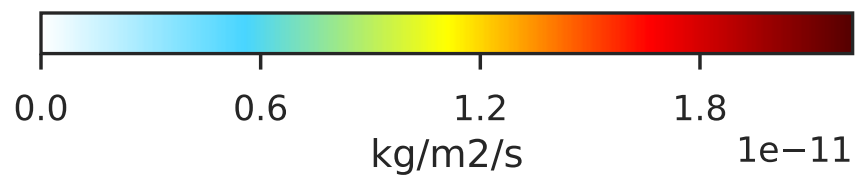
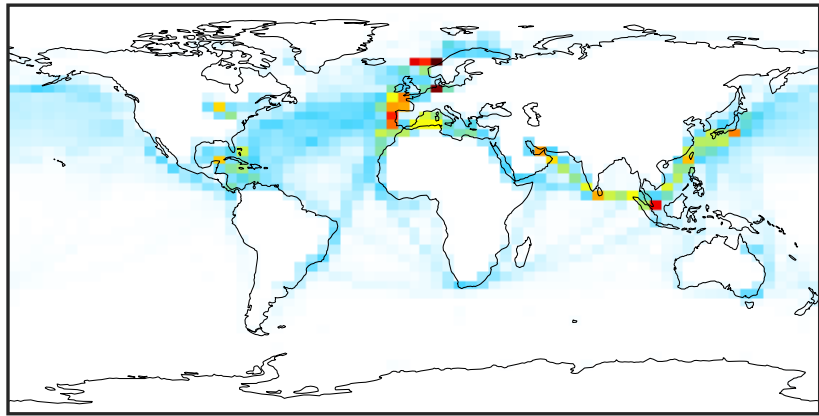
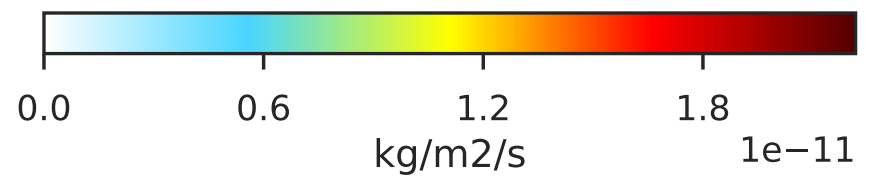
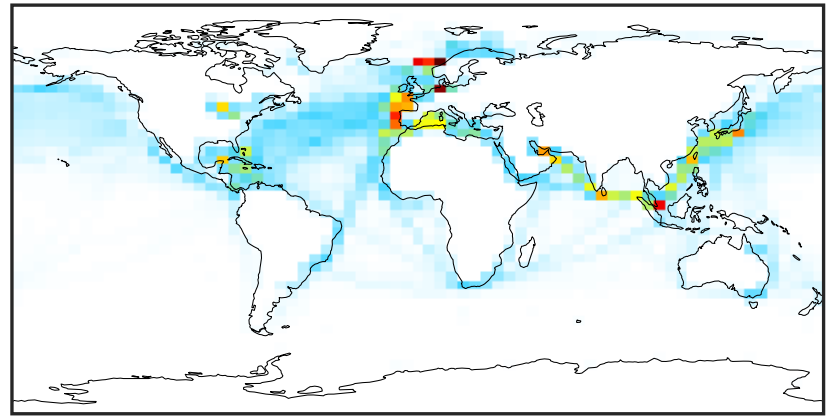


# EmisHNO3\_Ship (Apr2019)

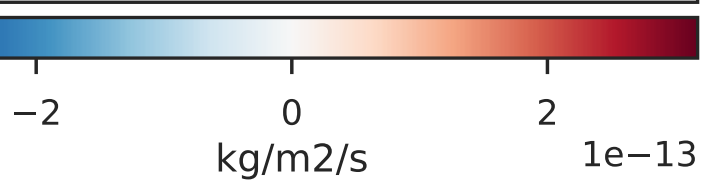
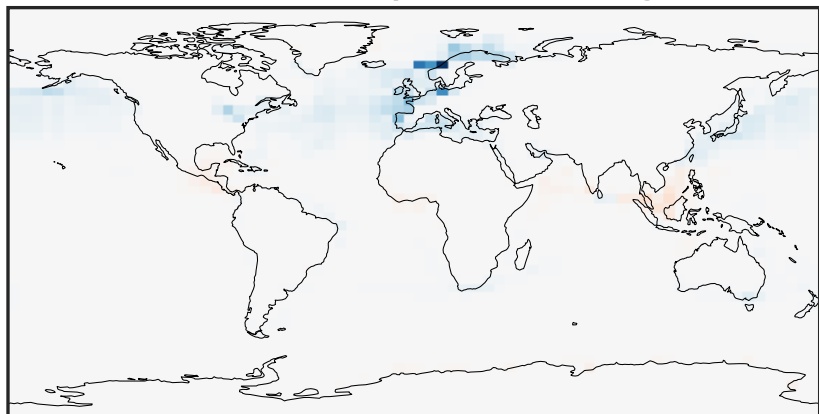
14.2.0-rc.2 (Ref)  
4.0x5.0



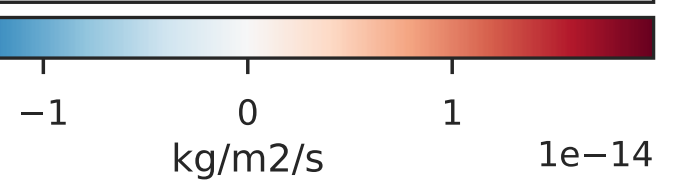
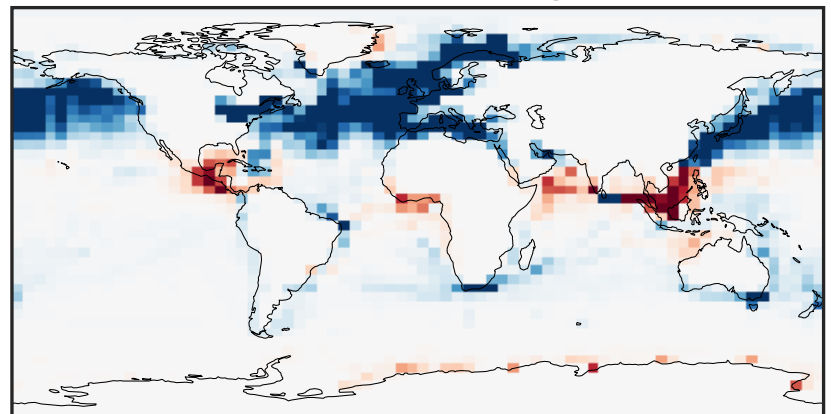
14.3.0-rc.0 (Dev)  
4.0x5.0



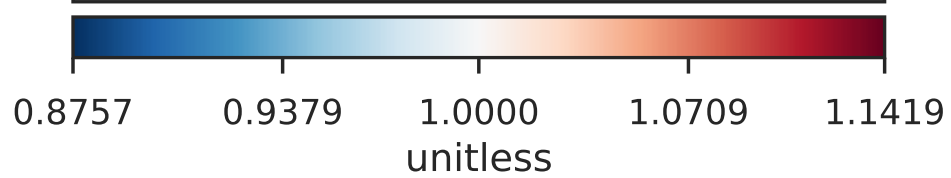
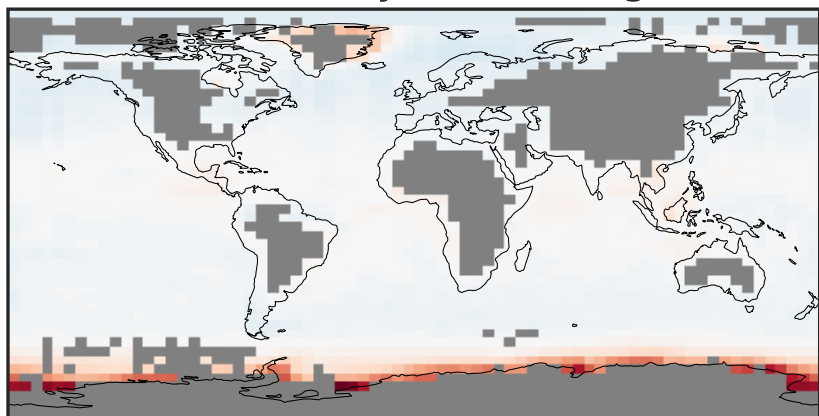
Difference  
Dev - Ref, Dynamic Range



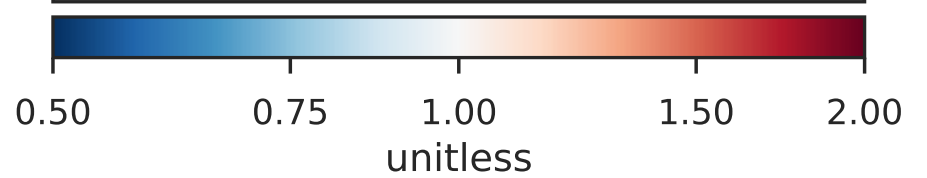
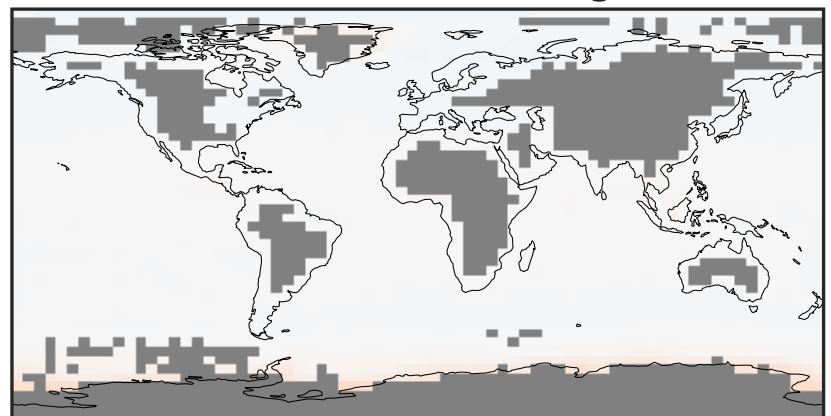
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

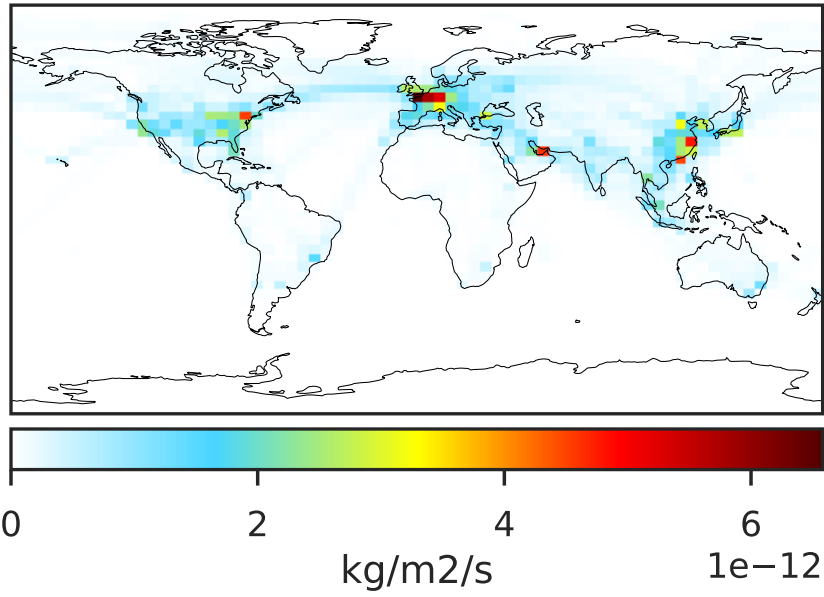


Ratio  
Dev/Ref, Fixed Range

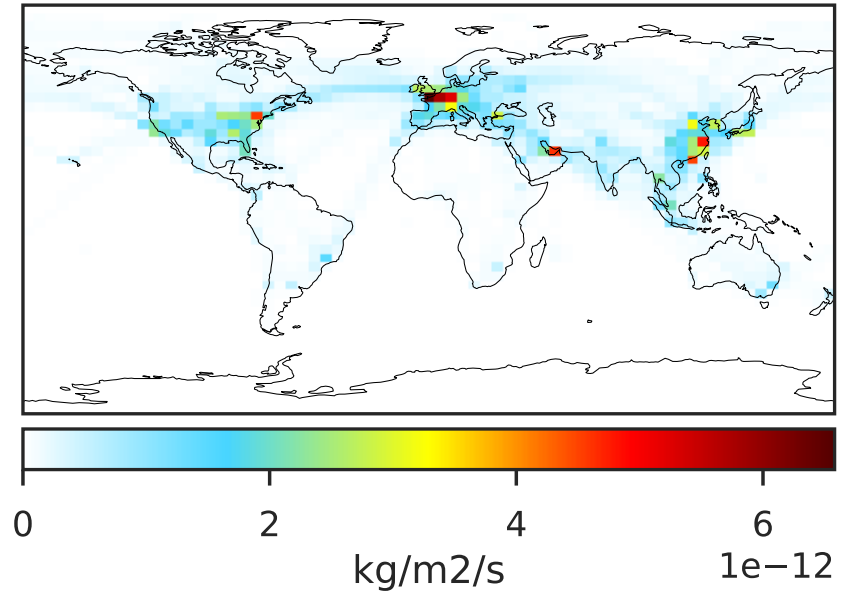


# EmisNO\_Aircraft (Apr2019)

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



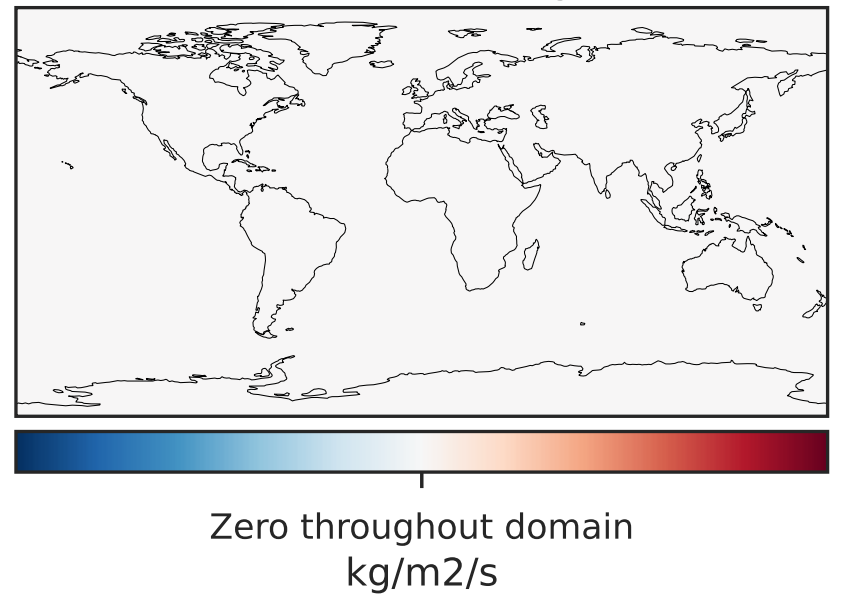
14.3.0-rc.0 (Dev)  
4.0x5.0



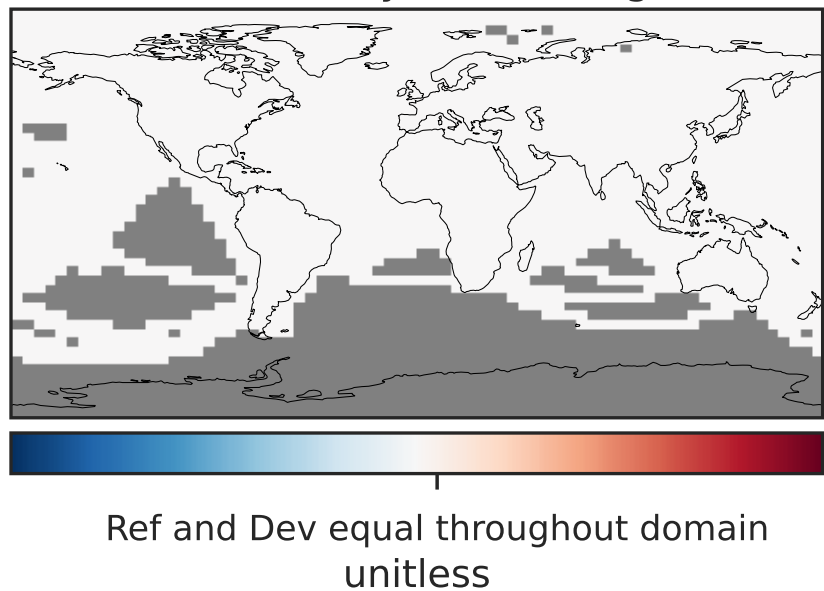
Difference  
Dev - Ref, Dynamic Range



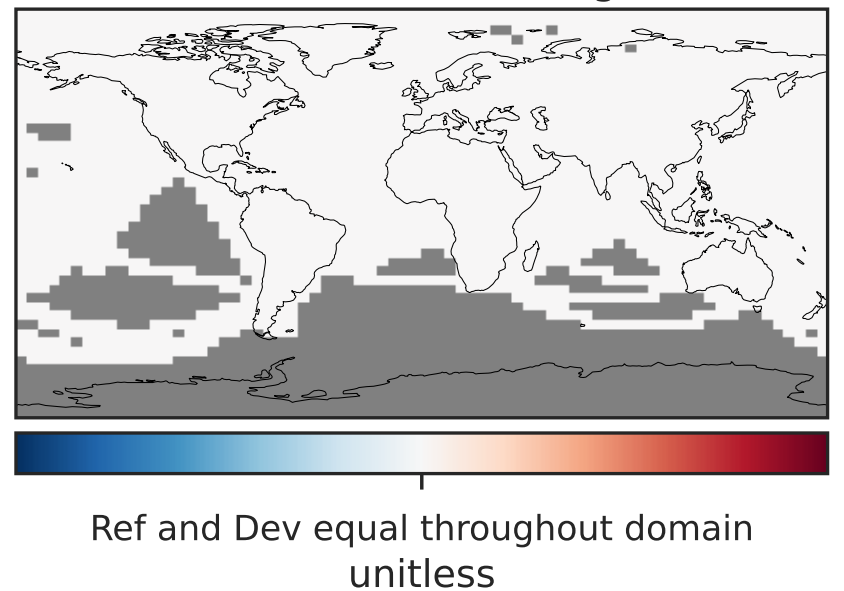
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

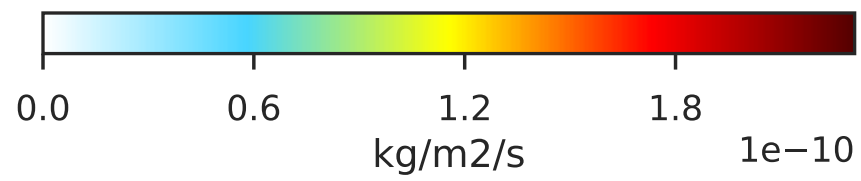
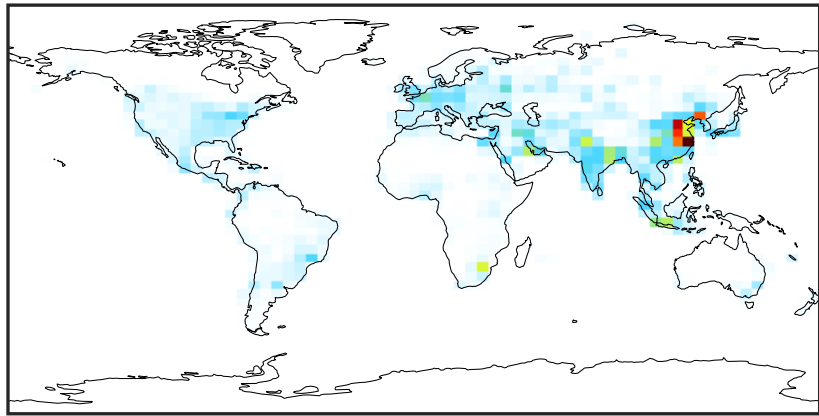


