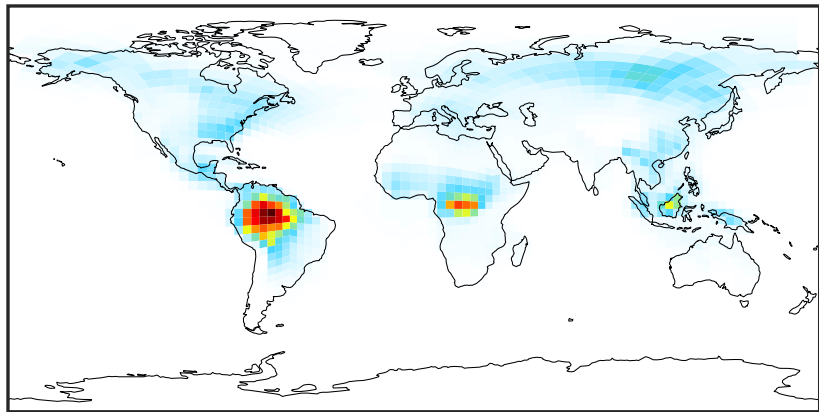


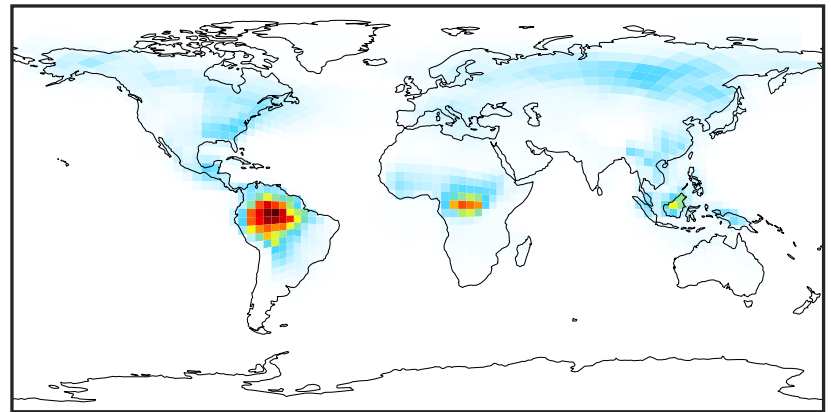
# SpeciesConcVV\_TSOA0 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



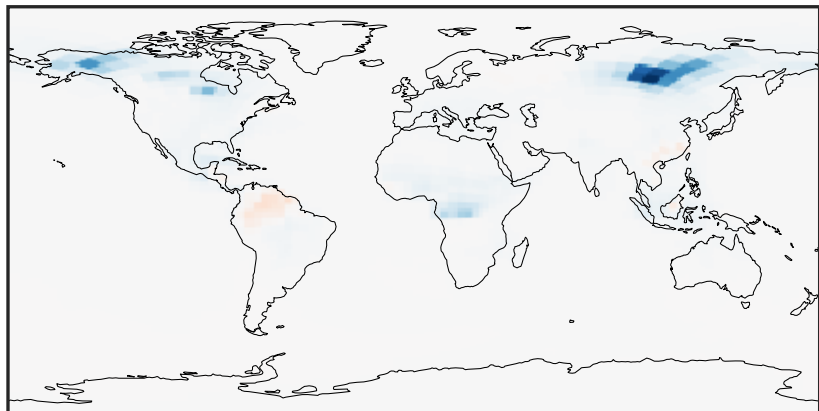
0.000 0.585 1.169 1.754 2.338  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



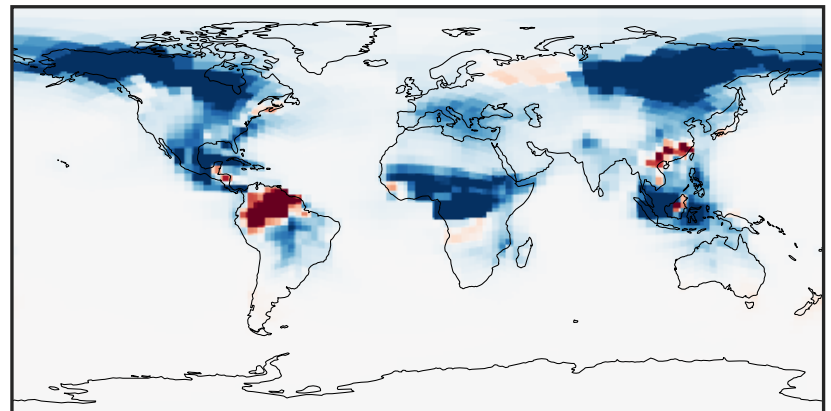
0.000 0.585 1.169 1.754 2.338  
 $\mu\text{g}/\text{m}^3$

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



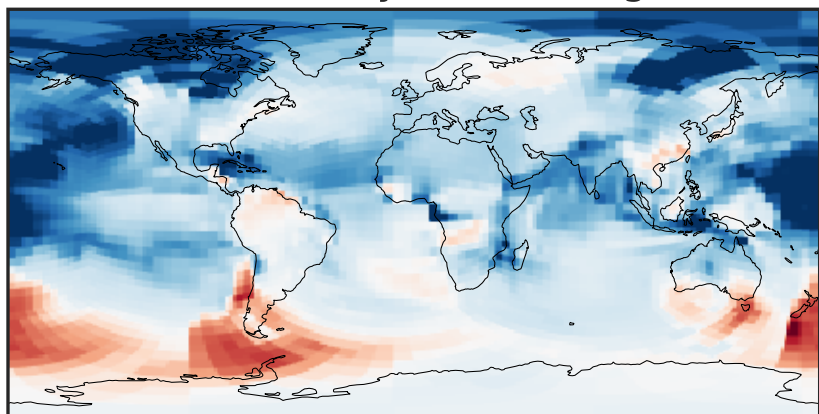
-0.1298 -0.0649 0.0000 0.0649 0.1298  
 $\mu\text{g}/\text{m}^3$

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



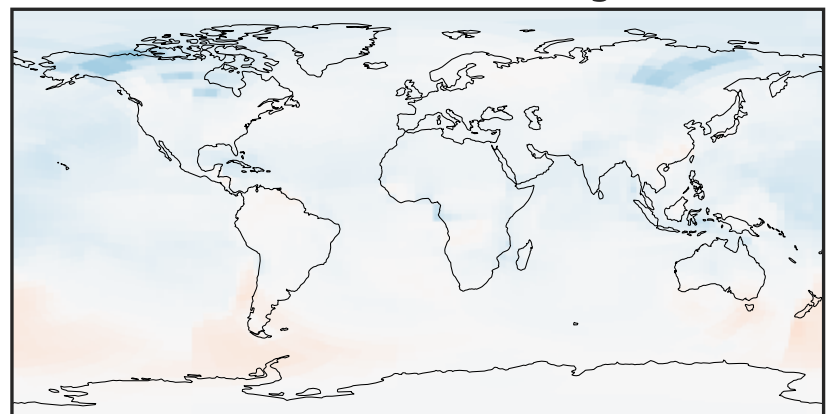
-0.004 0.000 0.004  
 $\mu\text{g}/\text{m}^3$

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



0.9067 0.9533 1.0000 1.0515 1.1029  
unitless

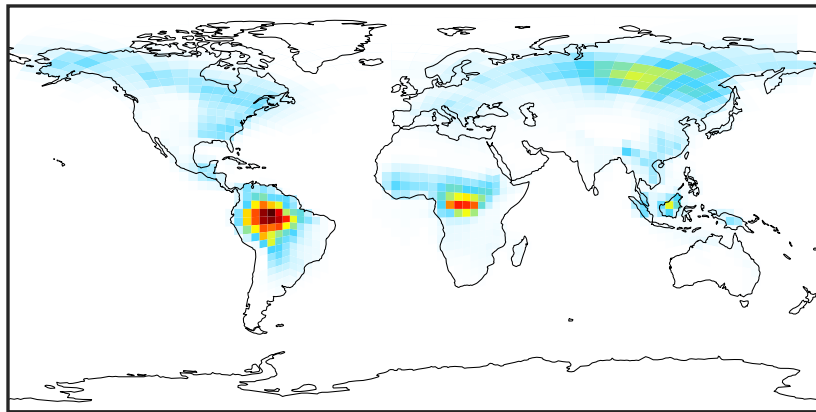
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

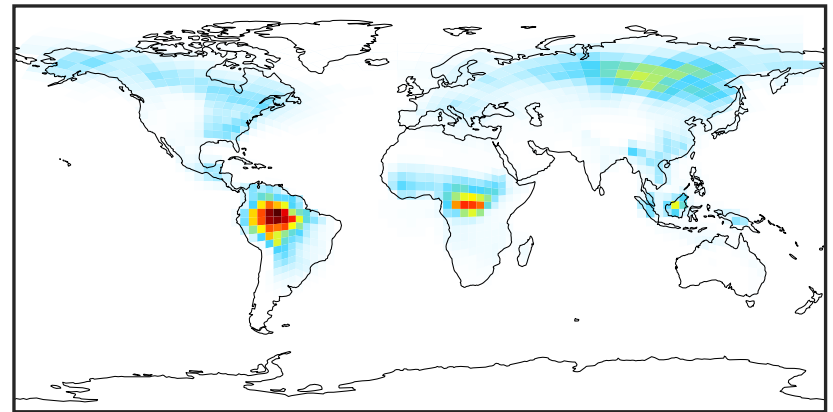
# SpeciesConcVV\_TSOA1 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



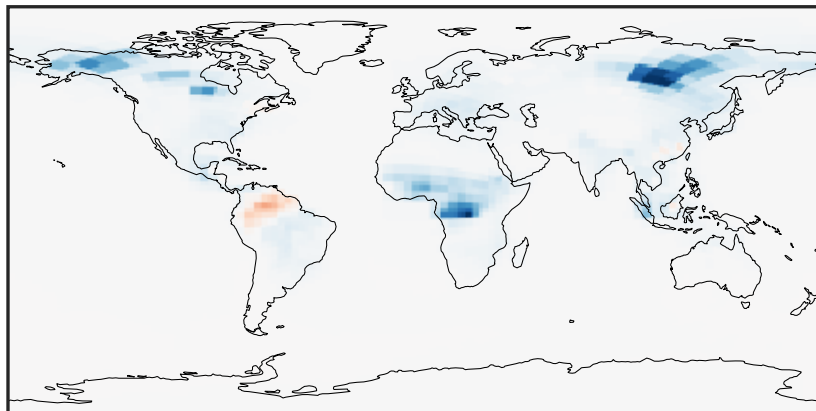
0.0000 0.2463 0.4927 0.7390 0.9853  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



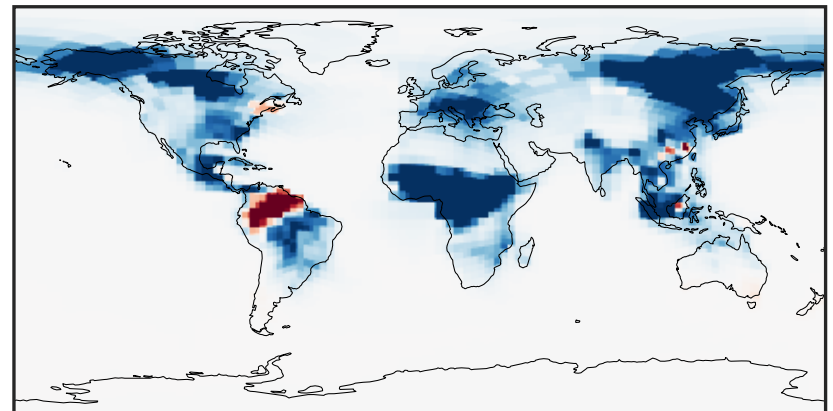
0.0000 0.2463 0.4927 0.7390 0.9853  
 $\mu\text{g}/\text{m}^3$

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



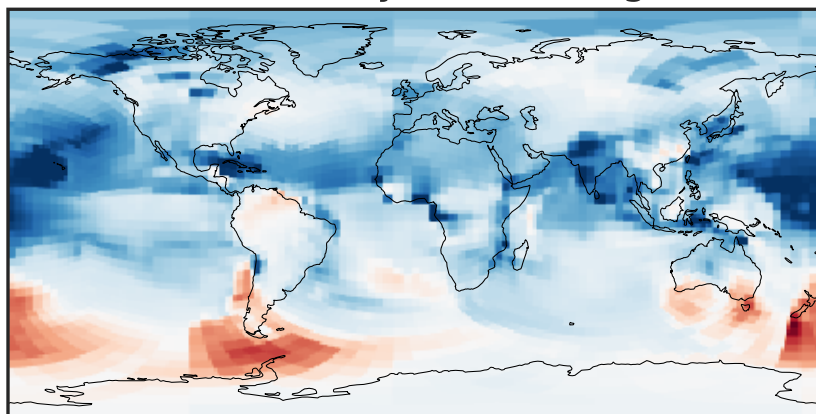
-0.015 0.000 0.015  
 $\mu\text{g}/\text{m}^3$

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



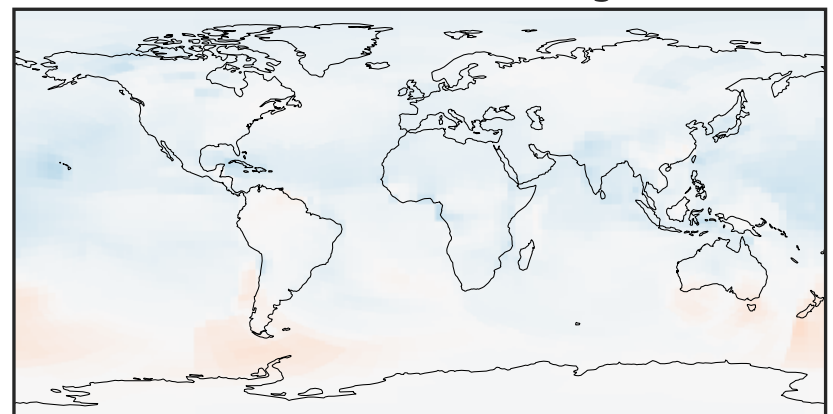
-0.0015 0.0000 0.0015  
 $\mu\text{g}/\text{m}^3$

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



0.8836 0.9418 1.0000 1.0659 1.1317  
unitless

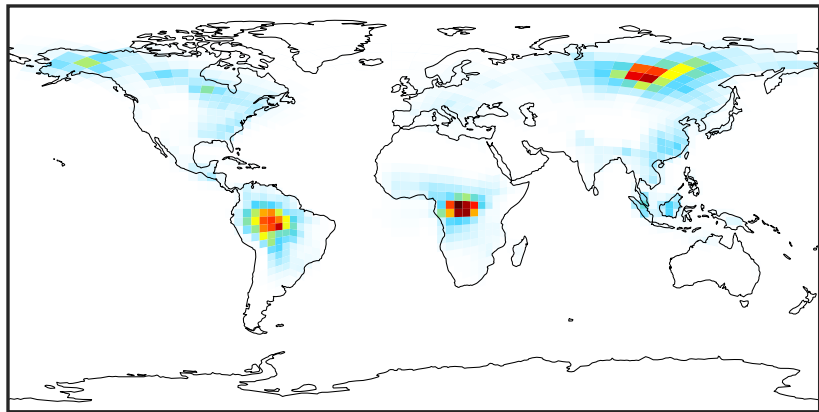
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

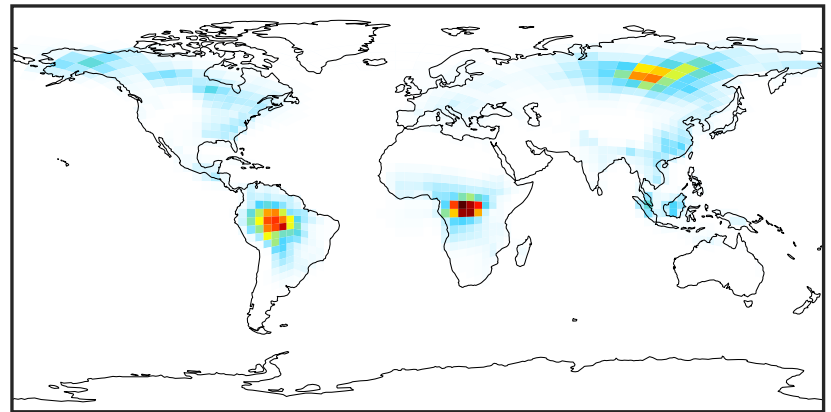
# SpeciesConcVV\_TSOA2 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.000 1.187 2.375 3.562 4.749  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



