

# EmisALD2\_Ship (AnnualMean)

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



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

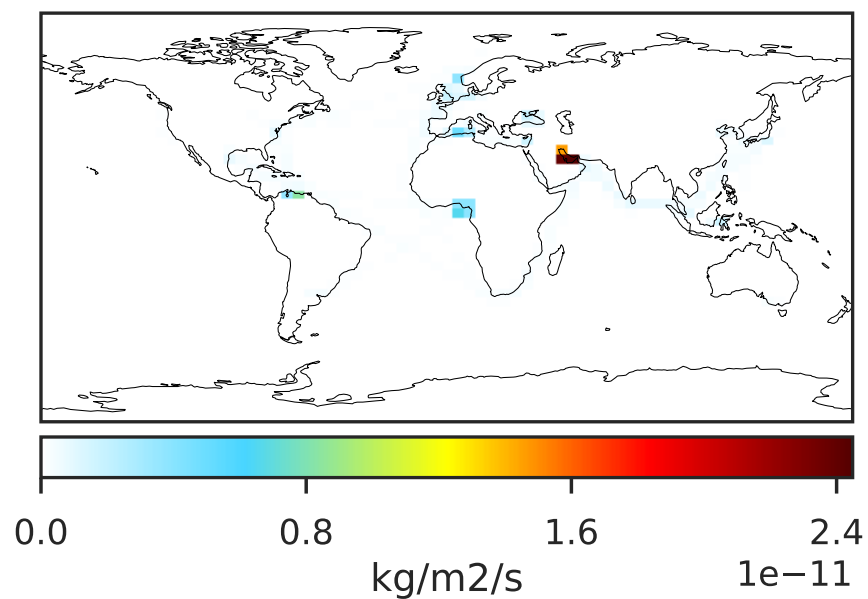
Ratio (1x1.25)  
Dev/Ref, Fixed Range



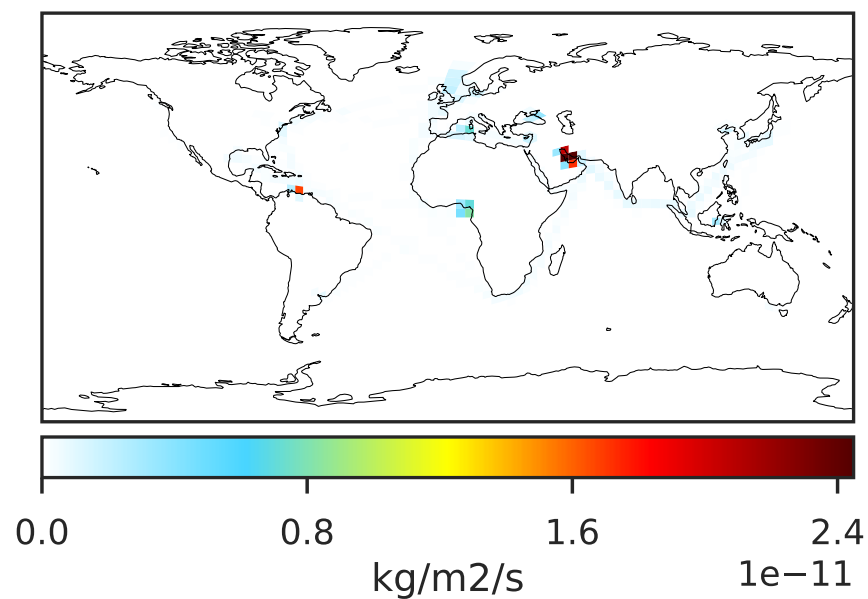
Undefined throughout domain  
unitless

# EmisALK4\_Ship (AnnualMean)

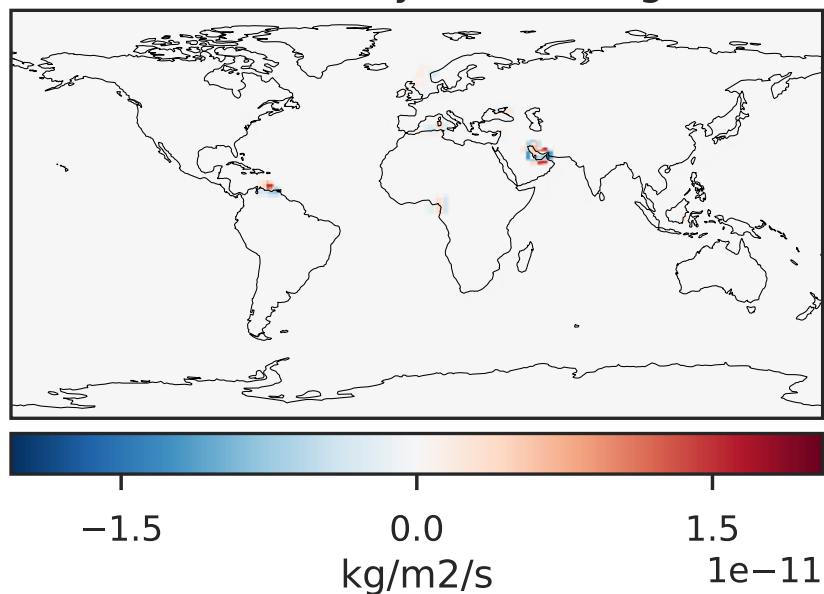
GCC\_14.2.0 (Ref)  
4.0x5.0



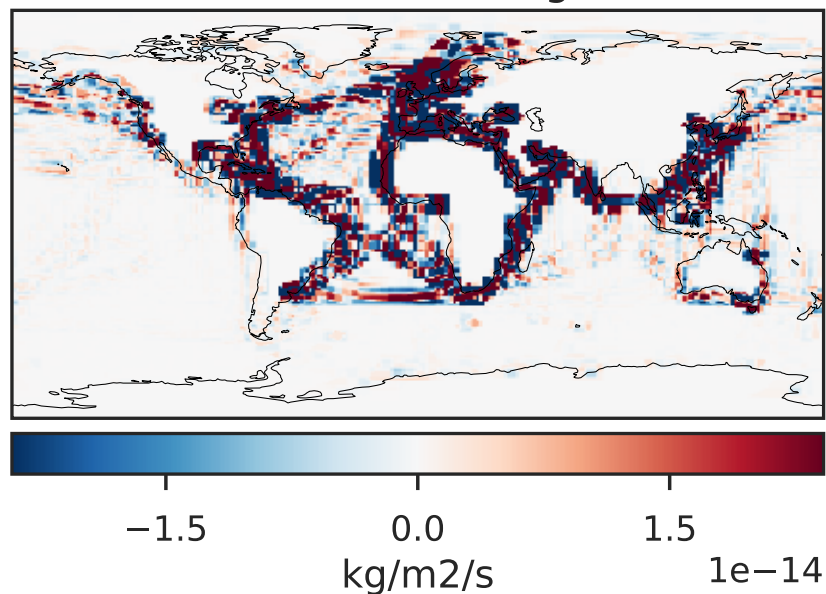
GCHP\_14.2.0 (Dev)  
c24



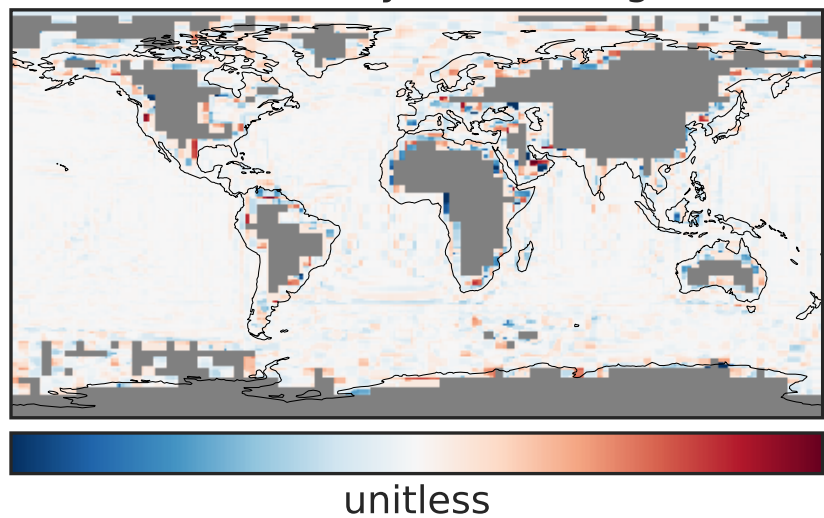
Difference (1x1.25)  
Dev - Ref, Dynamic Range



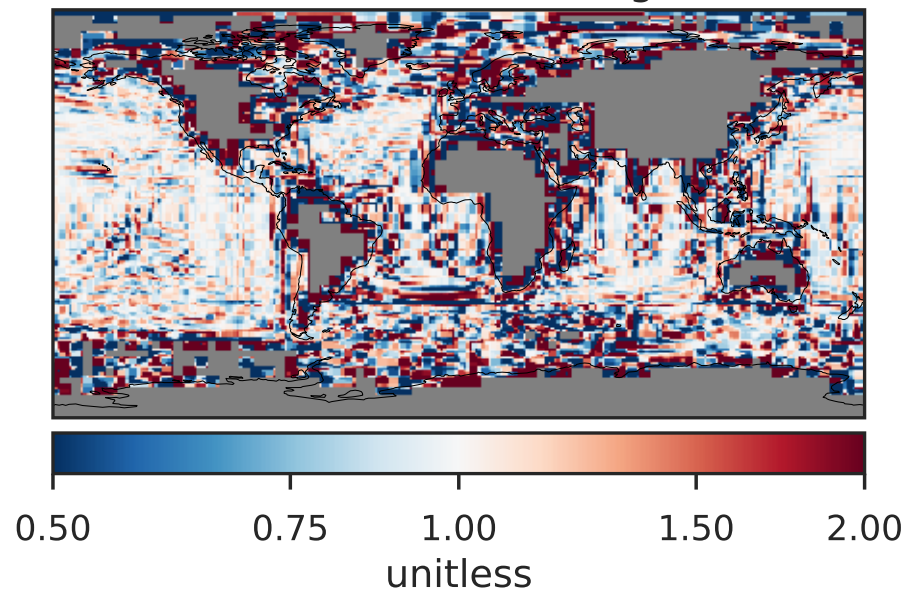
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

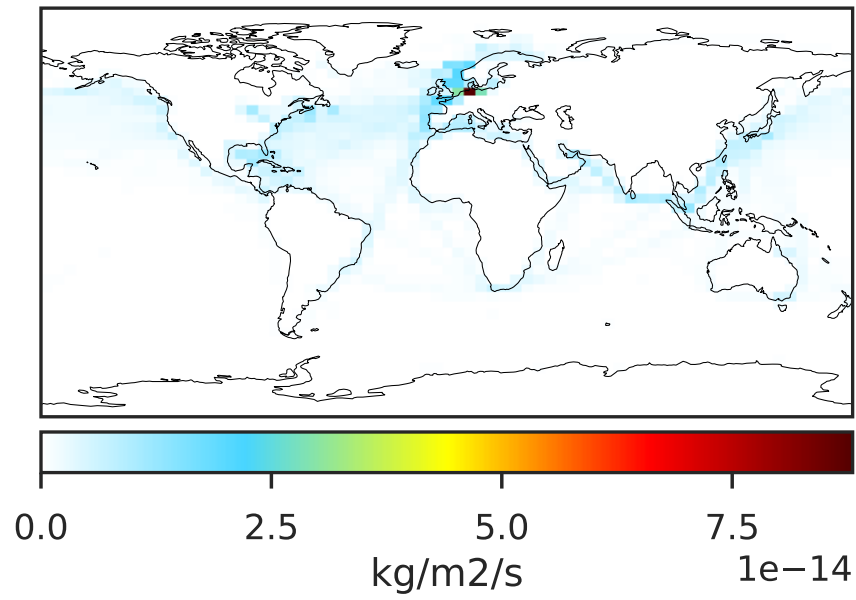


Ratio (1x1.25)  
Dev/Ref, Fixed Range

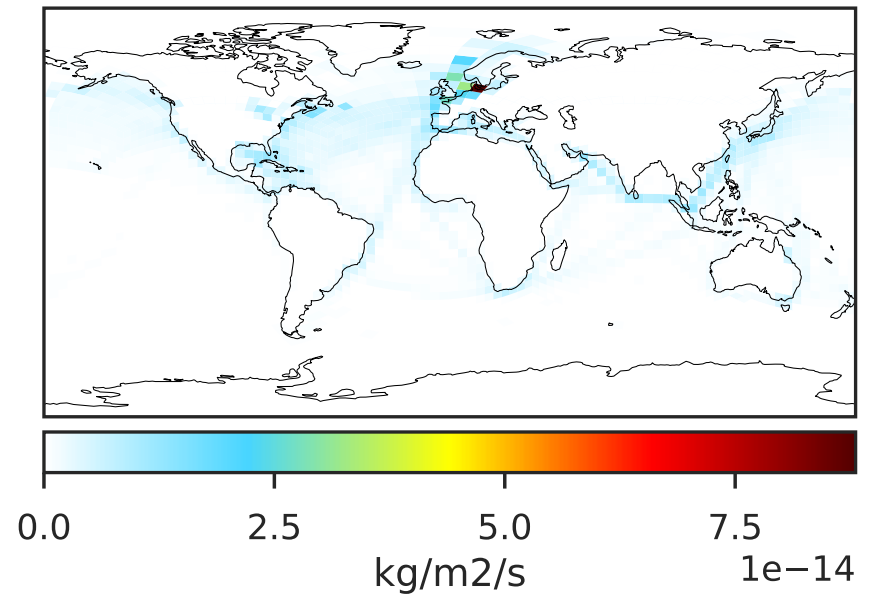


# EmisBCPI\_Ship (AnnualMean)

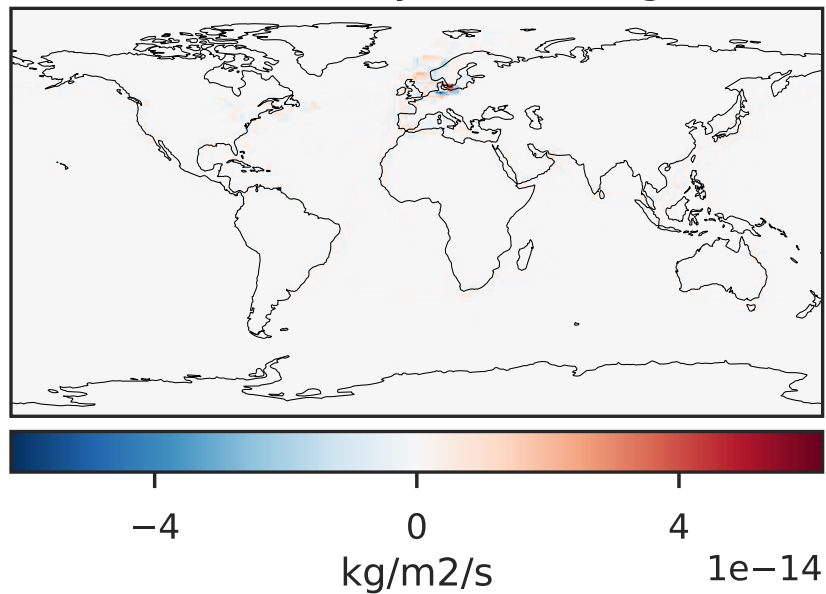
GCC\_14.2.0 (Ref)  
4.0x5.0



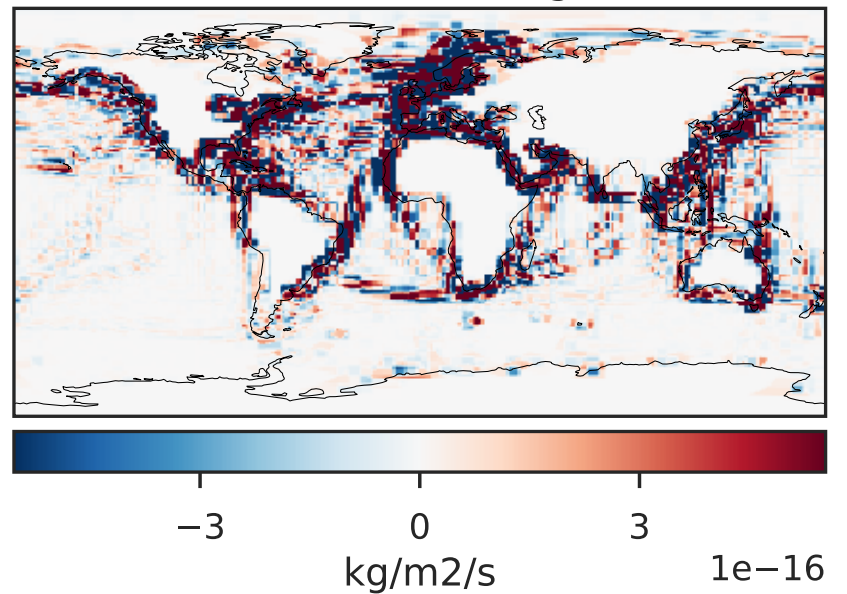
GCHP\_14.2.0 (Dev)  
c24



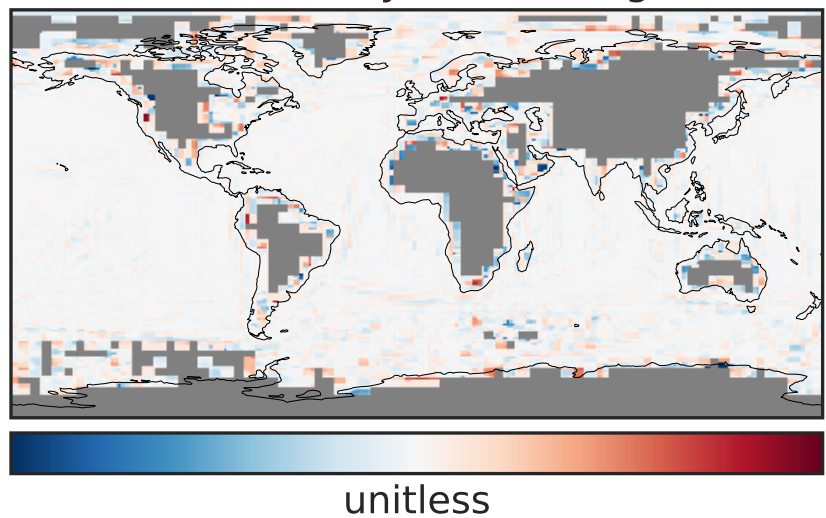
Difference (1x1.25)  
Dev - Ref, Dynamic Range



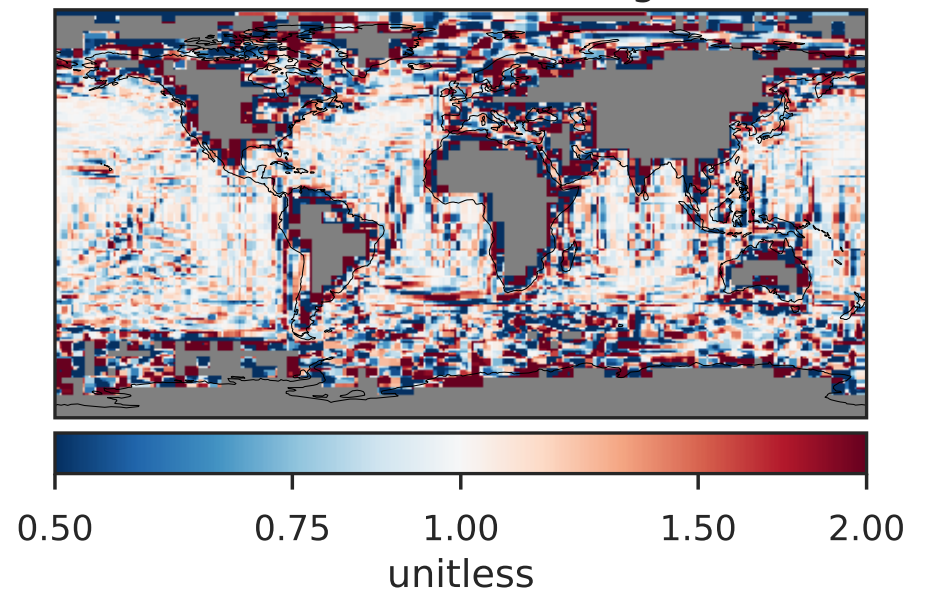
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



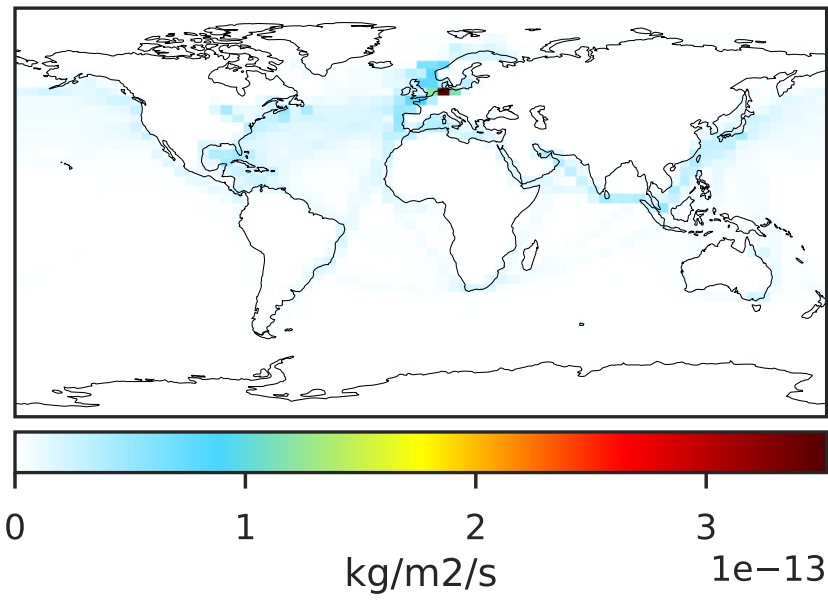
Ratio (1x1.25)  
Dev/Ref, Fixed Range



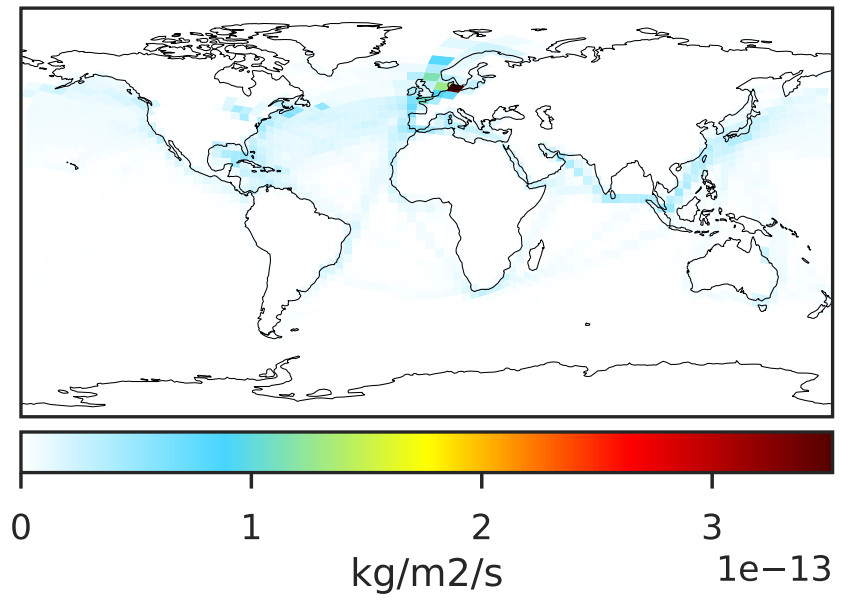


# EmisBCPO\_Ship (AnnualMean)

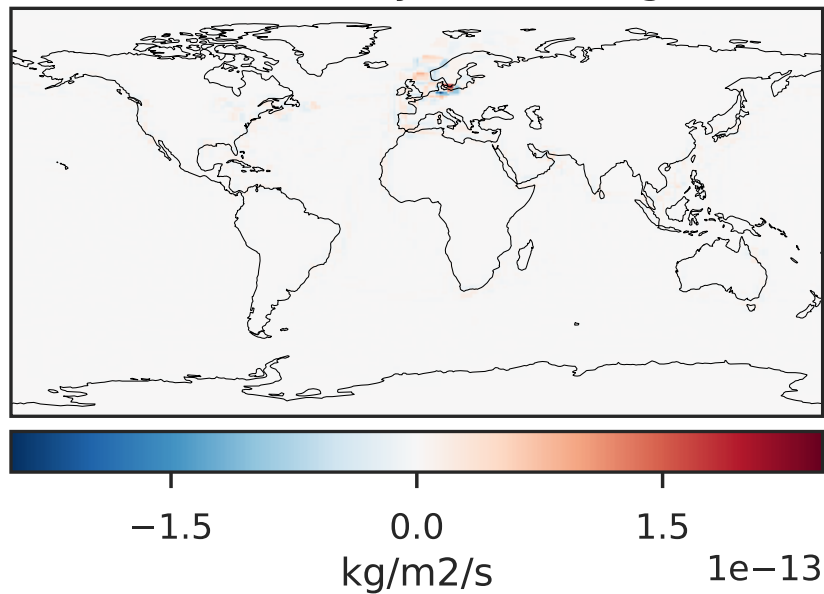
GCC\_14.2.0 (Ref)  
4.0x5.0



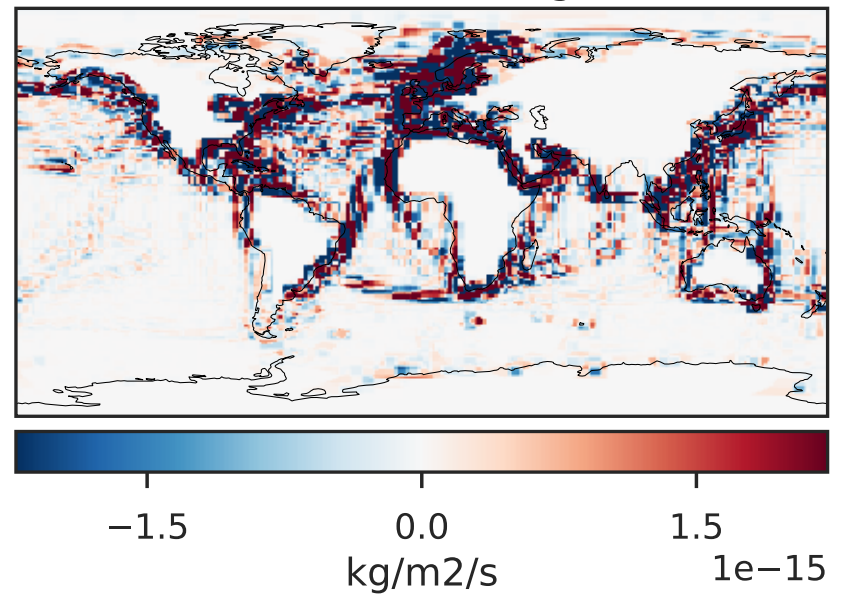
GCHP\_14.2.0 (Dev)  
c24



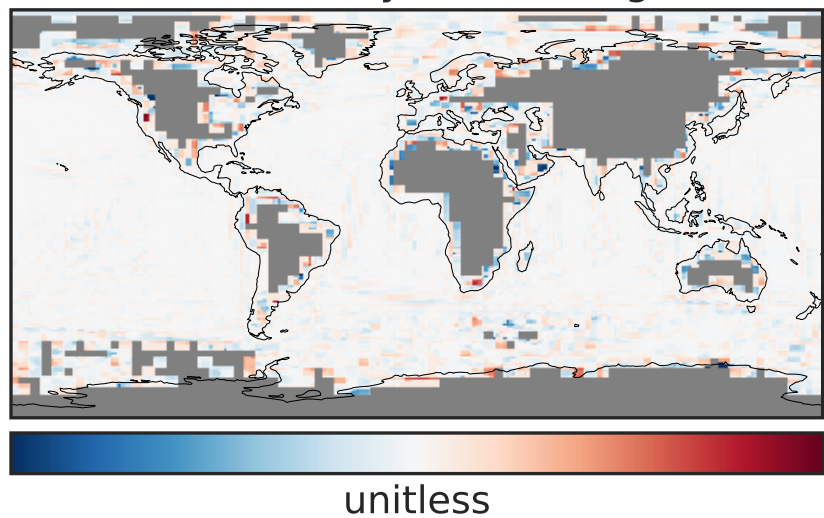
Difference (1x1.25)  
Dev - Ref, Dynamic Range



