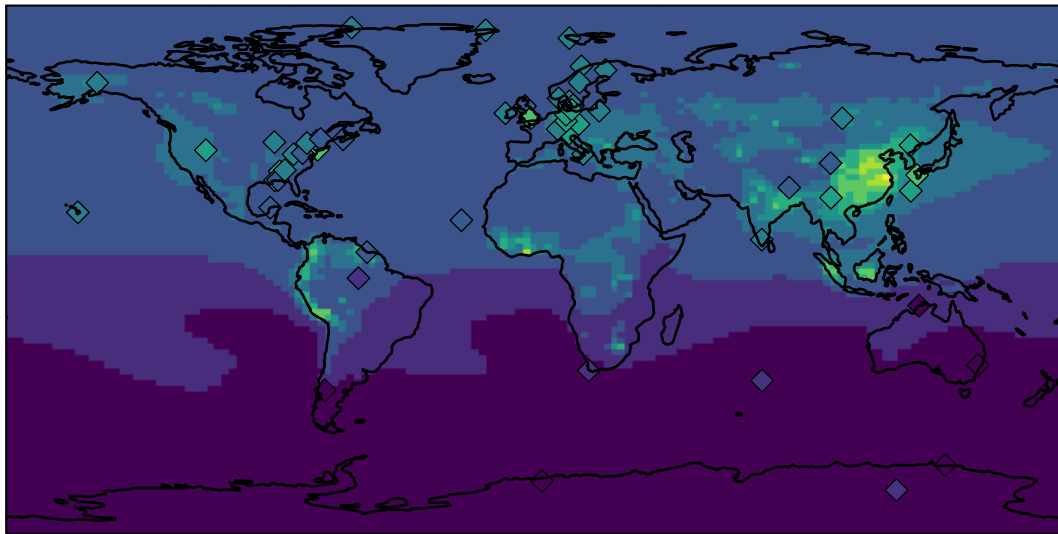


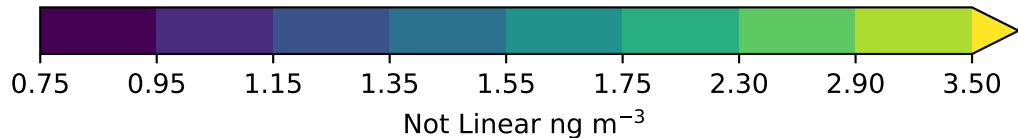
# Reference Model Version: Surface TGM



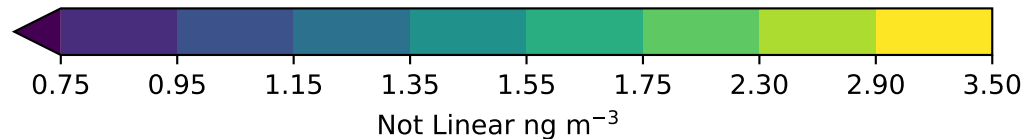
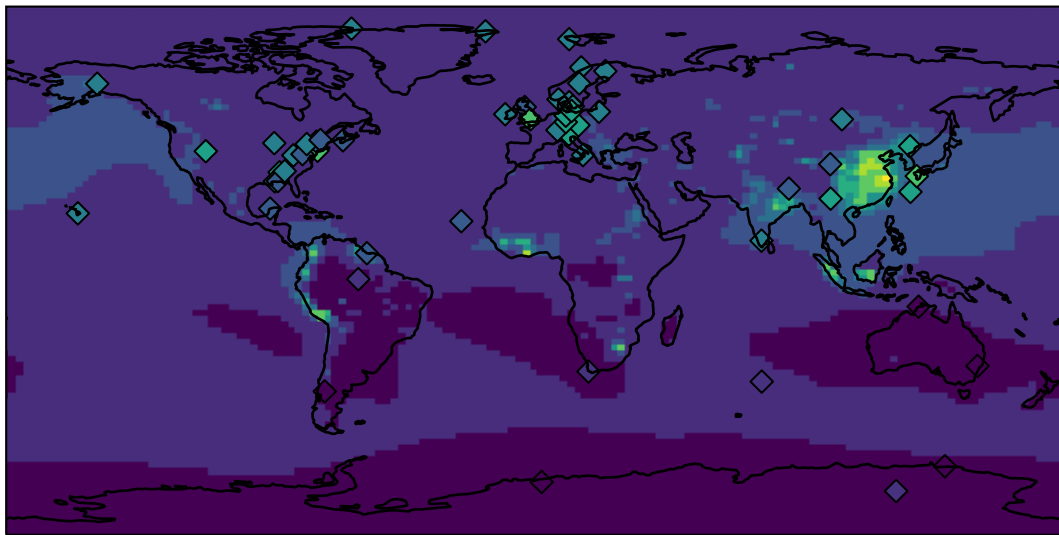
Terrestrial  $R^2 = 0.599$

Mean Mod. =  $1.29 \pm 0.19 \text{ ng m}^{-3}$

Mean Obs. =  $1.39 \pm 0.26 \text{ ng m}^{-3}$



## New Model Version: Surface TGM

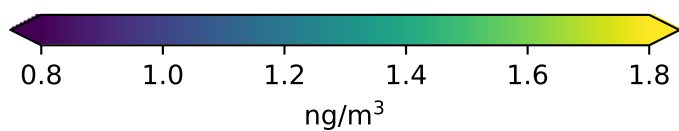
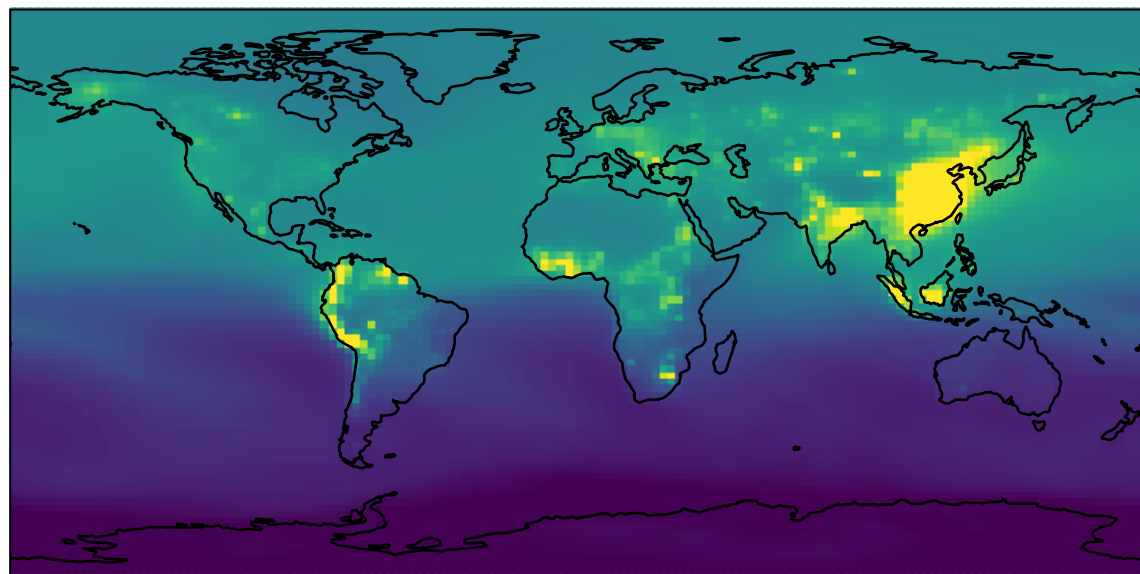


