Supplement of Atmos. Chem. Phys., 23, 3829–3859, 2023 https://doi.org/10.5194/acp-23-3829-2023-supplement © Author(s) 2023. CC BY 4.0 License.





Supplement of

Technical note: The CAMS greenhouse gas reanalysis from 2003 to 2020

Anna Agustí-Panareda et al.

Correspondence to: Anna Agustí-Panareda (anna.agusti-panareda@ecmwf.int)

The copyright of individual parts of the supplement might differ from the article licence.

$Catalogue\ of\ AirCore\ vertical\ profiles\ (from\ NOAA_AirCore_data_v20210813\ dataset,\ Baier\ et\ al.,\ 2021)\ used\ for\ the\ evaluation\ in\ Sect.\ 3.2.$

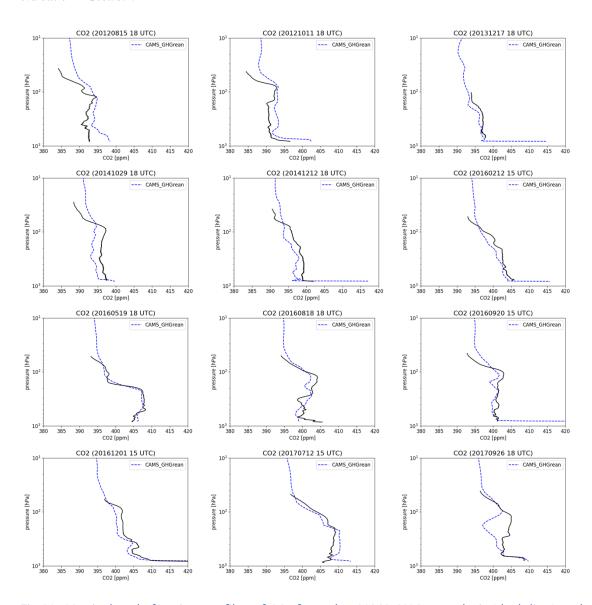


Fig S1a Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3) (*continued in the next page*).

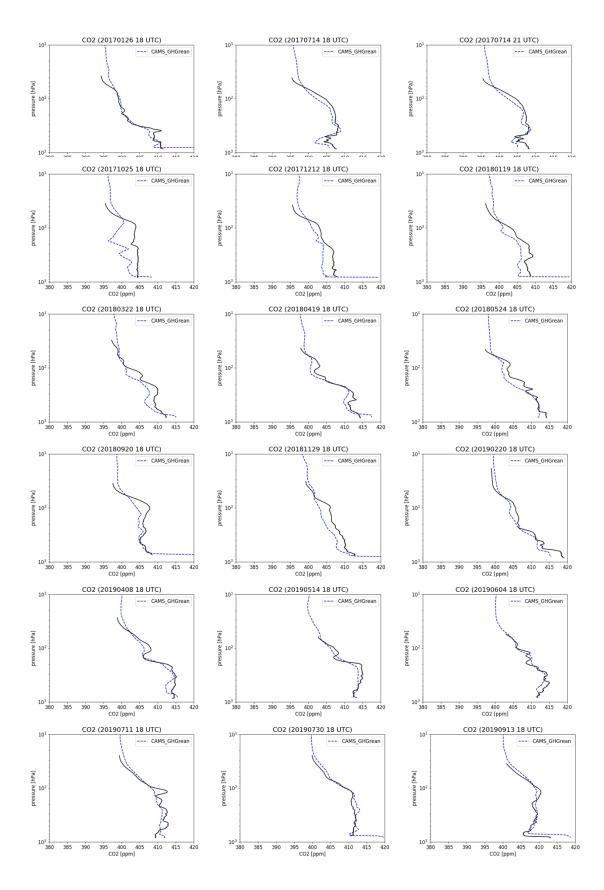


Fig S1a cont. Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3) (continued in the next page).