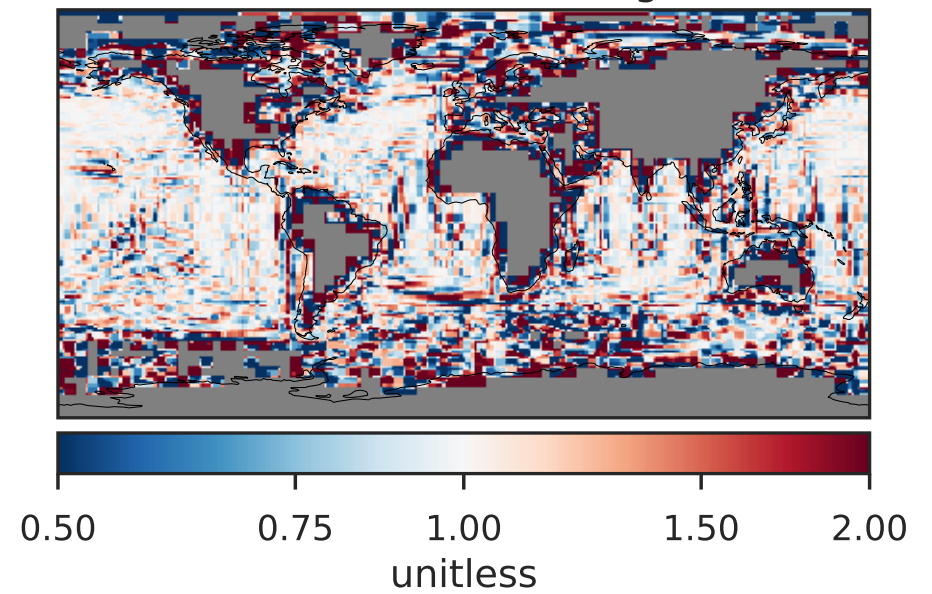
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



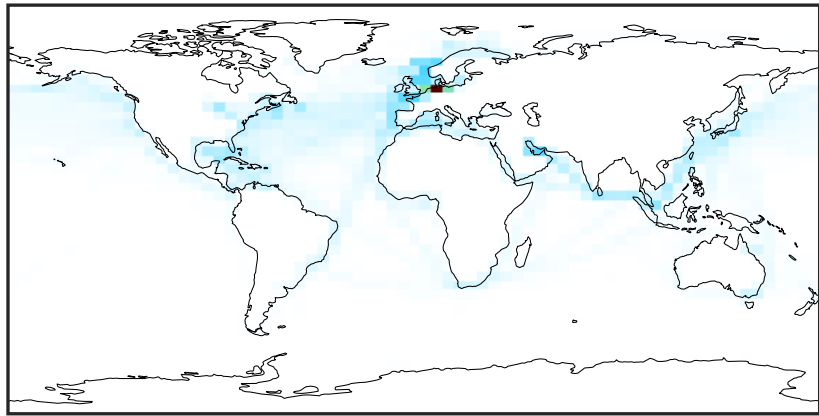
Ratio (1x1.25)  
Dev/Ref, Fixed Range





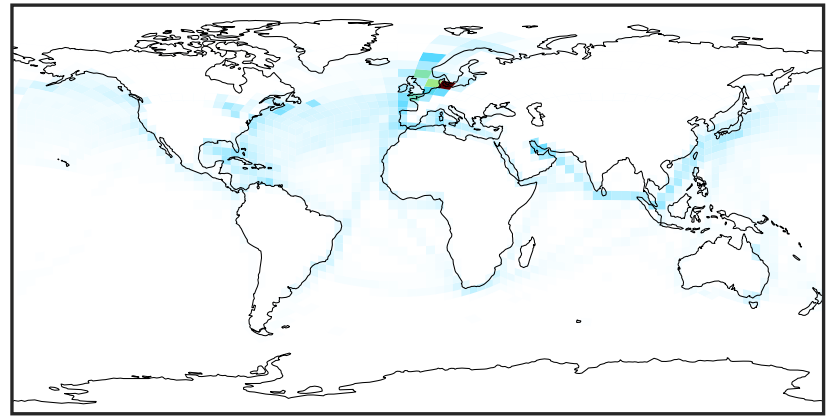
# EmisBENZ\_Ship (AnnualMean)

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



0.0 1.5 3.0  $1e-13$   
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



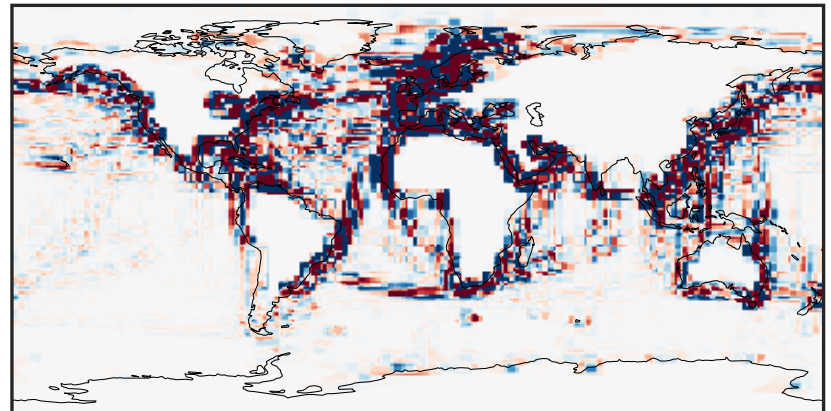
0.0 1.5 3.0  $1e-13$   
kg/m2/s

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



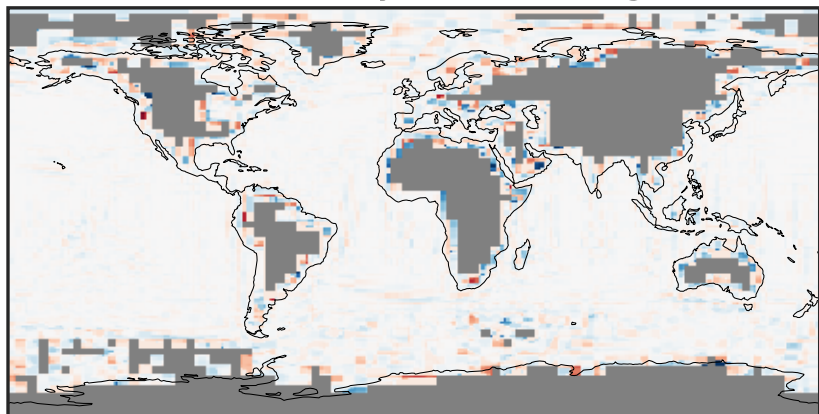
-1.5 0.0 1.5  $1e-13$   
kg/m2/s

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



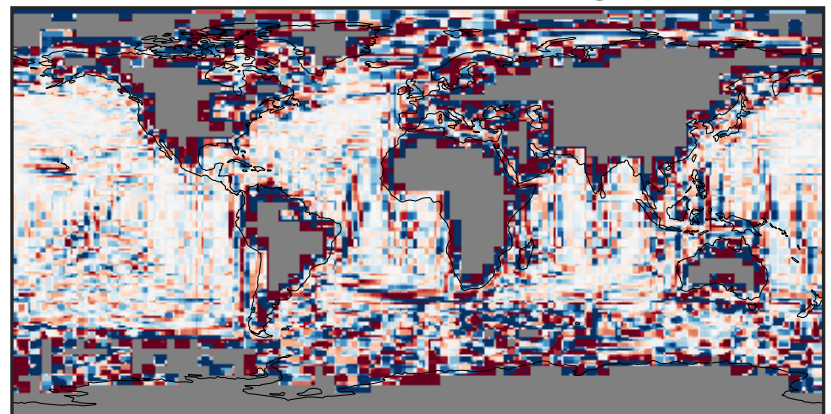
-1.5 0.0 1.5  $1e-15$   
kg/m2/s

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



unitless

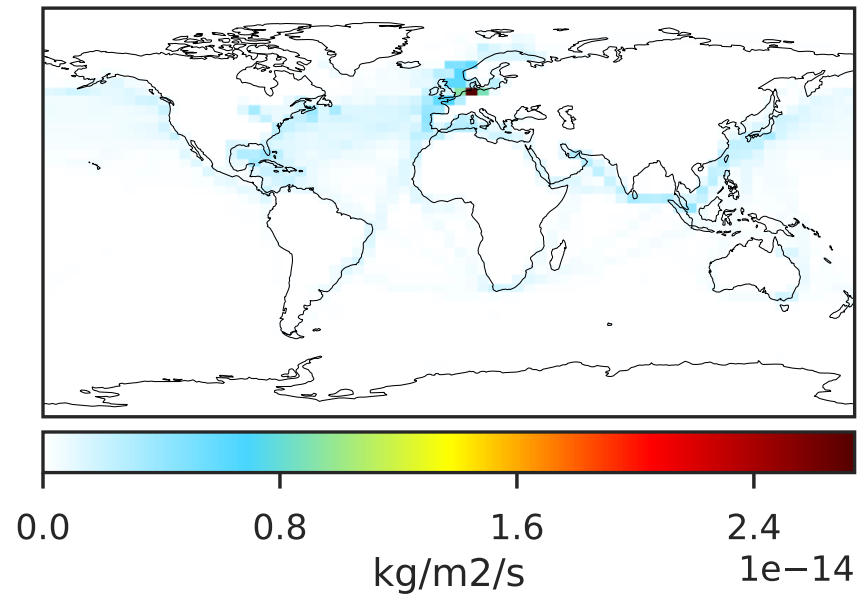
Ratio (1x1.25)  
Dev/Ref, Fixed Range



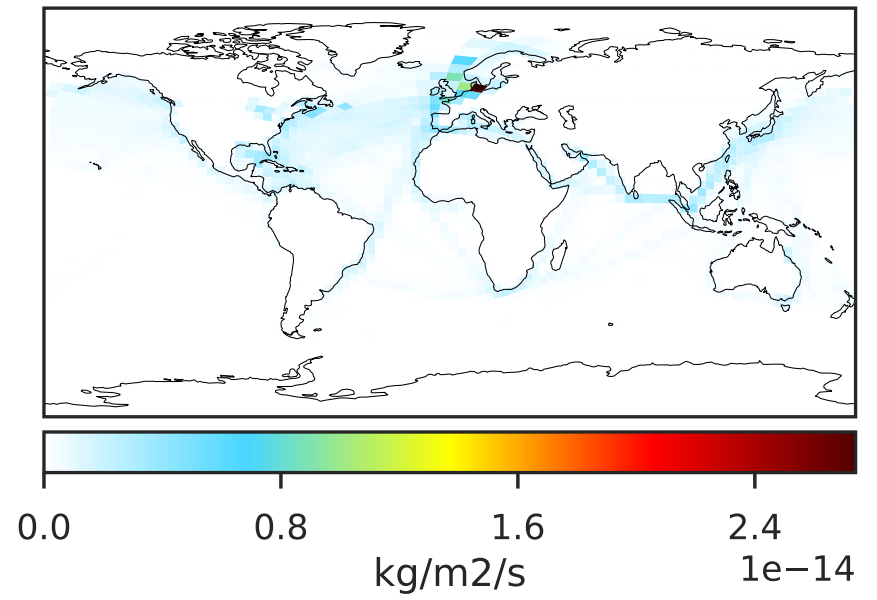
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisC2H2\_Ship (AnnualMean)

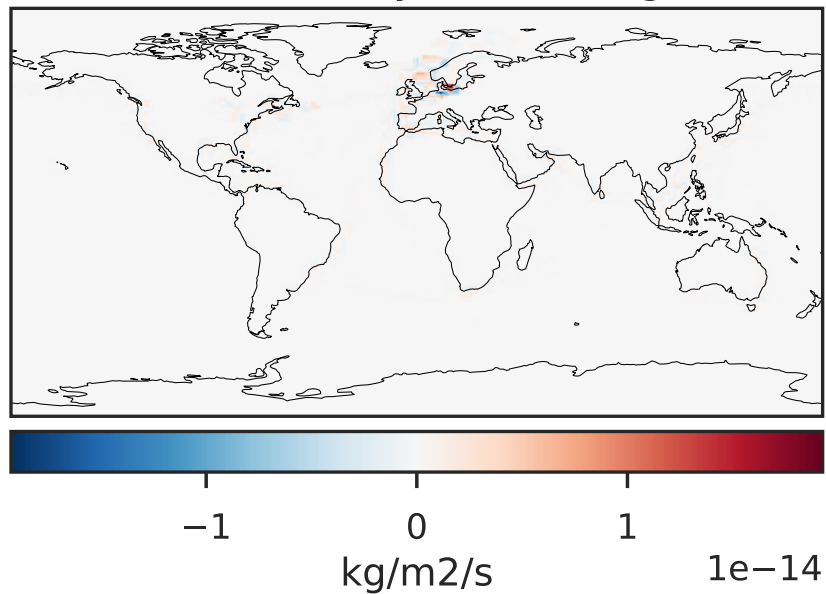
GCC\_14.2.0 (Ref)  
4.0x5.0



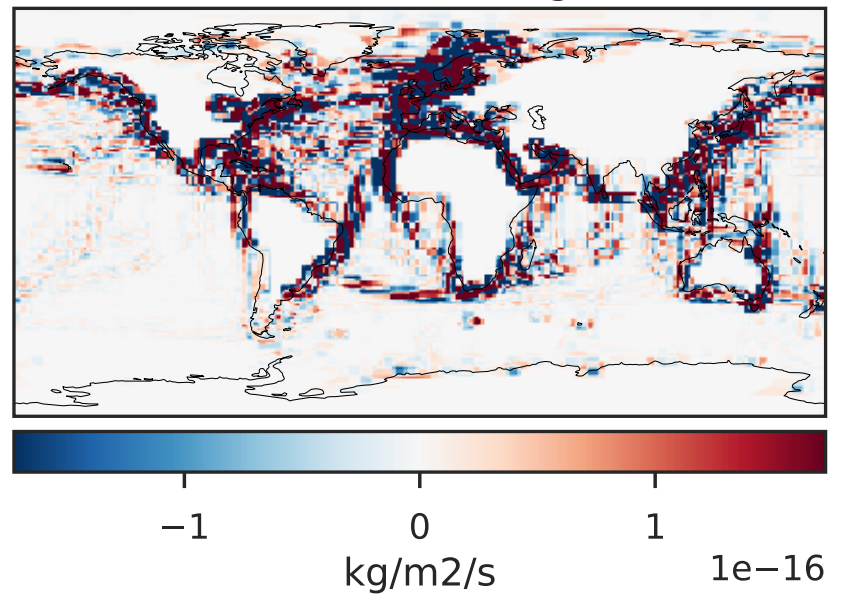
GCHP\_14.2.0 (Dev)  
c24



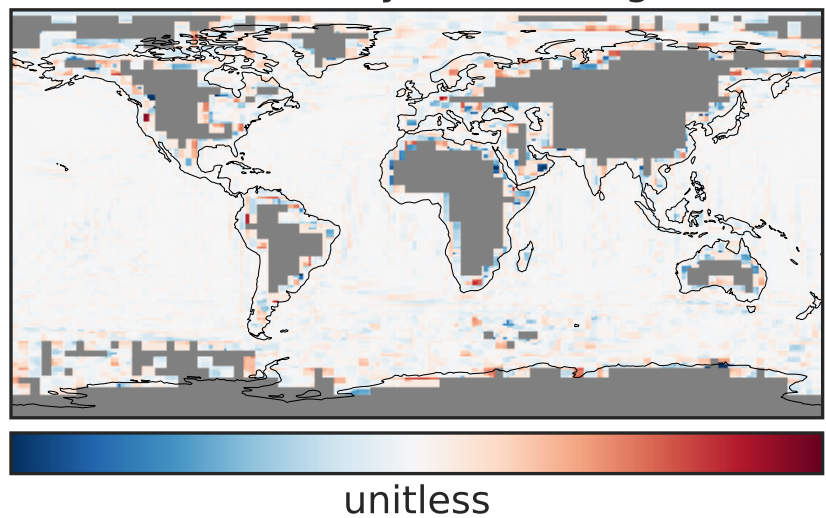
Difference (1x1.25)  
Dev - Ref, Dynamic Range



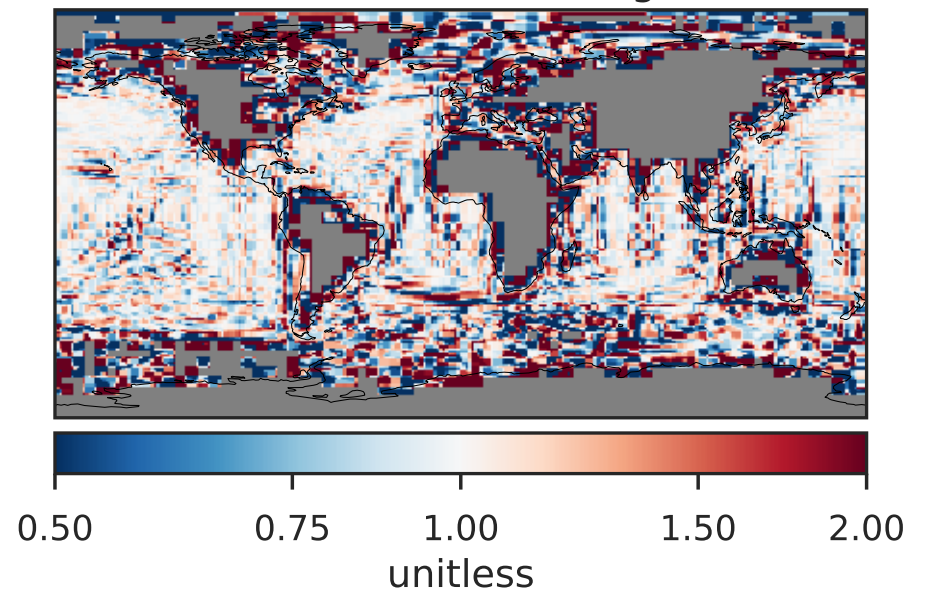
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



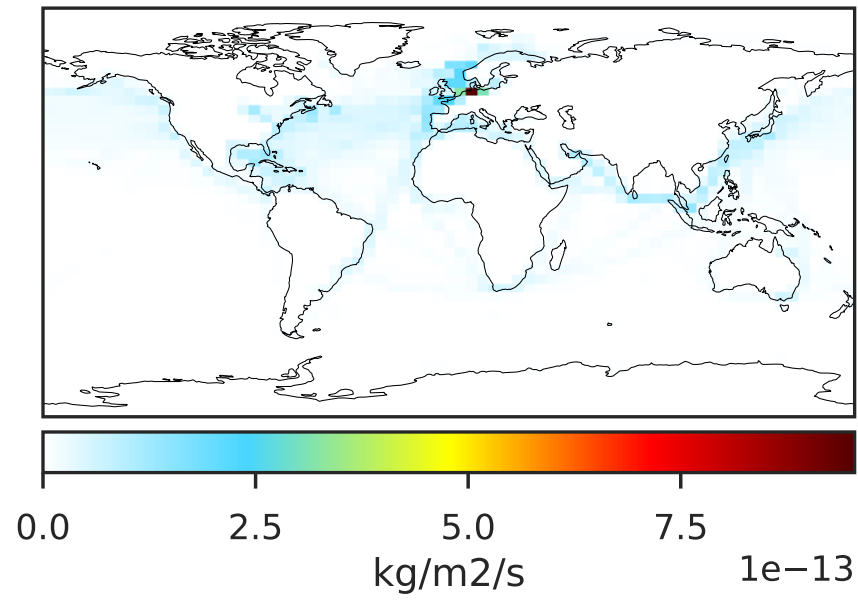
Ratio (1x1.25)  
Dev/Ref, Fixed Range



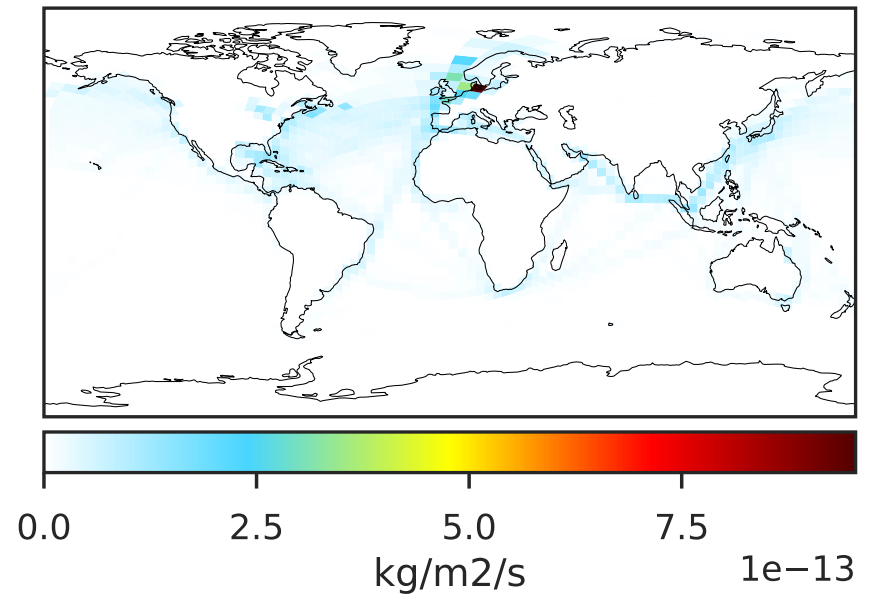


# EmisC2H4\_Ship (AnnualMean)

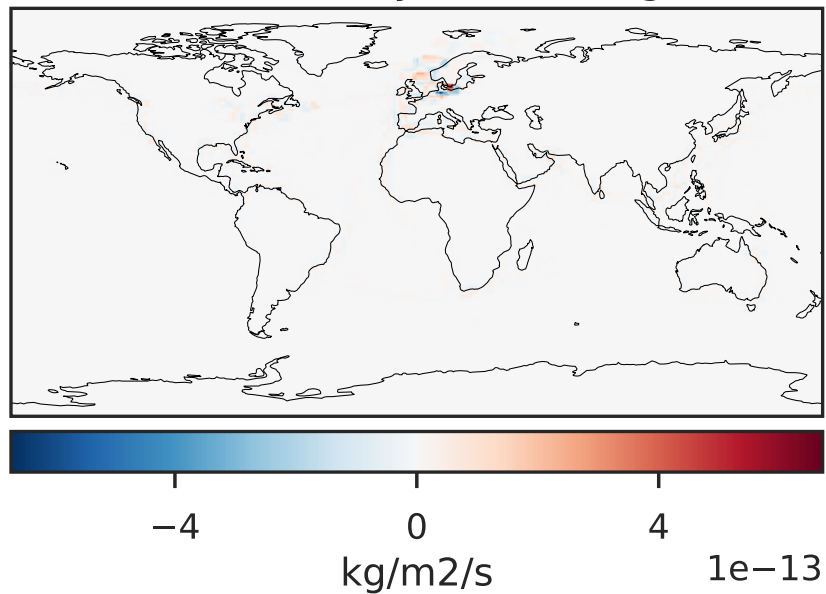
GCC\_14.2.0 (Ref)  
4.0x5.0



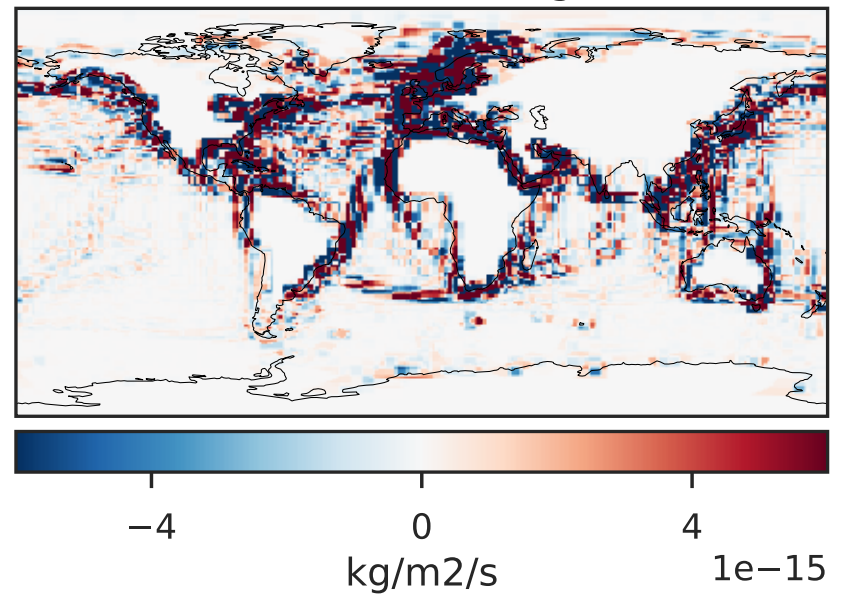
GCHP\_14.2.0 (Dev)  
c24



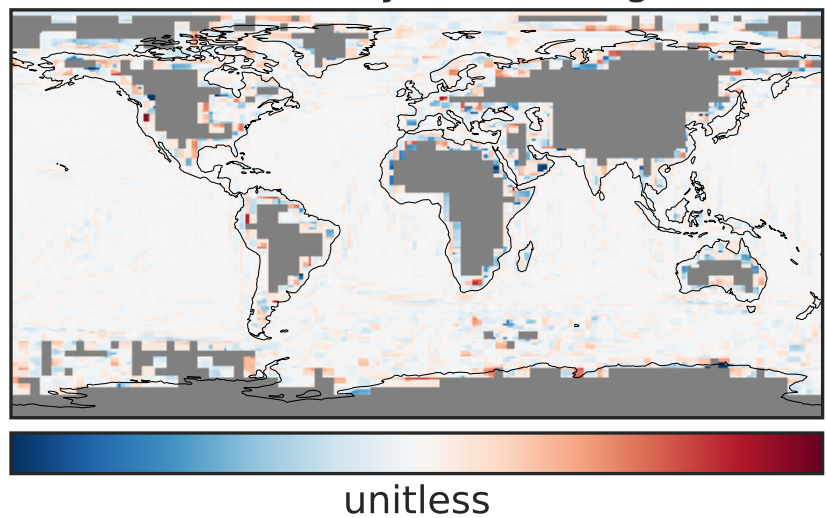
Difference (1x1.25)  
Dev - Ref, Dynamic Range



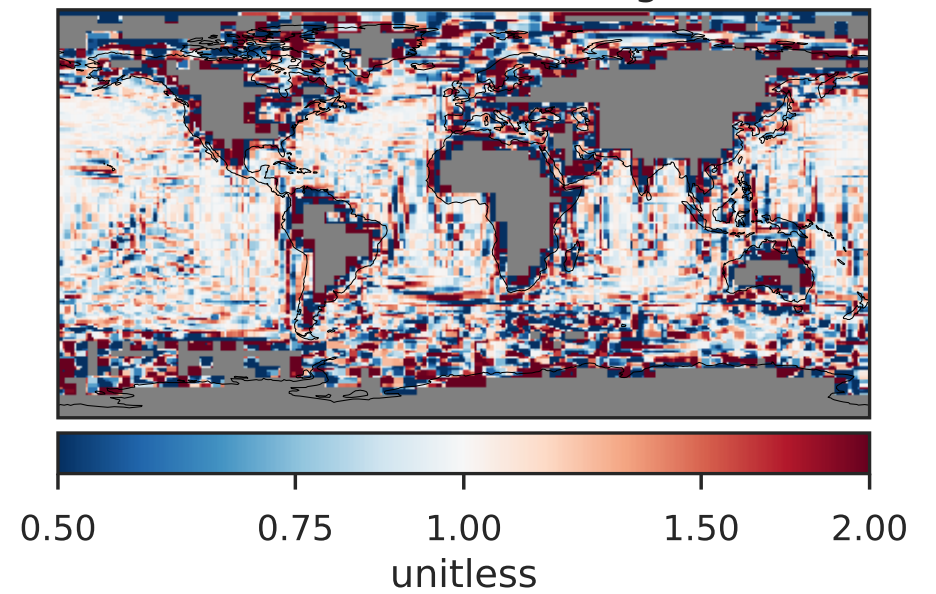
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



