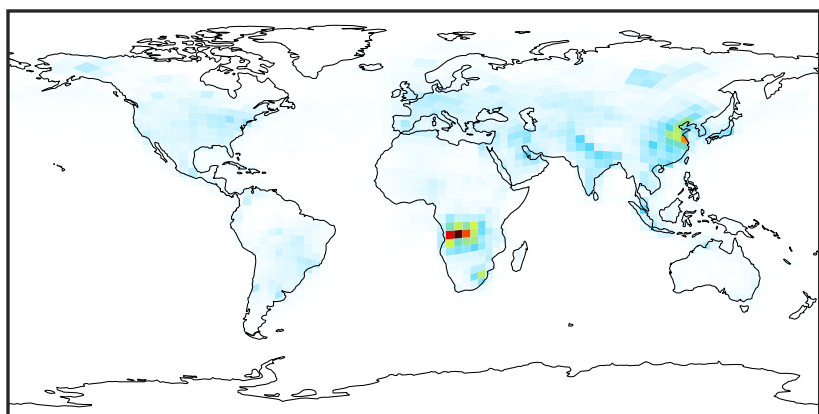


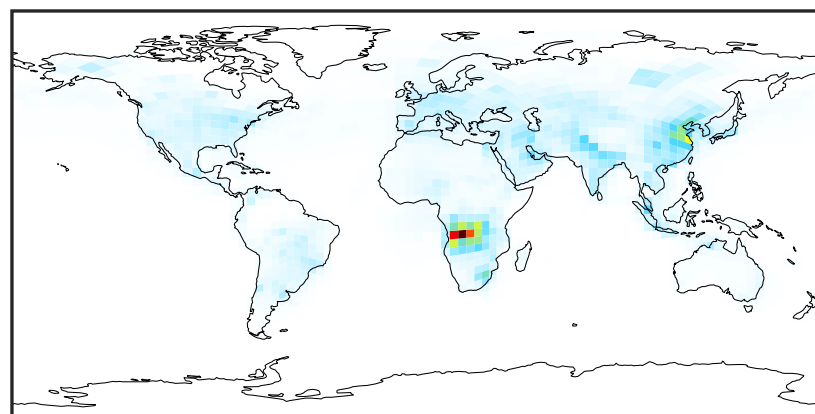
SpeciesConcVV_NOy (Jul2019)

GCHP_14.0.0 (Ref)
c24



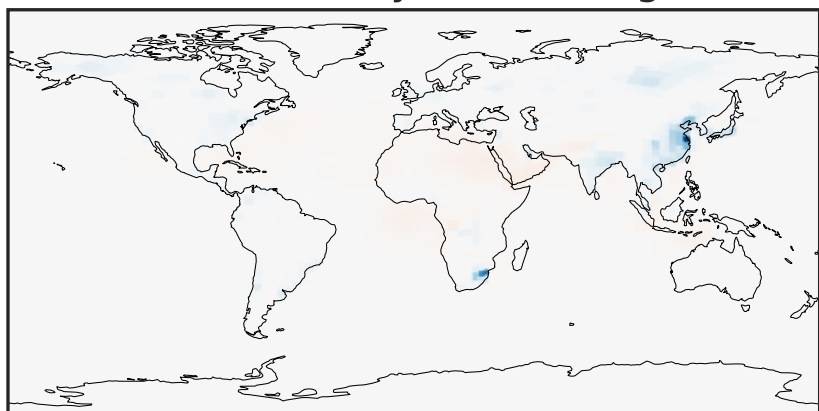
0.01 9.76 19.51 29.27 39.03
ppb

GCHP_14.2.0 (Dev)
c24



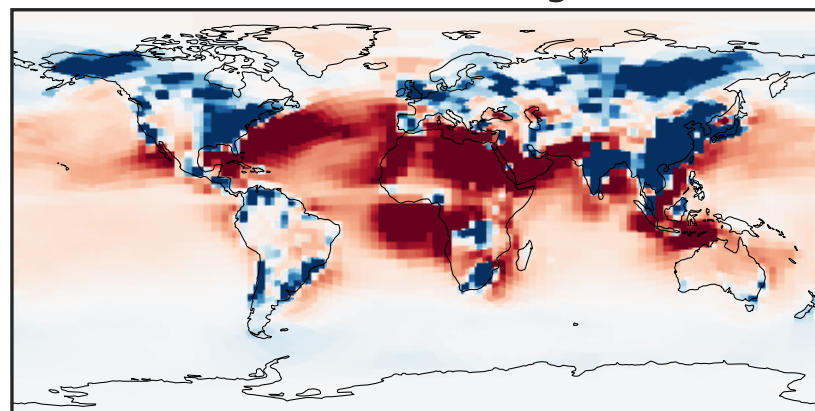
0.01 9.76 19.51 29.27 39.03
ppb

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



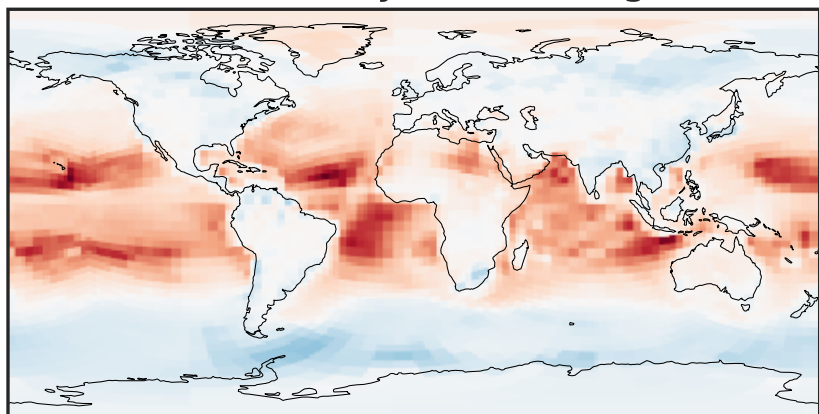
-5.12 -2.56 0.00 2.56 5.12
ppb

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



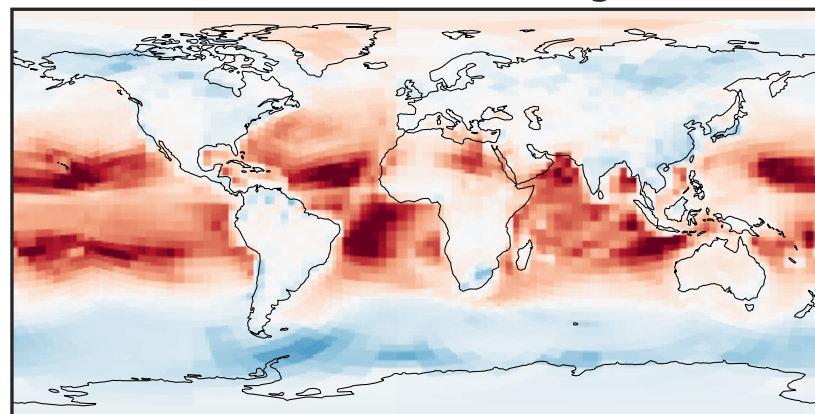
-0.0846 -0.0423 0.0000 0.0423 0.0846
ppb

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



0.379 0.690 1.000 1.818 2.636
unitless

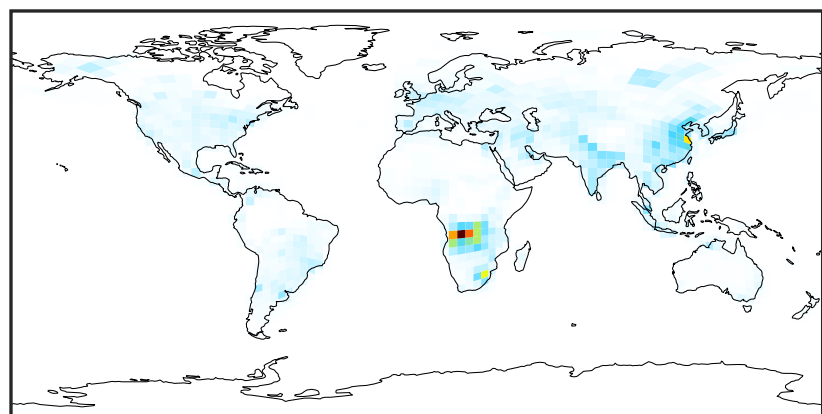
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

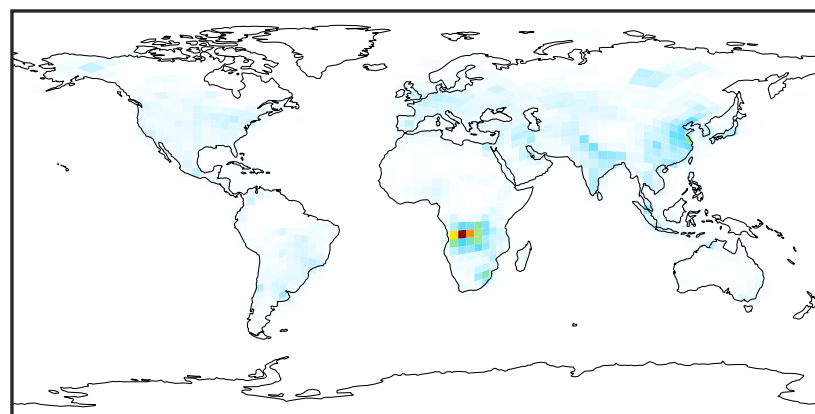
SpeciesConcVV_NOx (Jul2019)

GCHP_14.0.0 (Ref)
c24



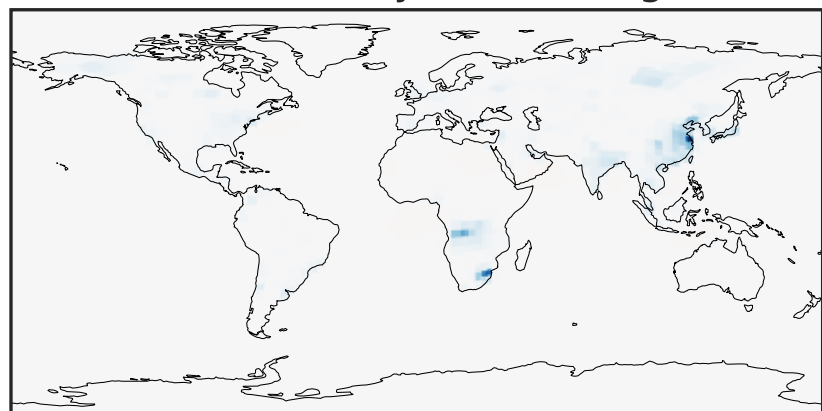
0.00 7.48 14.97 22.45 29.94
ppb

GCHP_14.2.0 (Dev)
c24



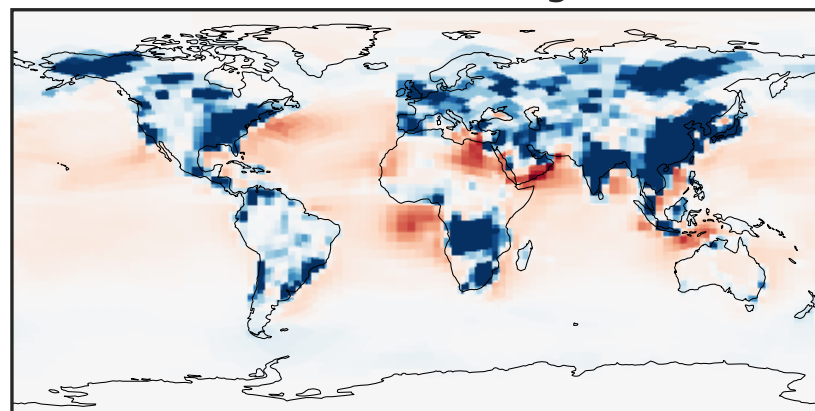
0.00 7.48 14.97 22.45 29.94
ppb

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



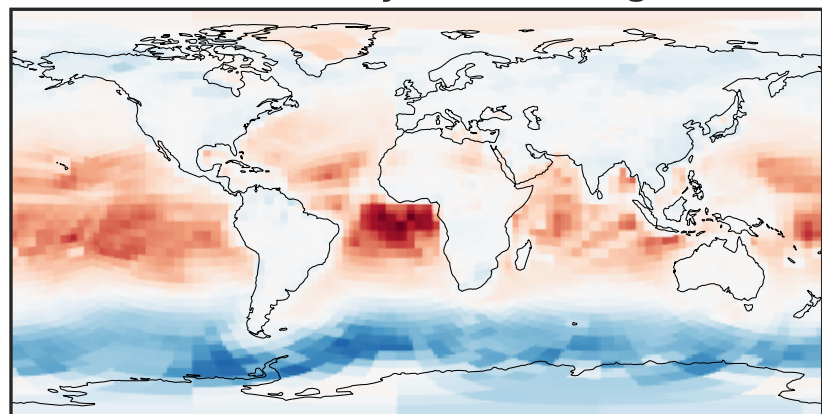
-5.10 -2.55 0.00 2.55 5.10
ppb

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



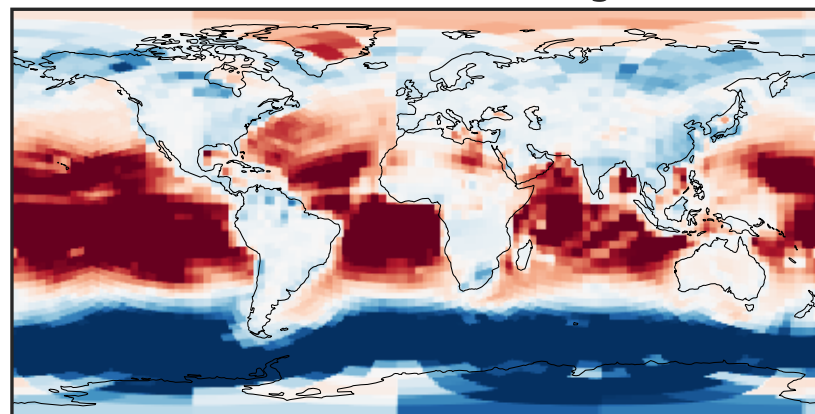
-0.1095 -0.0547 0.0000 0.0547 0.1095
ppb

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



1e-01 1 10
unitless

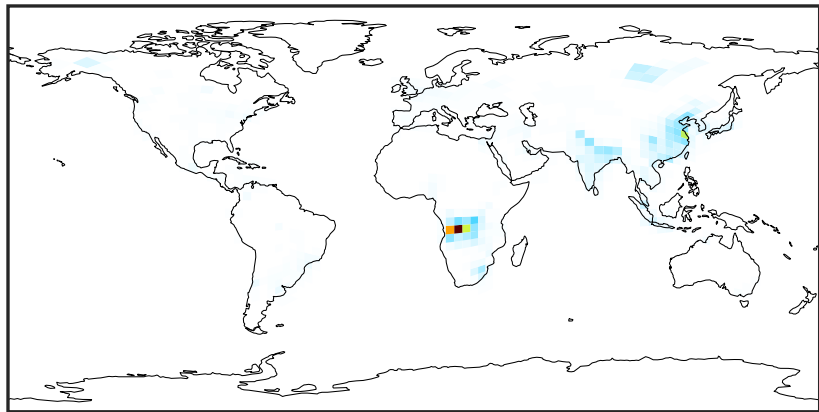
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

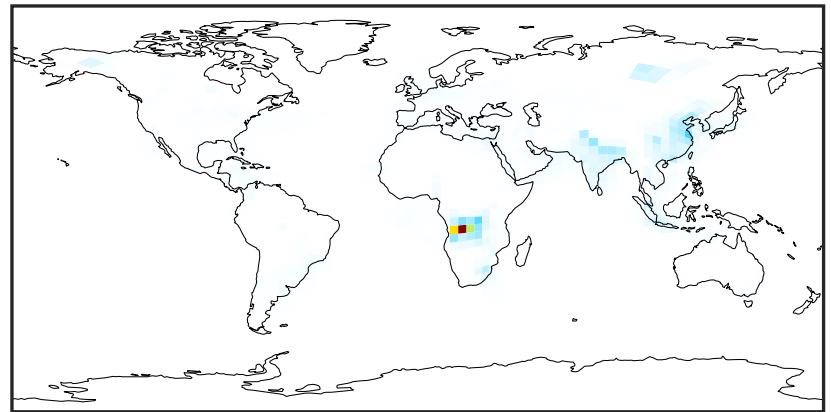
SpeciesConcVV_HNO2 (Jul2019)

GCHP_14.0.0 (Ref)
c24



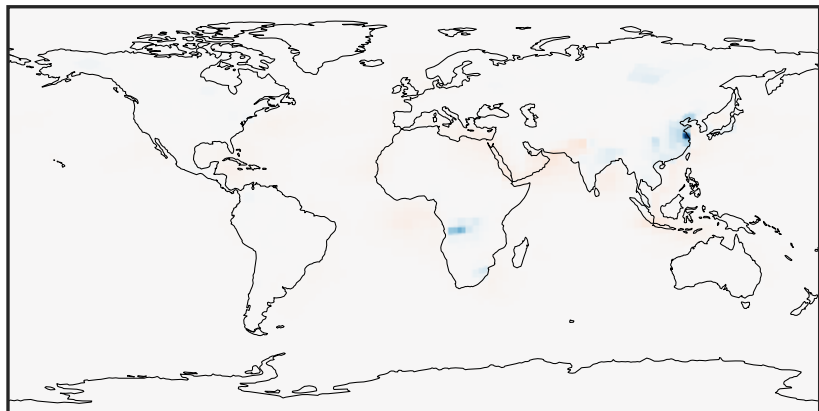
0.0000 0.1615 0.3230 0.4844 0.6459
ppb

GCHP_14.2.0 (Dev)
c24



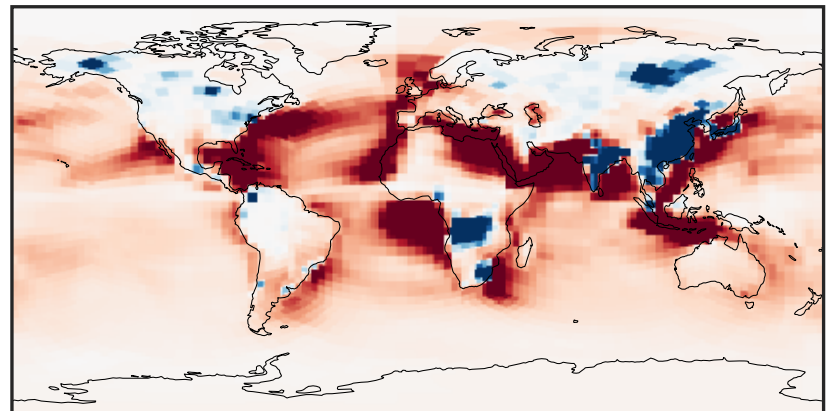
0.0000 0.1615 0.3230 0.4844 0.6459
ppb

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



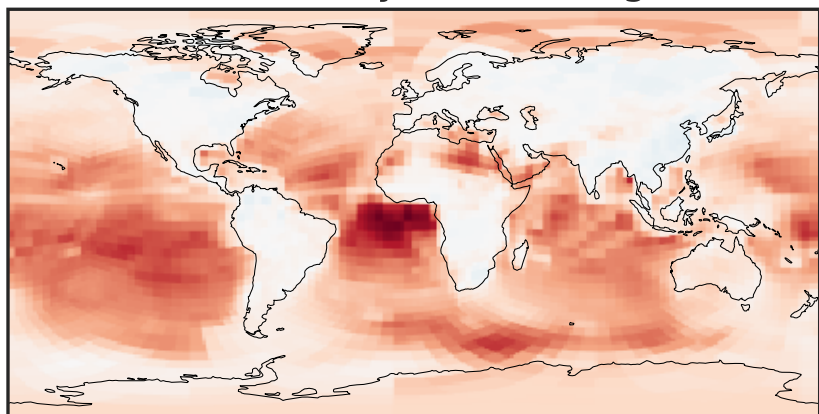
-0.1026 -0.0513 0.0000 0.0513 0.1026
ppb

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



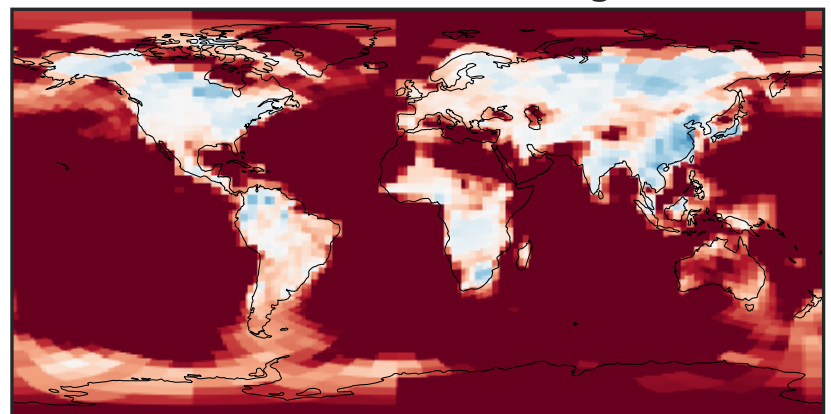
-0.001 0.000 0.001
ppb

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



1e-01 1 10
unitless

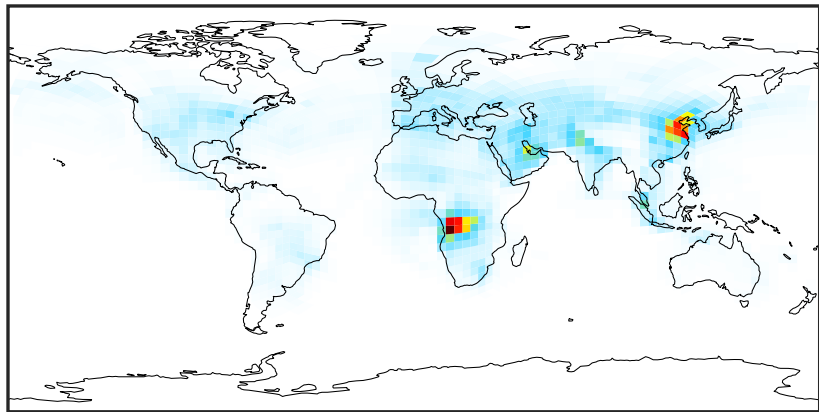
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

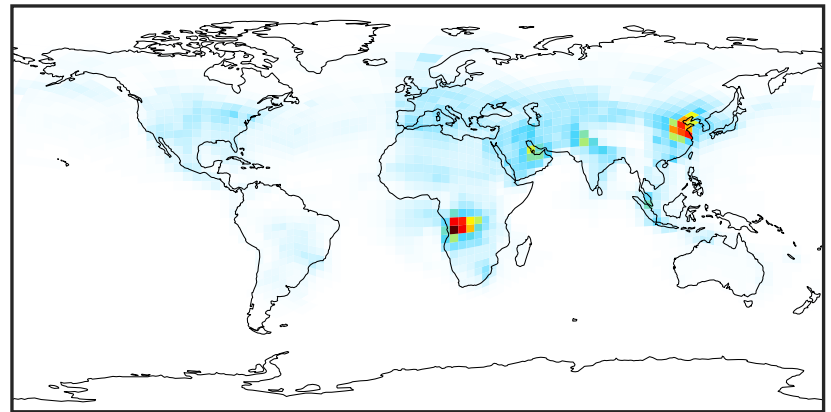
SpeciesConcVV_HNO3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



