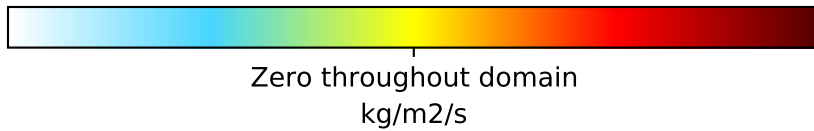
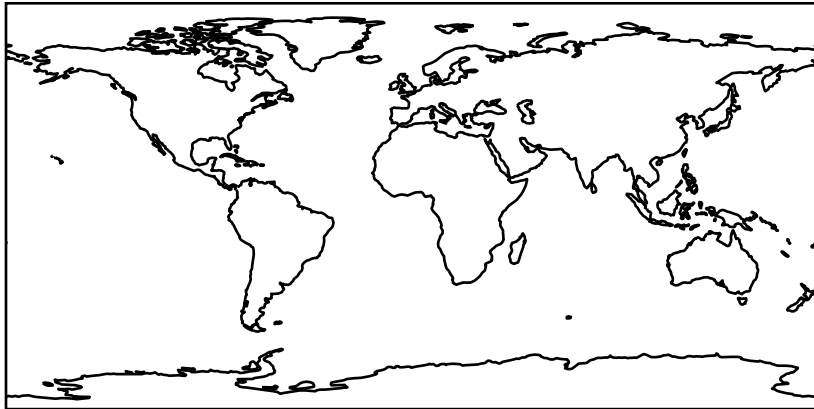
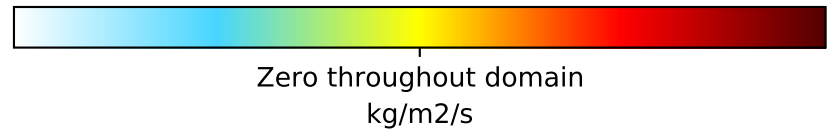
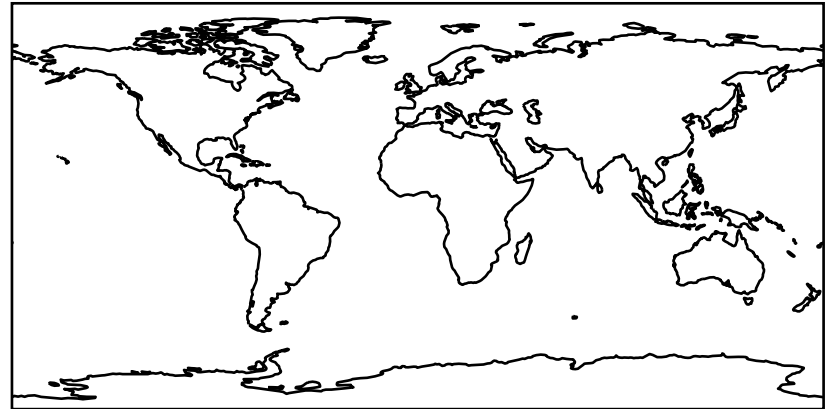


# EmisALD2\_Ship

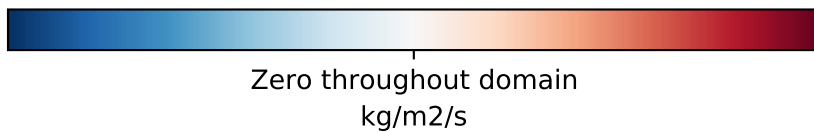
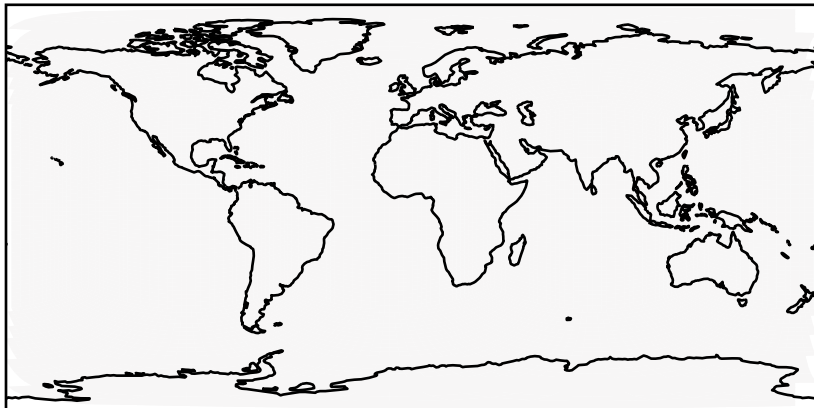
GCHP\_13.2.0 (Ref)  
c48



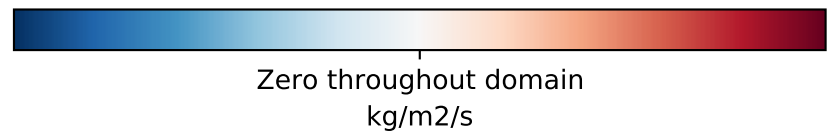
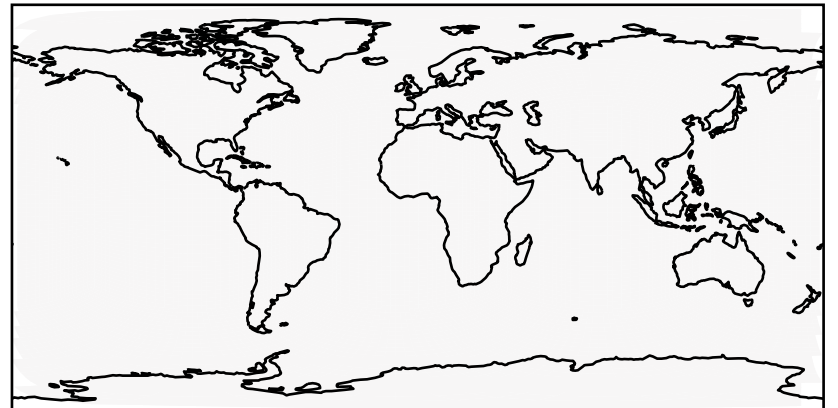
GCHP\_13.3.0-rc.1 (Dev)  
c48



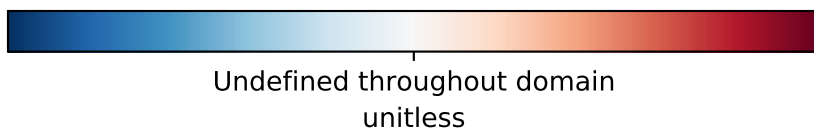
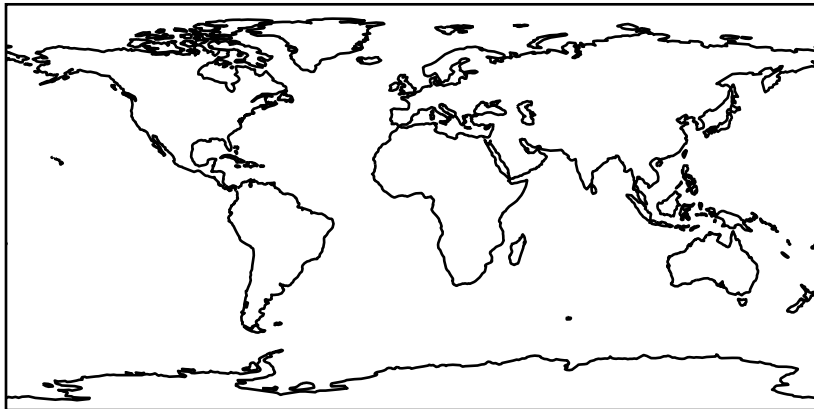
Difference  
Dev - Ref, Dynamic Range



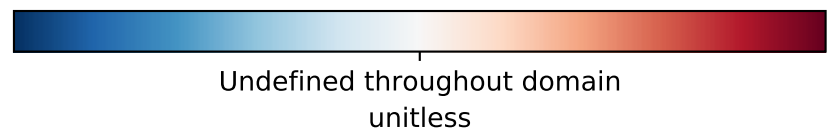
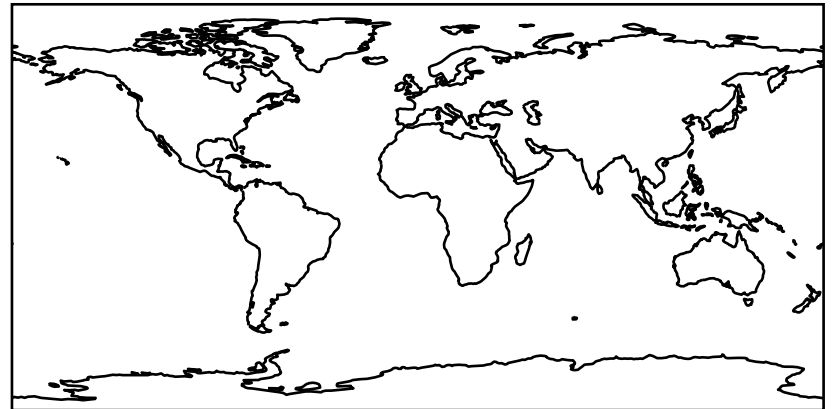
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

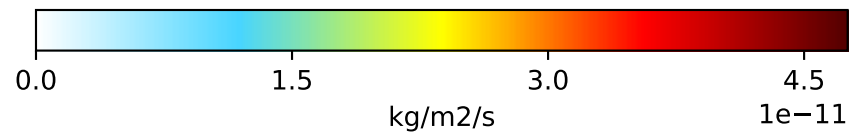
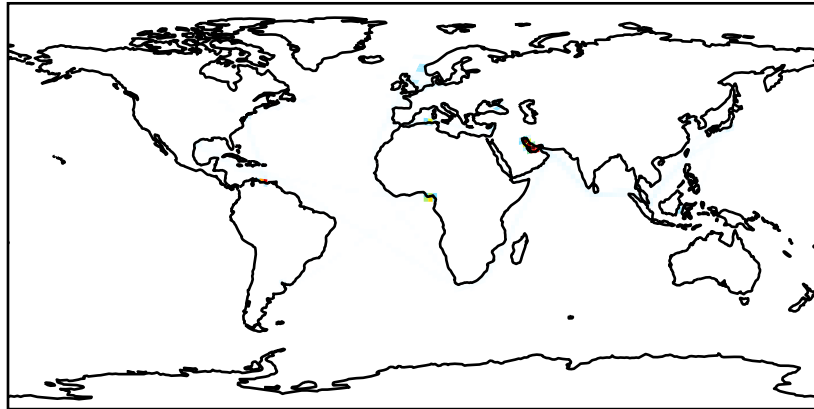


Ratio  
Dev/Ref, Fixed Range

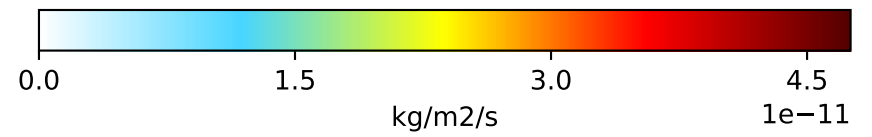
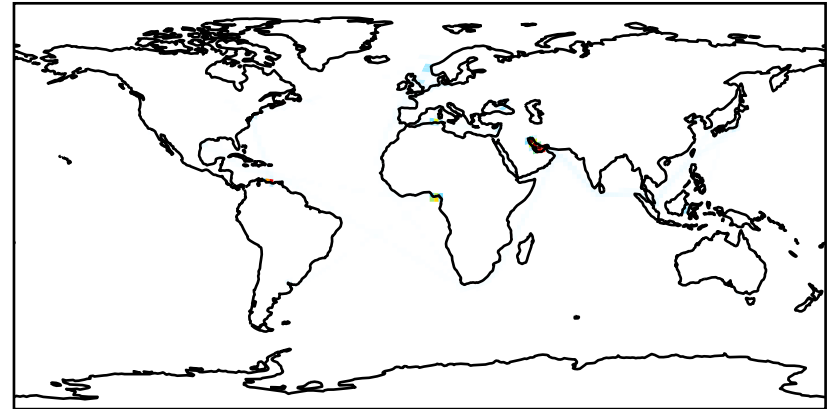


# EmisALK4\_Ship

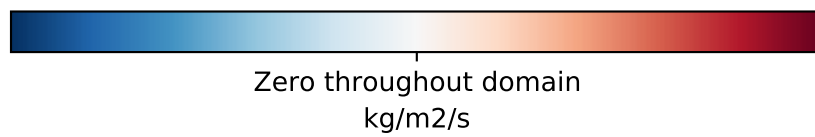
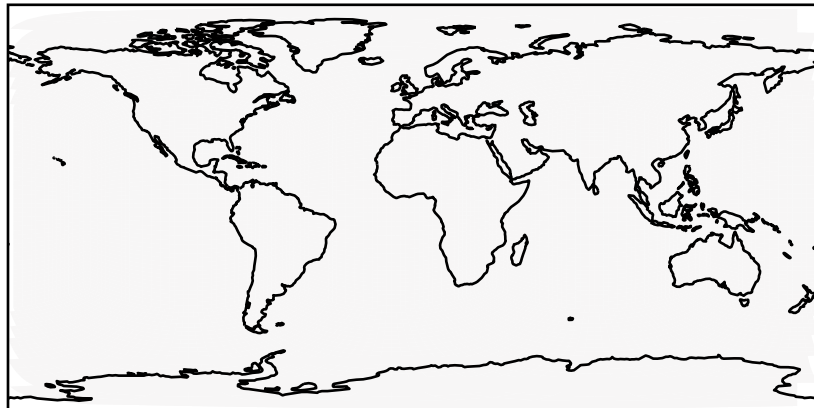
GCHP\_13.2.0 (Ref)  
c48



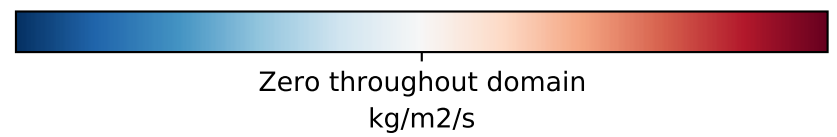
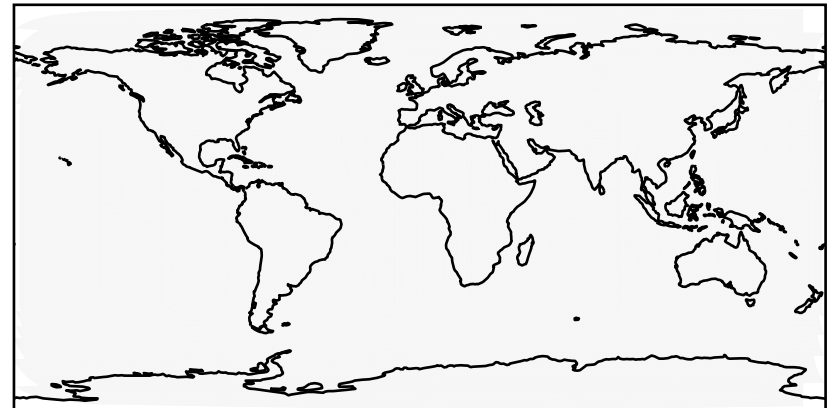
GCHP\_13.3.0-rc.1 (Dev)  
c48



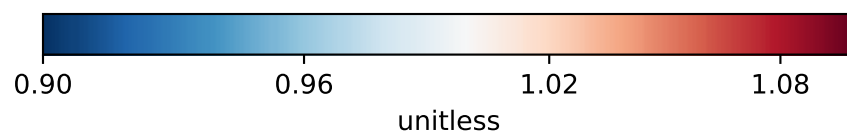
Difference  
Dev - Ref, Dynamic Range



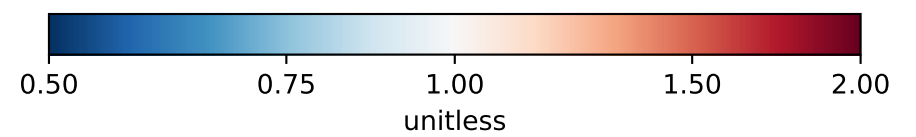
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



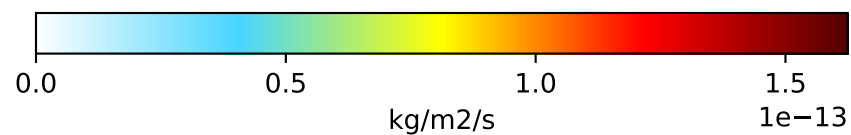
Ratio  
Dev/Ref, Fixed Range



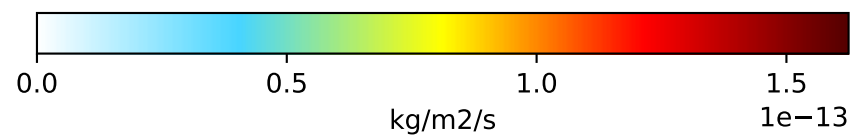
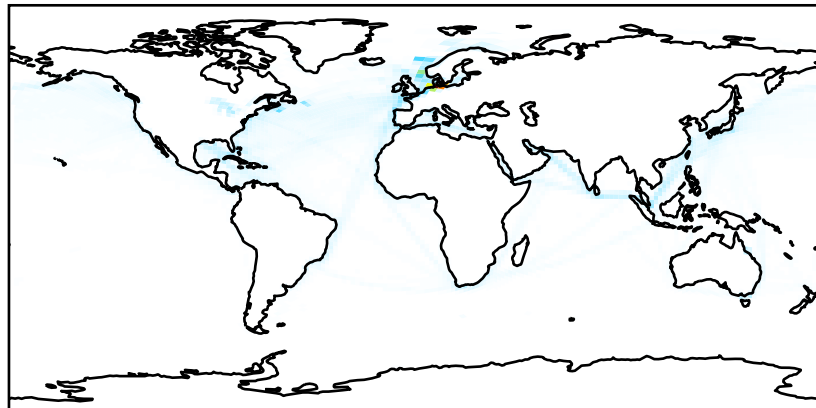


# EmisBCPI\_Ship

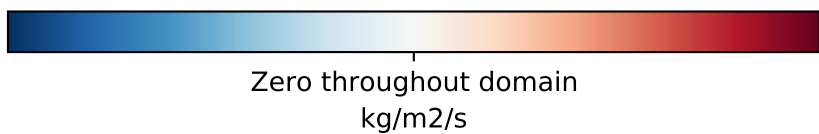
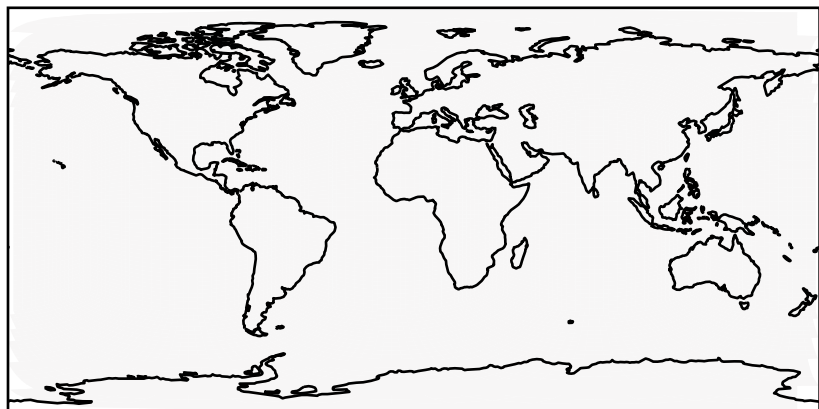
GCHP\_13.2.0 (Ref)  
c48



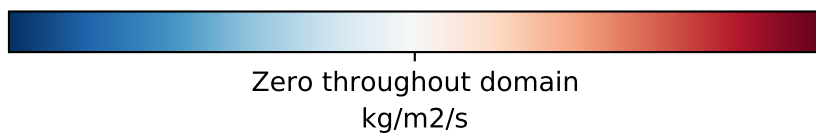
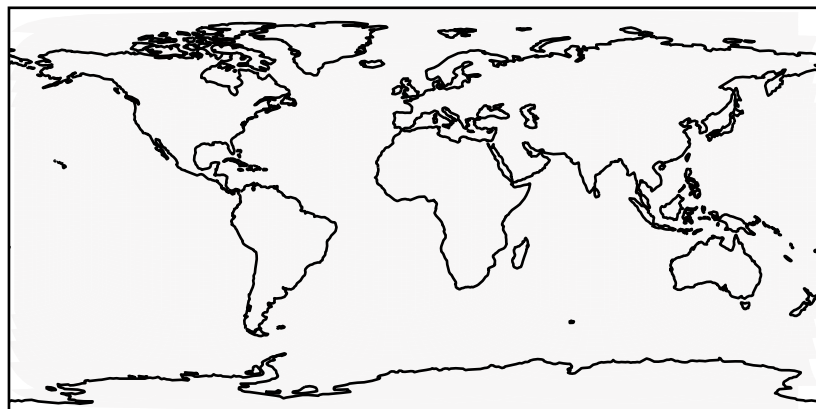
GCHP\_13.3.0-rc.1 (Dev)  
c48



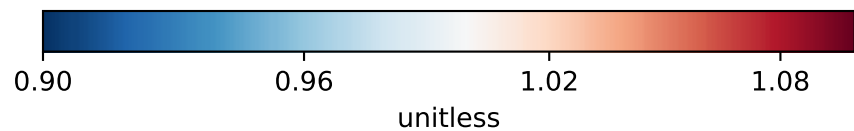
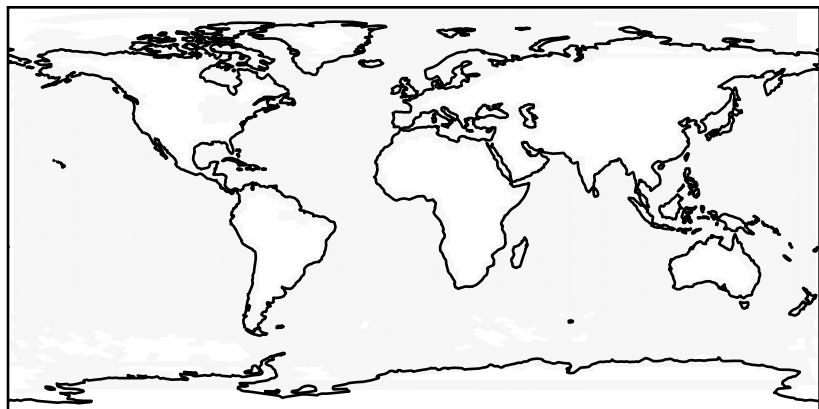
Difference  
Dev - Ref, Dynamic Range



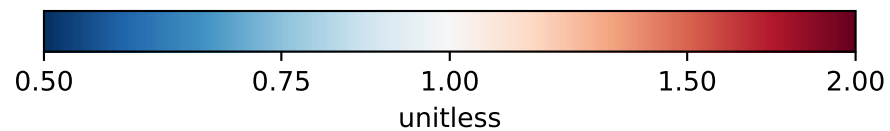
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

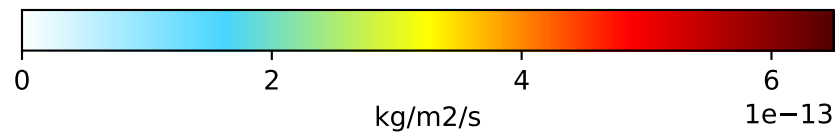
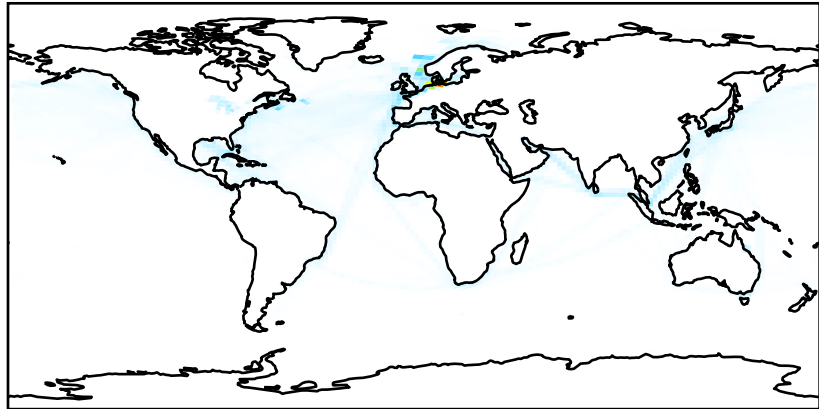


Ratio  
Dev/Ref, Fixed Range

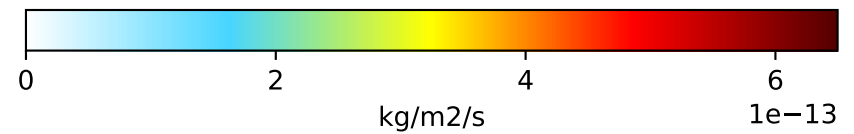
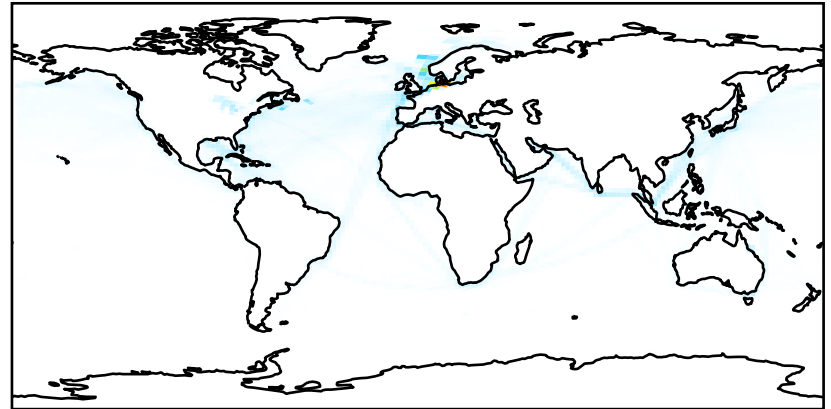


# EmisBCPO\_Ship

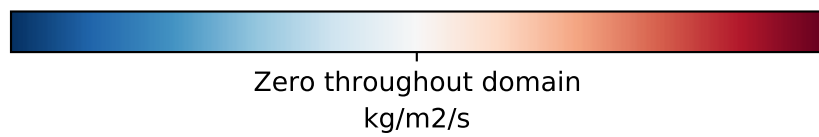
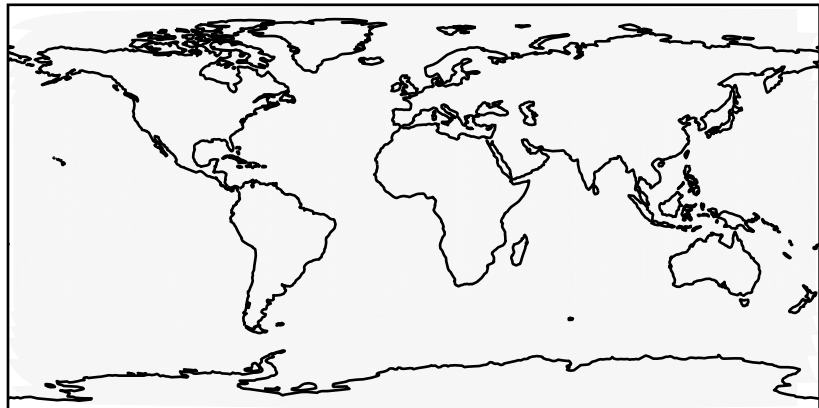
GCHP\_13.2.0 (Ref)  
c48



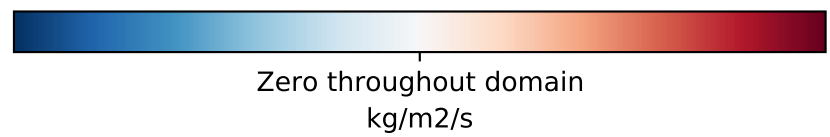
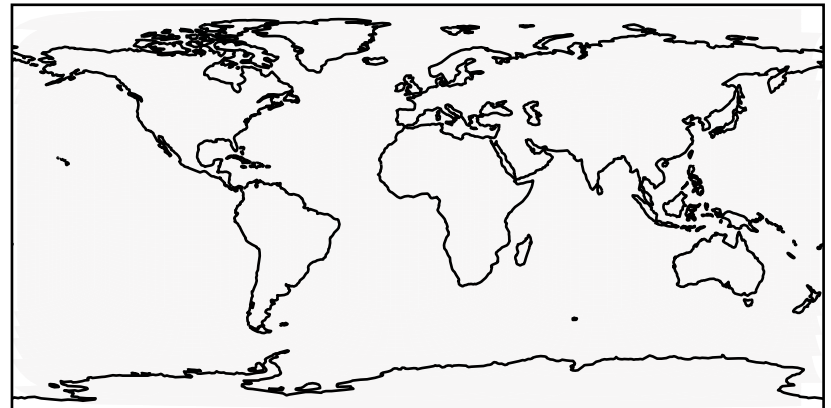
GCHP\_13.3.0-rc.1 (Dev)  
c48