Terrestrial  $R^2 = 0.437$

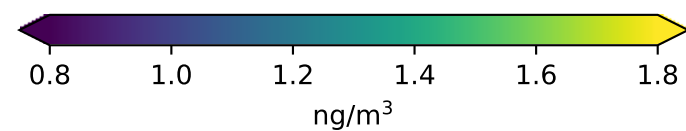
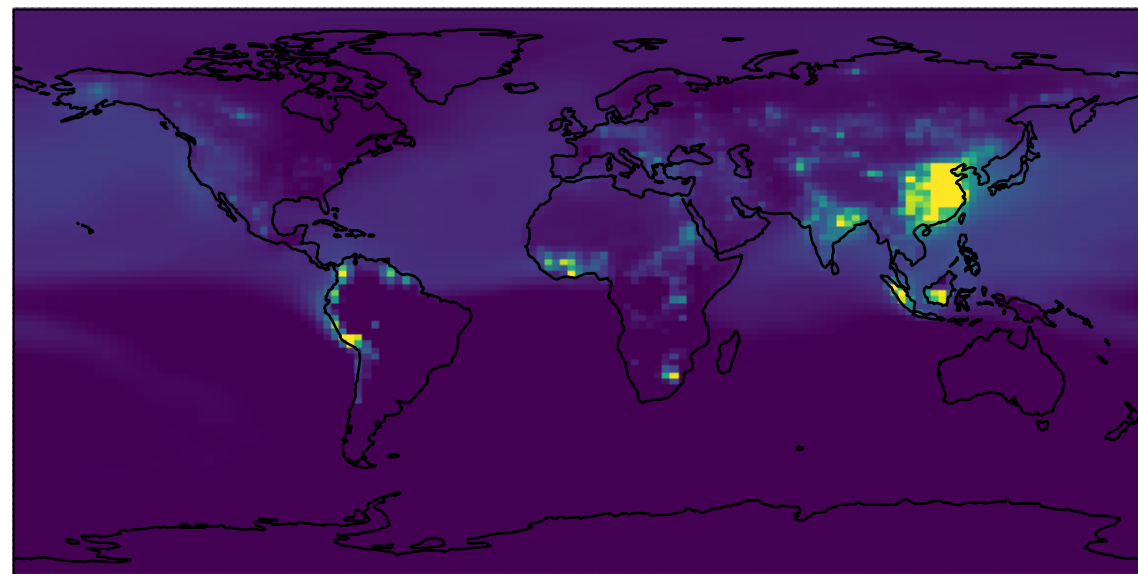
Mean Mod. =  $0.87 \pm 0.11 \text{ ng m}^{-3}$

Mean Obs. =  $1.39 \pm 0.26 \text{ ng m}^{-3}$

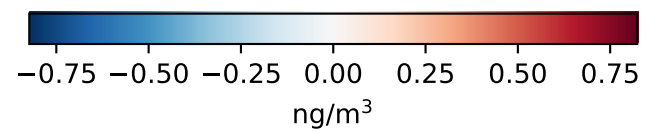
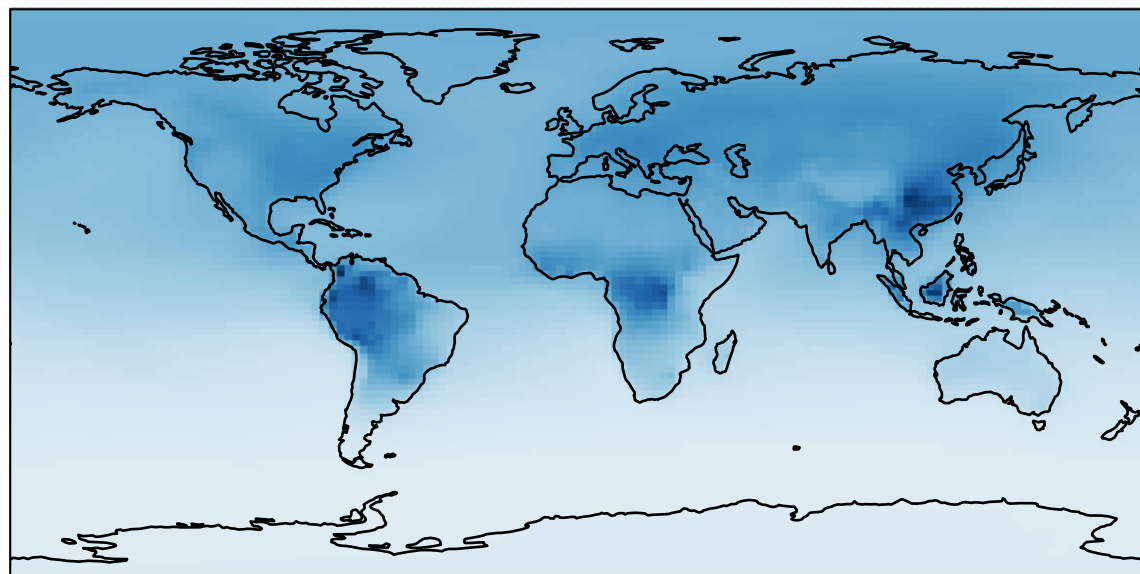
Reference Model Version: Surface TGM



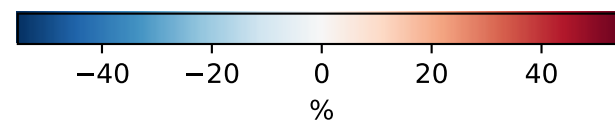
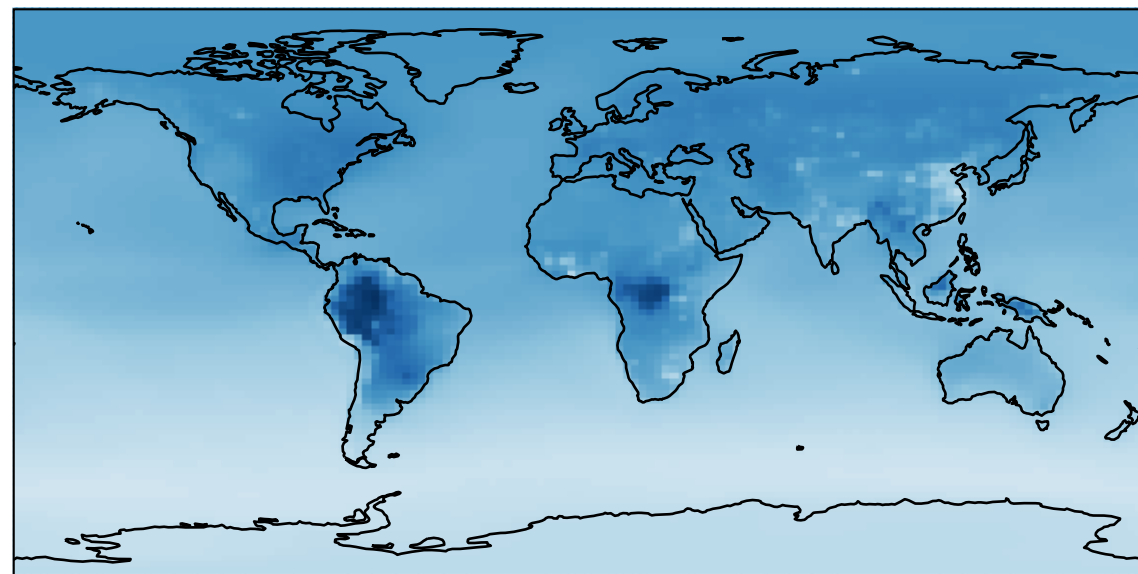
New Model Version: Surface TGM