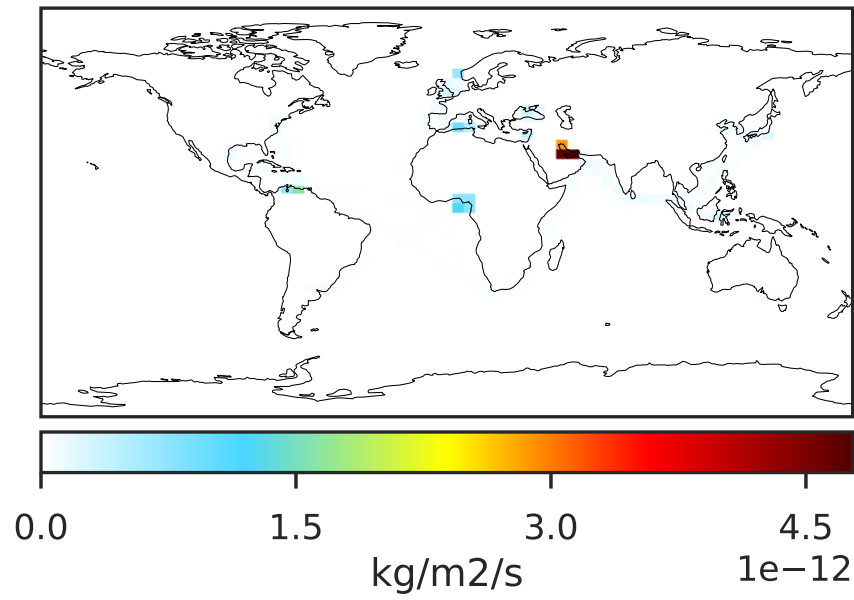
Ratio (1x1.25)  
Dev/Ref, Fixed Range



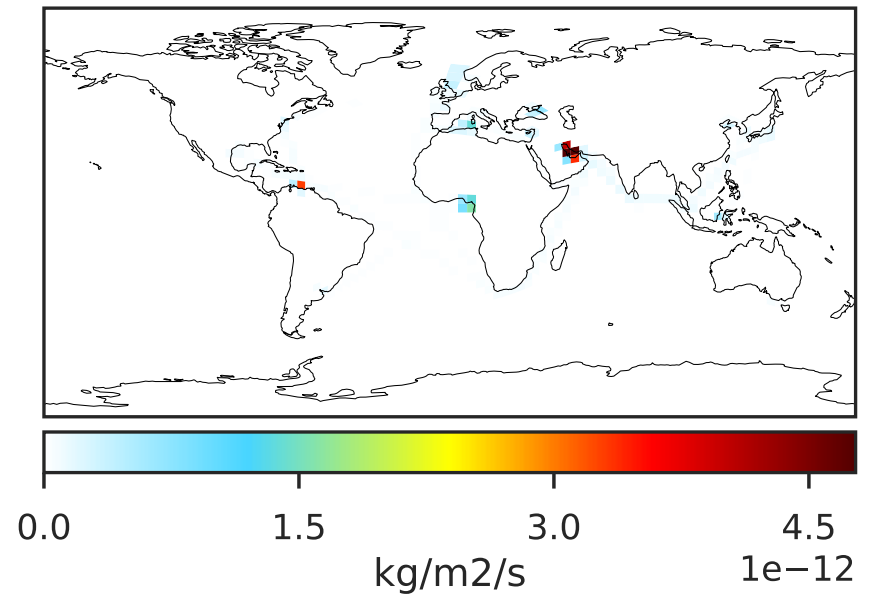


# EmisC2H6\_Ship (AnnualMean)

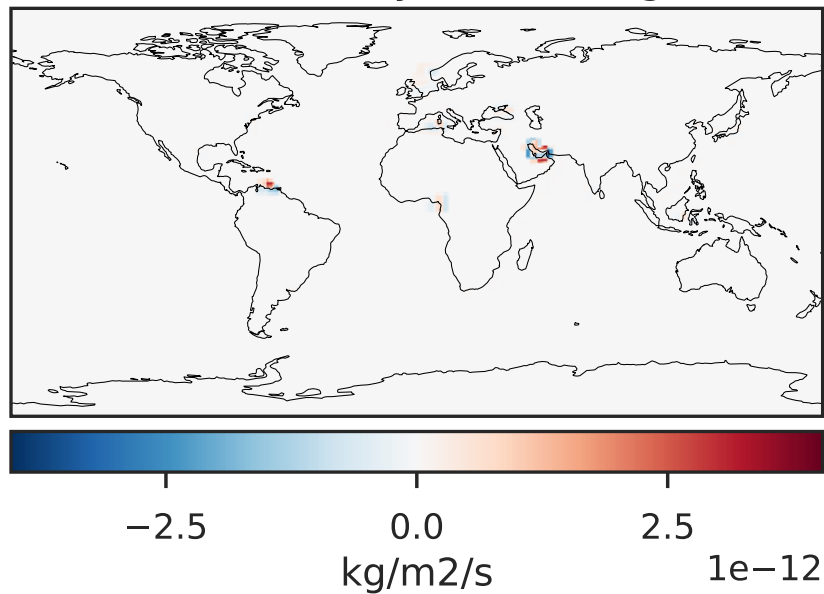
GCC\_14.2.0 (Ref)  
4.0x5.0



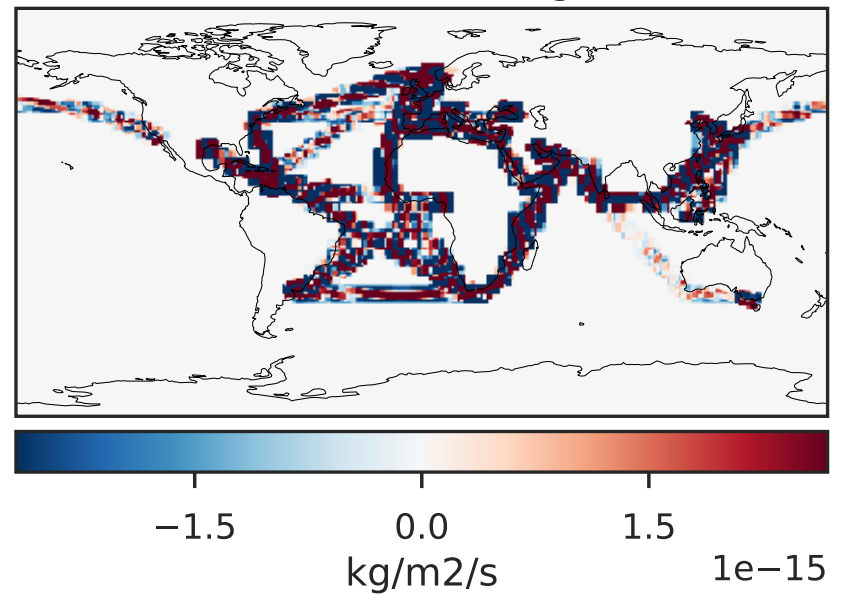
GCHP\_14.2.0 (Dev)  
c24



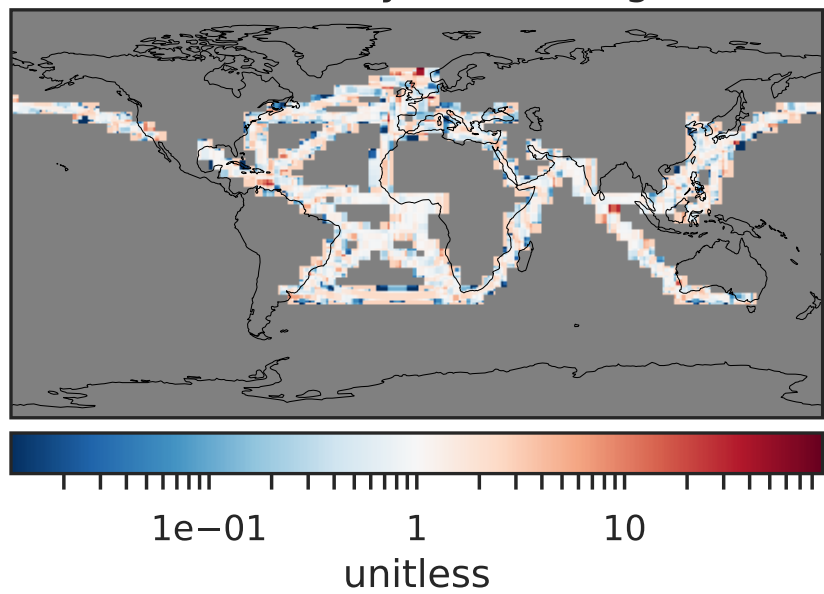
Difference (1x1.25)  
Dev - Ref, Dynamic Range



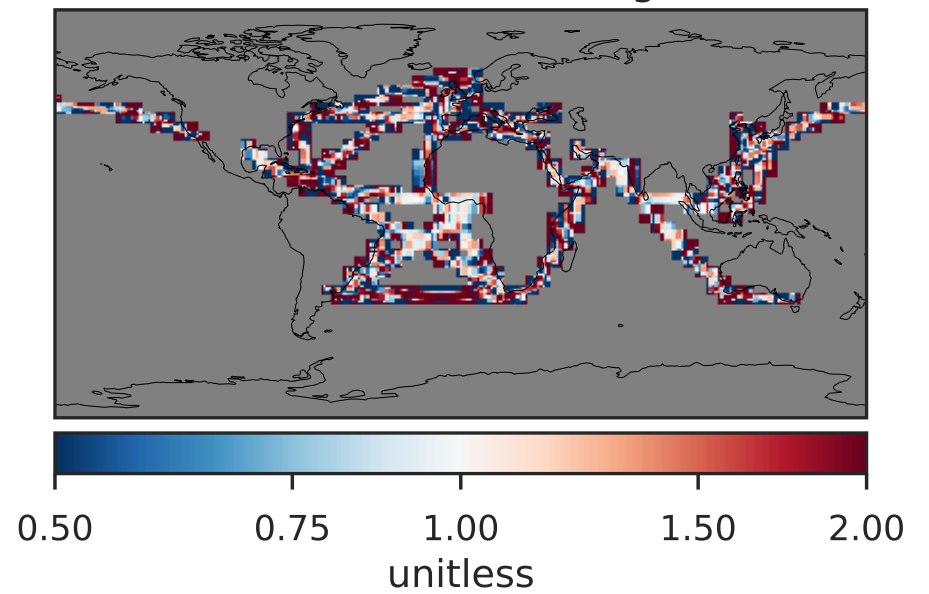
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

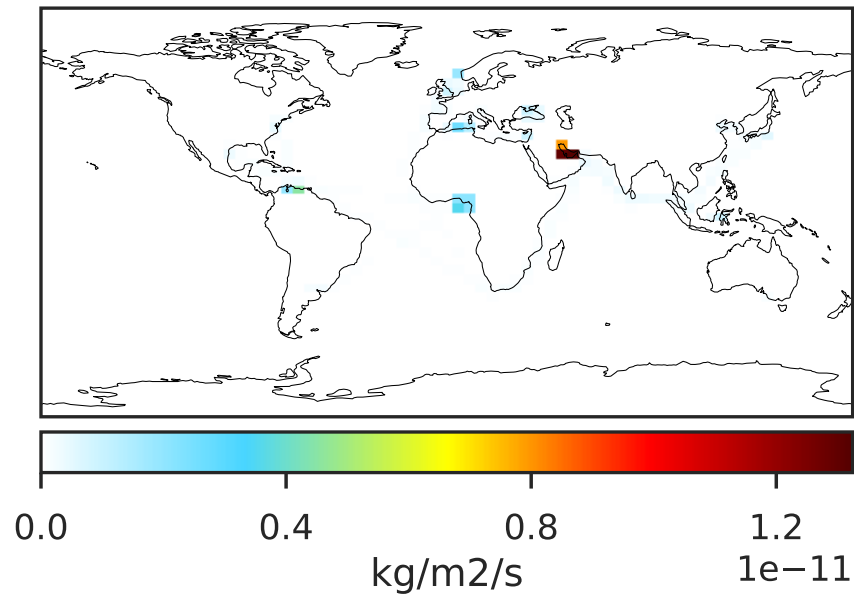


Ratio (1x1.25)  
Dev/Ref, Fixed Range

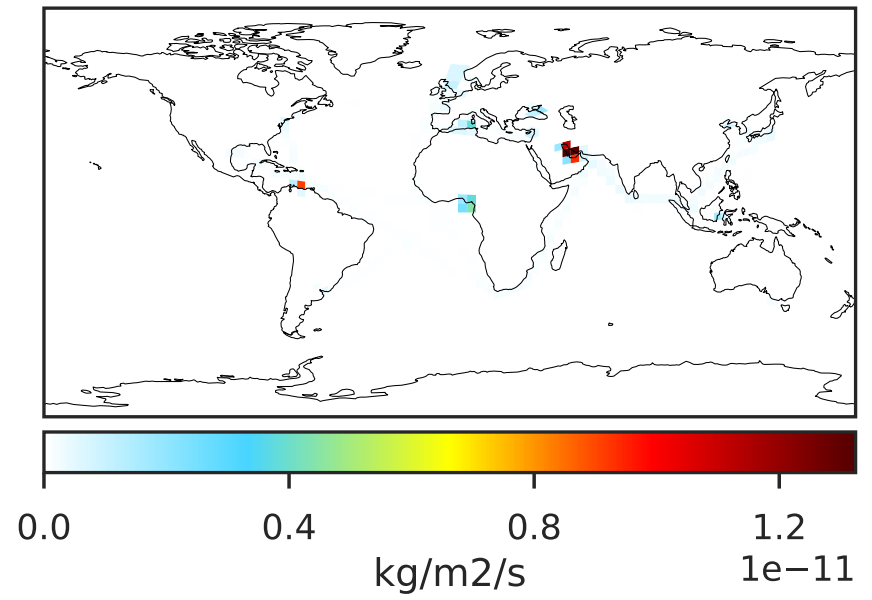


# EmisC3H8\_Ship (AnnualMean)

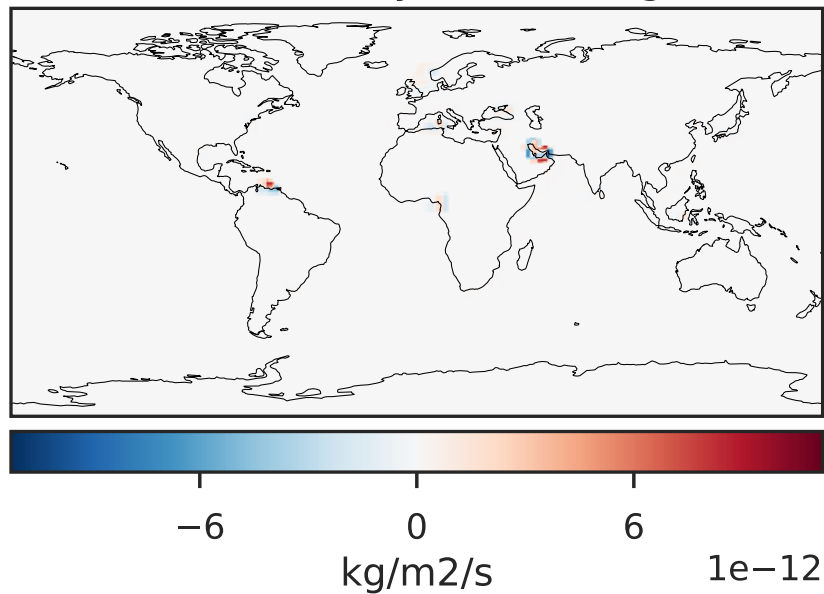
GCC\_14.2.0 (Ref)  
4.0x5.0



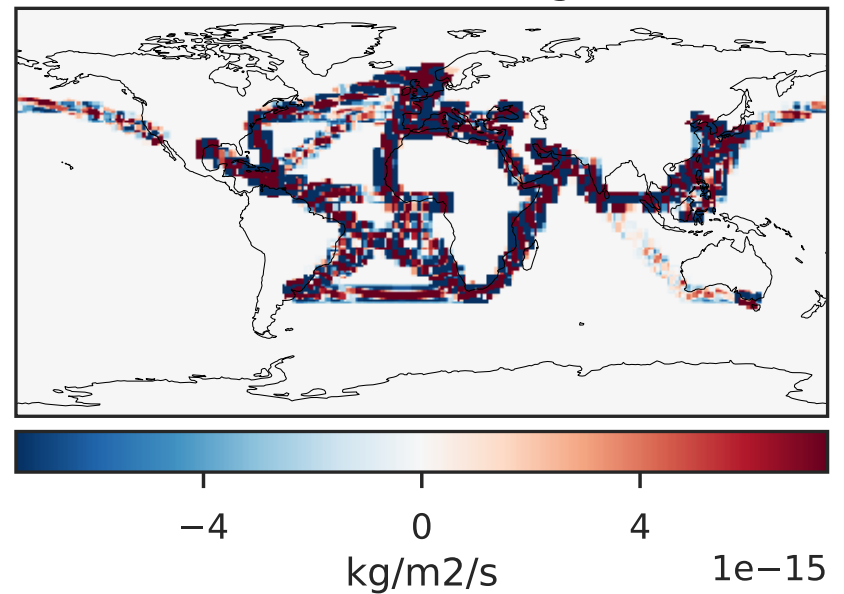
GCHP\_14.2.0 (Dev)  
c24



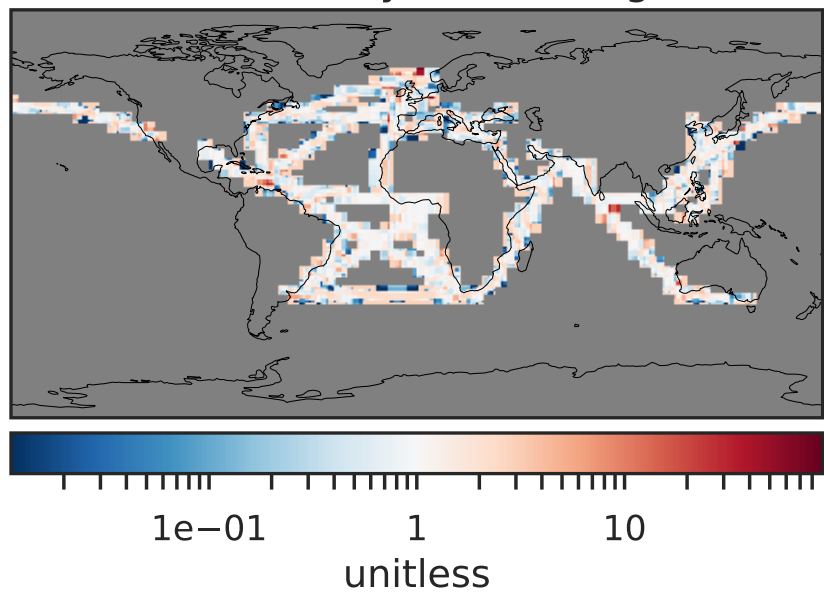
Difference (1x1.25)  
Dev - Ref, Dynamic Range



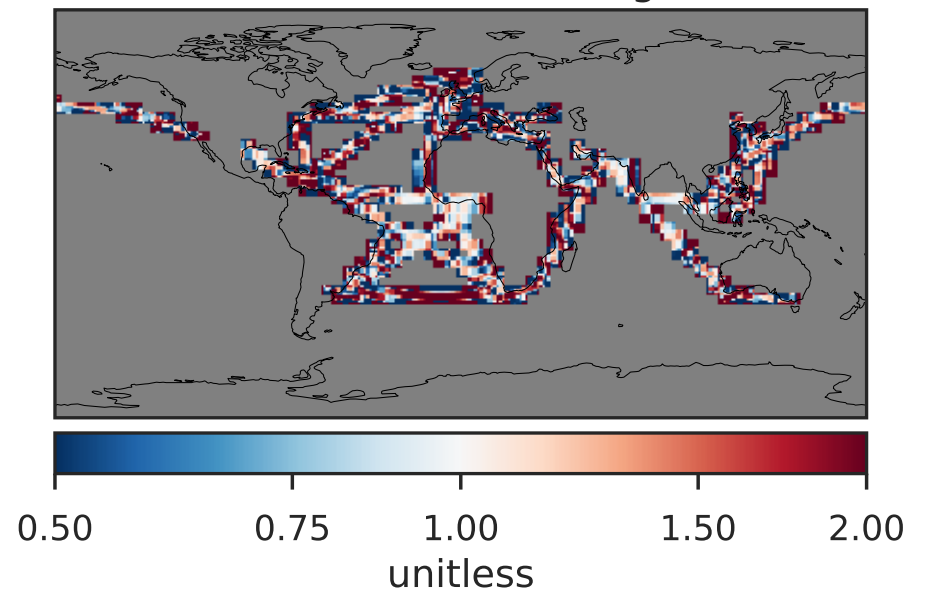
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

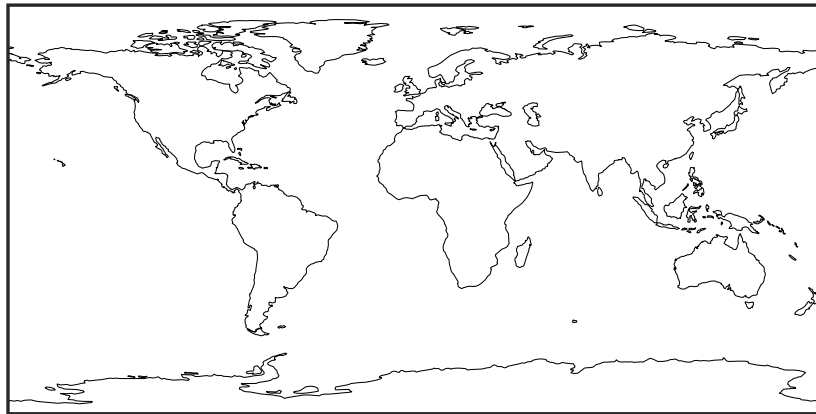


Ratio (1x1.25)  
Dev/Ref, Fixed Range



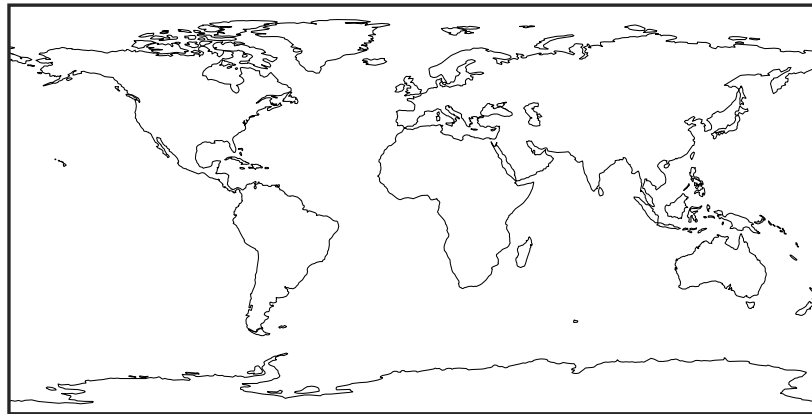
# EmisCH2O\_Ship (AnnualMean)

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



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



# EmisCO2\_Ship (AnnualMean)

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



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

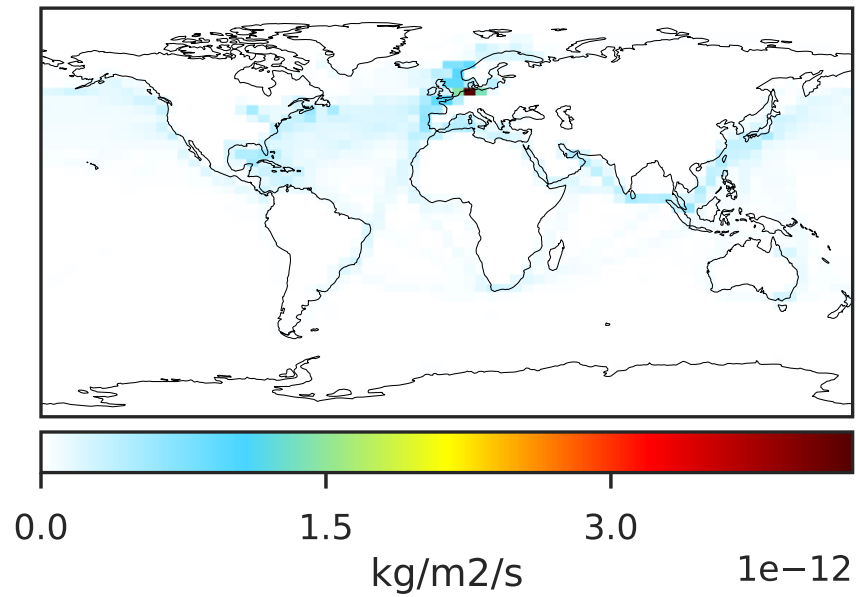
Ratio (1x1.25)  
Dev/Ref, Fixed Range



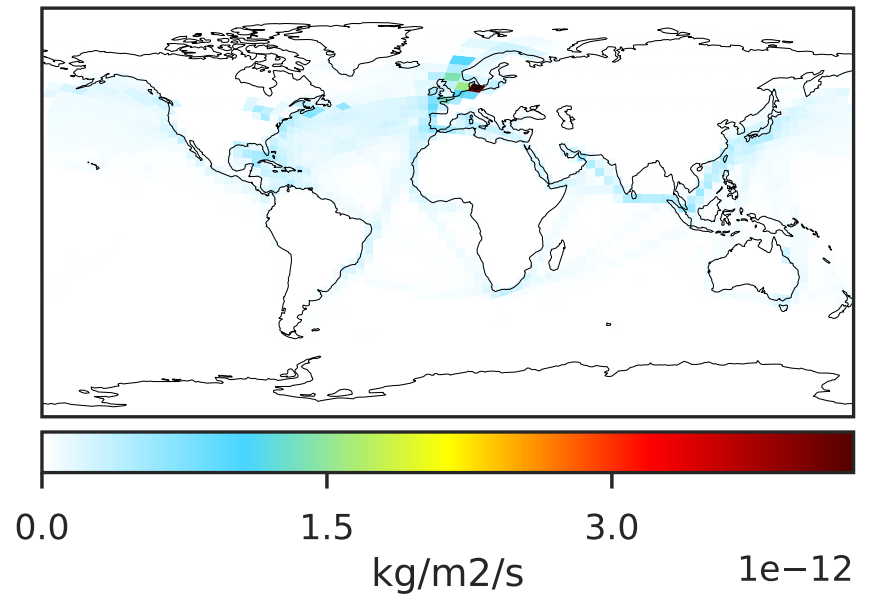
Undefined throughout domain  
unitless

# EmisCO\_Ship (AnnualMean)

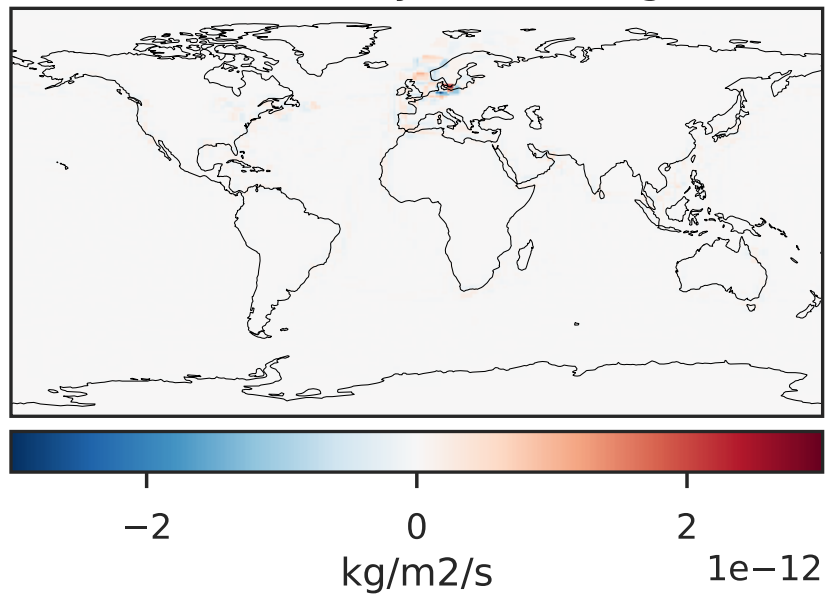
GCC\_14.2.0 (Ref)  
4.0x5.0



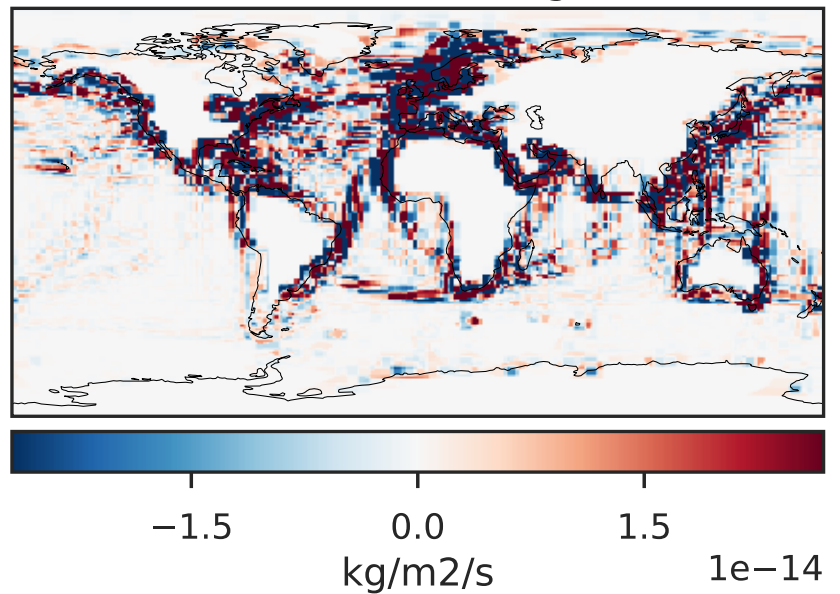
GCHP\_14.2.0 (Dev)  
c24



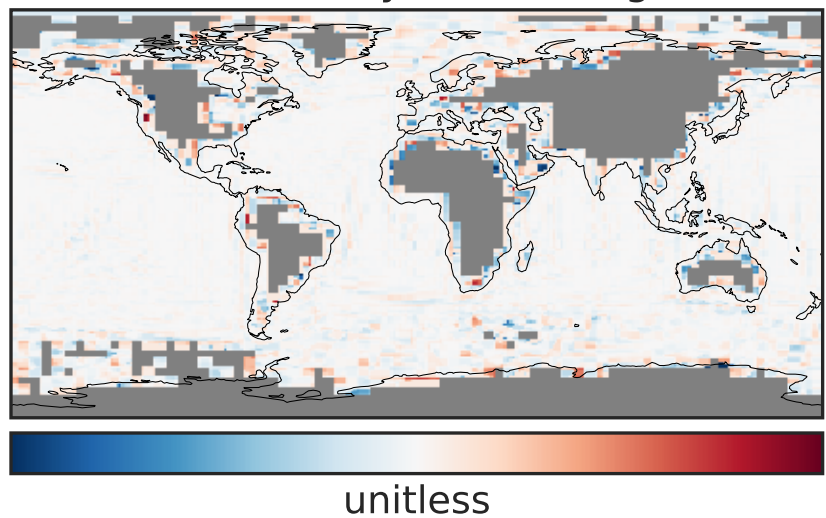
Difference (1x1.25)  
Dev - Ref, Dynamic Range



