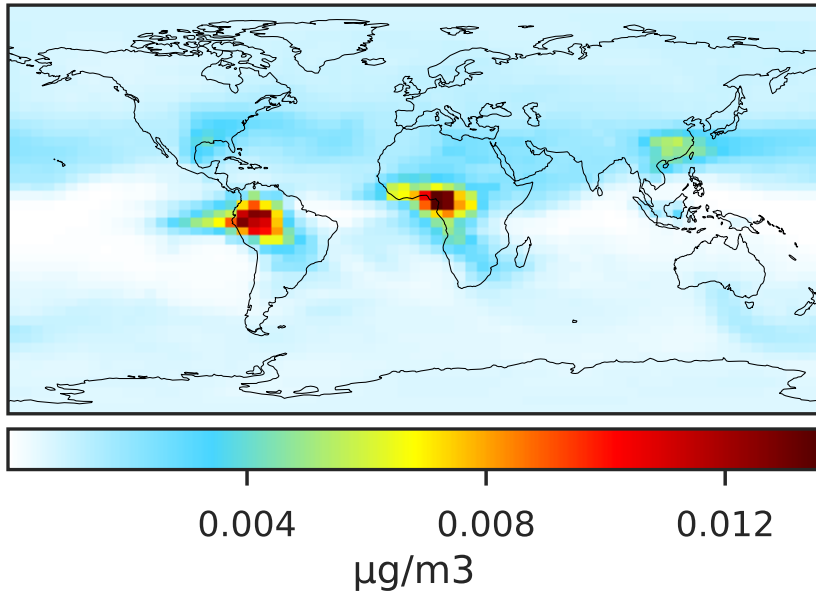
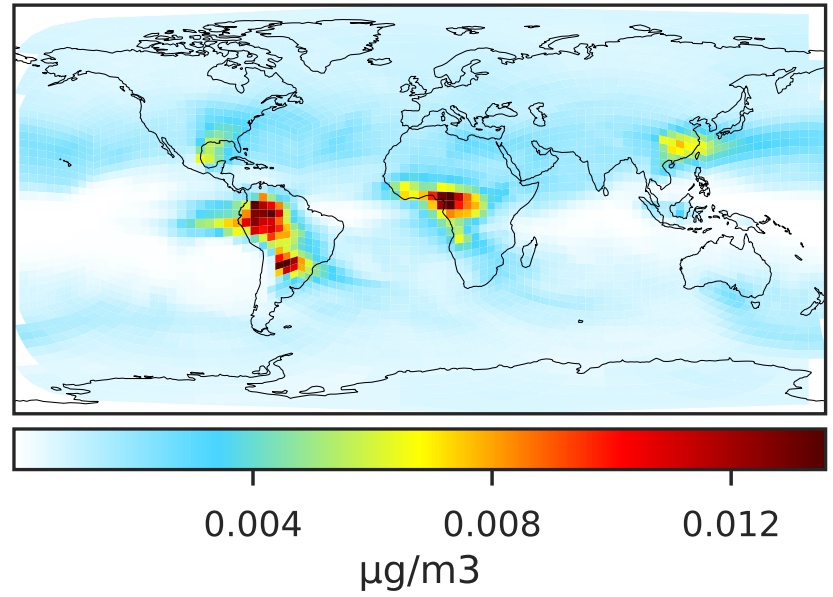


# SpeciesConcVV\_TSOA0 (Apr2019)

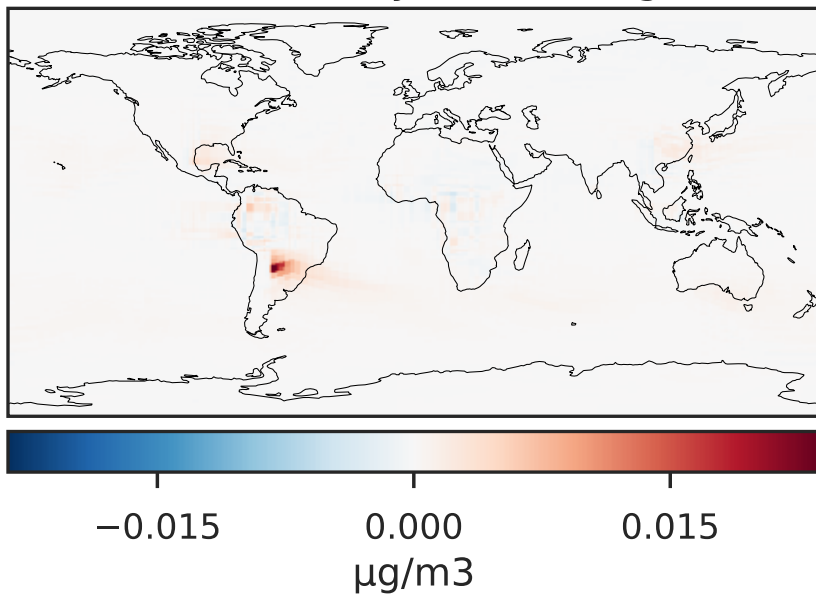
GCC\_14.2.0 (Ref)  
4.0x5.0



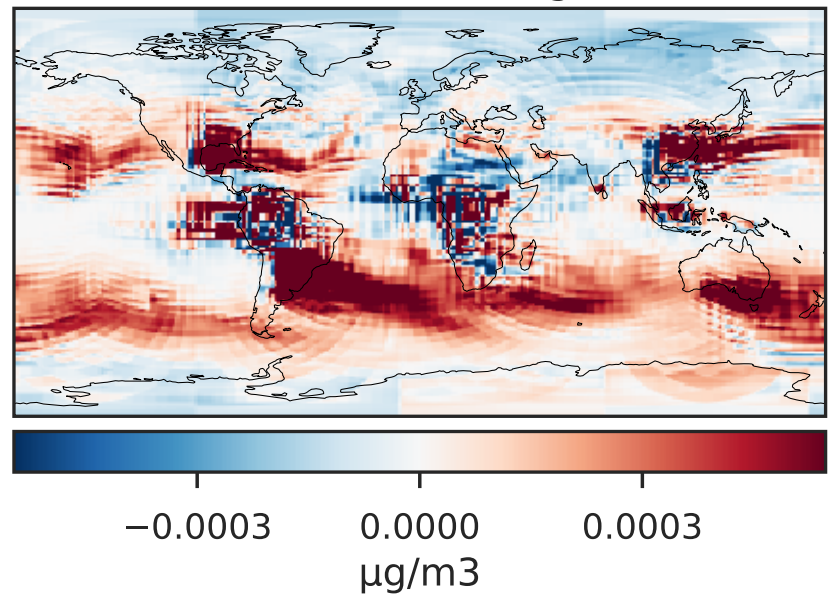
GCHP\_14.2.0 (Dev)  
c24



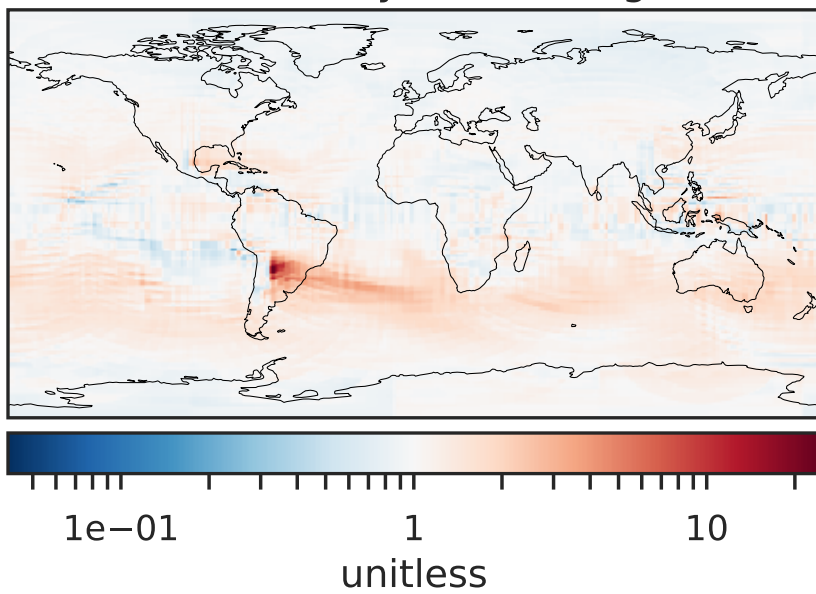
Difference (1x1.25)  
Dev - Ref, Dynamic Range



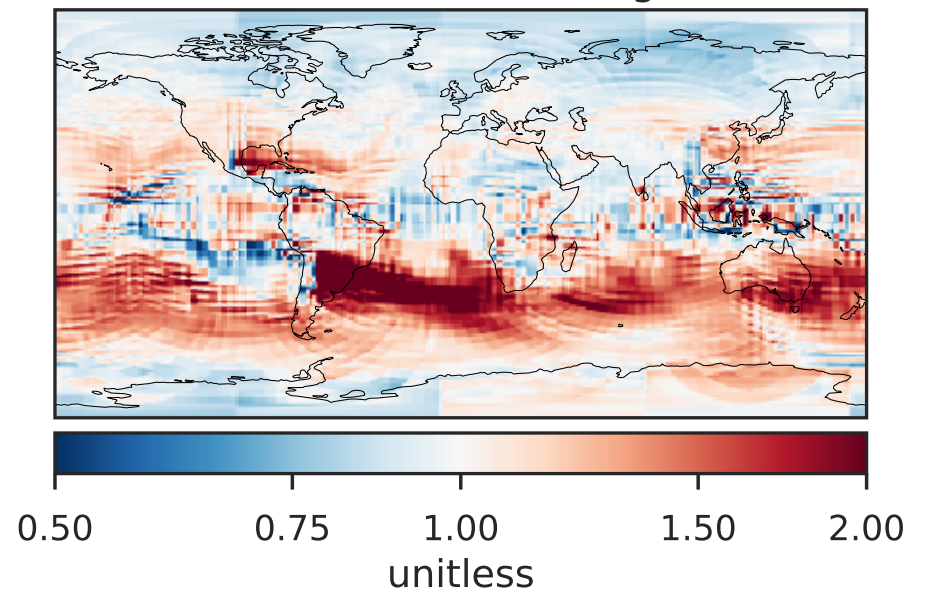
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

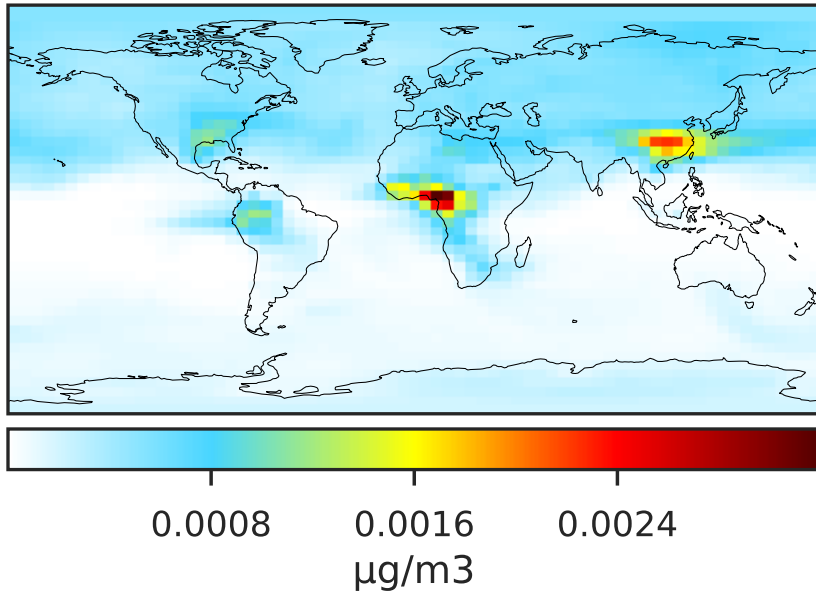


Ratio (1x1.25)  
Dev/Ref, Fixed Range

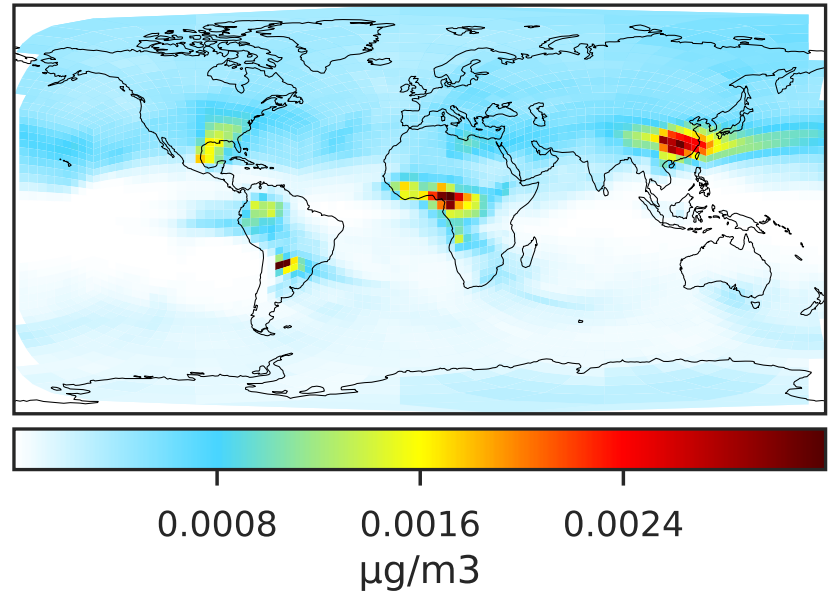


# SpeciesConcVV\_TSOA1 (Apr2019)

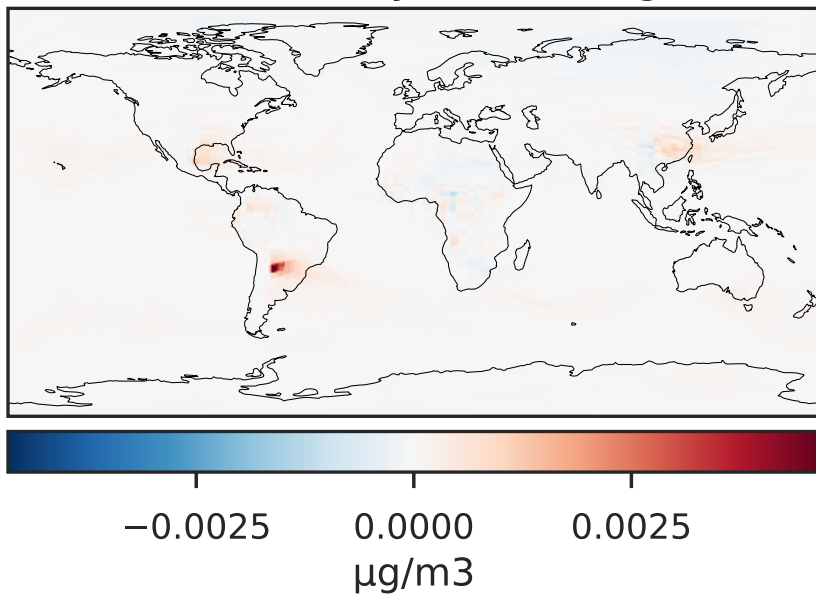
GCC\_14.2.0 (Ref)  
4.0x5.0



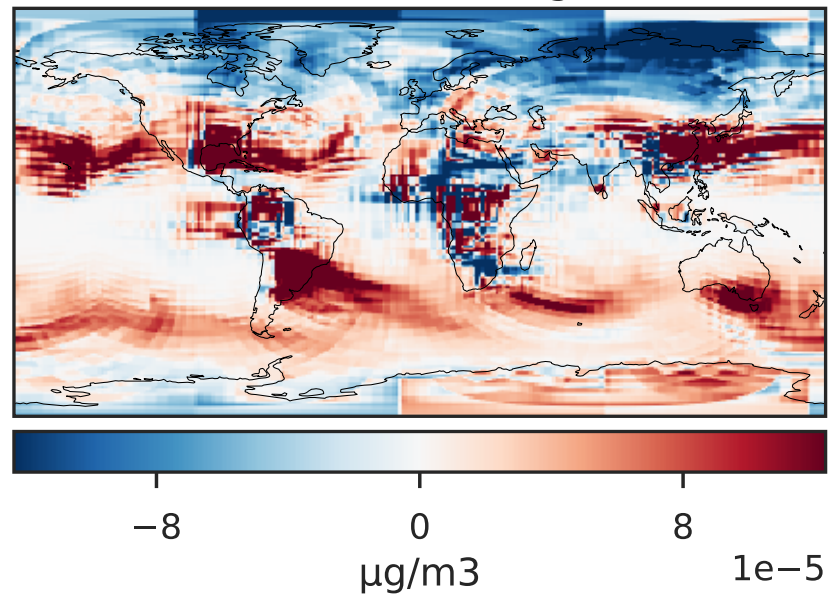
GCHP\_14.2.0 (Dev)  
c24



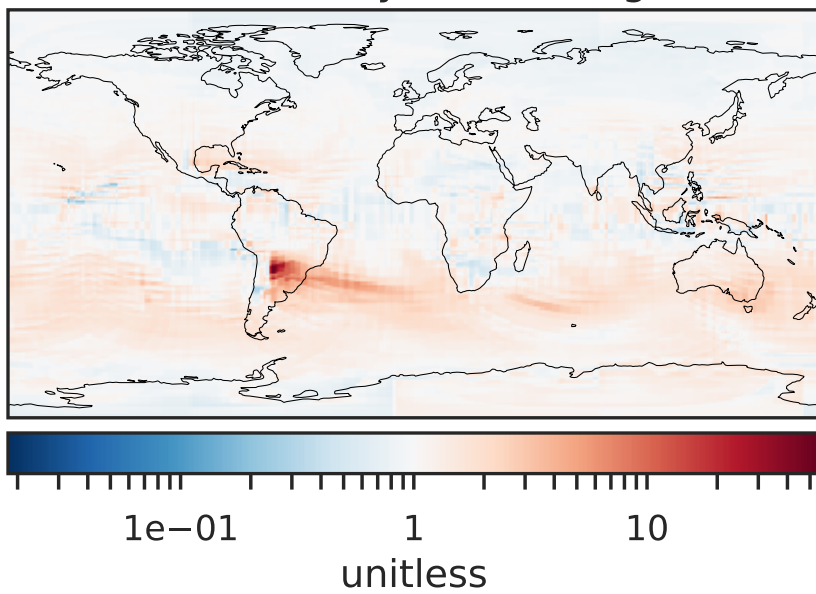
Difference (1x1.25)  
Dev - Ref, Dynamic Range



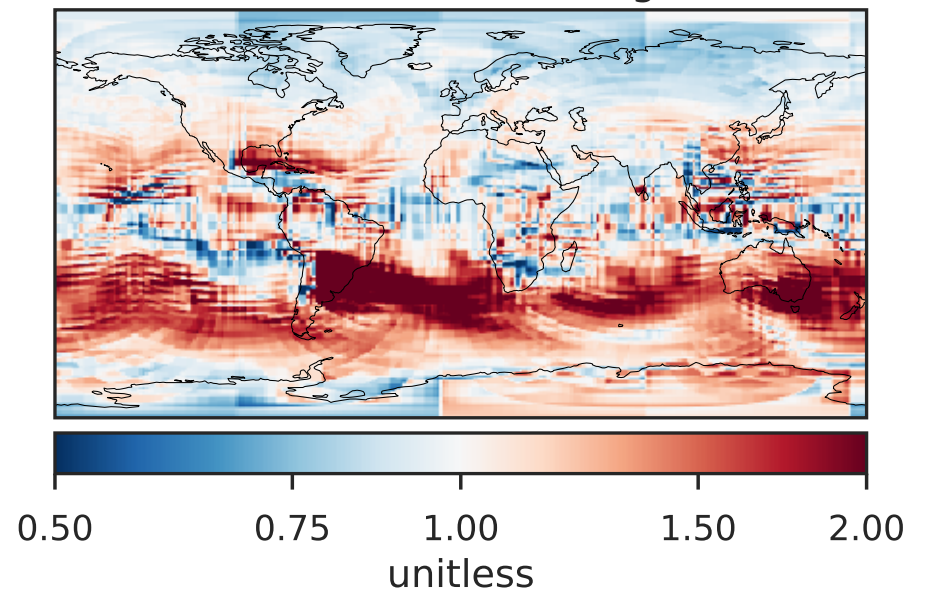
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

