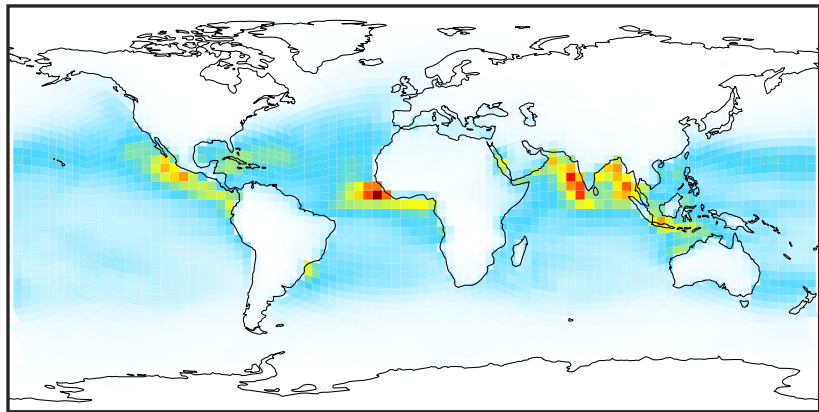


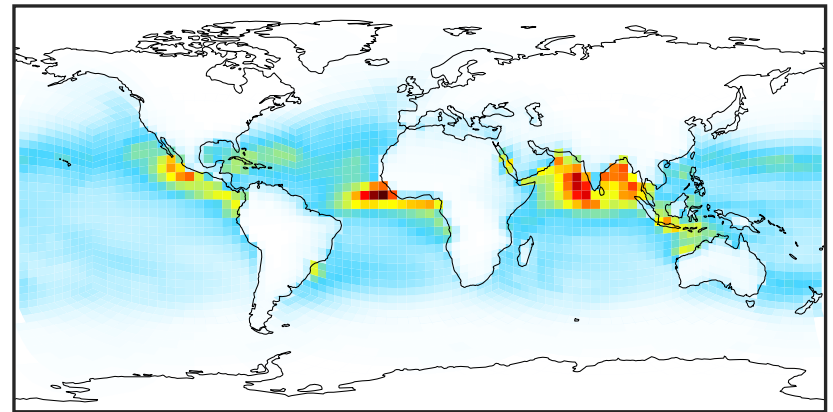
# SpeciesConcVV\_Iy (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



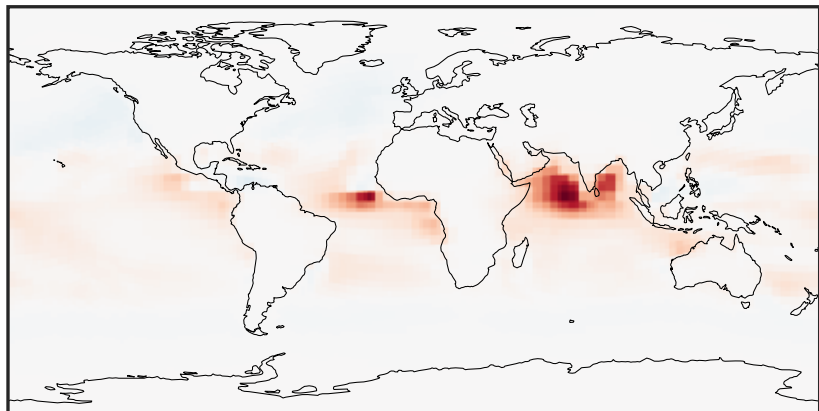
0.008 0.016 0.024  
ppb

GCHP\_14.2.0 (Dev)  
c24



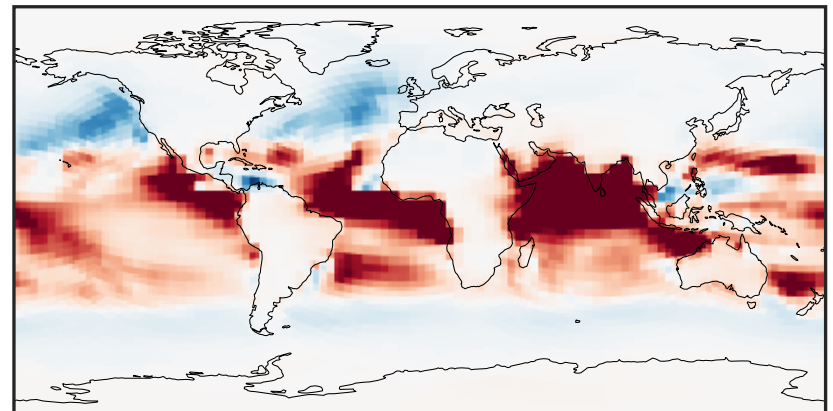
0.008 0.016 0.024  
ppb

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



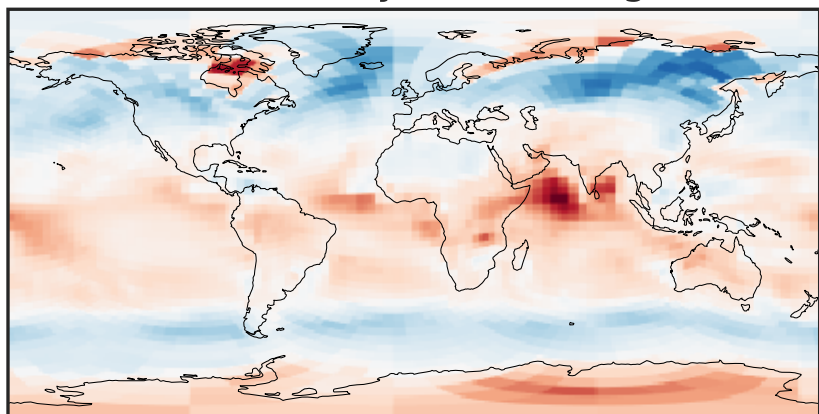
-0.004 0.000 0.004  
ppb

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



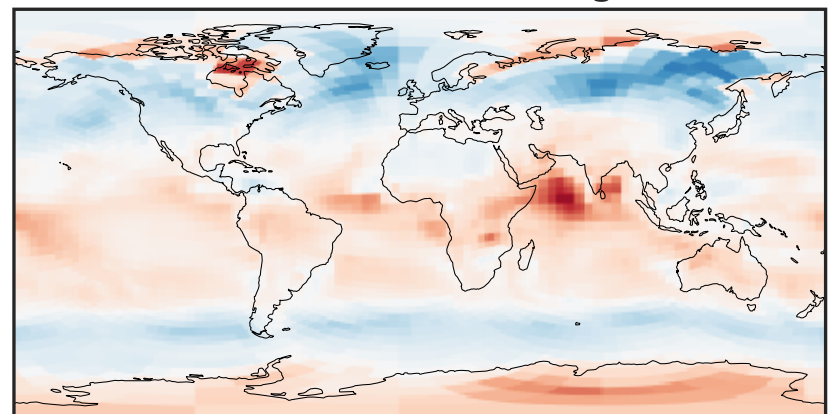
-0.0004 0.0000 0.0004  
ppb

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



0.550 0.775 1.000 1.409 1.818  
unitless

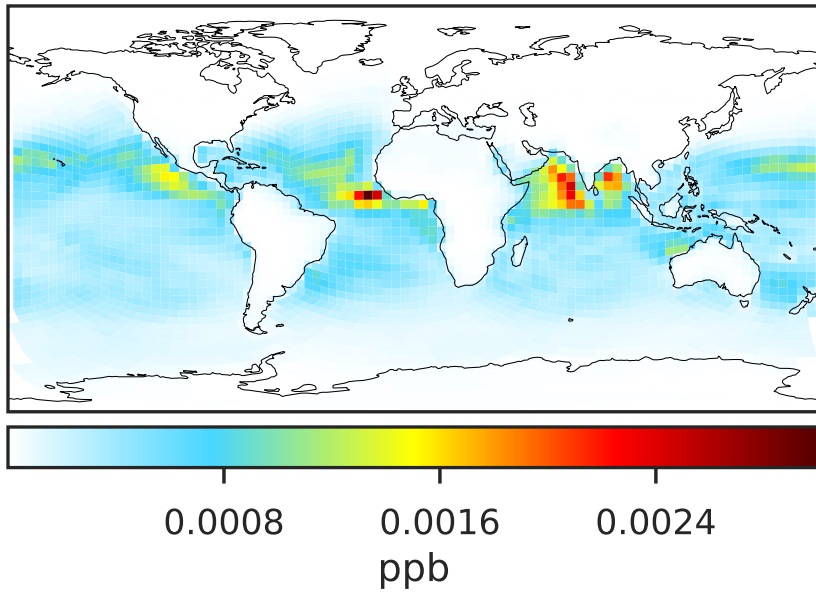
Ratio (1x1.25)  
Dev/Ref, Fixed Range



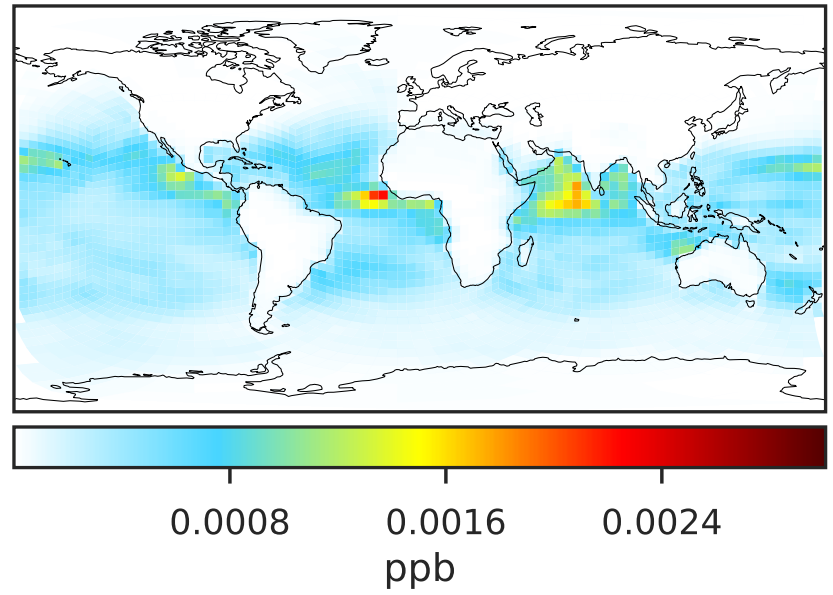
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_IxOy (Jan2019)

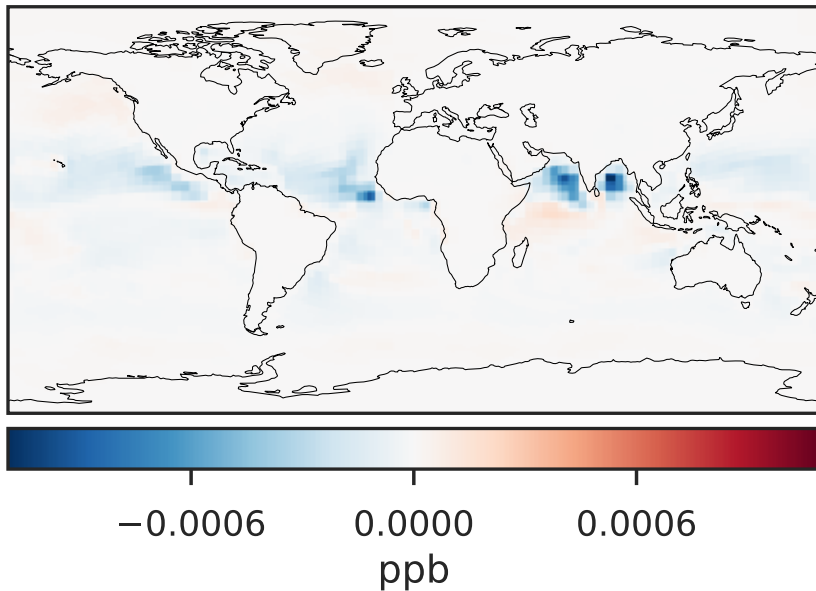
GCHP\_14.0.0 (Ref)  
c24



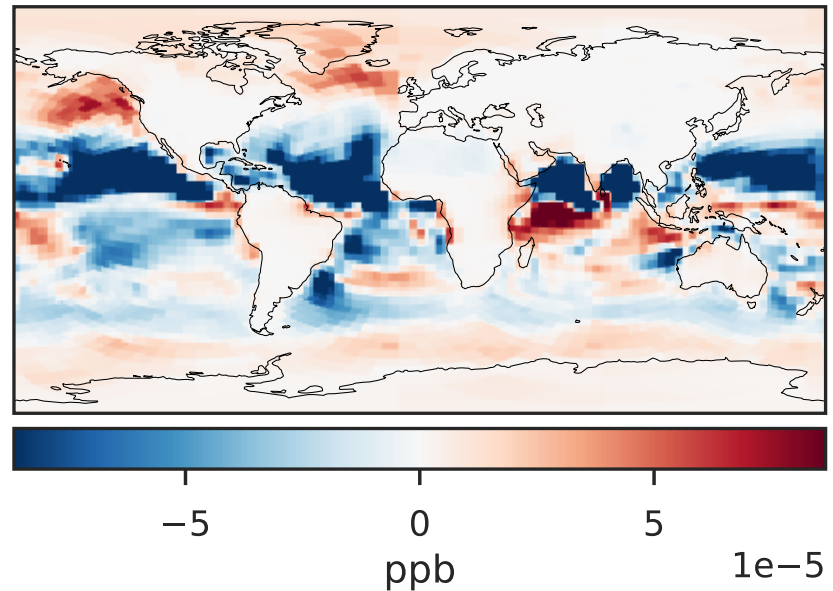
GCHP\_14.2.0 (Dev)  
c24



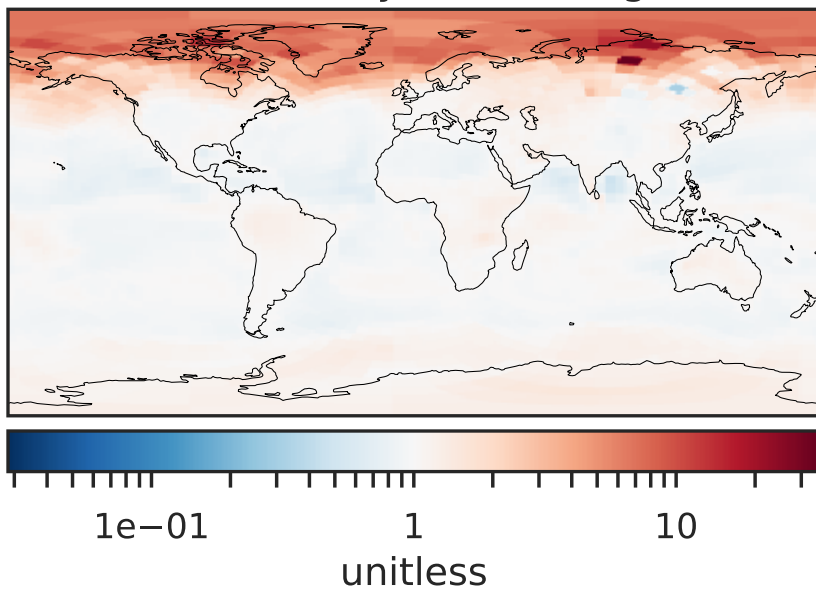
Difference (1x1.25)  
Dev - Ref, Dynamic Range



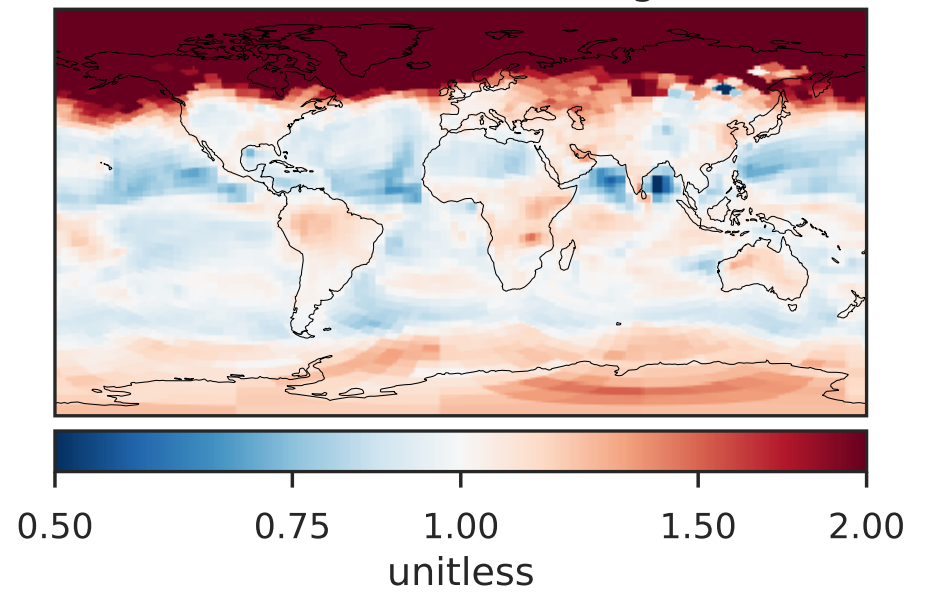
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

