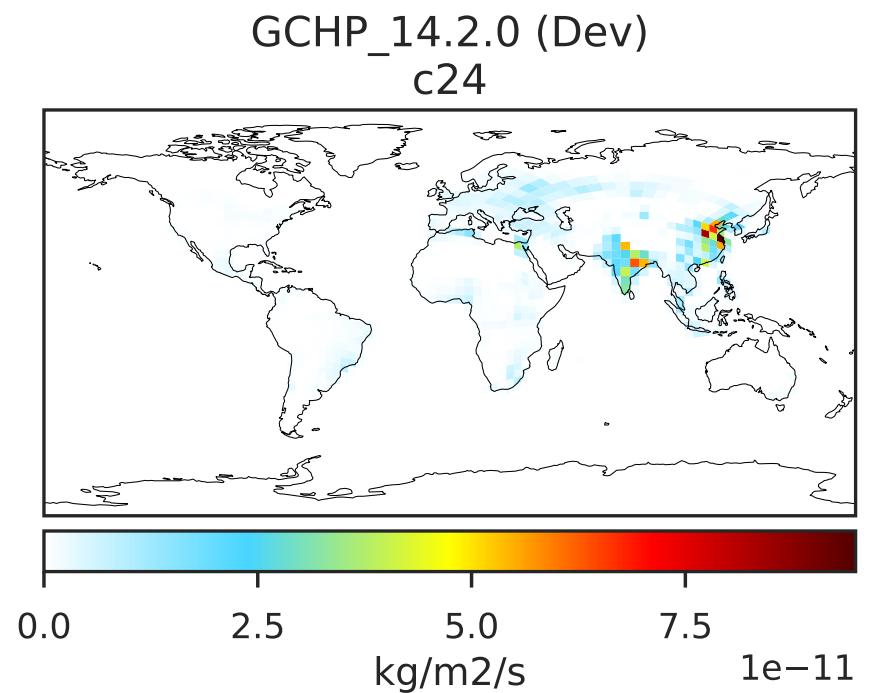
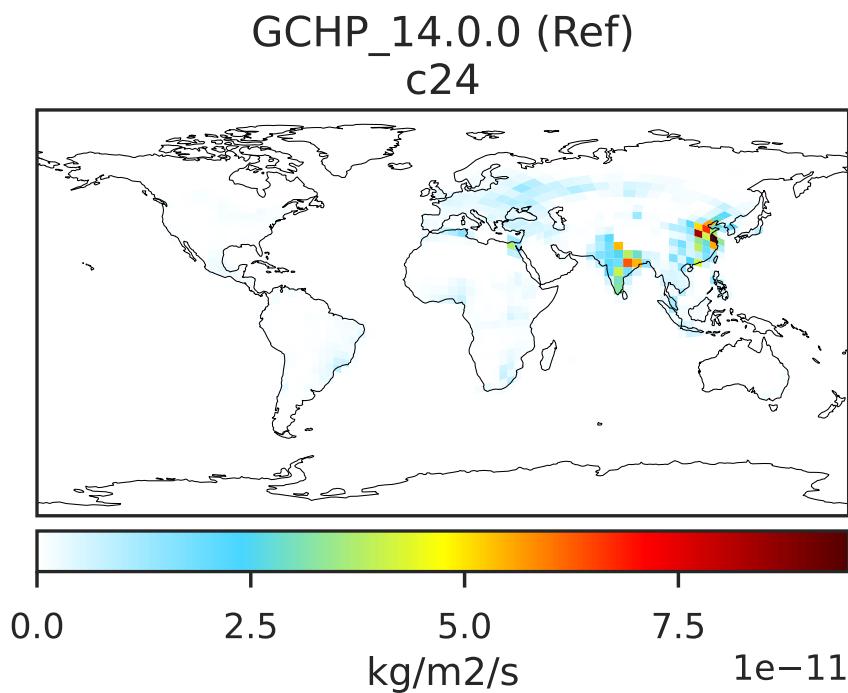
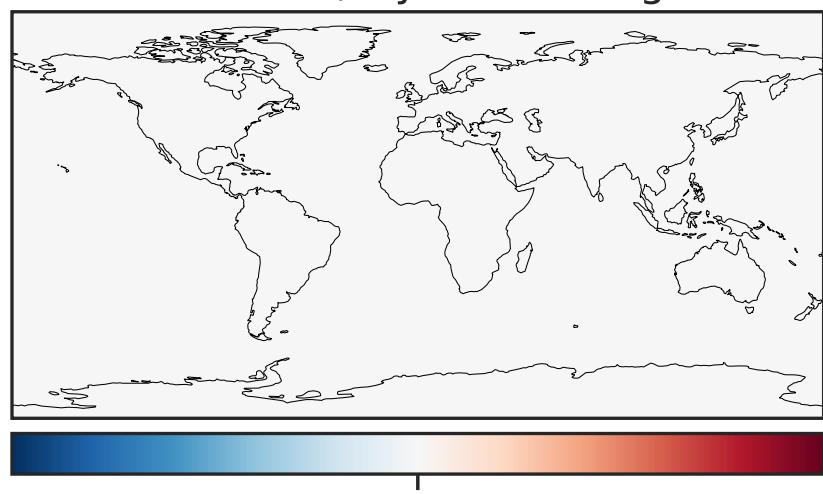


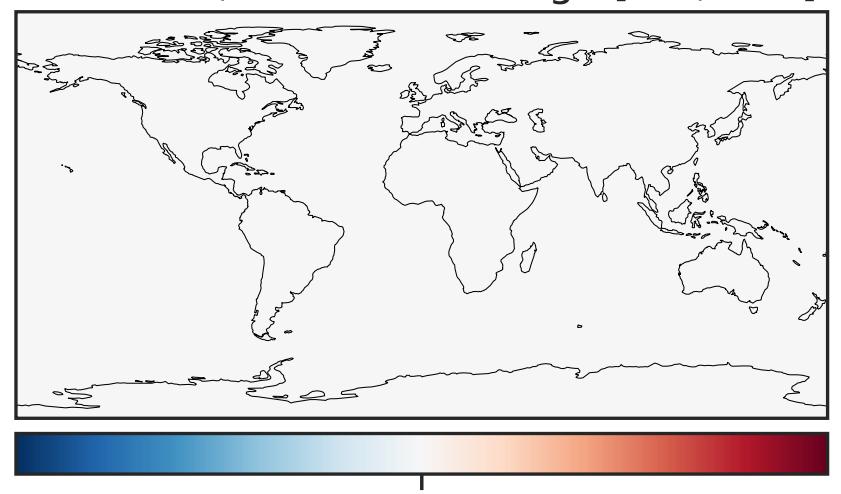
# EmisDST1\_Anthro (AnnualMean)



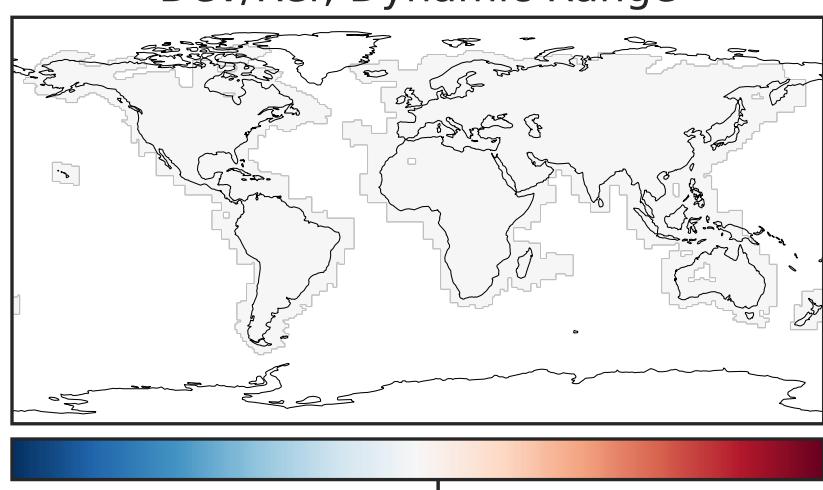
Difference (1x1.25)  
Dev - Ref, Dynamic Range



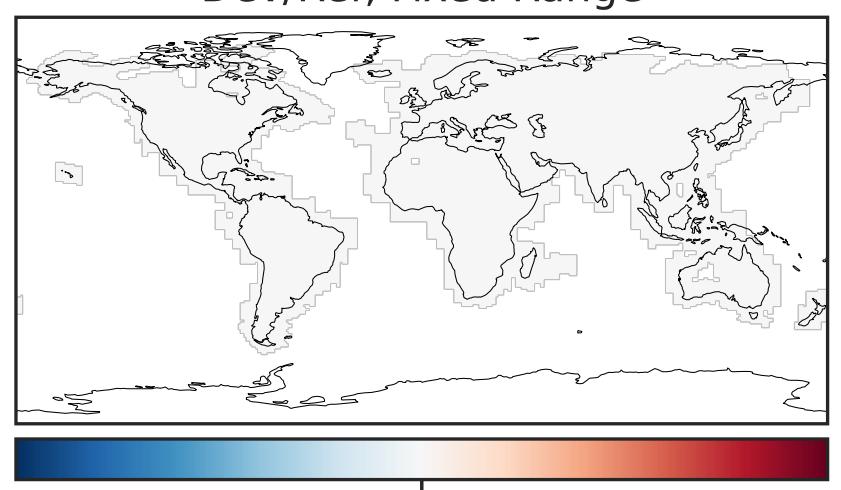
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



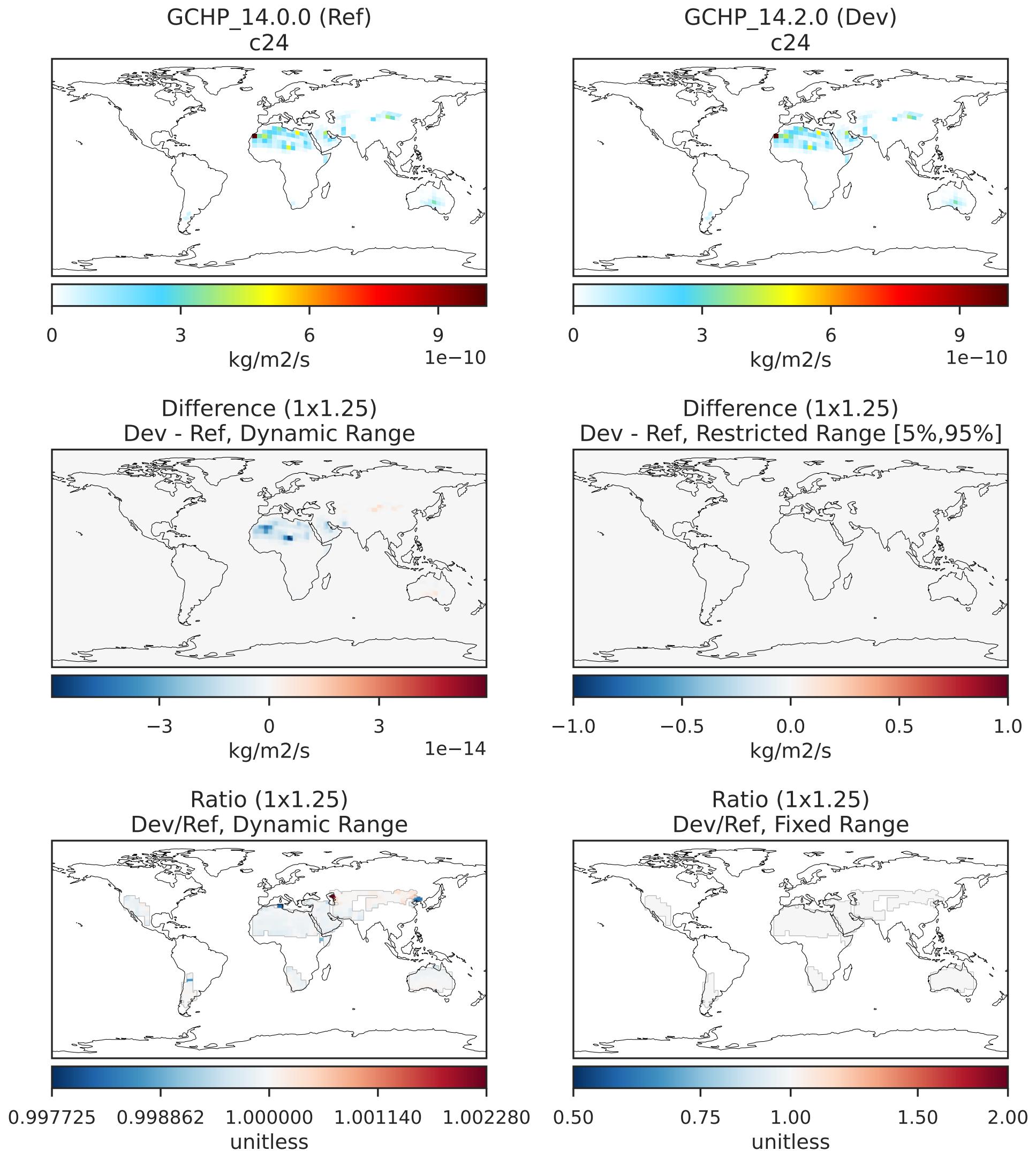
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



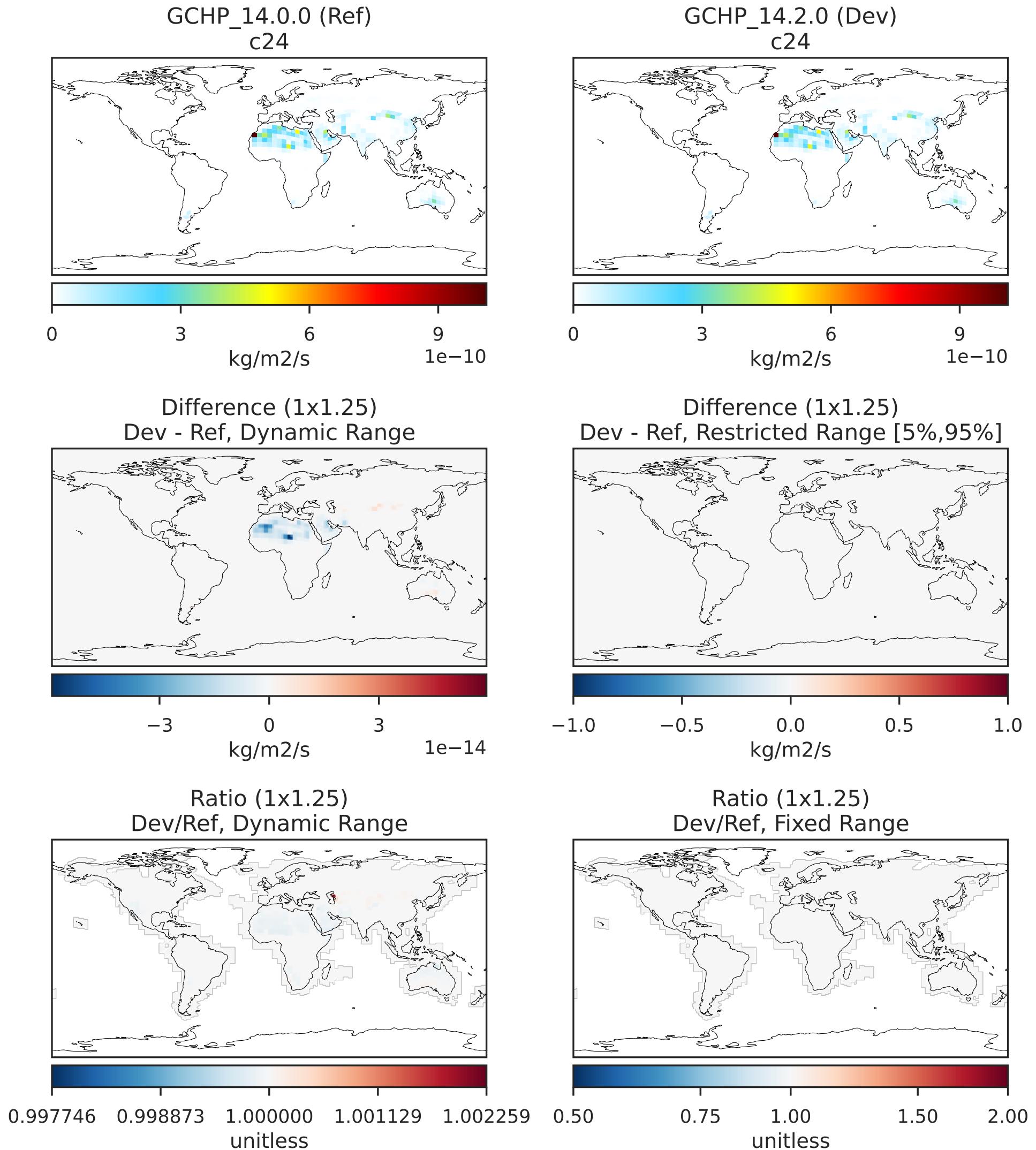
Ratio (1x1.25)  
Dev/Ref, Fixed Range



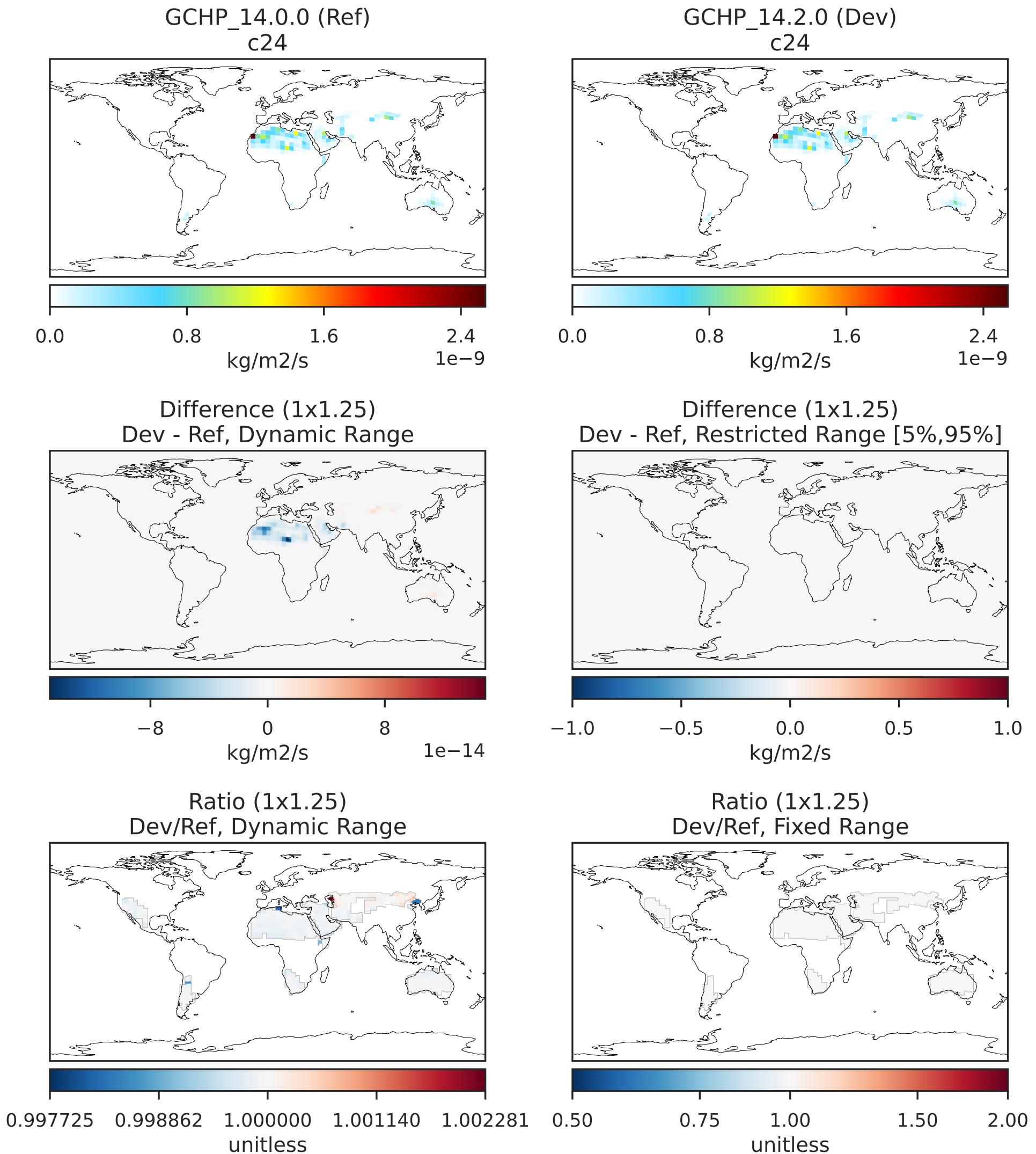
# EmisDST1\_Natural (AnnualMean)



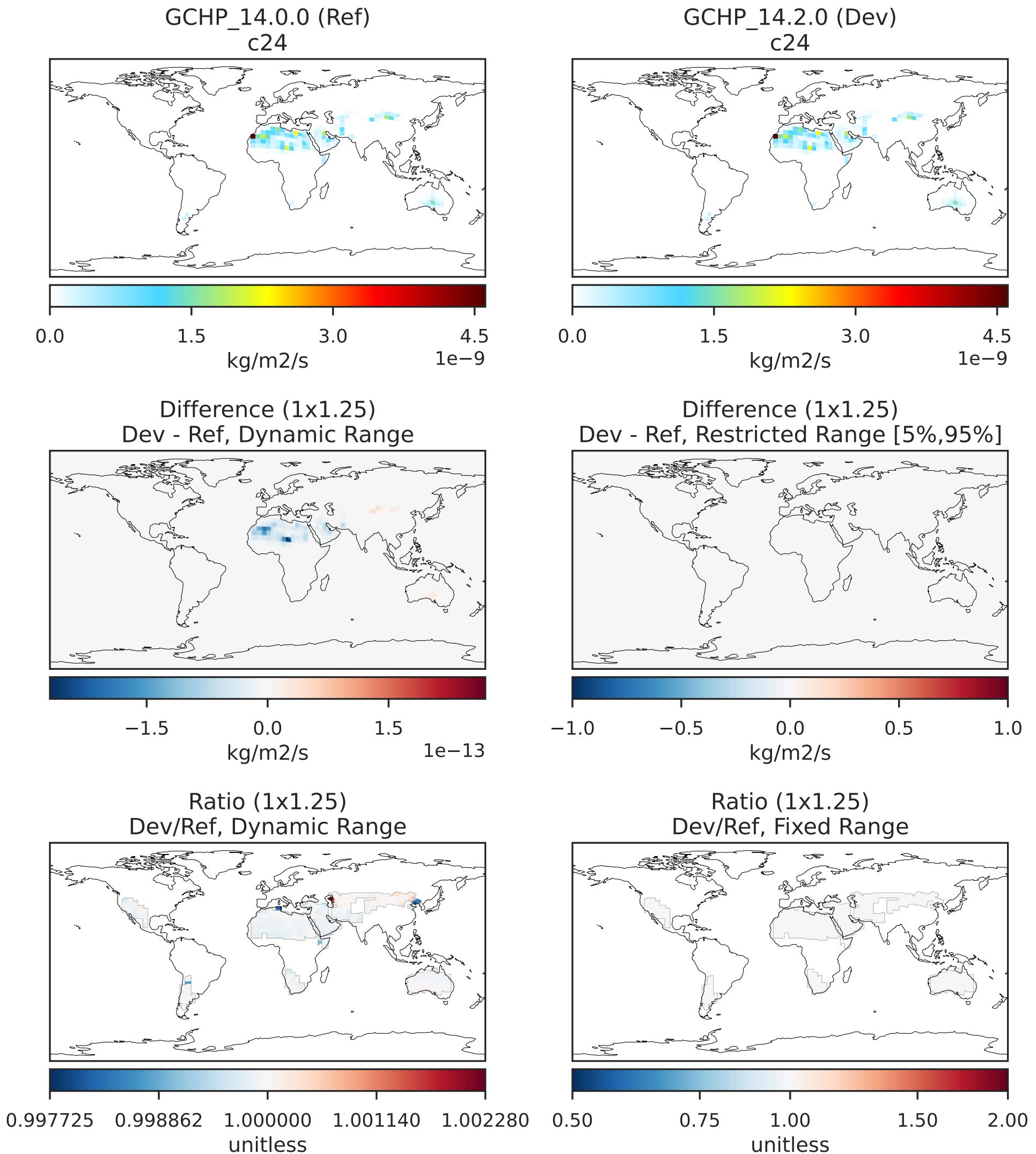
# EmisDST1\_Total (AnnualMean)



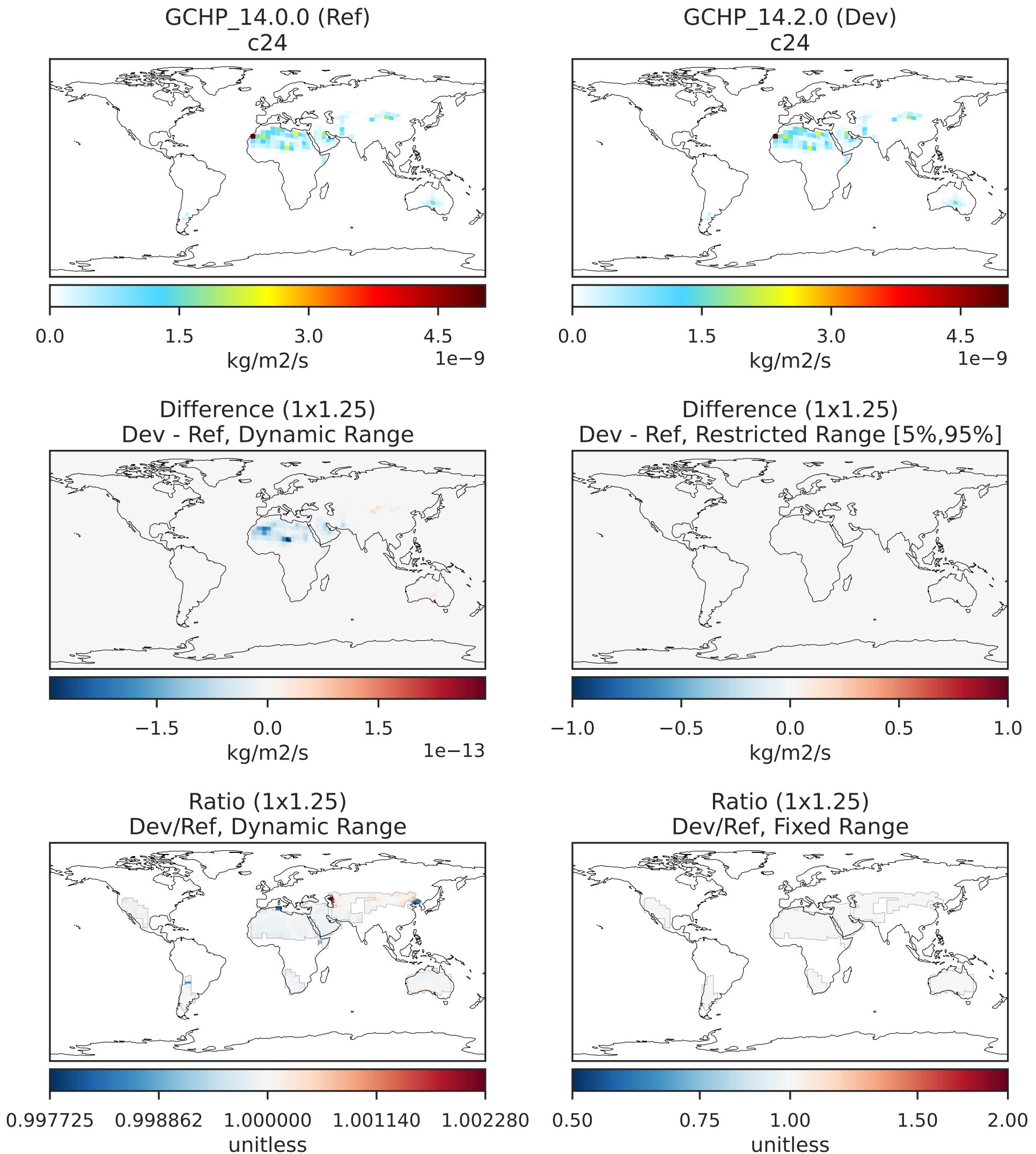
# EmisDST2\_Natural (AnnualMean)



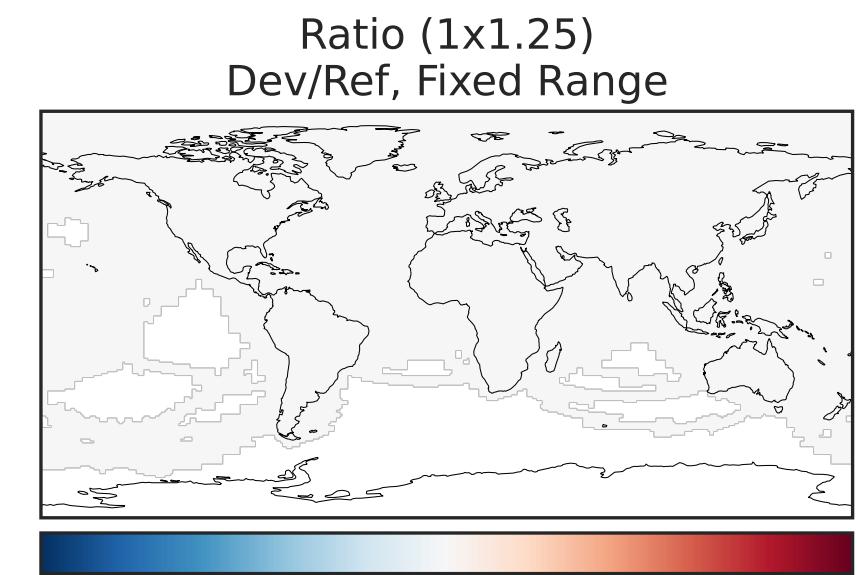
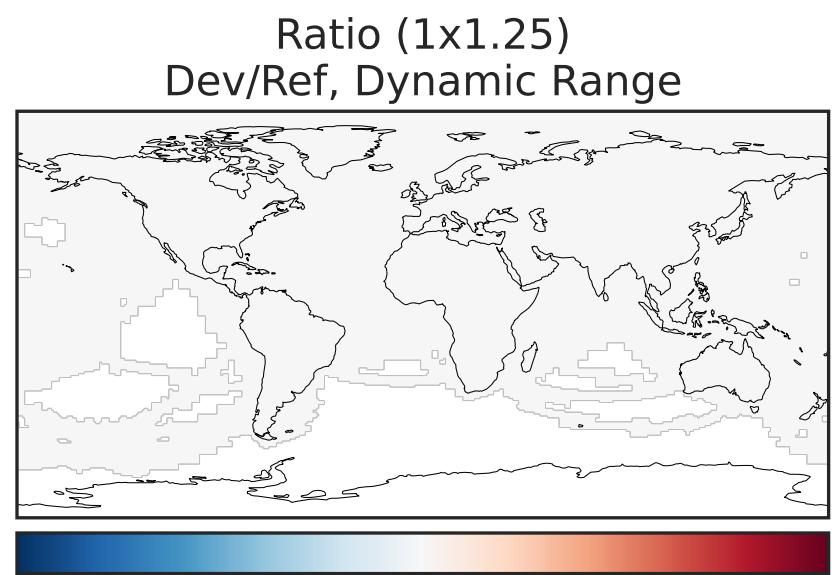
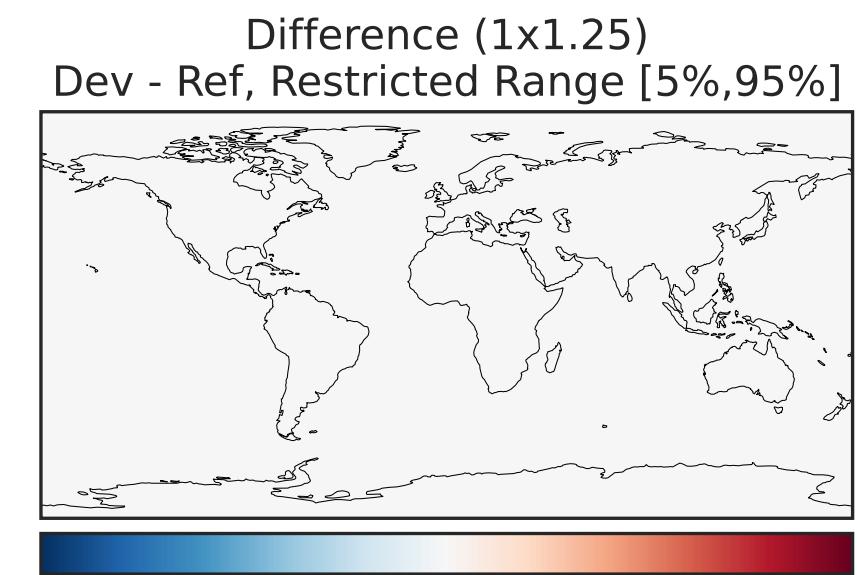
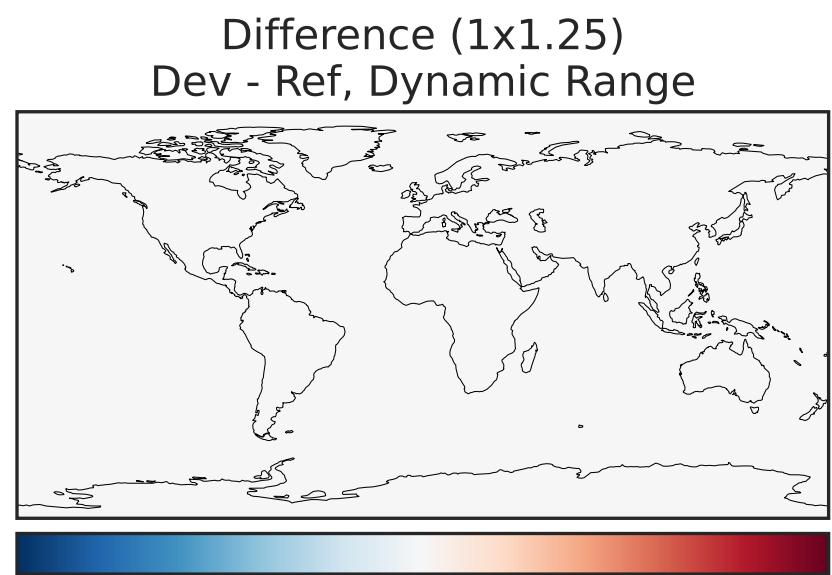
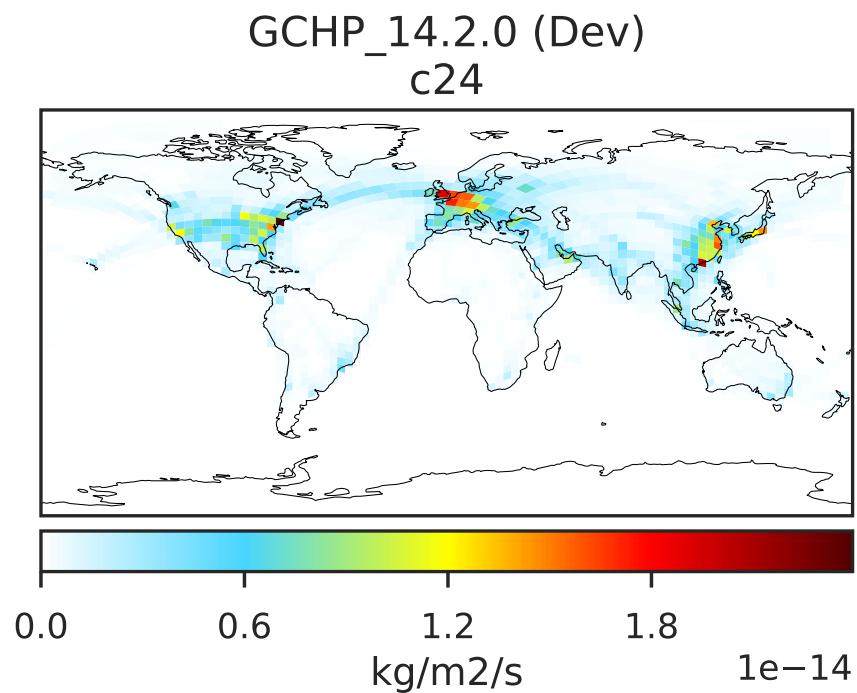
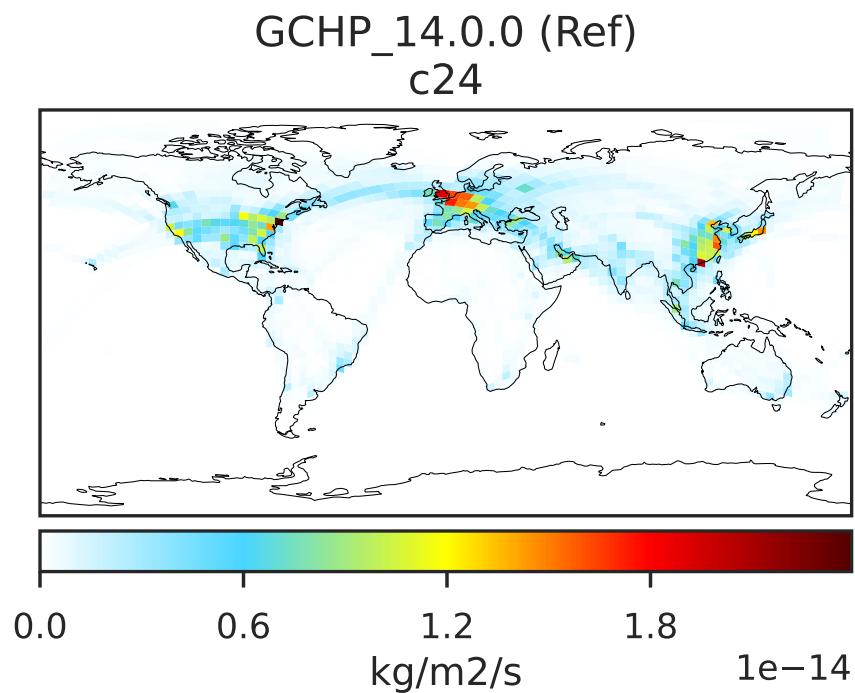
# EmisDST3\_Natural (AnnualMean)



