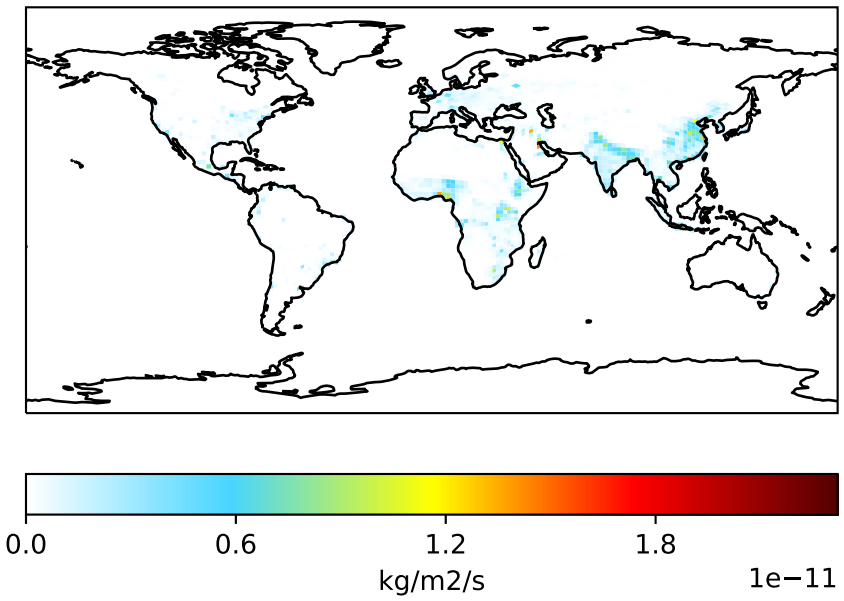
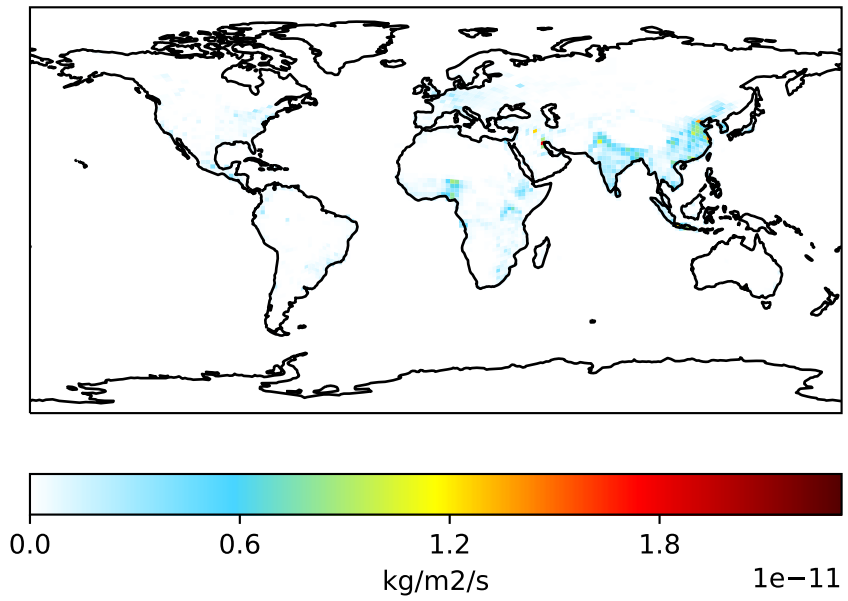
# EmisEOH_Anthro (Jul2019)

