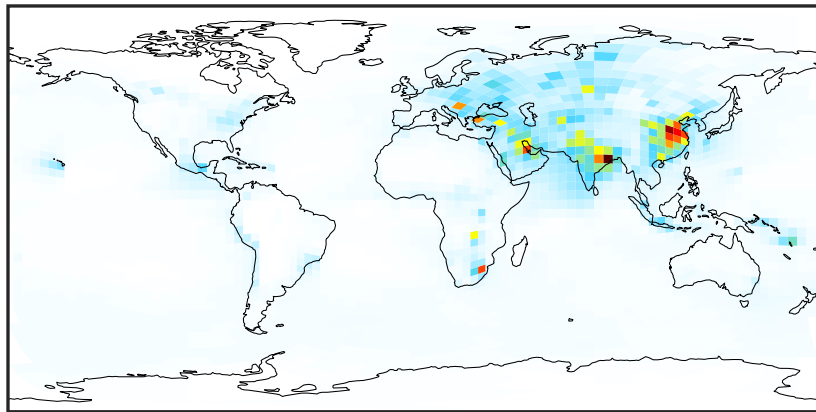


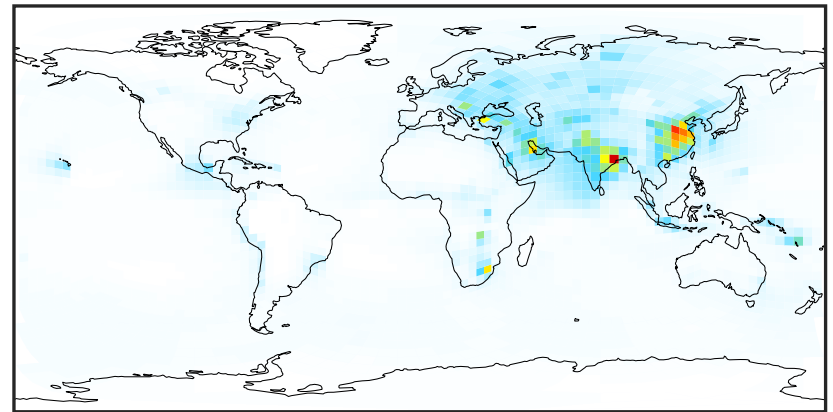
# SpeciesConcVV\_SOx (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



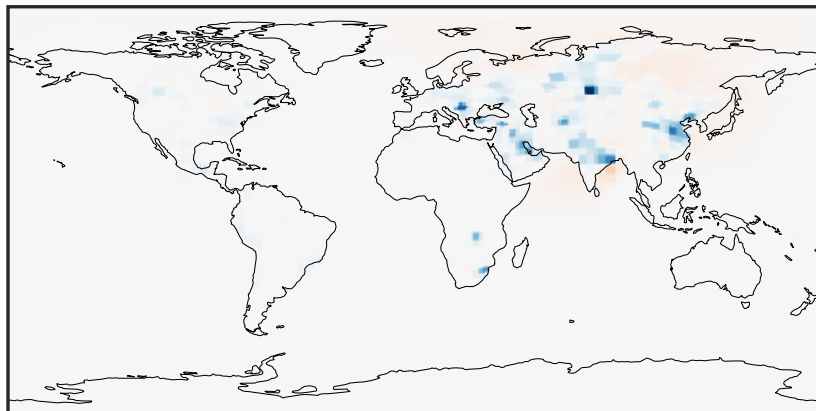
0.03 4.72 9.44 14.17 18.92  
ppb

GCHP\_14.2.0 (Dev)  
c24



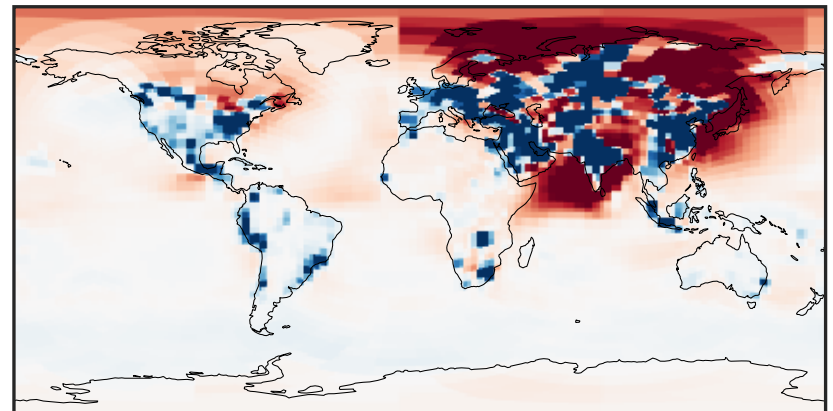
0.03 4.72 9.44 14.17 18.92  
ppb

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



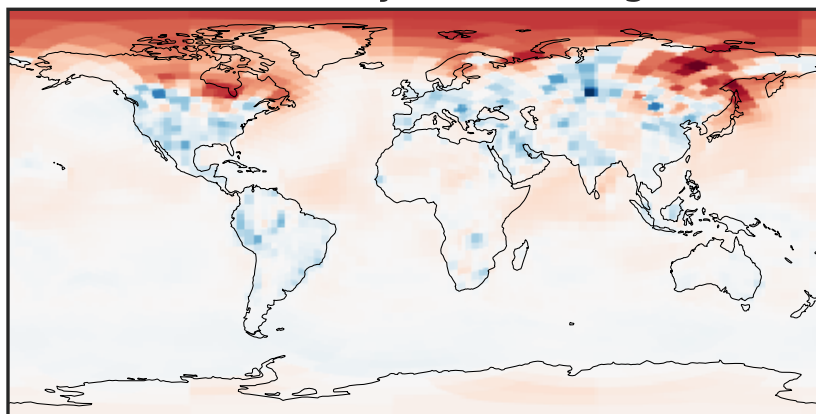
-5.22 -2.61 0.00 2.61 5.22  
ppb

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



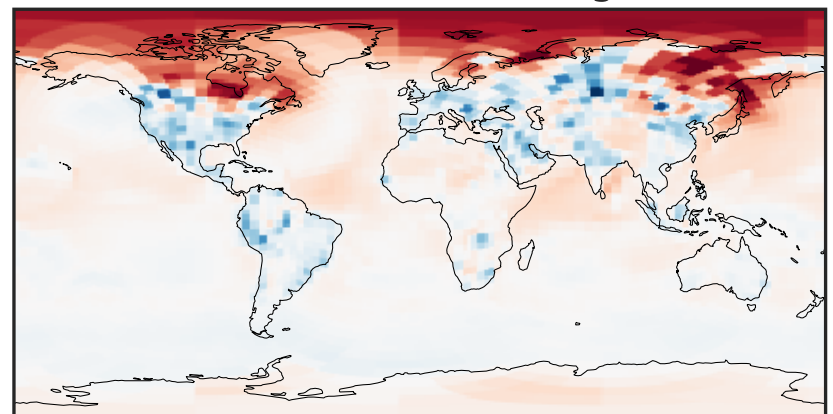
-0.1484 -0.0742 0.0000 0.0742 0.1484  
ppb

