

Supplementary

Atmospheric CH₄ at regional stations of the Korea Meteorological Administration/ Global Atmosphere Watch Programme: measurement, characteristics and long-term changes of its drivers

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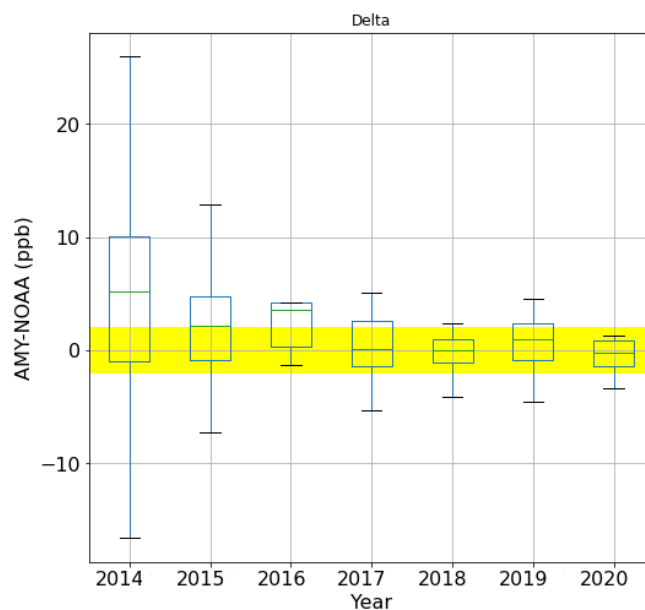


Figure S1. The box plot of CH₄ difference between AMY quasi-continuous hourly data and NOAA weekly flask data. The mean of difference is 2.2 ± 11.8 ppb.

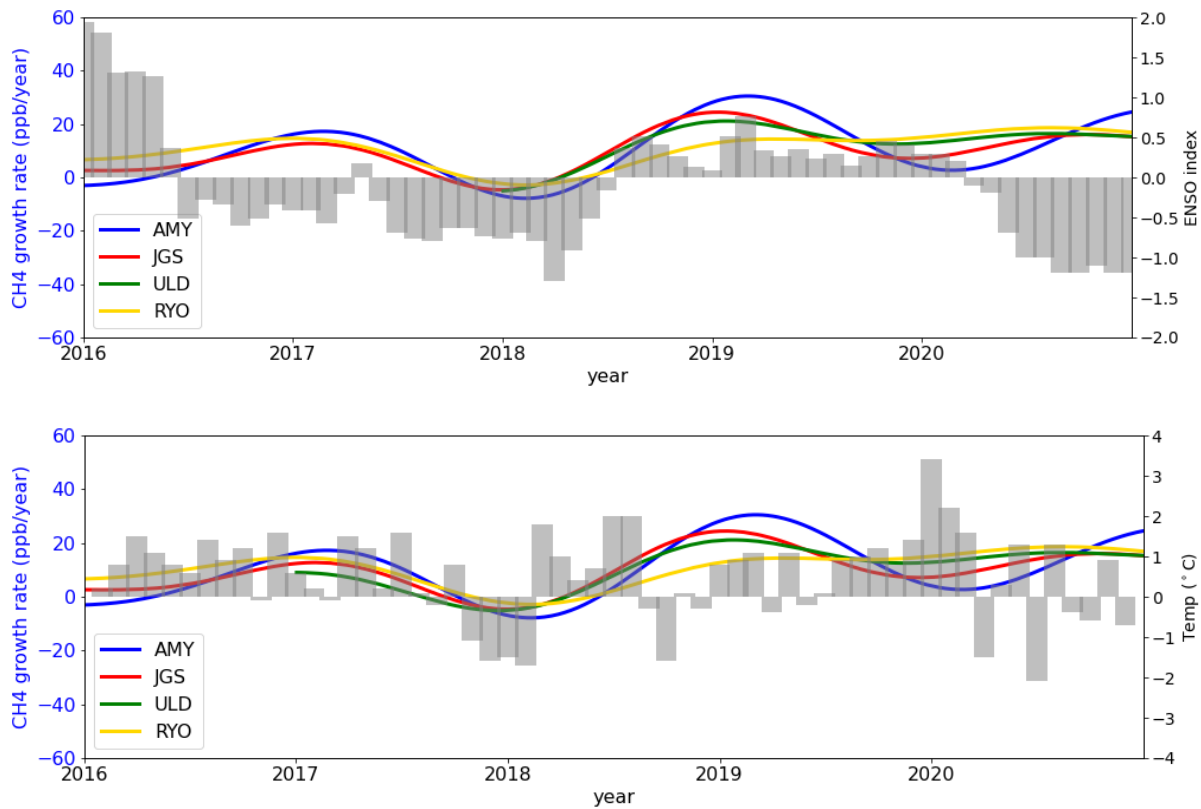


Figure S2. The trend of growth rate and ENSO (upper panel) and Temp ($^{\circ}\text{C}$) (bottom) at four regional stations (AMY, JGS, ULD and RYO). The Temperature data were downloaded from <https://data.kma.go.kr/stcs/grnd> (last access: 23 Aug. 2022). These values are calculated the difference from the mean temperature anomaly.

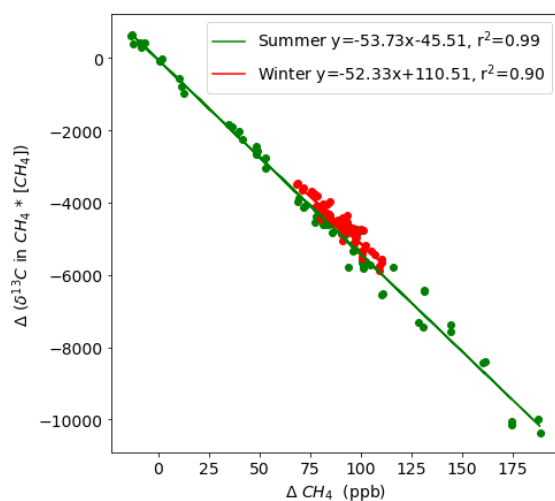


Figure S3. Miller-Tans plots showing the source signature of methane increments (Anmyeondo, AMY) into background air (Mauna-Loa). Collected from AMY station during summer (Jun, July and August, green scatters) and Winter (December, January, and February, red scatters).