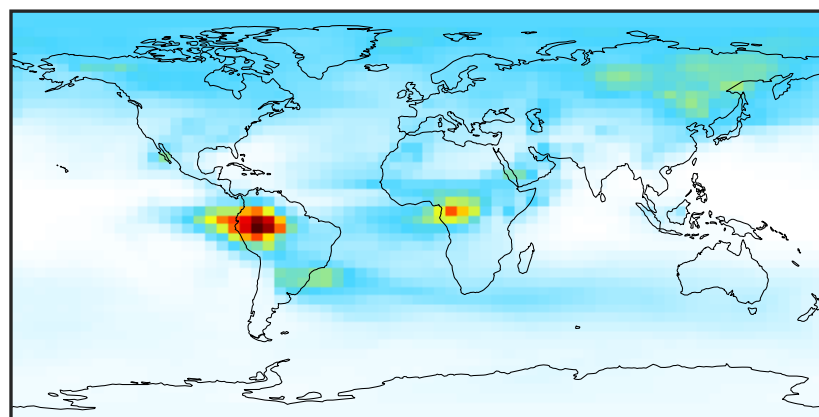


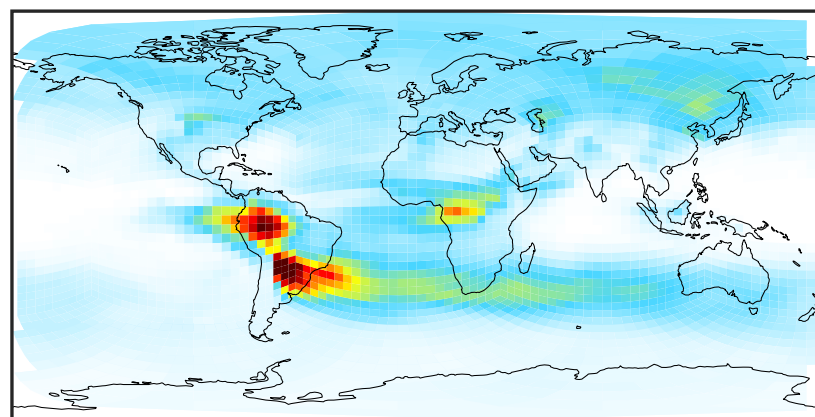
SpeciesConcVV_TSOA0 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



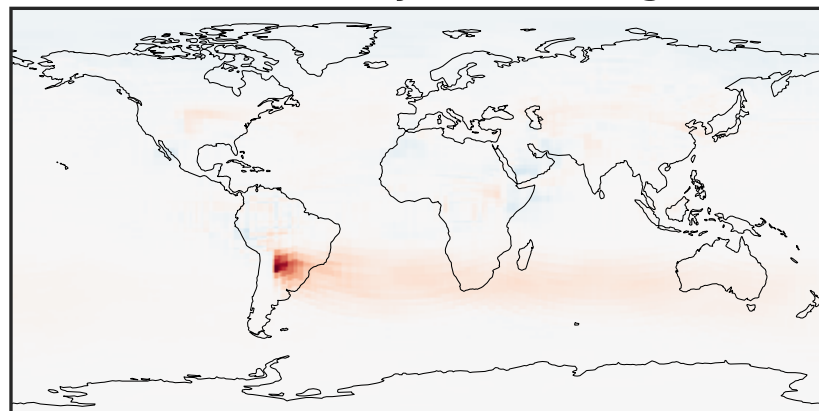
0.005 0.010 0.015
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



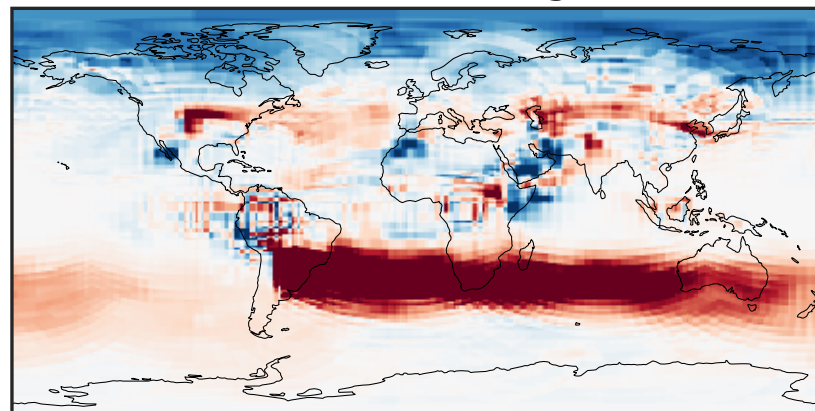
0.005 0.010 0.015
 $\mu\text{g}/\text{m}^3$

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



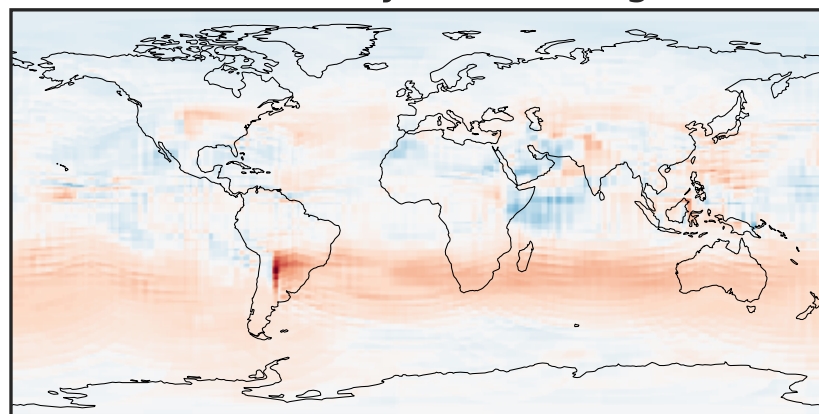
-0.015 0.000 0.015
 $\mu\text{g}/\text{m}^3$

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



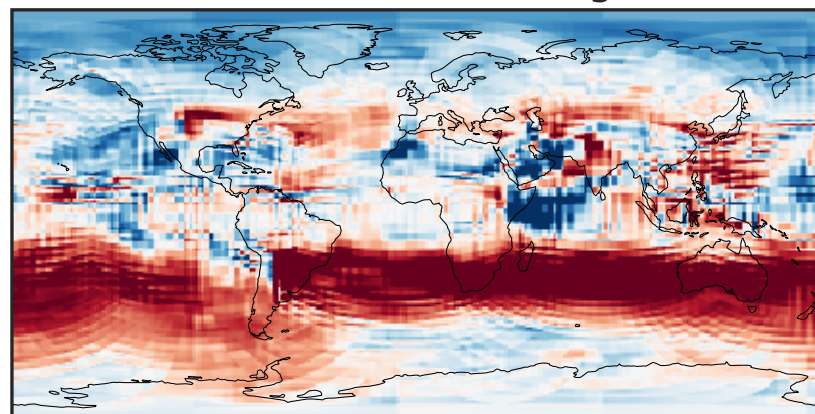
-0.0015 0.0000 0.0015
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

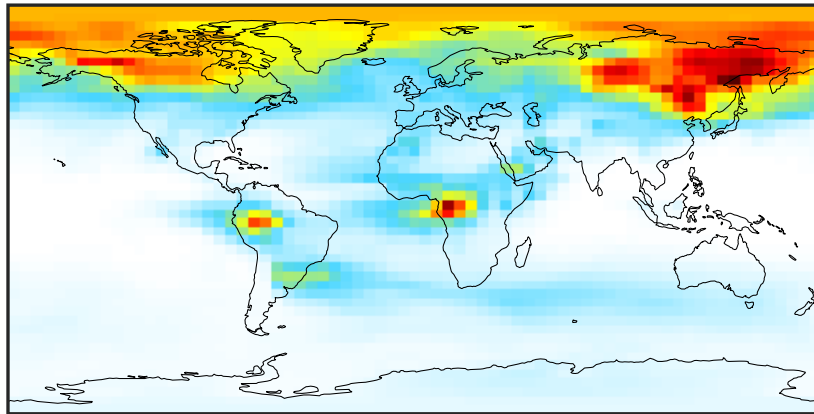
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

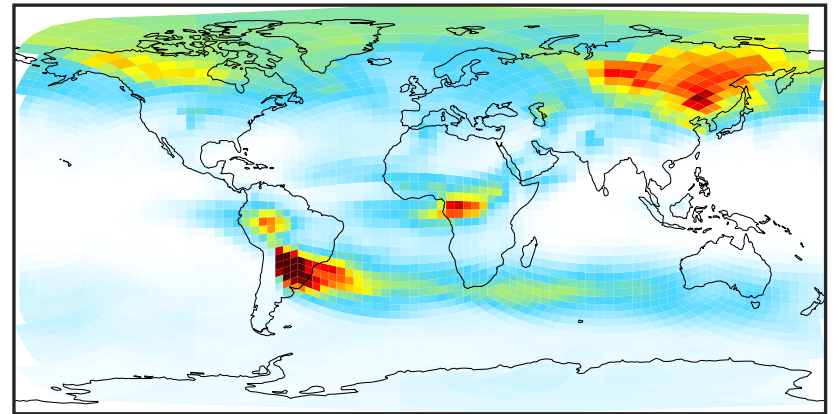
SpeciesConcVV_TSOA1 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



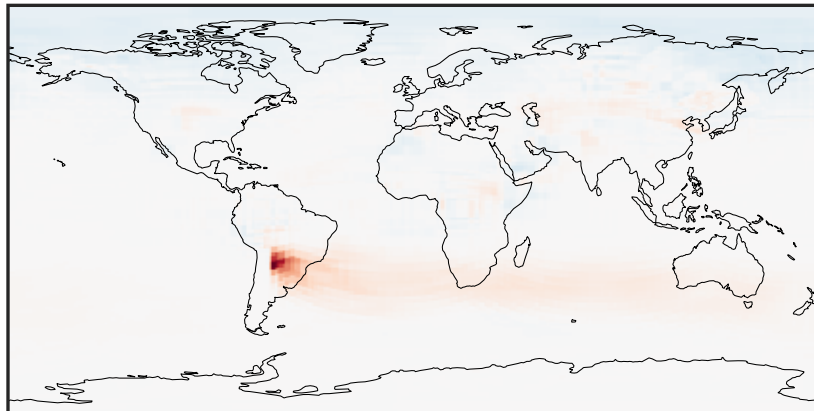
0.0015 0.0030
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



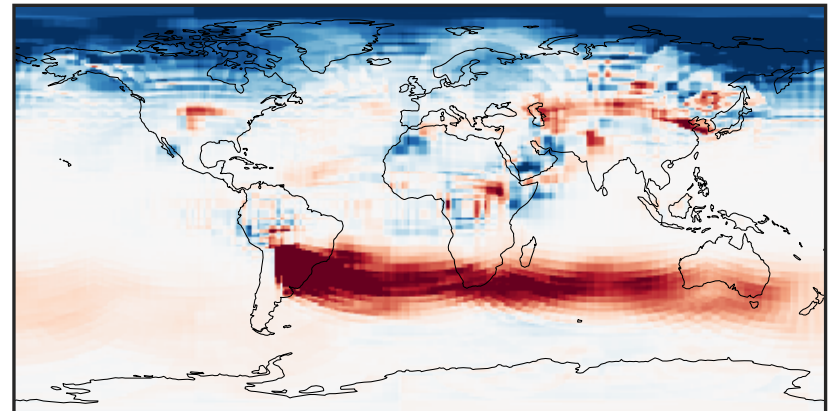
0.0015 0.0030
 $\mu\text{g}/\text{m}^3$

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



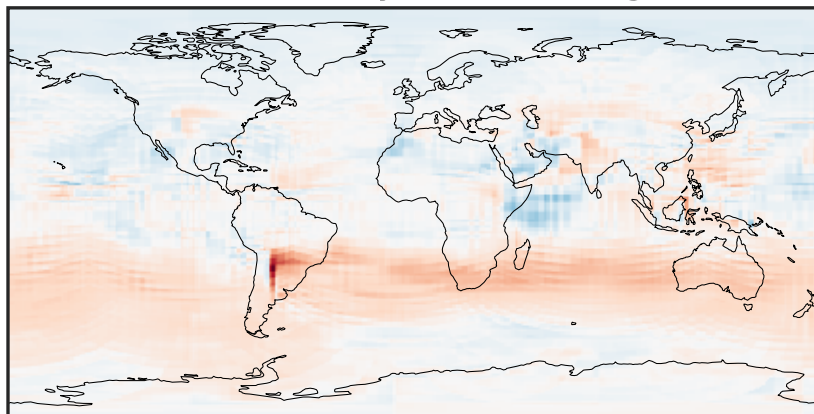
-0.005 0.000 0.005
 $\mu\text{g}/\text{m}^3$

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



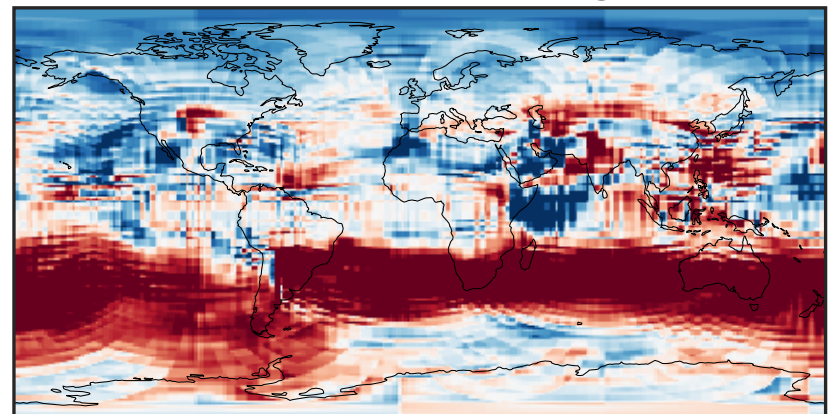
-0.0005 0.0000 0.0005
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

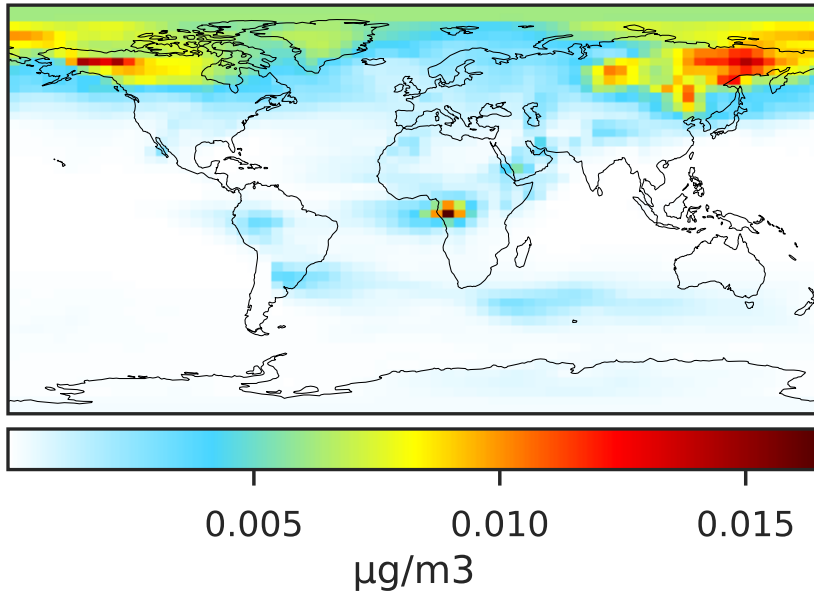
Ratio (1x1.25)
Dev/Ref, Fixed Range



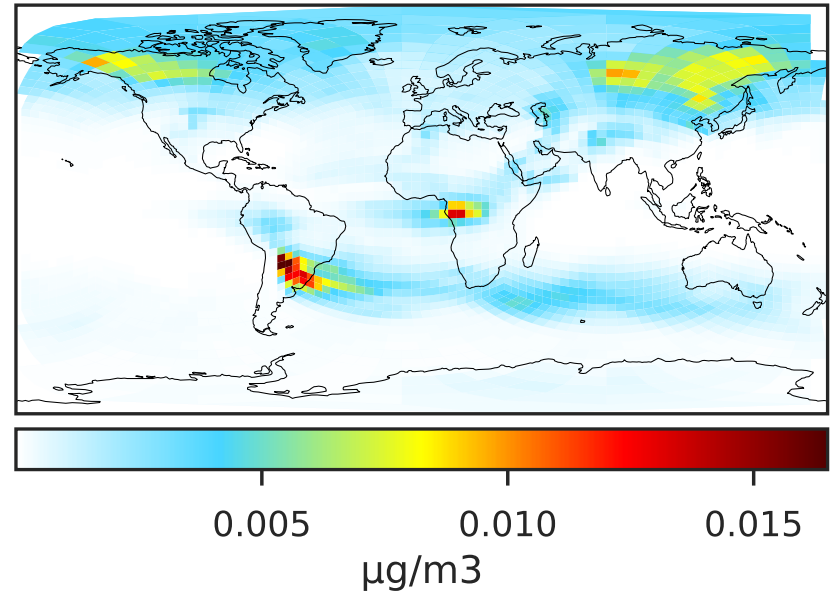
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_TSOA2 (Jul2019)

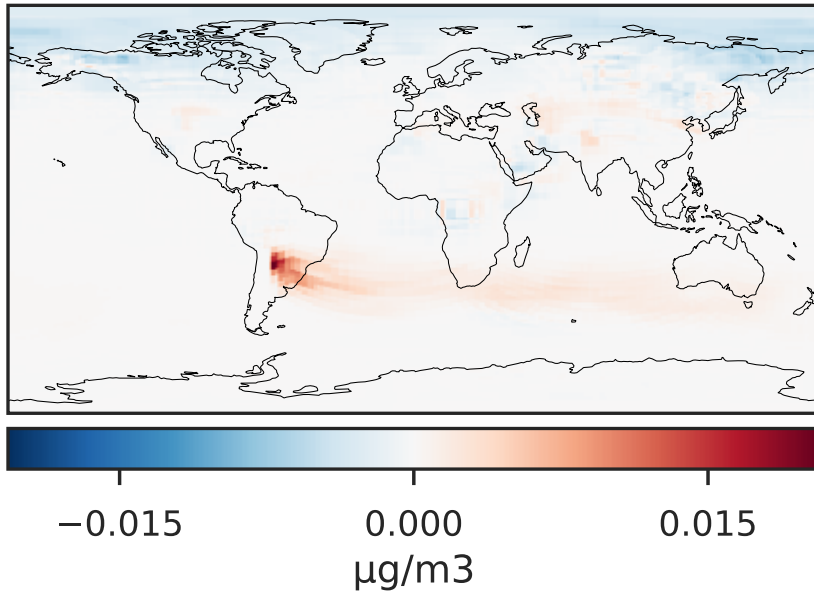
GCC_14.2.0 (Ref)
4.0x5.0



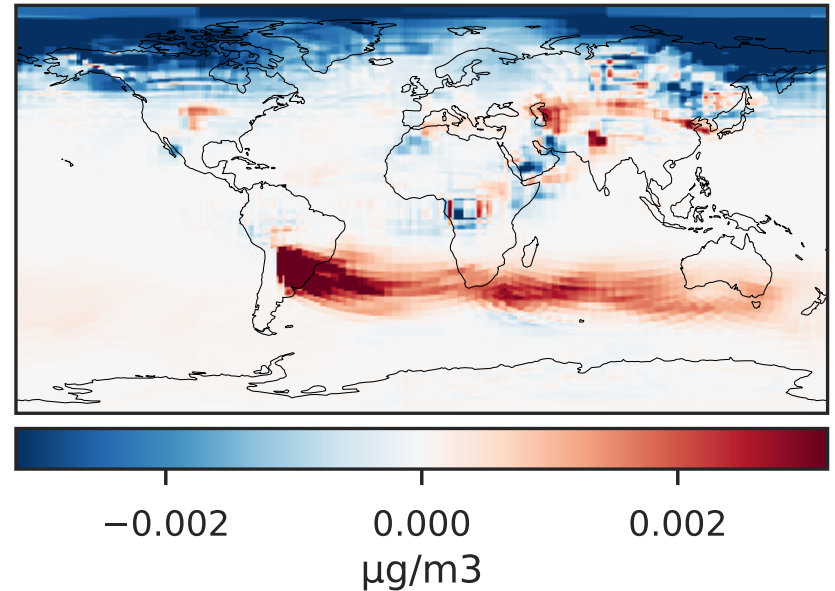
GCHP_14.2.0 (Dev)
c24



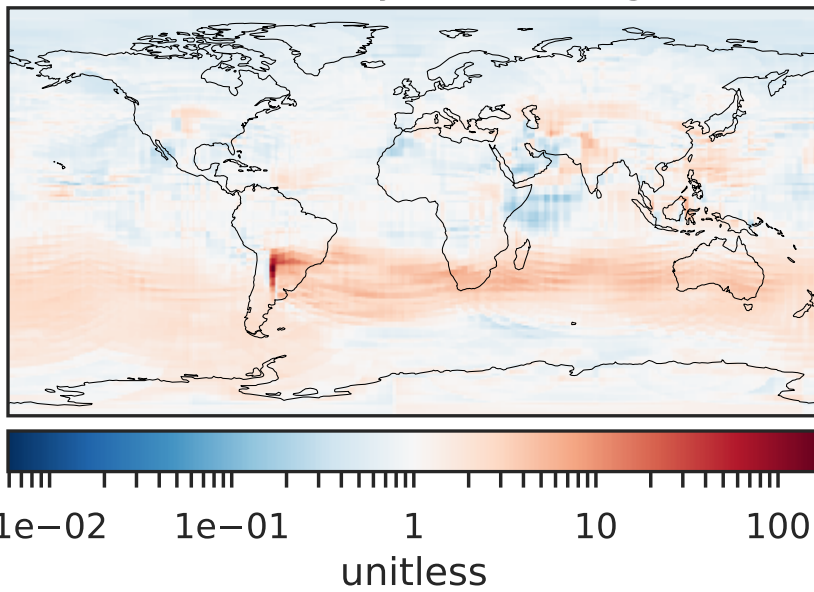
Difference (1x1.25)
Dev - Ref, Dynamic Range



