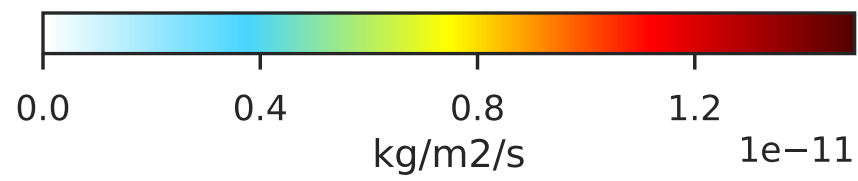
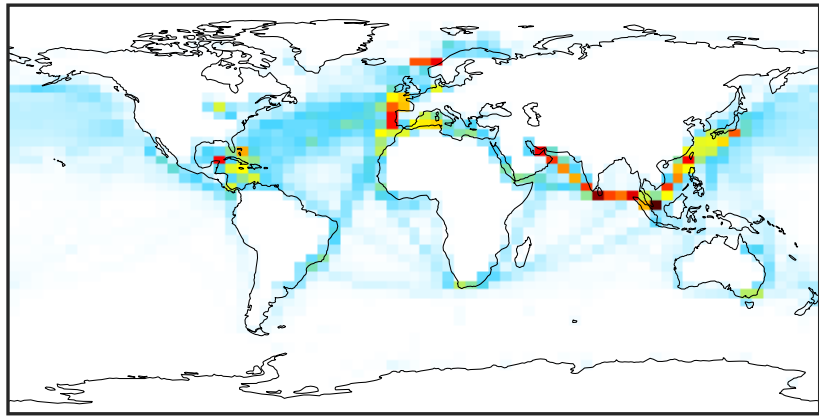
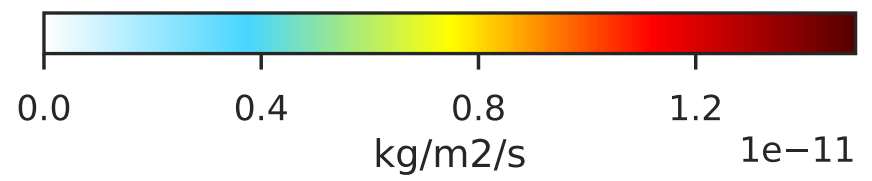
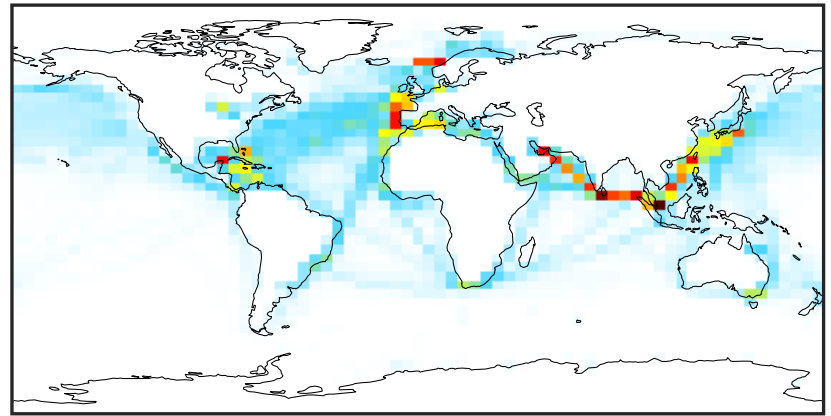


# EmisHNO3\_Ship (Jan2019)

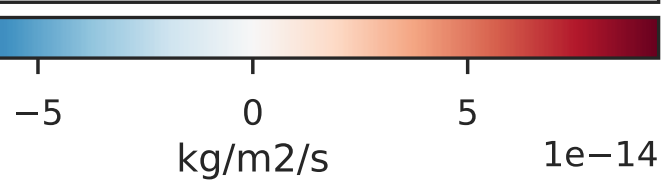
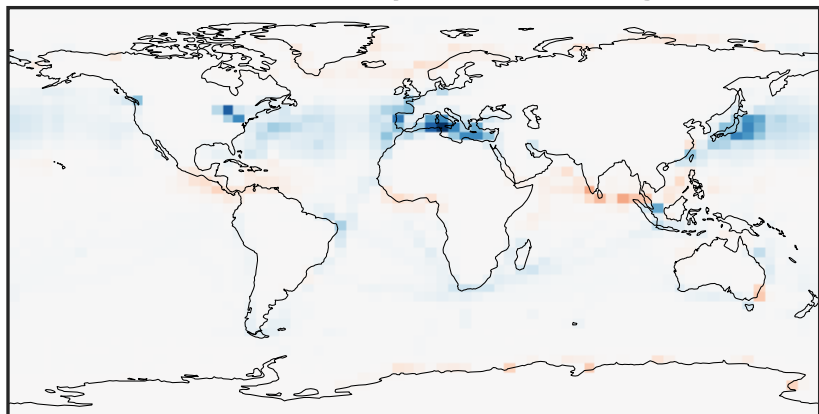
14.2.0-rc.2 (Ref)  
4.0x5.0



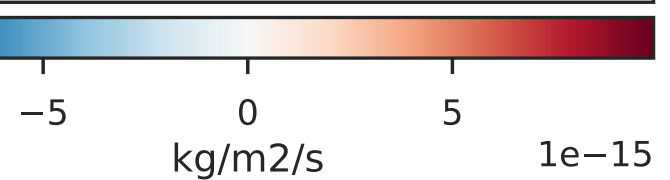
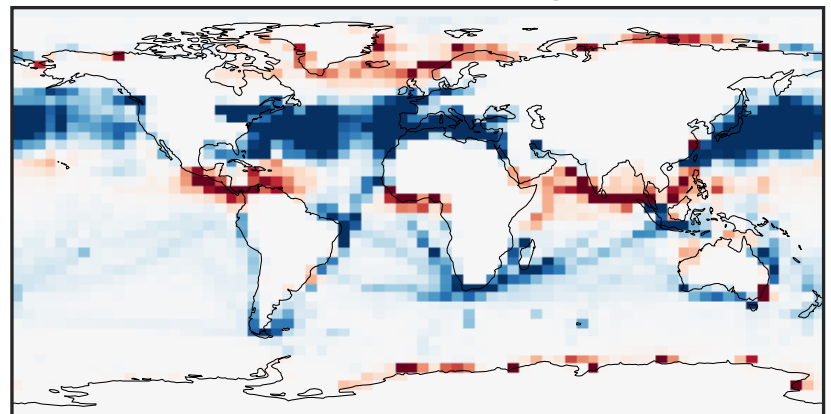
14.3.0-rc.0 (Dev)  
4.0x5.0



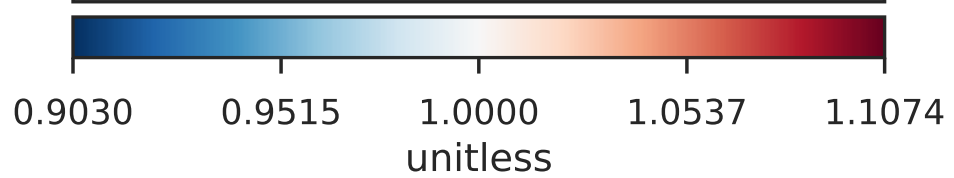
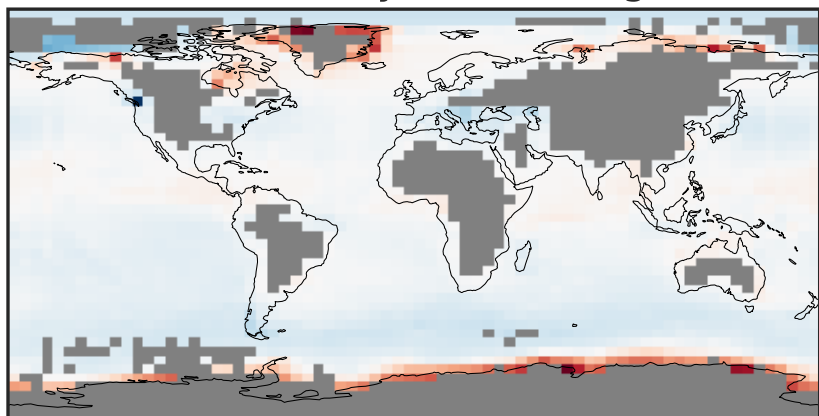
Difference  
Dev - Ref, Dynamic Range



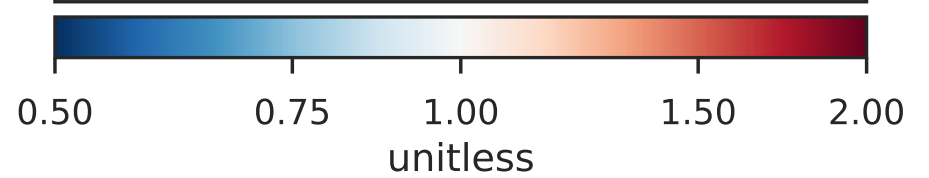
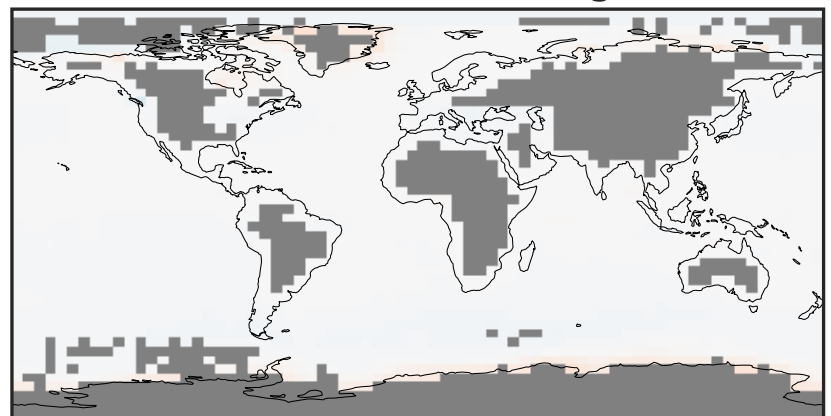
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

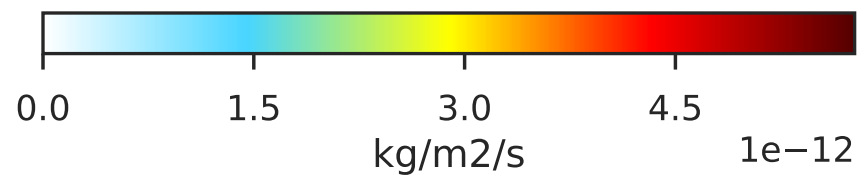
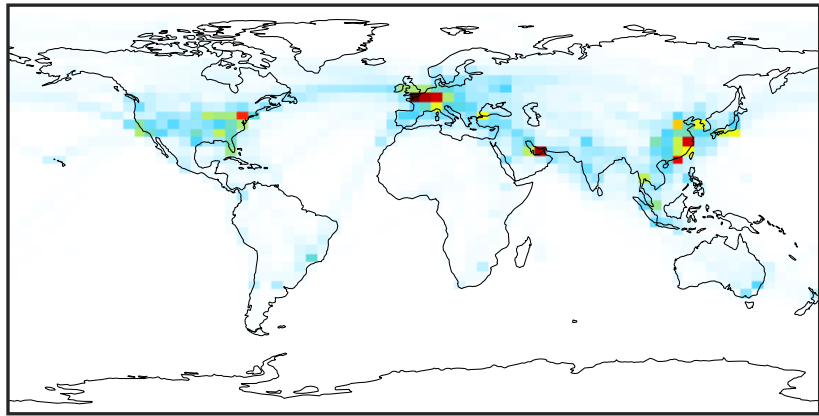


Ratio  
Dev/Ref, Fixed Range

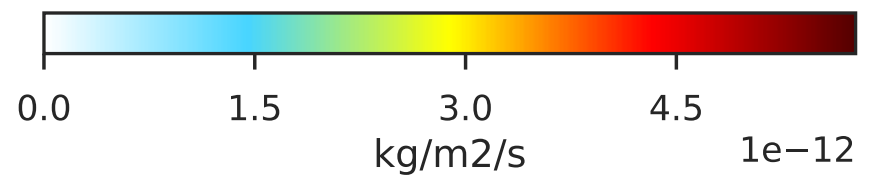
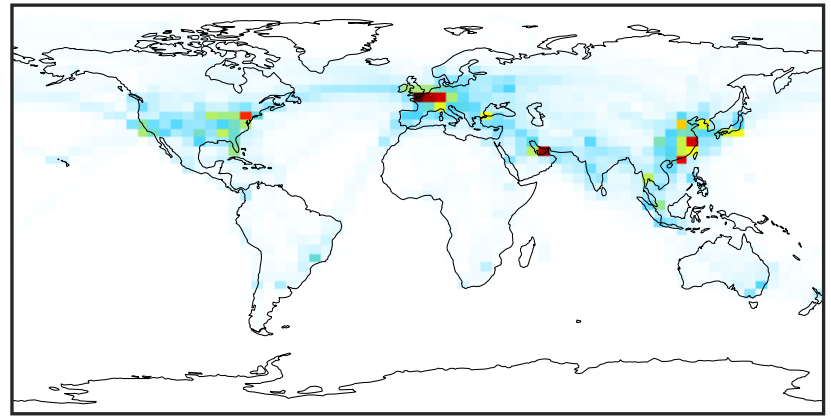


# EmisNO\_Aircraft (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0

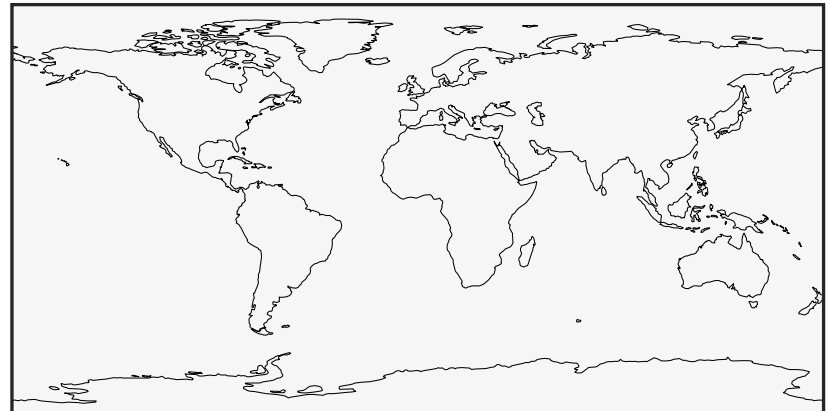


Difference  
Dev - Ref, Dynamic Range



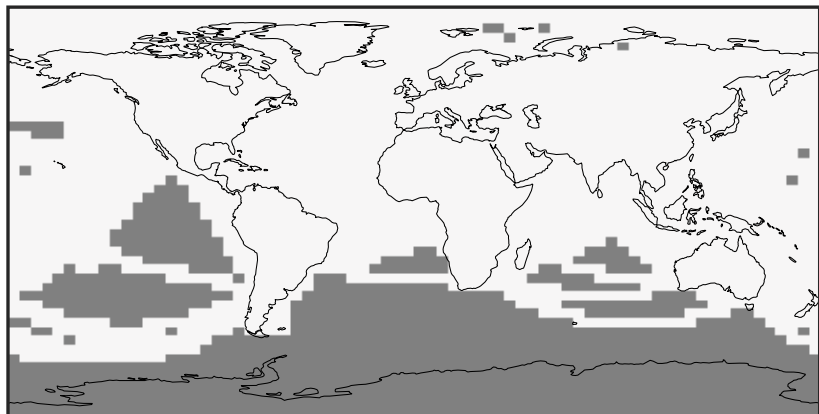
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



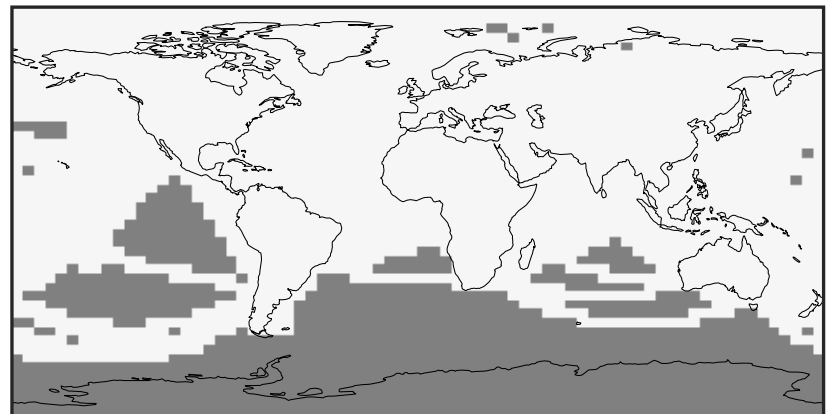
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

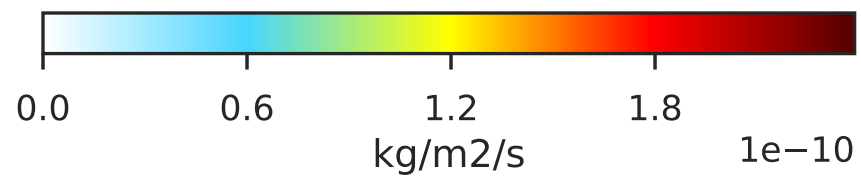
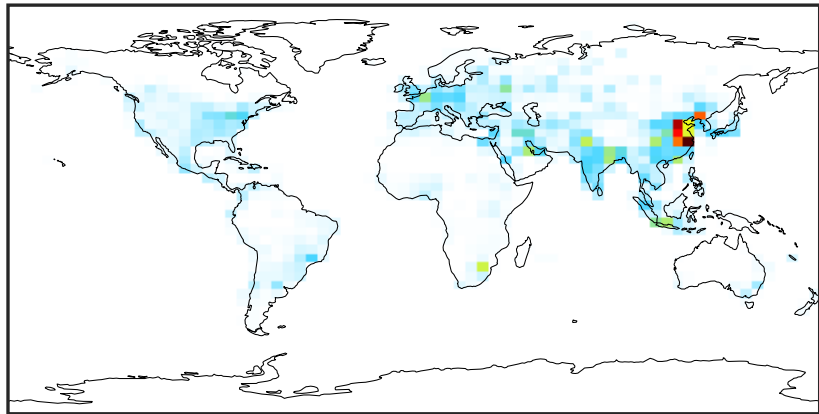
Ratio  
Dev/Ref, Fixed Range



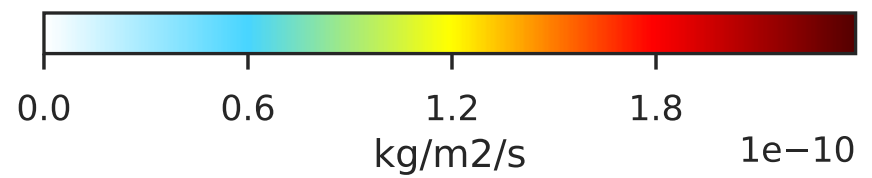
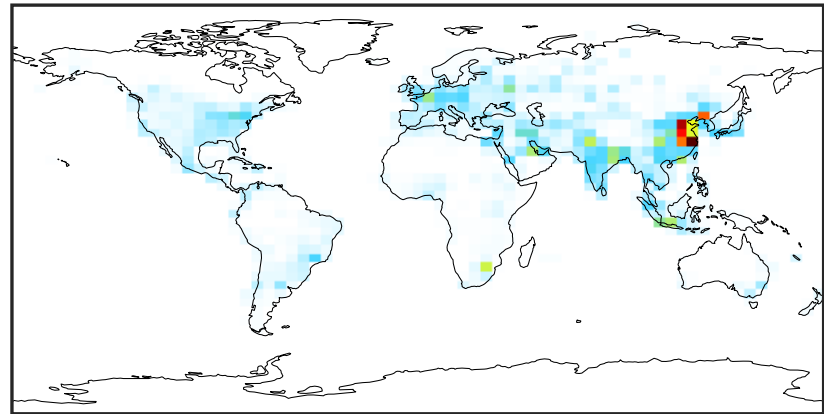
Ref and Dev equal throughout domain  
unitless

