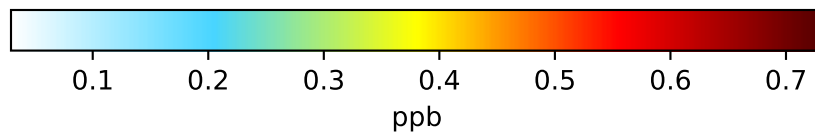
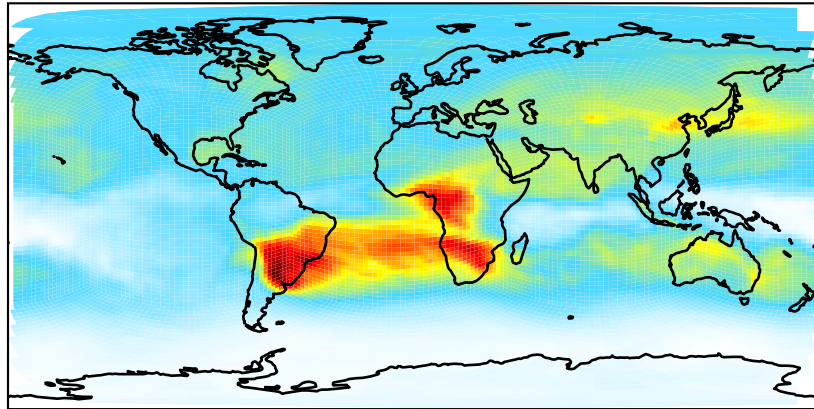
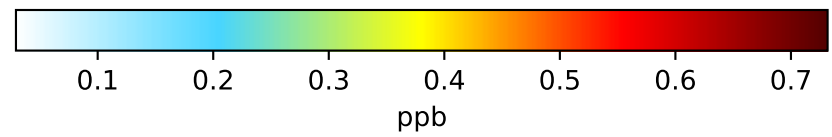
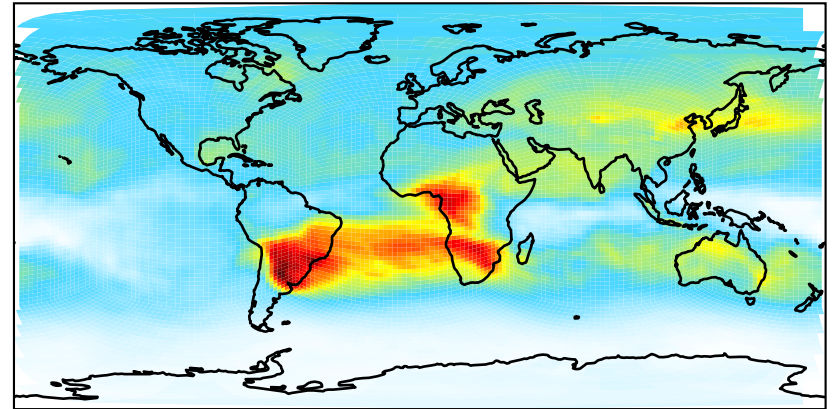


# SpeciesConc\_NOy (Jan2019)

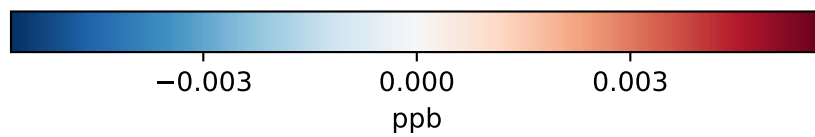
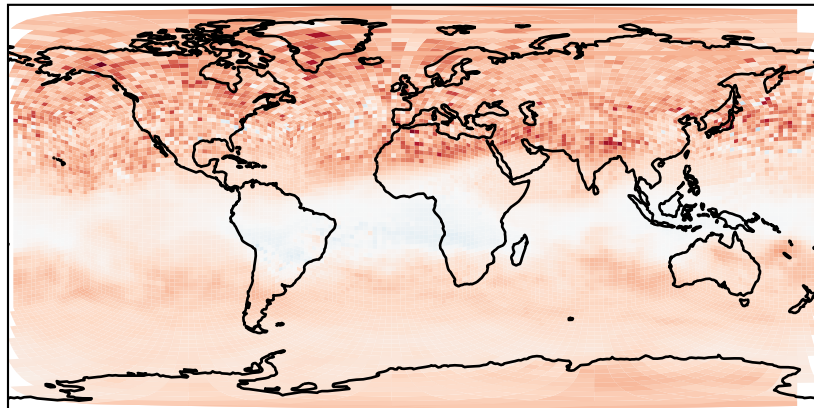
GCHP\_13.0.0-beta.1 (Ref)  
c48



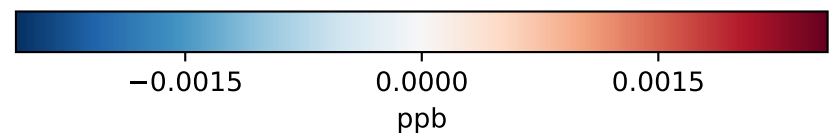
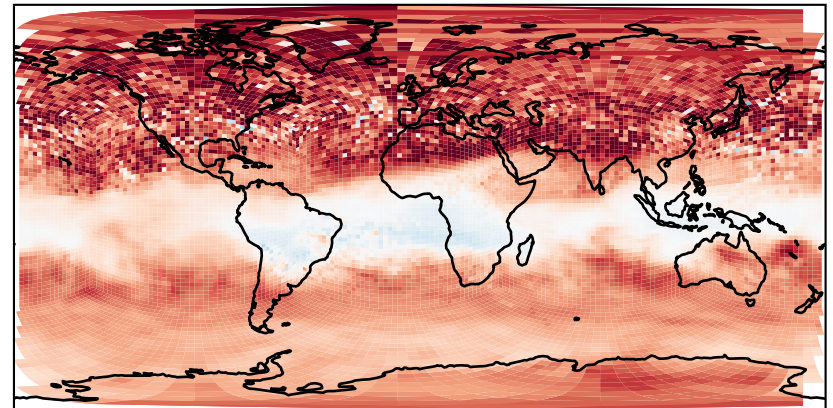
GCHP\_13.0.0-rc.0 (Dev)  
c48



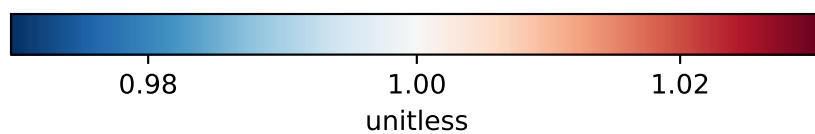
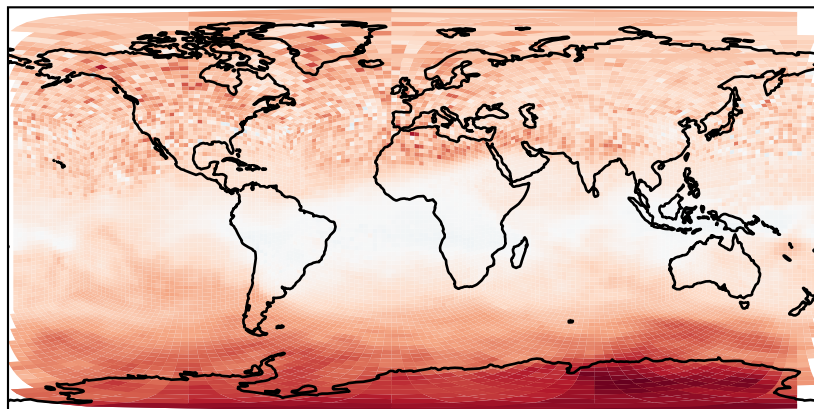
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

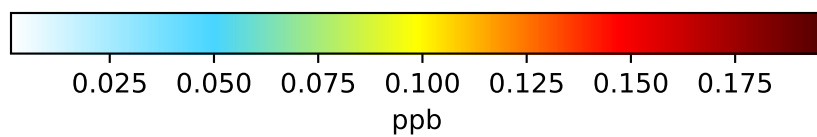
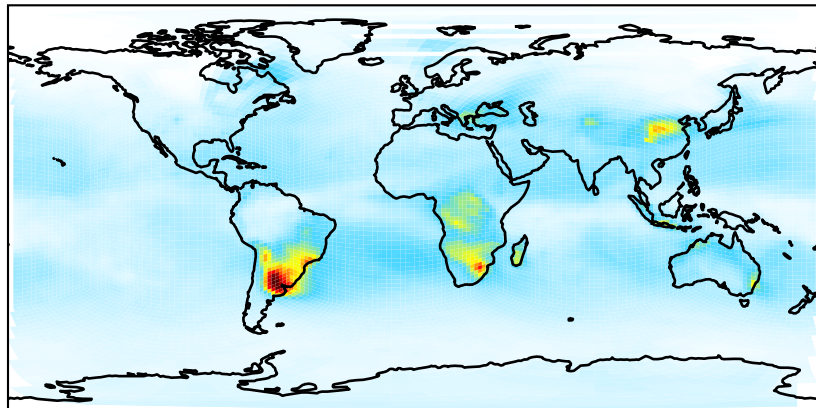


Ratio  
Dev/Ref, Fixed Range

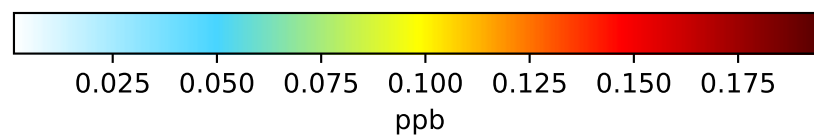
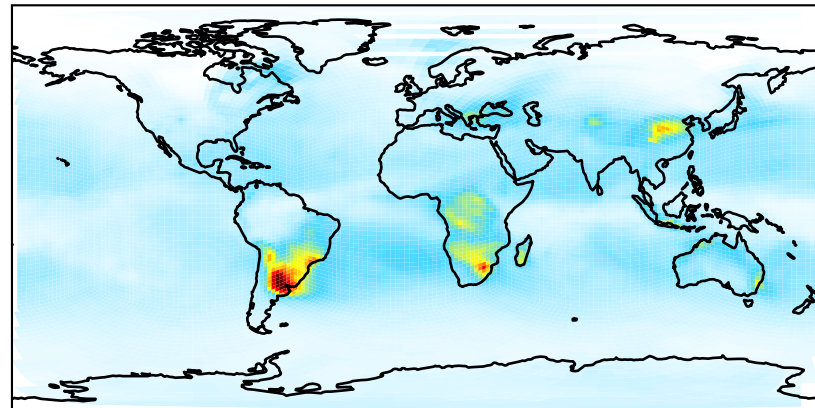


# SpeciesConc\_NOx (Jan2019)

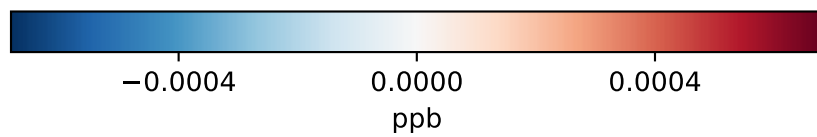
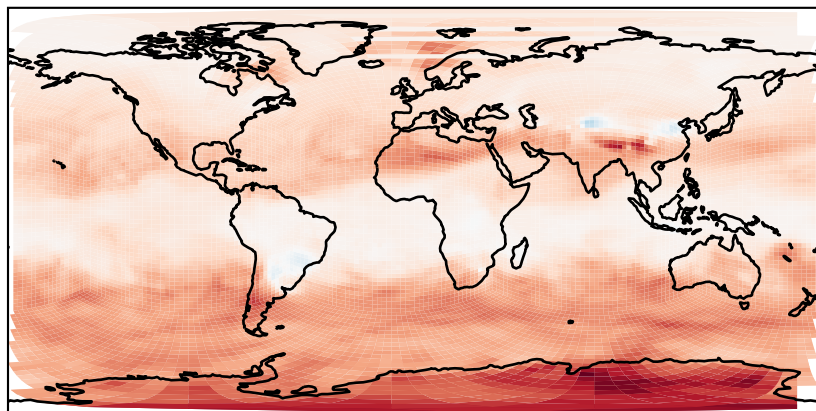
GCHP\_13.0.0-beta.1 (Ref)  
c48



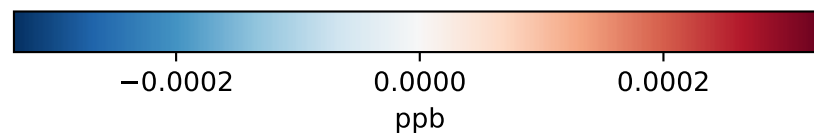
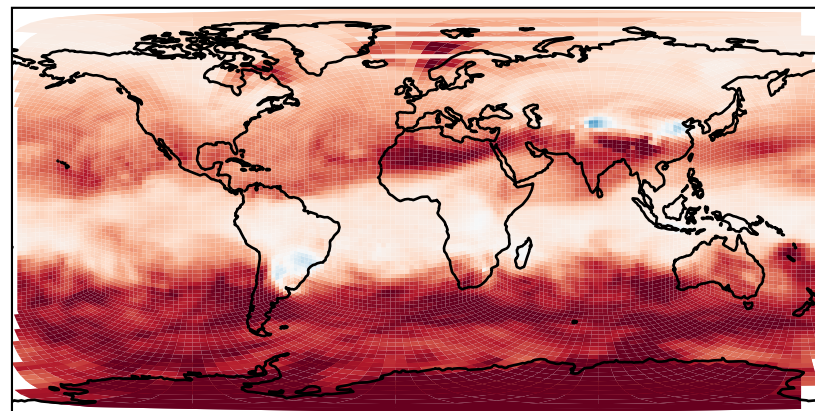
GCHP\_13.0.0-rc.0 (Dev)  
c48



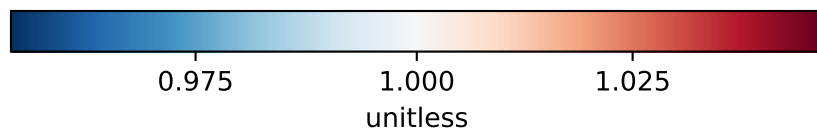
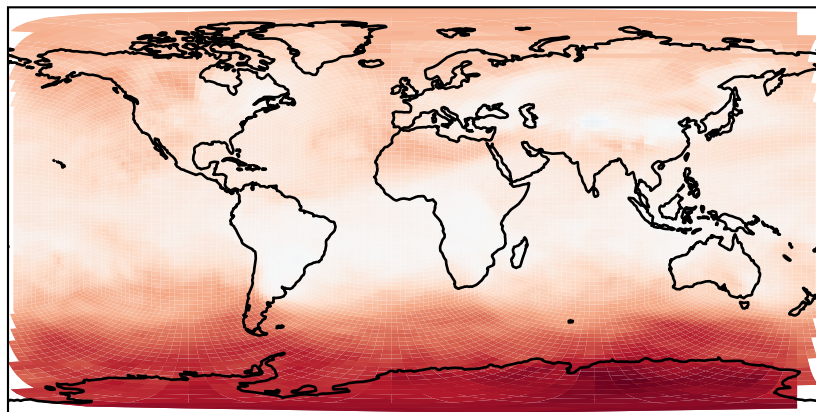
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

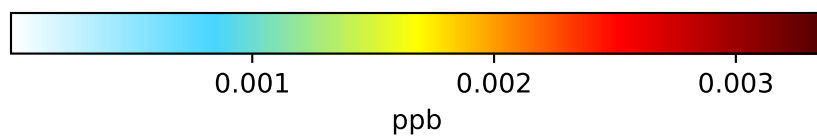
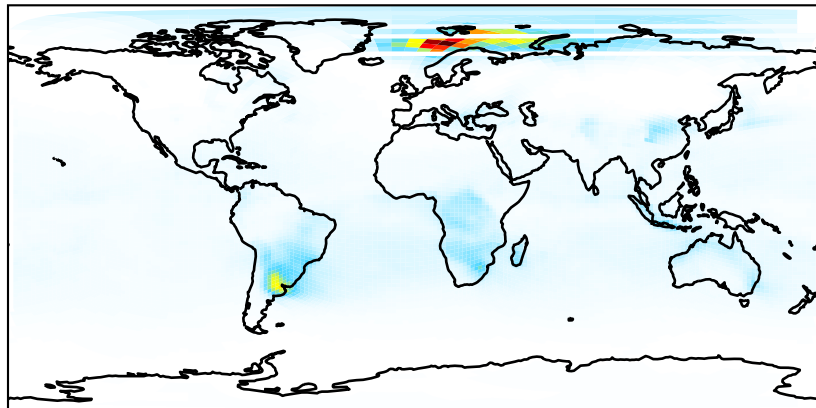


Ratio  
Dev/Ref, Fixed Range

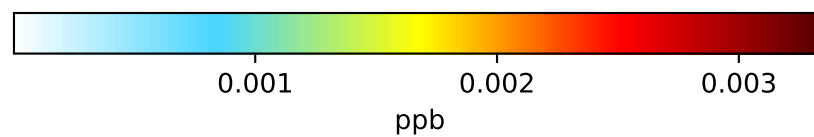
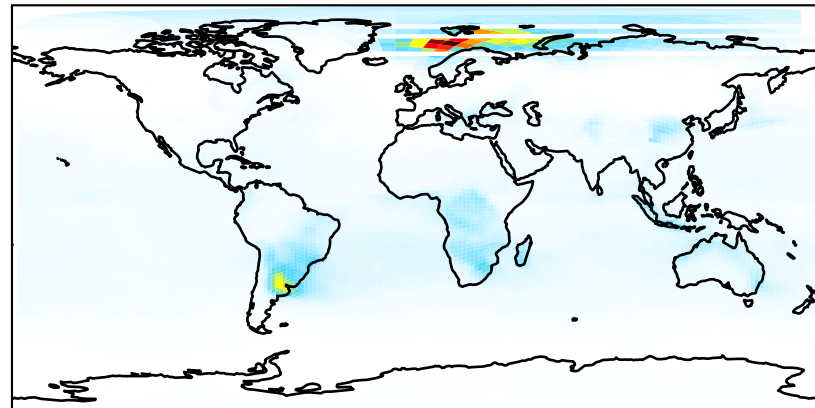


# SpeciesConc\_HNO2 (Jan2019)

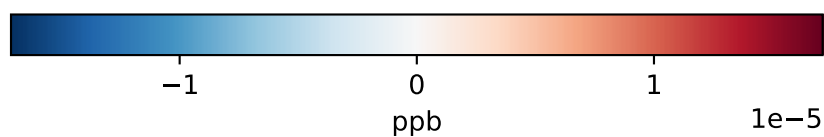
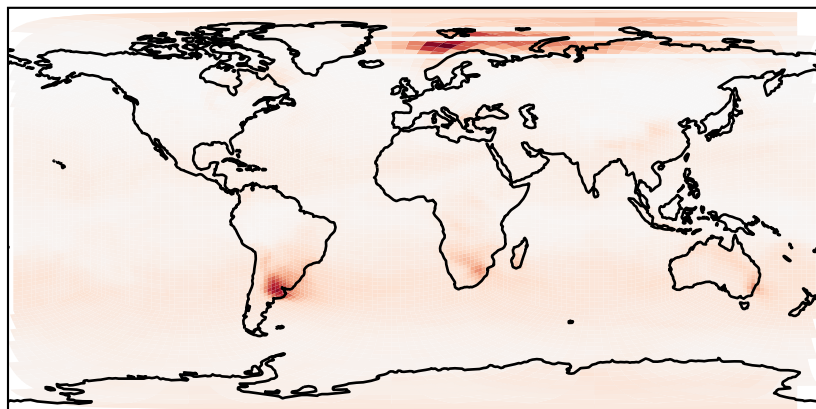
GCHP\_13.0.0-beta.1 (Ref)  
c48



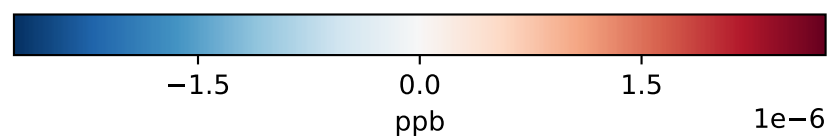
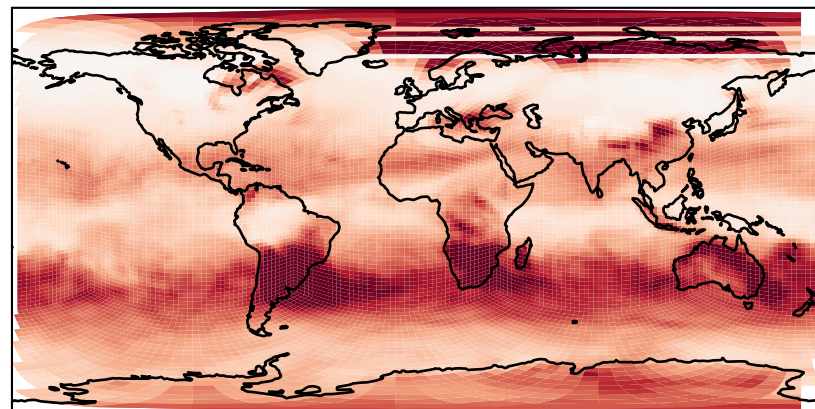
GCHP\_13.0.0-rc.0 (Dev)  
c48



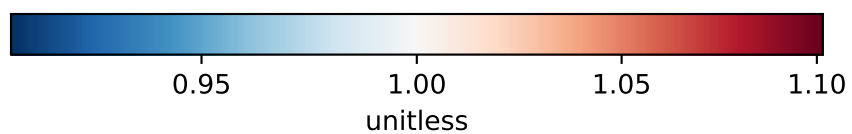
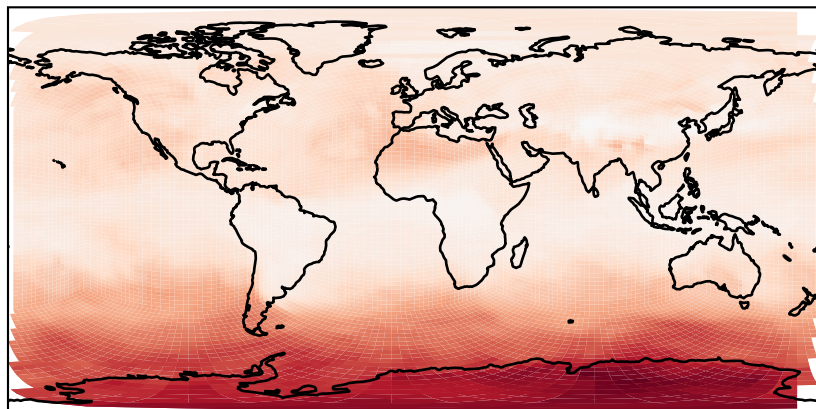
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

