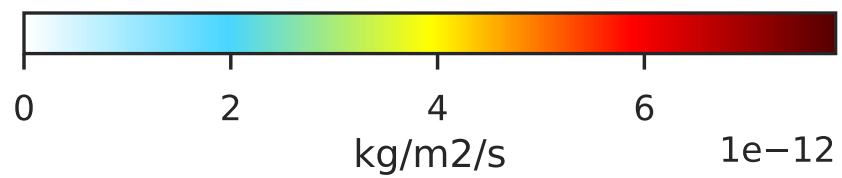
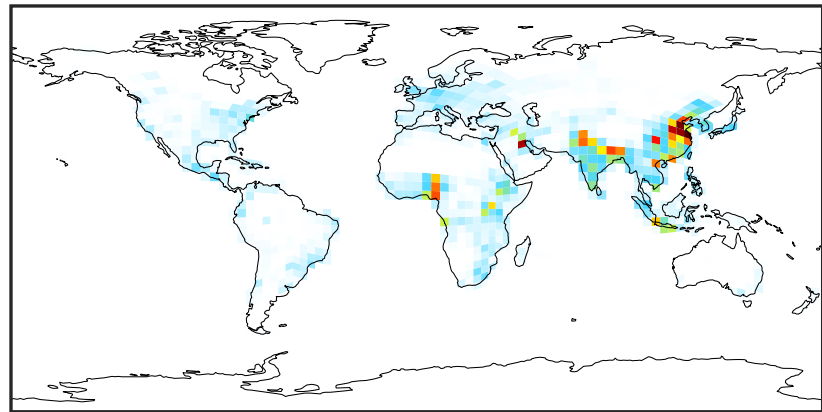
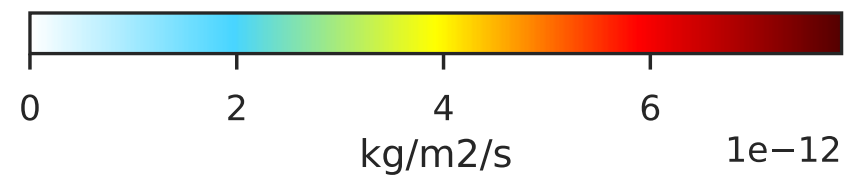
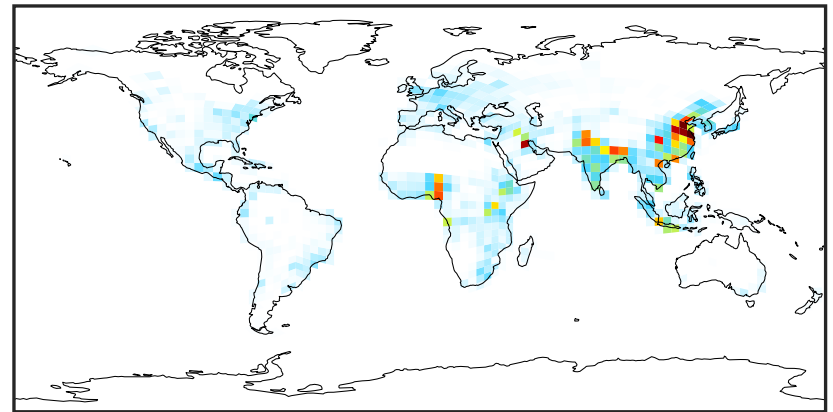


# EmisEOH\_Anthro (Jul2019)

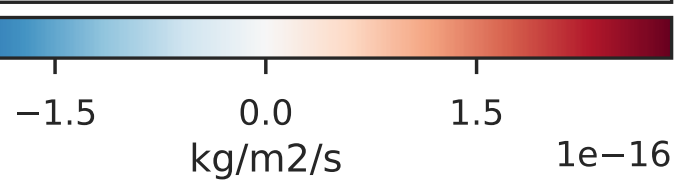
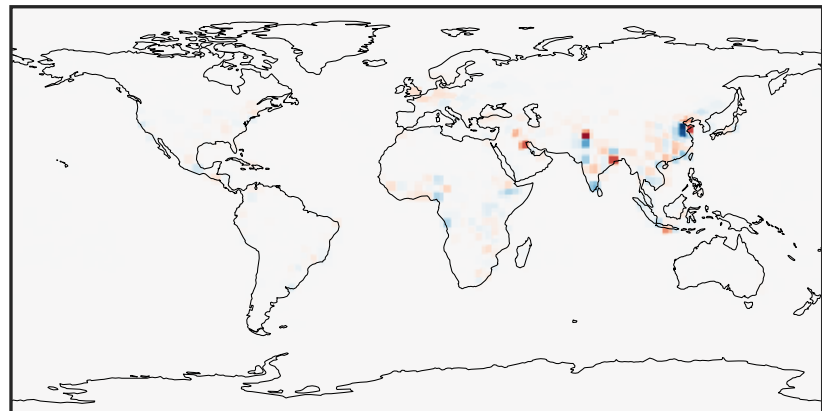
GCHP\_14.0.0 (Ref)  
c24



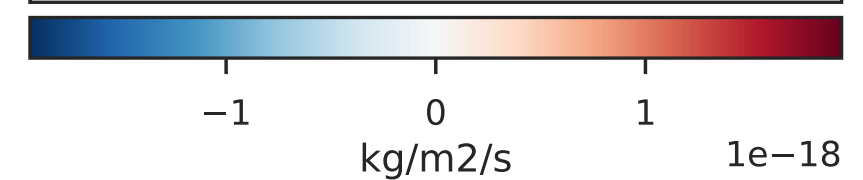
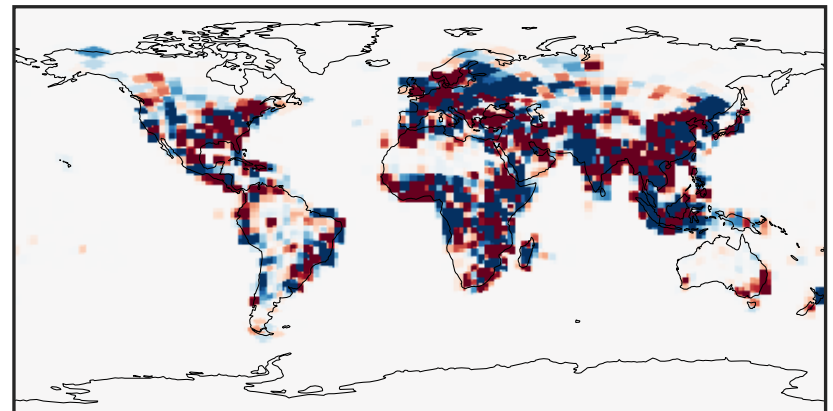
GCHP\_14.2.0 (Dev)  
c24



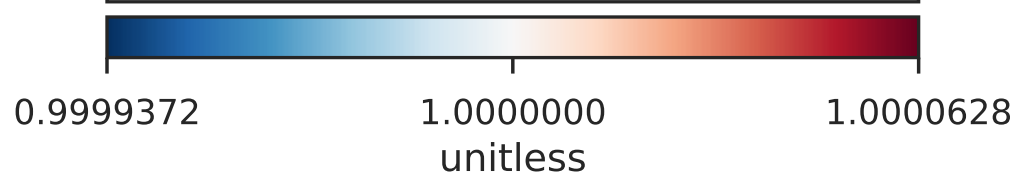
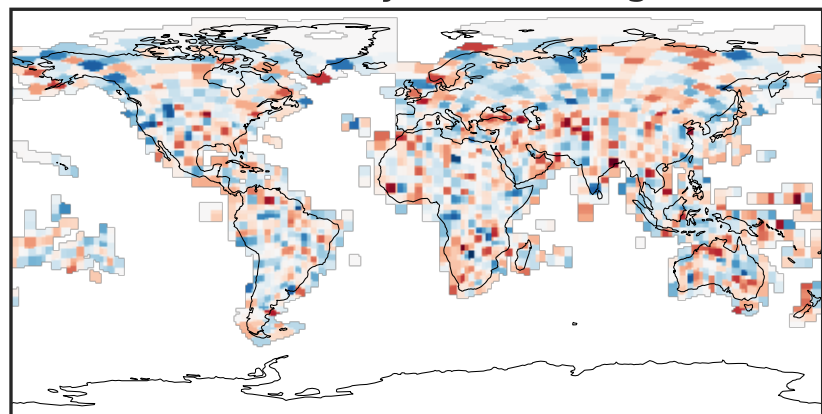
Difference (1x1.25)  
Dev - Ref, Dynamic Range



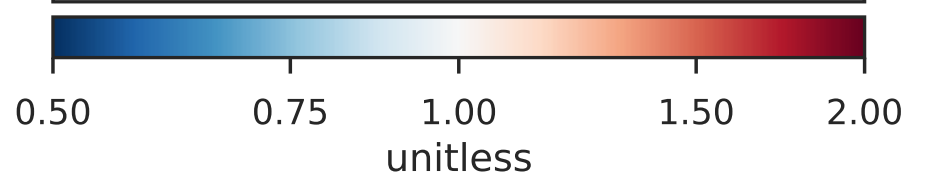
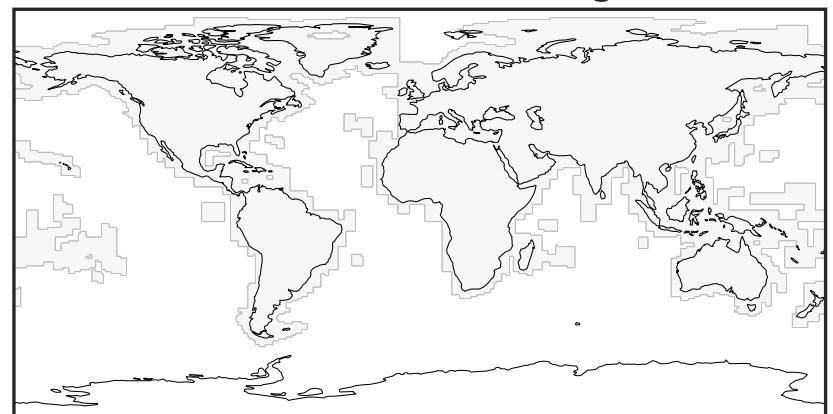
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

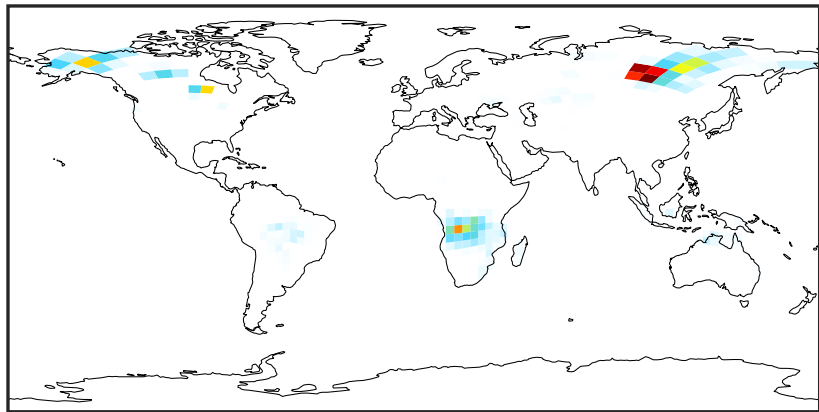


Ratio (1x1.25)  
Dev/Ref, Fixed Range



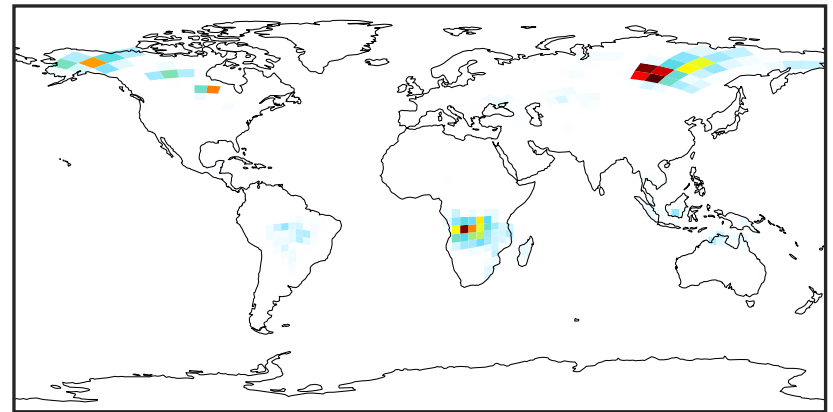
# EmisEOH\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



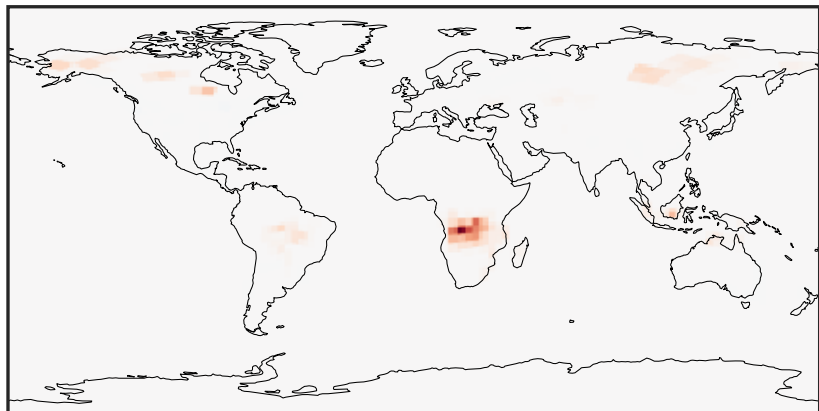
0.0 1.5 3.0  $1e-12$   
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



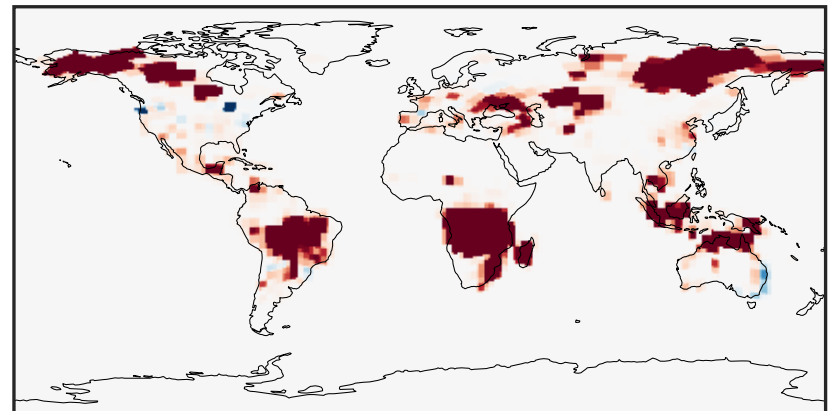
0.0 1.5 3.0  $1e-12$   
kg/m<sup>2</sup>/s

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



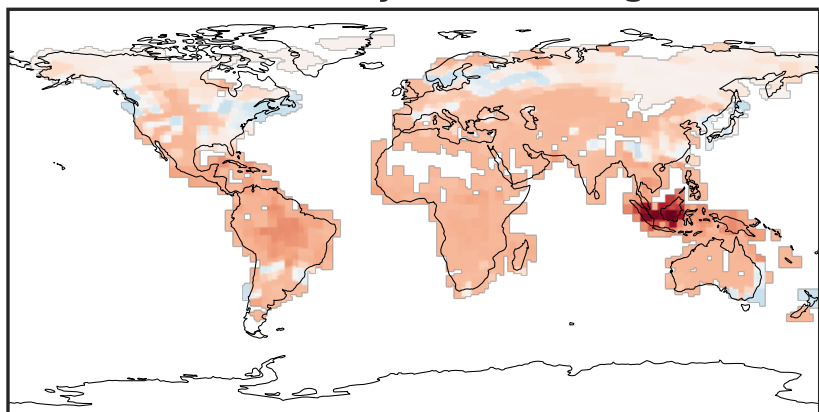
-8 0 8  $1e-13$   
kg/m<sup>2</sup>/s

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



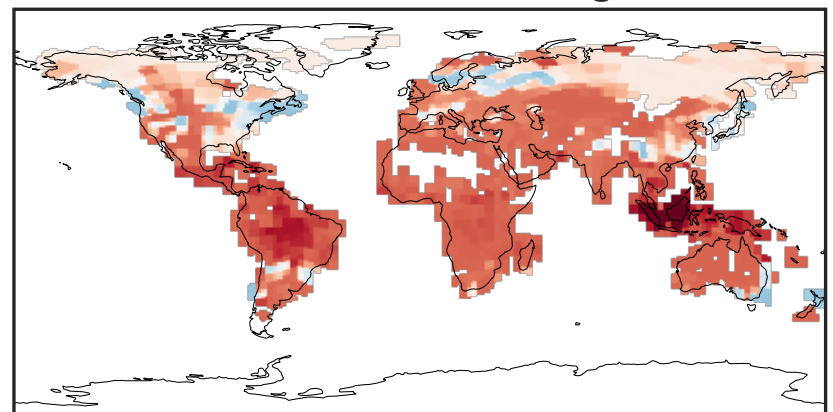
-4 0 4  $1e-15$   
kg/m<sup>2</sup>/s

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



0.296 0.648 1.000 2.191 3.381  
unitless

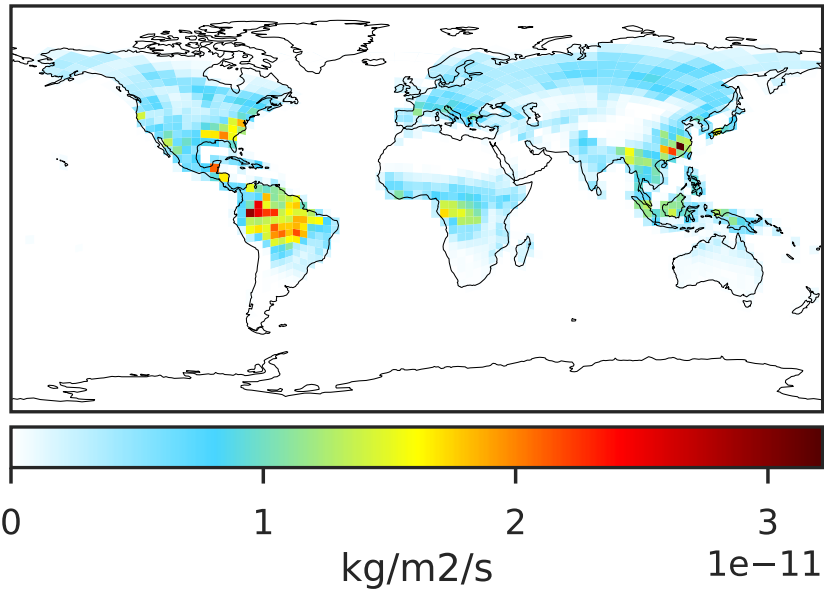
Ratio (1x1.25)  
Dev/Ref, Fixed Range



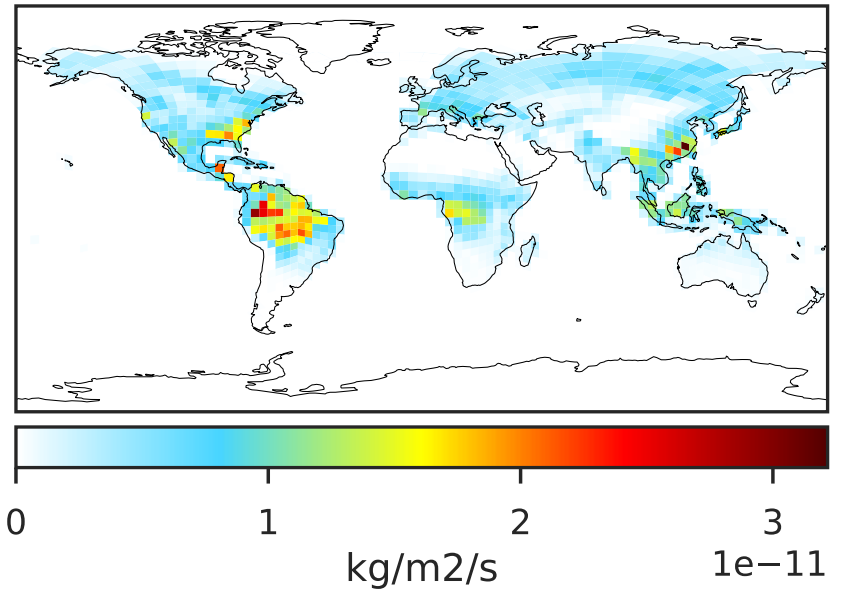
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisEOH\_Biogenic (Jul2019)

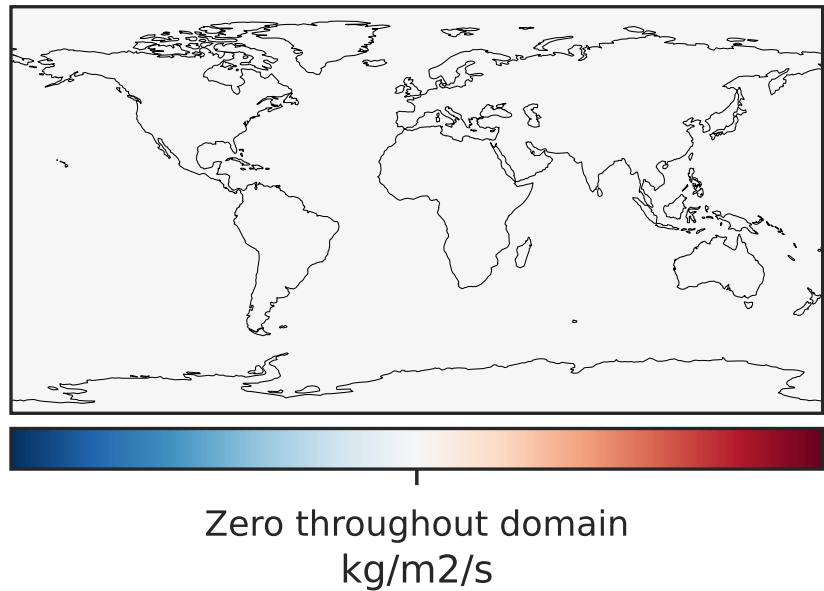
GCHP\_14.0.0 (Ref)  
c24



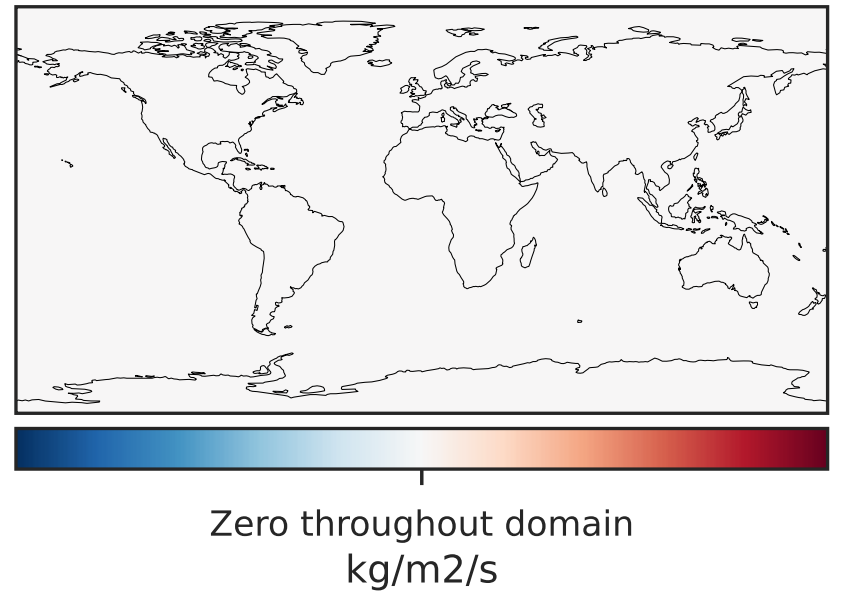
GCHP\_14.2.0 (Dev)  
c24



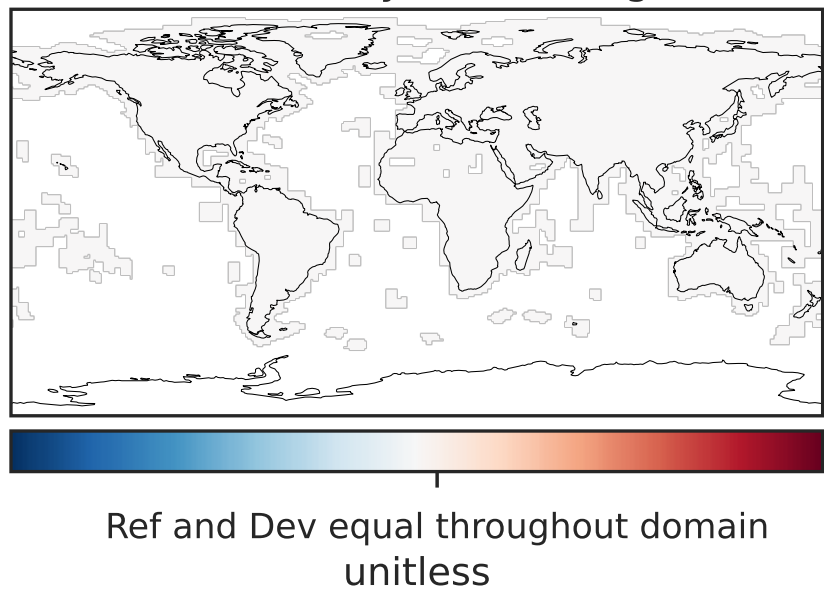
Difference (1x1.25)  
Dev - Ref, Dynamic Range



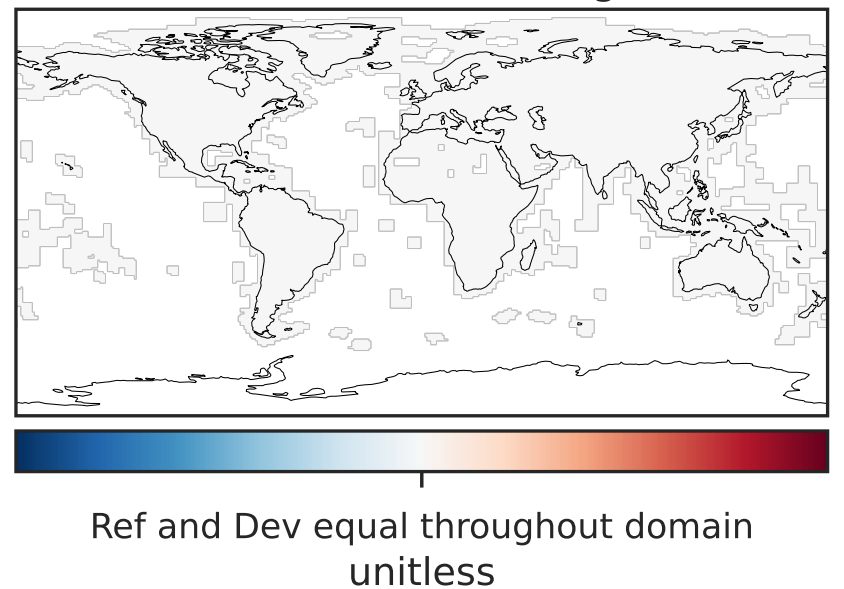
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

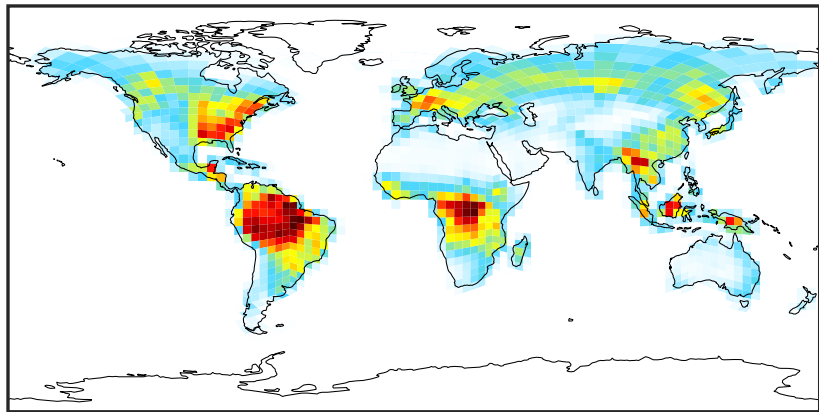


Ratio (1x1.25)  
Dev/Ref, Fixed Range



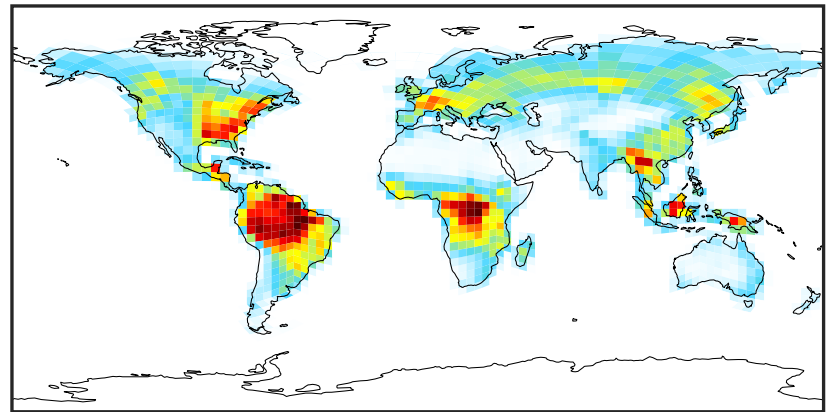
# EmisEOH\_PlantDecay (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-12

GCHP\_14.2.0 (Dev)  
c24



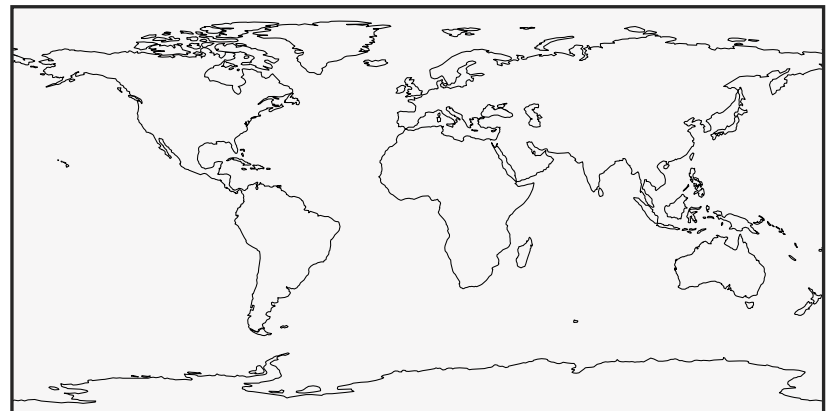
0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-12

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



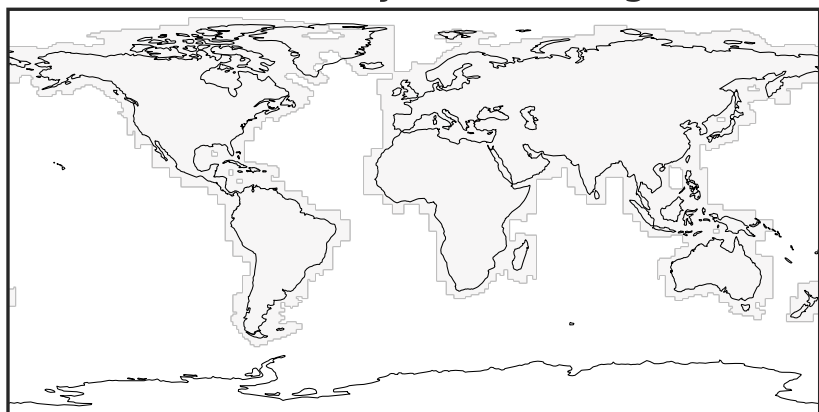
Zero throughout domain  
kg/m<sup>2</sup>/s

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



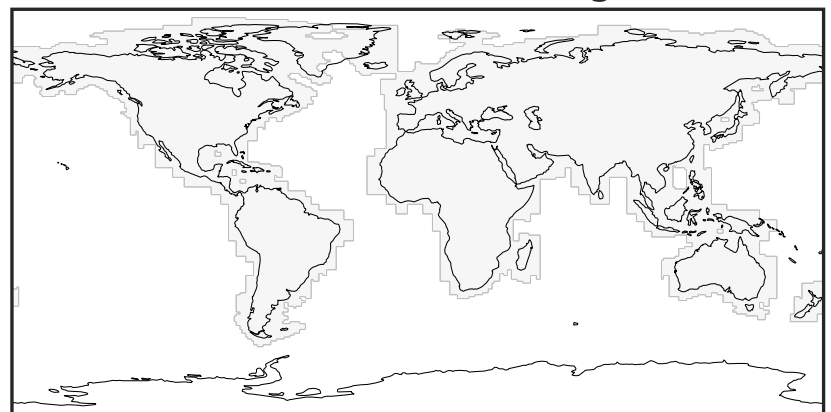
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

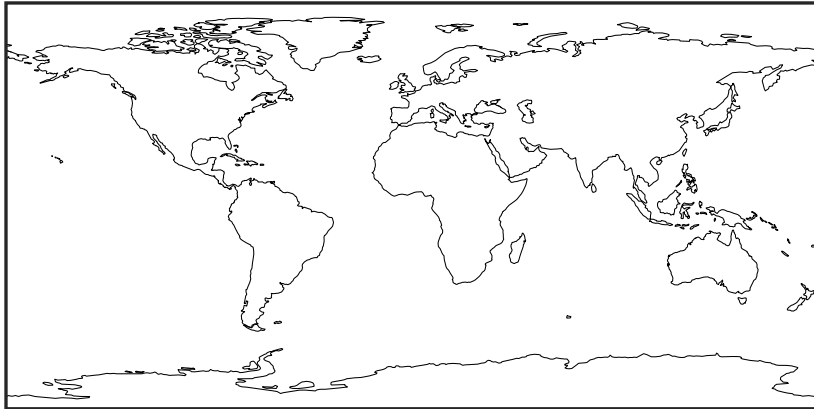
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

# EmisEOH\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



Zero throughput domain  
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



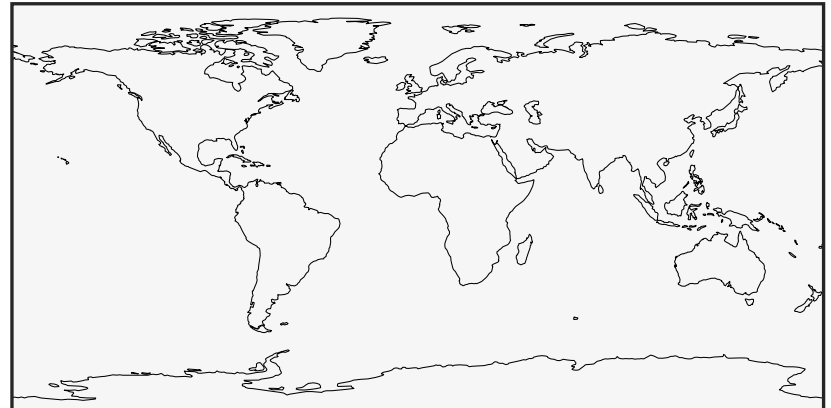
Zero throughput domain  
kg/m<sup>2</sup>/s

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



Zero throughput domain  
kg/m<sup>2</sup>/s

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



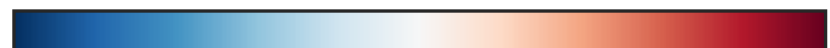
Zero throughput domain  
kg/m<sup>2</sup>/s

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



Undefined throughput domain  
unitless

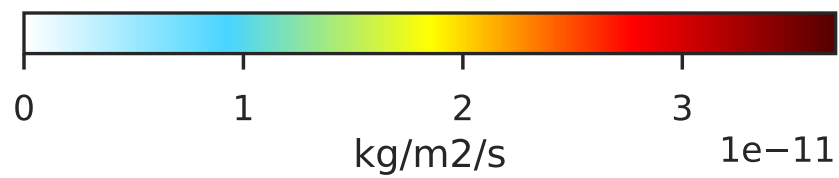
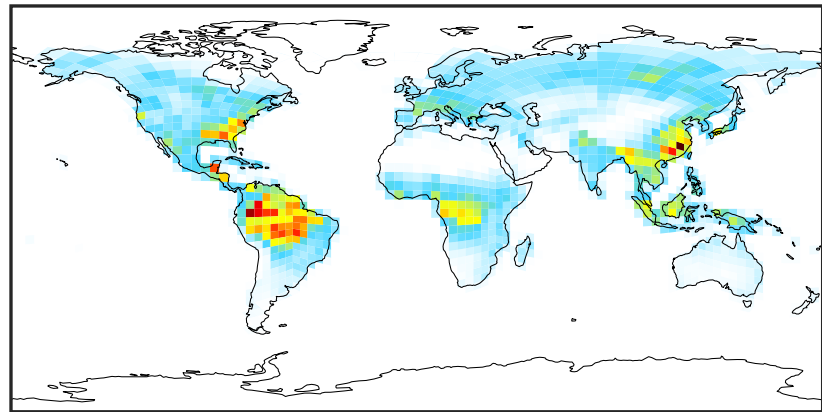
Ratio (1x1.25)  
Dev/Ref, Fixed Range



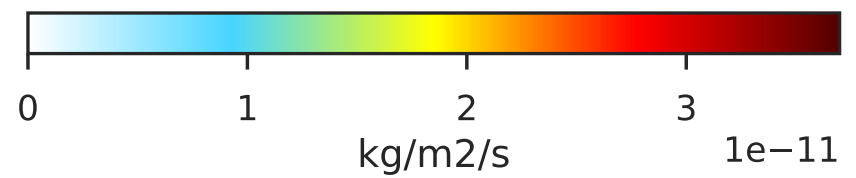
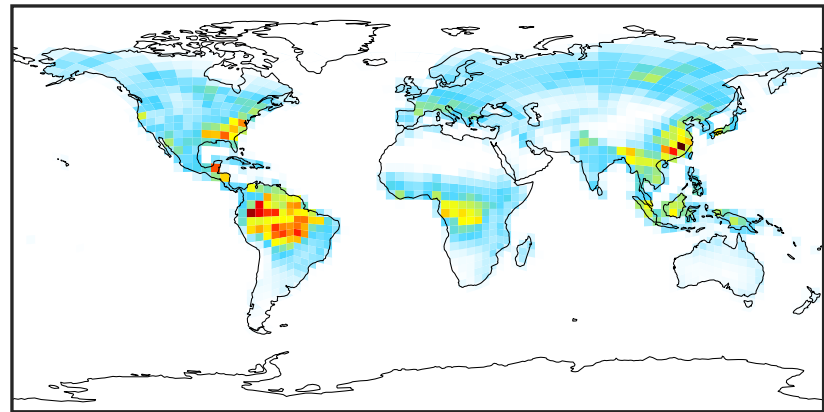
Undefined throughput domain  
unitless

# EmisEOH\_Total (Jul2019)

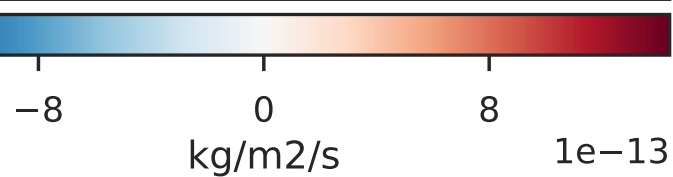
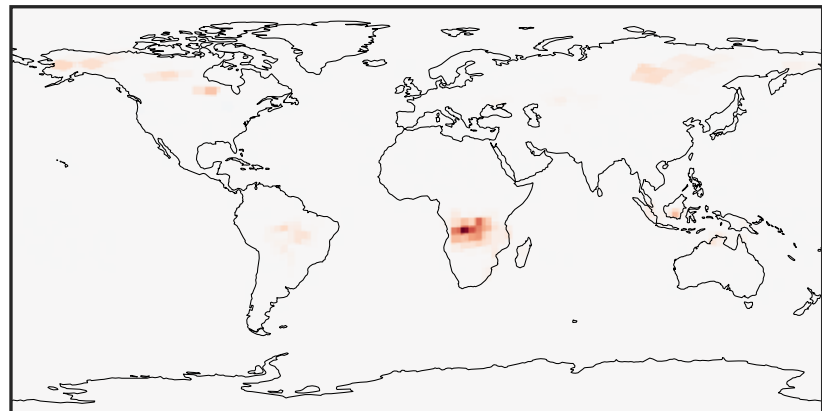
GCHP\_14.0.0 (Ref)  
c24



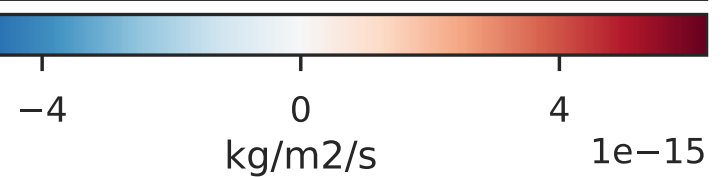
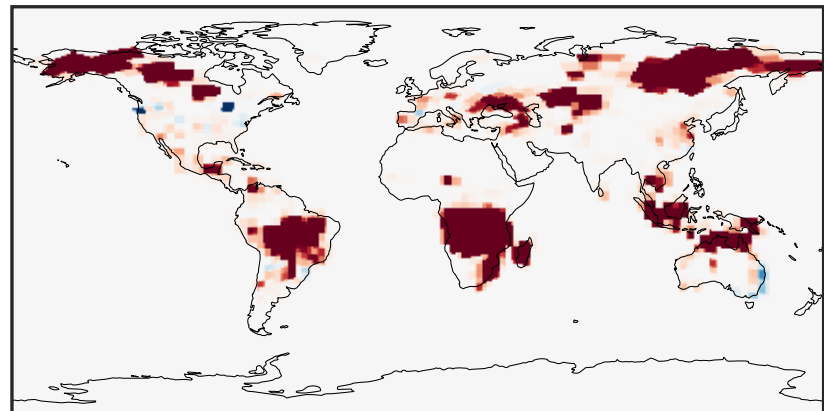
GCHP\_14.2.0 (Dev)  
c24



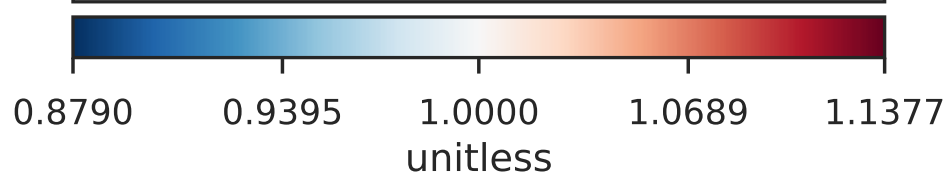
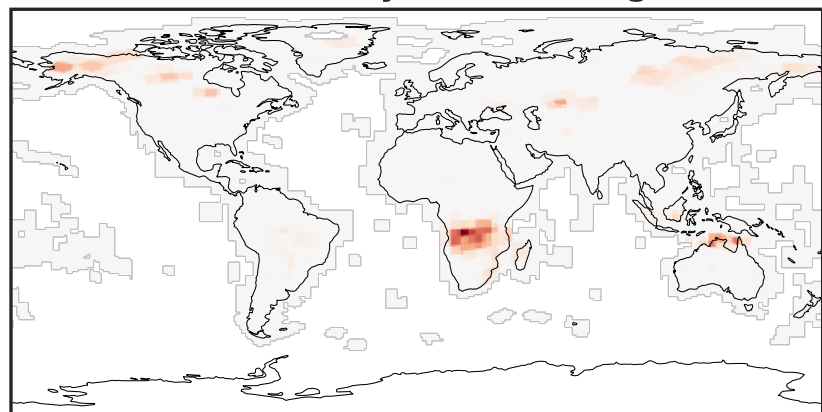
Difference (1x1.25)  
Dev - Ref, Dynamic Range



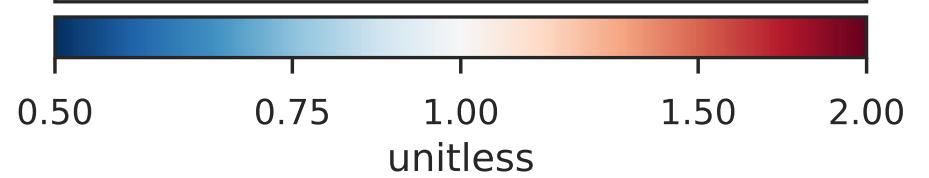
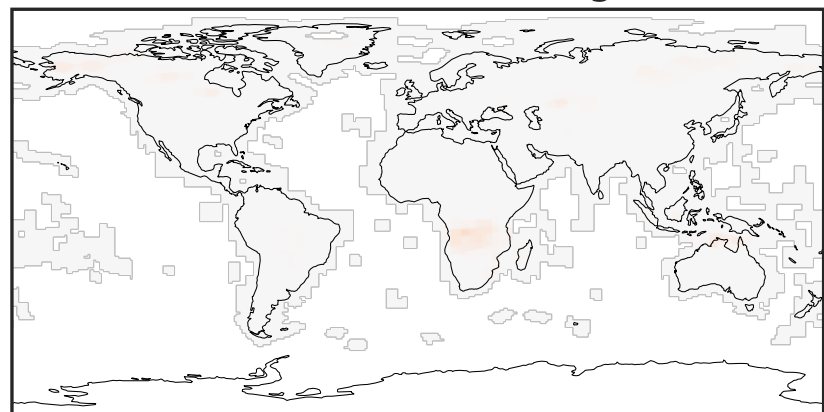
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

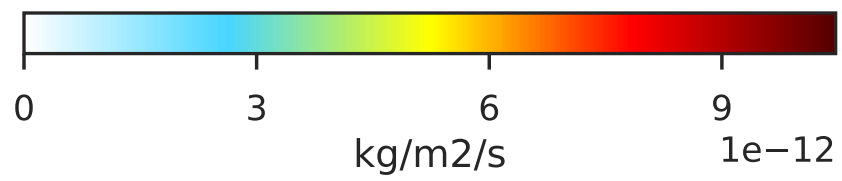
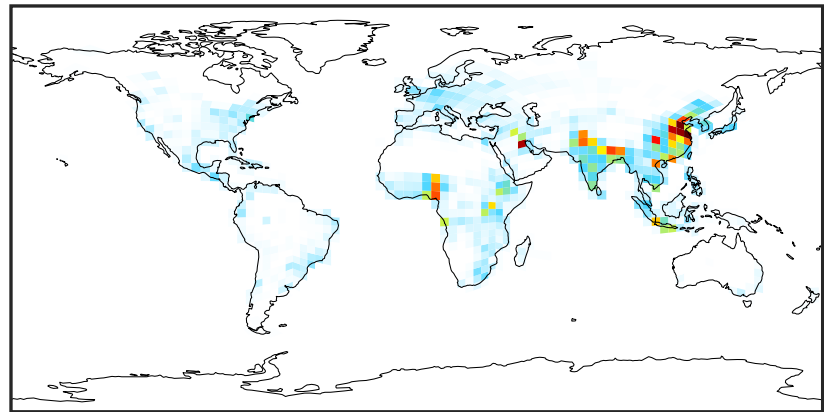


Ratio (1x1.25)  
Dev/Ref, Fixed Range

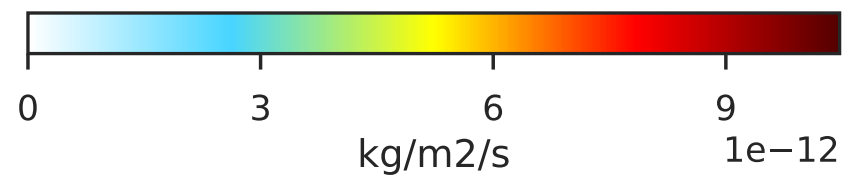
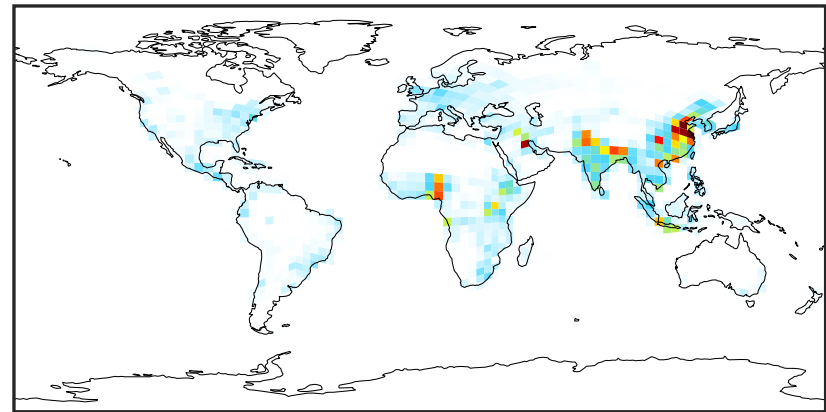


# EmisMOH\_Anthro (Jul2019)

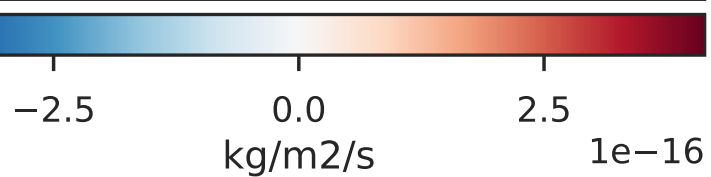
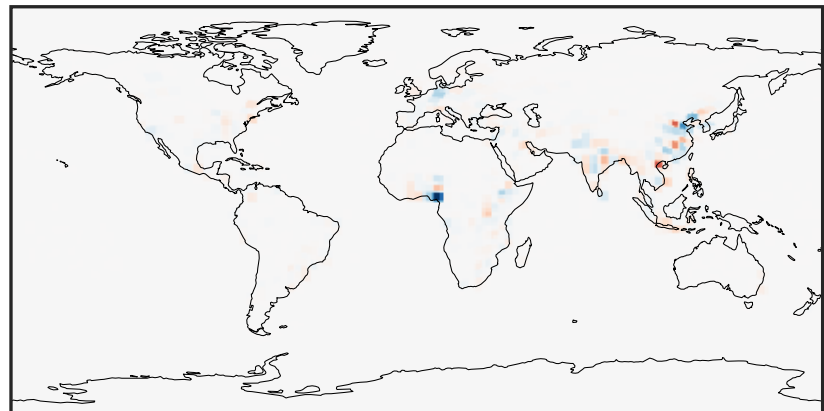
GCHP\_14.0.0 (Ref)  
c24



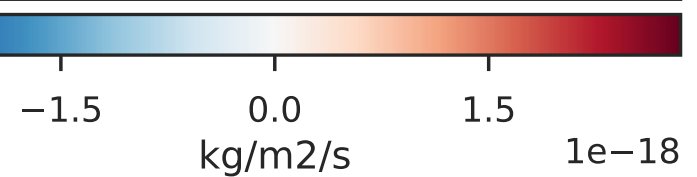
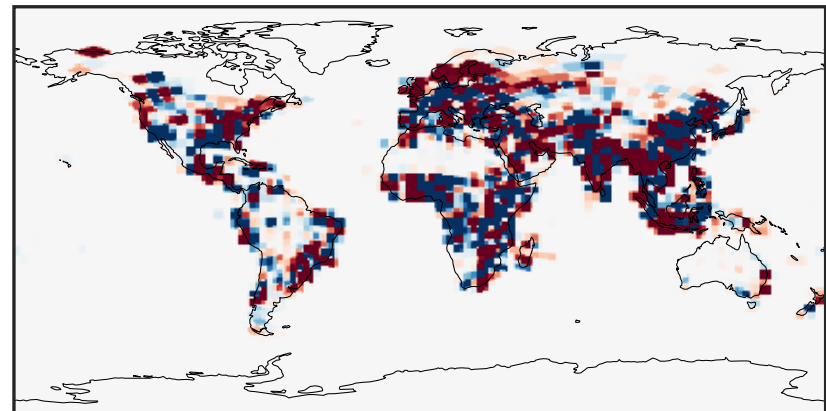
GCHP\_14.2.0 (Dev)  
c24



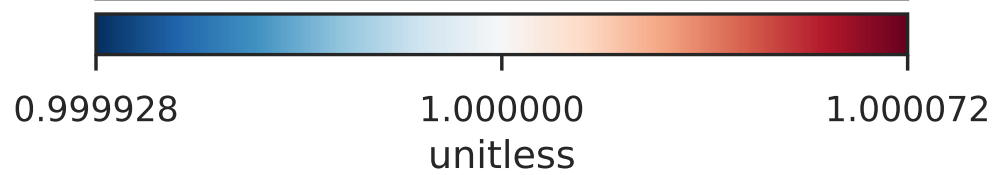
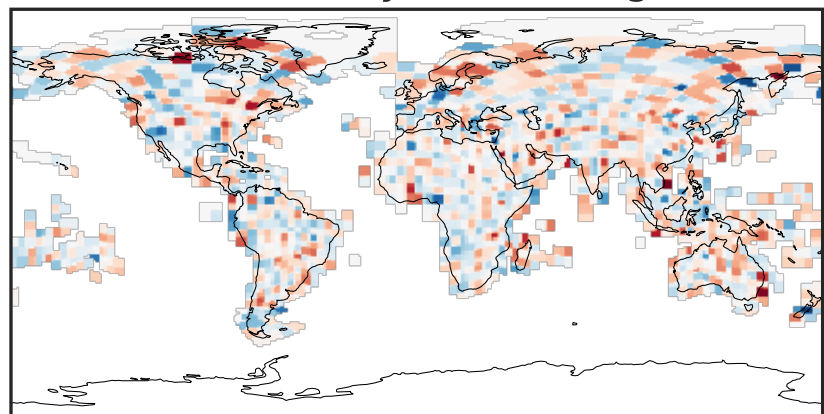
Difference (1x1.25)  
Dev - Ref, Dynamic Range



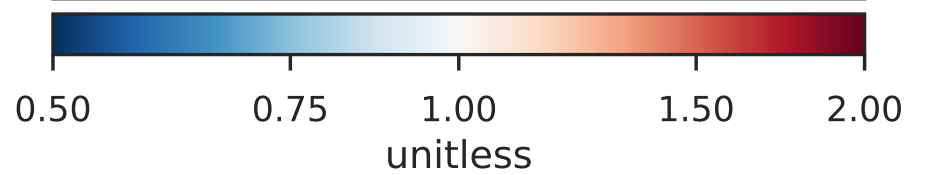
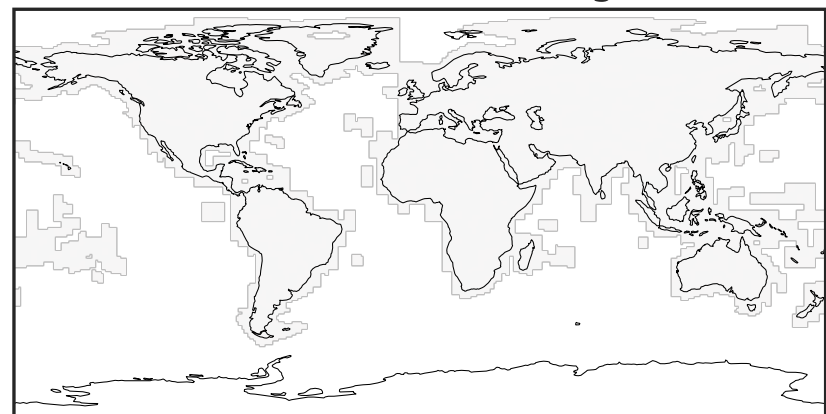
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

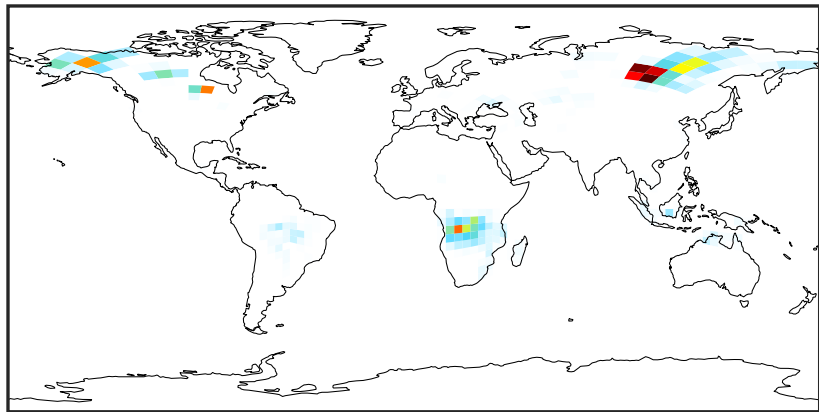


Ratio (1x1.25)  
Dev/Ref, Fixed Range



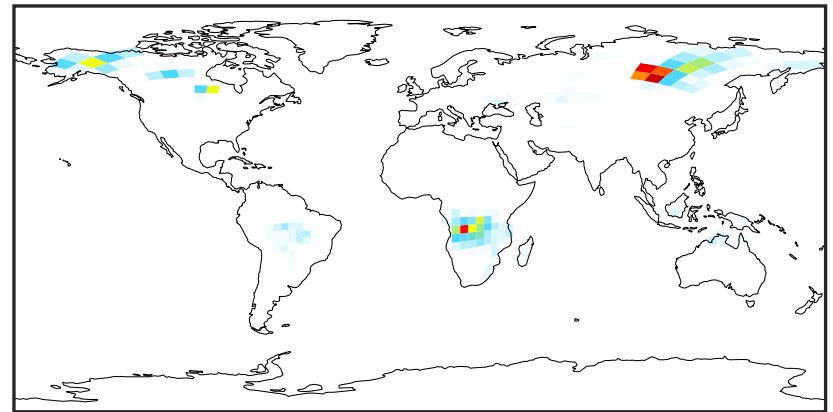
# EmisMOH\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



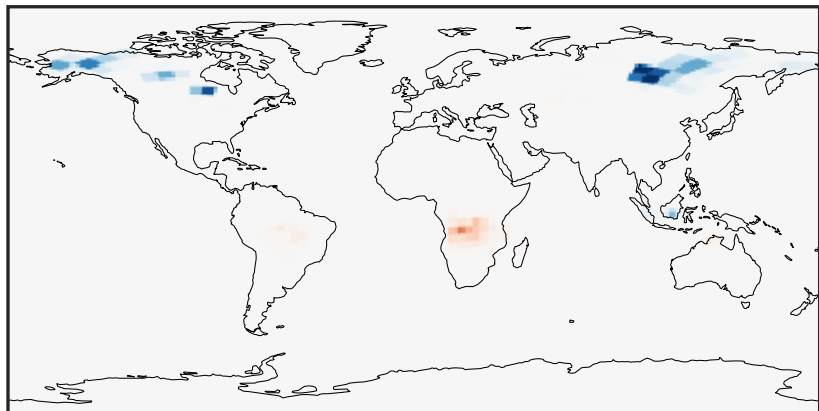
0.0 0.6 1.2 1.8  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