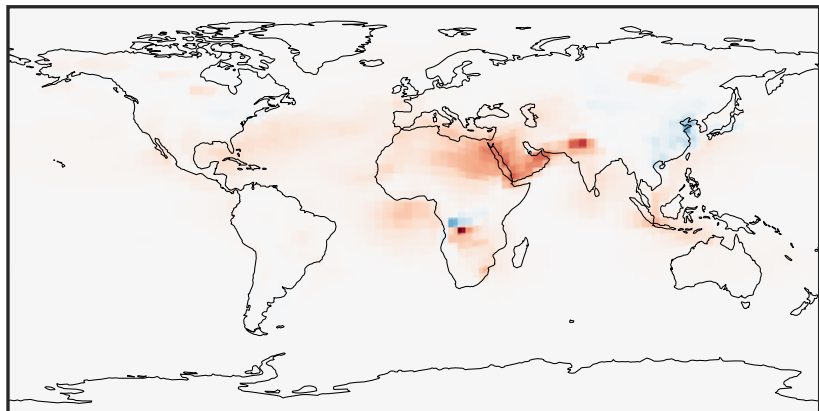
0.000 2.282 4.565 6.847 9.129
ppb

GCHP_14.2.0 (Dev)
c24



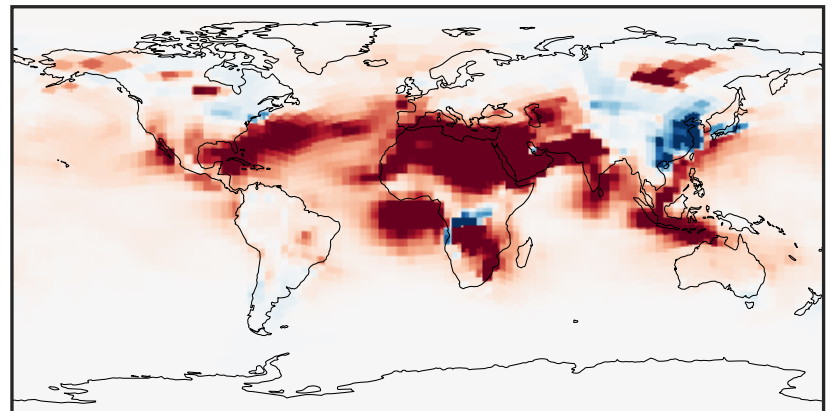
0.000 2.282 4.565 6.847 9.129
ppb

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



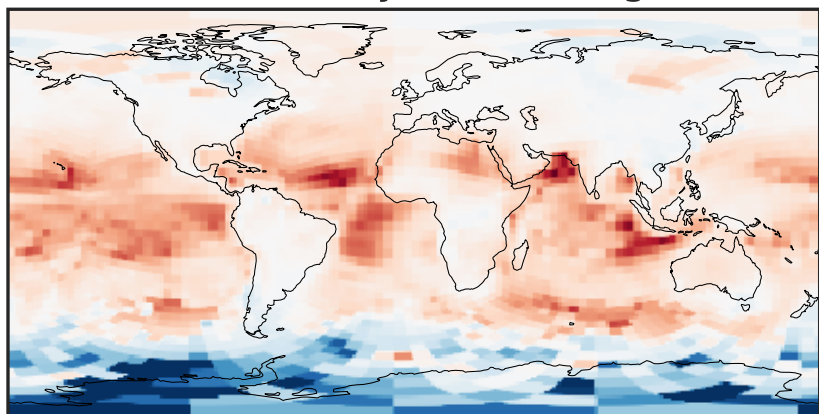
-0.507 -0.254 0.000 0.254 0.507
ppb

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



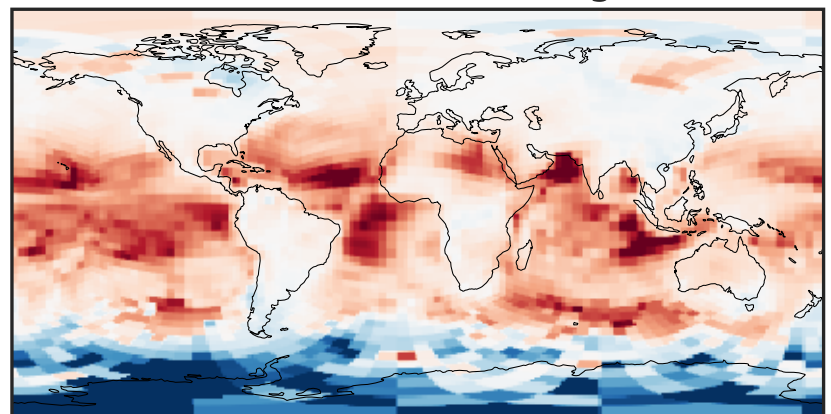
-0.0574 -0.0287 0.0000 0.0287 0.0574
ppb

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



0.355 0.677 1.000 1.909 2.819
unitless

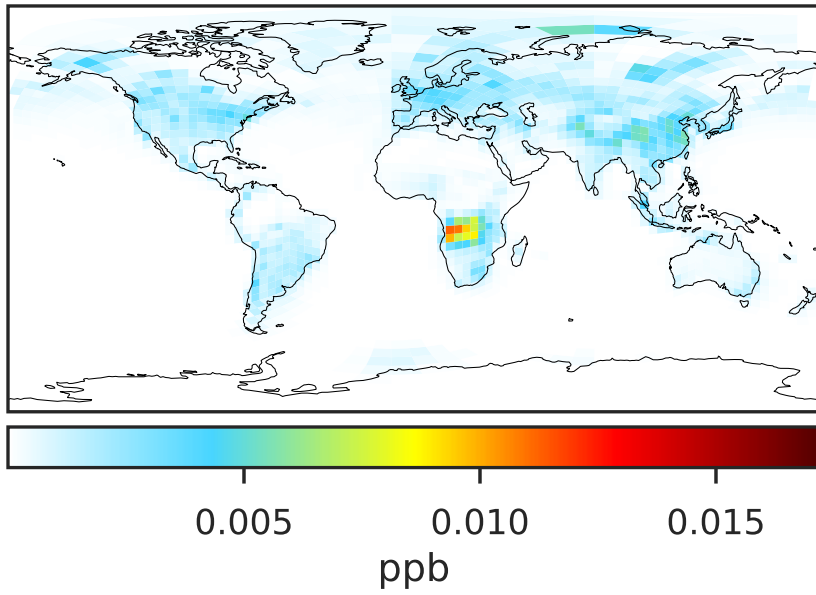
Ratio (1x1.25)
Dev/Ref, Fixed Range



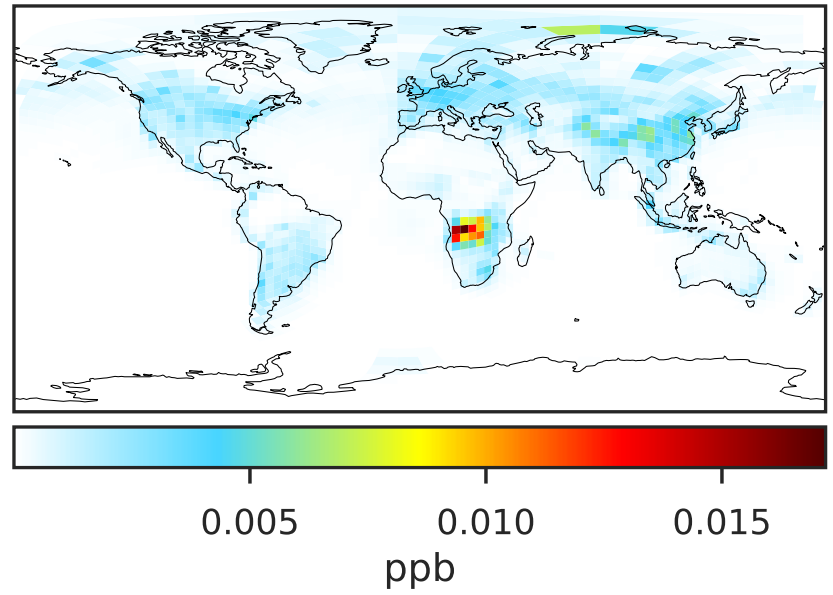
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_HNO4 (Jul2019)

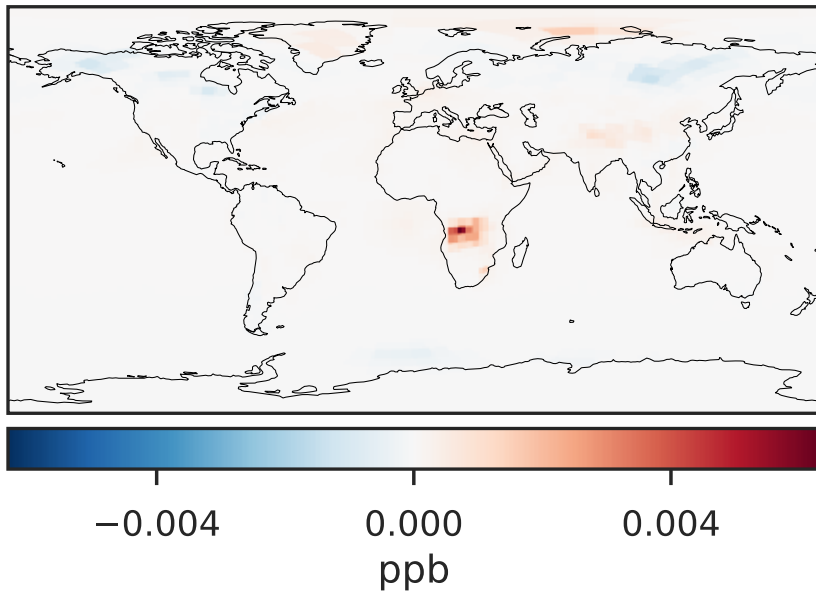
GCHP_14.0.0 (Ref)
c24



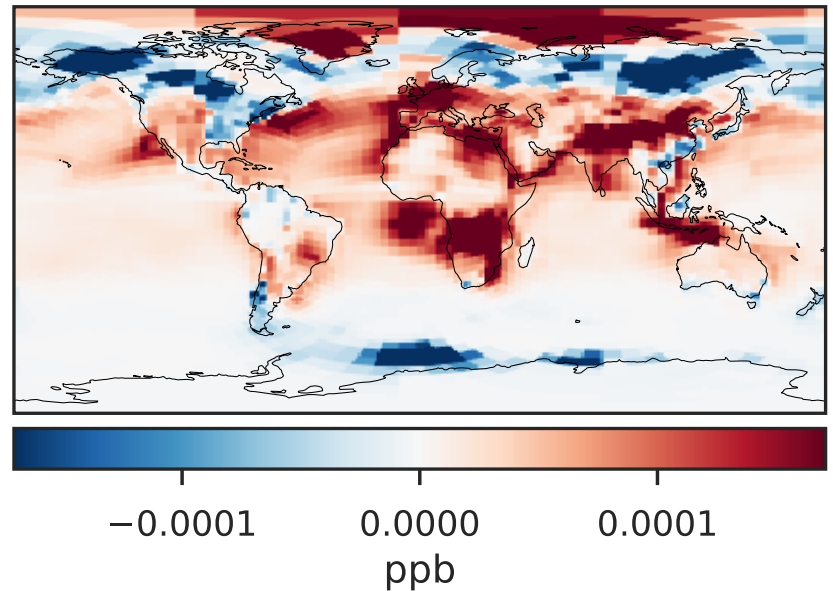
GCHP_14.2.0 (Dev)
c24



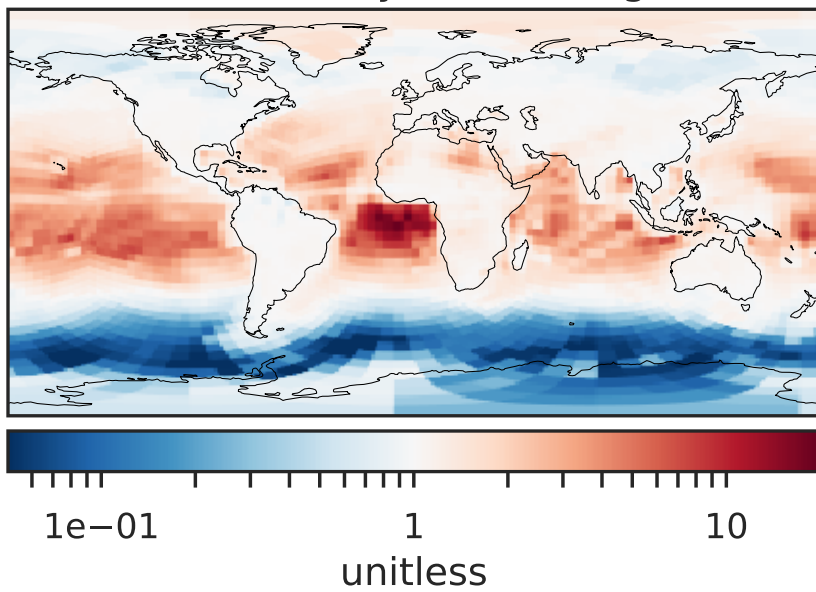
Difference (1x1.25)
Dev - Ref, Dynamic Range



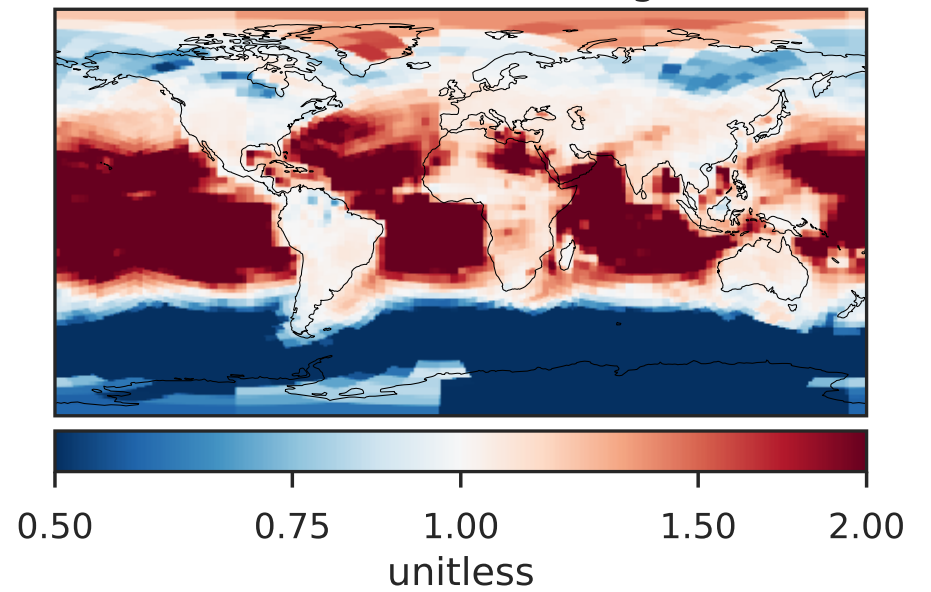
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

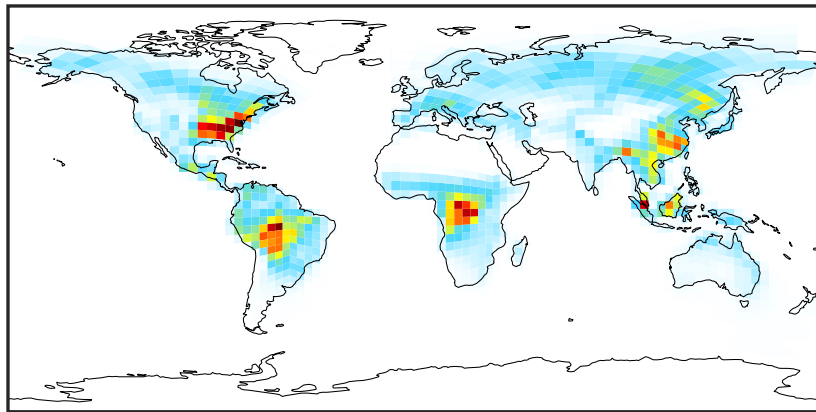


Ratio (1x1.25)
Dev/Ref, Fixed Range



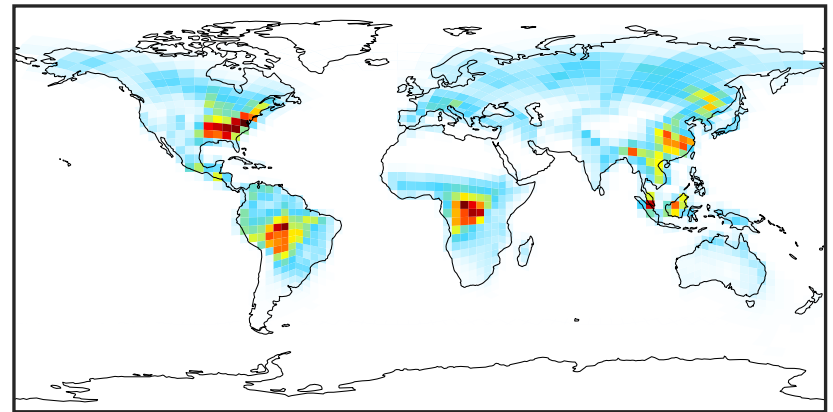
SpeciesConcVV_MPAN (Jul2019)

GCHP_14.0.0 (Ref)
c24



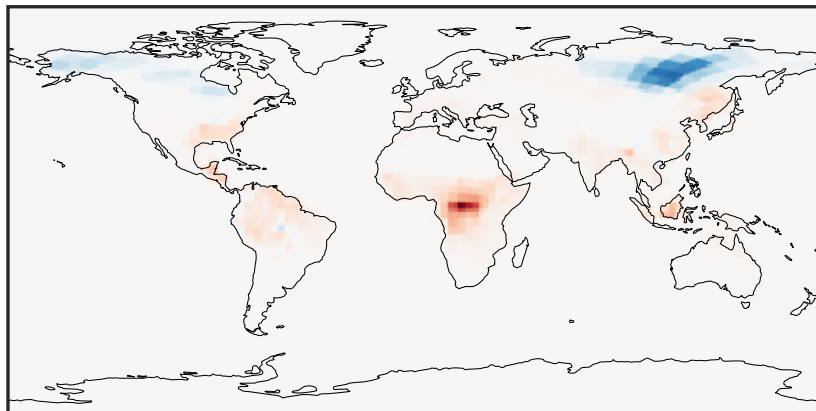
0.000 0.015 0.030
ppb

GCHP_14.2.0 (Dev)
c24



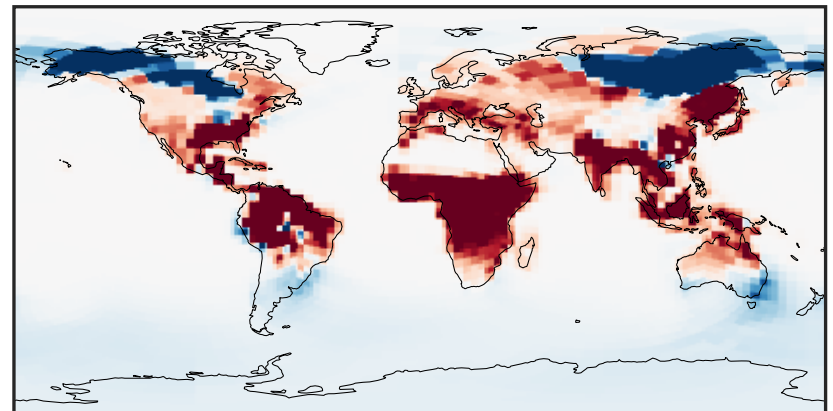
0.000 0.015 0.030
ppb

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



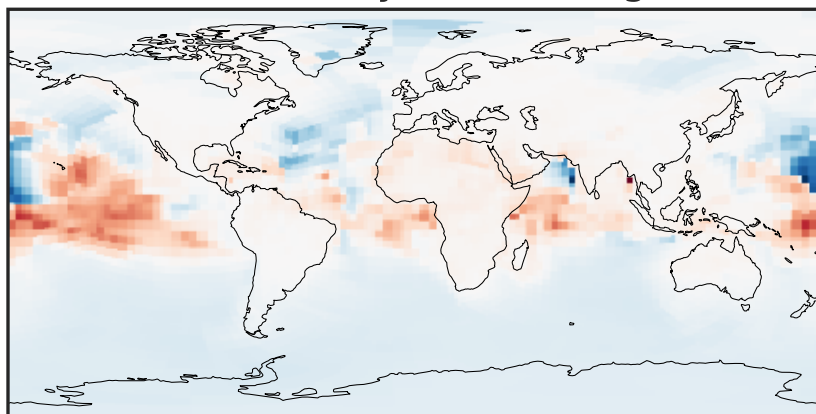
-0.0025 0.0000 0.0025
ppb

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



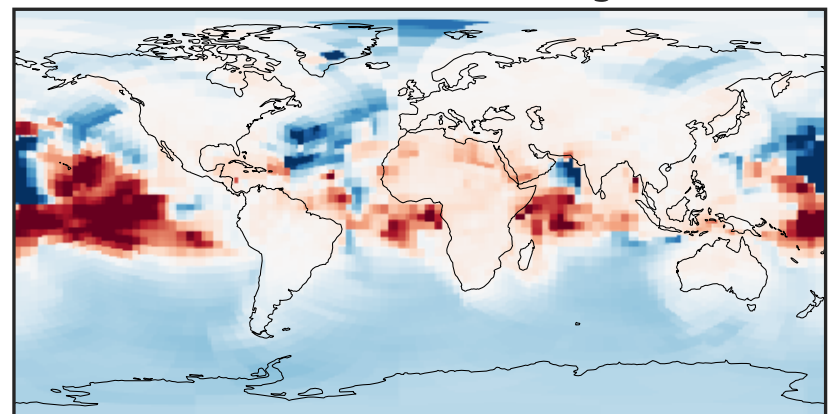
-0.0001 0.0000 0.0001
ppb

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



0.171 0.585 1.000 3.427 5.854
unitless

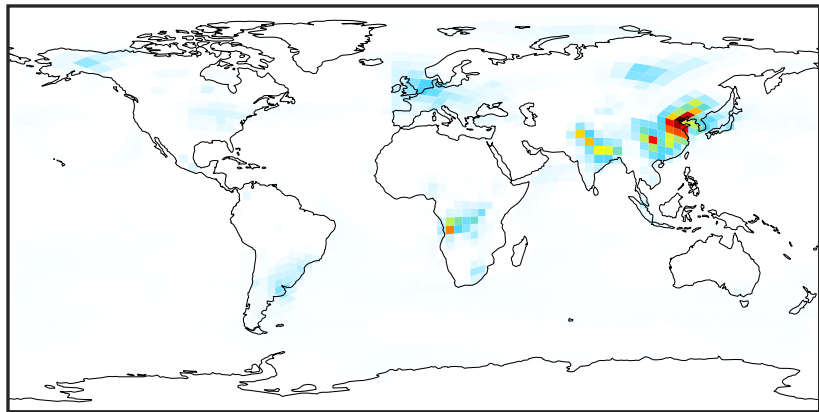
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

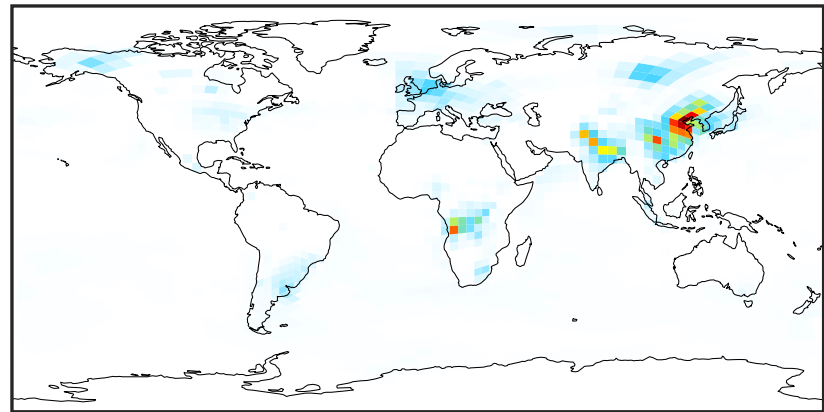
SpeciesConcVV_NIT (Jul2019)

