NDACC DHF at LaRC User Guide
Public Guide for Data Users

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Assistance:

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Web page summary and overview:

www.ndacc.org NDACC website

www-air.larc.nasa.gov/missions/ndacc/ NDACC interactive DHF

www-air.larc.nasa.gov/missions/ndacc/data.html NDACC public data archive

www-air.larc.nasa.gov/missions/ndacc/data.html?RapidDelivery=rd-list NDACC RD data archive

www-air.larc.nasa.gov/missions/ndacc/data.html?MUSICA=musica-list MUSICA data archive

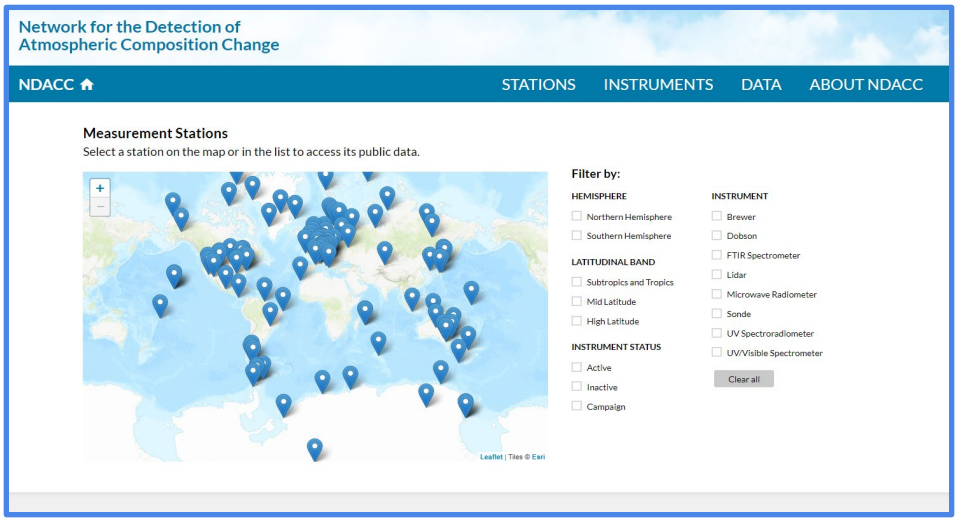
www-air.larc.nasa.gov/missions/ndacc/data.html?GMI_MODEL=gmi-list
GMI Model at NDACC station archive

www-air.larc.nasa.gov/missions/ndacc/data.html?NCEP=ncep-list
NCEP data at NDACC station archive

www-air.larc.nasa.gov/pub/NDACC/PUBLIC/
Directory tree structure public archive (useful for scripted data access, ie wget)

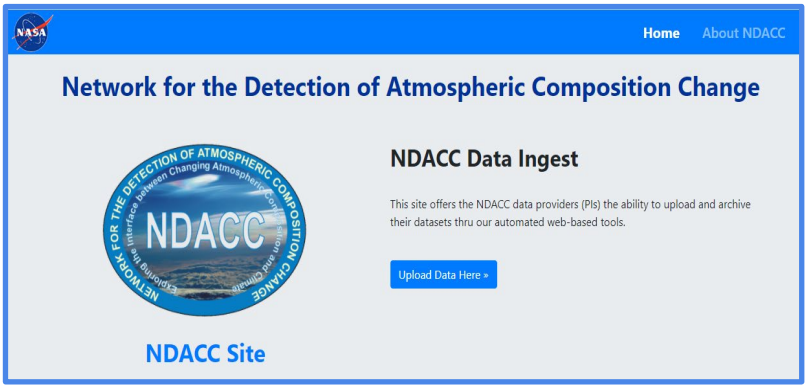
CONTENTS:

1- NDACC Web Page:

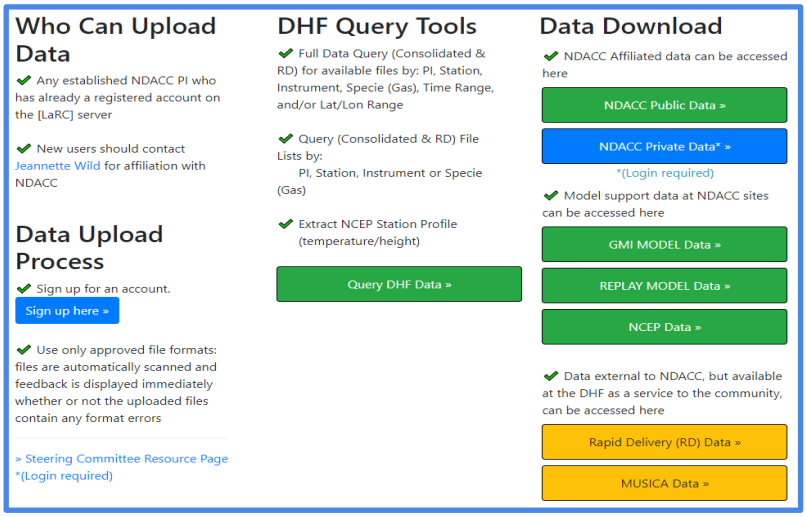


The NDACC web page moves around, but www.ndacc.org will always redirect to the current website. Of interest here are NDACC News, the Measurements and Analyses Directory, Station list and Interactive Map, Cooperating Network information, Data Protocols, NDACC History, and more. Visit often.

2- Main NDACC DHF web interface at LaRC:



The main interface for the NDACC DHF at LaRC is found at: www-air.larc.nasa.gov/missions/ndacc. This contains links to account creation, data submissions, data retrieval. Details on these items are found below.

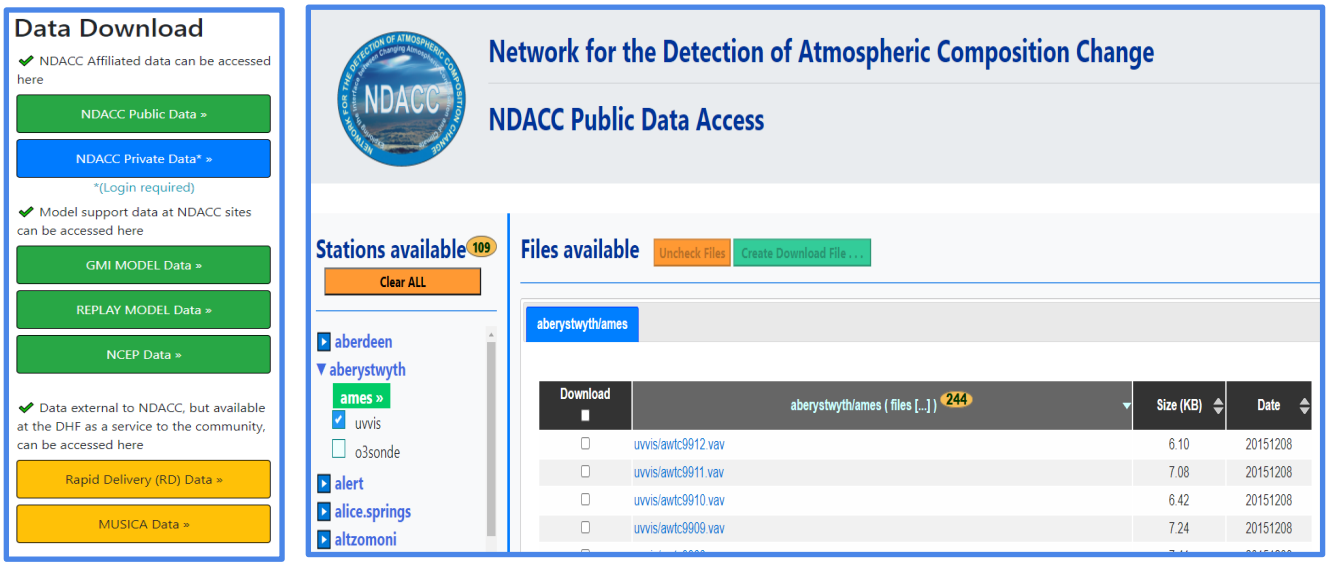


3- Account Creation:

Accounts are available only to data providers for NDACC Affiliated datasets. For more information about joining NDACC and affiliation of your instrument, see the NDACC Validation Protocol and its Appendices at www.ndacc.org under the DATA tab. Click on Protocols.