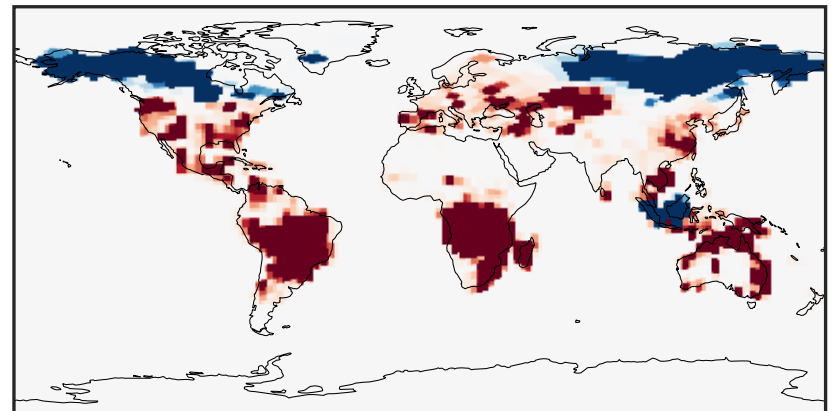
0.0 0.6 1.2 1.8  
kg/m<sup>2</sup>/s 1e-10

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



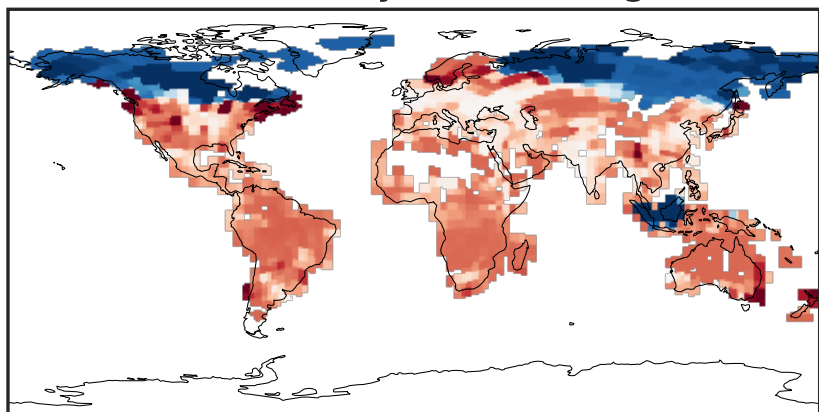
-2 0 2  
kg/m<sup>2</sup>/s 1e-11

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



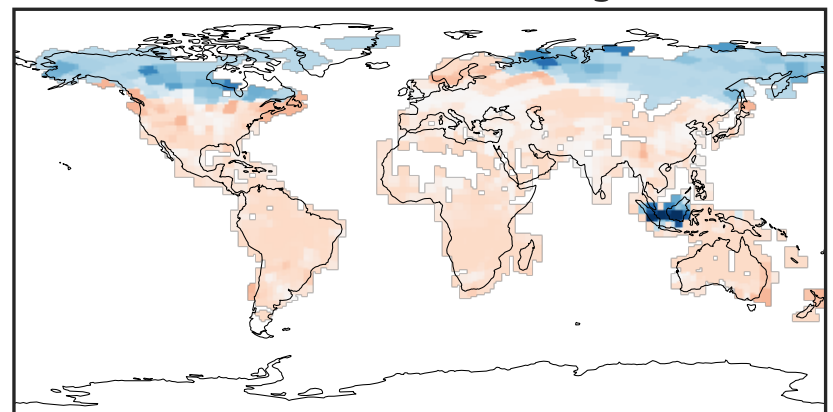
-8 0 8  
kg/m<sup>2</sup>/s 1e-15

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



0.7908 0.8954 1.0000 1.1322 1.2645  
unitless

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

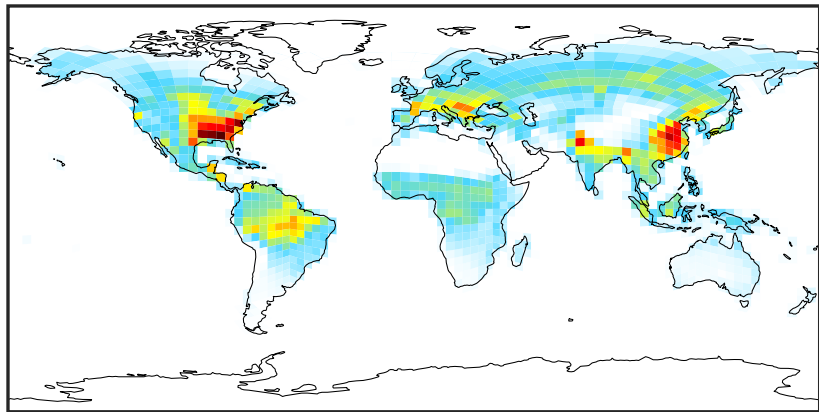


0.50 0.75 1.00 1.50 2.00  
unitless



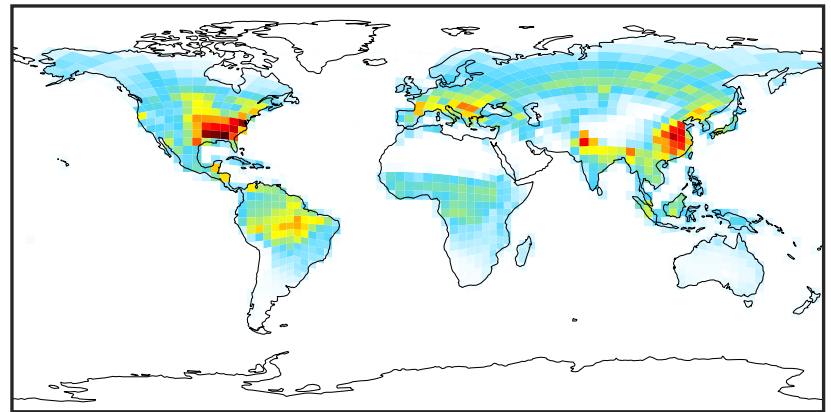
# EmisMOH\_Biogenic (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

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



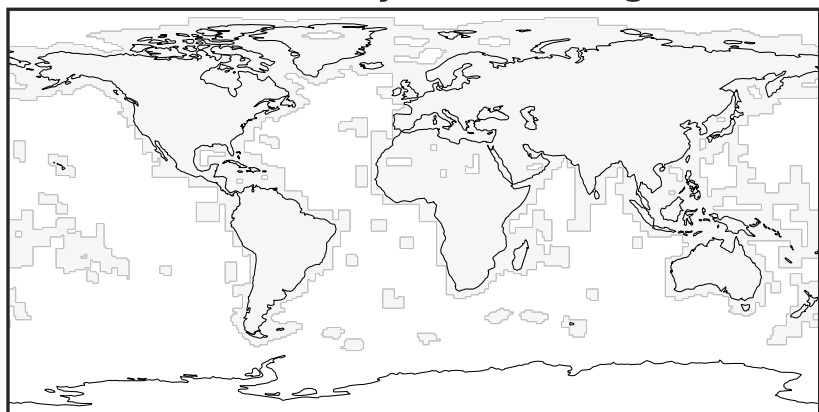
Zero throughout domain  
kg/m<sup>2</sup>/s

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



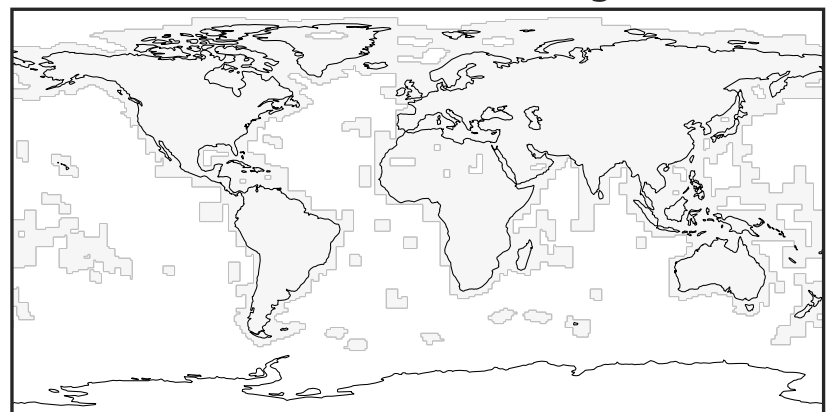
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

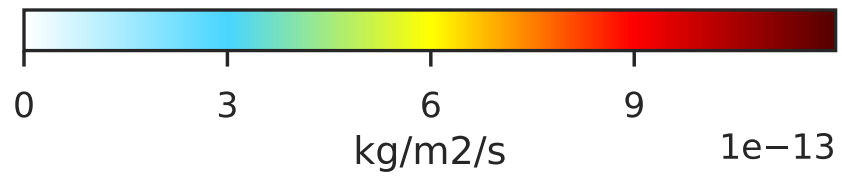
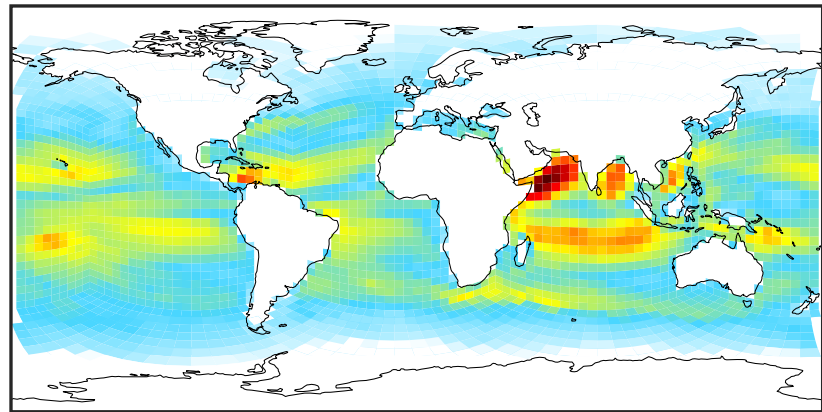
Ratio (1x1.25)  
Dev/Ref, Fixed Range



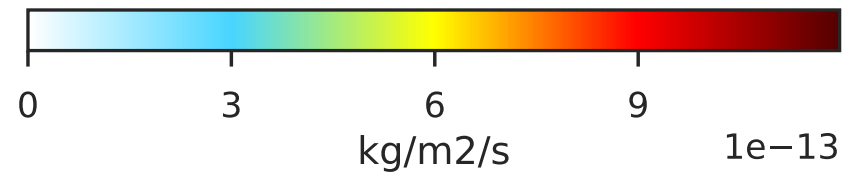
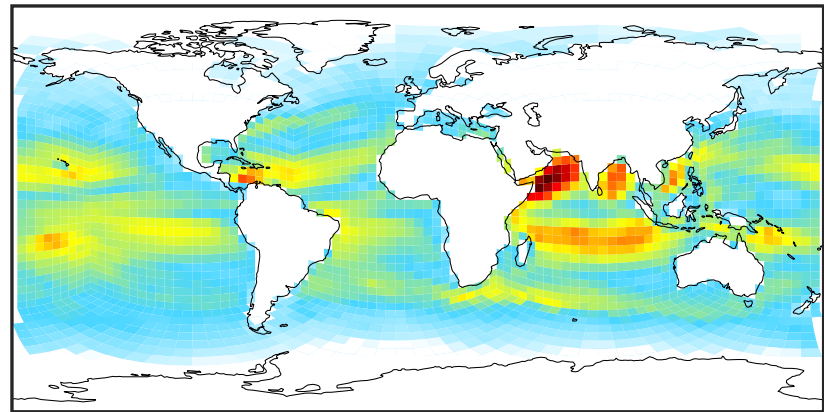
Ref and Dev equal throughout domain  
unitless

# EmisMOH\_Ocean (Jul2019)

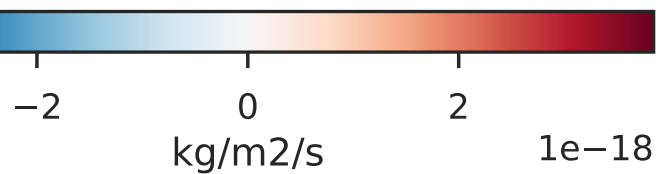
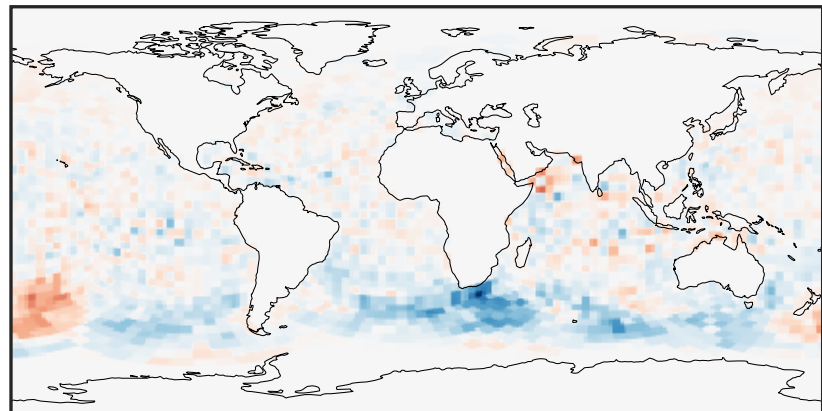
GCHP\_14.0.0 (Ref)  
c24



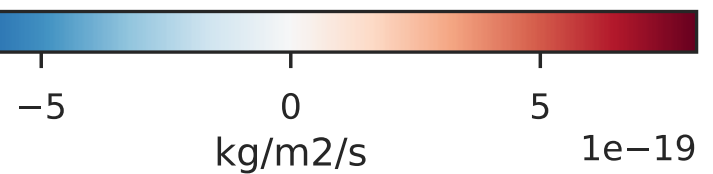
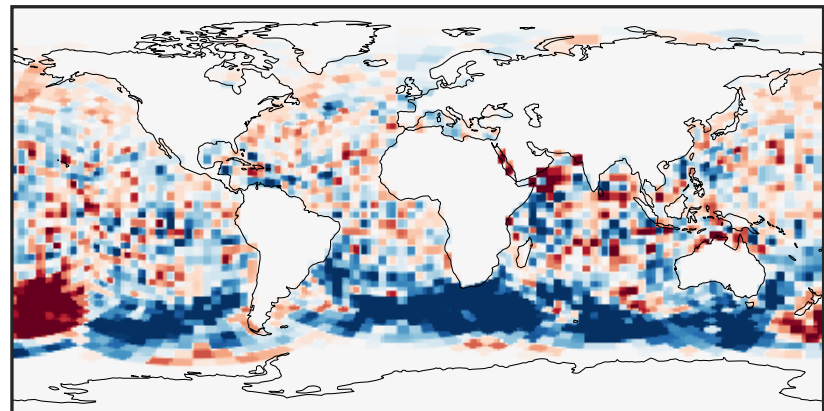
GCHP\_14.2.0 (Dev)  
c24



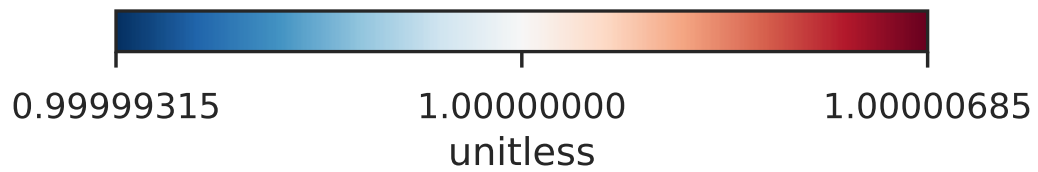
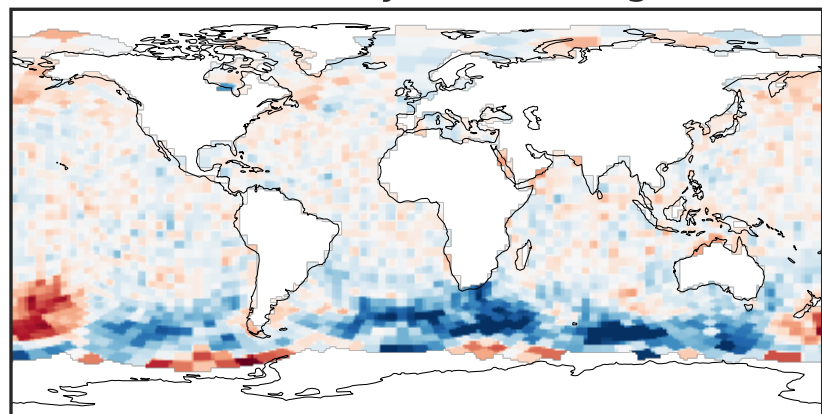
Difference (1x1.25)  
Dev - Ref, Dynamic Range



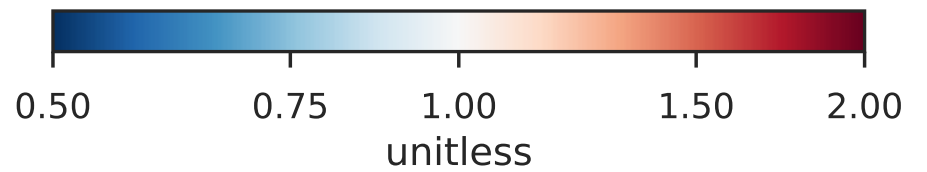
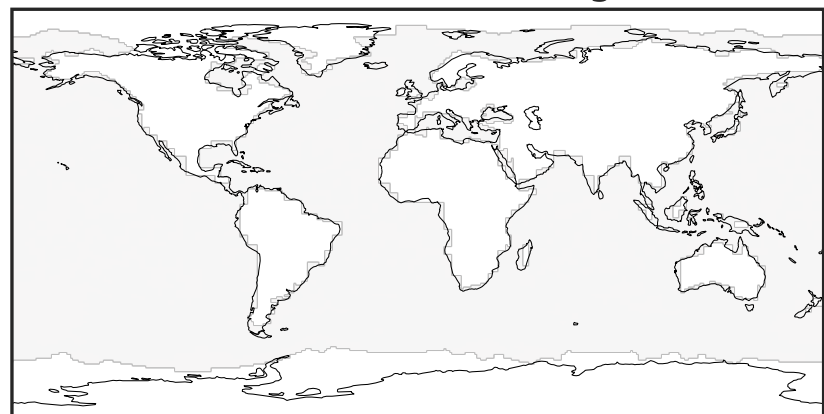
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



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



# EmisMOH\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



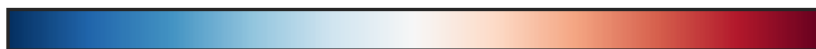
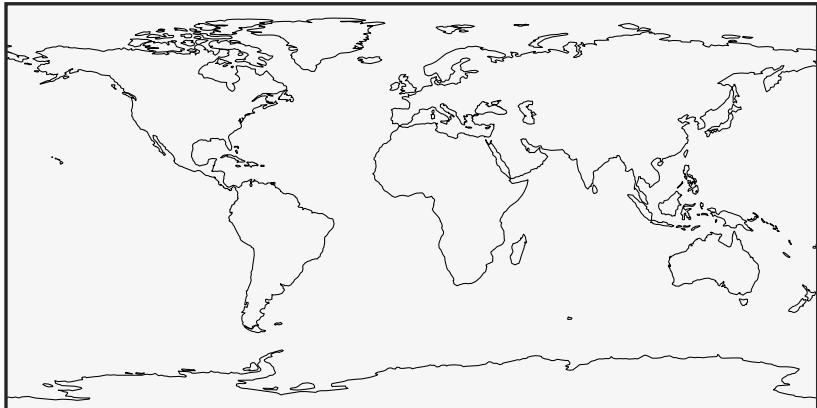
Zero throughout domain  
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



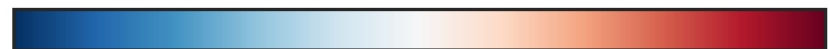
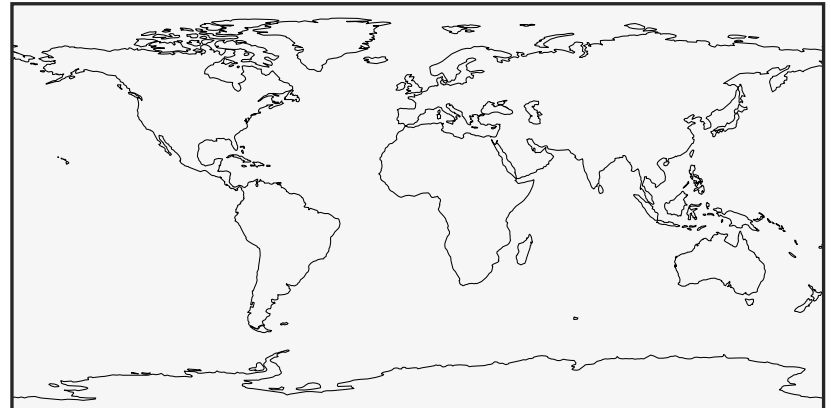
Zero throughout domain  
kg/m2/s

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



Zero throughout domain  
kg/m2/s

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



Zero throughout domain  
kg/m2/s

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



Undefined throughout domain  
unitless

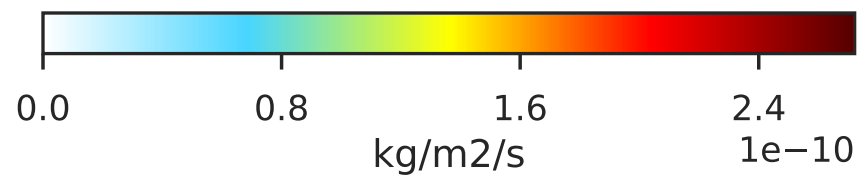
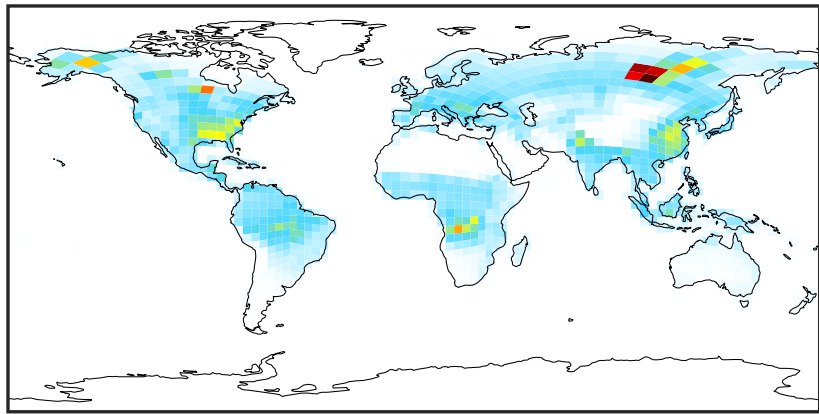
Ratio (1x1.25)  
Dev/Ref, Fixed Range



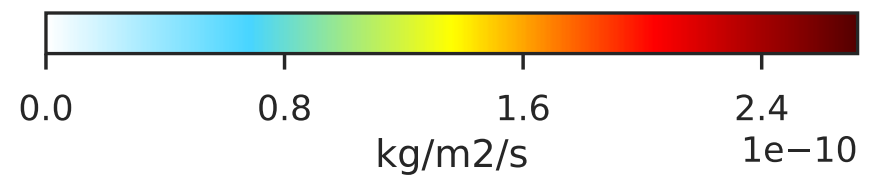
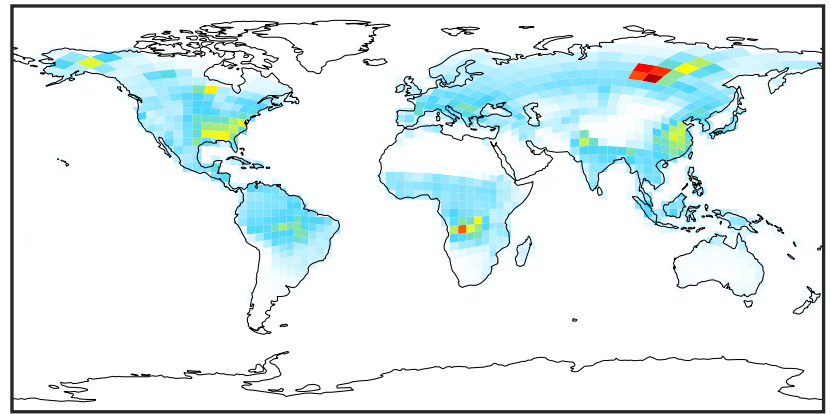
Undefined throughout domain  
unitless

# EmisMOH\_Total (Jul2019)

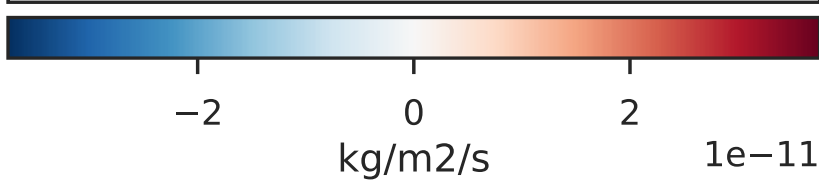
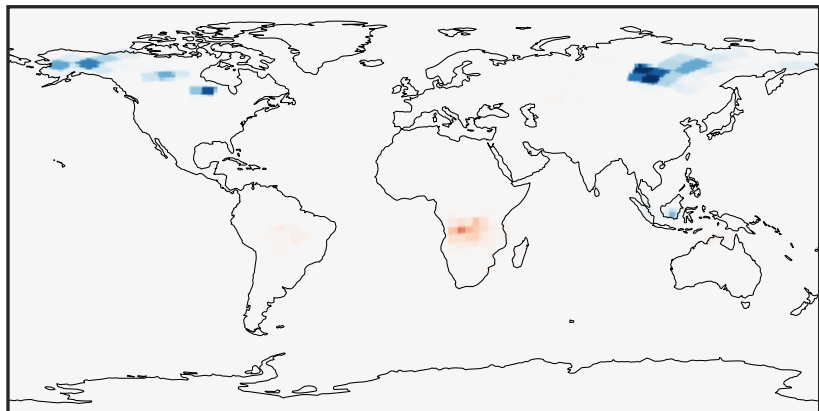
GCHP\_14.0.0 (Ref)  
c24



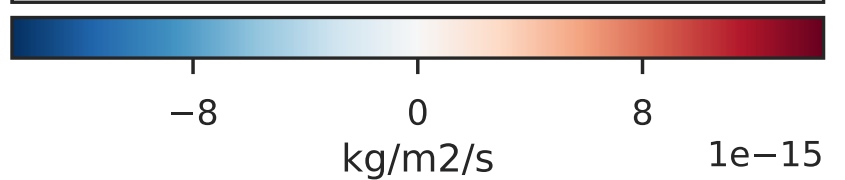
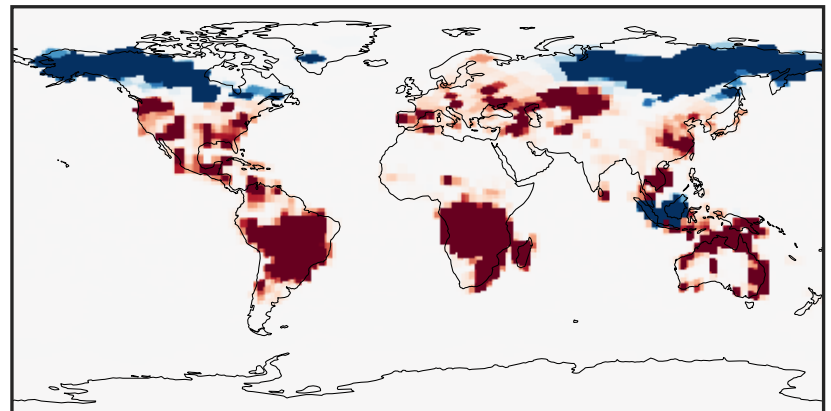
GCHP\_14.2.0 (Dev)  
c24



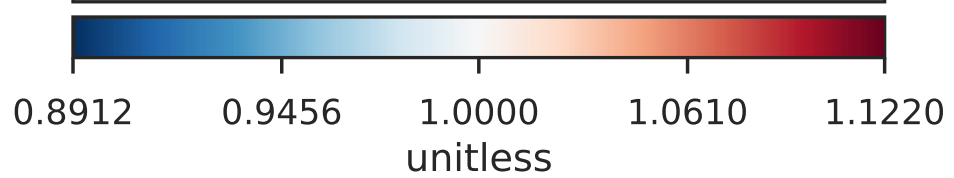
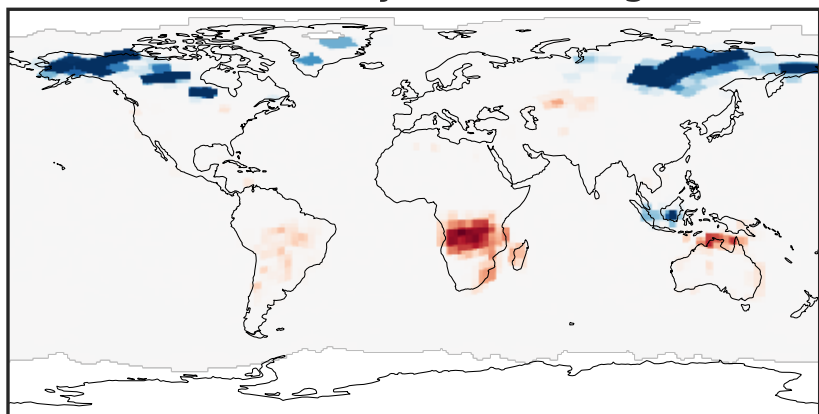
Difference (1x1.25)  
Dev - Ref, Dynamic Range



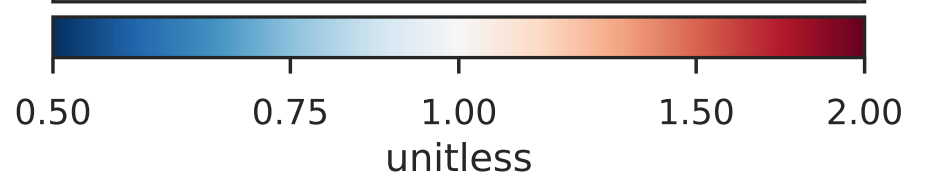
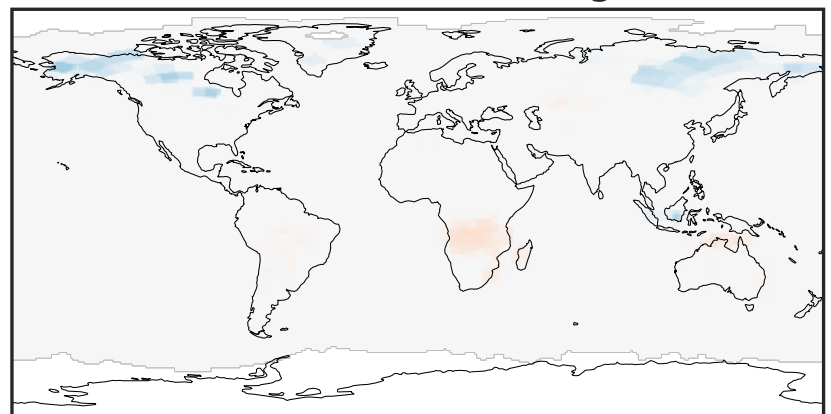
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



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



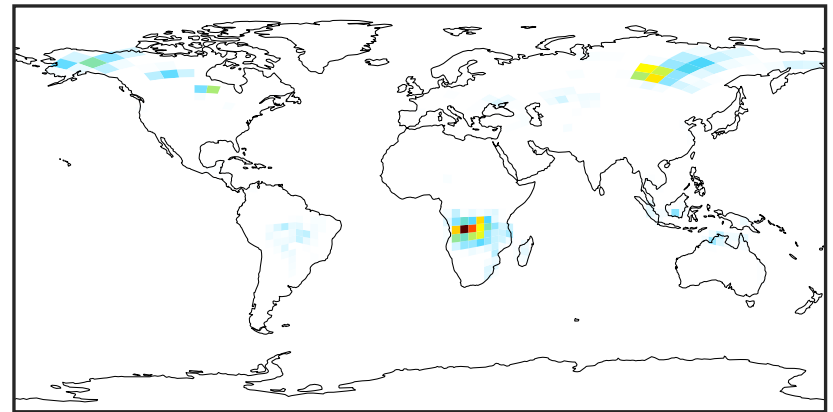
# EmisISOP\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



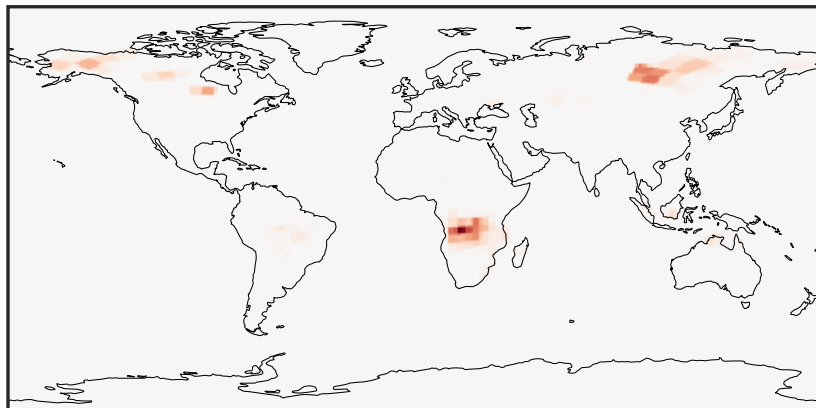
Zero throughout domain  
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



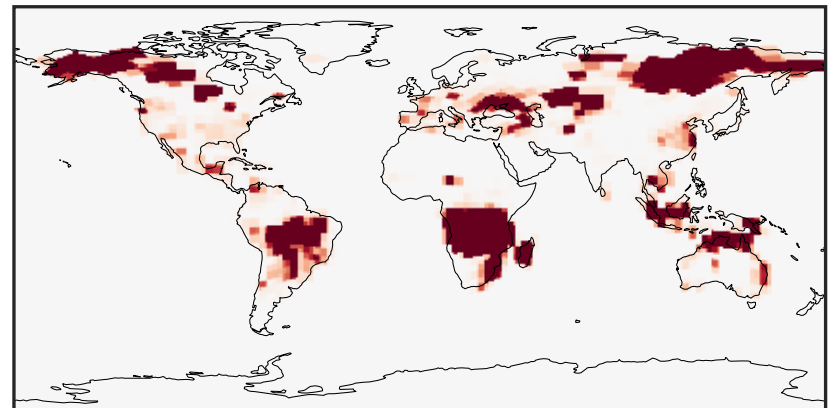
0 3 6 9  
kg/m<sup>2</sup>/s 1e-12

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



-6 0 6  
kg/m<sup>2</sup>/s 1e-12

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



-4 0 4  
kg/m<sup>2</sup>/s 1e-14

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



Undefined throughout domain  
unitless

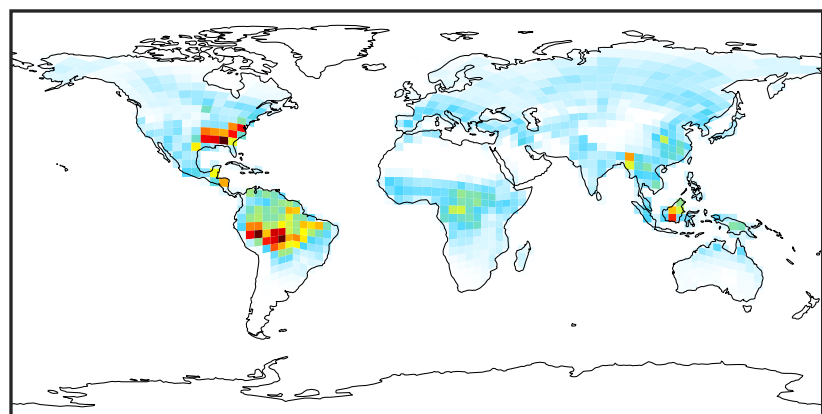
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Undefined throughout domain  
unitless

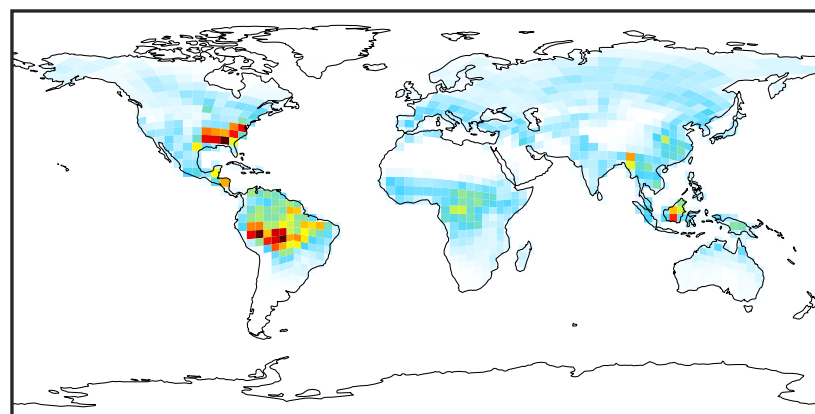
# EmisSOP\_Biogenic (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



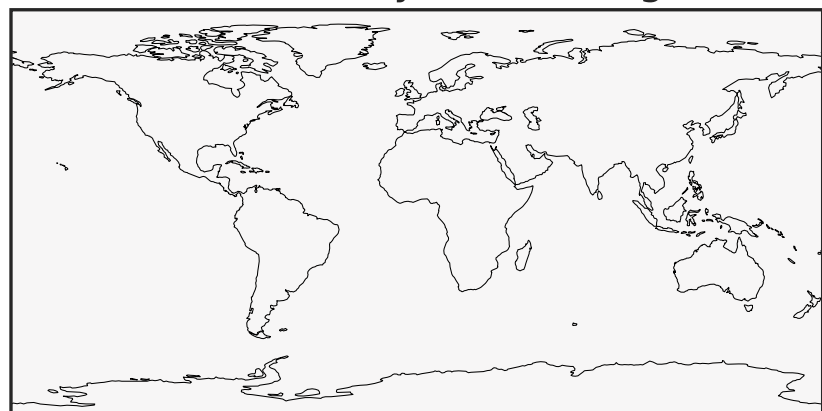
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-10

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



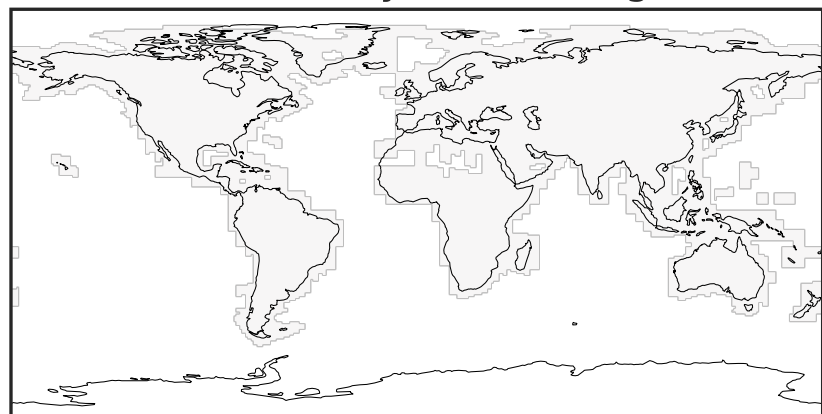
Zero throughout domain  
kg/m<sup>2</sup>/s

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



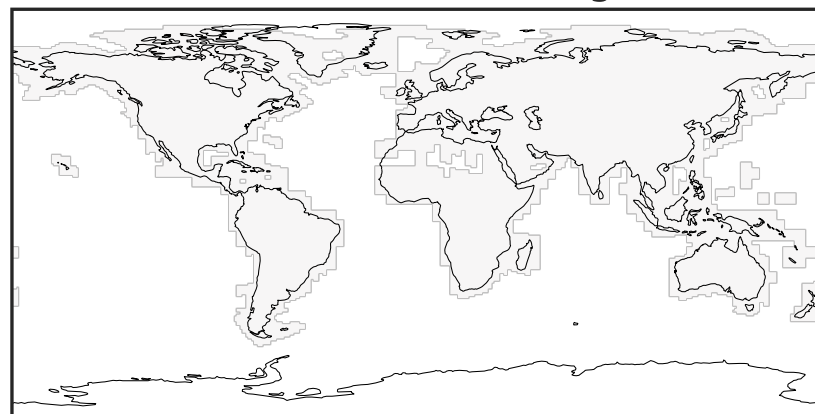
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

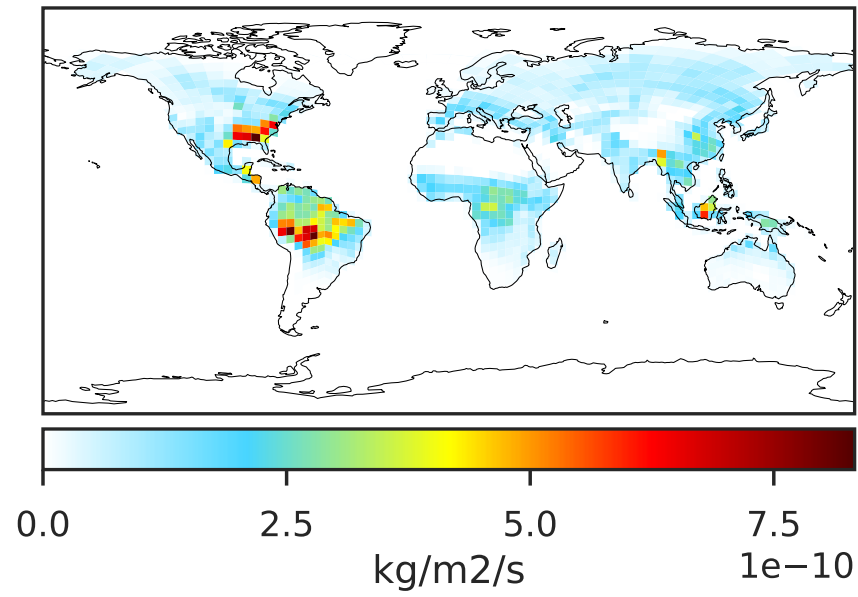
Ratio (1x1.25)  
Dev/Ref, Fixed Range



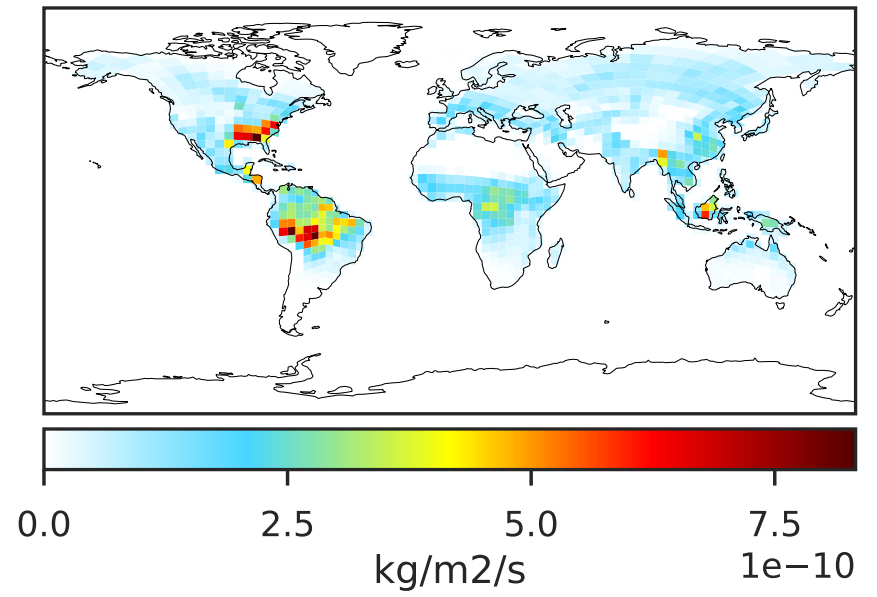
Ref and Dev equal throughout domain  
unitless

# EmisSOP\_Total (Jul2019)

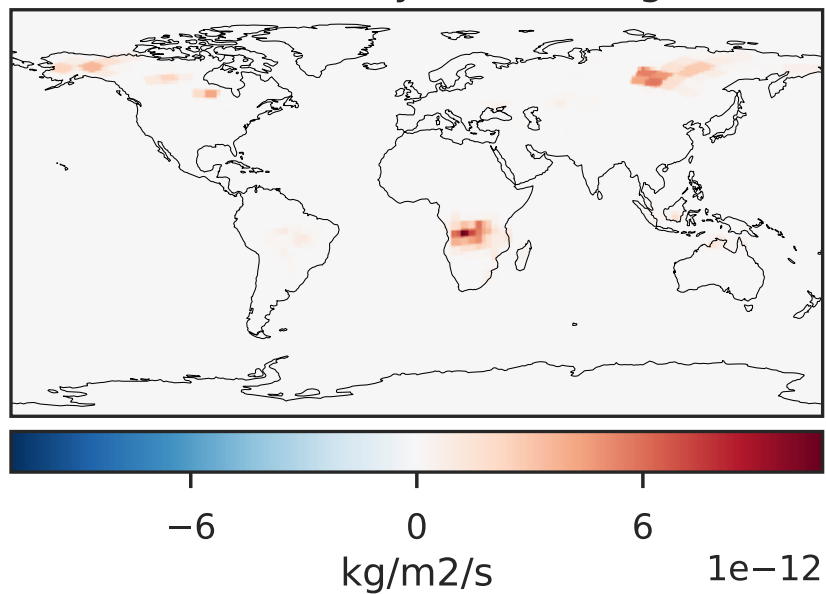
GCHP\_14.0.0 (Ref)  
c24



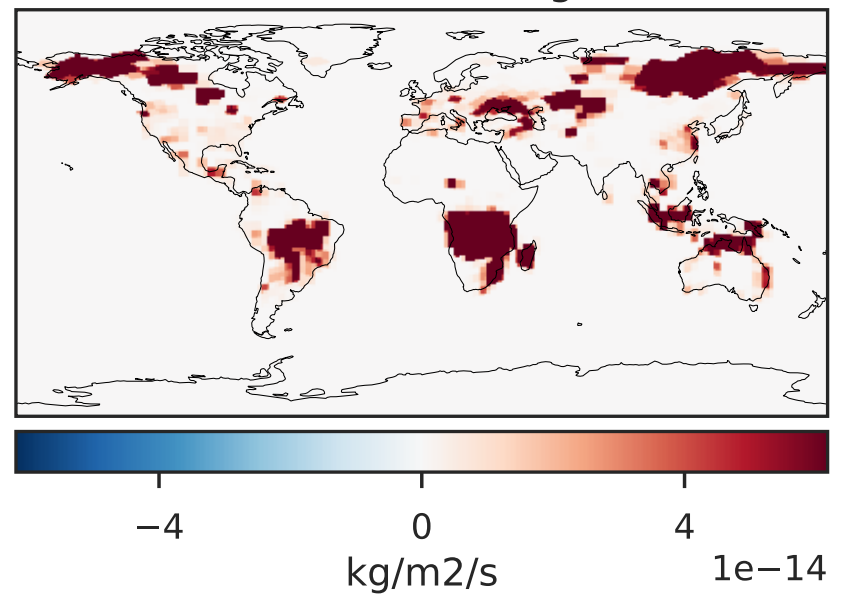
GCHP\_14.2.0 (Dev)  
c24



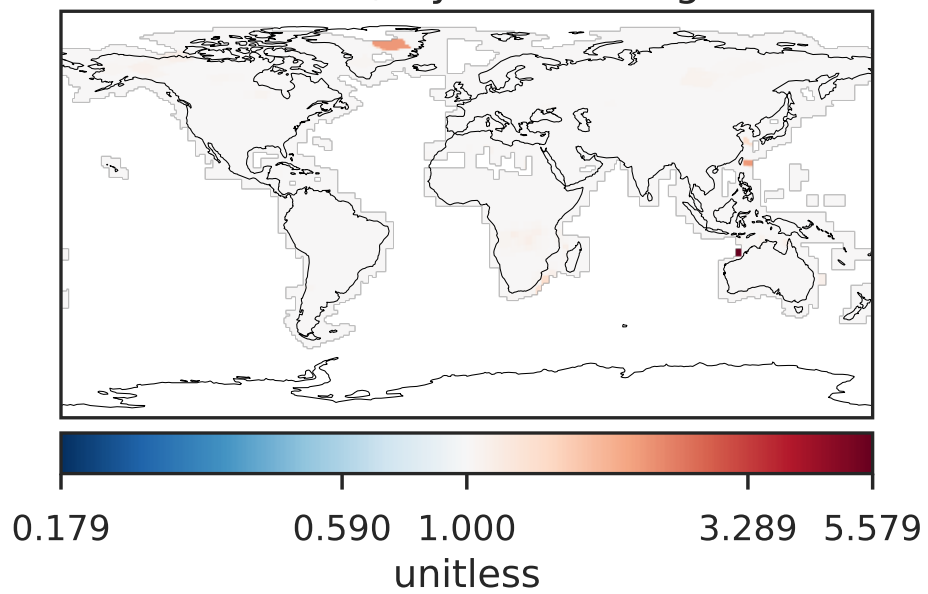
Difference (1x1.25)  
Dev - Ref, Dynamic Range



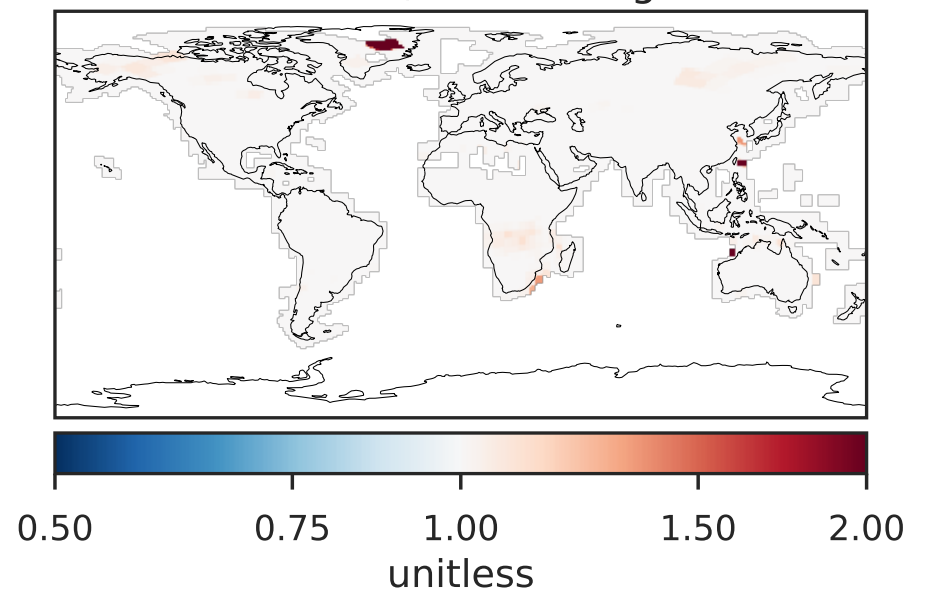
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

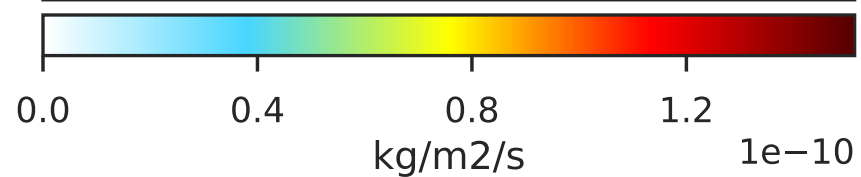
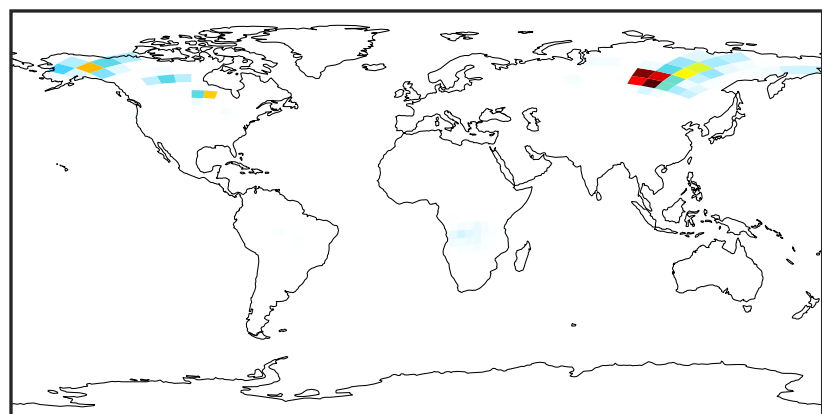


Ratio (1x1.25)  
Dev/Ref, Fixed Range

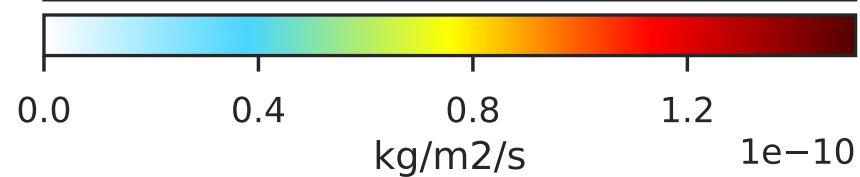
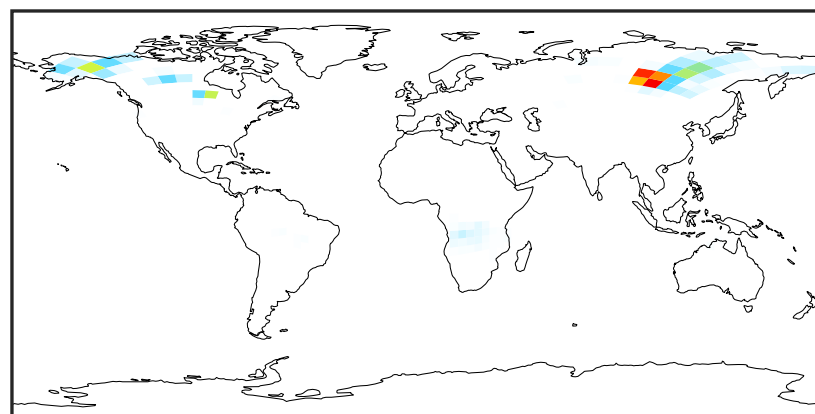


# EmisMTPA\_BioBurn (Jul2019)

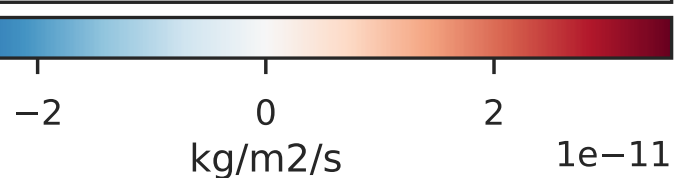
GCHP\_14.0.0 (Ref)  
c24



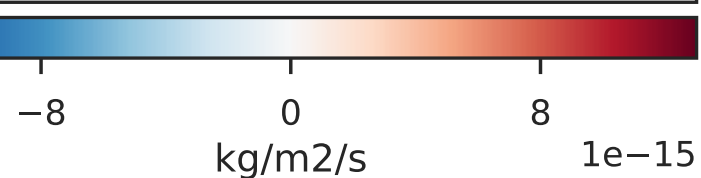
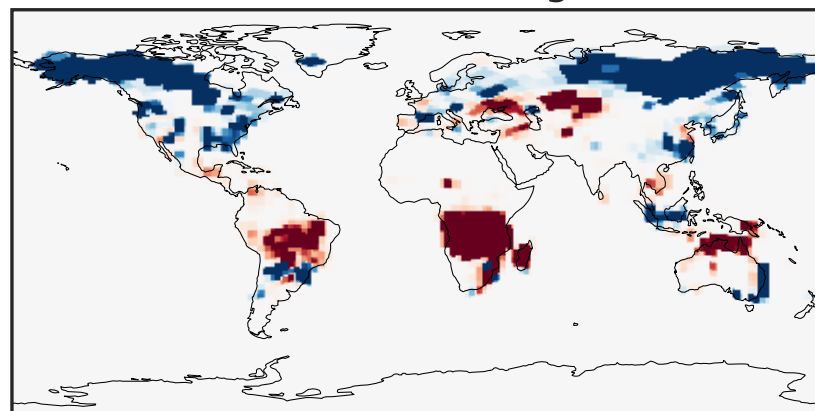
GCHP\_14.2.0 (Dev)  
c24



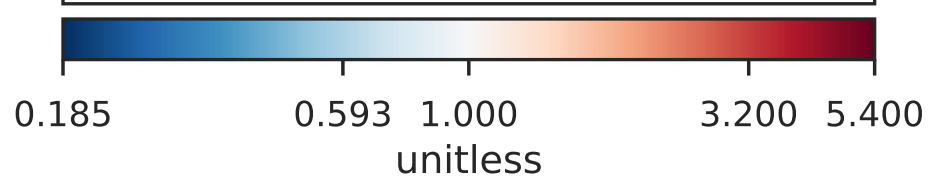
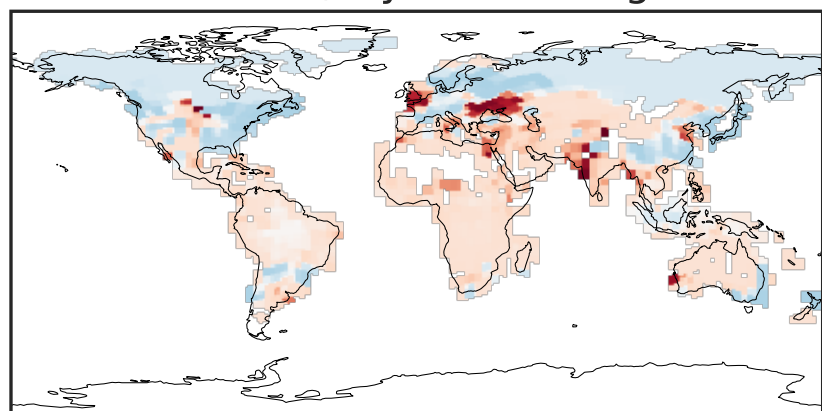
Difference (1x1.25)  
Dev - Ref, Dynamic Range



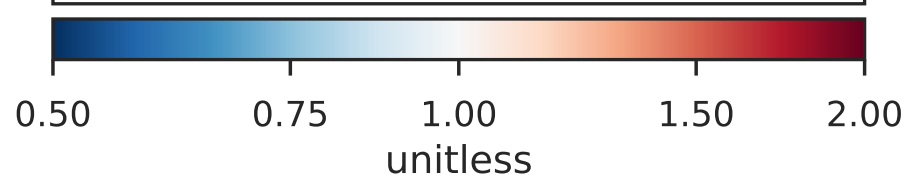
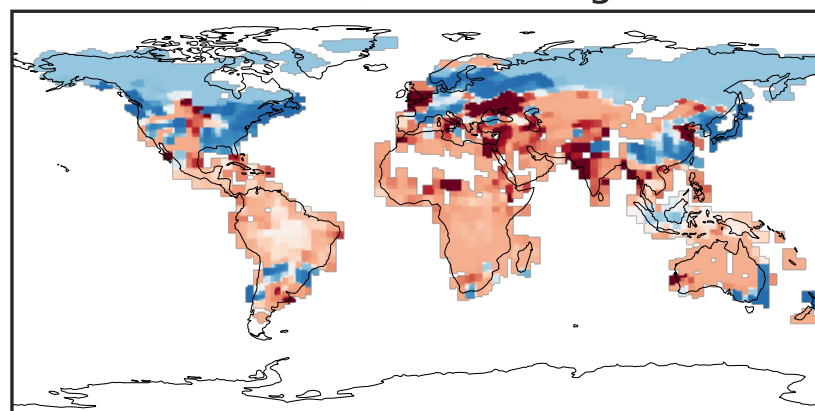
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



