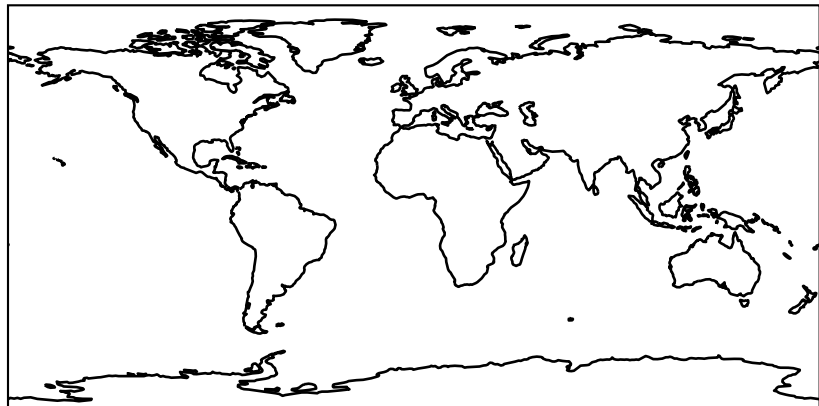


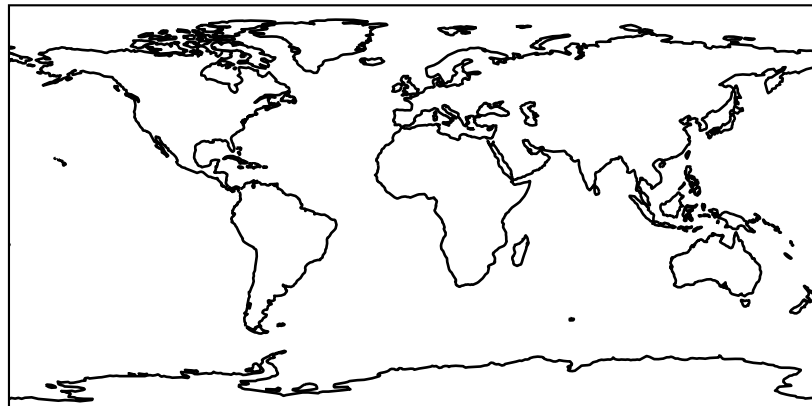
# EmisALD2\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



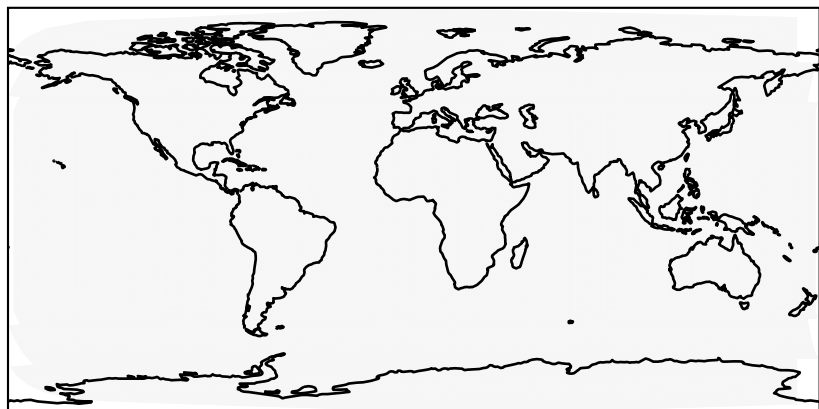
Zero throughout domain  
kg/m2/s

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



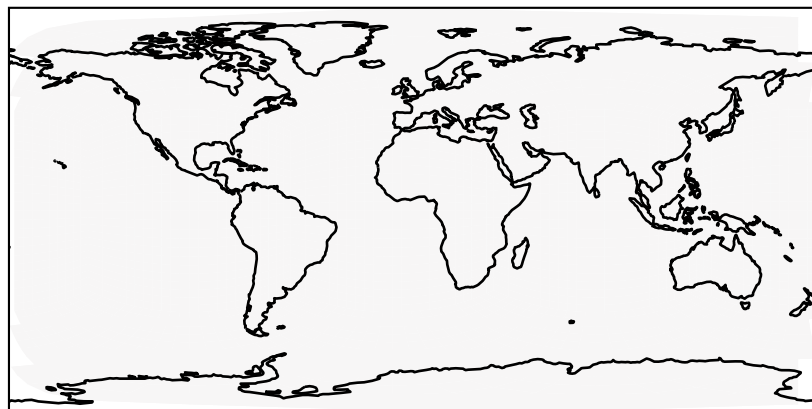
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



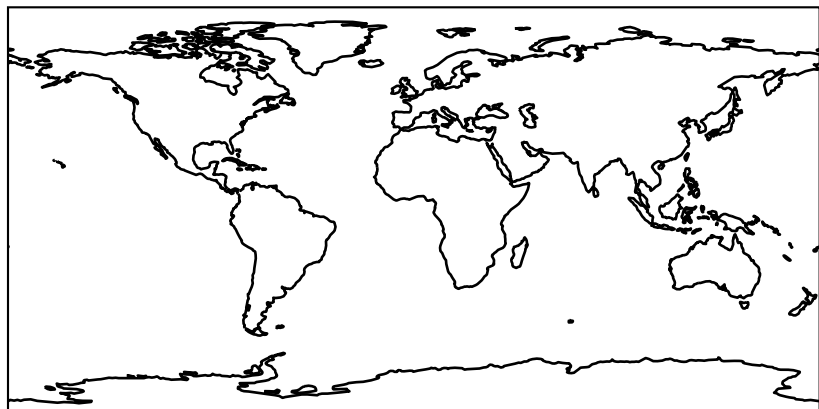
Zero throughout domain  
kg/m2/s

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



Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughout domain  
unitless

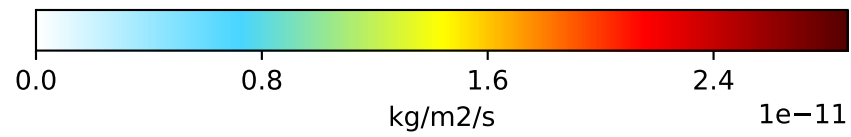
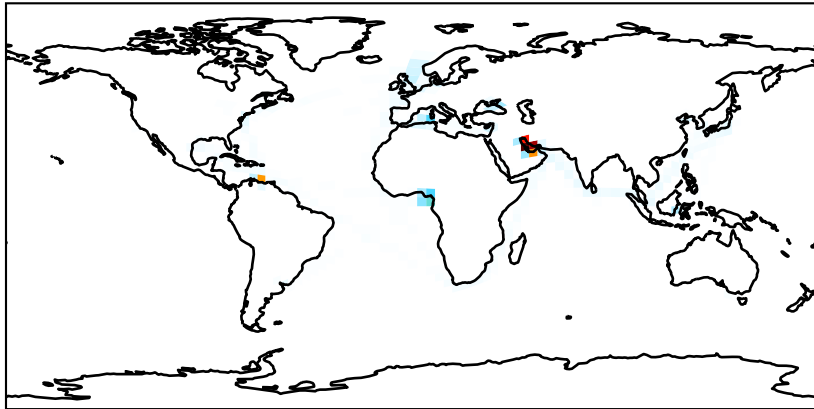
Ratio  
Dev/Ref, Fixed Range



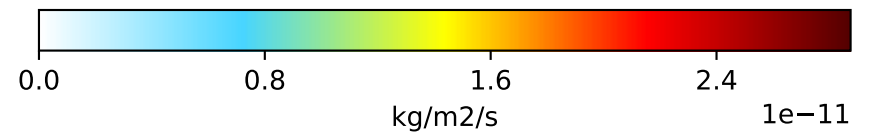
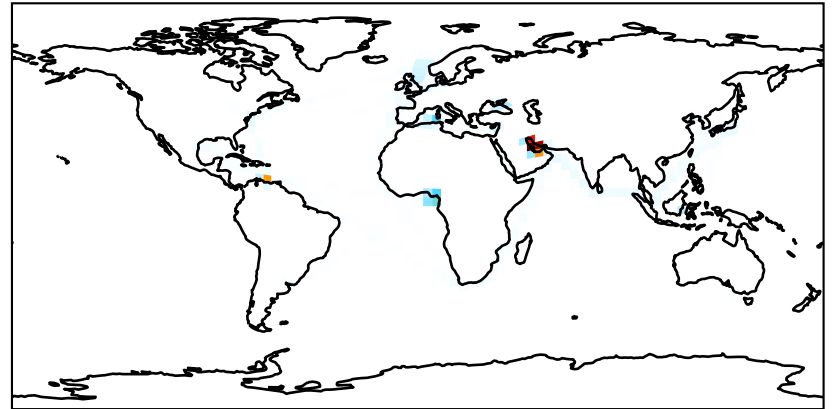
Undefined throughout domain  
unitless

# EmisALK4\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



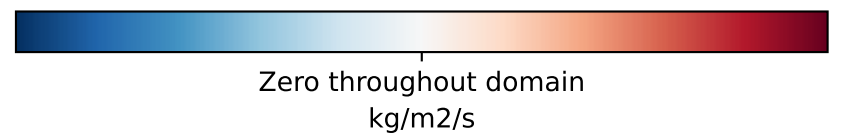
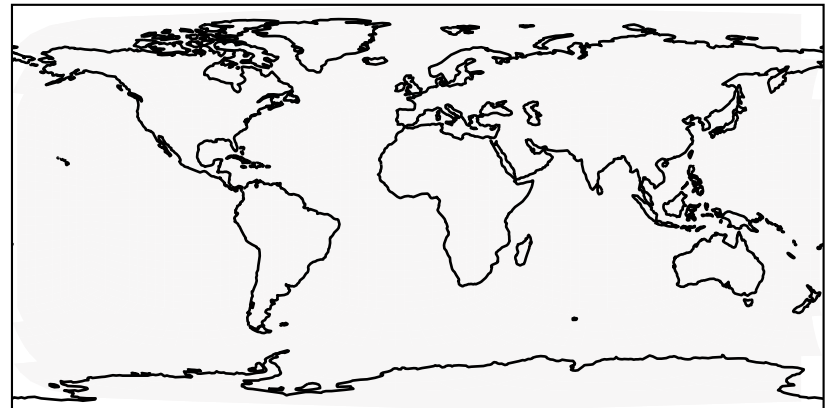
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



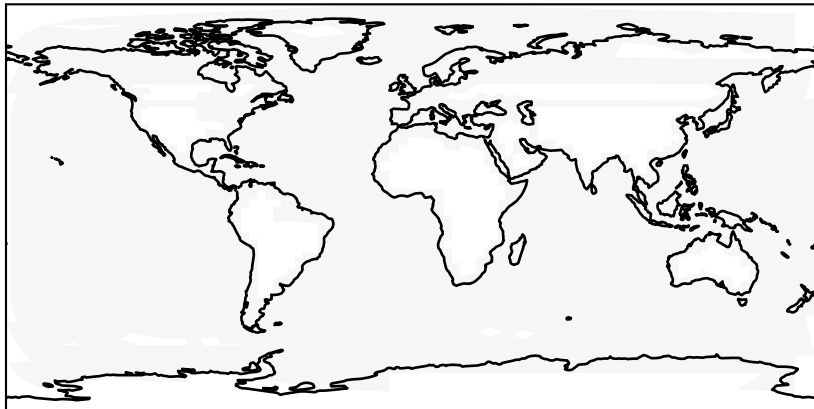
Difference  
Dev - Ref, Dynamic Range



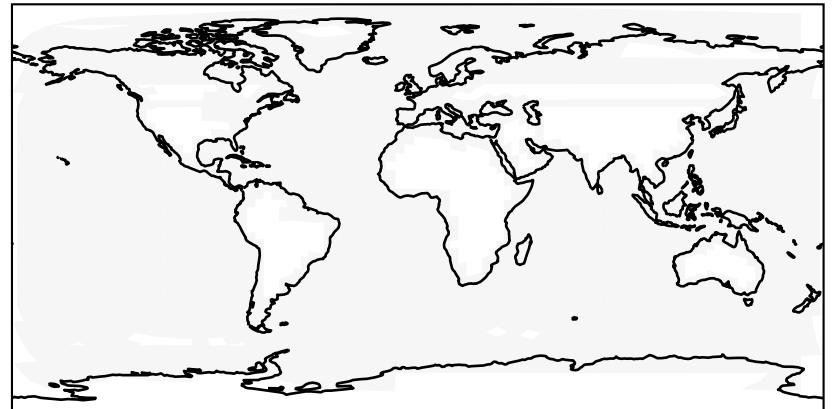
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

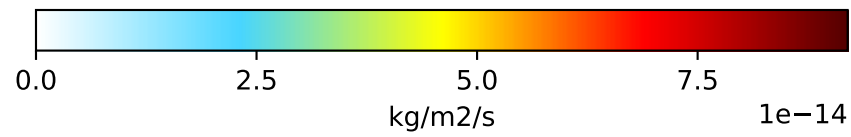
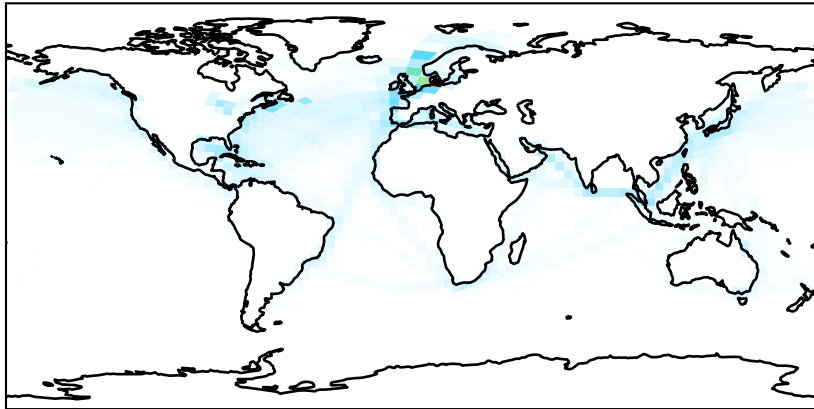


Ratio  
Dev/Ref, Fixed Range

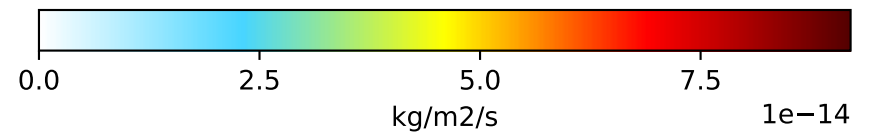


# EmisBCPI\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



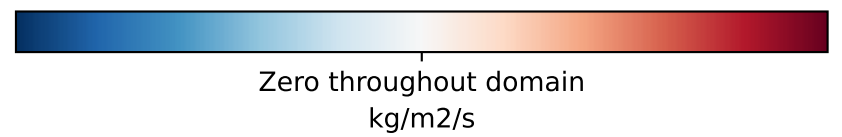
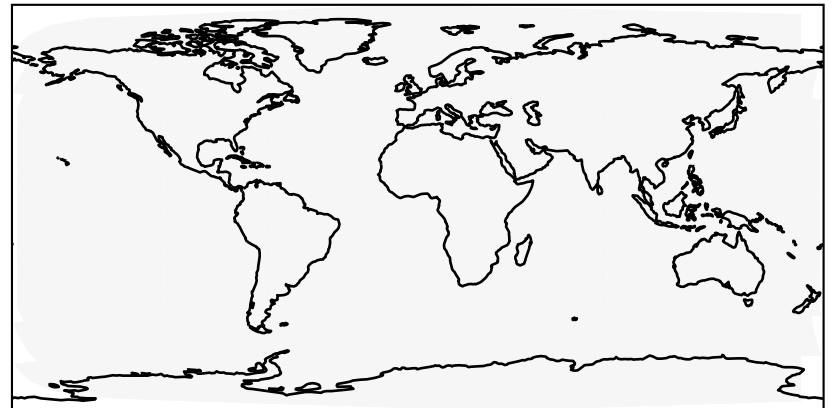
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



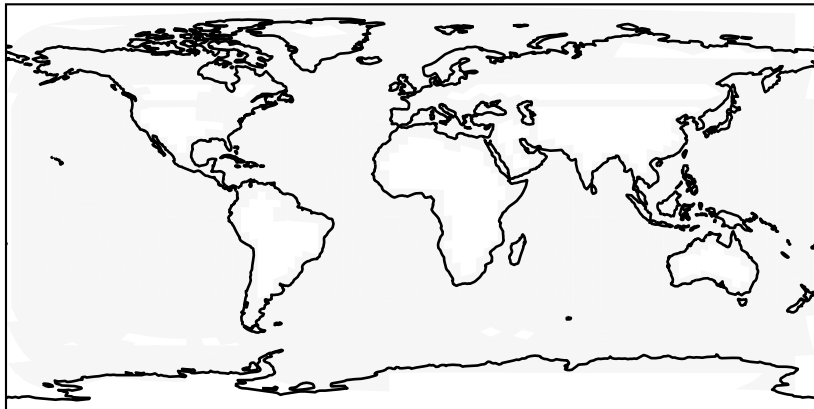
Difference  
Dev - Ref, Dynamic Range



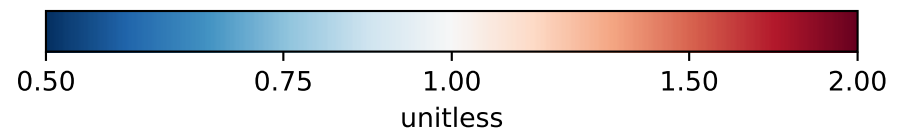
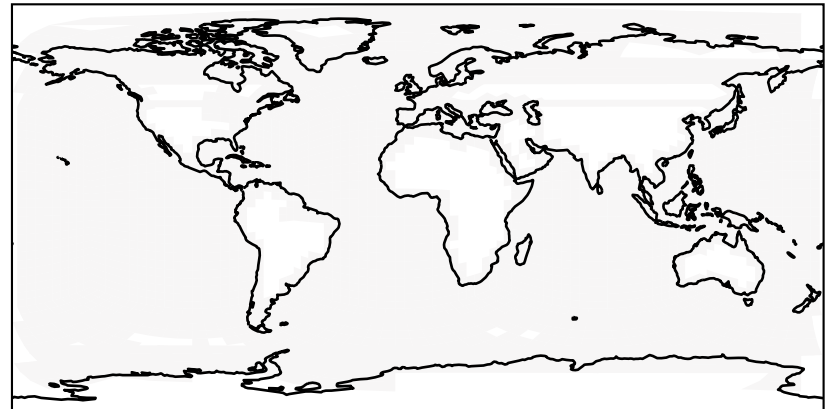
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

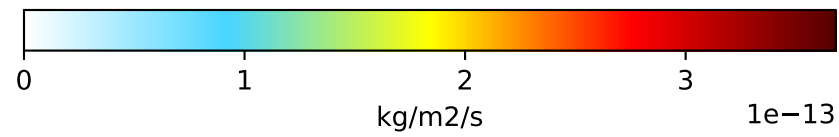
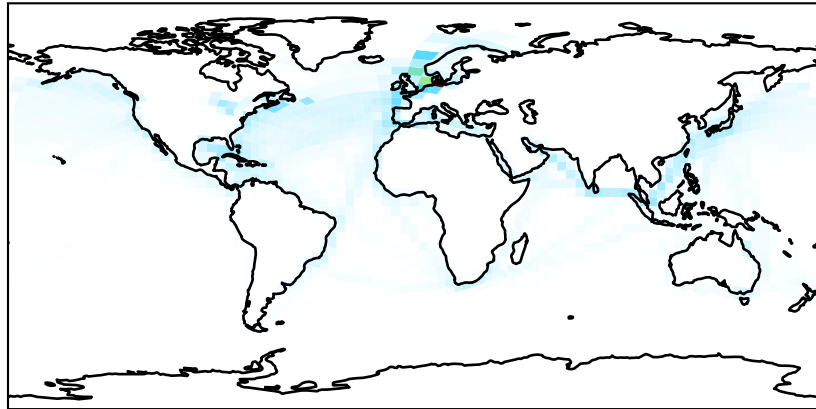


Ratio  
Dev/Ref, Fixed Range

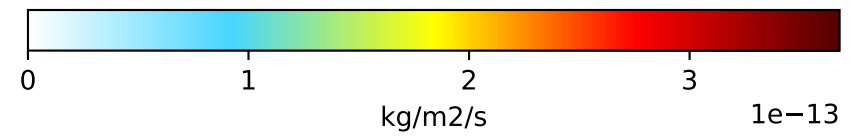
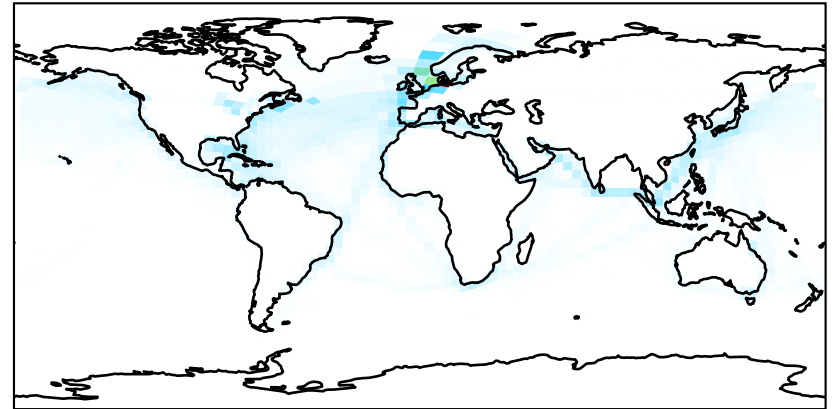


# EmisBCPO\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



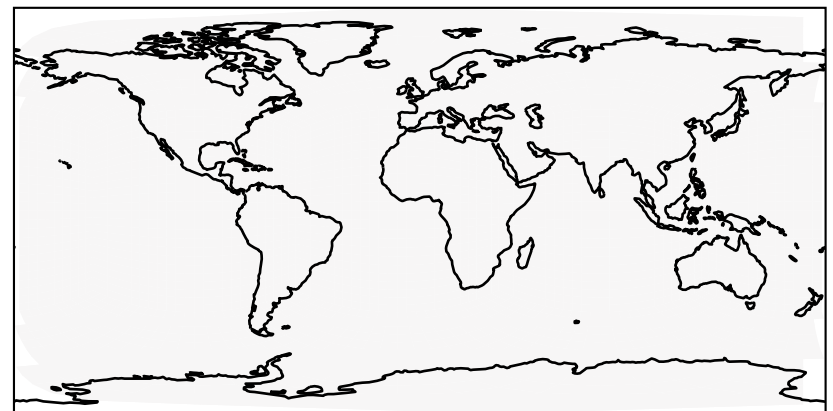
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



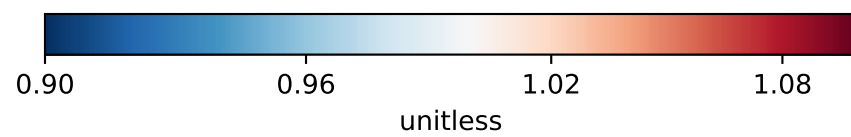
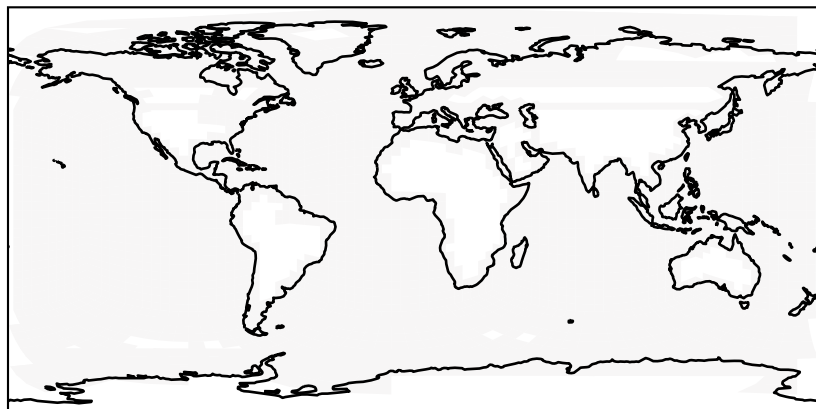
Difference  
Dev - Ref, Dynamic Range



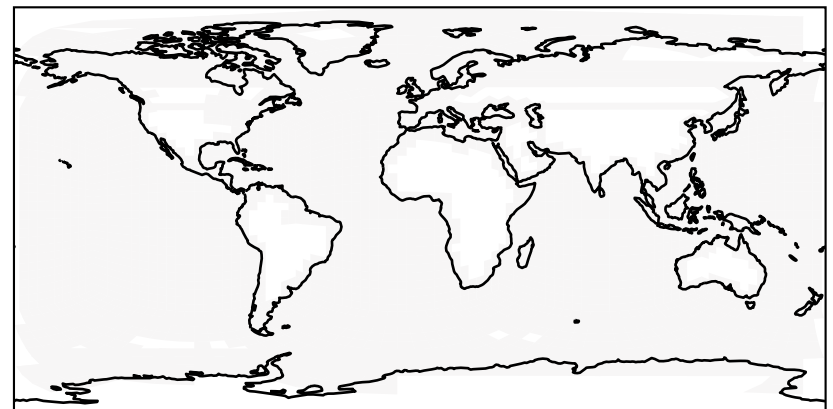
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