# EmisDST4\_Natural (AnnualMean)

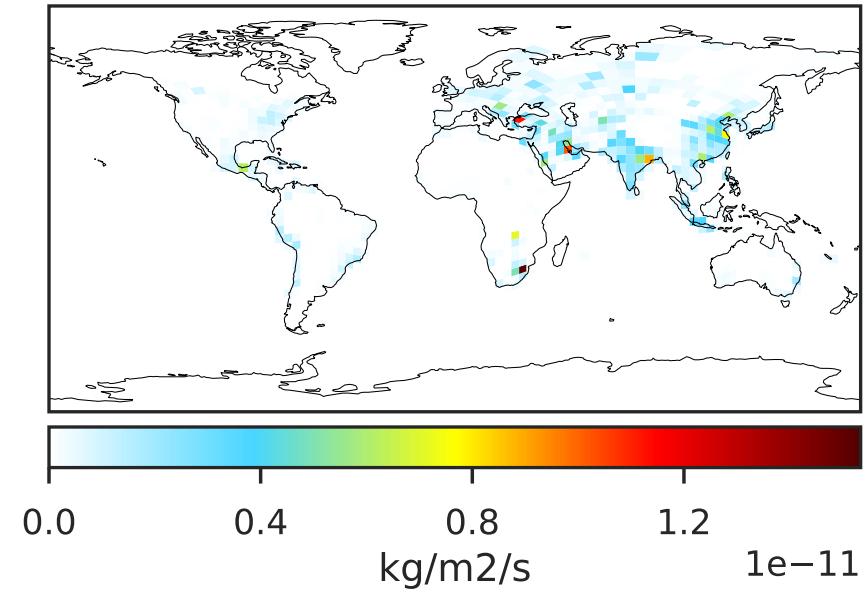


# EmisSO4\_Aircraft (AnnualMean)

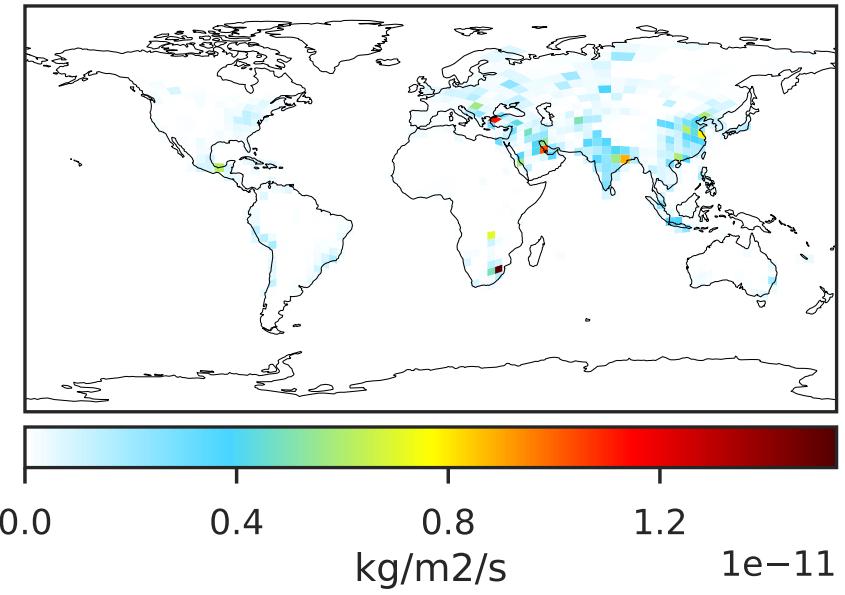


# EmisSO4\_Anthro (AnnualMean)

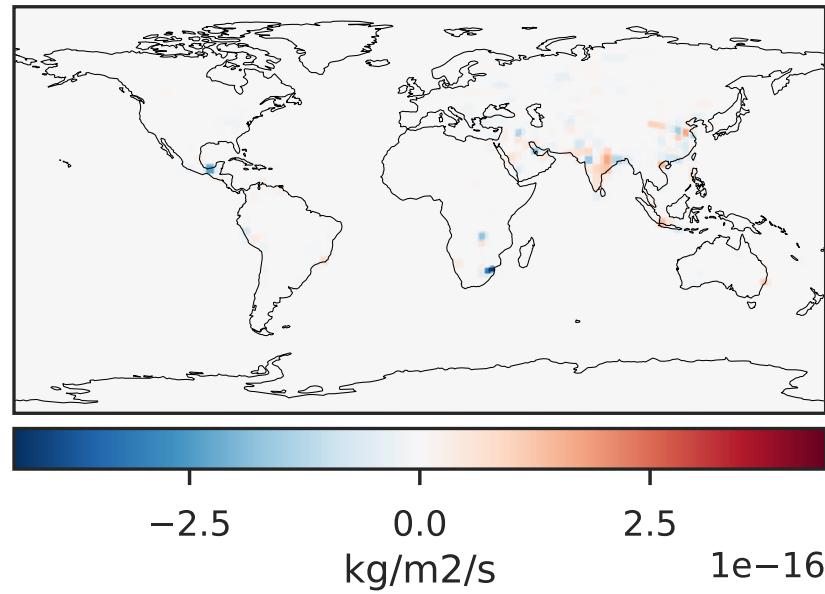
GCHP\_14.0.0 (Ref)  
c24



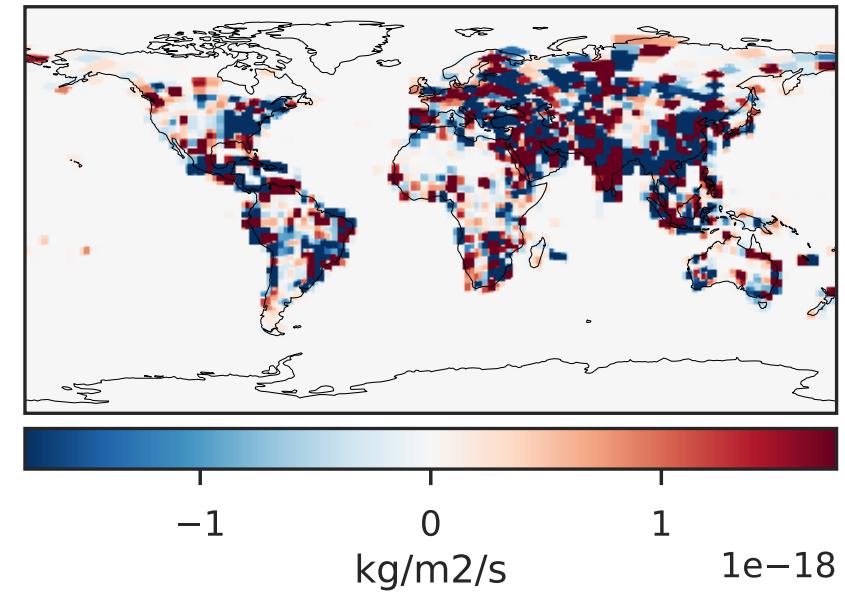
GCHP\_14.2.0 (Dev)  
c24



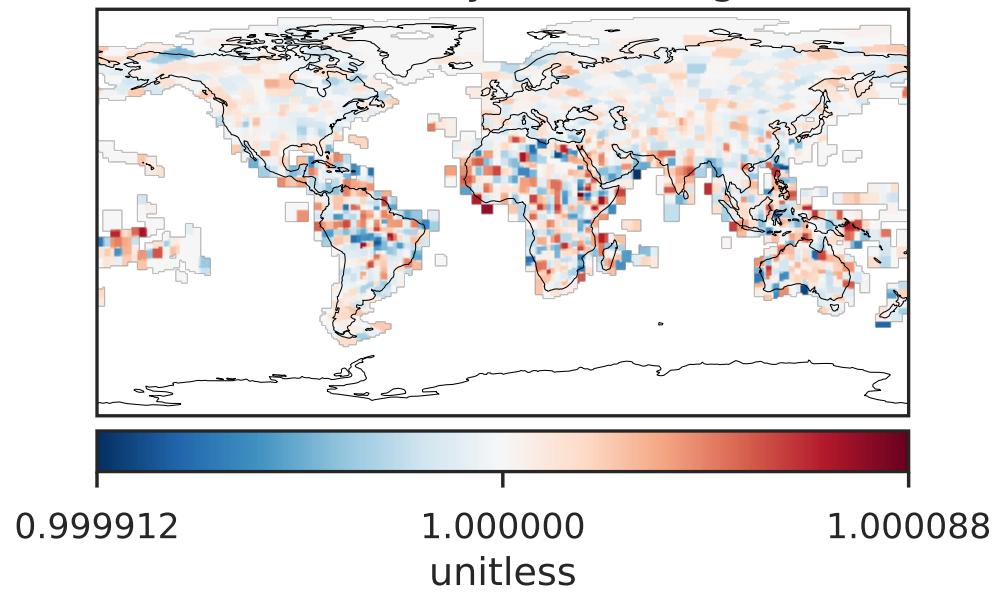
Difference (1x1.25)  
Dev - Ref, Dynamic Range



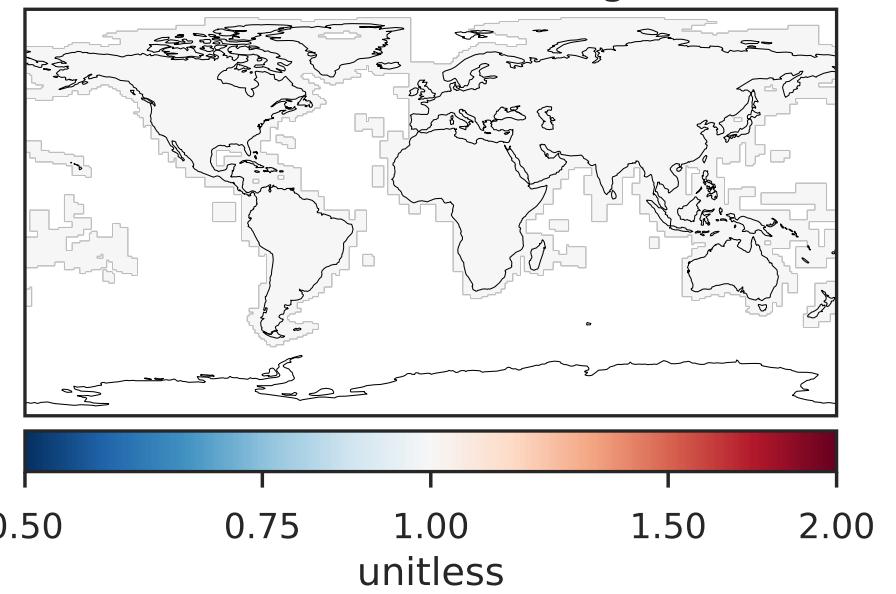
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



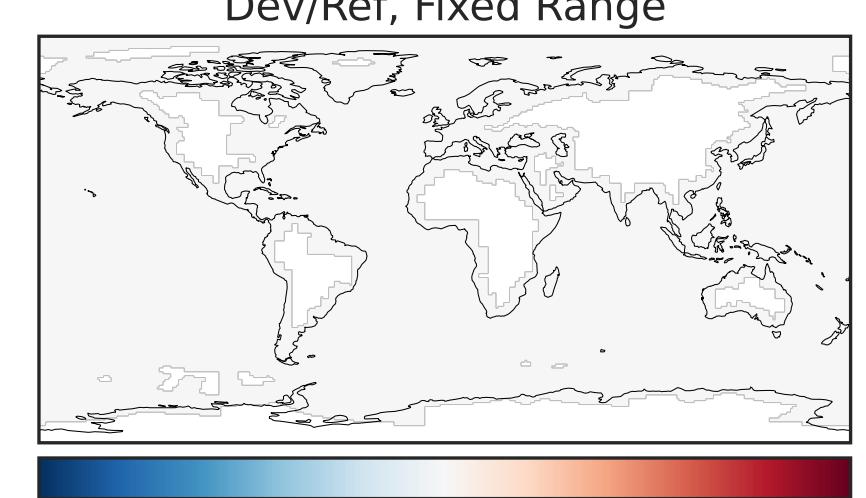
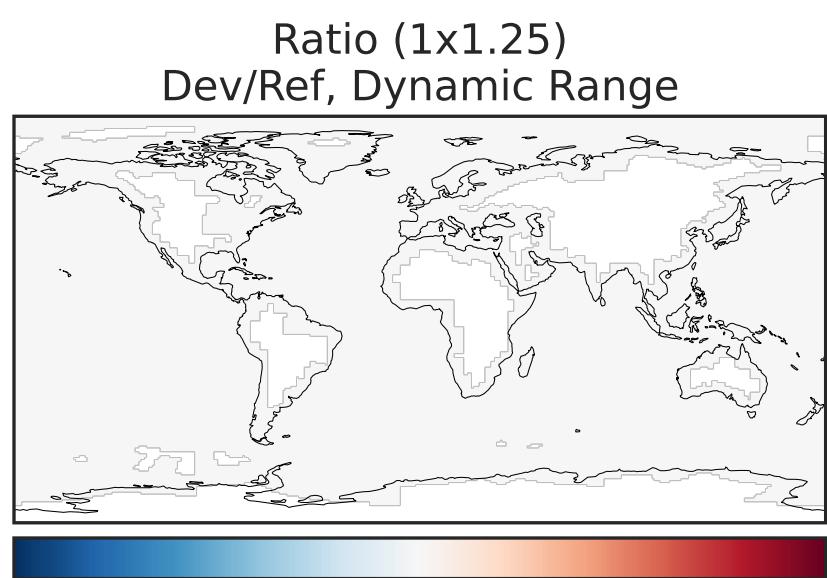
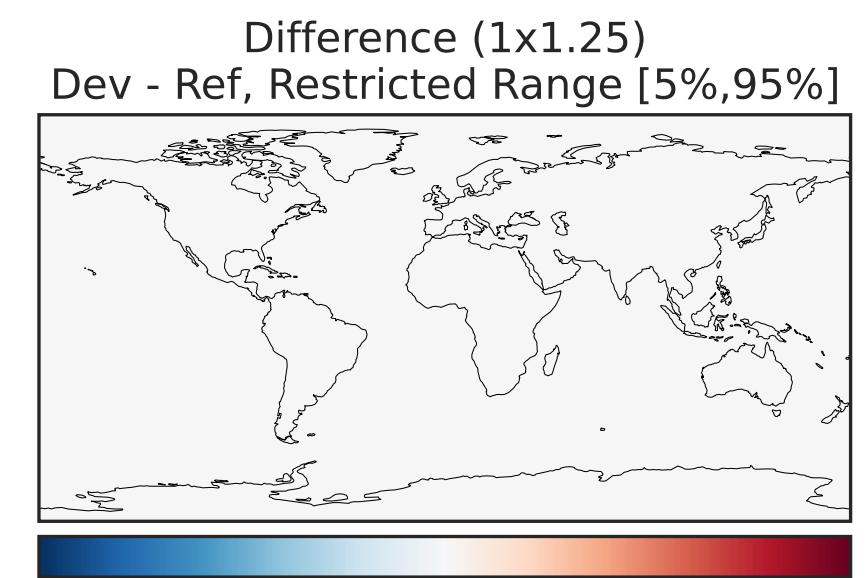
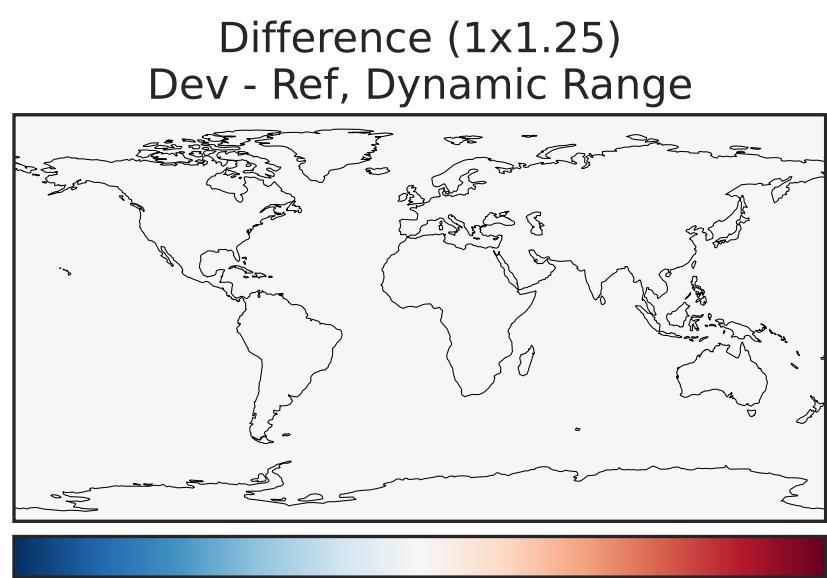
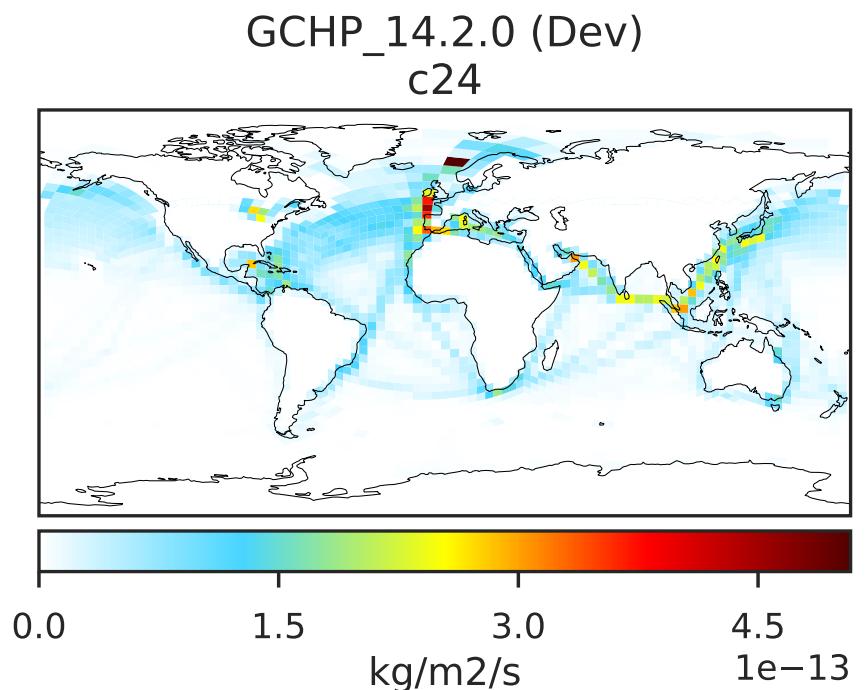
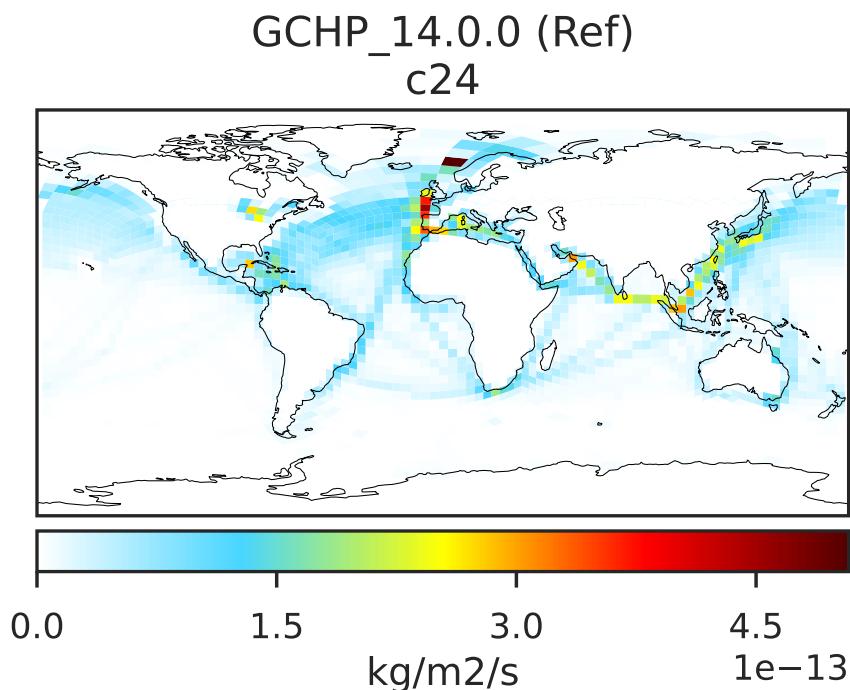
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



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

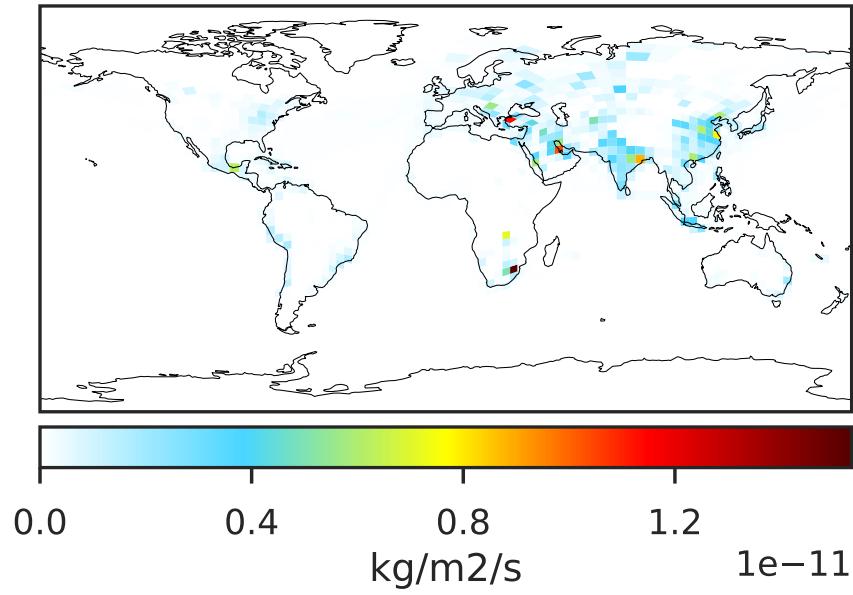


# EmisSO4\_Ship (AnnualMean)

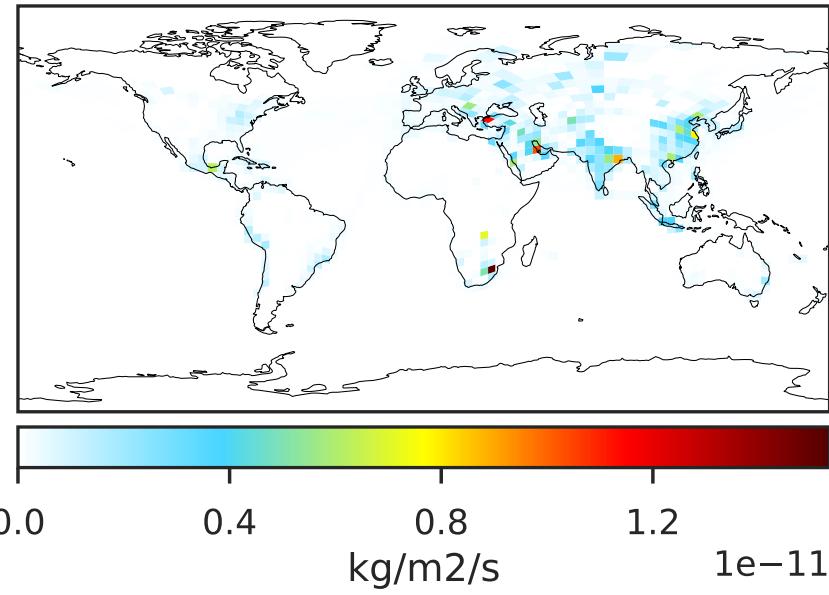


# EmisSO4\_Total (AnnualMean)

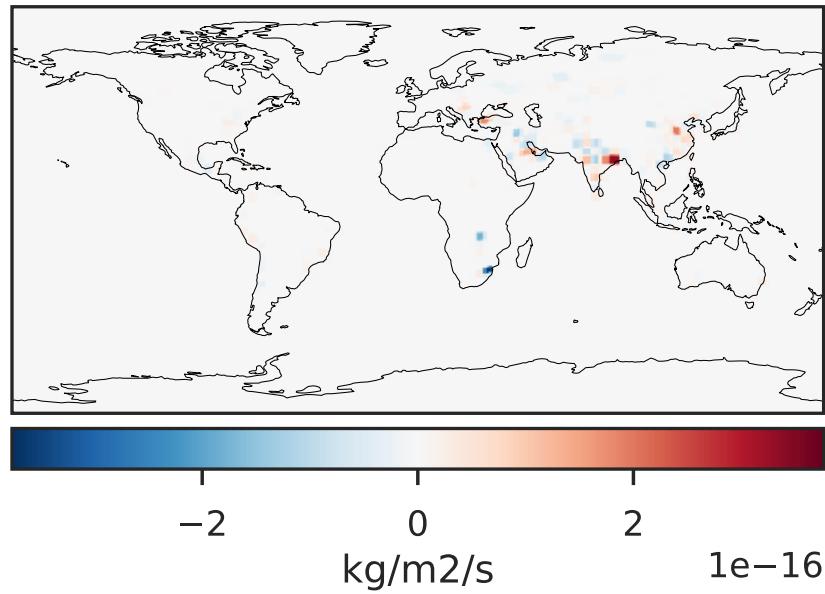
GCHP\_14.0.0 (Ref)  
c24



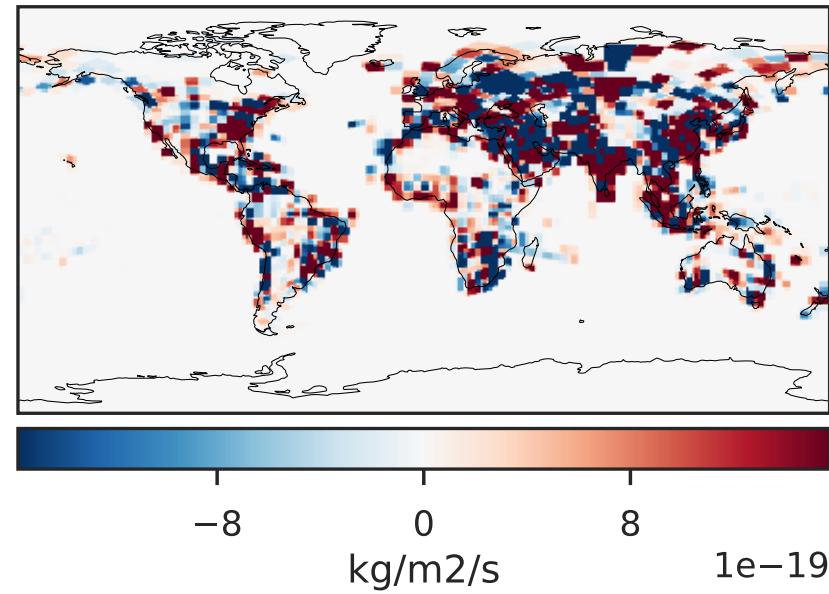
GCHP\_14.2.0 (Dev)  
c24



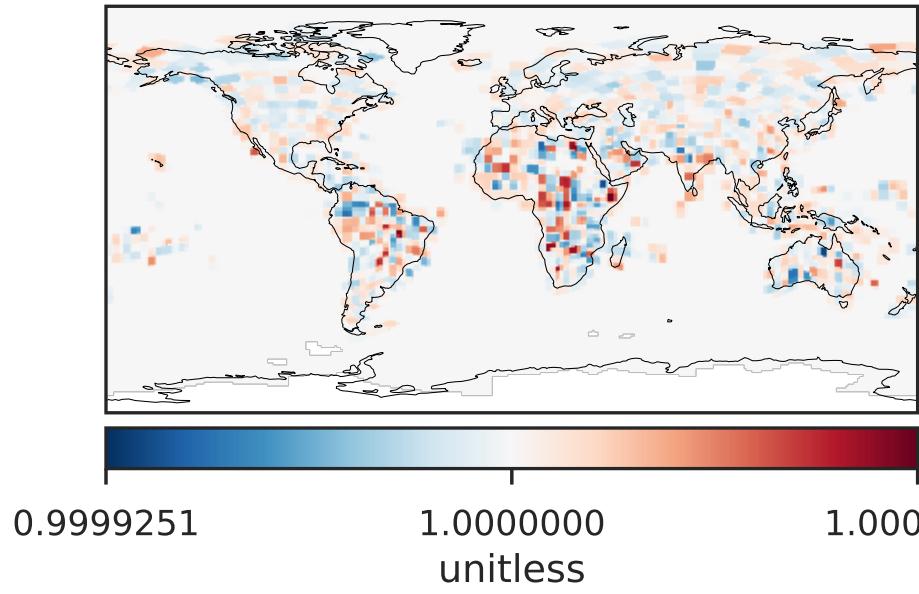
Difference (1x1.25)  
Dev - Ref, Dynamic Range



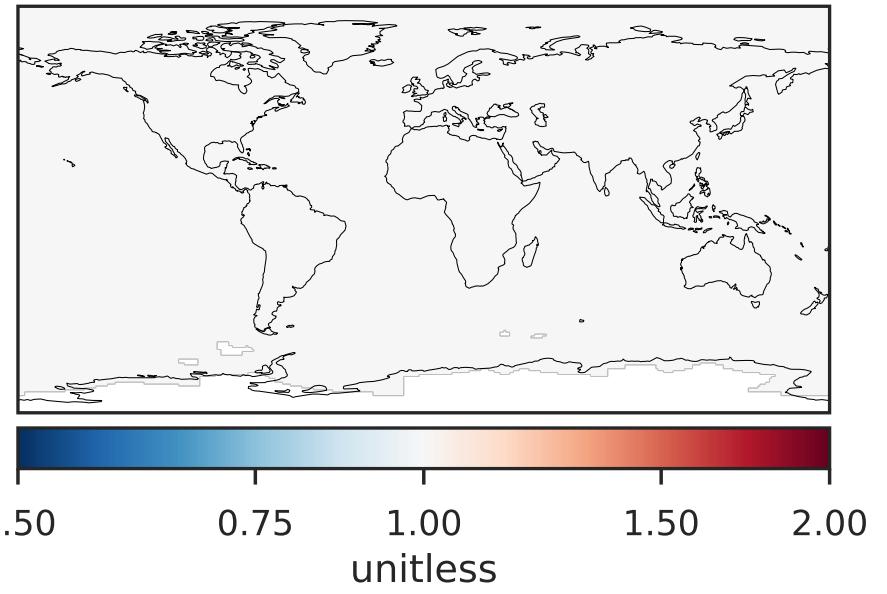
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