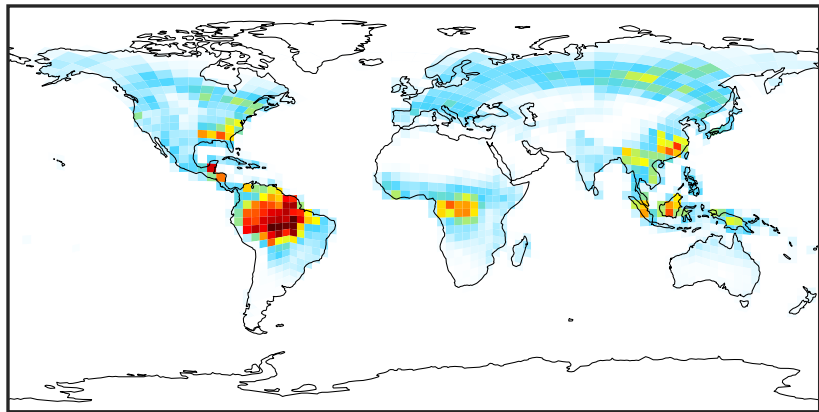
Ratio (1x1.25)  
Dev/Ref, Fixed Range





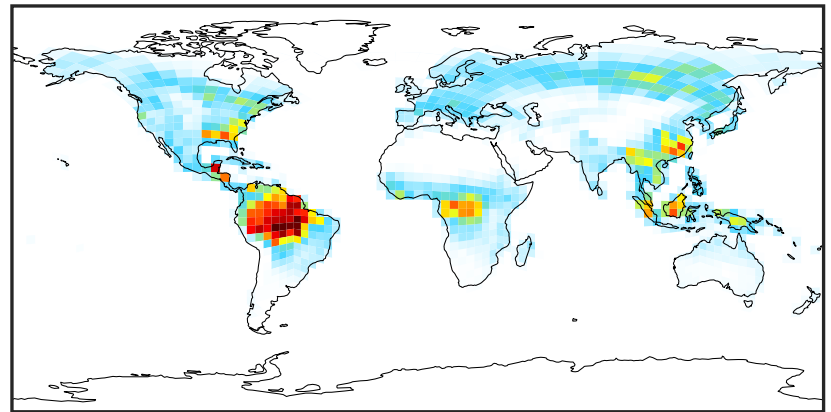
# EmisMTPA\_Biogenic (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

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



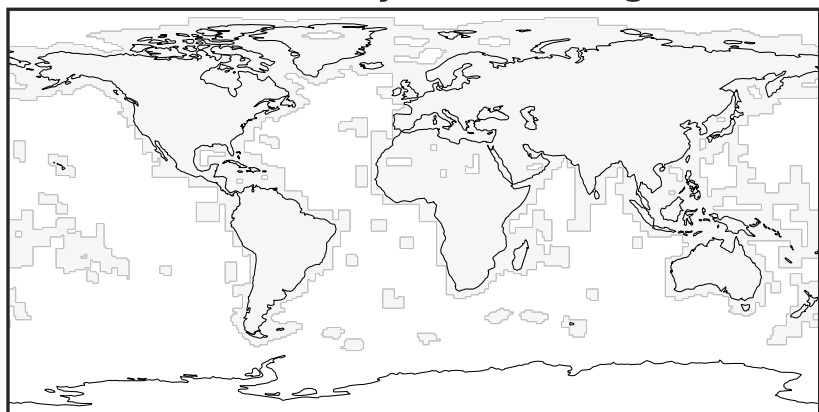
Zero throughout domain  
kg/m<sup>2</sup>/s

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



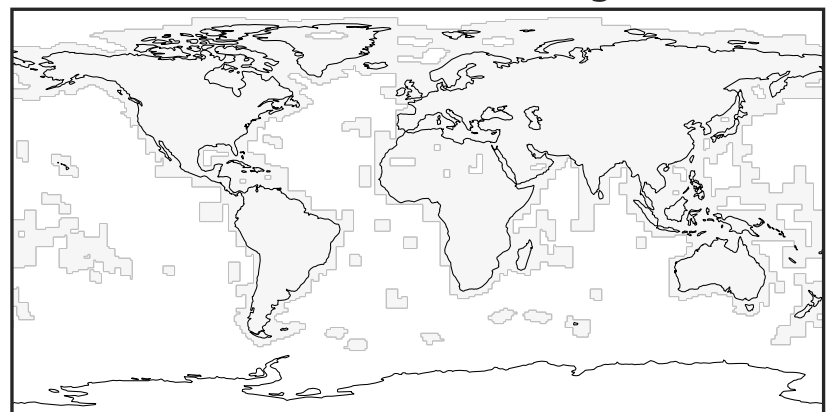
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

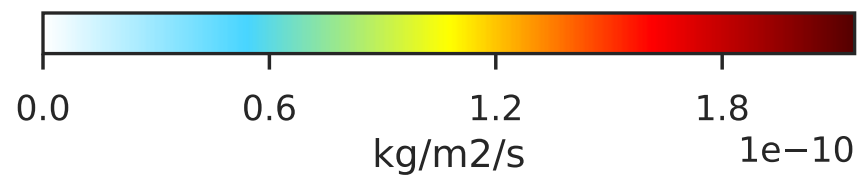
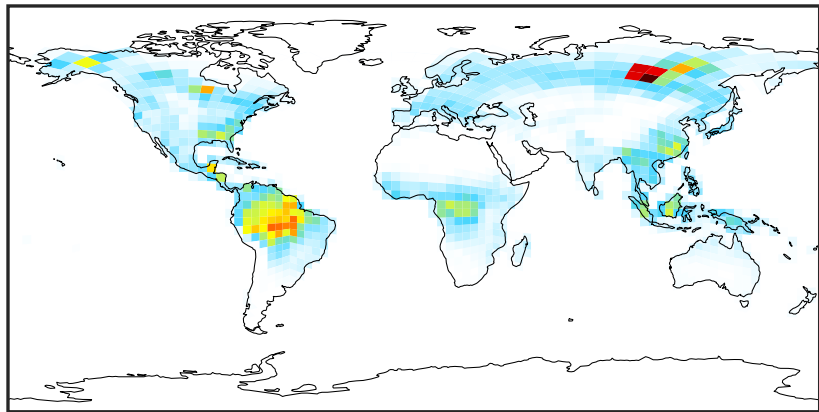
Ratio (1x1.25)  
Dev/Ref, Fixed Range



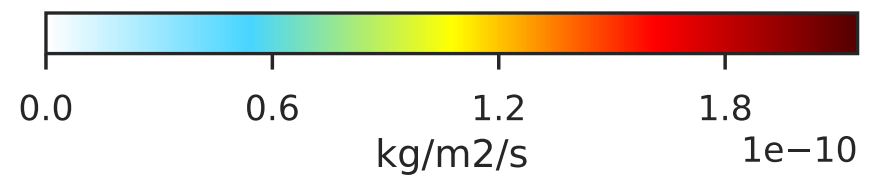
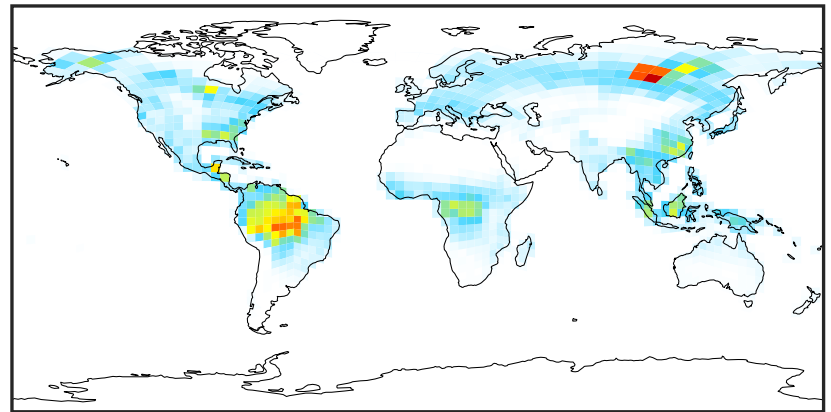
Ref and Dev equal throughout domain  
unitless

# EmisMTPA\_Total (Jul2019)

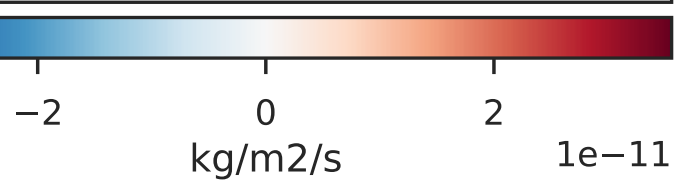
GCHP\_14.0.0 (Ref)  
c24



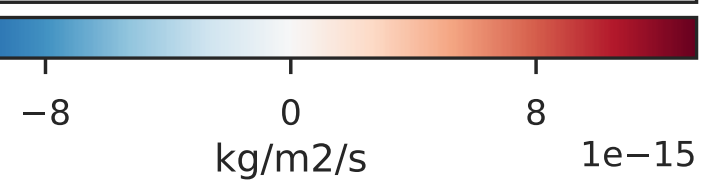
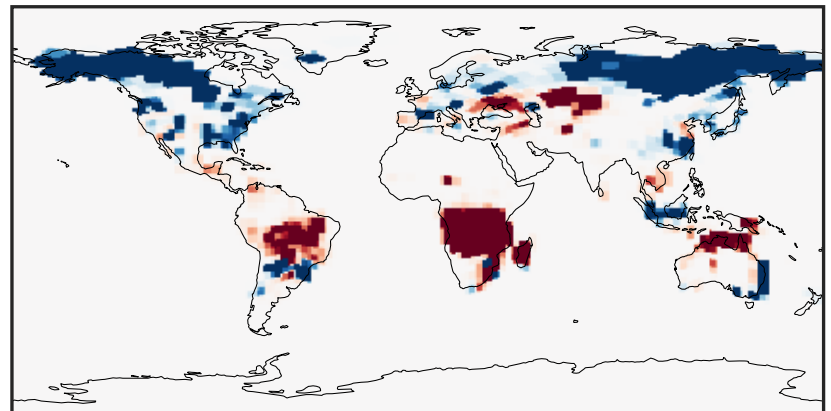
GCHP\_14.2.0 (Dev)  
c24



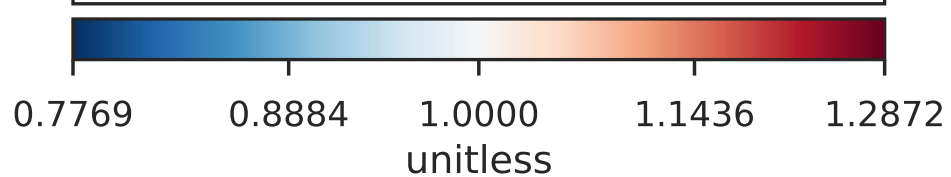
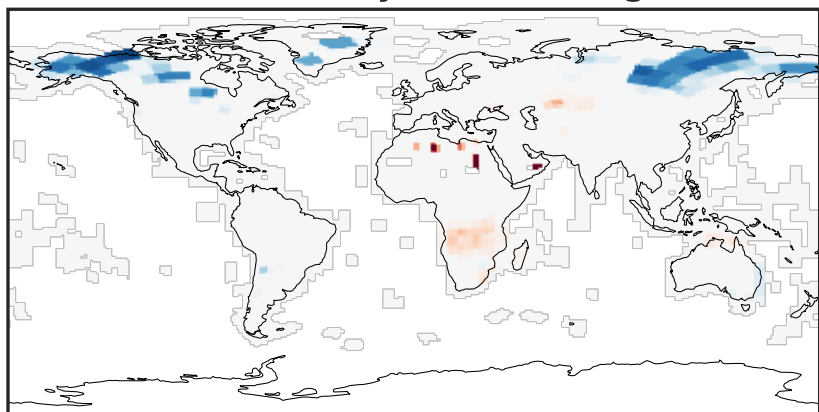
Difference (1x1.25)  
Dev - Ref, Dynamic Range



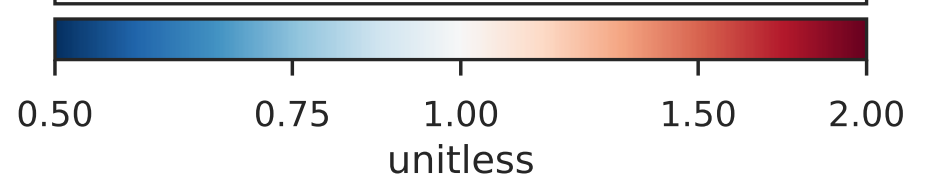
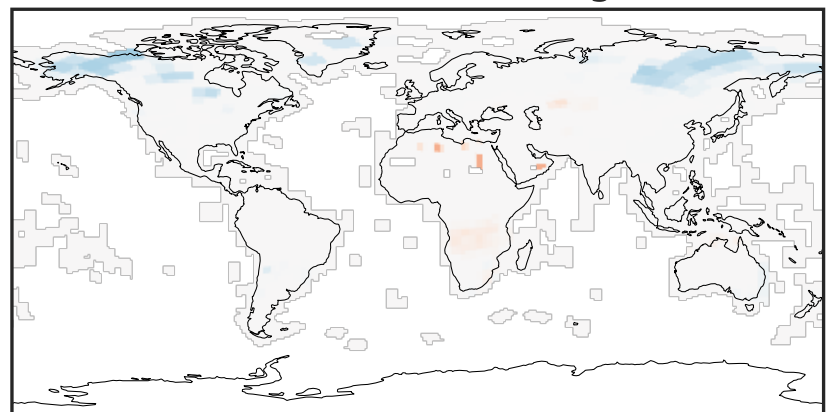
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

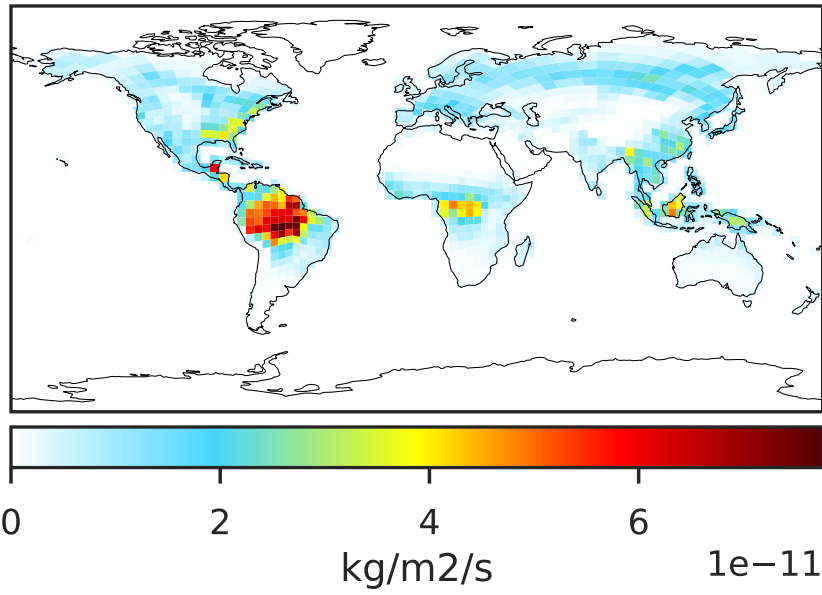


Ratio (1x1.25)  
Dev/Ref, Fixed Range

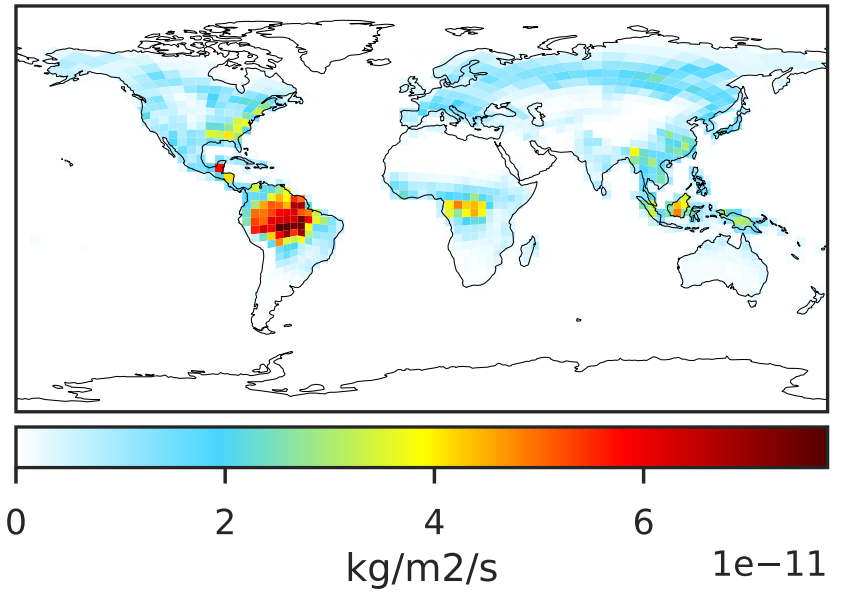


# EmisMTPO\_Biogenic (Jul2019)

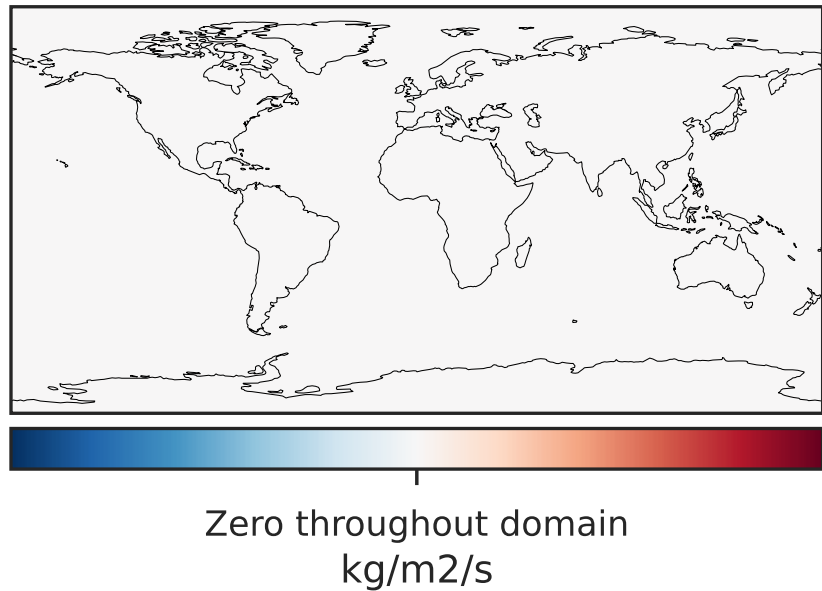
GCHP\_14.0.0 (Ref)  
c24



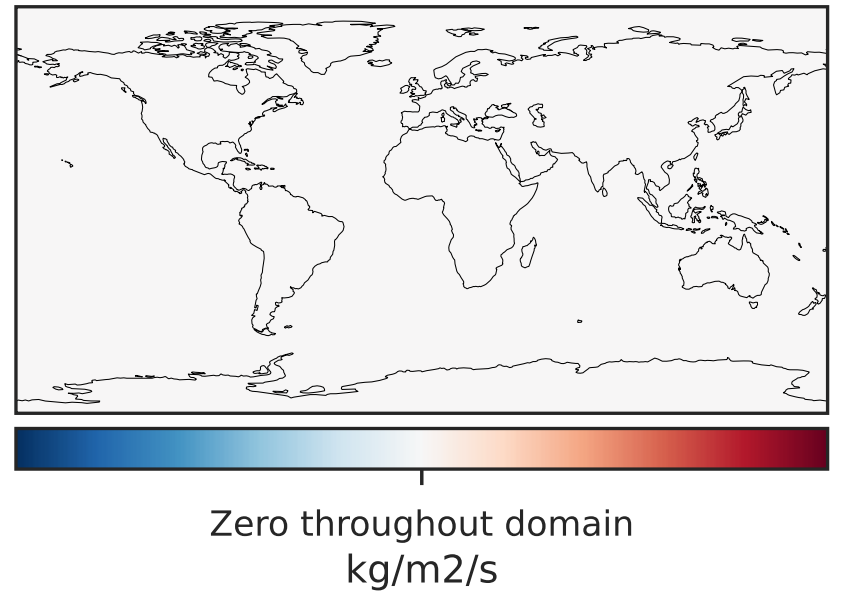
GCHP\_14.2.0 (Dev)  
c24



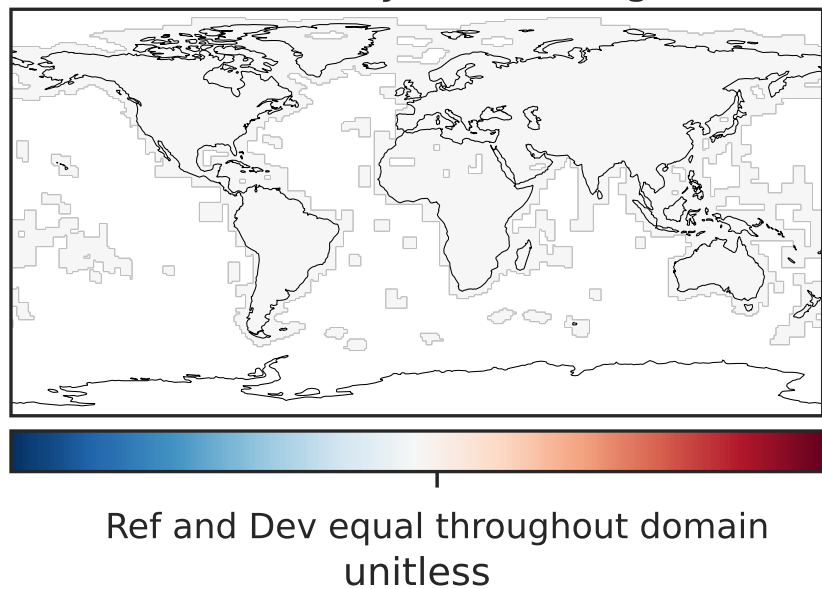
Difference (1x1.25)  
Dev - Ref, Dynamic Range



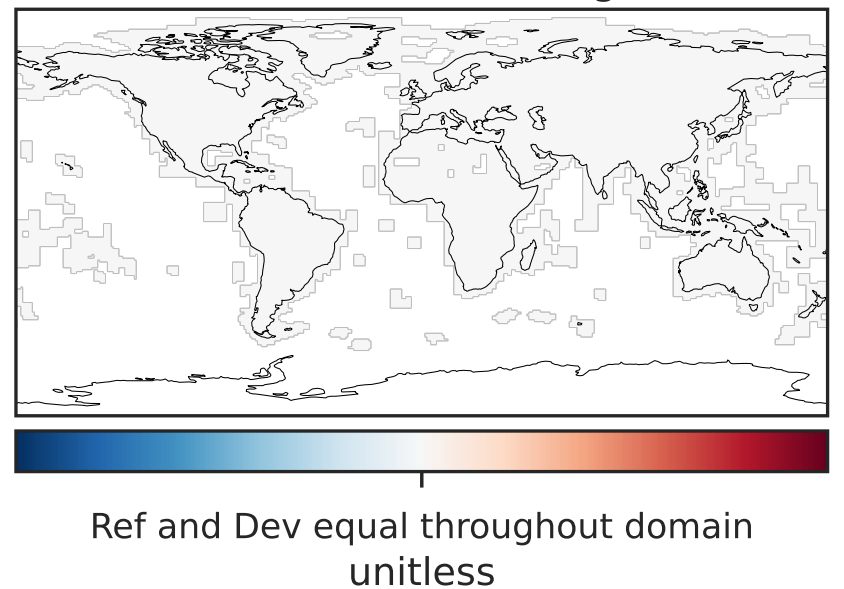
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



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



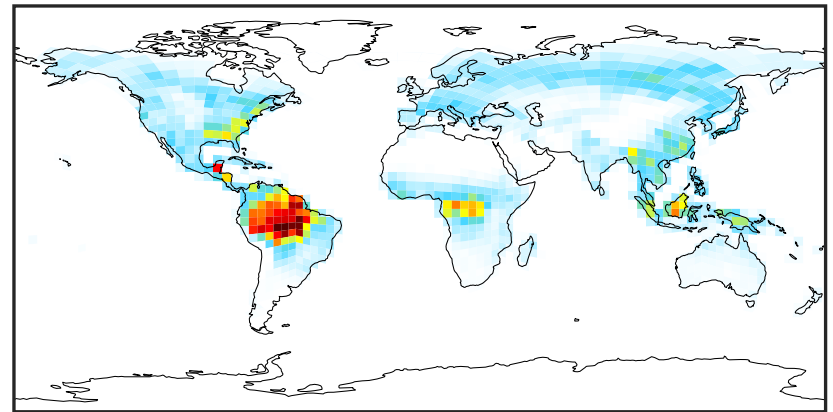
# EmisMTPO\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



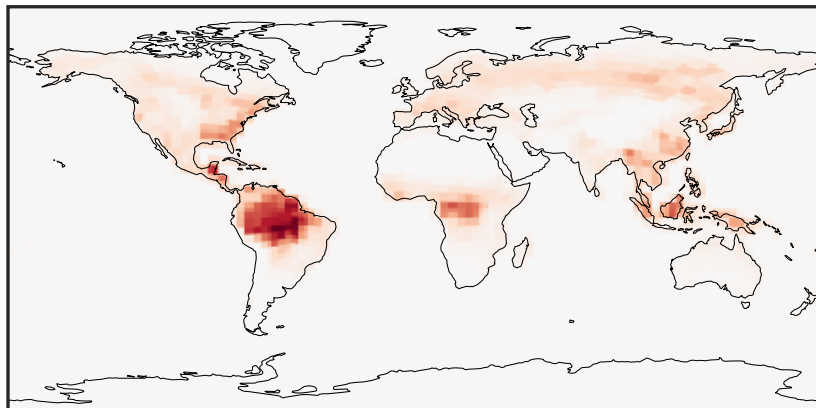
Zero throughout domain  
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



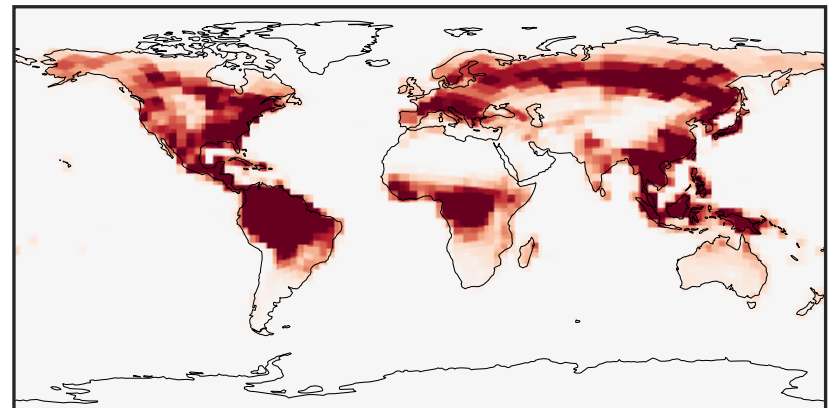
0 2 4 6  
kg/m<sup>2</sup>/s 1e-11

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



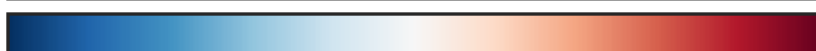
-4 0 4  
kg/m<sup>2</sup>/s 1e-11

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



-8 0 8  
kg/m<sup>2</sup>/s 1e-12

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



Undefined throughout domain  
unitless

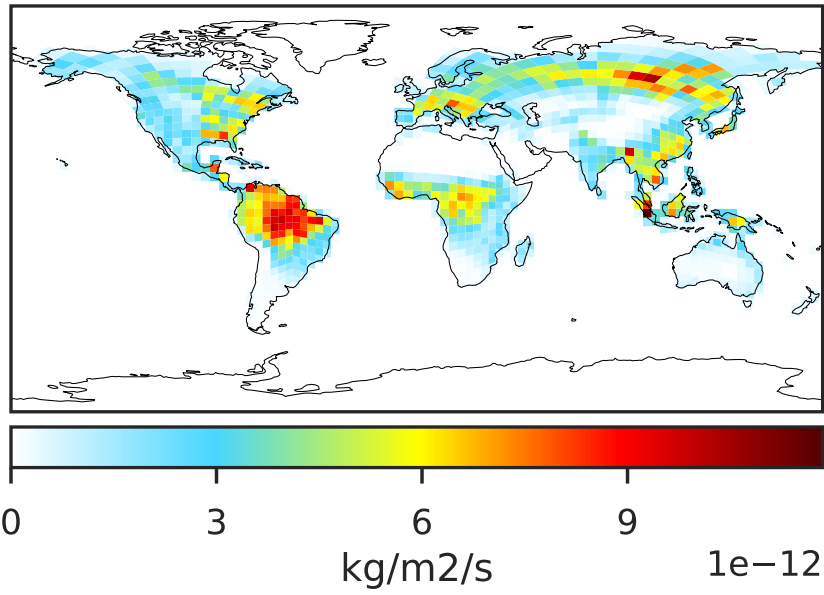
Ratio (1x1.25)  
Dev/Ref, Fixed Range



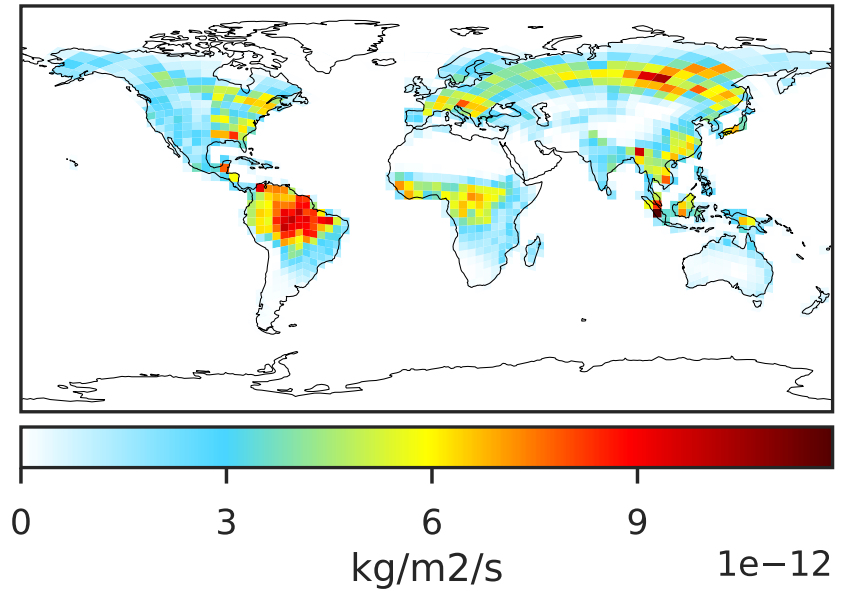
Undefined throughout domain  
unitless

# EmisLIMO\_Biogenic (Jul2019)

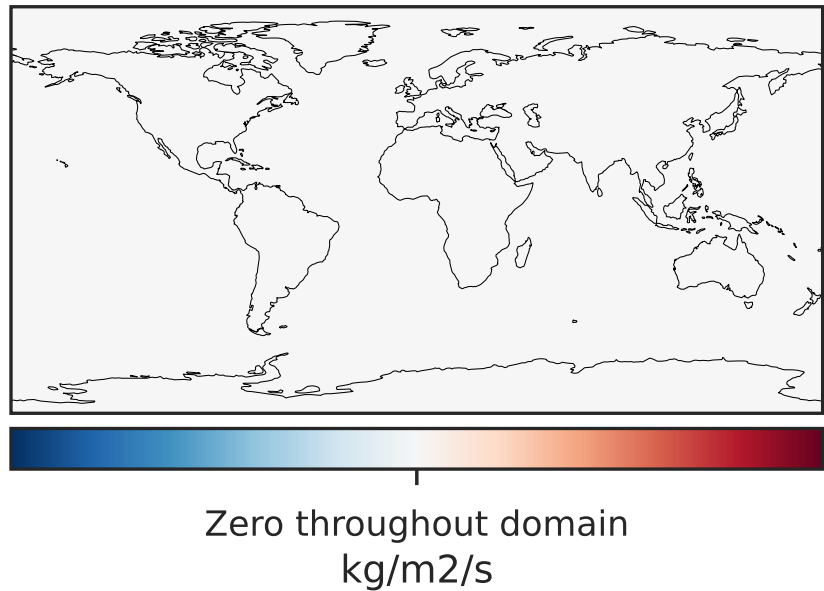
GCHP\_14.0.0 (Ref)  
c24



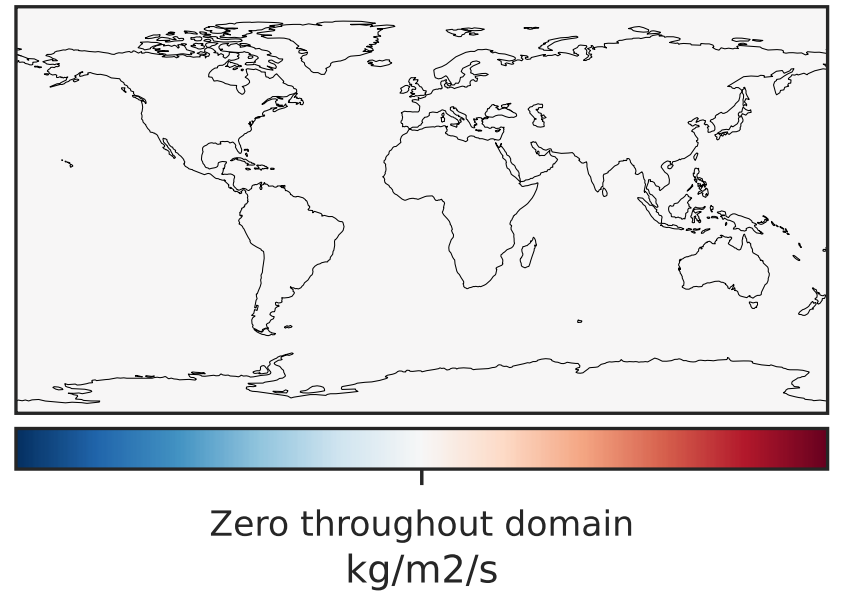
GCHP\_14.2.0 (Dev)  
c24



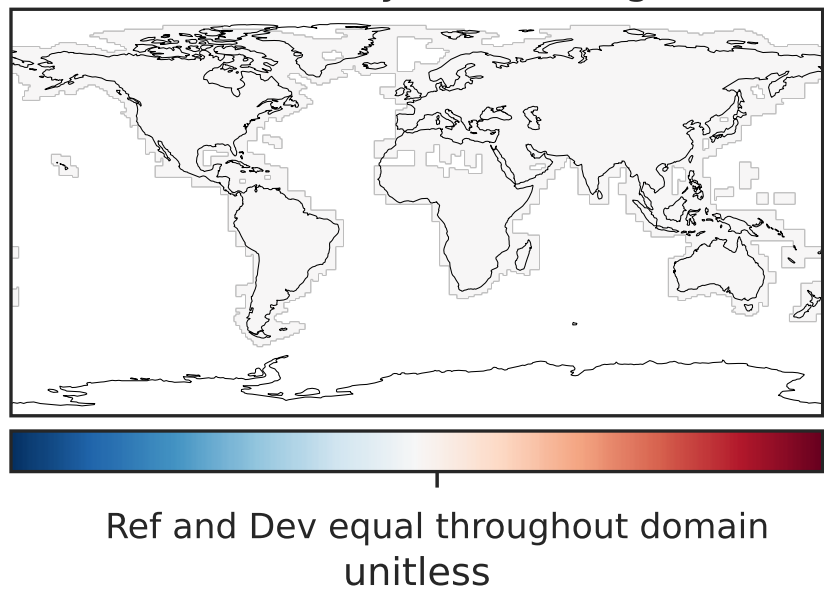
Difference (1x1.25)  
Dev - Ref, Dynamic Range



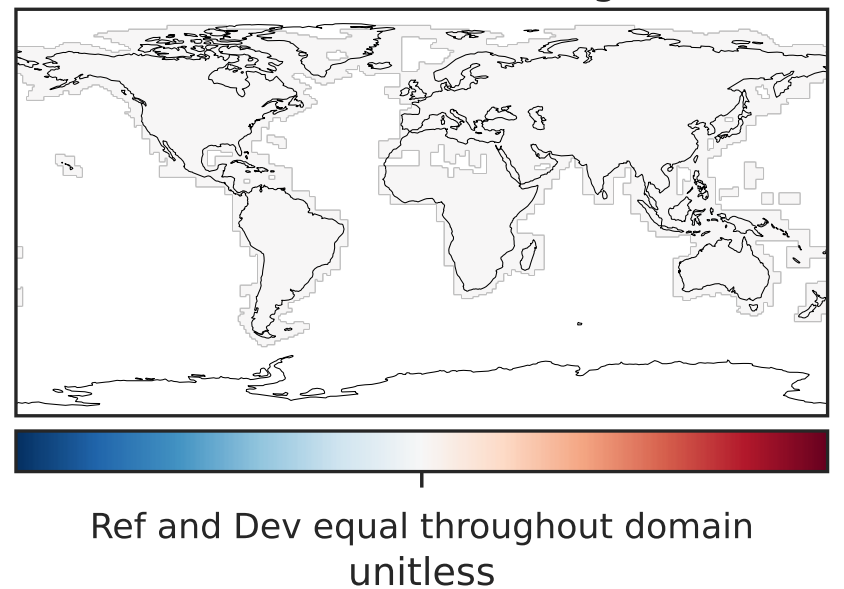
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

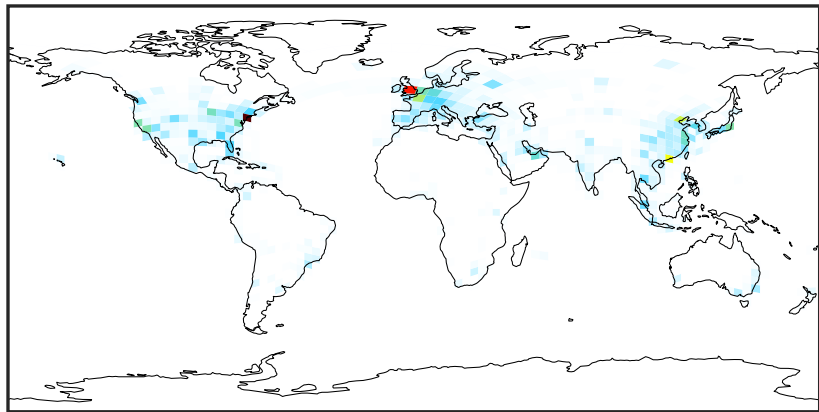


Ratio (1x1.25)  
Dev/Ref, Fixed Range



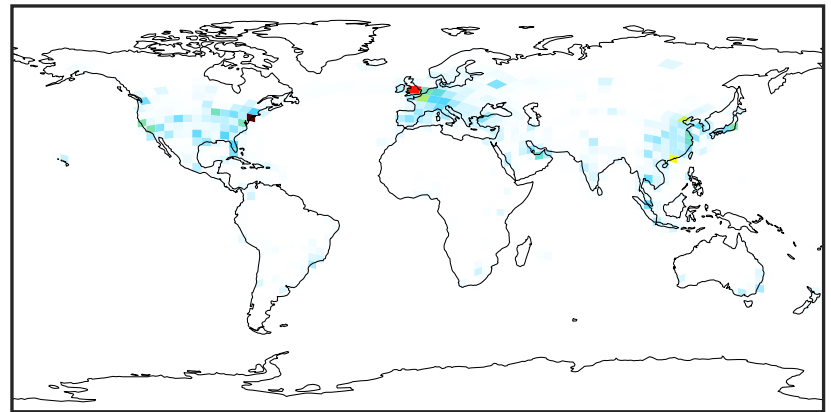
# EmisALK4\_Aircraft (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.8 1.6 2.4  $1e-13$   
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



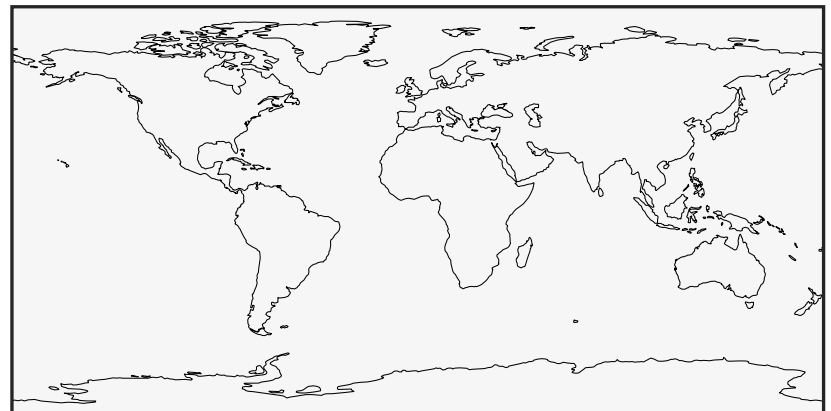
0.0 0.8 1.6 2.4  $1e-13$   
kg/m<sup>2</sup>/s

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



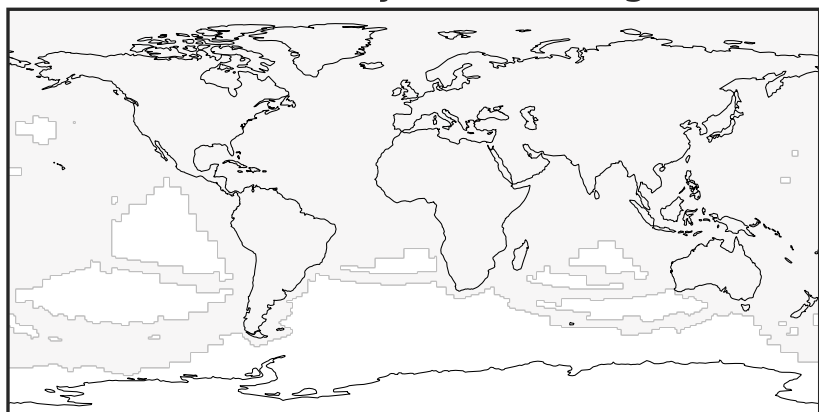
Zero throughout domain  
kg/m<sup>2</sup>/s

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



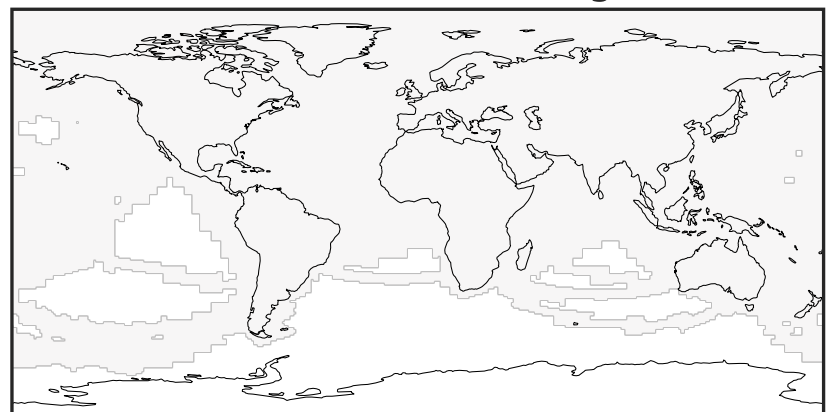
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

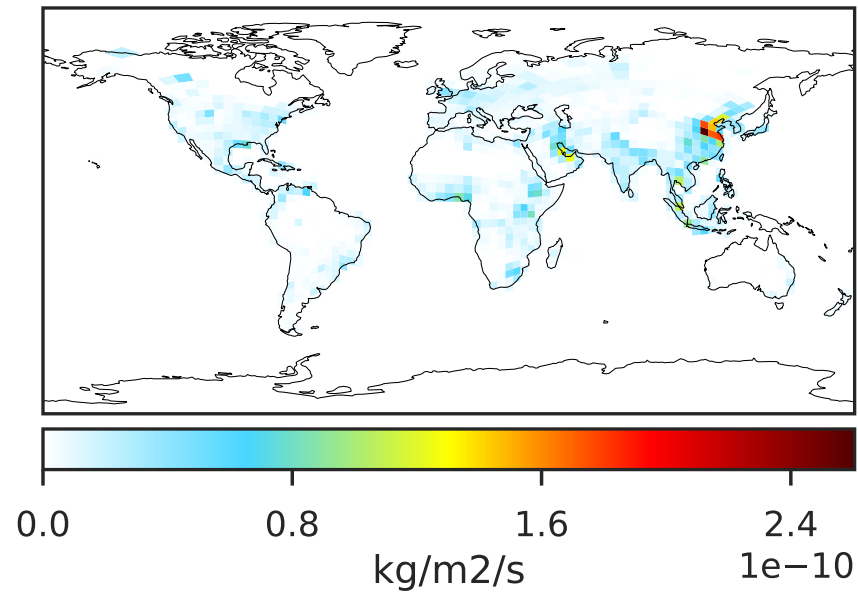
Ratio (1x1.25)  
Dev/Ref, Fixed Range



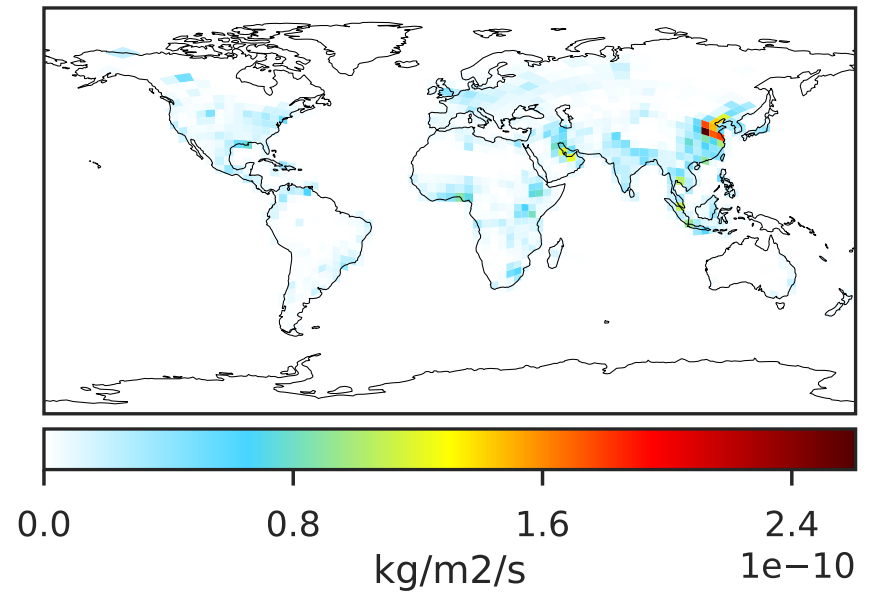
Ref and Dev equal throughout domain  
unitless

# EmisALK4\_Anthro (Jul2019)

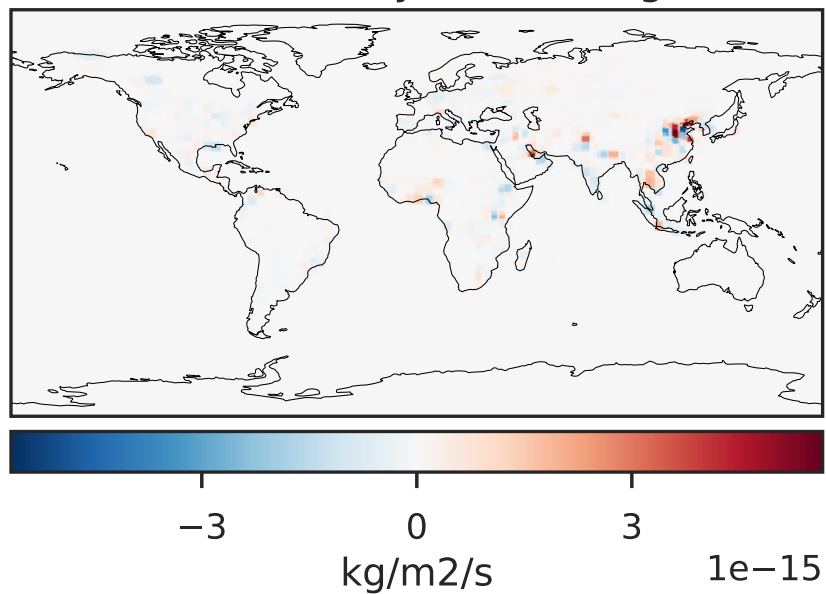
GCHP\_14.0.0 (Ref)  
c24



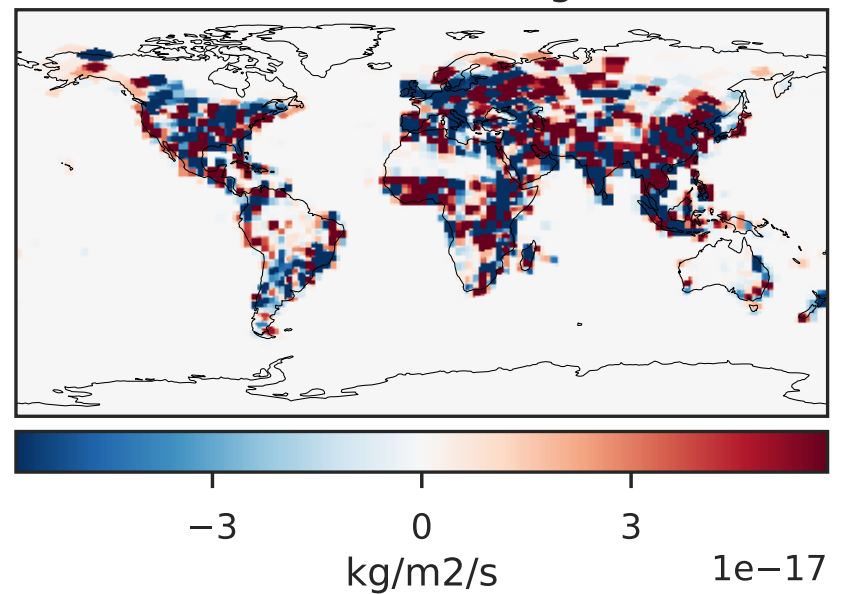
GCHP\_14.2.0 (Dev)  
c24



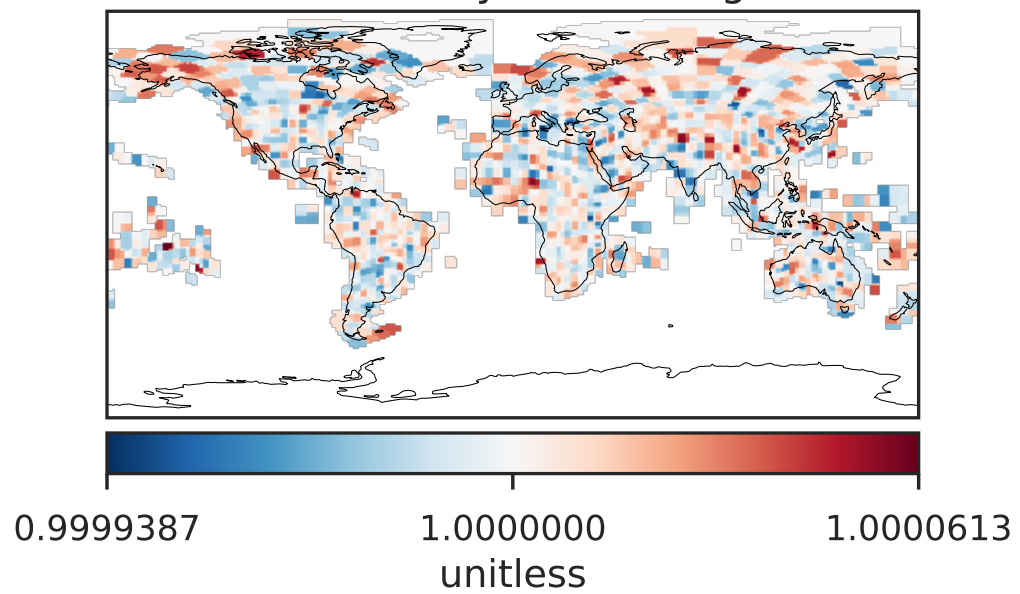
Difference (1x1.25)  
Dev - Ref, Dynamic Range



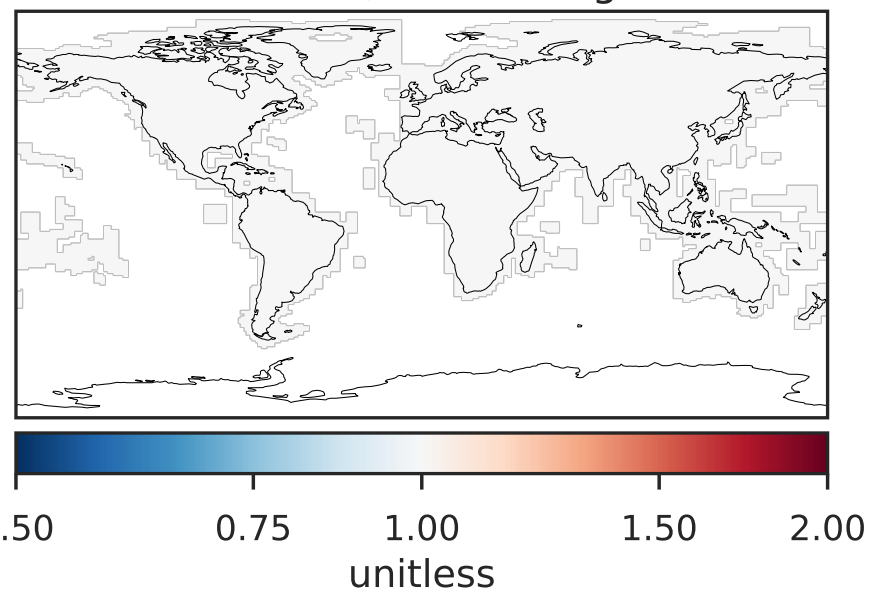
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

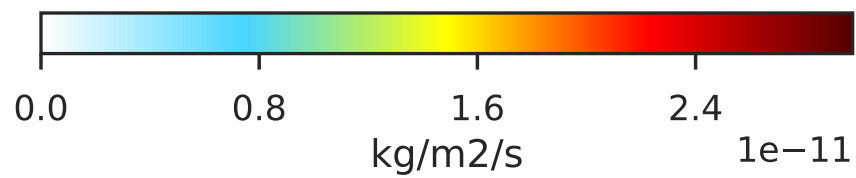
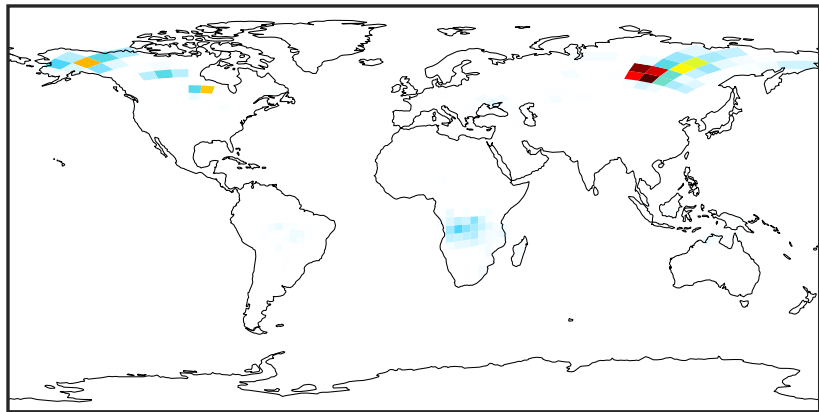


Ratio (1x1.25)  
Dev/Ref, Fixed Range

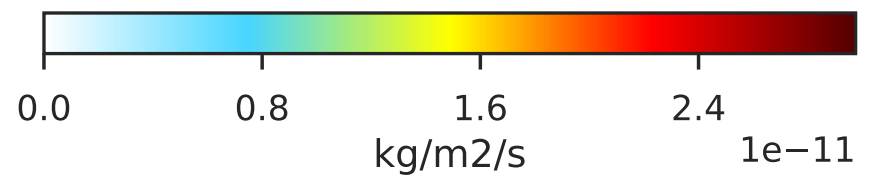
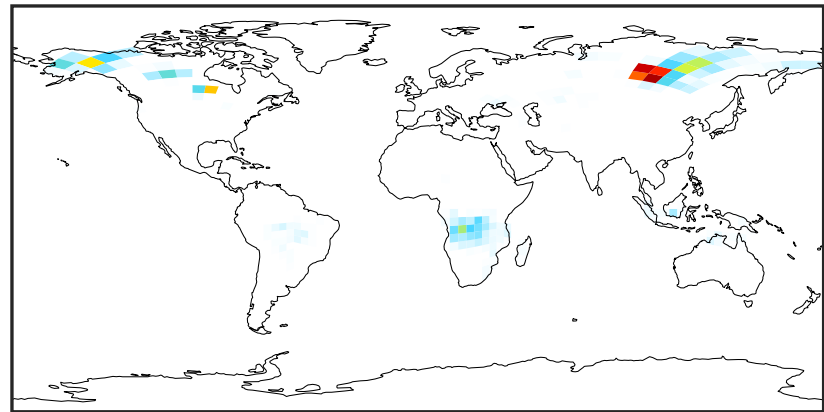


# EmisALK4\_BioBurn (Jul2019)

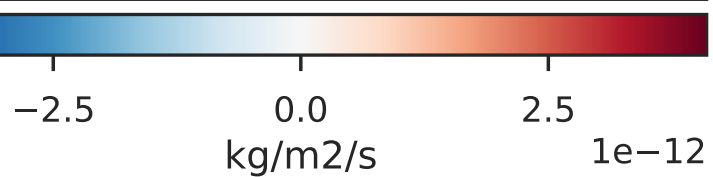
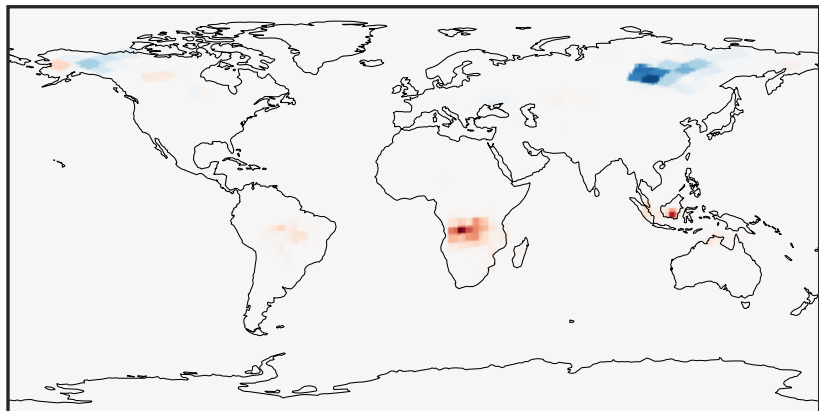
GCHP\_14.0.0 (Ref)  
c24



