

## Global Mean CO2 Mixing Ratios (ppm): Observations

Data					Data					
Source	Year	MixR	Yar	MixR	Source	Year	MixR	Year	MixR	
Ice-Core Data Adjusted for Global Mean	1850	285.2	1900	295.7		1950	311.3	2000	369.64	
	1851	285.1	1901	296.2		1951	311.8	2001	371.15	
	1852	285.0	1902	296.6		1952	312.2	2002	373.15	
	1853	285.0	1903	297.0		1953	312.6	2003	375.64	
	1854	284.9	1904	297.5		1954	313.2	NOAA/	2004	377.44
	1855	285.1	1905	298.0		1955	313.7	ESRL/	2005	379.46
	1856	285.4	1906	298.4		1956	314.3	trends	2006	381.59
	1857	285.6	1907	298.8		1957	314.8	change	2007	383.37
	1858	285.9	1908	299.3	SIO	1958	315.34	added	2008	385.46
	1859	286.1	1909	299.7	Mauna	1959	316.18	to	2009	386.95
	1860	286.4	1910	300.1	Loa	1960	317.07	2003	2010	389.21
	1861	286.6	1911	300.6	&	1961	317.73	data	2011	391.15
	1862	286.7	1912	301.0	South	1962	318.43			
	1863	286.8	1913	301.3	Pole	1963	319.08			
	1864	286.9	1914	301.4	Adjus-	1964	319.65			
	1865	287.1	1915	301.6	ted	1965	320.23			
	1866	287.2	1916	302.0	for	1966	321.59			
	1867	287.3	1917	302.4	Global	1967	322.31			
	1868	287.4	1918	302.8	Mean	1968	323.04			
	1869	287.5	1919	303.0		1969	324.23			
	1870	287.7	1920	303.4		1970	325.54			
	1871	287.9	1921	303.7		1971	326.42			
	1872	288.0	1922	304.1		1972	327.45			
	1873	288.2	1923	304.5		1973	329.43			
	1874	288.4	1924	304.9		1974	330.21			
	1875	288.6	1925	305.3	CMDL	1975	331.36			
	1876	288.7	1926	305.8	InSitu	1976	331.92			
	1877	288.9	1927	306.2	Mauna	1977	333.73			
	1878	289.5	1928	306.6	Loa	1978	335.42			
1879	290.1	1929	307.2	&	1979	337.10				
1880	290.8	1930	307.5	South	1980	338.99				
1881	291.4	1931	308.0	Pole	1981	340.36				
1882	292.0	1932	308.3		1982	341.57				
1883	292.5	1933	308.9	CMDL	1983	342.53				
1884	292.9	1934	309.3	Flask	1984	344.24				
1885	293.3	1935	309.7	Mean	1985	345.72				
1886	293.8	1936	310.1	of	1986	347.15				
1887	294.0	1937	310.6	Many	1987	348.93				
1888	294.1	1938	311.0	Sites	1988	351.47				
1889	294.2	1939	311.2		1989	353.15				

1890	294.4	1940	311.3	1990	354.29
1891	294.6	1941	311.0	1991	355.68
1892	294.8	1942	310.7	1992	356.42
1893	294.7	1943	310.5	1993	357.13
1894	294.8	1944	310.2	1994	358.61
1895	294.8	1945	310.3	1995	360.67
1896	294.9	1946	310.3	1996	362.58
1897	294.9	1947	310.4	1997	363.48
1898	294.9	1948	310.5	1998	366.27
1899	295.3	1949	310.9	1999	368.38

Global Mean CO2 Mixing Ratio (ppm): Future Scenarios

Alternative Scenario				2 Degree C Scenario			
Year	MixR	Year	MixR	Year	MixR	Year	MixR
2000	370.0	2050	445.0	2000	370.0	2050	486.2
2001	371.7	2051	446.2	2001	371.7	2051	489.2
2002	373.4	2052	447.4	2002	373.4	2052	492.1
2003	375.1	2053	448.5	2003	375.1	2053	494.9
2004	376.8	2054	449.6	2004	376.9	2054	497.6
2005	378.4	2055	450.8	2005	378.7	2055	500.4
2006	380.1	2056	451.8	2006	380.5	2056	503.0
2007	381.7	2057	452.9	2007	382.3	2057	505.6
2008	383.4	2058	453.9	2008	384.2	2058	508.1
2009	385.0	2059	454.9	2009	386.2	2059	510.6
2010	386.6	2060	455.9	2010	388.0	2060	513.0
2011	388.2	2061	456.9	2011	390.0	2061	515.4
2012	389.9	2062	457.8	2012	392.0	2062	517.7
2013	391.5	2063	458.7	2013	394.0	2063	519.8
2014	393.1	2064	459.6	2014	396.0	2064	522.0
2015	394.6	2065	460.4	2015	398.0	2065	524.1
2016	396.2	2066	461.3	2016	400.1	2066	526.2
2017	397.8	2067	462.1	2017	402.3	2067	528.1
2018	399.4	2068	462.9	2018	404.4	2068	530.1
2019	400.9	2069	463.6	2019	406.5	2069	532.0
2020	402.5	2070	464.4	2020	408.7	2070	533.8
2021	404.0	2071	465.1	2021	410.9	2071	535.5
2022	405.5	2072	465.7	2022	413.1	2072	537.2
2023	407.0	2073	466.4	2023	415.4	2073	538.8
2024	408.5	2074	467.0	2024	417.7	2074	540.3
2025	410.0	2075	467.6	2025	420.0	2075	541.8
2026	411.5	2076	468.2	2026	422.4	2076	543.3

2027	413.0	2077	468.8	2027	424.7	2077	544.7
2028	414.5	2078	469.3	2028	427.1	2078	546.0
2029	416.0	2079	469.9	2029	429.5	2079	547.3
2030	417.5	2080	470.4	2030	432.0	2080	548.5
2031	418.9	2081	470.8	2031	434.4	2081	549.7
2032	420.4	2082	471.2	2032	436.9	2082	550.8
2033	421.8	2083	471.7	2033	439.5	2083	551.7
2034	423.2	2084	472.1	2034	442.0	2084	552.7
2035	424.6	2085	472.4	2035	444.5	2085	553.6
2036	426.1	2086	472.8	2036	447.1	2086	554.5
2037	427.5	2087	473.1	2037	449.8	2087	555.2
2038	428.9	2088	473.4	2038	452.5	2088	556.0
2039	430.2	2089	473.6	2039	455.1	2089	556.7
2040	431.6	2090	473.9	2040	457.8	2090	557.2
2041	433.0	2091	474.1	2041	460.5	2091	557.8
2042	434.4	2092	474.3	2042	463.2	2092	558.3
2043	435.7	2093	474.5	2043	466.0	2093	558.7
2044	437.1	2094	474.6	2044	468.9	2094	559.0
2045	438.4	2095	474.8	2045	471.7	2095	559.3
2046	439.8	2096	474.9	2046	474.5	2096	559.6
2047	441.1	2097	474.9	2047	477.4	2097	559.8
2048	442.4	2098	475.0	2048	480.3	2098	560.0
2049	443.7	2099	475.0	2049	483.3	2099	560.0

### References

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