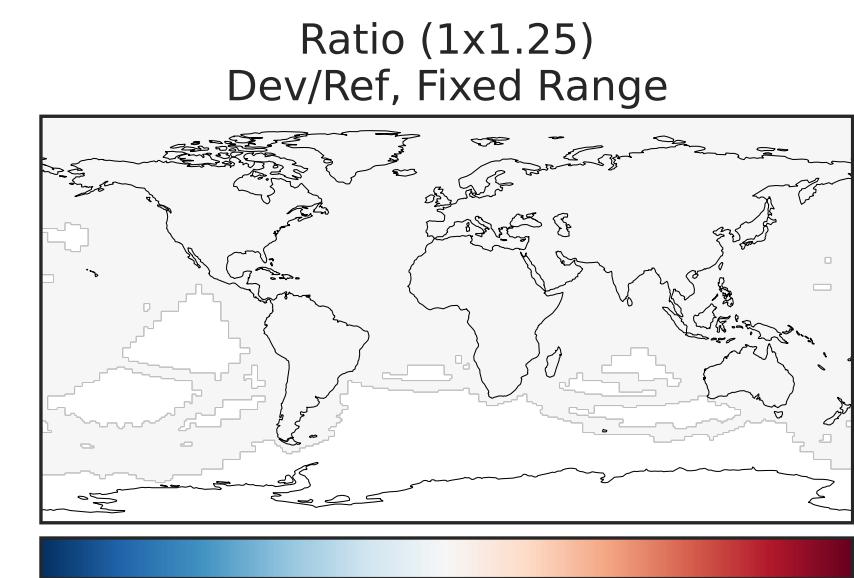
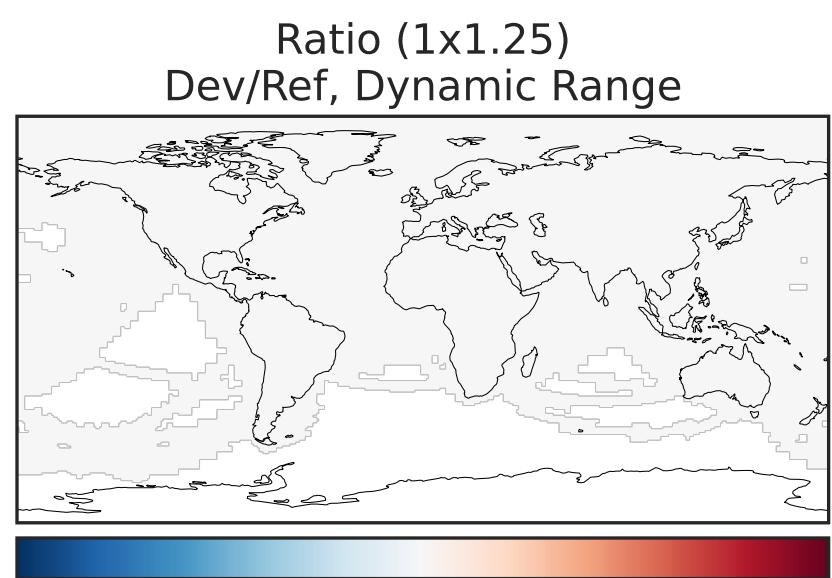
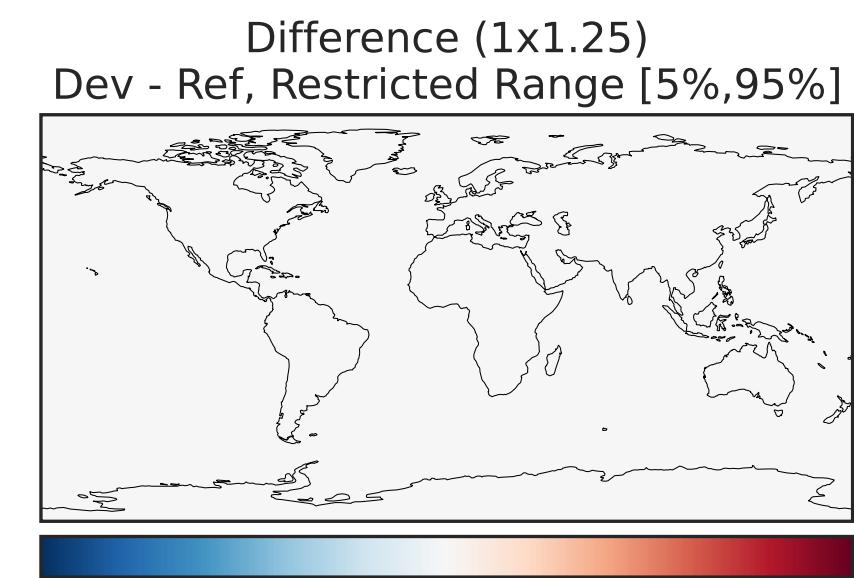
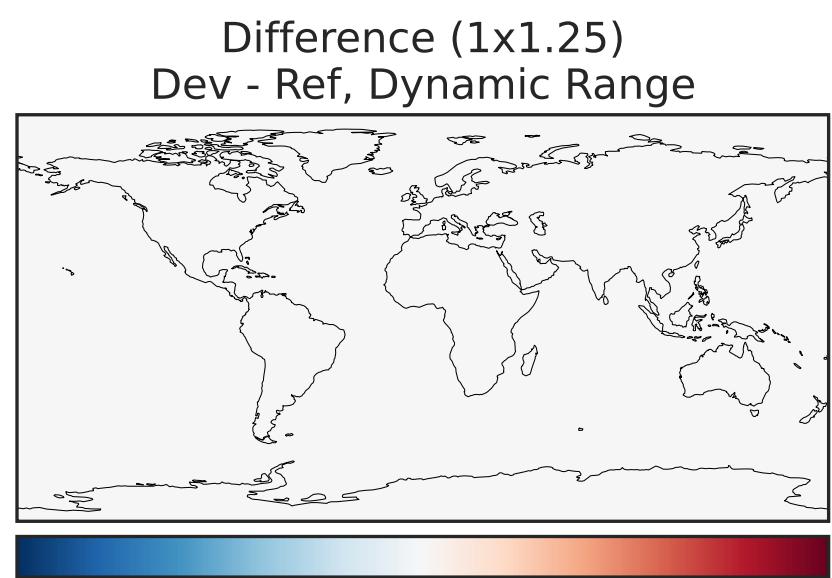
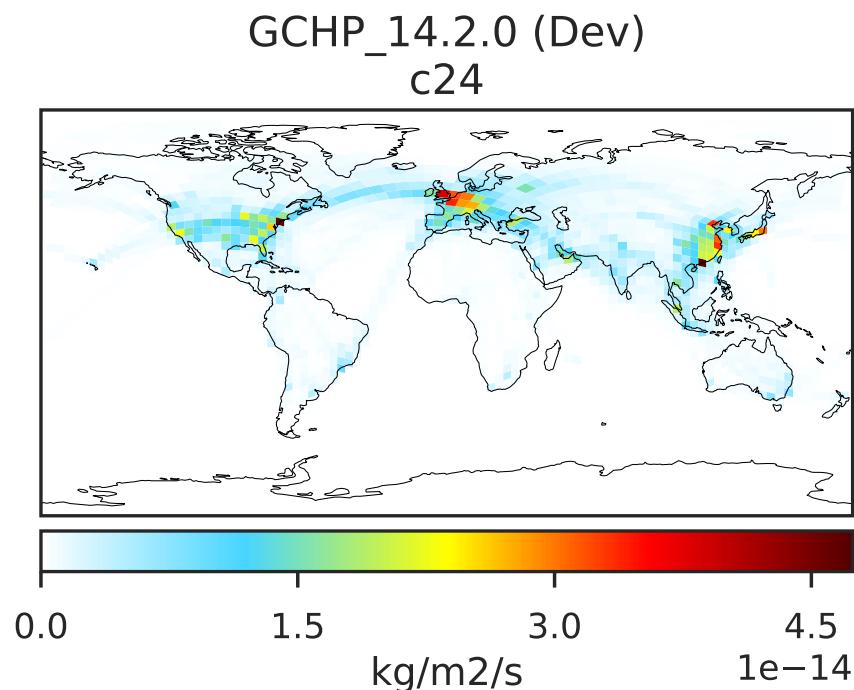
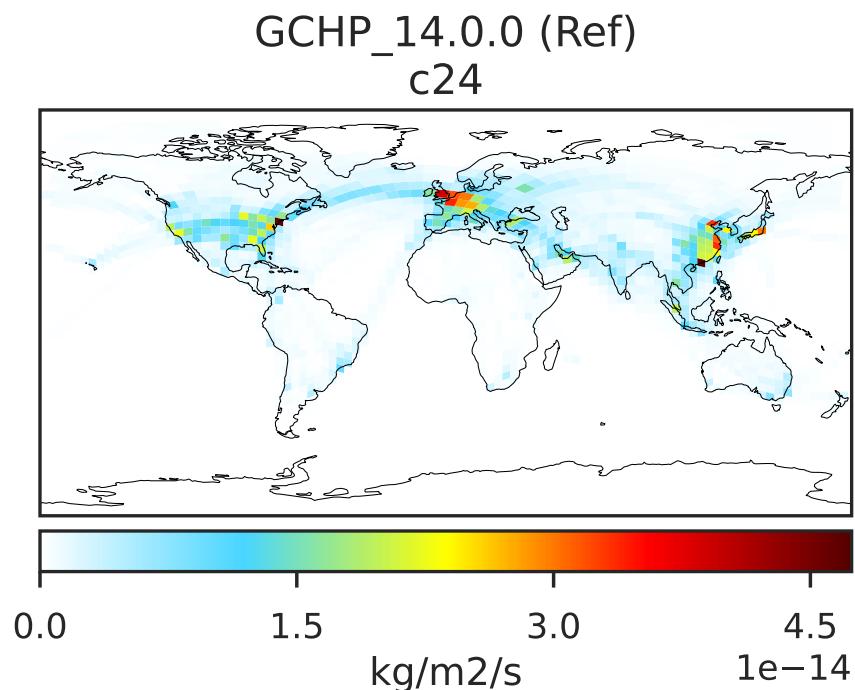
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



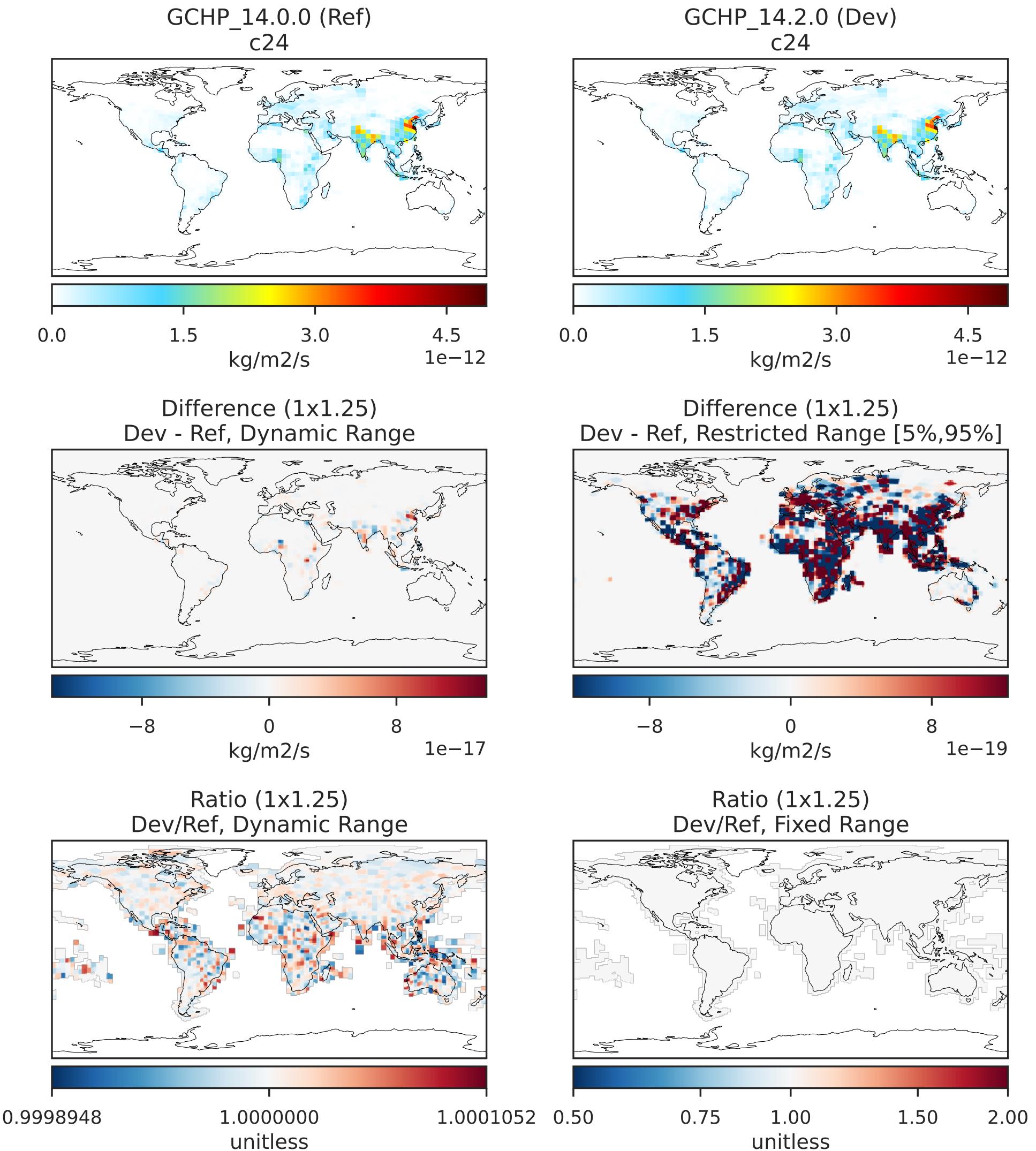
Ratio (1x1.25)  
Dev/Ref, Fixed Range



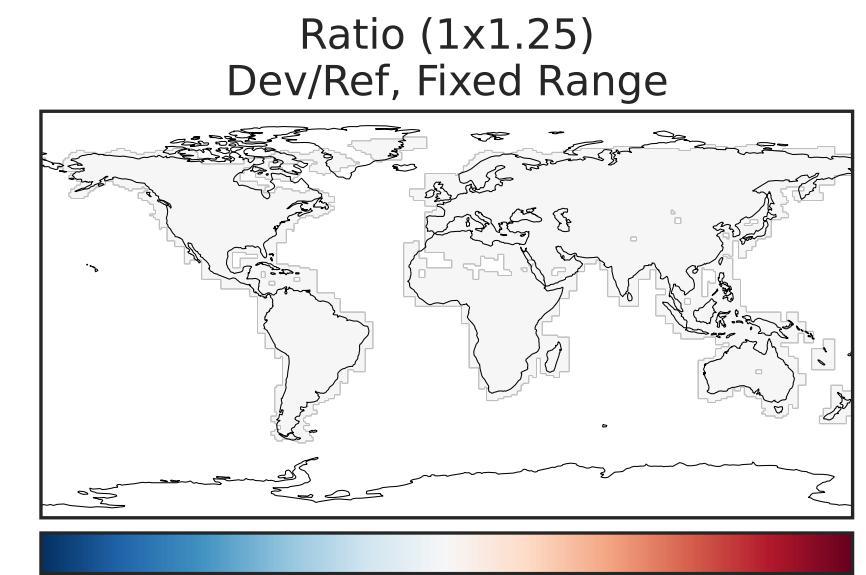
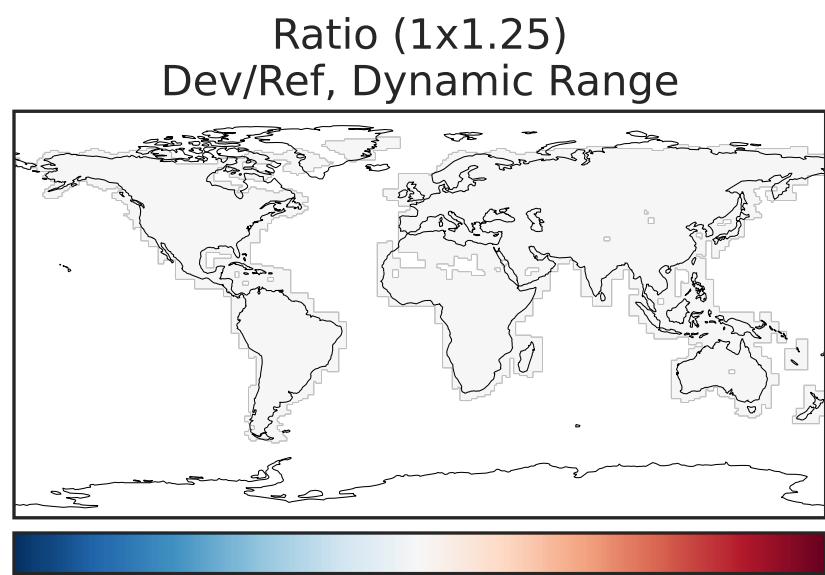
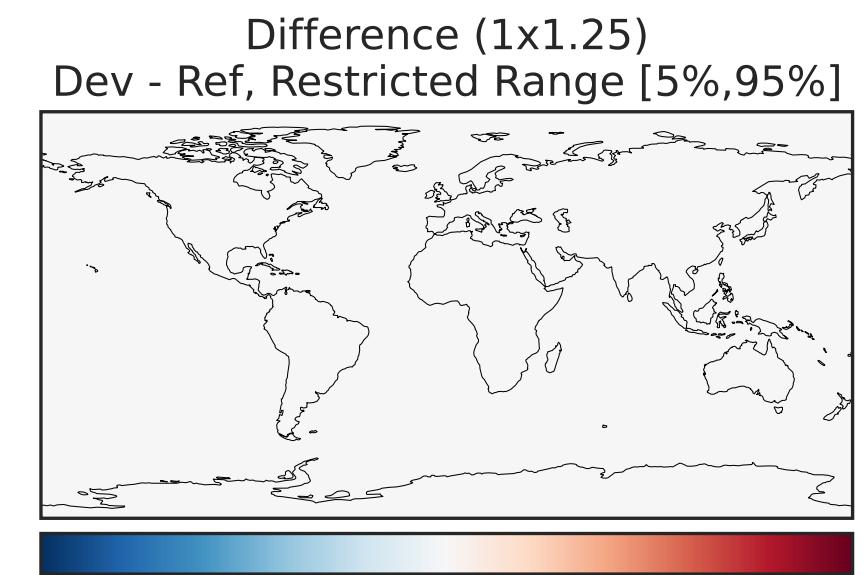
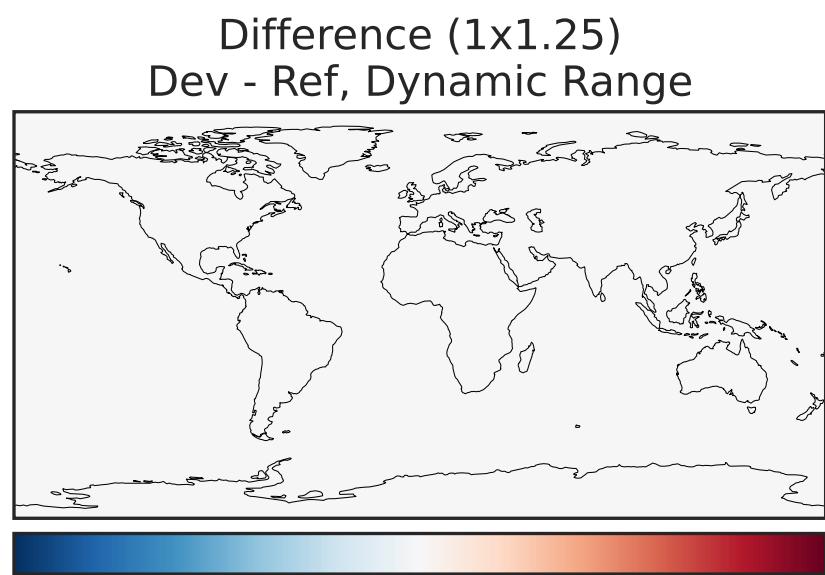
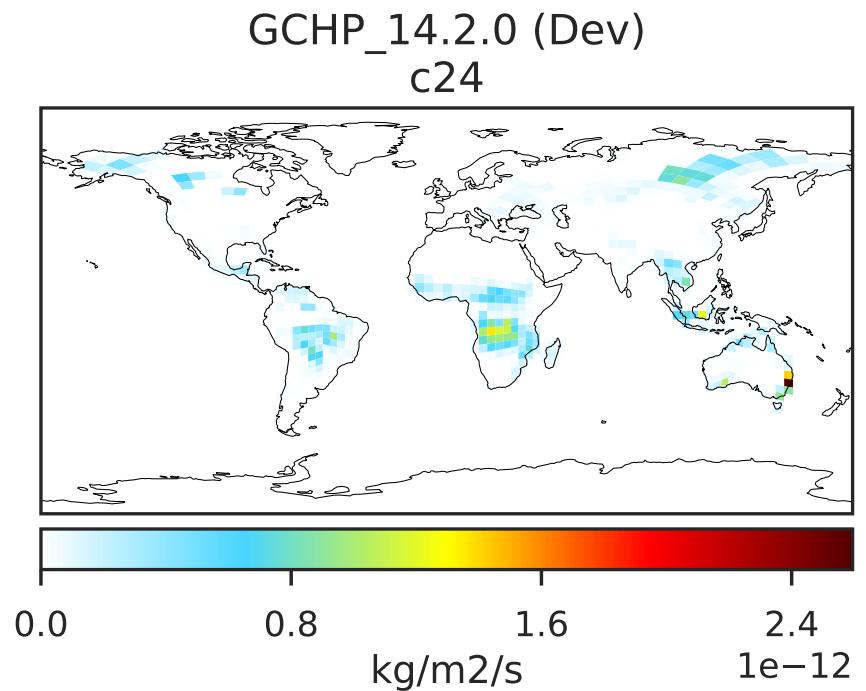
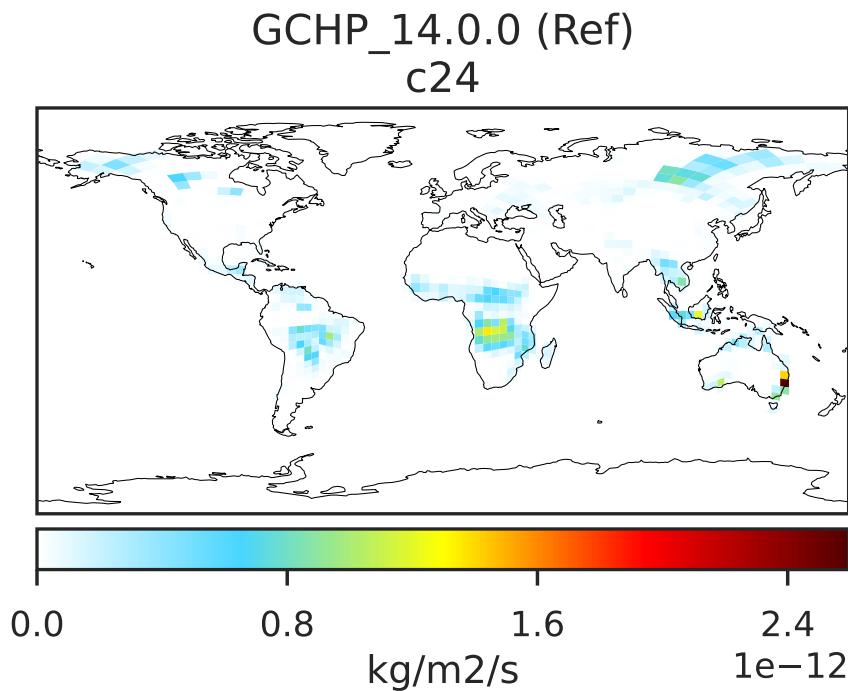
# EmisBCPI\_Aircraft (AnnualMean)



# EmisBCPI\_Anthro (AnnualMean)

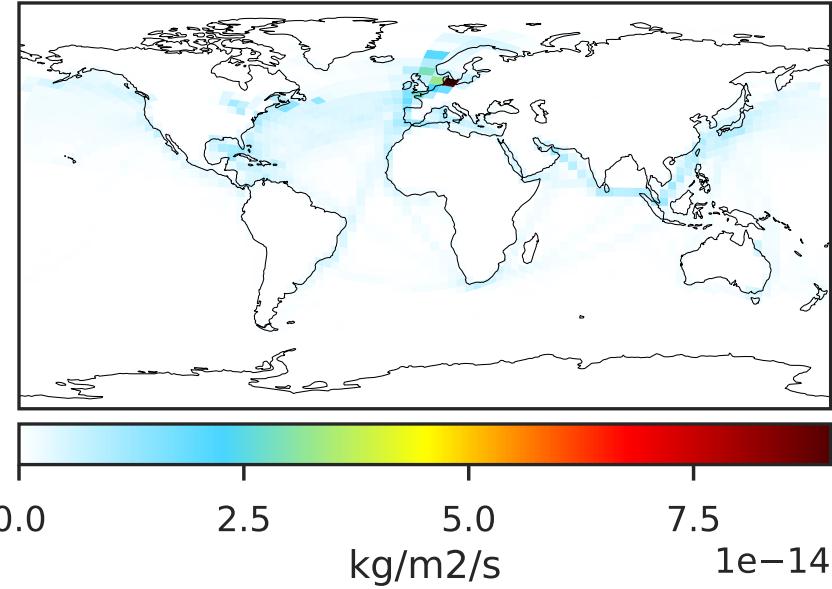


# EmisBCPI\_BioBurn (AnnualMean)

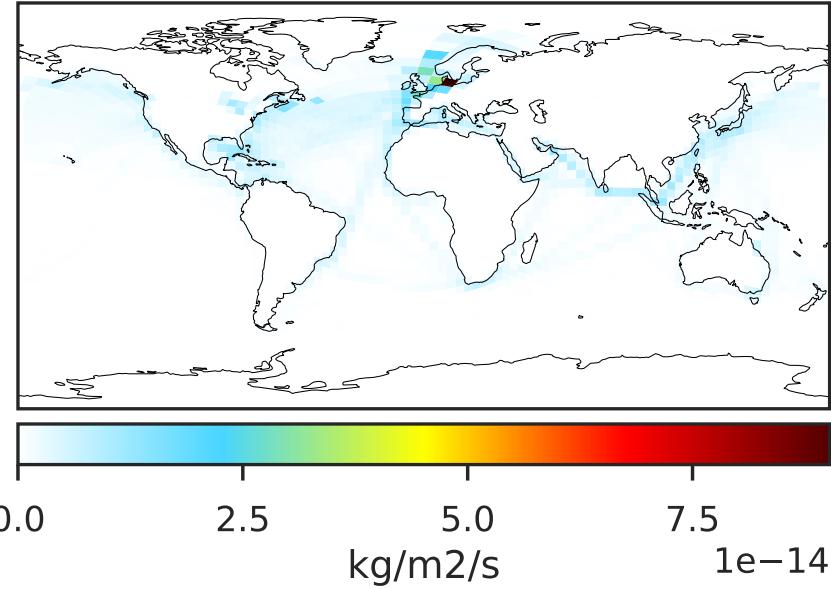


# EmisBCPI\_Ship (AnnualMean)

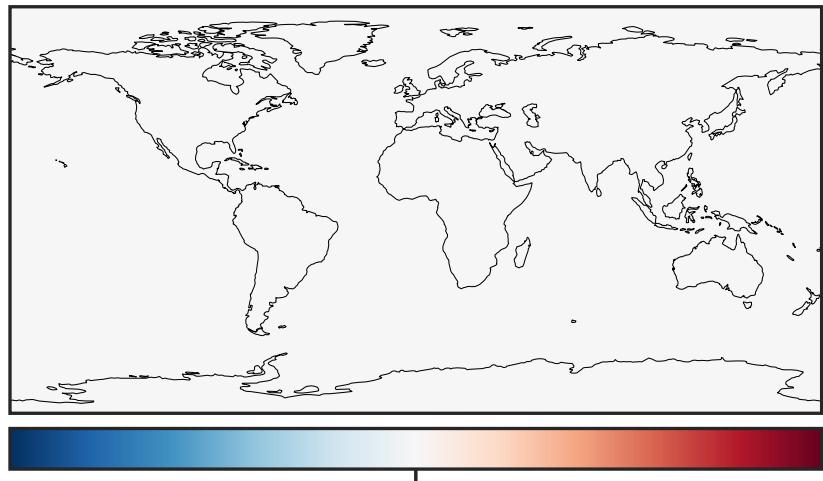
GCHP\_14.0.0 (Ref)  
c24



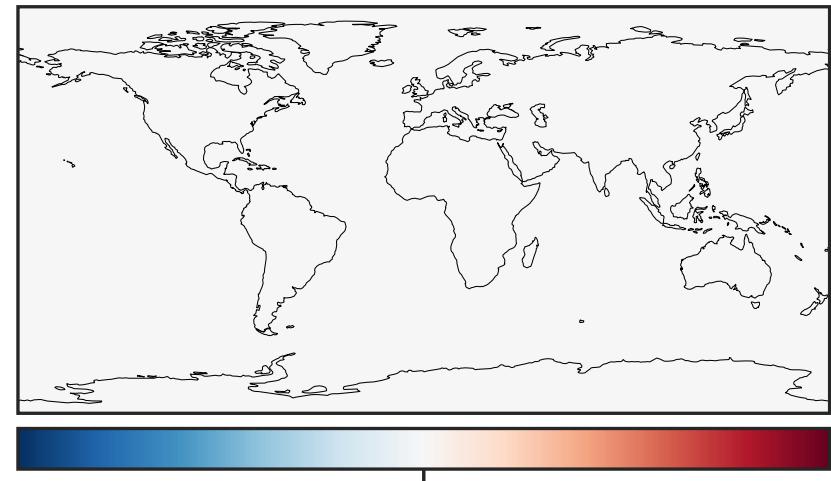
GCHP\_14.2.0 (Dev)  
c24



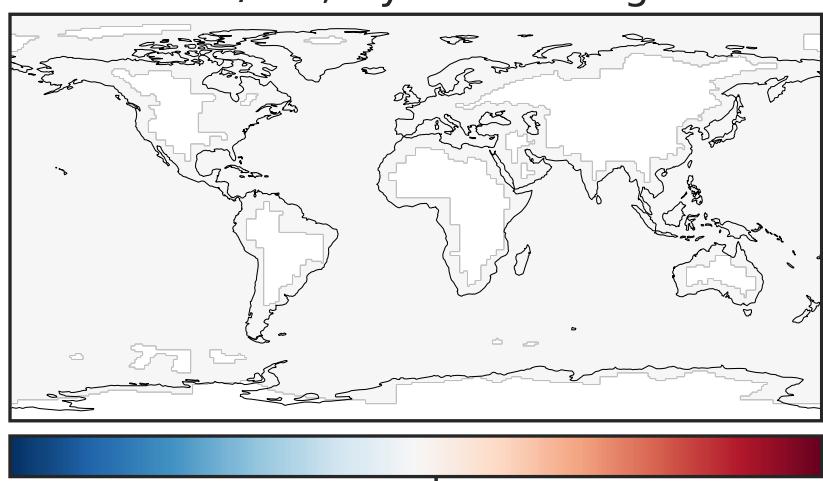
Difference (1x1.25)  
Dev - Ref, Dynamic Range



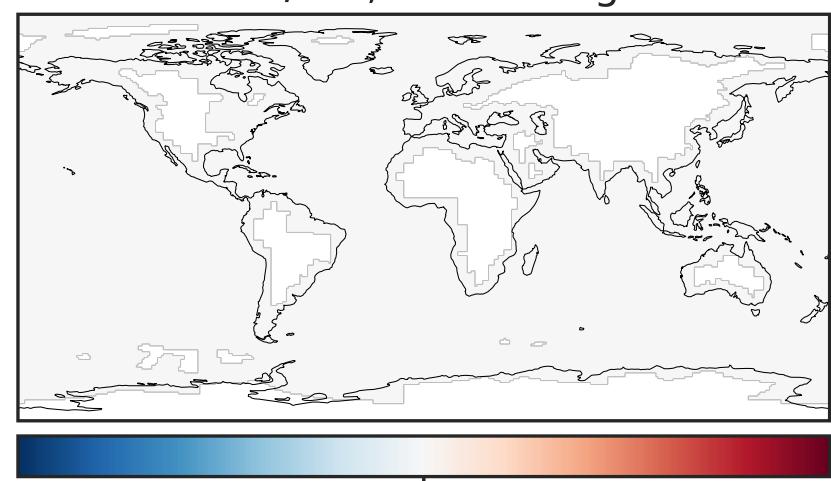
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



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

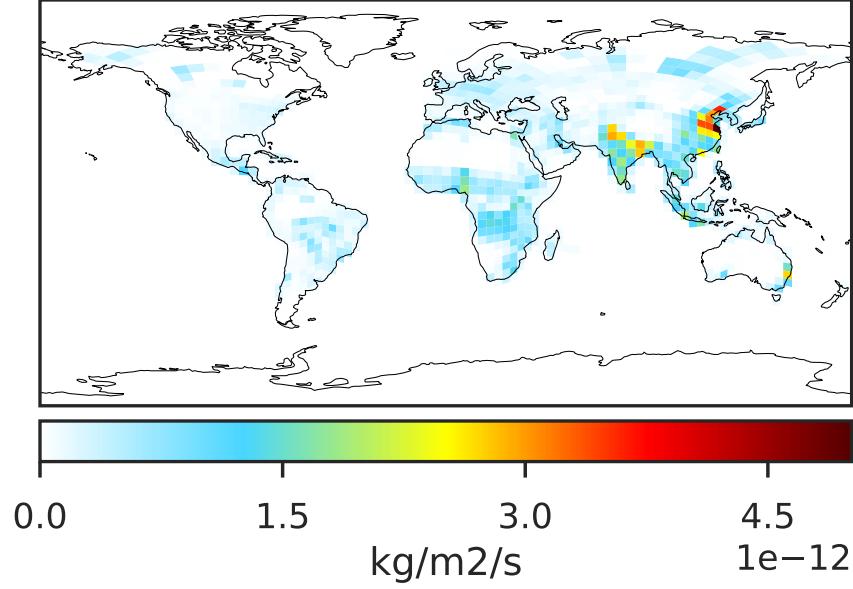


Ratio (1x1.25)  
Dev/Ref, Fixed Range

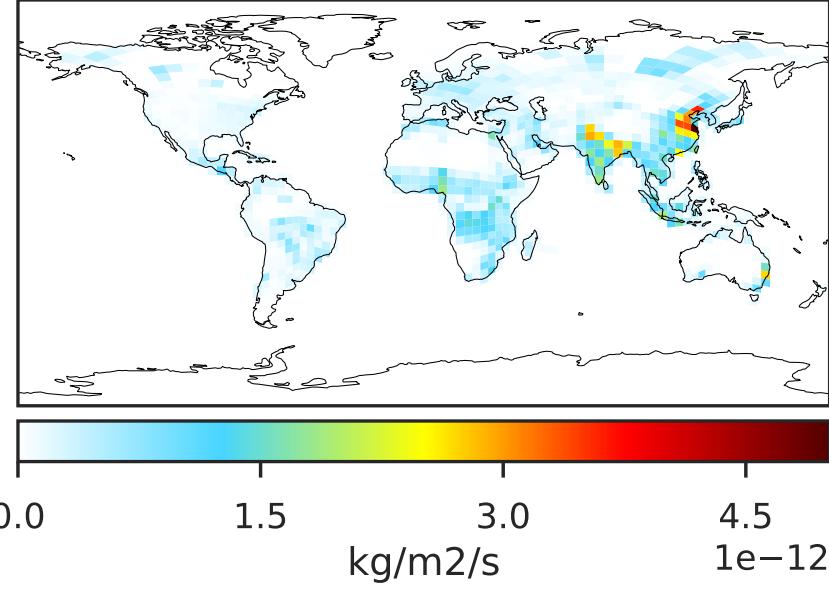


# EmisBCPI\_Total (AnnualMean)

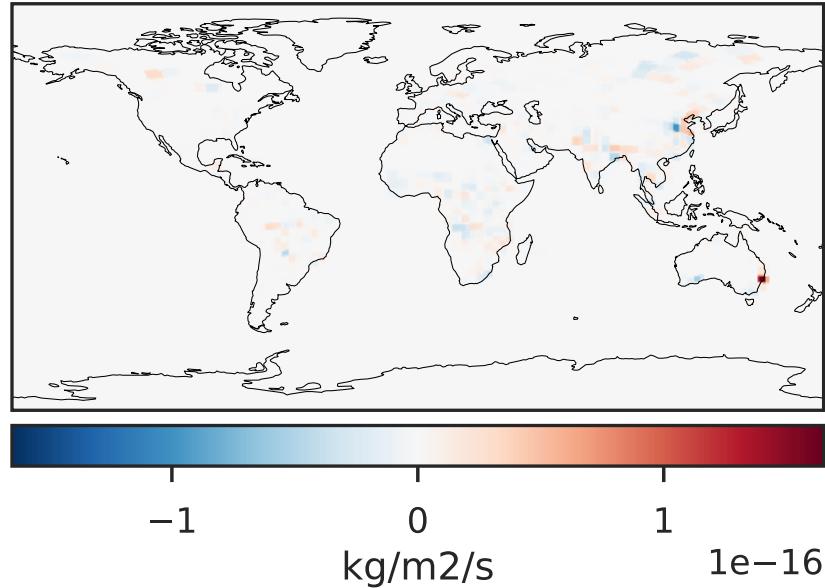
GCHP\_14.0.0 (Ref)  
c24



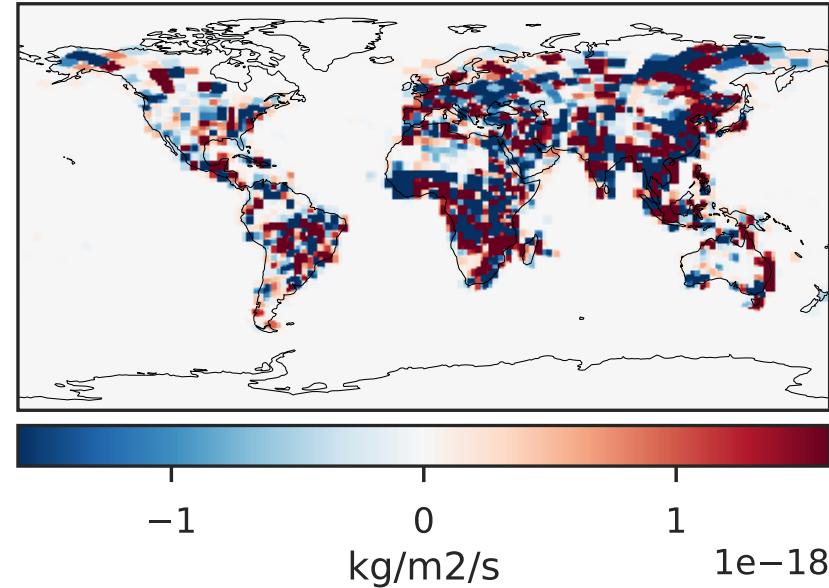
GCHP\_14.2.0 (Dev)  
c24



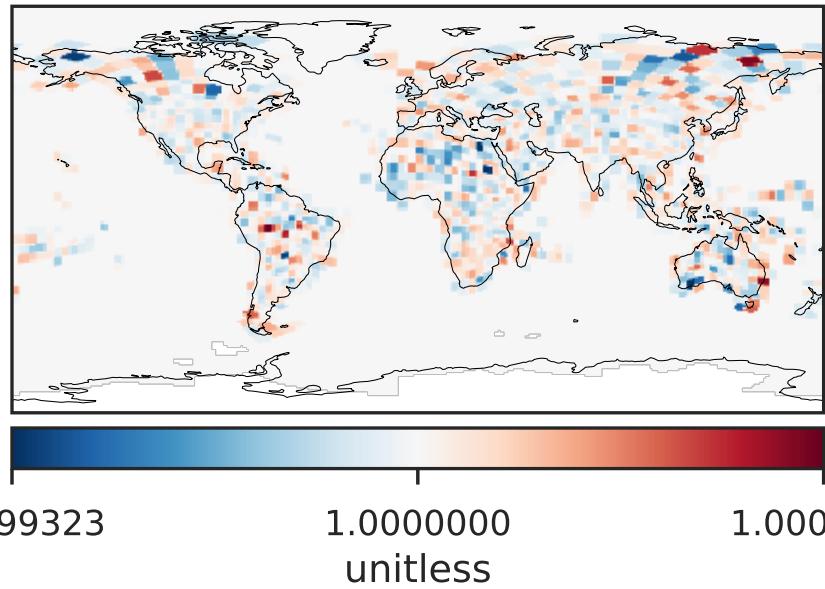
Difference (1x1.25)  
Dev - Ref, Dynamic Range



