

Mauna Loa Data

Since 1958, scientists have measured the amount of CO₂ in the Earth's atmosphere from a site on the Mauna Loa volcano in Hawaii. This site is one of the best locations in the world for measuring CO₂ because there are no plants or human activities nearby to influence the measurements.

Using the data in the table, graph the concentrations of CO₂ for May and October from 1958 to 2016. Using a different color, graph the annual average for each year. CO₂ concentrations expressed in parts per million.

Atmospheric CO₂ Concentrations 1958–2016

Year	May	Oct.	Annual
1958	317.50	–	–
1959	318.29	313.34	315.98
1960	320.03	313.83	316.91
1961	320.58	315.31	317.65
1962	321.01	315.42	318.45
1963	322.24	315.99	318.99
1964	322.23	316.87	319.62
1965	322.16	317.30	320.03
1966	324.07	318.10	321.37
1967	325.00	319.39	322.18
1968	325.57	320.25	323.05
1969	327.38	321.78	324.62
1970	328.07	323.07	325.68
1971	328.92	323.56	326.32
1972	330.07	325.20	327.46
1973	332.48	327.18	329.68
1974	333.09	327.37	330.25
1975	333.96	328.34	331.15
1976	334.87	328.94	332.15
1977	336.74	331.16	333.90
1978	338.01	332.54	335.50
1979	339.47	333.86	336.85
1980	341.46	336.01	338.69
1981	342.91	336.85	339.93
1982	344.13	337.86	341.13
1983	345.75	339.99	342.78
1984	347.43	341.35	344.42
1985	348.93	342.80	345.90
1986	350.21	344.17	347.15
1987	351.84	346.36	348.93
1988	354.22	348.88	351.48
1989	355.67	349.99	352.91

Year	May	Oct.	Annual
1990	357.16	351.18	354.19
1991	359.34	352.21	355.59
1992	359.66	353.31	356.37
1993	360.28	353.98	357.04
1994	361.68	355.99	358.88
1995	363.79	357.75	360.88
1996	365.41	359.60	362.64
1997	366.79	360.77	363.76
1998	369.29	364.23	366.63
1999	371.00	365.12	368.31
2000	371.82	366.73	369.48
2001	374.02	368.09	371.02
2002	375.55	370.24	373.10
2003	378.35	373.00	375.64
2004	380.63	374.24	377.38
2005	382.45	376.98	380.79
2006	384.94	379.06	382.56
2007	386.54	381.15	384.60
2008	388.60	382.73	385.34
2009	390.18	384.38	387.35
2010	392.94	387.18	389.78
2011	394.16	393.66	391.63
2012	396.78	391.01	393.82
2013	399.77	393.66	396.48
2014	401.88	395.95	398.61
2015	403.94	398.29	400.83
2016	407.70		

CO₂ concentrations expressed in parts per million.

Source: National Oceanic and Atmospheric Administration. Accessed 6/20/16 from <http://www.esrl.noaa.gov/gmd/ccgg/trends/> and ftp://aftp.cmdl.noaa.gov/products/trends/co2/co2_annmean_mlo.txt