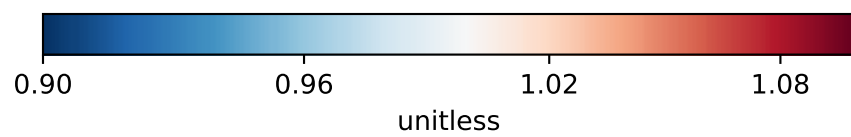
Difference  
Dev - Ref, Dynamic Range



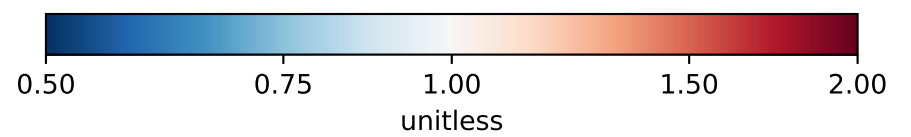
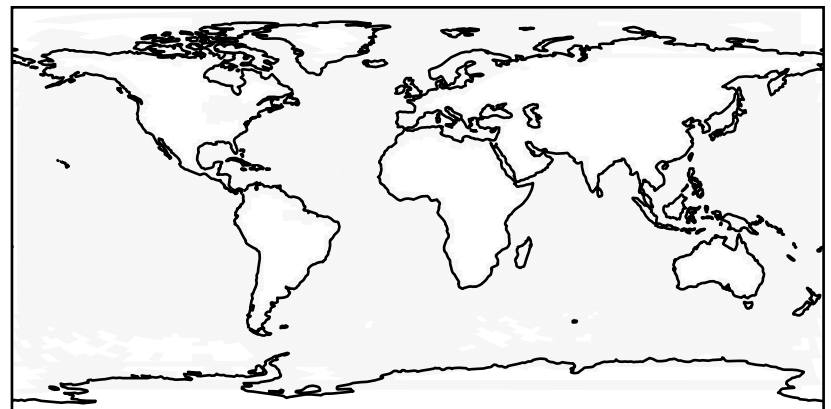
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

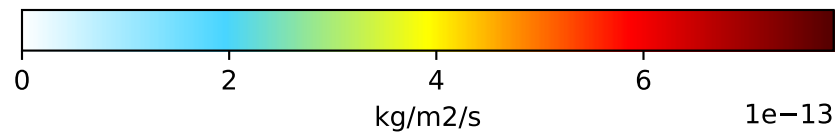
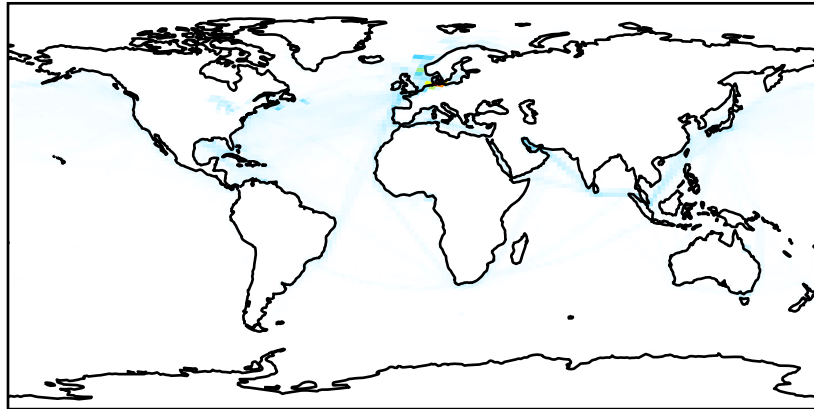


Ratio  
Dev/Ref, Fixed Range

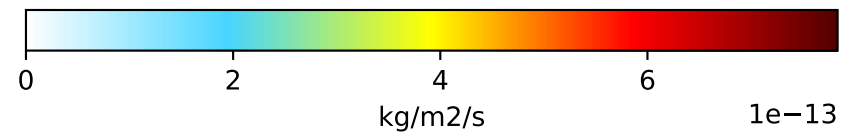
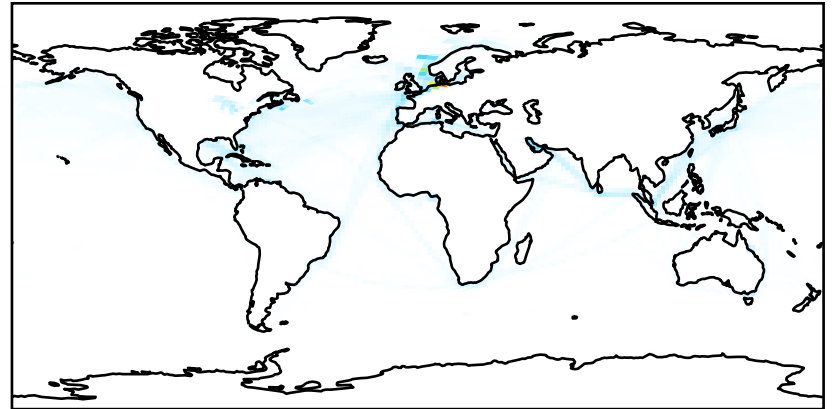


# EmisBENZ\_Ship

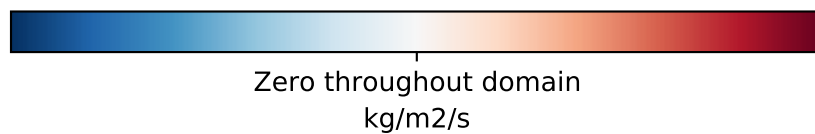
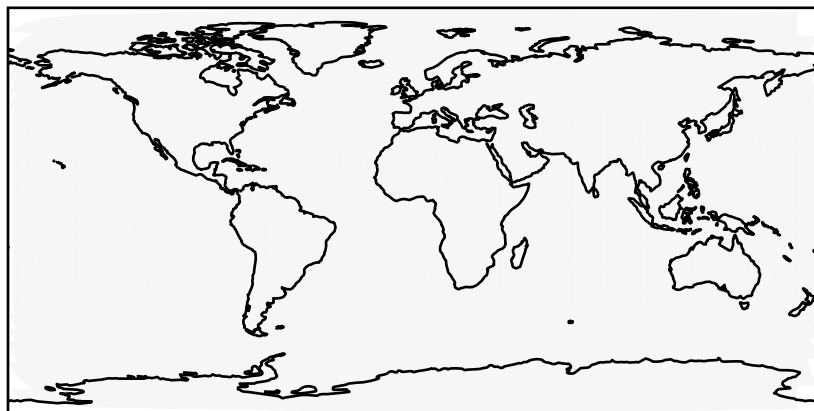
GCHP\_13.2.0 (Ref)  
c48



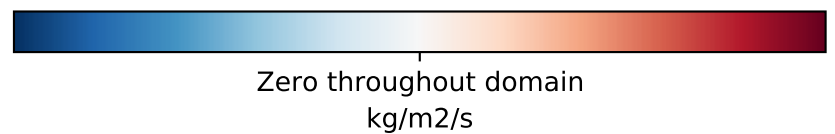
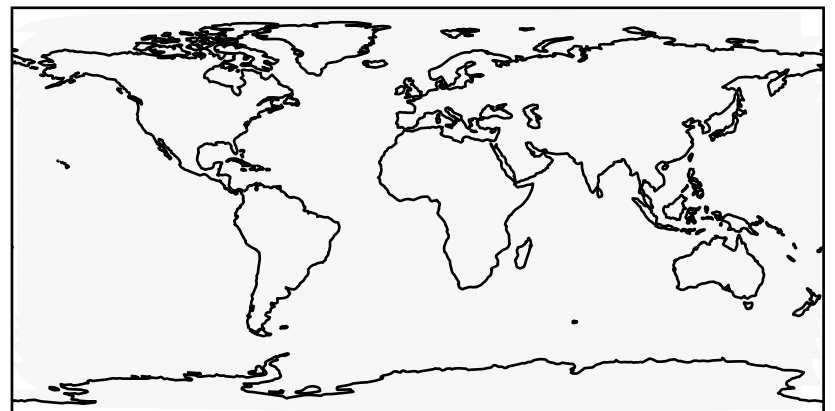
GCHP\_13.3.0-rc.1 (Dev)  
c48



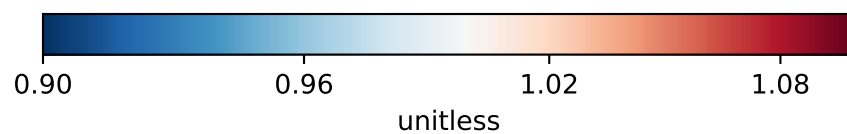
Difference  
Dev - Ref, Dynamic Range



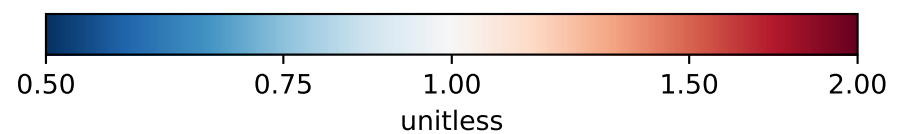
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

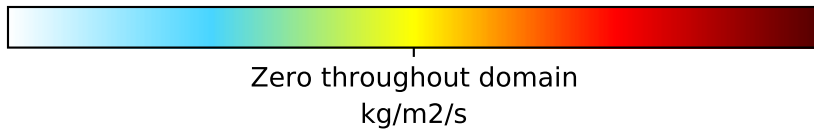
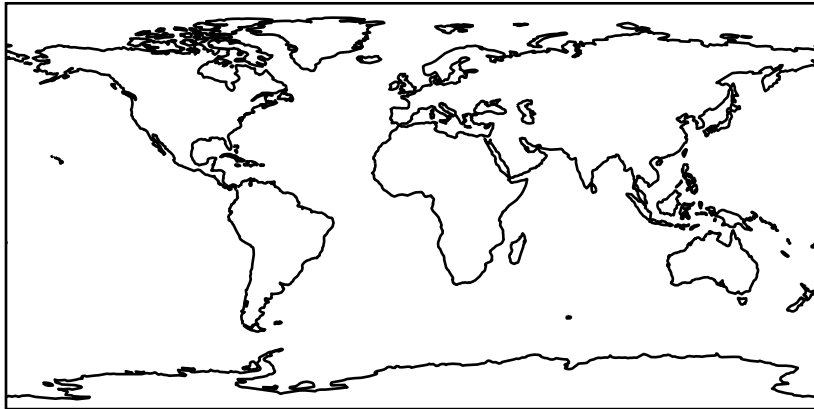


Ratio  
Dev/Ref, Fixed Range

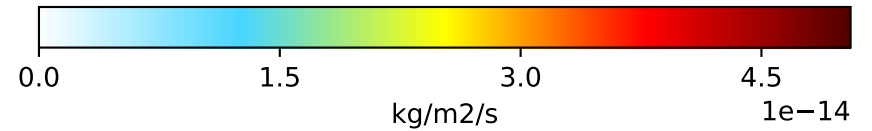


# EmisC2H2\_Ship

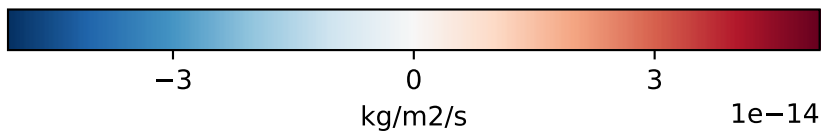
GCHP\_13.2.0 (Ref)  
c48



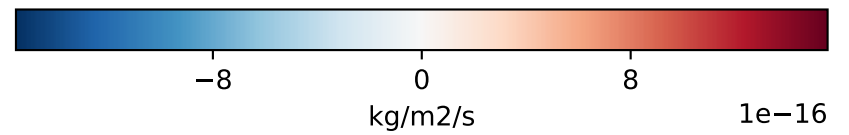
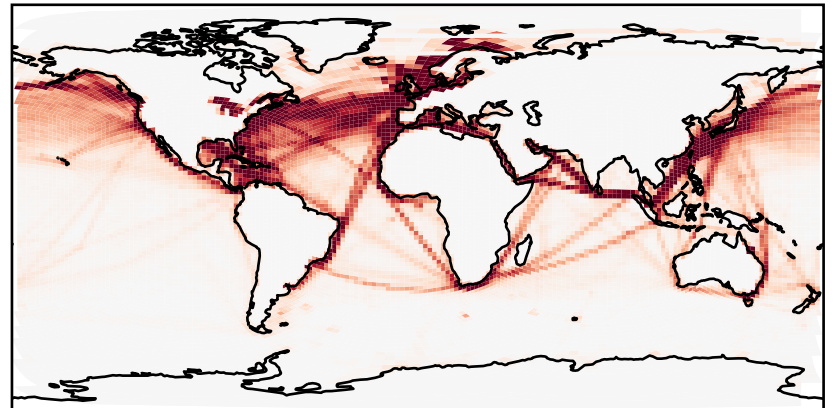
GCHP\_13.3.0-rc.1 (Dev)  
c48



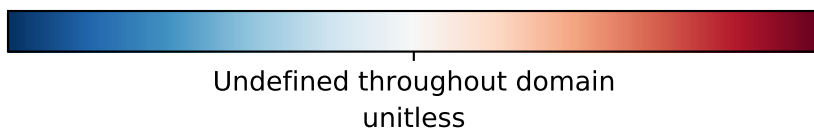
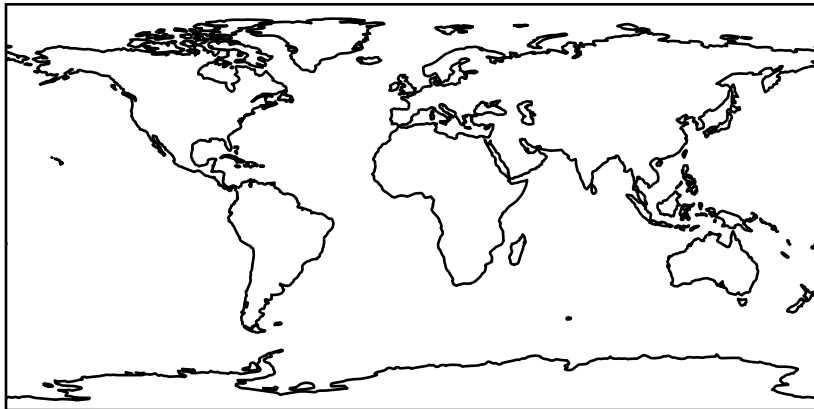
Difference  
Dev - Ref, Dynamic Range



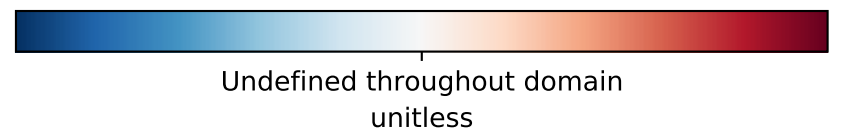
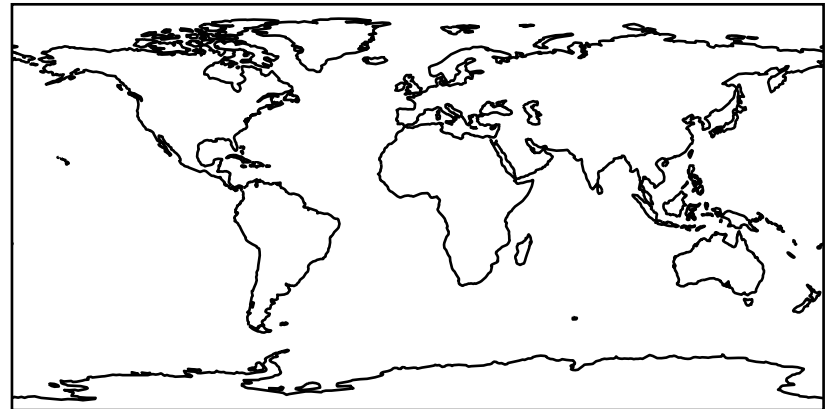
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



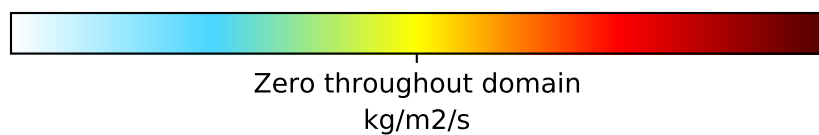
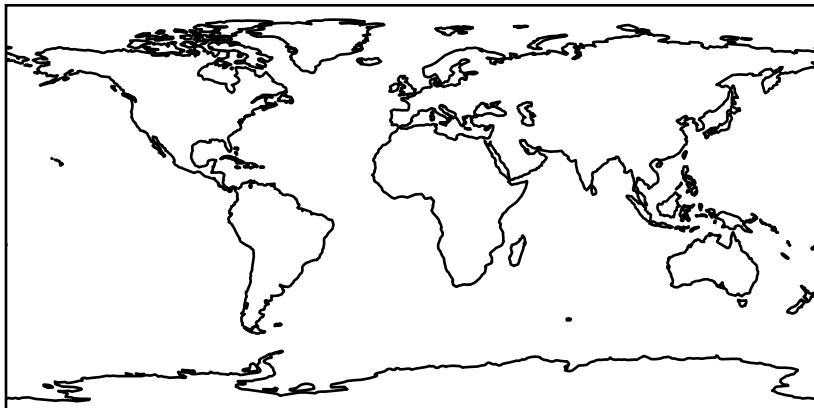
Ratio  
Dev/Ref, Fixed Range



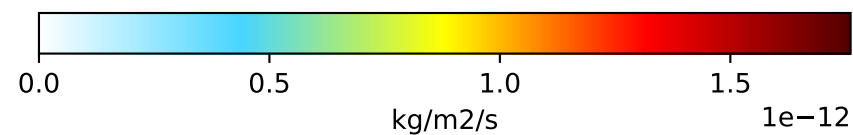
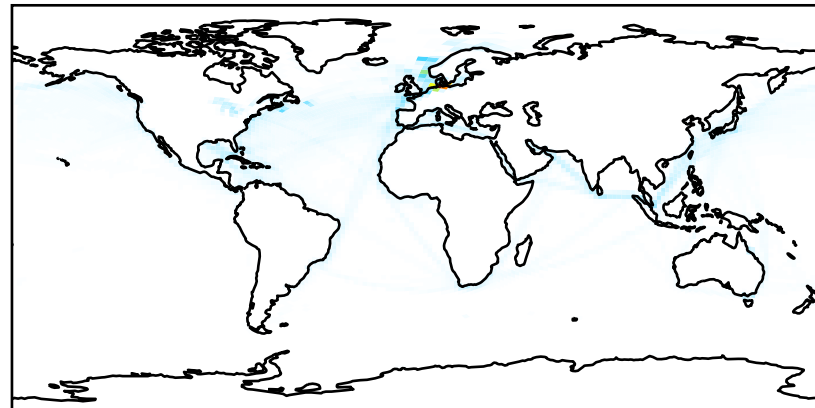


# EmisC2H4\_Ship

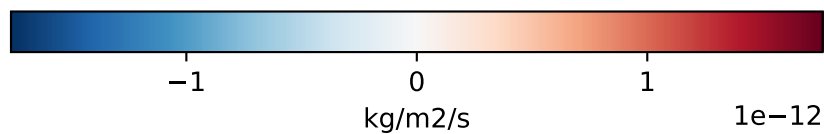
GCHP\_13.2.0 (Ref)  
c48



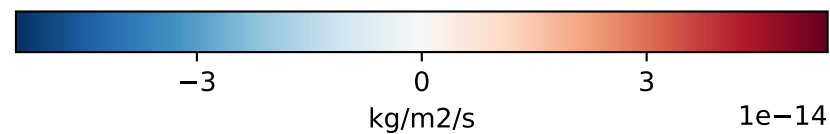
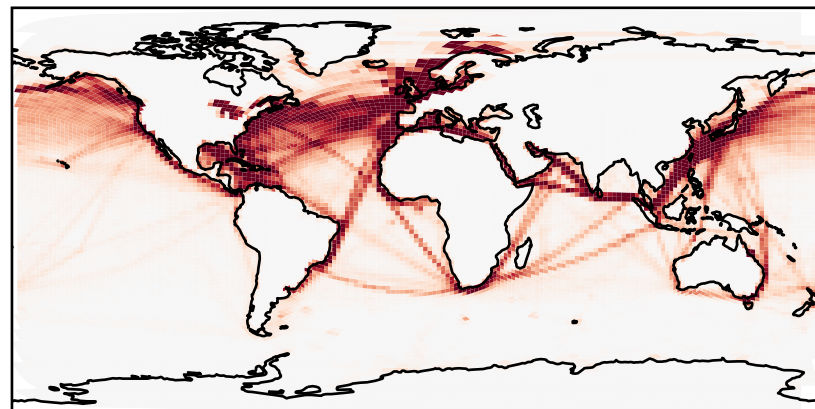
GCHP\_13.3.0-rc.1 (Dev)  
c48



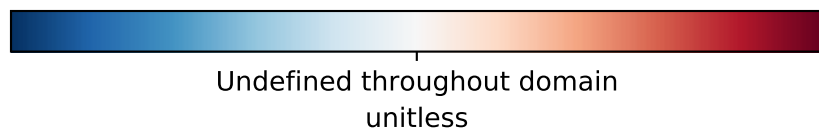
Difference  
Dev - Ref, Dynamic Range



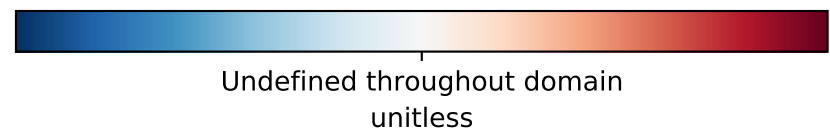
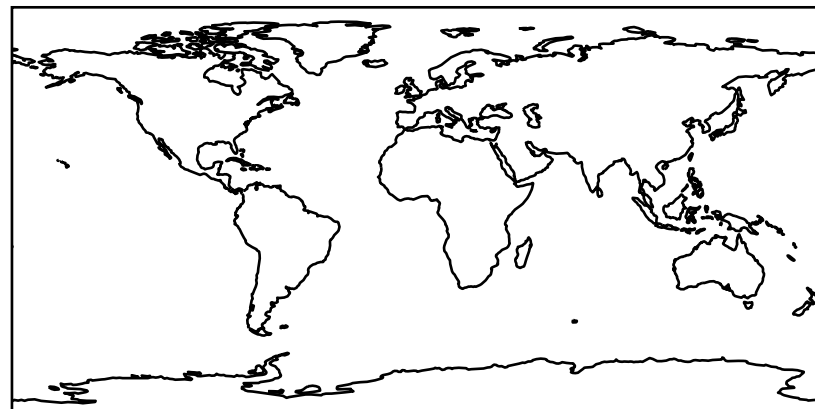
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

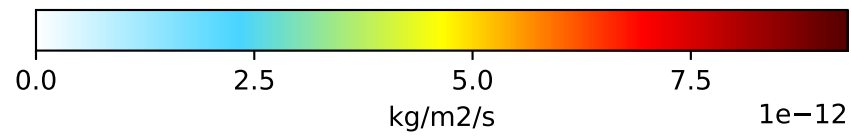
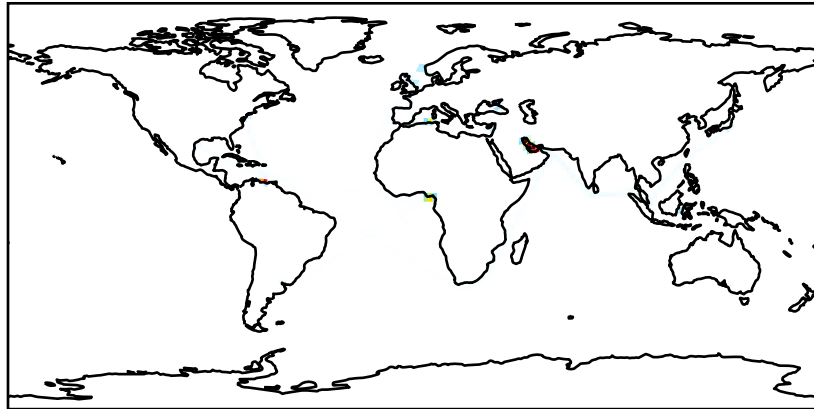


Ratio  
Dev/Ref, Fixed Range

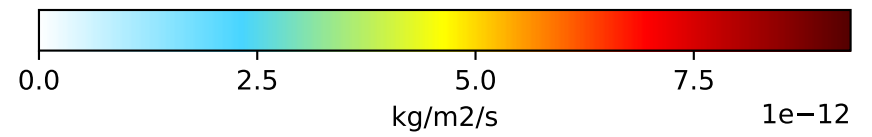
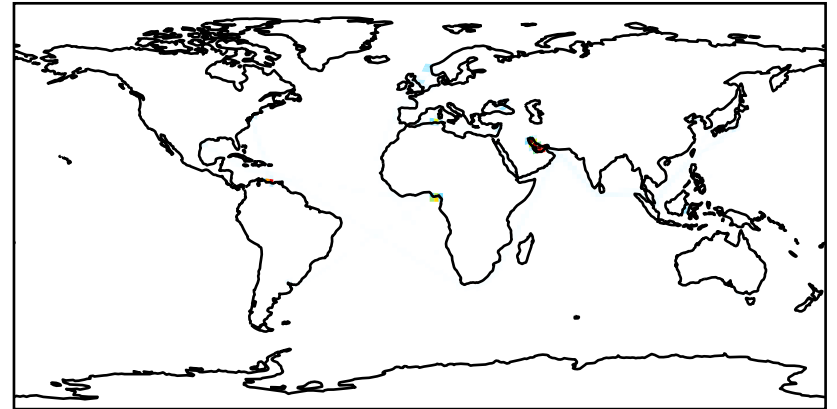


# EmisC2H6\_Ship

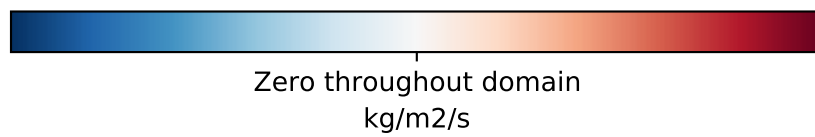
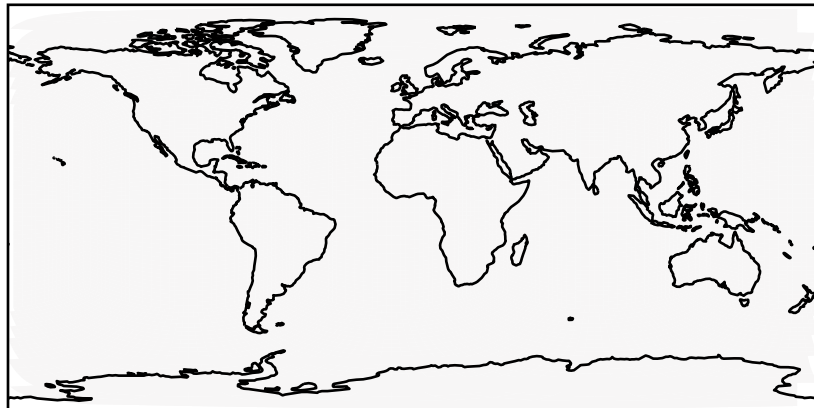
GCHP\_13.2.0 (Ref)  
c48



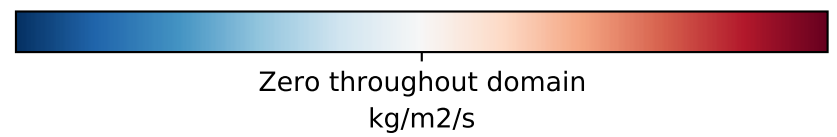
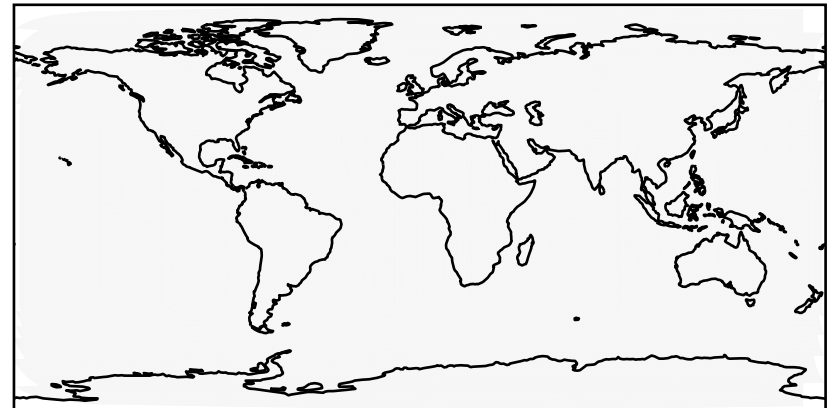
GCHP\_13.3.0-rc.1 (Dev)  
c48