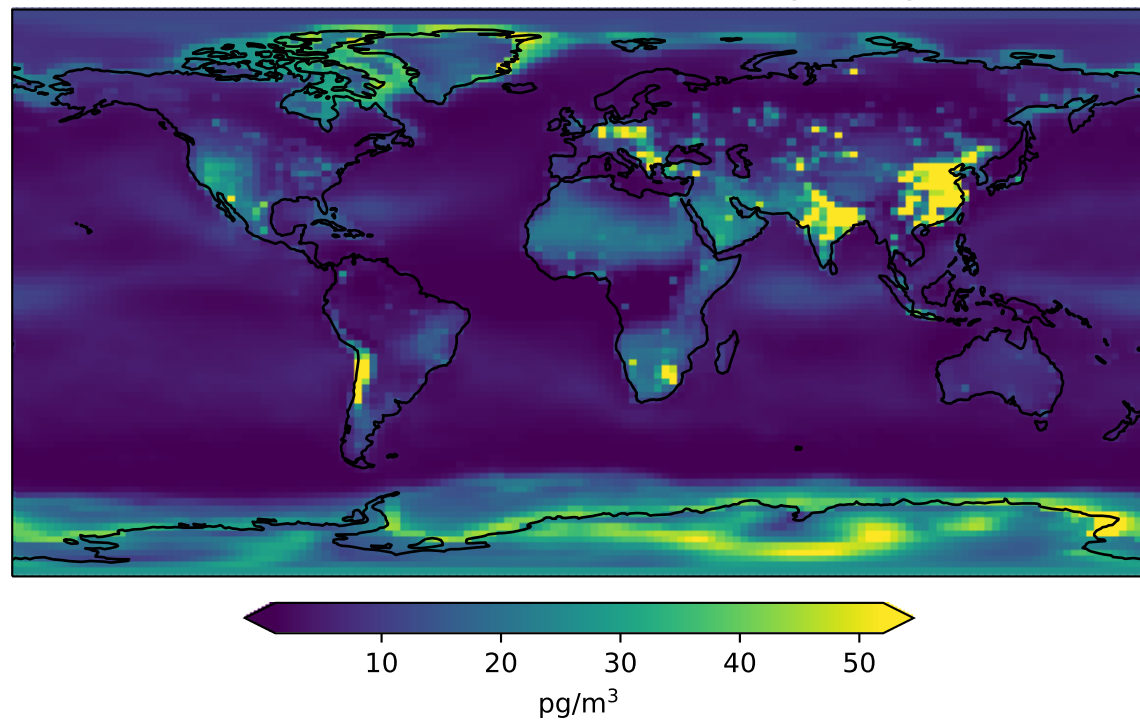
Absolute Difference



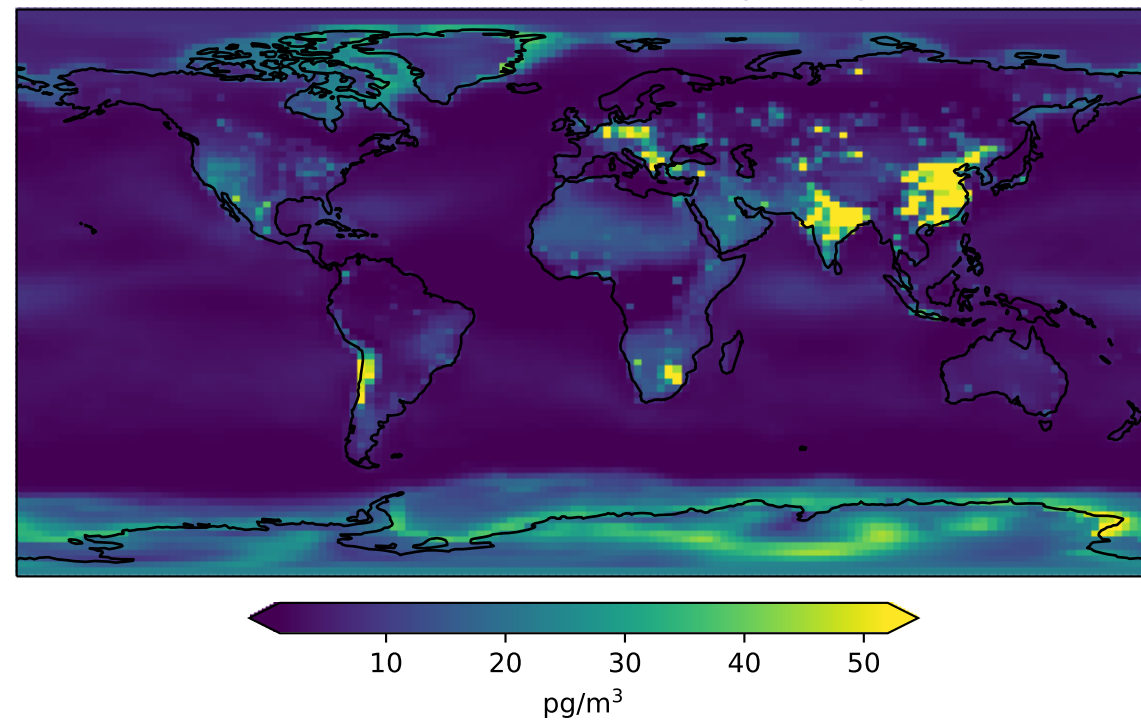
Percent Difference (%)