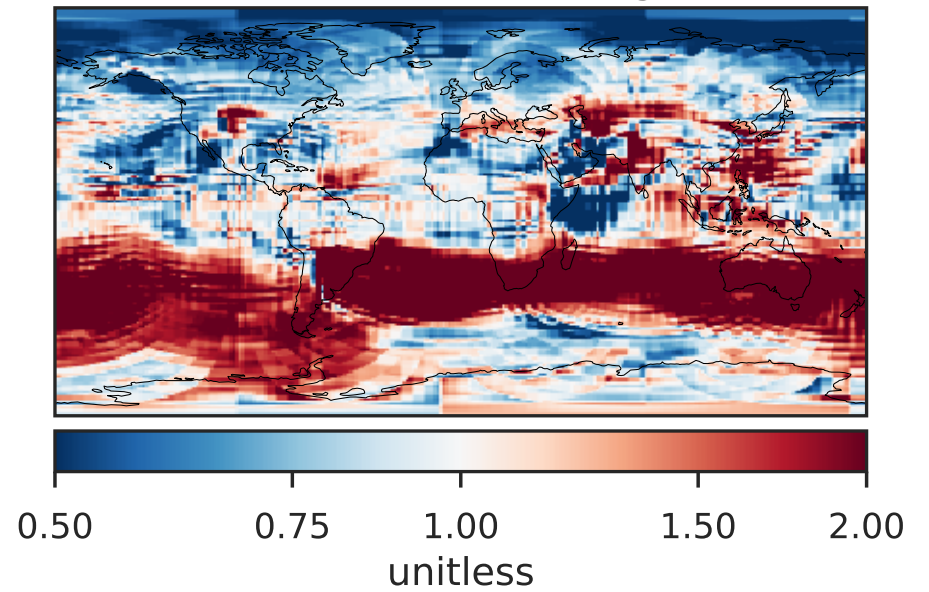
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

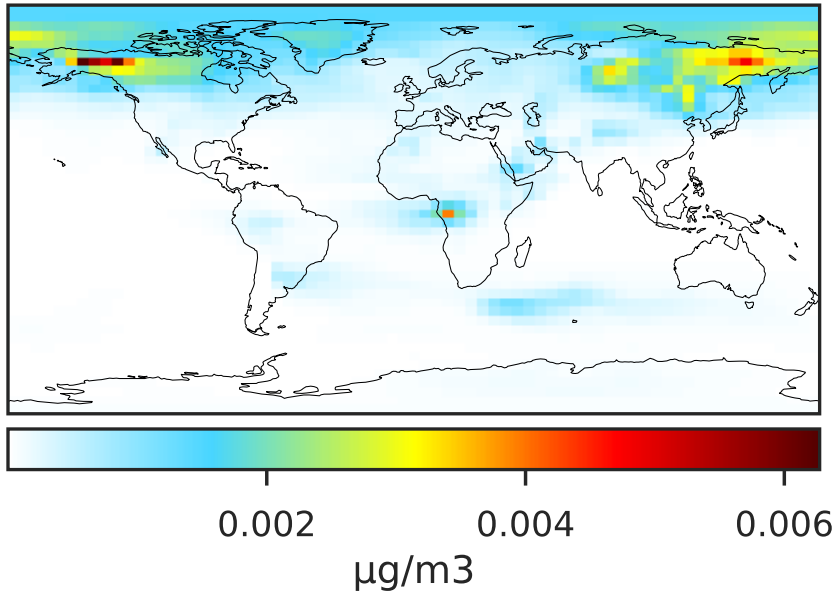


Ratio (1x1.25)
Dev/Ref, Fixed Range

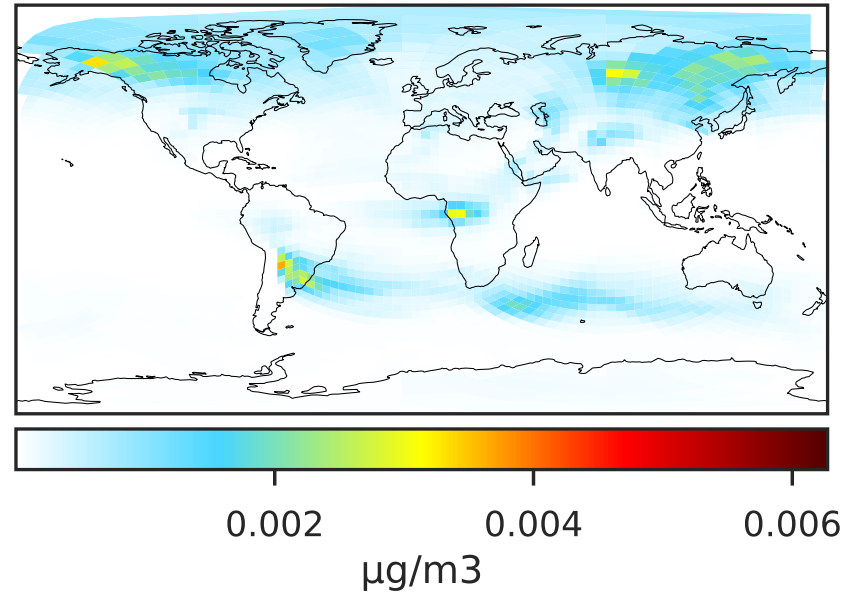


SpeciesConcVV_TSOA3 (Jul2019)

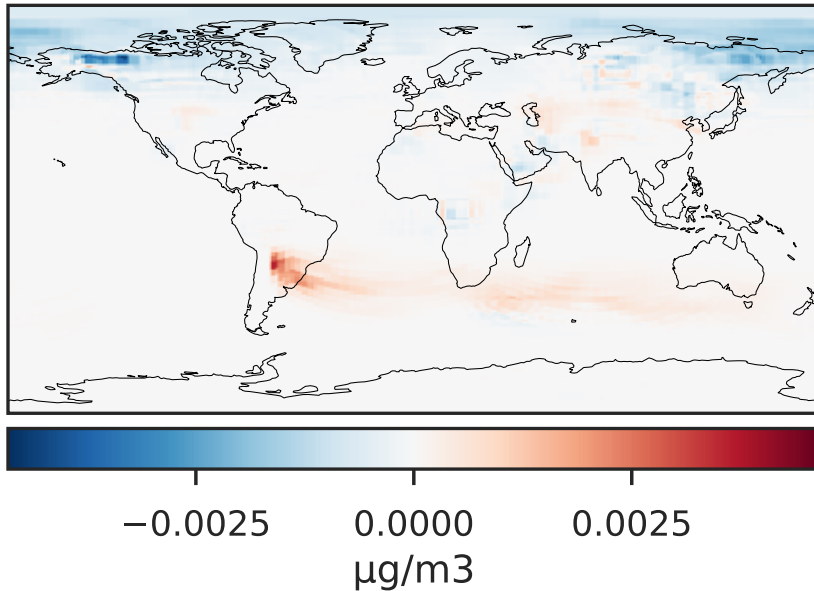
GCC_14.2.0 (Ref)
4.0x5.0



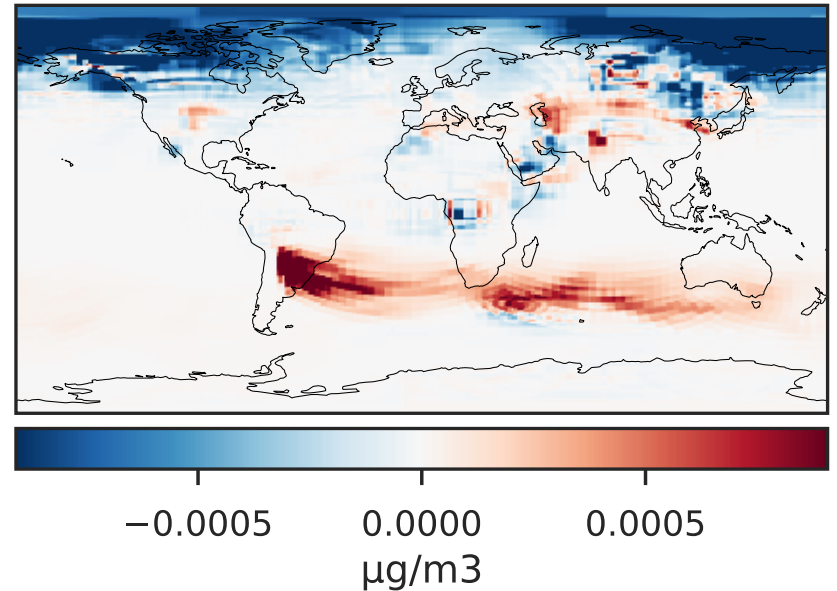
GCHP_14.2.0 (Dev)
c24



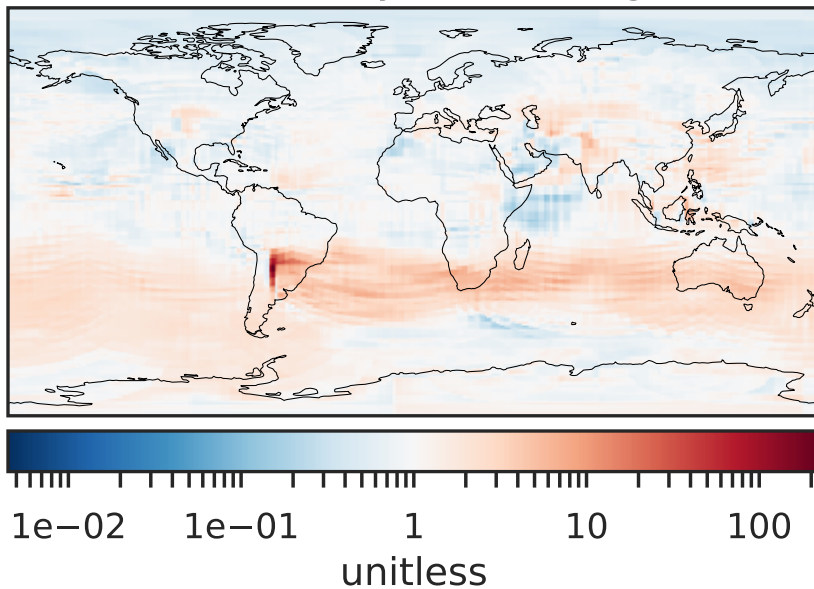
Difference (1x1.25)
Dev - Ref, Dynamic Range



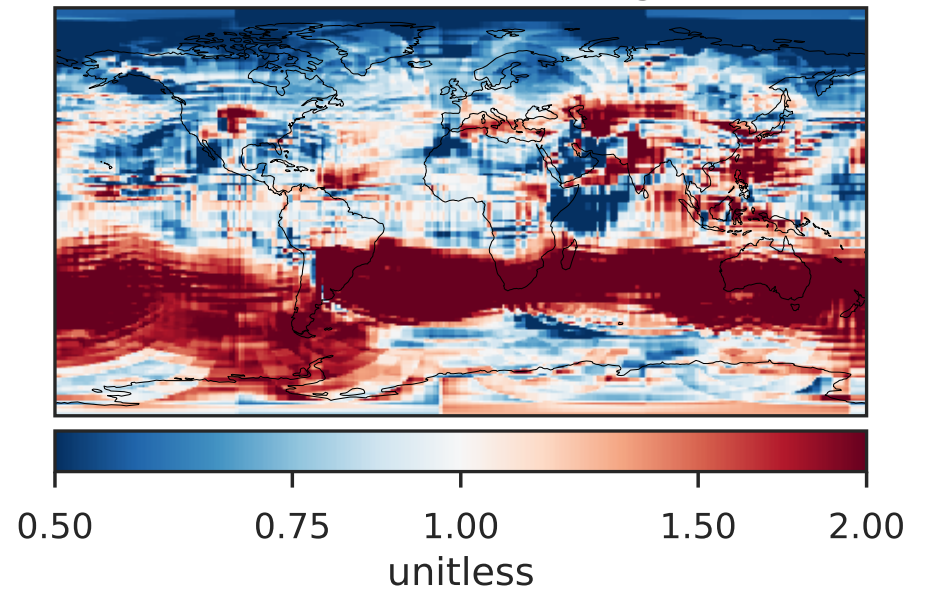
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

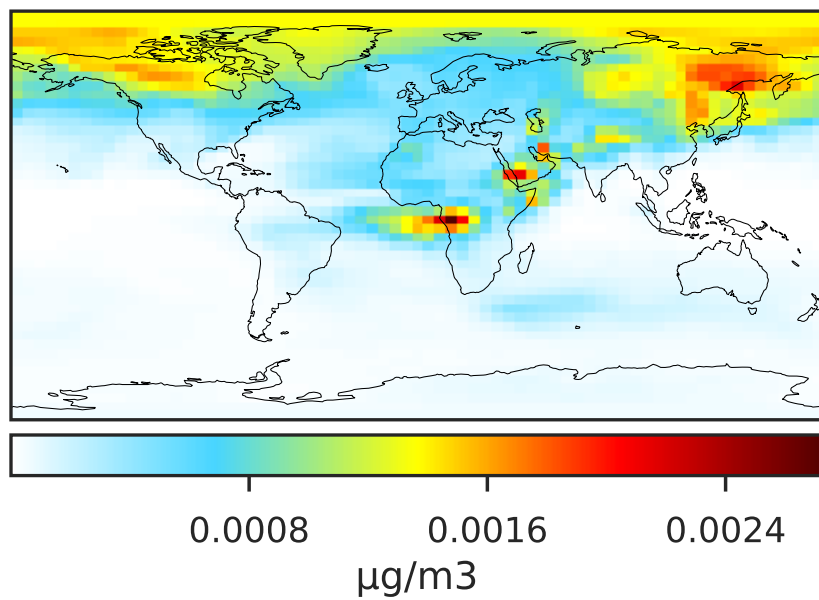


Ratio (1x1.25)
Dev/Ref, Fixed Range

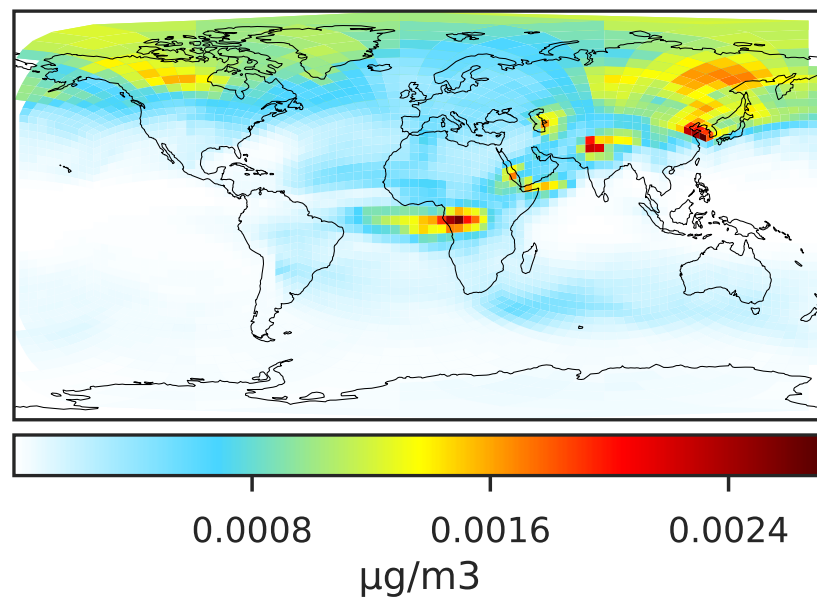


SpeciesConcVV_ASOA1 (Jul2019)

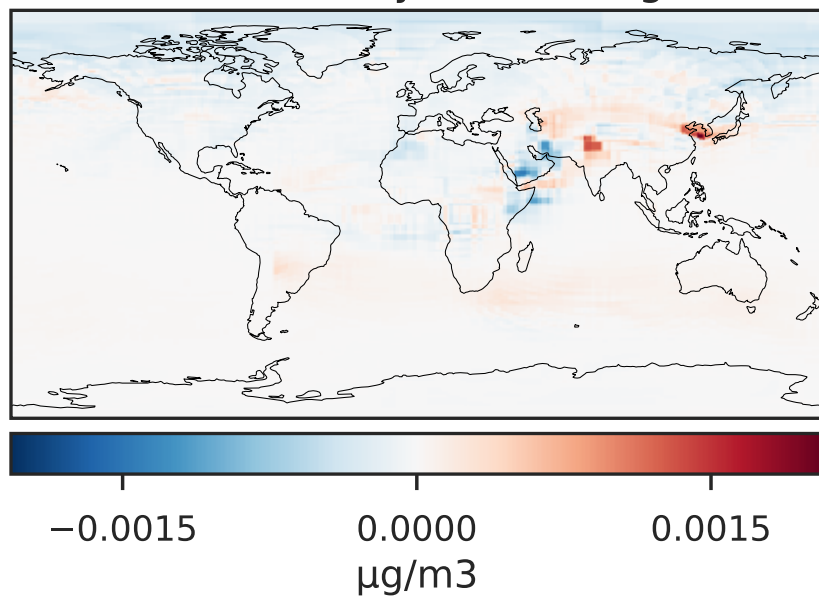
GCC_14.2.0 (Ref)
4.0x5.0



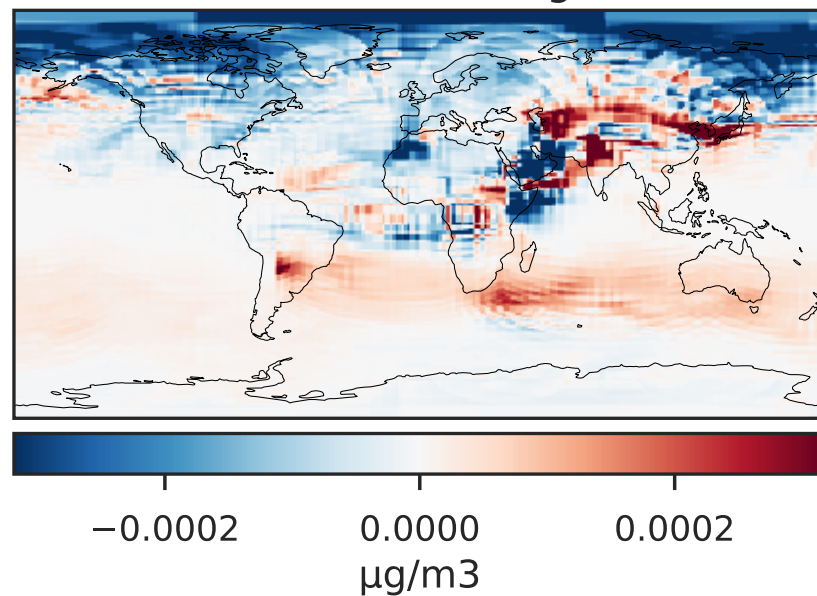
GCHP_14.2.0 (Dev)
c24



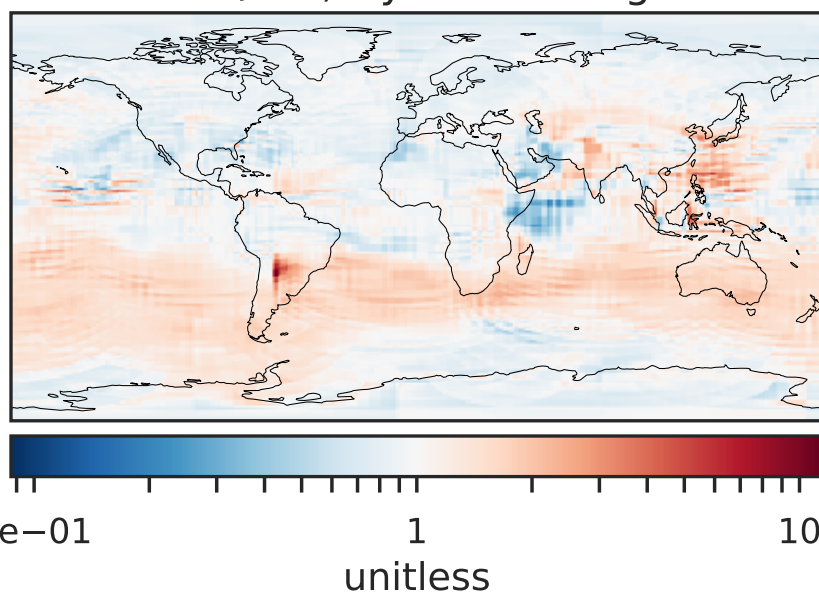
Difference (1x1.25)
Dev - Ref, Dynamic Range