Ratio  
Dev/Ref, Fixed Range

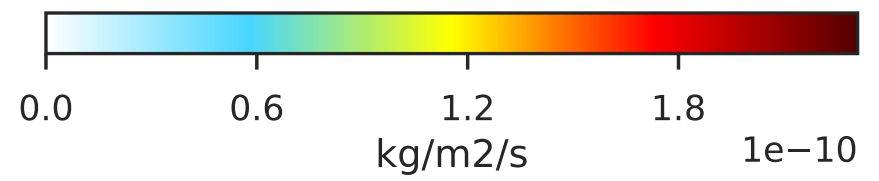
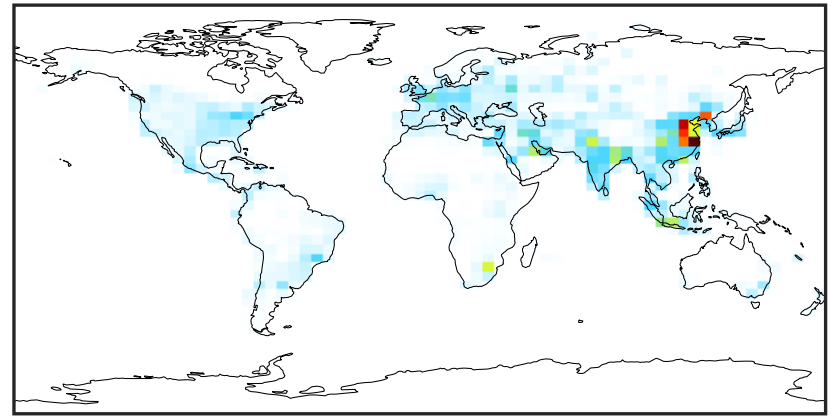


# EmisNO\_Anthro (Apr2019)

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



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



Difference  
Dev - Ref, Dynamic Range



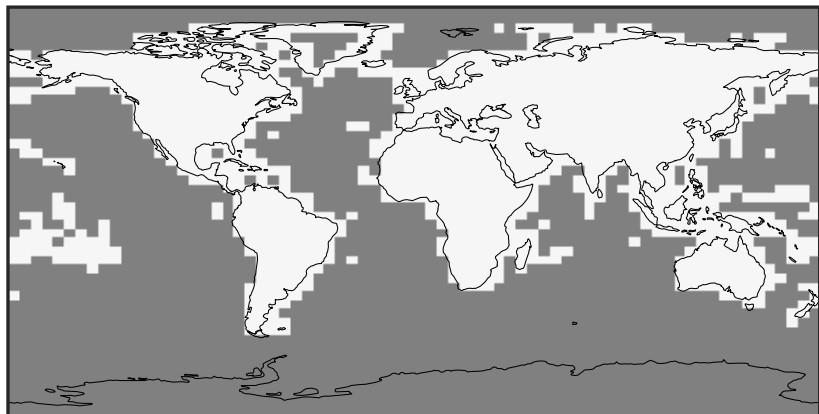
Zero throughout domain  
kg/m2/s

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



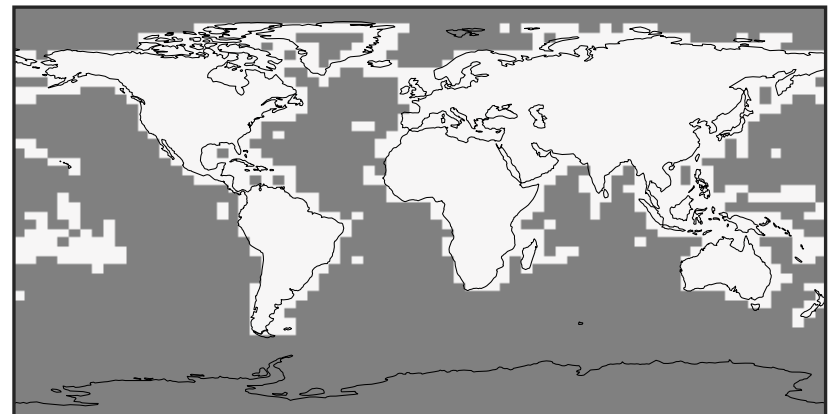
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

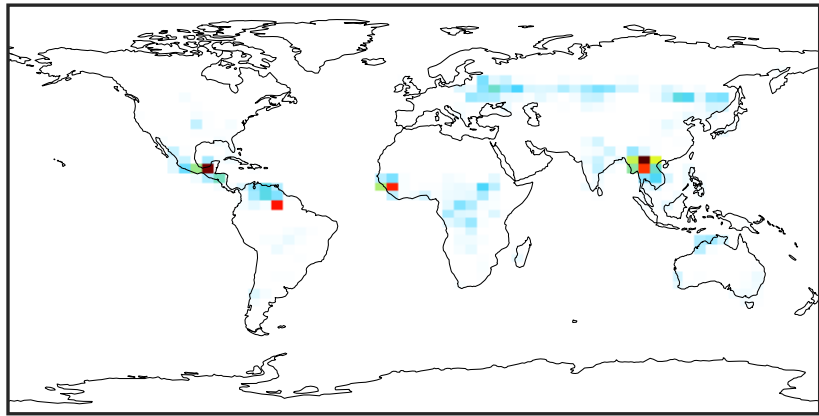
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

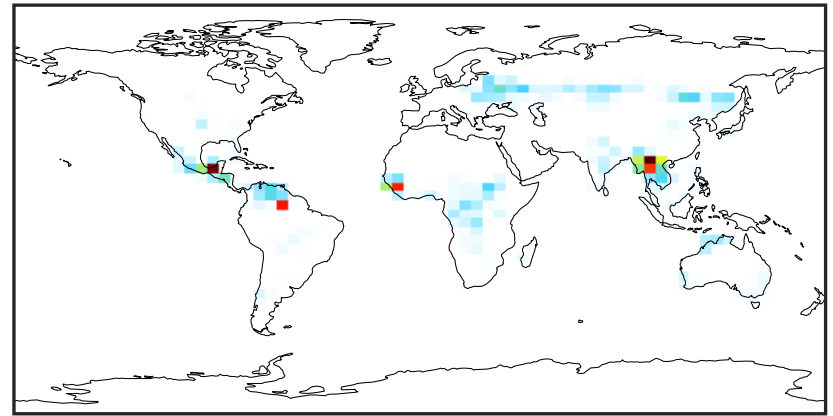
# EmisNO\_BioBurn (Apr2019)

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



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

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



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

Difference  
Dev - Ref, Dynamic Range



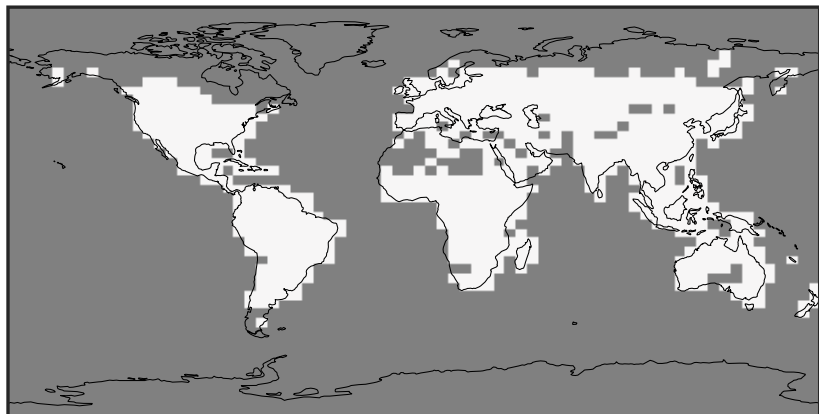
Zero throughout domain  
kg/m<sup>2</sup>/s

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



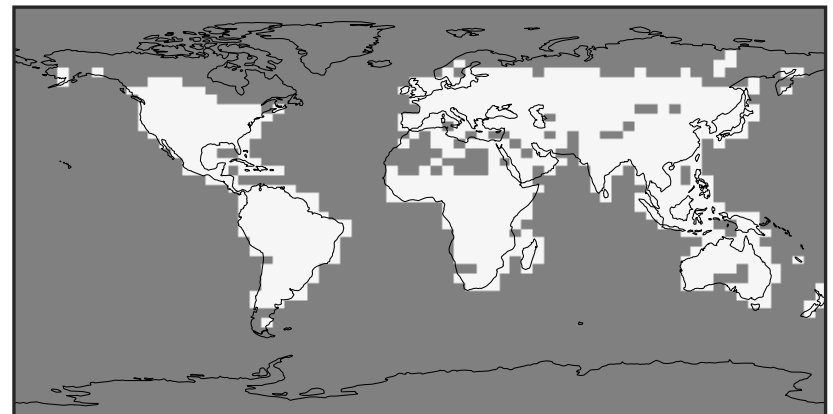
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

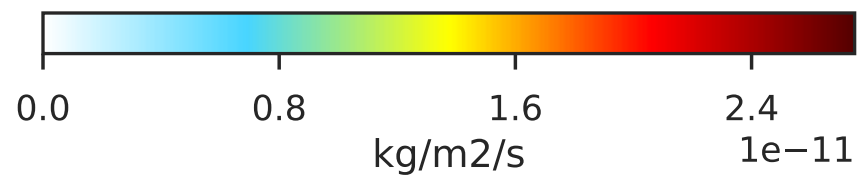
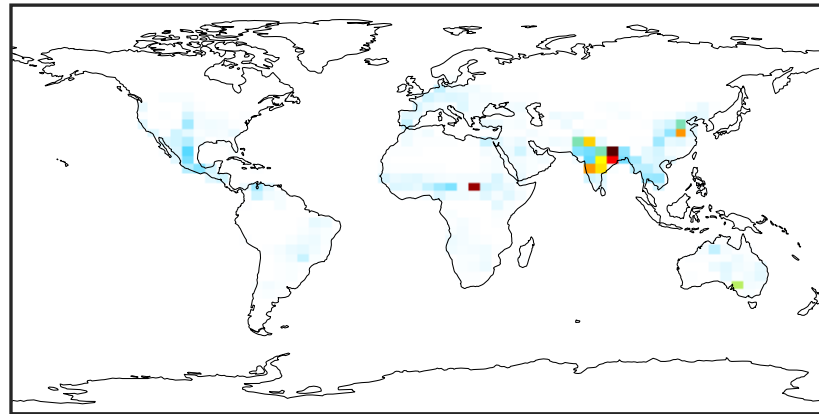
Ratio  
Dev/Ref, Fixed Range



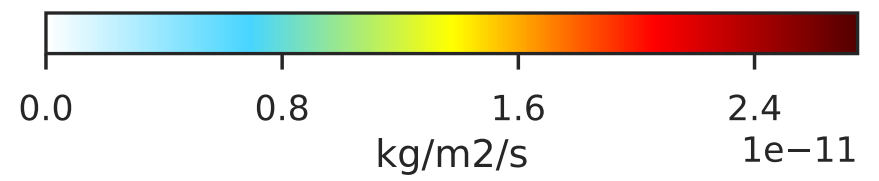
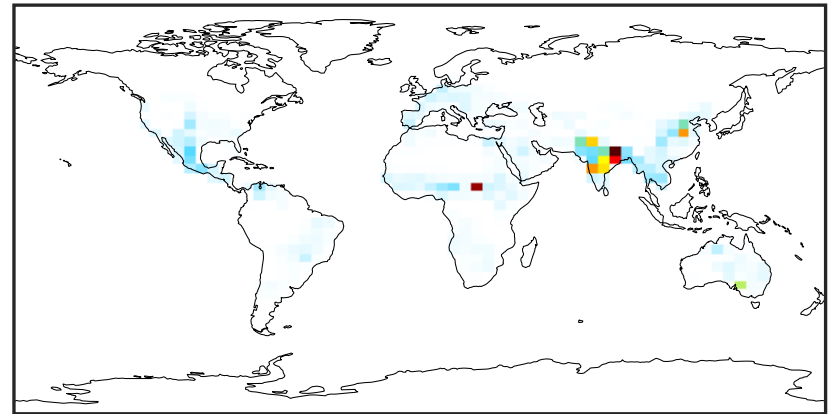
Ref and Dev equal throughout domain  
unitless

# EmisNO\_Fert (Apr2019)

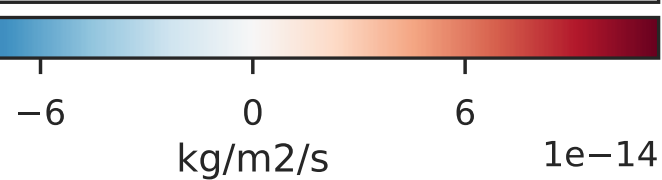
14.2.0-rc.2 (Ref)  
4.0x5.0



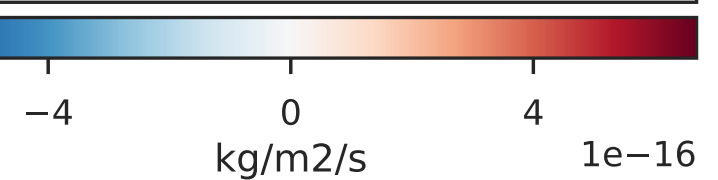
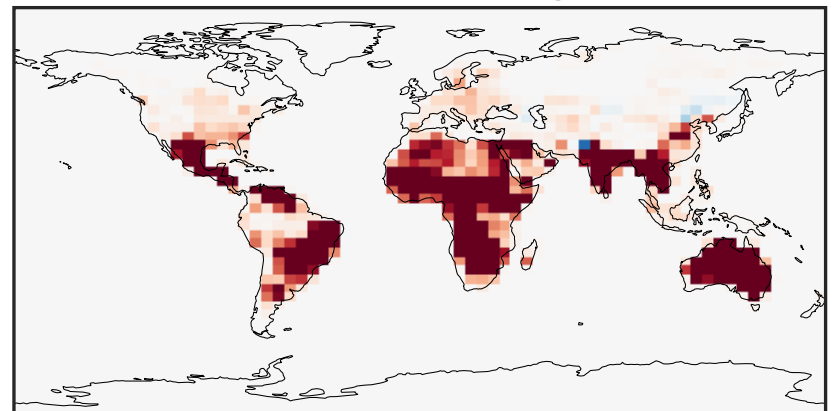
14.3.0-rc.0 (Dev)  
4.0x5.0



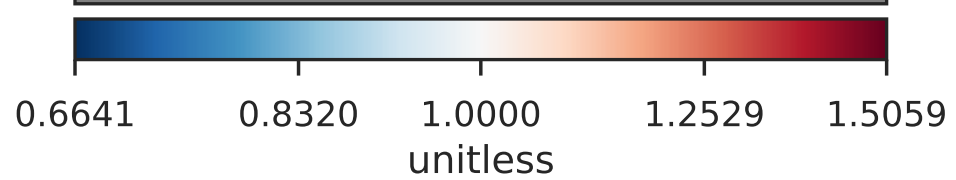
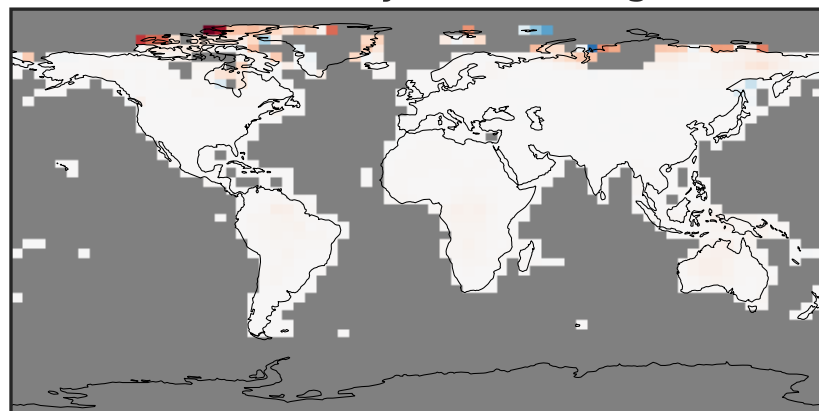
Difference  
Dev - Ref, Dynamic Range



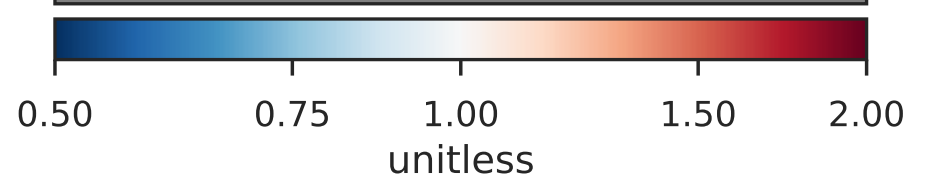
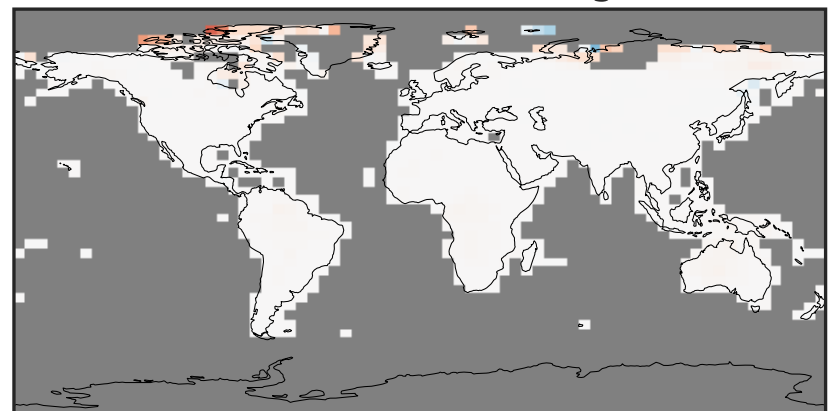
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



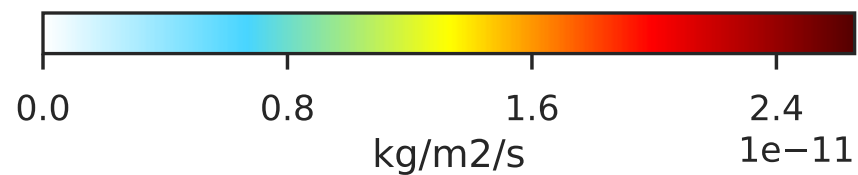
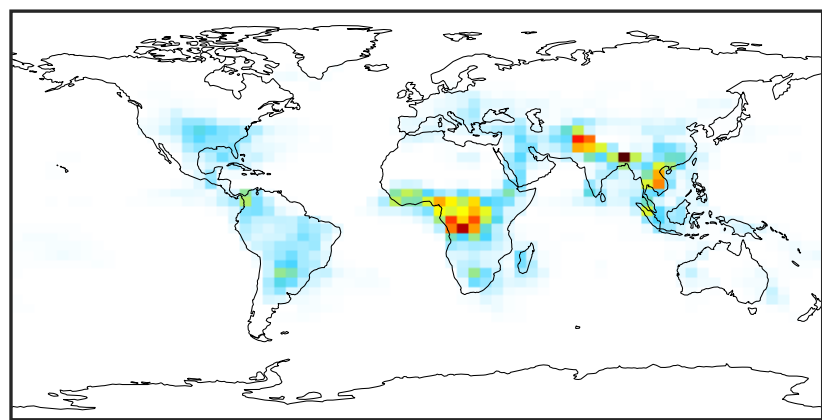
Ratio  
Dev/Ref, Fixed Range