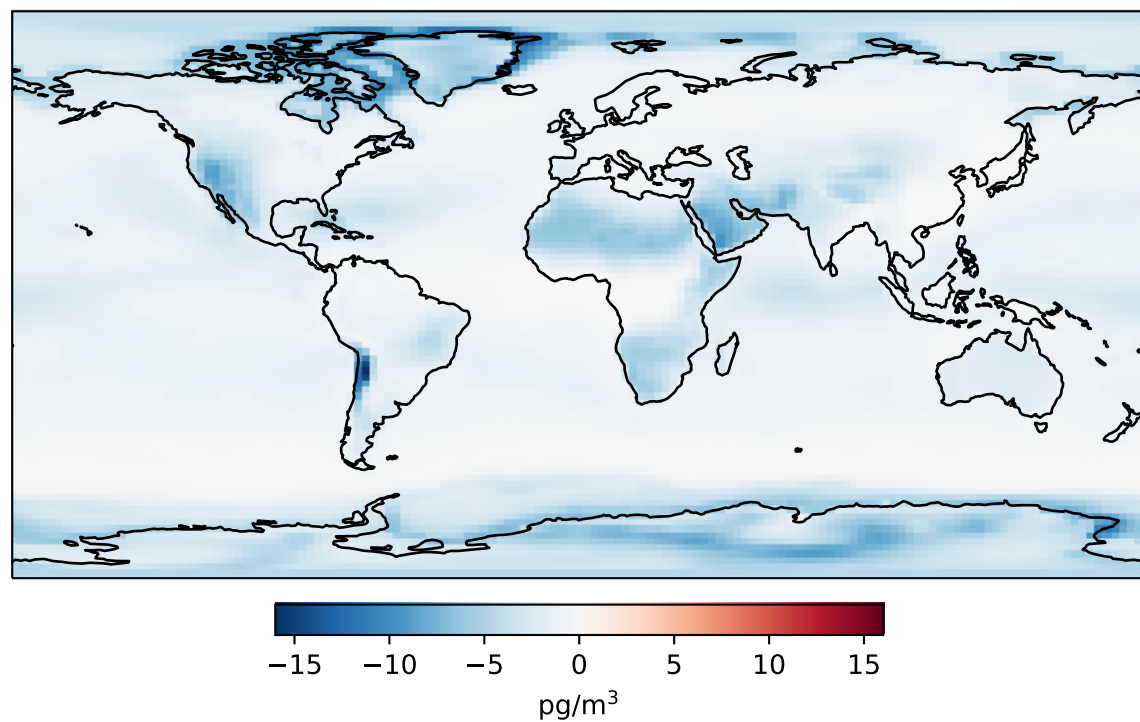
Reference Model Version: Surface Hg(II)+Hg(P)



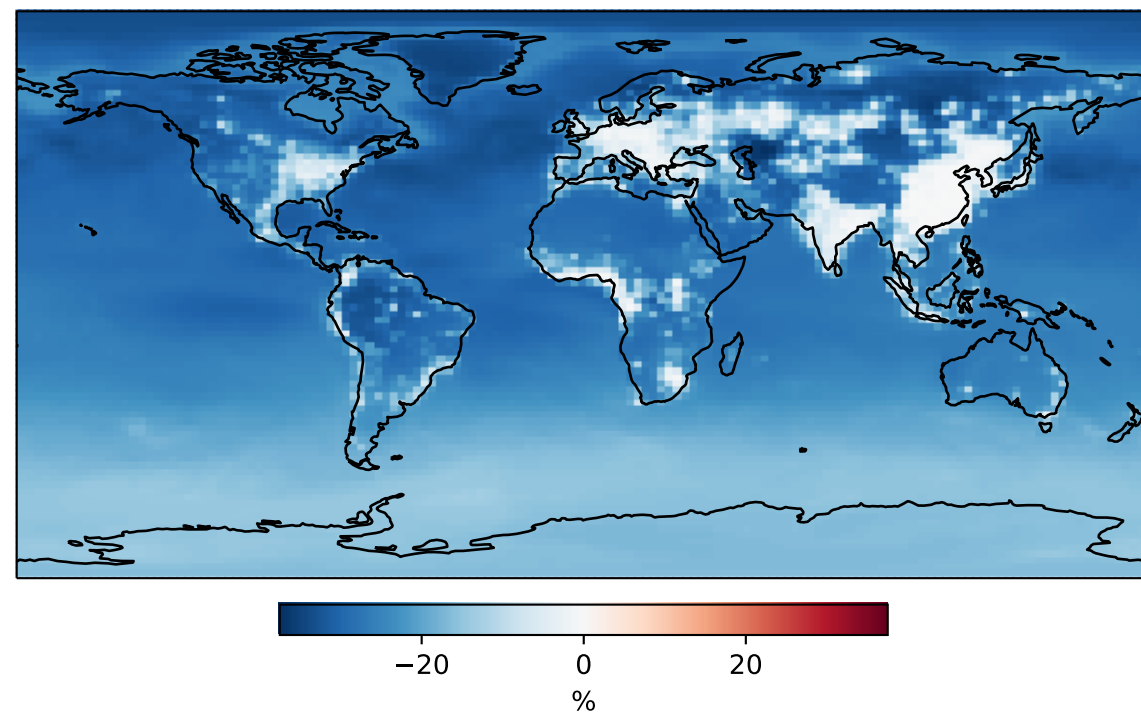
New Model Version: Surface Hg(II)+Hg(P)



