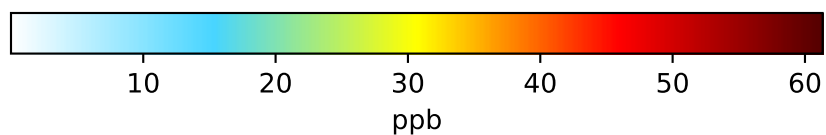
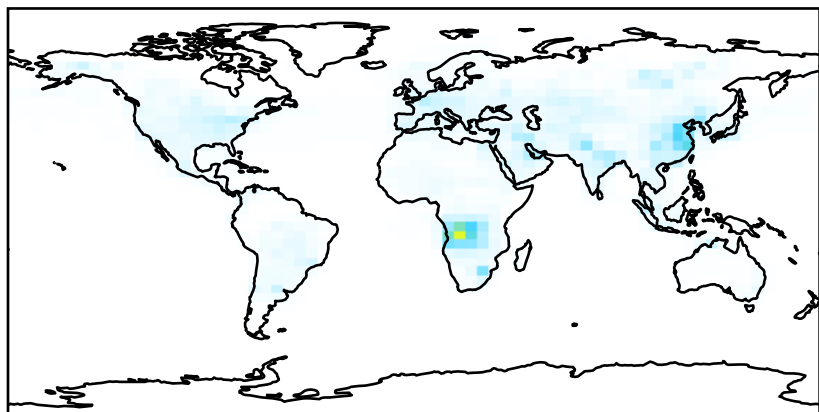
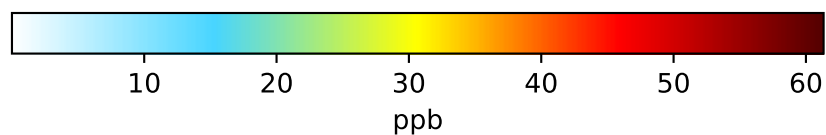
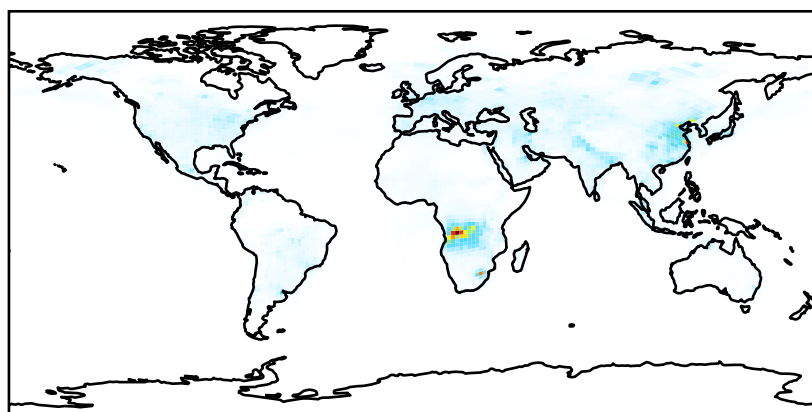


SpeciesConc_NOy (Jul2019)

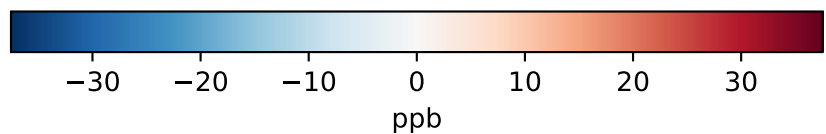
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



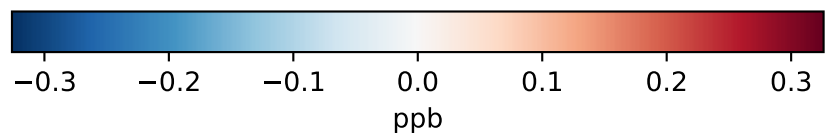
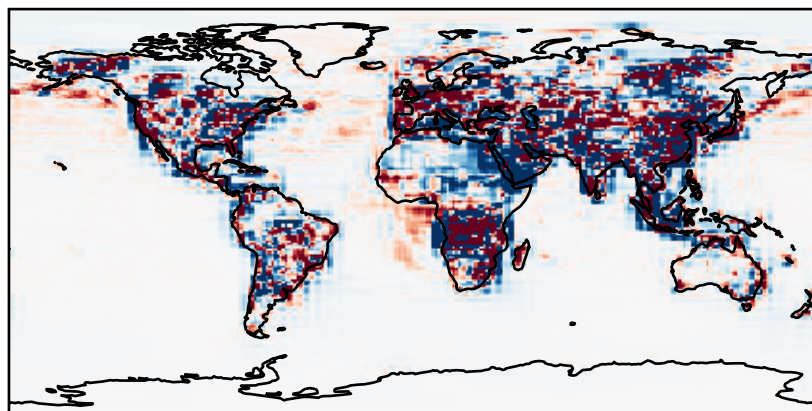
GCHP_13.0.0-beta.1 (Dev)
c48



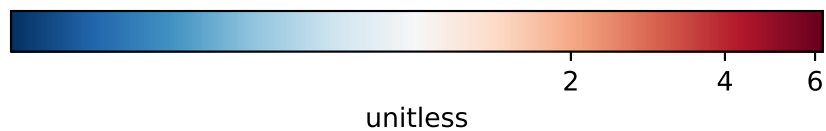
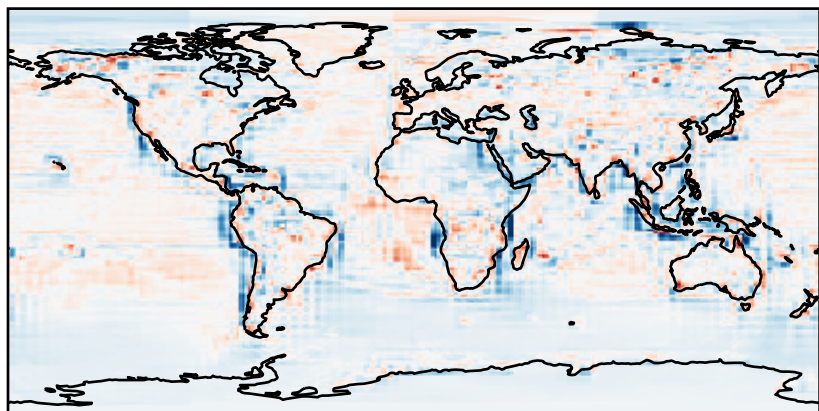
Difference (1x1.25)
Dev - Ref, Dynamic Range



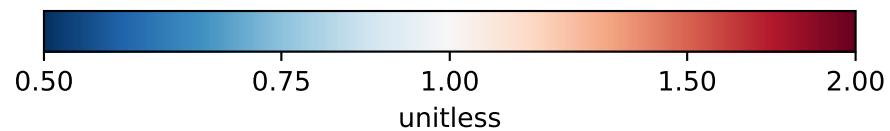
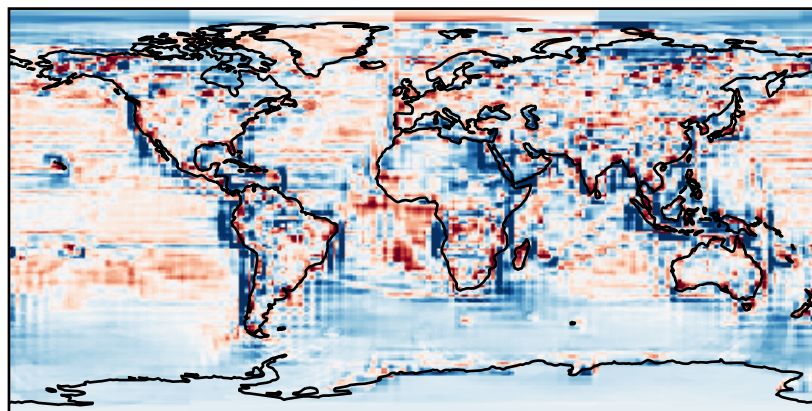
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

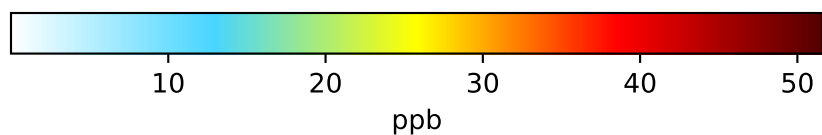
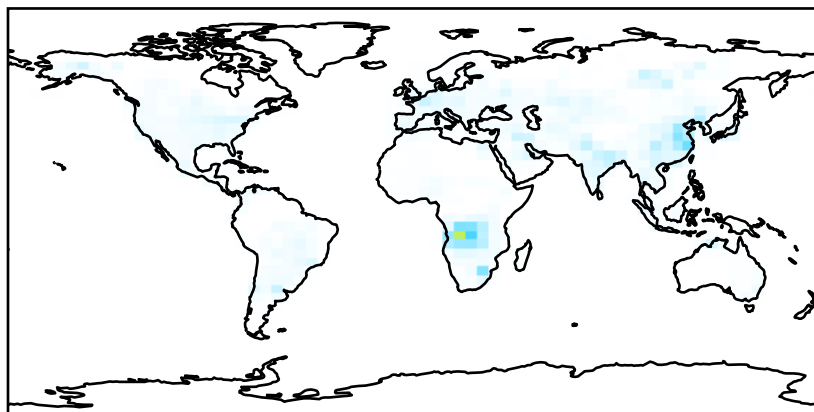


Ratio (1x1.25)
Dev/Ref, Fixed Range

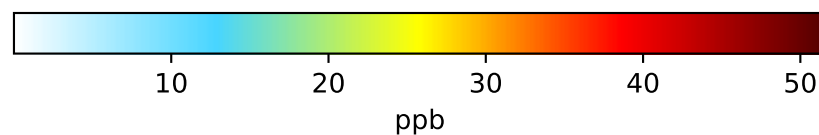
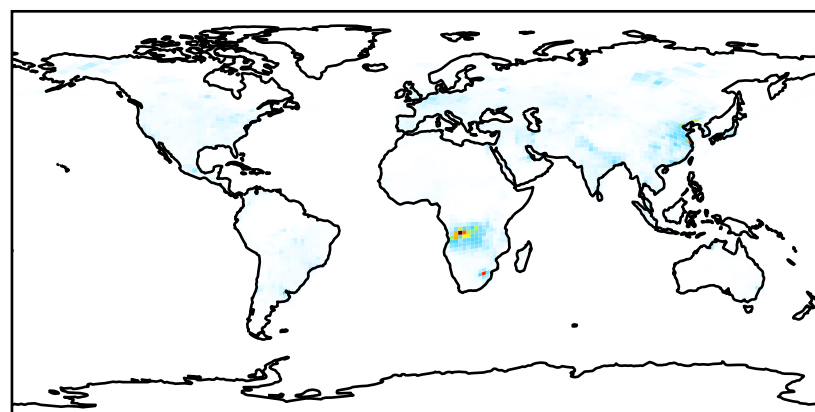


SpeciesConc_NOx (Jul2019)

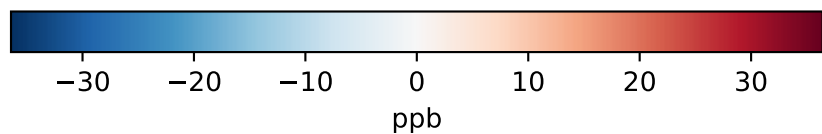
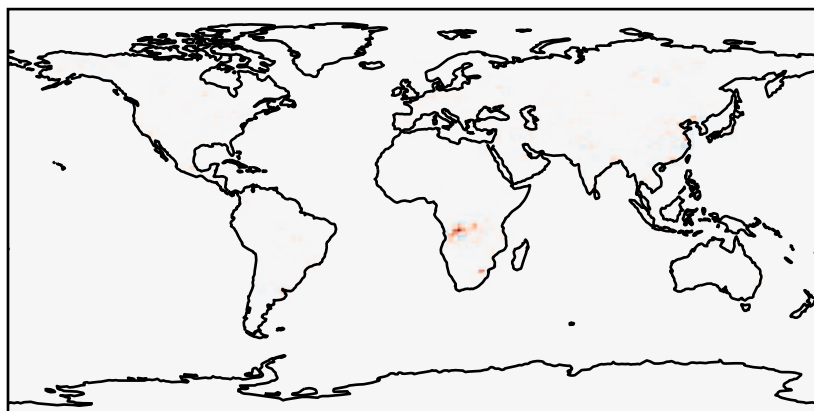
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



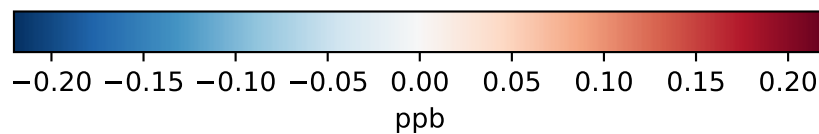
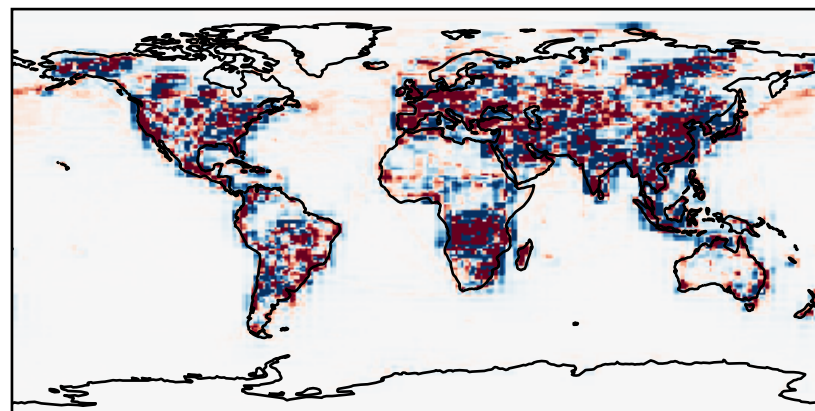
GCHP_13.0.0-beta.1 (Dev)
c48



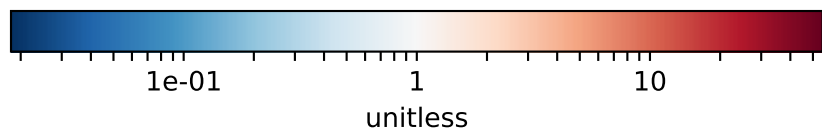
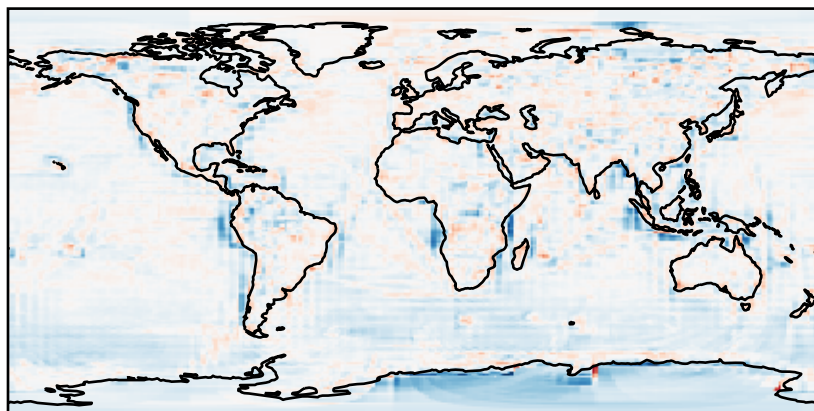
Difference (1x1.25)
Dev - Ref, Dynamic Range



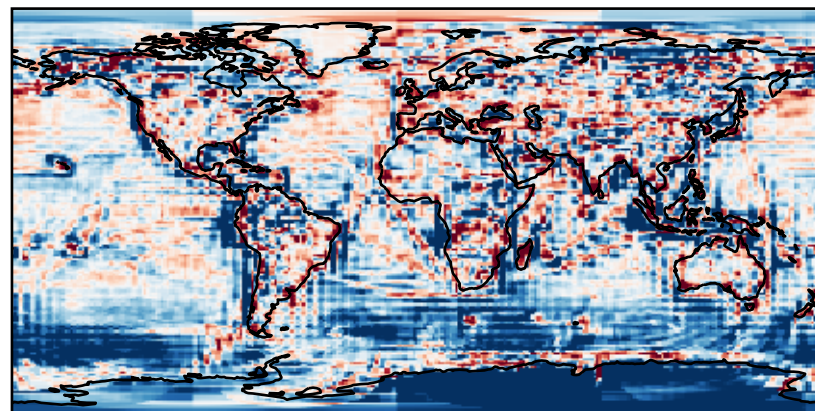
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

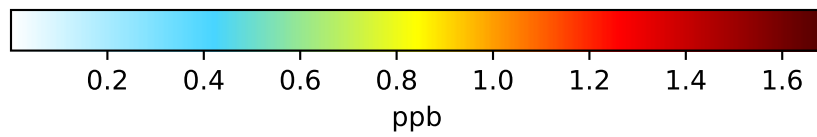
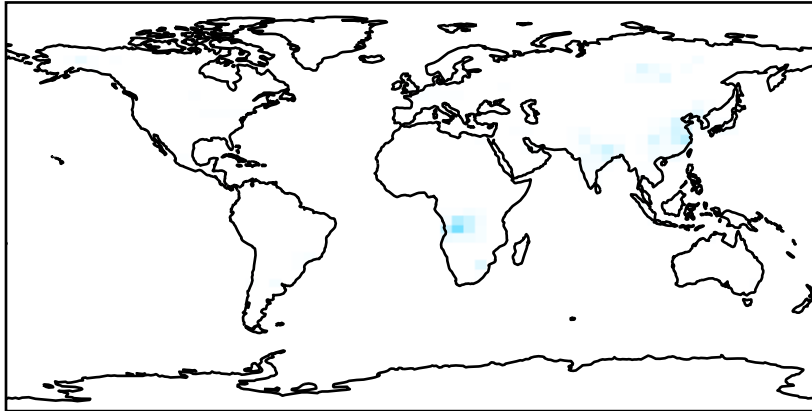


Ratio (1x1.25)
Dev/Ref, Fixed Range

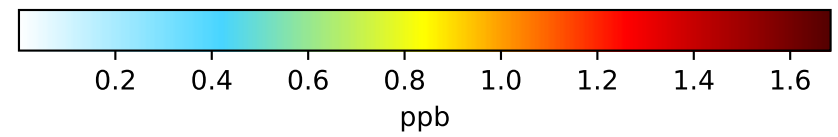
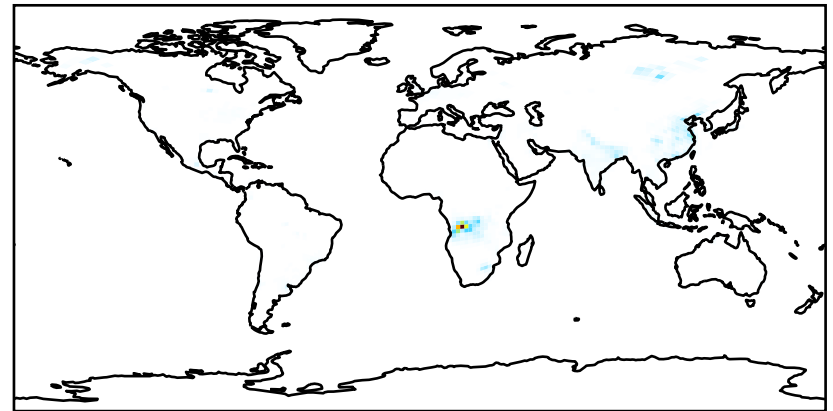


SpeciesConc_HNO2 (Jul2019)

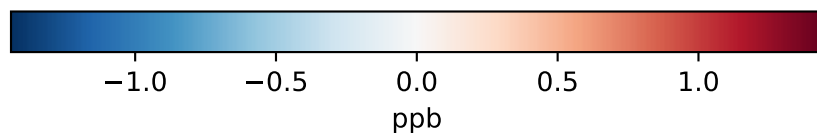
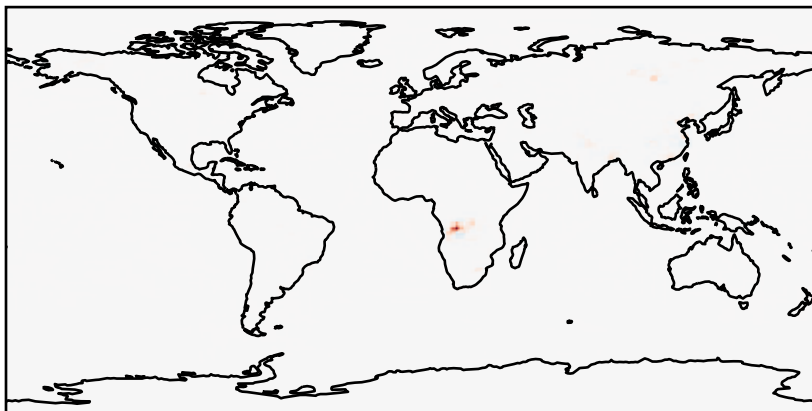
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



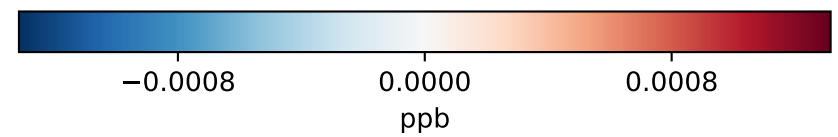
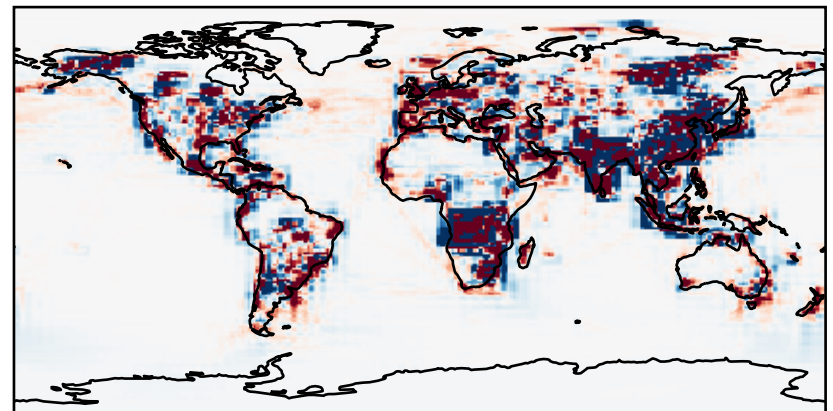
GCHP_13.0.0-beta.1 (Dev)
c48



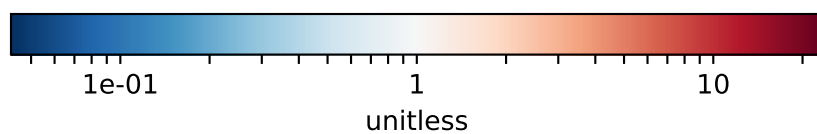
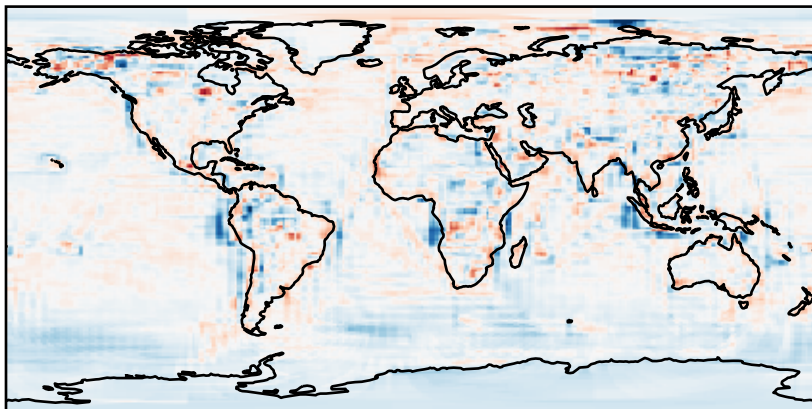
Difference (1x1.25)
Dev - Ref, Dynamic Range