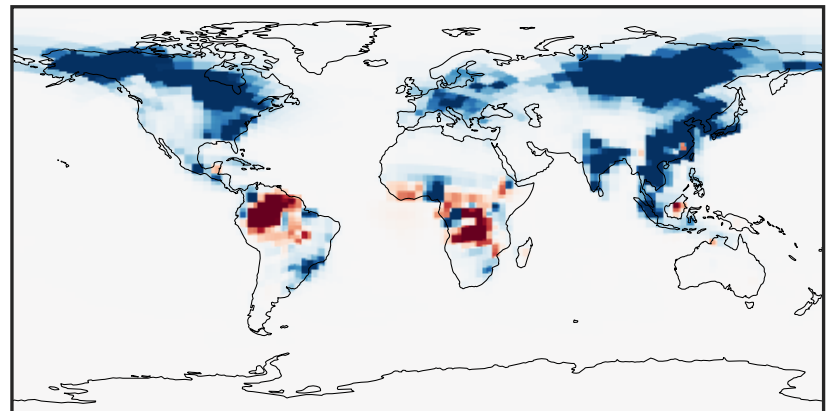
0.000 1.187 2.375 3.562 4.749  
µg/m3

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



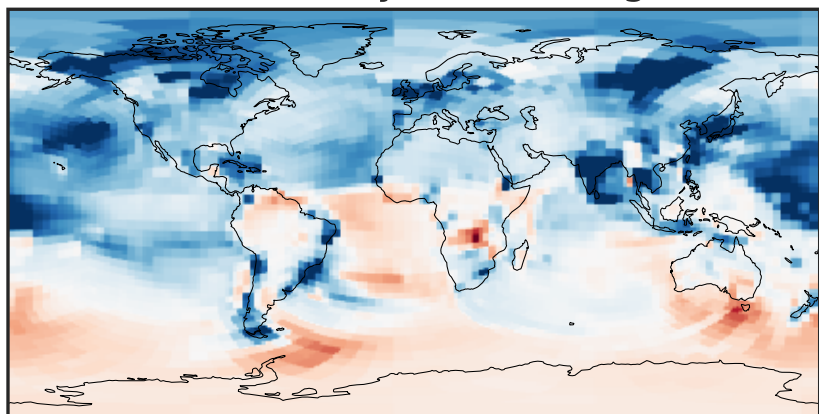
-1.061 -0.531 0.000 0.531 1.061  
µg/m3

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



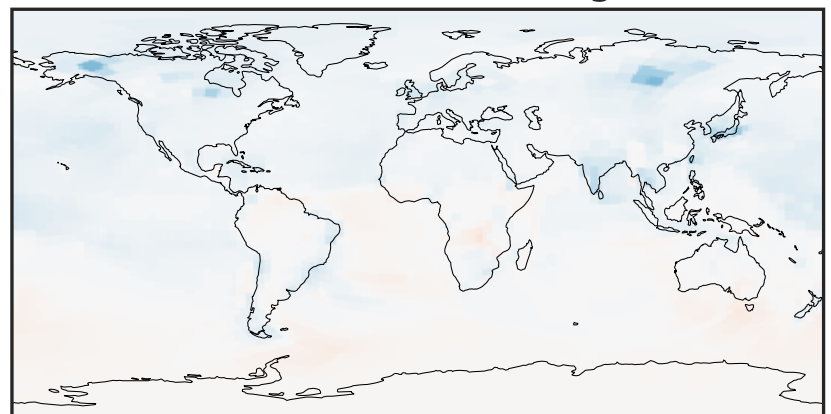
-0.005 0.000 0.005  
µg/m3

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



0.9183 0.9592 1.0000 1.0445 1.0889  
unitless

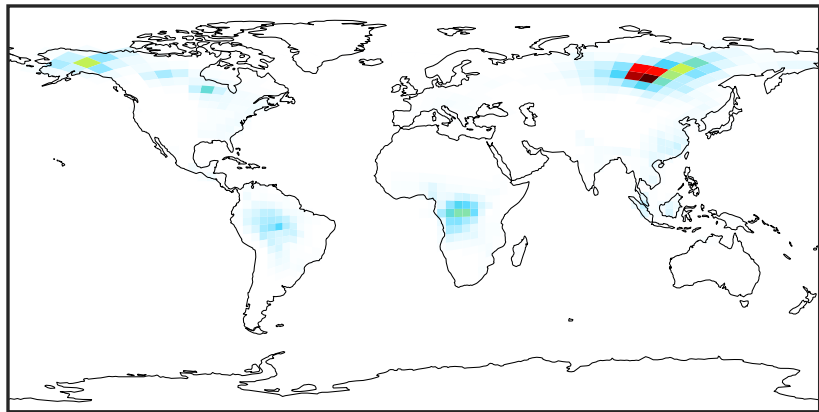
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

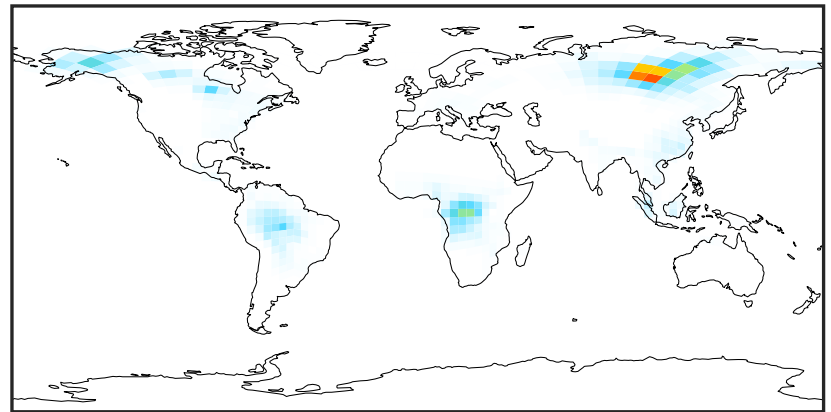
# SpeciesConcVV\_TSOA3 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.000 1.503 3.006 4.508 6.011  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



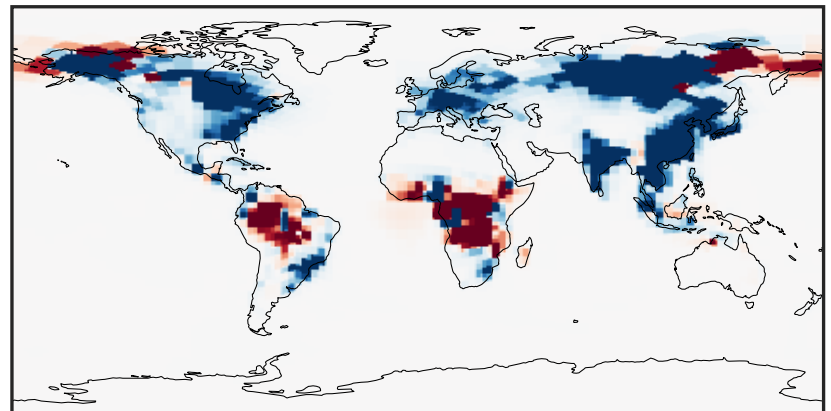
0.000 1.503 3.006 4.508 6.011  
µg/m3

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



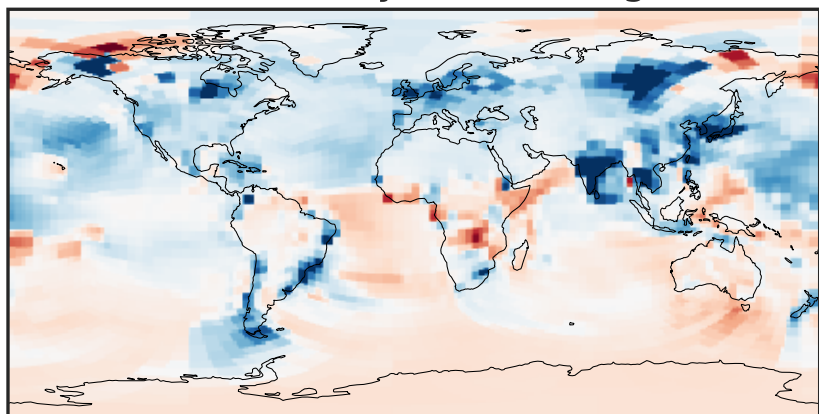
-2.006 -1.003 0.000 1.003 2.006  
µg/m3

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



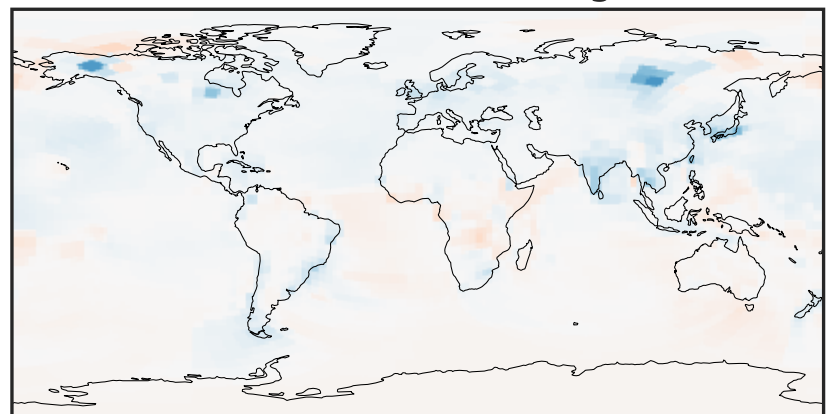
-0.0015 0.0000 0.0015  
µg/m3

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



0.8719 0.9359 1.0000 1.0735 1.1469  
unitless

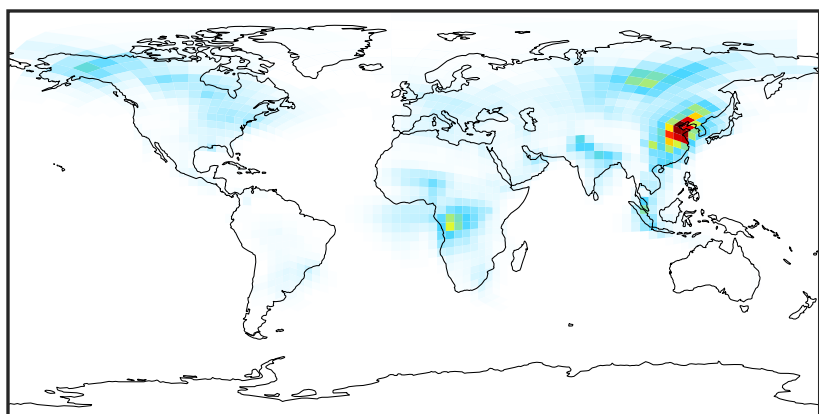
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

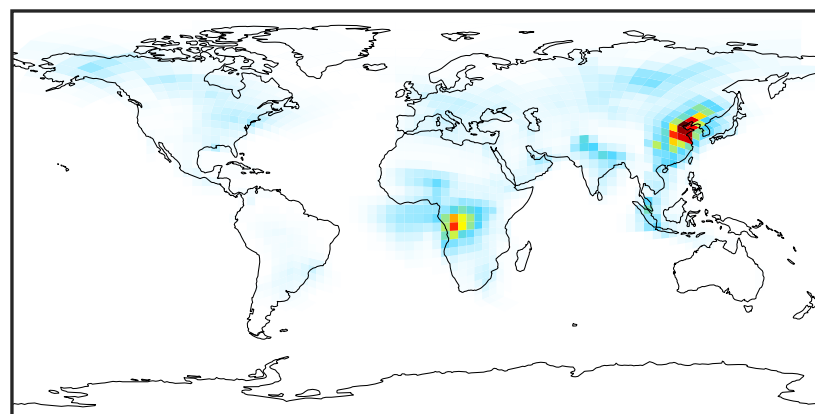
# SpeciesConcVV\_ASOA1 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



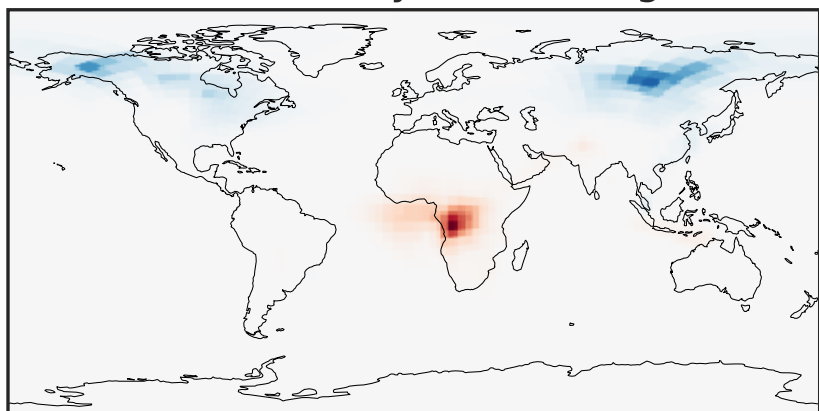
0.0000 0.0371 0.0743 0.1114 0.1485  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



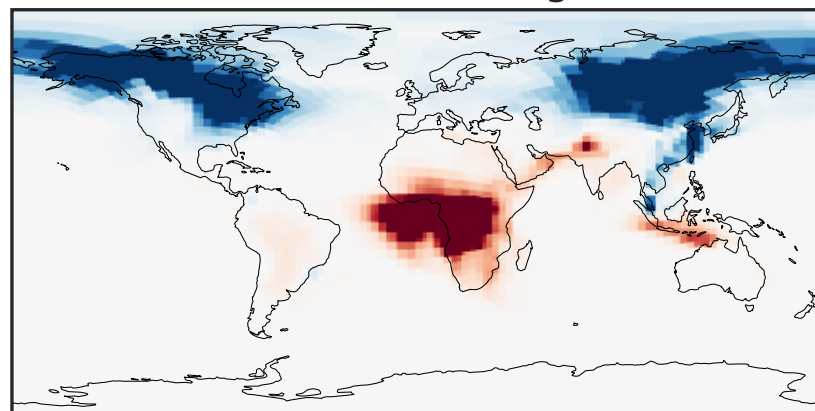
0.0000 0.0371 0.0743 0.1114 0.1485  
 $\mu\text{g}/\text{m}^3$

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



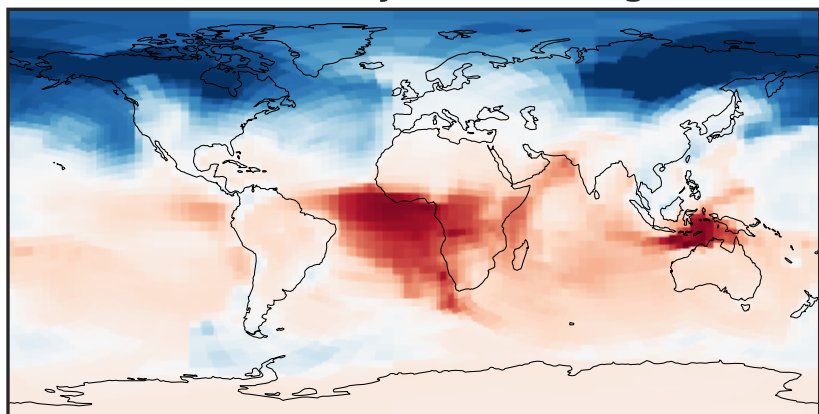
-0.02 0.00 0.02  
 $\mu\text{g}/\text{m}^3$

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



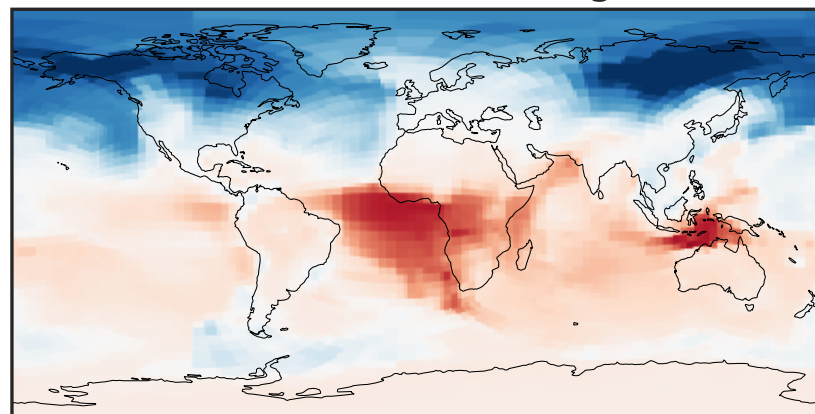
-0.0015 0.0000 0.0015  
 $\mu\text{g}/\text{m}^3$

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



0.545 0.772 1.000 1.417 1.835  
unitless

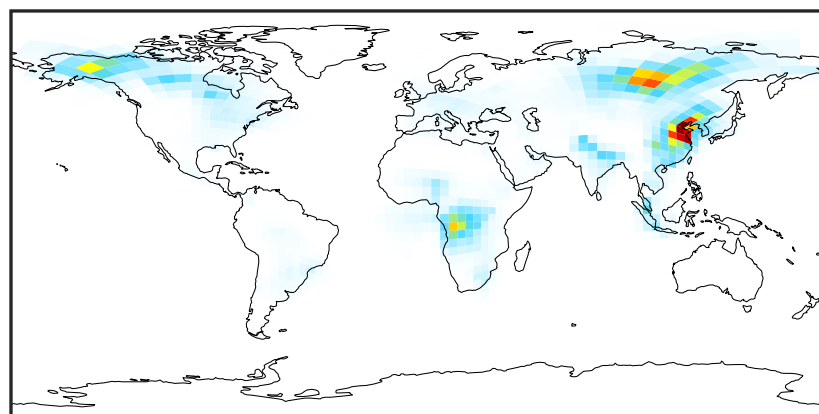
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

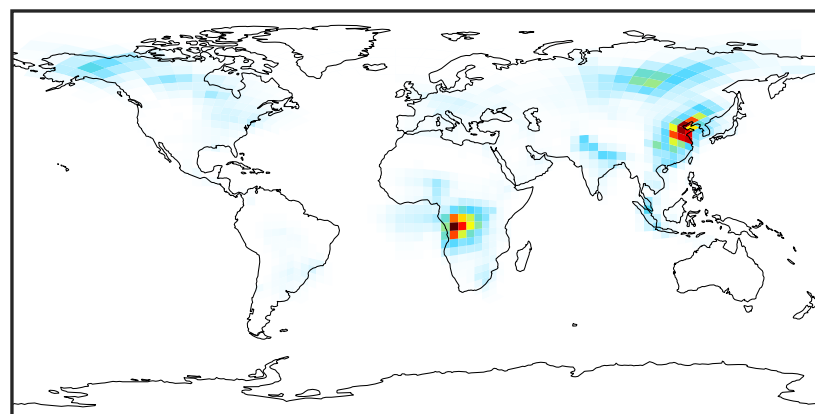
# SpeciesConcVV\_ASOA2 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