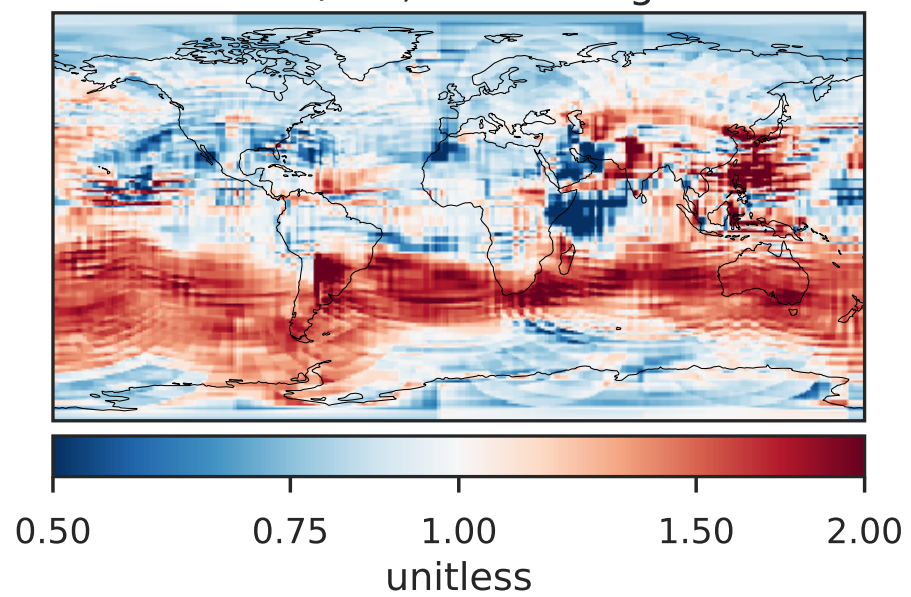
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

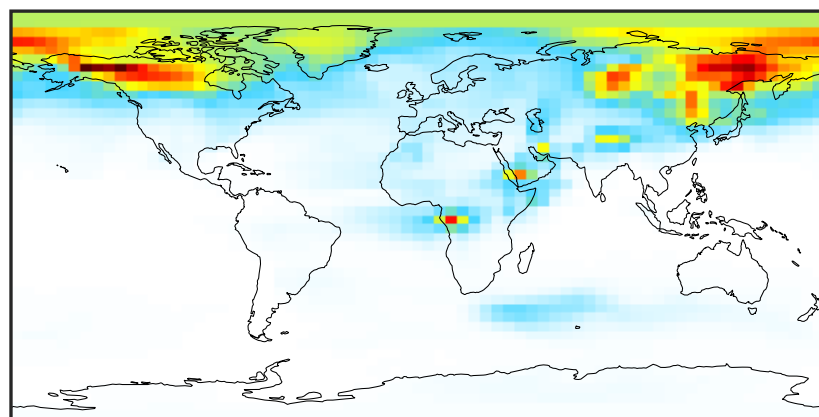


Ratio (1x1.25)
Dev/Ref, Fixed Range



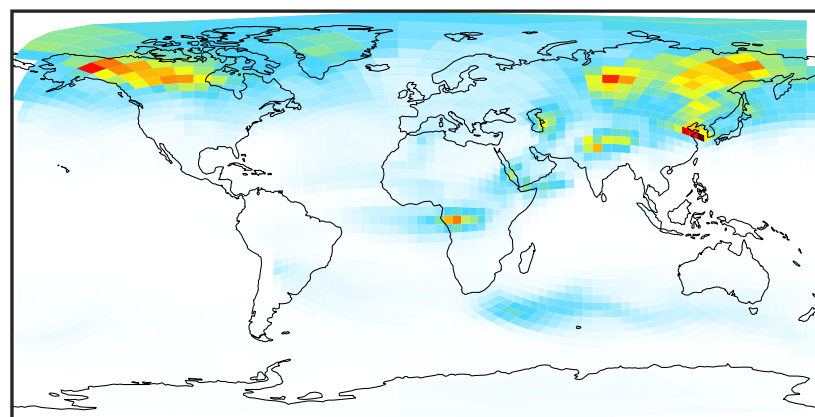
SpeciesConcVV_ASOA2 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



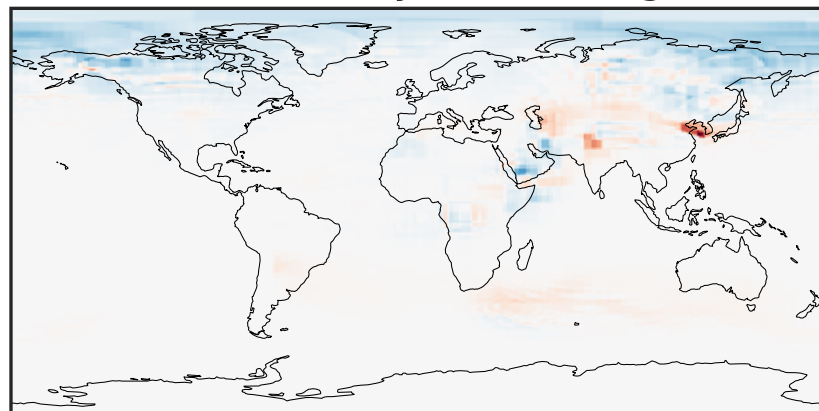
0.0002 0.0004 0.0006
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



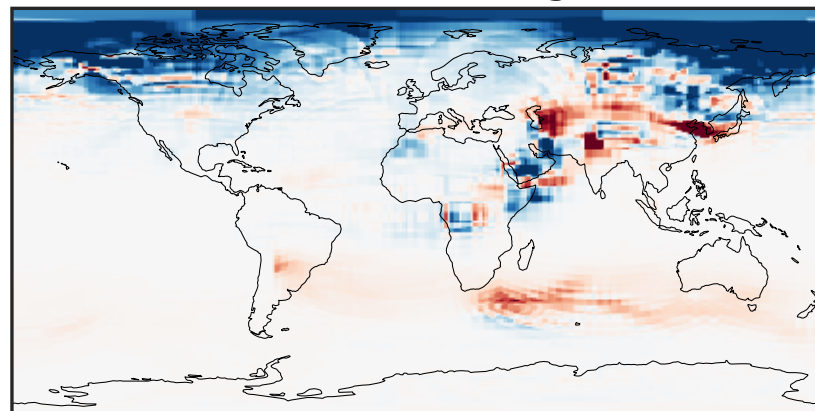
0.0002 0.0004 0.0006
 $\mu\text{g}/\text{m}^3$

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



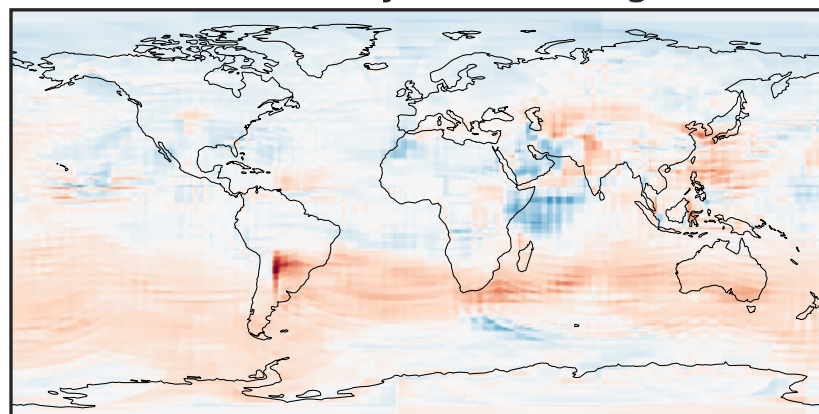
-0.0004 0.0000 0.0004
 $\mu\text{g}/\text{m}^3$

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



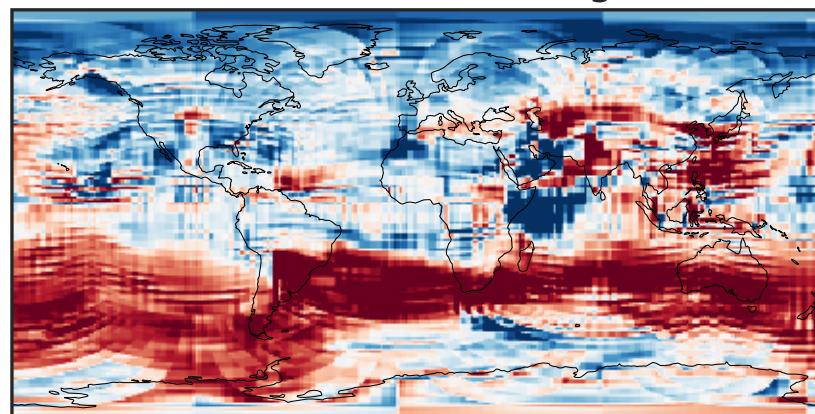
-8 0 8
 $\mu\text{g}/\text{m}^3$ $1\text{e}-5$

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



$1\text{e}-01$ 1 10
unitless

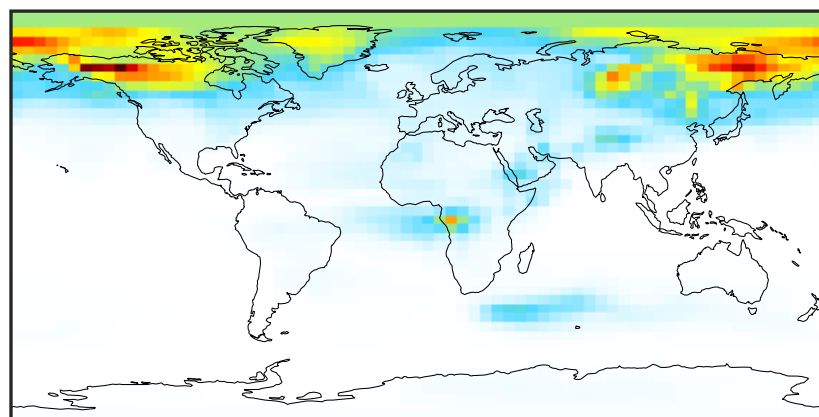
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

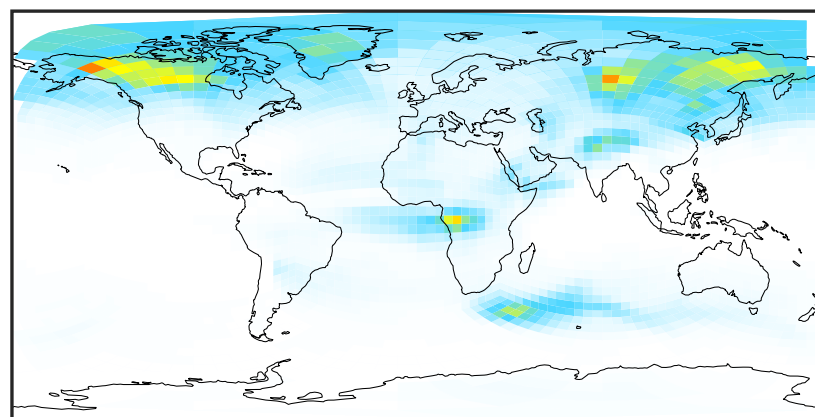
SpeciesConcVV_ASOA3 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



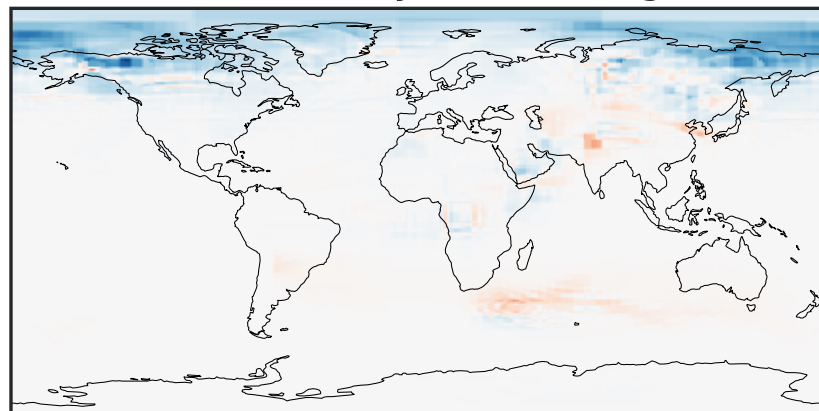
0.0004 0.0008 0.0012
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



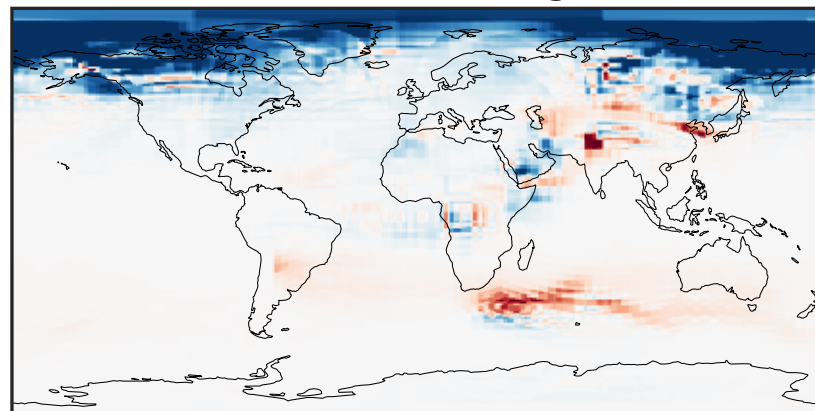
0.0004 0.0008 0.0012
 $\mu\text{g}/\text{m}^3$

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



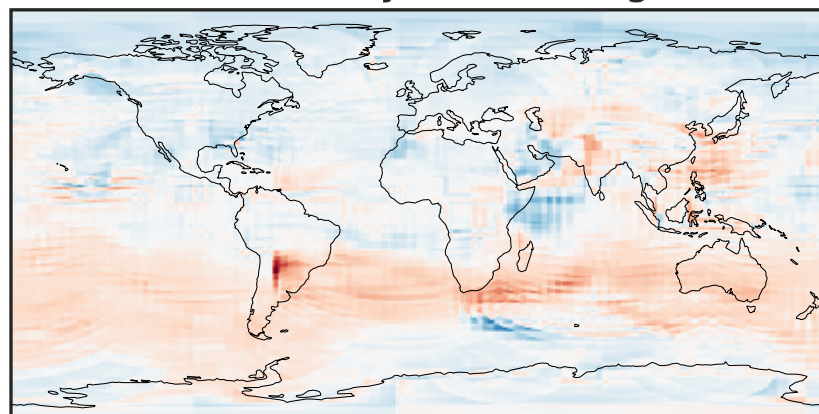
-0.0005 0.0000 0.0005
 $\mu\text{g}/\text{m}^3$

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



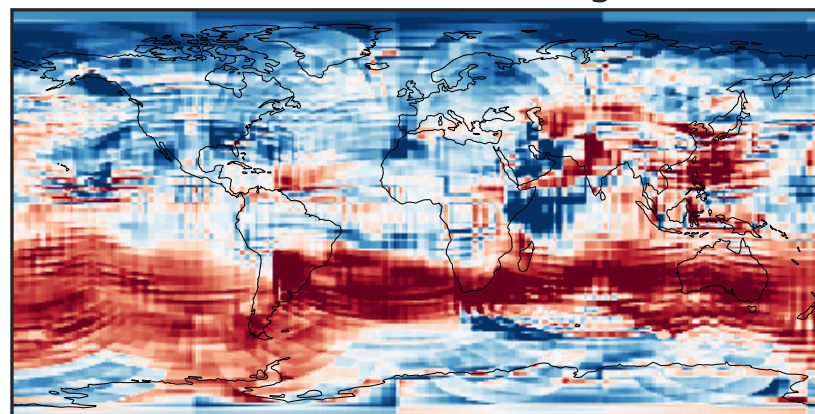
-0.00015 0.00000 0.00015
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

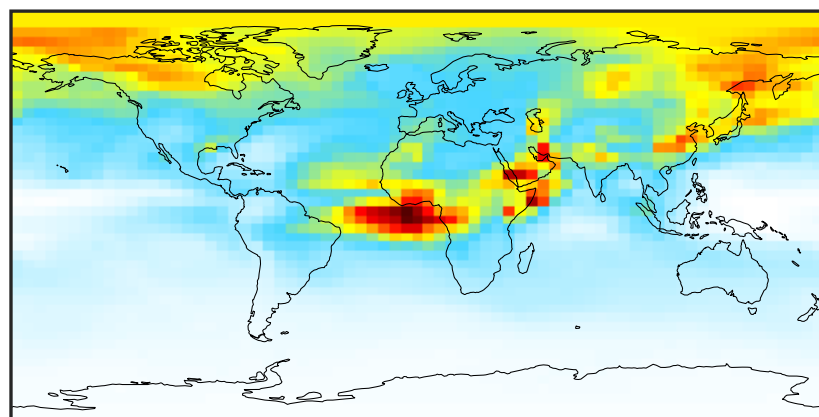
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

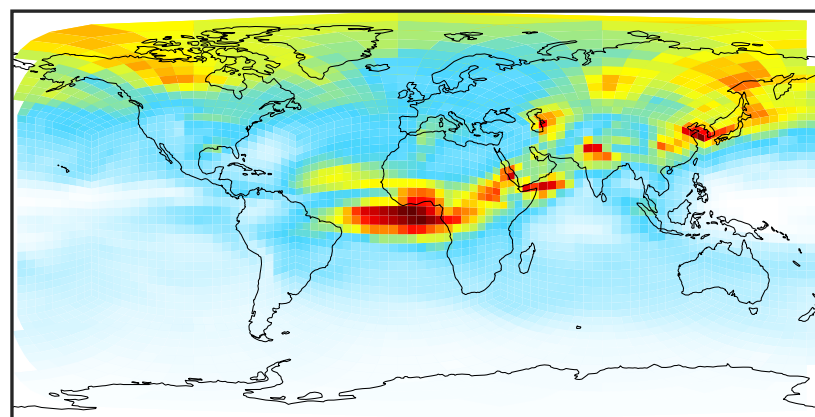
SpeciesConcVV_ASOAN (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



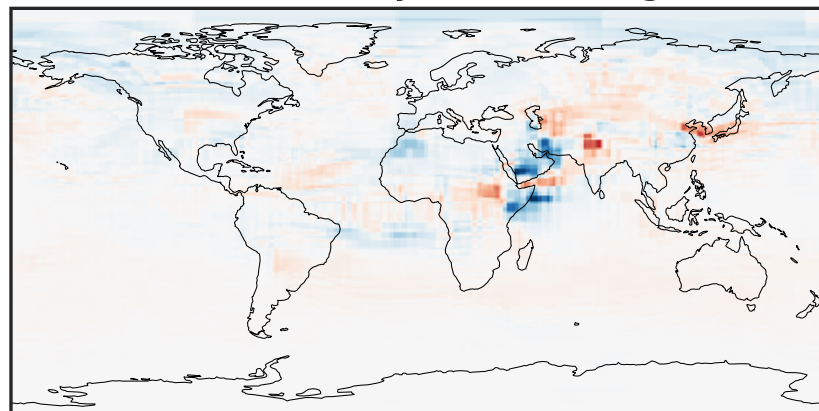
0.006 0.012 0.018
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