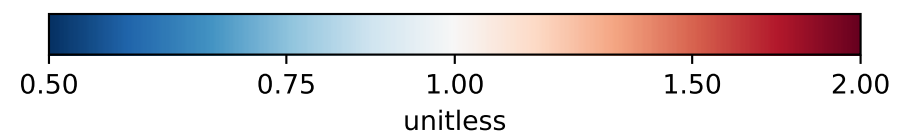
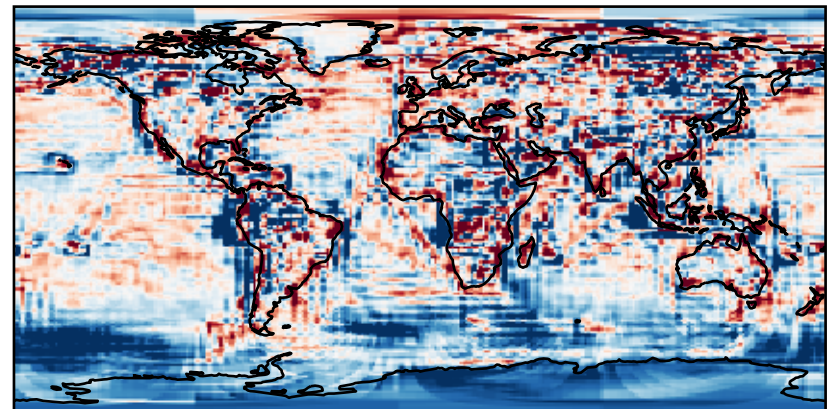
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

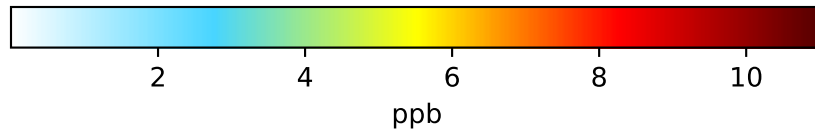
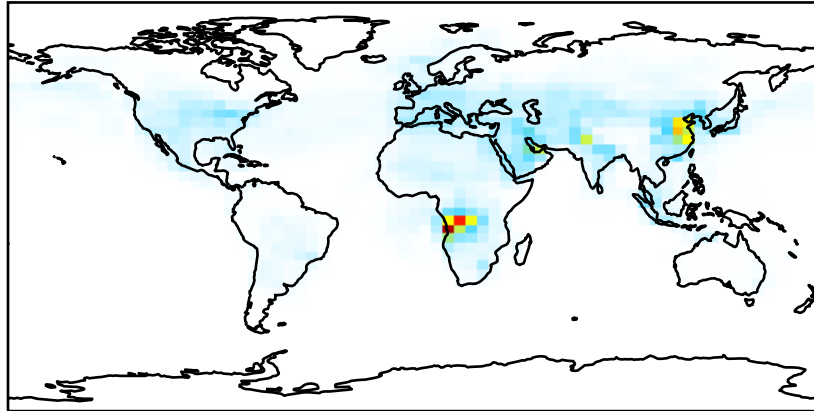


Ratio (1x1.25)
Dev/Ref, Fixed Range

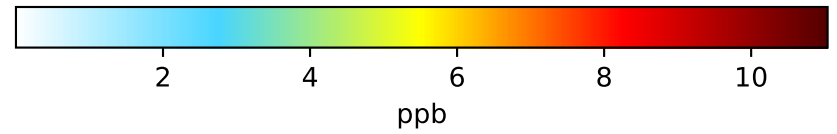
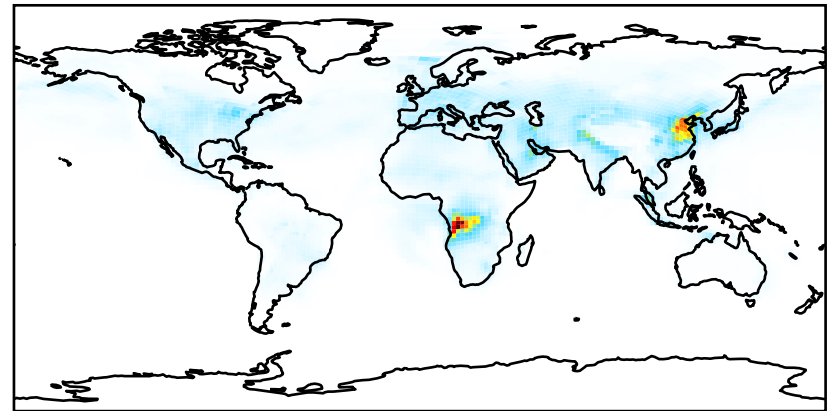


SpeciesConc_HNO3 (Jul2019)

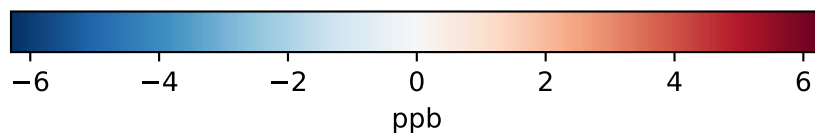
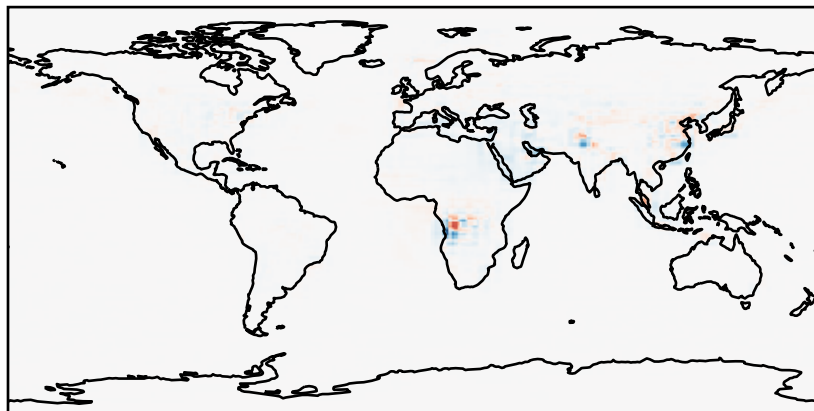
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



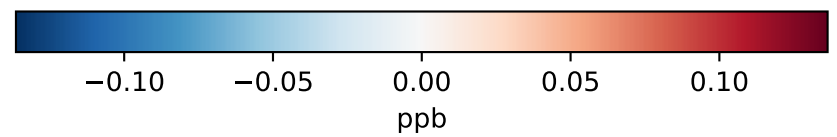
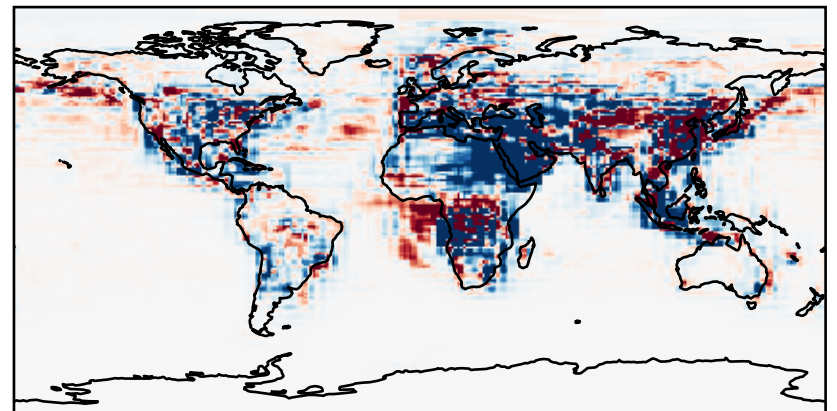
GCHP_13.0.0-beta.1 (Dev)
c48



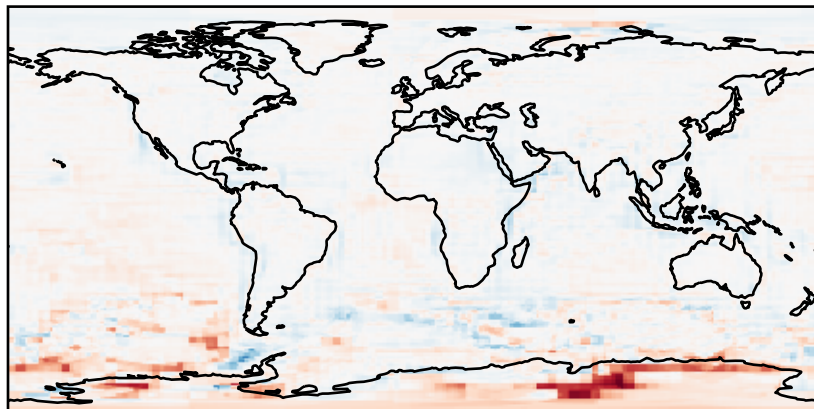
Difference (1x1.25)
Dev - Ref, Dynamic Range



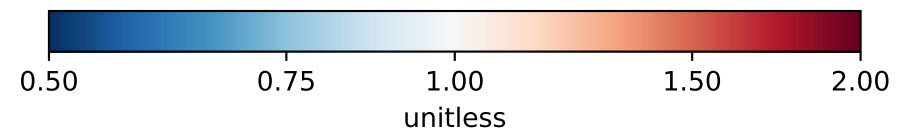
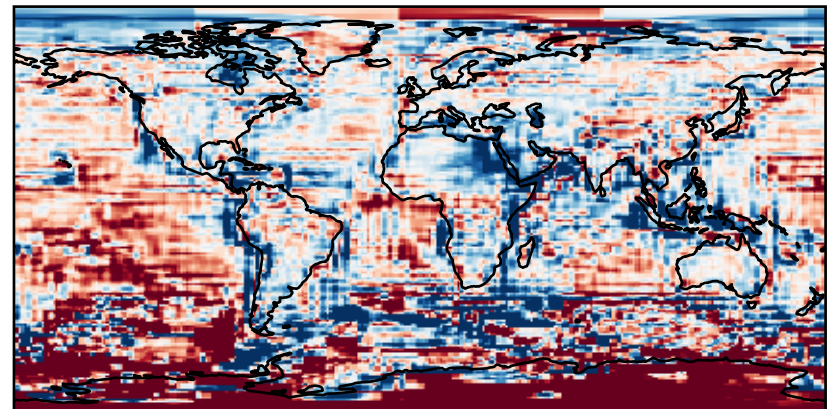
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

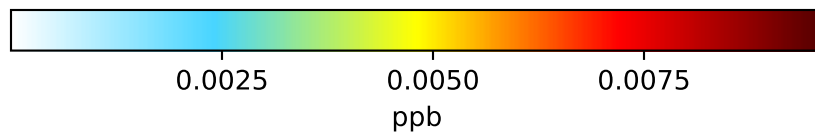
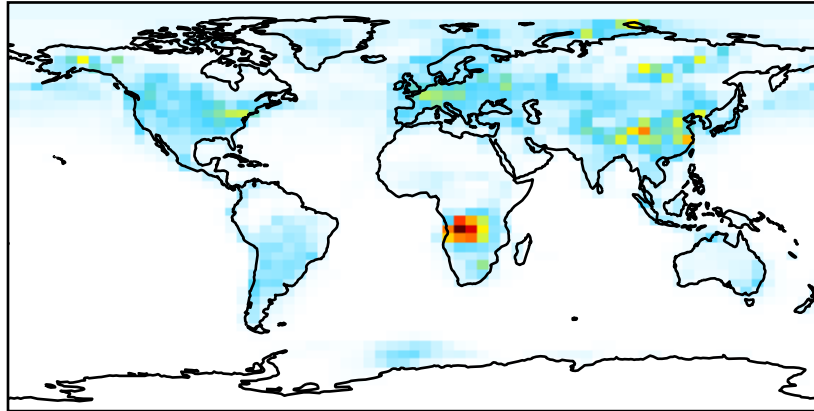


Ratio (1x1.25)
Dev/Ref, Fixed Range

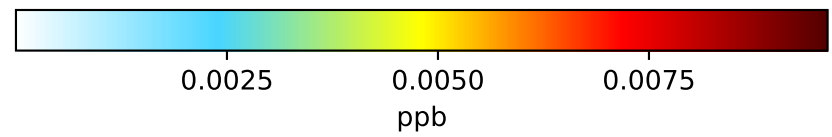
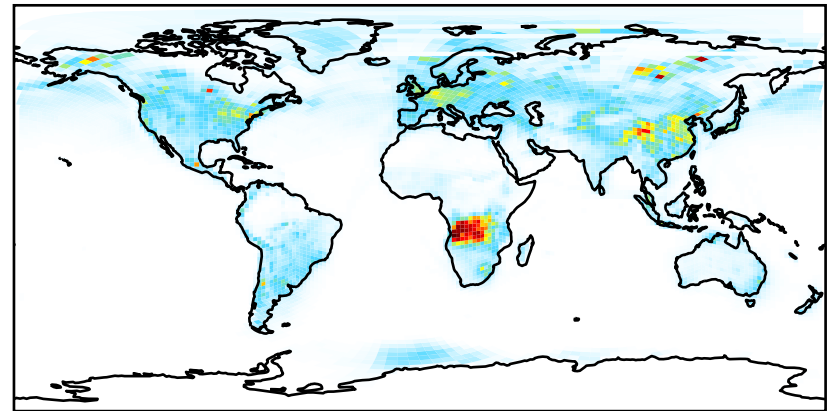


SpeciesConc_HNO4 (Jul2019)

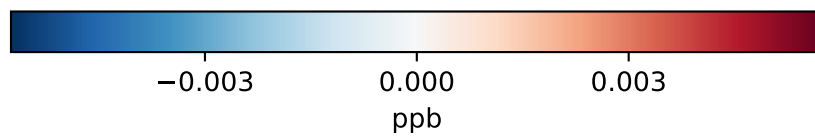
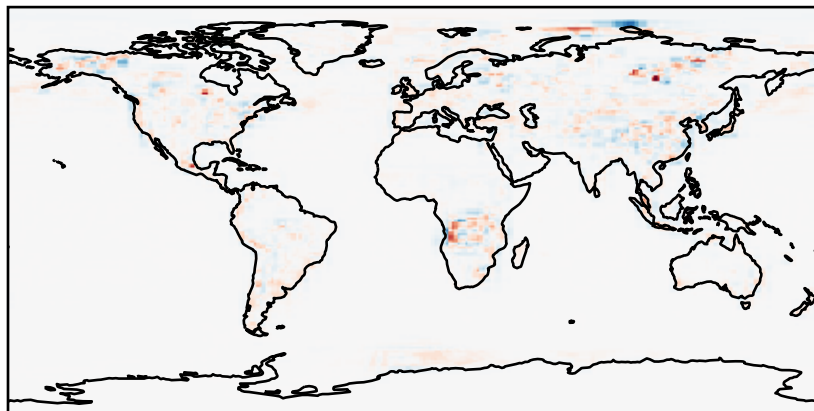
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



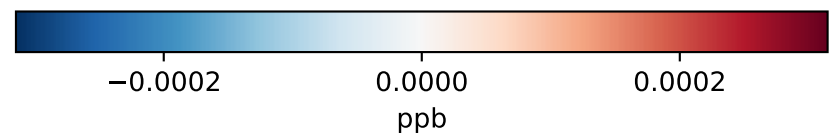
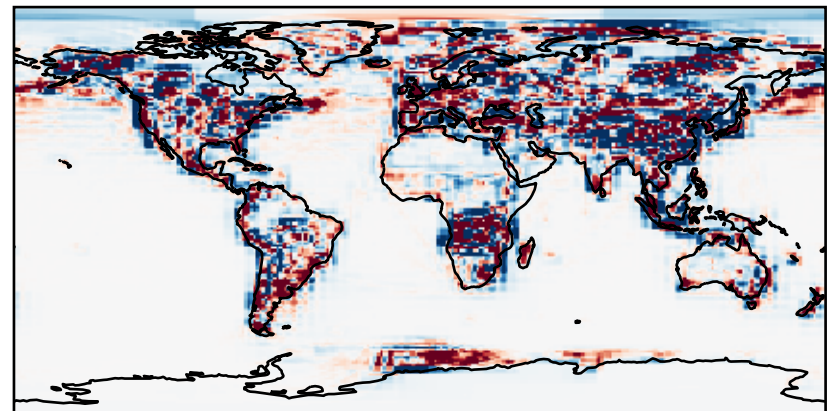
GCHP_13.0.0-beta.1 (Dev)
c48



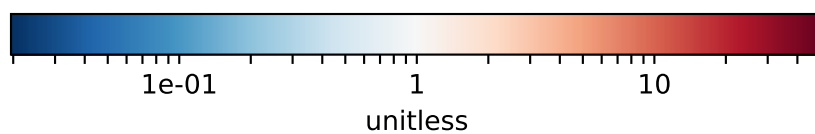
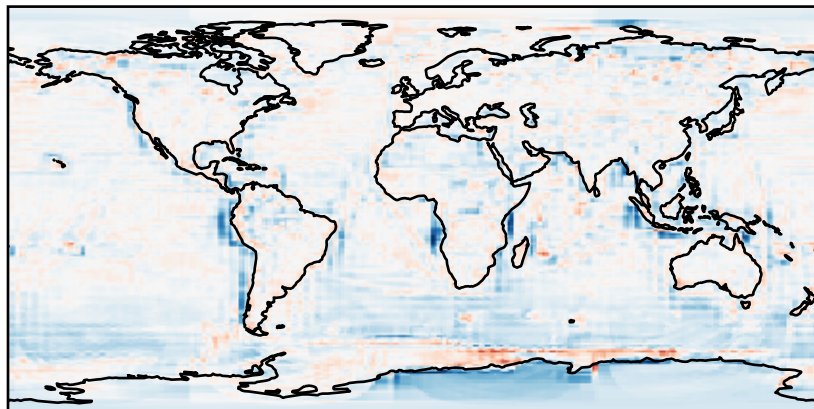
Difference (1x1.25)
Dev - Ref, Dynamic Range



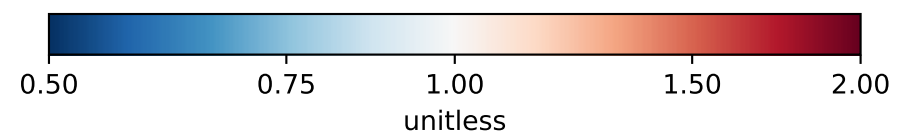
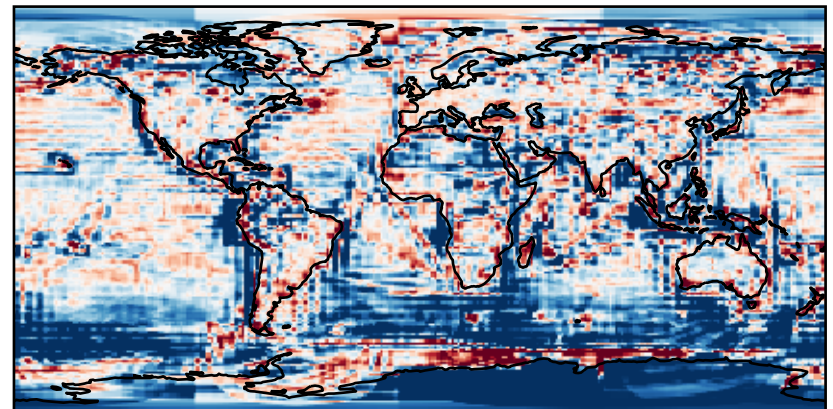
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

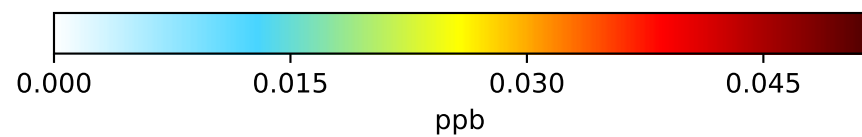
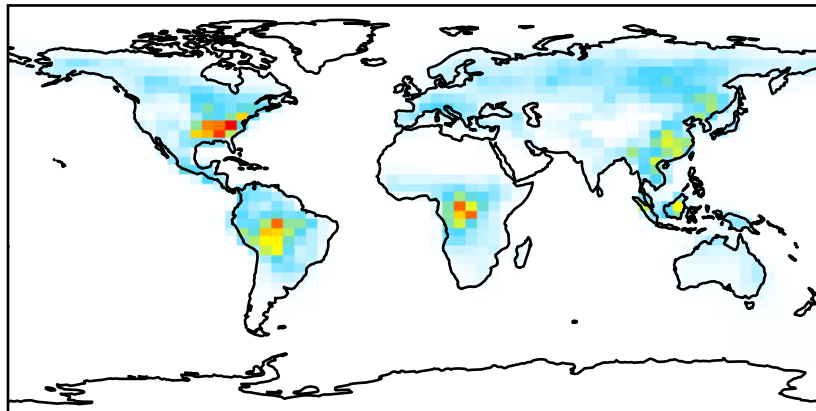


Ratio (1x1.25)
Dev/Ref, Fixed Range

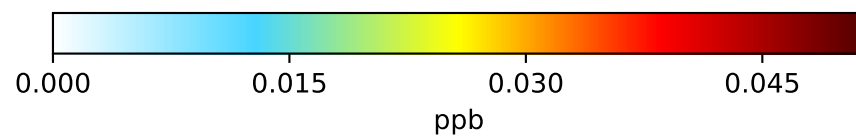
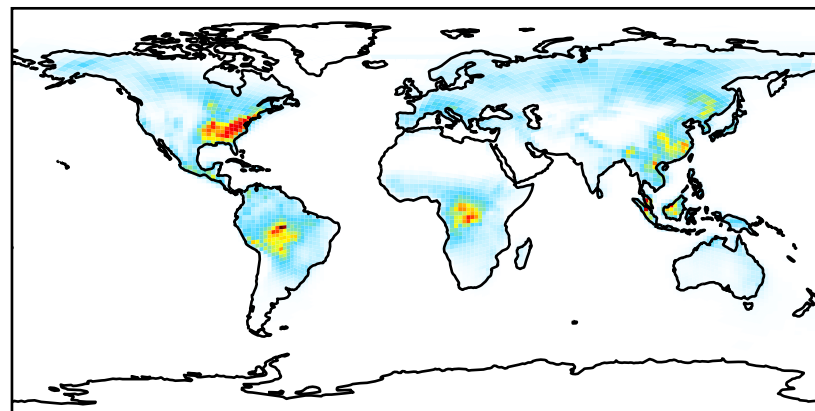


SpeciesConc_MPAN (Jul2019)

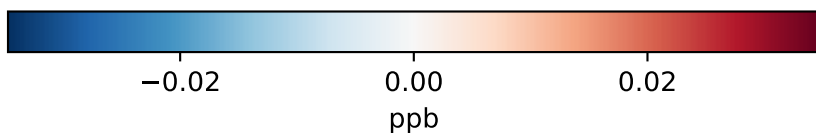
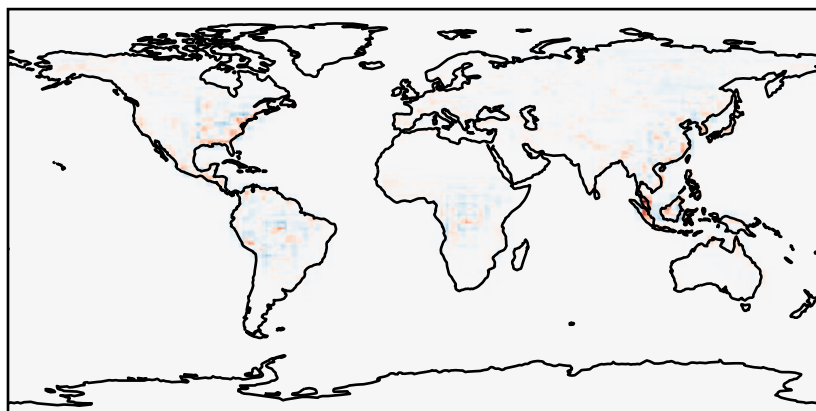
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