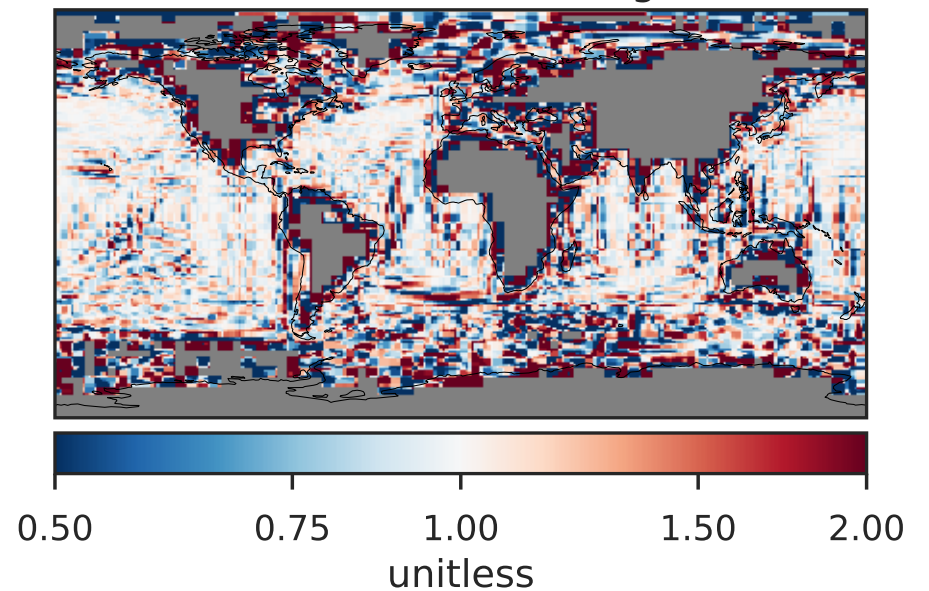
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



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



# EmisEOH\_Ship (AnnualMean)

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



Zero throughout domain  
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



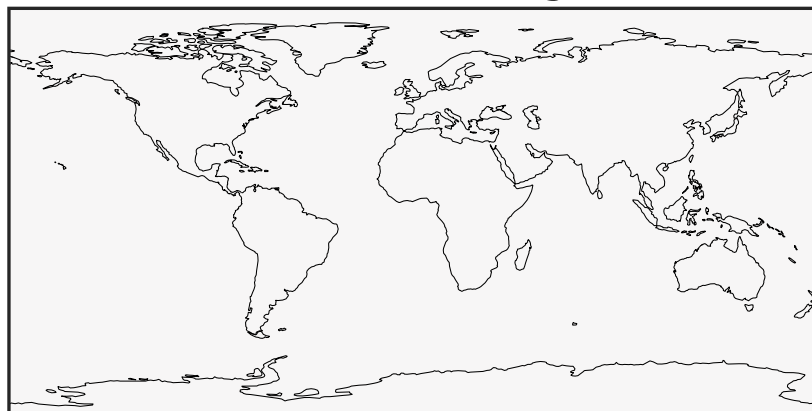
Zero throughout domain  
kg/m2/s

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



# EmisHCOOH\_Ship (AnnualMean)

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



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

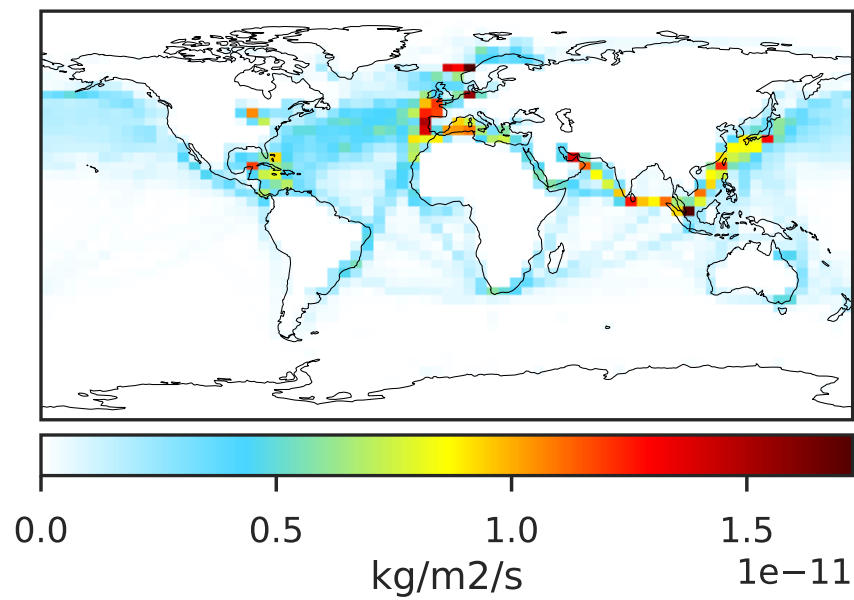
Ratio (1x1.25)  
Dev/Ref, Fixed Range



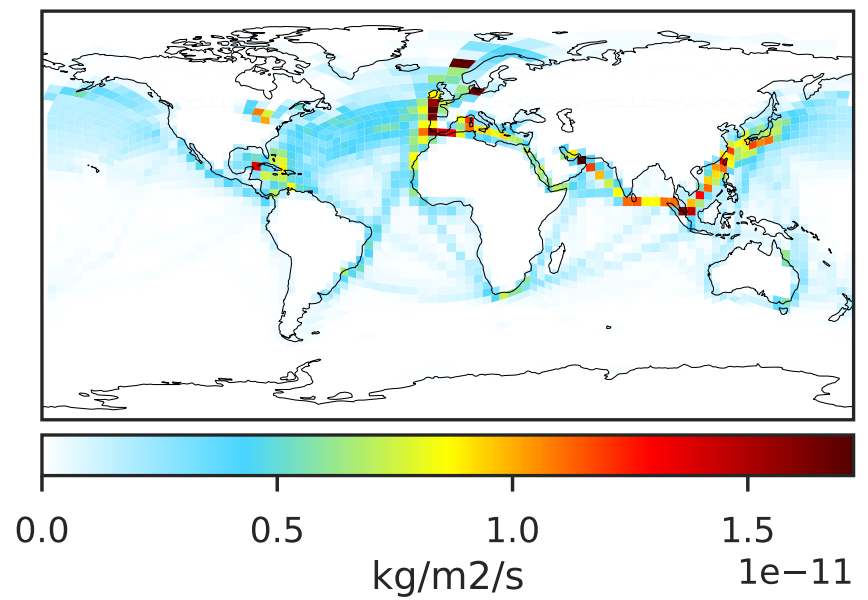
Undefined throughout domain  
unitless

# EmisHNO3\_Ship (AnnualMean)

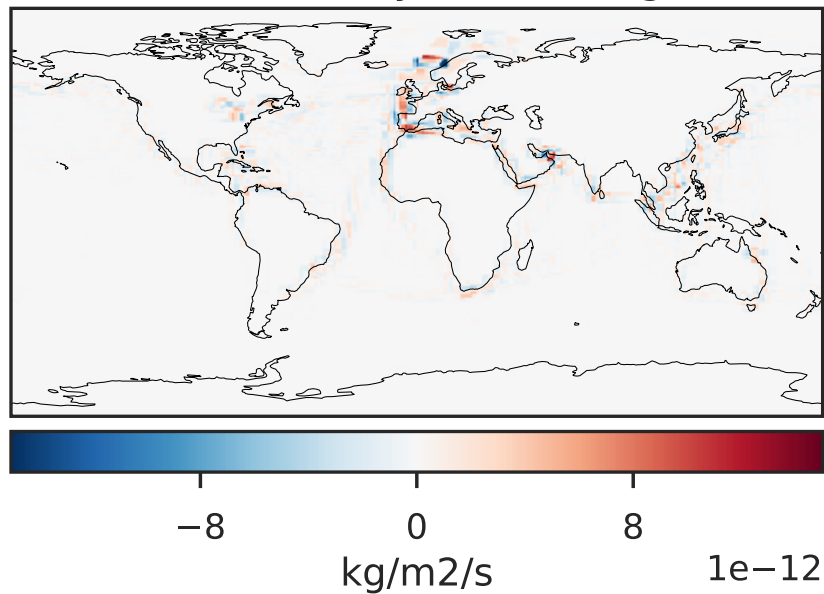
GCC\_14.2.0 (Ref)  
4.0x5.0



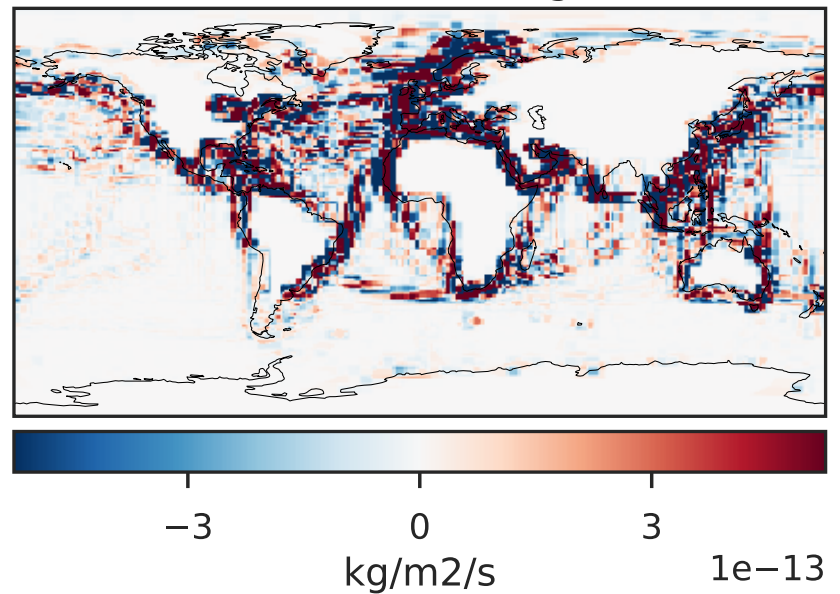
GCHP\_14.2.0 (Dev)  
c24



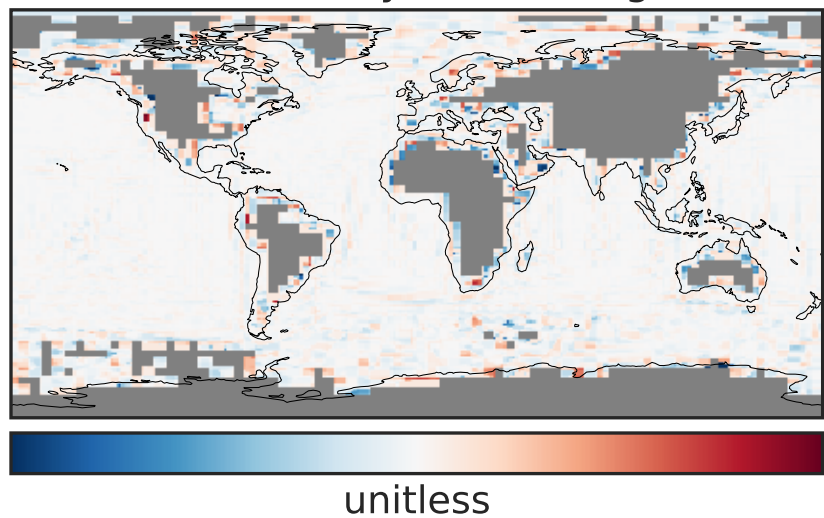
Difference (1x1.25)  
Dev - Ref, Dynamic Range



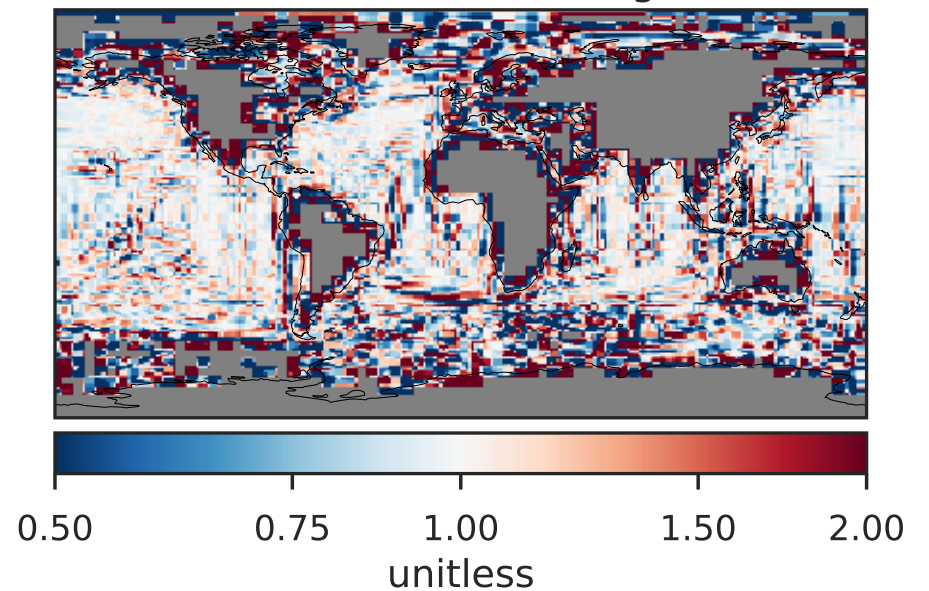
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



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



# EmisMEK\_Ship (AnnualMean)

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



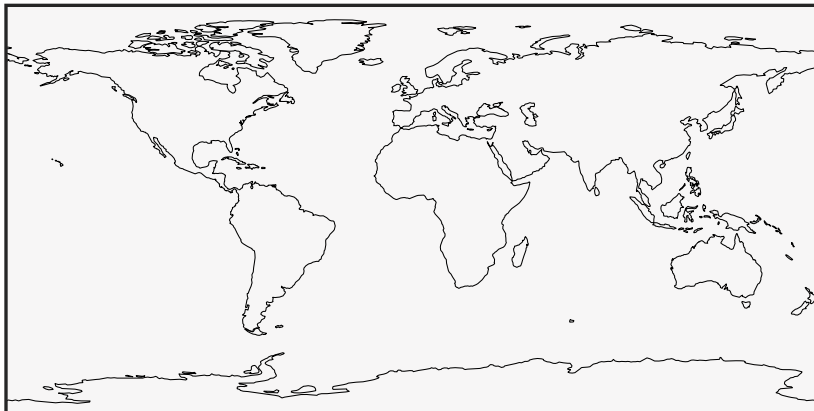
Zero throughout domain  
kg/m2/s

GCHP\_14.2.0 (Dev)  
c24



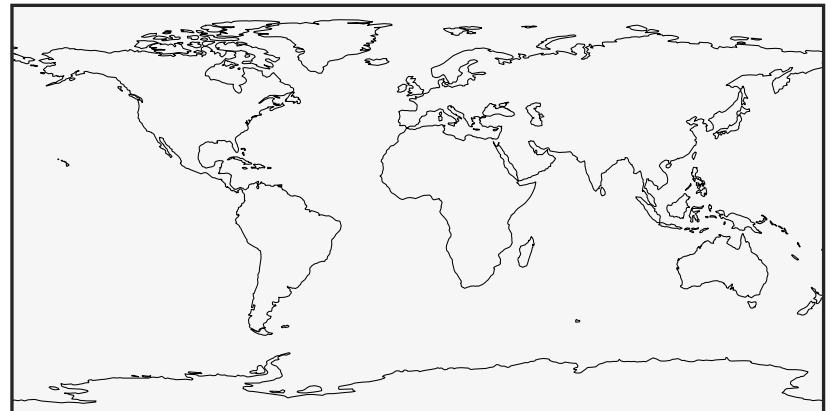
Zero throughout domain  
kg/m2/s

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



Zero throughout domain  
kg/m2/s

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



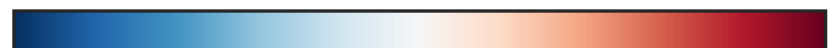
Zero throughout domain  
kg/m2/s

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



Undefined throughout domain  
unitless

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



Undefined throughout domain  
unitless



# EmisMOH\_Ship (AnnualMean)

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



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

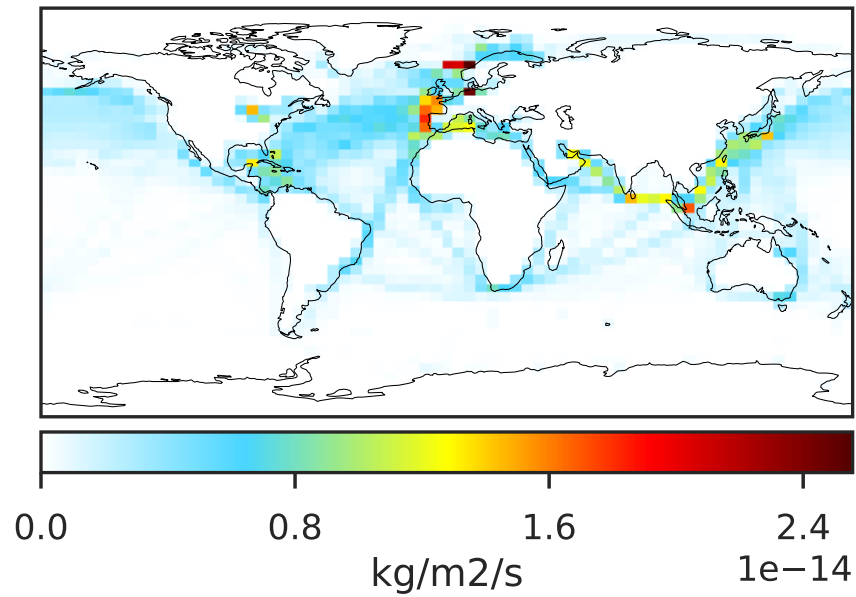
Ratio (1x1.25)  
Dev/Ref, Fixed Range



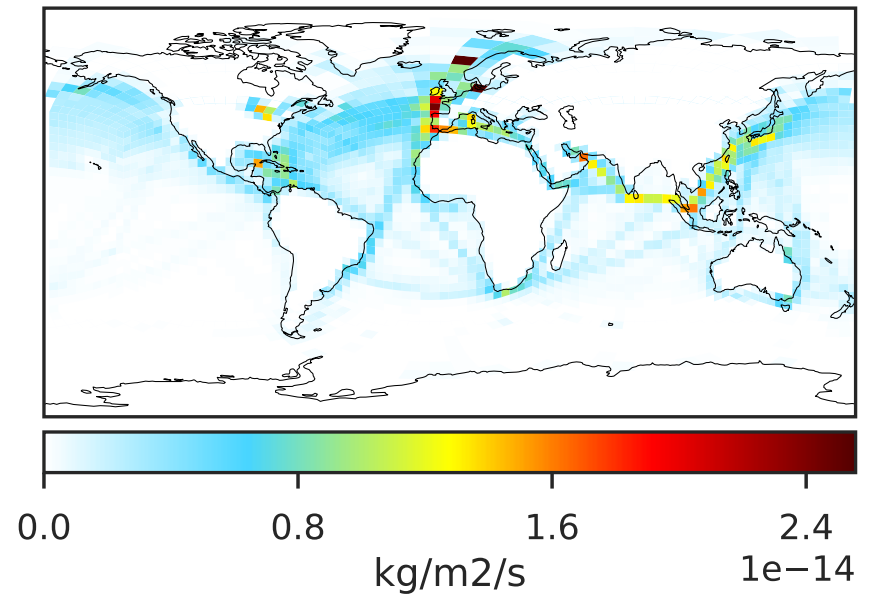
Undefined throughout domain  
unitless

# EmisNH3\_Ship (AnnualMean)

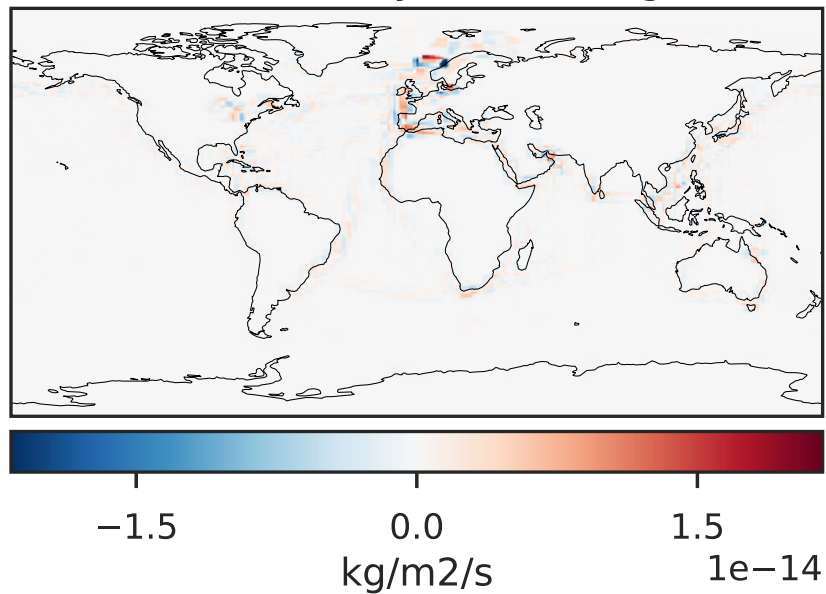
GCC\_14.2.0 (Ref)  
4.0x5.0



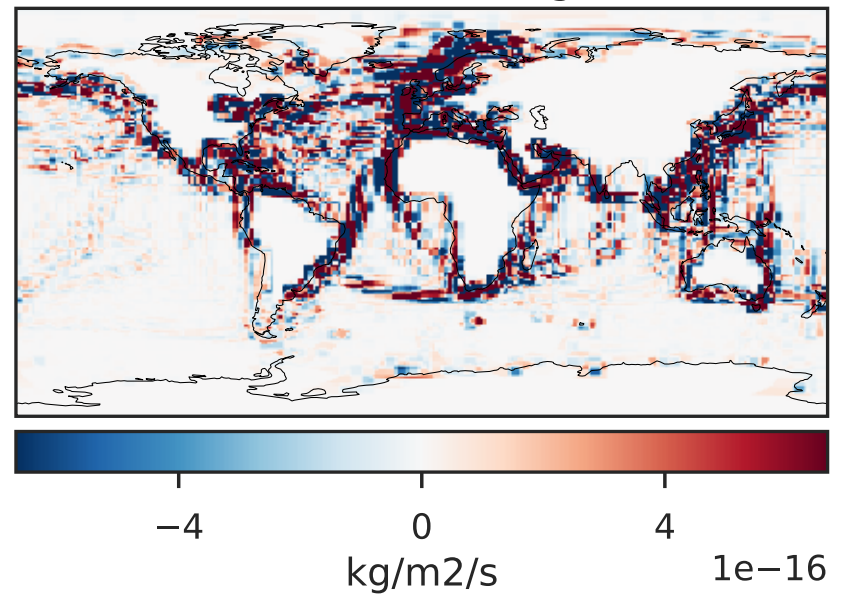
GCHP\_14.2.0 (Dev)  
c24



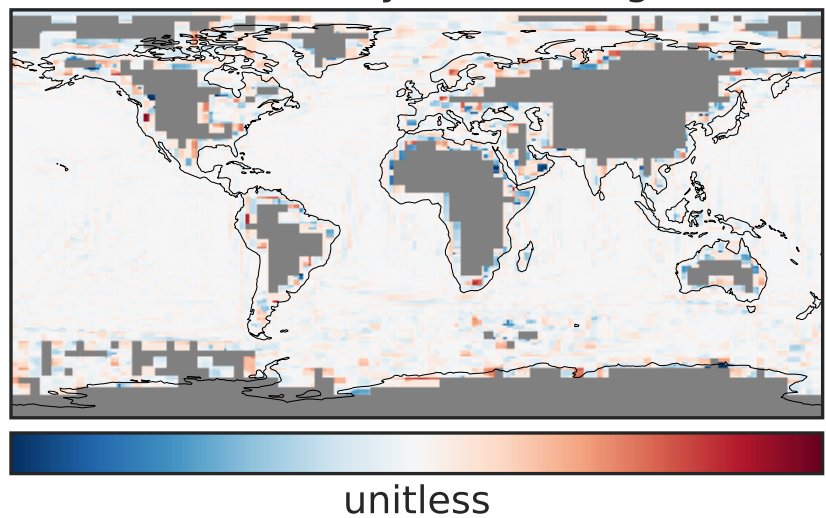
Difference (1x1.25)  
Dev - Ref, Dynamic Range



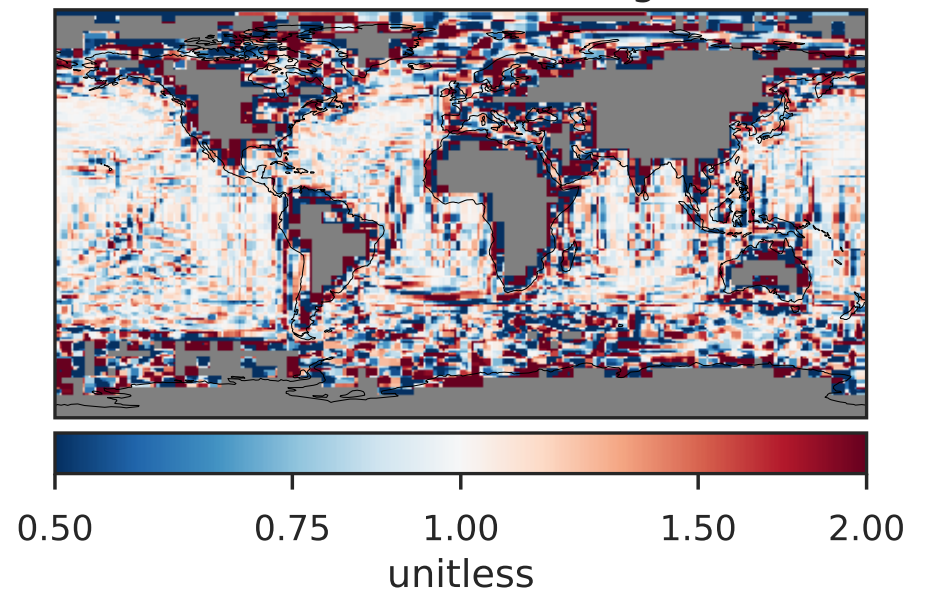
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