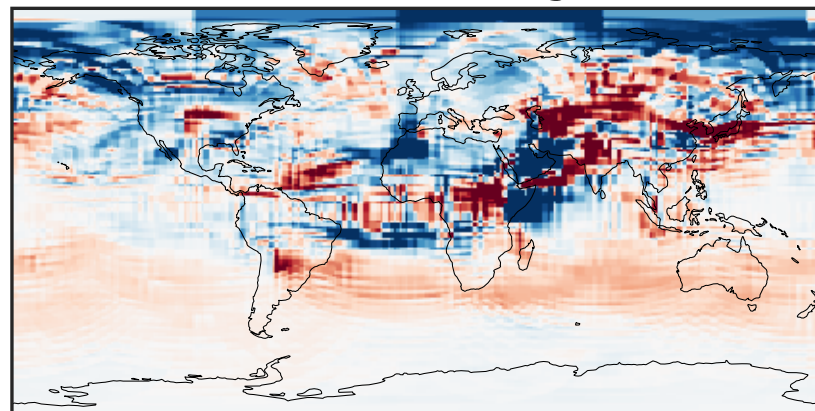
0.006 0.012 0.018
 $\mu\text{g}/\text{m}^3$

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



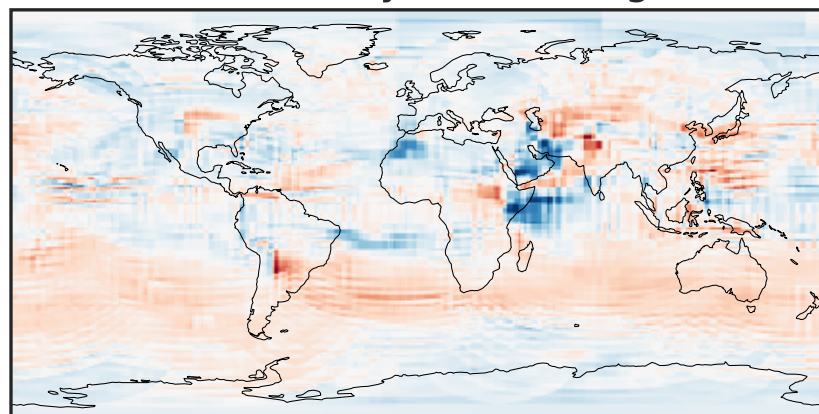
-0.006 0.000 0.006
 $\mu\text{g}/\text{m}^3$

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



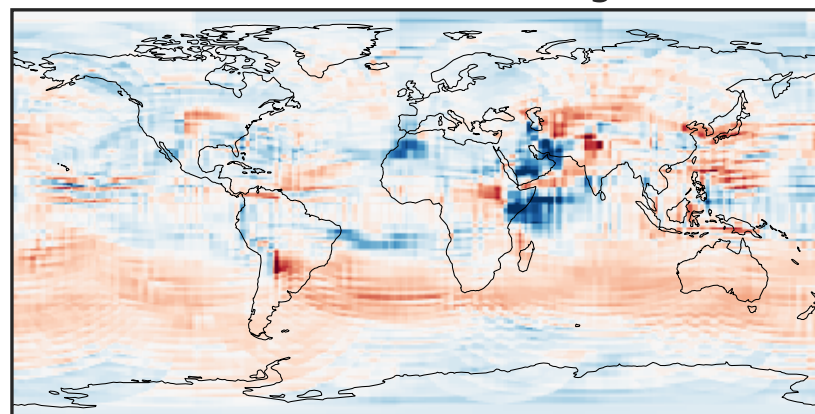
-0.0008 0.0000 0.0008
 $\mu\text{g}/\text{m}^3$

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



0.404 0.702 1.000 1.739 2.478
unitless

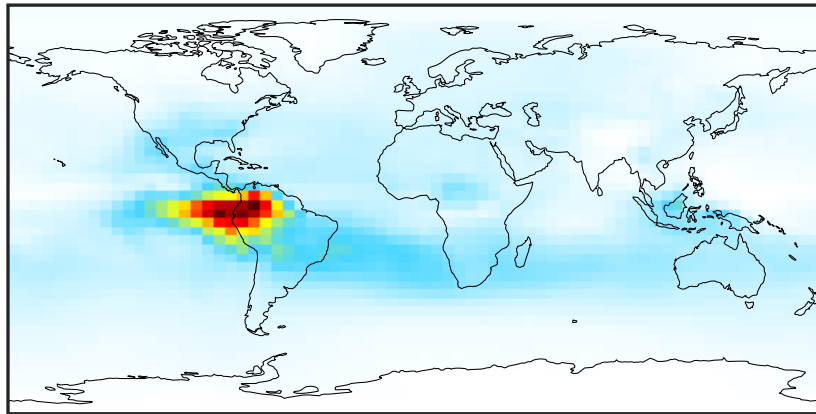
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

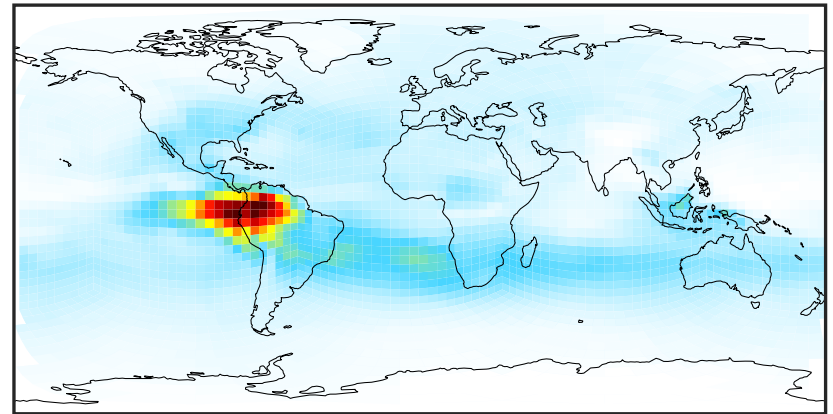
SpeciesConcVV_TSOG0 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



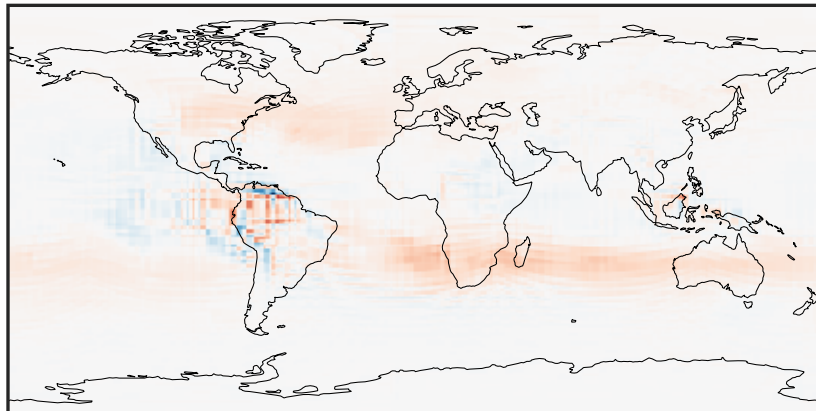
0.0025 0.0050 0.0075
μg/m3

GCHP_14.2.0 (Dev)
c24



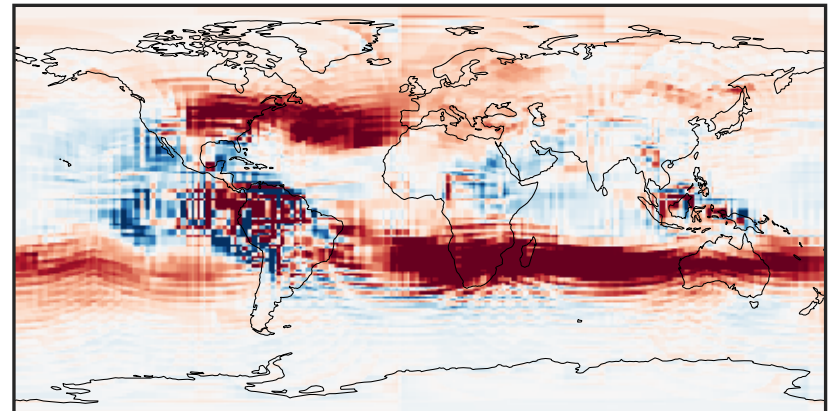
0.0025 0.0050 0.0075
μg/m3

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



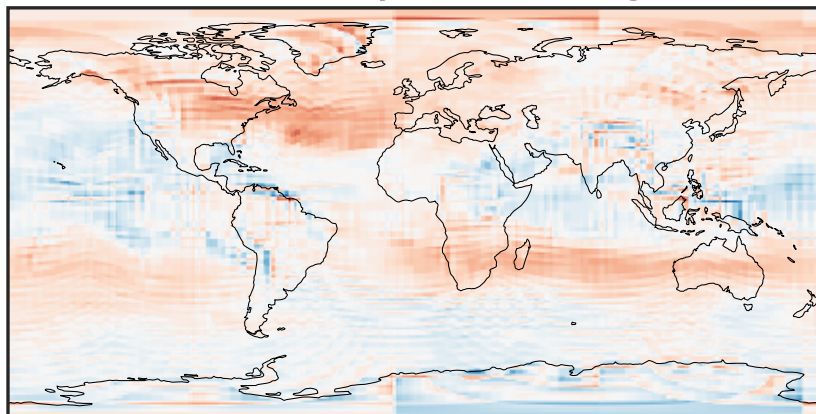
-0.0015 0.0000 0.0015
μg/m3

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



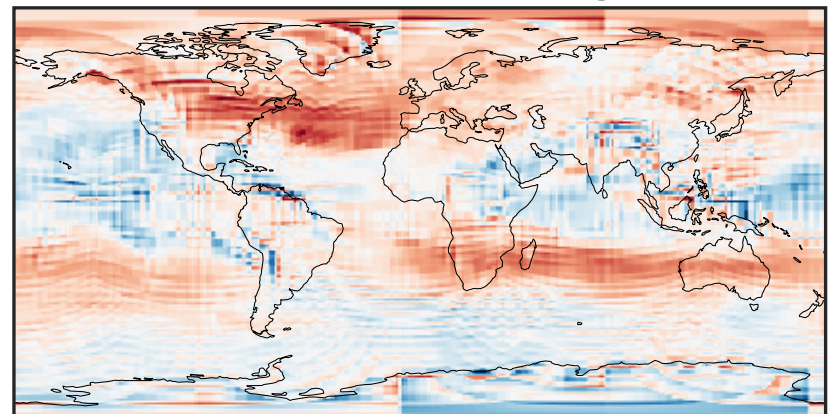
-0.0002 0.0000 0.0002
μg/m3

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



0.325 0.663 1.000 2.037 3.075
unitless

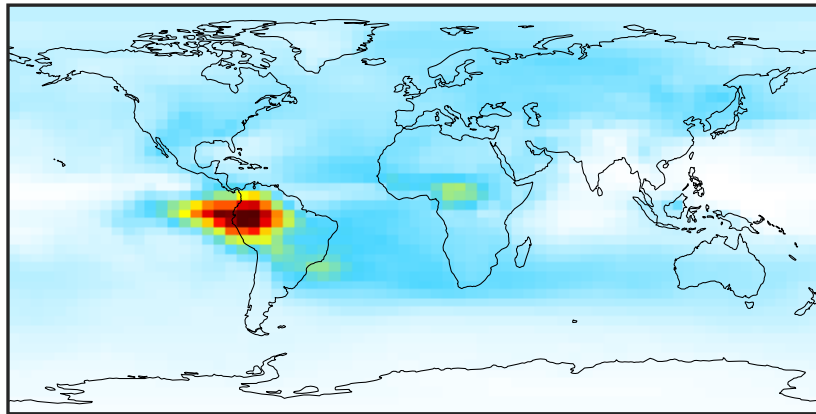
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

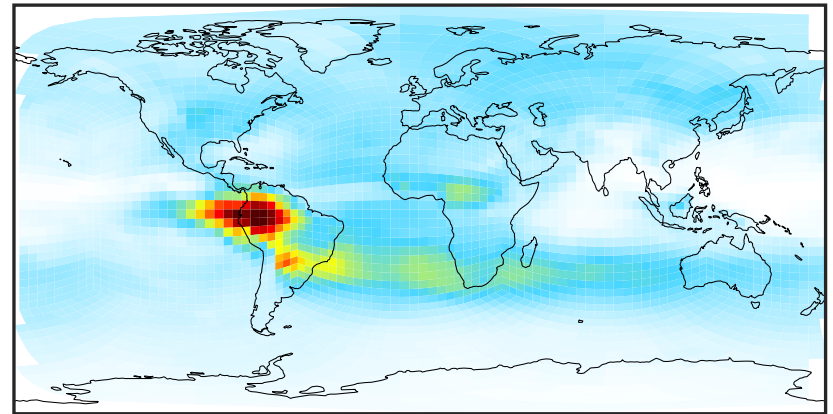
SpeciesConcVV_TSOG1 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



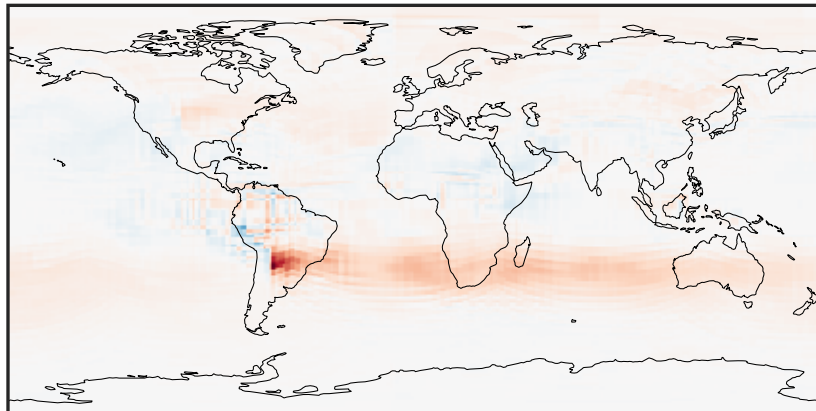
0.0025 0.0050 0.0075
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



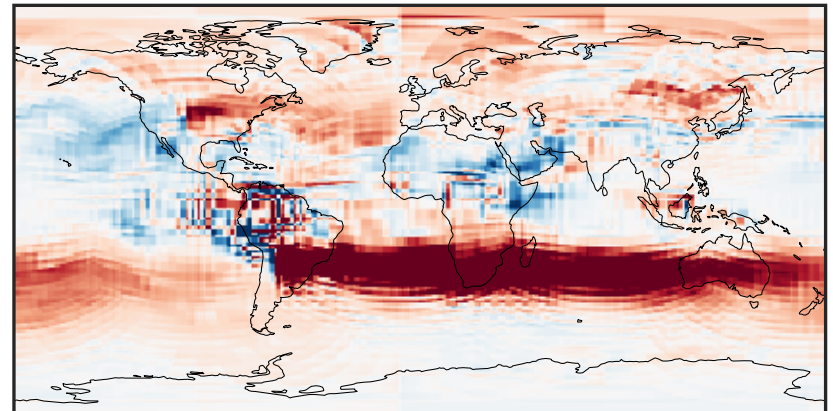
0.0025 0.0050 0.0075
 $\mu\text{g}/\text{m}^3$

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



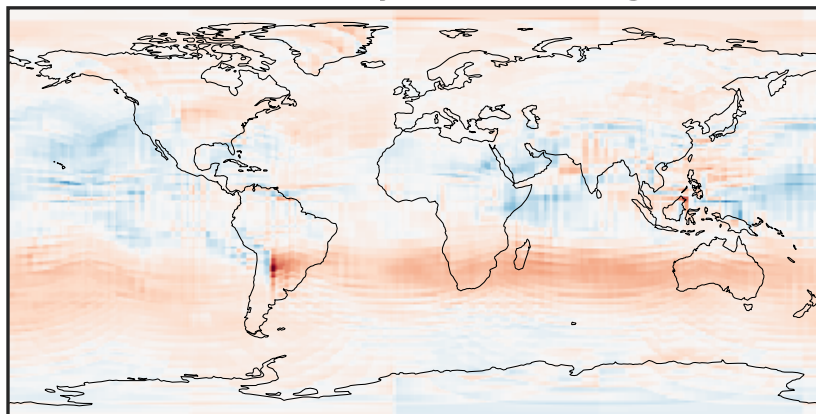
-0.0025 0.0000 0.0025
 $\mu\text{g}/\text{m}^3$

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



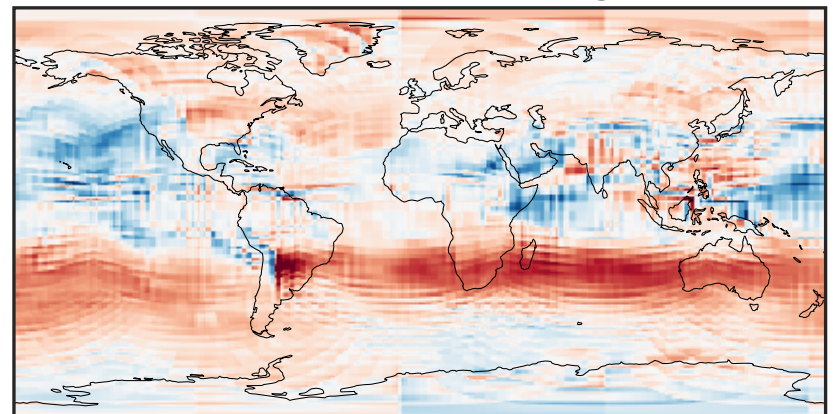
-0.0004 0.0000 0.0004
 $\mu\text{g}/\text{m}^3$

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



0.222 0.611 1.000 2.754 4.508
unitless

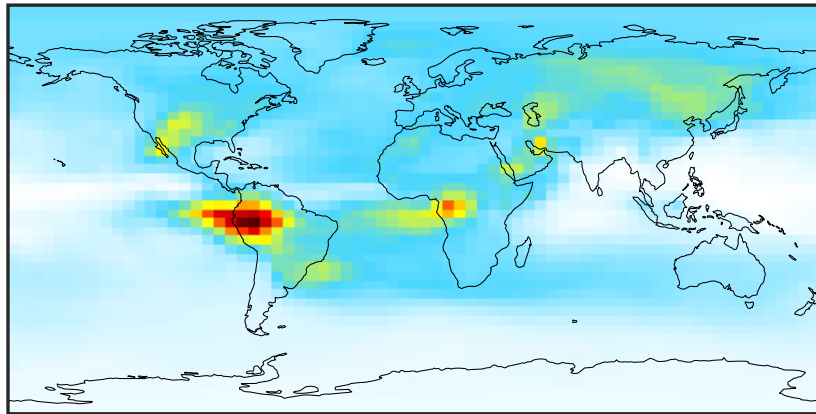
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

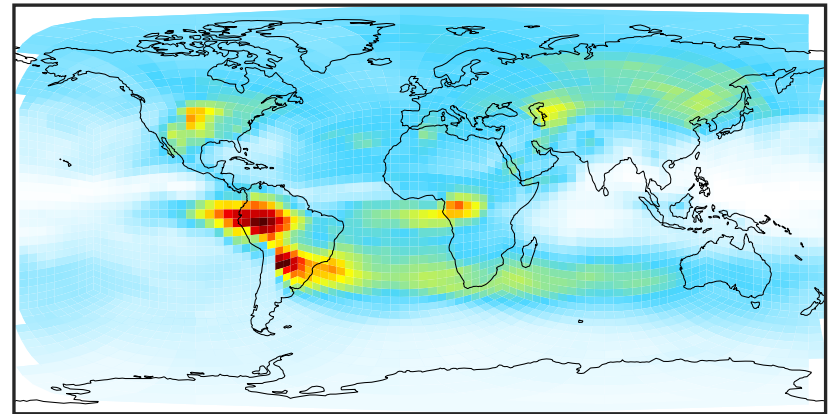
SpeciesConcVV_TSOG2 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