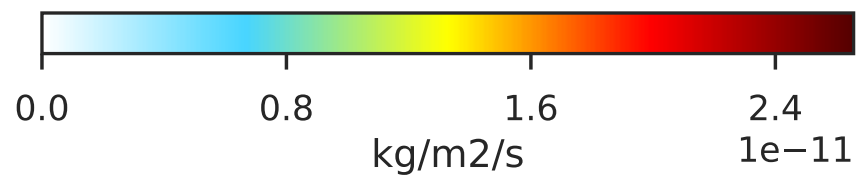
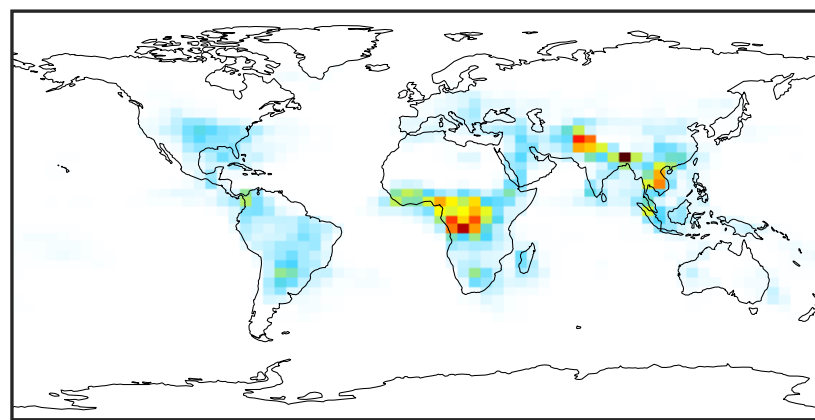


# EmisNO\_Lightning (Apr2019)

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



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

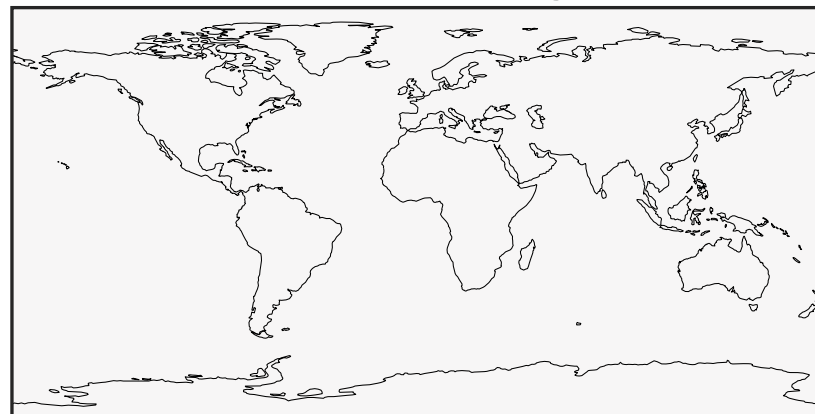


Difference  
Dev - Ref, Dynamic Range



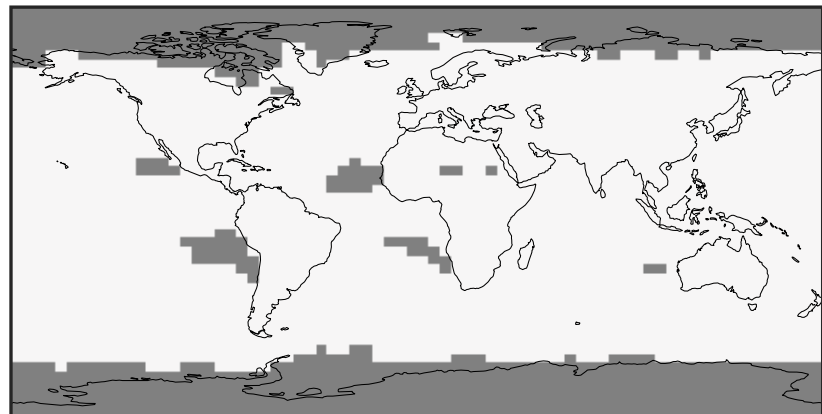
Zero throughout domain  
kg/m2/s

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



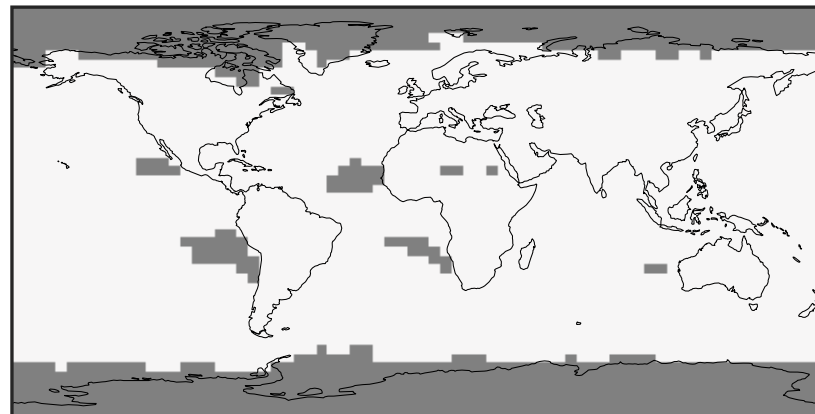
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

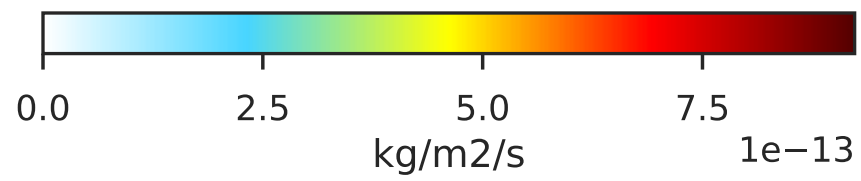
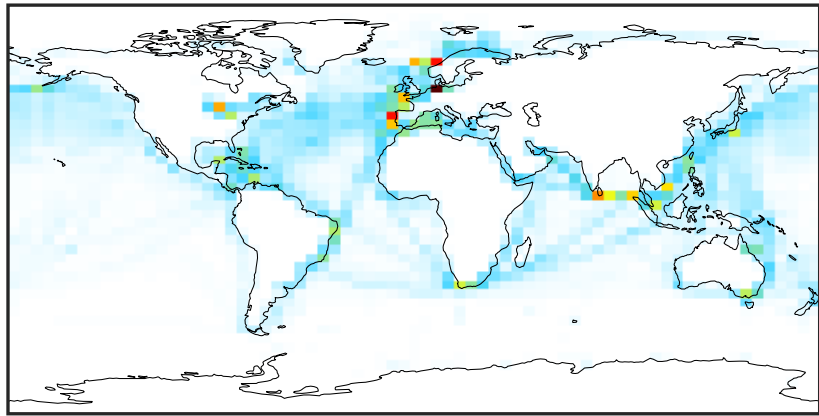
Ratio  
Dev/Ref, Fixed Range



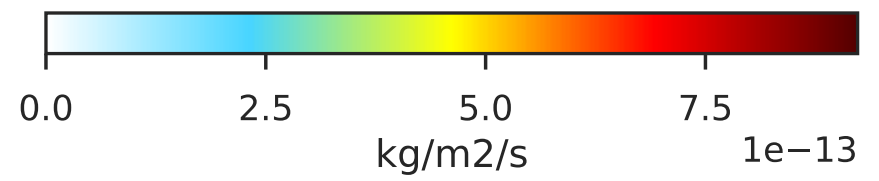
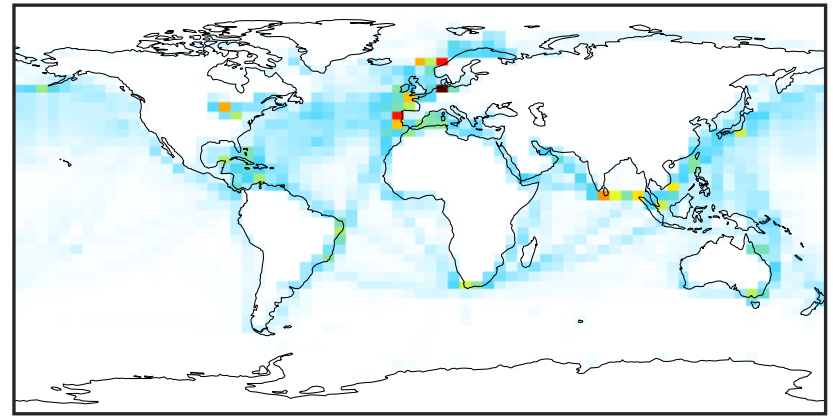
Ref and Dev equal throughout domain  
unitless

# EmisNO\_Ship (Apr2019)

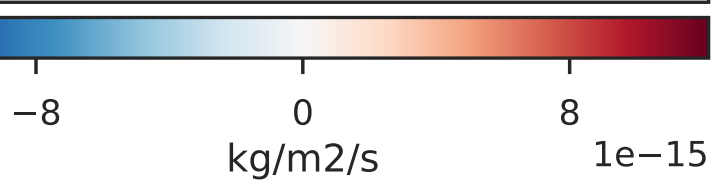
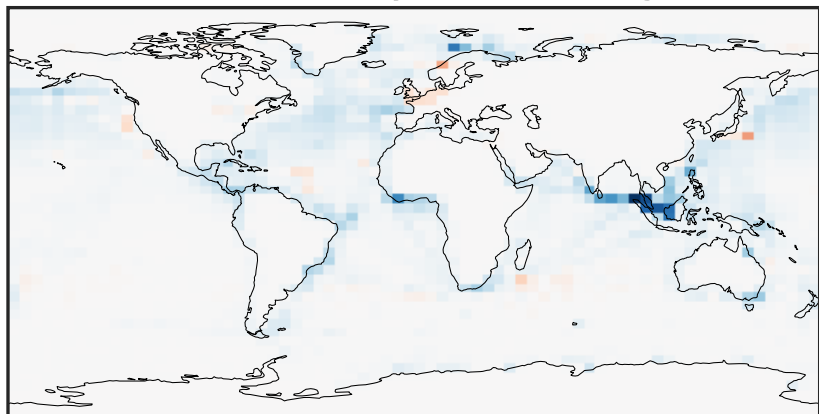
14.2.0-rc.2 (Ref)  
4.0x5.0



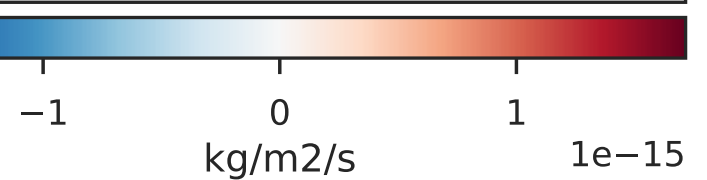
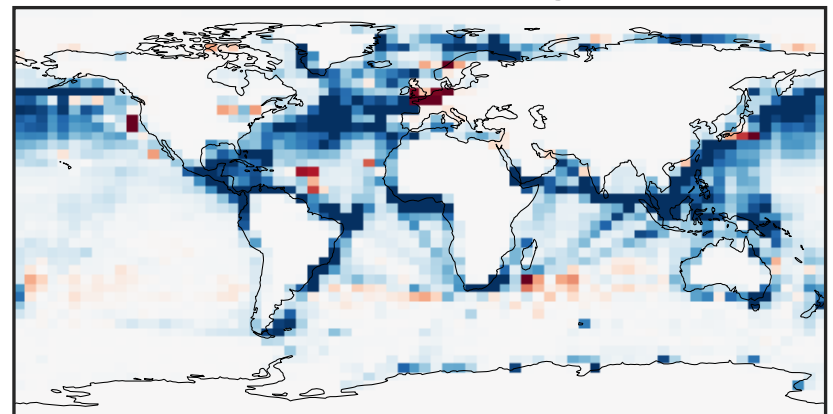
14.3.0-rc.0 (Dev)  
4.0x5.0



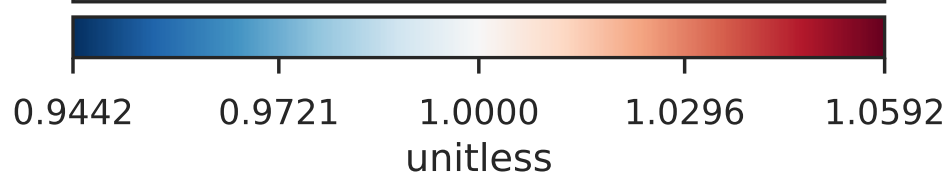
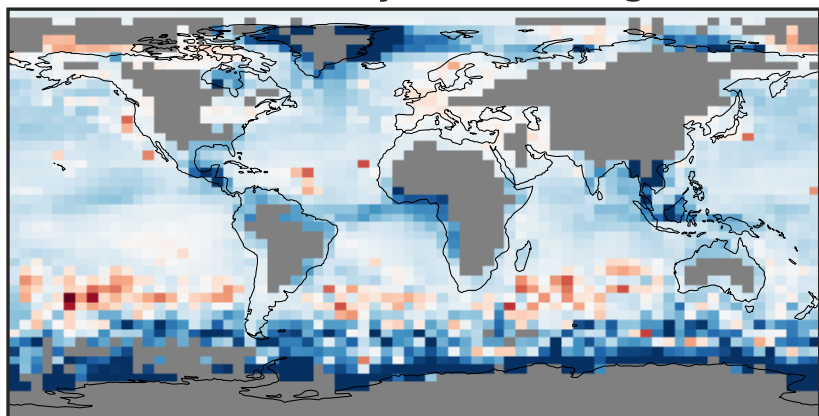
Difference  
Dev - Ref, Dynamic Range



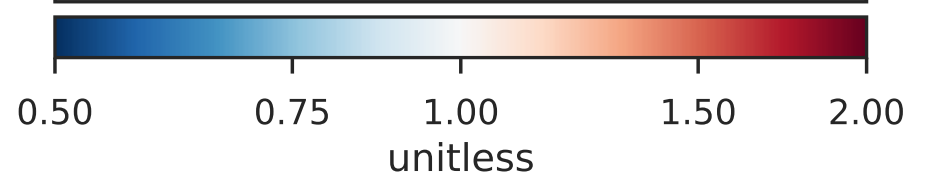
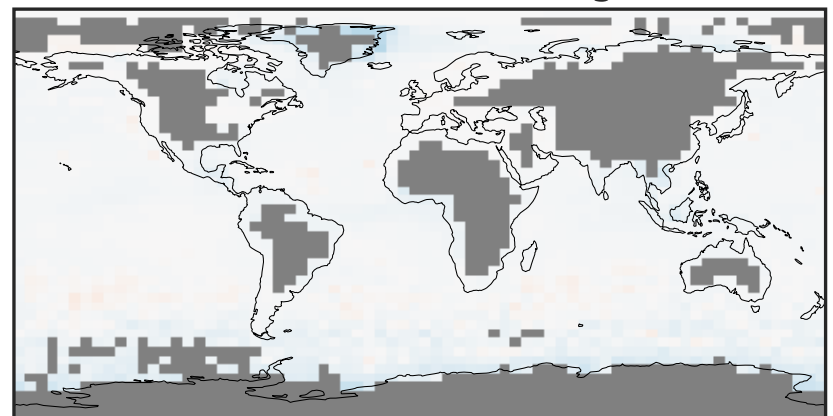
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

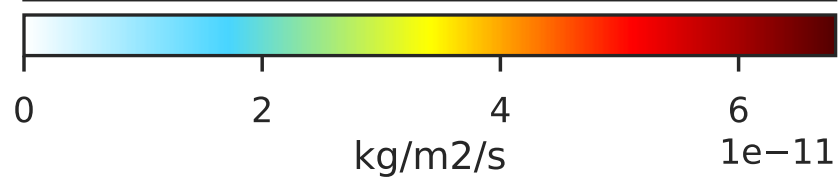
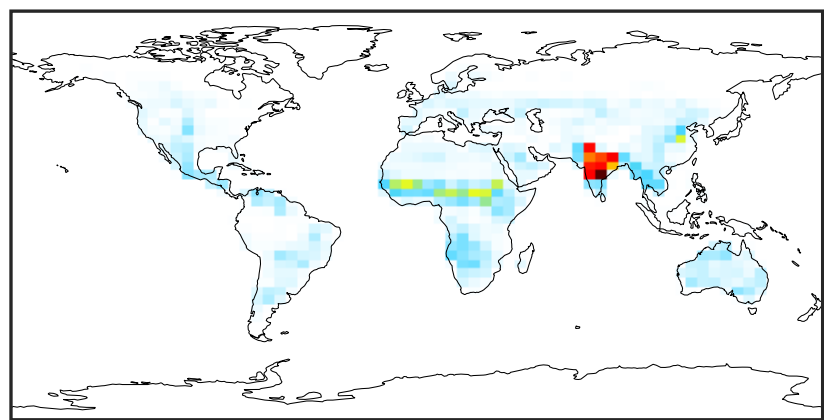


Ratio  
Dev/Ref, Fixed Range

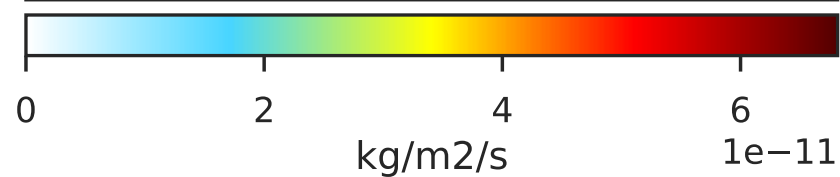
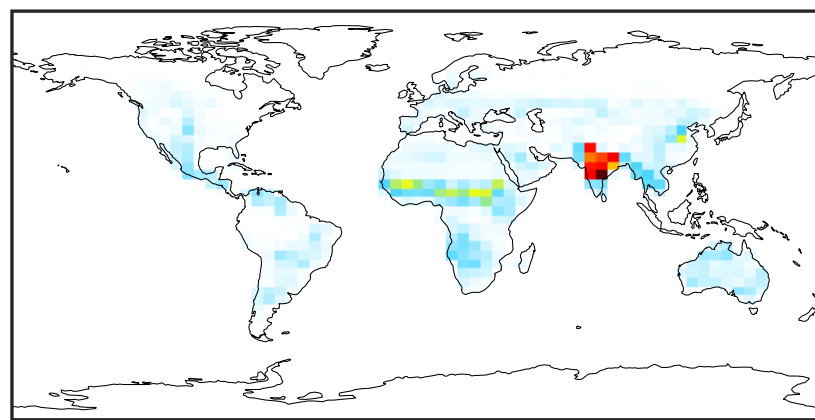


# EmisNO\_Soil (Apr2019)

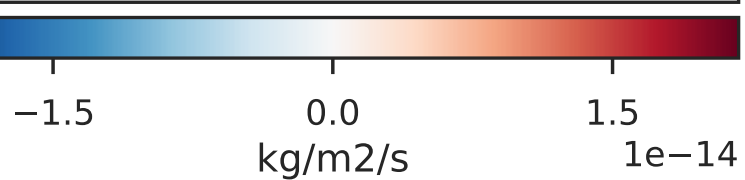
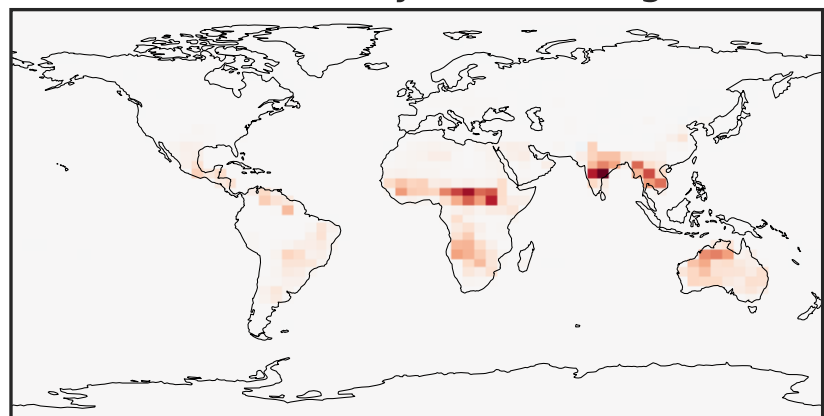
14.2.0-rc.2 (Ref)  
4.0x5.0



