



Legend for data sources of shown station data (grey dots):

**Panel a - CO<sub>2</sub> Raw station data:**

NOAA\_surface\_flask: 000, ABP, ALT, AMS, AMY, ASC, ASK, AVI, AZR, BAL, BHD, BKT, BME, BMW, BRW, BSC, CBA, CGO, CHR, CIB, CMO, CPT, CRZ, DRP, DSI, EIC, GMI, GOZ, HBA, HPB, HUN, ICE, IZO, KEY, KUM, KZD, KZM, LEF, LLB, LLN, LMP, MBC, MEX, MHD, MID, MKN, MLO, N03, N05, N06, N09, N10, N12, N15, N18, N20, N21, N25, N30, NAT, NMB, NWR, OPW, OXK, PAL, PSA, PTA, RPB, S05, S10, S15, S20, S25, S30, S35, SDZ, SEY, SGP, SHM, SMO, SPO, STC, STM, SUM, SYO, TAP, THD, TIK, USH, UTA, UUM, WIS, WLG, ZEP

**Panel b - CH<sub>4</sub> Raw station data:**

AGAGE\_gc-md\_monthly: cgo, mhd, rpb, smo, thd  
 NOAA\_surface\_flask: 000, ABP, ALT, AMS, AMY, ASC, ASK, AVI, AZR, BAL, BHD, BKT, BME, BMW, BRW, BSC, CBA, CGO, CHR, CIB, CMO, CPT, CRZ, DRP, DSI, EIC, GMI, GOZ, HBA, HPB, HUN, ICE, ITN, IZO, KEY, KUM, KZD, KZM, LEF, LLB, LLN, LMP, MBC, MEX, MHD, MID, MKN, MLO, N03, N05, N06, N09, N10, N12, N15, N18, N20, N21, N25, N30, NAT, NMB, NWR, OPW, OXK, PAL, PSA, PTA, RPB, S05, S10, S15, S20, S25, S30, S35, SDZ, SEY, SGP, SHM, SMO, SPO, STM, SUM, SYO, TAP, THD, TIK, USH, UTA, UUM, WIS, WKT, WLG, ZEP

**Panel c - N<sub>2</sub>O Raw station data:**

AGAGE\_gc-md\_monthly: cgo, mhd, rpb, smo, thd  
 HATS\_GLOBAL\_combined: alt, brw, cgo, kum, mhd, mlo, nwr, psa, smo, spo, sum, tdf, thd