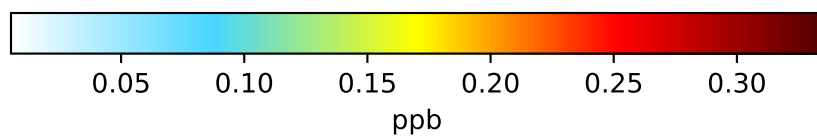
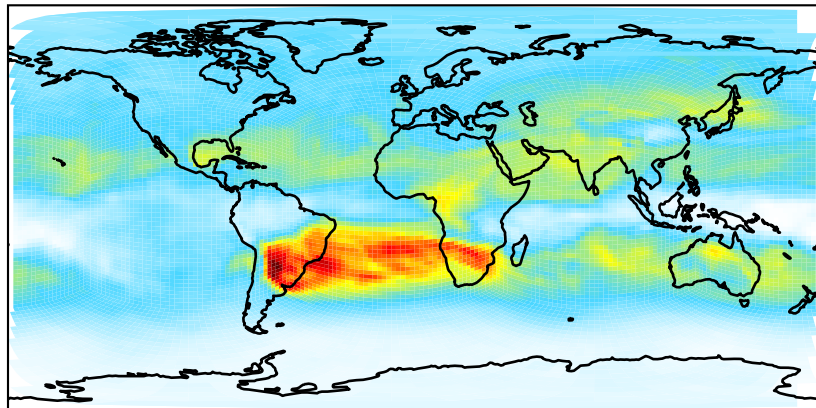


Ratio  
Dev/Ref, Fixed Range

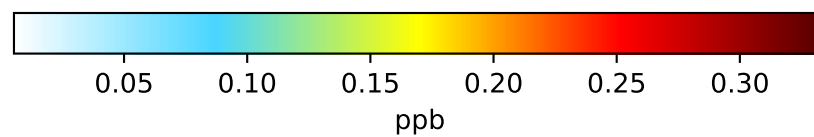
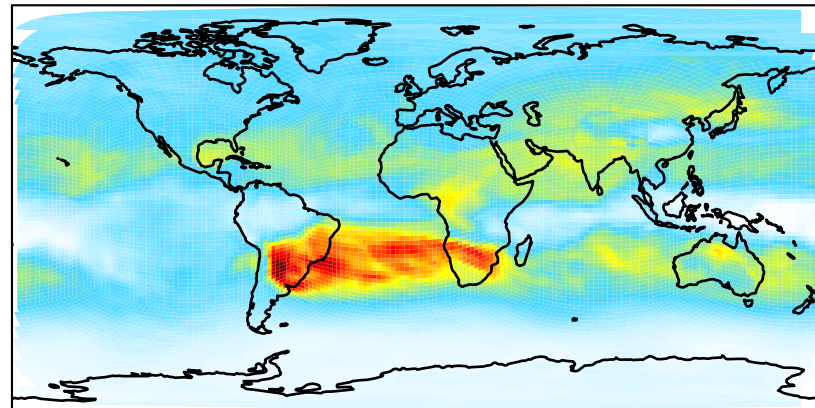


# SpeciesConc\_HNO3 (Jan2019)

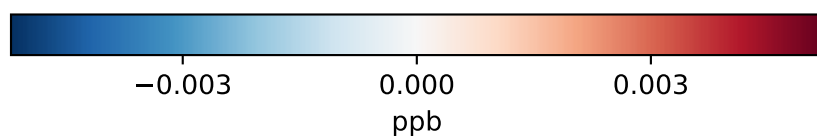
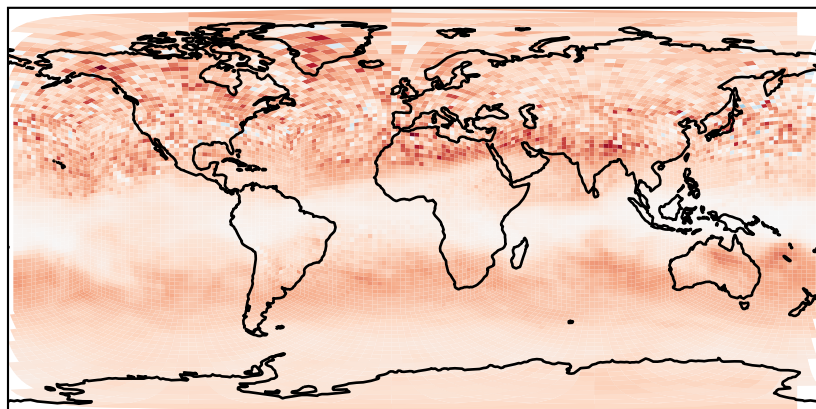
GCHP\_13.0.0-beta.1 (Ref)  
c48



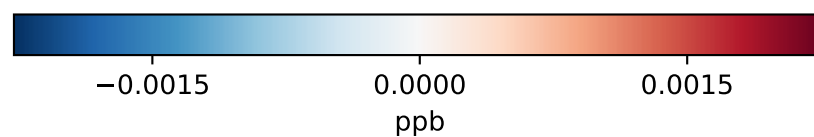
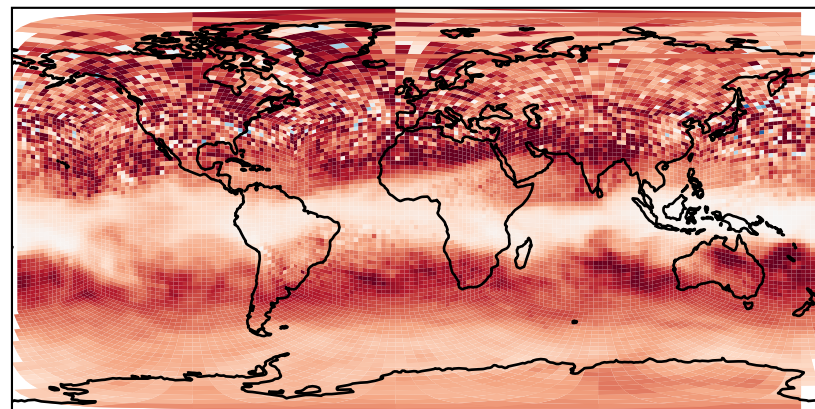
GCHP\_13.0.0-rc.0 (Dev)  
c48



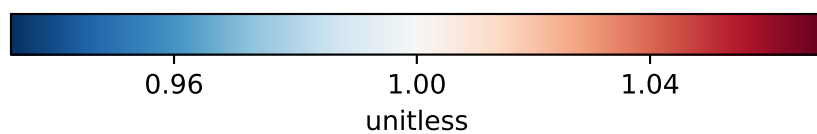
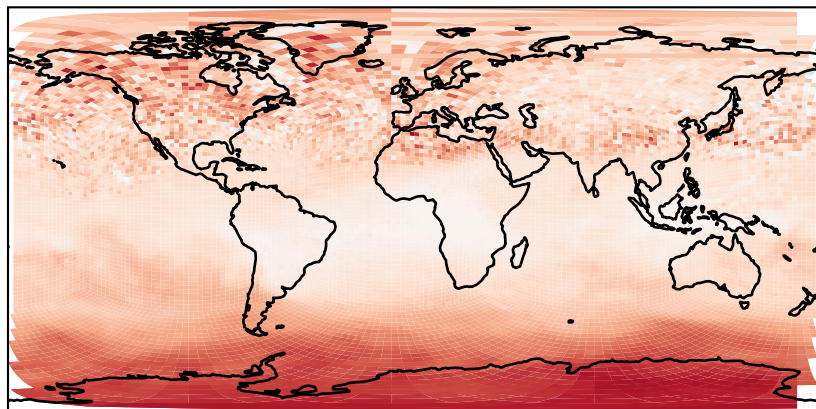
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

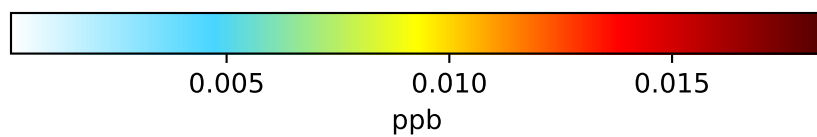
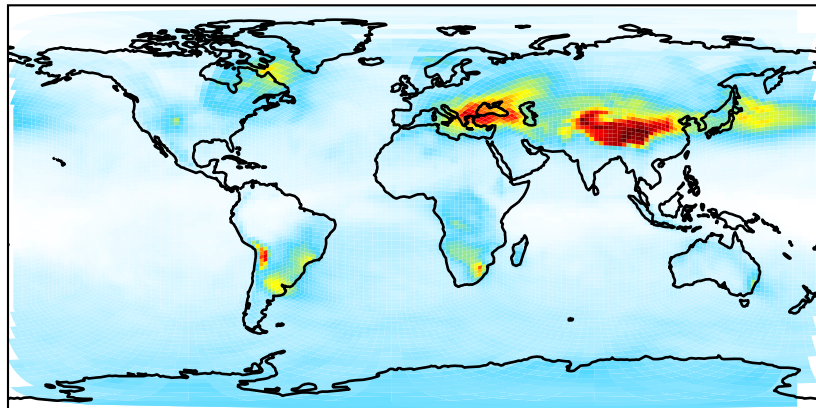


Ratio  
Dev/Ref, Fixed Range

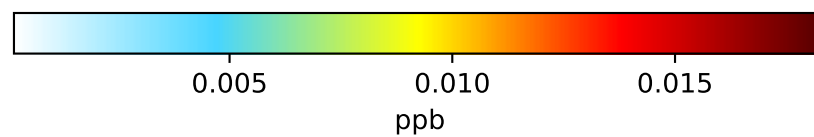
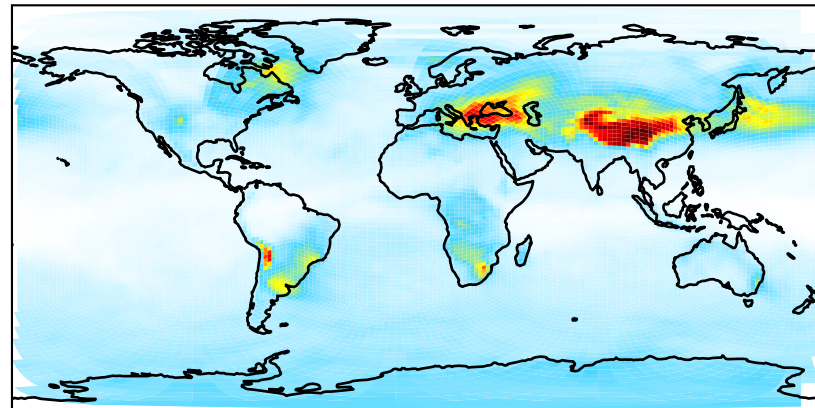


# SpeciesConc\_HNO4 (Jan2019)

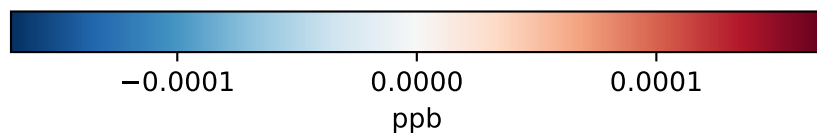
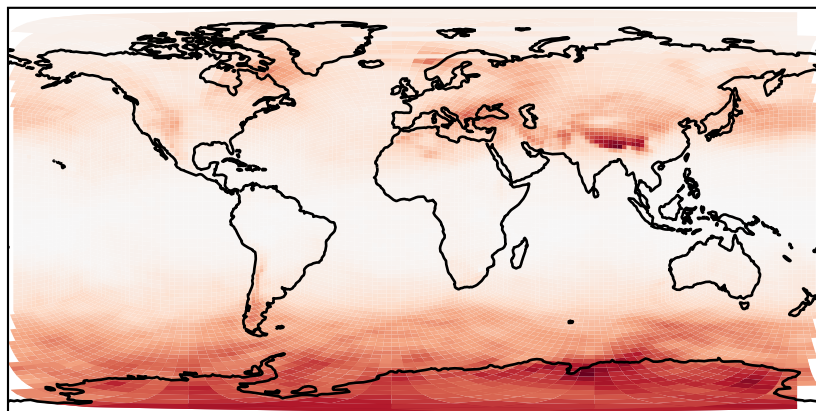
GCHP\_13.0.0-beta.1 (Ref)  
c48



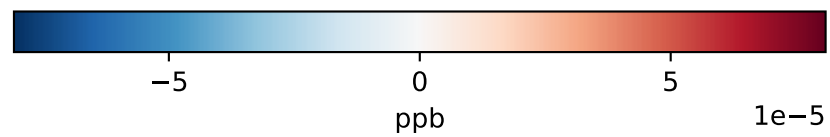
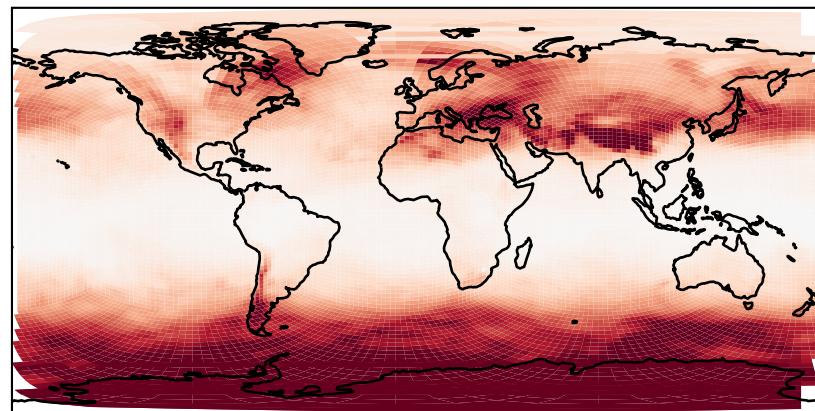
GCHP\_13.0.0-rc.0 (Dev)  
c48



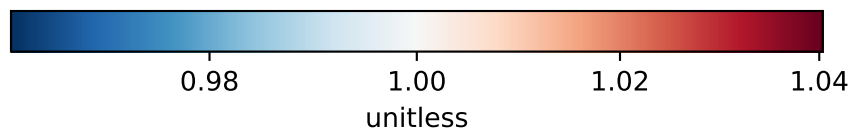
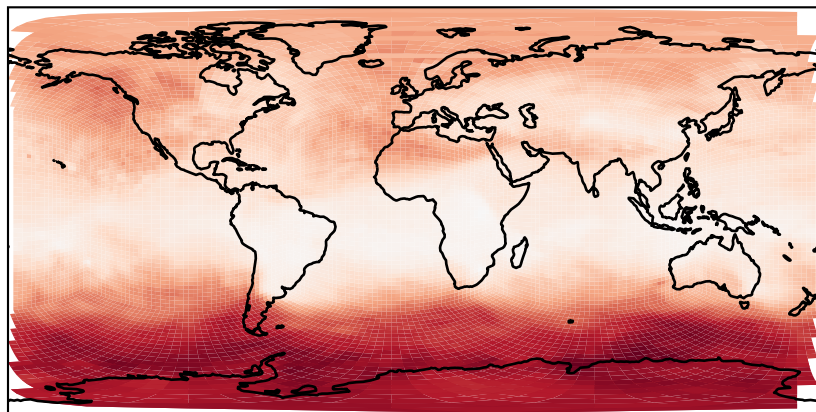
Difference  
Dev - Ref, Dynamic Range



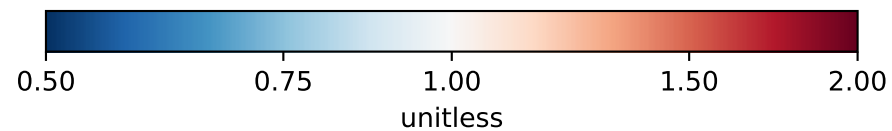
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

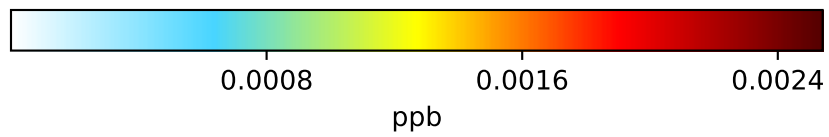
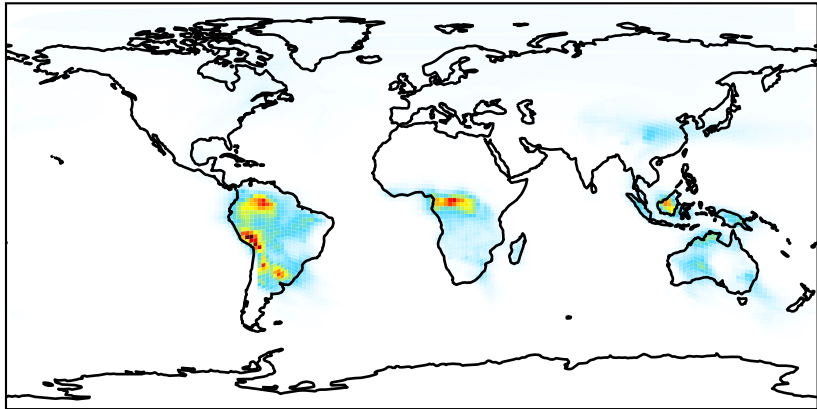


Ratio  
Dev/Ref, Fixed Range

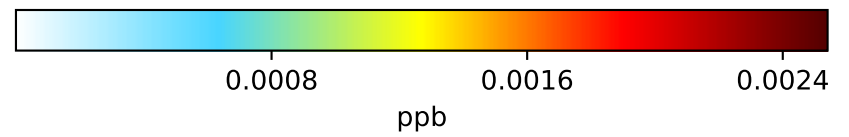
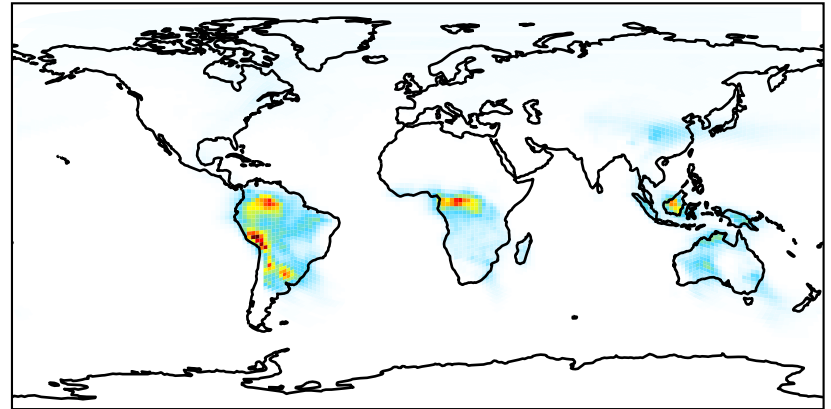


# SpeciesConc\_MPAN (Jan2019)

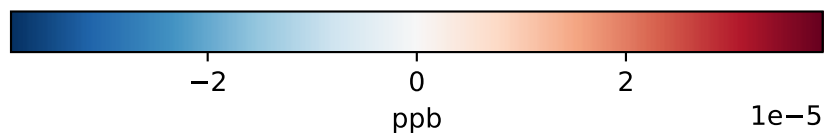
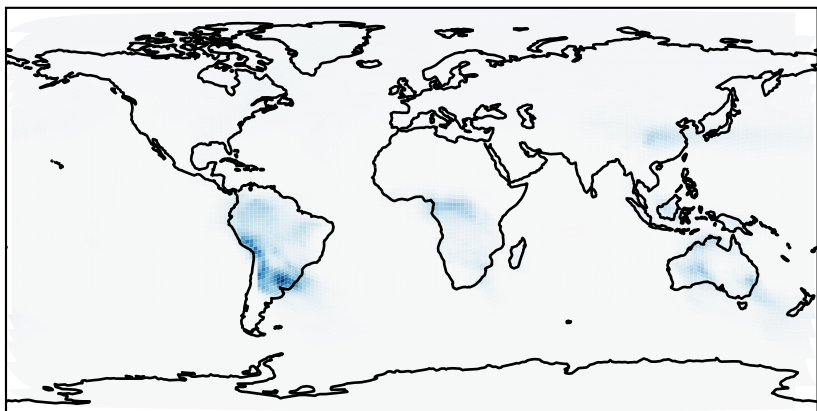
GCHP\_13.0.0-beta.1 (Ref)  
c48



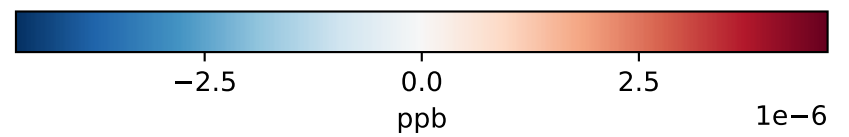
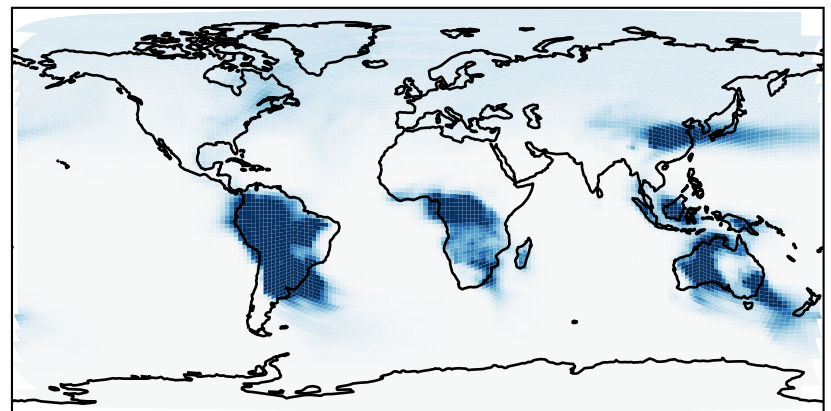
GCHP\_13.0.0-rc.0 (Dev)  
c48