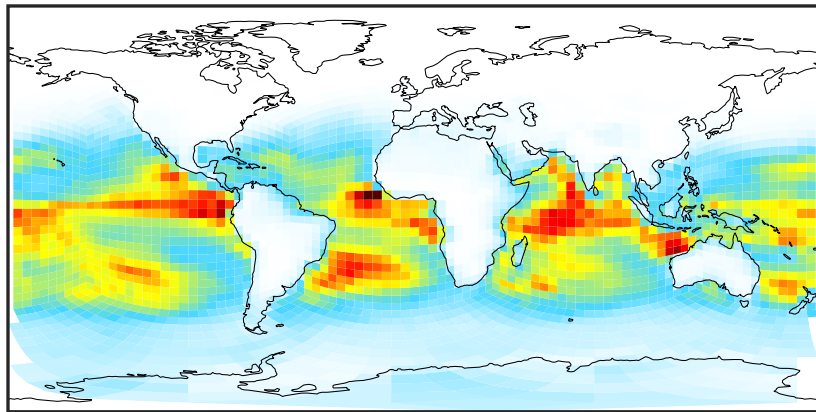


Ratio (1x1.25)  
Dev/Ref, Fixed Range



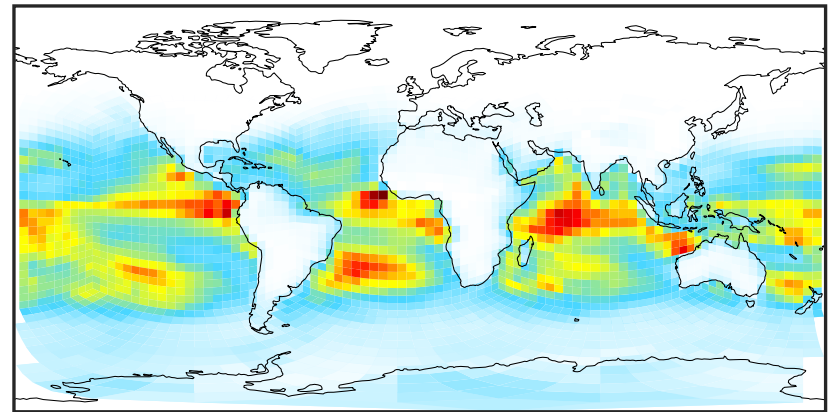
# SpeciesConcVV\_I (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



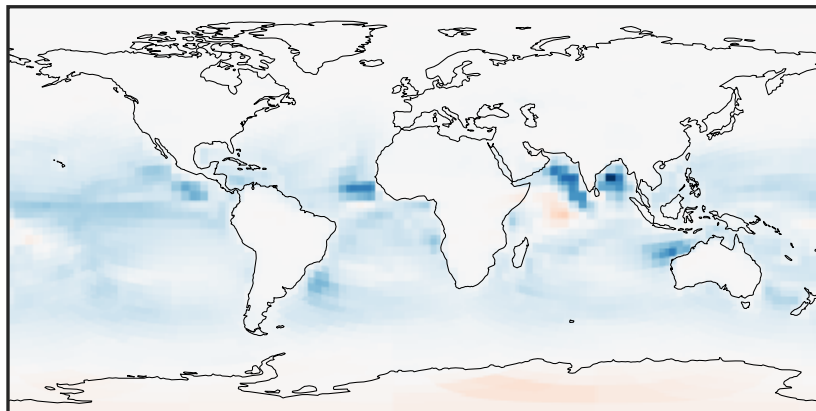
0.0000 0.0001 0.0002 0.0003  
ppb

GCHP\_14.2.0 (Dev)  
c24



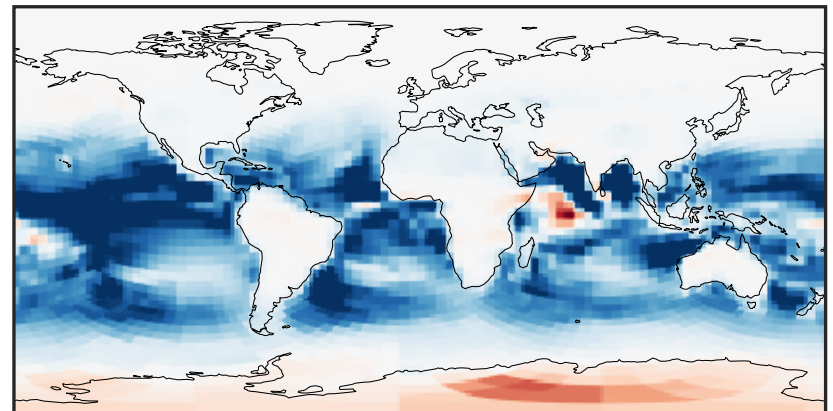
0.0000 0.0001 0.0002 0.0003  
ppb

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



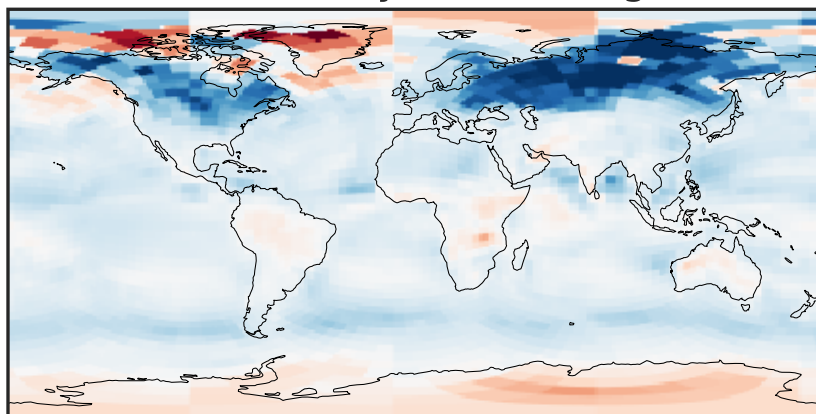
-5 0 5  
ppb  $1e-5$

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



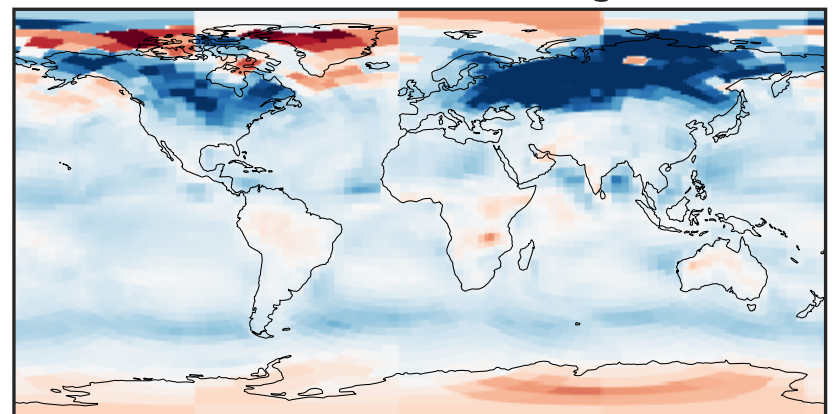
-1 0 1  
ppb  $1e-5$

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



0.417 0.708 1.000 1.700 2.401  
unitless

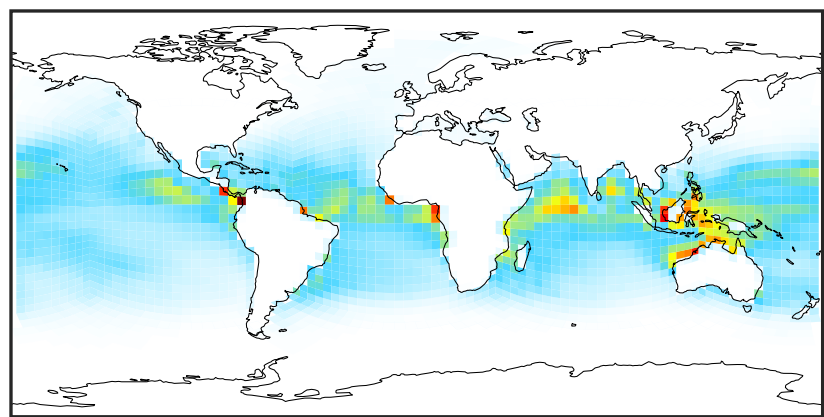
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

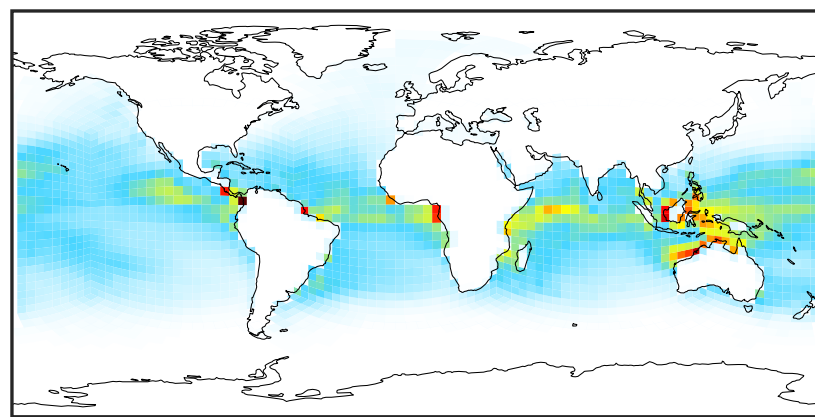
# SpeciesConcVW\_I2 (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



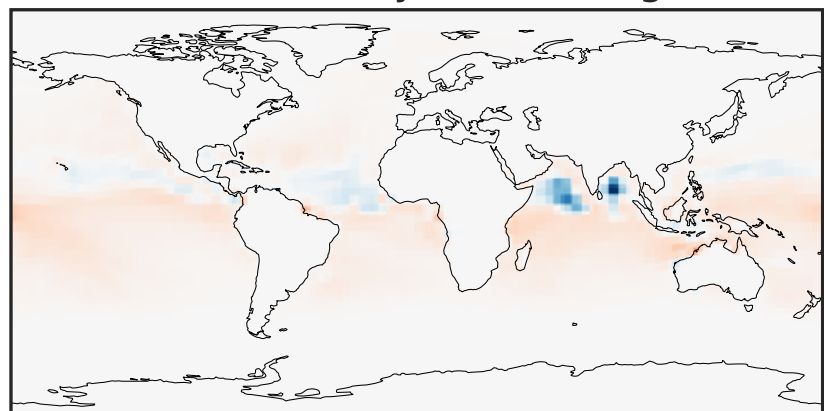
2.5 5.0 7.5  
ppb  $1e-5$

GCHP\_14.2.0 (Dev)  
c24



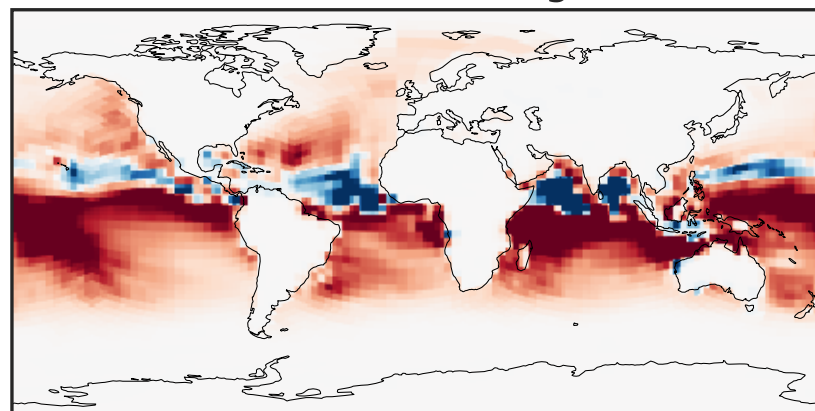
2.5 5.0 7.5  
ppb  $1e-5$

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



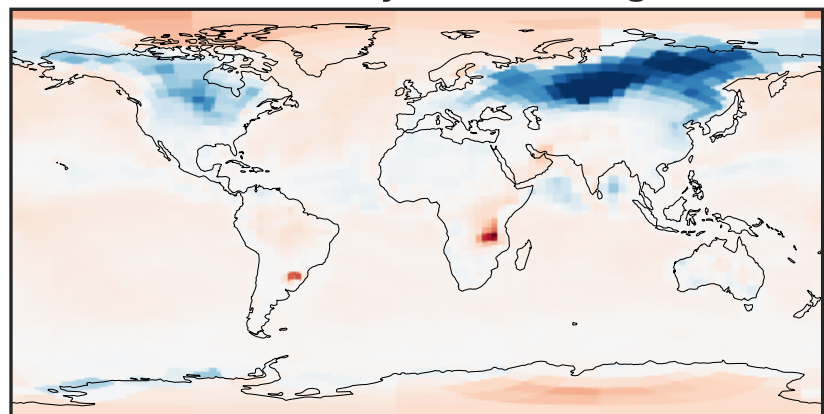
-1.5 0.0 1.5  
ppb  $1e-5$

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



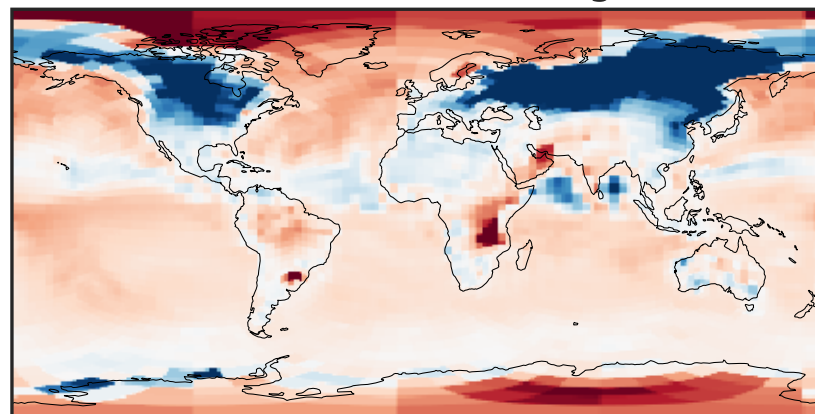
-1.5 0.0 1.5  
ppb  $1e-6$

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



0.105 0.553 1.000 5.259 9.517  
unitless

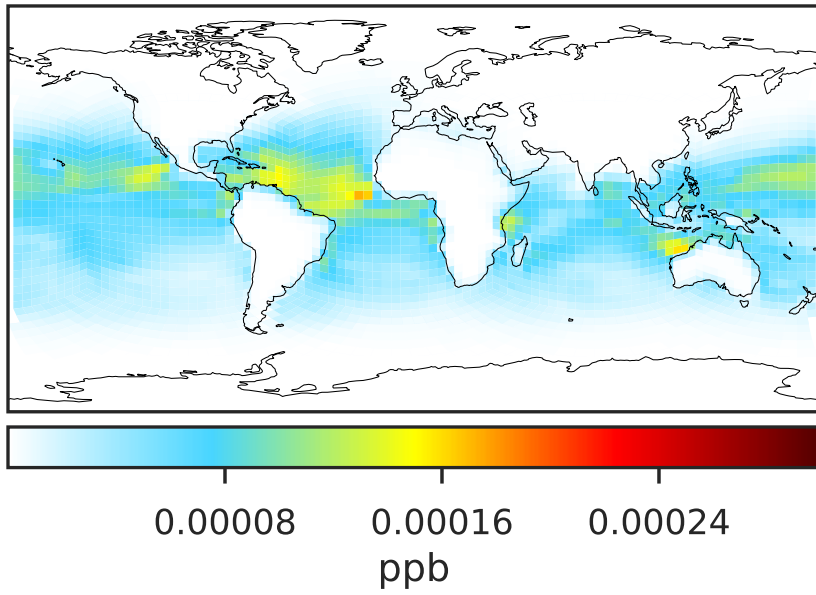
Ratio (1x1.25)  
Dev/Ref, Fixed Range



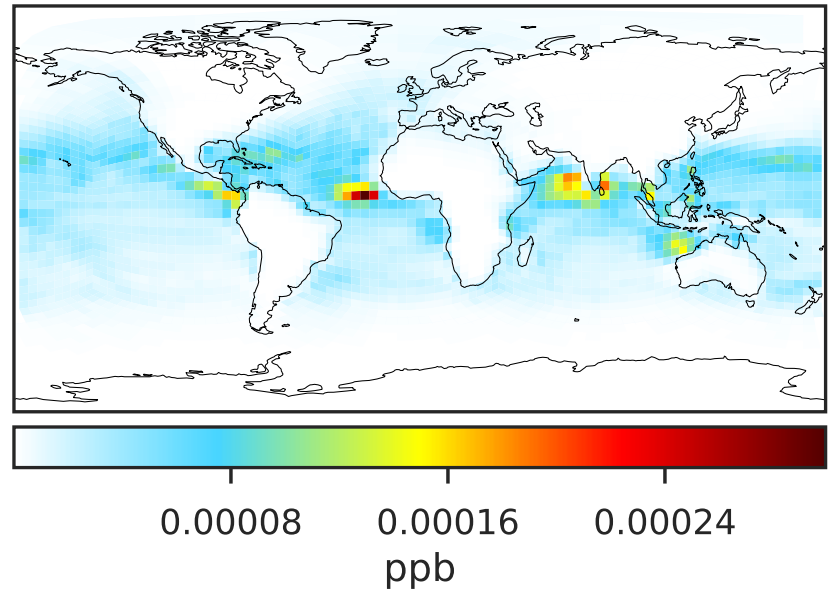
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_IBr (Jan2019)