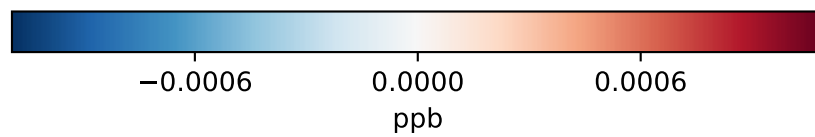
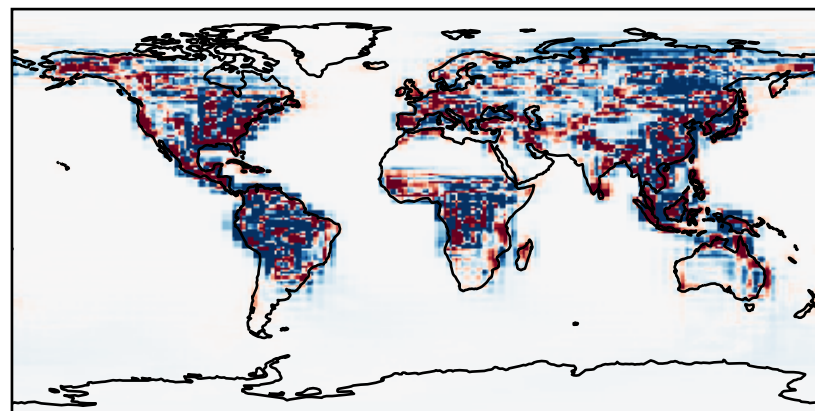
GCHP_13.0.0-beta.1 (Dev)
c48



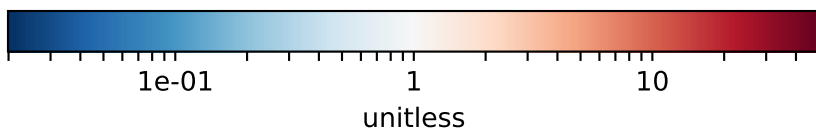
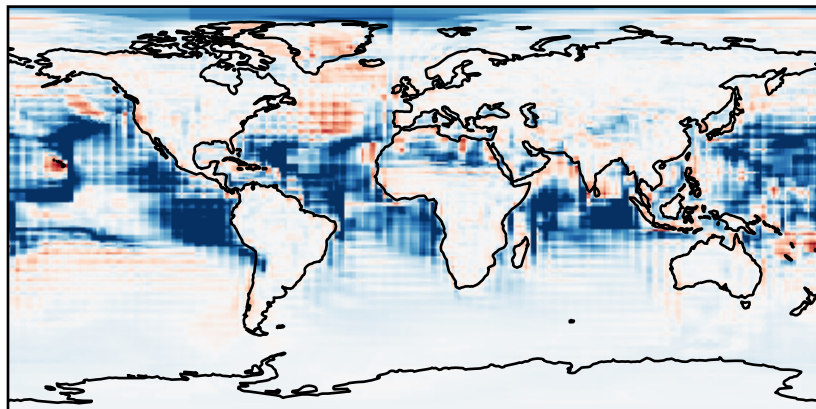
Difference (1x1.25)
Dev - Ref, Dynamic Range



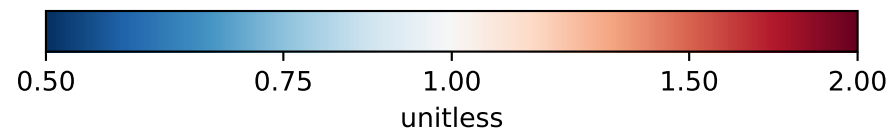
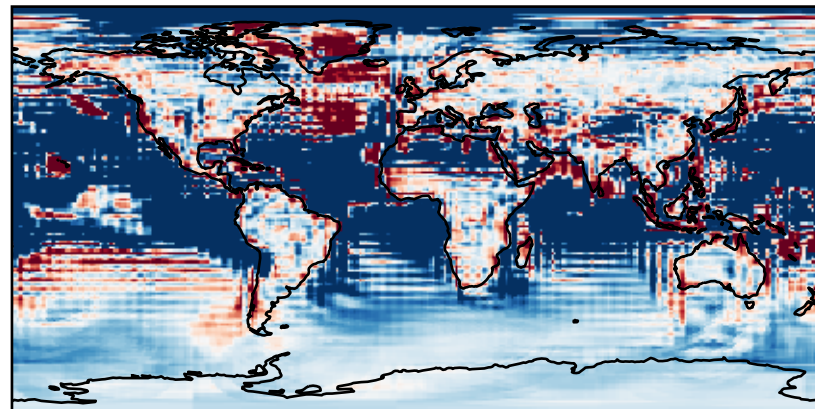
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

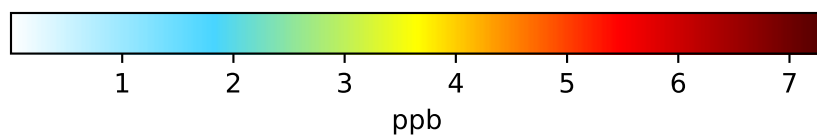
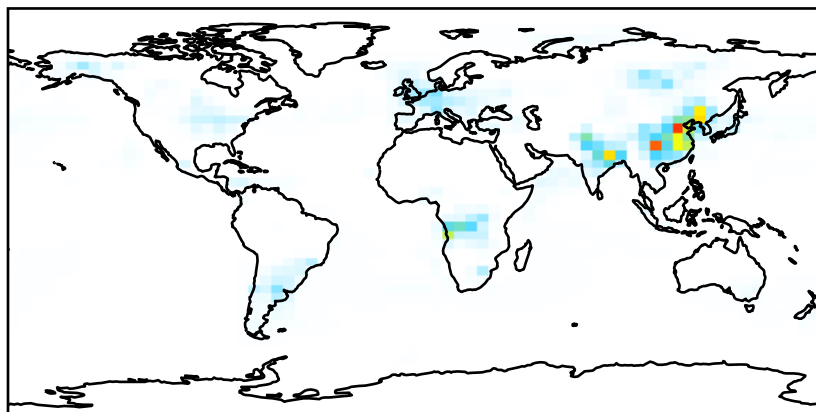


Ratio (1x1.25)
Dev/Ref, Fixed Range

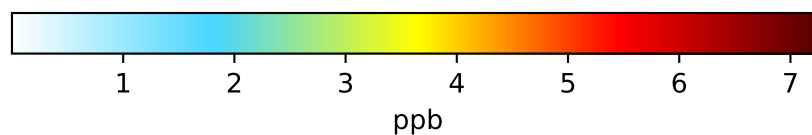
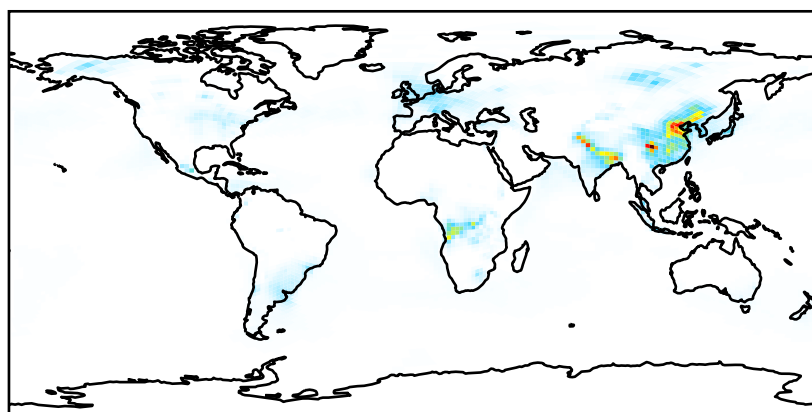


SpeciesConc_NIT (Jul2019)

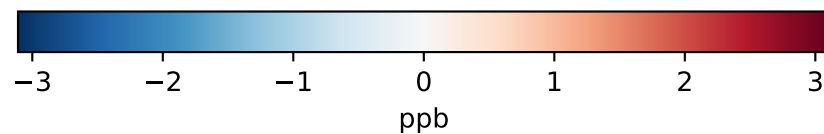
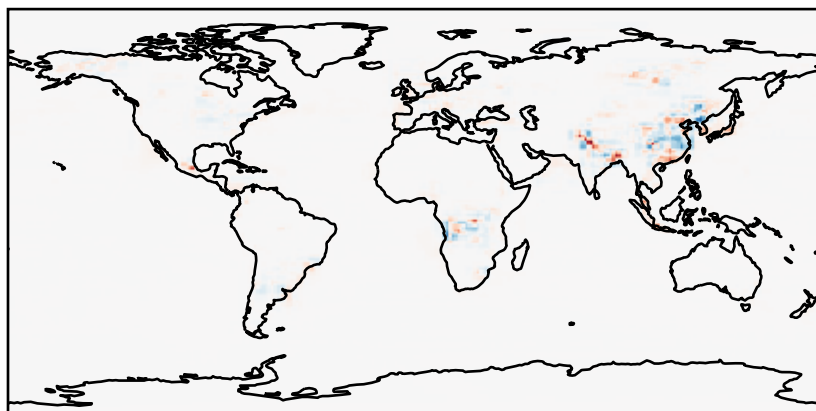
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



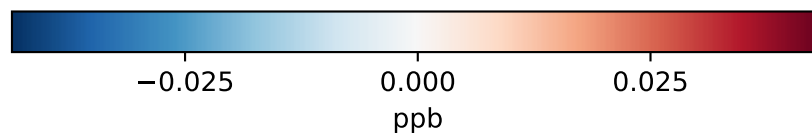
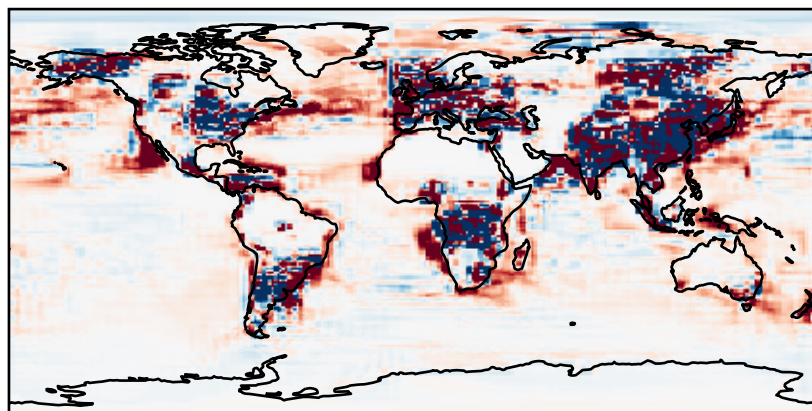
GCHP_13.0.0-beta.1 (Dev)
c48



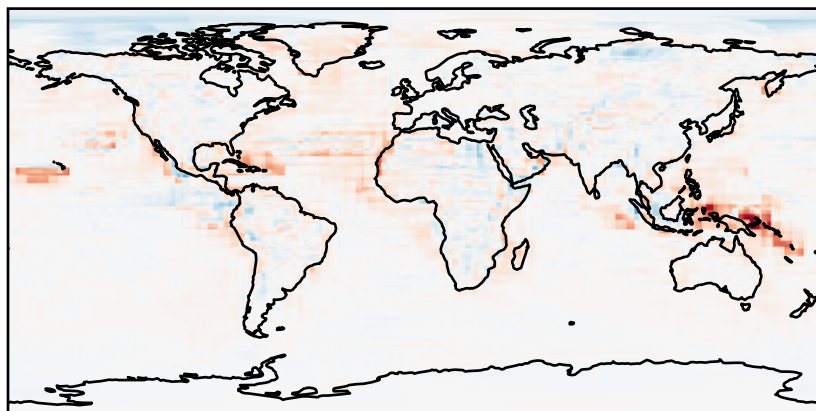
Difference (1x1.25)
Dev - Ref, Dynamic Range



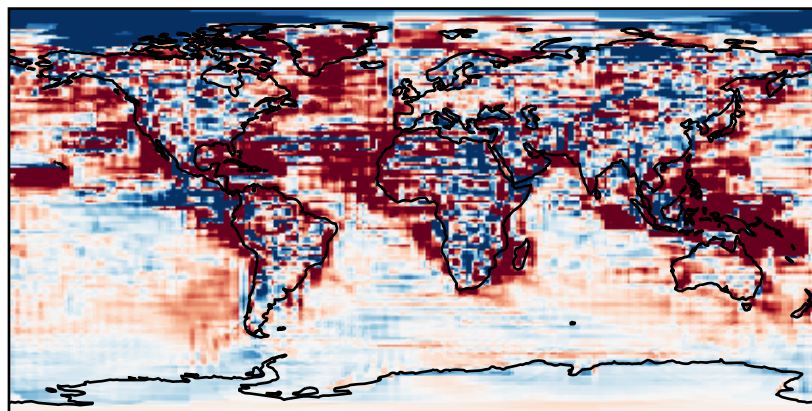
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

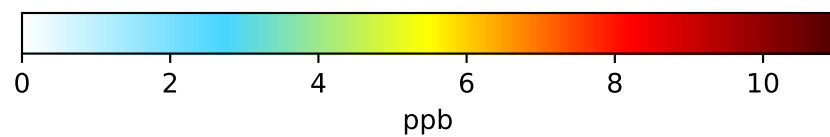
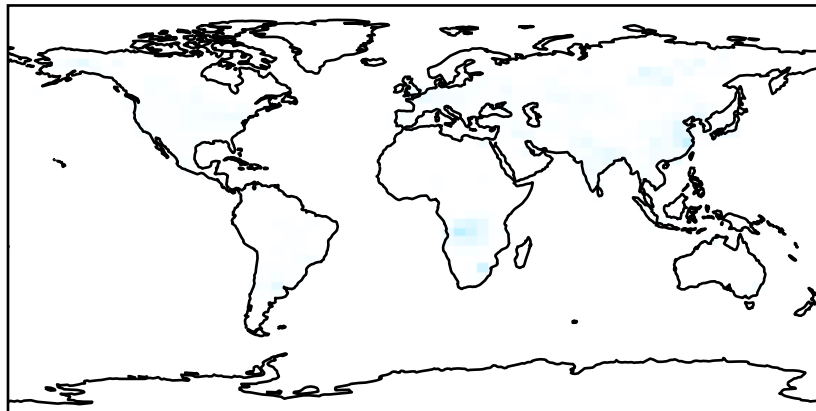


Ratio (1x1.25)
Dev/Ref, Fixed Range

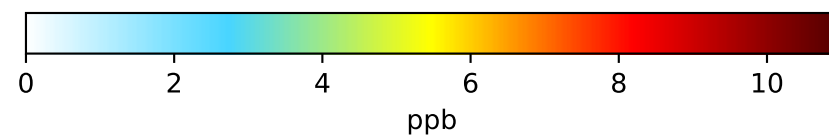
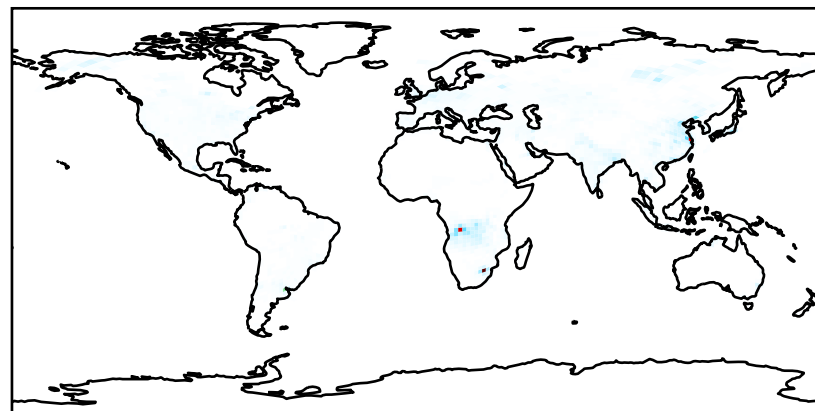


SpeciesConc_NO (Jul2019)

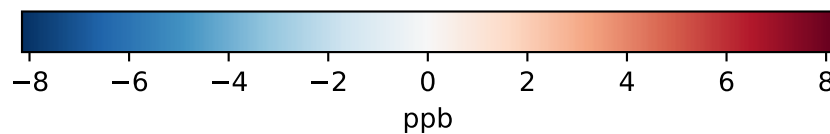
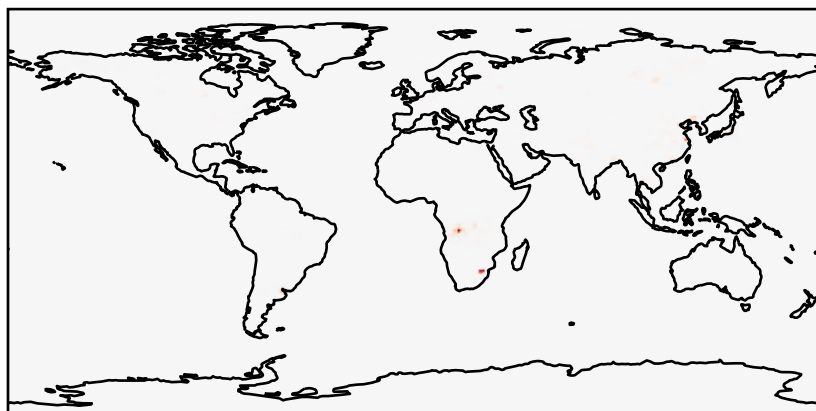
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



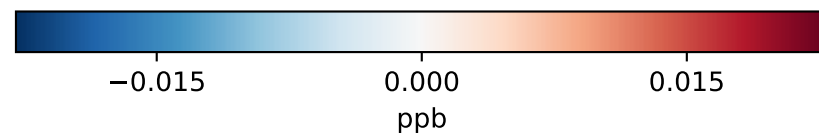
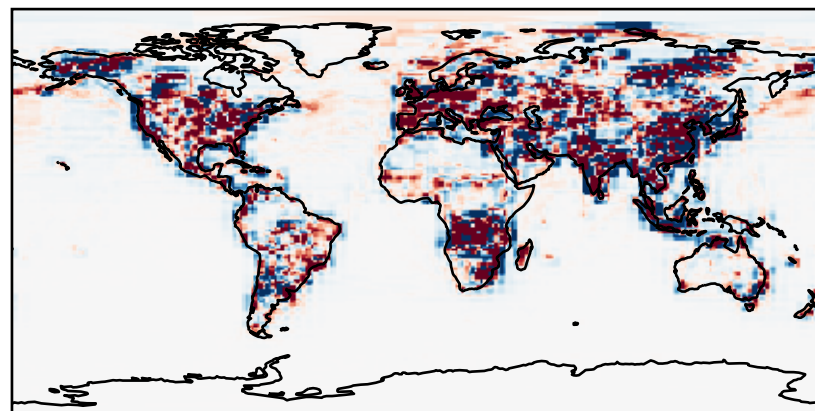
GCHP_13.0.0-beta.1 (Dev)
c48



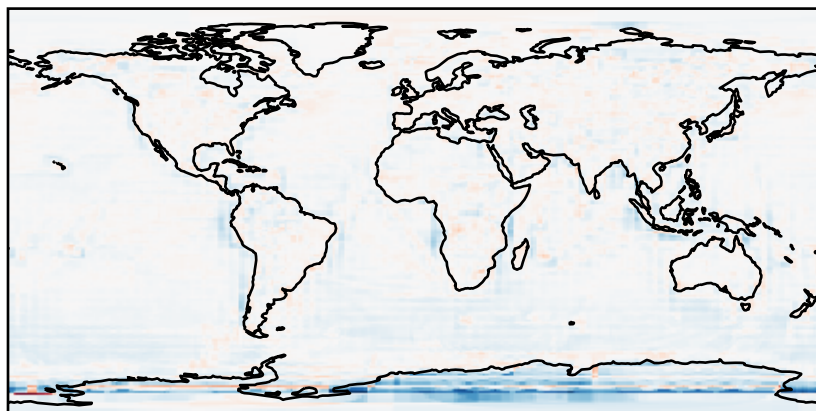
Difference (1x1.25)
Dev - Ref, Dynamic Range



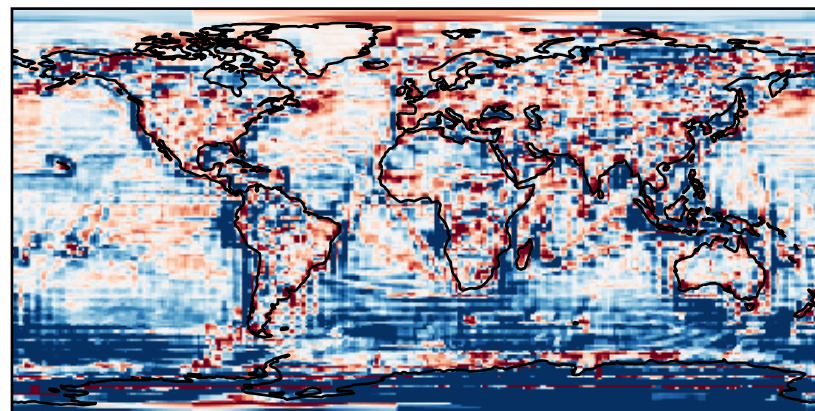
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

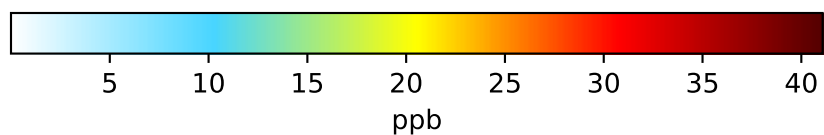
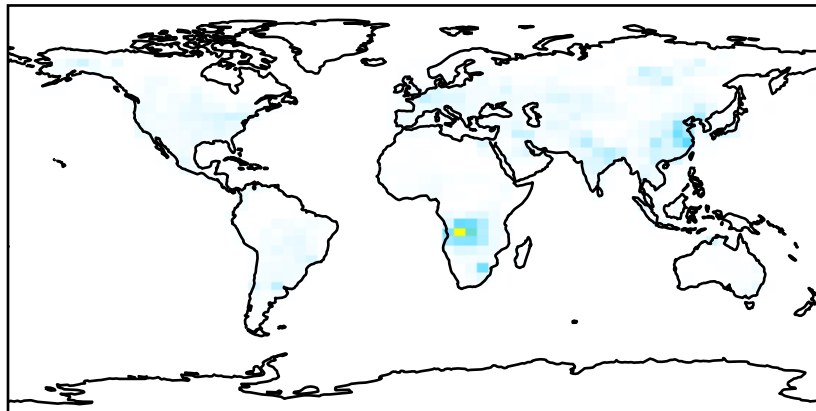


Ratio (1x1.25)
Dev/Ref, Fixed Range

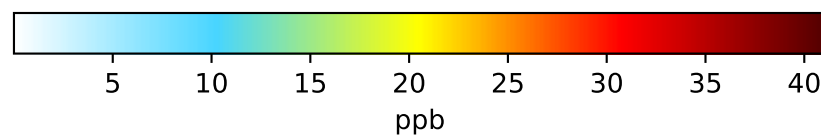
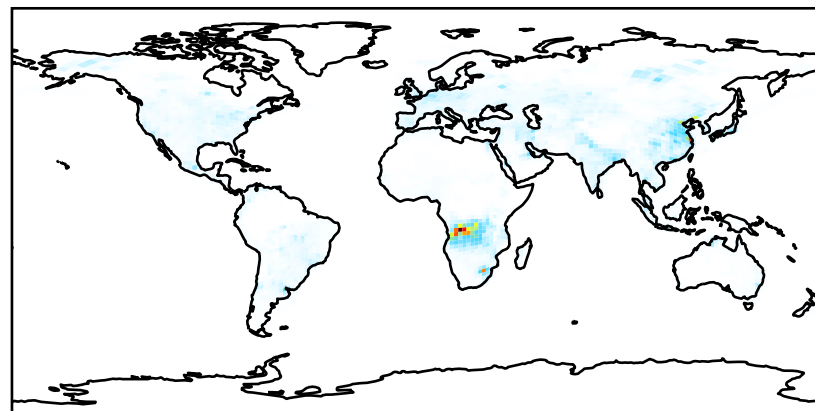