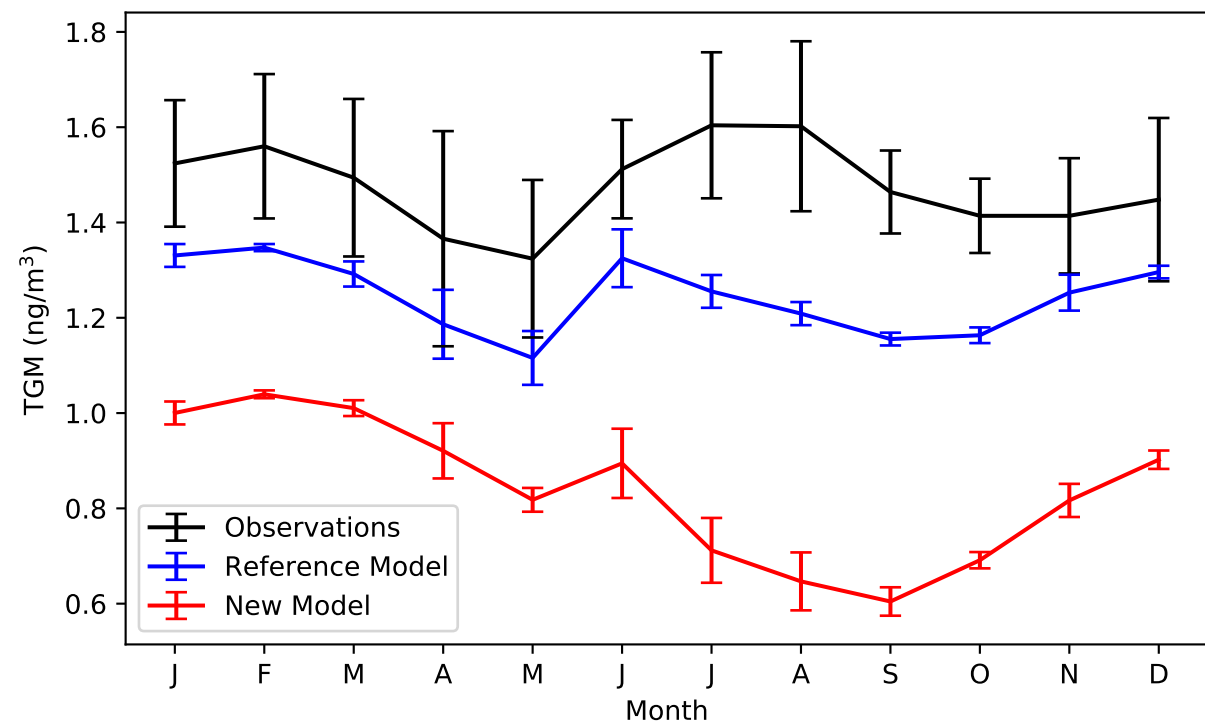
Absolute Difference



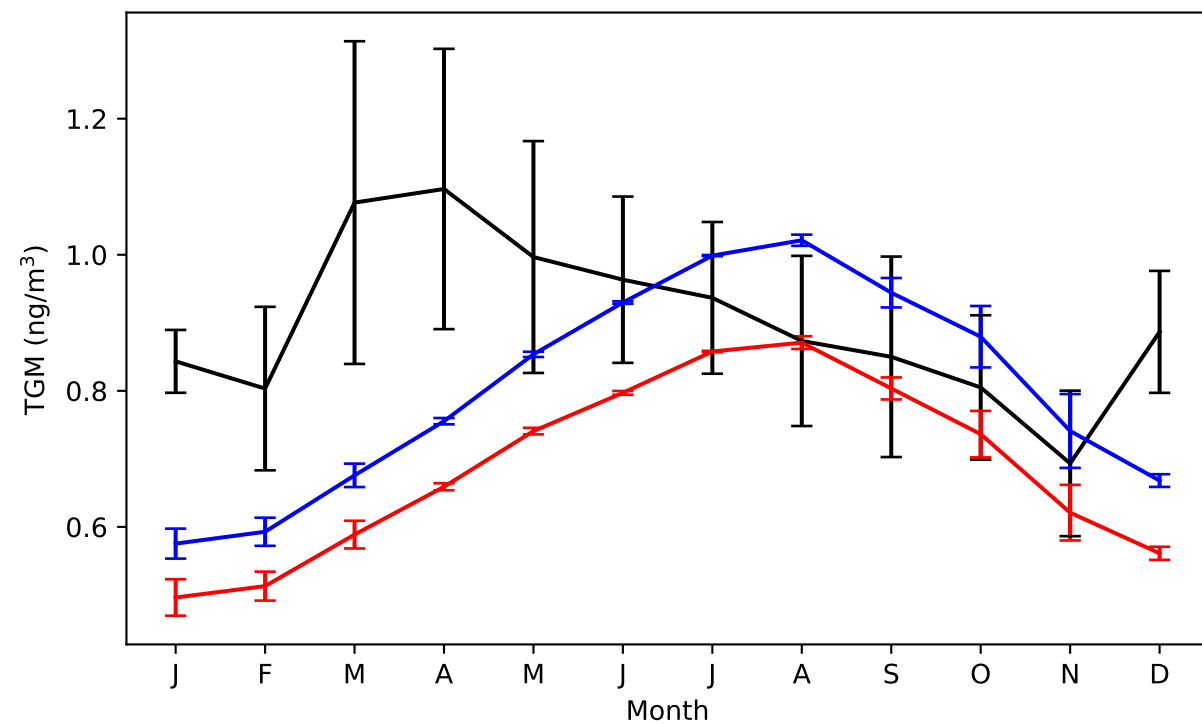
Percent Difference (%)