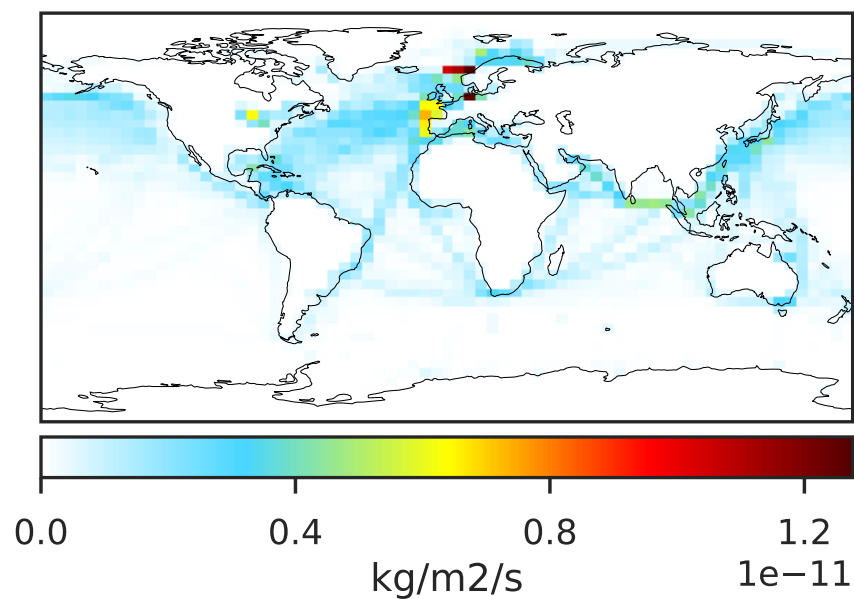


Ratio (1x1.25)  
Dev/Ref, Fixed Range

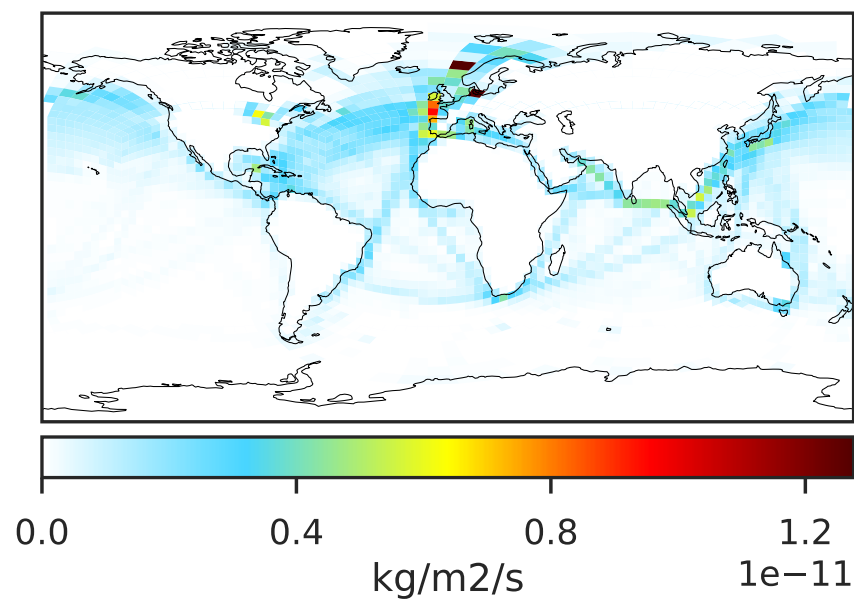


# EmisNO2\_Ship (AnnualMean)

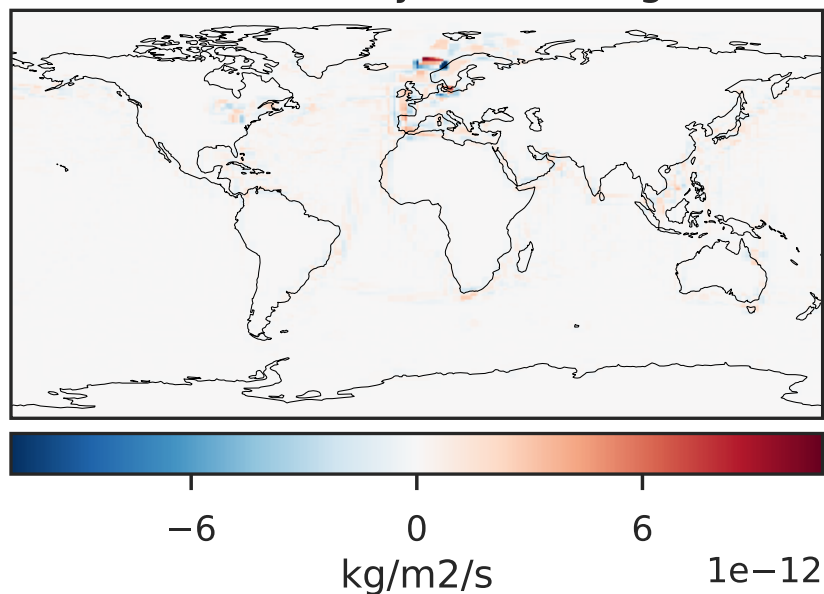
GCC\_14.2.0 (Ref)  
4.0x5.0



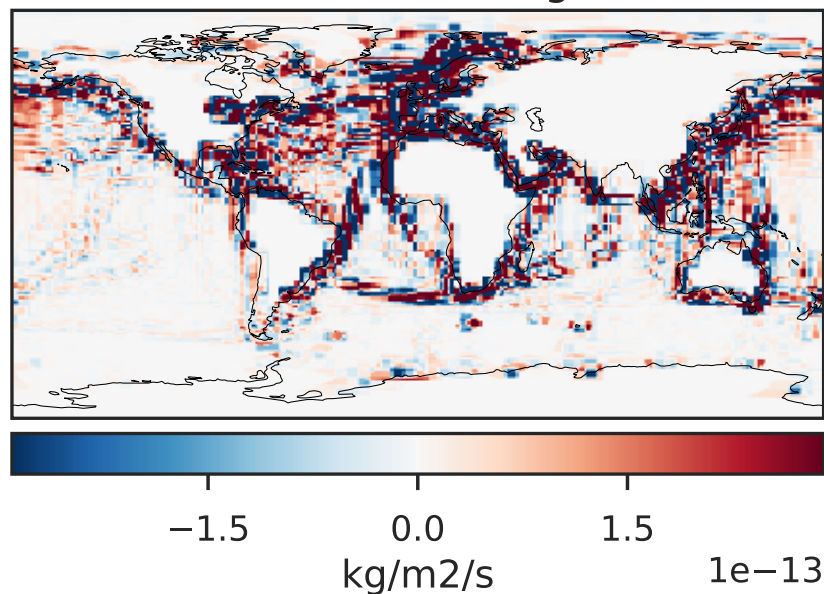
GCHP\_14.2.0 (Dev)  
c24



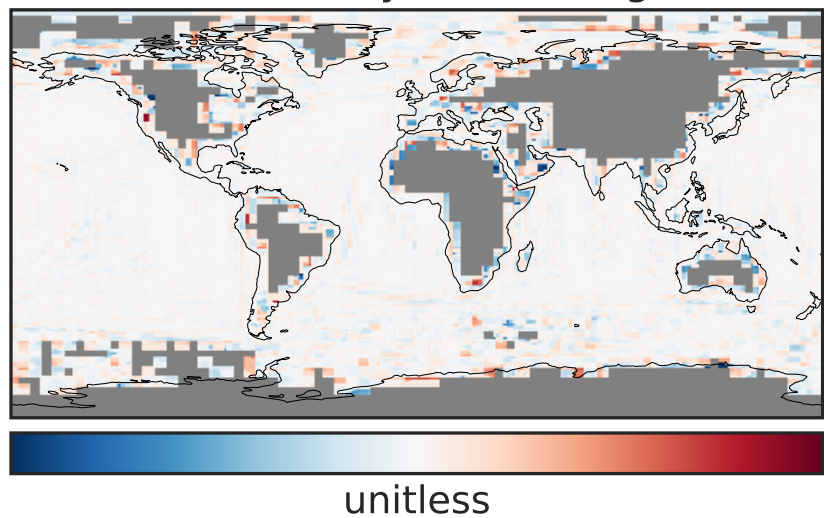
Difference (1x1.25)  
Dev - Ref, Dynamic Range



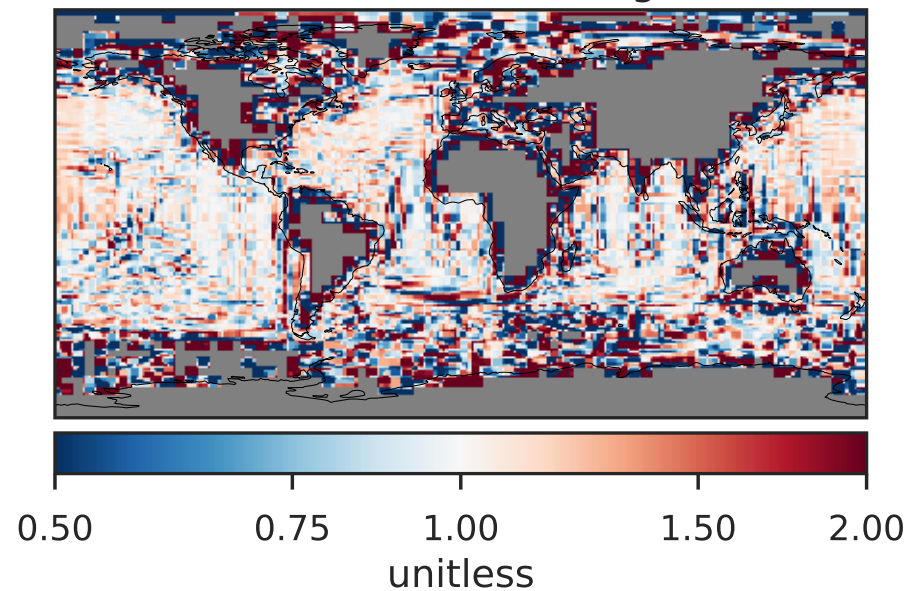
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



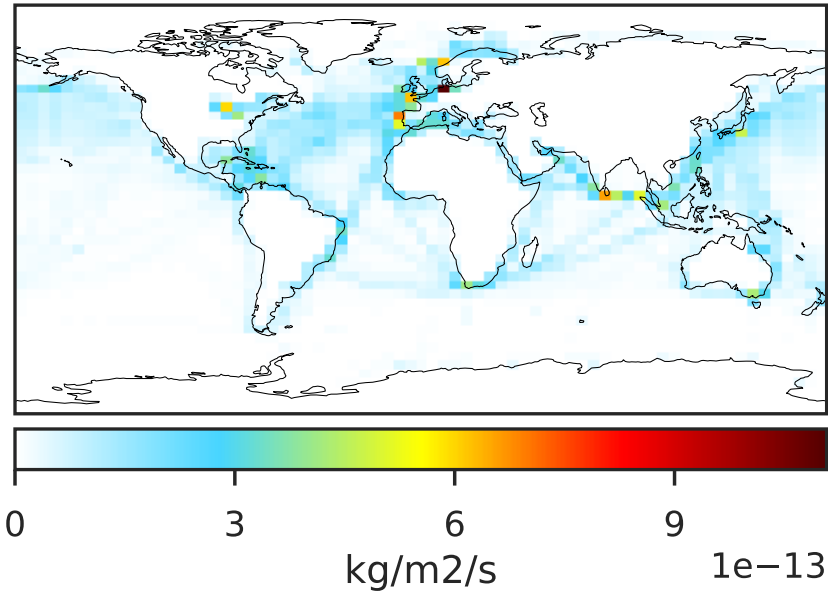
Ratio (1x1.25)  
Dev/Ref, Fixed Range



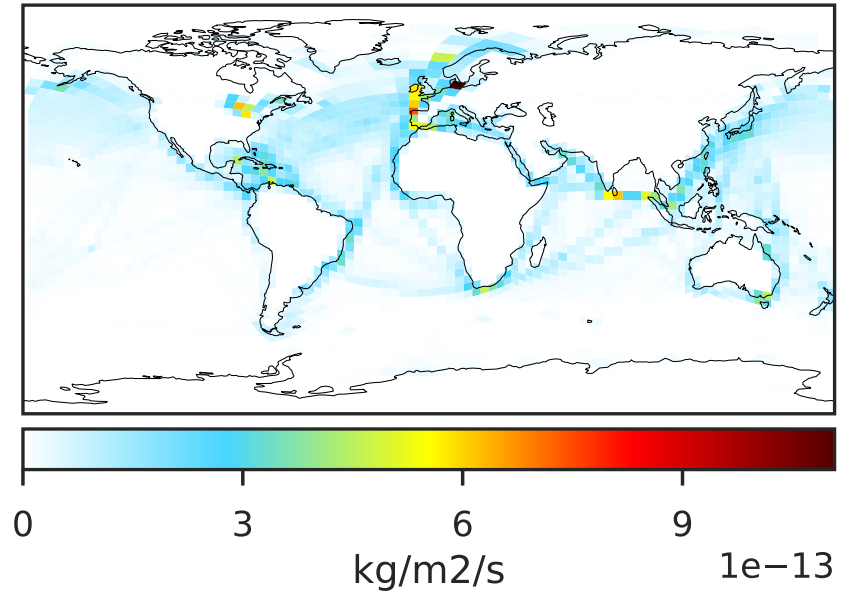


# EmisNO\_Ship (AnnualMean)

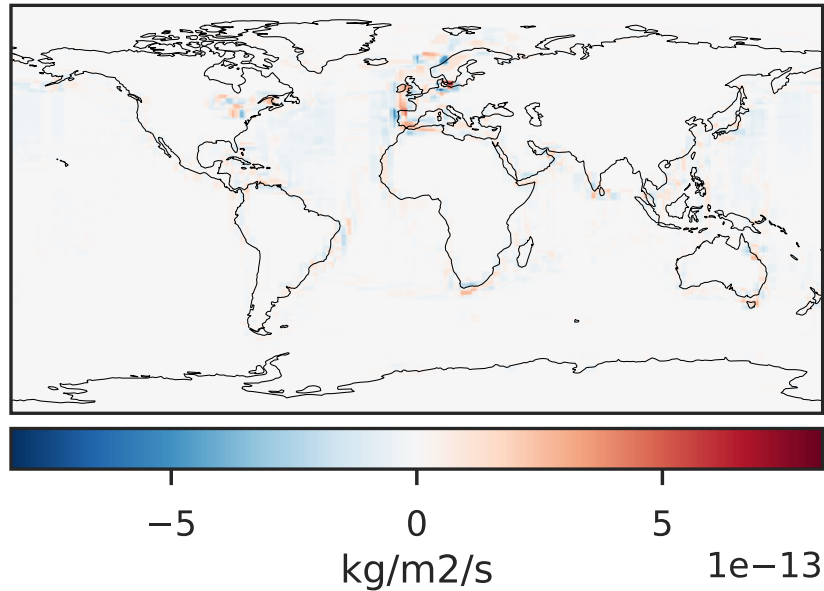
GCC\_14.2.0 (Ref)  
4.0x5.0



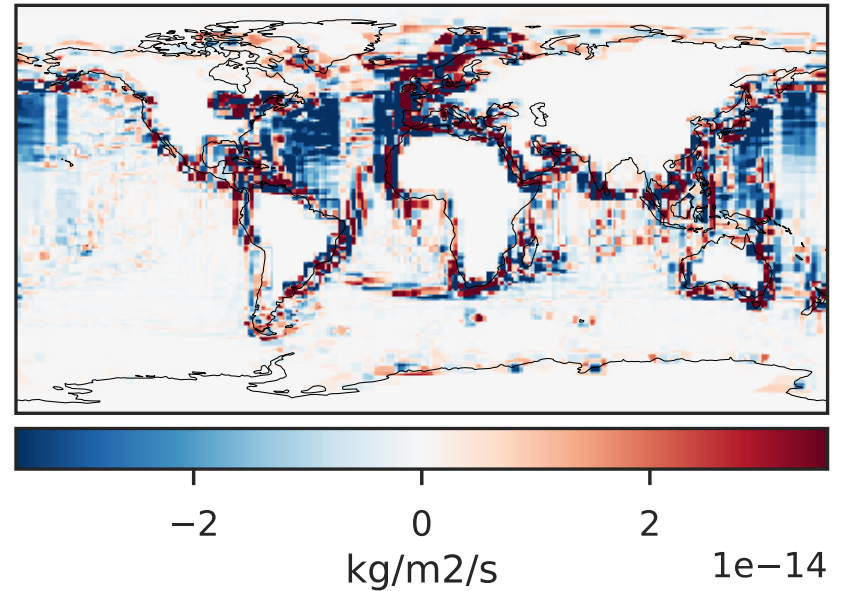
GCHP\_14.2.0 (Dev)  
c24



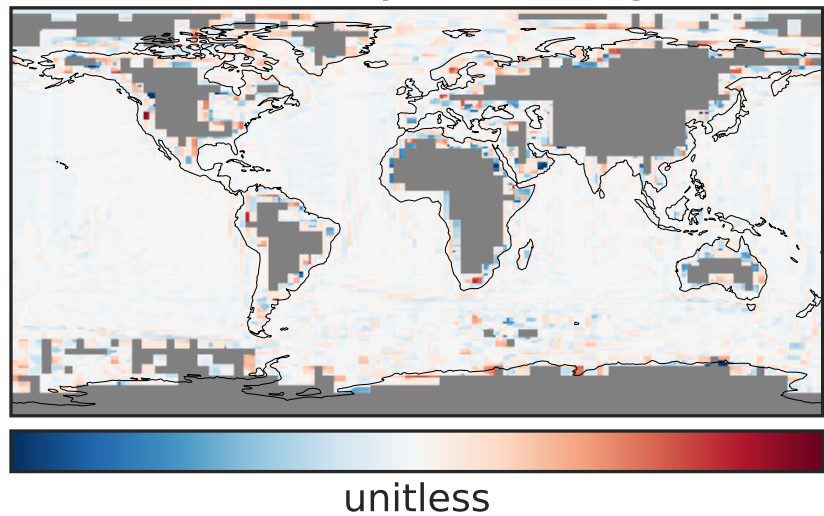
Difference (1x1.25)  
Dev - Ref, Dynamic Range



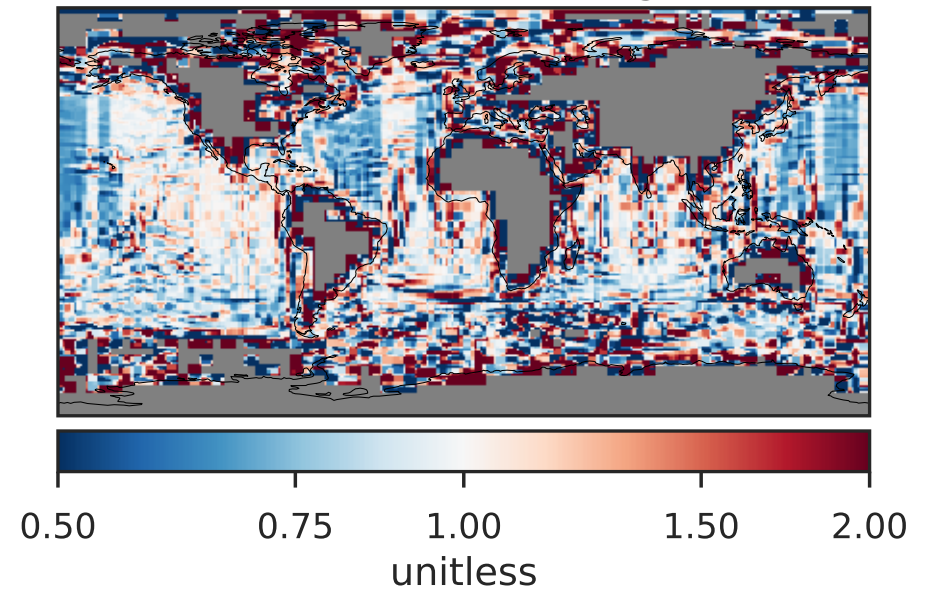
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

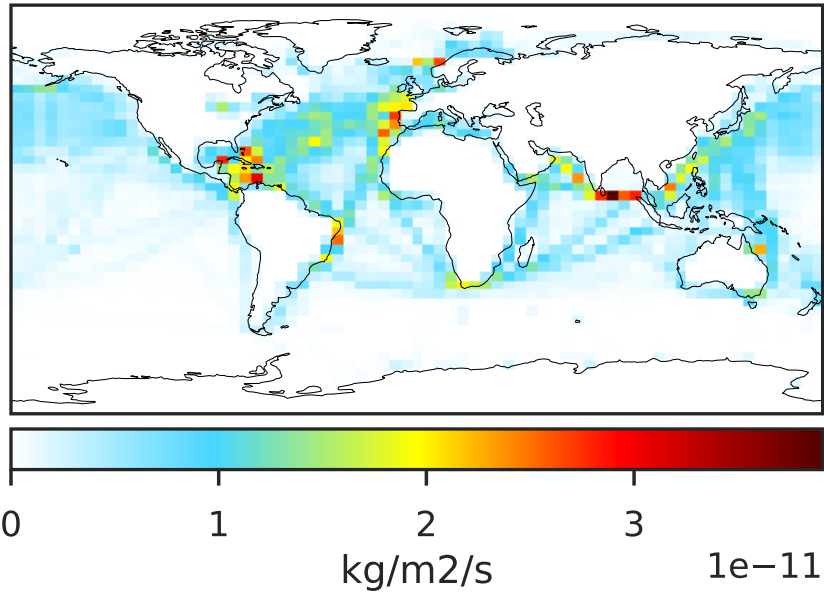


Ratio (1x1.25)  
Dev/Ref, Fixed Range

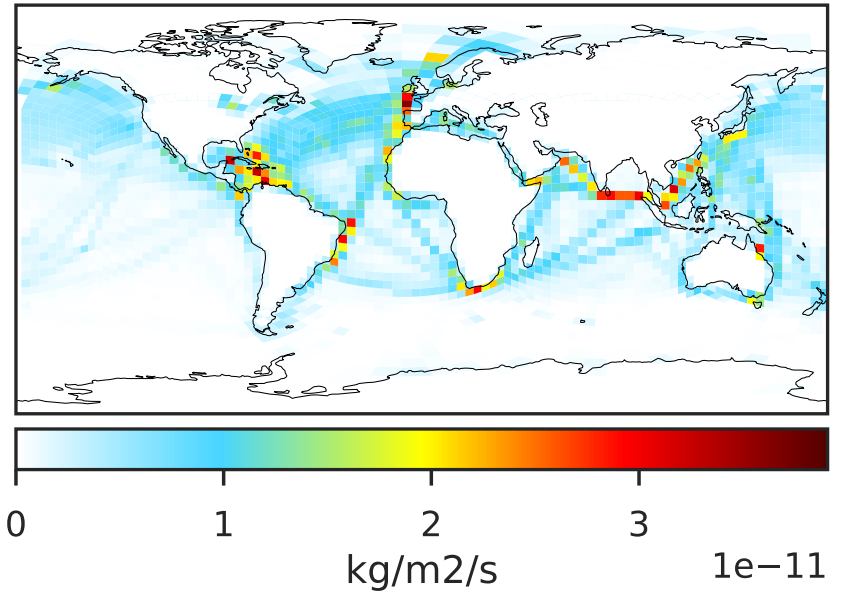


# EmisO3\_Ship (AnnualMean)

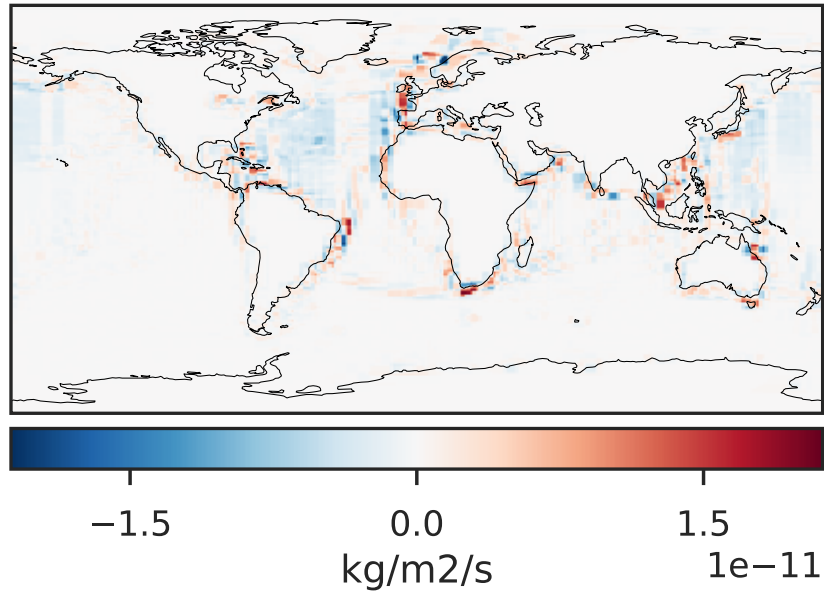
GCC\_14.2.0 (Ref)  
4.0x5.0



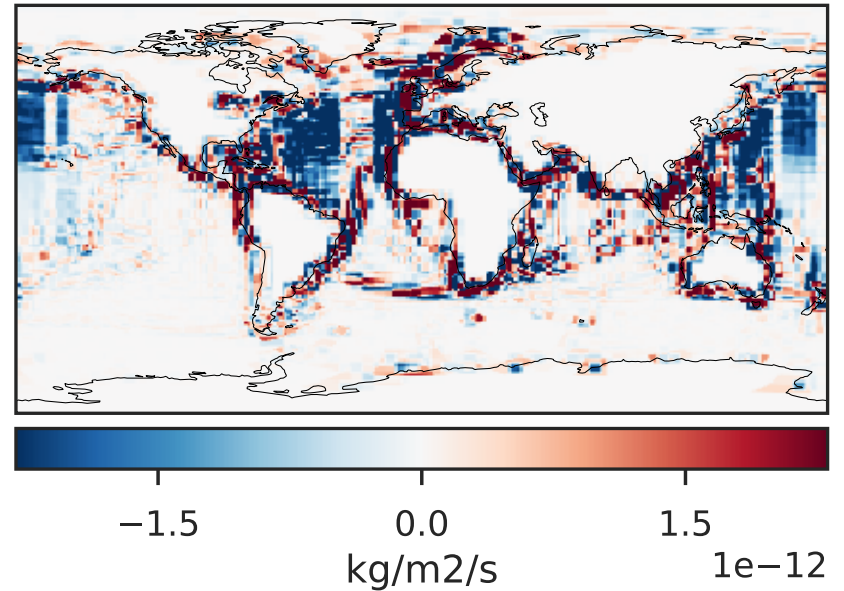
GCHP\_14.2.0 (Dev)  
c24



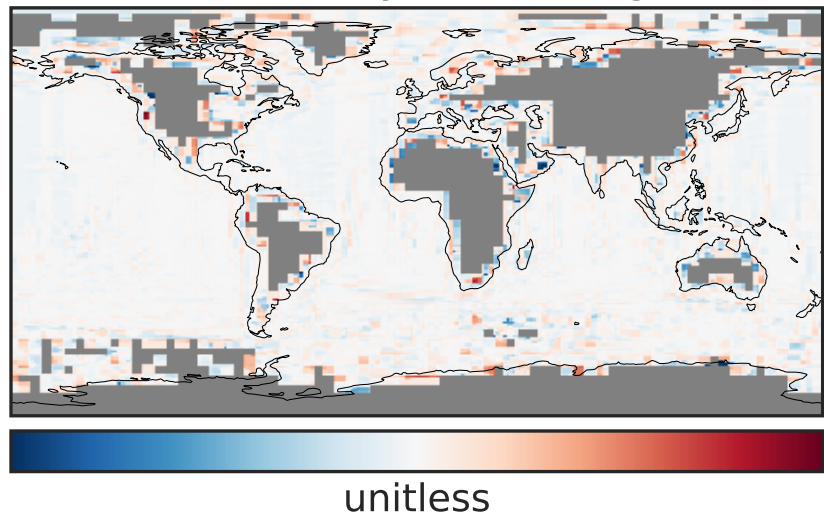
Difference (1x1.25)  
Dev - Ref, Dynamic Range