GCHP_14.0.0 (Ref)
c24



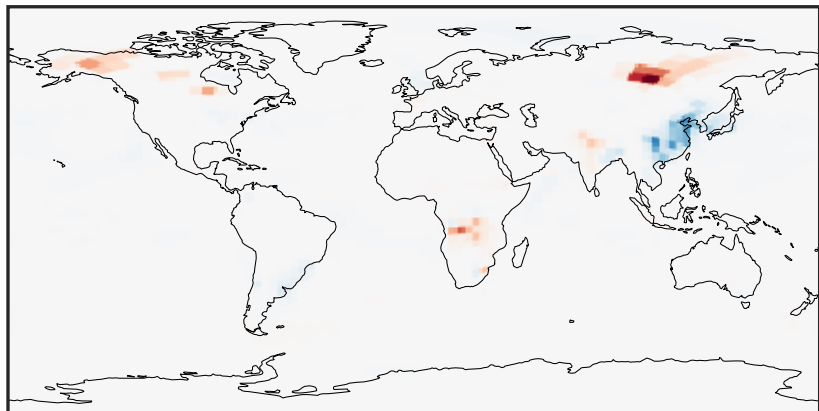
0.000 1.175 2.350 3.524 4.699
ppb

GCHP_14.2.0 (Dev)
c24



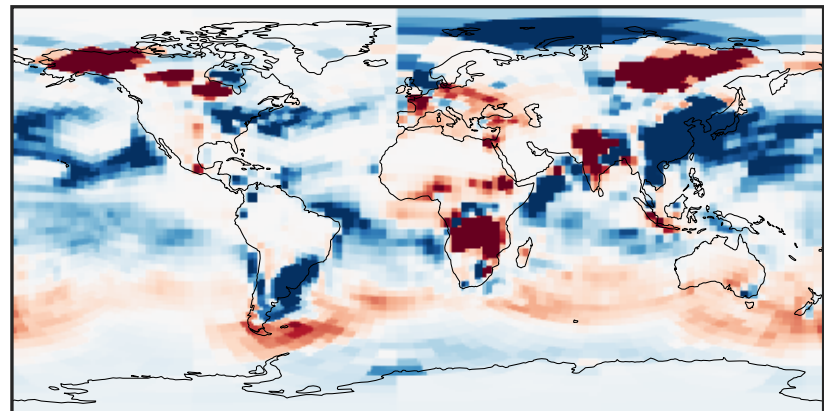
0.000 1.175 2.350 3.524 4.699
ppb

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



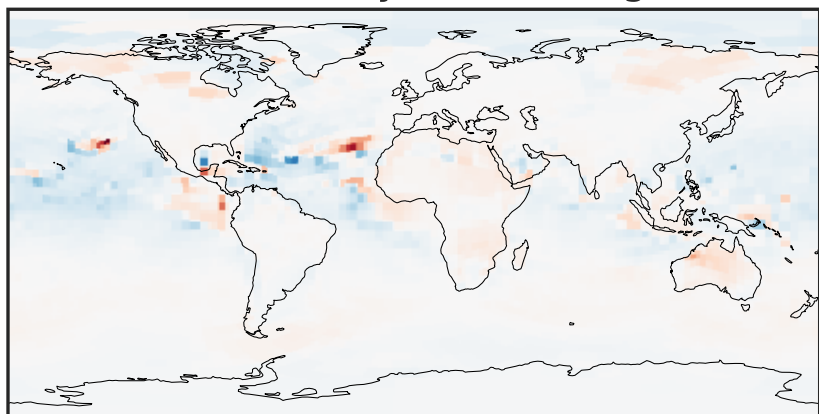
-0.4313 -0.2156 0.0000 0.2156 0.4313
ppb

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



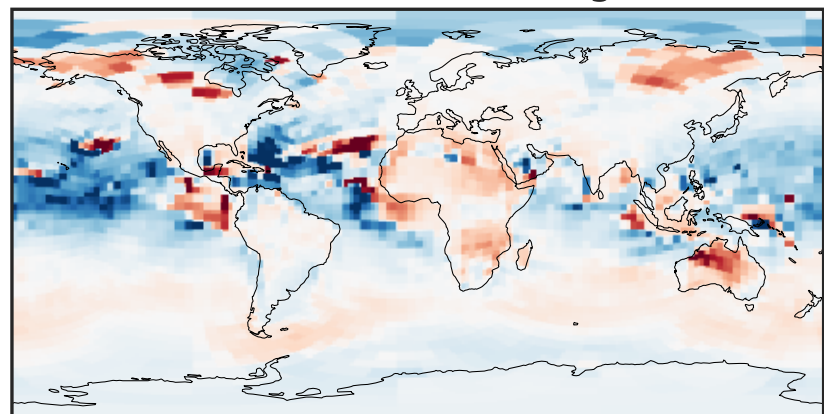
-0.004 0.000 0.004
ppb

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



1e-01 1 10
unitless

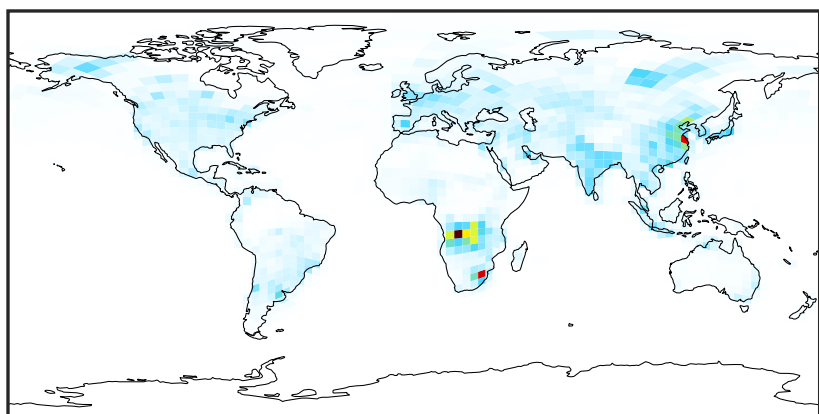
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

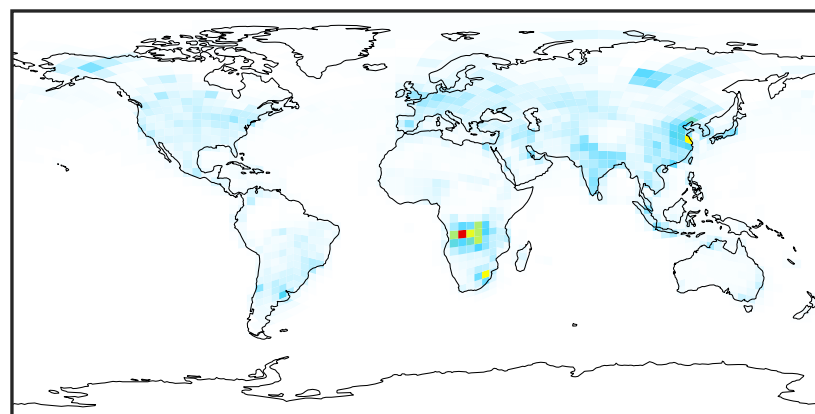
SpeciesConcVV_NO (Jul2019)

GCHP_14.0.0 (Ref)
c24



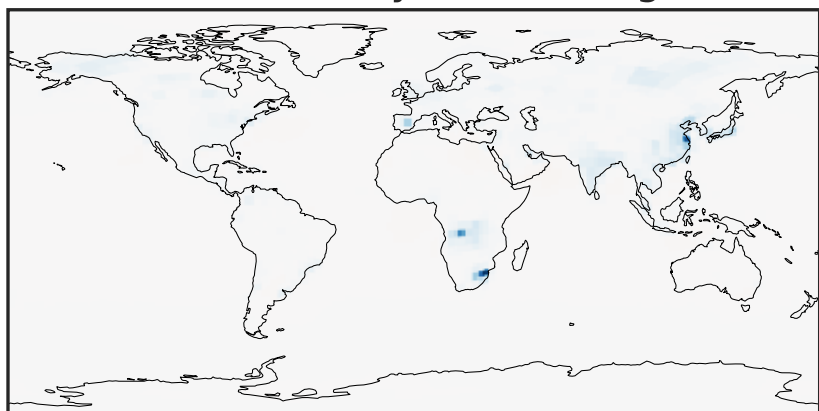
0.000 0.377 0.754 1.131 1.509
ppb

GCHP_14.2.0 (Dev)
c24



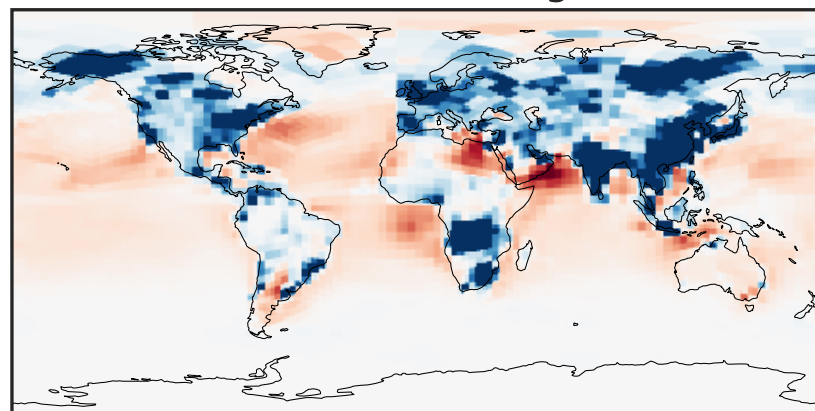
0.000 0.377 0.754 1.131 1.509
ppb

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



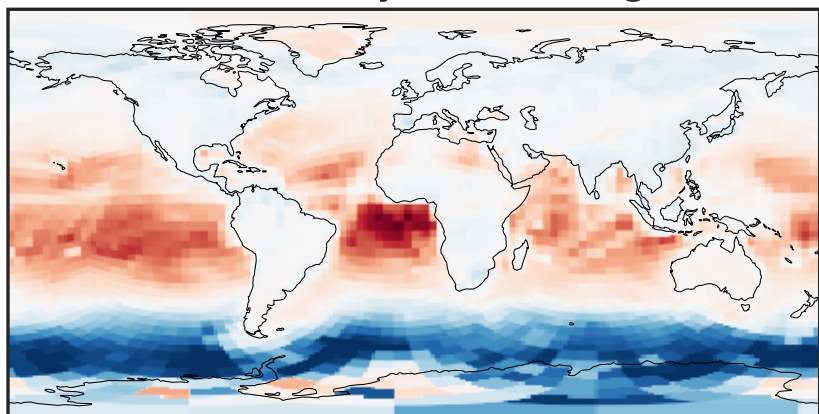
-0.4833 -0.2417 0.0000 0.2417 0.4833
ppb

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



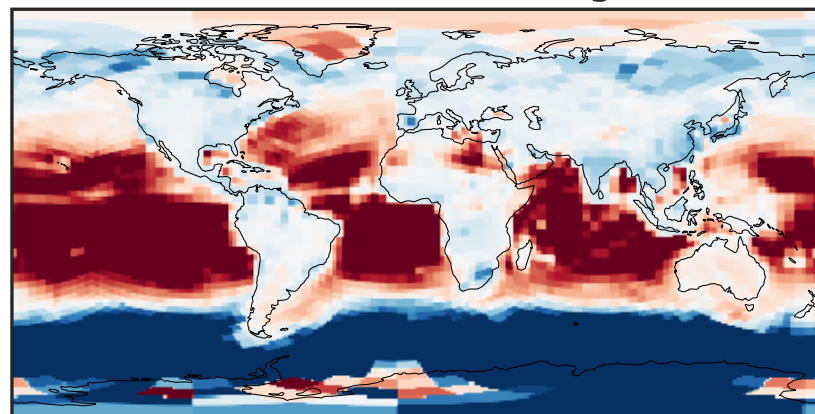
-0.006 0.000 0.006
ppb

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



1e-01 1 10
unitless

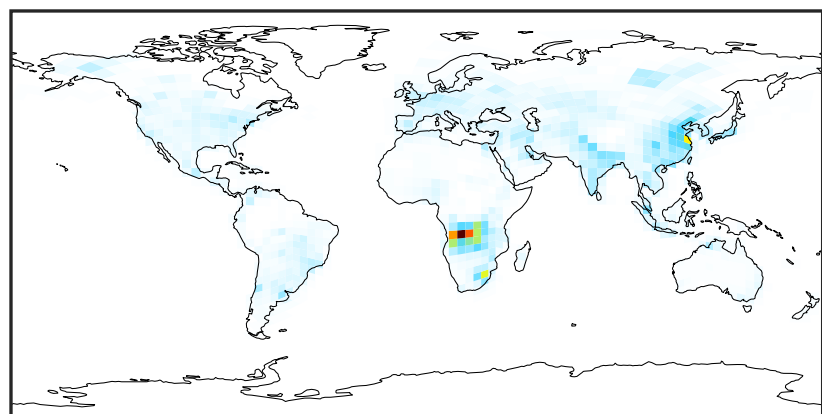
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

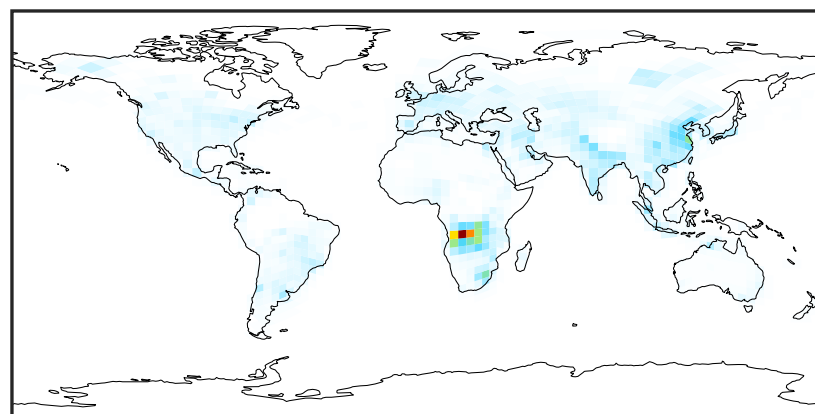
SpeciesConcVV_NO2 (Jul2019)

GCHP_14.0.0 (Ref)
c24



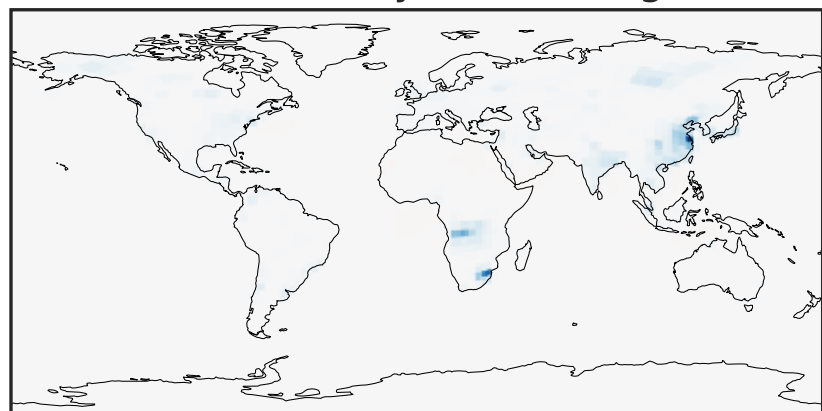
0.00 6.94 13.87 20.81 27.75
ppb

GCHP_14.2.0 (Dev)
c24



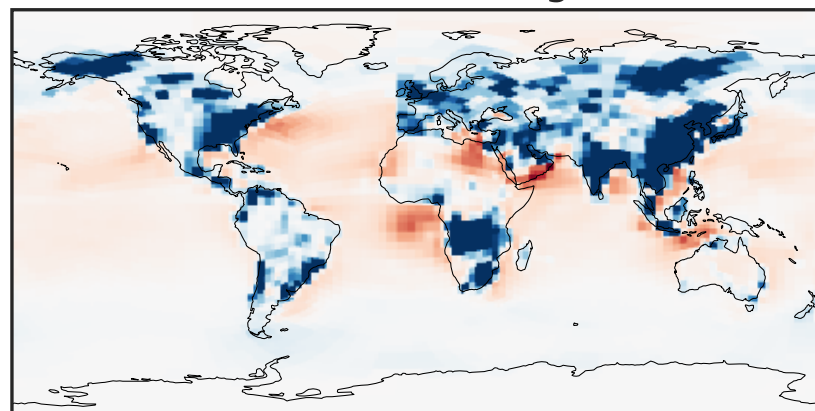
0.00 6.94 13.87 20.81 27.75
ppb

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



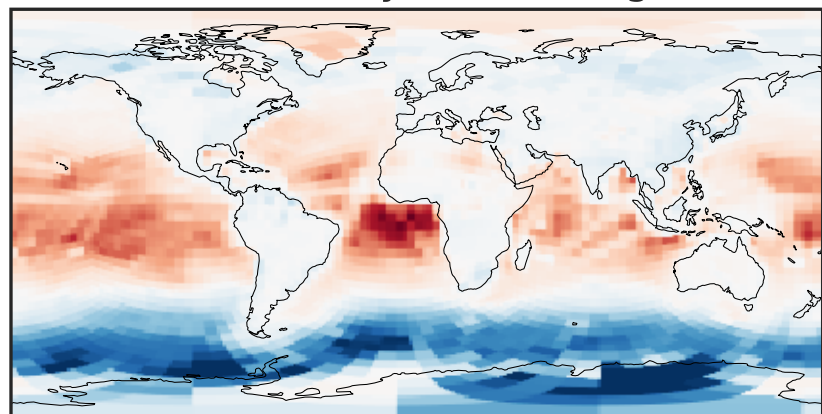
-4.588 -2.294 0.000 2.294 4.588
ppb

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



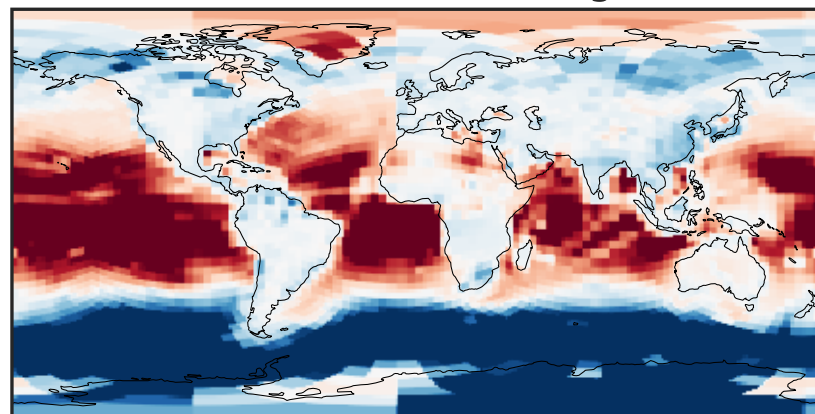
-0.0989 -0.0495 0.0000 0.0495 0.0989
ppb

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



0.102 0.551 1.000 5.410 9.820
unitless

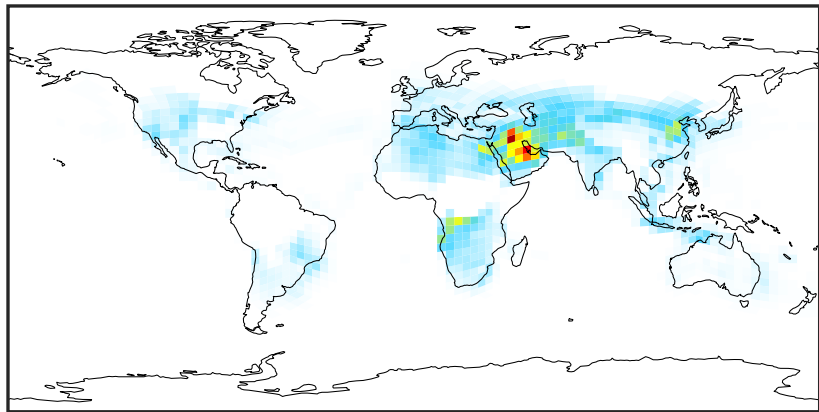
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

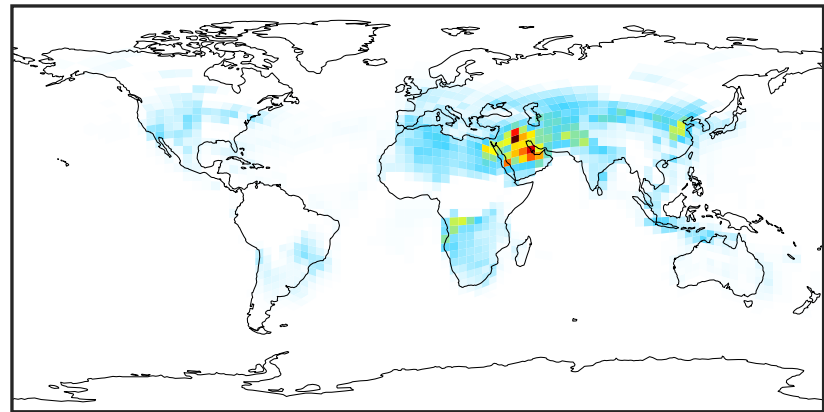
SpeciesConcVV_NO3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



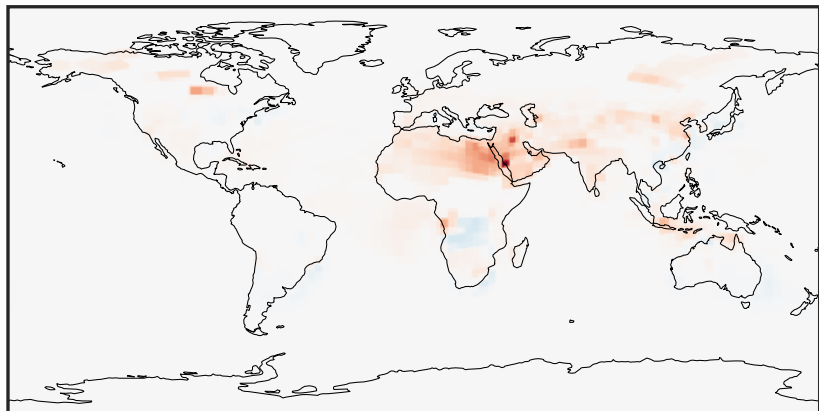
0.000 0.027 0.054 0.081 0.108
ppb

GCHP_14.2.0 (Dev)
c24



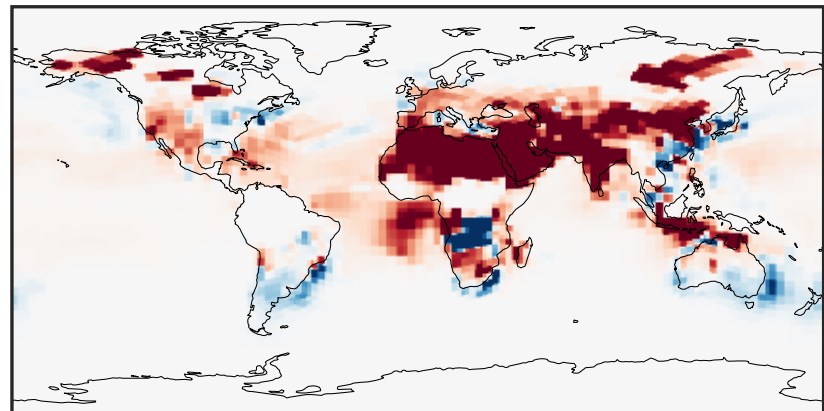
0.000 0.027 0.054 0.081 0.108
ppb

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



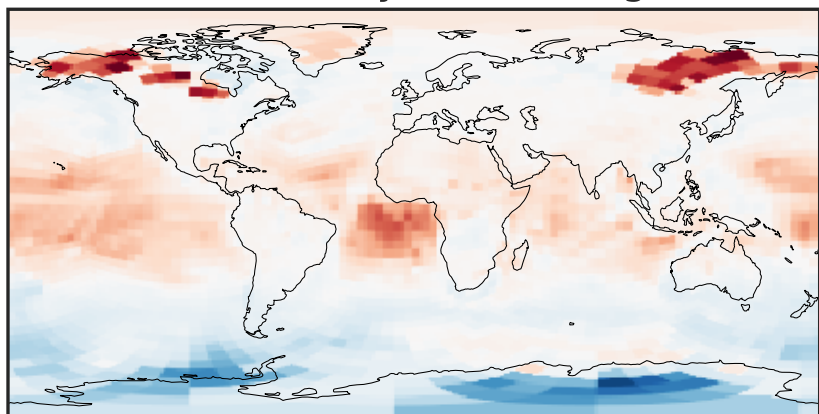
-0.015 0.000 0.015
ppb

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



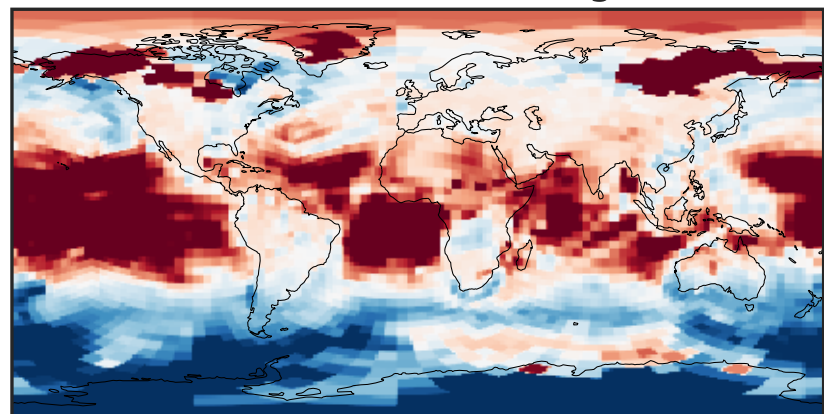
-0.0008 0.0000 0.0008
ppb

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



1e-01 1 10
unitless

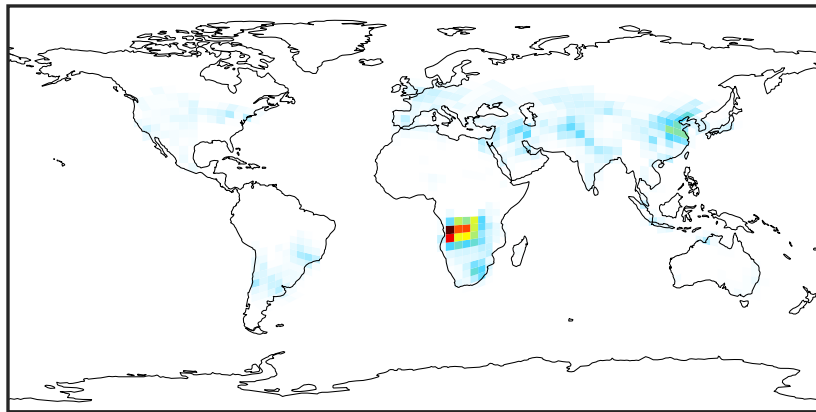
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