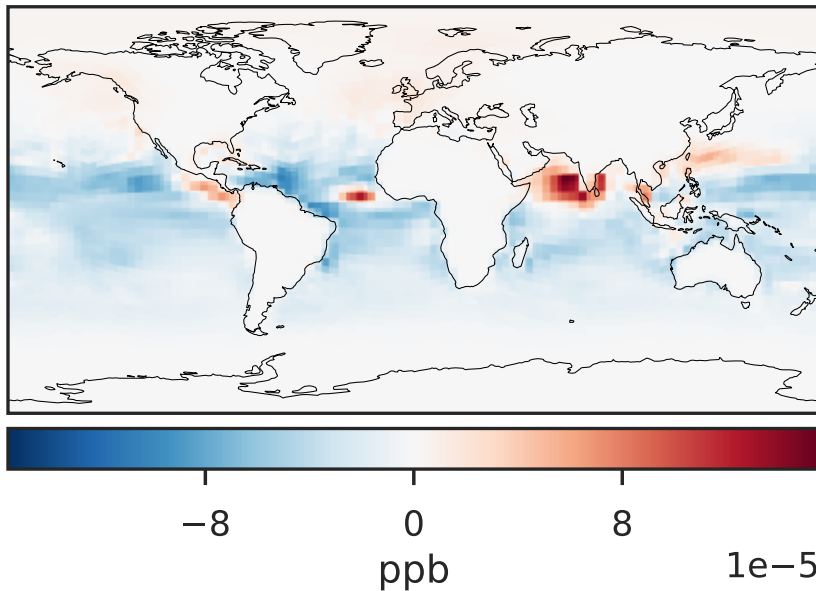
GCHP\_14.0.0 (Ref)  
c24



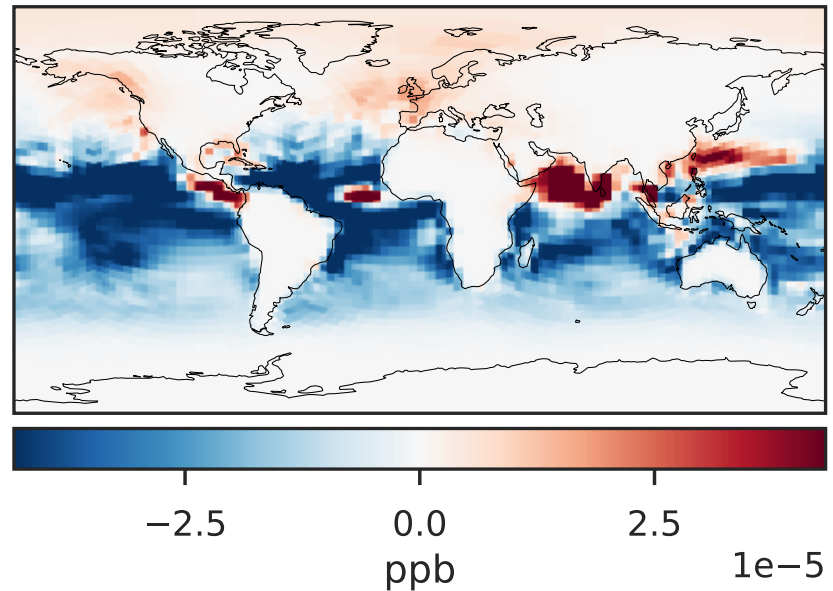
GCHP\_14.2.0 (Dev)  
c24



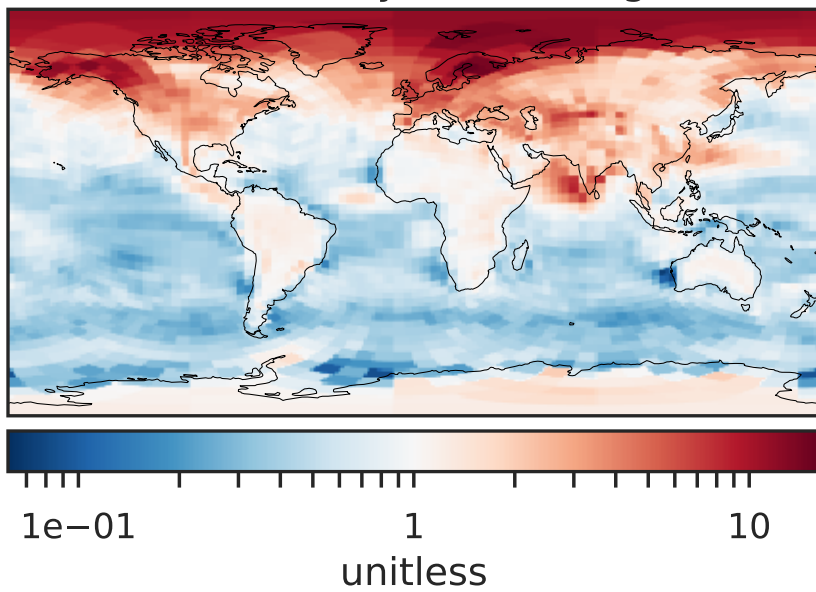
Difference (1x1.25)  
Dev - Ref, Dynamic Range



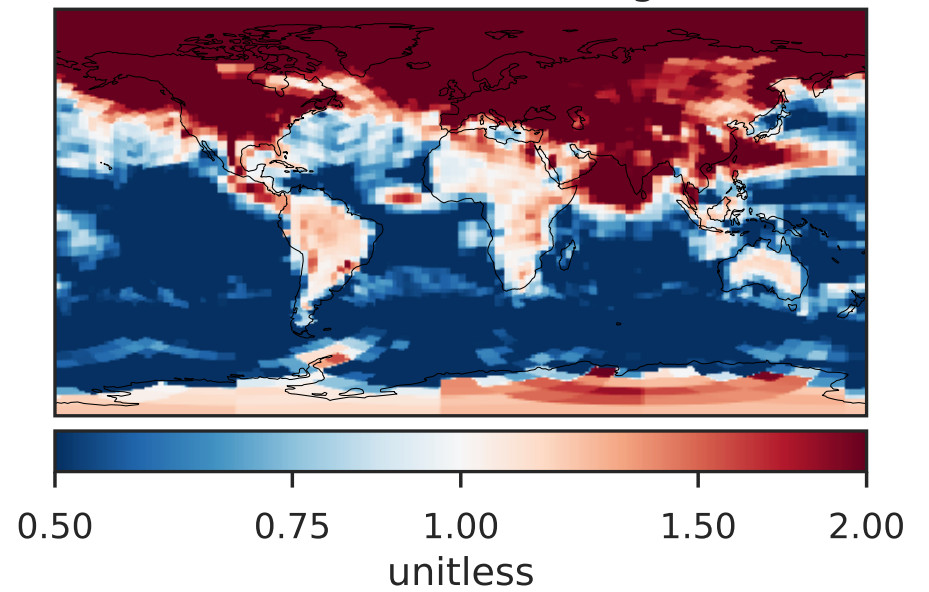
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

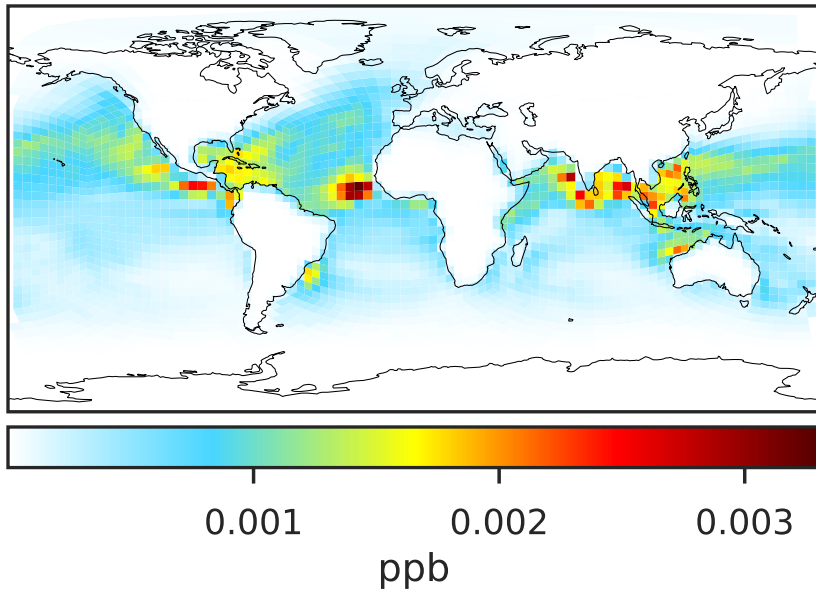


Ratio (1x1.25)  
Dev/Ref, Fixed Range

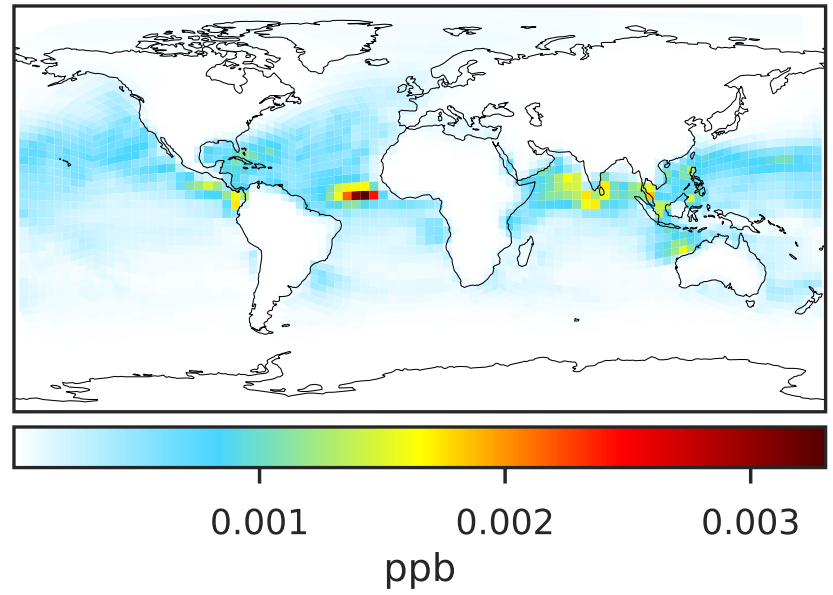


# SpeciesConcVV\_ICI (Jan2019)

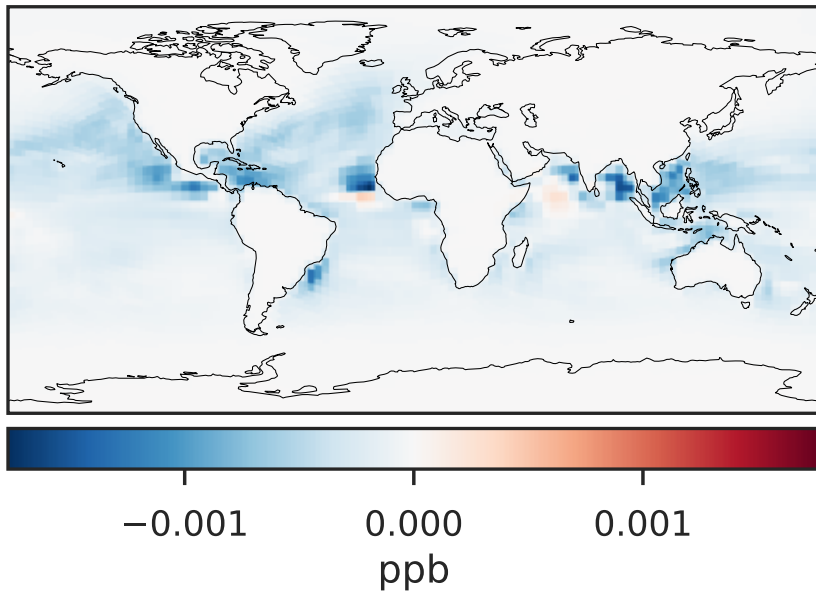
GCHP\_14.0.0 (Ref)  
c24



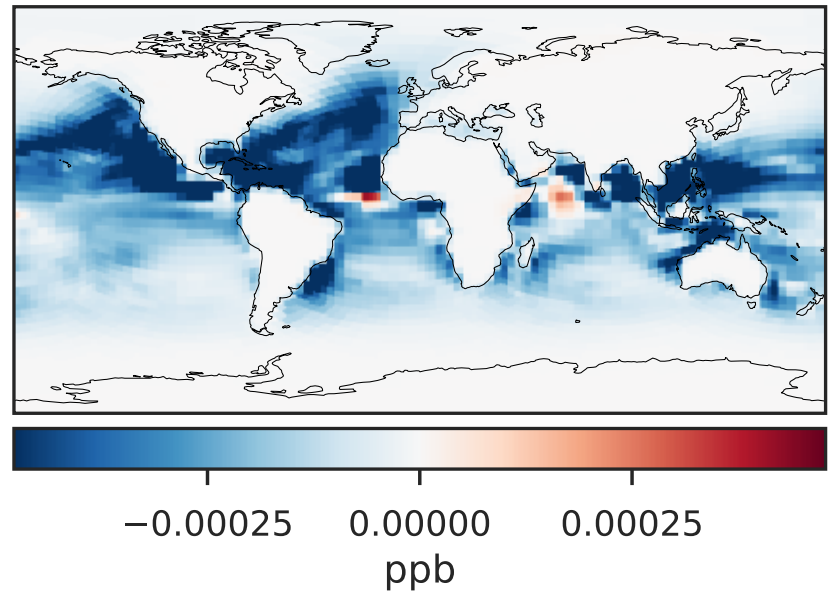
GCHP\_14.2.0 (Dev)  
c24



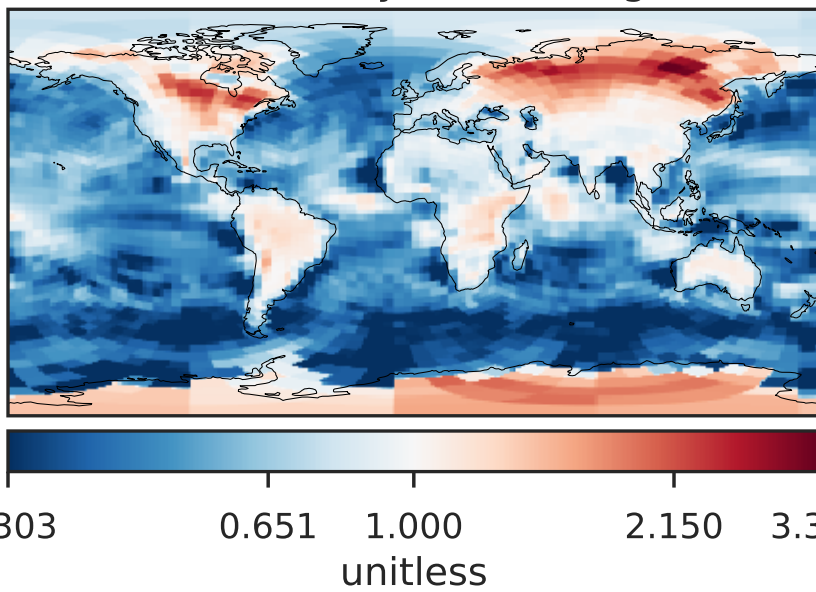
Difference (1x1.25)  
Dev - Ref, Dynamic Range