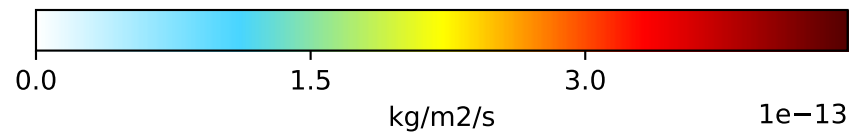
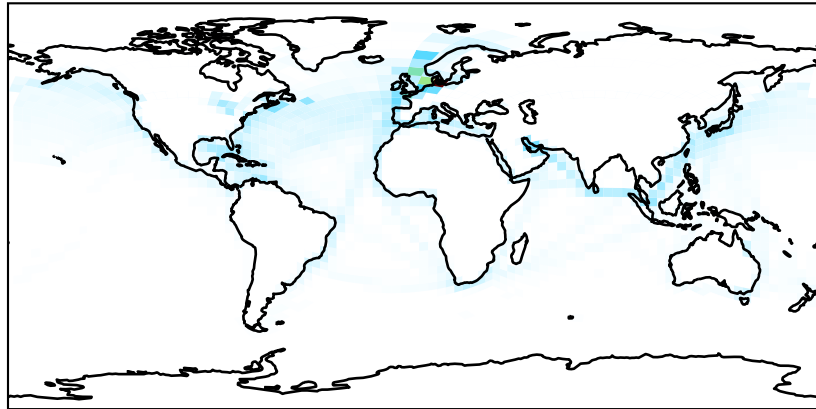


Ratio  
Dev/Ref, Fixed Range

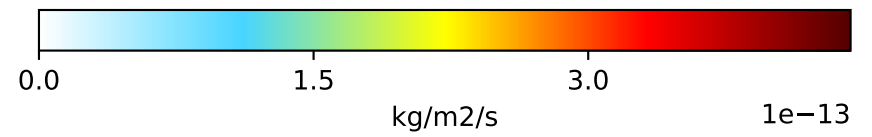
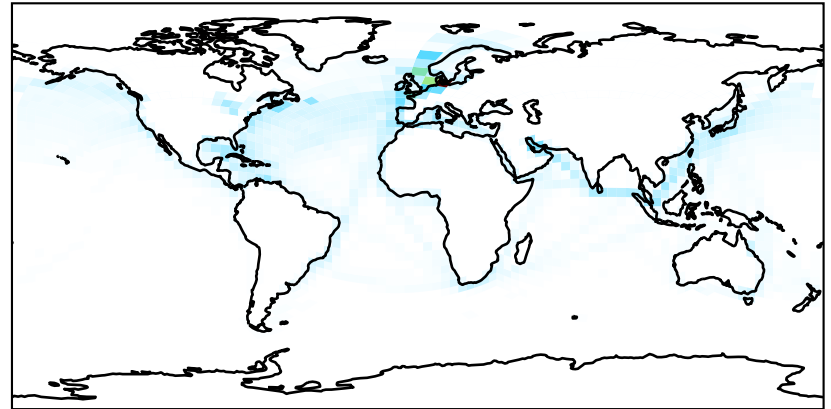


# EmisBENZ\_Ship

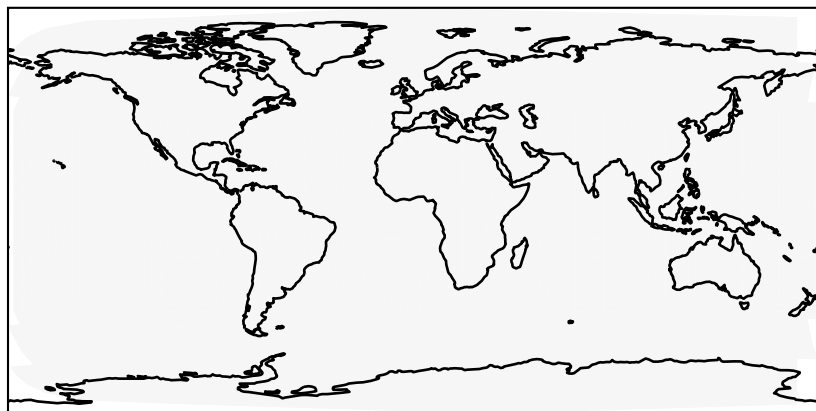
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



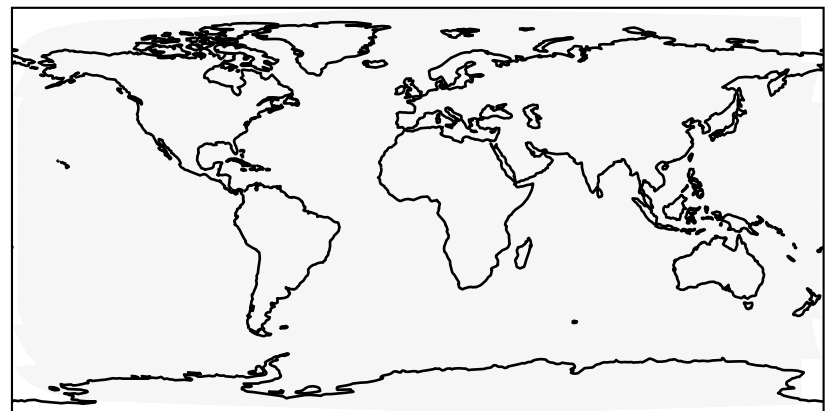
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



Difference  
Dev - Ref, Dynamic Range



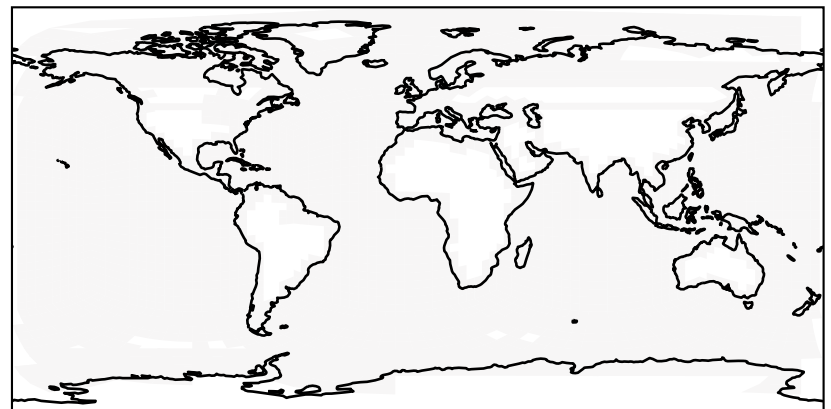
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

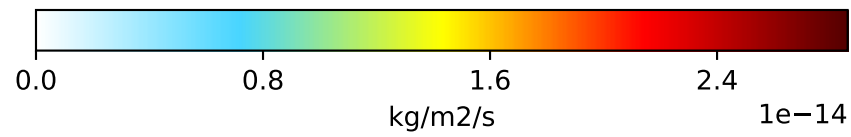
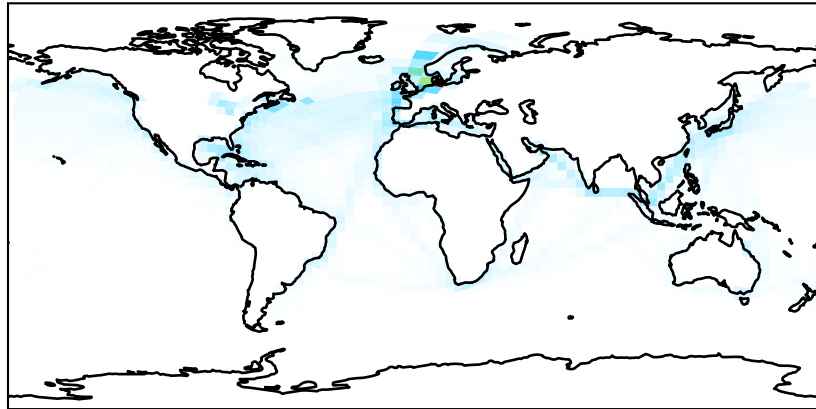


Ratio  
Dev/Ref, Fixed Range

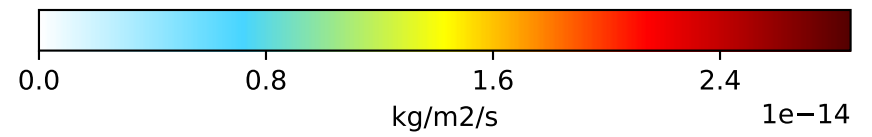
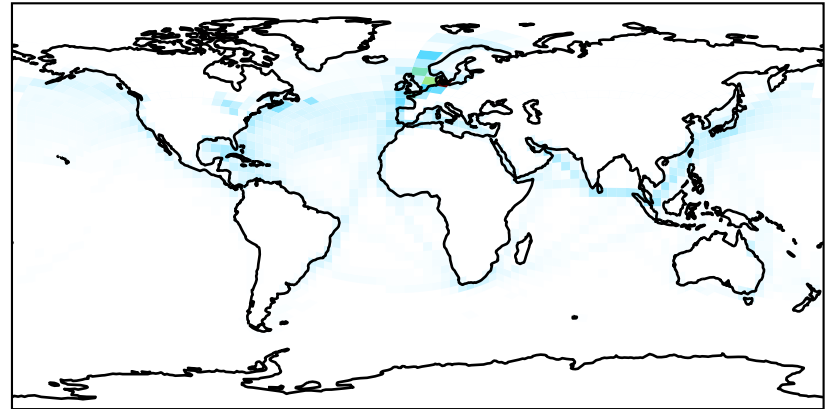


# EmisC2H2\_Ship

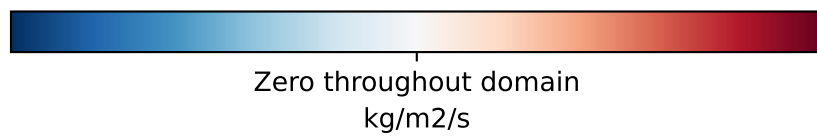
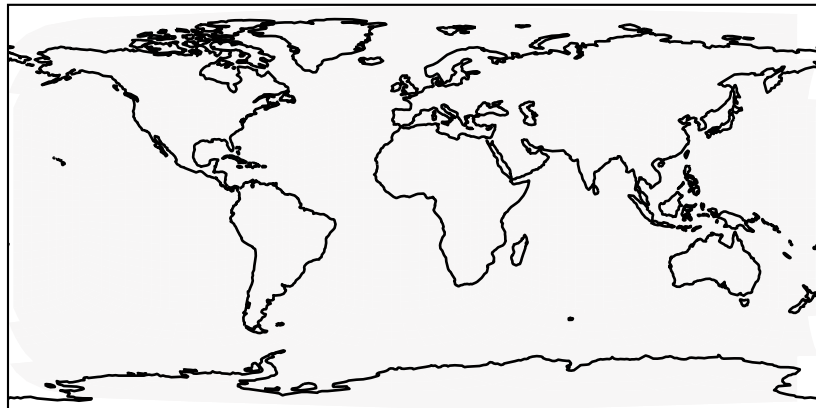
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



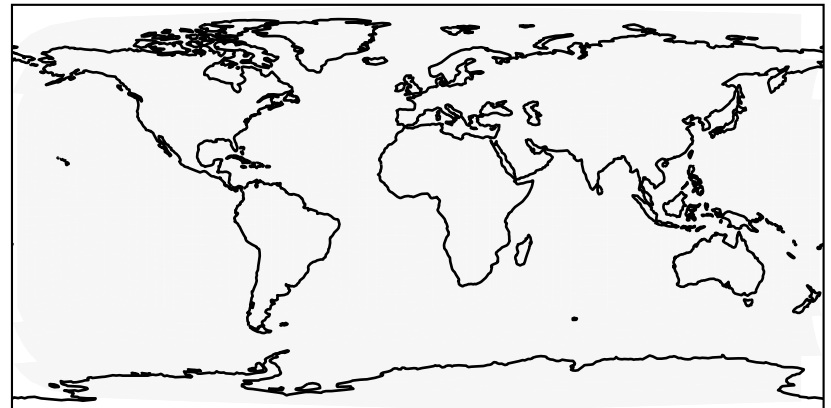
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



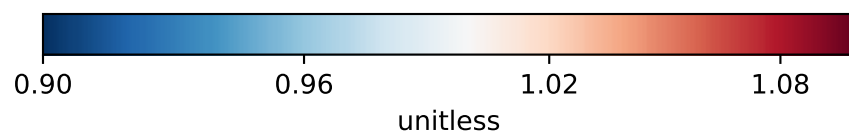
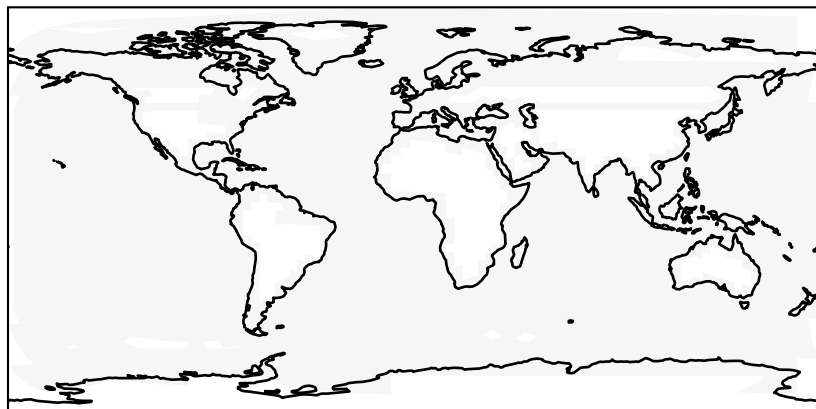
Difference  
Dev - Ref, Dynamic Range



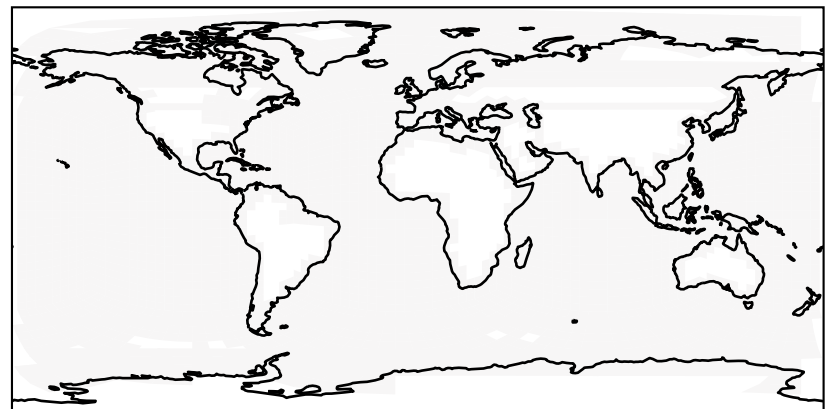
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

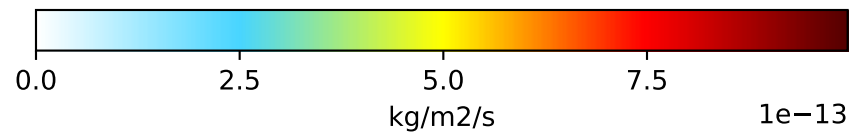
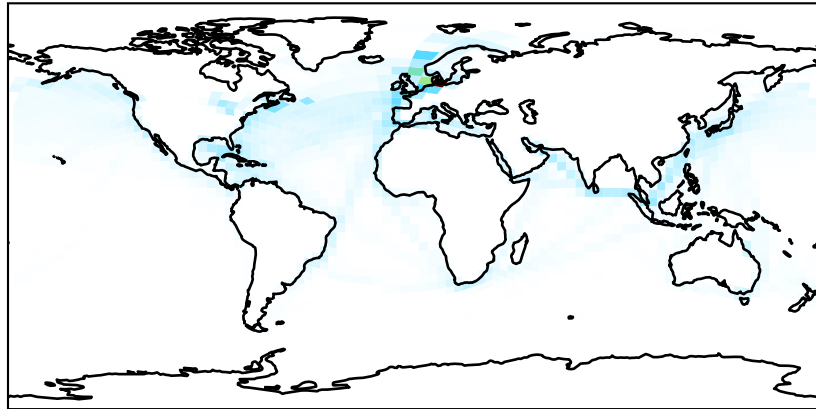


Ratio  
Dev/Ref, Fixed Range

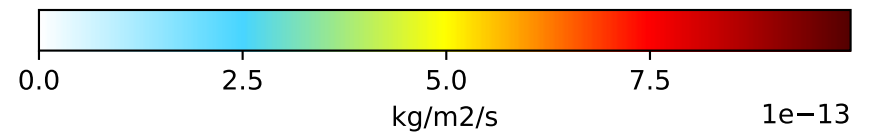
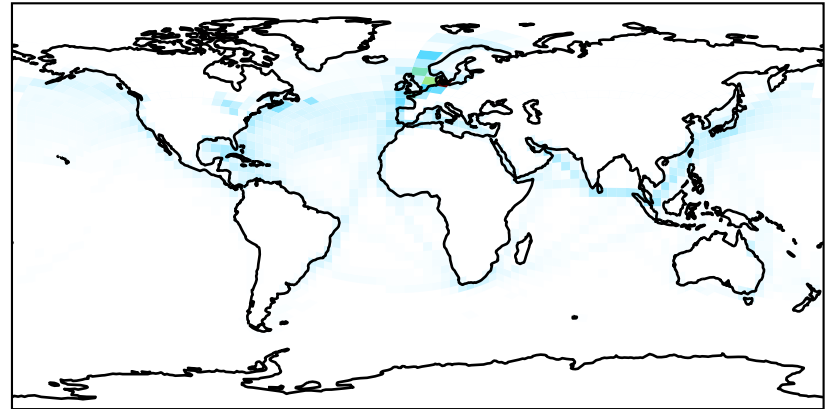


# EmisC2H4\_Ship

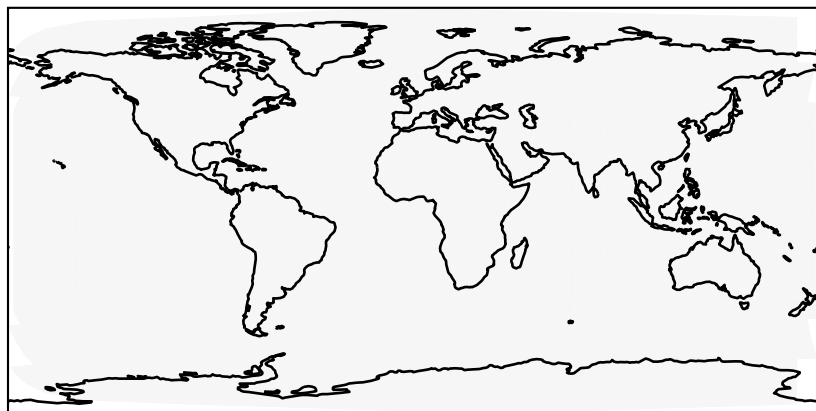
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



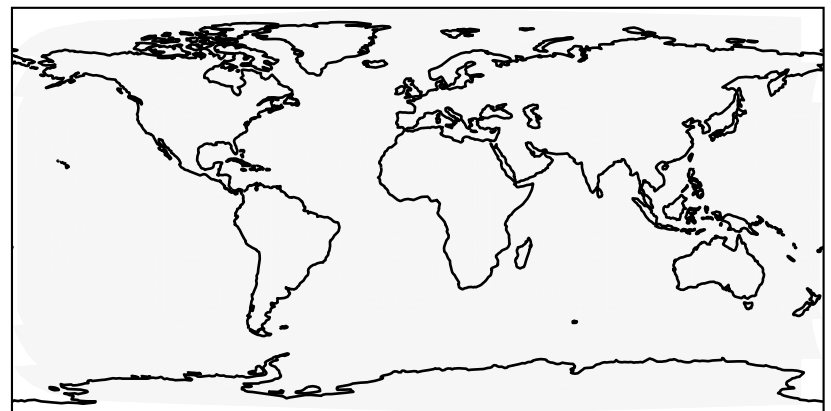
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



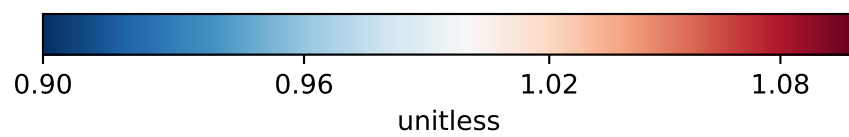
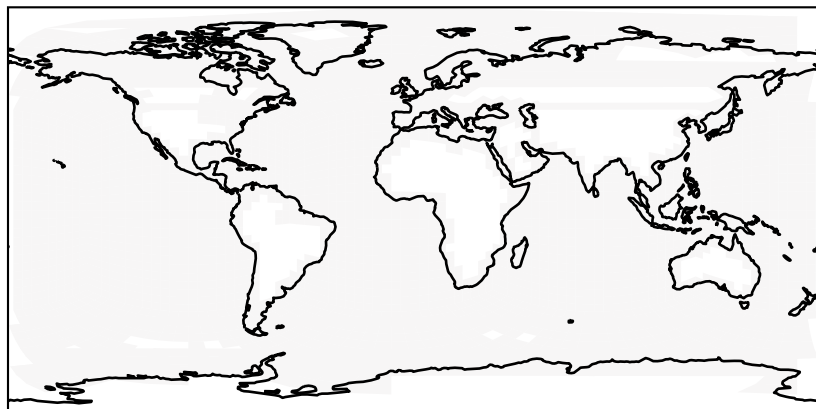
Difference  
Dev - Ref, Dynamic Range



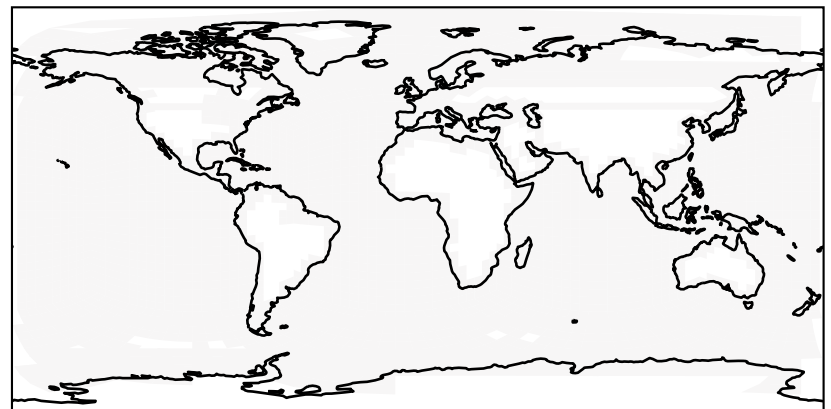
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

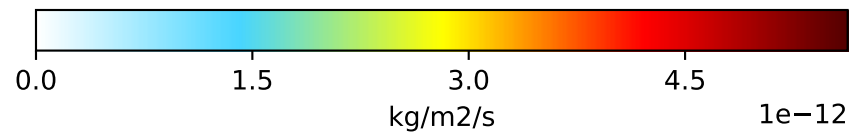
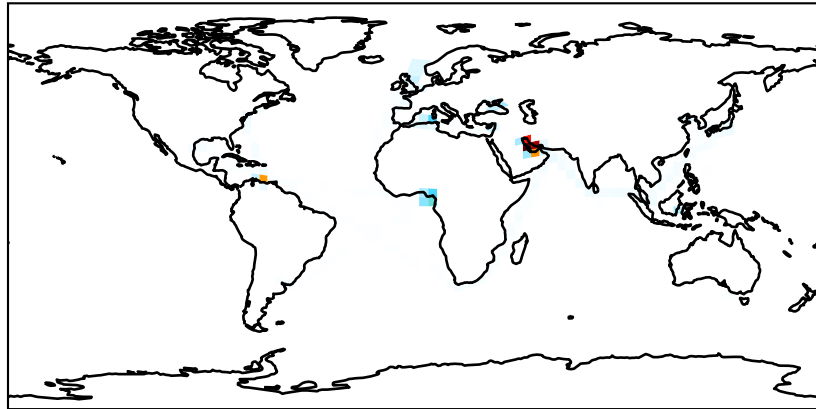


Ratio  
Dev/Ref, Fixed Range

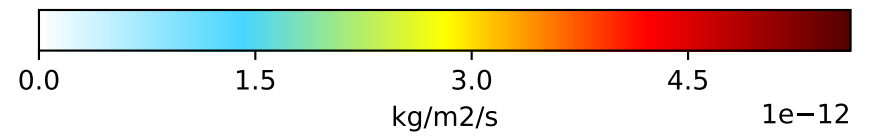
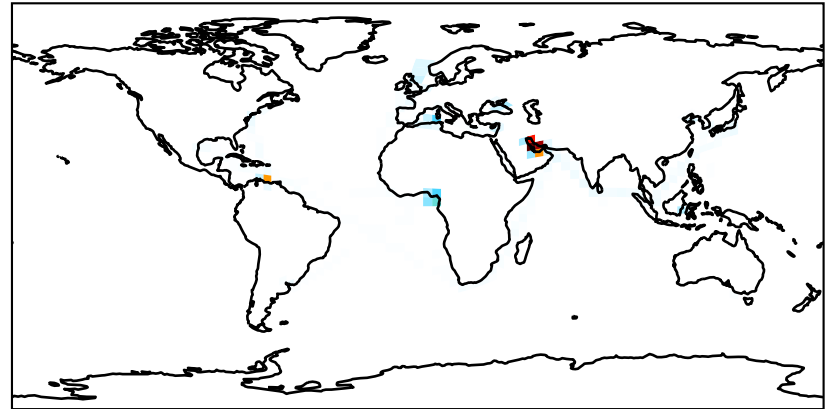


# EmisC2H6\_Ship

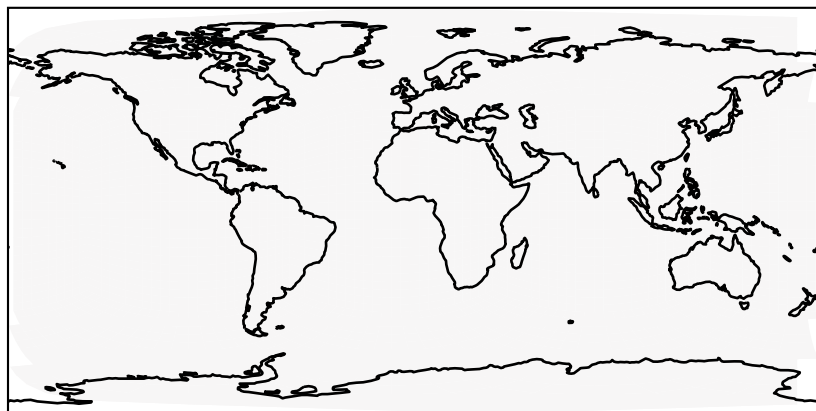
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