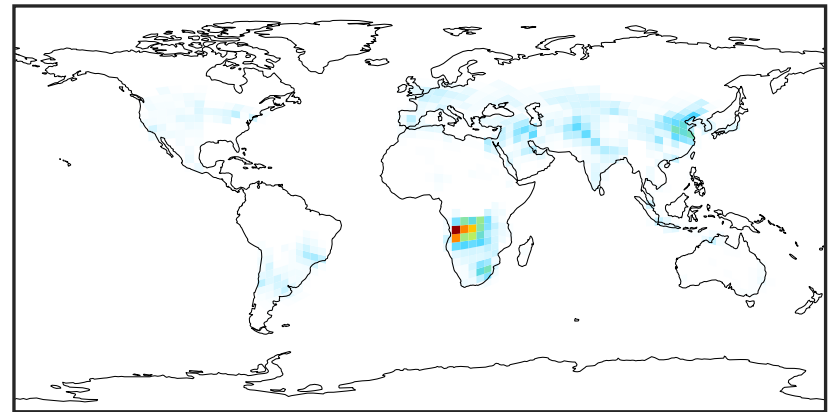
SpeciesConcVV_N2O5 (Jul2019)

GCHP_14.0.0 (Ref)
c24



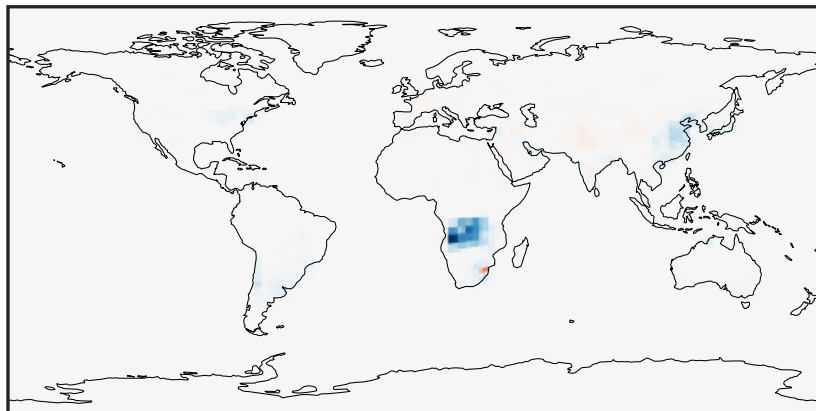
0.0000 0.1917 0.3834 0.5751 0.7667
ppb

GCHP_14.2.0 (Dev)
c24



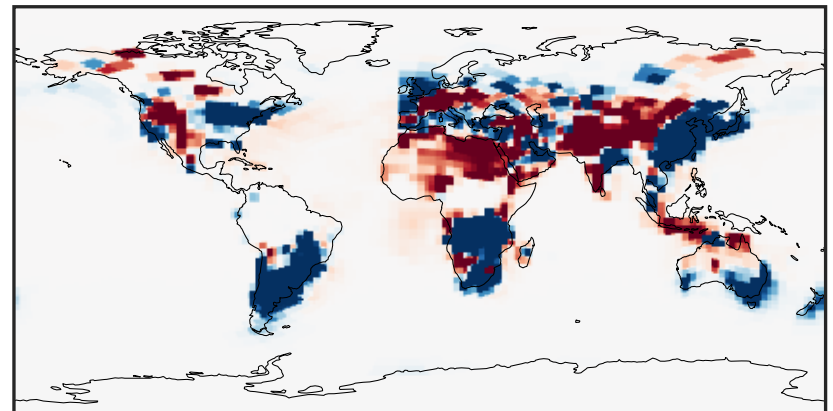
0.0000 0.1917 0.3834 0.5751 0.7667
ppb

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



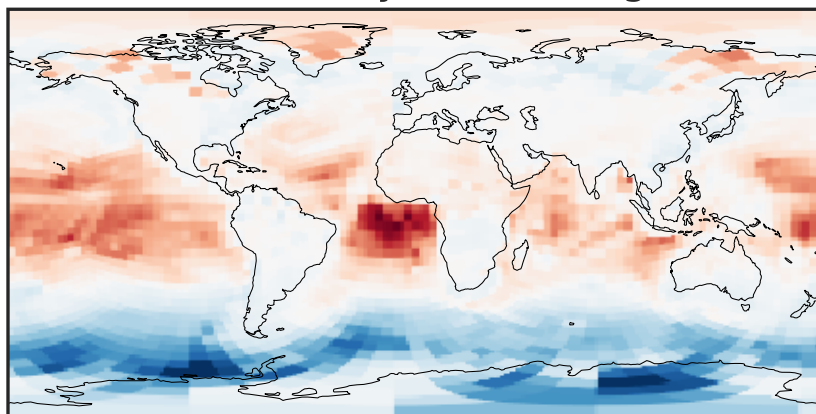
-0.1183 -0.0592 0.0000 0.0592 0.1183
ppb

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



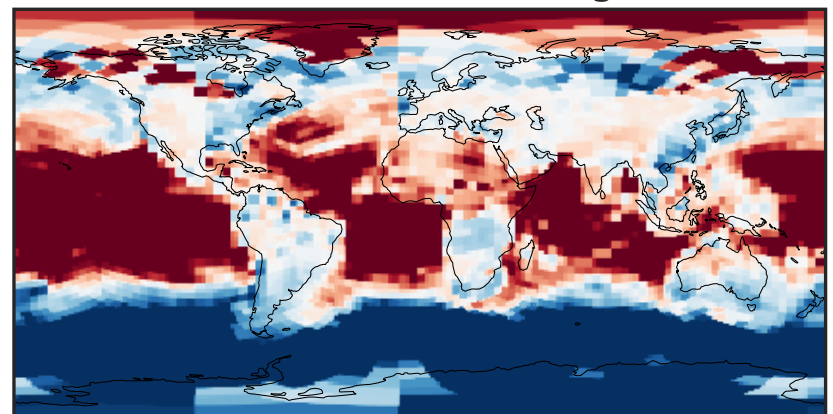
-0.0004 0.0000 0.0004
ppb

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



1e-02 1e-01 1 10 100
unitless

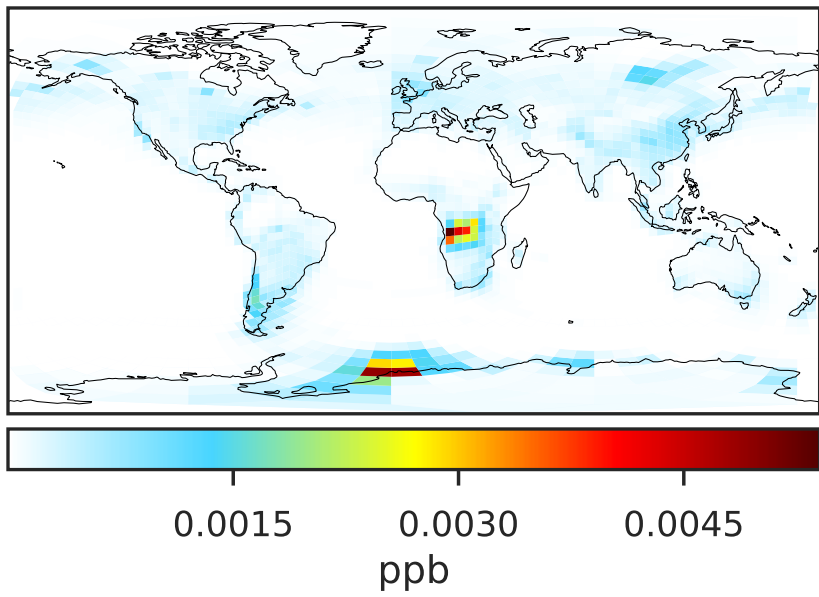
Ratio (1x1.25)
Dev/Ref, Fixed Range



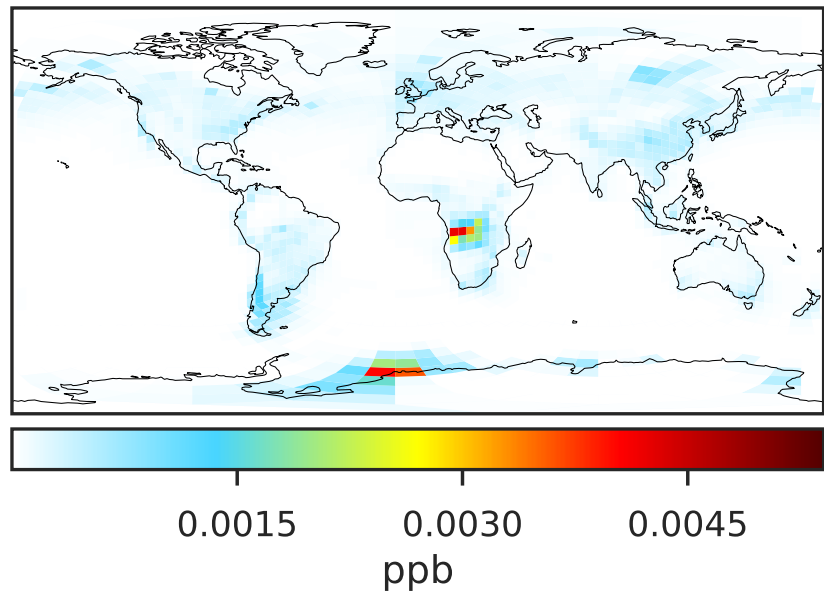
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_MPN (Jul2019)

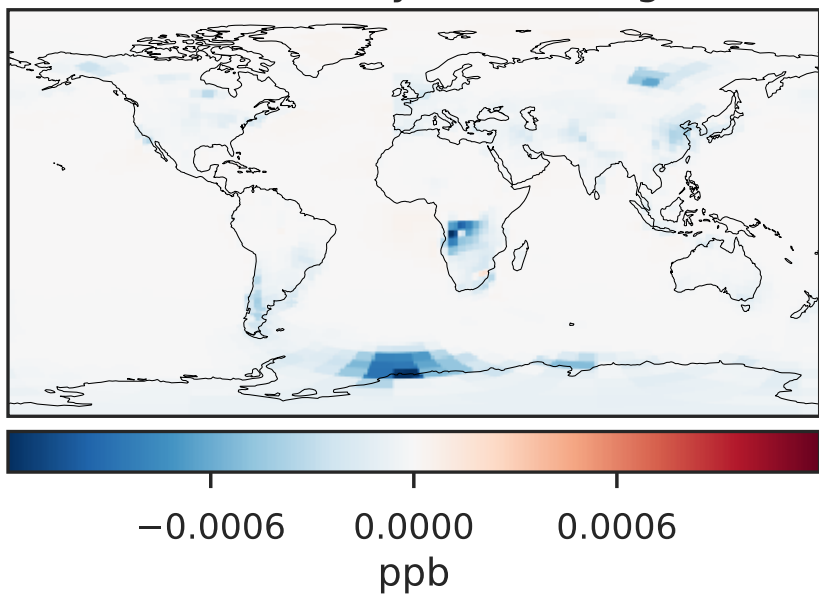
GCHP_14.0.0 (Ref)
c24



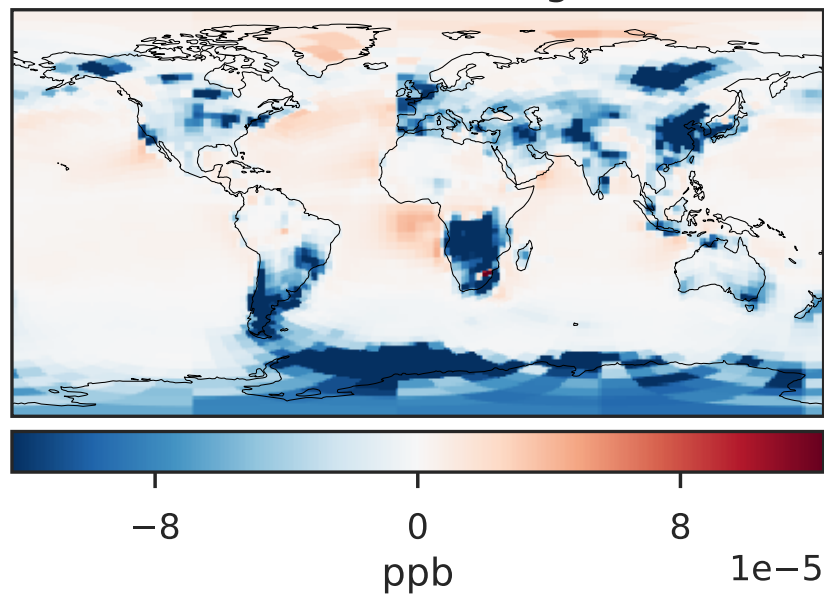
GCHP_14.2.0 (Dev)
c24



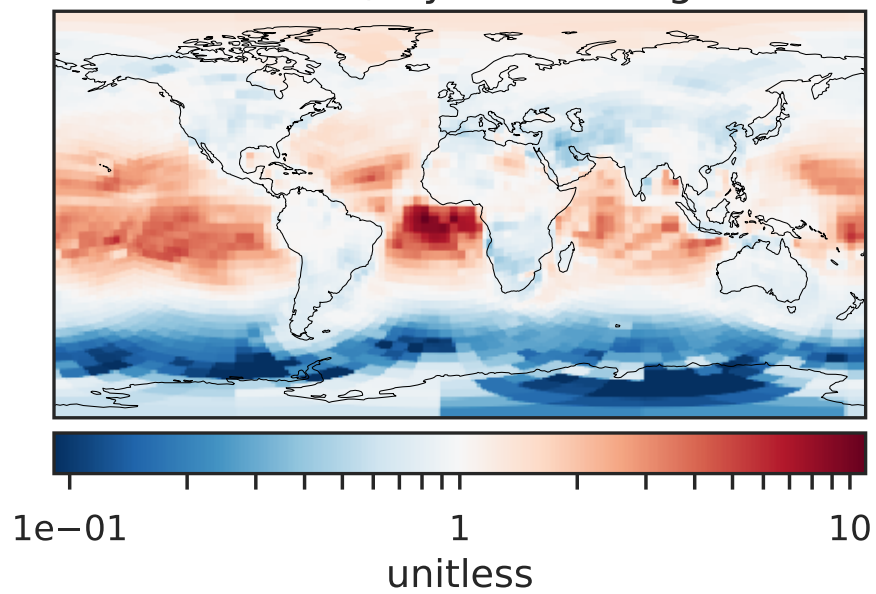
Difference (1x1.25)
Dev - Ref, Dynamic Range



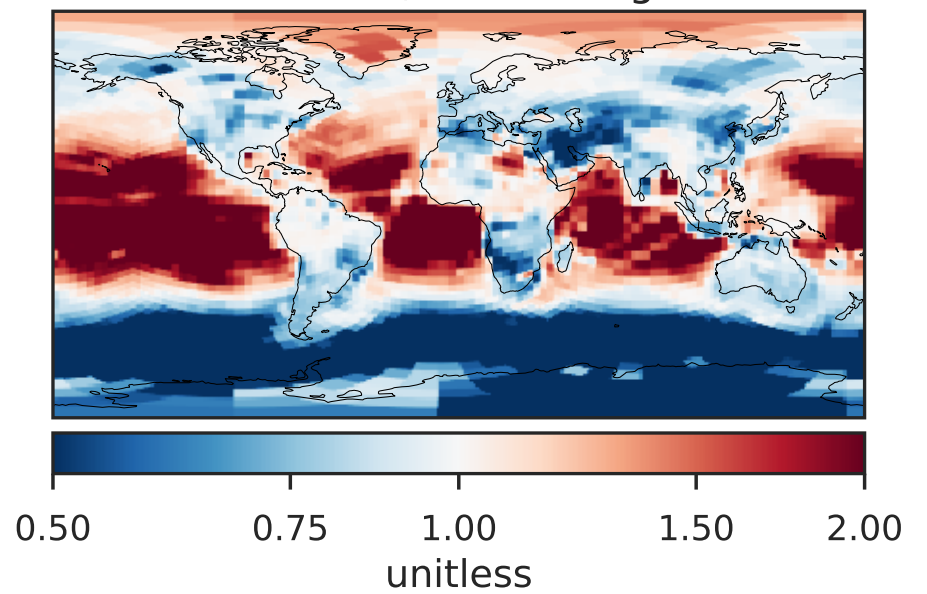
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

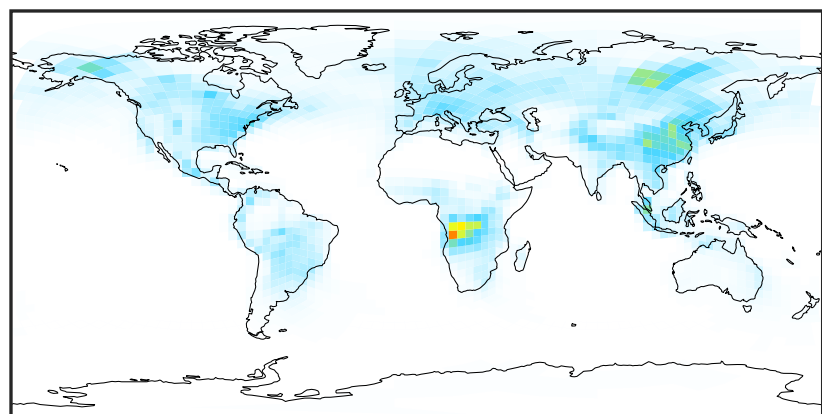


Ratio (1x1.25)
Dev/Ref, Fixed Range



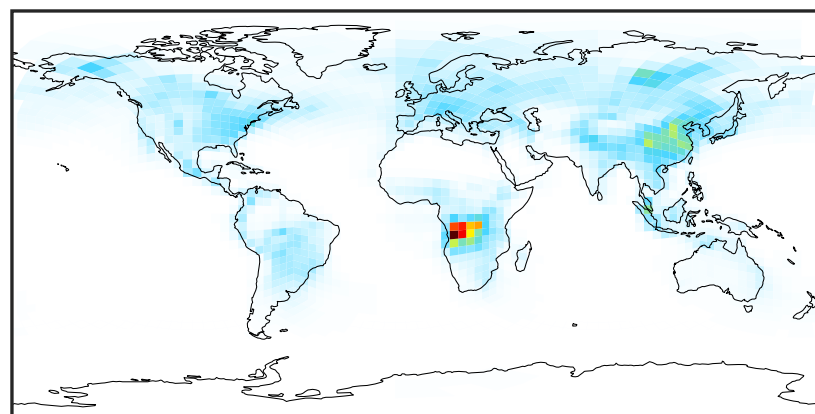
SpeciesConcVV_PAN (Jul2019)

GCHP_14.0.0 (Ref)
c24



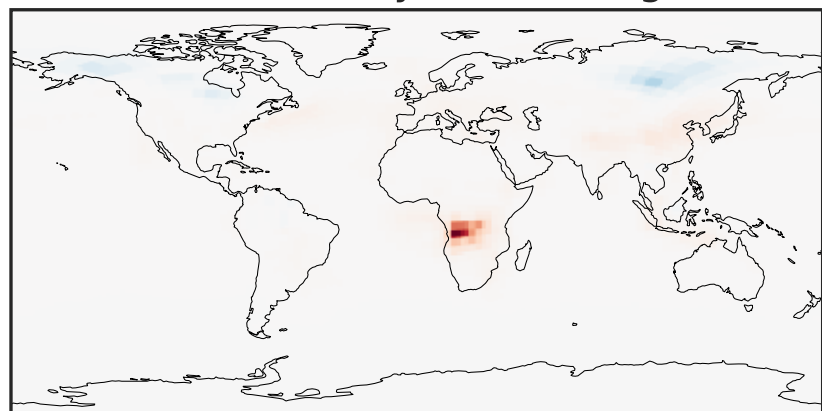
0.000 0.581 1.163 1.744 2.326
ppb

GCHP_14.2.0 (Dev)
c24



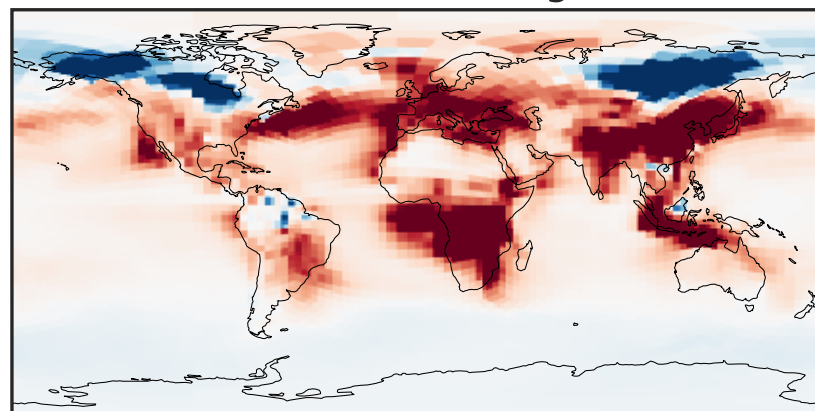
0.000 0.581 1.163 1.744 2.326
ppb

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



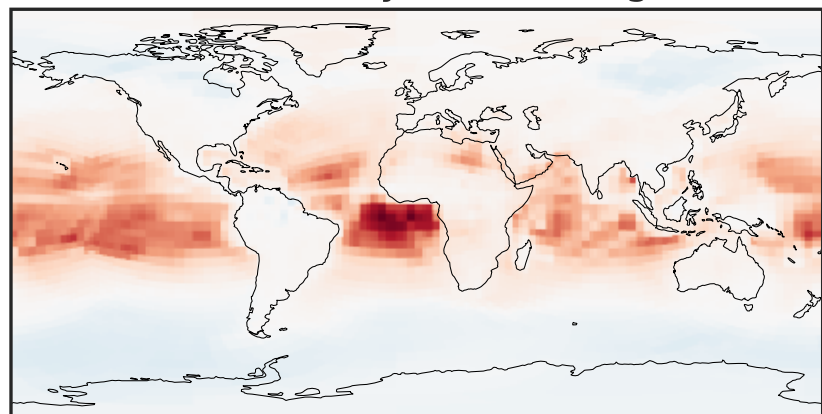
-0.890 -0.445 0.000 0.445 0.890
ppb

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



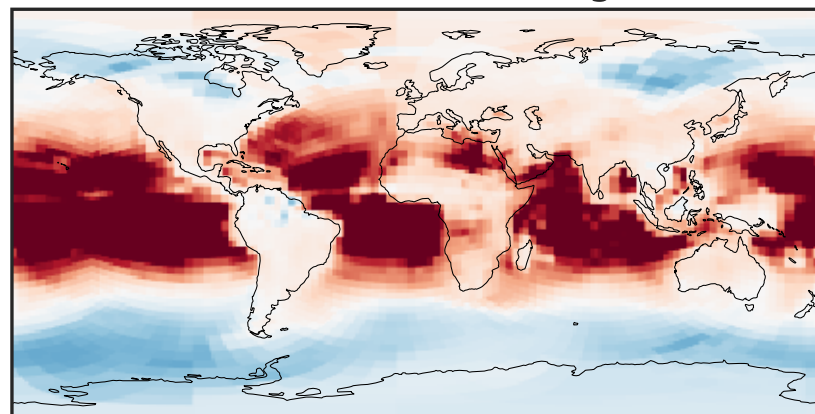
-0.01 0.00 0.01
ppb

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



1e-01 1 10
unitless

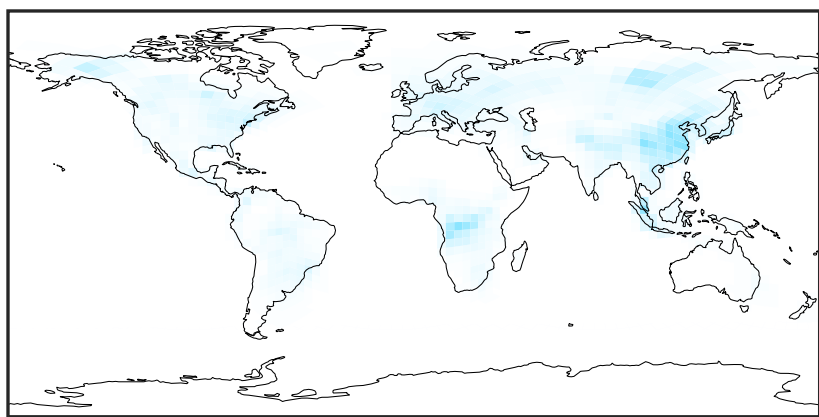
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

