

## Tables

## All.1: Historical Climate System Data

Table All.1.1a | Historical abundances of the Kyoto greenhouse gases

Year	CO <sub>2</sub> (ppm)	CH <sub>4</sub> (ppb)	N <sub>2</sub> O (ppb)	Year	CO <sub>2</sub> (ppm)	CH <sub>4</sub> (ppb)	N <sub>2</sub> O (ppb)
PI*	278 ± 2	722 ± 25	270 ± 7	PI*	278 ± 2	722 ± 25	270 ± 7
1755	276.7	723	272.8	1959	316.0	1251	292.1
1760	276.5	726	274.1	1960	316.7	1263	292.4
1765	276.6	730	274.2	1961	317.4	1275	292.5
1770	277.3	733	273.7	1962	318.0	1288	292.5
1775	278.0	736	273.1	1963	318.5	1301	292.6
1780	278.2	739	272.4	1964	319.0	319.0	292.6
1785	278.6	742	271.9	1965	319.7	1328	292.7
1790	280.0	745	271.8	1966	320.6	1343	292.9
1795	281.4	748	272.1	1967	321.5	1357	293.3
1800	282.6	751	272.6	1968	322.5	1372	293.8
1805	283.6	755	272.1	1969	323.5	1388	294.4
1810	284.2	760	271.4	1970	324.6	1403	295.2
1815	284.0	765	271.5	1971	325.6	1419	296.0
1820	283.3	769	272.9	1972	326.8	1435	296.9
1825	283.1	774	274.1	1973	328.0	1451	297.8
1830	283.8	779	273.7	1974	329.2	1467	298.4
1835	283.9	784	270.5	1975	330.2	1483	299.0
1840	284.1	789	269.6	1976	331.3	1500	299.4
1845	285.8	795	270.3	1977	332.7	1516	299.8
1850	286.8	802	270.4	1978	334.3	1532	300.2
1855	286.4	808	270.6	1979	336.2	1549	300.7
1860	286.1	815	271.7	1980	338.0	1567	301.3
1865	286.3	823	272.3	1981	339.3	1587	302.0
1870	288.0	831	273.0	1982	340.5	1607	303.0
1875	289.4	839	274.7	1983	342.1	1626	303.9
1880	289.8	847	275.8	1984	343.7	1643	304.5
1885	290.9	856	277.2	1985	345.2	1657	305.5
1890	293.1	866	278.3	1986	346.6	1670	305.9
1895	295.4	877	277.7	1987	348.4	1682	306.3
1900	296.2	891	277.3	1988	350.5	1694	306.7
1905	297.4	912	279.2	1989	352.2	1704	307.8
1910	299.3	935	280.8	1990	353.6	1714	308.7
1915	301.1	961	282.7	1991	354.8	1725	309.3
1920	303.3	990	285.1	1992	355.7	1733	309.8
1925	304.7	1020	284.3	1993	356.6	1738	310.1
1930	306.6	1049	284.9	1994	358.0	1743	310.4
1935	308.4	1077	286.6	1995	359.9	1747	311.0
1940	310.4	1102	287.7	1996	361.4	1751	311.8
1945	310.9	1129	288.0	1997	363.1	1757	312.7
1950	311.2	1162	287.6	1998	365.2	1765	313.7
1955	313.4	1207	289.6	1999	367.2	1771	314.7
1956	314.0	1217	290.4	2000	368.7	1773	315.6
1957	314.6	1228	291.2	2001	370.2	1773	316.3
1958	315.3	1239	291.7	2002	372.3	1774	317.0

(continued on next page)

Table AII.1.1a (continued)

Year	CO <sub>2</sub> (ppm)	CH <sub>4</sub> (ppb)	N <sub>2</sub> O (ppb)
PI*	278 ± 2	722 ± 25	270 ± 7
2003	374.5	1776	317.6
2004	376.6	1776	318.3
2005	378.7	1776	319.1
2006	380.8	1776	319.8
2007	382.7	1781	320.6
2008	384.6	1787	321.4
2005	378.7	1776	319.1
2006	380.8	1776	319.8
2007	382.7	1781	320.6
2008	384.6	1787	321.4
2009	386.4	1792	322.3
2010	388.4	1798	323.2
2011*	390.5 ± 0.3	1803 ± 4	324 ± 1

Year	SF <sub>6</sub> (ppt)	CF <sub>4</sub> (ppt)	C <sub>2</sub> F <sub>6</sub> (ppt)	C <sub>6</sub> F <sub>14</sub> (ppt)	NF <sub>3</sub> (ppt)
PI*	0	35	0	0	
1900	0	35	0	0	
1910	0	35	0.1	0	
1920	0	35	0.1	0	
1930	0	36	0.2	0	
1940	0	37	0.3	0	
1950	0	39	0.5	0	
1960	0.1	43	0.6	0	
1970	0.3	51	0.8	0	
1980	0.8	60	1.2	0	
1990	2.4	68	1.9	0	
2000	4.5	76	2.9	0	
2005	5.6	75	3.7	0	0.3
2010	7.0	78.3	4.1	0	
2011*	7.3 ± 0.1	79.0	4.2	0	0.6

Year	HFC-23 (ppt)	HFC-32 (ppt)	HFC-125 (ppt)	HFC-134a (ppt)	HFC-143a (ppt)	HFC-227ea (ppt)	HFC-245fa (ppt)	HFC-43-10mee (ppt)
PI*	0	0	0	0	0	0	0	0
1940	0.1	0	0	0	0	0	0	0
1950	0.3	0	0	0	0	0	0	0
1960	0.7	0	0	0	0	0	0	0
1970	1.6	0	0	0	0	0	0	0
1980	3.7	0	0	0	0.2	0	0	0
1990	7.9	0	0.1	0	0.6	0	0	0
2000	14.8	0	1.3	14	3.1	0.1	0	0
2010	23.2	4.1	8.2	58	10.9	0.6	1.1	0
2011*	24.0	4.9	9.6	63 ± 1	12.0	0.65	1.24	0

## Notes:

Abundances are mole fraction of dry air for the lower, well-mixed atmosphere (ppm = micromoles per mole, ppb = nanomoles per mole, ppt = picomoles per mole). Values refer to single-year average. Uncertainties (5 to 95% confidence intervals) are given for 2011 only when more than one laboratory reports global data. Pre-industrial (PI\*, taken to be 1750 for GHG) and present day (2011\*) abundances are from Chapter 2, Tables 2.1 and 2.SM.1; see also Chapter 6 for Holocene variability (10 ppm CO<sub>2</sub>, 40 ppb CH<sub>4</sub>, 10 ppb N<sub>2</sub>O). Intermediate data for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O are from Chapters 2 and 8, Figure 8.6. See also Appendix 1.A. Intermediate data for the F-gases are taken from Meinshausen et al. (2011).