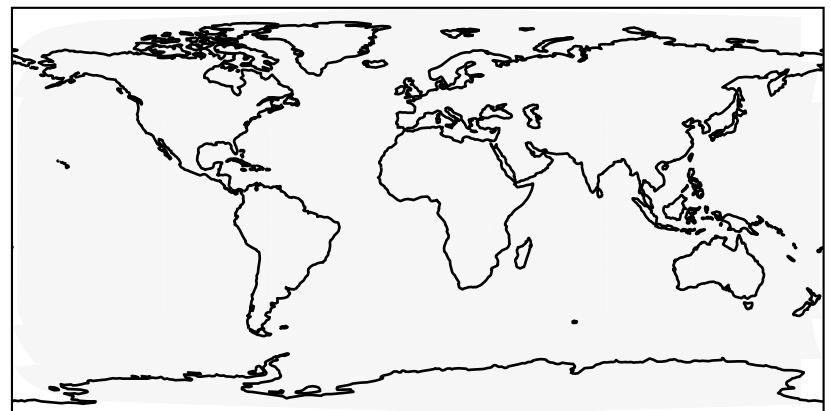
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



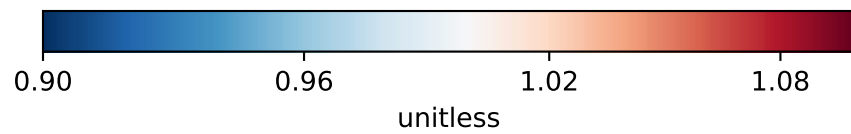
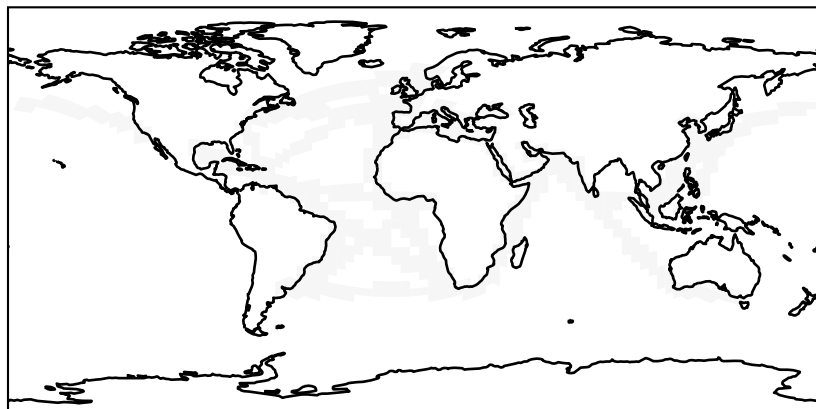
Difference  
Dev - Ref, Dynamic Range



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



Ratio  
Dev/Ref, Dynamic Range



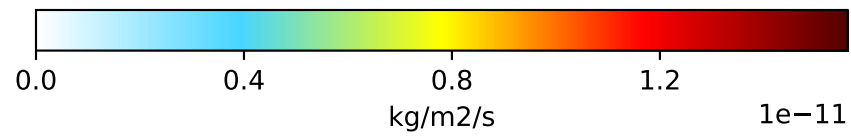
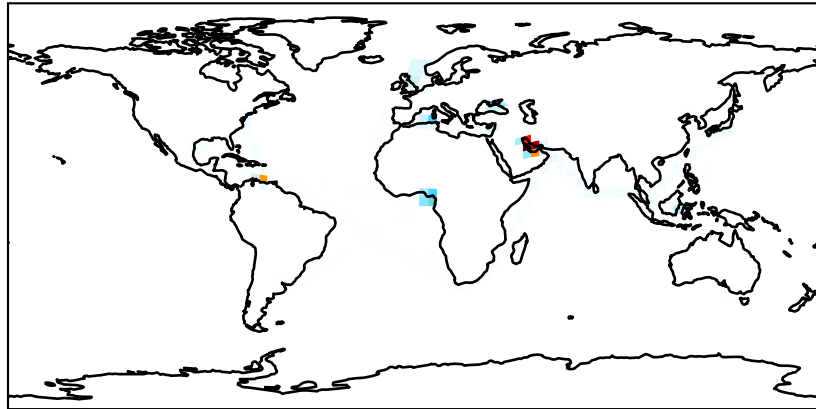
Ratio  
Dev/Ref, Fixed Range



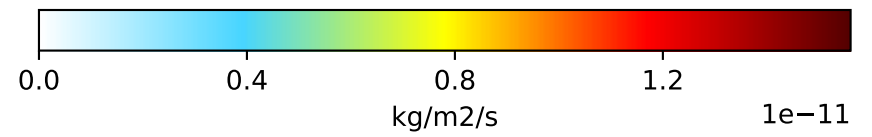
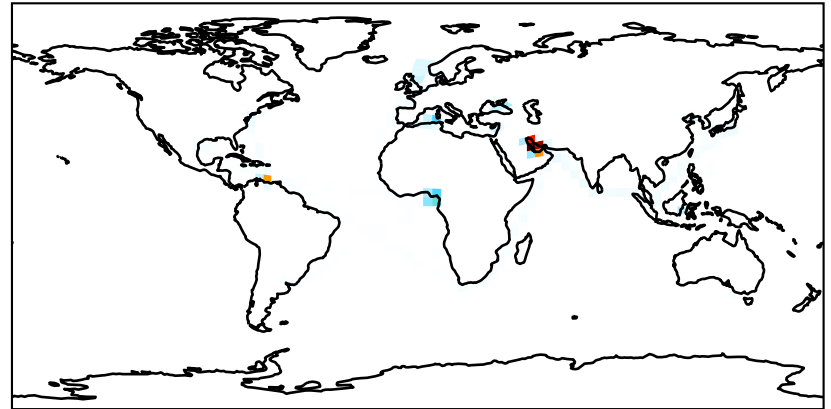


# EmisC3H8\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



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



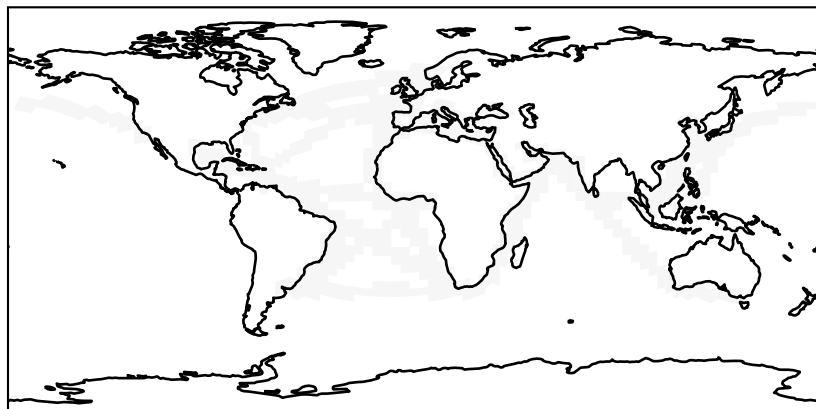
Difference  
Dev - Ref, Dynamic Range



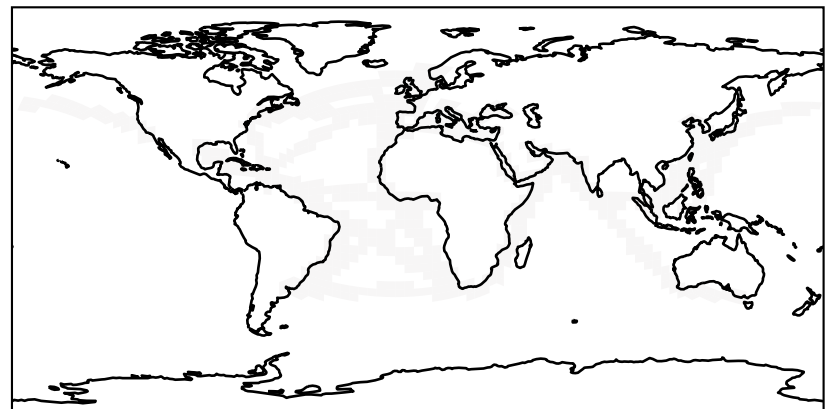
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

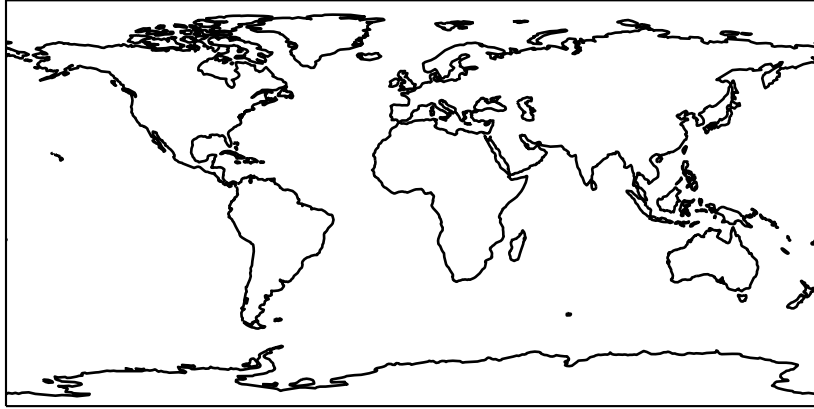


Ratio  
Dev/Ref, Fixed Range



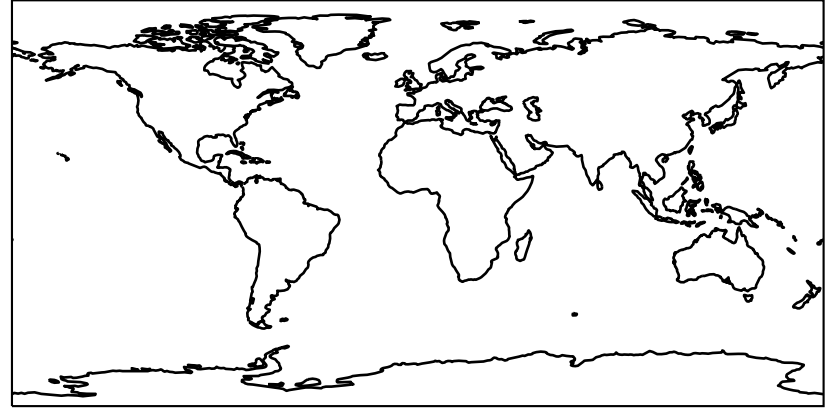
# EmisCH2O\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



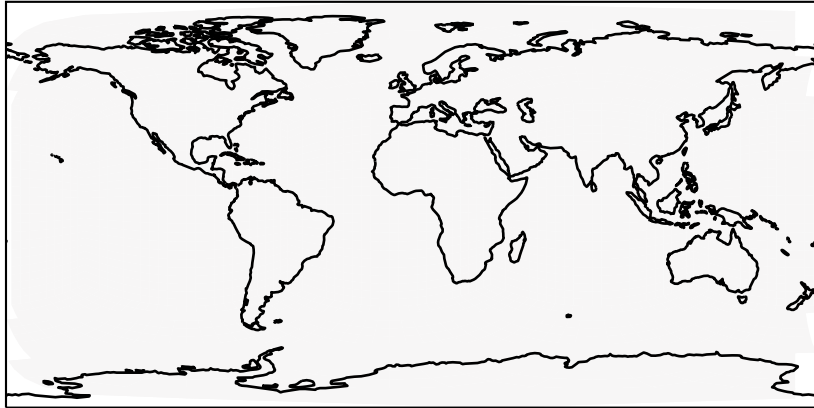
Zero throughout domain  
kg/m2/s

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



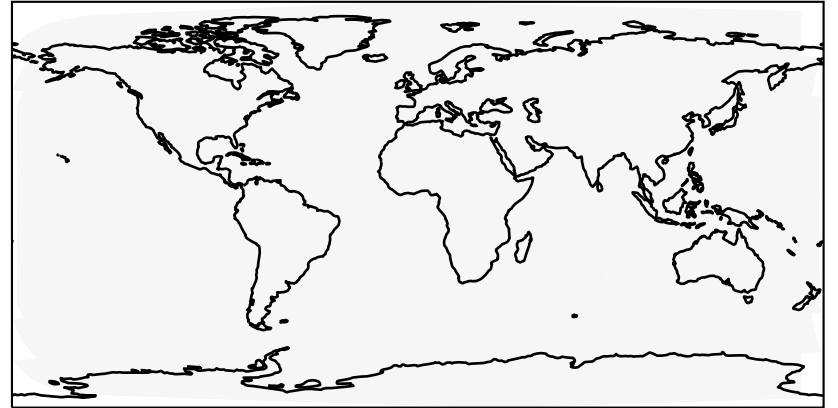
Zero throughout domain  
kg/m2/s

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

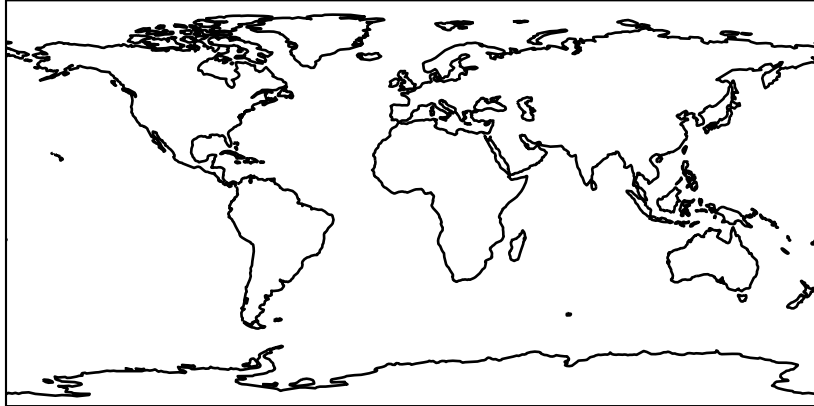
Ratio  
Dev/Ref, Fixed Range



Undefined throughout domain  
unitless

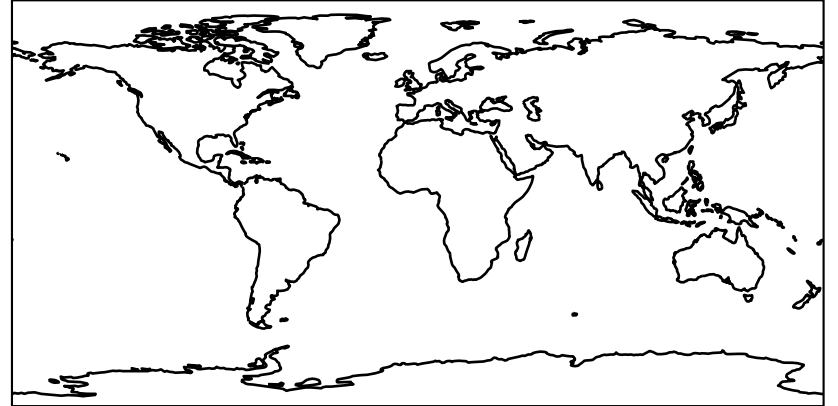
# EmisCO2\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



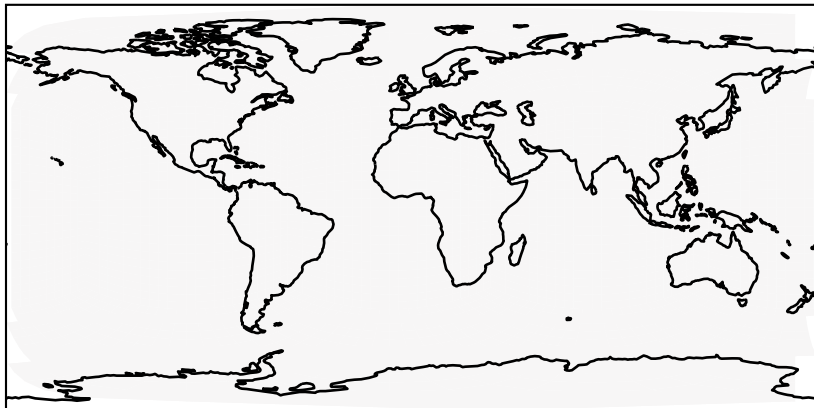
Zero throughout domain  
kg/m2/s

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



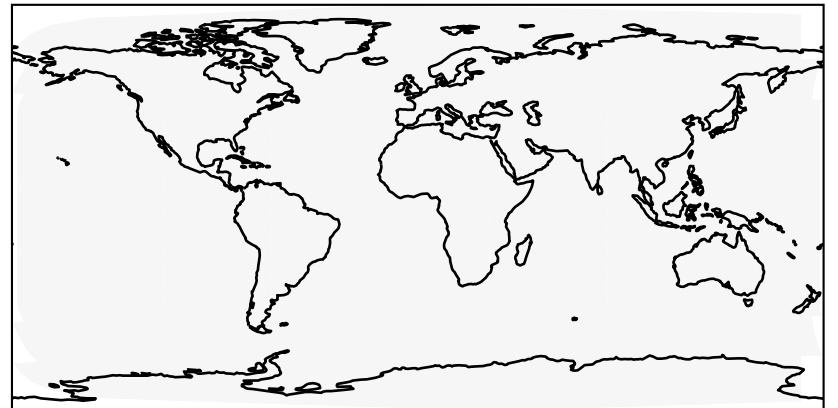
Zero throughout domain  
kg/m2/s

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

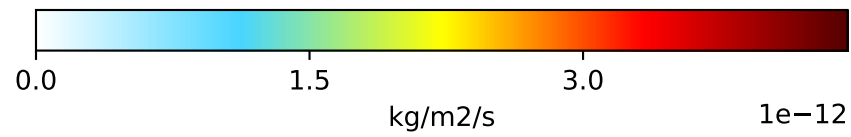
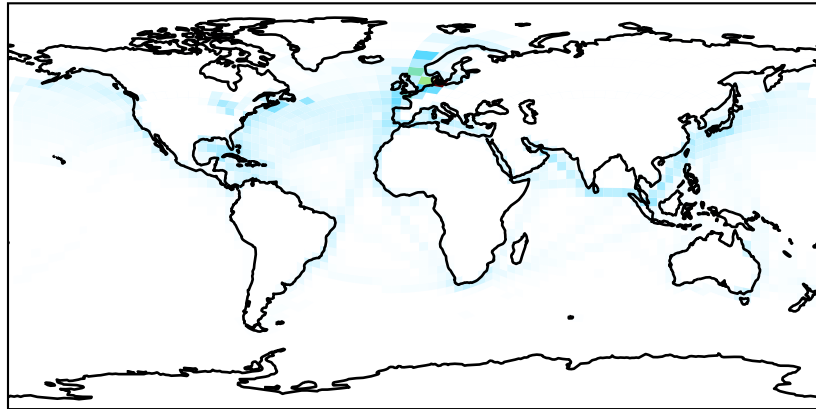
Ratio  
Dev/Ref, Fixed Range



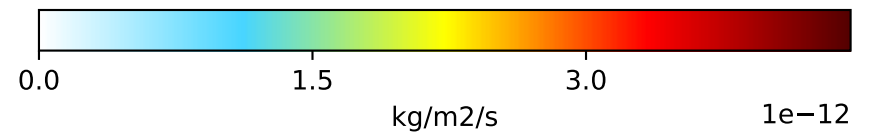
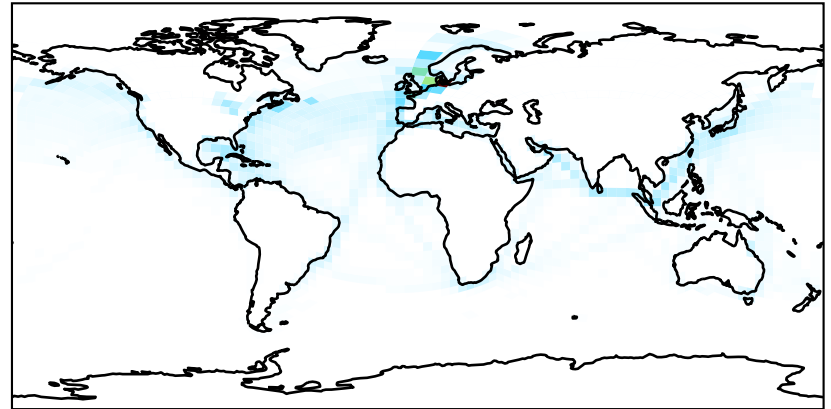
Undefined throughout domain  
unitless

# EmisCO\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



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



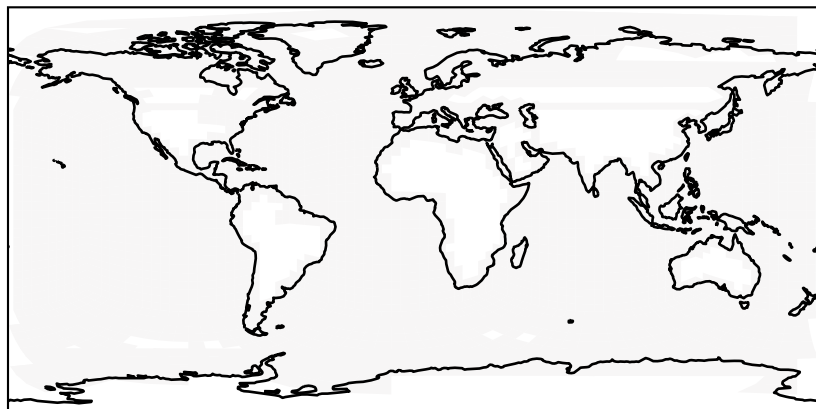
Difference  
Dev - Ref, Dynamic Range



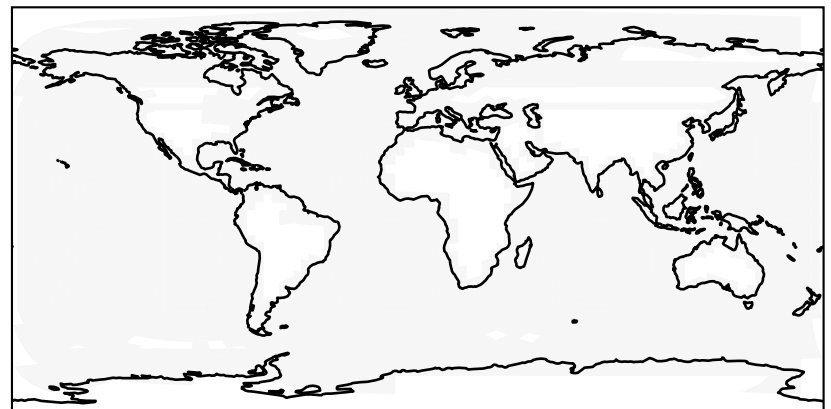
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

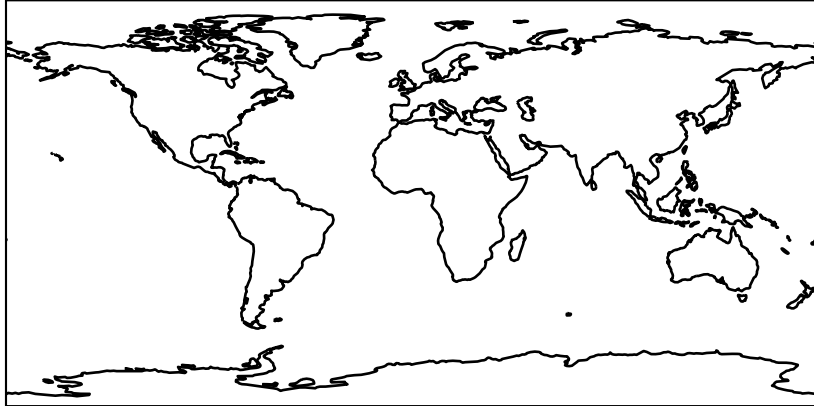


Ratio  
Dev/Ref, Fixed Range



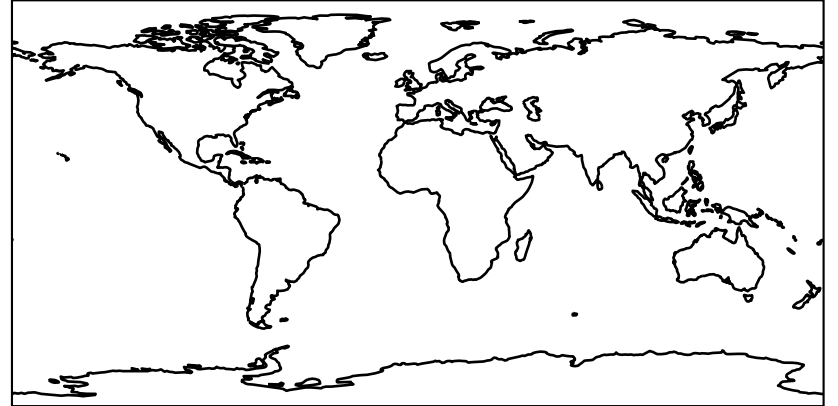
# EmisEOH\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