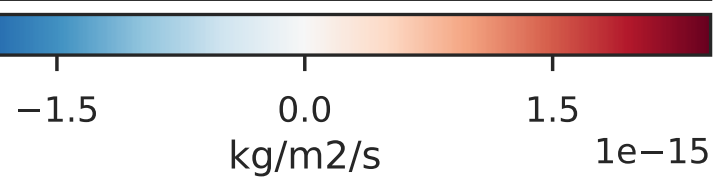
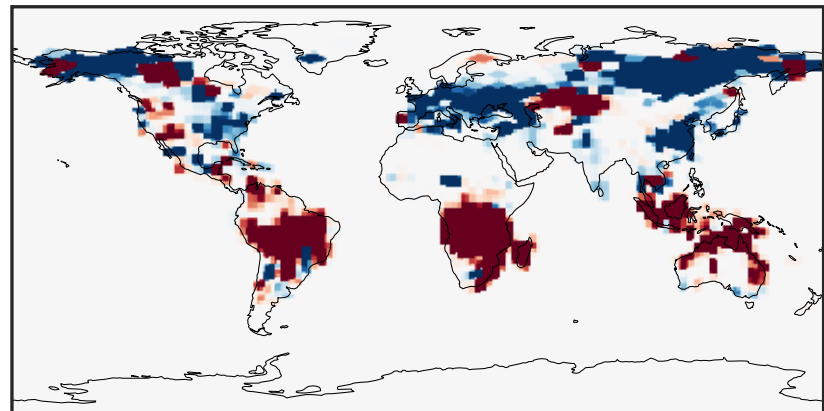
GCHP\_14.2.0 (Dev)  
c24



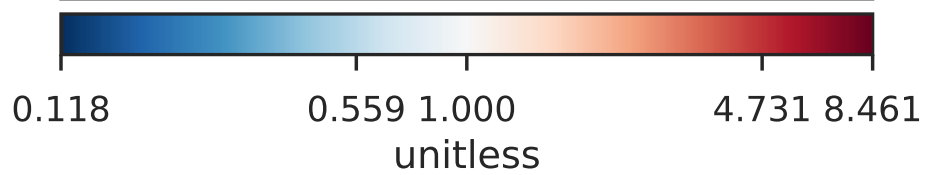
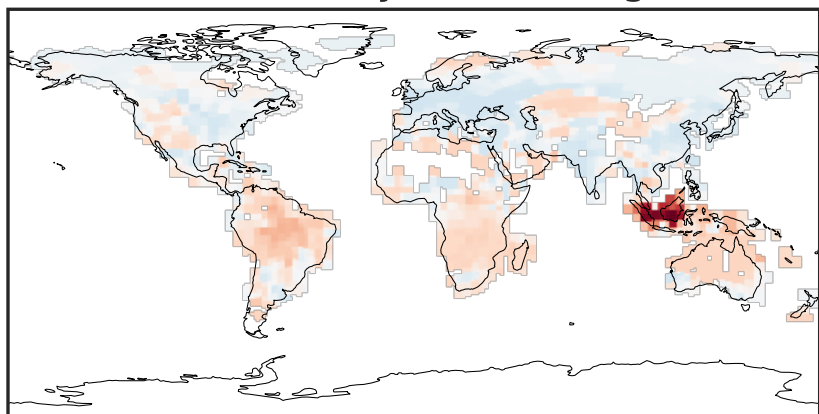
Difference (1x1.25)  
Dev - Ref, Dynamic Range



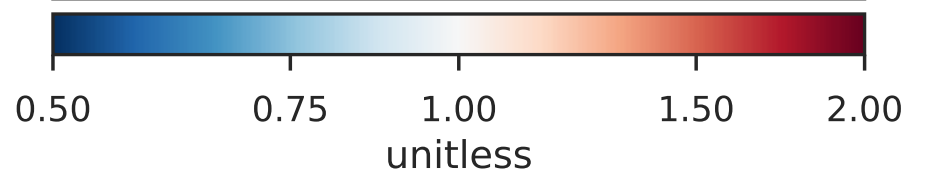
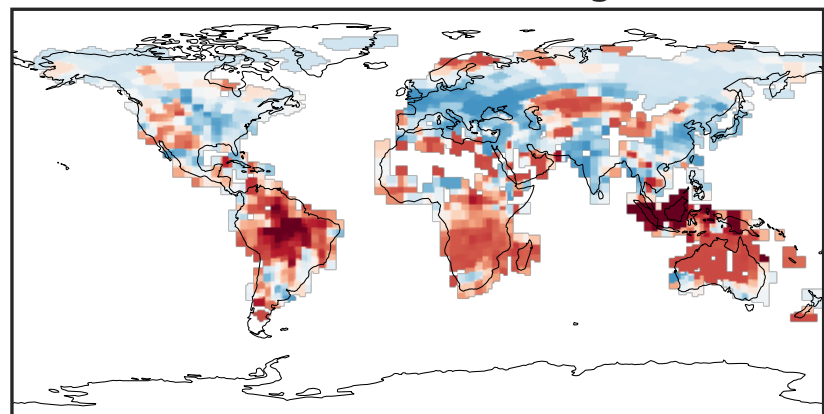
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



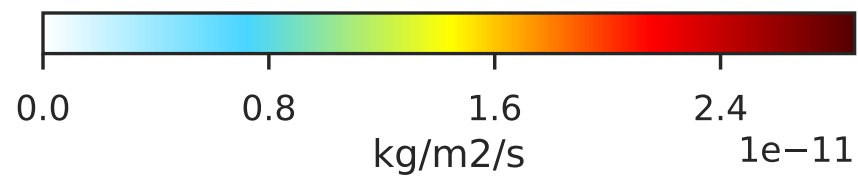
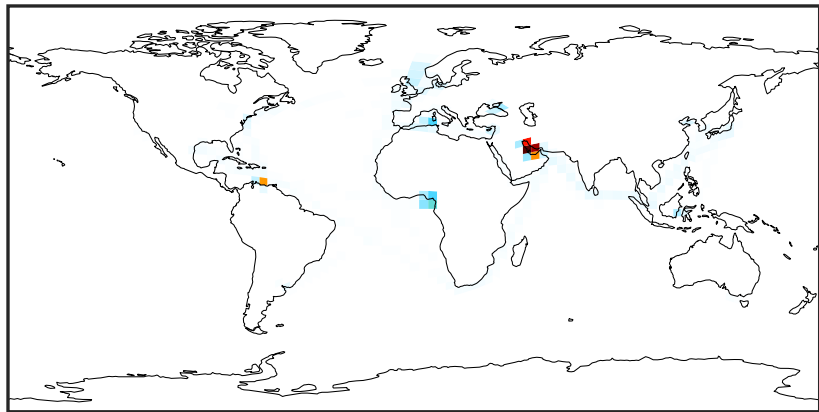
Ratio (1x1.25)  
Dev/Ref, Fixed Range



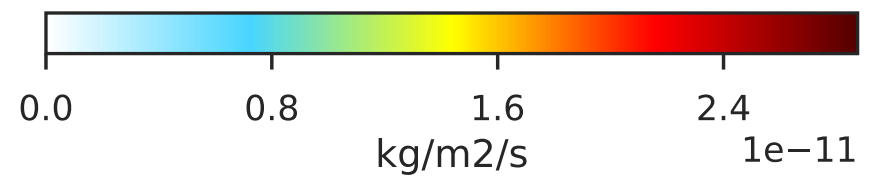
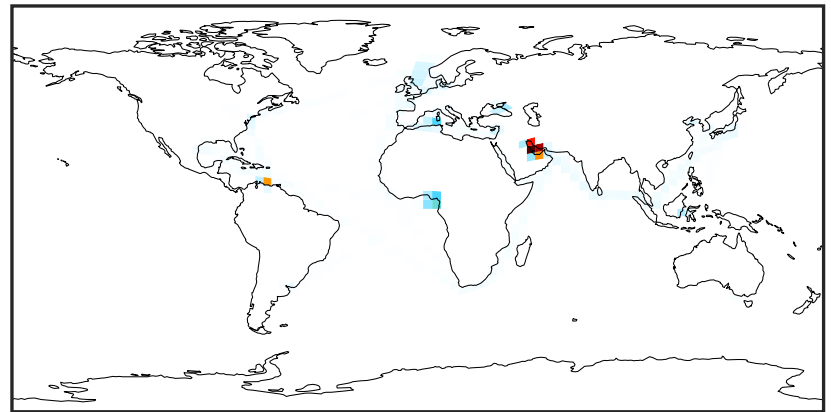


# EmisALK4\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24



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



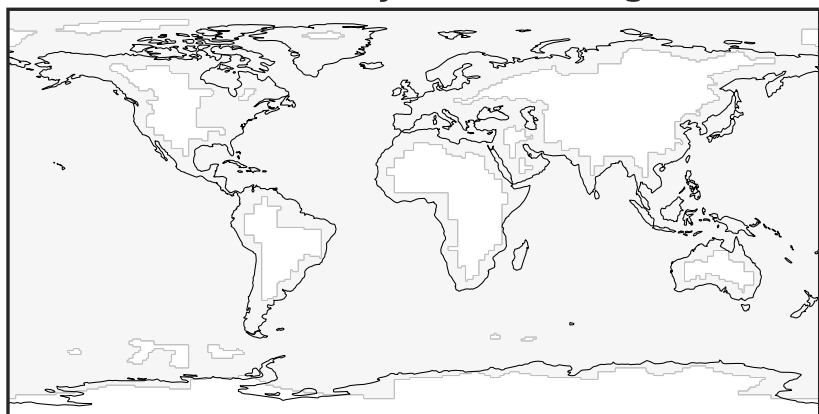
Zero throughout domain  
 $\text{kg/m}^2/\text{s}$

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



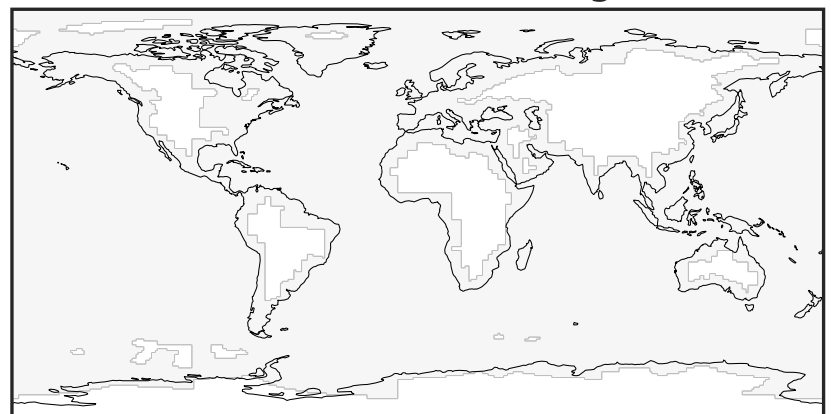
Zero throughout domain  
 $\text{kg/m}^2/\text{s}$

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



Ref and Dev equal throughout domain  
unitless

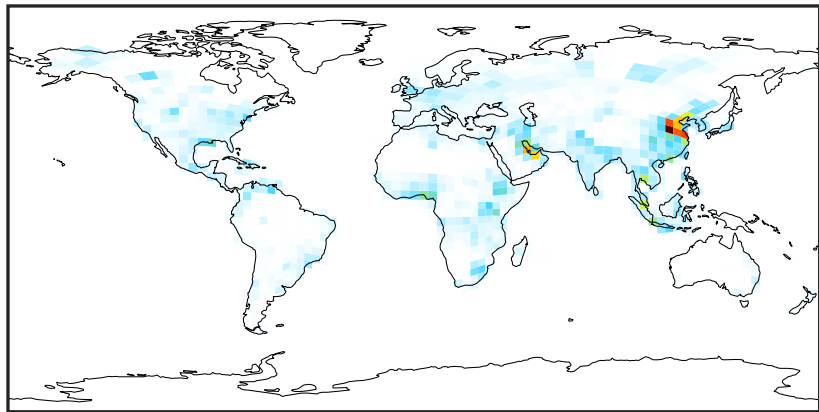
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

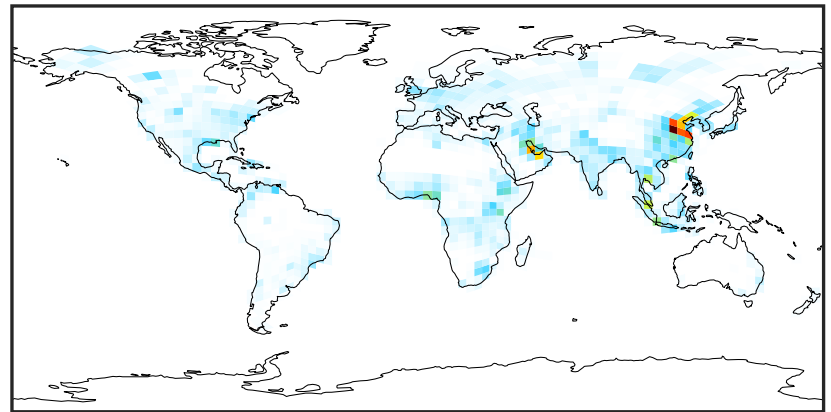
# EmisALK4\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



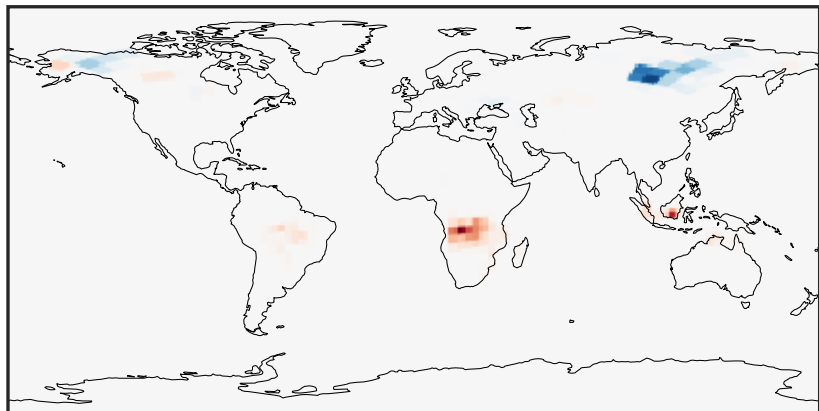
0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



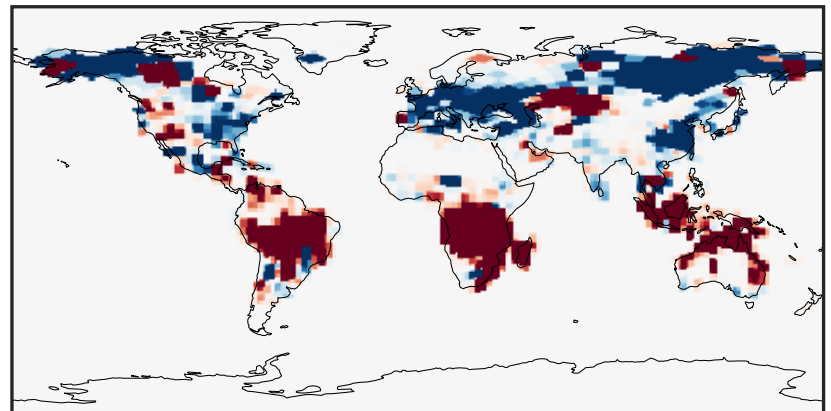
0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-10

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



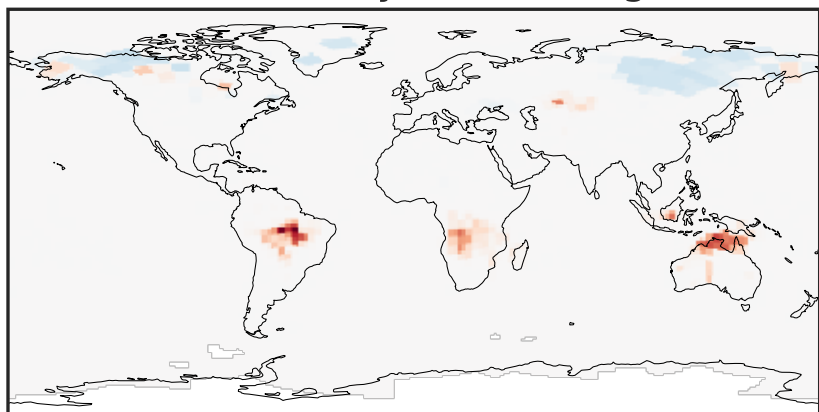
-2.5 0.0 2.5  
kg/m<sup>2</sup>/s 1e-12

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



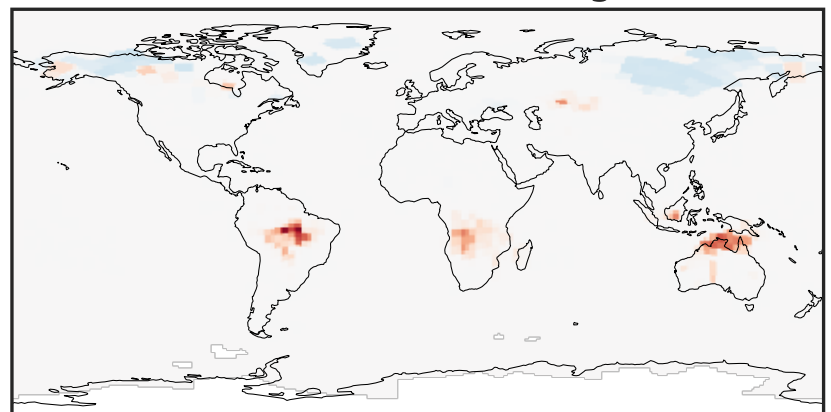
-1.5 0.0 1.5  
kg/m<sup>2</sup>/s 1e-15

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



0.527 0.764 1.000 1.449 1.897  
unitless

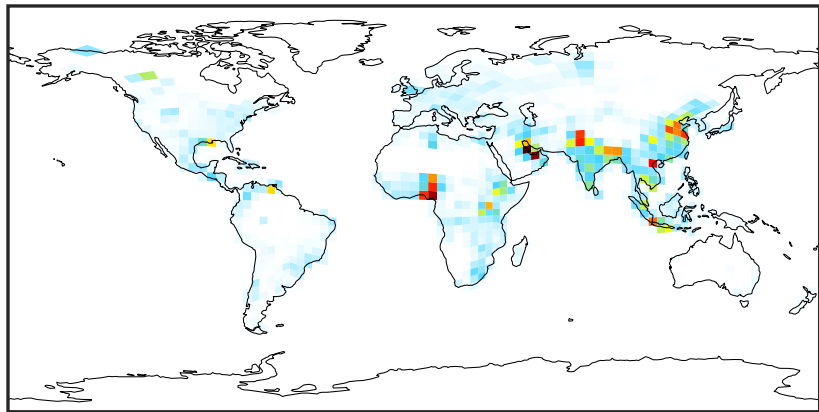
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

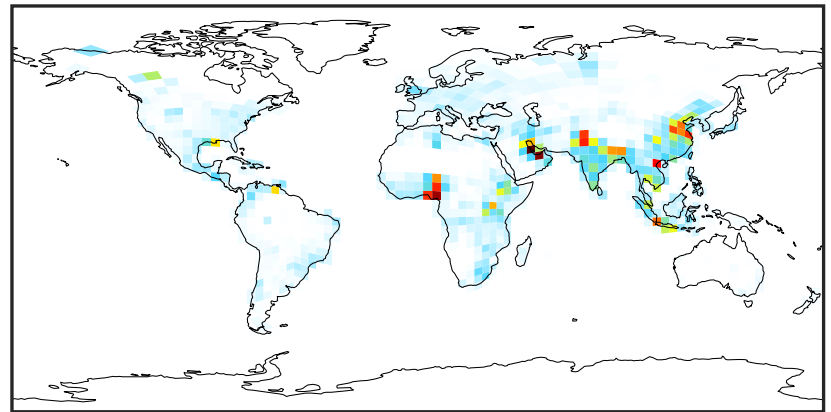
# EmisBENZ\_Anthro (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



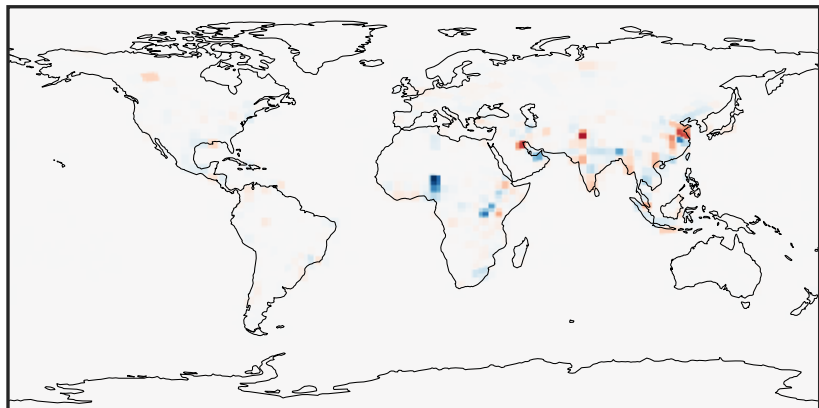
0.0 0.5 1.0 1.5  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



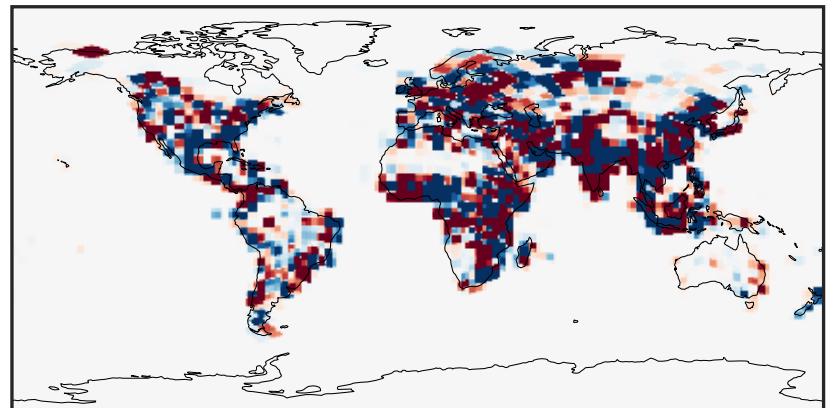
0.0 0.5 1.0 1.5  
kg/m<sup>2</sup>/s 1e-11

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



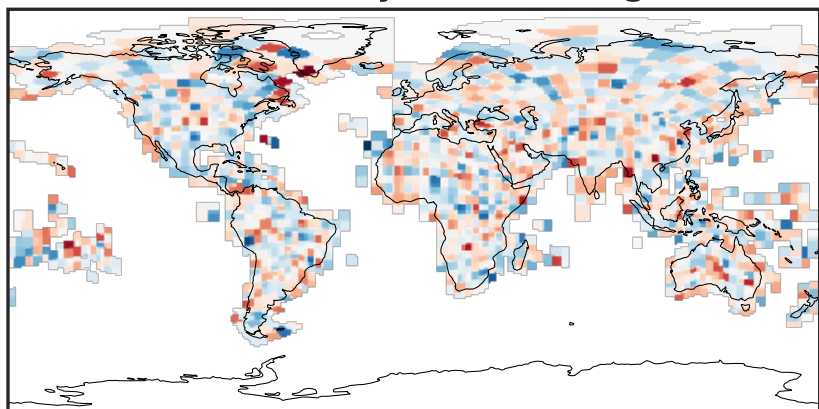
-3 0 3  
kg/m<sup>2</sup>/s 1e-16

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



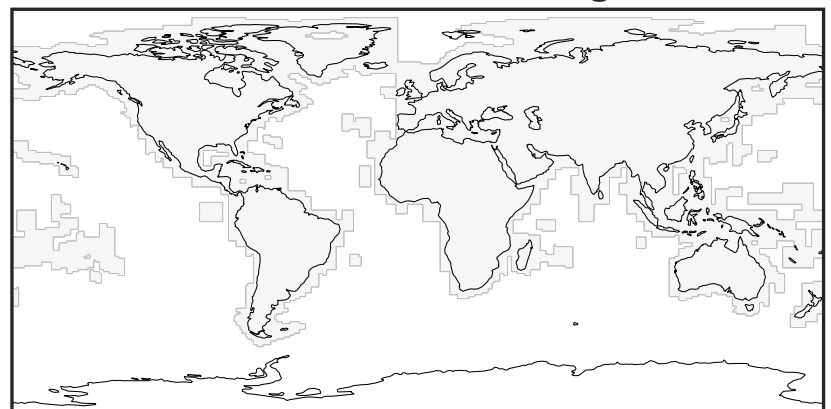
-3 0 3  
kg/m<sup>2</sup>/s 1e-18

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



0.9999325 1.000000 1.0000675  
unitless

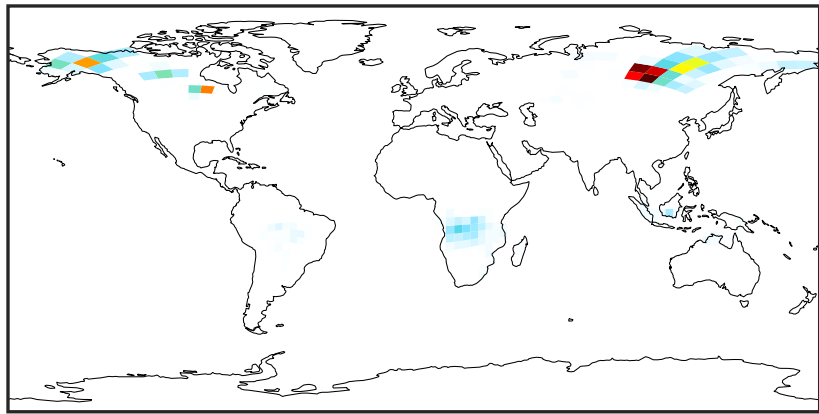
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

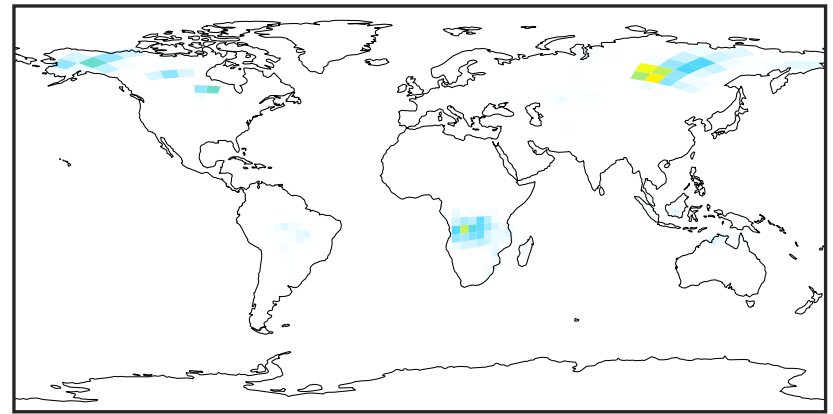
# EmisBENZ\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



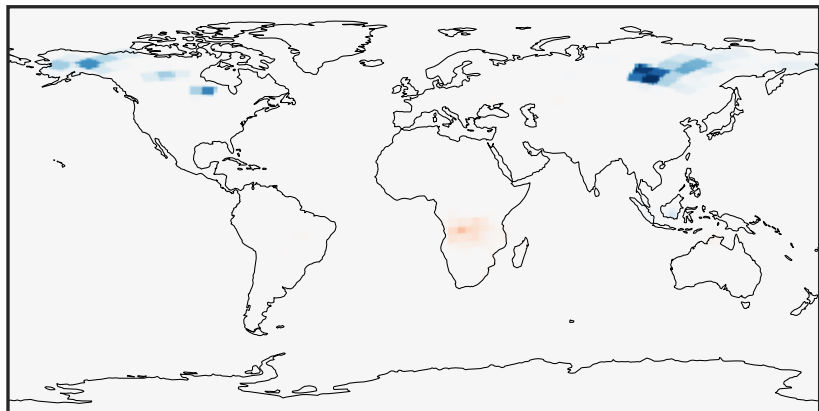
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



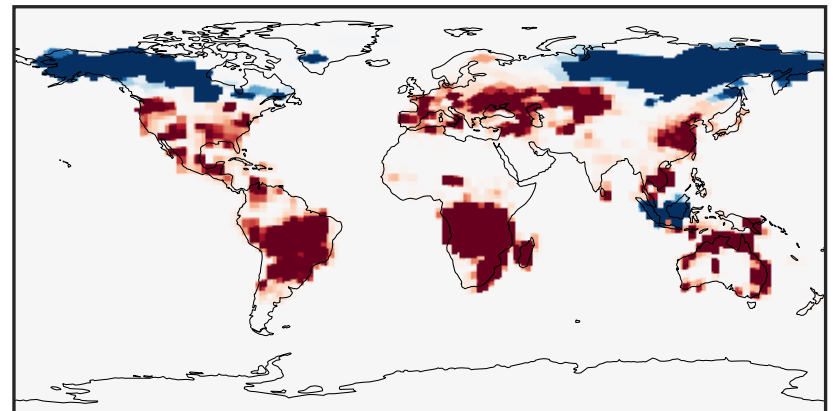
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-11

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



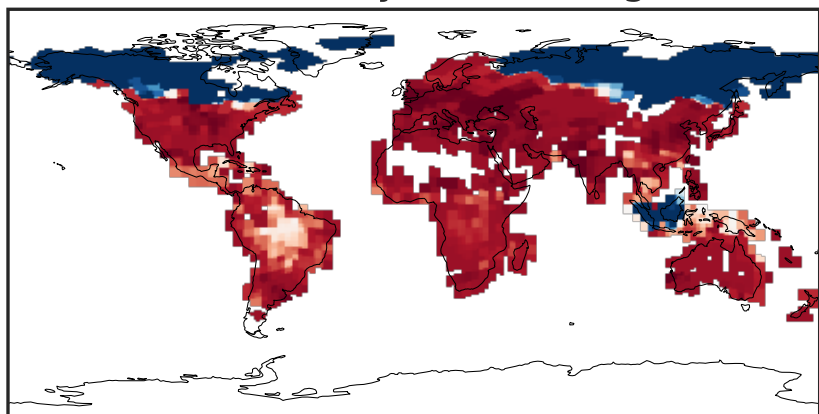
-2.5 0.0 2.5  
kg/m<sup>2</sup>/s 1e-11

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



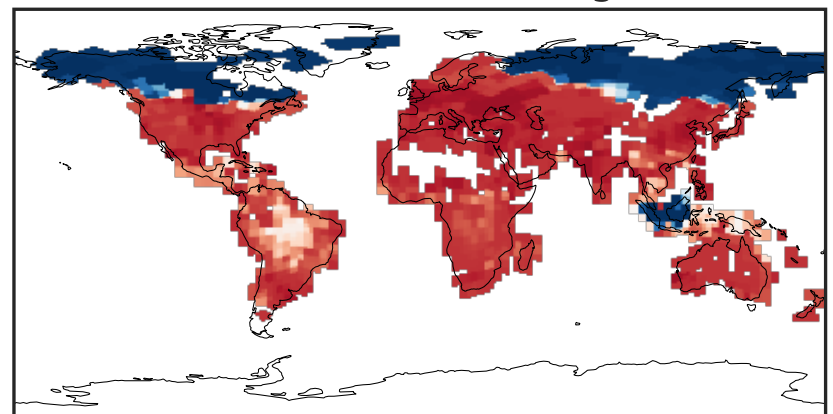
-8 0 8  
kg/m<sup>2</sup>/s 1e-15

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



0.556 0.778 1.000 1.400 1.800  
unitless

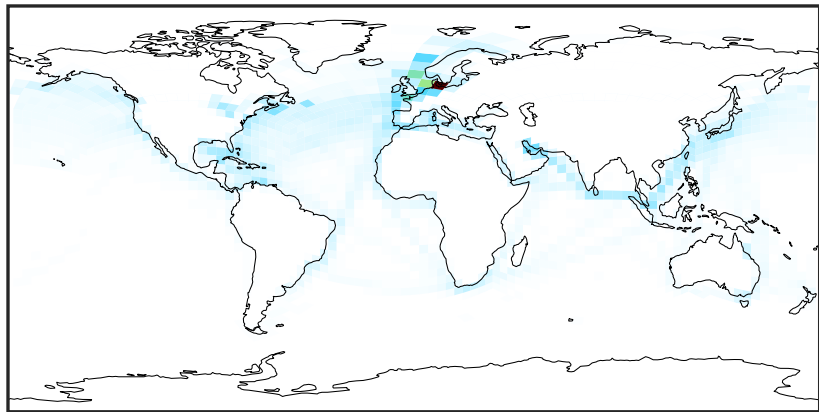
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

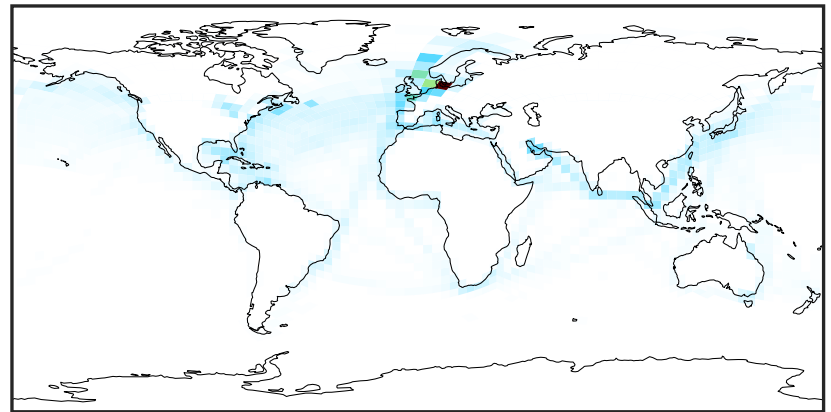
# EmisBENZ\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 1.5 3.0  $1e-13$   
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



0.0 1.5 3.0  $1e-13$   
kg/m<sup>2</sup>/s

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



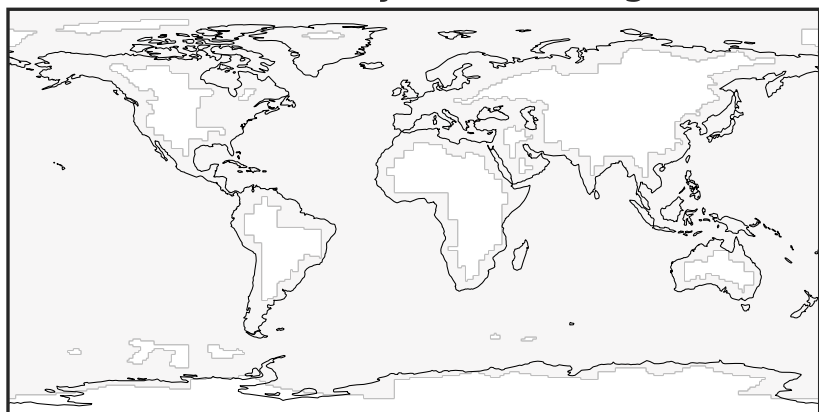
Zero throughout domain  
kg/m<sup>2</sup>/s

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



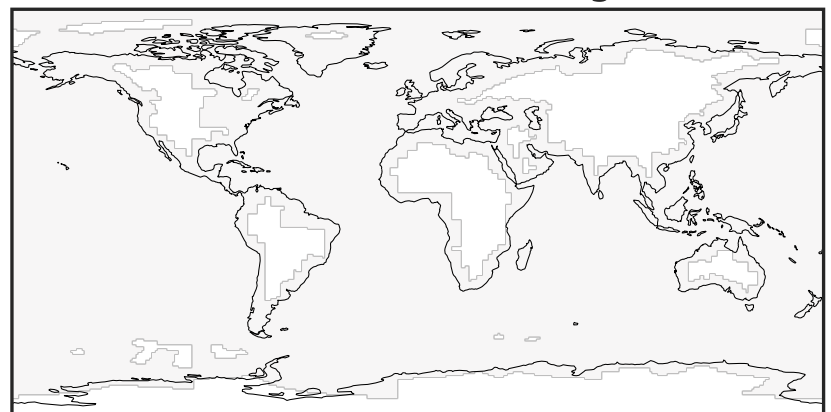
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

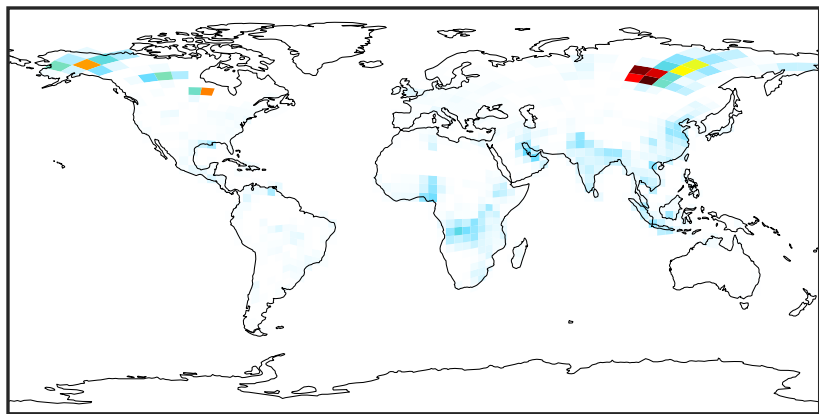
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

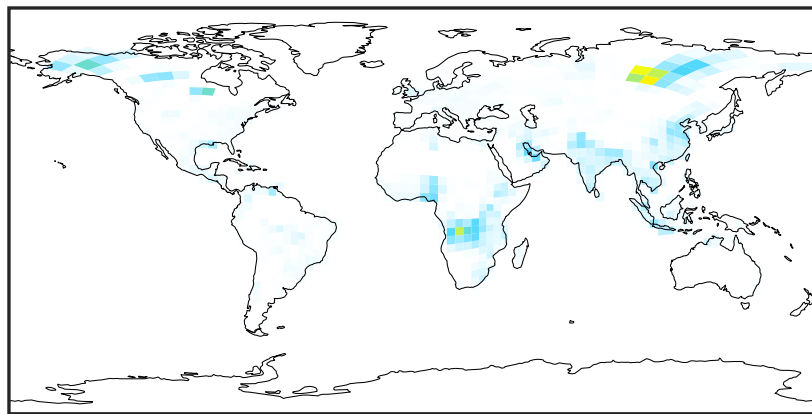
# EmisBENZ\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



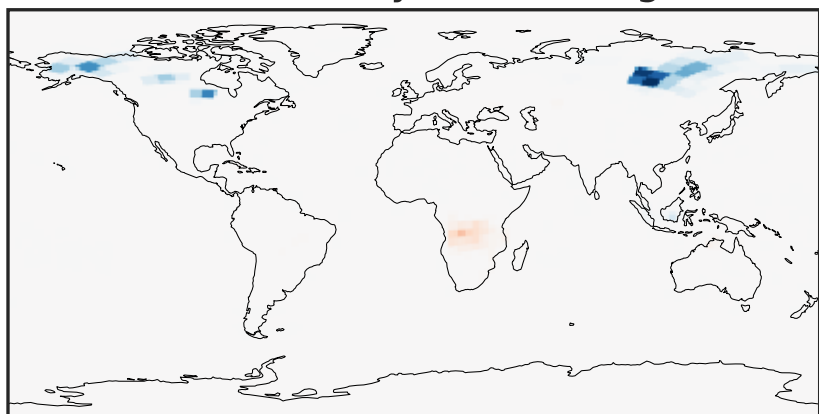
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



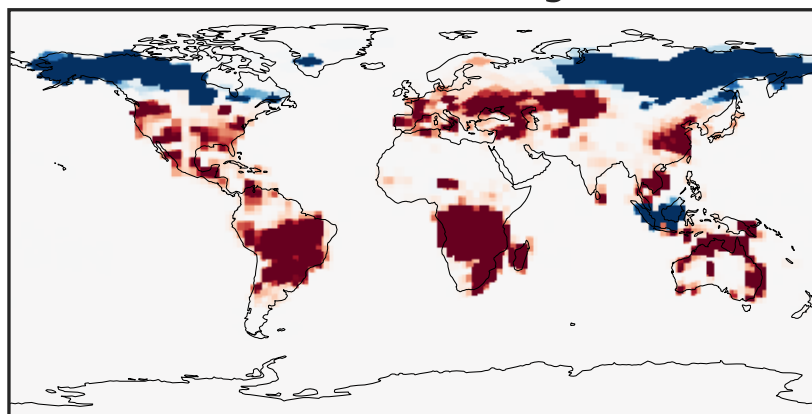
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-11

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



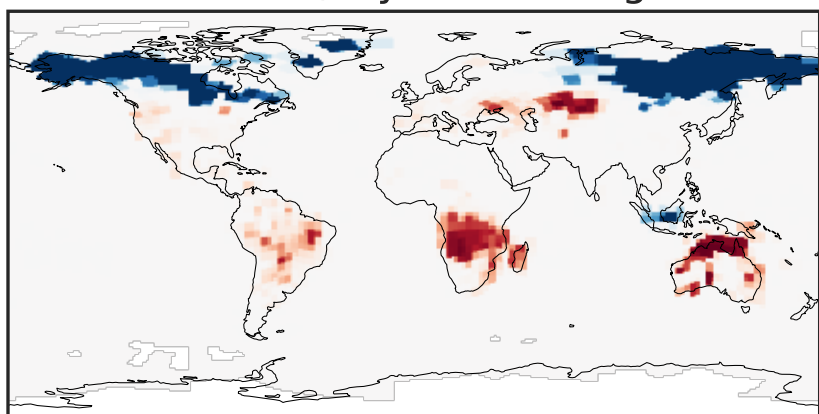
-2.5 0.0 2.5  
kg/m<sup>2</sup>/s 1e-11

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



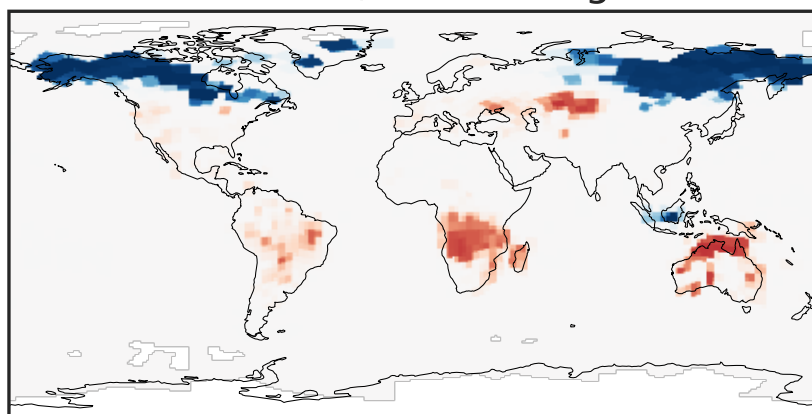
-8 0 8  
kg/m<sup>2</sup>/s 1e-15

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



0.607 0.803 1.000 1.324 1.647  
unitless

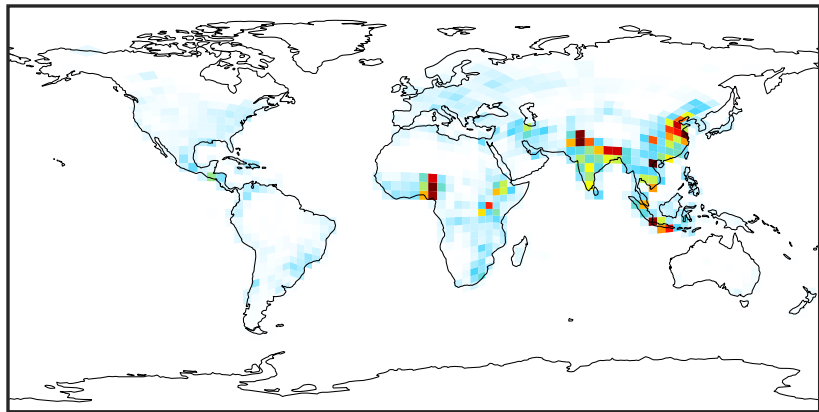
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

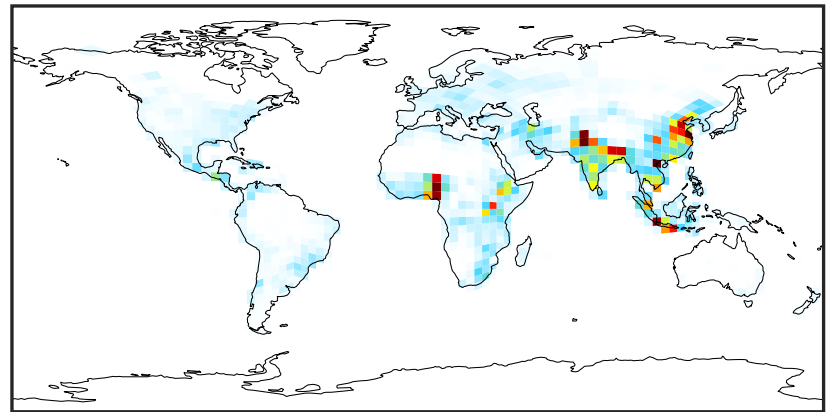
# EmisC2H2\_Anthro (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



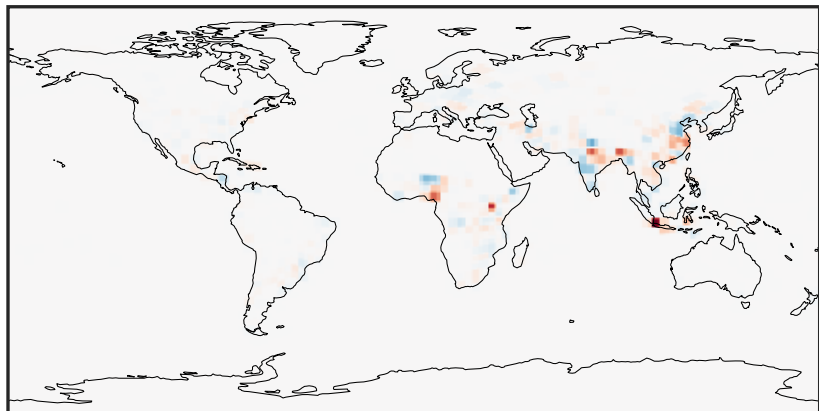
0.0 2.5 5.0 7.5  
kg/m2/s 1e-12

GCHP\_14.2.0 (Dev)  
c24



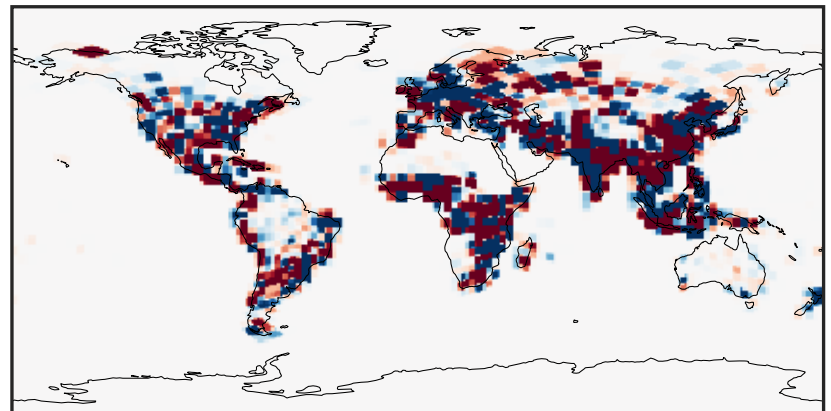
0.0 2.5 5.0 7.5  
kg/m2/s 1e-12

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



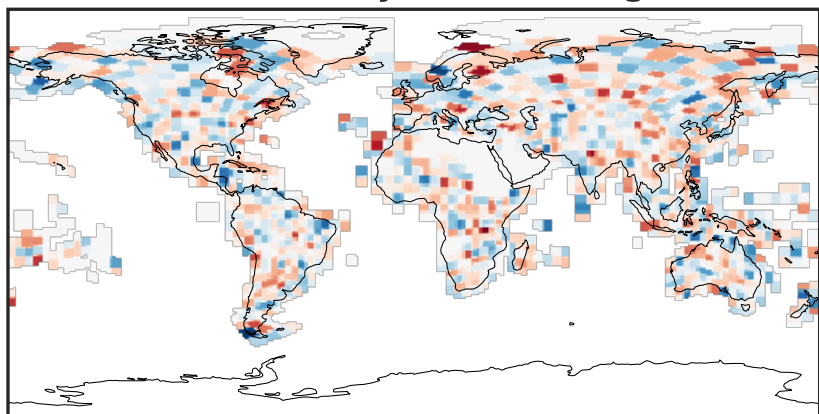
-1.5 0.0 1.5  
kg/m2/s 1e-16

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



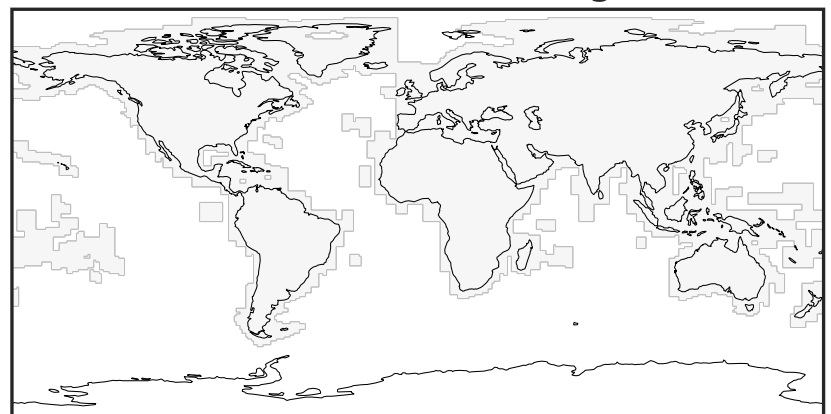
-1.5 0.0 1.5  
kg/m2/s 1e-18

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



0.999936 1.000000 1.000064  
unitless

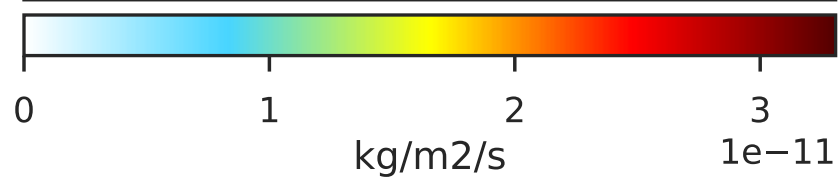
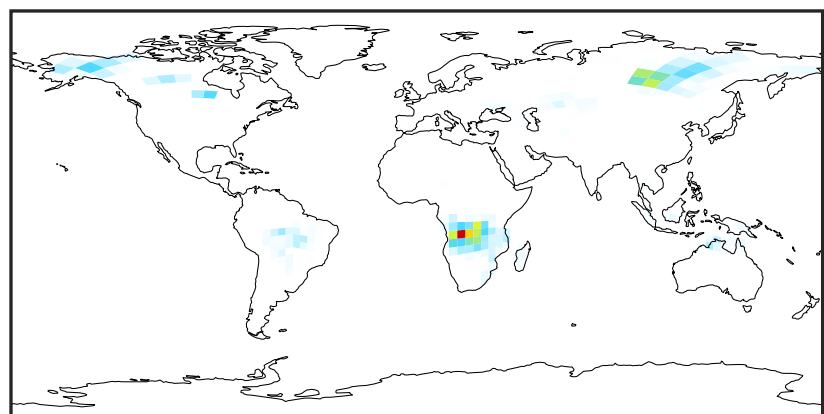
Ratio (1x1.25)  
Dev/Ref, Fixed Range



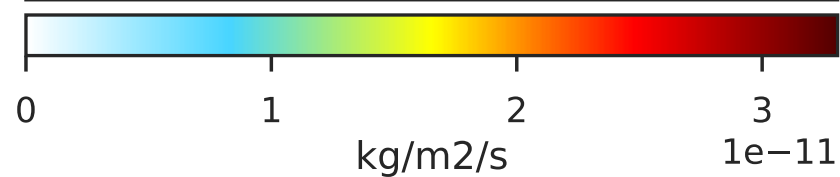
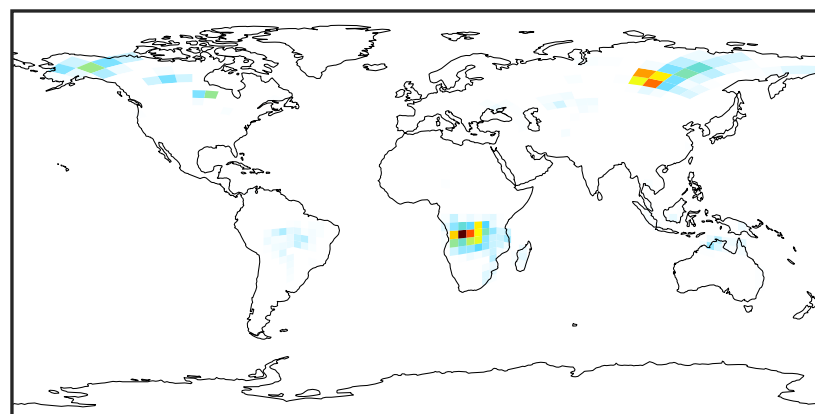
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisC2H2\_BioBurn (Jul2019)

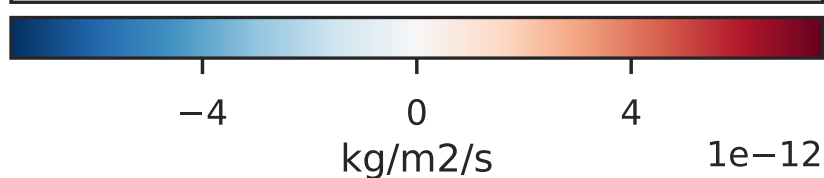
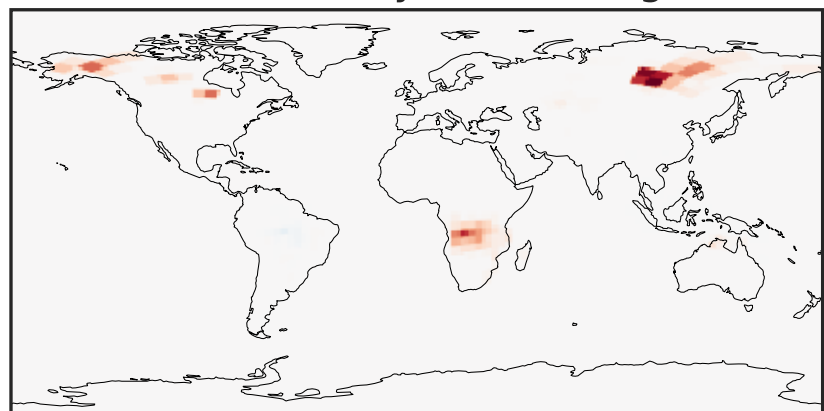
GCHP\_14.0.0 (Ref)  
c24



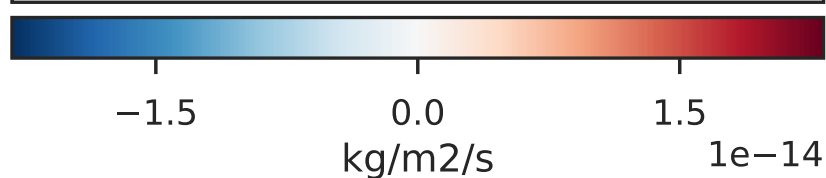
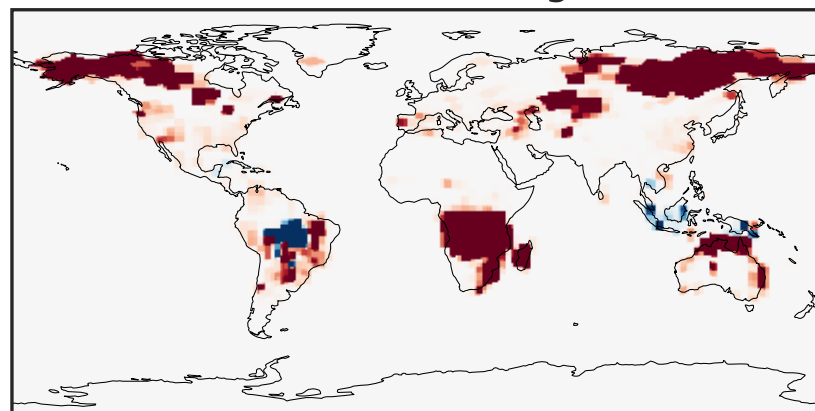
GCHP\_14.2.0 (Dev)  
c24



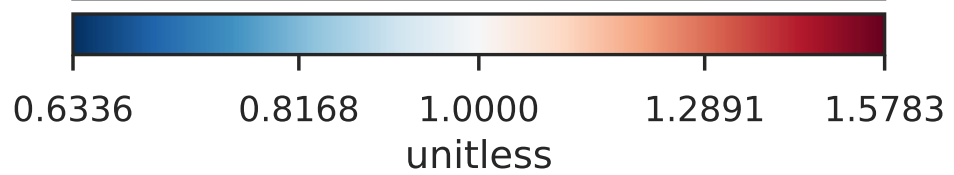
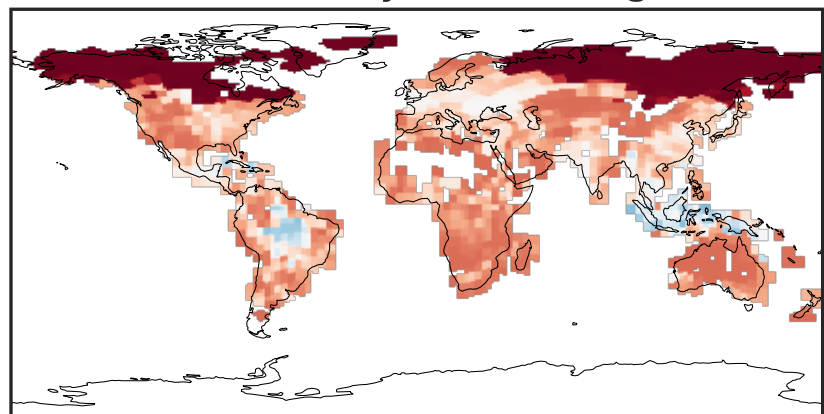
Difference (1x1.25)  
Dev - Ref, Dynamic Range