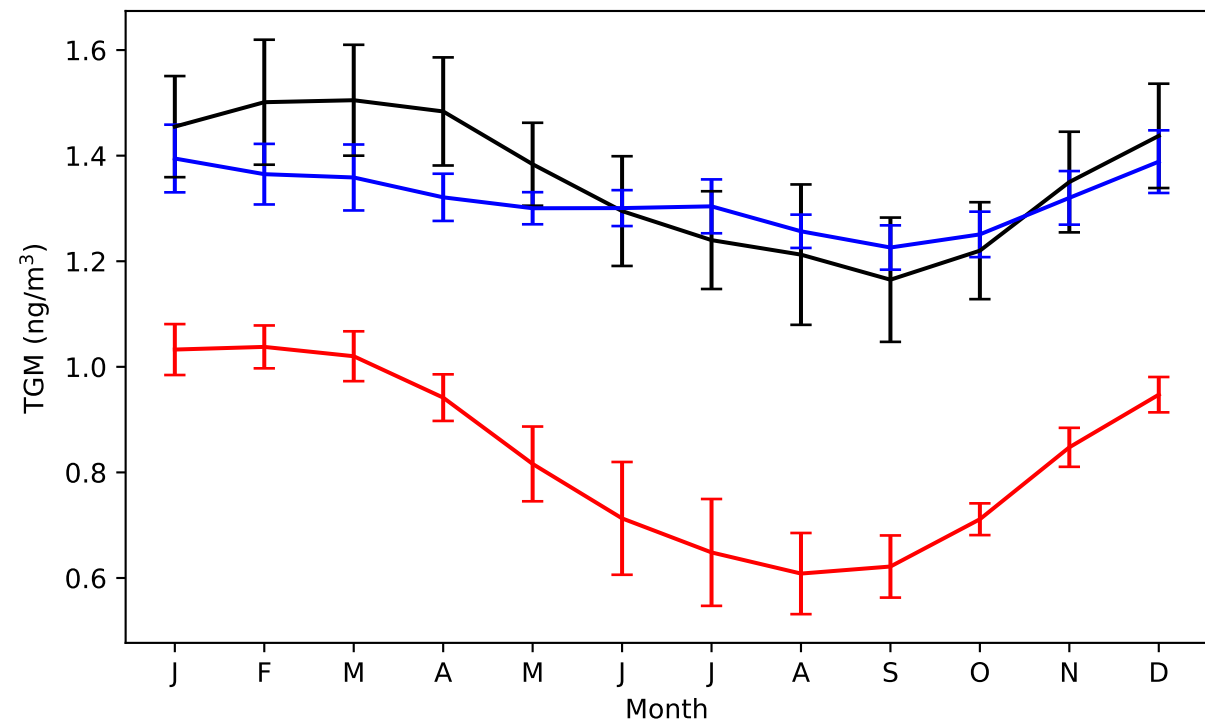
Arctic



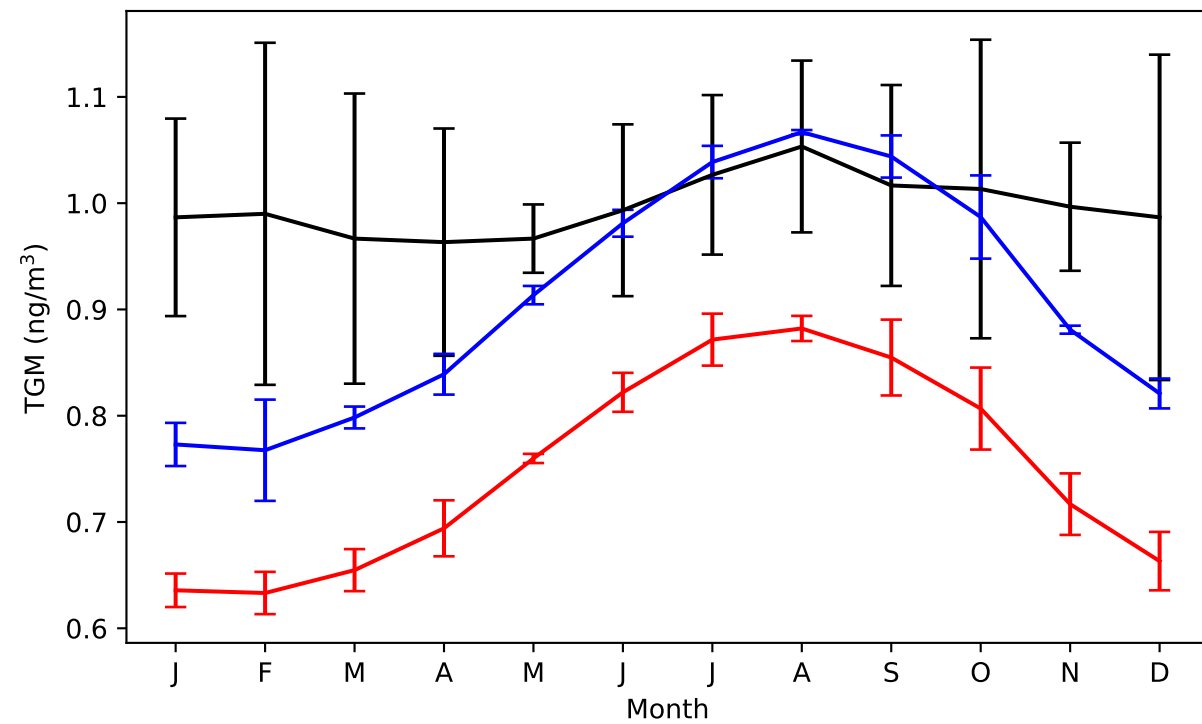
Antarctic

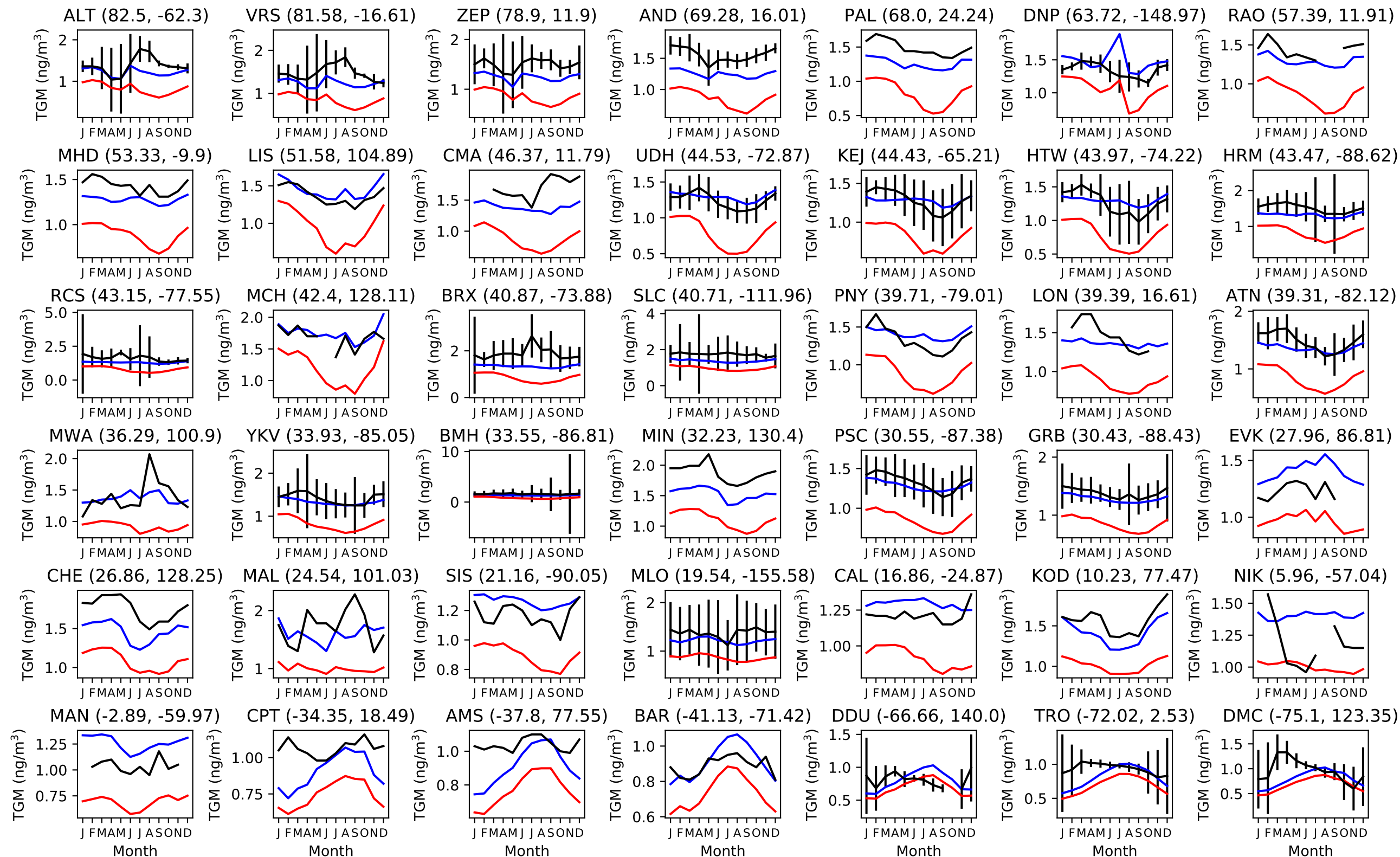
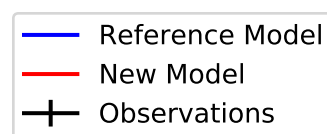