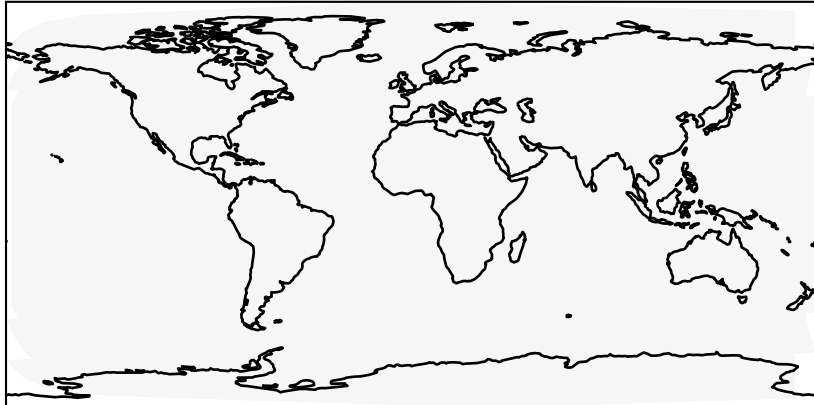
Zero throughout domain  
kg/m2/s

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



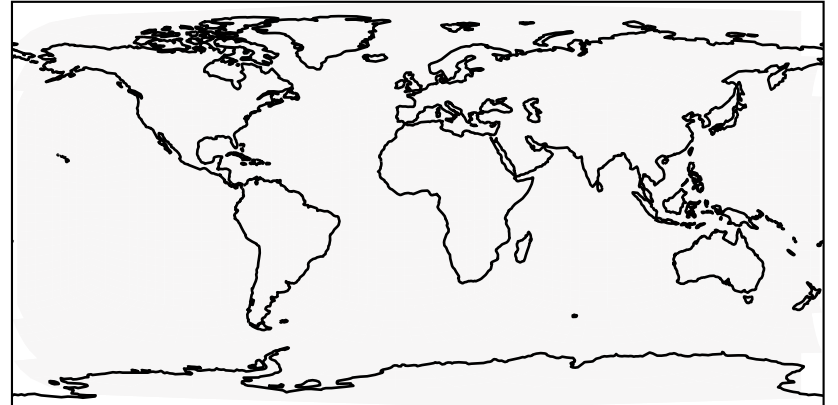
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



Zero throughout domain  
kg/m2/s

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



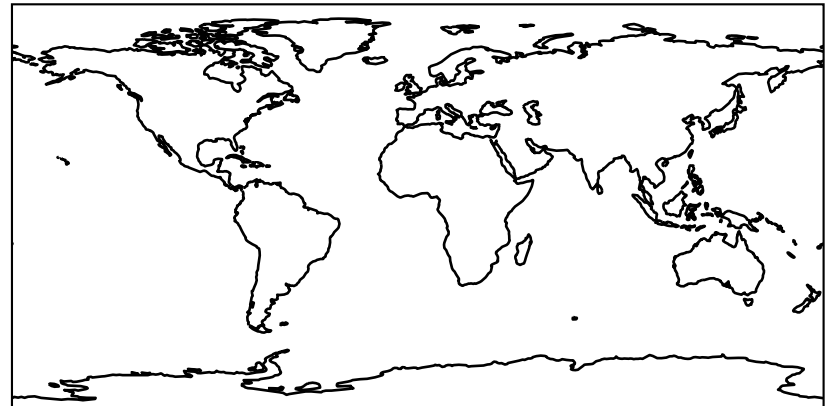
Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughout domain  
unitless

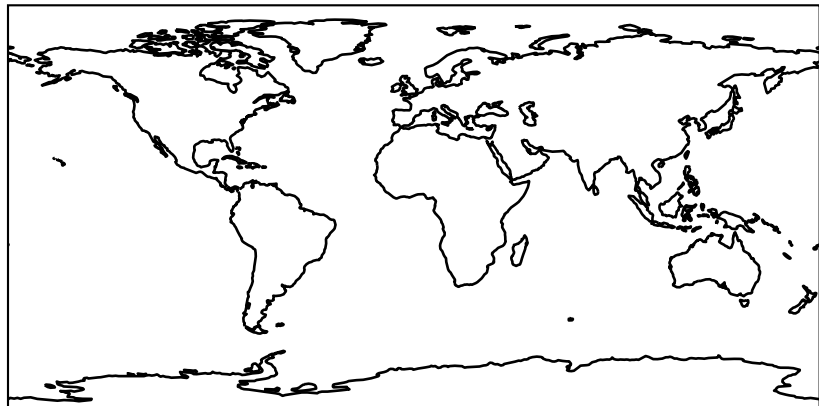
Ratio  
Dev/Ref, Fixed Range



Undefined throughout domain  
unitless

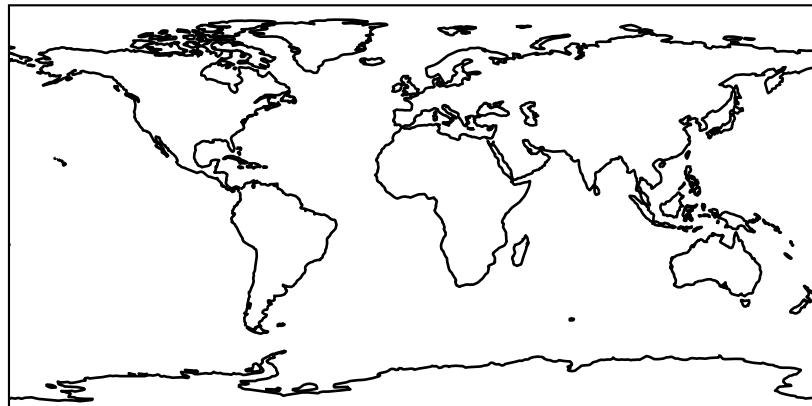
# EmisHCOOH\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



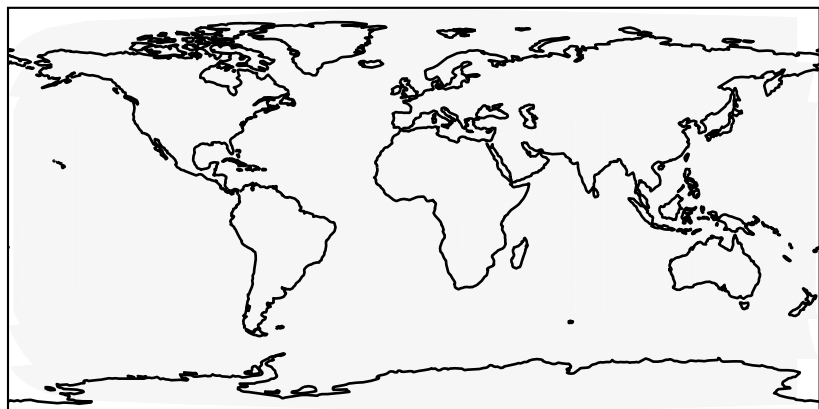
Zero throughout domain  
kg/m2/s

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



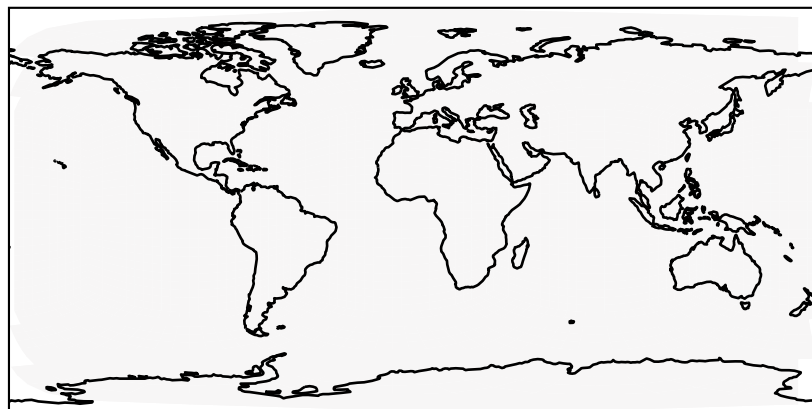
Zero throughout domain  
kg/m2/s

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

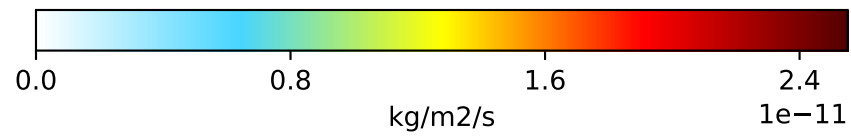
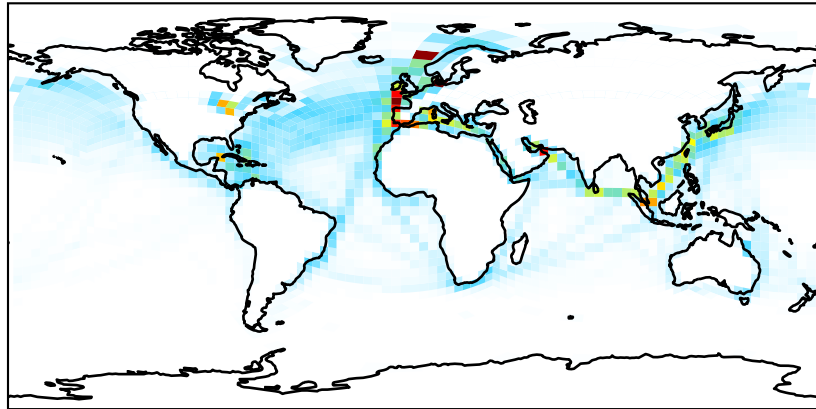
Ratio  
Dev/Ref, Fixed Range



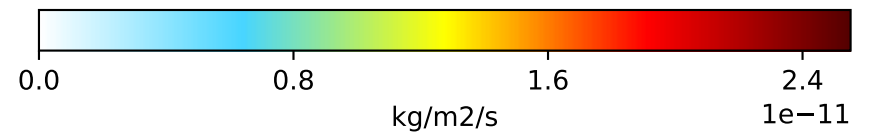
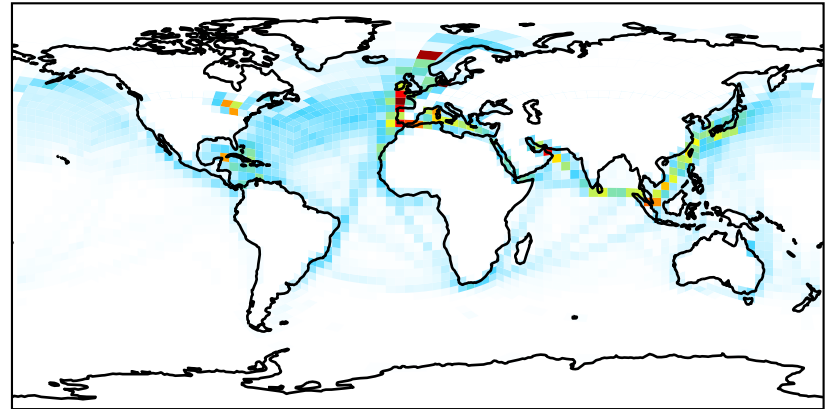
Undefined throughout domain  
unitless

# EmisHNO3\_Ship

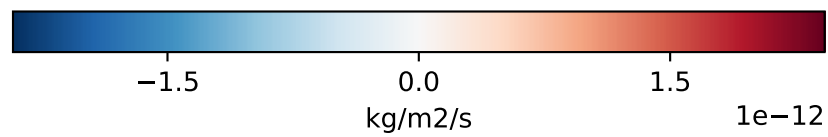
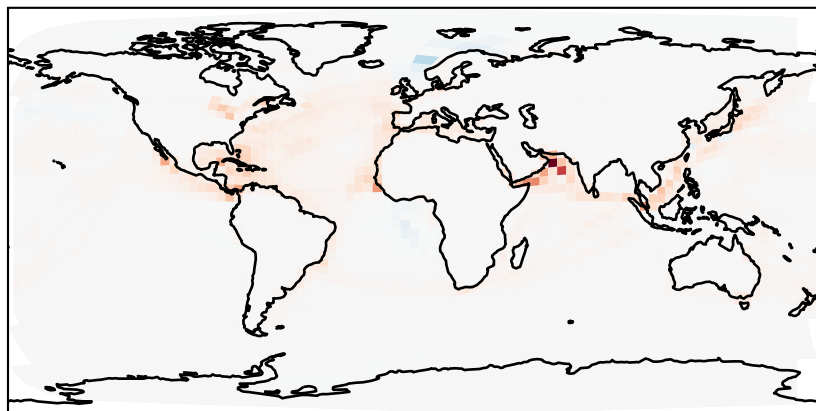
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



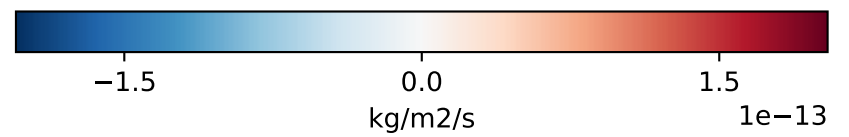
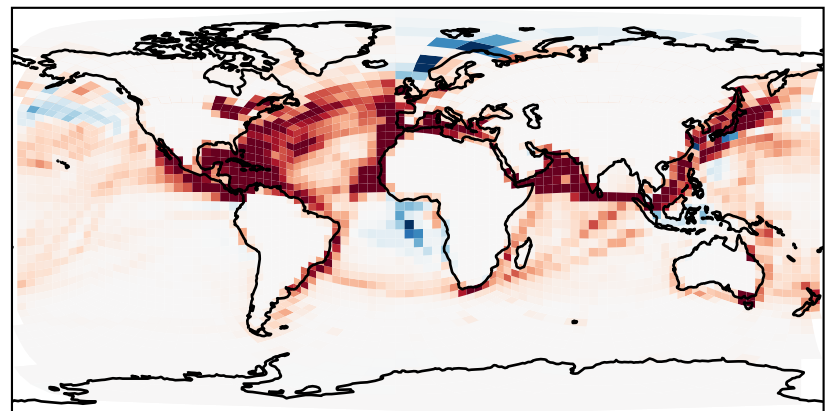
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



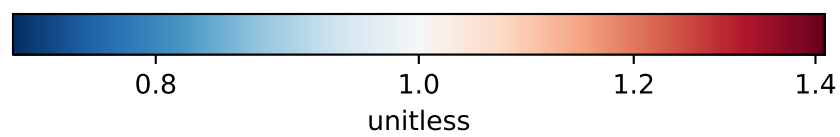
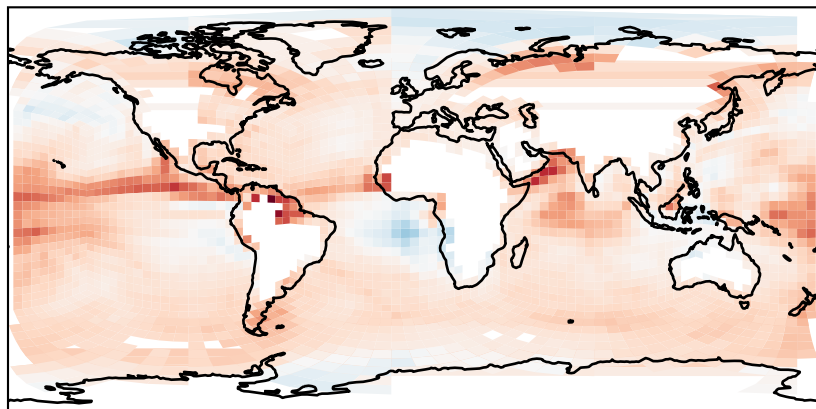
Difference  
Dev - Ref, Dynamic Range



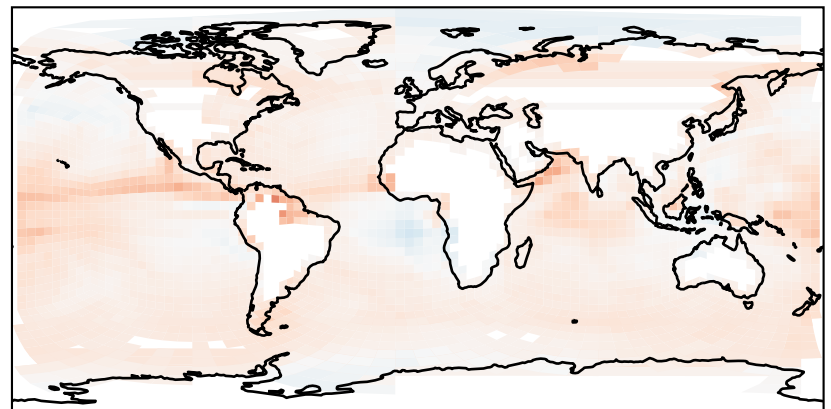
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

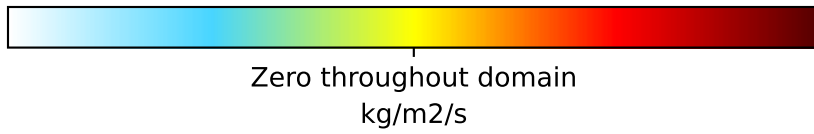
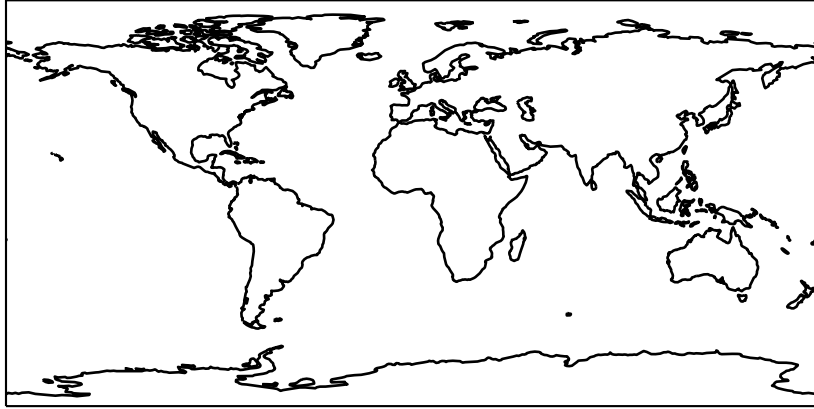


Ratio  
Dev/Ref, Fixed Range

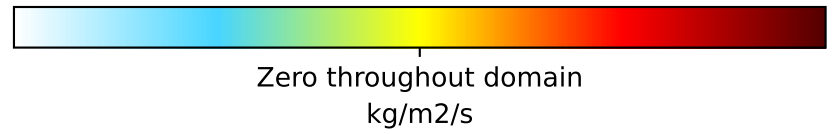
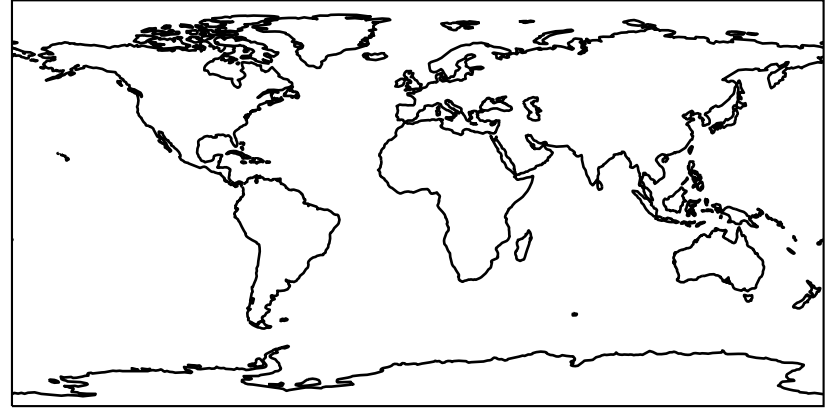


# EmisMEK\_Ship

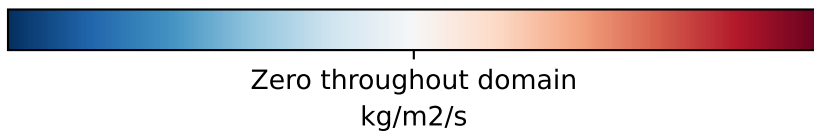
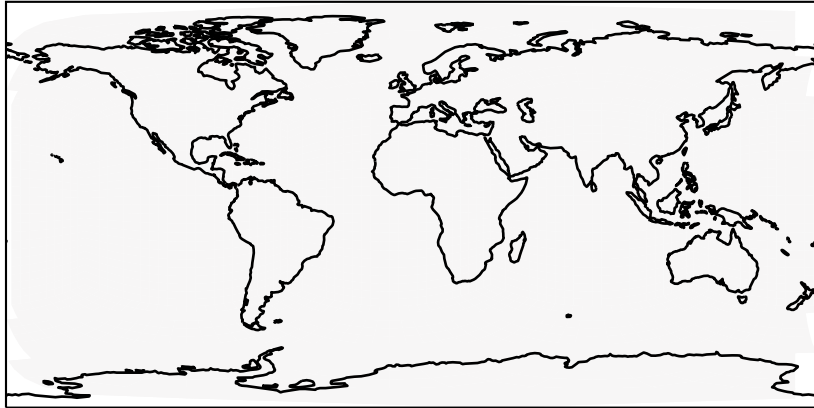
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



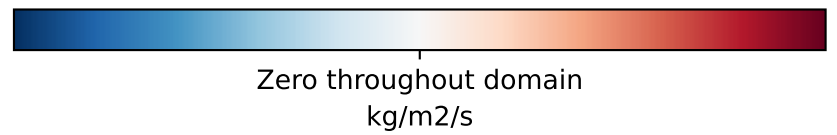
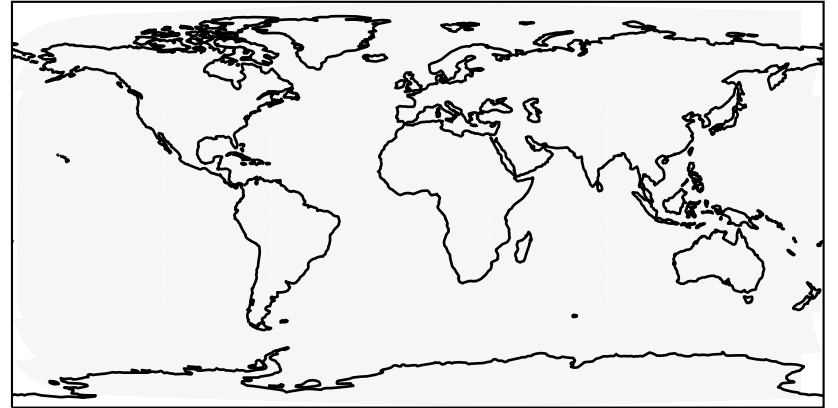
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



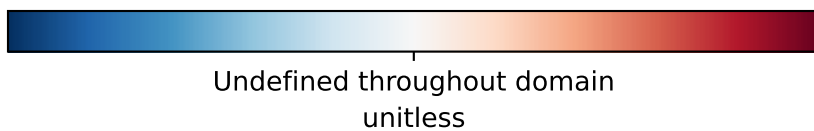
Difference  
Dev - Ref, Dynamic Range



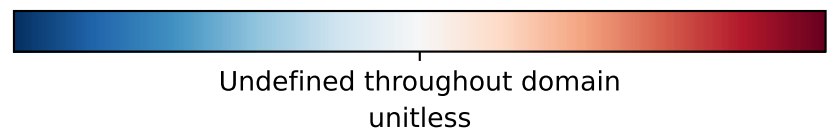
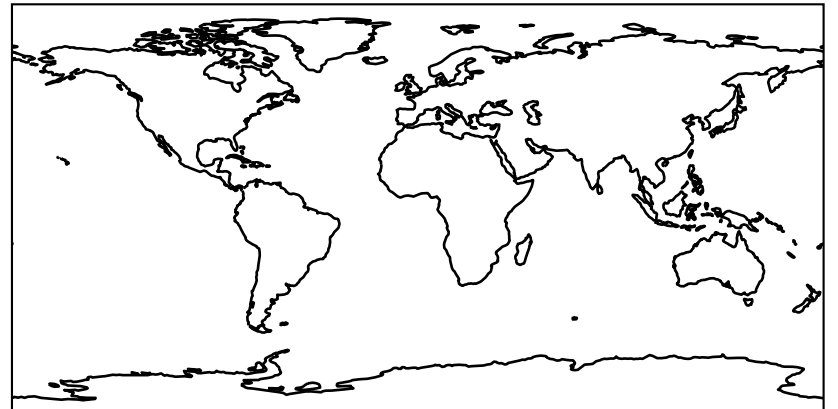
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