SpeciesConc_NO2 (Jul2019)

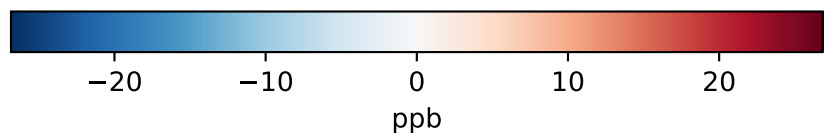
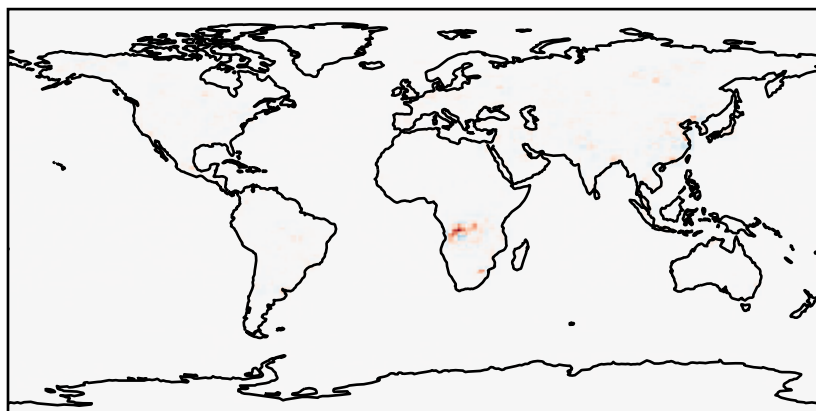
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



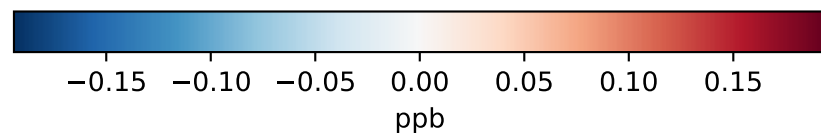
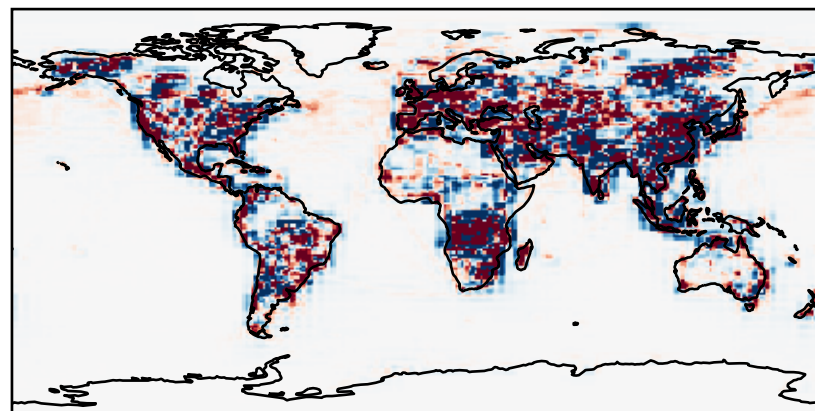
GCHP_13.0.0-beta.1 (Dev)
c48



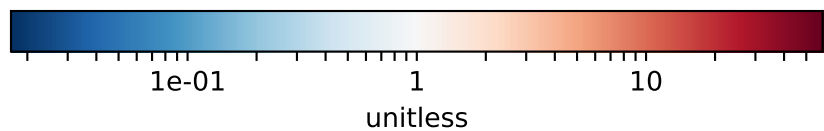
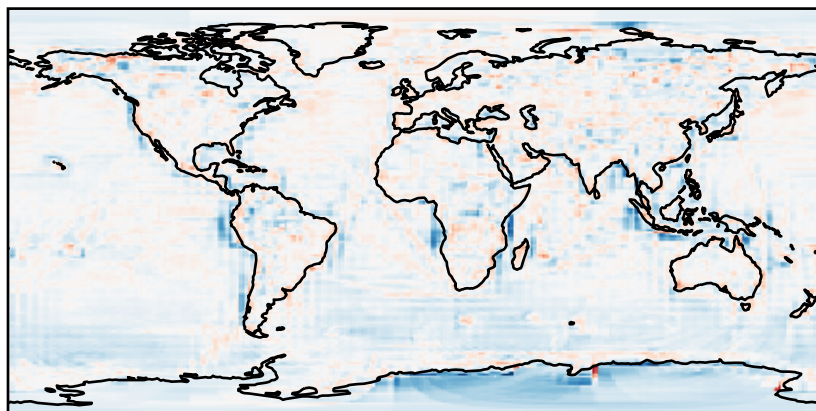
Difference (1x1.25)
Dev - Ref, Dynamic Range



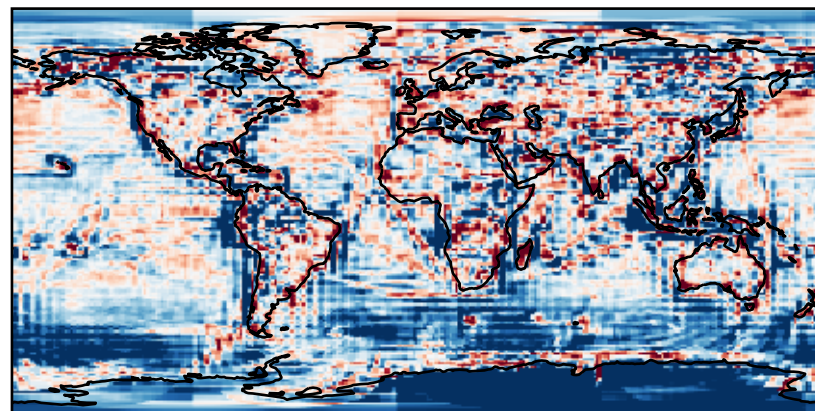
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

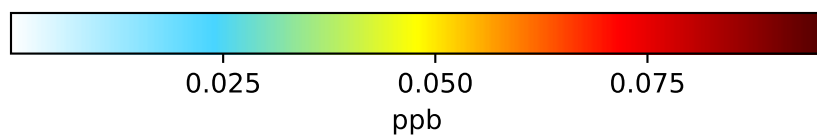
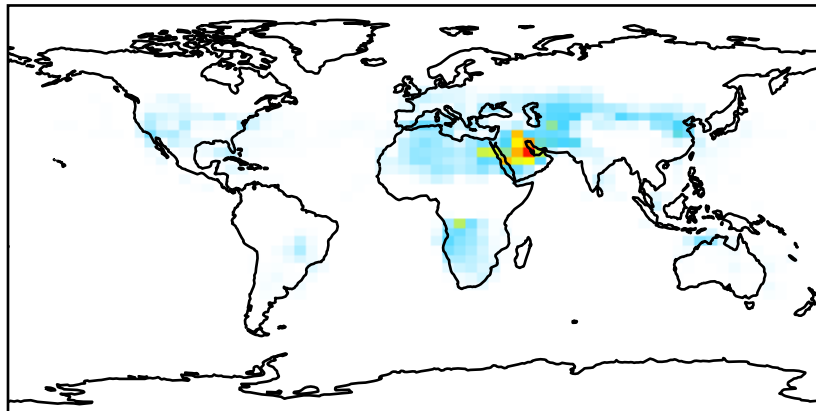


Ratio (1x1.25)
Dev/Ref, Fixed Range

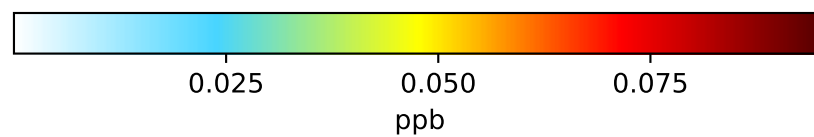
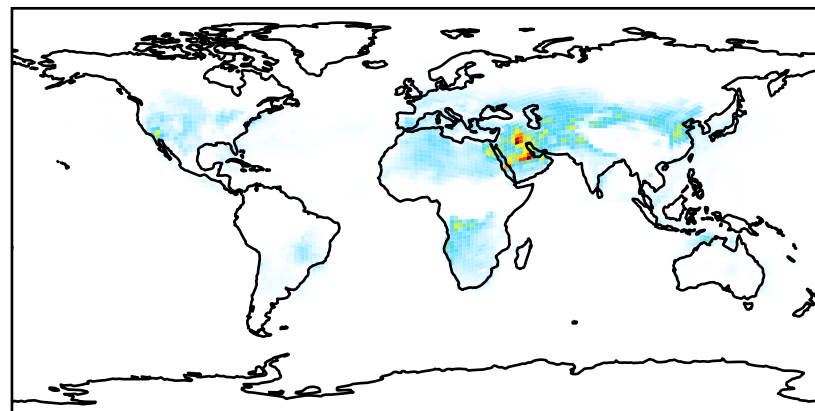


SpeciesConc_NO3 (Jul2019)

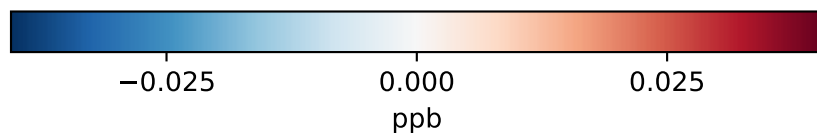
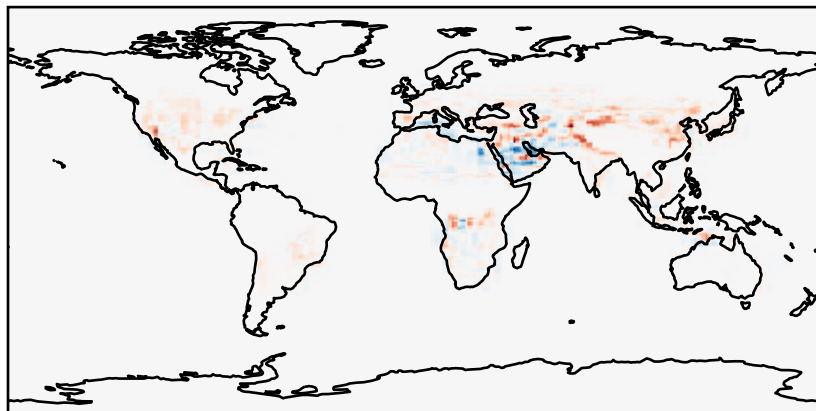
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



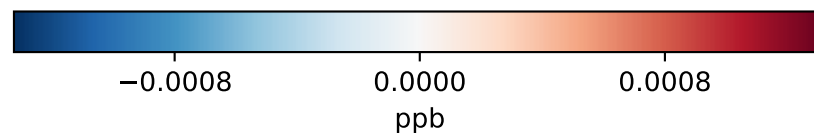
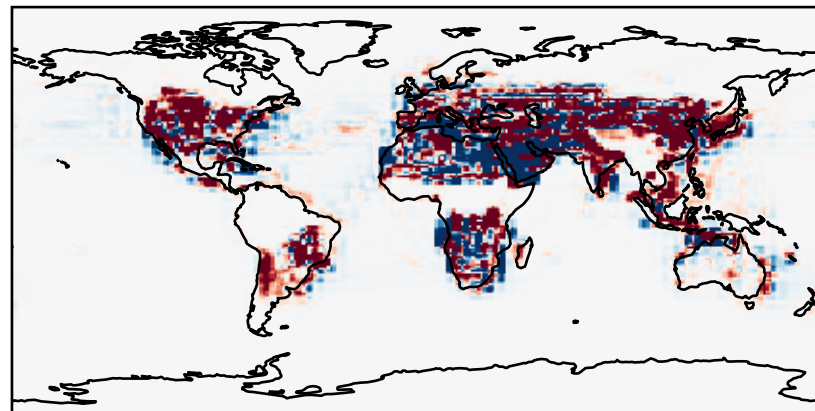
GCHP_13.0.0-beta.1 (Dev)
c48



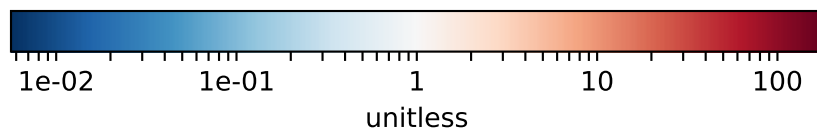
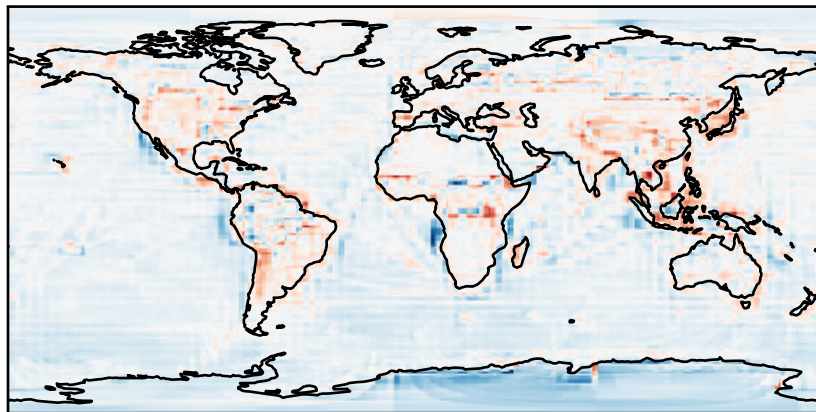
Difference (1x1.25)
Dev - Ref, Dynamic Range



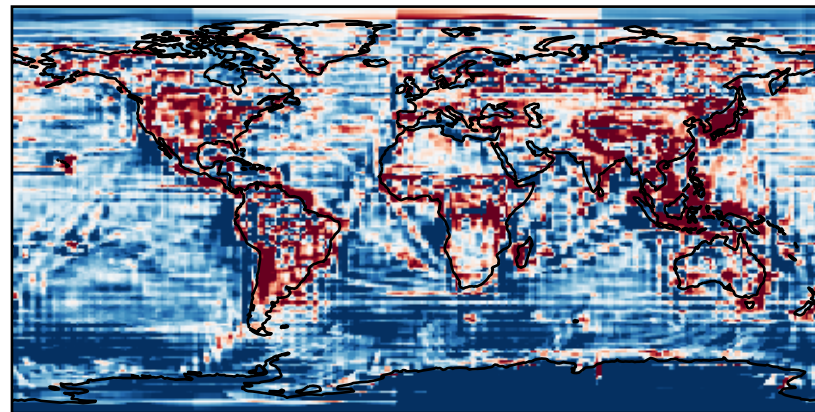
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

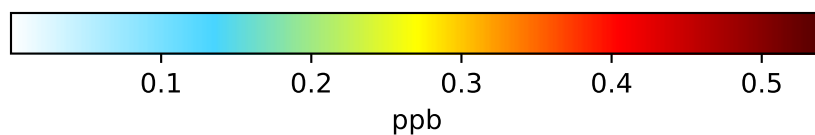
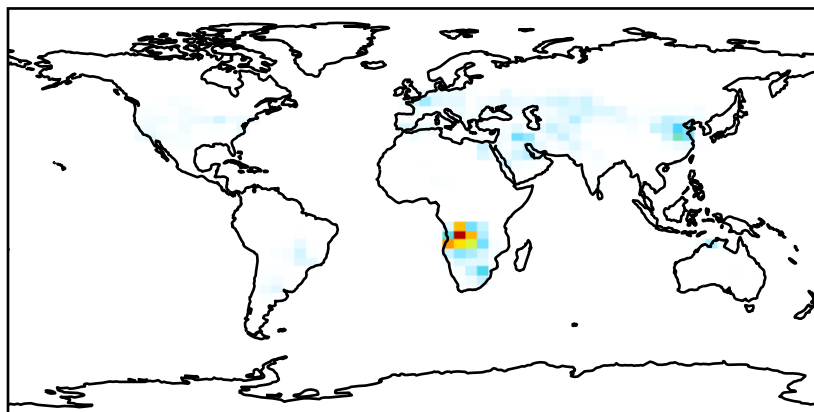


Ratio (1x1.25)
Dev/Ref, Fixed Range

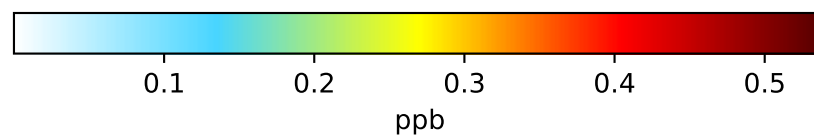
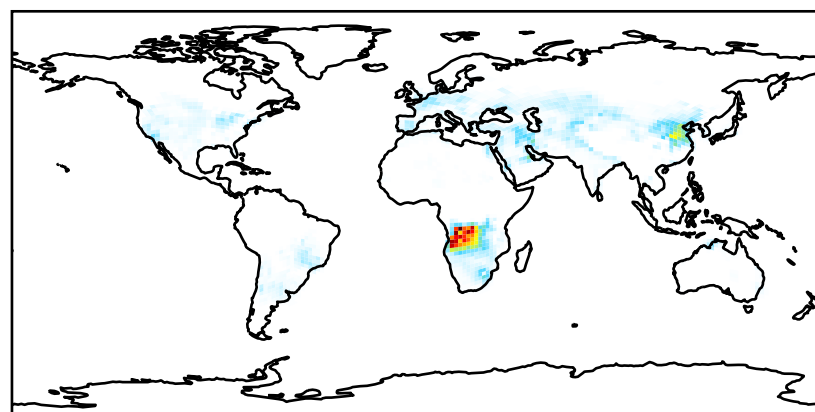


SpeciesConc_N2O5 (Jul2019)

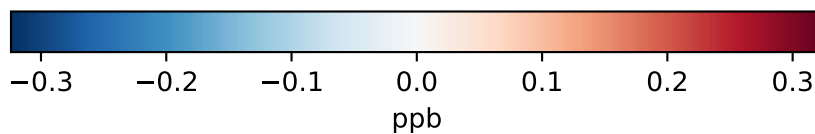
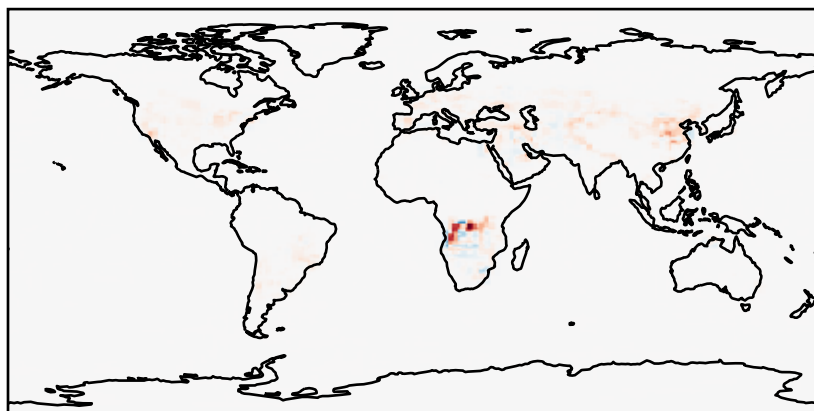
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



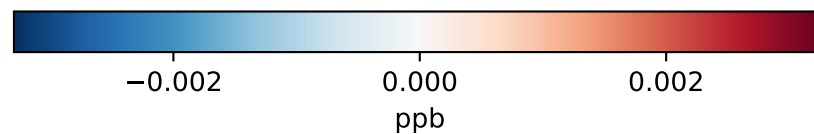
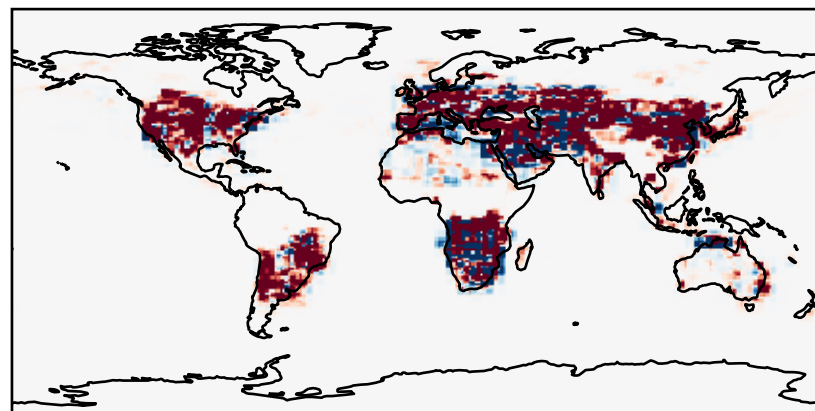
GCHP_13.0.0-beta.1 (Dev)
c48



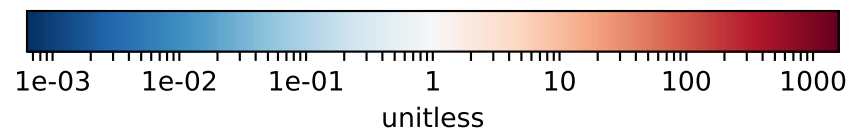
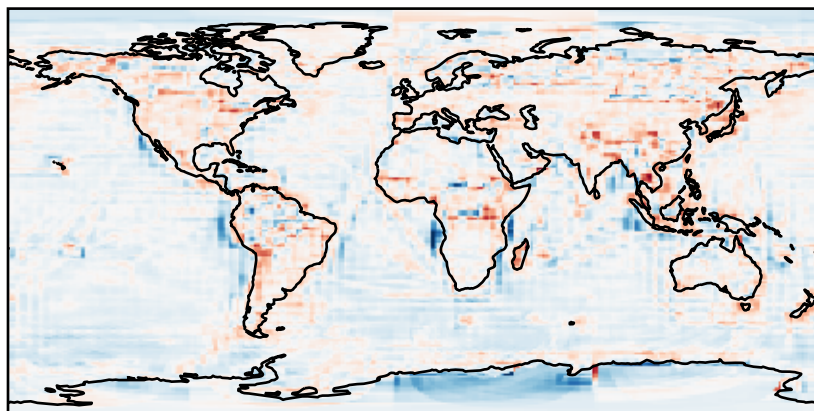
Difference (1x1.25)
Dev - Ref, Dynamic Range



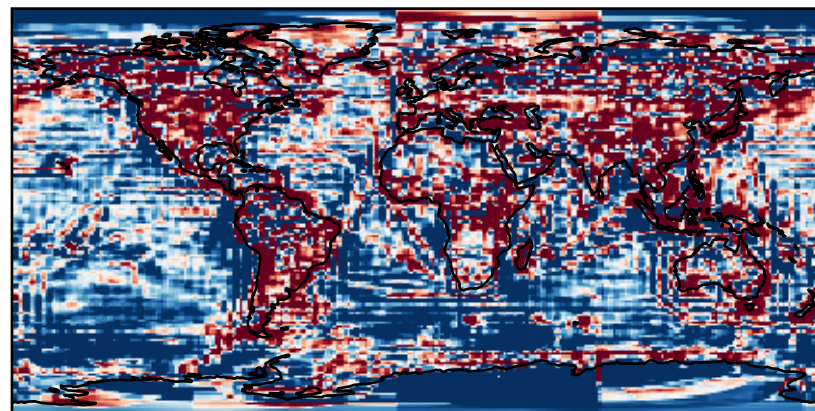
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