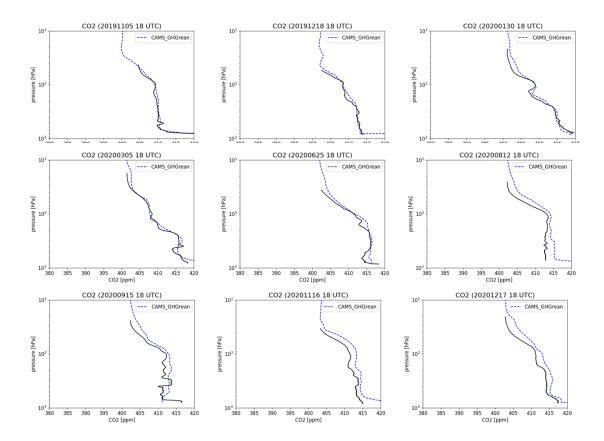


Fig S1a *cont*. Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3) (*continued in the next page*).

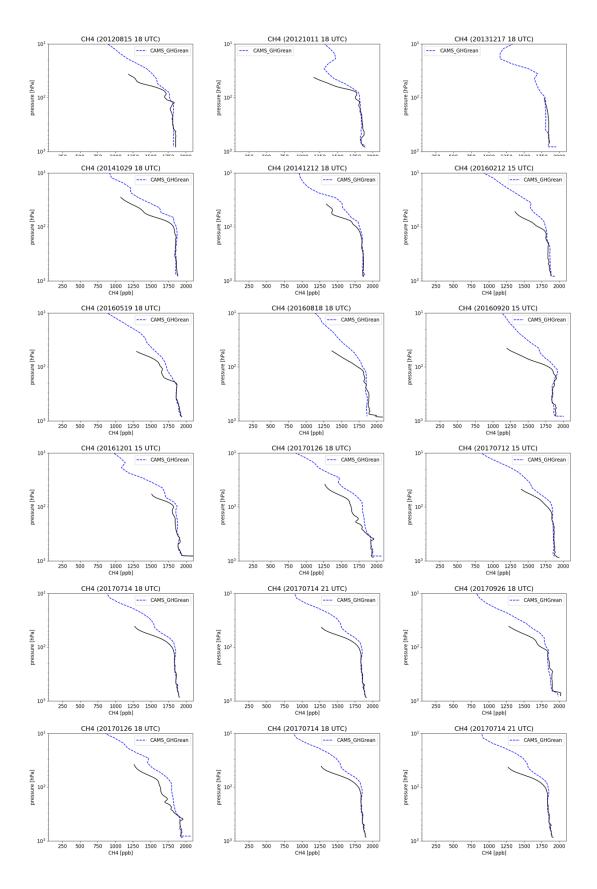


Fig S1b Vertical mole fraction profiles of CH₄ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3) (continued in the next page).

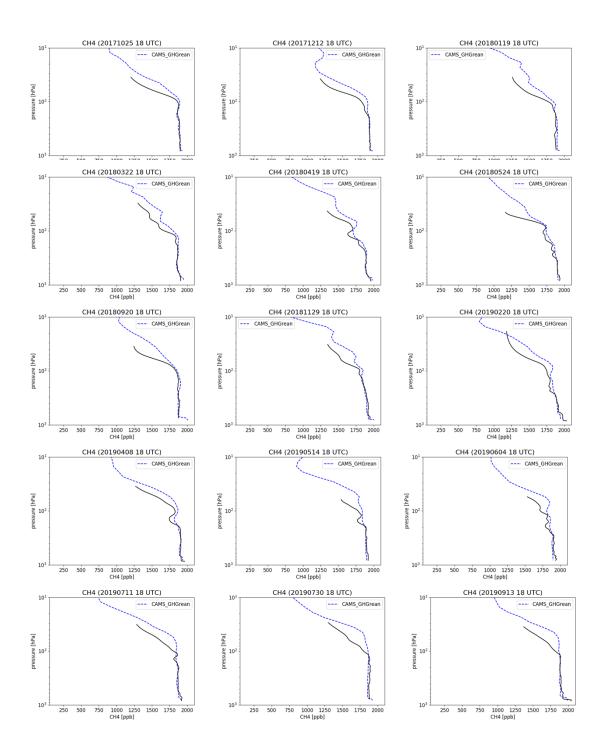


Fig S1b *cont.* Vertical mole fraction profiles of CH₄ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3) (*continued in the next page*).