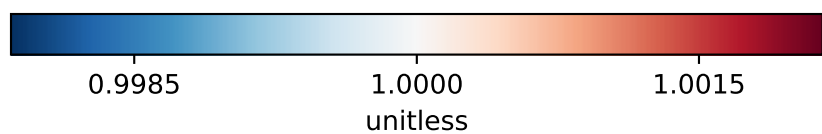
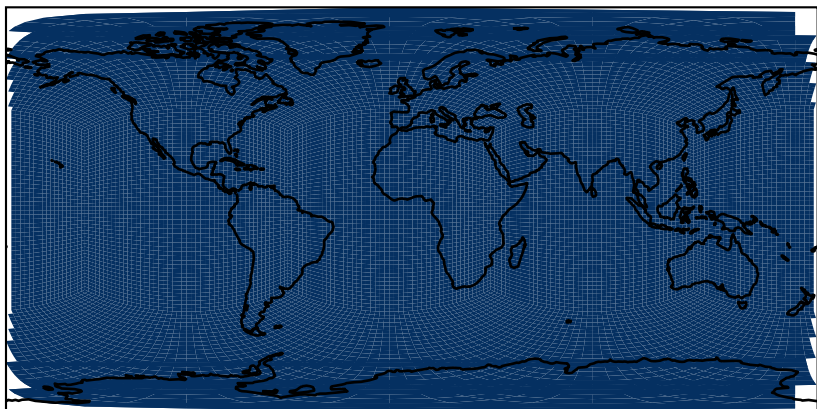
Difference  
Dev - Ref, Dynamic Range



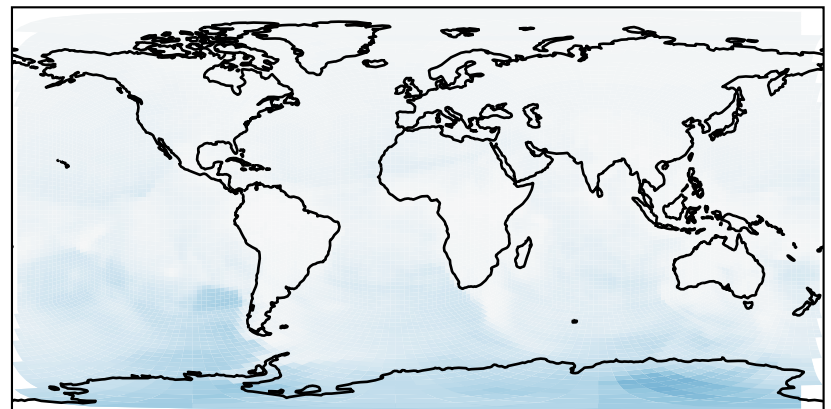
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

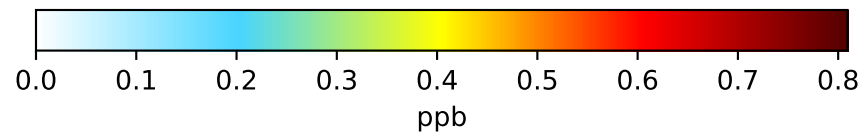
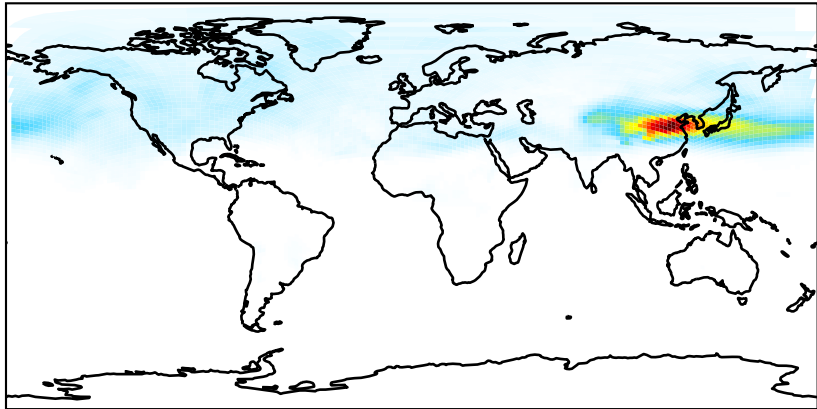


Ratio  
Dev/Ref, Fixed Range

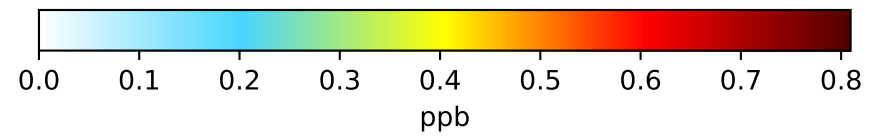
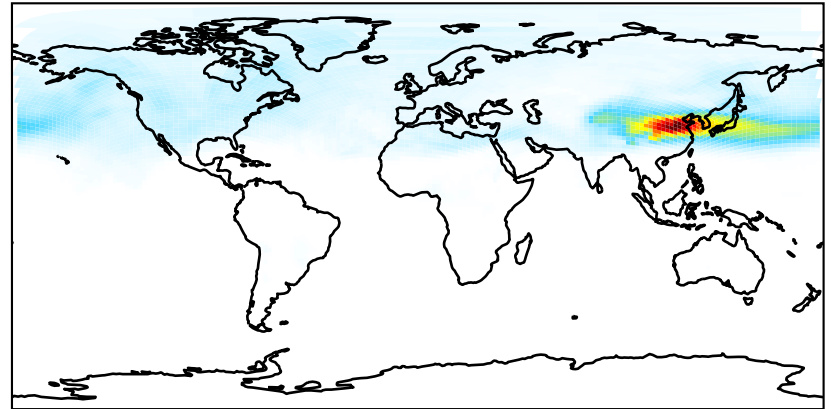


# SpeciesConc\_NIT (Jan2019)

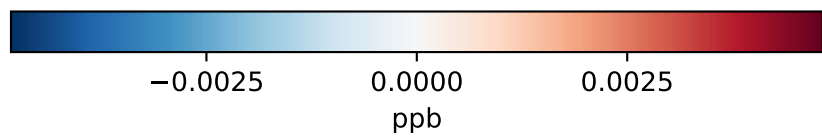
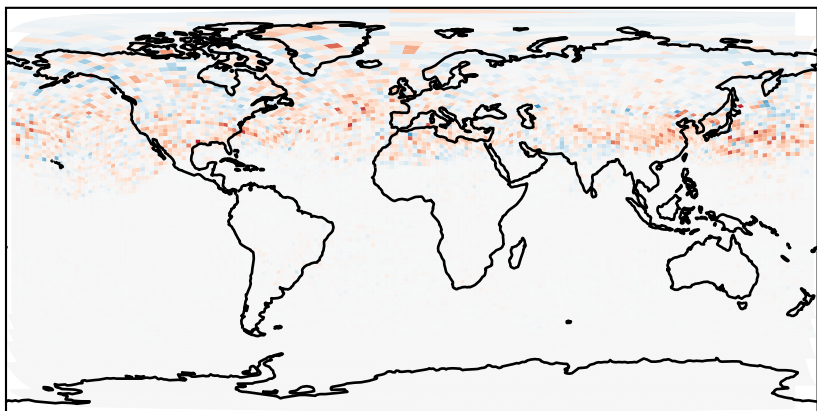
GCHP\_13.0.0-beta.1 (Ref)  
c48



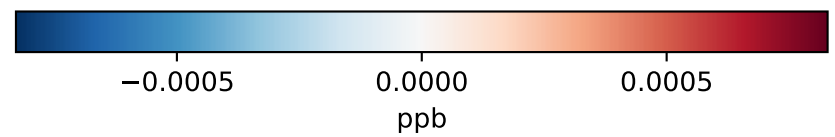
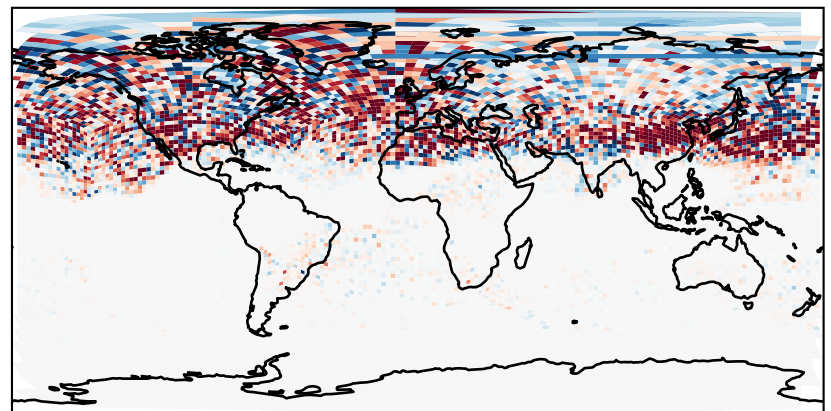
GCHP\_13.0.0-rc.0 (Dev)  
c48



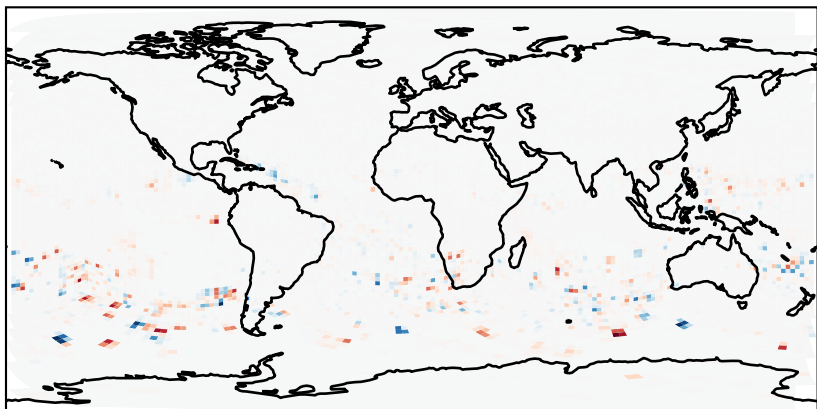
Difference  
Dev - Ref, Dynamic Range



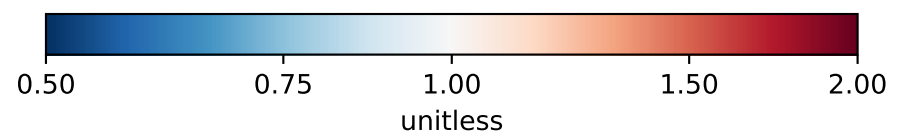
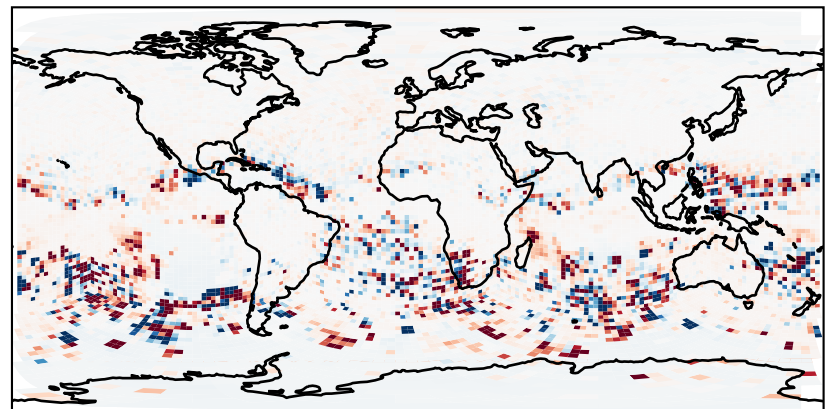
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

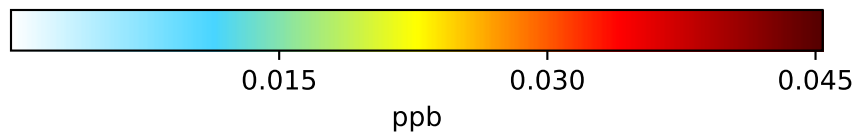
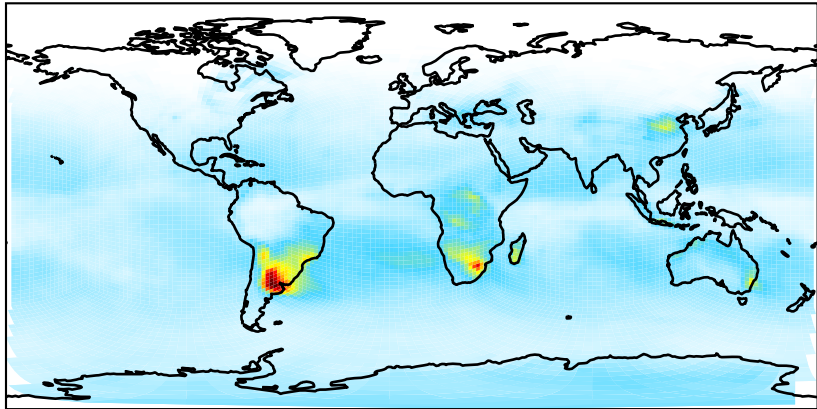


Ratio  
Dev/Ref, Fixed Range

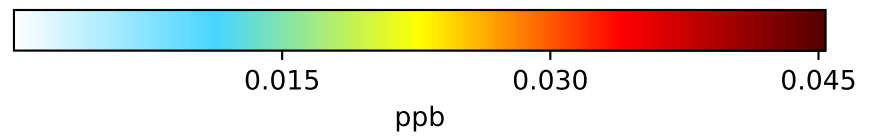
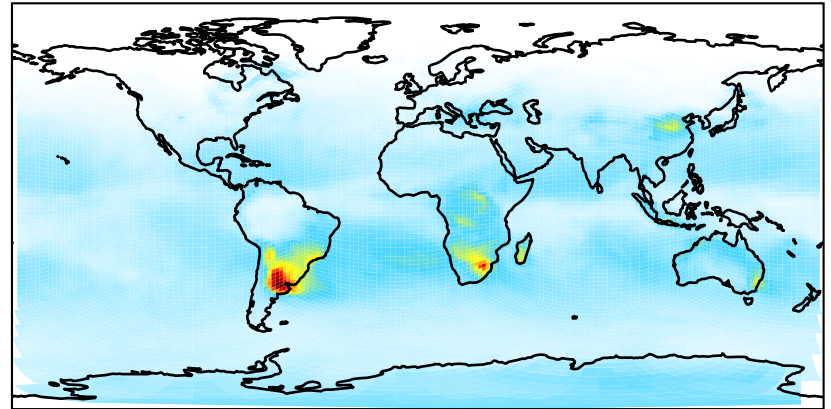


# SpeciesConc\_NO (Jan2019)

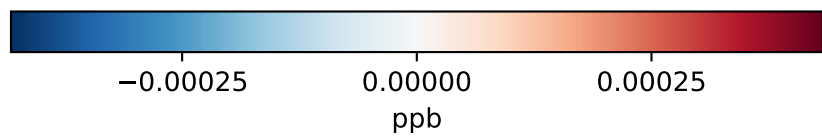
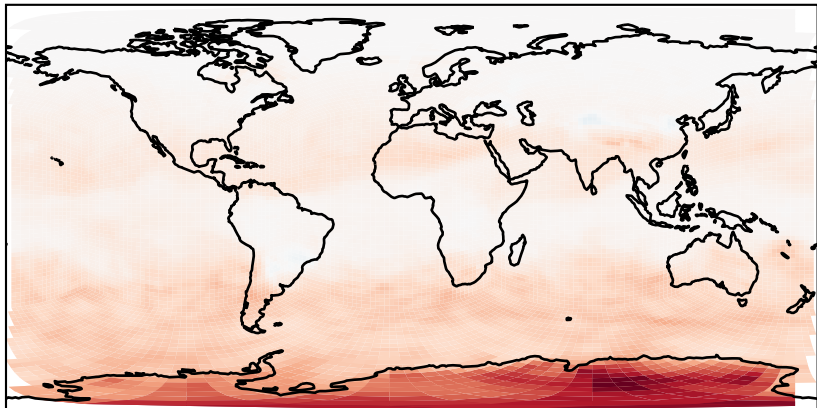
GCHP\_13.0.0-beta.1 (Ref)  
c48



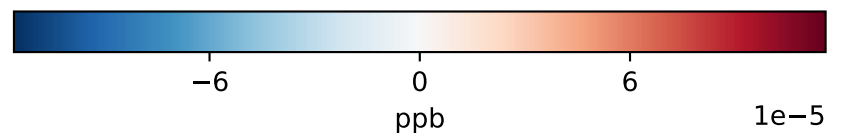
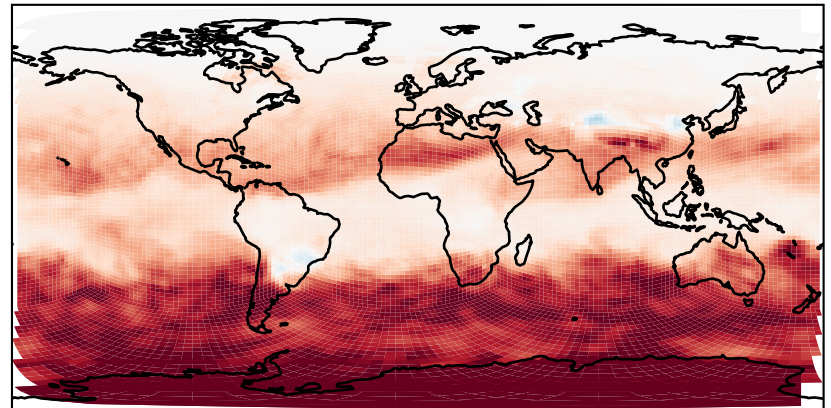
GCHP\_13.0.0-rc.0 (Dev)  
c48



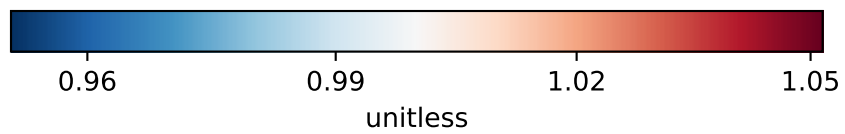
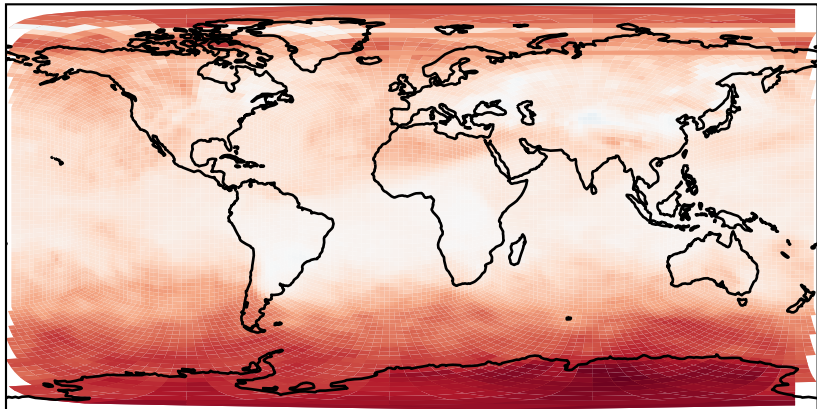
Difference  
Dev - Ref, Dynamic Range



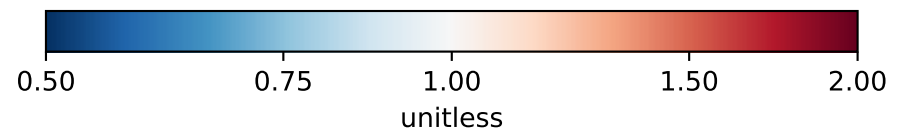
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



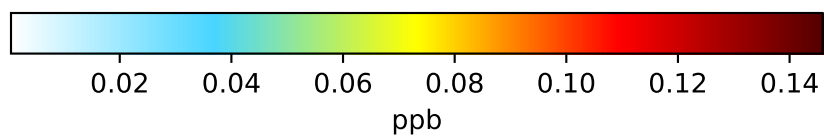
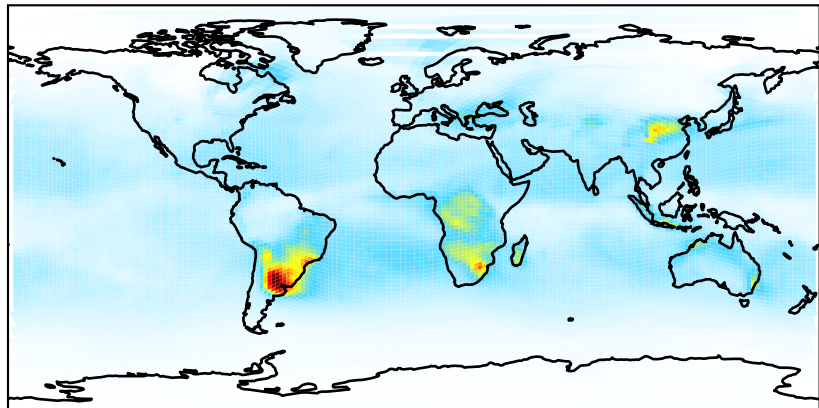
Ratio  
Dev/Ref, Fixed Range



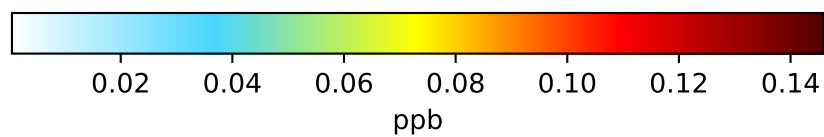
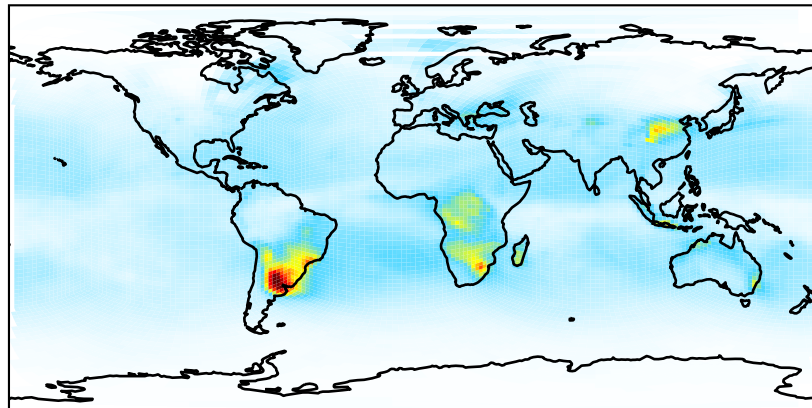