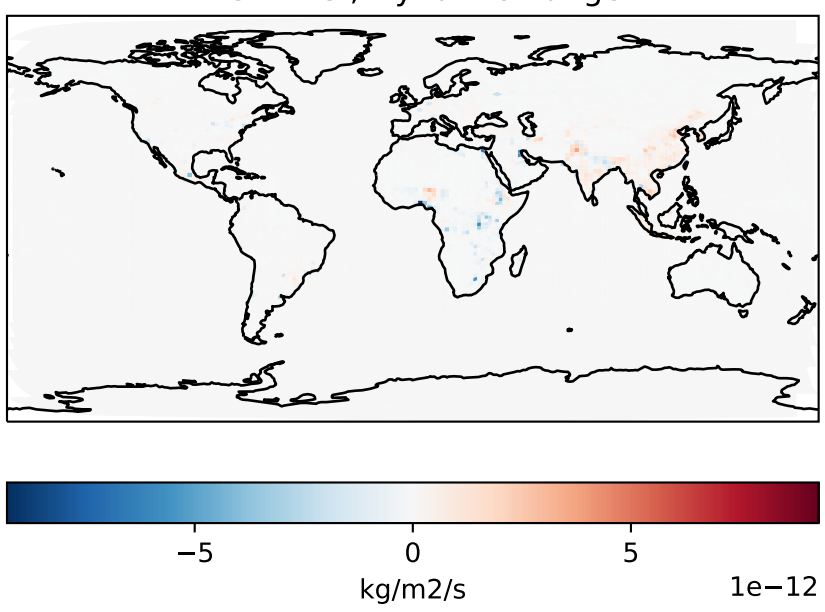
GCHP_13.0.0 (Ref)
c48



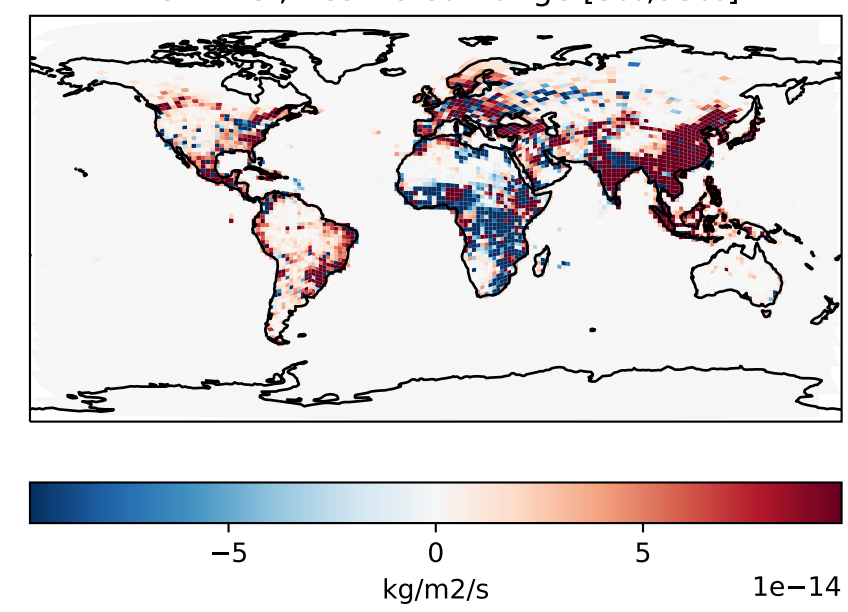

GCHP_13.2.0 (Dev)
c48



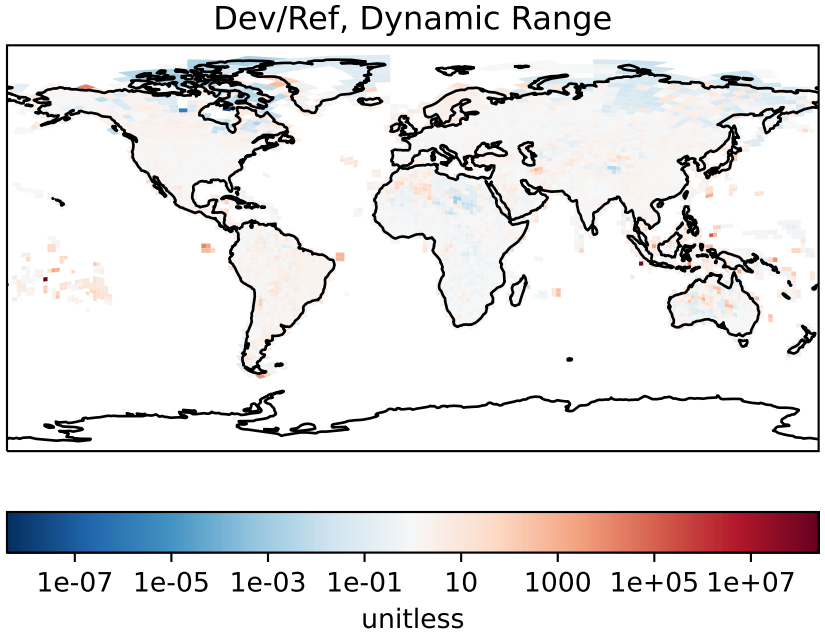

Difference
Dev - Ref, Dynamic Range



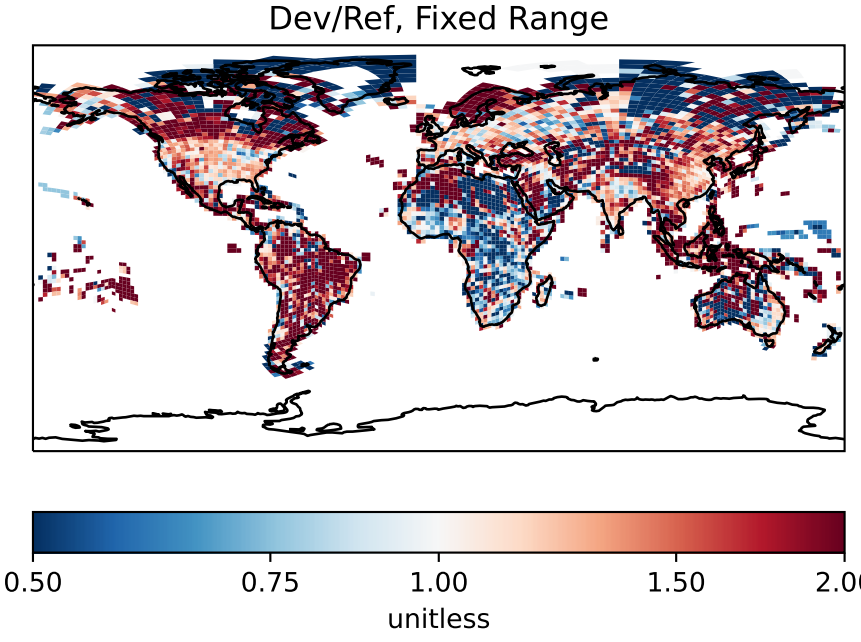

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