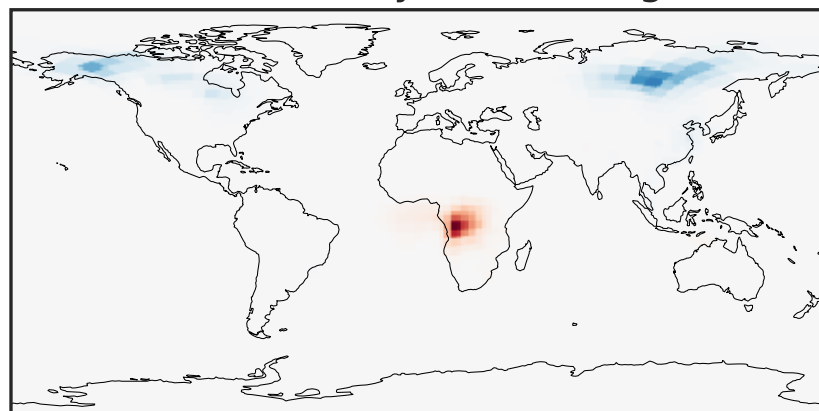
0.025 0.050 0.075  
μg/m3

GCHP\_14.2.0 (Dev)  
c24



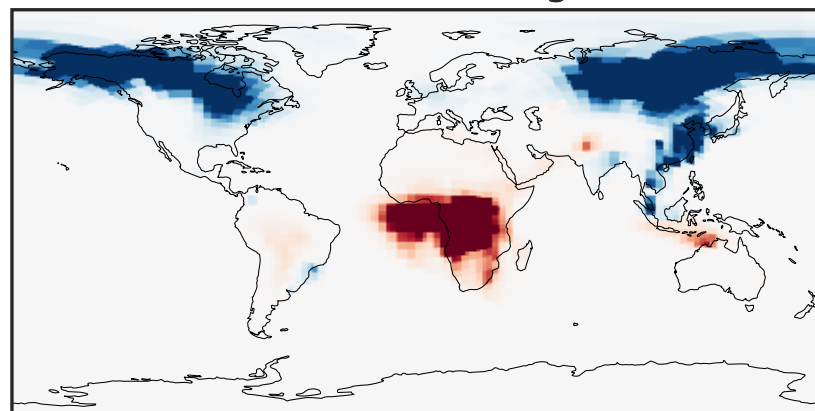
0.025 0.050 0.075  
μg/m3

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



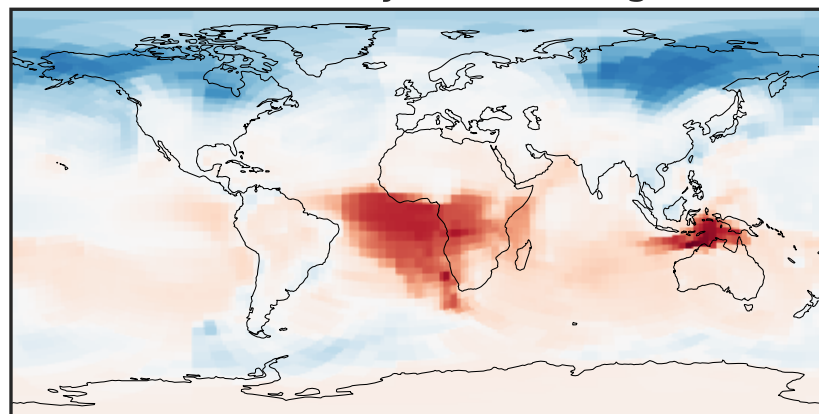
-0.025 0.000 0.025  
μg/m3

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



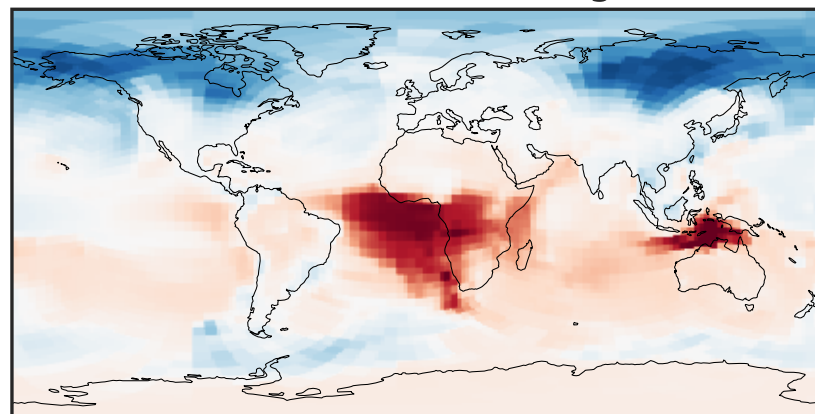
-0.0006 0.0000 0.0006  
μg/m3

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



0.419 0.710 1.000 1.693 2.386  
unitless

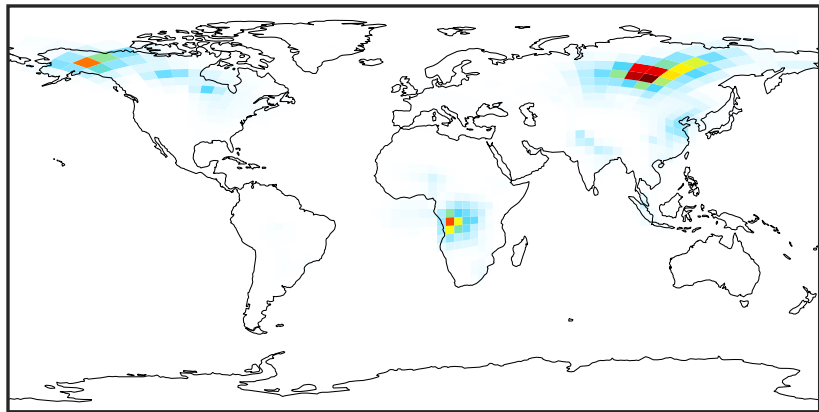
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

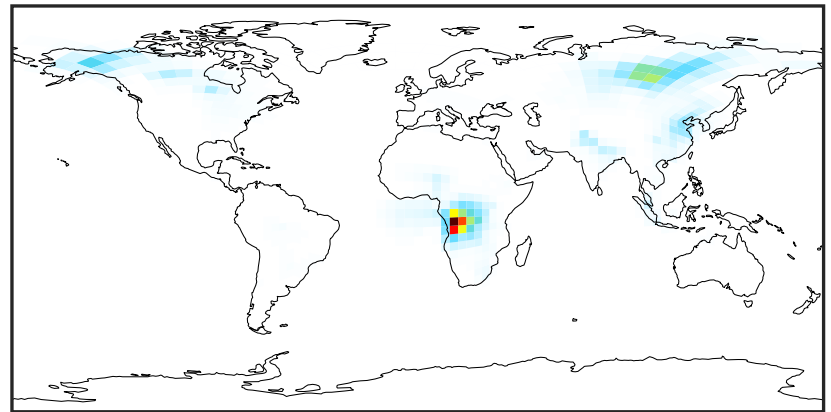
# SpeciesConcVV\_ASOA3 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



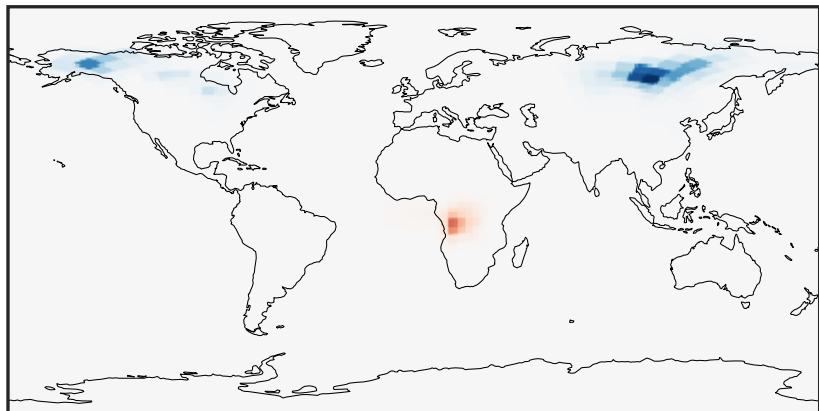
0.0000 0.0576 0.1152 0.1727 0.2303  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



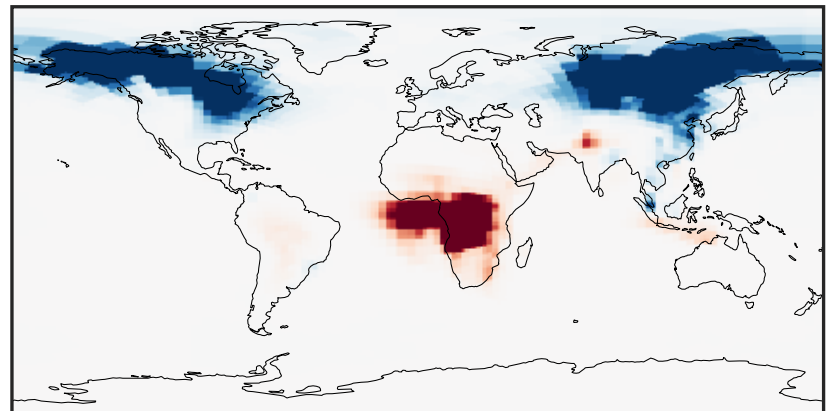
0.0000 0.0576 0.1152 0.1727 0.2303  
 $\mu\text{g}/\text{m}^3$

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



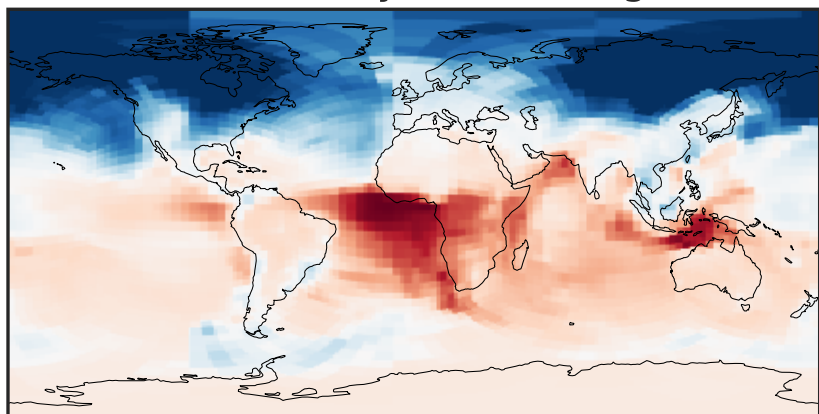
-0.1292 -0.0646 0.0000 0.0646 0.1292  
 $\mu\text{g}/\text{m}^3$

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



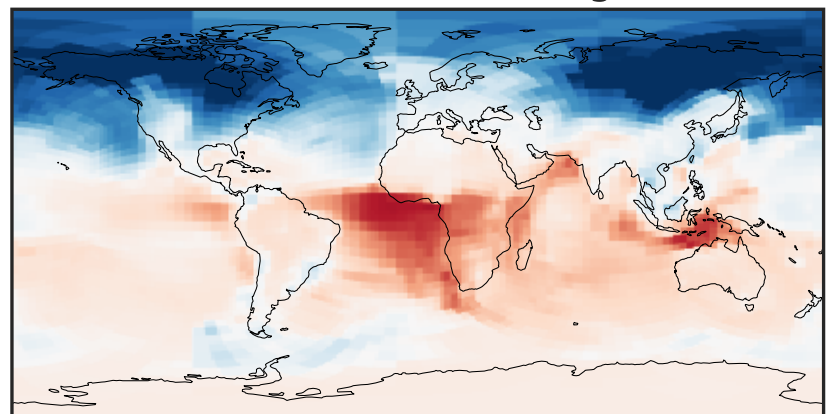
-0.001 0.000 0.001  
 $\mu\text{g}/\text{m}^3$

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



0.566 0.783 1.000 1.384 1.768  
unitless

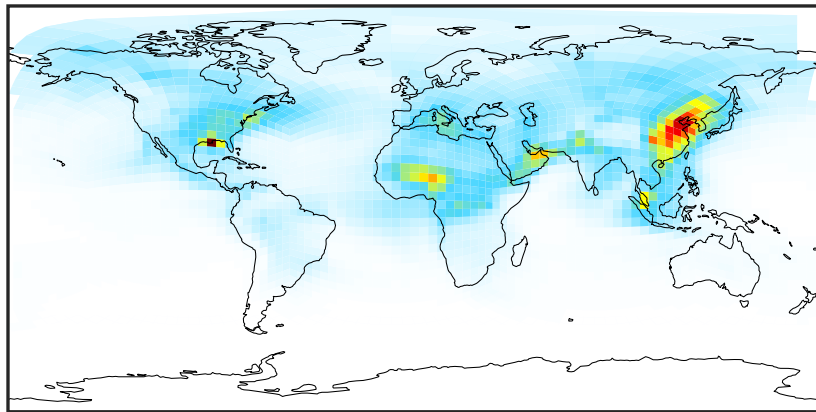
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

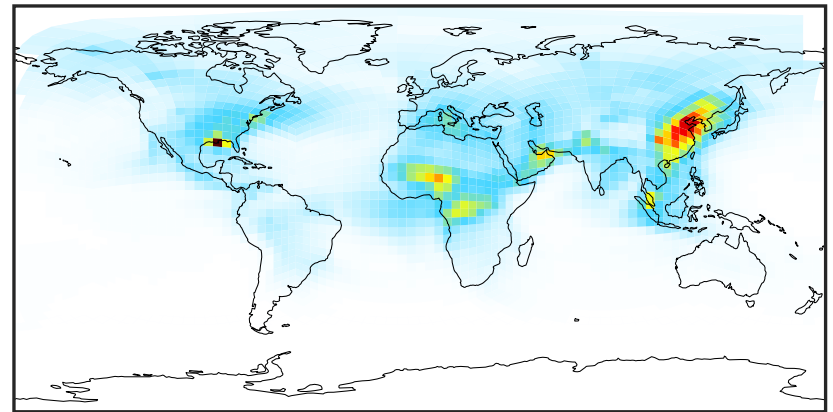
# SpeciesConcVV\_ASOAN (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



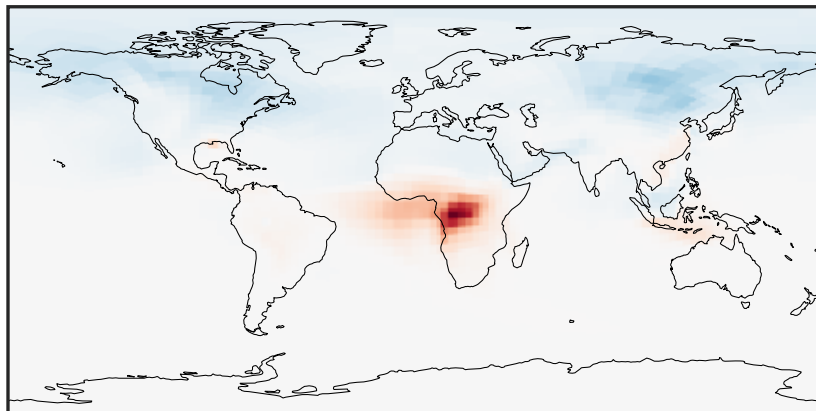
0.0002 0.0941 0.1882 0.2822 0.3765  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



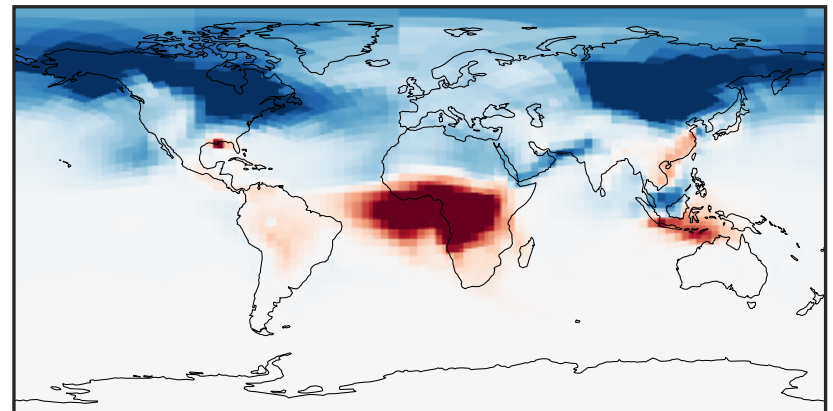
0.0002 0.0941 0.1882 0.2822 0.3765  
 $\mu\text{g}/\text{m}^3$

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



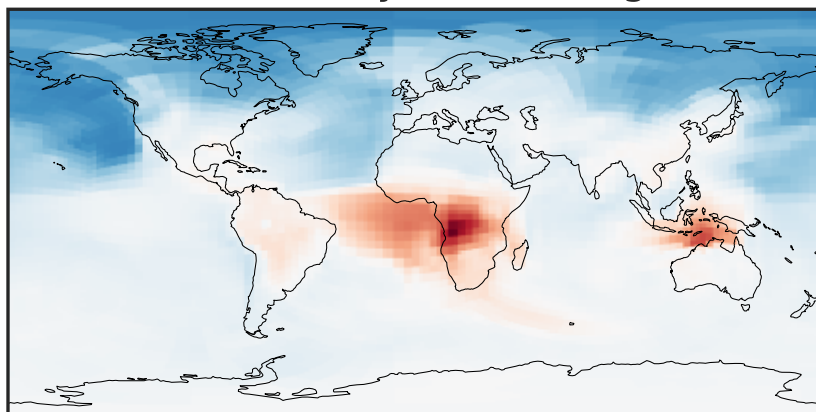
-0.0703 -0.0351 0.0000 0.0351 0.0703  
 $\mu\text{g}/\text{m}^3$

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



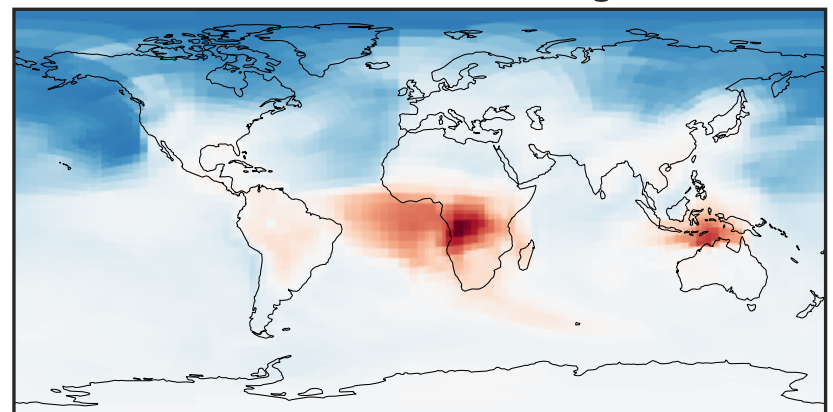
-0.008 0.000 0.008  
 $\mu\text{g}/\text{m}^3$

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



0.477 0.738 1.000 1.548 2.097  
unitless

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

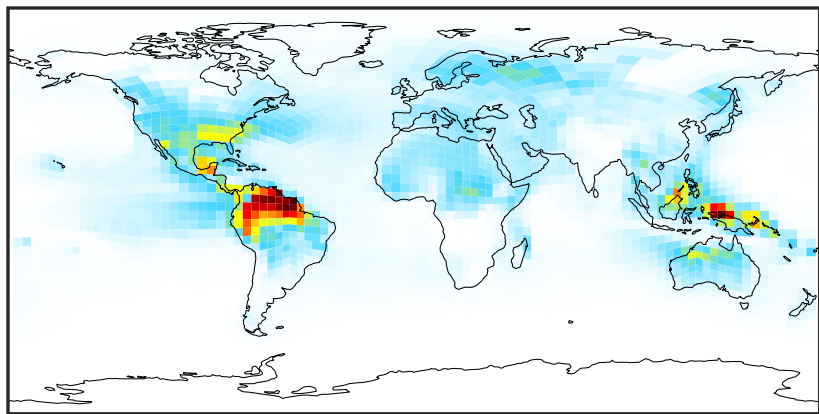


0.50 0.75 1.00 1.50 2.00  
unitless



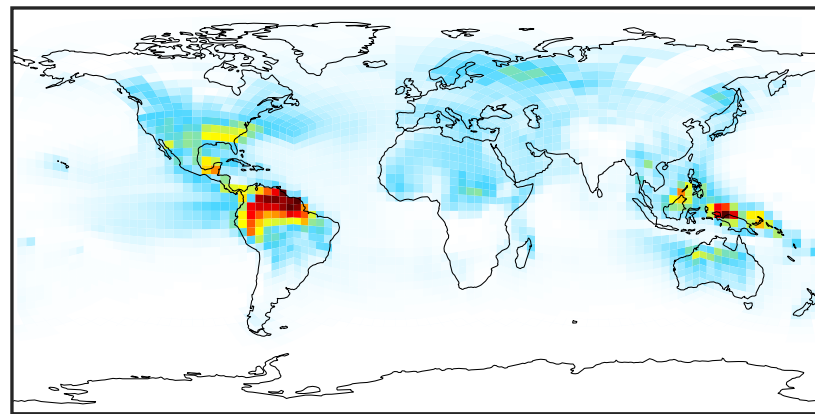
# SpeciesConcVV\_TSOG0 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