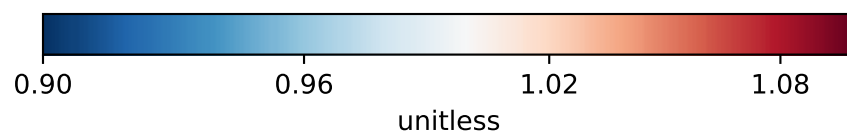
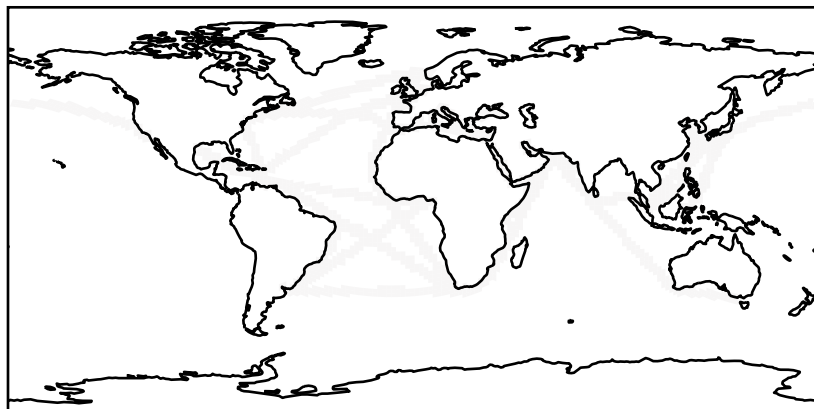
Difference  
Dev - Ref, Dynamic Range



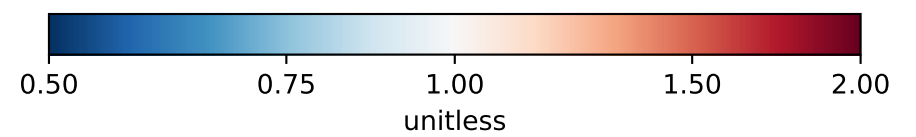
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

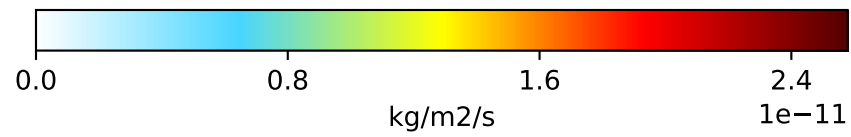
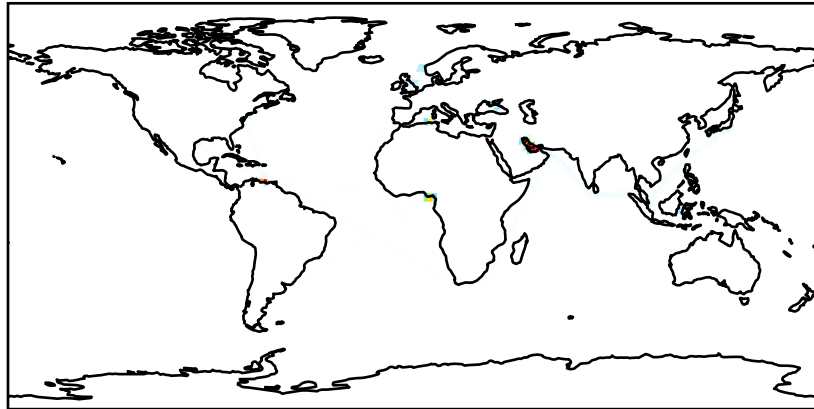


Ratio  
Dev/Ref, Fixed Range

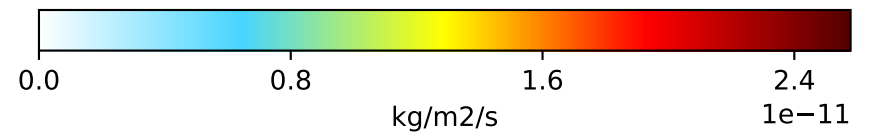
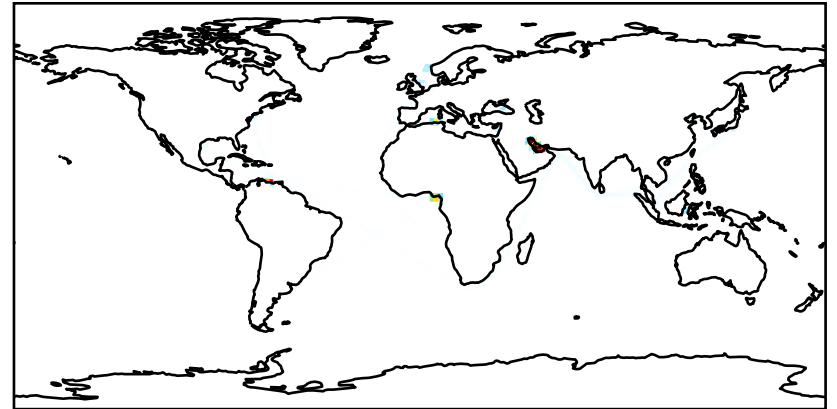


# EmisC3H8\_Ship

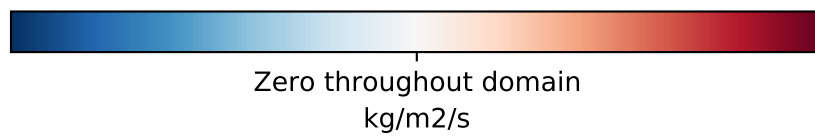
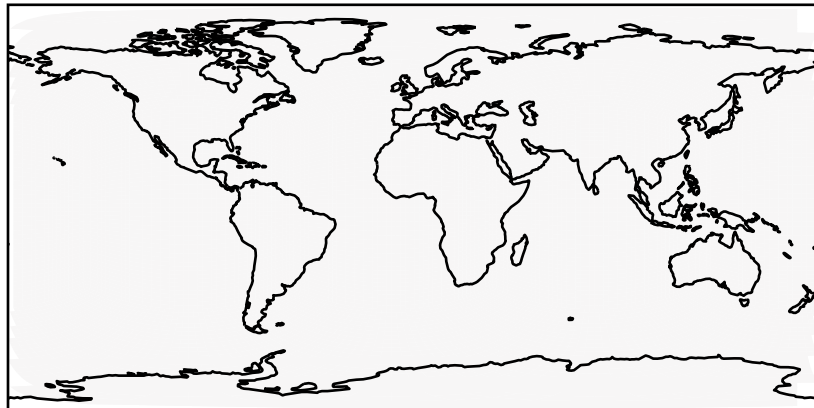
GCHP\_13.2.0 (Ref)  
c48



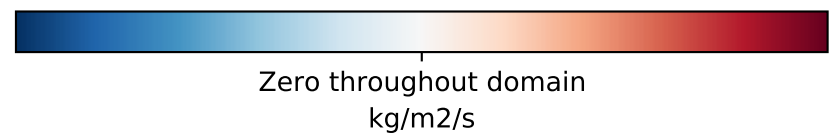
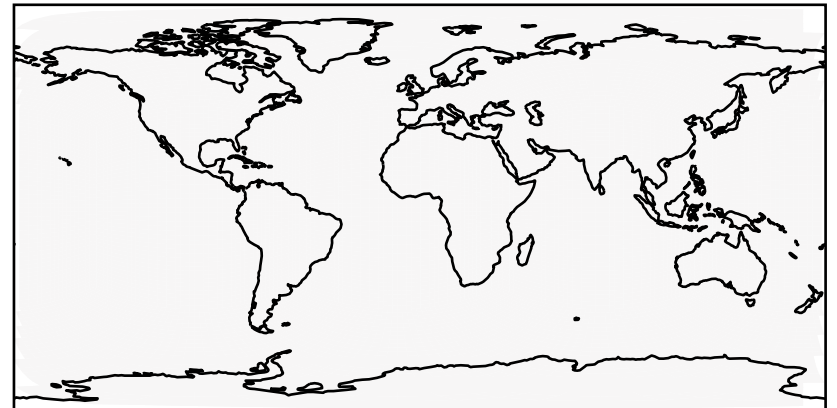
GCHP\_13.3.0-rc.1 (Dev)  
c48



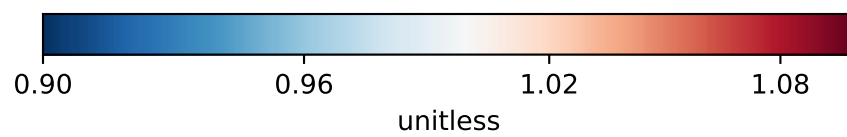
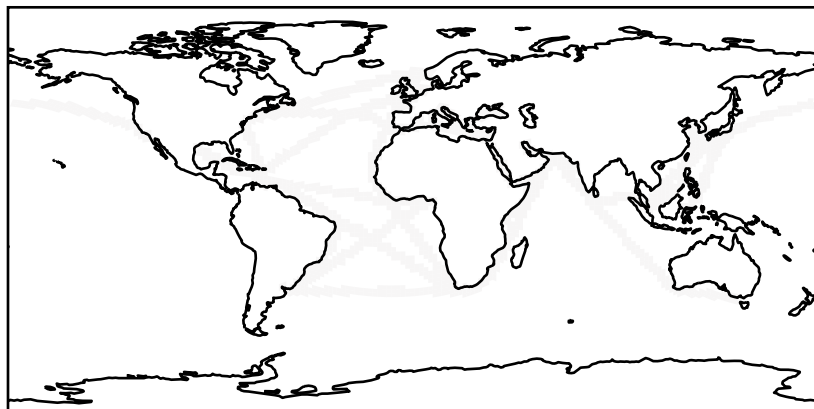
Difference  
Dev - Ref, Dynamic Range



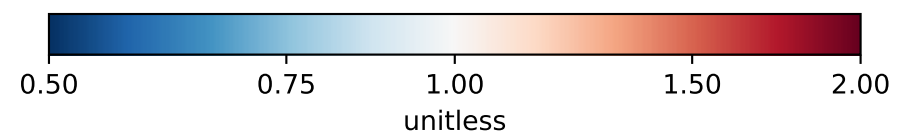
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

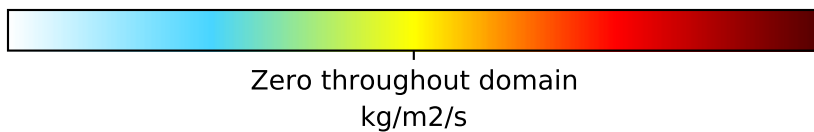
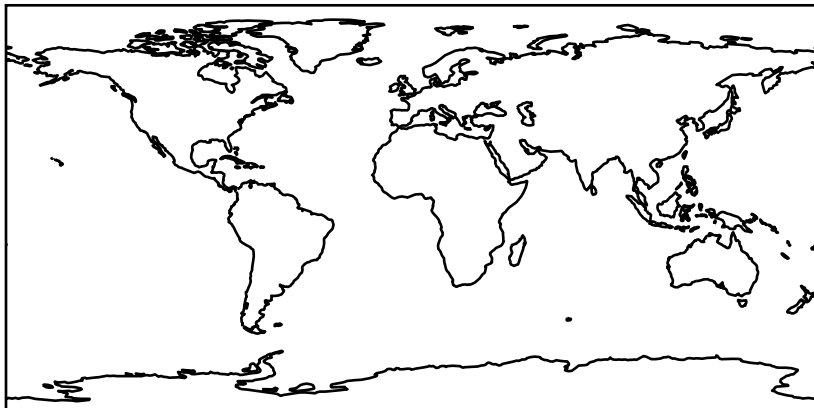


Ratio  
Dev/Ref, Fixed Range

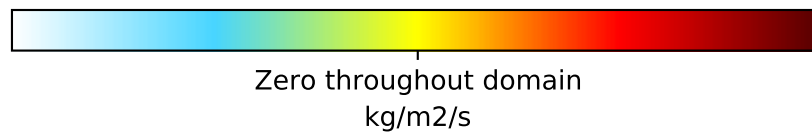


# EmisCH2O\_Ship

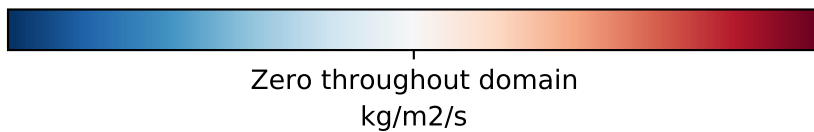
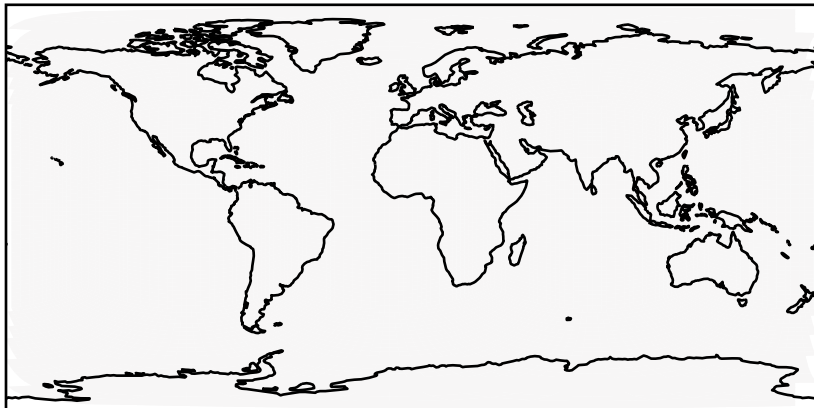
GCHP\_13.2.0 (Ref)  
c48



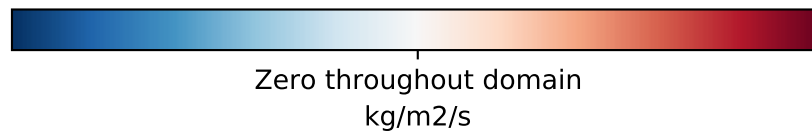
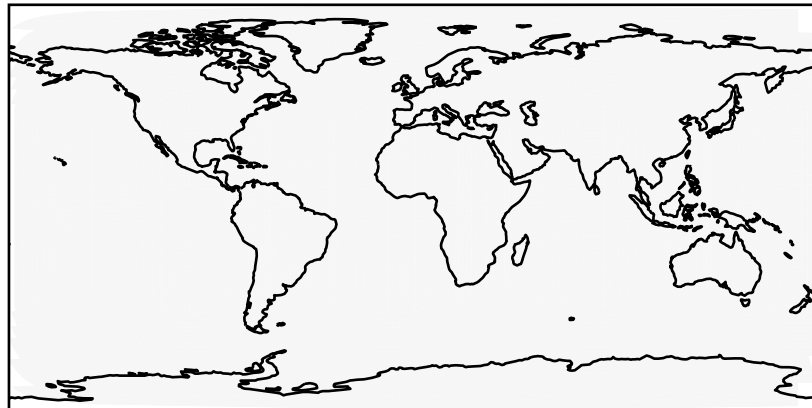
GCHP\_13.3.0-rc.1 (Dev)  
c48



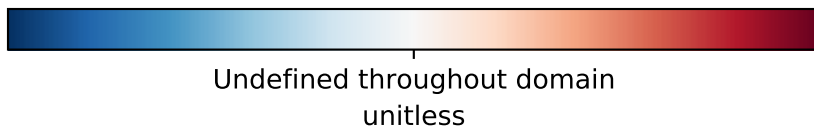
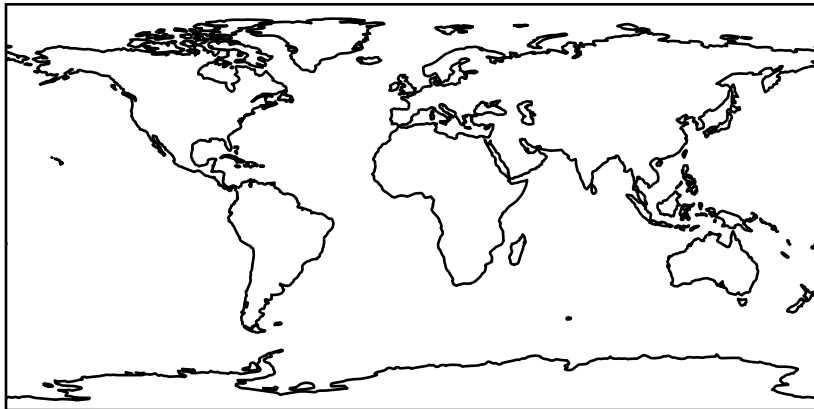
Difference  
Dev - Ref, Dynamic Range



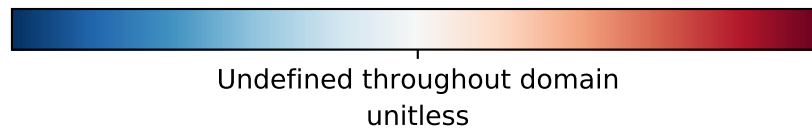
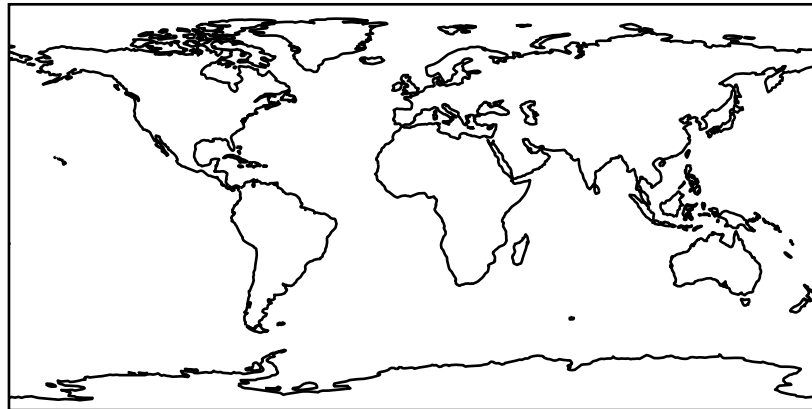
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



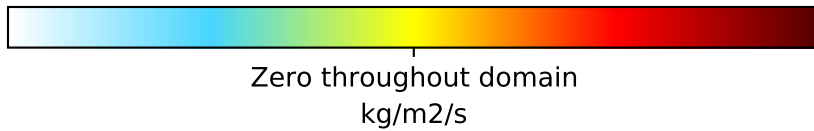
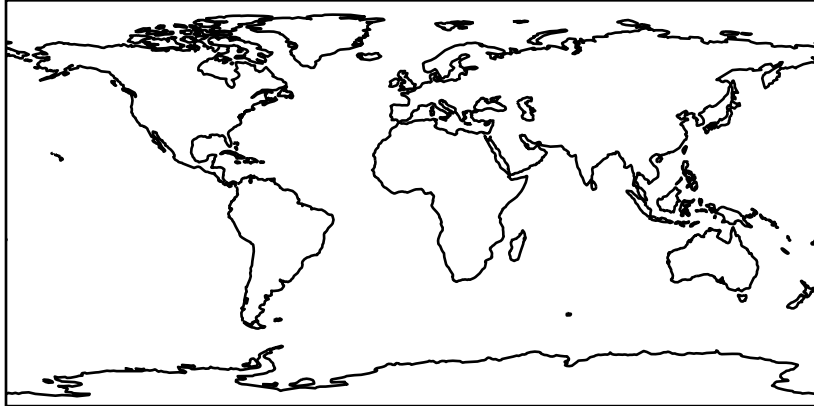
Ratio  
Dev/Ref, Fixed Range



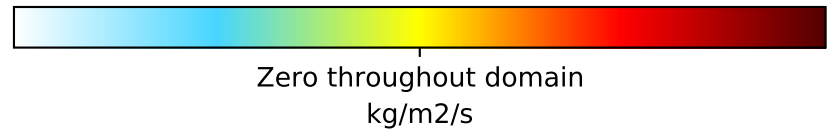
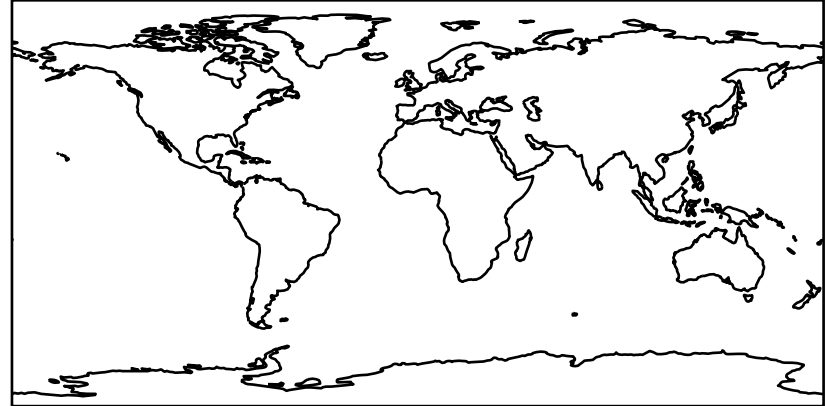


# EmisCO2\_Ship

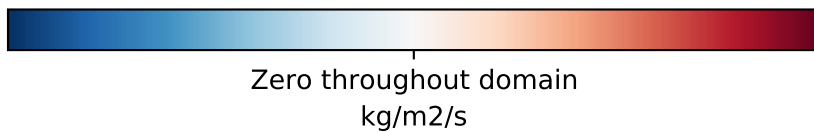
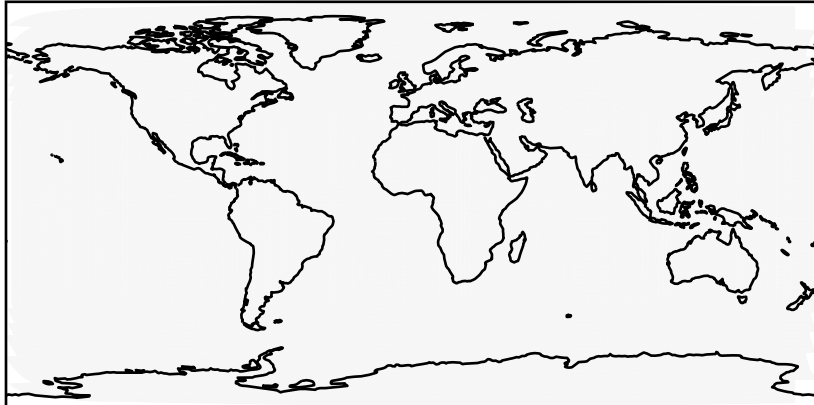
GCHP\_13.2.0 (Ref)  
c48



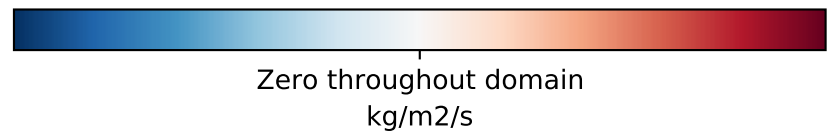
GCHP\_13.3.0-rc.1 (Dev)  
c48



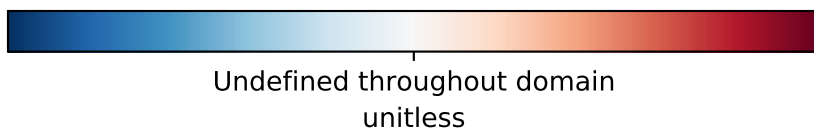
Difference  
Dev - Ref, Dynamic Range



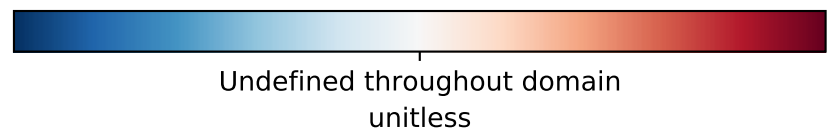
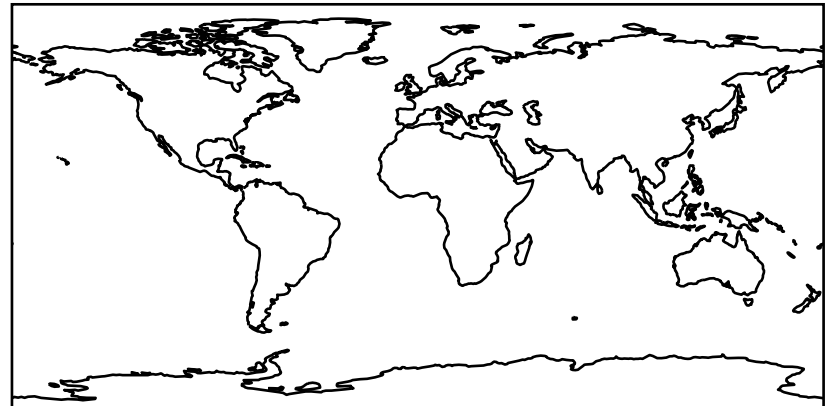
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

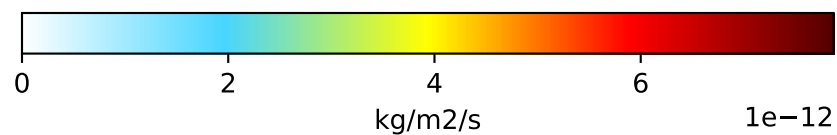
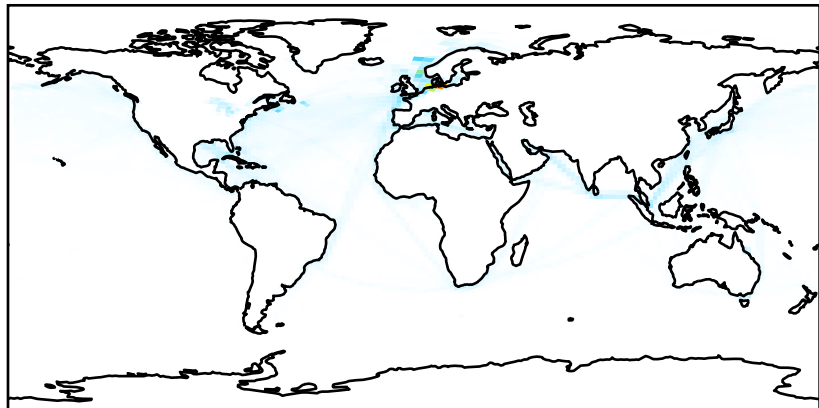


Ratio  
Dev/Ref, Fixed Range

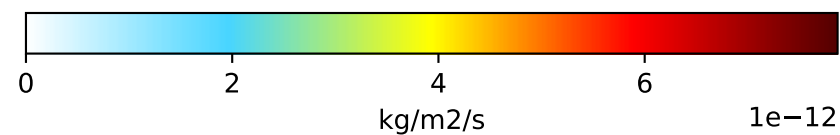
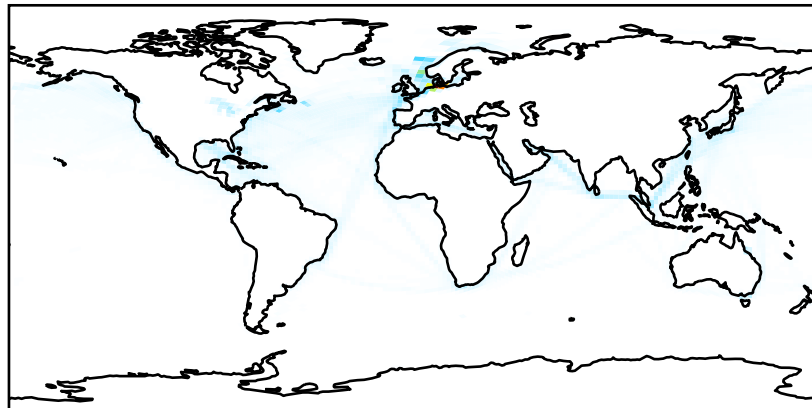