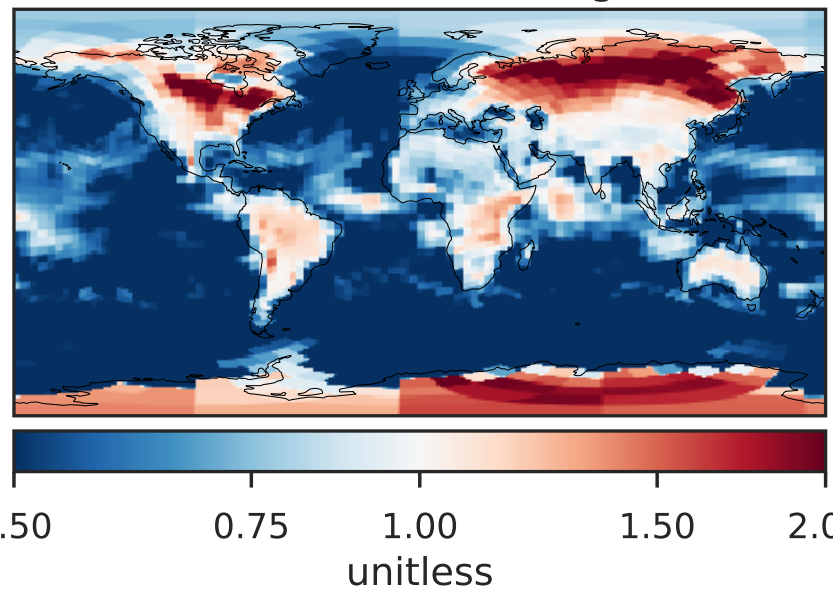
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

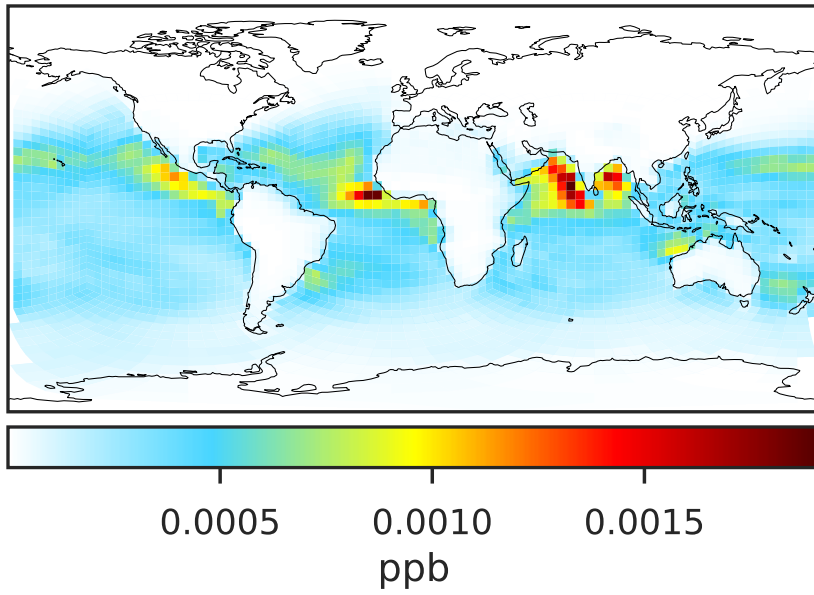


Ratio (1x1.25)  
Dev/Ref, Fixed Range

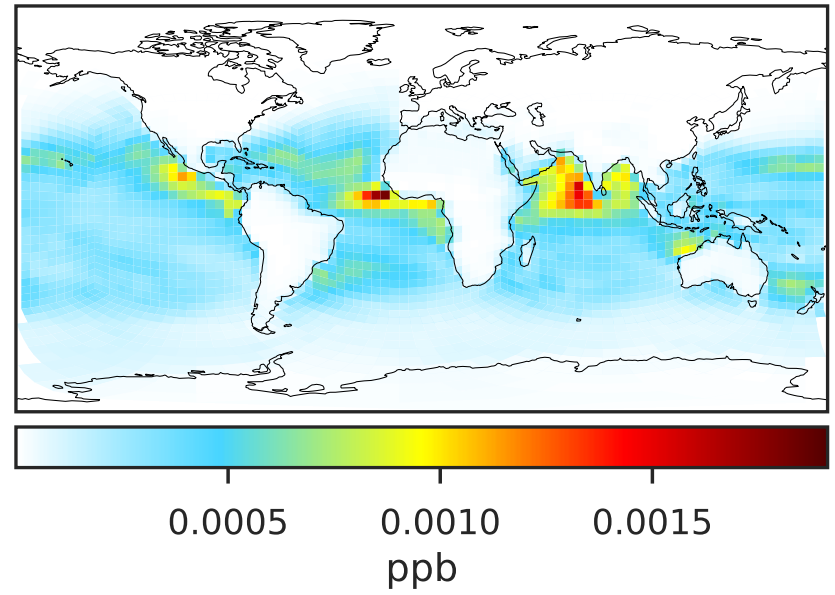


# SpeciesConcVV\_IO (Jan2019)

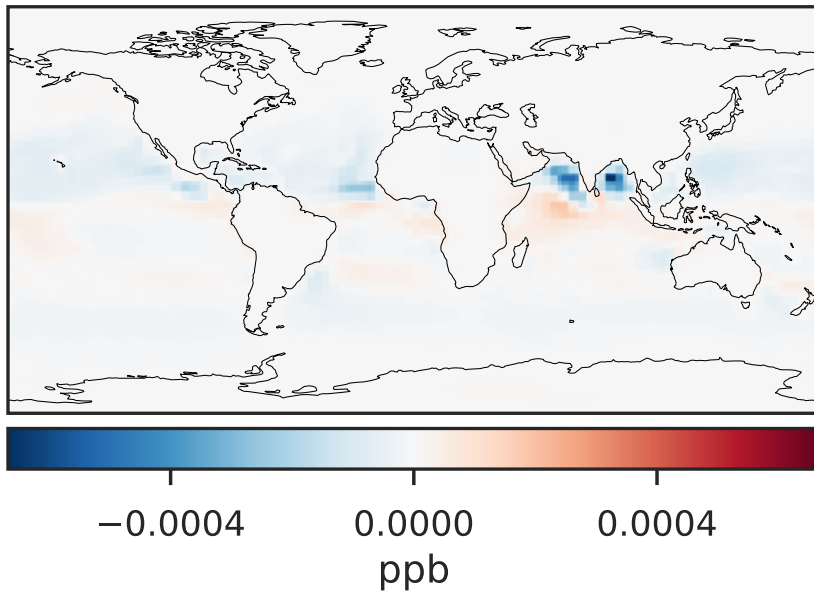
GCHP\_14.0.0 (Ref)  
c24



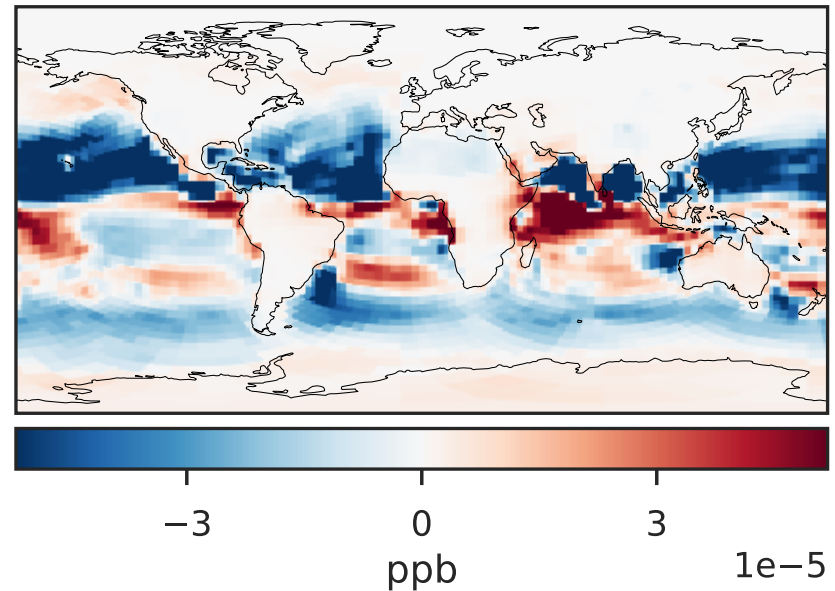
GCHP\_14.2.0 (Dev)  
c24



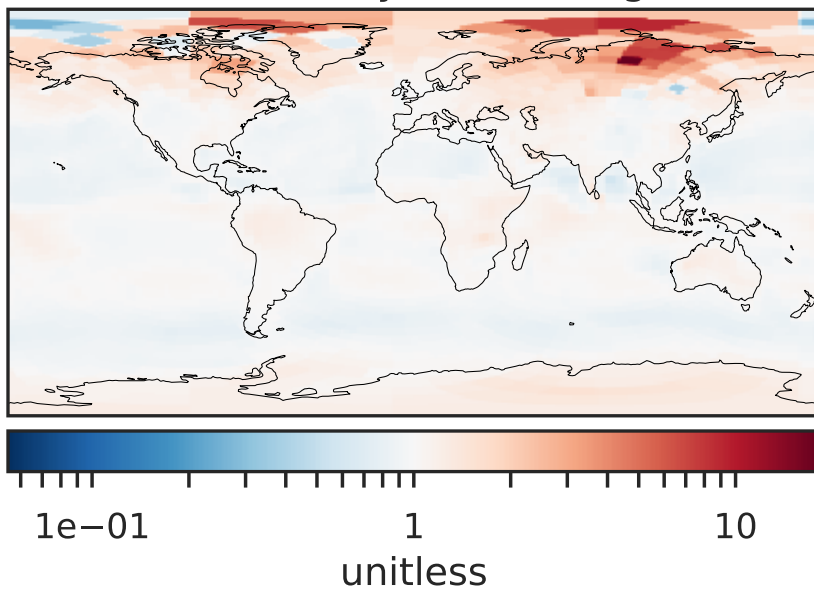
Difference (1x1.25)  
Dev - Ref, Dynamic Range



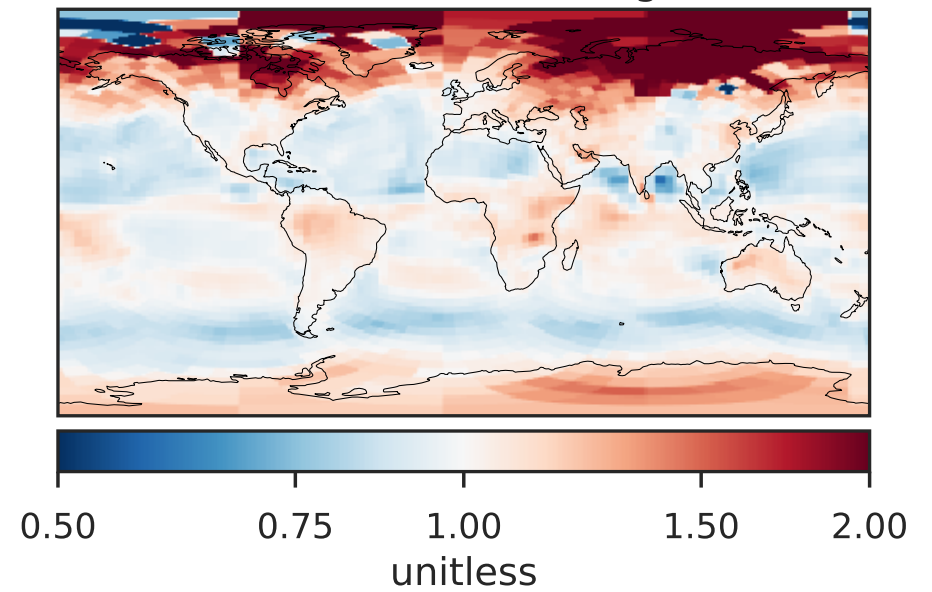
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

