

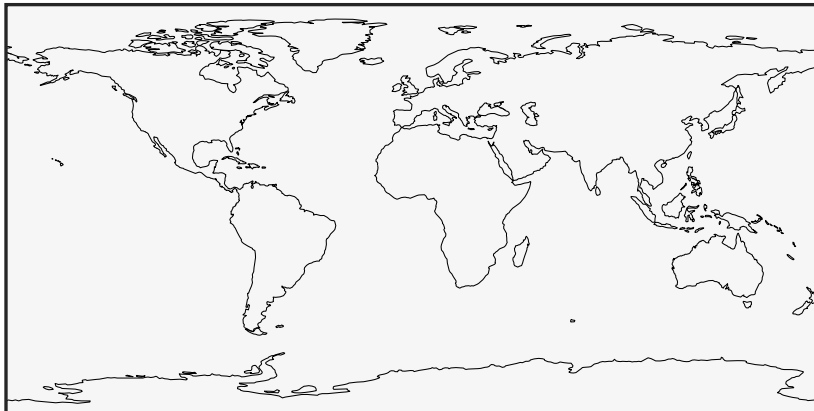
# EmisALD2\_Ship (Jan2019)

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



Zero throughput domain  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



Zero throughput domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



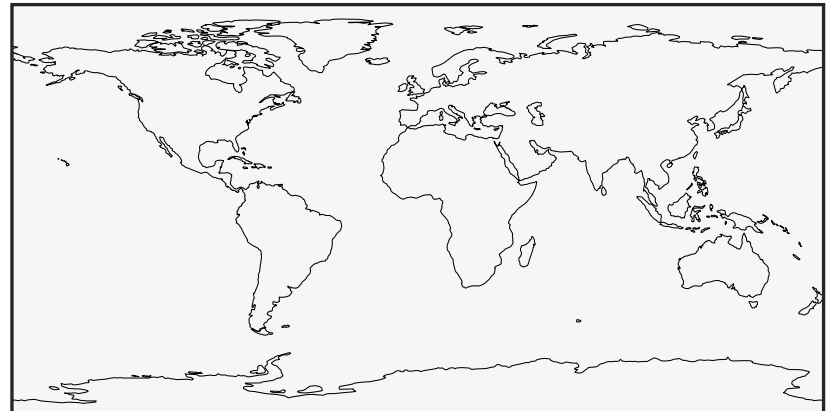
Undefined throughout domain  
unitless

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



Zero throughput domain  
kg/m2/s

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



Zero throughput domain  
kg/m2/s

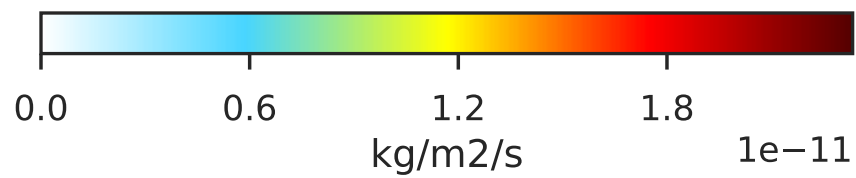
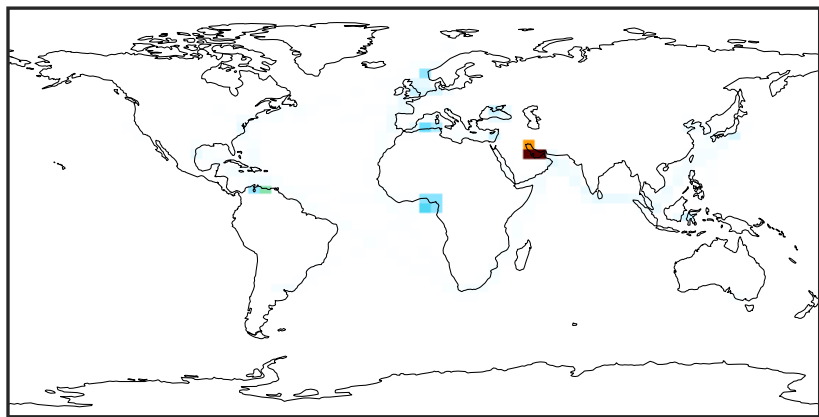
Ratio  
Dev/Ref, Fixed Range



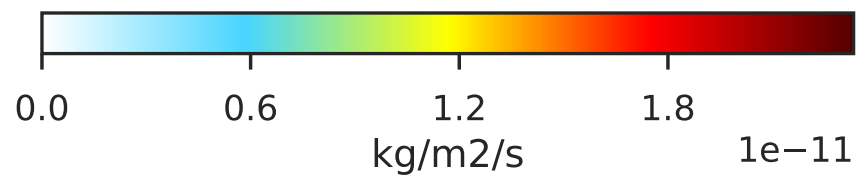
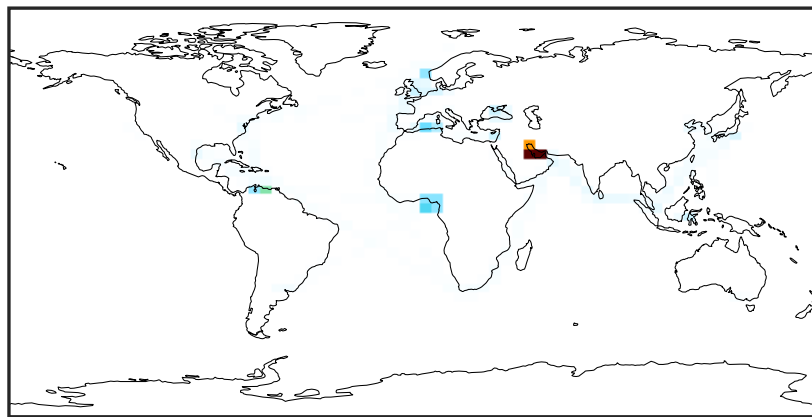
Undefined throughout domain  
unitless

# EmisALK4\_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



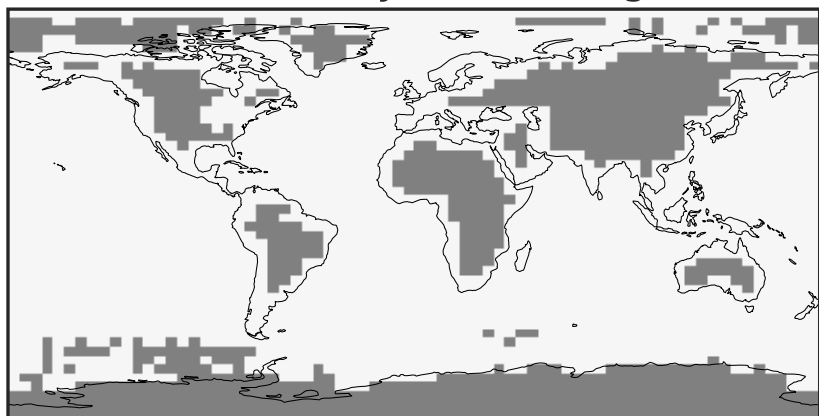
Zero throughout domain  
kg/m2/s

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



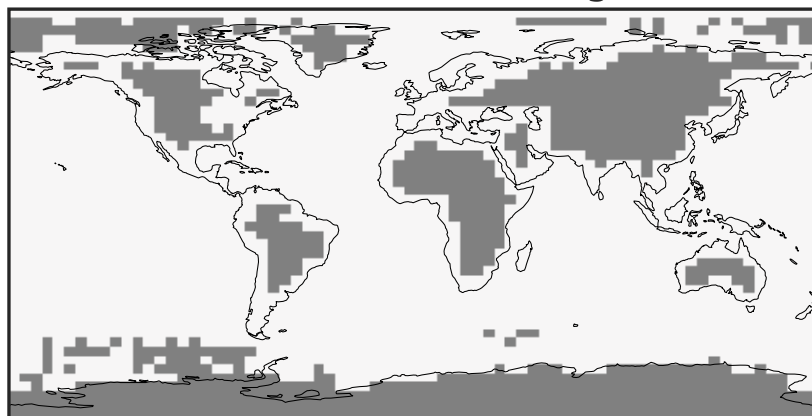
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

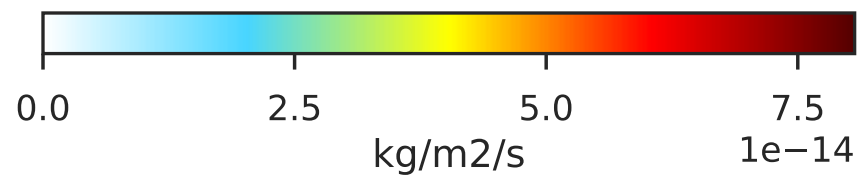
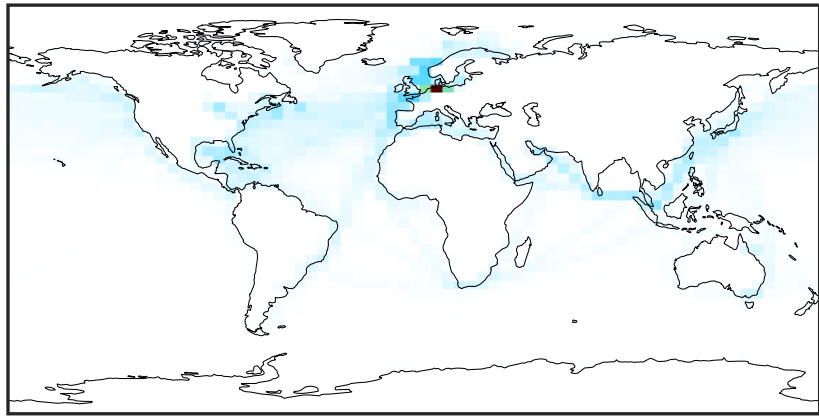
Ratio  
Dev/Ref, Fixed Range



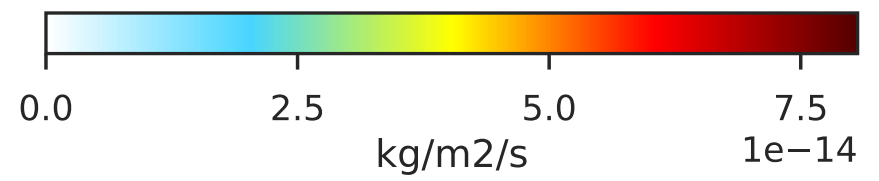
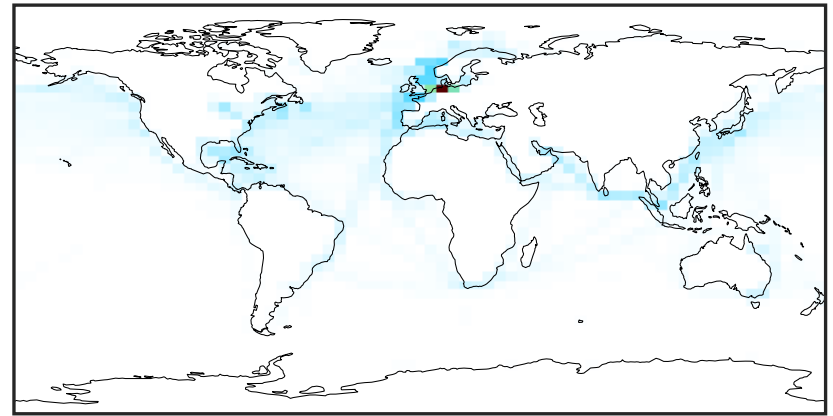
Ref and Dev equal throughout domain  
unitless

# EmisBCPI\_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



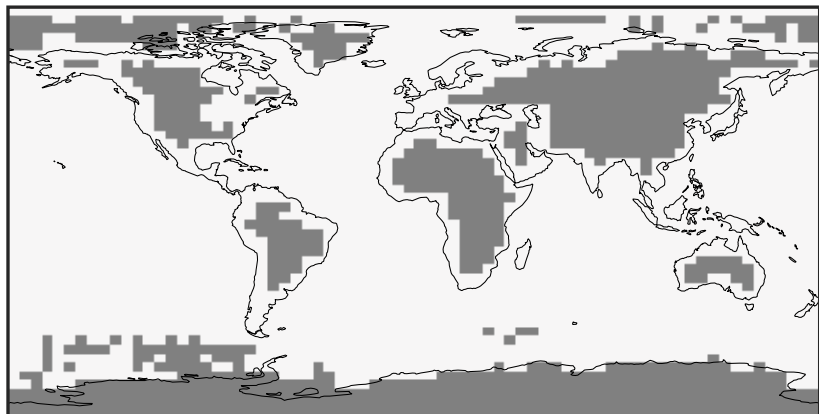
Zero throughout domain  
kg/m2/s

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



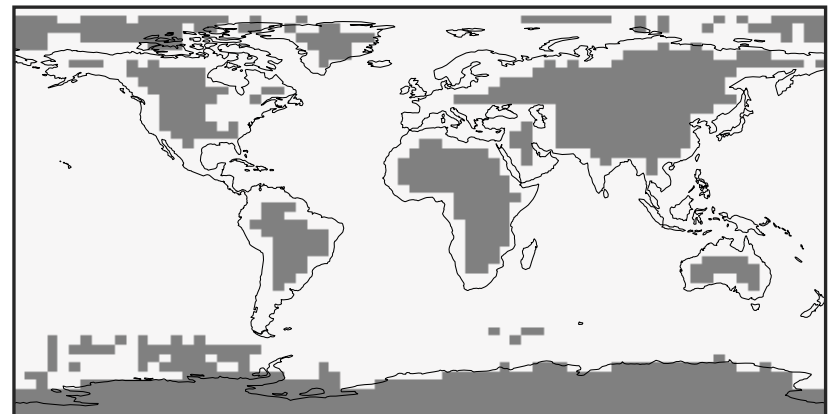
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

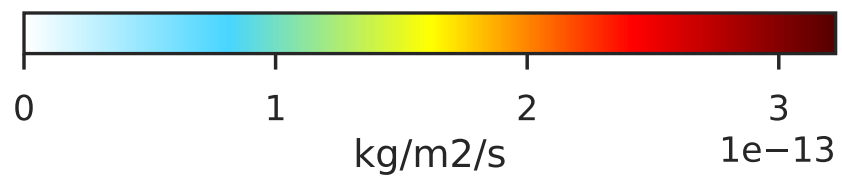
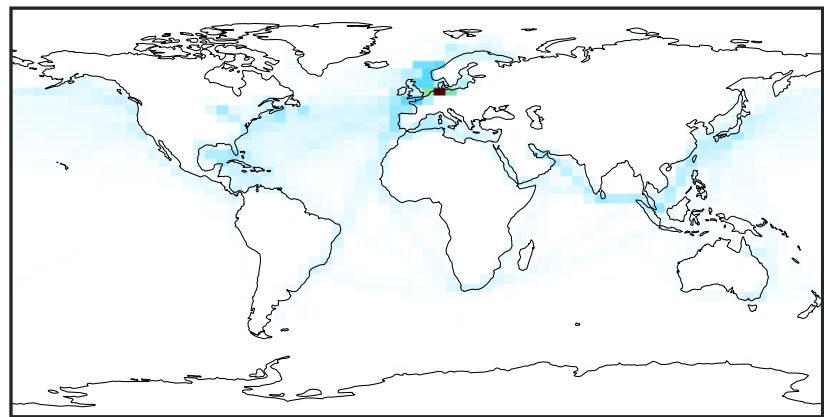
Ratio  
Dev/Ref, Fixed Range



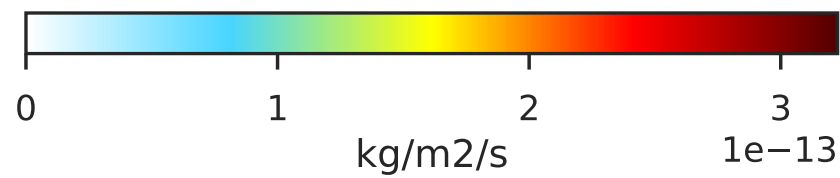
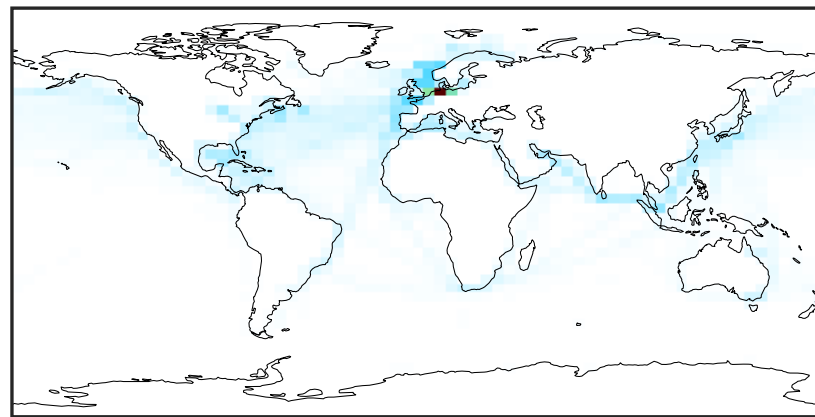
Ref and Dev equal throughout domain  
unitless

# EmisBCPO\_Ship (Jan2019)

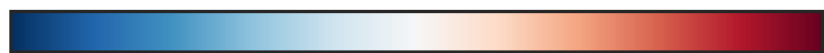
14.2.0-rc.2 (Ref)  
4.0x5.0



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

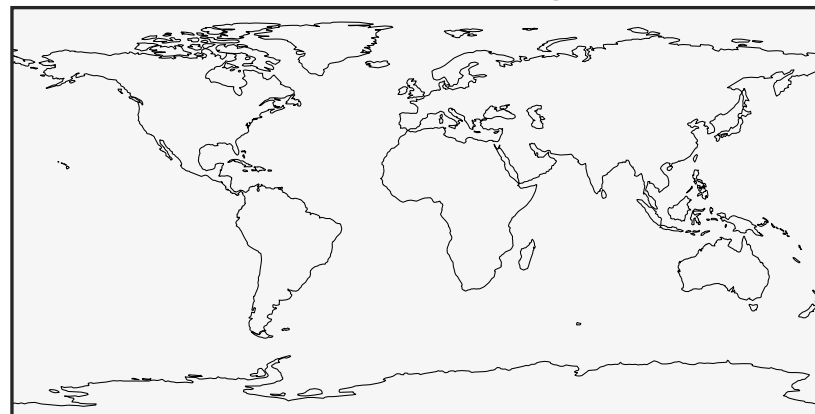


Difference  
Dev - Ref, Dynamic Range



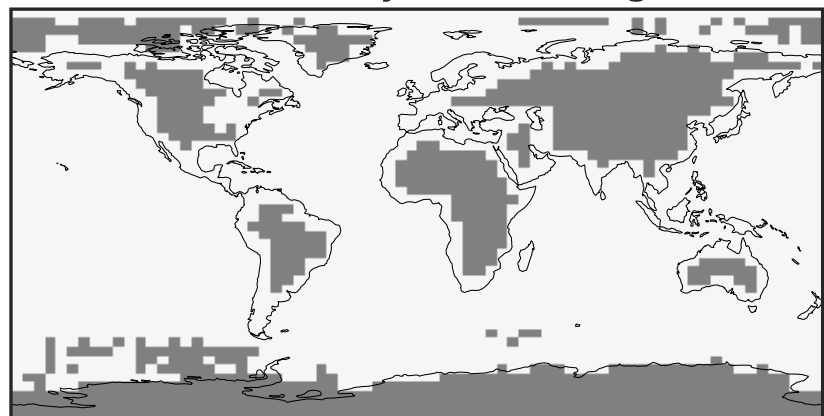
Zero throughout domain  
kg/m2/s

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



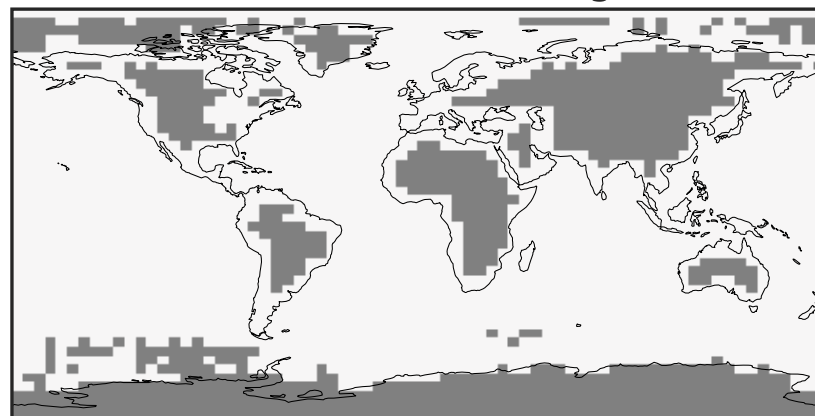
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range

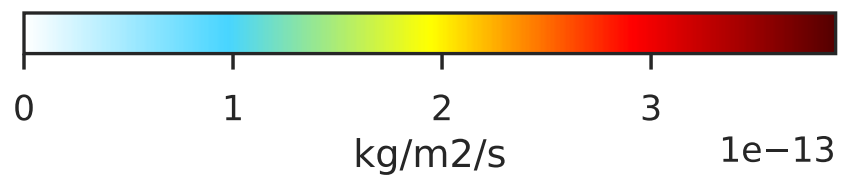
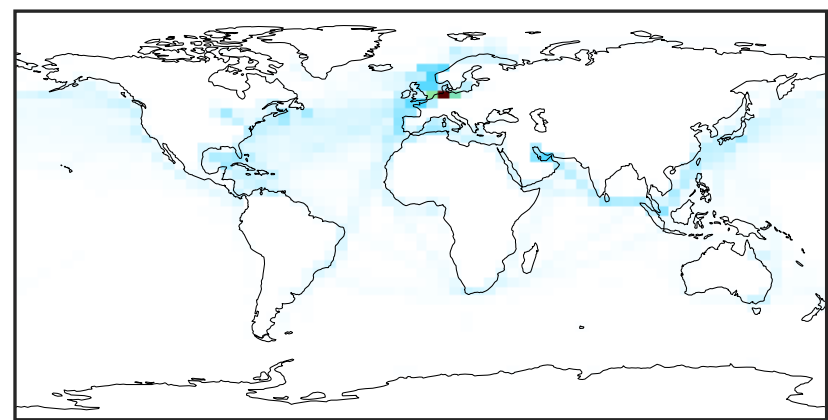