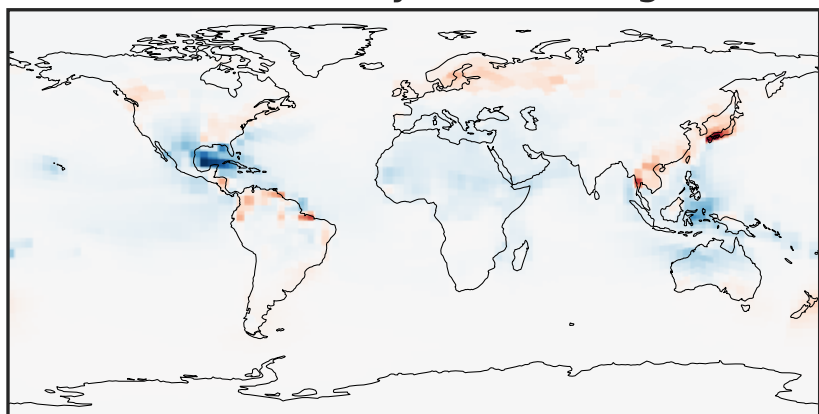
0.015 0.030 0.045  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



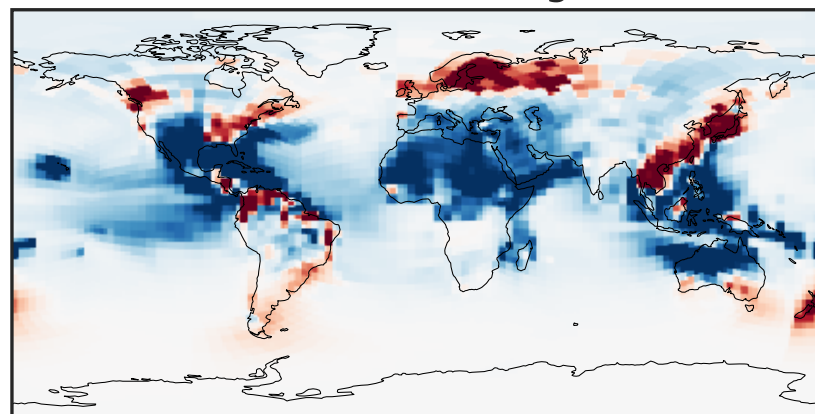
0.015 0.030 0.045  
 $\mu\text{g}/\text{m}^3$

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



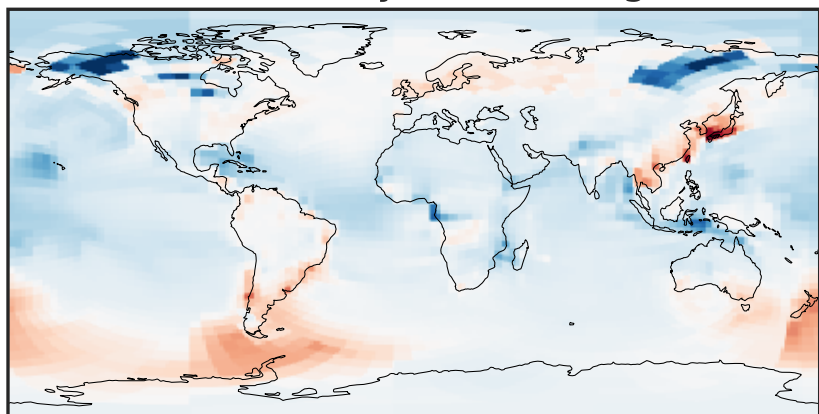
-0.001 0.000 0.001  
 $\mu\text{g}/\text{m}^3$

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



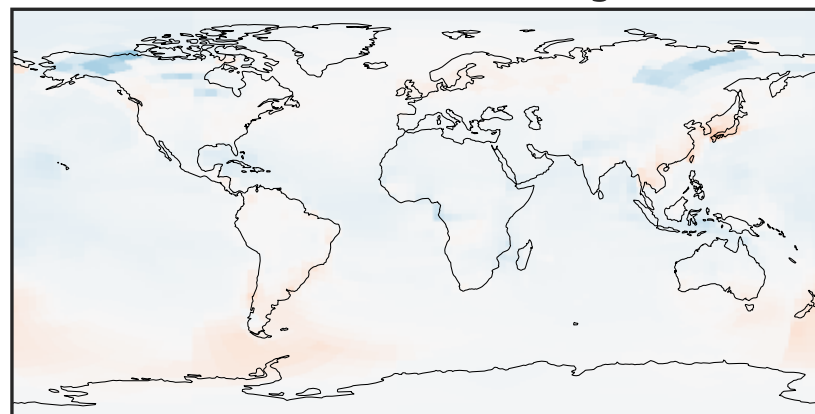
-0.0001 0.0000 0.0001  
 $\mu\text{g}/\text{m}^3$

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



0.8237 0.9119 1.0000 1.1070 1.2140  
unitless

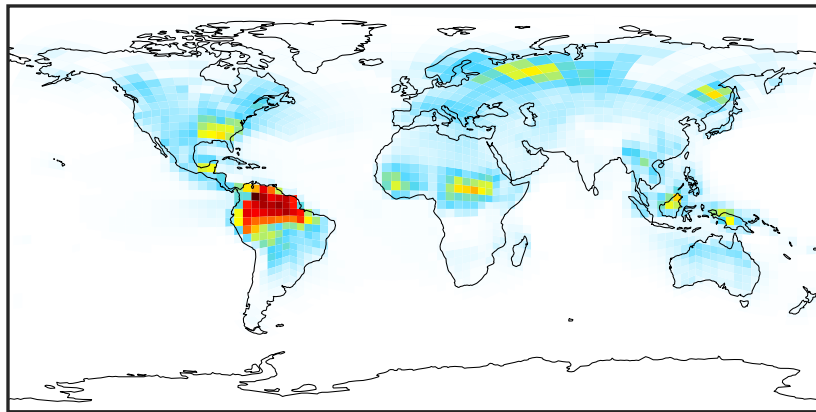
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

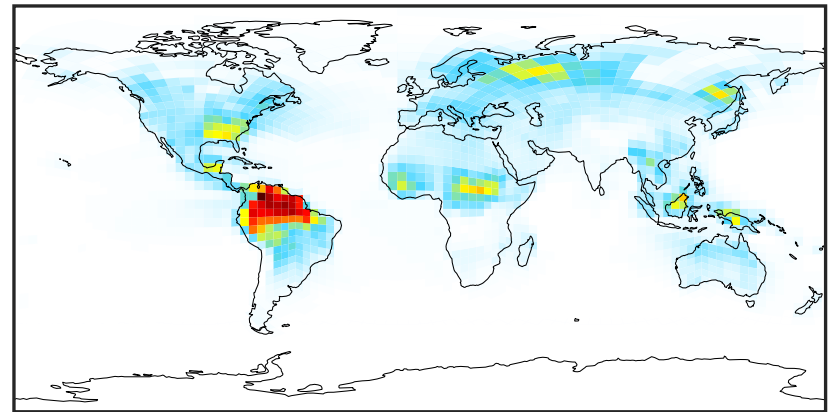
# SpeciesConcVV\_TSOG1 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



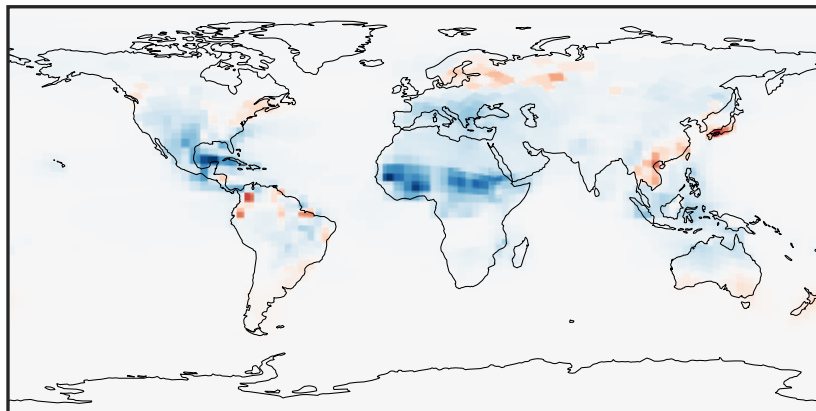
0.0000 0.0402 0.0804 0.1205 0.1607  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



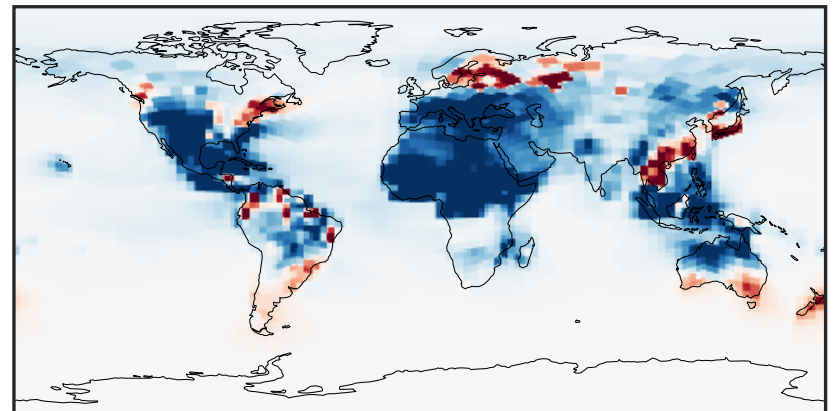
0.0000 0.0402 0.0804 0.1205 0.1607  
µg/m3

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



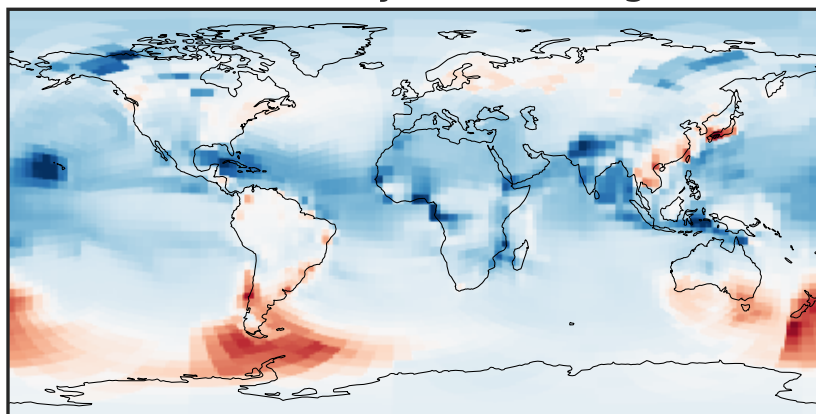
-0.002 0.000 0.002  
µg/m3

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



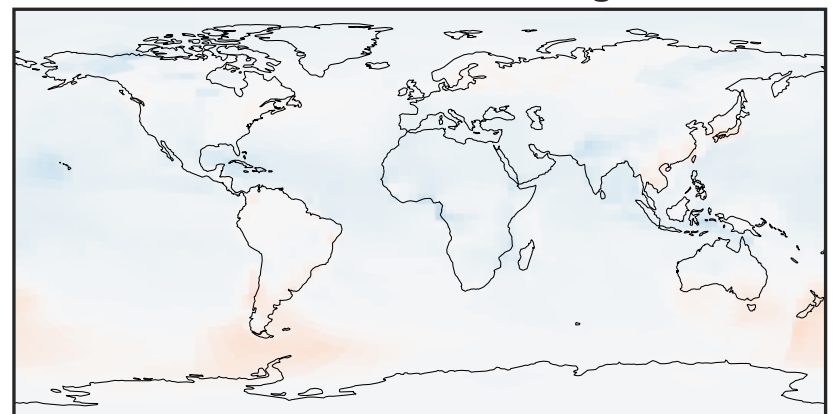
-0.0003 0.0000 0.0003  
µg/m3

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



0.8796 0.9398 1.0000 1.0685 1.1369  
unitless

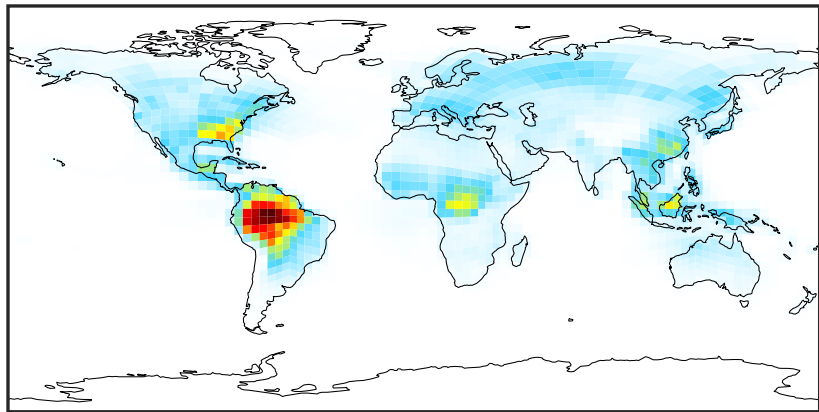
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

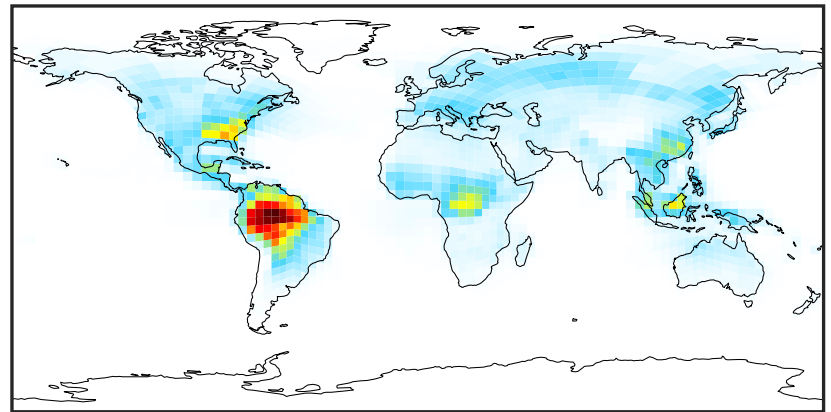
# SpeciesConcVV\_TSOG2 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



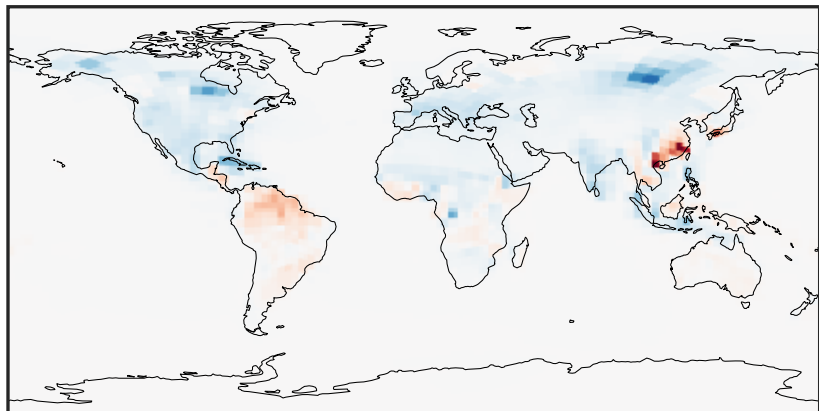
0.000 0.902 1.804 2.706 3.609  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



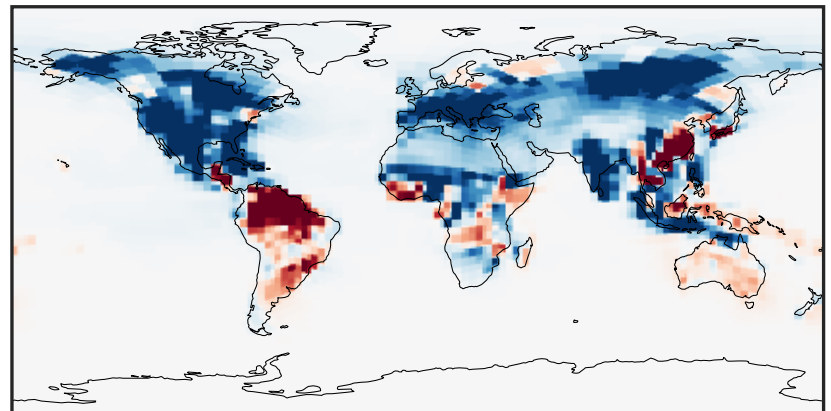
0.000 0.902 1.804 2.706 3.609  
µg/m3

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



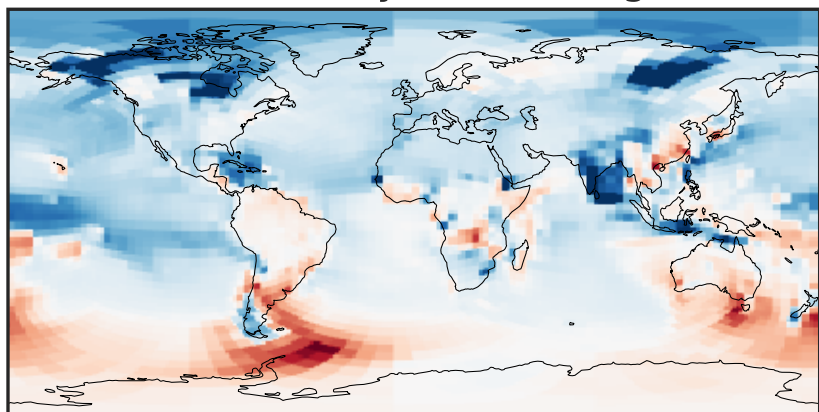
-0.054 -0.027 0.000 0.027 0.054  
µg/m3

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



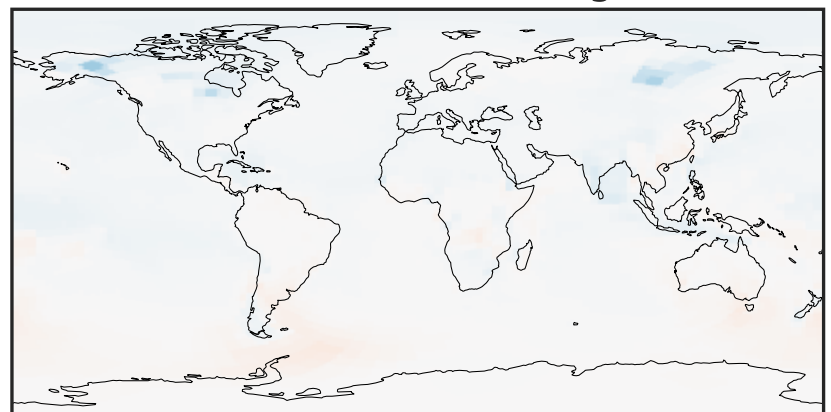
-0.004 0.000 0.004  
µg/m3

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



0.9400 0.9700 1.0000 1.0319 1.0638  
unitless

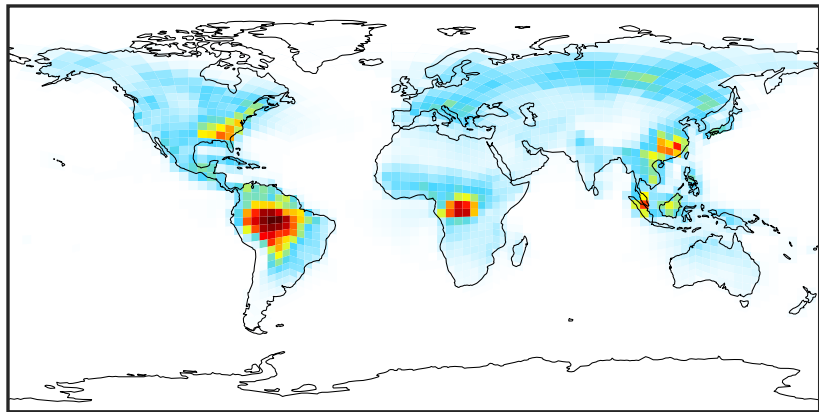
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