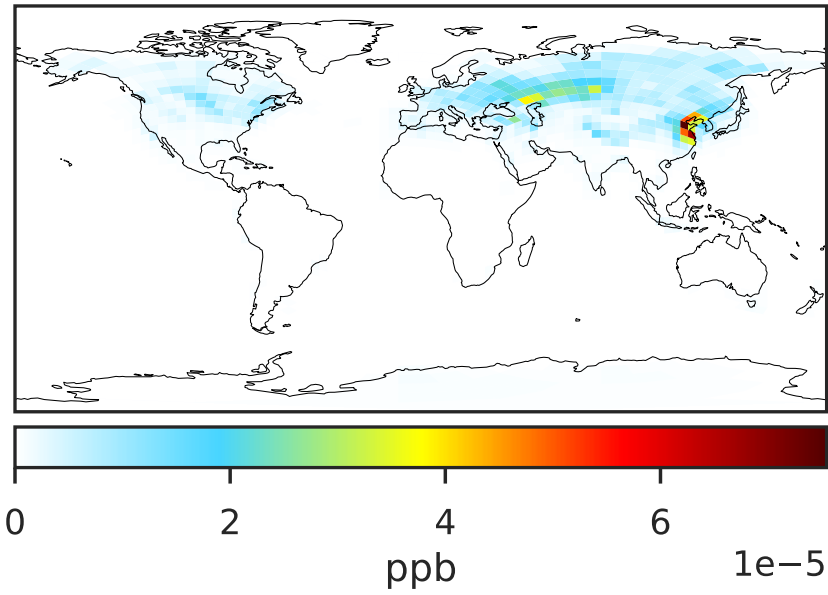


Ratio (1x1.25)  
Dev/Ref, Fixed Range

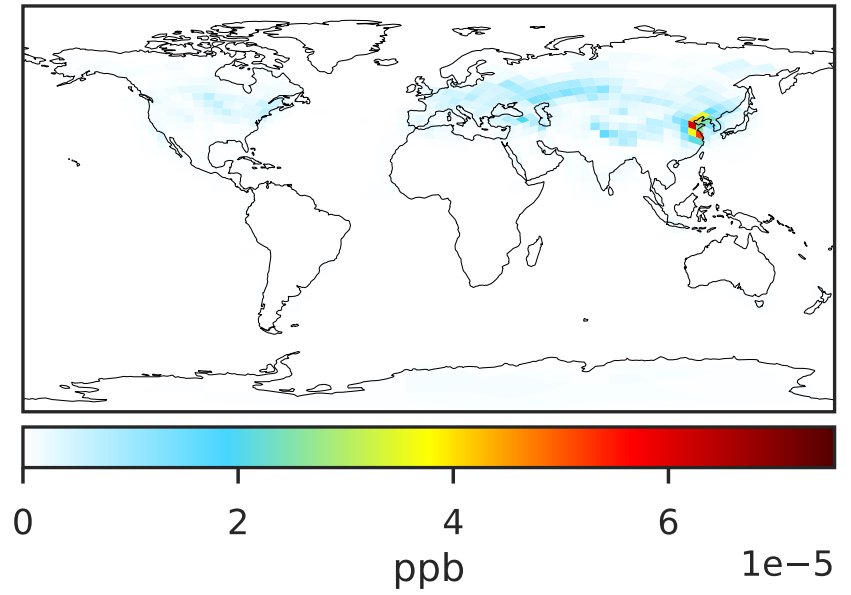


# SpeciesConcVV\_IONO (Jan2019)

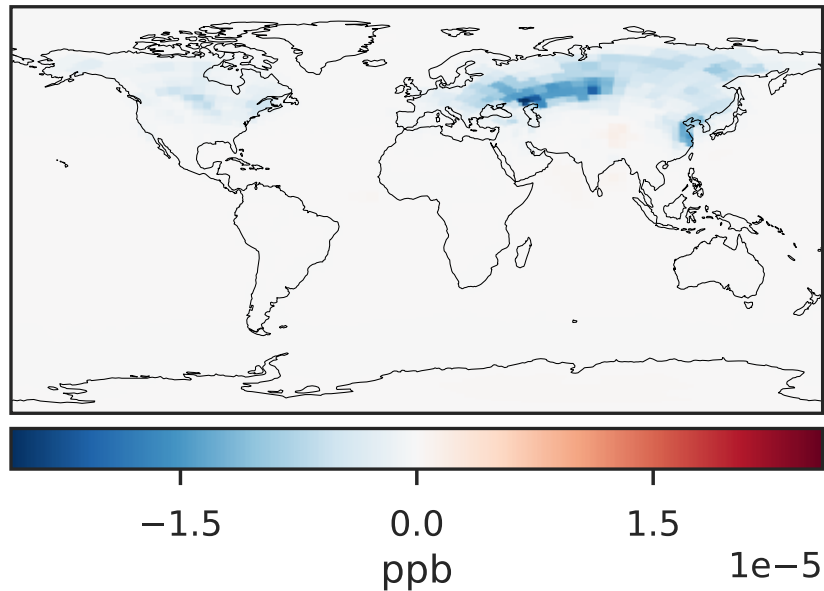
GCHP\_14.0.0 (Ref)  
c24



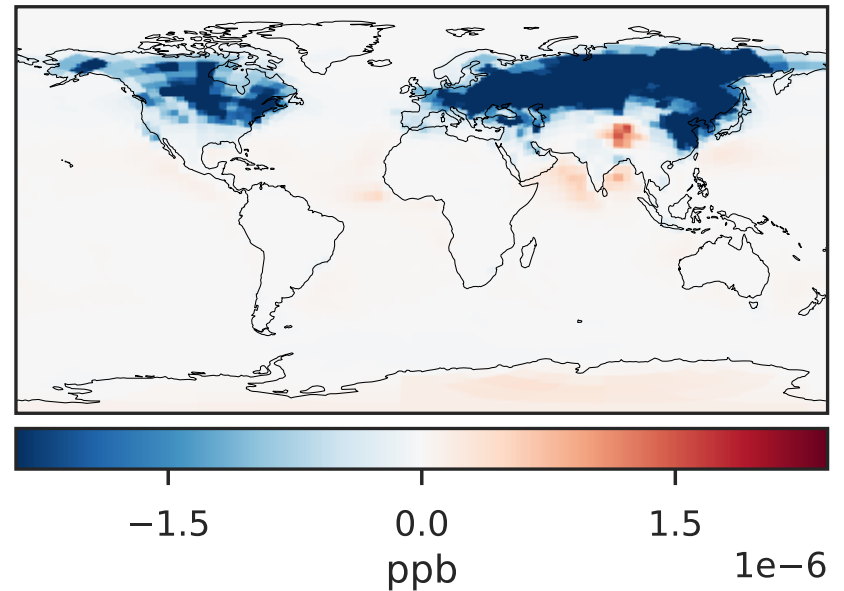
GCHP\_14.2.0 (Dev)  
c24



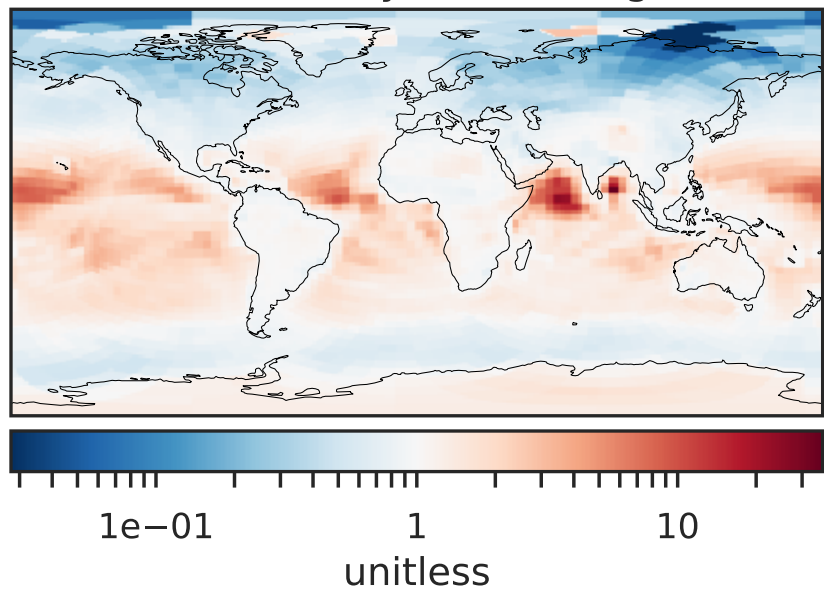
Difference (1x1.25)  
Dev - Ref, Dynamic Range



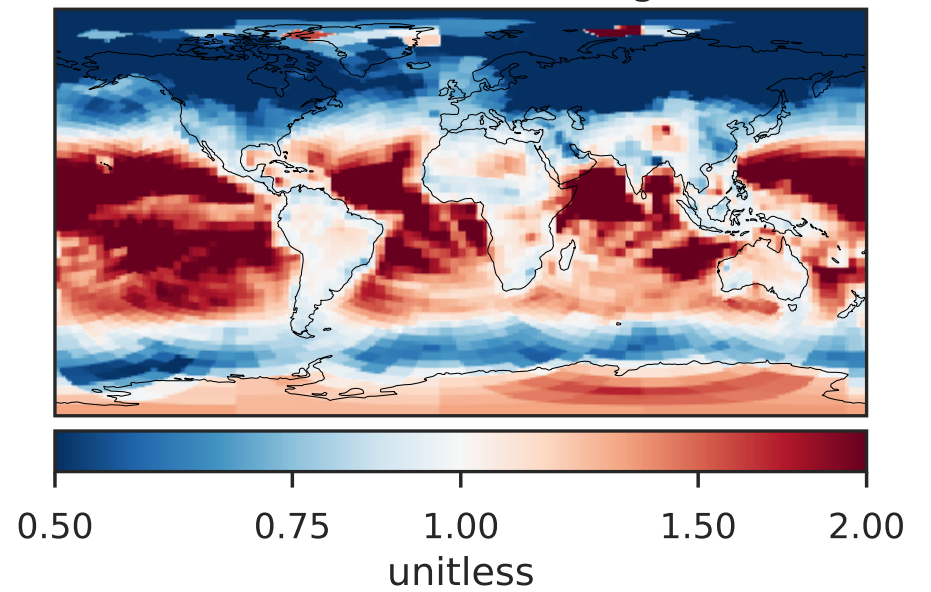
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



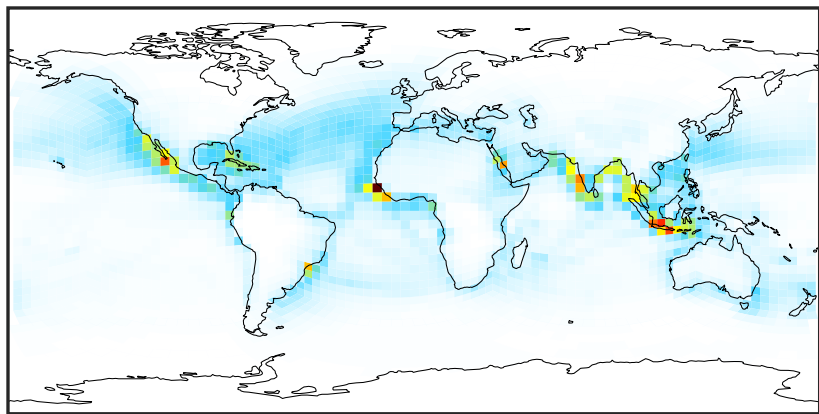
Ratio (1x1.25)  
Dev/Ref, Fixed Range





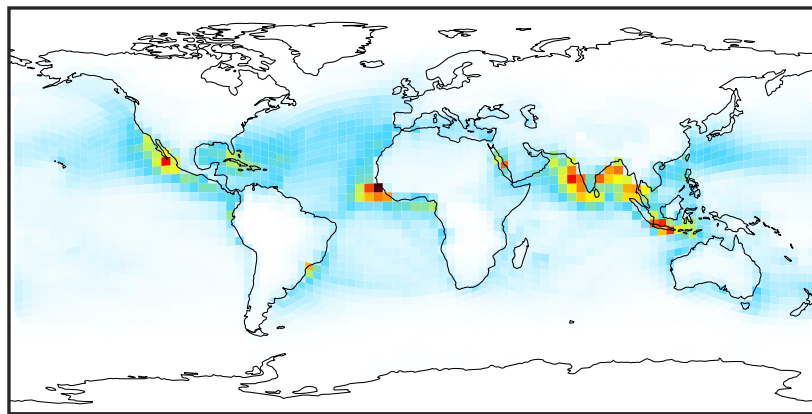
# SpeciesConcVV\_IONO2 (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



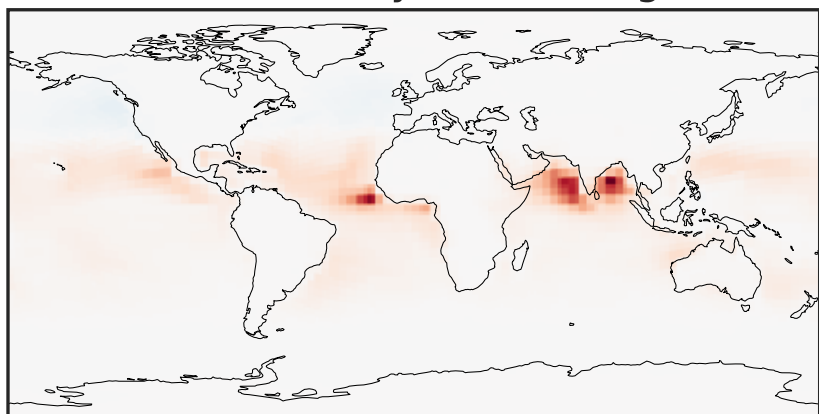
0.0015 0.0030  
ppb

GCHP\_14.2.0 (Dev)  
c24



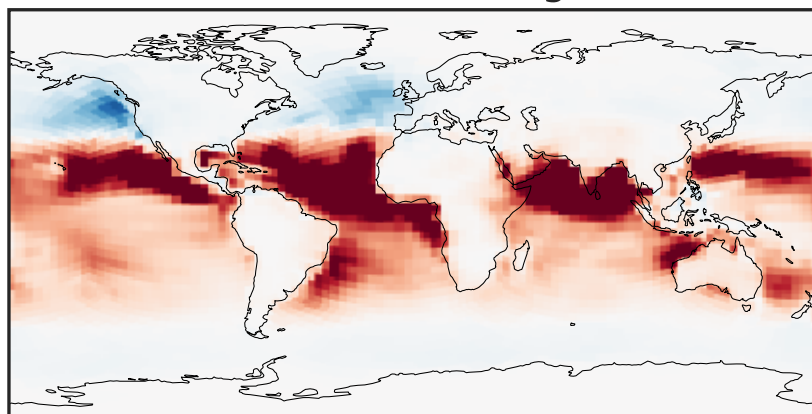
0.0015 0.0030  
ppb

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



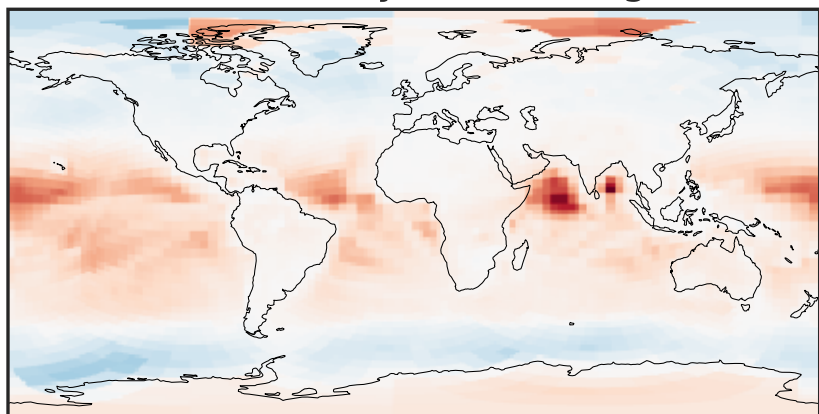
-0.0015 0.0000 0.0015  
ppb

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



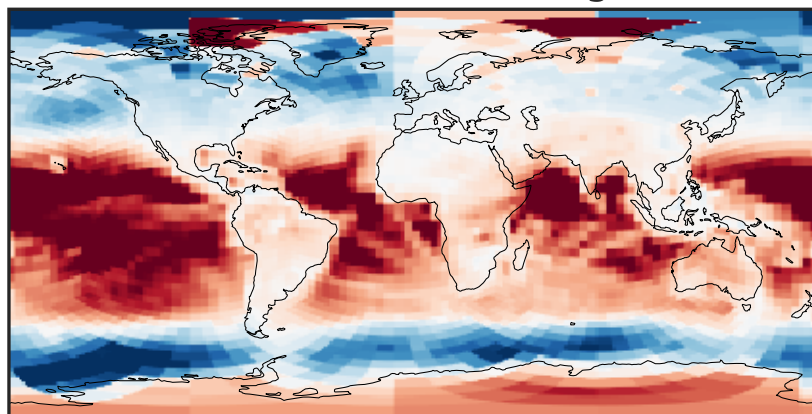
-0.00015 0.00000 0.00015  
ppb

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



1e-01 1 10  
unitless

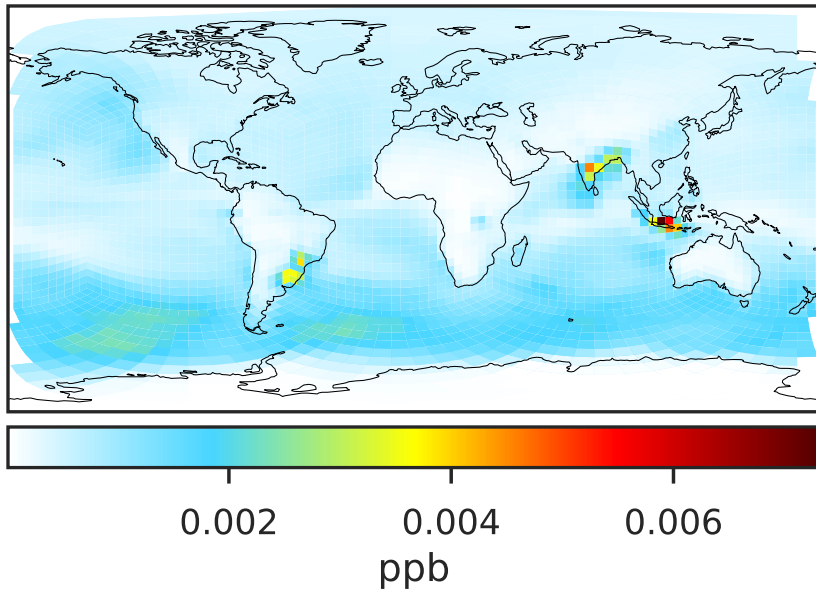
Ratio (1x1.25)  
Dev/Ref, Fixed Range



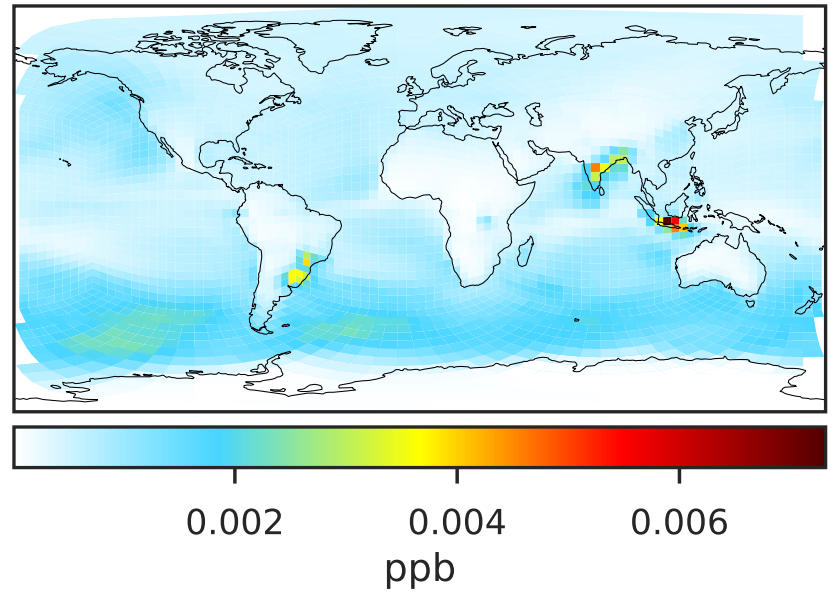
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVW\_CH3I (Jan2019)