Ref and Dev equal throughout domain  
unitless

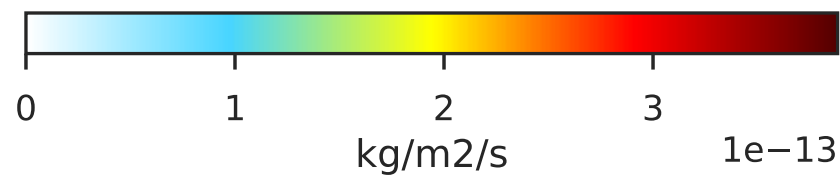
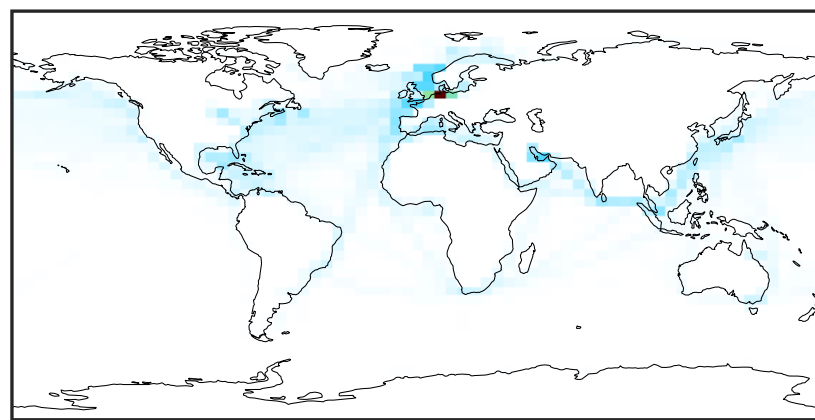


# EmisBENZ\_Ship (Jan2019)

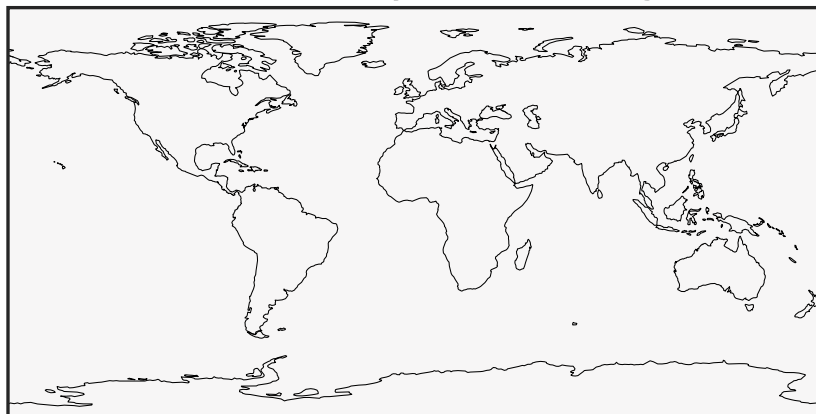
14.2.0-rc.2 (Ref)  
4.0x5.0



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

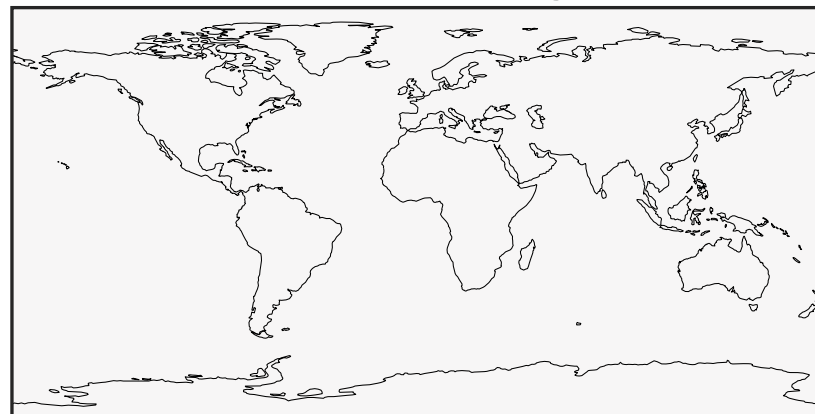


Difference  
Dev - Ref, Dynamic Range



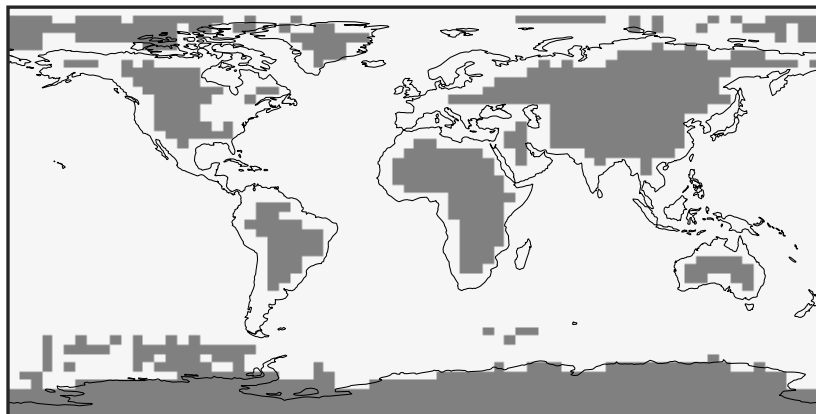
Zero throughout domain  
kg/m2/s

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



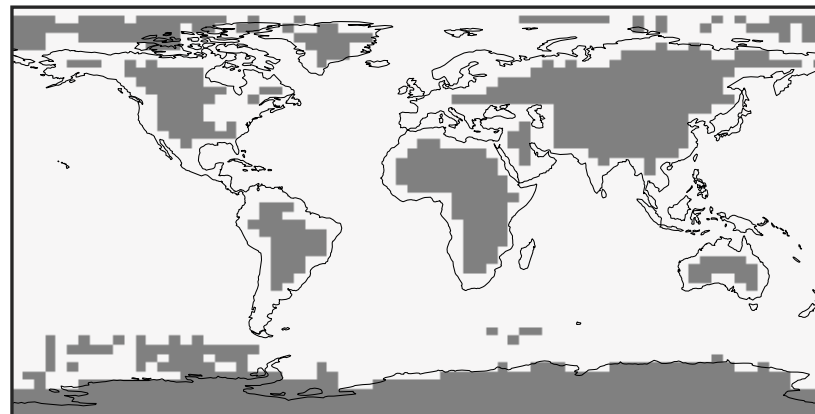
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

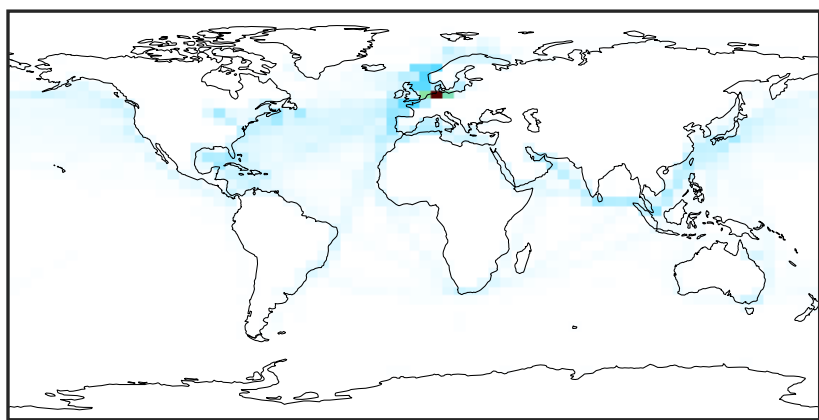
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

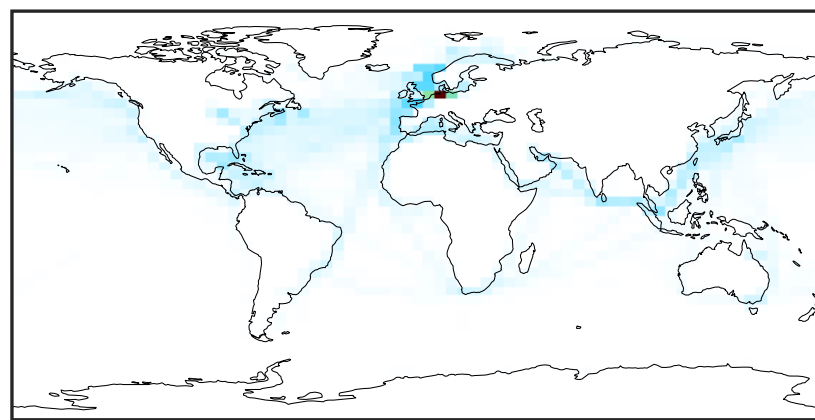
# EmisC2H2\_Ship (Jan2019)

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



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

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



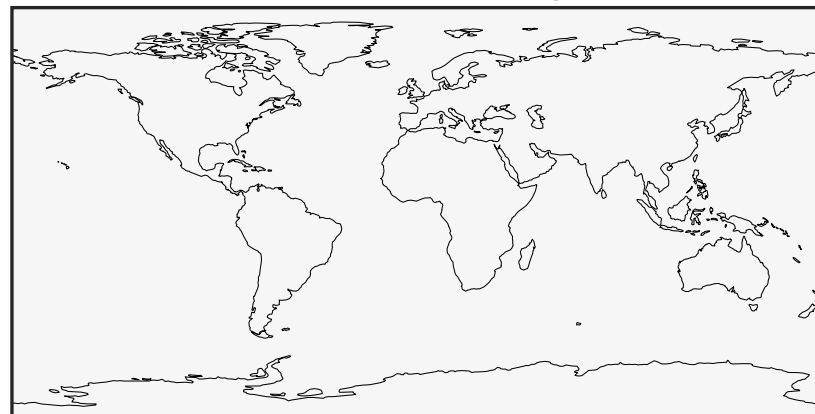
0.0 0.8 1.6 2.4  
kg/m<sup>2</sup>/s 1e-14

Difference  
Dev - Ref, Dynamic Range



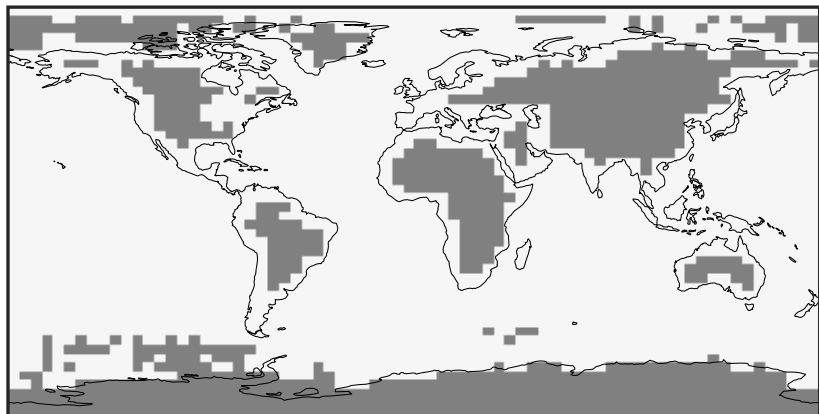
Zero throughout domain  
kg/m<sup>2</sup>/s

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



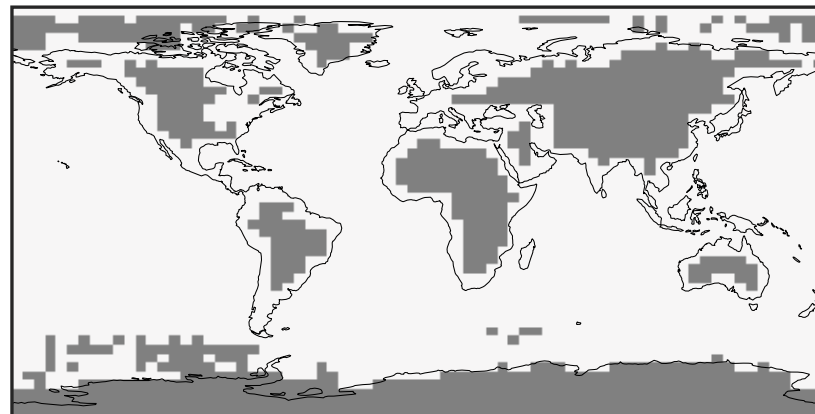
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

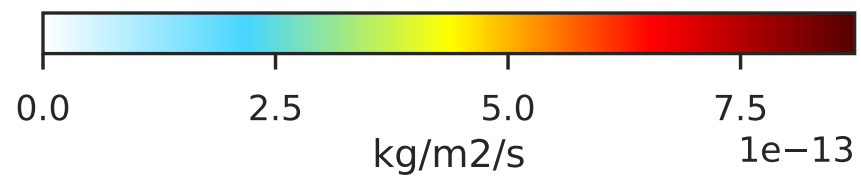
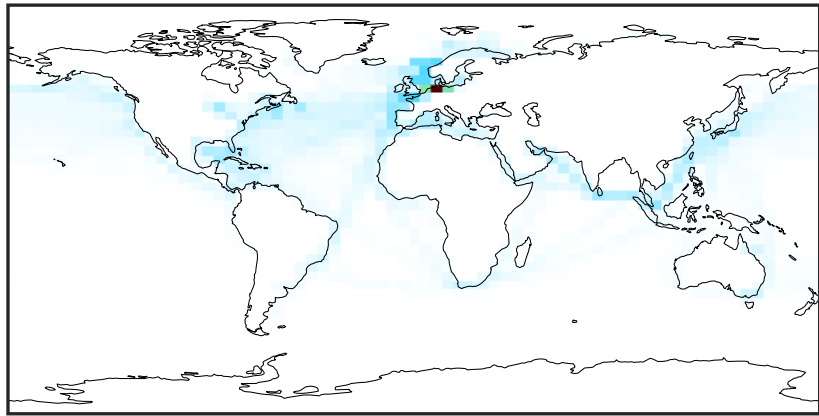
Ratio  
Dev/Ref, Fixed Range



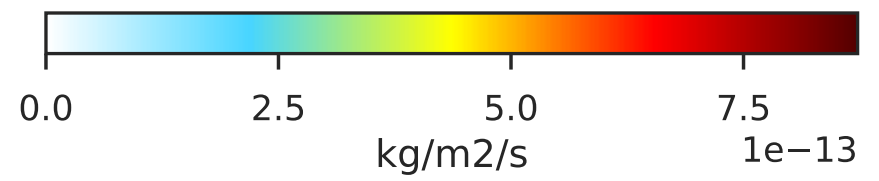
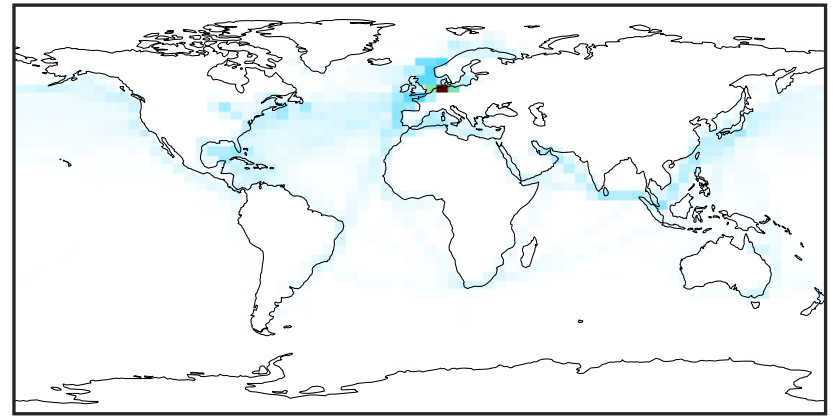
Ref and Dev equal throughout domain  
unitless

# EmisC2H4\_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



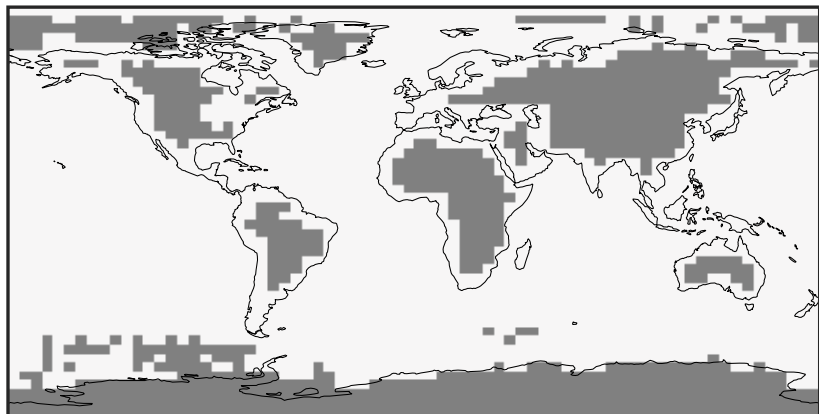
Zero throughout domain  
kg/m2/s

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



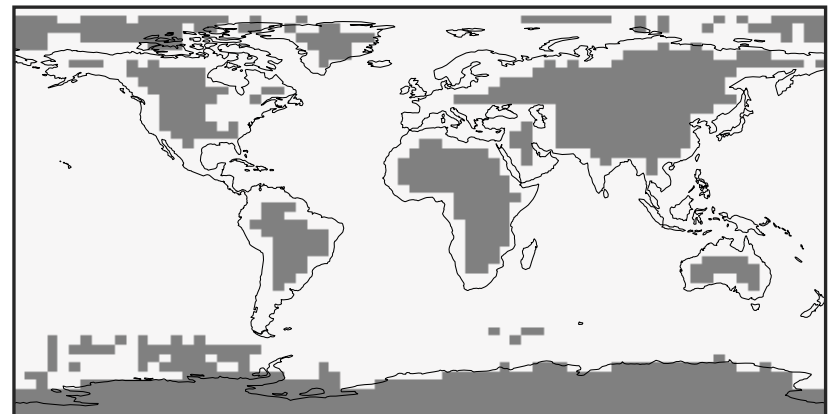
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

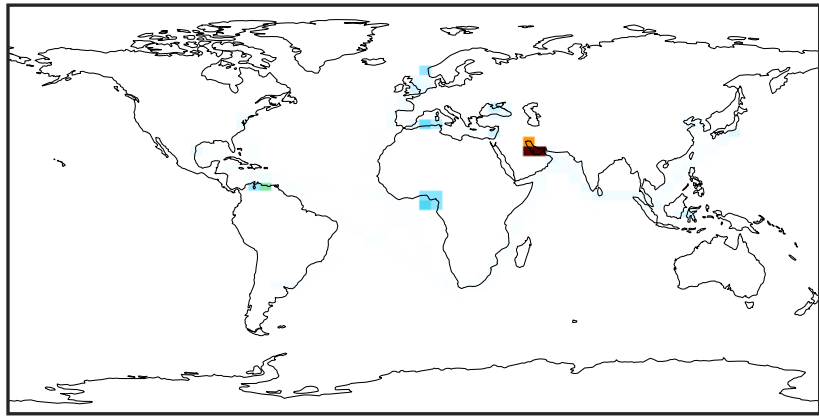
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

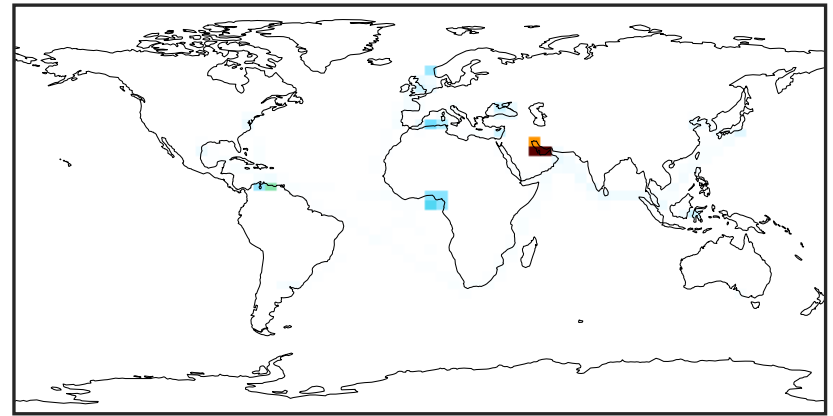
# EmisC2H6\_Ship (Jan2019)

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



0.0 1.5 3.0 4.5  
kg/m2/s 1e-12

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



0.0 1.5 3.0 4.5  
kg/m2/s 1e-12

Difference  
Dev - Ref, Dynamic Range



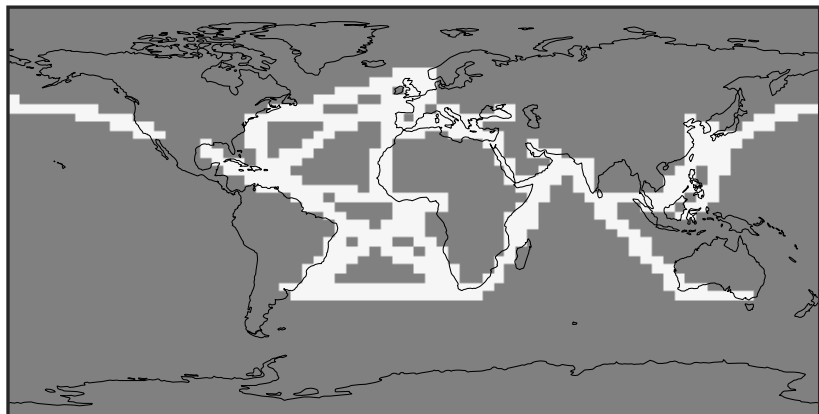
Zero throughout domain  
kg/m2/s

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



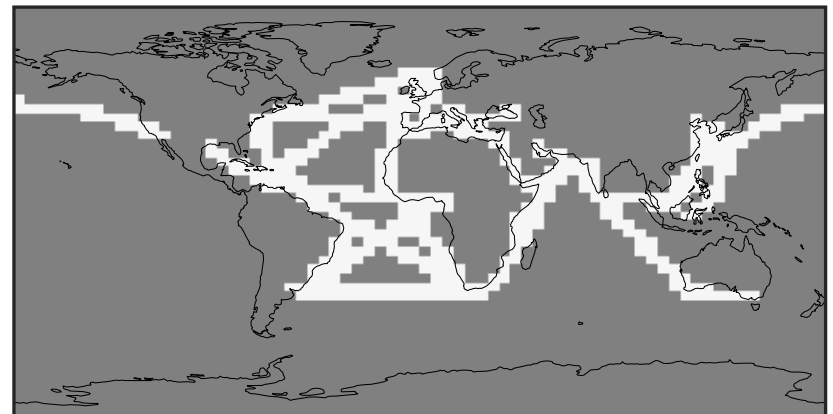
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