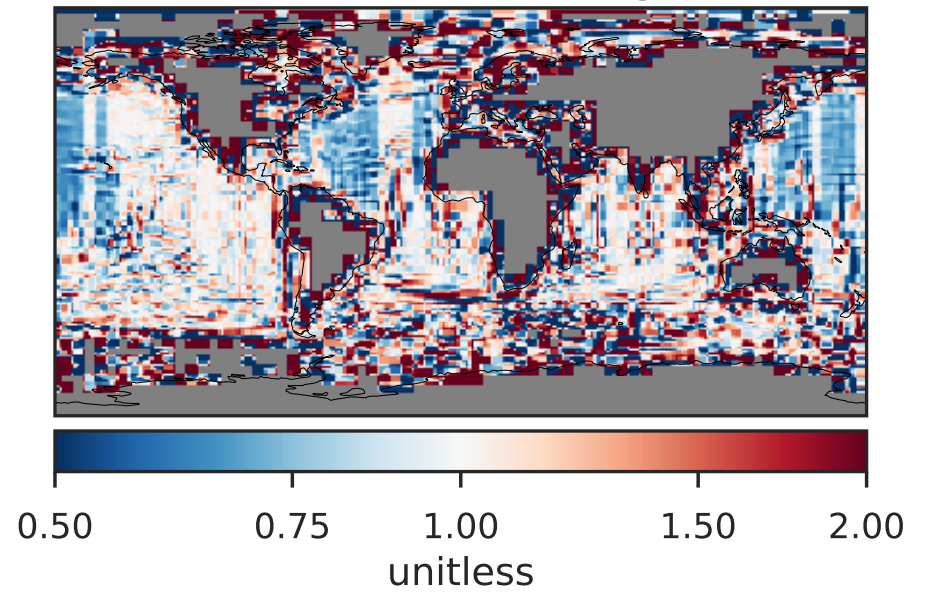
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



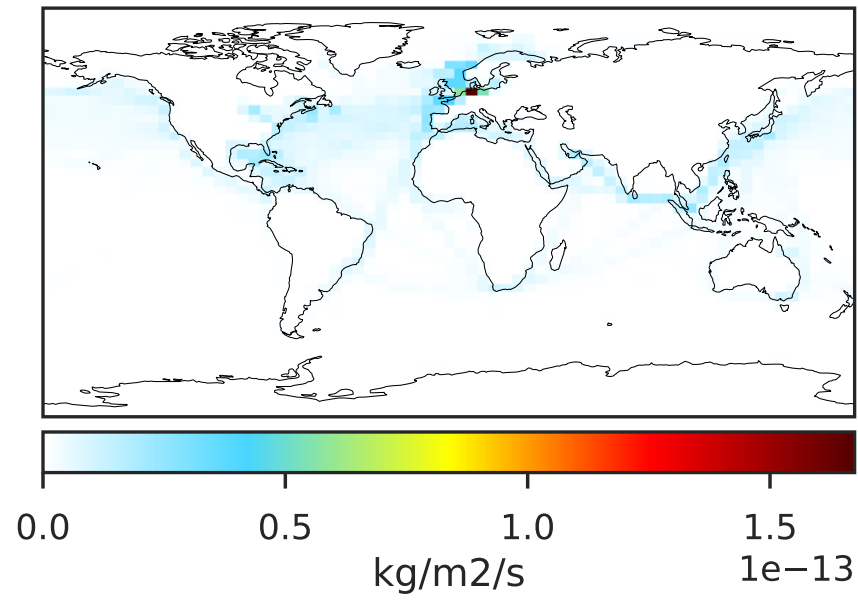
Ratio (1x1.25)  
Dev/Ref, Fixed Range



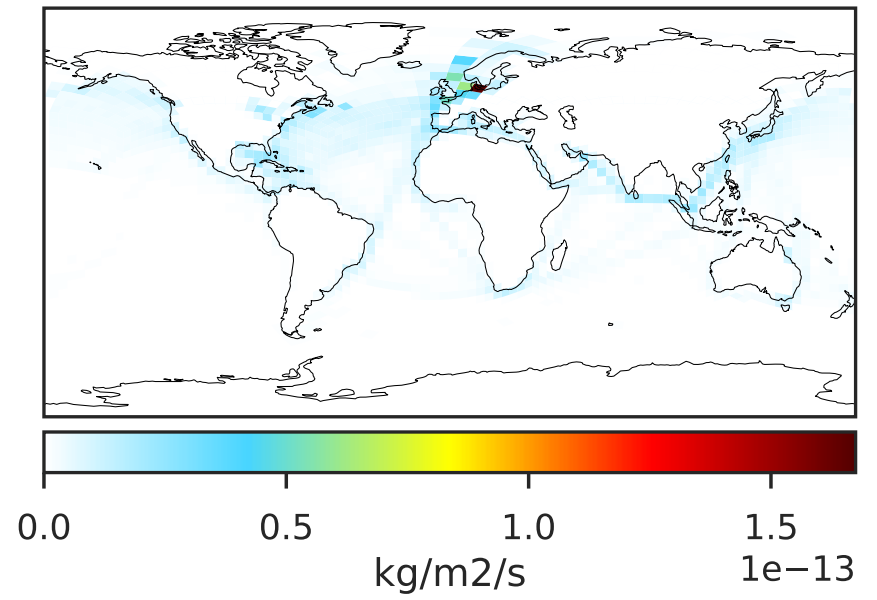


# EmisOCPI\_Ship (AnnualMean)

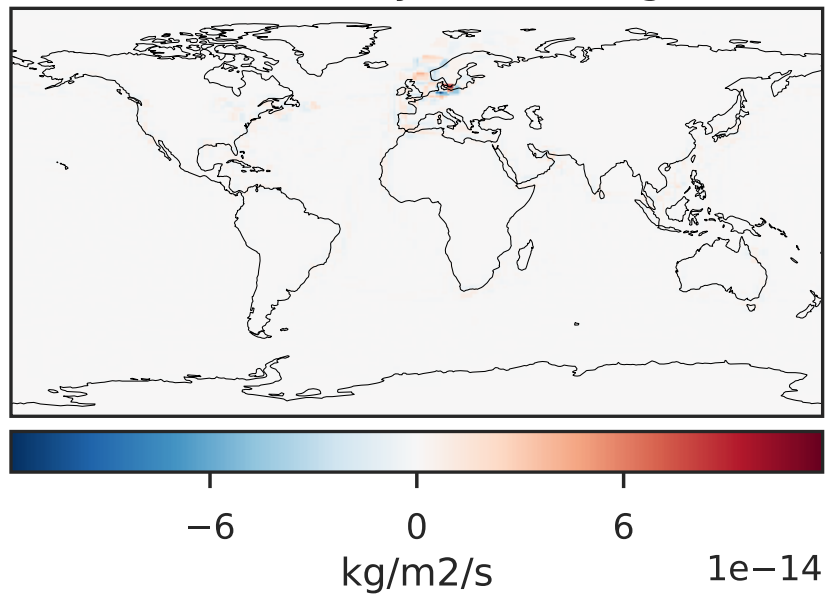
GCC\_14.2.0 (Ref)  
4.0x5.0



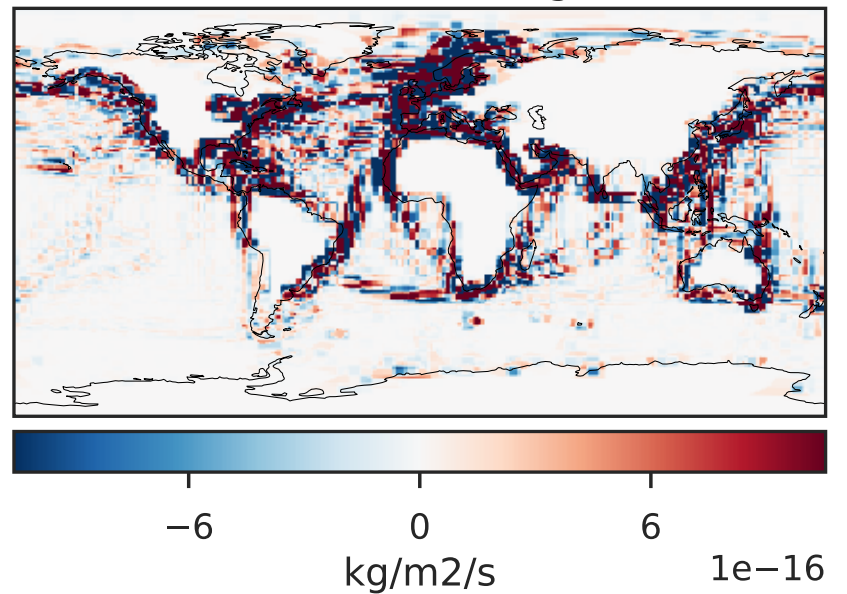
GCHP\_14.2.0 (Dev)  
c24



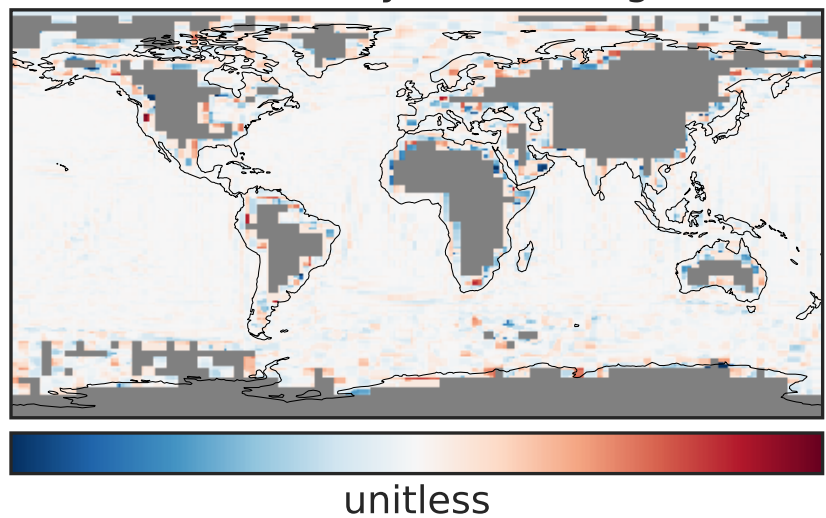
Difference (1x1.25)  
Dev - Ref, Dynamic Range



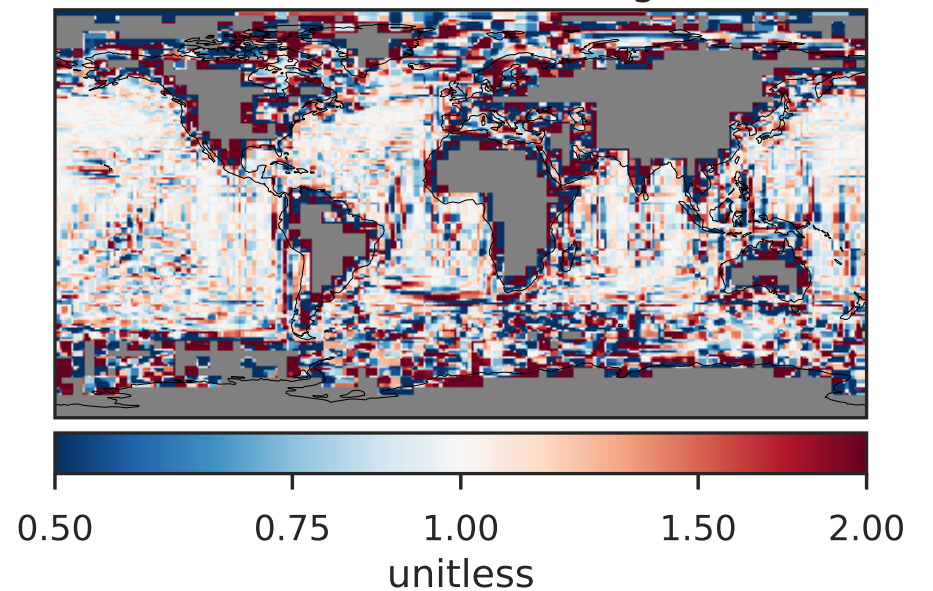
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



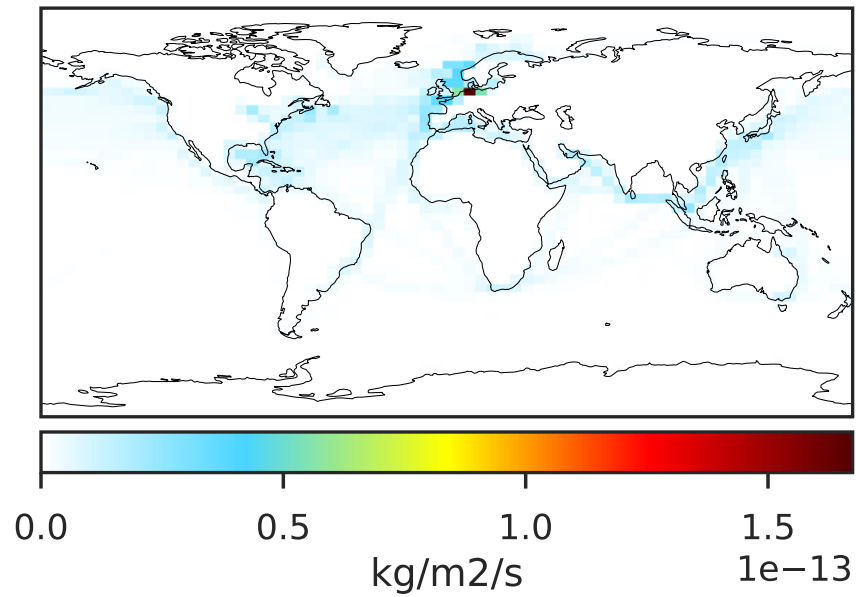
Ratio (1x1.25)  
Dev/Ref, Fixed Range



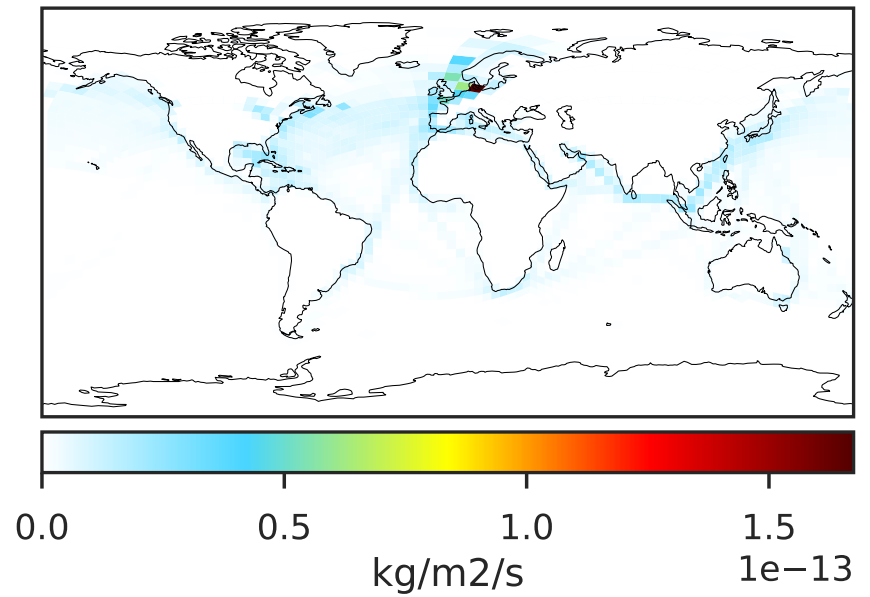


# EmisOCPO\_Ship (AnnualMean)

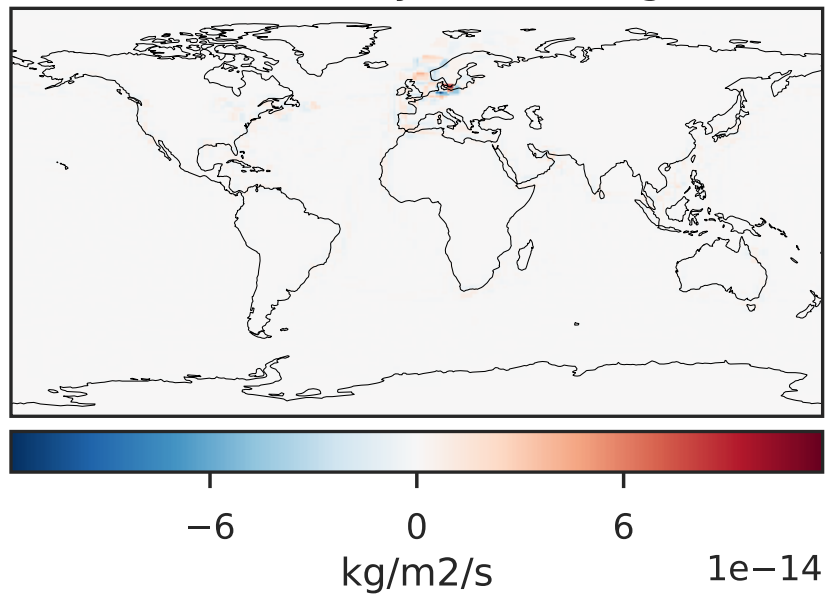
GCC\_14.2.0 (Ref)  
4.0x5.0



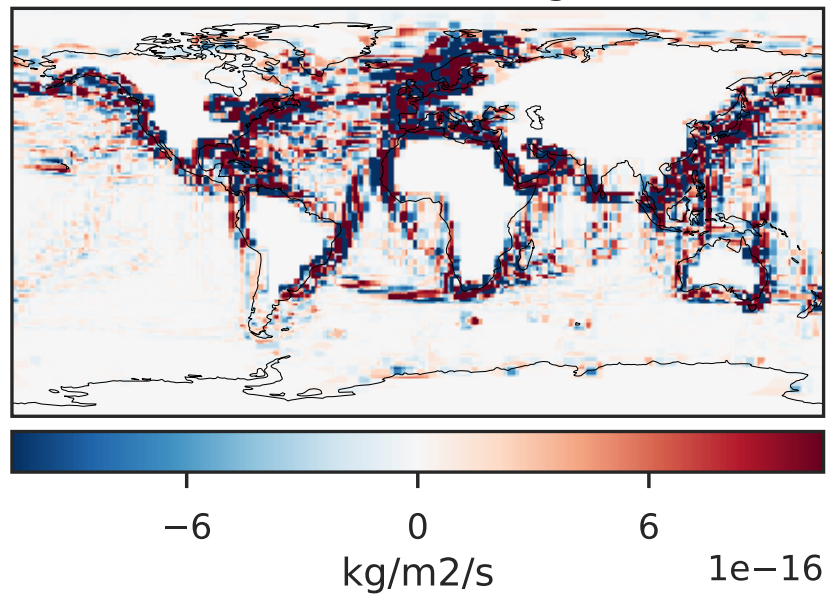
GCHP\_14.2.0 (Dev)  
c24



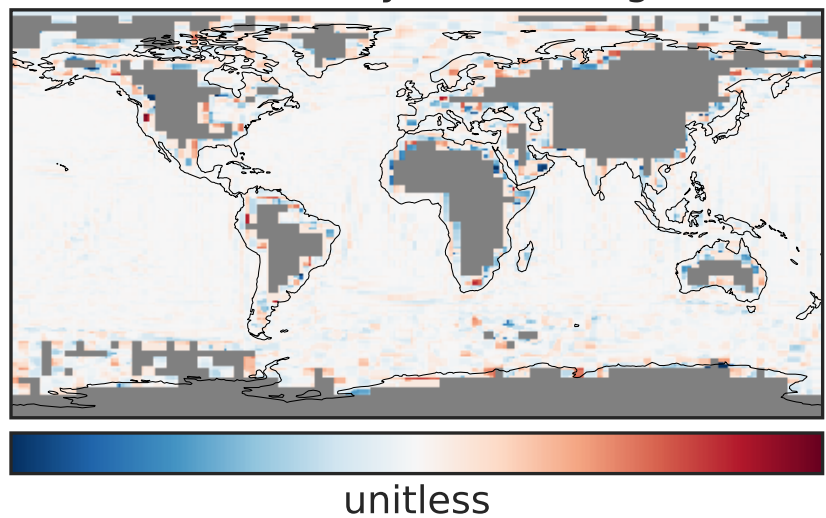
Difference (1x1.25)  
Dev - Ref, Dynamic Range



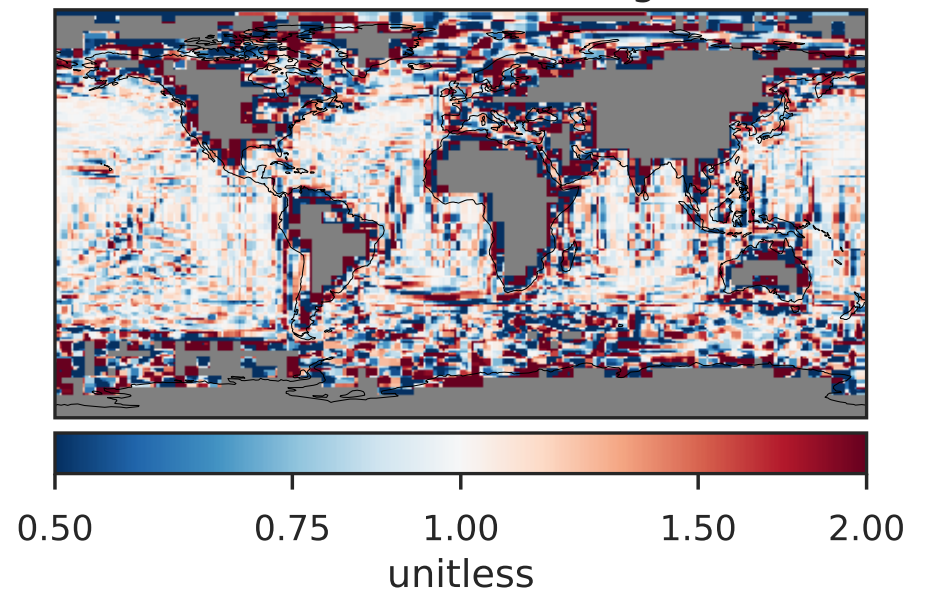
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

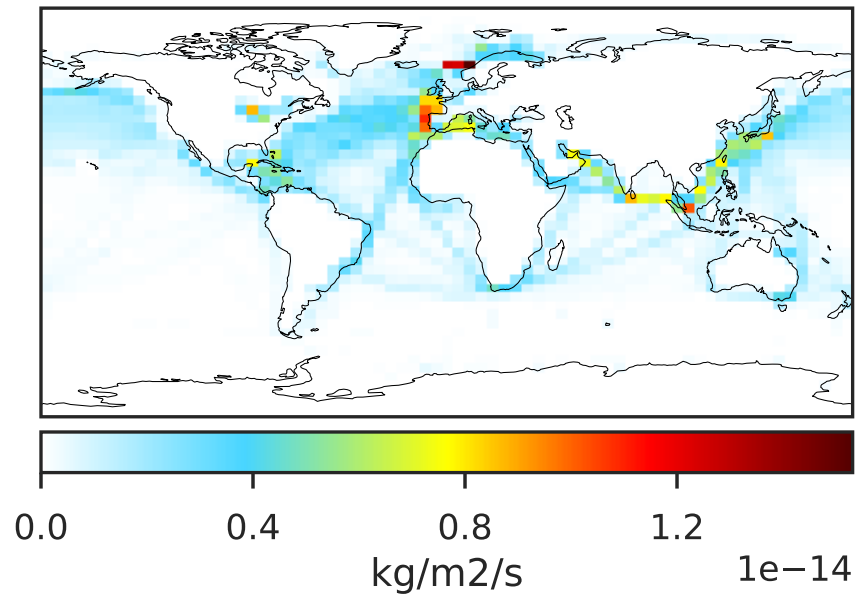


Ratio (1x1.25)  
Dev/Ref, Fixed Range

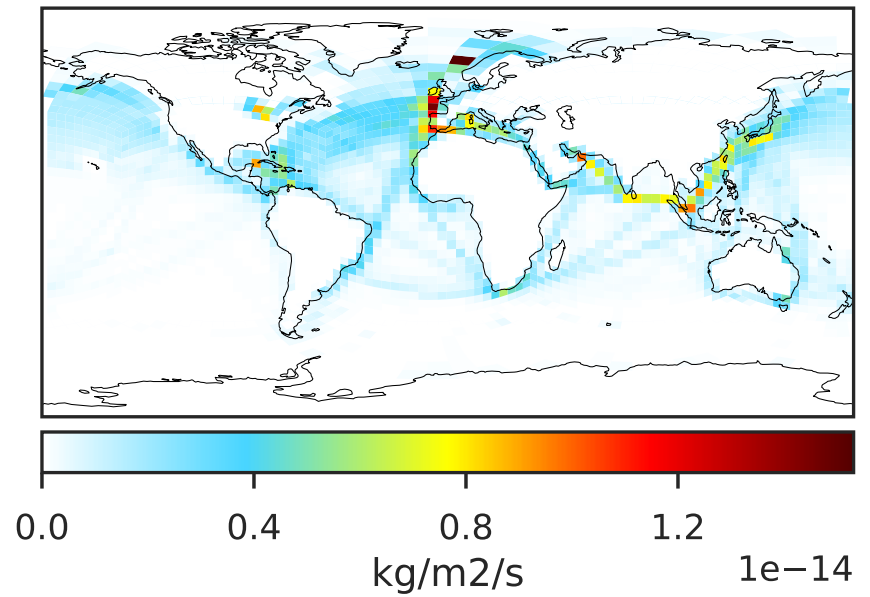


# EmispFe\_Ship (AnnualMean)

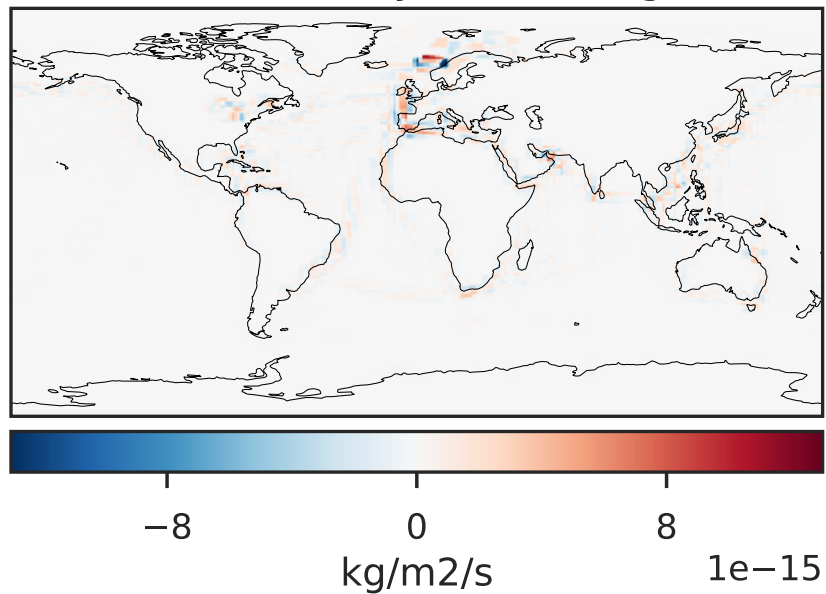
GCC\_14.2.0 (Ref)  
4.0x5.0



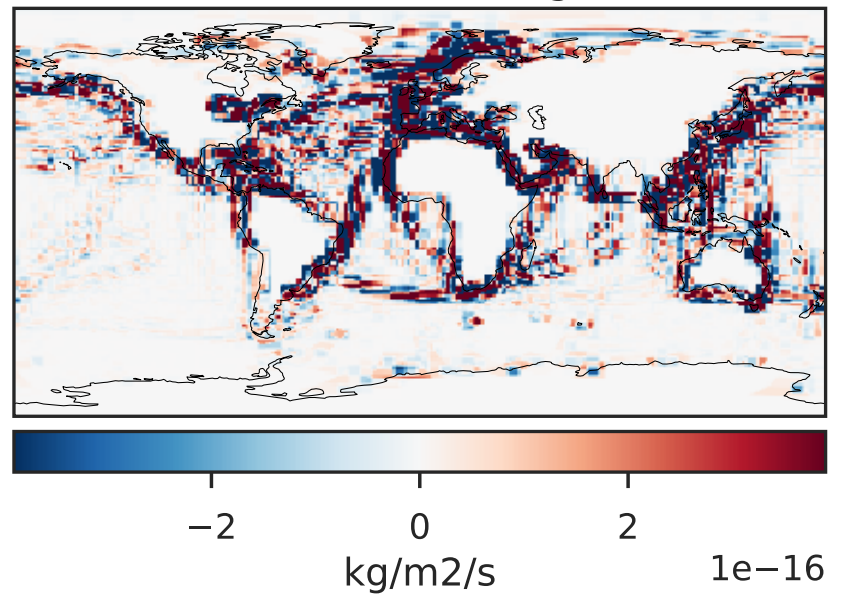
GCHP\_14.2.0 (Dev)  
c24



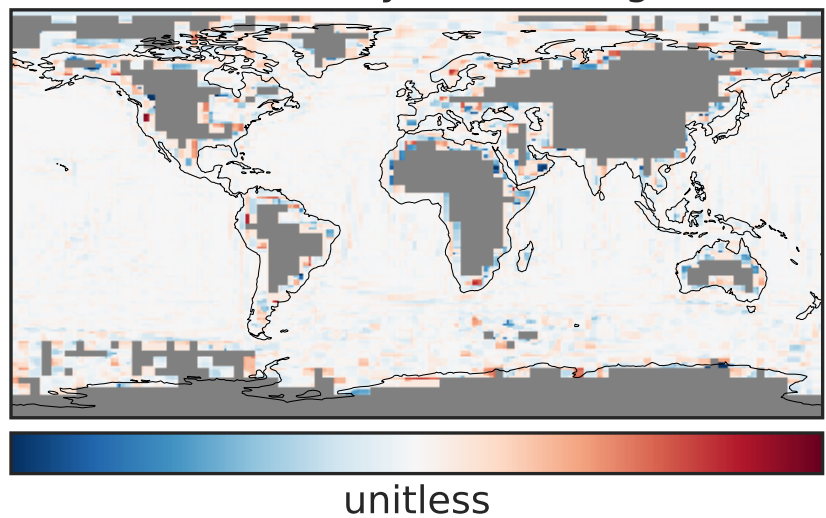
Difference (1x1.25)  
Dev - Ref, Dynamic Range



