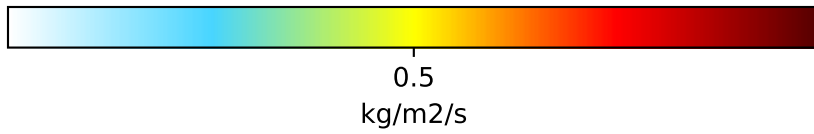
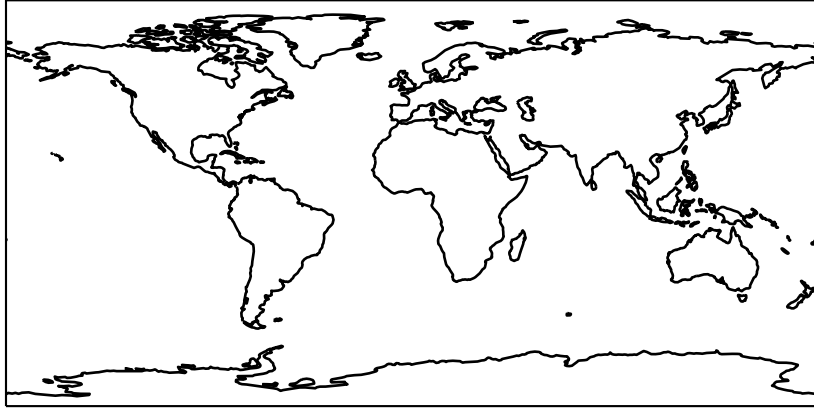


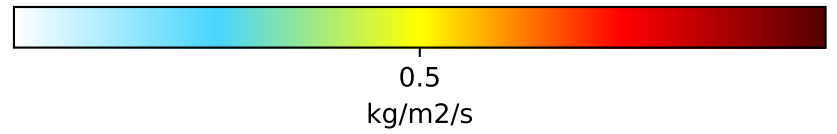
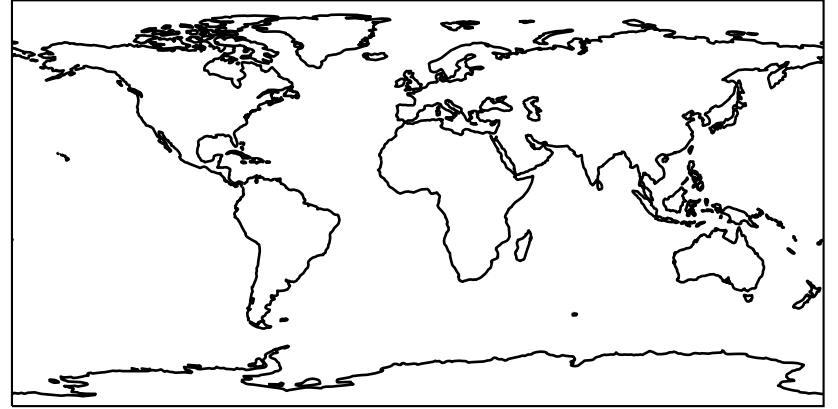
# EmisALD2\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



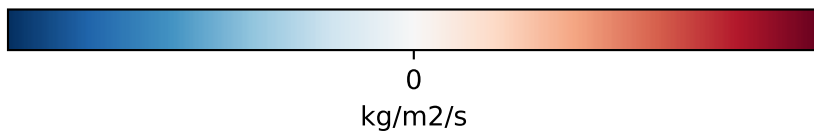
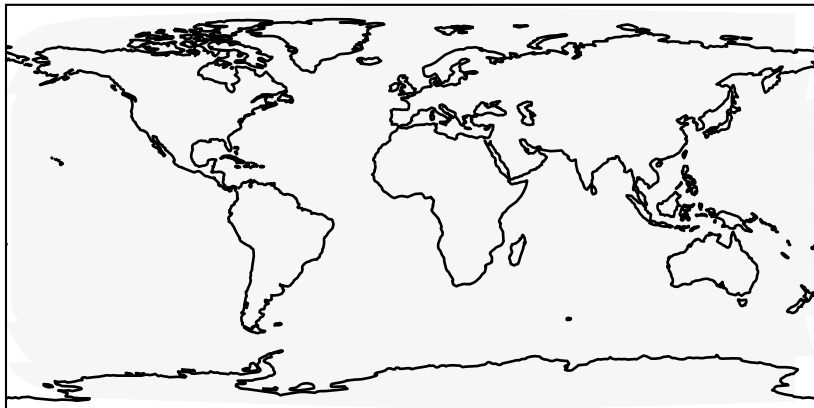
0.5  
kg/m2/s

GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



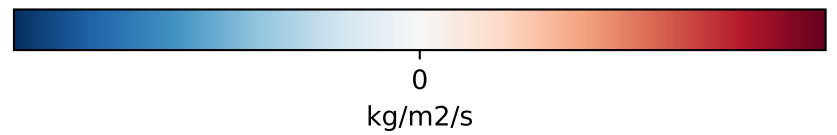
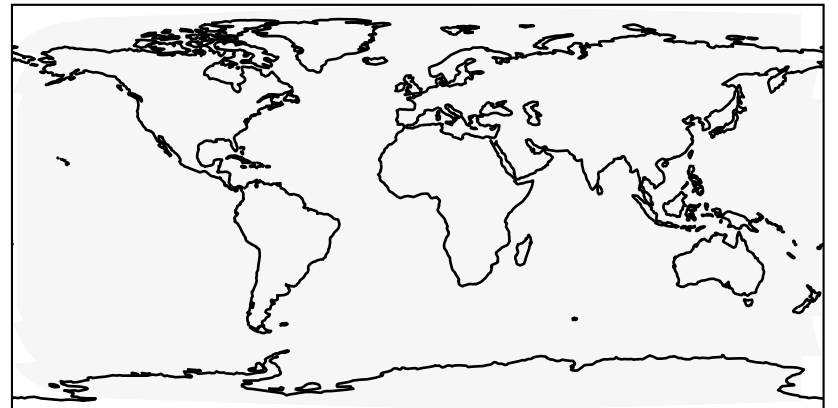
0.5  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



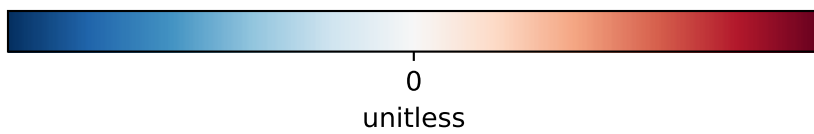
0  
kg/m2/s

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



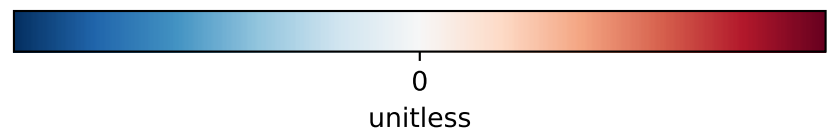
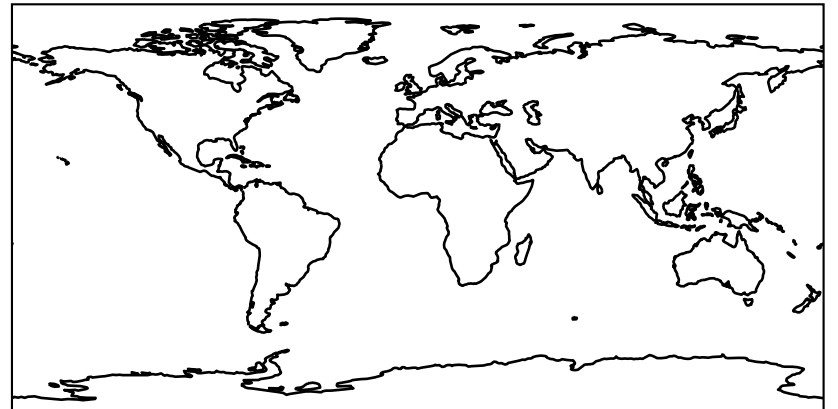
0  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



0  
unitless

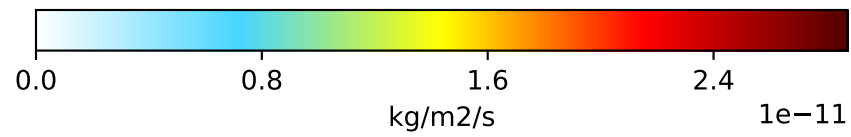
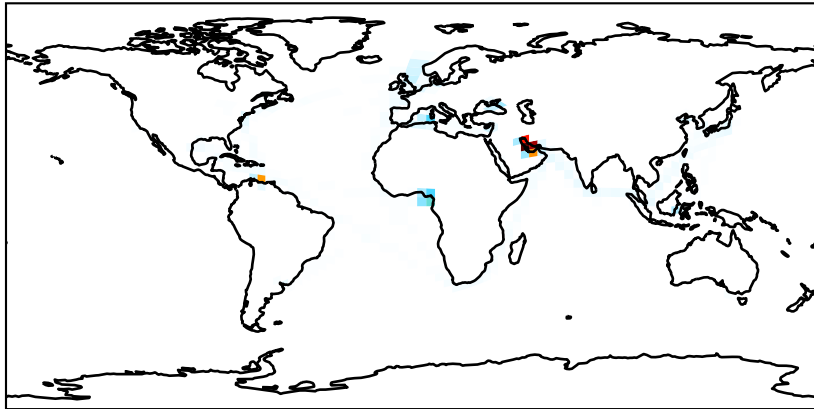
Ratio  
Dev/Ref, Fixed Range



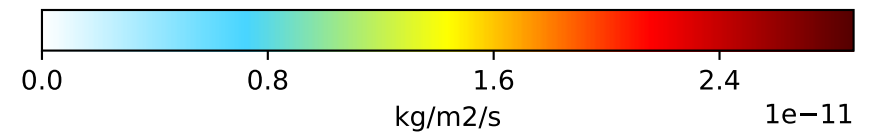
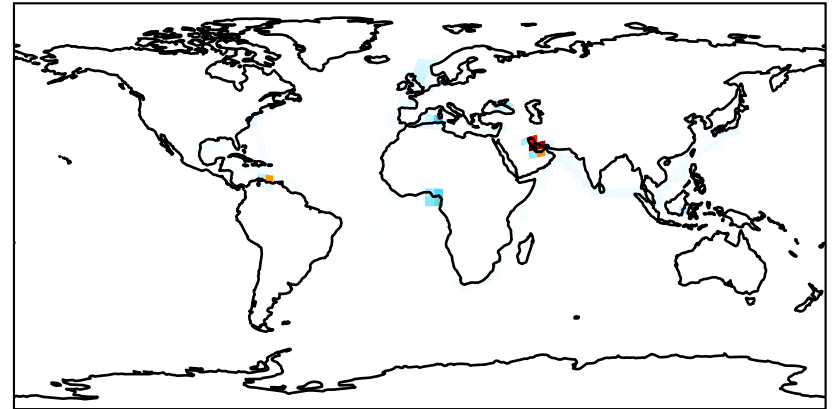
0  
unitless

# EmisALK4\_Ship

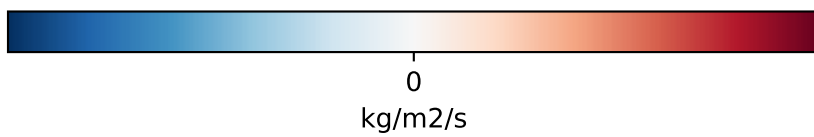
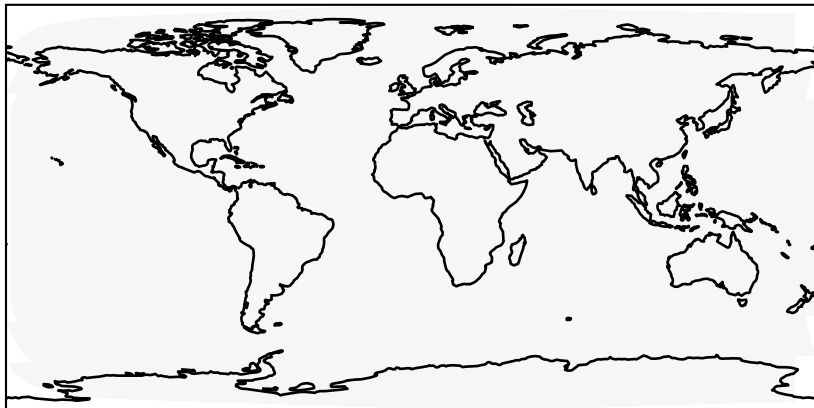
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



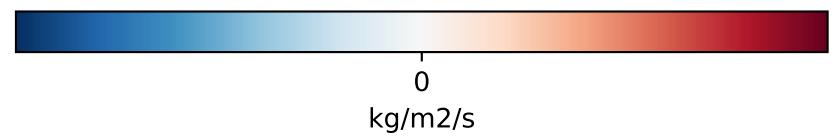
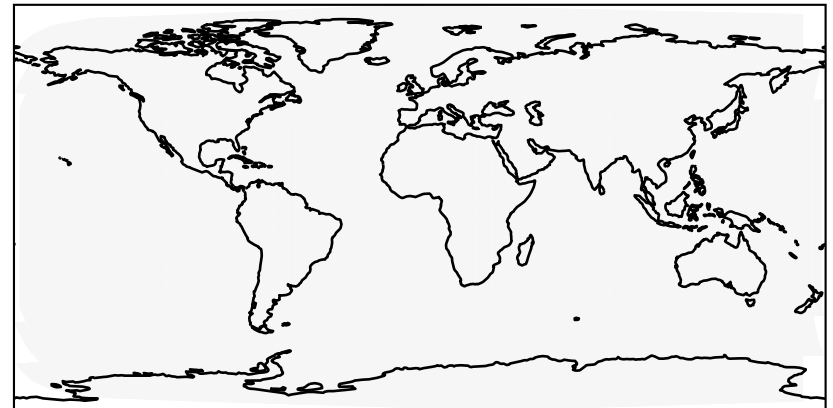
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



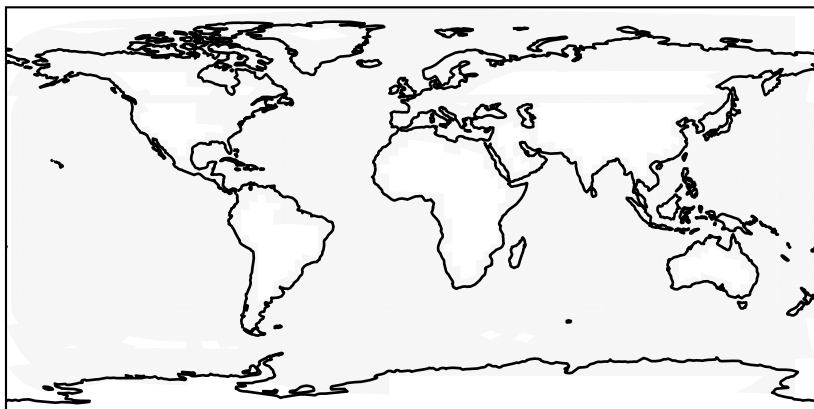
Difference  
Dev - Ref, Dynamic Range



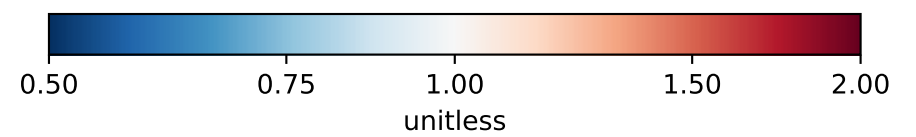
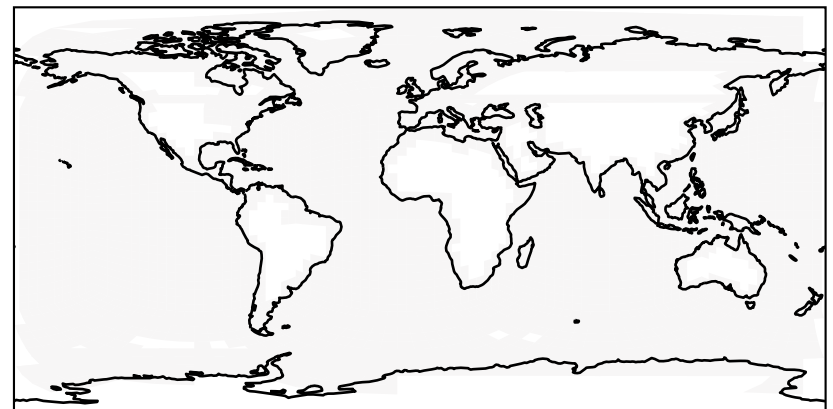
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

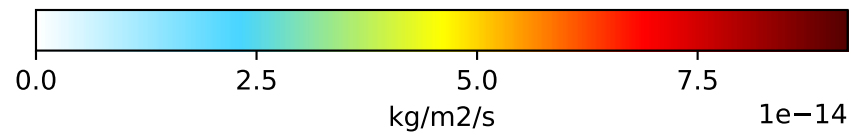
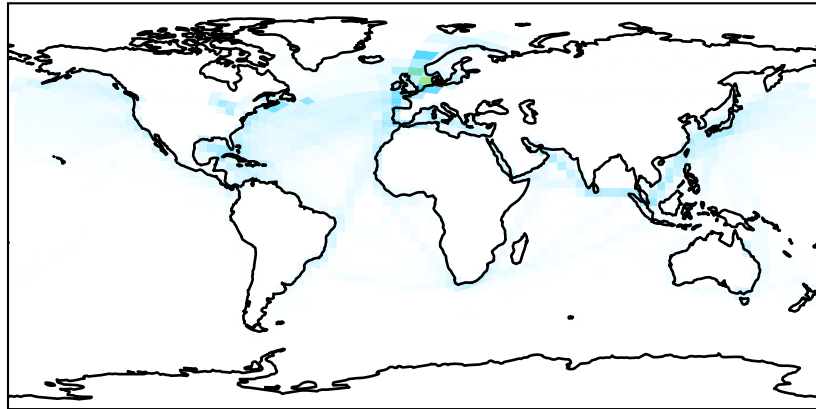


Ratio  
Dev/Ref, Fixed Range

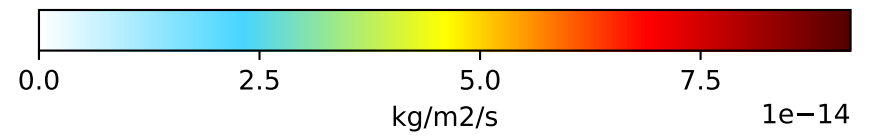
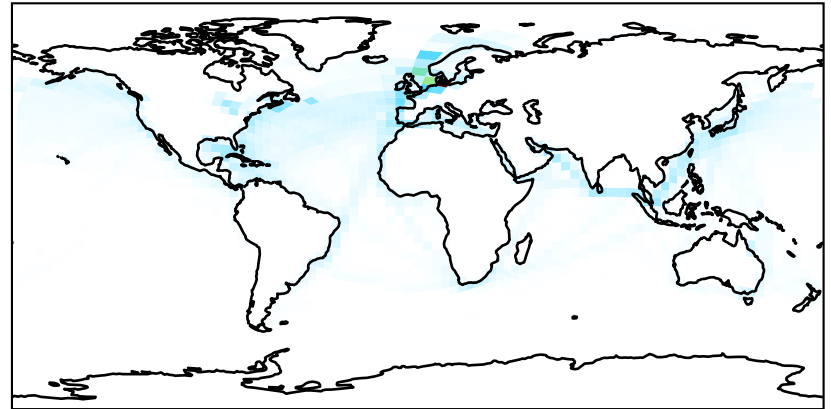


# EmisBCPI\_Ship

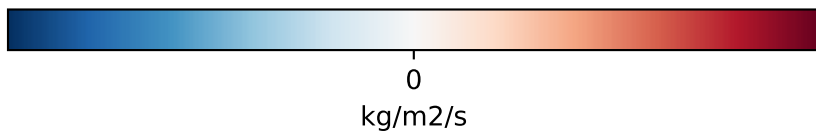
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



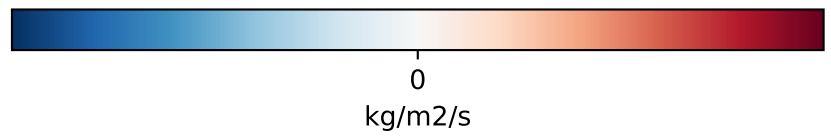
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



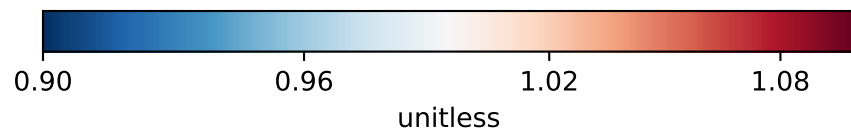
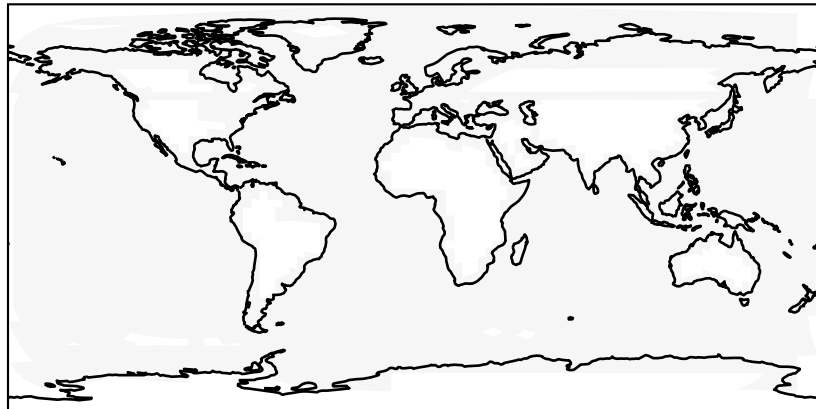
Difference  
Dev - Ref, Dynamic Range



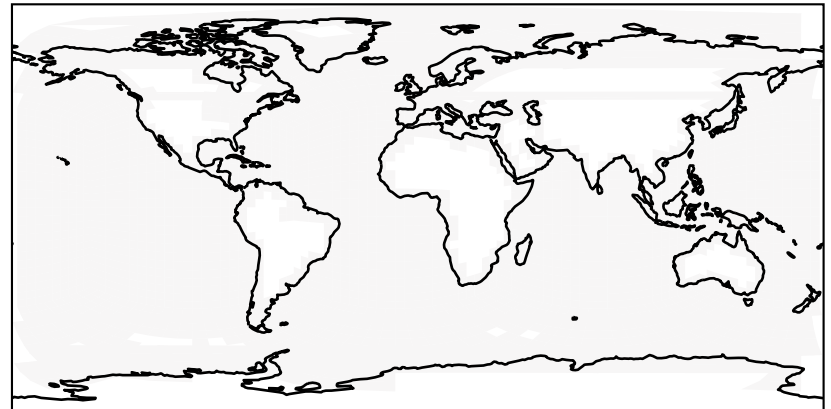
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

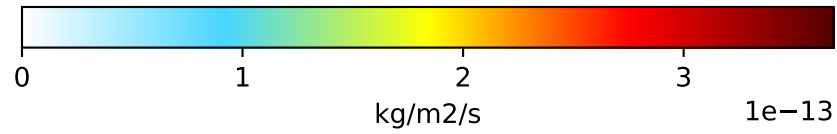
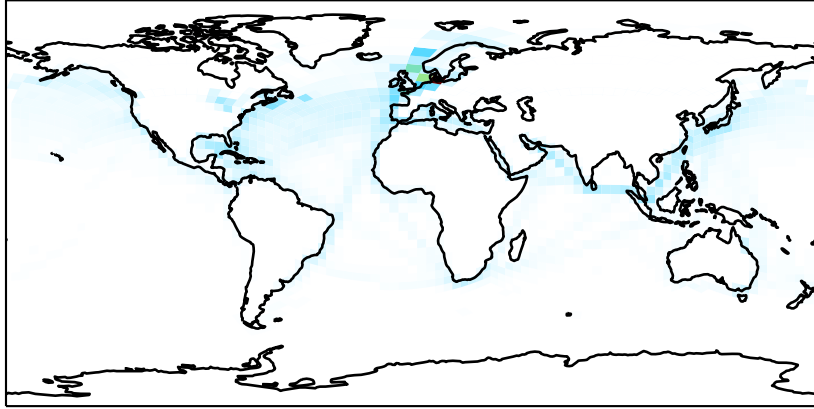


Ratio  
Dev/Ref, Fixed Range

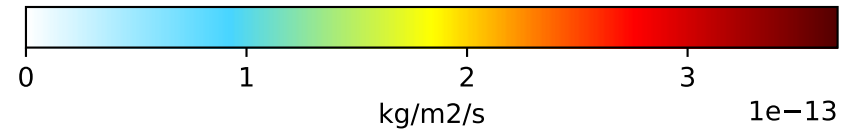
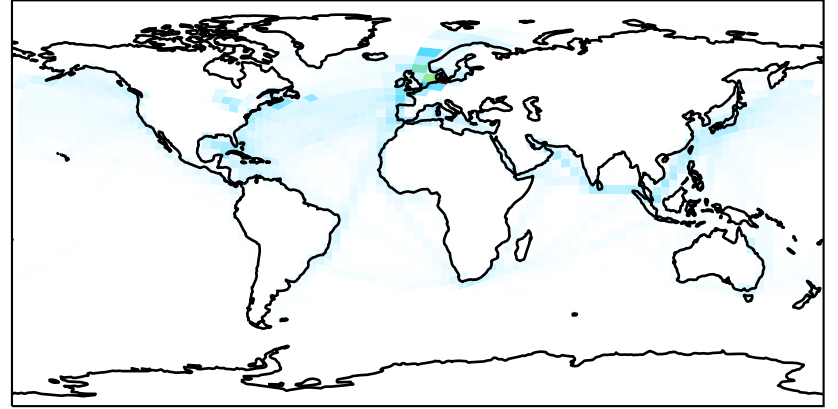


# EmisBCPO\_Ship

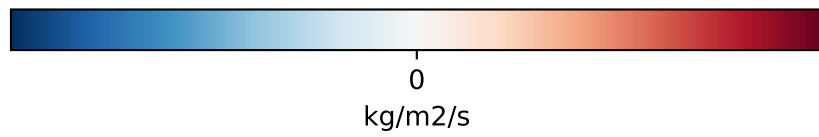
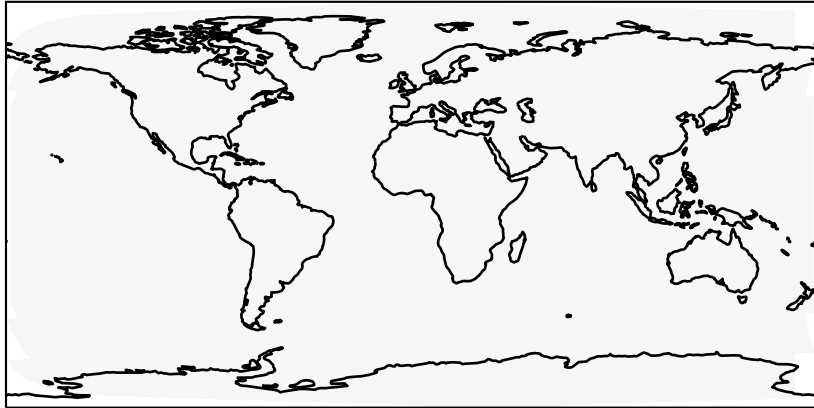
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



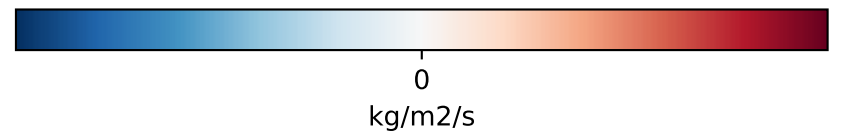
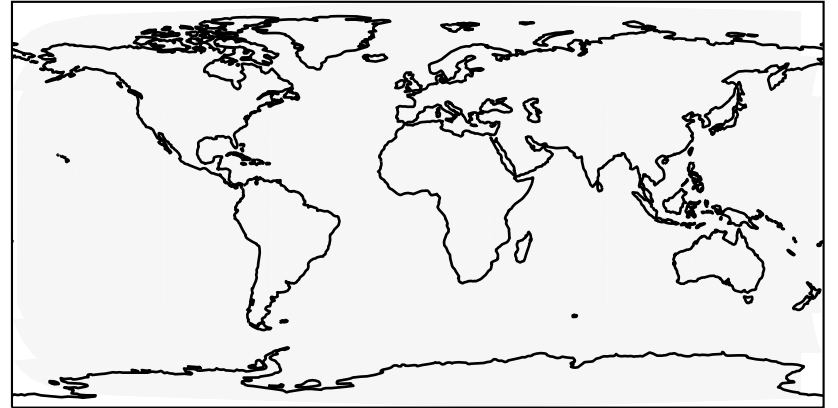
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