# EmisNO\_Anthro (Jan2019)

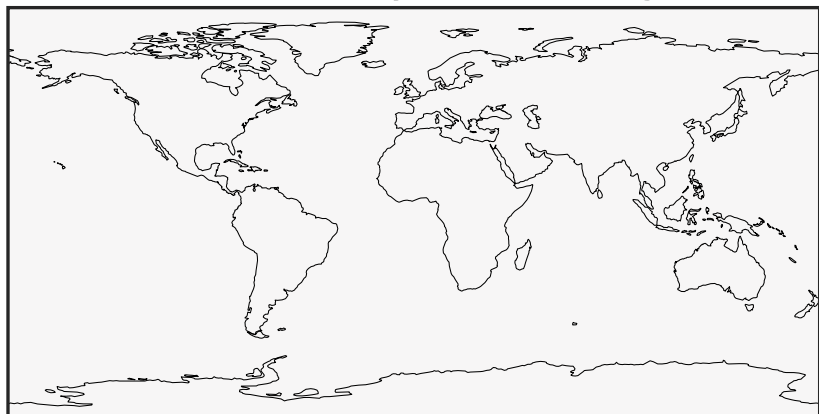
14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0

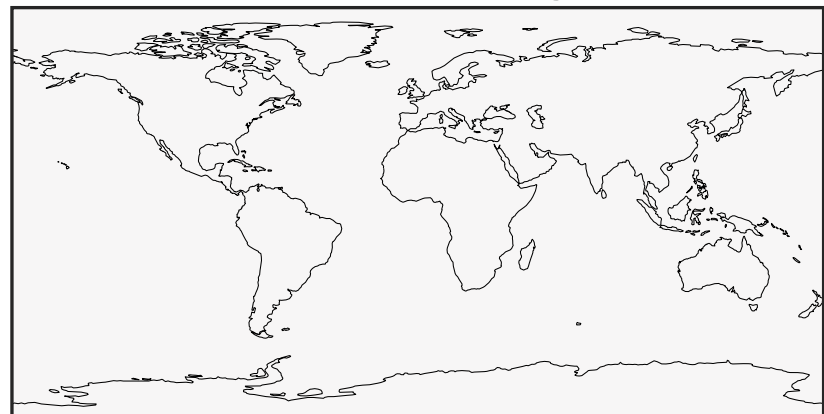


Difference  
Dev - Ref, Dynamic Range



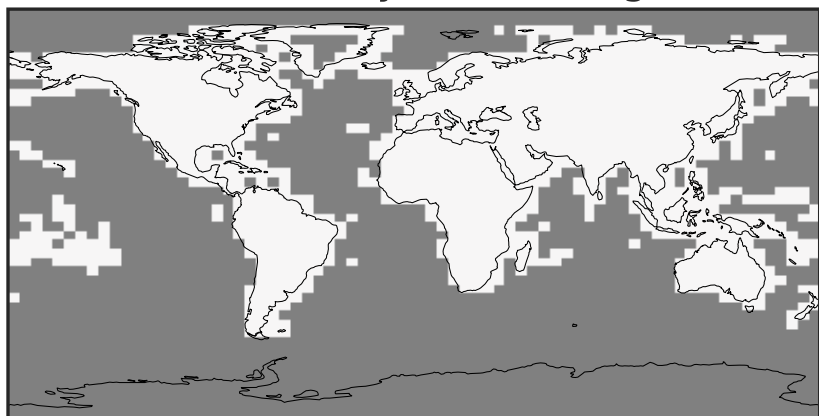
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



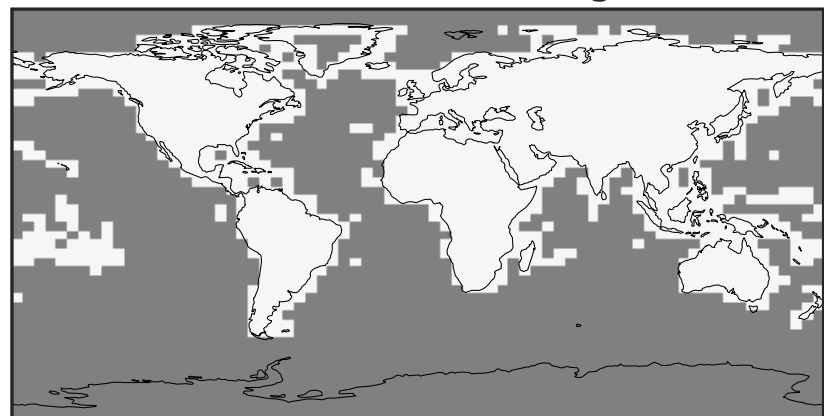
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

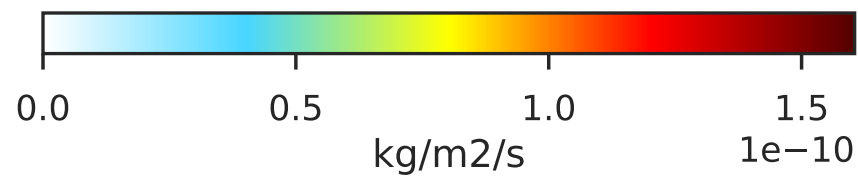
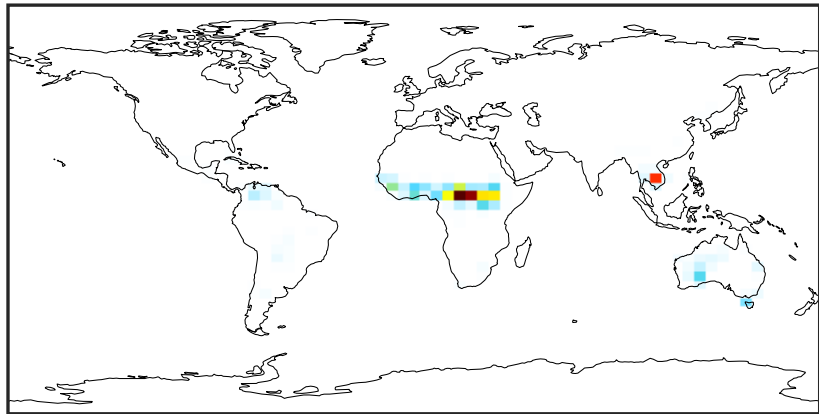
Ratio  
Dev/Ref, Fixed Range



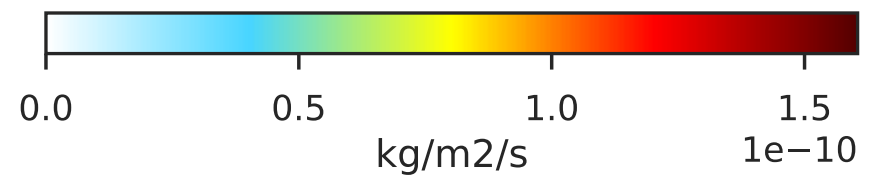
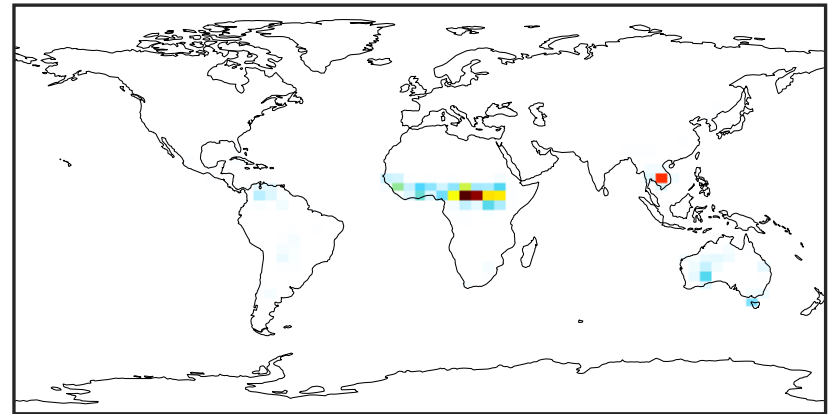
Ref and Dev equal throughout domain  
unitless

# EmisNO\_BioBurn (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0

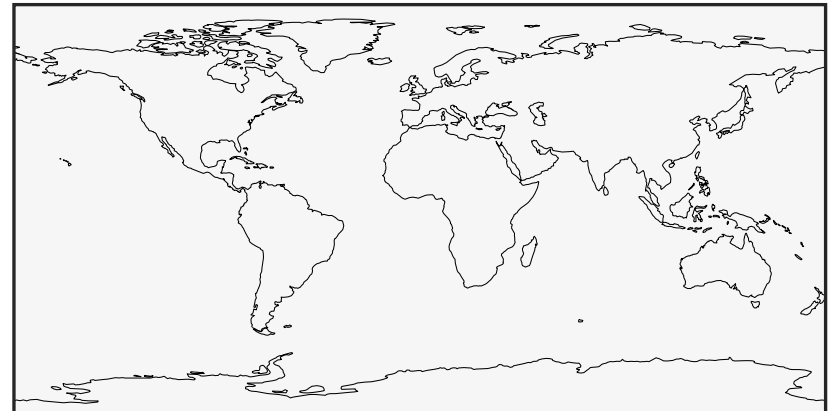


Difference  
Dev - Ref, Dynamic Range



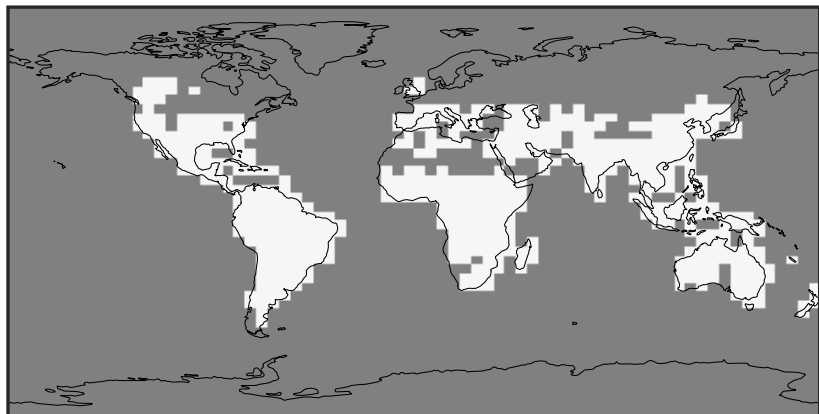
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



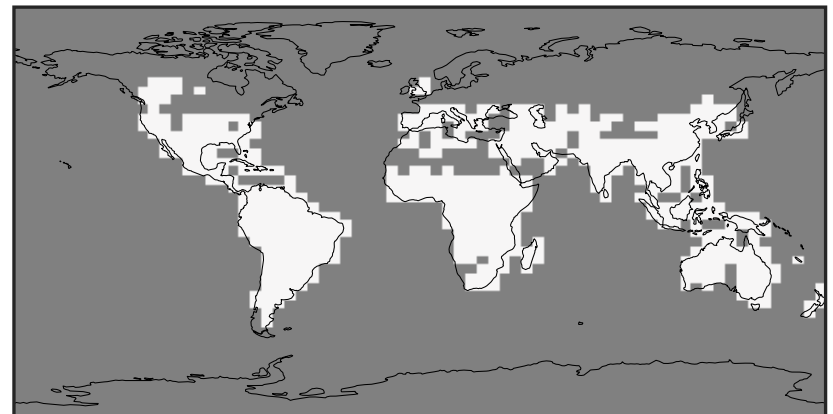
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

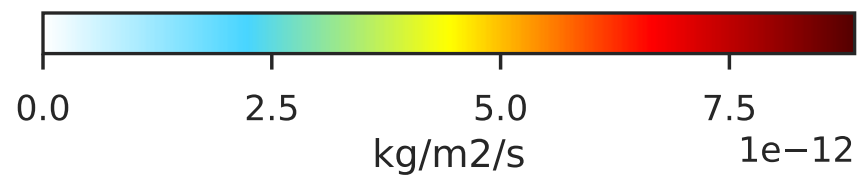
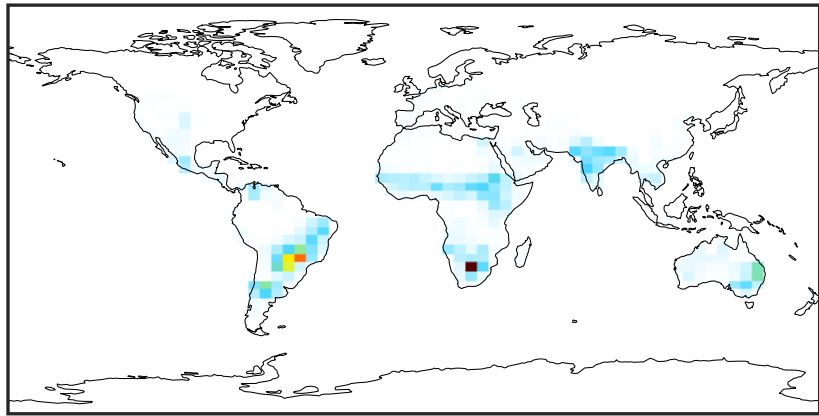
Ratio  
Dev/Ref, Fixed Range



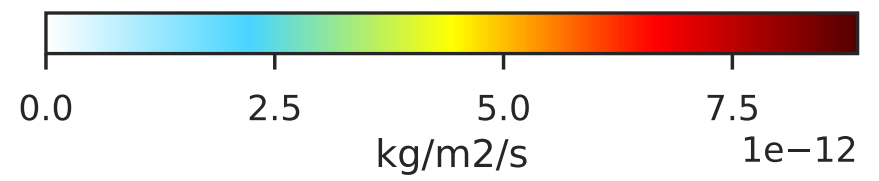
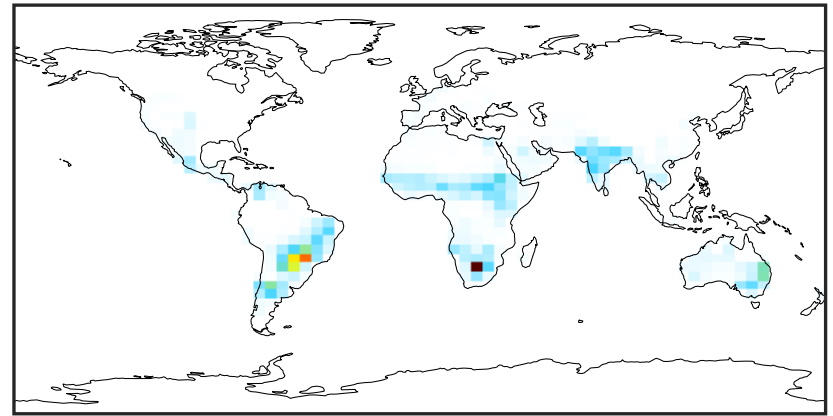
Ref and Dev equal throughout domain  
unitless

# EmisNO\_Fert (Jan2019)

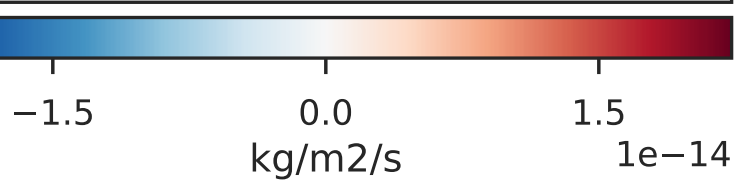
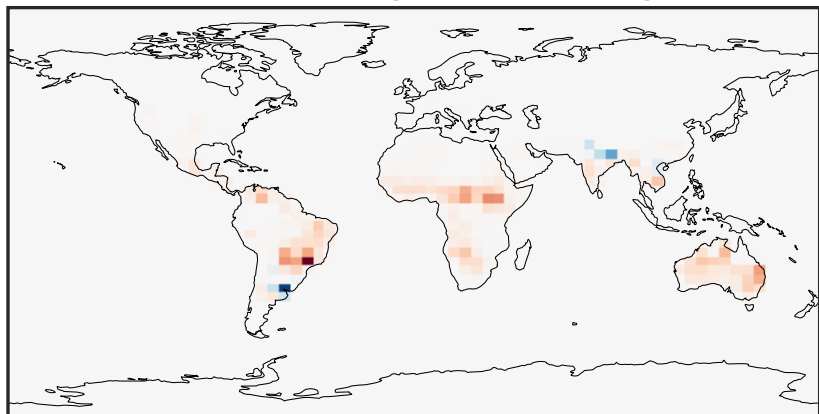
14.2.0-rc.2 (Ref)  
4.0x5.0



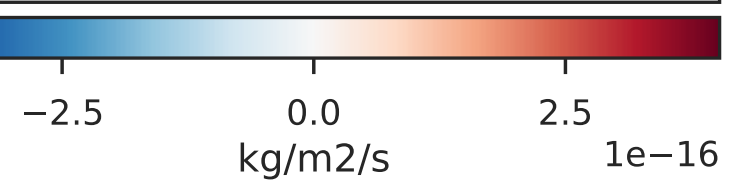
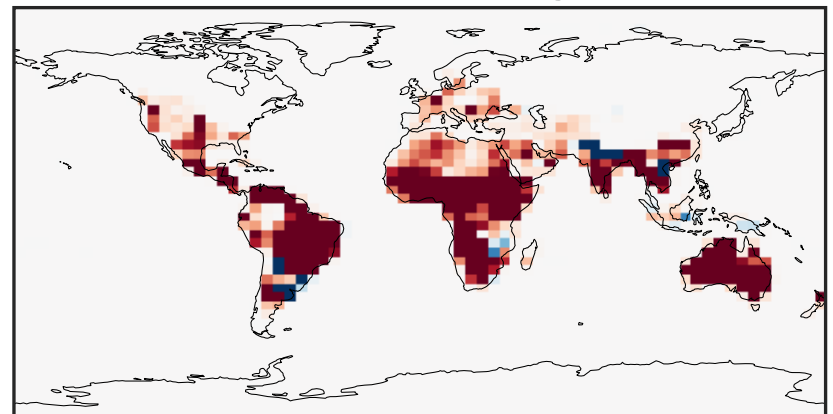
14.3.0-rc.0 (Dev)  
4.0x5.0



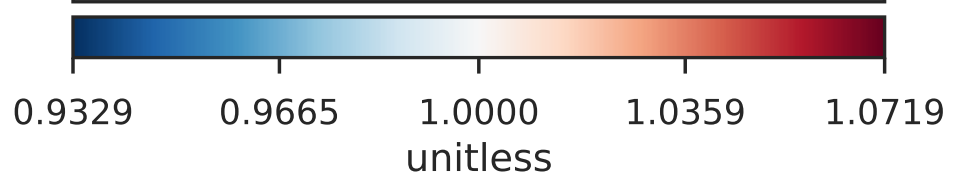
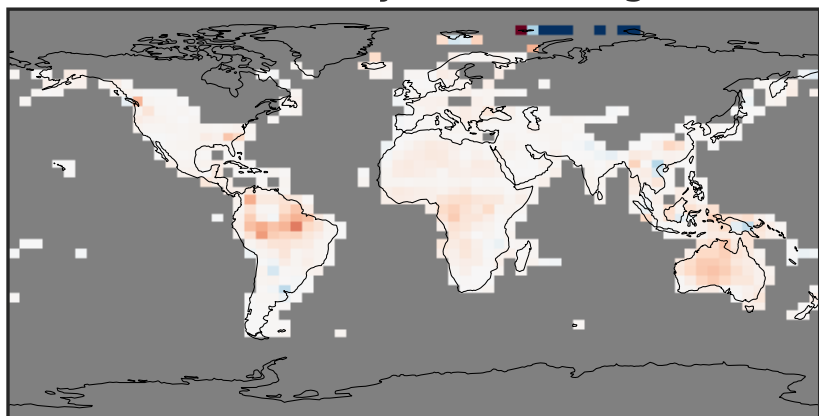
Difference  
Dev - Ref, Dynamic Range