Northern Mid Latitudes

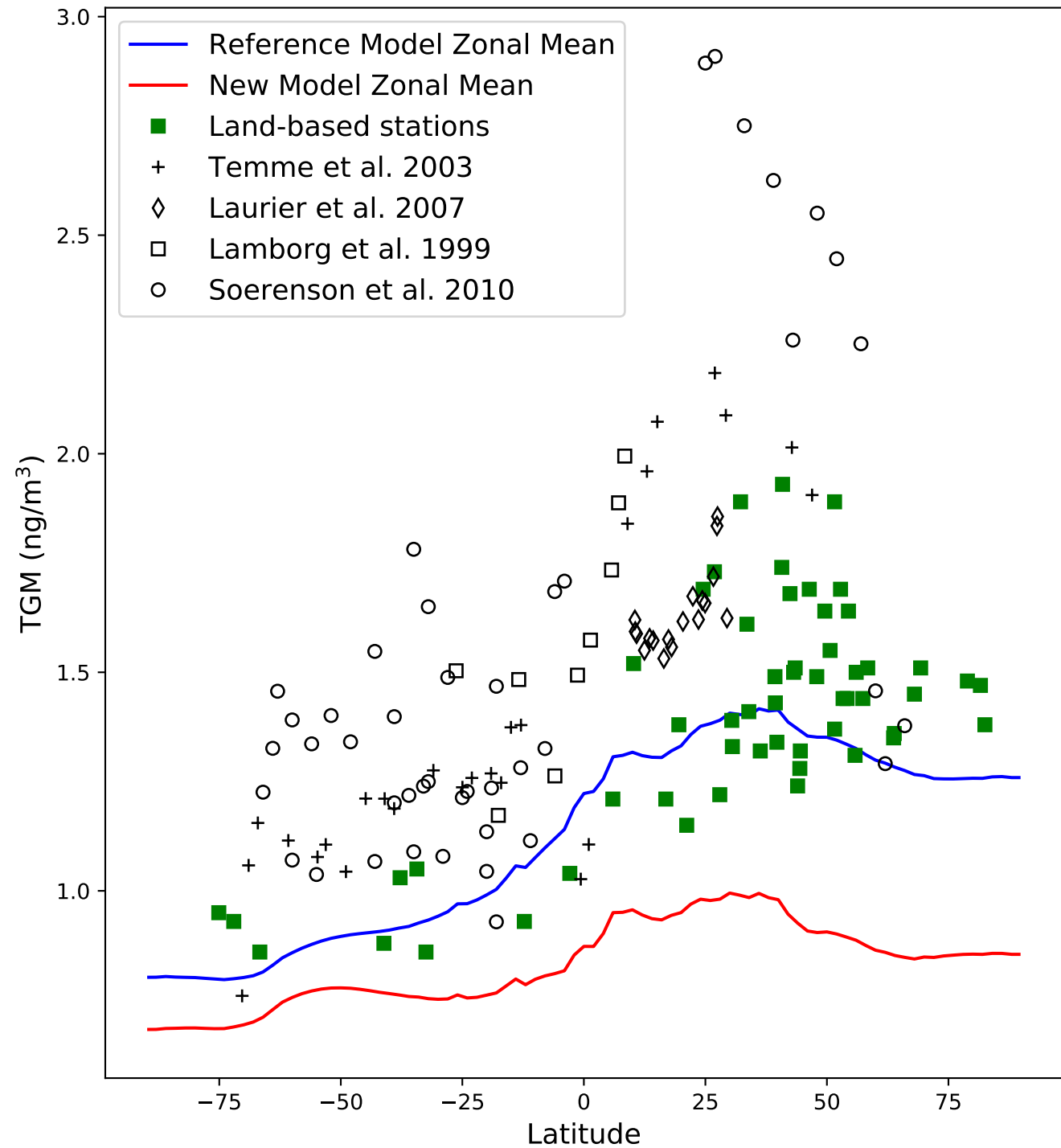


Southern Mid Latitudes

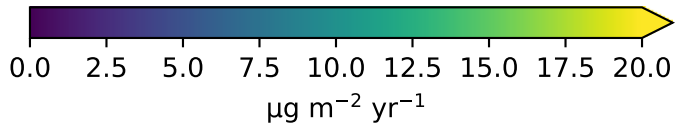
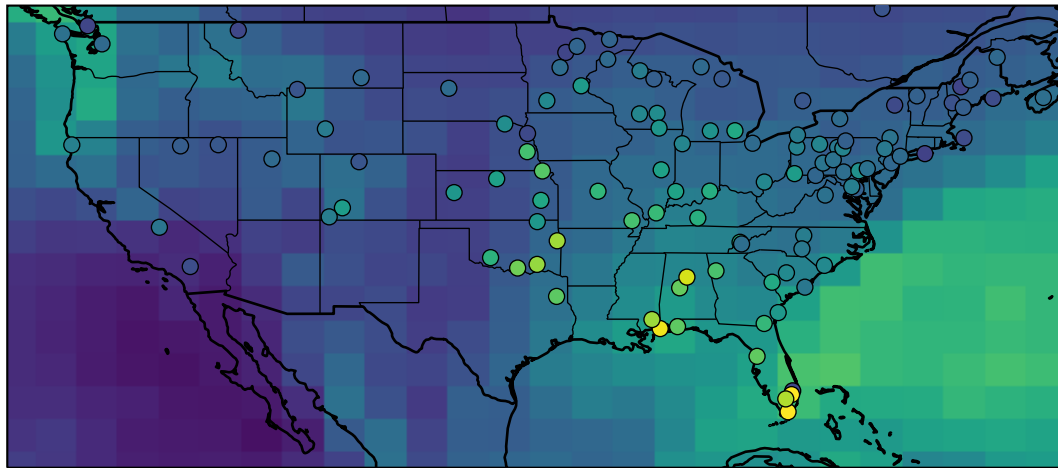




# Surface TGM



# Hg Wet Deposition, Reference Model (2015), MDN (2015)



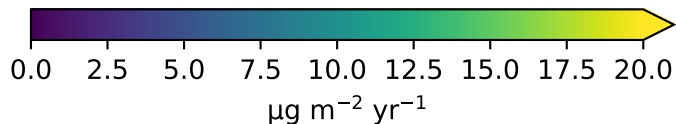
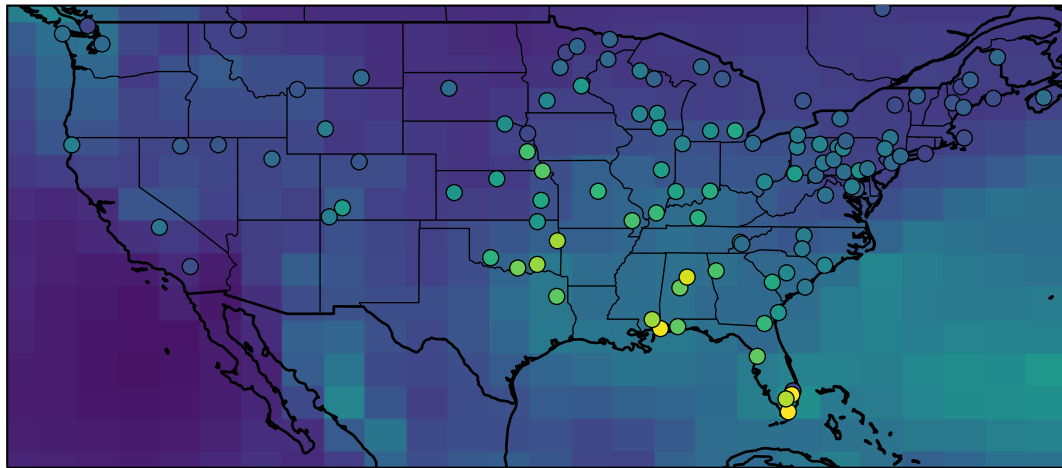
$$R^2 = 0.277$$