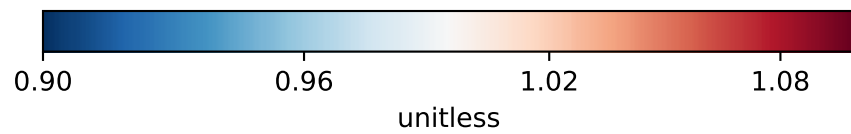
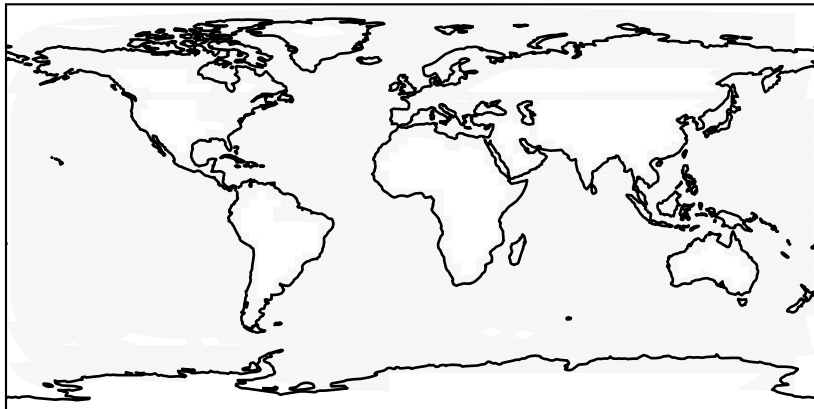
Difference  
Dev - Ref, Dynamic Range



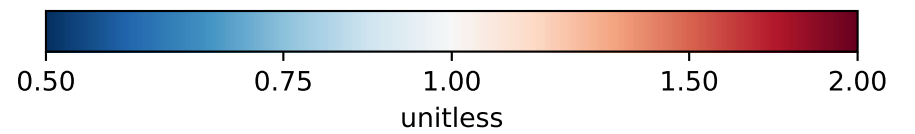
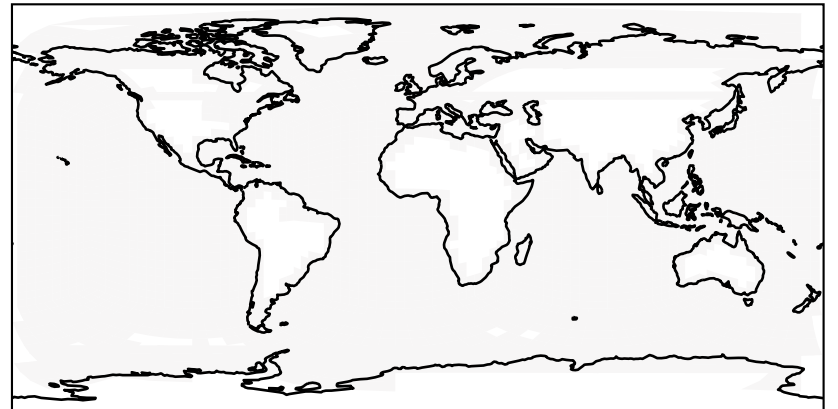
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



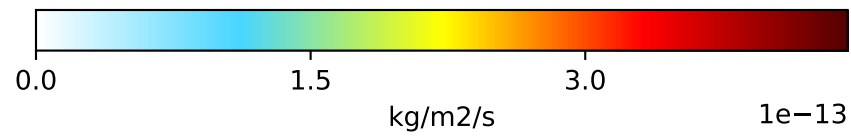
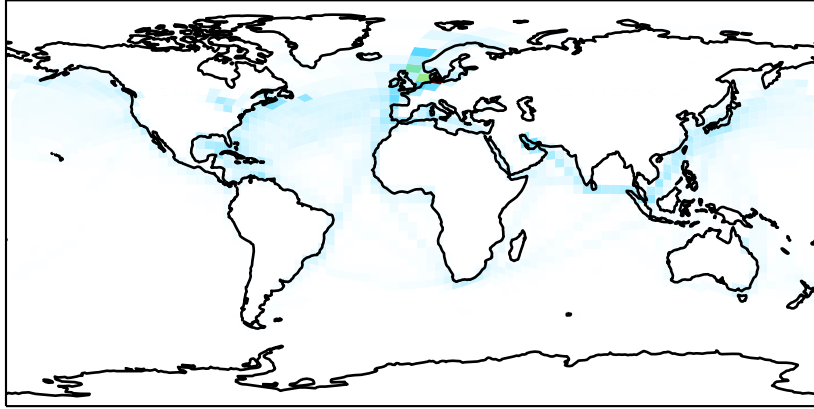
Ratio  
Dev/Ref, Fixed Range



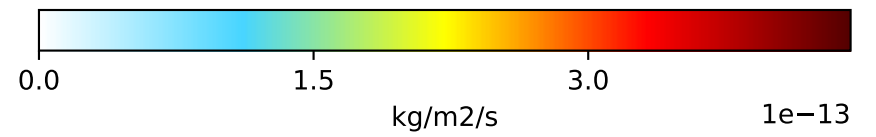
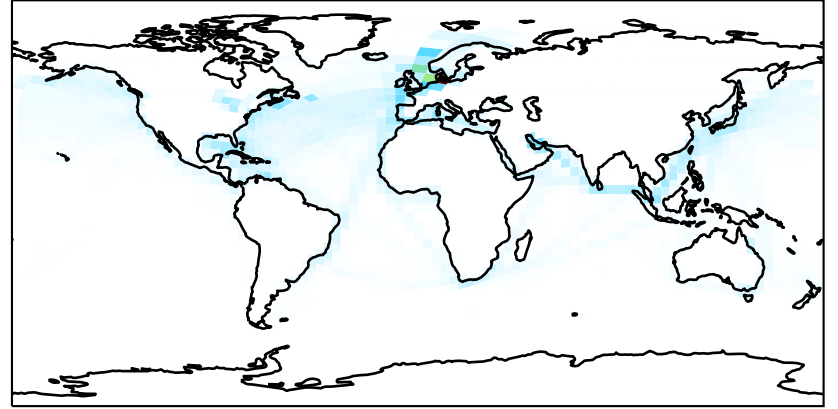


# EmisBENZ\_Ship

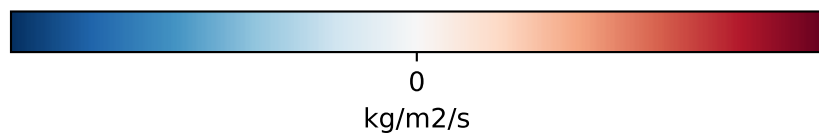
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



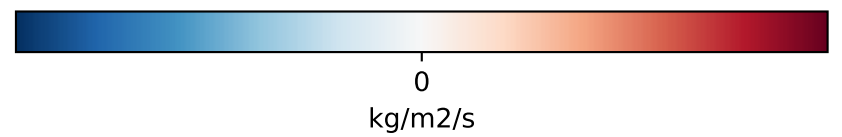
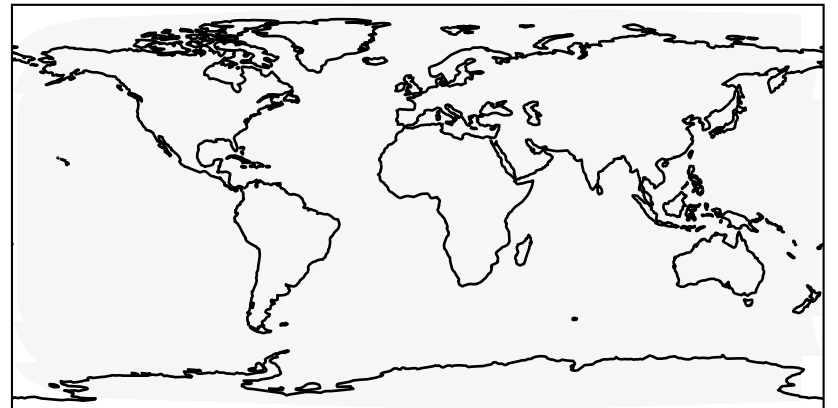
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



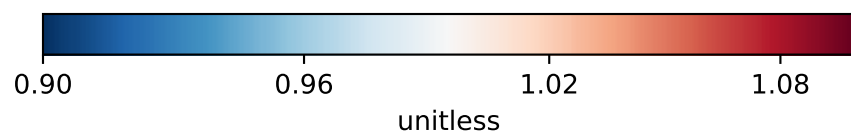
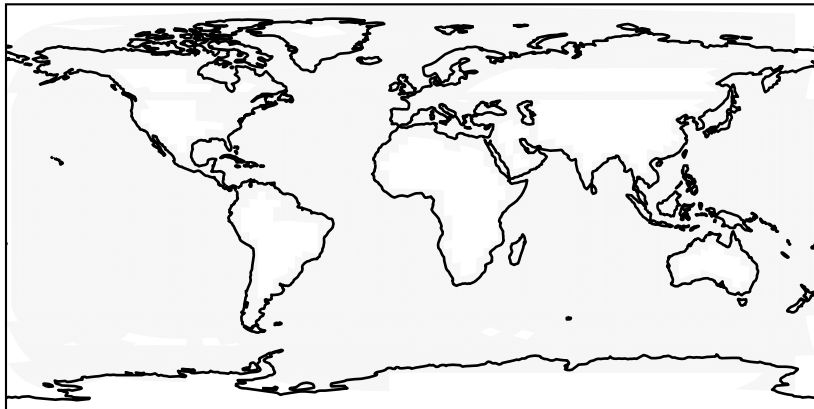
Difference  
Dev - Ref, Dynamic Range



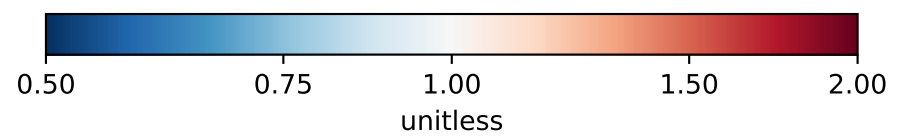
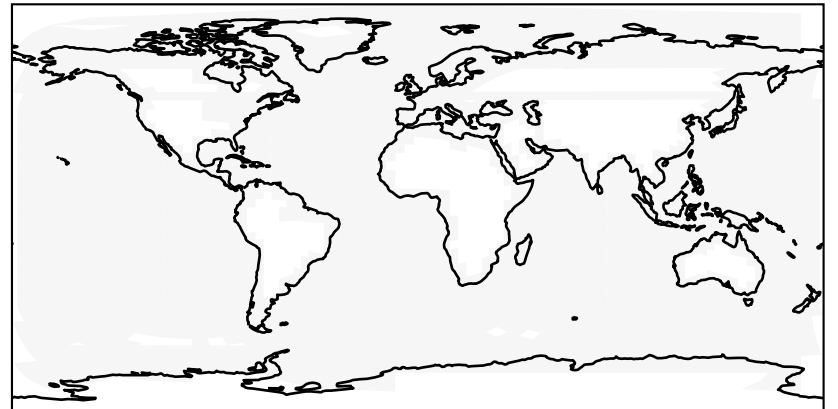
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

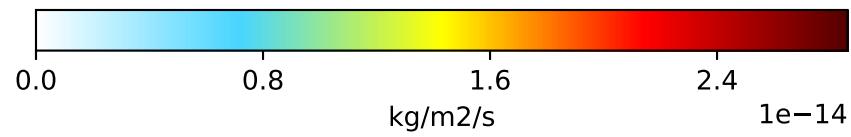
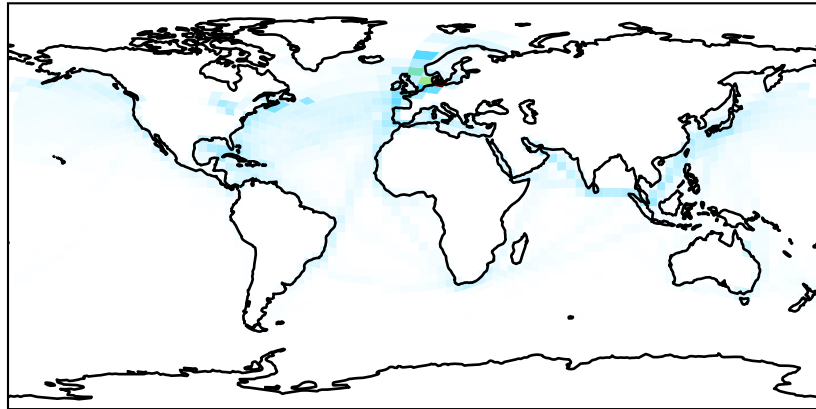


Ratio  
Dev/Ref, Fixed Range

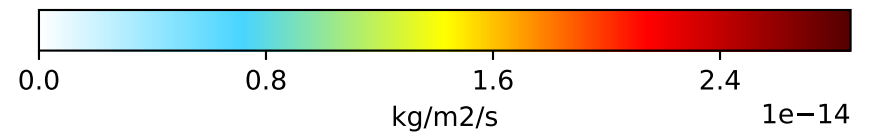
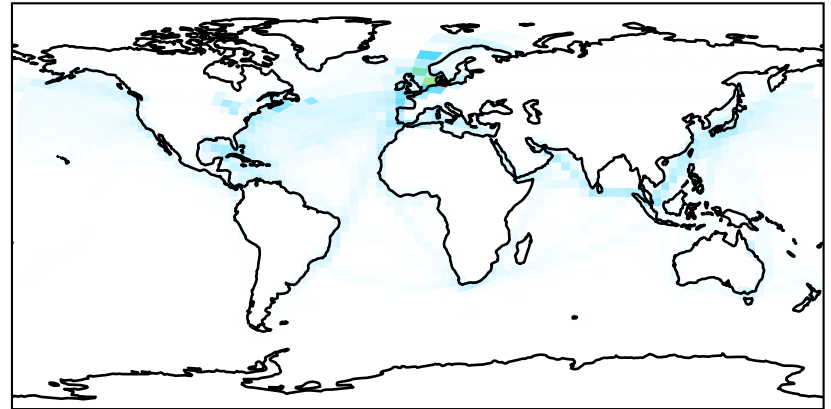


# EmisC2H2\_Ship

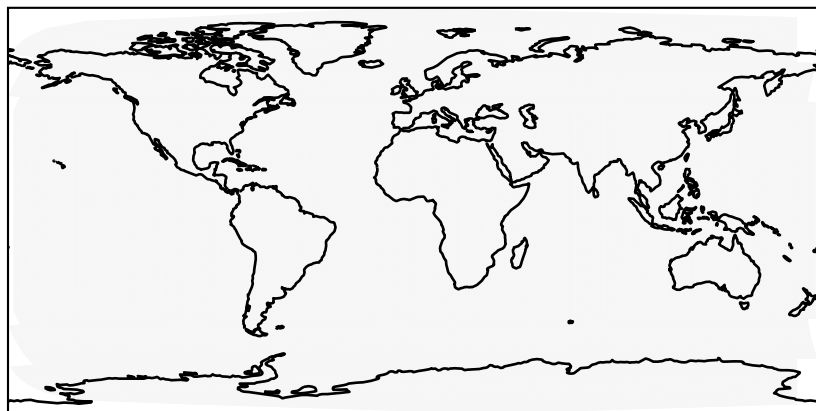
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



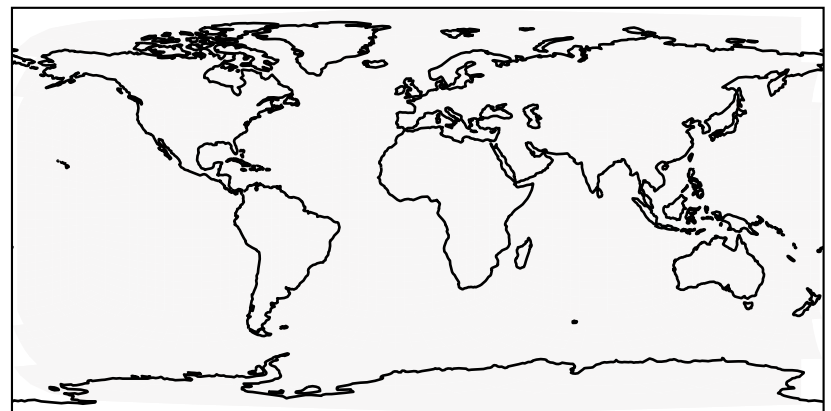
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



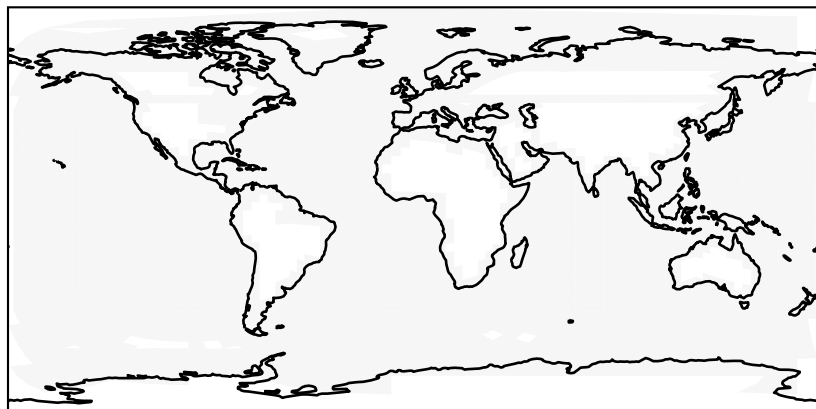
Difference  
Dev - Ref, Dynamic Range



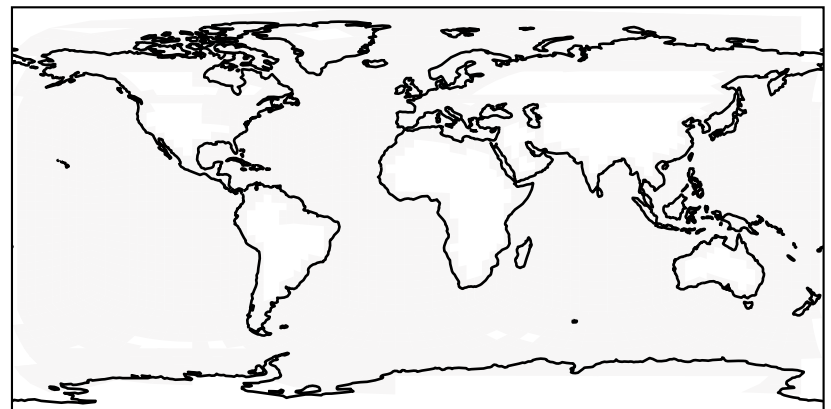
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

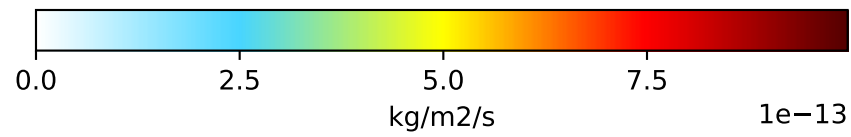
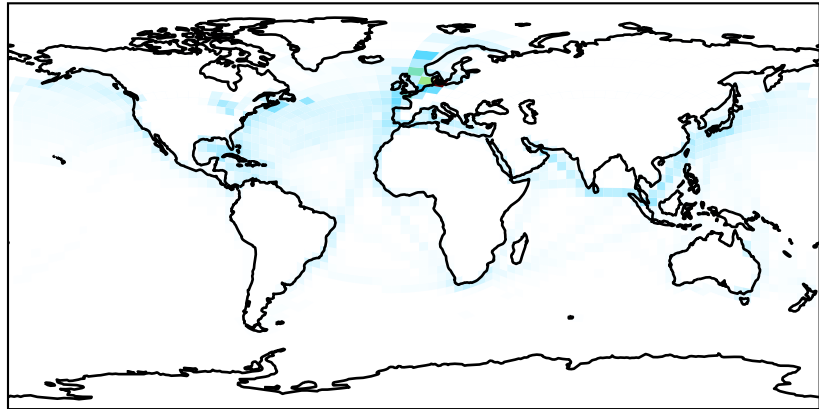


Ratio  
Dev/Ref, Fixed Range

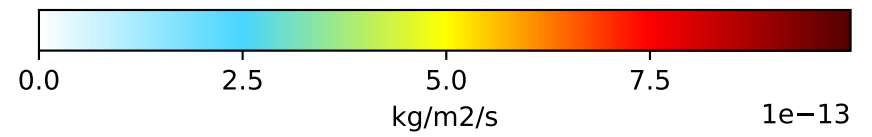
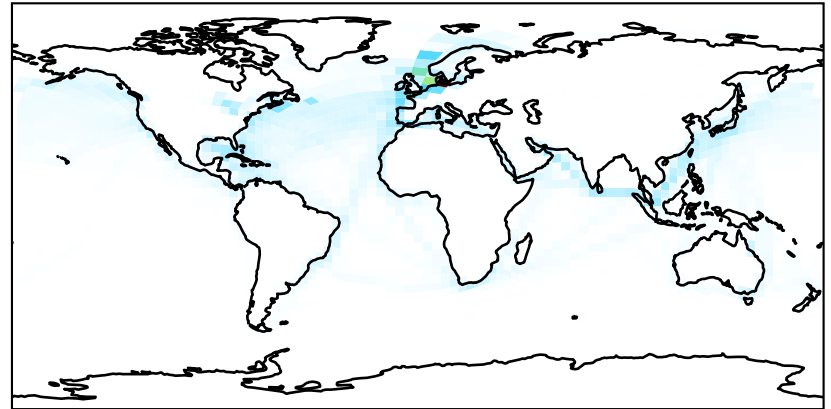


# EmisC2H4\_Ship

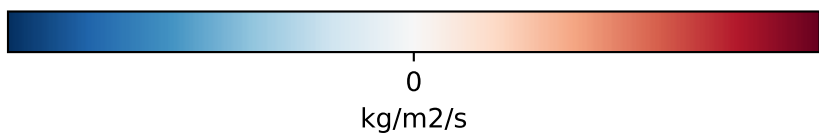
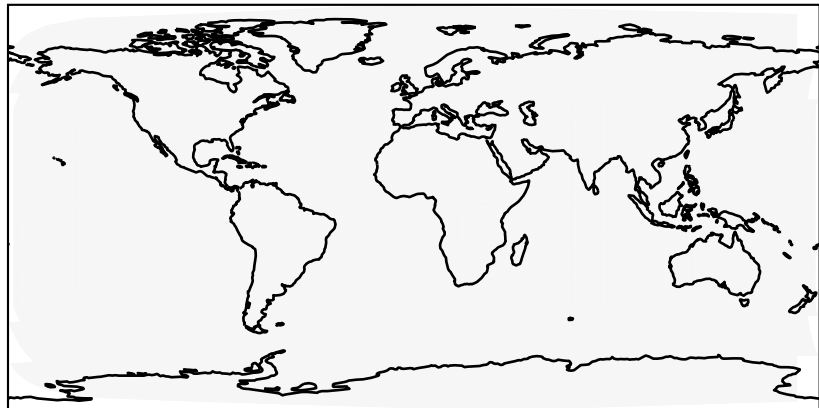
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



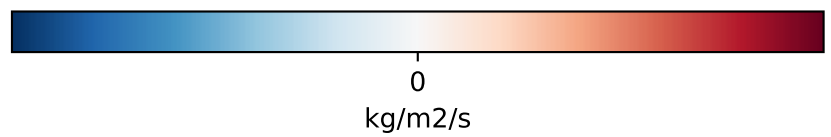
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



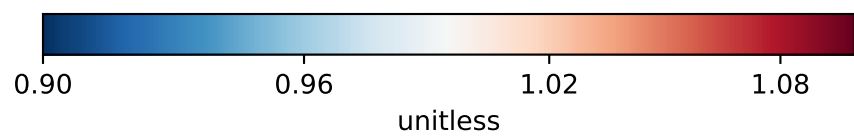
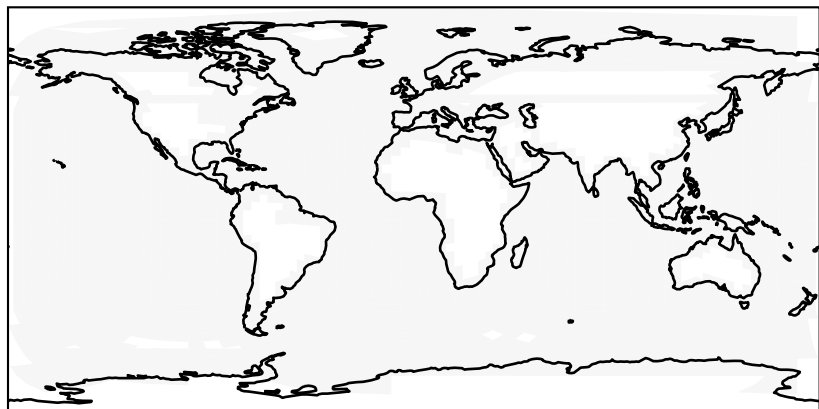
Difference  
Dev - Ref, Dynamic Range



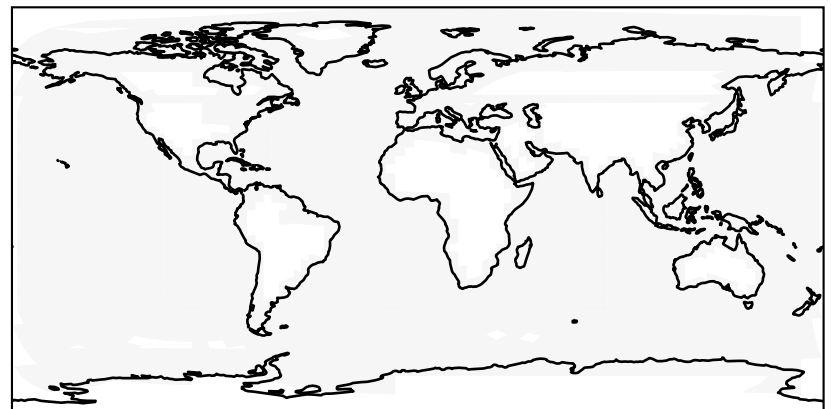
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

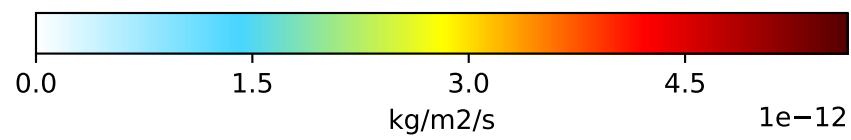
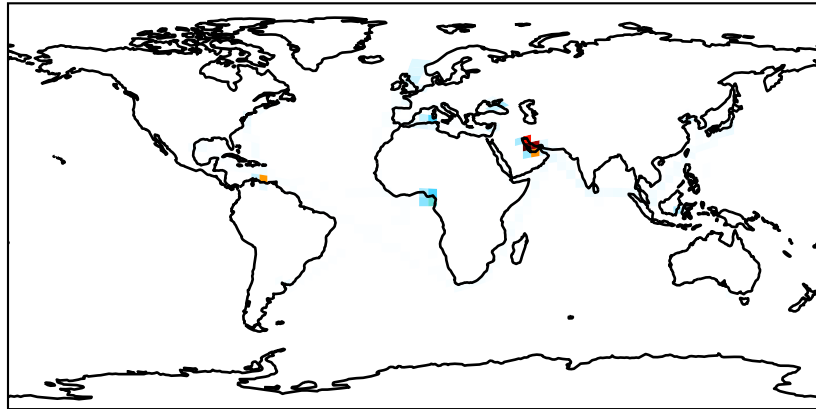