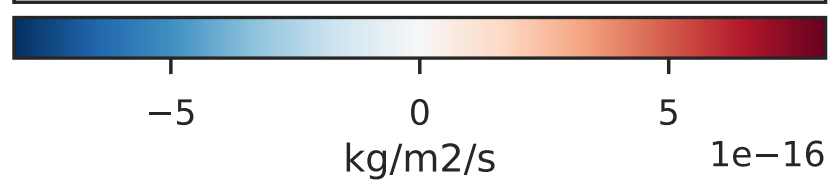
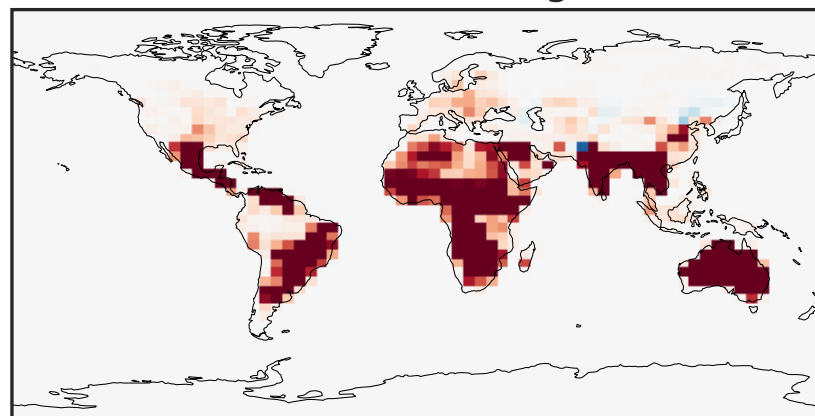
14.3.0-rc.0 (Dev)  
4.0x5.0



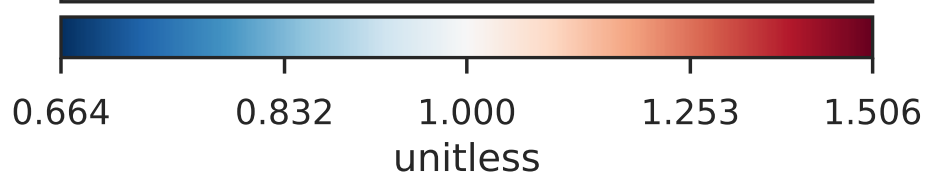
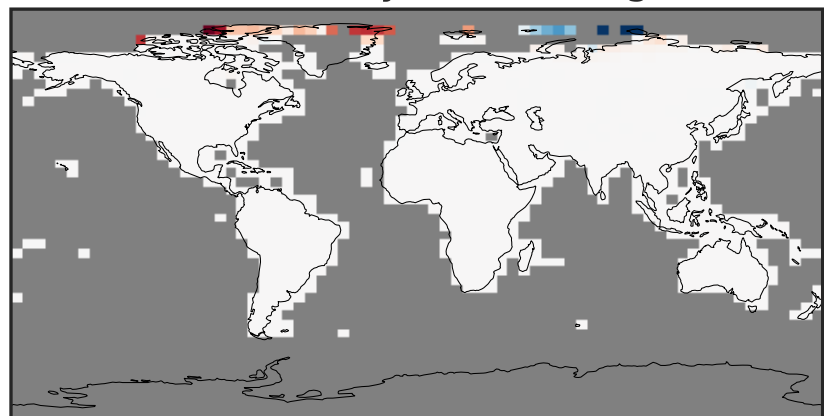
Difference  
Dev - Ref, Dynamic Range



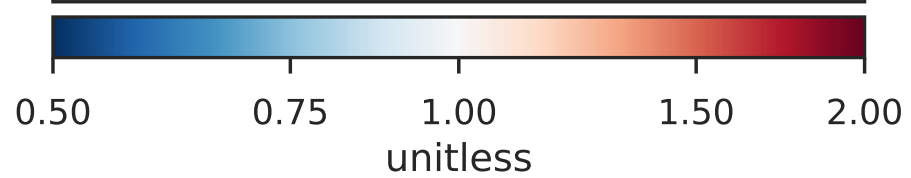
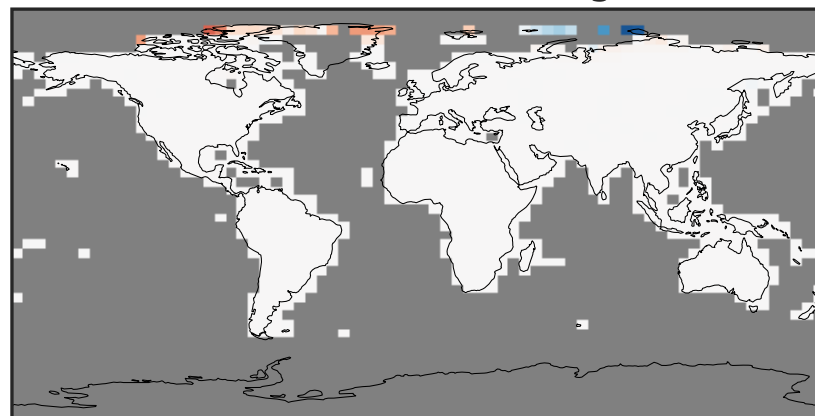
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



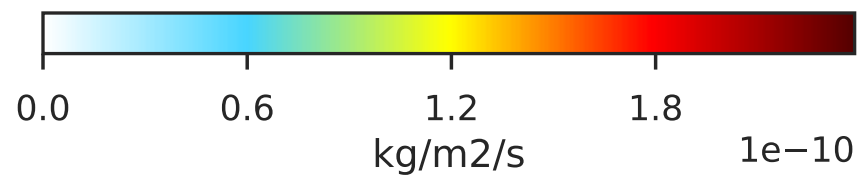
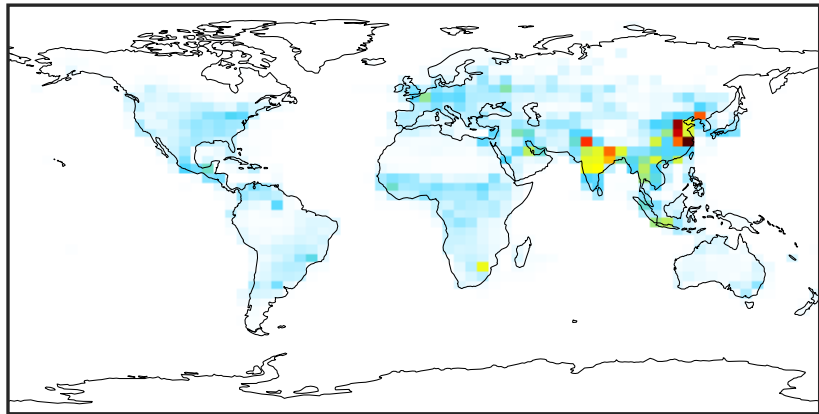
Ratio  
Dev/Ref, Fixed Range



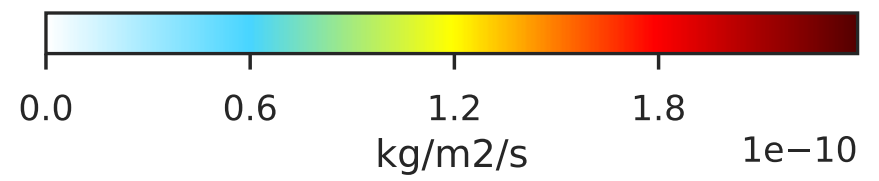
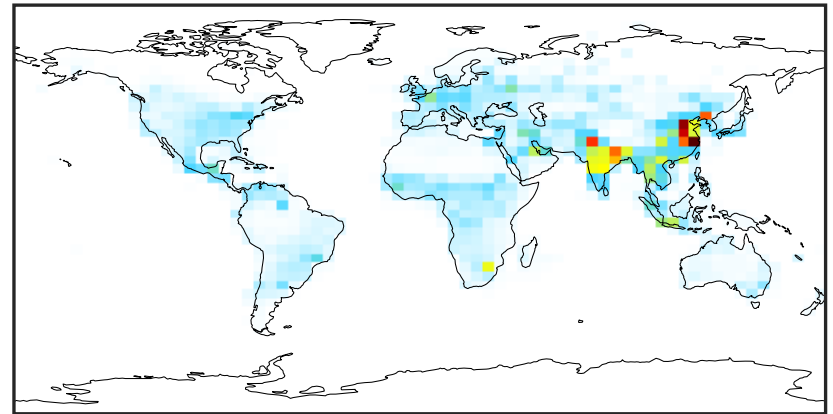


# EmisNO\_Total (Apr2019)

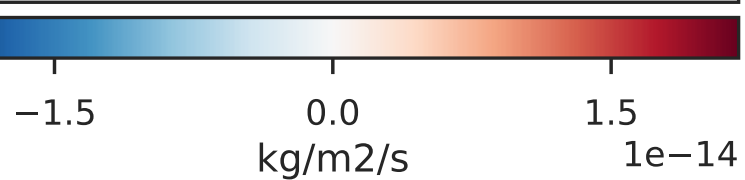
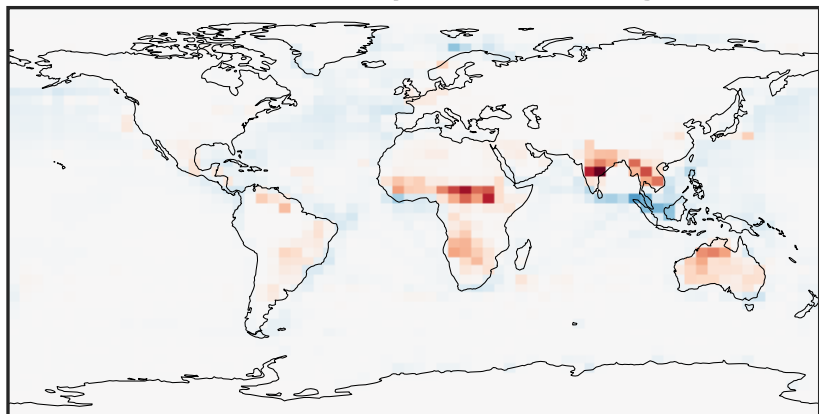
14.2.0-rc.2 (Ref)  
4.0x5.0



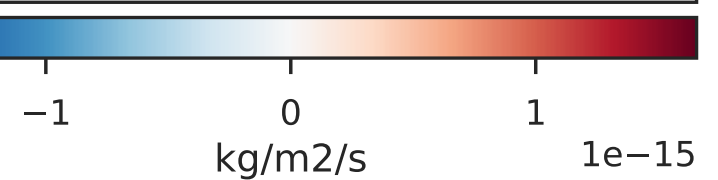
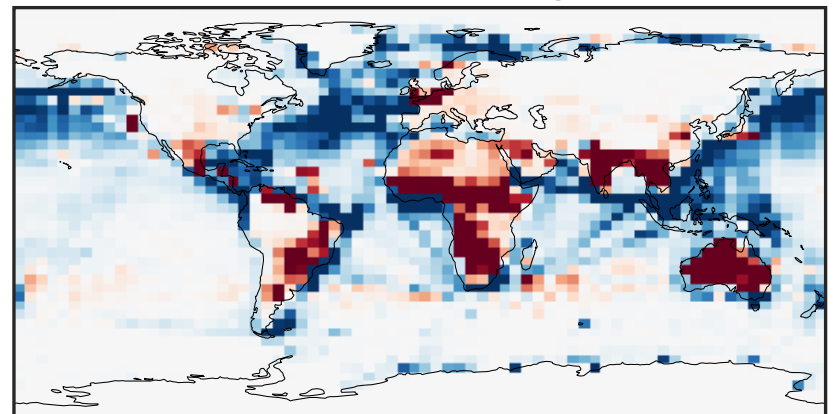
14.3.0-rc.0 (Dev)  
4.0x5.0



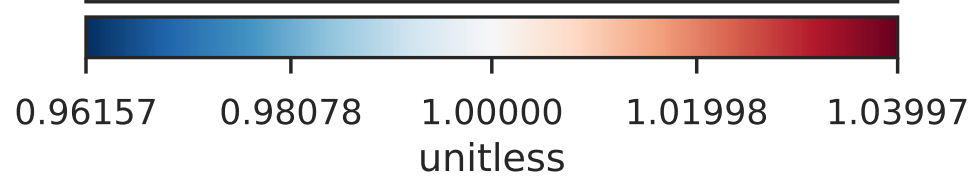
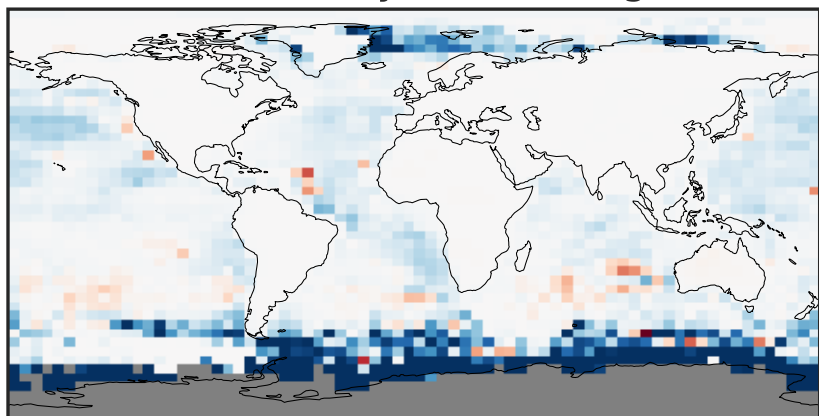
Difference  
Dev - Ref, Dynamic Range



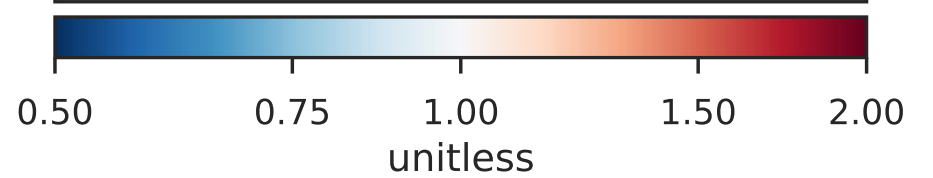
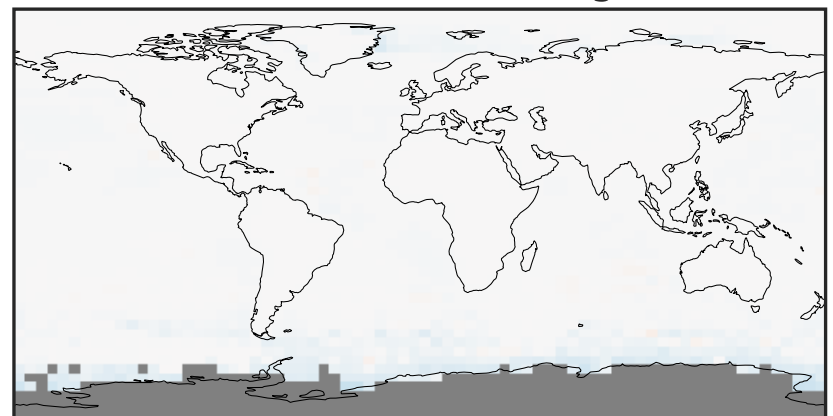
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

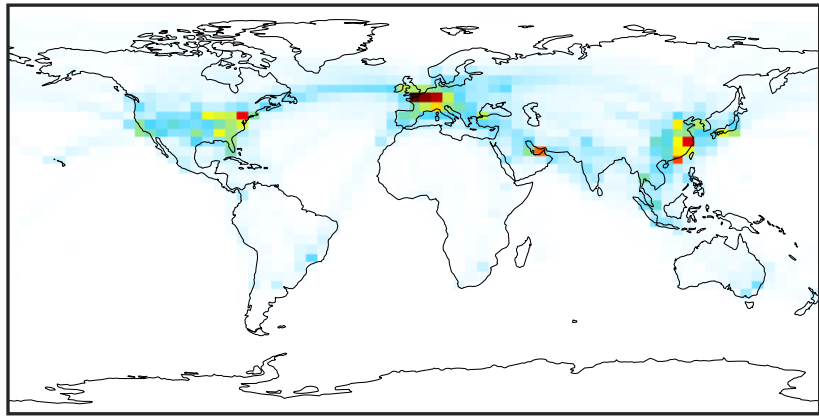


Ratio  
Dev/Ref, Fixed Range



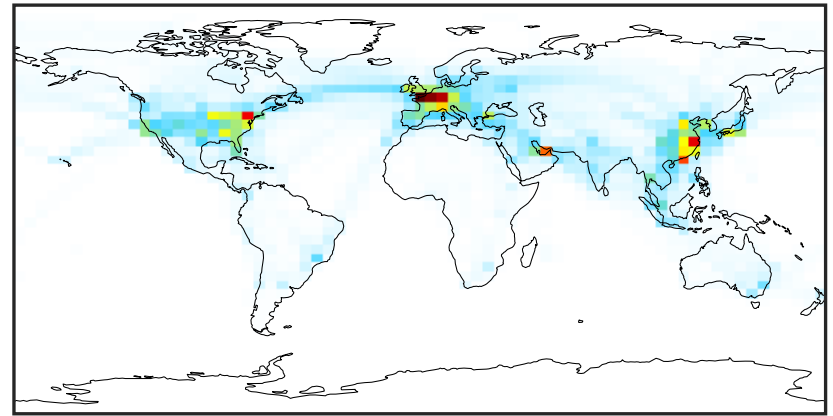
# EmisNO2\_Aircraft (Apr2019)

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



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-12

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



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-12

Difference  
Dev - Ref, Dynamic Range



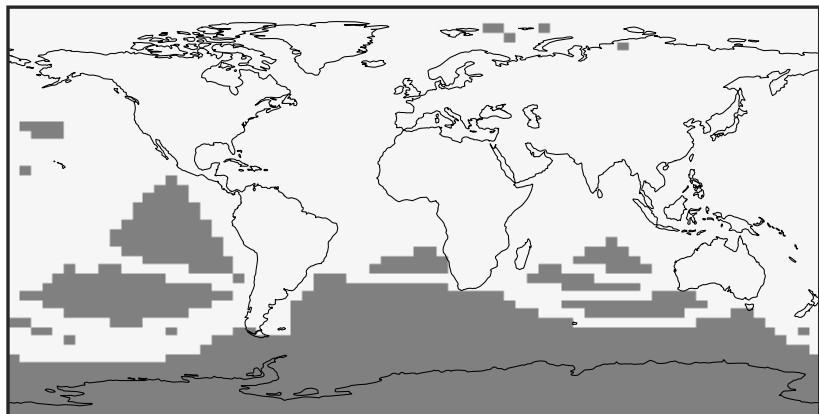
Zero throughout domain  
kg/m<sup>2</sup>/s

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



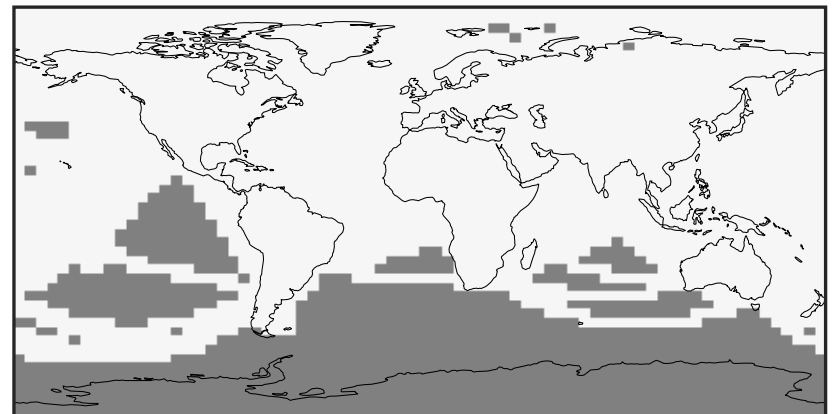
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