# SpeciesConc\_NO2 (Jan2019)

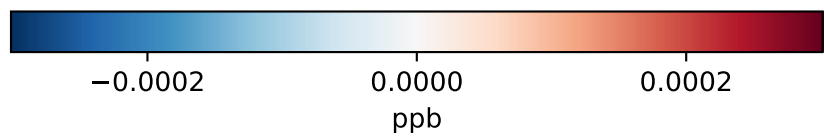
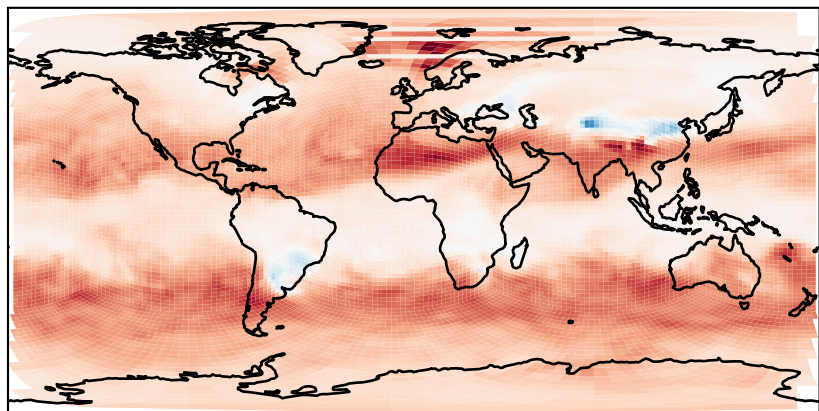
GCHP\_13.0.0-beta.1 (Ref)  
c48



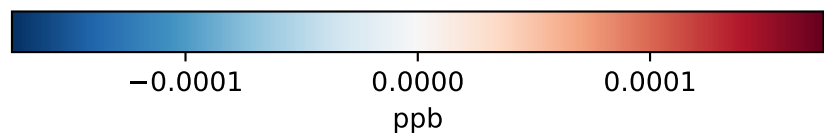
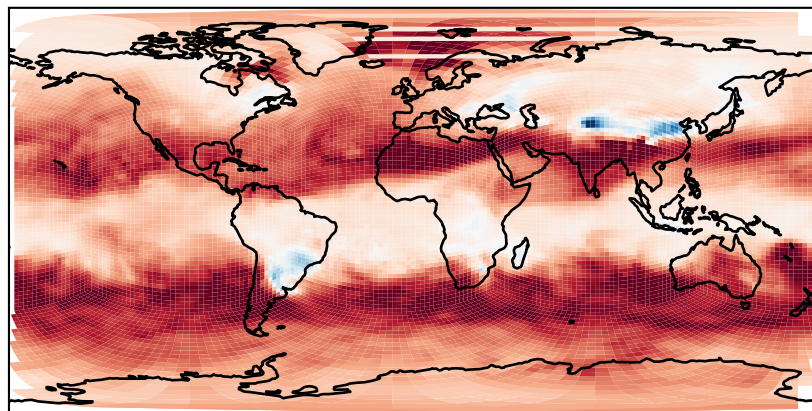
GCHP\_13.0.0-rc.0 (Dev)  
c48



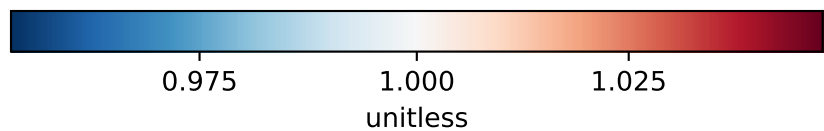
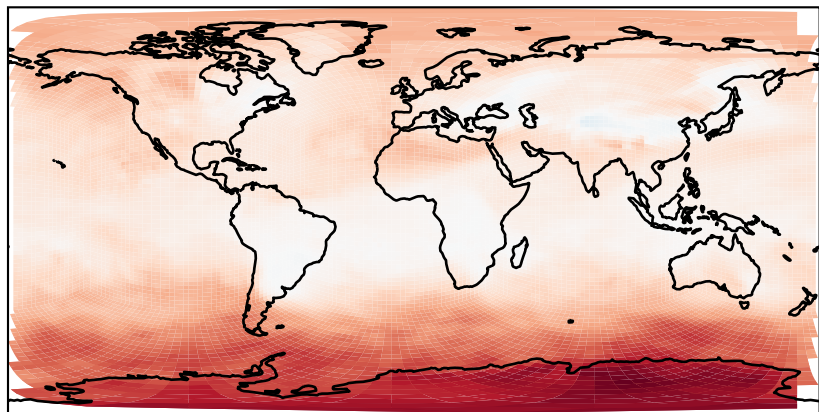
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

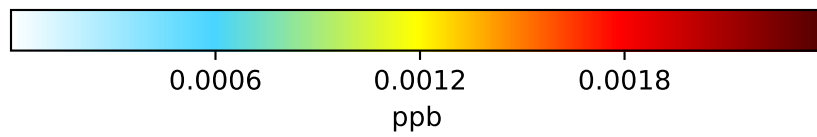
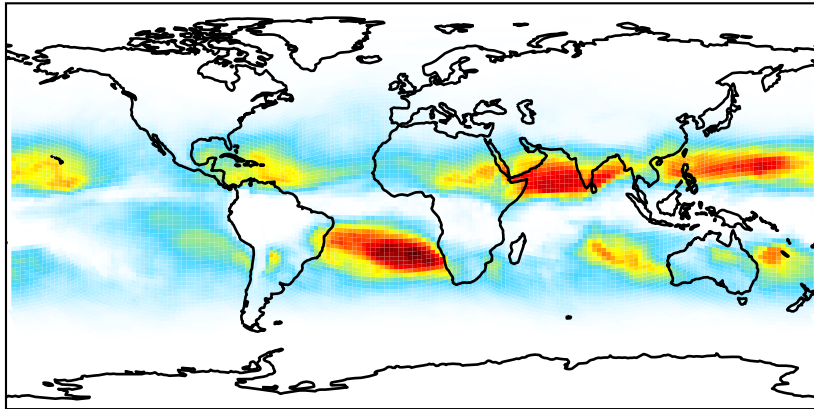


Ratio  
Dev/Ref, Fixed Range

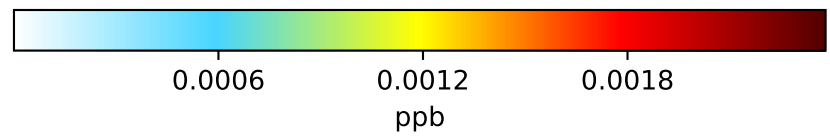
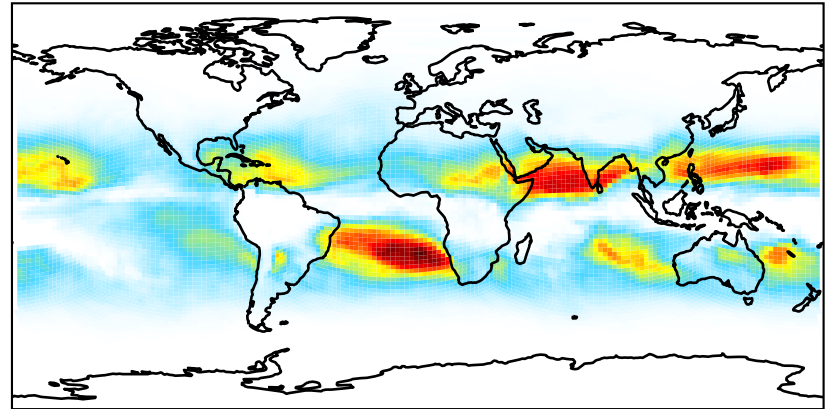


# SpeciesConc\_NO3 (Jan2019)

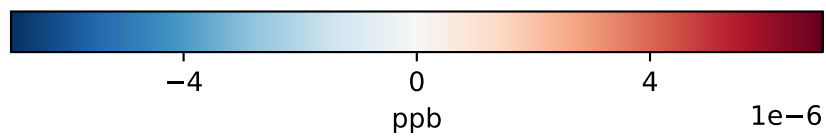
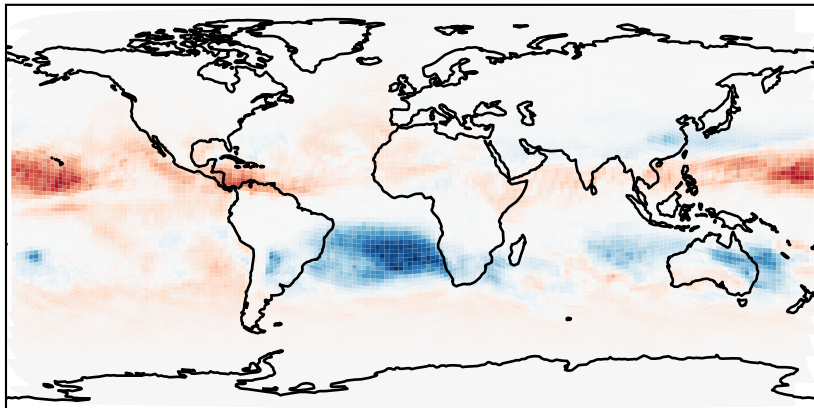
GCHP\_13.0.0-beta.1 (Ref)  
c48



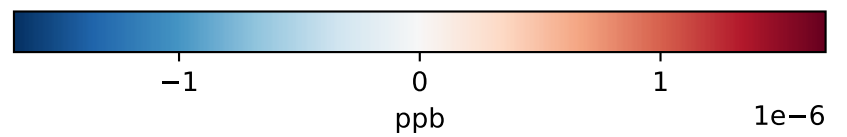
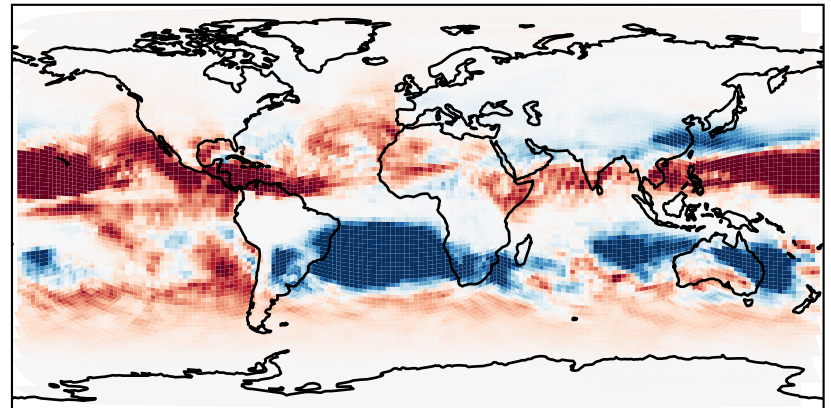
GCHP\_13.0.0-rc.0 (Dev)  
c48



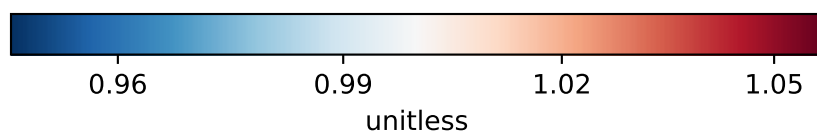
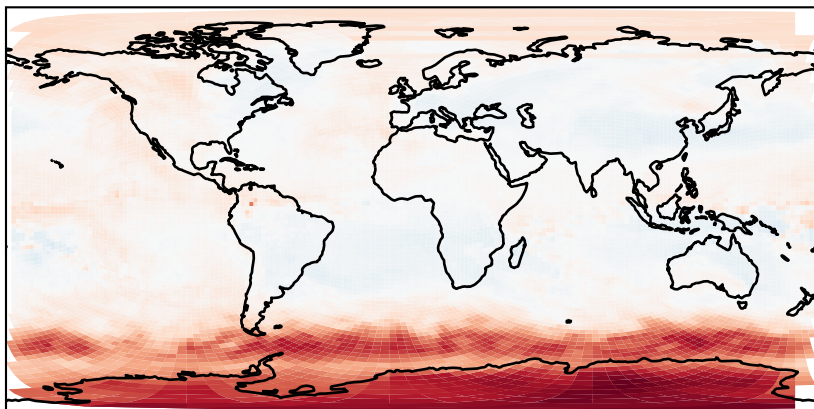
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

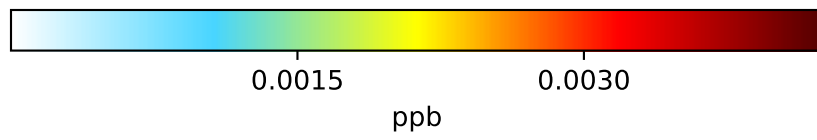
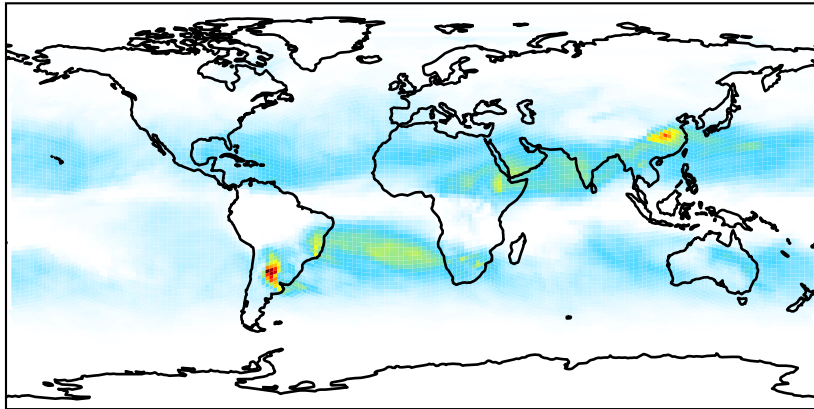


Ratio  
Dev/Ref, Fixed Range

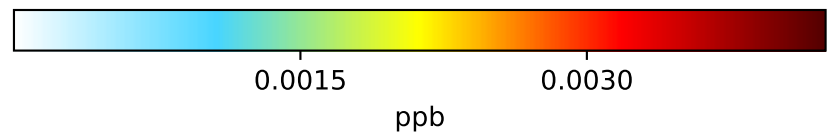
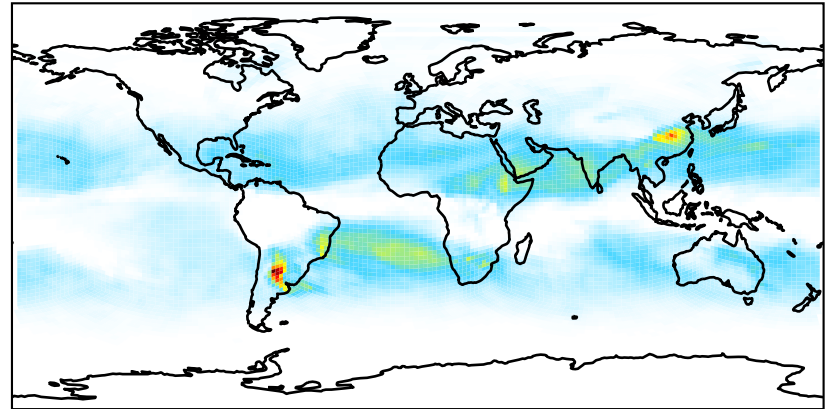


# SpeciesConc\_N2O5 (Jan2019)

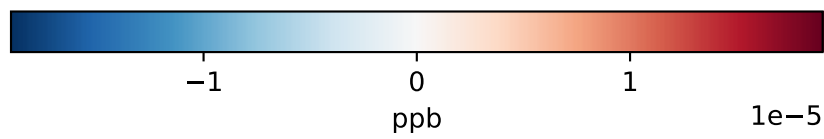
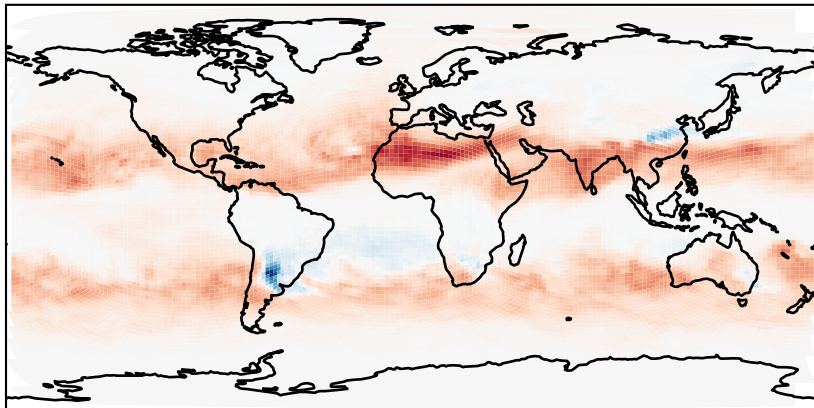
GCHP\_13.0.0-beta.1 (Ref)  
c48



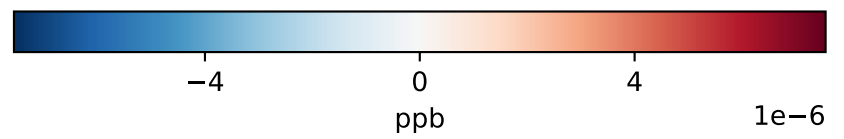
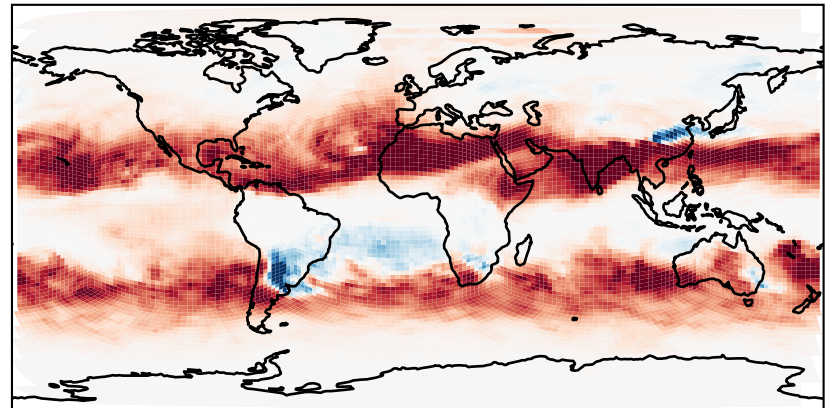
GCHP\_13.0.0-rc.0 (Dev)  
c48



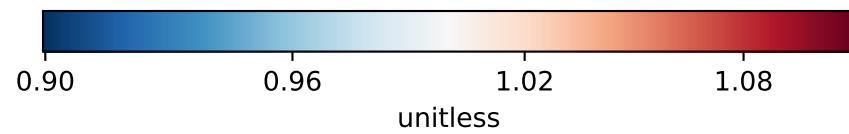
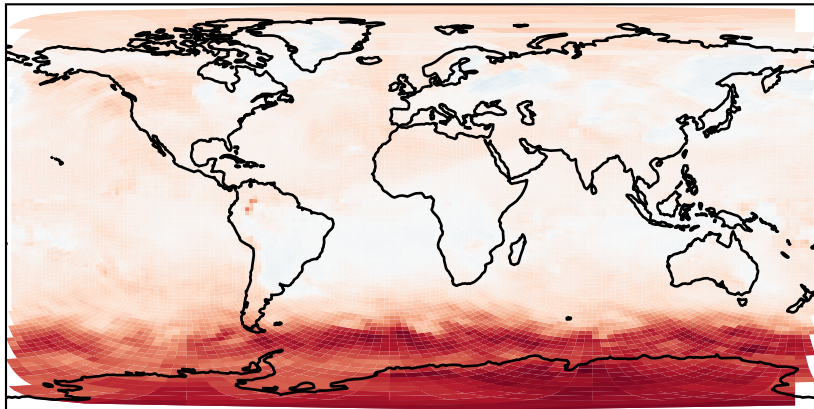
Difference  
Dev - Ref, Dynamic Range



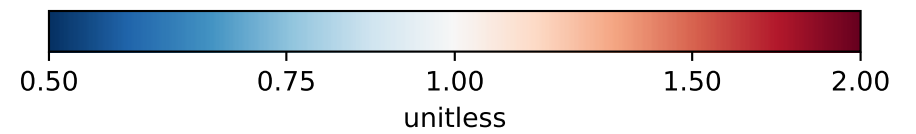
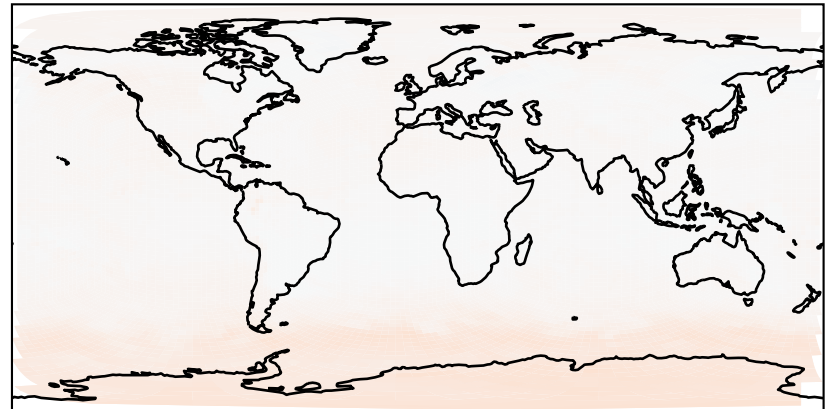
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

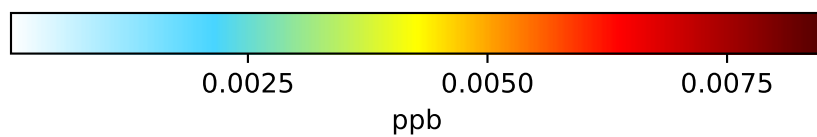
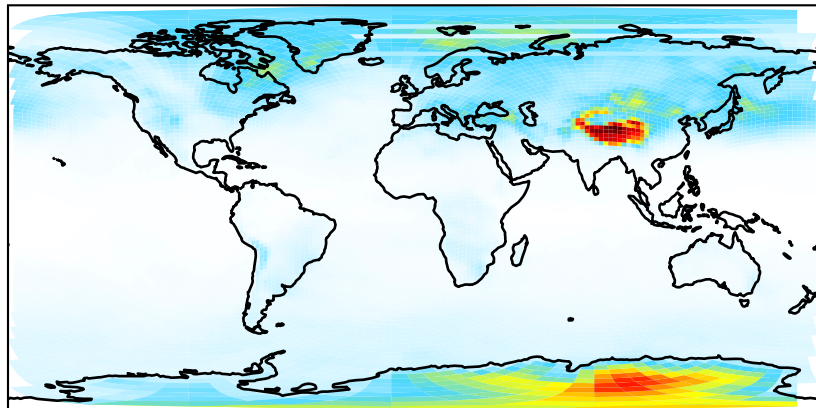