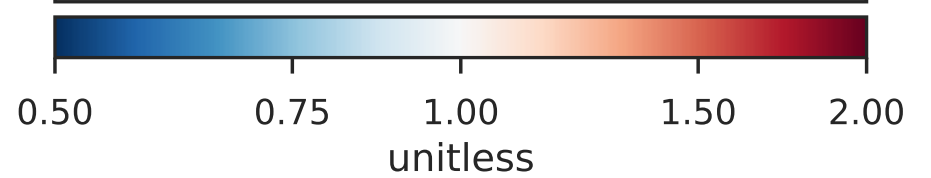
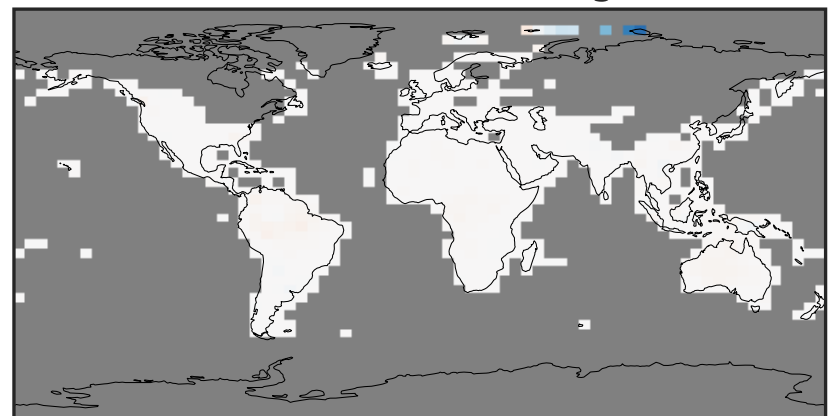
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

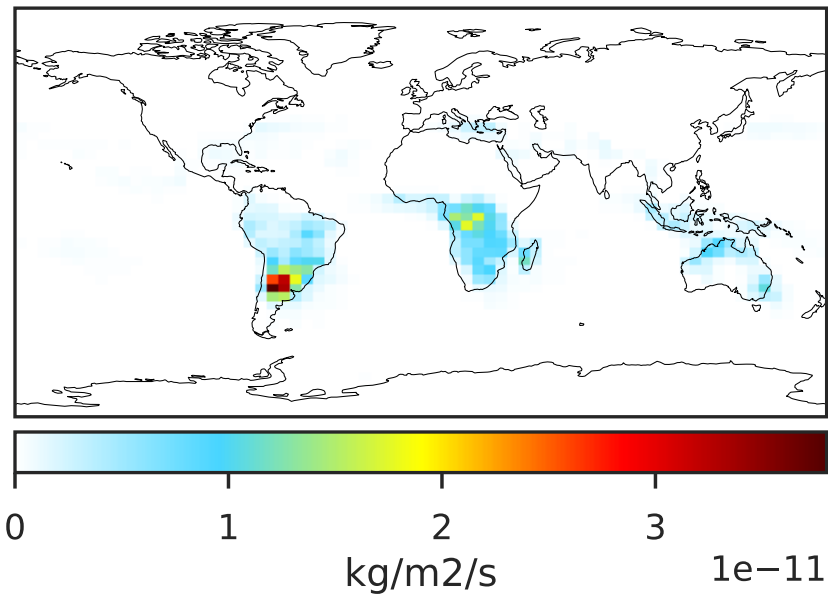


Ratio  
Dev/Ref, Fixed Range

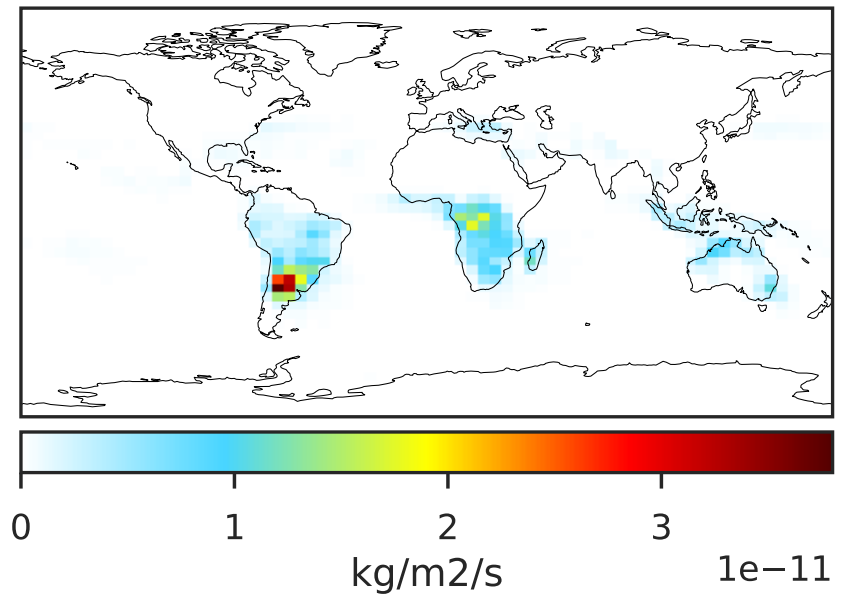


# EmisNO\_Lightning (Jan2019)

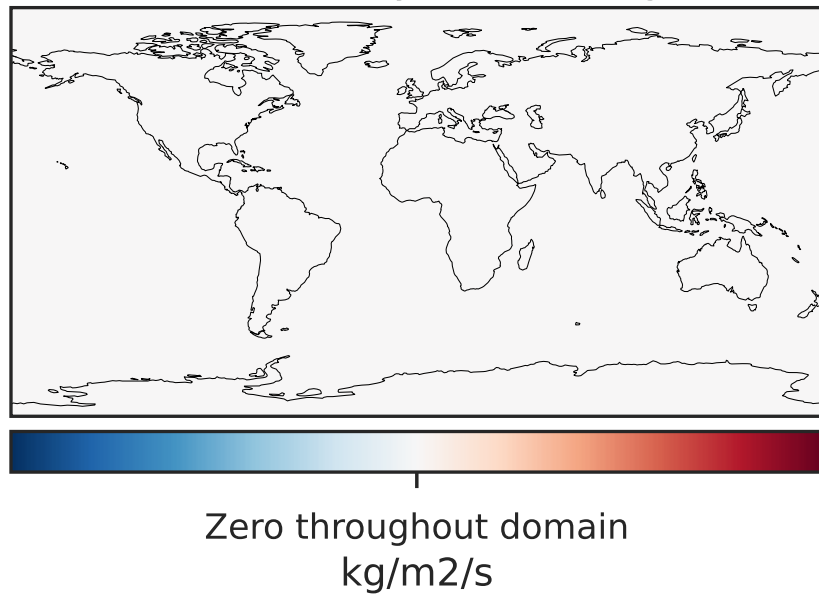
14.2.0-rc.2 (Ref)  
4.0x5.0



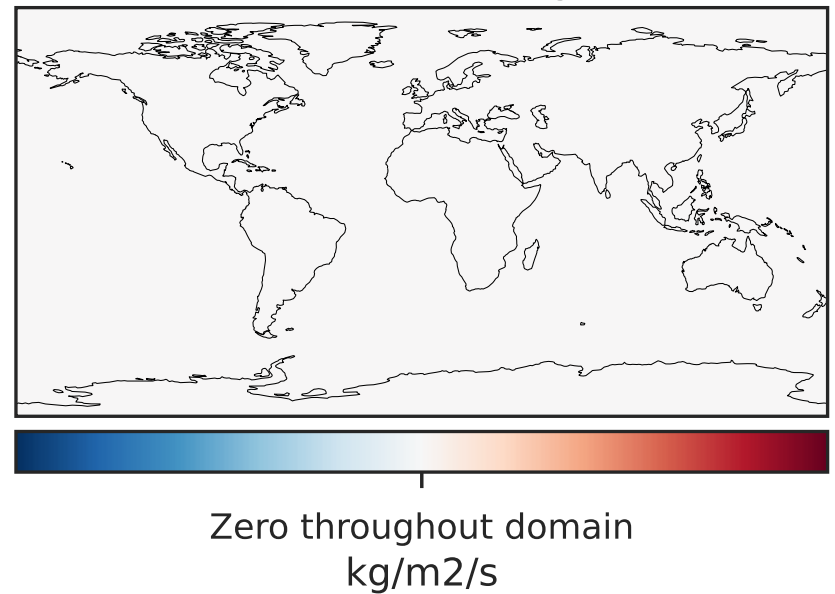
14.3.0-rc.0 (Dev)  
4.0x5.0



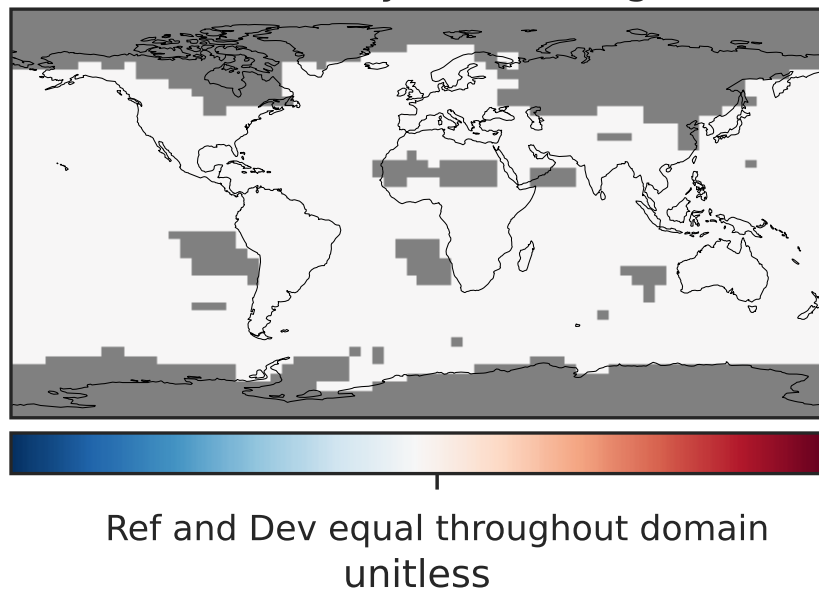
Difference  
Dev - Ref, Dynamic Range



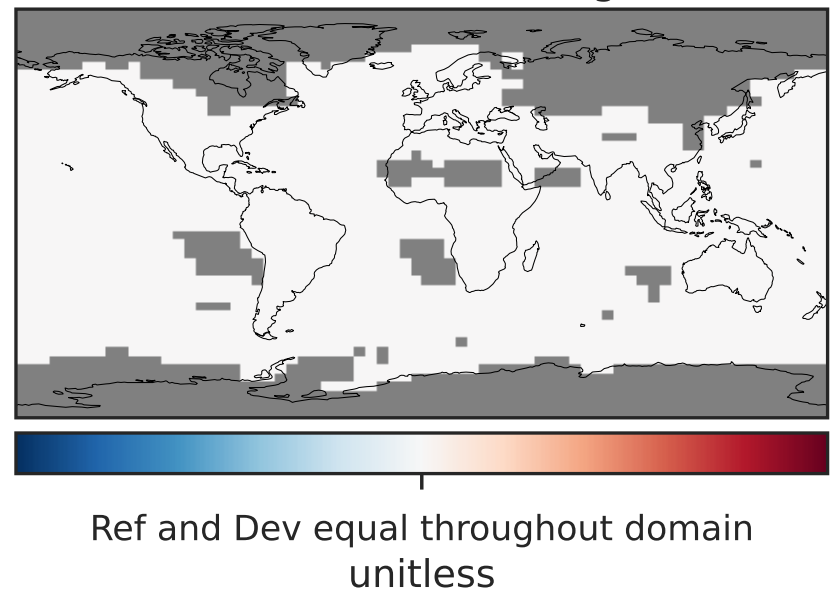
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

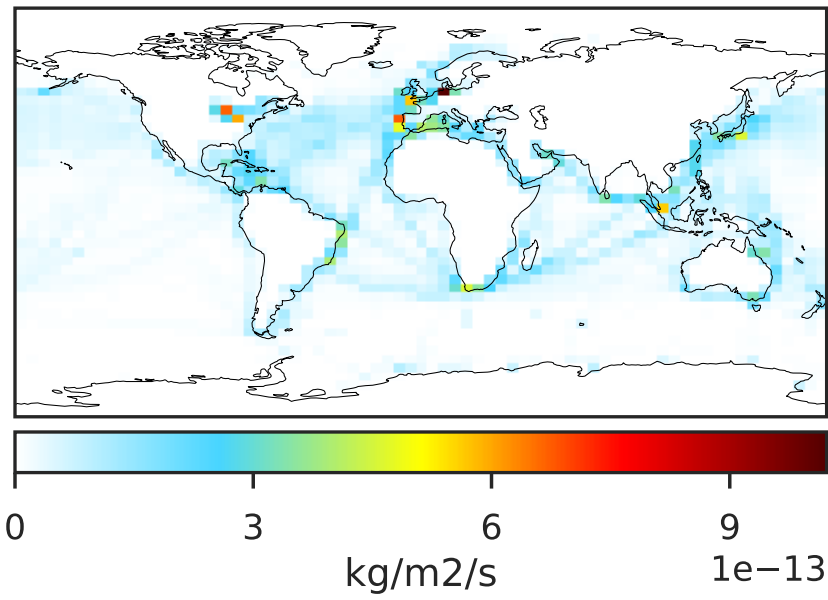


Ratio  
Dev/Ref, Fixed Range

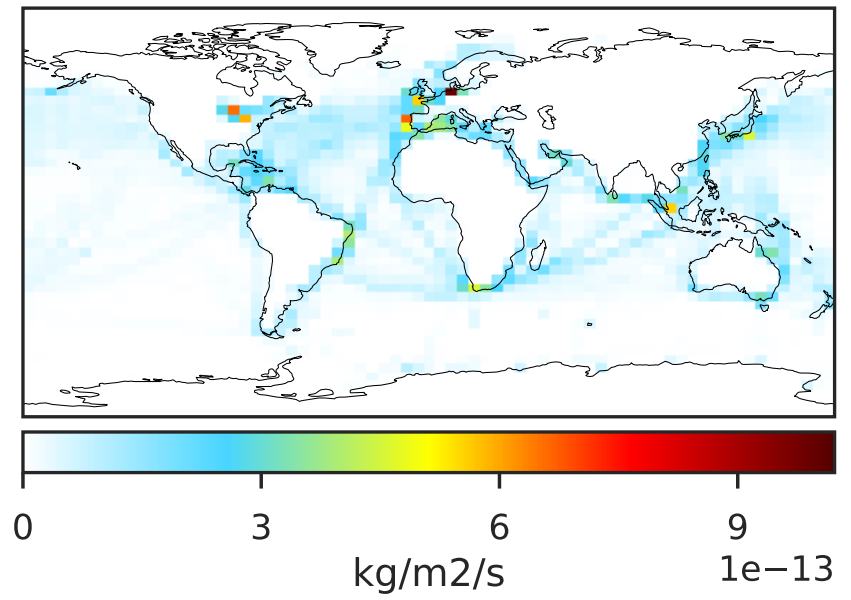


# EmisNO\_Ship (Jan2019)

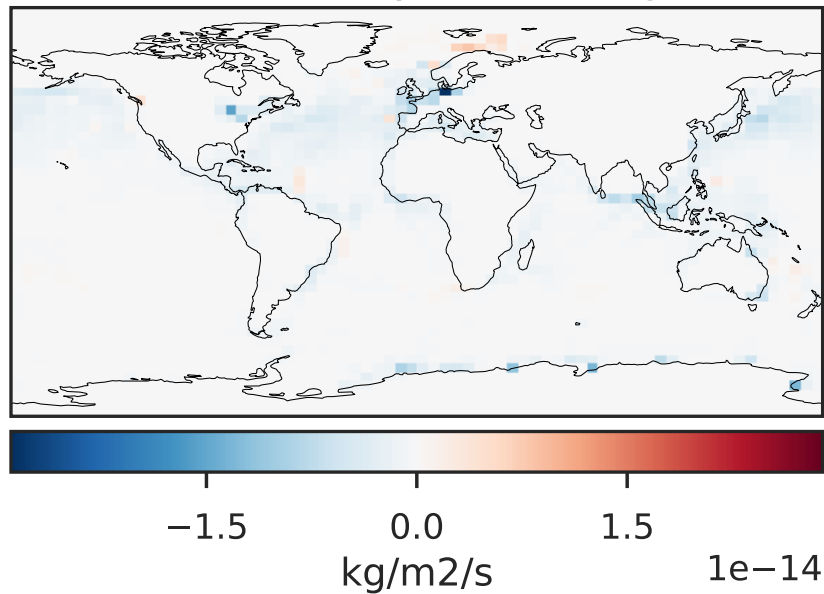
14.2.0-rc.2 (Ref)  
4.0x5.0



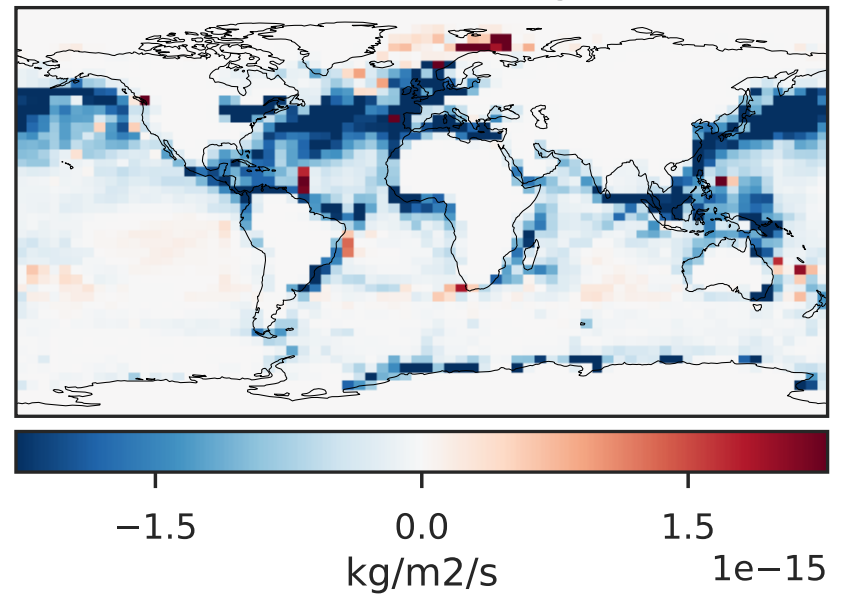
14.3.0-rc.0 (Dev)  
4.0x5.0



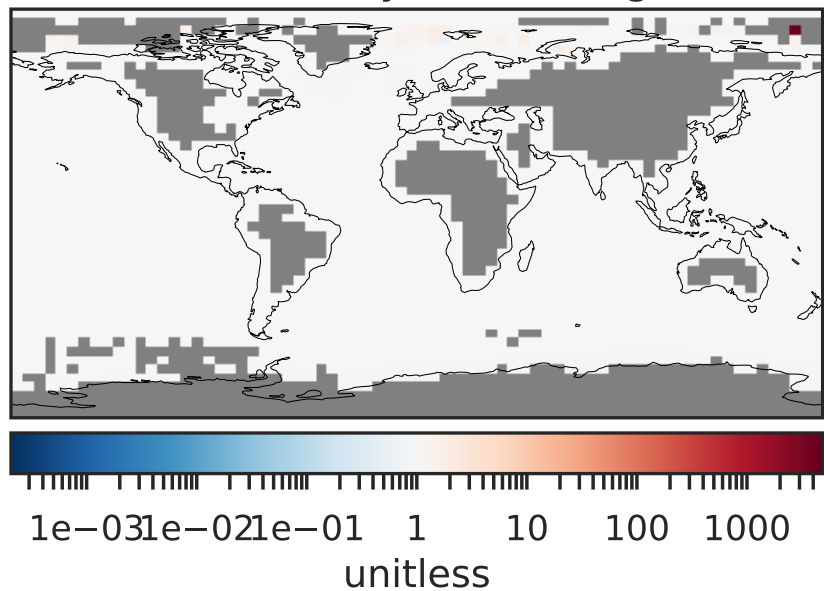
Difference  
Dev - Ref, Dynamic Range



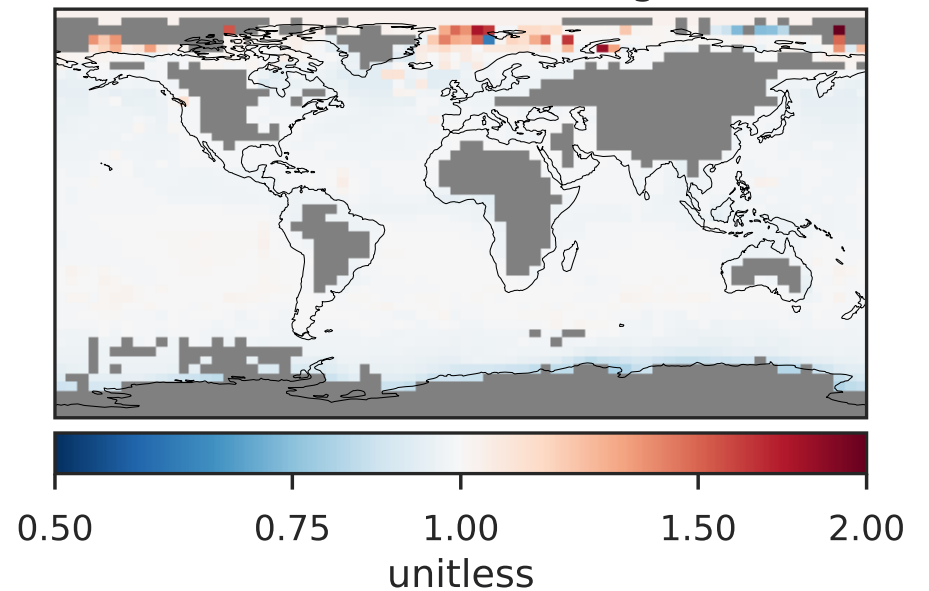
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