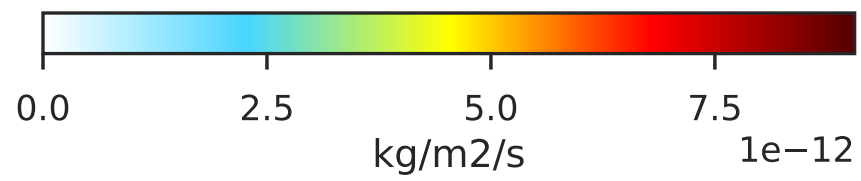
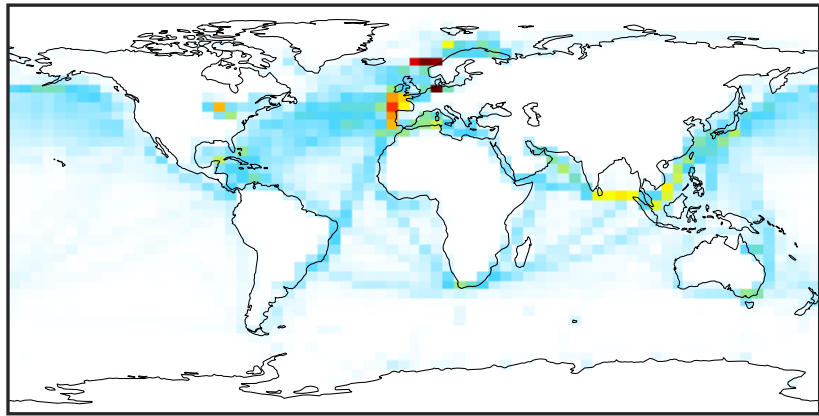
Ratio  
Dev/Ref, Fixed Range



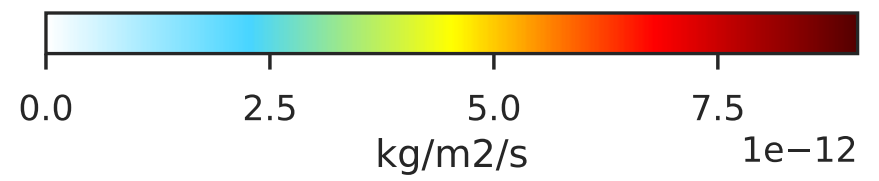
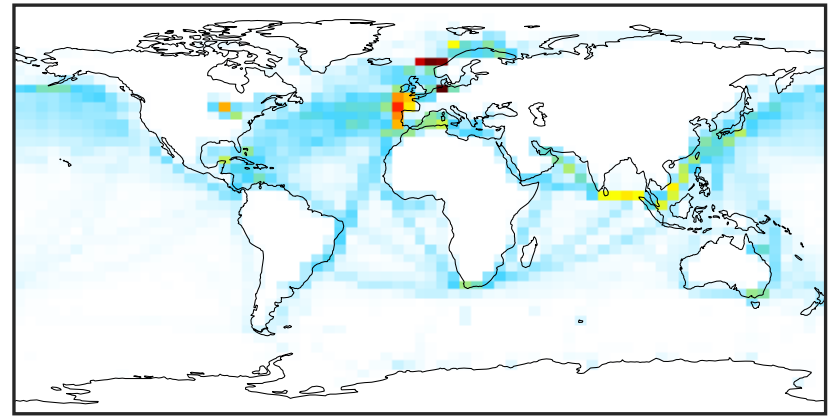
Ref and Dev equal throughout domain  
unitless

# EmisNO2\_Ship (Apr2019)

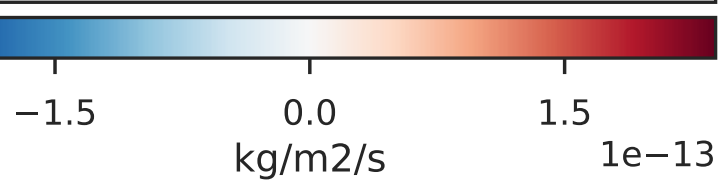
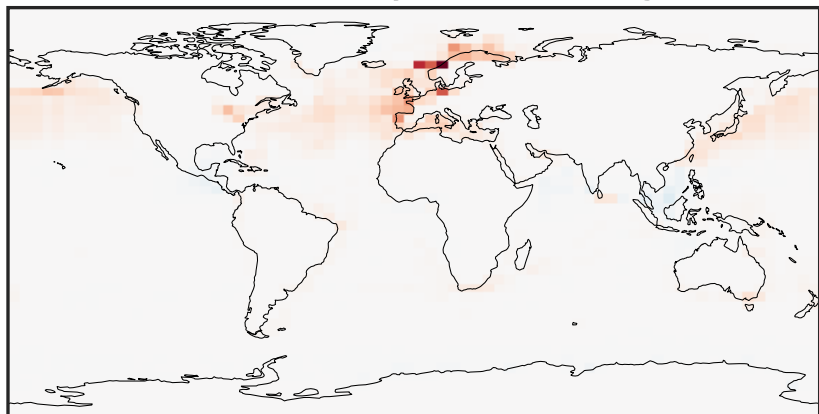
14.2.0-rc.2 (Ref)  
4.0x5.0



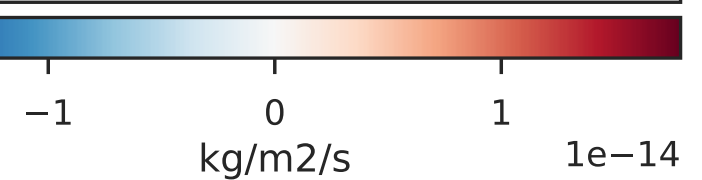
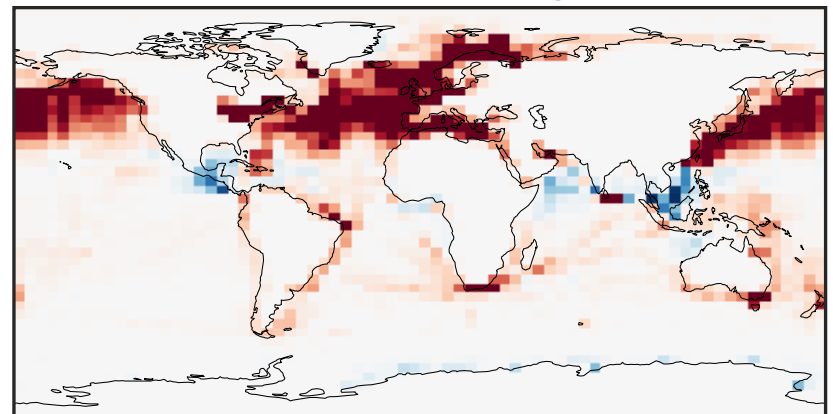
14.3.0-rc.0 (Dev)  
4.0x5.0



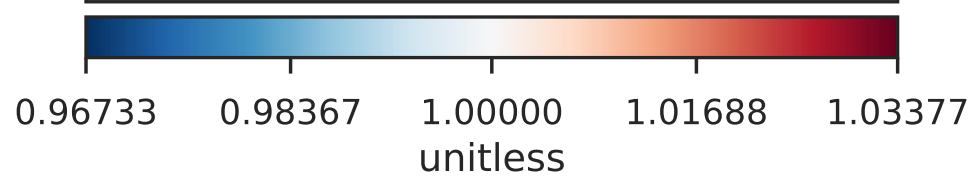
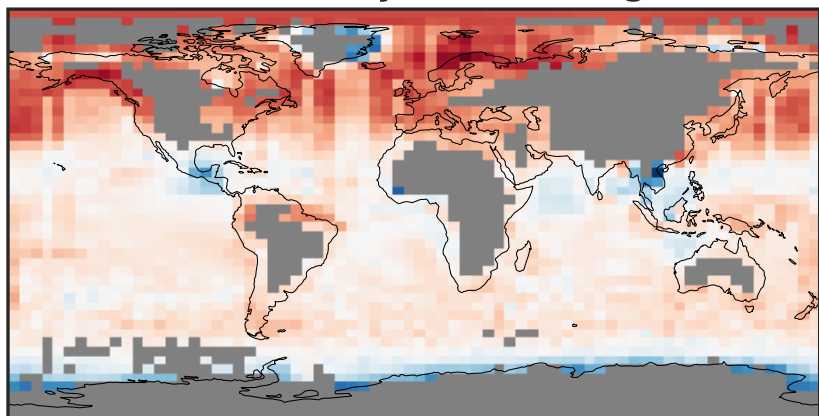
Difference  
Dev - Ref, Dynamic Range



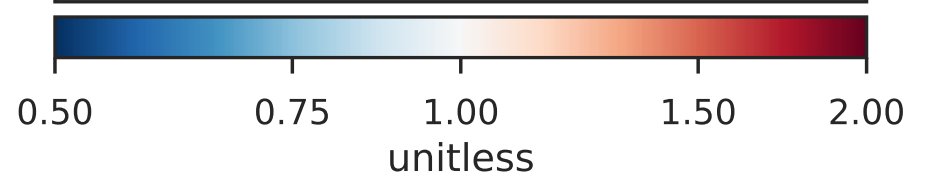
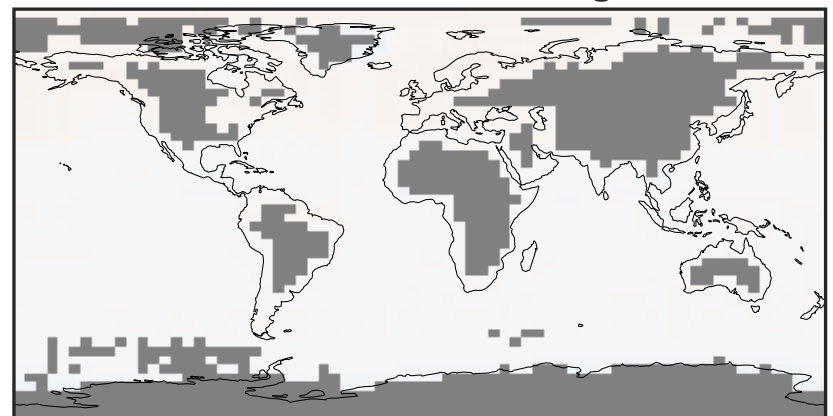
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

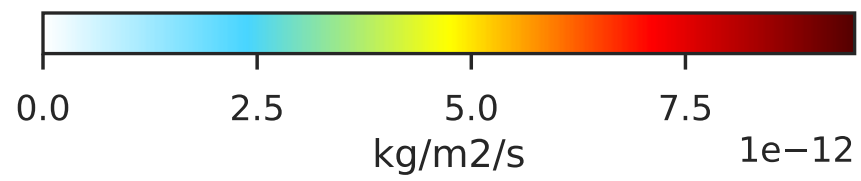
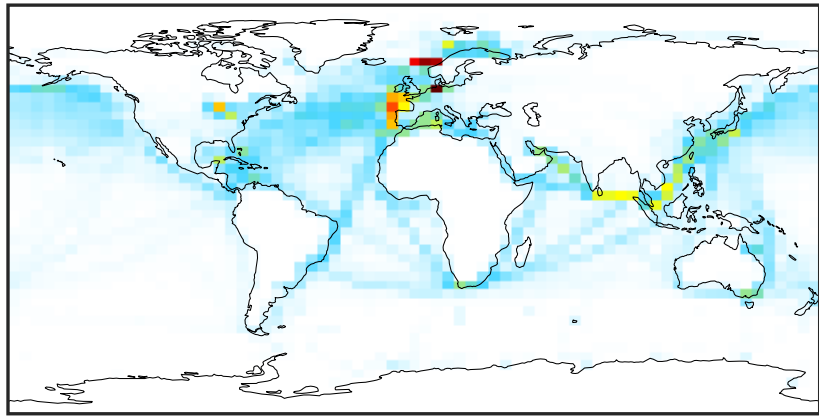


Ratio  
Dev/Ref, Fixed Range

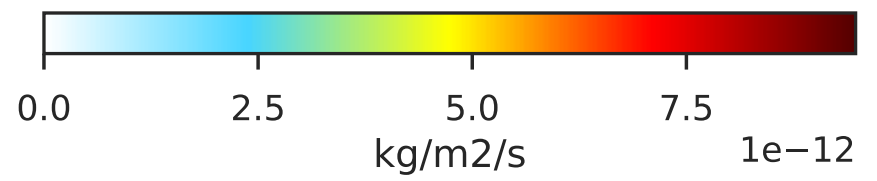
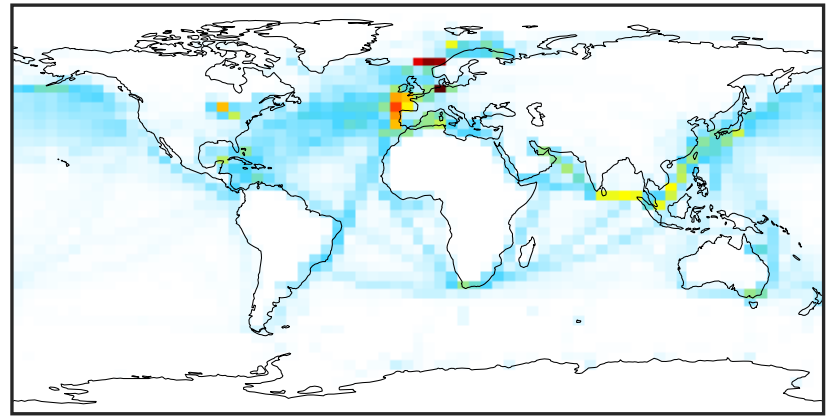


# EmisNO2\_Total (Apr2019)

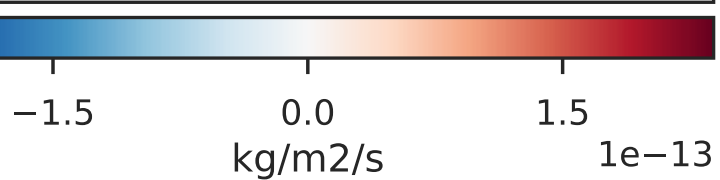
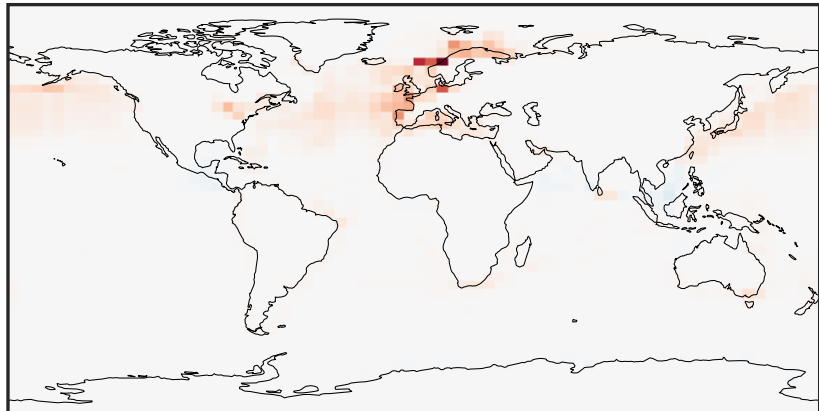
14.2.0-rc.2 (Ref)  
4.0x5.0



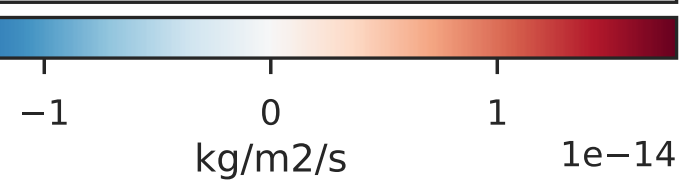
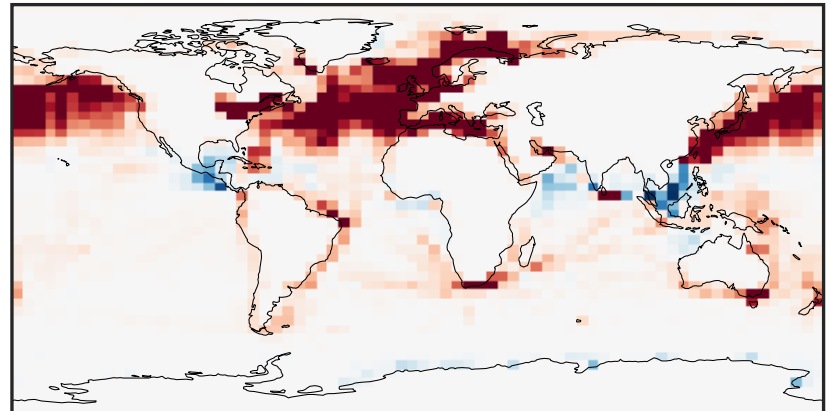
14.3.0-rc.0 (Dev)  
4.0x5.0



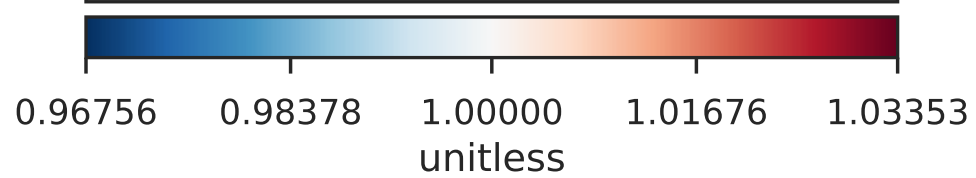
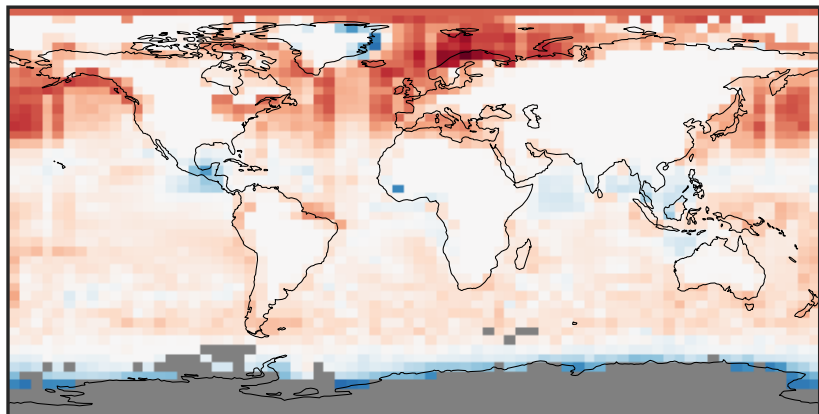
Difference  
Dev - Ref, Dynamic Range



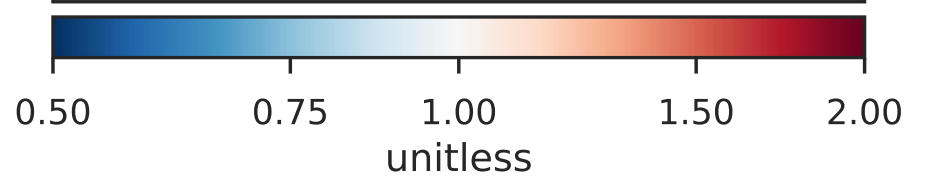
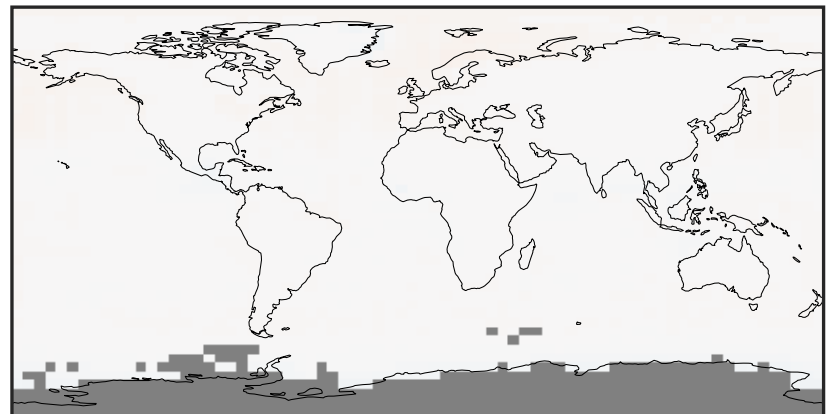
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