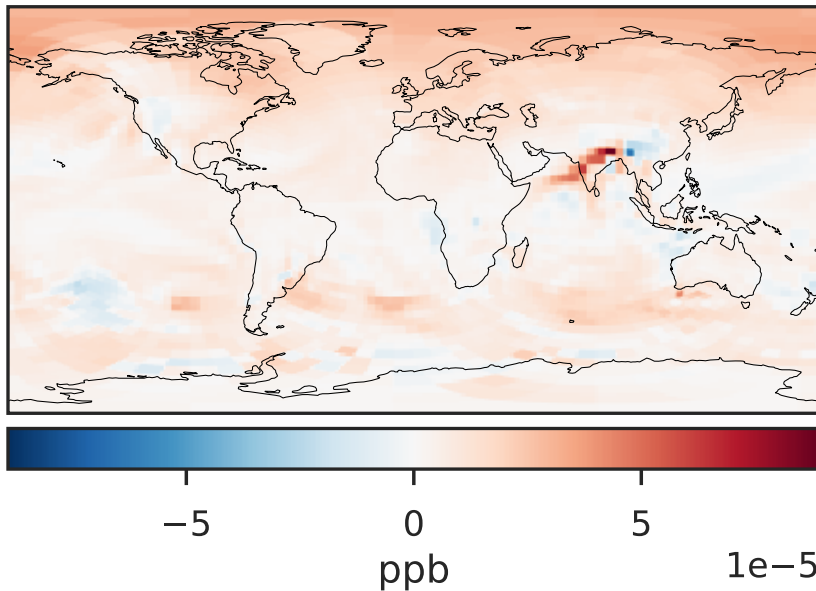
GCHP\_14.0.0 (Ref)  
c24



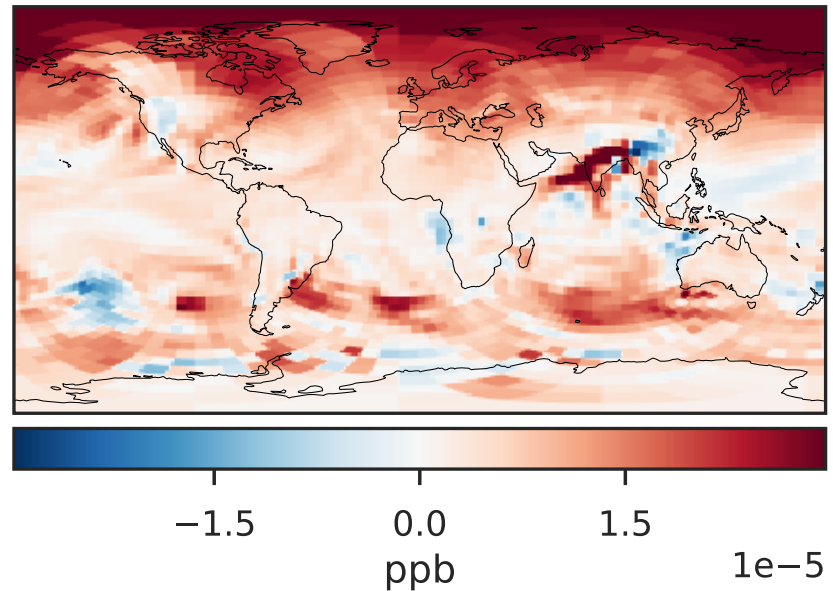
GCHP\_14.2.0 (Dev)  
c24



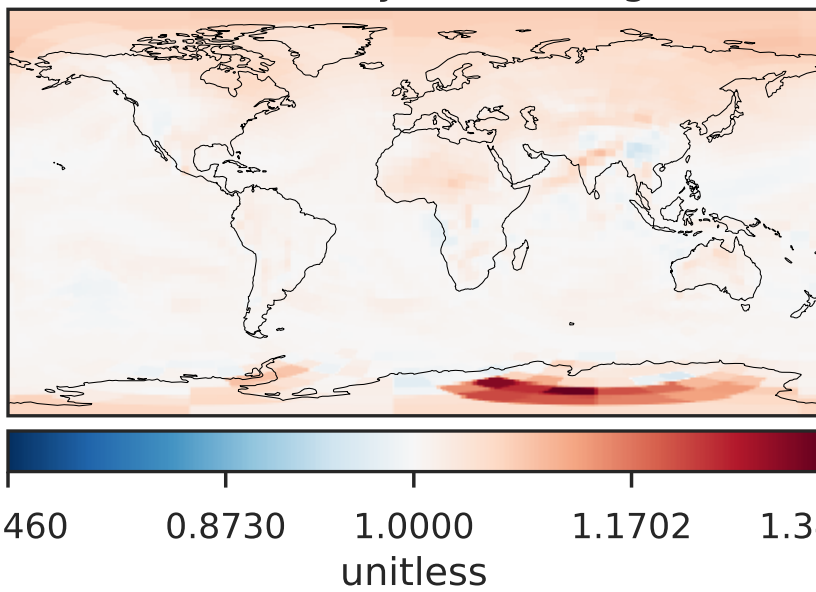
Difference (1x1.25)  
Dev - Ref, Dynamic Range



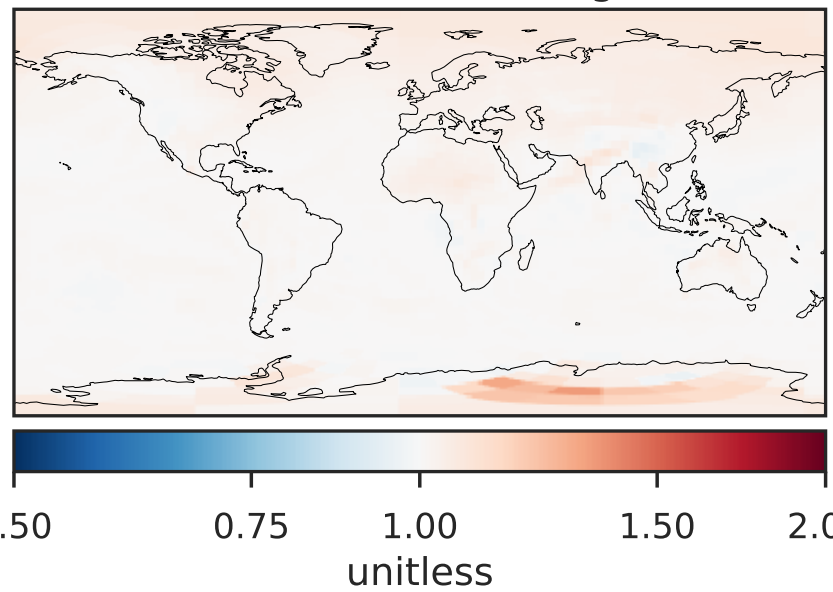
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

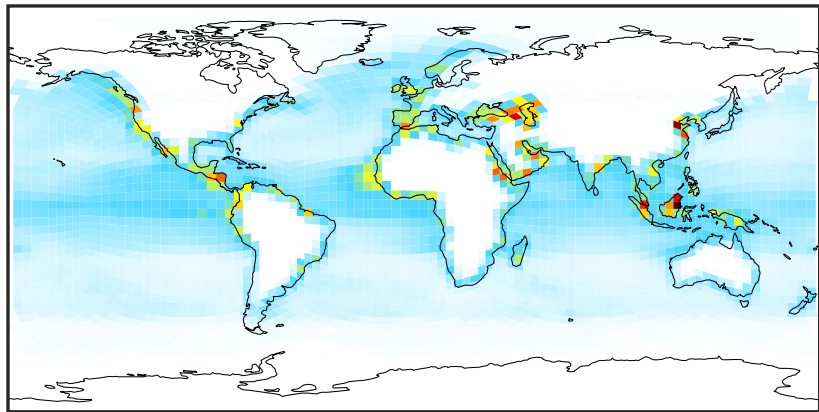


Ratio (1x1.25)  
Dev/Ref, Fixed Range



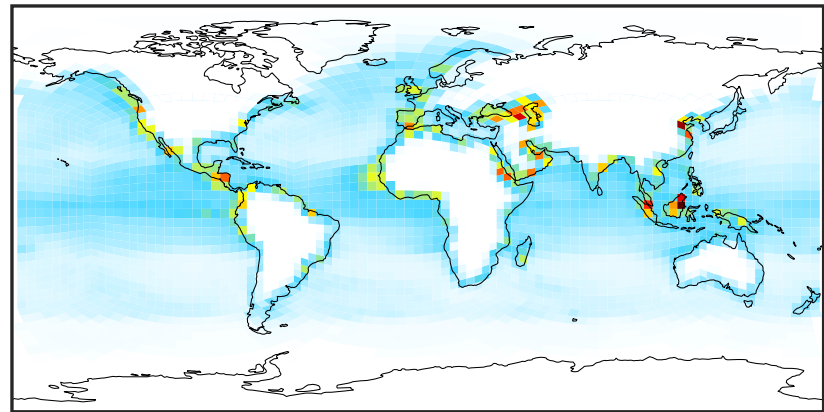
# SpeciesConcVV\_CH2I2 (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



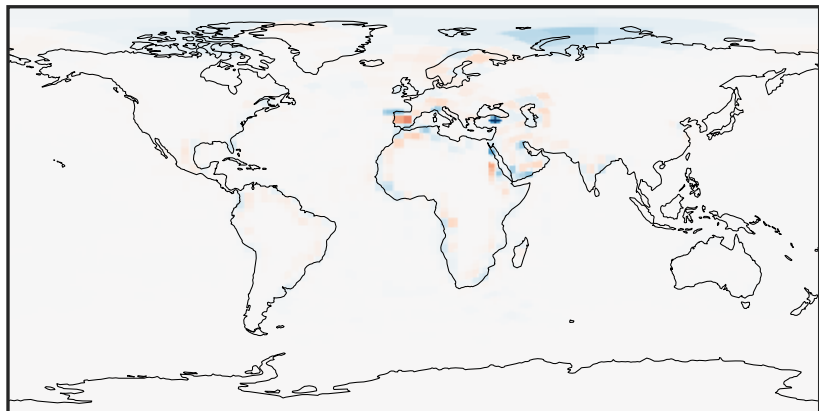
0.00000 0.00004 0.00008 0.00012  
ppb

GCHP\_14.2.0 (Dev)  
c24



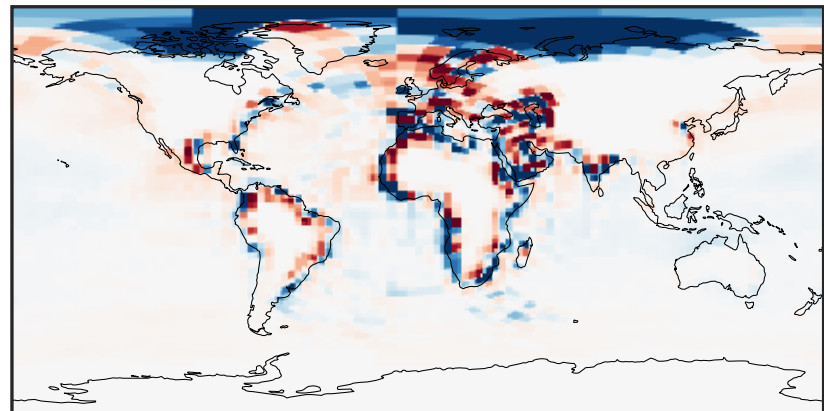
0.00000 0.00004 0.00008 0.00012  
ppb

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



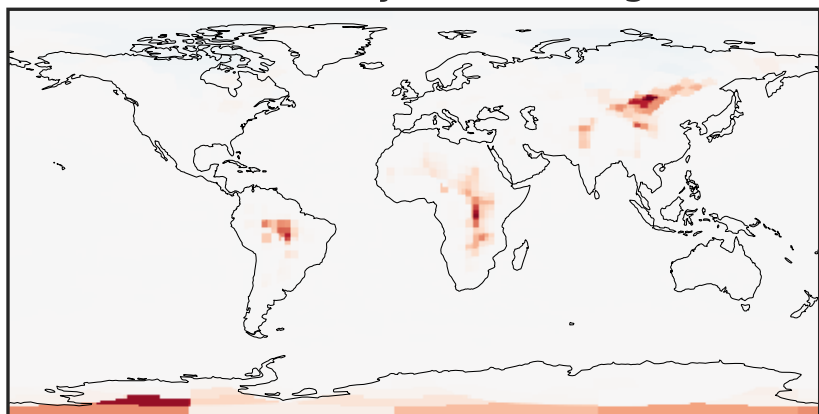
-8 0 8  
ppb  $1e-7$

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



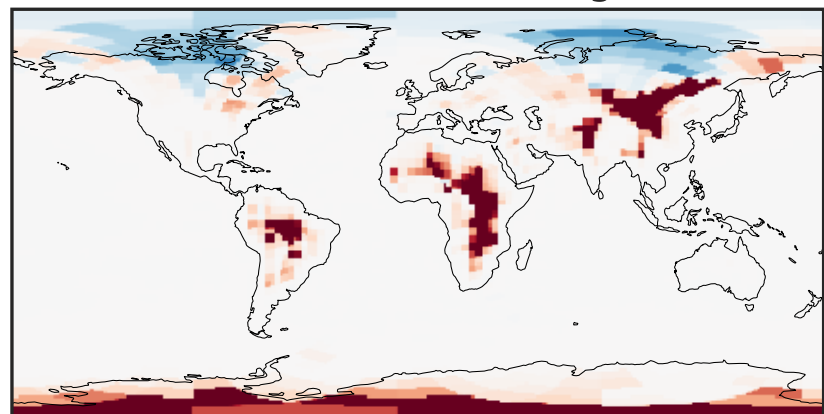
-6 0 6  
ppb  $1e-8$

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



unitless

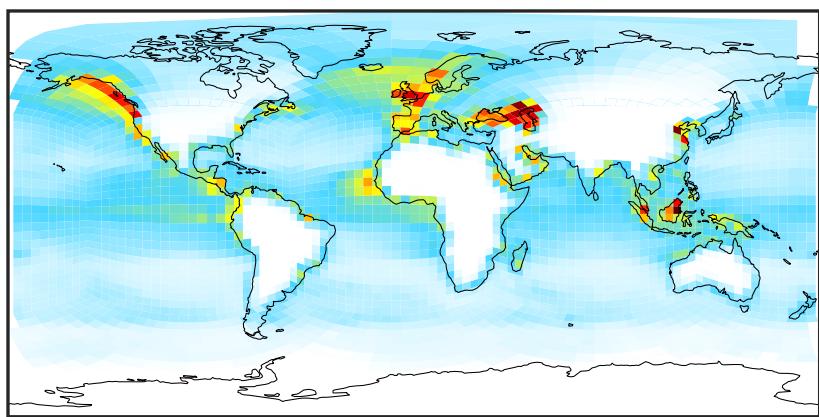
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

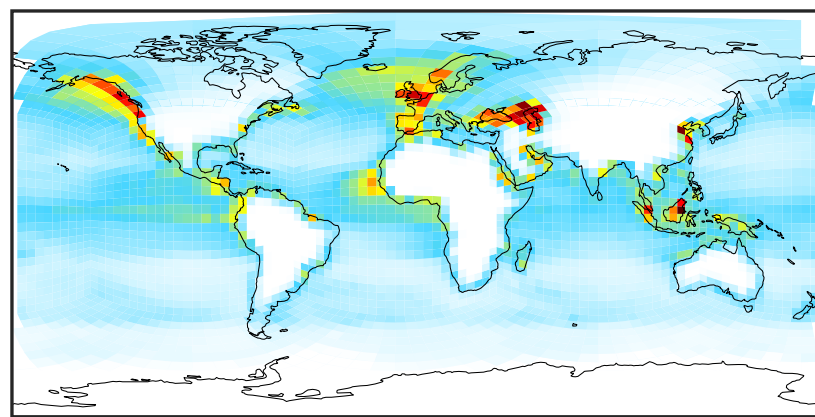
# SpeciesConcVV\_CH2ICl (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