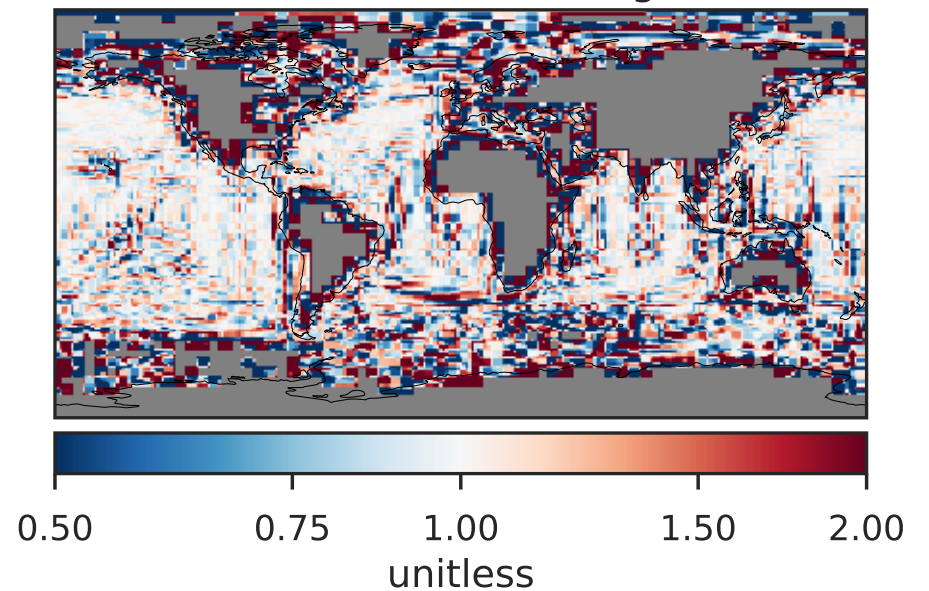
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



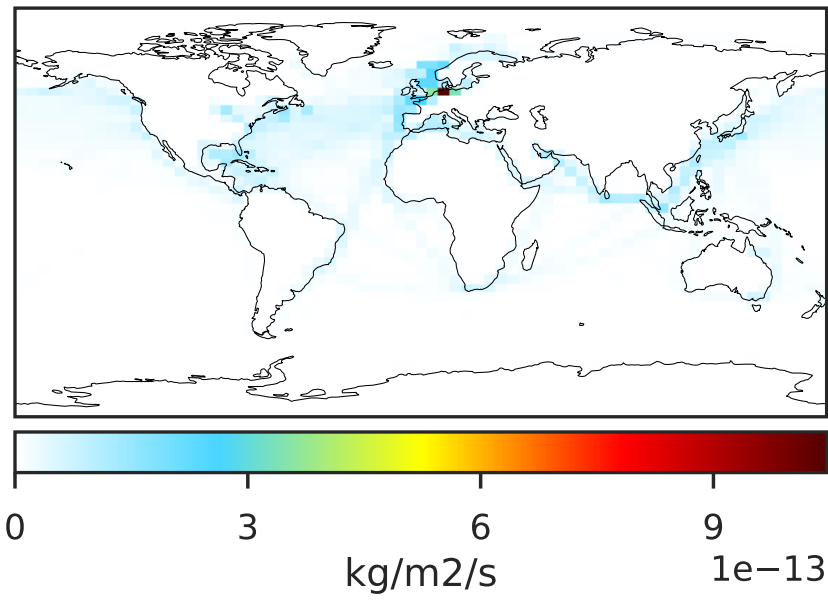
Ratio (1x1.25)  
Dev/Ref, Fixed Range



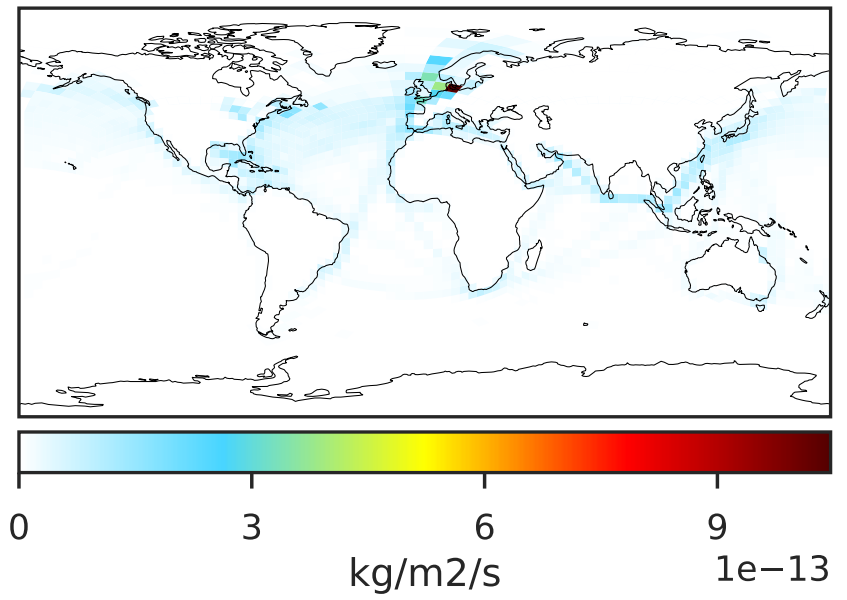


# EmisPRPE\_Ship (AnnualMean)

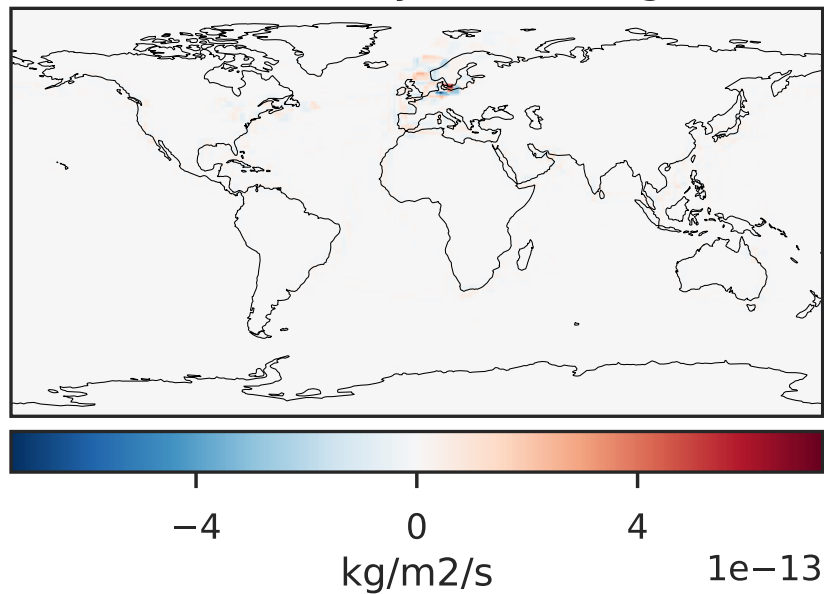
GCC\_14.2.0 (Ref)  
4.0x5.0



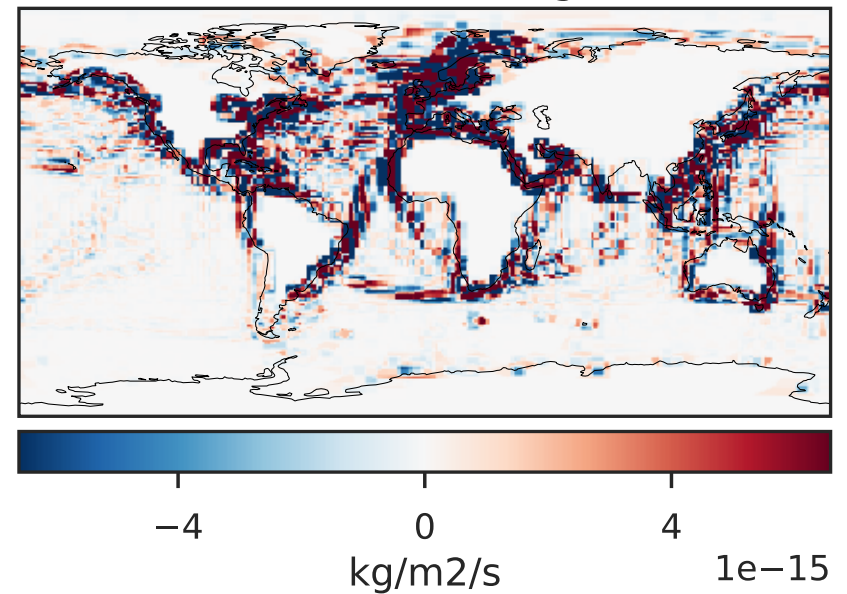
GCHP\_14.2.0 (Dev)  
c24



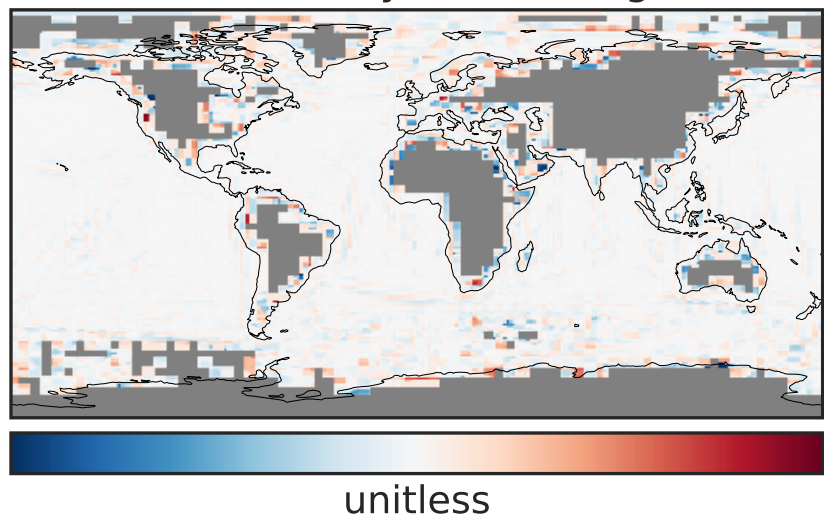
Difference (1x1.25)  
Dev - Ref, Dynamic Range



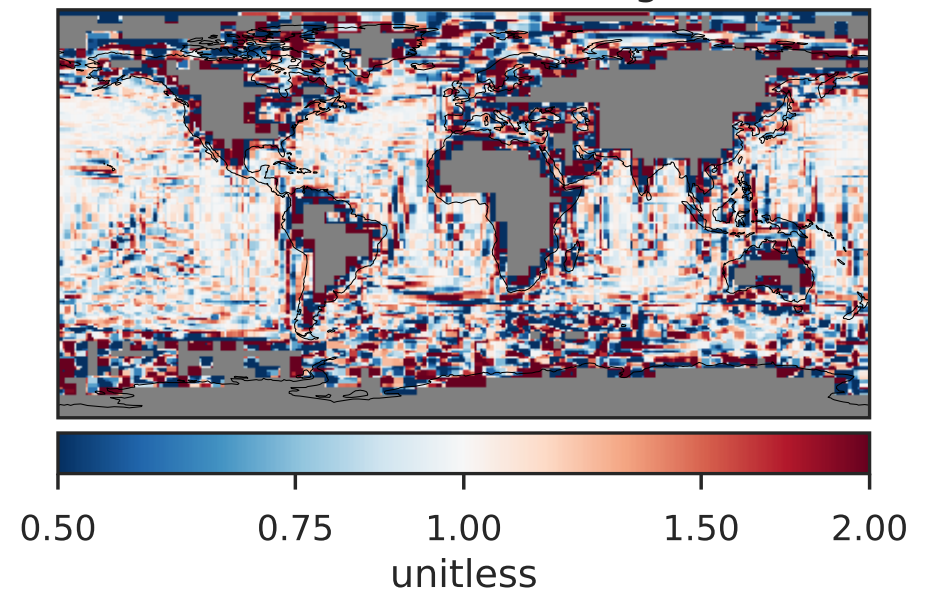
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



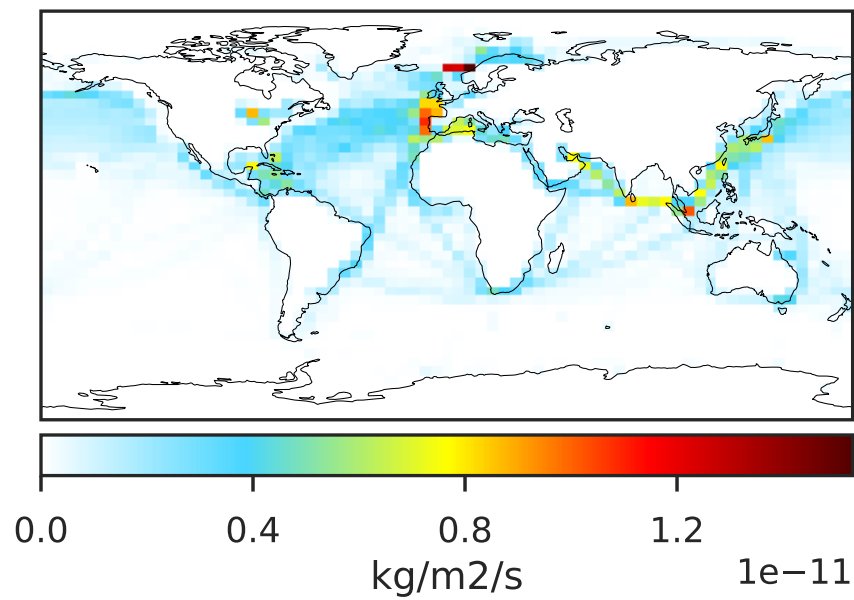
Ratio (1x1.25)  
Dev/Ref, Fixed Range



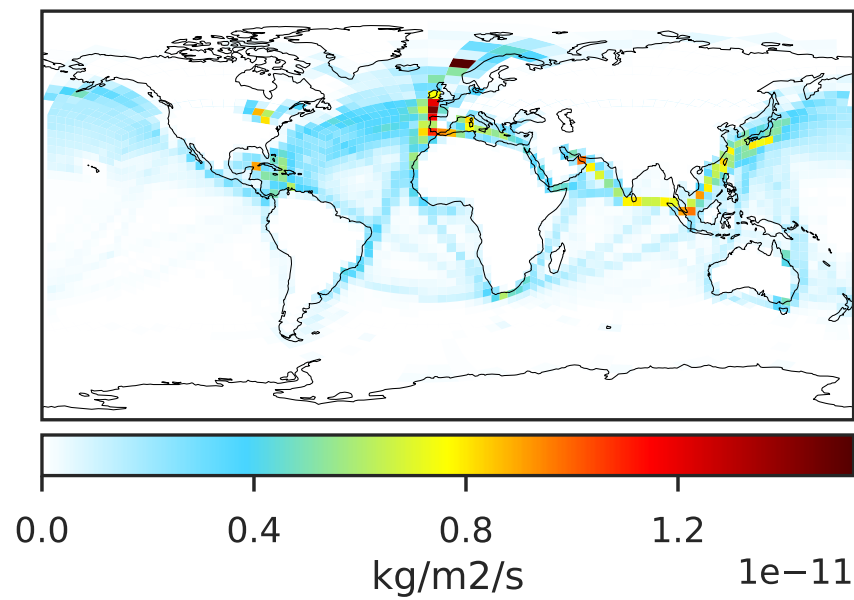


# EmisSO2\_Ship (AnnualMean)

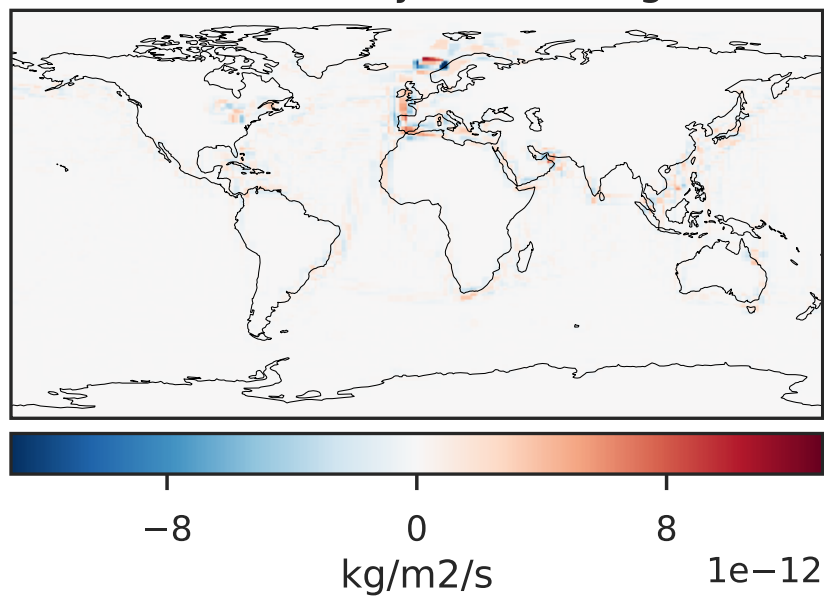
GCC\_14.2.0 (Ref)  
4.0x5.0



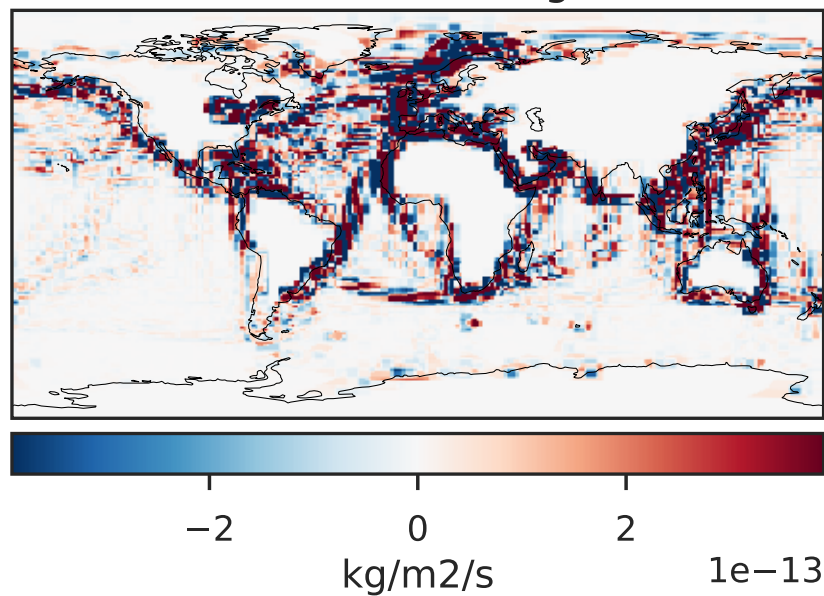
GCHP\_14.2.0 (Dev)  
c24



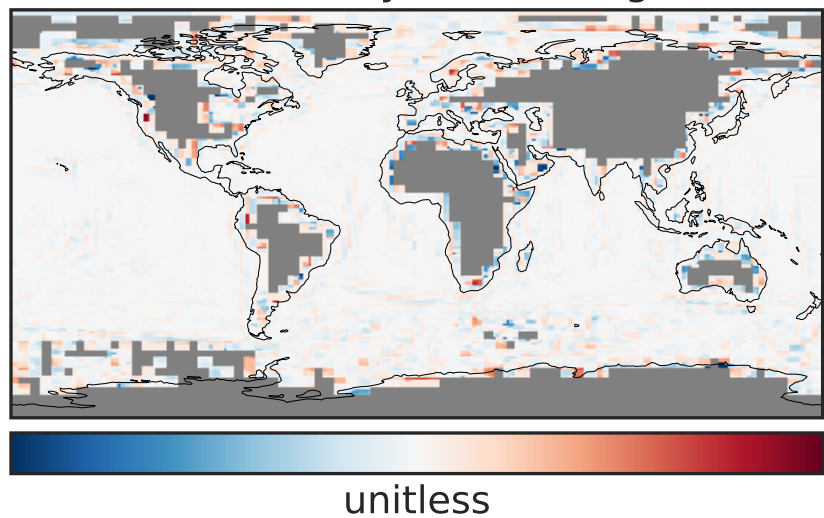
Difference (1x1.25)  
Dev - Ref, Dynamic Range



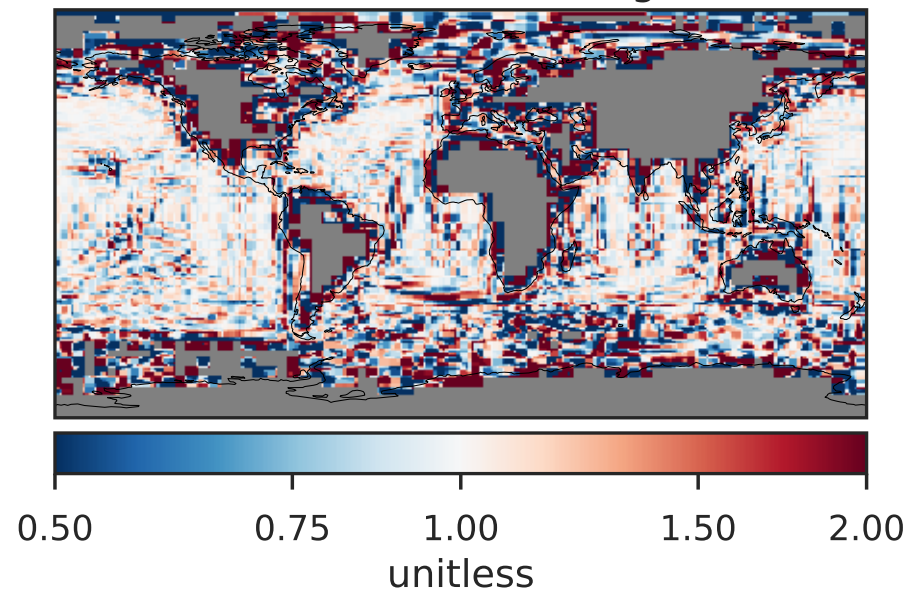
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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

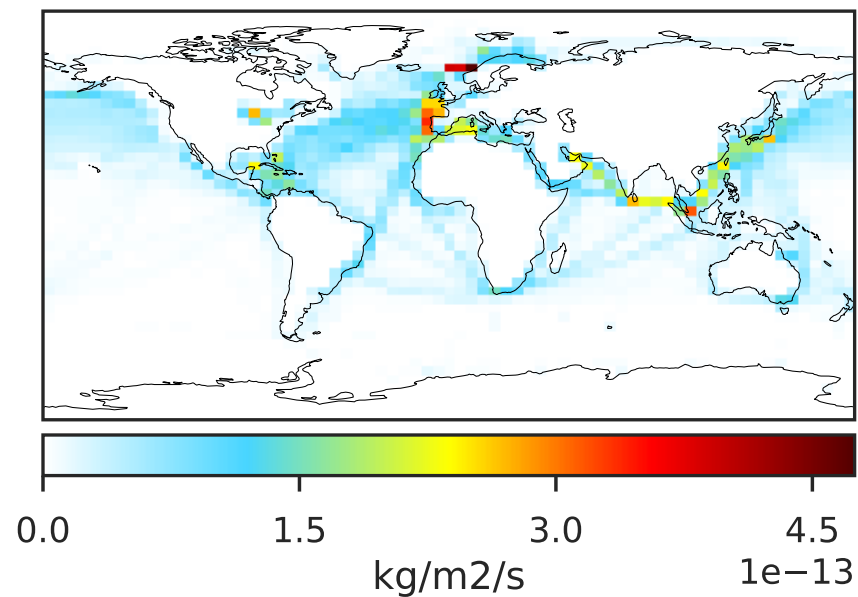


Ratio (1x1.25)  
Dev/Ref, Fixed Range

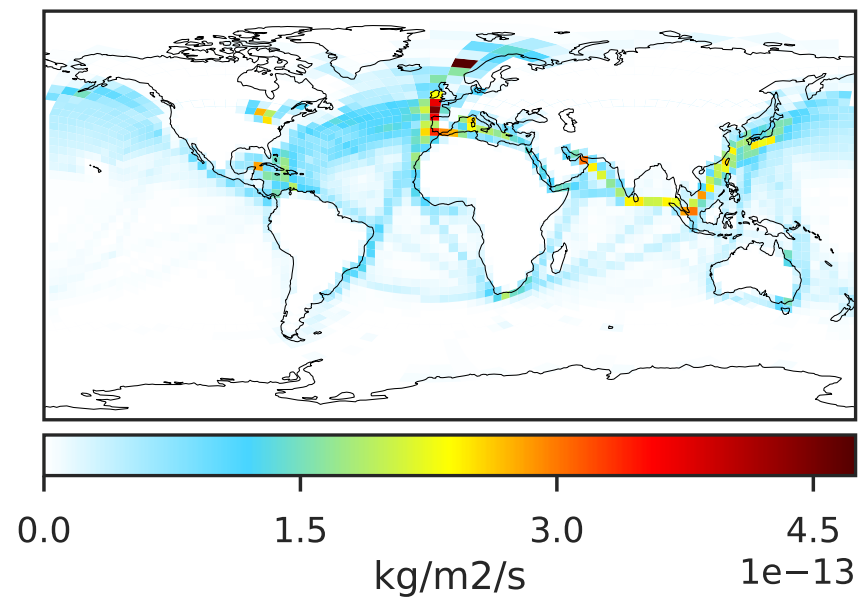


# EmisSO4\_Ship (AnnualMean)

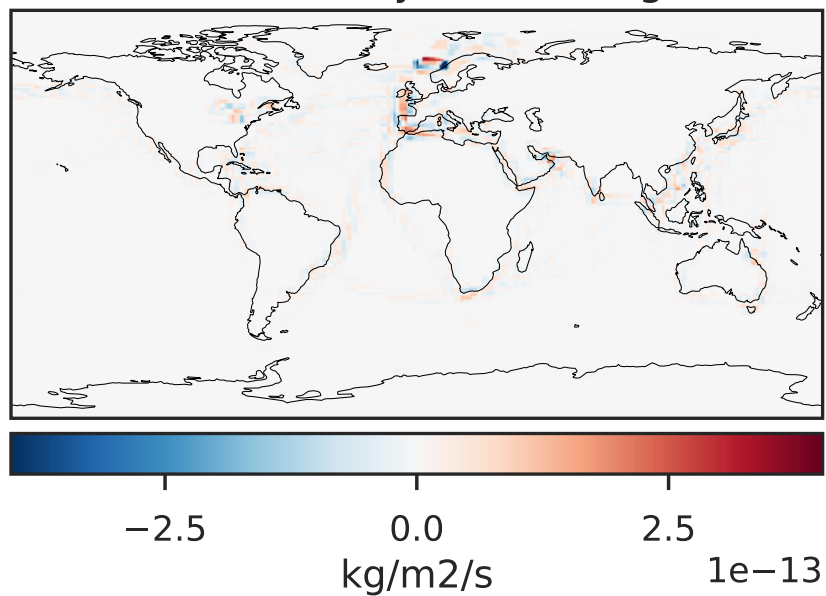
GCC\_14.2.0 (Ref)  
4.0x5.0



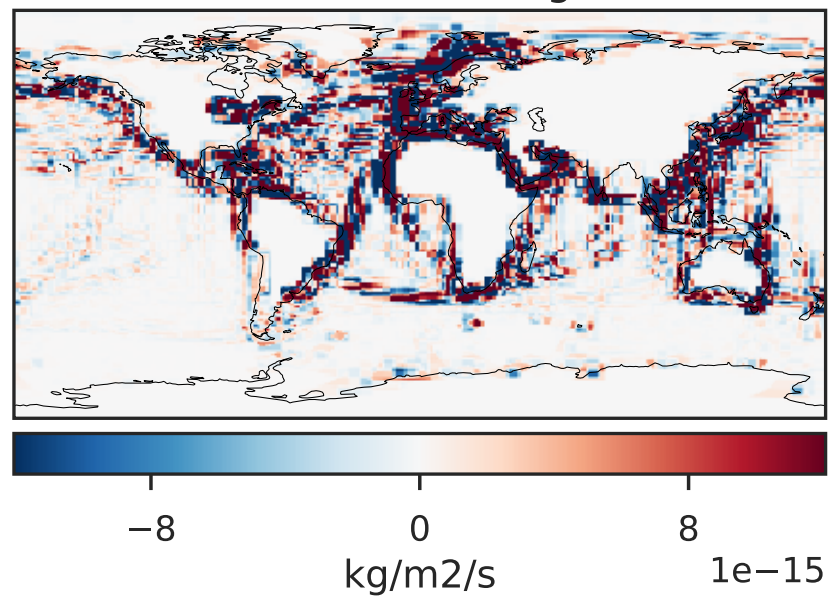
GCHP\_14.2.0 (Dev)  
c24



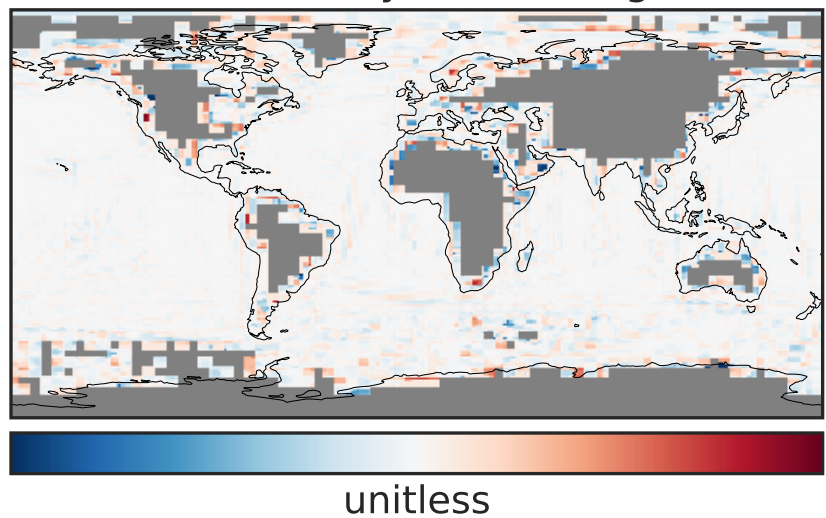
Difference (1x1.25)  
Dev - Ref, Dynamic Range