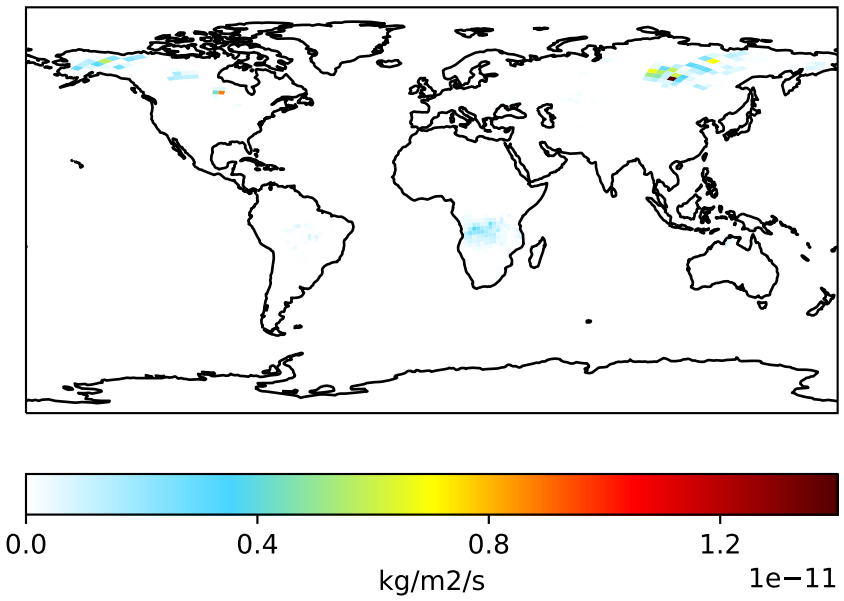



Ratio
Dev/Ref, Fixed Range

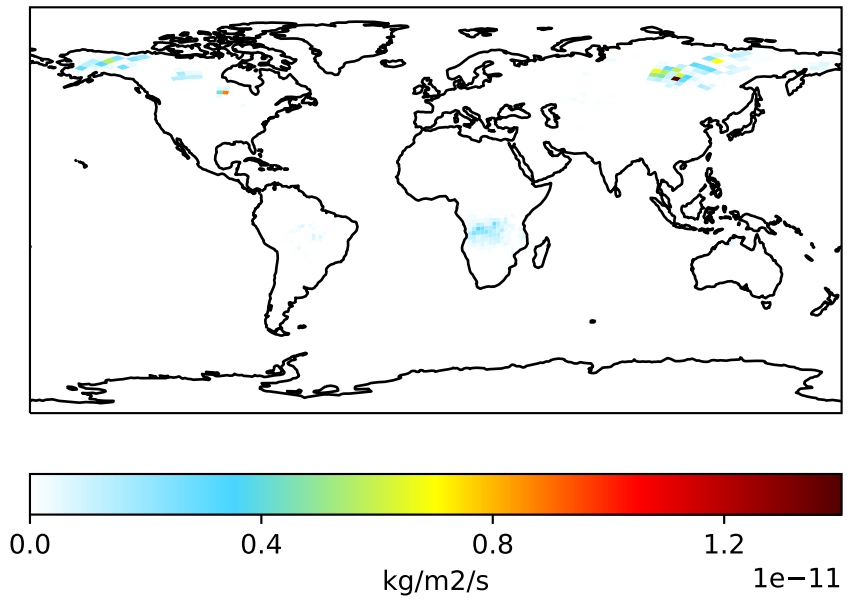


# EmisEOH_BioBurn (Jul2019)

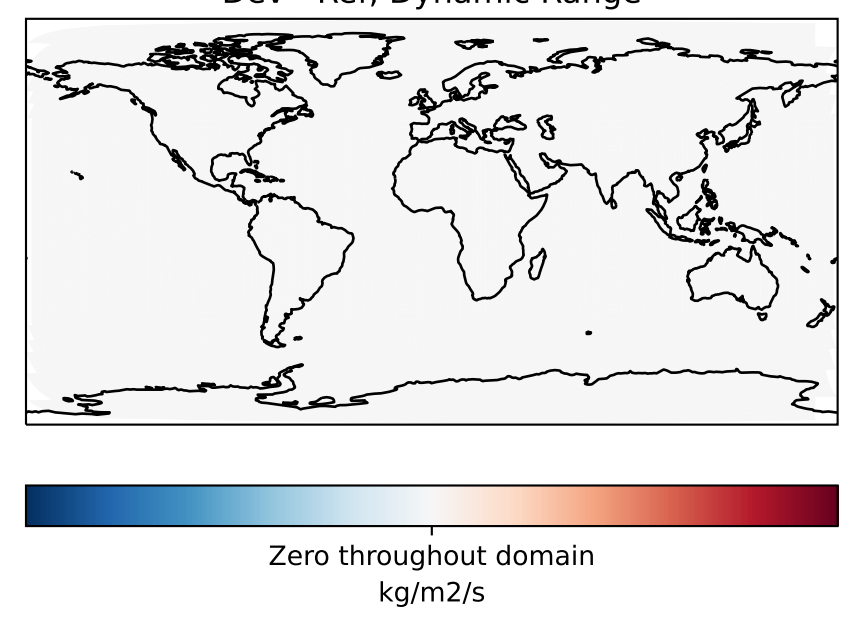
GCHP_13.0.0 (Ref)
c48



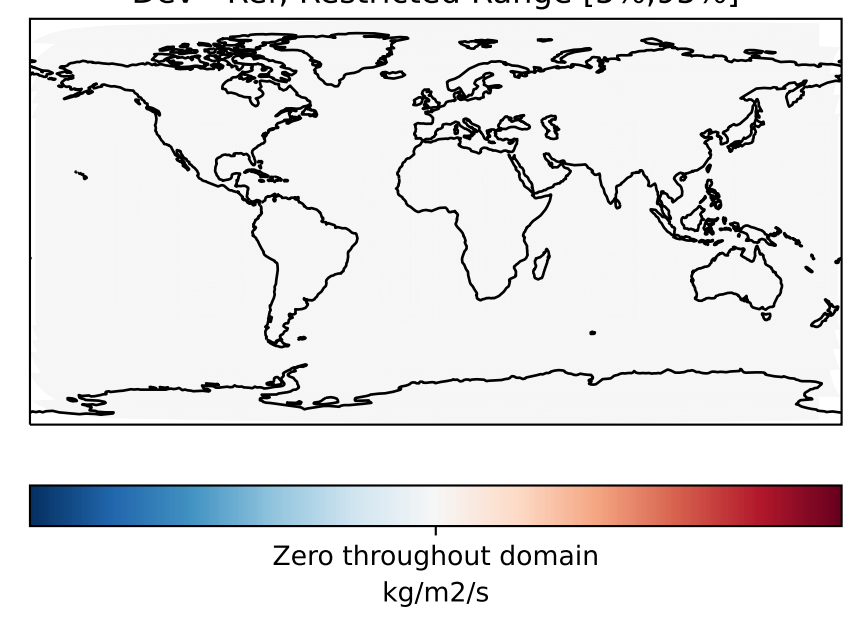

GCHP_13.2.0 (Dev)
c48