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



0.421 0.710 1.000 1.689 2.378  
unitless

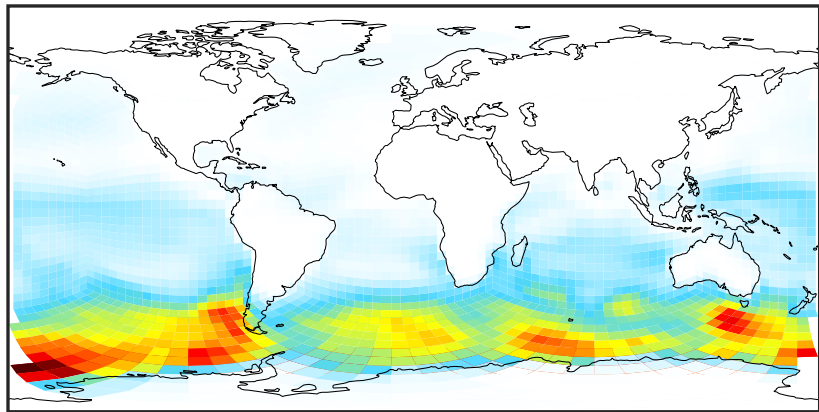
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

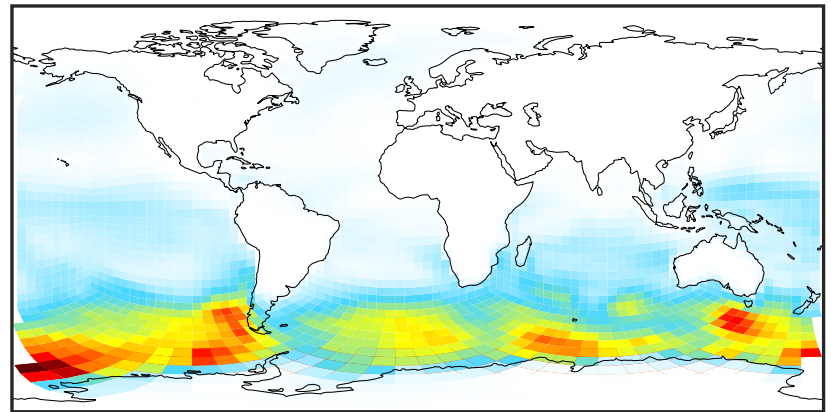
# SpeciesConcVV\_DMS (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



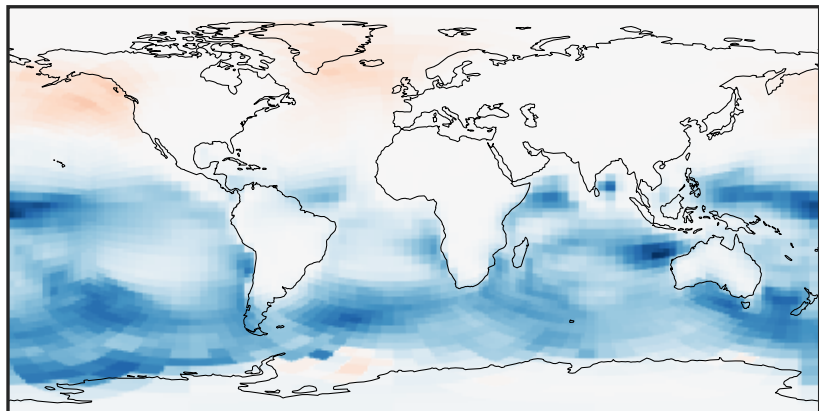
0.000 0.364 0.728 1.091 1.455  
ppb

GCHP\_14.2.0 (Dev)  
c24



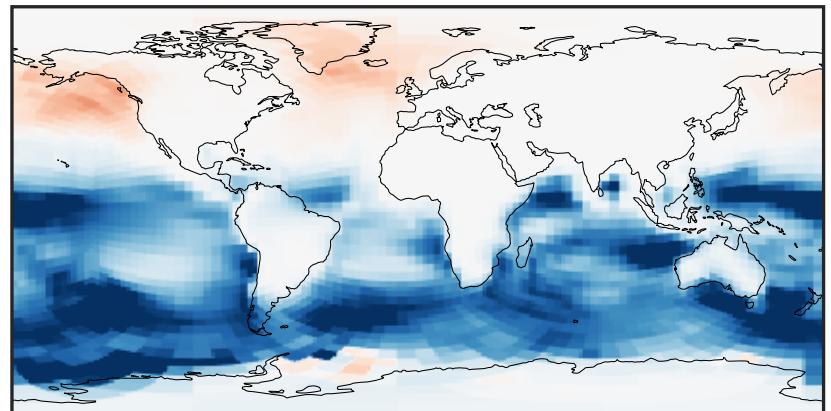
0.000 0.364 0.728 1.091 1.455  
ppb

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



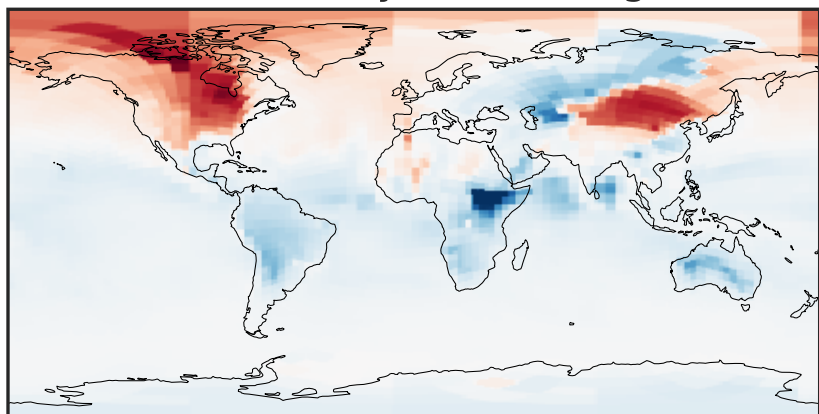
-0.0546 -0.0273 0.0000 0.0273 0.0546  
ppb