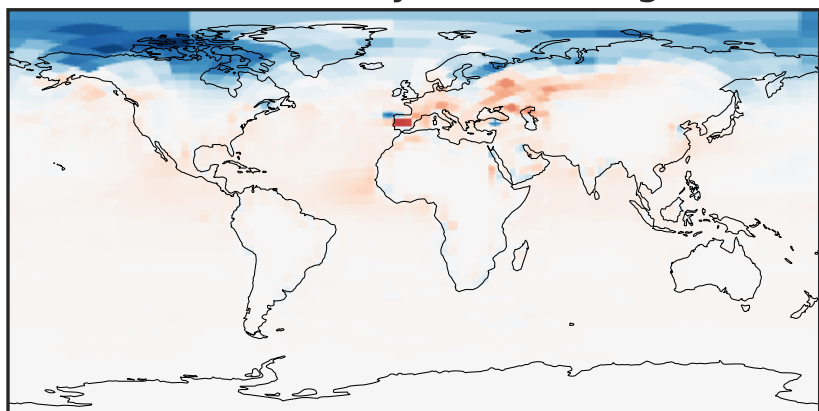
0.0000 0.0002 0.0004 0.0006  
ppb

GCHP\_14.2.0 (Dev)  
c24



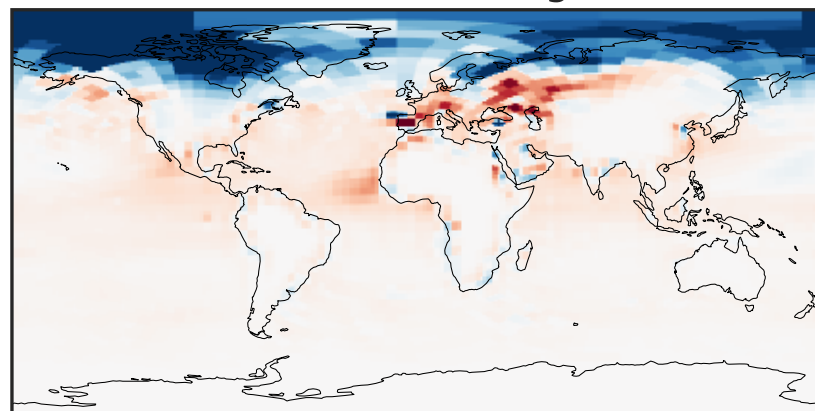
0.0000 0.0002 0.0004 0.0006  
ppb

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



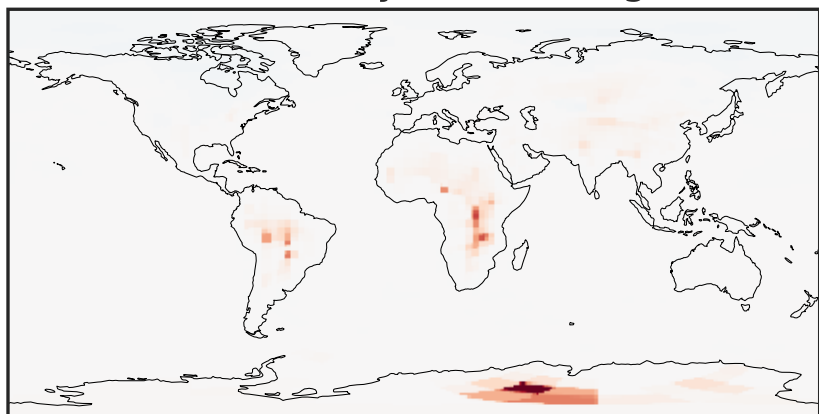
-5 0 5  
ppb 1e-6

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



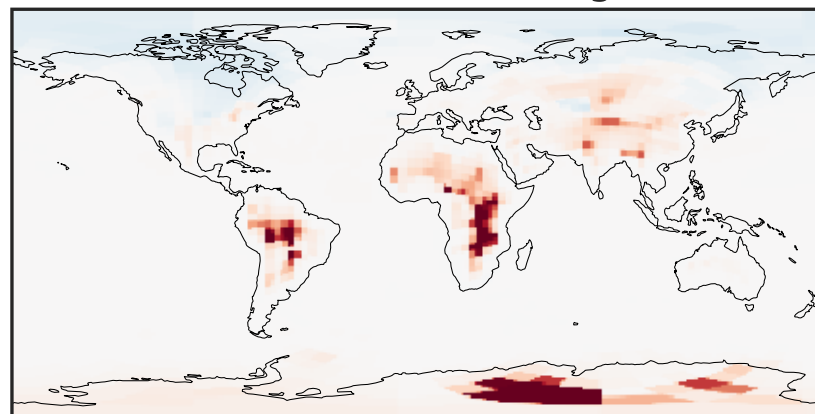
-2.5 0.0 2.5  
ppb 1e-6

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



1e-01 1 10  
unitless

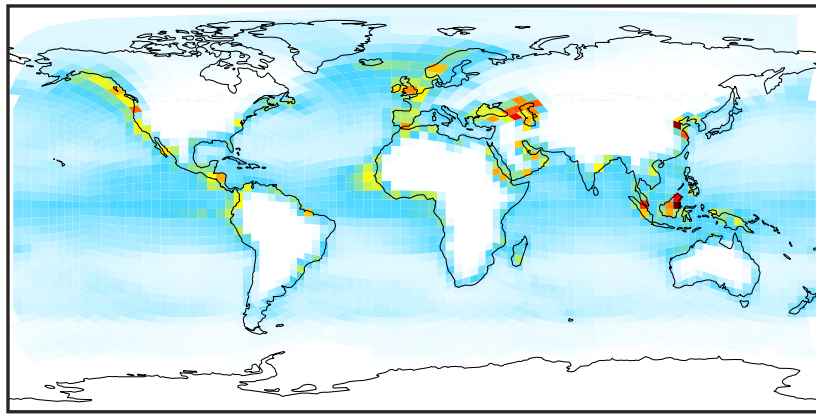
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

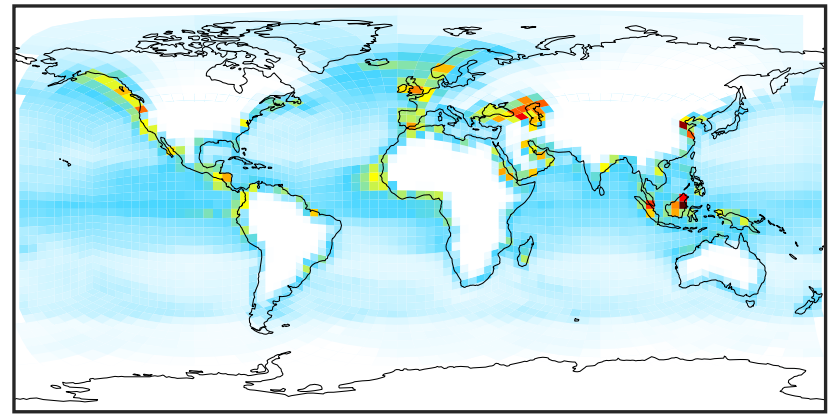
# SpeciesConcVV\_CH2IBr (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



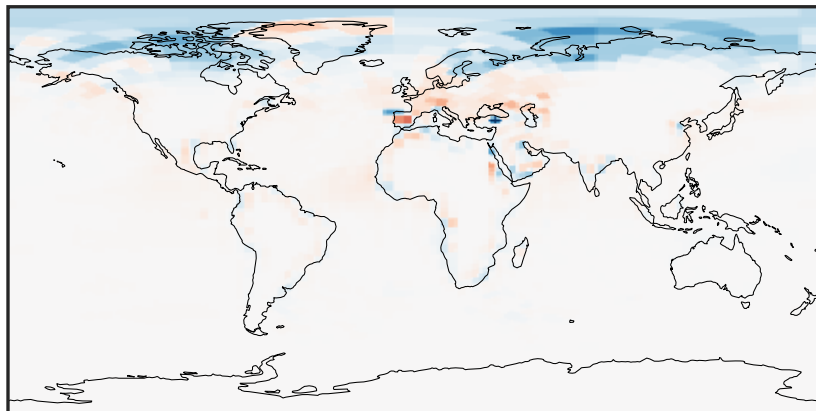
0.00000 0.00005 0.00010 0.00015  
ppb

GCHP\_14.2.0 (Dev)  
c24



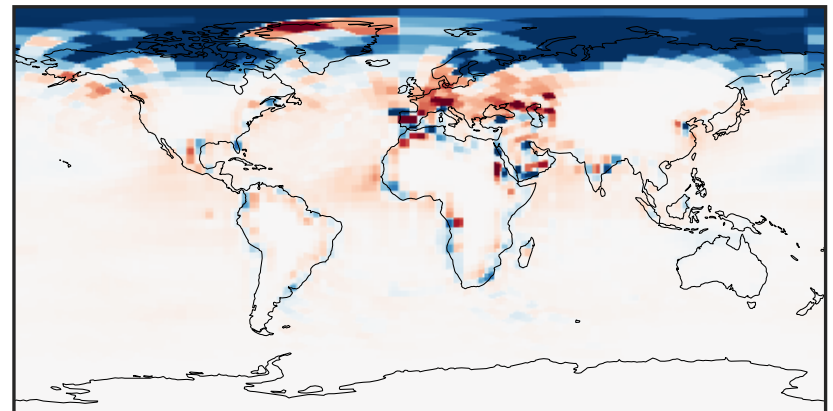
0.00000 0.00005 0.00010 0.00015  
ppb

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



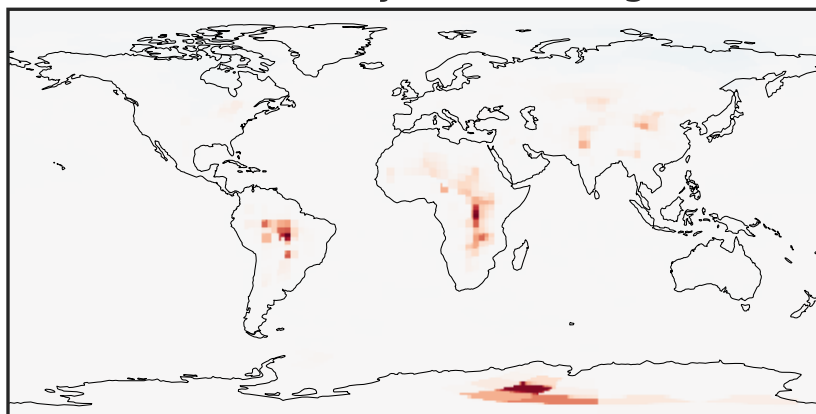
-1 0 1  
ppb  $1e-6$

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



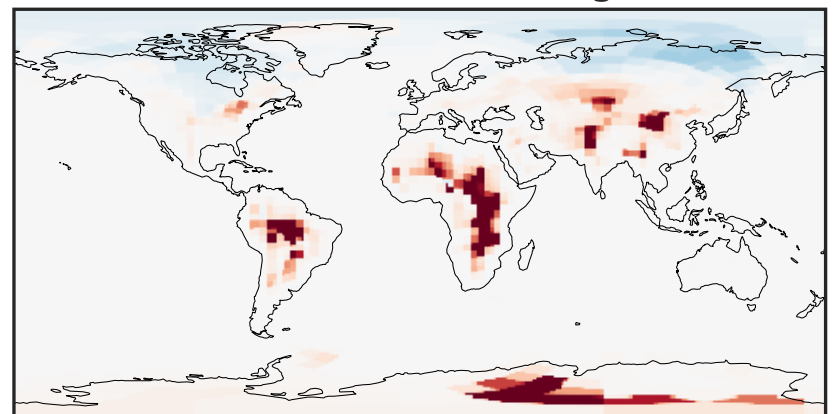
-2.5 0.0 2.5  
ppb  $1e-7$

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



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

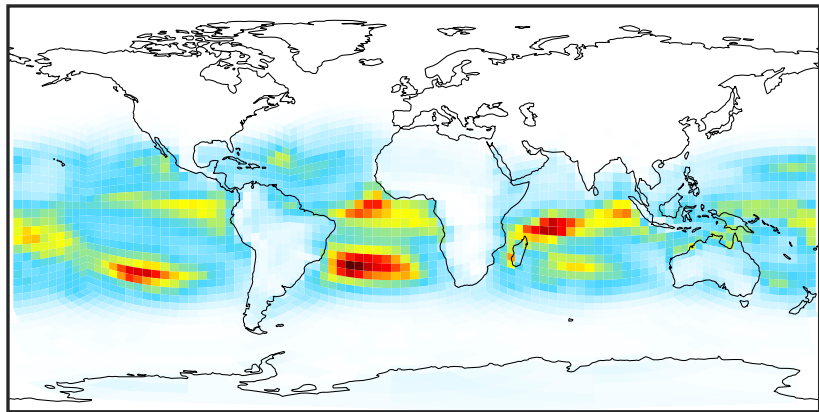
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

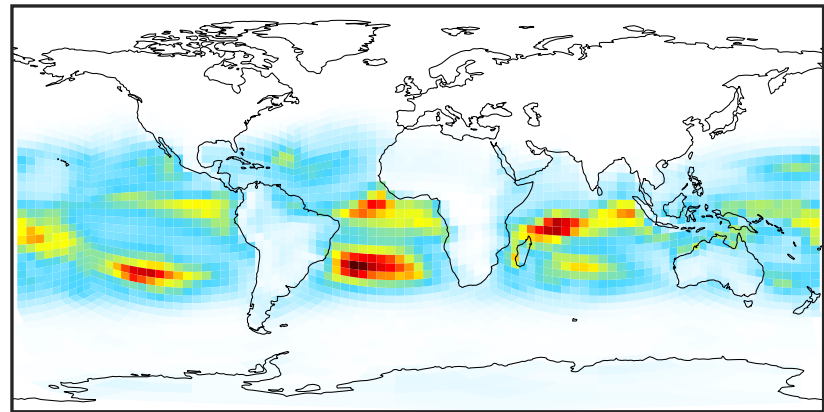
# SpeciesConcVV\_HI (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



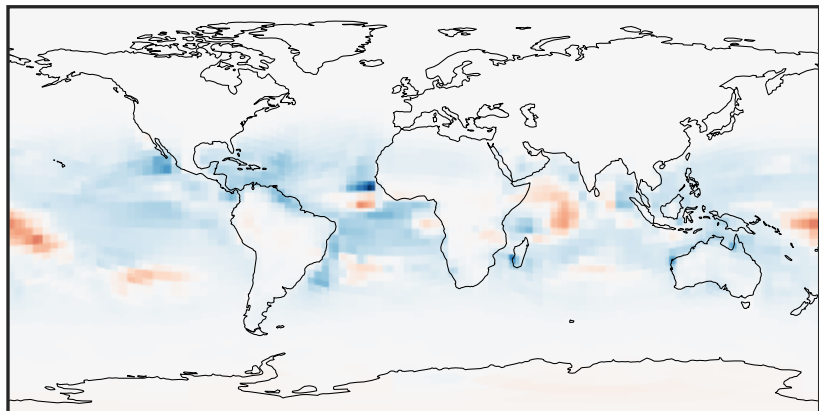
0.00000 0.00004 0.00008 0.00012  
ppb

GCHP\_14.2.0 (Dev)  
c24



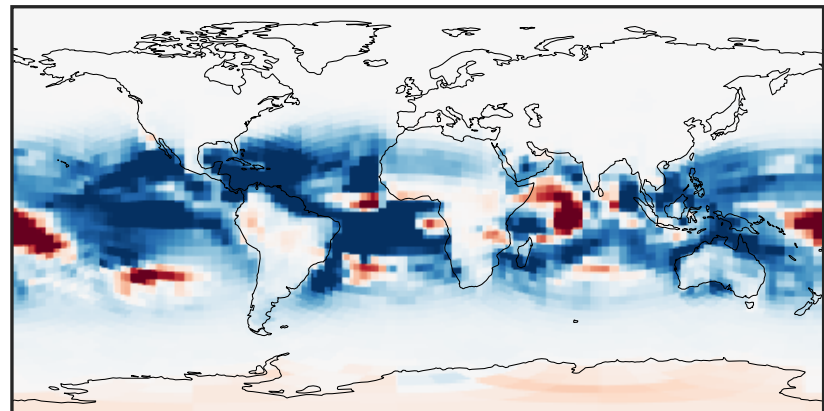
0.00000 0.00004 0.00008 0.00012  
ppb

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



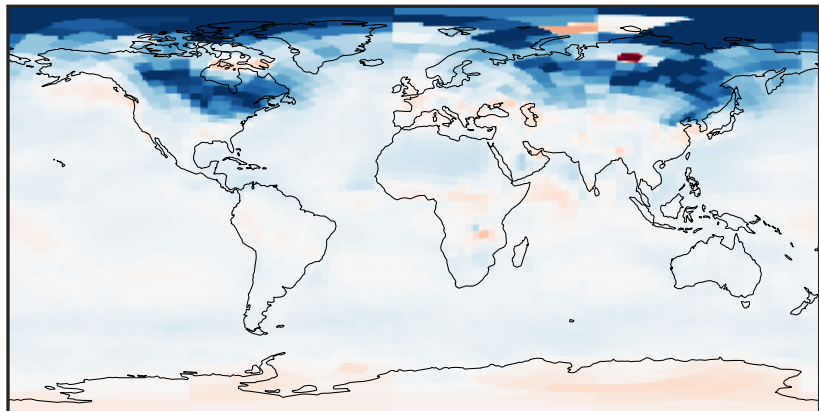
-5 0 5  
ppb  $1e-6$

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



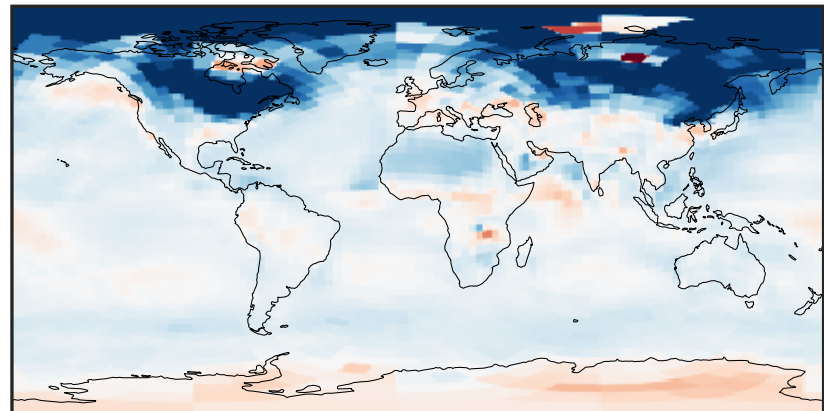
-1.5 0.0 1.5  
ppb  $1e-6$

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



0.292 0.646 1.000 2.210 3.419  
unitless

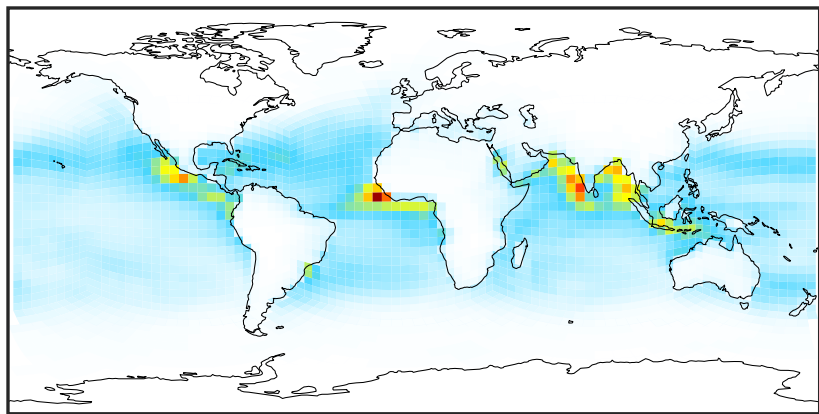
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