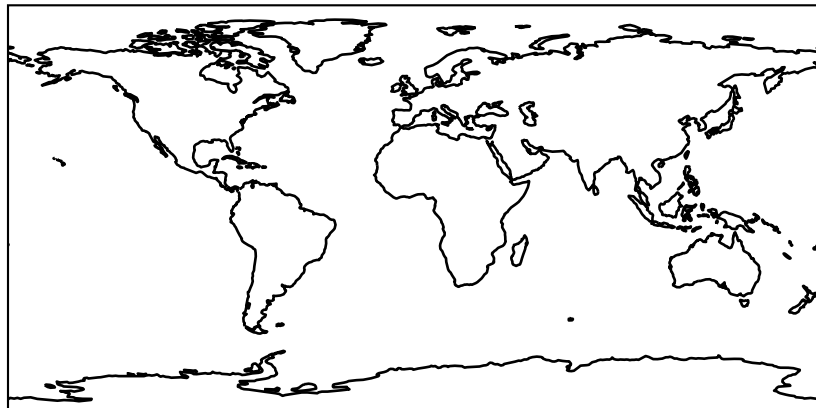
Ratio  
Dev/Ref, Fixed Range





# EmisMOH\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



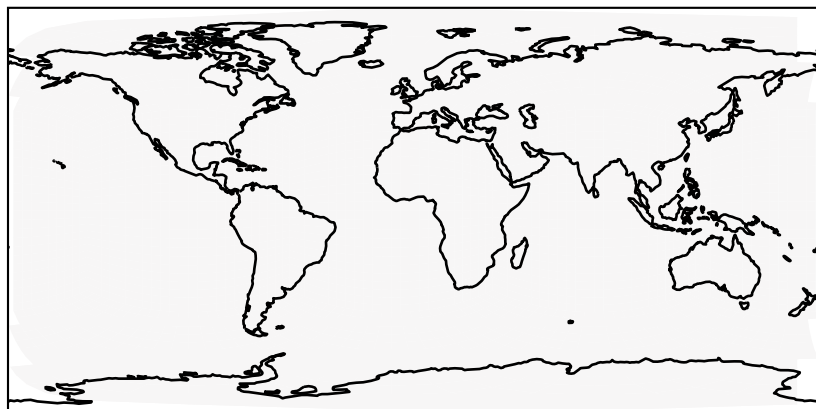
Zero throughout domain  
kg/m2/s

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



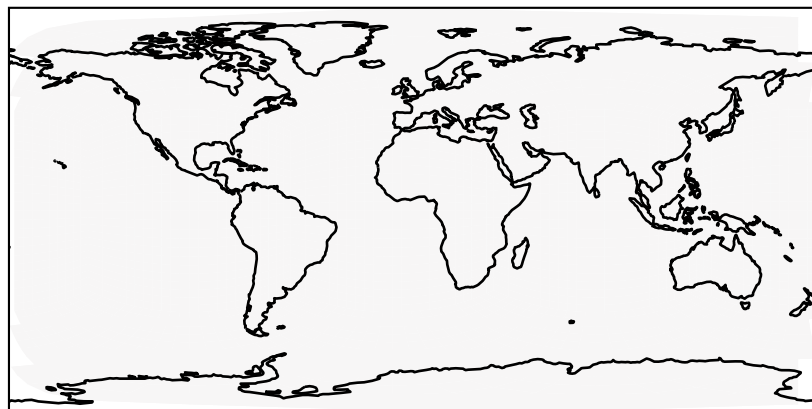
Zero throughout domain  
kg/m2/s

Difference  
Dev - Ref, Dynamic Range



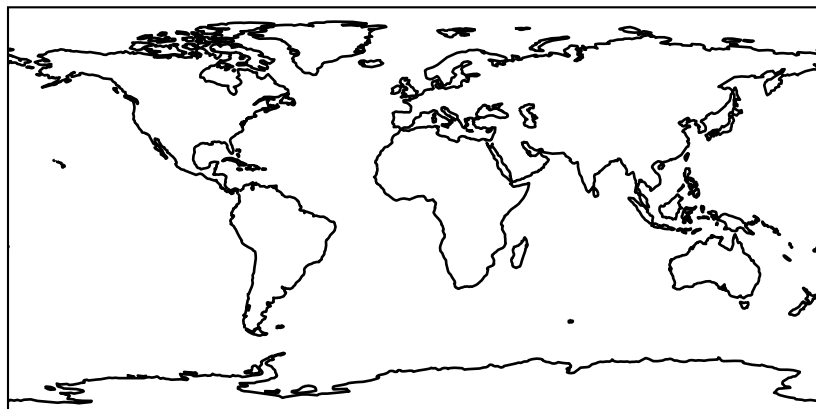
Zero throughout domain  
kg/m2/s

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



Zero throughout domain  
kg/m2/s

Ratio  
Dev/Ref, Dynamic Range



Undefined throughout domain  
unitless

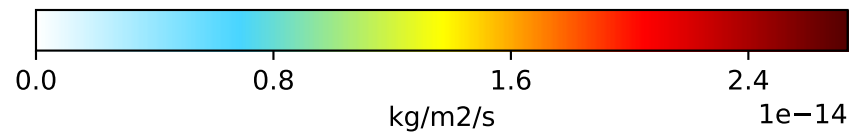
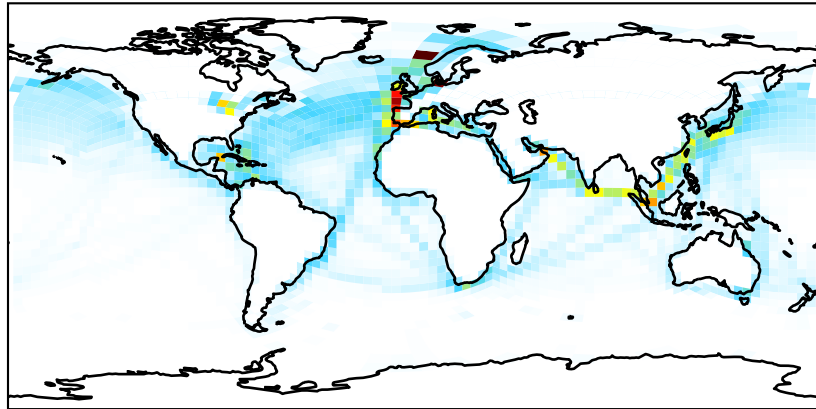
Ratio  
Dev/Ref, Fixed Range



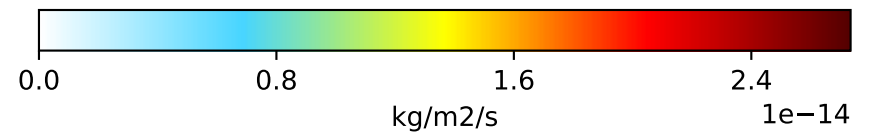
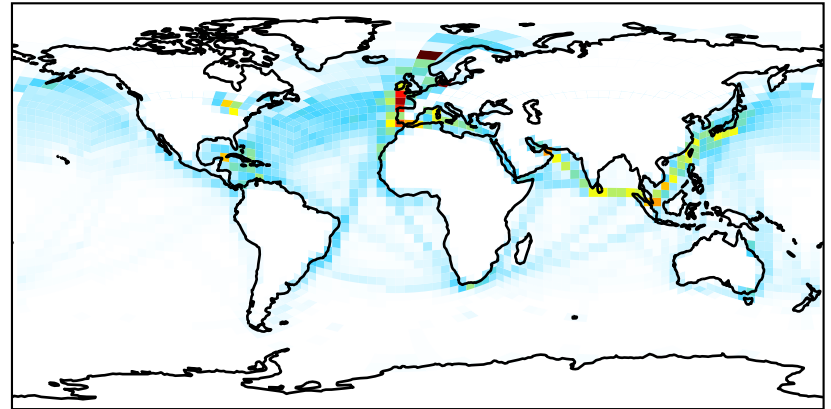
Undefined throughout domain  
unitless

# EmisNH3\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



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



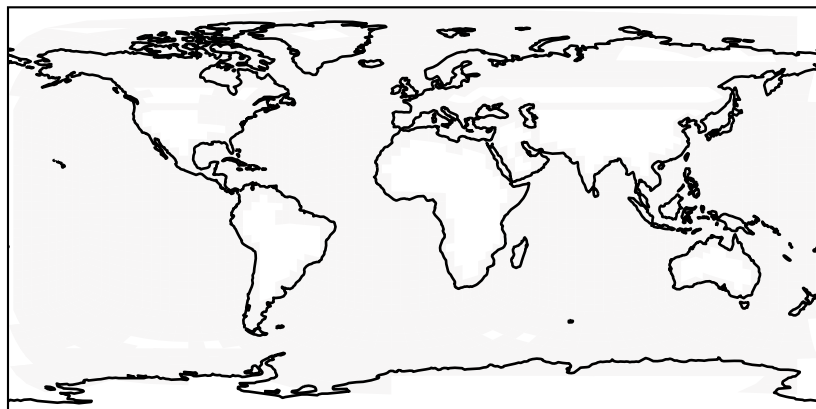
Difference  
Dev - Ref, Dynamic Range



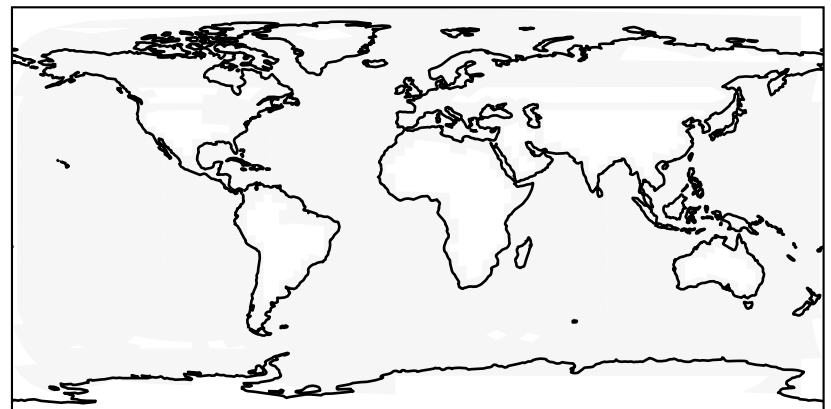
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

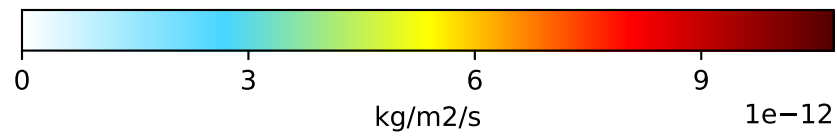
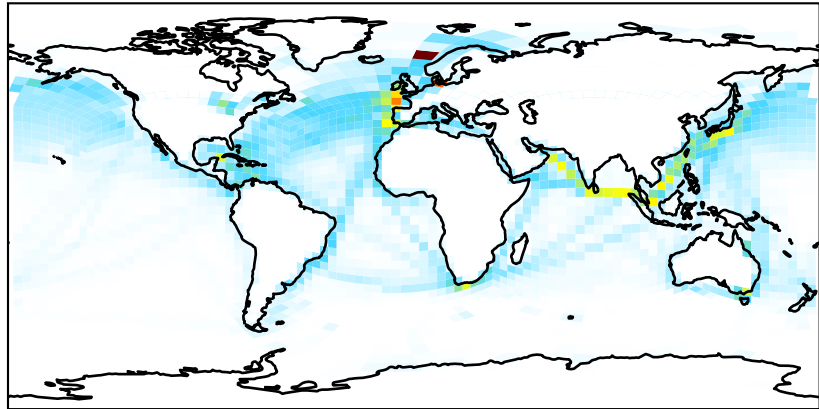


Ratio  
Dev/Ref, Fixed Range

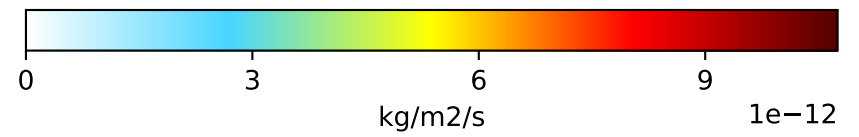
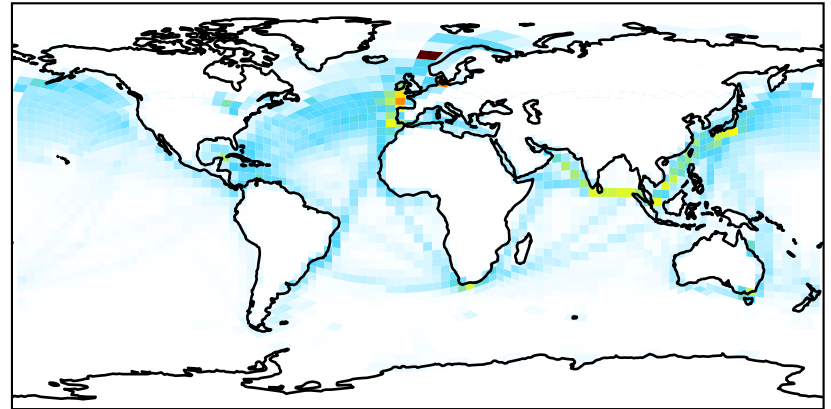


# EmisNO2\_Ship

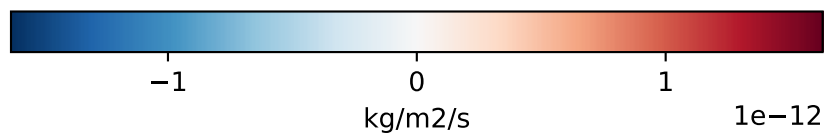
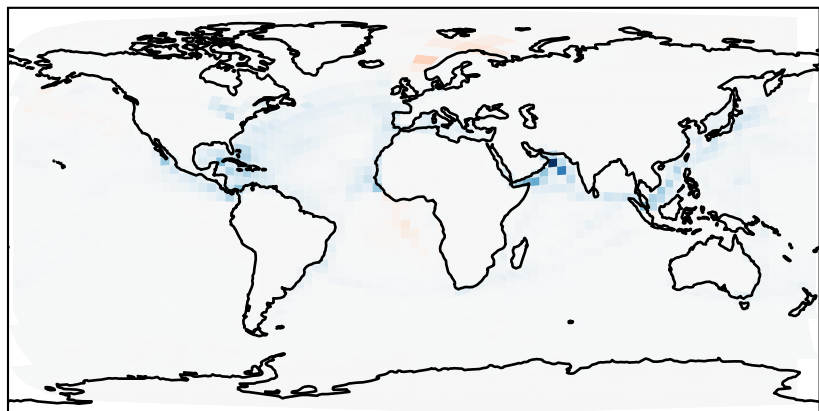
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



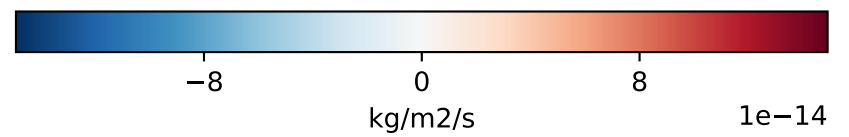
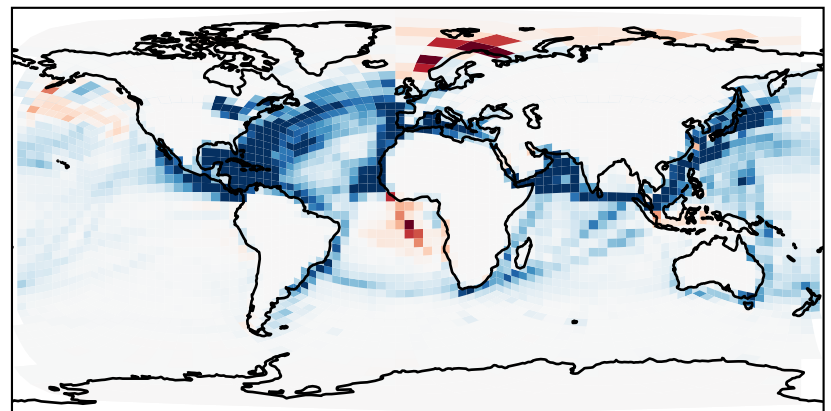
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



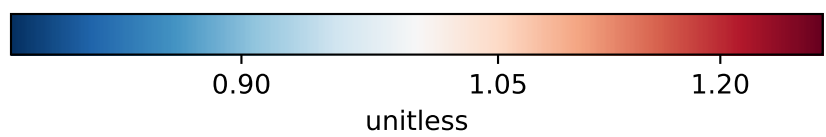
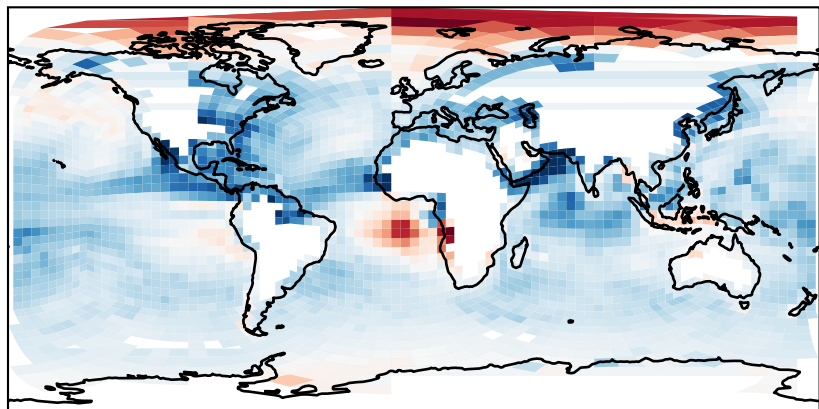
Difference  
Dev - Ref, Dynamic Range



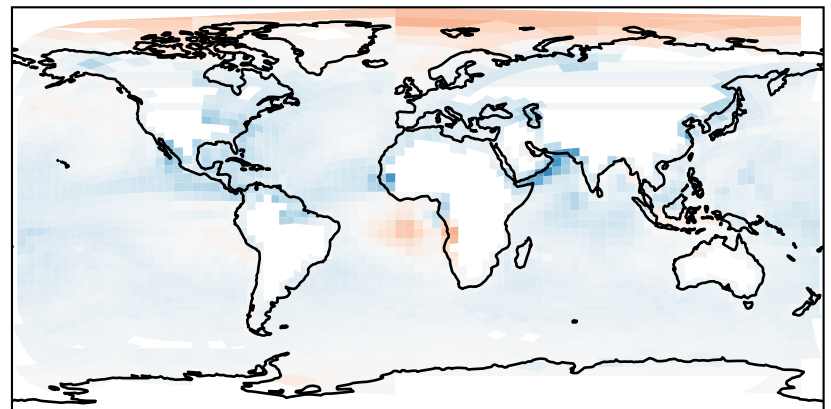
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

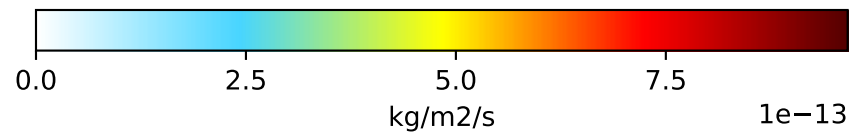
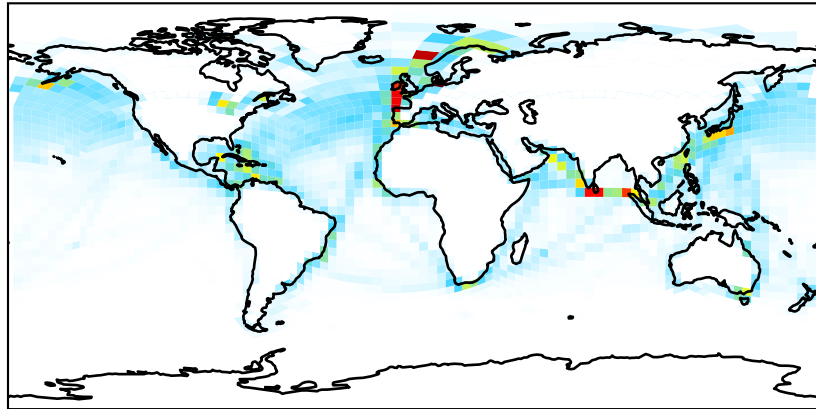


Ratio  
Dev/Ref, Fixed Range

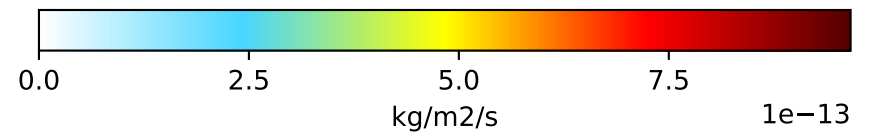
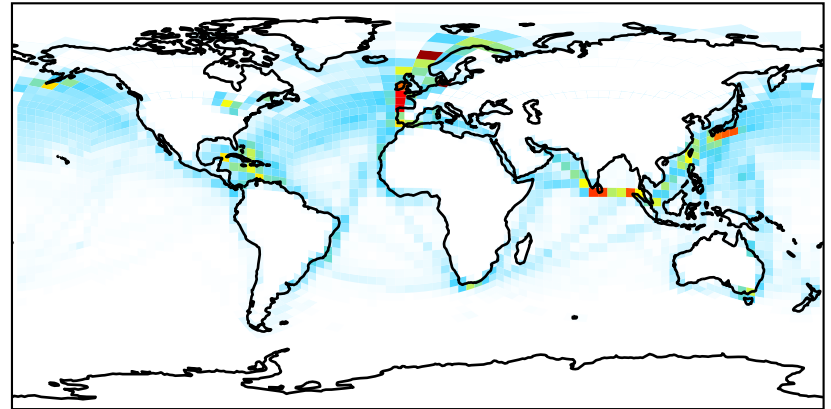


# EmisNO\_Ship

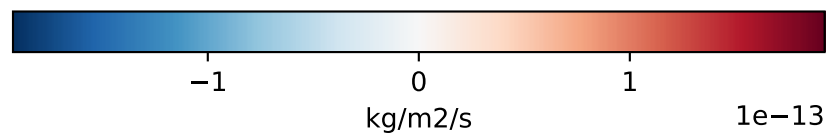
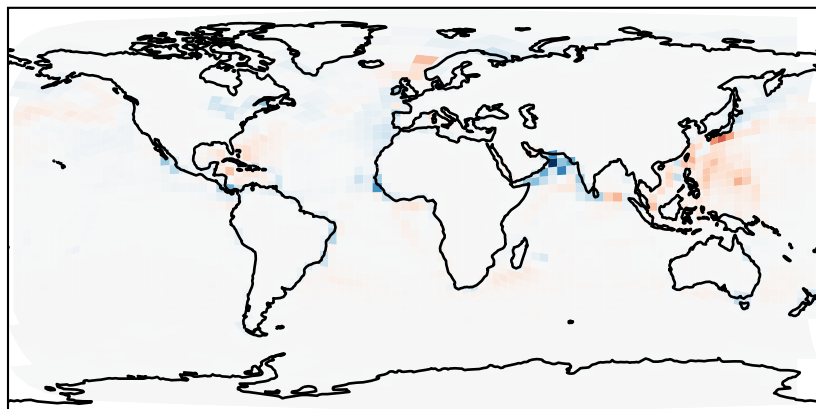
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



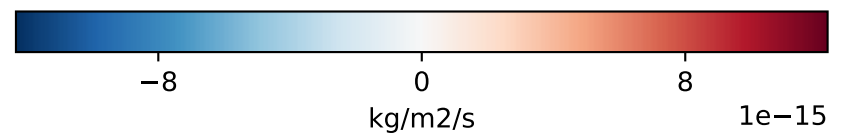
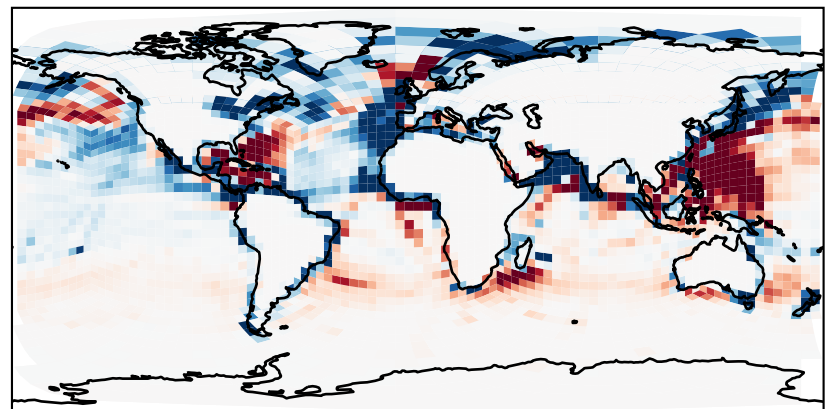
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



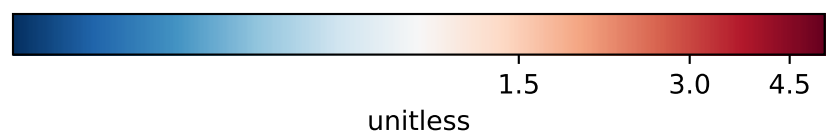
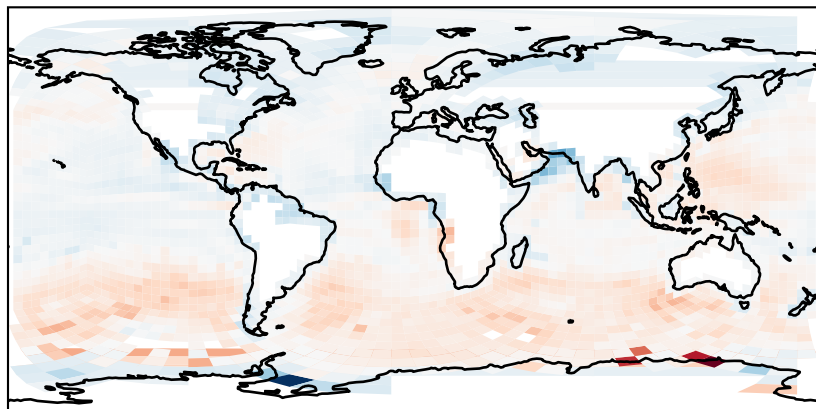
Difference  
Dev - Ref, Dynamic Range



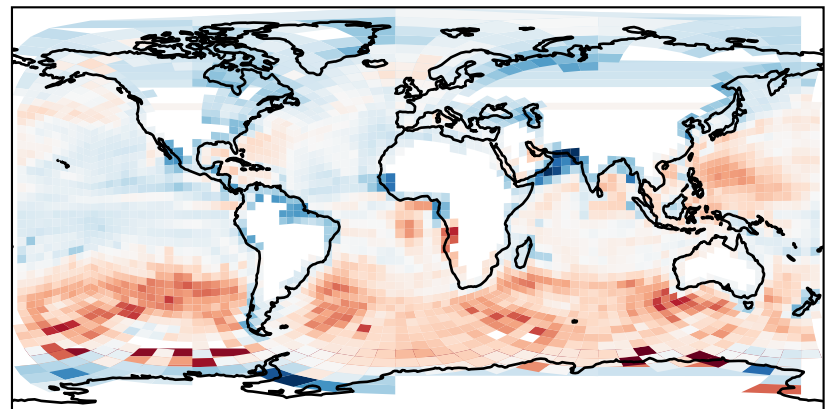
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