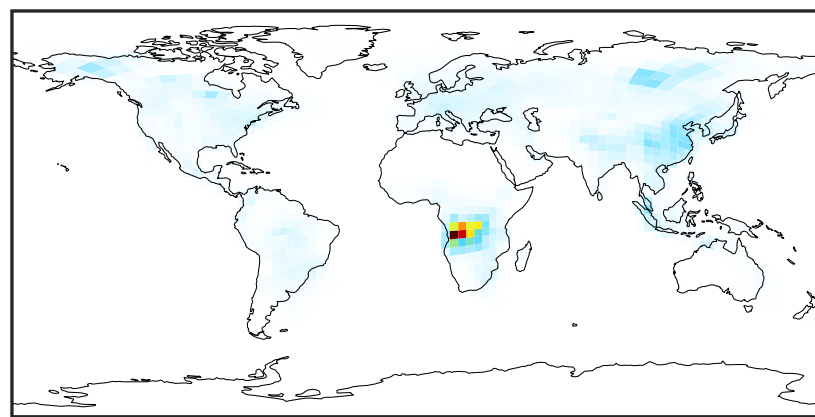
SpeciesConcVV_PPN (Jul2019)

GCHP_14.0.0 (Ref)
c24



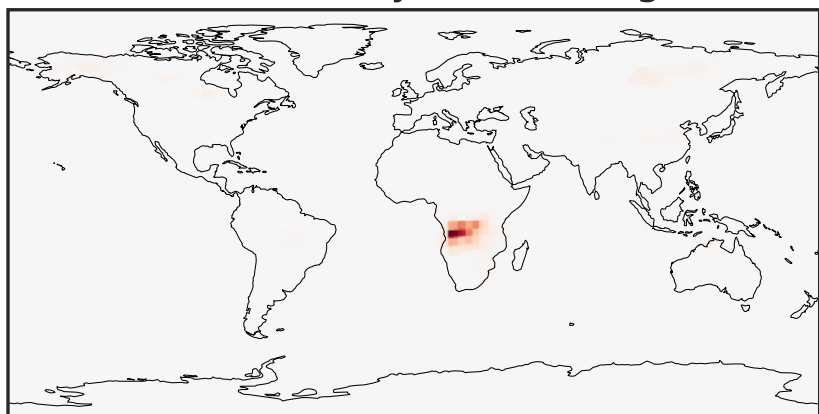
0.000 0.276 0.552 0.828 1.104
ppb

GCHP_14.2.0 (Dev)
c24



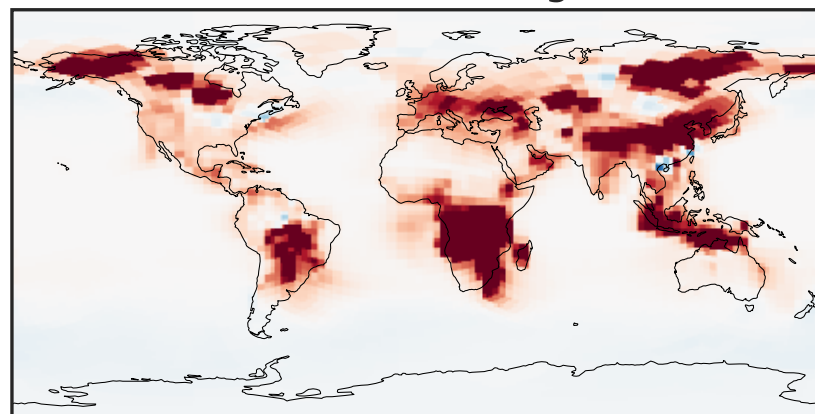
0.000 0.276 0.552 0.828 1.104
ppb

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



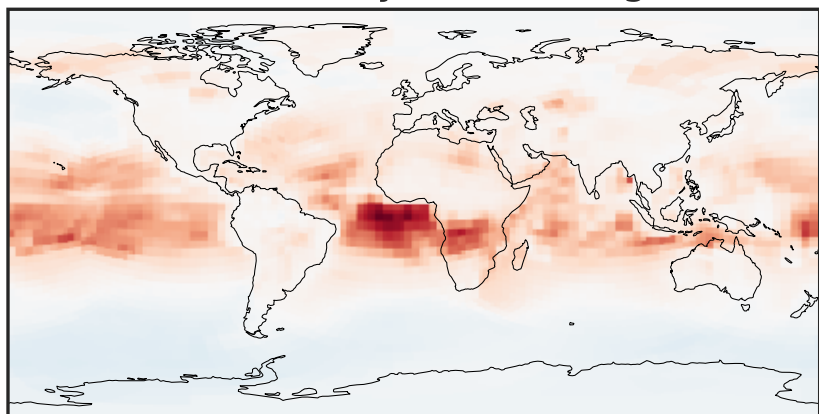
-0.974 -0.487 0.000 0.487 0.974
ppb

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



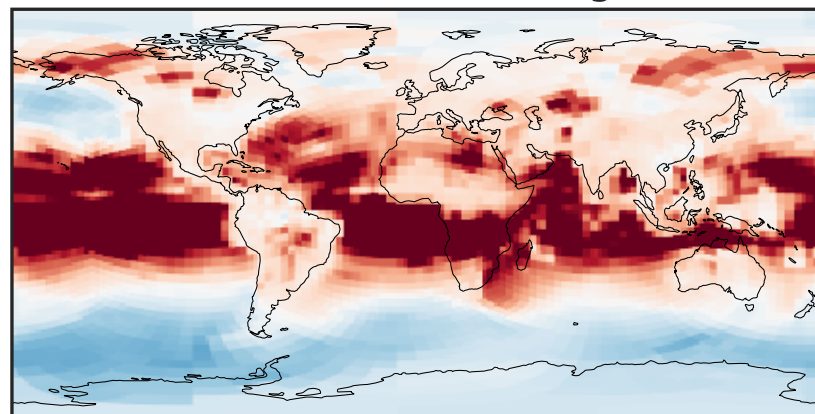
-0.003 0.000 0.003
ppb

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



1e-01 1 10
unitless

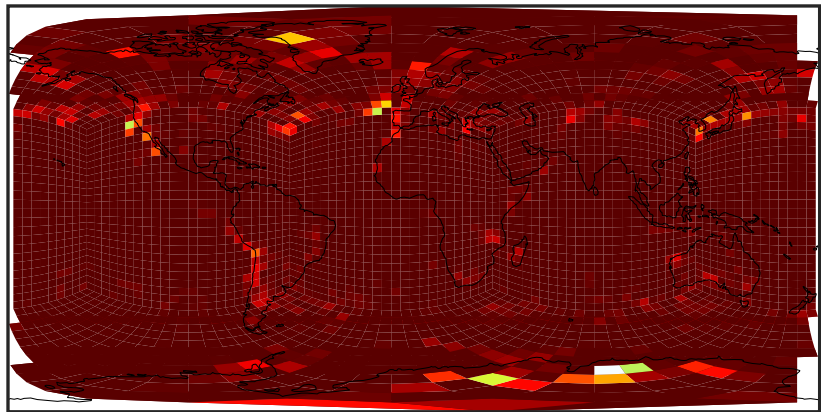
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

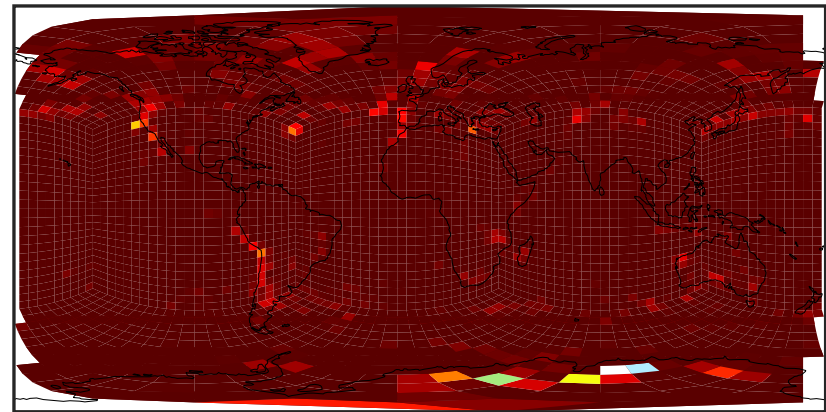
SpeciesConcVV_N2O (Jul2019)

GCHP_14.0.0 (Ref)
c24



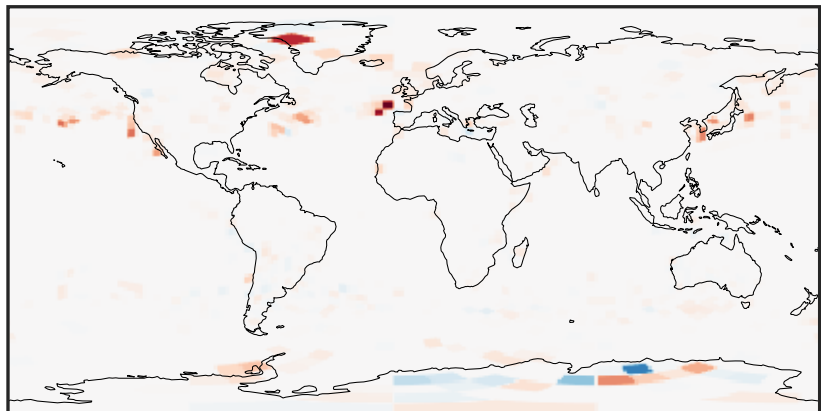
0.004 0.006 0.008
ppb +3.3034e2

GCHP_14.2.0 (Dev)
c24



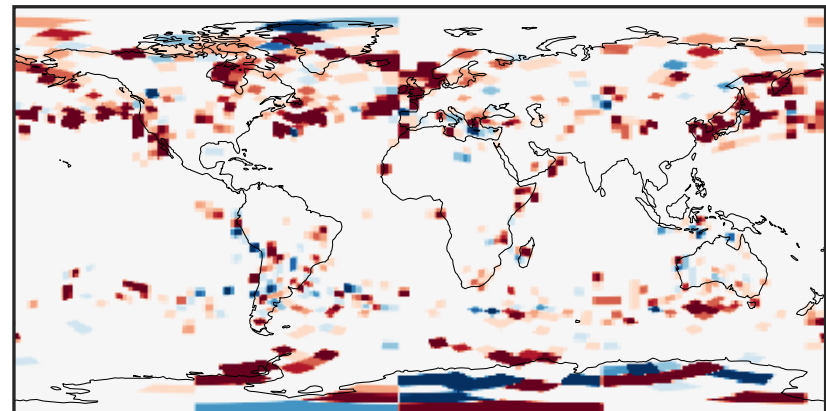
0.004 0.006 0.008
ppb +3.3034e2

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



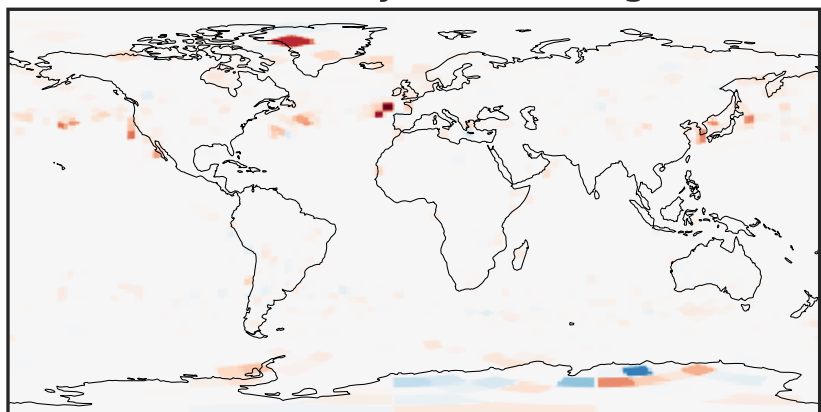
-0.0015 0.0000 0.0015
ppb

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



-8 0 8
ppb 1e-5

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



0.99999178 1.0000000 1.00000822
unitless

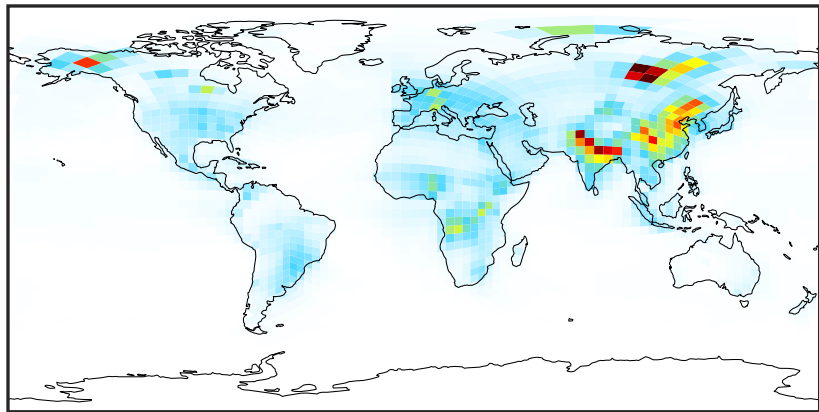
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

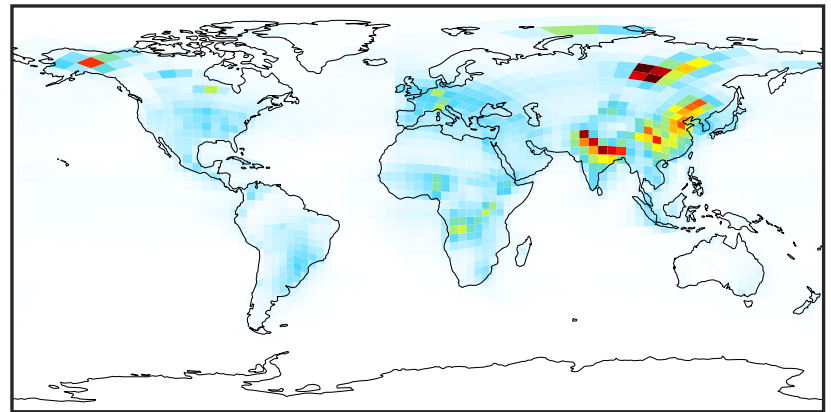
SpeciesConcVV_NHx (Jul2019)

GCHP_14.0.0 (Ref)
c24



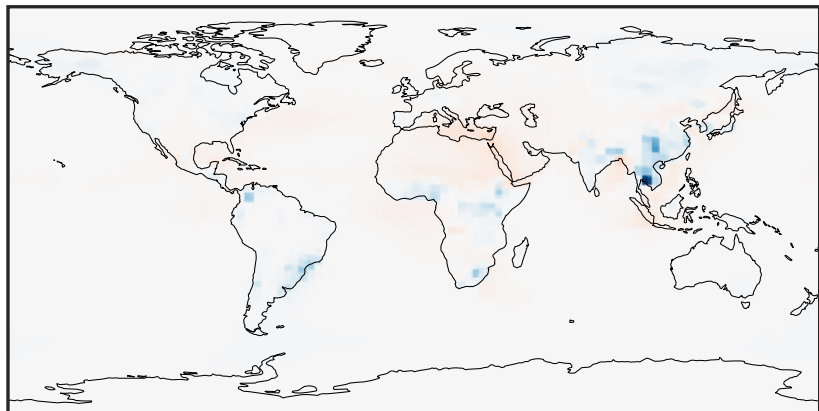
0.01 6.01 12.02 18.02 24.04
ppb

GCHP_14.2.0 (Dev)
c24



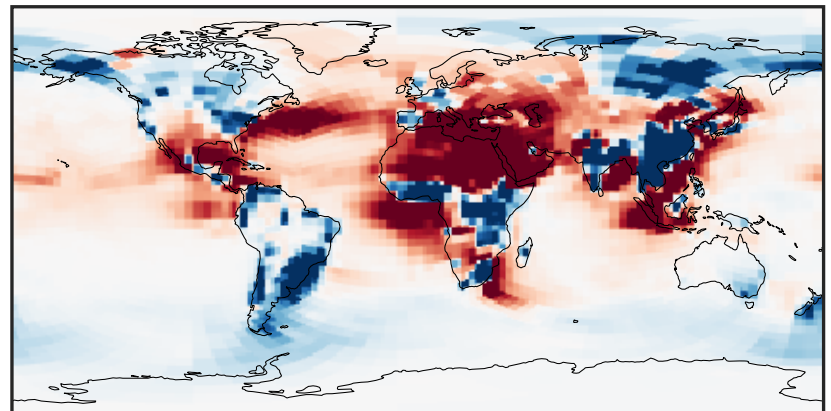
0.01 6.01 12.02 18.02 24.04
ppb

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



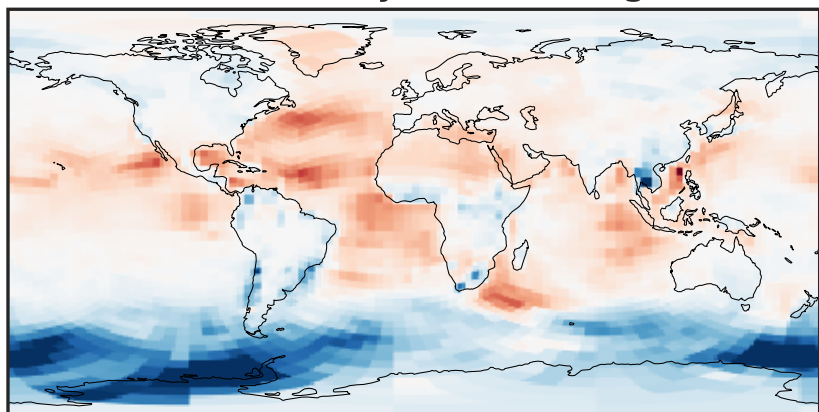
-0.714 -0.357 0.000 0.357 0.714
ppb

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



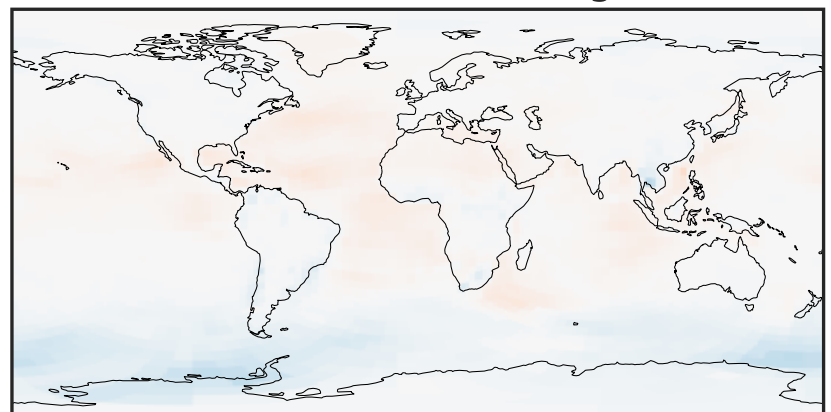
-0.015 0.000 0.015
ppb

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



0.8859 0.9429 1.0000 1.0644 1.1288
unitless

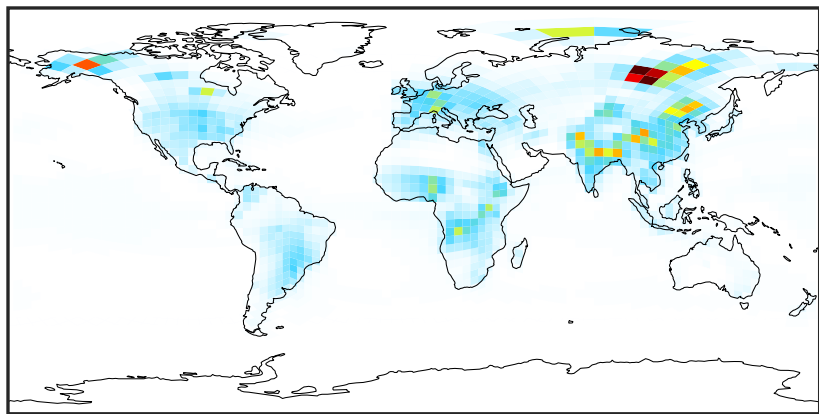
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

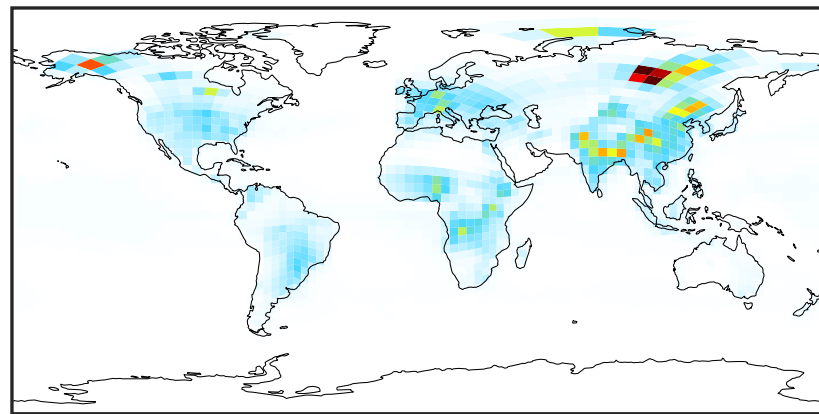
SpeciesConcVV_NH3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



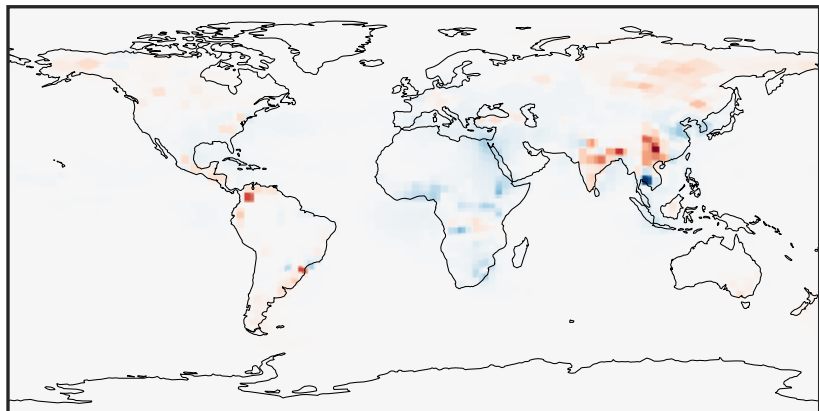
0.00 4.89 9.77 14.66 19.54
ppb

GCHP_14.2.0 (Dev)
c24



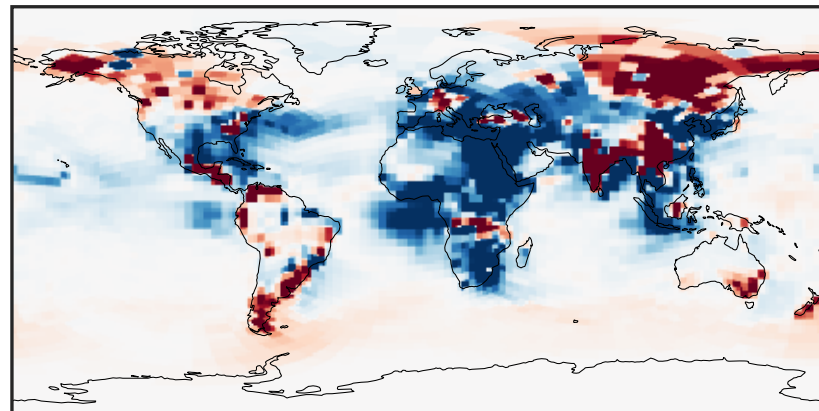
0.00 4.89 9.77 14.66 19.54
ppb

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



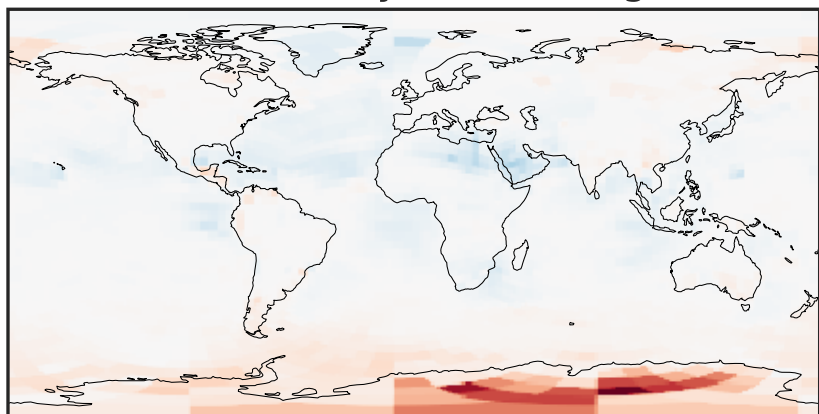
-0.4961 -0.2481 0.0000 0.2481 0.4961
ppb