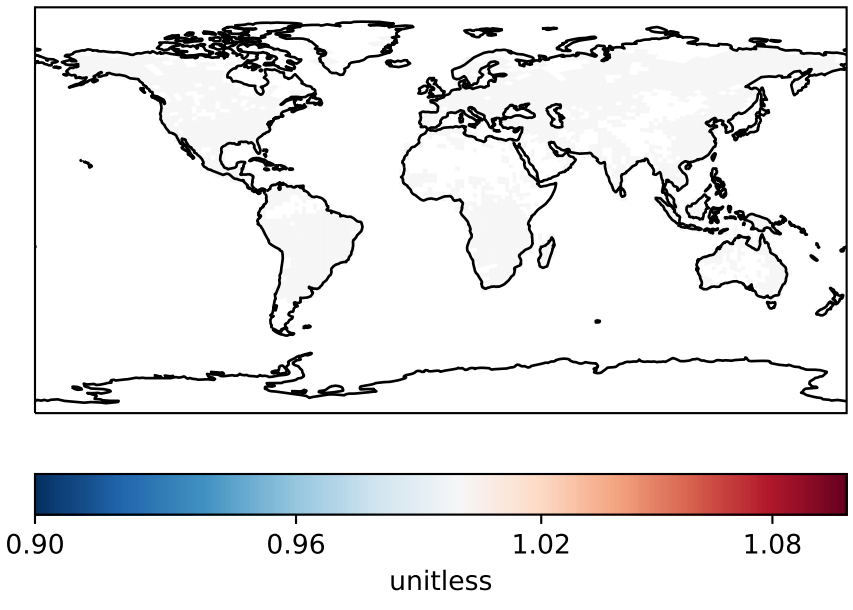

Difference
Dev - Ref, Dynamic Range



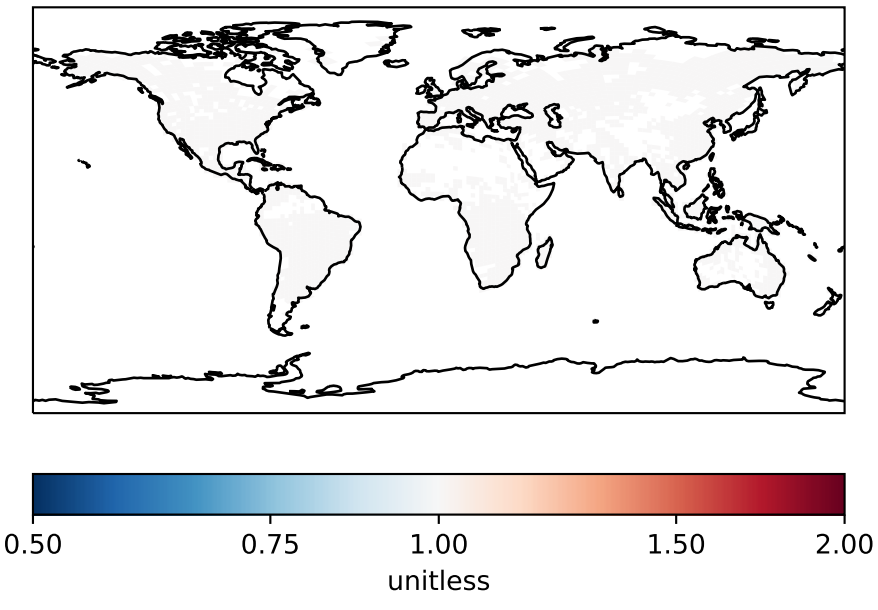

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

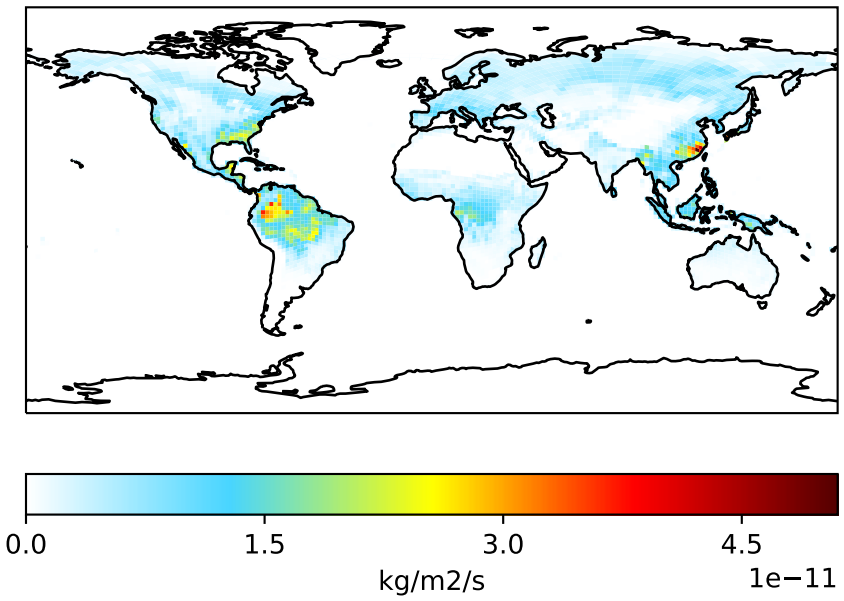



Ratio
Dev/Ref, Fixed Range

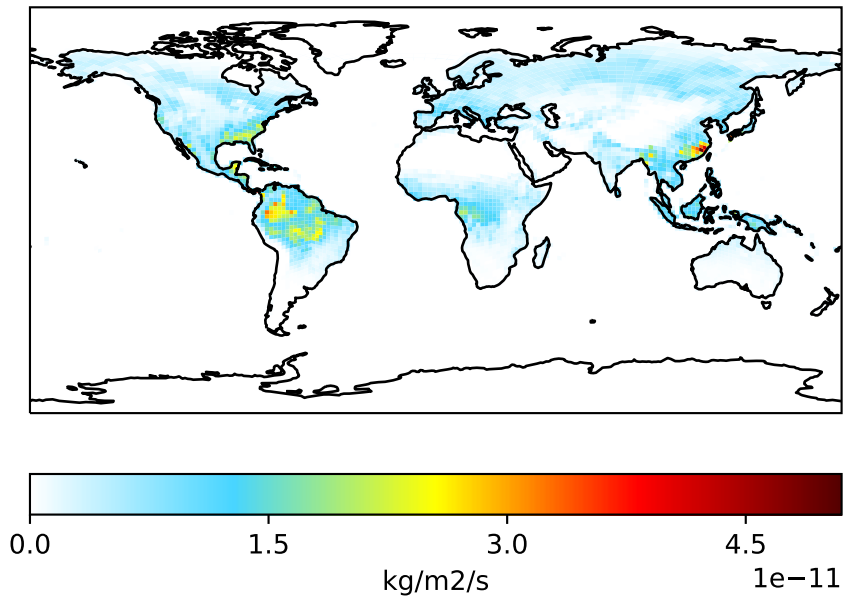