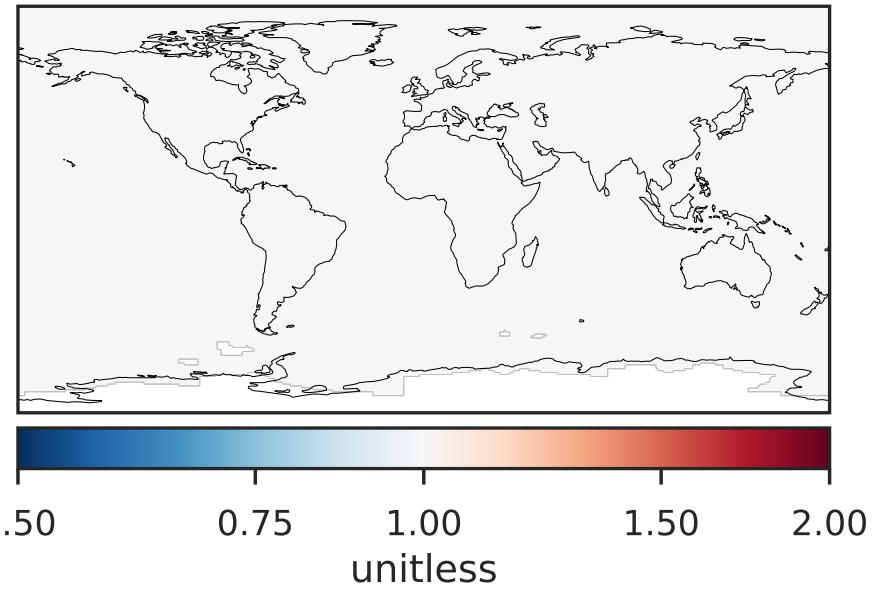
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



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

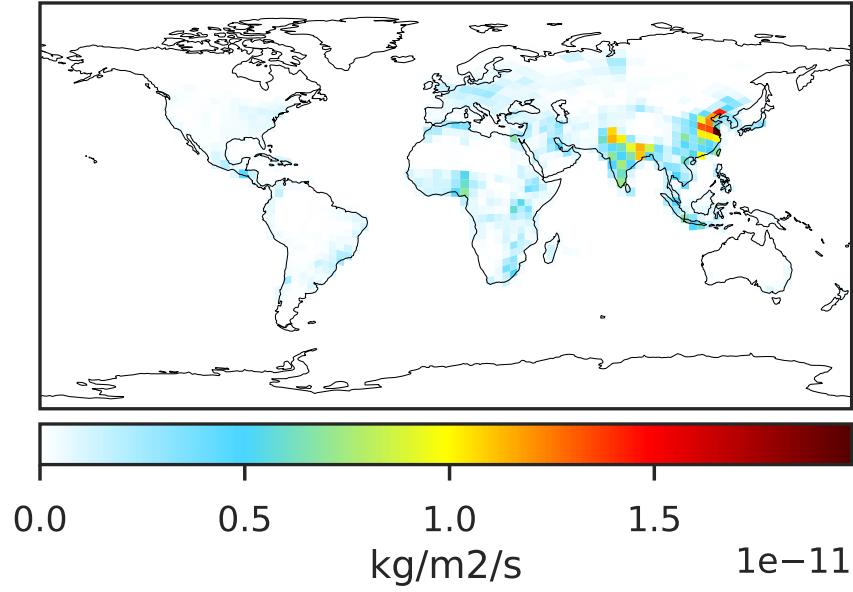


Ratio (1x1.25)  
Dev/Ref, Fixed Range

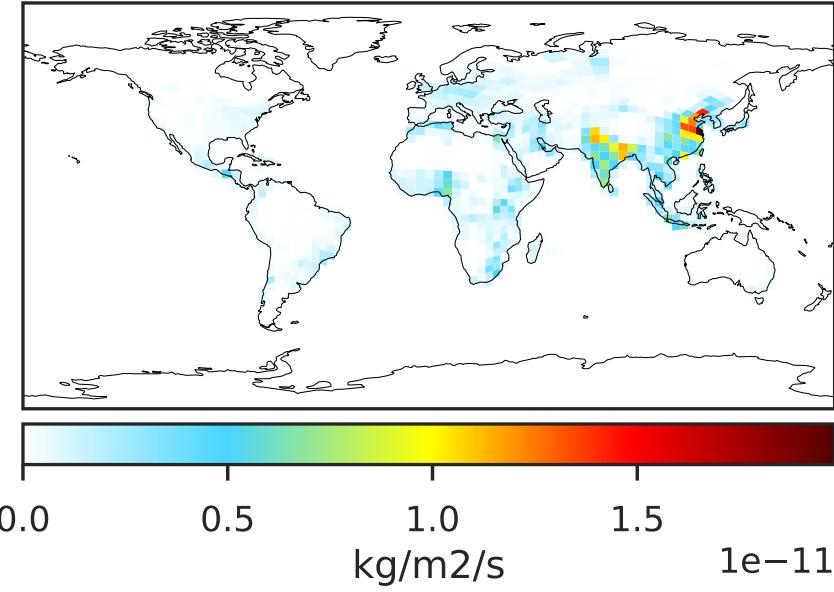


# EmisBCPO\_Anthro (AnnualMean)

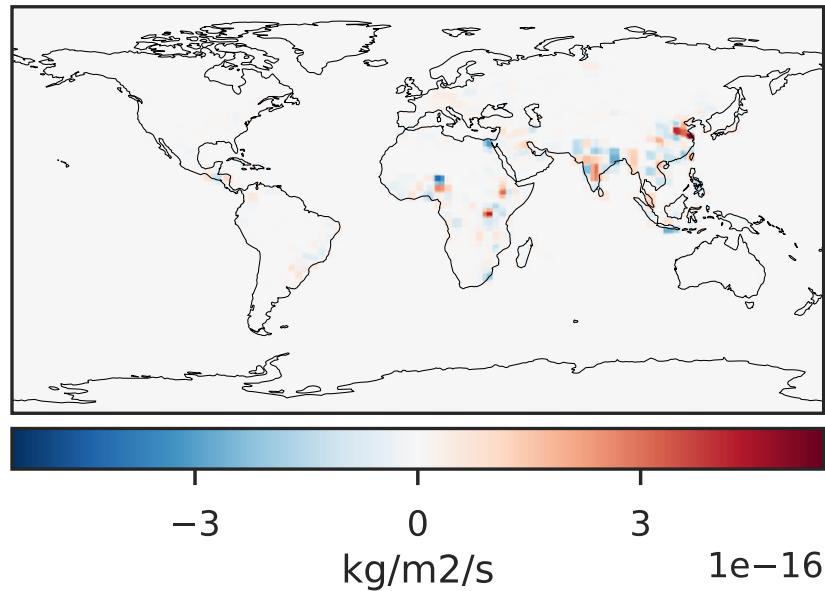
GCHP\_14.0.0 (Ref)  
c24



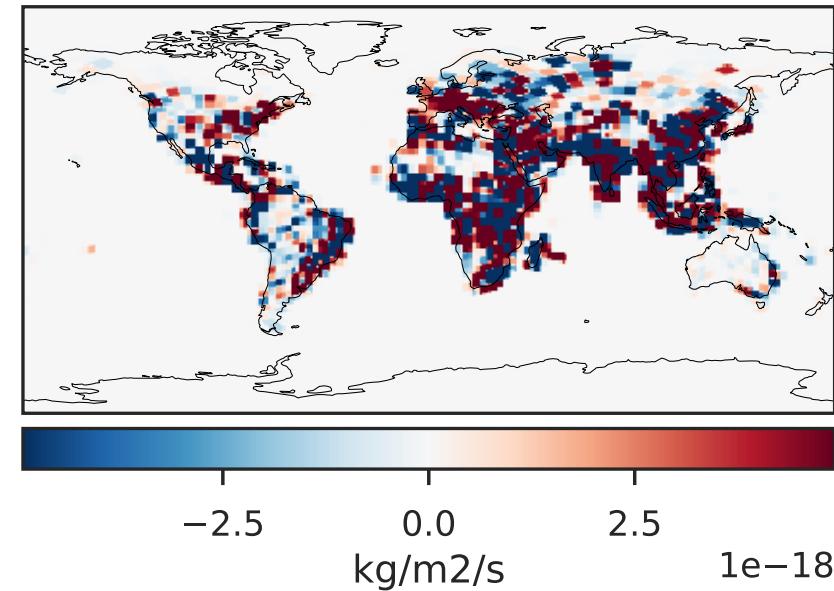
GCHP\_14.2.0 (Dev)  
c24



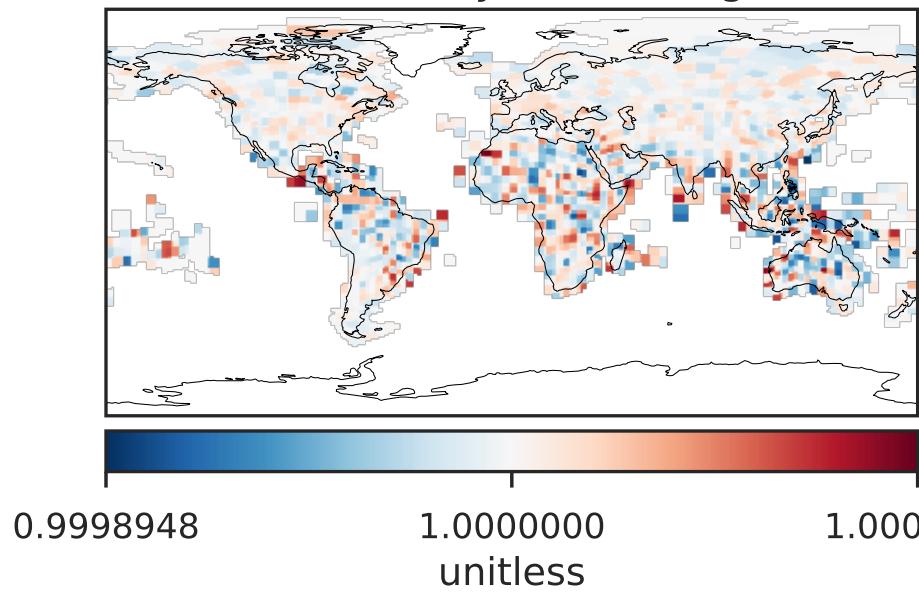
Difference (1x1.25)  
Dev - Ref, Dynamic Range



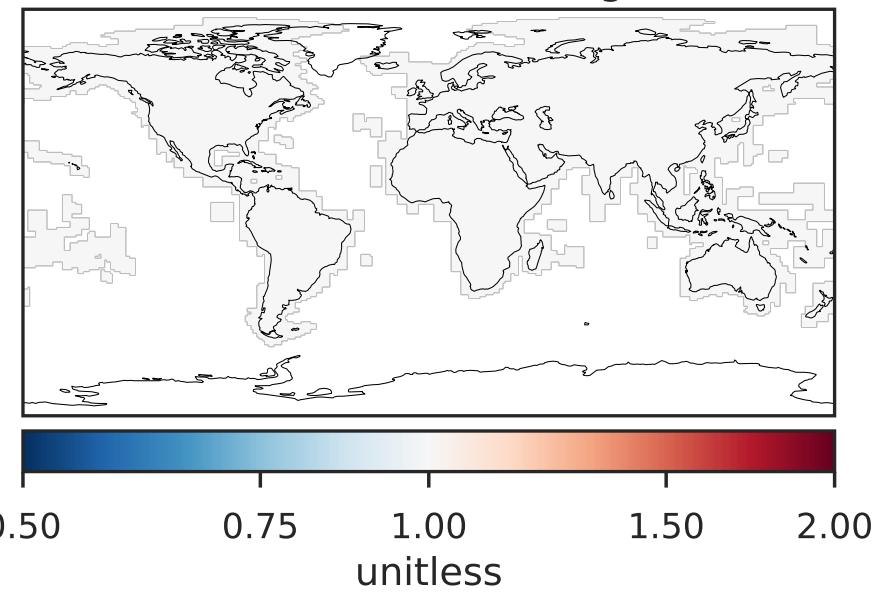
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



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

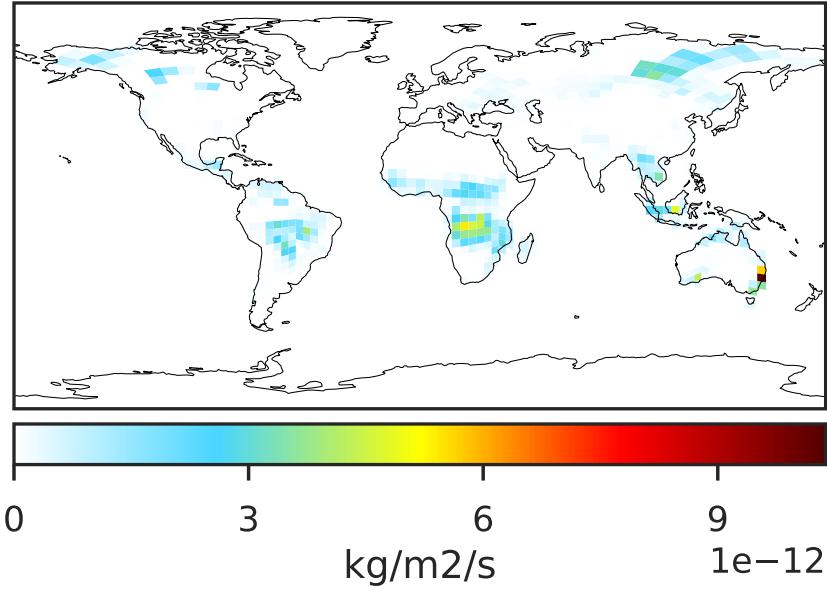


Ratio (1x1.25)  
Dev/Ref, Fixed Range

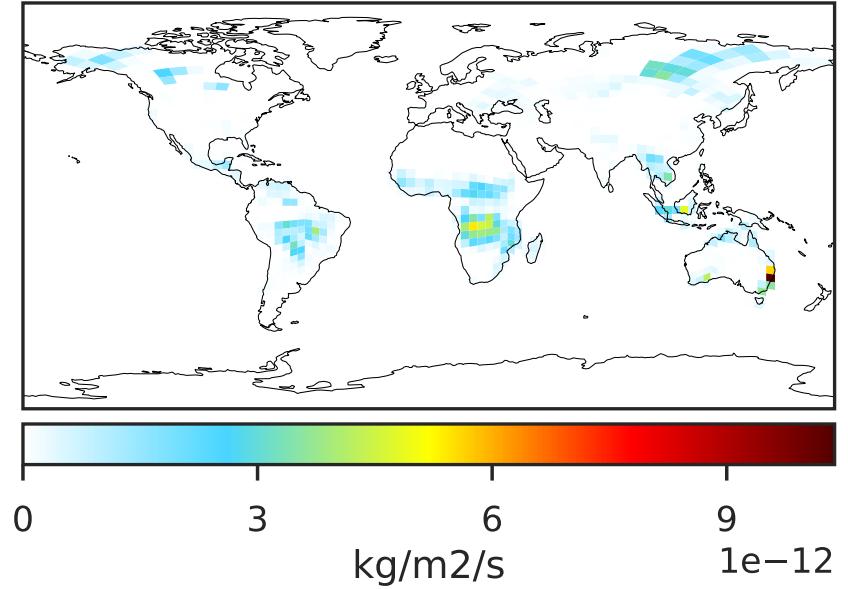


# EmisBCPO\_BioBurn (AnnualMean)

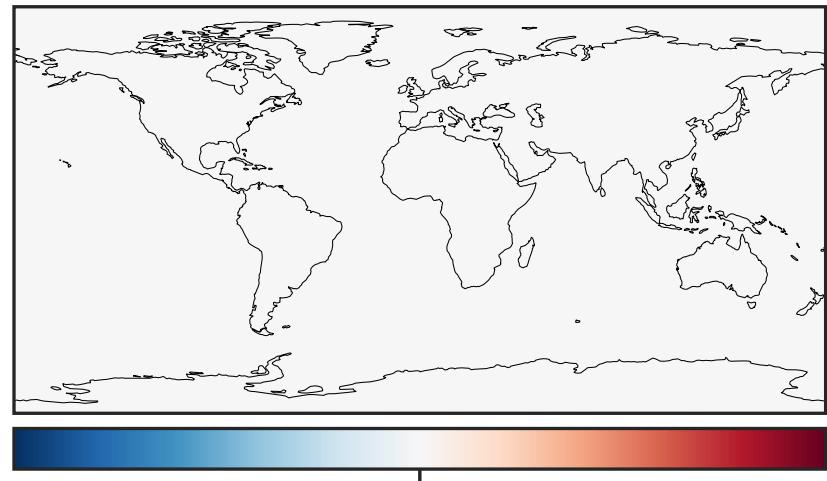
GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24

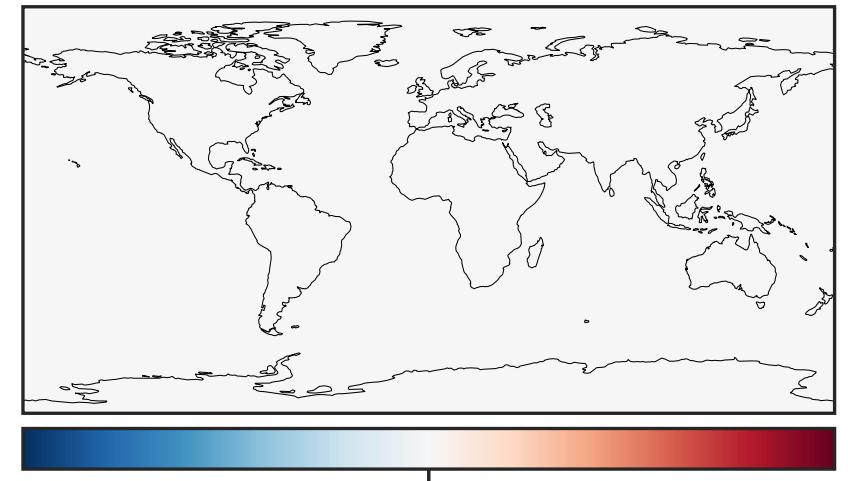


Difference (1x1.25)  
Dev - Ref, Dynamic Range

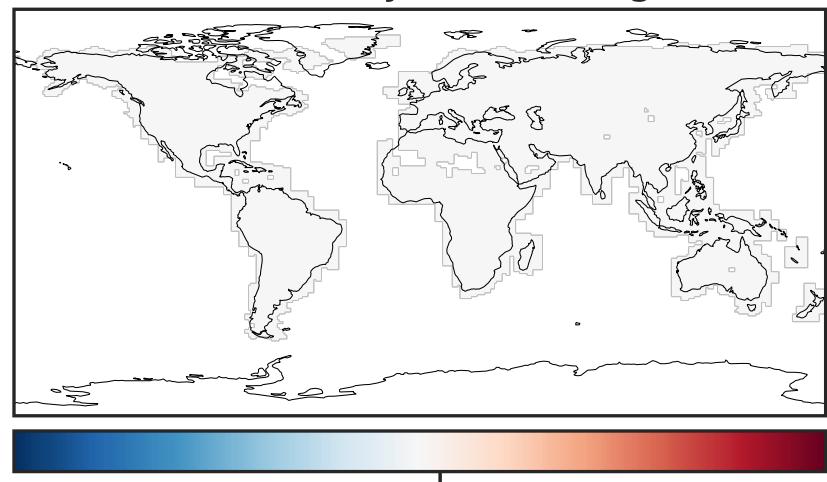


Zero throughout domain  
kg/m<sup>2</sup>/s

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

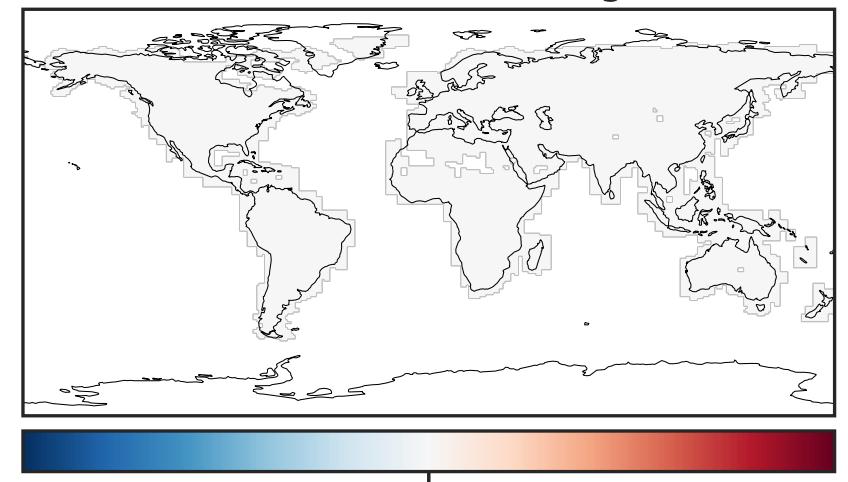


Ratio (1x1.25)  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

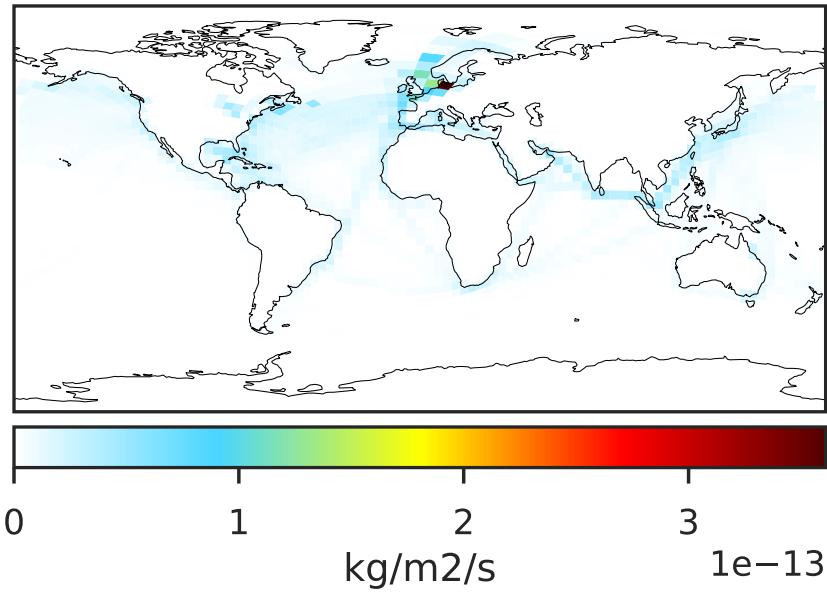
Ratio (1x1.25)  
Dev/Ref, Fixed Range



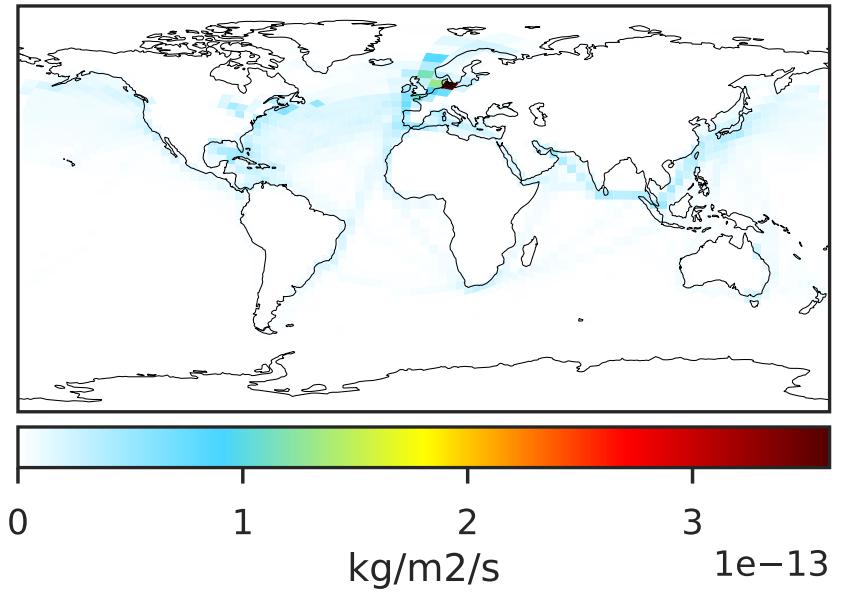
Ref and Dev equal throughout domain  
unitless

# EmisBCPO\_Ship (AnnualMean)

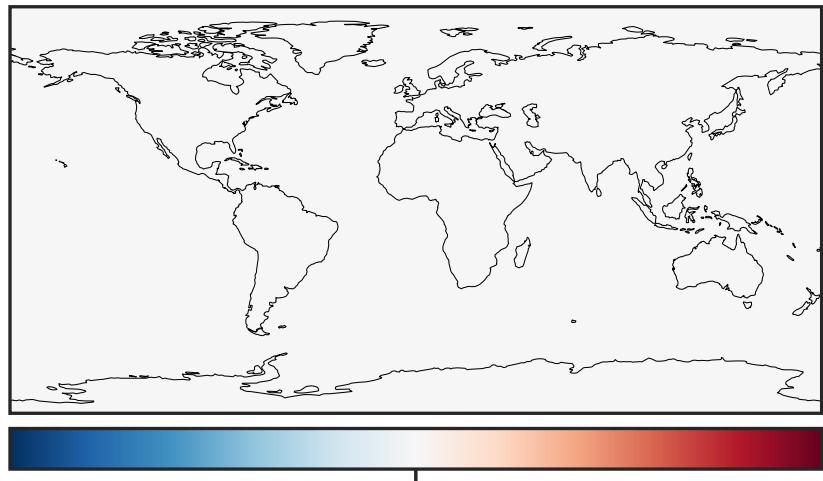
GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24

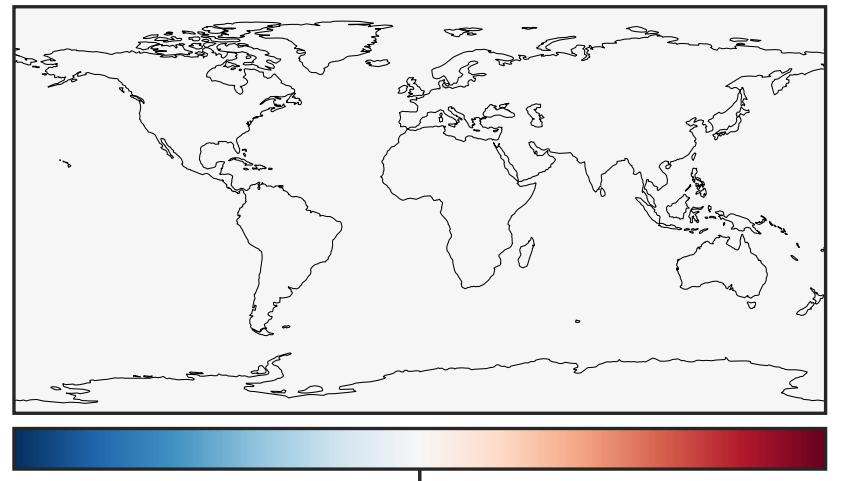


Difference (1x1.25)  
Dev - Ref, Dynamic Range



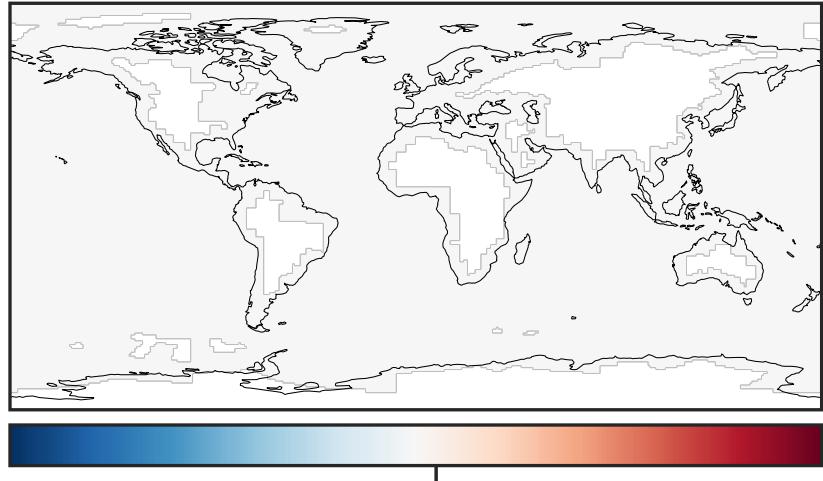
Zero throughout domain  
 $\text{kg/m}^2/\text{s}$

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



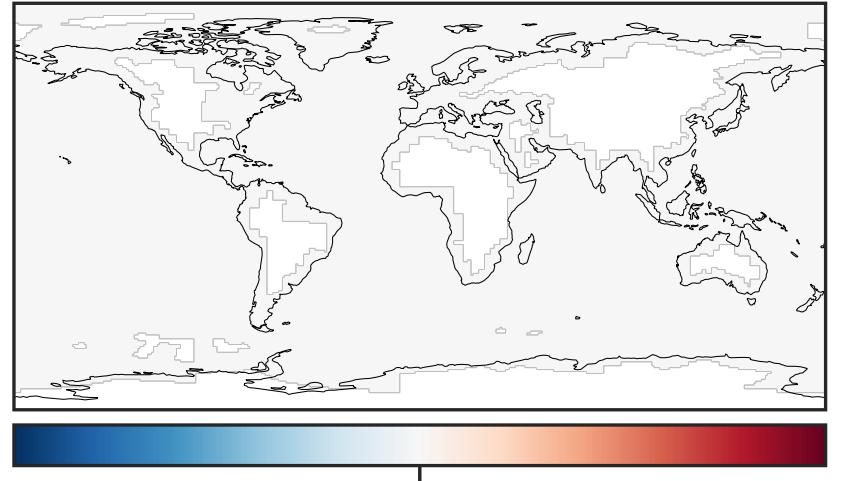
Zero throughout domain  
 $\text{kg/m}^2/\text{s}$

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



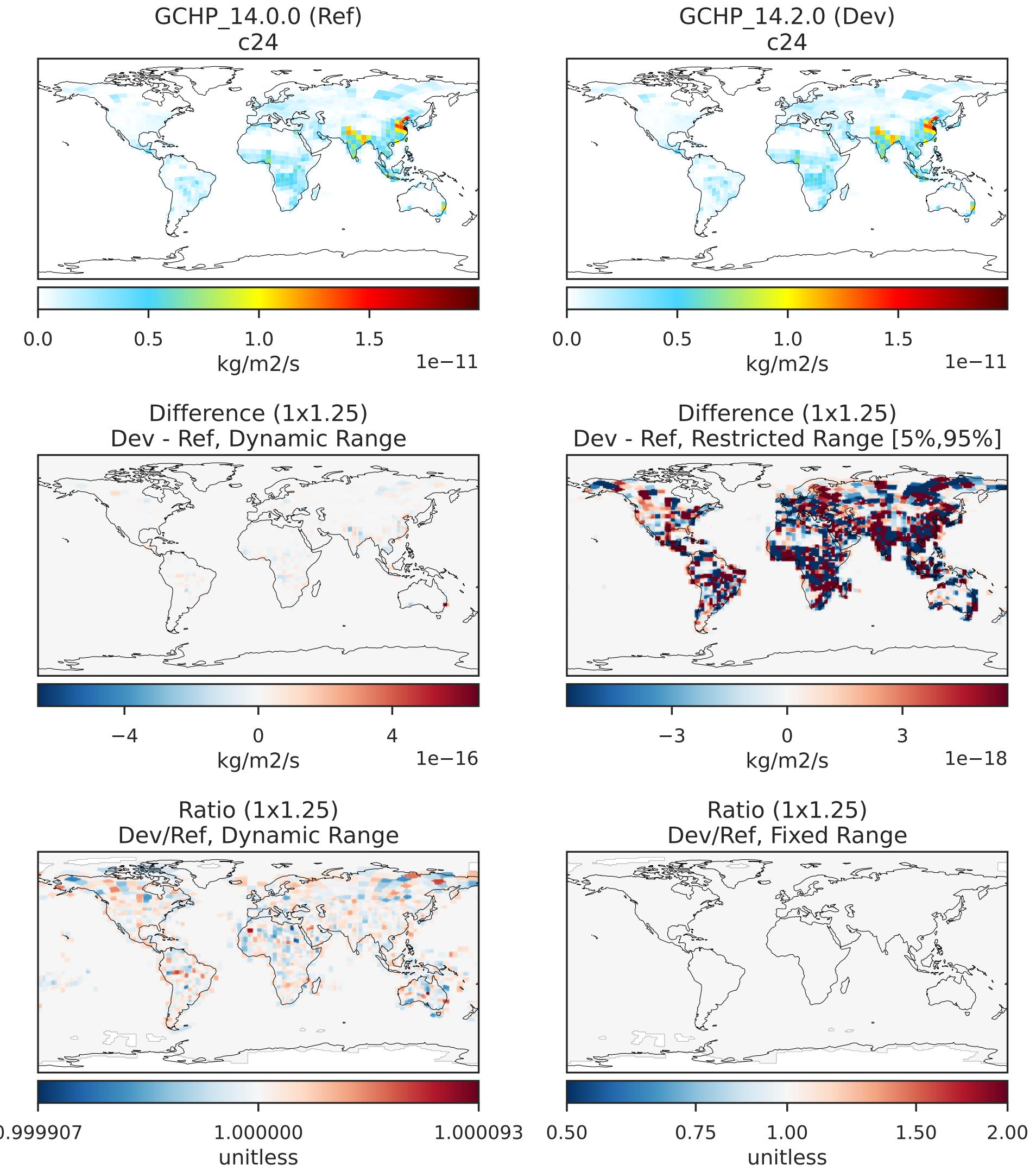
Ref and Dev equal throughout domain  
unitless

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



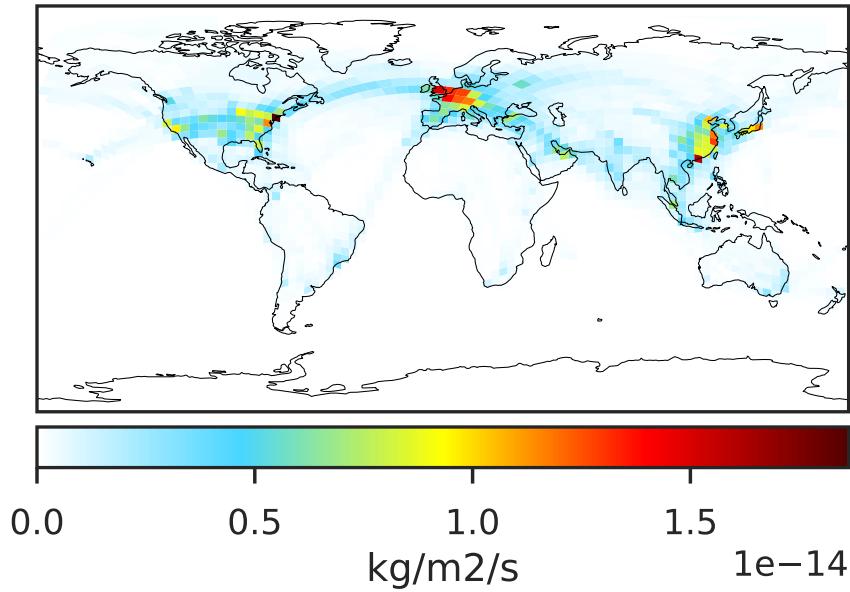
Ref and Dev equal throughout domain  
unitless