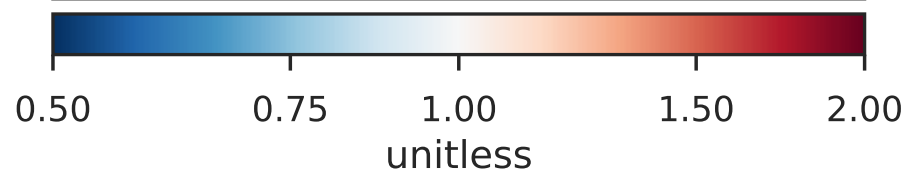
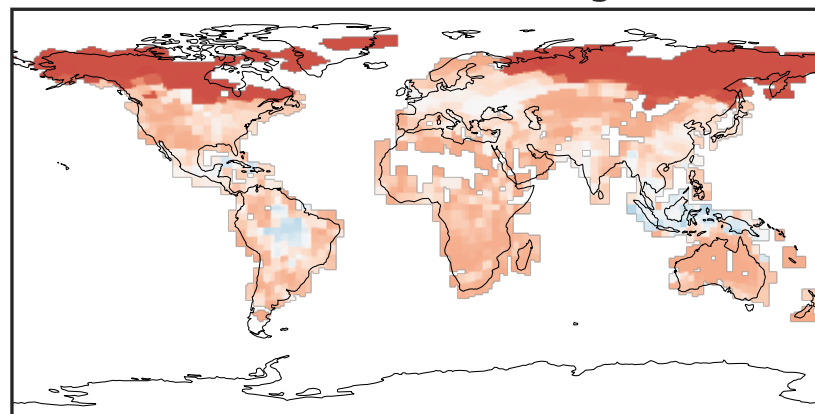
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



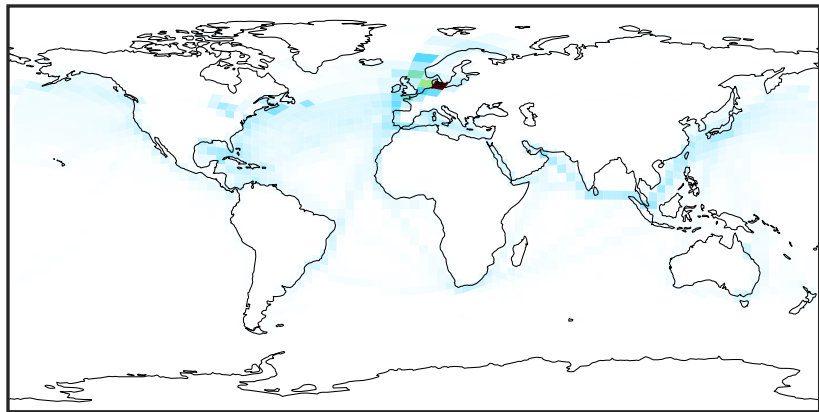
Ratio (1x1.25)  
Dev/Ref, Fixed Range





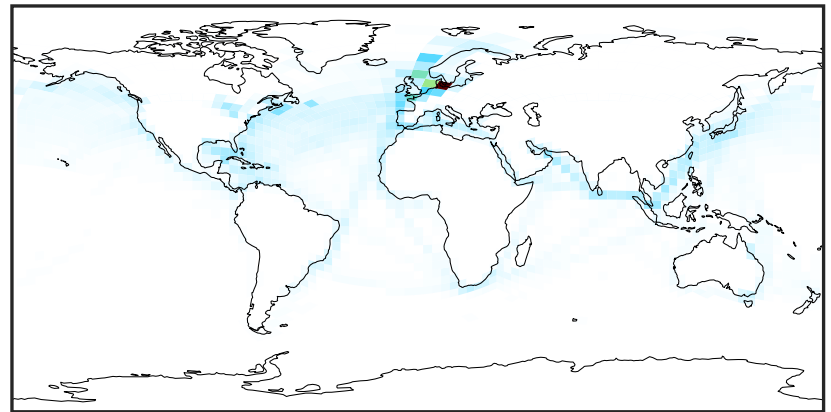
# EmisC2H2\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-14

GCHP\_14.2.0 (Dev)  
c24



0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-14

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



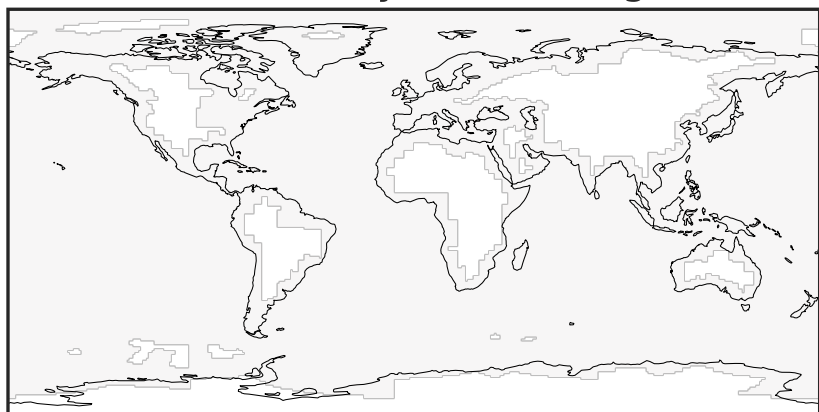
Zero throughout domain  
kg/m<sup>2</sup>/s

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



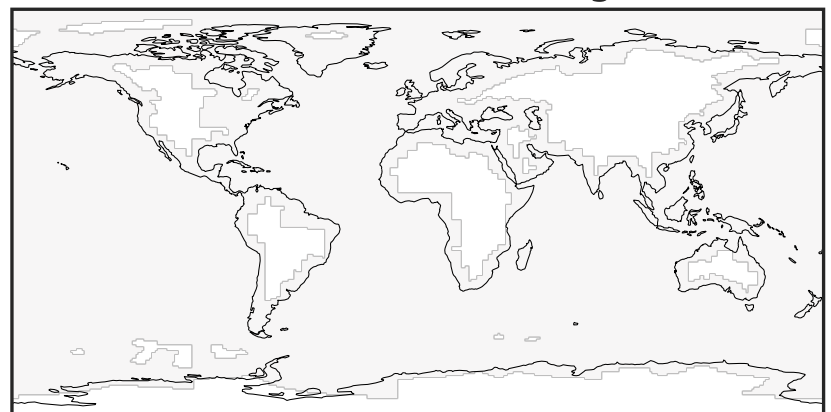
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

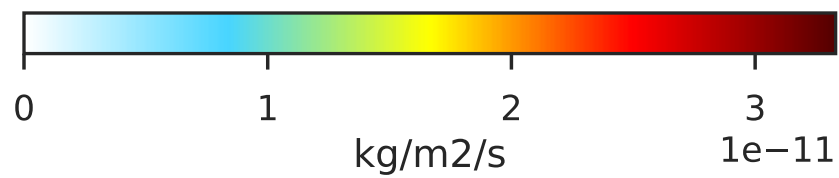
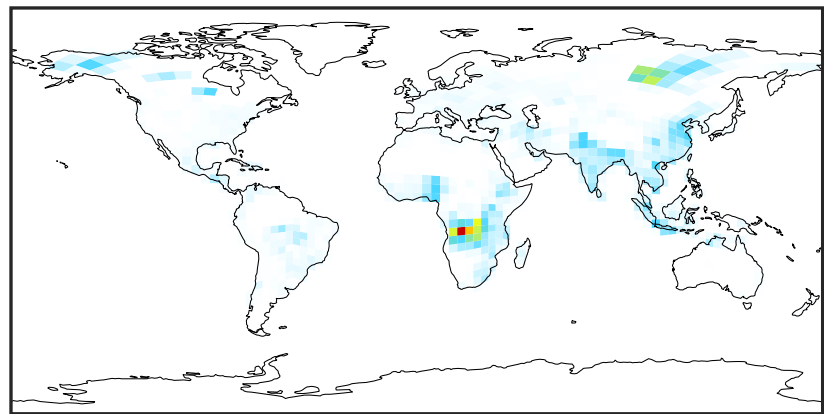
Ratio (1x1.25)  
Dev/Ref, Fixed Range



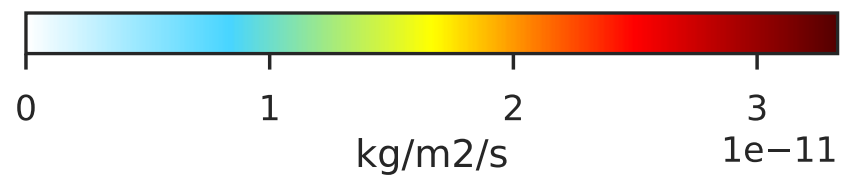
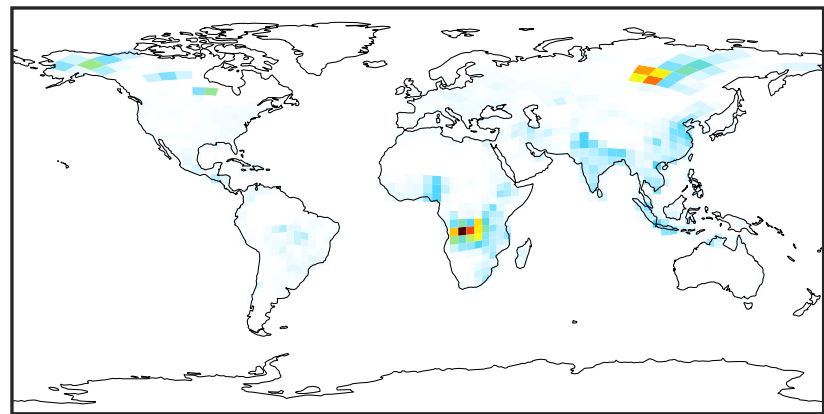
Ref and Dev equal throughout domain  
unitless

# EmisC2H2\_Total (Jul2019)

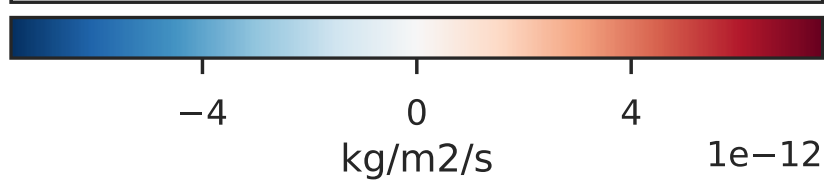
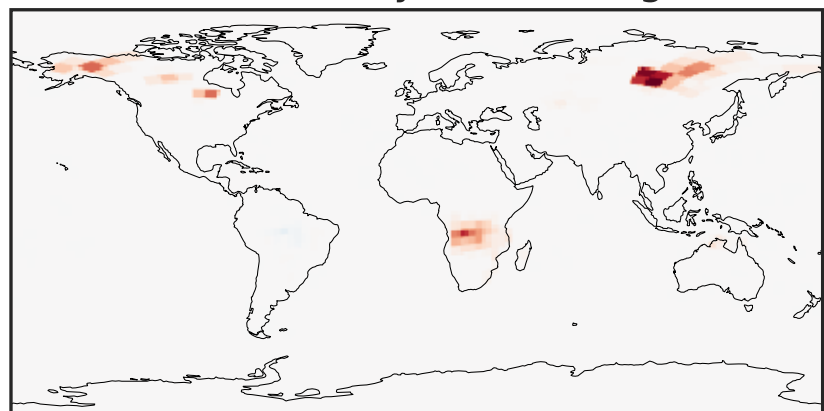
GCHP\_14.0.0 (Ref)  
c24



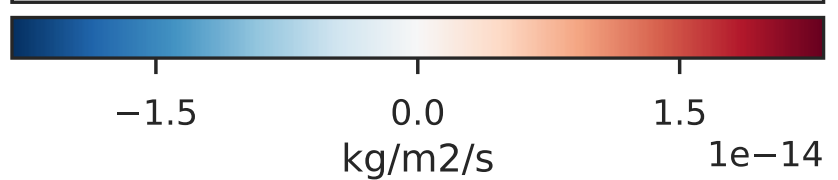
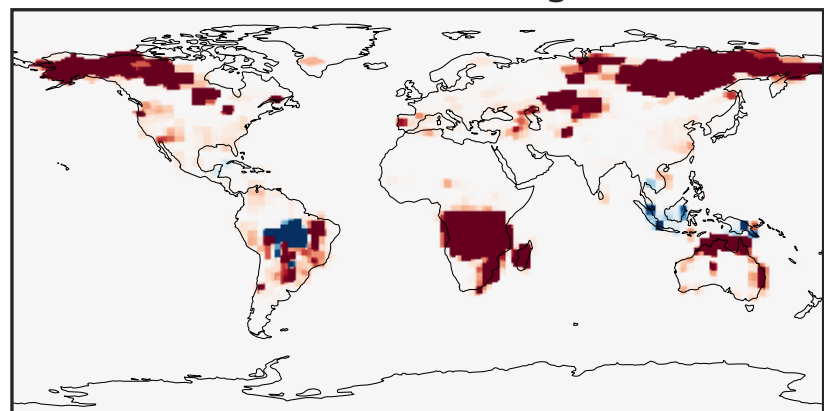
GCHP\_14.2.0 (Dev)  
c24



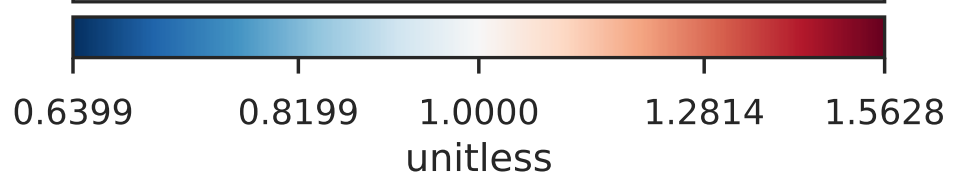
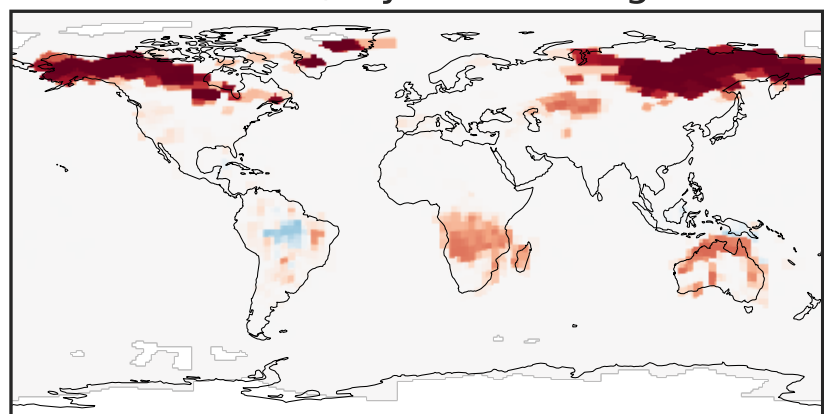
Difference (1x1.25)  
Dev - Ref, Dynamic Range



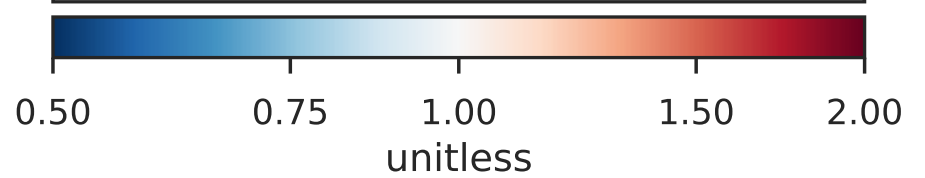
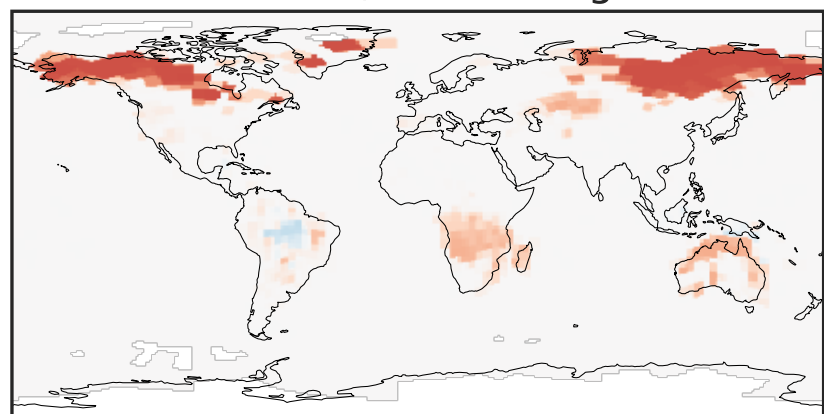
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

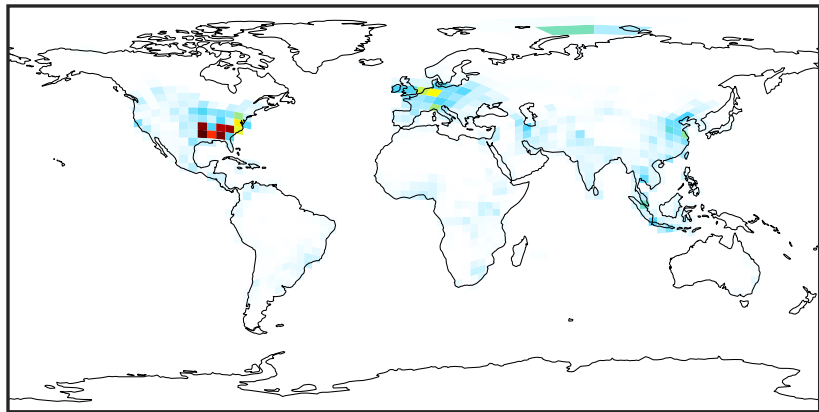


Ratio (1x1.25)  
Dev/Ref, Fixed Range



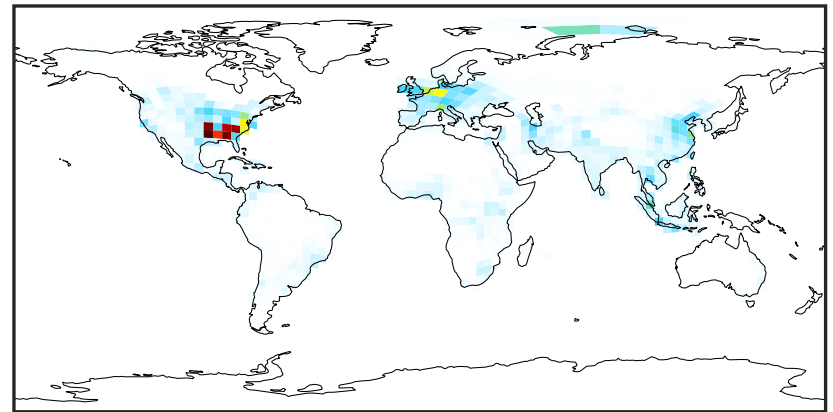
# EmisC2H4\_Anthro (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



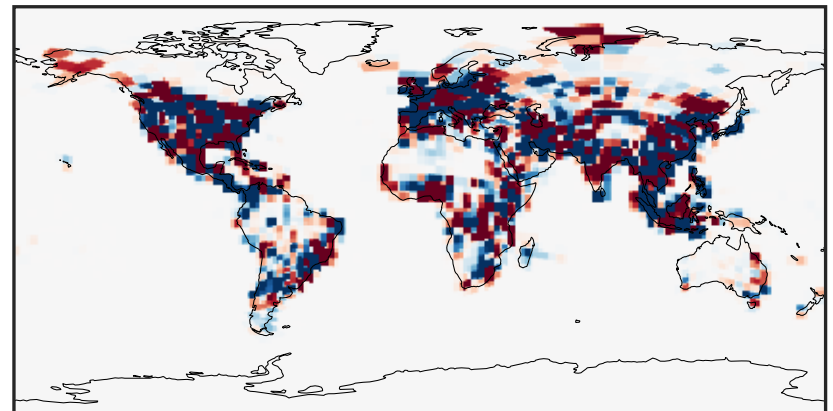
0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-11

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



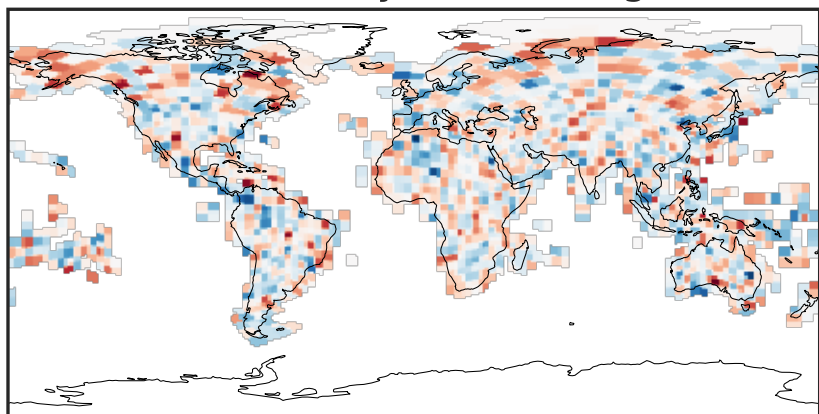
-8 0 8  
kg/m<sup>2</sup>/s 1e-16

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



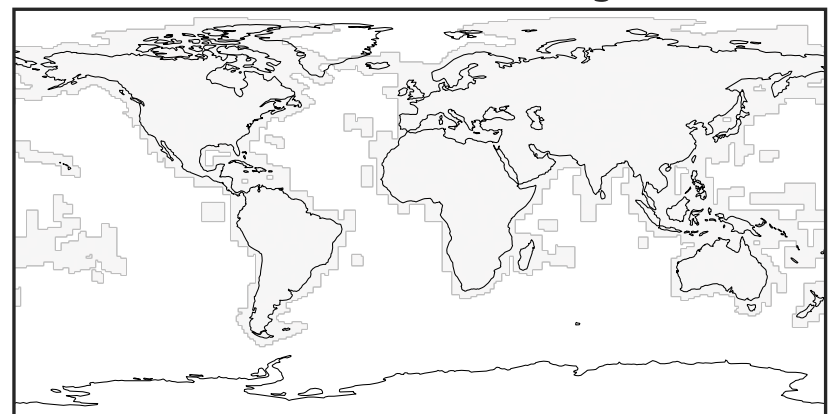
-4 0 4  
kg/m<sup>2</sup>/s 1e-18

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



0.999938 1.000000 1.000062  
unitless

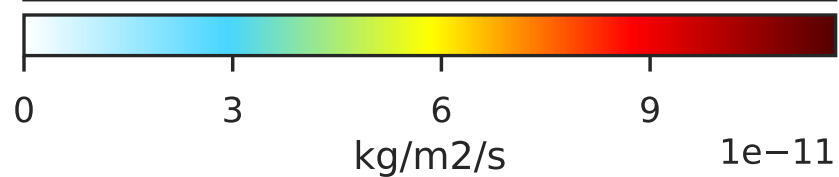
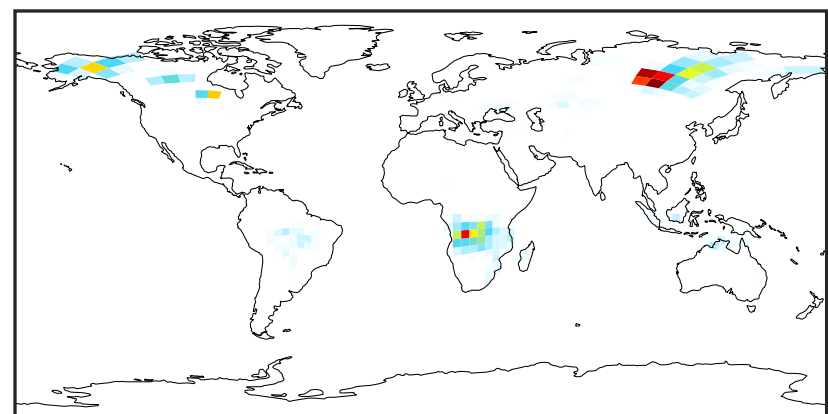
Ratio (1x1.25)  
Dev/Ref, Fixed Range



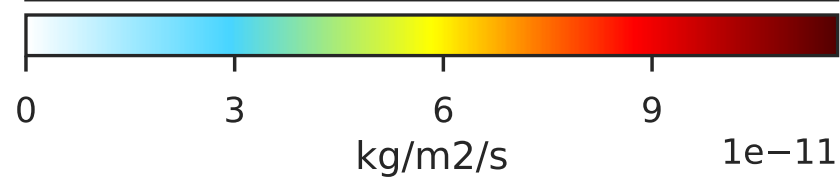
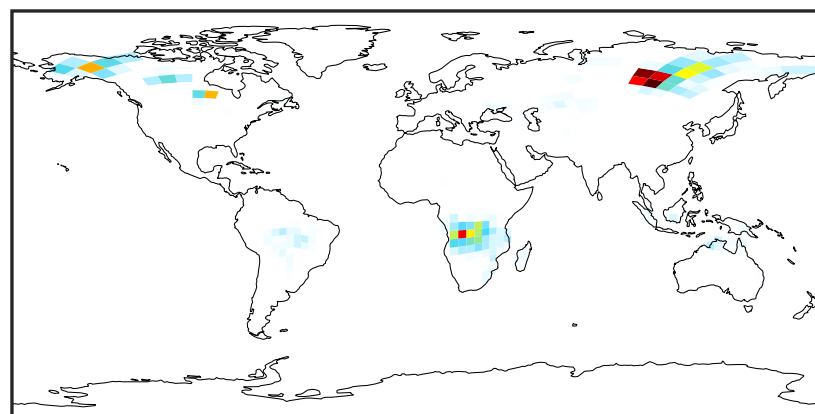
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisC2H4\_BioBurn (Jul2019)

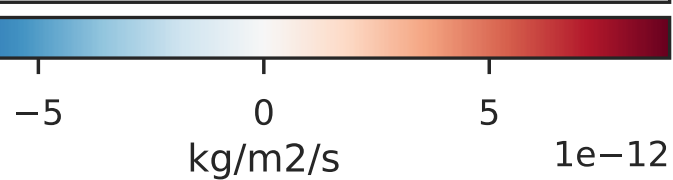
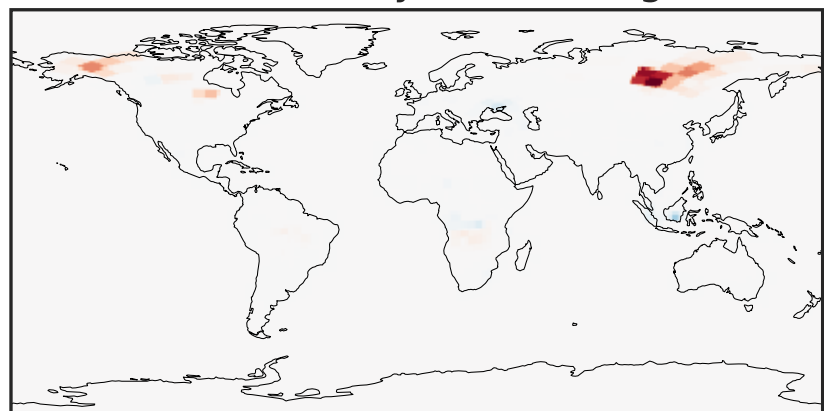
GCHP\_14.0.0 (Ref)  
c24



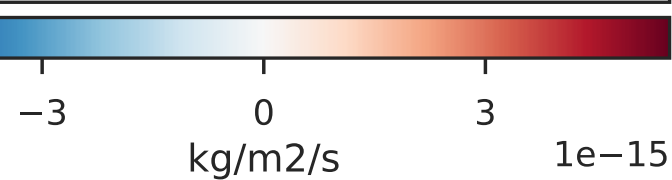
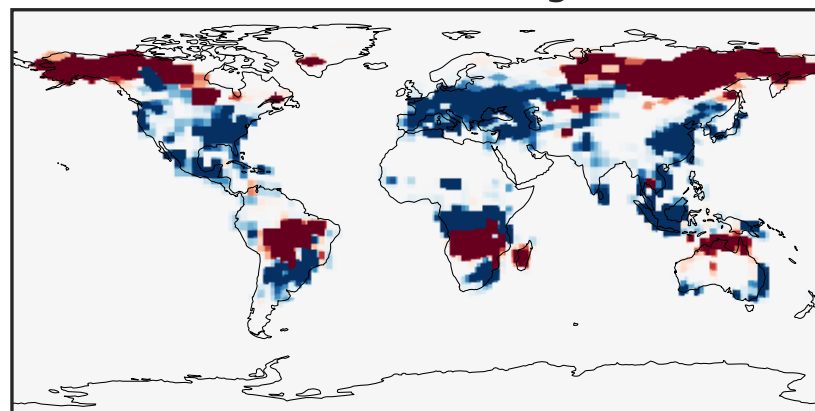
GCHP\_14.2.0 (Dev)  
c24



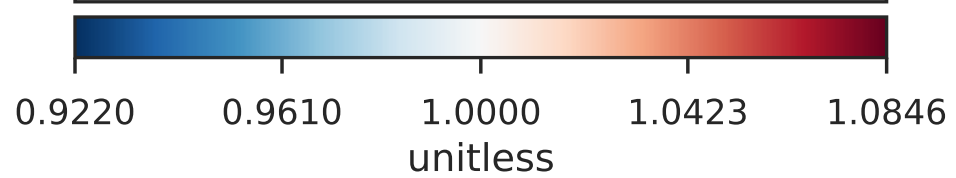
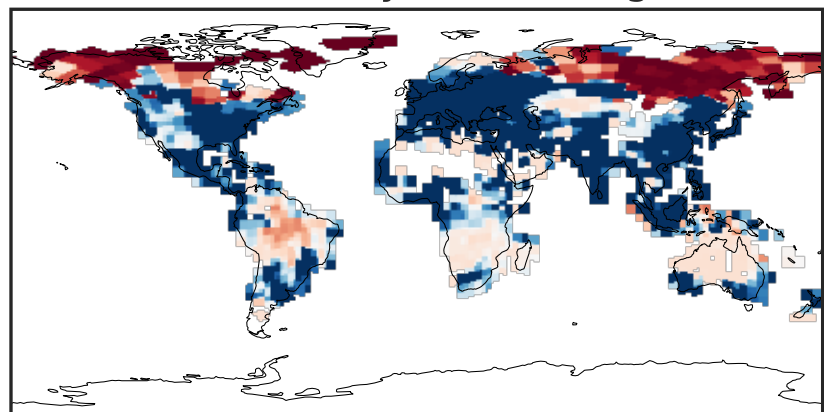
Difference (1x1.25)  
Dev - Ref, Dynamic Range



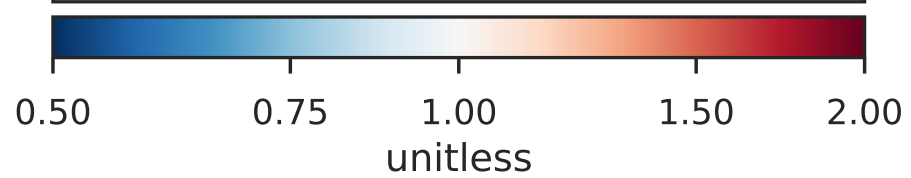
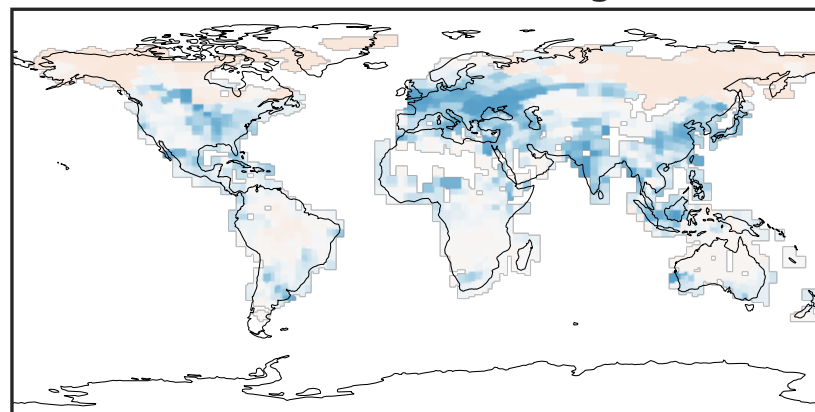
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

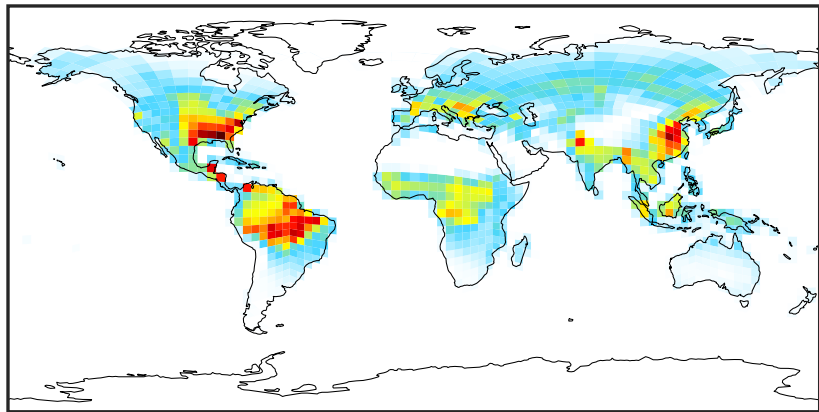


Ratio (1x1.25)  
Dev/Ref, Fixed Range



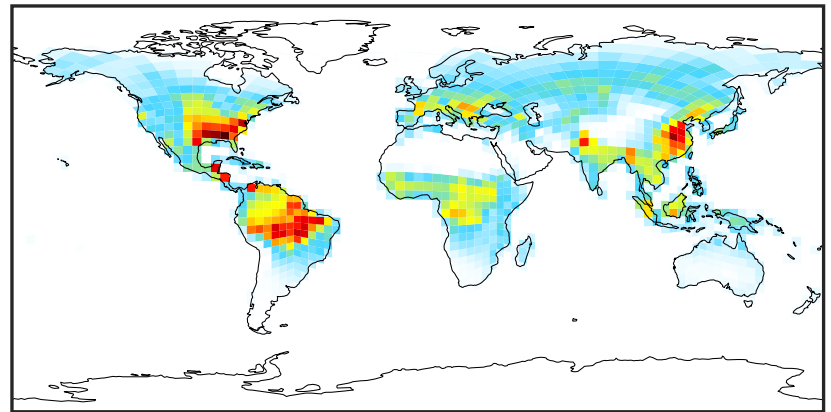
# EmisC2H4\_Biogenic (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.8 1.6 2.4  $1e-11$   
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



0.0 0.8 1.6 2.4  $1e-11$   
kg/m2/s

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



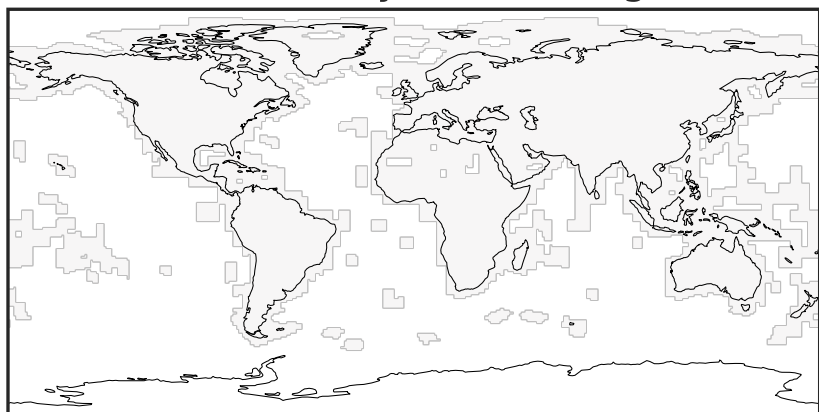
Zero throughout domain  
kg/m2/s

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



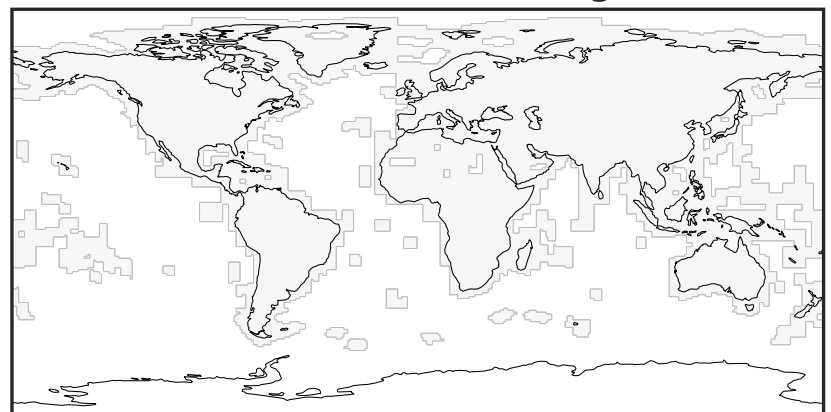
Zero throughout domain  
kg/m2/s

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



Ref and Dev equal throughout domain  
unitless

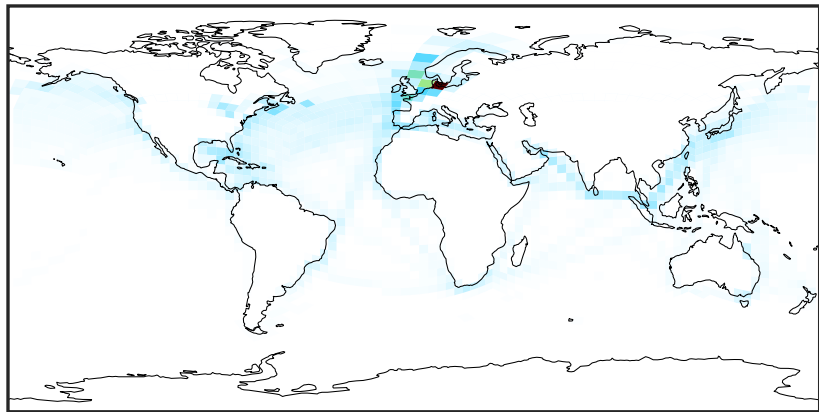
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

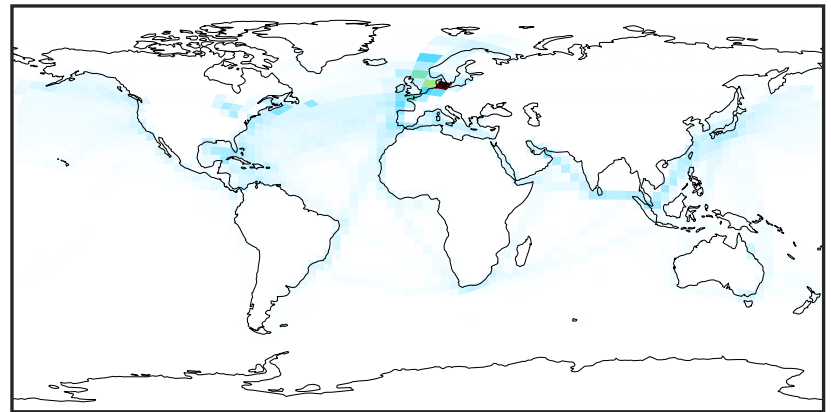
# EmisC2H4\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 2.5 5.0 7.5 1e-13  
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



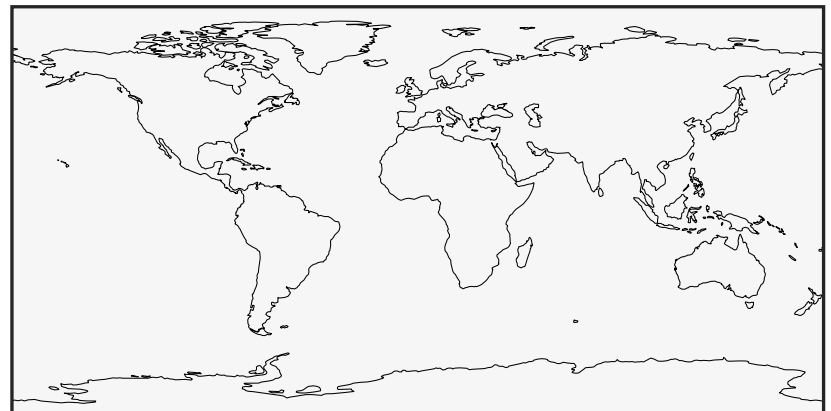
0.0 2.5 5.0 7.5 1e-13  
kg/m2/s

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



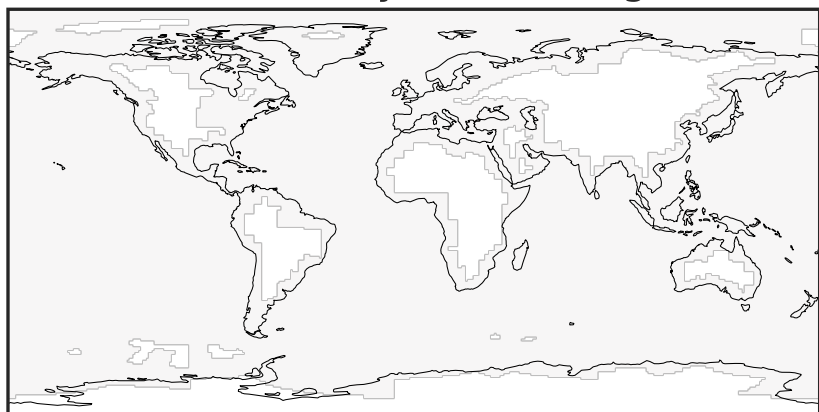
Zero throughput domain  
kg/m2/s

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



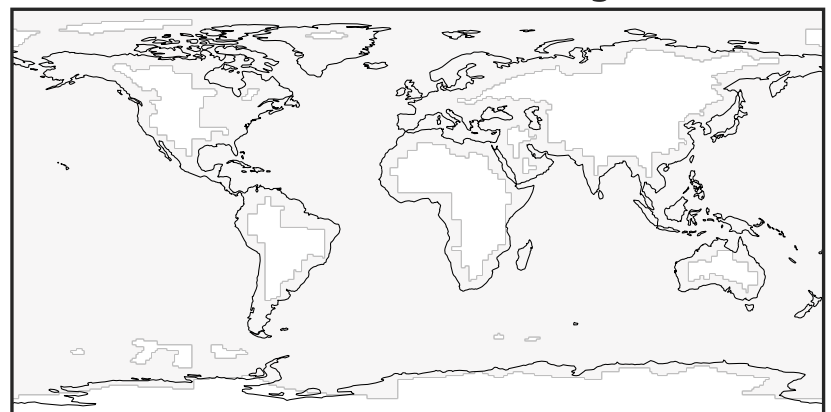
Zero throughput domain  
kg/m2/s

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



Ref and Dev equal throughout domain  
unitless

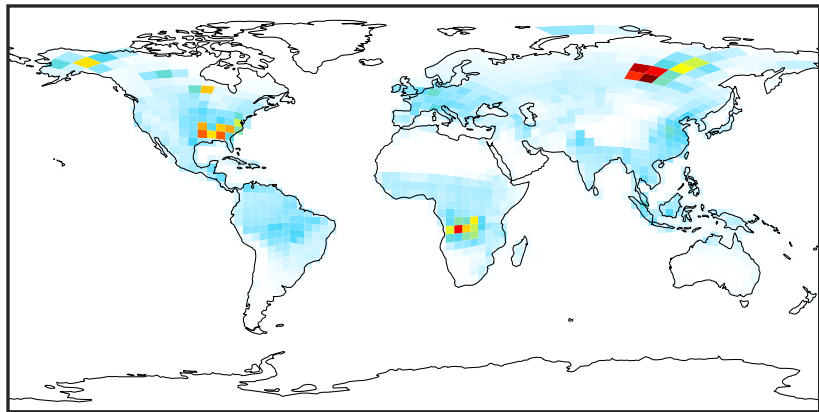
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

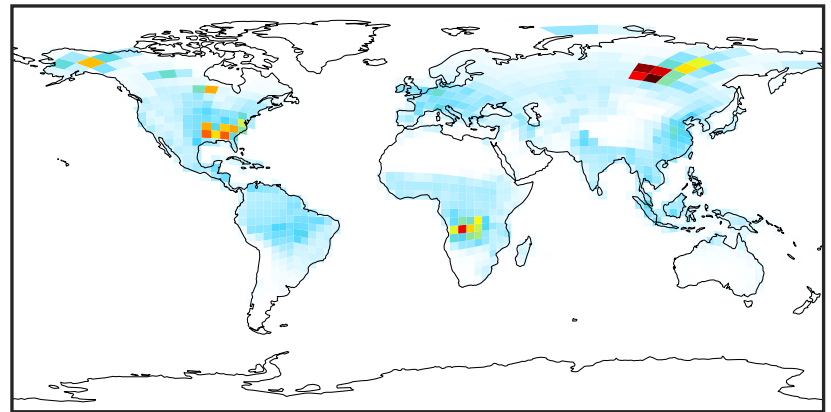
# EmisC2H4\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



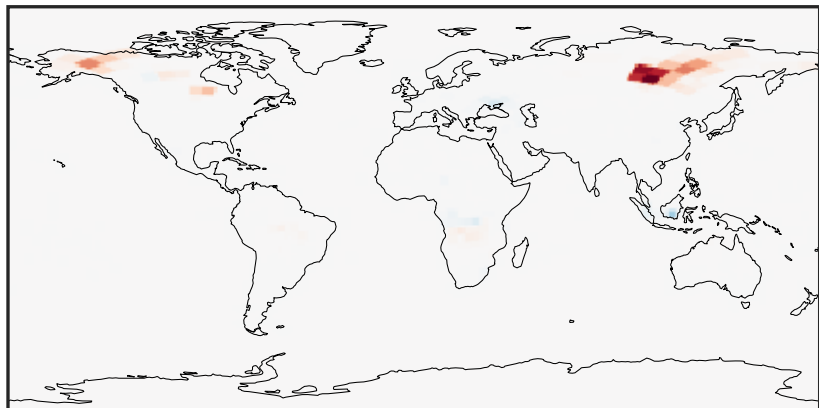
0.0 0.4 0.8 1.2  
kg/m2/s  $1e-10$

GCHP\_14.2.0 (Dev)  
c24



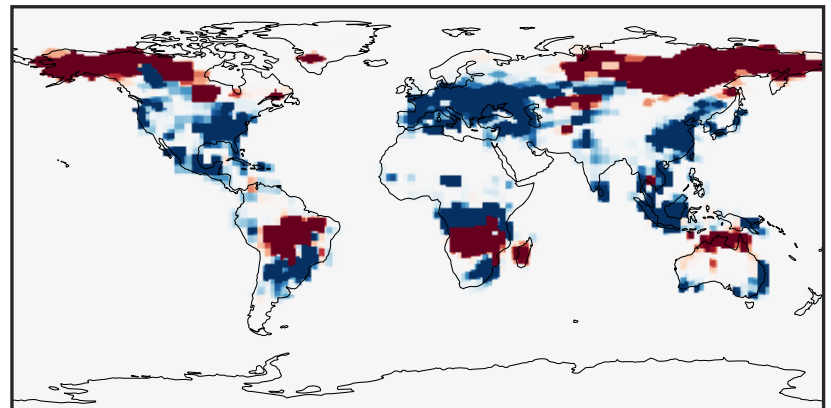
0.0 0.4 0.8 1.2  
kg/m2/s  $1e-10$

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



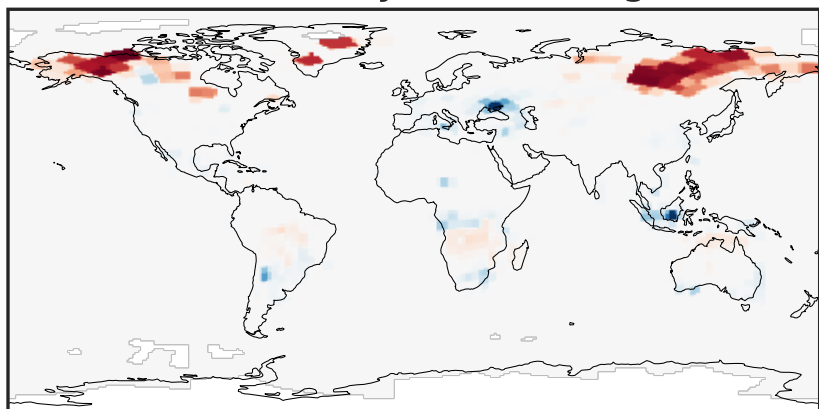
-5 0 5  
kg/m2/s  $1e-12$

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



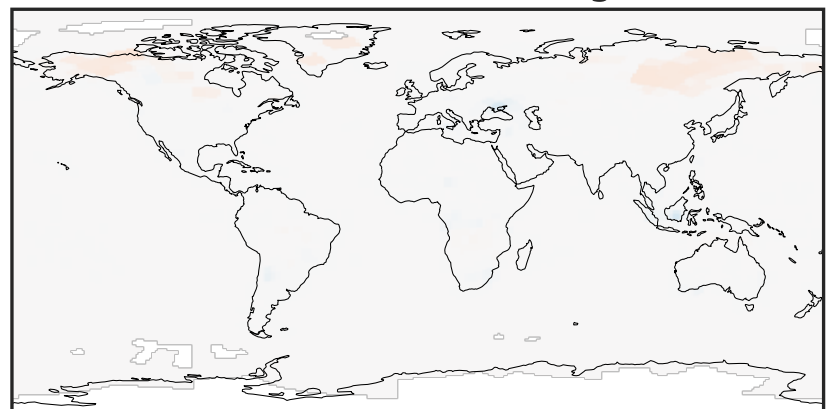
-3 0 3  
kg/m2/s  $1e-15$

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



0.9262 0.9631 1.0000 1.0398 1.0796  
unitless

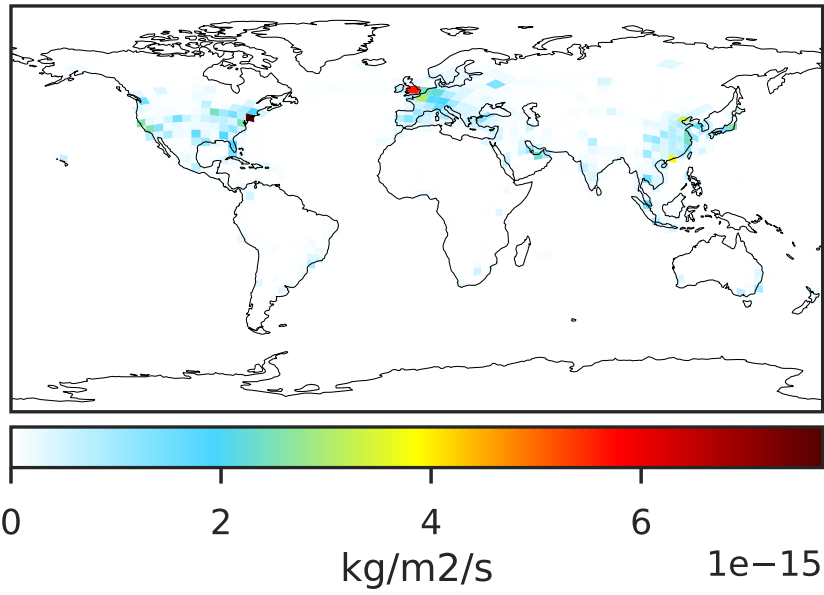
Ratio (1x1.25)  
Dev/Ref, Fixed Range



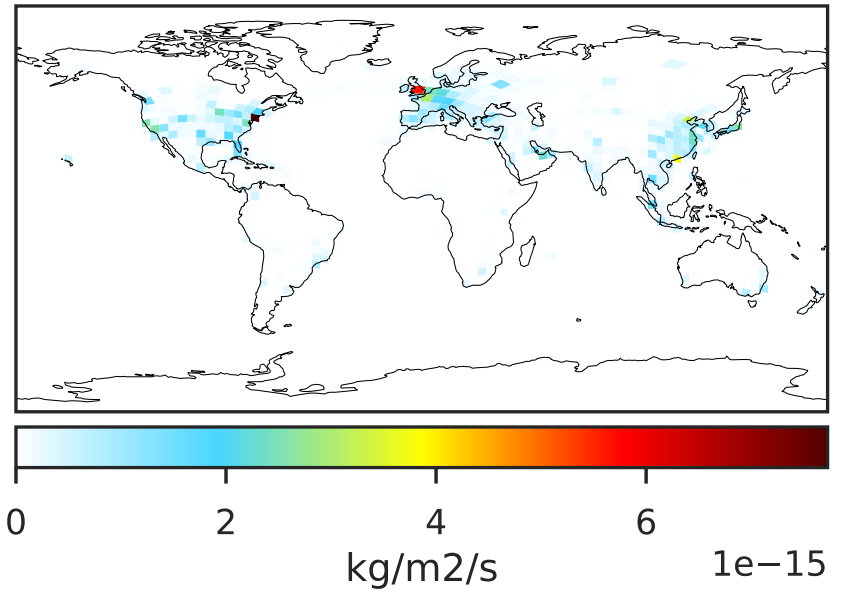
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisC2H6\_Aircraft (Jul2019)

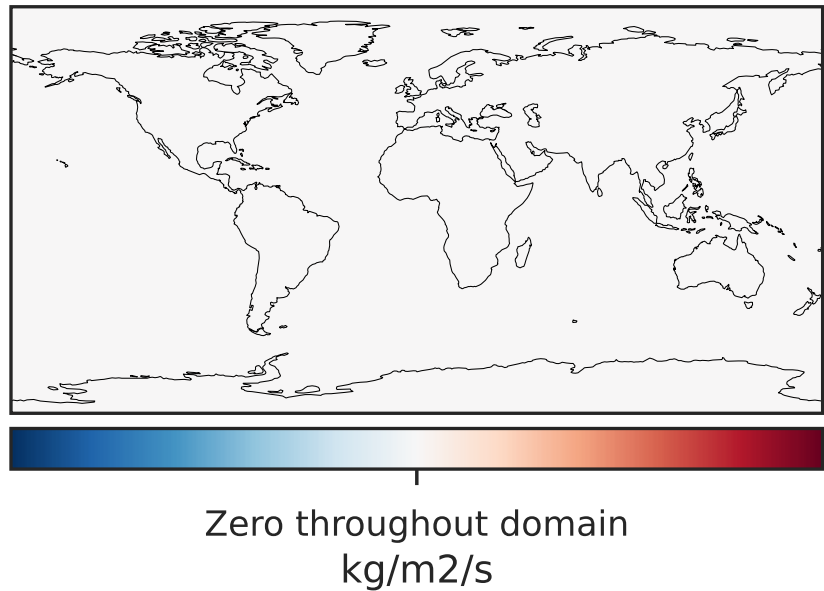
GCHP\_14.0.0 (Ref)  
c24



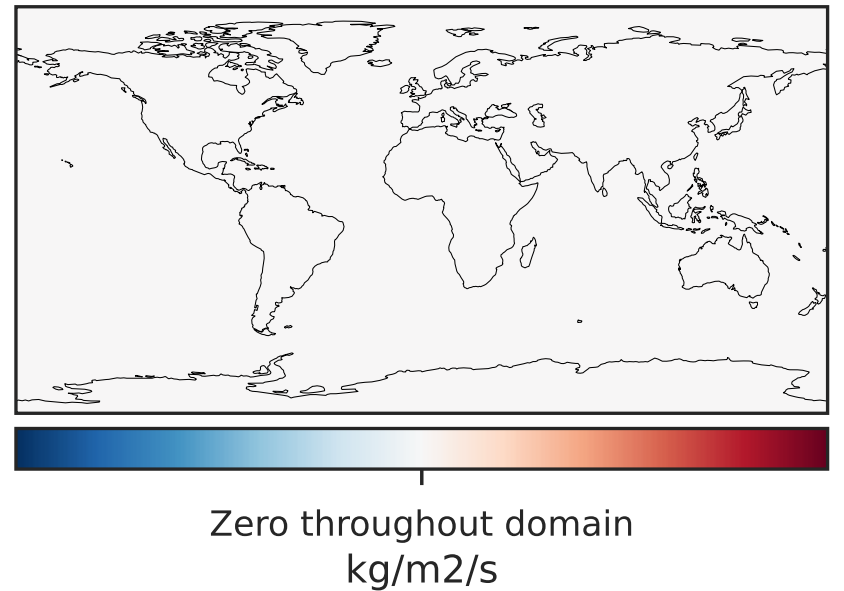
GCHP\_14.2.0 (Dev)  
c24



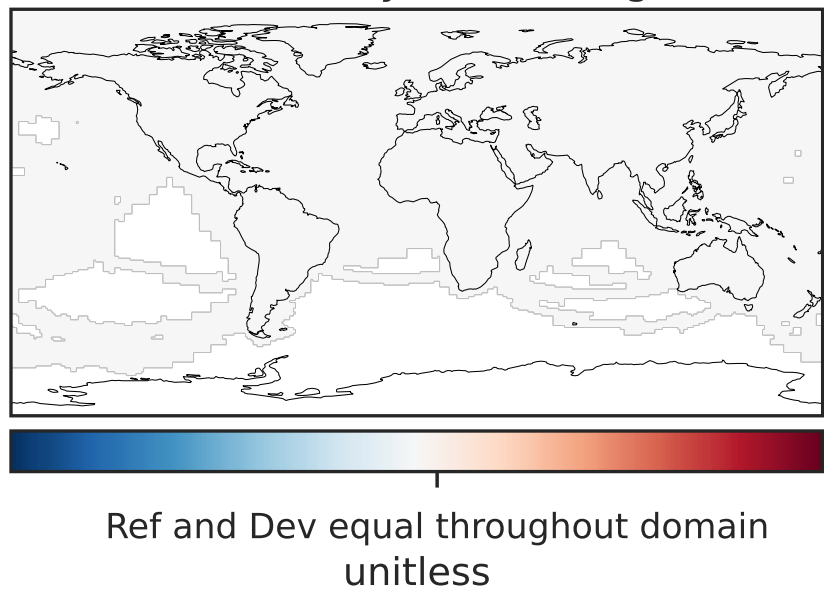
Difference (1x1.25)  
Dev - Ref, Dynamic Range



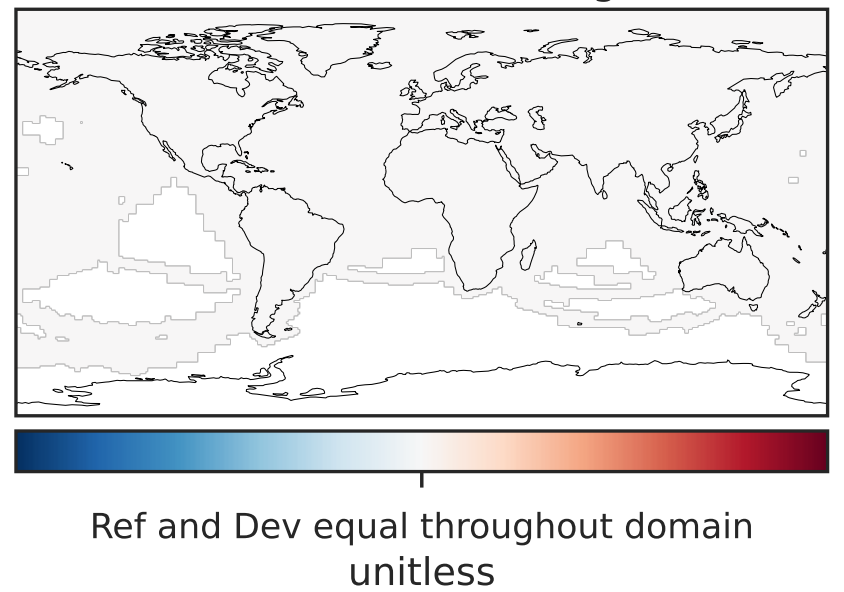
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