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



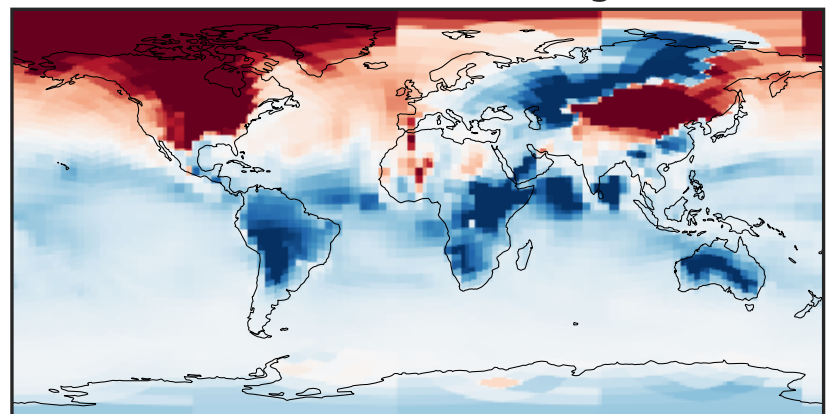
-0.02 0.00 0.02  
ppb

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



0.115 0.558 1.000 4.839 8.677  
unitless

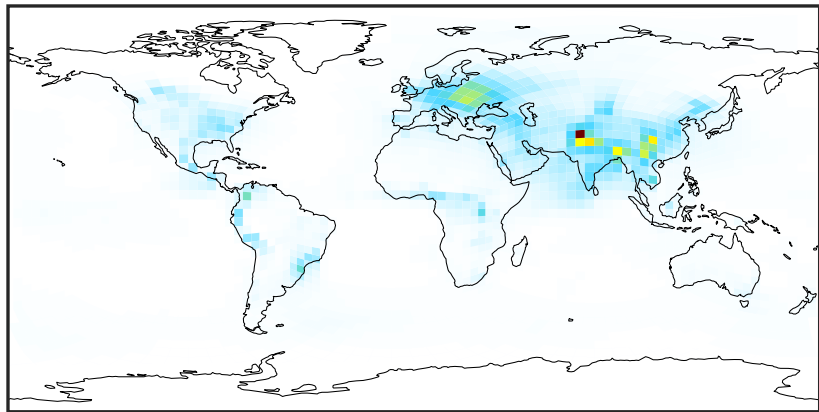
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

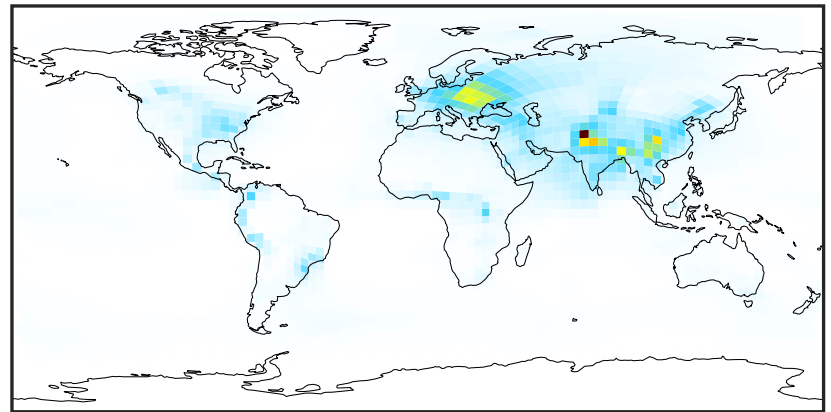
# SpeciesConcVV\_HMS (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



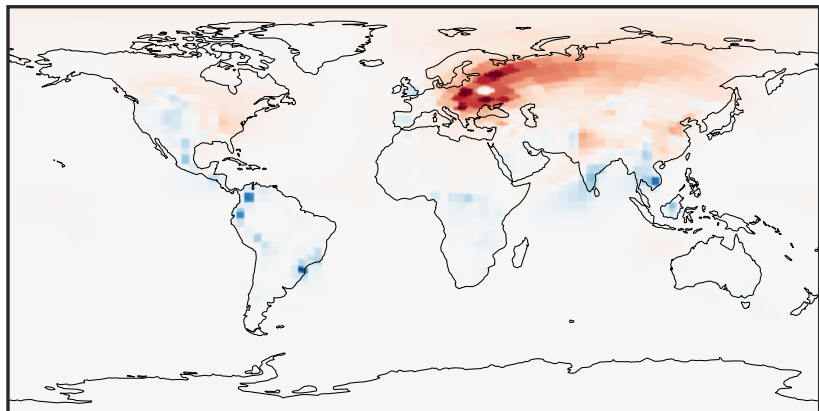
0.0003 0.2386 0.4772 0.7157 0.9547  
ppb

GCHP\_14.2.0 (Dev)  
c24



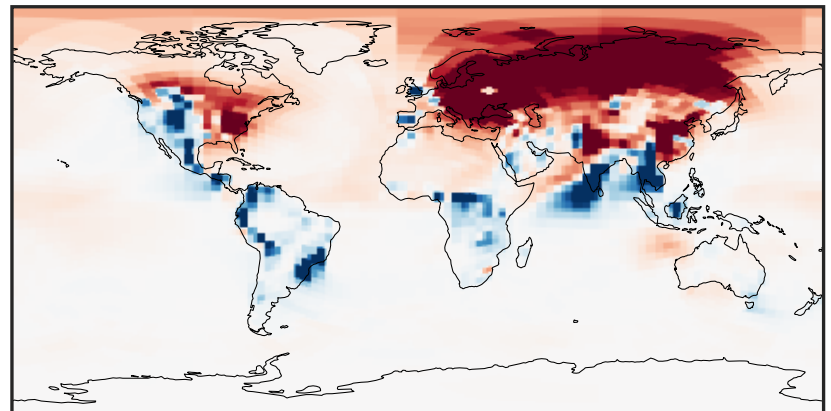
0.0003 0.2386 0.4772 0.7157 0.9547  
ppb