# EmisBCPO\_Total (AnnualMean)

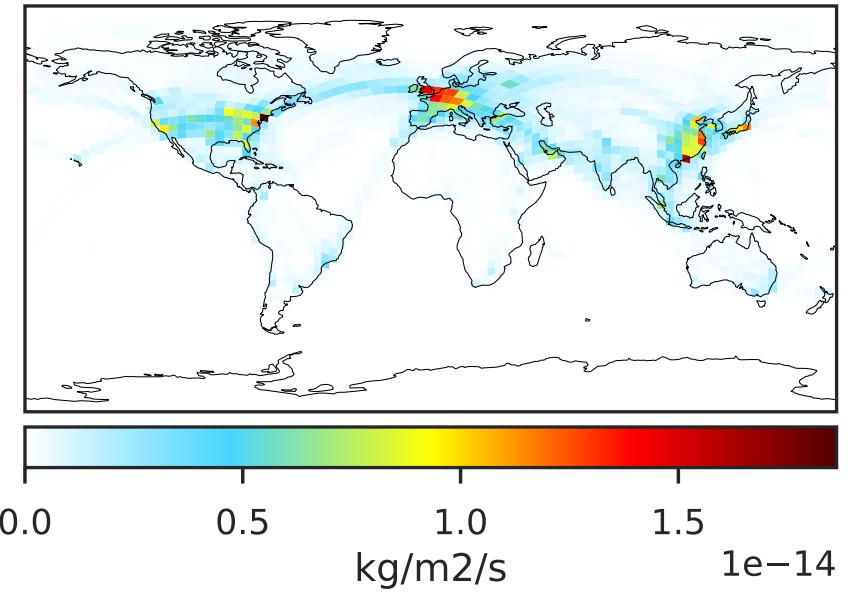


# EmisOCPI\_Aircraft (AnnualMean)

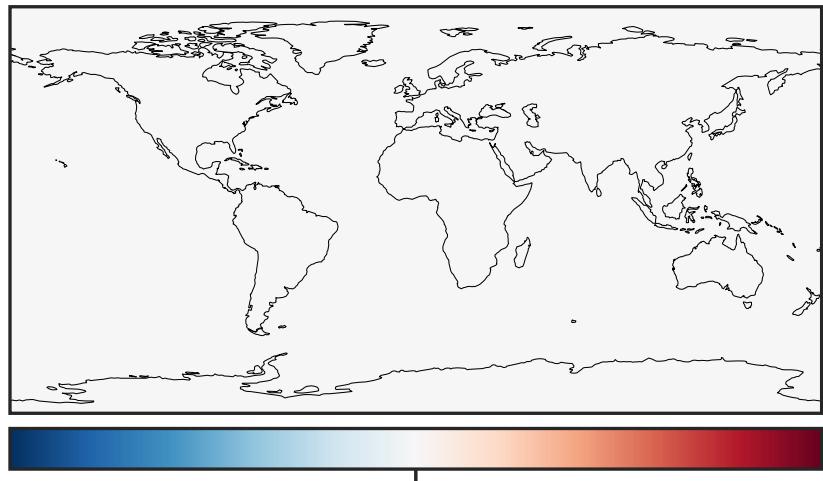
GCHP\_14.0.0 (Ref)  
c24



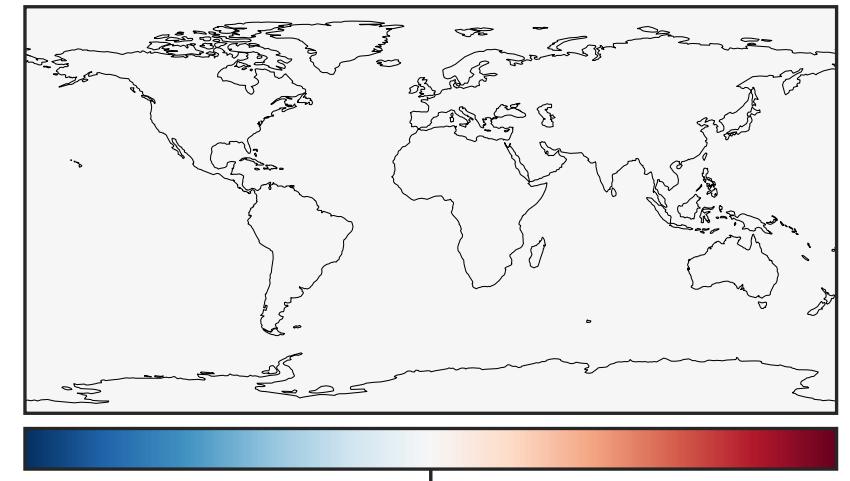
GCHP\_14.2.0 (Dev)  
c24



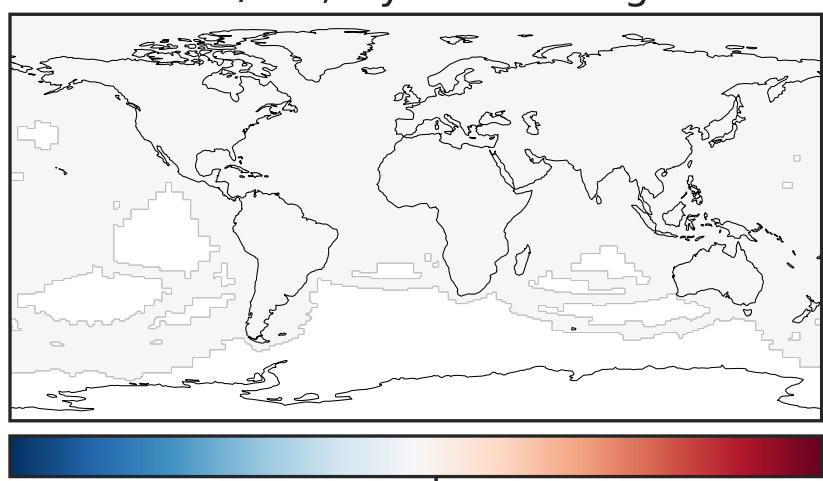
Difference (1x1.25)  
Dev - Ref, Dynamic Range



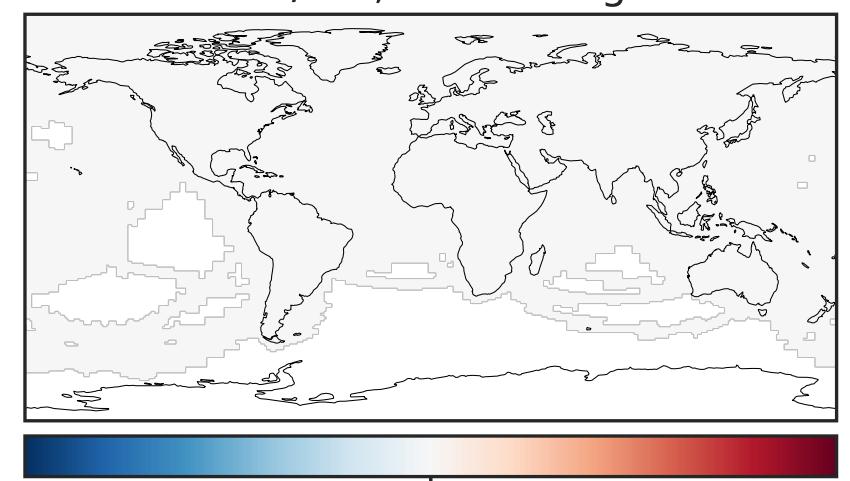
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



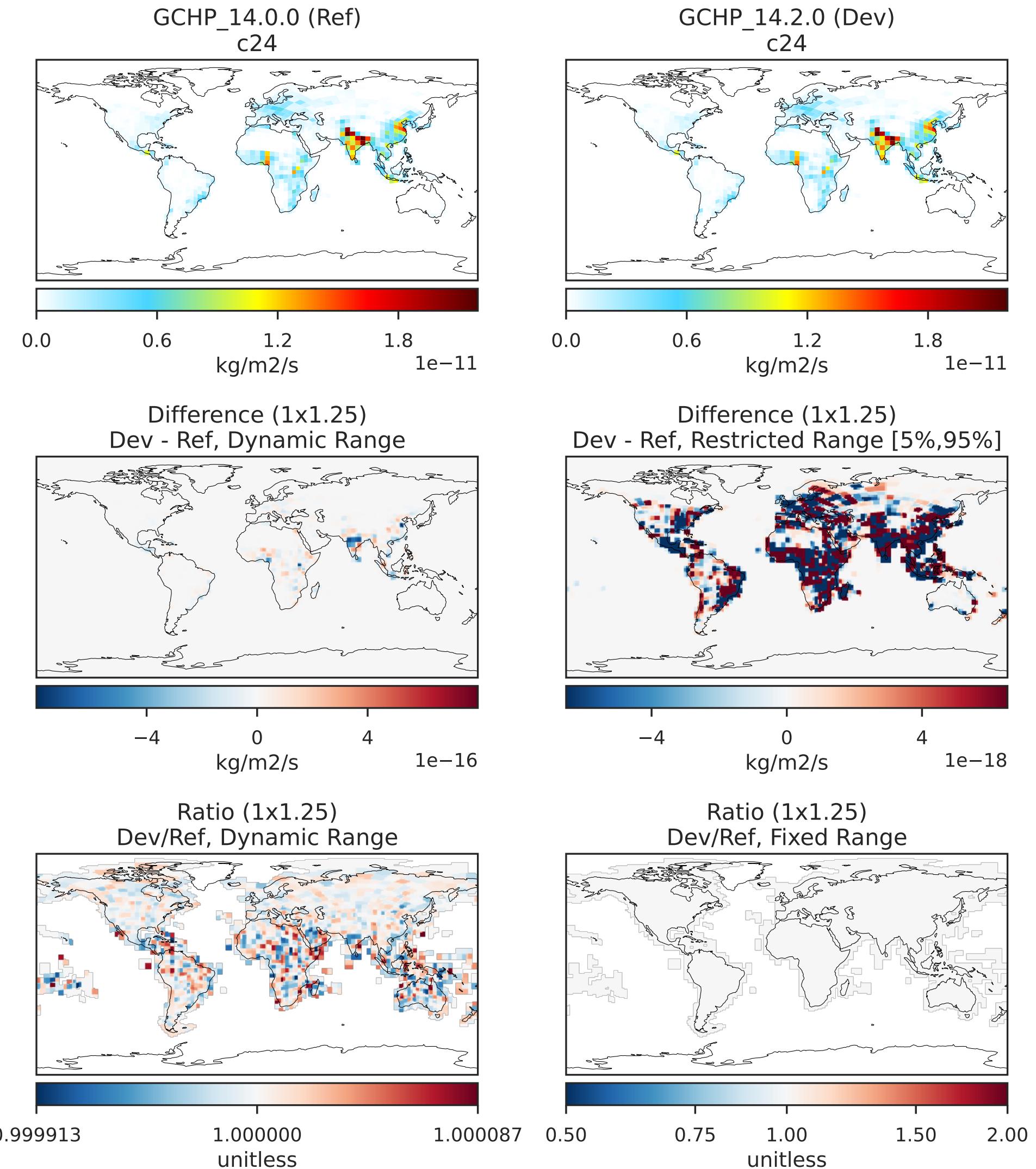
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



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

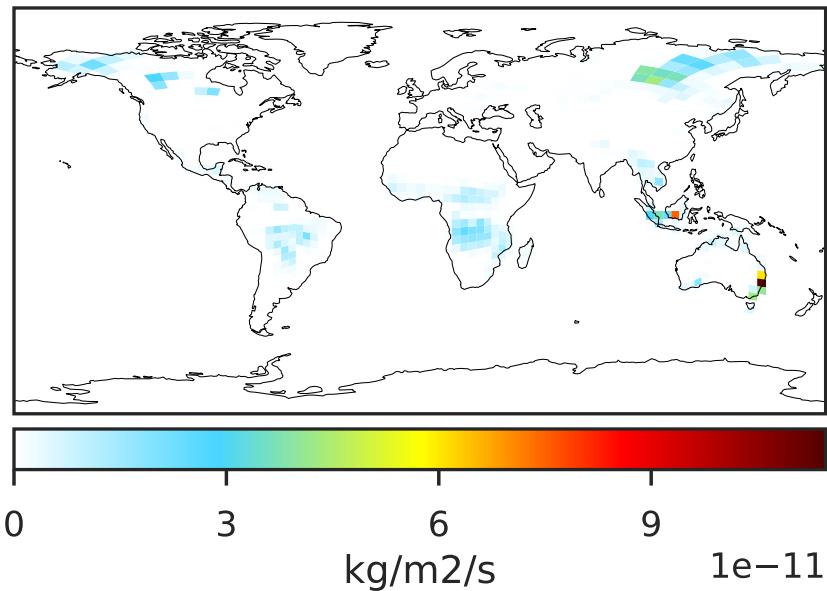


# EmisOCPI\_Anthro (AnnualMean)

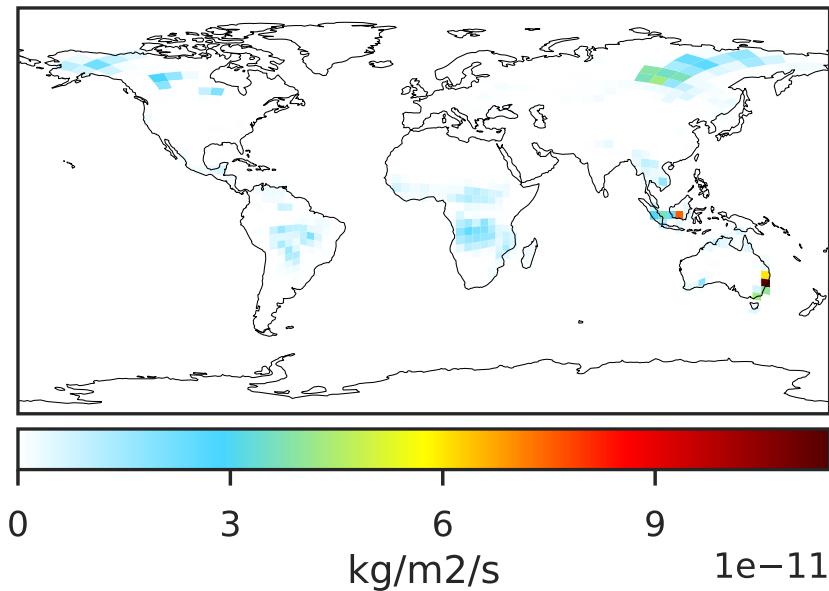


# EmisOCPI\_BioBurn (AnnualMean)

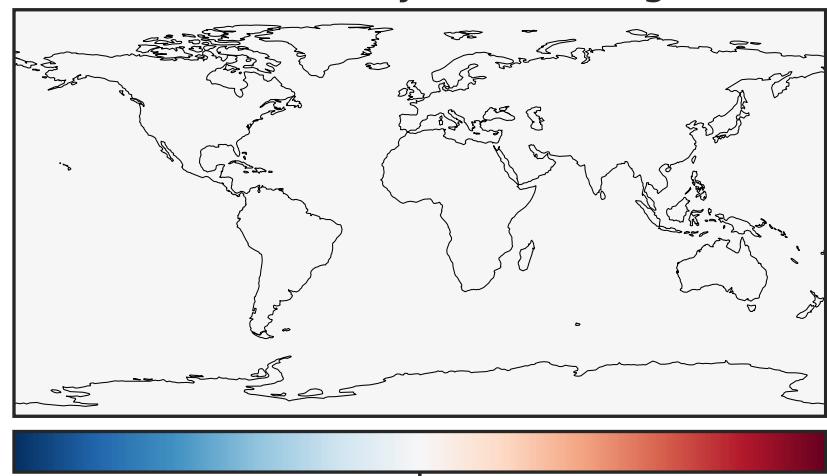
GCHP\_14.0.0 (Ref)  
c24



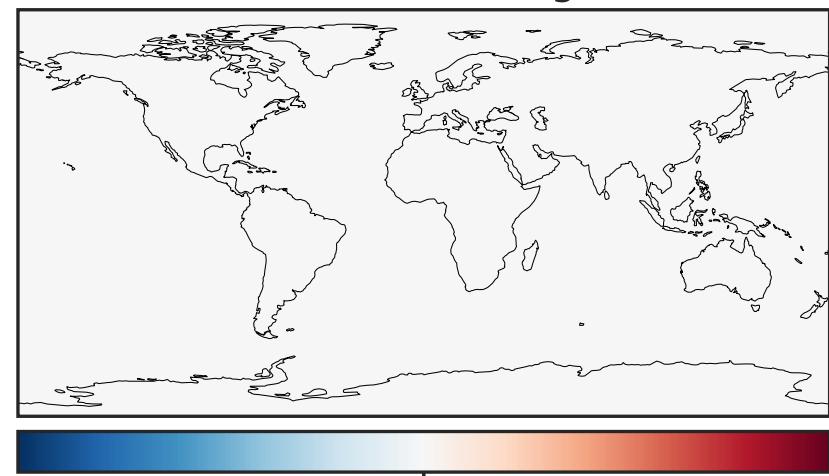
GCHP\_14.2.0 (Dev)  
c24



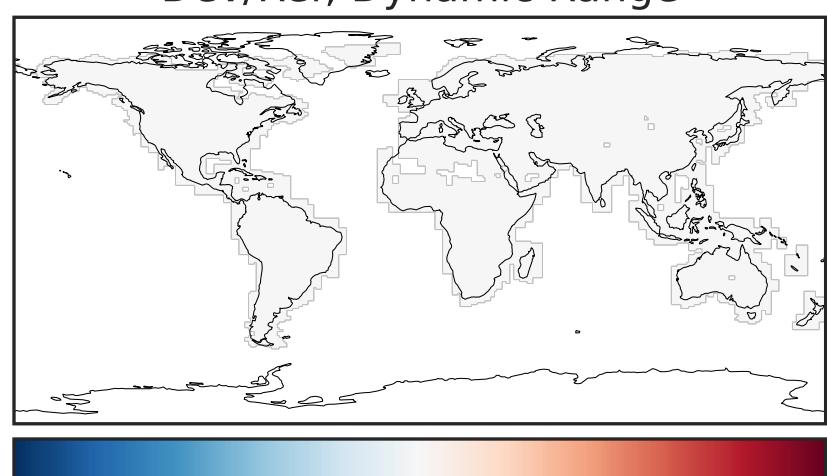
Difference (1x1.25)  
Dev - Ref, Dynamic Range



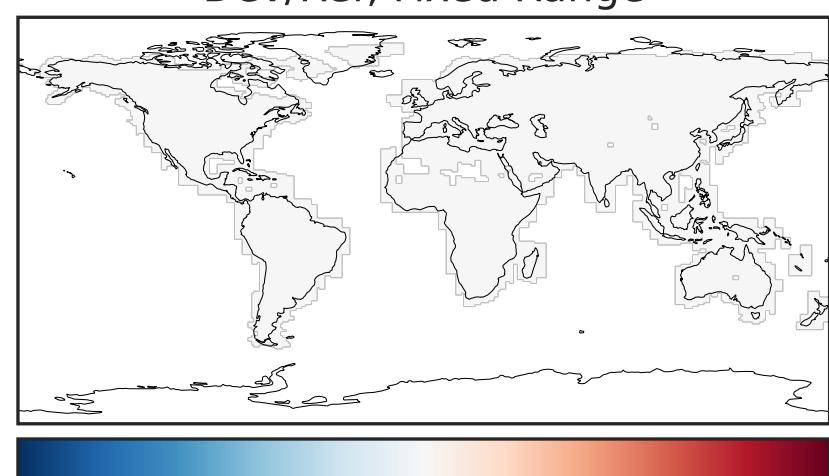
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



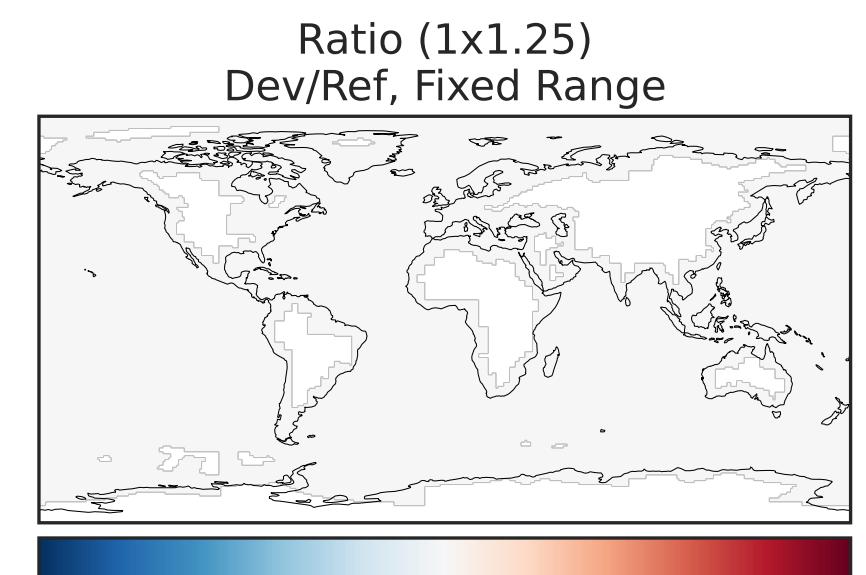
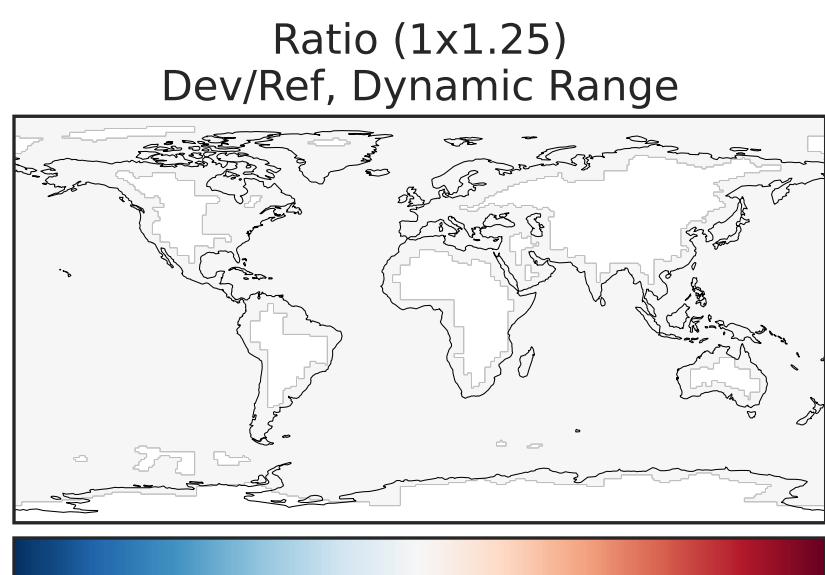
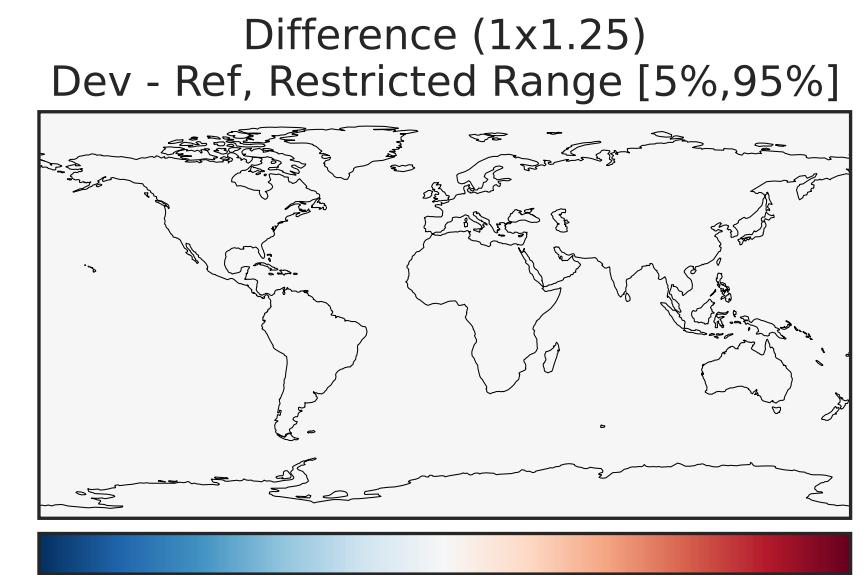
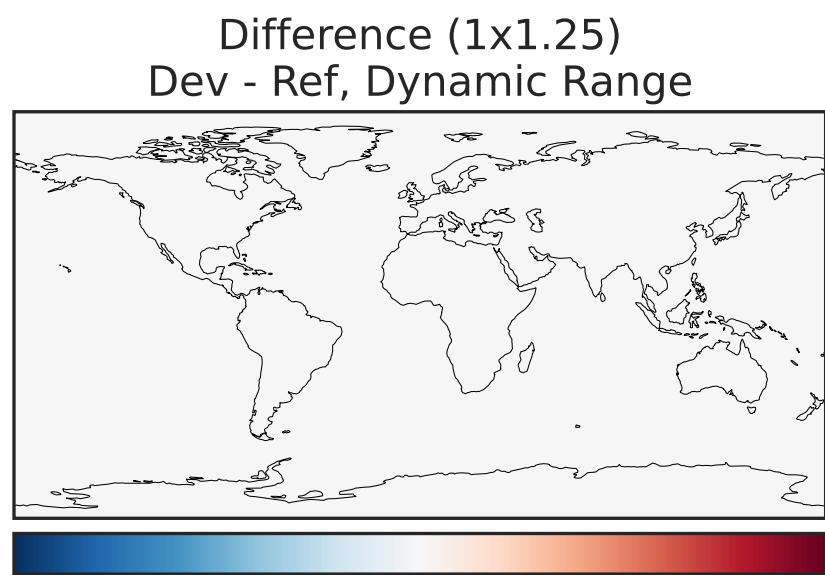
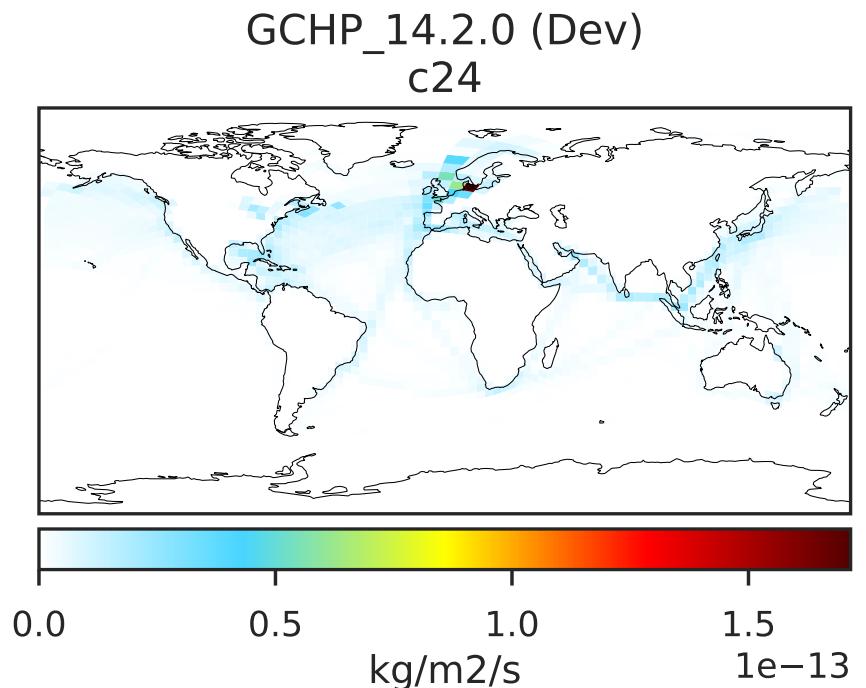
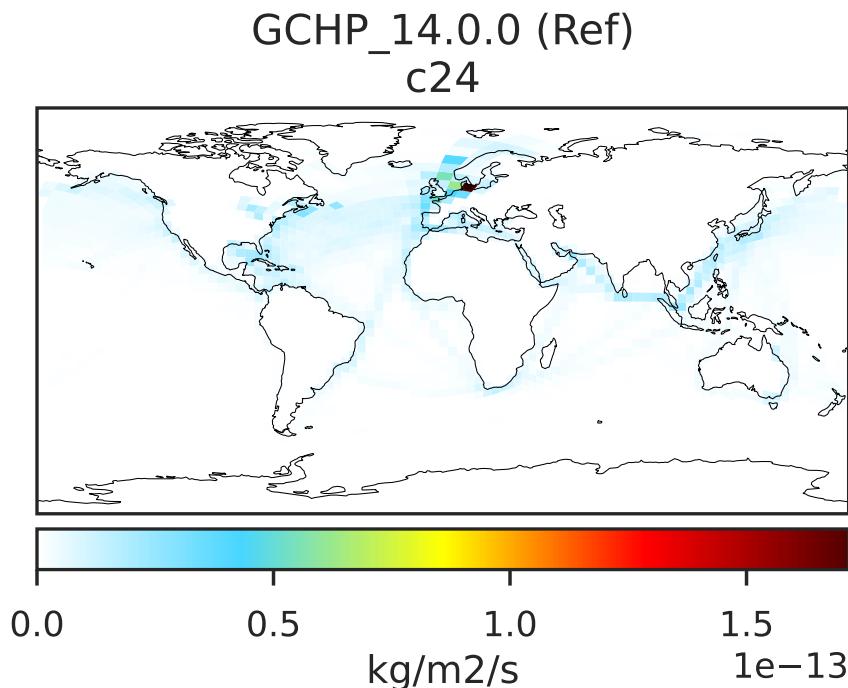
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



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

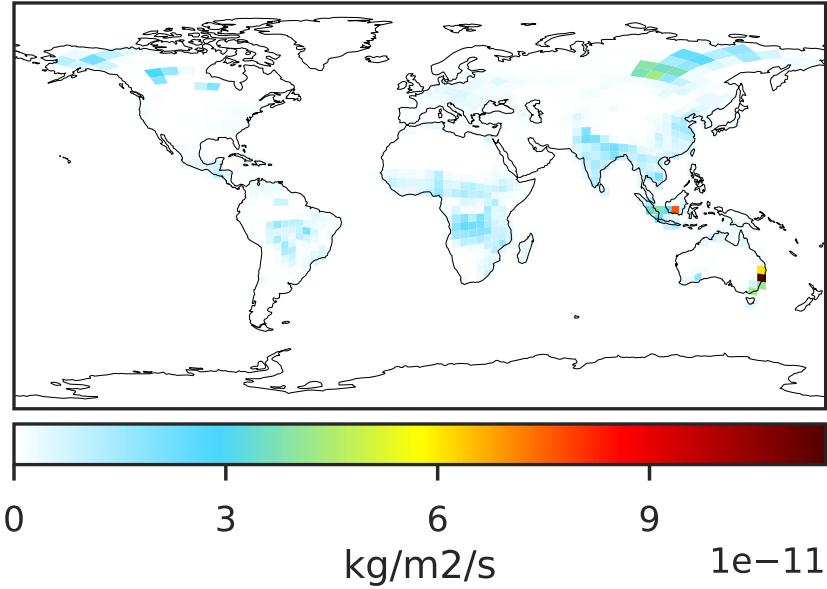


# EmisOCPI\_Ship (AnnualMean)

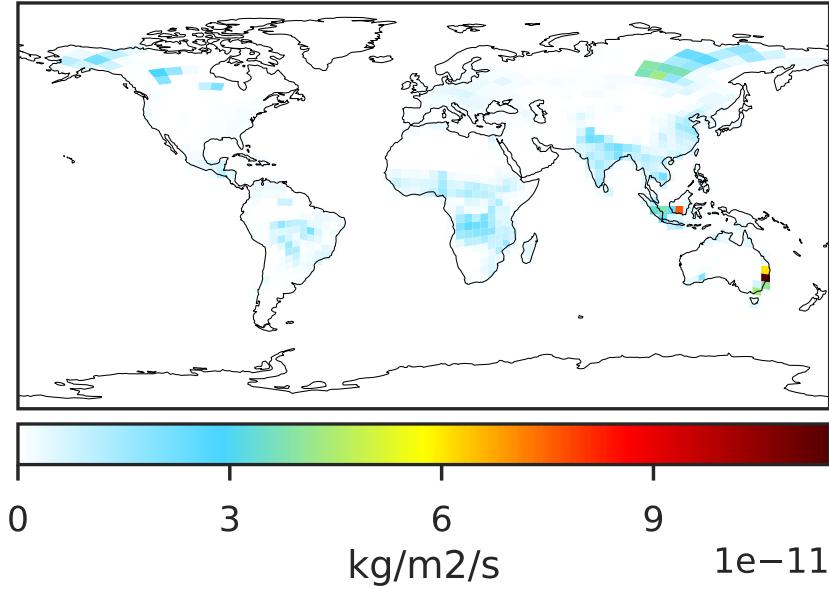


# EmisOCPI\_Total (AnnualMean)

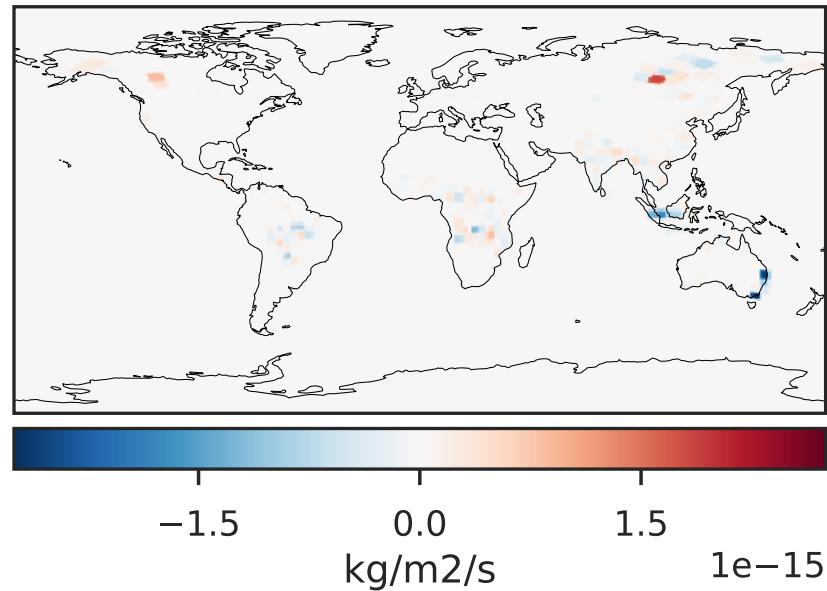
GCHP\_14.0.0 (Ref)  
c24



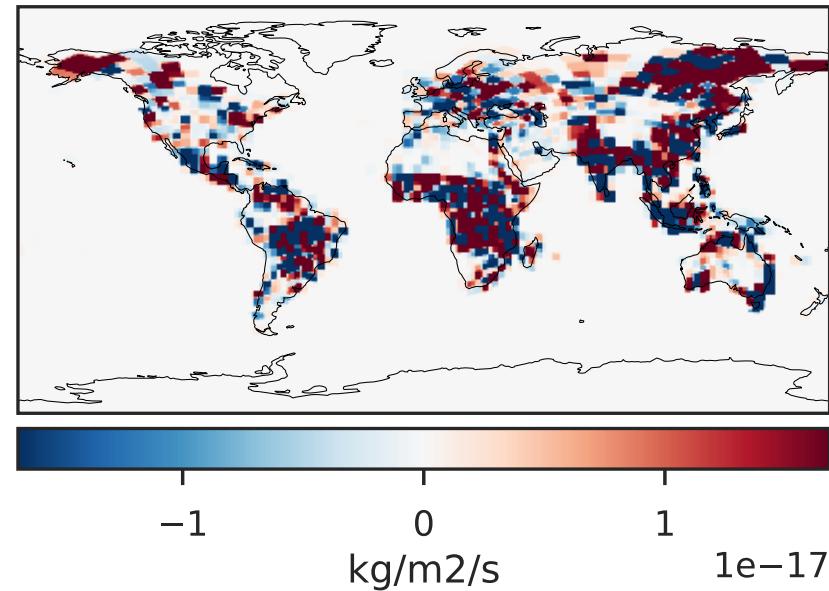
GCHP\_14.2.0 (Dev)  
c24



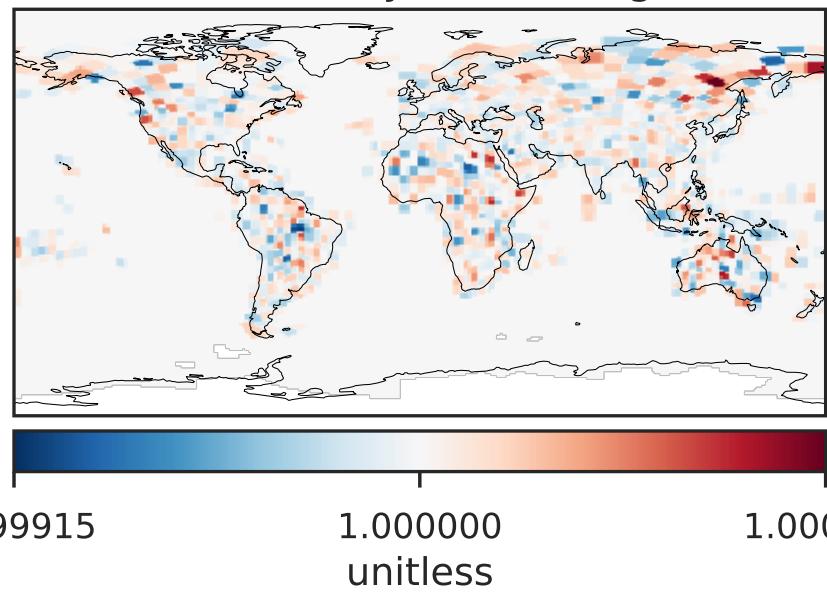
Difference (1x1.25)  
Dev - Ref, Dynamic Range