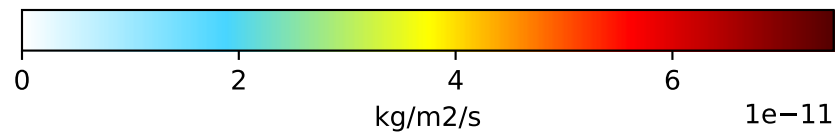
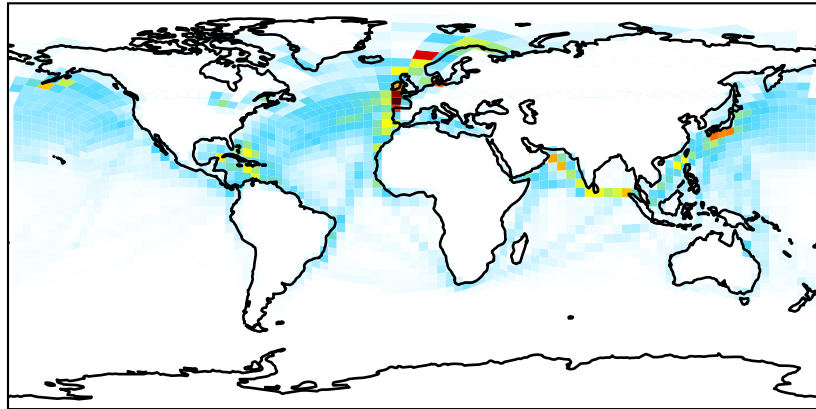


Ratio  
Dev/Ref, Fixed Range

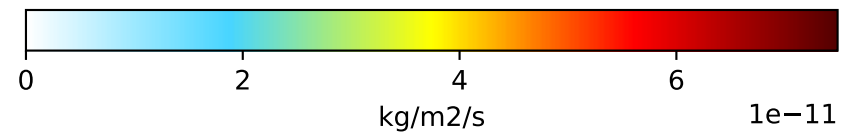
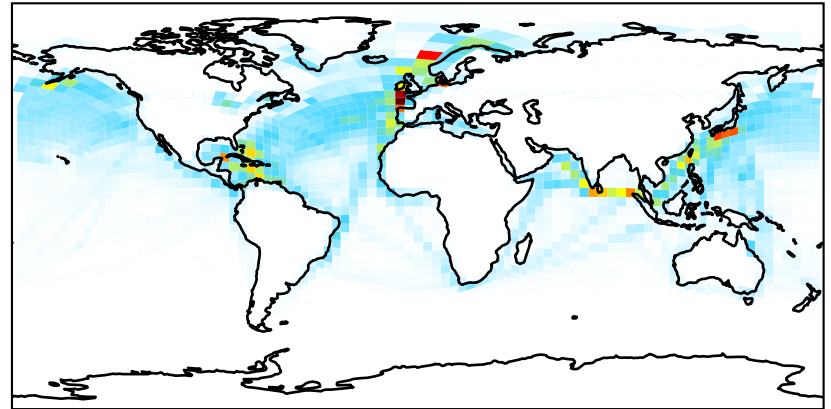


# EmisO3\_Ship

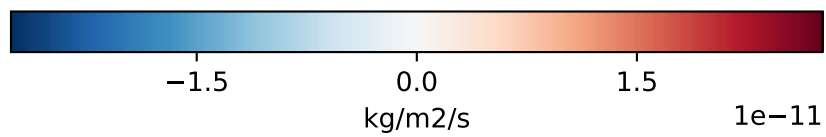
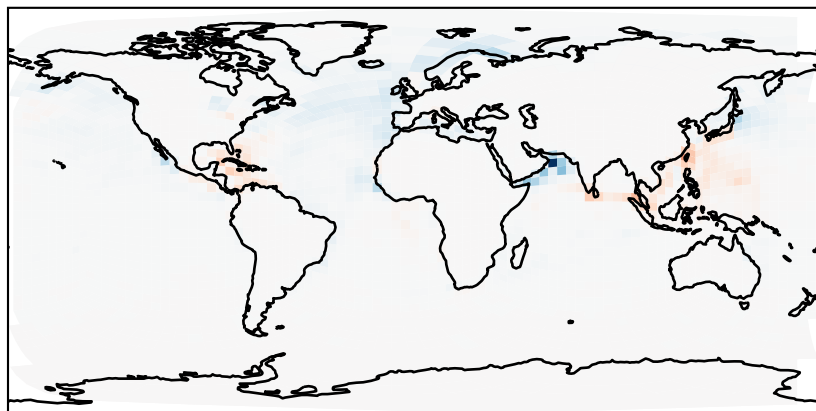
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



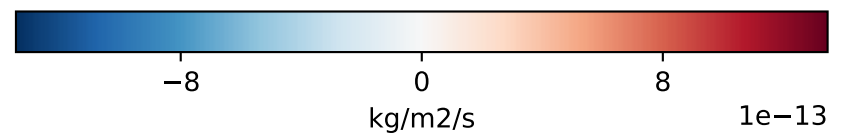
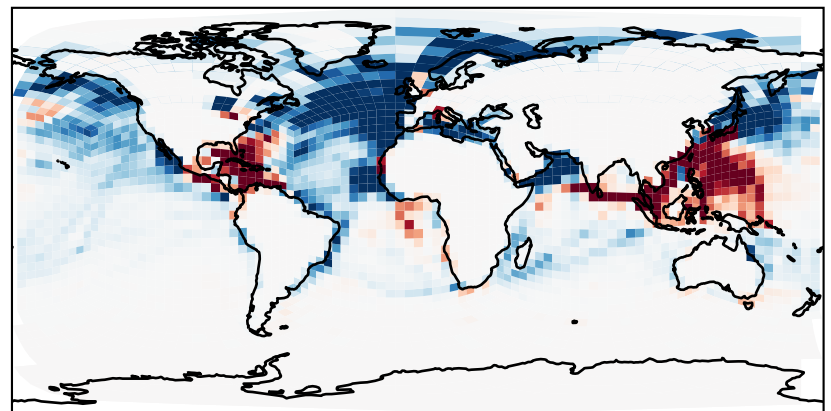
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



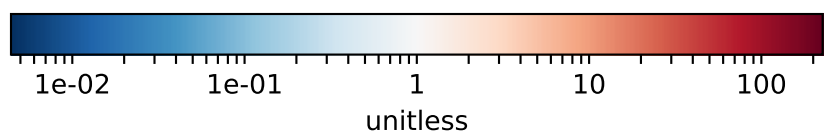
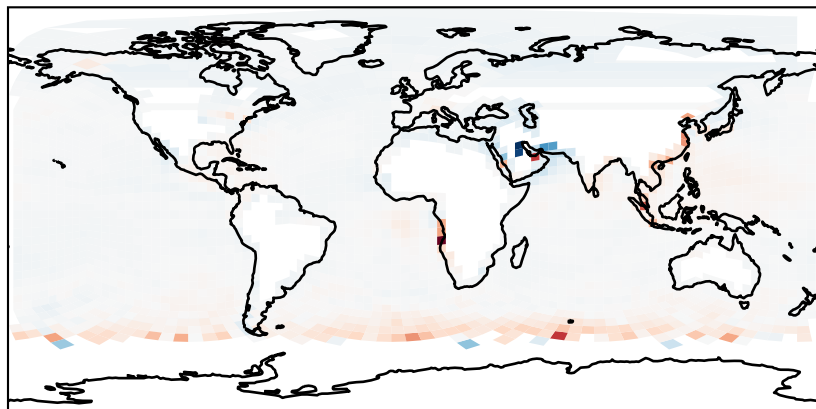
Difference  
Dev - Ref, Dynamic Range



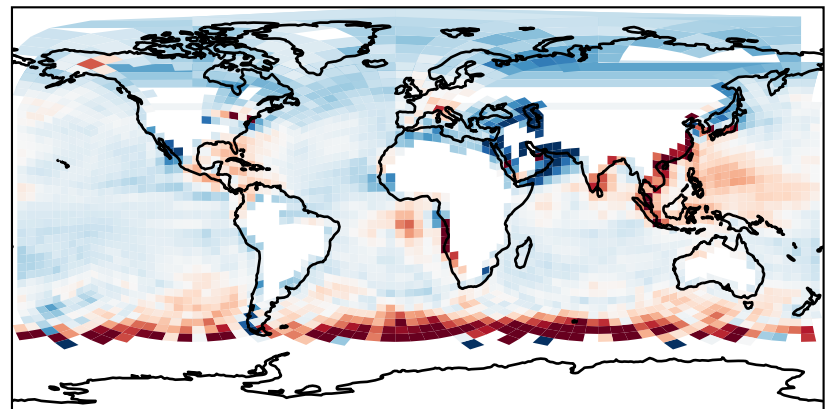
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

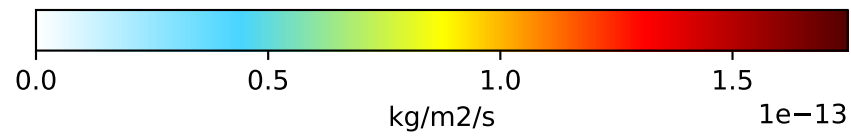
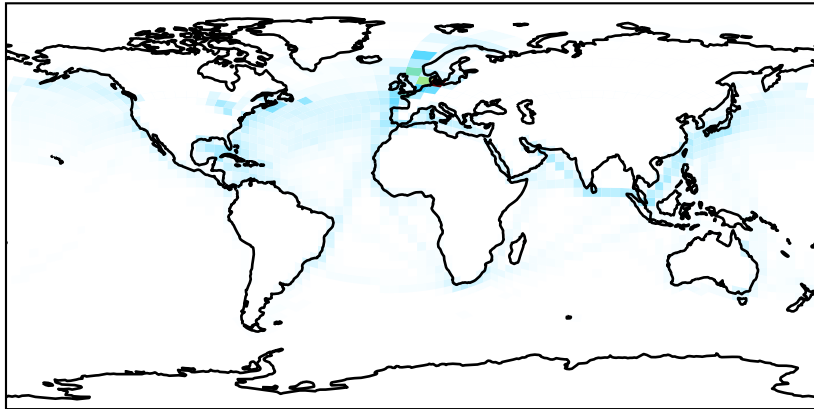


Ratio  
Dev/Ref, Fixed Range

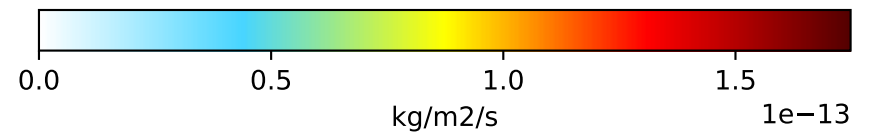


# EmisOCPI\_Ship

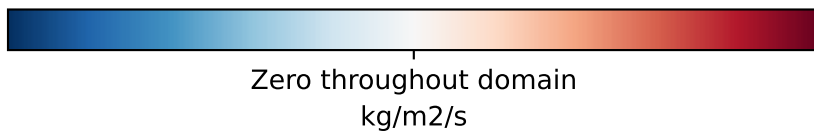
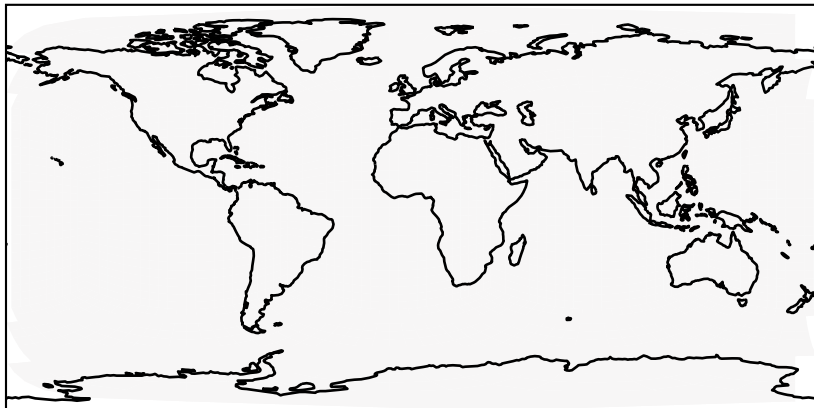
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



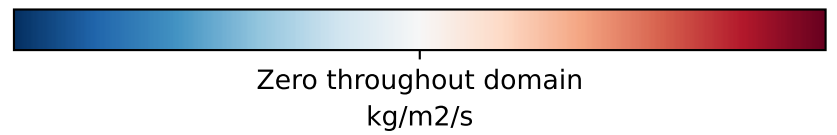
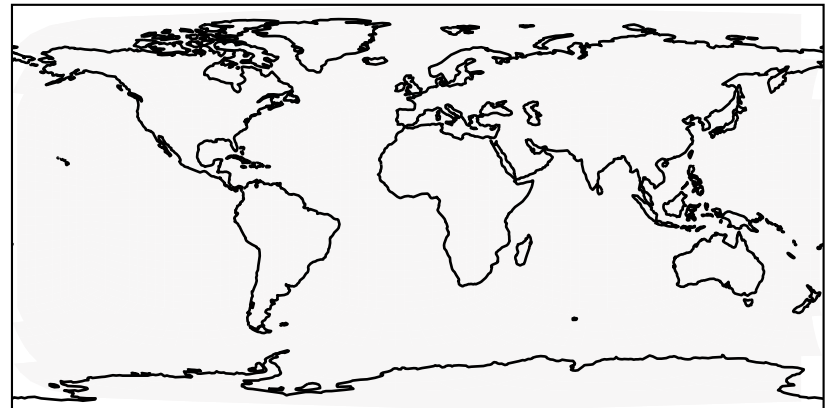
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



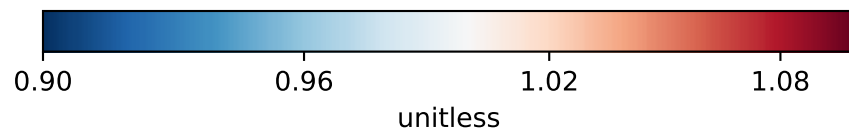
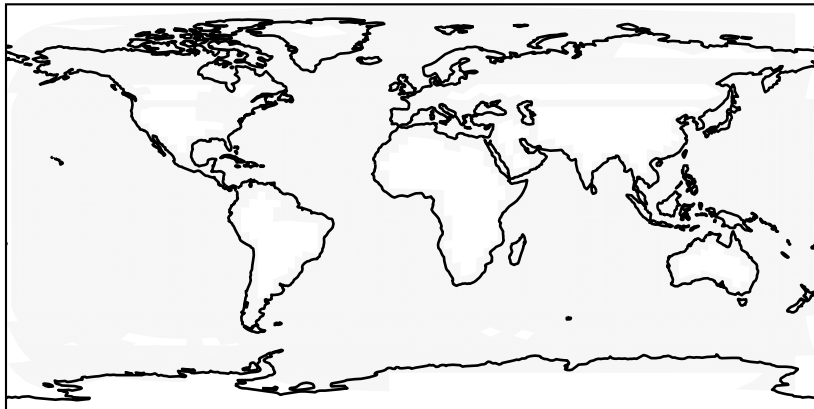
Difference  
Dev - Ref, Dynamic Range



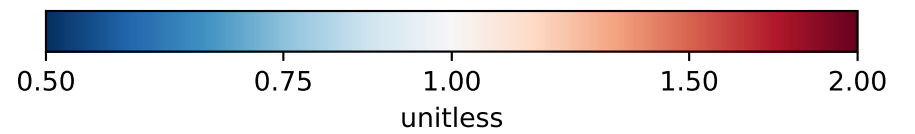
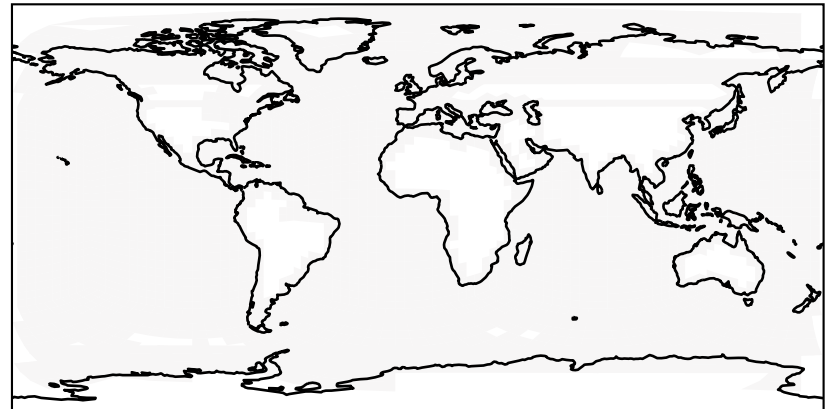
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

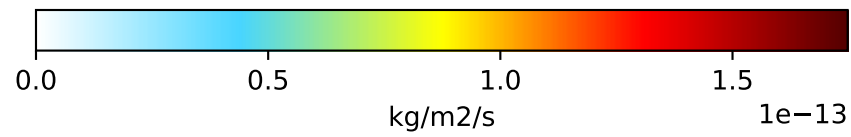
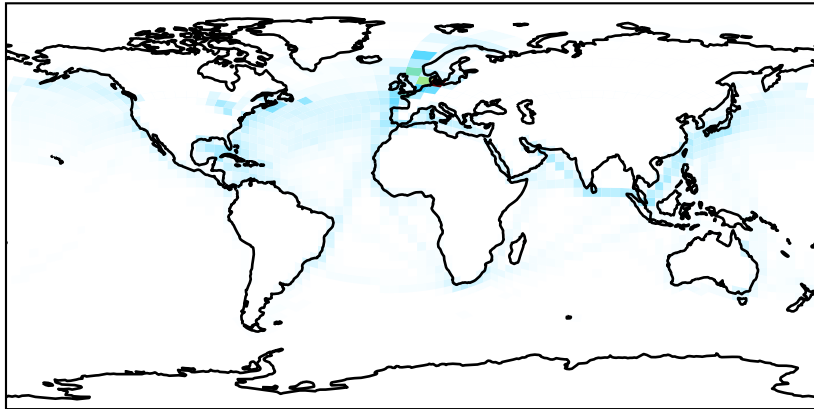


Ratio  
Dev/Ref, Fixed Range

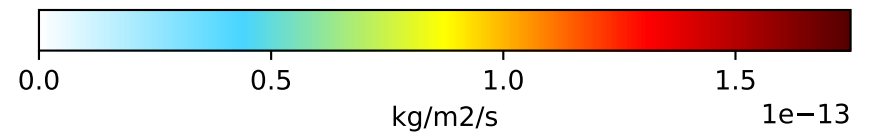
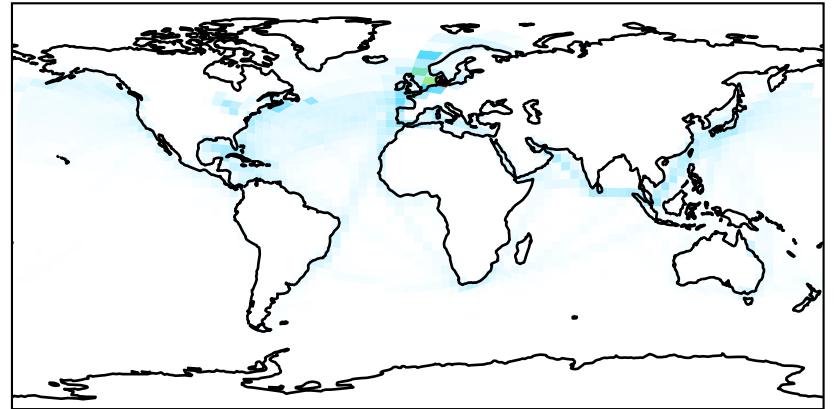


# EmisOCPO\_Ship

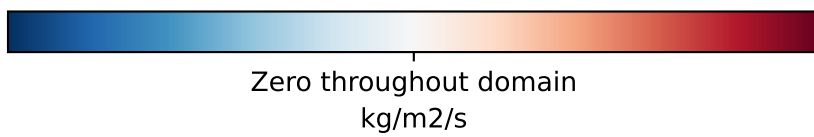
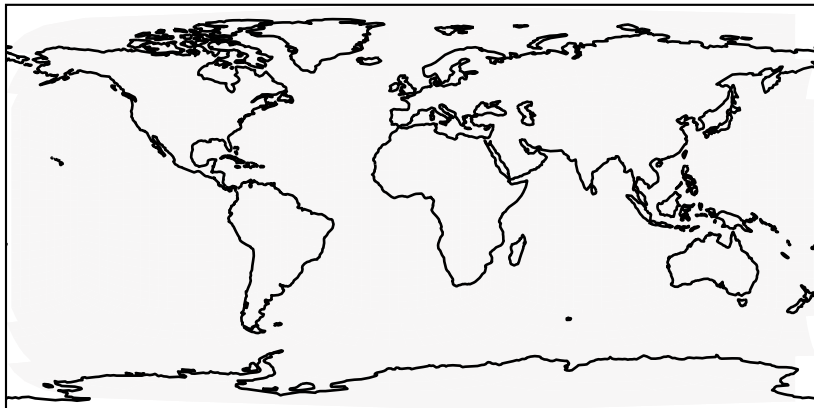
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



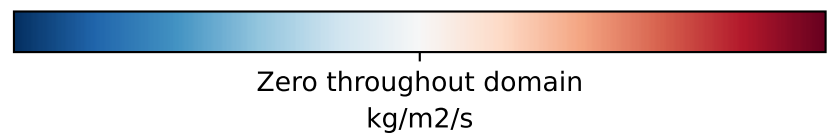
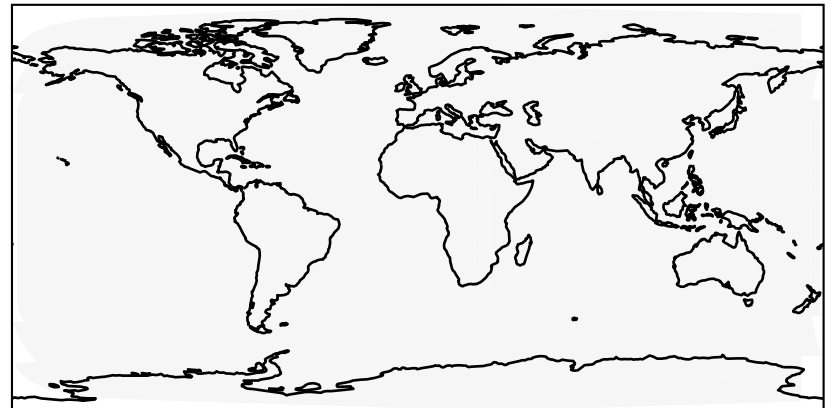
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



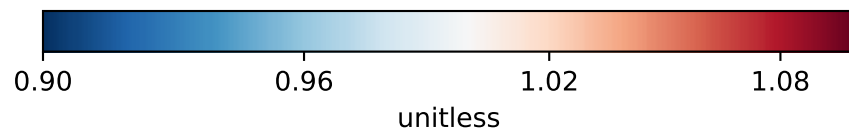
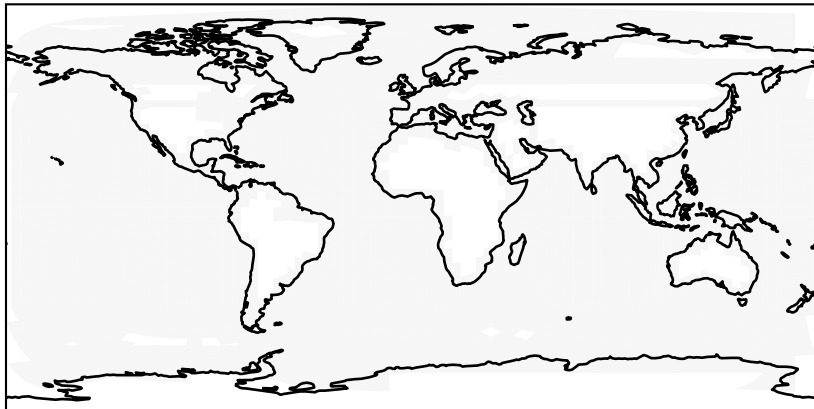
Difference  
Dev - Ref, Dynamic Range



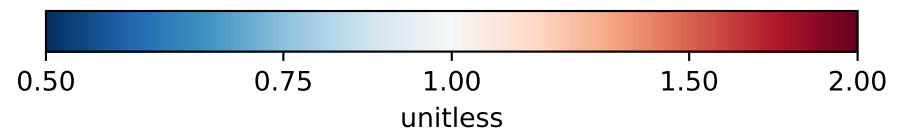
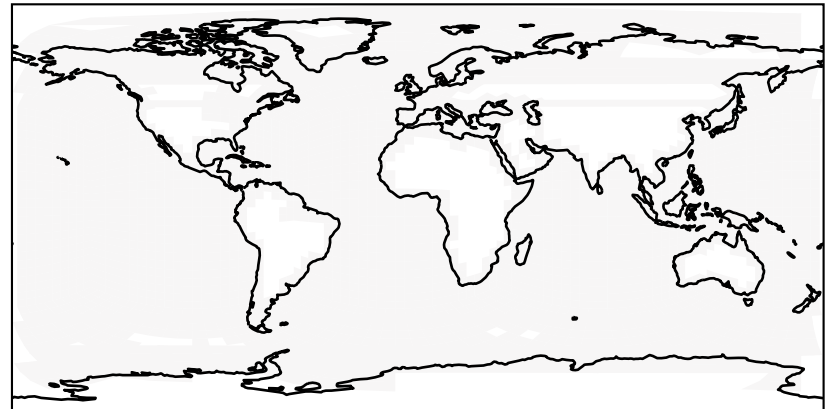
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