# EmisEOH_Biogenic (Jul2019)

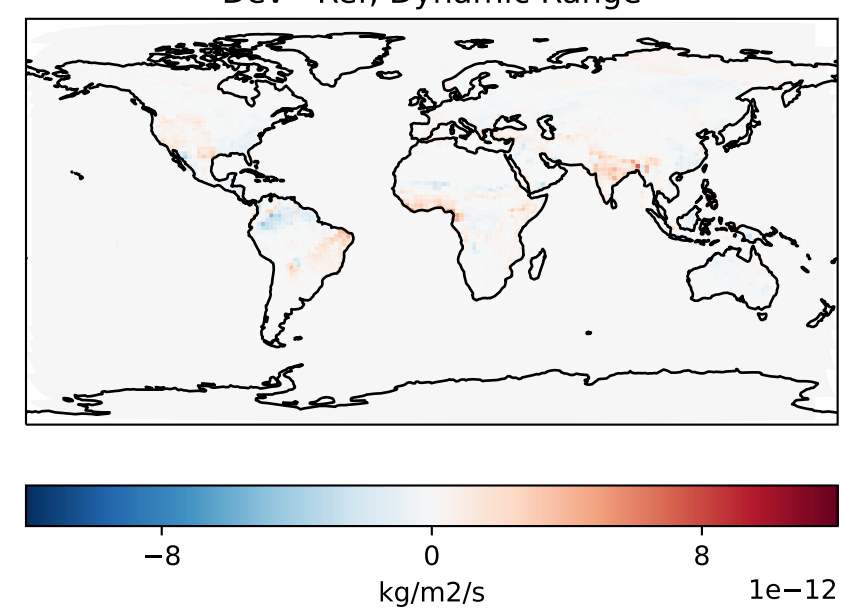
GCHP_13.0.0 (Ref)
c48



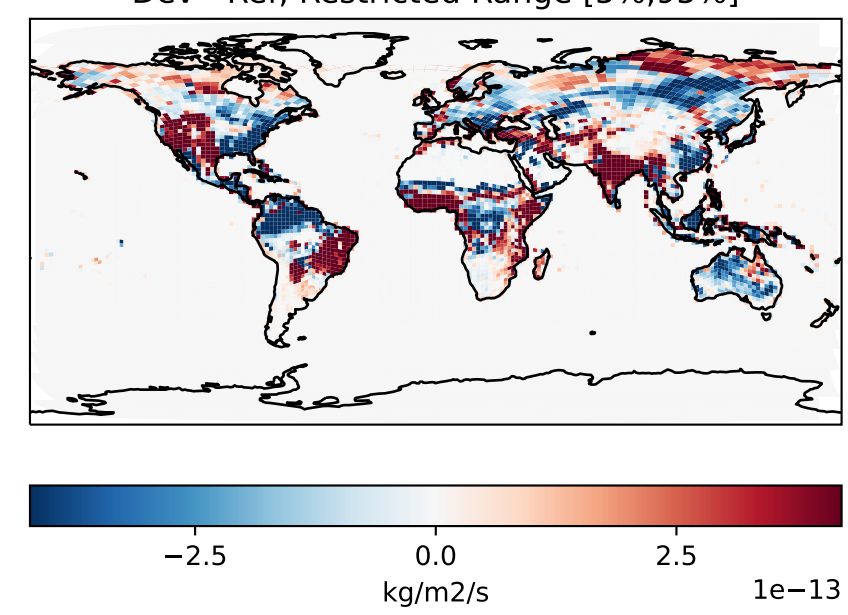

GCHP_13.2.0 (Dev)
c48



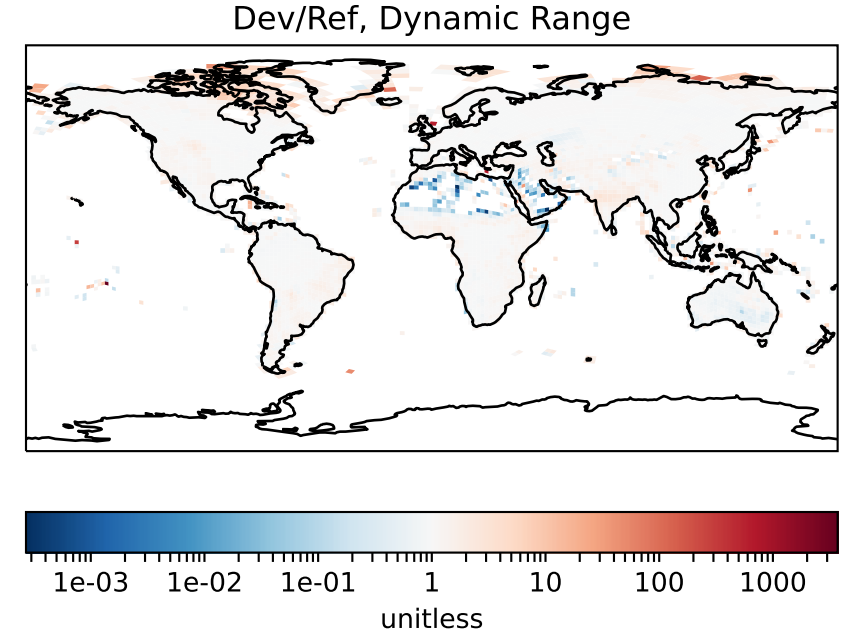

Difference
Dev - Ref, Dynamic Range



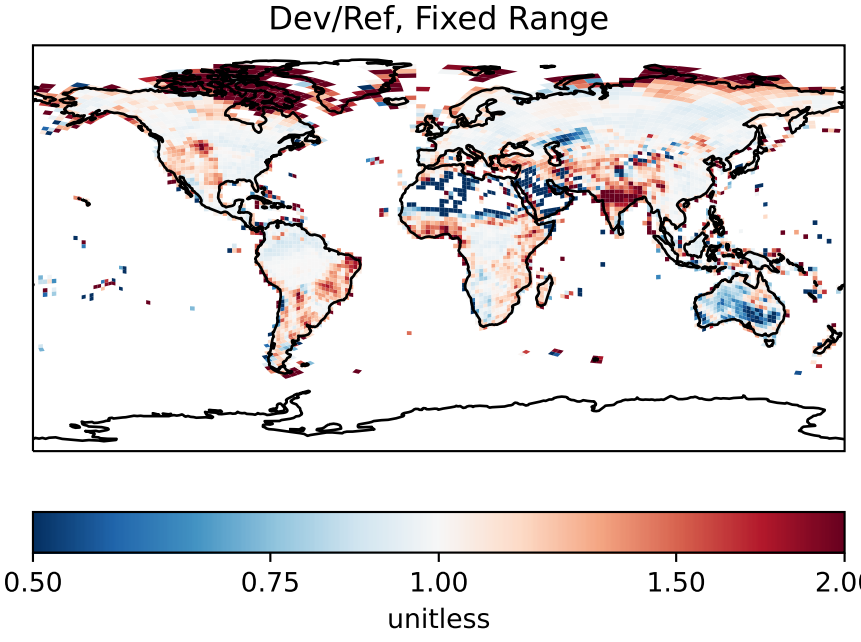

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