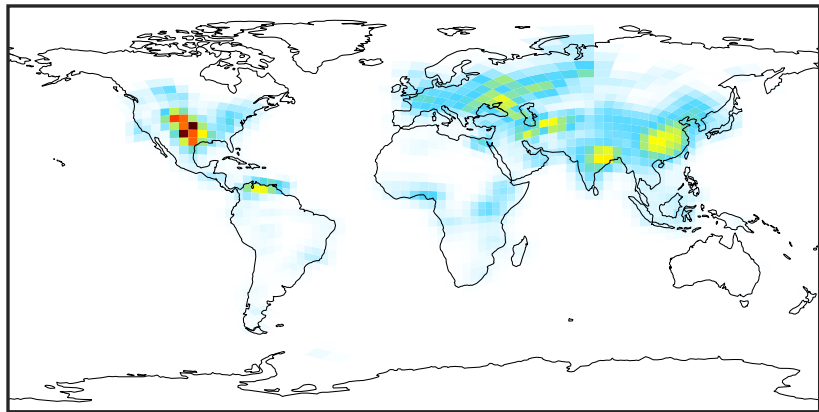
Ratio (1x1.25)  
Dev/Ref, Fixed Range





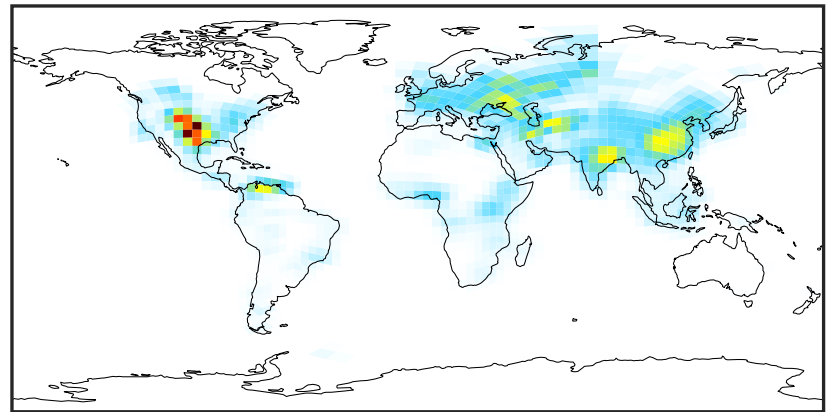
# EmisC2H6\_Anthro (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.6 1.2 1.8  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



0.0 0.6 1.2 1.8  
kg/m<sup>2</sup>/s 1e-11

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



Zero throughout domain  
kg/m<sup>2</sup>/s

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



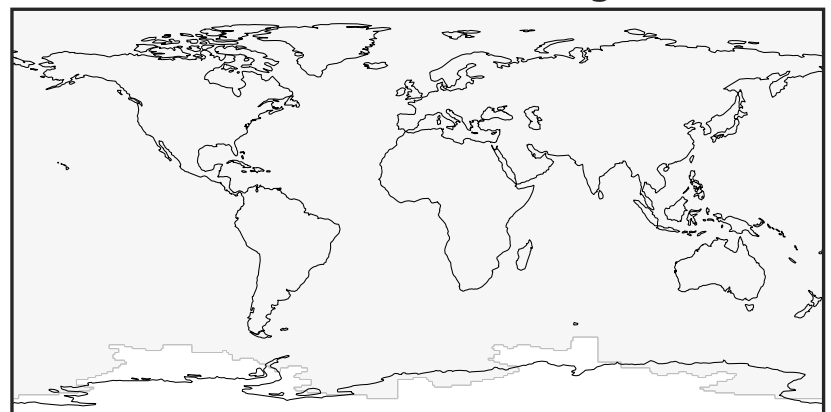
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

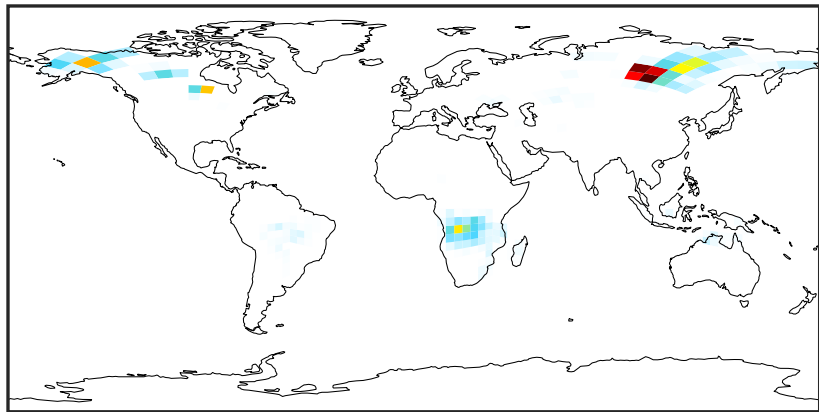
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

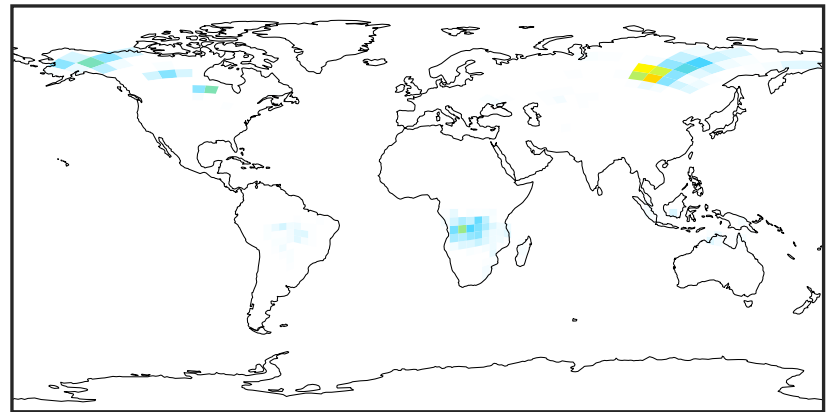
# EmisC2H6\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



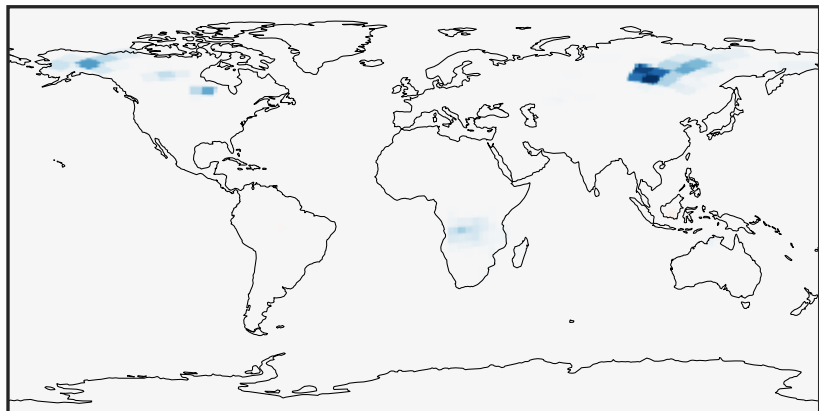
0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

GCHP\_14.2.0 (Dev)  
c24



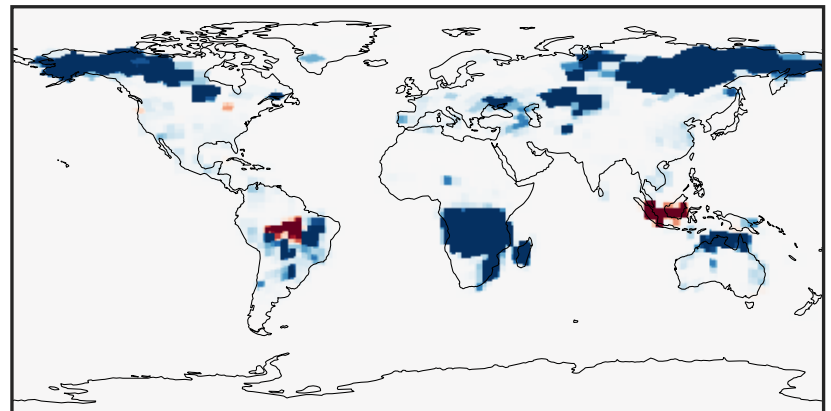
0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-10

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



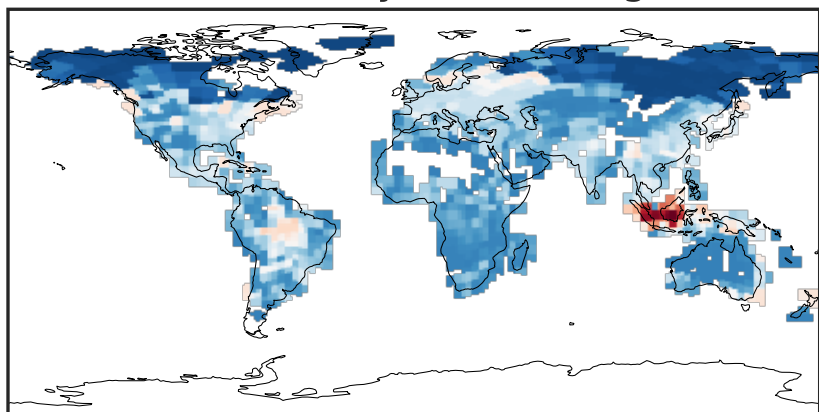
-4 0 4  
kg/m<sup>2</sup>/s 1e-11

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



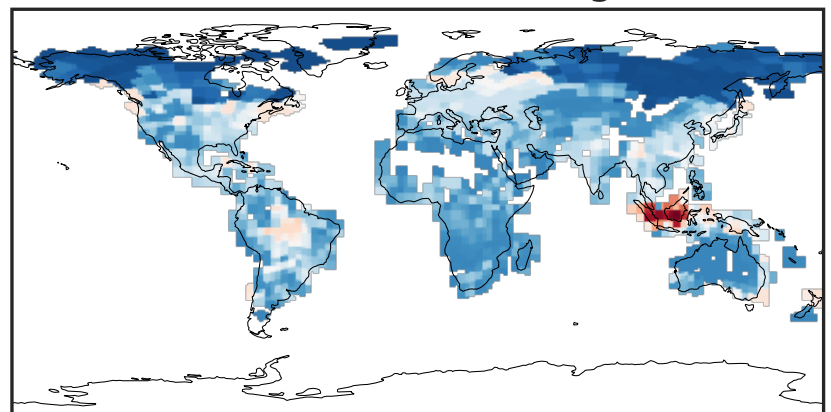
-8 0 8  
kg/m<sup>2</sup>/s 1e-14

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



0.510 0.755 1.000 1.480 1.959  
unitless

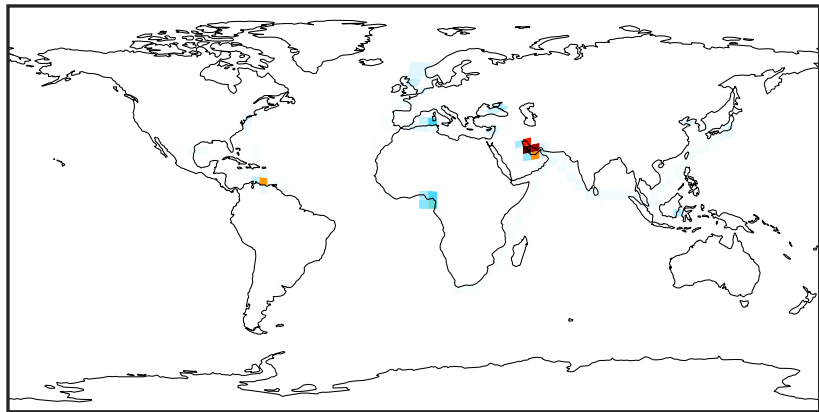
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

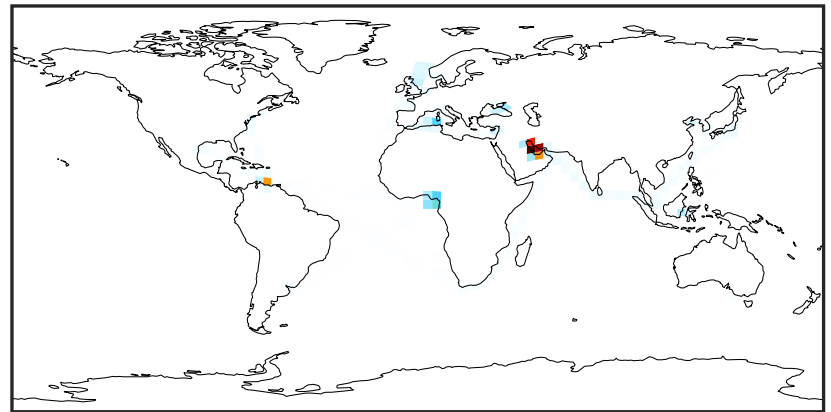
# EmisC2H6\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-12

GCHP\_14.2.0 (Dev)  
c24



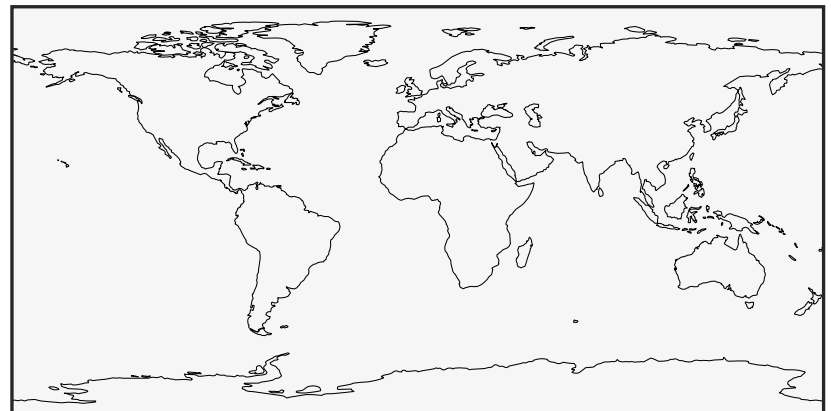
0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-12

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



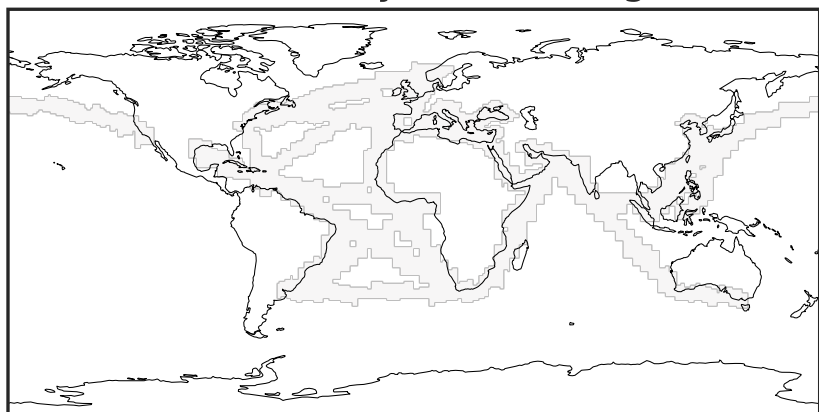
Zero throughout domain  
kg/m<sup>2</sup>/s

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



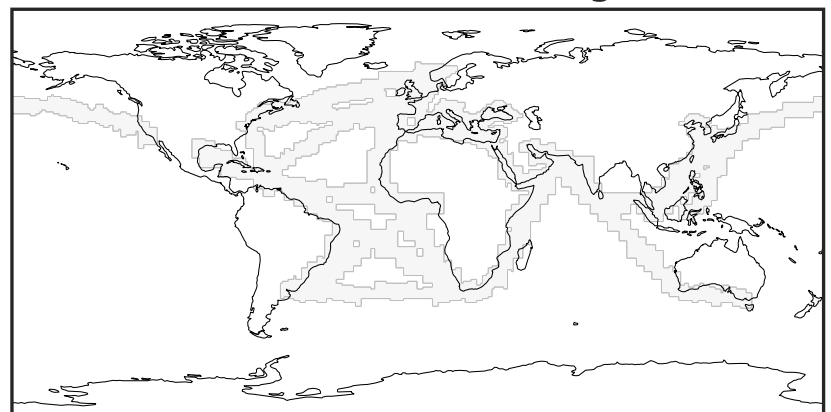
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

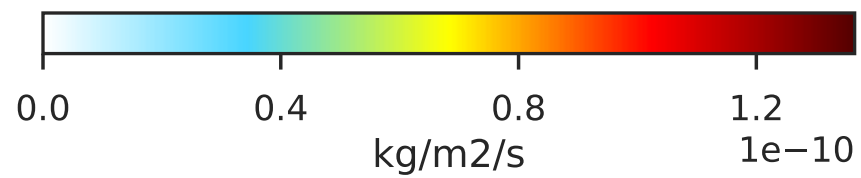
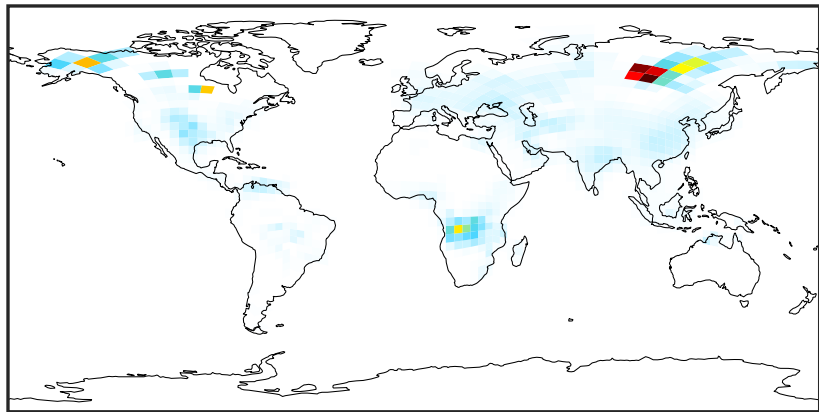
Ratio (1x1.25)  
Dev/Ref, Fixed Range



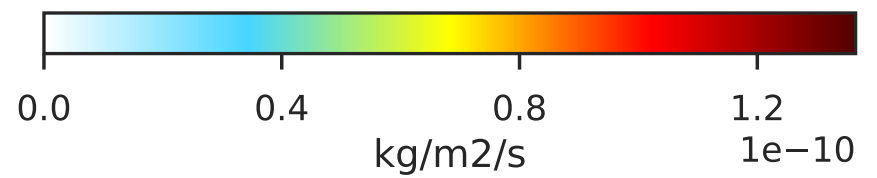
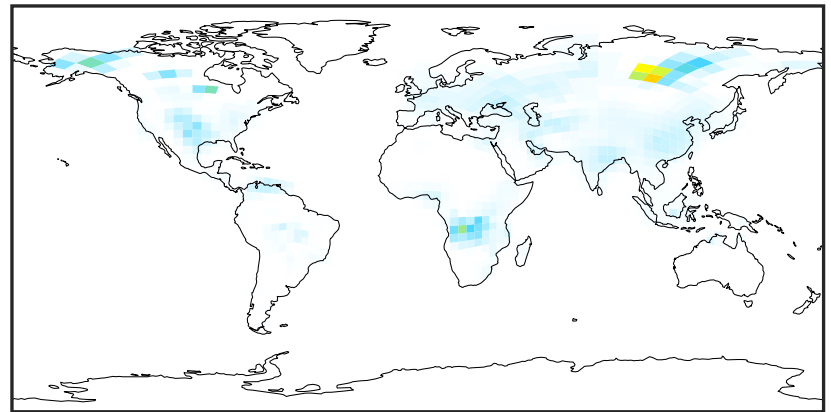
Ref and Dev equal throughout domain  
unitless

# EmisC2H6\_Total (Jul2019)

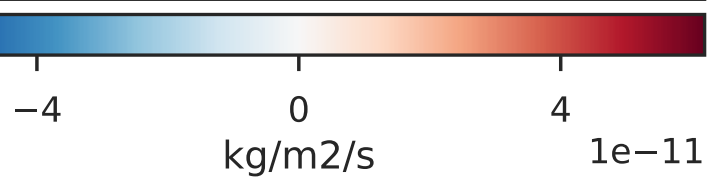
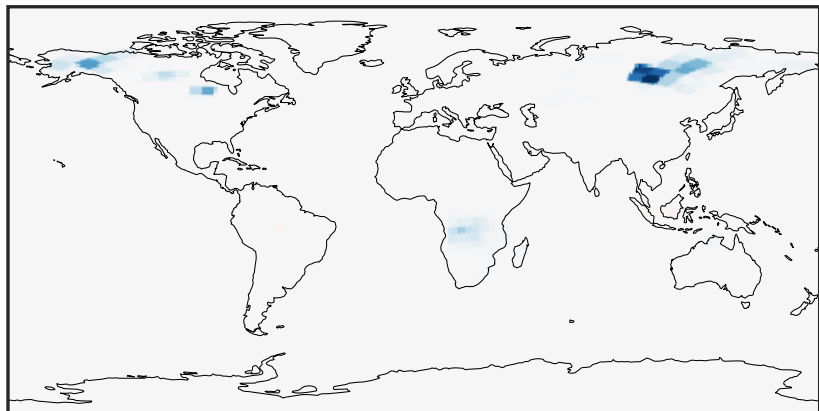
GCHP\_14.0.0 (Ref)  
c24



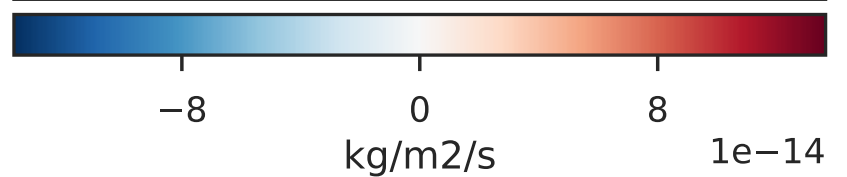
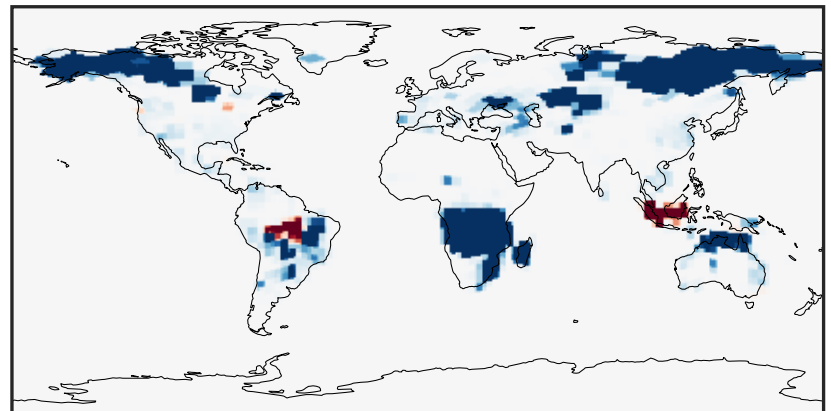
GCHP\_14.2.0 (Dev)  
c24



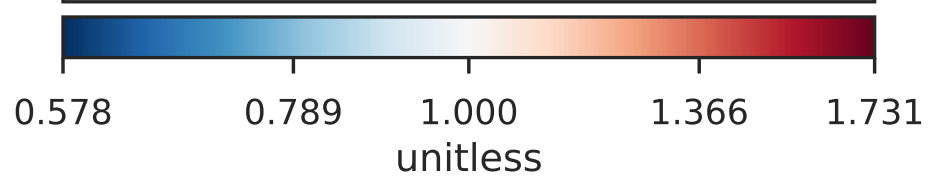
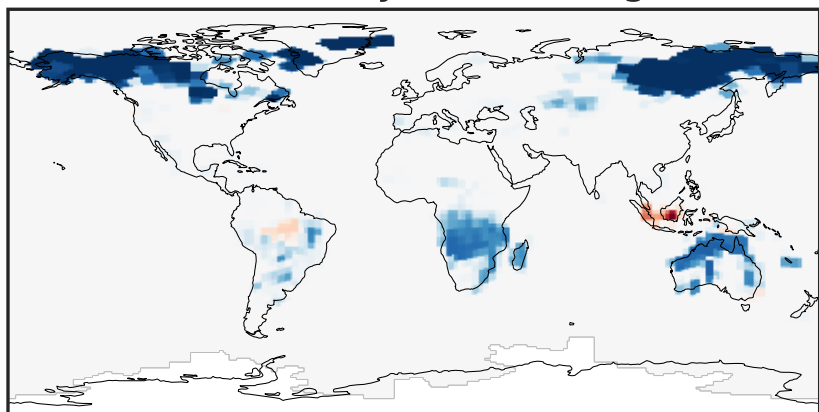
Difference (1x1.25)  
Dev - Ref, Dynamic Range



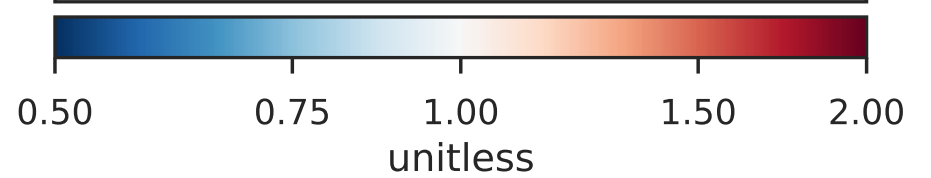
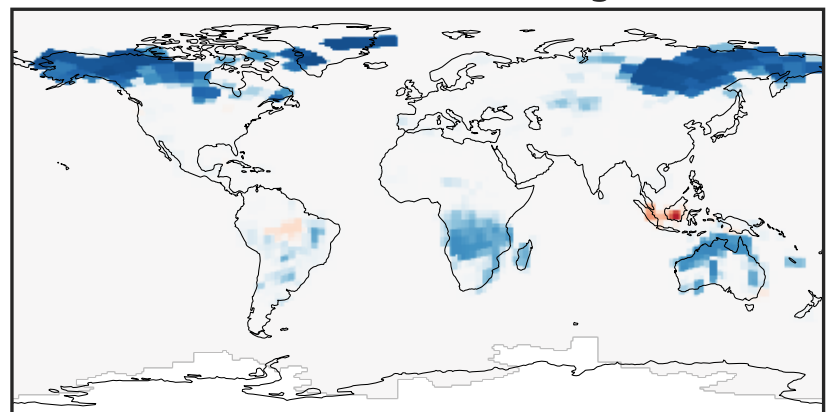
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

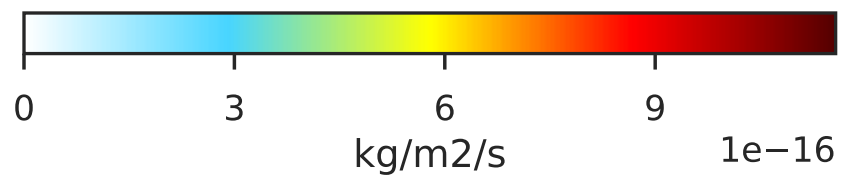
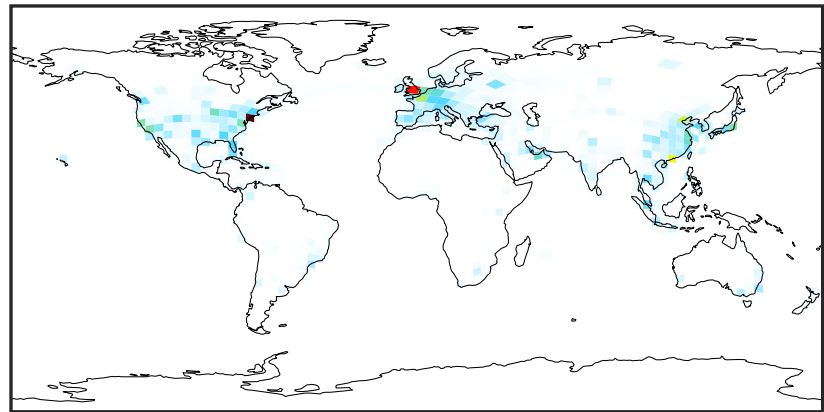


Ratio (1x1.25)  
Dev/Ref, Fixed Range

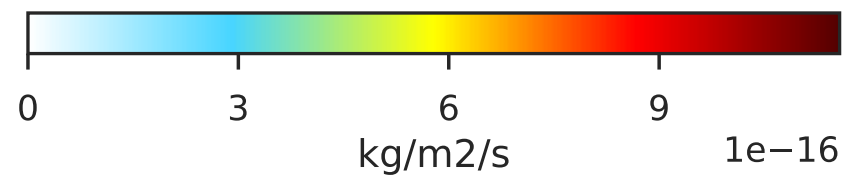
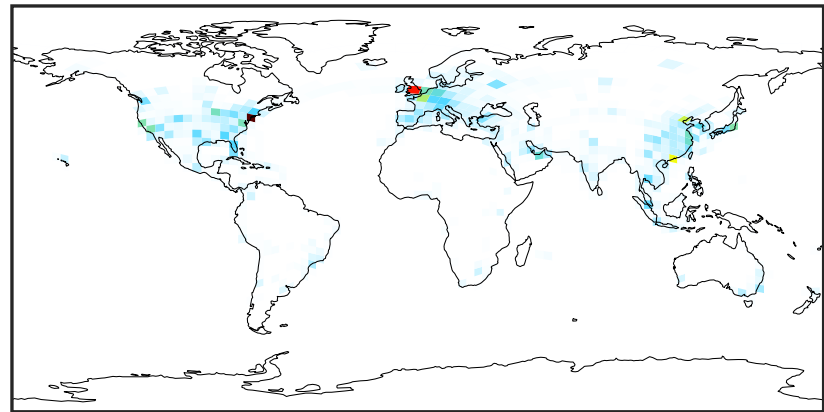


# EmisC3H8\_Aircraft (Jul2019)

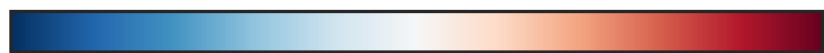
GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24

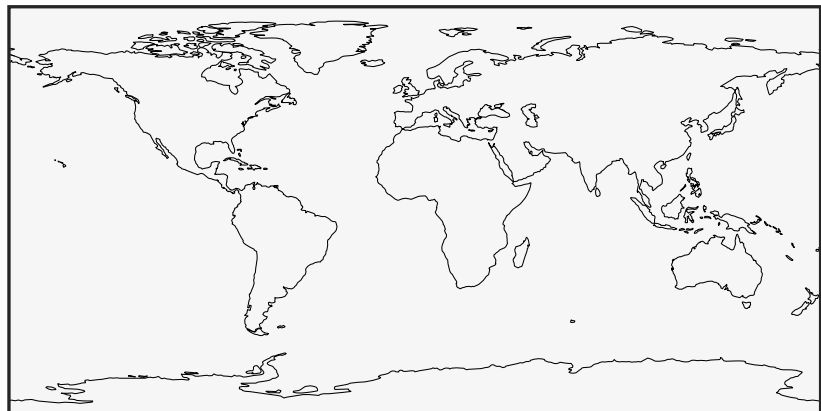


Difference (1x1.25)  
Dev - Ref, Dynamic Range



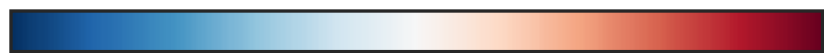
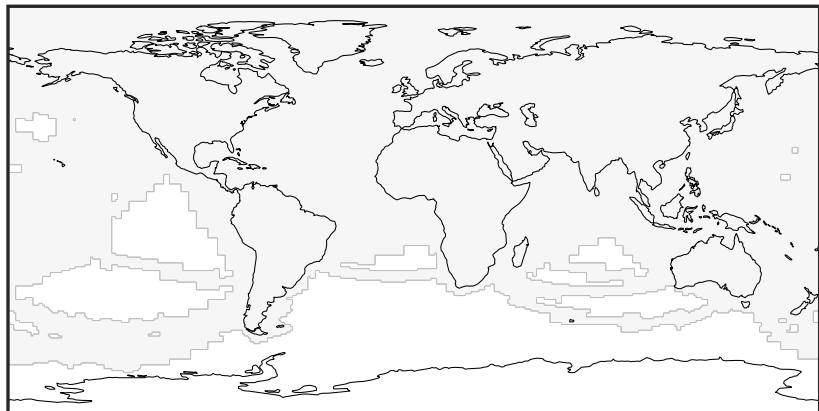
Zero throughout domain  
kg/m2/s

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



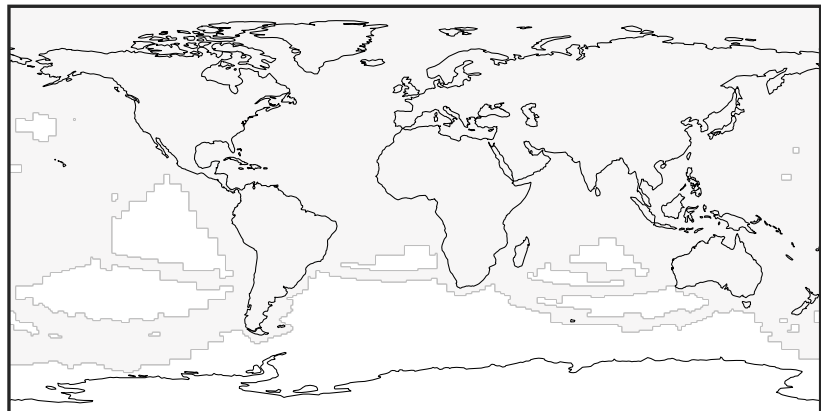
Zero throughout domain  
kg/m2/s

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



Ref and Dev equal throughout domain  
unitless

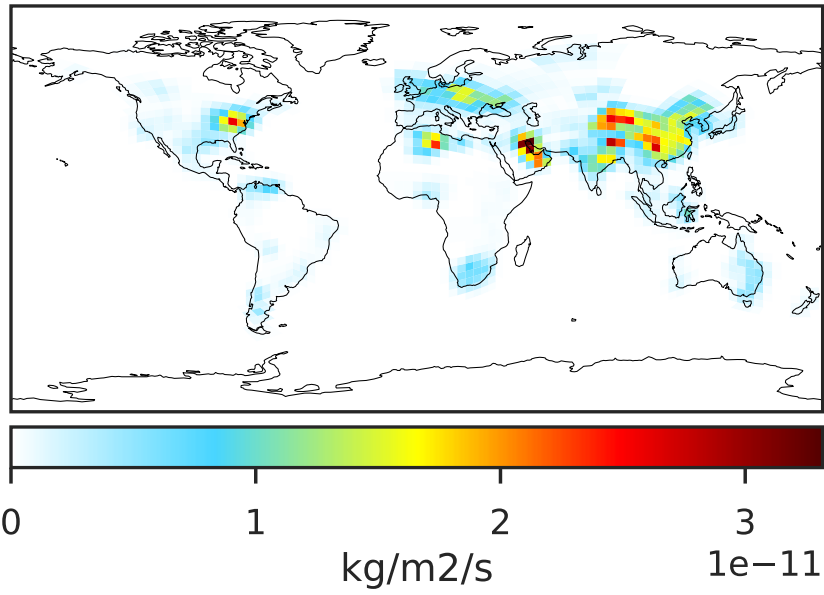
Ratio (1x1.25)  
Dev/Ref, Fixed Range



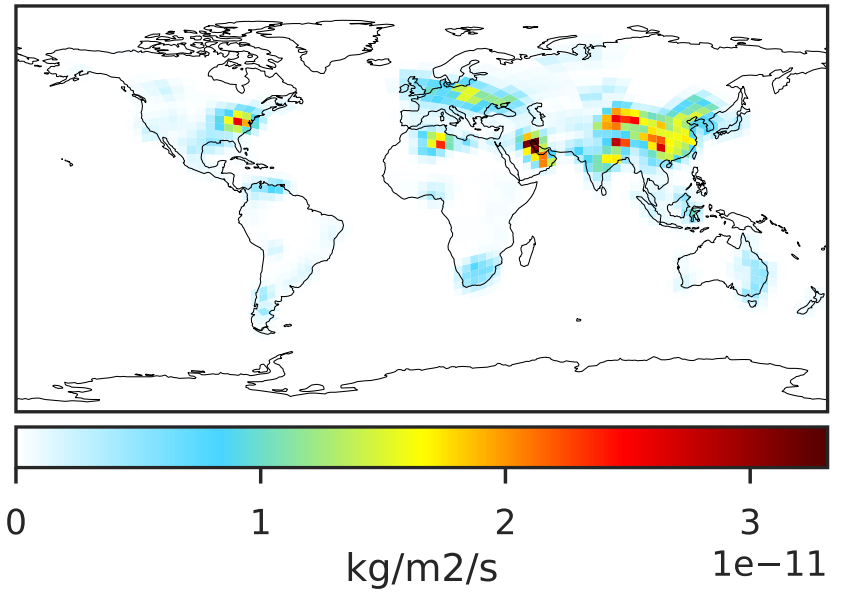
Ref and Dev equal throughout domain  
unitless

# EmisC3H8\_Anthro (Jul2019)

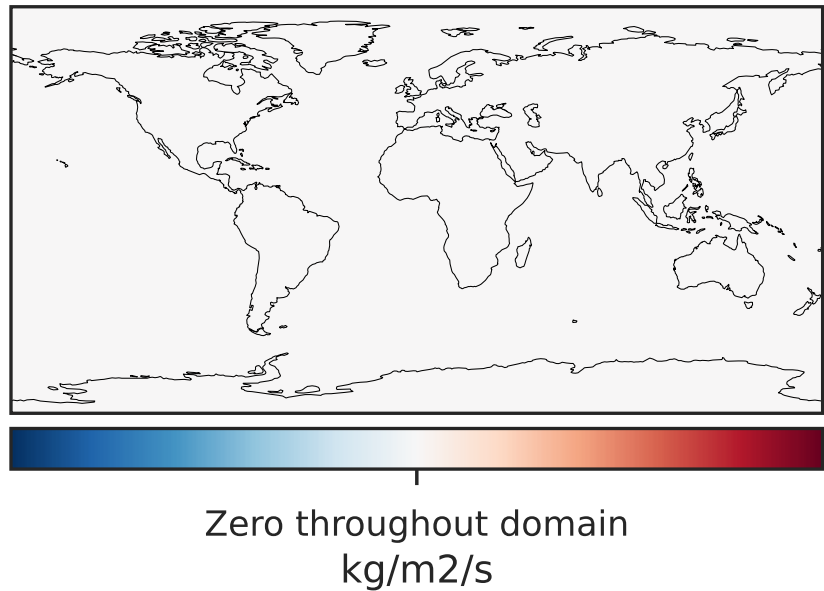
GCHP\_14.0.0 (Ref)  
c24



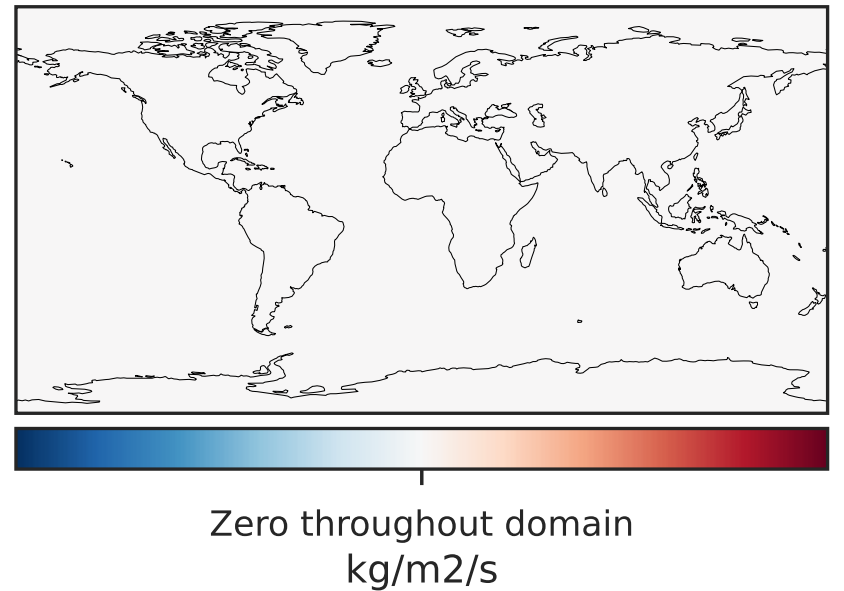
GCHP\_14.2.0 (Dev)  
c24



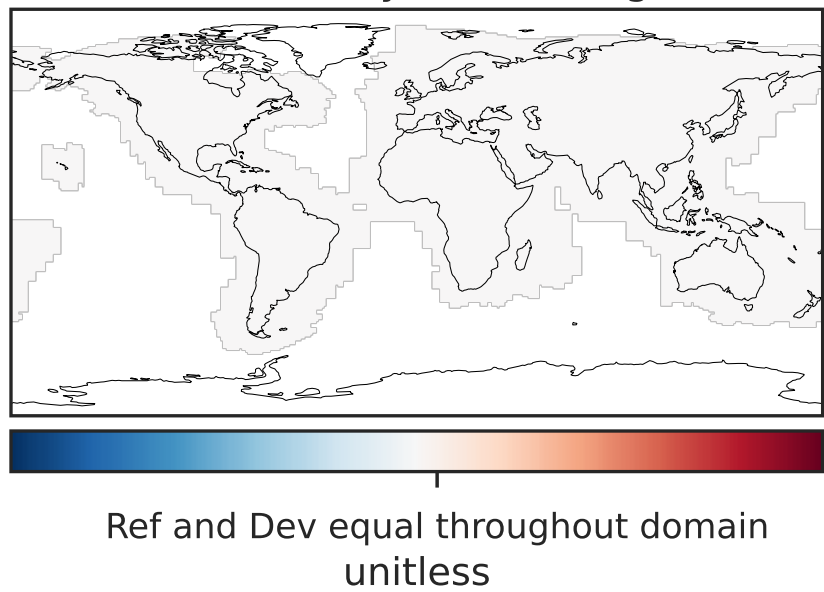
Difference (1x1.25)  
Dev - Ref, Dynamic Range



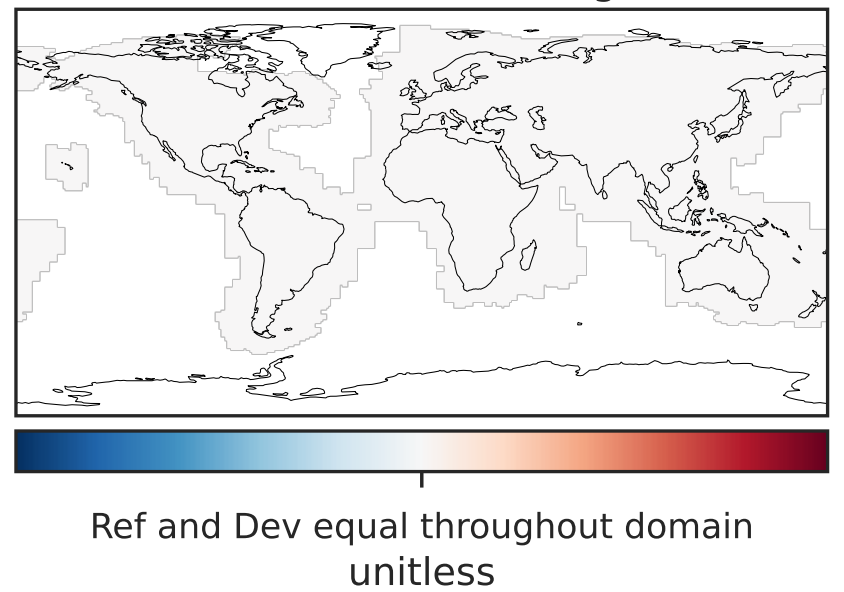
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

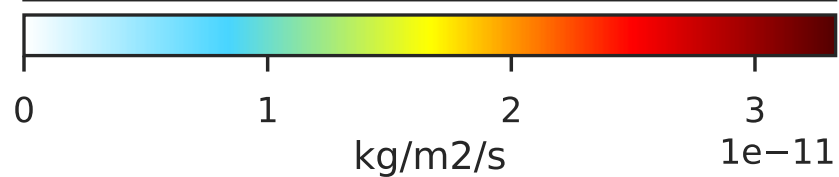
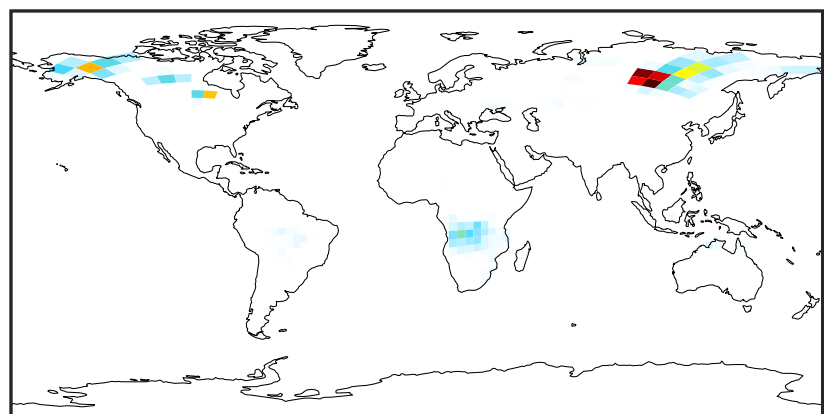


Ratio (1x1.25)  
Dev/Ref, Fixed Range

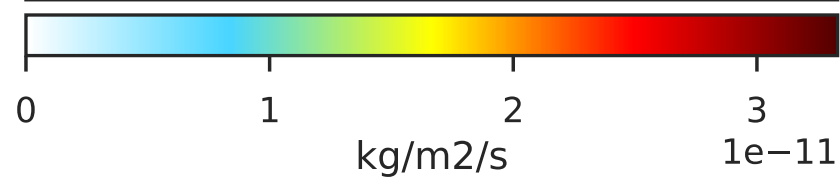
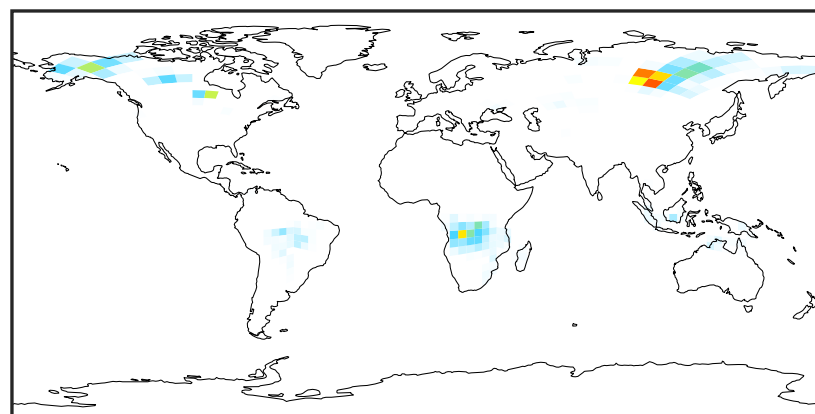


# EmisC3H8\_BioBurn (Jul2019)

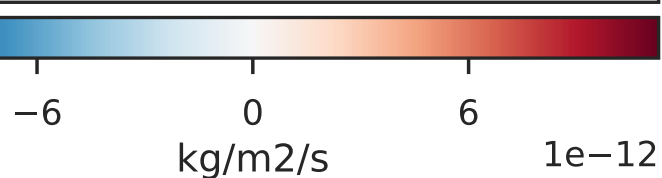
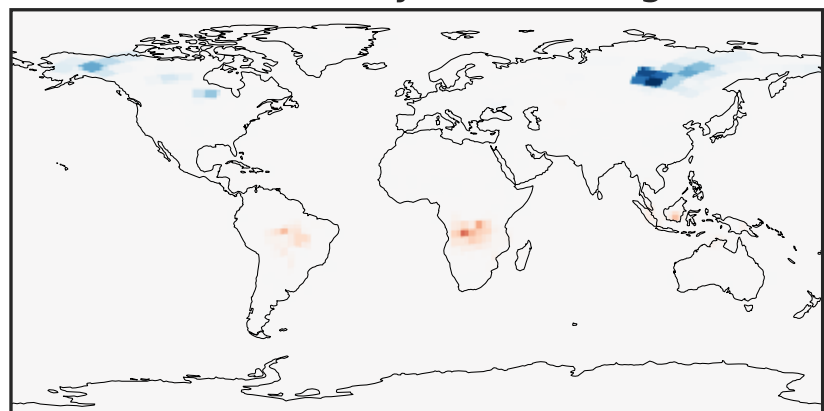
GCHP\_14.0.0 (Ref)  
c24



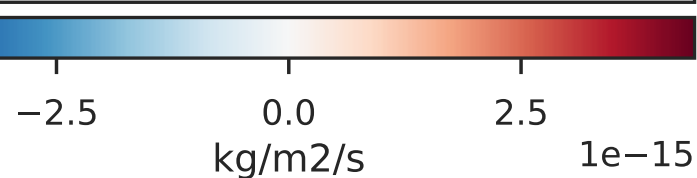
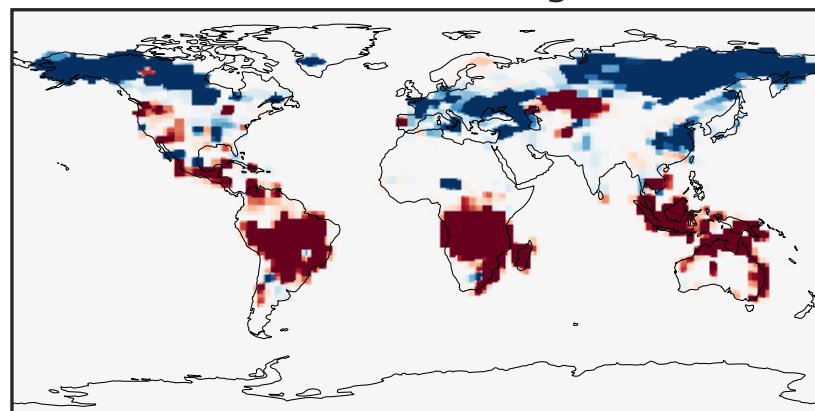
GCHP\_14.2.0 (Dev)  
c24



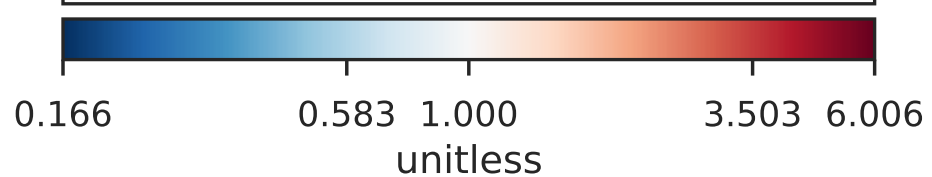
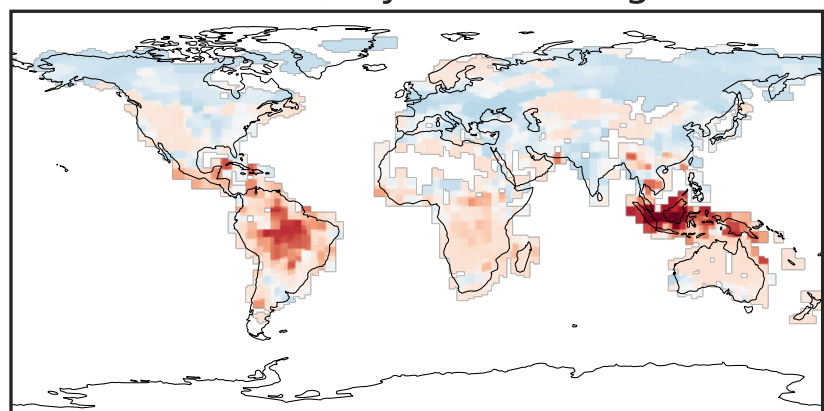
Difference (1x1.25)  
Dev - Ref, Dynamic Range



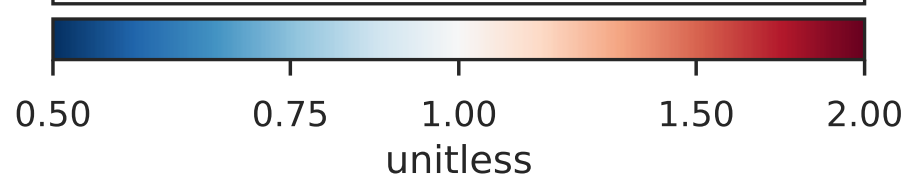
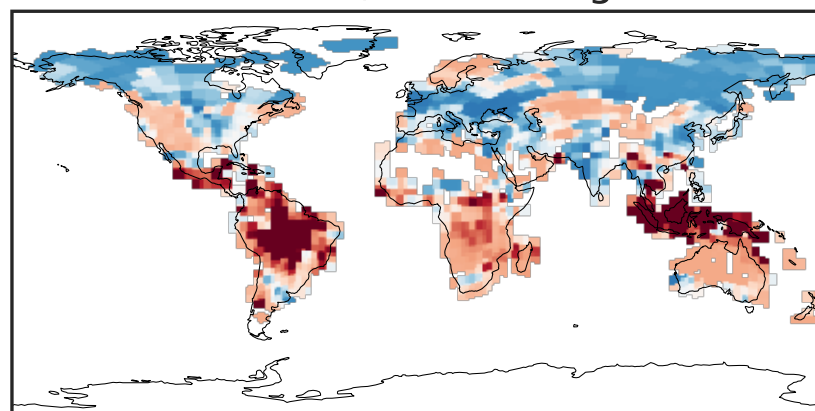
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

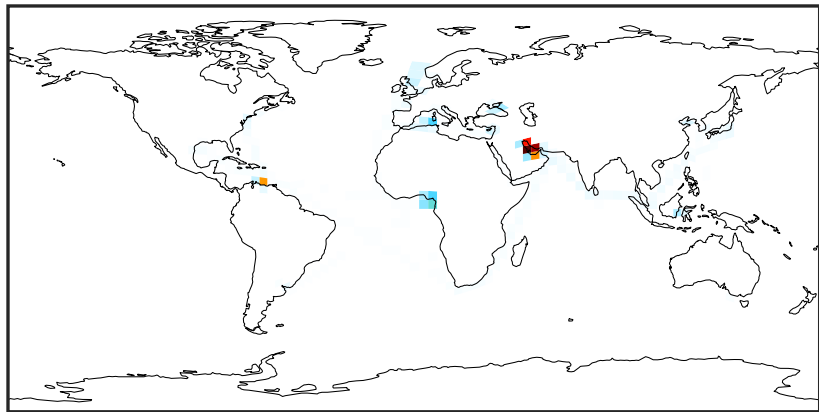


Ratio (1x1.25)  
Dev/Ref, Fixed Range



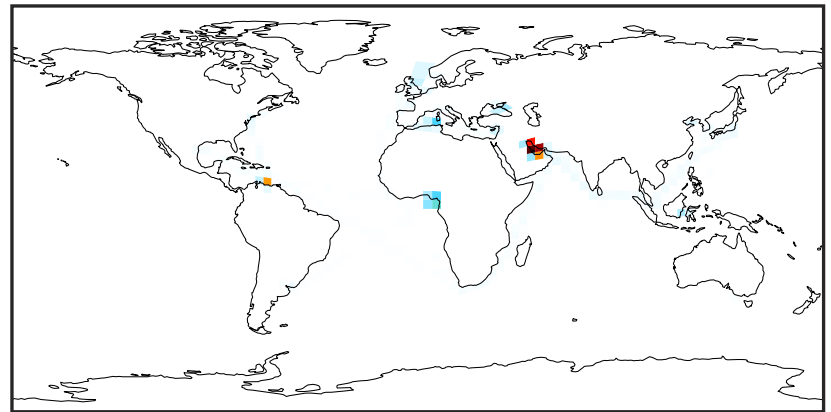
# EmisC3H8\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.4 0.8 1.2  $1e-11$   
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



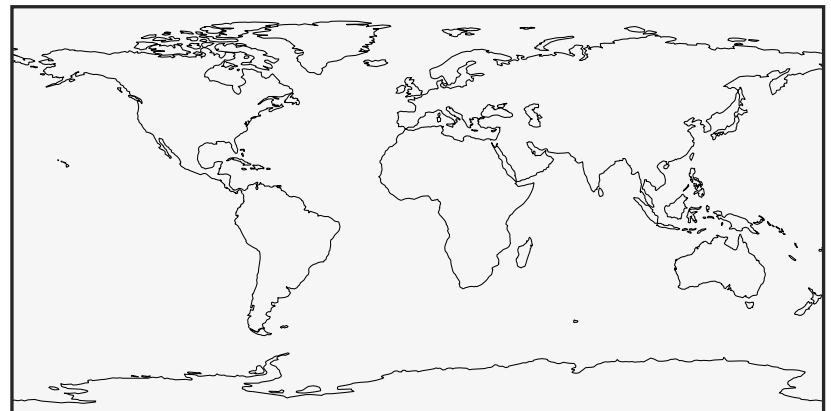
0.0 0.4 0.8 1.2  $1e-11$   
kg/m<sup>2</sup>/s

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



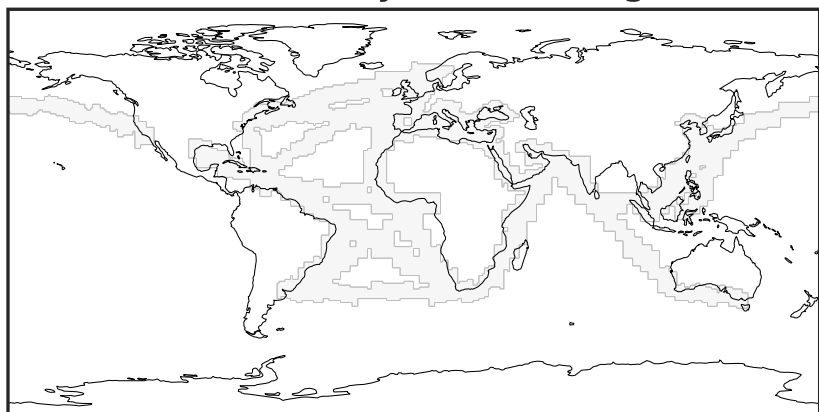
Zero throughout domain  
kg/m<sup>2</sup>/s

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



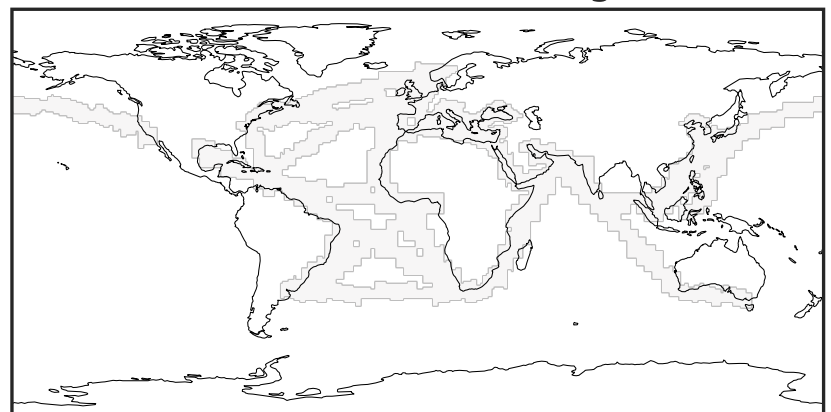
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