Ratio  
Dev/Ref, Fixed Range

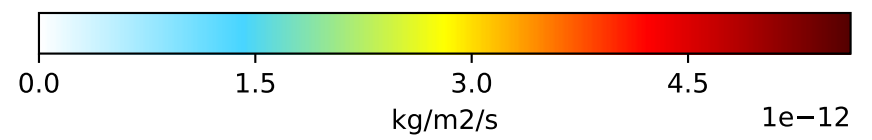
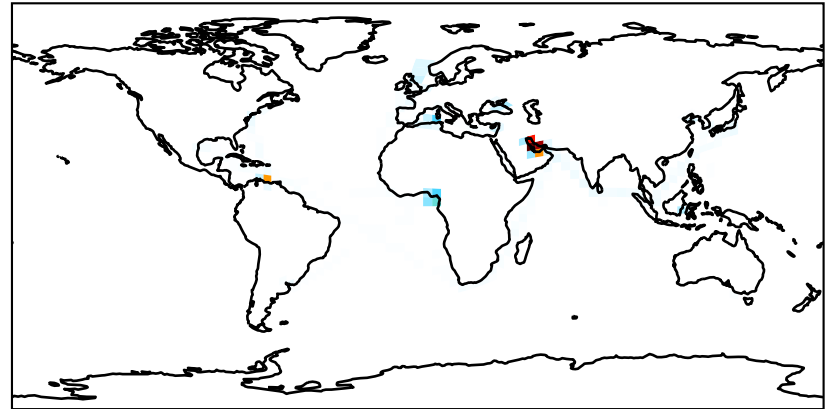


# EmisC2H6\_Ship

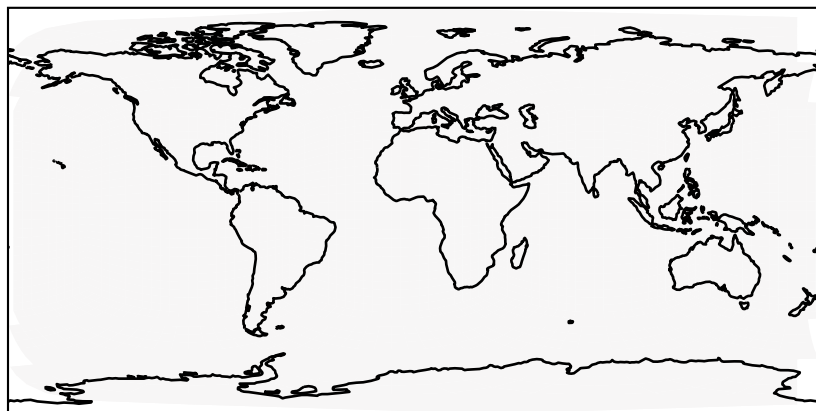
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



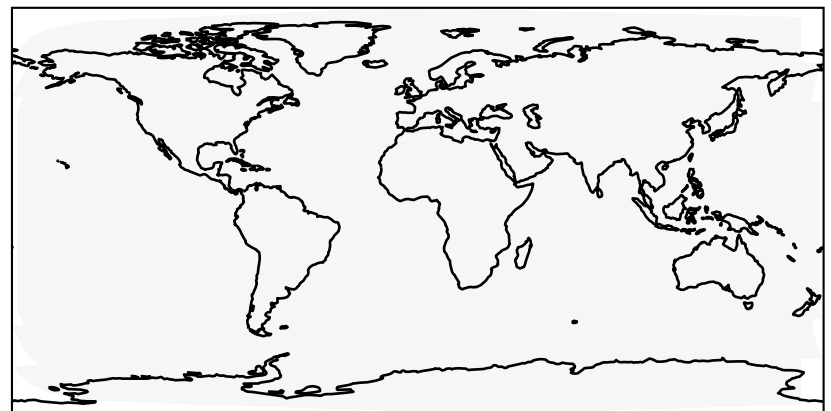
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



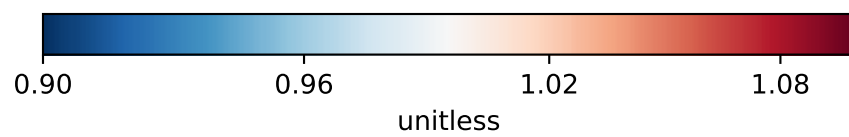
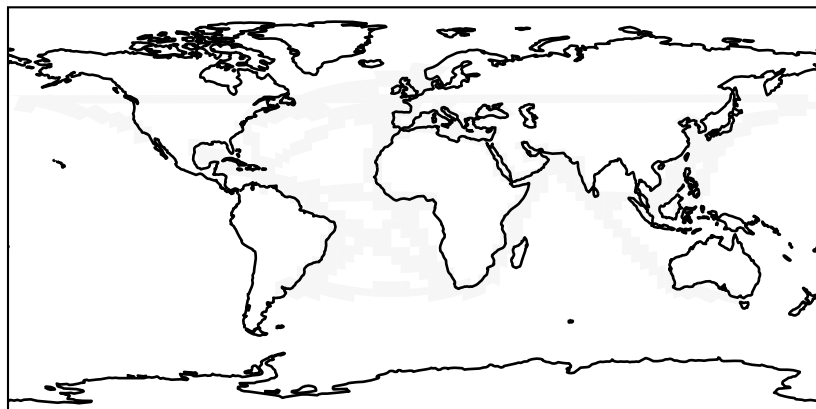
Difference  
Dev - Ref, Dynamic Range



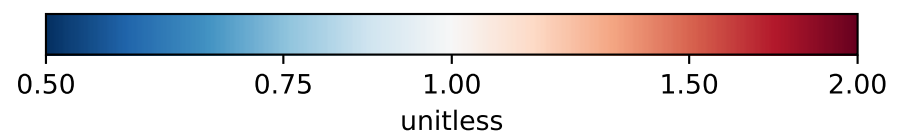
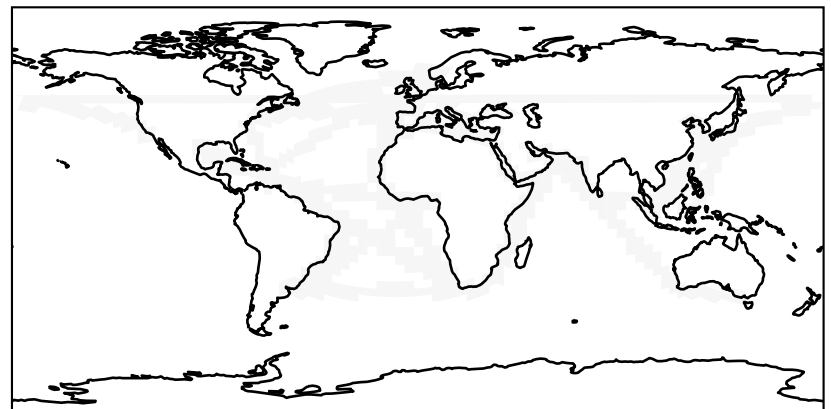
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

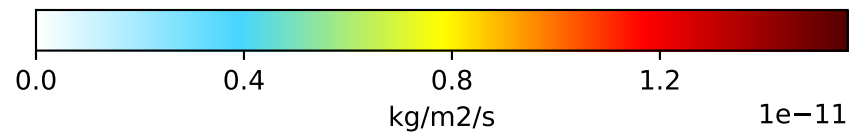
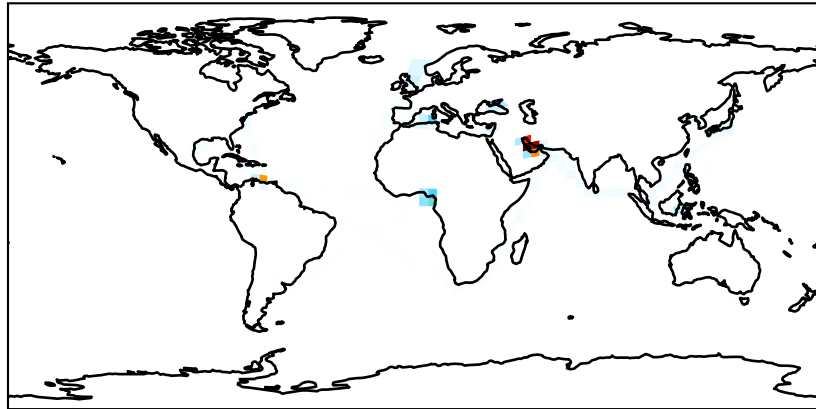


Ratio  
Dev/Ref, Fixed Range

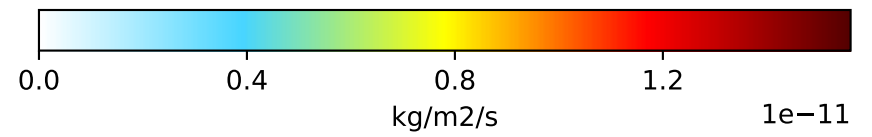
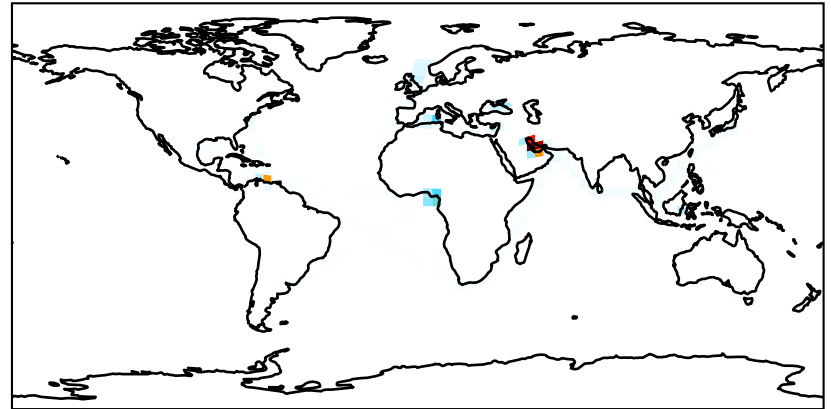


# EmisC3H8\_Ship

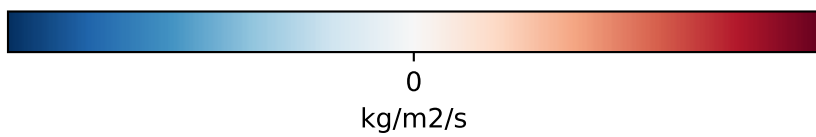
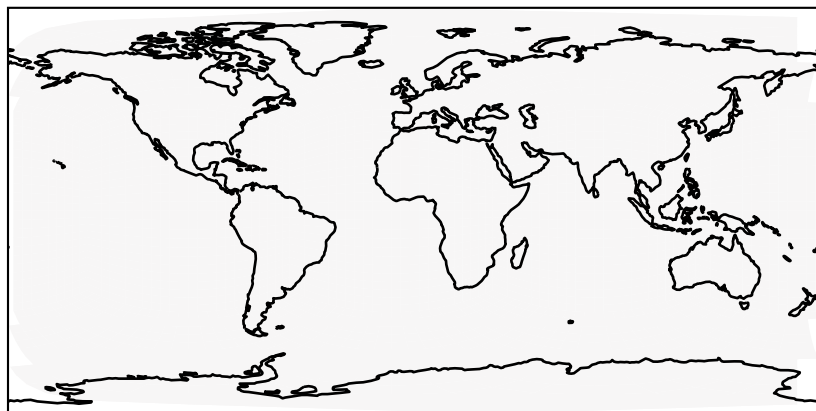
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



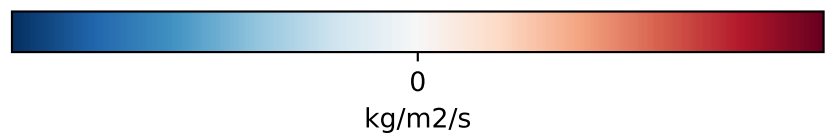
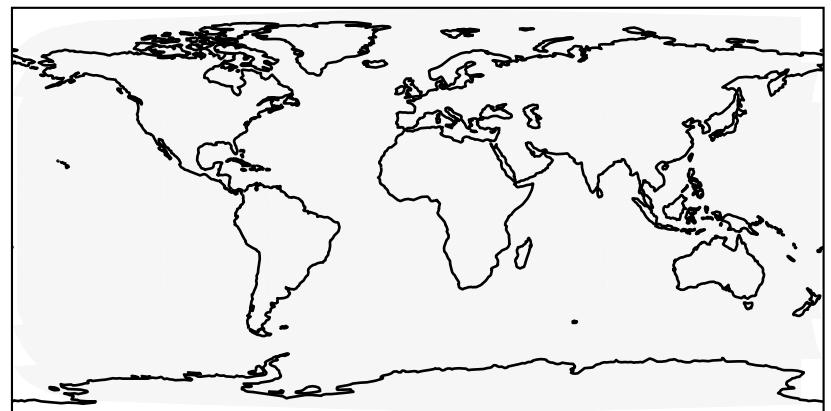
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



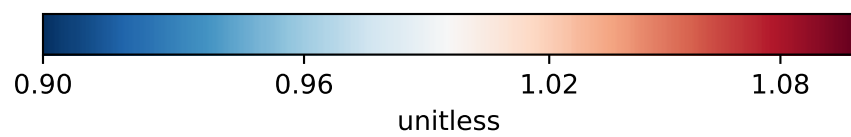
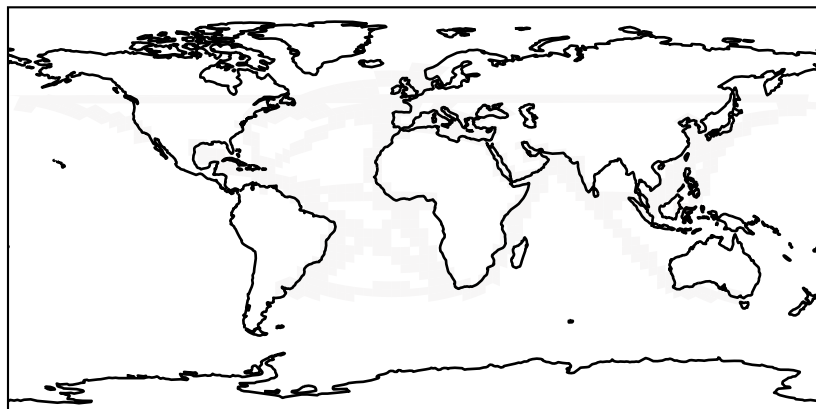
Difference  
Dev - Ref, Dynamic Range



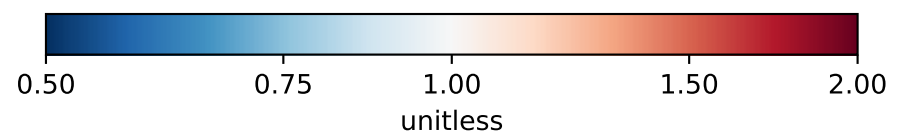
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



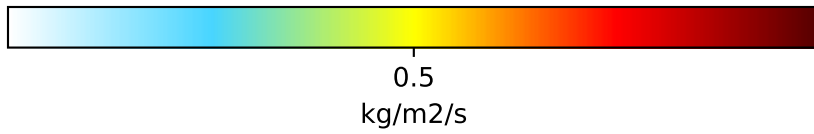
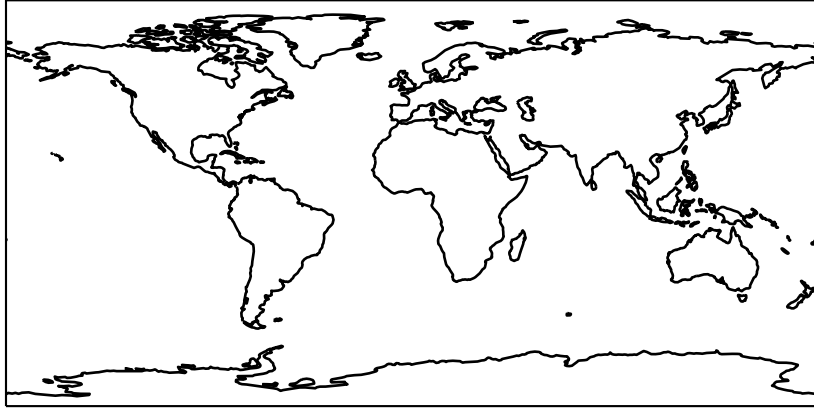
Ratio  
Dev/Ref, Fixed Range



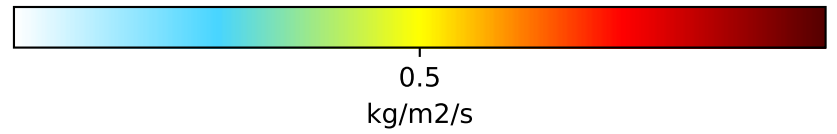
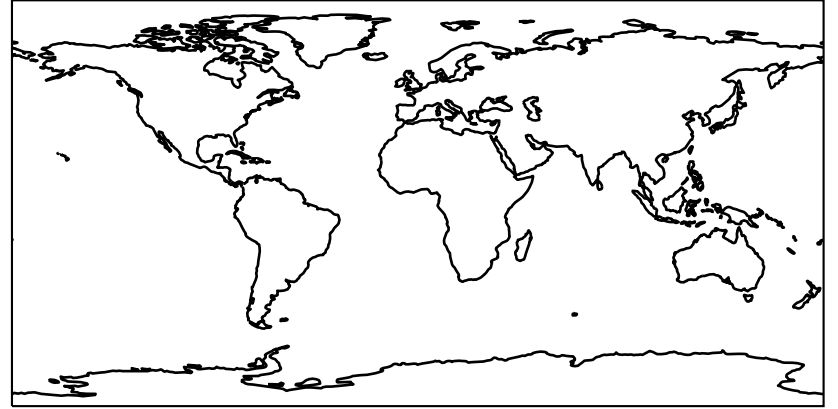


# EmisCH20\_Ship

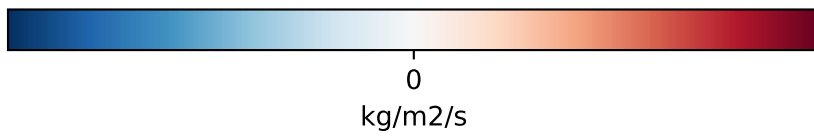
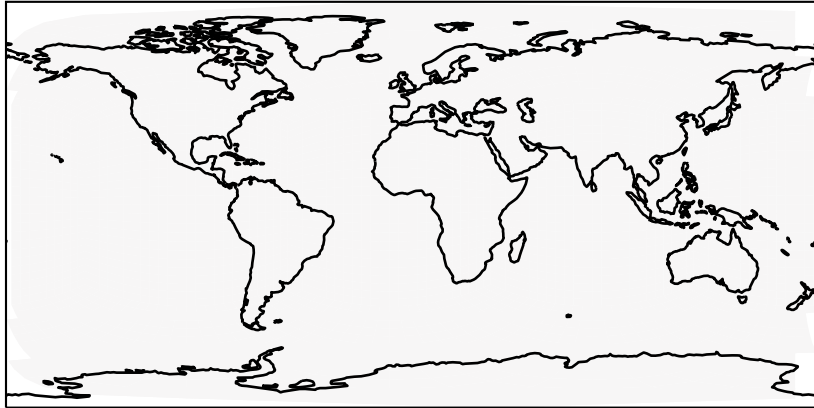
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



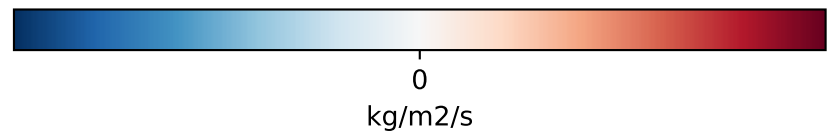
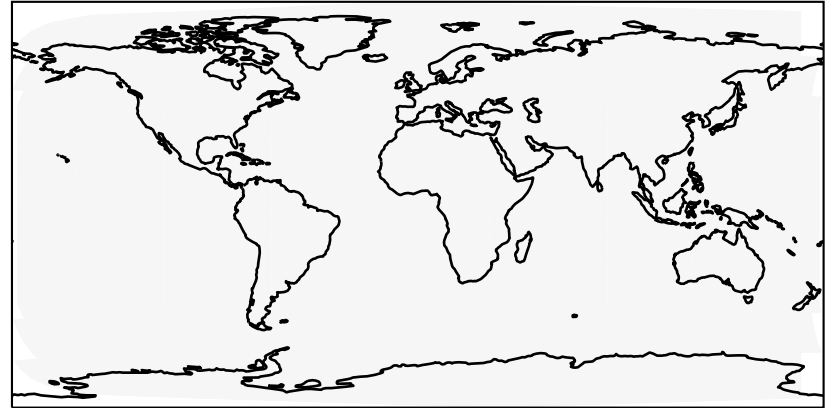
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



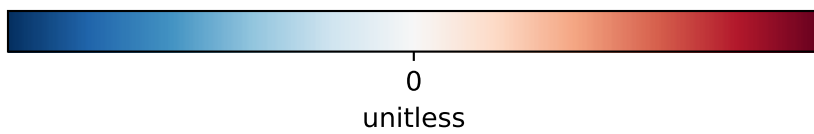
Difference  
Dev - Ref, Dynamic Range



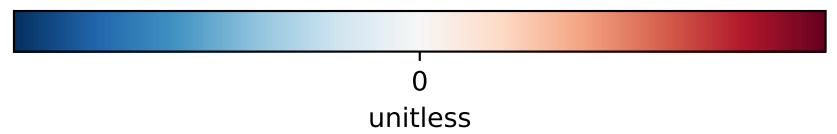
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

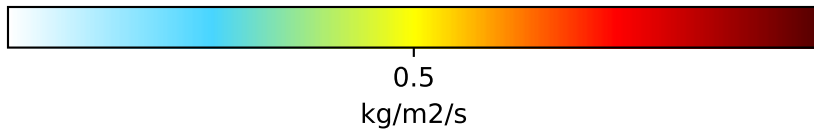
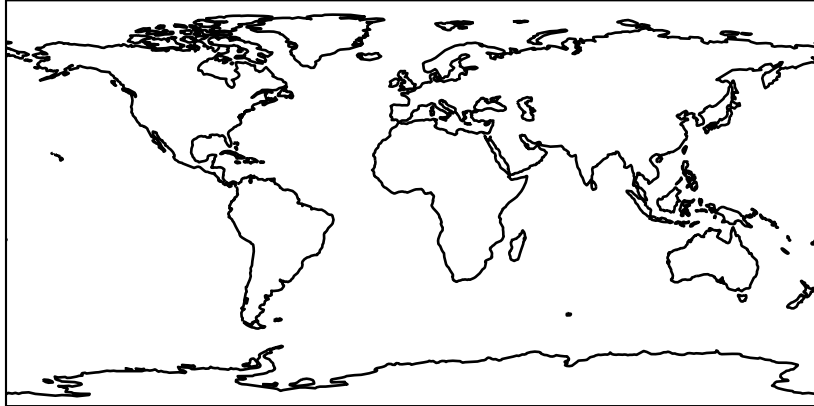


Ratio  
Dev/Ref, Fixed Range

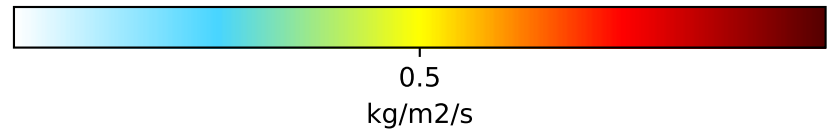
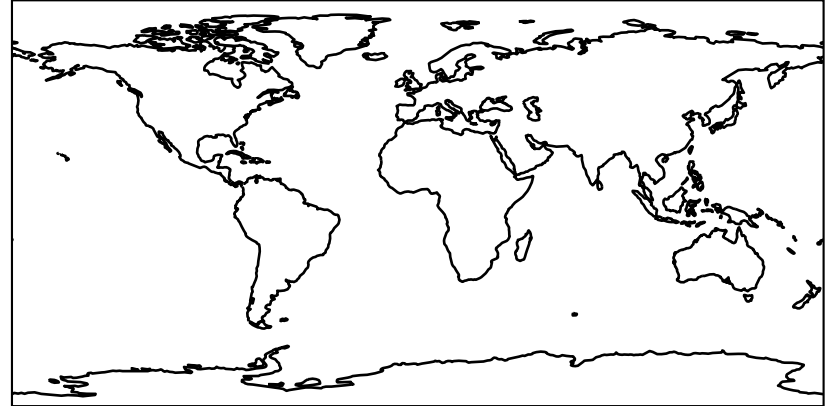


# EmisCO2\_Ship

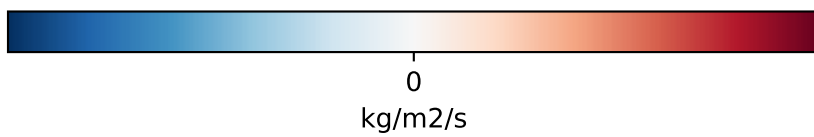
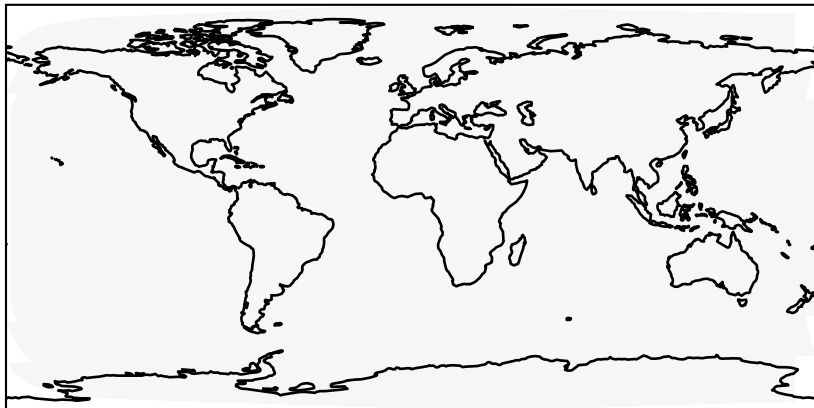
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



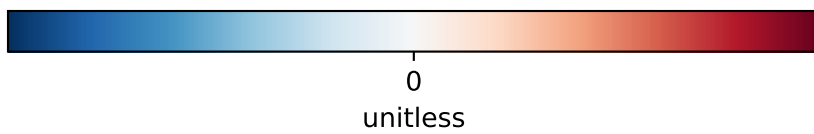
Difference  
Dev - Ref, Dynamic Range



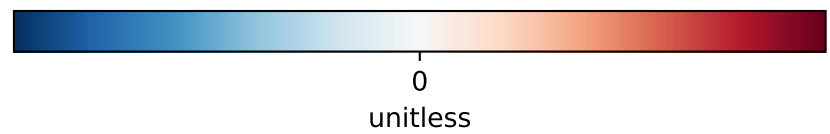
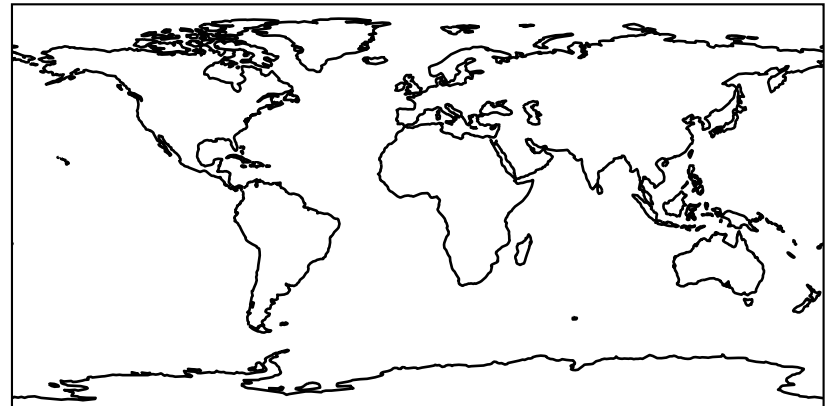
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