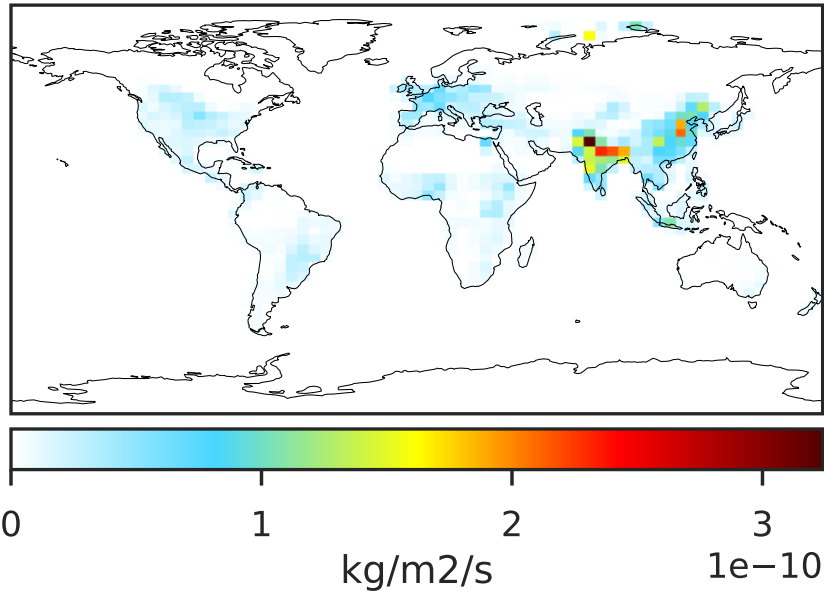


Ratio  
Dev/Ref, Fixed Range

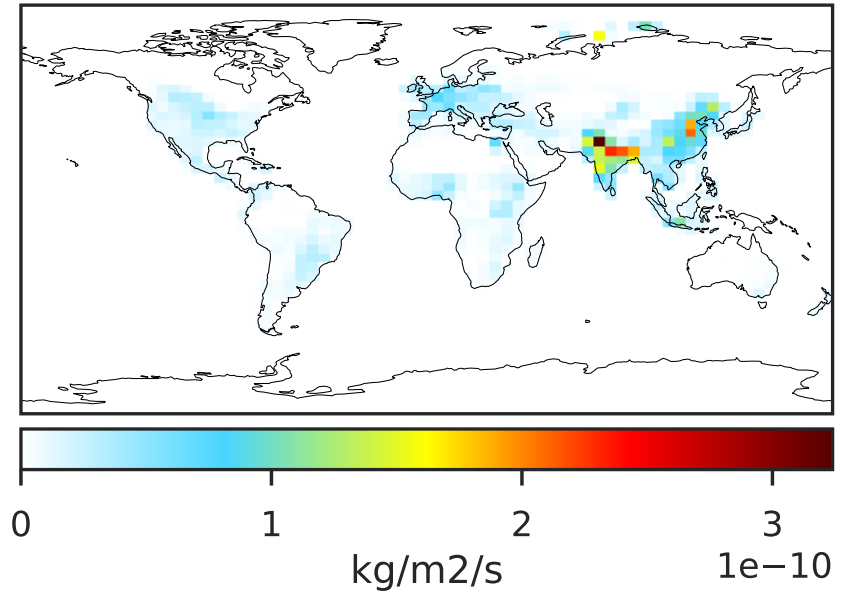


# EmisNH3\_Anthro (Apr2019)

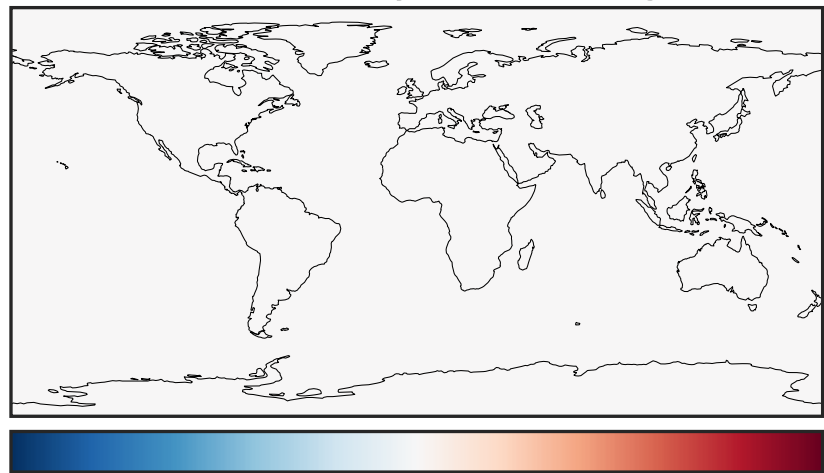
14.2.0-rc.2 (Ref)  
4.0x5.0



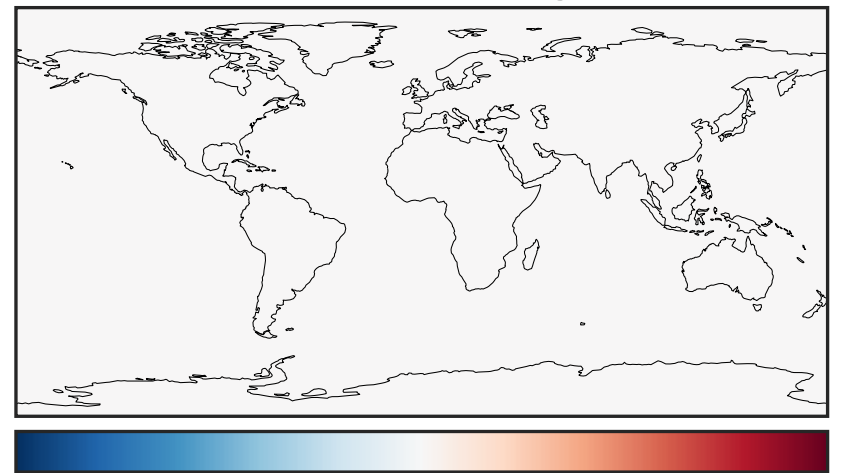
14.3.0-rc.0 (Dev)  
4.0x5.0



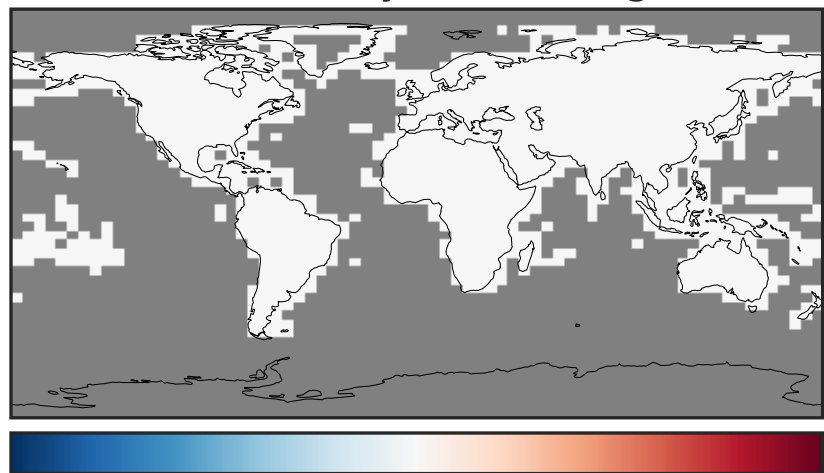
Difference  
Dev - Ref, Dynamic Range



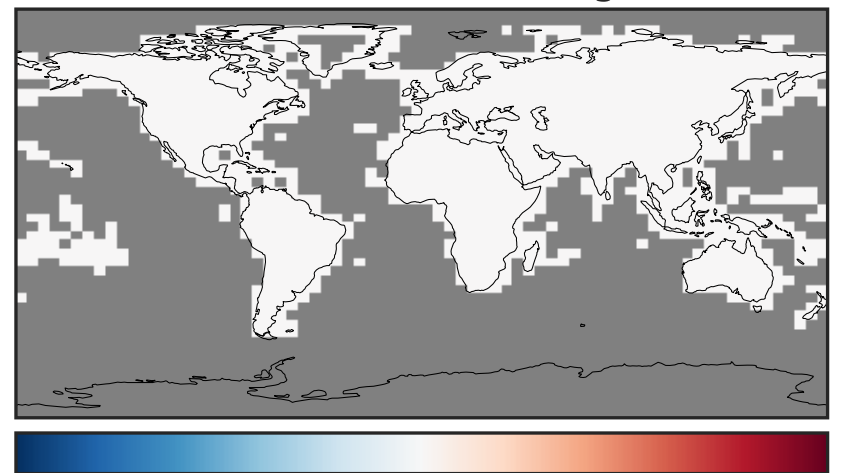
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



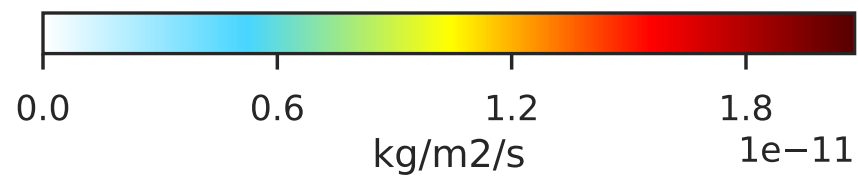
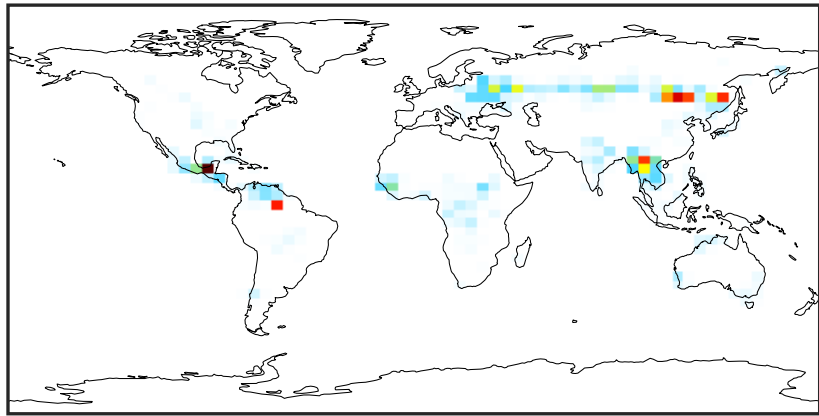
Ratio  
Dev/Ref, Fixed Range



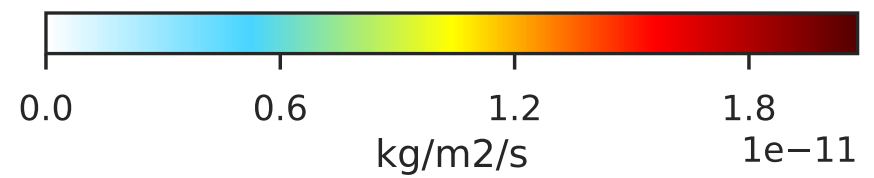
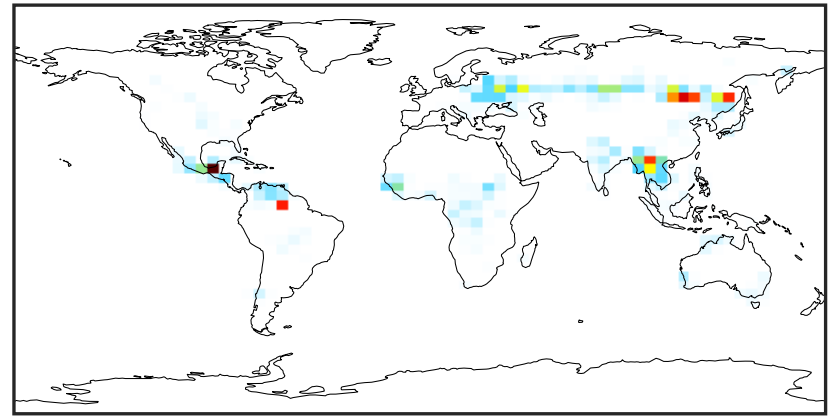


# EmisNH3\_BioBurn (Apr2019)

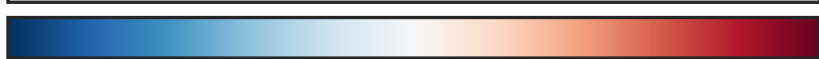
14.2.0-rc.2 (Ref)  
4.0x5.0



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

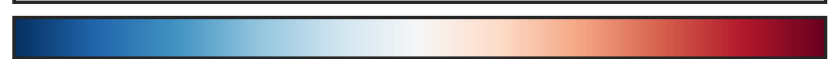


Difference  
Dev - Ref, Dynamic Range



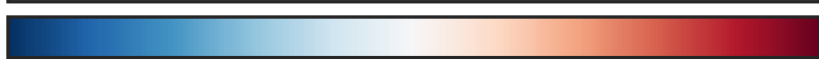
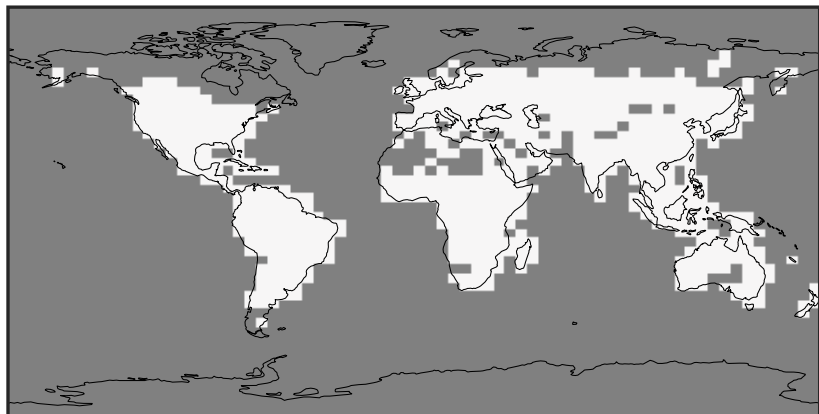
Zero throughout domain  
kg/m2/s

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



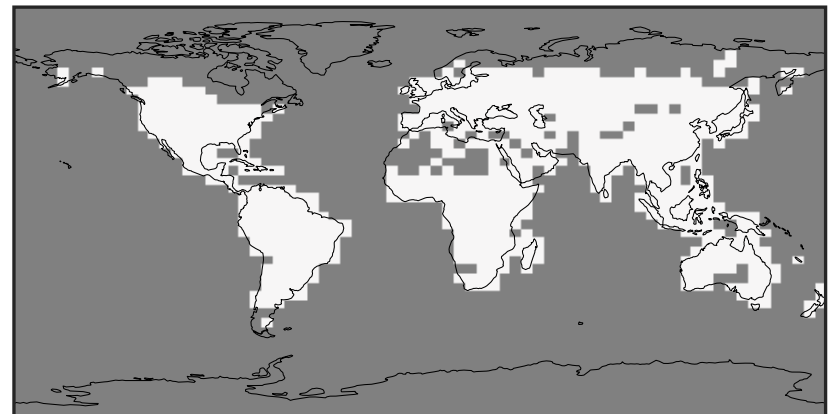
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

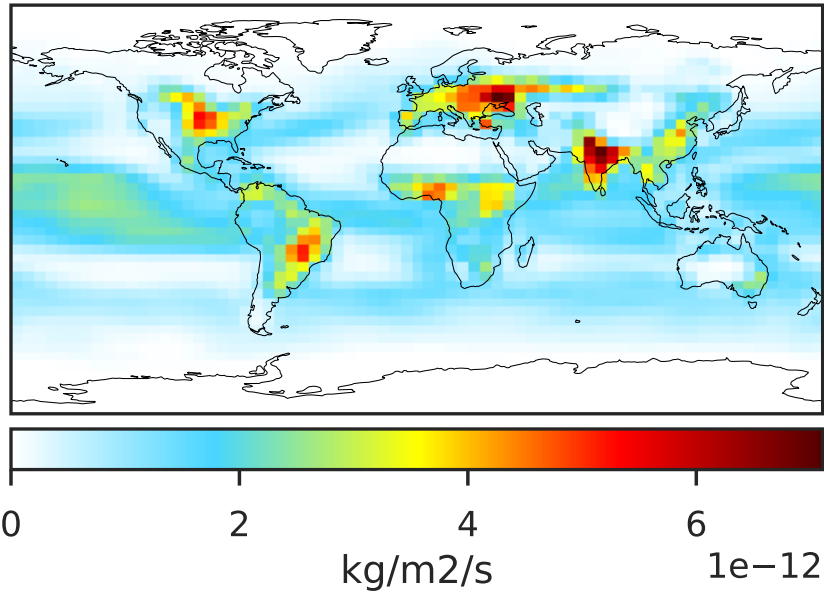
Ratio  
Dev/Ref, Fixed Range



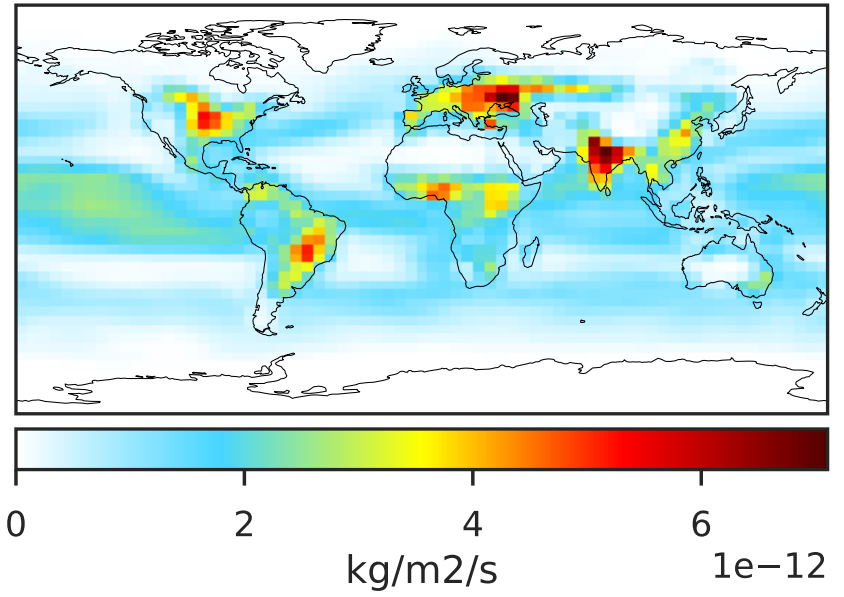
Ref and Dev equal throughout domain  
unitless