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

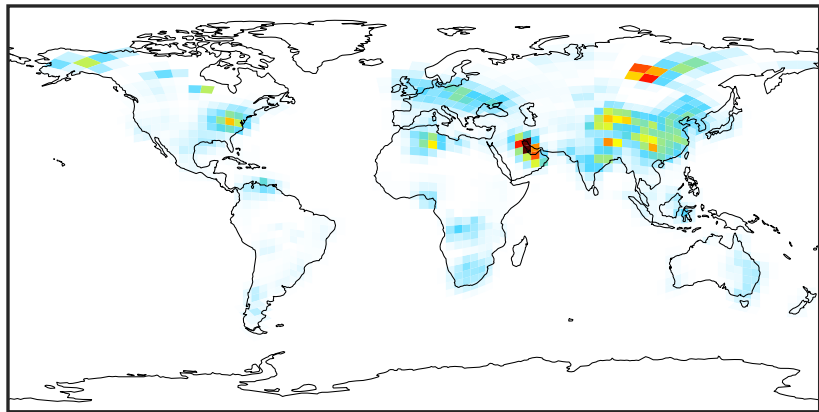


Ref and Dev equal throughout domain  
unitless



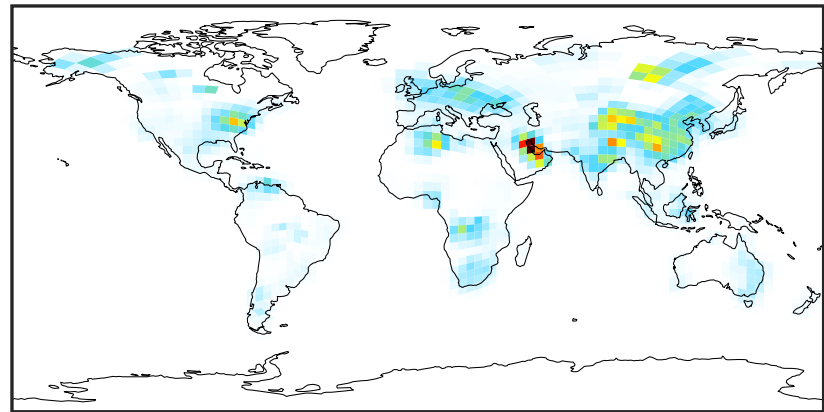
# EmisC3H8\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



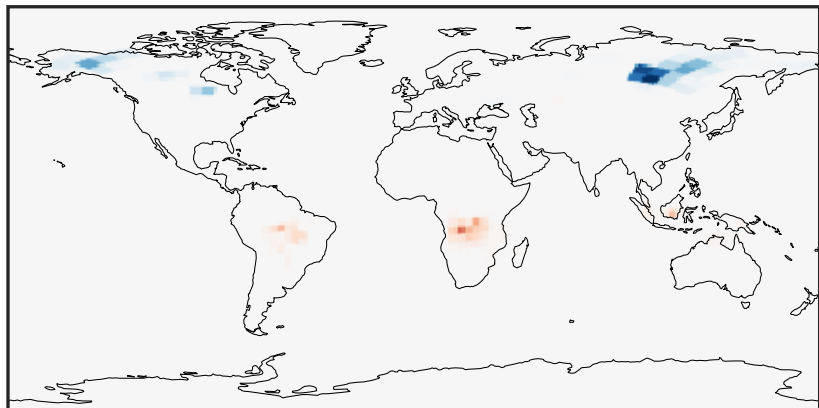
0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



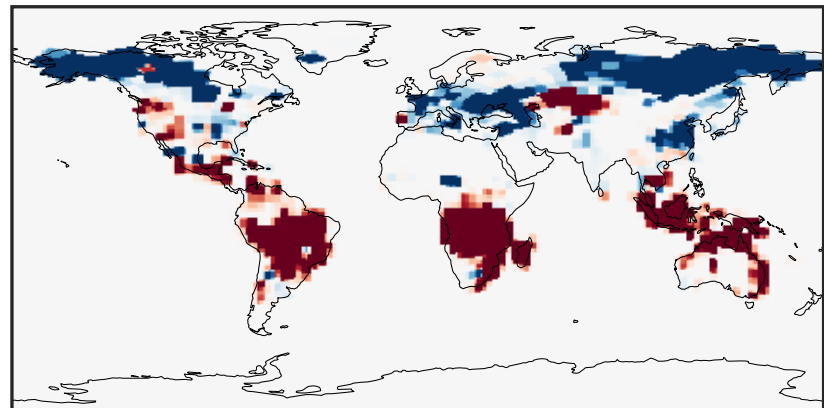
0.0 1.5 3.0 4.5  
kg/m<sup>2</sup>/s 1e-11

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



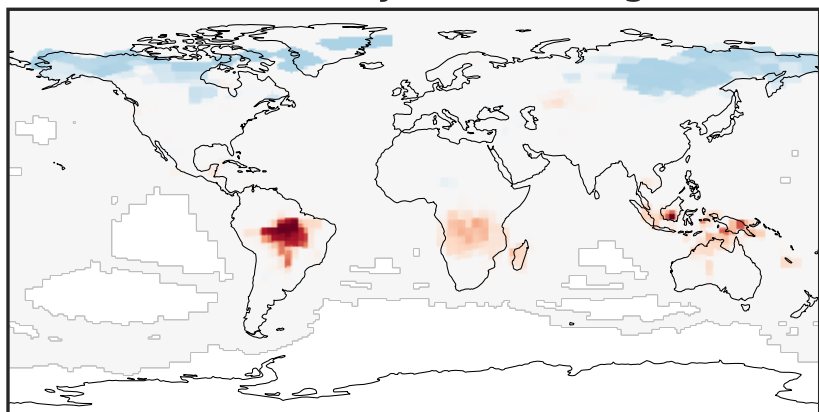
-6 0 6  
kg/m<sup>2</sup>/s 1e-12

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



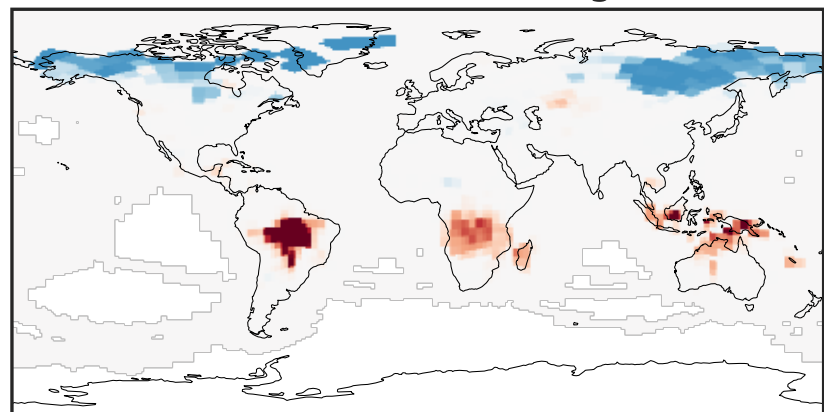
-2.5 0.0 2.5  
kg/m<sup>2</sup>/s 1e-15

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



0.268 0.634 1.000 2.365 3.729  
unitless

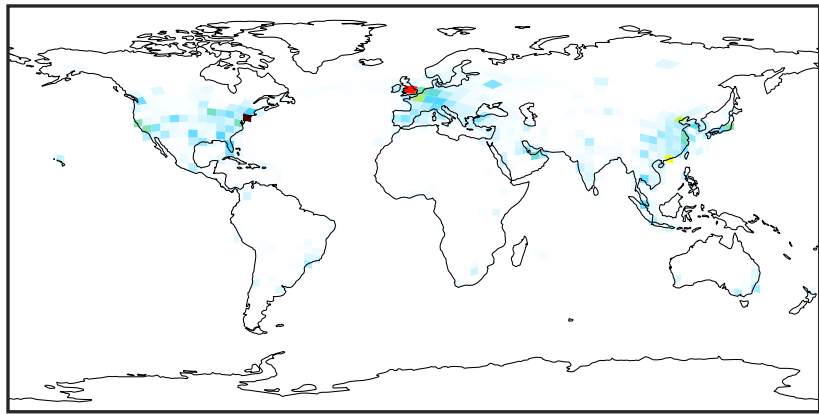
Ratio (1x1.25)  
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00  
unitless

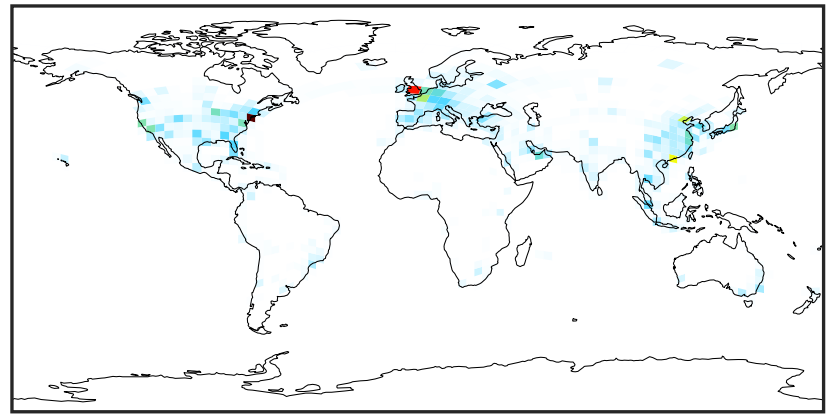
# EmisPRPE\_Aircraft (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-13

GCHP\_14.2.0 (Dev)  
c24



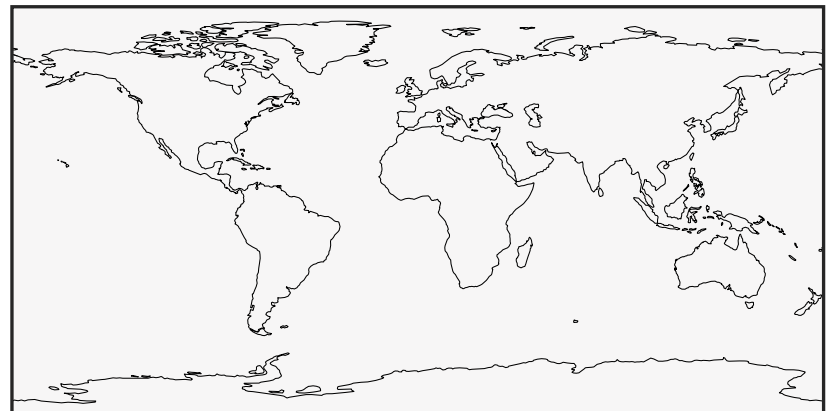
0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-13

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



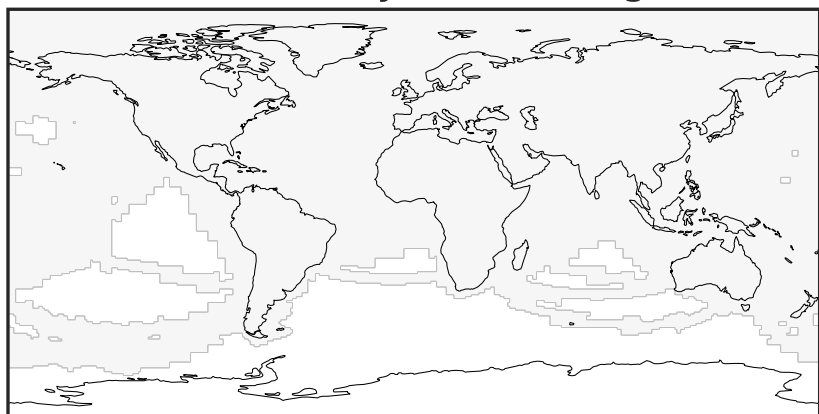
Zero throughout domain  
kg/m<sup>2</sup>/s

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



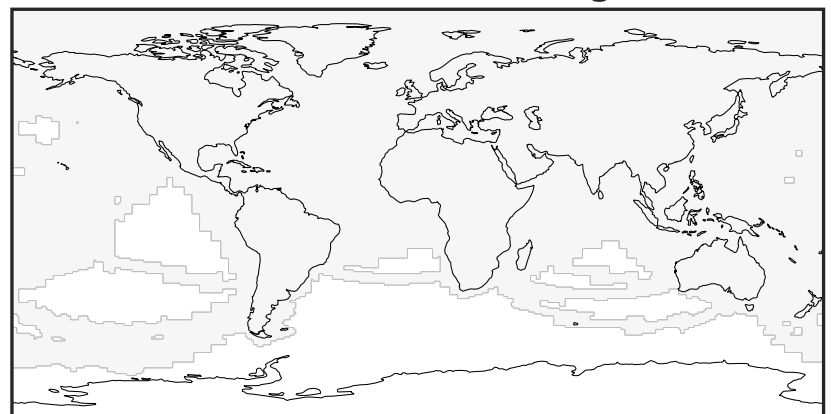
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

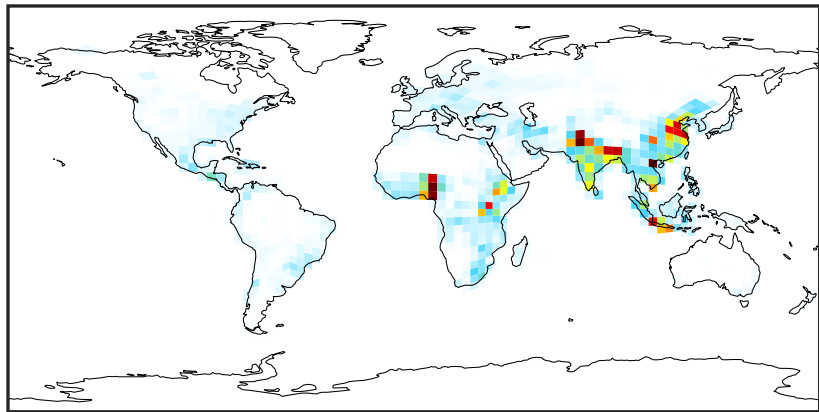
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

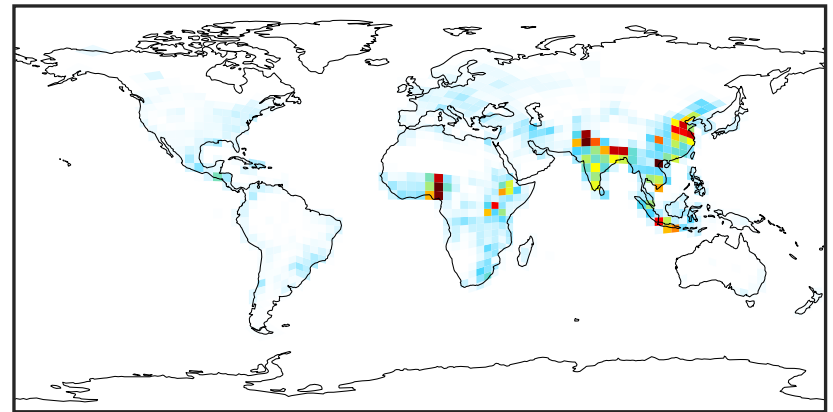
# EmisPRPE\_Anthro (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



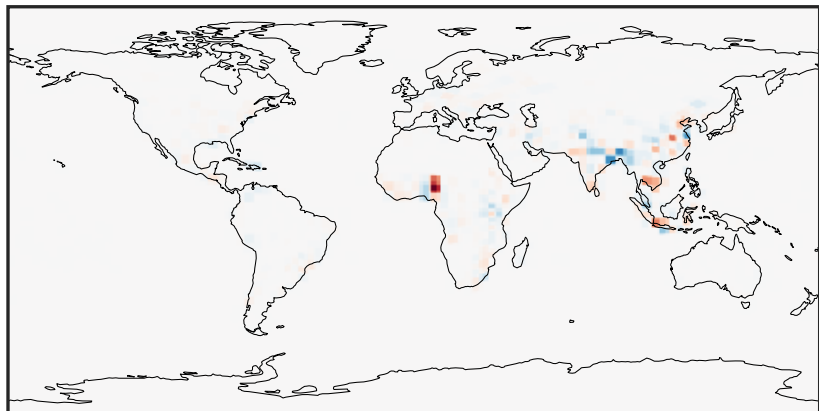
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-12

GCHP\_14.2.0 (Dev)  
c24



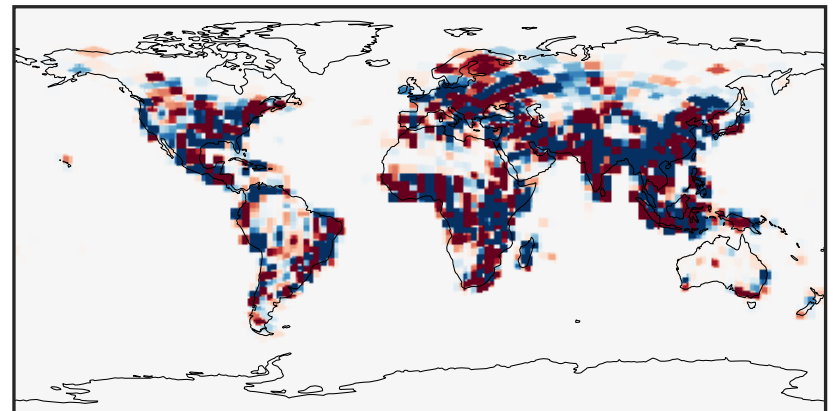
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-12

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



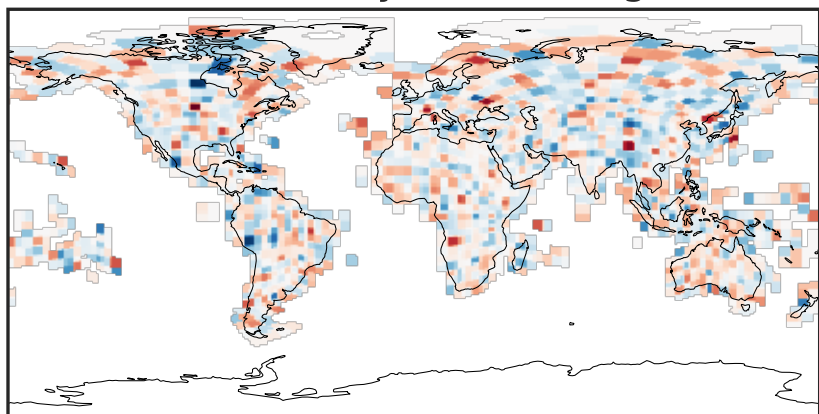
-2 0 2  
kg/m<sup>2</sup>/s 1e-16

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



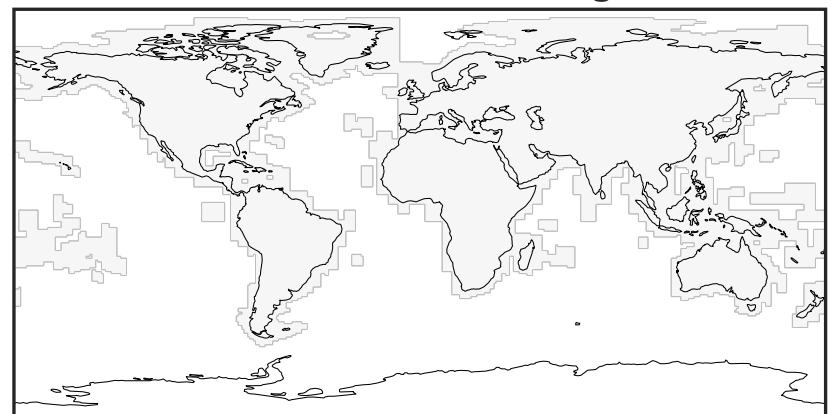
-1.5 0.0 1.5  
kg/m<sup>2</sup>/s 1e-18

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



0.9999281 1.000000 1.0000719  
unitless

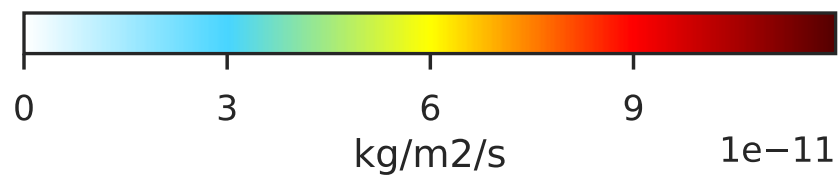
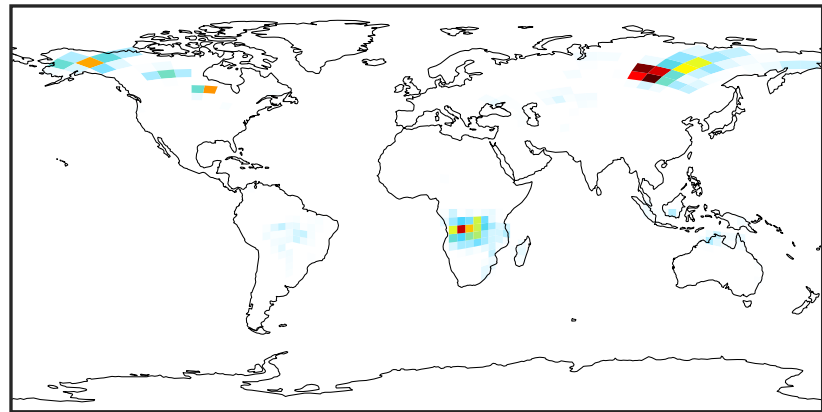
Ratio (1x1.25)  
Dev/Ref, Fixed Range



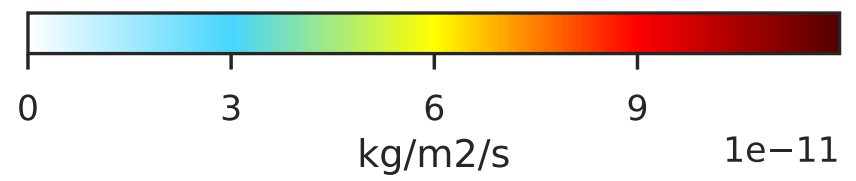
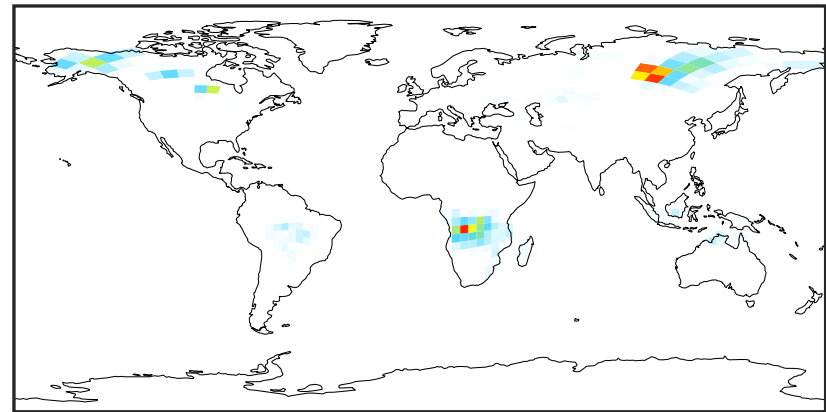
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisPRPE\_BioBurn (Jul2019)

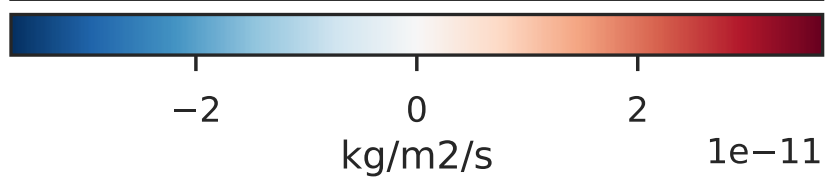
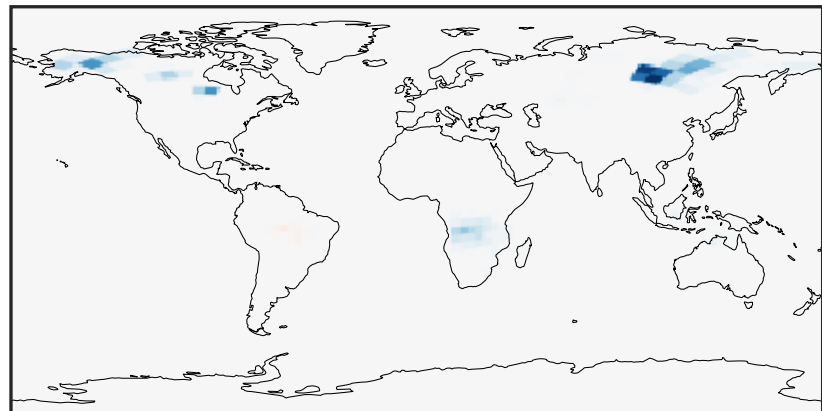
GCHP\_14.0.0 (Ref)  
c24



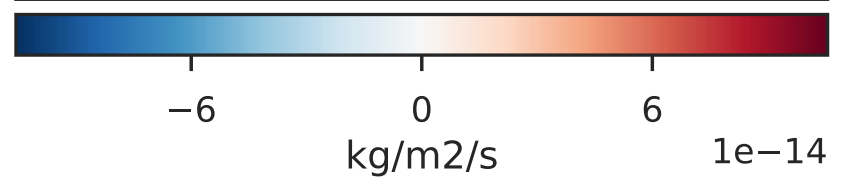
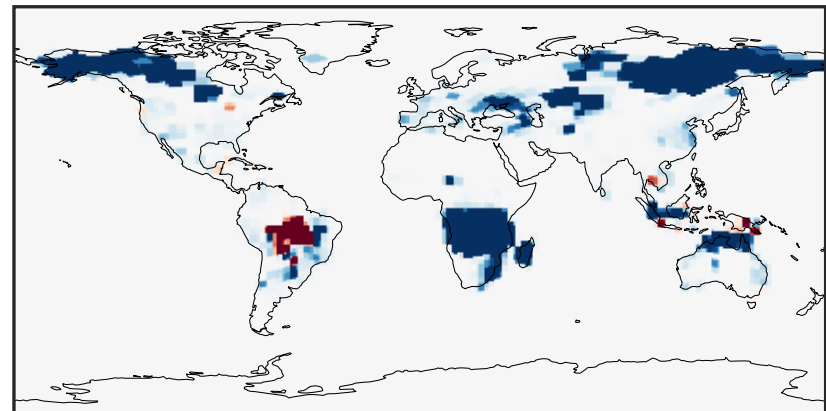
GCHP\_14.2.0 (Dev)  
c24



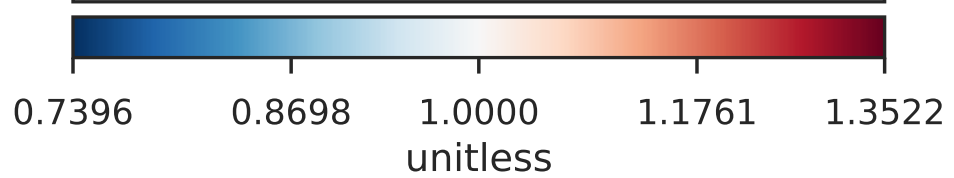
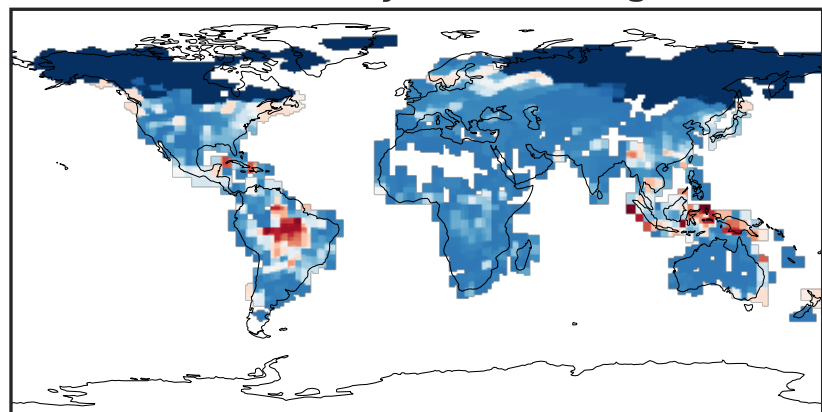
Difference (1x1.25)  
Dev - Ref, Dynamic Range



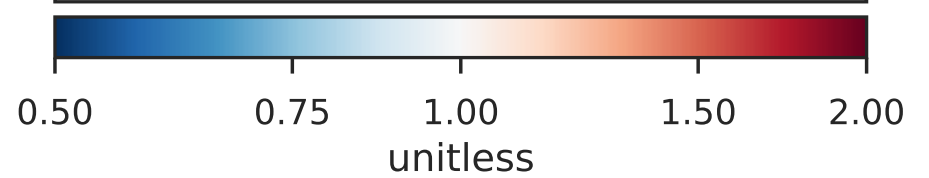
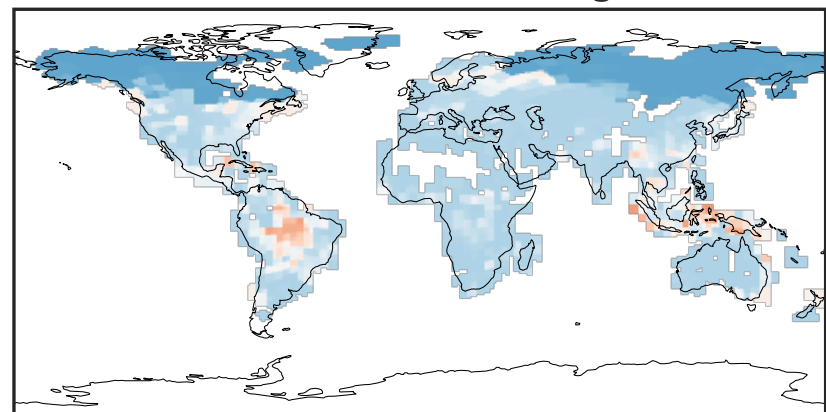
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

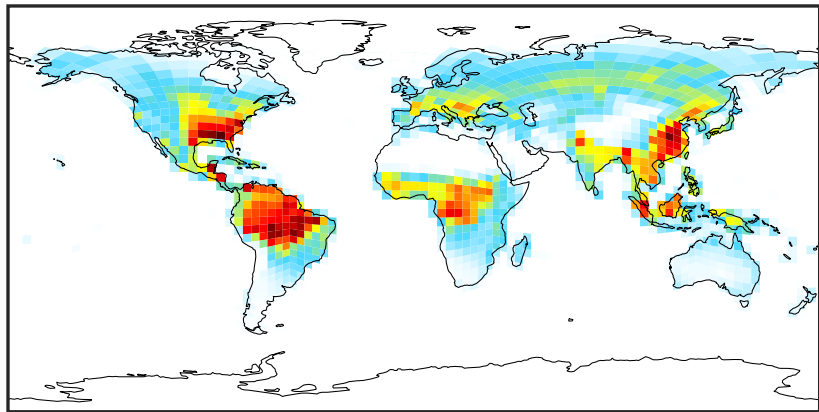


Ratio (1x1.25)  
Dev/Ref, Fixed Range



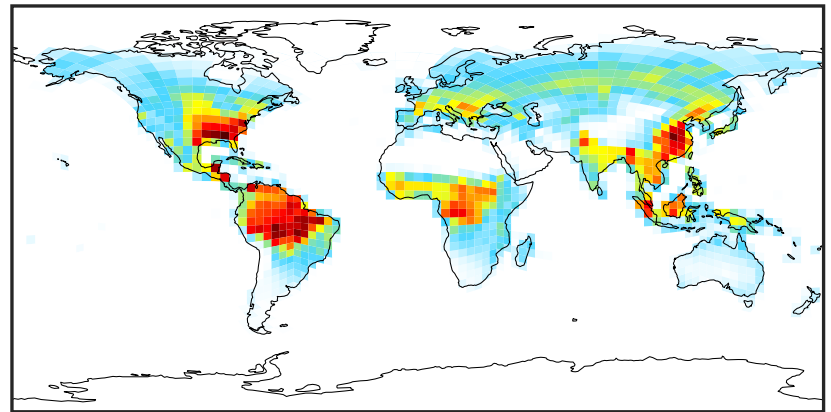
# EmisPRPE\_Biogenic (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



0.0 0.6 1.2 1.8  
kg/m2/s  $1e-11$

GCHP\_14.2.0 (Dev)  
c24



0.0 0.6 1.2 1.8  
kg/m2/s  $1e-11$

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



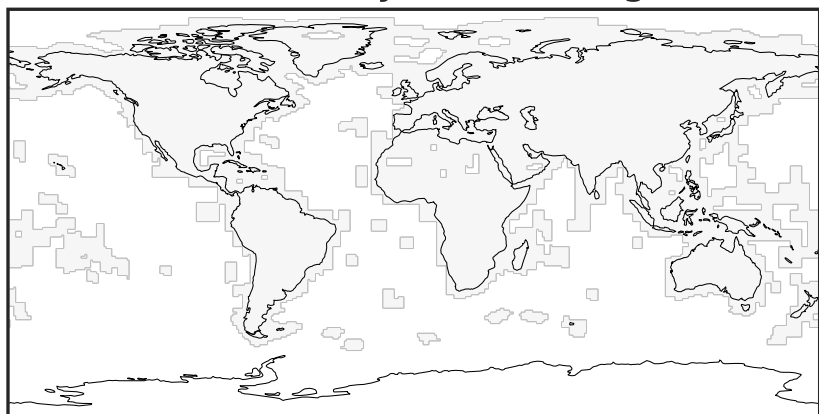
Zero throughout domain  
kg/m2/s

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



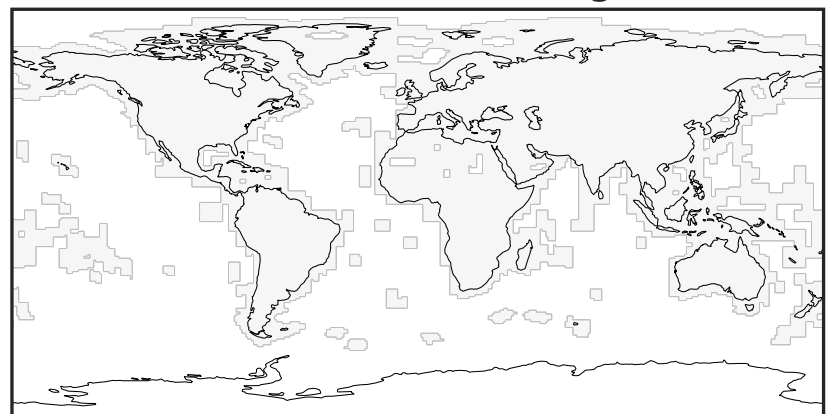
Zero throughout domain  
kg/m2/s

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



Ref and Dev equal throughout domain  
unitless

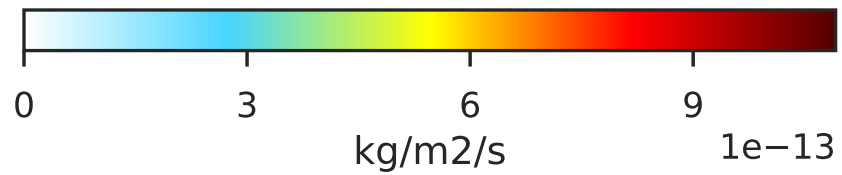
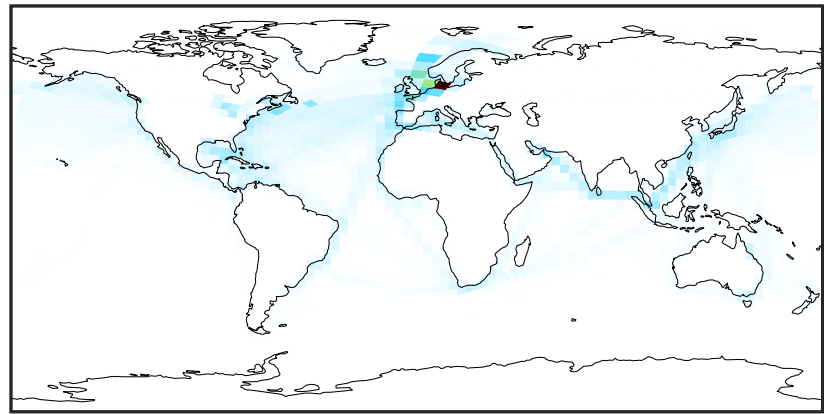
Ratio (1x1.25)  
Dev/Ref, Fixed Range



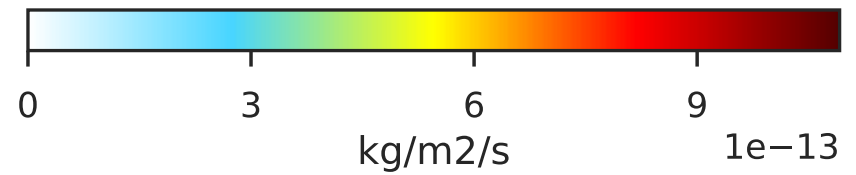
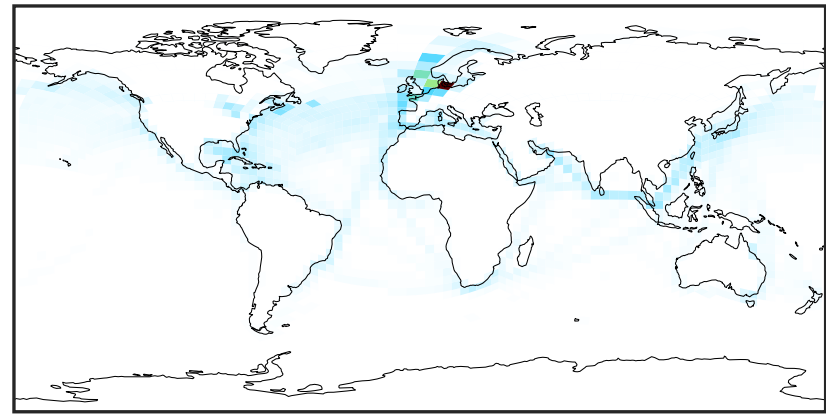
Ref and Dev equal throughout domain  
unitless

# EmisPRPE\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24



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



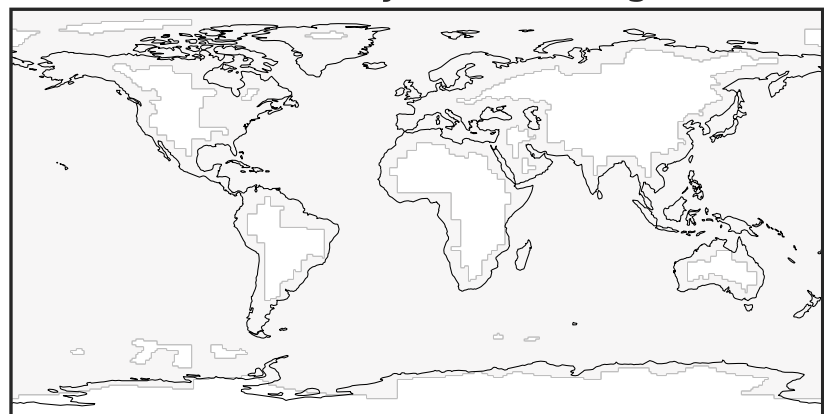
Zero throughout domain  
kg/m<sup>2</sup>/s

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



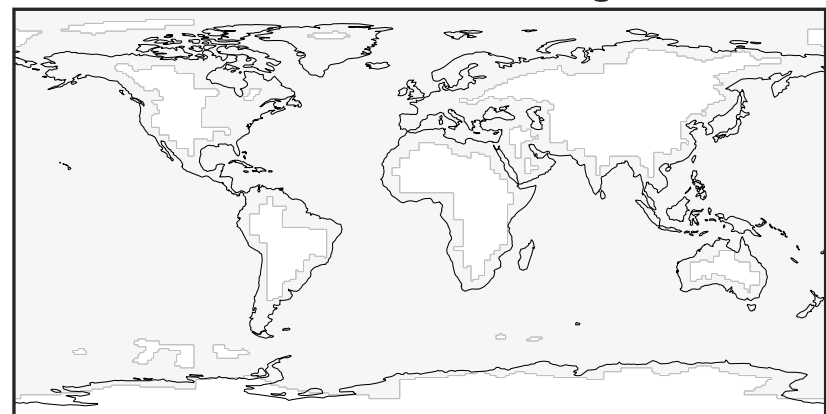
Zero throughout domain  
kg/m<sup>2</sup>/s

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



Ref and Dev equal throughout domain  
unitless

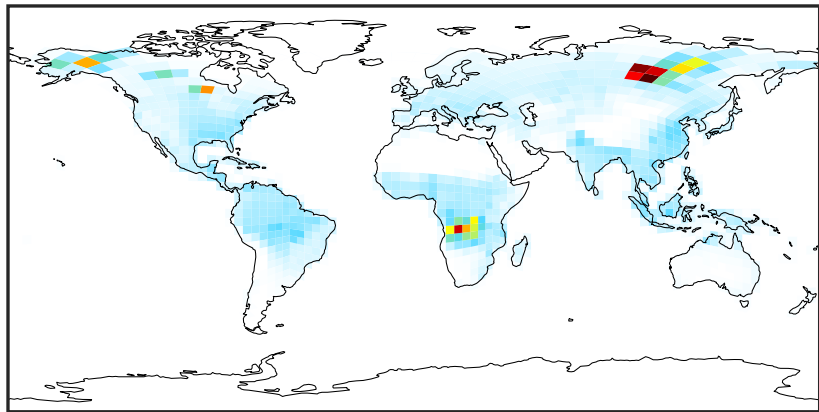
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

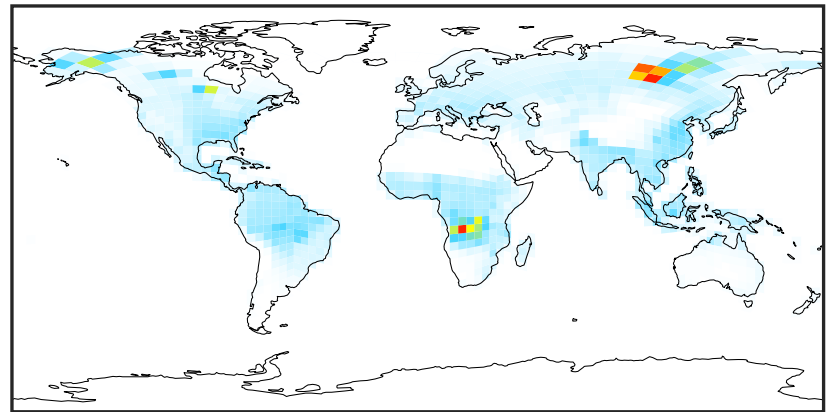
# EmisPRPE\_Total (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



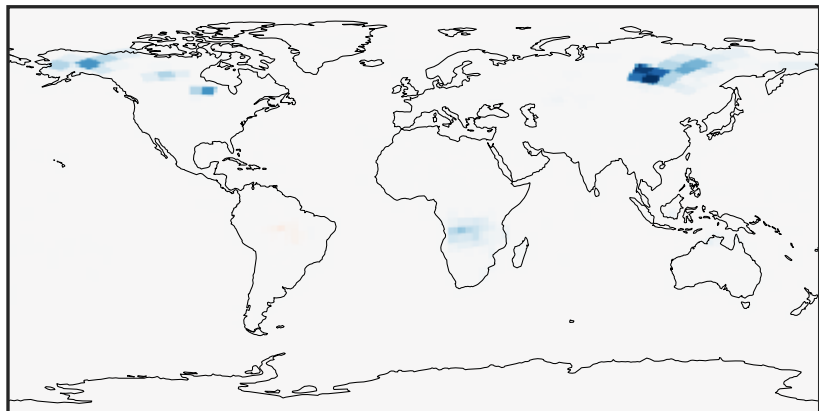
0.0 0.4 0.8 1.2  
kg/m2/s  $1e-10$

GCHP\_14.2.0 (Dev)  
c24



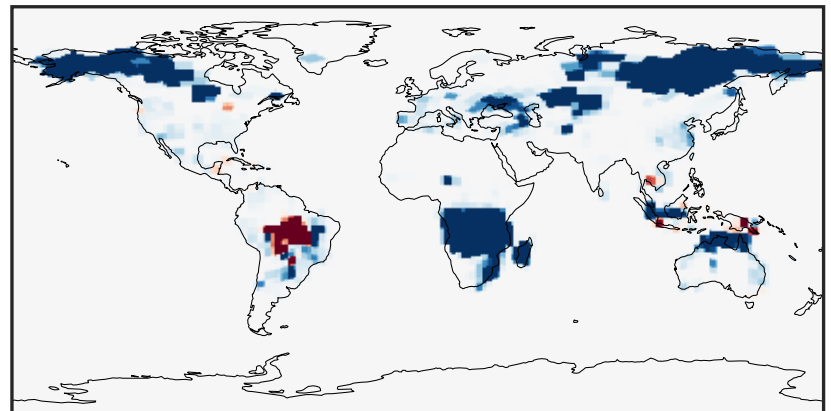
0.0 0.4 0.8 1.2  
kg/m2/s  $1e-10$

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



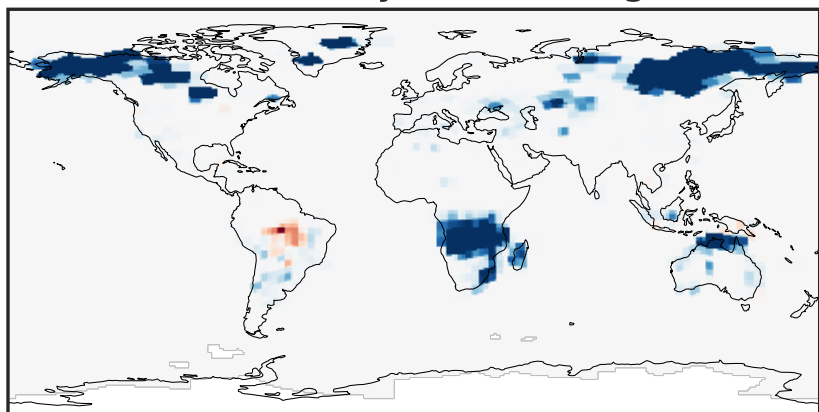
-2 0 2  
kg/m2/s  $1e-11$

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



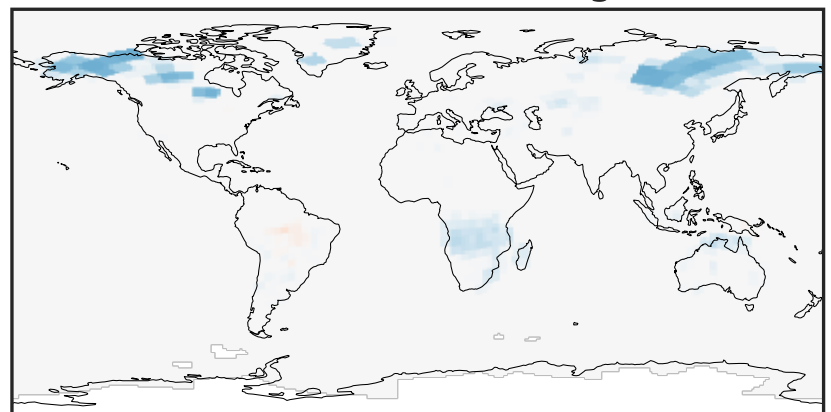
-6 0 6  
kg/m2/s  $1e-14$

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



0.9075 0.9537 1.0000 1.0510 1.1020  
unitless

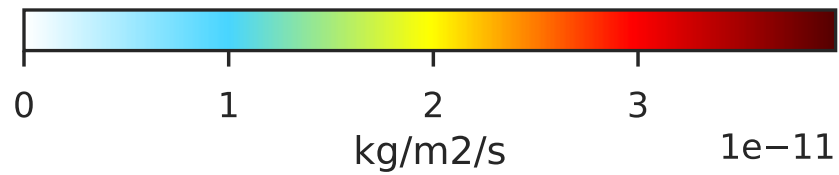
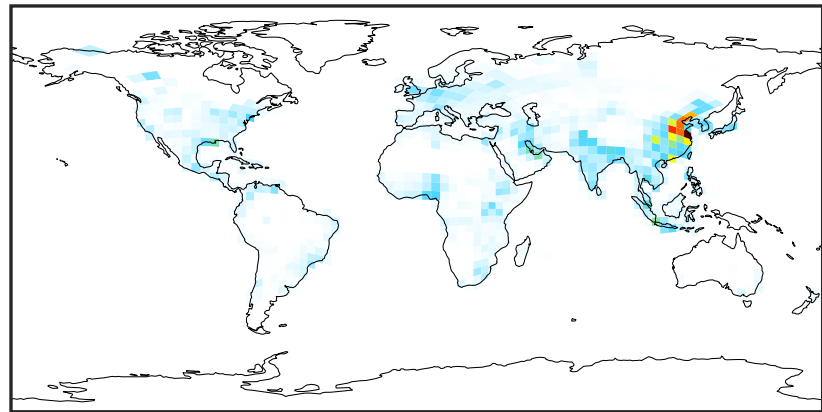
Ratio (1x1.25)  
Dev/Ref, Fixed Range



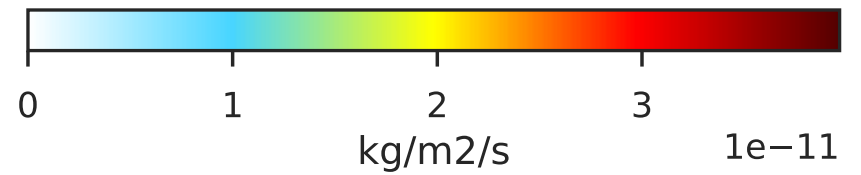
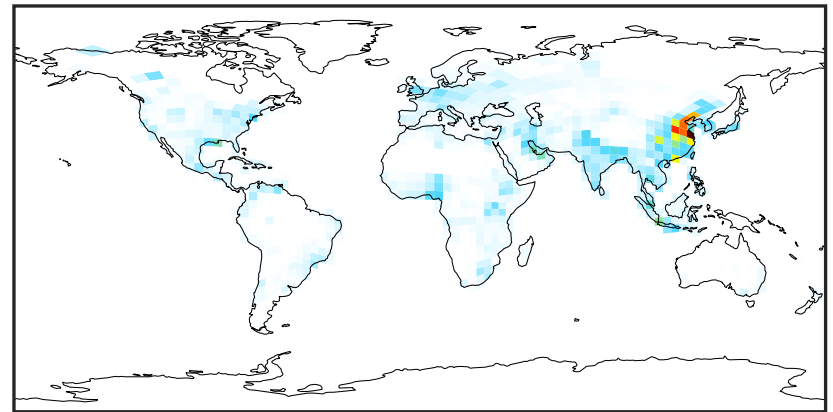
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisTOLU\_Anthro (Jul2019)

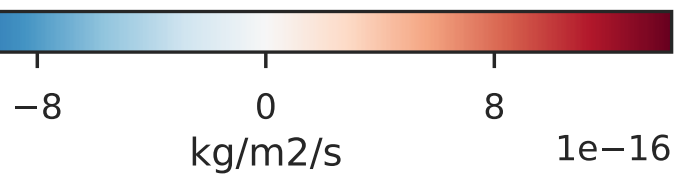
GCHP\_14.0.0 (Ref)  
c24



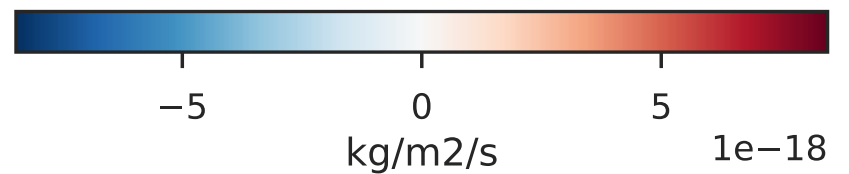
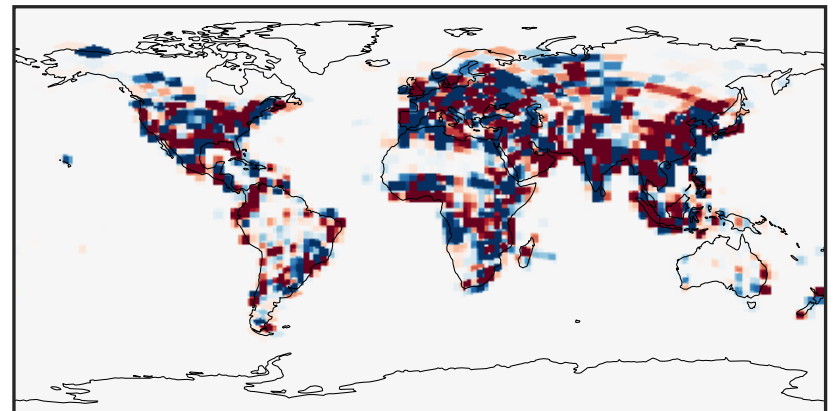
GCHP\_14.2.0 (Dev)  
c24



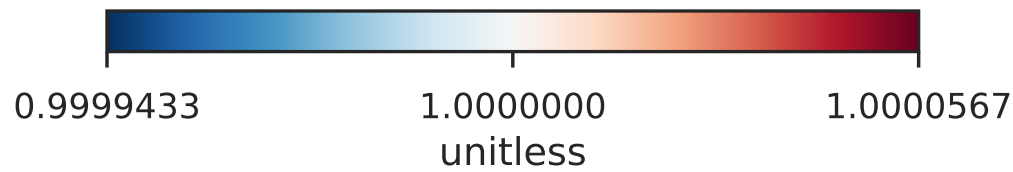
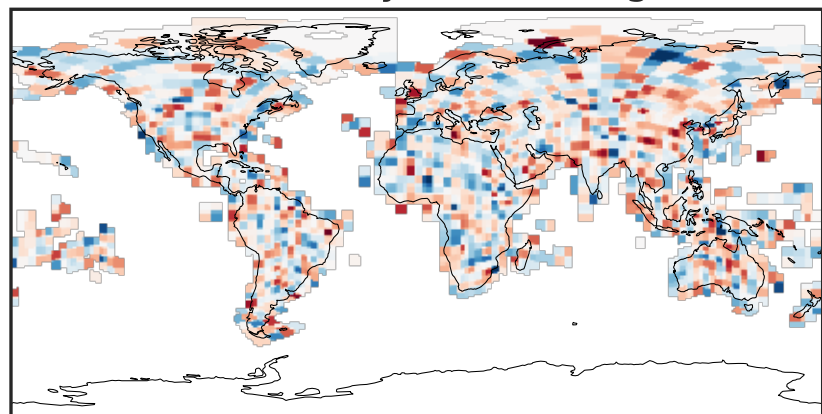
Difference (1x1.25)  
Dev - Ref, Dynamic Range



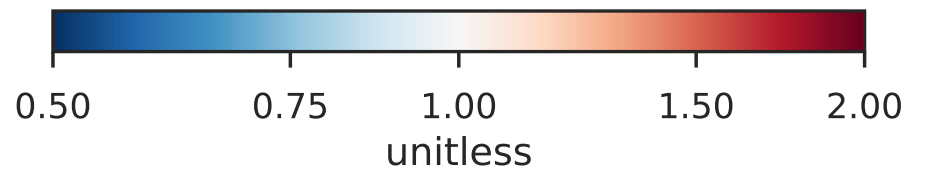
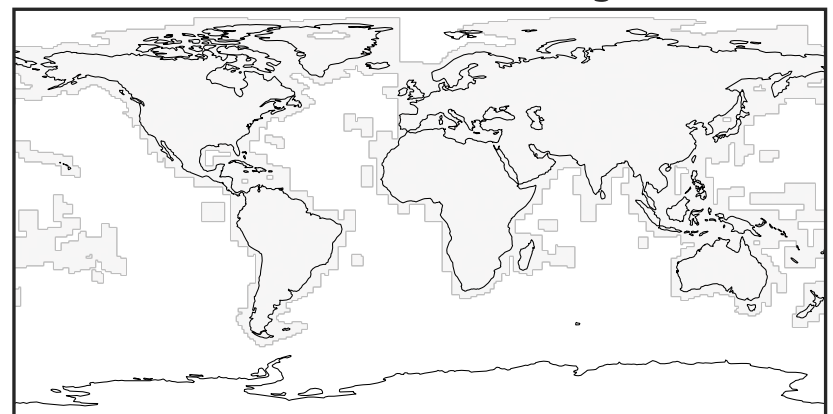
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



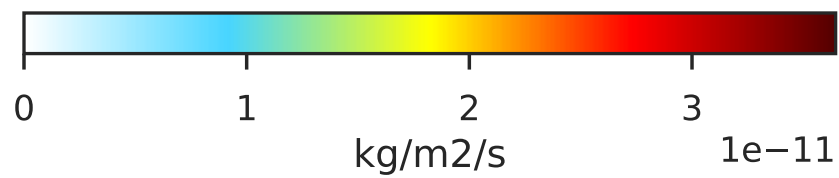
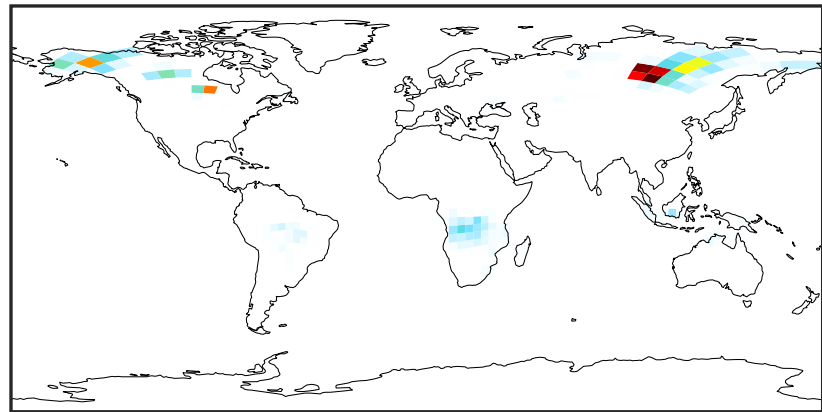
Ratio (1x1.25)  
Dev/Ref, Fixed Range