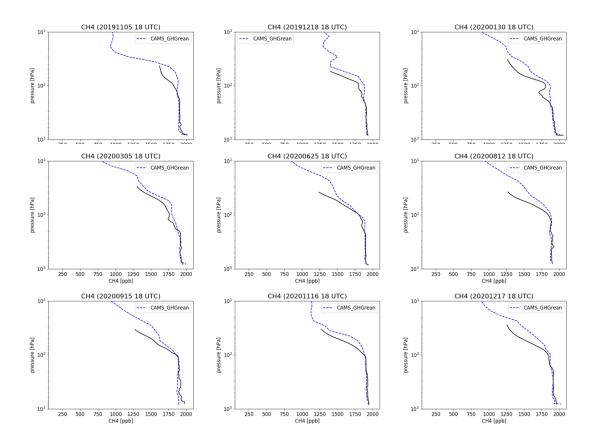


Fig S1b Vertical mole fraction profiles of CH_4 from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Boulder (CO, USA, see Table A3).

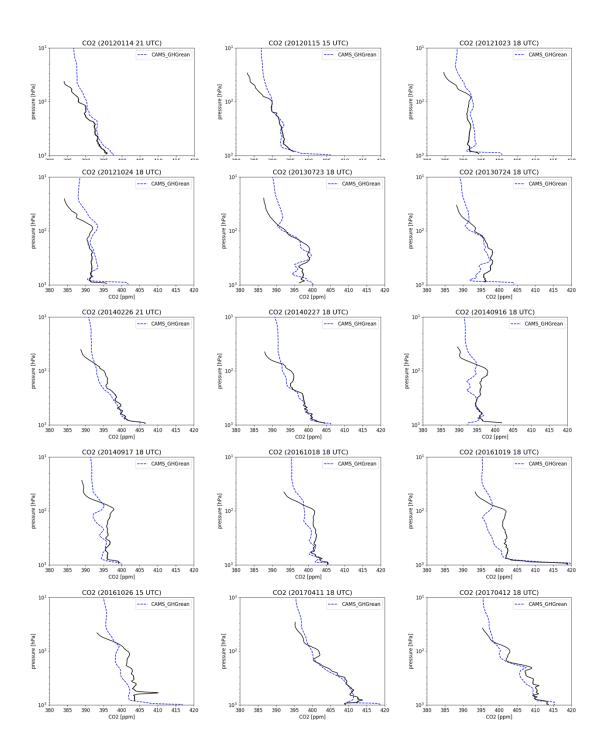


Fig S2a Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Lamont (OK, USA, see Table A3) (continued in the next page).

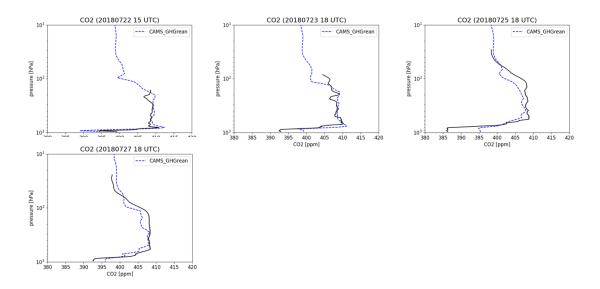


Fig S2a cont. Vertical mole fraction profiles of CO_2 from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Lamont (OK, USA, see Table A3).