# EmisCO\_Ship

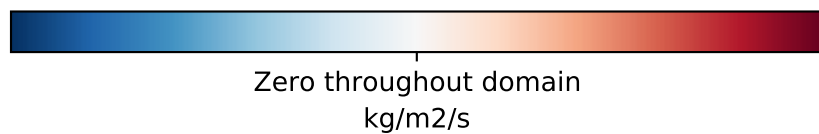
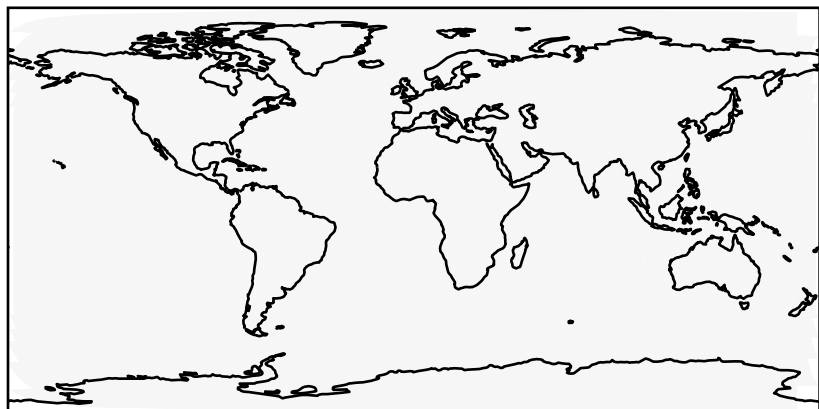
GCHP\_13.2.0 (Ref)  
c48



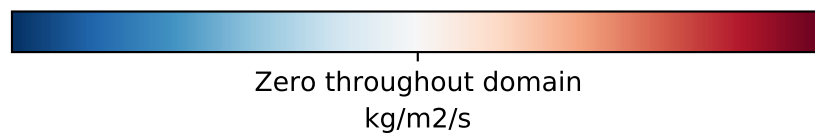
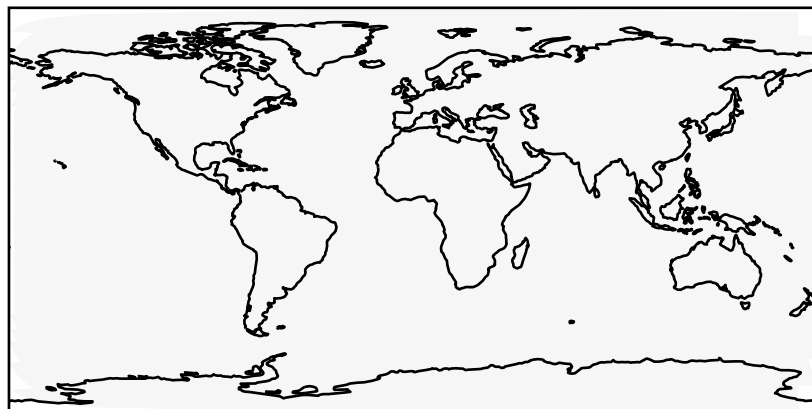
GCHP\_13.3.0-rc.1 (Dev)  
c48



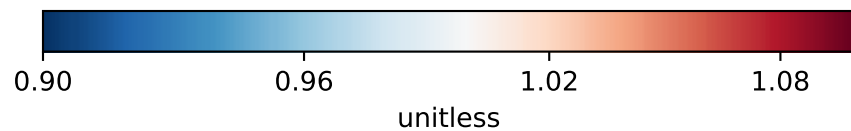
Difference  
Dev - Ref, Dynamic Range



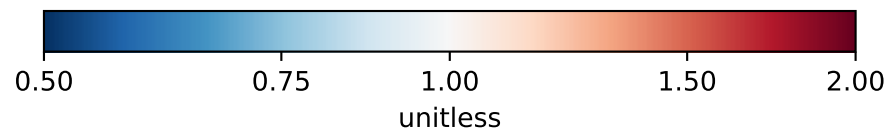
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

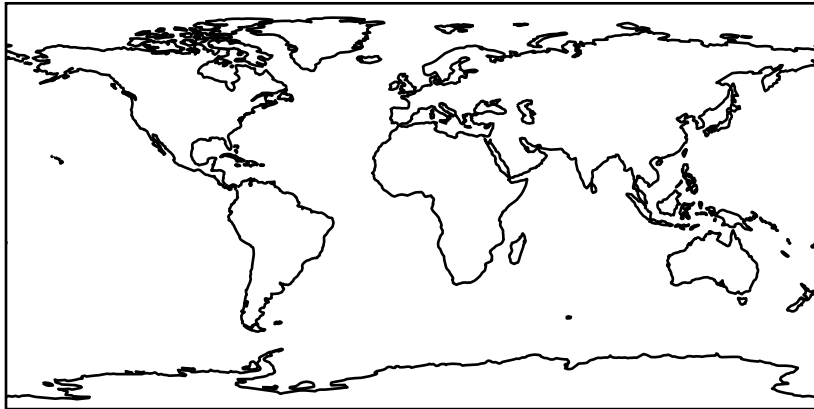


Ratio  
Dev/Ref, Fixed Range



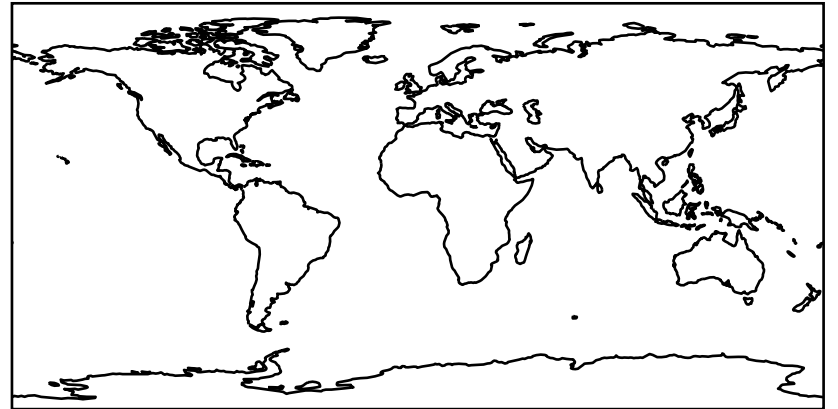
# EmisEOH\_Ship

GCHP\_13.2.0 (Ref)  
c48



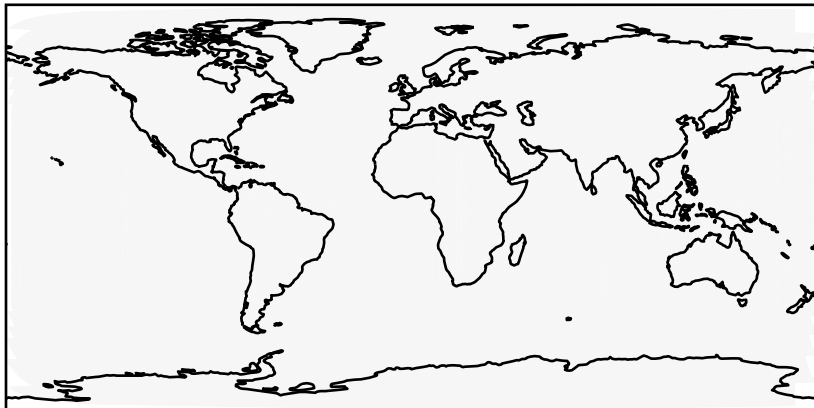
Zero throughout domain  
kg/m2/s

GCHP\_13.3.0-rc.1 (Dev)  
c48



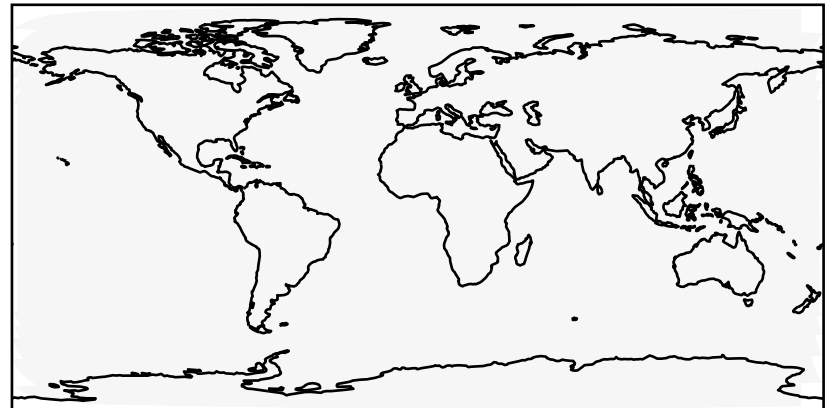
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



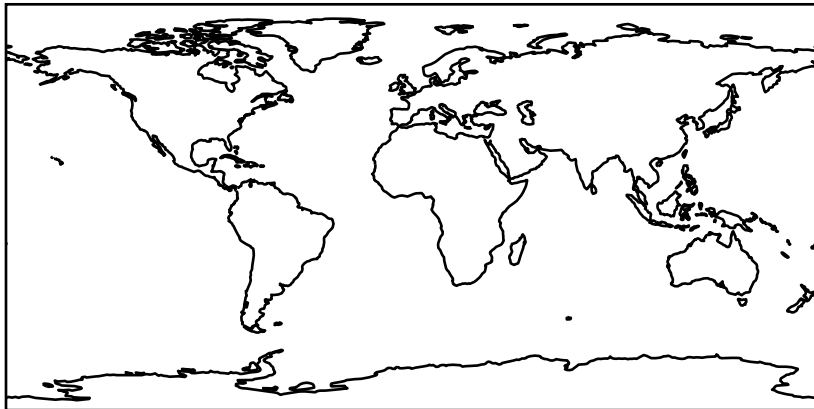
Zero throughout domain  
kg/m2/s

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



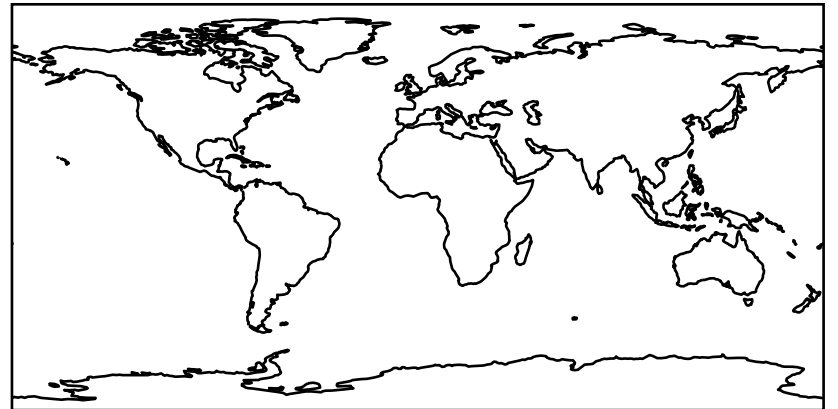
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughout domain  
unitless

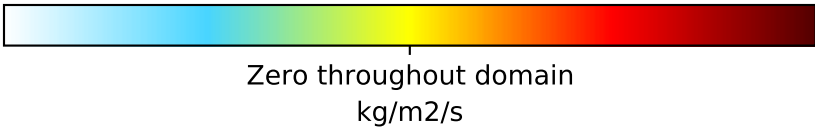
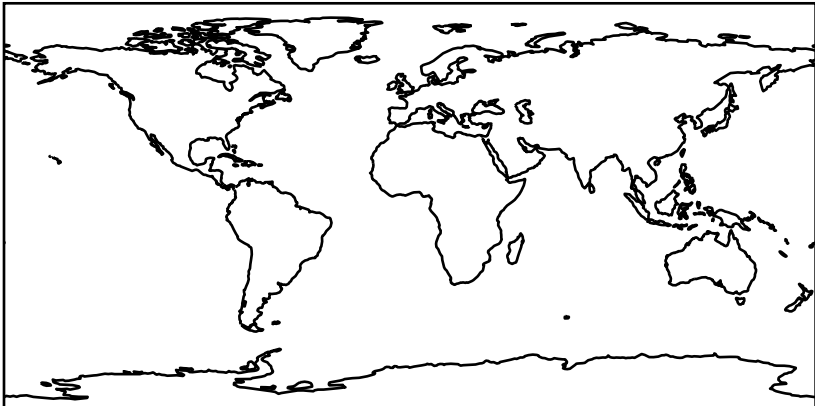
Ratio  
Dev/Ref, Fixed Range



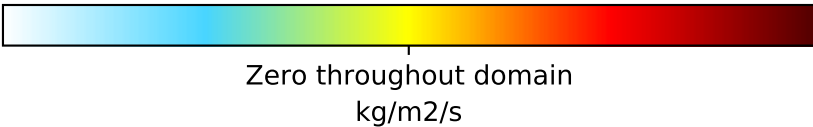
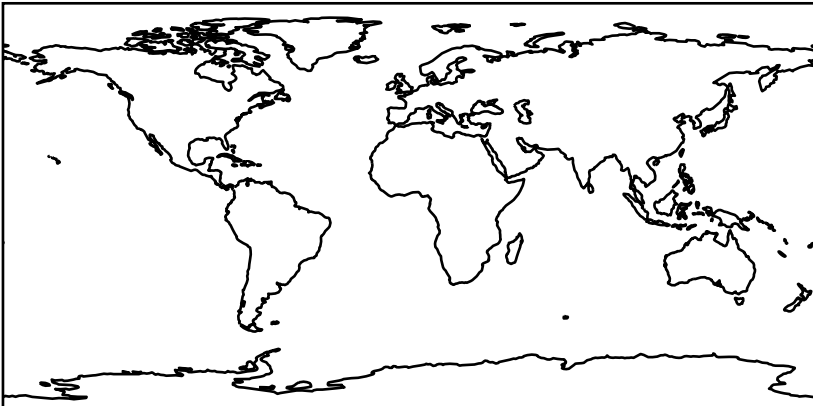
Undefined throughout domain  
unitless

# EmisHCOOH\_Ship

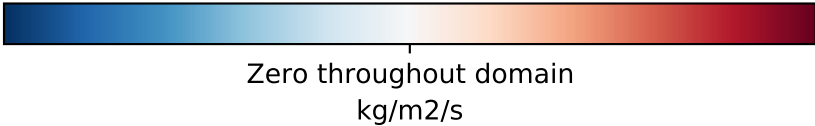
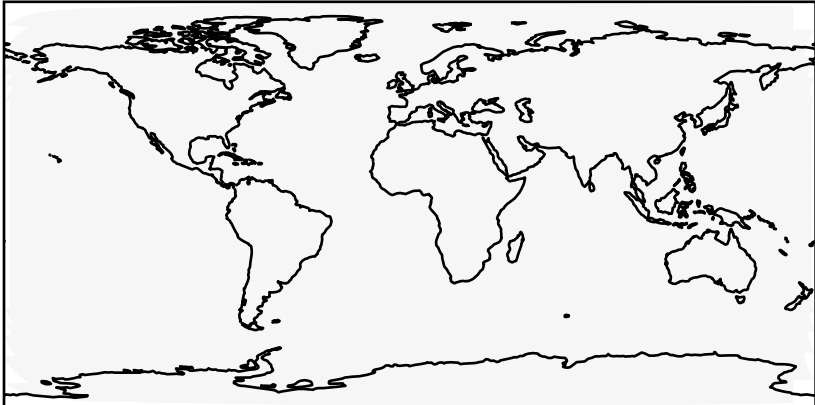
GCHP\_13.2.0 (Ref)  
c48



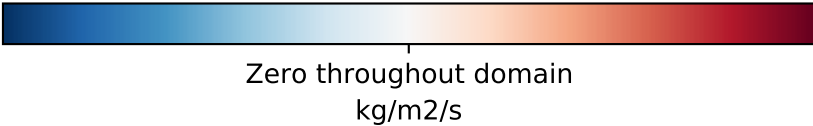
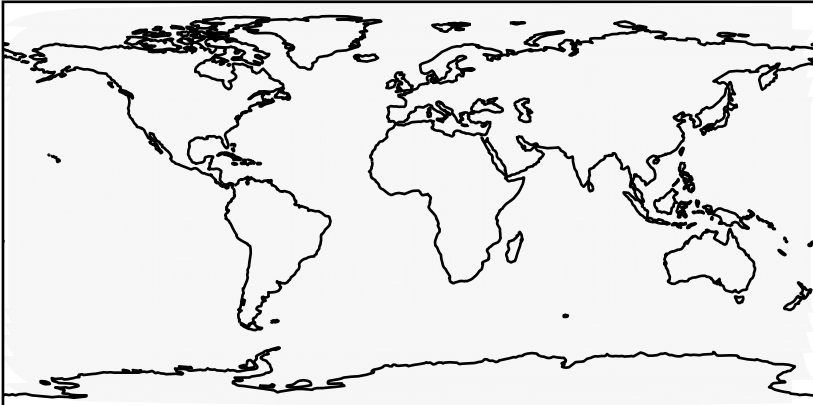
GCHP\_13.3.0-rc.1 (Dev)  
c48



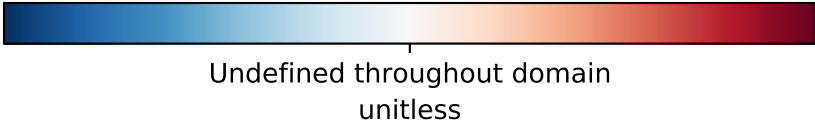
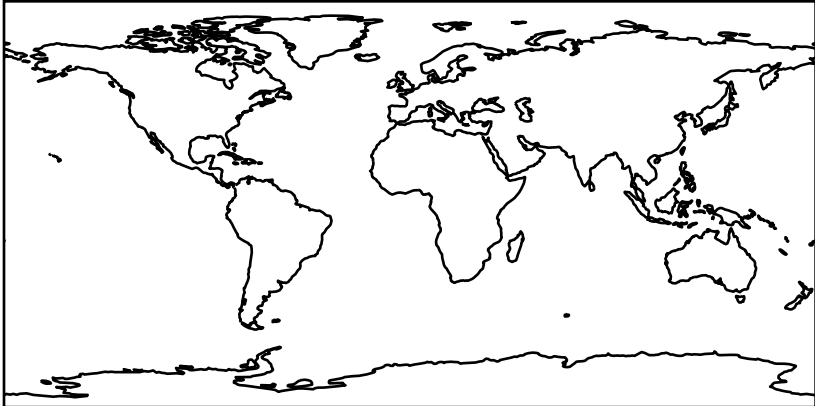
Difference  
Dev - Ref, Dynamic Range



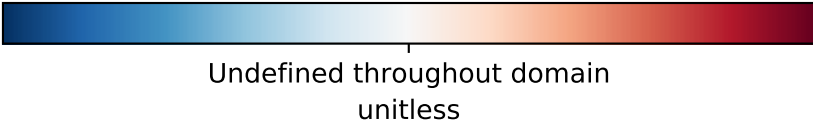
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



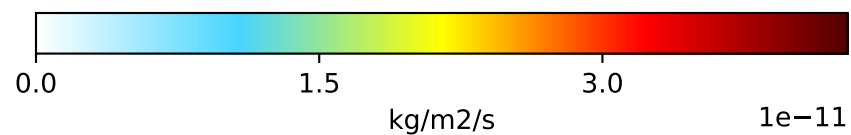
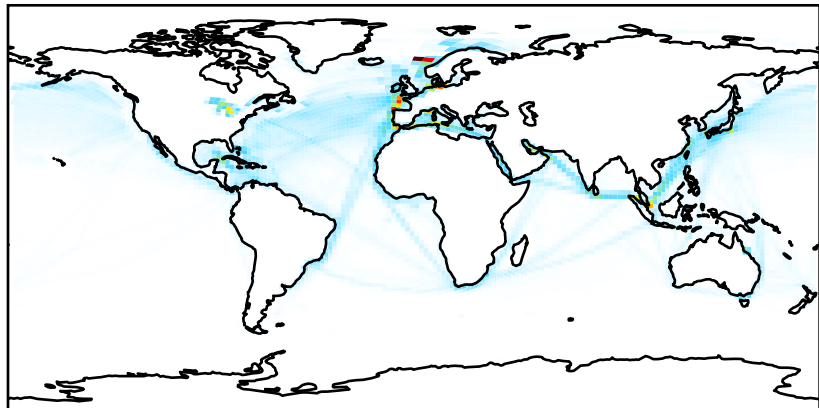
Ratio  
Dev/Ref, Fixed Range



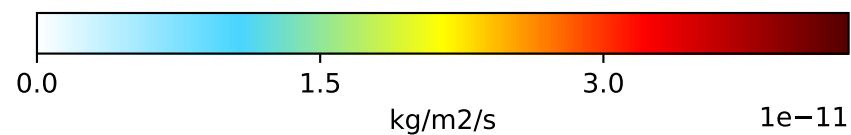
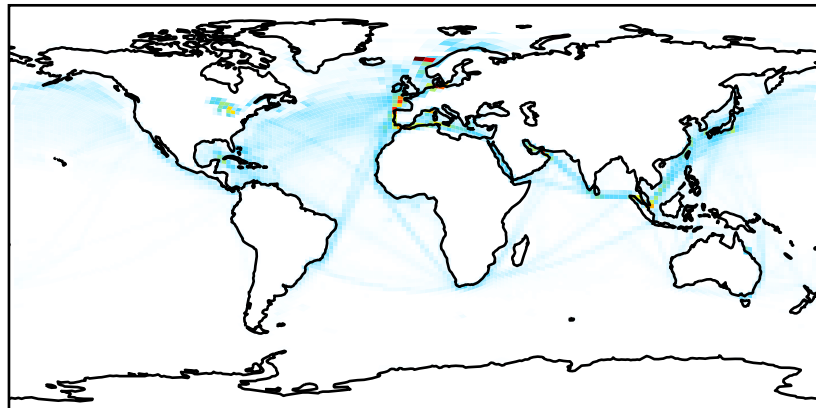


# EmisHNO3\_Ship

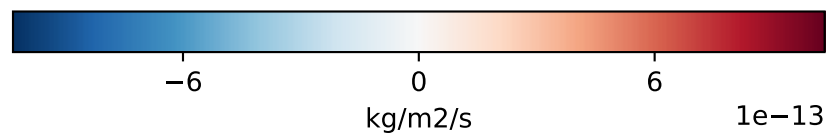
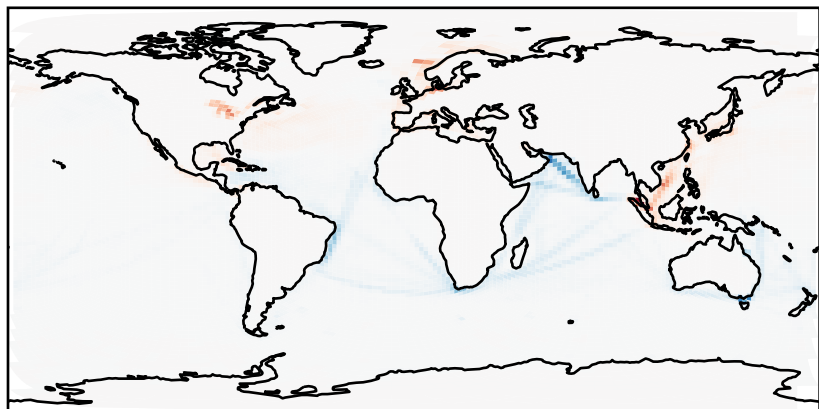
GCHP\_13.2.0 (Ref)  
c48



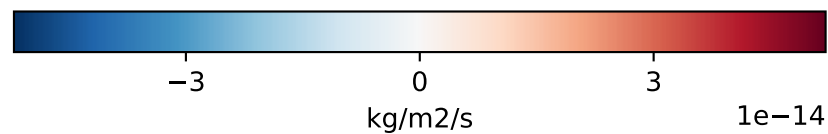
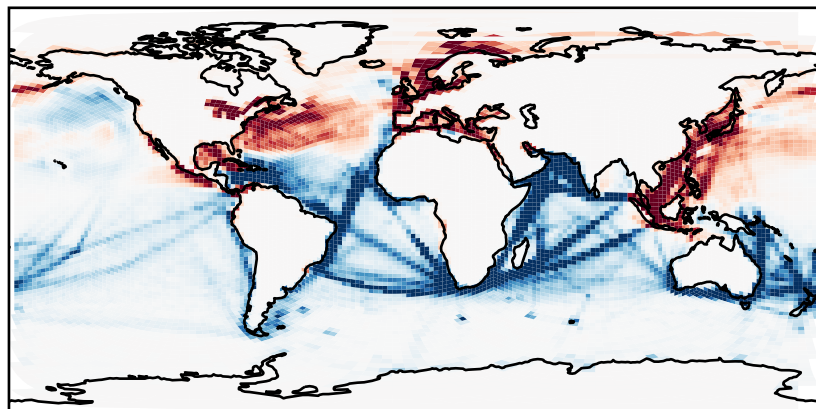
GCHP\_13.3.0-rc.1 (Dev)  
c48



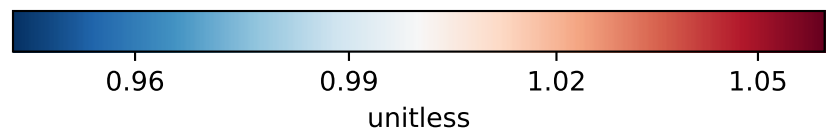
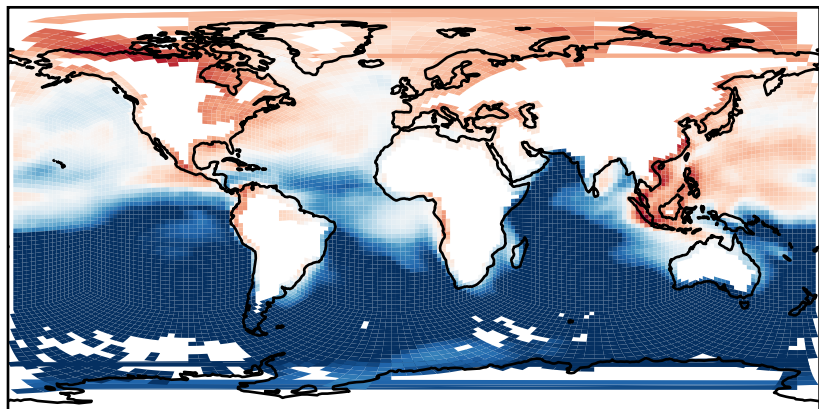
Difference  
Dev - Ref, Dynamic Range



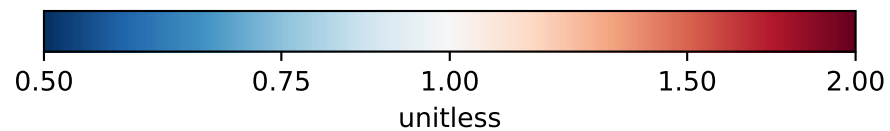
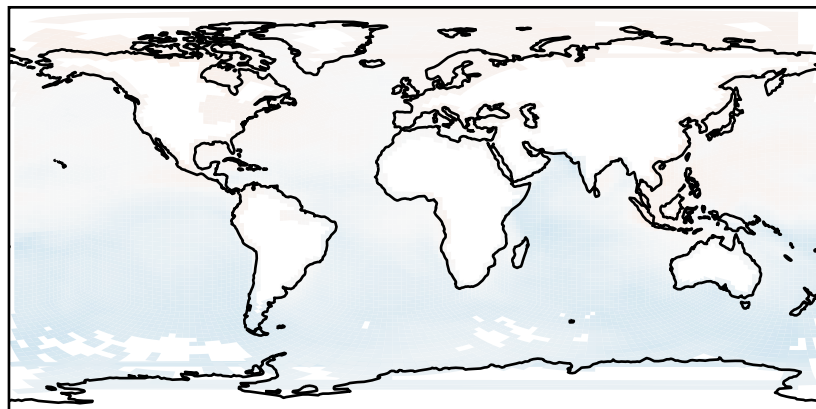
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

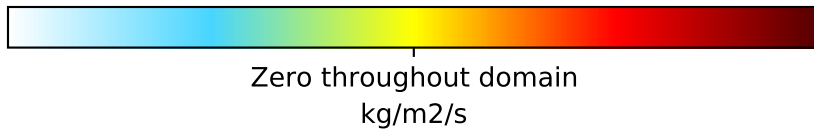
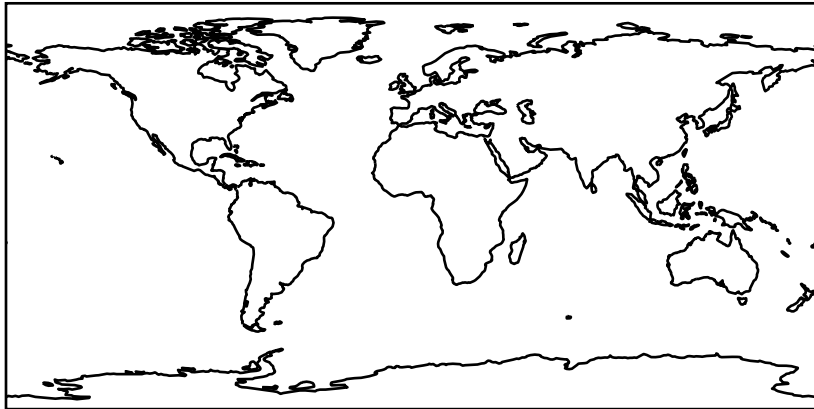