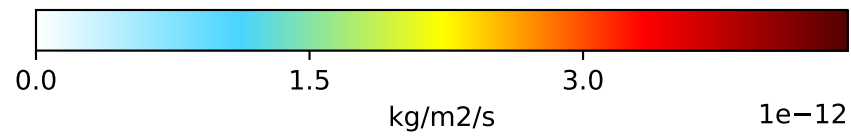
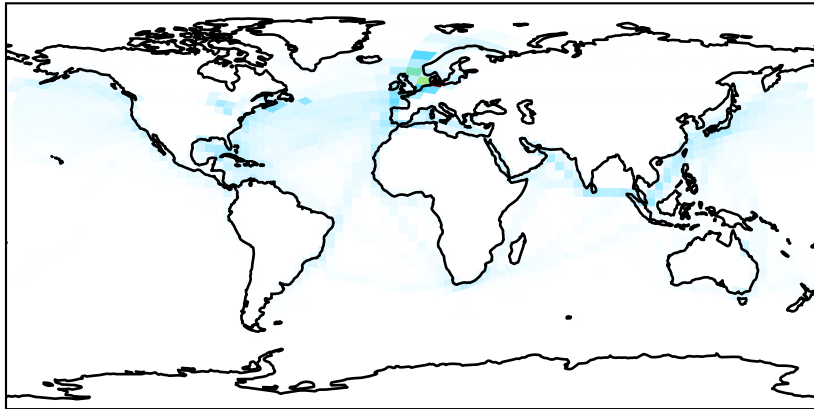


Ratio  
Dev/Ref, Fixed Range

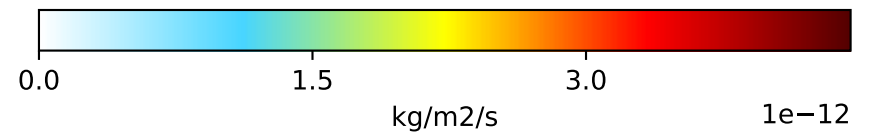
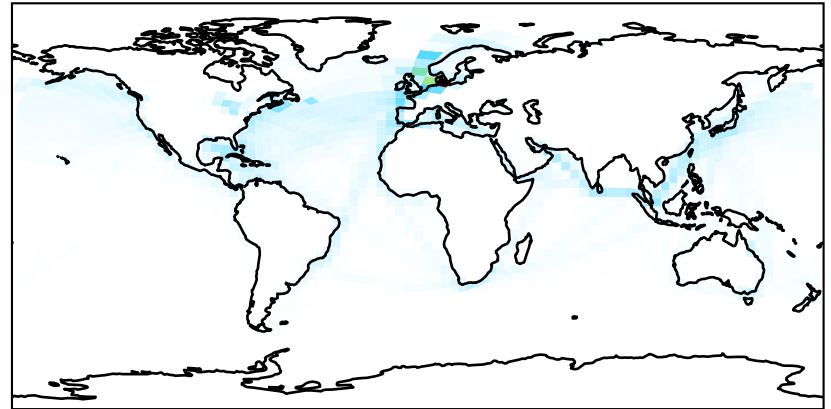


# EmisCO\_Ship

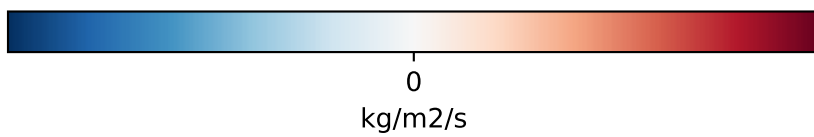
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



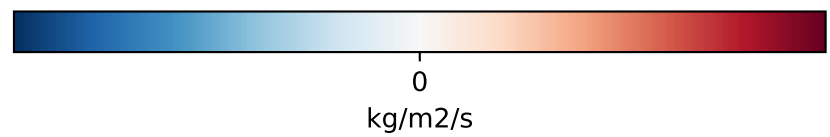
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



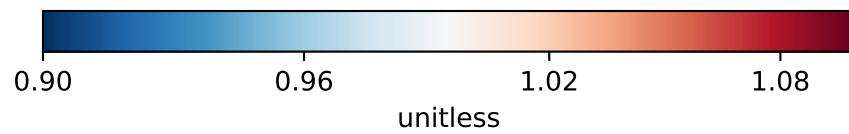
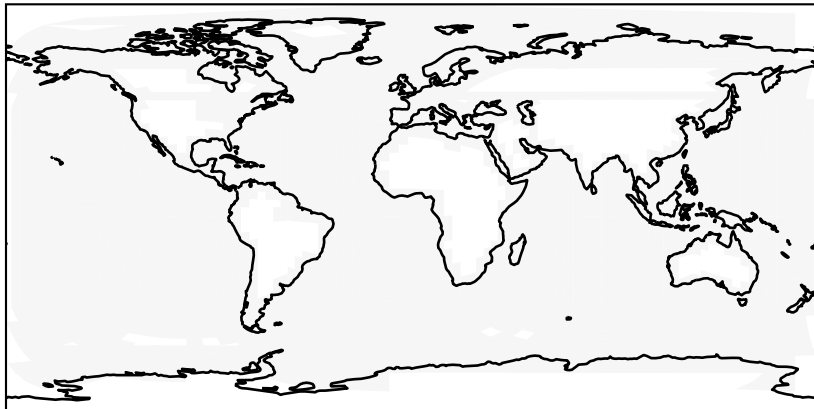
Difference  
Dev - Ref, Dynamic Range



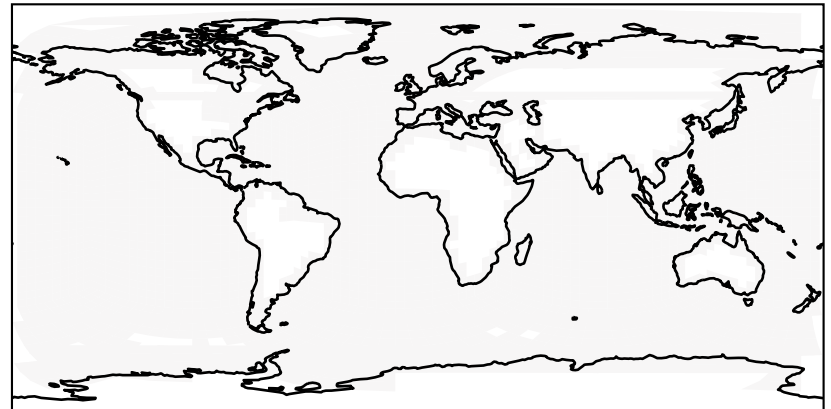
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

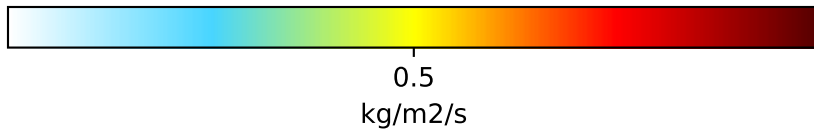
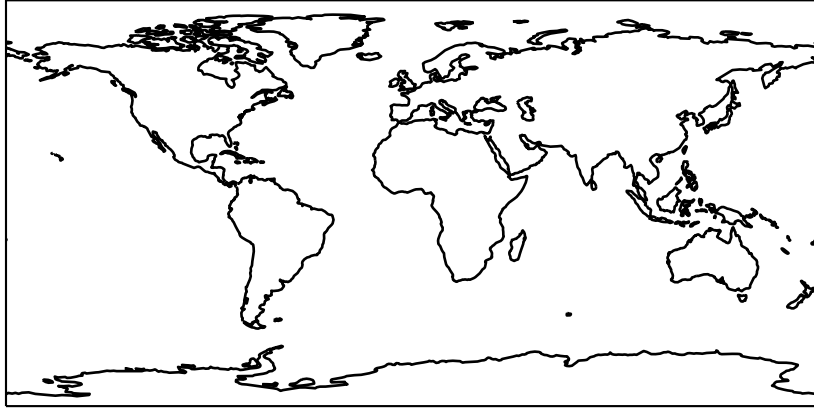


Ratio  
Dev/Ref, Fixed Range

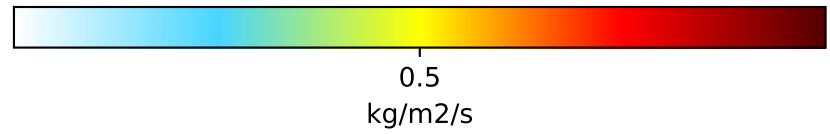
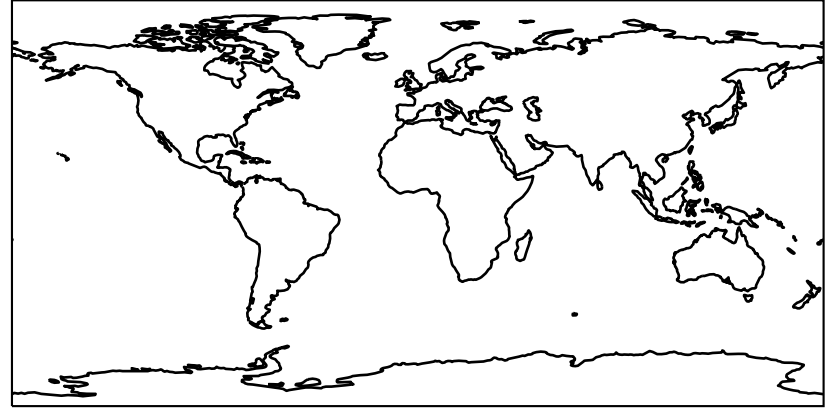


# EmisEOH\_Ship

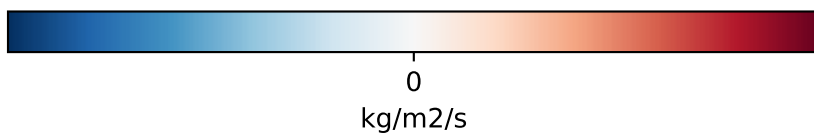
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



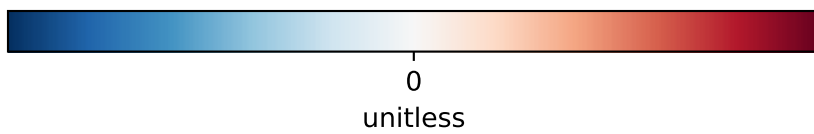
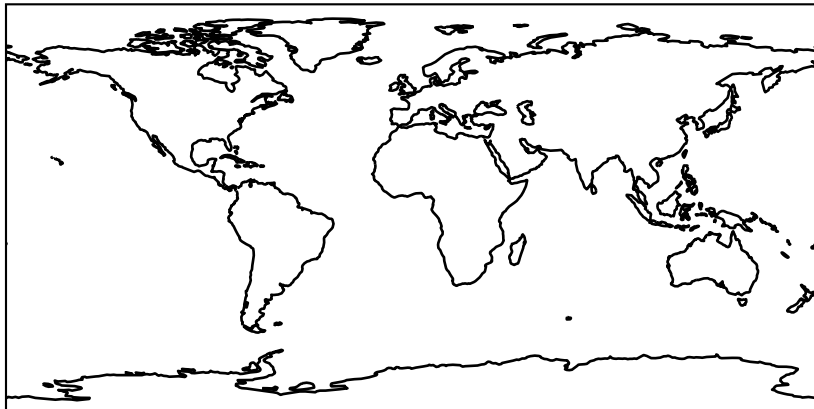
Difference  
Dev - Ref, Dynamic Range



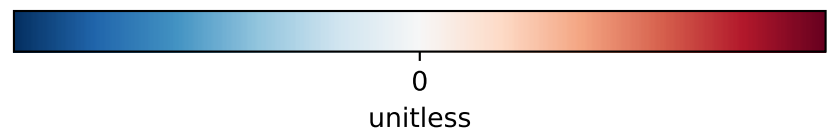
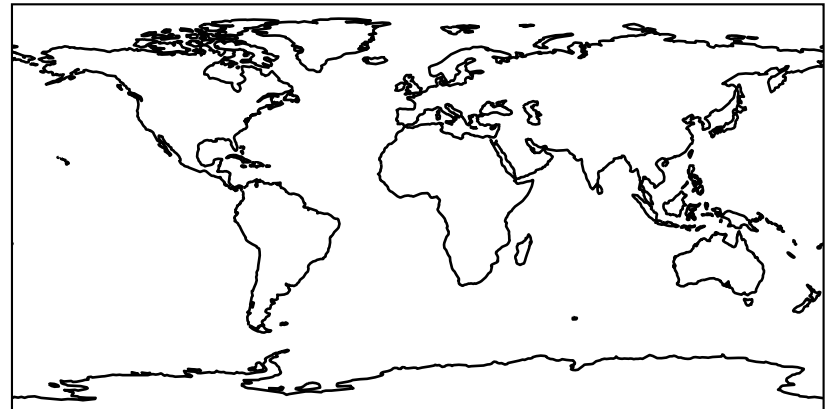
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

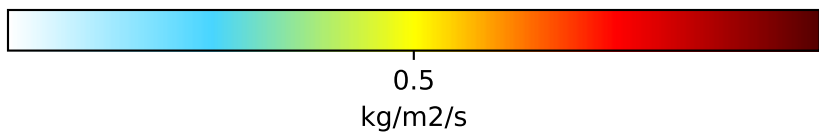


Ratio  
Dev/Ref, Fixed Range

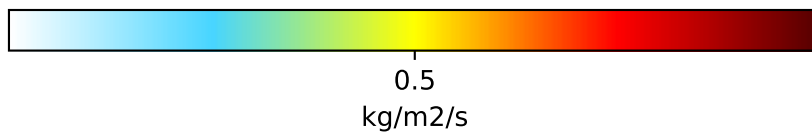


# EmisHCOOH\_Ship

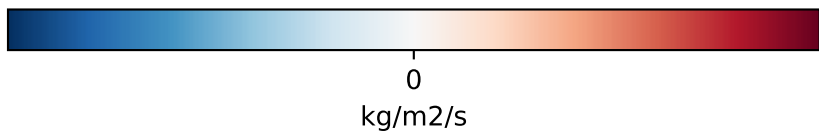
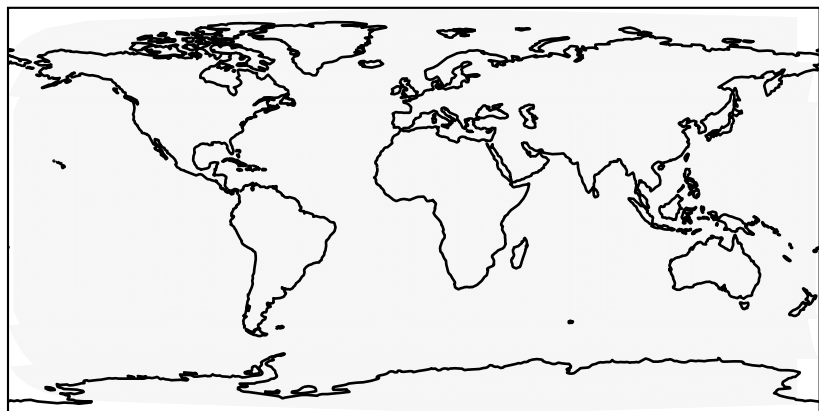
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



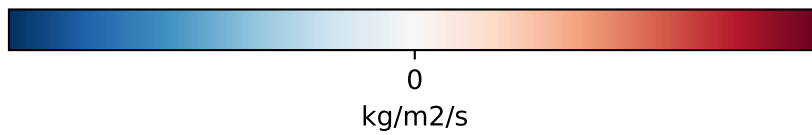
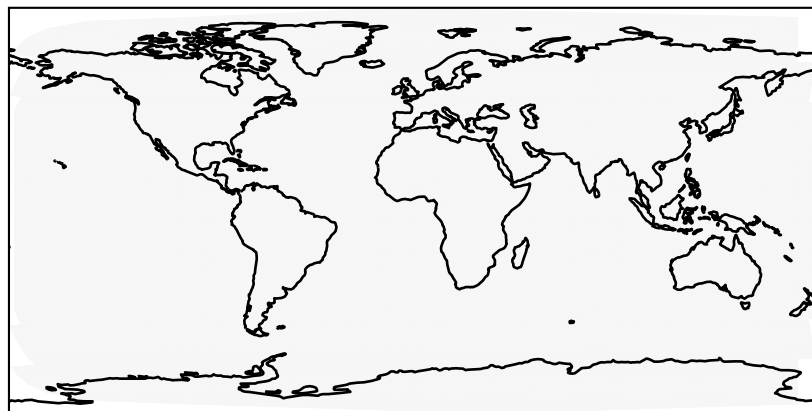
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



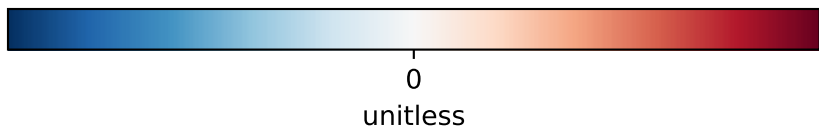
Difference  
Dev - Ref, Dynamic Range



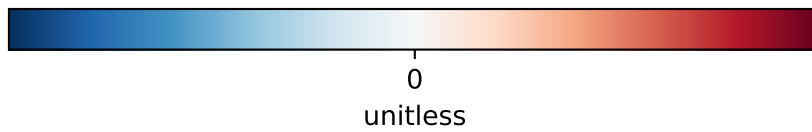
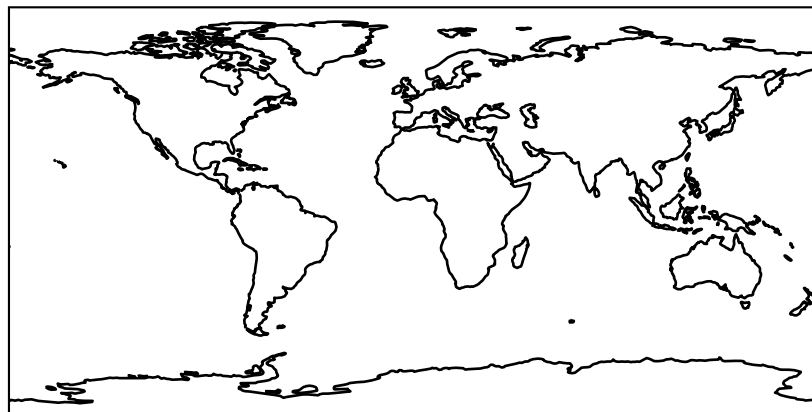
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



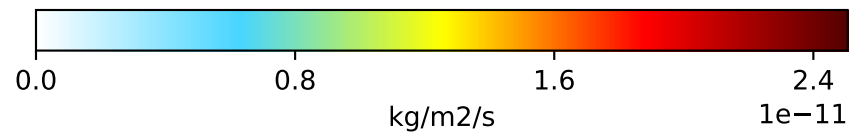
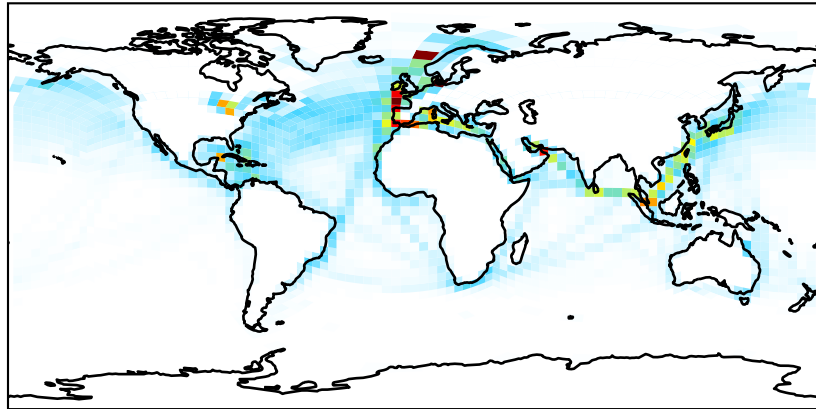
Ratio  
Dev/Ref, Fixed Range



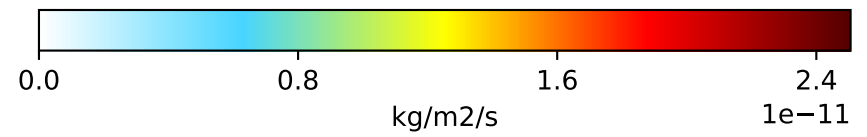
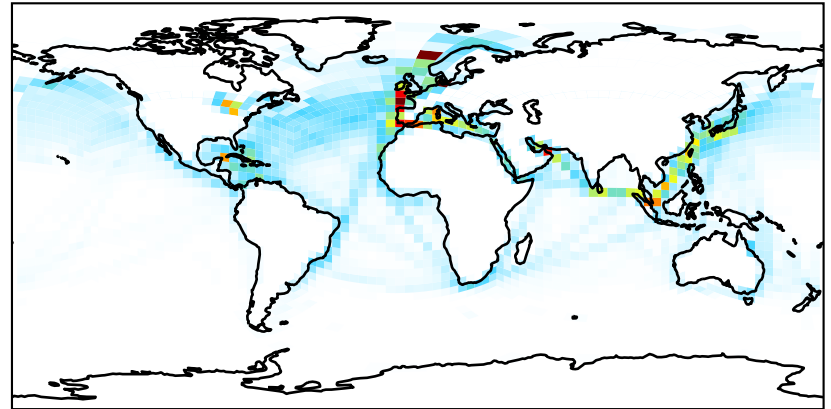


# EmisHNO3\_Ship

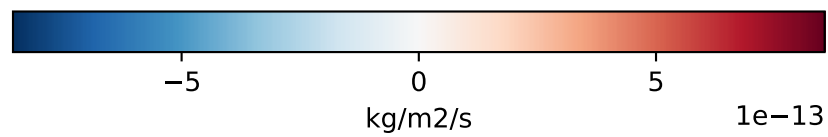
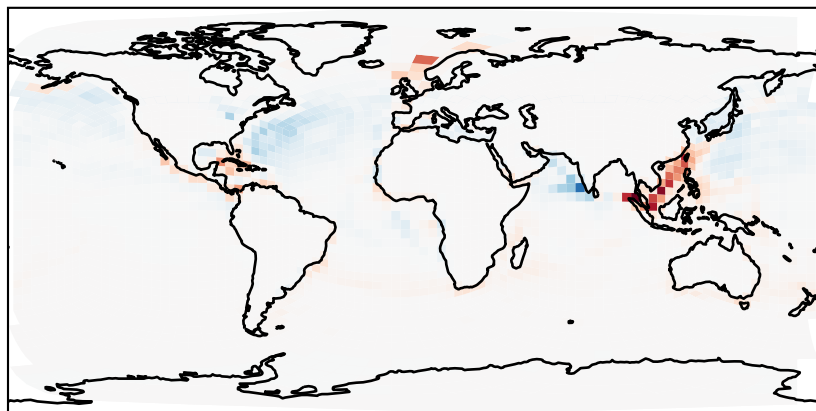
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



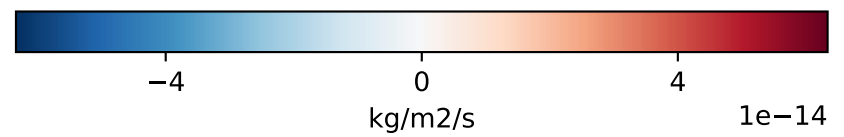
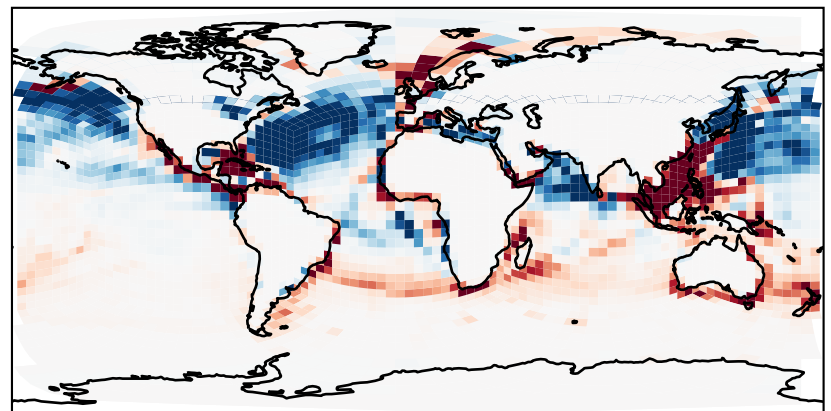
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



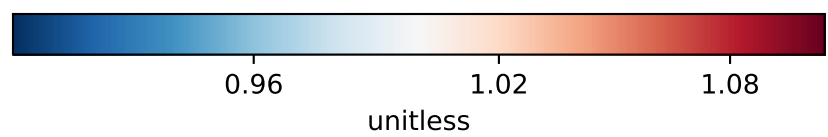
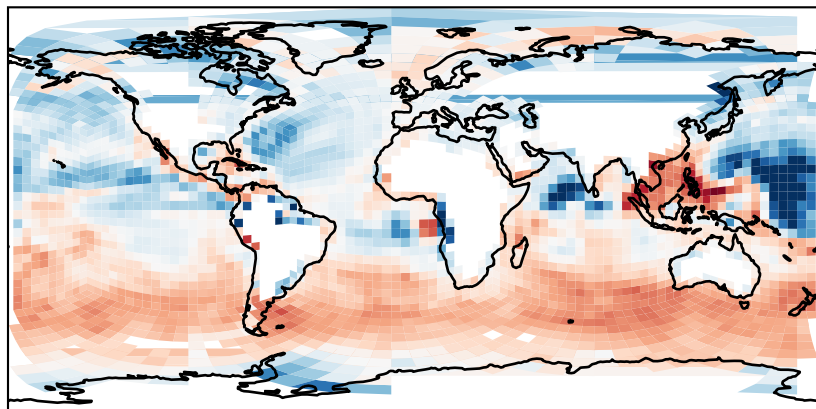
Difference  
Dev - Ref, Dynamic Range



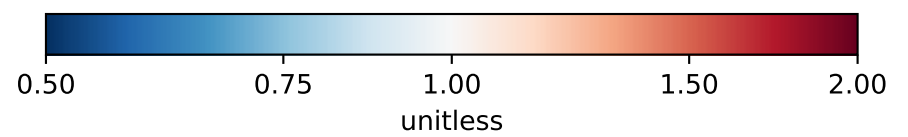
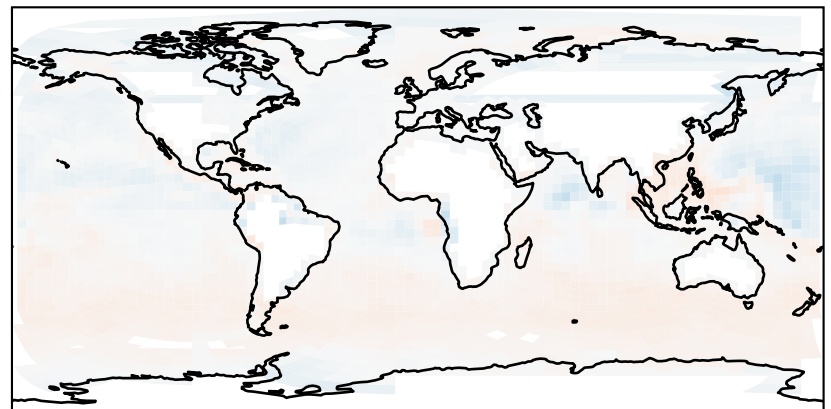
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

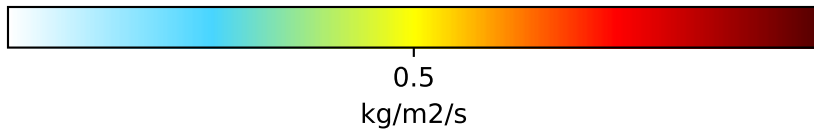
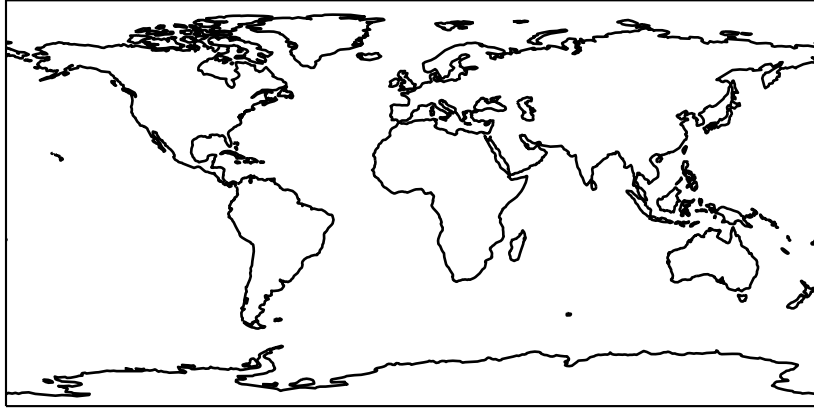