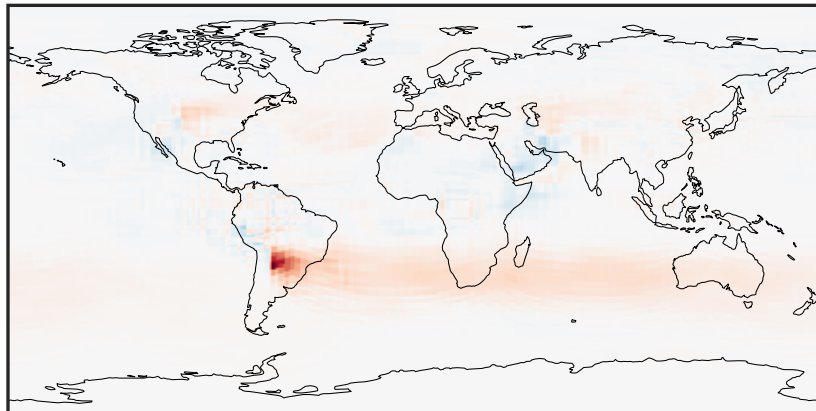
0.0004 0.0253 0.0505 0.0758 0.1015
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



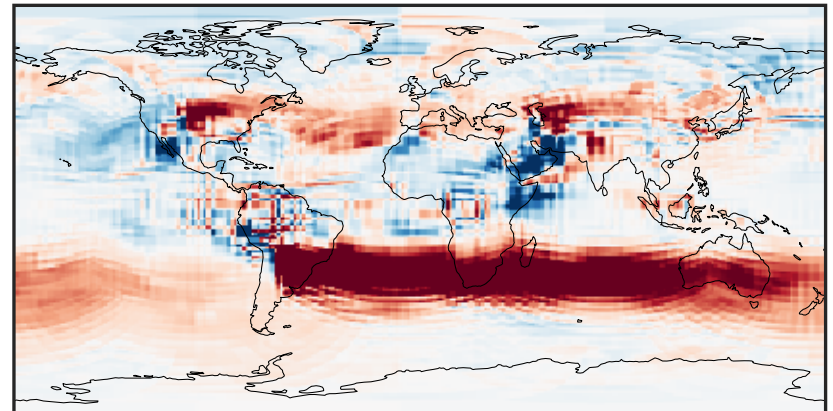
0.0004 0.0253 0.0505 0.0758 0.1015
 $\mu\text{g}/\text{m}^3$

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



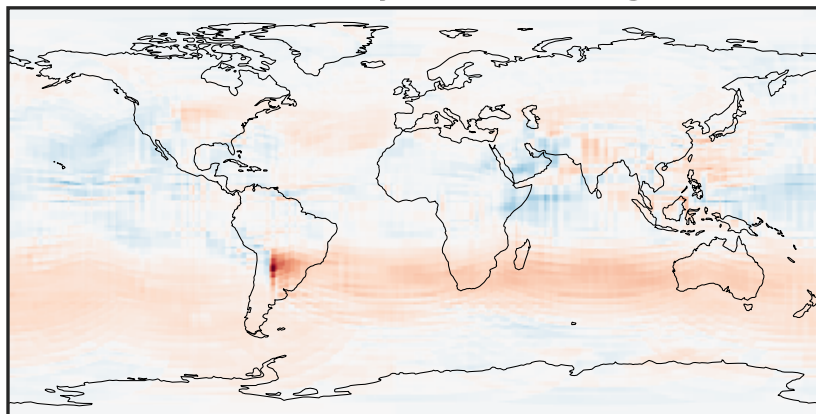
-0.0897 -0.0449 0.0000 0.0449 0.0897
 $\mu\text{g}/\text{m}^3$

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



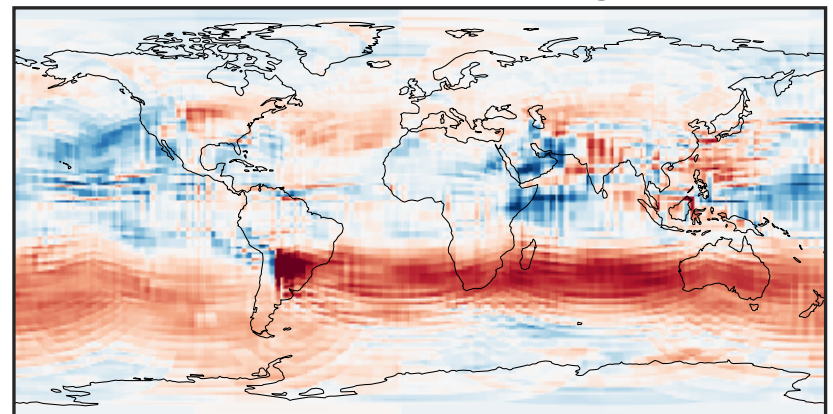
-0.005 0.000 0.005
 $\mu\text{g}/\text{m}^3$

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



0.125 0.562 1.000 4.510 8.021
unitless

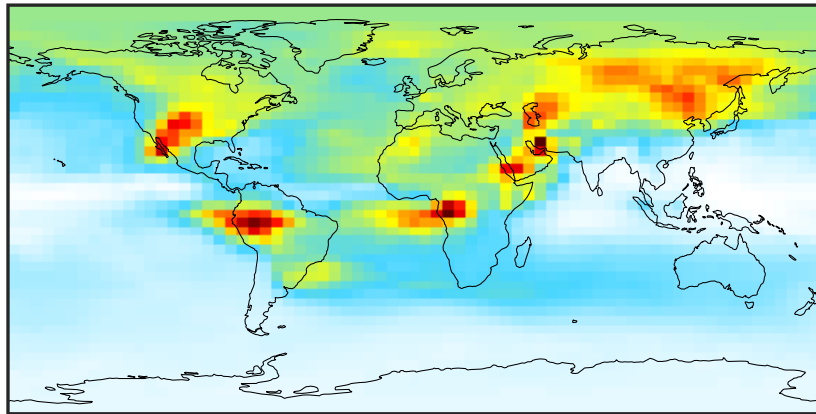
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

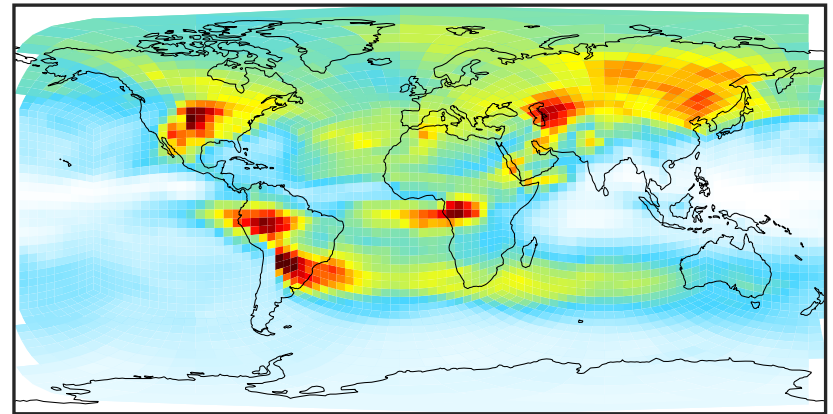
SpeciesConcVV_TSOG3 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



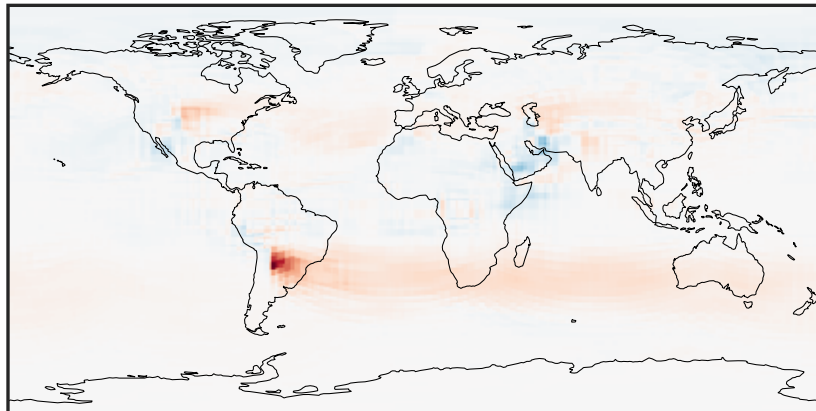
0.0008 0.0325 0.0651 0.0976 0.1310
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



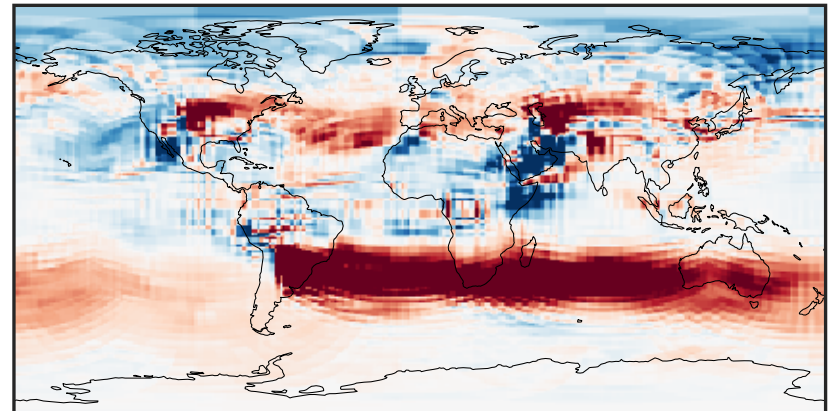
0.0008 0.0325 0.0651 0.0976 0.1310
 $\mu\text{g}/\text{m}^3$

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



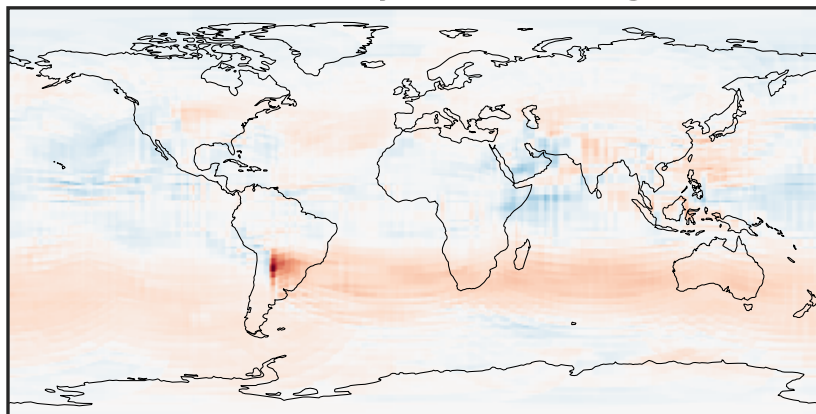
-0.1512 -0.0756 0.0000 0.0756 0.1512
 $\mu\text{g}/\text{m}^3$

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



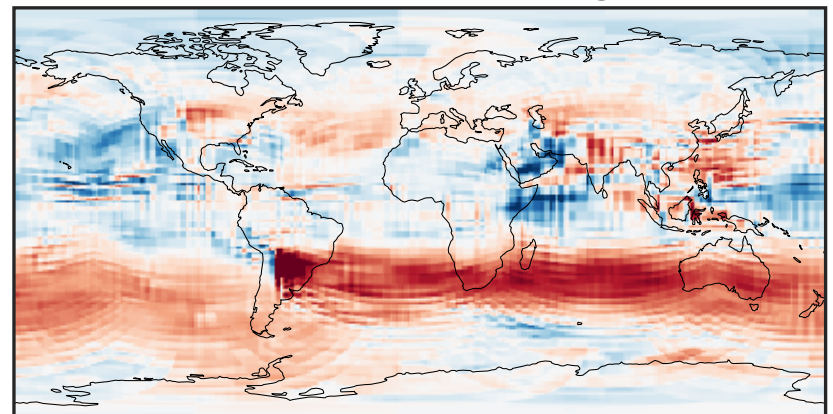
-0.008 0.000 0.008
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

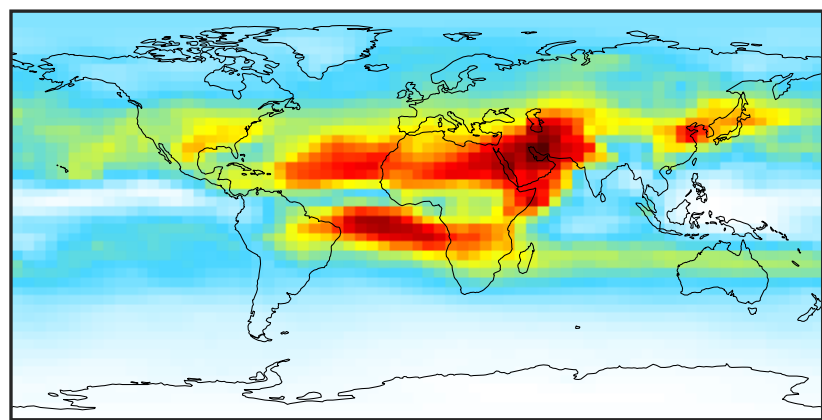
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

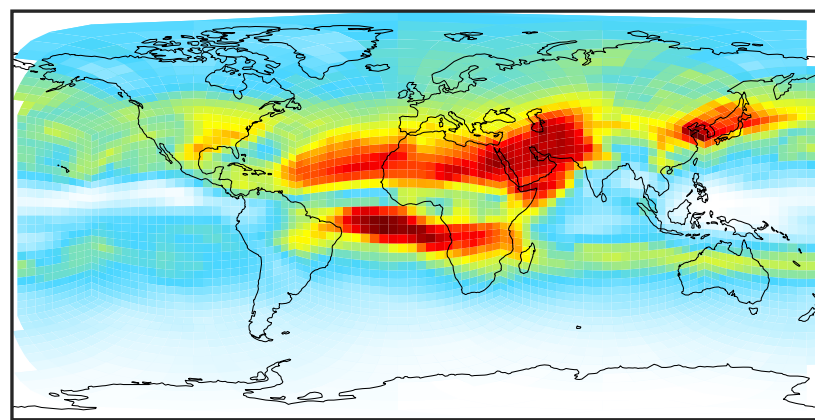
SpeciesConcVV_ASOG1 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



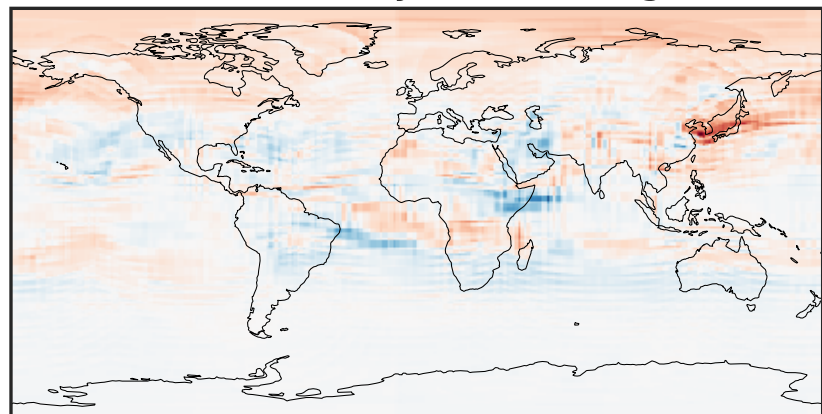
0.0008 0.0016 0.0024
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



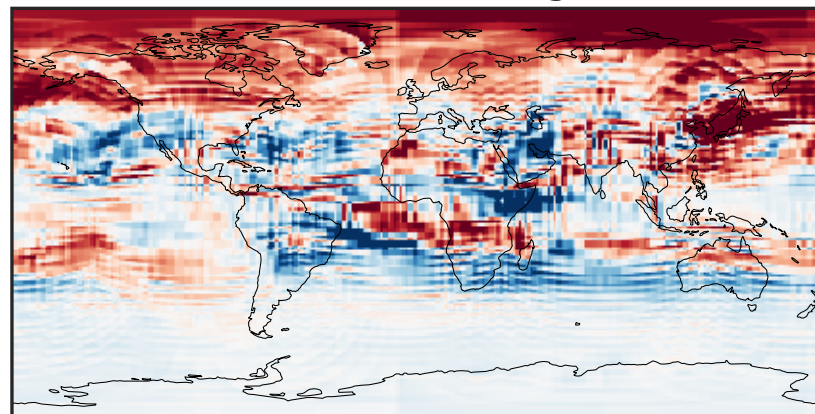
0.0008 0.0016 0.0024
 $\mu\text{g}/\text{m}^3$

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



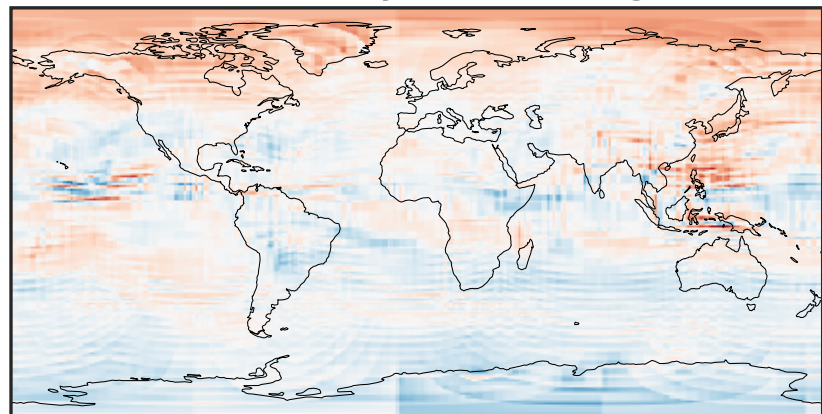
-0.0005 0.0000 0.0005
 $\mu\text{g}/\text{m}^3$

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



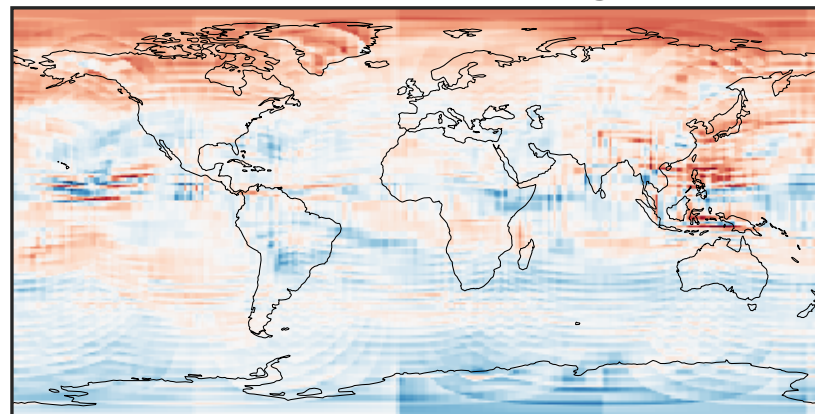
-0.00015 0.00000 0.00015
 $\mu\text{g}/\text{m}^3$

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



0.395 0.697 1.000 1.767 2.533
unitless

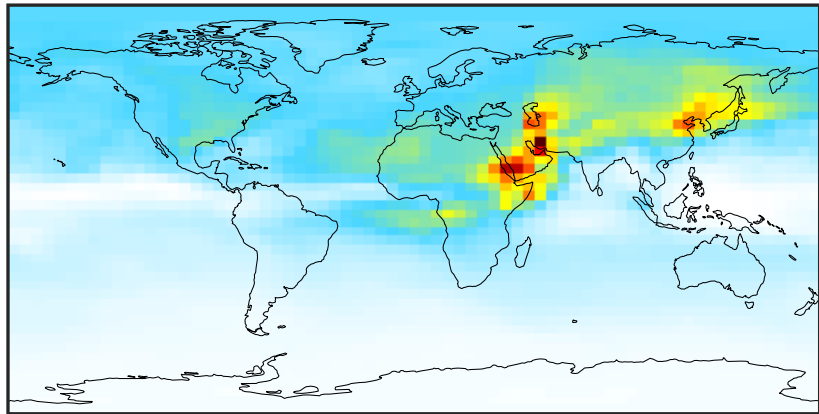
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