Ratio  
Dev/Ref, Fixed Range

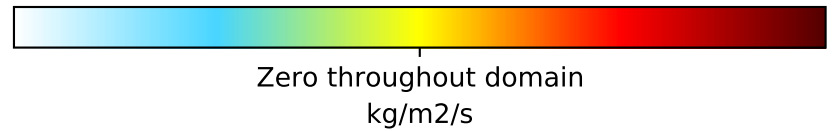
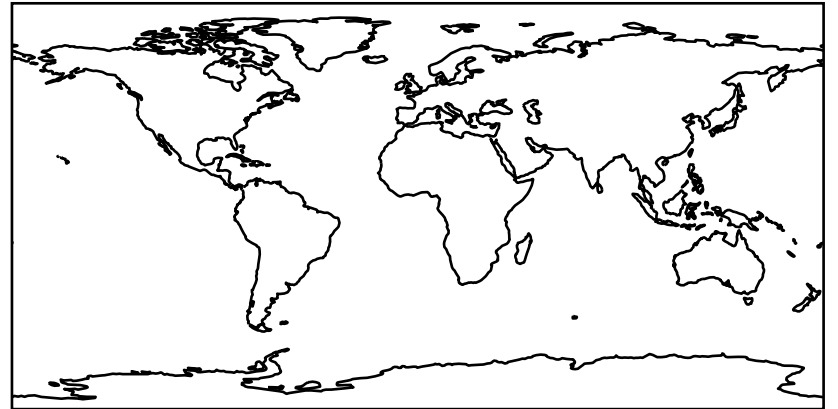


# EmisMEK\_Ship

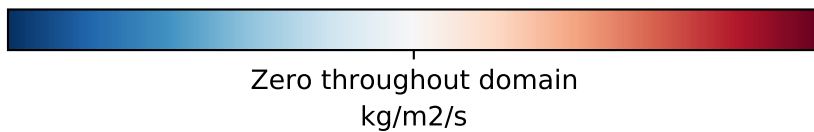
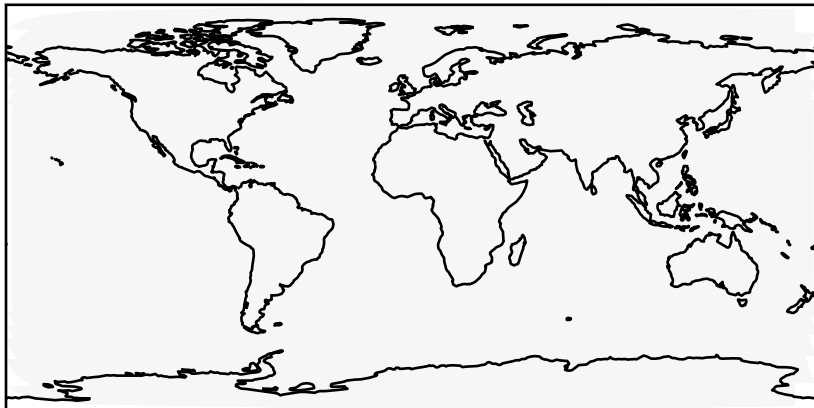
GCHP\_13.2.0 (Ref)  
c48



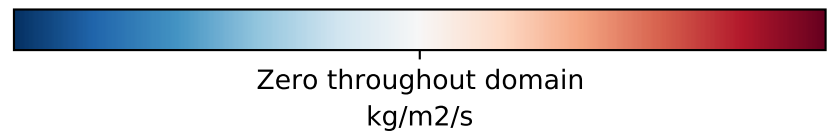
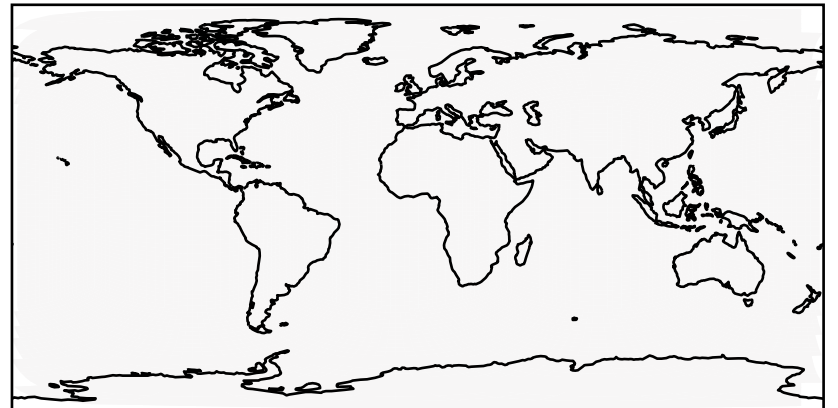
GCHP\_13.3.0-rc.1 (Dev)  
c48



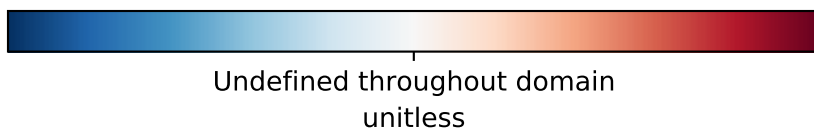
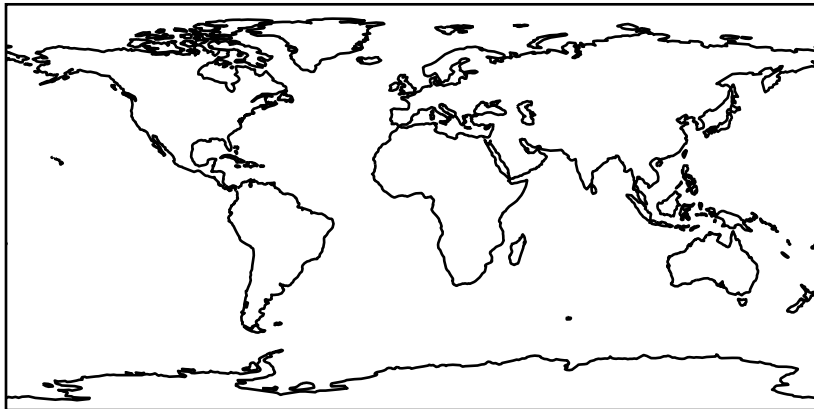
Difference  
Dev - Ref, Dynamic Range



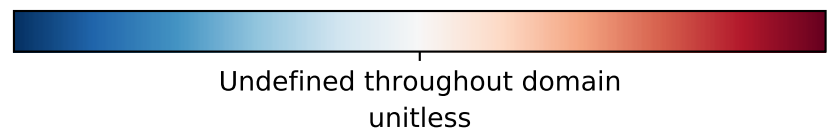
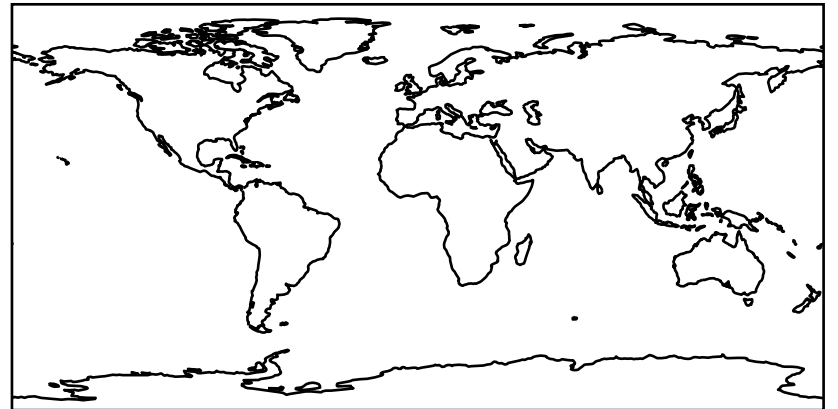
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

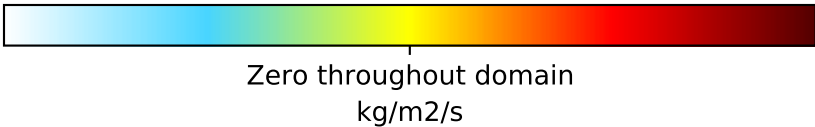
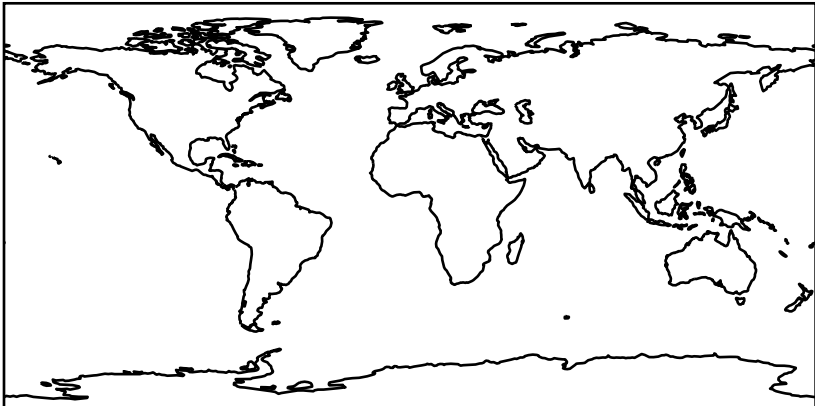


Ratio  
Dev/Ref, Fixed Range

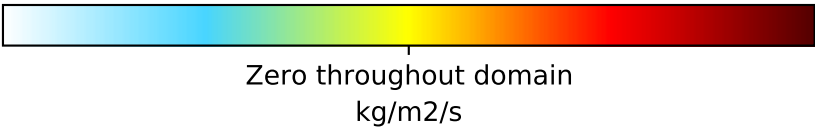
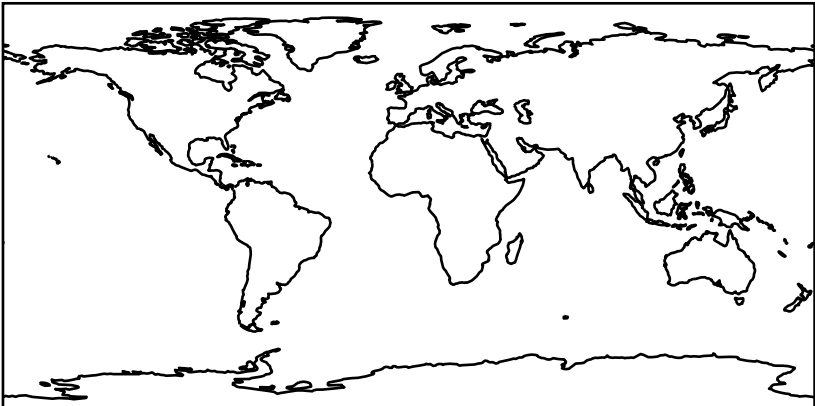


# EmisMOH\_Ship

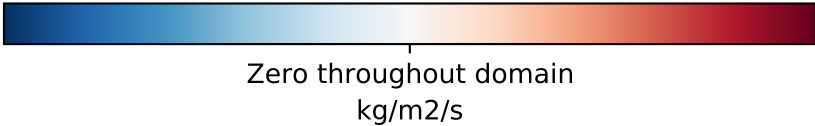
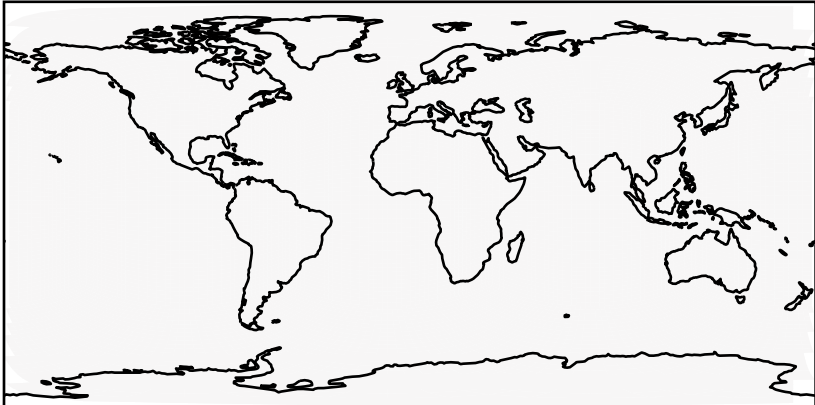
GCHP\_13.2.0 (Ref)  
c48



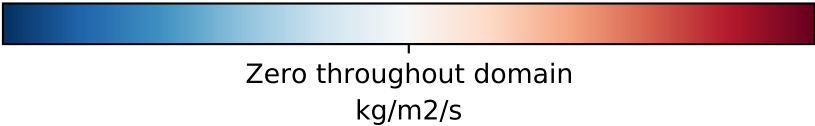
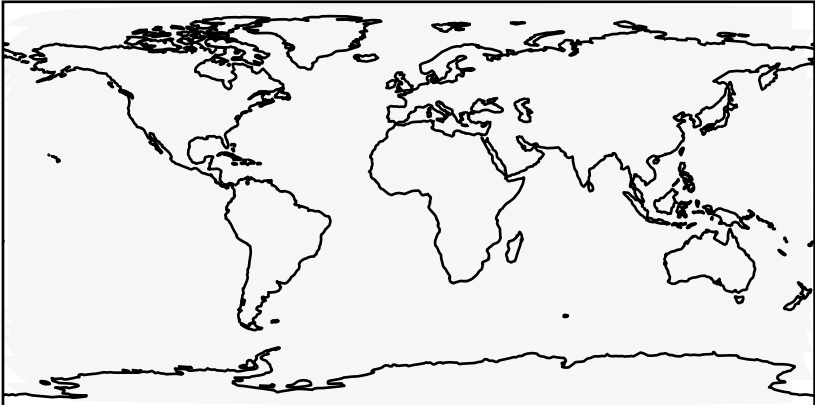
GCHP\_13.3.0-rc.1 (Dev)  
c48



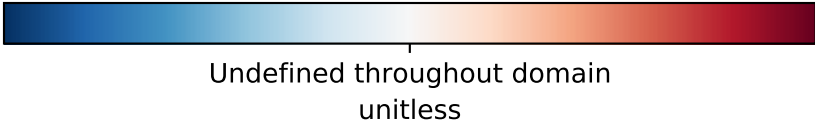
Difference  
Dev - Ref, Dynamic Range



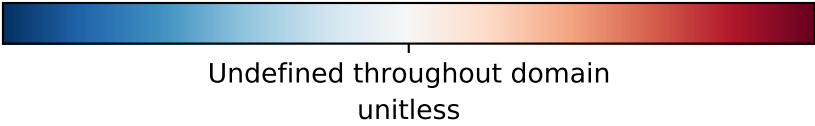
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



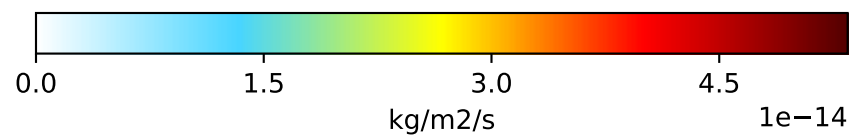
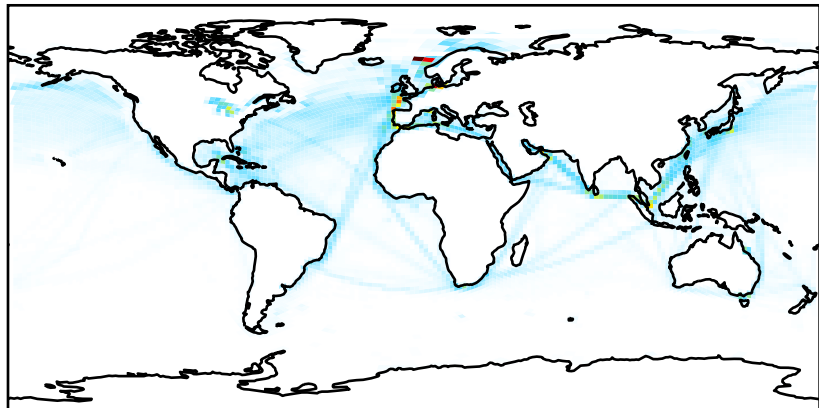
Ratio  
Dev/Ref, Fixed Range



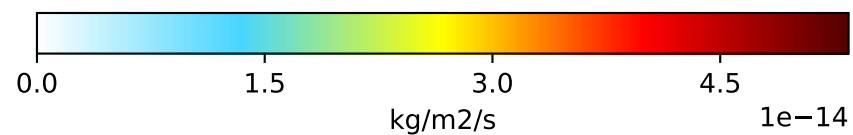
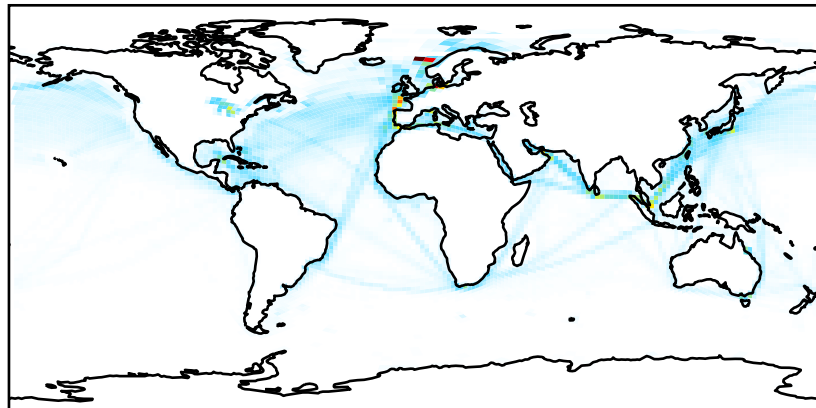


# EmisNH3\_Ship

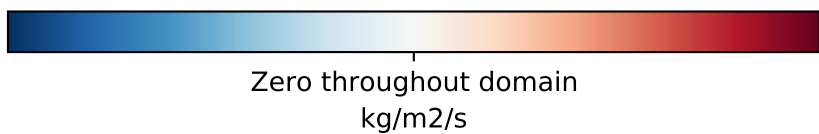
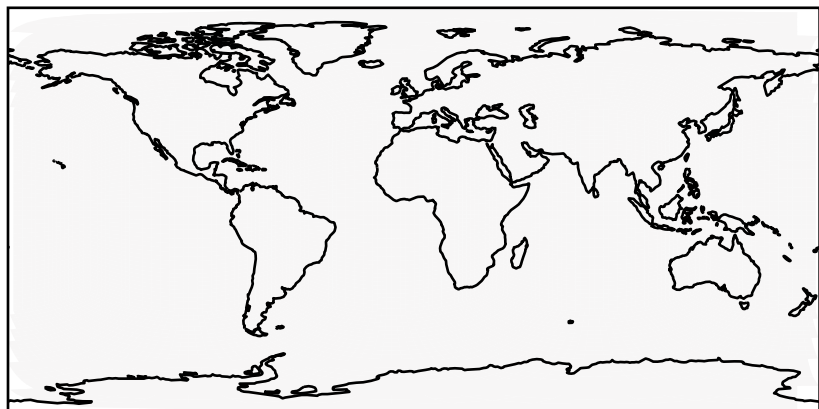
GCHP\_13.2.0 (Ref)  
c48



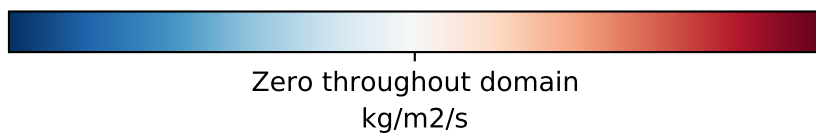
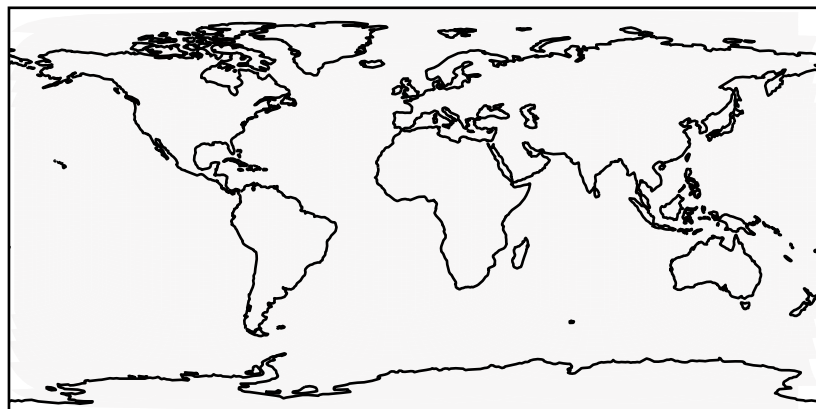
GCHP\_13.3.0-rc.1 (Dev)  
c48



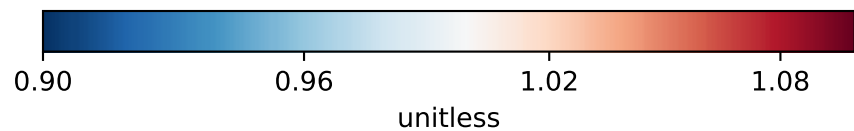
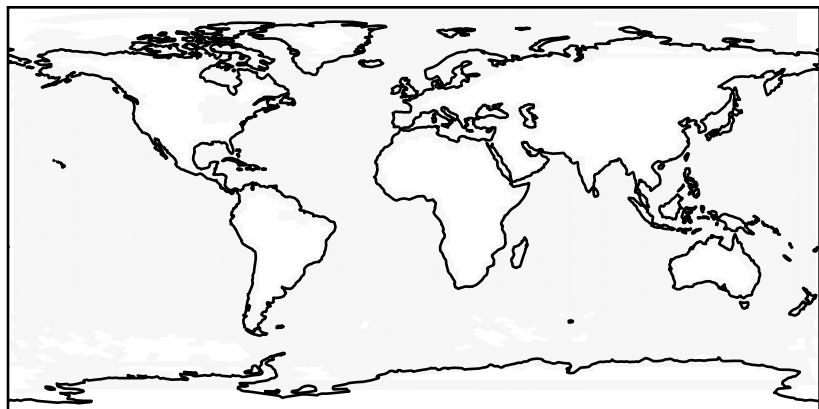
Difference  
Dev - Ref, Dynamic Range



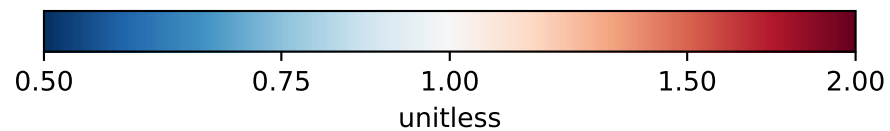
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



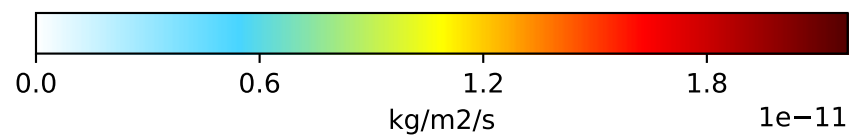
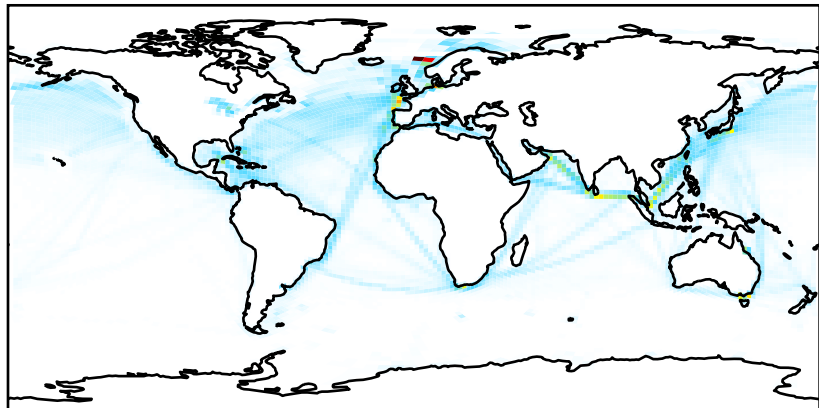
Ratio  
Dev/Ref, Fixed Range



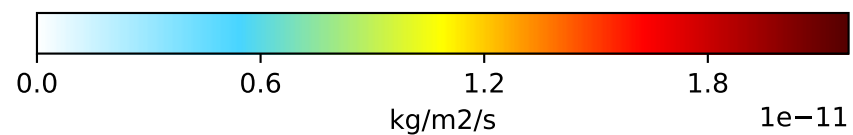
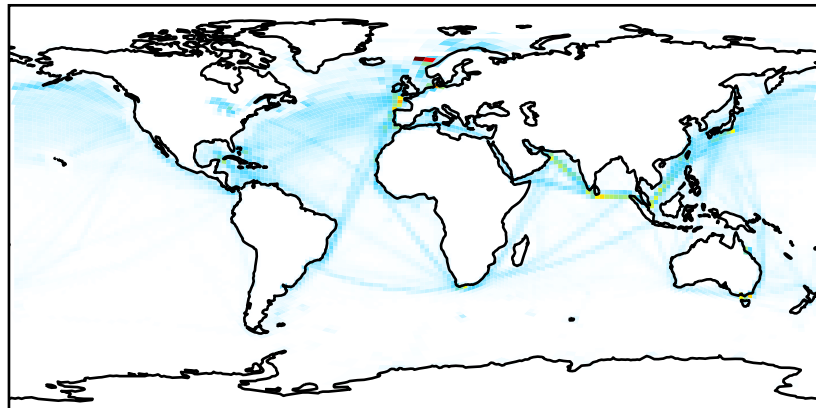


# EmisNO2\_Ship

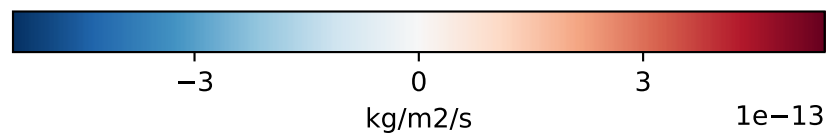
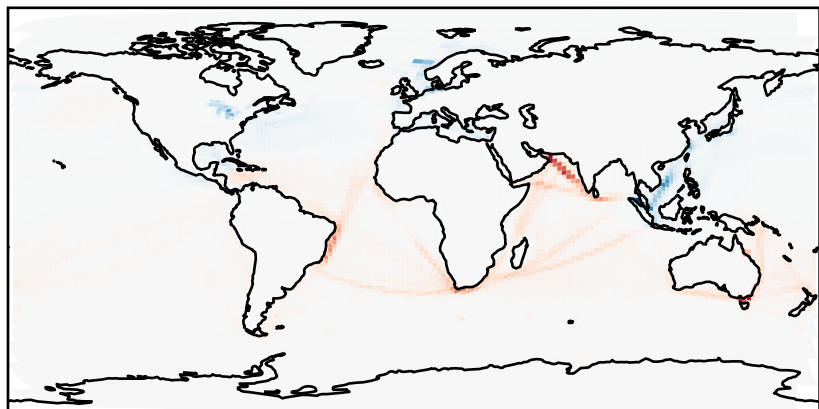
GCHP\_13.2.0 (Ref)  
c48



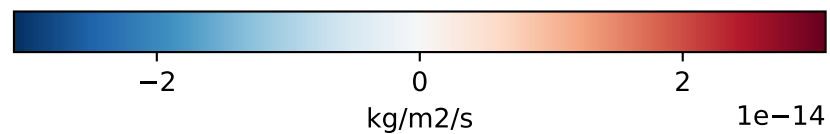
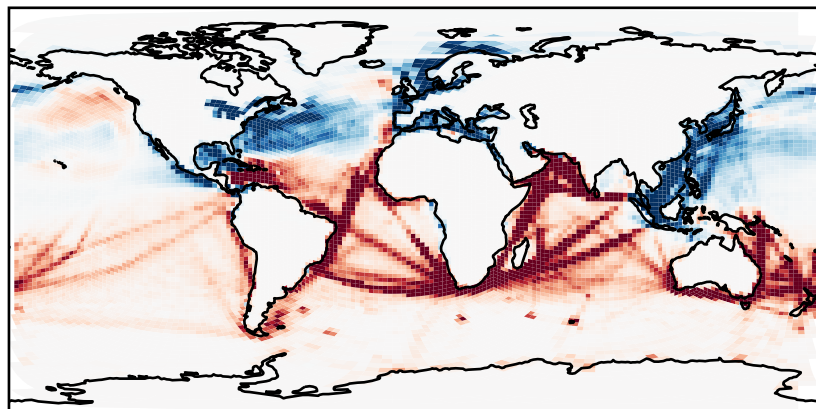
GCHP\_13.3.0-rc.1 (Dev)  
c48