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



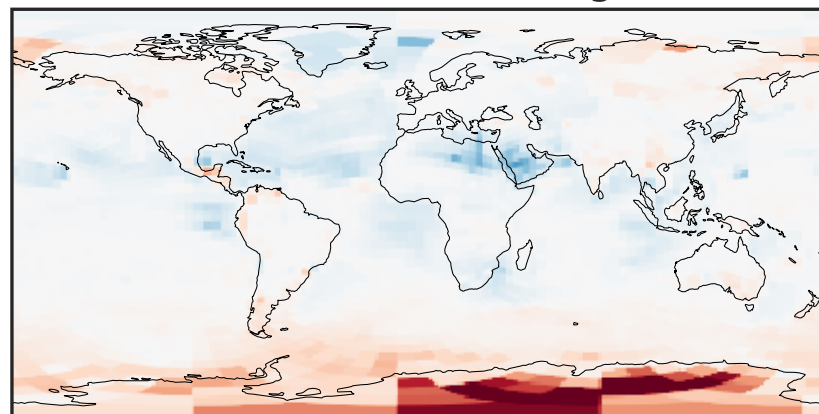
-0.015 0.000 0.015
ppb

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



0.286 0.643 1.000 2.250 3.500
unitless

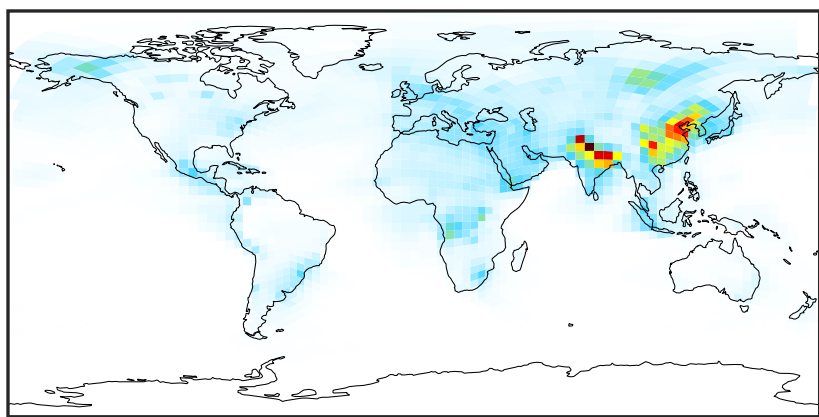
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

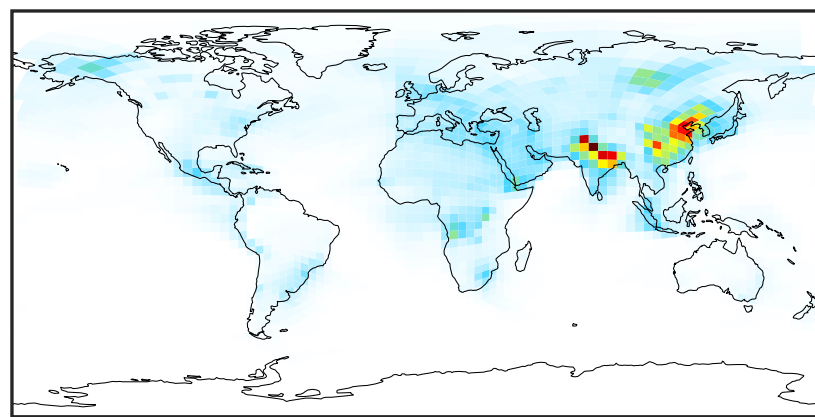
SpeciesConcVV_NH4 (Jul2019)

GCHP_14.0.0 (Ref)
c24



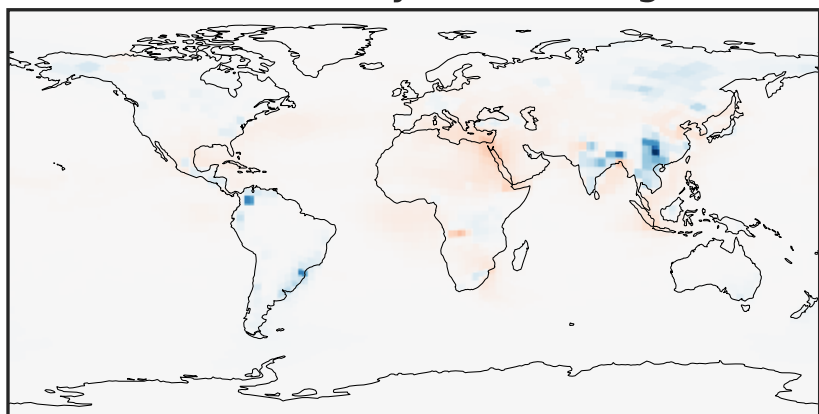
0.00 3.12 6.25 9.37 12.50
ppb

GCHP_14.2.0 (Dev)
c24



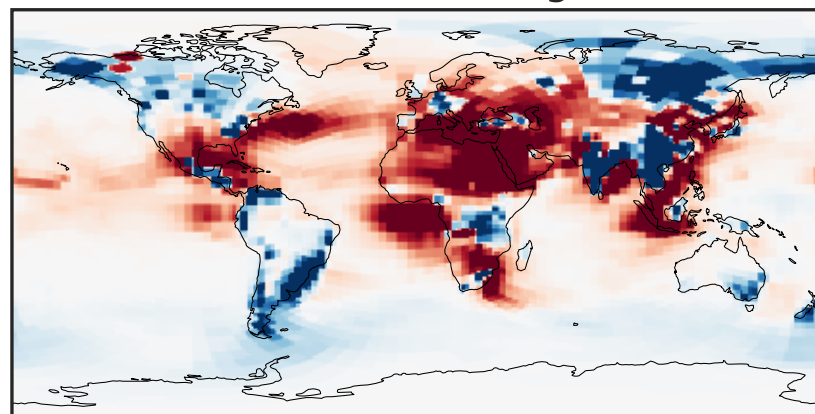
0.00 3.12 6.25 9.37 12.50
ppb

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



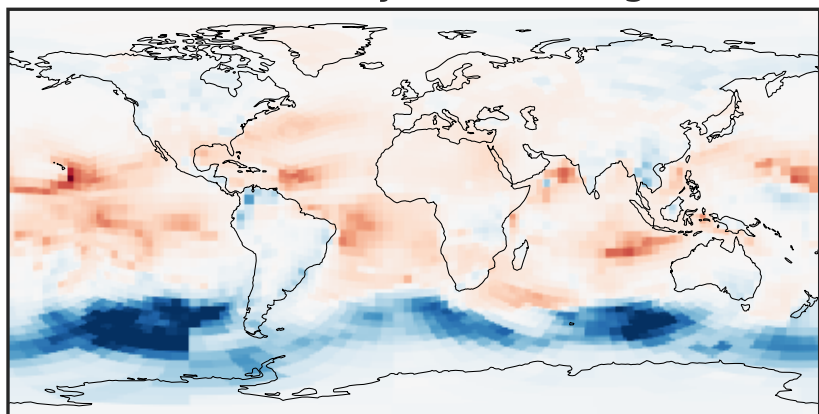
-0.878 -0.439 0.000 0.439 0.878
ppb

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



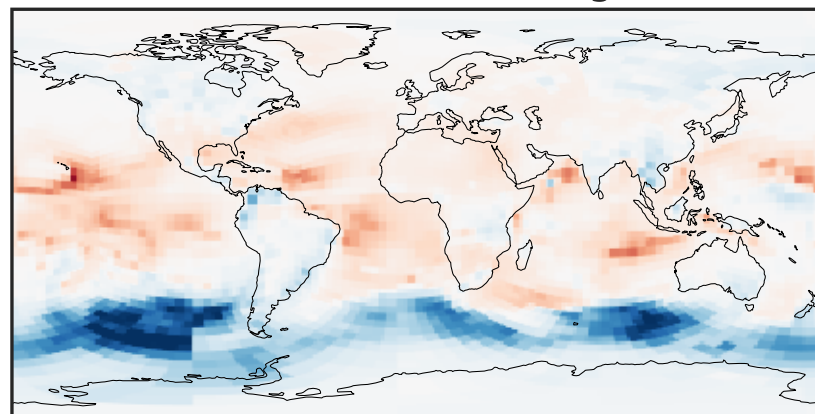
-0.025 0.000 0.025
ppb

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



0.542 0.771 1.000 1.422 1.845
unitless

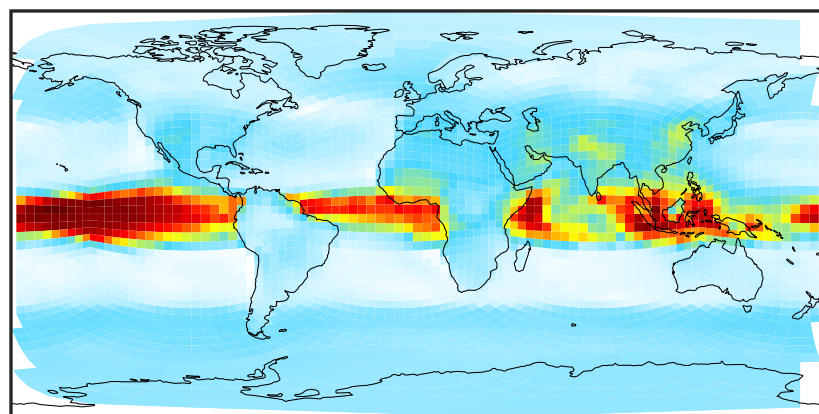
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

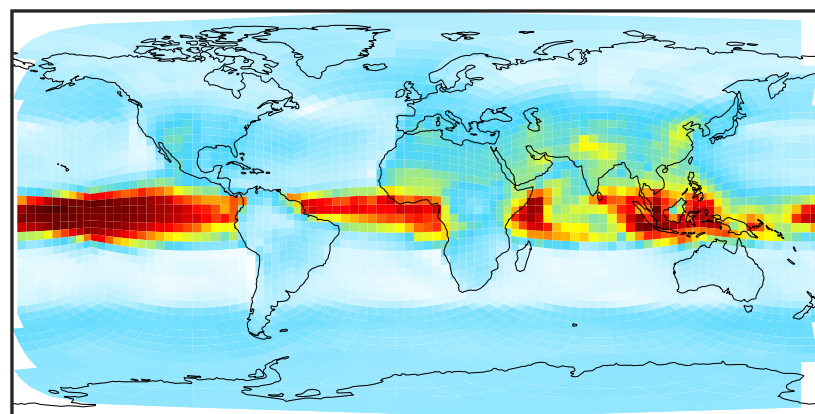
SpeciesConcVV_MENO3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



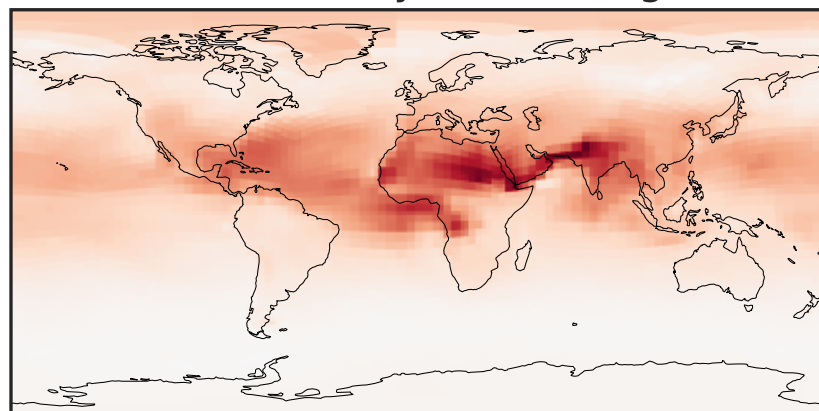
0.006 0.012 0.018
ppb

GCHP_14.2.0 (Dev)
c24



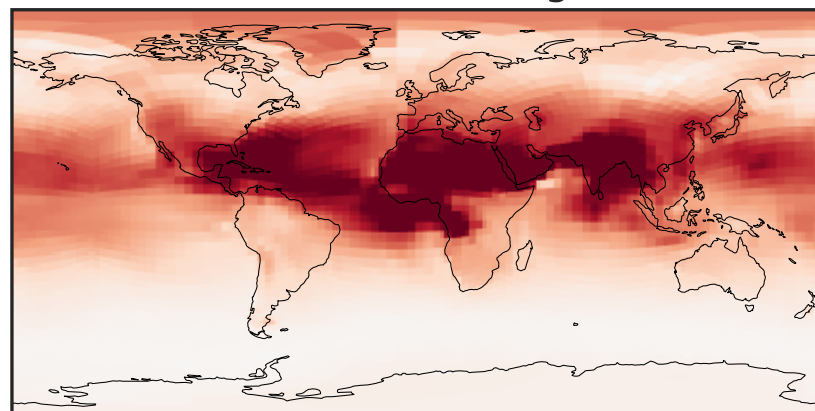
0.006 0.012 0.018
ppb

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



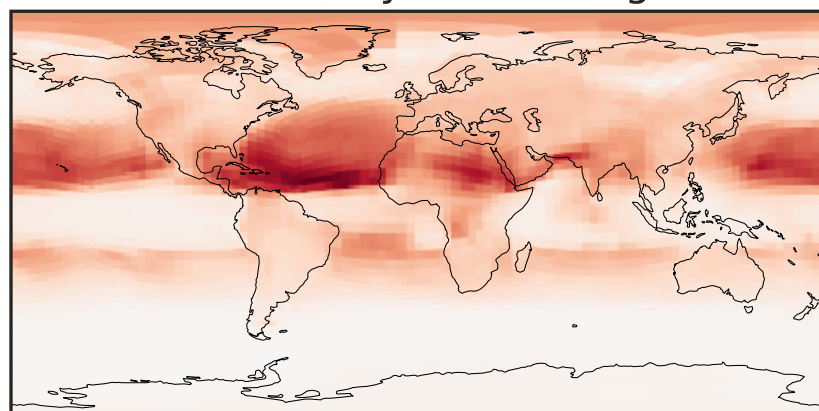
-0.001 0.000 0.001
ppb

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



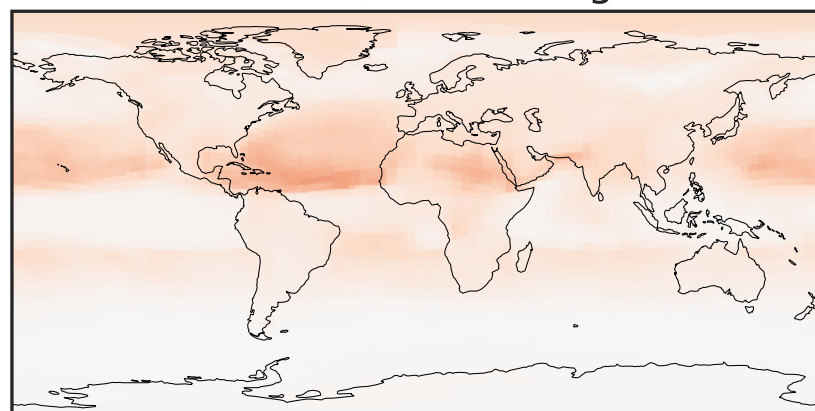
-0.0005 0.0000 0.0005
ppb

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



0.7460 0.8730 1.0000 1.1702 1.3404
unitless

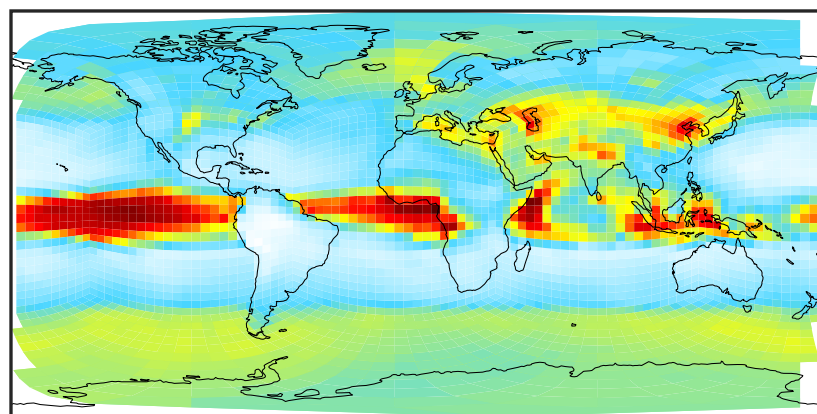
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

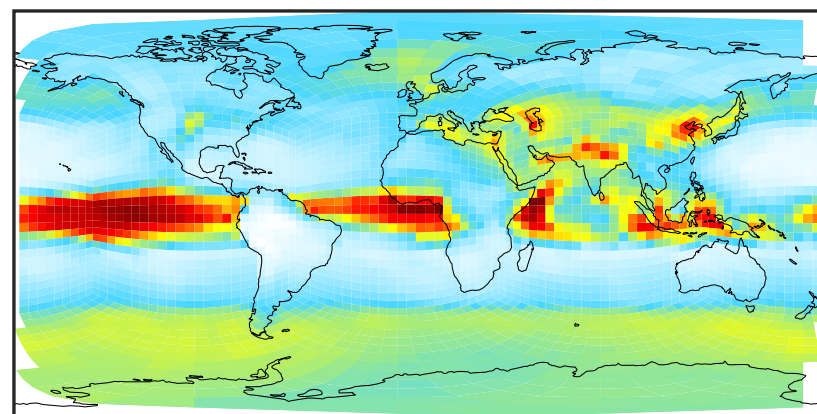
SpeciesConcVV_ETNO3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



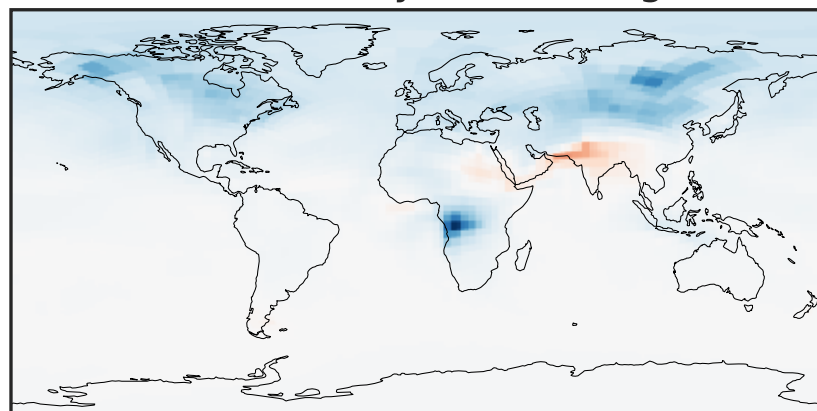
0.0025 0.0050 0.0075
ppb

GCHP_14.2.0 (Dev)
c24



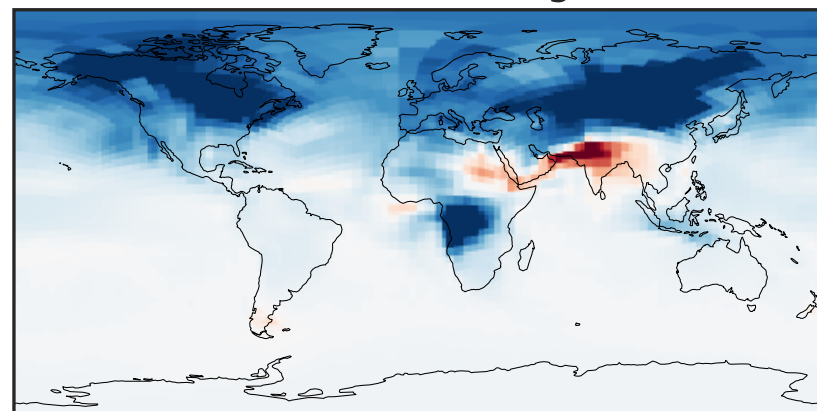
0.0025 0.0050 0.0075
ppb

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



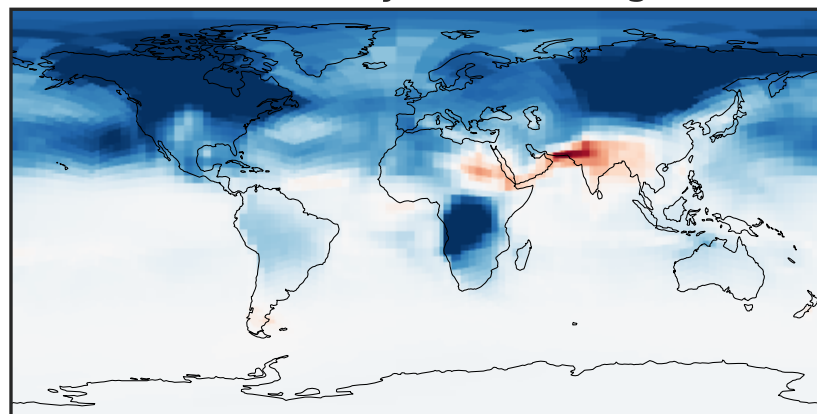
-0.0015 0.0000 0.0015
ppb

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



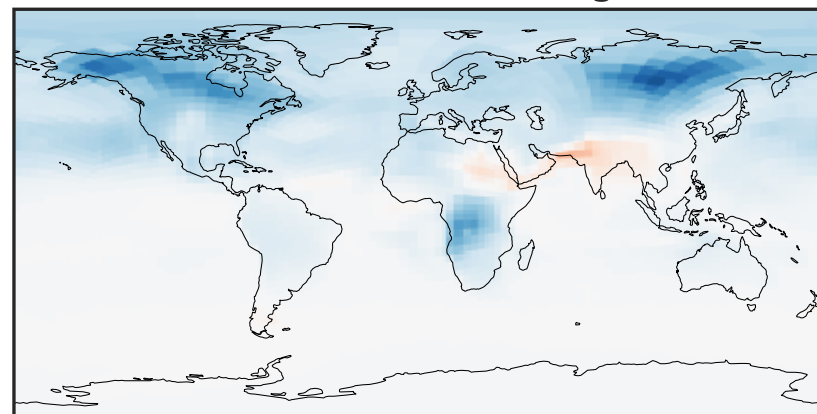
-0.0004 0.0000 0.0004
ppb

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



0.7873 0.8937 1.0000 1.1351 1.2701
unitless

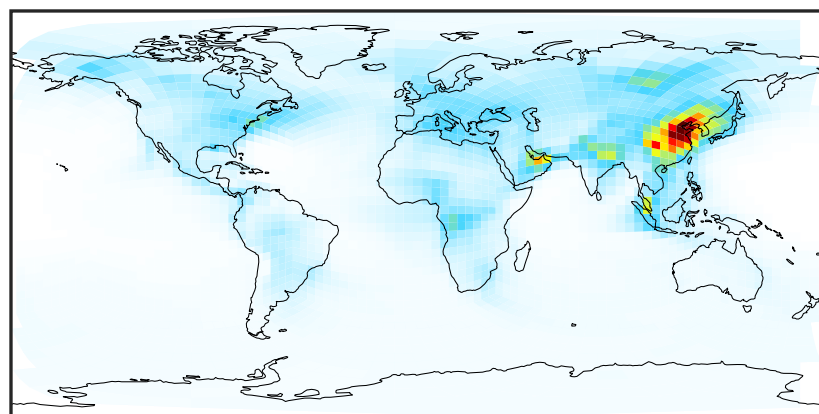
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