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



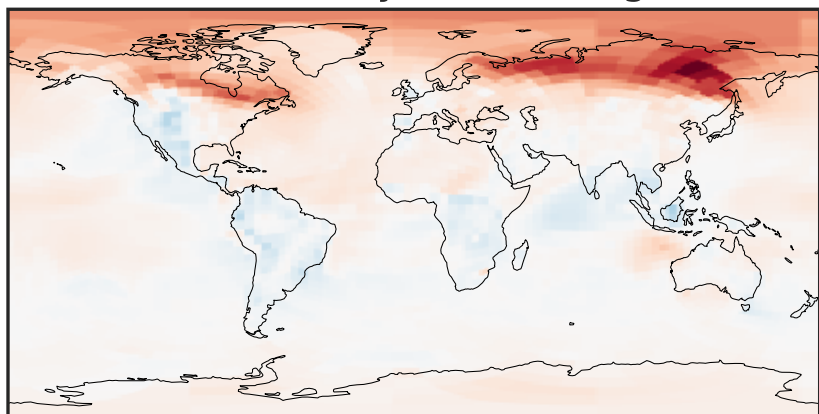
-0.0913 -0.0456 0.0000 0.0456 0.0913  
ppb

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



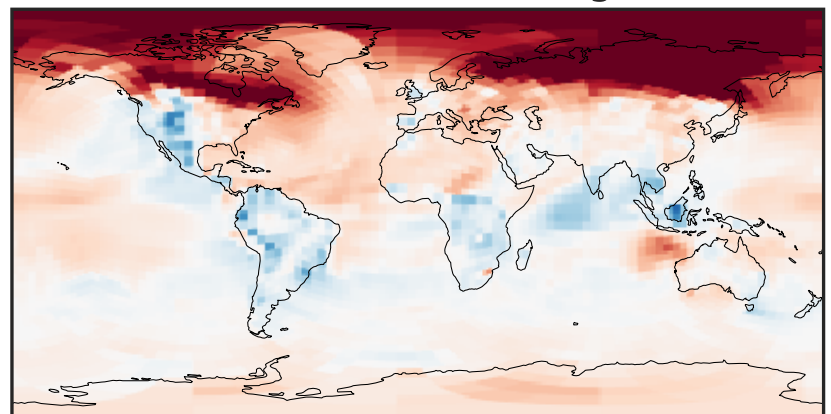
-0.008 0.000 0.008  
ppb

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



0.183 0.592 1.000 3.228 5.457  
unitless

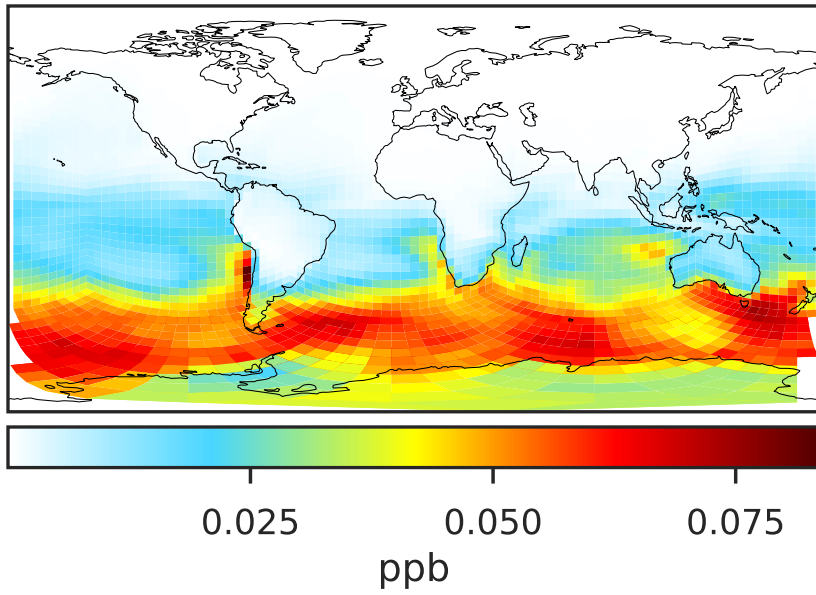
Ratio (1x1.25)  
Dev/Ref, Fixed Range



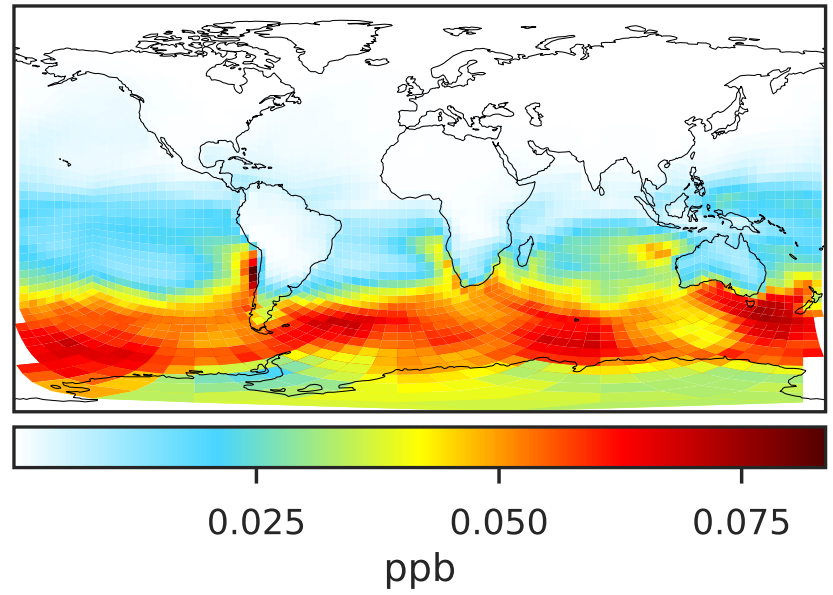
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_MSA (Jan2019)