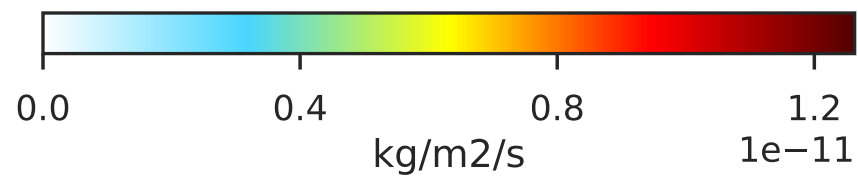
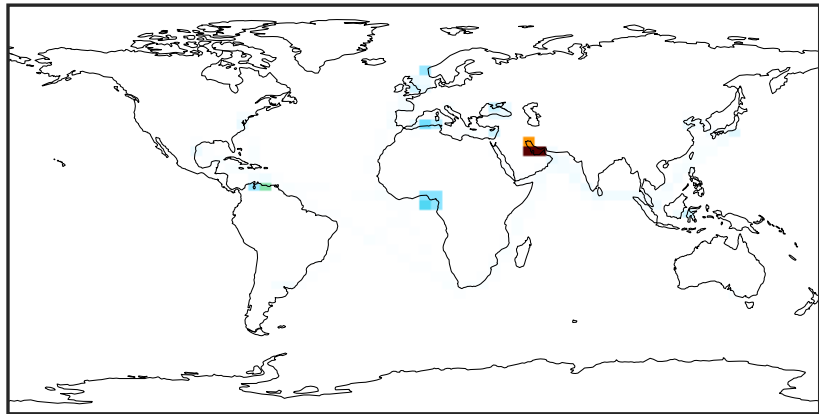
Ratio  
Dev/Ref, Fixed Range



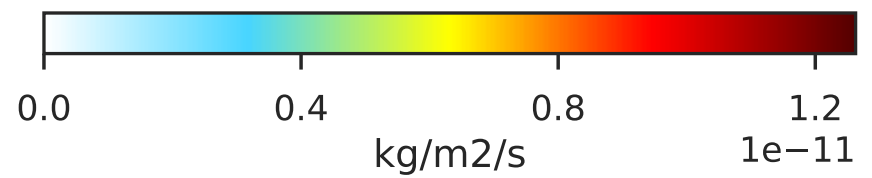
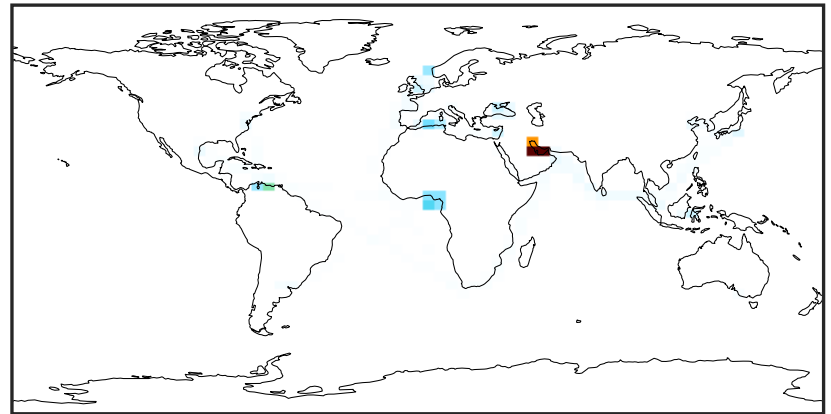
Ref and Dev equal throughout domain  
unitless

# EmisC3H8\_Ship (Jan2019)

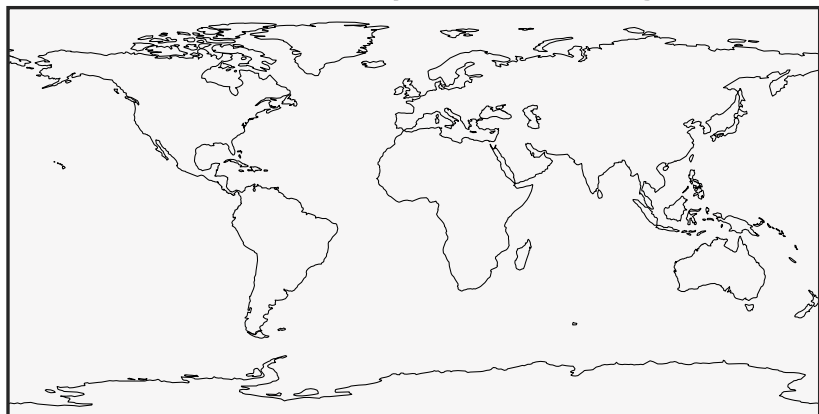
14.2.0-rc.2 (Ref)  
4.0x5.0



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

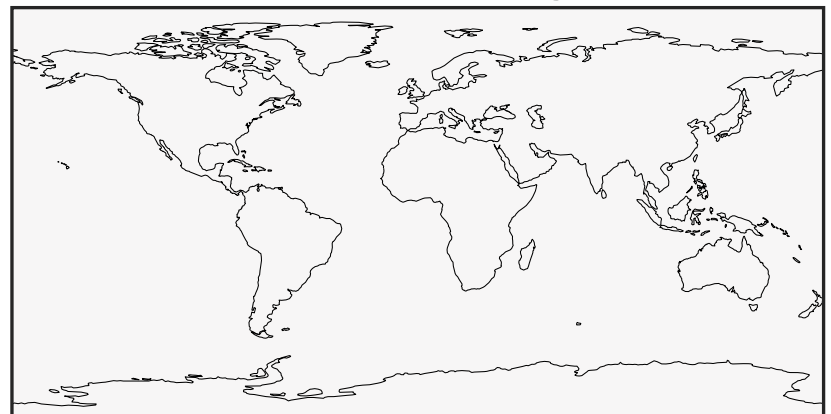


Difference  
Dev - Ref, Dynamic Range



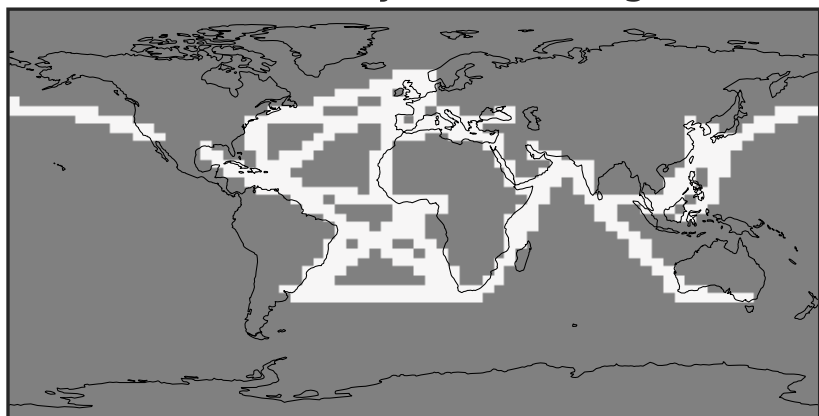
Zero throughout domain  
kg/m2/s

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



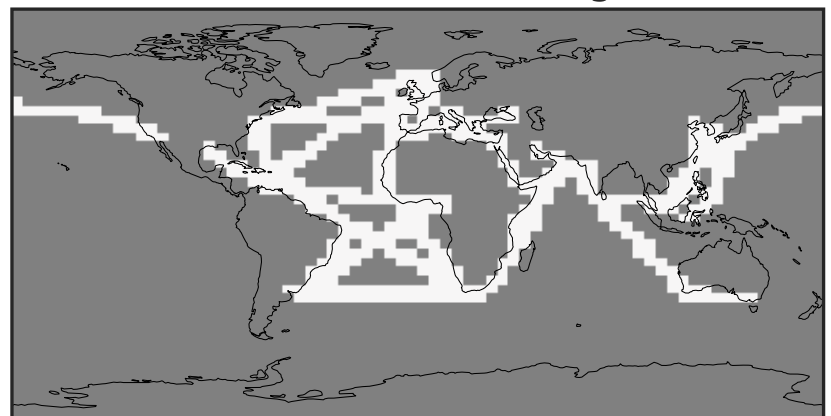
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless



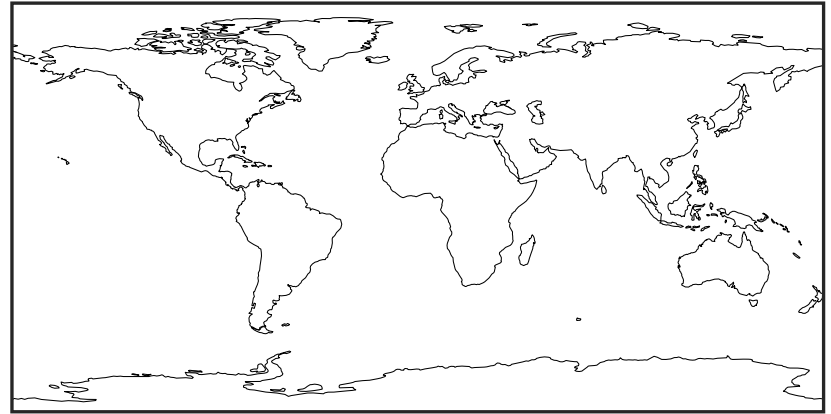
# EmisCH2O\_Ship (Jan2019)

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



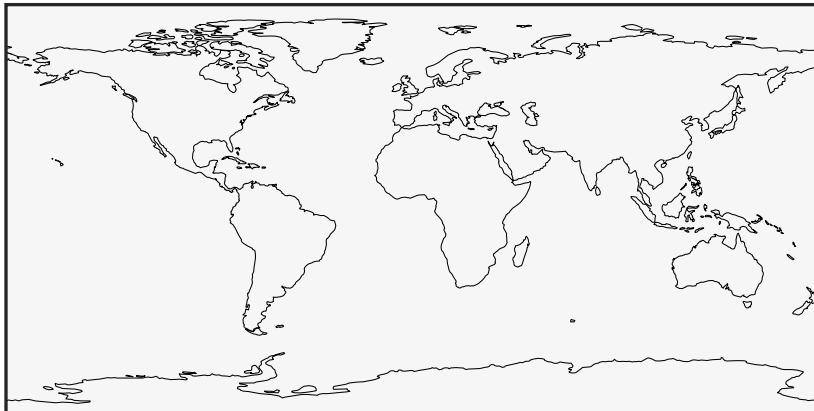
Zero throughput domain  
kg/m<sup>2</sup>/s

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



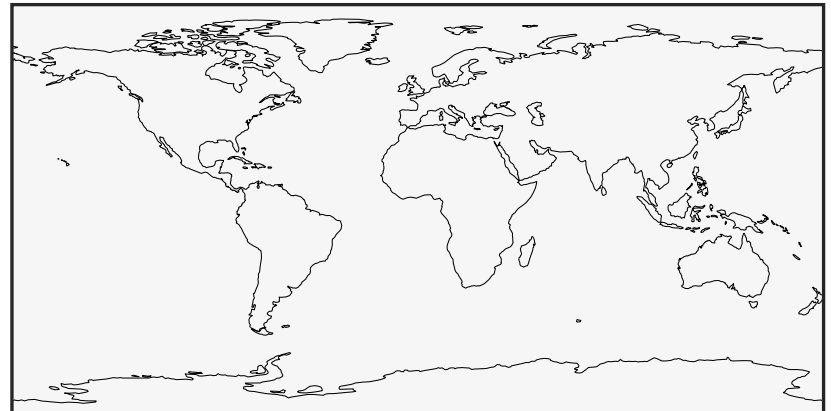
Zero throughput domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



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

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



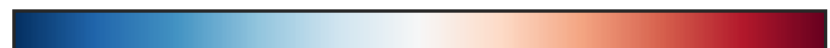
Zero throughput domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughput domain  
unitless

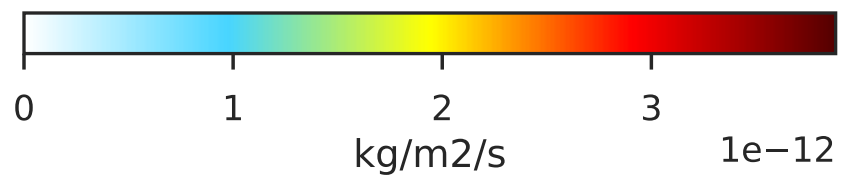
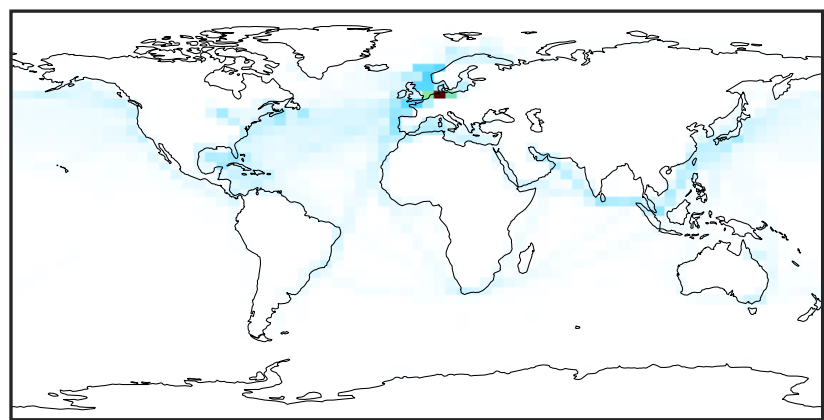
Ratio  
Dev/Ref, Fixed Range



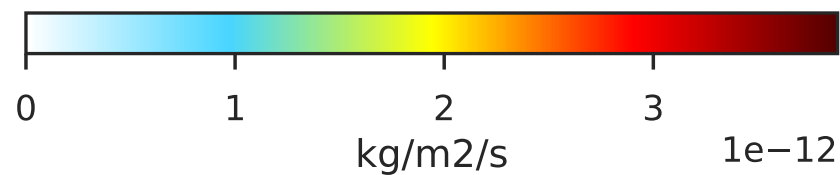
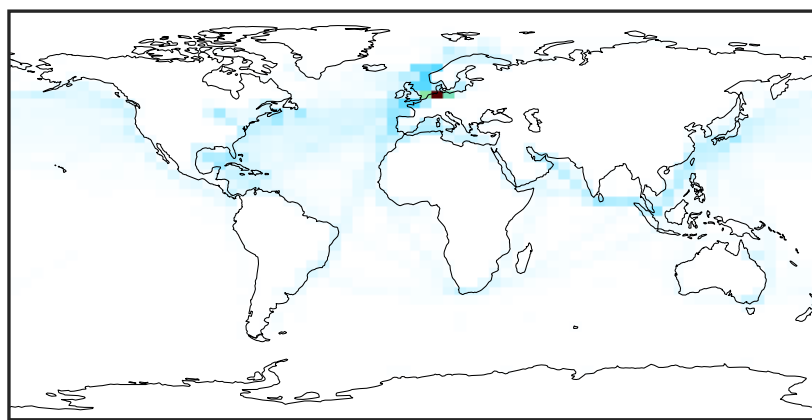
Undefined throughput domain  
unitless

# EmisCO\_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



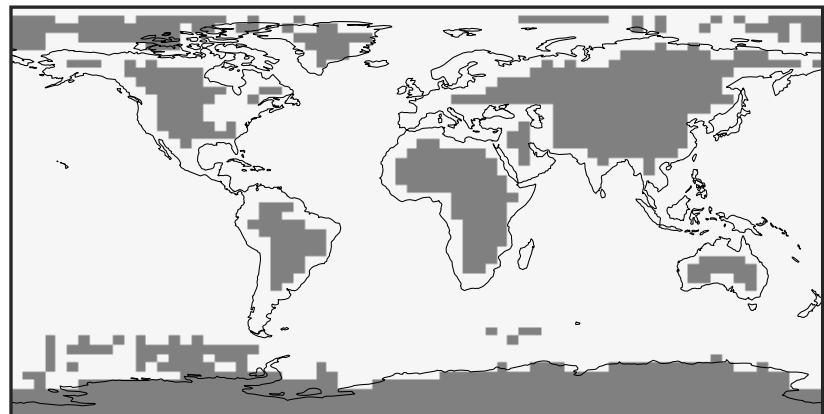
Zero throughout domain  
kg/m2/s

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



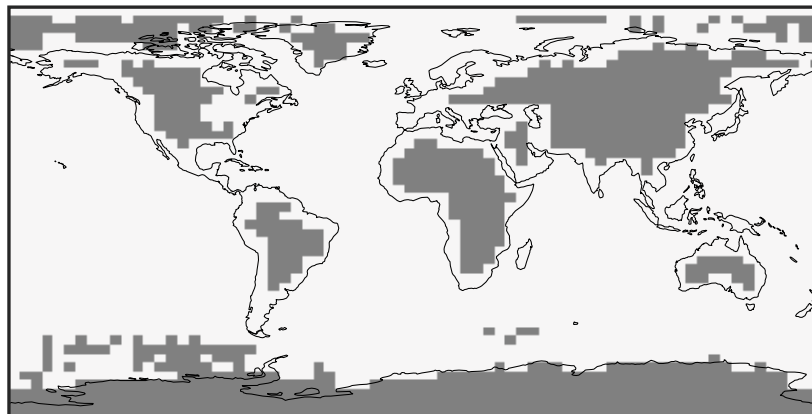
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

# EmisEOH\_Ship (Jan2019)

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



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

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



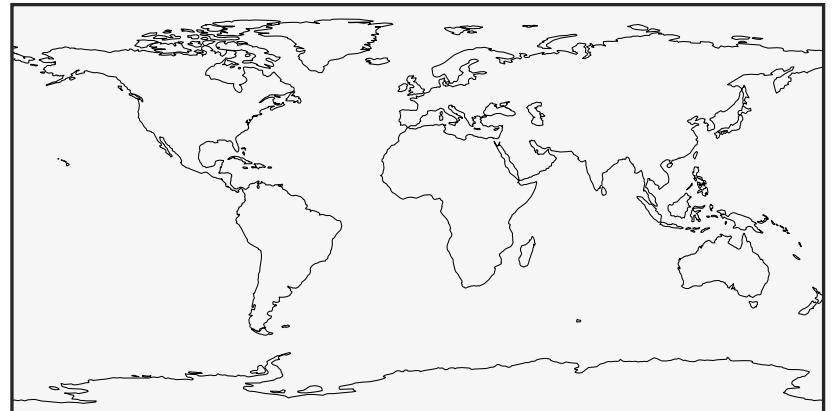
Zero throughput domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



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

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



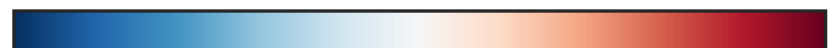
Zero throughput domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughput domain  
unitless

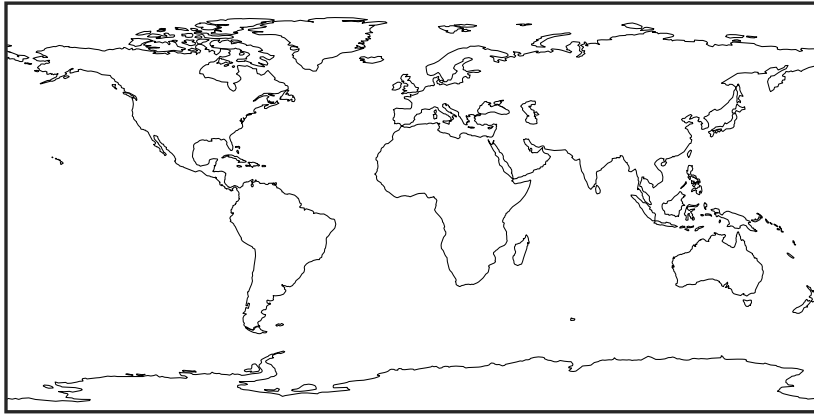
Ratio  
Dev/Ref, Fixed Range



Undefined throughput domain  
unitless

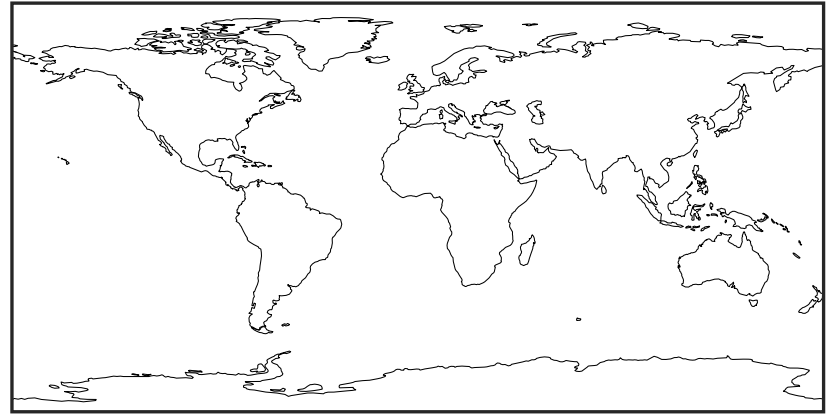
# EmisHCOOH\_Ship (Jan2019)