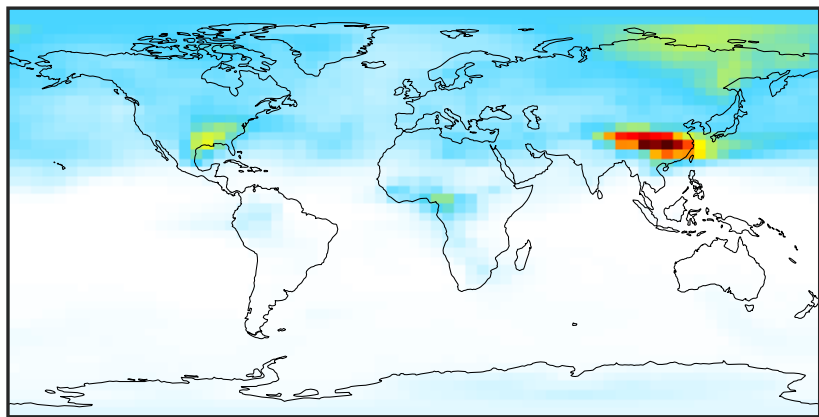


Ratio (1x1.25)  
Dev/Ref, Fixed Range



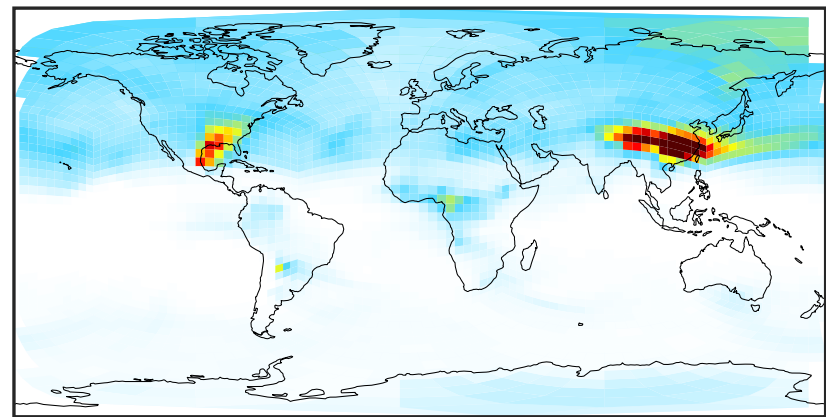
# SpeciesConcVV\_TSOA2 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



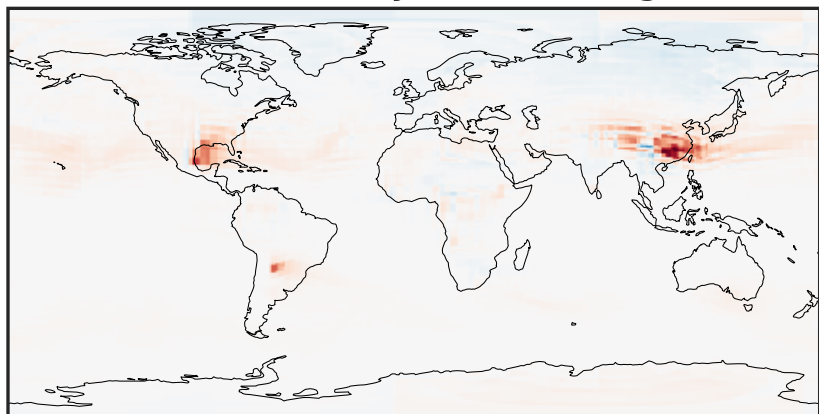
0.004 0.008 0.012  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



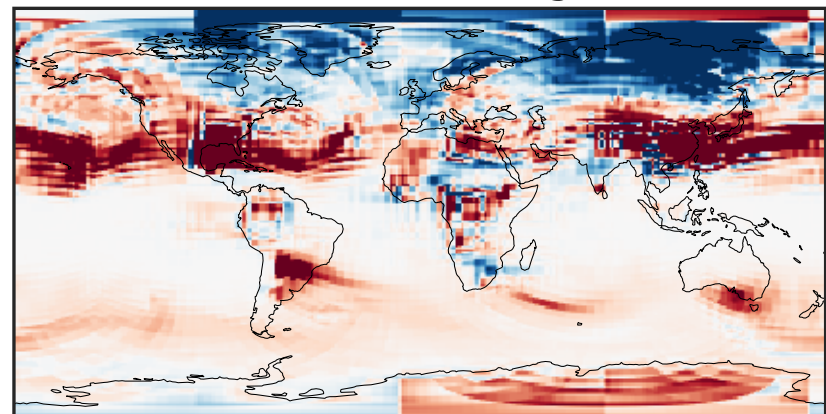
0.004 0.008 0.012  
 $\mu\text{g}/\text{m}^3$

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



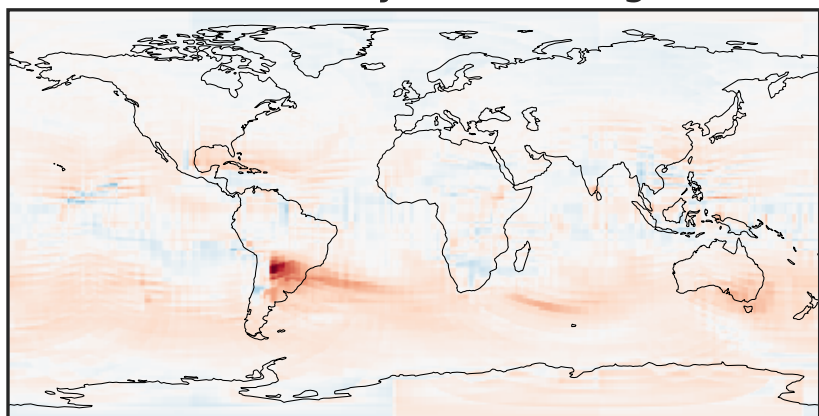
-0.005 0.000 0.005  
 $\mu\text{g}/\text{m}^3$

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



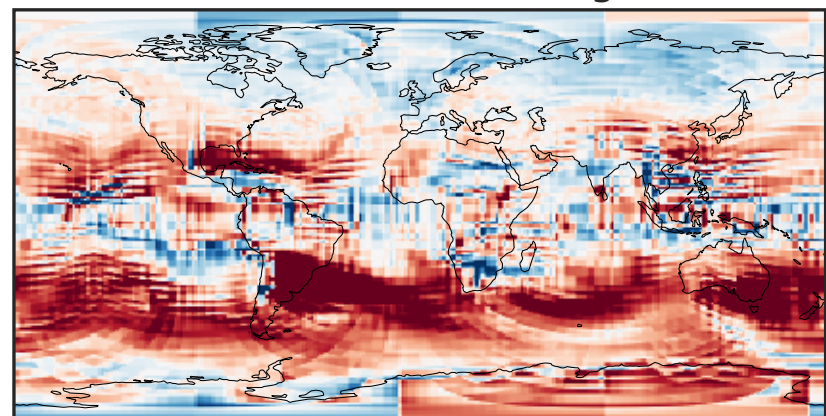
-0.0003 0.0000 0.0003  
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10  
unitless

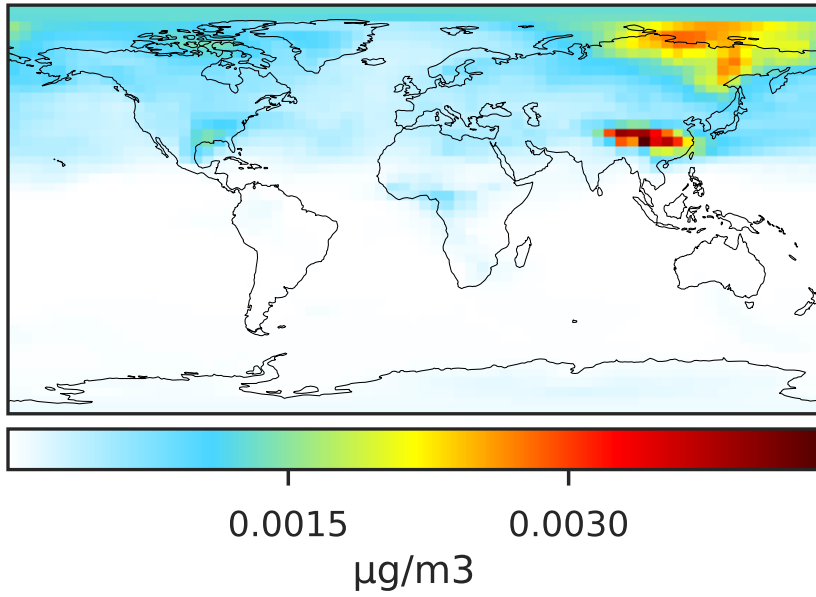
Ratio (1x1.25)  
Dev/Ref, Fixed Range



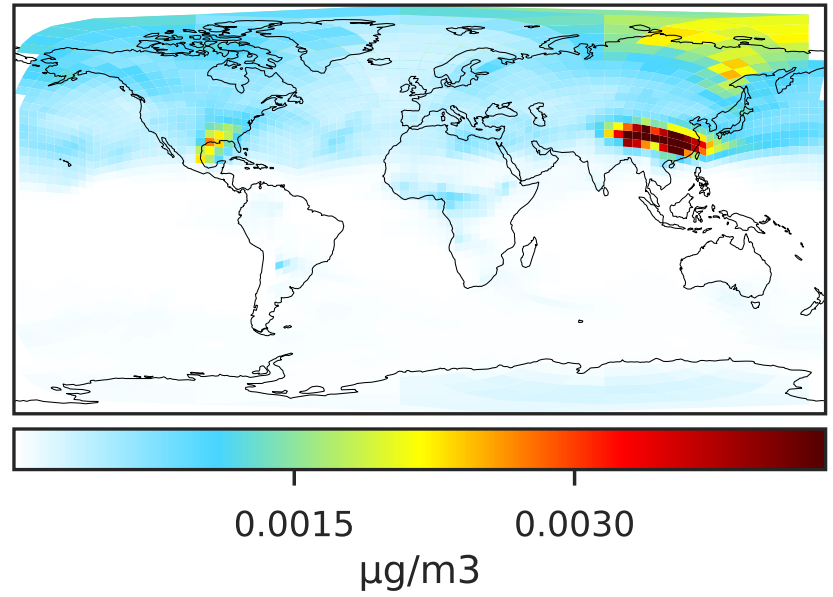
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_TSOA3 (Apr2019)

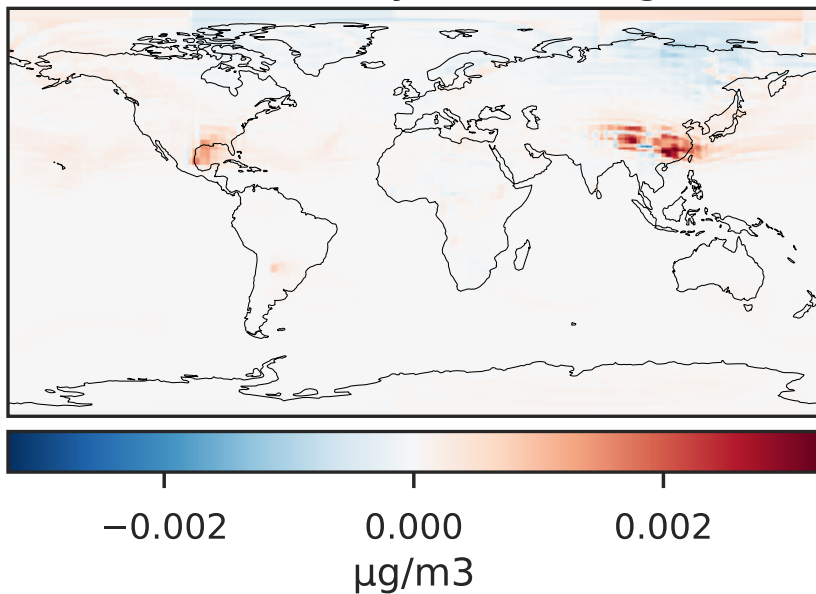
GCC\_14.2.0 (Ref)  
4.0x5.0



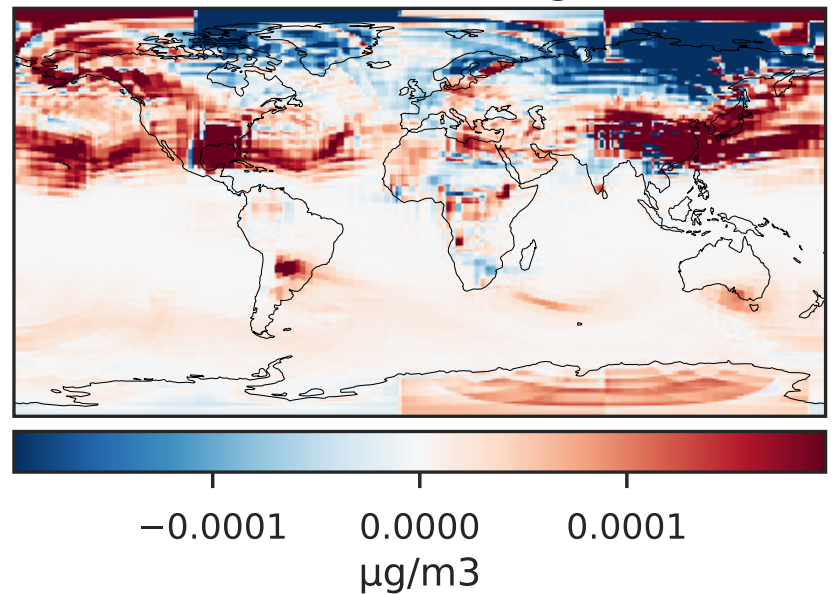
GCHP\_14.2.0 (Dev)  
c24



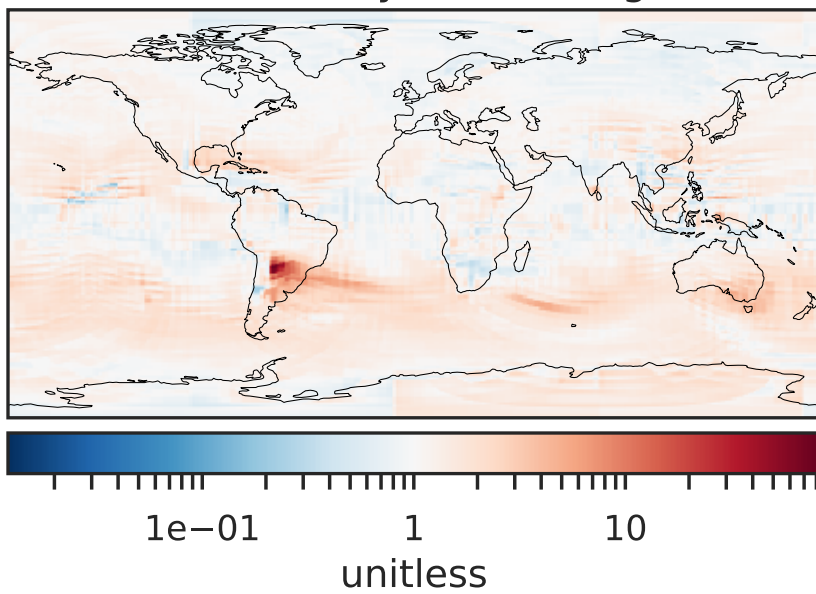
Difference (1x1.25)  
Dev - Ref, Dynamic Range



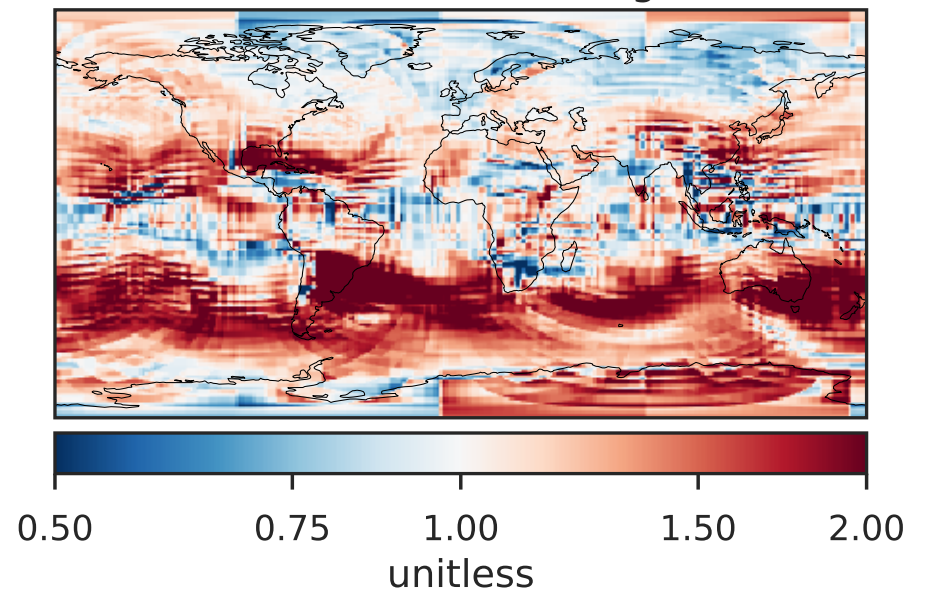
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

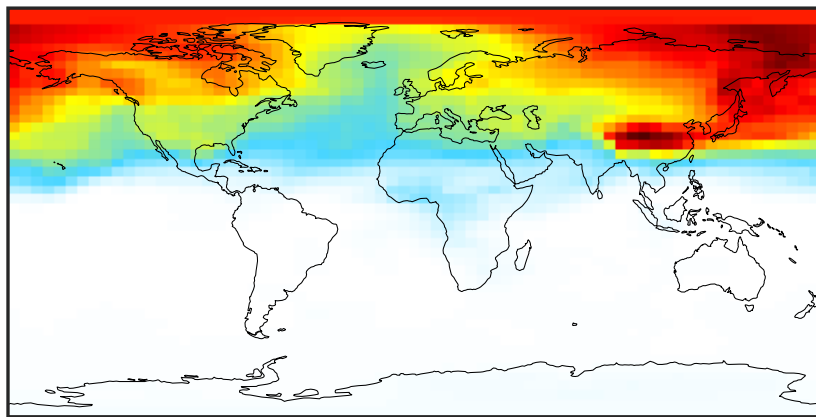


Ratio (1x1.25)  
Dev/Ref, Fixed Range



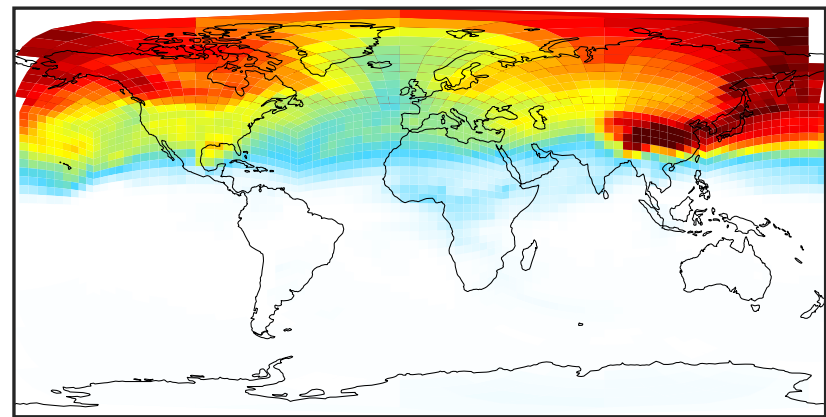
# SpeciesConcVV\_ASOA1 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