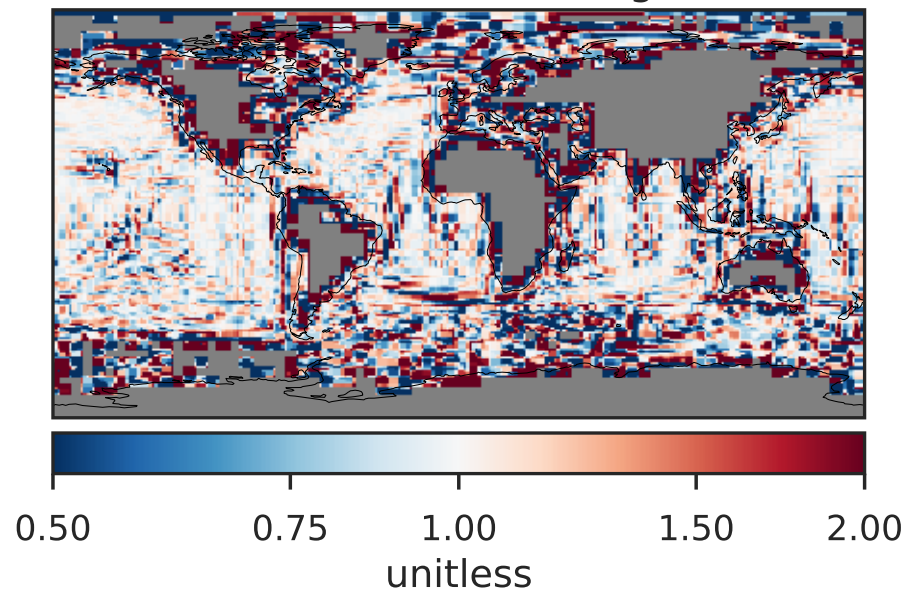
Difference (1x1.25)  
Dev - Ref, Restricted Range [5%,95%]



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



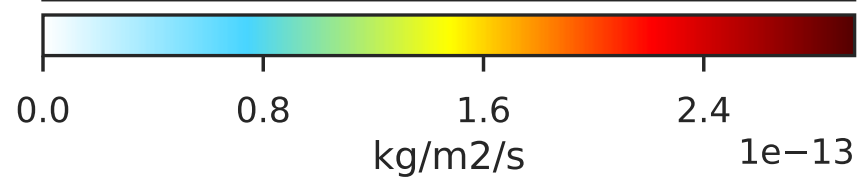
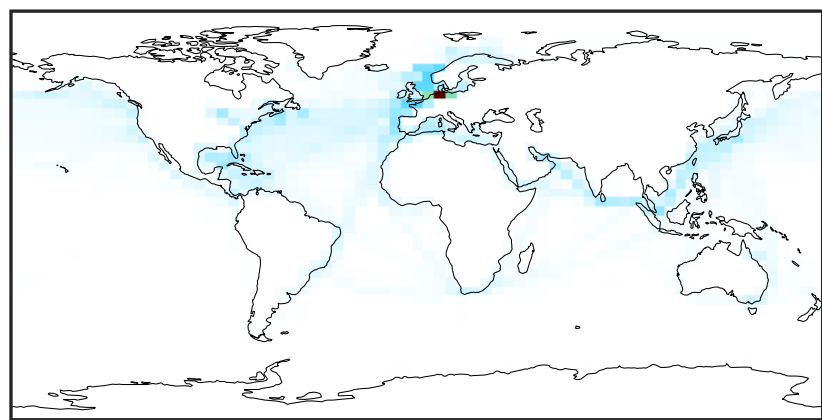
Ratio (1x1.25)  
Dev/Ref, Fixed Range



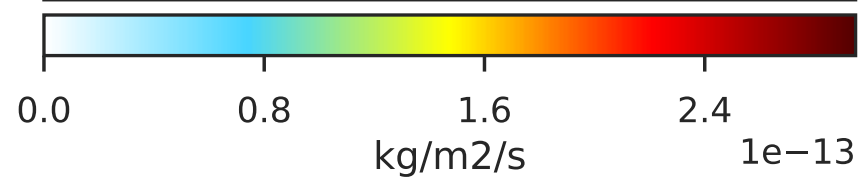
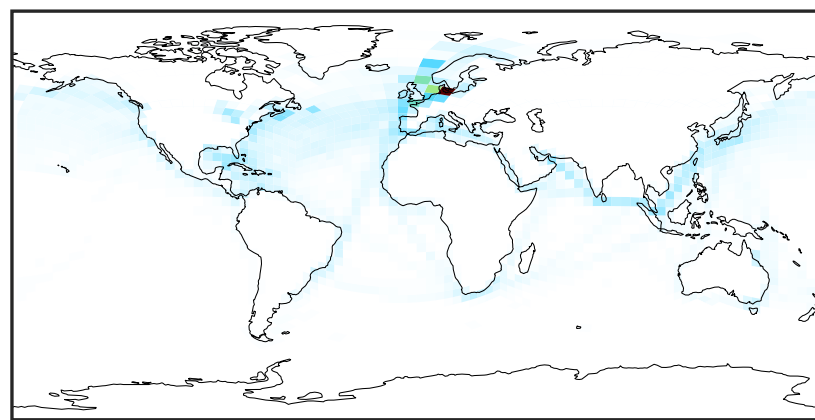


# EmisSOAP\_Ship (AnnualMean)

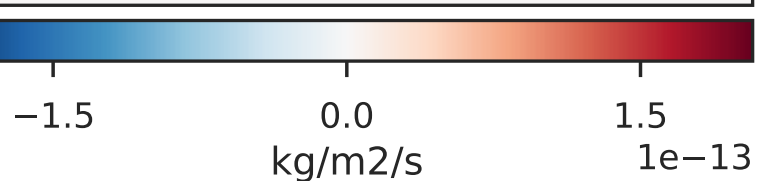
GCC\_14.2.0 (Ref)  
4.0x5.0



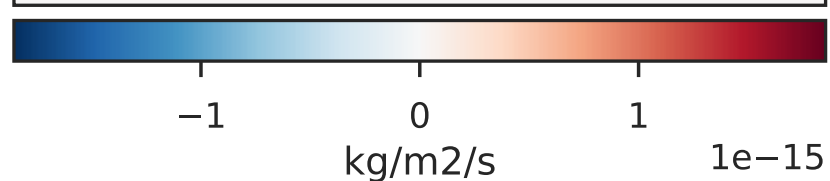
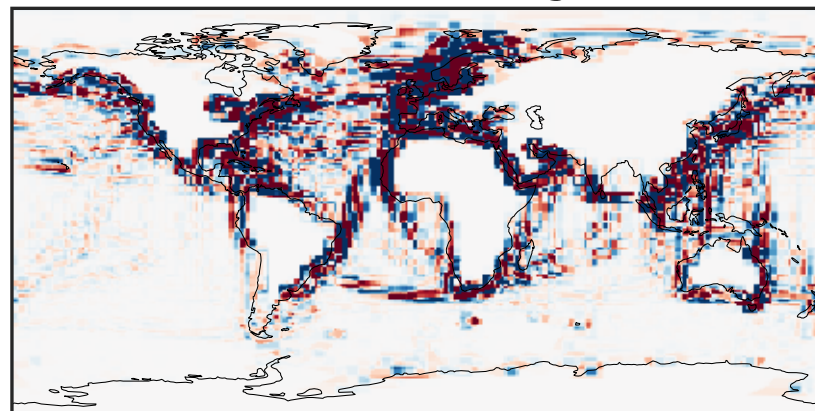
GCHP\_14.2.0 (Dev)  
c24



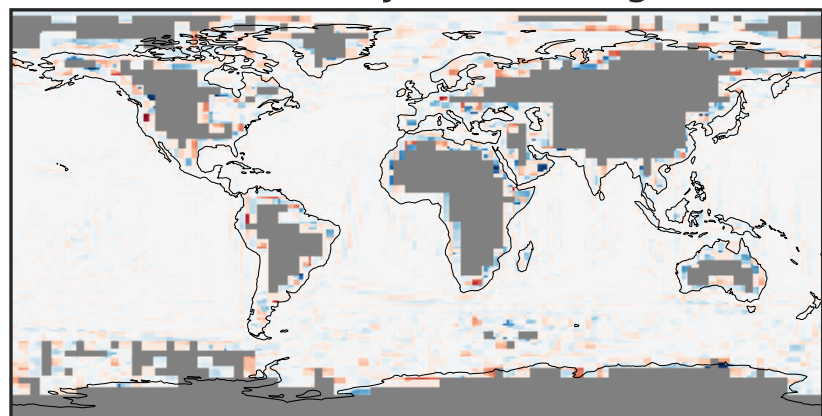
Difference (1x1.25)  
Dev - Ref, Dynamic Range



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

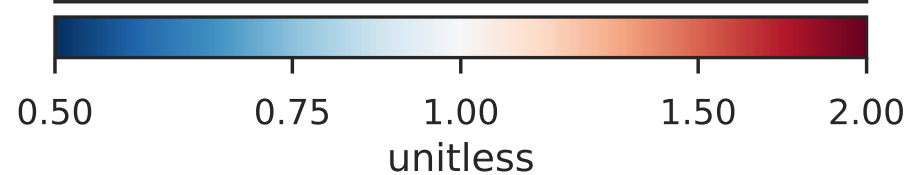
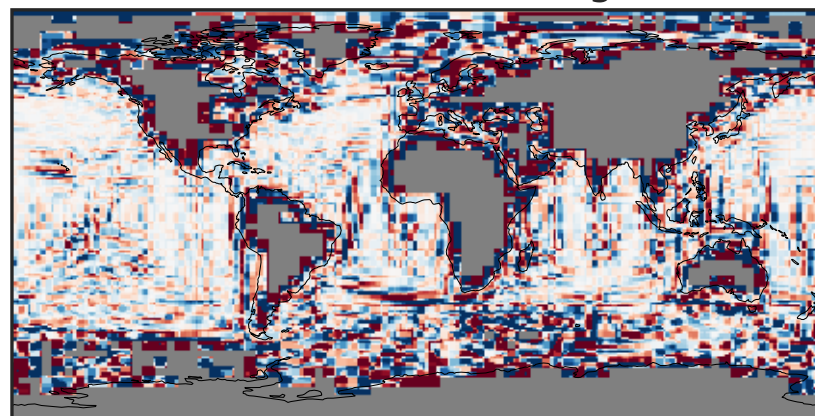


Ratio (1x1.25)  
Dev/Ref, Dynamic Range



unitless

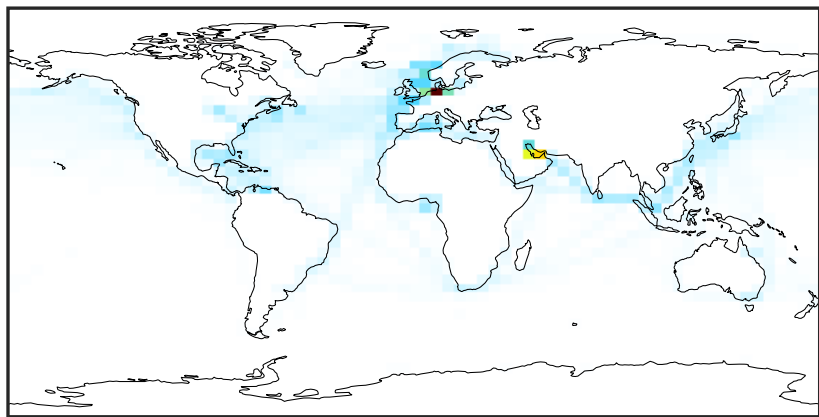
Ratio (1x1.25)  
Dev/Ref, Fixed Range





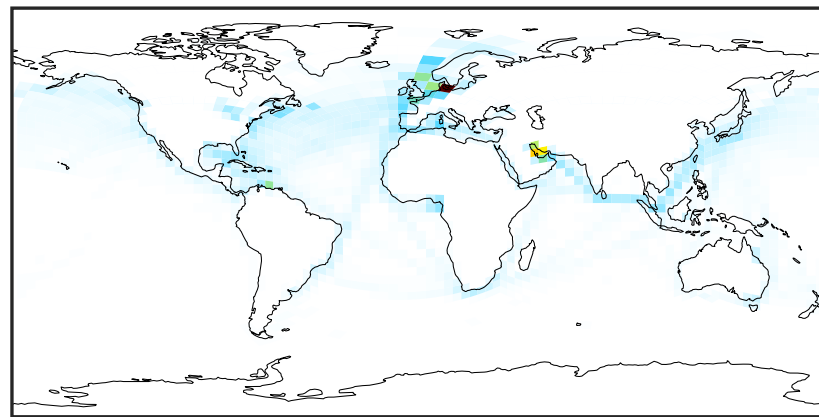
# EmisTOLU\_Ship (AnnualMean)

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



0.0 0.6 1.2 1.8  $1e-13$   
kg/m<sup>2</sup>/s

GCHP\_14.2.0 (Dev)  
c24



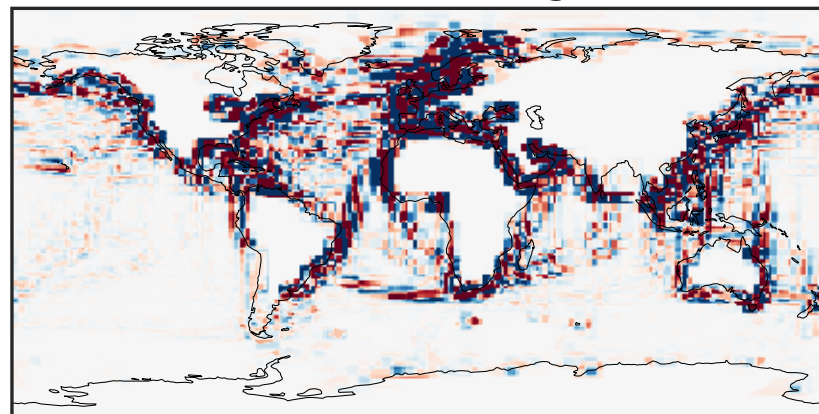
0.0 0.6 1.2 1.8  $1e-13$   
kg/m<sup>2</sup>/s

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



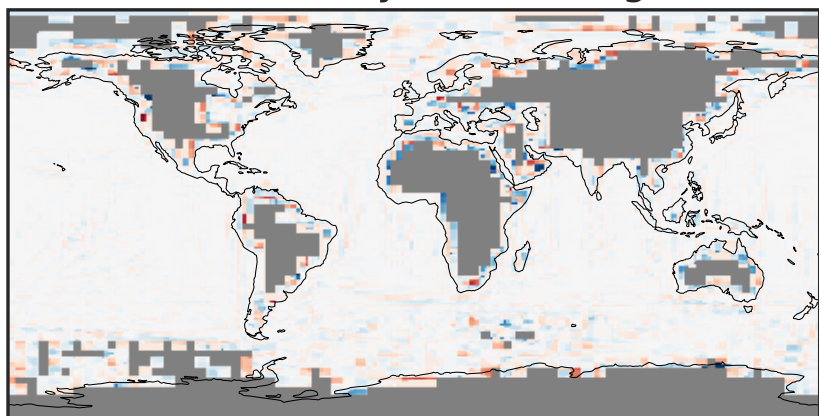
-1 0 1  $1e-13$   
kg/m<sup>2</sup>/s

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



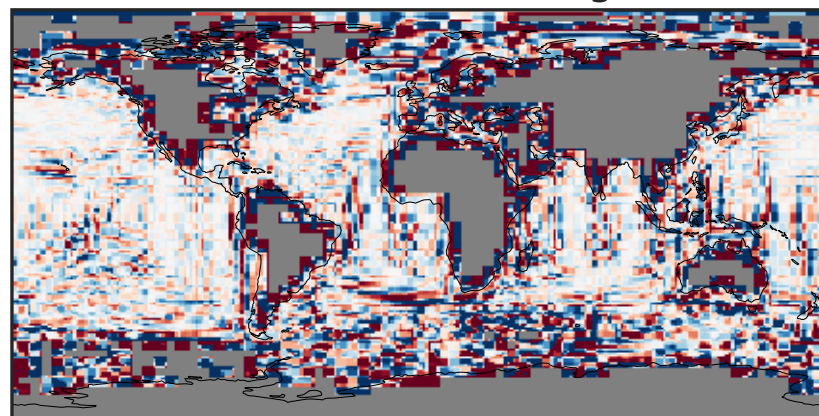
-1 0 1  $1e-15$   
kg/m<sup>2</sup>/s

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



unitless

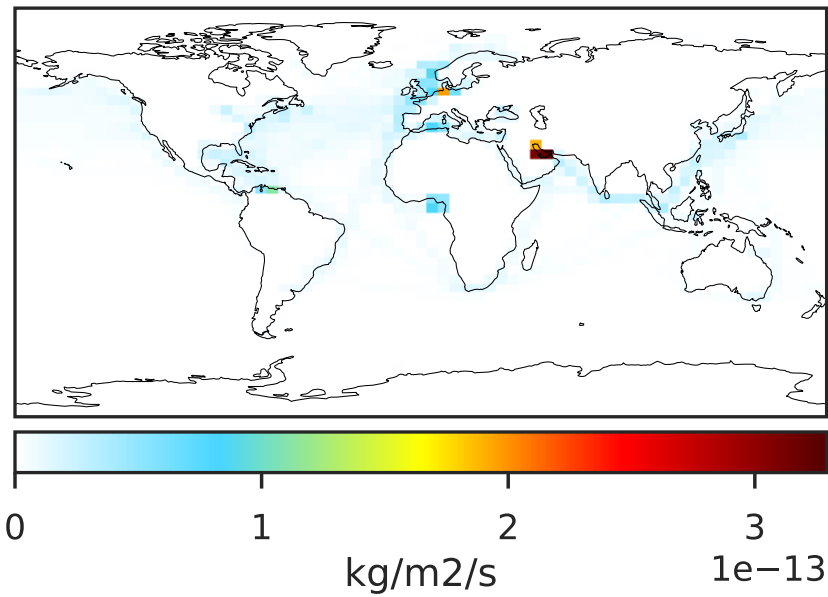
Ratio (1x1.25)  
Dev/Ref, Fixed Range



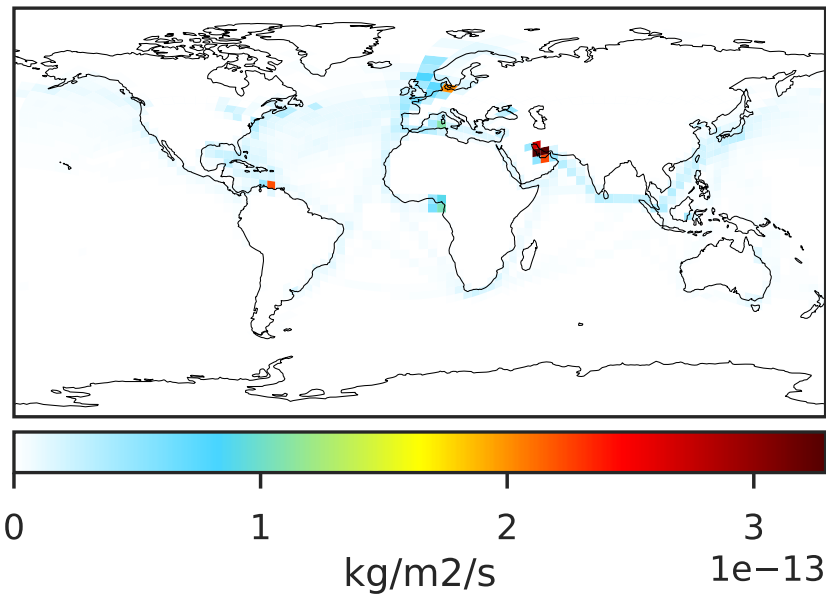
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisXYLE\_Ship (AnnualMean)

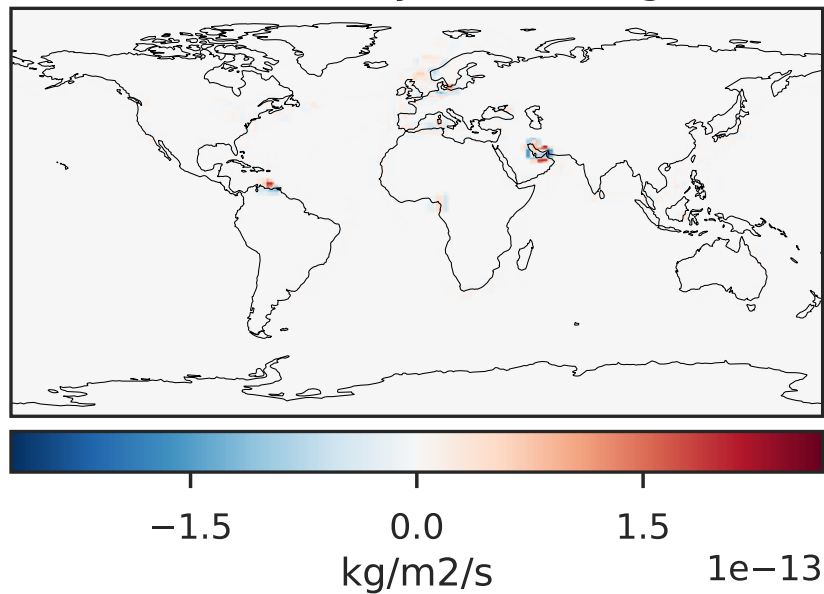
GCC\_14.2.0 (Ref)  
4.0x5.0



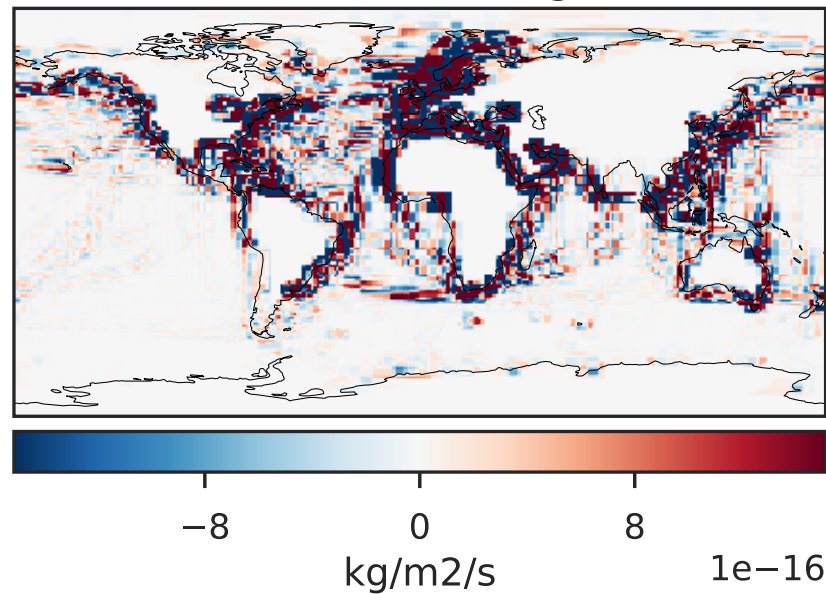
GCHP\_14.2.0 (Dev)  
c24



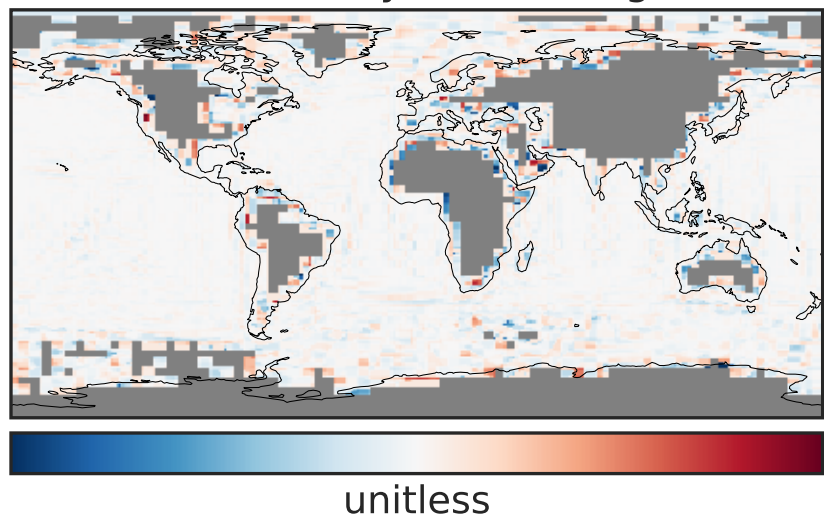
Difference (1x1.25)  
Dev - Ref, Dynamic Range



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



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



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