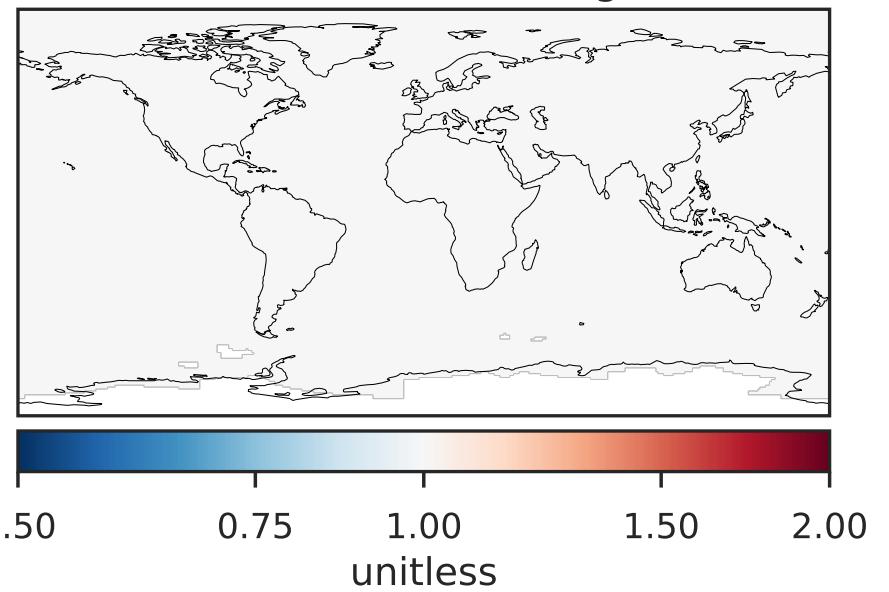
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



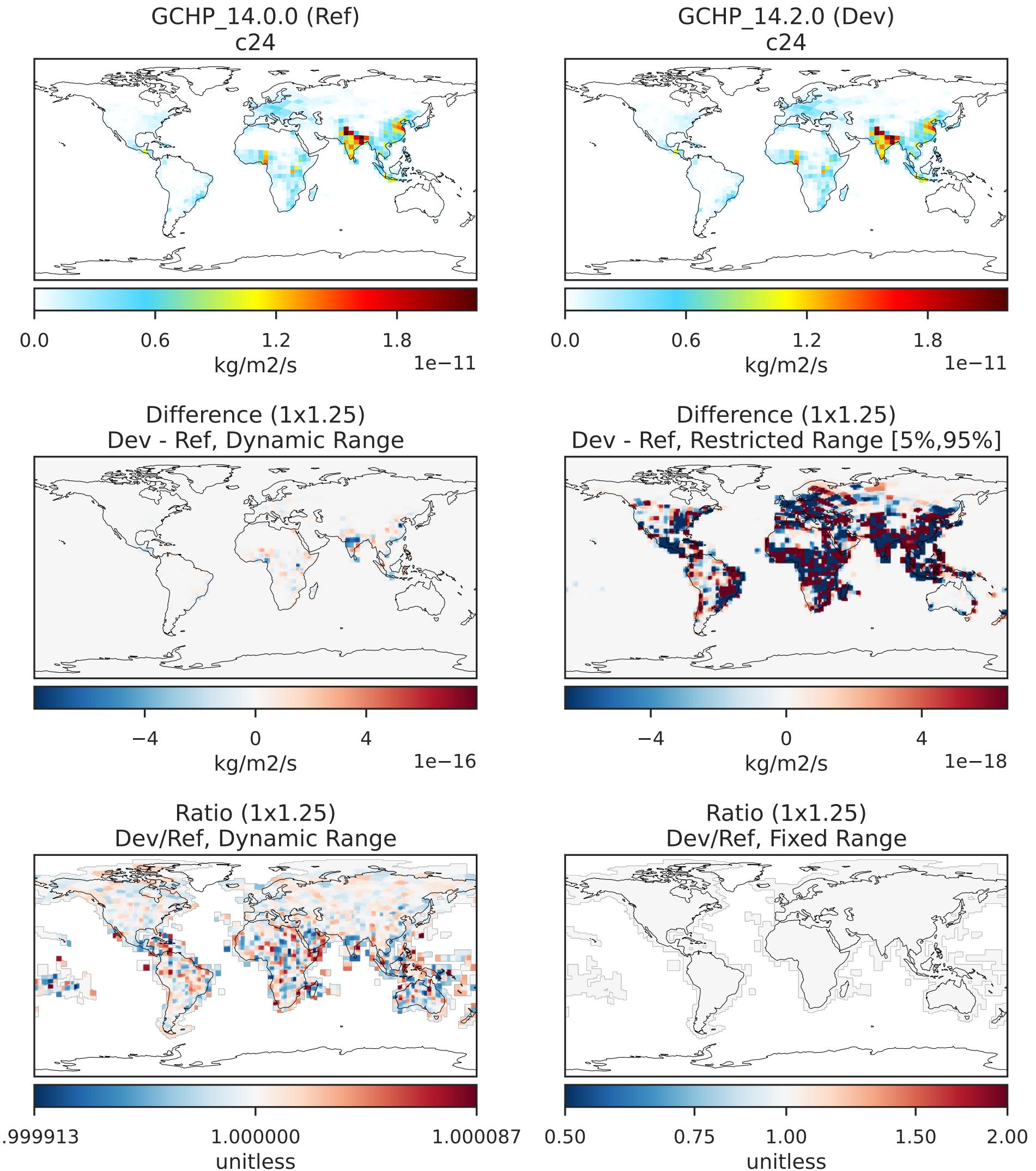
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



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

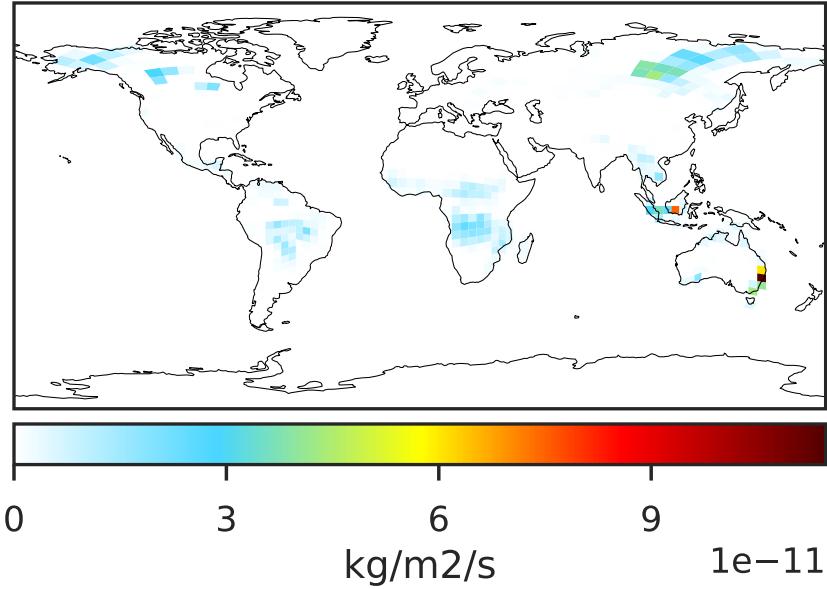


# EmisOCPO\_Anthro (AnnualMean)

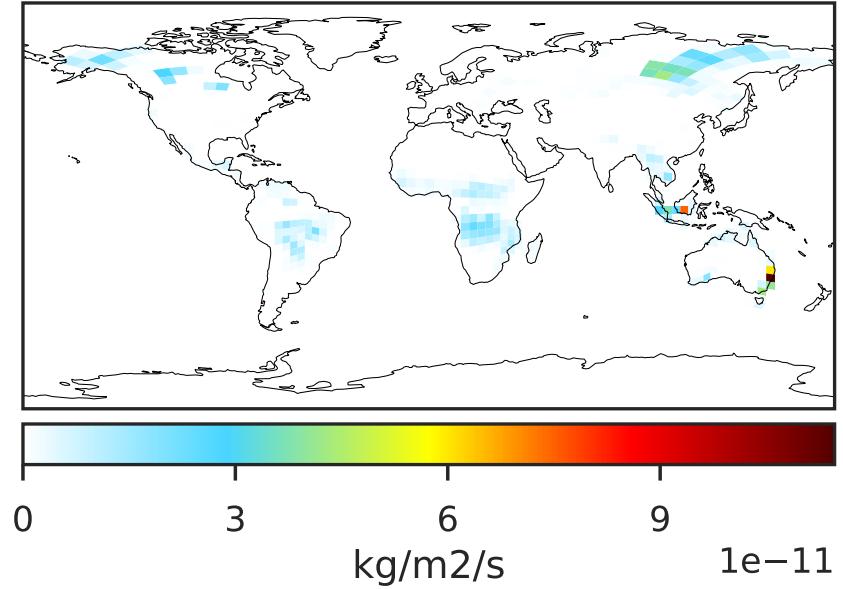


# EmisOCPO\_BioBurn (AnnualMean)

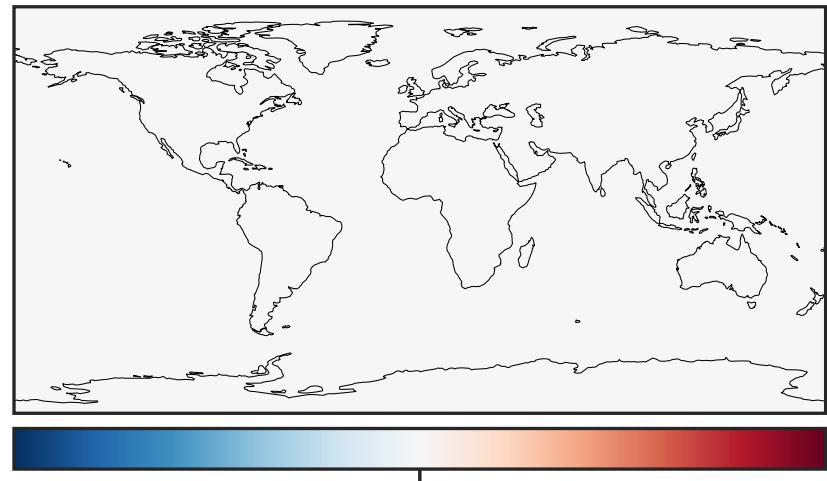
GCHP\_14.0.0 (Ref)  
c24



GCHP\_14.2.0 (Dev)  
c24

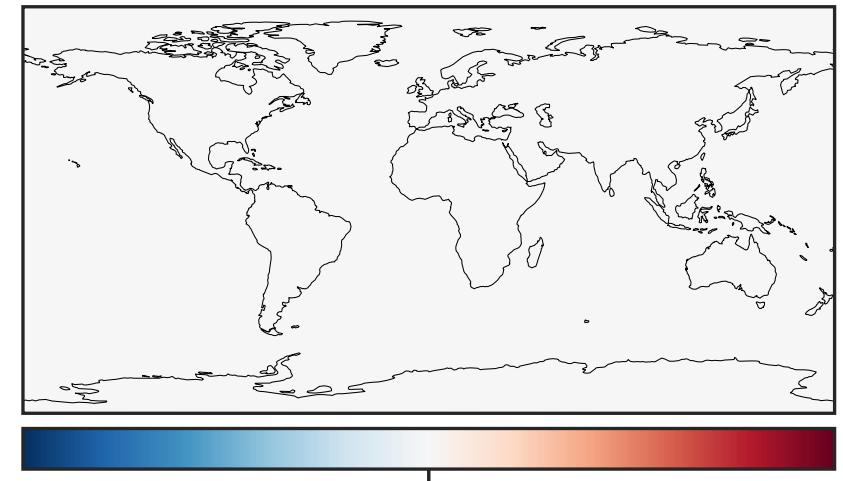


Difference (1x1.25)  
Dev - Ref, Dynamic Range

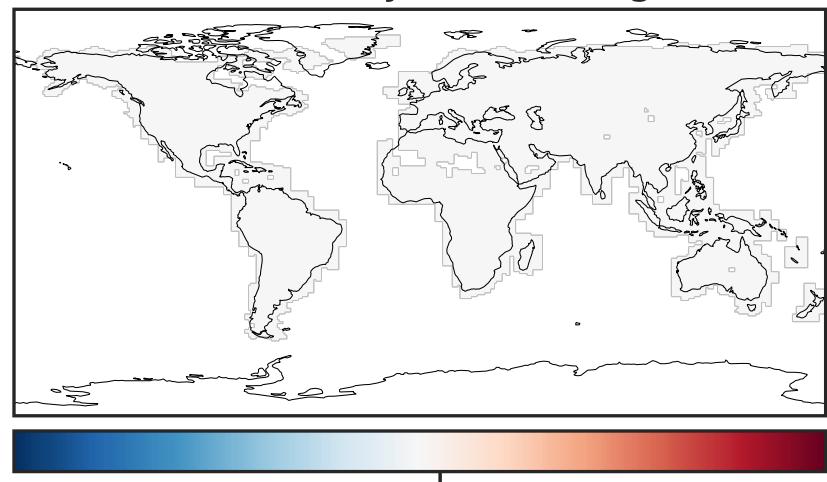


Zero throughout domain  
kg/m<sup>2</sup>/s

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

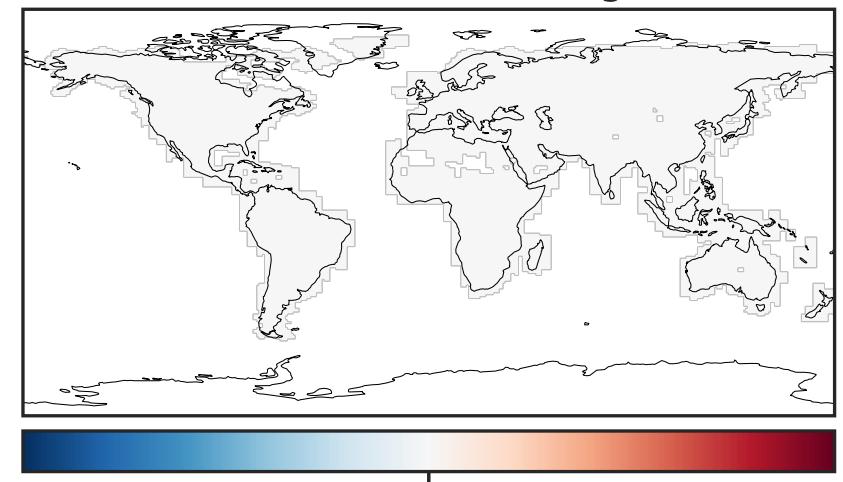


Ratio (1x1.25)  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

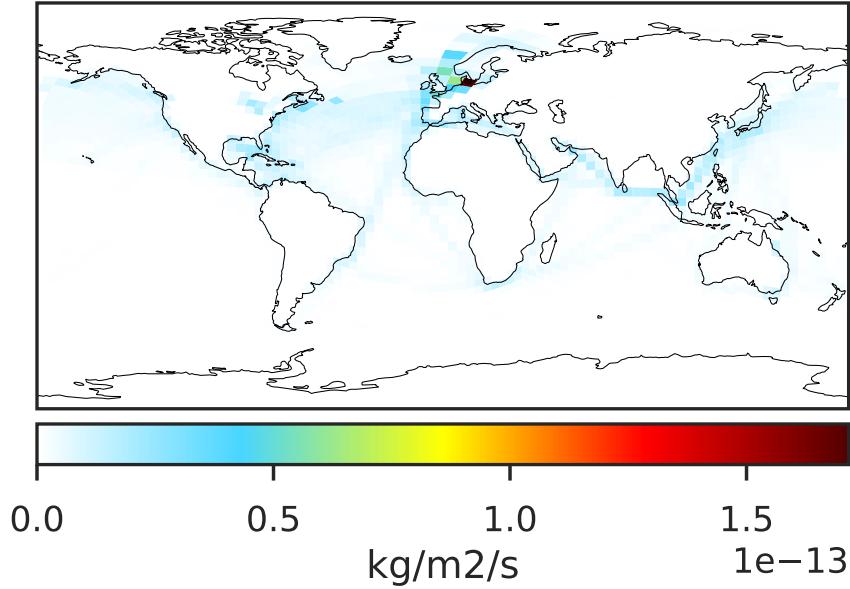
Ratio (1x1.25)  
Dev/Ref, Fixed Range



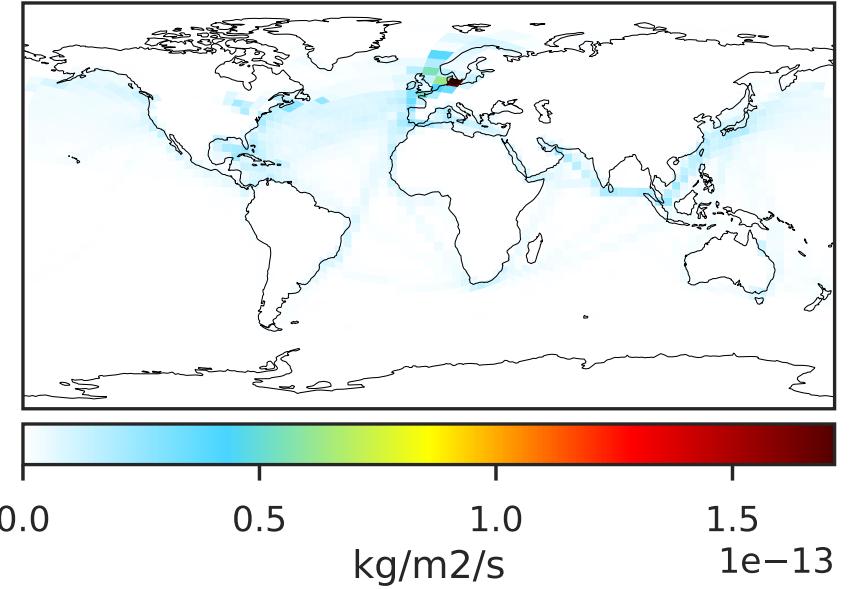
Ref and Dev equal throughout domain  
unitless

# EmisOCPO\_Ship (AnnualMean)

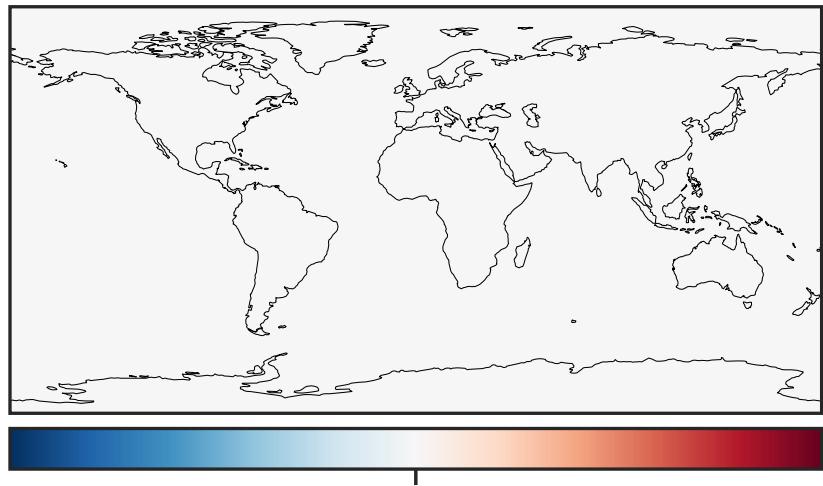
GCHP\_14.0.0 (Ref)  
c24



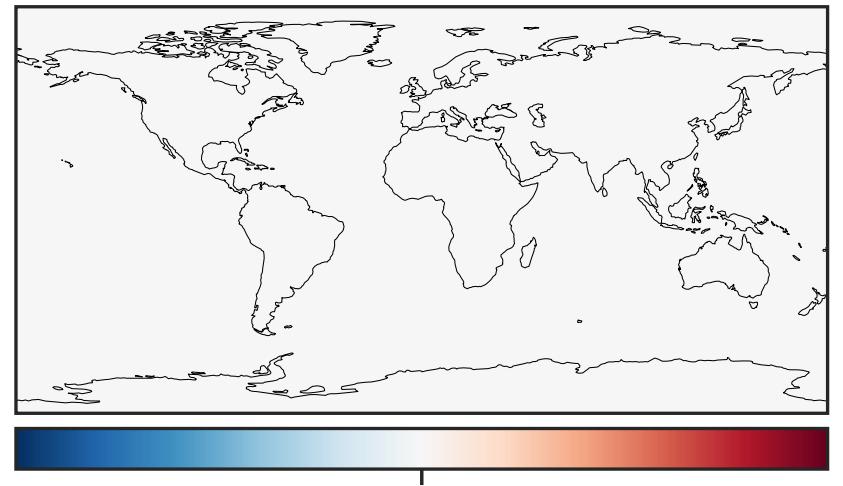
GCHP\_14.2.0 (Dev)  
c24



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



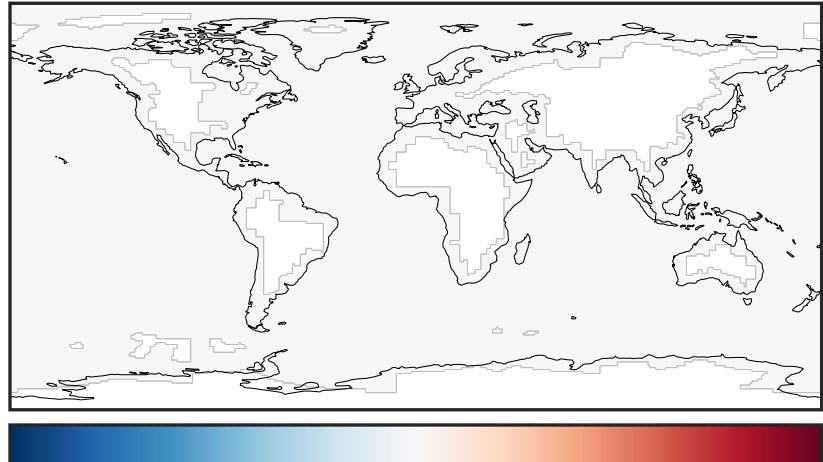
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



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

Ratio (1x1.25)

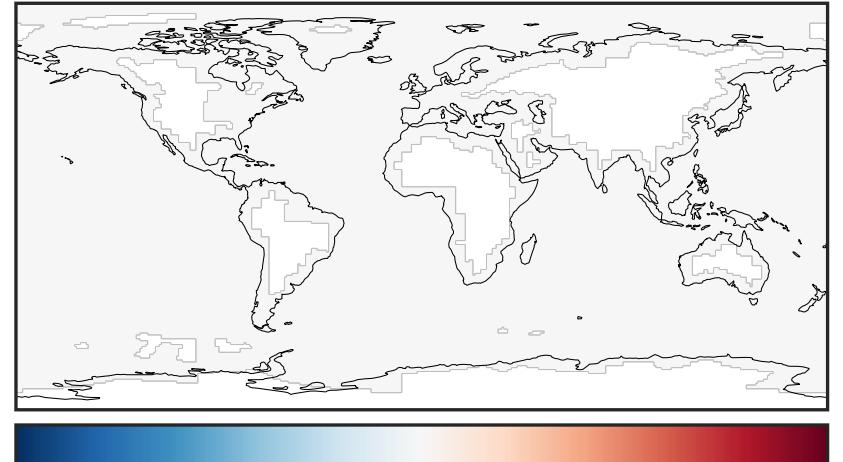
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

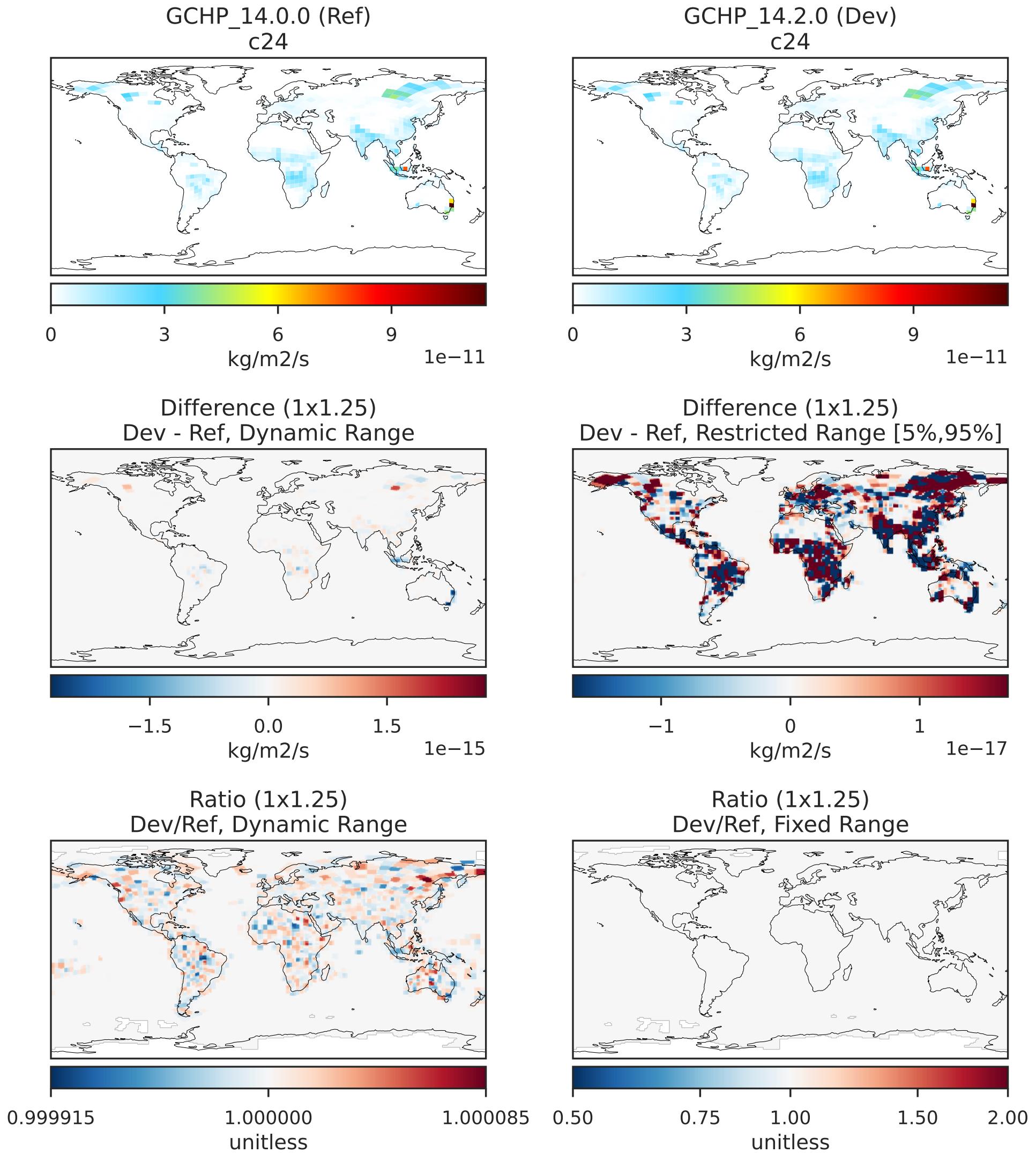
Ratio (1x1.25)

Dev/Ref, Fixed Range



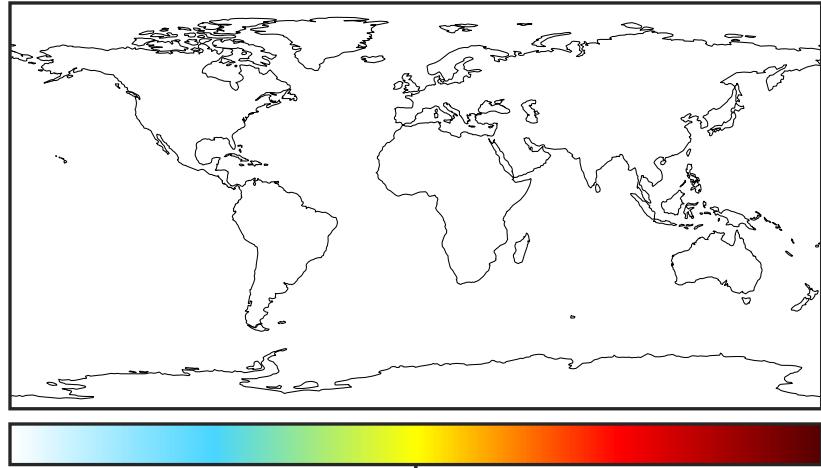
Ref and Dev equal throughout domain  
unitless

# EmisOCPO\_Total (AnnualMean)



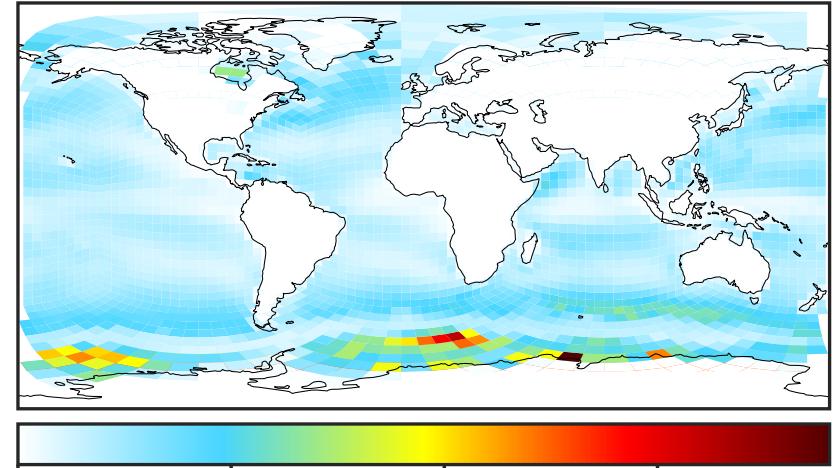
# EmisBrSALA\_Natural (AnnualMean)

GCHP\_14.0.0 (Ref)  
c24



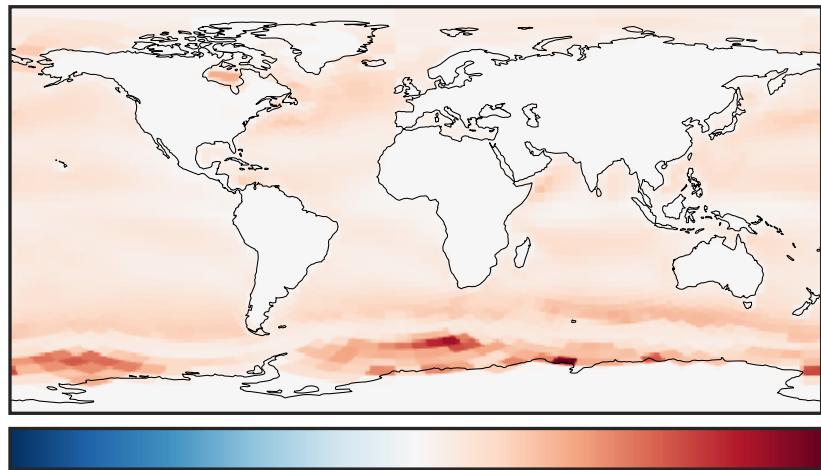
Zero throughout domain  
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



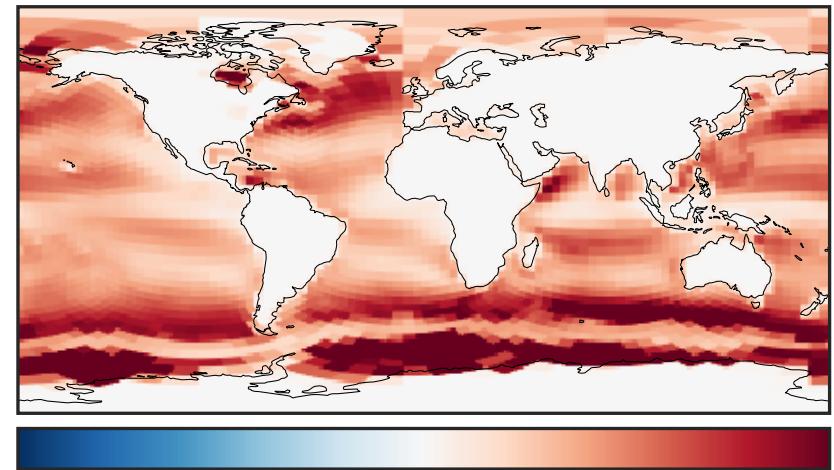
0.0 2.5 5.0 7.5  
kg/m<sup>2</sup>/s 1e-14

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



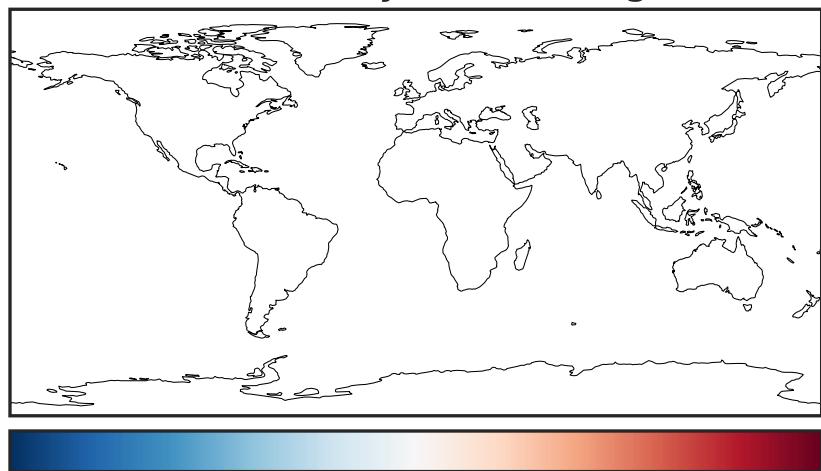
-5 0 5  
kg/m<sup>2</sup>/s  $1e-14$

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



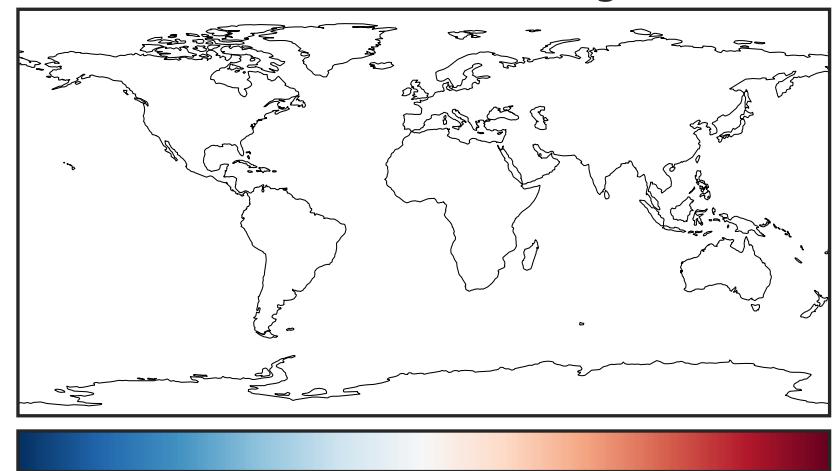
-1.5 0.0 1.5  
kg/m<sup>2</sup>/s  $1e-14$

