

WMO on the state of Greenhouse Gases in the atmosphere

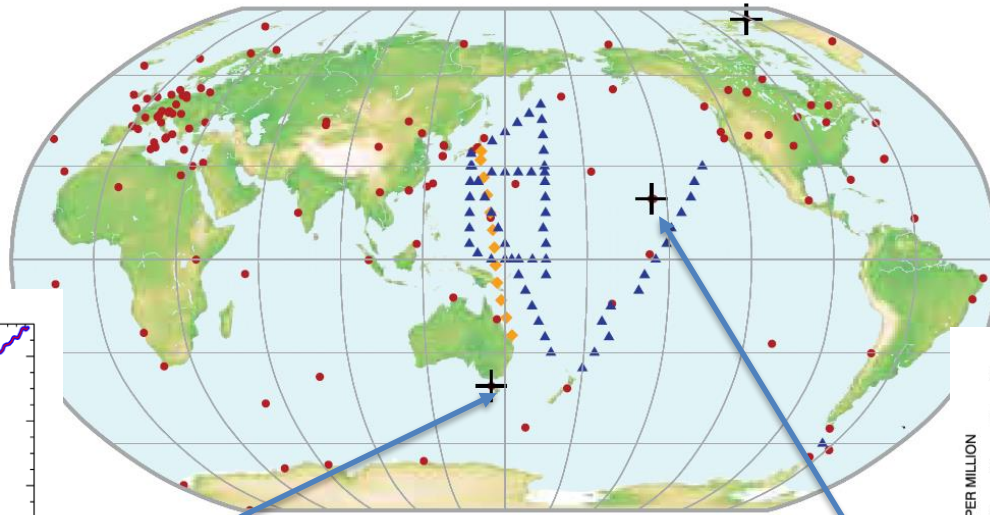


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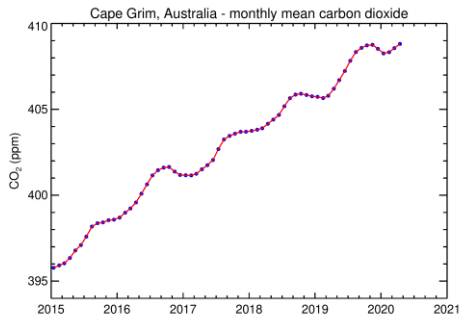
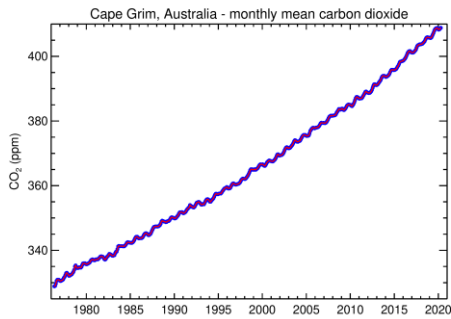
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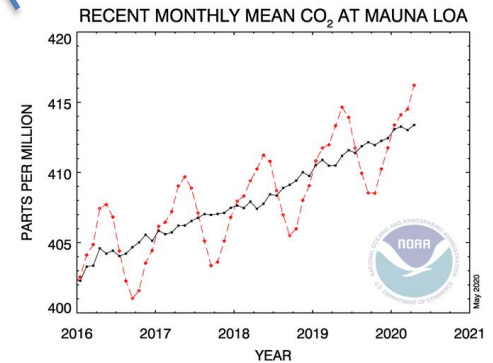
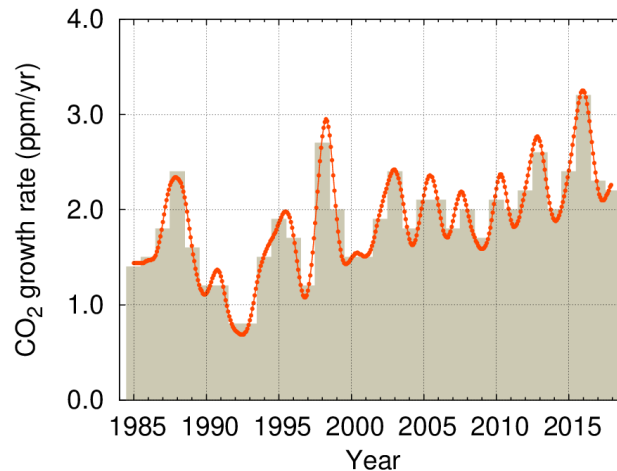
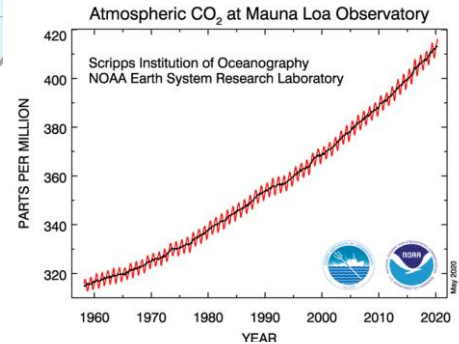
WMO/GAW global network for CO₂