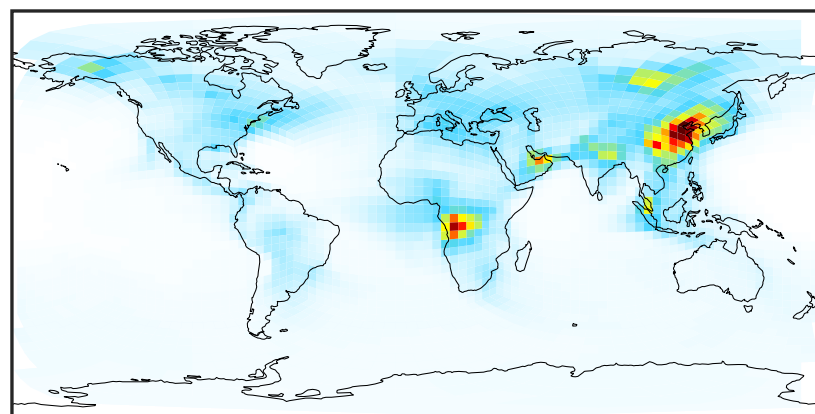
SpeciesConcVV_IPRNO3 (Jul2019)

GCHP_14.0.0 (Ref)
c24



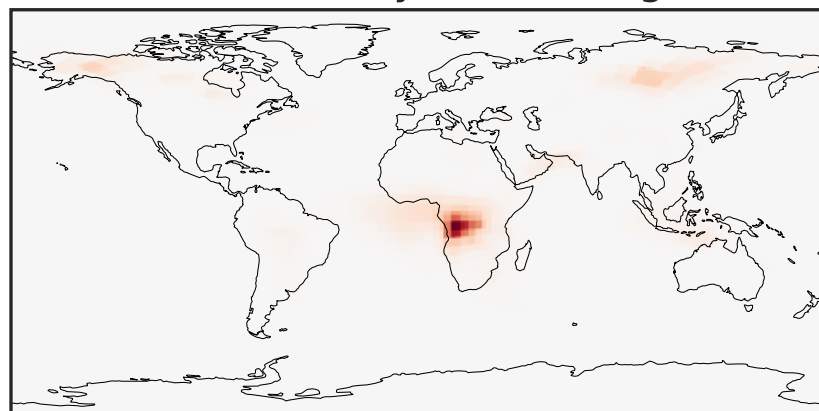
0.02 0.04 0.06
ppb

GCHP_14.2.0 (Dev)
c24



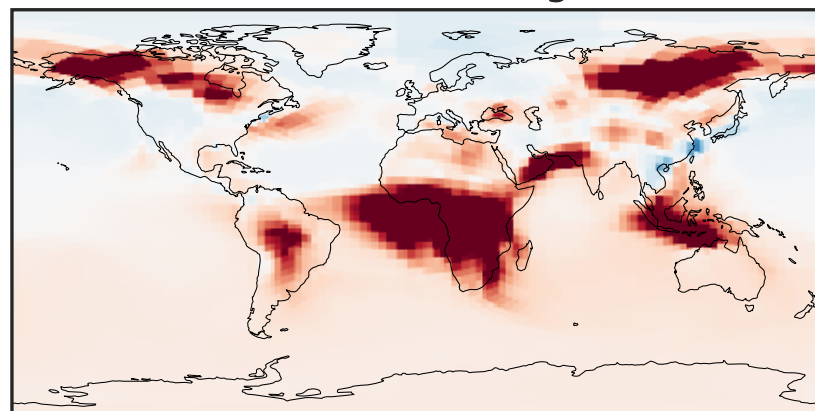
0.02 0.04 0.06
ppb

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



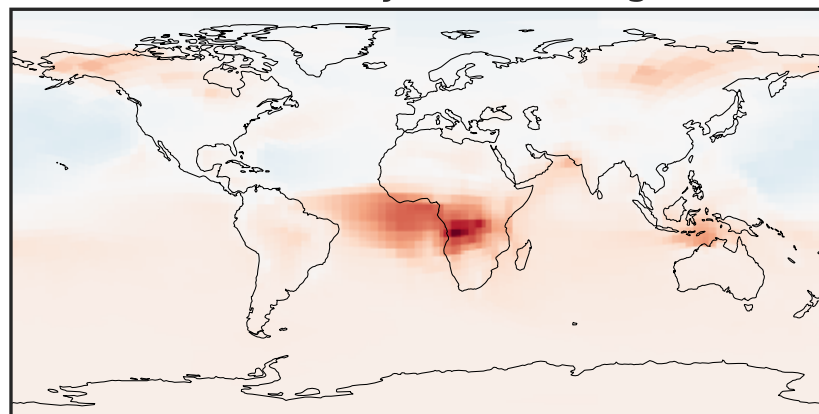
-0.02 0.00 0.02
ppb

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



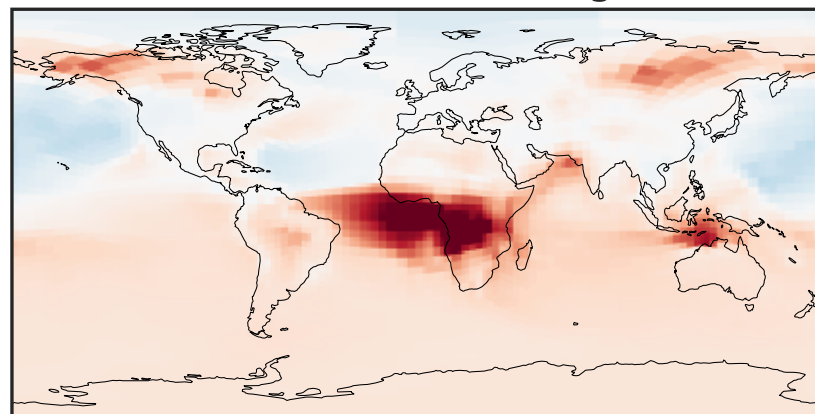
-0.0008 0.0000 0.0008
ppb

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



0.256 0.628 1.000 2.453 3.906
unitless

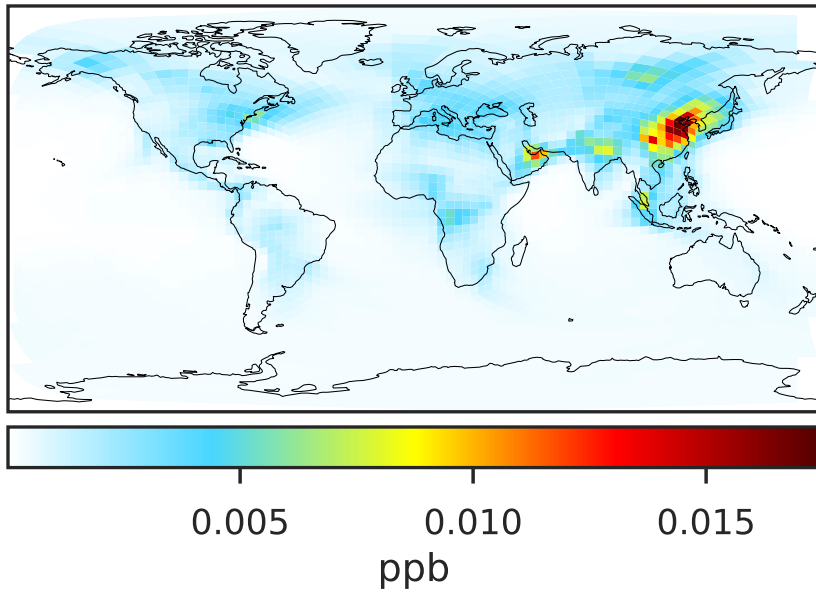
Ratio (1x1.25)
Dev/Ref, Fixed Range



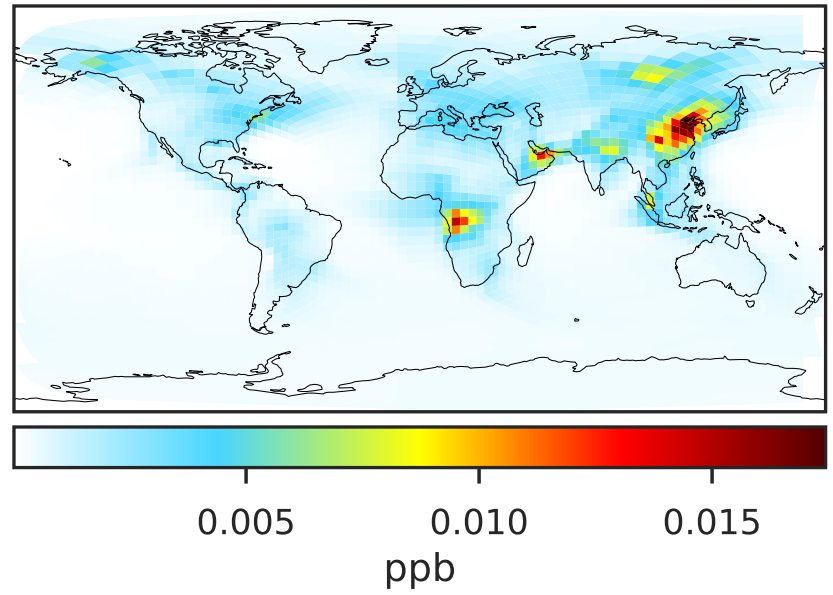
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_NPRNO3 (Jul2019)

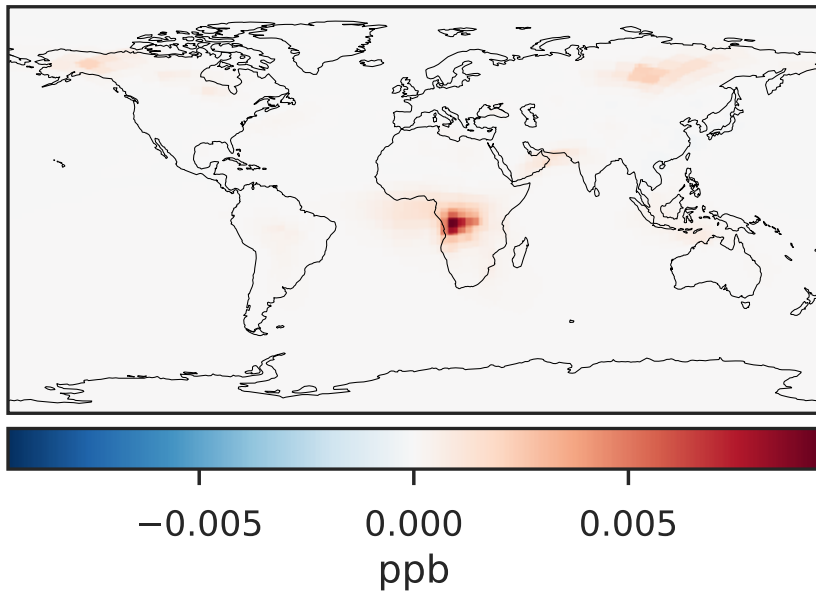
GCHP_14.0.0 (Ref)
c24



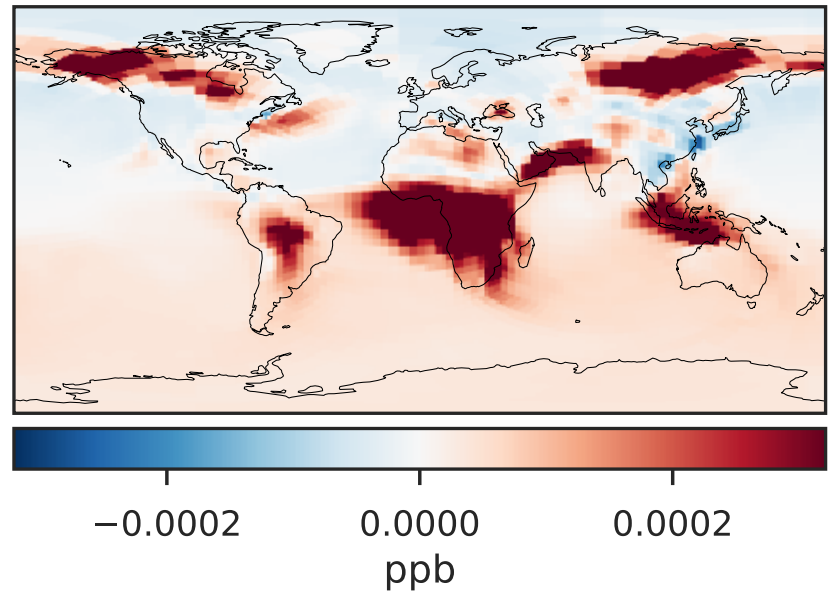
GCHP_14.2.0 (Dev)
c24



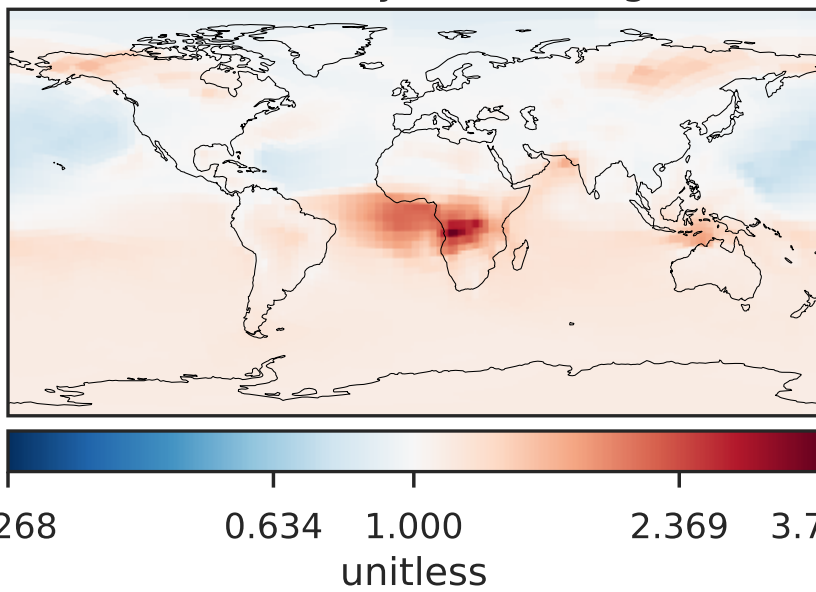
Difference (1x1.25)
Dev - Ref, Dynamic Range



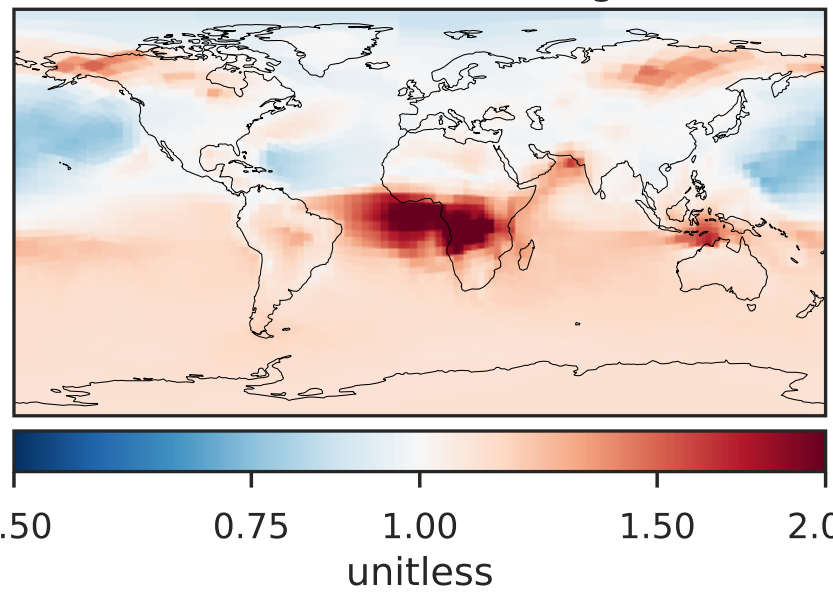
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

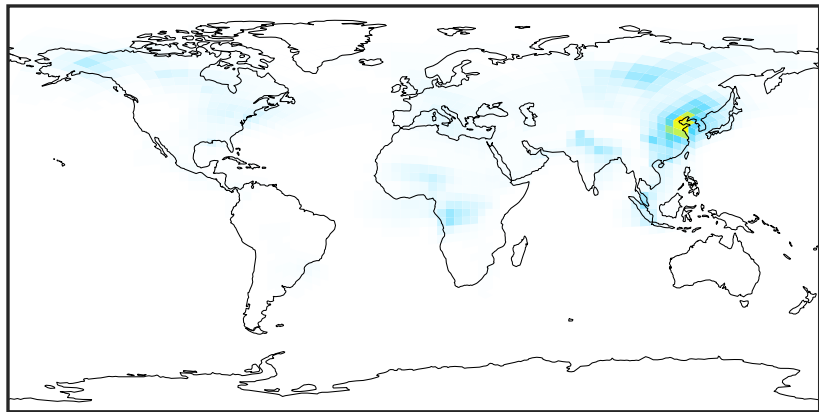


Ratio (1x1.25)
Dev/Ref, Fixed Range



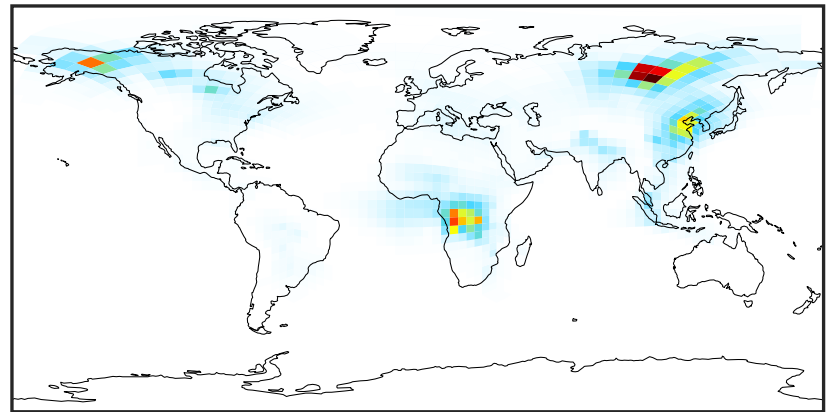
SpeciesConcVV_AONITA (Jul2019)

GCHP_14.0.0 (Ref)
c24



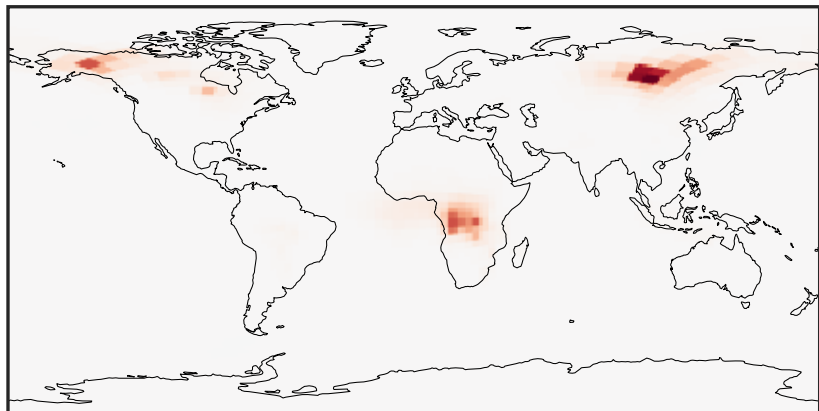
0.0000 0.1199 0.2399 0.3598 0.4798
ppb

GCHP_14.2.0 (Dev)
c24



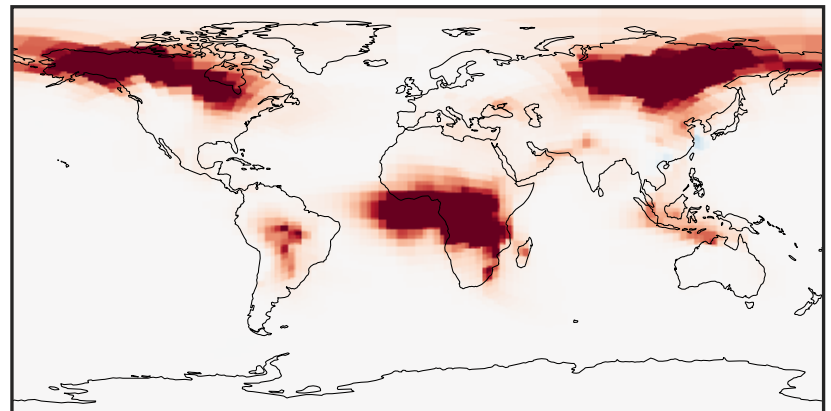
0.0000 0.1199 0.2399 0.3598 0.4798
ppb

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



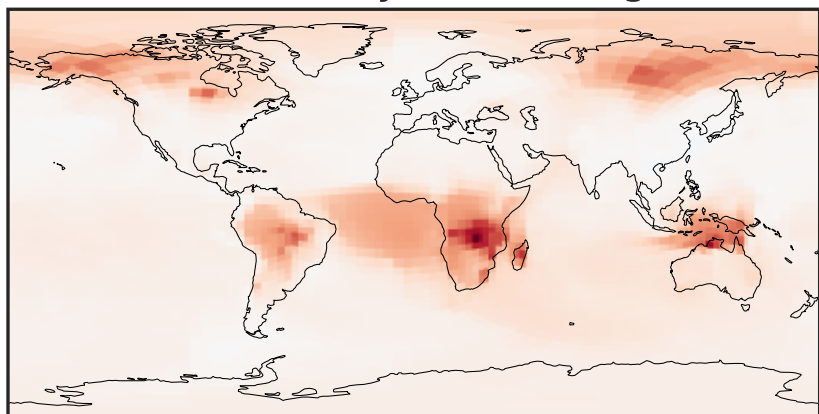
-0.4086 -0.2043 0.0000 0.2043 0.4086
ppb

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



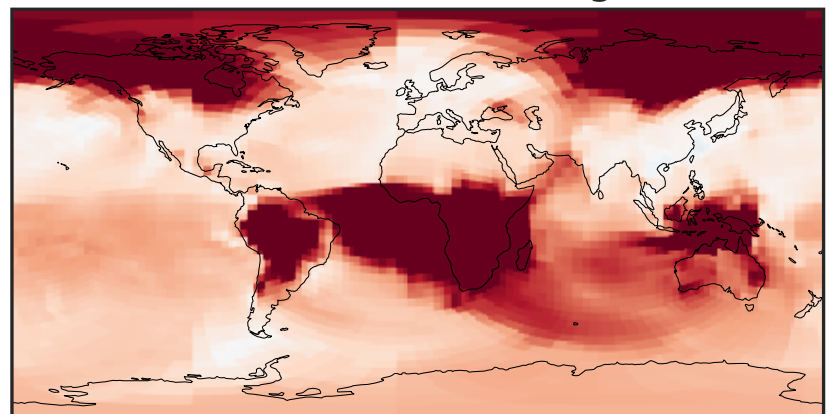
-0.008 0.000 0.008
ppb

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



1e-01 1 10
unitless

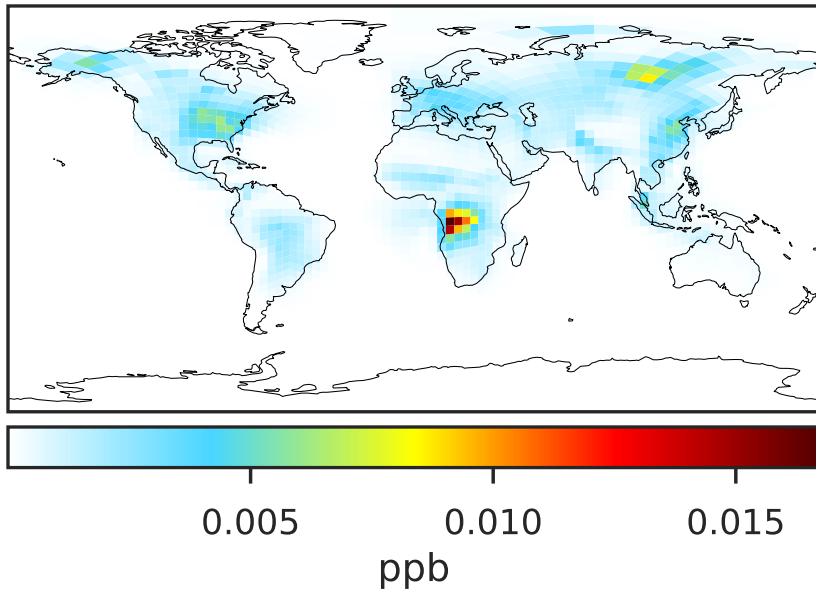
Ratio (1x1.25)
Dev/Ref, Fixed Range



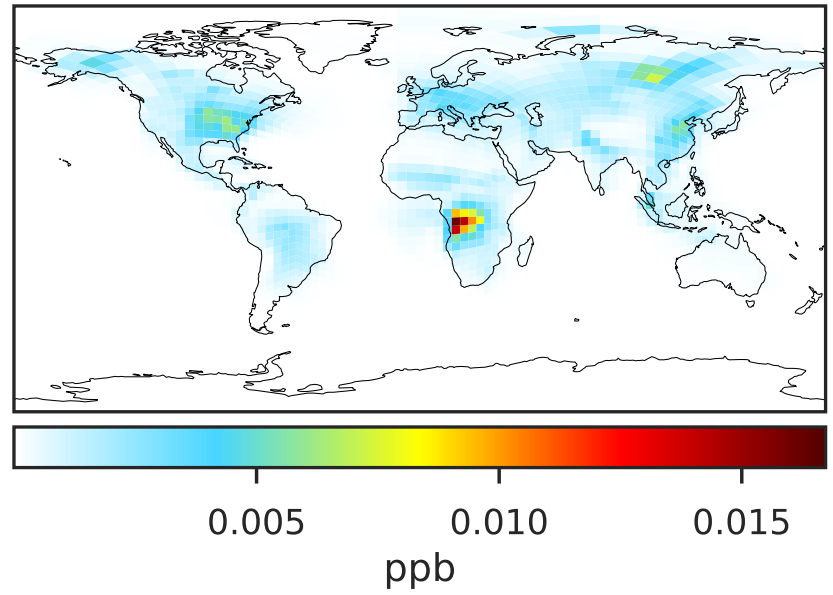
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_ETHN (Jul2019)