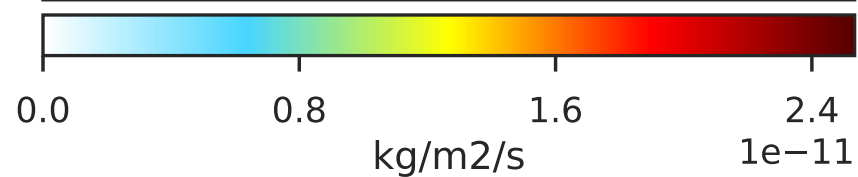
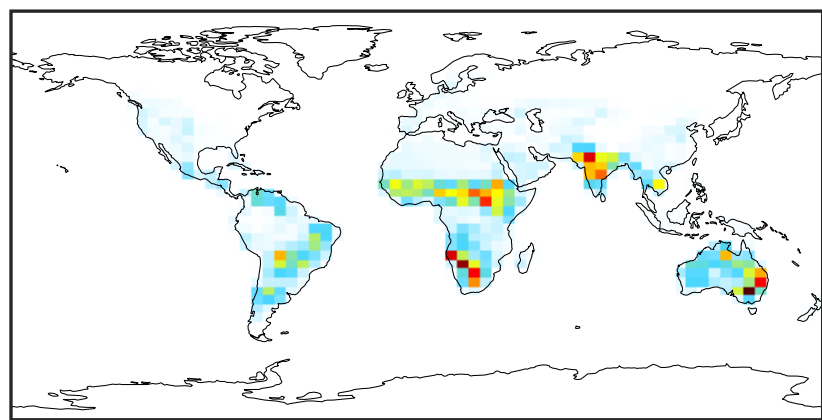


Ratio  
Dev/Ref, Fixed Range

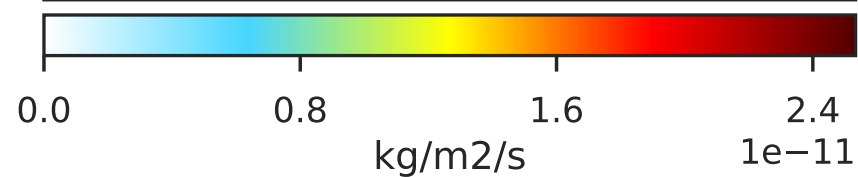
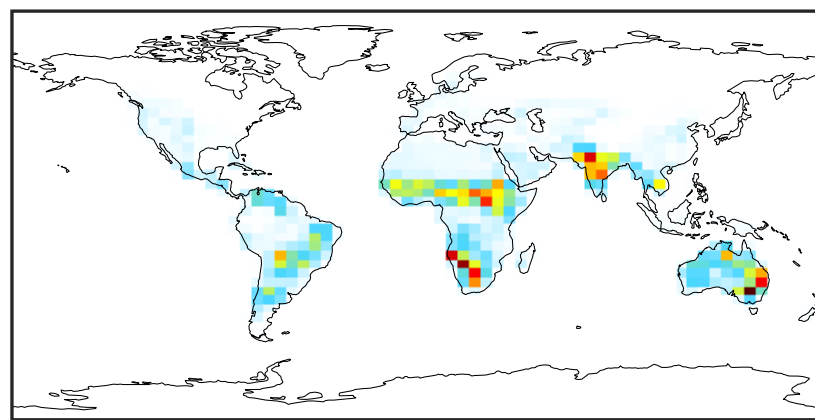


# EmisNO\_Soil (Jan2019)

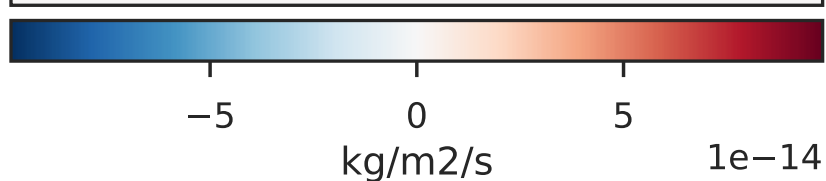
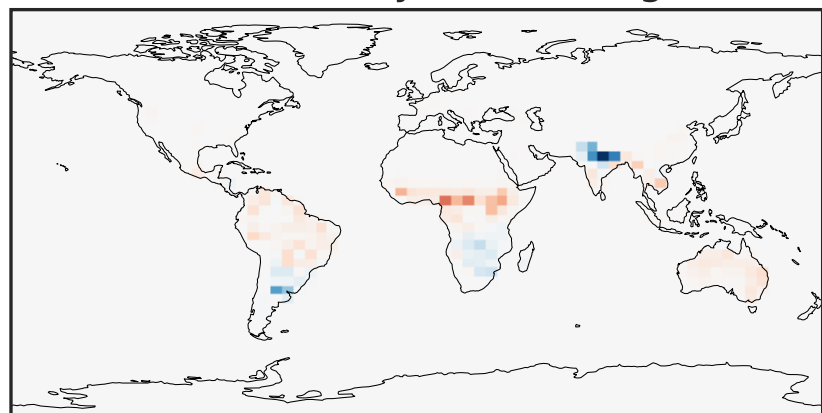
14.2.0-rc.2 (Ref)  
4.0x5.0



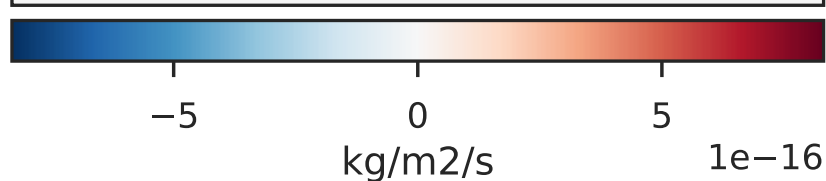
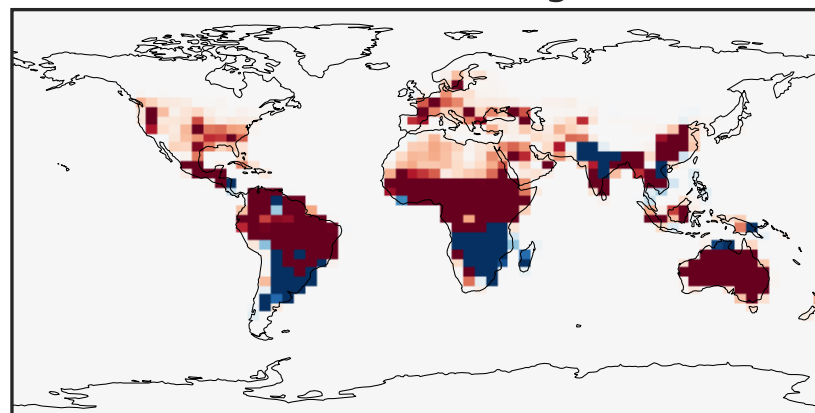
14.3.0-rc.0 (Dev)  
4.0x5.0



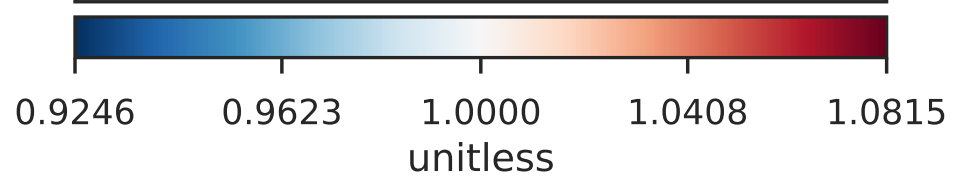
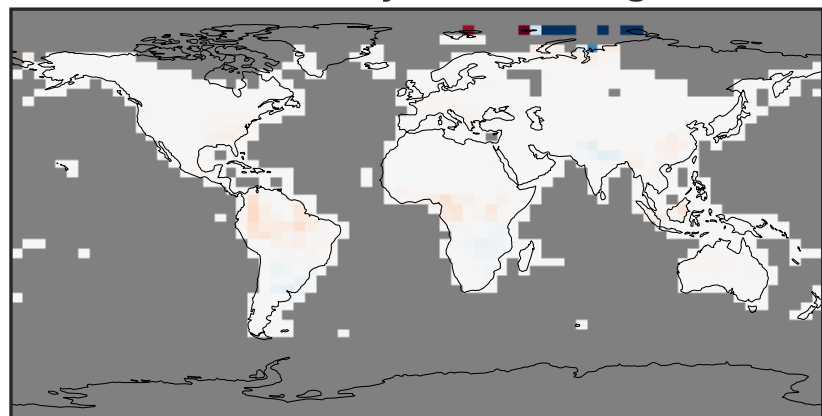
Difference  
Dev - Ref, Dynamic Range



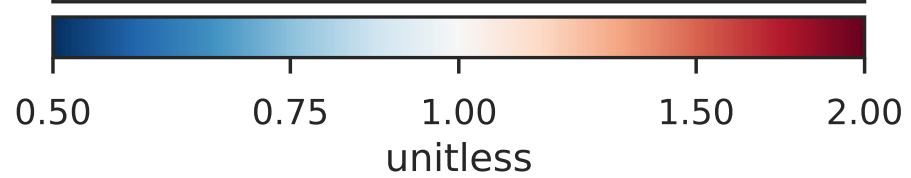
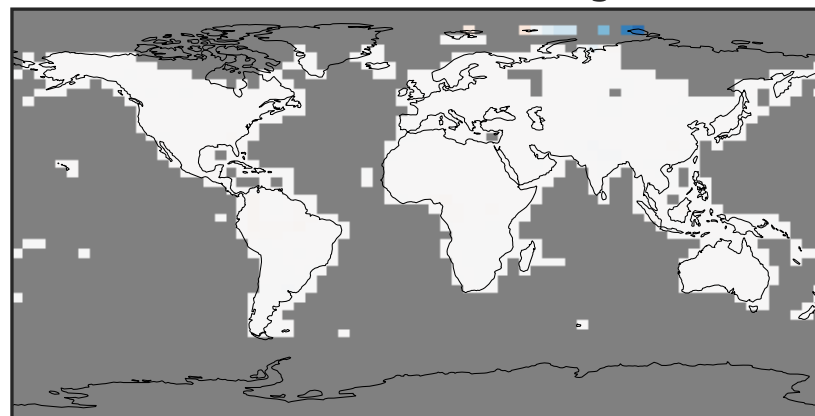
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



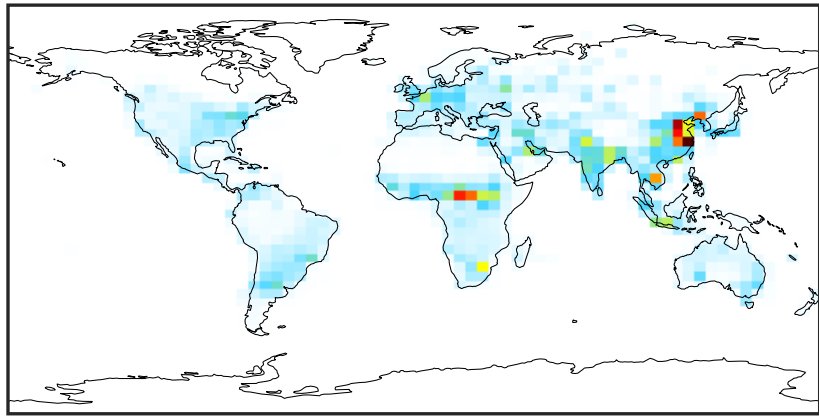
Ratio  
Dev/Ref, Fixed Range





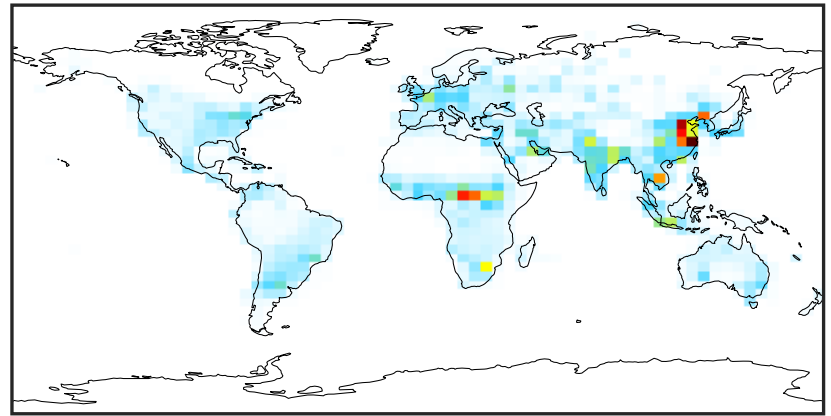
# EmisNO\_Total (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



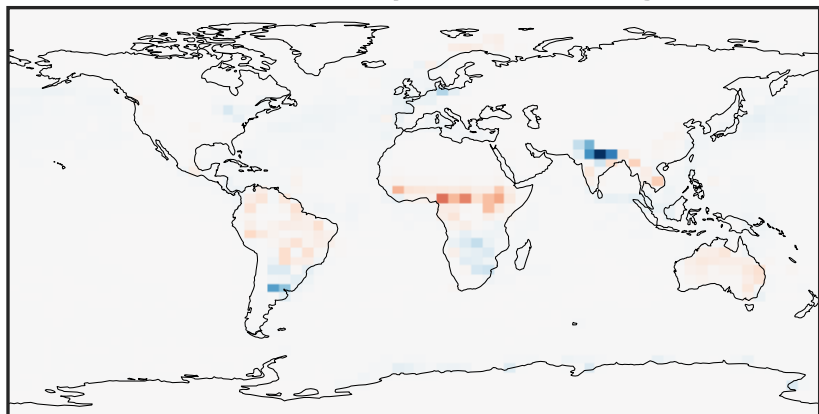
0.0 0.8 1.6 2.4  
kg/m2/s  $1e-10$

14.3.0-rc.0 (Dev)  
4.0x5.0



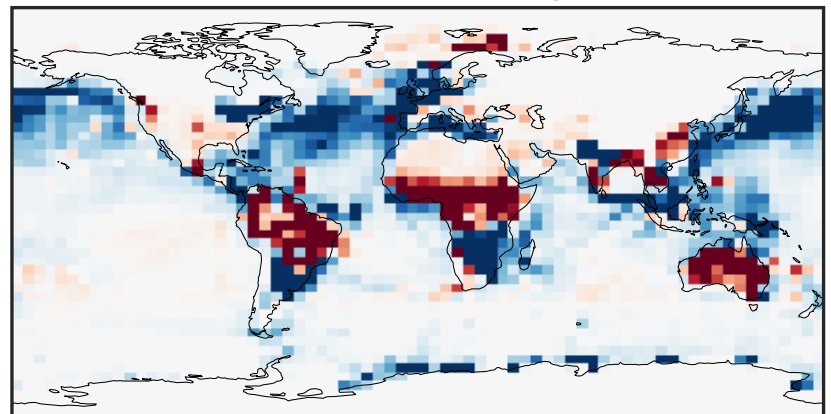
0.0 0.8 1.6 2.4  
kg/m2/s  $1e-10$

Difference  
Dev - Ref, Dynamic Range



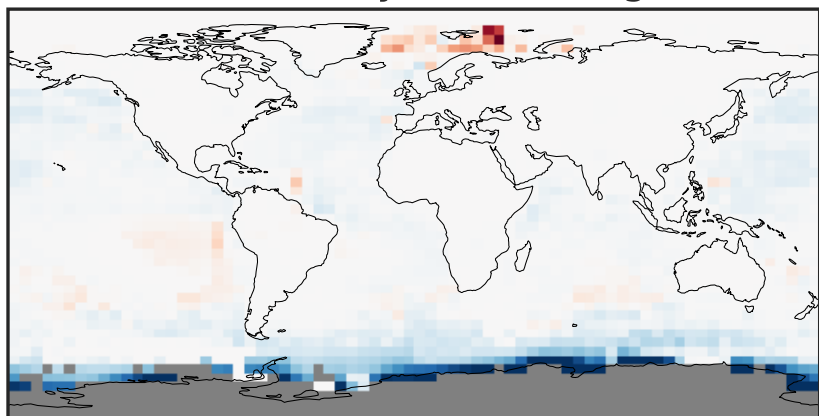
-5 0 5  
kg/m2/s  $1e-14$

Difference  
Dev - Ref, Restricted Range [5%,95%]



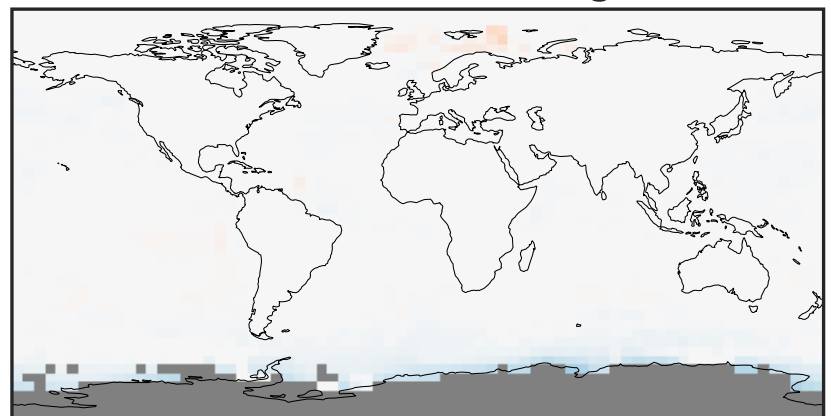
-1.5 0.0 1.5  
kg/m2/s  $1e-15$

Ratio  
Dev/Ref, Dynamic Range



0.8613 0.9307 1.0000 1.0805 1.1610  
unitless

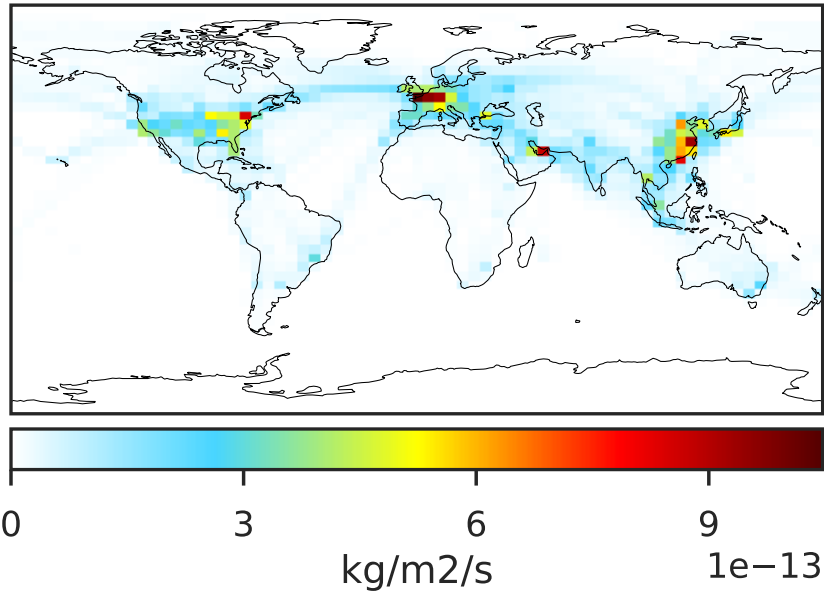
Ratio  
Dev/Ref, Fixed Range



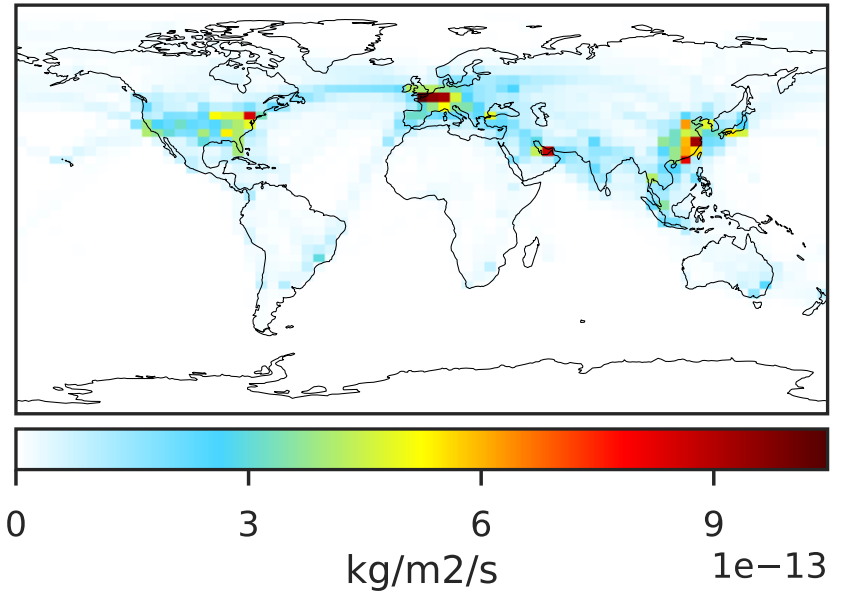
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisNO2\_Aircraft (Jan2019)

