

## Errata for “WMO WDCGG DATA SUMMARY WDCGG No.43”

3 June 2020

“2. METHANE (CH<sub>4</sub>)” (p. 12)

Correct

(currently available version)

### 2. METHANE (CH<sub>4</sub>)

Atmospheric mole fractions of methane (CH<sub>4</sub>) – the second most significant anthropogenic greenhouse gas – have been increasing since the beginning of the industrial era in around 1750. The global mean mole fraction of CH<sub>4</sub> was 1,859±2 ppb in 2017, representing an increase of 7 ppb relative to the previous year and 257% of the pre-industrial level of 722 ppb. CH<sub>4</sub> is responsible for around 17% of radiative forcing (relative to the pre-industrial era) caused by long-lived greenhouse gases (WMO, 2018a).

Incorrect

(former version until 3 June 2020)

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“3. NITROUS OXIDE (N<sub>2</sub>O)” (p. 18)

Correct

(currently available version)

### 3. NITROUS OXIDE (N<sub>2</sub>O)

Atmospheric mole fractions of nitrous oxide (N<sub>2</sub>O) – a significant factor in global warming – have been increasing since the beginning of the industrial era in around 1750. The global mean mole fraction in 2017 was 329.9±0.1 ppb, representing an increase of 0.9 ppb relative to the previous year and 122% of the pre-industrial level of 270 ppb. N<sub>2</sub>O is responsible for approximately 6% of total radiative forcing (relative to the pre-industrial era) from long-lived greenhouse gases (WMO, 2018a).

N<sub>2</sub>O sources include microbial processes (nitrification and denitrification), oceans, nitrogen fertilizers generally used in agriculture, fossil fuel combustion and biomass burning. The gas is relatively stable in the troposphere with a lifetime of around 121 years. Its mole fraction is relatively uniformly distributed in the troposphere and declines in the stratosphere where N<sub>2</sub>O is destroyed via ultraviolet (UV) photo-decomposition.

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