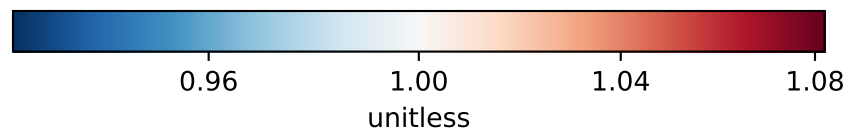
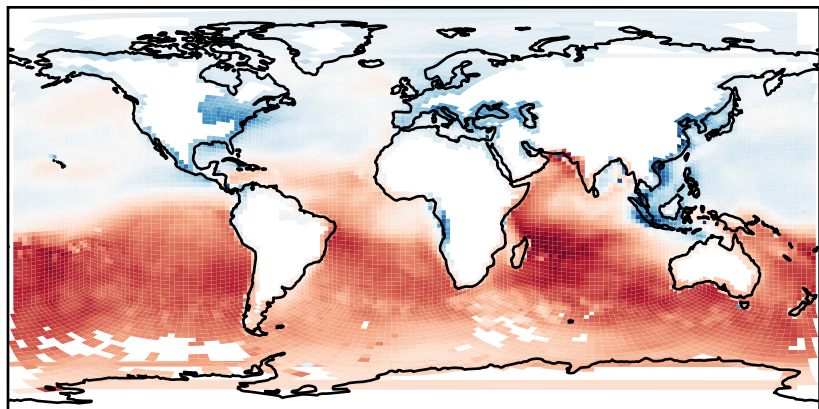
Difference  
Dev - Ref, Dynamic Range



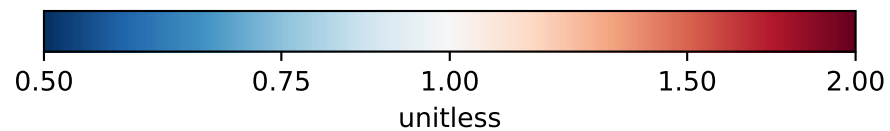
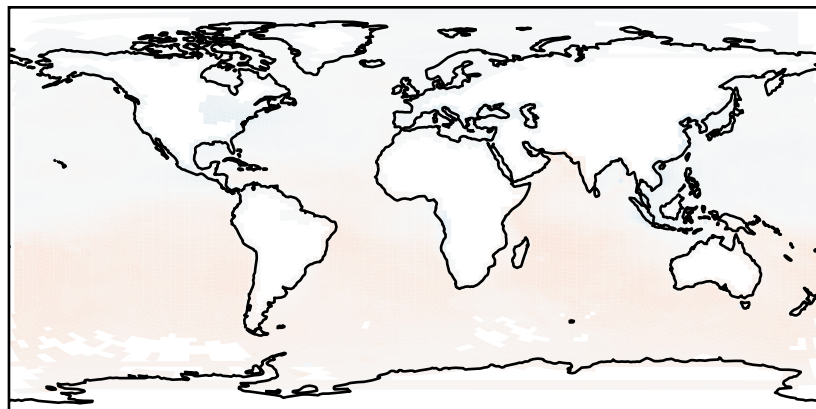
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

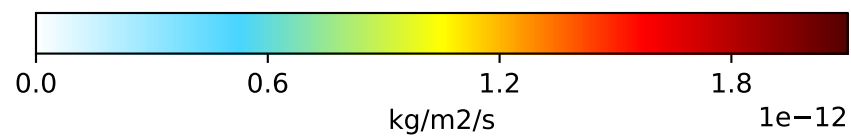
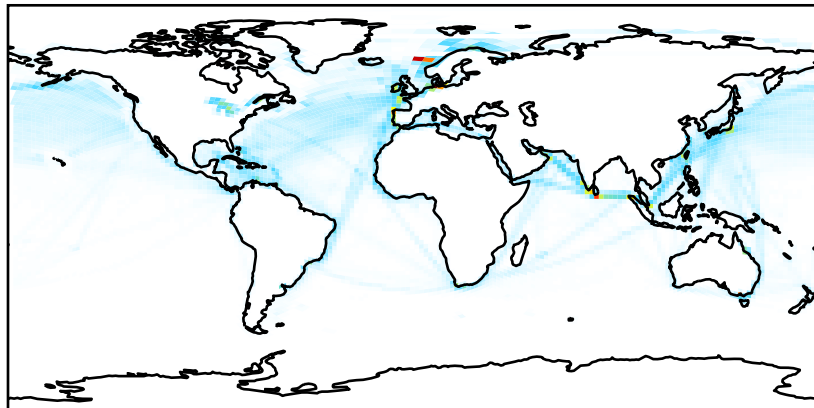


Ratio  
Dev/Ref, Fixed Range

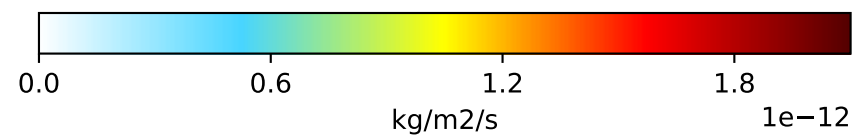
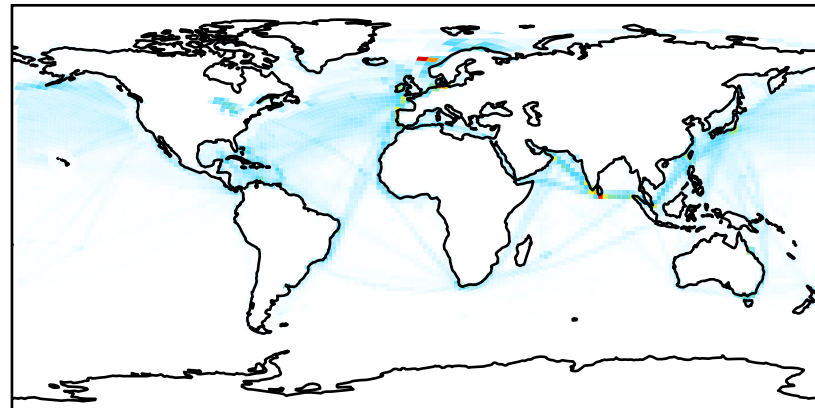


# EmisNO\_Ship

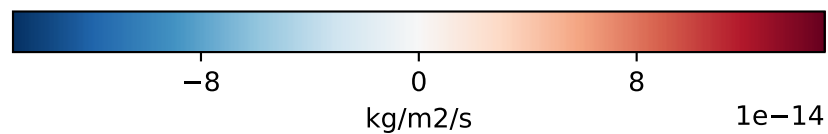
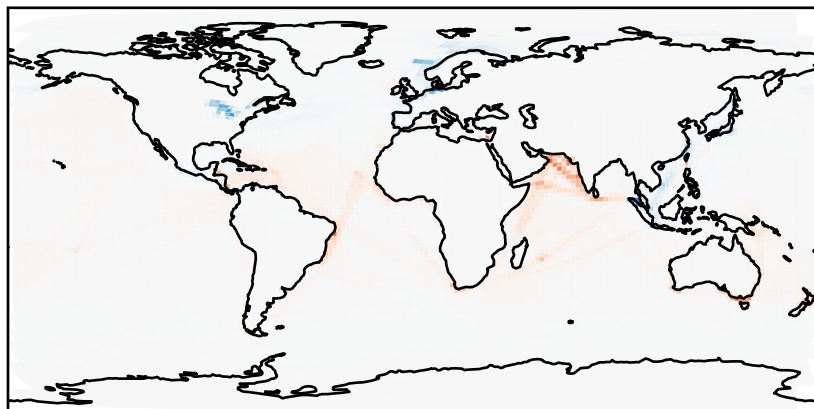
GCHP\_13.2.0 (Ref)  
c48



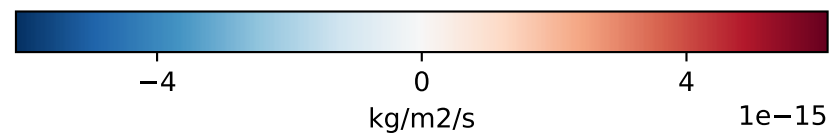
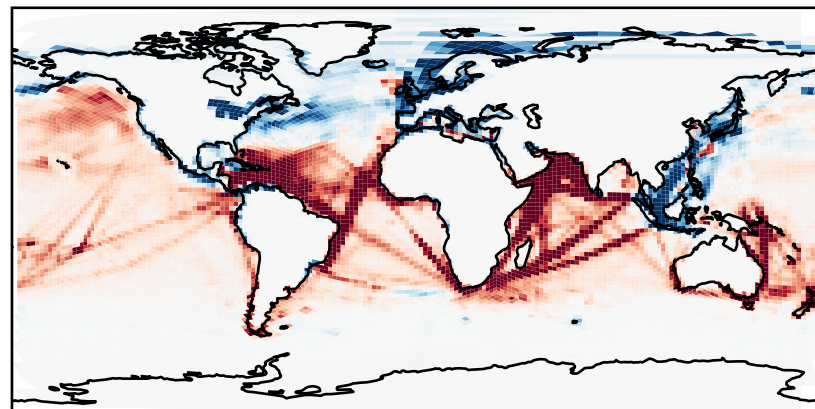
GCHP\_13.3.0-rc.1 (Dev)  
c48



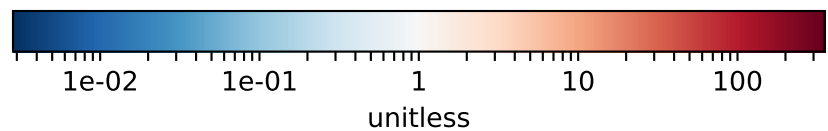
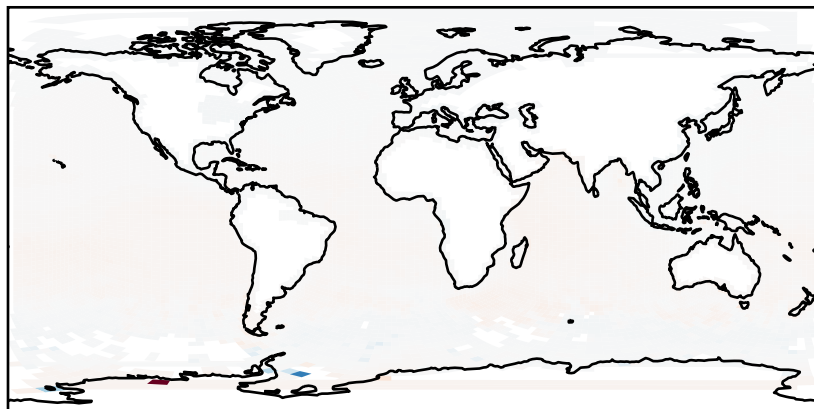
Difference  
Dev - Ref, Dynamic Range



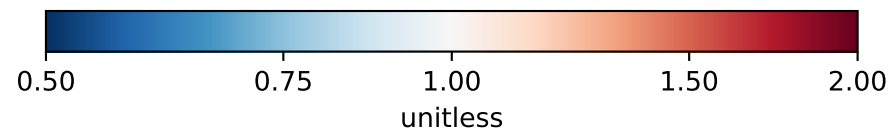
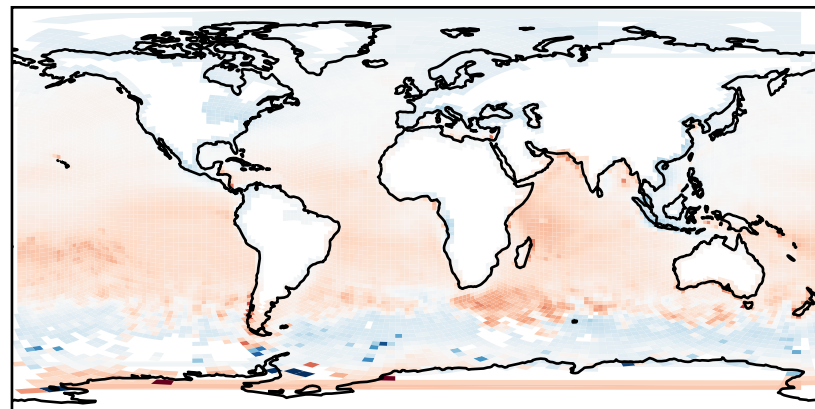
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



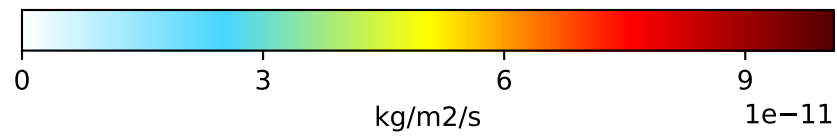
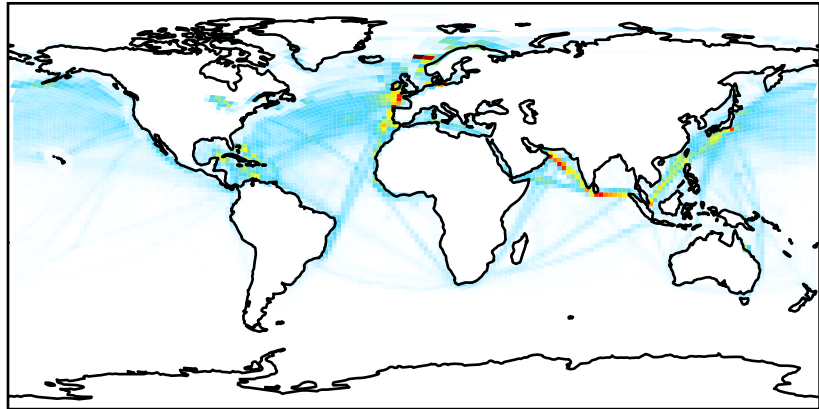
Ratio  
Dev/Ref, Fixed Range



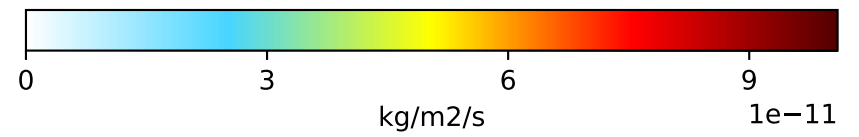
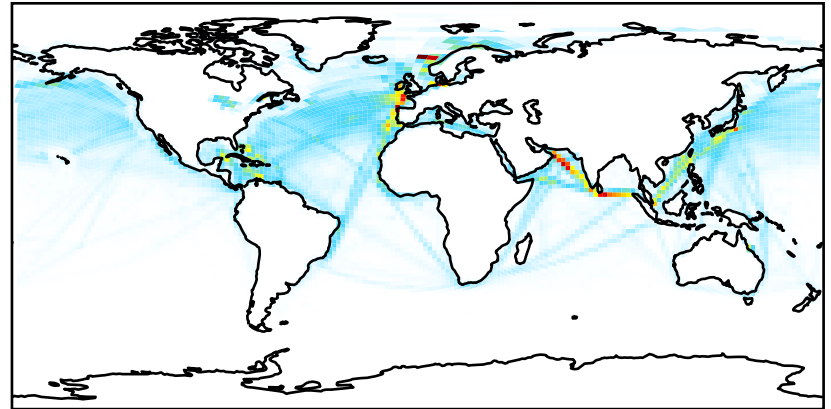


# Emis03\_Ship

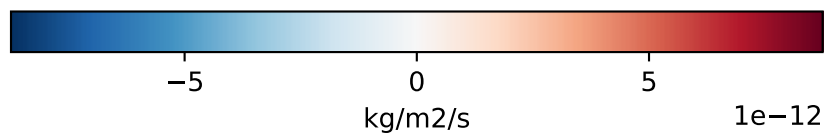
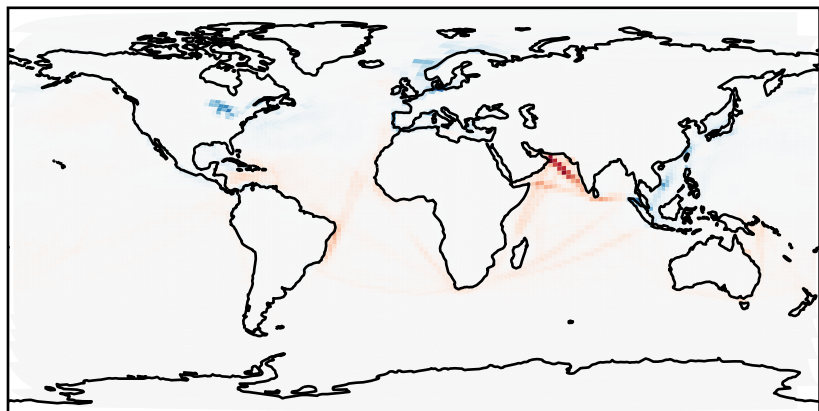
GCHP\_13.2.0 (Ref)  
c48



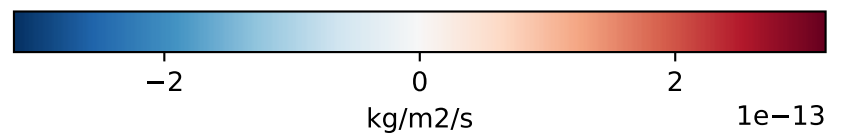
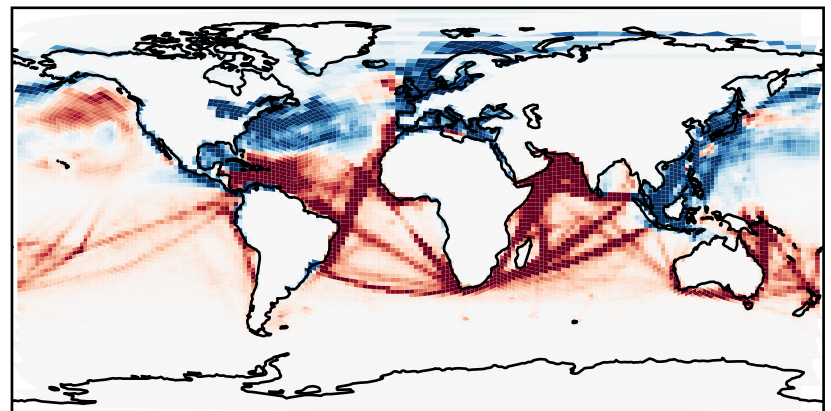
GCHP\_13.3.0-rc.1 (Dev)  
c48



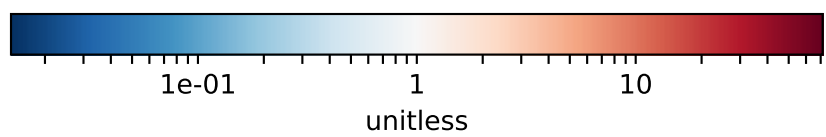
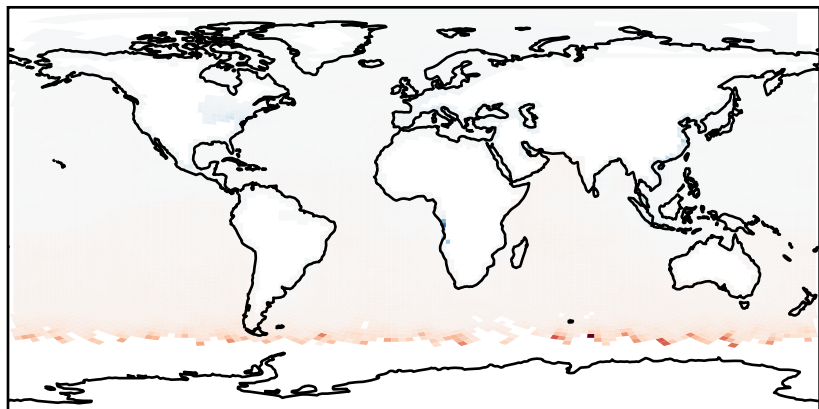
Difference  
Dev - Ref, Dynamic Range



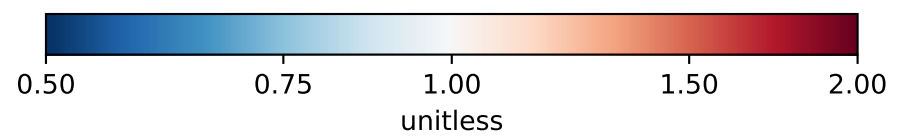
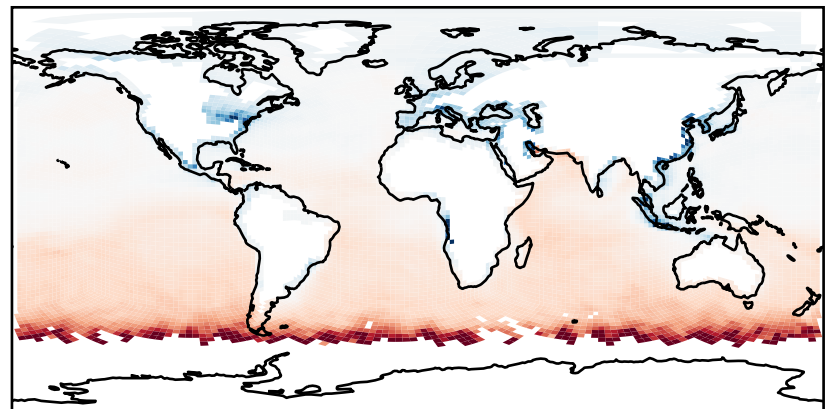
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

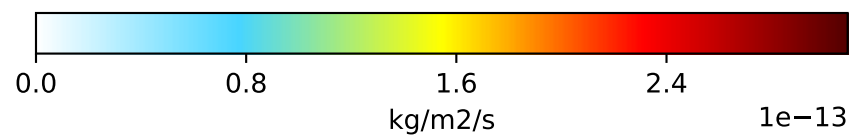
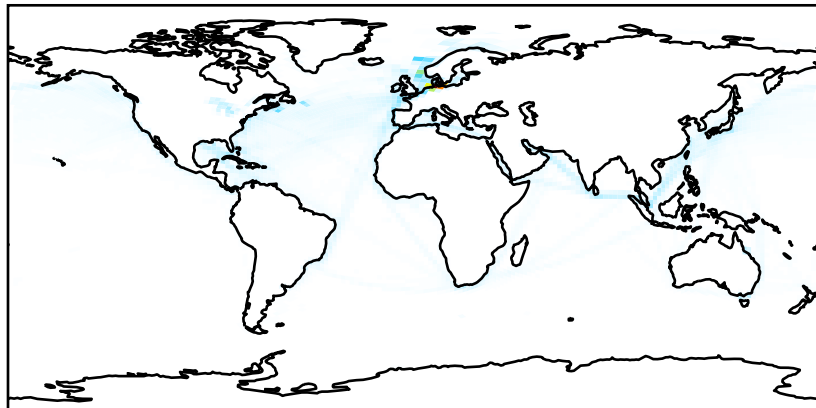


Ratio  
Dev/Ref, Fixed Range

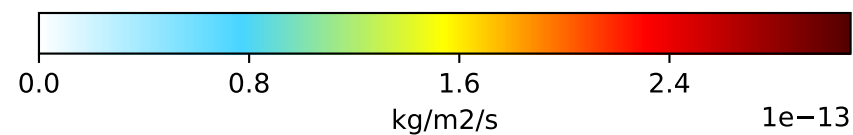
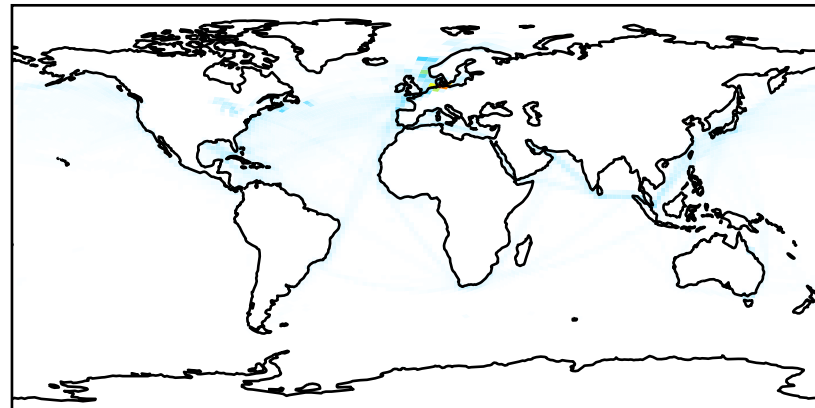


# EmisOCPI\_Ship

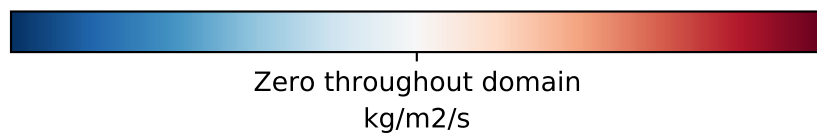
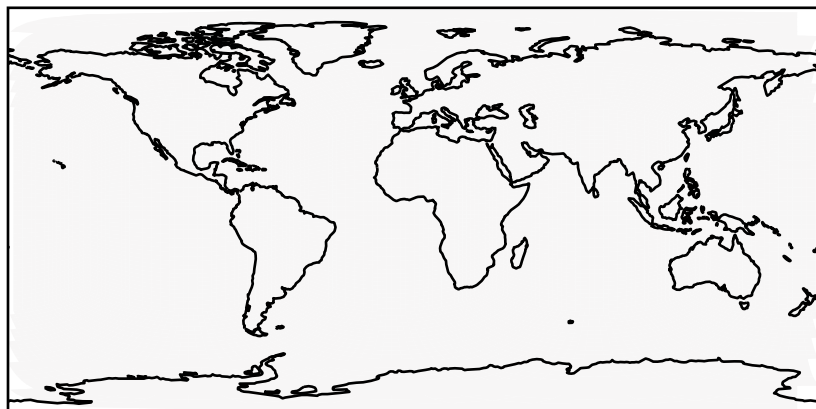
GCHP\_13.2.0 (Ref)  
c48



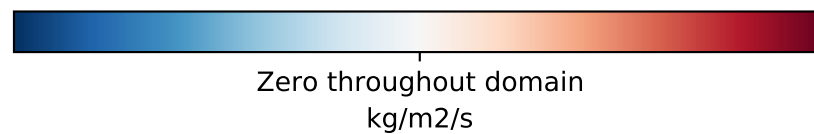
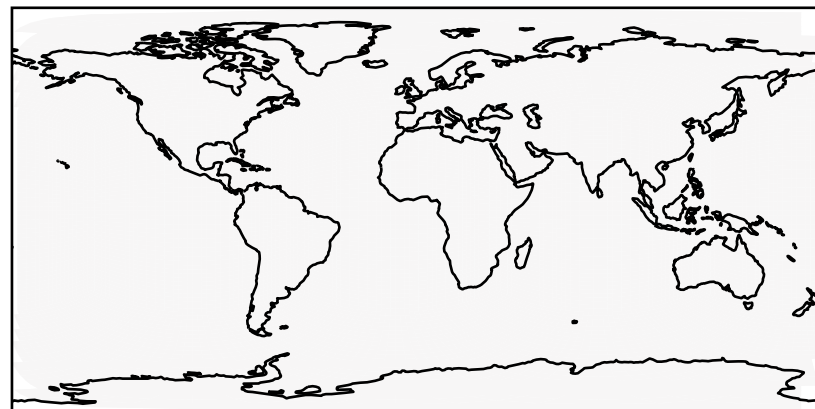
GCHP\_13.3.0-rc.1 (Dev)  
c48



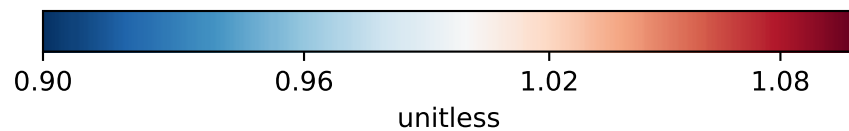
Difference  
Dev - Ref, Dynamic Range



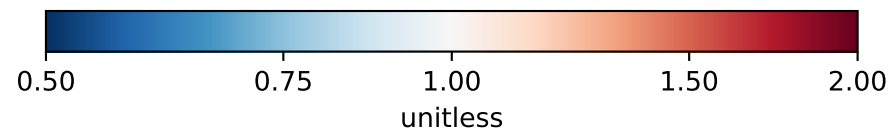
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