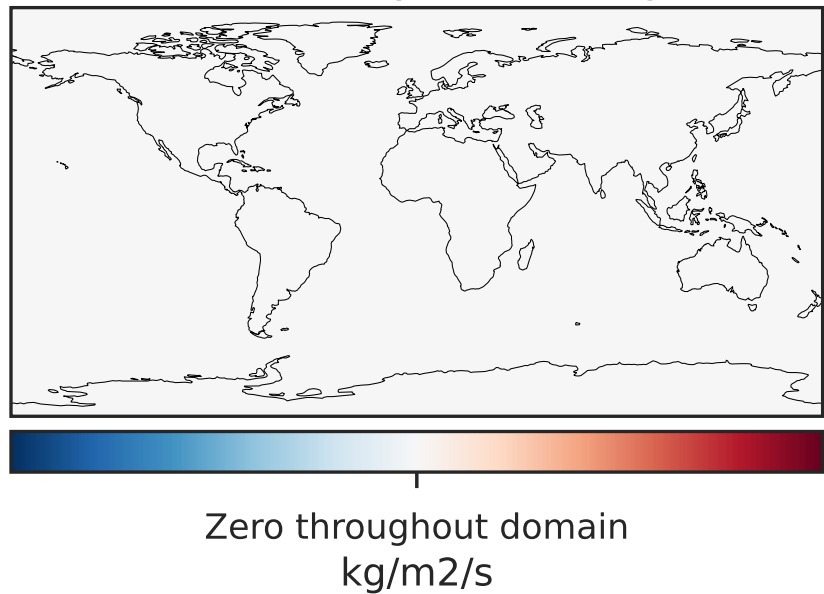
14.2.0-rc.2 (Ref)  
4.0x5.0



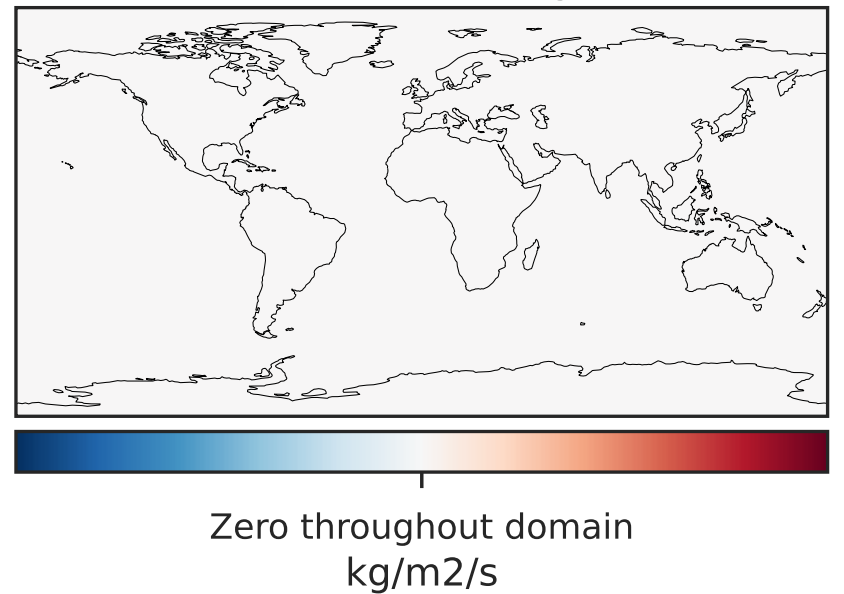
14.3.0-rc.0 (Dev)  
4.0x5.0



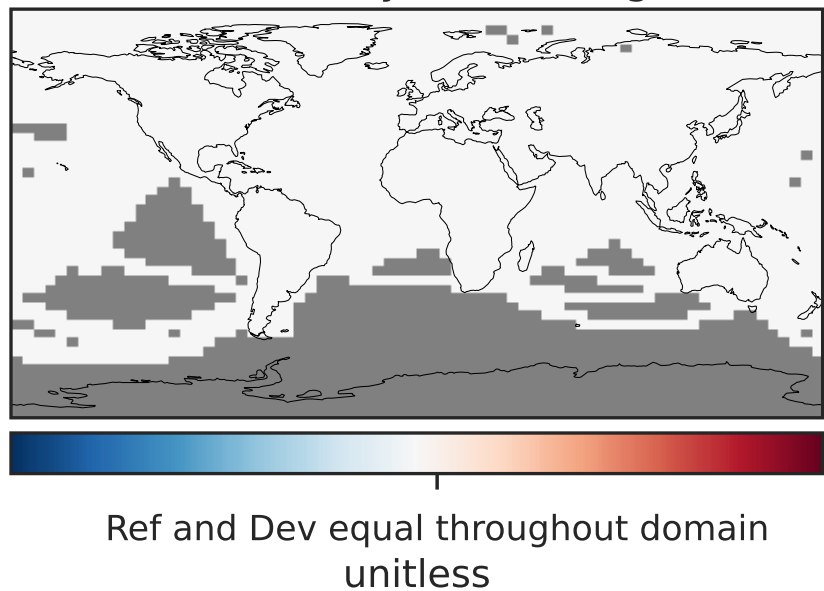
Difference  
Dev - Ref, Dynamic Range



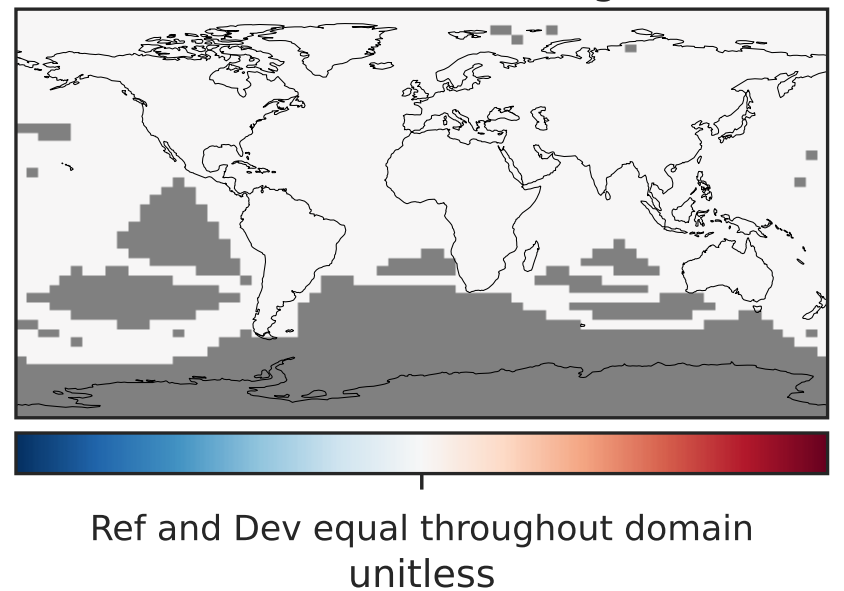
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

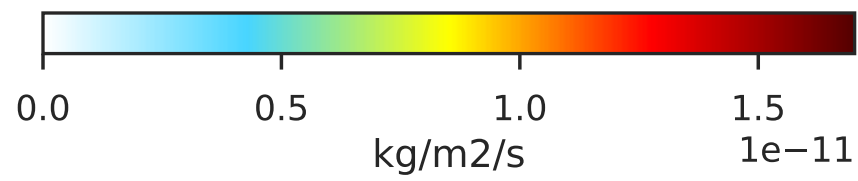
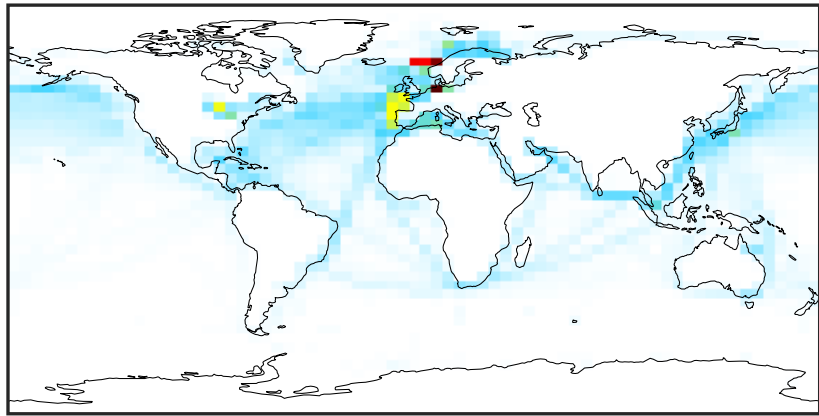


Ratio  
Dev/Ref, Fixed Range

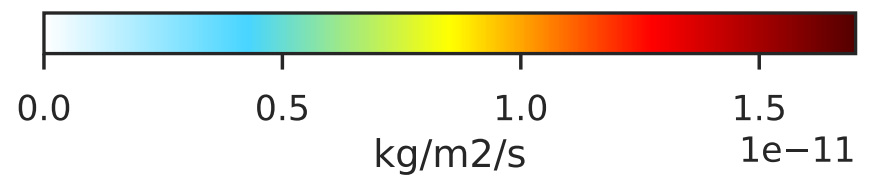
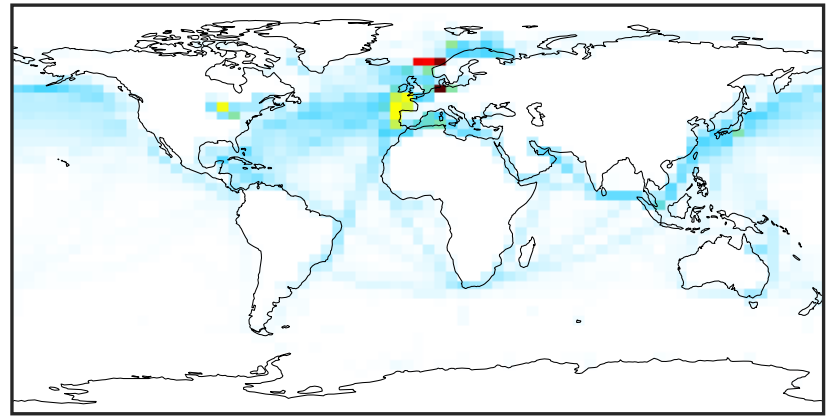


# EmisNO2\_Ship (Jan2019)

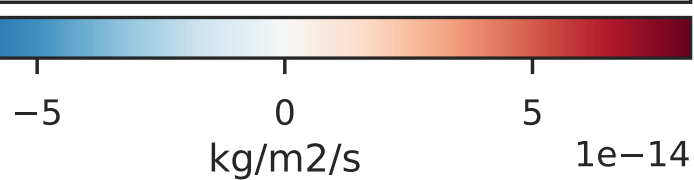
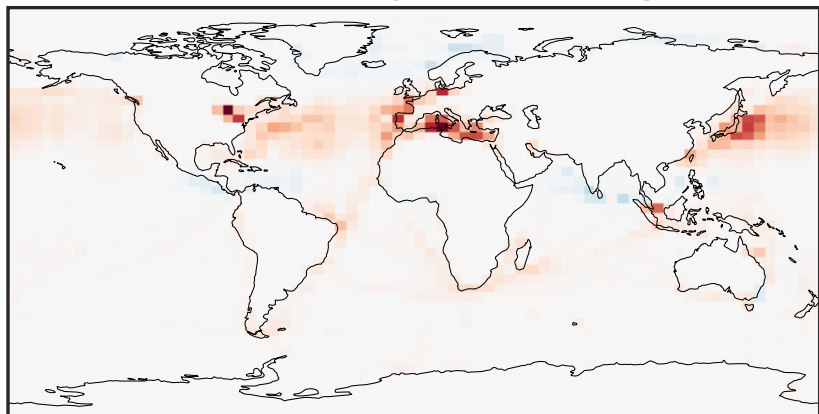
14.2.0-rc.2 (Ref)  
4.0x5.0



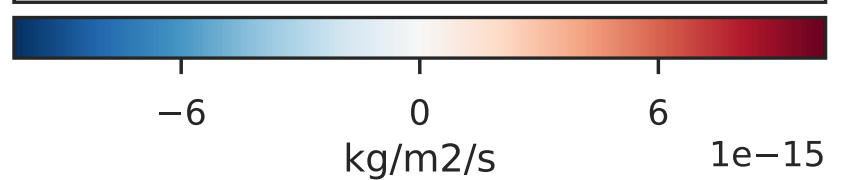
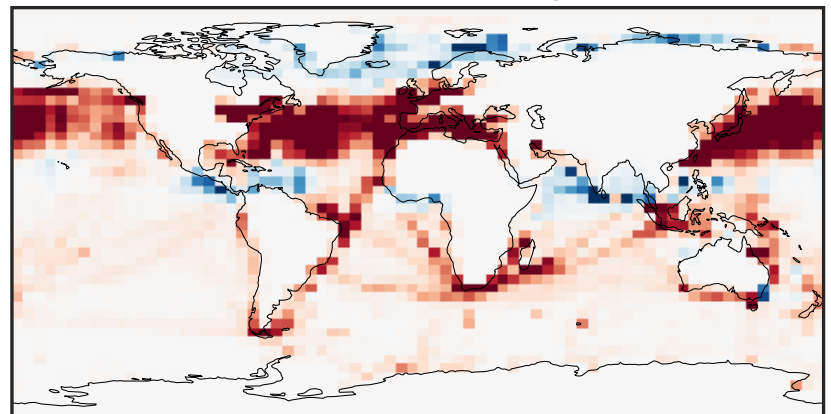
14.3.0-rc.0 (Dev)  
4.0x5.0



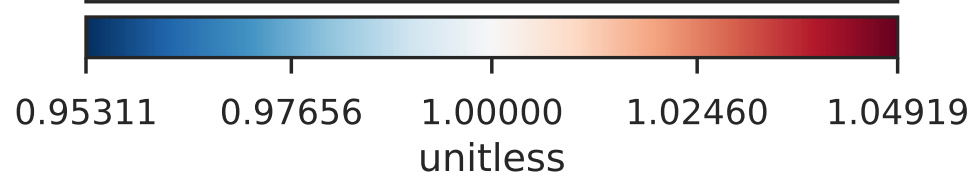
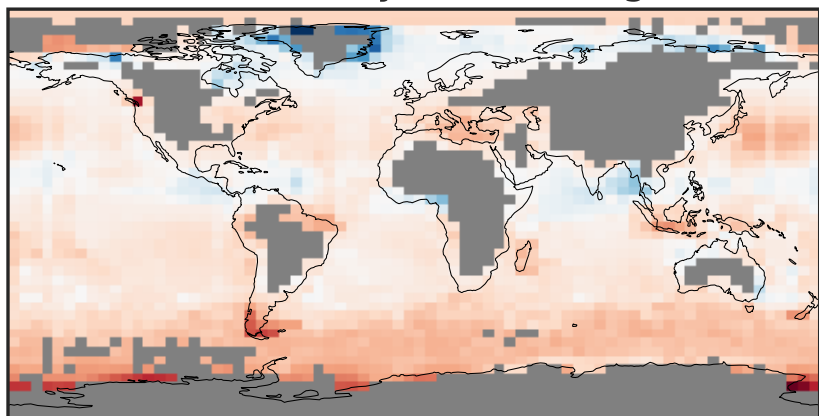
Difference  
Dev - Ref, Dynamic Range



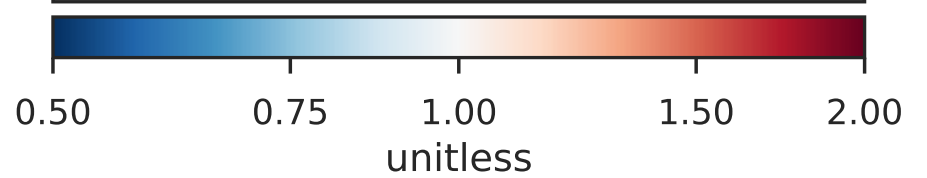
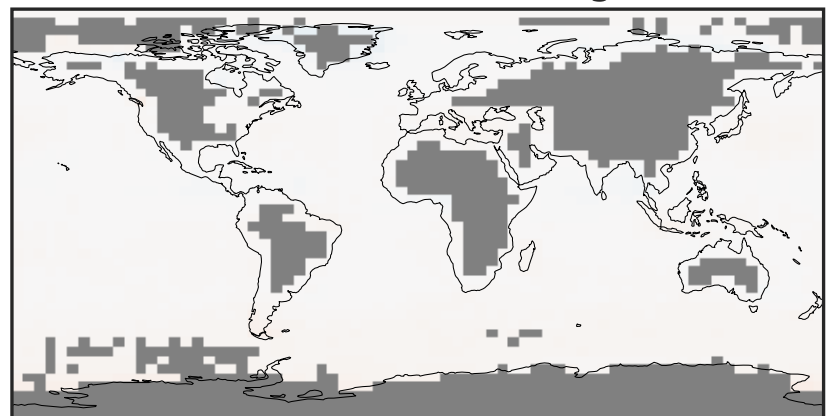
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