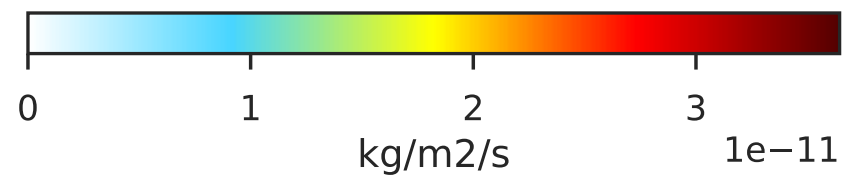
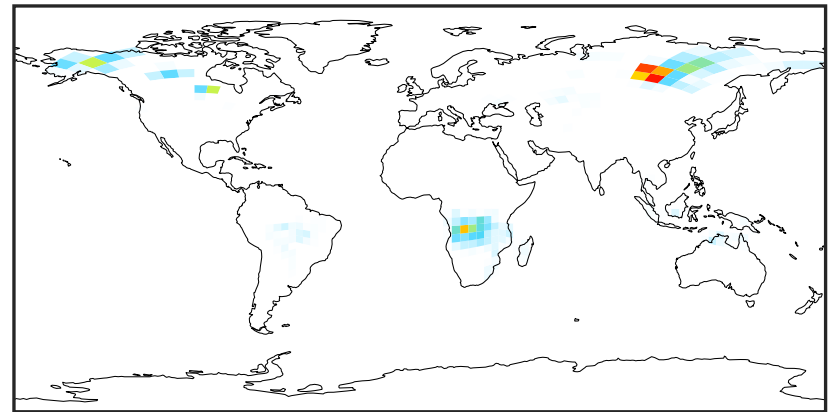


# EmisTOLU\_BioBurn (Jul2019)

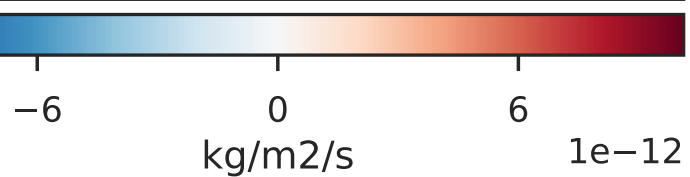
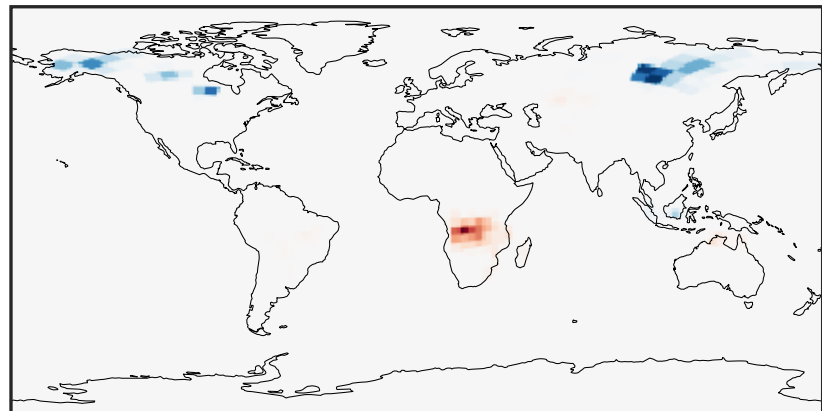
GCHP\_14.0.0 (Ref)  
c24



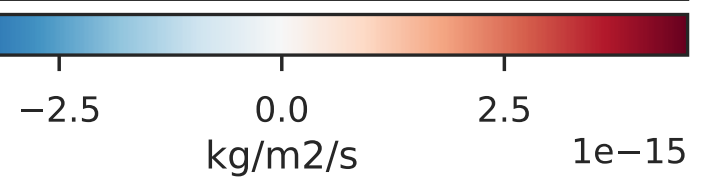
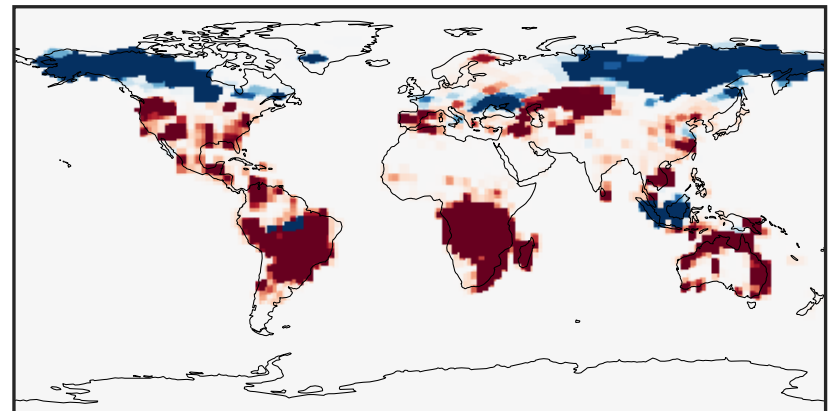
GCHP\_14.2.0 (Dev)  
c24



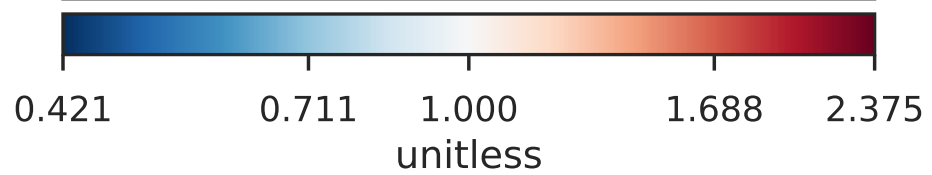
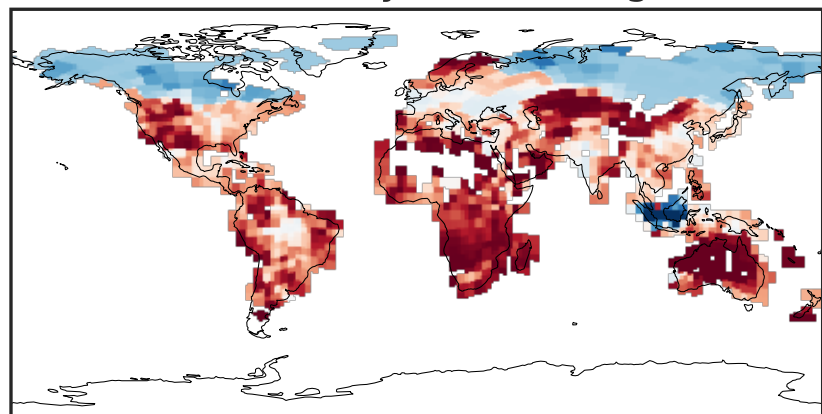
Difference (1x1.25)  
Dev - Ref, Dynamic Range



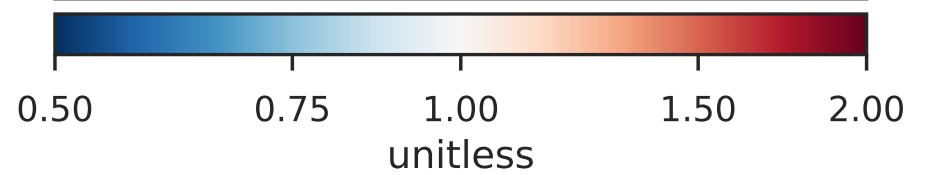
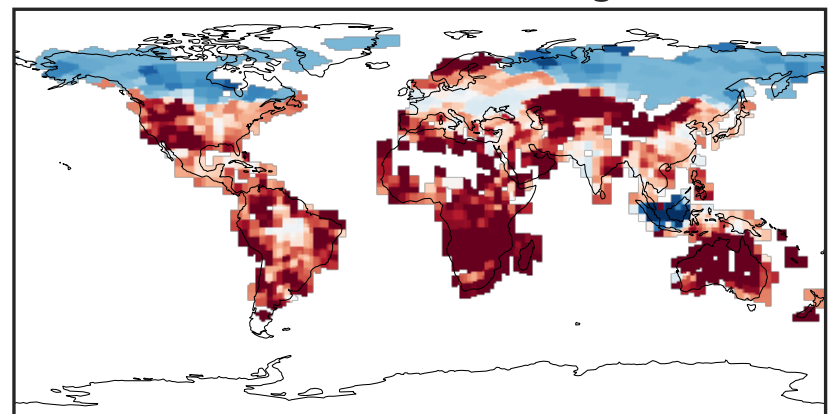
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

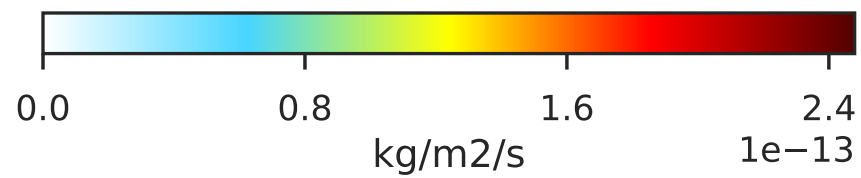
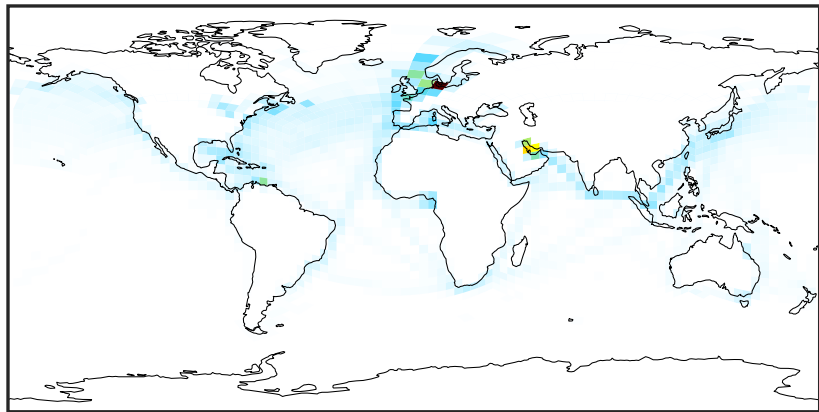


Ratio (1x1.25)  
Dev/Ref, Fixed Range

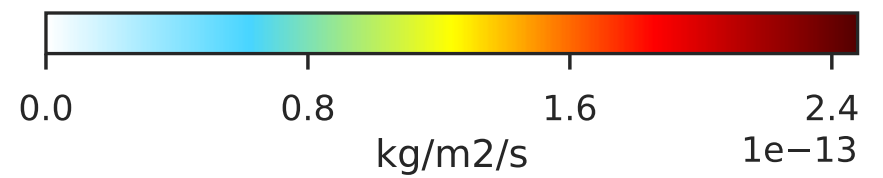
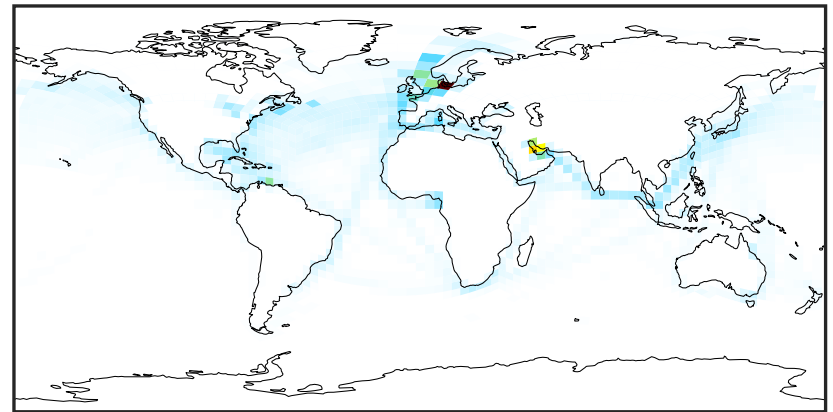


# EmisTOLU\_Ship (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24

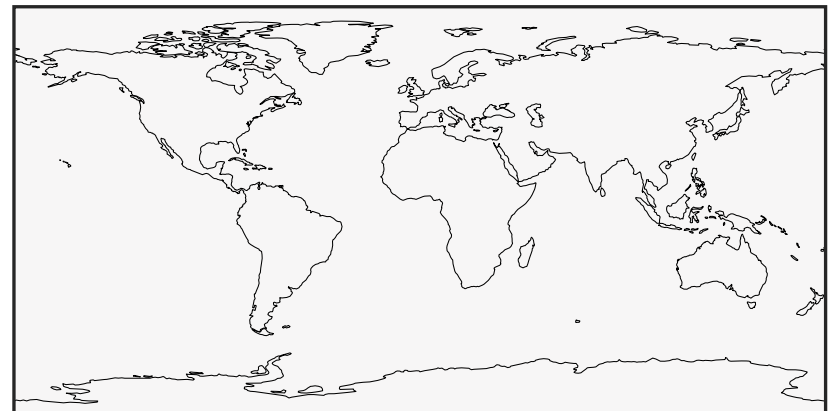


Difference (1x1.25)  
Dev - Ref, Dynamic Range



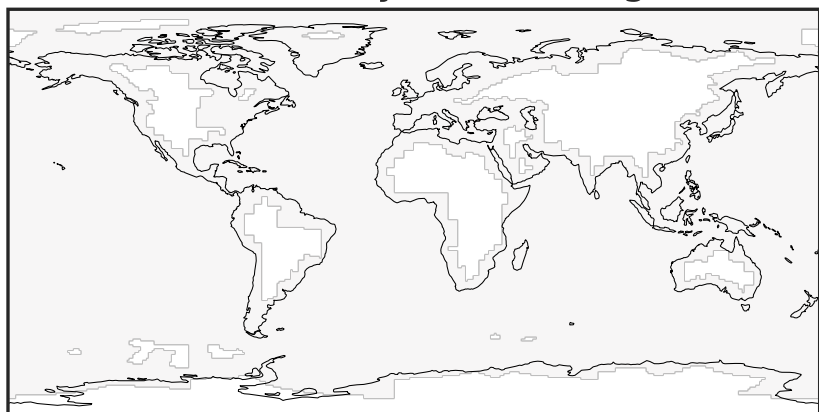
Zero throughout domain  
kg/m2/s

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



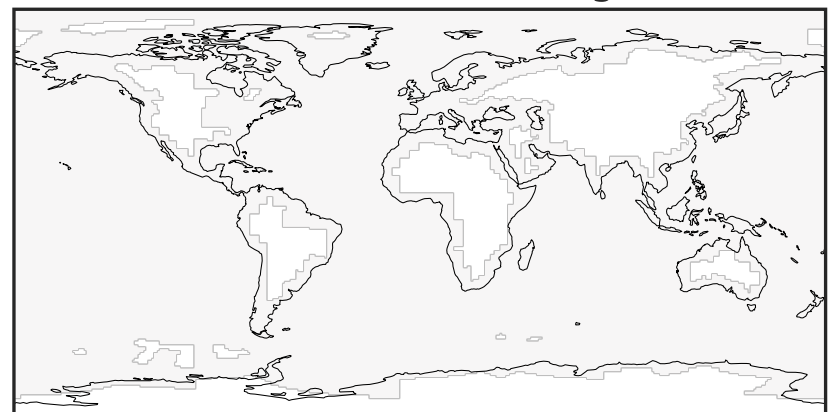
Zero throughout domain  
kg/m2/s

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



Ref and Dev equal throughout domain  
unitless

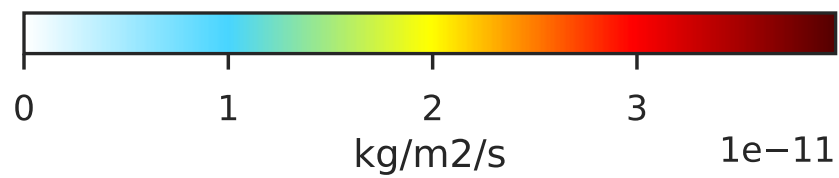
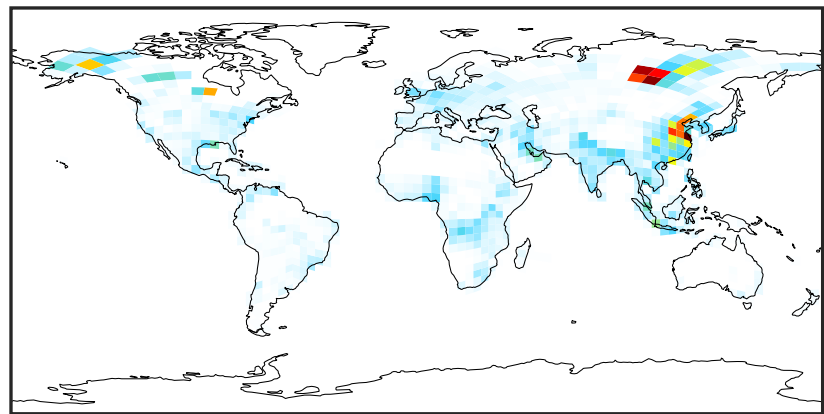
Ratio (1x1.25)  
Dev/Ref, Fixed Range



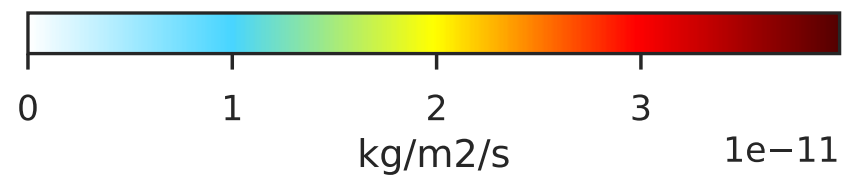
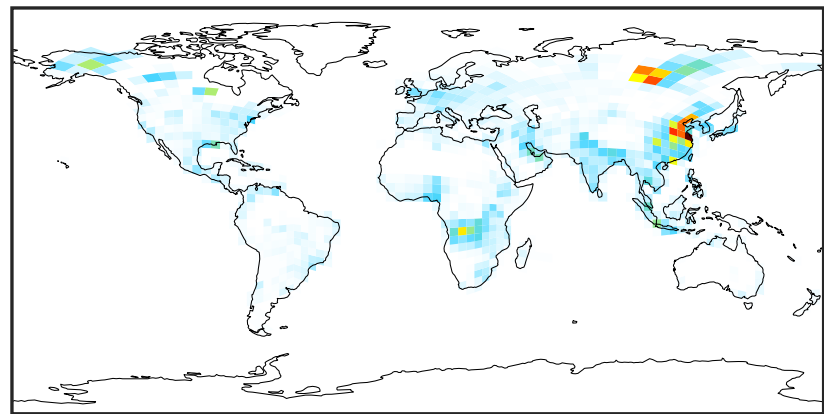
Ref and Dev equal throughout domain  
unitless

# EmisTOLU\_Total (Jul2019)

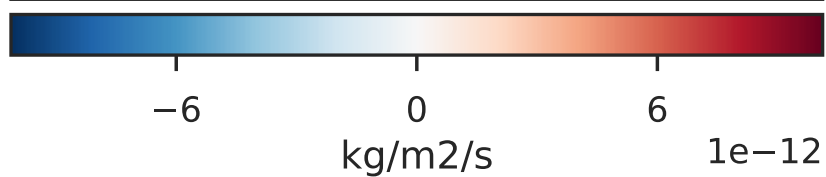
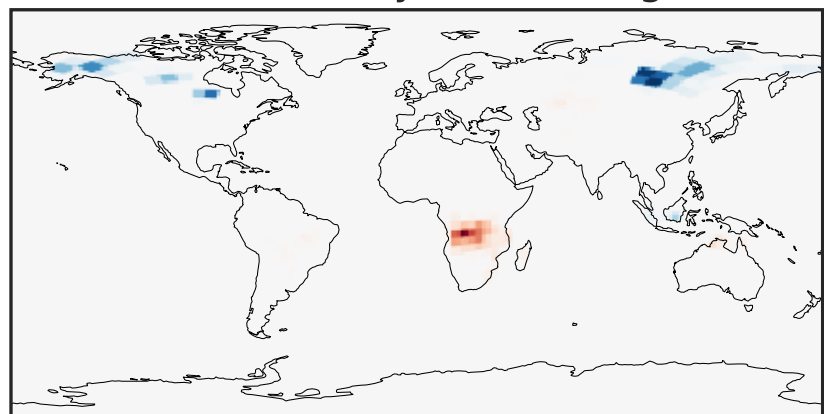
GCHP\_14.0.0 (Ref)  
c24



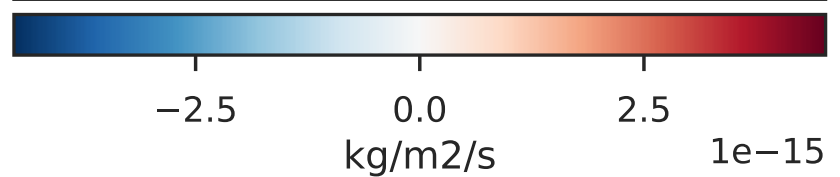
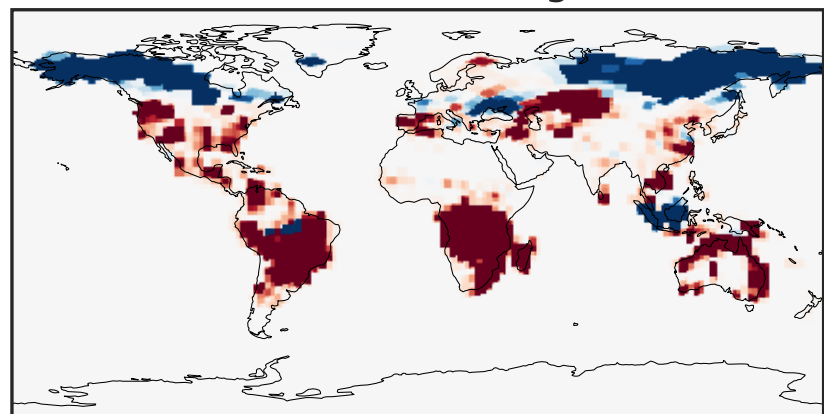
GCHP\_14.2.0 (Dev)  
c24



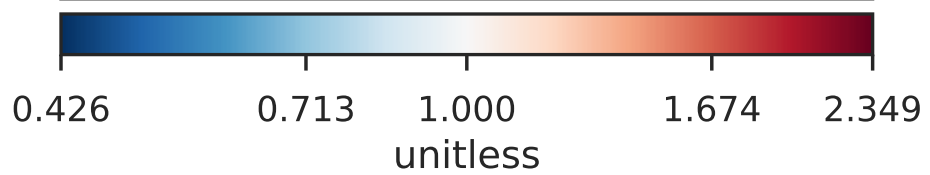
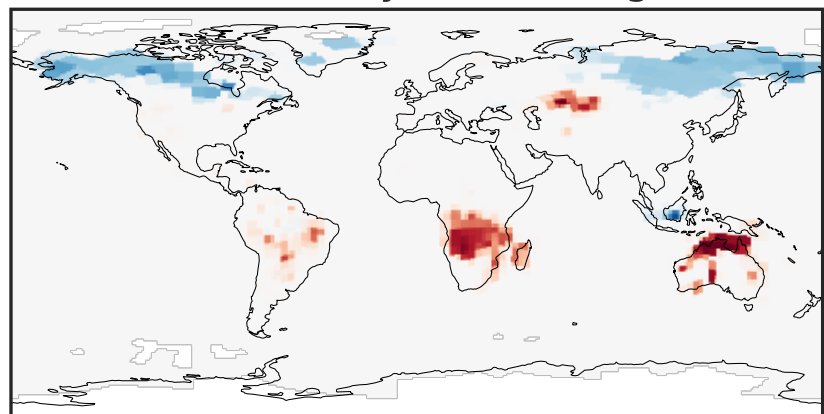
Difference (1x1.25)  
Dev - Ref, Dynamic Range



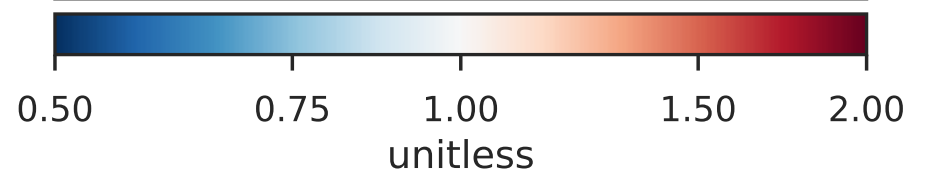
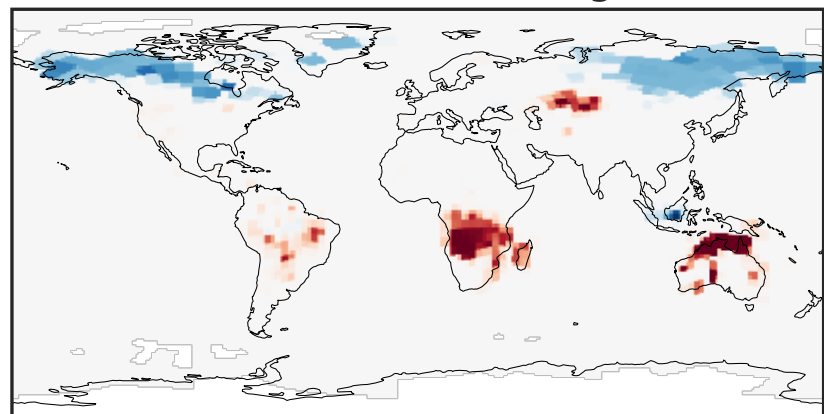
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

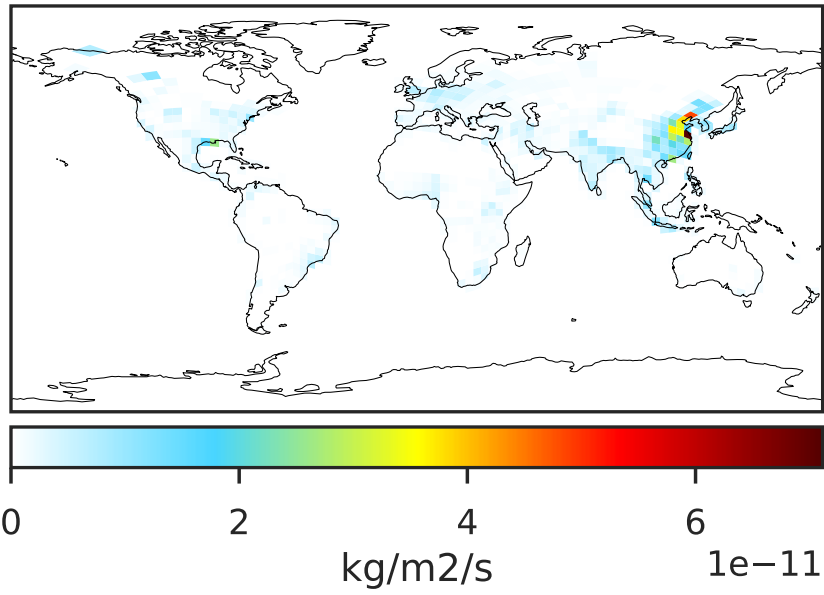


Ratio (1x1.25)  
Dev/Ref, Fixed Range

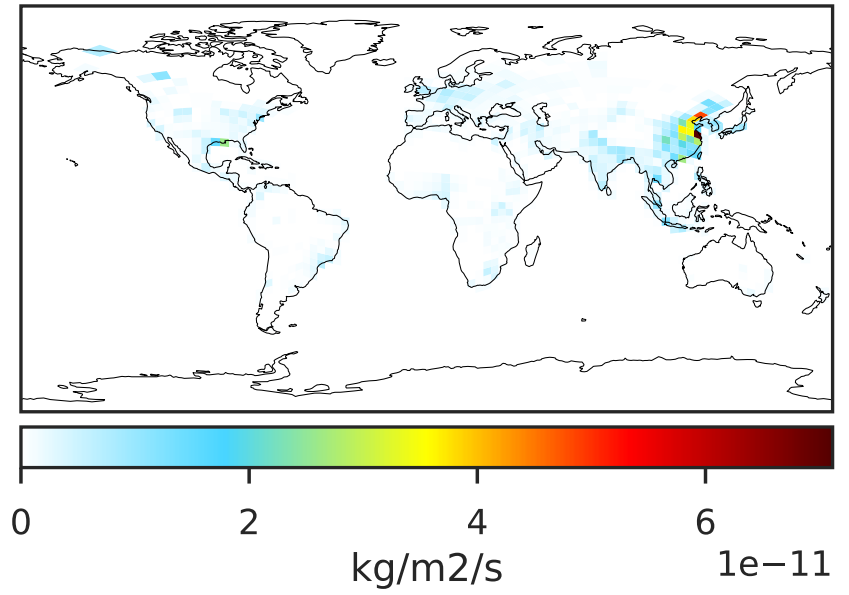


# EmisXYLE\_Anthro (Jul2019)

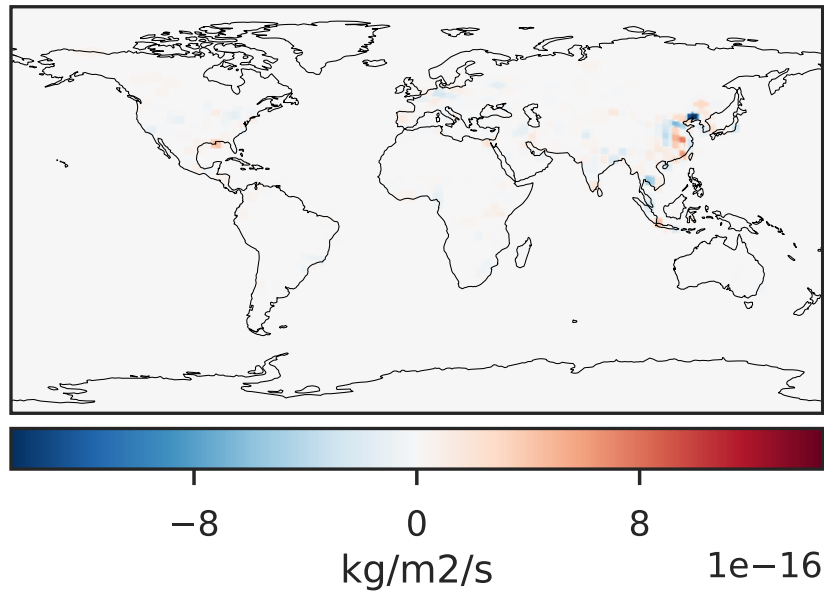
GCHP\_14.0.0 (Ref)  
c24



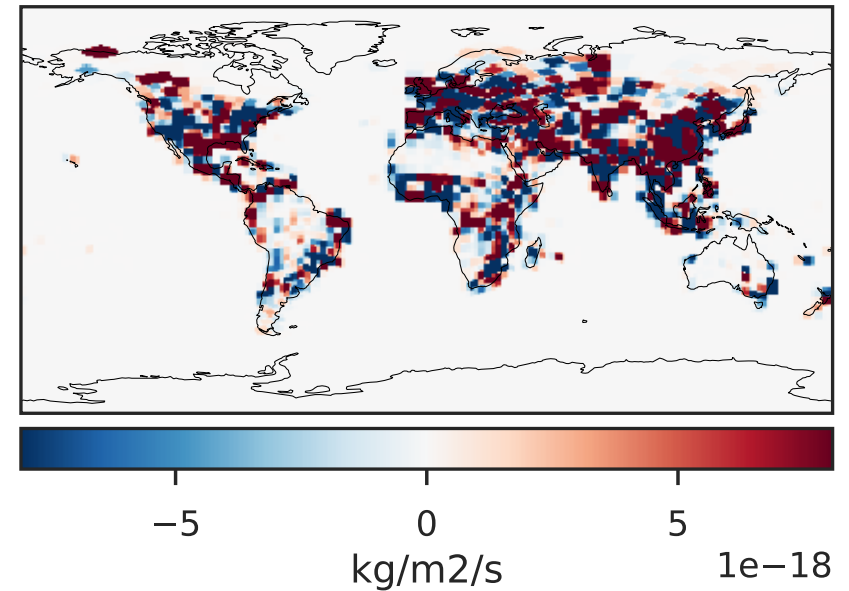
GCHP\_14.2.0 (Dev)  
c24



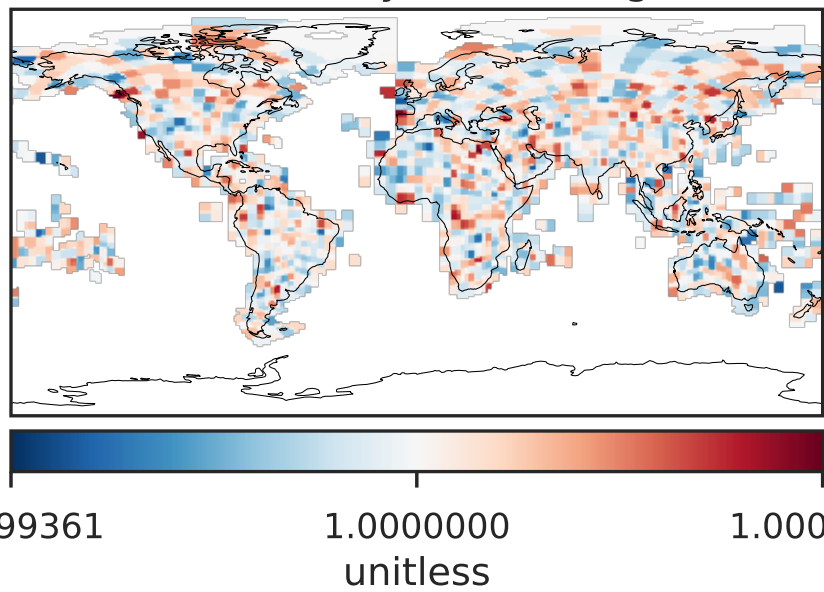
Difference (1x1.25)  
Dev - Ref, Dynamic Range



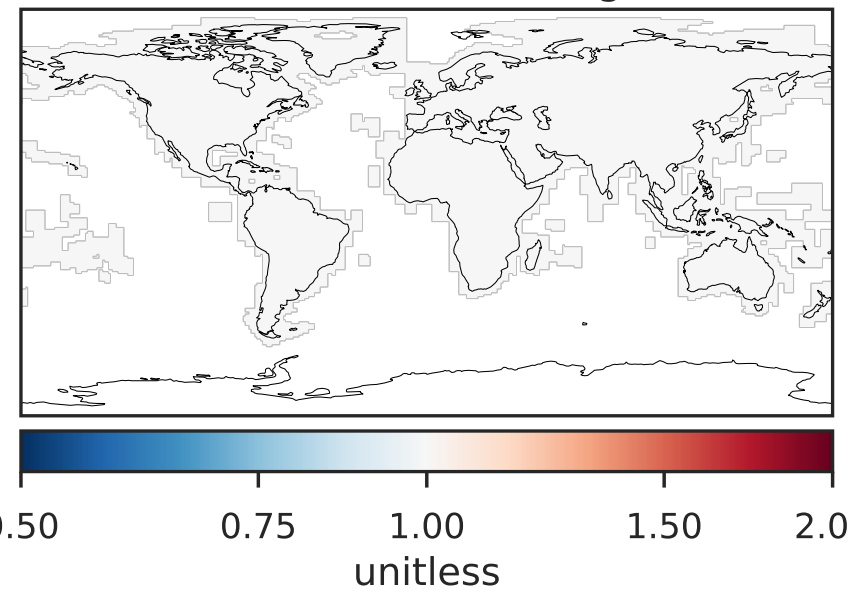
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

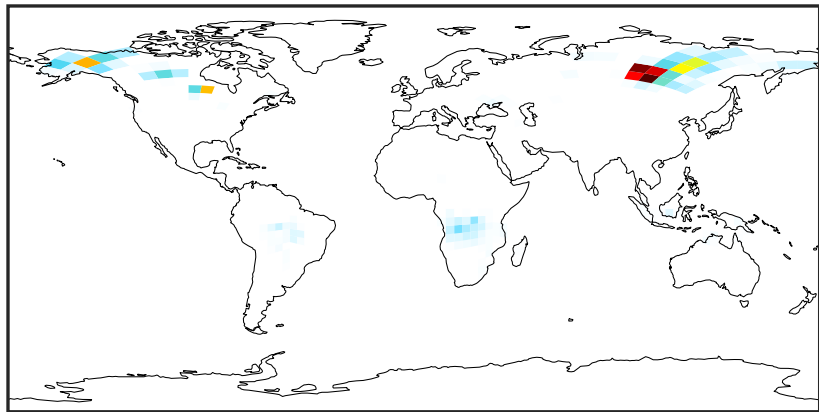


Ratio (1x1.25)  
Dev/Ref, Fixed Range



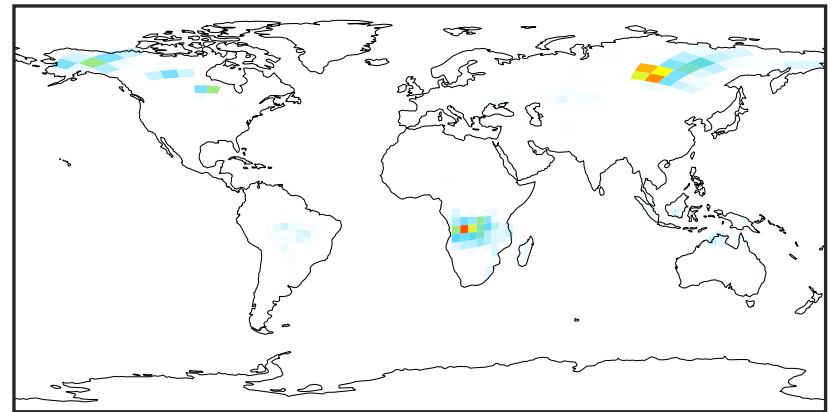
# EmisXYLE\_BioBurn (Jul2019)

GCHP\_14.0.0 (Ref)  
c24



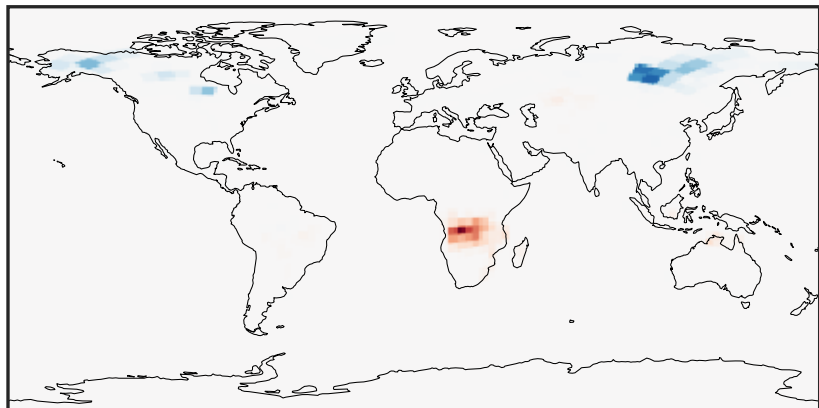
0.0 0.4 0.8 1.2  
kg/m2/s 1e-11

GCHP\_14.2.0 (Dev)  
c24



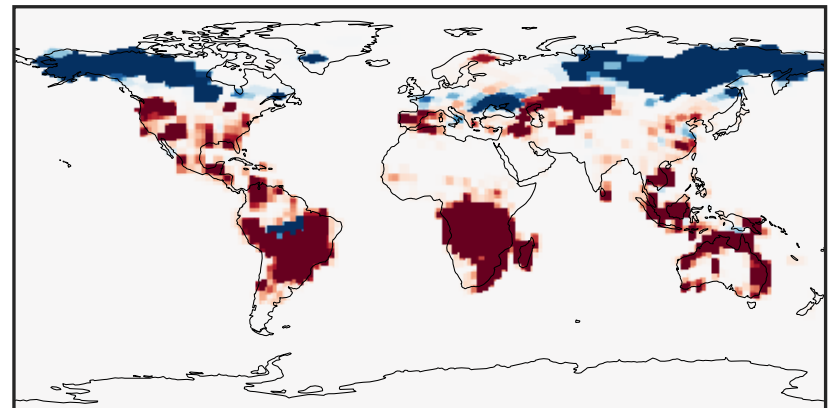
0.0 0.4 0.8 1.2  
kg/m2/s 1e-11

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



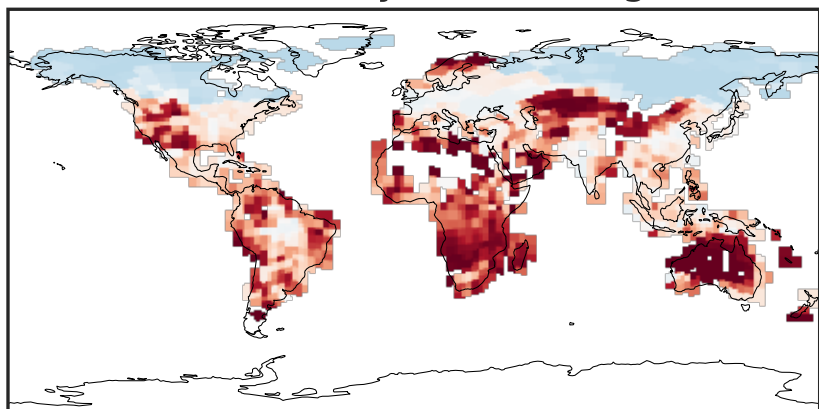
-4 0 4  
kg/m2/s 1e-12

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



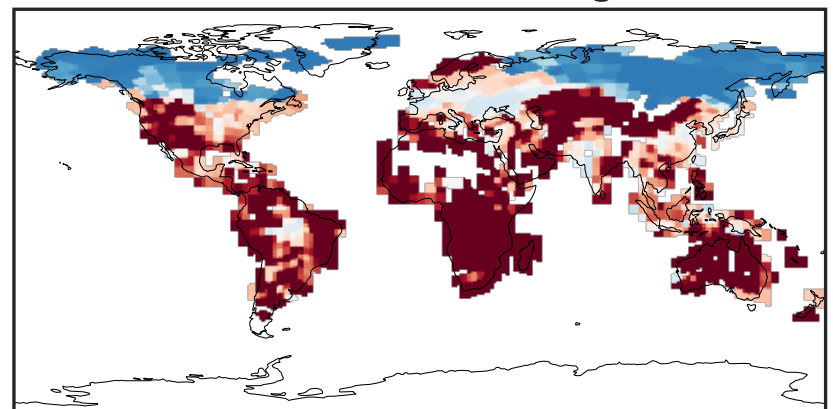
-2 0 2  
kg/m2/s 1e-15

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



0.163 0.581 1.000 3.572 6.143  
unitless

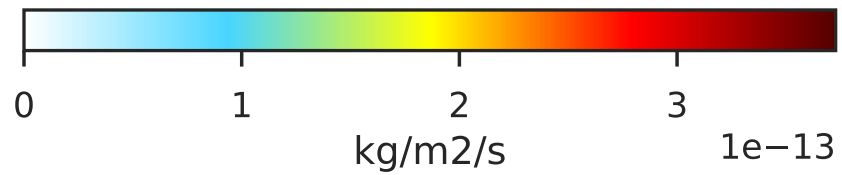
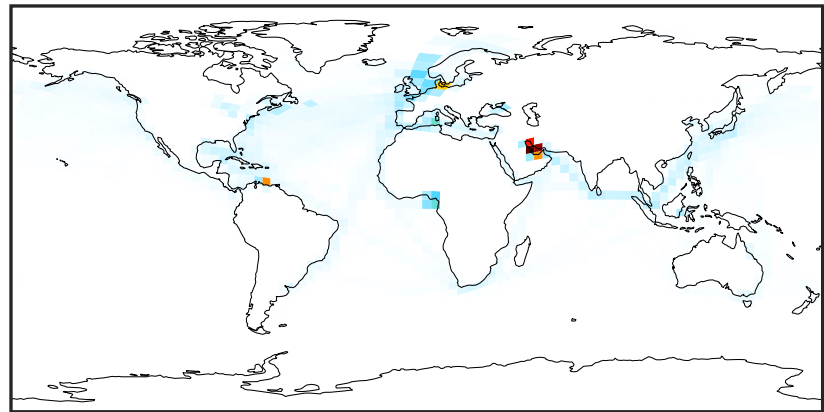
Ratio (1x1.25)  
Dev/Ref, Fixed Range



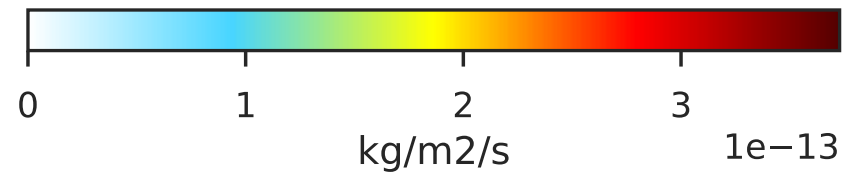
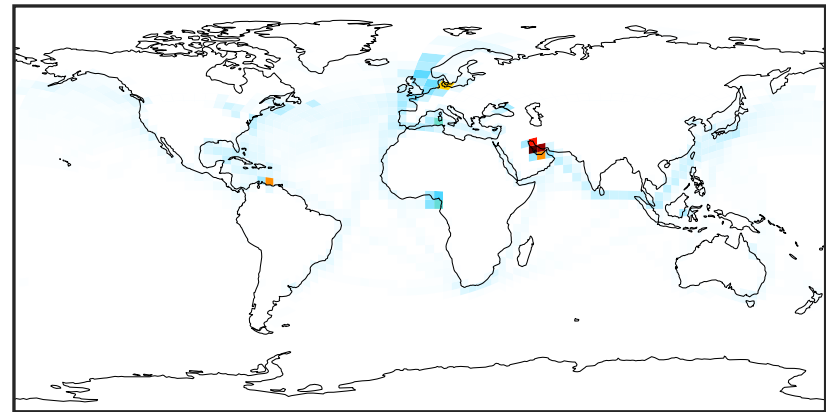
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisXYLE\_Ship (Jul2019)

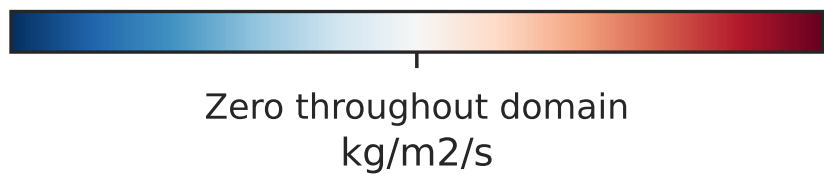
GCHP\_14.0.0 (Ref)  
c24



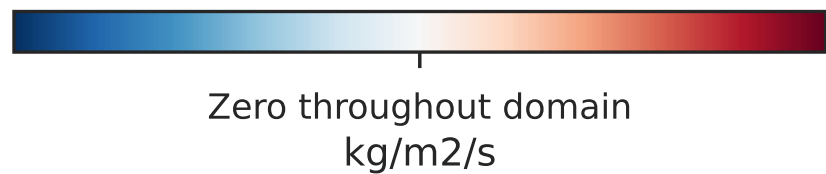
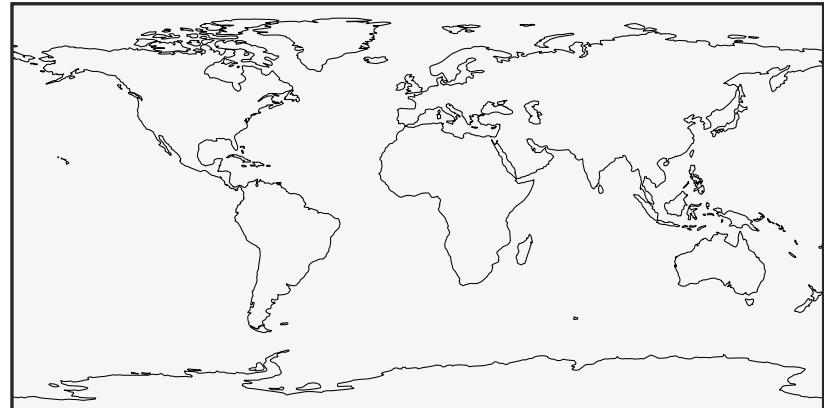
GCHP\_14.2.0 (Dev)  
c24



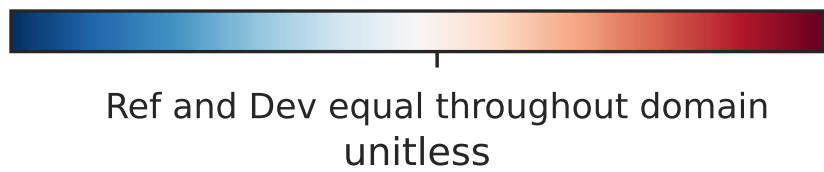
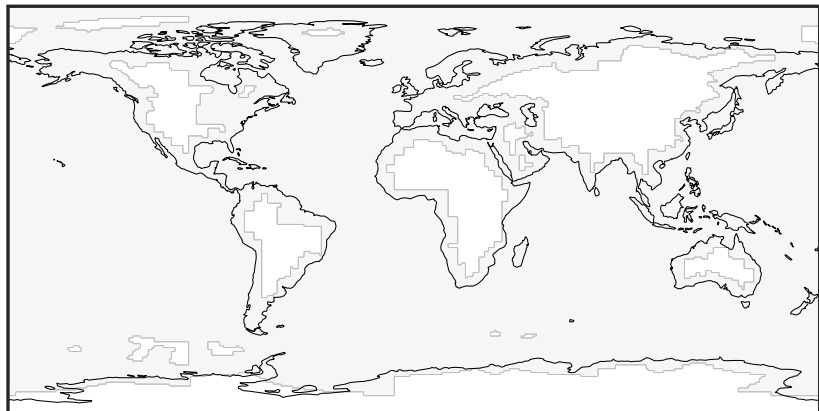
Difference (1x1.25)  
Dev - Ref, Dynamic Range



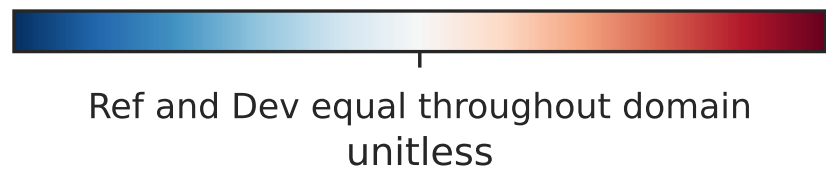
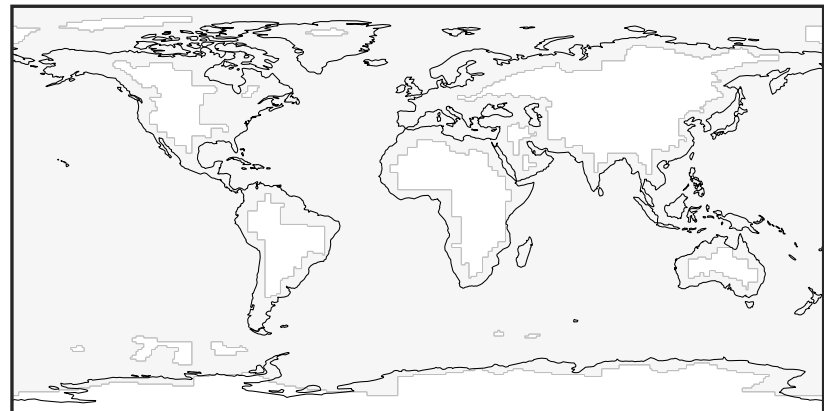
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

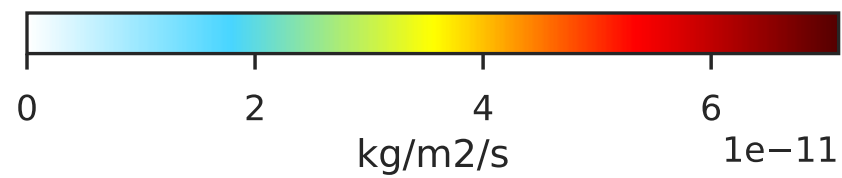
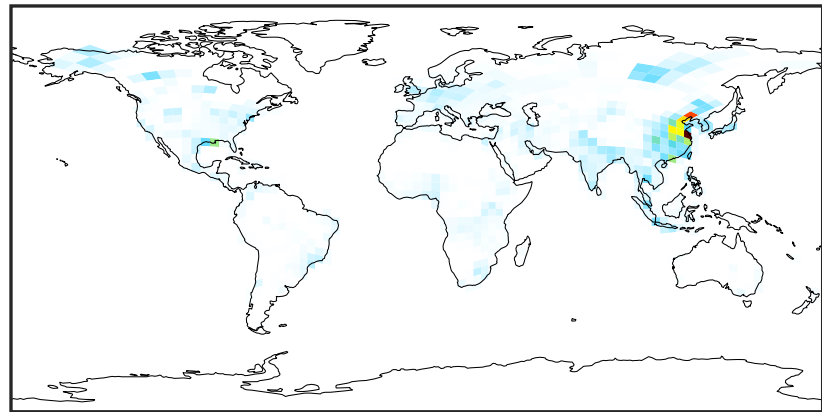


Ratio (1x1.25)  
Dev/Ref, Fixed Range

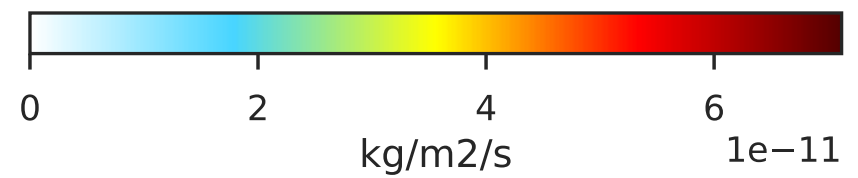
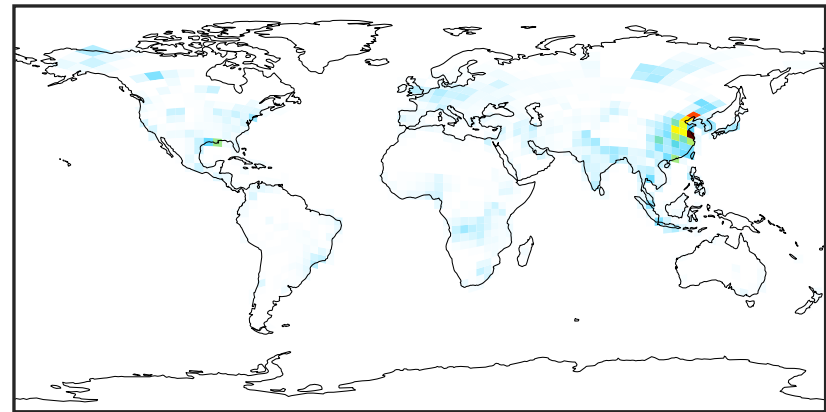


# EmisXYLE\_Total (Jul2019)

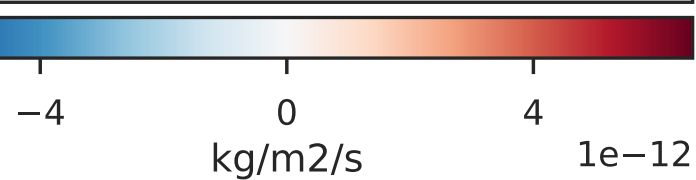
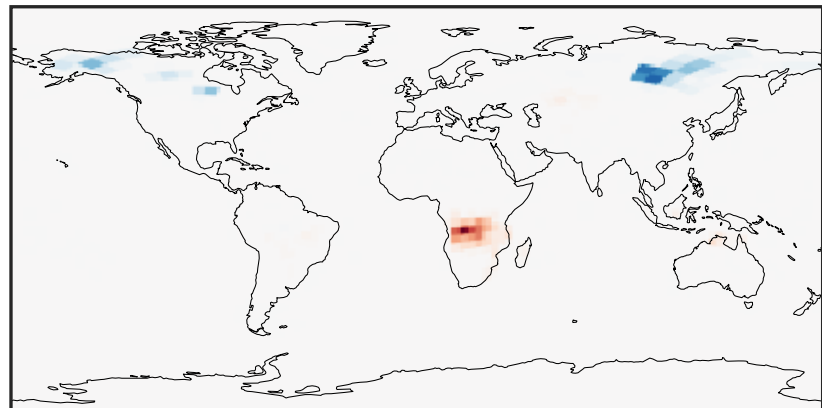
GCHP\_14.0.0 (Ref)  
c24



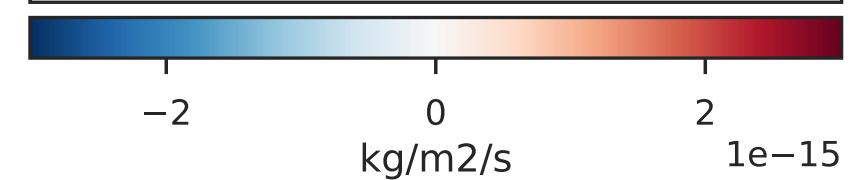
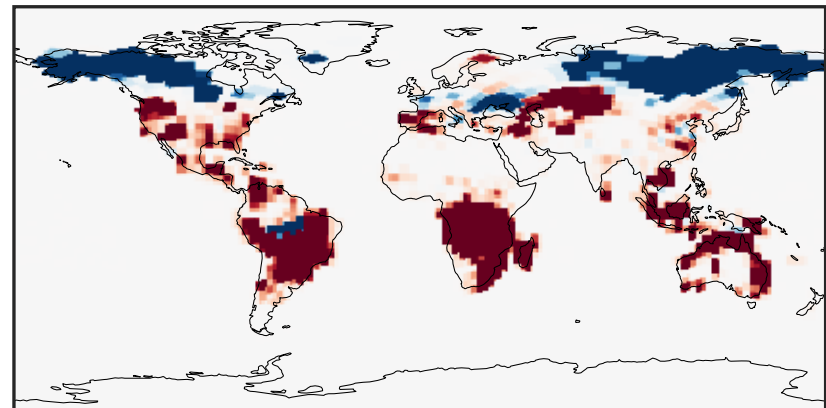
GCHP\_14.2.0 (Dev)  
c24



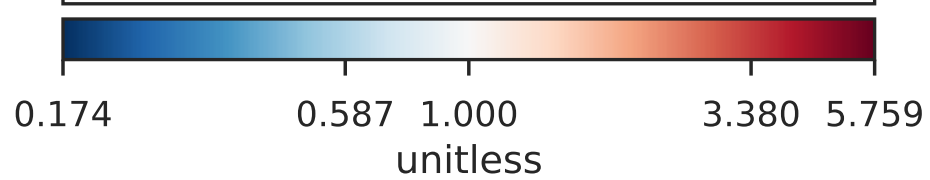
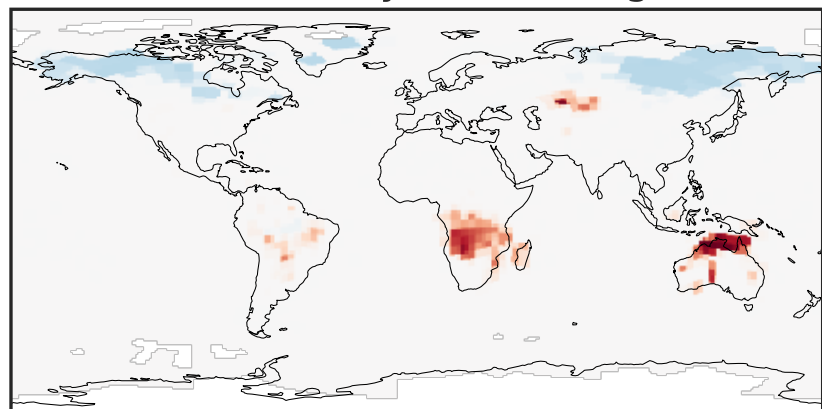
Difference (1x1.25)  
Dev - Ref, Dynamic Range



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



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



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