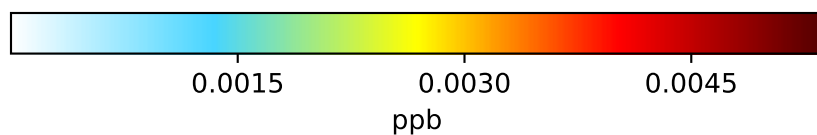
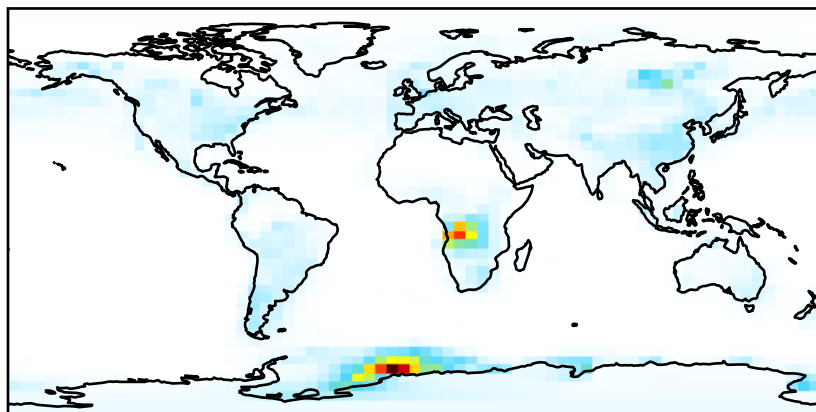


Ratio (1x1.25)
Dev/Ref, Fixed Range

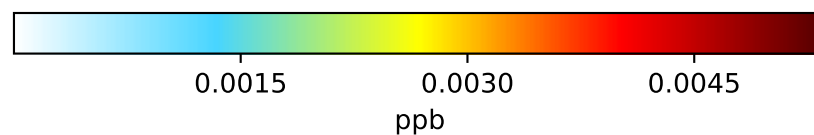
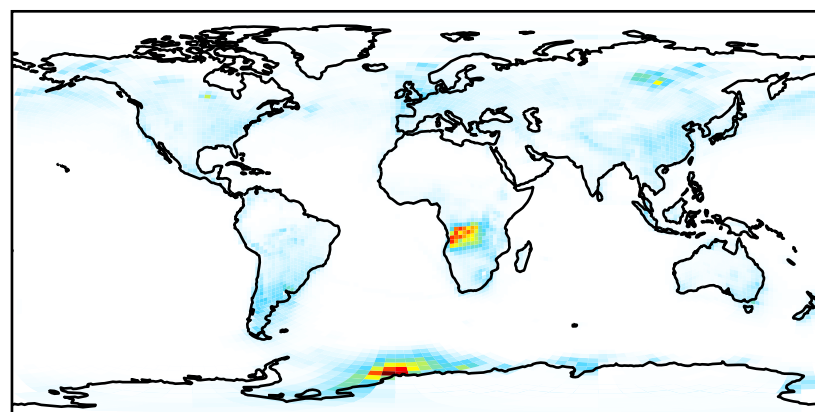


SpeciesConc_MPN (Jul2019)

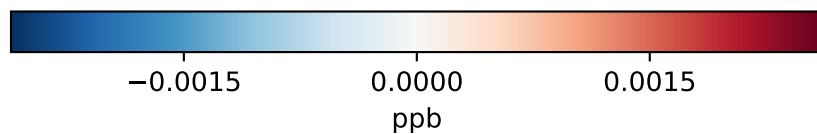
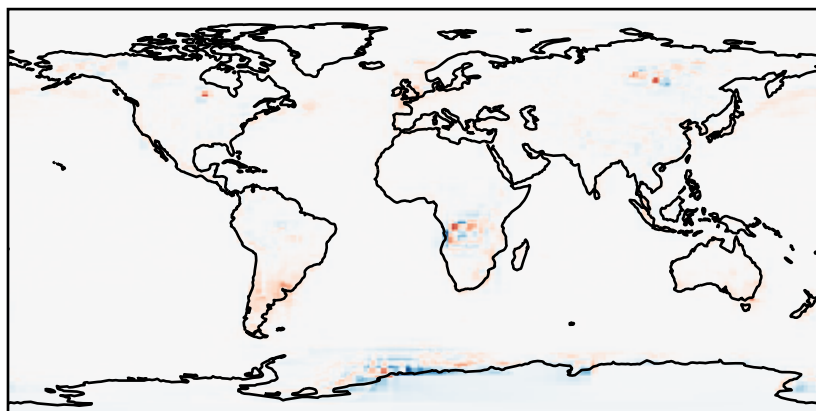
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



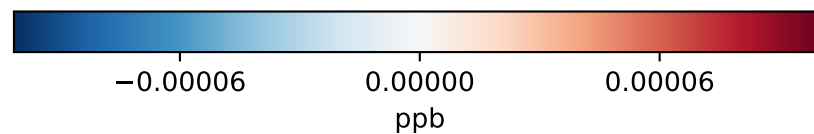
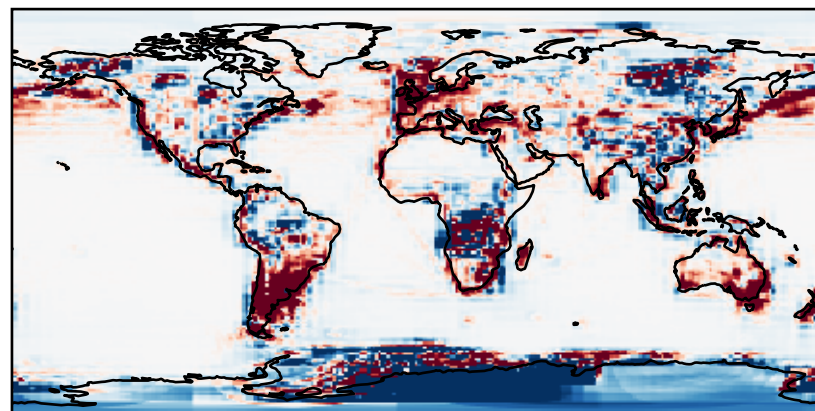
GCHP_13.0.0-beta.1 (Dev)
c48



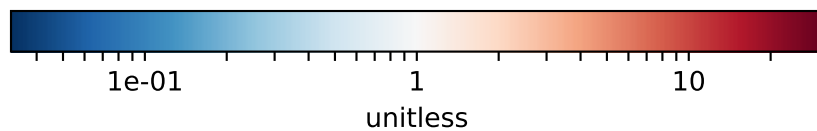
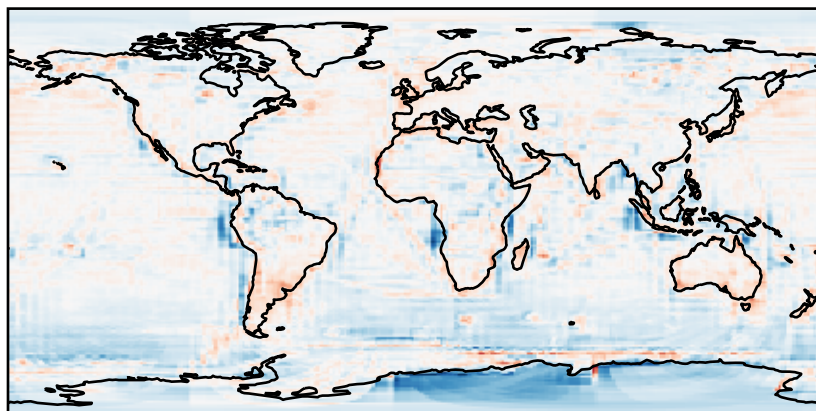
Difference (1x1.25)
Dev - Ref, Dynamic Range



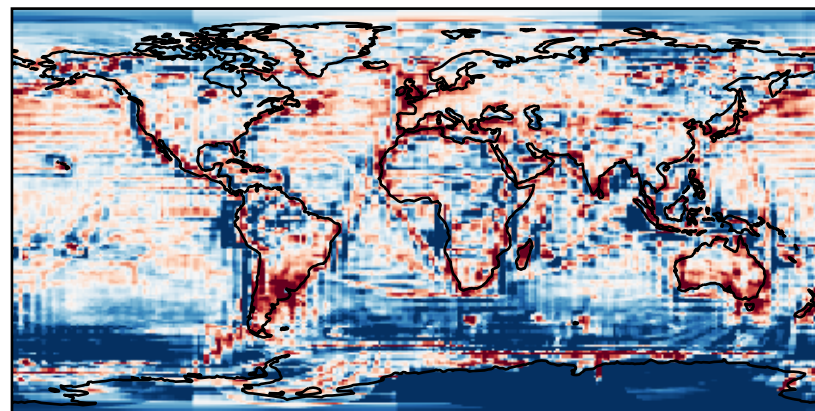
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

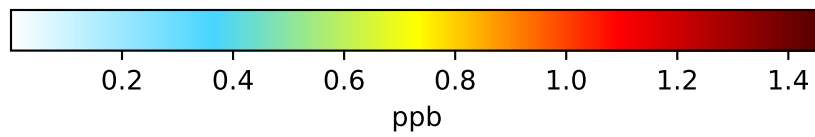
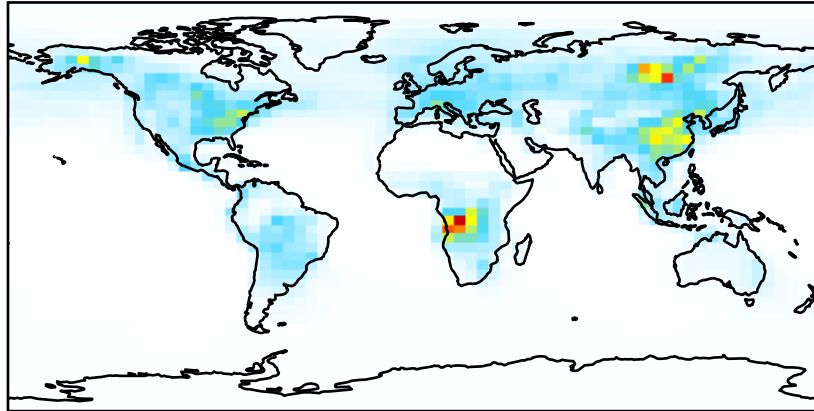


Ratio (1x1.25)
Dev/Ref, Fixed Range

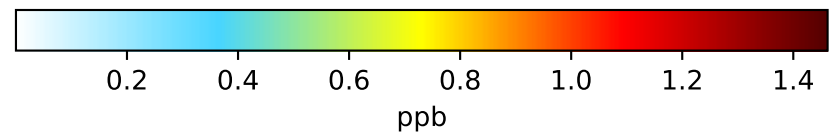
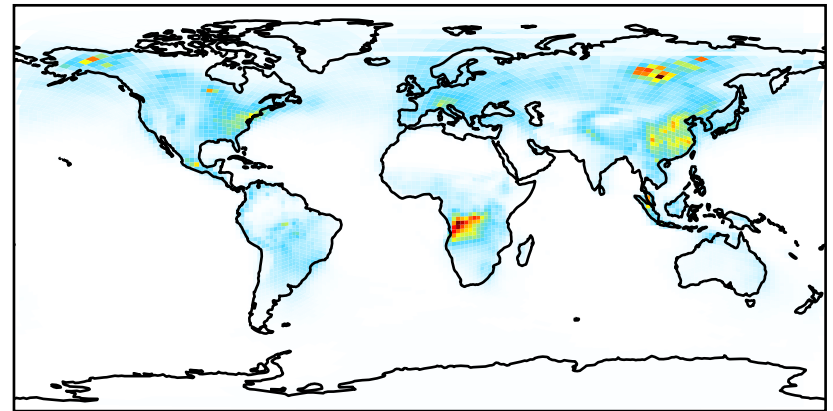


SpeciesConc_PAN (Jul2019)

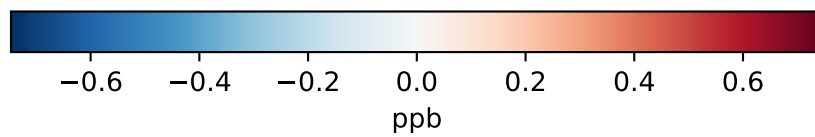
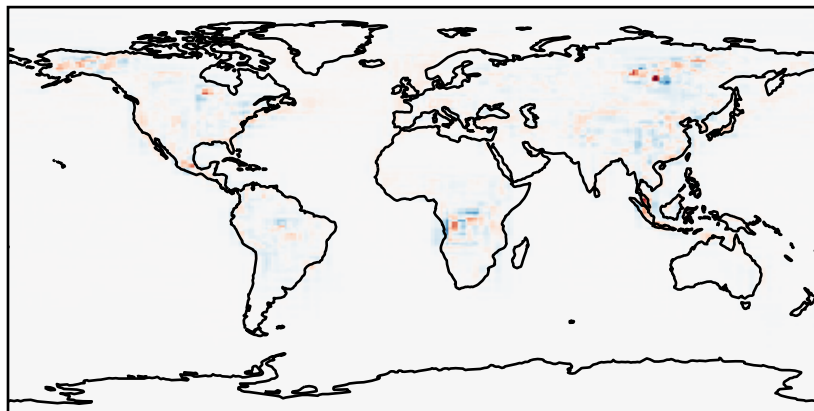
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



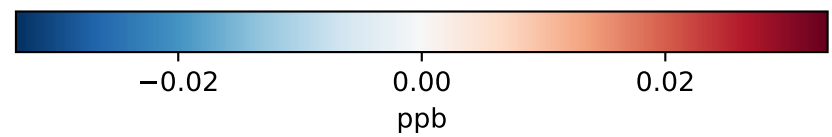
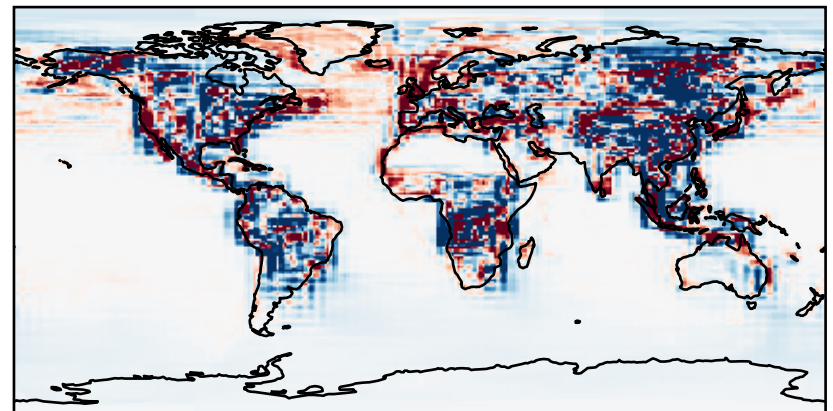
GCHP_13.0.0-beta.1 (Dev)
c48



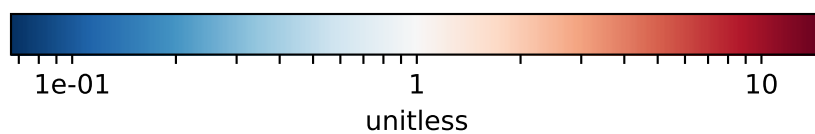
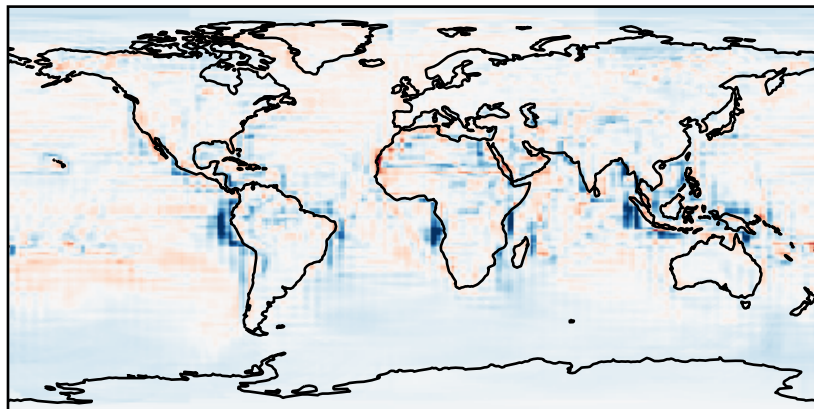
Difference (1x1.25)
Dev - Ref, Dynamic Range



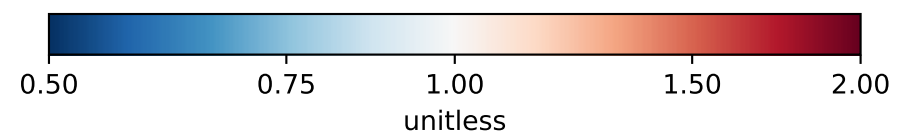
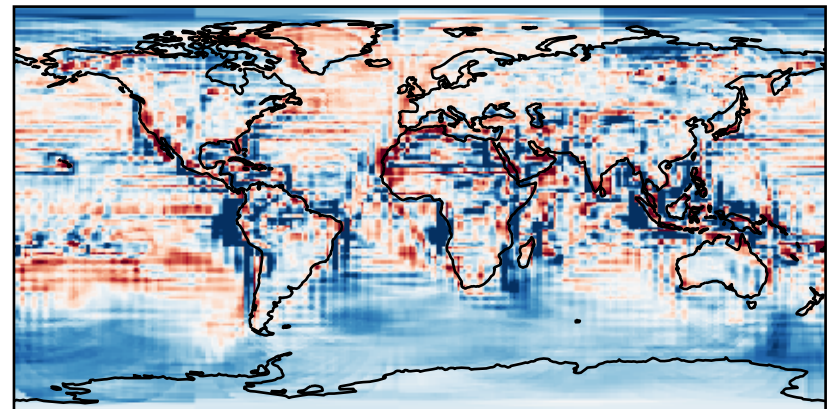
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

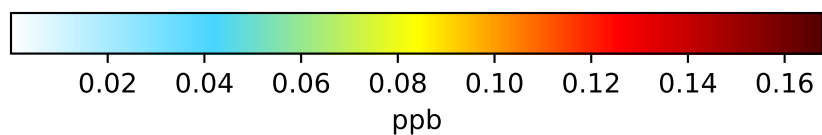
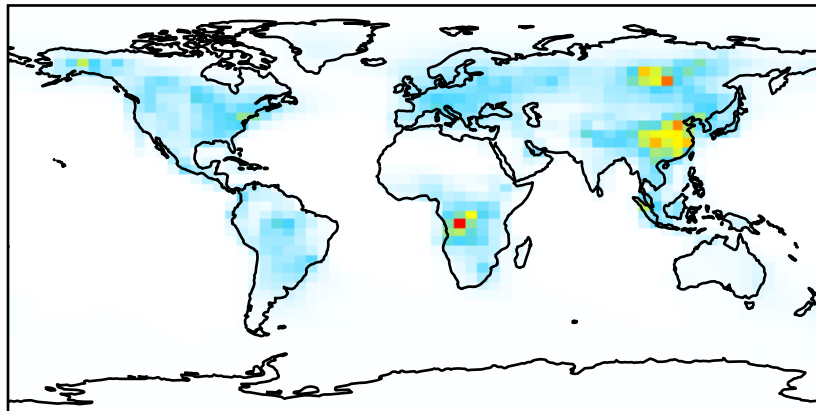


Ratio (1x1.25)
Dev/Ref, Fixed Range

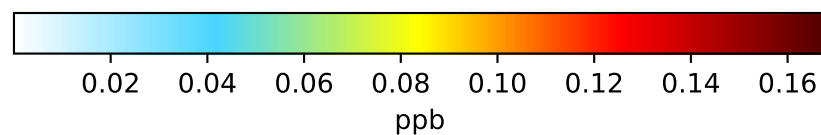
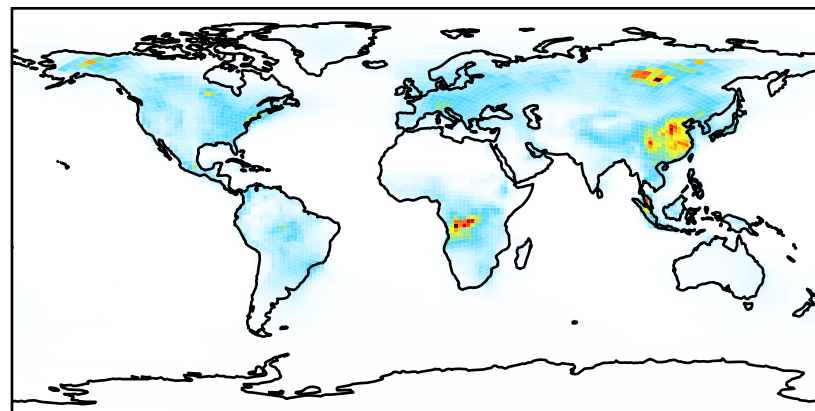


SpeciesConc_PPN (Jul2019)

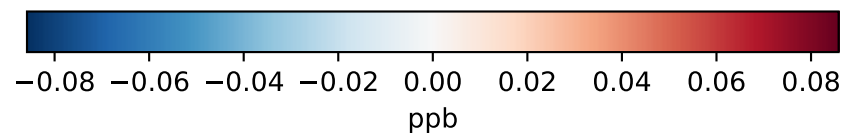
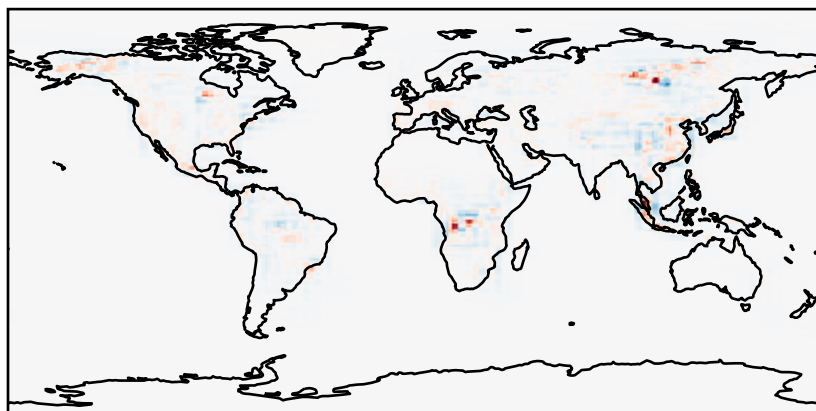
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



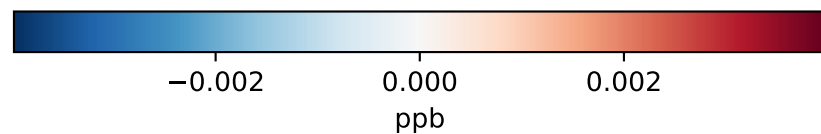
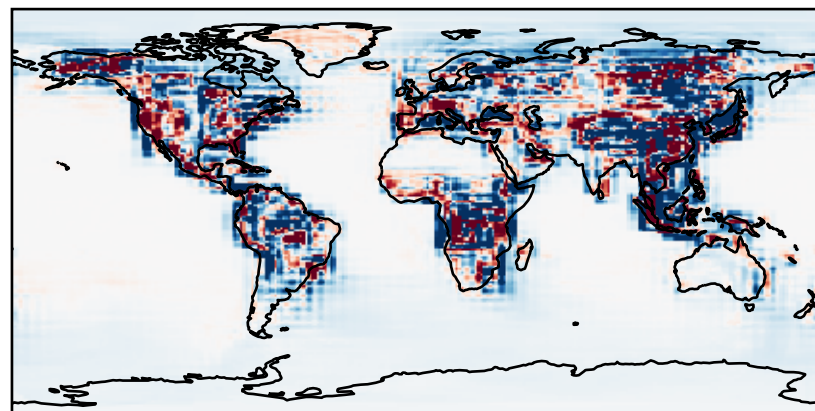
GCHP_13.0.0-beta.1 (Dev)
c48