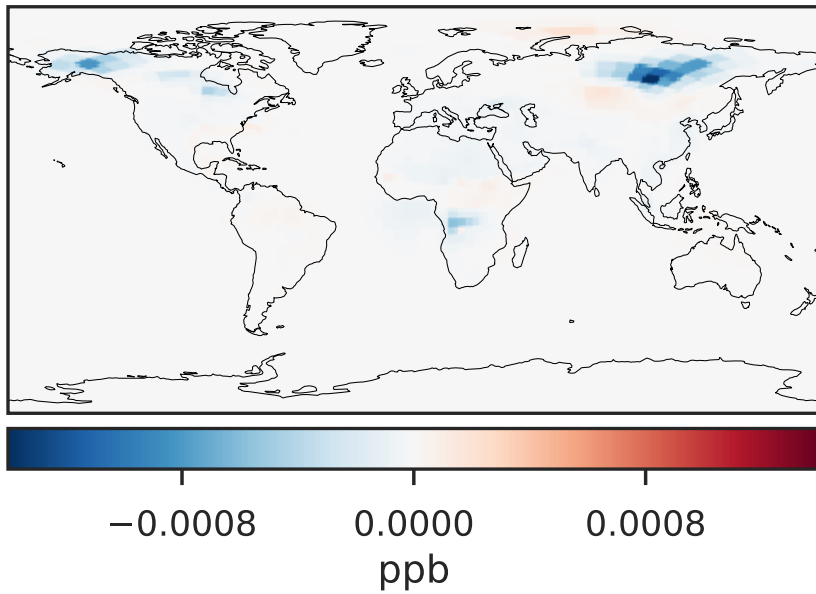
GCHP_14.0.0 (Ref)
c24



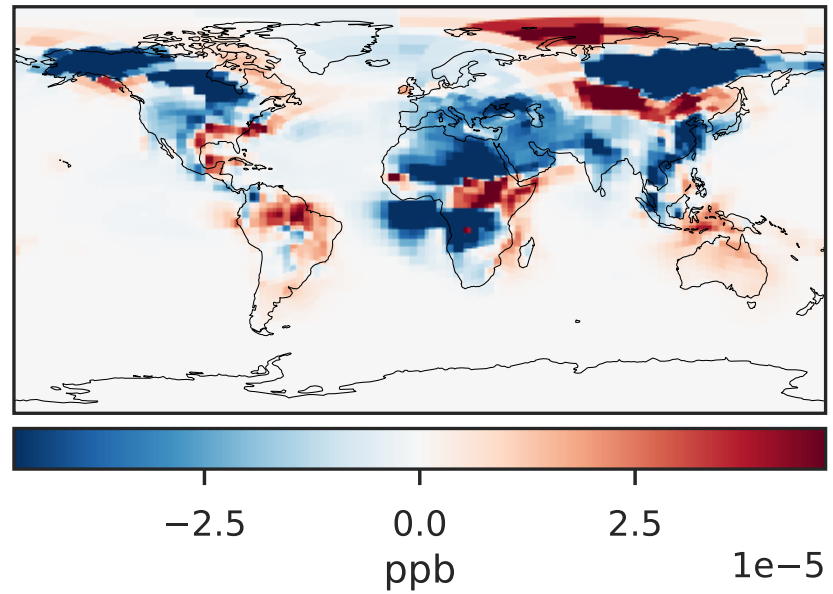
GCHP_14.2.0 (Dev)
c24



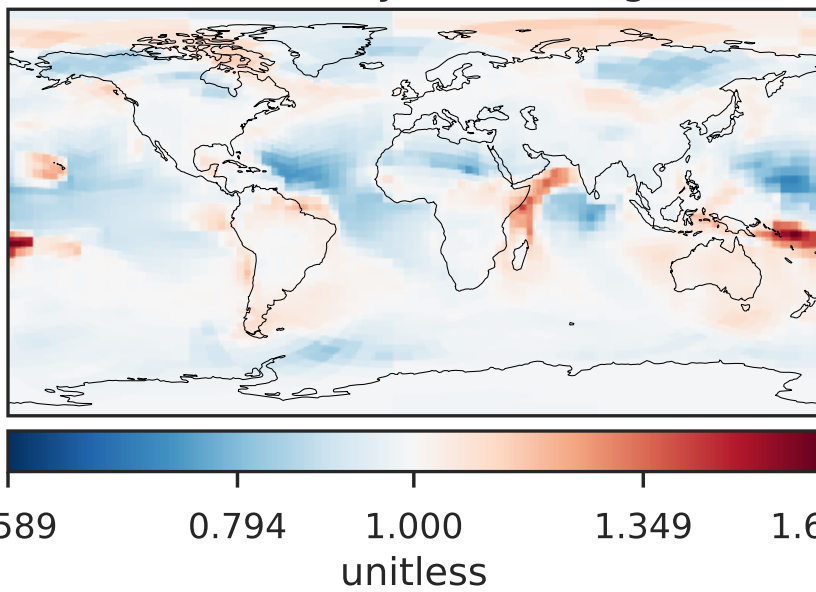
Difference (1x1.25)
Dev - Ref, Dynamic Range



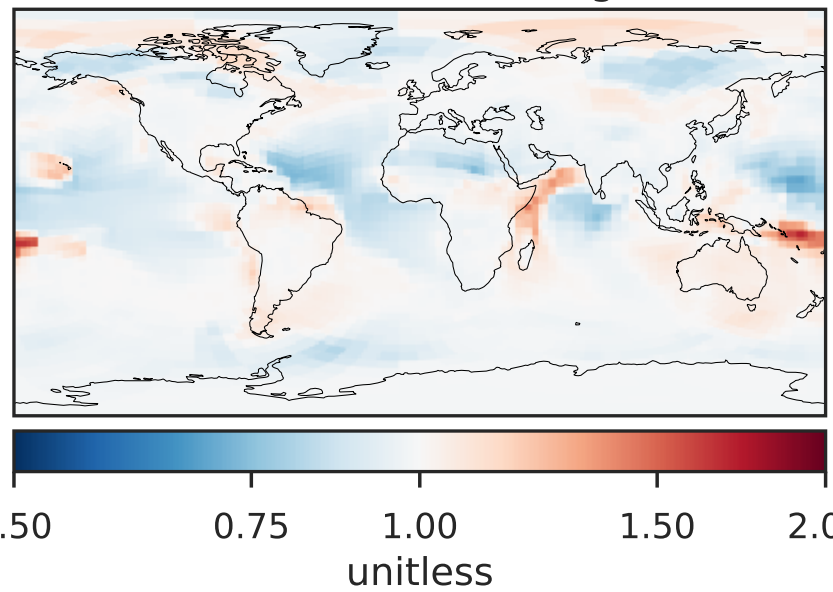
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

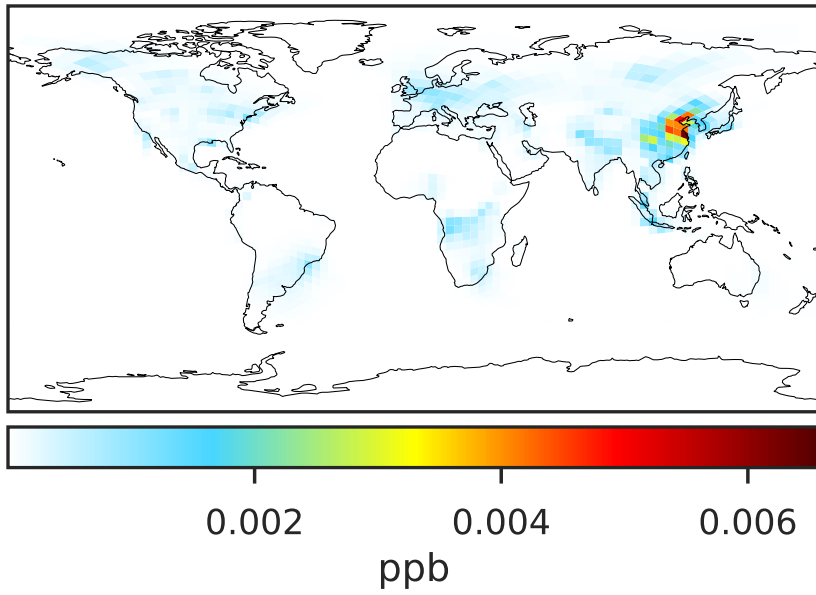


Ratio (1x1.25)
Dev/Ref, Fixed Range

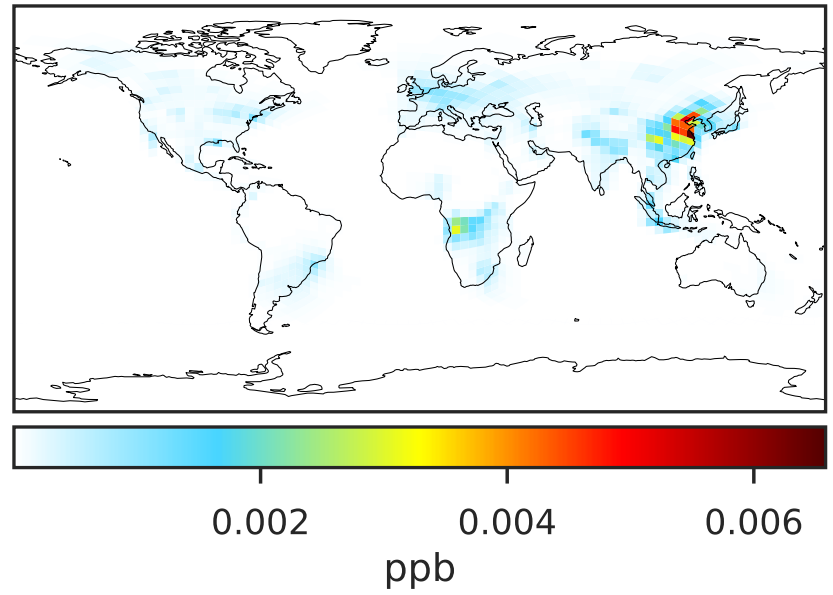


SpeciesConcVV_BZPAN (Jul2019)

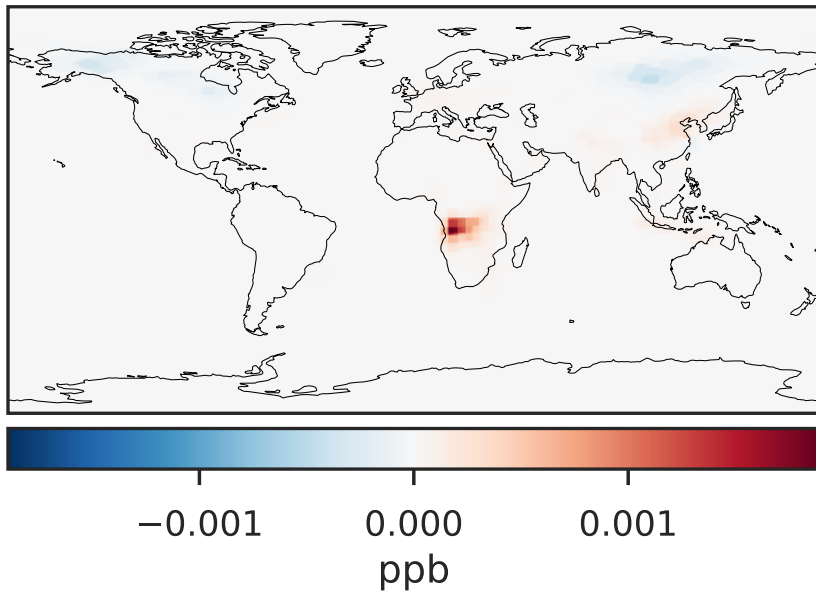
GCHP_14.0.0 (Ref)
c24



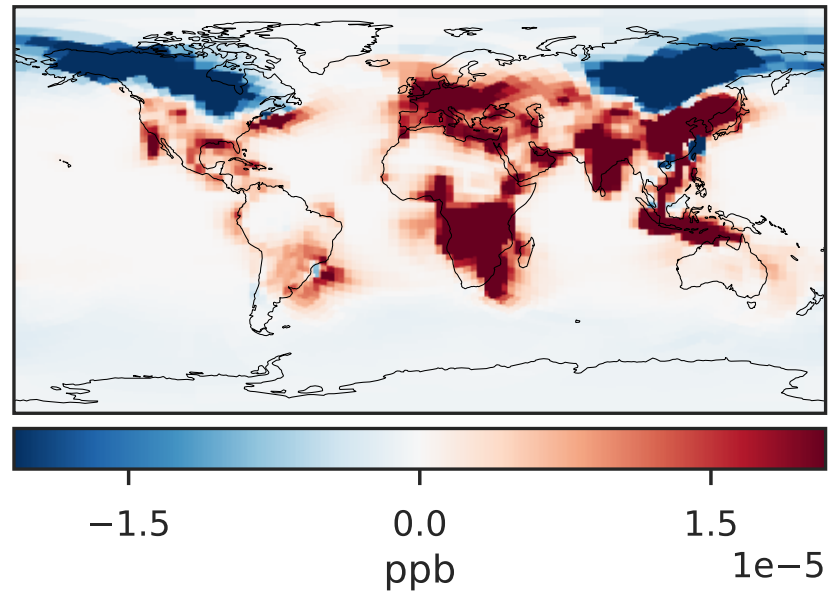
GCHP_14.2.0 (Dev)
c24



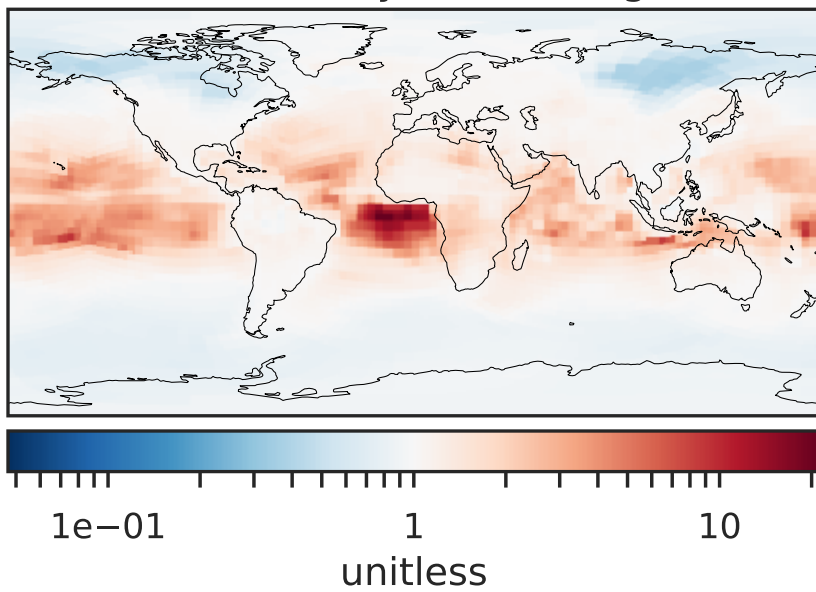
Difference (1x1.25)
Dev - Ref, Dynamic Range



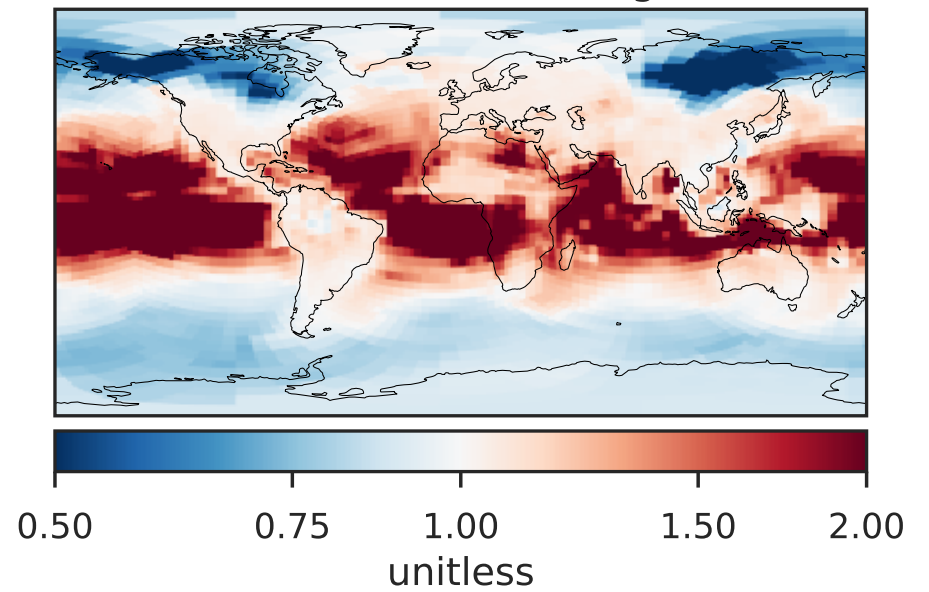
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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



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



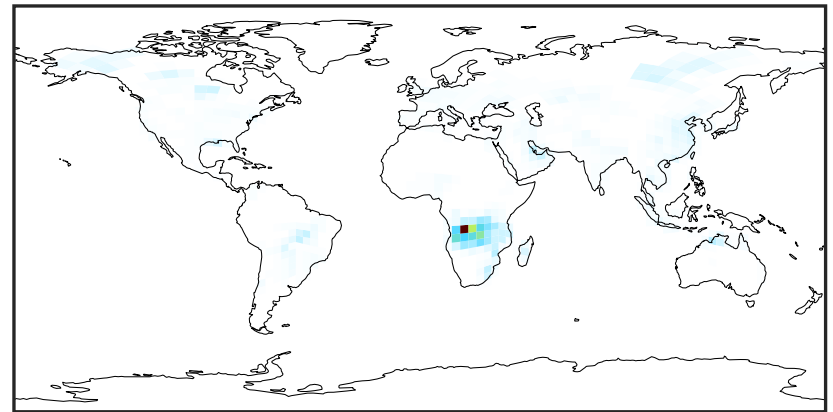
SpeciesConcVV_NPHEN (Jul2019)

GCHP_14.0.0 (Ref)
c24



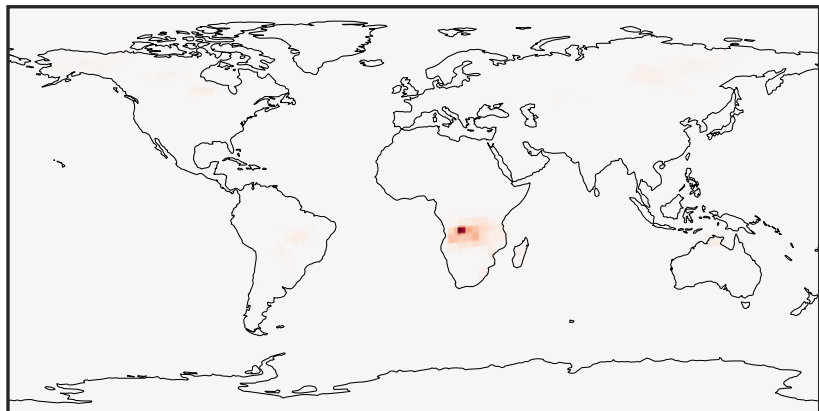
0.025 0.050 0.075
ppb

GCHP_14.2.0 (Dev)
c24



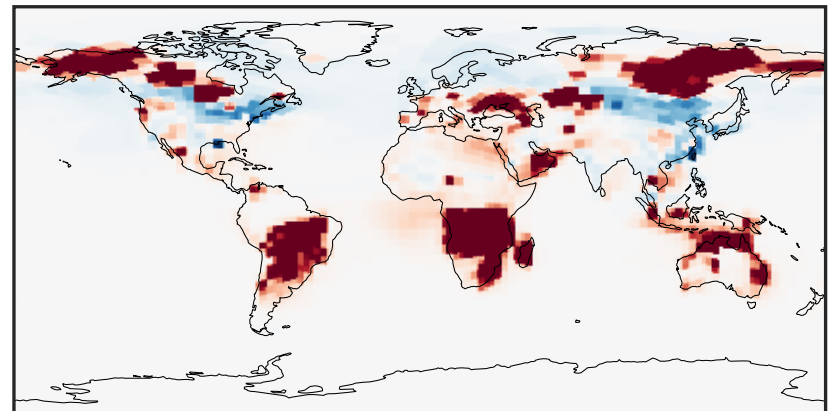
0.025 0.050 0.075
ppb

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



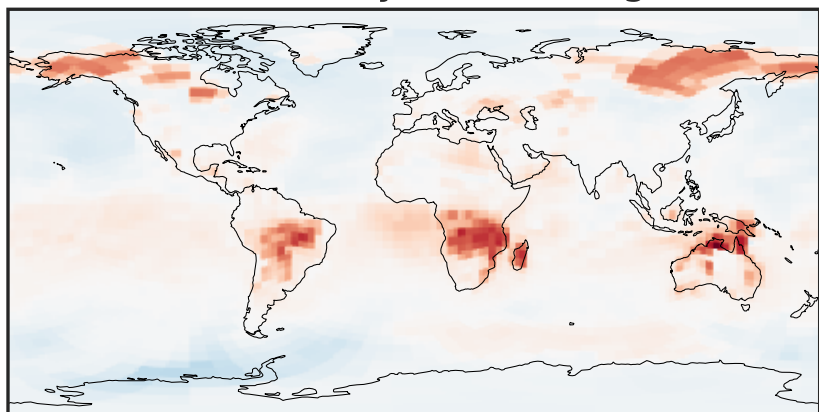
-0.0772 -0.0386 0.0000 0.0386 0.0772
ppb

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



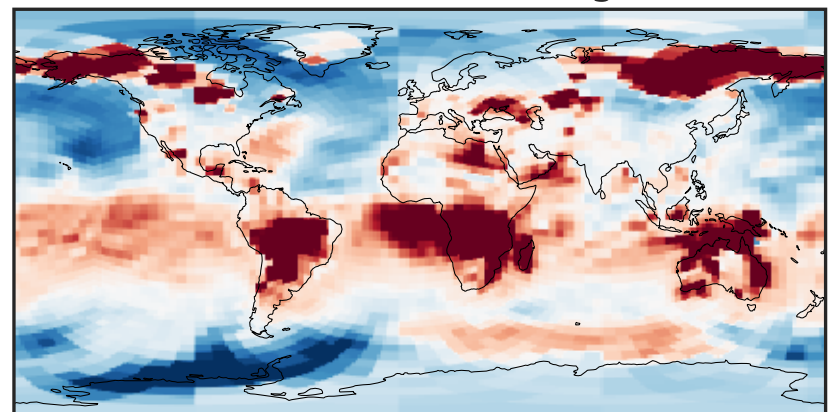
-0.00015 0.00000 0.00015
ppb

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



1e-01 1 10
unitless

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



0.50 0.75 1.00 1.50 2.00
unitless