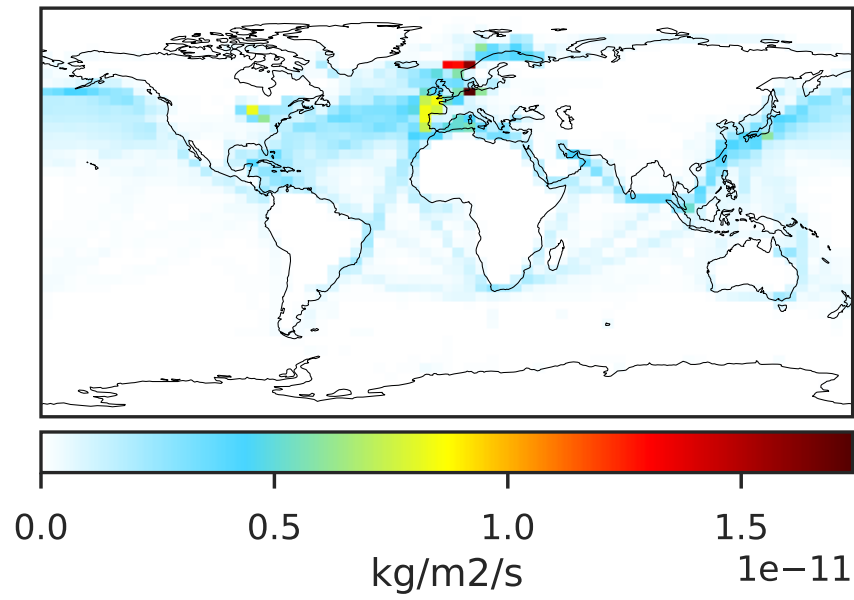


Ratio  
Dev/Ref, Fixed Range

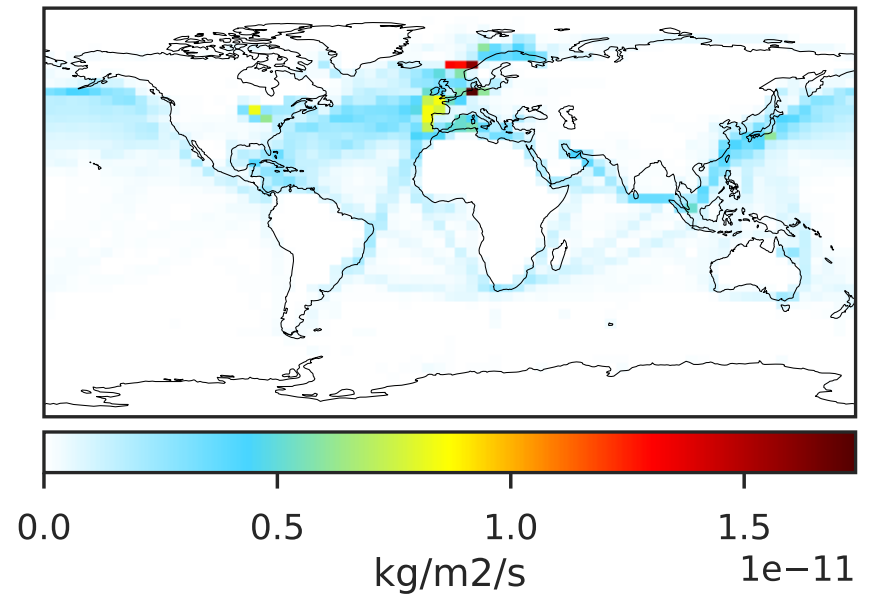


# EmisNO2\_Total (Jan2019)

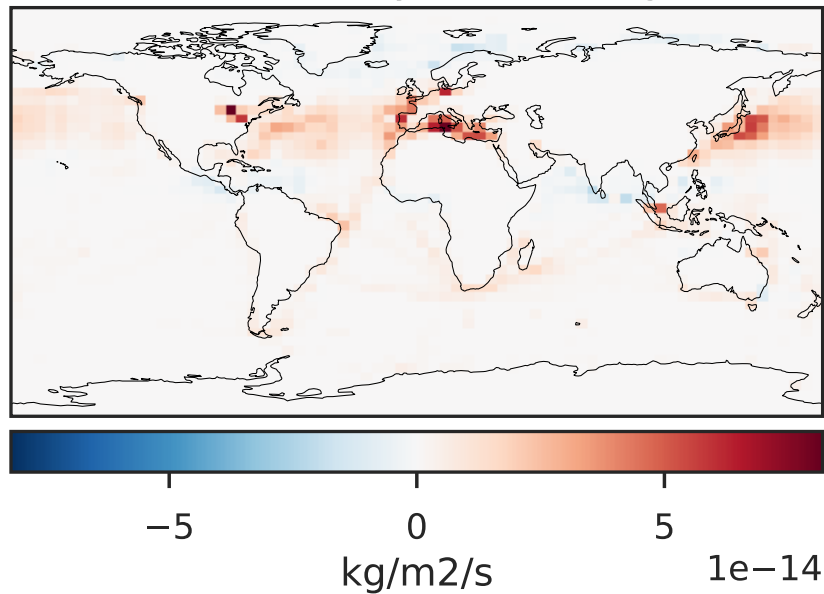
14.2.0-rc.2 (Ref)  
4.0x5.0



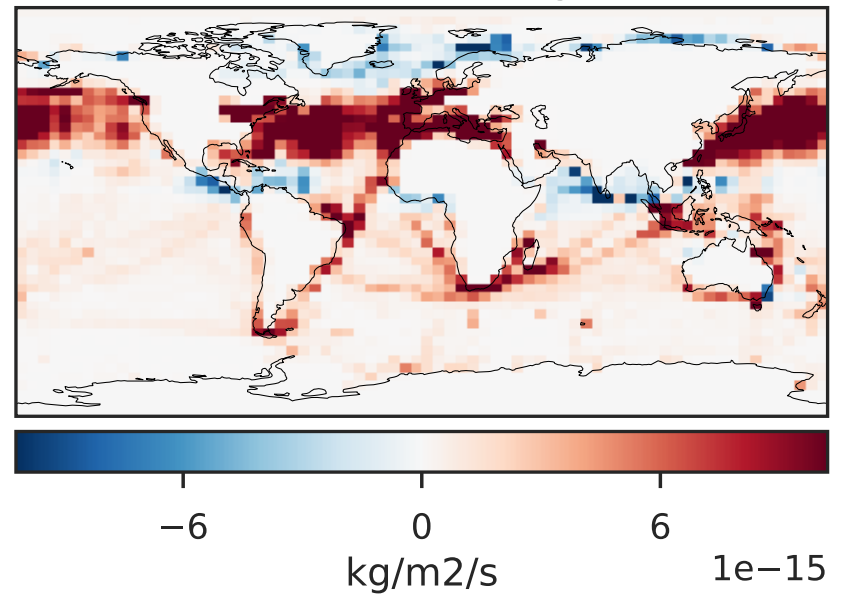
14.3.0-rc.0 (Dev)  
4.0x5.0



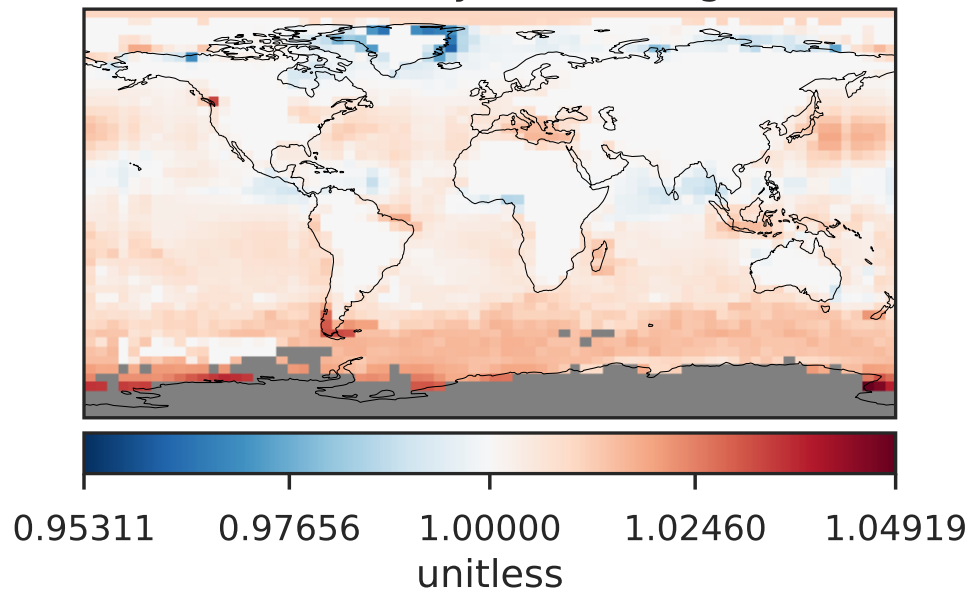
Difference  
Dev - Ref, Dynamic Range



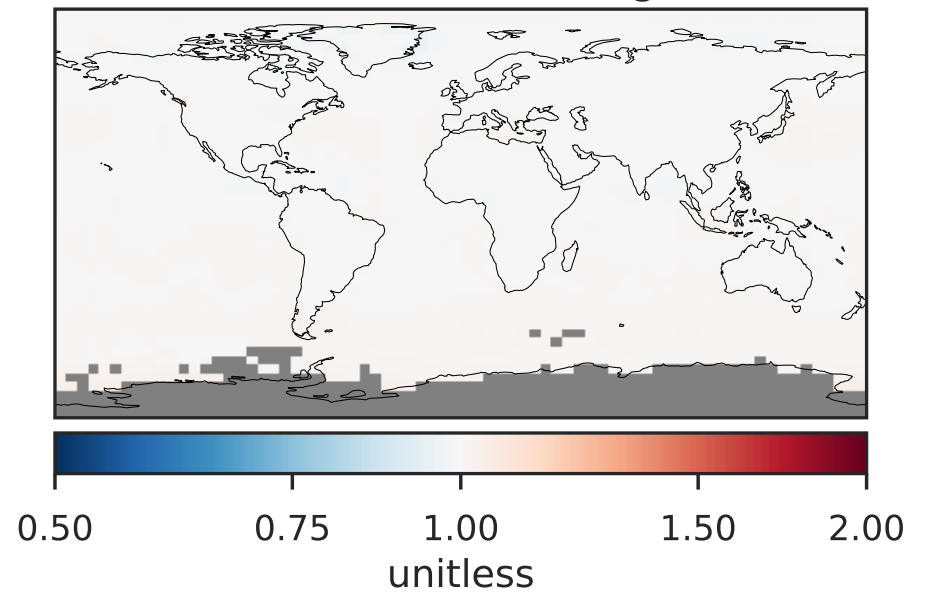
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

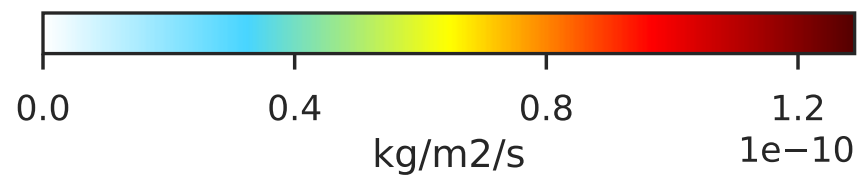
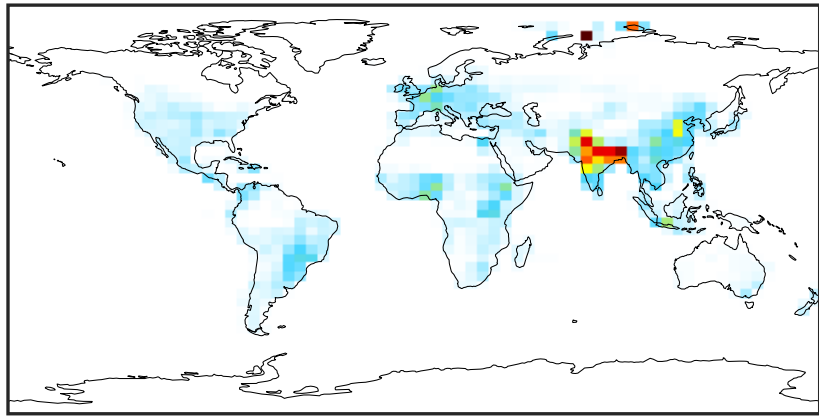


Ratio  
Dev/Ref, Fixed Range

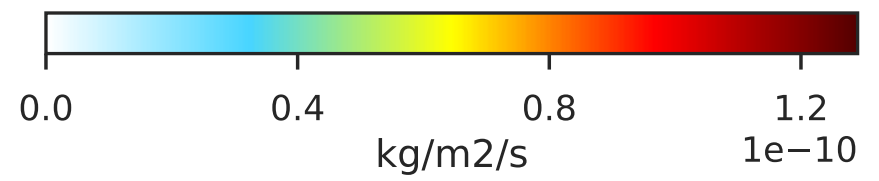
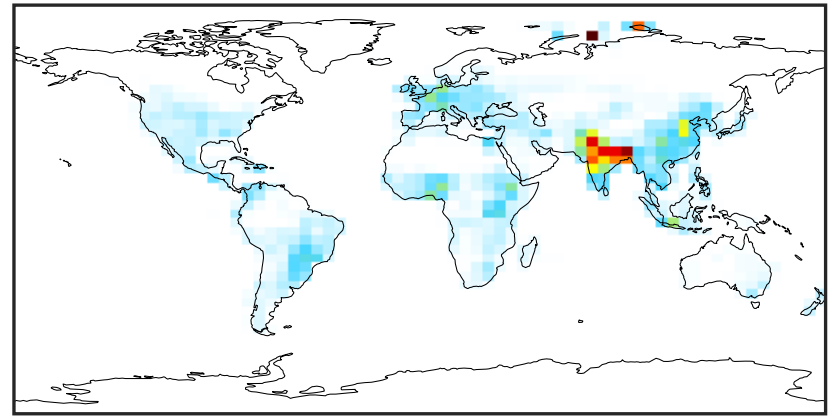


# EmisNH3\_Anthro (Jan2019)

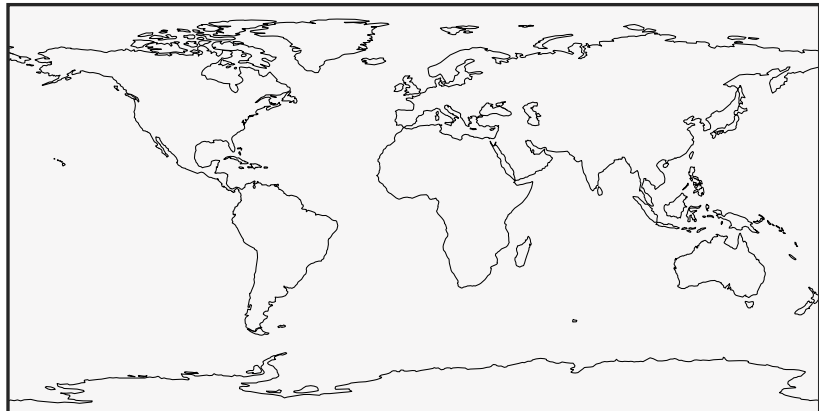
14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0



Difference  
Dev - Ref, Dynamic Range



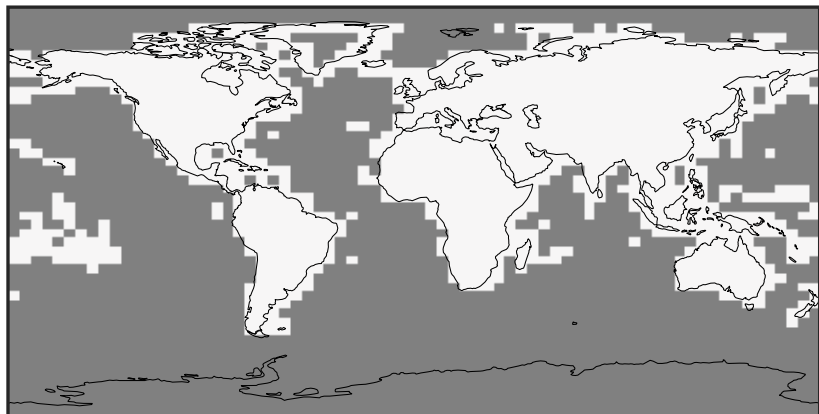
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



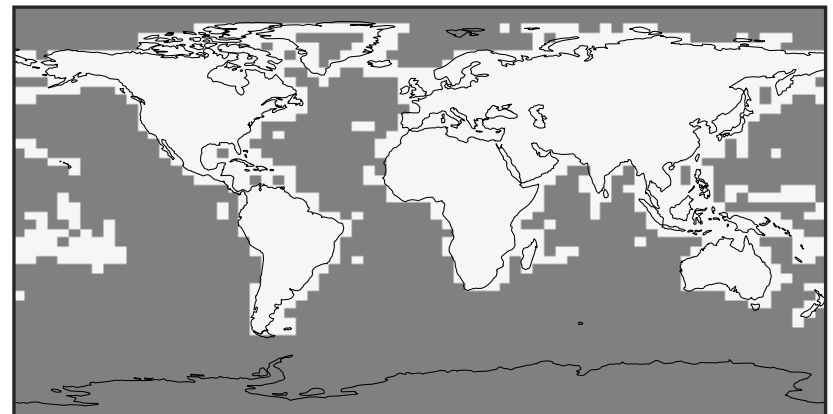
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

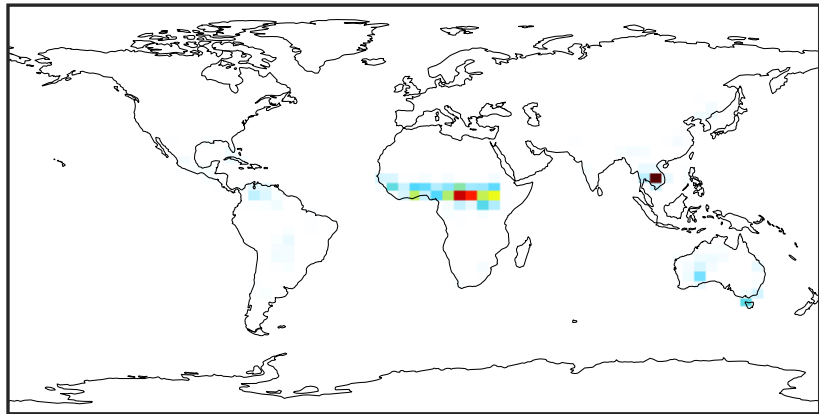
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

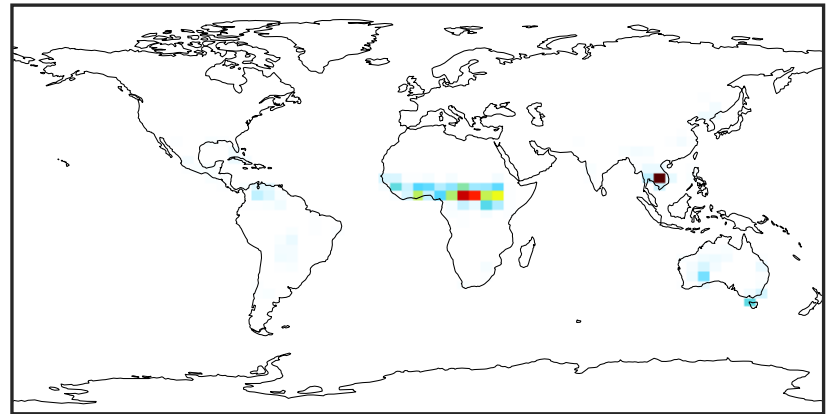
# EmisNH3\_BioBurn (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



0.0 0.8 1.6 2.4  $1e-11$   
kg/m<sup>2</sup>/s

14.3.0-rc.0 (Dev)  
4.0x5.0



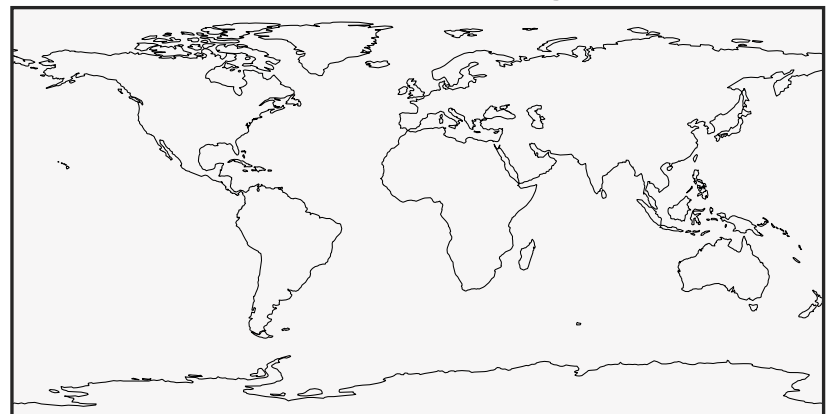
0.0 0.8 1.6 2.4  $1e-11$   
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



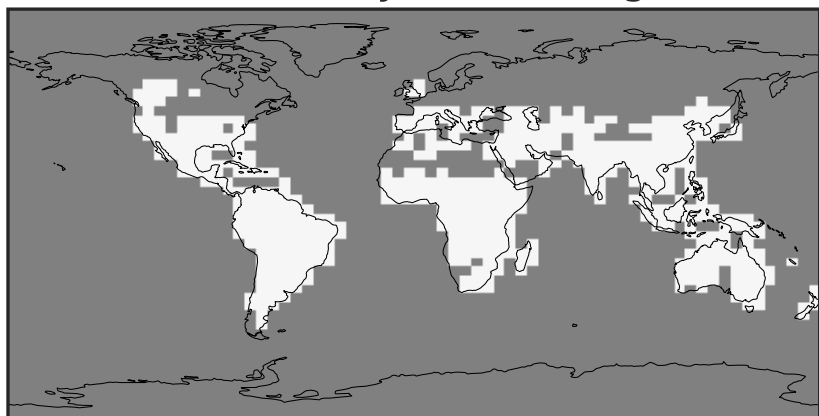
Zero throughout domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