# EmisNH3\_Natural (Apr2019)

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



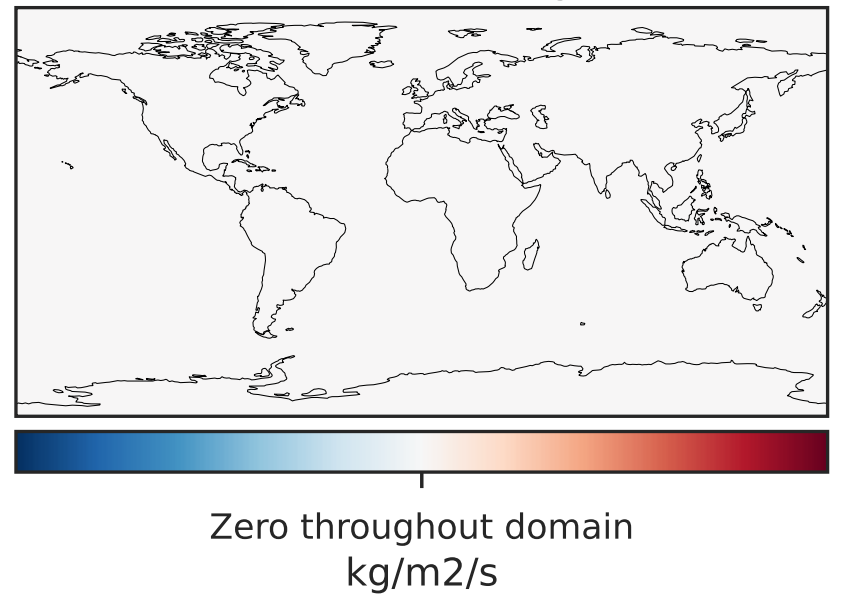
14.3.0-rc.0 (Dev)  
4.0x5.0



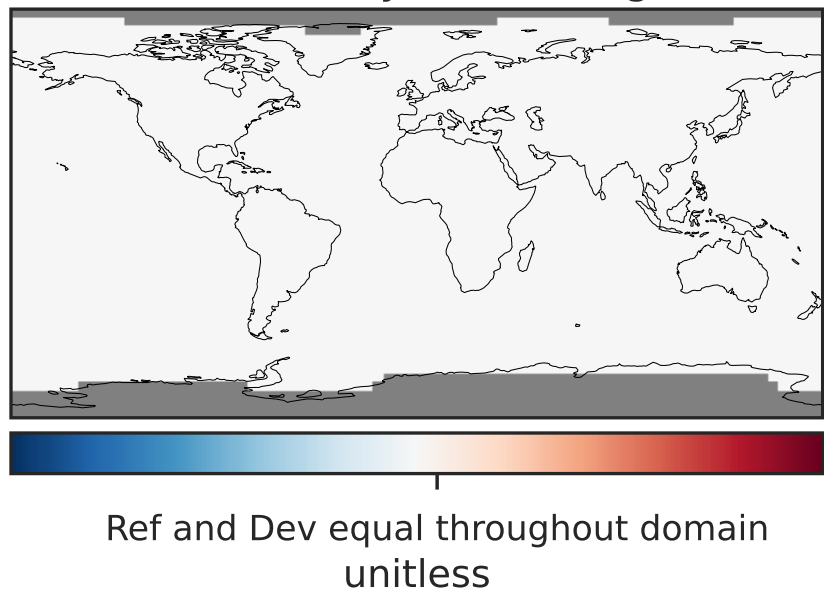
Difference  
Dev - Ref, Dynamic Range



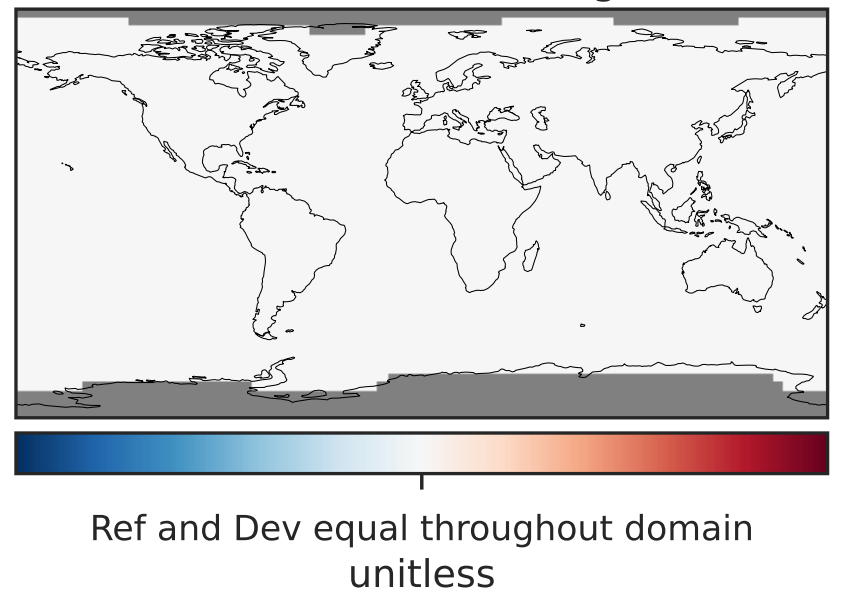
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range



# EmisNH3\_Seabirds (Apr2019)

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



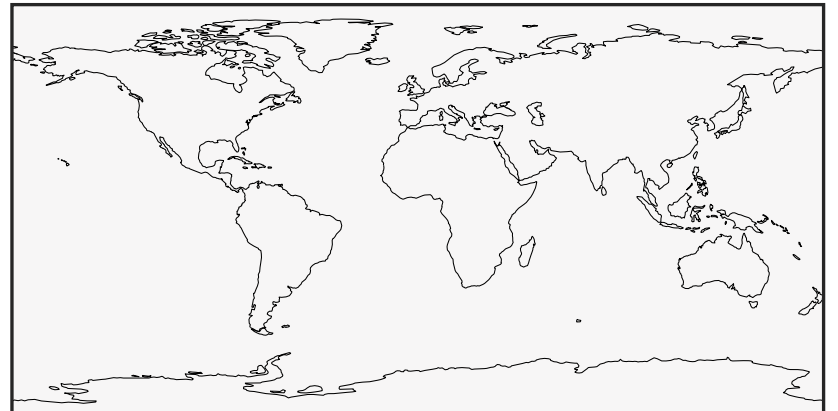
Undefined throughout domain  
unitless

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



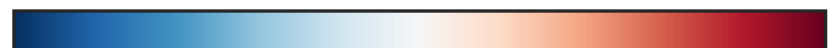
Zero throughout domain  
kg/m<sup>2</sup>/s

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



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

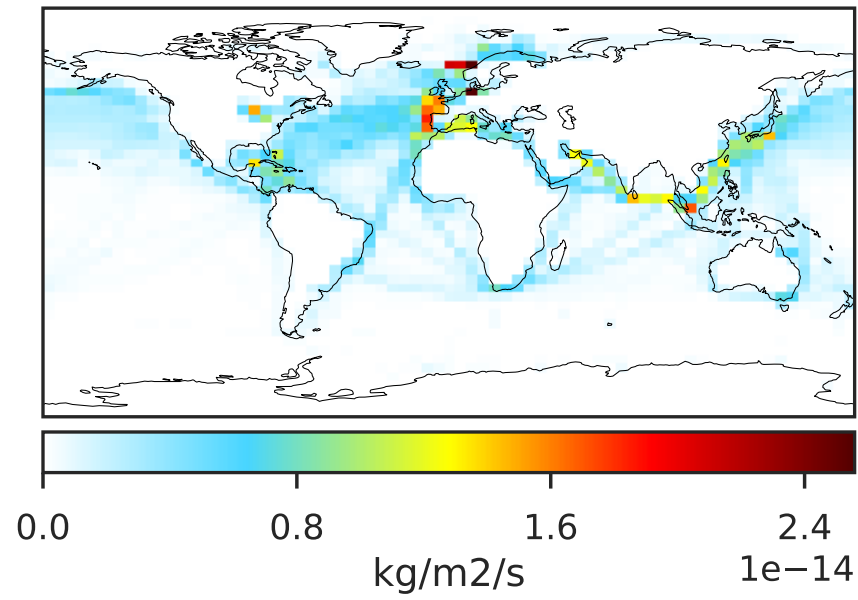
Ratio  
Dev/Ref, Fixed Range



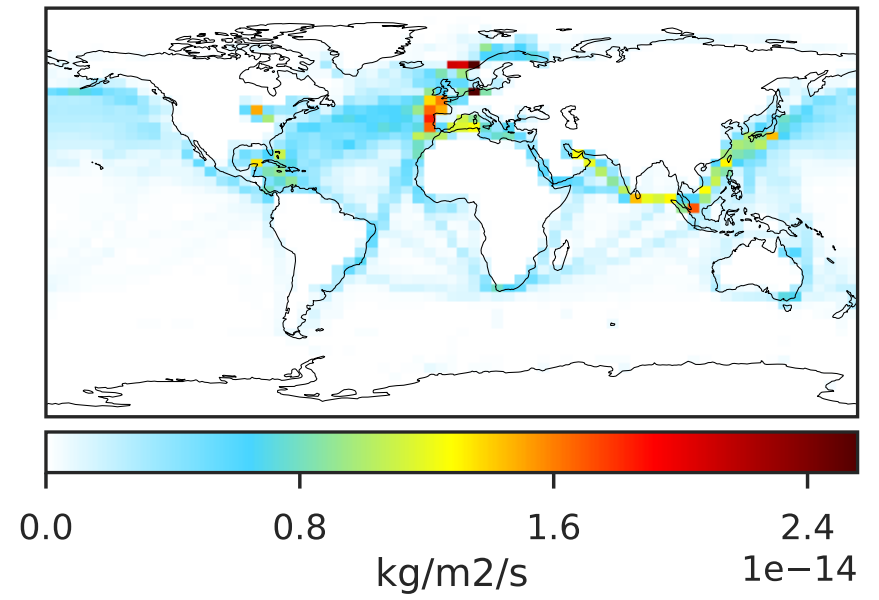
Undefined throughout domain  
unitless

# EmisNH3\_Ship (Apr2019)

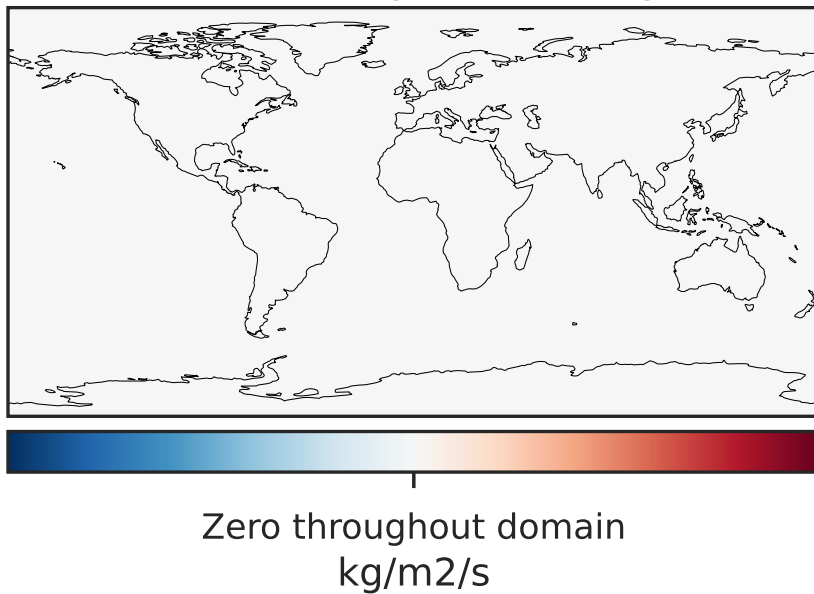
14.2.0-rc.2 (Ref)  
4.0x5.0



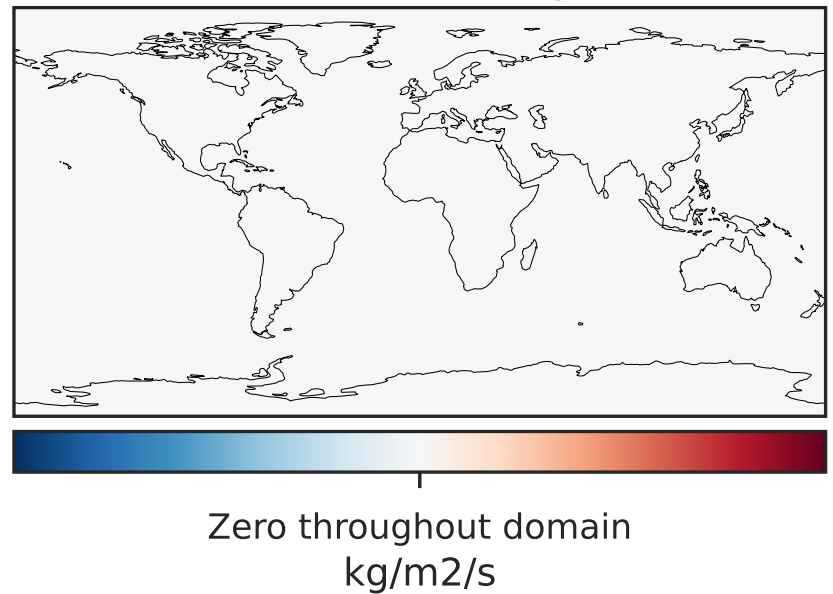
14.3.0-rc.0 (Dev)  
4.0x5.0



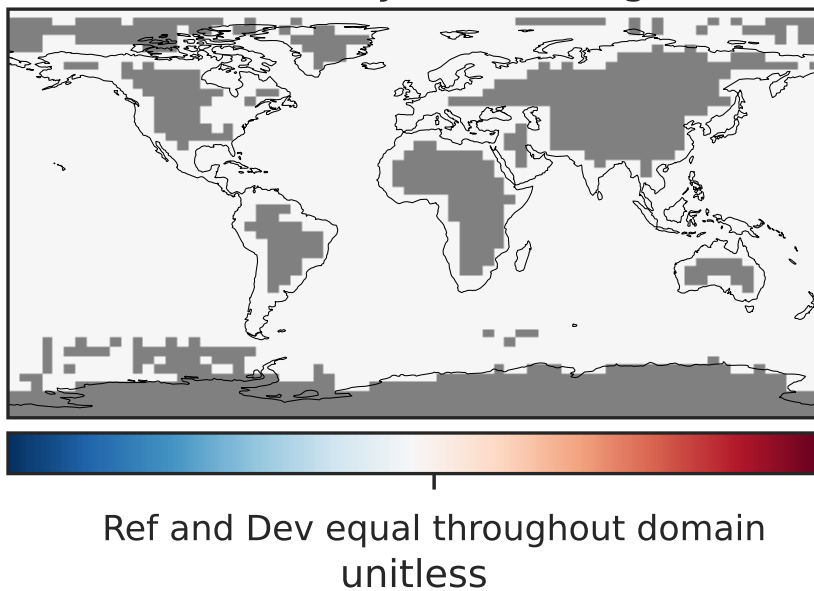
Difference  
Dev - Ref, Dynamic Range



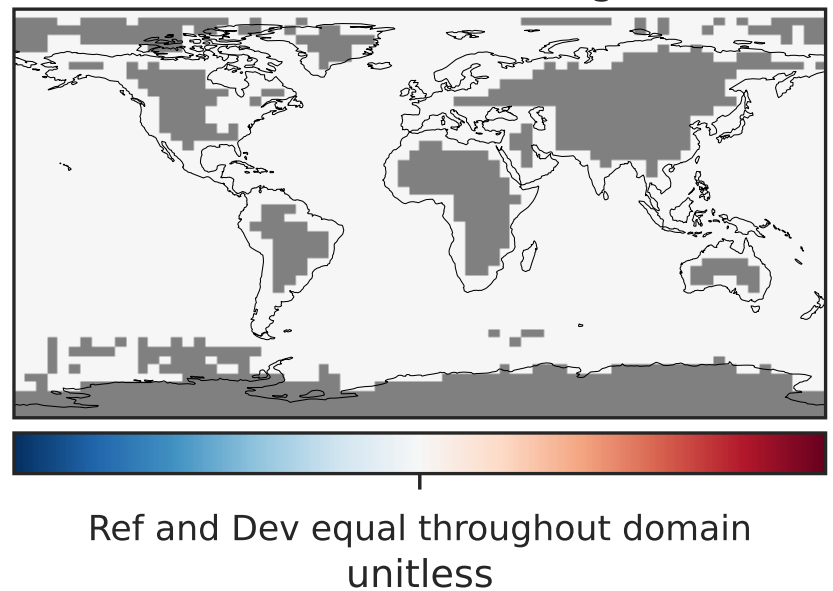
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

