

Table AIII.1a | Historical abundances and ERF (W m<sup>-2</sup>) for CO<sub>2</sub> (ppm), CH<sub>4</sub> (ppb) and N<sub>2</sub>O (ppb).

Year	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Year	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Year	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
1750 <sup>a</sup>	278.3	729	270.1	1968	322.5	1372	295.2	1994	358.2	1743	310.8
1850 <sup>a</sup>	285.5	808	272.1	1969	323.4	1389	295.6	1995	360.0	1748	311.4
1860 <sup>b</sup>	286.8	822	273.2	1970	324.9	1411	296.0	1996	361.8	1750	312.3
1870	288.4	852	274.9	1971	325.5	1431	296.5	1997	362.5	1754	313.1
1880	290.4	868	276.6	1972	327.4	1449	296.9	1998	365.5	1764	313.9
1890	293.3	896	277.6	1973	330.0	1463	297.3	1999	367.6	1772	314.9
1900	296.4	925	278.9	1974	330.8	1476	297.8	2000	368.8	1773	315.9
1905	298.0	947	280.2	1975	330.9	1492	298.3	2001	370.4	1772	316.6
1910	300.0	974	281.8	1976	331.6	1509	298.8	2002	372.4	1773	317.3
1915	302.5	991	283.6	1977	333.4	1528	299.3	2003	375.0	1777	318.0
1920	304.8	1025	284.5	1978	335.0	1547	299.8	2004	376.8	1776	318.6
1925	306.3	1052	285.3	1979	336.6	1566	300.4	2005	378.8	1774	319.3
1930	307.1	1072	285.6	1980	338.8 <sup>c</sup>	1585	301.1 <sup>c</sup>	2006	381.0	1774	320.2
1935	308.6	1097	286.3	1981	340.0	1603	301.9	2007	382.7	1781	320.9
1940	311.7	1120	287.3	1982	340.8	1619	303.1	2008	384.8	1788	321.8
1945	312.7	1139	289.0	1983	342.4	1633	303.7	2009	386.3	1793	322.6
1950	313.1	1164	289.5	1984	344.0	1645 <sup>c</sup>	304.3	2010	388.6	1798	323.4
1955	314.6	1207	290.7	1985	345.5	1657	304.9	2011	390.5	1803	324.4
1960	316.8	1264	292.1	1986	346.9	1670	305.8	2012	392.5	1808	325.3
1961	317.5	1269	292.5	1987	348.6	1680	306.0	2013	395.2	1814	326.2
1962	318.2	1282	292.8	1988	351.2	1693	306.7	2014	397.1	1823	327.4
1963	318.8	1301	293.2	1989	352.8	1707	307.8	2015	399.4	1834	328.3
1964	319.5	1317	293.6	1990	354.0	1714	308.7	2016	402.9	1842	329.1
1965	320.0	1331	293.9	1991	355.3	1728	309.4	2017	405.0	1849	330.0
1966	321.0	1342	294.4	1992	356.0	1735	309.9	2018	407.4	1858	331.2
1967	321.6	1354	294.8	1993	356.7	1737	310.3	2019	409.9	1866	332.1
								<b>ERF<sup>d</sup></b>	<b>2.16</b>	<b>0.54</b>	<b>0.21</b>

Notes: <sup>a</sup> 1750/1850 CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from multiple ice cores assessed in Chapter 2. Uncertainties (90% CI) for 1750 are 2.9 ppm, 9.4 ppb and 6.0 ppb for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, respectively. Uncertainties for 1850 are 2.1 ppm, 13.8 ppb and 5.7 ppb, based on variations of ice cores.

<sup>b</sup> Mixing ratios from 1851–1980/1984 are updated from the CMIP6 (Meinshausen et al., 2017) dataset, using a linear time-dependent offset correction function.

<sup>c</sup> CO<sub>2</sub> from NOAA network; CH<sub>4</sub> and N<sub>2</sub>O from merged NOAA and AGAGE networks. Uncertainties (90% CI) in 2019, derived from multiple global networks, are 0.36 ppm, 3.3 ppb and 0.4 ppb for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, respectively, and do not include estimates of analytical accuracy. Uncertainties for other years may differ.

<sup>d</sup> ERF (2019–1750) from Chapter 7.