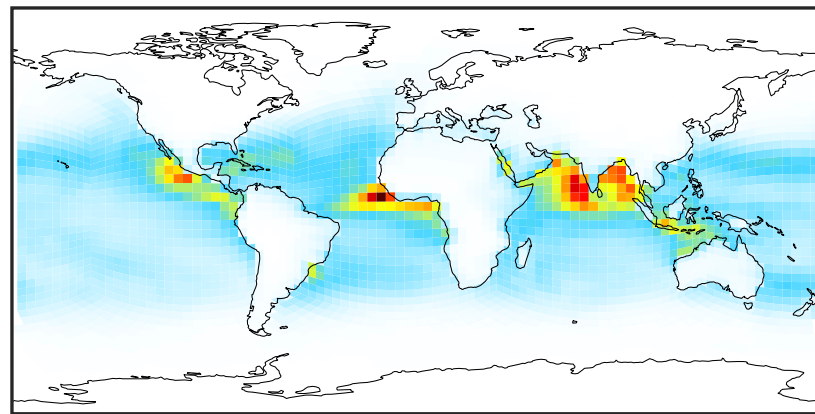
# SpeciesConcVV\_HOI (Jan2019)

GCHP\_14.0.0 (Ref)  
c24



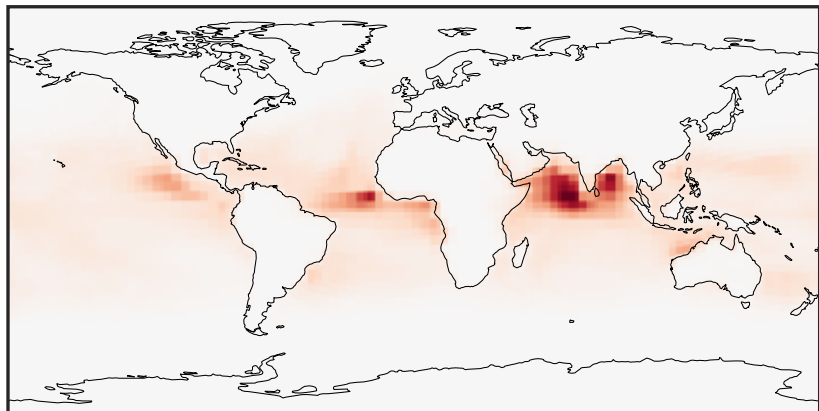
0.005 0.010 0.015  
ppb

GCHP\_14.2.0 (Dev)  
c24



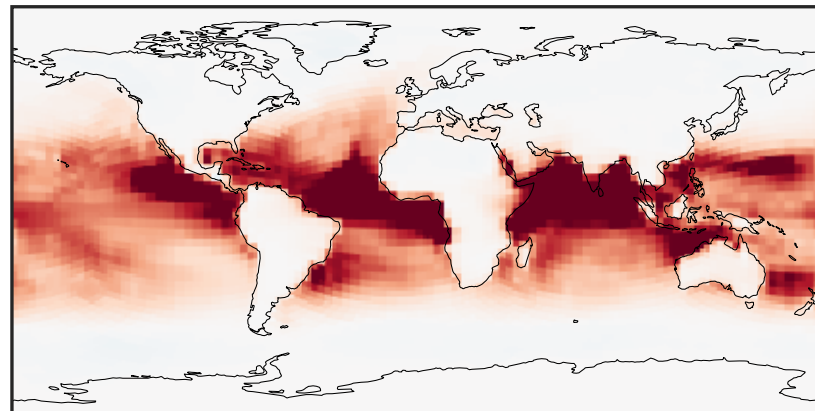
0.005 0.010 0.015  
ppb

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



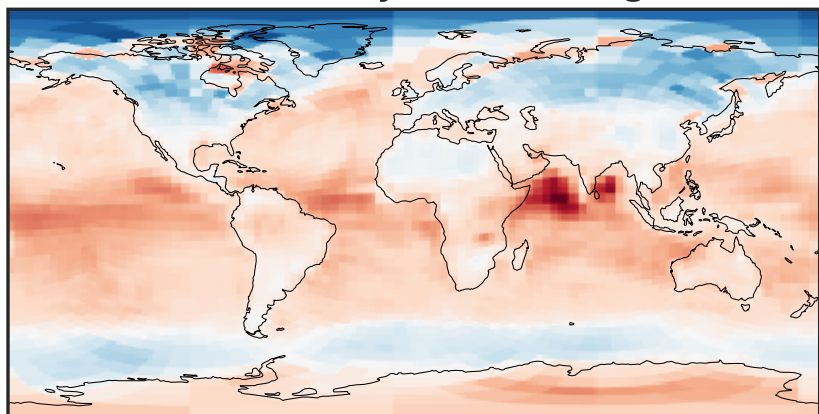
-0.003 0.000 0.003  
ppb

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



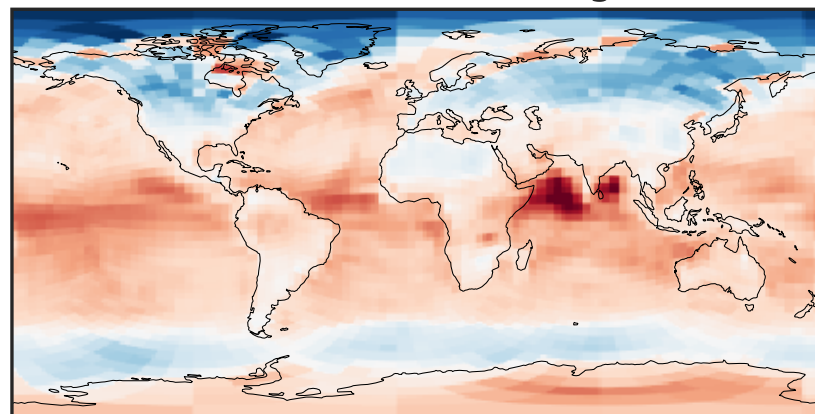
-0.0005 0.0000 0.0005  
ppb

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



0.454 0.727 1.000 1.602 2.203  
unitless

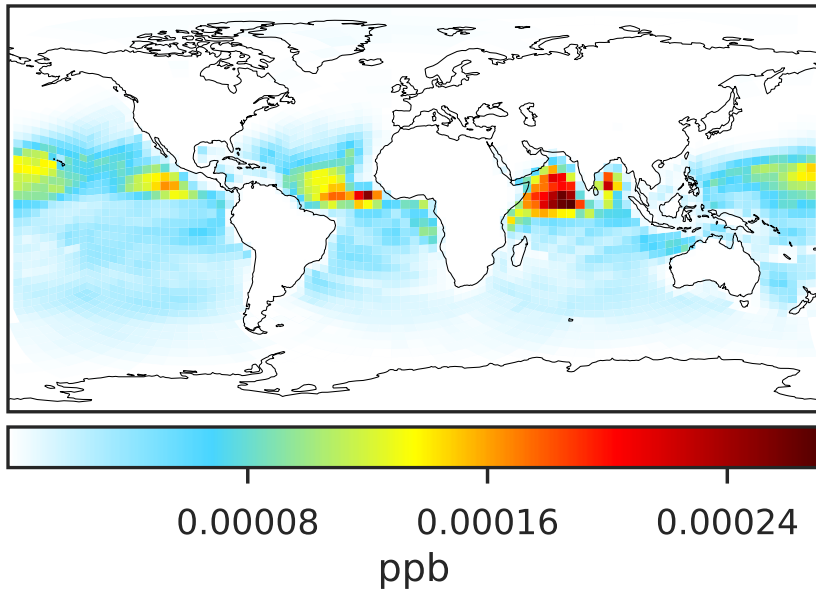
Ratio (1x1.25)  
Dev/Ref, Fixed Range



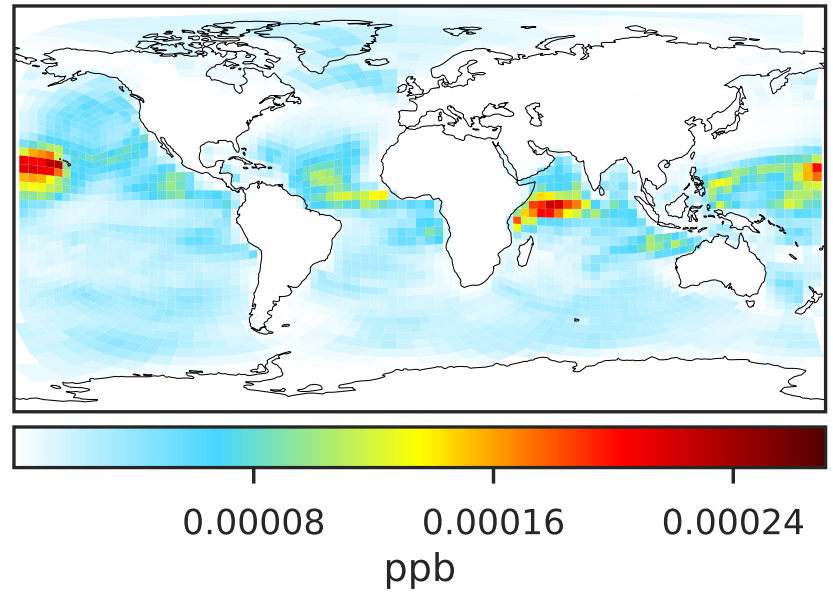
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_OIO (Jan2019)

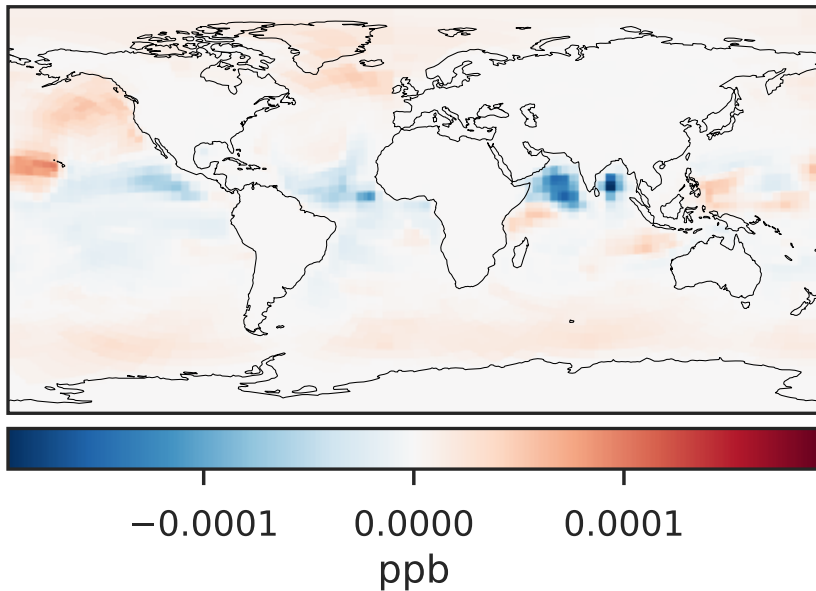
GCHP\_14.0.0 (Ref)  
c24



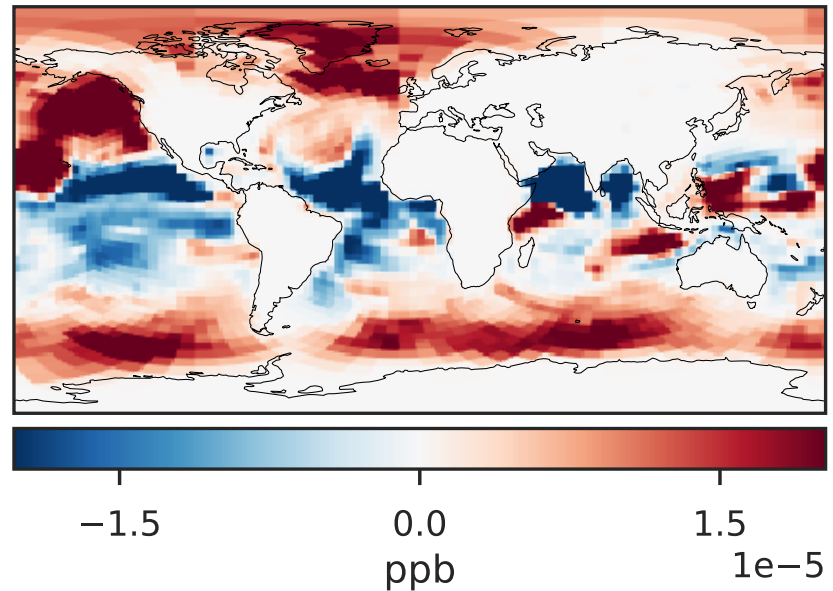
GCHP\_14.2.0 (Dev)  
c24



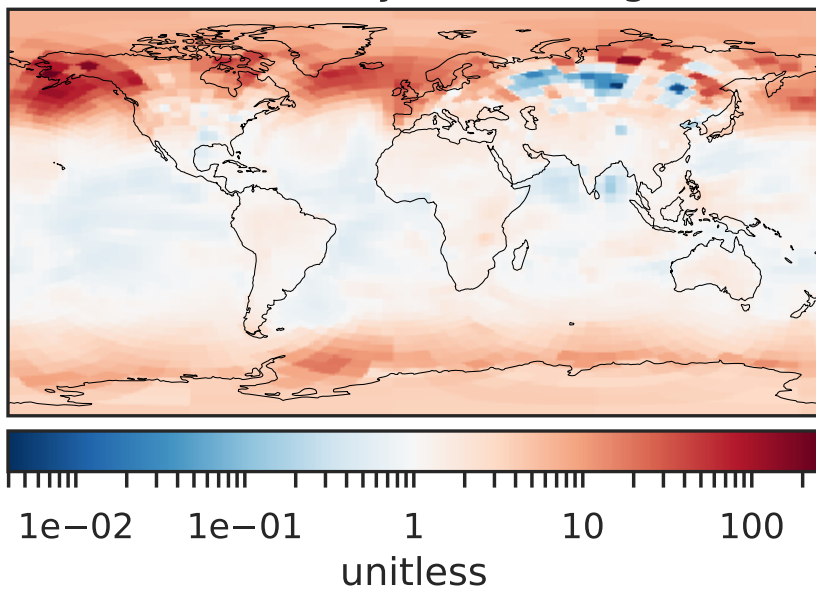
Difference (1x1.25)  
Dev - Ref, Dynamic Range



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



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



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