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



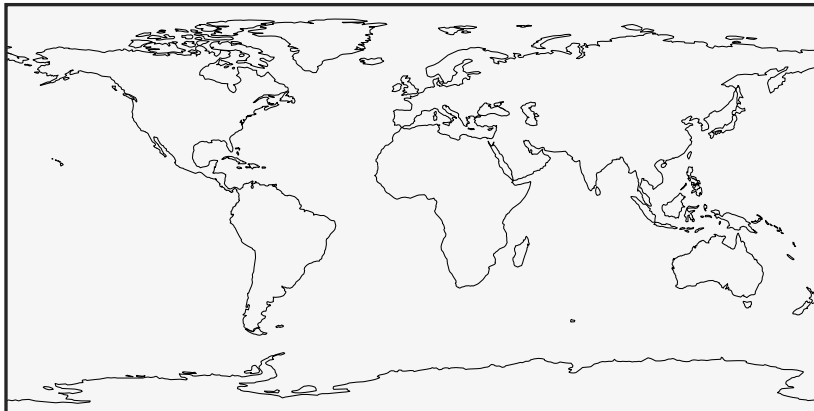
Zero throughput domain  
kg/m<sup>2</sup>/s

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



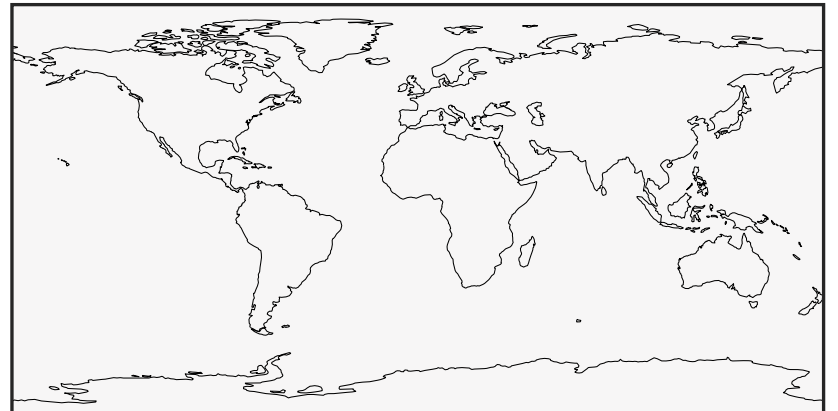
Zero throughput domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



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

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



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

Ratio  
Dev/Ref, Dynamic Range



Undefined throughout domain  
unitless

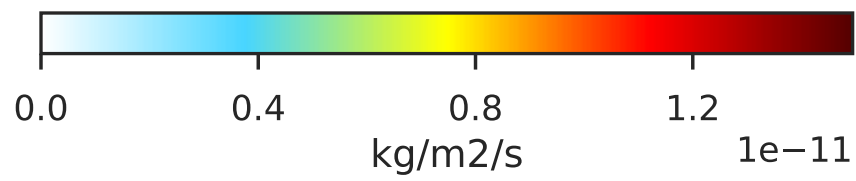
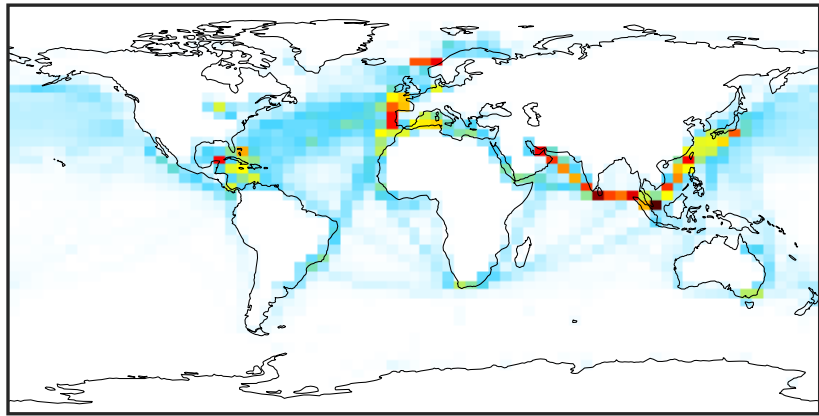
Ratio  
Dev/Ref, Fixed Range



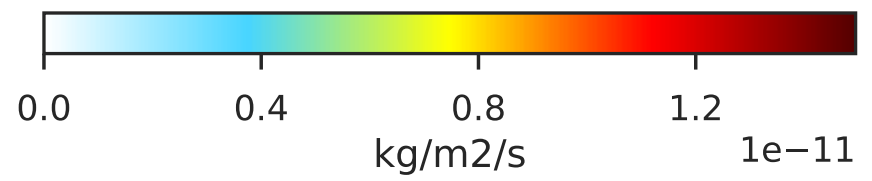
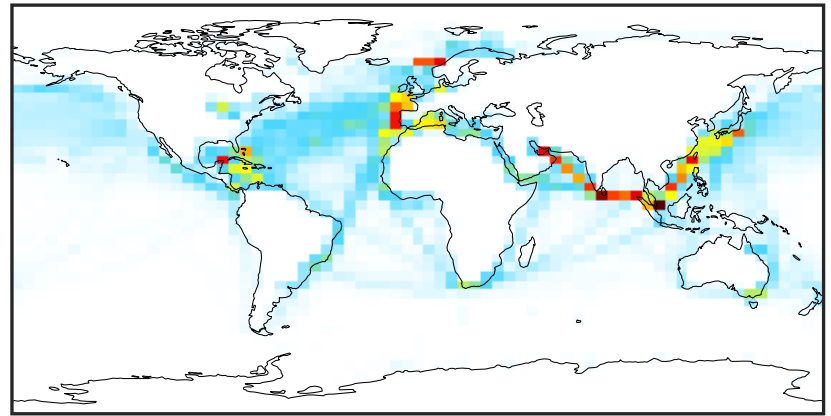
Undefined throughout domain  
unitless

# EmisHNO3\_Ship (Jan2019)

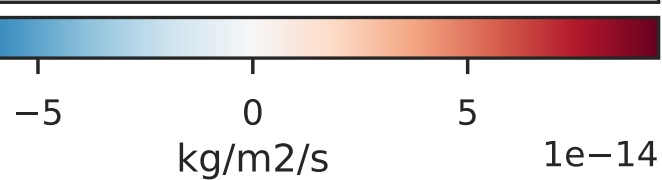
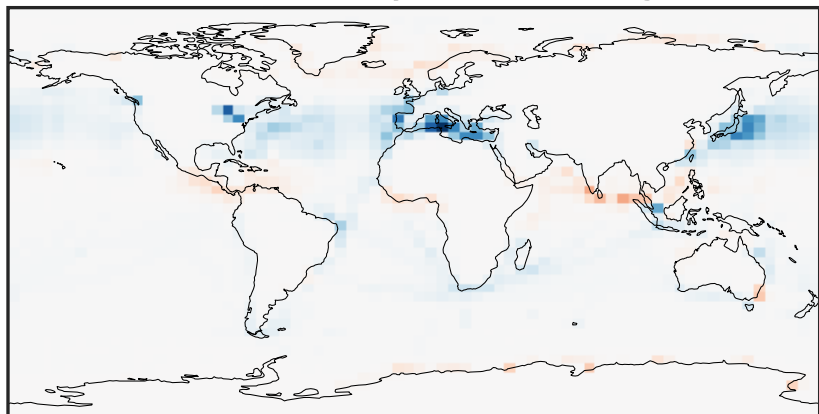
14.2.0-rc.2 (Ref)  
4.0x5.0



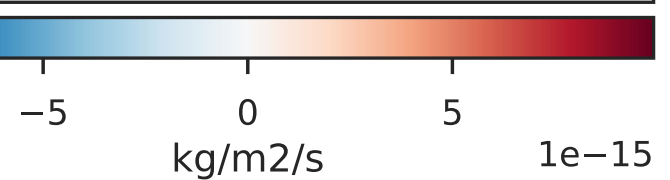
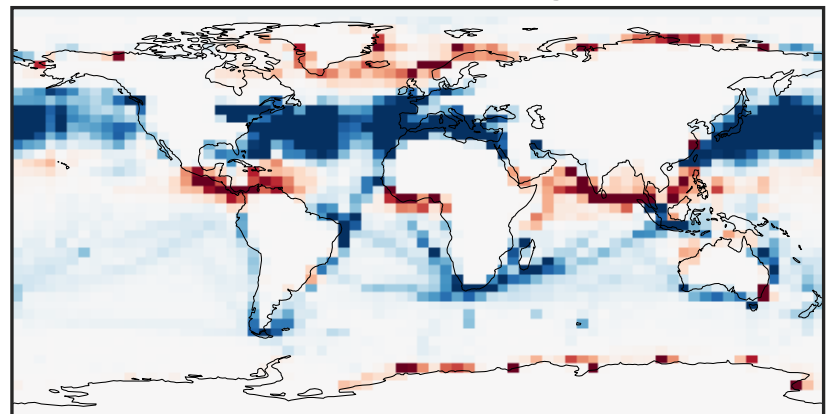
14.3.0-rc.0 (Dev)  
4.0x5.0



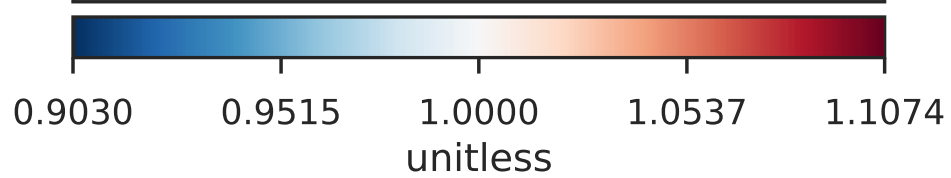
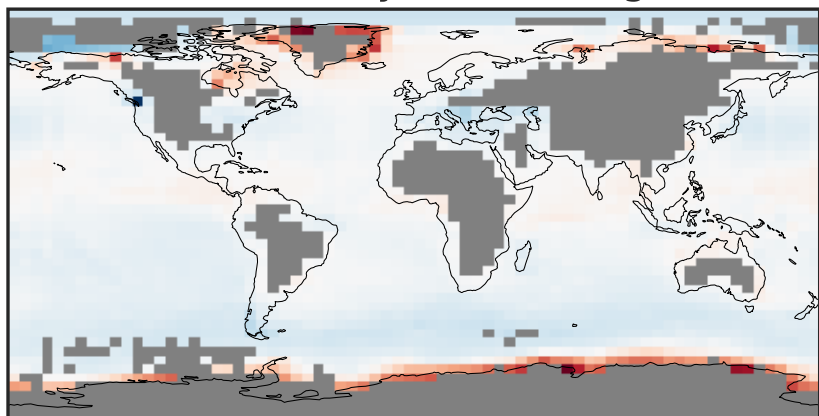
Difference  
Dev - Ref, Dynamic Range



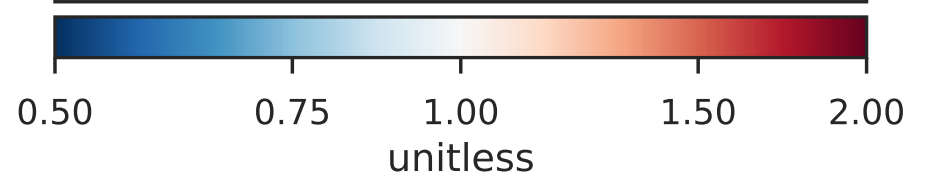
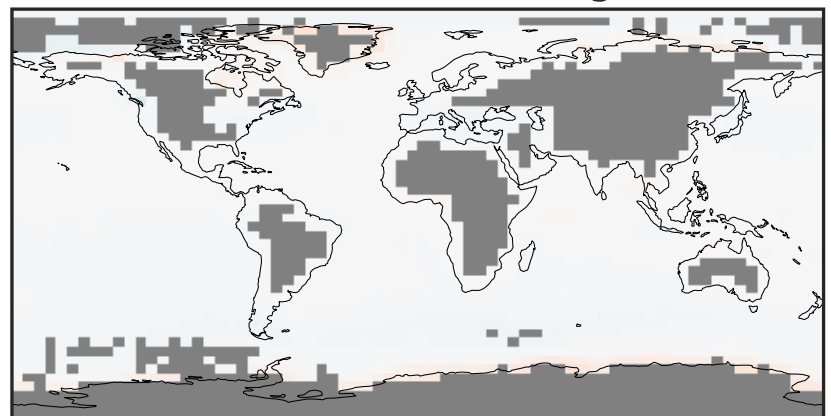
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range





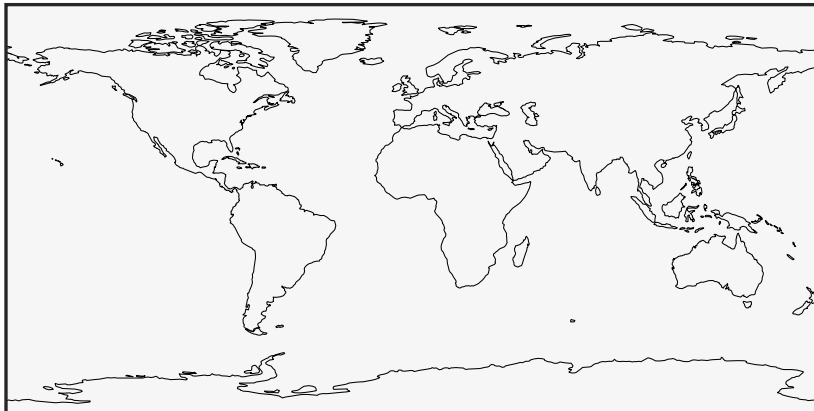
# EmisMEK\_Ship (Jan2019)

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



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

Difference  
Dev - Ref, Dynamic Range



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

Ratio  
Dev/Ref, Dynamic Range



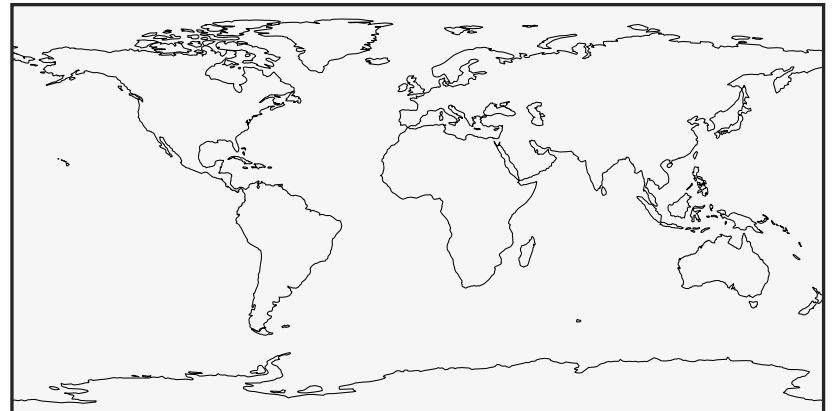
Undefined throughput domain  
unitless

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



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

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



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

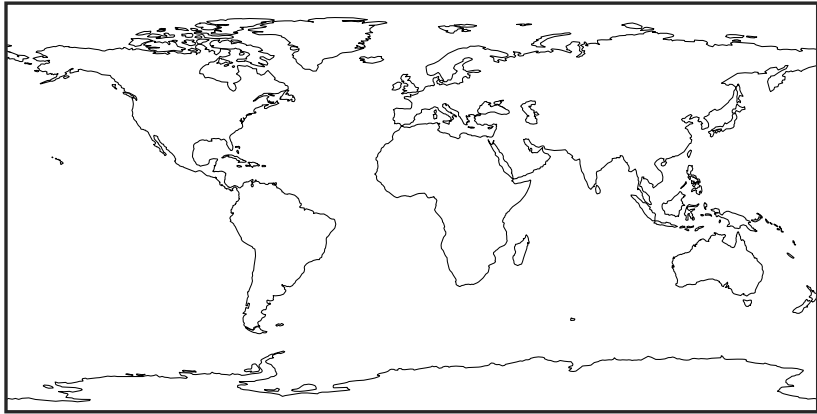
Ratio  
Dev/Ref, Fixed Range



Undefined throughput domain  
unitless

# EmisMOH\_Ship (Jan2019)

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



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

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



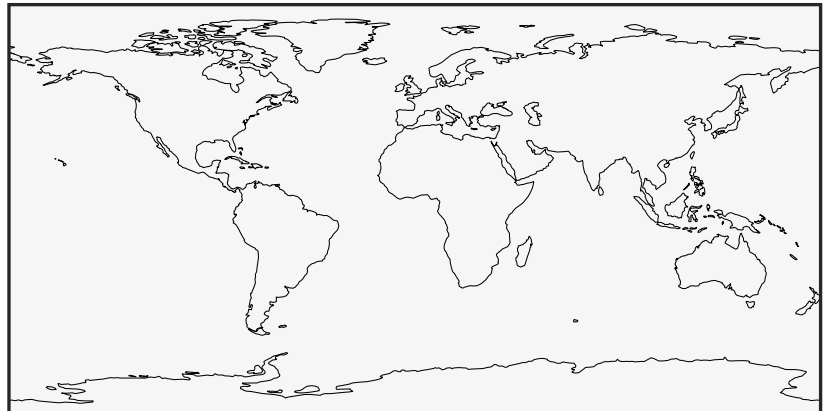
Zero throughput domain  
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