● Ground-based
 ◆ Aircraft
 ▲ Ship
 ⊕ GHG comparison sites



Cape Grim GHG webpage data - created on Fri May 15 07:18:04 2020 by glaser-as@GL2.AS

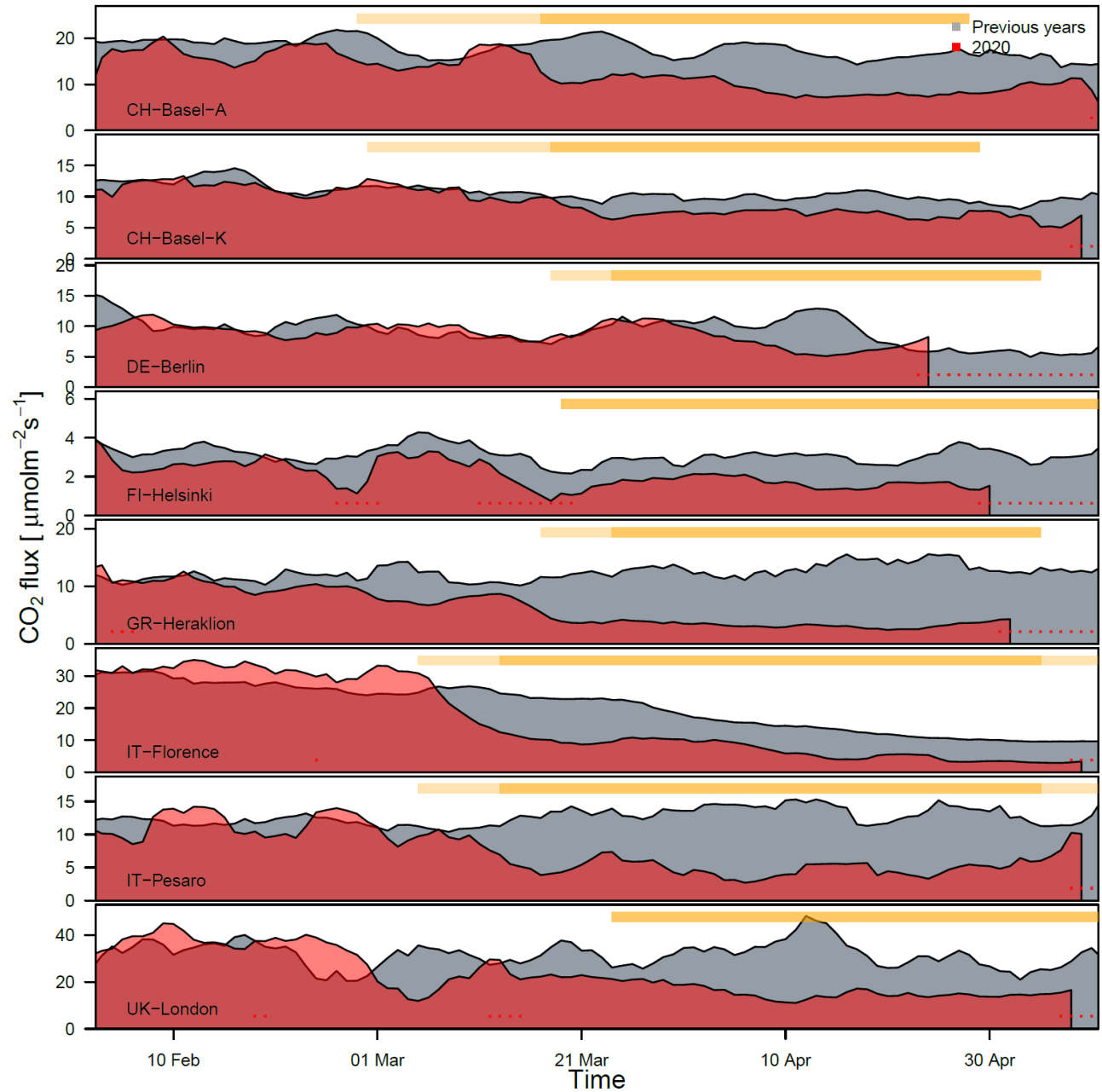


1 ppm is within natural interannual variability
 Lock-down measures can decrease the growth rate by 0.2 ppm max

ICOS work on urban scale

Significant changes can be measured within cities using so called **eddy covariance techniques** that directly measure vertical exchange fluxes.

WMO Integrated Global Greenhouse Gas Information System (IG3IS) can be used to identify emission changes combining measurements and analysis.



What are the impacts of COVID-19 on greenhouse gas concentrations?

1. Concentration of carbon dioxide in the atmosphere will not decrease as a result of lock-down measures
2. Separation of natural variability from the one driven by lock-down measures needs longer datasets and more complicated analysis (e.g use of isotopes)
2. The most substantial impact of emission reduction on atmospheric GHG concentrations is visible in urban areas there emission changes can be detected by direct flux measurements



Thank you



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