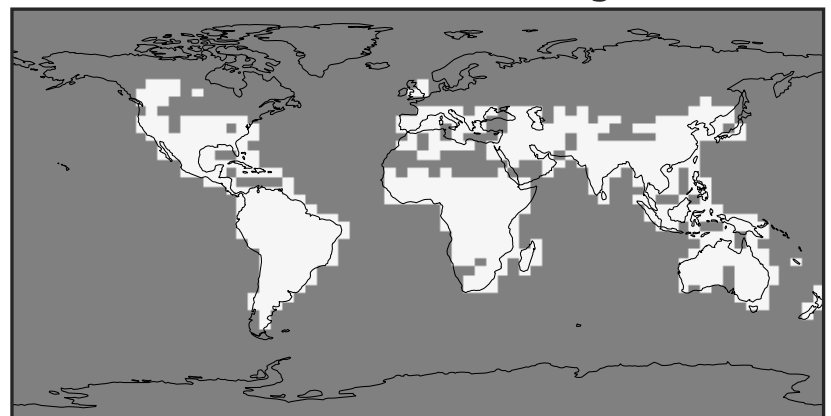
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

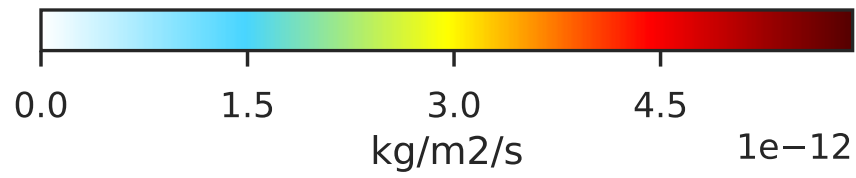
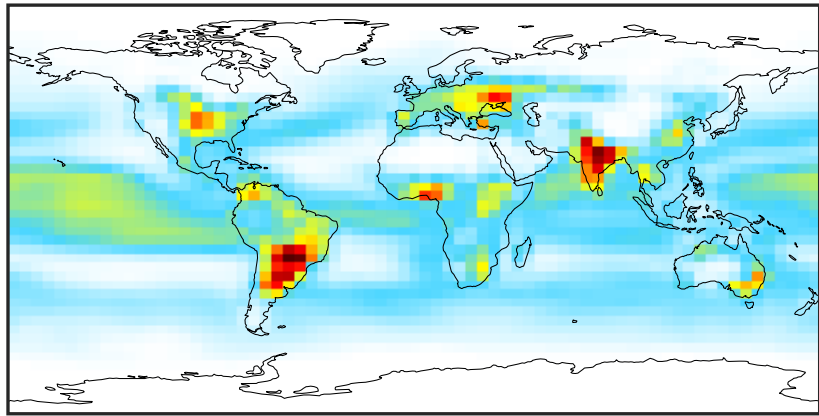
Ratio  
Dev/Ref, Fixed Range



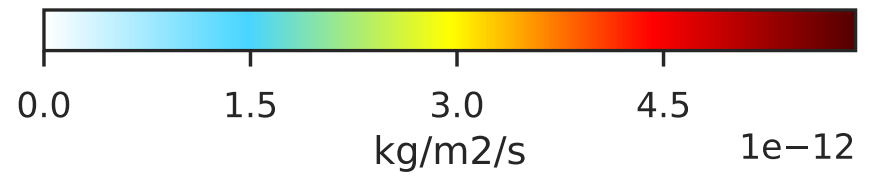
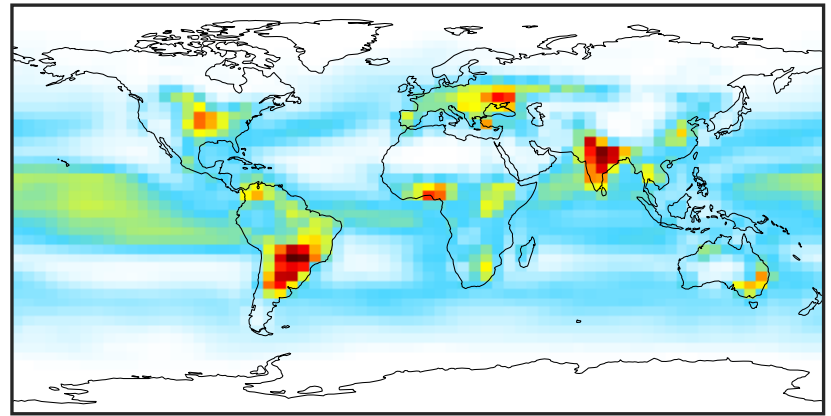
Ref and Dev equal throughout domain  
unitless

# EmisNH3\_Natural (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0

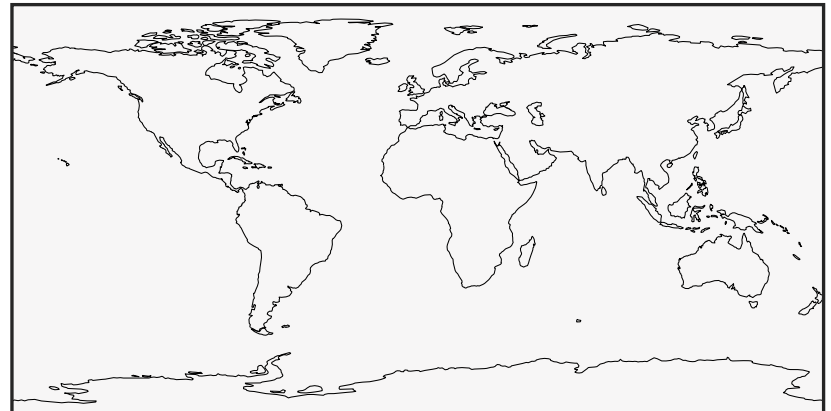


Difference  
Dev - Ref, Dynamic Range



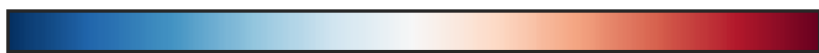
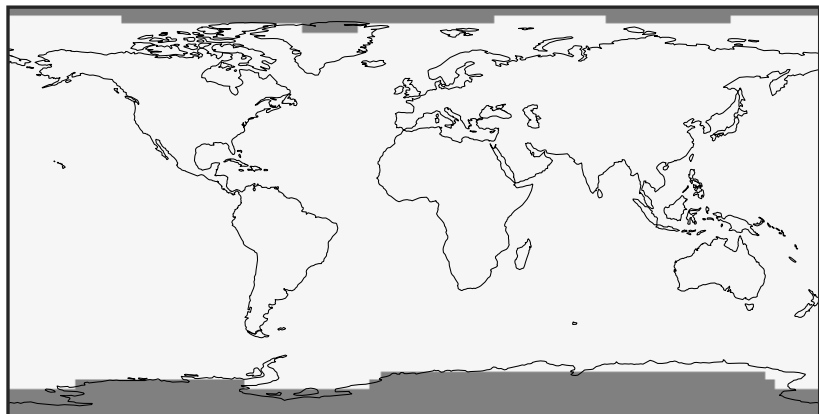
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



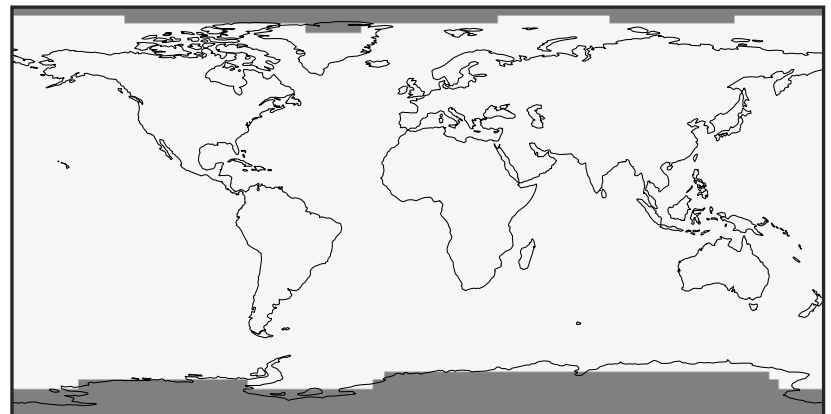
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

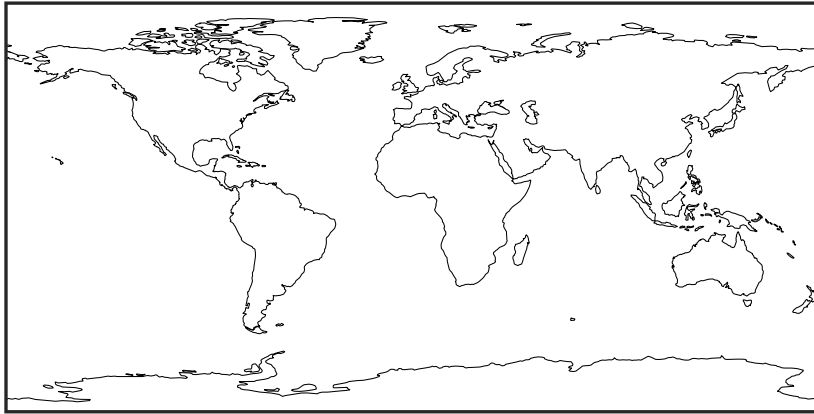
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

# EmisNH3\_Seabirds (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



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

Difference  
Dev - Ref, Dynamic Range



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

Ratio  
Dev/Ref, Dynamic Range



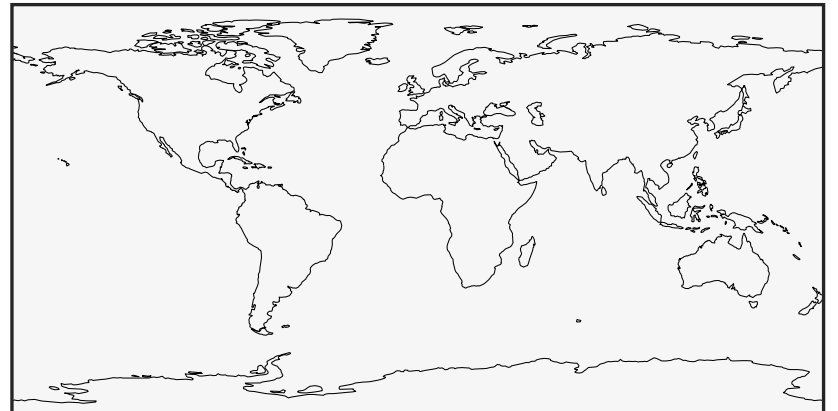
Undefined throughout domain  
unitless

14.3.0-rc.0 (Dev)  
4.0x5.0



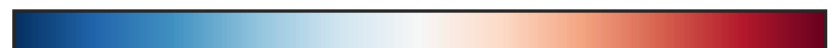
Zero throughout domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



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

Ratio  
Dev/Ref, Fixed Range

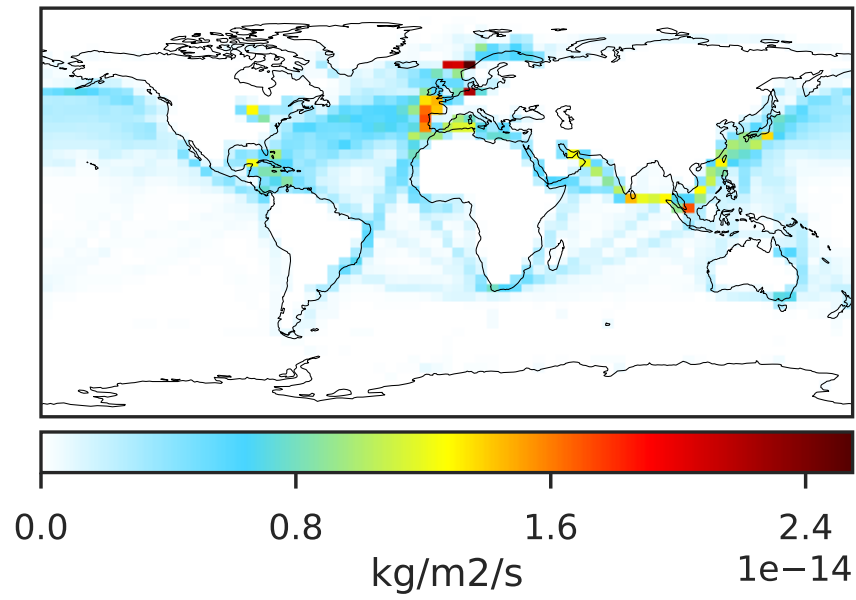


Undefined throughout domain  
unitless

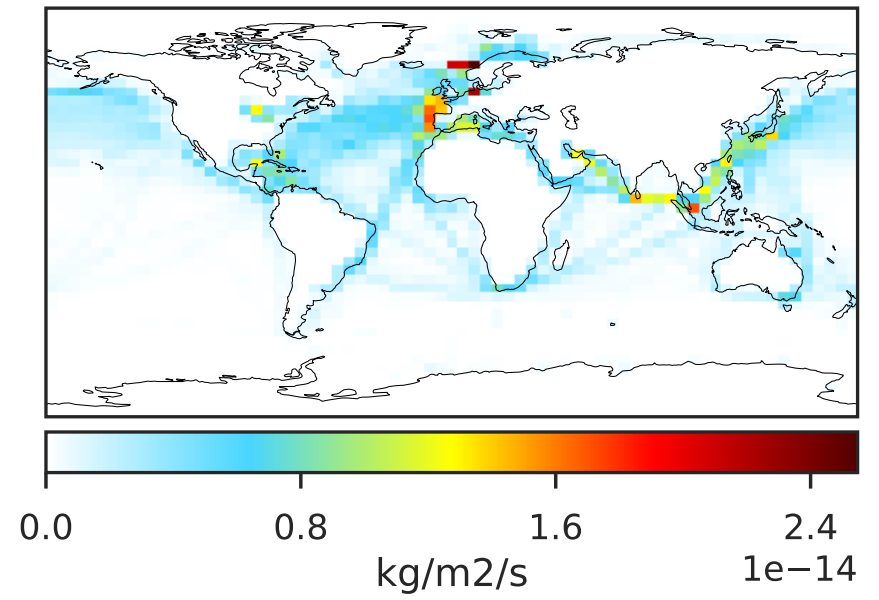


# EmisNH3\_Ship (Jan2019)

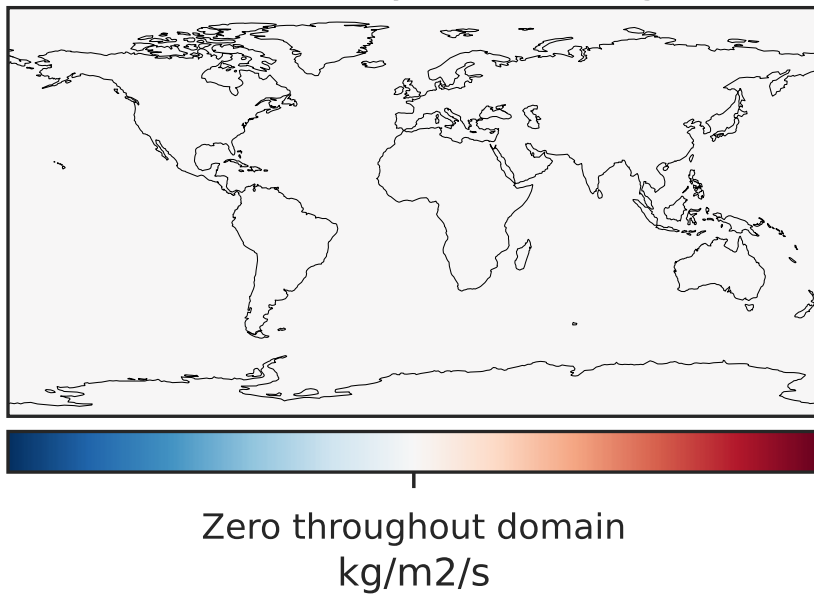
14.2.0-rc.2 (Ref)  
4.0x5.0



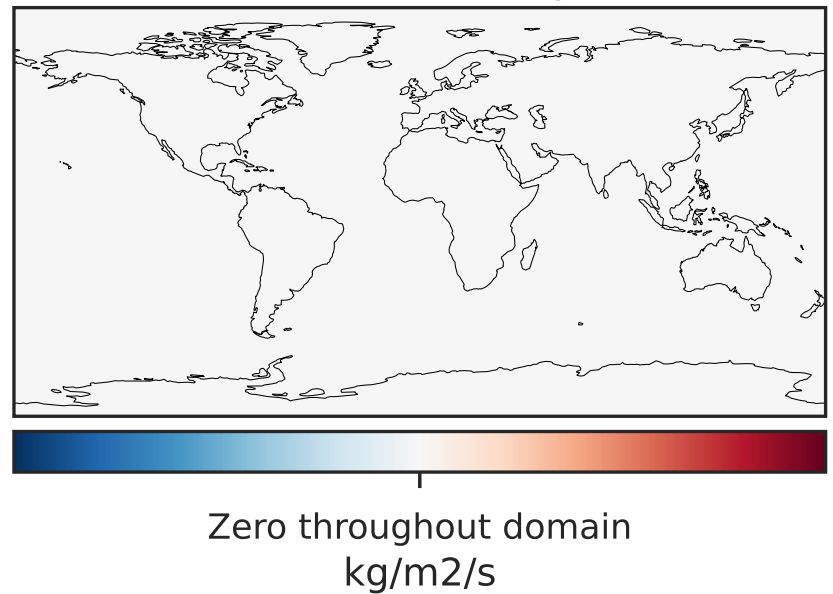
14.3.0-rc.0 (Dev)  
4.0x5.0



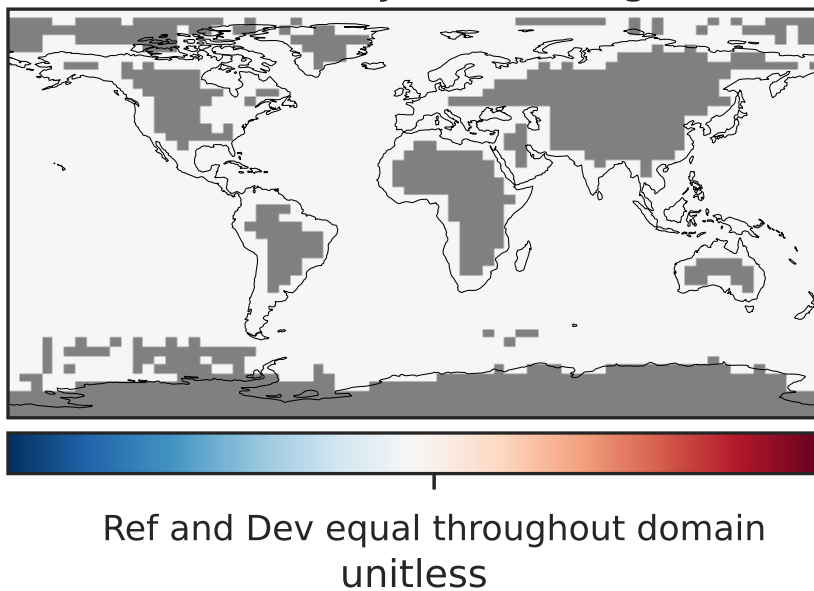
Difference  
Dev - Ref, Dynamic Range



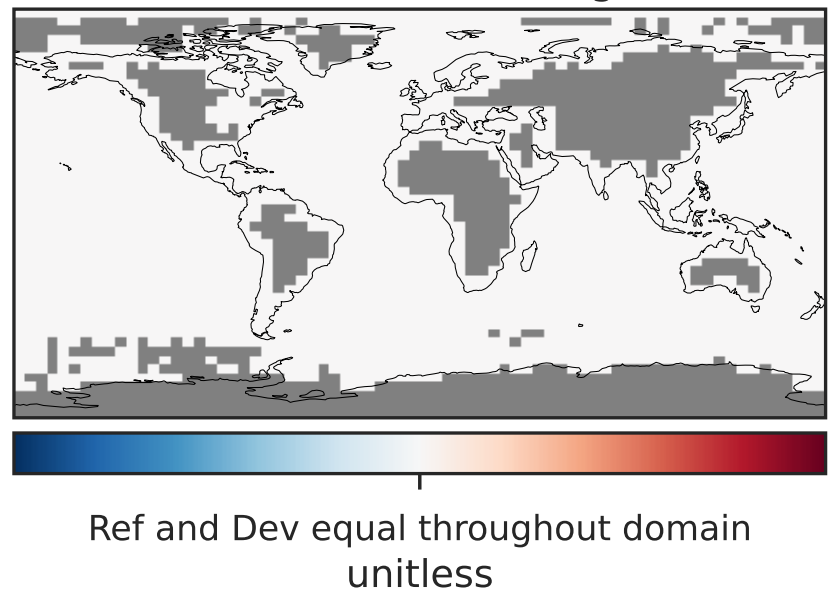
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