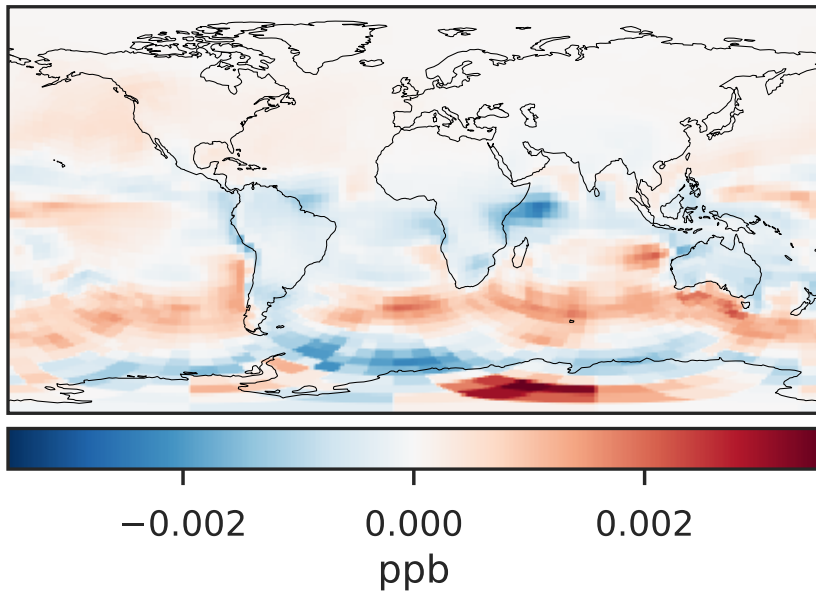
GCHP\_14.0.0 (Ref)  
c24



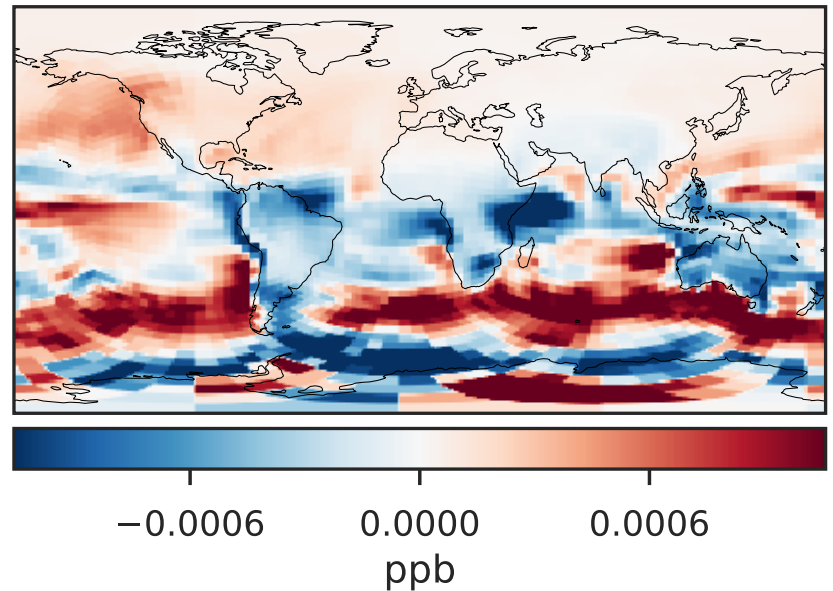
GCHP\_14.2.0 (Dev)  
c24



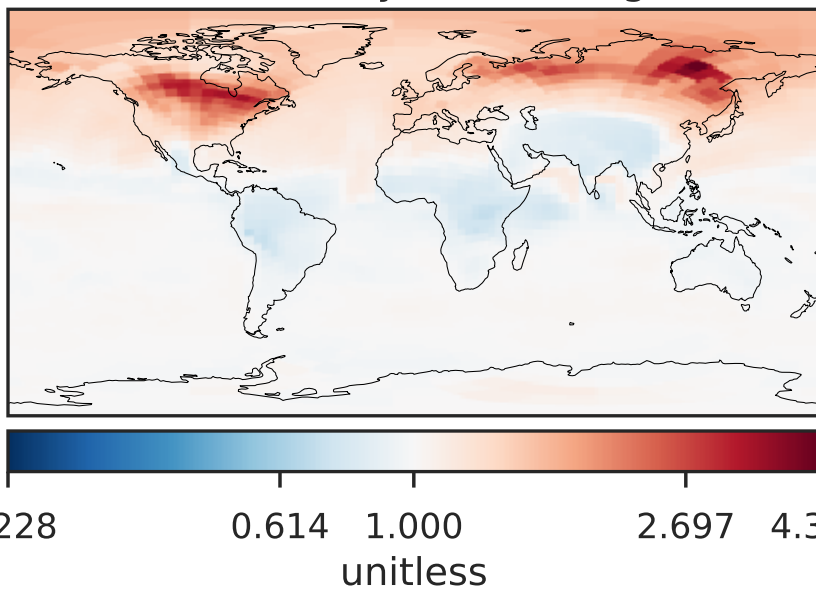
Difference (1x1.25)  
Dev - Ref, Dynamic Range



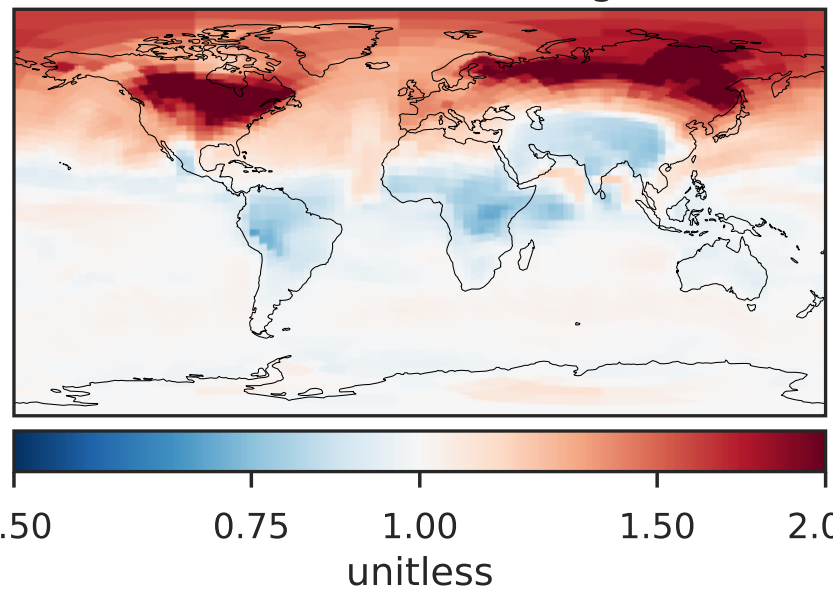
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