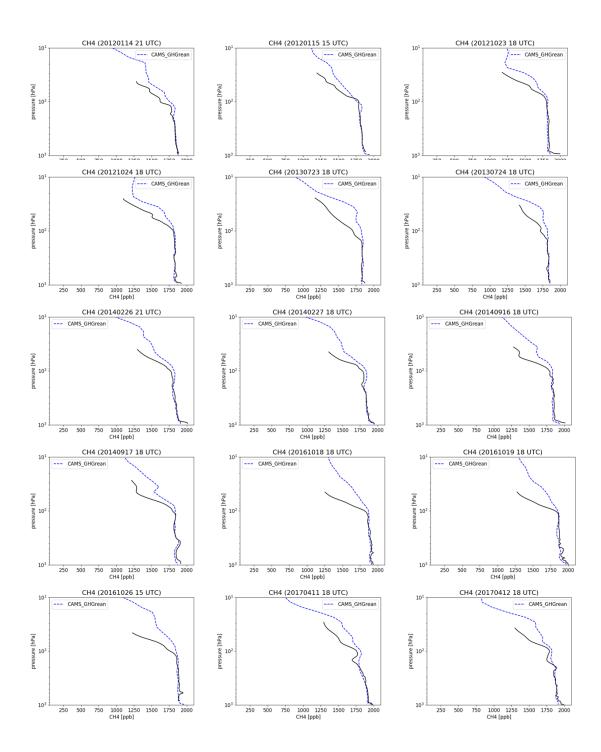


Fig S2b Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Lamont (OK, USA, see Table A3) (*continued in the next page*).

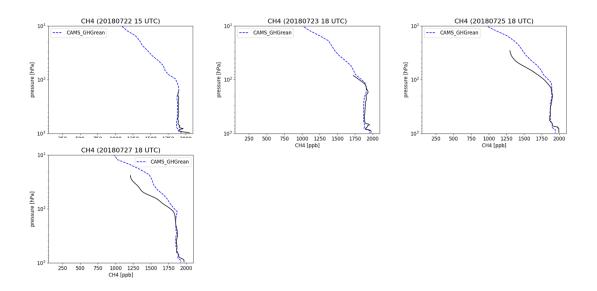


Fig S2b *cont.* Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Lamont (OK, USA, see Table A3) (*continued in the next page*).

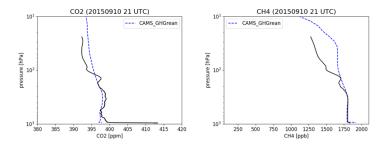


Fig S3 Vertical mole fraction profiles of CO_2 and CH_4 from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Lauder (New Zealand, see Table A3).

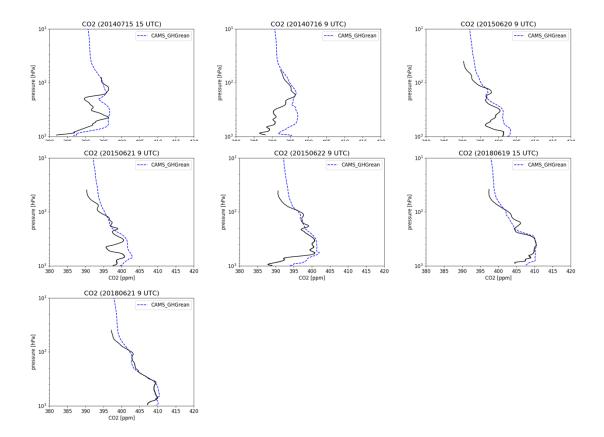


Fig S4a Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Sodankylä (Finland, see Table A3).