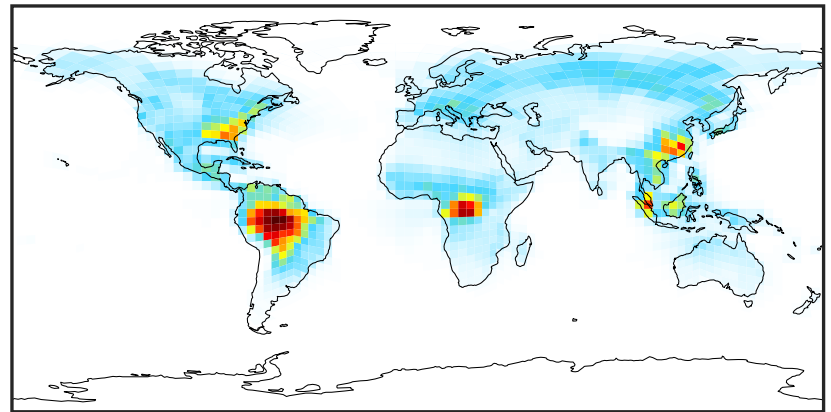
# SpeciesConcVV\_TSOG3 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



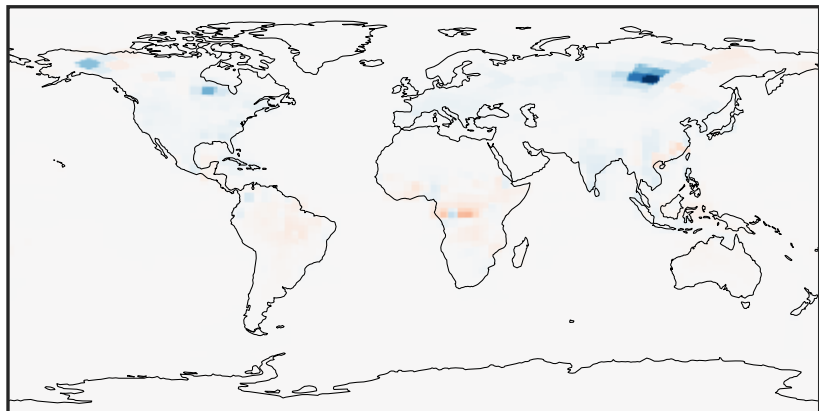
0.000 1.763 3.526 5.290 7.053  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



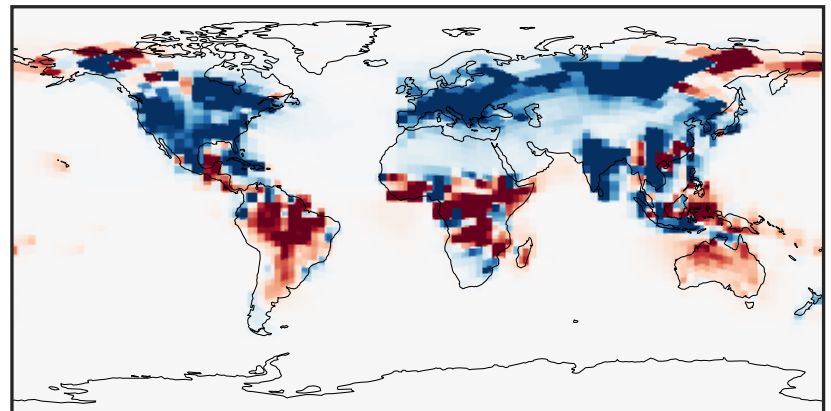
0.000 1.763 3.526 5.290 7.053  
µg/m3

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



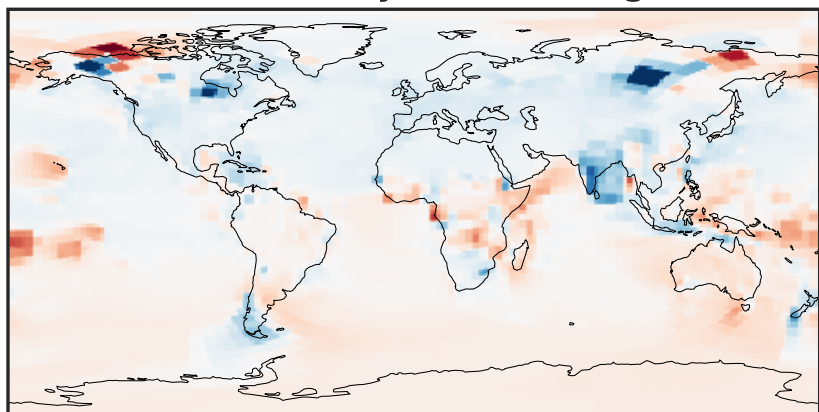
-0.656 -0.328 0.000 0.328 0.656  
µg/m3

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



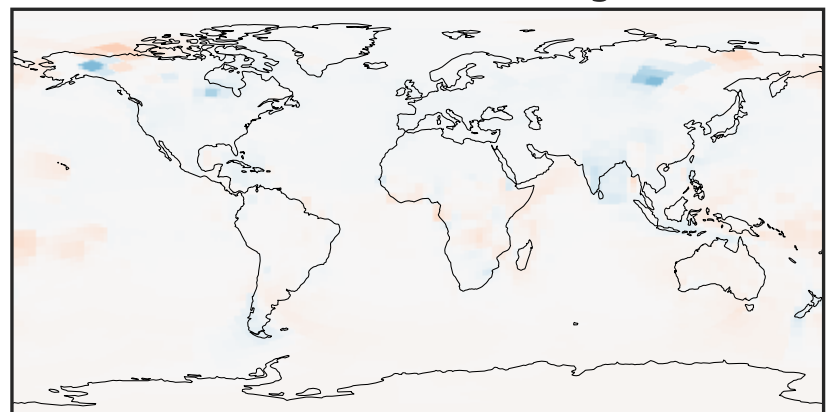
-0.01 0.00 0.01  
µg/m3

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



0.8458 0.9229 1.0000 1.0911 1.1823  
unitless

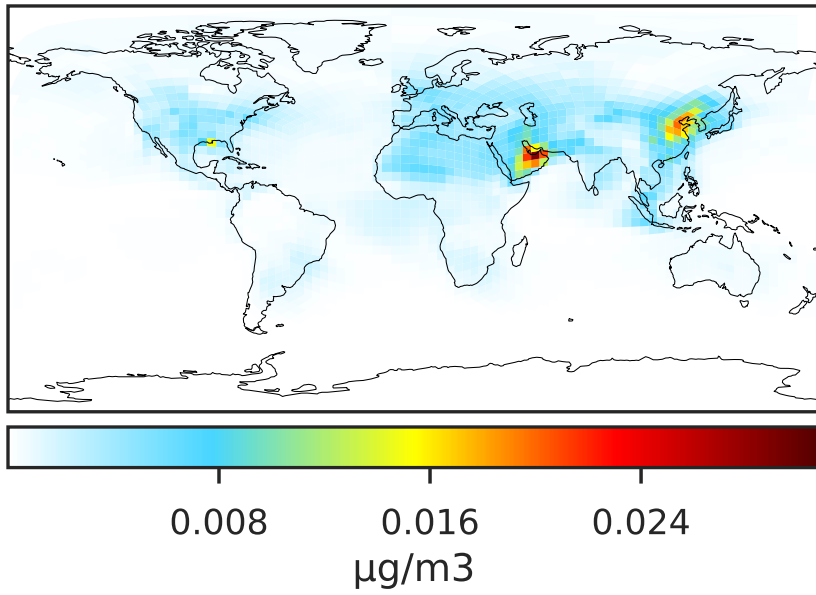
Ratio (1x1.25)  
Dev/Ref, Fixed Range



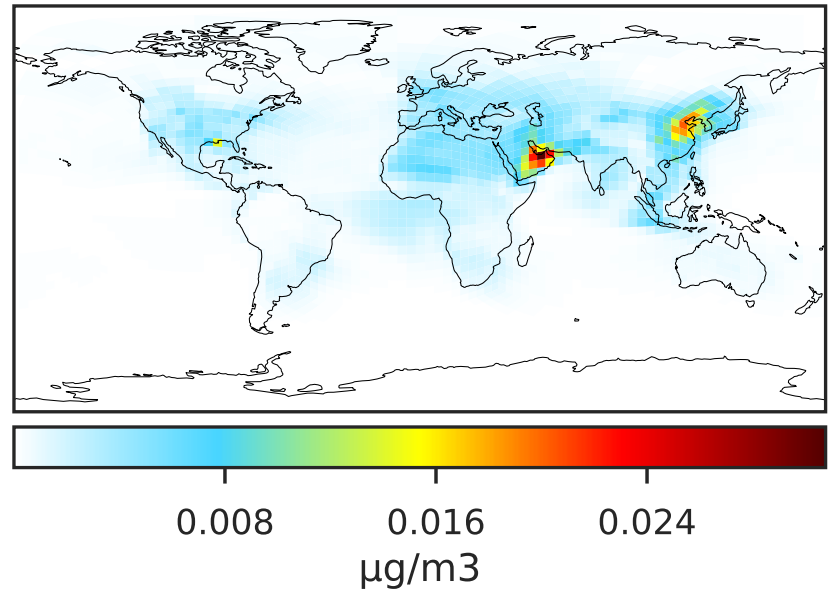
0.50 0.75 1.00 1.50 2.00  
unitless

# SpeciesConcVV\_ASOG1 (Jul2019)

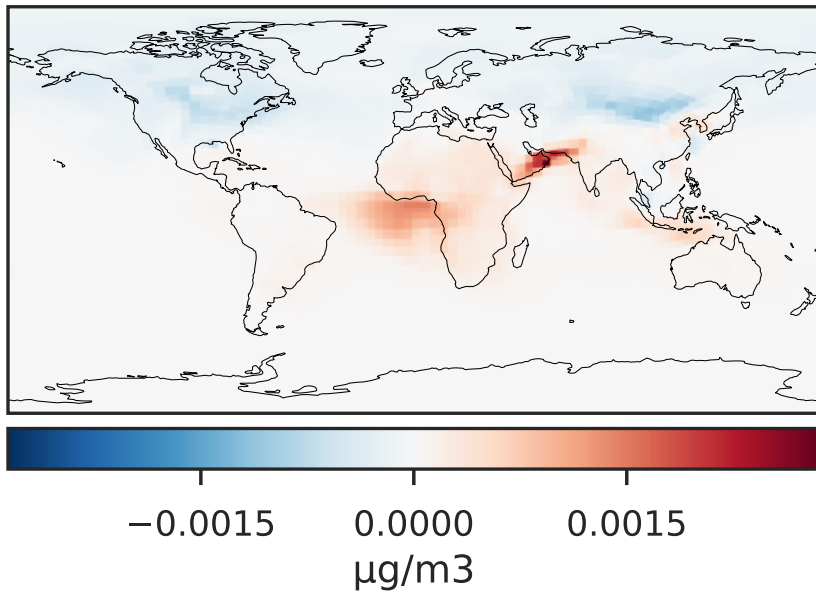
GCHP\_14.0.0 (Ref)  
c24



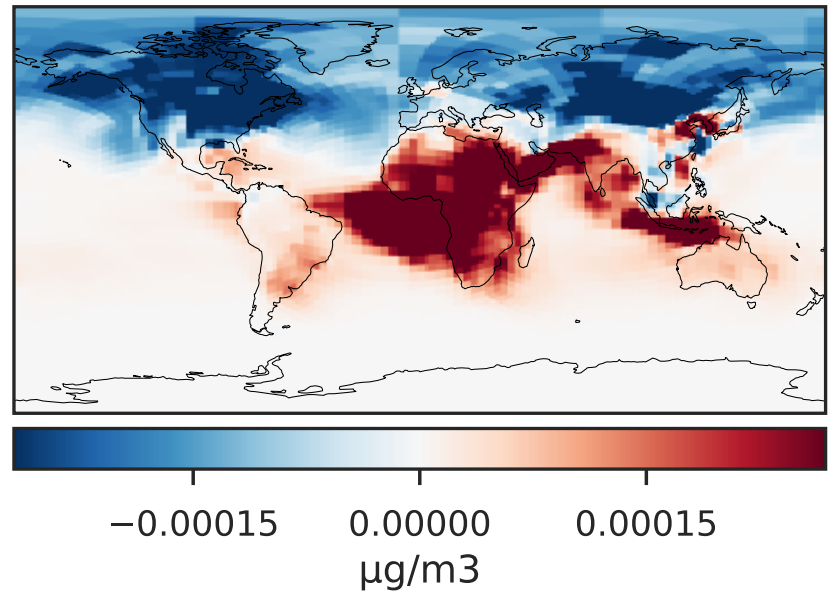
GCHP\_14.2.0 (Dev)  
c24



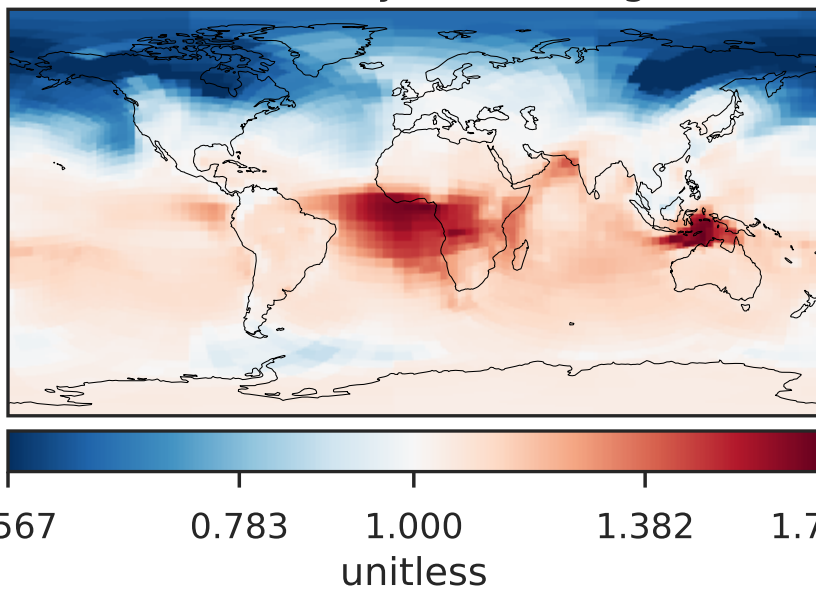
Difference (1x1.25)  
Dev - Ref, Dynamic Range



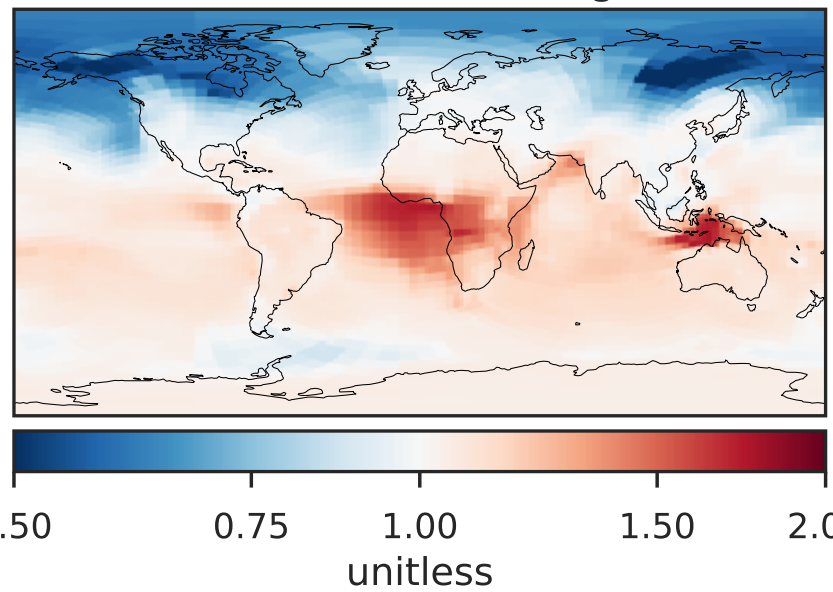
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