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

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



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

Ratio  
Dev/Ref, Dynamic Range



Undefined throughput domain  
unitless

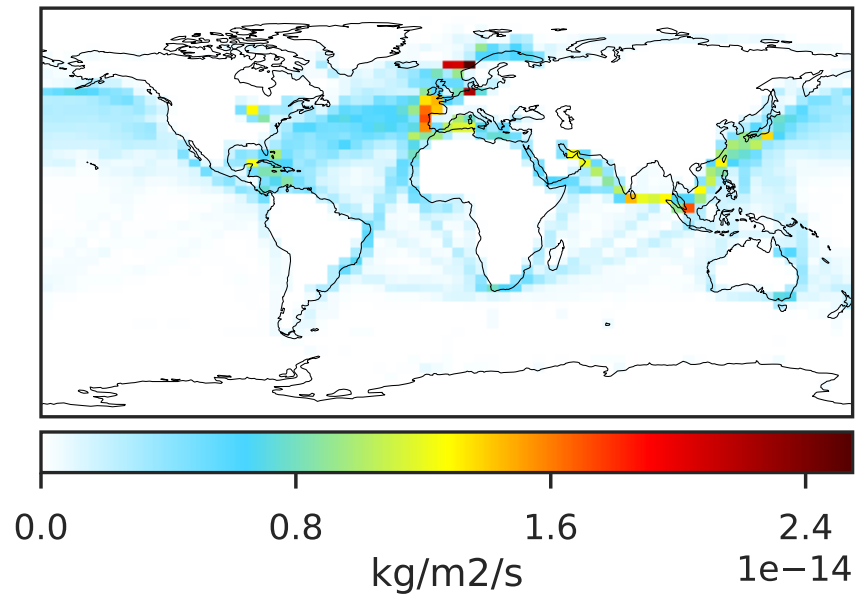
Ratio  
Dev/Ref, Fixed Range



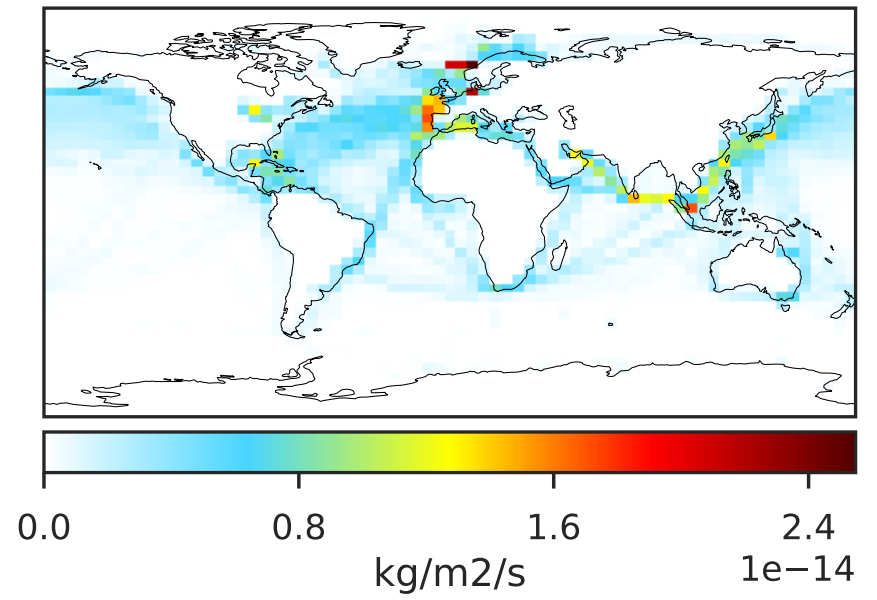
Undefined throughput domain  
unitless

# EmisNH3\_Ship (Jan2019)

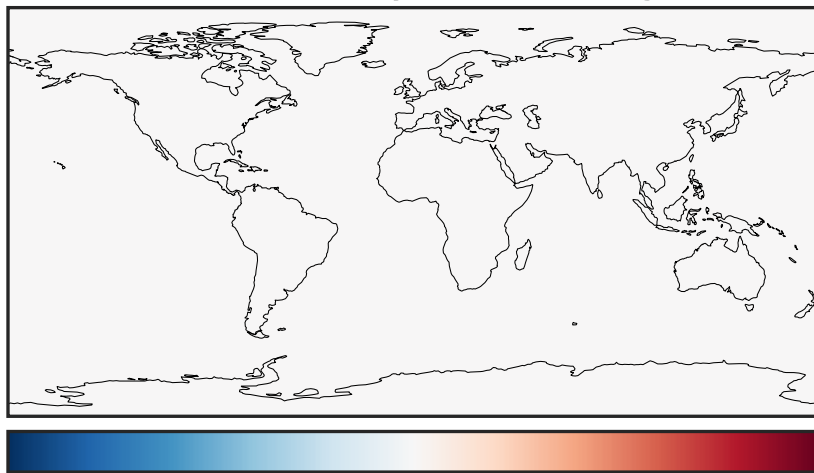
14.2.0-rc.2 (Ref)  
4.0x5.0



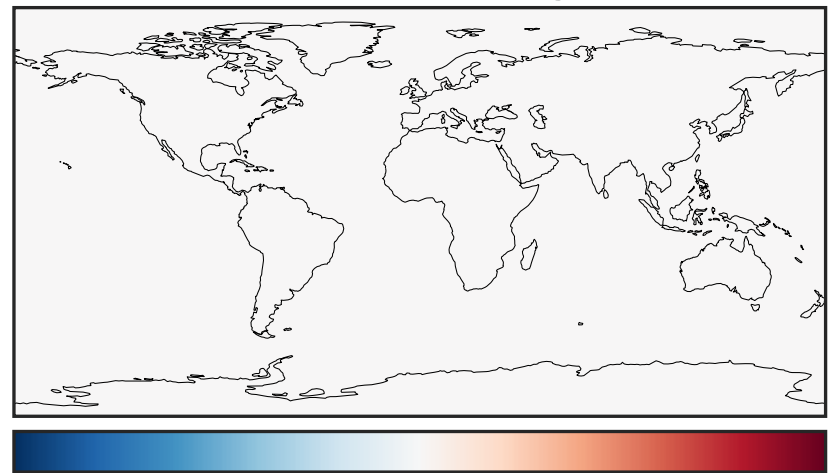
14.3.0-rc.0 (Dev)  
4.0x5.0



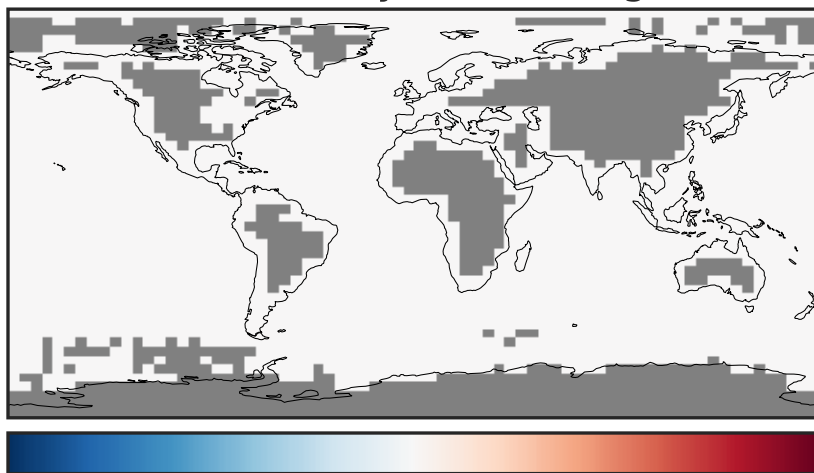
Difference  
Dev - Ref, Dynamic Range



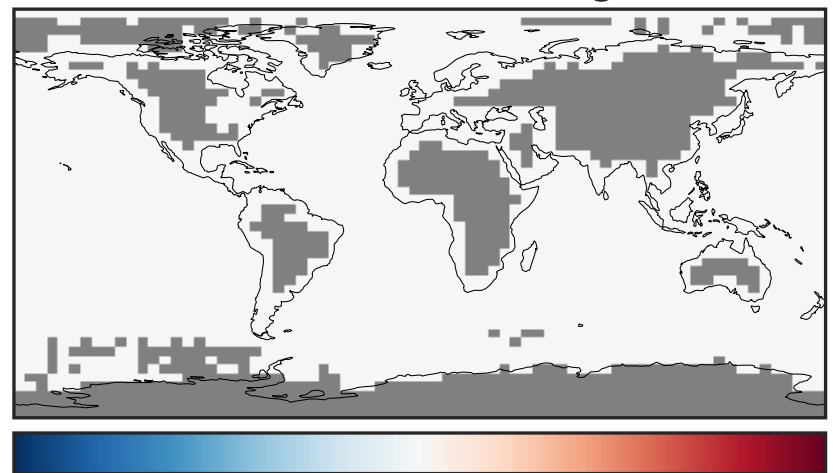
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

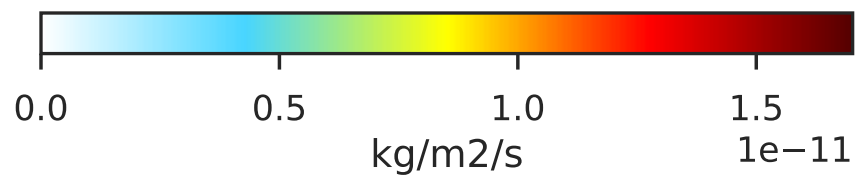
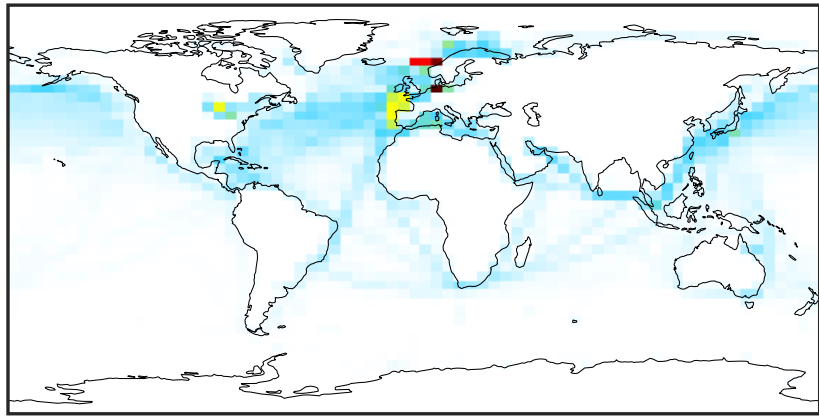


Ratio  
Dev/Ref, Fixed Range

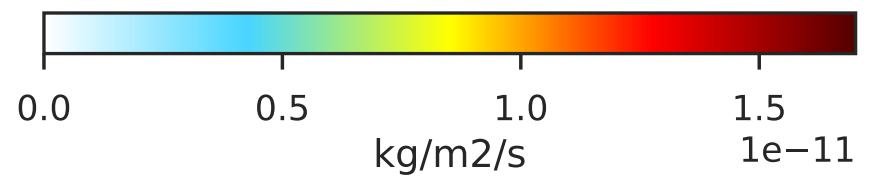
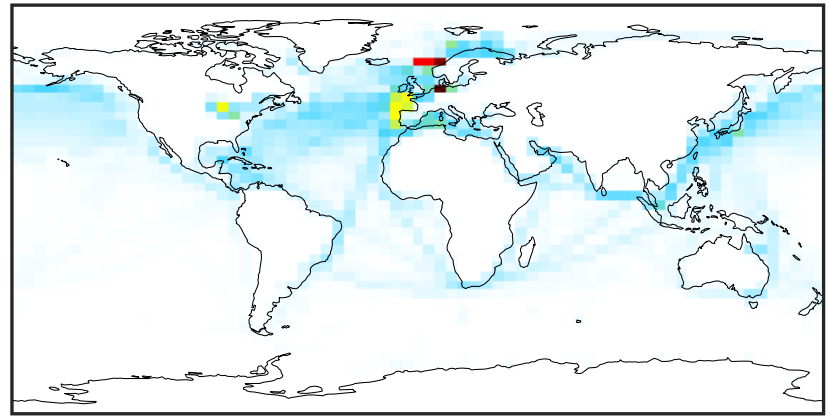


# EmisNO2\_Ship (Jan2019)

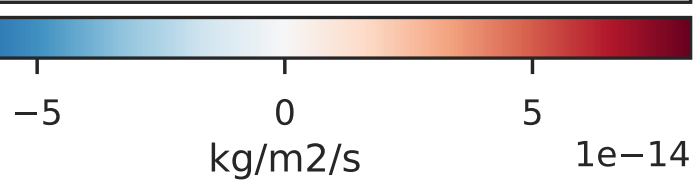
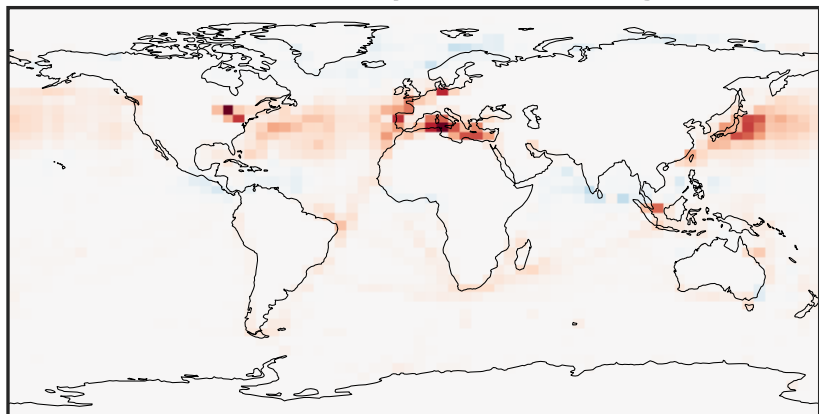
14.2.0-rc.2 (Ref)  
4.0x5.0



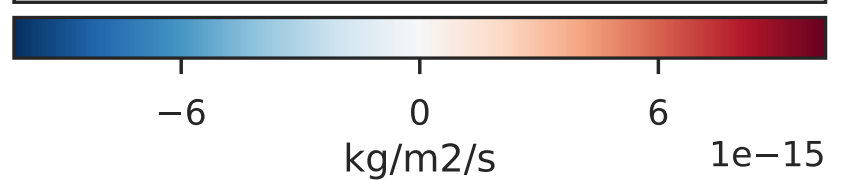
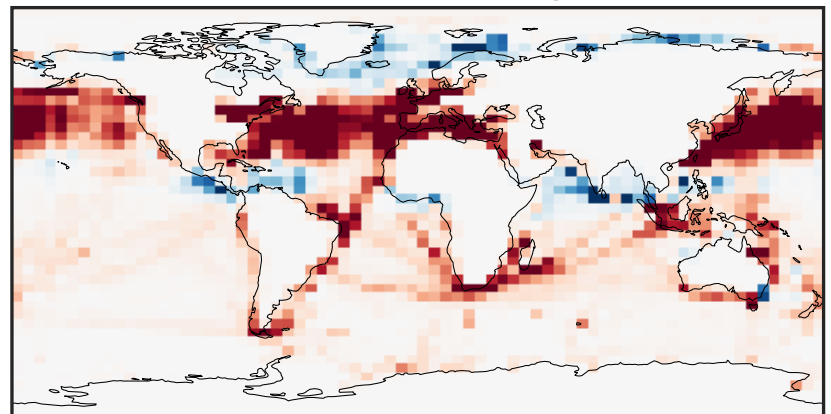
14.3.0-rc.0 (Dev)  
4.0x5.0



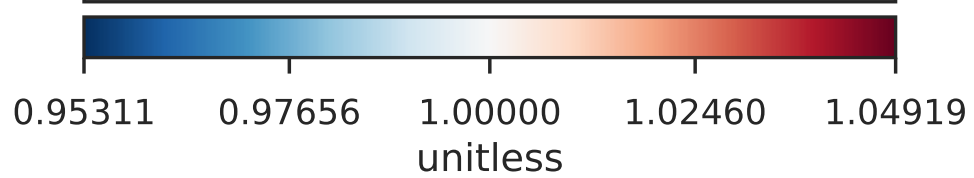
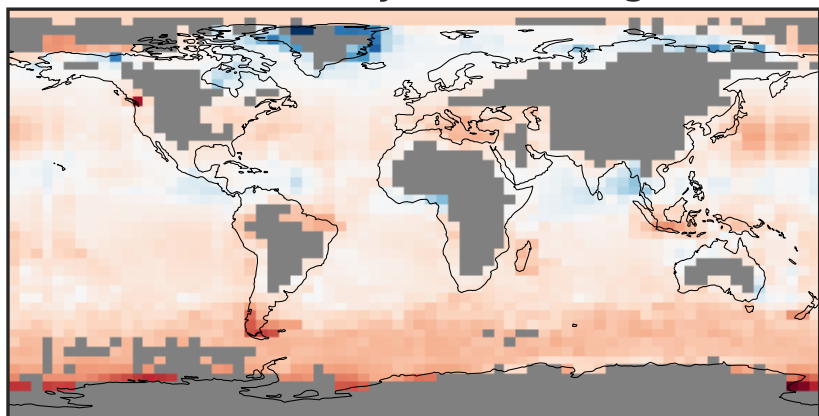
Difference  
Dev - Ref, Dynamic Range



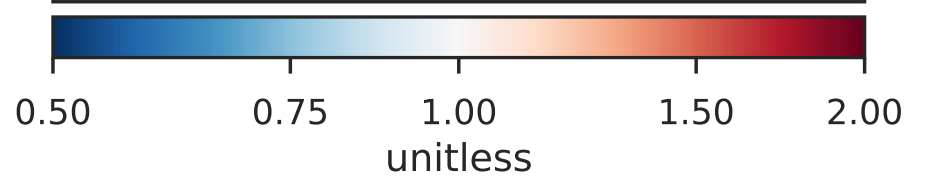
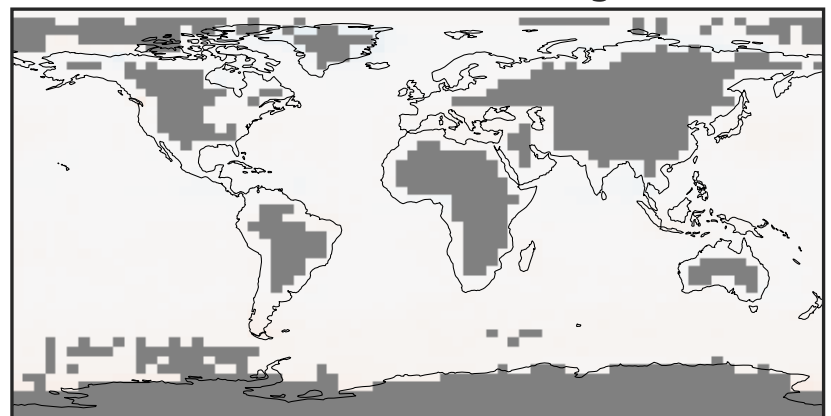
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

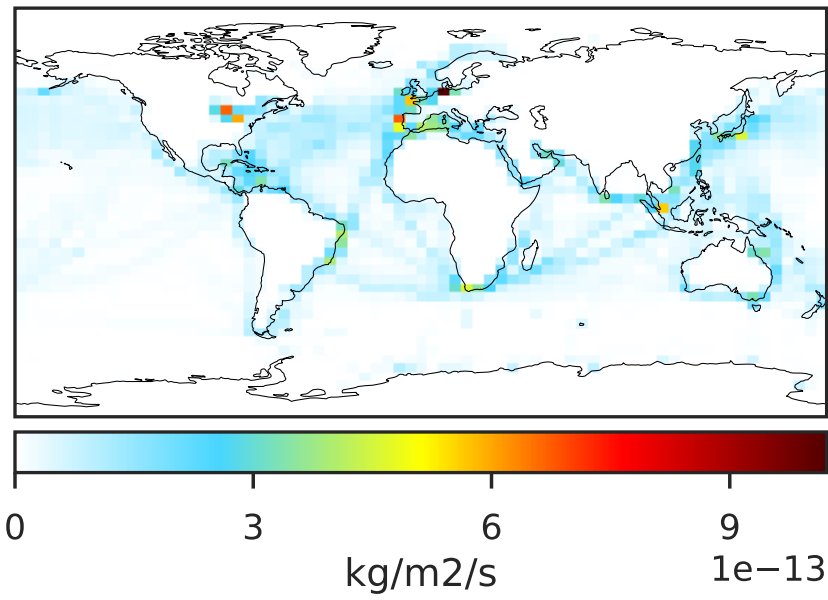


Ratio  
Dev/Ref, Fixed Range

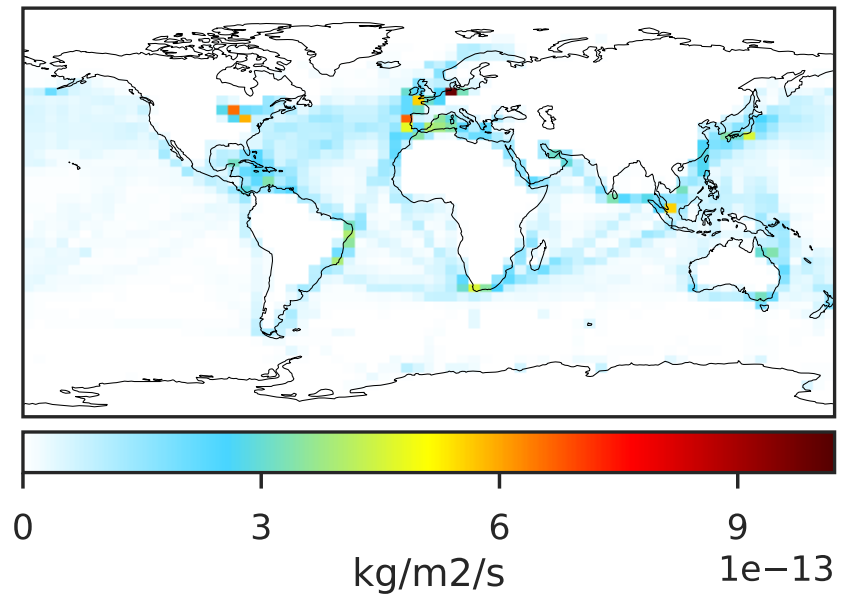


# EmisNO\_Ship (Jan2019)

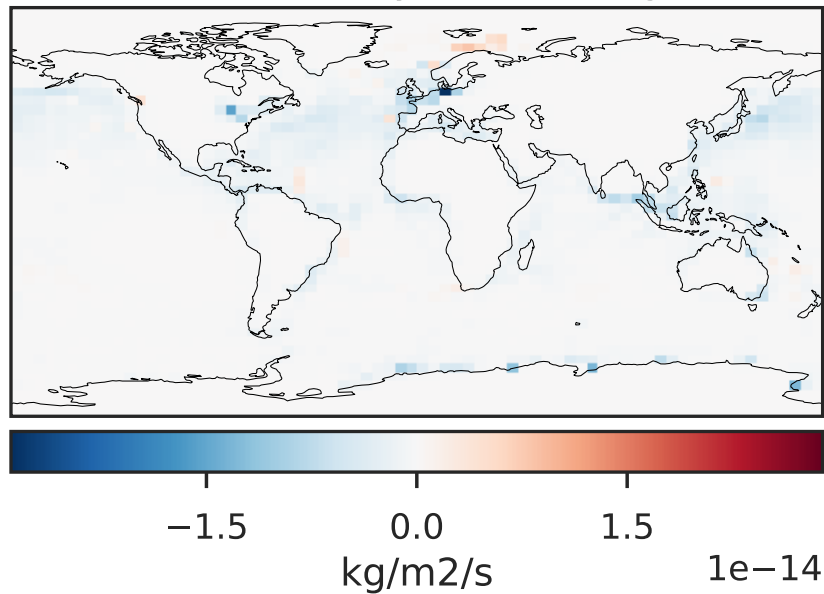
14.2.0-rc.2 (Ref)  
4.0x5.0



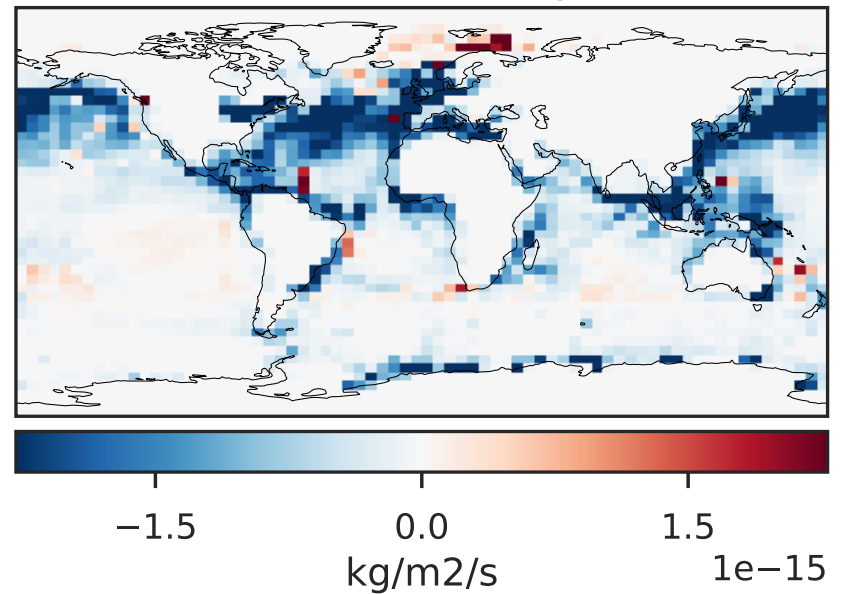
14.3.0-rc.0 (Dev)  
4.0x5.0



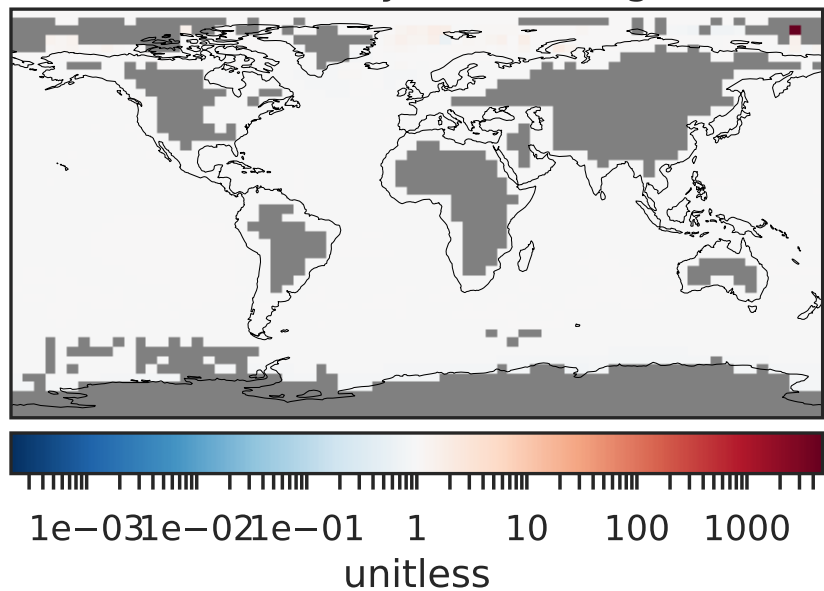
Difference  
Dev - Ref, Dynamic Range



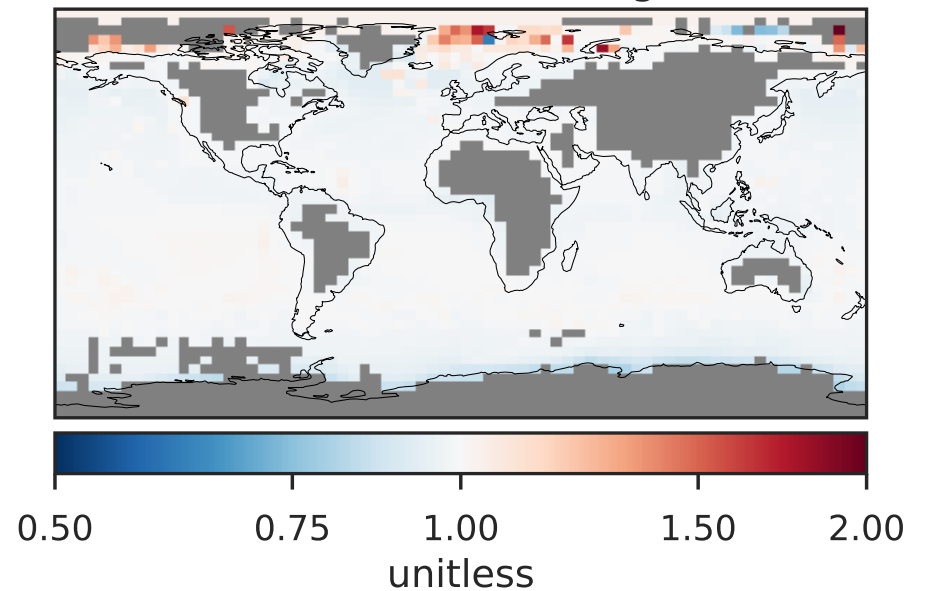
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