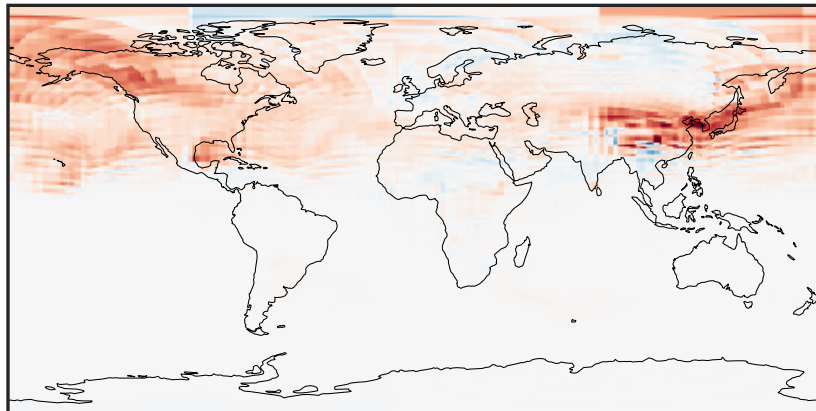
0.001 0.002 0.003  
μg/m3

GCHP\_14.2.0 (Dev)  
c24



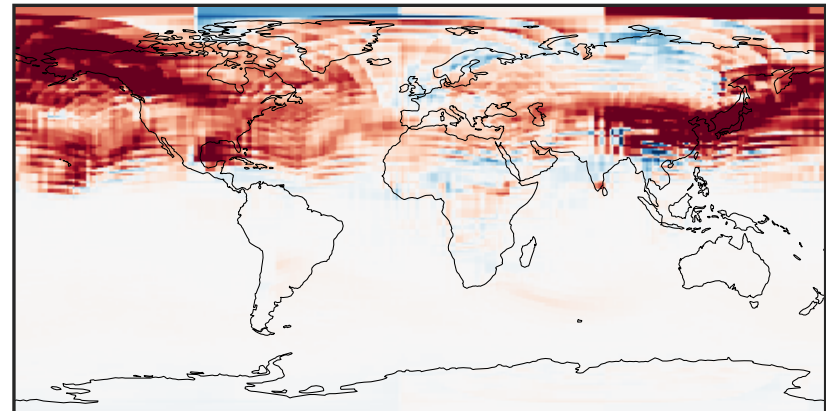
0.001 0.002 0.003  
μg/m3

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



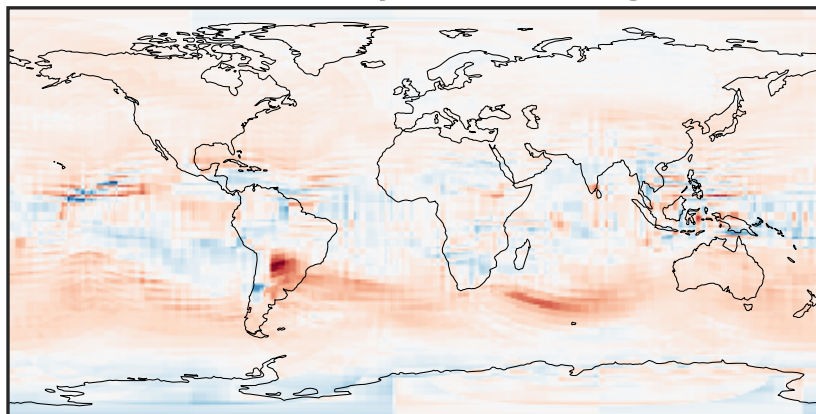
-0.0008 0.0000 0.0008  
μg/m3

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



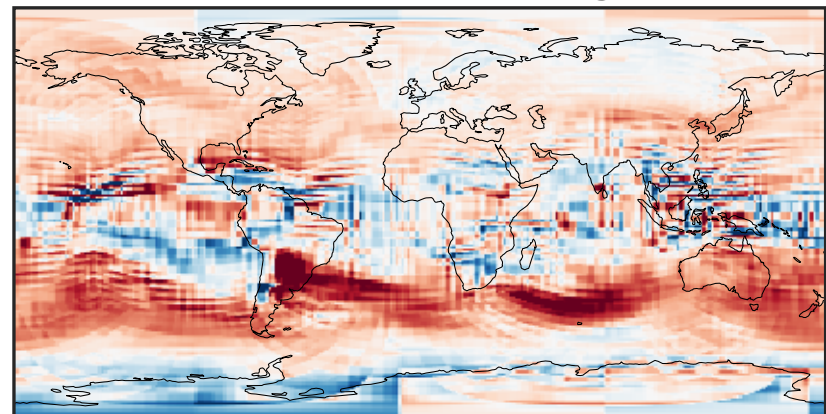
-0.00025 0.00000 0.00025  
μg/m3

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



0.135 0.567 1.000 4.204 7.408  
unitless

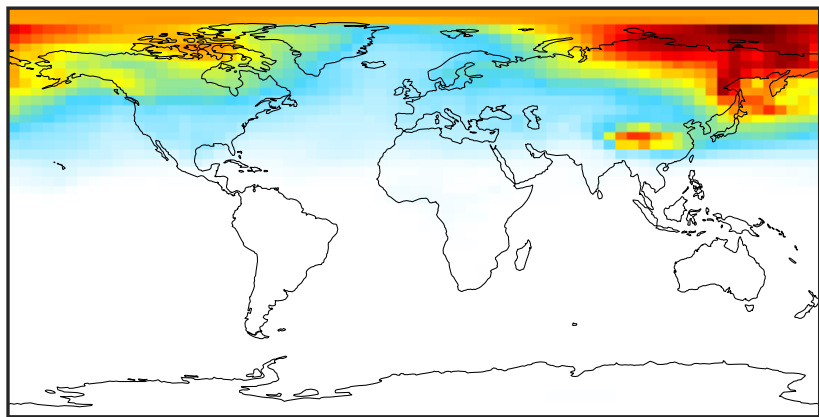
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

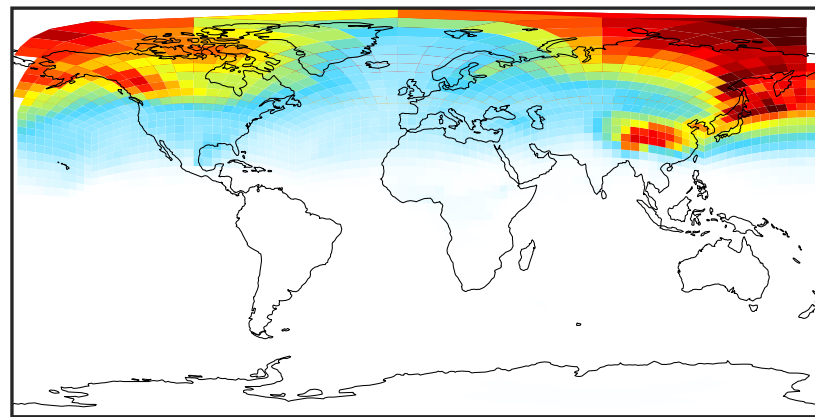
# SpeciesConcVV\_ASOA2 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



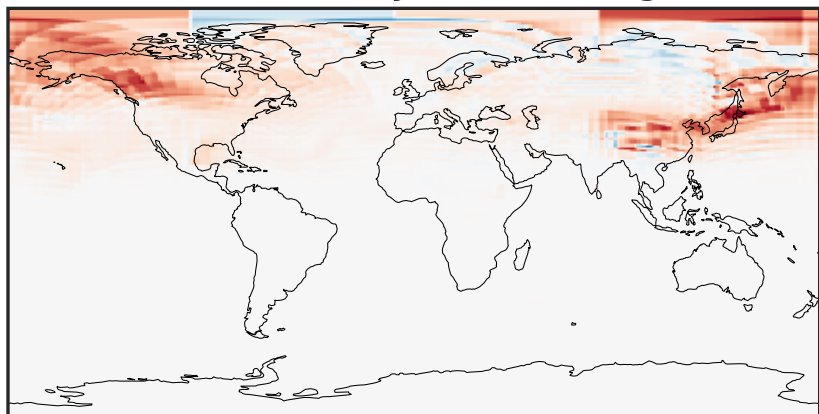
0.0008 0.0016 0.0024  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



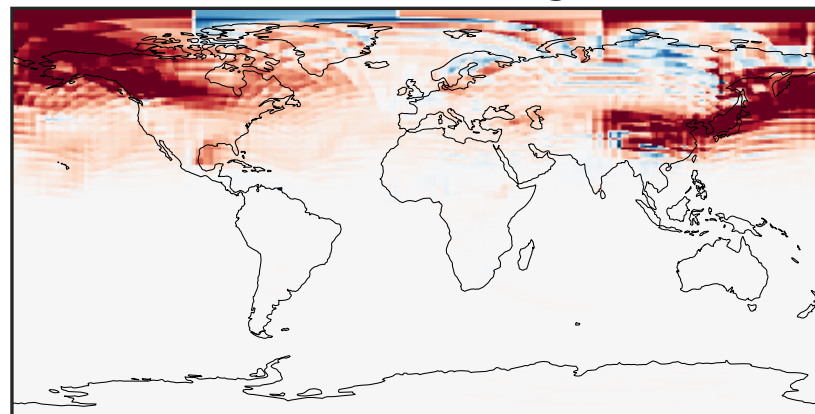
0.0008 0.0016 0.0024  
 $\mu\text{g}/\text{m}^3$

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



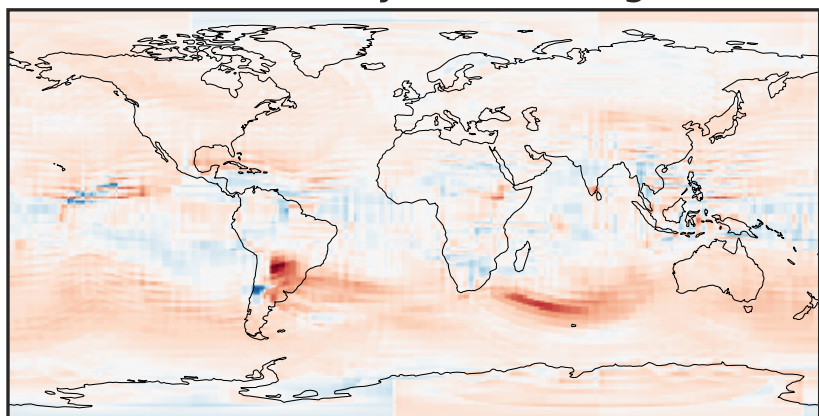
-0.0006 0.0000 0.0006  
 $\mu\text{g}/\text{m}^3$

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



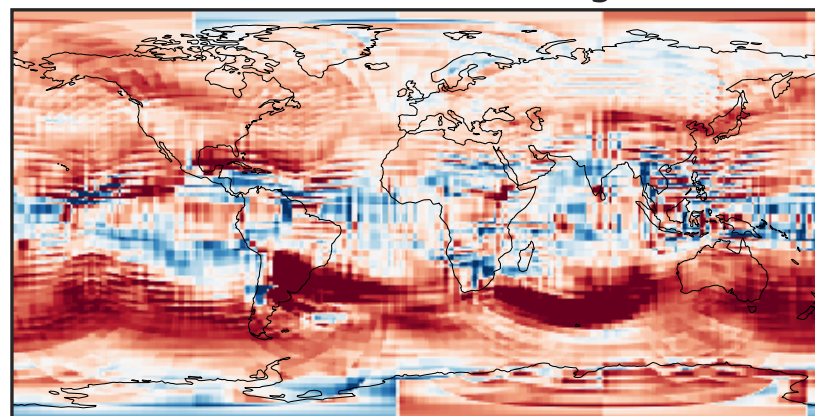
-0.0002 0.0000 0.0002  
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10  
unitless

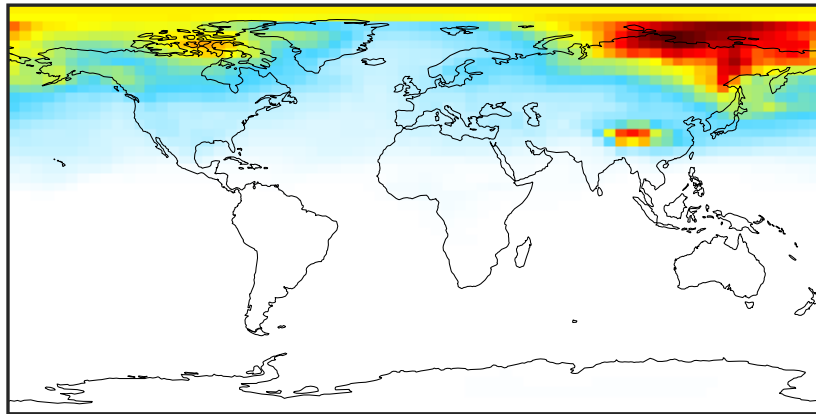
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

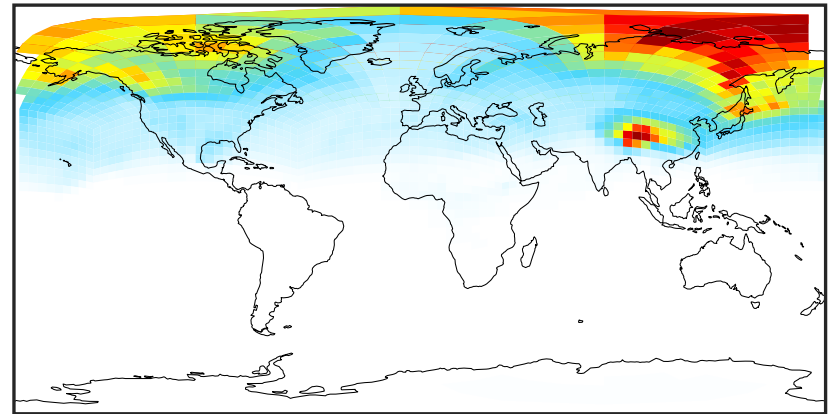
# SpeciesConcVV\_ASOA3 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



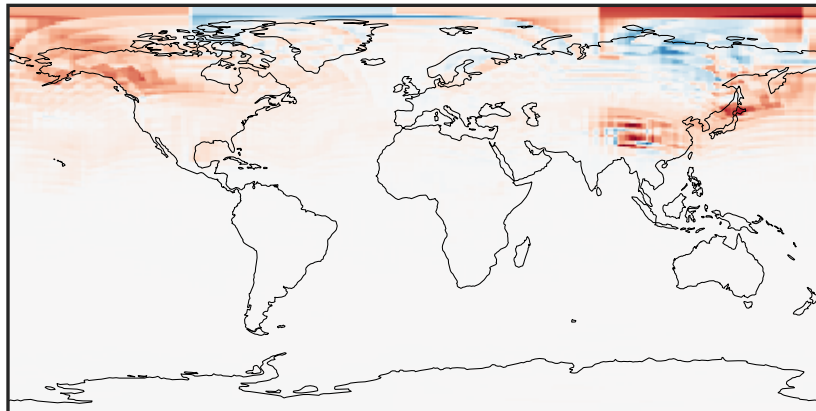
0.001 0.002 0.003  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



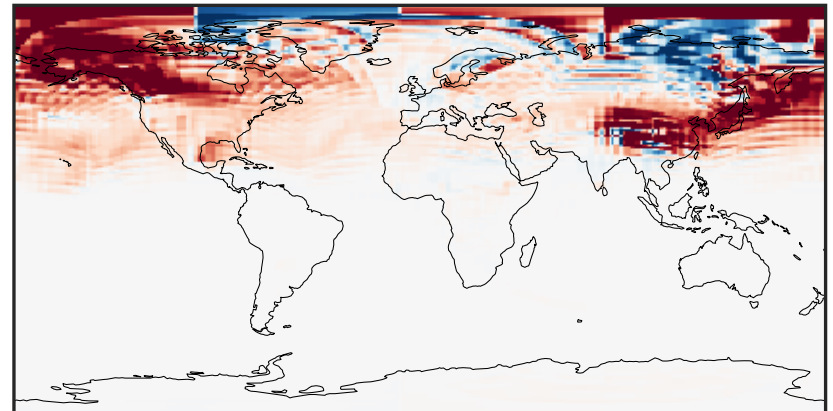
0.001 0.002 0.003  
 $\mu\text{g}/\text{m}^3$

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



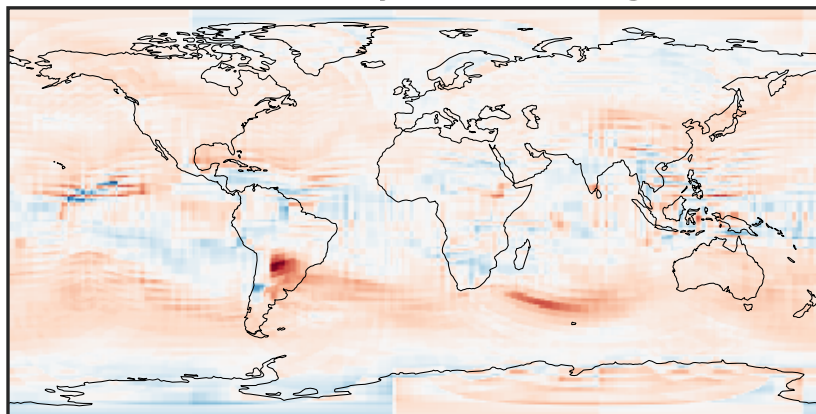
-0.0008 0.0000 0.0008  
 $\mu\text{g}/\text{m}^3$

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



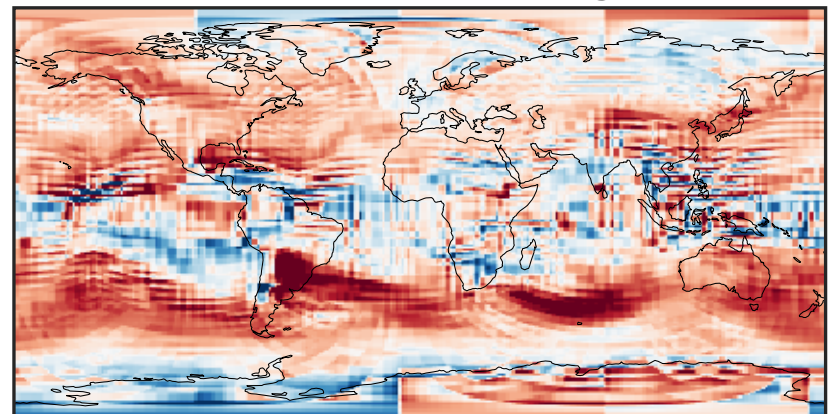
-0.0002 0.0000 0.0002  
 $\mu\text{g}/\text{m}^3$

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



0.109 0.555 1.000 5.082 9.165  
unitless

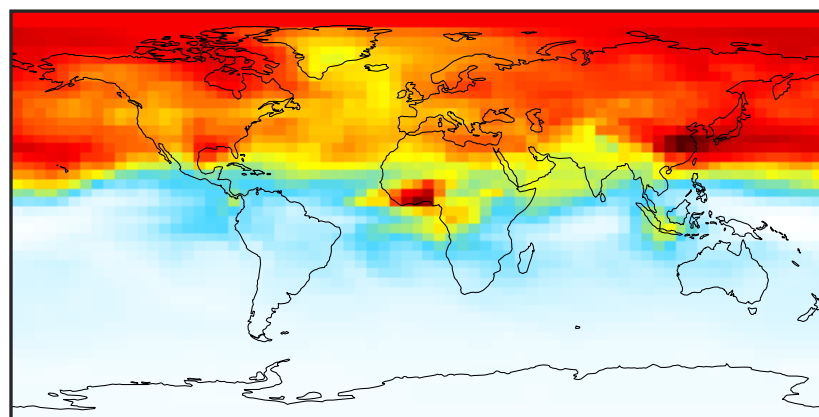
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

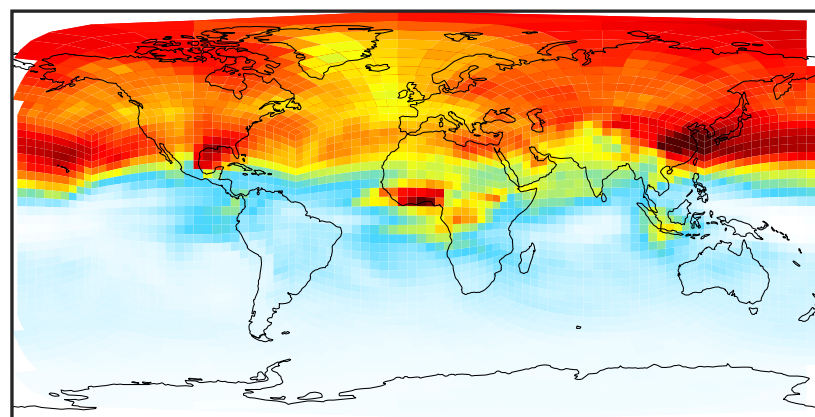
# SpeciesConcVV\_ASOAN (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