Ratio  
Dev/Ref, Fixed Range

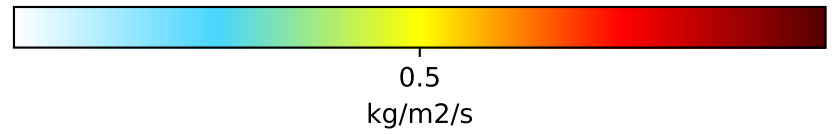
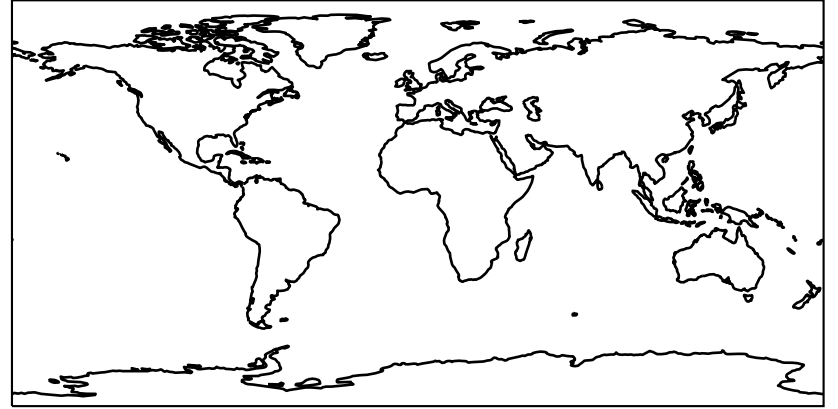


# EmisMEK\_Ship

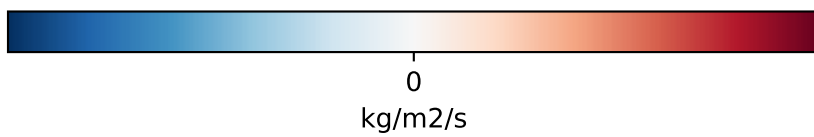
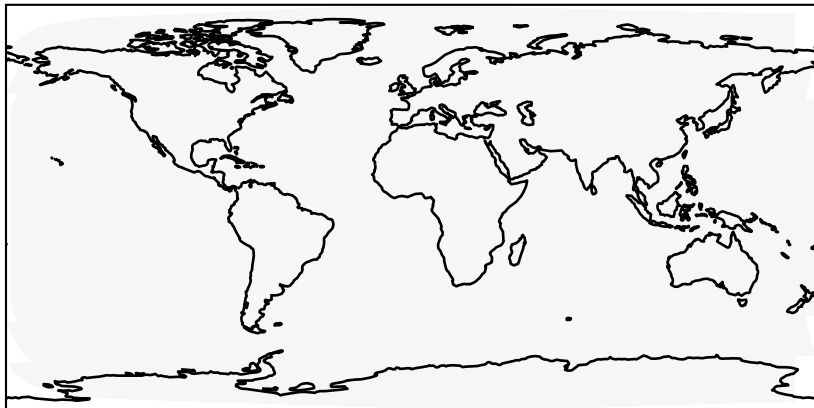
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



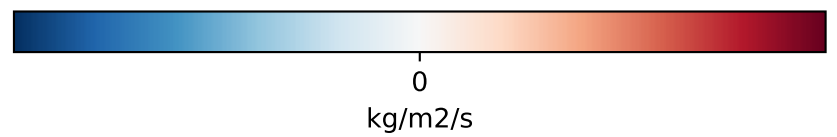
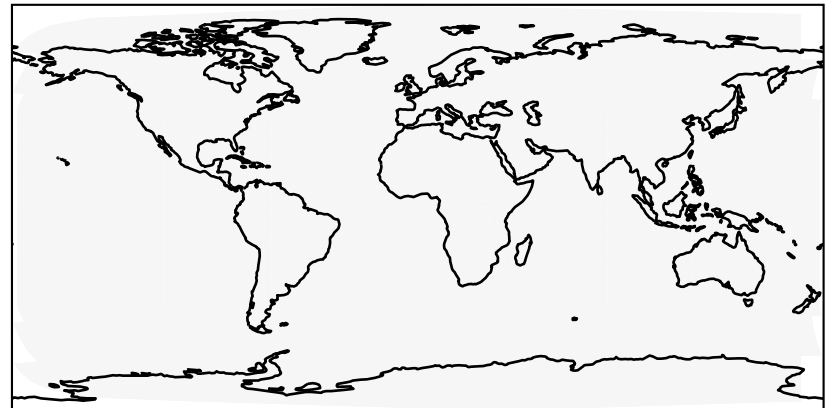
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



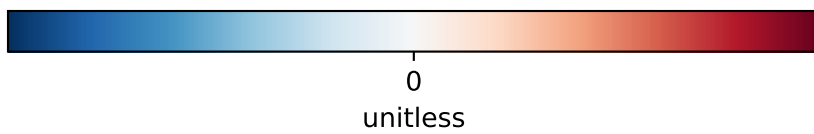
Difference  
Dev - Ref, Dynamic Range



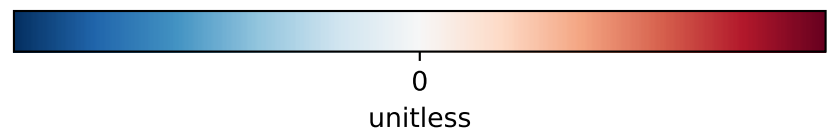
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

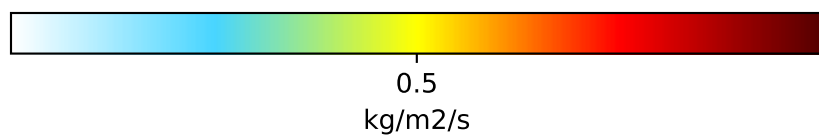


Ratio  
Dev/Ref, Fixed Range

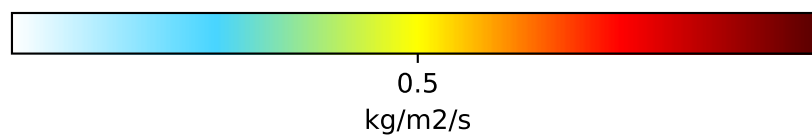
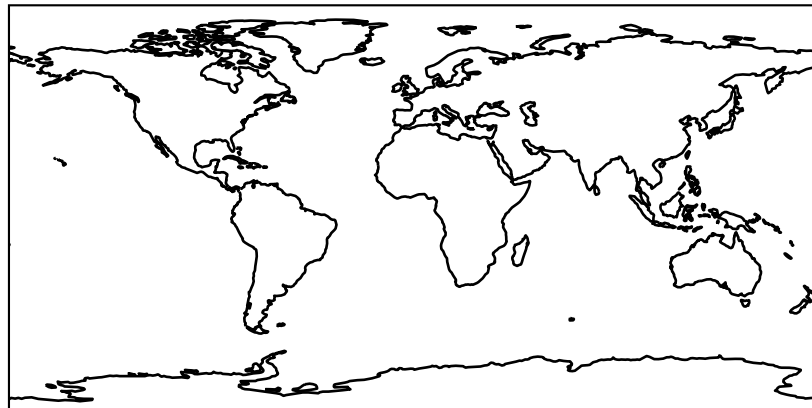


# EmisMOH\_Ship

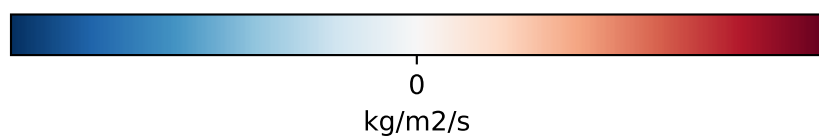
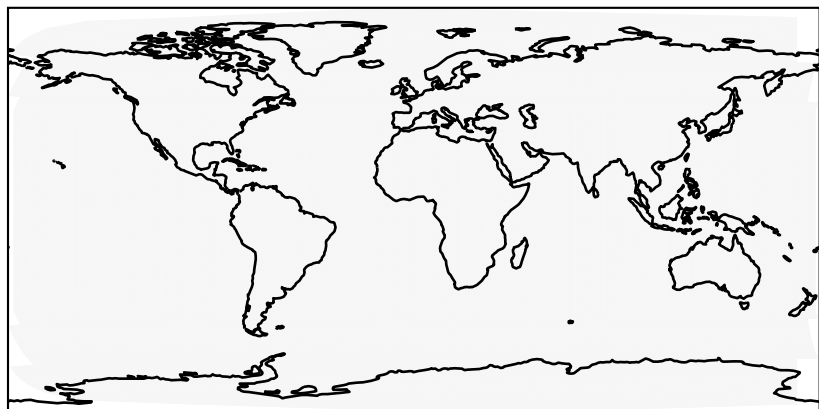
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



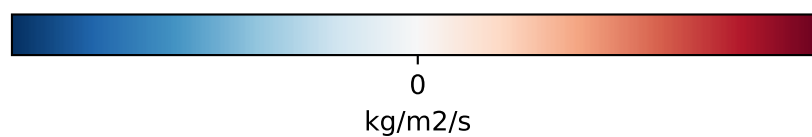
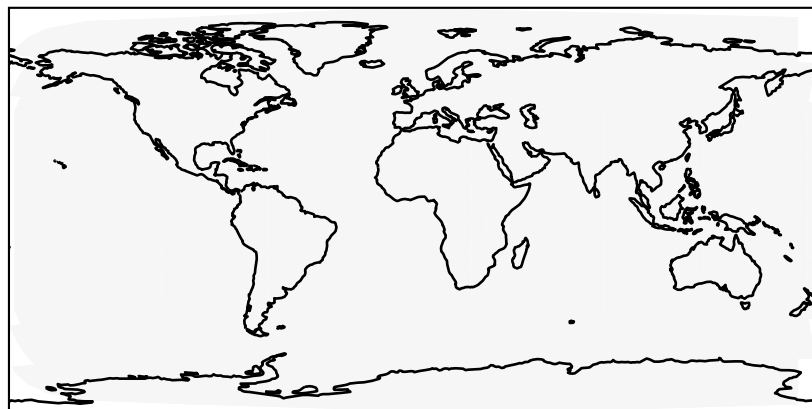
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



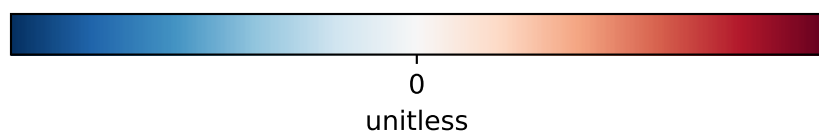
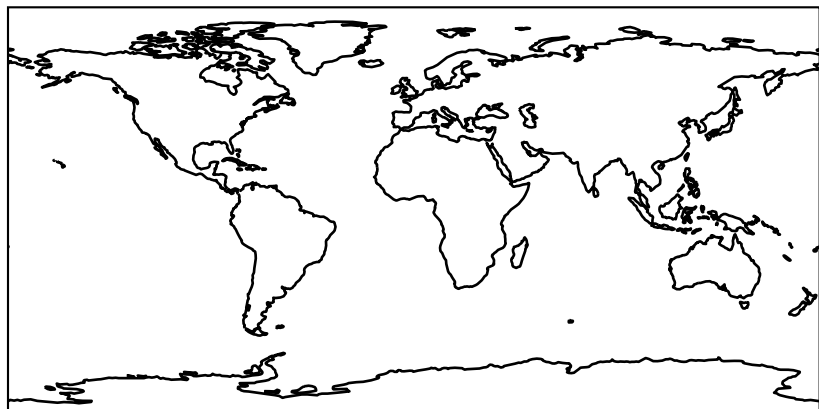
Difference  
Dev - Ref, Dynamic Range



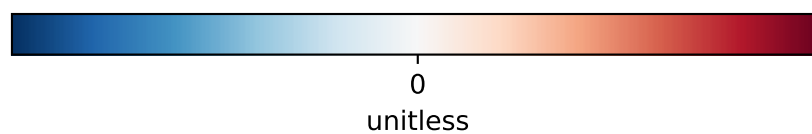
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

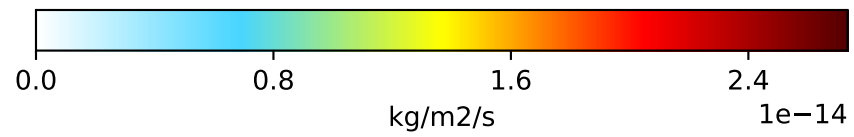
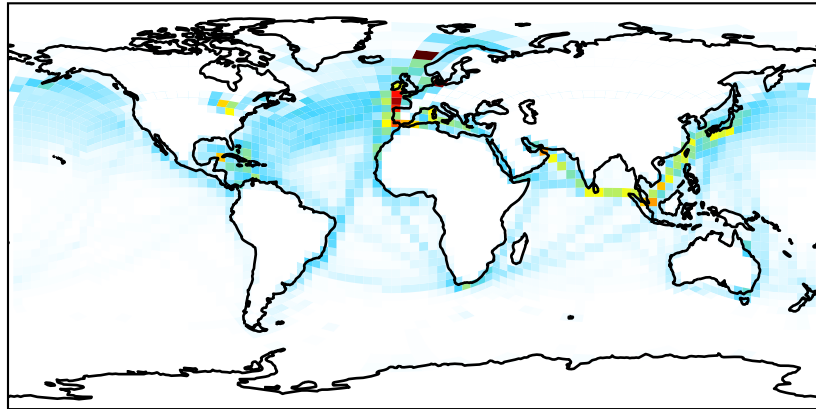


Ratio  
Dev/Ref, Fixed Range

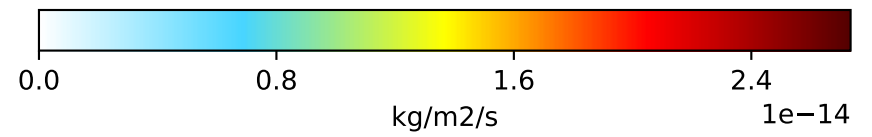
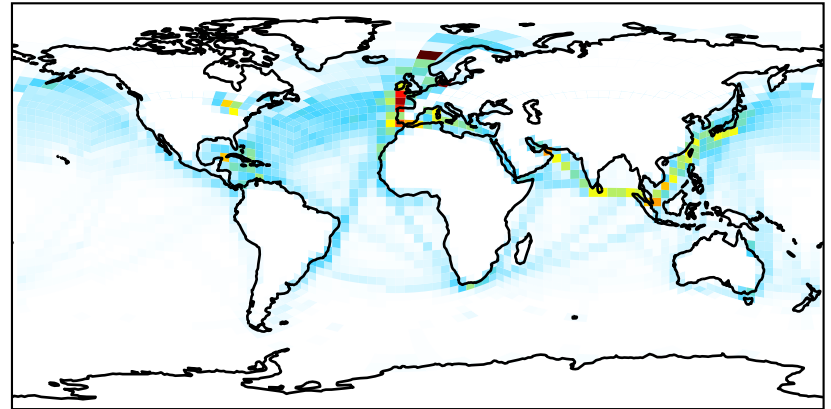


# EmisNH3\_Ship

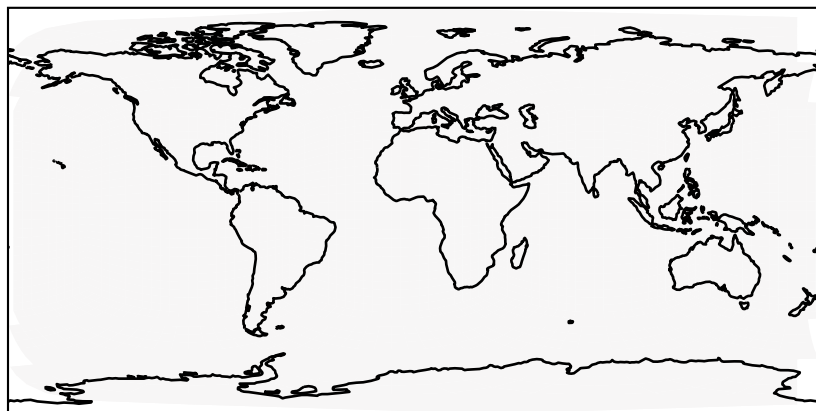
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



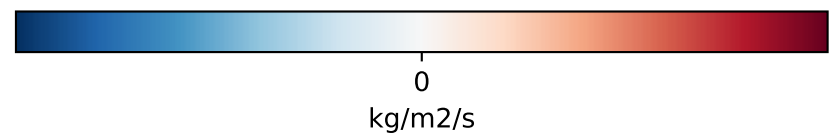
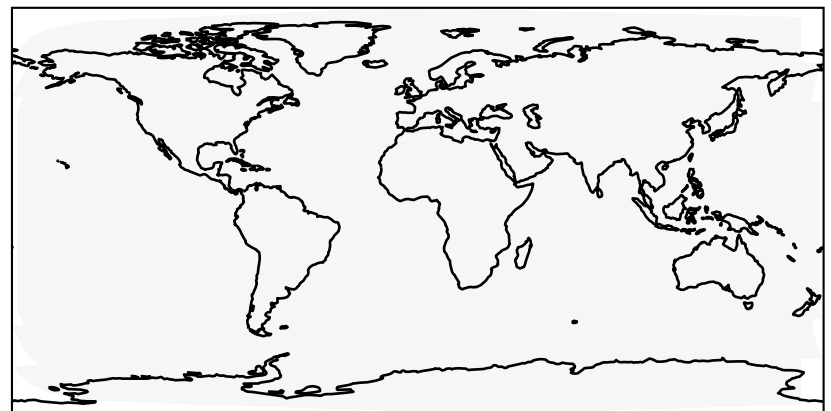
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



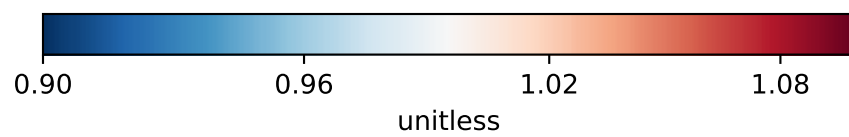
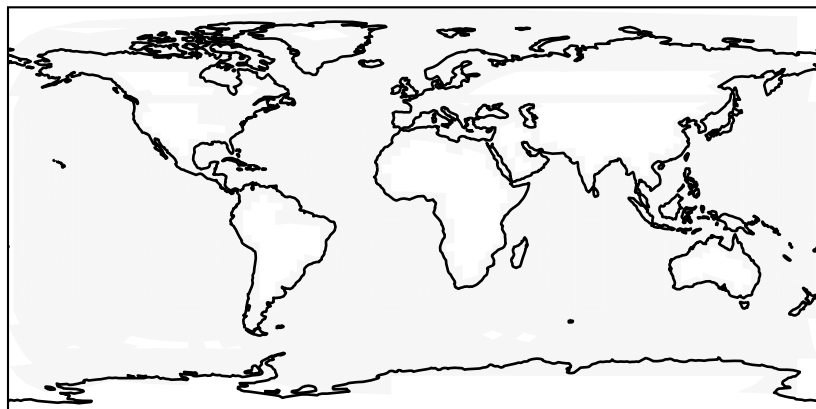
Difference  
Dev - Ref, Dynamic Range



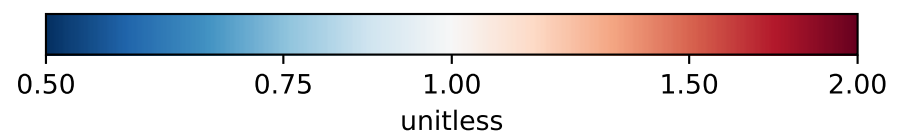
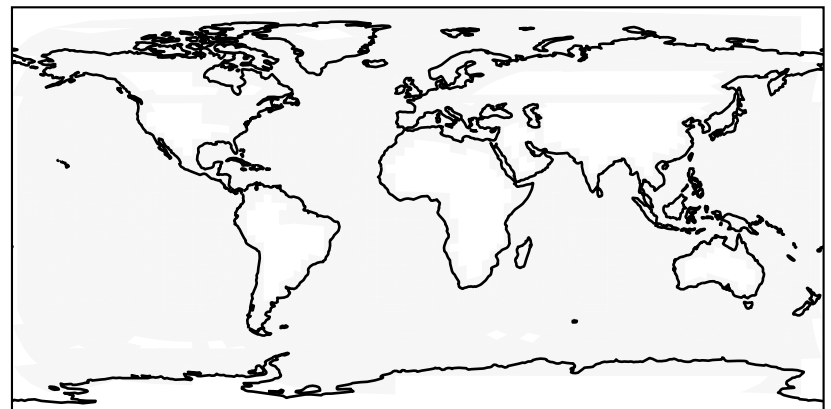
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



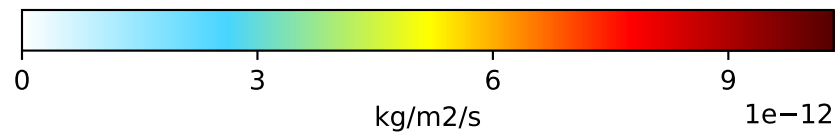
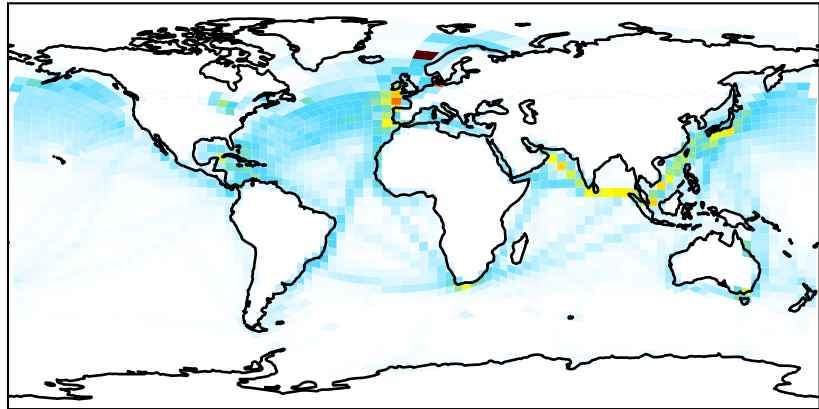
Ratio  
Dev/Ref, Fixed Range



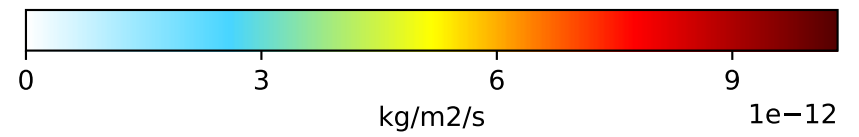
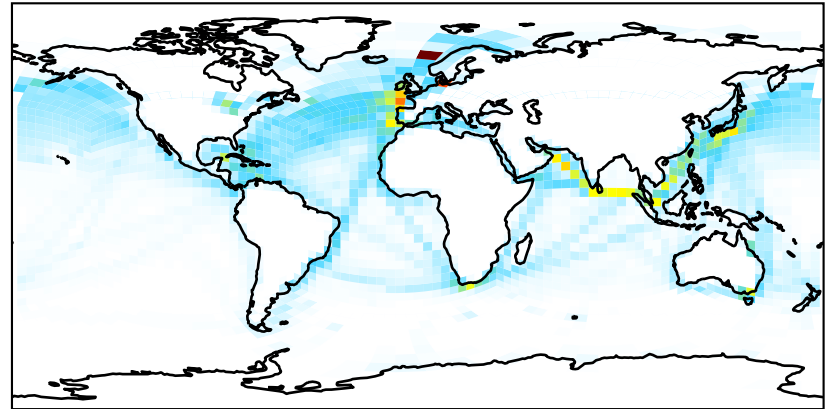


# EmisNO2\_Ship

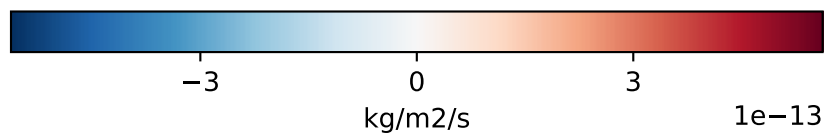
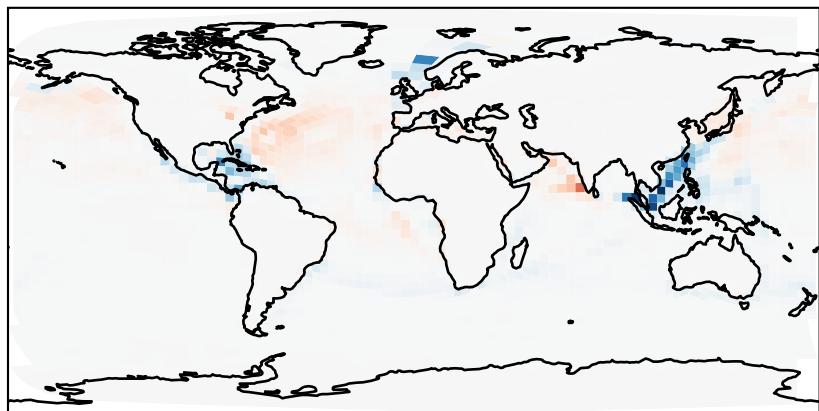
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



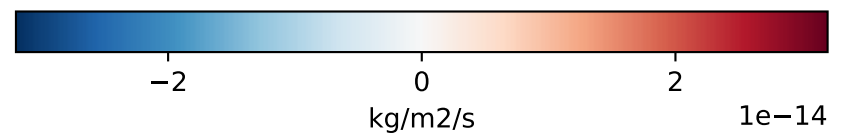
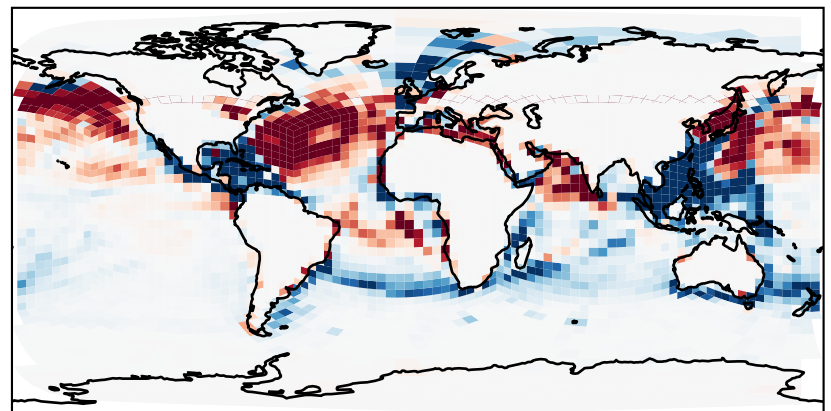
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



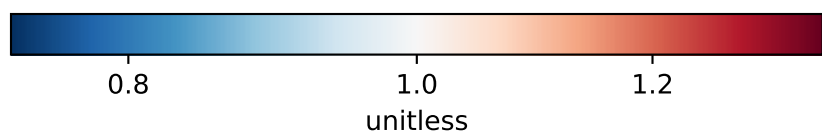
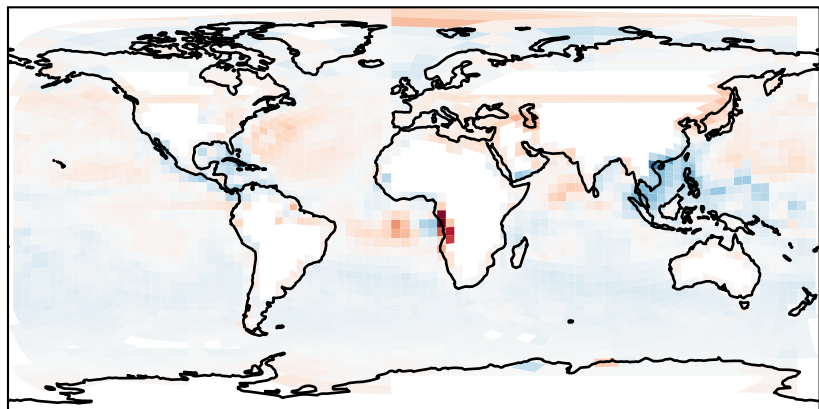
Difference  
Dev - Ref, Dynamic Range