Ratio  
Dev/Ref, Fixed Range

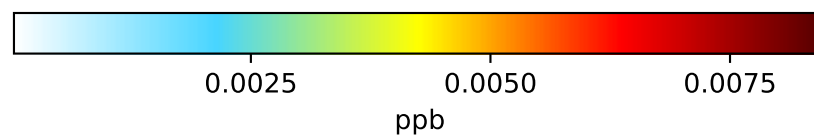
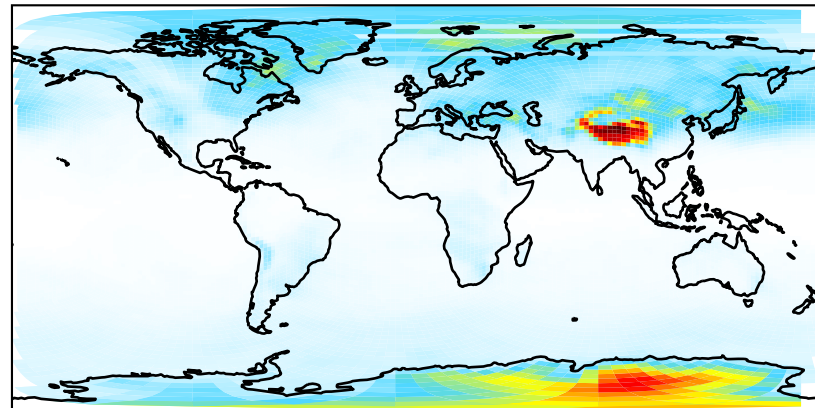


# SpeciesConc\_MPN (Jan2019)

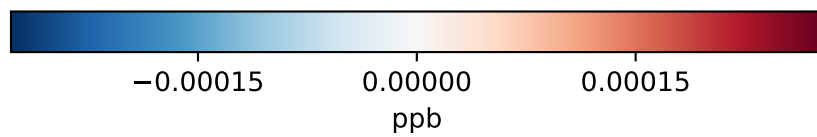
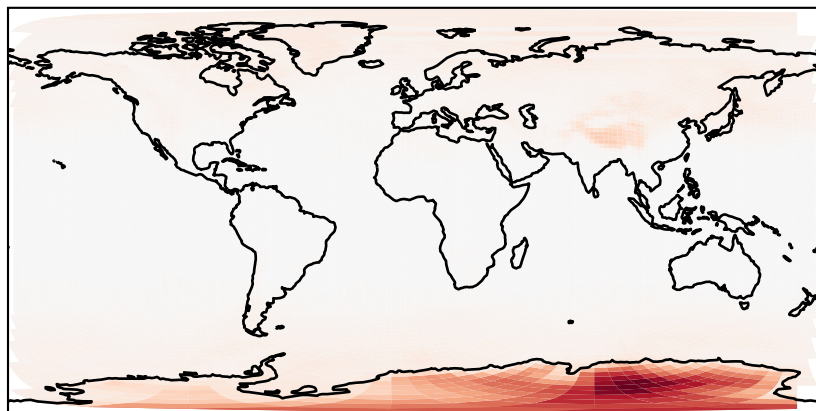
GCHP\_13.0.0-beta.1 (Ref)  
c48



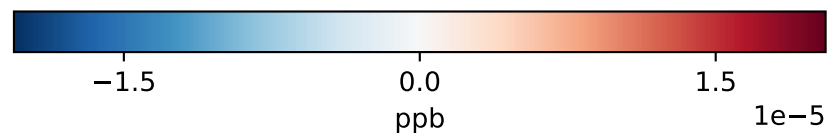
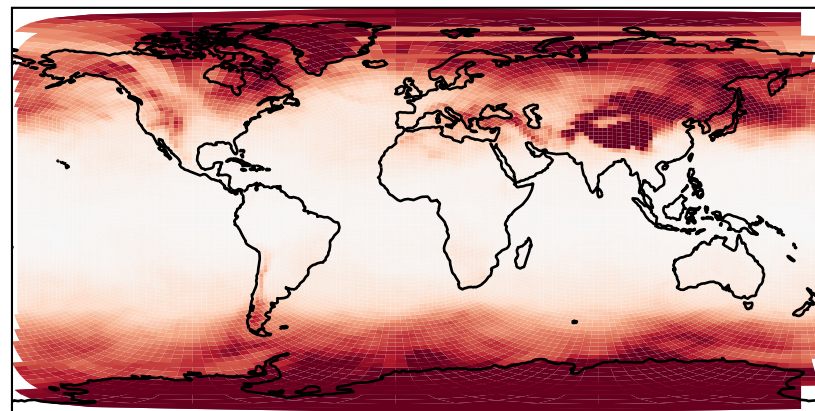
GCHP\_13.0.0-rc.0 (Dev)  
c48



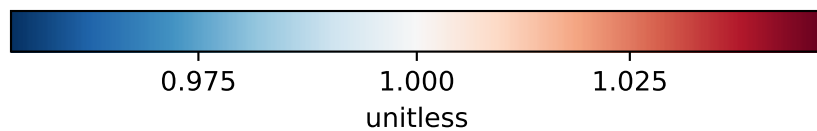
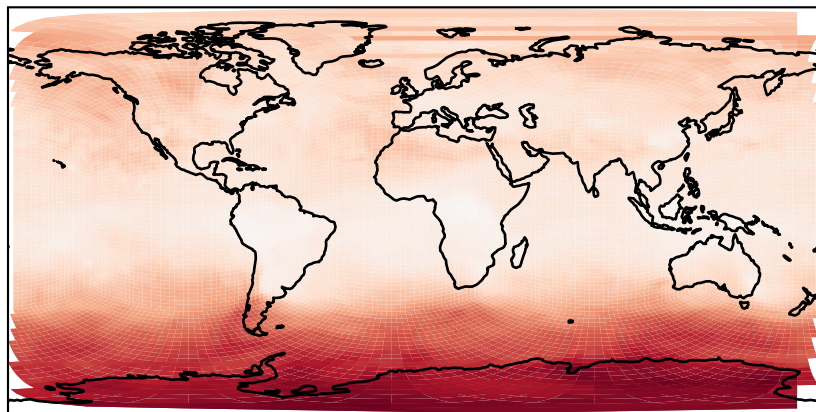
Difference  
Dev - Ref, Dynamic Range



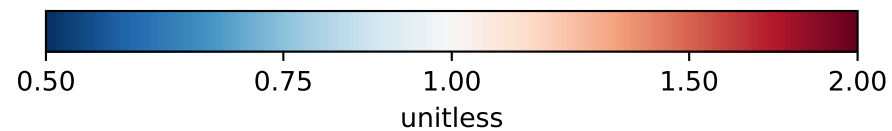
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

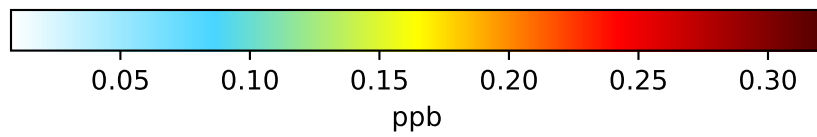
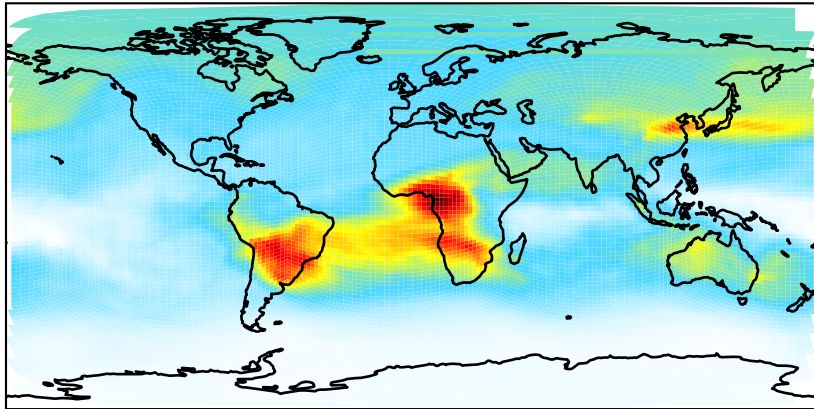


Ratio  
Dev/Ref, Fixed Range

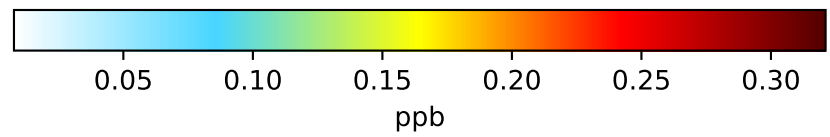
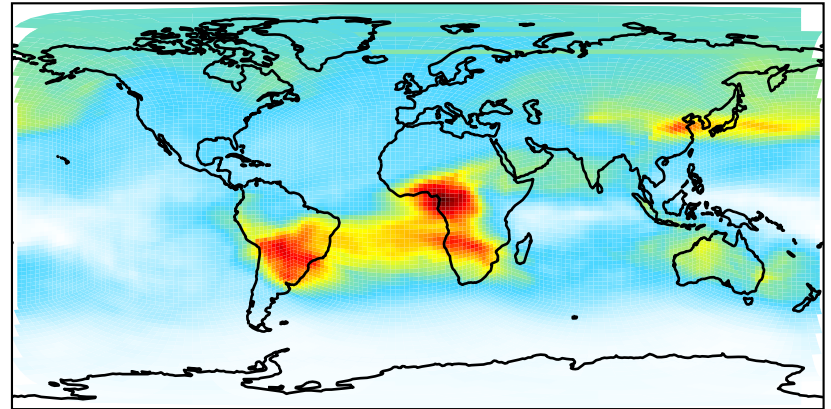


# SpeciesConc\_PAN (Jan2019)

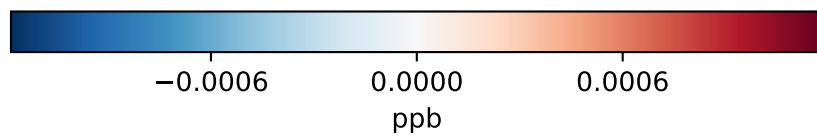
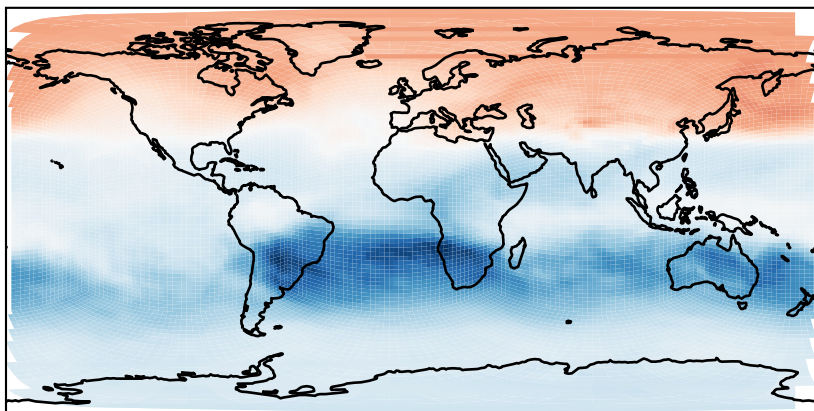
GCHP\_13.0.0-beta.1 (Ref)  
c48



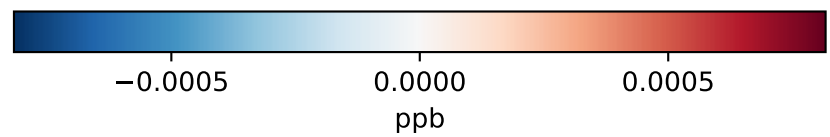
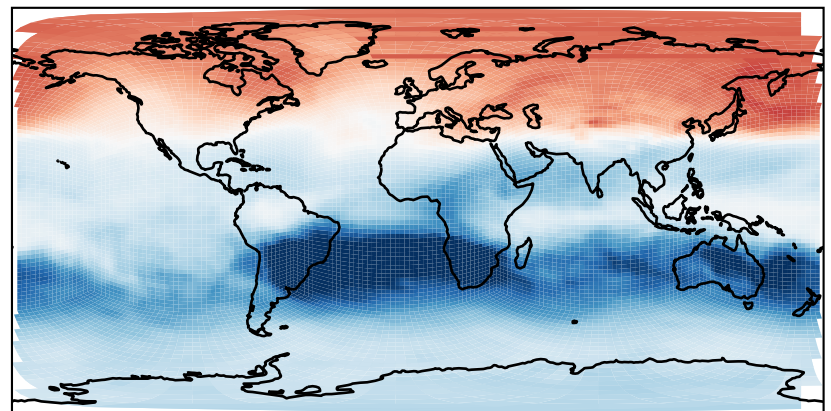
GCHP\_13.0.0-rc.0 (Dev)  
c48



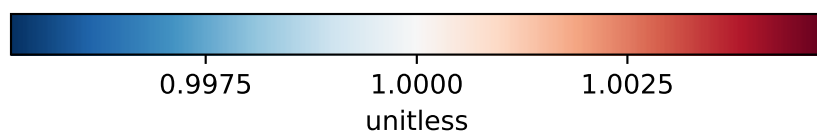
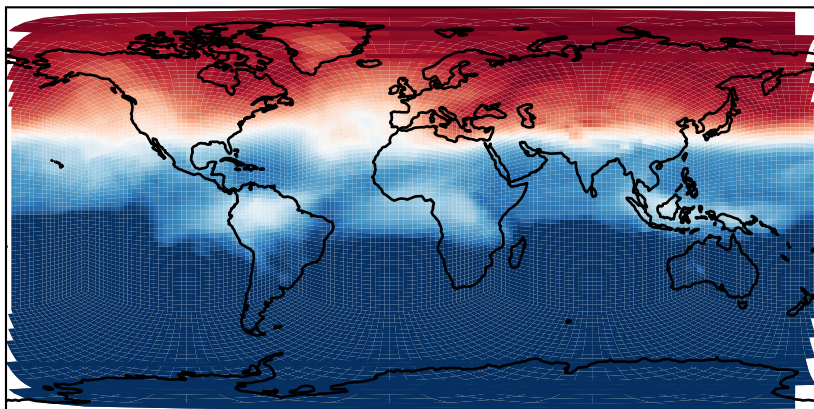
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

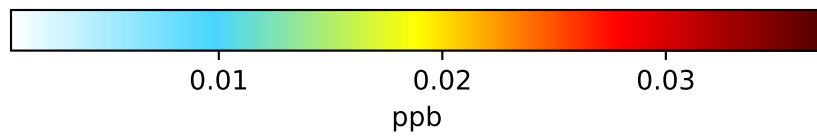
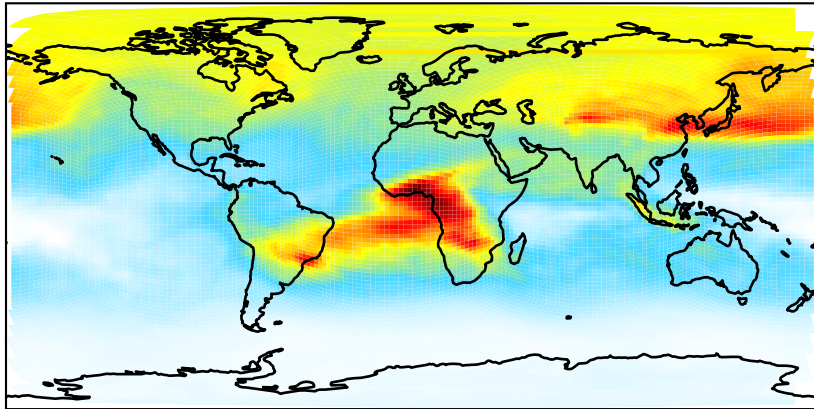


Ratio  
Dev/Ref, Fixed Range

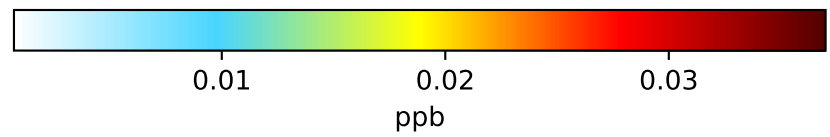
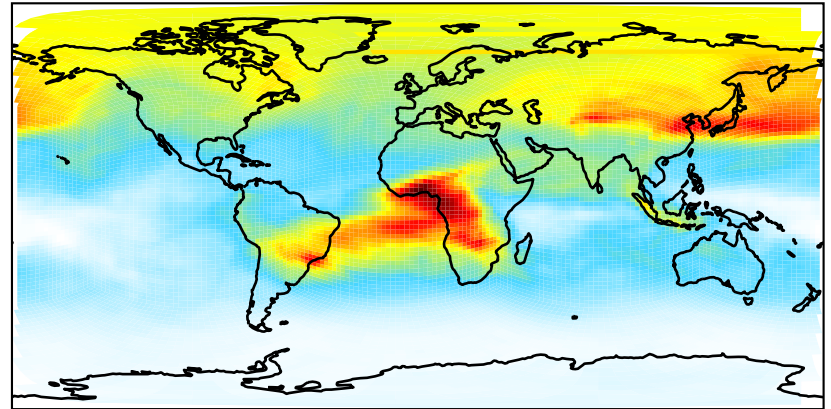


# SpeciesConc\_PPN (Jan2019)

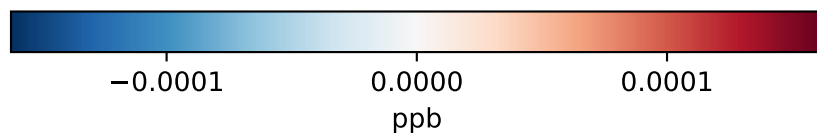
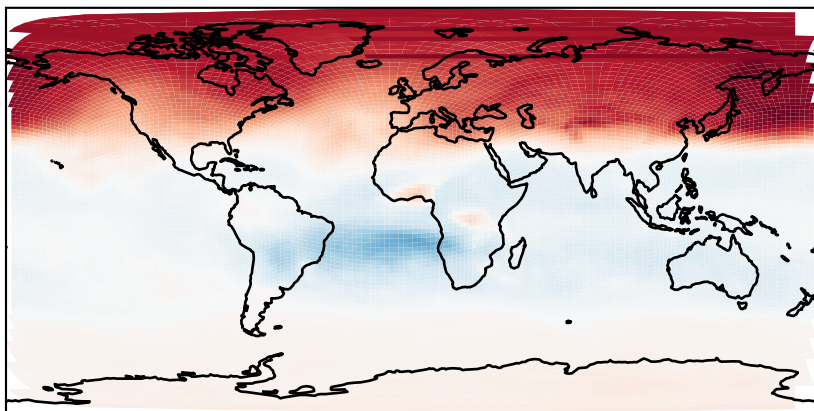
GCHP\_13.0.0-beta.1 (Ref)  
c48



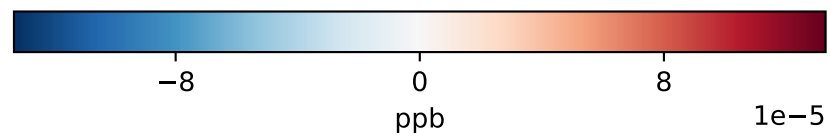
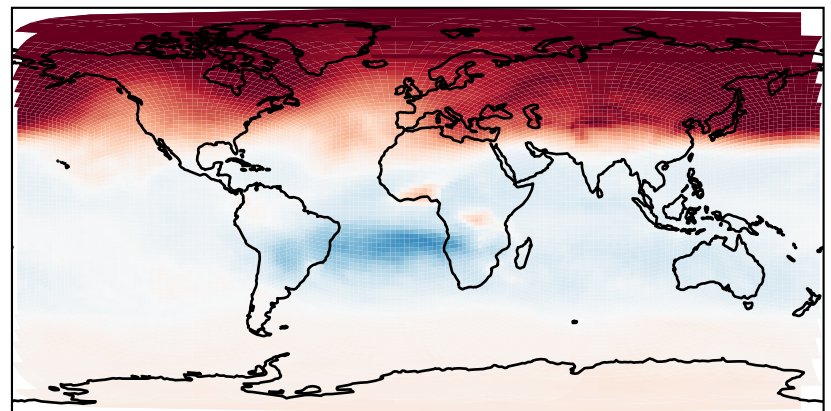
GCHP\_13.0.0-rc.0 (Dev)  
c48



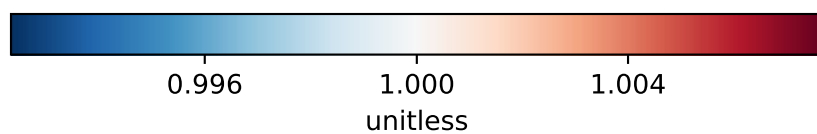
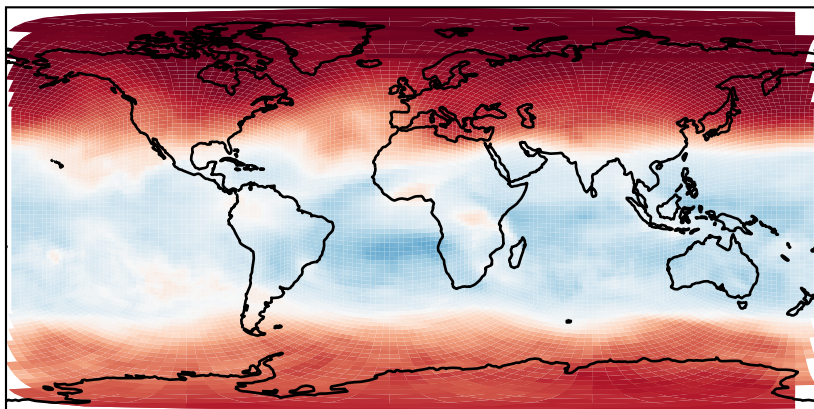
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