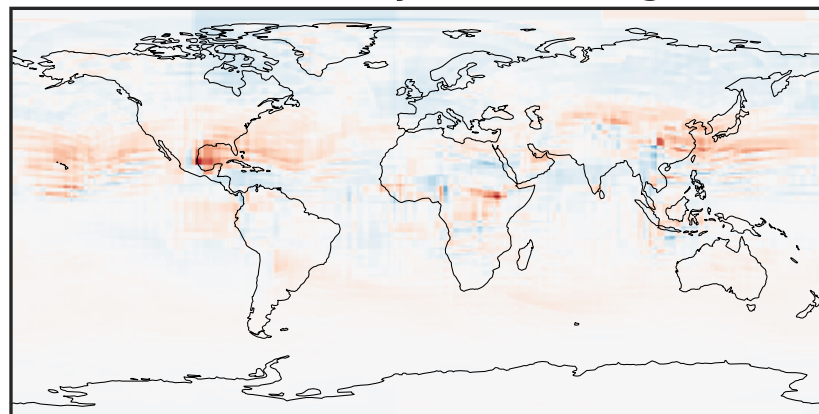
0.004 0.008 0.012  
μg/m3

GCHP\_14.2.0 (Dev)  
c24



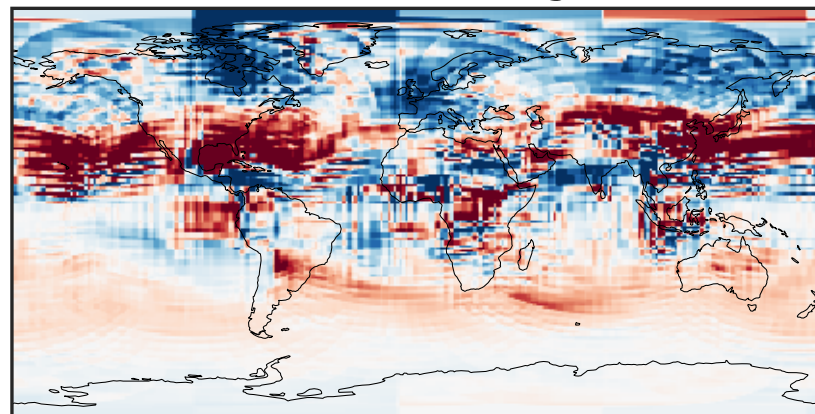
0.004 0.008 0.012  
μg/m3

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



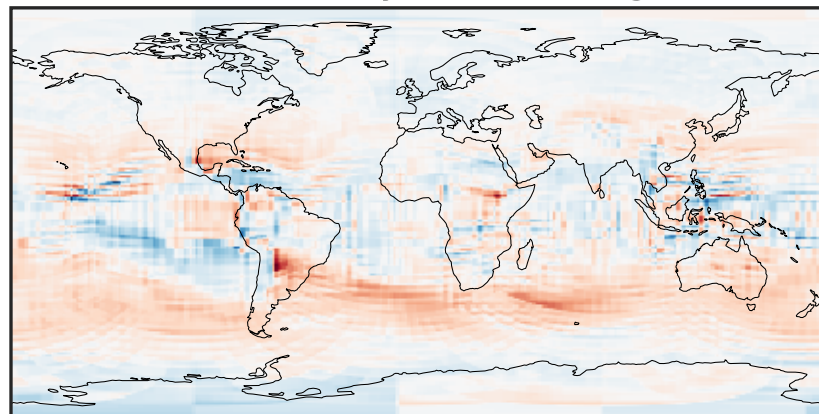
-0.003 0.000 0.003  
μg/m3

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



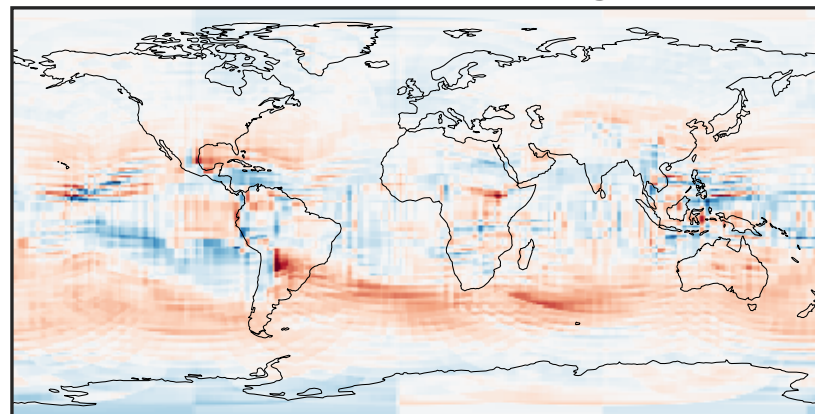
-0.0004 0.0000 0.0004  
μg/m3

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



0.445 0.722 1.000 1.624 2.248  
unitless

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

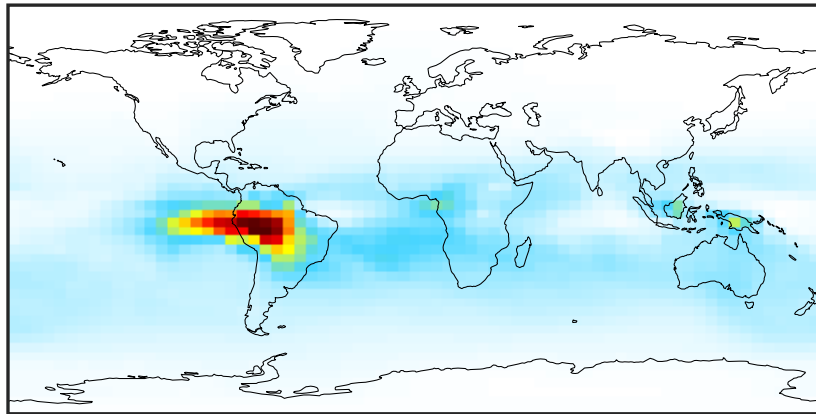


0.50 0.75 1.00 1.50 2.00  
unitless



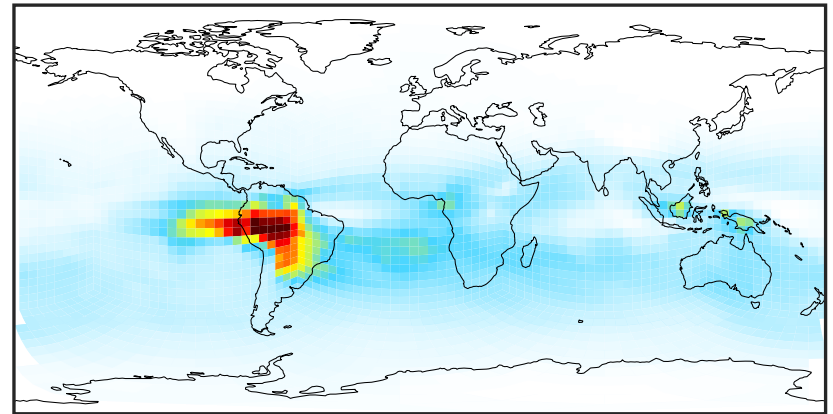
# SpeciesConcVV\_TSOG0 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



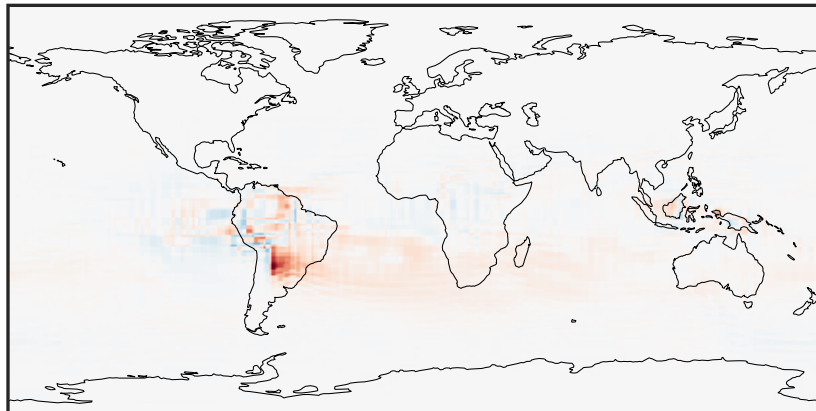
0.003 0.006 0.009  
μg/m3

GCHP\_14.2.0 (Dev)  
c24



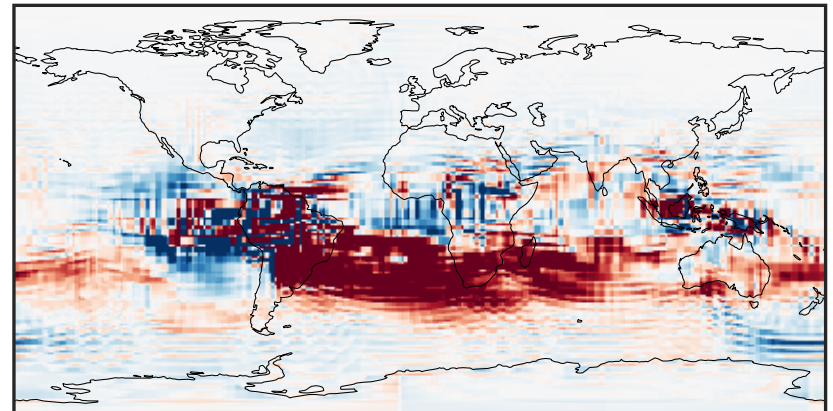
0.003 0.006 0.009  
μg/m3

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



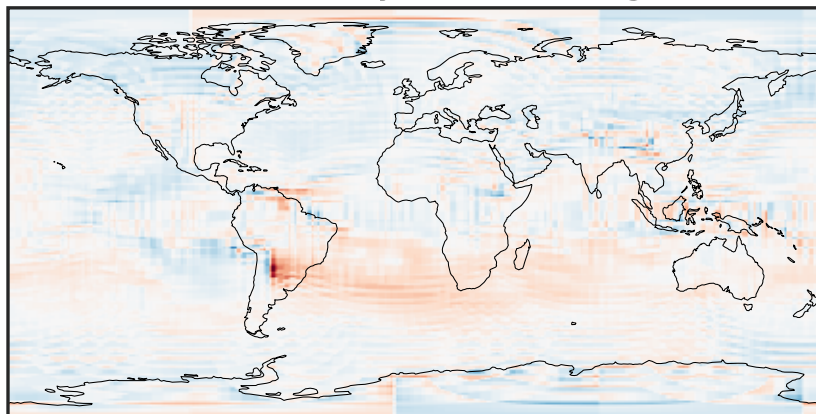
-0.003 0.000 0.003  
μg/m3

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



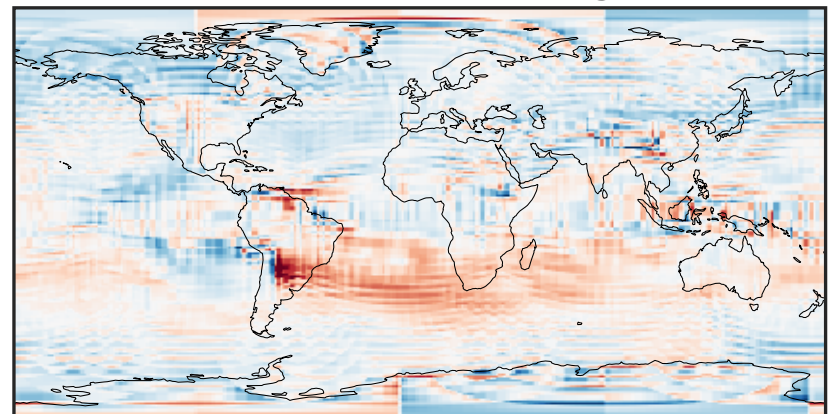
-0.00015 0.00000 0.00015  
μg/m3

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



0.257 0.629 1.000 2.444 3.888  
unitless

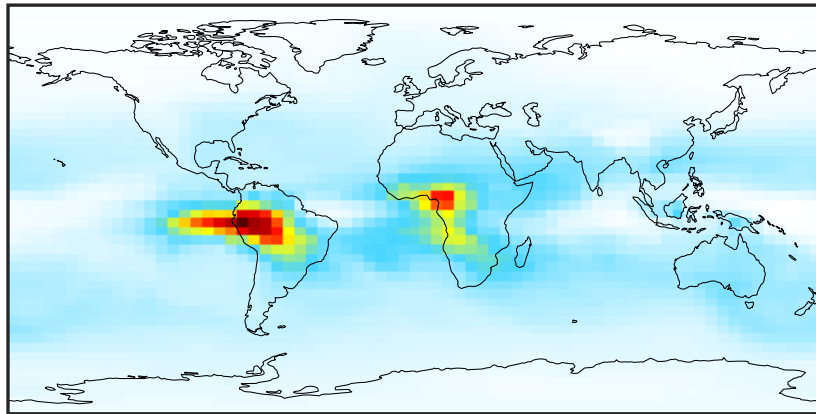
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

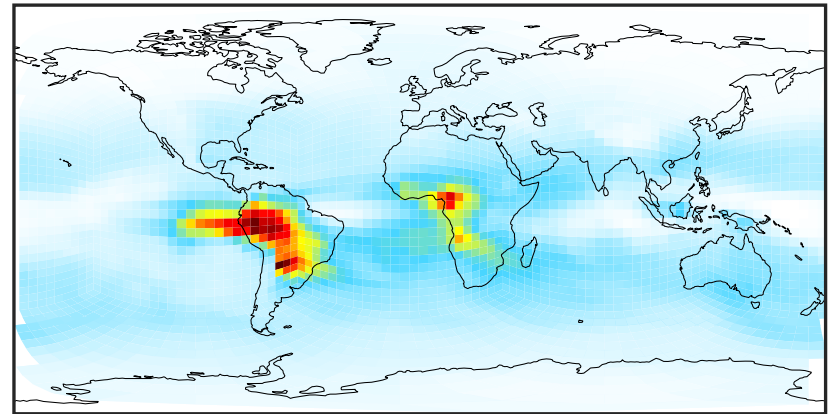
# SpeciesConcVV\_TSOG1 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



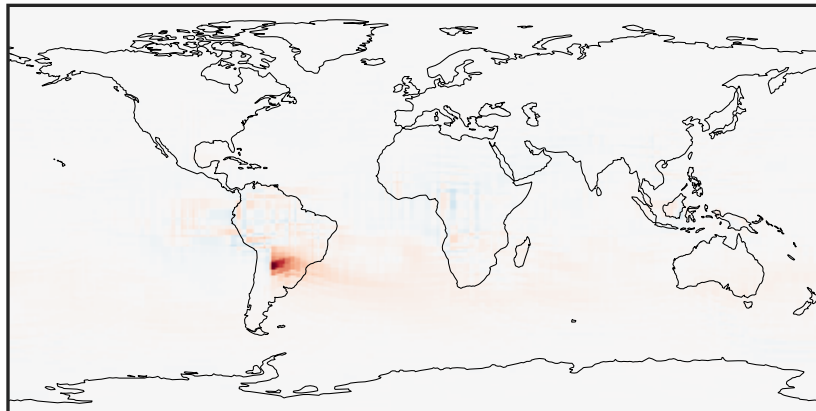
0.0025 0.0050 0.0075  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



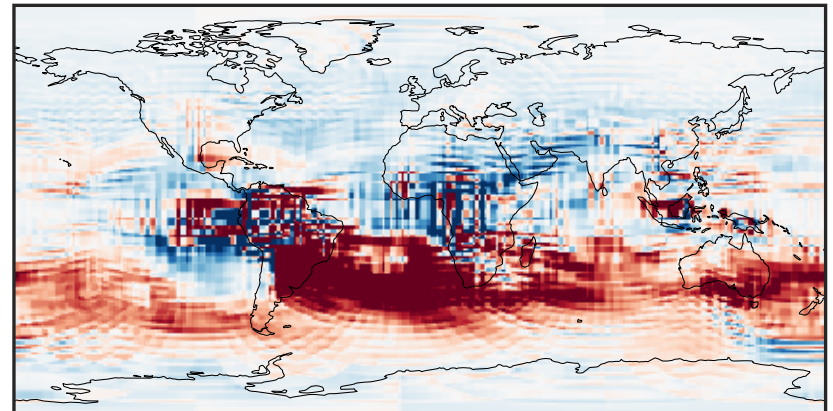
0.0025 0.0050 0.0075  
 $\mu\text{g}/\text{m}^3$

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



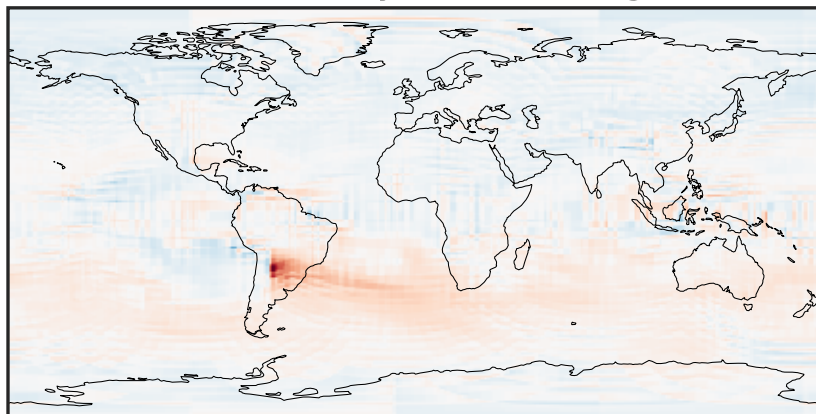
-0.004 0.000 0.004  
 $\mu\text{g}/\text{m}^3$

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



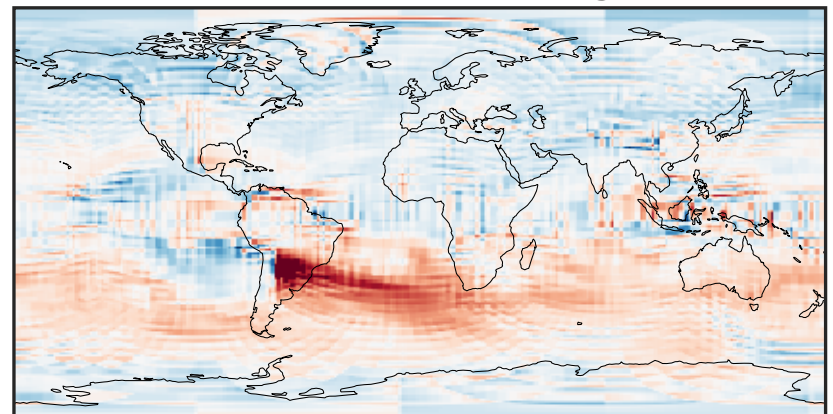
-0.00015 0.00000 0.00015  
 $\mu\text{g}/\text{m}^3$

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



0.144 0.572 1.000 3.962 6.925  
unitless

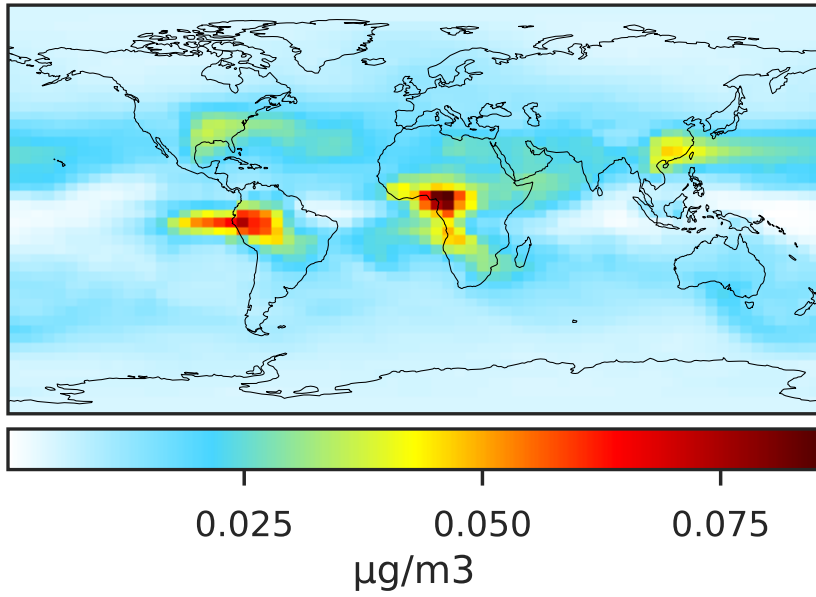
Ratio (1x1.25)  
Dev/Ref, Fixed Range



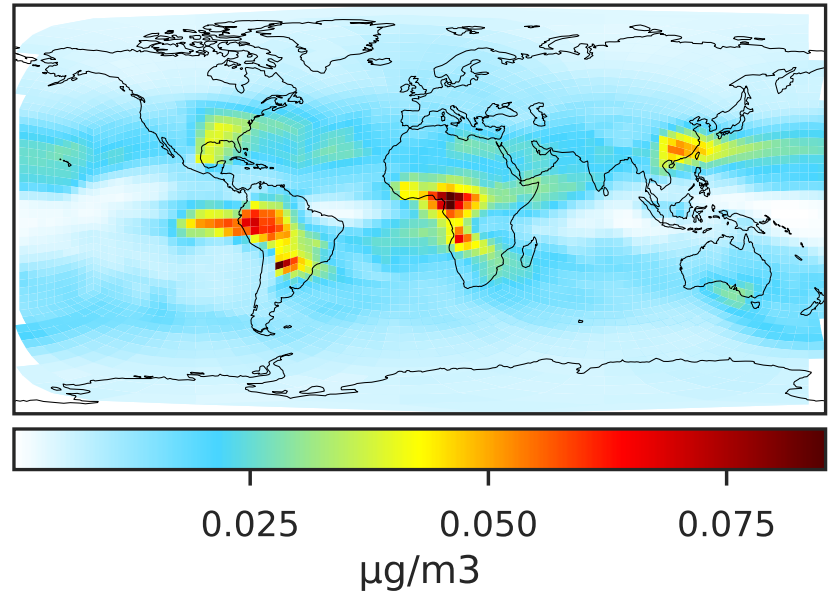
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_TSOG2 (Apr2019)

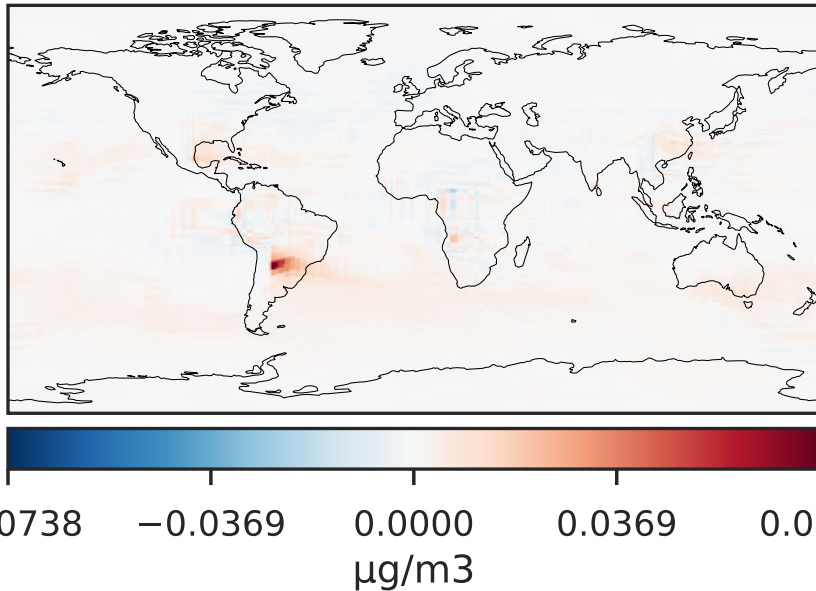
GCC\_14.2.0 (Ref)  
4.0x5.0



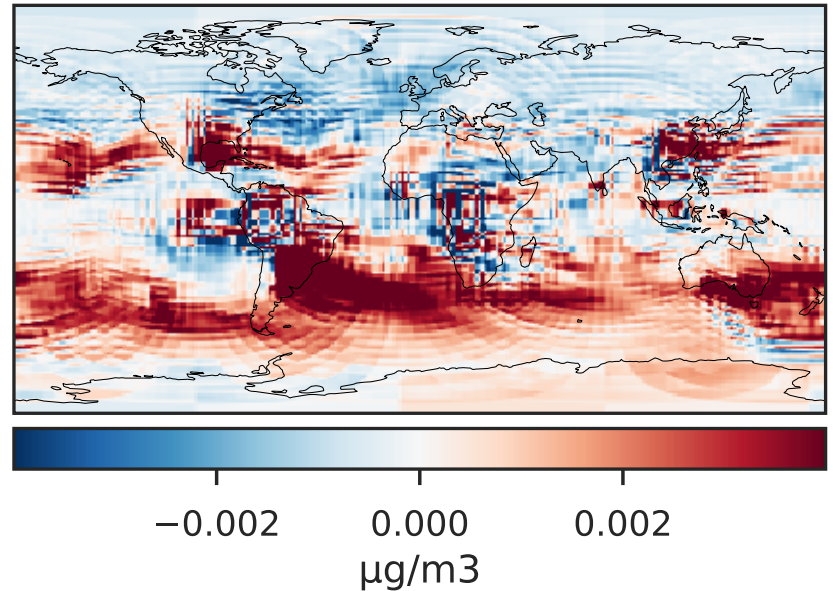
GCHP\_14.2.0 (Dev)  
c24



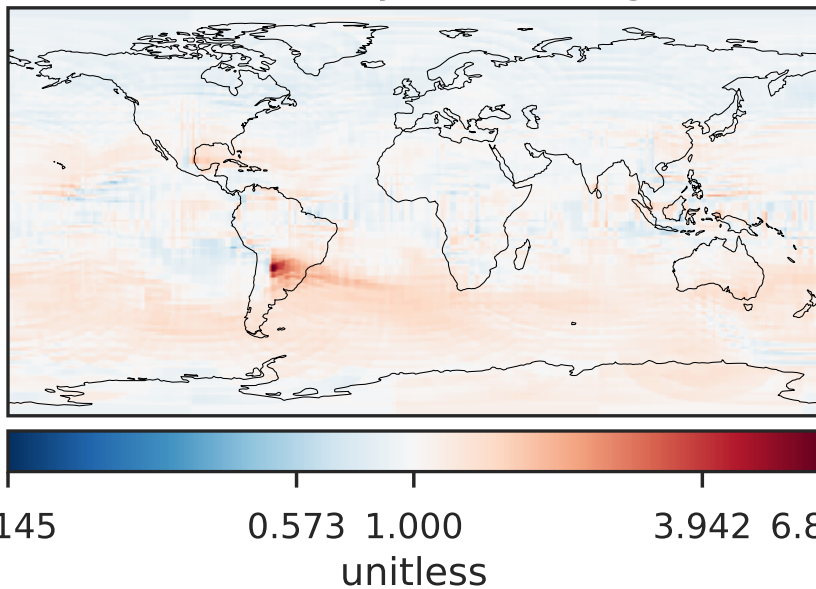
Difference (1x1.25)  
Dev - Ref, Dynamic Range



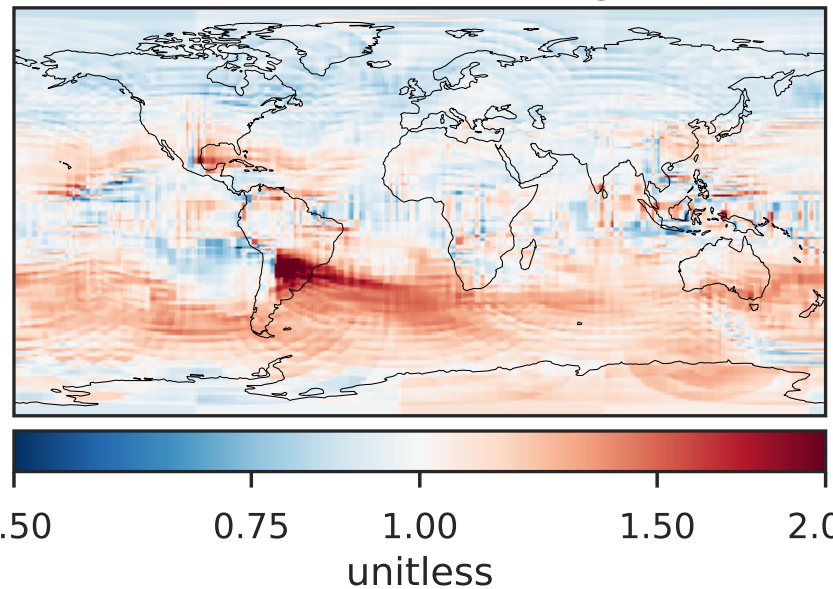
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

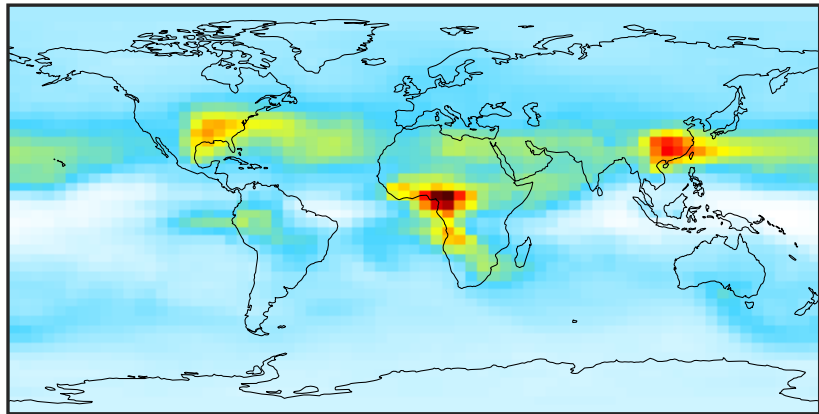


Ratio (1x1.25)  
Dev/Ref, Fixed Range



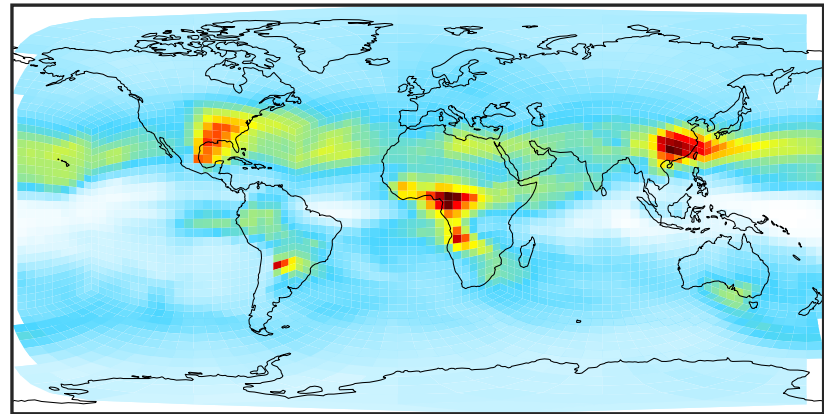
# SpeciesConcVV\_TSOG3 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



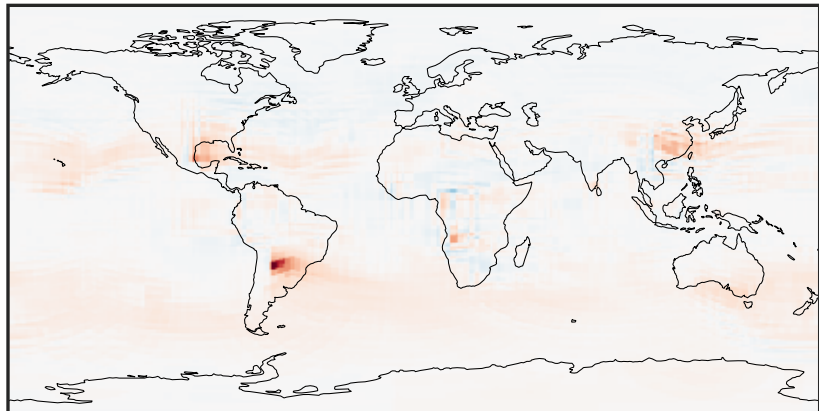
0.0003 0.0362 0.0724 0.1086 0.1451  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



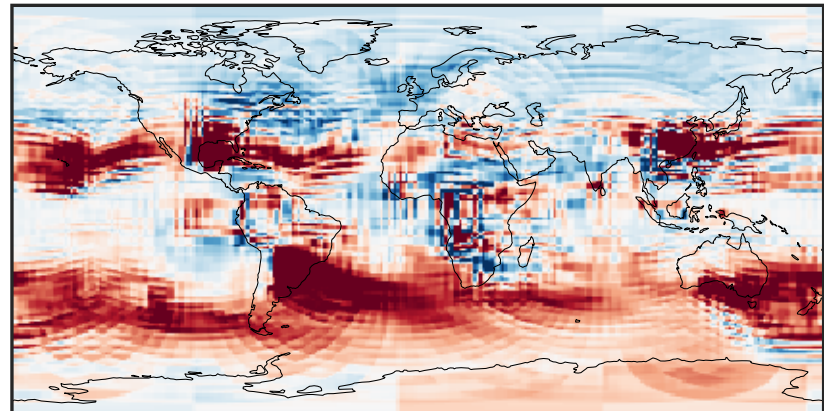
0.0003 0.0362 0.0724 0.1086 0.1451  
 $\mu\text{g}/\text{m}^3$

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



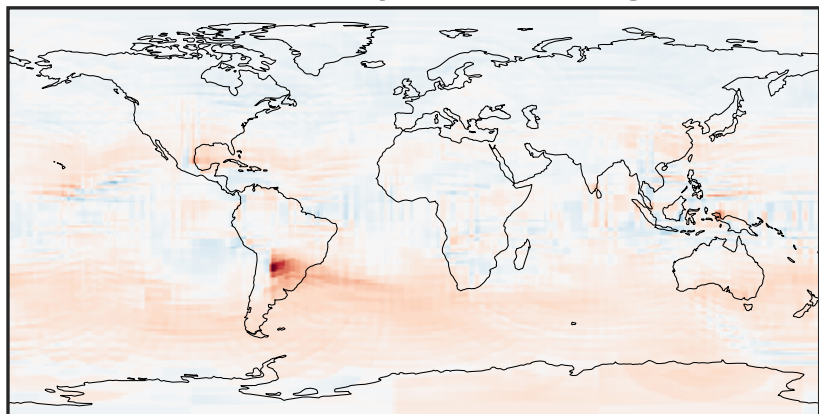
-0.1004 -0.0502 0.0000 0.0502 0.1004  
 $\mu\text{g}/\text{m}^3$

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



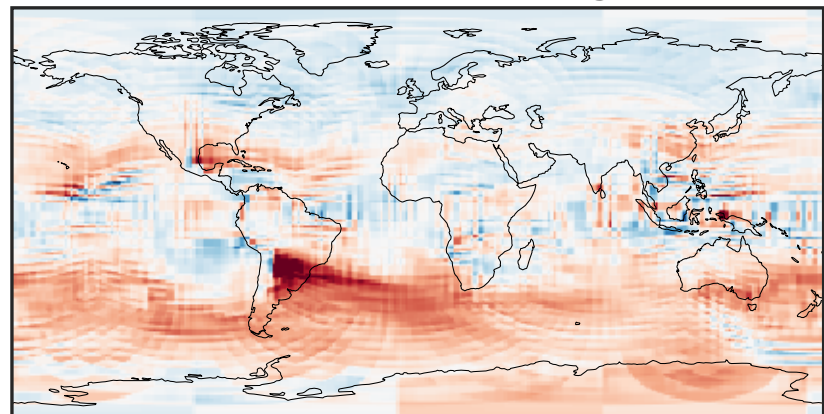
-0.005 0.000 0.005  
 $\mu\text{g}/\text{m}^3$

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



0.154 0.577 1.000 3.756 6.513  
unitless

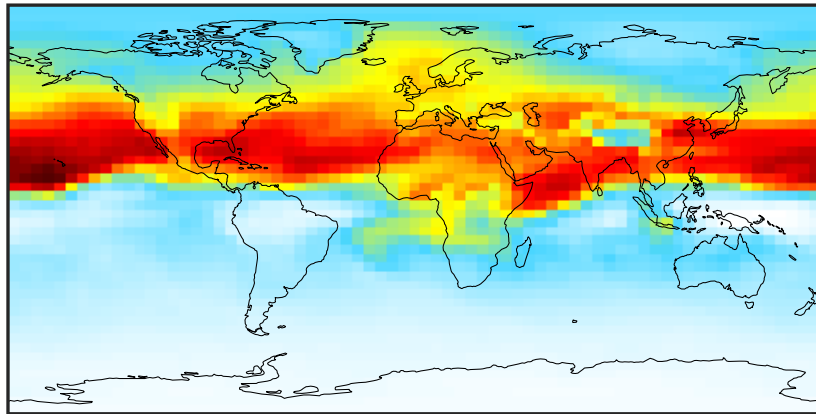
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

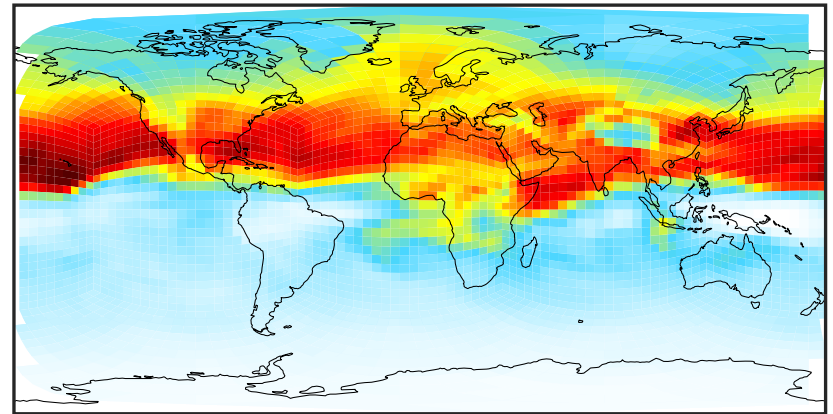
# SpeciesConcVV\_ASOG1 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



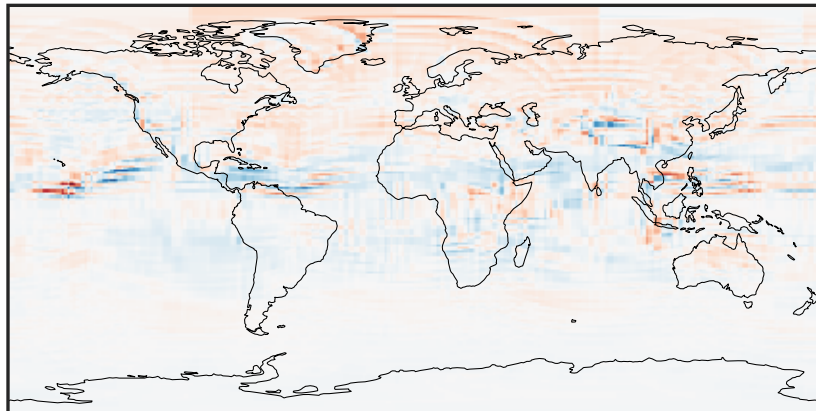
0.0006 0.0012 0.0018  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



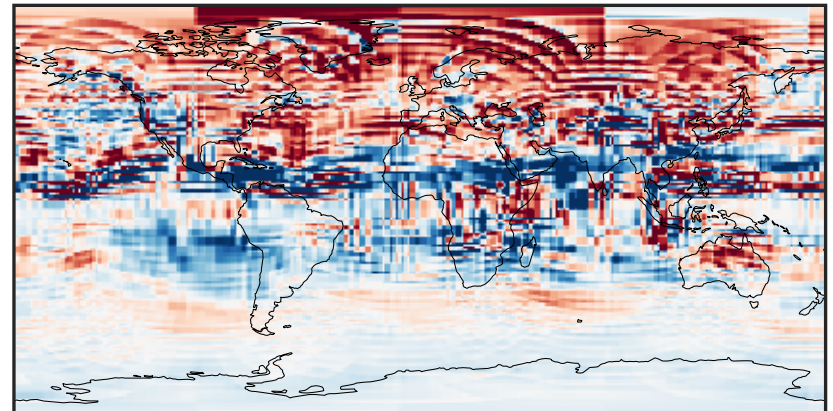
0.0006 0.0012 0.0018  
 $\mu\text{g}/\text{m}^3$

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



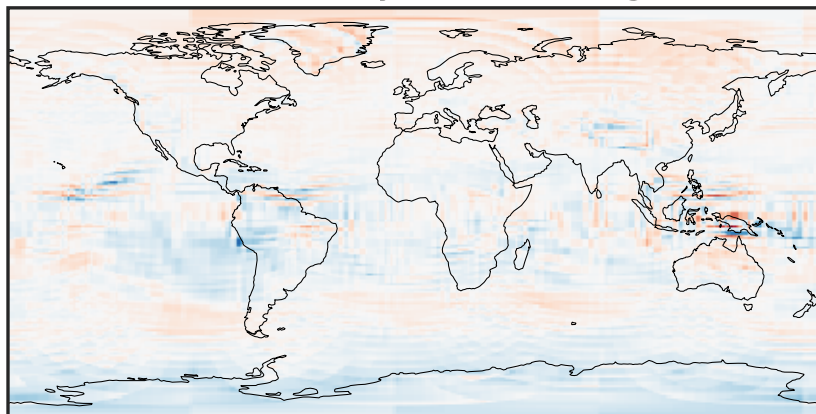
-0.0004 0.0000 0.0004  
 $\mu\text{g}/\text{m}^3$

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



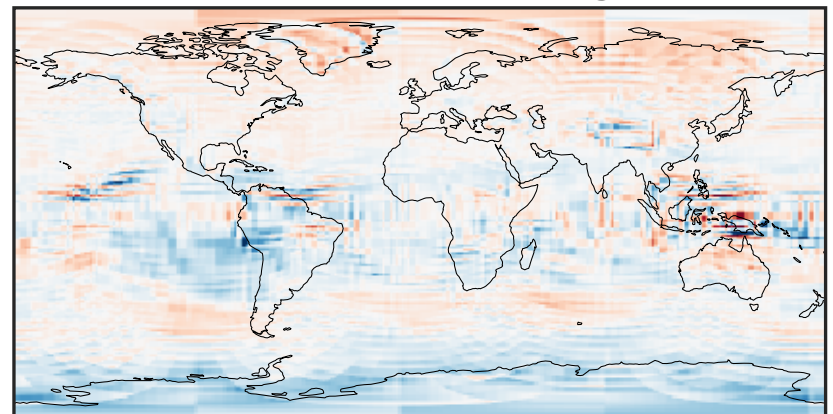
-5 0 5  
 $\mu\text{g}/\text{m}^3$   $1\text{e}-5$

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



0.320 0.660 1.000 2.064 3.128  
unitless

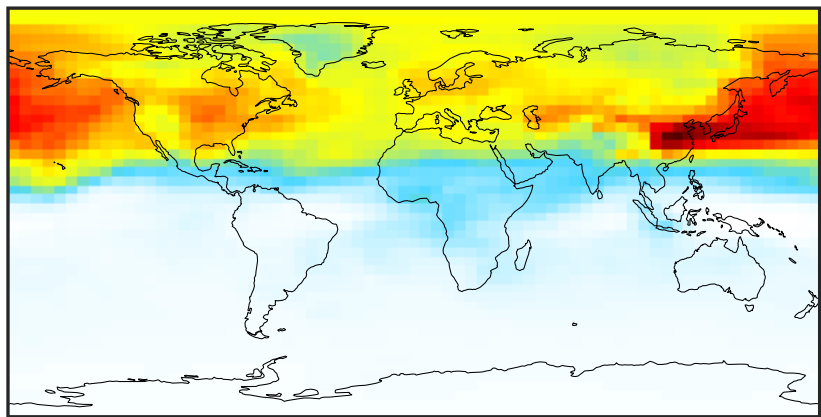
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

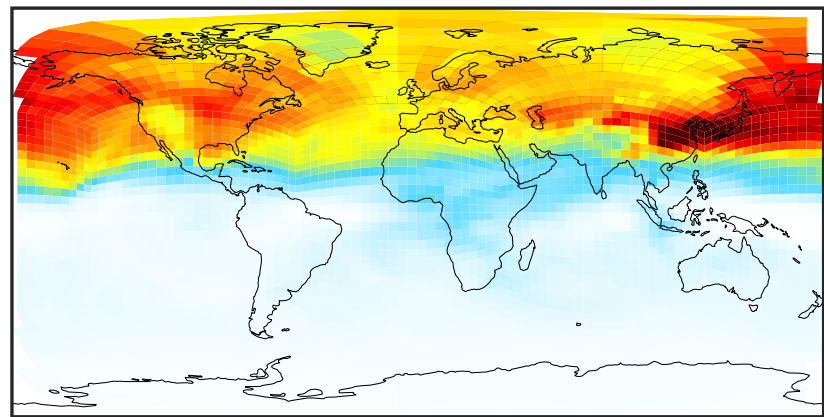
# SpeciesConcVV\_ASOG2 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



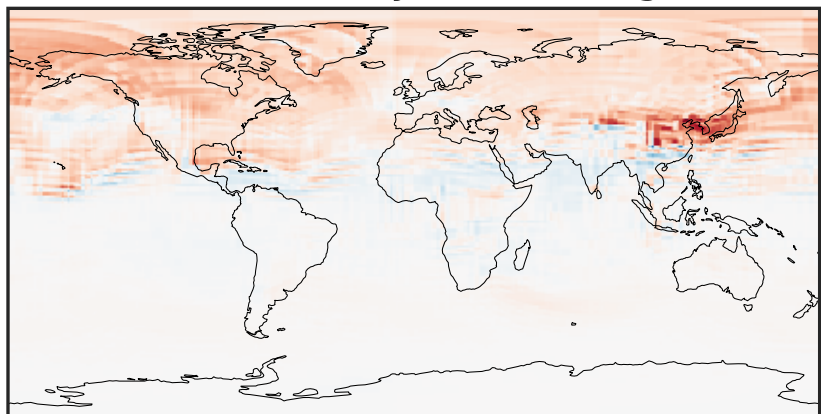
0.0015 0.0030 0.0045  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



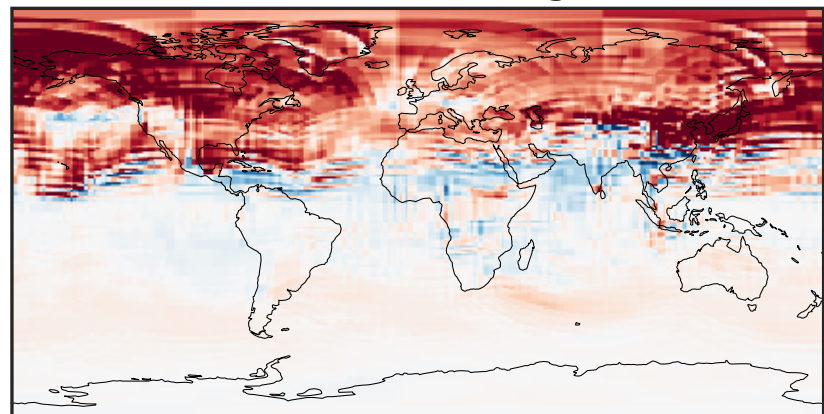
0.0015 0.0030 0.0045  
 $\mu\text{g}/\text{m}^3$

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



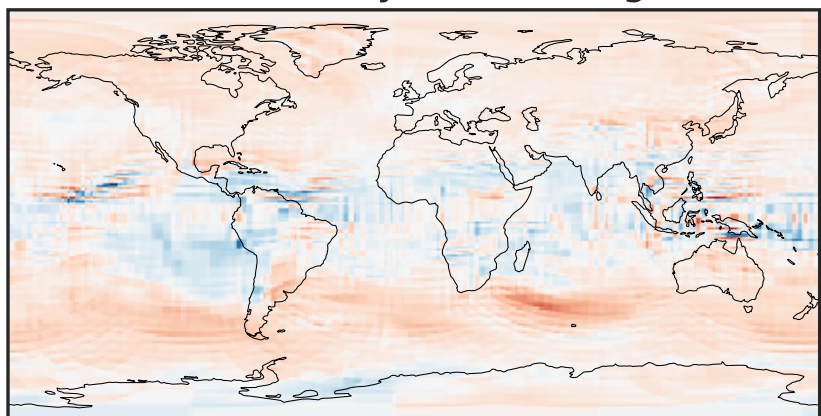
-0.0008 0.0000 0.0008  
 $\mu\text{g}/\text{m}^3$

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



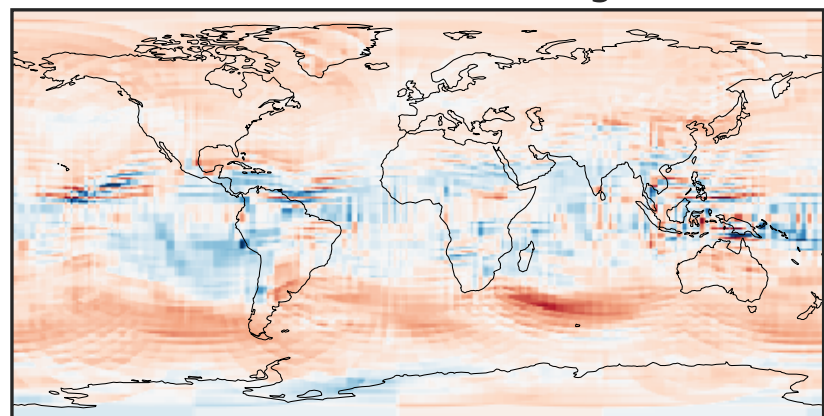
-0.00025 0.00000 0.00025  
 $\mu\text{g}/\text{m}^3$

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



0.373 0.687 1.000 1.840 2.680  
unitless

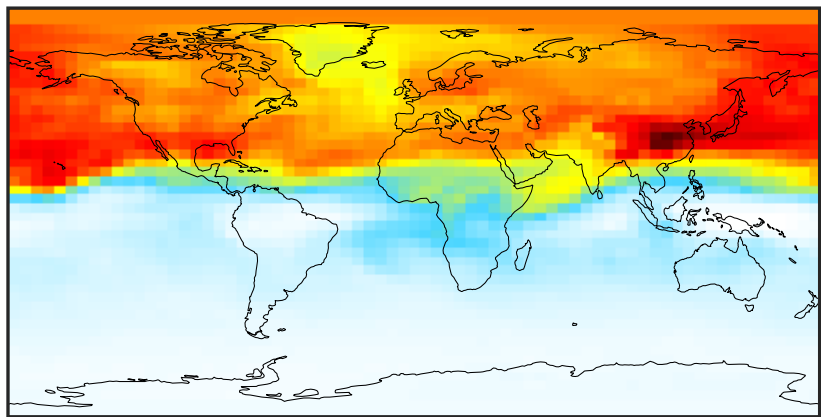
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

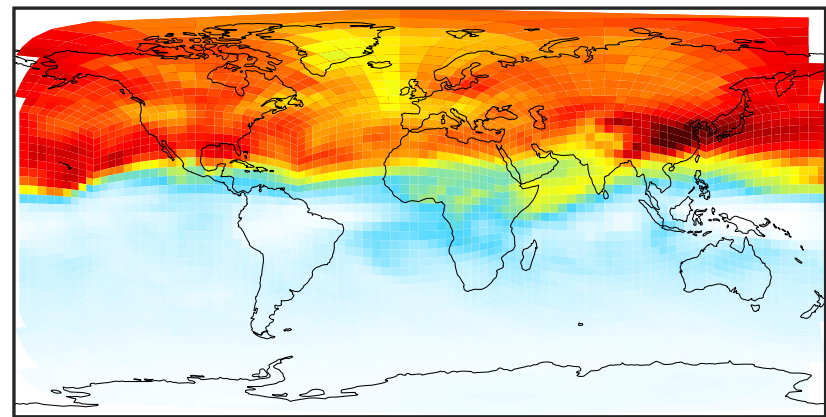
# SpeciesConcVV\_ASOG3 (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



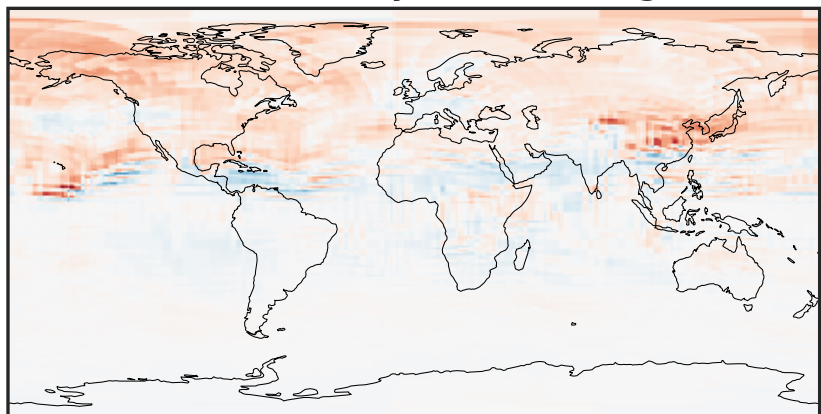
0.015 0.030 0.045  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



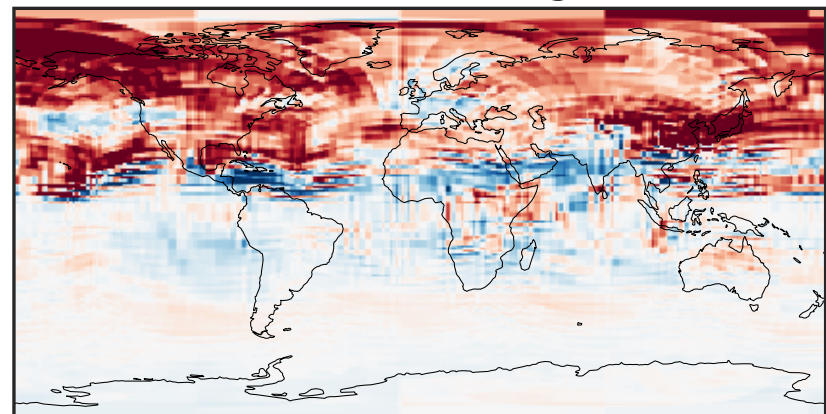
0.015 0.030 0.045  
 $\mu\text{g}/\text{m}^3$

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



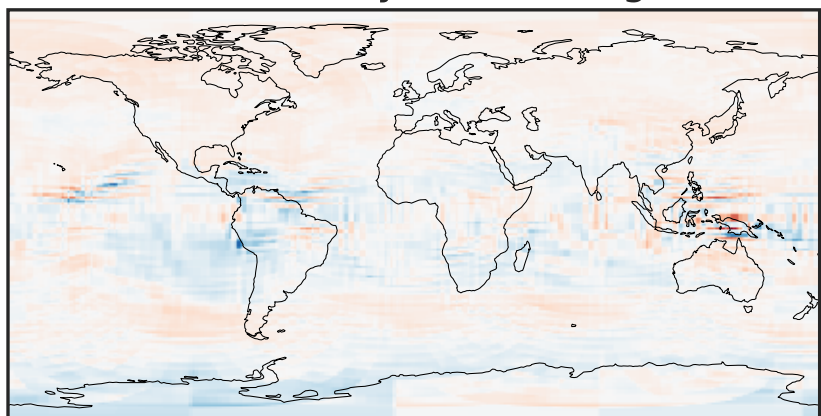
-0.008 0.000 0.008  
 $\mu\text{g}/\text{m}^3$

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



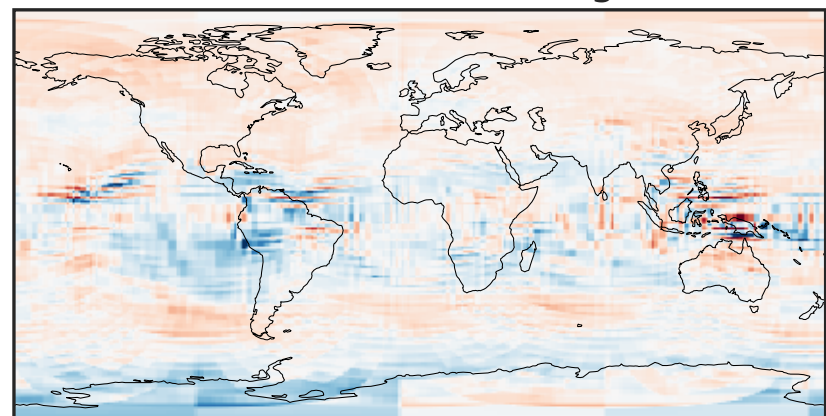
-0.002 0.000 0.002  
 $\mu\text{g}/\text{m}^3$

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



0.283 0.642 1.000 2.264 3.529  
unitless

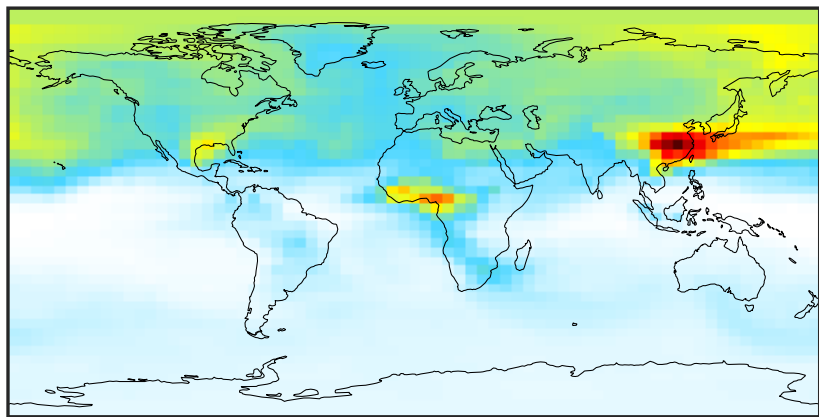
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

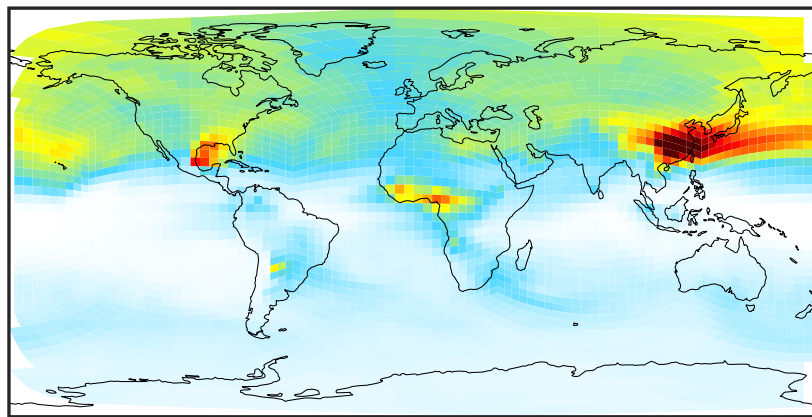
# SpeciesConcVV\_INDIOL (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



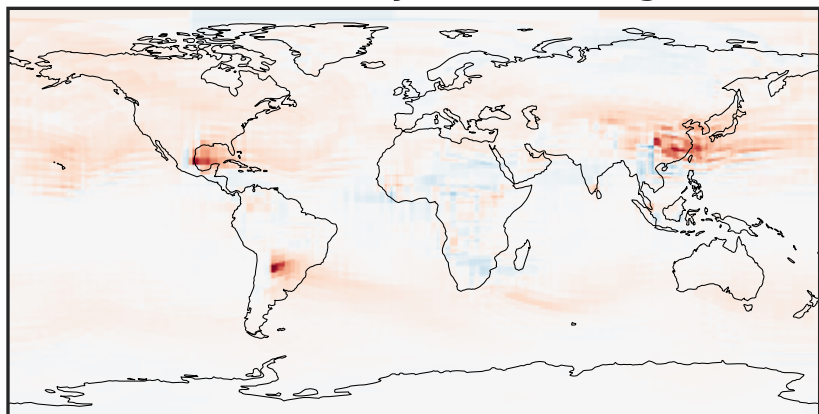
0.0001 0.0405 0.0810 0.1214 0.1620  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



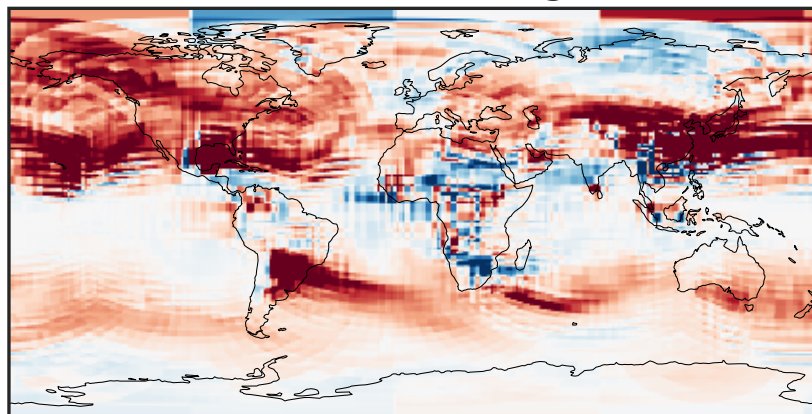
0.0001 0.0405 0.0810 0.1214 0.1620  
 $\mu\text{g}/\text{m}^3$

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



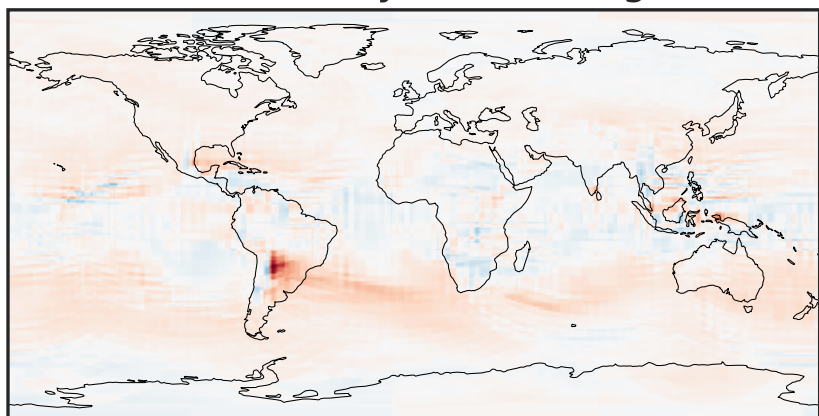
-0.0797 -0.0398 0.0000 0.0398 0.0797  
 $\mu\text{g}/\text{m}^3$

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



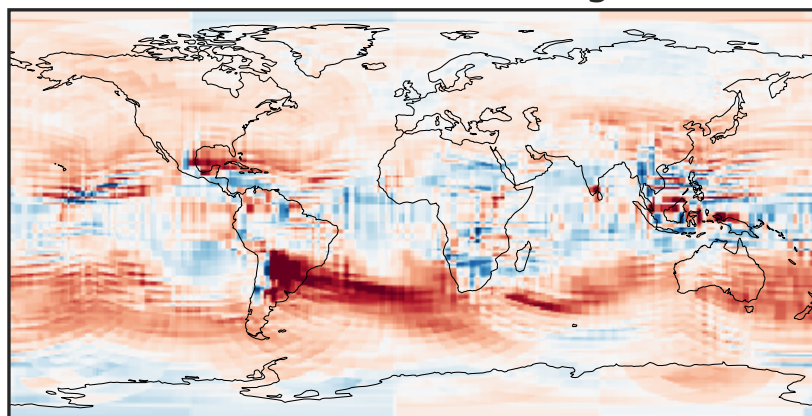
-0.006 0.000 0.006  
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10  
unitless

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

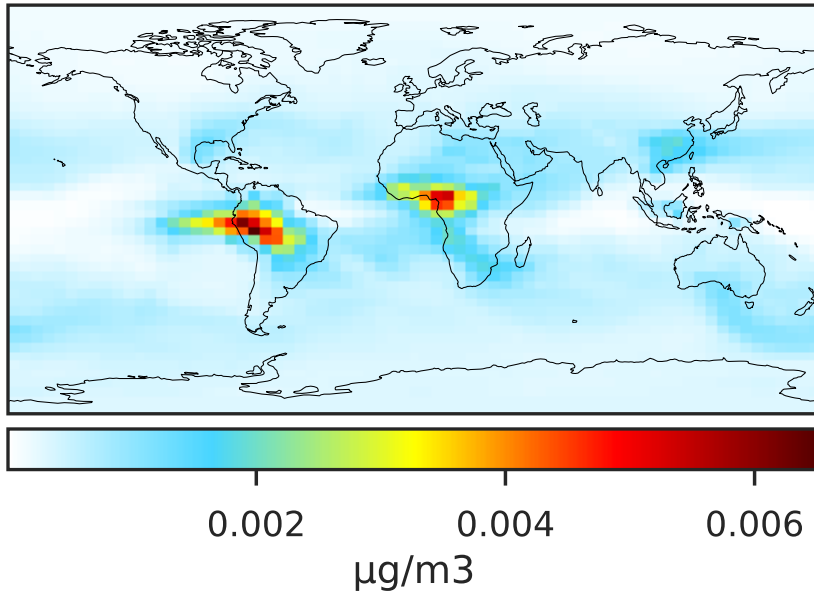


0.50 0.75 1.00 1.50 2.00  
unitless

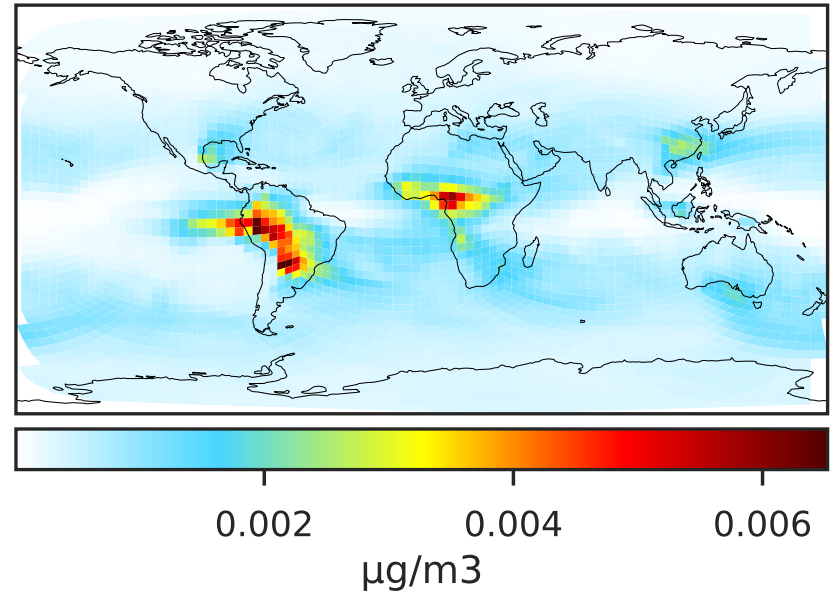


# SpeciesConcVV\_LVOCOA (Apr2019)

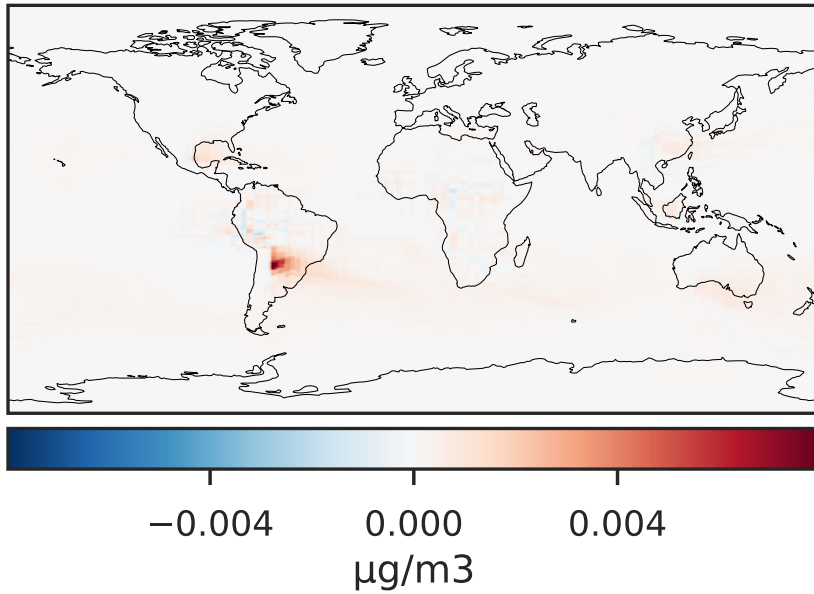
GCC\_14.2.0 (Ref)  
4.0x5.0



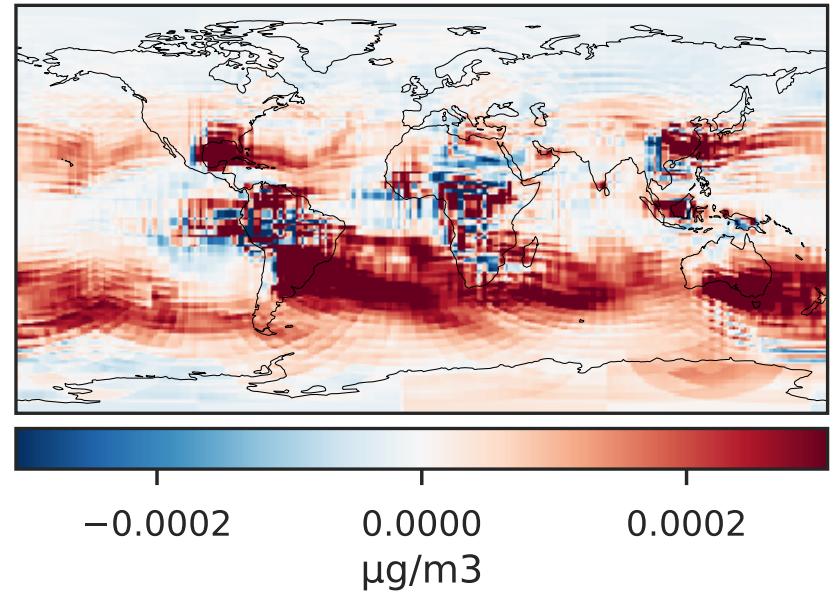
GCHP\_14.2.0 (Dev)  
c24



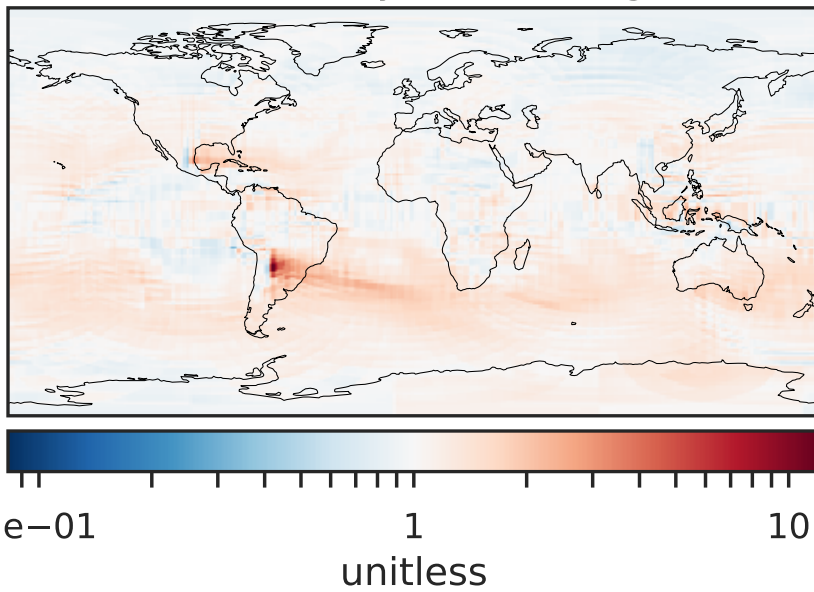
Difference (1x1.25)  
Dev - Ref, Dynamic Range



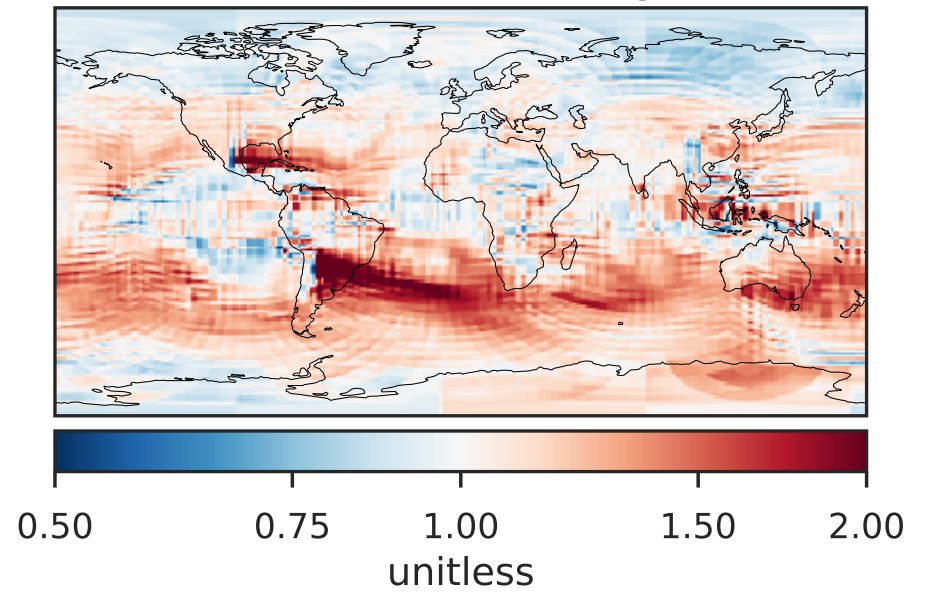
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

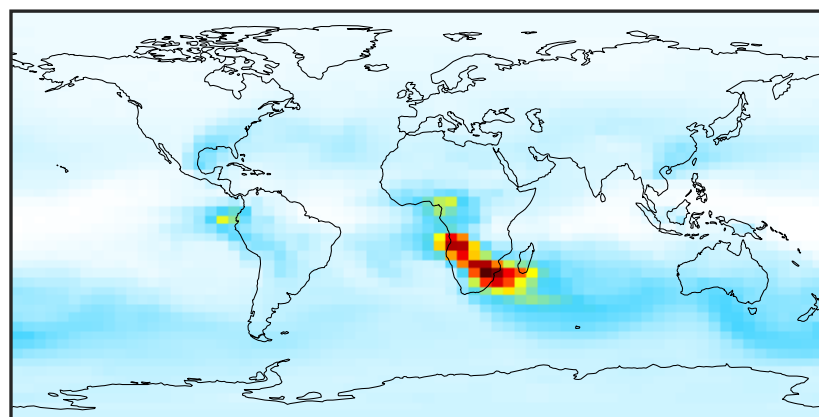


Ratio (1x1.25)  
Dev/Ref, Fixed Range



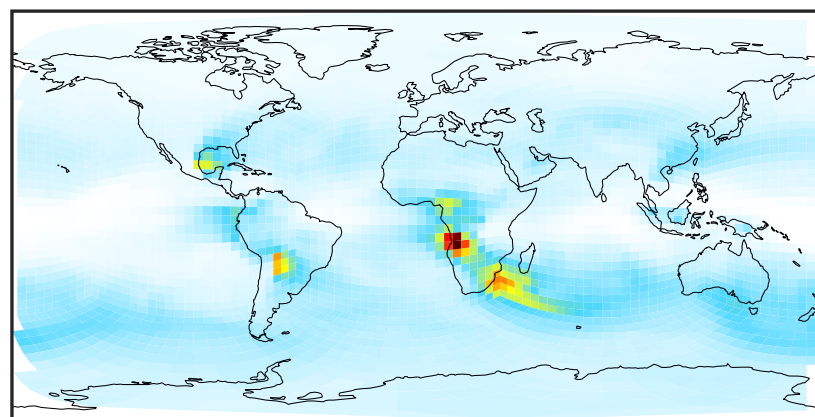
# SpeciesConcVV\_SOAIE (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



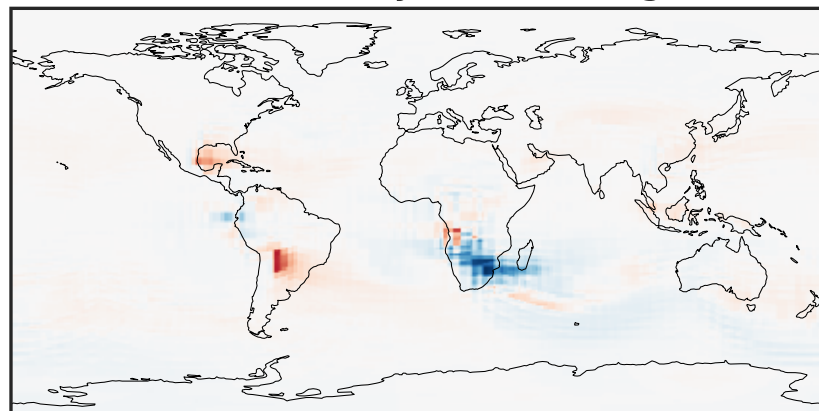
0.025 0.050 0.075  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



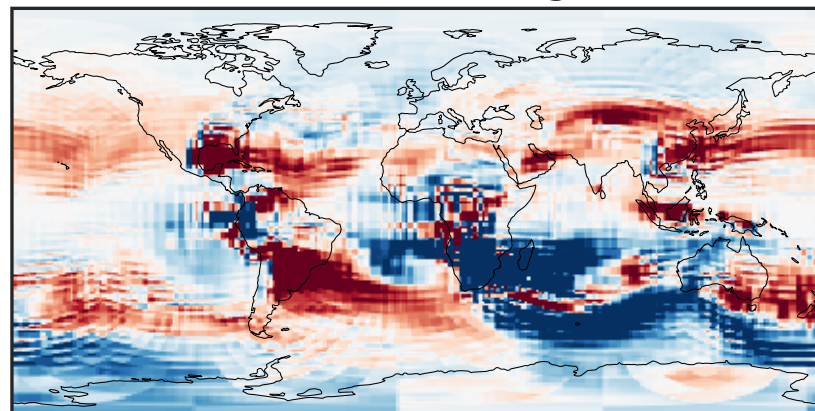
0.025 0.050 0.075  
 $\mu\text{g}/\text{m}^3$

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



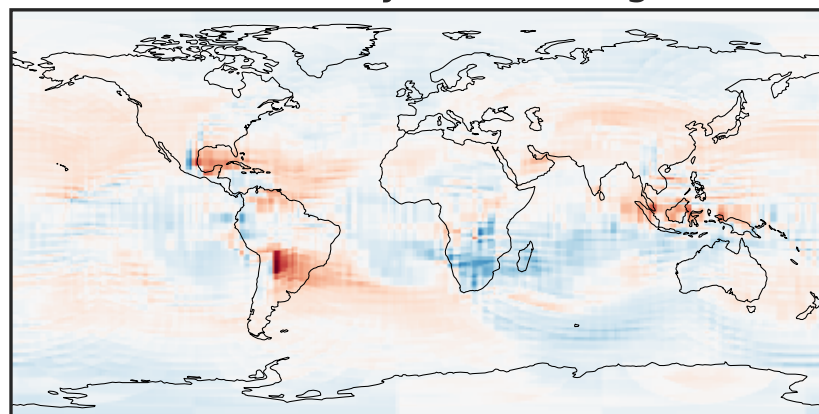
-0.0526 -0.0263 0.0000 0.0263 0.0526  
 $\mu\text{g}/\text{m}^3$

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



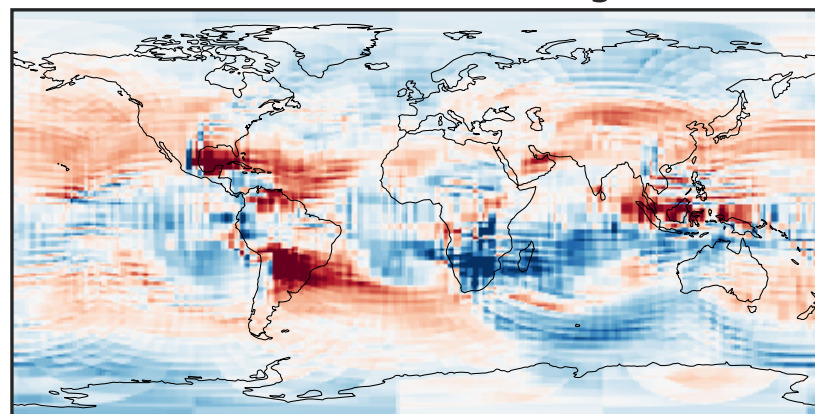
-0.0015 0.0000 0.0015  
 $\mu\text{g}/\text{m}^3$

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



0.151 0.575 1.000 3.813 6.625  
unitless

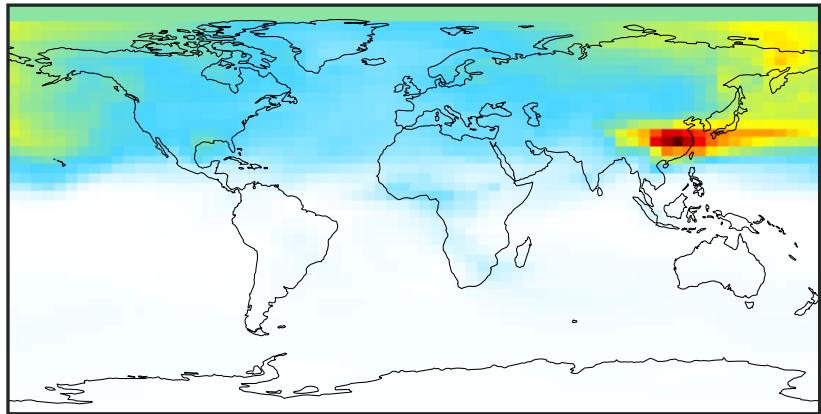
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

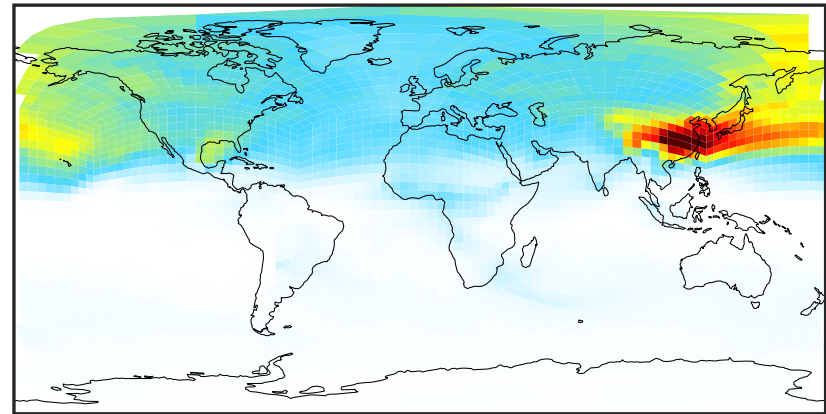
# SpeciesConcVV\_SOAGX (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



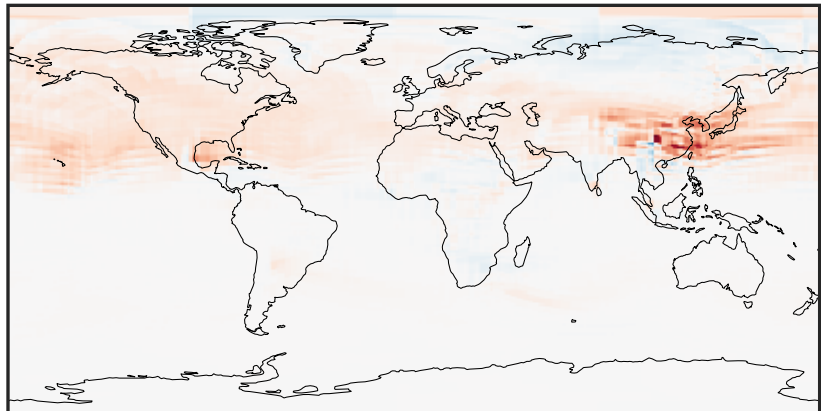
0.008 0.016 0.024  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



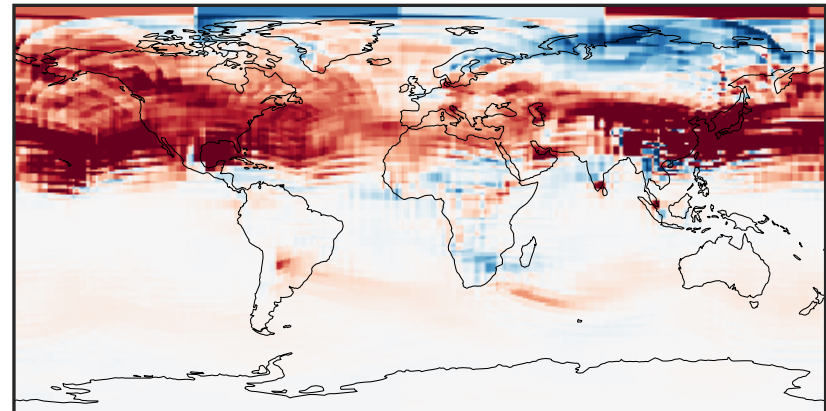
0.008 0.016 0.024  
 $\mu\text{g}/\text{m}^3$

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



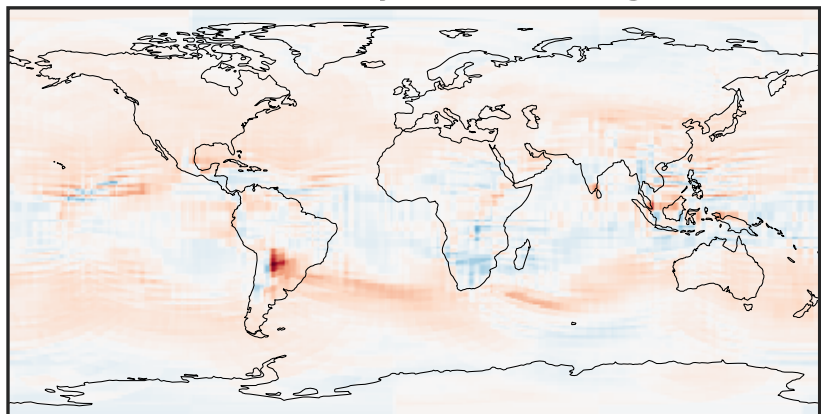
-0.006 0.000 0.006  
 $\mu\text{g}/\text{m}^3$

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



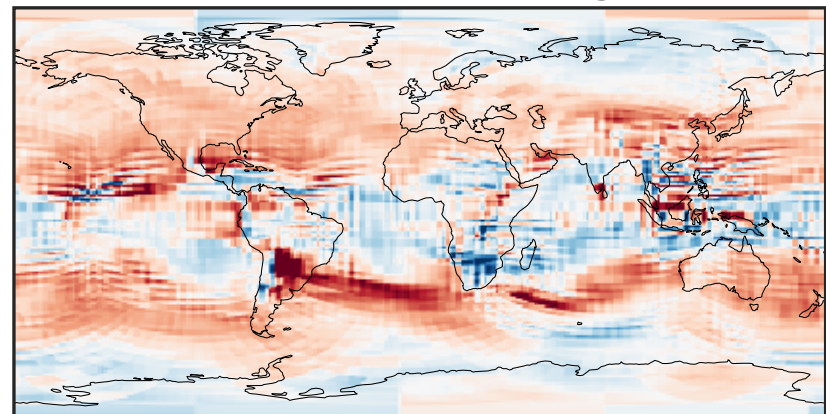
-0.001 0.000 0.001  
 $\mu\text{g}/\text{m}^3$

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



0.112 0.556 1.000 4.974 8.947  
unitless

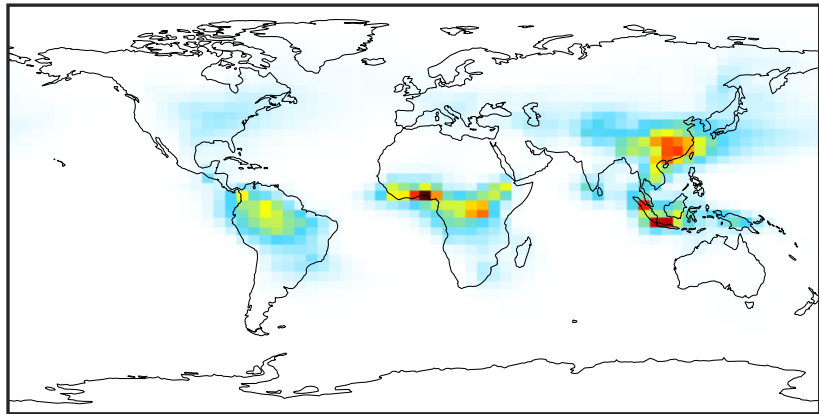
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

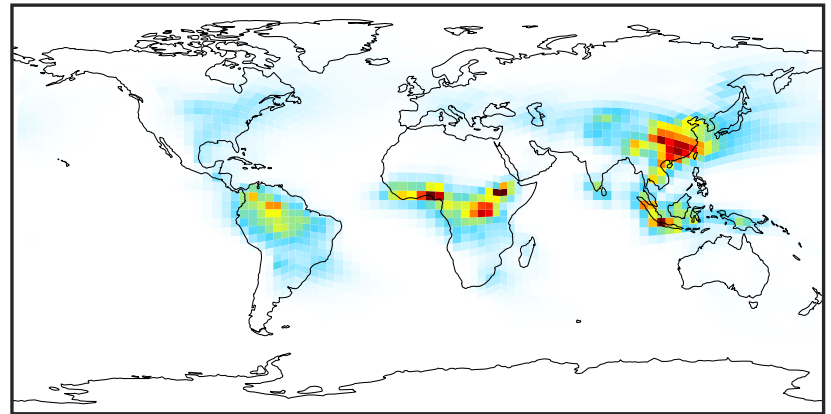
# SpeciesConcVV\_SOAP (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



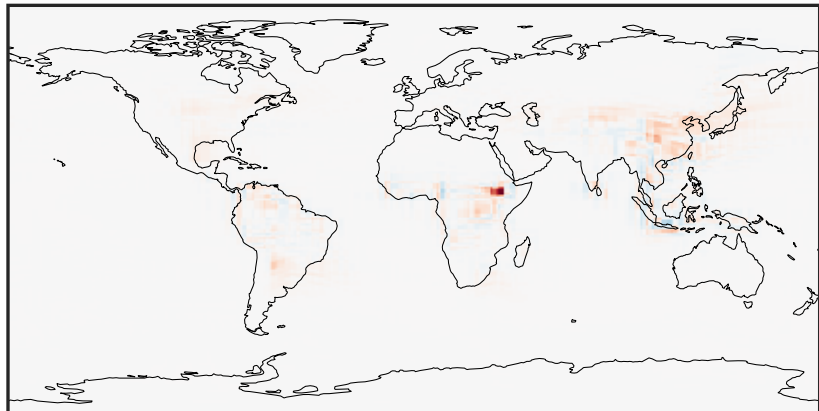
0.025 0.050 0.075  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



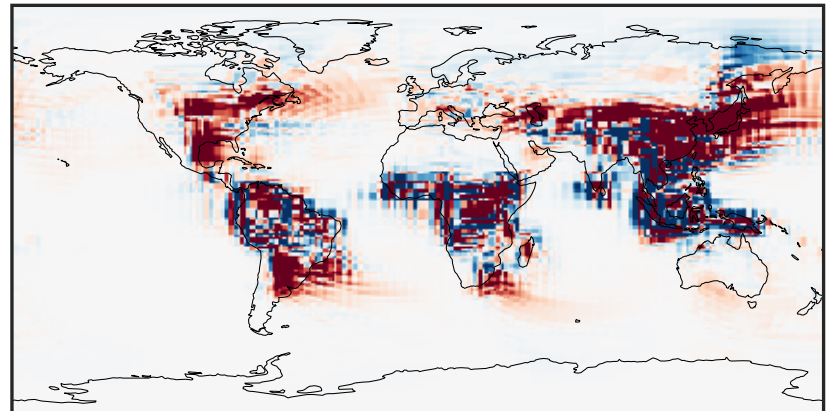
0.025 0.050 0.075  
 $\mu\text{g}/\text{m}^3$

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



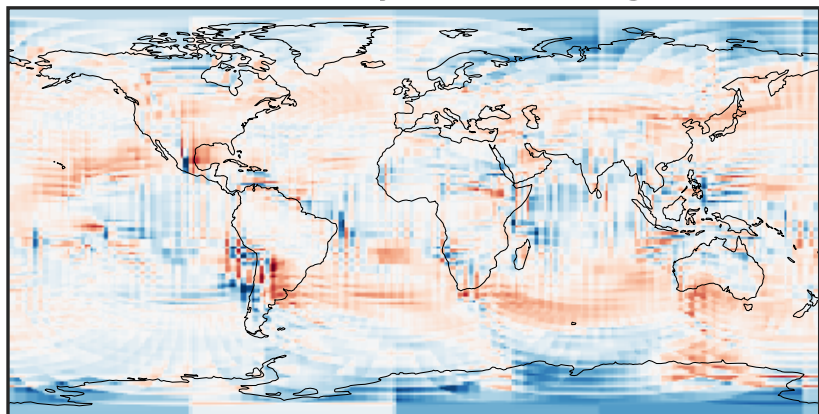
-0.0847 -0.0424 0.0000 0.0424 0.0847  
 $\mu\text{g}/\text{m}^3$

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



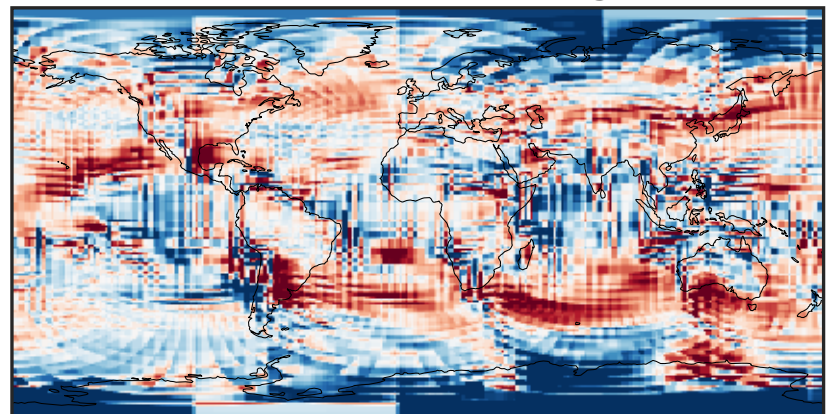
-0.0015 0.0000 0.0015  
 $\mu\text{g}/\text{m}^3$

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



0.134 0.567 1.000 4.224 7.448  
unitless

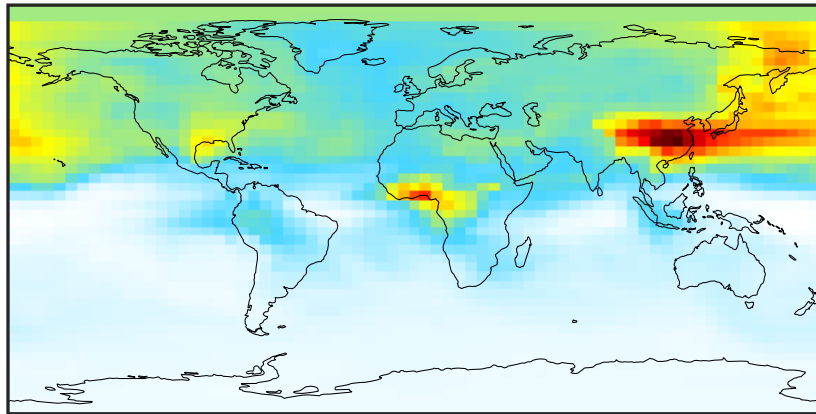
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

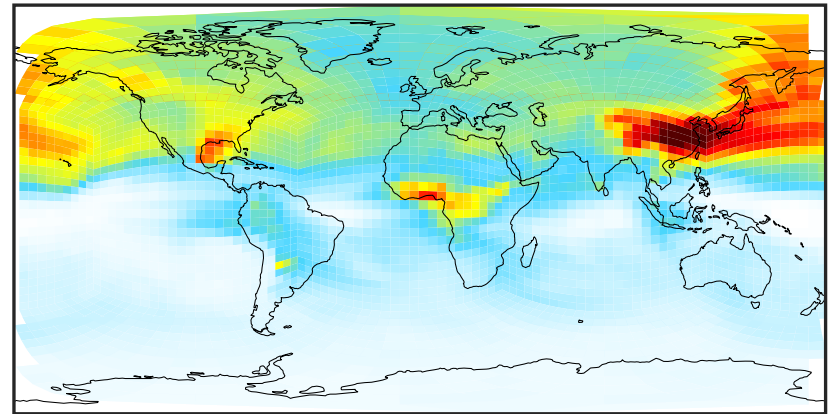
# SpeciesConcVV\_SOAS (Apr2019)

GCC\_14.2.0 (Ref)  
4.0x5.0



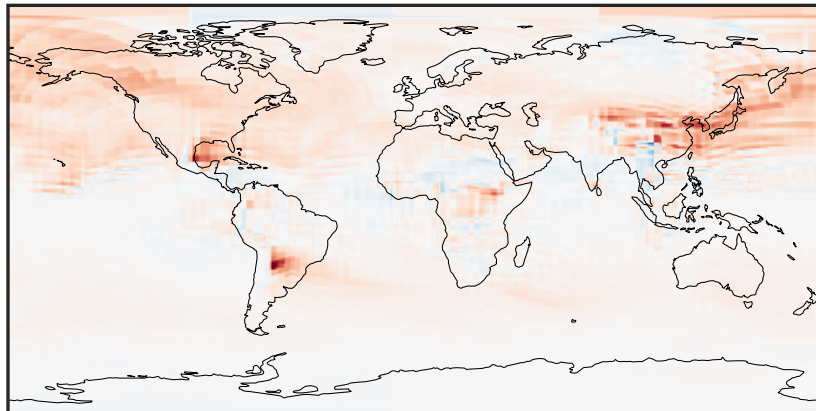
0.0009 0.0811 0.1623 0.2434 0.3255  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



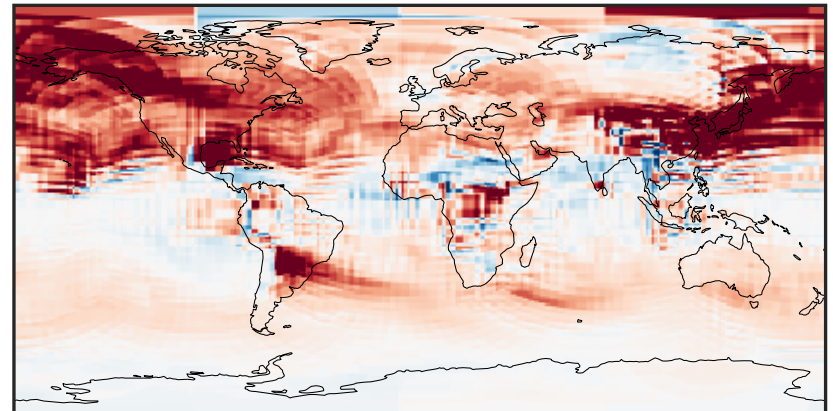
0.0009 0.0811 0.1623 0.2434 0.3255  
 $\mu\text{g}/\text{m}^3$

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



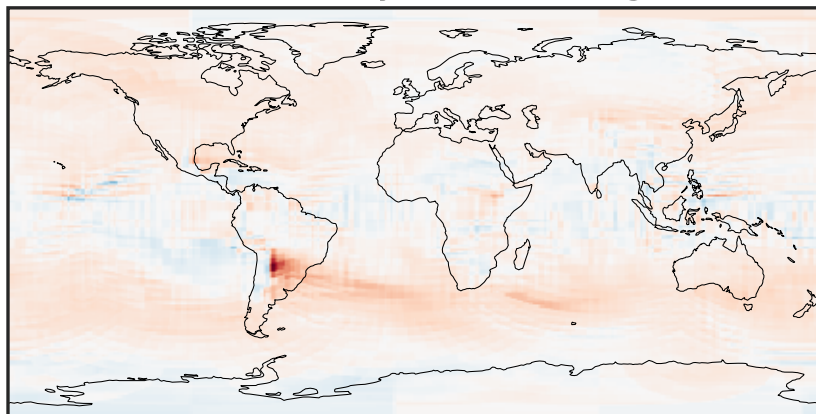
-0.1415 -0.0708 0.0000 0.0708 0.1415  
 $\mu\text{g}/\text{m}^3$

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



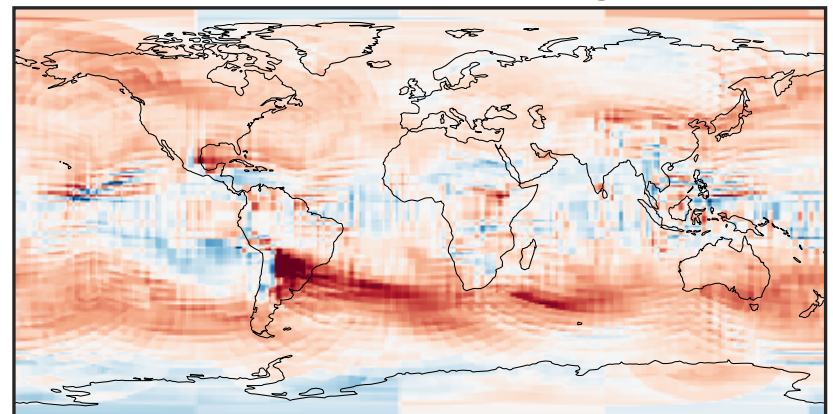
-0.02 0.00 0.02  
 $\mu\text{g}/\text{m}^3$

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



0.130 0.565 1.000 4.353 7.705  
unitless

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



0.50 0.75 1.00 1.50 2.00  
unitless