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



Undefined throughout domain  
unitless

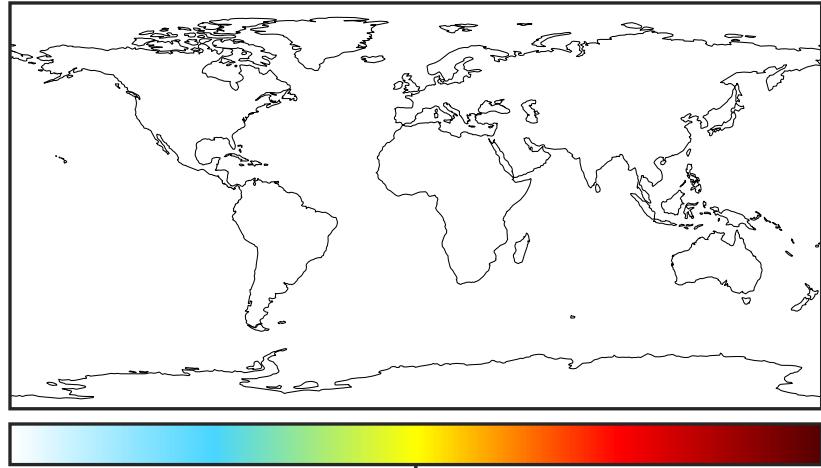
Ratio (1x1.25)  
Dev/Ref, Fixed Range



Undefined throughout domain  
unitless

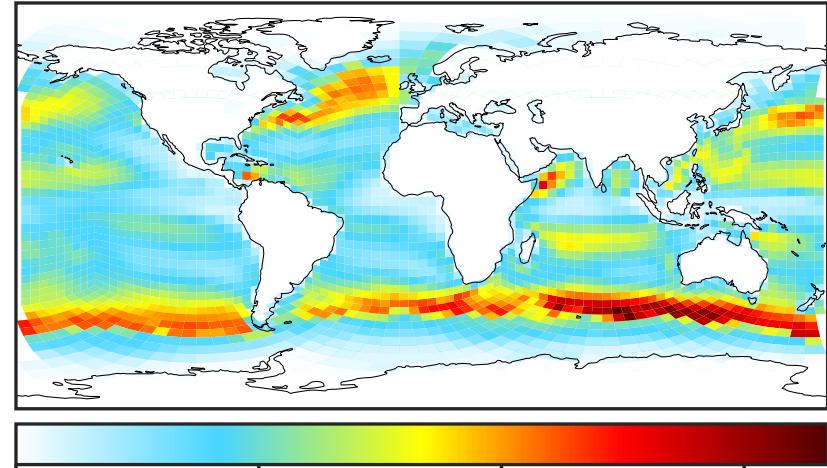
# EmisBrSALC\_Natural (AnnualMean)

GCHP\_14.0.0 (Ref)  
c24



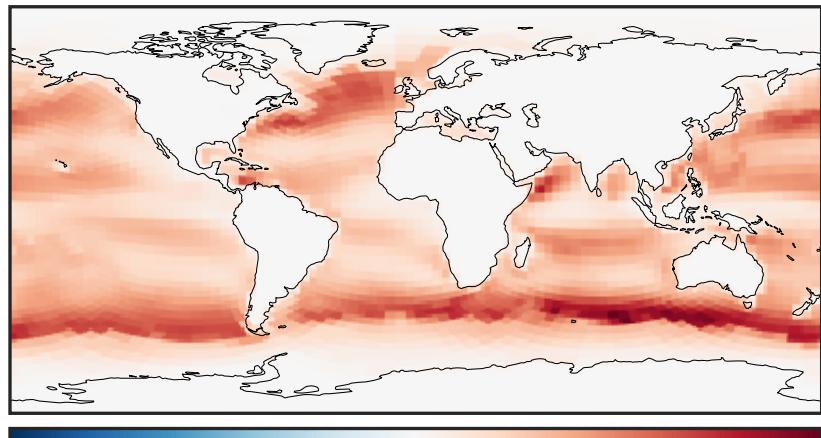
Zero throughout domain  
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



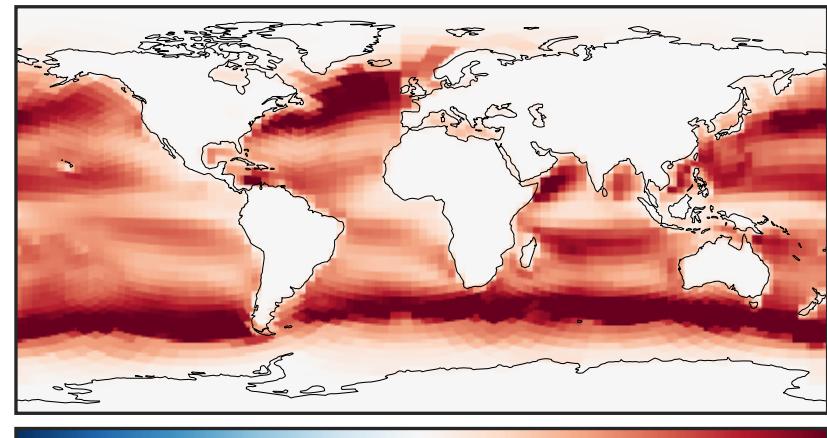
0.0      0.6      1.2      1.8  
kg/m<sup>2</sup>/s      1e-12

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



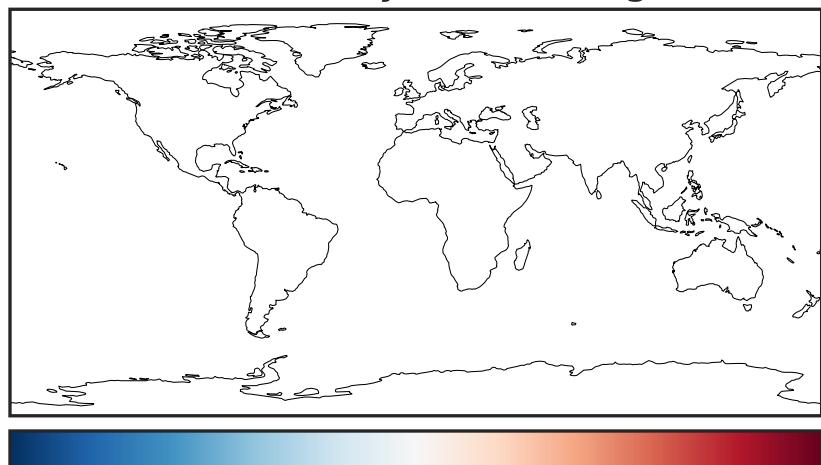
-1.5      0.0      1.5  
kg/m<sup>2</sup>/s      1e-12

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



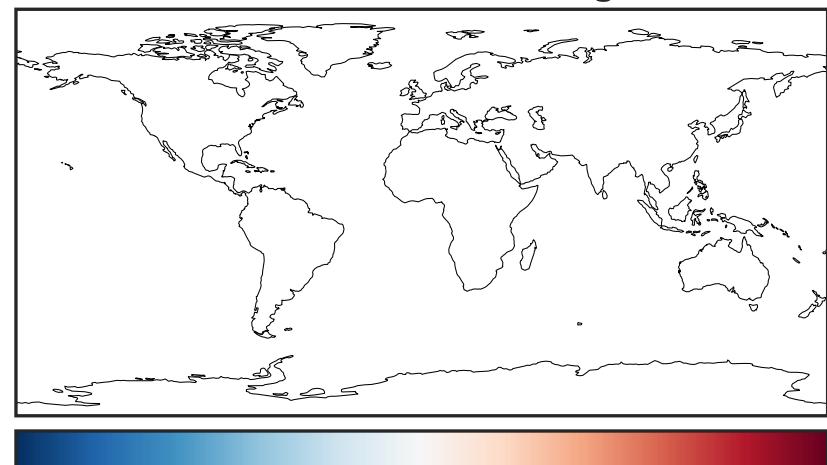
-6      0      6  
kg/m<sup>2</sup>/s      1e-13

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



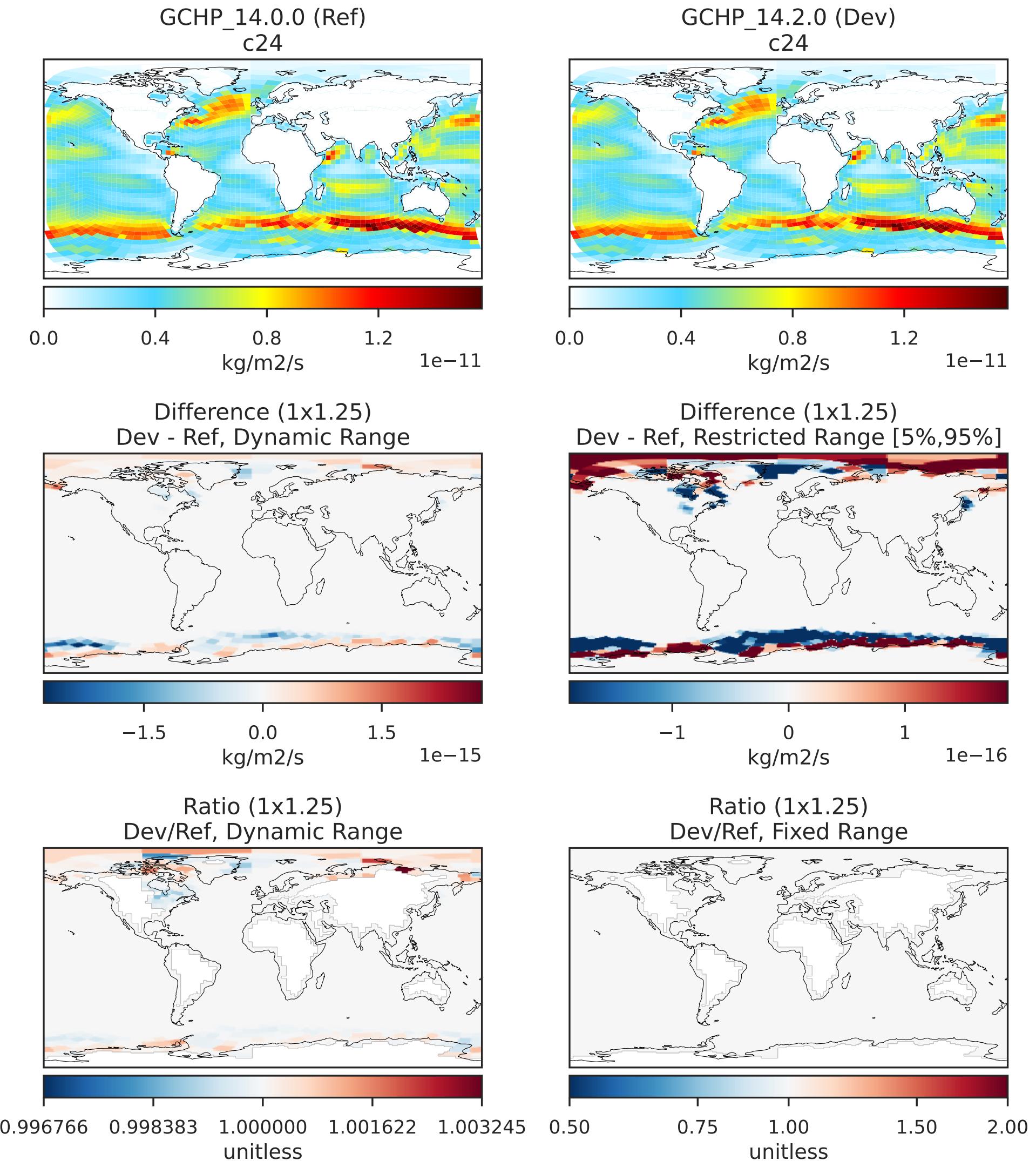
Undefined throughout domain  
unitless

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

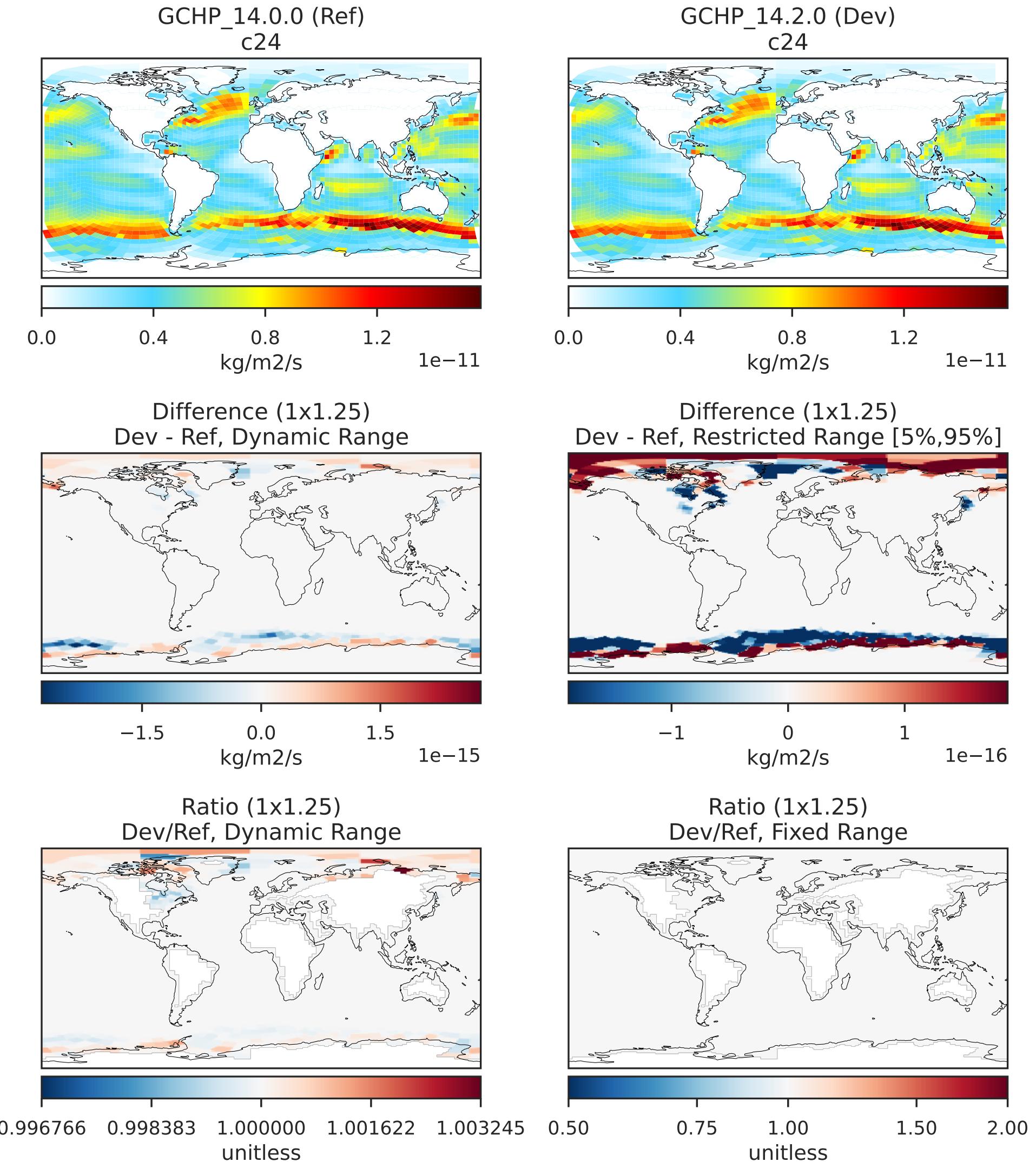


Undefined throughout domain  
unitless

# EmisSALA\_Natural (AnnualMean)

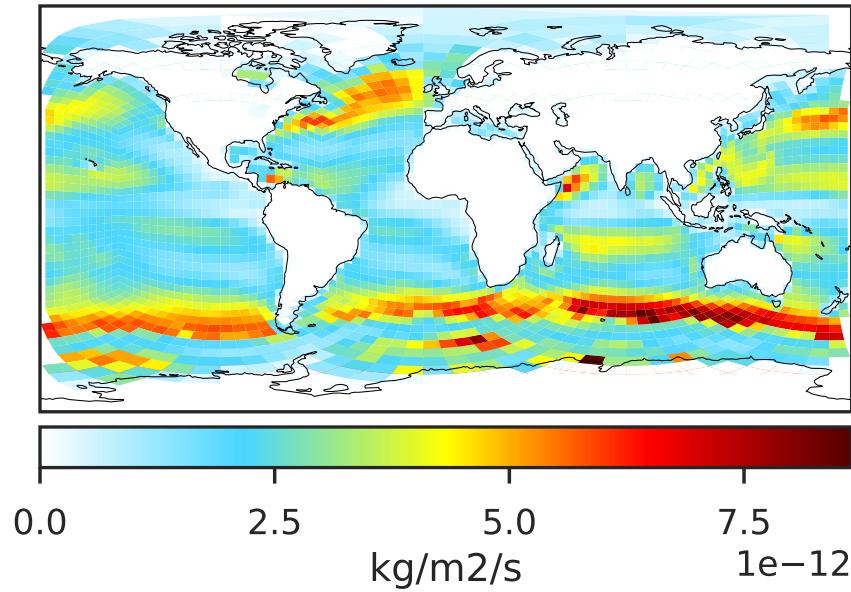


# EmisSALAAL\_Natural (AnnualMean)

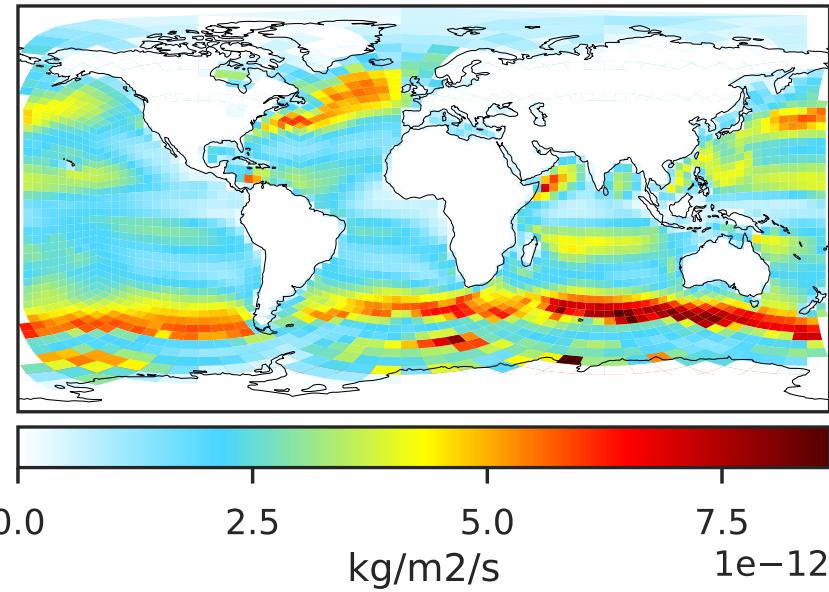


# EmisSALACL\_Natural (AnnualMean)

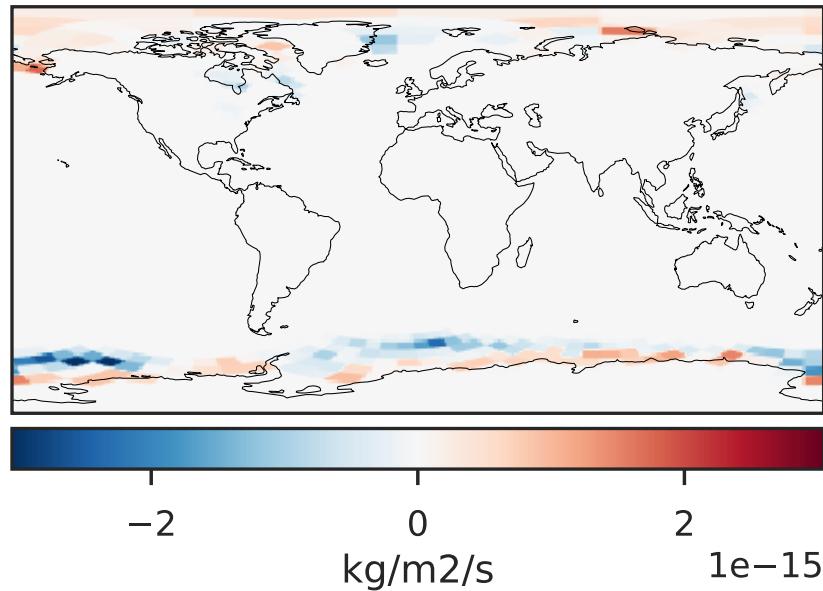
GCHP\_14.0.0 (Ref)  
c24



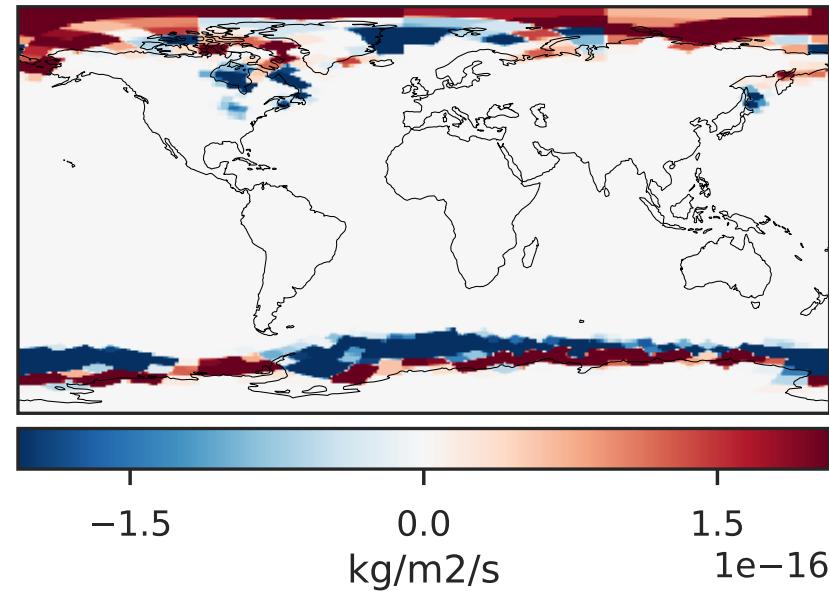
GCHP\_14.2.0 (Dev)  
c24



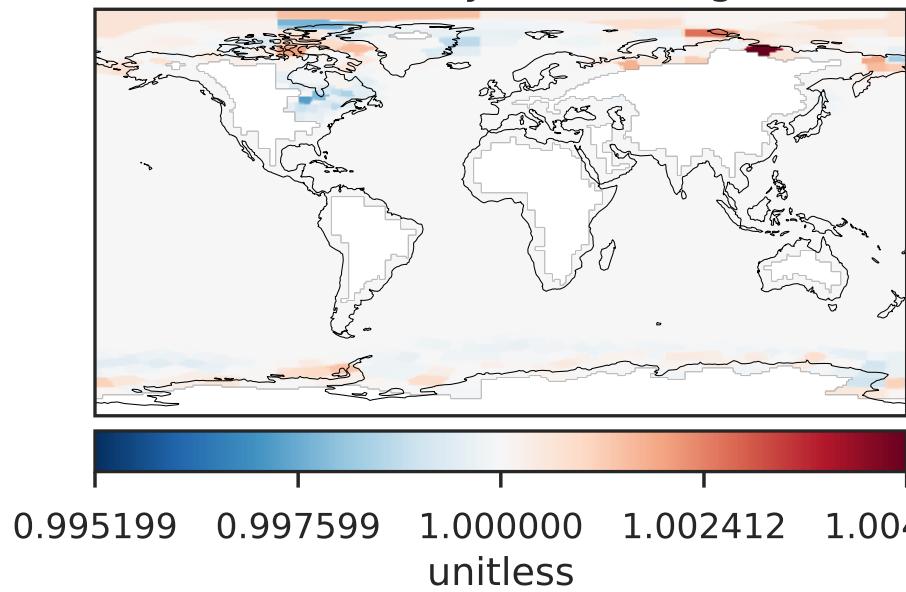
Difference (1x1.25)  
Dev - Ref, Dynamic Range



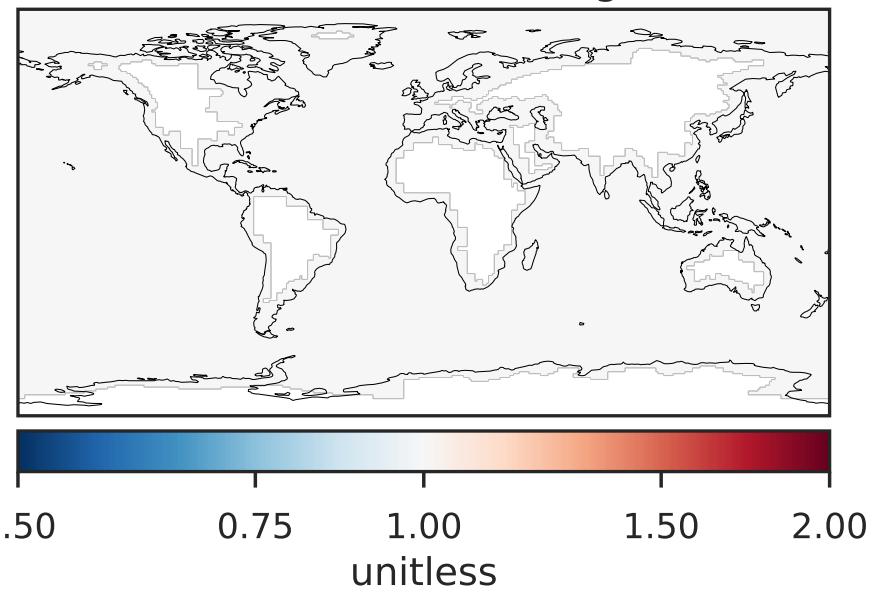
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



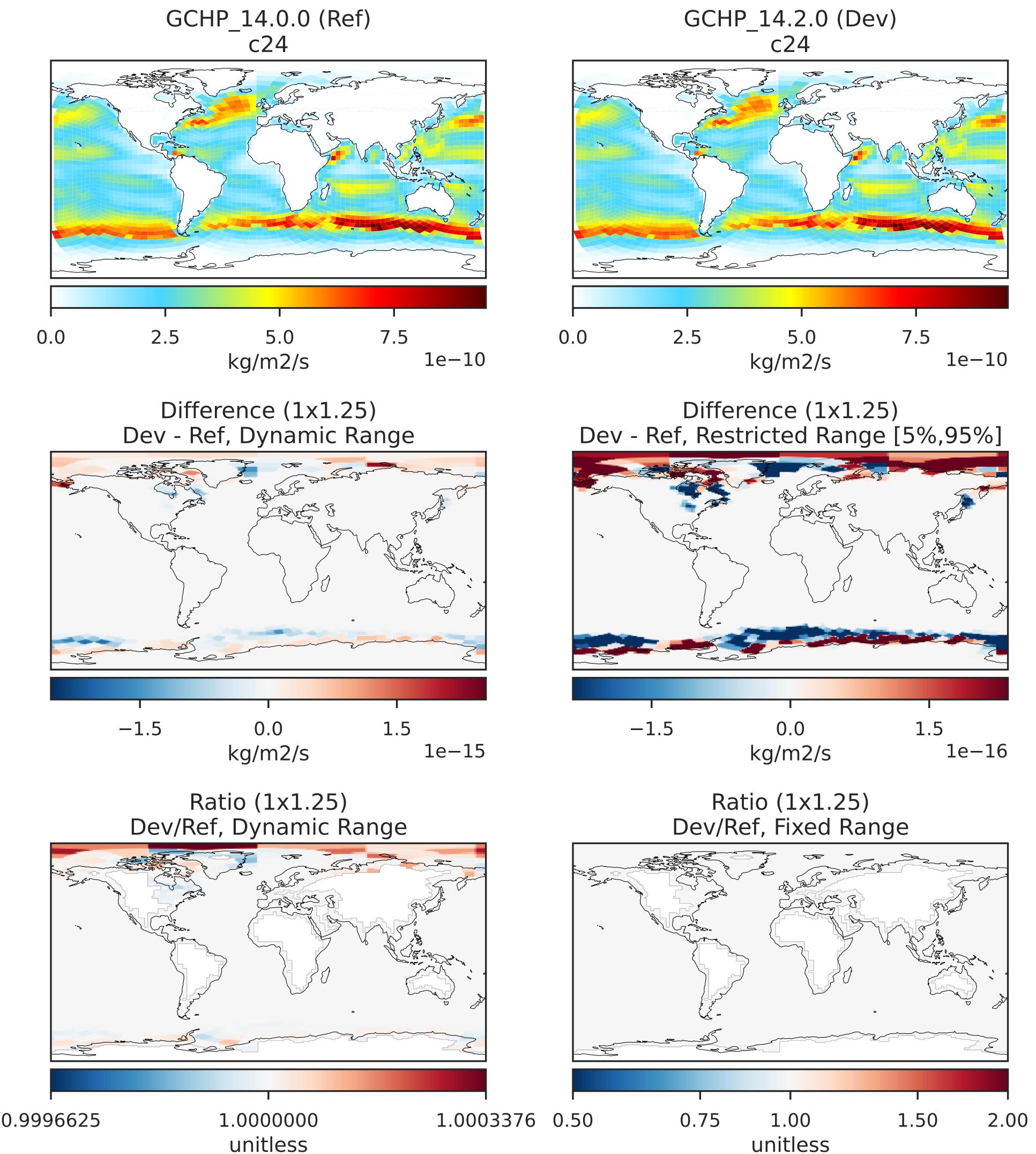
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



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

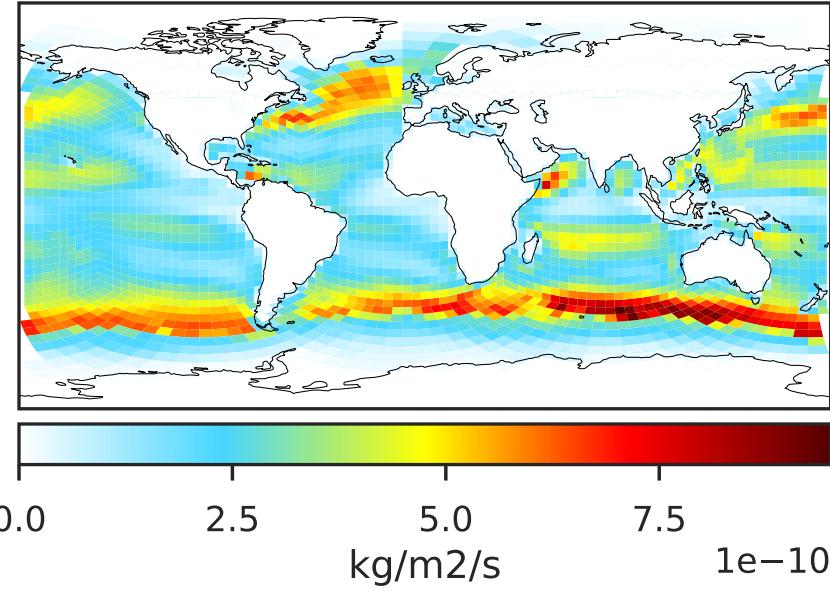


# EmisSALC\_Natural (AnnualMean)

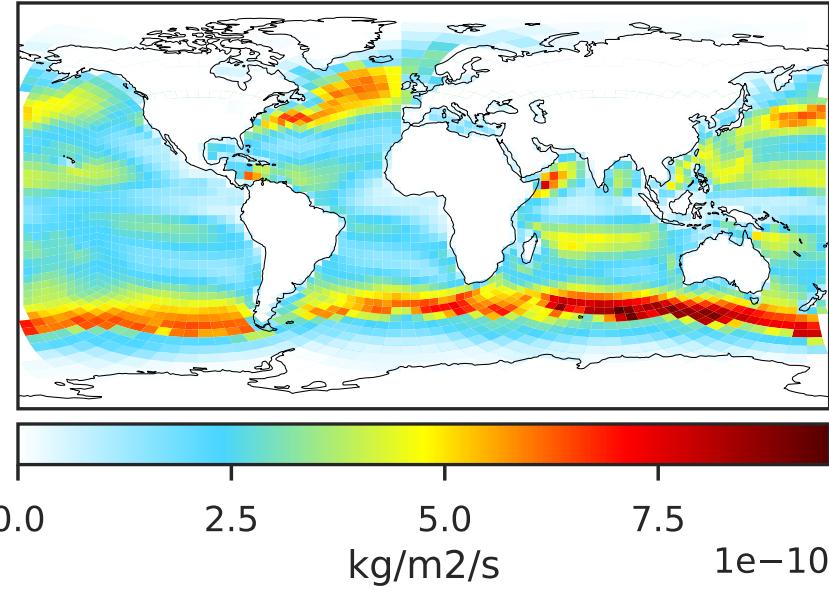


# EmisSALCAL\_Natural (AnnualMean)

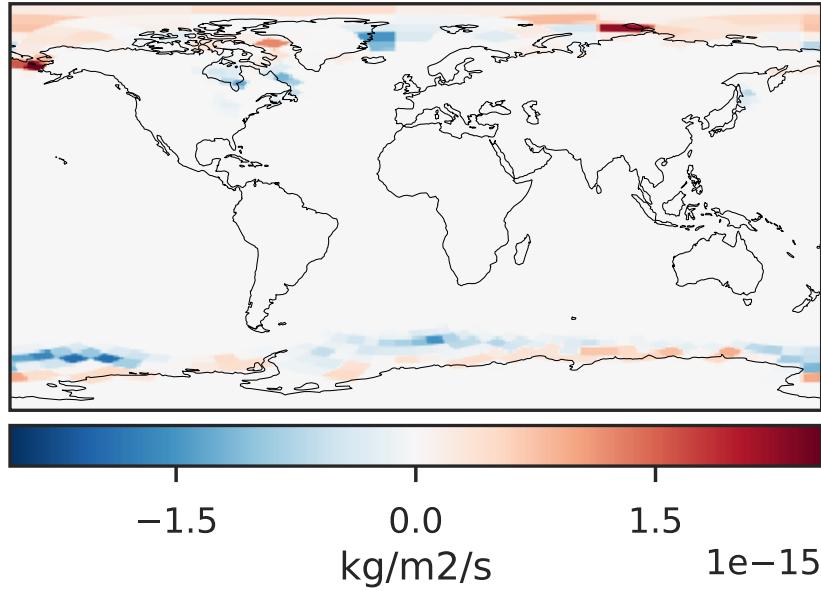
GCHP\_14.0.0 (Ref)  
c24



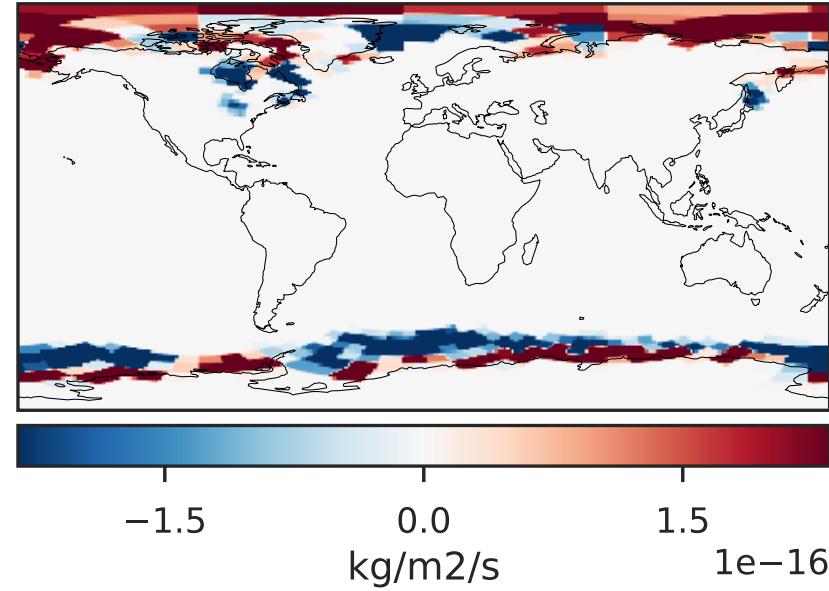
GCHP\_14.2.0 (Dev)  
c24



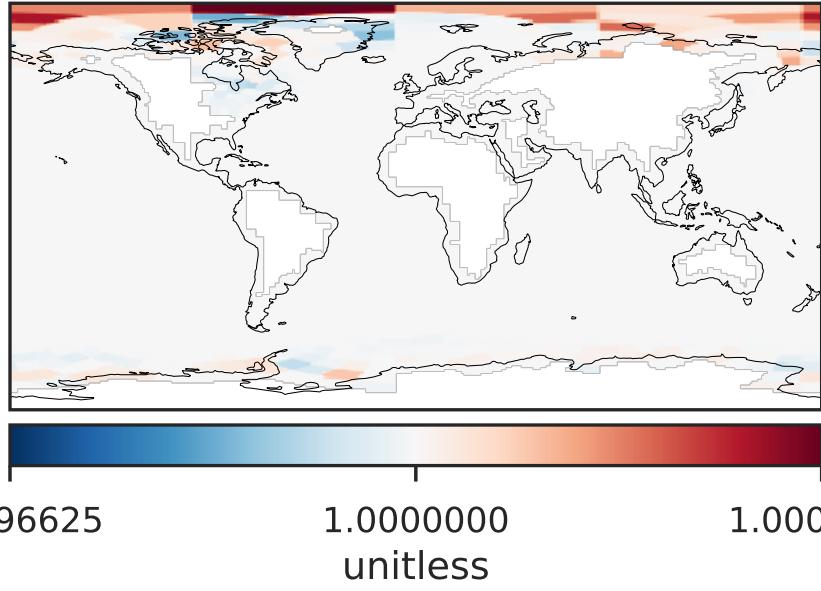
Difference (1x1.25)  
Dev - Ref, Dynamic Range