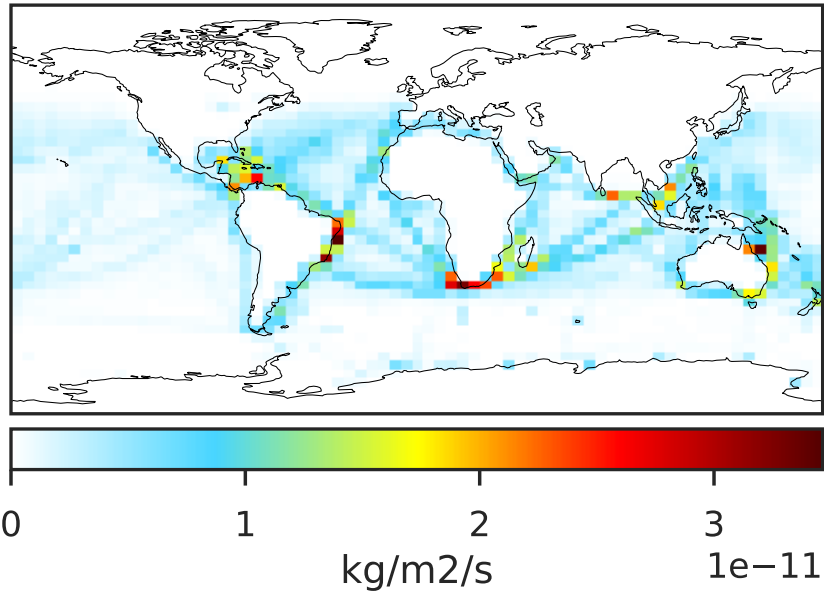
Ratio  
Dev/Ref, Fixed Range



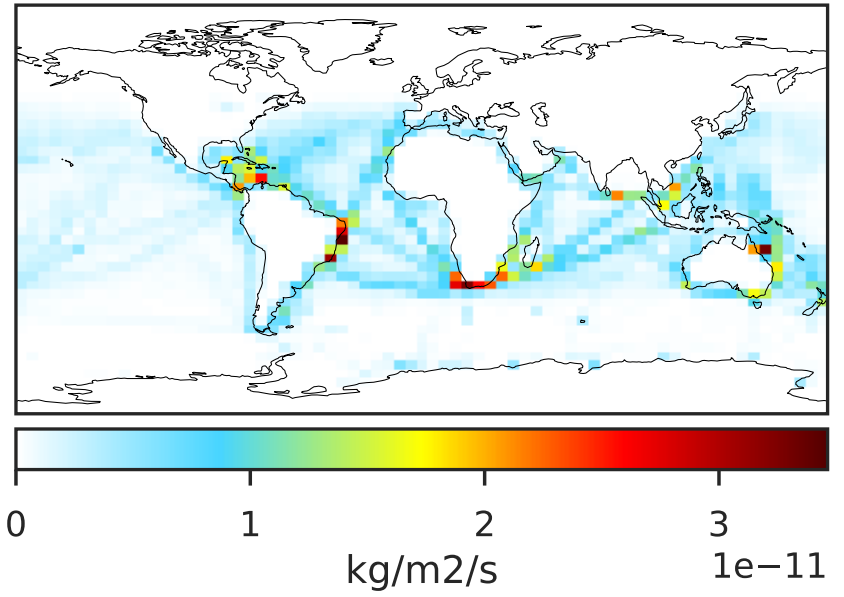


# EmisO3\_Ship (Jan2019)

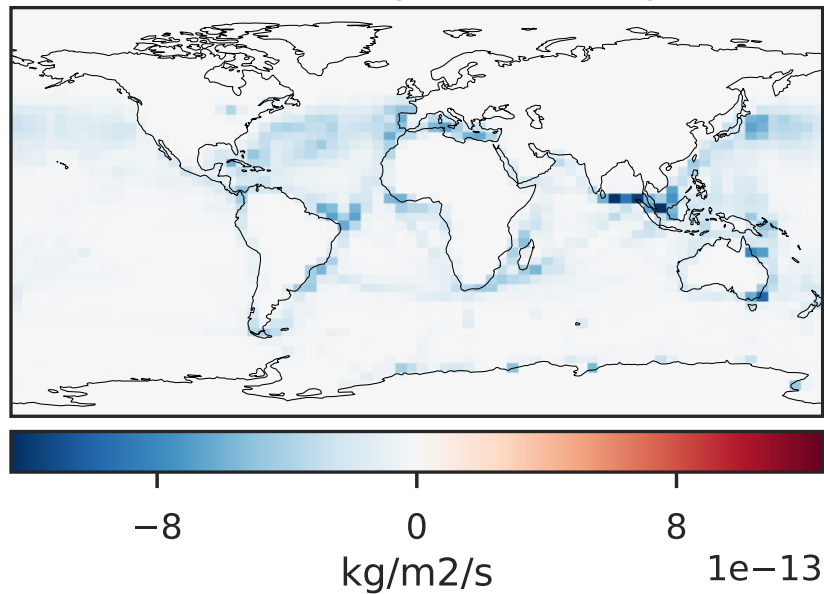
14.2.0-rc.2 (Ref)  
4.0x5.0



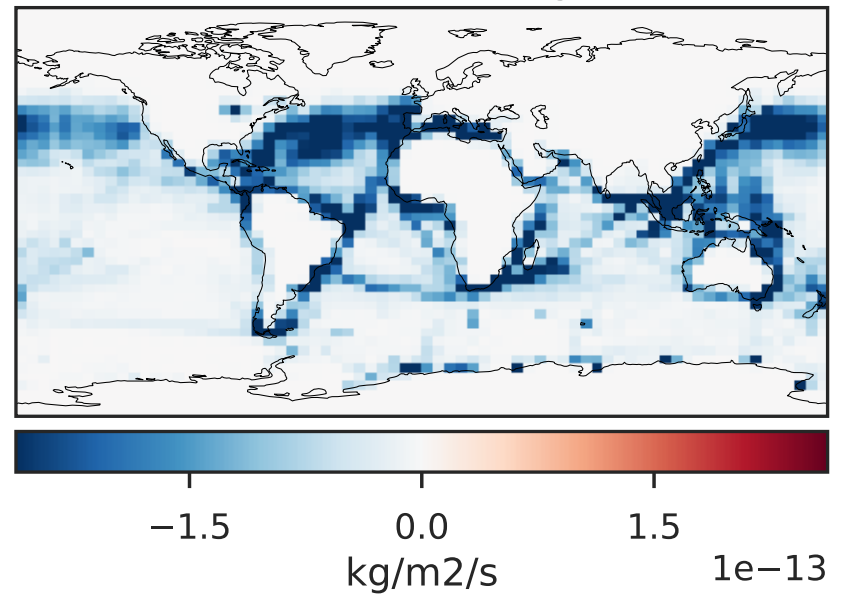
14.3.0-rc.0 (Dev)  
4.0x5.0



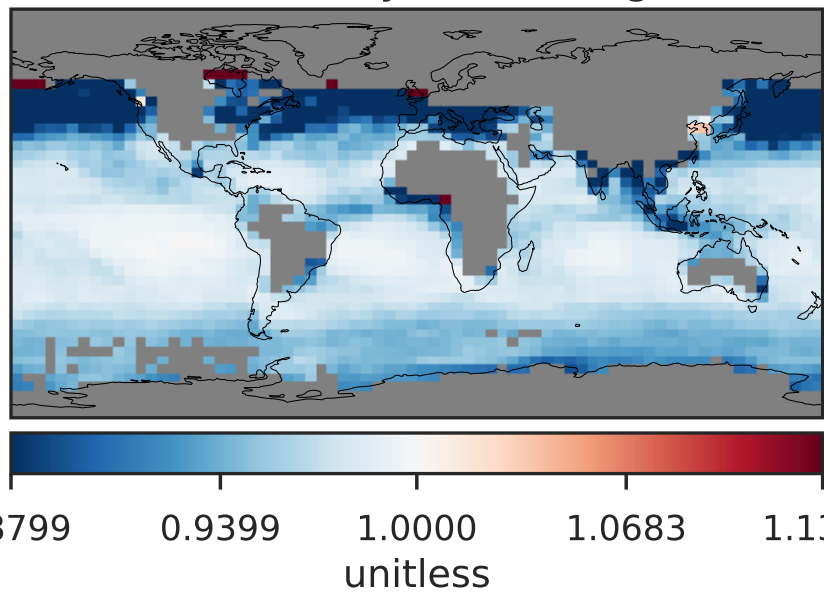
Difference  
Dev - Ref, Dynamic Range



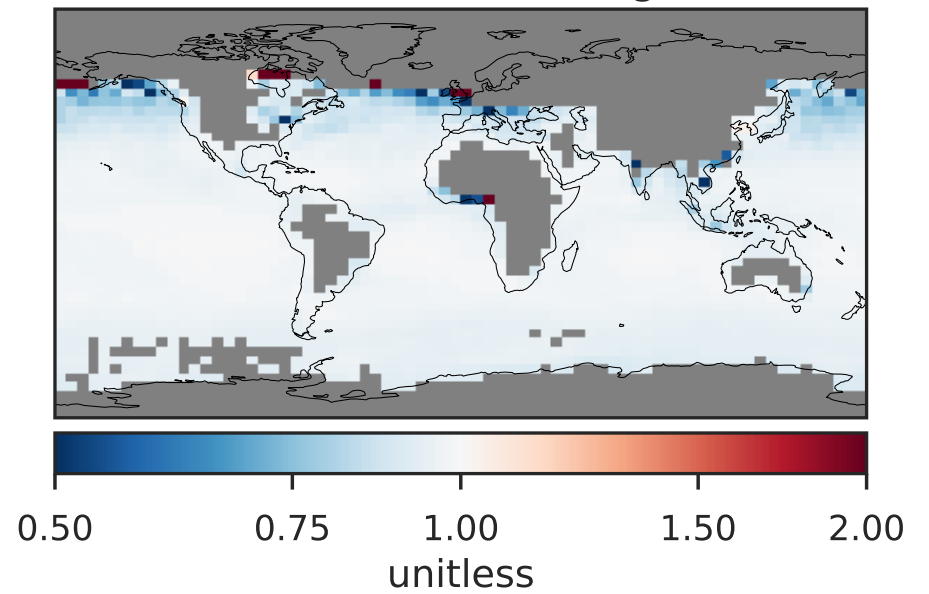
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

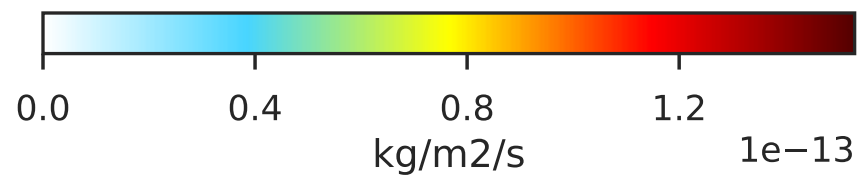
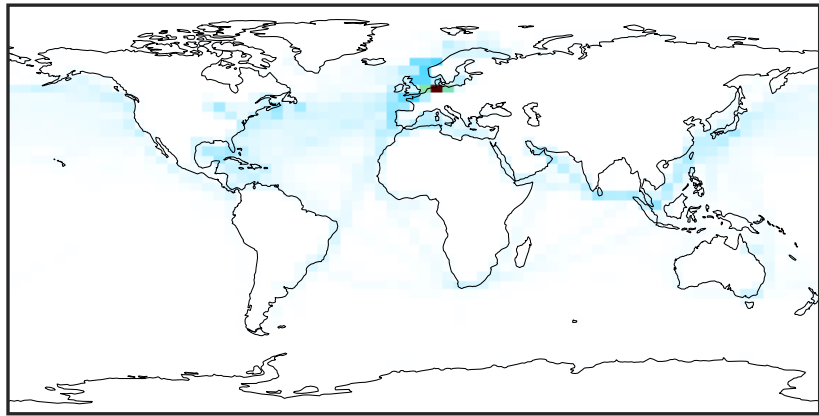


Ratio  
Dev/Ref, Fixed Range

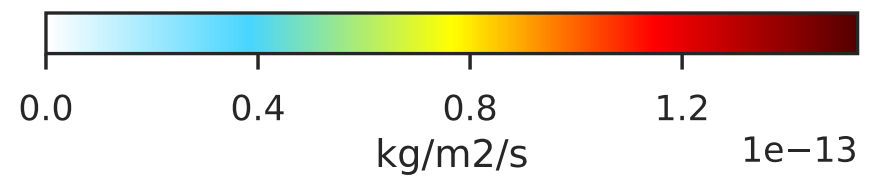
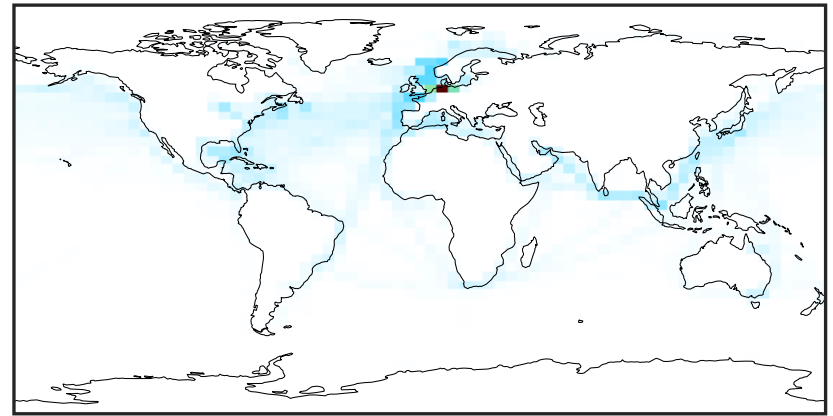


# EmisOCPI\_Ship (Jan2019)

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



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



Difference  
Dev - Ref, Dynamic Range



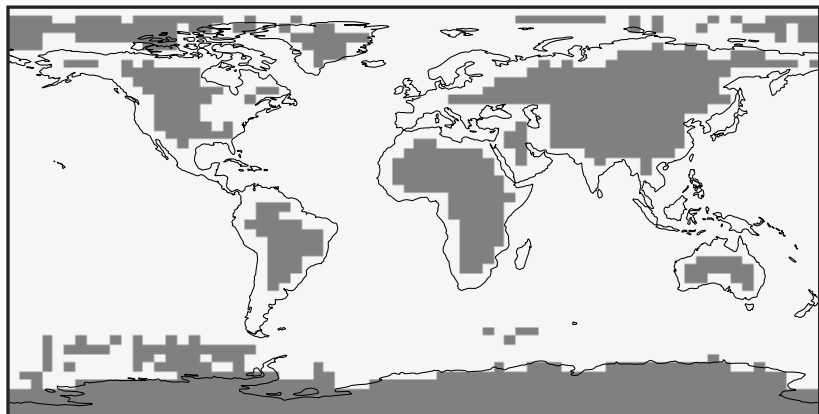
Zero throughout domain  
kg/m2/s

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



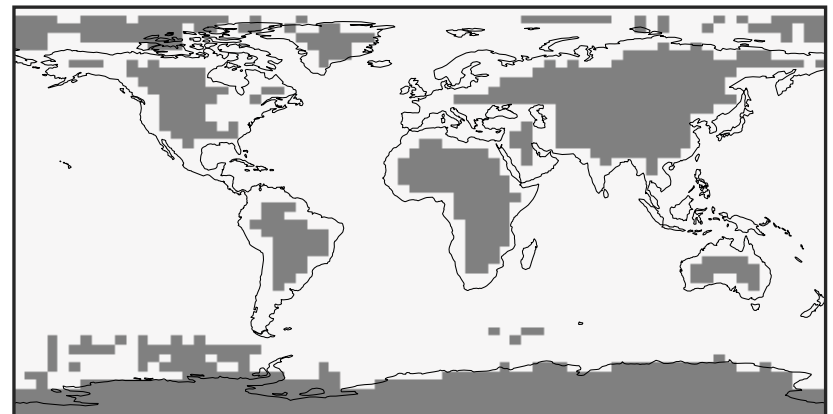
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

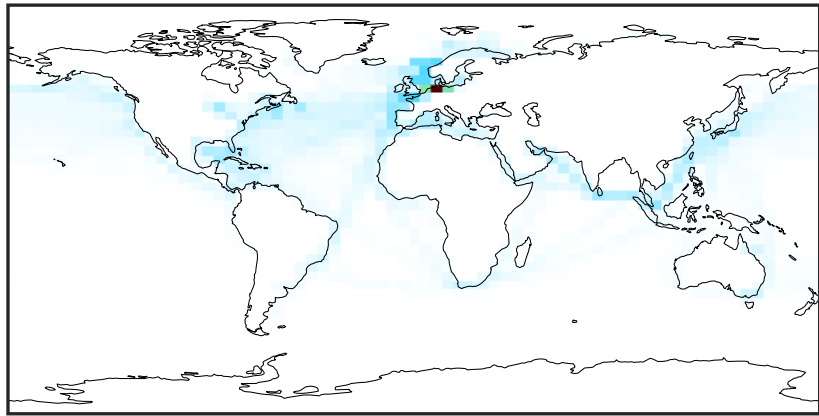
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

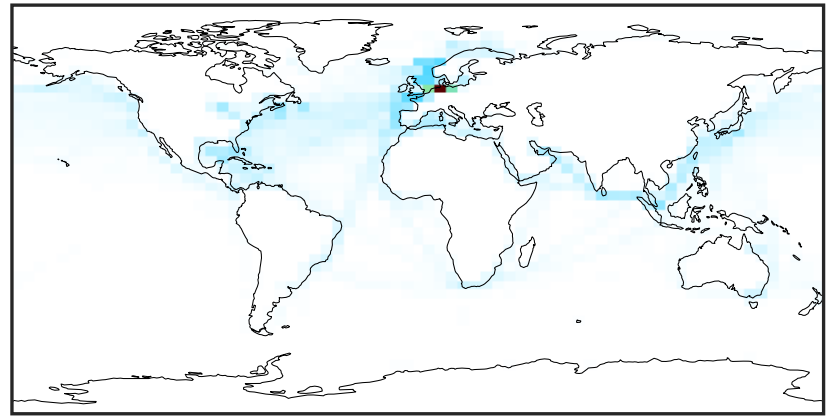
# EmisOCPO\_Ship (Jan2019)

