Table 2. Annual global averaged CO2 mole fraction (Mean, ppm) and its G­ATM (ppm yr-1) derived from GAW observations using GFIT method. U(Mean) and U(G­ATM) respectively indicate the uncertainty of Mean and its G­ATM as 68% confidence interval. The annual value is averaged over the monthly values of the year.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
| **Mean** | 338.95 | 340.24 | 341.08 | 342.62 | 344.34 | 345.66 | 347.14 | 349.07 | 351.47 | 353.12 |
| **U(Mean)** | 0.38 | 0.24 | 0.19 | 0.24 | 0.26 | 0.22 | 0.14 | 0.15 | 0.12 | 0.15 |
| **G­ATM** | 1.65 | 1.07 | 0.88 | 2.02 | 1.32 | 1.38 | 1.55 | 2.38 | 2.08 | 1.23 |
| **U(G­ATM)** | 0.12 | 0.10 | 0.15 | 0.13 | 0.08 | 0.11 | 0.14 | 0.08 | 0.09 | 0.06 |
| **Year** | **1990** | **1991** | **1992** | **1993** | **1994** | **1995** | **1996** | **1997** | **1998** | **1999** |
| **Mean** | 354.25 | 355.66 | 356.38 | 357.21 | 358.71 | 360.54 | 362.29 | 363.45 | 366.14 | 368.10 |
| **U(Mean)** | 0.10 | 0.11 | 0.10 | 0.10 | 0.11 | 0.12 | 0.12 | 0.10 | 0.10 | 0.10 |
| **G­ATM** | 1.41 | 1.03 | 0.65 | 1.22 | 1.72 | 2.06 | 1.16 | 1.82 | 2.89 | 1.34 |
| **U(G­ATM)** | 0.08 | 0.06 | 0.05 | 0.05 | 0.05 | 0.08 | 0.07 | 0.05 | 0.05 | 0.05 |
| **Year** | **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** |
| **Mean** | 369.56 | 371.04 | 373.00 | 375.40 | 377.13 | 379.27 | 381.36 | 383.22 | 385.30 | 386.83 |
| **U(Mean)** | 0.12 | 0.11 | 0.10 | 0.10 | 0.10 | 0.10 | 0.09 | 0.10 | 0.10 | 0.11 |
| **G­ATM** | 1.58 | 1.58 | 2.33 | 2.17 | 1.66 | 2.42 | 1.75 | 2.20 | 1.71 | 1.68 |
| **U(G­ATM)** | 0.05 | 0.06 | 0.06 | 0.04 | 0.04 | 0.03 | 0.05 | 0.04 | 0.05 | 0.04 |
| **Year** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** | **2017** | **2018** | **2019** |
| **Mean** | 389.04 | 390.96 | 393.15 | 395.84 | 397.78 | 400.13 | 403.41 | 405.66 | 407.92 | 410.56 |
| **U(Mean)** | 0.12 | 0.12 | 0.14 | 0.11 | 0.10 | 0.10 | 0.11 | 0.09 | 0.10 | 0.13 |
| **G­ATM** | 2.32 | 1.73 | 2.74 | 2.30 | 1.91 | 2.98 | 2.95 | 2.04 | 2.50 | 2.61 |
| **U(G­ATM)** | 0.05 | 0.06 | 0.09 | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 | 0.07 | 0.05 |
| **Year** | **2020** |  |  |  |  |  |  |  |  |  |
| **Mean** | 413.06 |  |  |  |  |  |  |  |  |  |
| **U(Mean)** | 0.16 |  |  |  |  |  |  |  |  |  |
| **G­ATM** | 2.60 |  |  |  |  |  |  |  |  |  |
| **U(G­ATM)** | 0.16 |  |  |  |  |  |  |  |  |  |