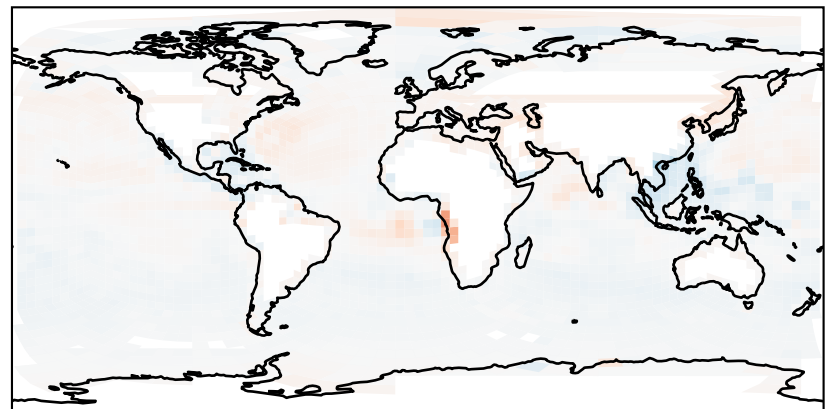
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



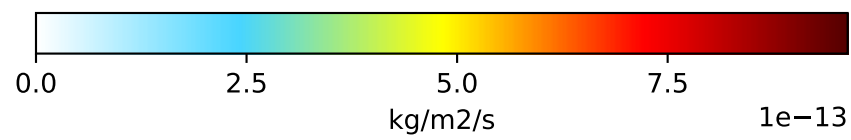
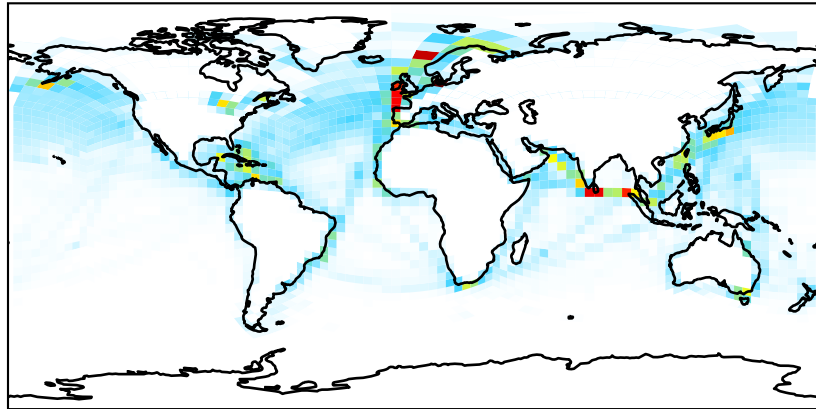
Ratio  
Dev/Ref, Fixed Range



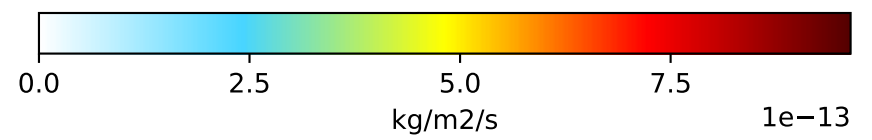
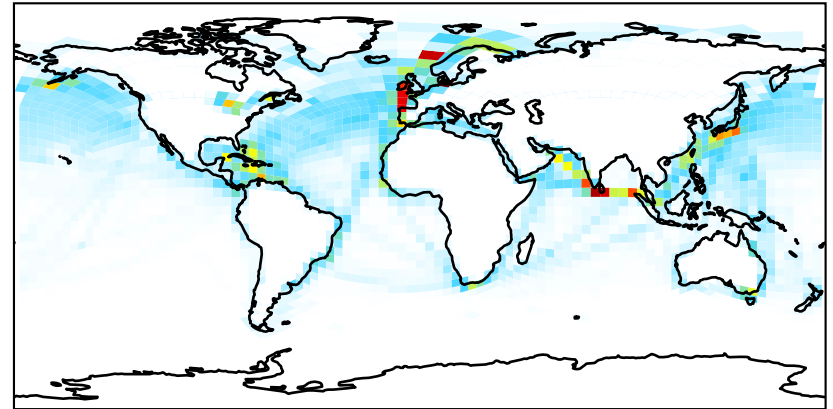


# EmisNO\_Ship

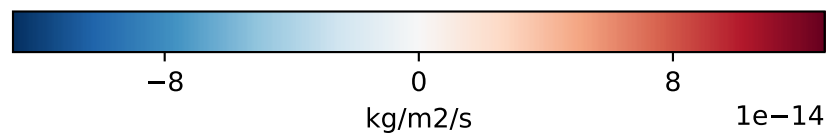
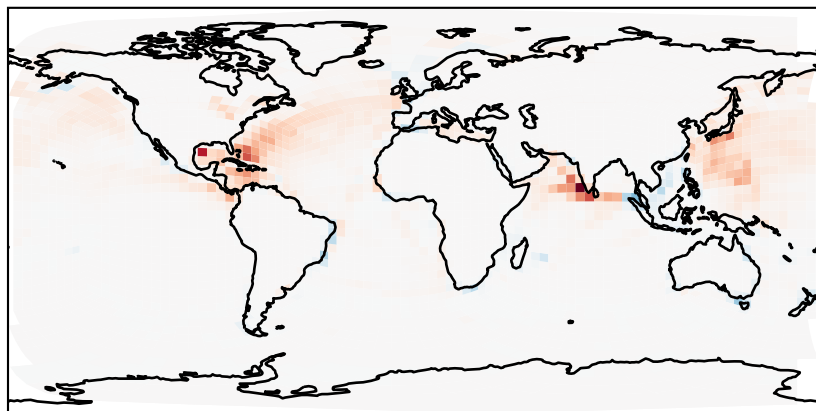
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



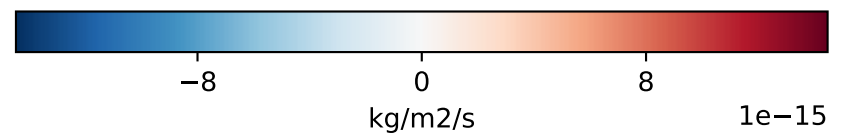
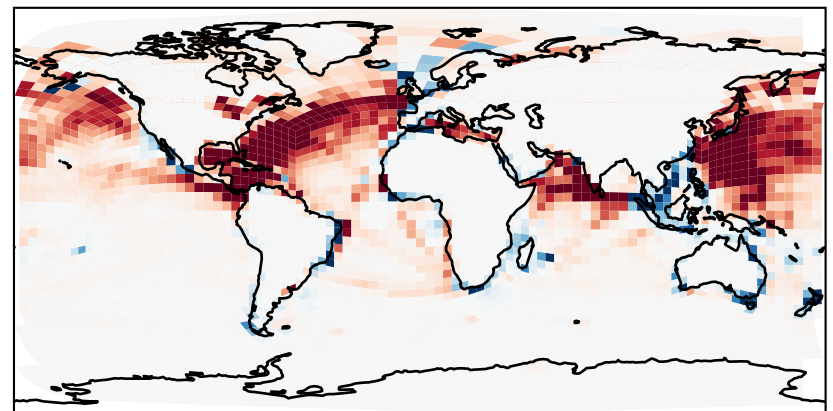
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



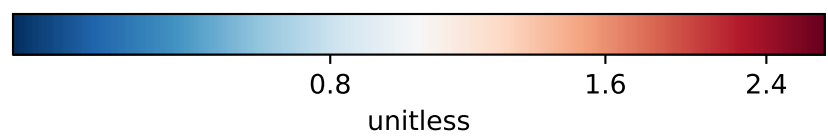
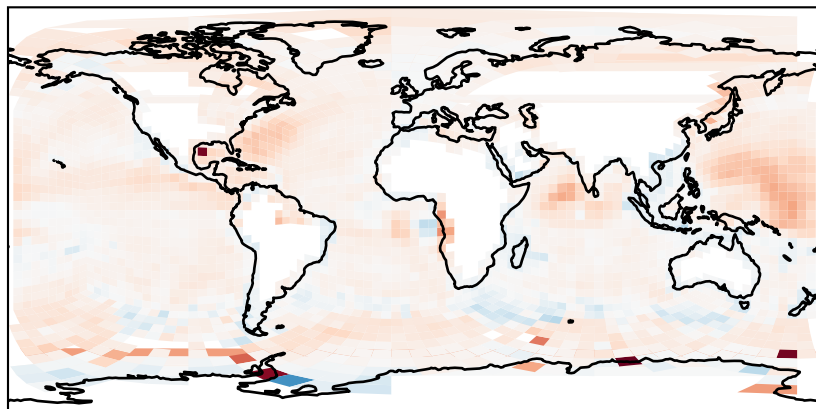
Difference  
Dev - Ref, Dynamic Range



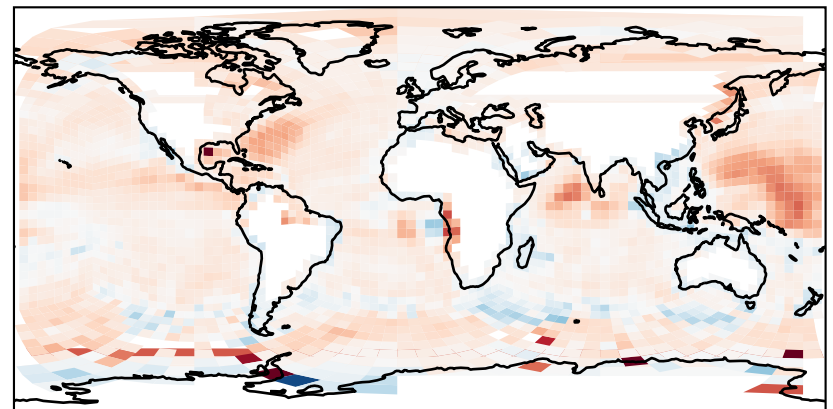
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

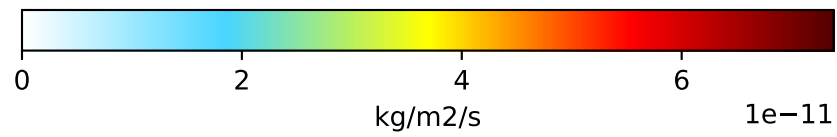
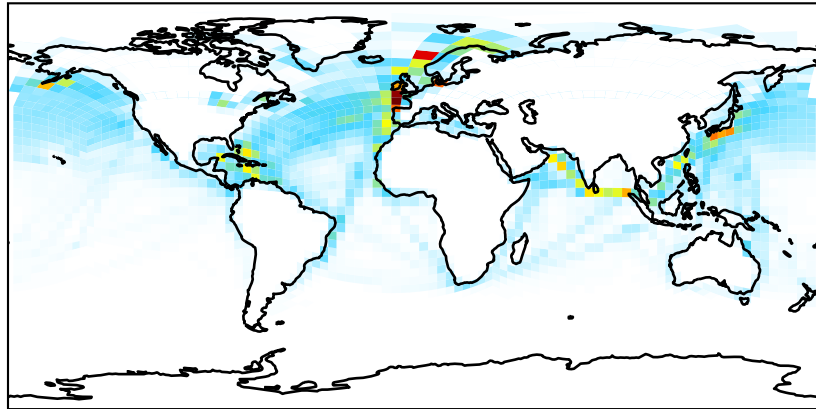


Ratio  
Dev/Ref, Fixed Range

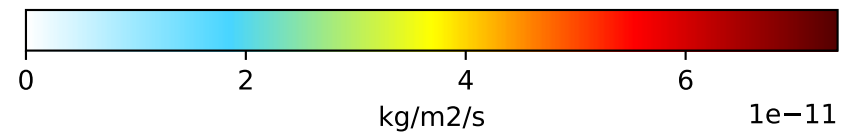
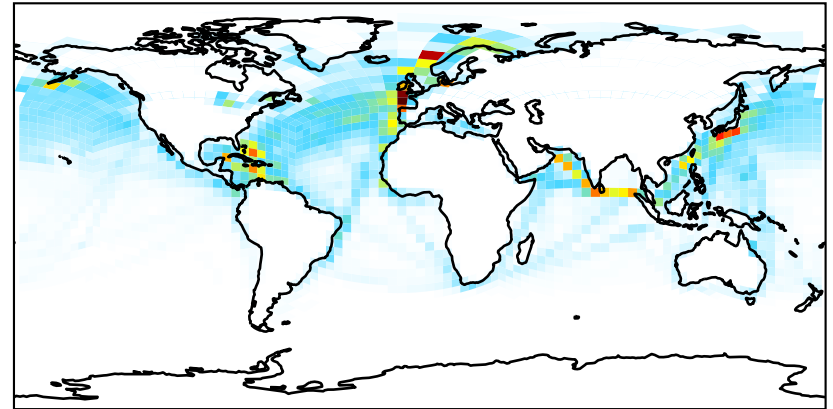


# Emis03\_Ship

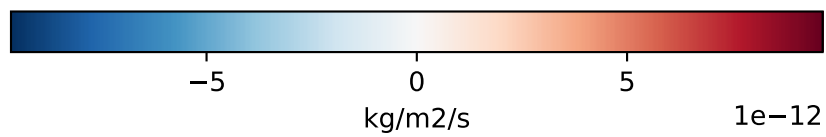
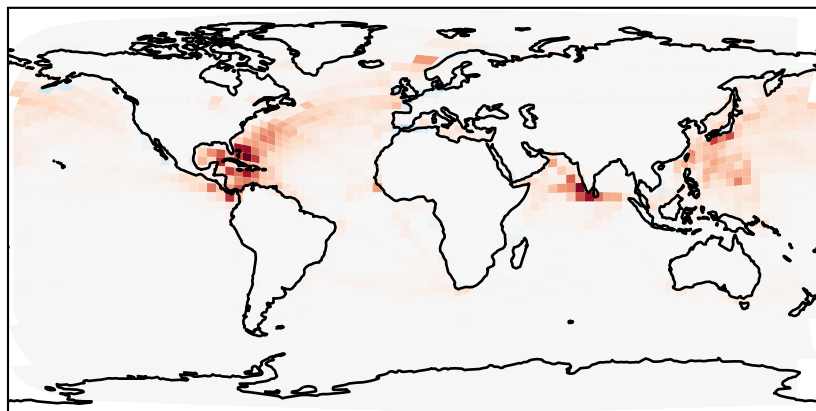
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



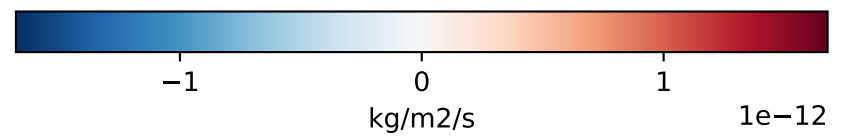
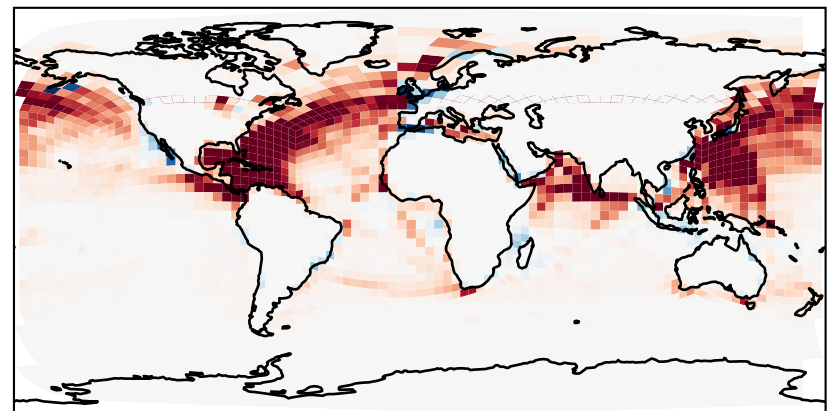
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



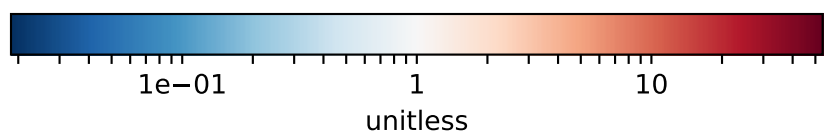
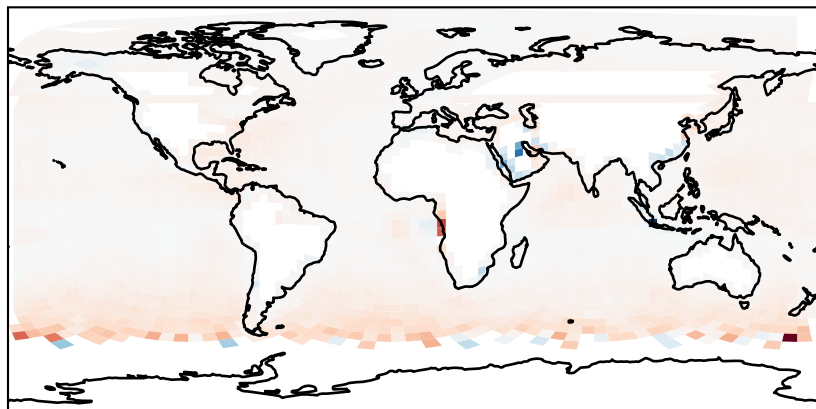
Difference  
Dev - Ref, Dynamic Range



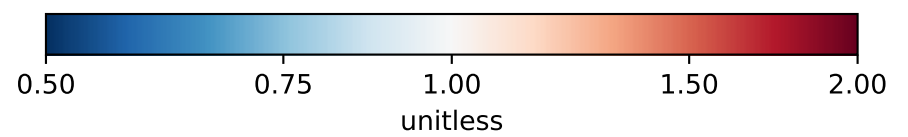
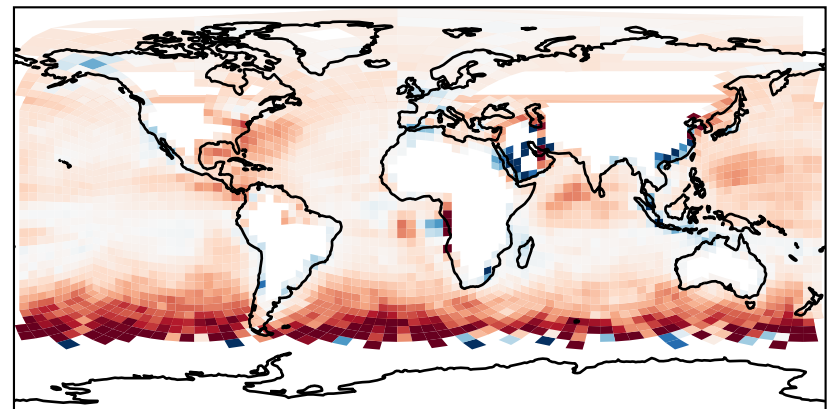
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

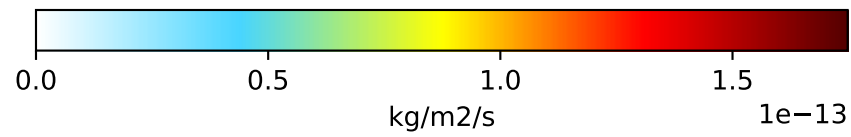
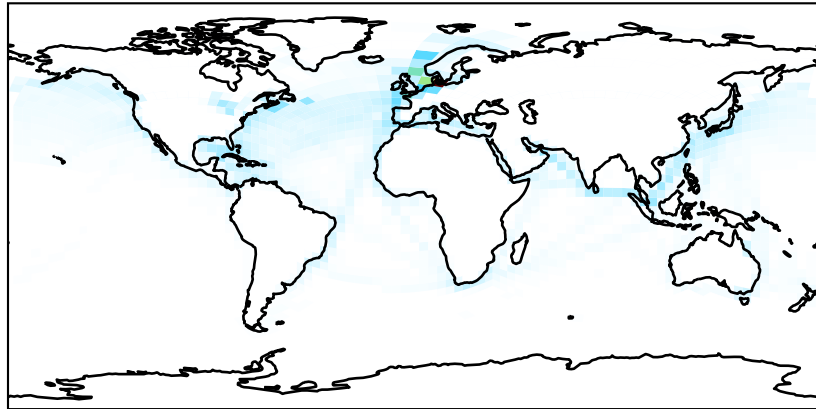


Ratio  
Dev/Ref, Fixed Range

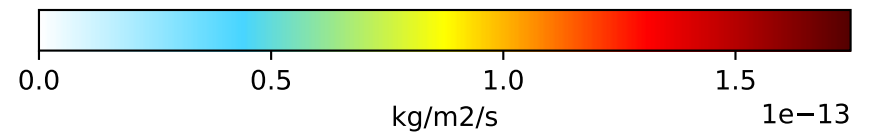
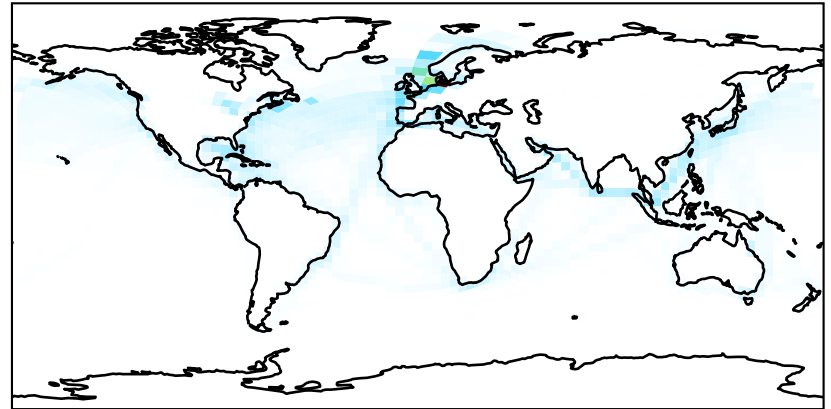


# EmisOCPI\_Ship

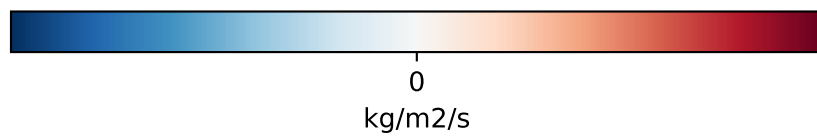
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



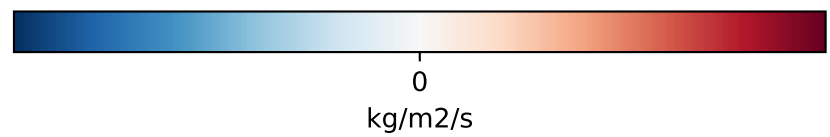
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



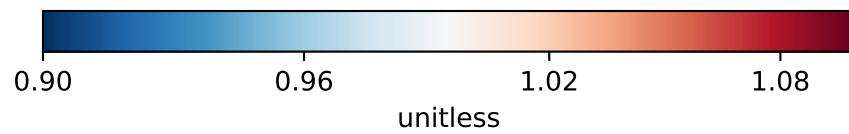
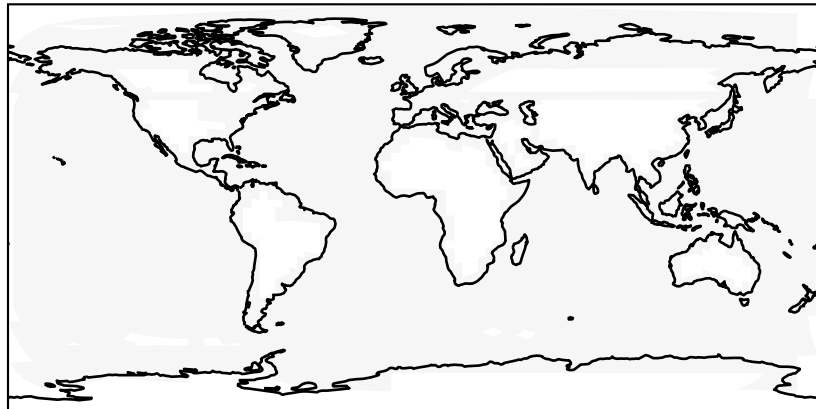
Difference  
Dev - Ref, Dynamic Range



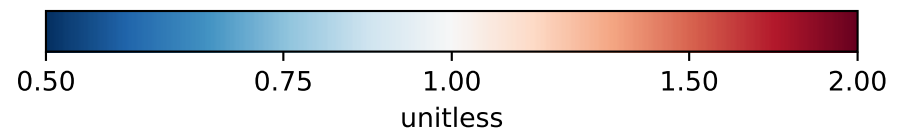
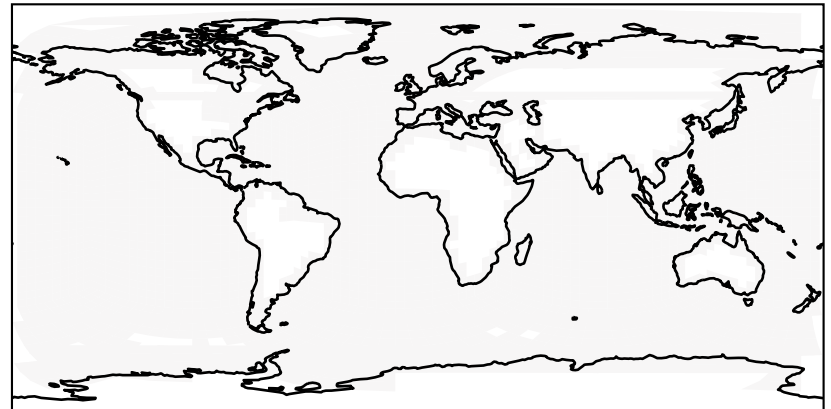
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

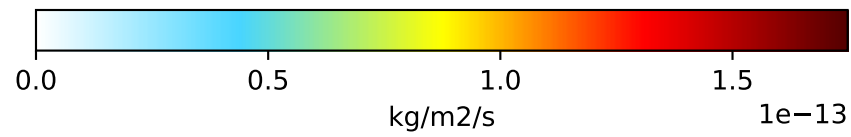
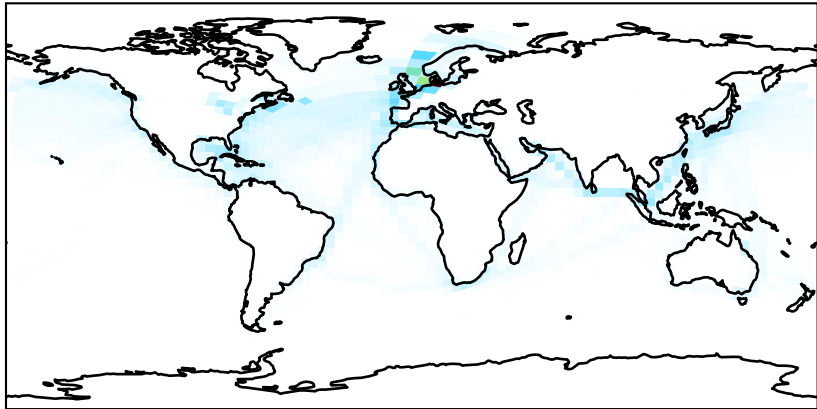


Ratio  
Dev/Ref, Fixed Range

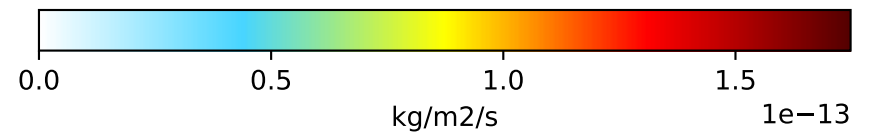
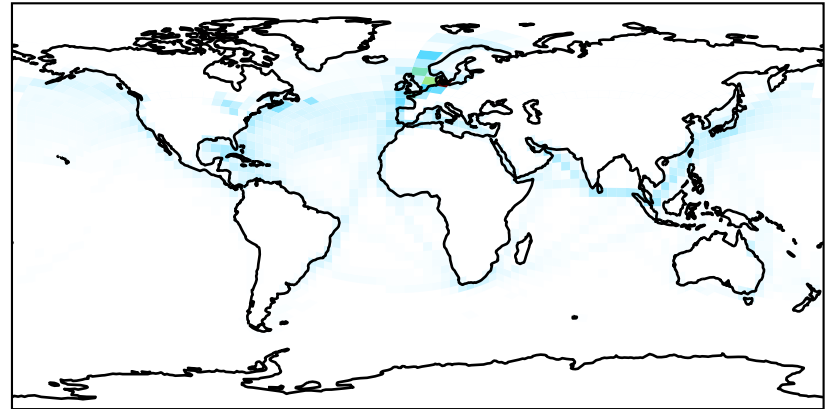