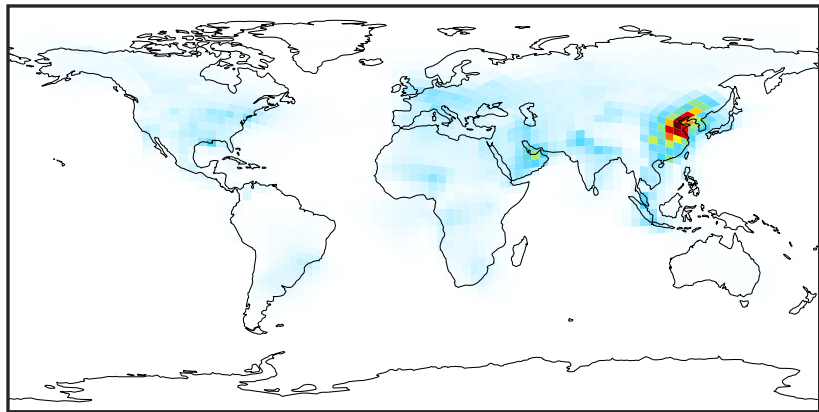


Ratio (1x1.25)  
Dev/Ref, Fixed Range



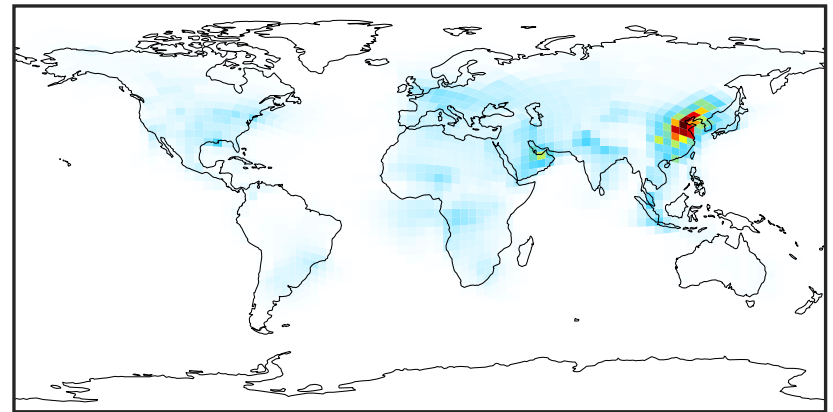
# SpeciesConcVV\_ASOG2 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



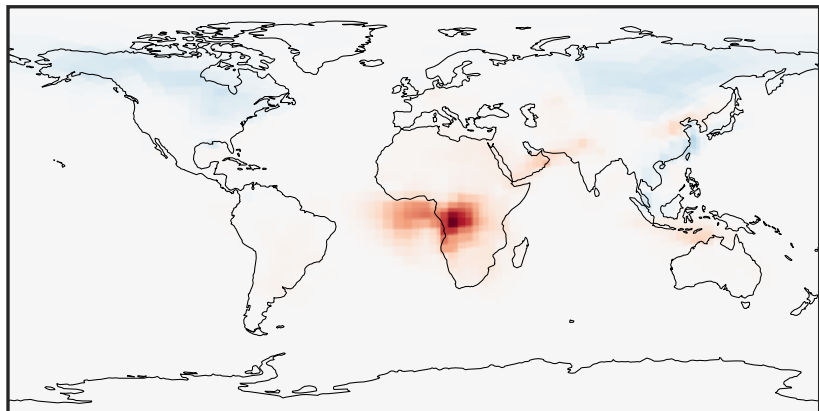
0.0000 0.0293 0.0587 0.0880 0.1174  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



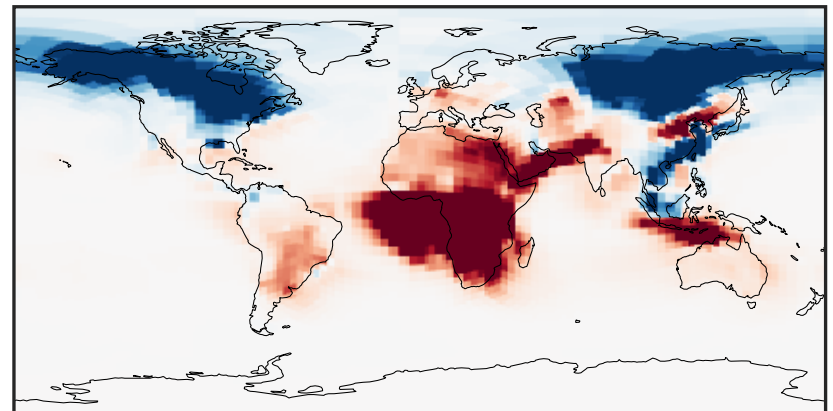
0.0000 0.0293 0.0587 0.0880 0.1174  
 $\mu\text{g}/\text{m}^3$

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



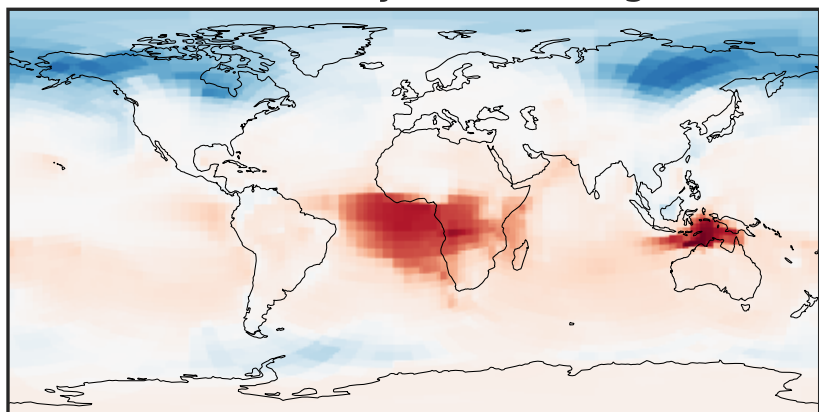
-0.005 0.000 0.005  
 $\mu\text{g}/\text{m}^3$

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



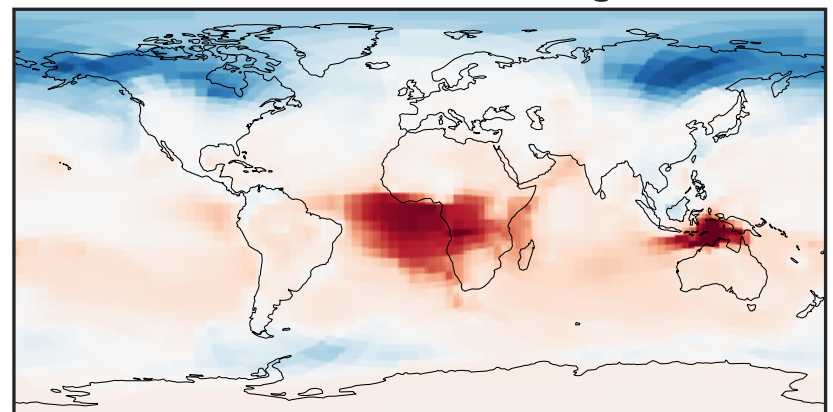
-0.0003 0.0000 0.0003  
 $\mu\text{g}/\text{m}^3$

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



0.444 0.722 1.000 1.627 2.254  
unitless

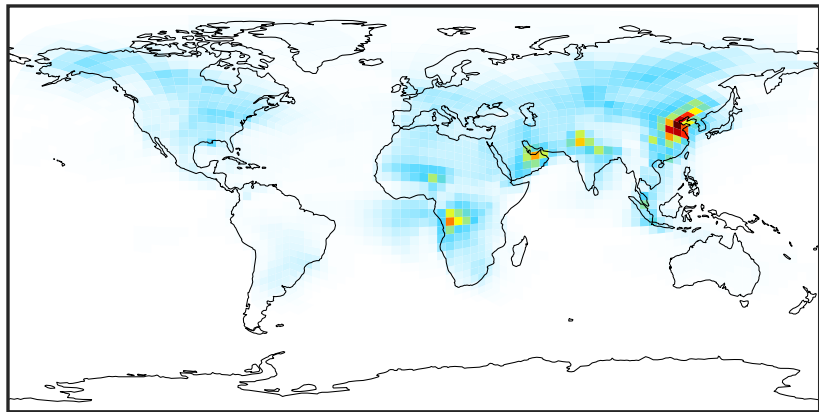
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

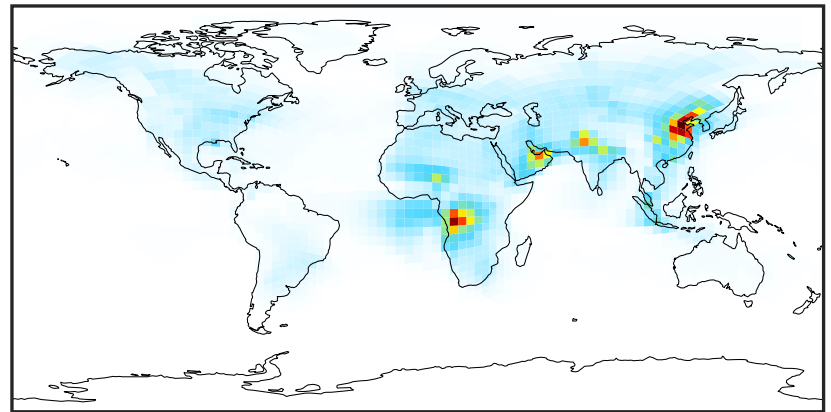
# SpeciesConcVV\_ASOG3 (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



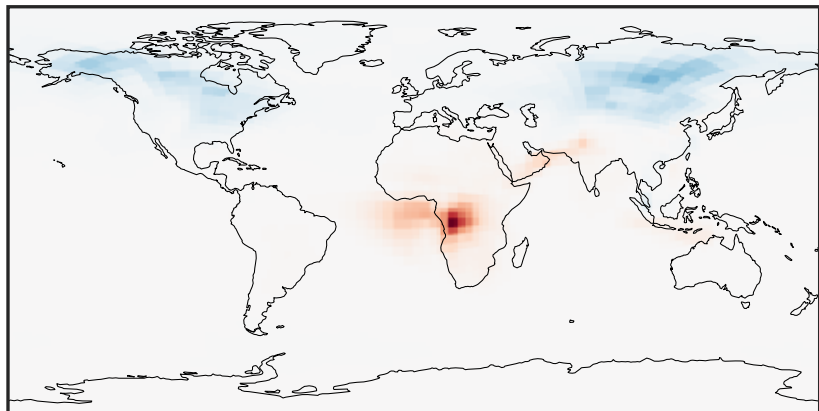
0.0000 0.1211 0.2423 0.3634 0.4845  
µg/m<sup>3</sup>

GCHP\_14.2.0 (Dev)  
c24



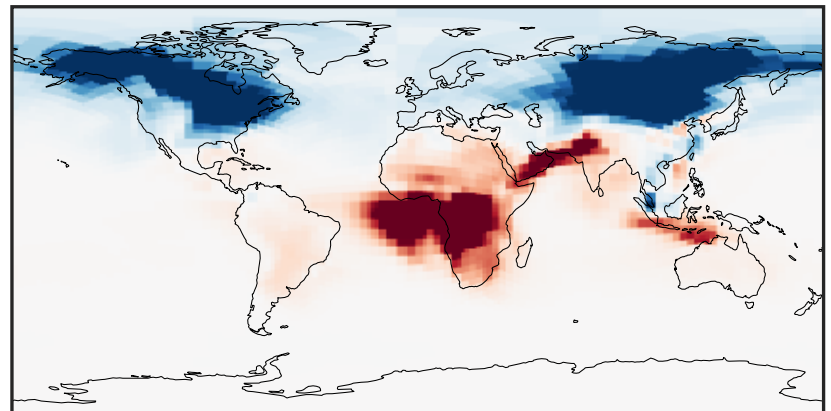
0.0000 0.1211 0.2423 0.3634 0.4845  
µg/m<sup>3</sup>

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



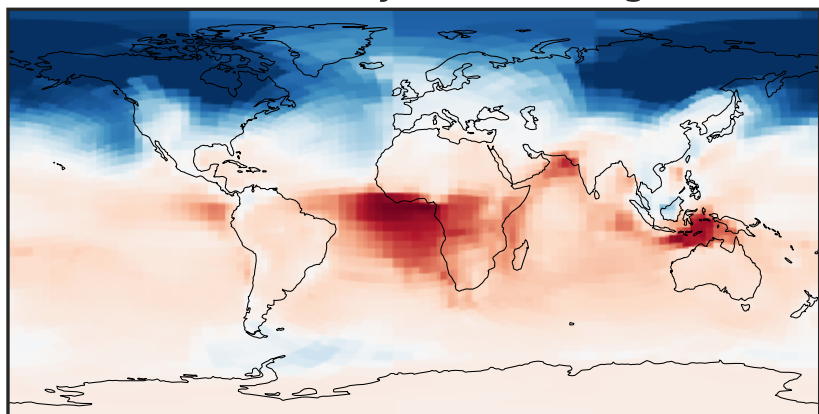
-0.1389 -0.0694 0.0000 0.0694 0.1389  
µg/m<sup>3</sup>

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



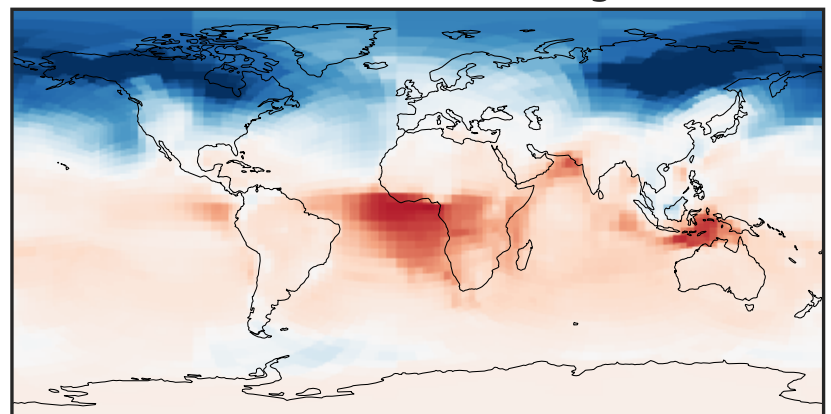
-0.008 0.000 0.008  
µg/m<sup>3</sup>

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



0.567 0.783 1.000 1.383 1.765  
unitless

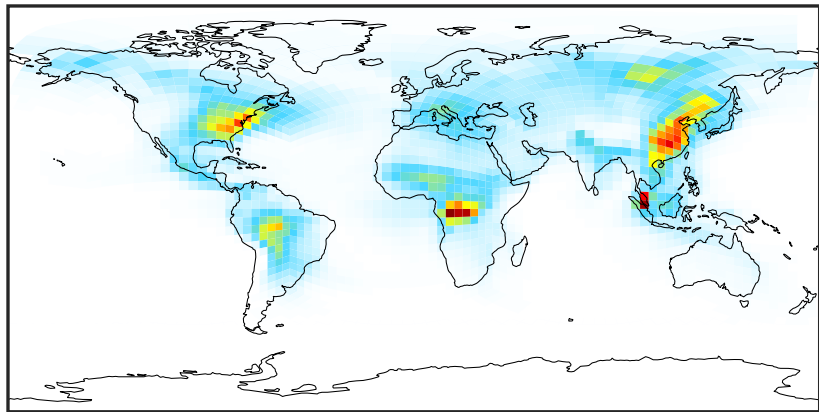
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

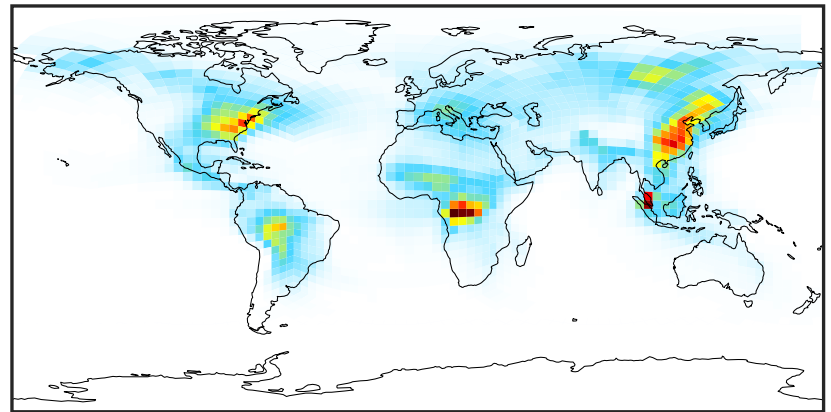
# SpeciesConcVV\_INDIOL (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



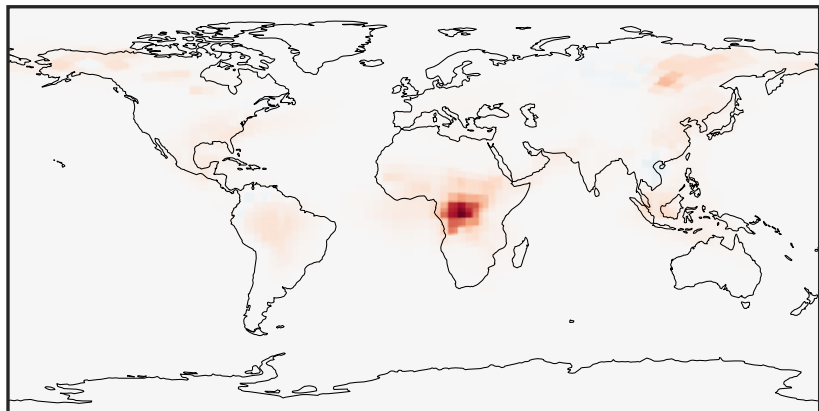
0.002 2.200 4.399 6.599 8.800  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



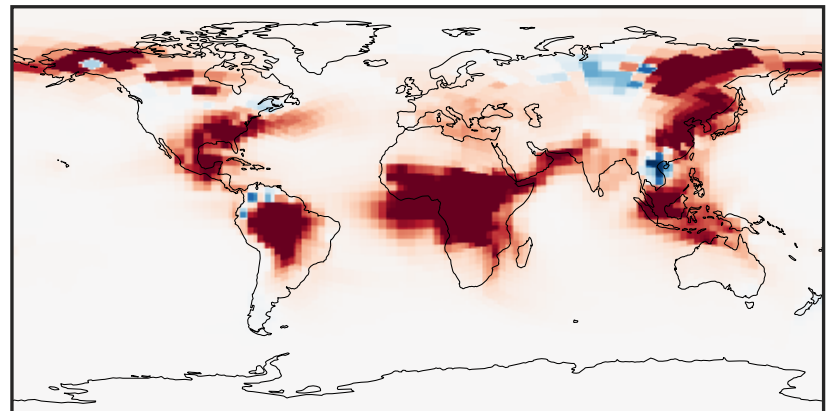
0.002 2.200 4.399 6.599 8.800  
 $\mu\text{g}/\text{m}^3$

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



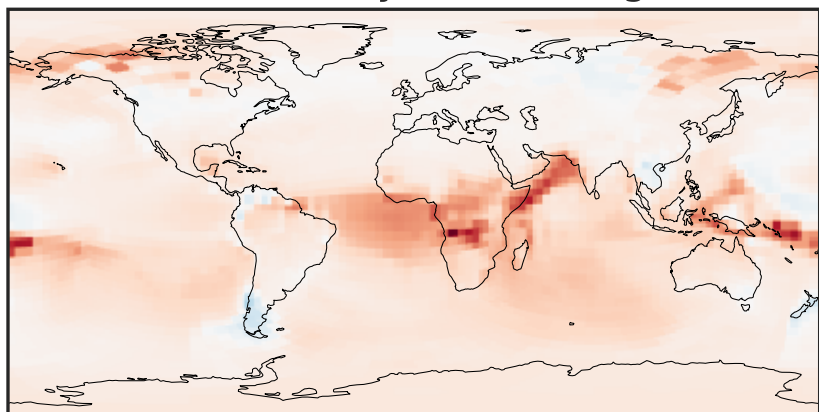
-0.877 -0.439 0.000 0.439 0.877  
 $\mu\text{g}/\text{m}^3$

