

**Table 5.44-- ATMOSPHERIC CARBON DIOXIDE MEASUREMENTS  
AT MAUNA LOA: 1958 TO 2019**

[Average carbon dioxide mixing ratio, parts per million]

Year	Annual average	Year	Annual average	Year	Annual average
1958	1/ 315.17	1979	336.73	2000	369.55
1959	315.83	1980	338.72	2001	371.14
1960	316.75	1981	340.12	2002	373.28
1961	317.49	1982	341.21	2003	375.80
1962	318.30	1983	342.87	2004	377.52
1963	318.83	1984	344.48	2005	379.80
1964	2/ 319.04	1985	345.85	2006	381.90
1965	319.87	1986	347.21	2007	383.79
1966	321.21	1987	348.98	2008	385.60
1967	322.02	1988	351.34	2009	387.43
1968	322.83	1989	352.89	2010	389.90
1969	323.93	1990	354.26	2011	391.65
1970	325.27	1991	355.45	2012	393.85
1971	326.17	1992	356.58	2013	396.52
1972	327.26	1993	357.01	2014	398.65
1973	329.45	1994	358.51	2015	400.83
1974	1/ 329.72	1995	360.62	2016	404.24
1975	3/ 331.14	1996	362.40	2017	406.55
1976	332.04	1997	363.54	2018	408.52
1977	333.79	1998	366.61	2019	411.44
1978	335.35	1999	368.33		

1/ Based on data for 8 months.

2/ Based on data for 9 months.

3/ Based on data for 11 months.

Source: National Weather Service, Pacific Region, Honolulu (for 1958-1991); Mauna Loa Observatory (for 1992-1999); and U.S. Department of Commerce, National Oceanic & Atmospheric Administration (NOAA), Cooperative Global Air Sampling Network, Global Monitoring Division, Earth Systems Research Laboratory (ESRL) <<ftp://aftp.cmdl.noaa.gov/products/trends/co2/>> accessed July 13, 2020 and records.