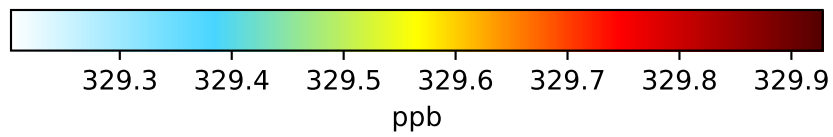
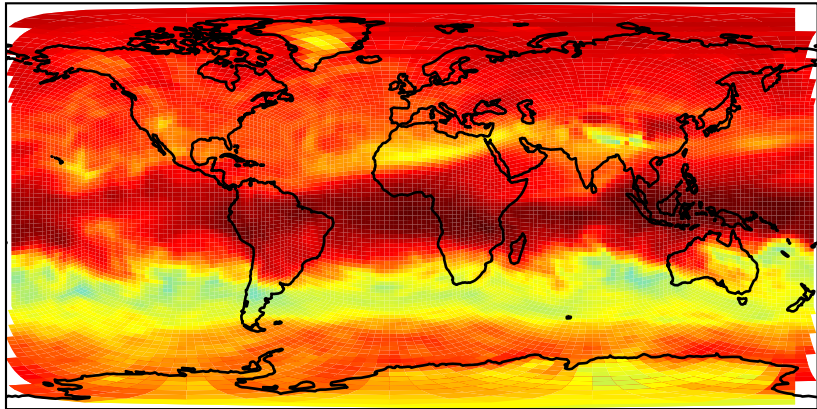


Ratio  
Dev/Ref, Fixed Range

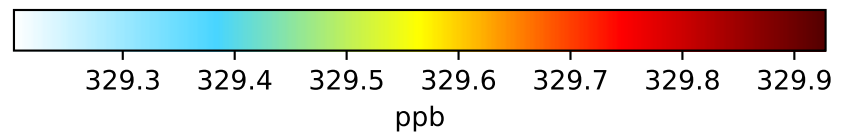
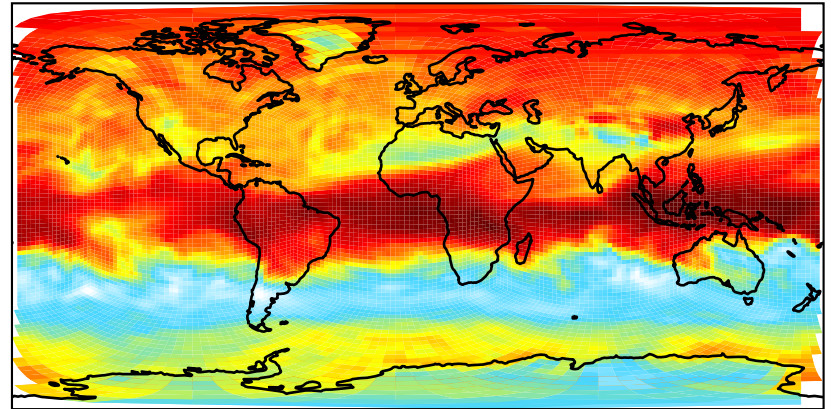


# SpeciesConc\_N2O (Jan2019)

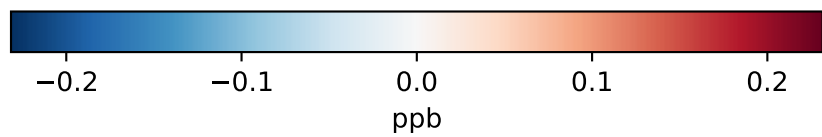
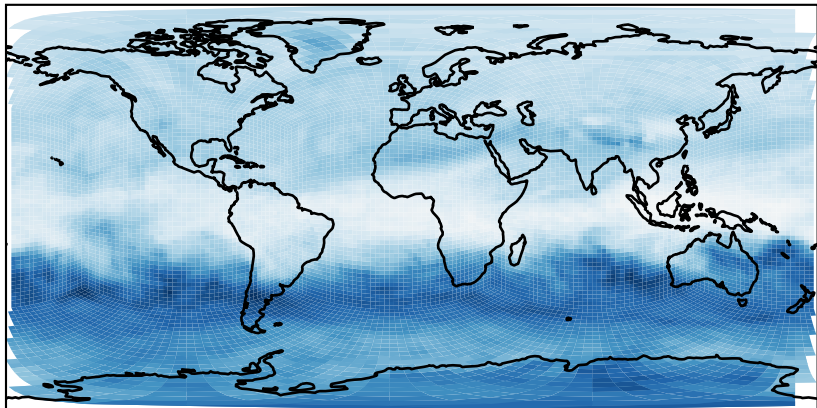
GCHP\_13.0.0-beta.1 (Ref)  
c48



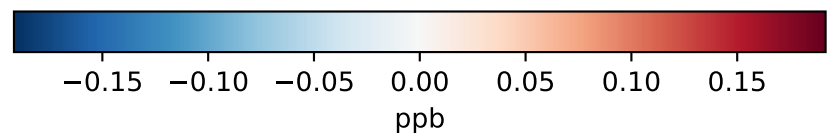
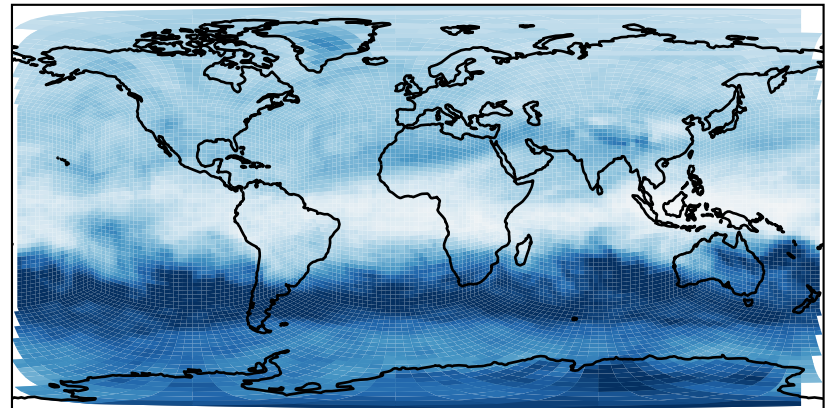
GCHP\_13.0.0-rc.0 (Dev)  
c48



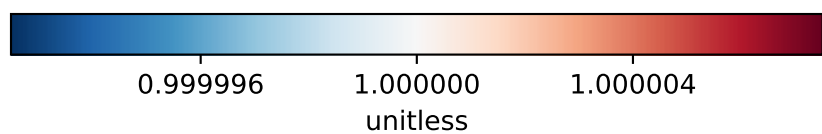
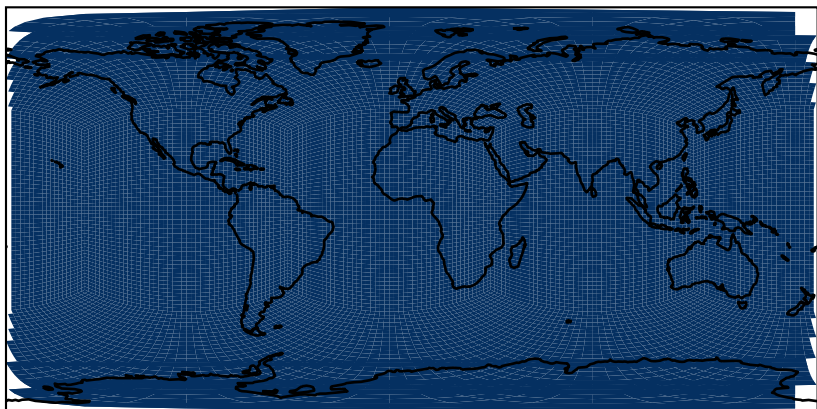
Difference  
Dev - Ref, Dynamic Range



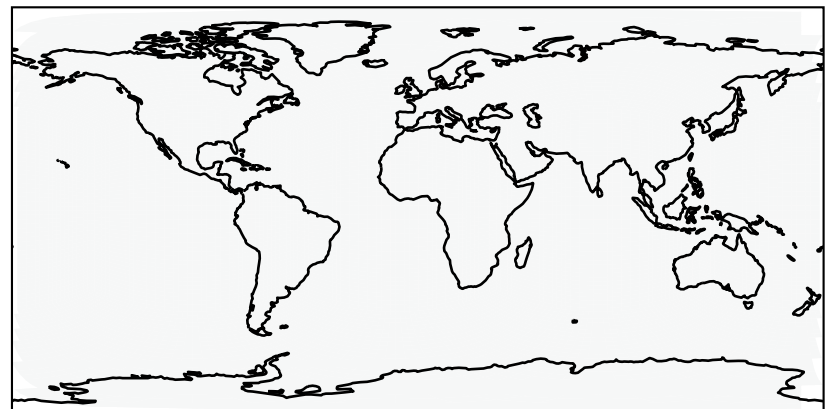
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

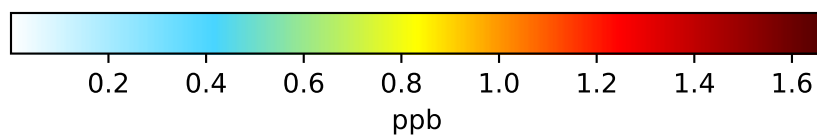
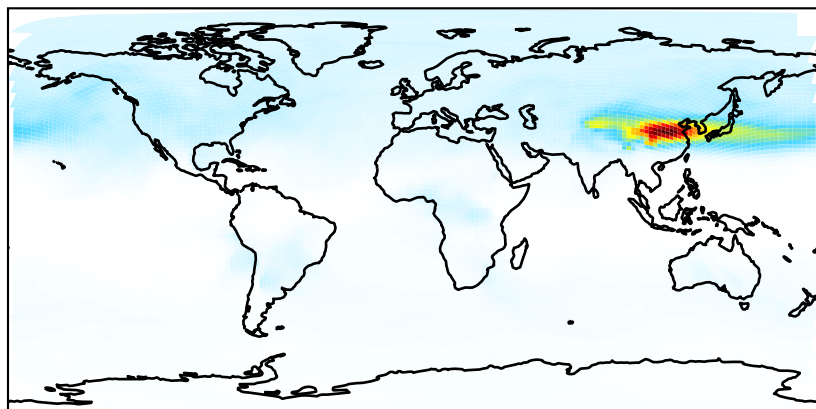


Ratio  
Dev/Ref, Fixed Range

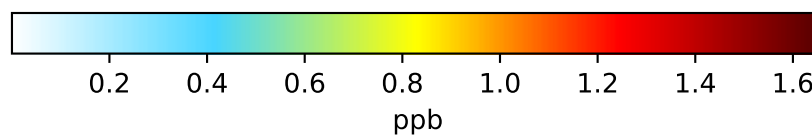
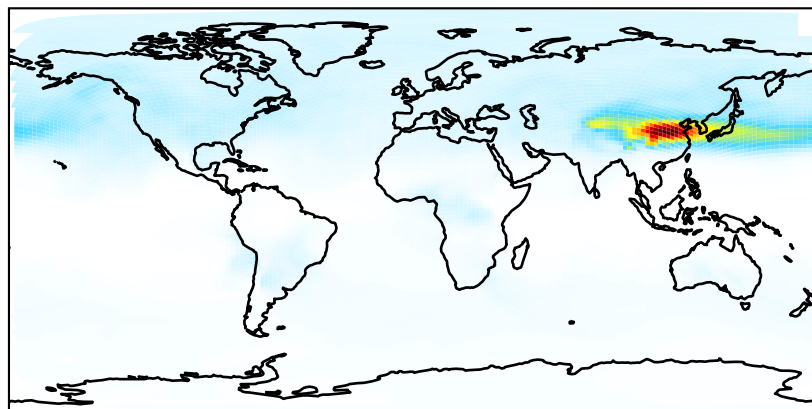


# SpeciesConc\_NHx (Jan2019)

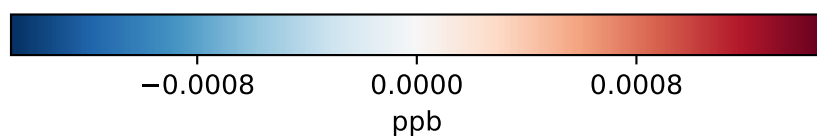
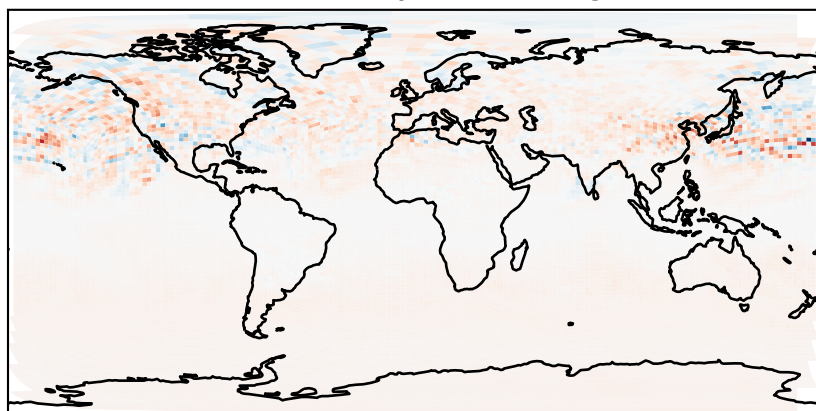
GCHP\_13.0.0-beta.1 (Ref)  
c48



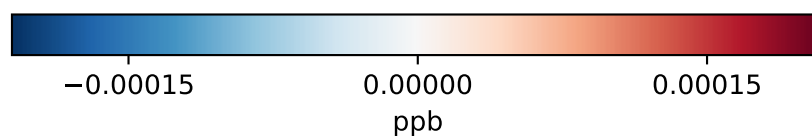
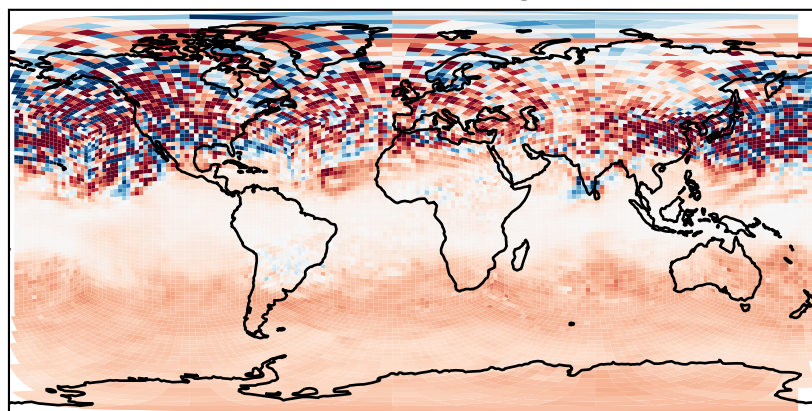
GCHP\_13.0.0-rc.0 (Dev)  
c48



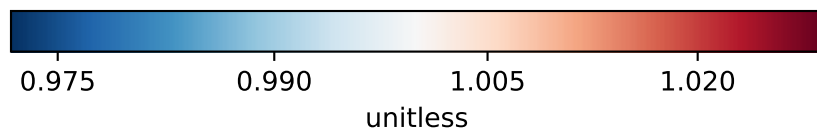
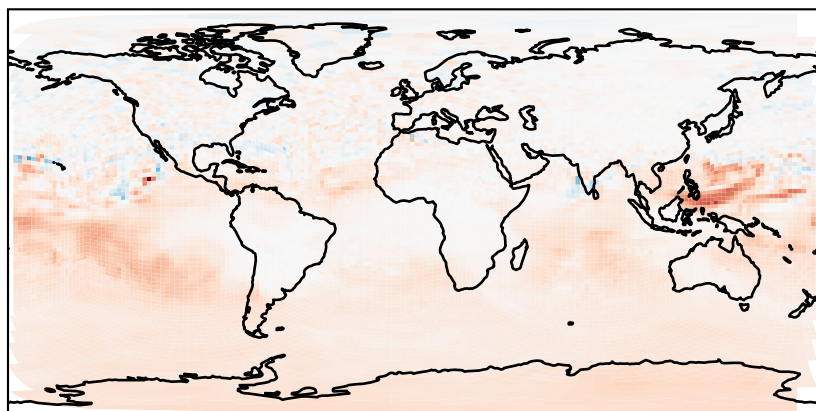
Difference  
Dev - Ref, Dynamic Range



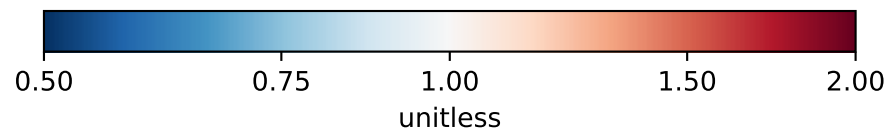
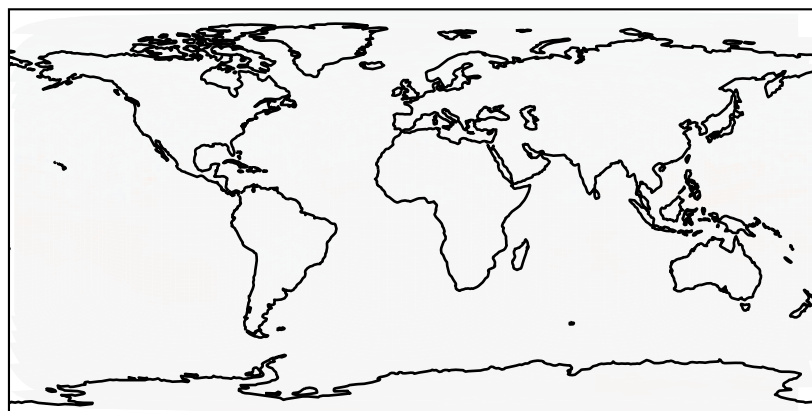
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



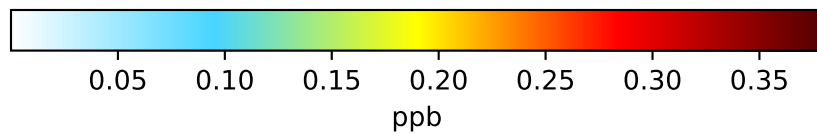
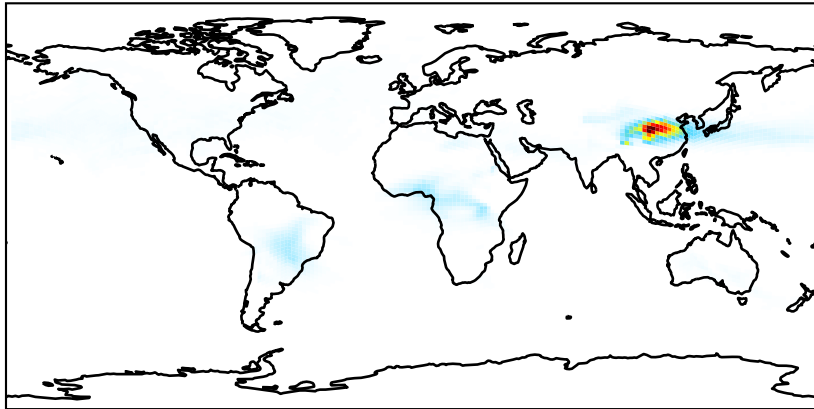
Ratio  
Dev/Ref, Fixed Range



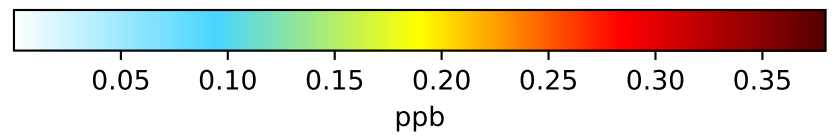
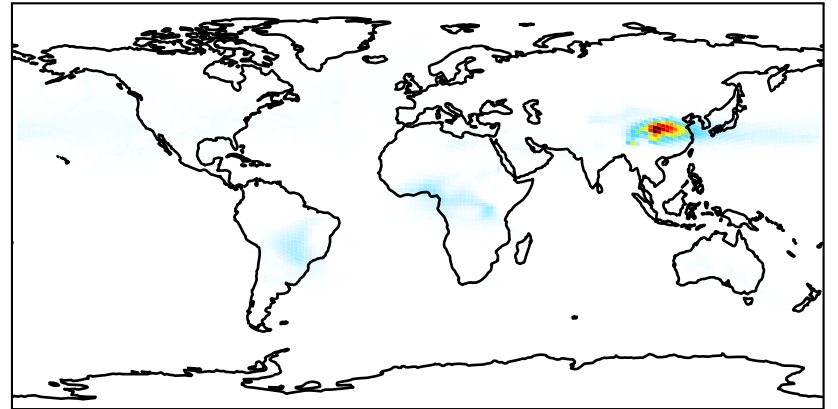


# SpeciesConc\_NH3 (Jan2019)

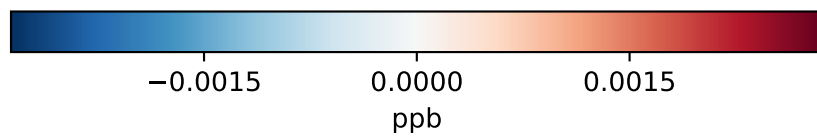
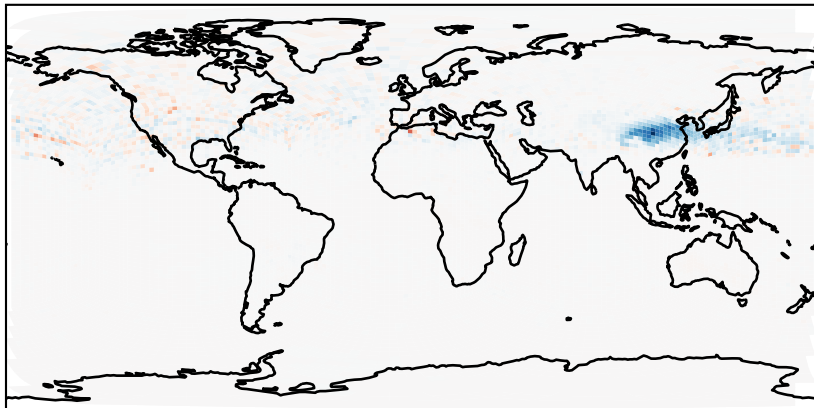
GCHP\_13.0.0-beta.1 (Ref)  
c48