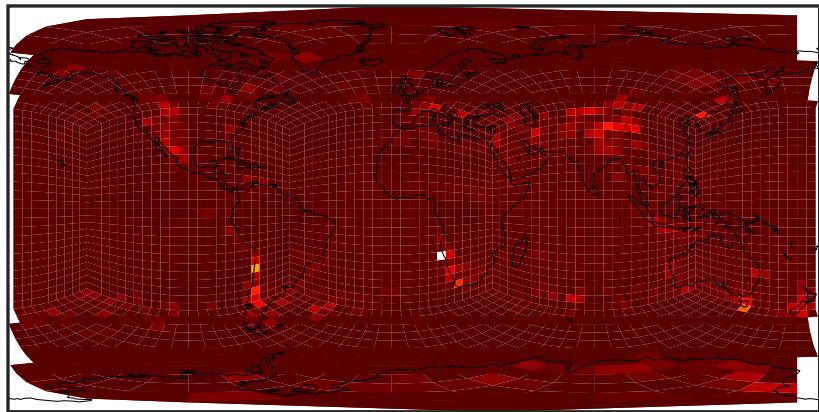


Ratio (1x1.25)  
Dev/Ref, Fixed Range



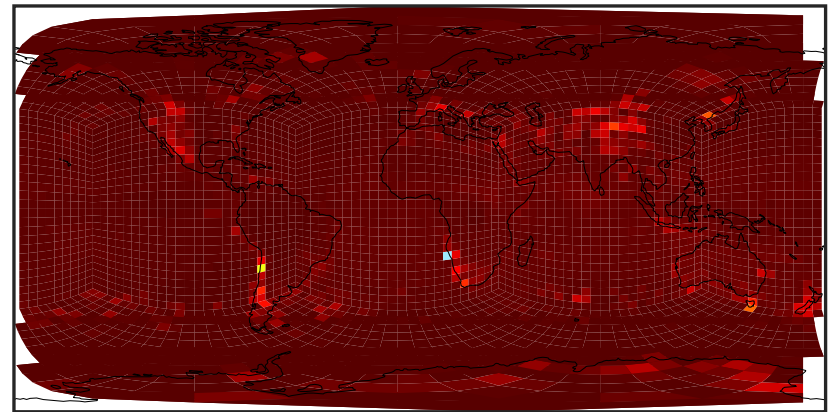
# SpeciesConcVV\_OCS (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



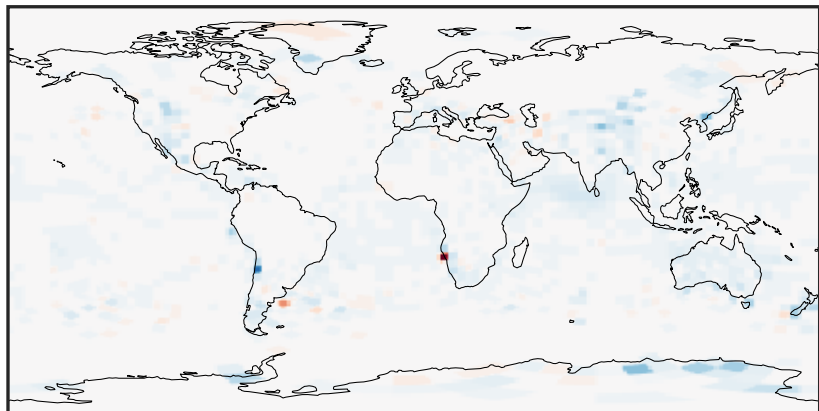
87.5 90.0 92.5 95.0  
ppb  $1e-6+4.999e-1$

GCHP\_14.2.0 (Dev)  
c24



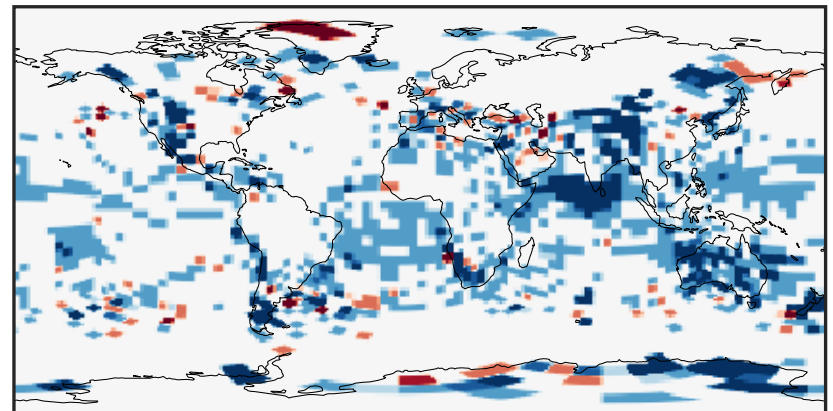
87.5 90.0 92.5 95.0  
ppb  $1e-6+4.999e-1$

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



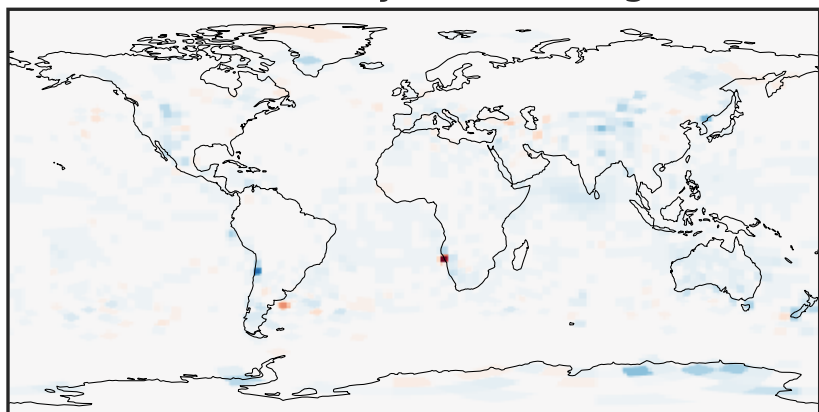
-8 0 8  
ppb  $1e-7$

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



-6 0 6  
ppb  $1e-8$

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



0.999997556 1.000000000 1.000002444  
unitless

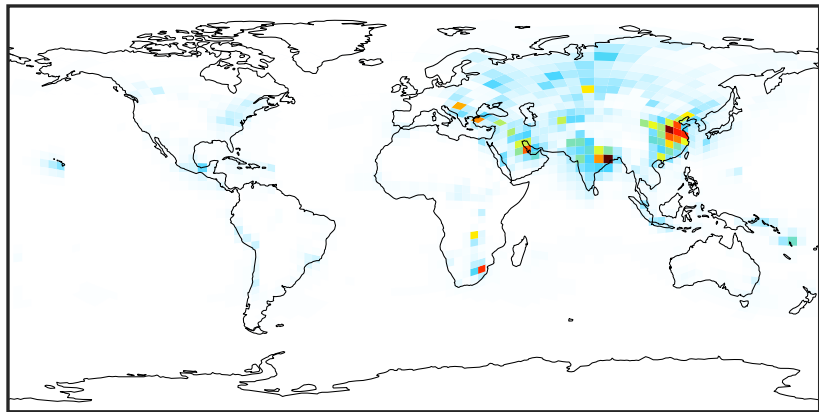
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