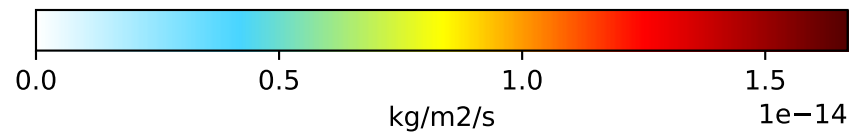
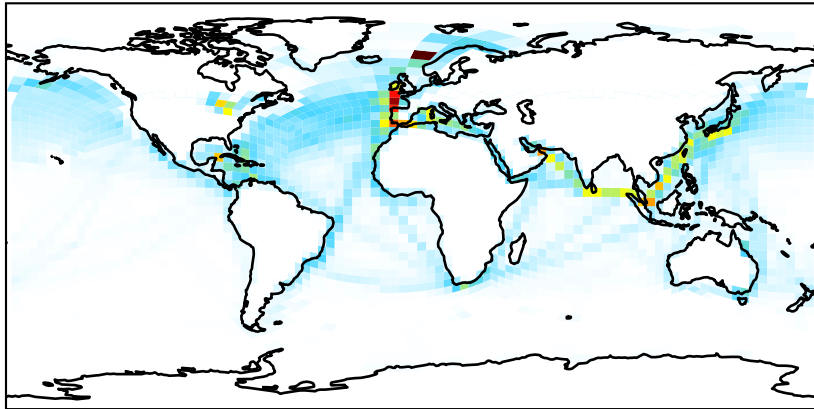


Ratio  
Dev/Ref, Fixed Range

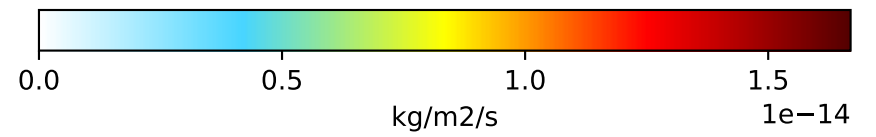
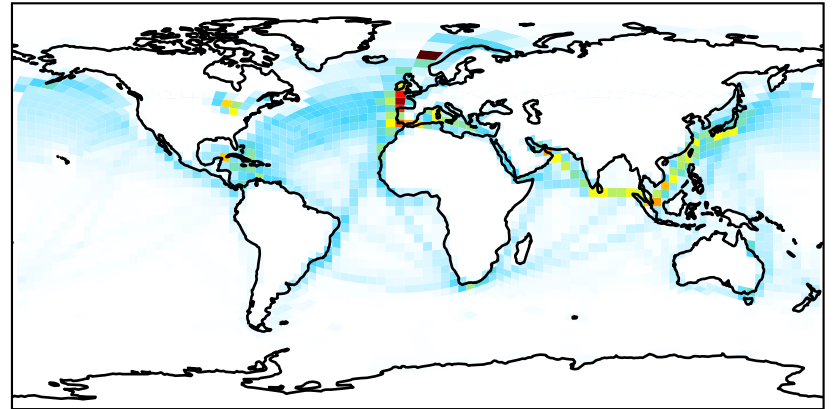


# EmispFe\_Ship

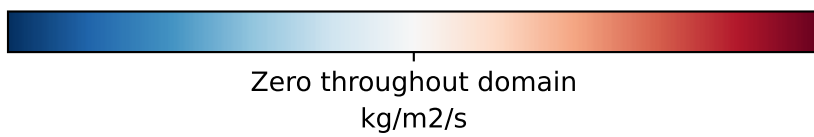
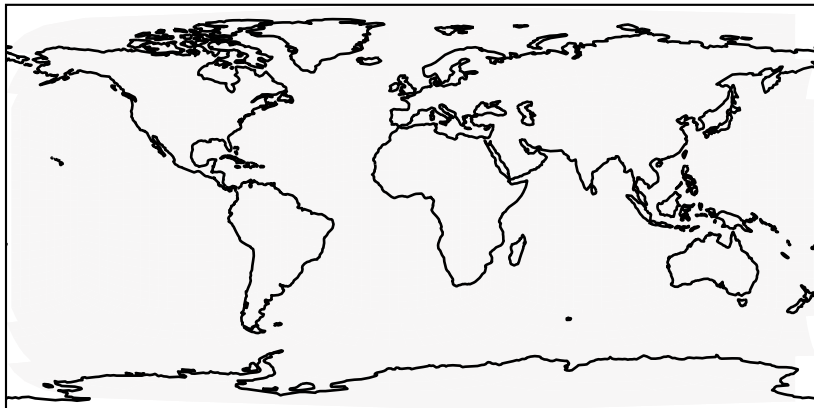
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



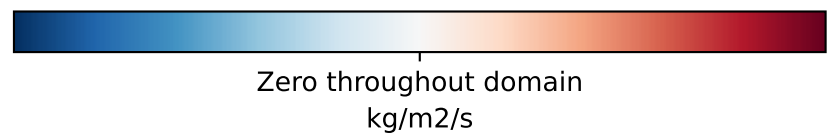
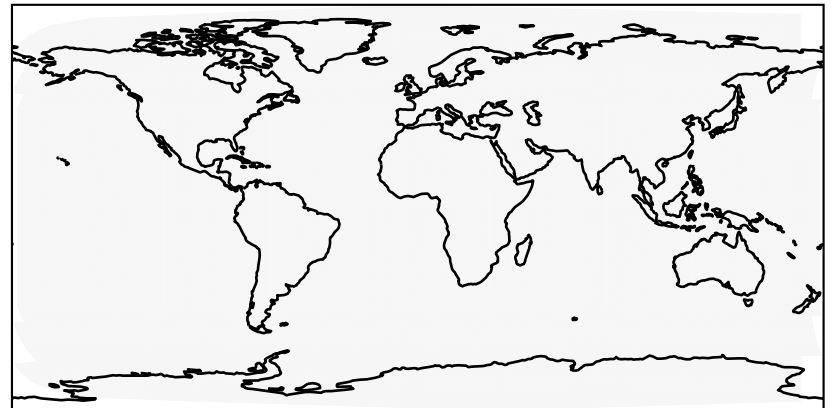
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



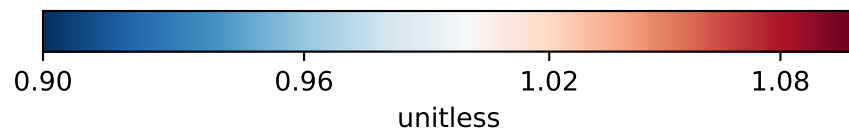
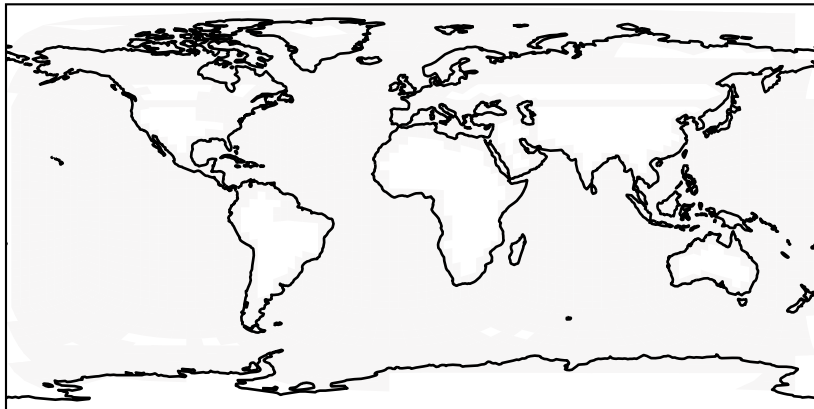
Difference  
Dev - Ref, Dynamic Range



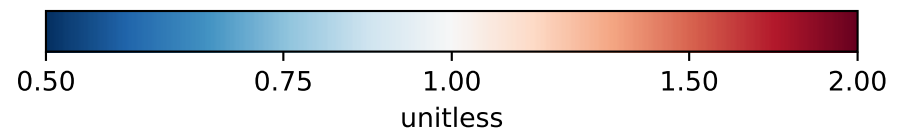
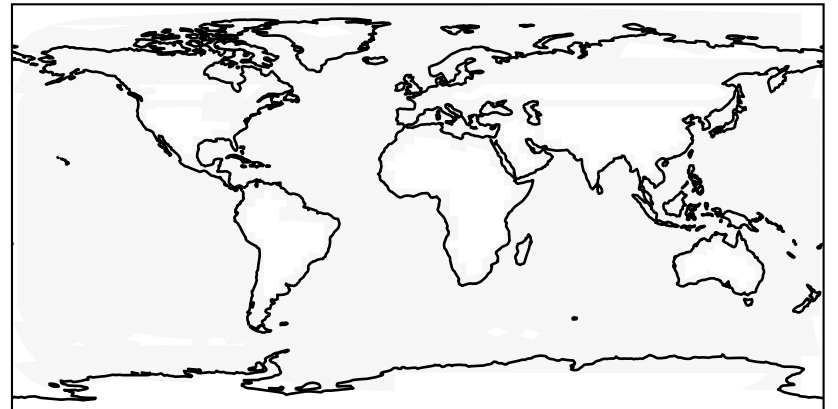
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range



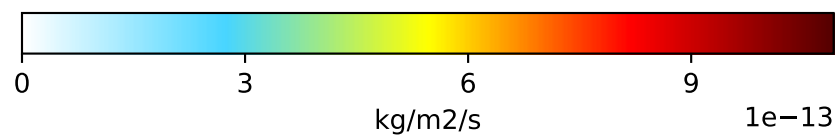
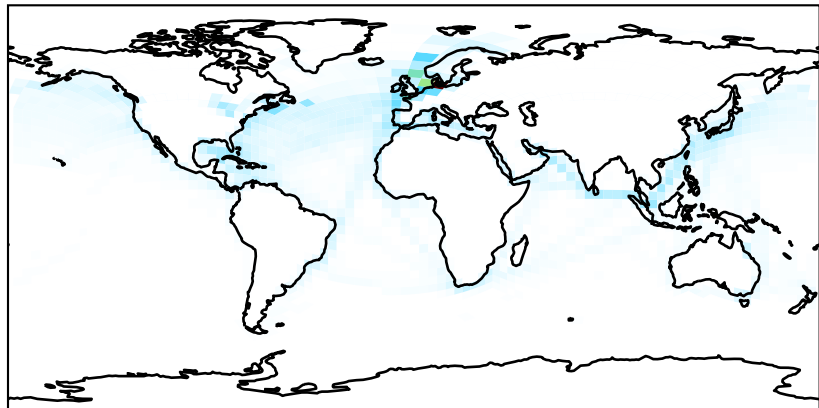
Ratio  
Dev/Ref, Fixed Range



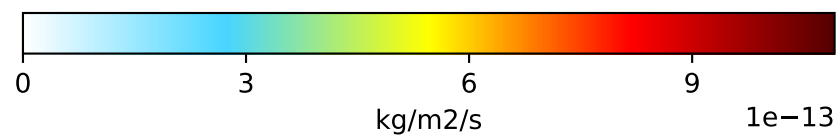
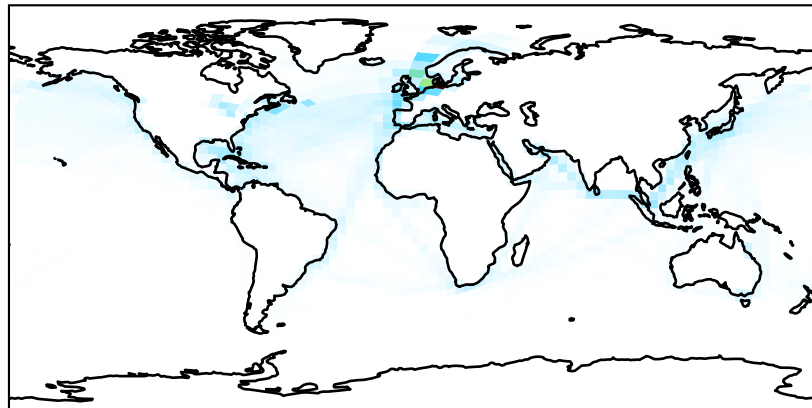


# EmisPRPE\_Ship

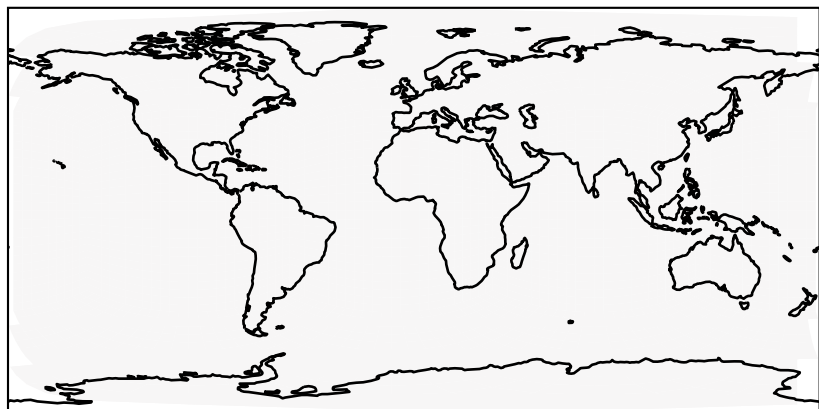
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



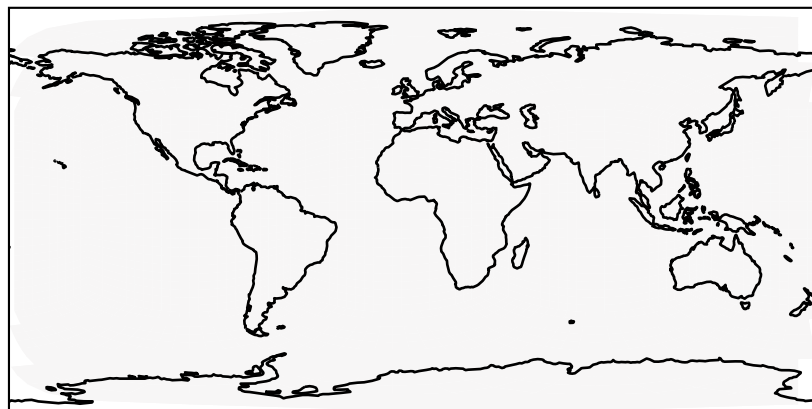
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



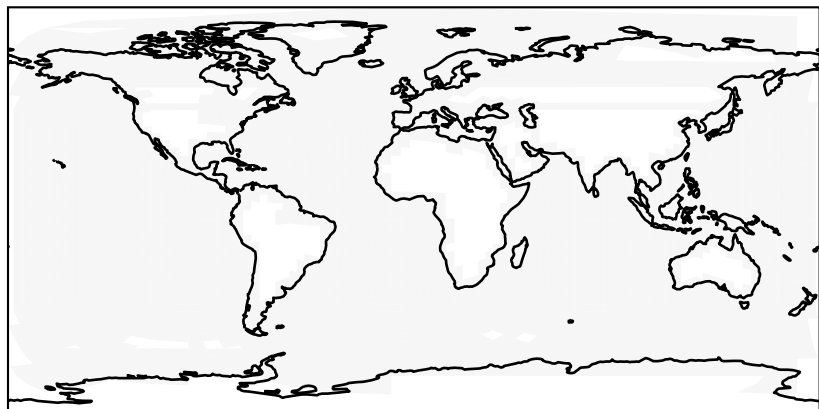
Difference  
Dev - Ref, Dynamic Range



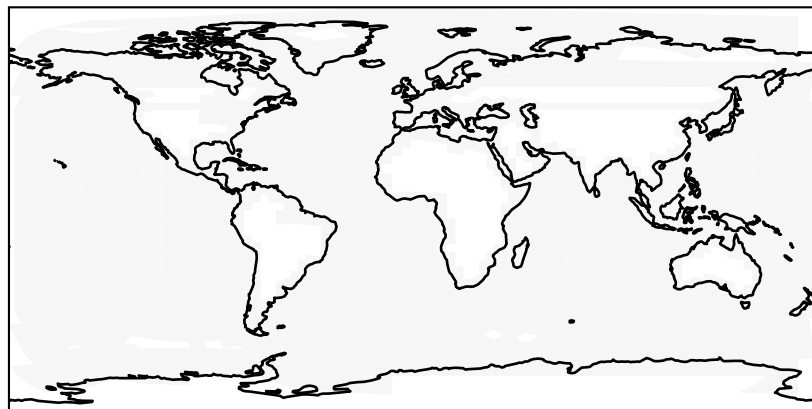
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

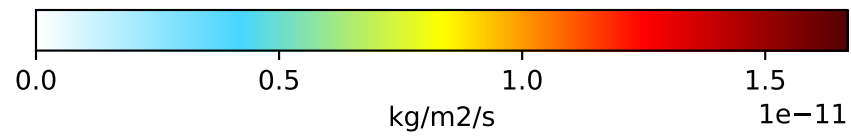
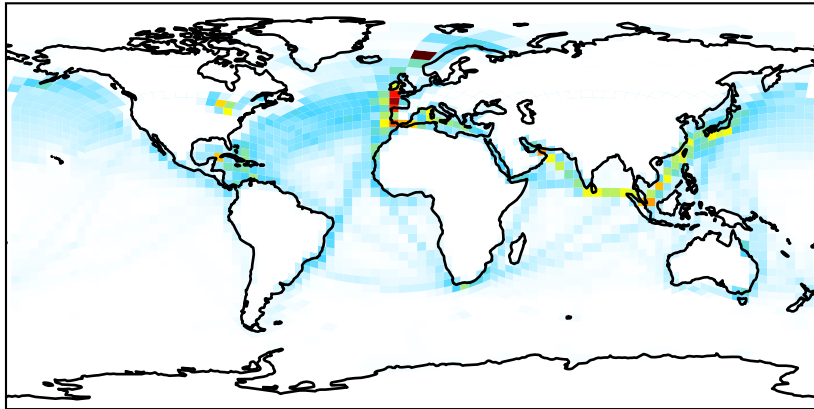


Ratio  
Dev/Ref, Fixed Range

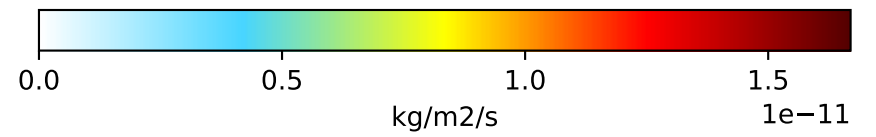
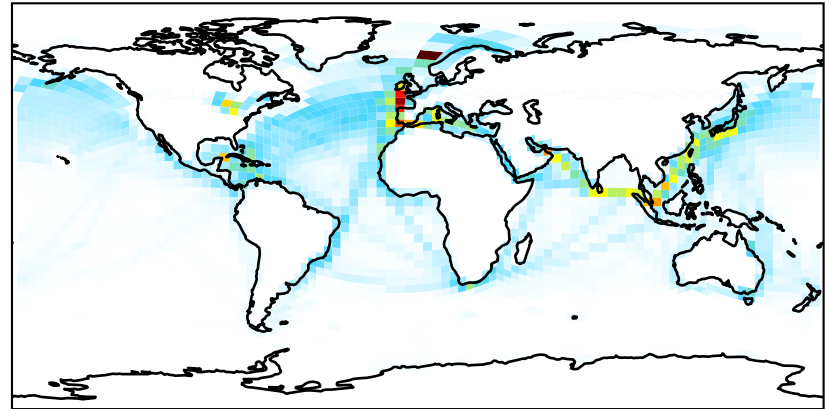


# EmisSO2\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



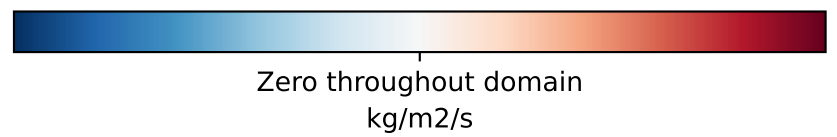
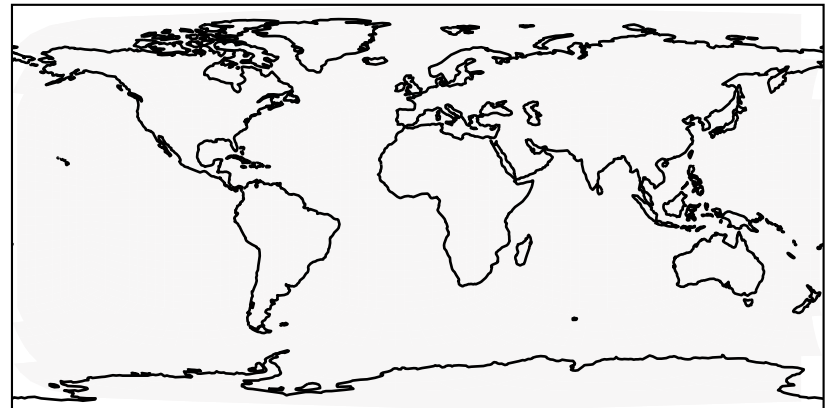
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



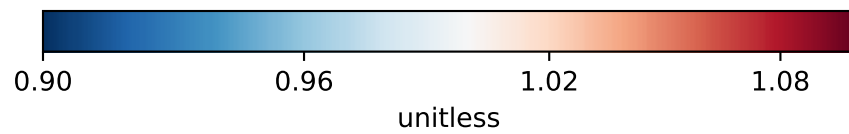
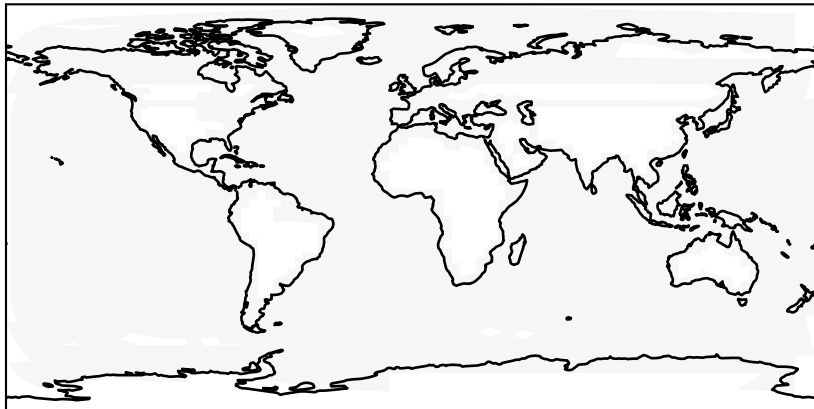
Difference  
Dev - Ref, Dynamic Range



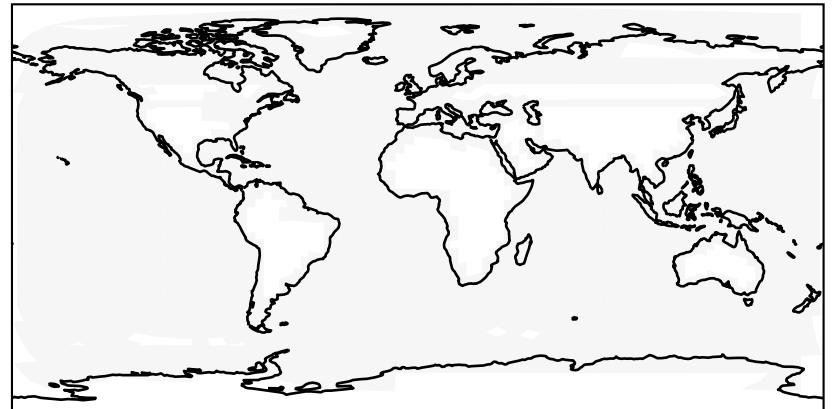
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

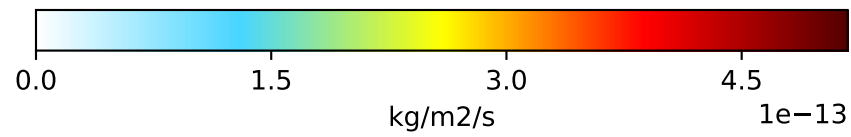
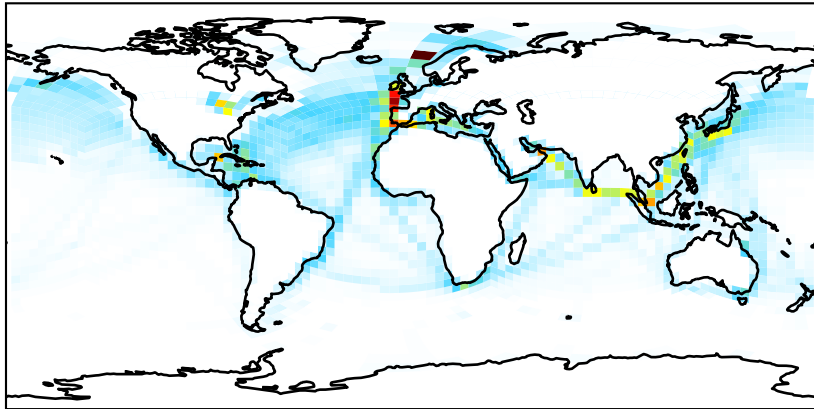


Ratio  
Dev/Ref, Fixed Range

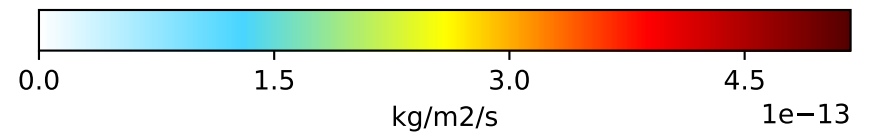
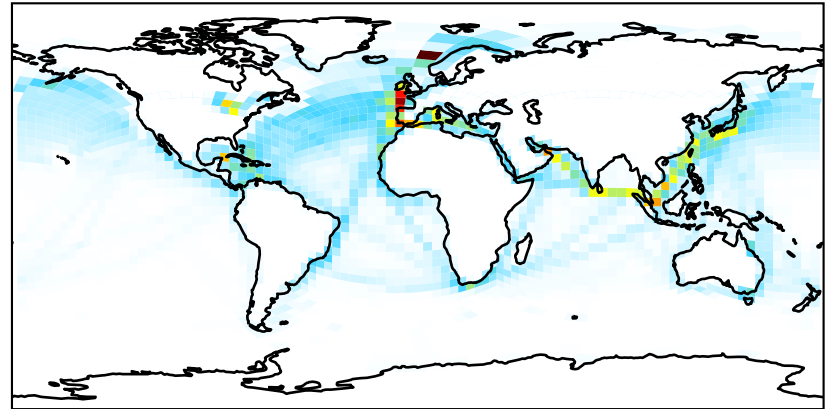