# EmisOCPO\_Ship

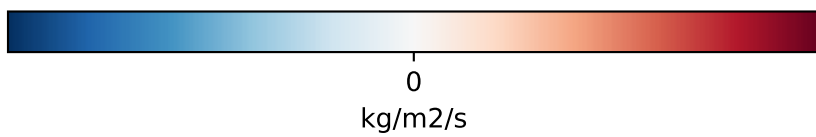
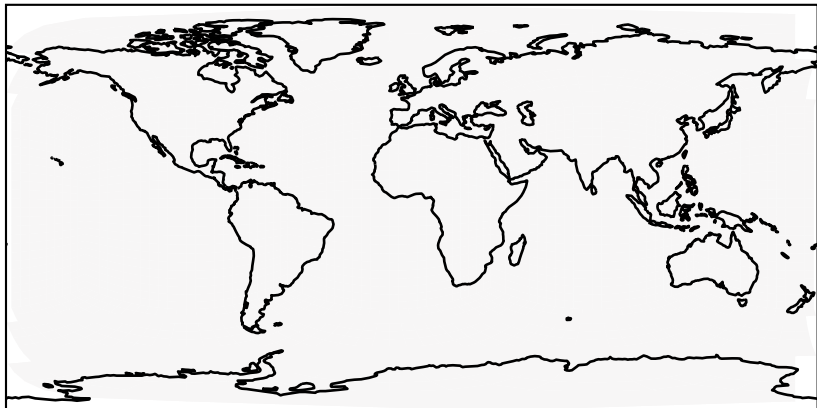
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



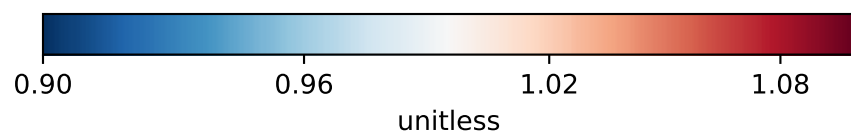
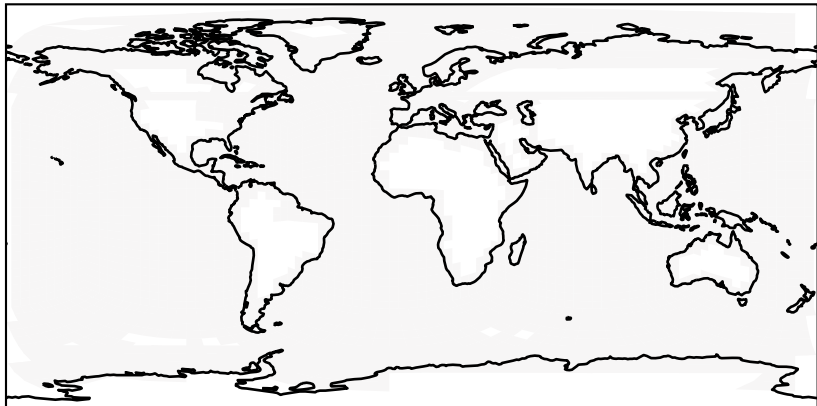
Difference  
Dev - Ref, Dynamic Range



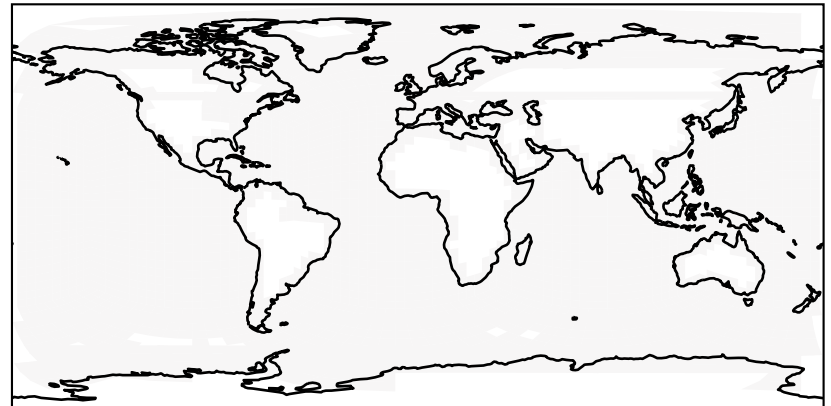
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



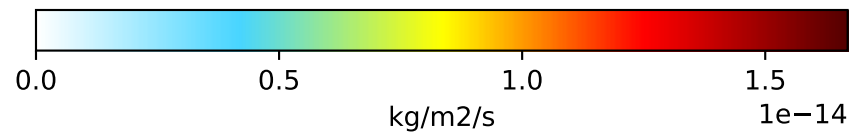
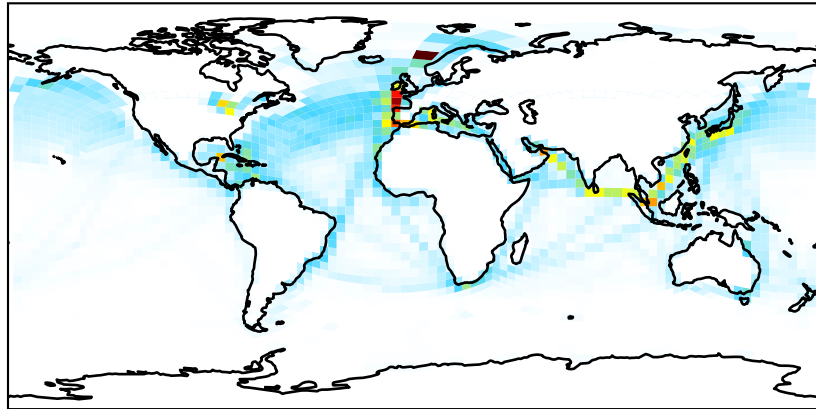
Ratio  
Dev/Ref, Fixed Range



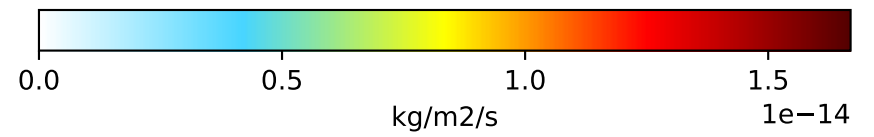
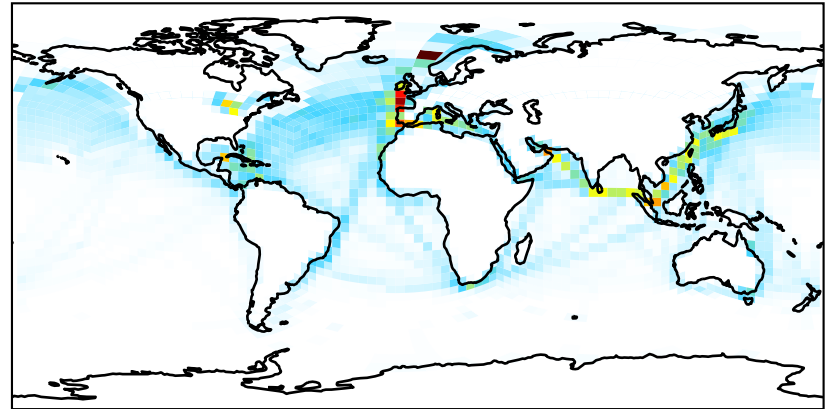


# EmispFe\_Ship

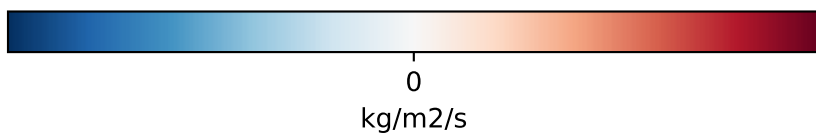
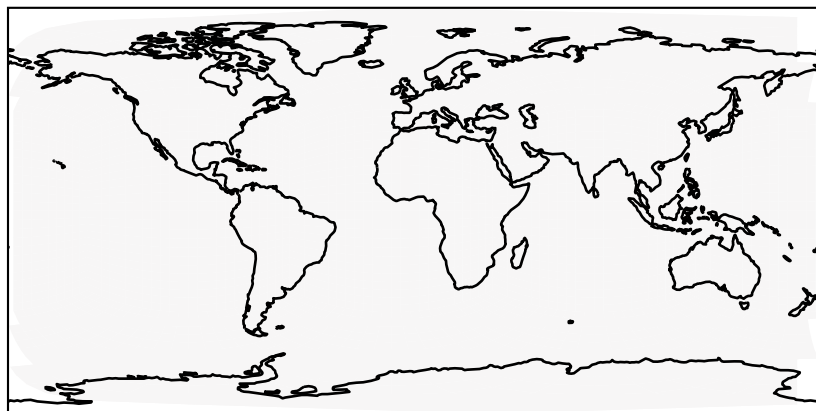
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



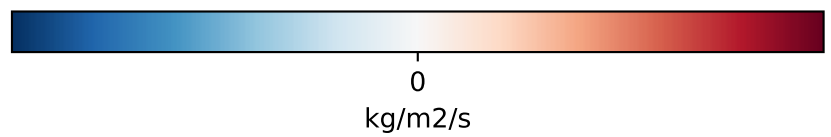
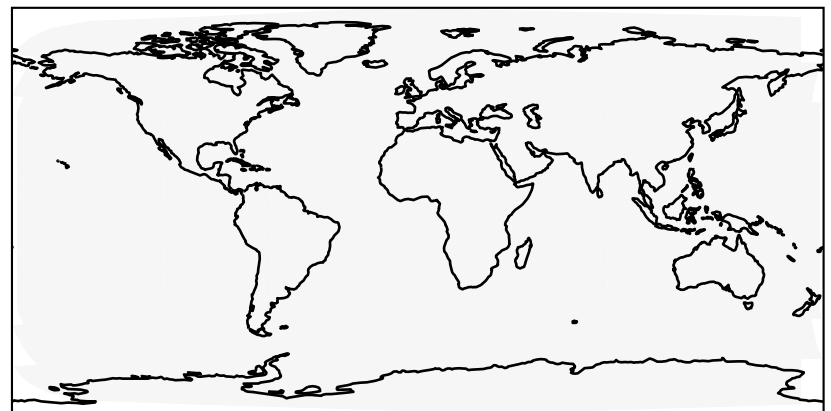
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



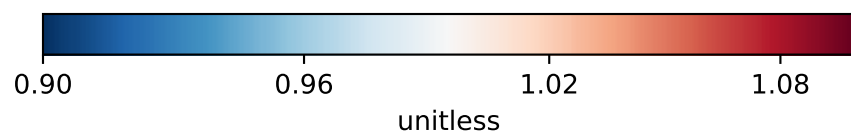
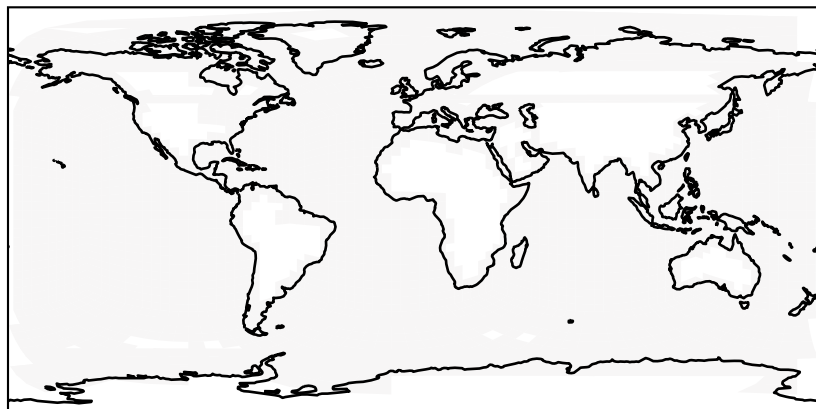
Difference  
Dev - Ref, Dynamic Range



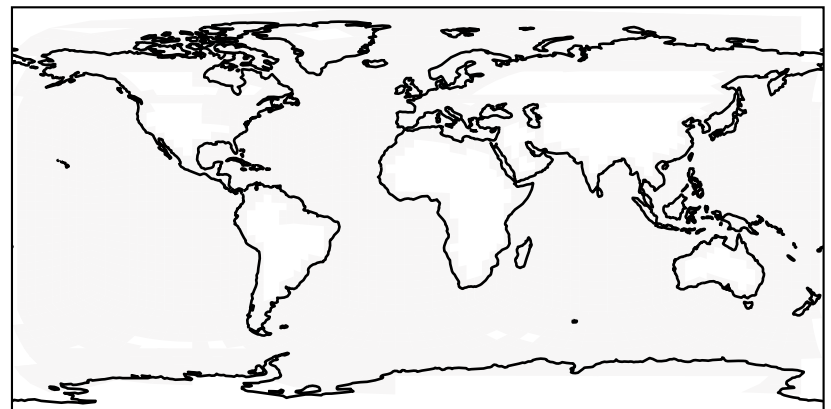
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



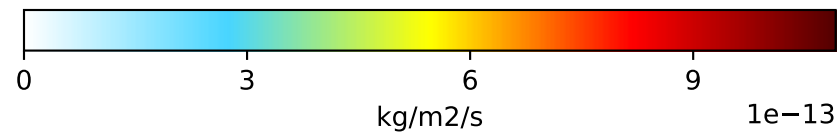
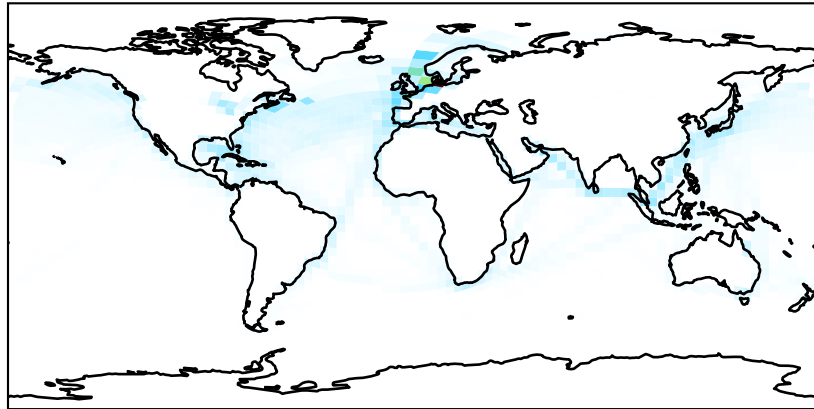
Ratio  
Dev/Ref, Fixed Range



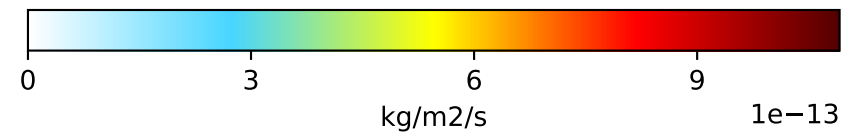
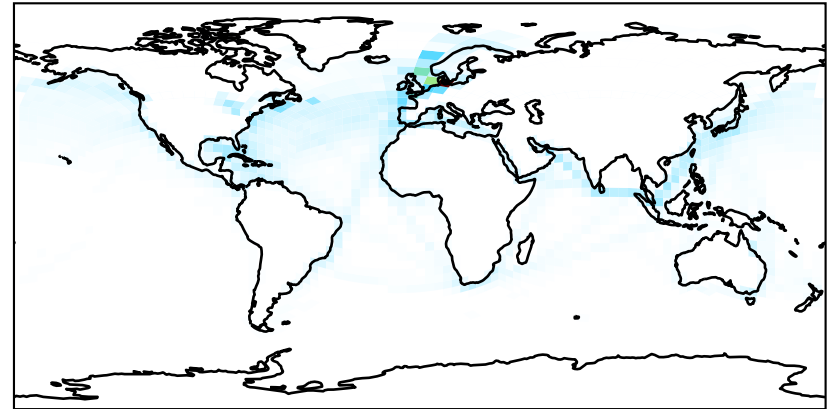


# EmisPRPE\_Ship

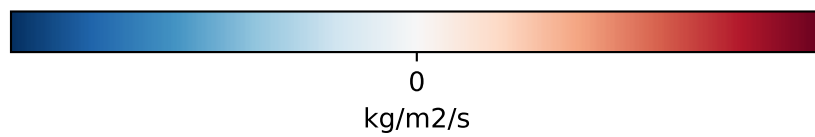
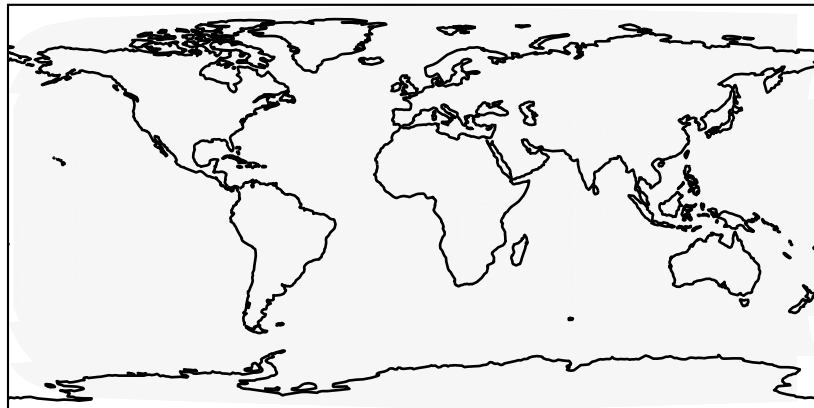
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



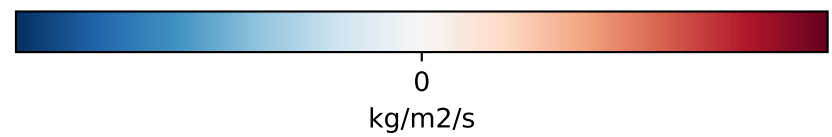
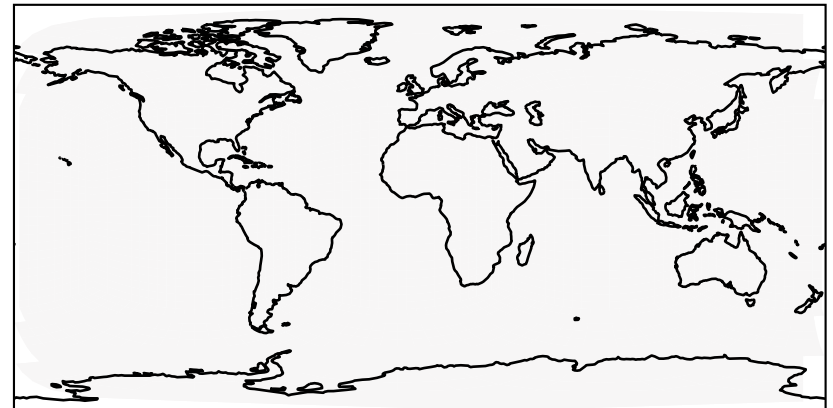
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



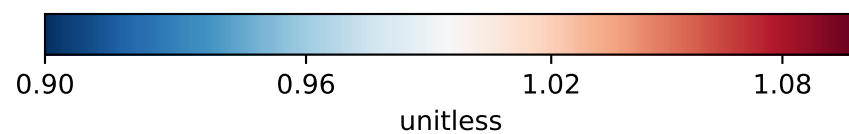
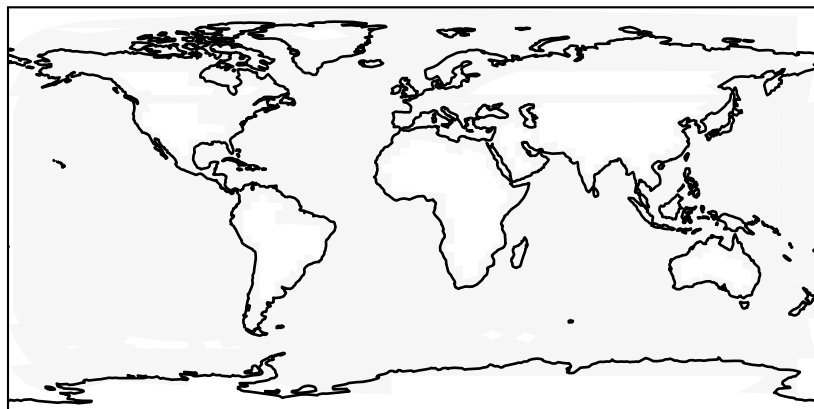
Difference  
Dev - Ref, Dynamic Range



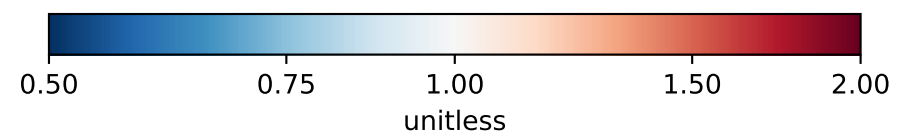
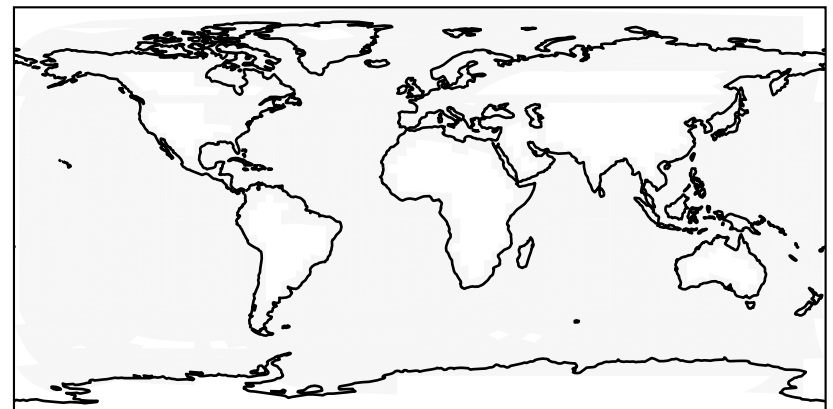
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

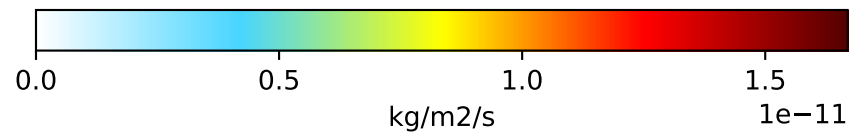
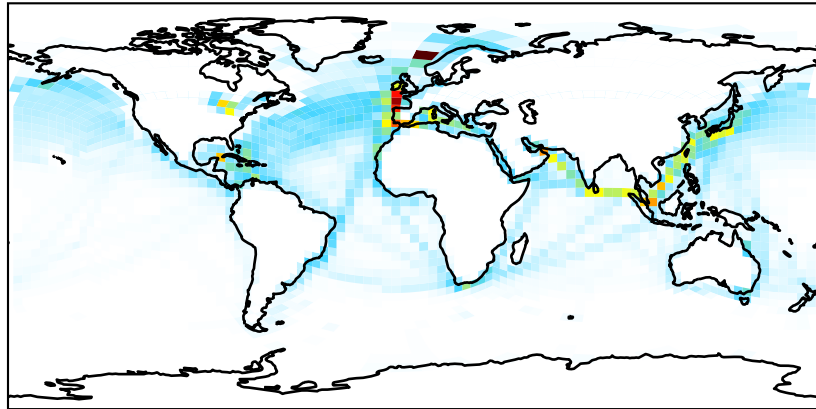


Ratio  
Dev/Ref, Fixed Range

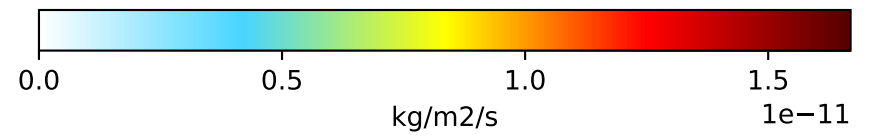
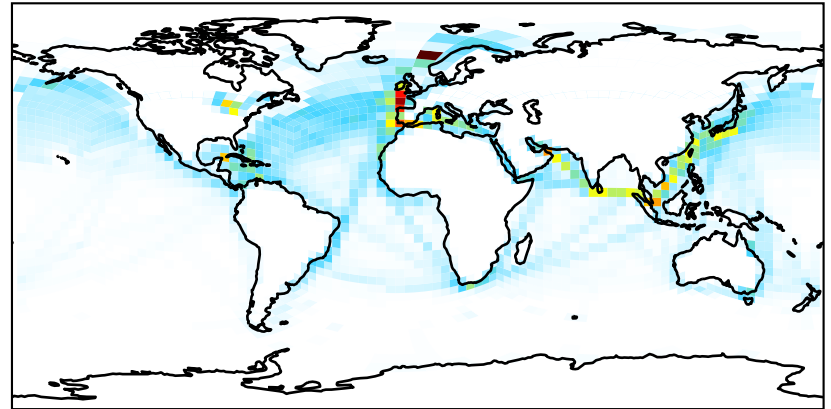


# EmisSO2\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



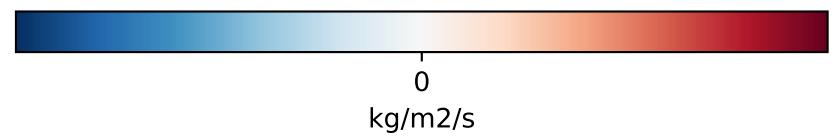
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



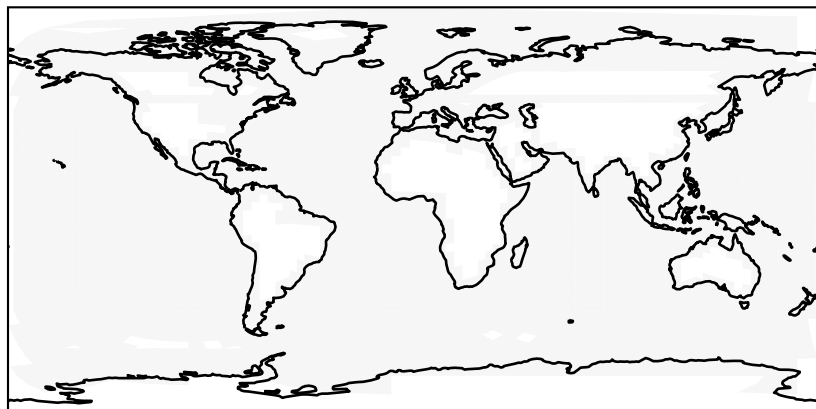
Difference  
Dev - Ref, Dynamic Range



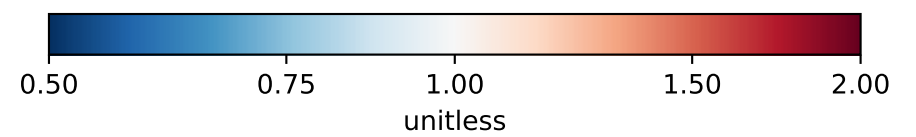
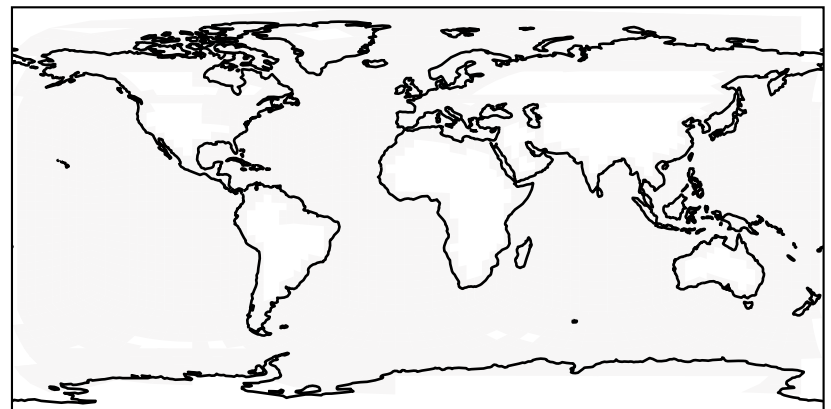
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

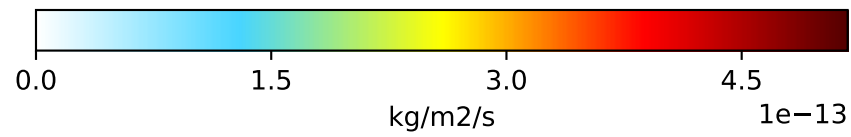
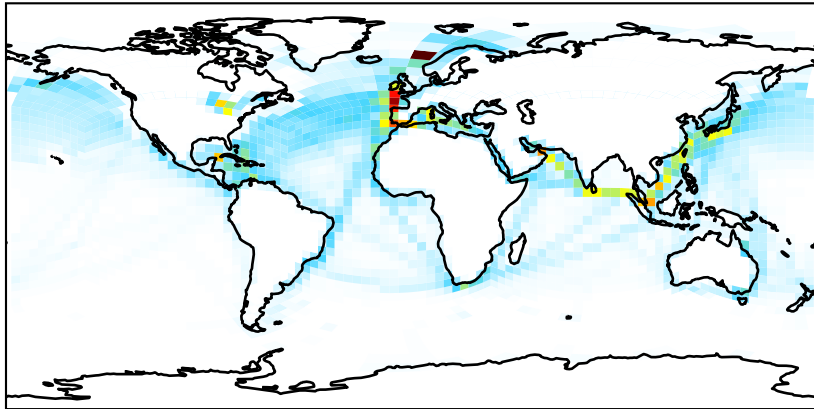


