

Figure S1 below shows the differences in CO_2 and CH_4 fluxes between the LGR (ambient and numerically dried) and Picarro (physically dried) plotted against the measured H_2O flux by the LGR. The LGR H_2O flux is computed at the optimal lag time for H_2O ($\sim 20\text{s}$). These plots show the same qualitative trend as Figure 5 of the paper, i.e. the differences in CO_2 and CH_4 fluxes due to the H_2O correction increase with increasing H_2O flux.

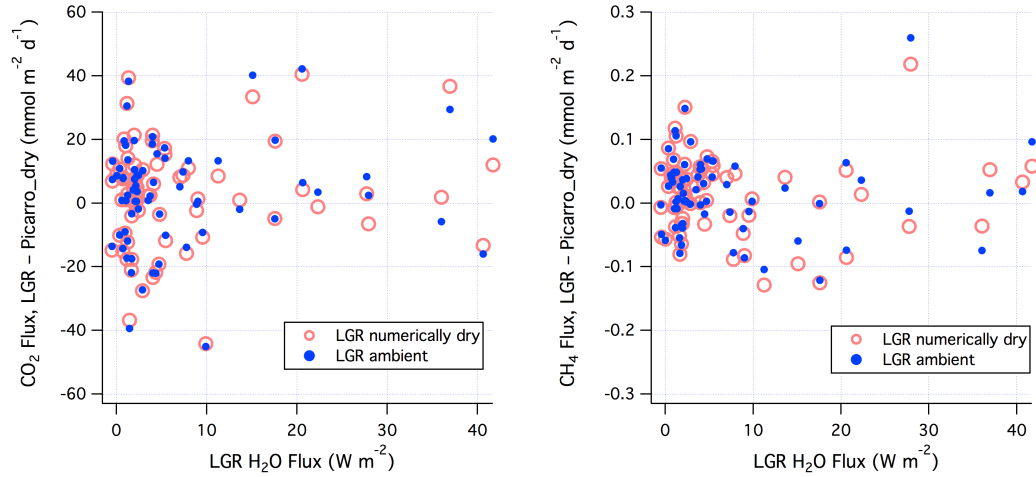


Figure S1. Differences in CO_2 and CH_4 fluxes between the LGR and Picarro vs. measured H_2O flux by the LGR.

Figure S2 below shows that measured LGR H_2O flux increases non-linearly with the predicted bulk H_2O flux. Attenuation of H_2O flux principally by the tubing was at least 80%.

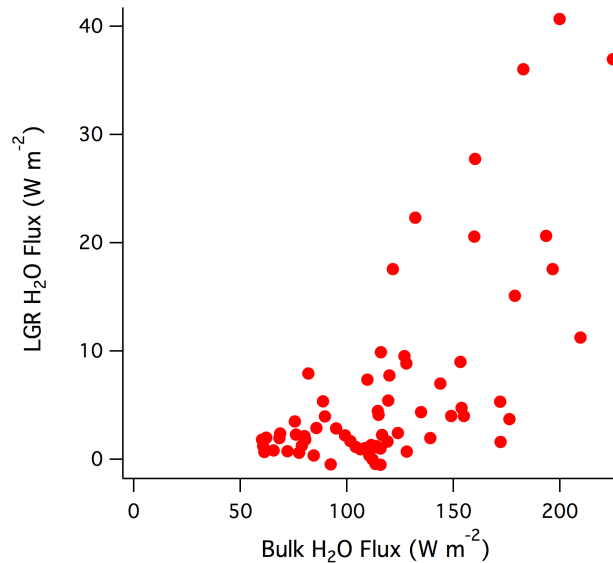


Figure S2. Measured H_2O flux by the LGR vs. predicted bulk H_2O flux for the air-water wind sector.