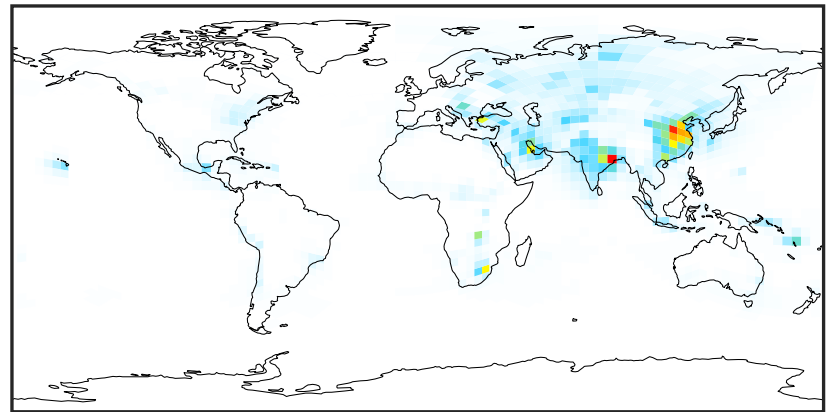
# SpeciesConcVV\_SO2 (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



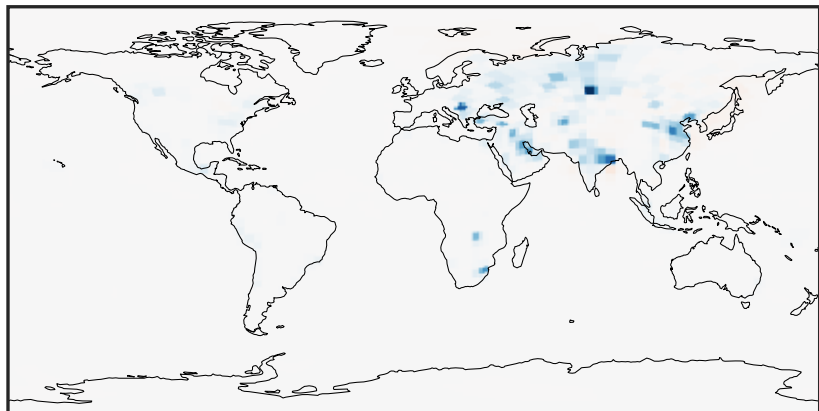
0.00 3.85 7.70 11.55 15.40  
ppb

GCHP\_14.2.0 (Dev)  
c24



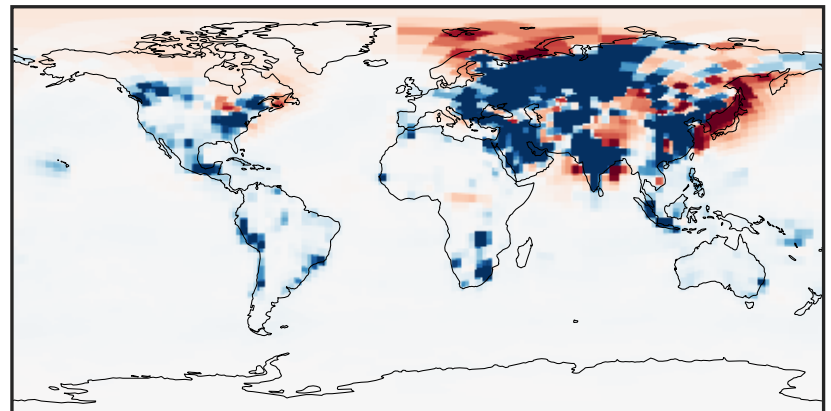
0.00 3.85 7.70 11.55 15.40  
ppb

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



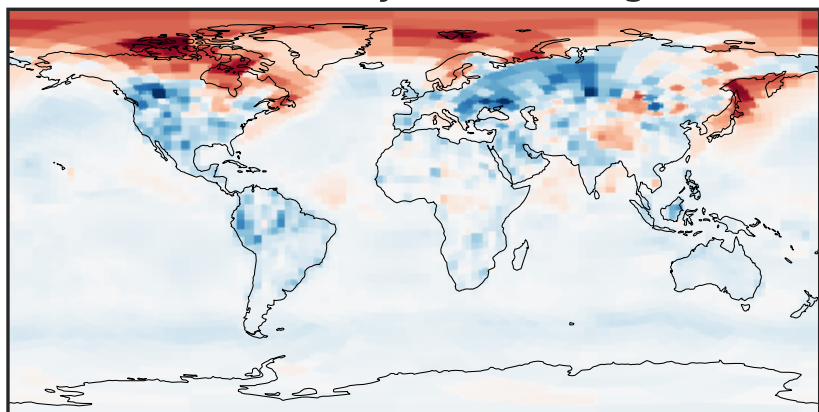
-5.12 -2.56 0.00 2.56 5.12  
ppb

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



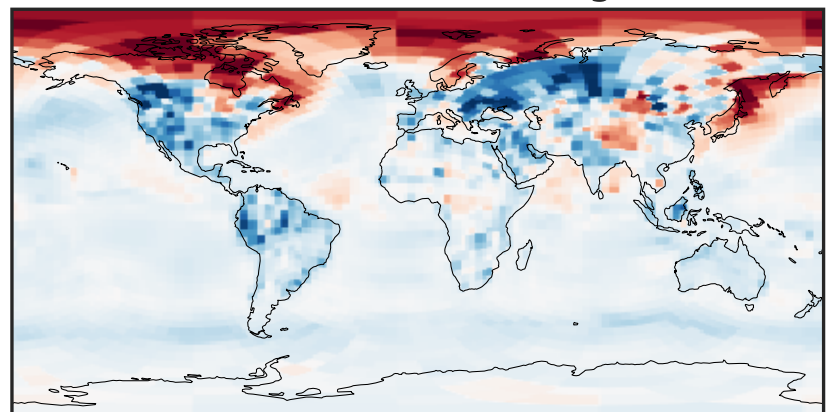
-0.1385 -0.0692 0.0000 0.0692 0.1385  
ppb

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



0.377 0.689 1.000 1.825 2.650  
unitless

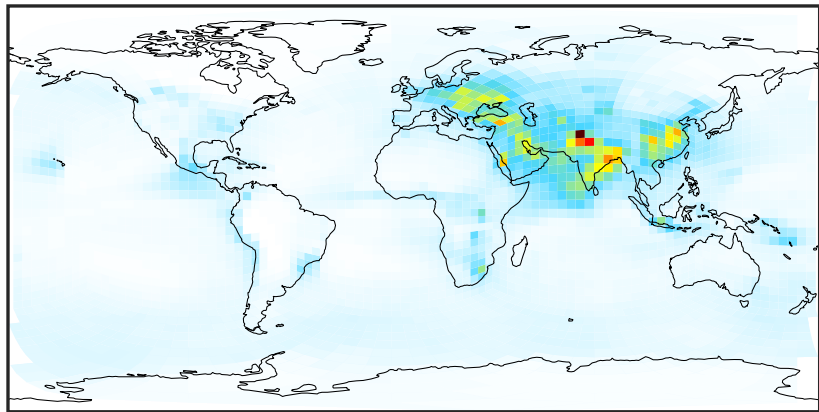
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