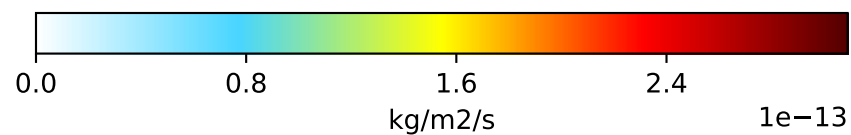
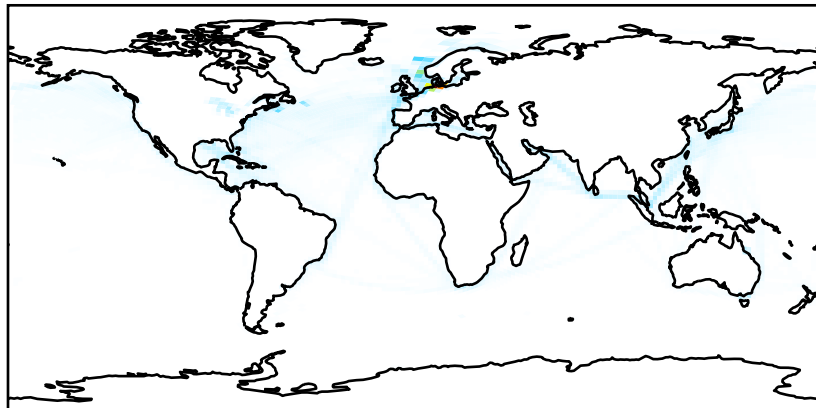
Ratio  
Dev/Ref, Fixed Range



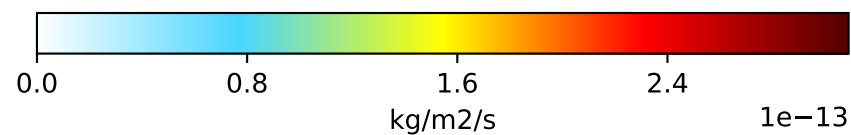
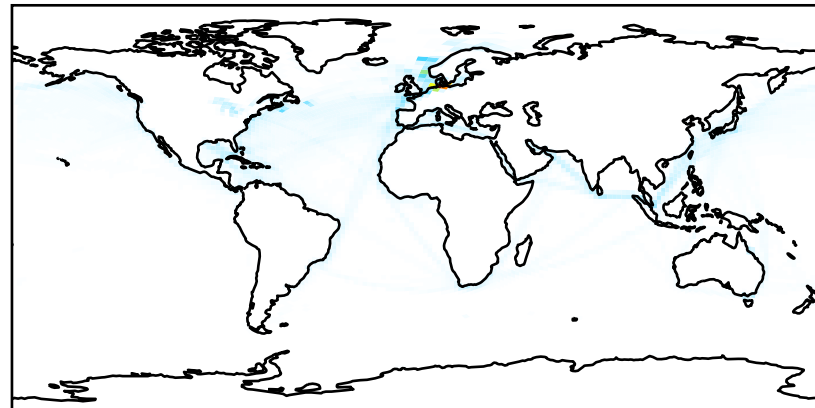


# EmisOCPO\_Ship

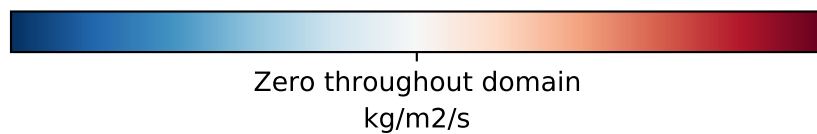
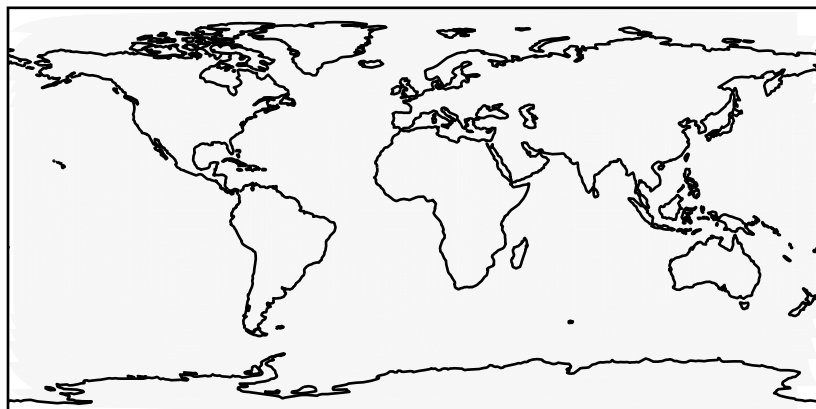
GCHP\_13.2.0 (Ref)  
c48



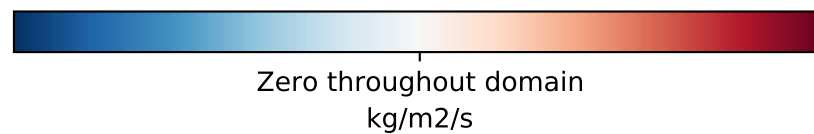
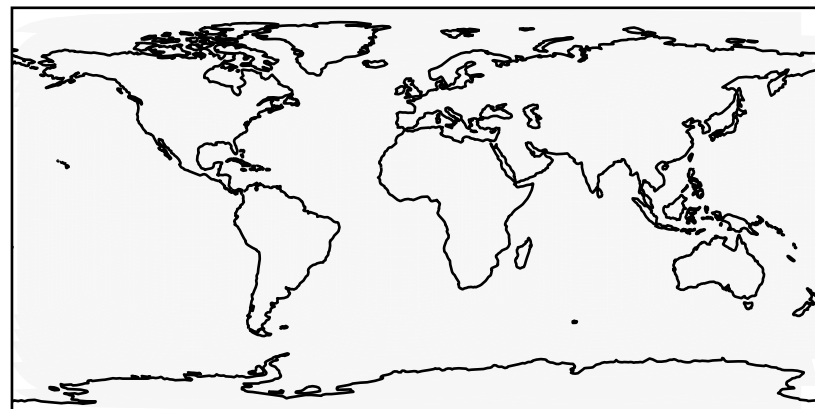
GCHP\_13.3.0-rc.1 (Dev)  
c48



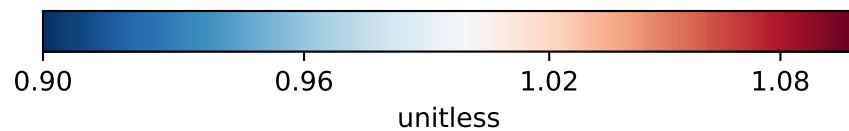
Difference  
Dev - Ref, Dynamic Range



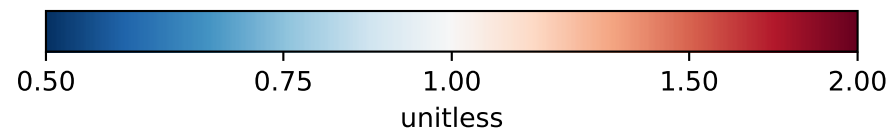
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

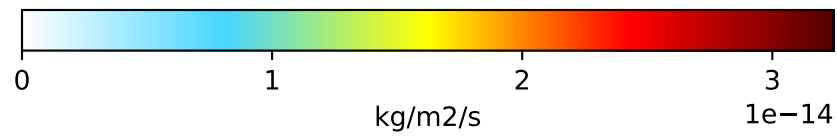
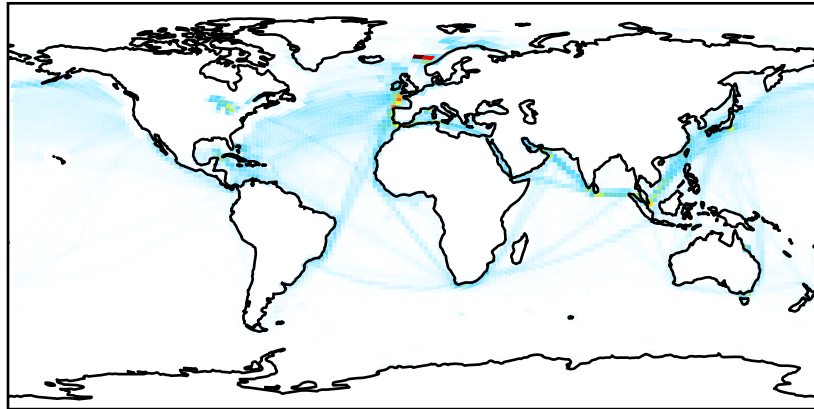


Ratio  
Dev/Ref, Fixed Range

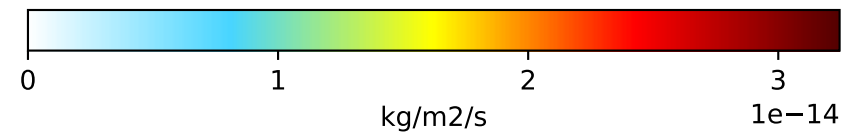
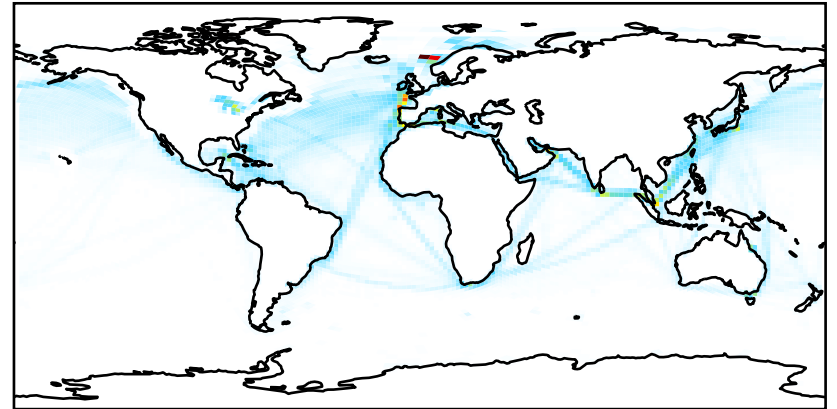


# EmispFe\_Ship

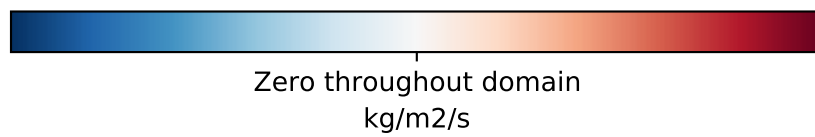
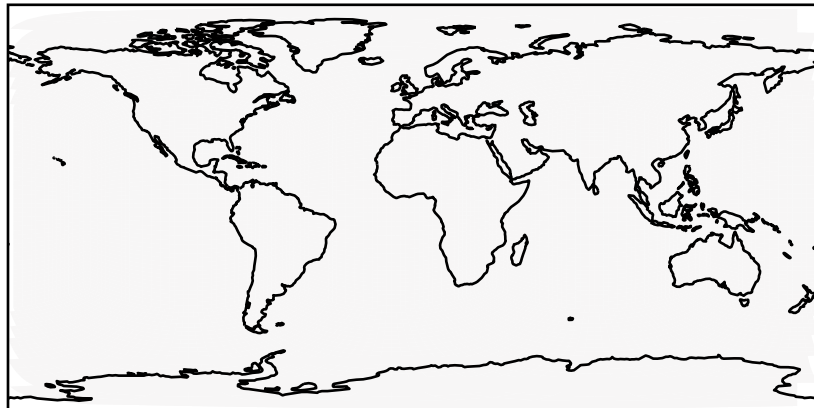
GCHP\_13.2.0 (Ref)  
c48



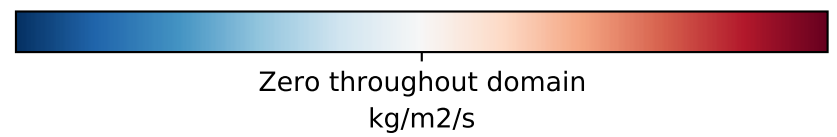
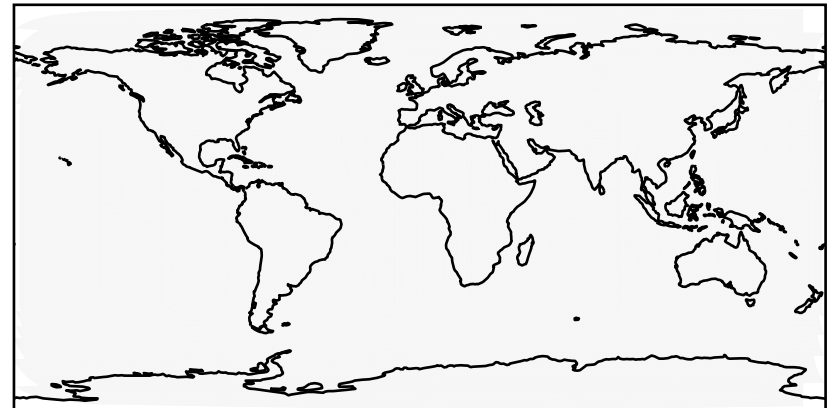
GCHP\_13.3.0-rc.1 (Dev)  
c48



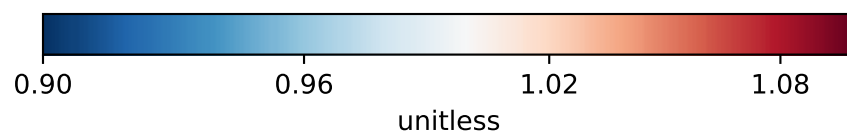
Difference  
Dev - Ref, Dynamic Range



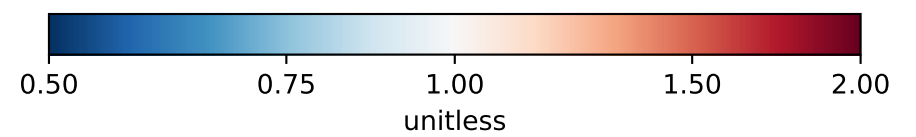
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

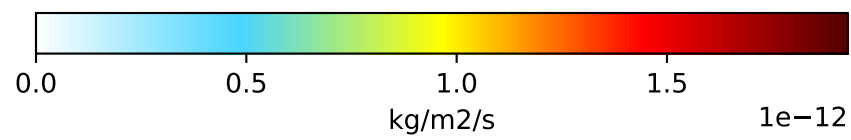
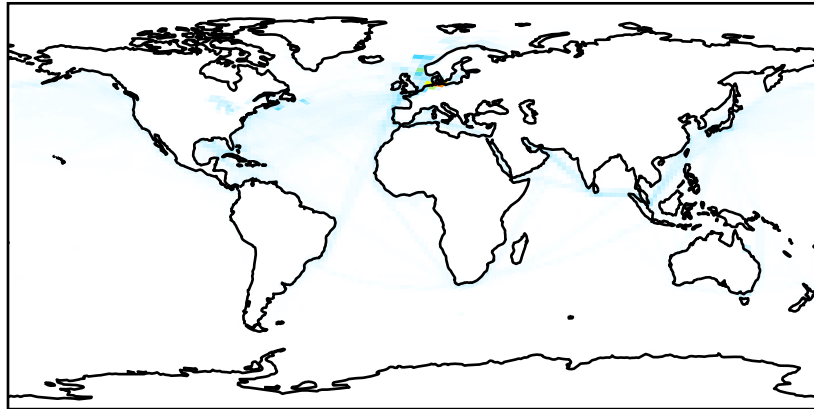


Ratio  
Dev/Ref, Fixed Range

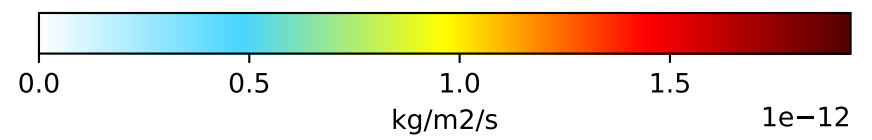
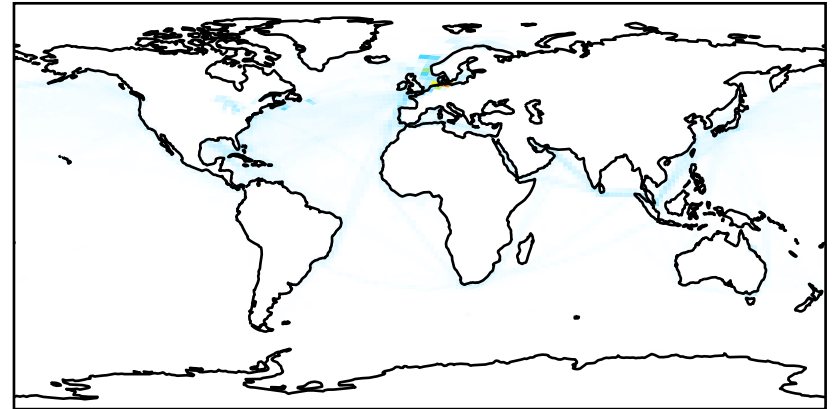


# EmisPRPE\_Ship

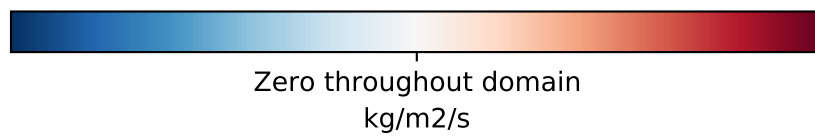
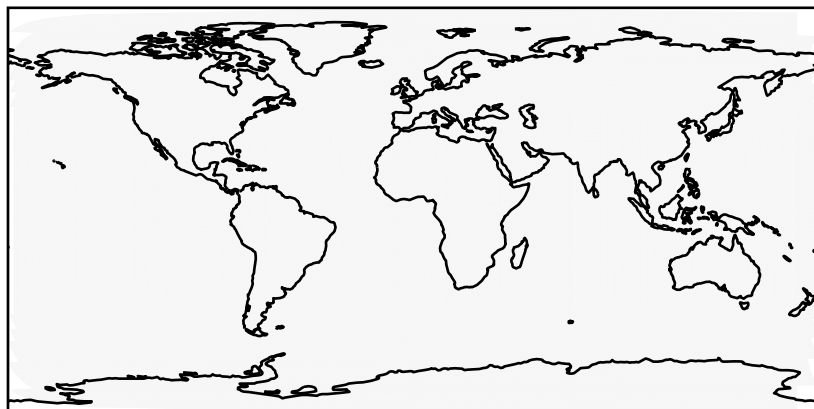
GCHP\_13.2.0 (Ref)  
c48



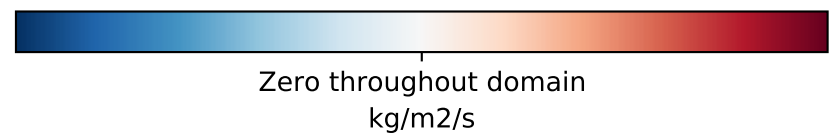
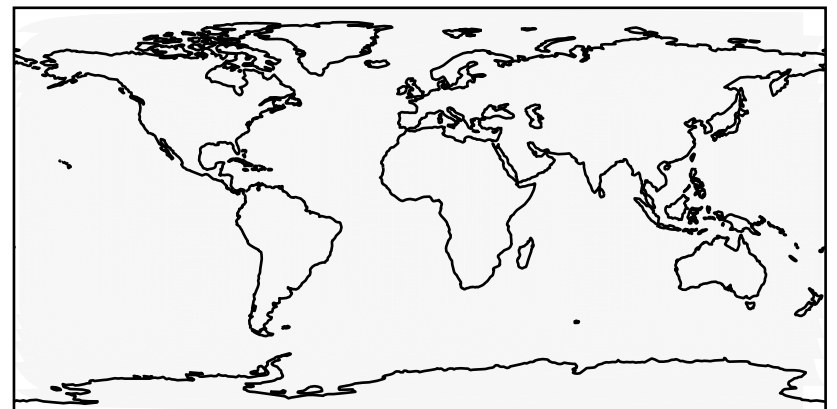
GCHP\_13.3.0-rc.1 (Dev)  
c48



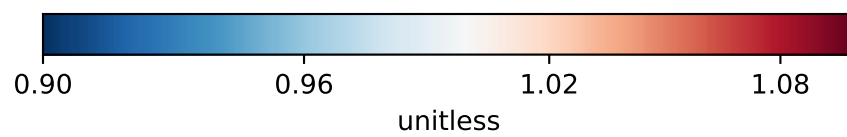
Difference  
Dev - Ref, Dynamic Range



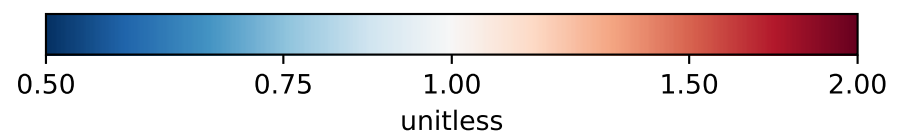
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



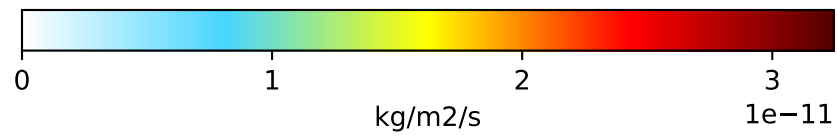
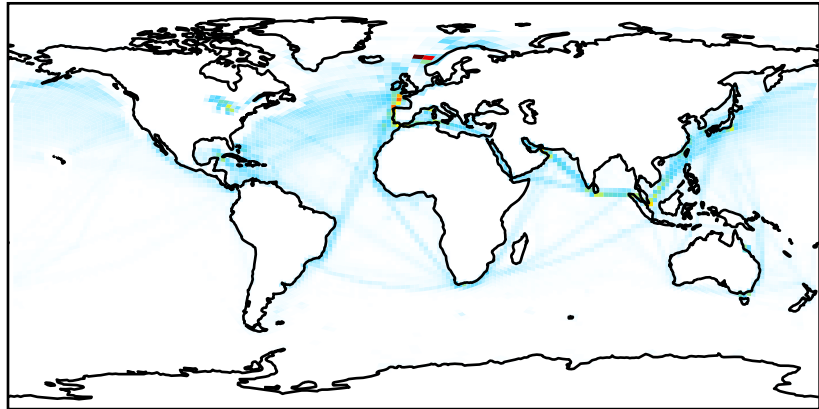
Ratio  
Dev/Ref, Fixed Range



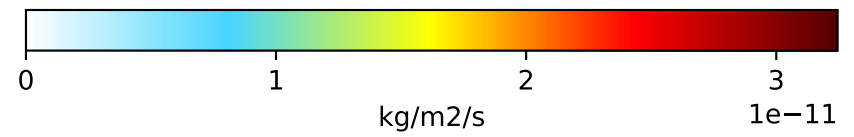
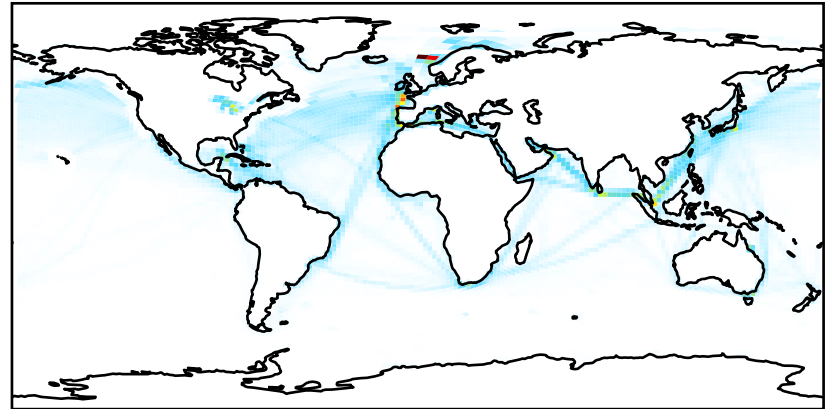


# EmisSO2\_Ship

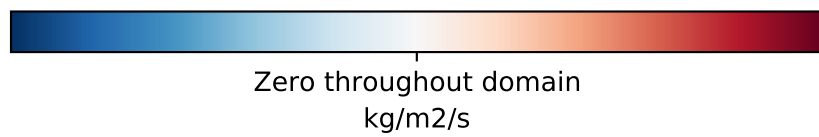
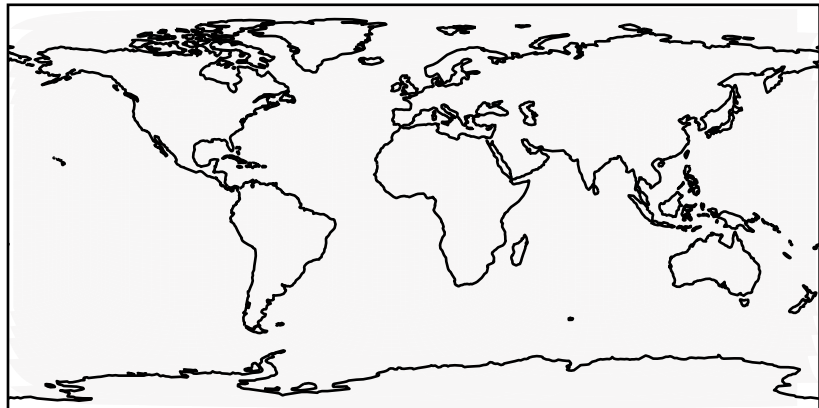
GCHP\_13.2.0 (Ref)  
c48



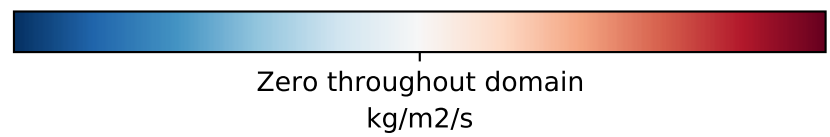
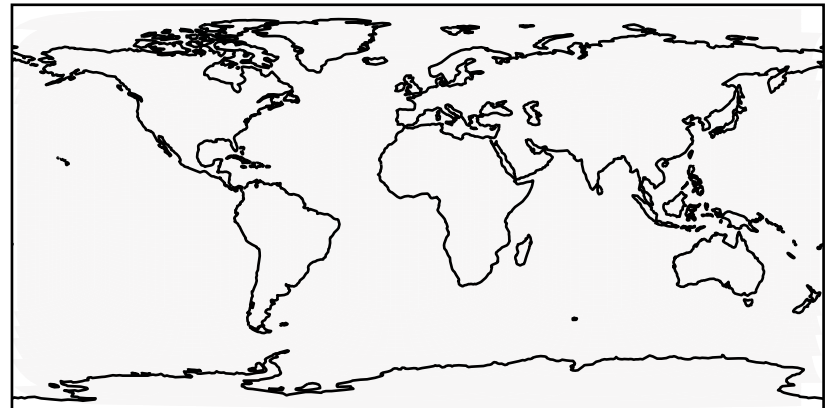
GCHP\_13.3.0-rc.1 (Dev)  
c48



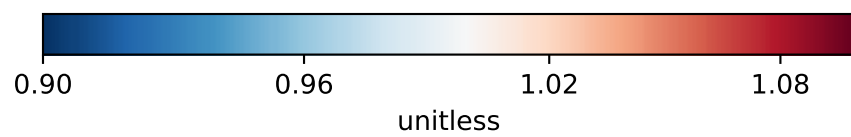
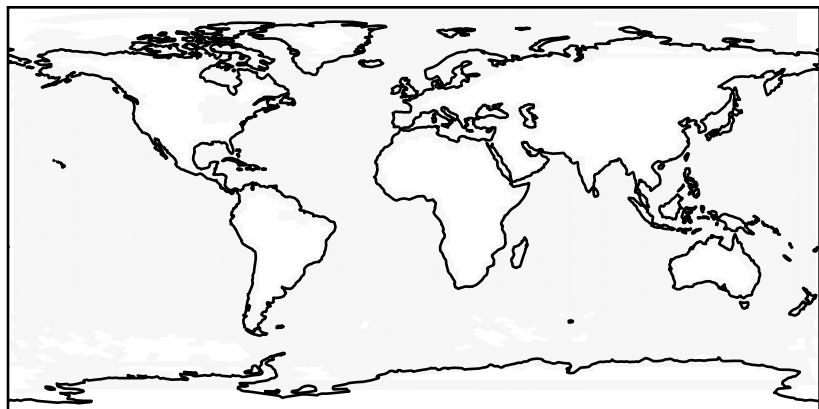
Difference  
Dev - Ref, Dynamic Range



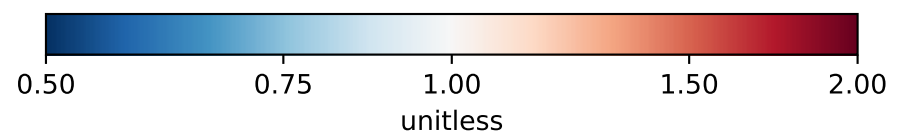
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