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



0.0 0.4 0.8 1.2  $1e-13$   
kg/m<sup>2</sup>/s

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



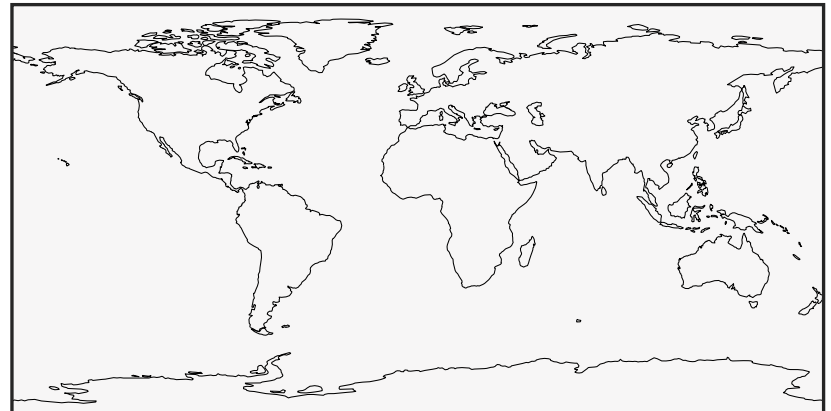
0.0 0.4 0.8 1.2  $1e-13$   
kg/m<sup>2</sup>/s

Difference  
Dev - Ref, Dynamic Range



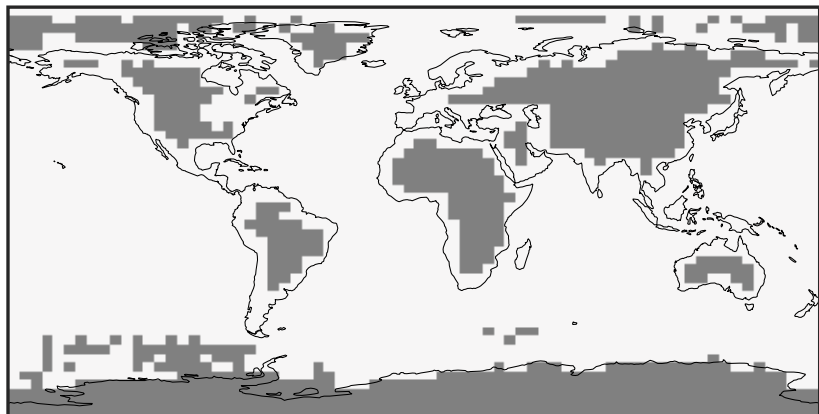
Zero throughout domain  
kg/m<sup>2</sup>/s

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



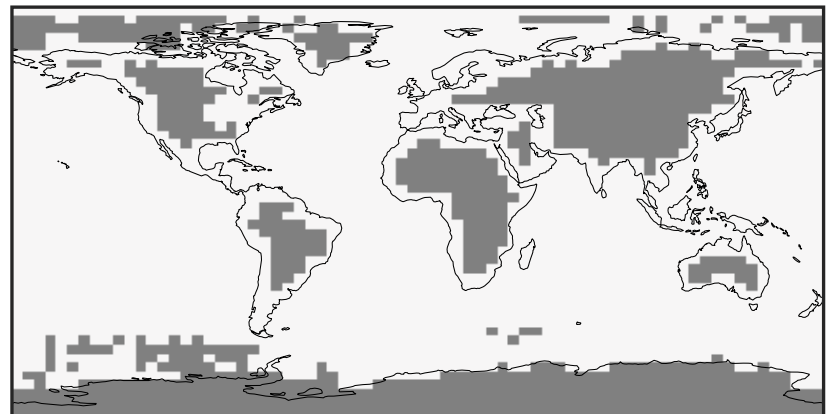
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

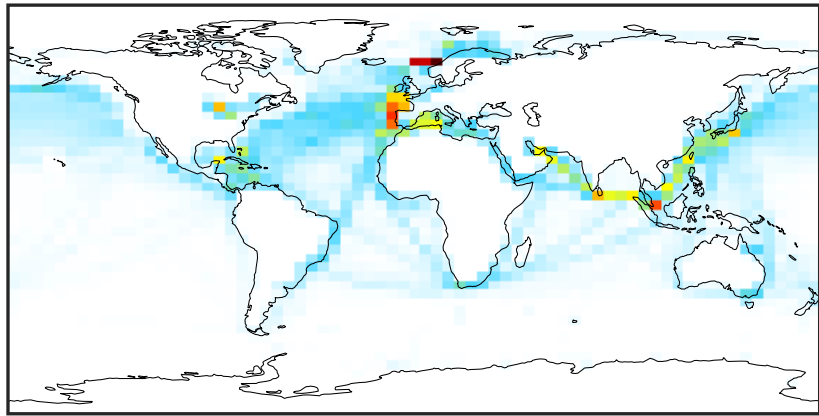
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

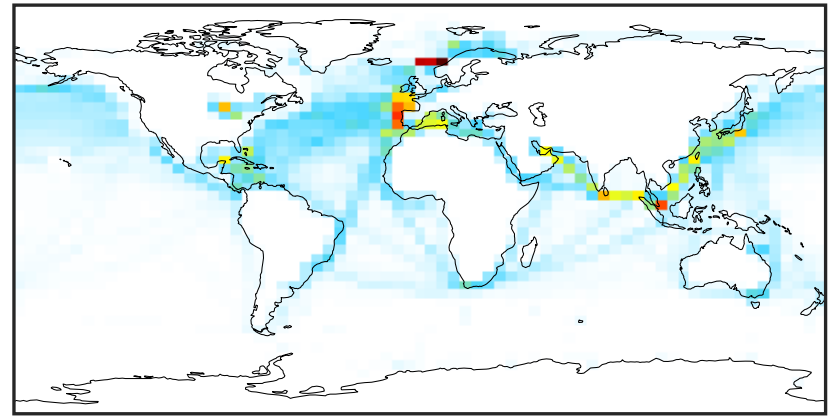
# EmispFe\_Ship (Jan2019)

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



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-14

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



0.0 0.4 0.8 1.2  
kg/m<sup>2</sup>/s 1e-14

Difference  
Dev - Ref, Dynamic Range



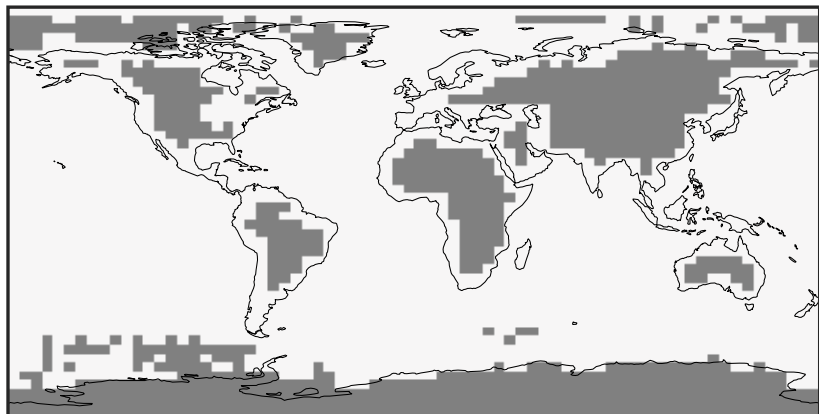
Zero throughout domain  
kg/m<sup>2</sup>/s

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



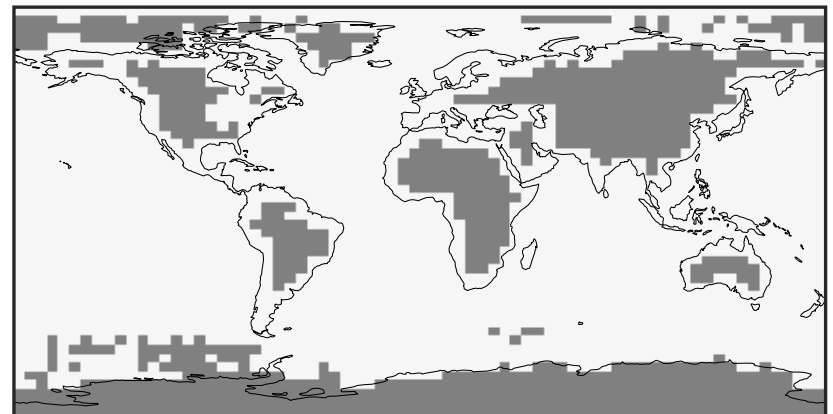
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

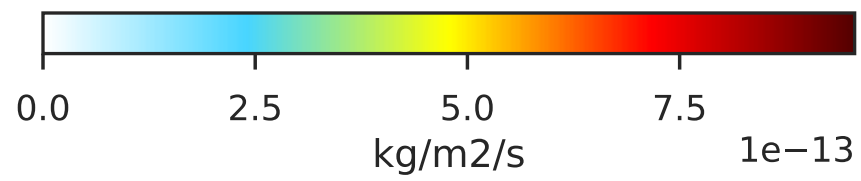
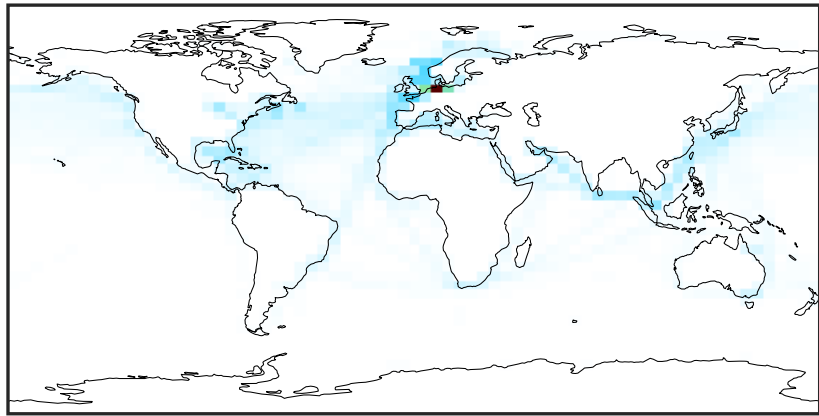
Ratio  
Dev/Ref, Fixed Range



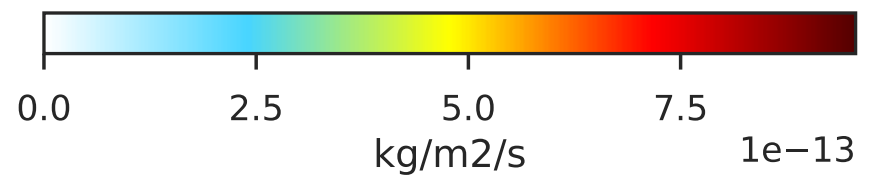
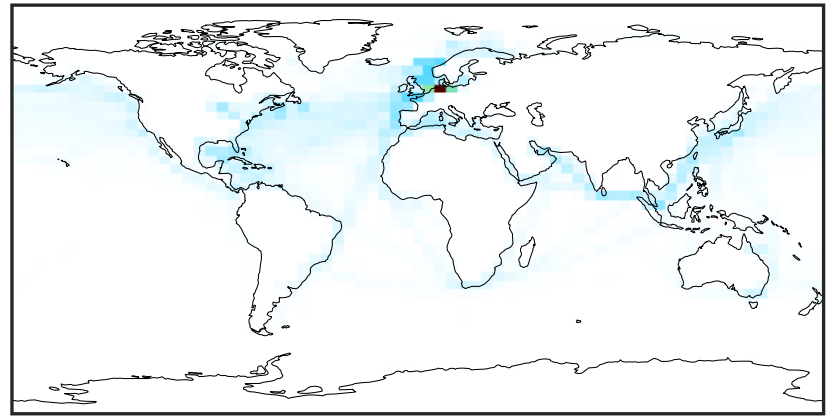
Ref and Dev equal throughout domain  
unitless

# EmisPRPE\_Ship (Jan2019)

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



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

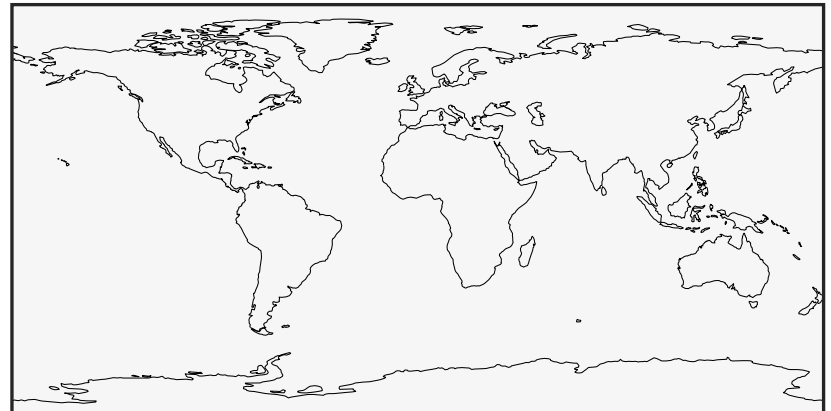


Difference  
Dev - Ref, Dynamic Range



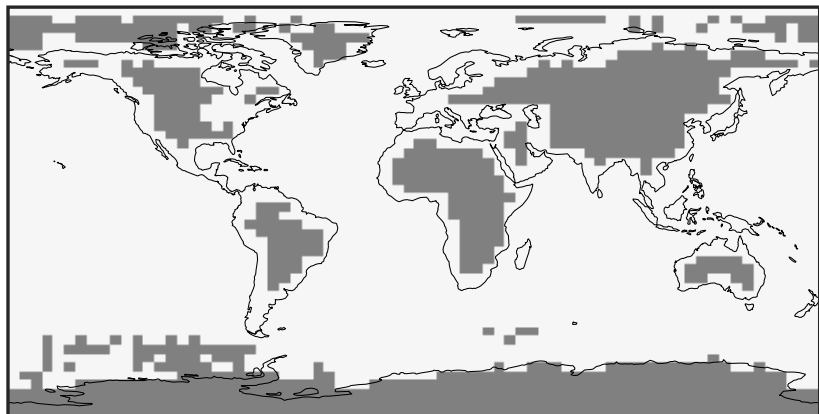
Zero throughout domain  
kg/m2/s

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



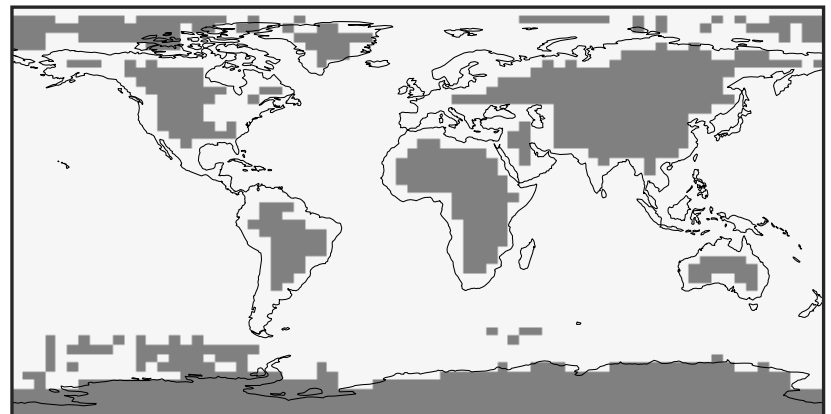
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range

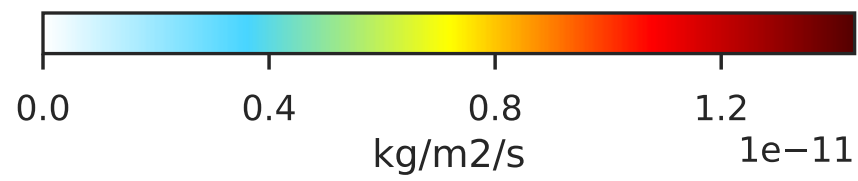
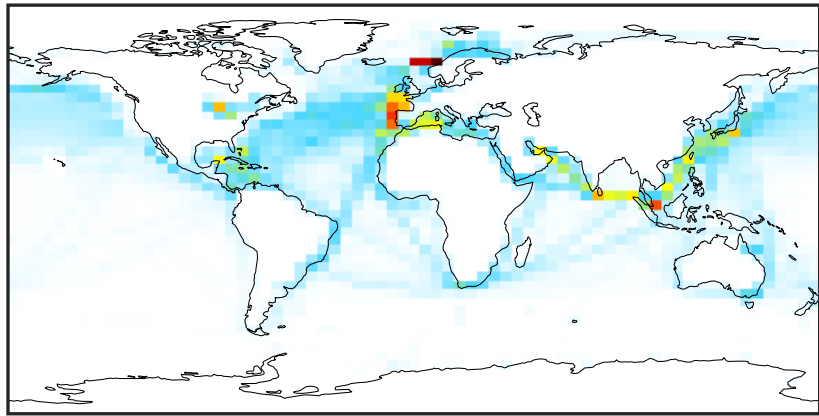


Ref and Dev equal throughout domain  
unitless

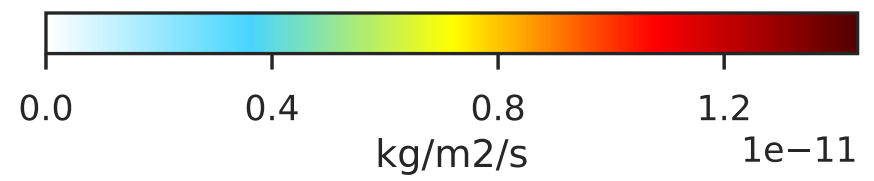
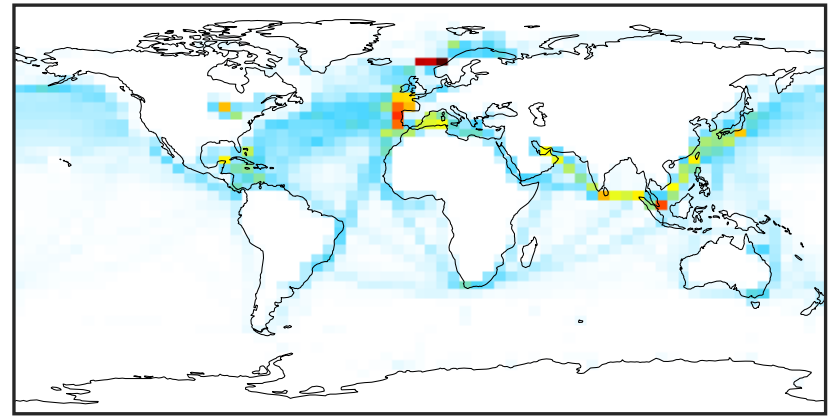


# EmisSO2\_Ship (Jan2019)

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



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

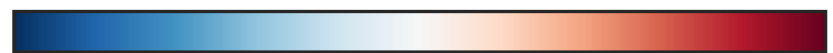


Difference  
Dev - Ref, Dynamic Range



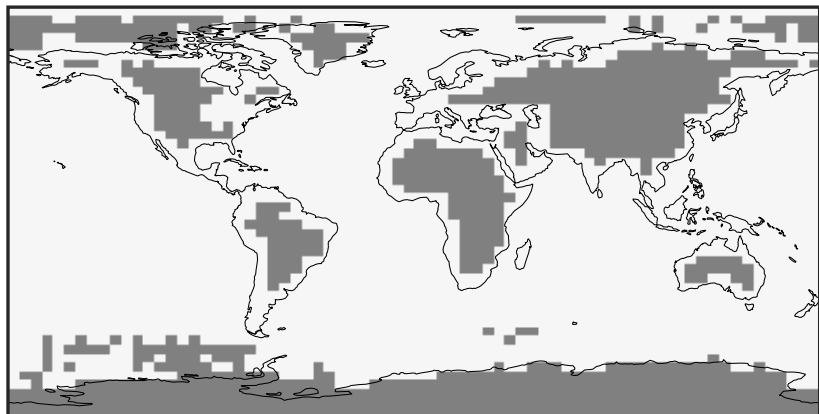
Zero throughout domain  
kg/m2/s

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



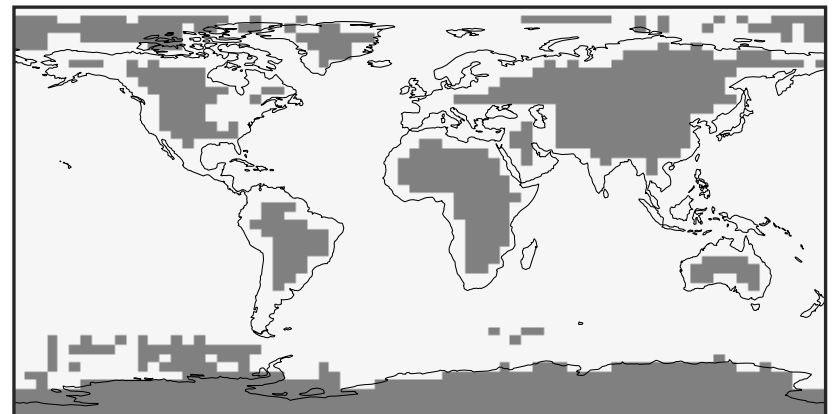
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

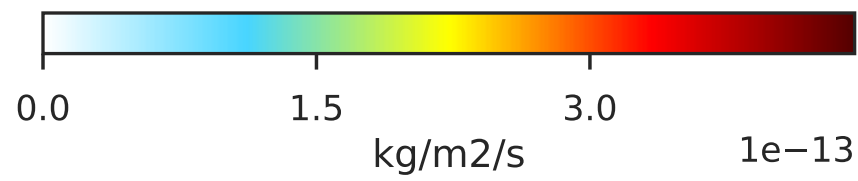
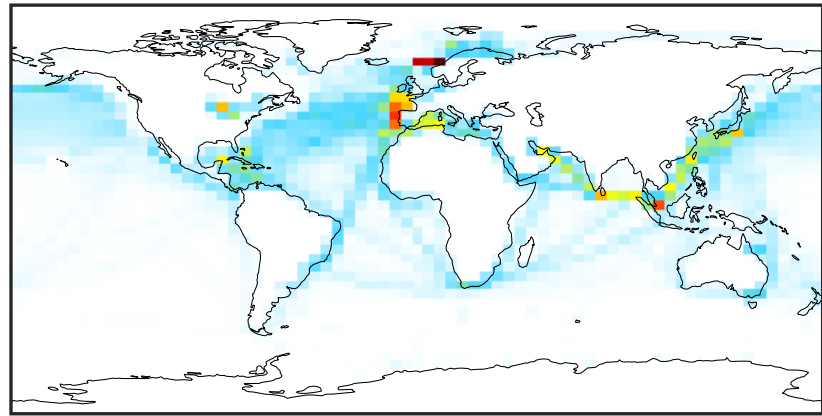
Ratio  
Dev/Ref, Fixed Range