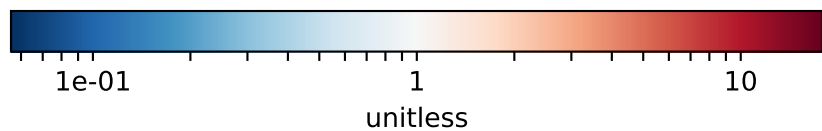
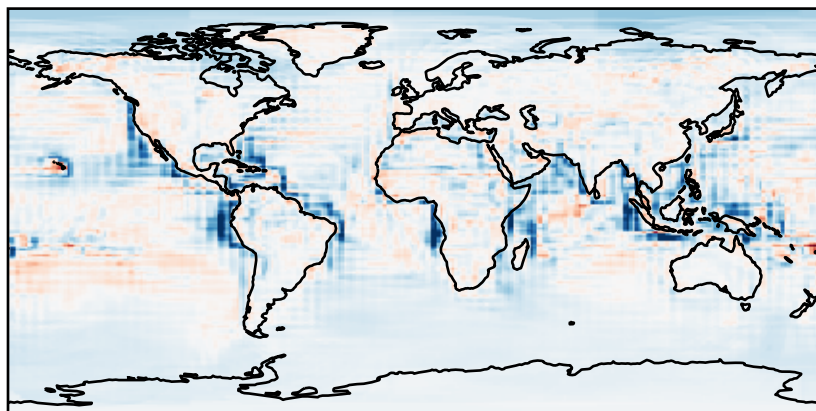
Difference (1x1.25)
Dev - Ref, Dynamic Range



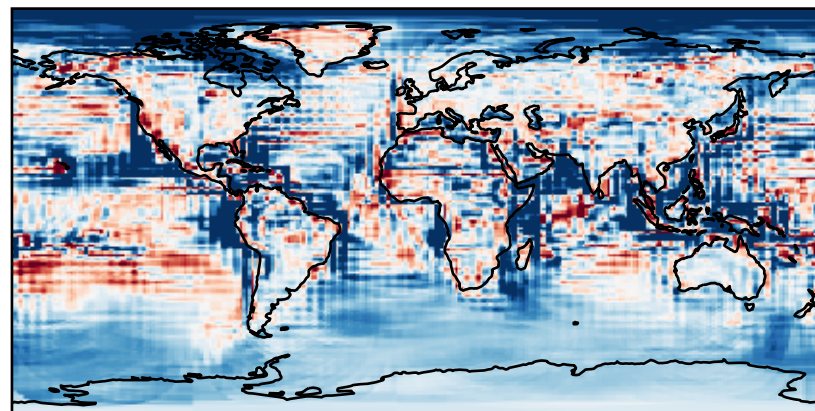
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

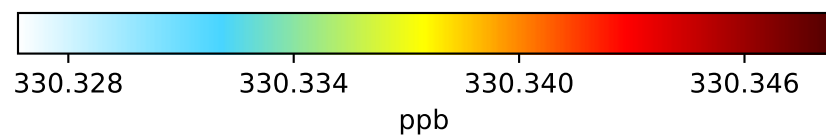
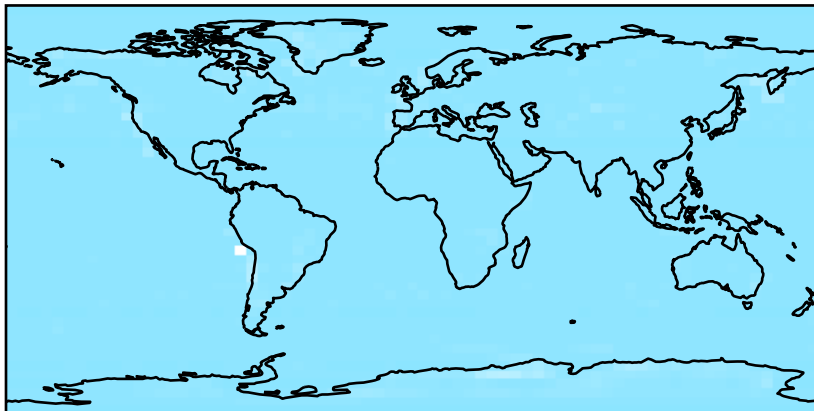


Ratio (1x1.25)
Dev/Ref, Fixed Range

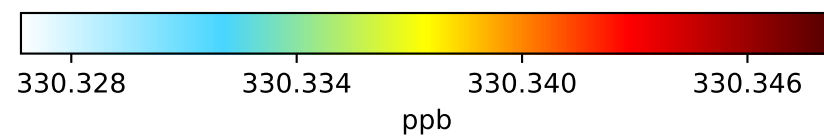
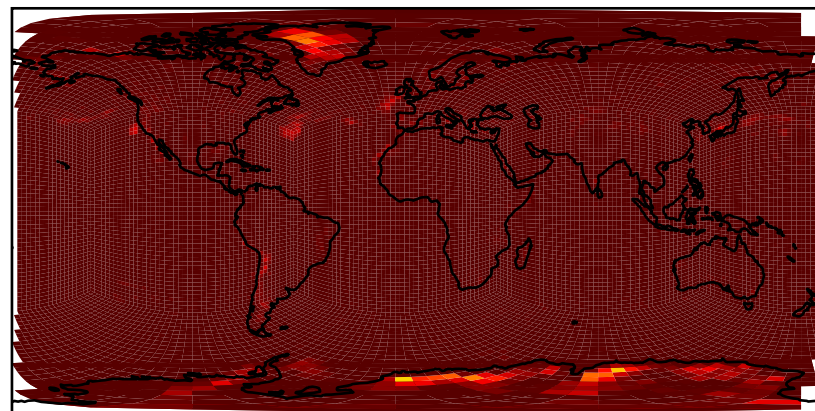


SpeciesConc_N2O (Jul2019)

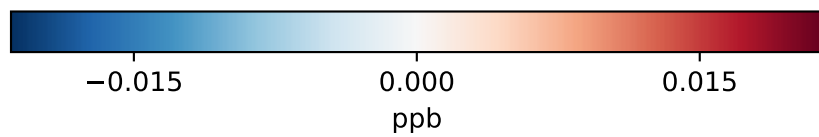
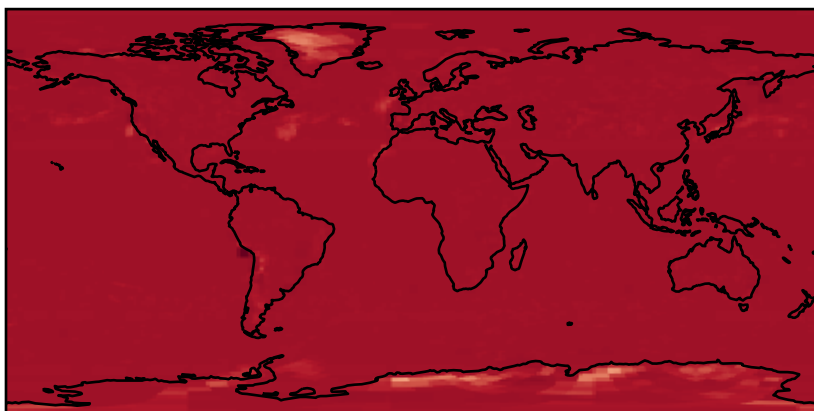
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



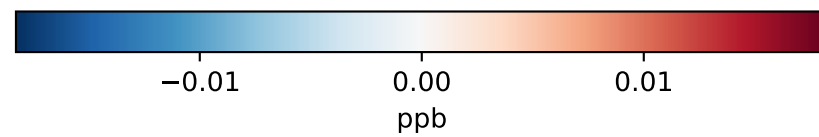
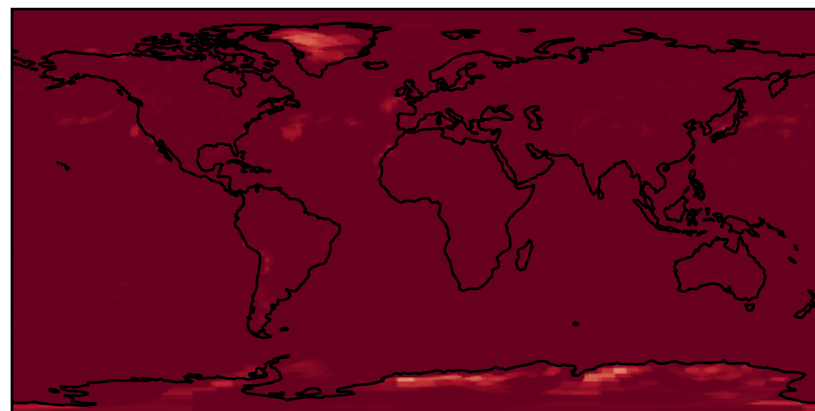
GCHP_13.0.0-beta.1 (Dev)
c48



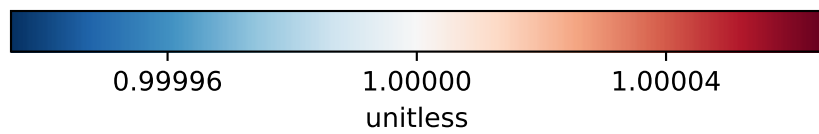
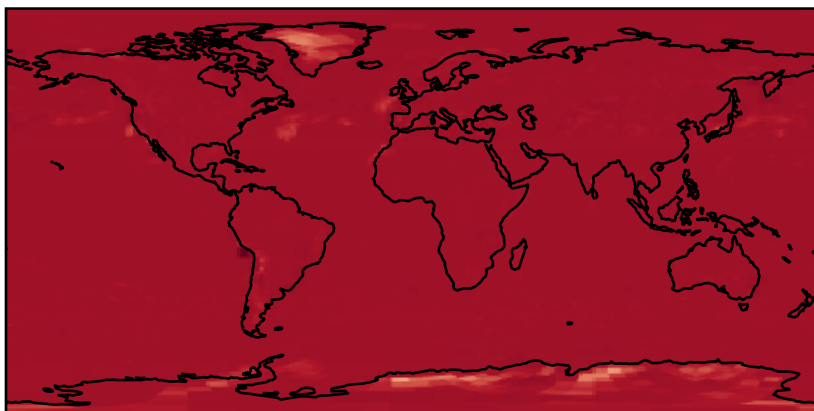
Difference (1x1.25)
Dev - Ref, Dynamic Range



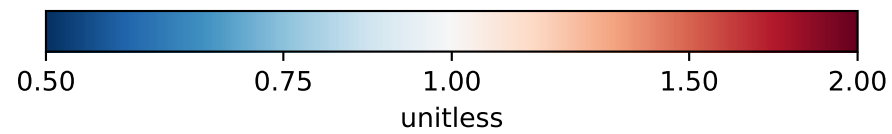
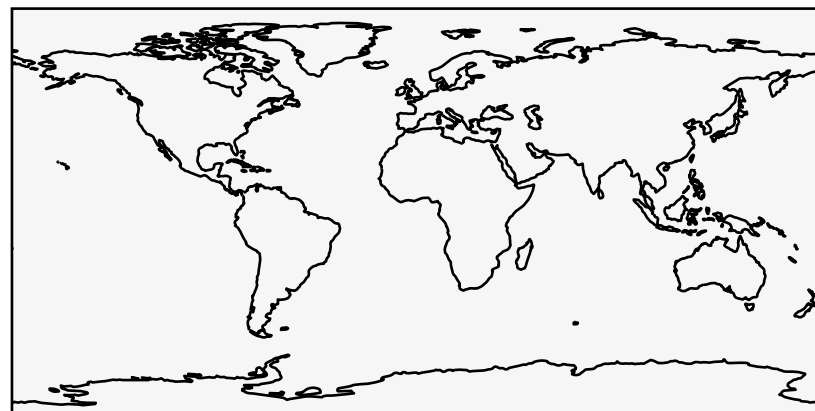
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

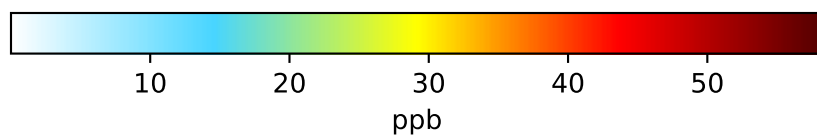
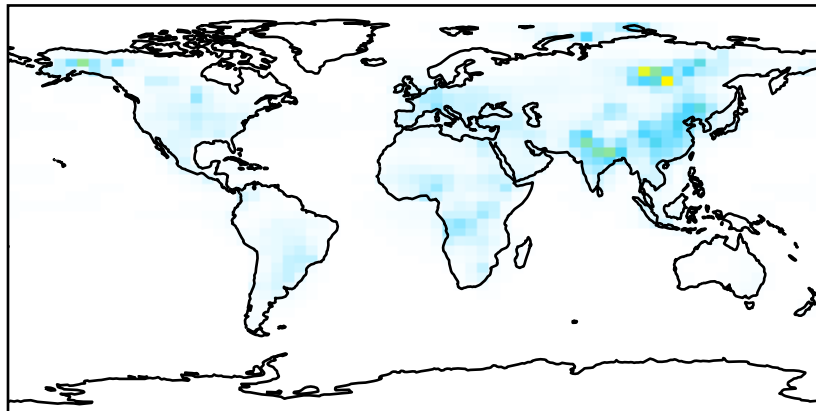


Ratio (1x1.25)
Dev/Ref, Fixed Range

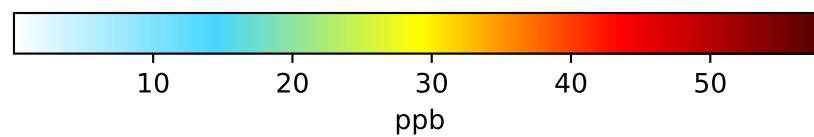
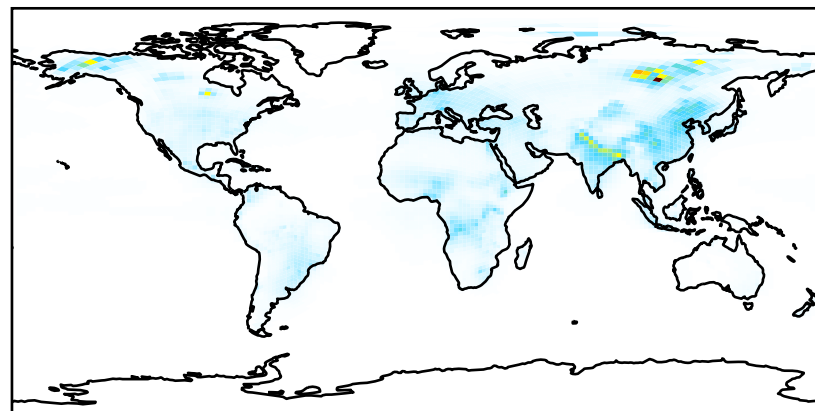


SpeciesConc_NHx (Jul2019)

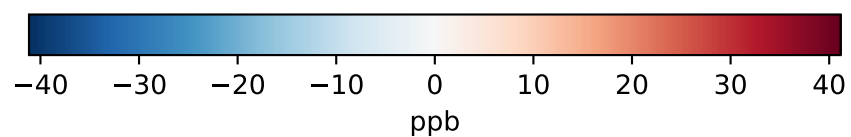
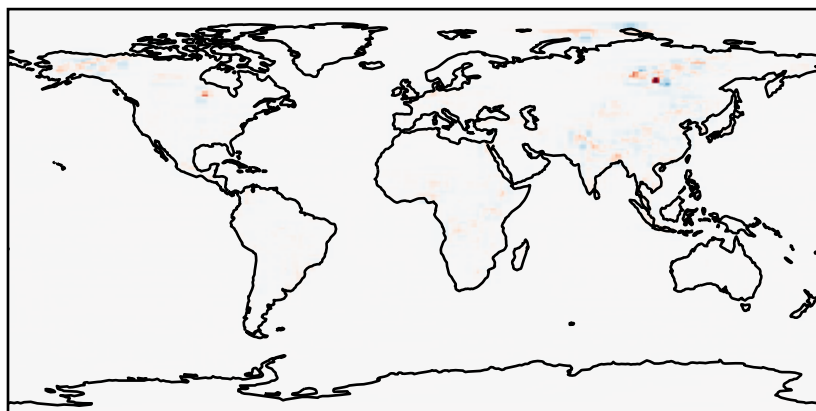
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



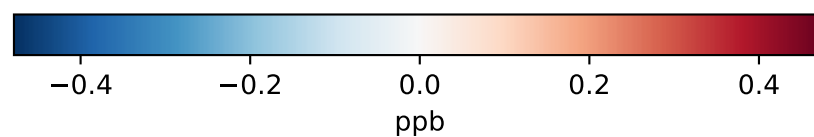
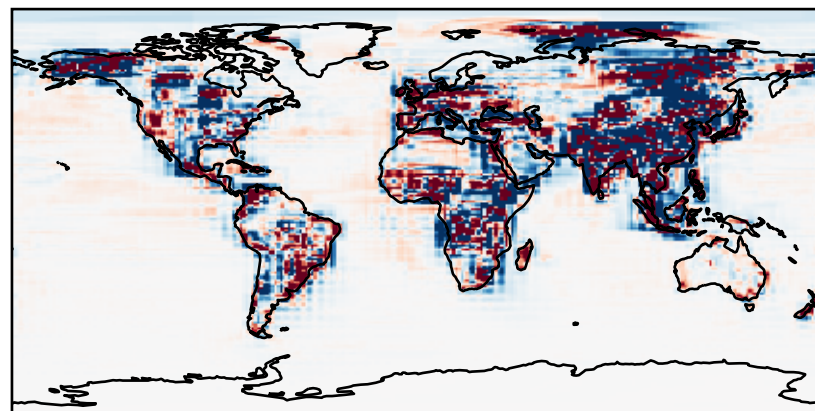
GCHP_13.0.0-beta.1 (Dev)
c48



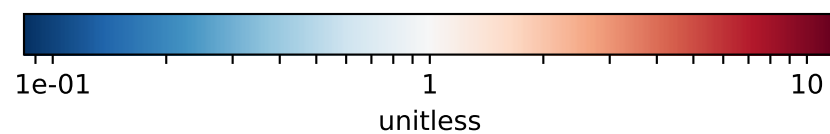
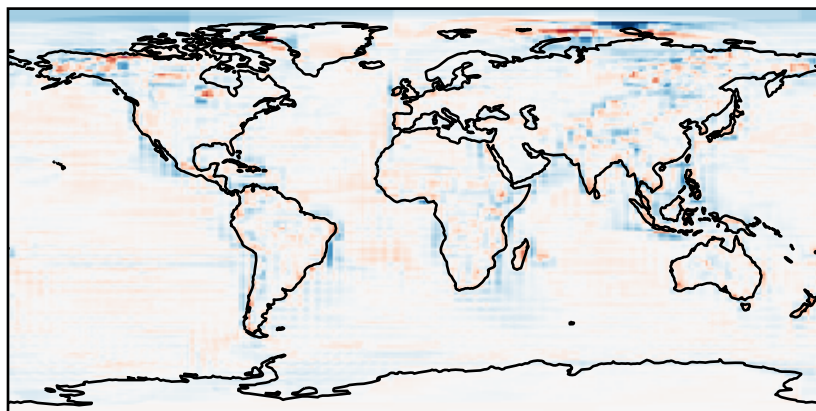
Difference (1x1.25)
Dev - Ref, Dynamic Range



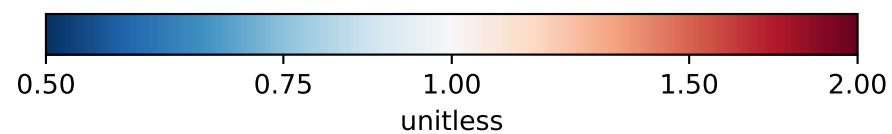
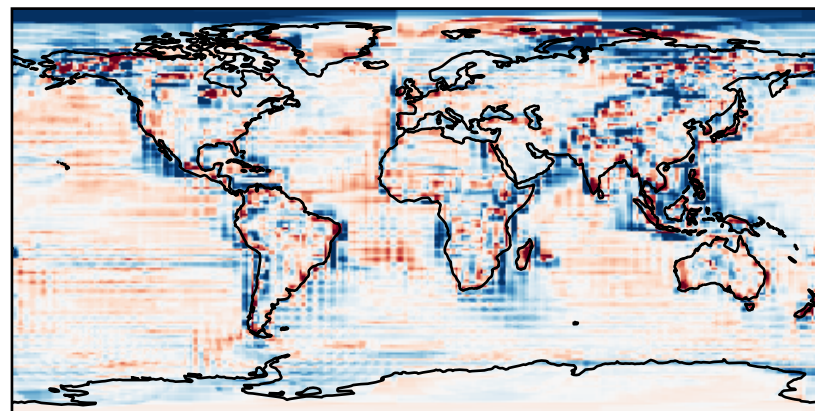
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

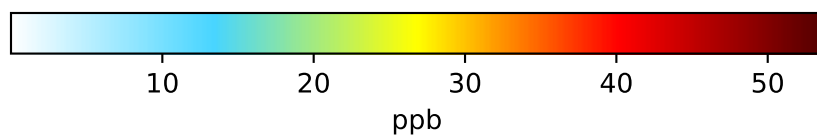
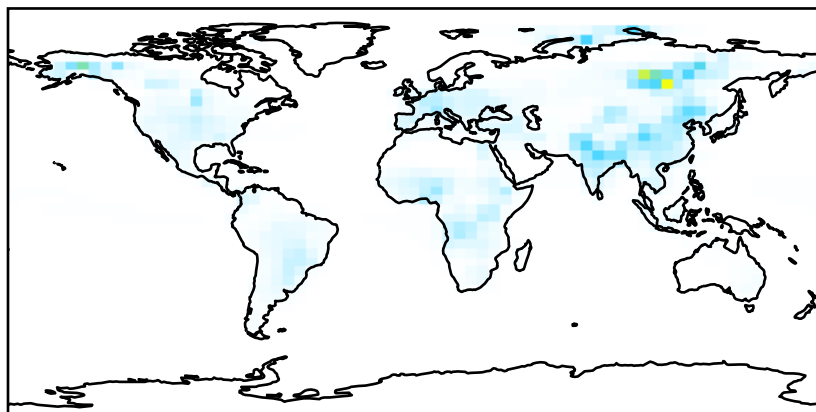


Ratio (1x1.25)
Dev/Ref, Fixed Range

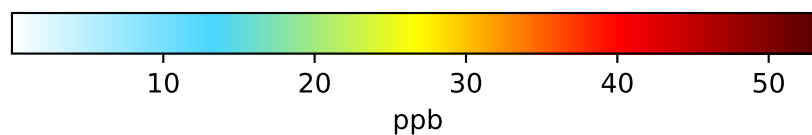
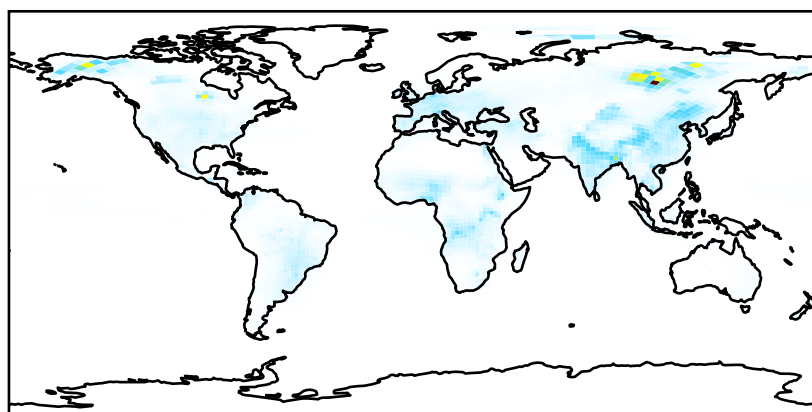


SpeciesConc_NH3 (Jul2019)

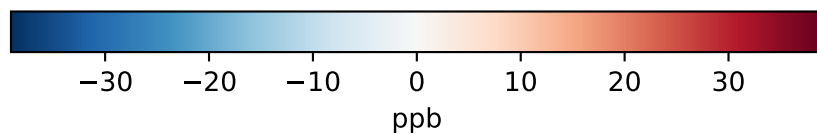
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