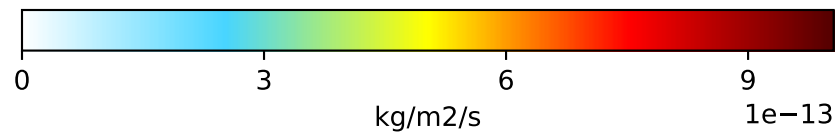
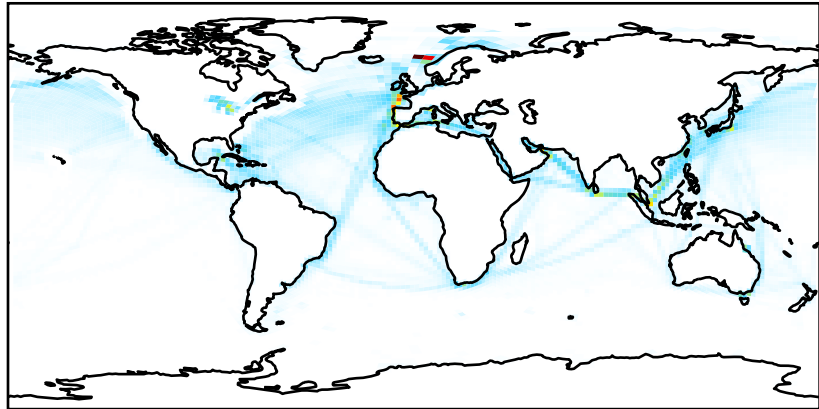
Ratio  
Dev/Ref, Fixed Range



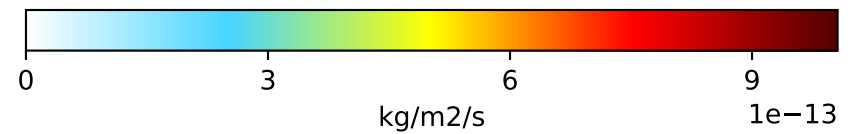
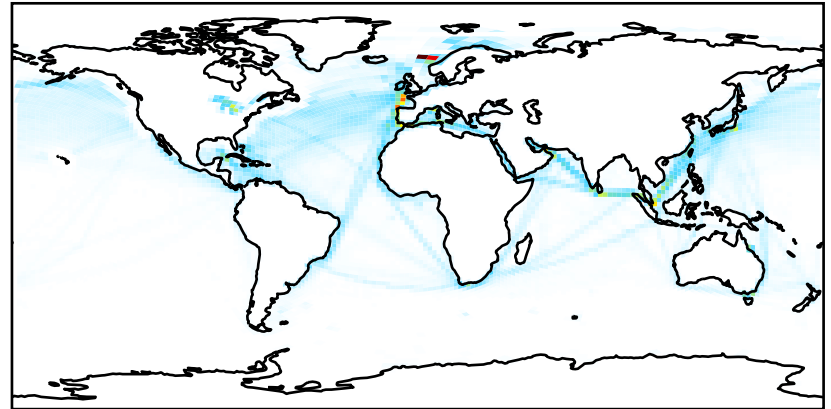


# EmisSO4\_Ship

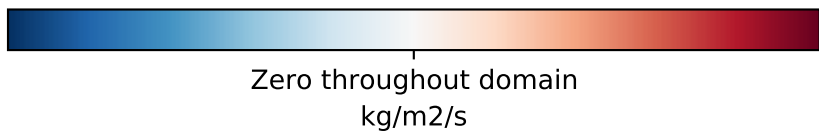
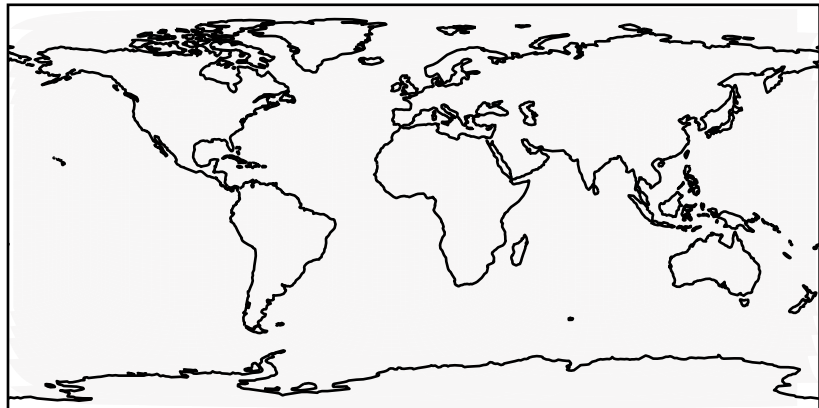
GCHP\_13.2.0 (Ref)  
c48



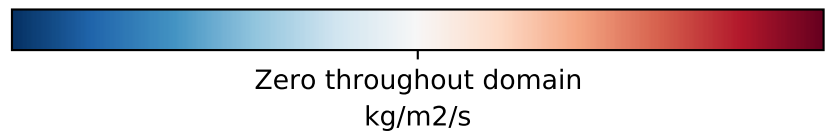
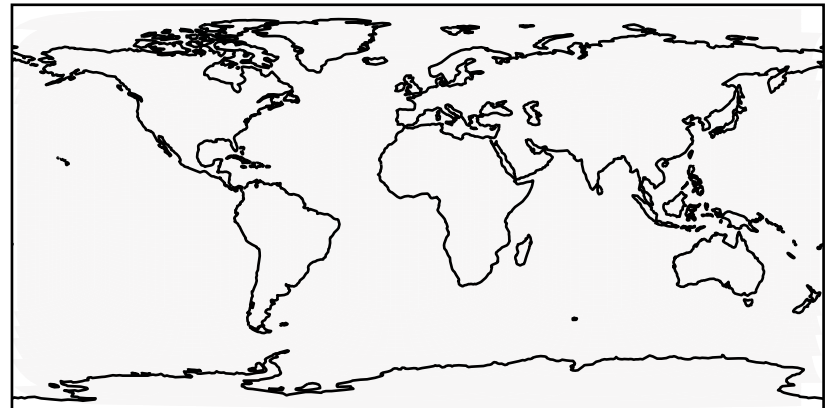
GCHP\_13.3.0-rc.1 (Dev)  
c48



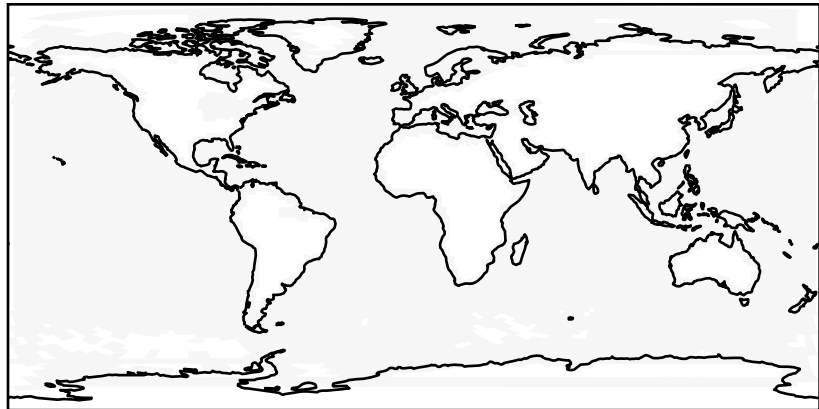
Difference  
Dev - Ref, Dynamic Range



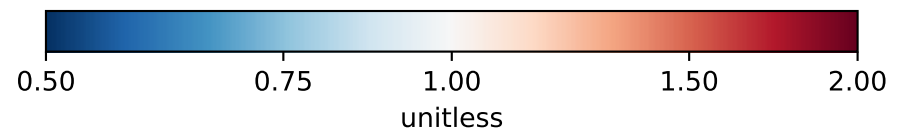
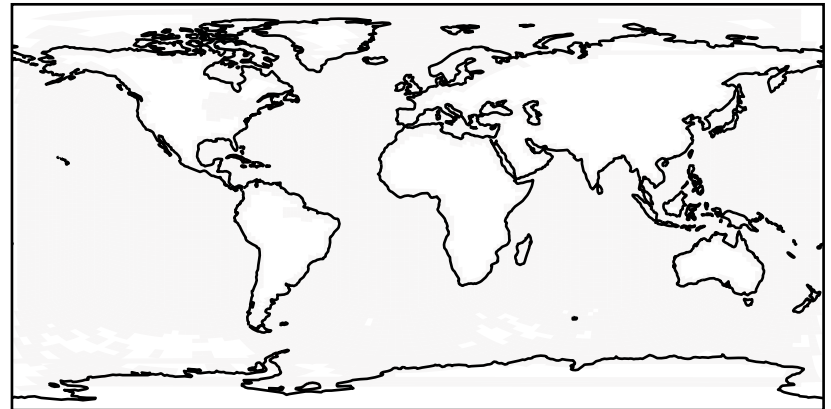
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

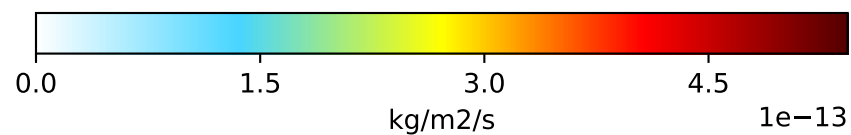
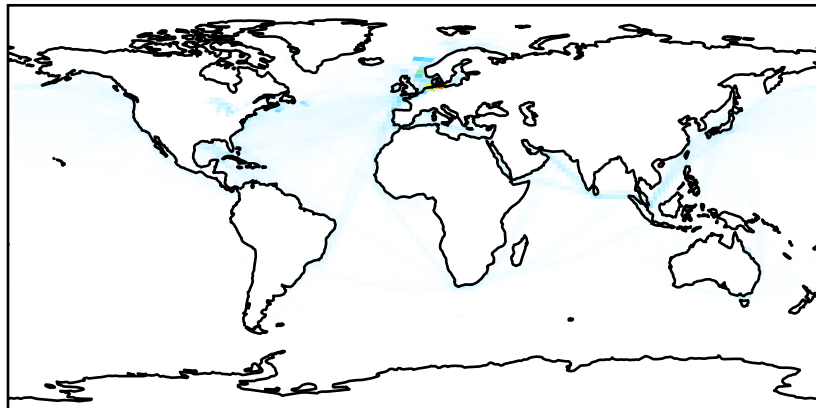


Ratio  
Dev/Ref, Fixed Range

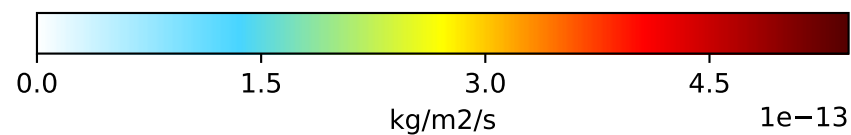
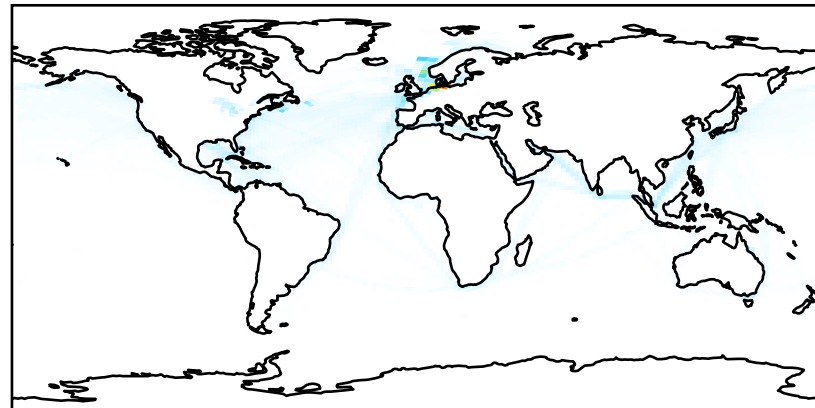


# EmisSOAP\_Ship

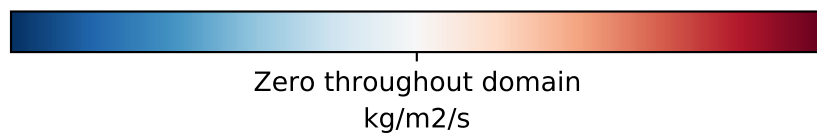
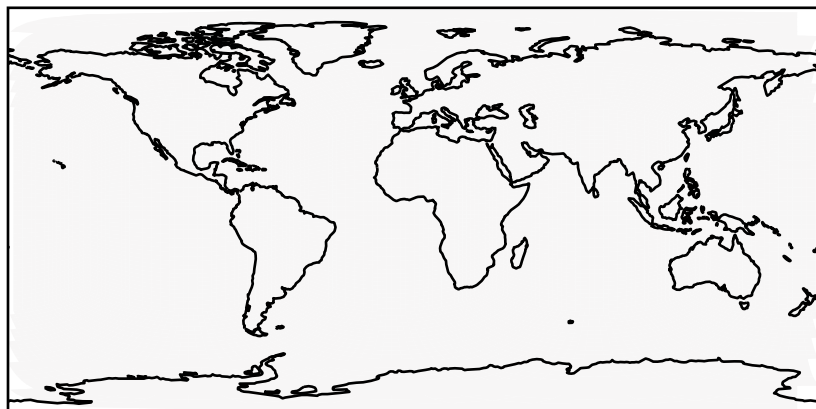
GCHP\_13.2.0 (Ref)  
c48



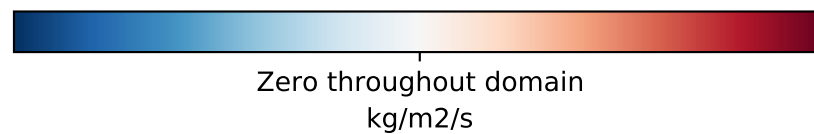
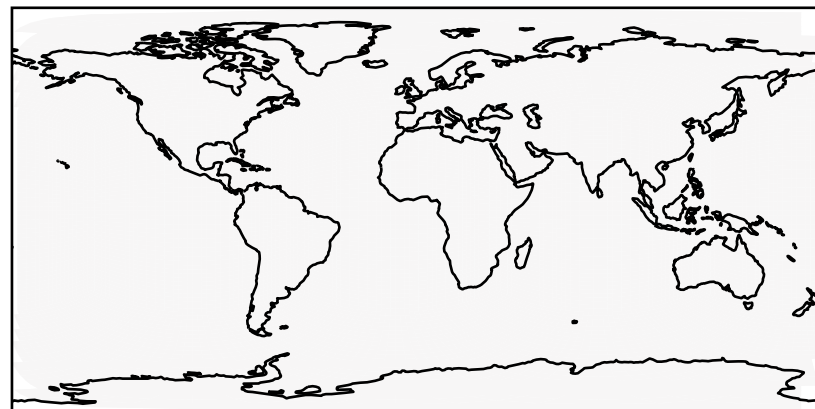
GCHP\_13.3.0-rc.1 (Dev)  
c48



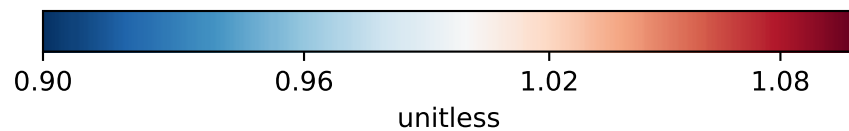
Difference  
Dev - Ref, Dynamic Range



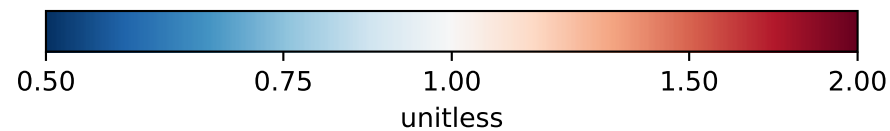
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

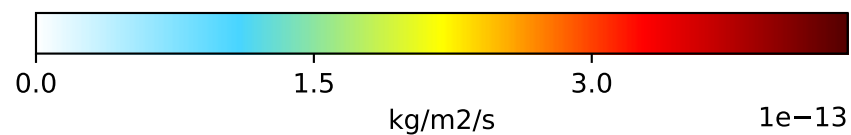
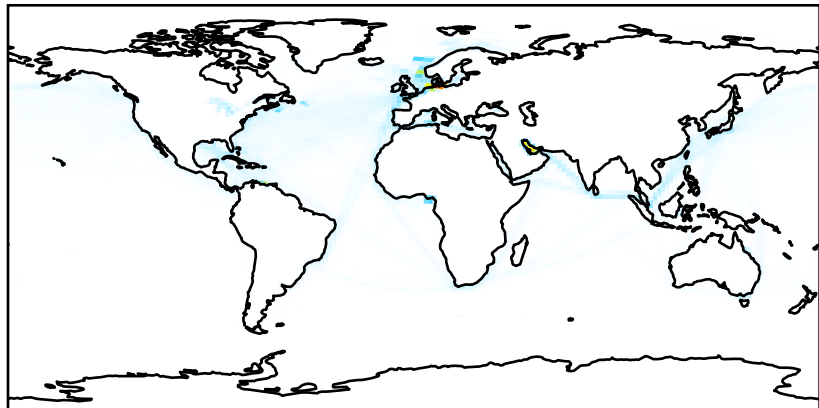


Ratio  
Dev/Ref, Fixed Range

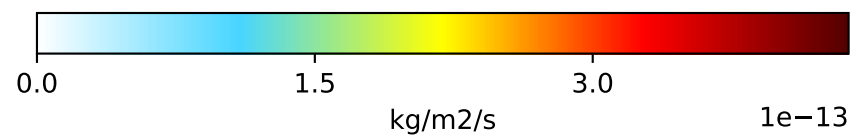
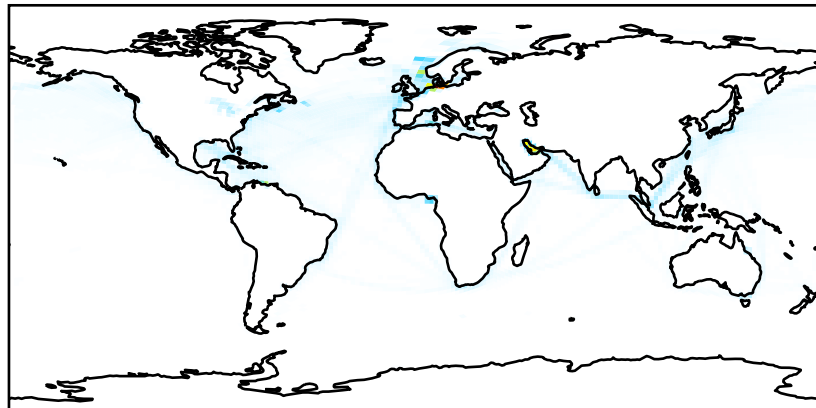


# EmisTOLU\_Ship

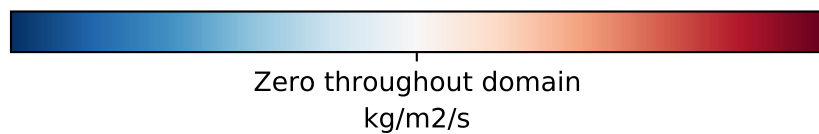
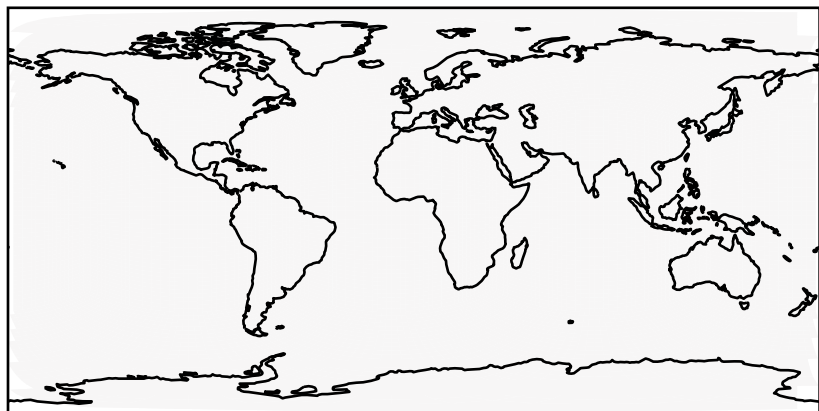
GCHP\_13.2.0 (Ref)  
c48



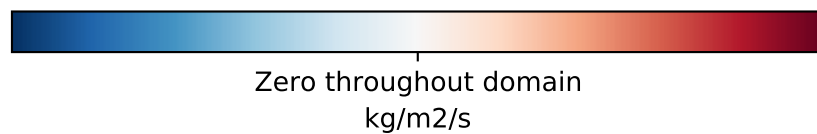
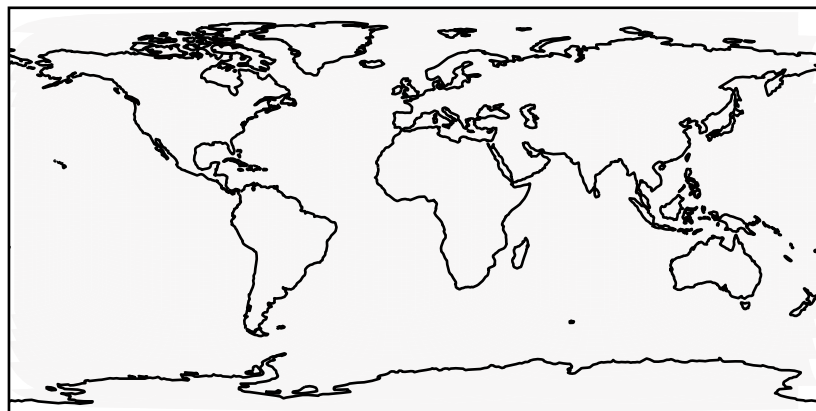
GCHP\_13.3.0-rc.1 (Dev)  
c48



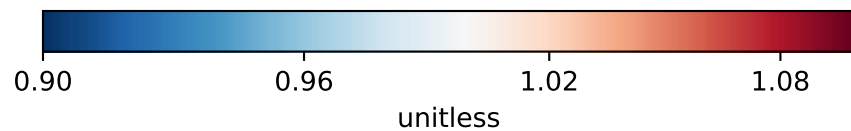
Difference  
Dev - Ref, Dynamic Range



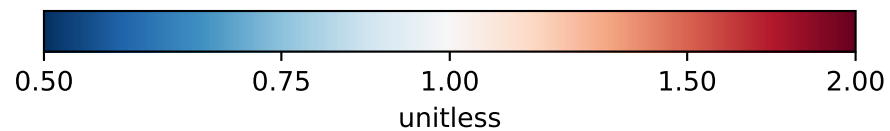
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



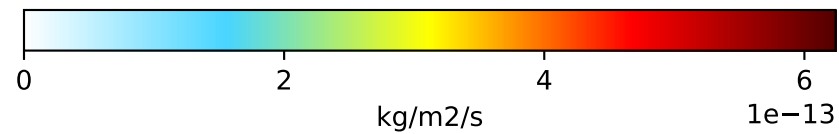
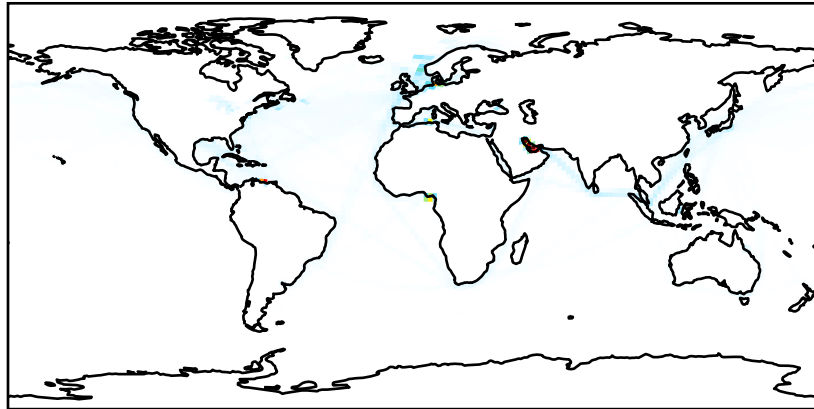
Ratio  
Dev/Ref, Fixed Range



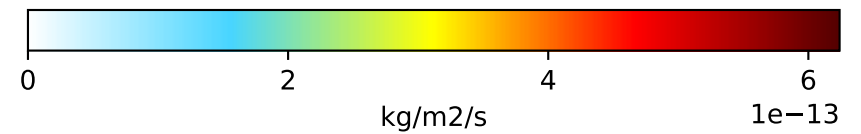
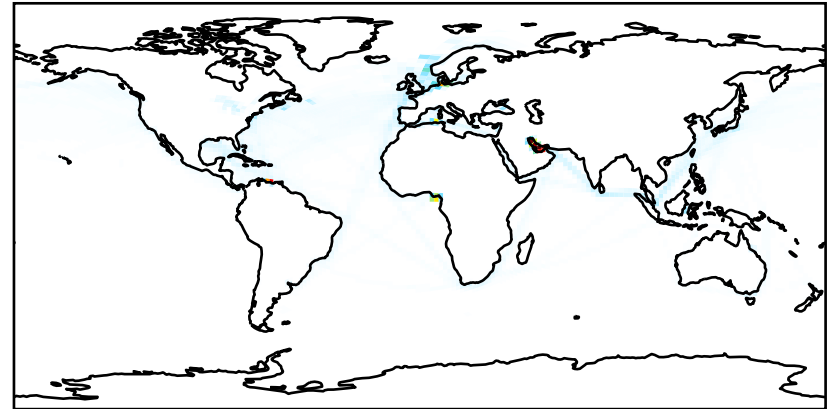


# EmisXYLE\_Ship

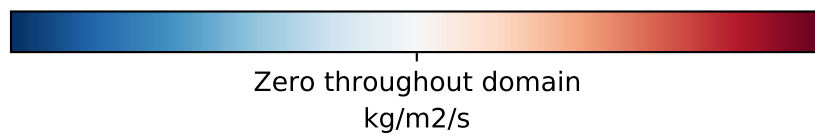
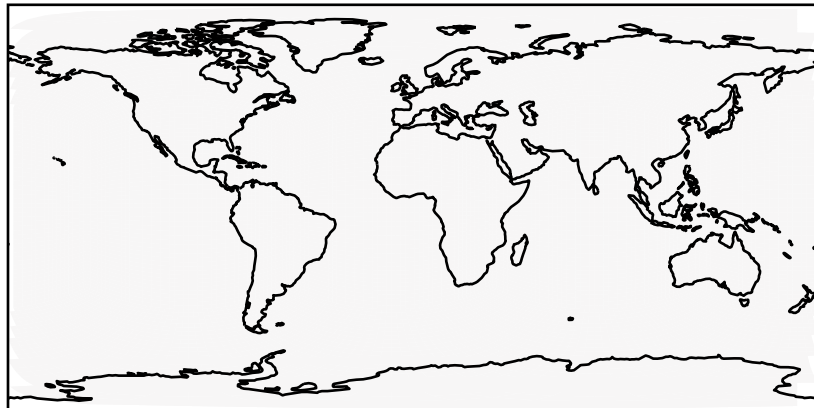
GCHP\_13.2.0 (Ref)  
c48



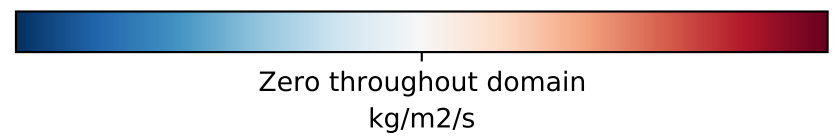
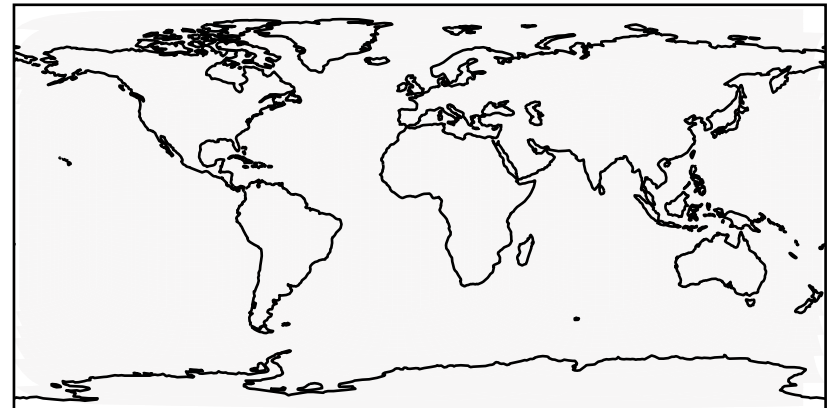
GCHP\_13.3.0-rc.1 (Dev)  
c48



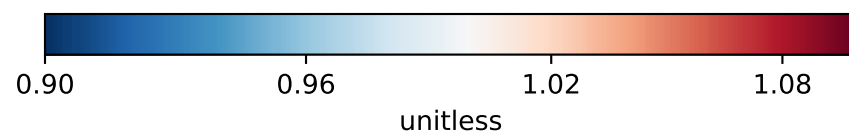
Difference  
Dev - Ref, Dynamic Range



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



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