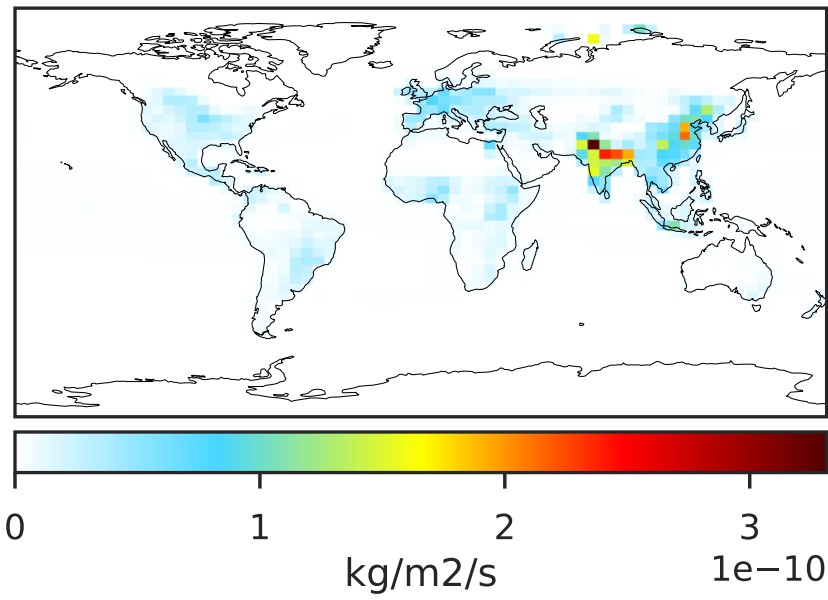


Ratio  
Dev/Ref, Fixed Range

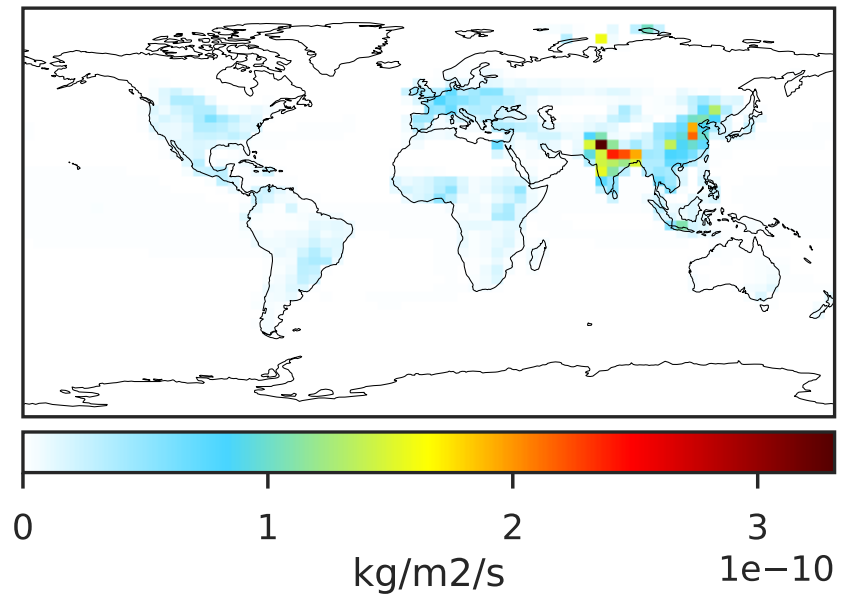


# EmisNH3\_Total (Apr2019)

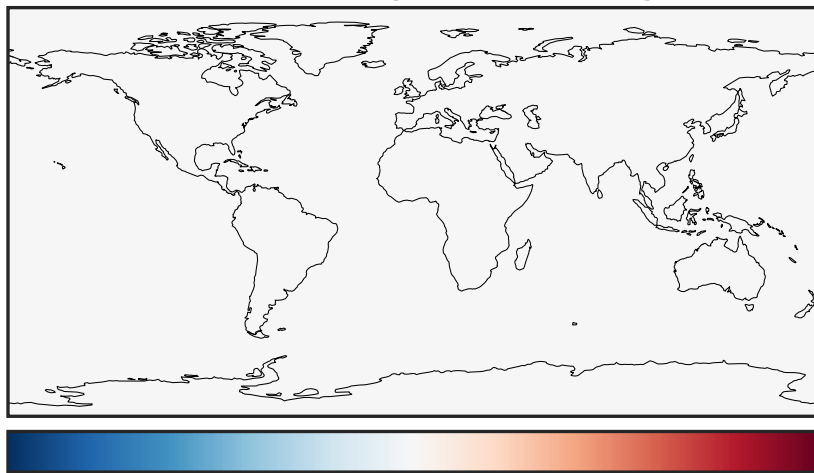
14.2.0-rc.2 (Ref)  
4.0x5.0



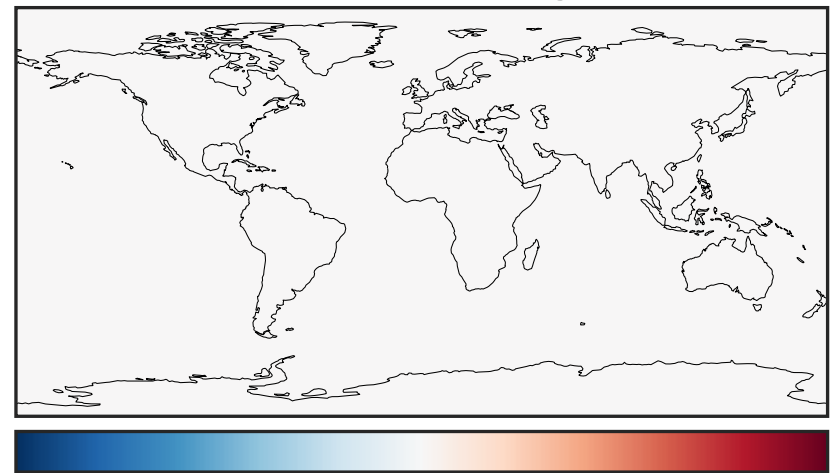
14.3.0-rc.0 (Dev)  
4.0x5.0



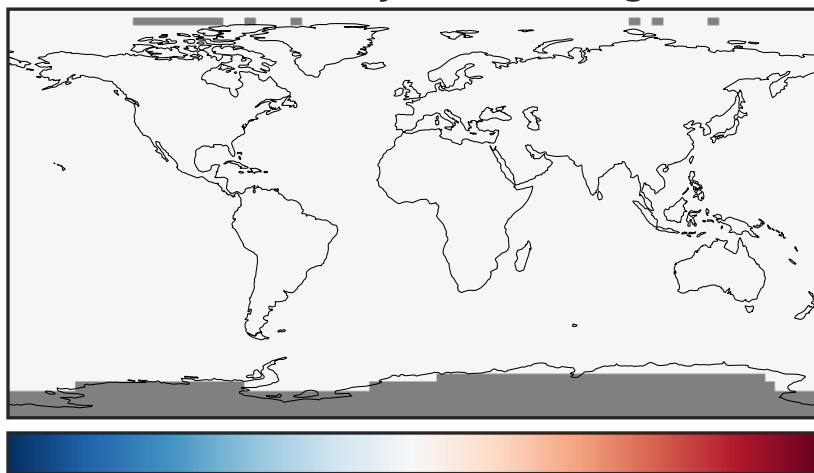
Difference  
Dev - Ref, Dynamic Range



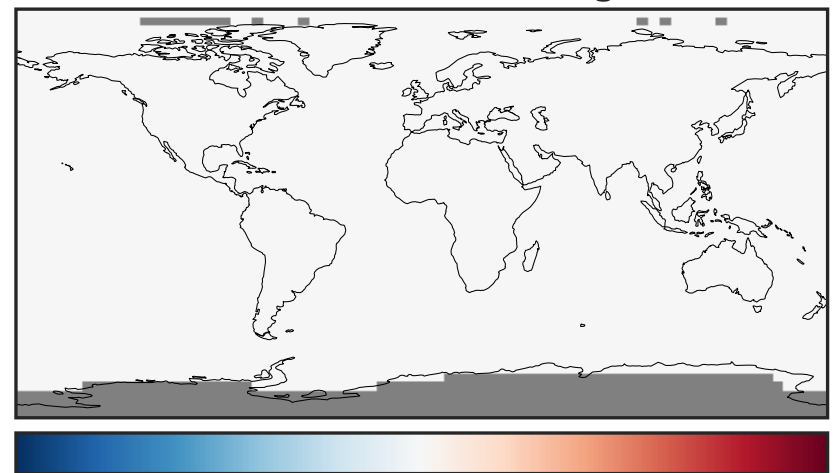
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



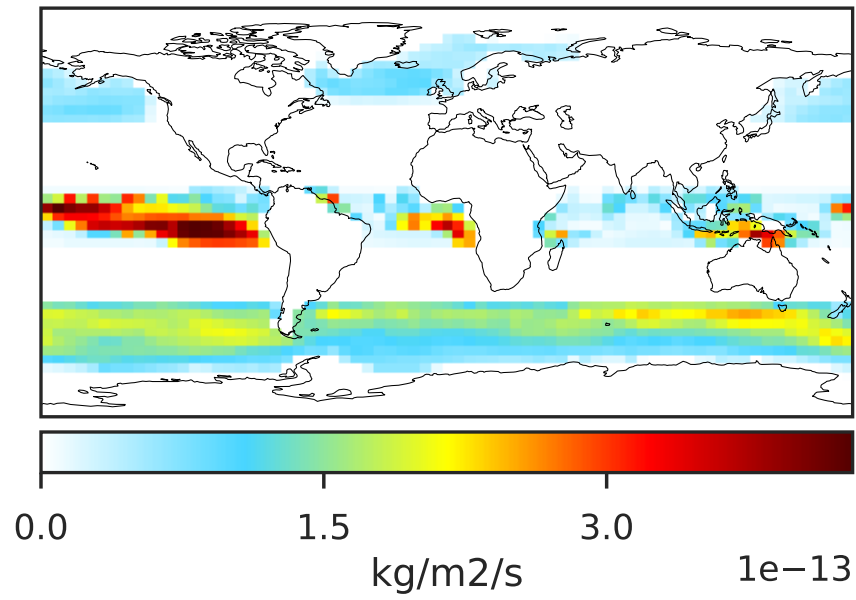
Ratio  
Dev/Ref, Fixed Range



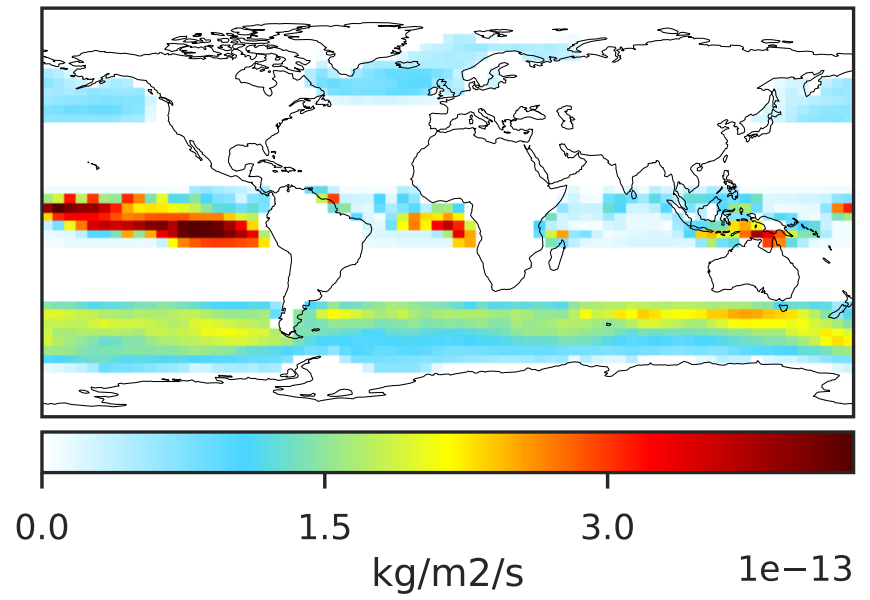


# EmisMENO3\_Ocean (Apr2019)

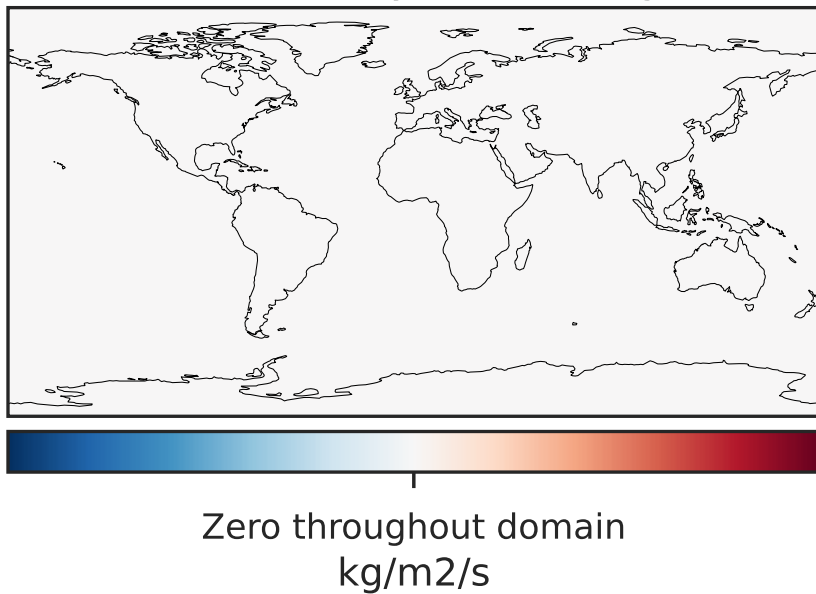
14.2.0-rc.2 (Ref)  
4.0x5.0



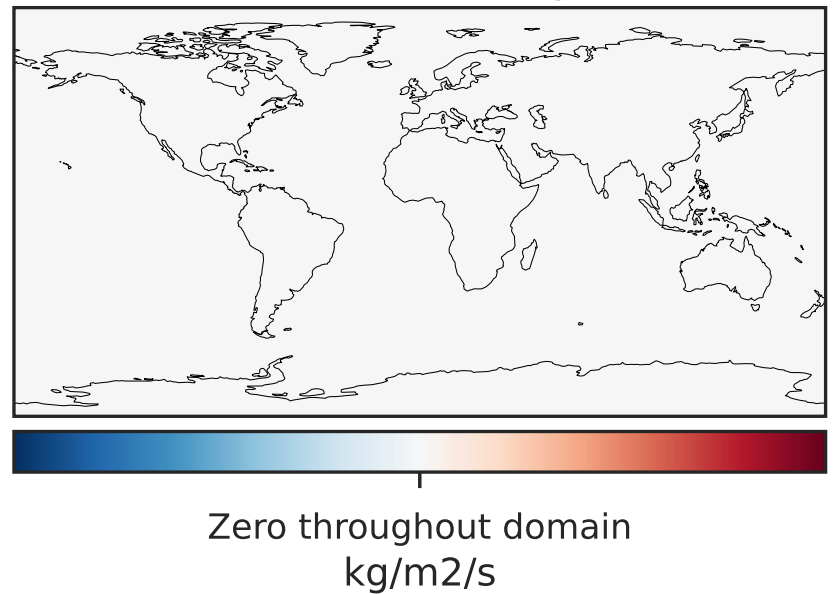
14.3.0-rc.0 (Dev)  
4.0x5.0



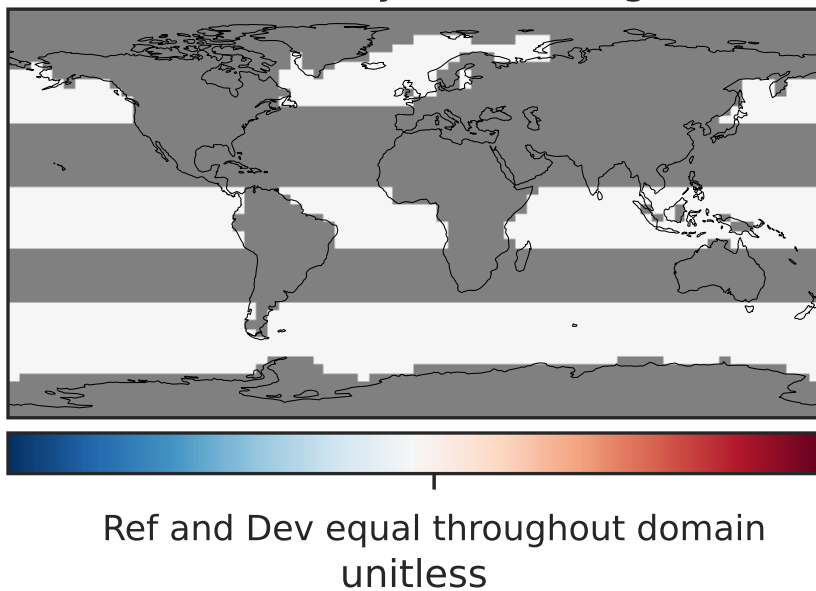
Difference  
Dev - Ref, Dynamic Range



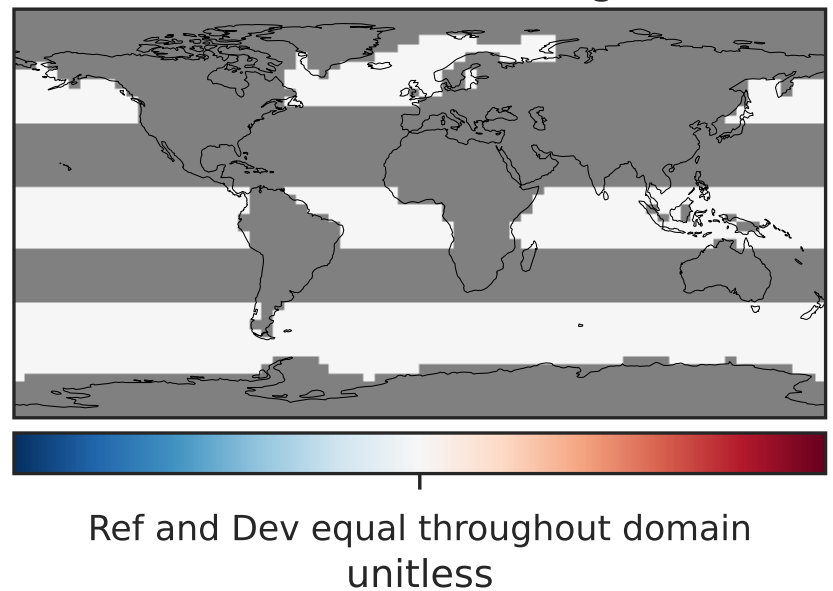
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

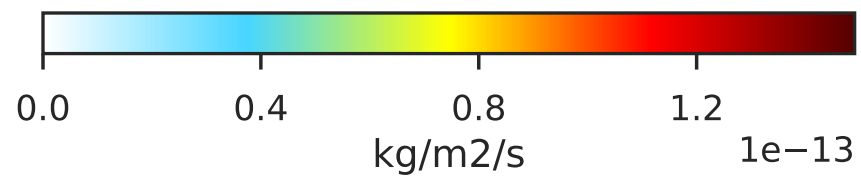
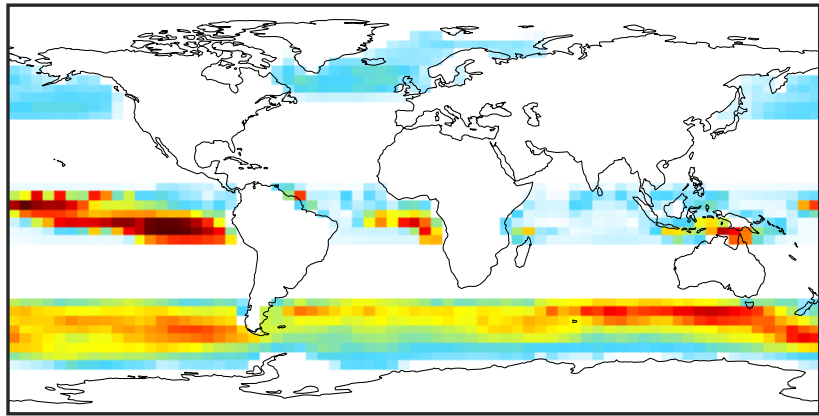


Ratio  
Dev/Ref, Fixed Range

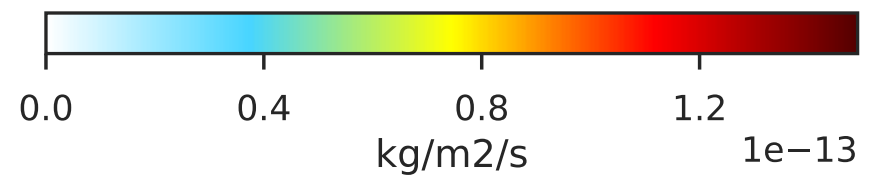
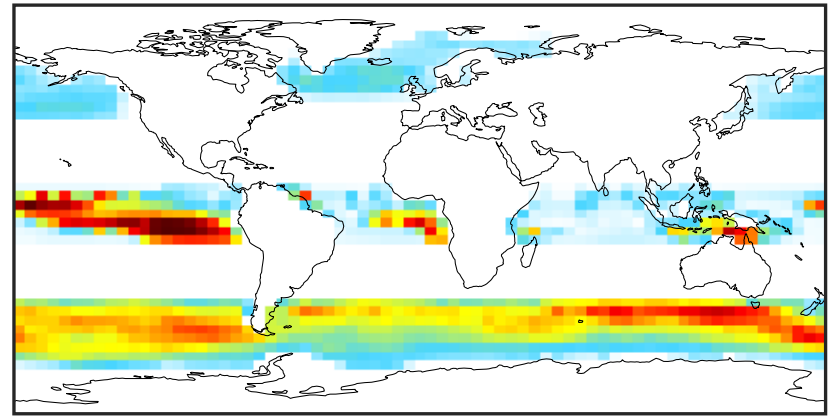


# EmisETNO3\_Ocean (Apr2019)

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



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



Difference  
Dev - Ref, Dynamic Range



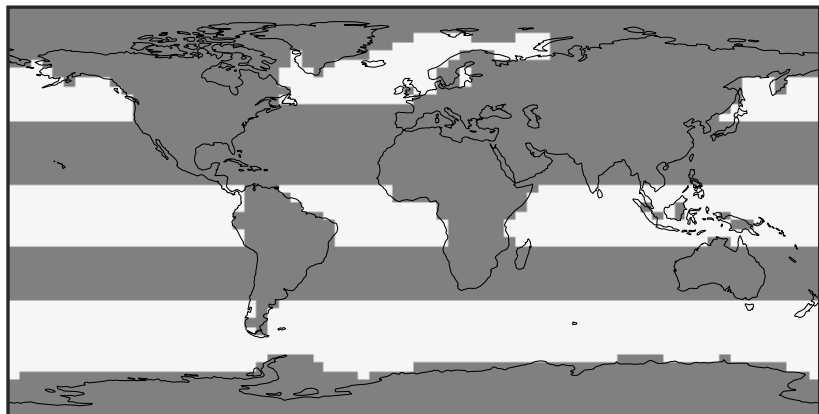
Zero throughout domain  
kg/m2/s

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



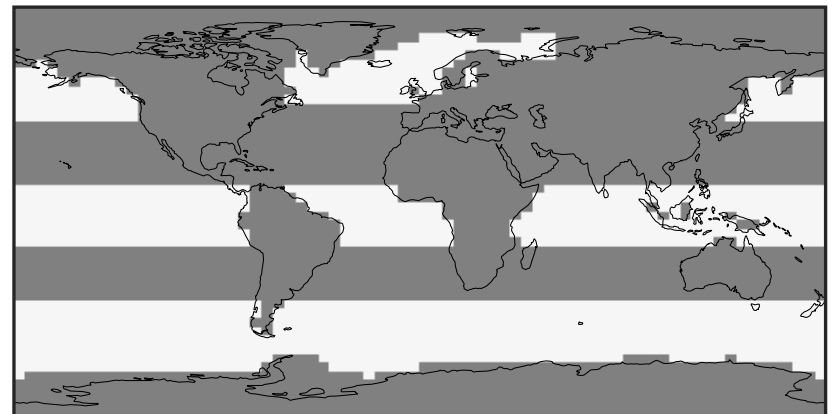
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless