EBAS platform code; 3) a code for your lab analysing the data, which you will need for the metadata in your submission. The three letter GAW IDs and the IDs used in the CLRTAP EMEP database EBAS were introduced independently and are maintained for consistency.
3. **Selection of time series to report:** For sites that have been in operation back in time, we encourage that the full historic time series is submitted to the database (multi-year submission is easy to accommodate, but timeseries needs to be split according to any significant changes with regards to instrumentation etc).
4. **Quality assure your data:** This step will probably take longest of all steps in this data submission guideline, and is prerequisite for any further use of the data. Please make sure that you followed the respective standard operating procedure (SOP) valid for your instrument, both during data collection and data processing and evaluation. There will likely be periods for which the data is invalid due to calibrations or malfunctions, and there may be additional conditions (activity around the station, etc.) you will want to convey to the data user. EBAS uses a system of flags for this purpose. Each flag is assigned a three digit integer number. A list of these flags can be found at <http://www.nilu.no/projects/ccc/flags/flags.html>. The list of flags is comprehensive, but may still not be complete. If there is a condition you think is not covered, please send an e-mail to ebas@nilu.no for guidance or an extension of the list of flags.

World Data Centre for Reactive Gases

From: Steinbacher, Martin

Sent: Mittwoch, 5. Oktober 2016 07:44

To: 'ebas@nilu.no'

Cc: Zablon W. Shilenje (zablonweku@yahoo.com); okuku@meteo.go.ke

Subject: O3 data from MKN to be submitted to WDCRG

To whom it may concern,

I would like to submit surface O3 data from the global GAW station Mount Kenya (GAW ID: MKN) for the year 2015 to the World Data Centre for Reactive Gases.

Please provide the necessary information (IDs etc.) that I can proceed with the data submission.

Kind regards

Martin Steinbacher

World Data Centre for Reactive Gases

From: Paul Eckhardt [mailto:ebas@nilu.no]
Sent: Mittwoch, 5. Oktober 2016 09:51
To: Steinbacher, Martin
Subject: [#12086]: O3 data from MKN to be submitted to WDCRG

Dear Martin!

Thanks for your contribution to the WDCRG!

Some general information about the data submission procedure can be found at <http://www.gaw-wdcr.org>. A template and detailed documentation of the data format and metadata is available at <http://ebas-submit.nilu.no/Submit-Data/Regular-Annual-Data-Reporting/Ozone>

For checking your files and submitting data, please use our online data submission tool at <http://ebas-submit-tool.nilu.no>

The metadata for your station and institute currently stored in EBAS is as follows, please check if everything is correct:

...

World Data Centre for Reactive Gases

From: Paul Eckhardt [mailto:ebas@nilu.no]
Sent: Mittwoch, 5. Oktober 2016 09:51
To: Steinbacher, Martin
Subject: [#12086]: O3 data from MKN to be submitted to WDCRG

The metadata for your station and institute currently stored in EBAS is as follows, please check if everything is correct:

Station code: KE0001G
Station name: Mt. Kenya
Na_iso_id: KE404KEN
Station number: 1
Station type: G
Organisation code: CH01L
Platform type: S
GAW type: G
Station setting: Mountain
WMO region: 1
Station landuse: Grassland
Latitude: -0.0622
Longitude: 37.2972
Altitude: 3678.0m
WDCA ID: GAWAKE__MKN
GAW ID: MKN
GAW name: Mt. Kenya

Organisation code: CH01L
Organisation name: Swiss Federal Laboratories for Materials
Science and Technology
Na_id_iso: CH756CHE
Organisation number: 1
Organisation type: L
Acronym: EMPA
Unit: Section Air Pollution
Address: Überlandstrasse 133
Zip code: 8600
City: Dübendorf
Country: Switzerland

...



General introduction

The EBAS atmospheric database, originally designed for the [European Monitoring and Evaluation Programme \(EMEP\)](#), archives today data on atmospheric composition from ground stations around the globe as well as aircraft platforms. Co-operating frameworks and projects include:

- [The Convention on Long-Range Transboundary Air Pollution - EMEP](#)
- [The WMO Global Atmosphere Watch Programme](#)
- [The Arctic Monitoring and Assessment Programme \(AMAP\)](#)
- [The EU-project Aerosols, Clouds, and Trace gases Research InfraStructure Network \(ACTRIS\)](#)

Data providers benefit from improved data dissemination through EBAS with an increased number of collaborations. Data submitted to EBAS are protected by a [fair-use data policy](#) while some projects/programmes requests a more restrictive data policy. The association of data to projects thus defines the associated data policy.

Submission Format

Data submitted to EBAS need to be formatted in the EBAS NASA-Ames format by the data provider. The EBAS NASA-Ames format is based on the ASCII text NASA-Ames 1001 format, but contains additional metadata specifications ensuring proper documentation, and is designed to be easily understandable (see [reasoning behind this setup](#)). This page provides links to data reporting templates for reporting data to EBAS.

Submission Procedure

The normal mode of submitting data to EBAS is the regular, annual data submission (see left margin, top). The deadline for a submission depends on the framework or project the dataset is associated with. EBAS also offers advanced data reporting that establishes complete traceability of the measurement and data analysis process. Participation in the advanced data reporting scheme is voluntary unless required by the associated project or framework. The usual steps for submitting data for the first time include:

1. **Initial contact with EBAS:** Please establish the initial contact with EBAS by writing an e-mail to ebas@nilu.no. In your mail, please indicate the station you are intending to report data for. If your station is part of the Global Atmosphere Watch programme, please also provide us the GAWSIS station ID (if you wish to register a new GAW site, please follow the instructions available at <https://gawsis.meteoswiss.ch>). See also the GAW Implementation Plan for further details: <http://www.wmo.int/pages/prog/arep/gaw/documents/IPFinalDraftMay11.pdf>
2. **IDs:** We will provide three further IDs: 1) the EBAS station code; 2) the EBAS platform code; 3) a code for your lab analysing the data, which you will need for the metadata in your submission. The three letter GAW IDs and the IDs used in the CLRTAP EMEP database EBAS were introduced independently and are maintained for consistency.
3. **Selection of time series to report:** For sites that have been in operation back in time, we encourage that the full historic time series is submitted to the database (multi-year submission is easy to accommodate, but timeseries needs to be split according to any significant changes with regards to instrumentation etc).
4. **Quality assure your data:** This step will probably take longest of all steps in this data submission guideline, and is prerequisite for any further use of the data. Please make sure that you followed the respective standard operating procedure (SOP) valid for your instrument, both during data collection and data processing and evaluation. There will likely be periods for which the data is invalid due to calibrations or malfunctions, and there may be additional conditions (activity around the station, etc.) you will want to convey to the data user. EBAS uses a system of flags for this purpose. Each flag is assigned a three digit integer number. A list of these flags can be found at <http://www.nilu.no/projects/ccc/flags/flags.html>. The list of flags is comprehensive, but may still not be complete. If there is a condition you think is not covered, please send an e-mail to ebas@nilu.no for guidance or an extension of the list of flags.
5. **Assemble / Update Metadata Header:**
 - i. **First-time submitters:** In assembling the header with metadata for a first-time data submission, it is probably easiest just to copy the respective template valid for the parameter to be reported (see menu on the left), and adapt it to the station and protocols used for data collection and processing. Each line in the online template is a link pointing to an explanation of the content. The explanation always begins with a specification of the syntax used. Items enclosed in "<>" mark a place holder to be replaced with content or key words as described. Please follow the syntax exactly since many lines contain a keyword identifying the content, and these keywords are recognised by string comparison.
 - ii. **Experienced submitters:** If you have submitted data for a given parameter to EBAS before, you can copy the header from the previous year to start with, and update at least the fields containing a date or time. However, please make sure to check through the metadata items and update them in case any changes occurred in your setup. Especially for later trend analysis, it is rather important that any changes that may have caused a rupture in the dataset are documented in the metadata.
6. **Format data, join header and data sections:** The data section of an EBAS NASA-Ames file consists of a fixed width, fixed number format ASCII table, with the number formats specified in the file header. Please refer to the parameter specific pages for examples (menu on left). Once the data section is constructed, please join header and data section into one file, and name the file using the file name stated in the header.
7. **Format checker:** Please use our web based tool to check if your files are correctly formatted, and check also time series for potential outliers or other indications of dubious data: [EBAS Data Submission Tool](#). Please see this [presentation](#) for an introductory guide on the EBAS data format.
8. **Submit Data:** The files containing the data submissions are also uploaded through the [EBAS Data Submission Tool](#). Please note, that after submitting, the file will go through a manual QA and data curation workflow at NILU. Therefore it will take time before the actual data is available in EBAS.

World Data Centre for Reactive Gases

<http://www.gaw-wdcrg.org/>



EBAS Data Submission Manual

Web Site Search...

LOGIN

Submit Data Data Policy Standard Operating Procedures Near real-time data submissions Software Tools

Submit Data

October 20, 2017

General introduction
Getting started
Reporting Templates
List of Data flags

General introduction

The EBAS atmospheric database, originally designed for the [European Monitoring and Evaluation Programme \(EMEP\)](#), archives today data on atmospheric composition from ground stations around the globe as well as aircraft platforms. Co-operating partners include:

- [Long-Range Transboundary Air Pollution - EMEP](#)
- [Global Atmosphere Watch Programme](#)
- [GHG](#)
- [VOC](#)
- [NOx](#)
- [Inorganic air/aerosol chemistry \(filter-based\)](#)
- [Infrastructure Network \(ACTRIS\)](#)

Submission Format

NIM/C

Data submitted to EBAS need to be formatted in the EBAS NASA-Ames format by the data provider. The EBAS NASA-Ames format is based on the ASCII text NASA-Ames 1001 format, but contains additional metadata specifications ensuring proper documentation, and is designed to be easily understandable (see [reasoning behind this setup](#)). This page provides links to data reporting templates for reporting data to EBAS.

Submission Procedure

The normal mode of submitting data to EBAS is the regular, annual data submission (see left margin, top). The deadline for a submission depends on the framework or project the dataset is associated with. EBAS also offers advanced data reporting that establishes complete traceability of the measurement and data analysis process. Participation in the advanced data reporting scheme is voluntary unless required by the associated project or framework. The usual steps for submitting data for the first time include:

- Initial contact with EBAS:** Please establish the initial contact with EBAS by writing an e-mail to ebas@nilu.no. In your mail, please indicate the station you are intending to report data for. If your station is part of the Global Atmosphere Watch programme, please also provide us the GAW station ID (if you wish to register a new GAW site, please follow the instructions available at <https://gawsis.meteoswiss.ch>). See also the GAW Implementation Plan for further details: <http://www.wmo.int/pages/prog/arep/gaw/documents/IPFinalDraftMay11.pdf>
- IDs:** We will provide three further IDs: 1) the EBAS station code; 2) the EBAS platform code; 3) a code for your lab analysing the data, which you will need for the metadata in your submission. The three letter GAW IDs and the IDs used in the CLRTAP EMEP database EBAS were introduced independently and are maintained for consistency.
- Selection of time series to report:** For sites that have been in operation back in time, we encourage that the full historic time series is submitted to the database (multi-year submission is easy to accommodate, but timeseries needs to be split according to any significant changes with regards to instrumentation etc).
- Quality assure your data:** This step will probably take longest of all steps in this data submission guideline, and is prerequisite for any further use of the data. Please make sure that you followed the respective standard operating procedure (SOP) valid for your instrument, both during data collection and data processing and evaluation. There will likely be periods for which the data is invalid due to calibrations or malfunctions, and there may be additional conditions (activity around the station, etc.) you will want to convey to the data user. EBAS uses a system of flags for this purpose. Each flag is assigned a three digit integer number. A list of these flags can be found at <http://www.nilu.no/projects/cccr/flags/flags.html>. The list of flags is comprehensive, but may still not be complete. If there is a condition you think is not covered, please send an e-mail to ebas@nilu.no for guidance or an extension of the list of flags.
- Assemble / Update Metadata Header:**
 - First-time submitters:** In assembling the header with metadata for a first-time data submission, it is probably easiest just to copy the respective template valid for the parameter to be reported (see menu on the left), and adapt it to the station and protocols used for data collection and processing. Each line in the online template is a link pointing to an explanation of the content. The explanation always begins with a specification of the syntax used. Items enclosed in "<>" mark a place holder to be replaced with content or key words as described. Please follow the syntax exactly since many lines contain a keyword identifying the content, and these keywords are recognised by string comparison.
 - Experienced submitters:** If you have submitted data for a given parameter to EBAS before, you can copy the header from the previous year to start with, and update at least the fields containing a date or time. However, please make sure to check through the metadata items and update them in case any changes occurred in your setup. Especially for later trend analysis, it is rather important that any changes that may have caused a rupture in the dataset are documented in the metadata.
- Format data, join header and data sections:** The data section of an EBAS NASA-Ames file consists of a fixed width, fixed number format ASCII table, with the number formats specified in the file header. Please refer to the parameter specific pages for examples (menu on left). Once the data section is constructed, please join header and data section into one file, and name the file using the file name stated in the header.
- Format checker:** Please use our web based tool to check if your files are correctly formatted, and check also time series for potential outliers or other indications of dubious data: [EBAS Data Submission Tool](#). Please see this [presentation](#) for an introductory guide on the EBAS data format.
- Submit Data:** The files containing the data submissions are also uploaded through the [EBAS Data Submission Tool](#). Please note, that after submitting, the file will go through a manual QA and data curation workflow at NILU. Therefore it will take time before the actual data is available in EBAS.

Sponsoring Projects:



World Data Centre for Reactive Gases

<http://www.gaw-wdcrg.org/>

Flags commonly used with this format:

Group 0: Valid data

Flag	Validity	Description
000	V	Valid measurement

Group 1: Exception flags for accepted, irregular data

Flag	Validity	Description
110	V	Episode data checked and accepted by data originator. Valid measurement
147	V	Below theoretical detection limit or formal Q/A limit, but a value has been measured and reported and is considered valid

Group 3: Flags for aggregated datasets

Flag	Validity	Description
390	V	Data completeness less than 50%
392	V	Data completeness less than 75%
394	V	Data completeness less than 90%

Group 5: Chemical problem

Flag	Validity	Description
559	V	Unspecified contamination or local influence, but considered valid
599	I	Unspecified contamination or local influence

Group 9: Missing flags

Flag	Validity	Description
999	M	Missing measurement, unspecified reason

Template for Data Submission:

```
91 1001
Solberg, Sverre; Someone, Else
N001L, Norwegian Institute for Air Research, NILU, Atmosphere and Climate Department, Instituttveien 18, , 2007, Kjeller, Norway
Hjellbrekke, Anne
EMEP GAW-WDCRG
1 1
2014 01 01 2016 02 04
0.041667
days from file reference point
9
1 1 1 1 1 1 1 1 1
9999.999999 9999.9 9.999999999 9999.9 9.999999999 9999.9 9.999999999 999.9 9.999999999
end_time of measurement, days from the file reference point
ozone, nmol/mol, Statistics=arithmetic mean
numflag ozone, no unit, Statistics=arithmetic mean
ozone, nmol/mol, Statistics=arithmetic mean
```

More explanation is given when clicking on one of the lines in the template

World Data Centre for Reactive Gases

<http://www.gaw-wdcrg.org/>

Variable names (vname) - ozone

```
end_time, days from the file reference point
ozone, nmol/mol, Statistics=arithmetic mean, Measurement uncertainty=2.0 nmol/mol, Measurement uncertainty expl.=includes statistical uncertainty of individual sample and calibration uncertainty
numflag ozone, nmol/mol, Statistics=arithmetic mean, Measurement uncertainty=2.0 nmol/mol, Measurement uncertainty expl.=includes statistical uncertainty of individual sample and calibration uncertainty
ozone, nmol/mol, Statistics=stddev
numflag ozone, no unit, Statistics=stddev
ozone, nmol/mol, Statistics=minimum
numflag ozone, no unit, Statistics=minimum
ozone, nmol/mol, Statistics=maximum
numflag ozone, no unit, Statistics=maximum
```

syntax:

```
<component_name>, <unit>, <tag>=<value>, ..., <tag>=<value>
...
<component_name>, <unit>, <tag>=<value>, ..., <tag>=<value>
```

Each `<tag>=<value>` pair can set any ebas metadata element specifically for this variable.

These lines contains the names of the dependent variables. The number will depend on which parameters are analyzed in the sample. The total number of variables, numflag columns plus end_time must always be the same as the number specified in line 10.

Please make sure that component names are spelled correctly and reported in the correct unit. A list of components currently defined in ebas can be found [here](#). Although ozone is stored in ebas as ug/m3, we prefer submissin of data in nmol/mol or ppb.

Tag=value may be used for components having metadata different from the default metadata in the file, for example if the detection limit is different or has a different unit, or for specifying statistical parameters relevant to the measured data.

Examples:

ozone, nmol/mol
- all default meta data given in the comment section is valid for this component

numflag ozone, no unit
- numflag for ozone. The numflag column must follow directly after the data column, even if the variable name is included in the vname for numflag

ozone, nmol/mol, Statistics=stddev
- standard deviation for ozone based on the data in the original time resolution

World Data Centre for Reactive Gases



<http://www.gaw-wdcr.org/>

Info

GAW World Data Centre for Reactive Gases (WDCRG)



The World Data Centre for Reactive Gases (WDCRG) is the data repository and archive for reactive gases of the World Meteorological Organisation's (WMO) [Global Atmosphere Watch \(GAW\) programme](#). The WDCRG was established January 1, 2016 and takes over the responsibility of this part of the GAW programme after Japan Meteorological Agency (which will continue to host the World Data Centre on Greenhouse Gases (WDCGG)).

The first ordinary reporting deadline of data is by end 2016 (data for 2015).

The reactive gases to be hosted at WDCRG are: SO₂, Oxidized nitrogen species, Ozone (tropospheric) and VOCs (list to be extended as additional variables are added to the monitoring efforts).

To browse for data submitted to WDCRG, please visit <http://ebas.nilu.no>, then select "GAW-WDCRG" in the "Framework" filter on the top left.

GAW-WDCRG will be utilizing the EBAS data infrastructure at NILU, and the procedures and formats etc will follow the same approach as for GAW-WDCA, EMEP and ACTRIS (the old formats used for submission to GAW-WDCGG are not valid).

Below is some initial information, and for comments and questions, please contact Kjetil Tørseth (... kt ... @ ... nilu.no ...)

- Instructions and templates for data submissions are found at: <http://ebas-submit.nilu.no>.
- The meta-data requirements and formats differ significantly from the previous requirements of the WDCGG, so we encourage data originators to resubmit their historic time series to provide the most updated and fully documented dataset possible (a direct transfer of historic data from WDCGG will result in datasets which do not contain the appropriate set of meta-data, and further there would be large difficulties in keeping track of potential more recent revisions should the data already exist in EBAS through submissions to other relevant programmes).
- Please note that one can submit the full time series in one submission (provided that essential meta-data are consistent), so reporting of historic data will not require much additional effort.
- As NILU hosts databases for several projects and programmes, the meta-data are used to document the association of data to these, and further to regulate the access to data, tracking data use etc. For this reason, data originators MUST as part of their metadata specifically indicate to which programme the data are reported. One can list several affiliations at once, and as such report the same dataset to multiple databases (e.g. "GAW-WDCRG EMEP ACTRIS" to assign data to these three programmes). Reactive gases data intended for GAW must have the Project association (Line 5 of the data header) "GAW-WDCRG" (data reported in near-real-time need to have the Project association "GAW-WDCRG_NRT". Further instructions will be provided to data originators who wish to implement NRT dataflow (contact pe...@...nilu.no).

World Data Centre for Reactive Gases

<http://ebas.nilu.no/>



Home Acknowledgment Data policy Login

Framework [48] Country [71] Station [1104] Matrix [29]

Instrument type [105] Component [625]

From >>All To >>All

Available datasets: 102738

Reset List datasets

Map (Populate) (Show large)



Additional resources

- European Monitoring and Evaluation Programme (EMEP-CCC)
- Site descriptions - EMEP
- WMO Global Atmosphere Watch (GAW)
- Site descriptions - GAW
- Air mass trajectories
- Data submission
- Contact persons
- About EBAS
- EBAS User Feedback Tracker
- Social media

GAW Data Policy

Use of data obtained from one of the WMO/GAW World Data Centres is subject to the following statement endorsed by the WMO Executive Council/Committee on Atmospheric Sciences (EC/CAS) Panel of Experts Working Group on Environmental Pollution and Atmospheric Chemistry [WMO, 2001a]:

“For scientific purposes, access to these [GAW] data is unlimited and provided without charge. By their use you accept that an offer of co-authorship will be made through personal contact with the data providers or owners whenever substantial use is made of their data. In all cases, an acknowledgment must be made to the data providers or owners and to the data centre when these data are used within a publication.”

Up to now, no registration is needed when downloading data.

GAW Data Policy

Accordingly, the World Data Centre for Reactive Gases Data Policy reads:

“For scientific purposes, access to these data is unlimited and provided without charge. By their use you accept that an offer of co-authorship will be made through personal contact with the data providers or owners whenever substantial use is made of their data. In all cases, an acknowledgement must be made to the data providers or owners and to the project name when these data are used within a publication.”

Up to now, no registration is needed when downloading data.

Questions ?