Ratio  
Dev/Ref, Fixed Range

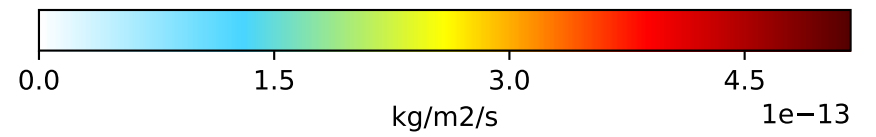
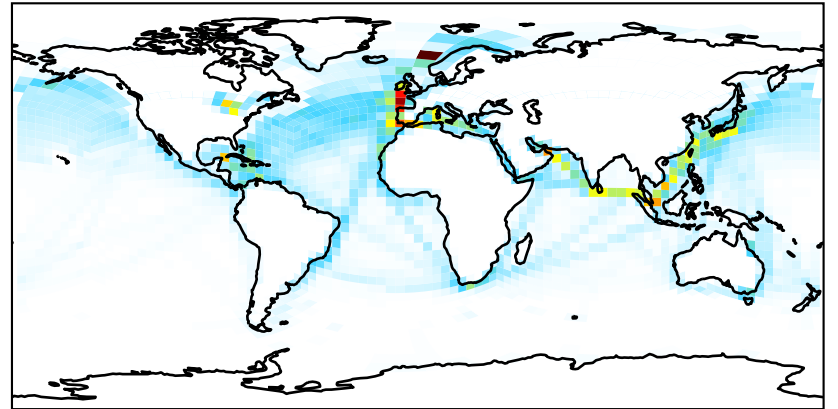


# EmisSO4\_Ship

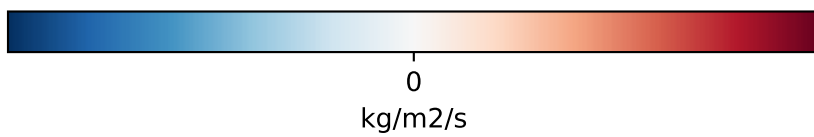
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



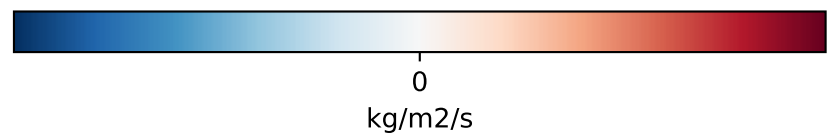
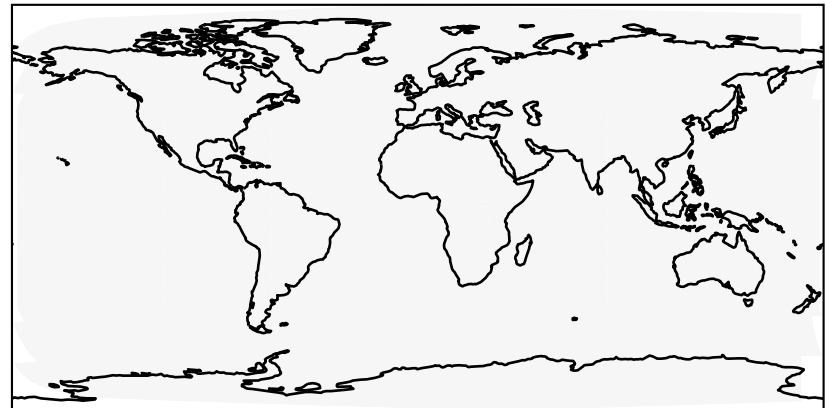
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



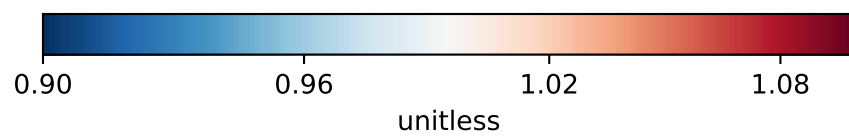
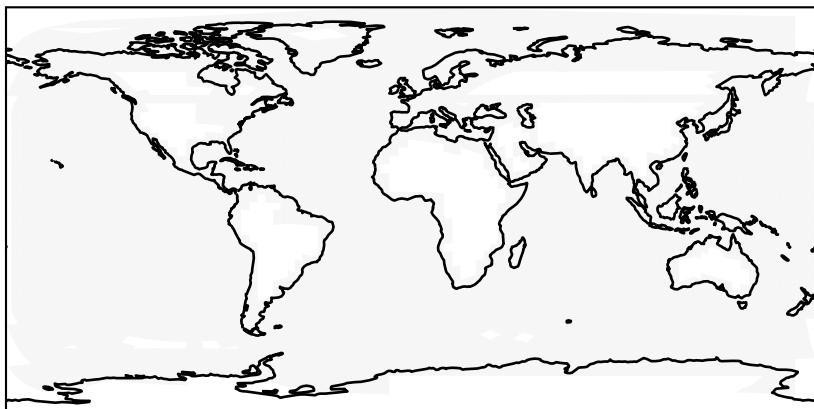
Difference  
Dev - Ref, Dynamic Range



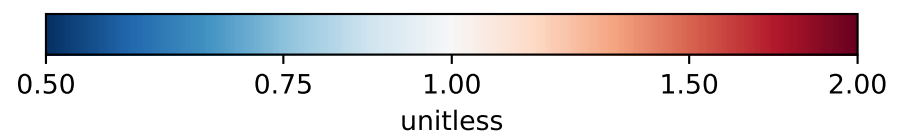
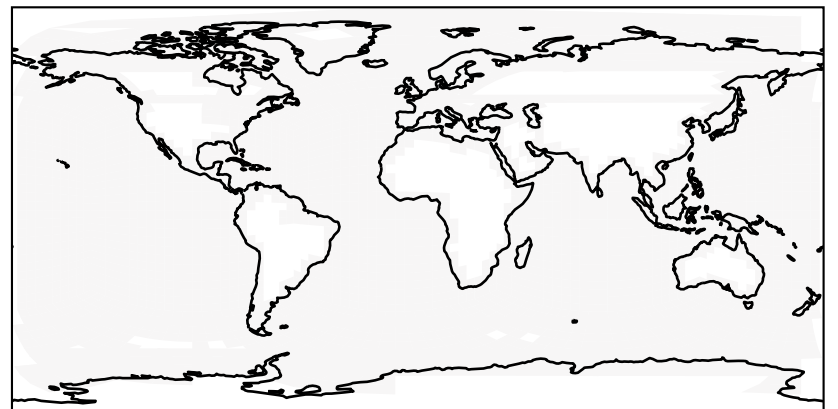
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

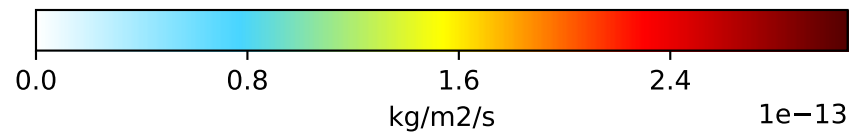
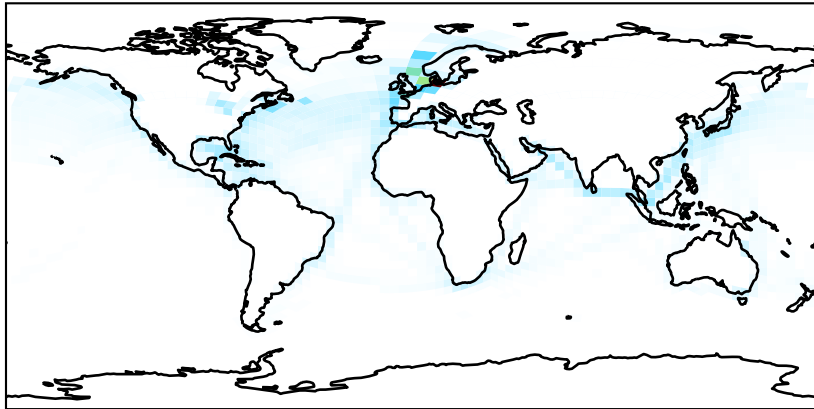


Ratio  
Dev/Ref, Fixed Range

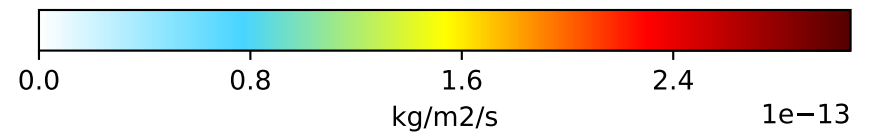


# EmisSOAP\_Ship

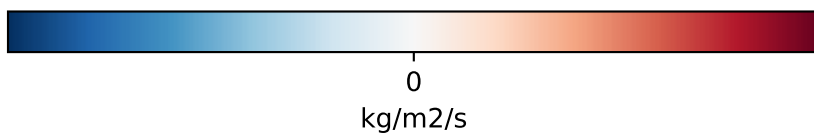
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



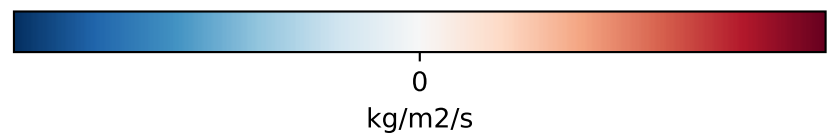
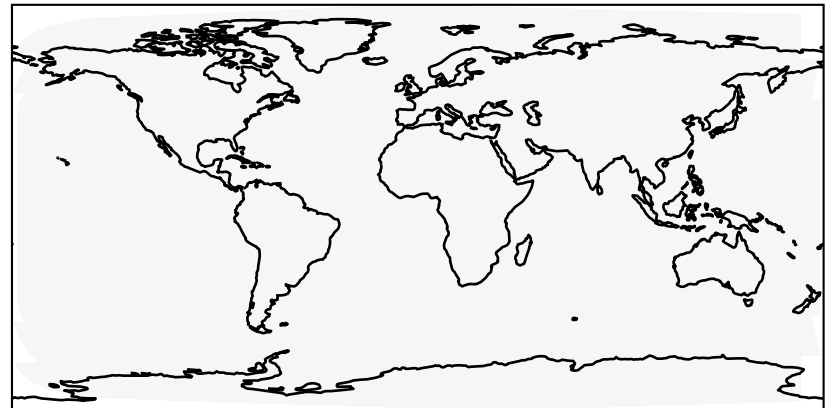
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



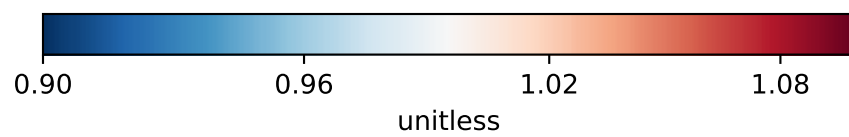
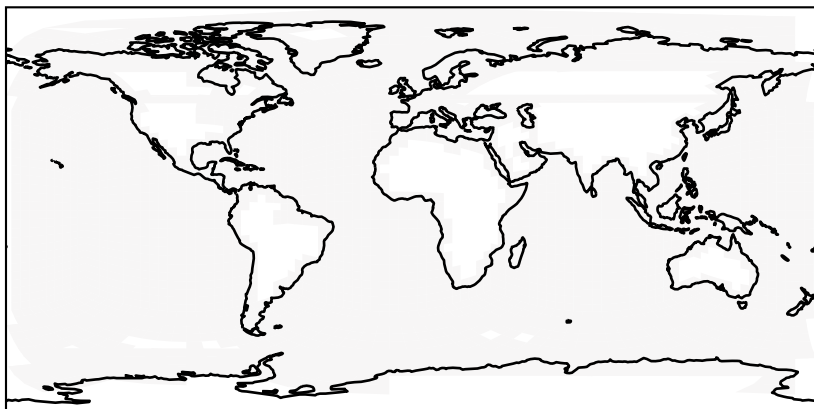
Difference  
Dev - Ref, Dynamic Range



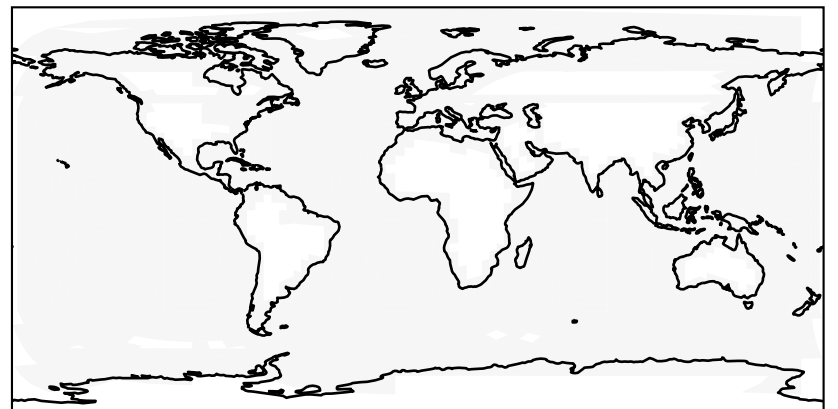
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



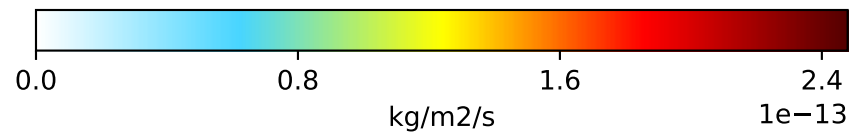
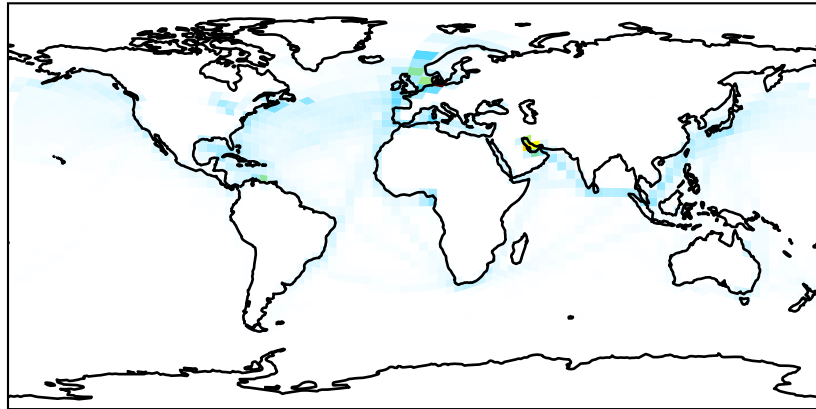
Ratio  
Dev/Ref, Fixed Range



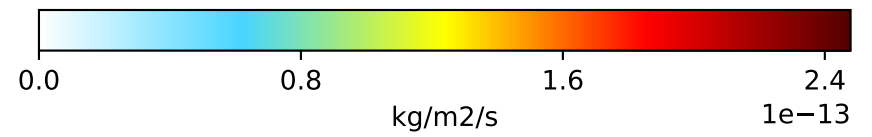
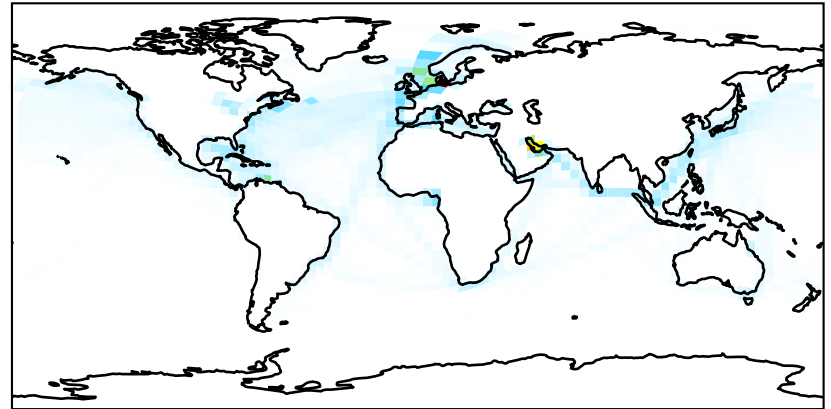


# EmisTOLU\_Ship

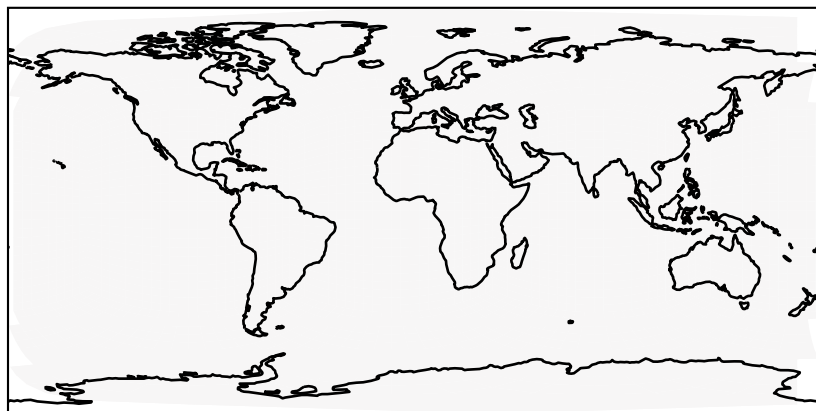
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



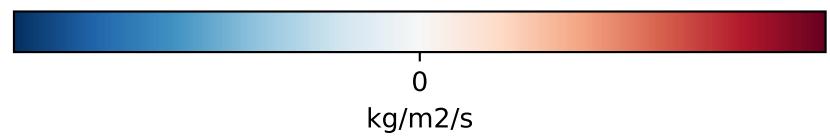
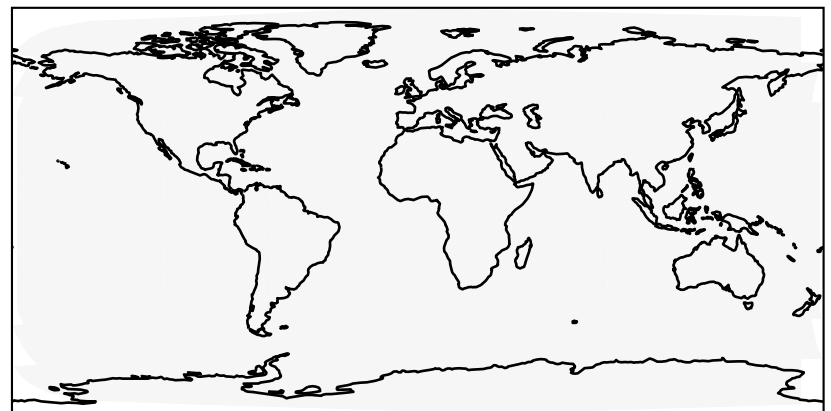
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



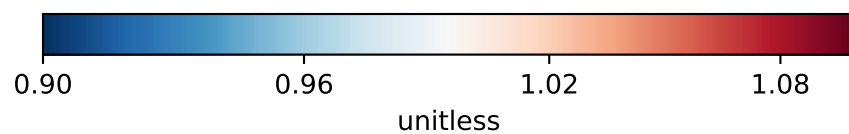
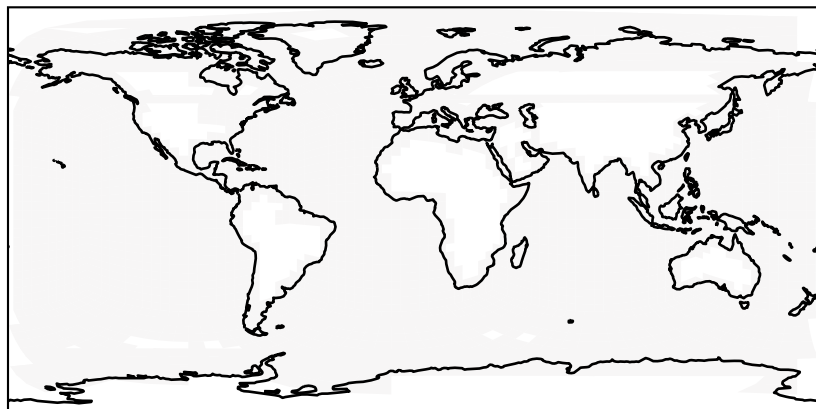
Difference  
Dev - Ref, Dynamic Range



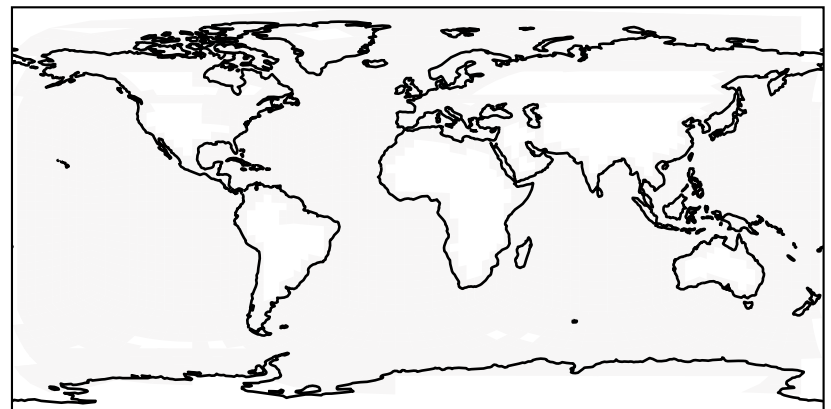
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



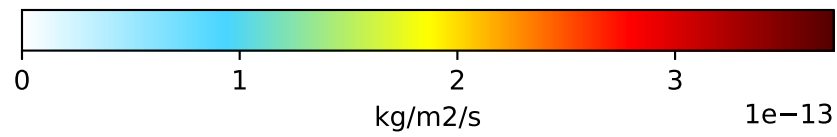
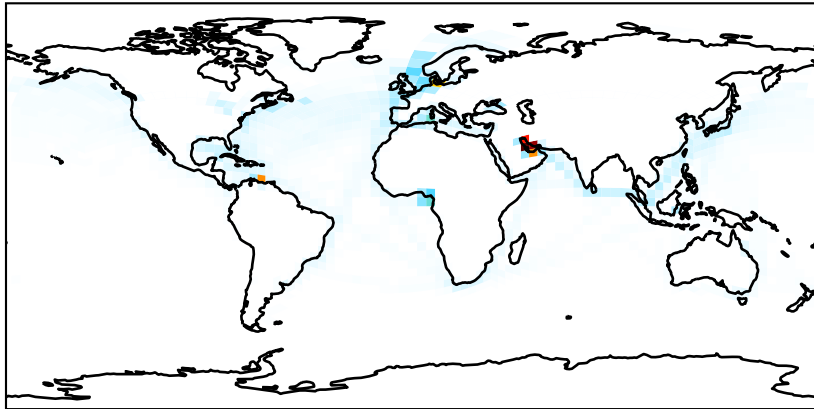
Ratio  
Dev/Ref, Fixed Range



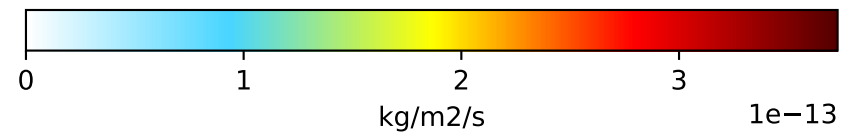
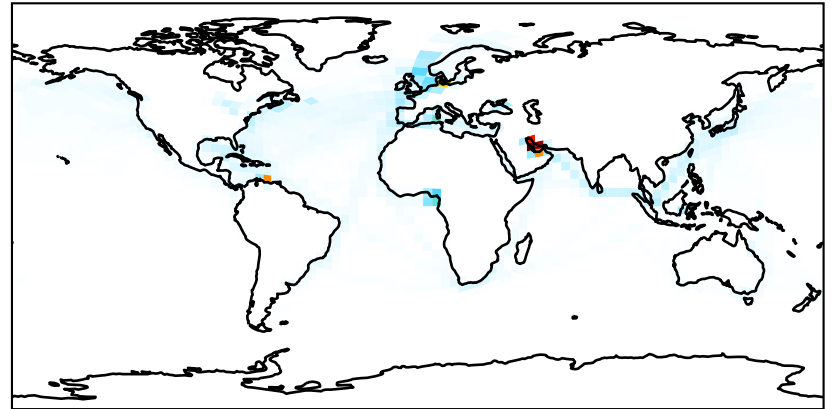


# EmisXYLE\_Ship

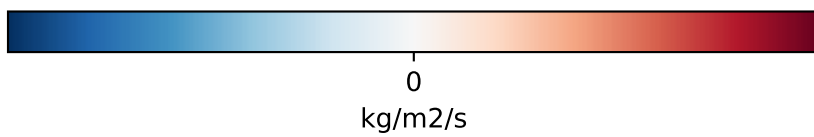
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



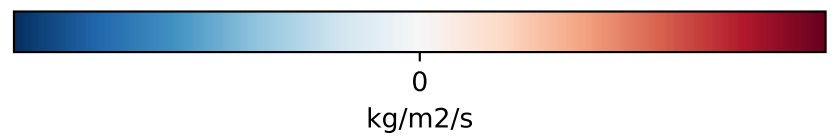
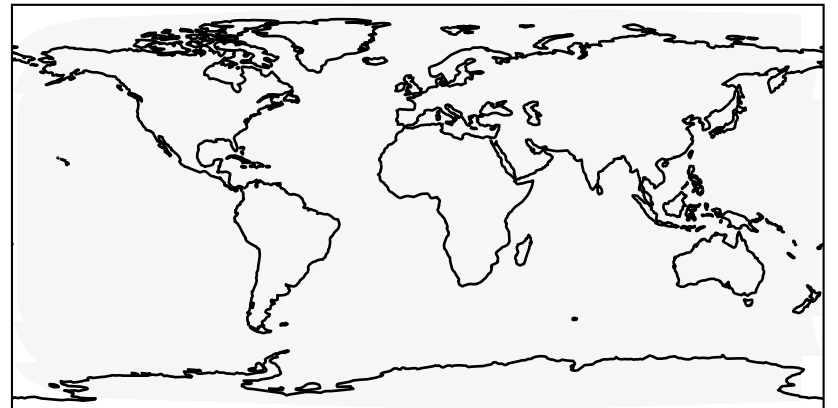
GCHP\_14.2.0\_GEOS-FP (Dev)  
c24



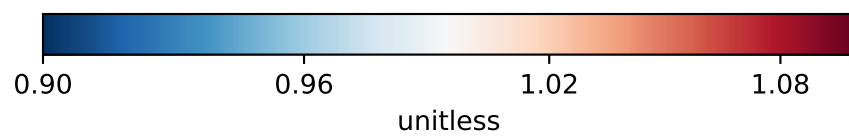
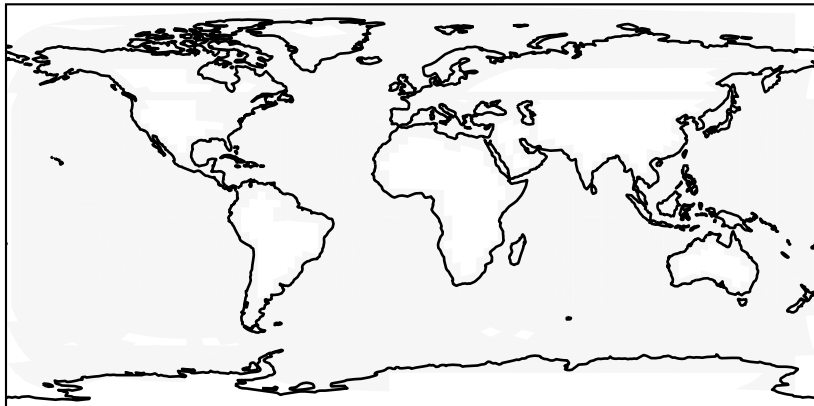
Difference  
Dev - Ref, Dynamic Range



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



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