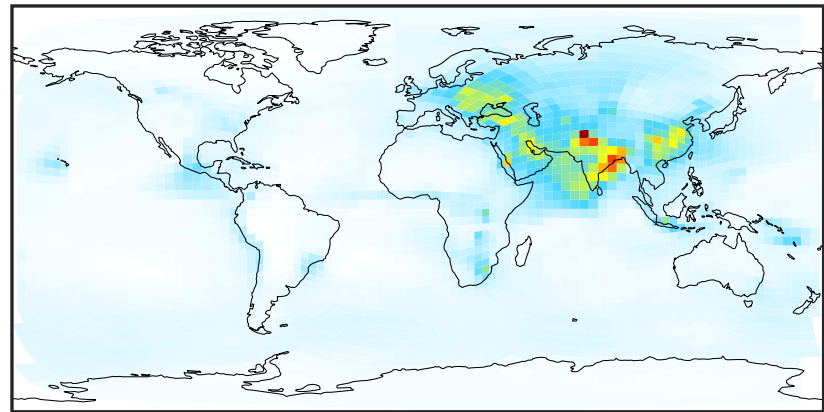
# SpeciesConcVV\_SO4 (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



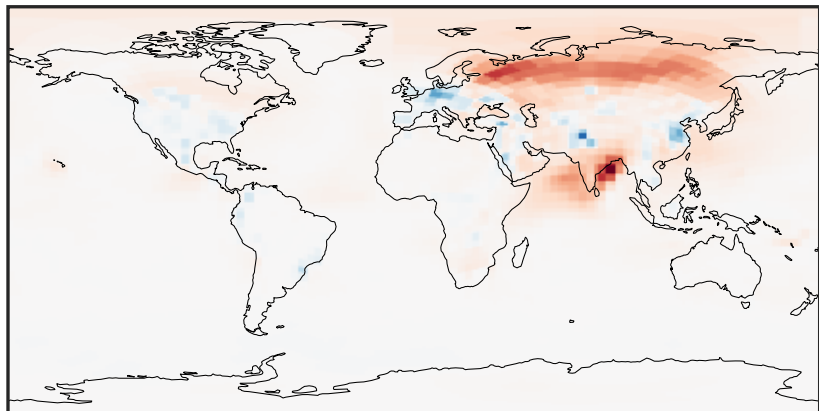
0.024 1.435 2.869 4.304 5.763  
ppb

GCHP\_14.2.0 (Dev)  
c24



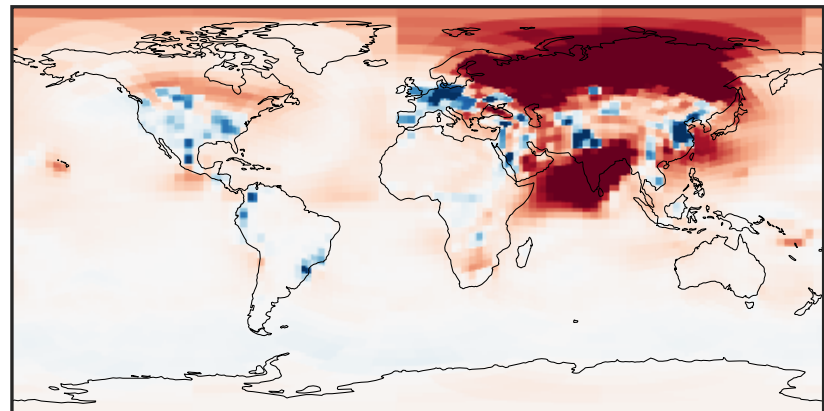
0.024 1.435 2.869 4.304 5.763  
ppb

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



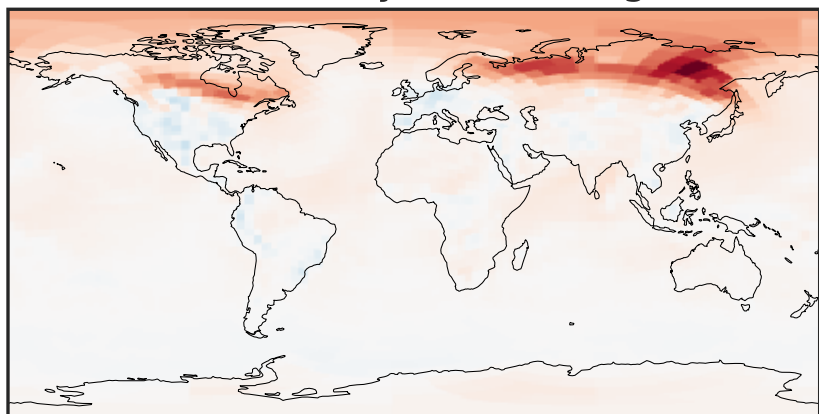
-0.751 -0.376 0.000 0.376 0.751  
ppb

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



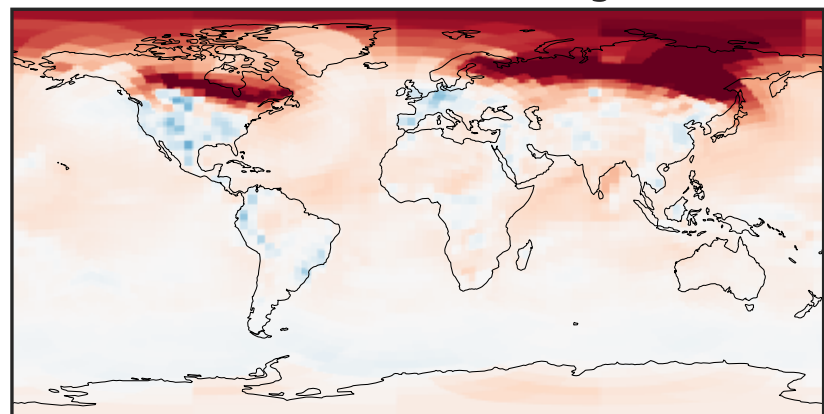
-0.1448 -0.0724 0.0000 0.0724 0.1448  
ppb

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



0.203 0.602 1.000 2.959 4.918  
unitless

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



0.50 0.75 1.00 1.50 2.00  
unitless