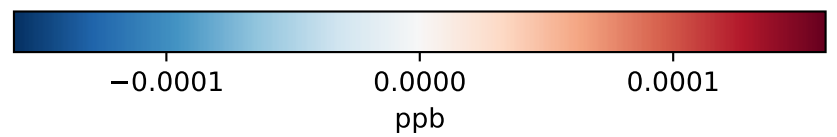
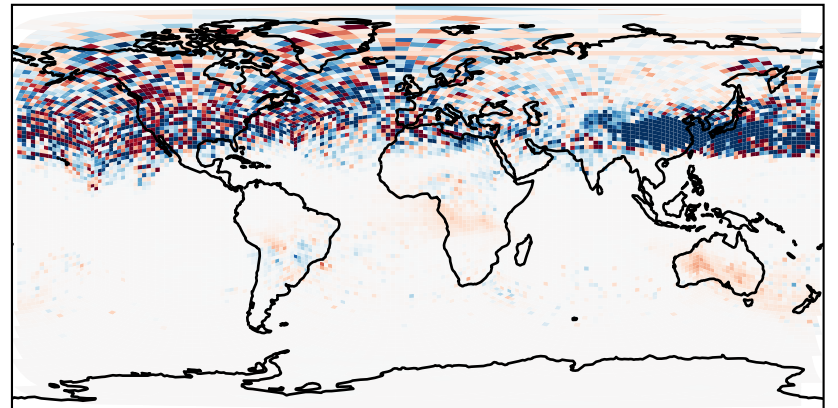
GCHP\_13.0.0-rc.0 (Dev)  
c48



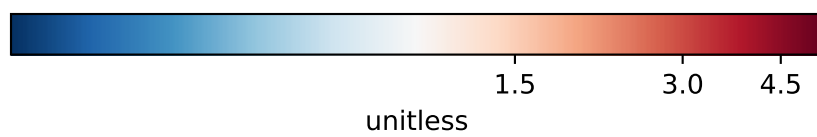
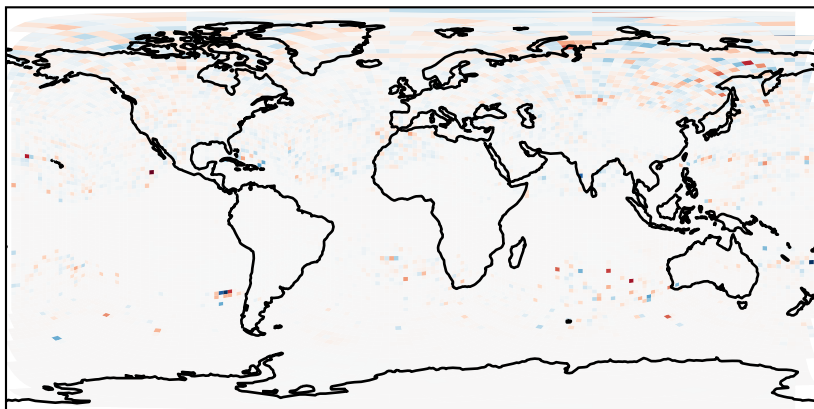
Difference  
Dev - Ref, Dynamic Range



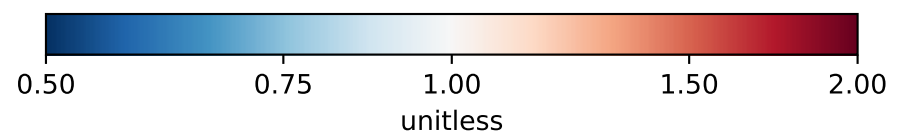
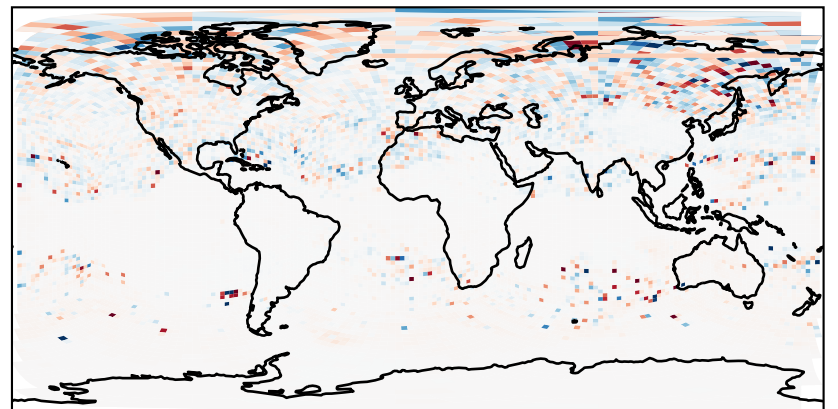
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

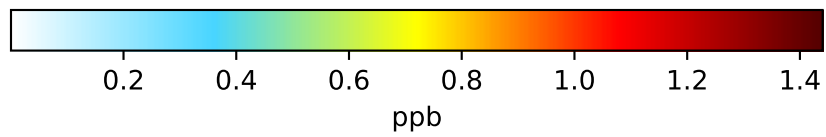
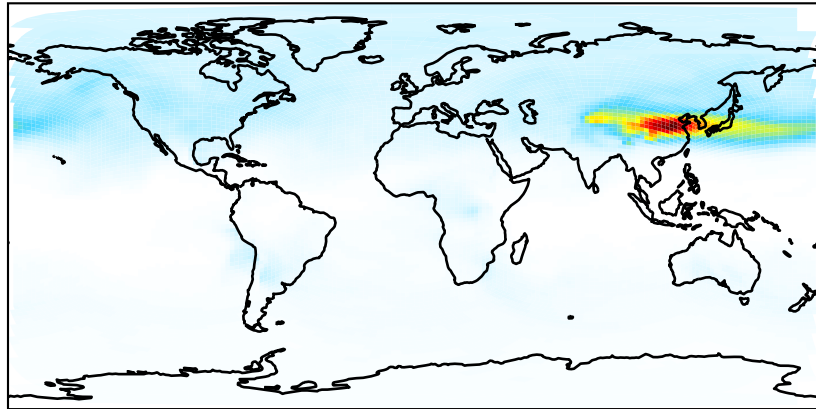


Ratio  
Dev/Ref, Fixed Range

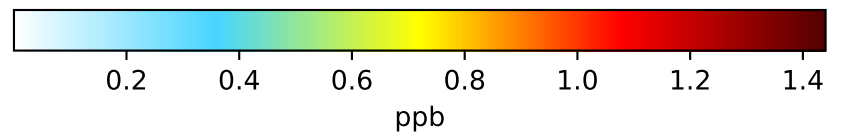
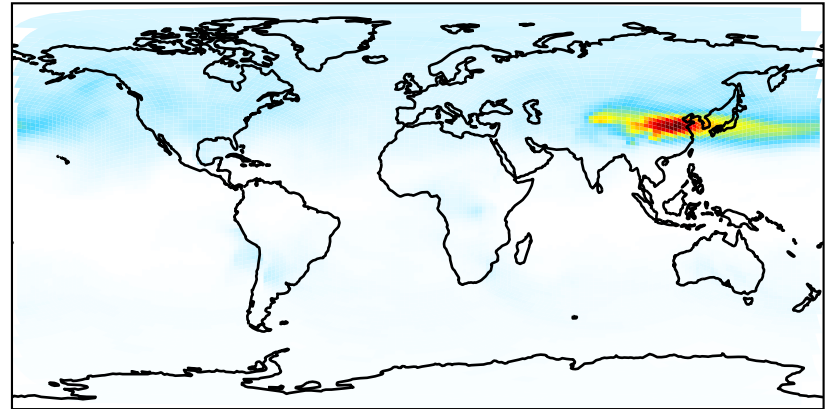


# SpeciesConc\_NH4 (Jan2019)

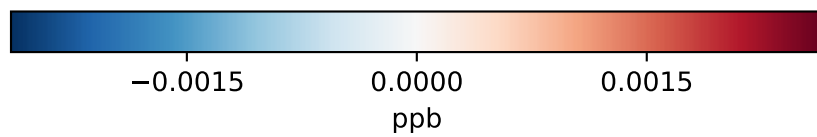
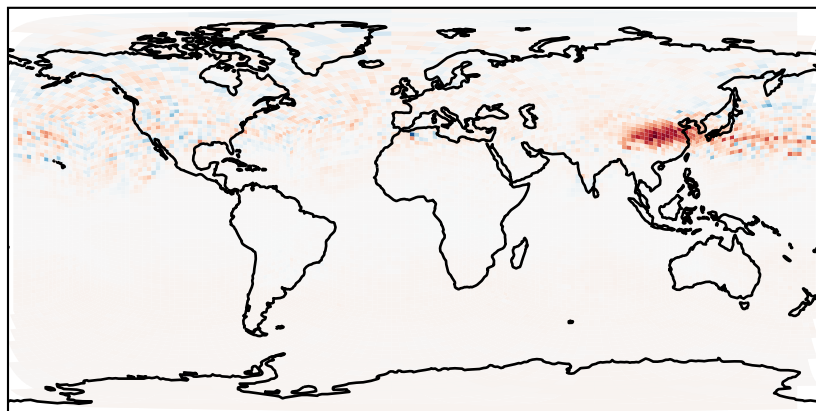
GCHP\_13.0.0-beta.1 (Ref)  
c48



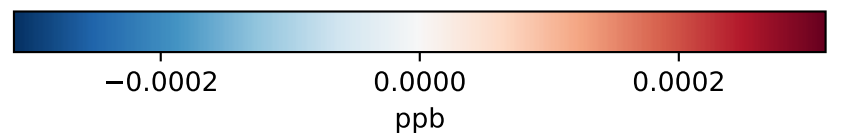
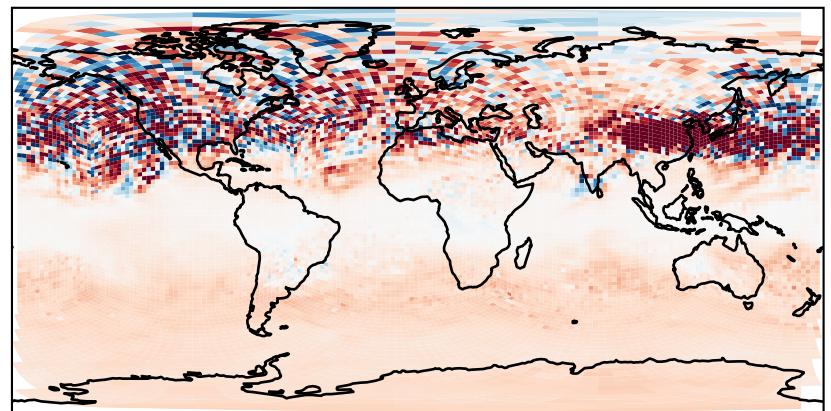
GCHP\_13.0.0-rc.0 (Dev)  
c48



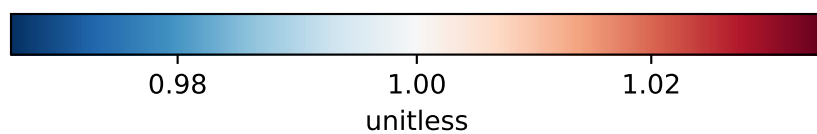
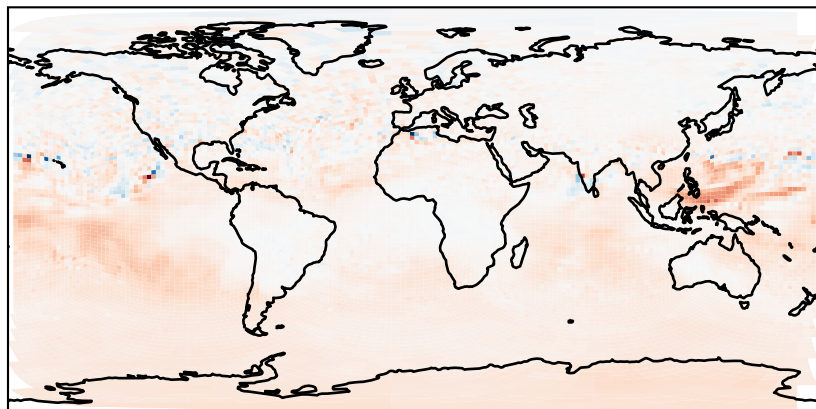
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

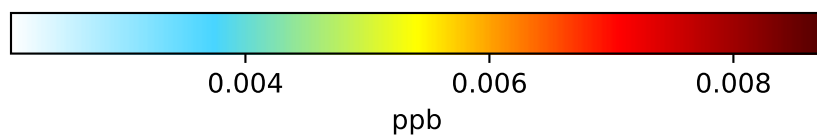
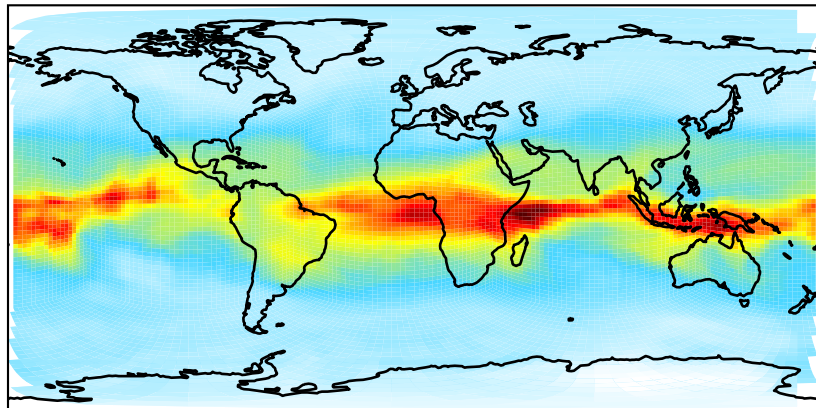


Ratio  
Dev/Ref, Fixed Range

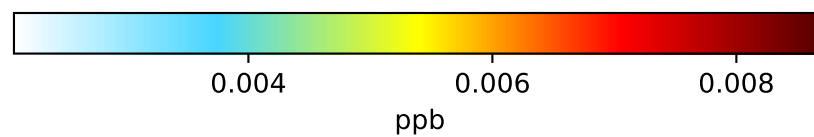
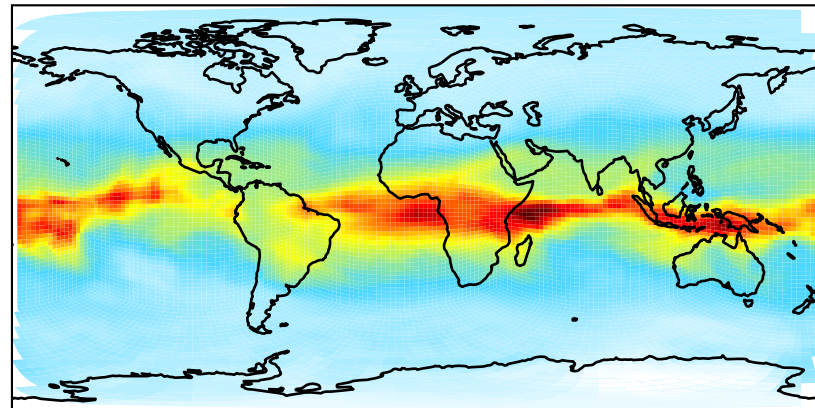


# SpeciesConc\_MENO3 (Jan2019)

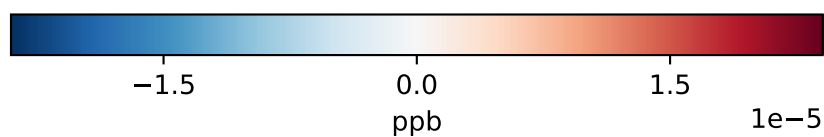
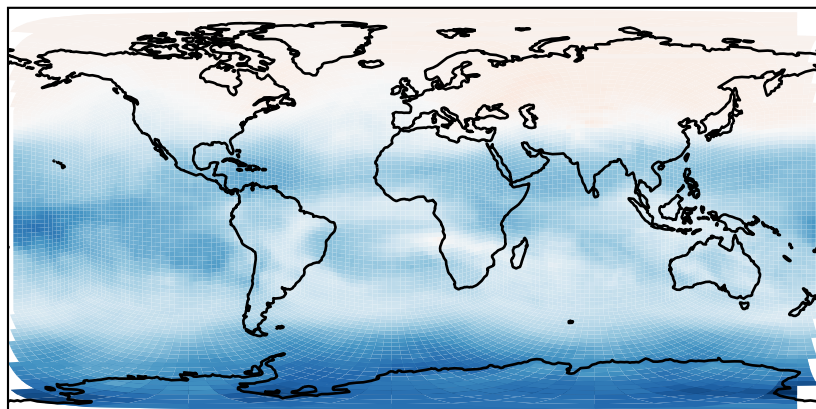
GCHP\_13.0.0-beta.1 (Ref)  
c48



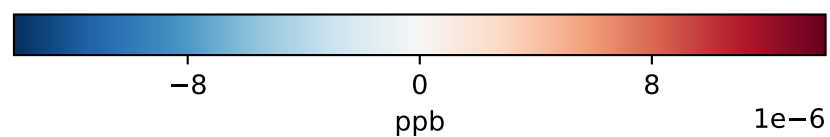
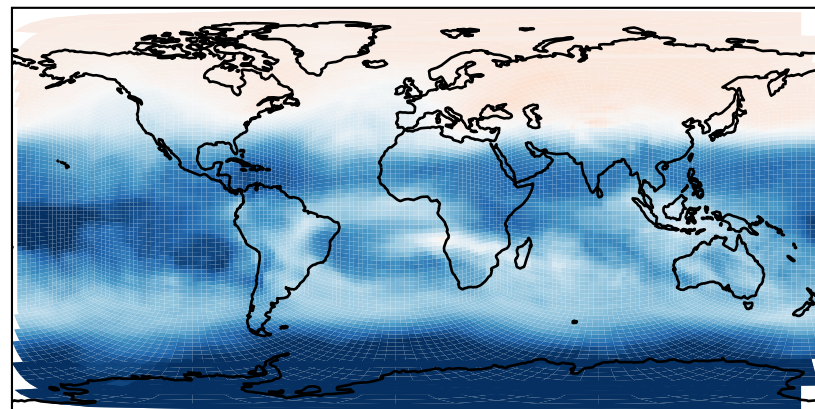
GCHP\_13.0.0-rc.0 (Dev)  
c48



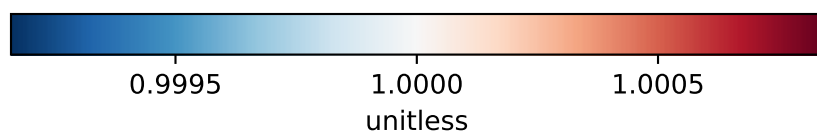
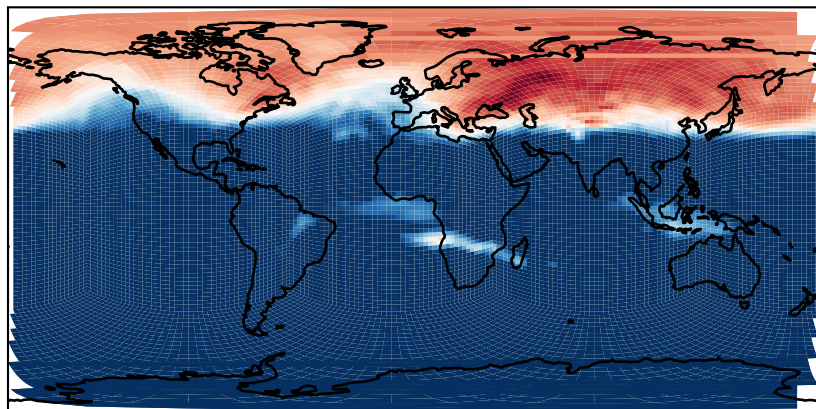
Difference  
Dev - Ref, Dynamic Range



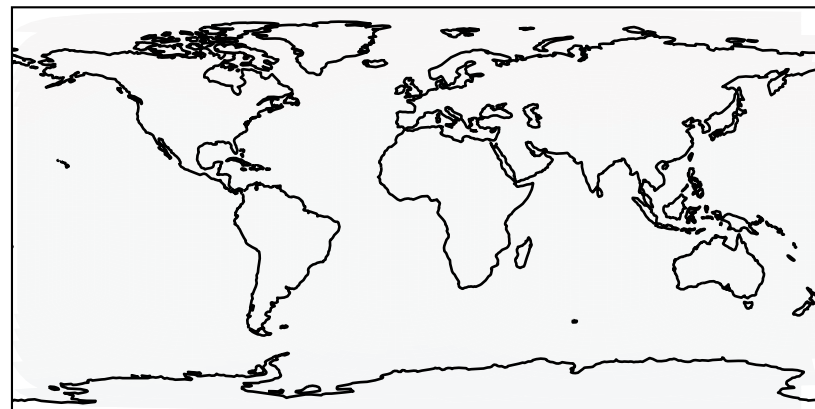
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

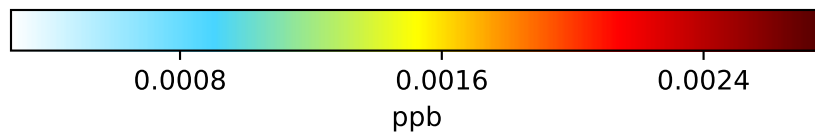
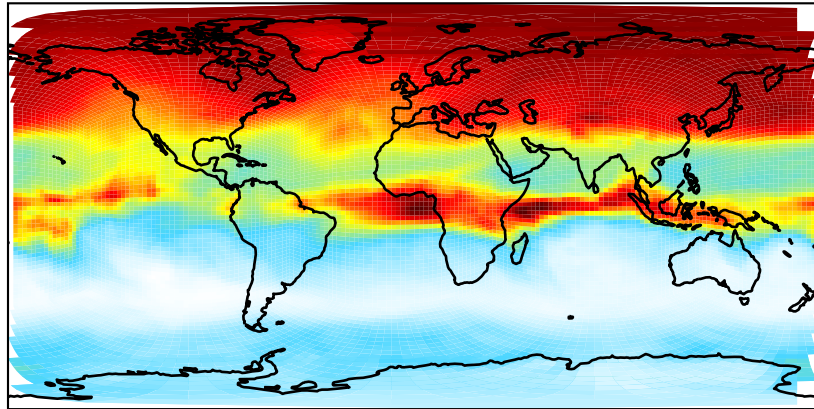