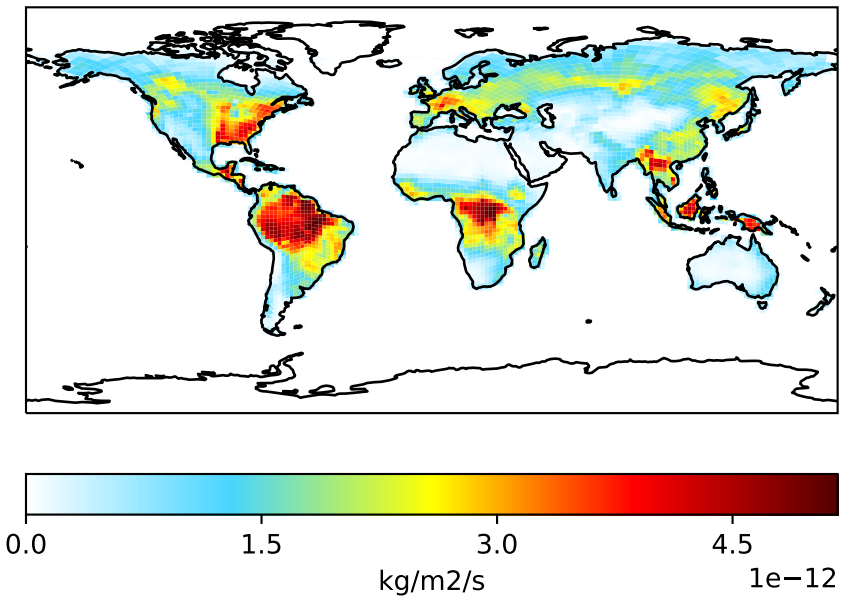



Ratio
Dev/Ref, Fixed Range

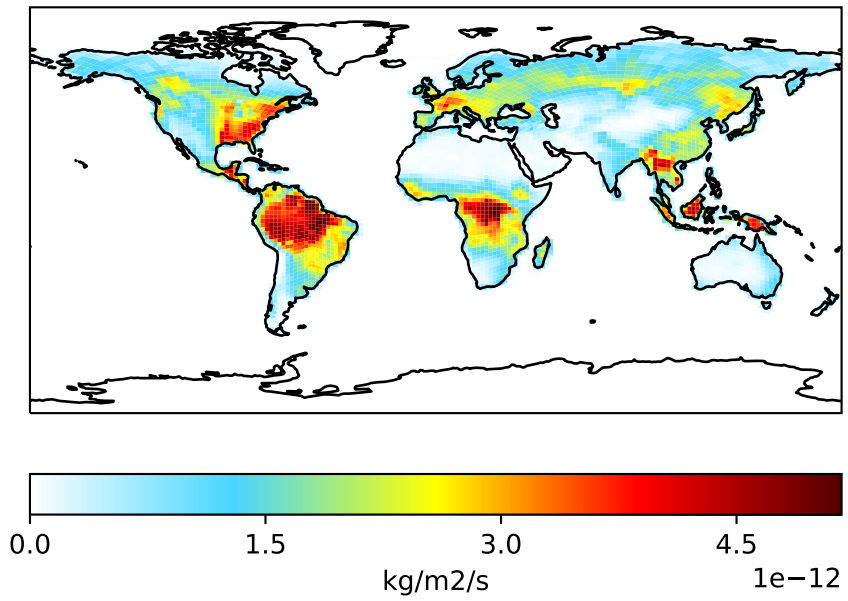


# EmisEOH_PlantDecay (Jul2019)

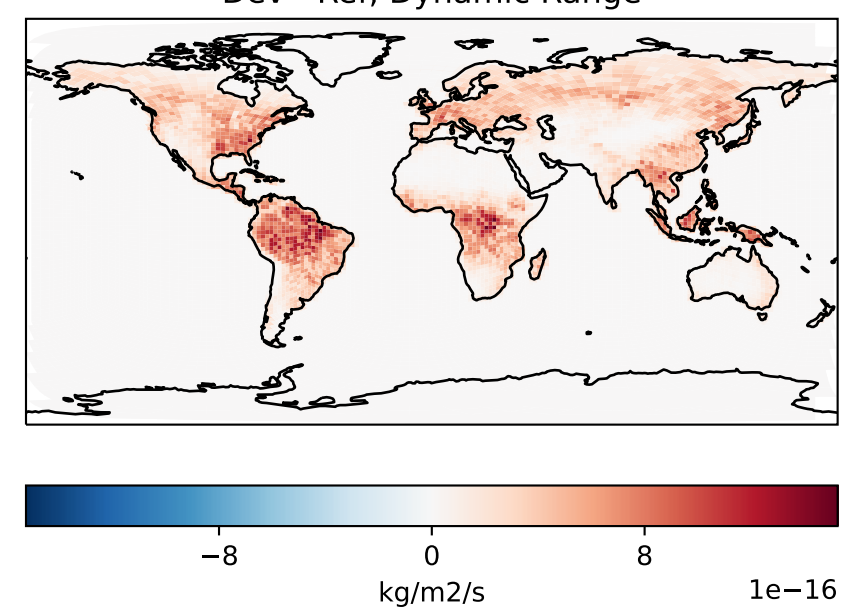
GCHP_13.0.0 (Ref)
c48



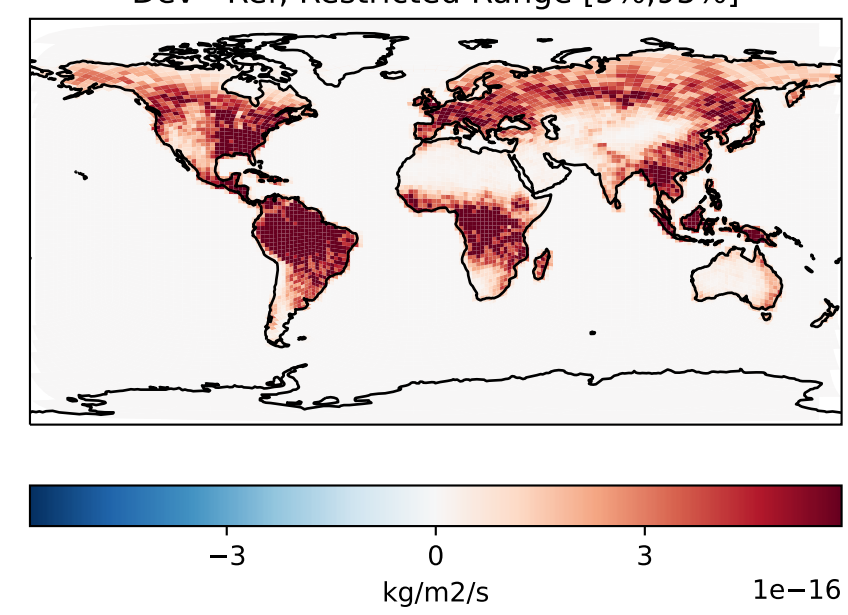

GCHP_13.2.0 (Dev)