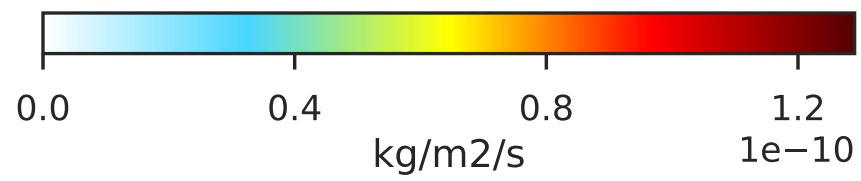
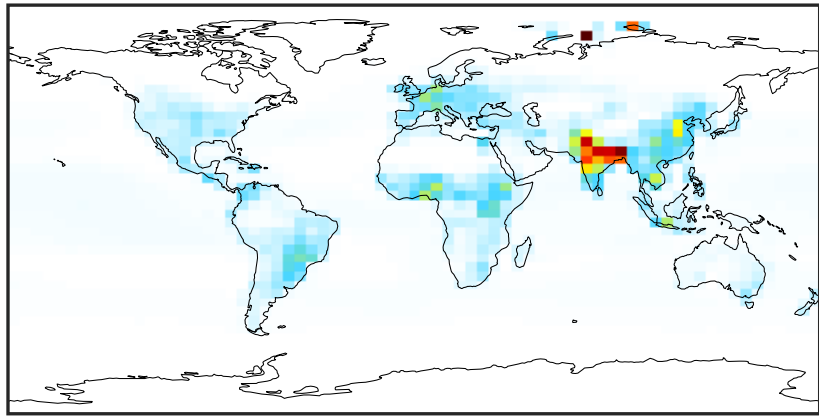


Ratio  
Dev/Ref, Fixed Range

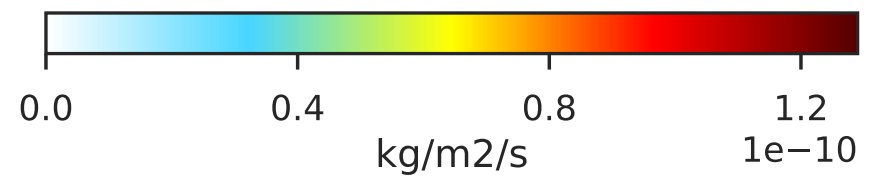
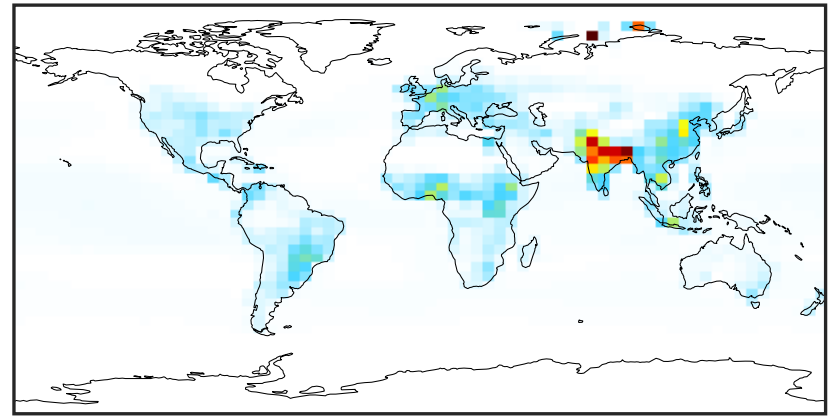


# EmisNH3\_Total (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



14.3.0-rc.0 (Dev)  
4.0x5.0



Difference  
Dev - Ref, Dynamic Range



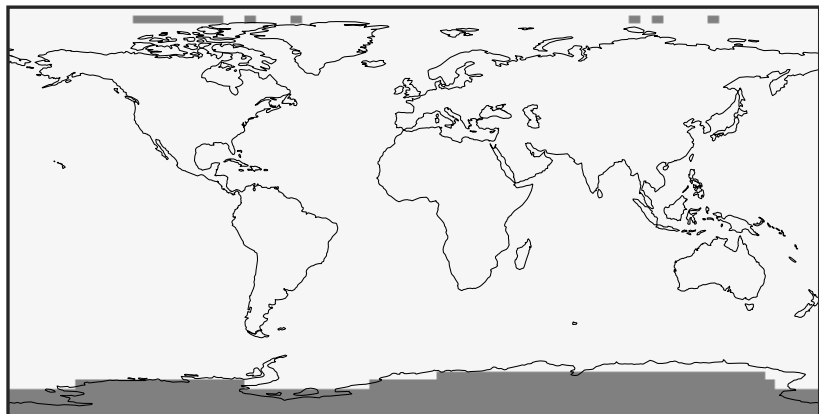
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



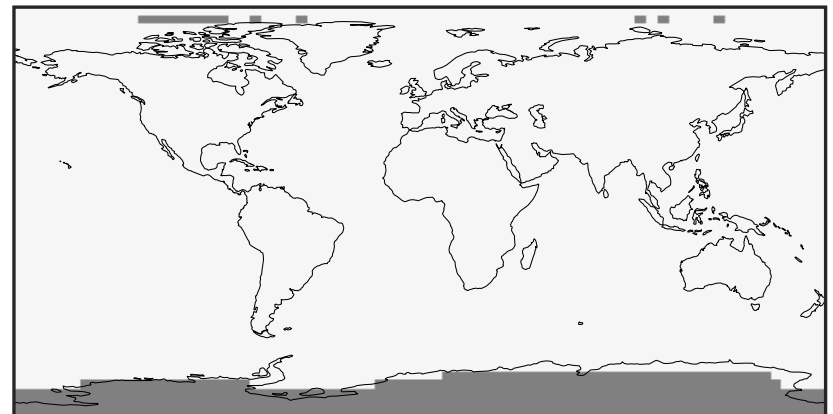
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

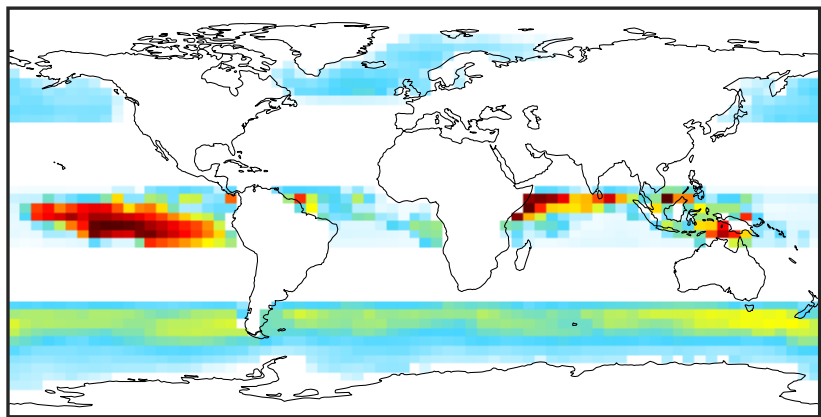
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

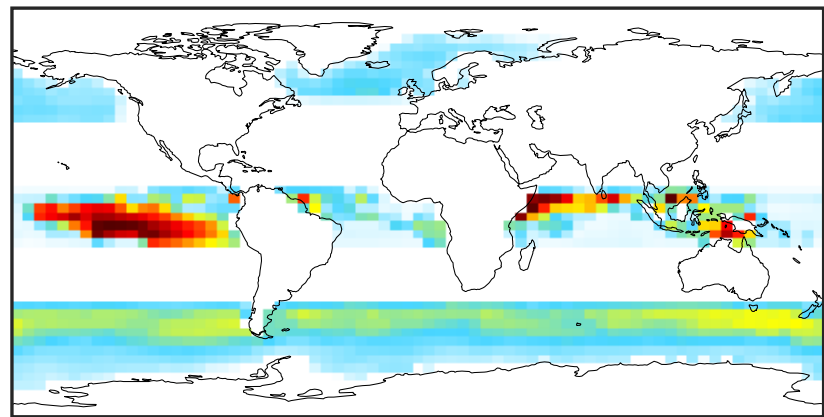
# EmisMENO3\_Ocean (Jan2019)

14.2.0-rc.2 (Ref)  
4.0x5.0



0.0 1.5 3.0 4.5  
kg/m2/s  $1e^{-13}$

14.3.0-rc.0 (Dev)  
4.0x5.0



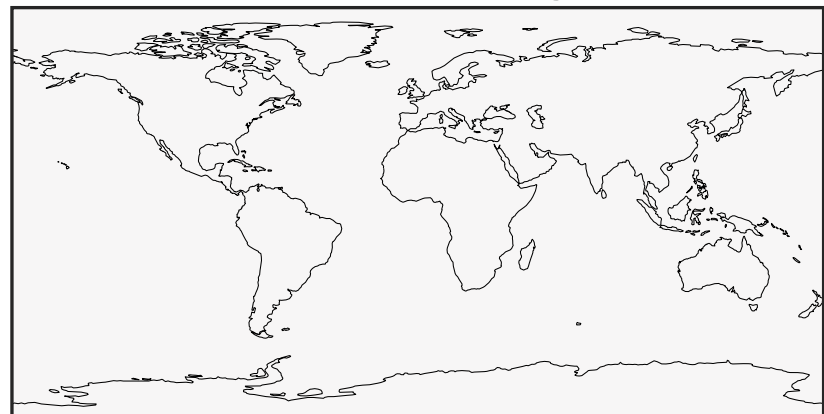
0.0 1.5 3.0 4.5  
kg/m2/s  $1e^{-13}$

Difference  
Dev - Ref, Dynamic Range



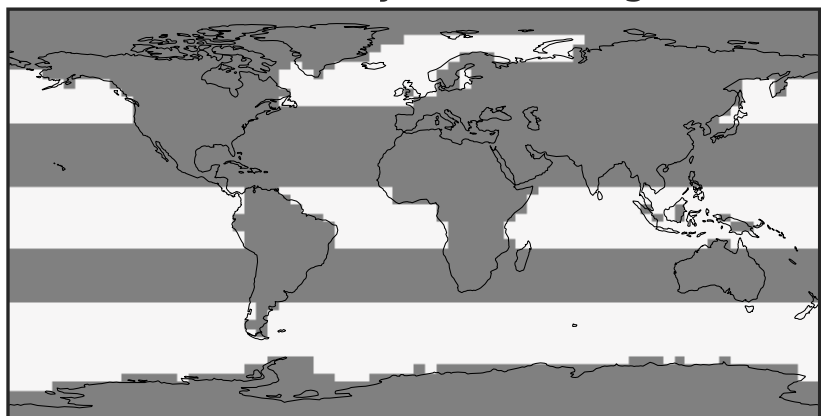
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Restricted Range [5%,95%]



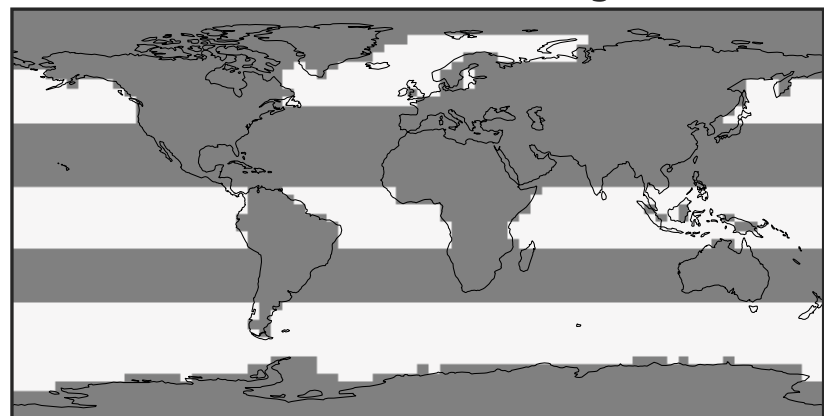
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

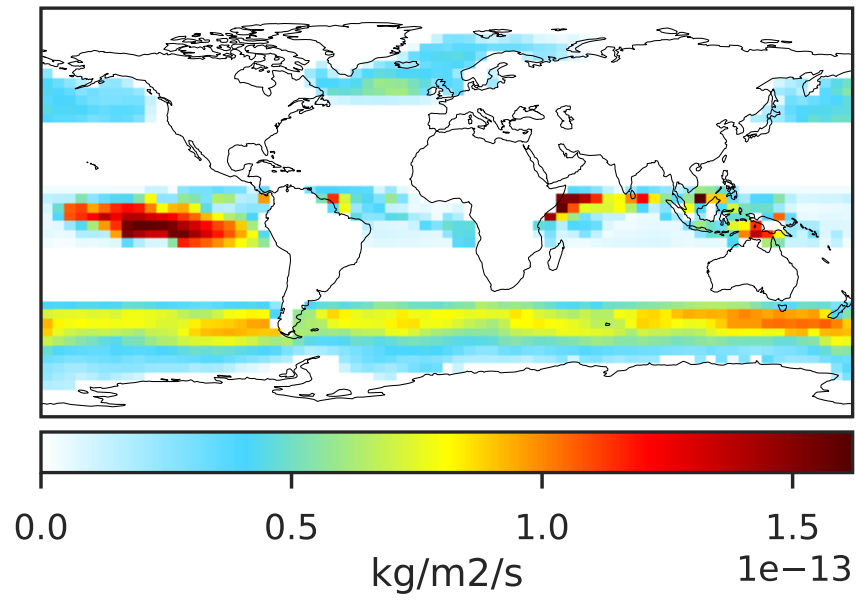
Ratio  
Dev/Ref, Fixed Range



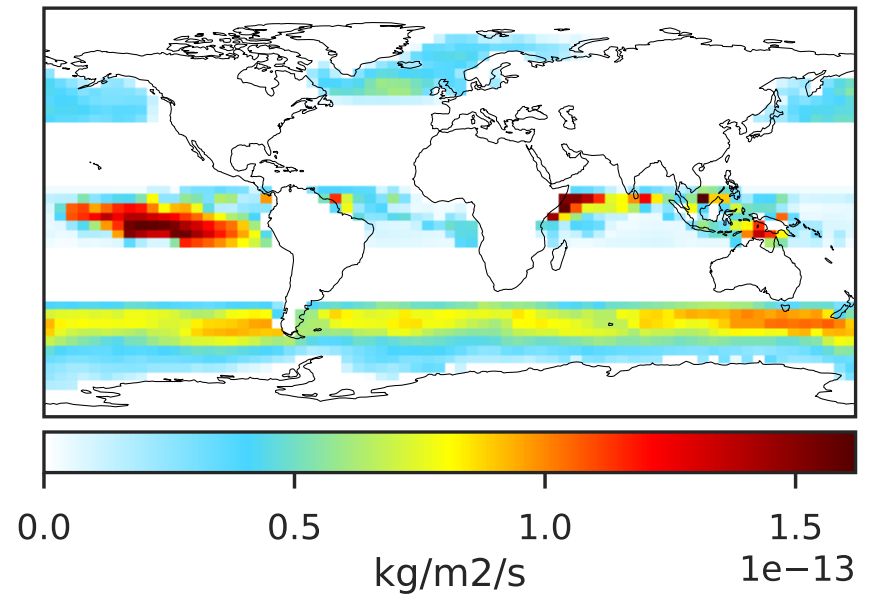
Ref and Dev equal throughout domain  
unitless

# EmisETNO3\_Ocean (Jan2019)

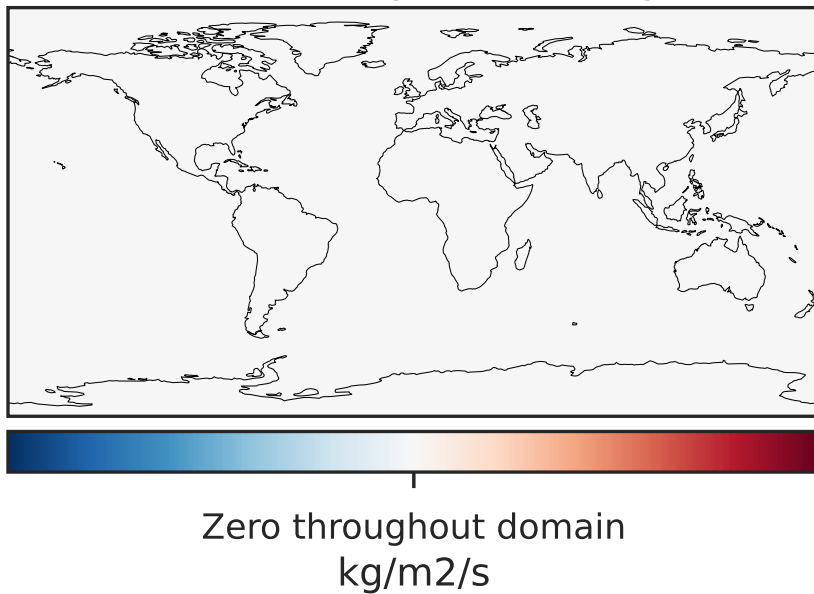
14.2.0-rc.2 (Ref)  
4.0x5.0



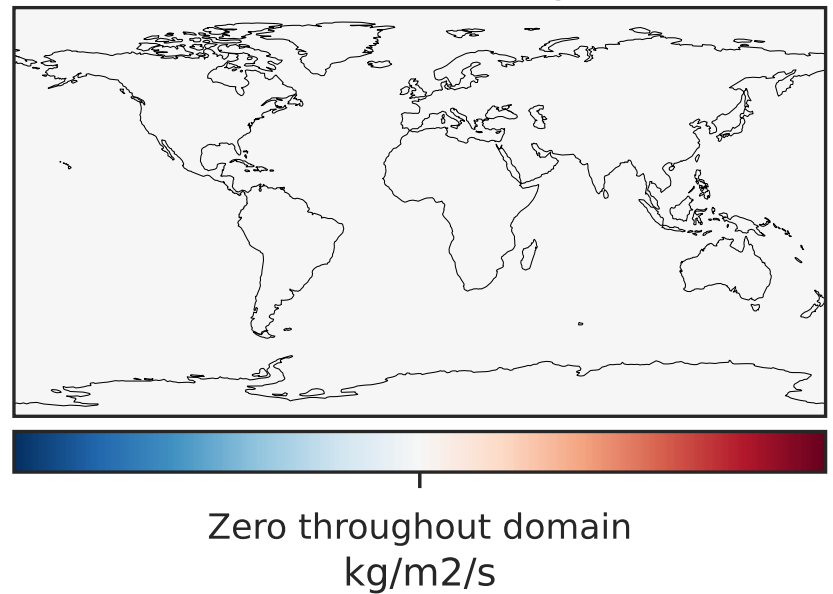
14.3.0-rc.0 (Dev)  
4.0x5.0



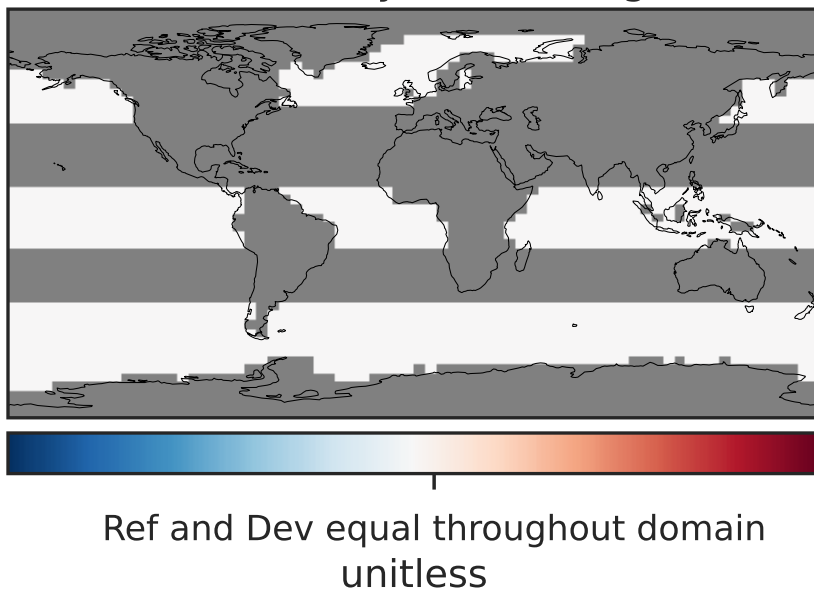
Difference  
Dev - Ref, Dynamic Range



Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