Ratio  
Dev/Ref, Fixed Range

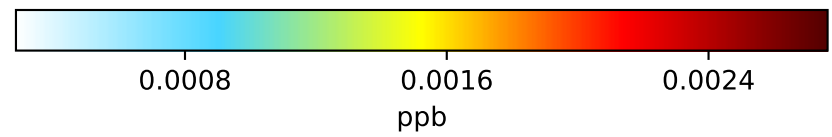
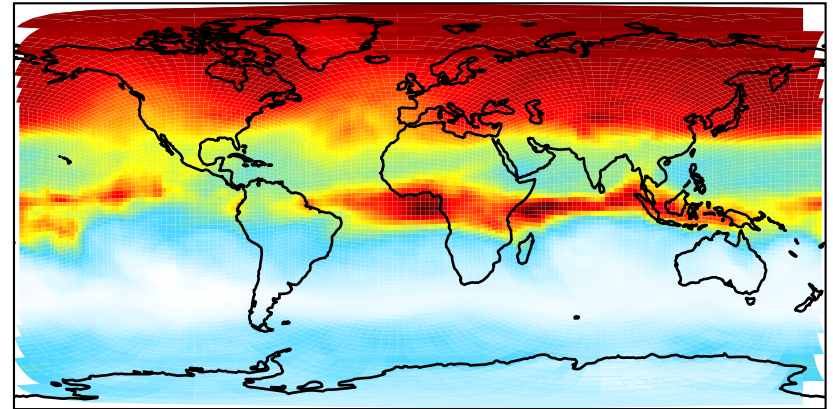


# SpeciesConc\_ETNO3 (Jan2019)

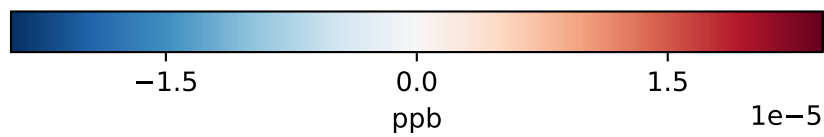
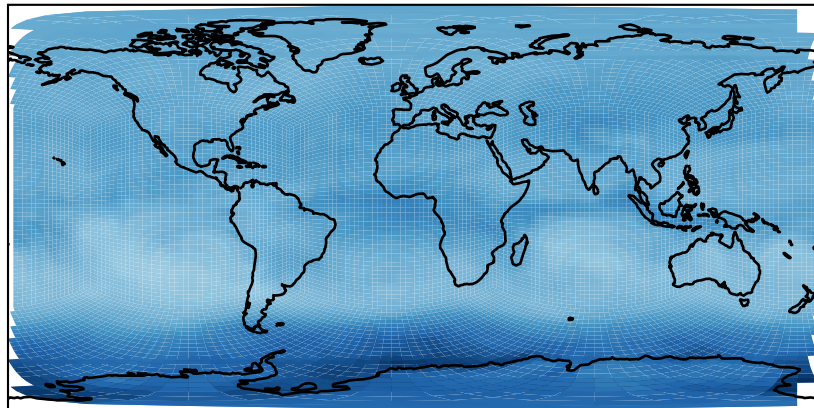
GCHP\_13.0.0-beta.1 (Ref)  
c48



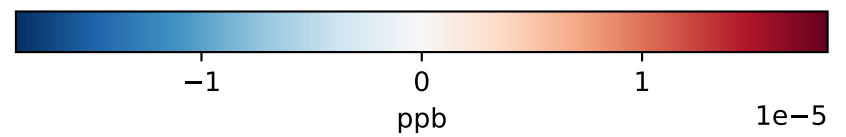
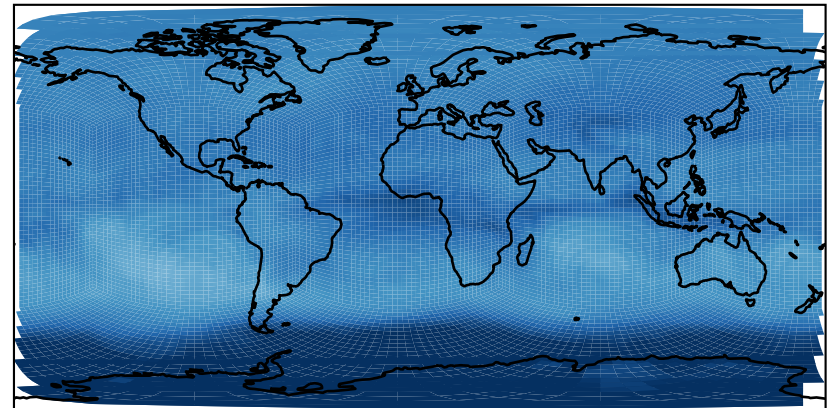
GCHP\_13.0.0-rc.0 (Dev)  
c48



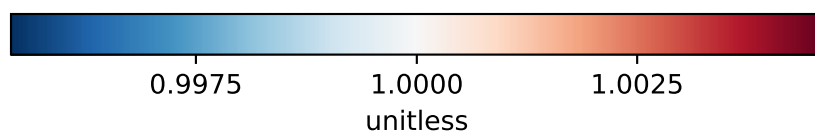
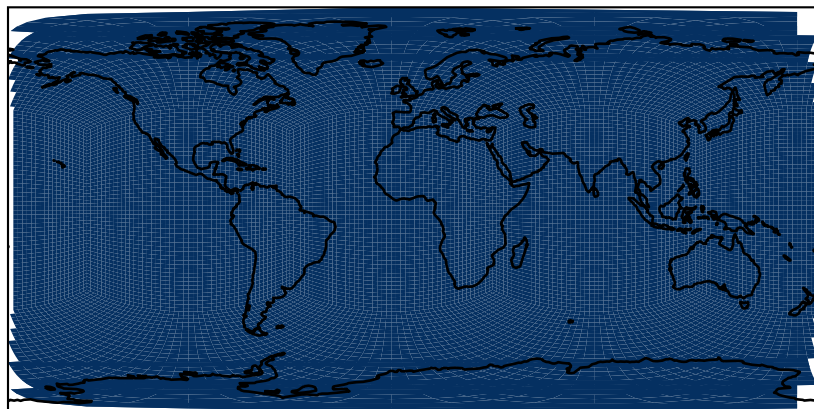
Difference  
Dev - Ref, Dynamic Range



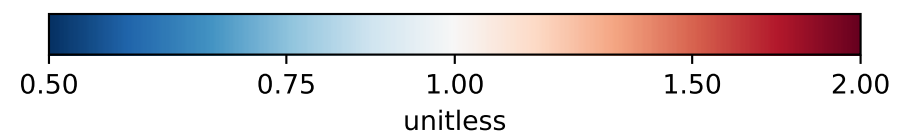
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

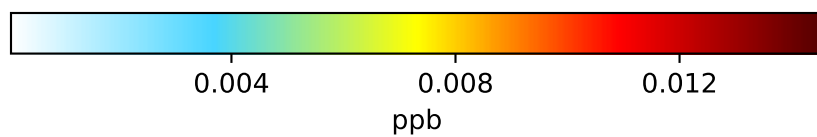
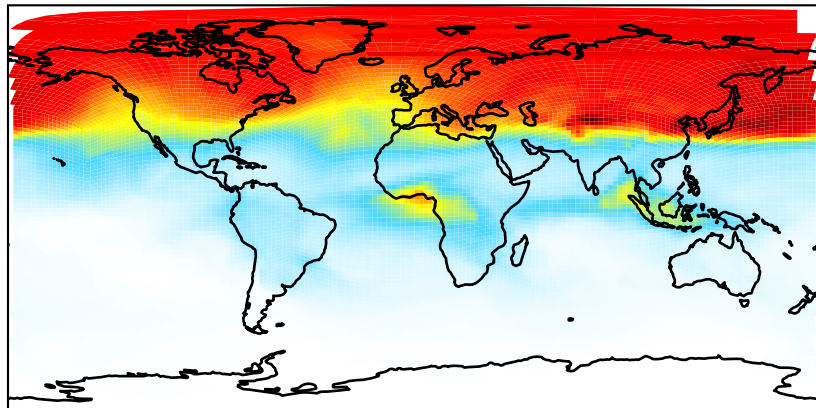


Ratio  
Dev/Ref, Fixed Range

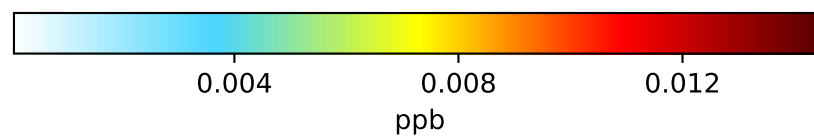
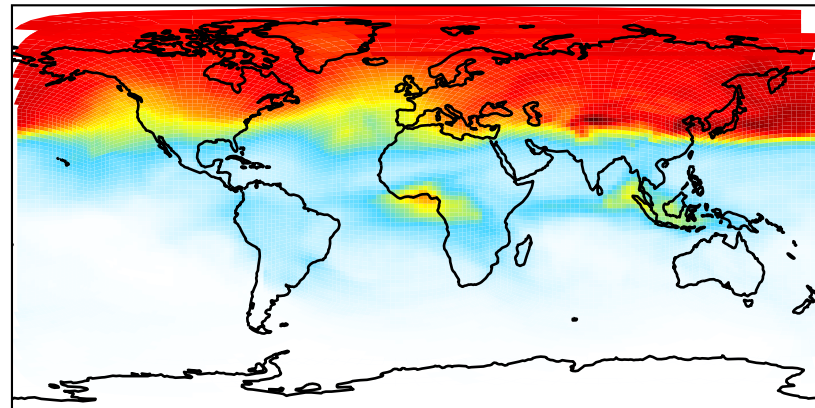


# SpeciesConc\_IPRNO3 (Jan2019)

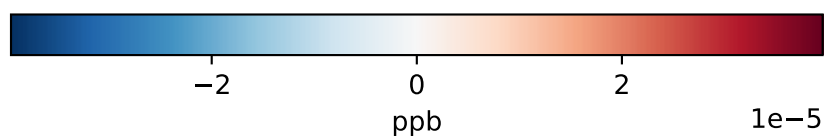
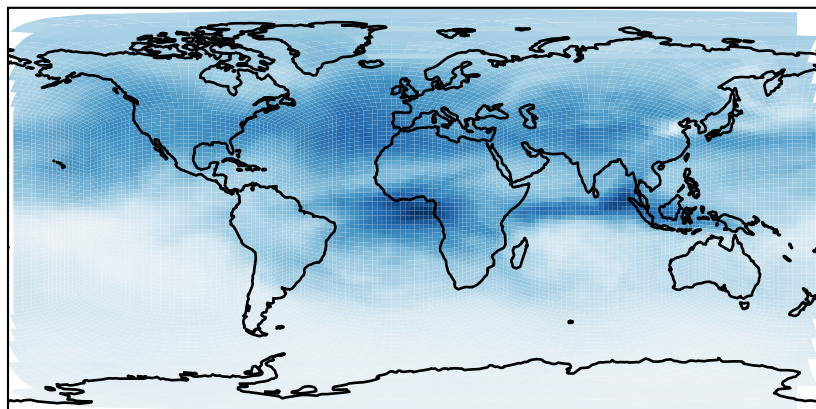
GCHP\_13.0.0-beta.1 (Ref)  
c48



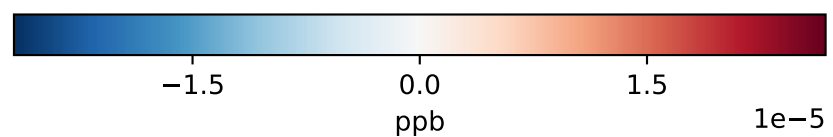
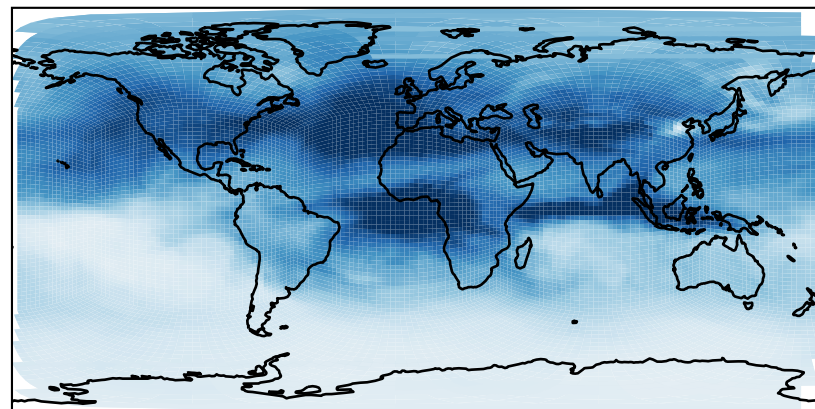
GCHP\_13.0.0-rc.0 (Dev)  
c48



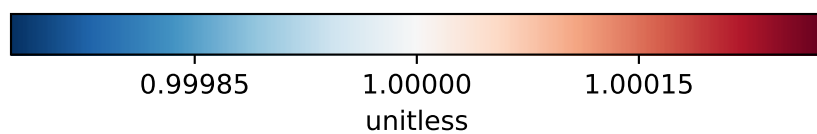
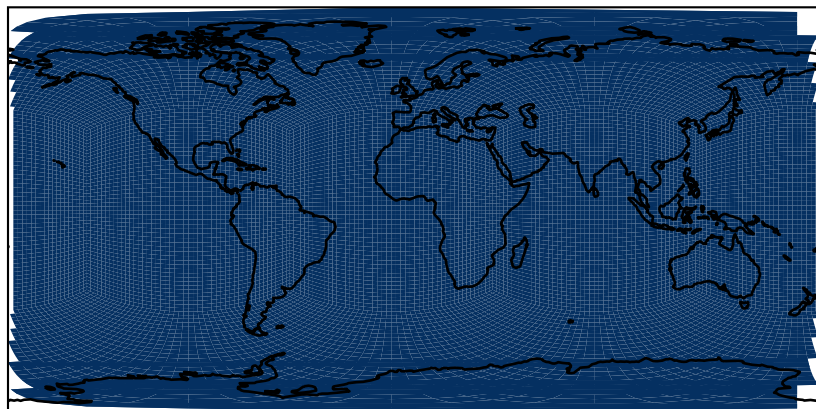
Difference  
Dev - Ref, Dynamic Range



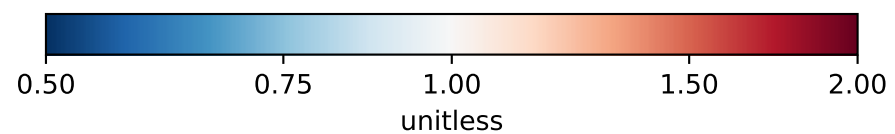
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

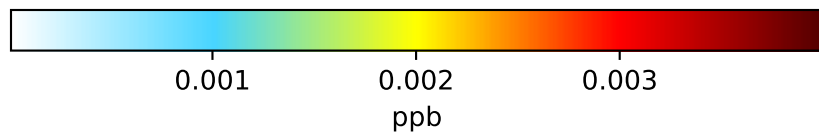
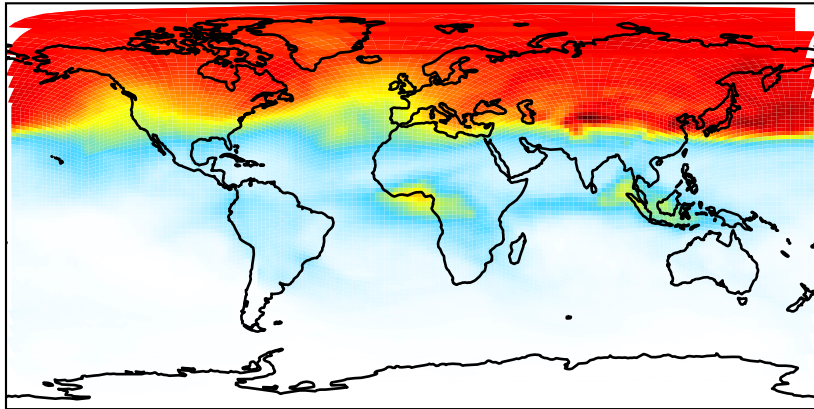


Ratio  
Dev/Ref, Fixed Range

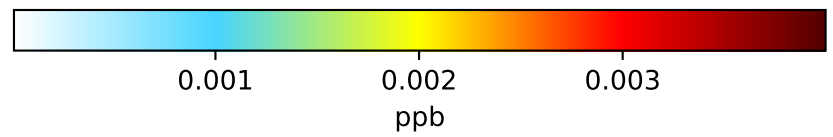
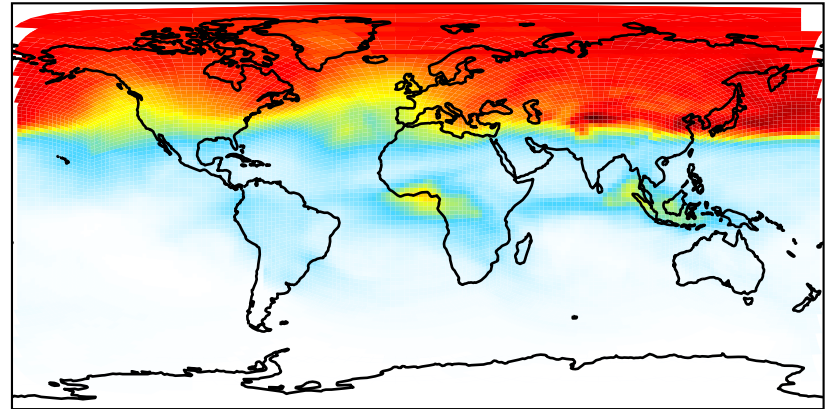


# SpeciesConc\_NPRNO3 (Jan2019)

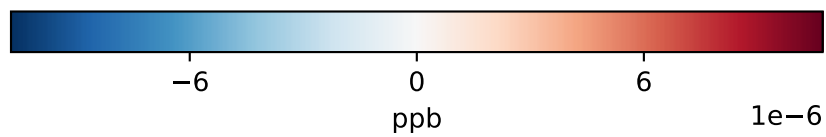
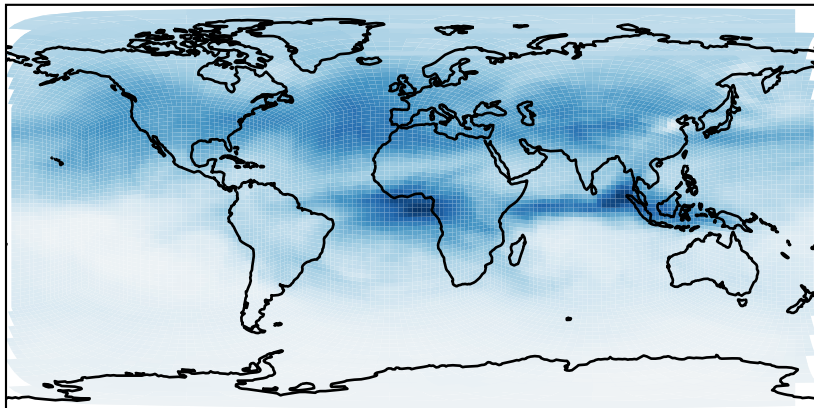
GCHP\_13.0.0-beta.1 (Ref)  
c48



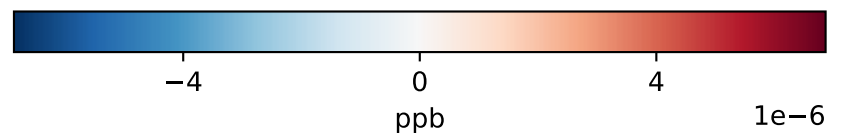
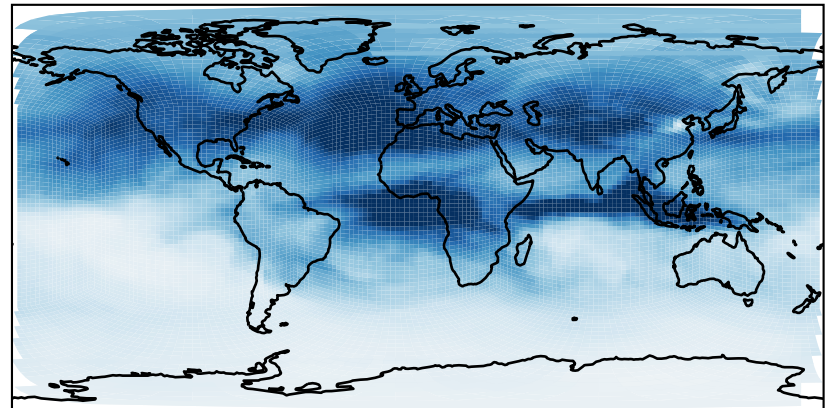
GCHP\_13.0.0-rc.0 (Dev)  
c48



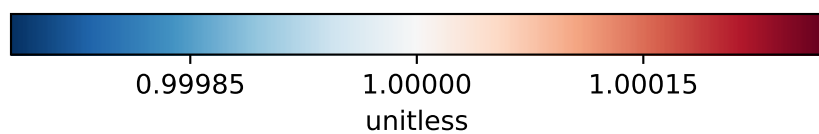
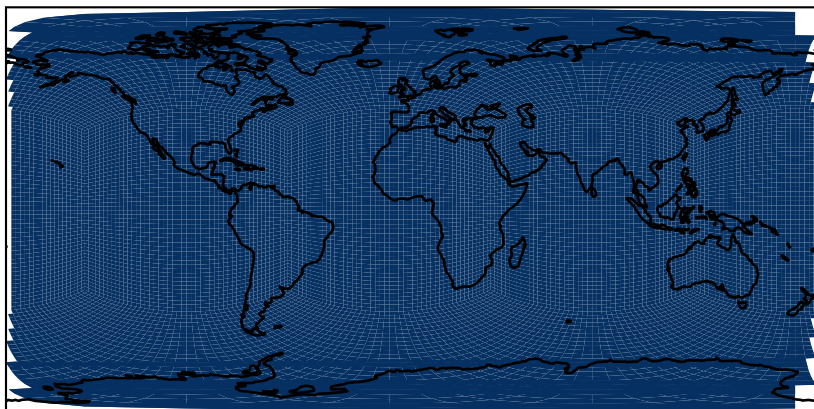
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