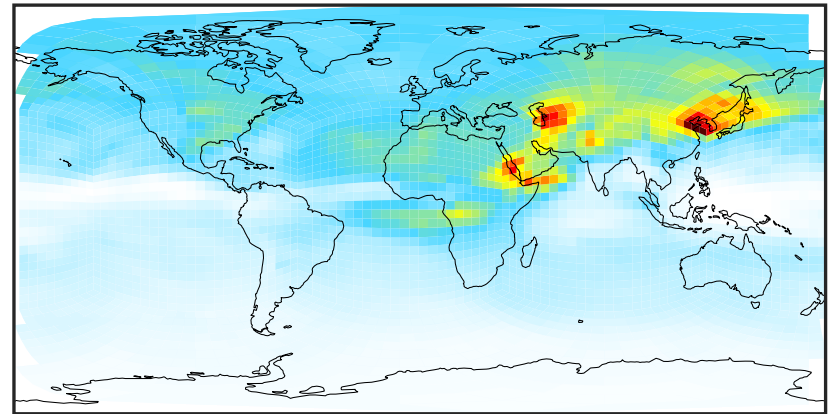
SpeciesConcVV_ASOG2 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



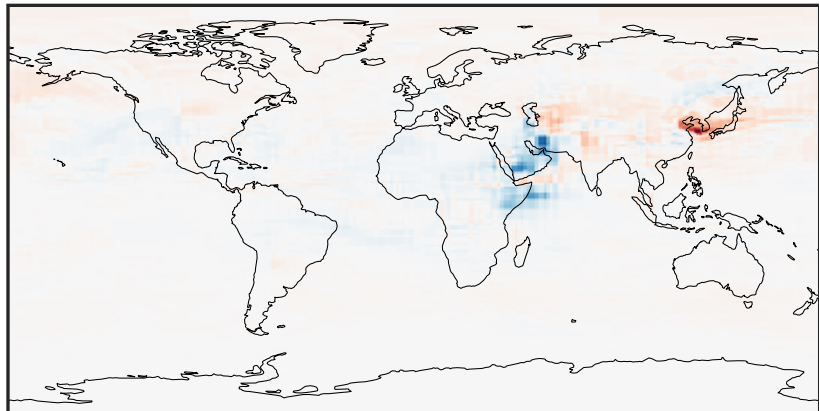
0.0015 0.0030 0.0045
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



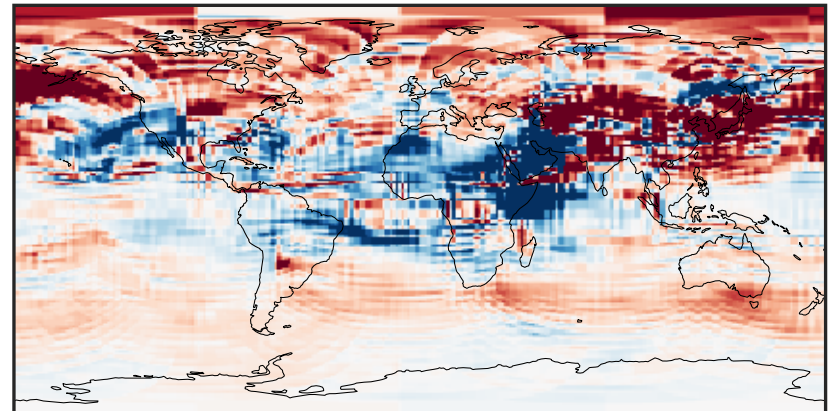
0.0015 0.0030 0.0045
 $\mu\text{g}/\text{m}^3$

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



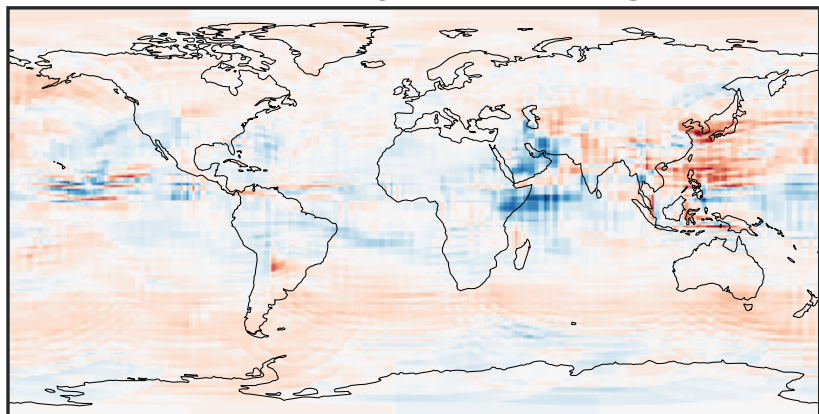
-0.0015 0.0000 0.0015
 $\mu\text{g}/\text{m}^3$

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



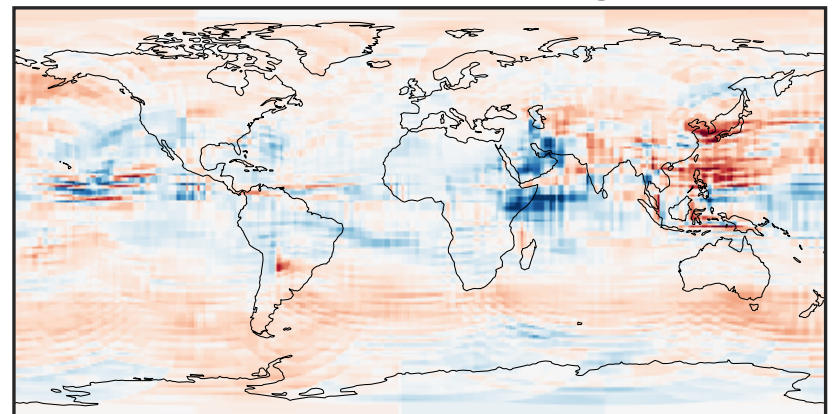
-8 0 8
 $\mu\text{g}/\text{m}^3$ $1\text{e}-5$

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



0.398 0.699 1.000 1.756 2.512
unitless

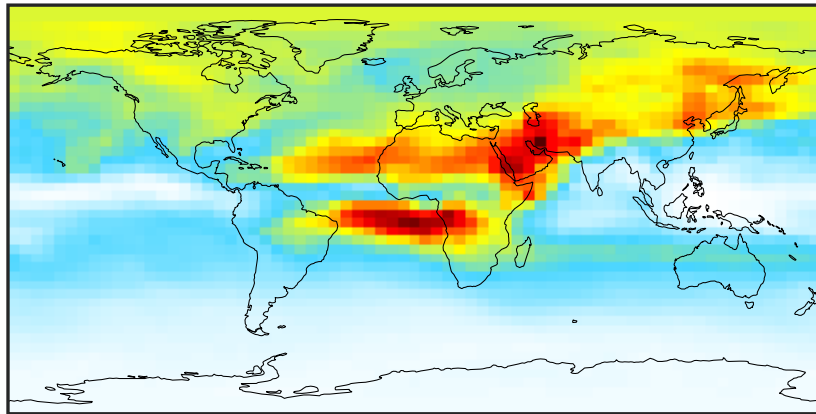
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

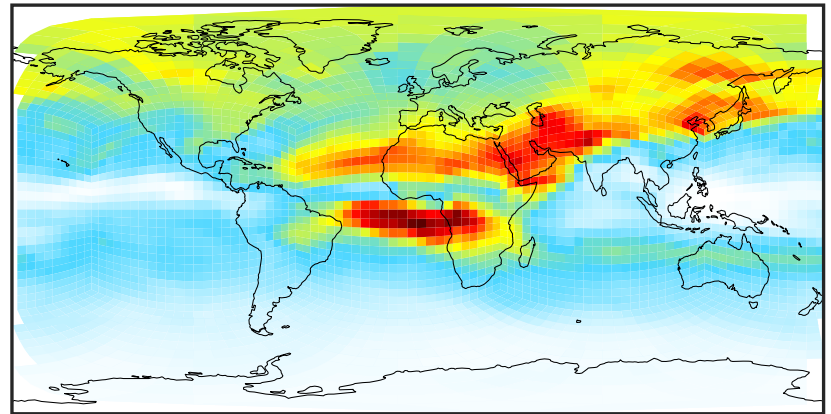
SpeciesConcVV_ASOG3 (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



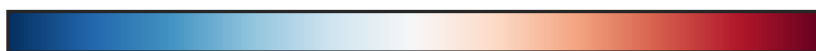
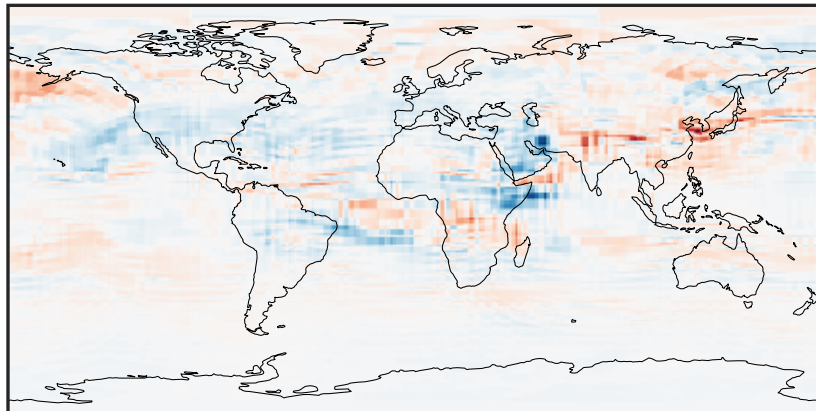
0.015 0.030
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



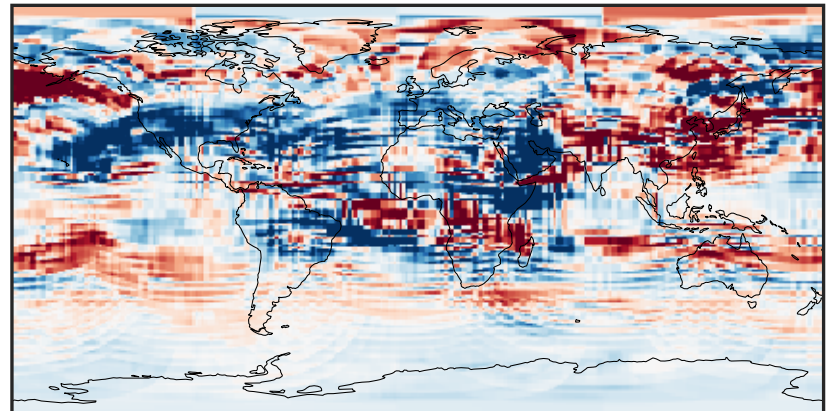
0.015 0.030
 $\mu\text{g}/\text{m}^3$

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



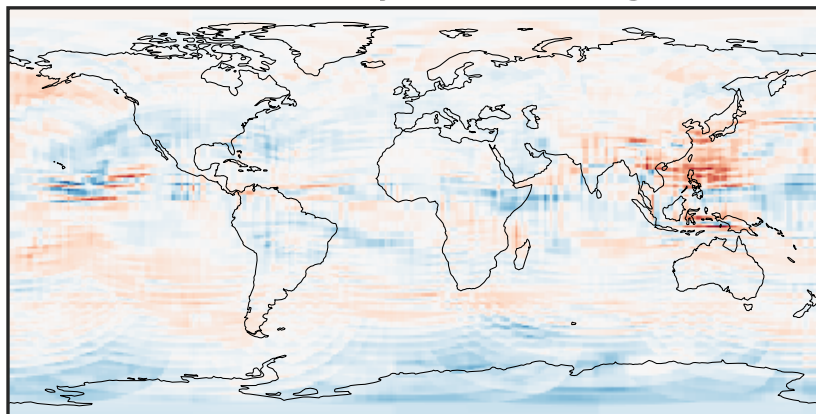
-0.006 0.000 0.006
 $\mu\text{g}/\text{m}^3$

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



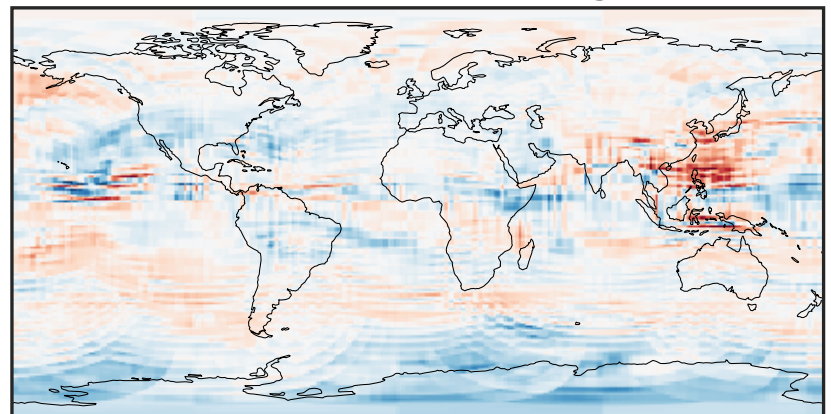
-0.001 0.000 0.001
 $\mu\text{g}/\text{m}^3$

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



0.398 0.699 1.000 1.756 2.513
unitless

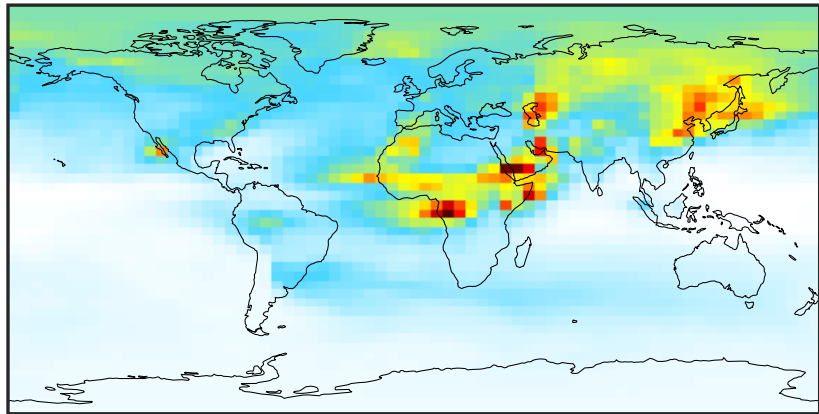
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

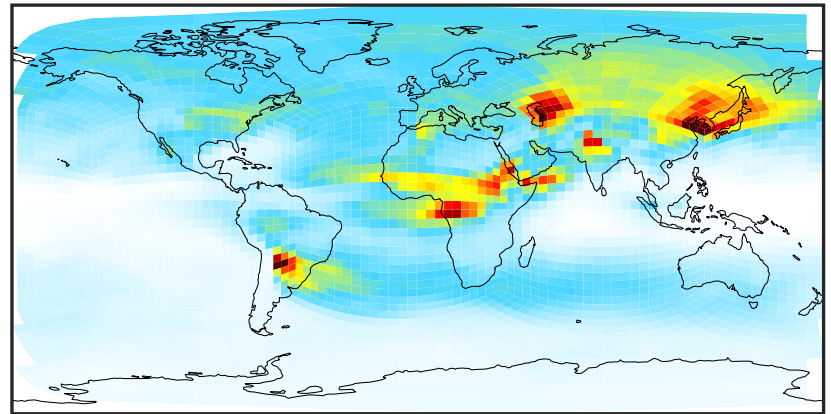
SpeciesConcVV_INDIOL (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



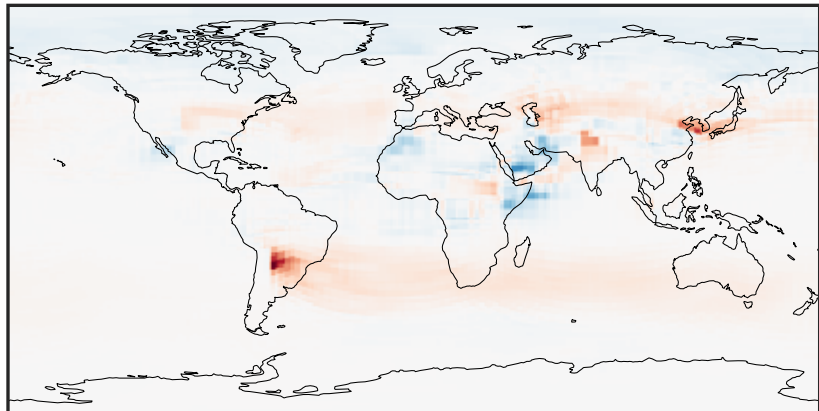
0.0003 0.0335 0.0670 0.1005 0.1343
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



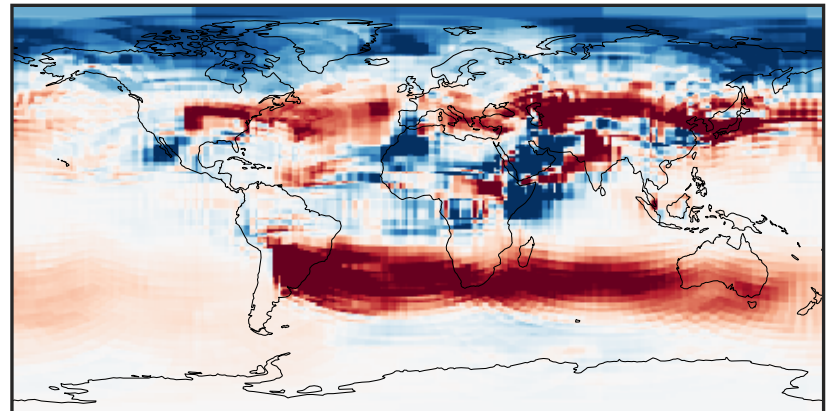
0.0003 0.0335 0.0670 0.1005 0.1343
 $\mu\text{g}/\text{m}^3$

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



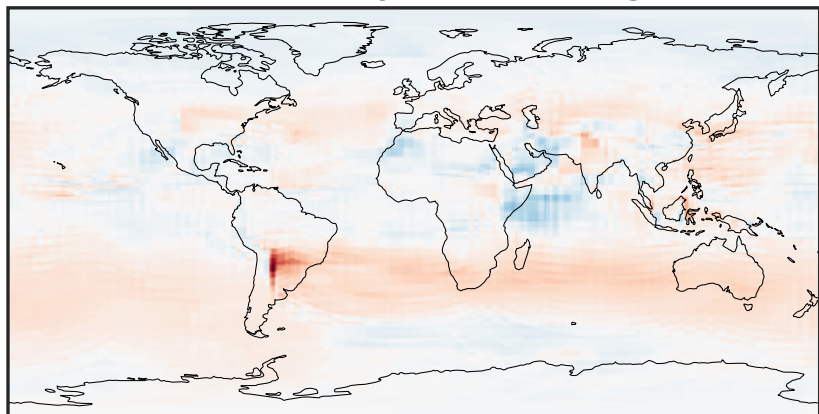
-0.1471 -0.0735 0.0000 0.0735 0.1471
 $\mu\text{g}/\text{m}^3$

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



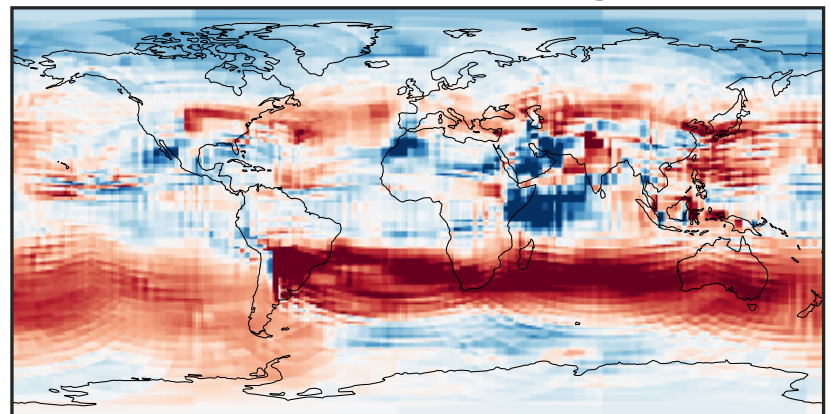
-0.008 0.000 0.008
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

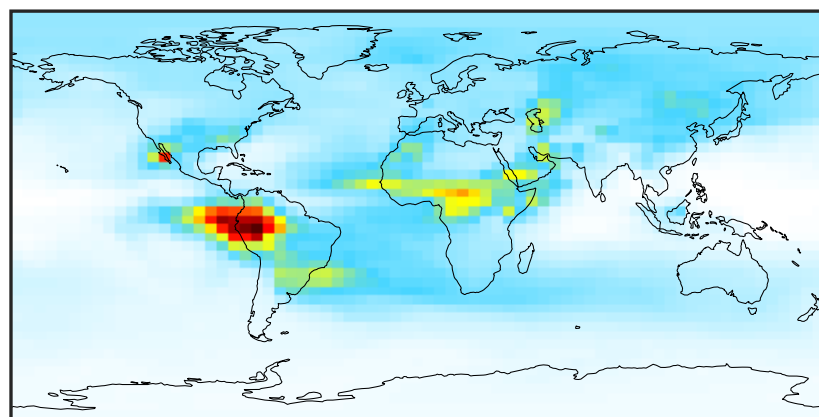
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