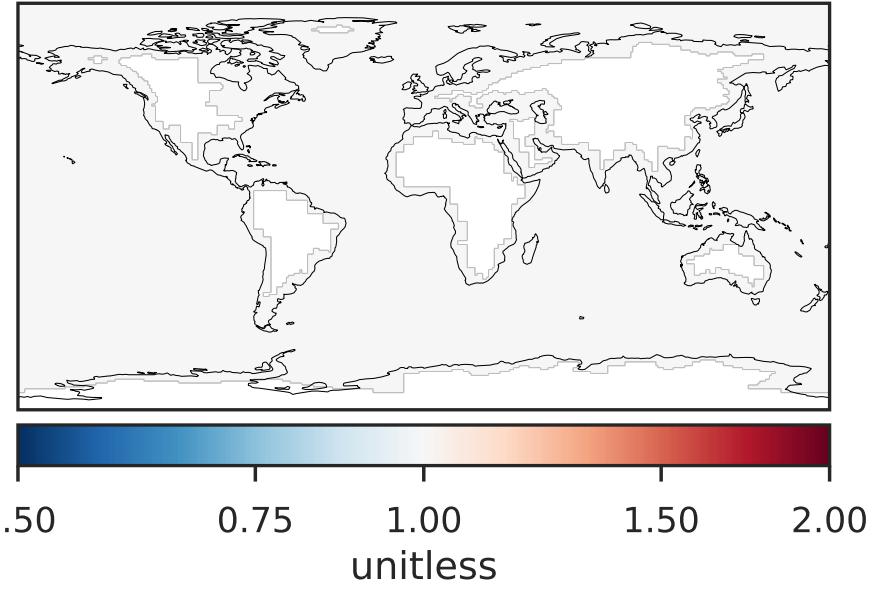
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



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

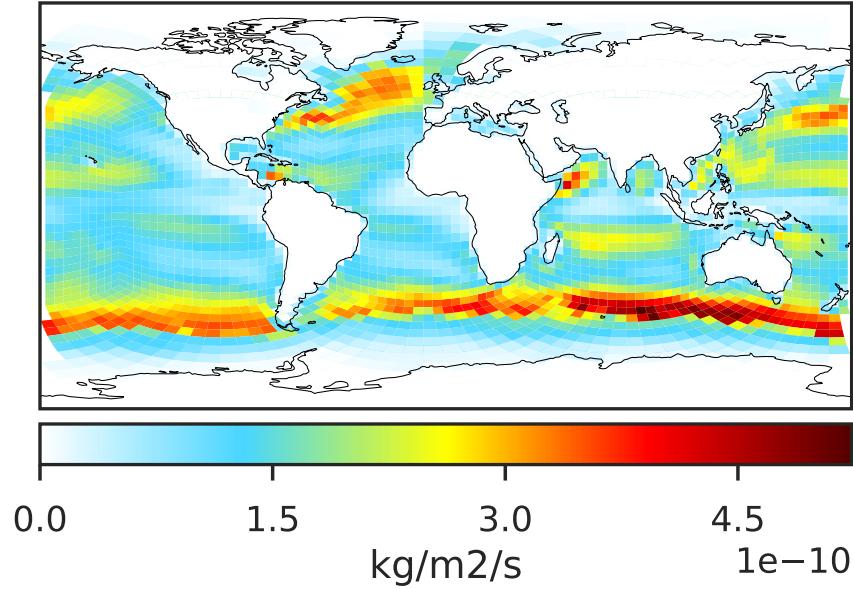


Ratio (1x1.25)  
Dev/Ref, Fixed Range

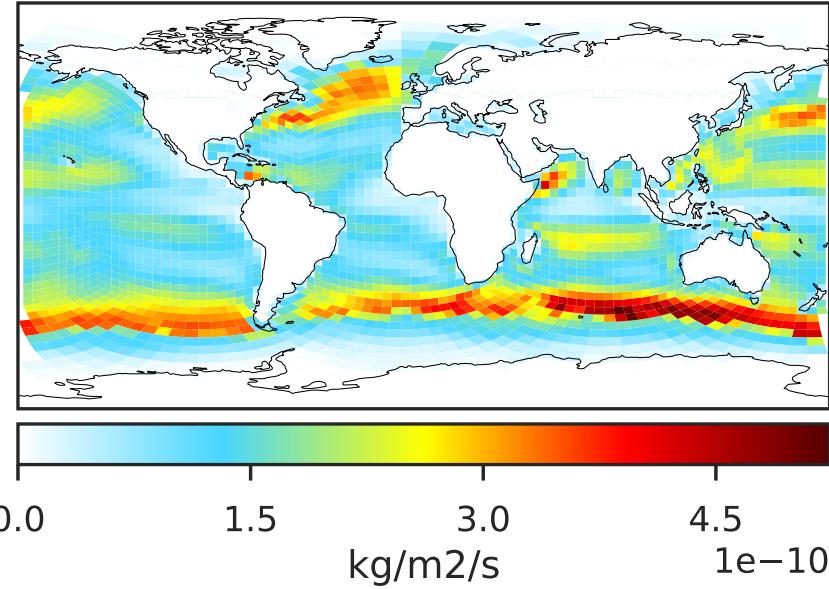


# EmisSALCCL\_Natural (AnnualMean)

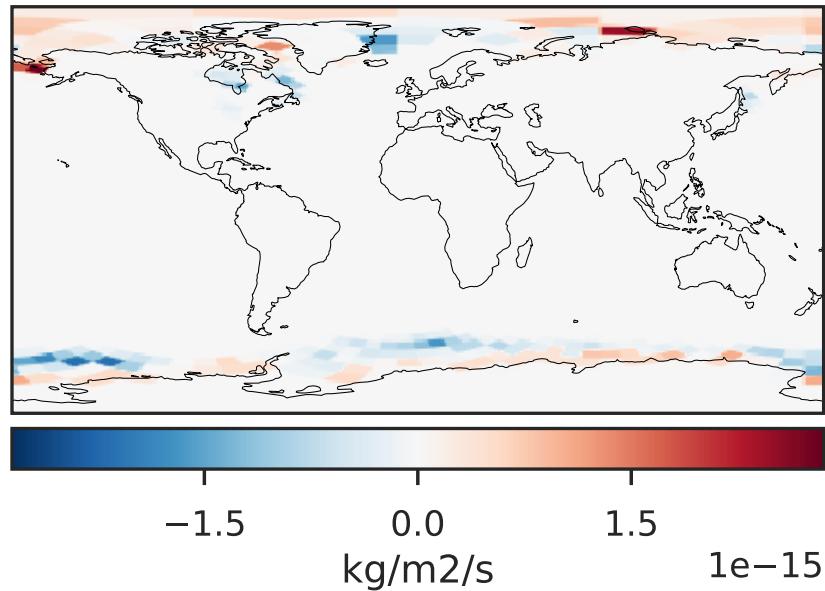
GCHP\_14.0.0 (Ref)  
c24



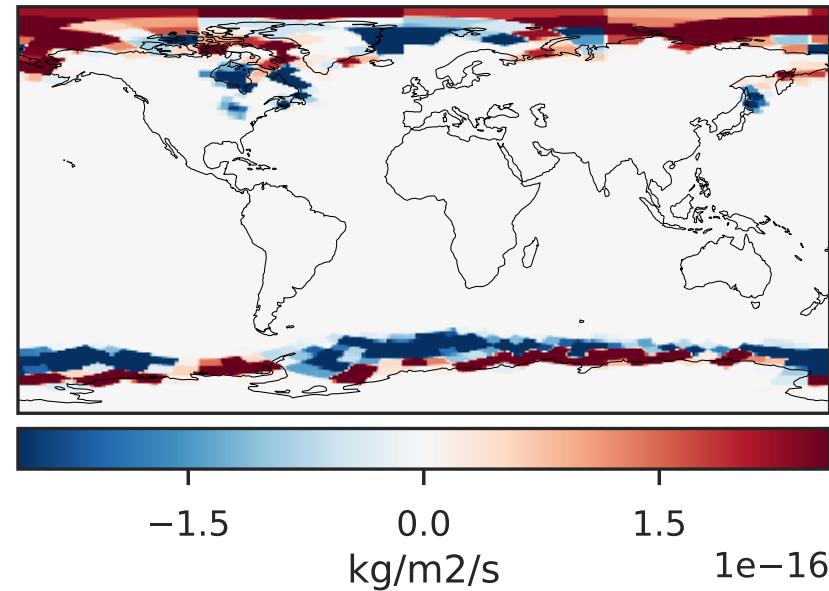
GCHP\_14.2.0 (Dev)  
c24



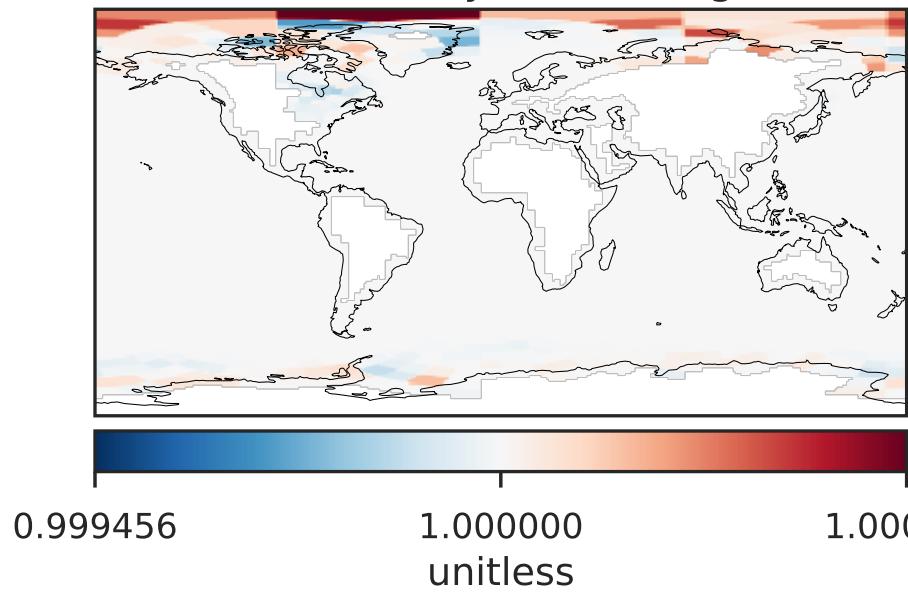
Difference (1x1.25)  
Dev - Ref, Dynamic Range



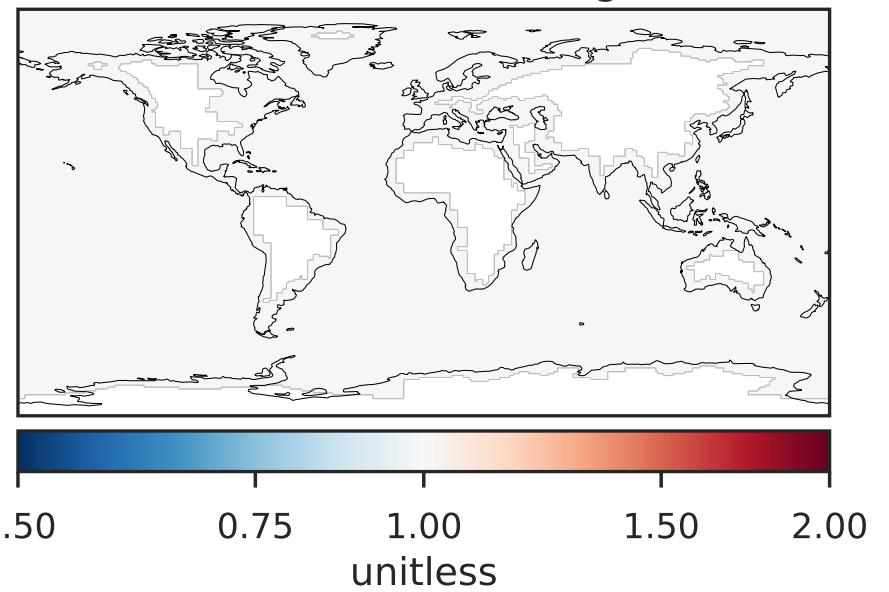
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%, 95%]



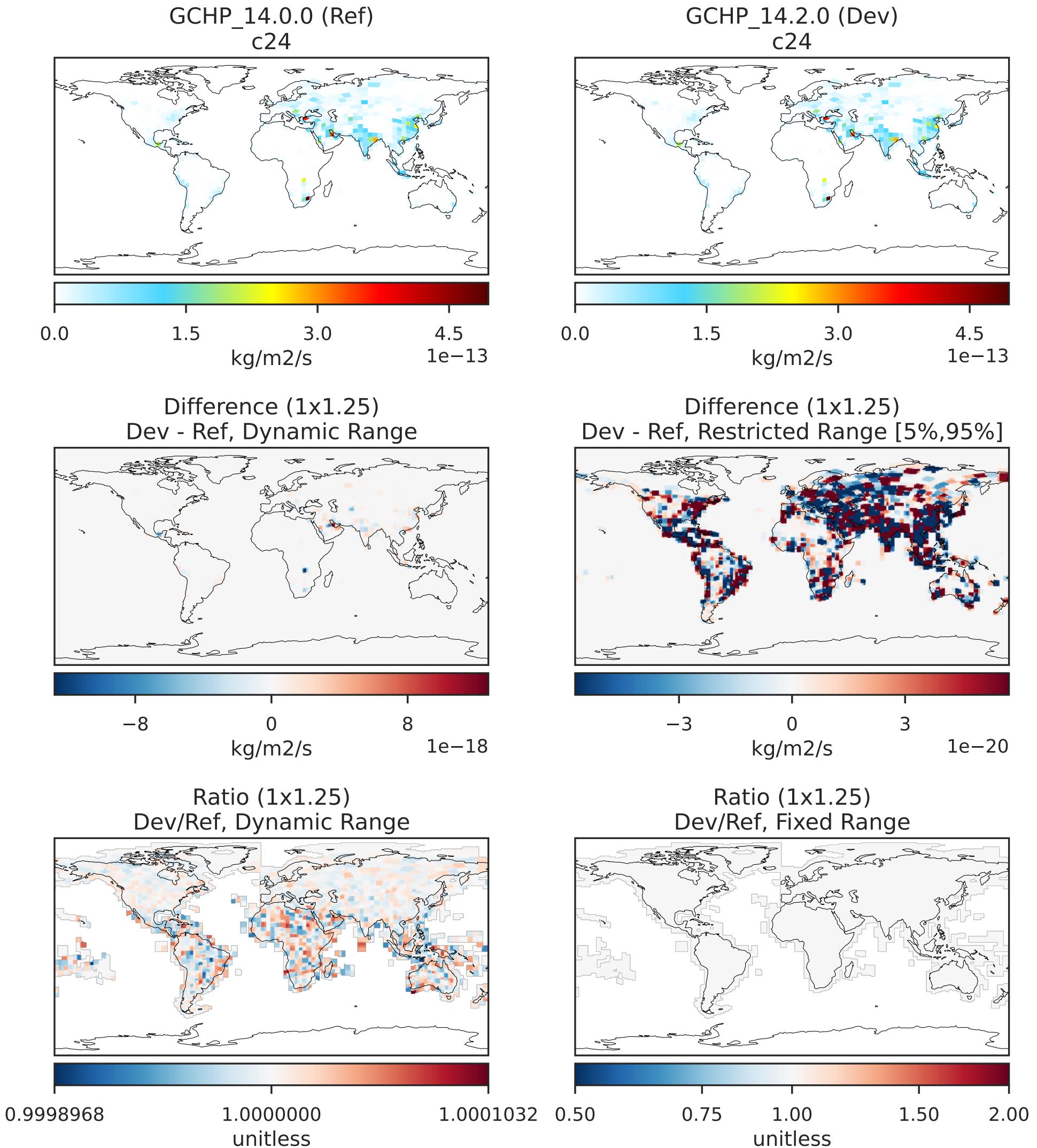
Ratio (1x1.25)  
Dev/Ref, Dynamic Range



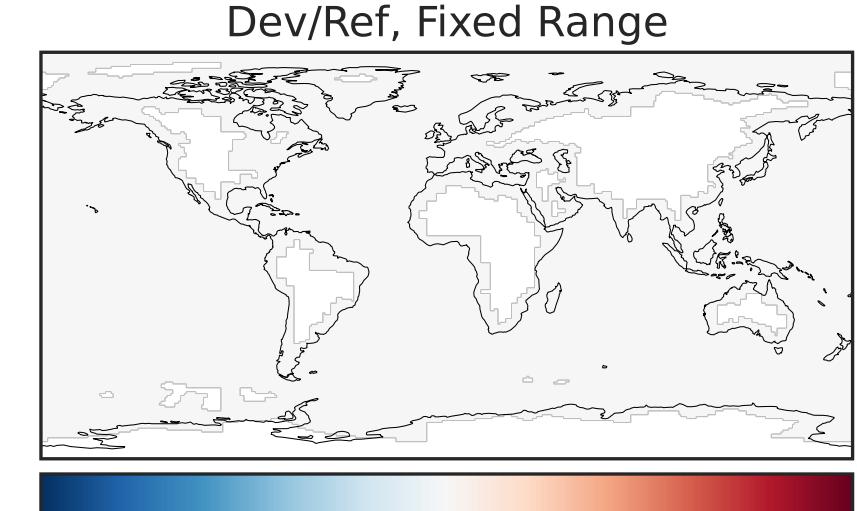
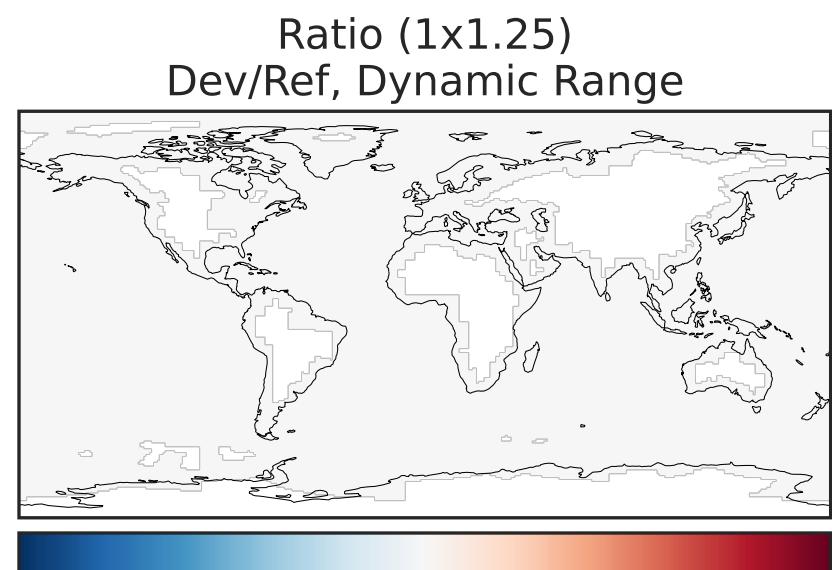
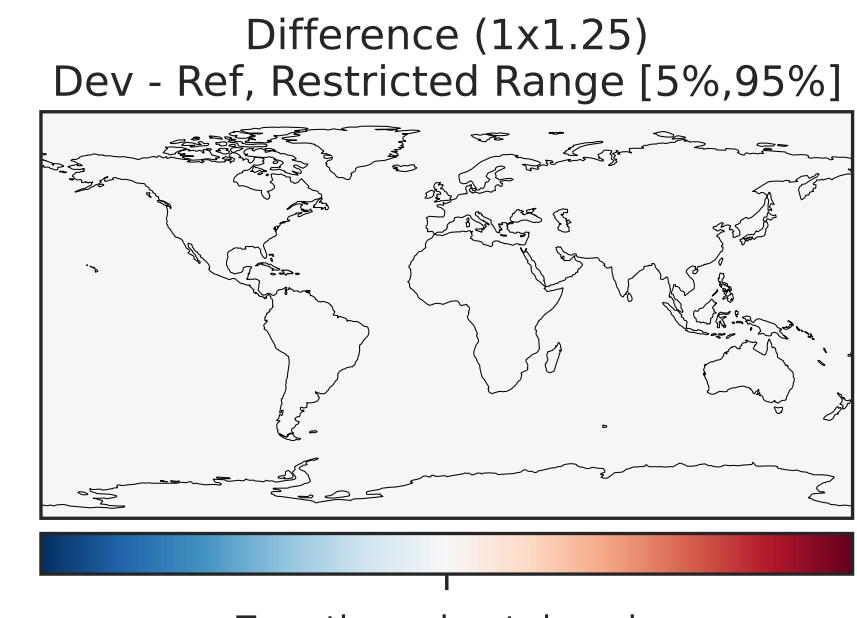
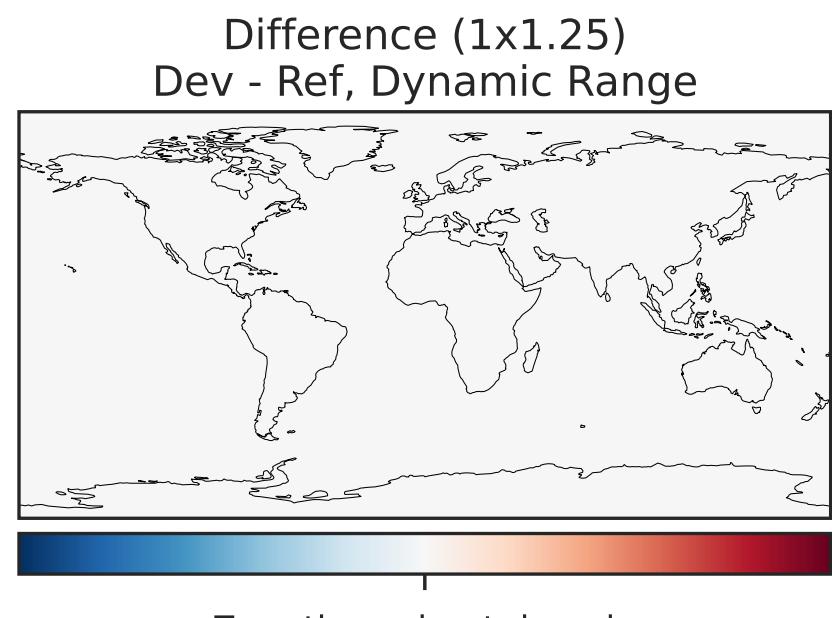
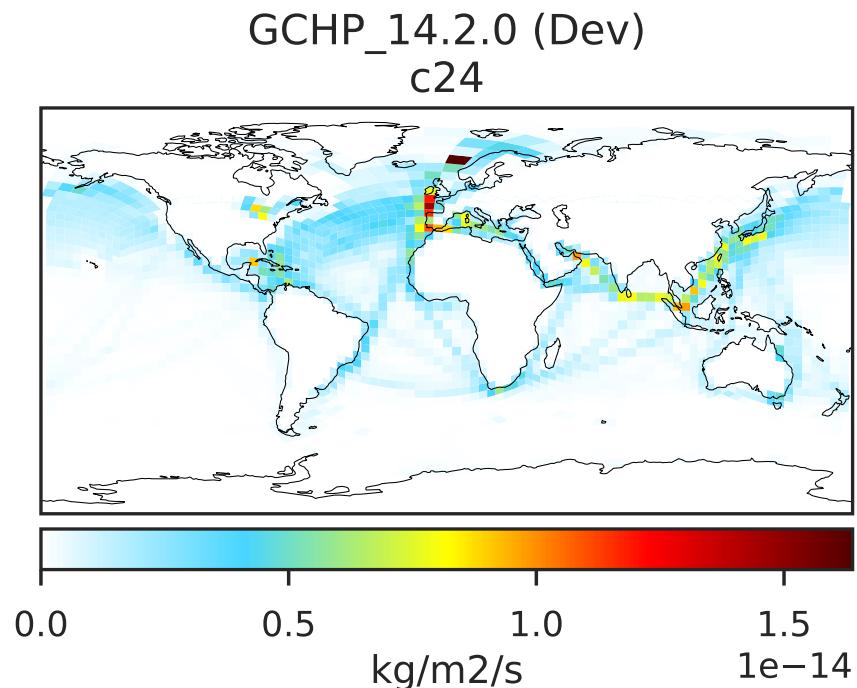
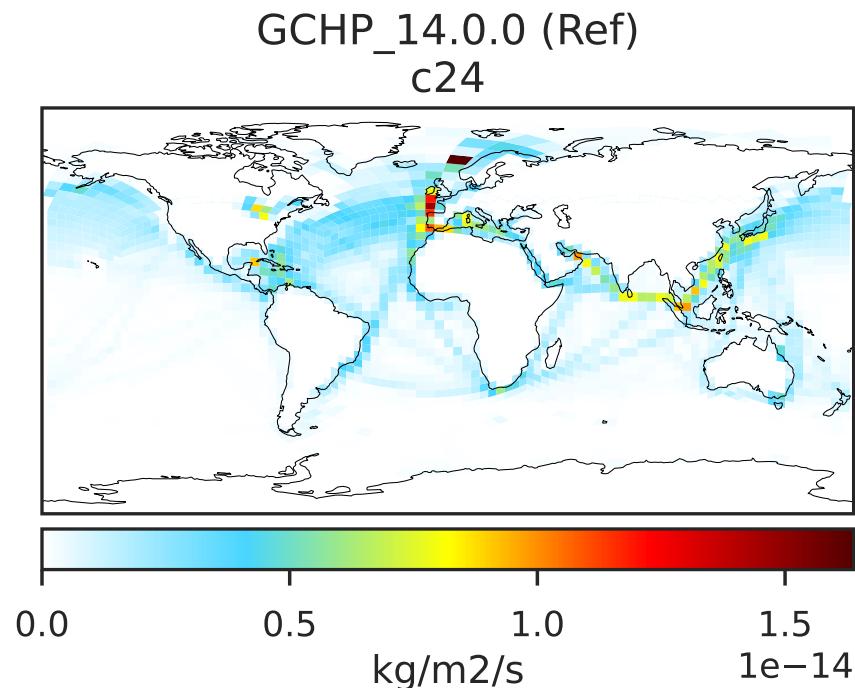
Ratio (1x1.25)  
Dev/Ref, Fixed Range



# EmispFe\_Anthro (AnnualMean)

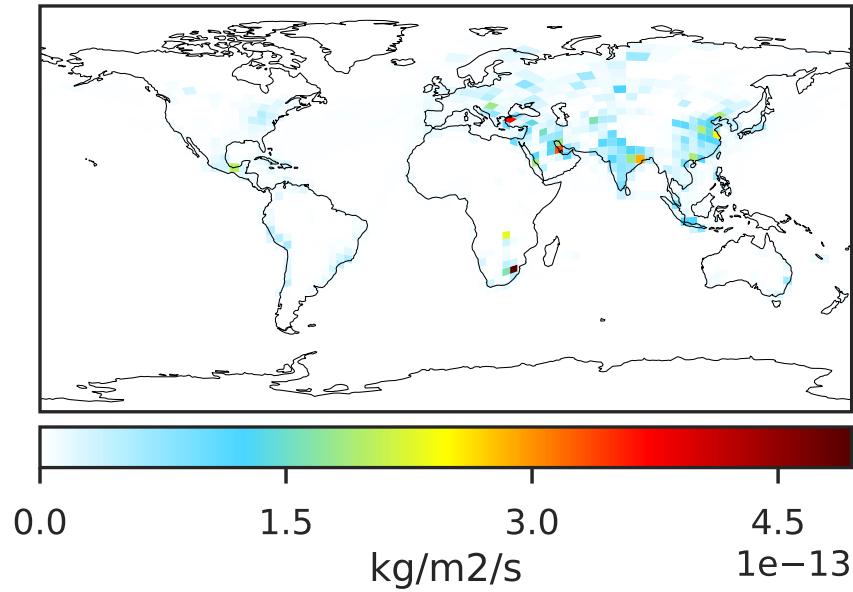


# EmispFe\_Ship (AnnualMean)

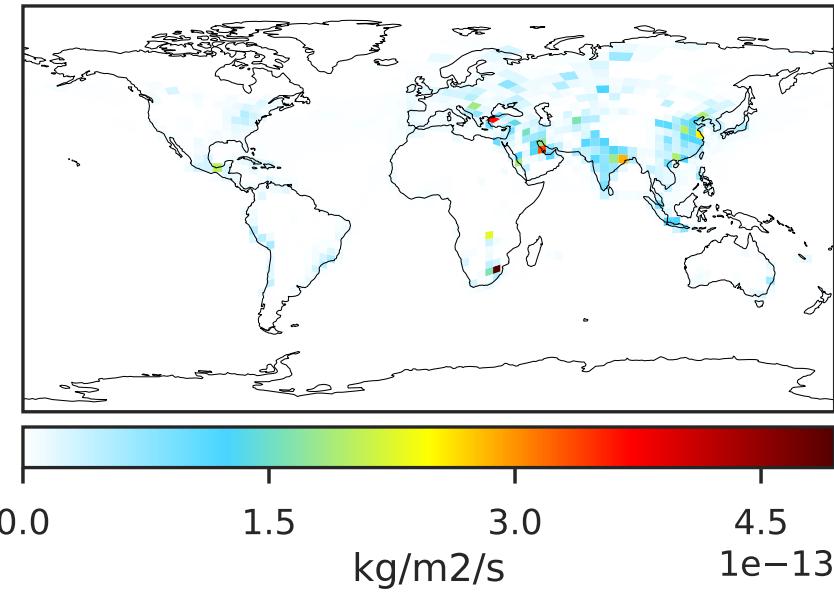


# EmispFe\_Total (AnnualMean)

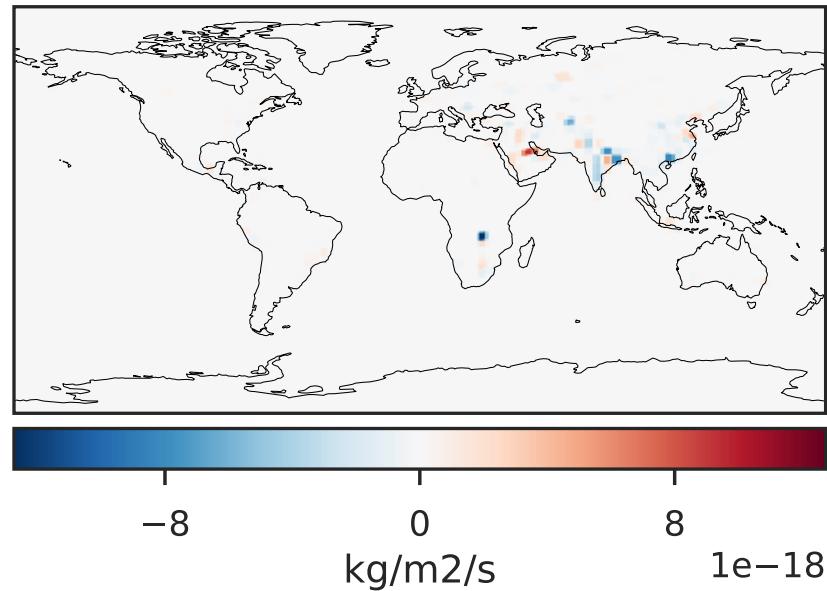
GCHP\_14.0.0 (Ref)  
c24



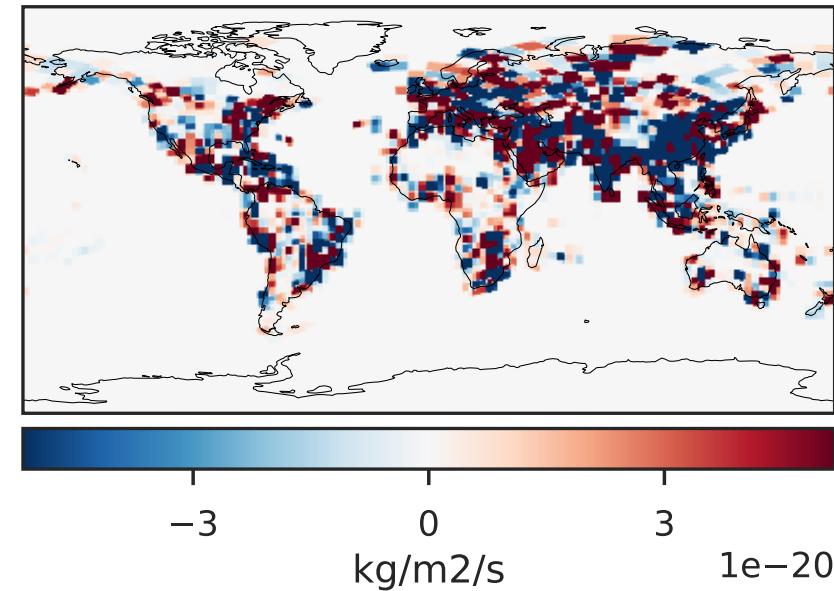
GCHP\_14.2.0 (Dev)  
c24



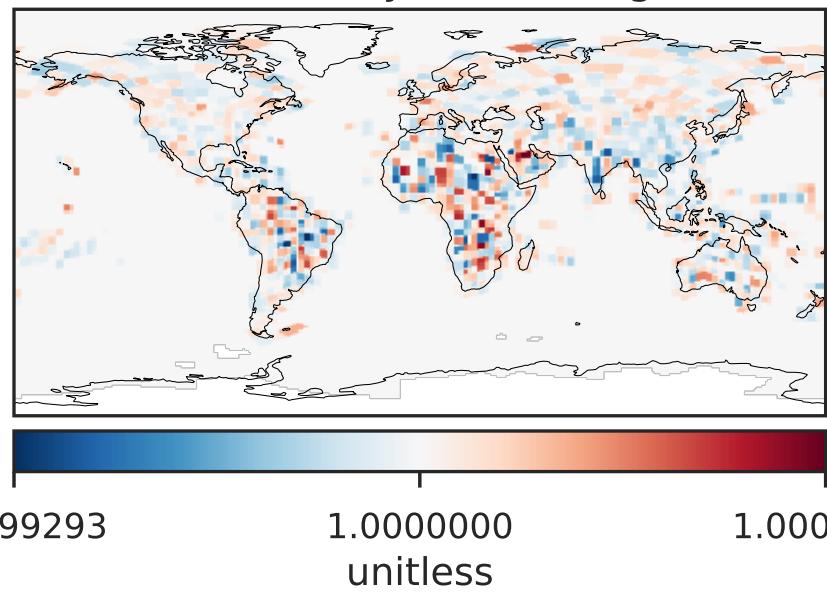
Difference (1x1.25)  
Dev - Ref, Dynamic Range



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



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



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