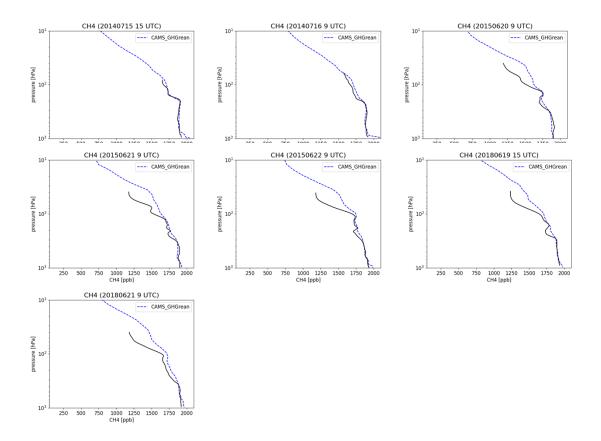


Fig S4b Vertical mole fraction profiles of CH_4 from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Sodankylä (Finland, see Table A3).

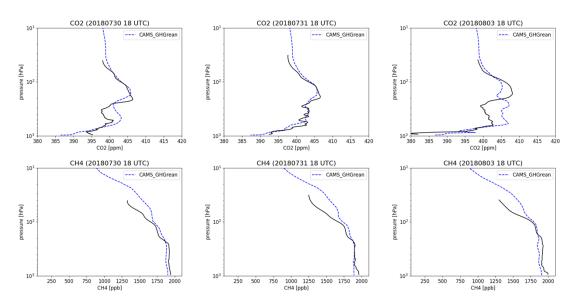


Fig S5 Vertical mole fraction profiles of CO₂ and CH₄ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Park Falls (WI, USA, see Table A3).

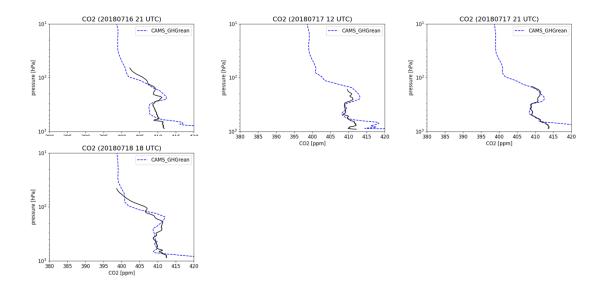


Fig S6a Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Edwads (CA, USA, see Table A3).

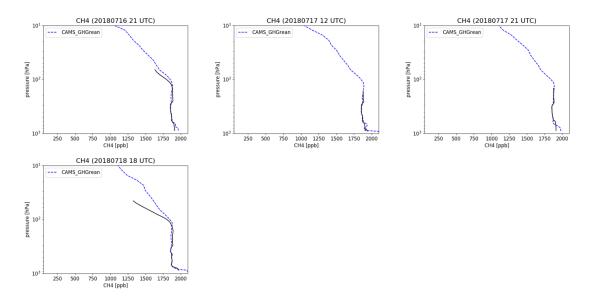


Fig S6b Vertical mole fraction profiles of CH₄ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Edwads (CA, USA, see Table A3).

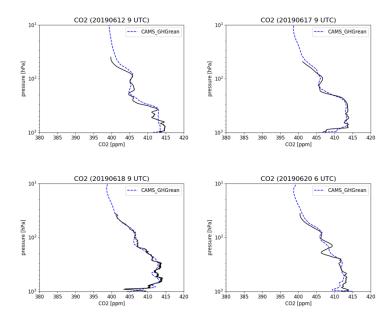


Fig S7a Vertical mole fraction profiles of CO₂ from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Traînou (France, see Table A3).

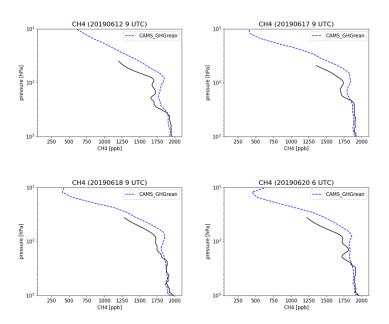


Fig S7b Vertical mole fraction profiles of CO_2 from the CAMS GHG reanalysis (dash line) and AirCore observations (solid line) at Traînou (France, see Table A3).