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



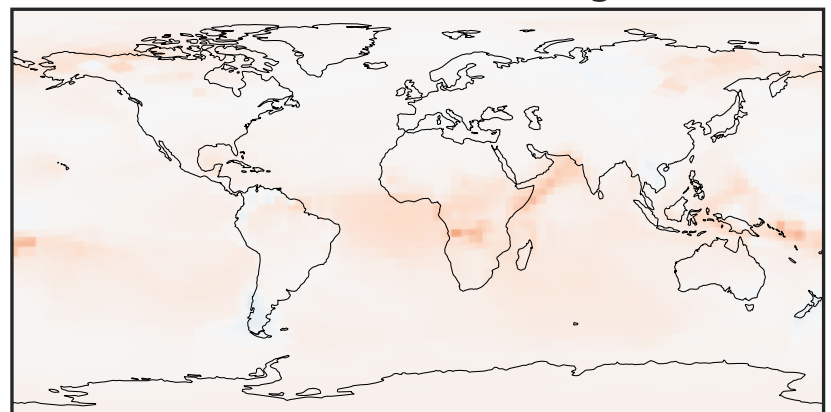
-0.0546 -0.0273 0.0000 0.0273 0.0546  
 $\mu\text{g}/\text{m}^3$

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



0.7649 0.8824 1.0000 1.1537 1.3074  
unitless

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

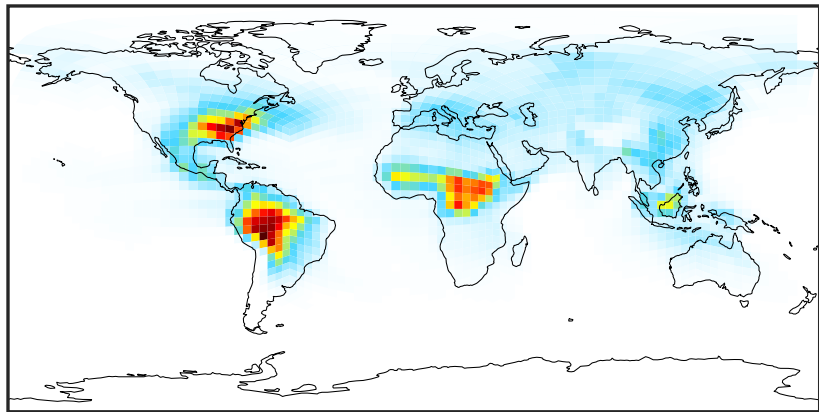


0.50 0.75 1.00 1.50 2.00  
unitless



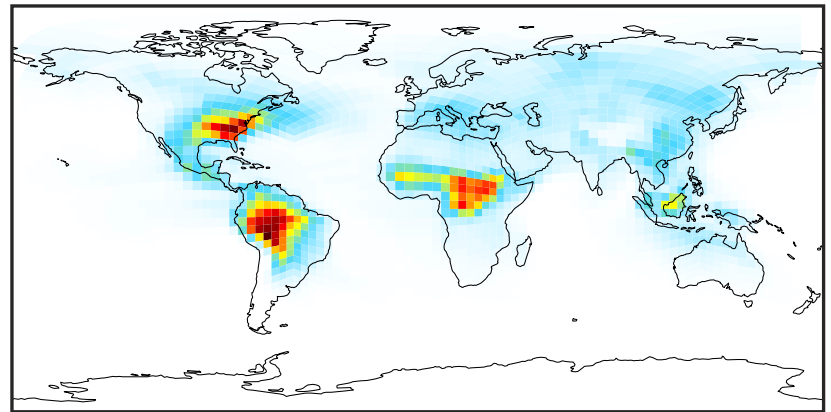
# SpeciesConcVV\_LVCOA (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



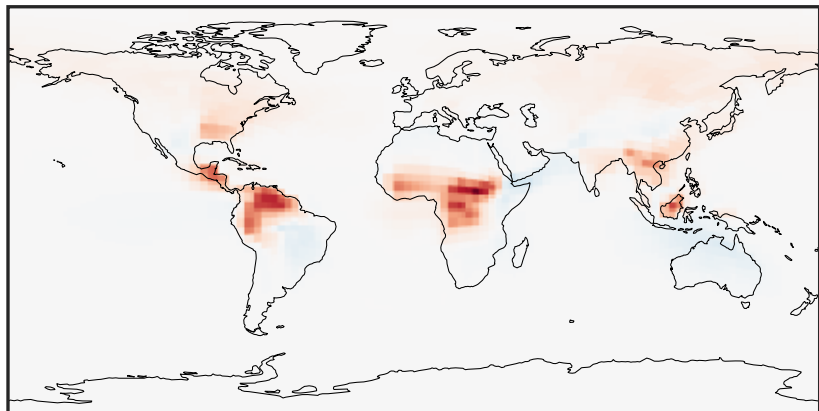
0.0000 0.0515 0.1029 0.1544 0.2059  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



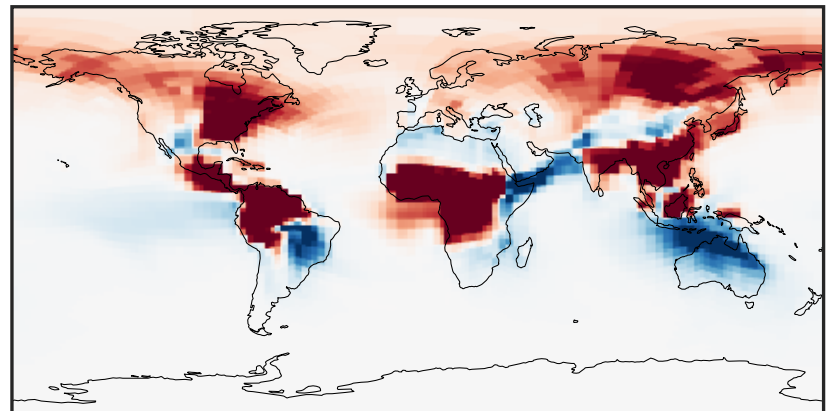
0.0000 0.0515 0.1029 0.1544 0.2059  
 $\mu\text{g}/\text{m}^3$

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



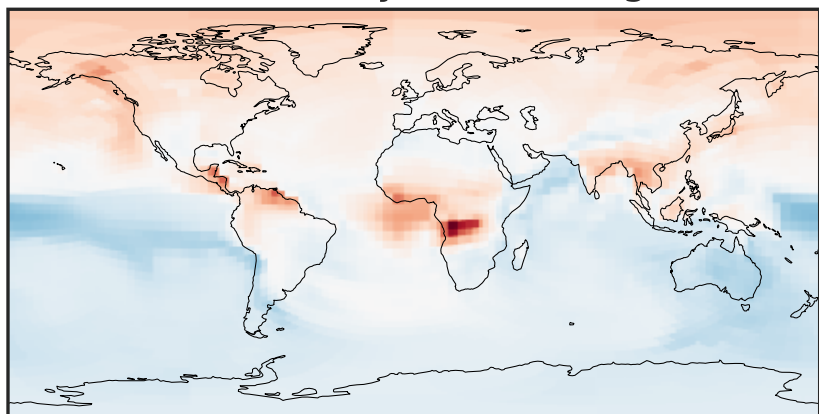
-0.003 0.000 0.003  
 $\mu\text{g}/\text{m}^3$

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



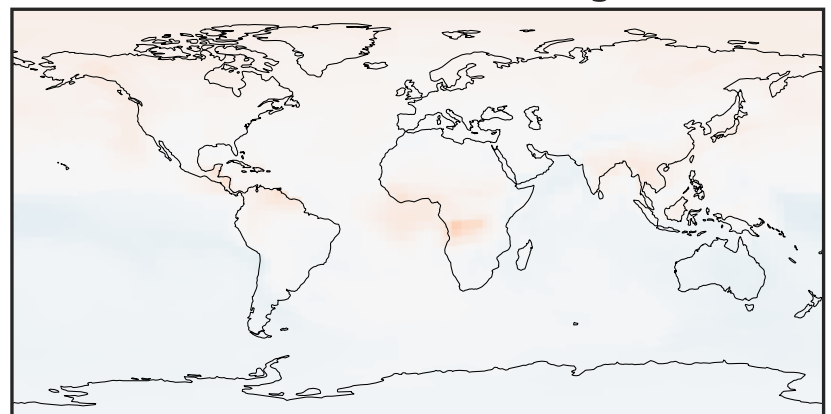
-0.00025 0.00000 0.00025  
 $\mu\text{g}/\text{m}^3$

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



0.8485 0.9242 1.0000 1.0893 1.1786  
unitless

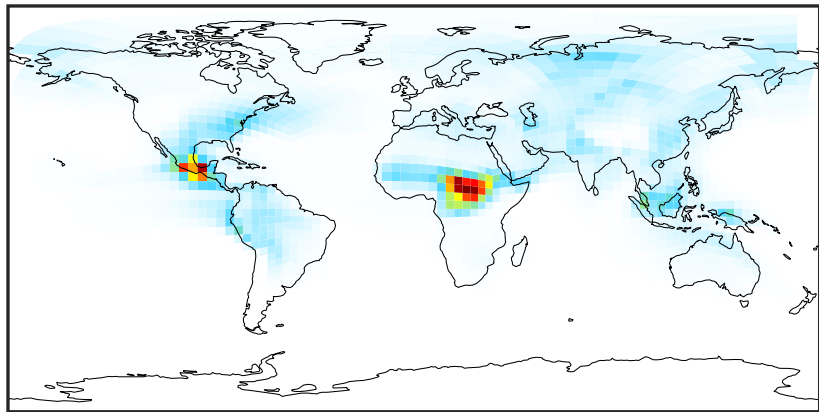
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

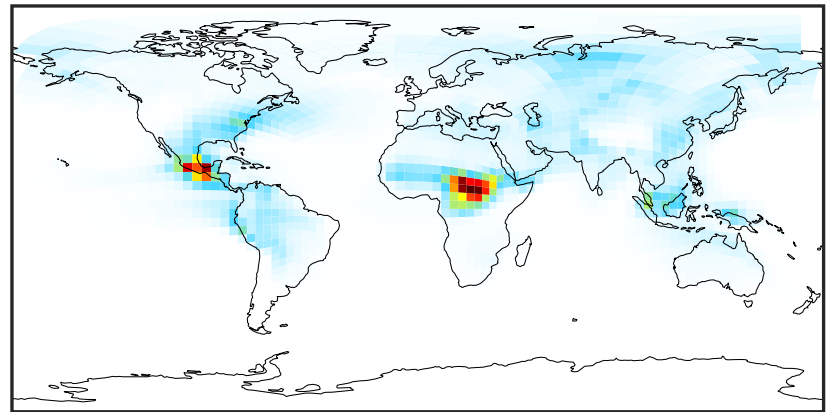
# SpeciesConcVV\_SOAIE (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



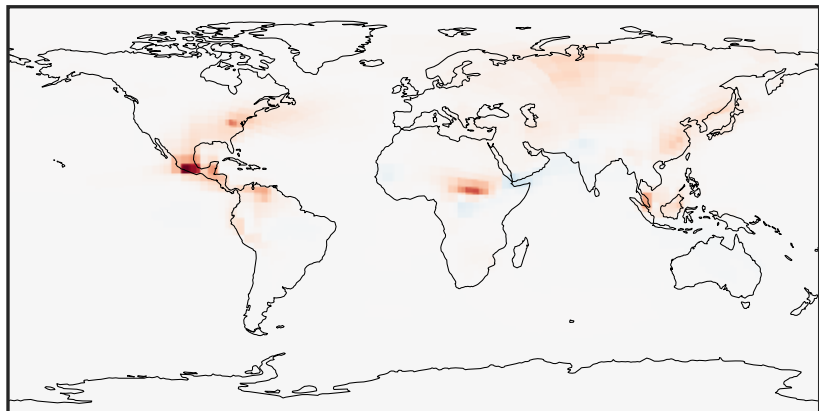
0.000 1.234 2.467 3.701 4.935  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



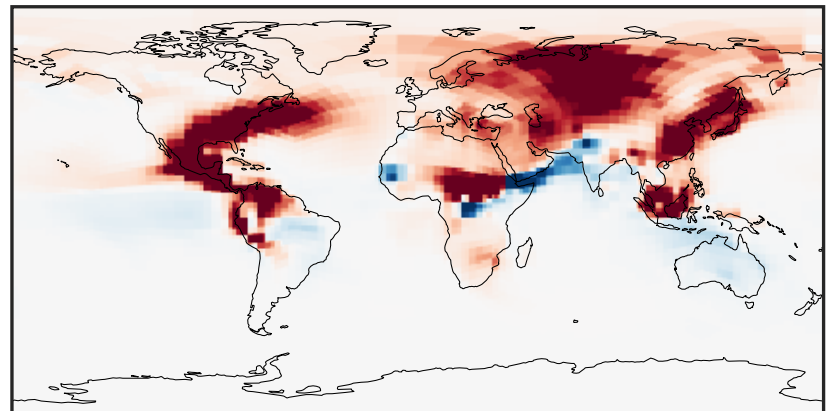
0.000 1.234 2.467 3.701 4.935  
µg/m3

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



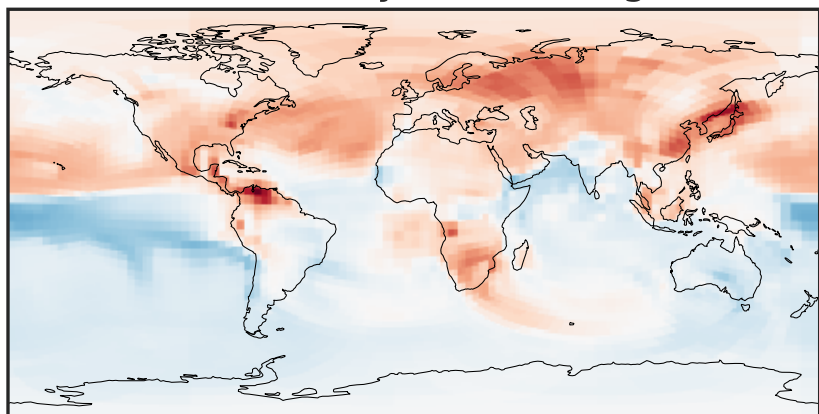
-0.4534 -0.2267 0.0000 0.2267 0.4534  
µg/m3

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



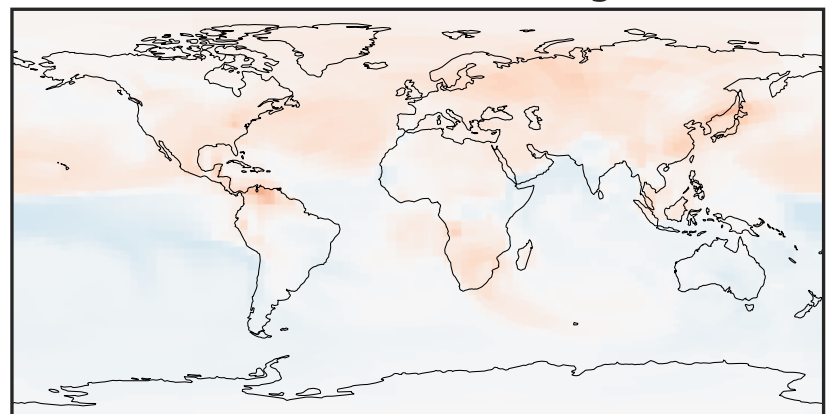
-0.02 0.00 0.02  
µg/m3

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



0.7812 0.8906 1.0000 1.1401 1.2801  
unitless

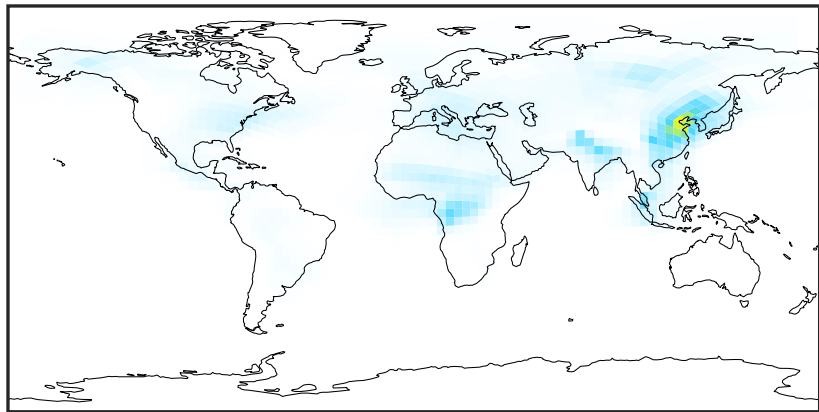
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

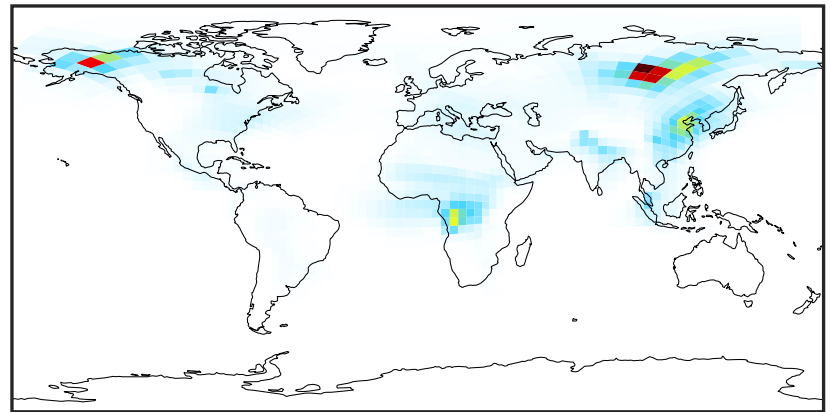
# SpeciesConcVV\_SOAGX (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