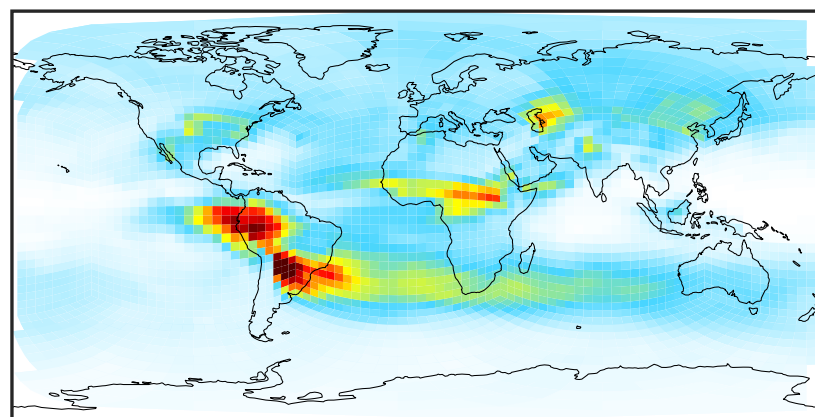
SpeciesConcVV_LVOCOA (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



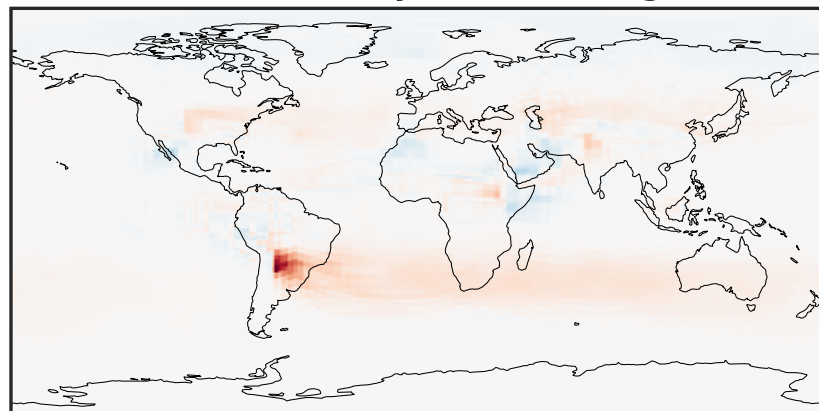
0.0015 0.0030 0.0045
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



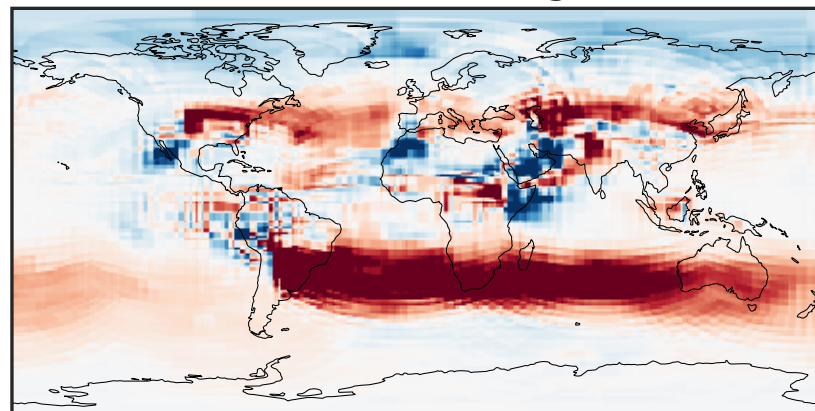
0.0015 0.0030 0.0045
 $\mu\text{g}/\text{m}^3$

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



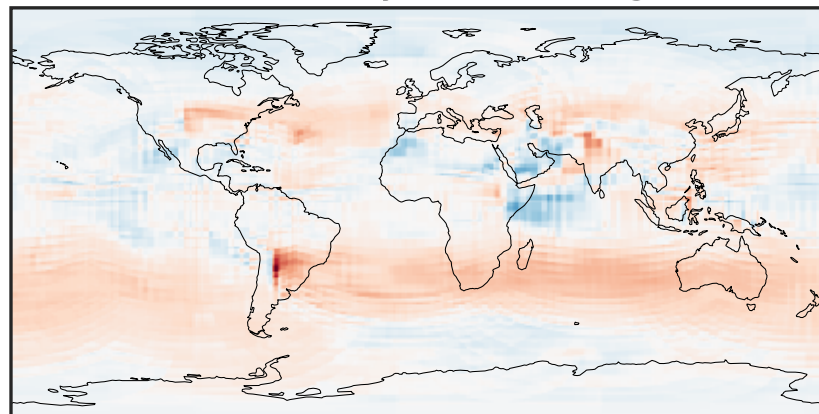
-0.004 0.000 0.004
 $\mu\text{g}/\text{m}^3$

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



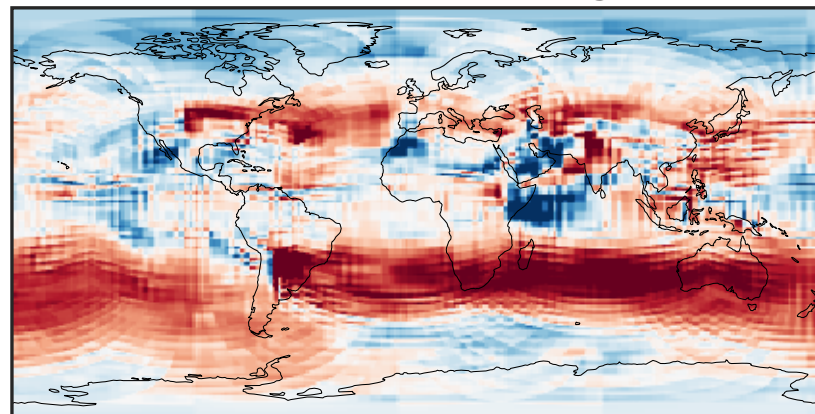
-0.0004 0.0000 0.0004
 $\mu\text{g}/\text{m}^3$

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



1e-01 1 10
unitless

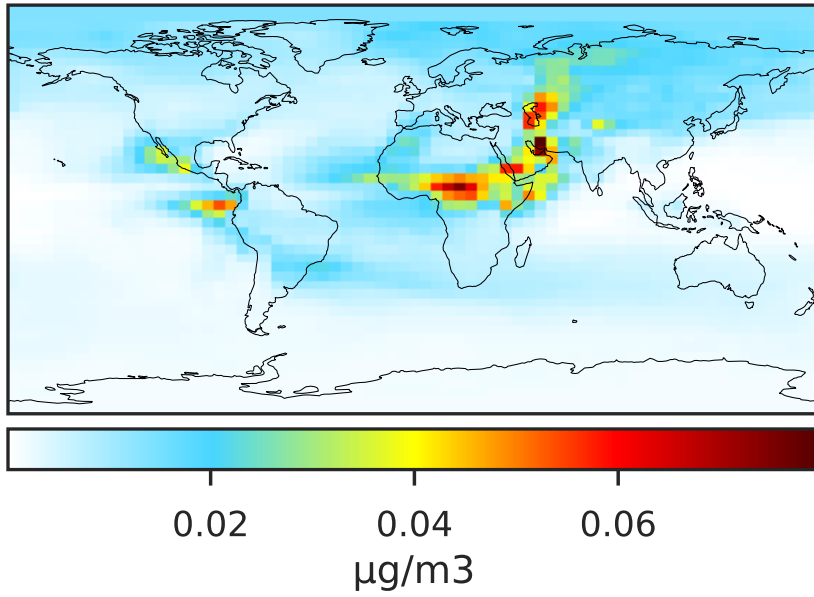
Ratio (1x1.25)
Dev/Ref, Fixed Range



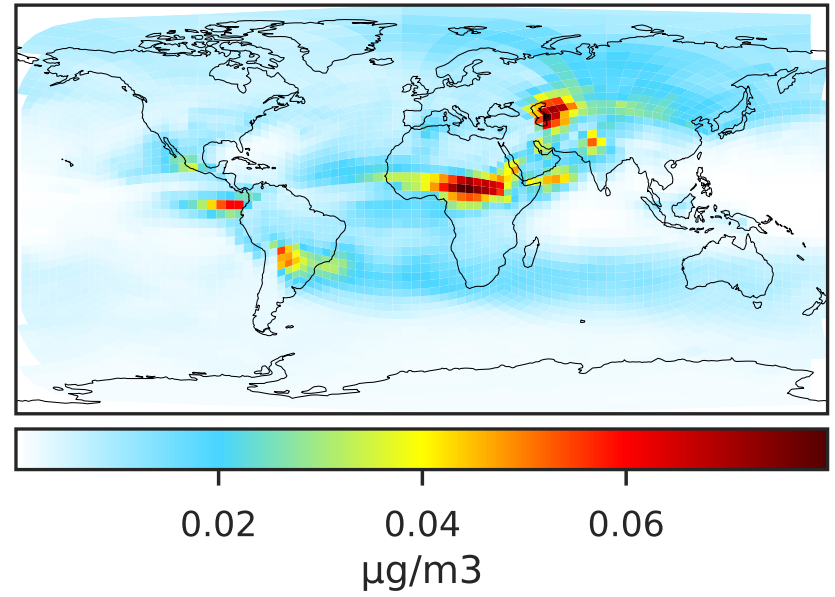
0.50 0.75 1.00 1.50 2.00
unitless

SpeciesConcVV_SOAIE (Jul2019)

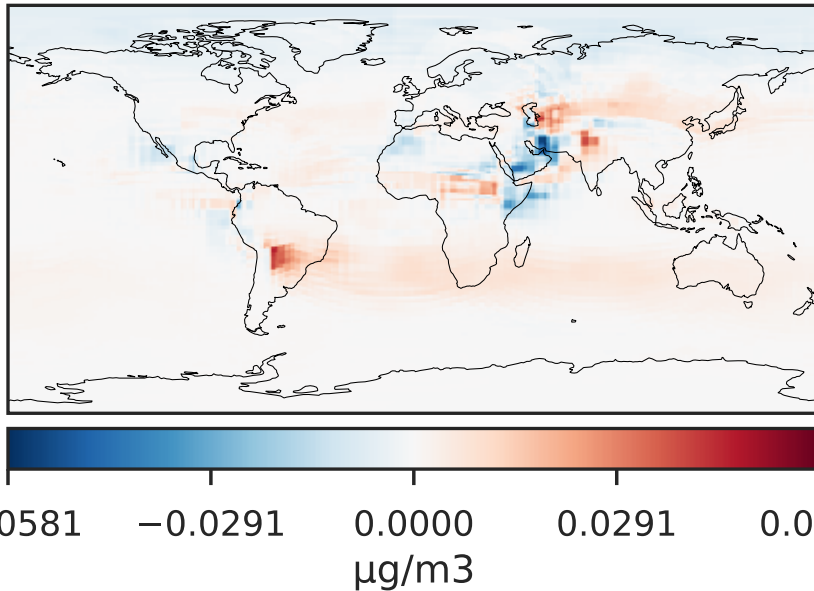
GCC_14.2.0 (Ref)
4.0x5.0



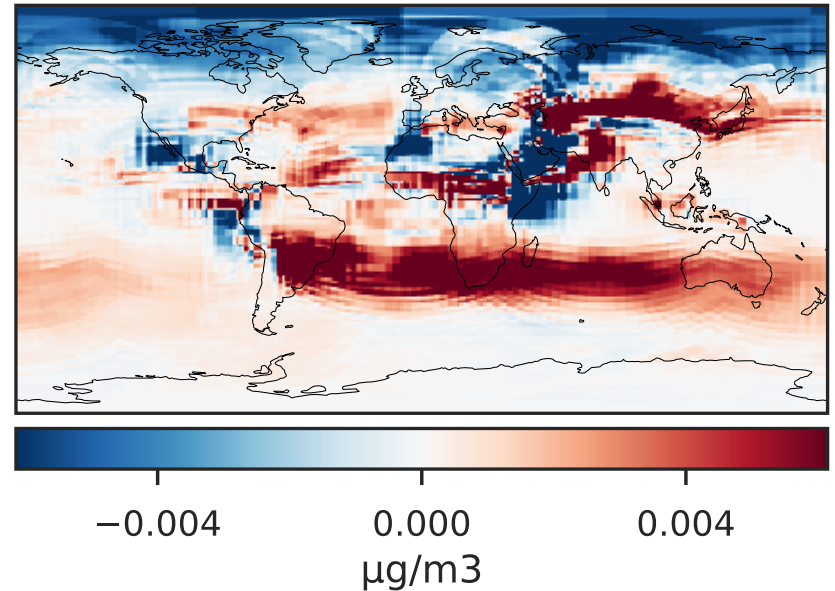
GCHP_14.2.0 (Dev)
c24



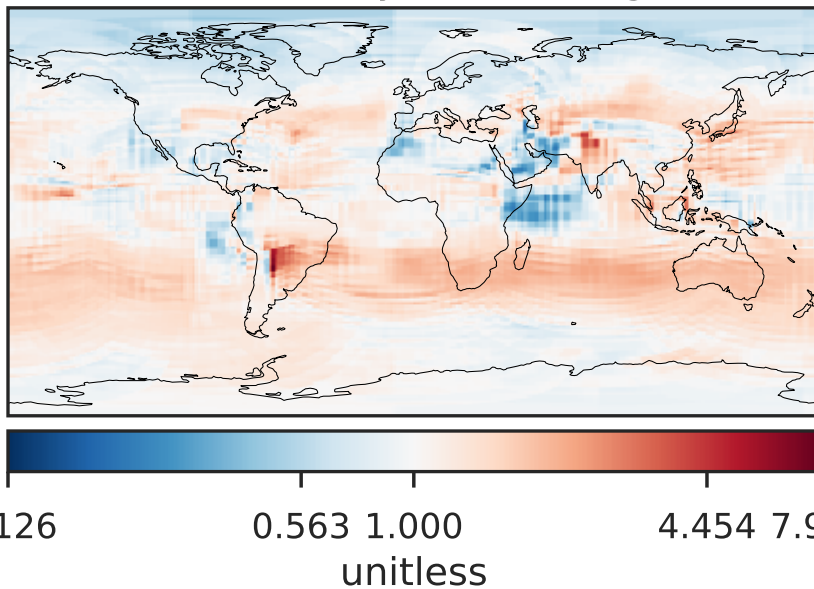
Difference (1x1.25)
Dev - Ref, Dynamic Range



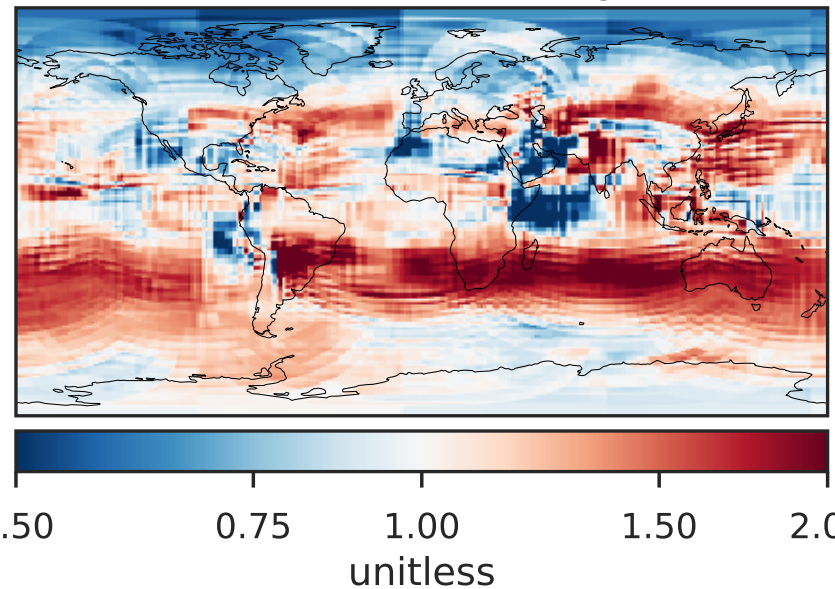
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

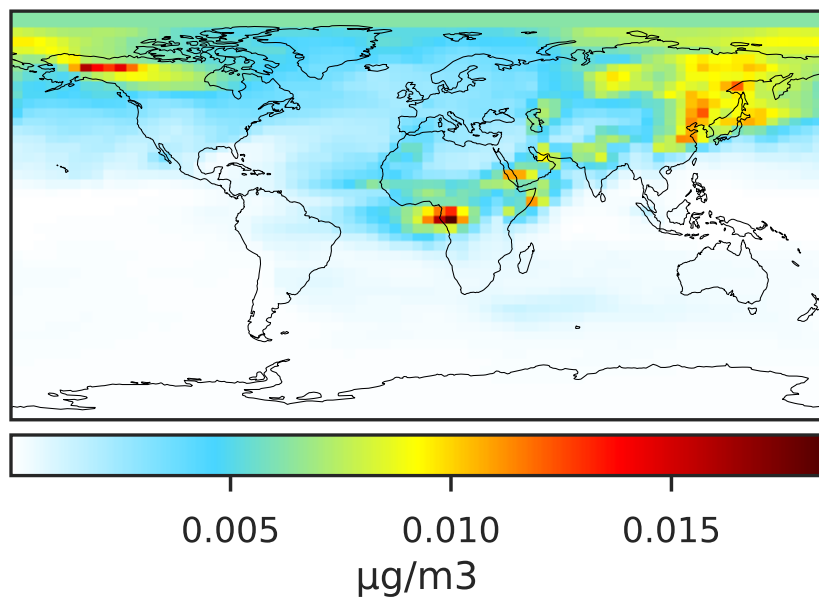


Ratio (1x1.25)
Dev/Ref, Fixed Range

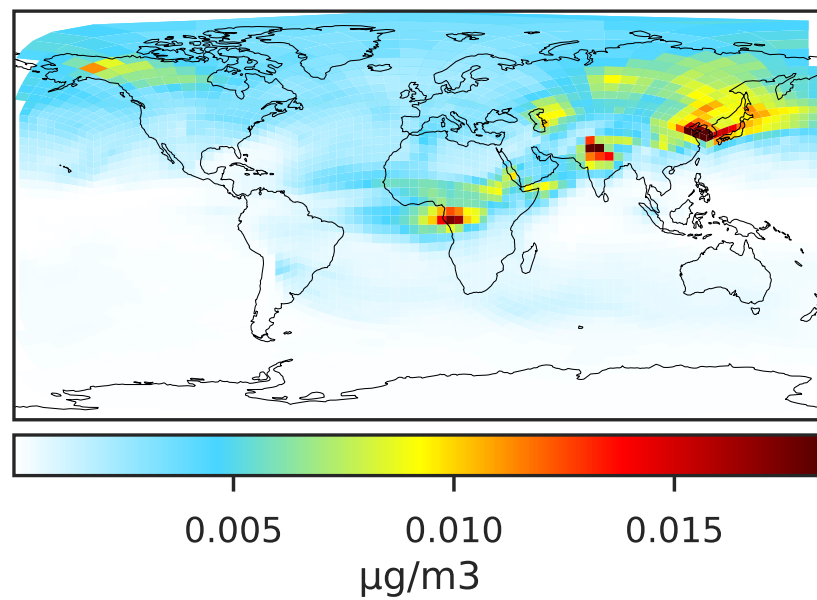


SpeciesConcVV_SOAGX (Jul2019)

