



## Global Monitoring Laboratory

Earth System Research Laboratories

Trends in CO<sub>2</sub>

Trends in CH<sub>4</sub>



Trends in N<sub>2</sub>O

Trends in SF<sub>6</sub>

## Trends in Atmospheric Carbon Dioxide

- NOTE: Starting Feb. 10, 2021, the CO<sub>2</sub> data is now on the WMO X2019 scale. Read about the [CO<sub>2</sub> Scale](#) for more details.
- [Can we see a change in the CO2 record because of COVID-19?](#)

[Mauna Loa, Hawaii](#)

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[CO<sub>2</sub> Animation](#)

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## Data

The complete Mauna Loa CO<sub>2</sub> records described on this page are available.

- [Mauna Loa CO<sub>2</sub> monthly mean data](#) (CSV)
- [Mauna Loa CO<sub>2</sub> annual mean data](#) (CSV)
- [Mauna Loa CO<sub>2</sub> annual mean growth rates](#) (CSV)
- [Mauna Loa CO<sub>2</sub> weekly mean and historical comparisons](#) (CSV)

Additional CO<sub>2</sub> data from Mauna Loa and other worldwide sampling sites can be found using the [GML Data Finder](#) of public data sets.

These values are **subject to change** depending on quality control checks of the measured data, but any revisions are expected to be small.

- [See change log and notes](#)
- [A description of how we make measurements at Mauna Loa.](#)

## How to reference content from this page

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## Further Reading

C.D. Keeling, R.B. Bacastow, A.E. Bainbridge, C.A. Ekdahl, P.R. Guenther, and L.S. Waterman, (1976), Atmospheric carbon dioxide variations at Mauna Loa Observatory, Hawaii, *Tellus*, vol. 28, 538-551

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