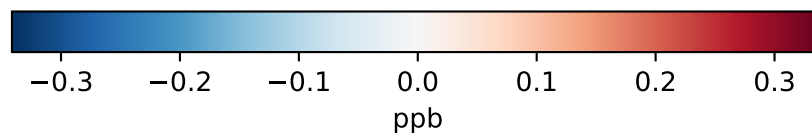
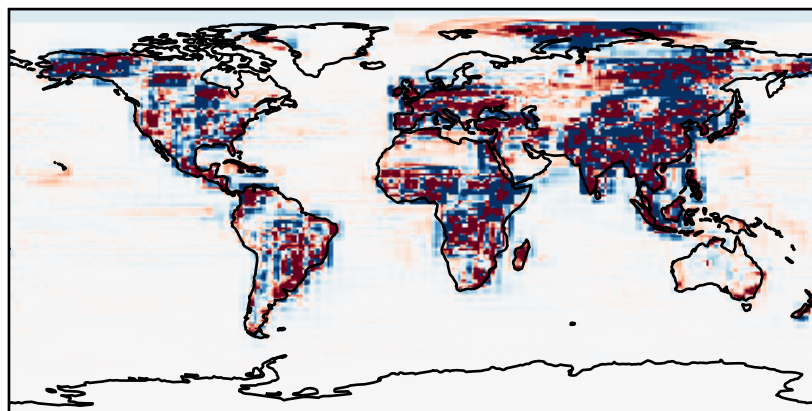
GCHP_13.0.0-beta.1 (Dev)
c48



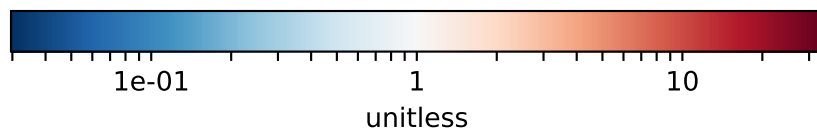
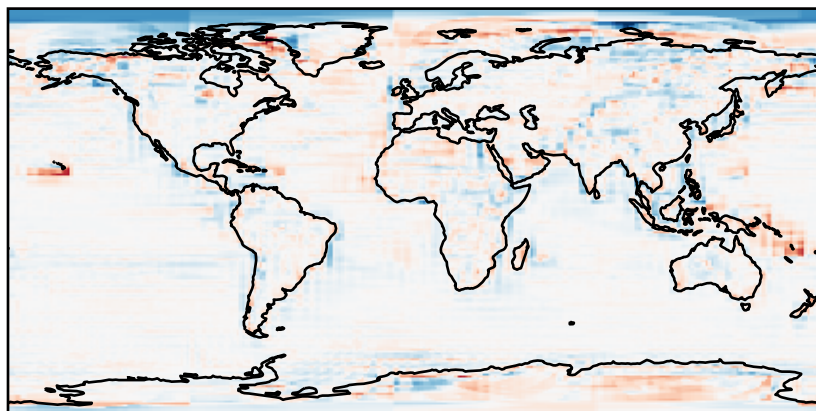
Difference (1x1.25)
Dev - Ref, Dynamic Range



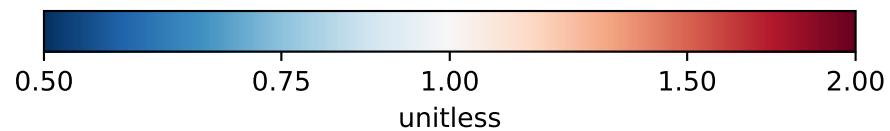
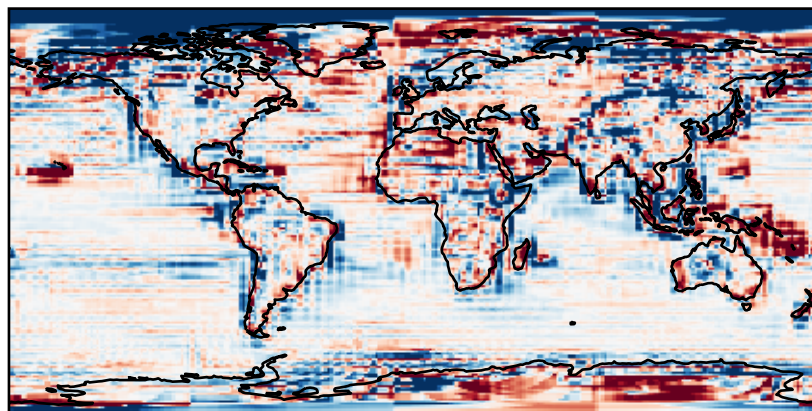
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

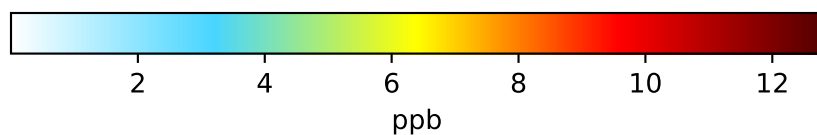
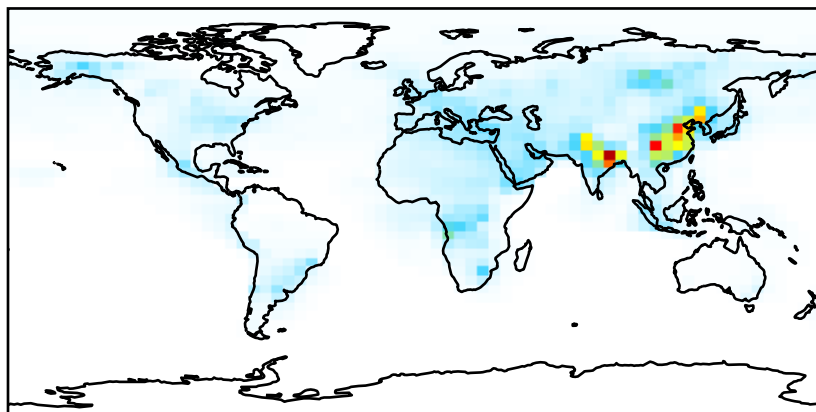


Ratio (1x1.25)
Dev/Ref, Fixed Range

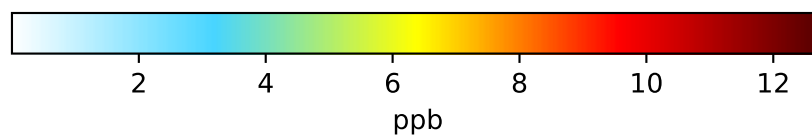
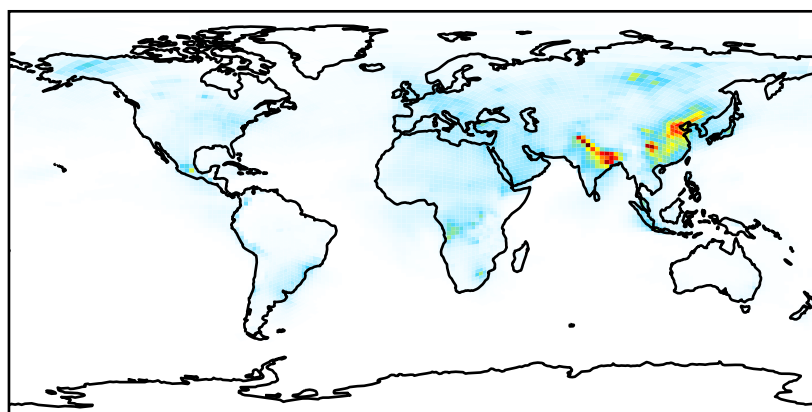


SpeciesConc_NH4 (Jul2019)

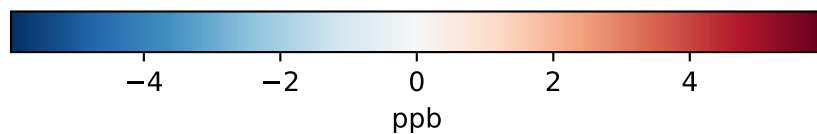
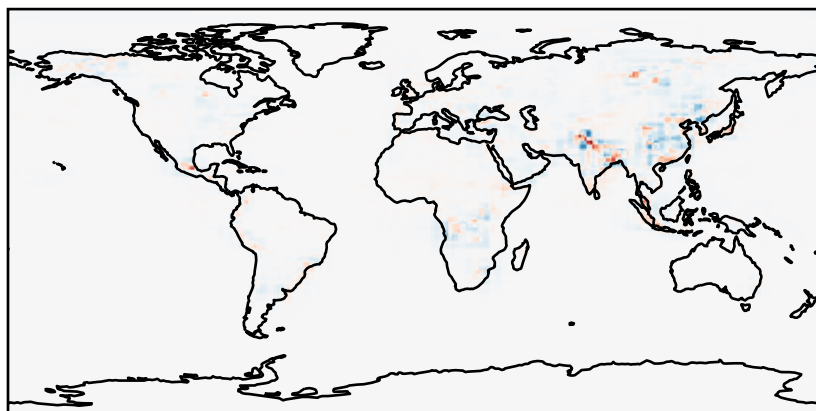
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



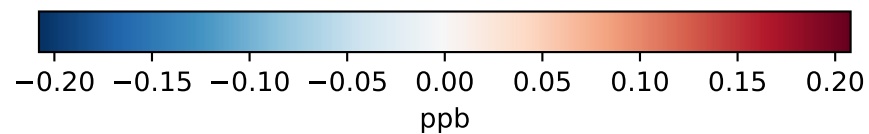
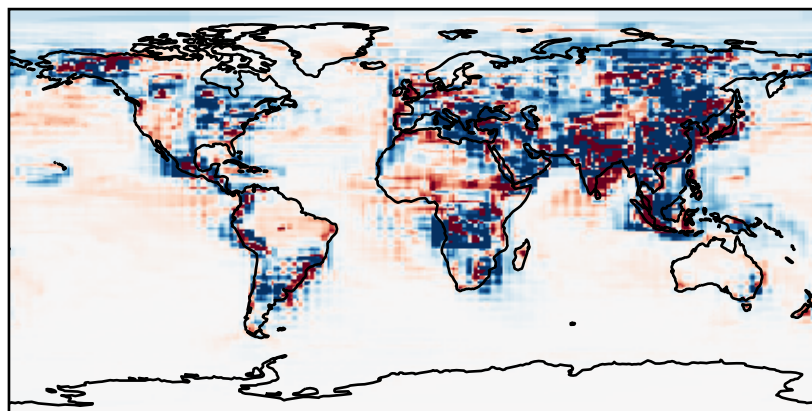
GCHP_13.0.0-beta.1 (Dev)
c48



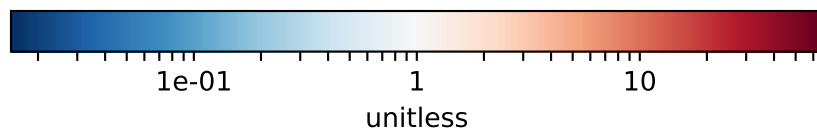
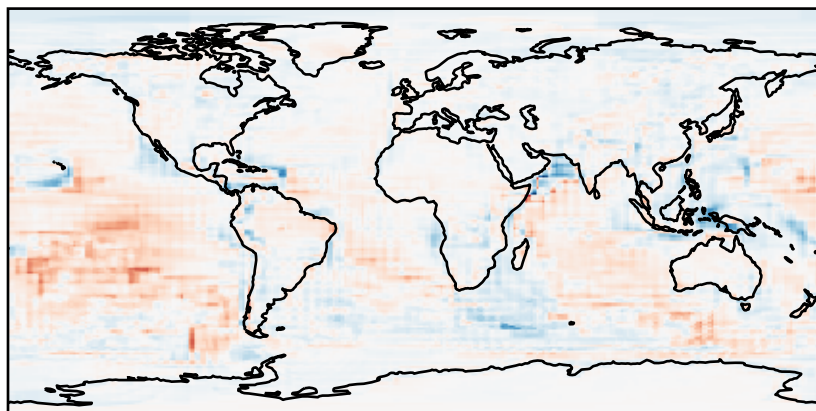
Difference (1x1.25)
Dev - Ref, Dynamic Range



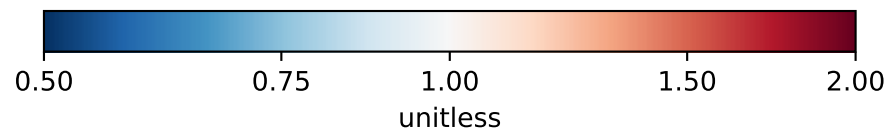
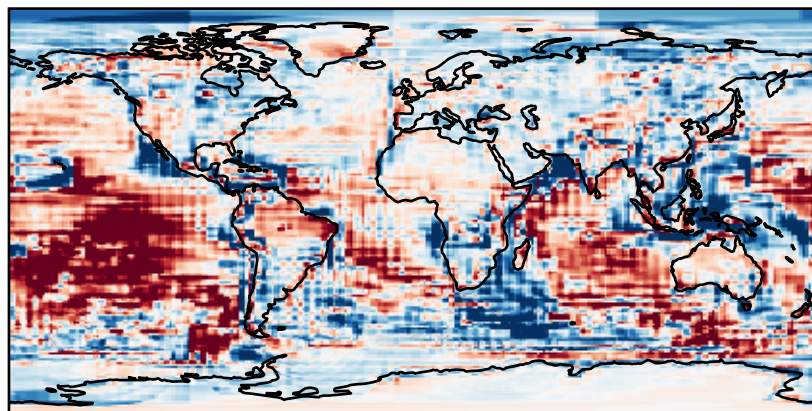
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

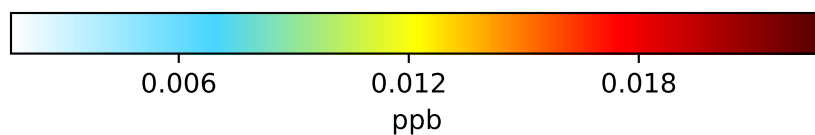
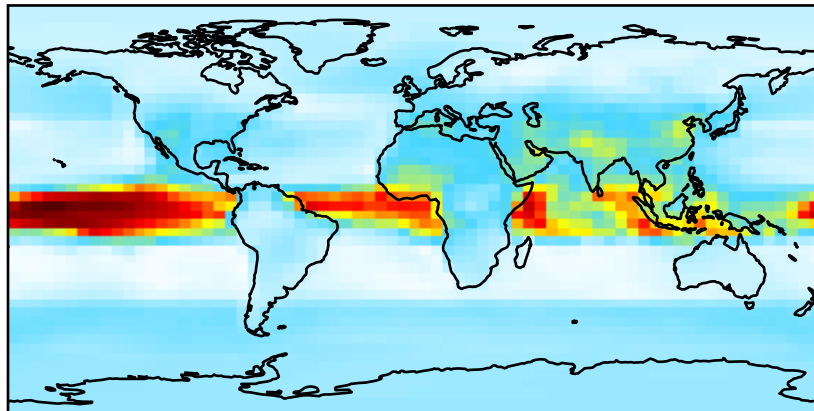


Ratio (1x1.25)
Dev/Ref, Fixed Range

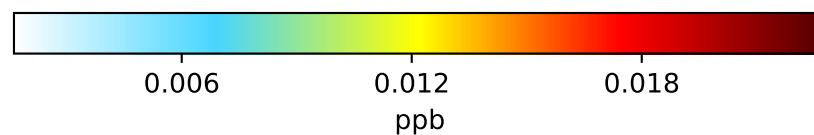
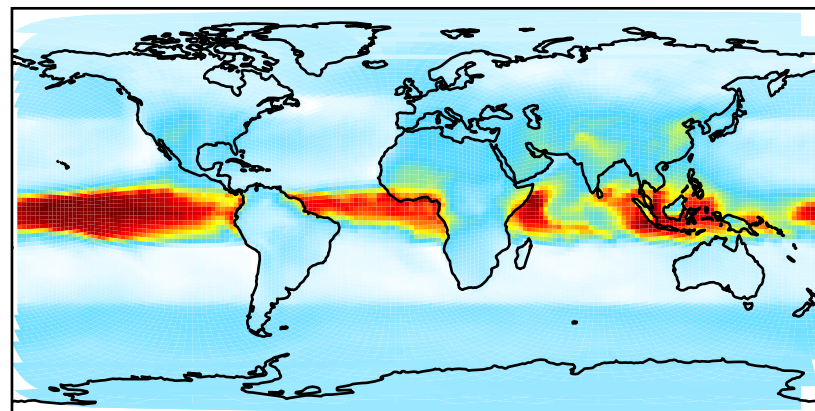


SpeciesConc_MENO3 (Jul2019)

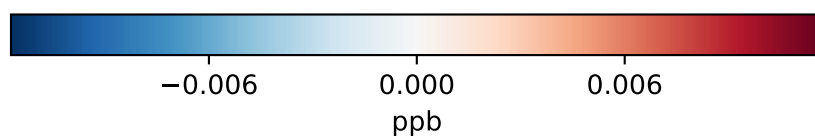
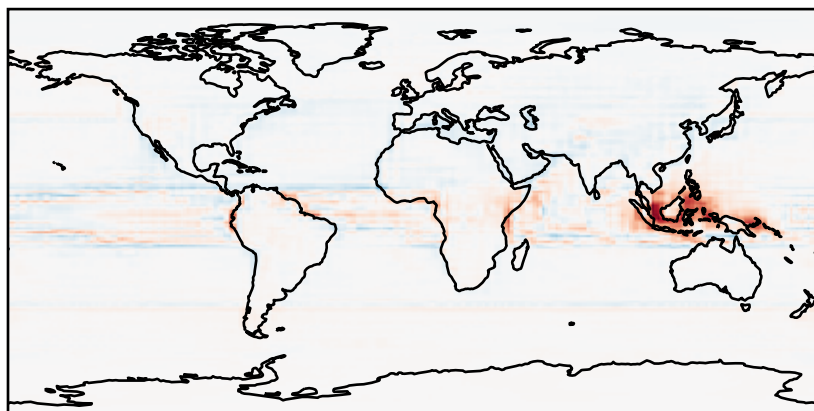
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



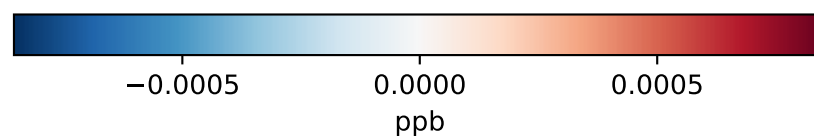
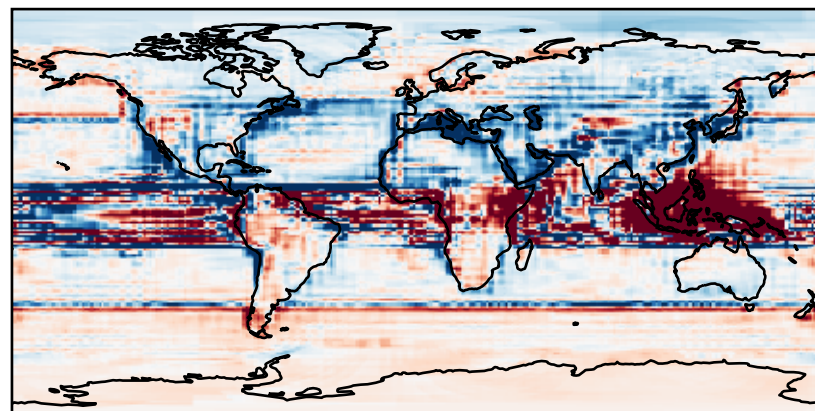
GCHP_13.0.0-beta.1 (Dev)
c48



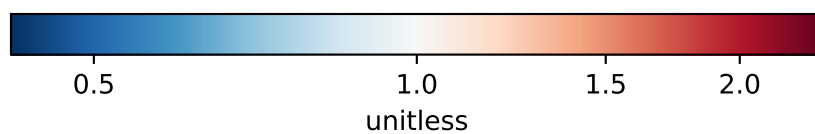
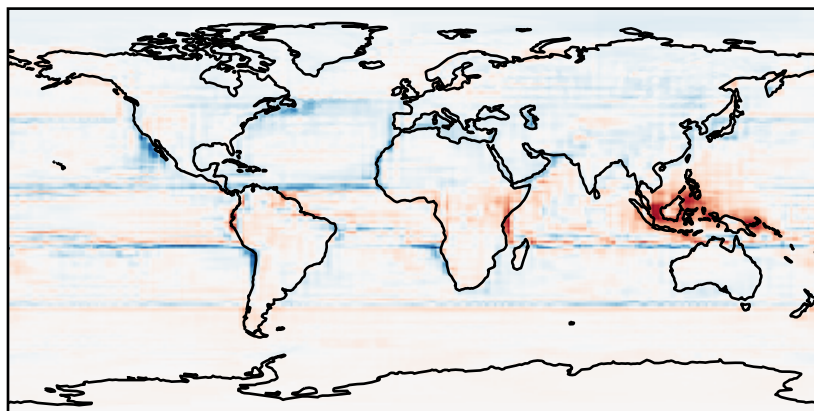
Difference (1x1.25)
Dev - Ref, Dynamic Range



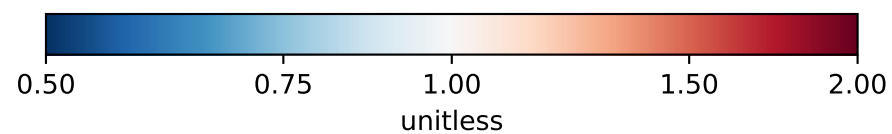
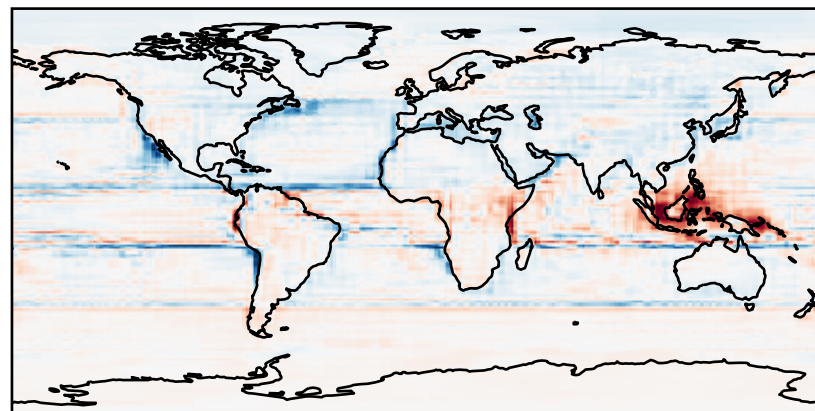
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

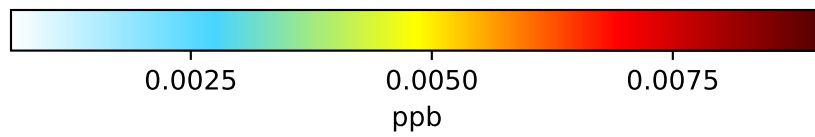
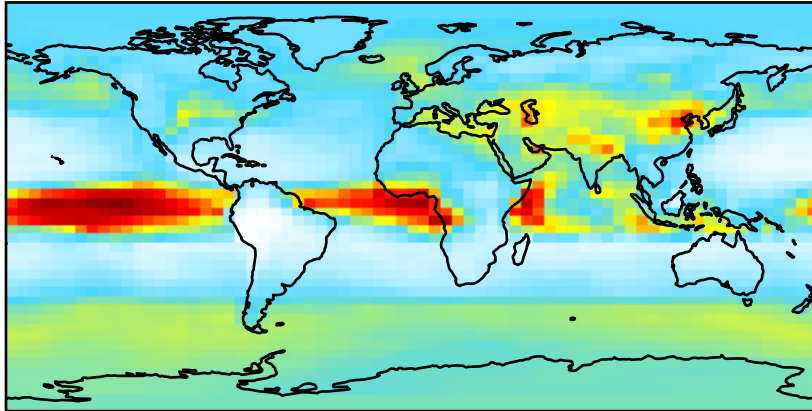