$$\text{Mean Mod.} = 7.0 \pm 2.3 \mu\text{g m}^{-2} \text{yr}^{-1}$$

$$\text{Mean Obs.} = 8.9 \pm 4.1 \mu\text{g m}^{-2} \text{yr}^{-1}$$



# Hg Wet Deposition, New Model (2015), MDN (2015)



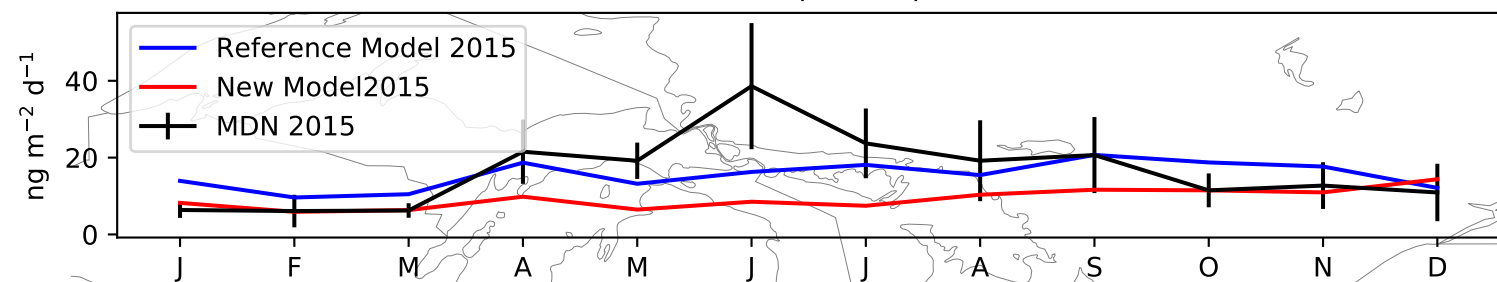
$$R^2 = 0.527$$

$$\text{Mean Mod.} = 4.9 \pm 1.8 \mu\text{g m}^{-2} \text{yr}^{-1}$$

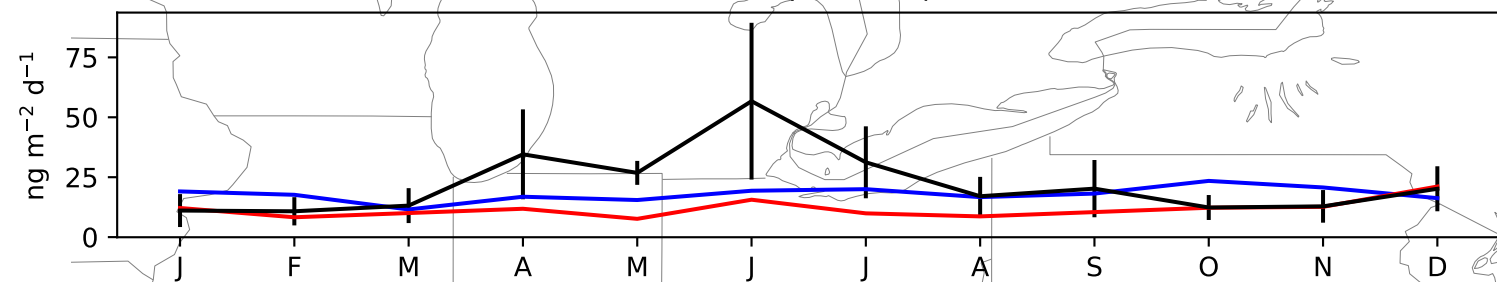
$$\text{Mean Obs.} = 8.9 \pm 4.1 \mu\text{g m}^{-2} \text{yr}^{-1}$$

# Wet deposition fluxes, Eastern USA

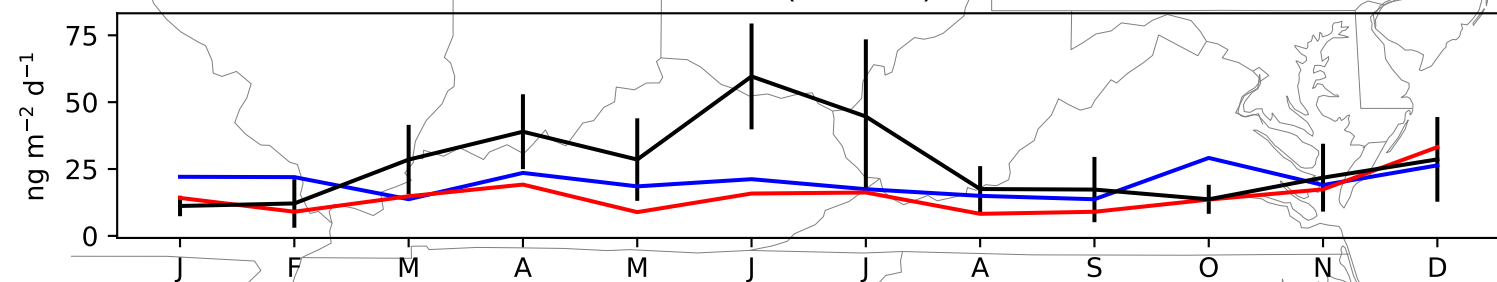
46 °N (7 sites)



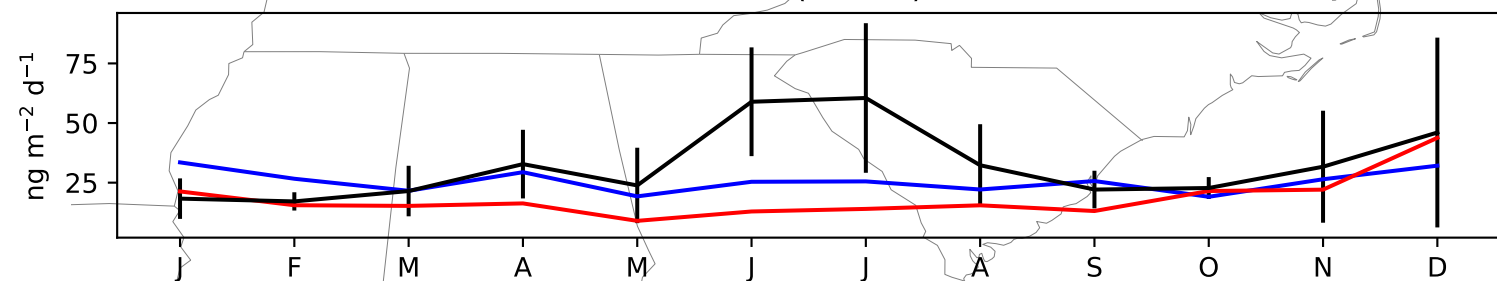
42 °N (21 sites)



38 °N (14 sites)



34 °N (8 sites)



30 °N (5 sites)

