



**Figure S1.** Surface fossil fuel emission anomalies based on CarbonMonitor. Anomalies are computed based on available 2019 months, which was a nominal year compared to COVID-19 related changes to anthropogenic sources through 2020 to 2021. Despite large changes in 2020 and 2021 fossil fuels expected, these only amount to magnitude anomalies of <5 TgC per month, which are much less than anomalies due to biospheric processes.