Ratio (1x1.25)
Dev/Ref, Fixed Range

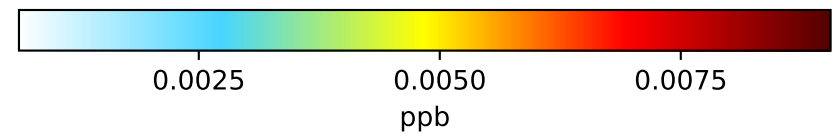
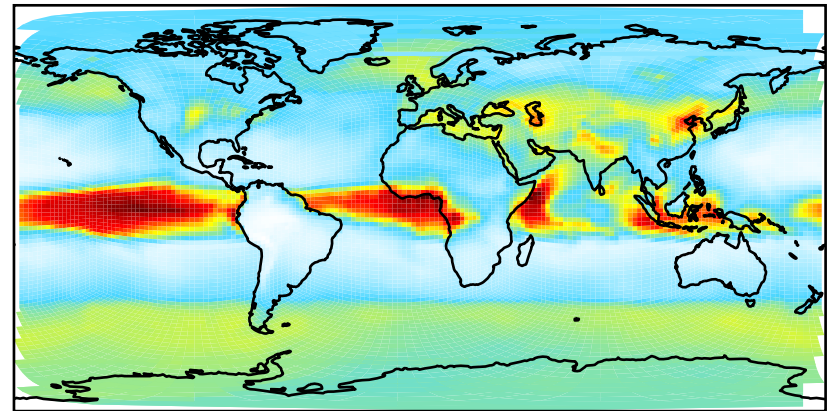


SpeciesConc_ETNO3 (Jul2019)

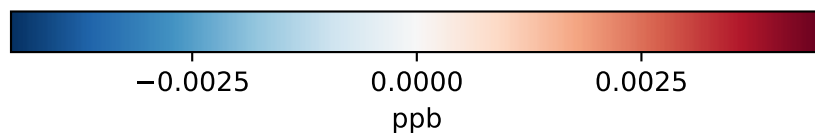
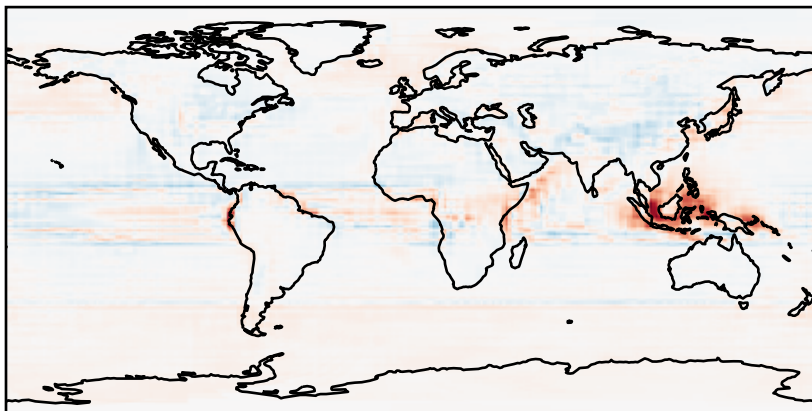
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



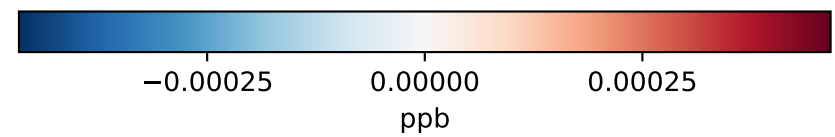
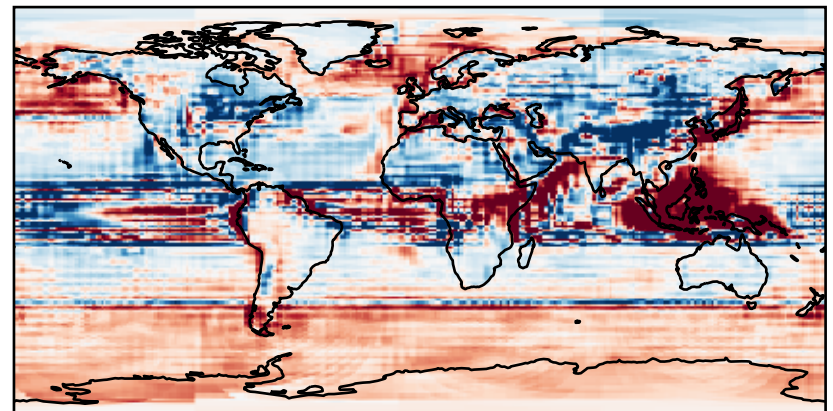
GCHP_13.0.0-beta.1 (Dev)
c48



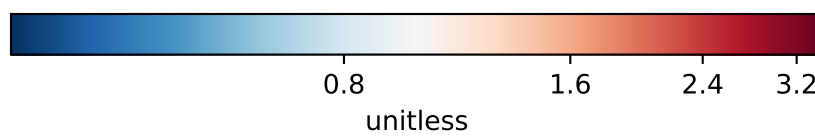
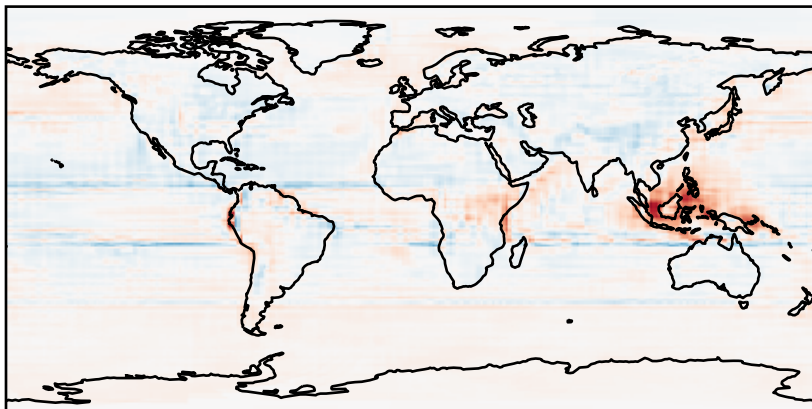
Difference (1x1.25)
Dev - Ref, Dynamic Range



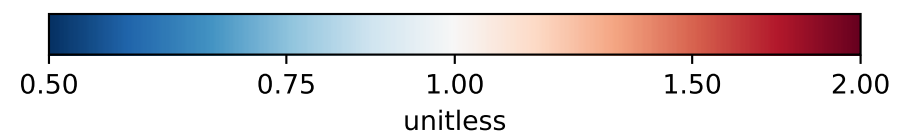
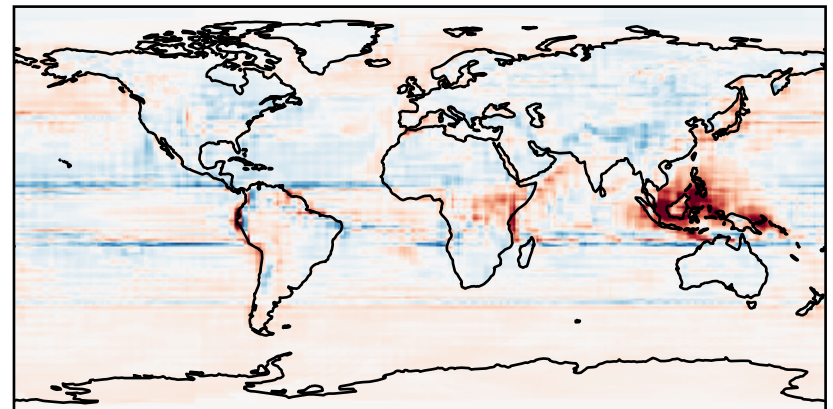
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

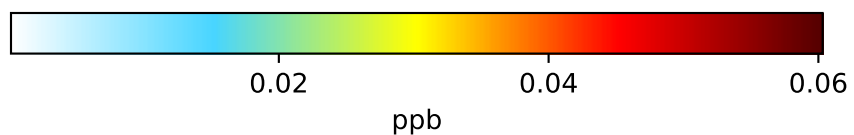
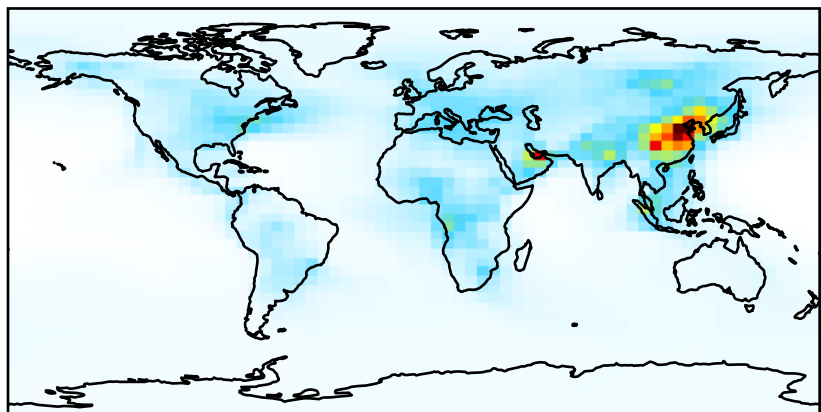


Ratio (1x1.25)
Dev/Ref, Fixed Range

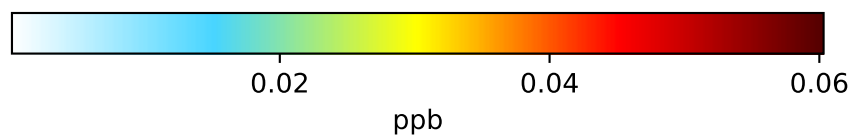
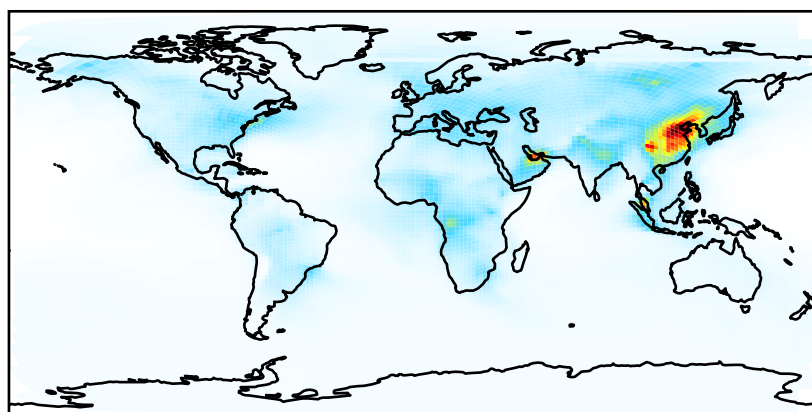


SpeciesConc_IPRNO3 (Jul2019)

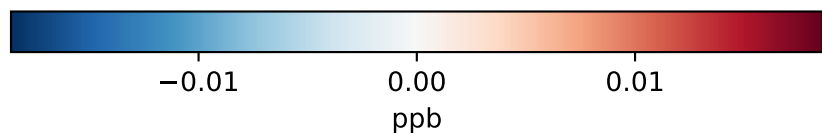
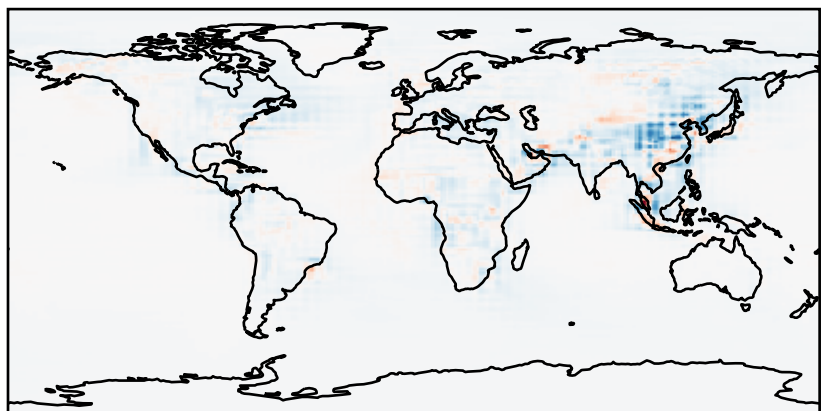
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



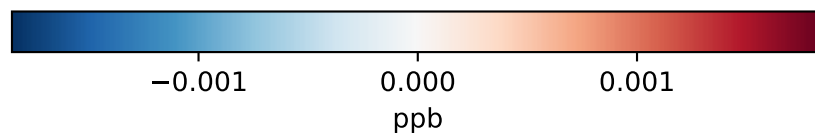
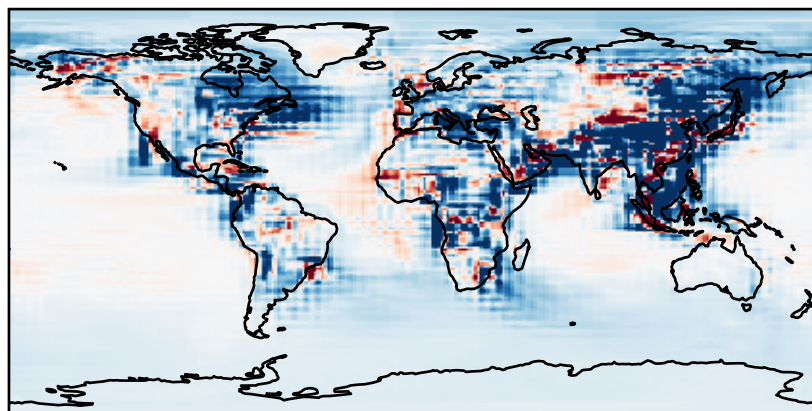
GCHP_13.0.0-beta.1 (Dev)
c48



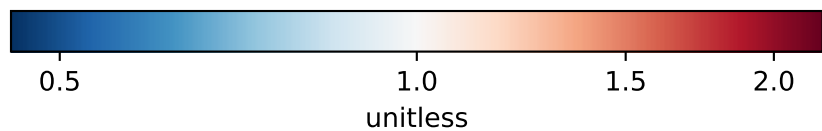
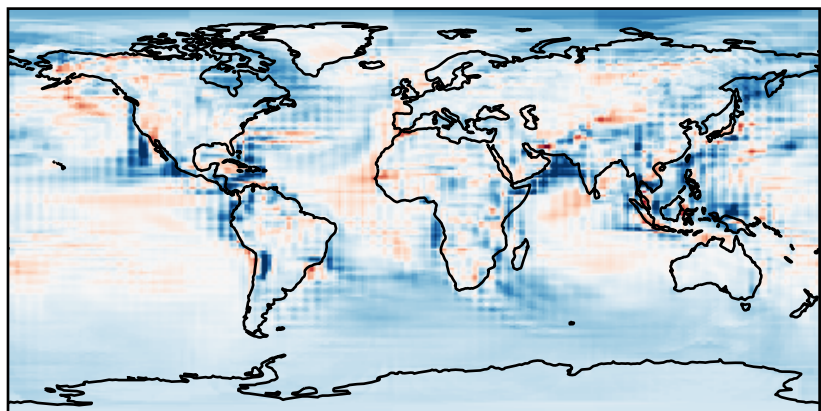
Difference (1x1.25)
Dev - Ref, Dynamic Range



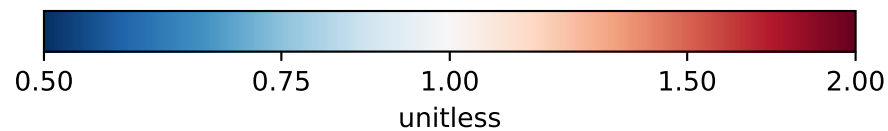
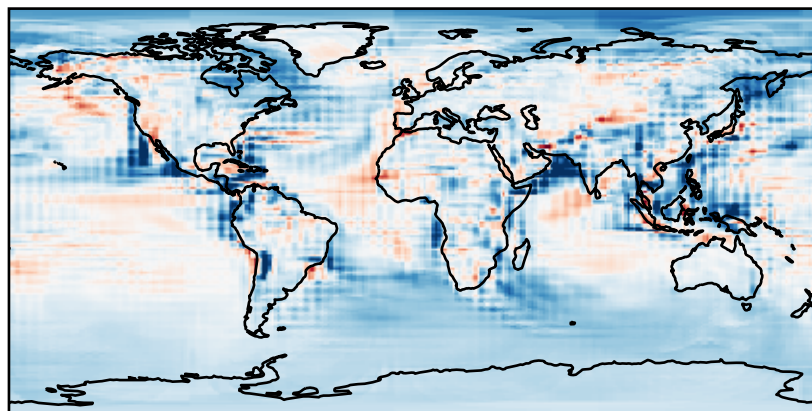
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range

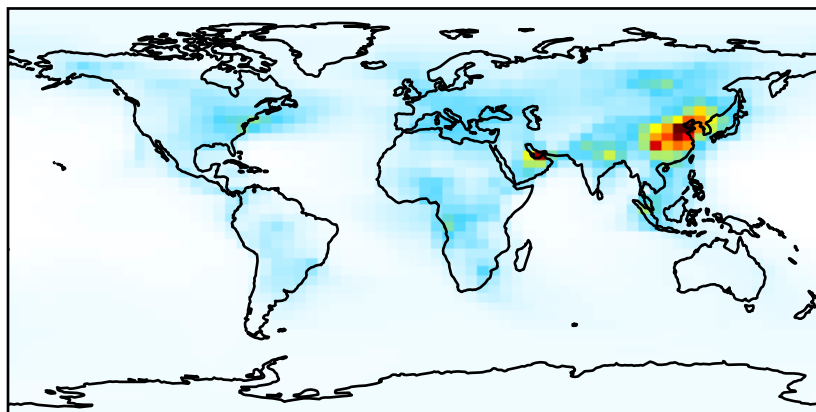


Ratio (1x1.25)
Dev/Ref, Fixed Range

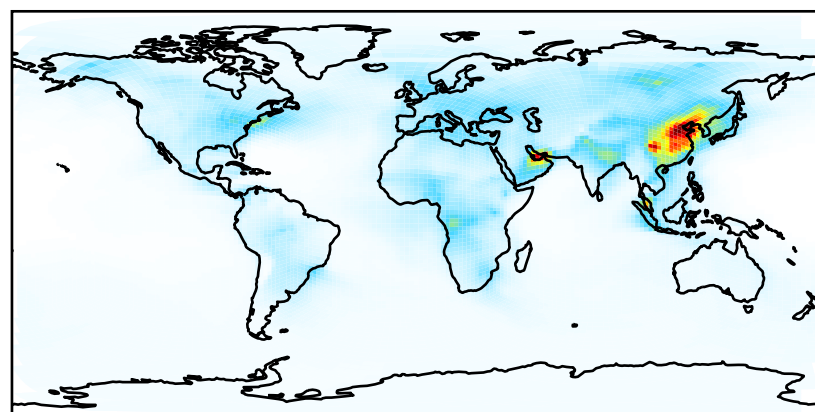


SpeciesConc_NPRNO3 (Jul2019)

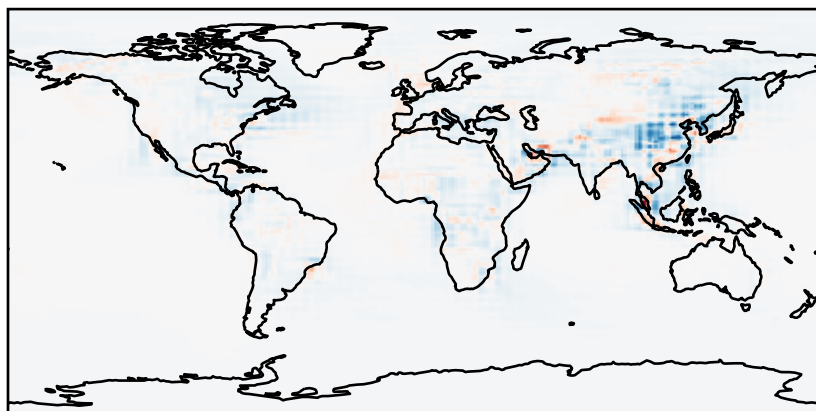
GCC_13.0.0-beta.1 (Ref)
4.0x5.0



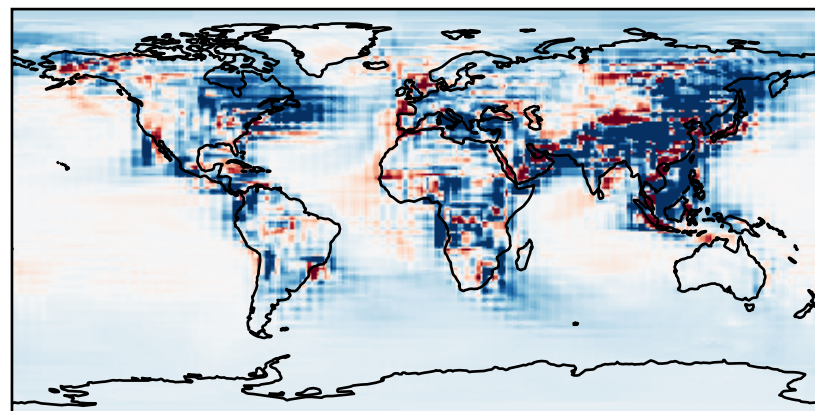
GCHP_13.0.0-beta.1 (Dev)
c48



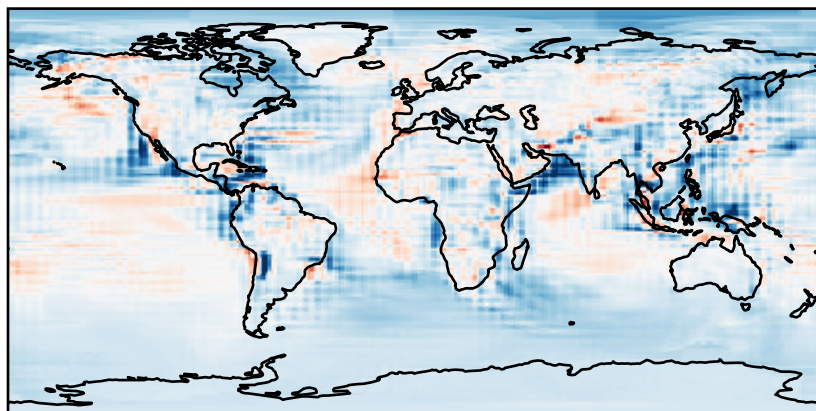
Difference (1x1.25)
Dev - Ref, Dynamic Range



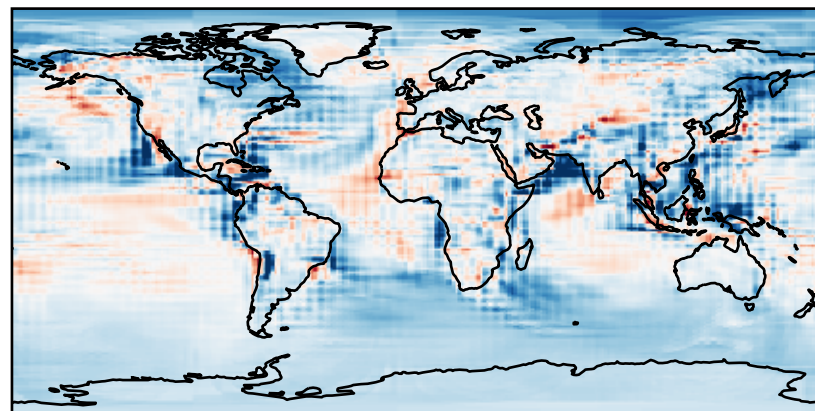
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



Ratio (1x1.25)
Dev/Ref, Dynamic Range



Ratio (1x1.25)
Dev/Ref, Fixed Range



0.6 1.2 1.8 2.4
unitless

0.50 0.75 1.00 1.50 2.00
unitless