To create an account contact Jeannette Wild at jeannette.wild@noaa.gov.

4- Data Access - Getting Data from the DHF at LaRC:



Public Data:

NDACC data is publicly available by http: at www-air.larc.nasa.gov/missions/ndacc.
All data in these directories are subject to the NDACC Data protocols available on www.ndacc.org. Users should acknowledge the NDACC and the NDACC data providers as detailed therein.

The above example shows the link for the NDACC Public Data. Data can be selected by clicking through the selections on the left menu. After files are selected then click on the 'Create Download File' to generate a zip file containing all selected items. Note you can collect sets in multiple tabs from many stations to gather in a single zip file for download.

The active buttons link to the following:

NDACC Public Data — NDACC data is public no later than one year after acquisition, though most data providers permit the data to go public when archived. Data in this link are fully NDACC affiliated, and are fully reviewed and vetted by the data PI.

GMI MODEL Data — NDACC instrument support data in netCDF are created from a Hindcast simulation of the NASA Global Modeling Initiative (GMI) chemistry transport model (CTM). The files include vertical profiles for constituents and meteorological fields. Files supporting Dobson, Lidar

and Sonde instruments contain hourly data. The files supporting FTIR measured parameters contain monthly data.

REPLAY Model Data — NDACC instrument support data in netCDF are also available from a Hindcast simulation of the GEOS Replay Model that uses the GMI chemical mechanism with the meteorology replayed to MERRA2. The files include daily (FTIR) or 3-hourly (Dobson, Lidar and Sonde) vertical profiles for constituents and meteorological fields for 1996-2020.

NCEP Data — The NOAA/NWS/National Centers for Environmental Prediction (NCEP) provides daily profiles of temperatures and geopotential heights on 18 pressure levels from 1000 to .4 hPa at NDACC stations.

Rapid Delivery Data — Some NDACC PIs provide preliminary data to the Rapidly Delivery section of the DHF shortly after acquisition. These data have not yet been fully reviewed and certified to be of full NDACC quality, and are not considered part of the validated NDACC archive, but may be useful to the scientific community e.g. for quick satellite validation, or examination of timely events.

MUSICA Data — MUSICA ("MUlti-platform remote sensing of Isotopologues for investigating the Cycle of Atmospheric water" is a European Research Council (ERC) project. This dataset important to NDACC is archived here.

Step through the directory tree and click on a filename to view a file. While in the file view, right click to save a file. Alternatively to save a single or multiple files, check all files you wish to download. You can choose from multiple stations, and each station will open in a new tab. The total files you have selected will show in a balloon at the top of the page. When you have checked all desired files, click on 'Create Download File' (a green button at the top) to create a zip file.

File links can also be dragged to a directory window to save the shortcut.

Scripts to download data:

One simple way to download files using the command-line is via "wget" (cURL can also be used); there are plenty of resources on the web explaining how to download one or multiple files using wget or cURL. Here are 2 examples showing how to use wget:

Download all files in a directory and maintain structure (e.g., /broadmeadows):

```
wget -e robots=off -r -np -R "index.html*" https://www-air.larc.nasa.gov/pub/NDACC/PUBLIC/stations/broadmeadows/
```

Download a single file (e.g., abtc9401.wof):

> wget -i https://www-air.larc.nasa.gov/pub/NDACC/PUBLIC/stations/aberdeen/ames/ftir/abtc9401.wof

Note that these commands refer to http-based directory tree access to the DHF. These directories are available for the public to view the database, but are not interactive at the same level as www-air.larc.nasa.gov/missions/ndacc.