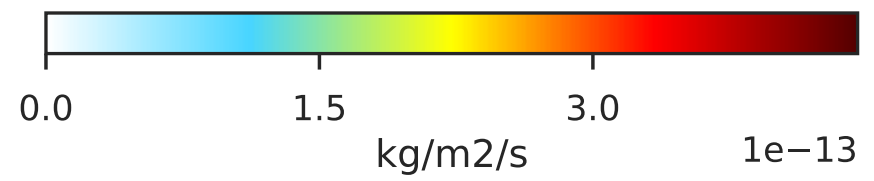
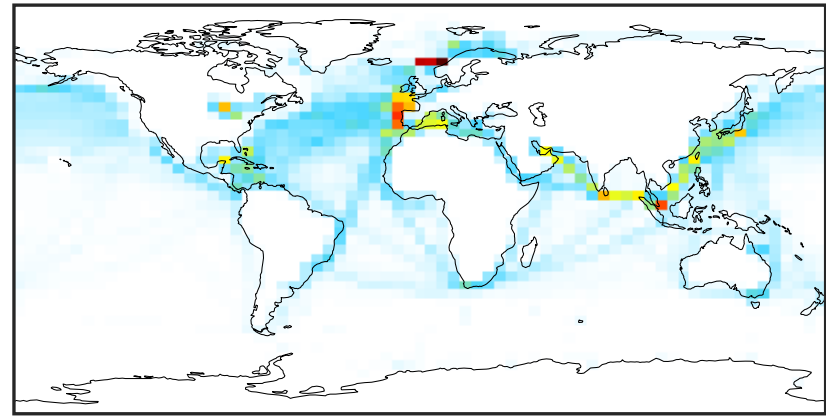
Ref and Dev equal throughout domain  
unitless

# EmisSO4\_Ship (Jan2019)

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



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

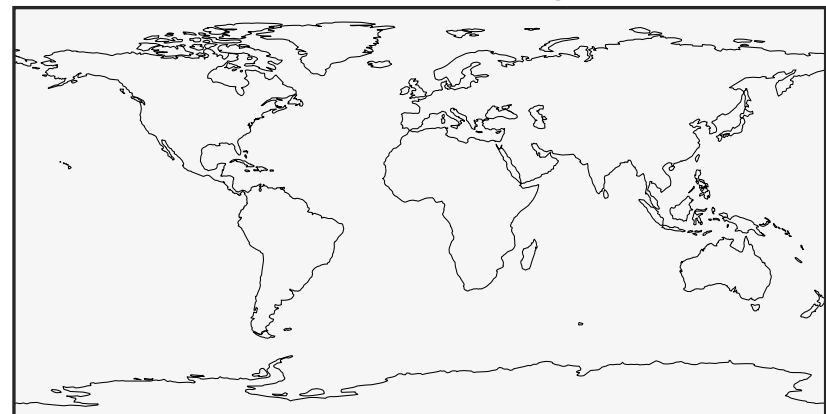


Difference  
Dev - Ref, Dynamic Range



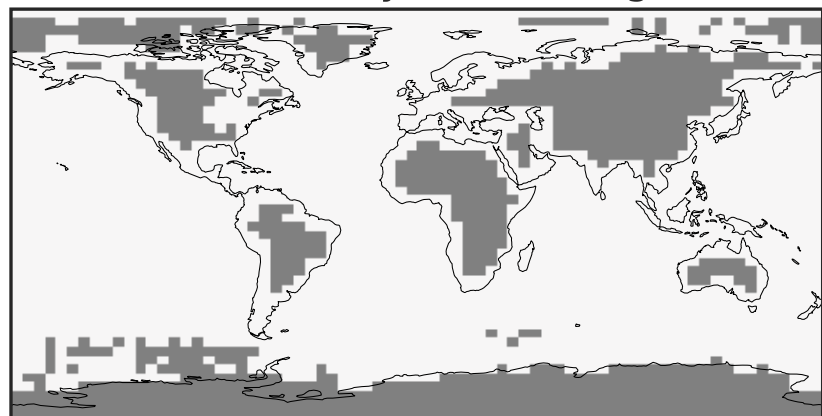
Zero throughout domain  
kg/m2/s

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



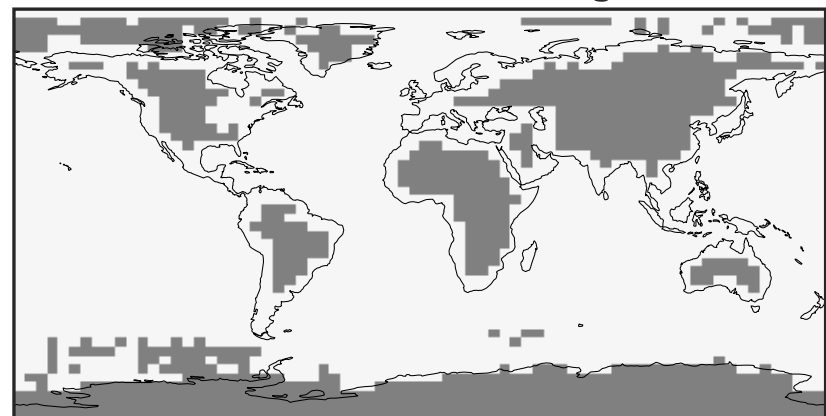
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

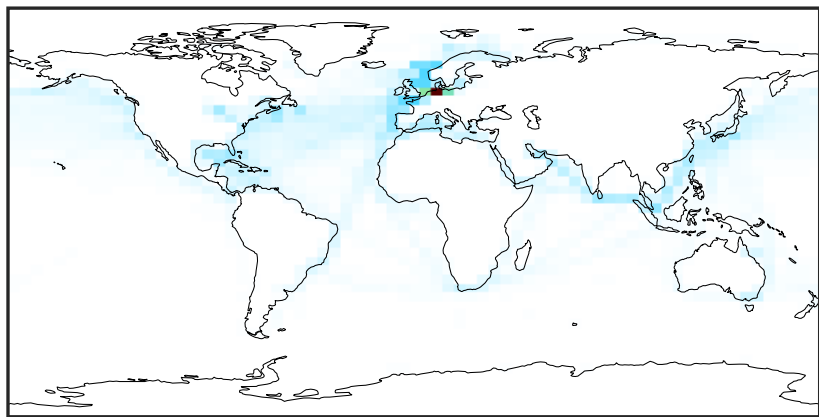
Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless

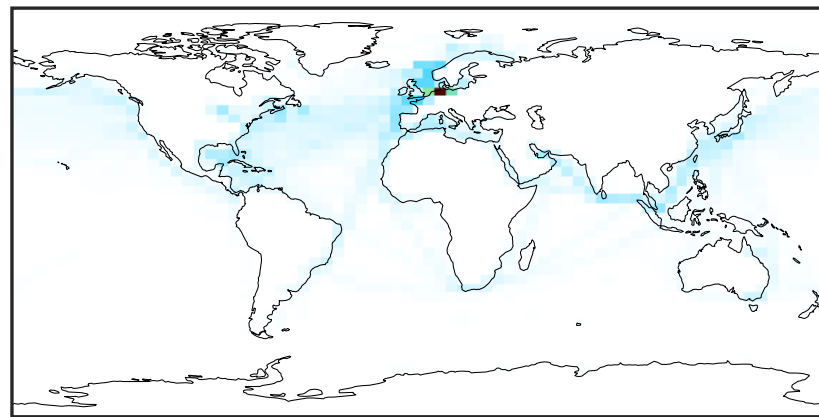
# EmisSOAP\_Ship (Jan2019)

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



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

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



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

Difference  
Dev - Ref, Dynamic Range



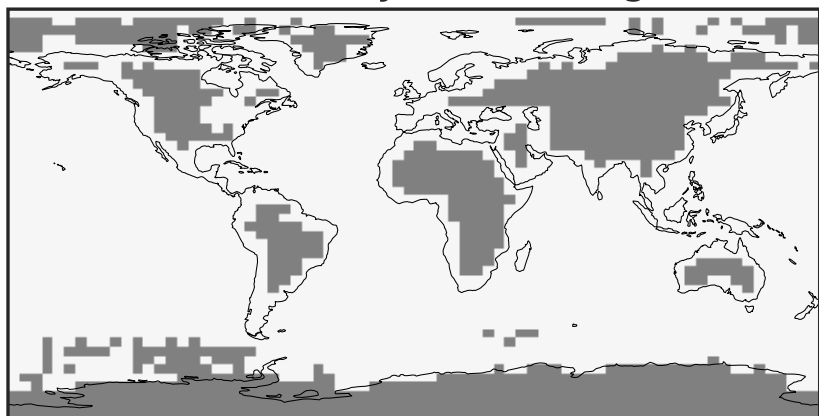
Zero throughout domain  
kg/m<sup>2</sup>/s

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



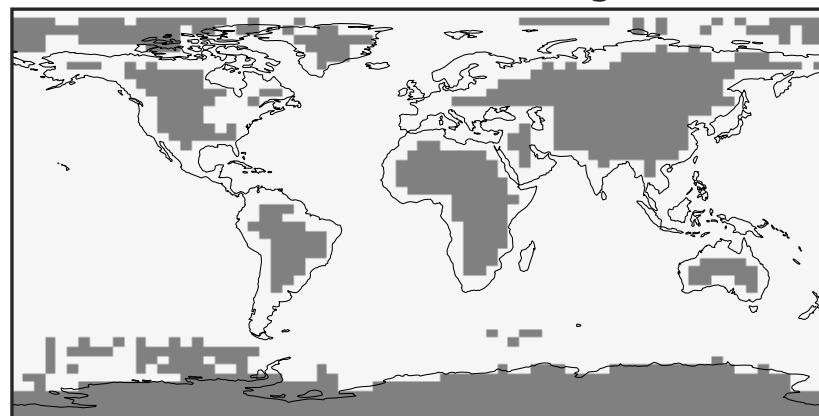
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

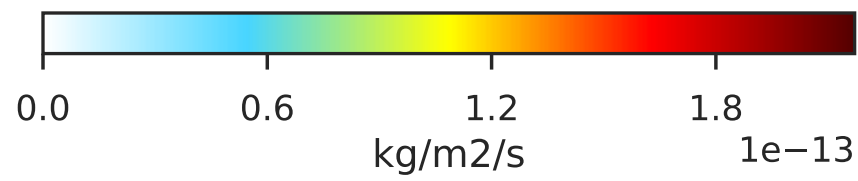
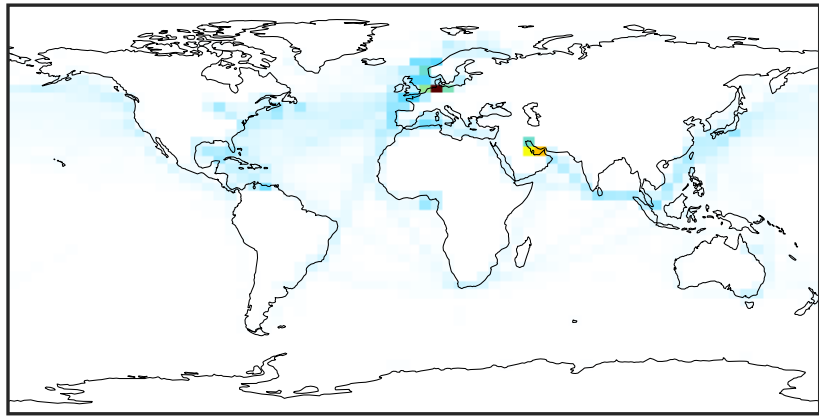
Ratio  
Dev/Ref, Fixed Range



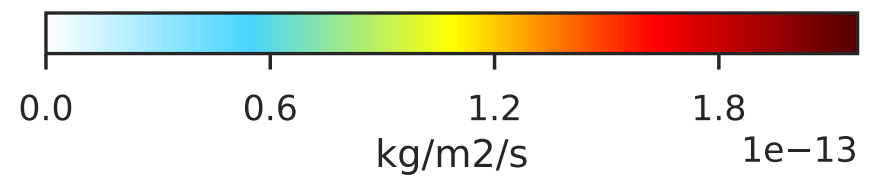
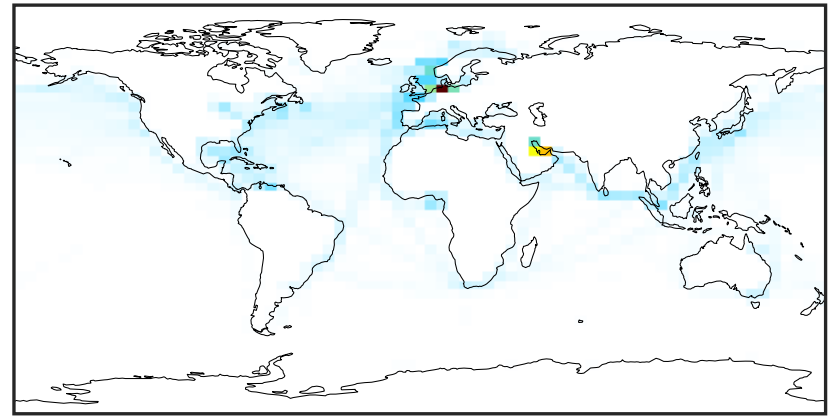
Ref and Dev equal throughout domain  
unitless

# EmisTOLU\_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



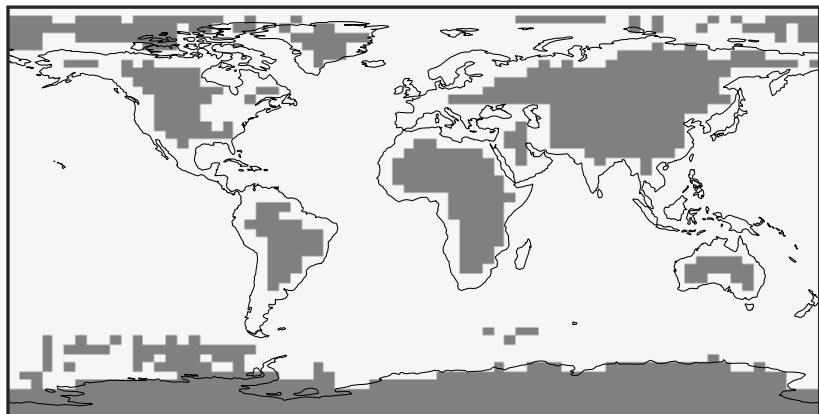
Zero throughout domain  
kg/m2/s

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



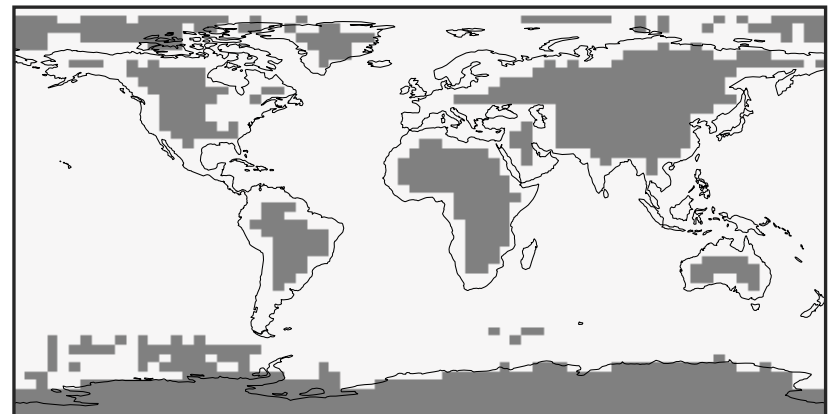
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

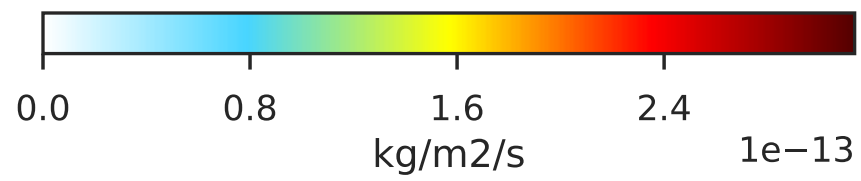
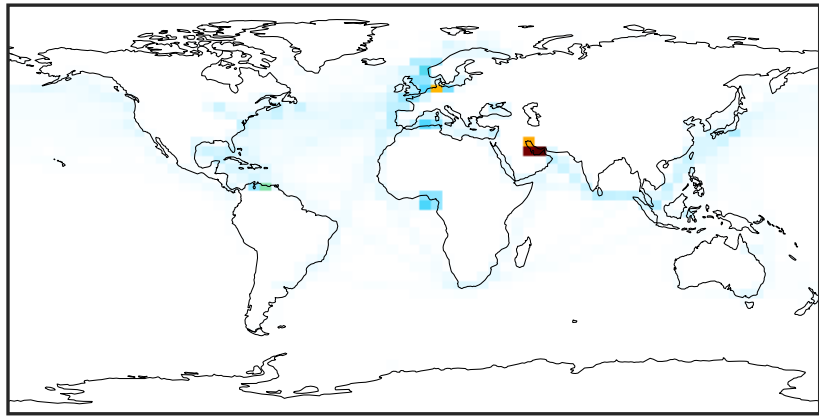
Ratio  
Dev/Ref, Fixed Range



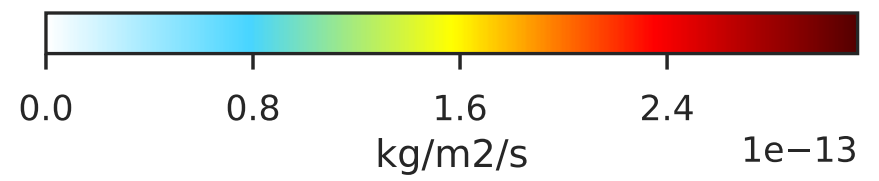
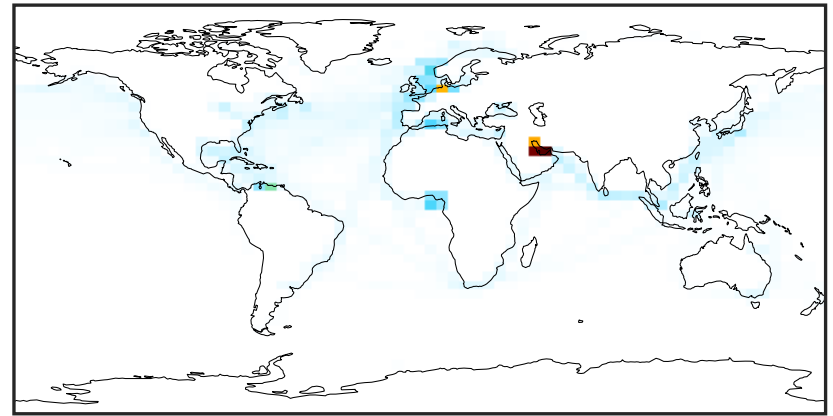
Ref and Dev equal throughout domain  
unitless

# EmisXYLE\_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



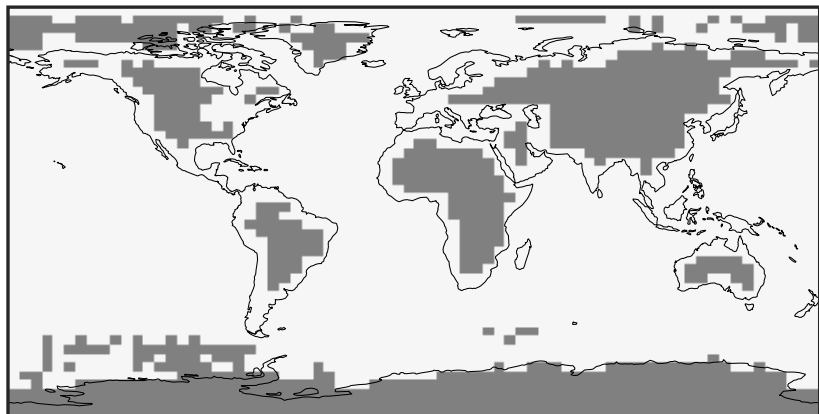
Zero throughout domain  
kg/m2/s

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



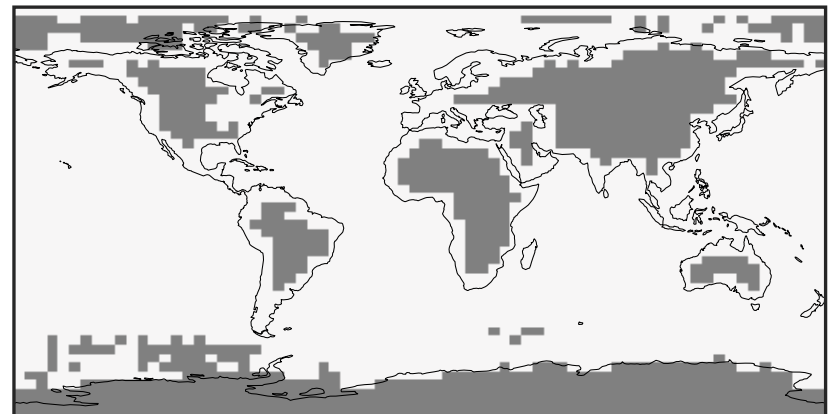
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Ref and Dev equal throughout domain  
unitless

Ratio  
Dev/Ref, Fixed Range



Ref and Dev equal throughout domain  
unitless