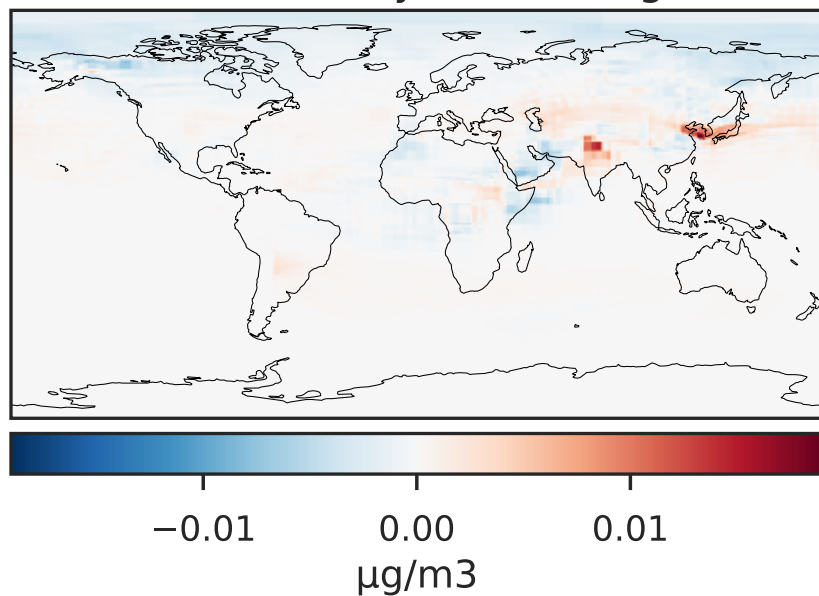
GCC_14.2.0 (Ref)
4.0x5.0



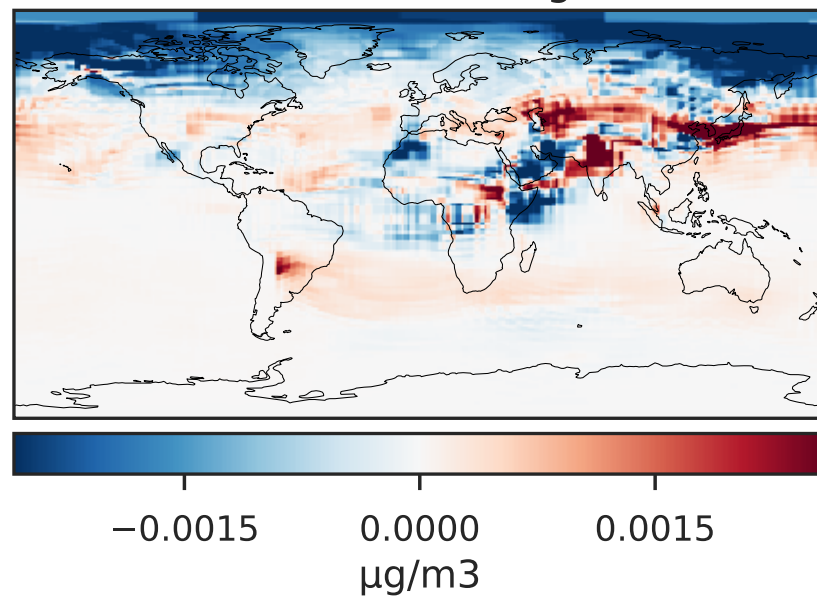
GCHP_14.2.0 (Dev)
c24



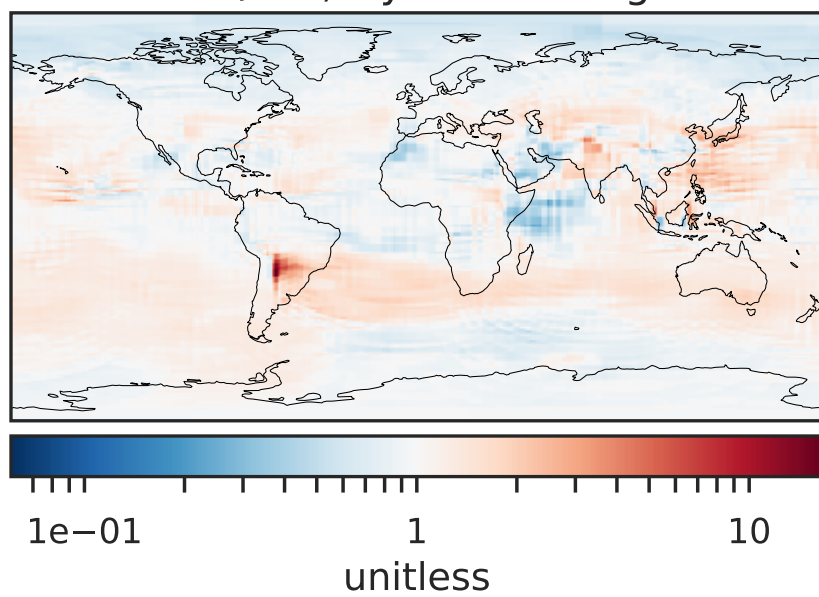
Difference (1x1.25)
Dev - Ref, Dynamic Range



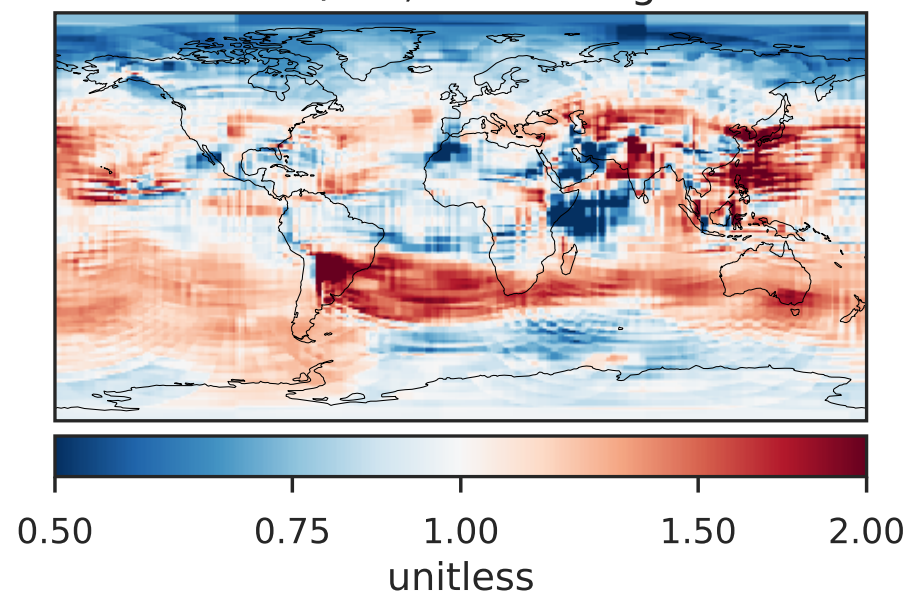
Difference (1x1.25)
Dev - Ref, Restricted Range [5%,95%]



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

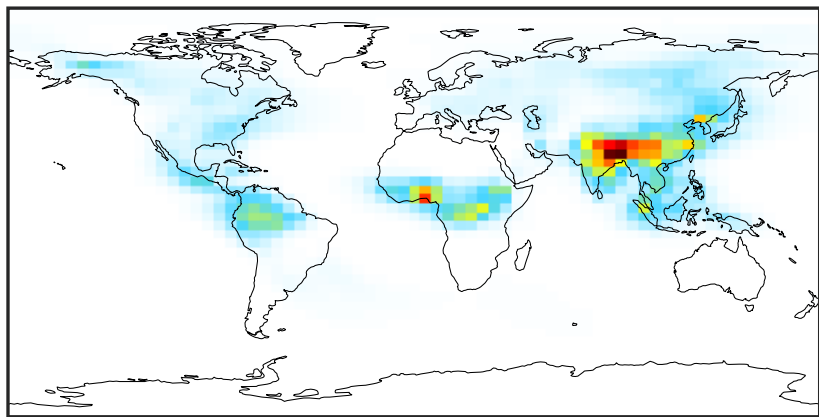


Ratio (1x1.25)
Dev/Ref, Fixed Range



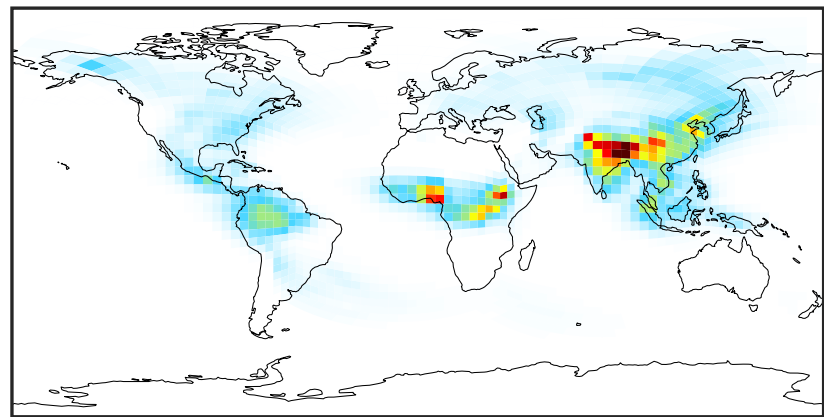
SpeciesConcVV_SOAP (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



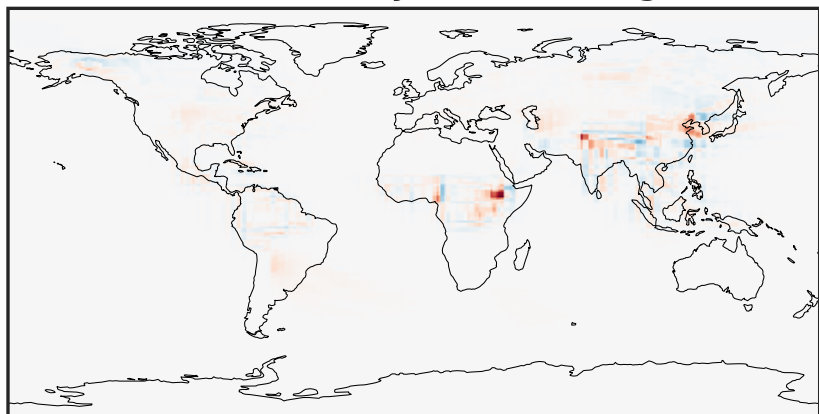
0.0000 0.0351 0.0702 0.1054 0.1405
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



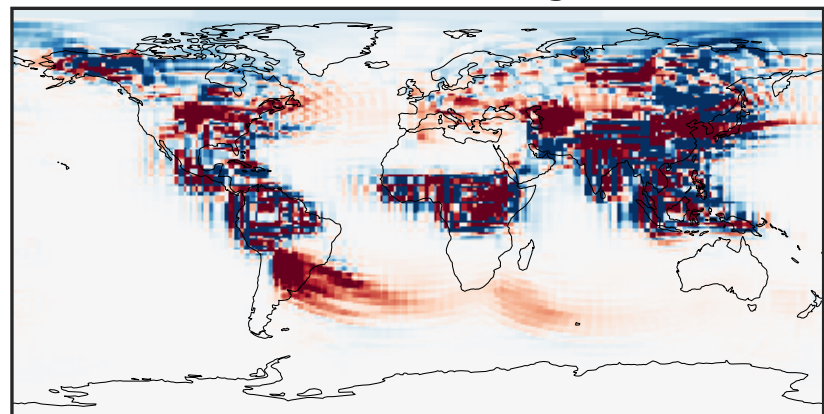
0.0000 0.0351 0.0702 0.1054 0.1405
 $\mu\text{g}/\text{m}^3$

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



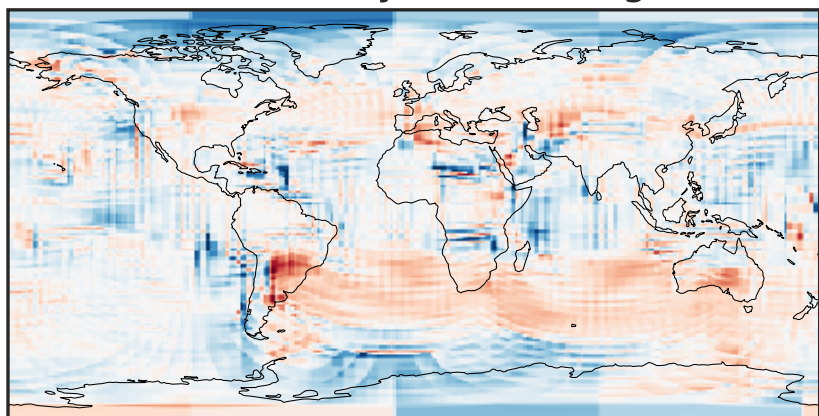
-0.0831 -0.0416 0.0000 0.0416 0.0831
 $\mu\text{g}/\text{m}^3$

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



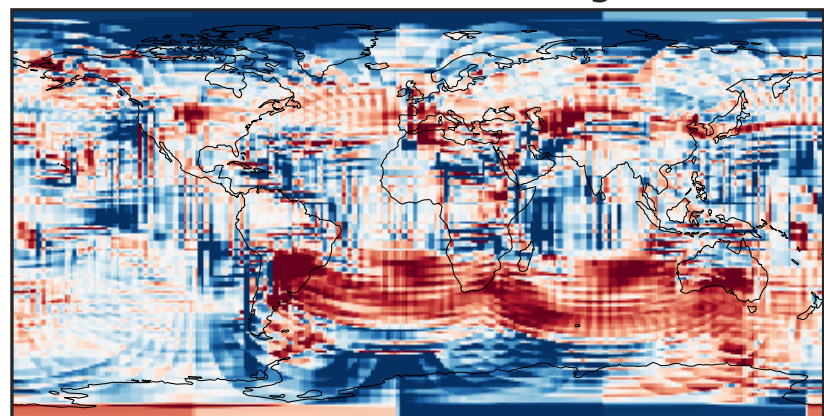
-0.0015 0.0000 0.0015
 $\mu\text{g}/\text{m}^3$

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



0.106 0.553 1.000 5.217 9.435
unitless

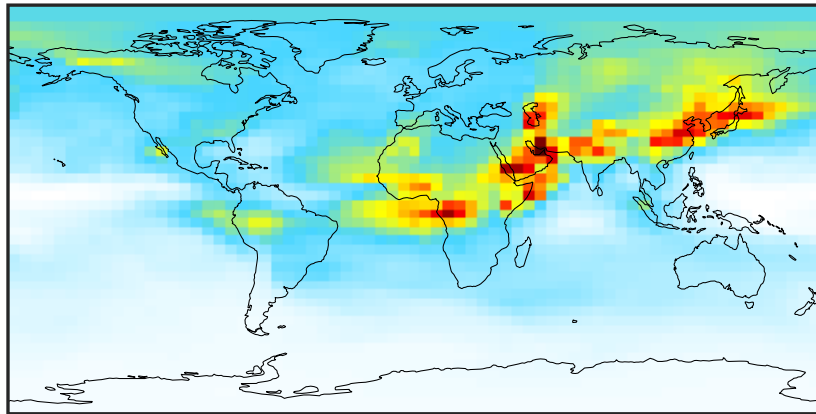
Ratio (1x1.25)
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

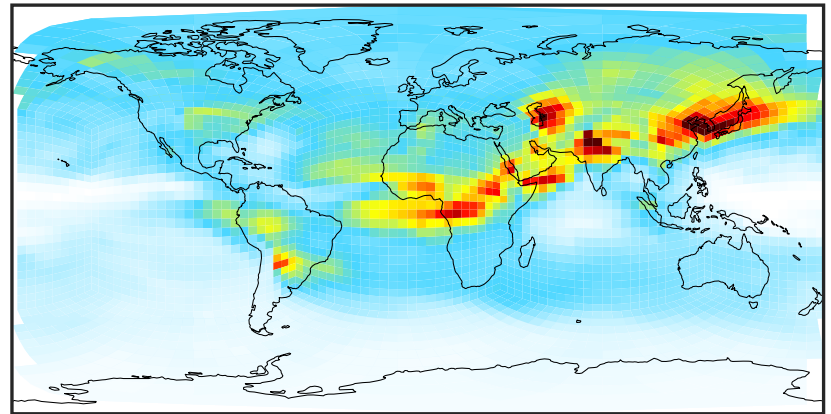
SpeciesConcVW_SOAS (Jul2019)

GCC_14.2.0 (Ref)
4.0x5.0



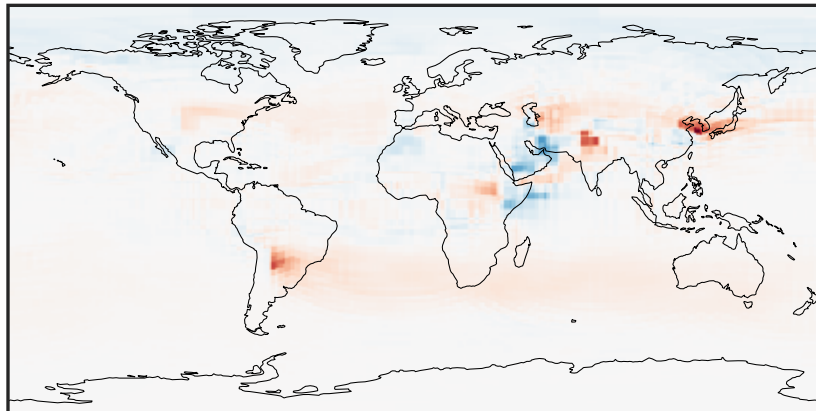
0.0021 0.0728 0.1455 0.2183 0.2932
 $\mu\text{g}/\text{m}^3$

GCHP_14.2.0 (Dev)
c24



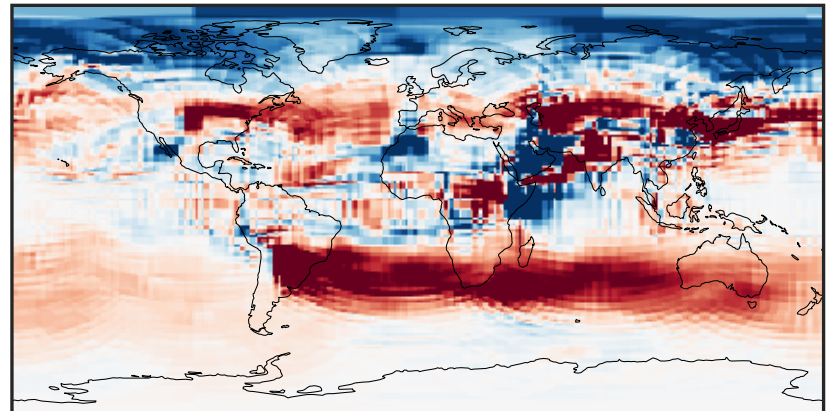
0.0021 0.0728 0.1455 0.2183 0.2932
 $\mu\text{g}/\text{m}^3$

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



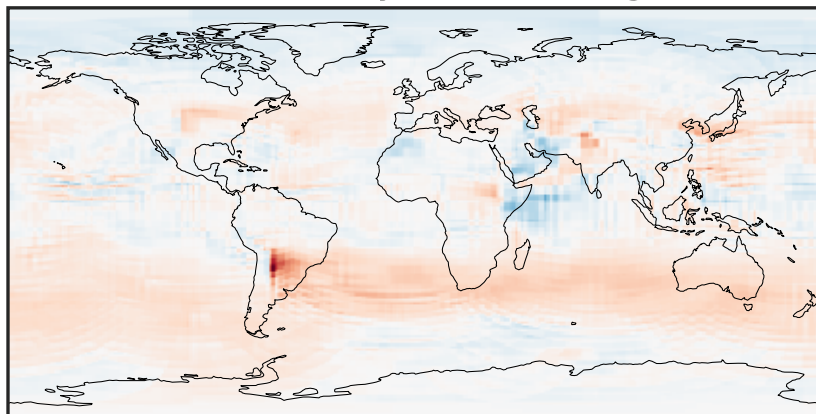
-0.2678 -0.1339 0.0000 0.1339 0.2678
 $\mu\text{g}/\text{m}^3$

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



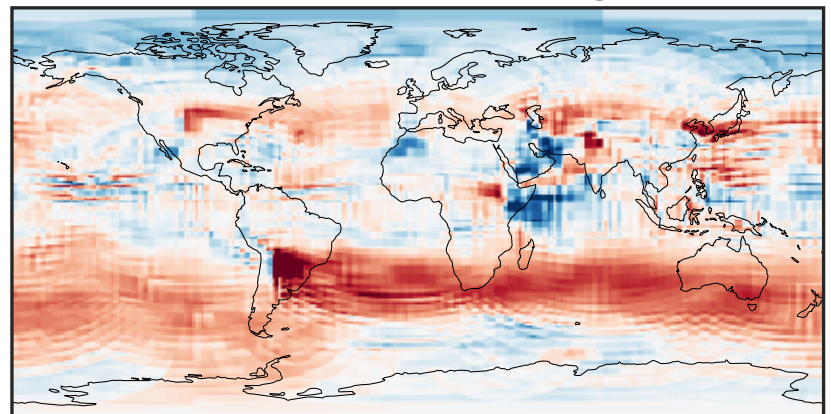
-0.015 0.000 0.015
 $\mu\text{g}/\text{m}^3$

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



0.128 0.564 1.000 4.409 7.818
unitless

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



0.50 0.75 1.00 1.50 2.00
unitless