

Data Intake Processing and Verification Report

[Draft - In Progress]

Background Information

- **Original Dataset Name:**
 - NOAA Global Greenhouse Gas Reference Network Continuous Insitu Measurements of CO₂, CH₄, and CO at Global Background Sites, 1973-Present
 - Earth System Research Laboratory Carbon Cycle and Greenhouse Gases Group Continuous Measurements of CO₂, CO, and CH₄ from Tall Towers, 1992-Present
 - NOAA Global Greenhouse Gas Reference Network Flask-Air Sample Measurements of CO₂, CH₄, CO, N₂O, H₂, SF₆ and isotopic ratios at Global and Regional Background Sites, 1967-Present
 - NOAA Global Greenhouse Gas Reference Network Flask-Air PFP Sample Measurements of CO₂, CH₄, CO, N₂O, H₂, SF₆ and isotopic ratios of carbon and oxygen at Tall Tower and other Continental Surface Sites, 2005-Present
- **GHG Center Dataset Title:** Atmospheric Carbon Dioxide Concentrations from NOAA Global Monitoring Laboratory
- **Dataset Provider:** NOAA
- **Date Obtained:** April 2024
- **Location Obtained From:**
 - https://gml.noaa.gov/aftp/data/greenhouse_gases/co2/in-situ/surface/co2_surface-insitu_ccgg_text.zip
 - https://gml.noaa.gov/aftp/data/greenhouse_gases/co2/in-situ/tower/co2_tower-insitu_ccgg_text.zip
 - https://gml.noaa.gov/aftp/data/greenhouse_gases/co2/flask/surface/co2_surface-flask_ccgg_text.zip (event.txt files only)
 - https://gml.noaa.gov/aftp/data/greenhouse_gases/co2/pfp/surface/co2_surface-pfp_ccgg_text.zip (event.txt files only)
- **Data Location in GHG Center:** noaa-gggrn-co2-concentrations
- **Data POC(s):** Dr. John Miller, Dr. Arlyn Andrews
- **Dataset File Type(s):** Text (.txt)
- **Projection (if different from WGS84):** N/A

Data Intake Process

- https://us-ghg-center.github.io/ghgc-docs/data_workflow/noaa-insitu_Data_Flow.html

Confirmation of Successful Data Transfer & Processing

All data are read directly from NOAA's data repository

(https://gml.noaa.gov/aftp/data/greenhouse_gases/co2). Due to the shortness of record, the

following Surface PFP sites ([co2_surface-pfp_ccgg_text](#)) have been excluded: LAC, INX, BWD, NEB, NWB, TMD, SPF, KLM, MKO, MLO, HFM.

For the tower data ([/in-situ/tower/co2_tower-insitu_ccgg_text](#)), hourly measurements were aggregated into daily and monthly averages for display in the US GHG Center. Validation for the hourly to daily & monthly averages are shown below:

Summary

- We are confident that the display of data in the GHG Center is correct
- There were no problems identified in the data
- [Link to Data Usage Notebook](#)
- [Link to US GHG Center Data Catalog overview page](#)

Report Completed on: 4/26/2024

MSFC POC for questions: [Deborah Smith](#), [Siddharth Chaudhary](#)