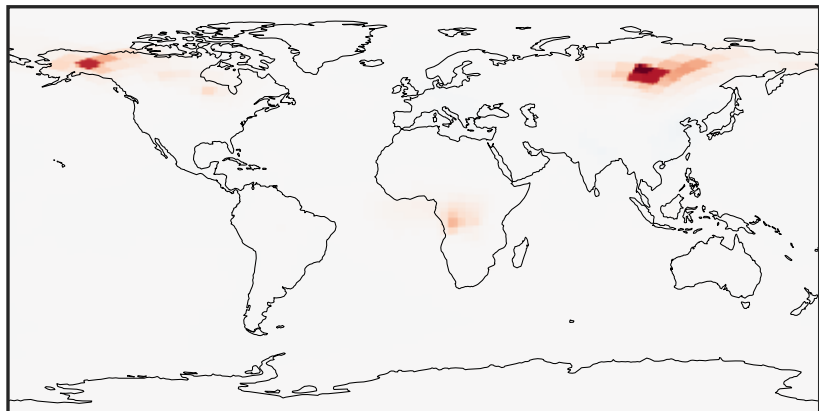
0.000 0.733 1.466 2.199 2.932  
µg/m3

GCHP\_14.2.0 (Dev)  
c24



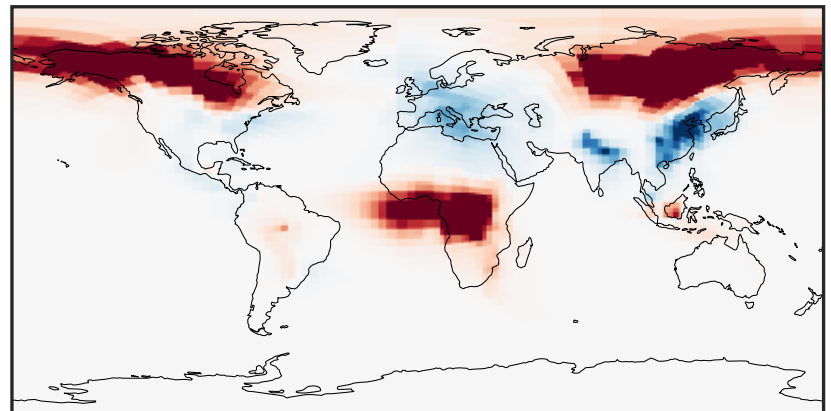
0.000 0.733 1.466 2.199 2.932  
µg/m3

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



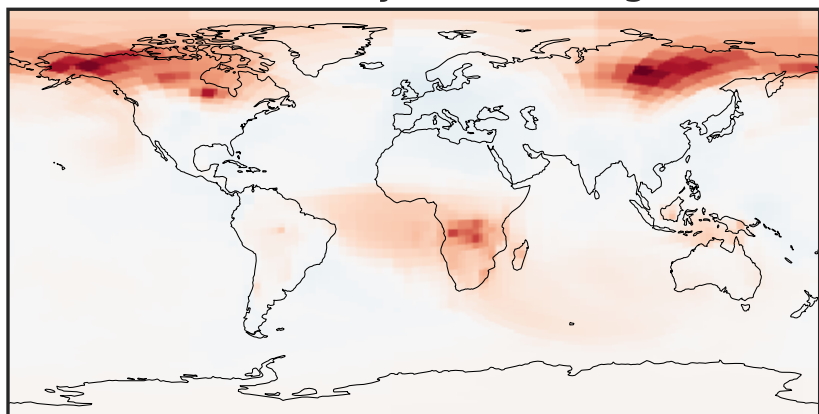
-2.714 -1.357 0.000 1.357 2.714  
µg/m3

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



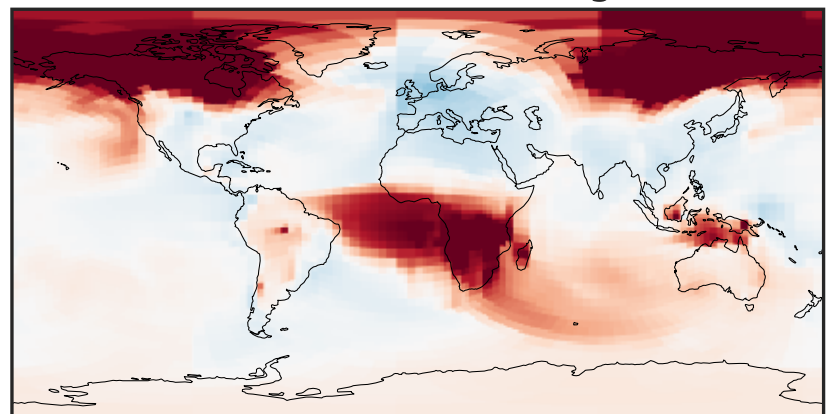
-0.0650 -0.0325 0.0000 0.0325 0.0650  
µg/m3

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



1e-01 1 10  
unitless

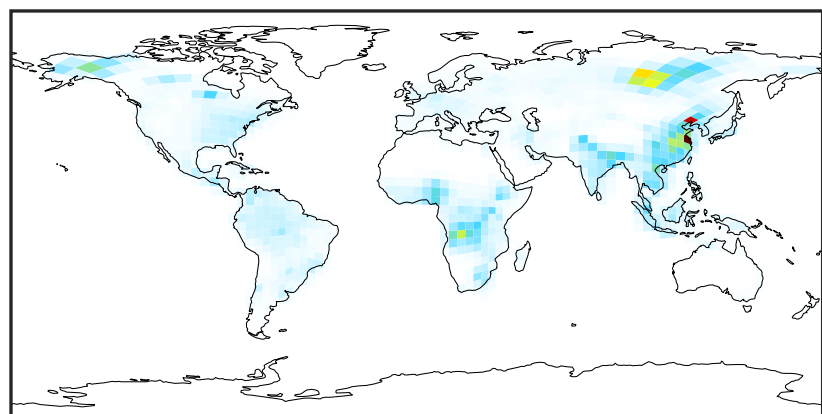
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

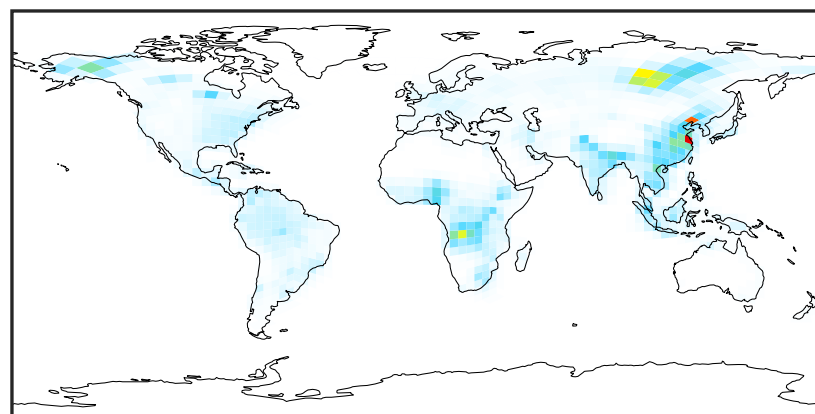
# SpeciesConcVV\_SOAP (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



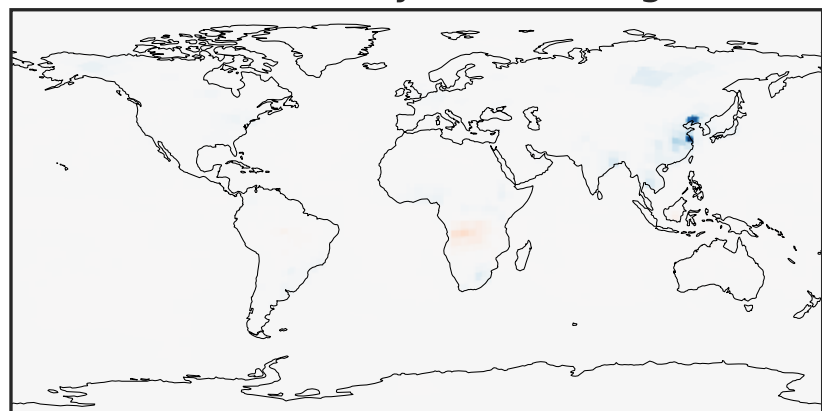
0.00 5.19 10.37 15.56 20.75  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



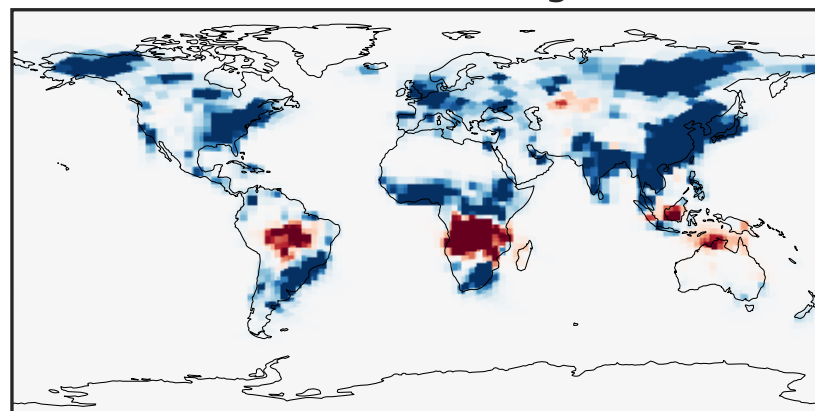
0.00 5.19 10.37 15.56 20.75  
 $\mu\text{g}/\text{m}^3$

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



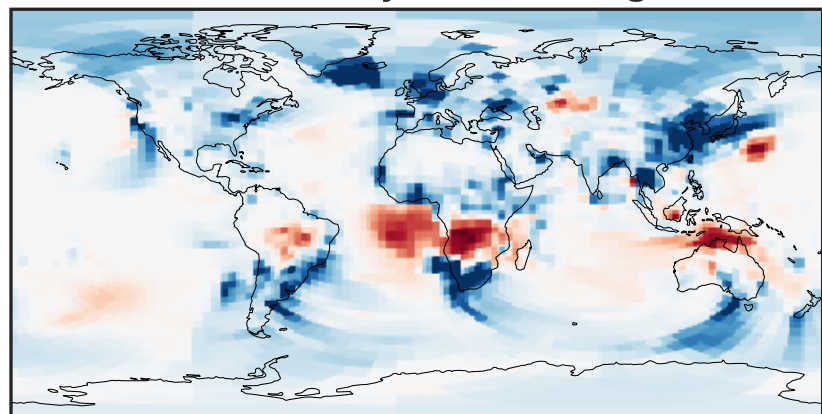
-4.279 -2.139 0.000 2.139 4.279  
 $\mu\text{g}/\text{m}^3$

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



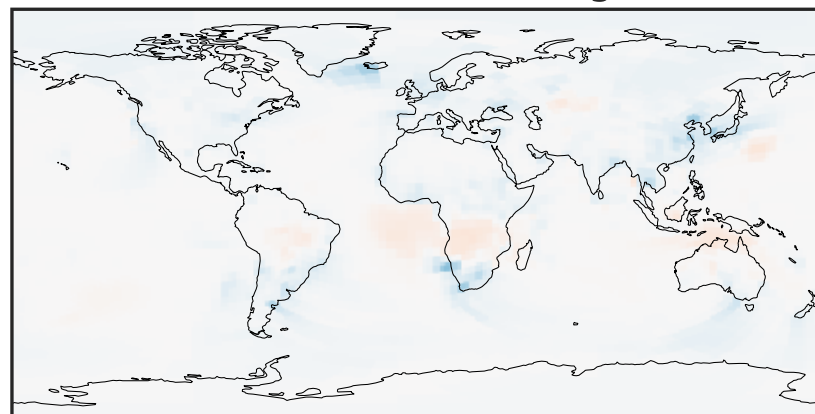
-0.02 0.00 0.02  
 $\mu\text{g}/\text{m}^3$

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



0.9205 0.9602 1.0000 1.0432 1.0864  
unitless

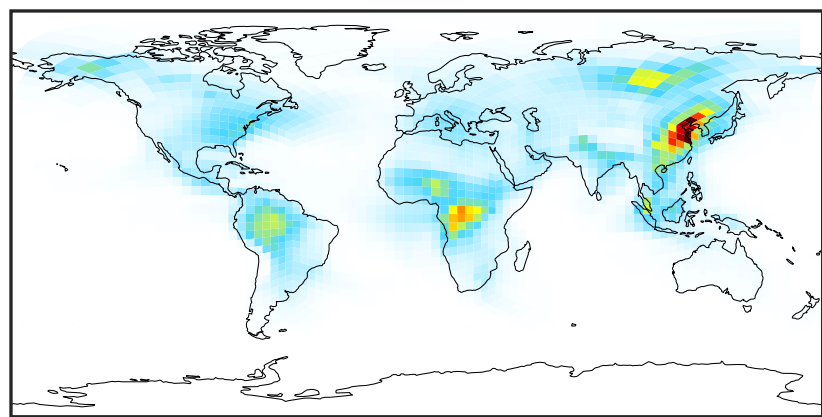
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

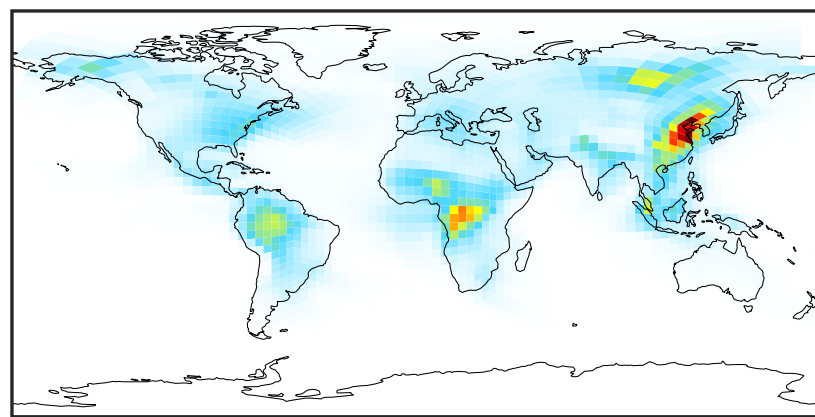
# SpeciesConcVW\_SOAS (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



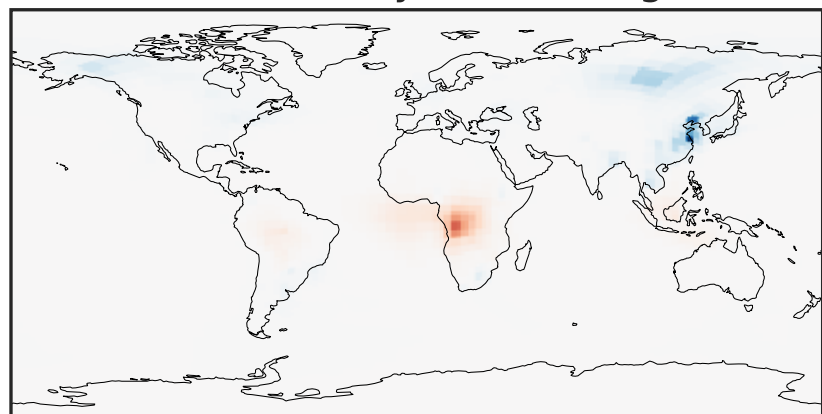
0.01 3.63 7.25 10.88 14.51  
 $\mu\text{g}/\text{m}^3$

GCHP\_14.2.0 (Dev)  
c24



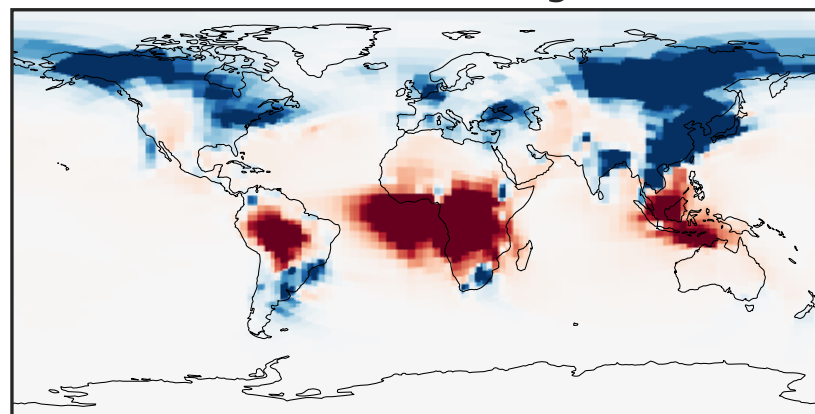
0.01 3.63 7.25 10.88 14.51  
 $\mu\text{g}/\text{m}^3$

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



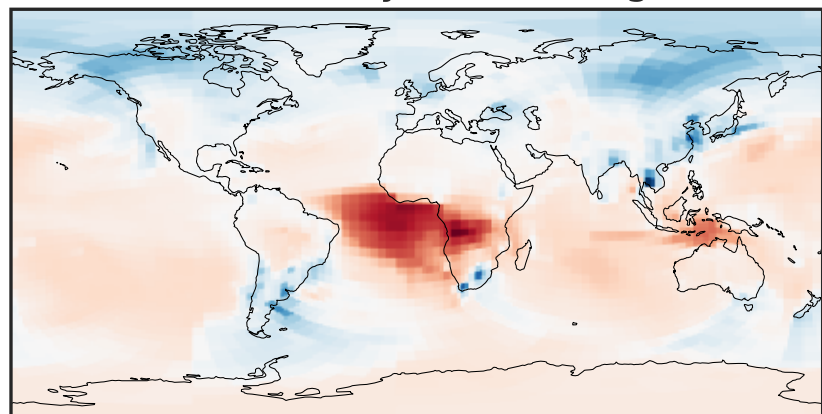
-0.836 -0.418 0.000 0.418 0.836  
 $\mu\text{g}/\text{m}^3$

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



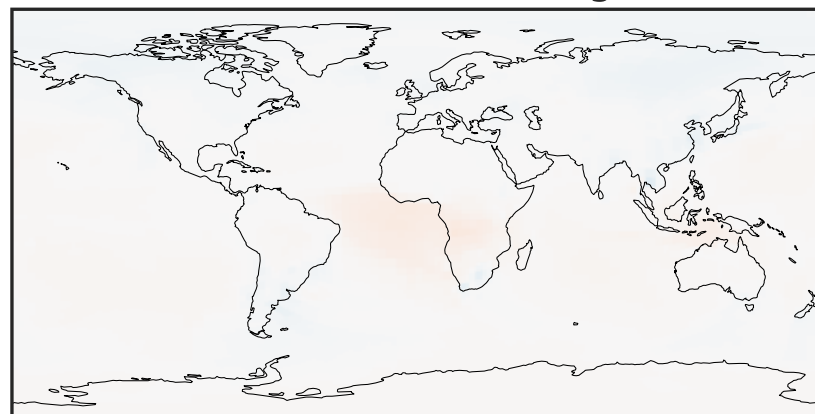
-0.015 0.000 0.015  
 $\mu\text{g}/\text{m}^3$

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



0.9320 0.9660 1.0000 1.0365 1.0730  
unitless

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



0.50 0.75 1.00 1.50 2.00  
unitless