c48



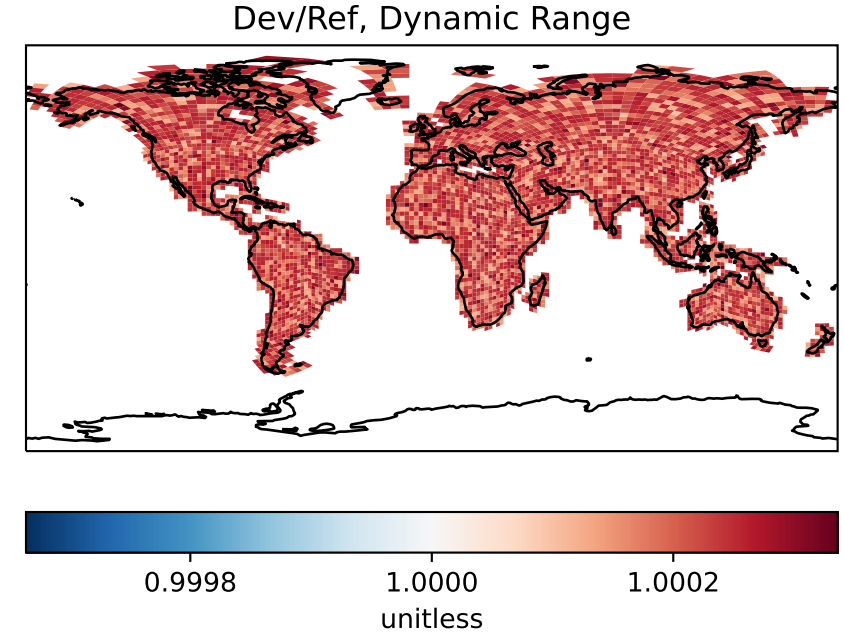

Difference
Dev - Ref, Dynamic Range



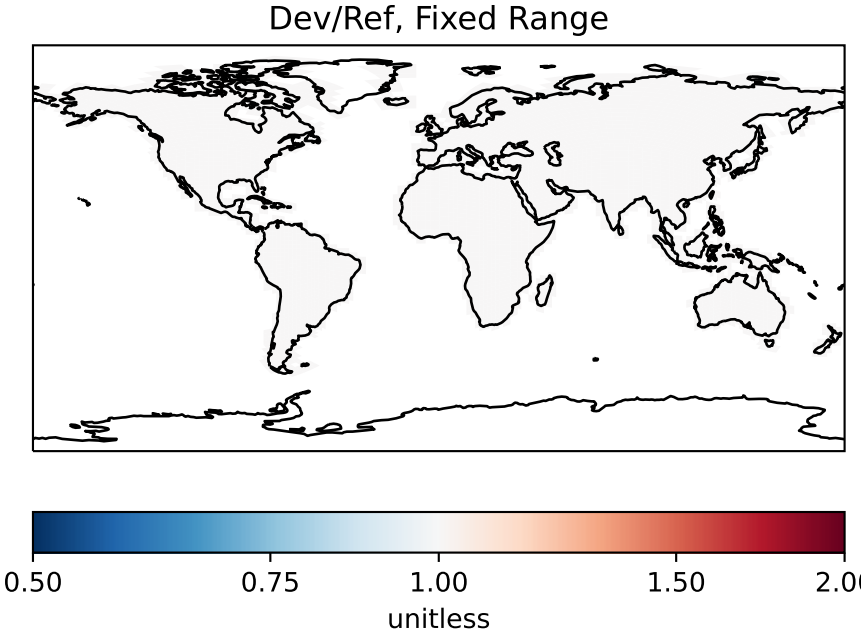

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

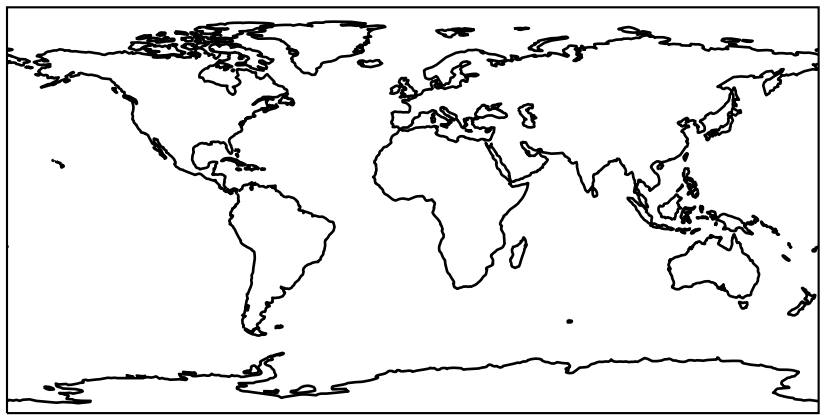



Ratio
Dev/Ref, Fixed Range



# EmisEOH_Ship (Jul2019)

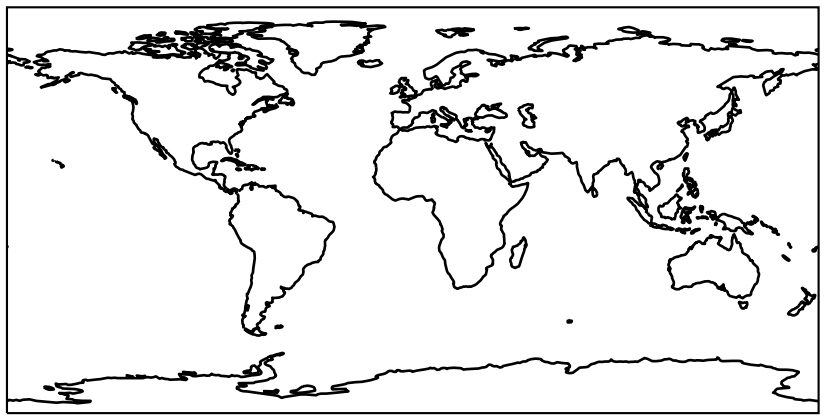