# EmisSO4\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



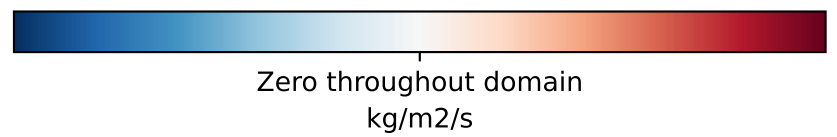
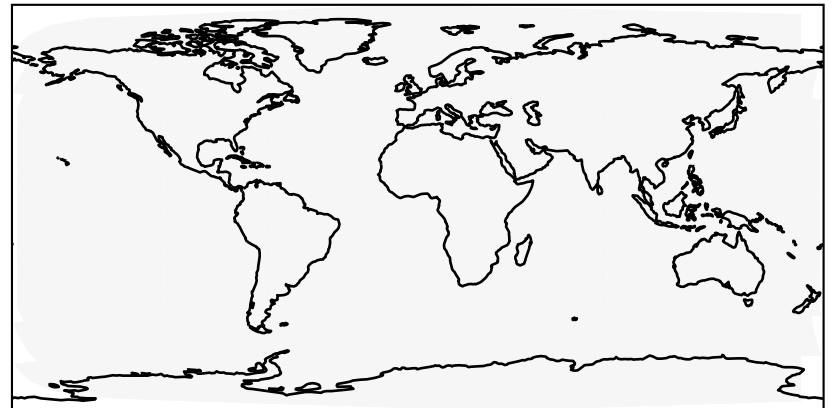
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



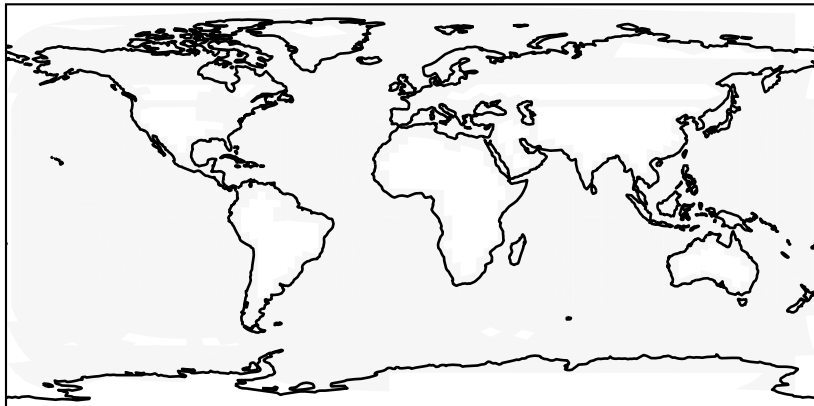
Difference  
Dev - Ref, Dynamic Range



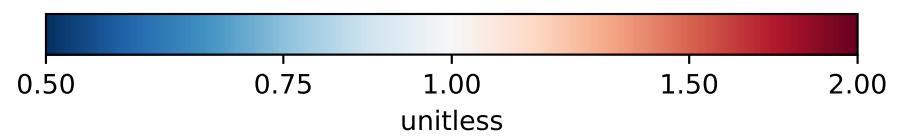
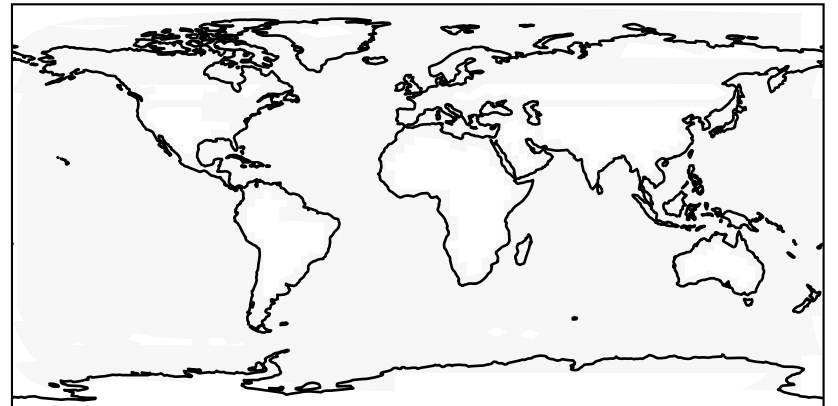
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

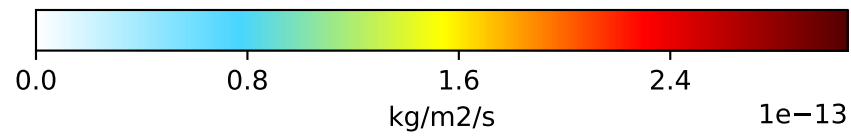
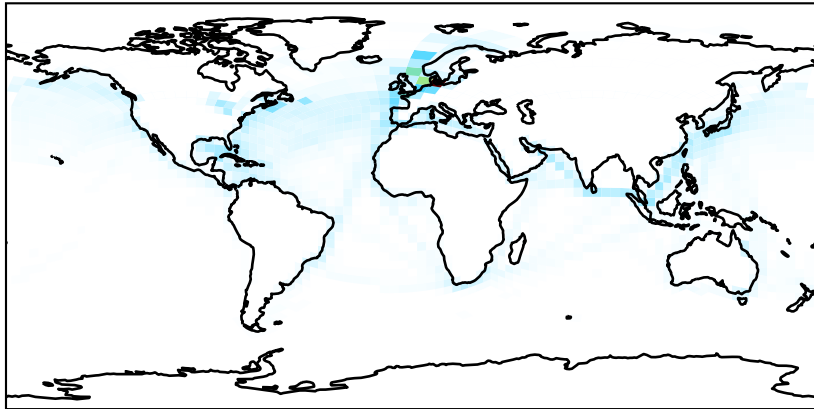


Ratio  
Dev/Ref, Fixed Range

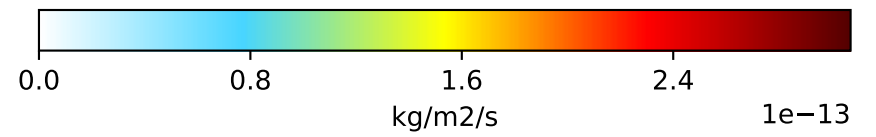


# EmisSOAP\_Ship

GCHP\_14.2.0\_MERRA2 (Ref)  
c24



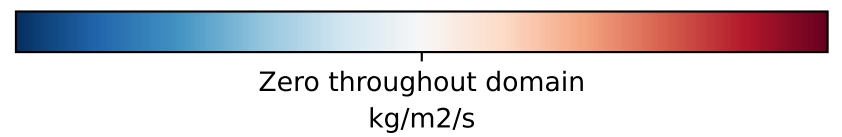
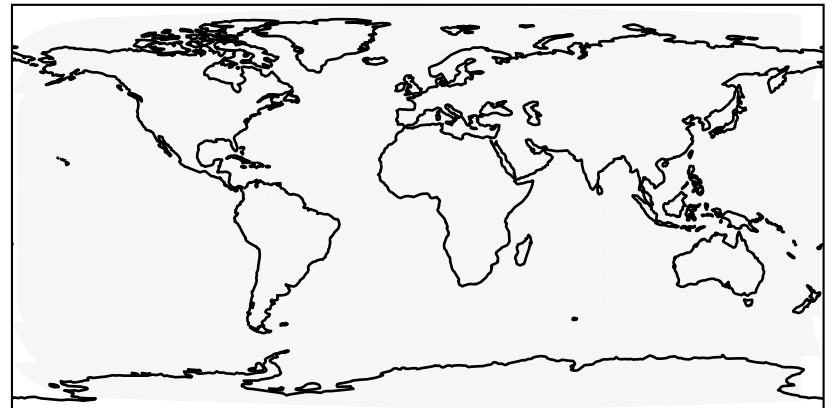
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



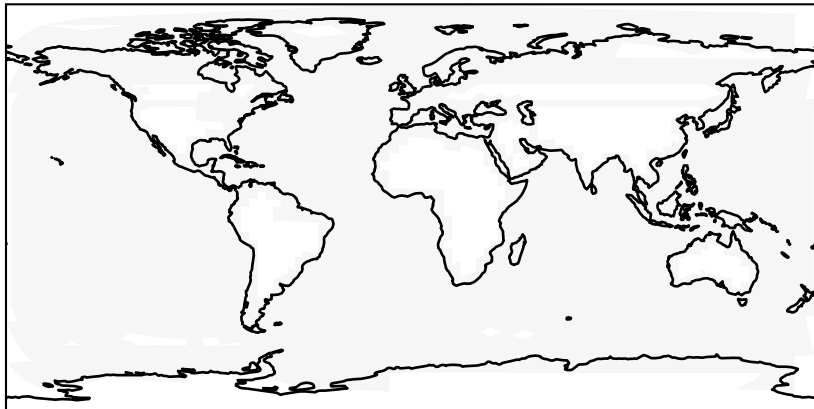
Difference  
Dev - Ref, Dynamic Range



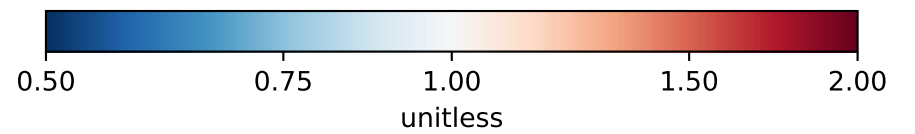
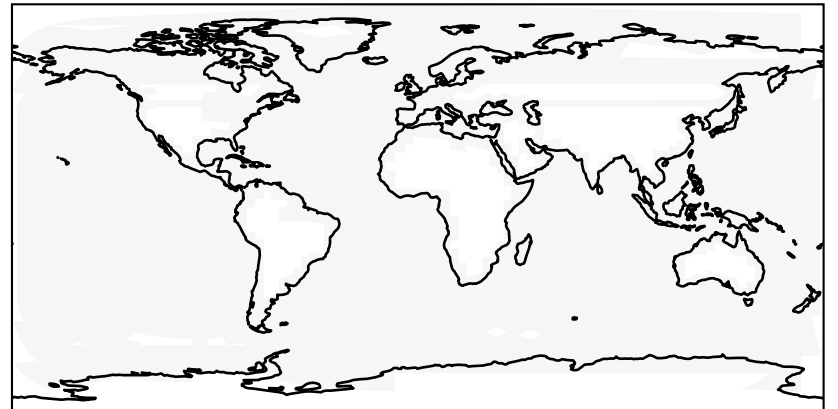
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

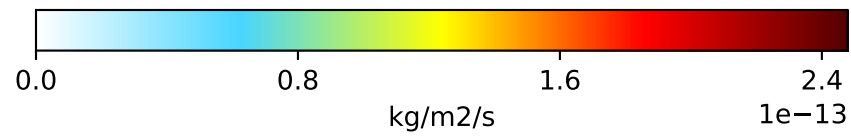
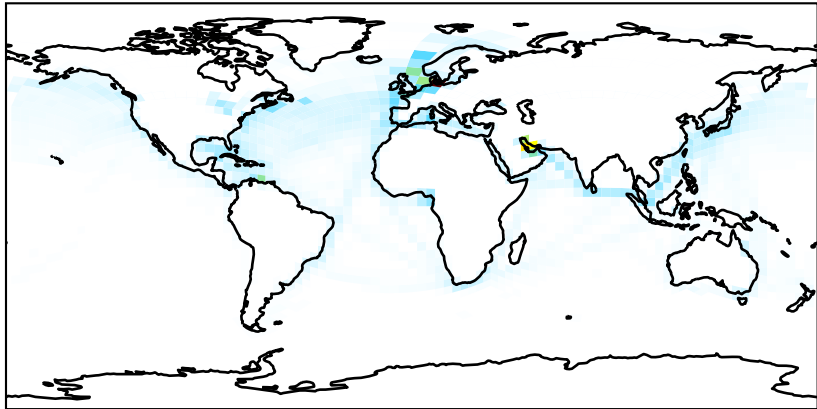


Ratio  
Dev/Ref, Fixed Range

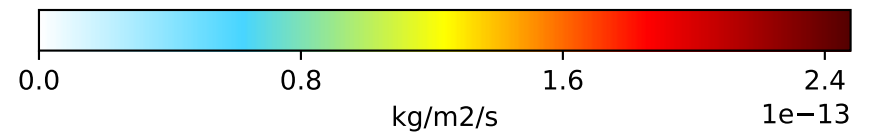
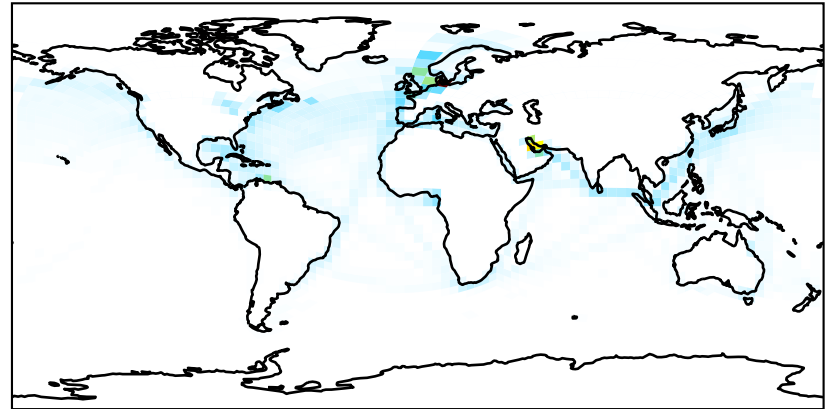


# EmisTOLU\_Ship

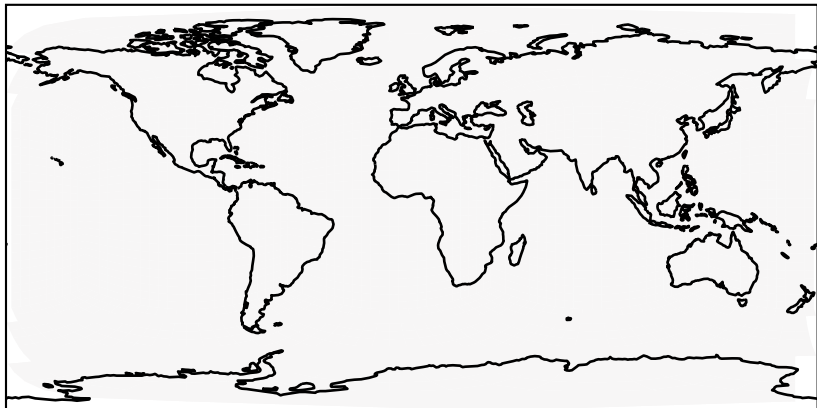
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



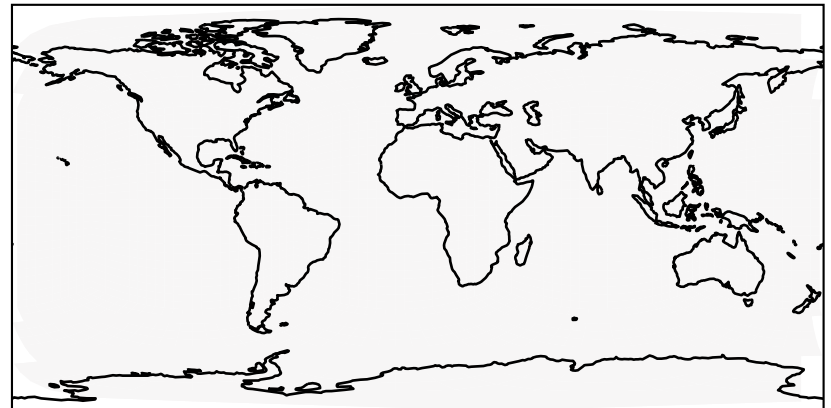
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



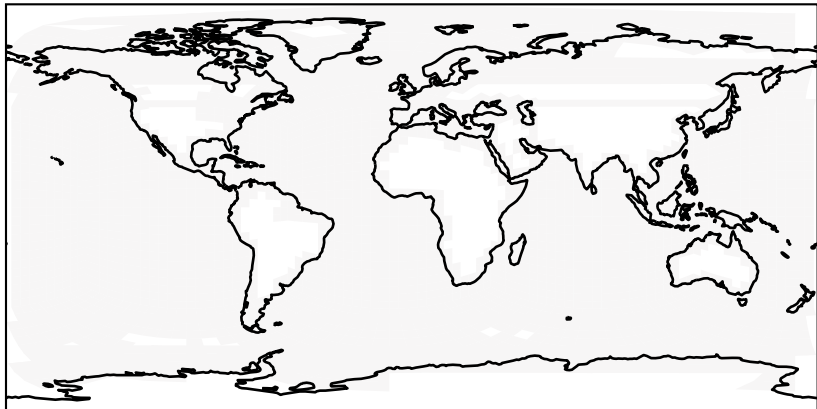
Difference  
Dev - Ref, Dynamic Range



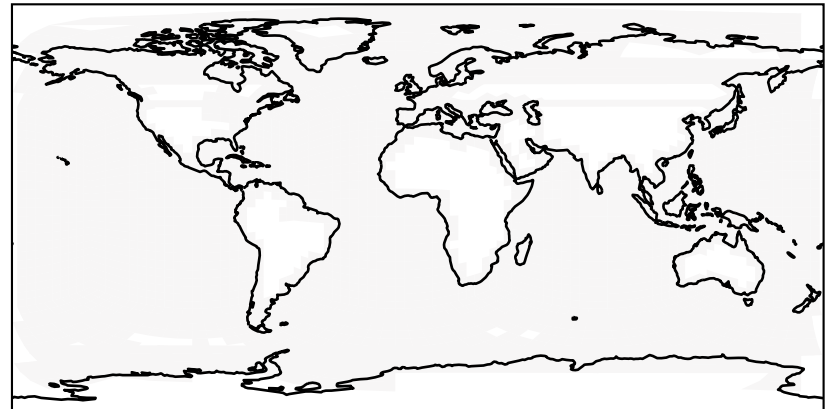
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

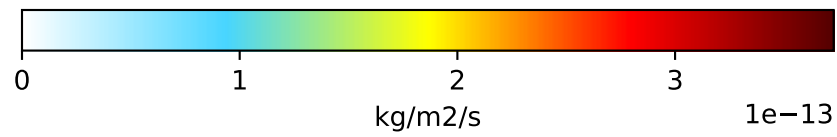
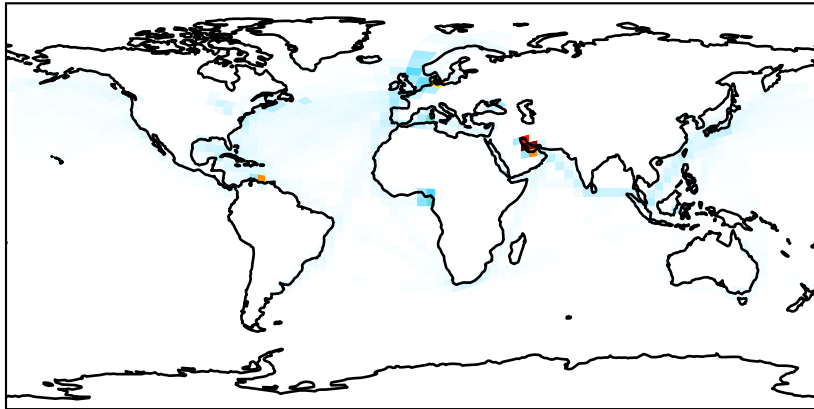


Ratio  
Dev/Ref, Fixed Range

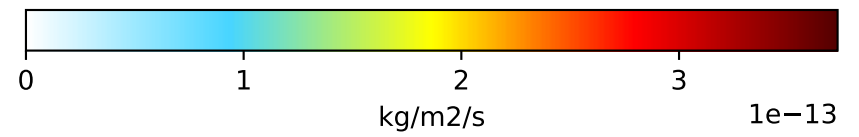
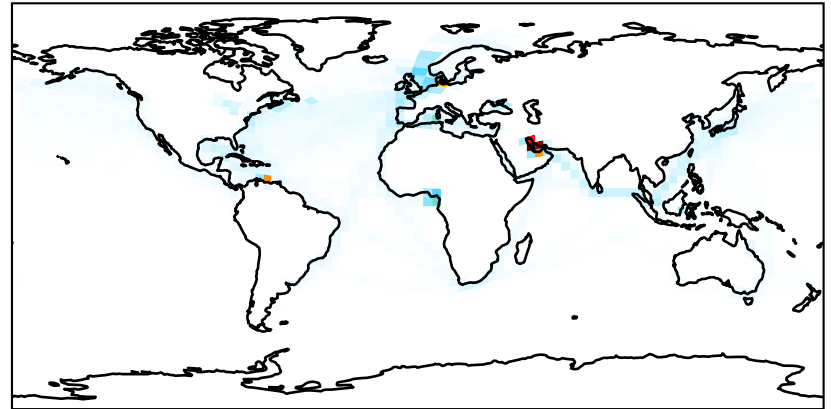


# EmisXYLE\_Ship

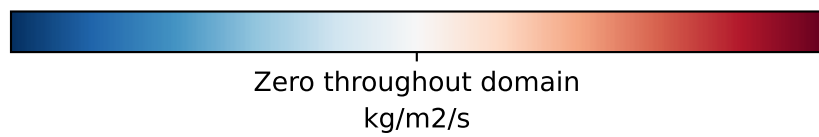
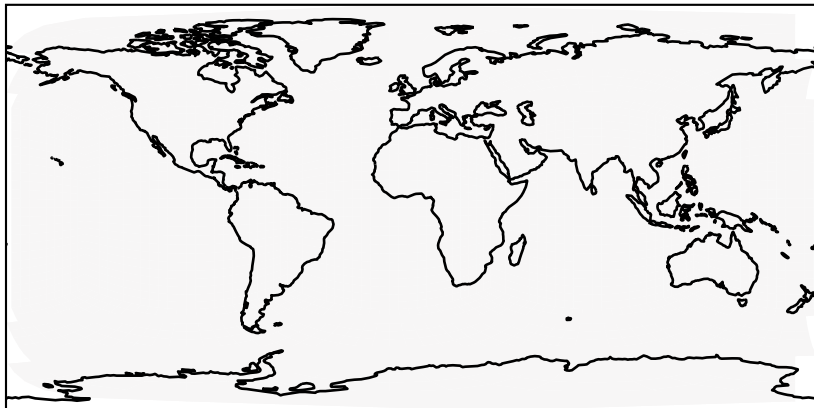
GCHP\_14.2.0\_MERRA2 (Ref)  
c24



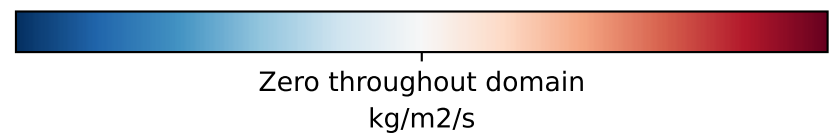
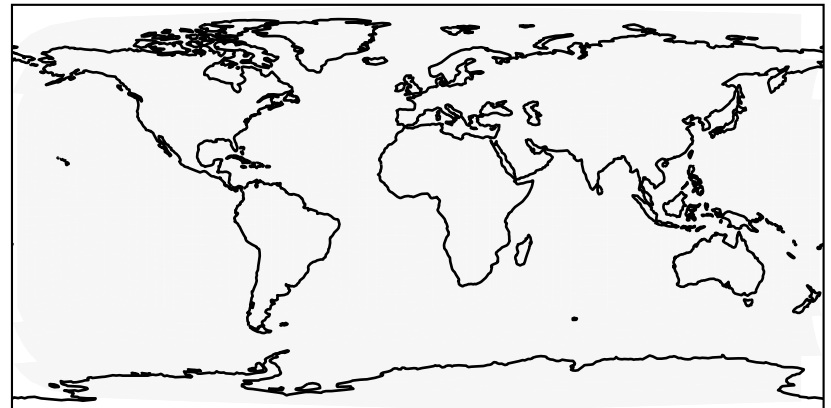
GCHP\_14.2.0\_GEOS-IT (Dev)  
c24



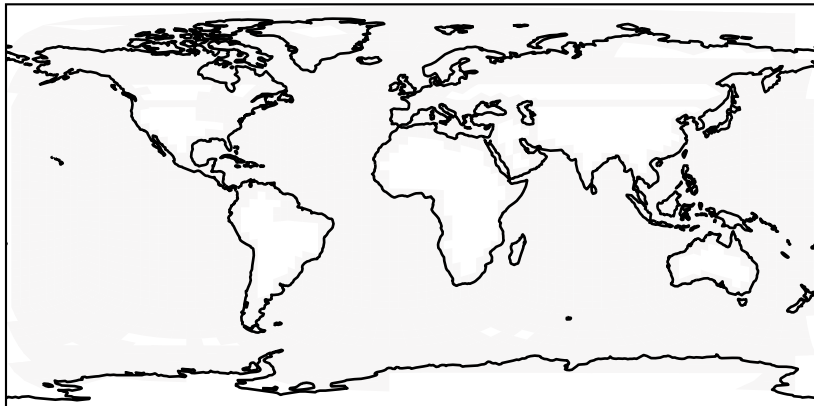
Difference  
Dev - Ref, Dynamic Range



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



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

