

## Globally averaged marine surface annual mean growth rates

year	ann inc	unc
2001	0.71	0.12
2002	0.50	0.15
2003	0.80	0.15
2004	0.53	0.16
2005	0.87	0.15
2006	0.69	0.12
2007	0.90	0.14
2008	0.91	0.14
2009	0.76	0.16
2010	1.08	0.15
2011	0.90	0.14
2012	0.81	0.13
2013	1.01	0.15
2014	1.25	0.15
2015	0.90	0.14
2016	0.66	0.16
2017	1.02	0.15
2018	1.17	0.14
2019	0.90	0.13

N2O expressed as a mole fraction in dry air, nanomol/mol, abbreviated as ppb

NOTE: In general, the data presented for the last year are subject to change, depending on recalibration of the reference gas mixtures used, and other quality control procedures. Occasionally, earlier years may also change for the same reasons. Usually these changes are minor.

See [www.esrl.noaa.gov/gmd/ccgg/trends\\_n2o/](http://www.esrl.noaa.gov/gmd/ccgg/trends_n2o/) for additional details.

**Data Source: NOAA ESRL**