GCHP_13.0.0 (Ref)
c48





Zero throughout domain
kg/m2/s

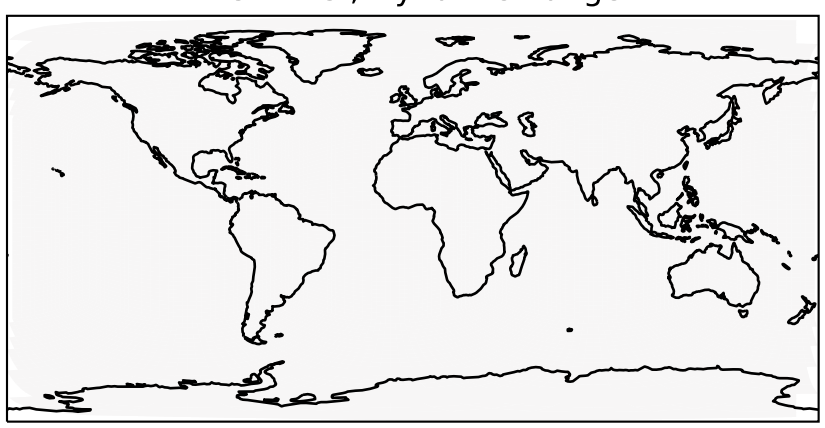
GCHP_13.2.0 (Dev)
c48





Zero throughout domain
kg/m2/s

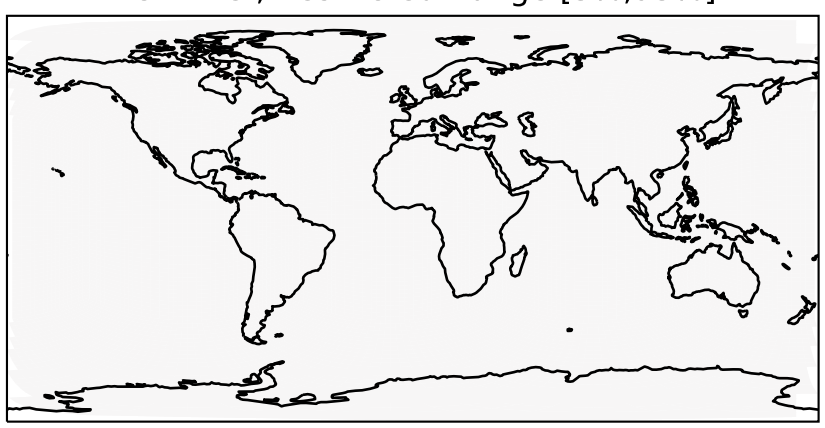
Difference
Dev - Ref, Dynamic Range





Zero throughout domain
kg/m2/s

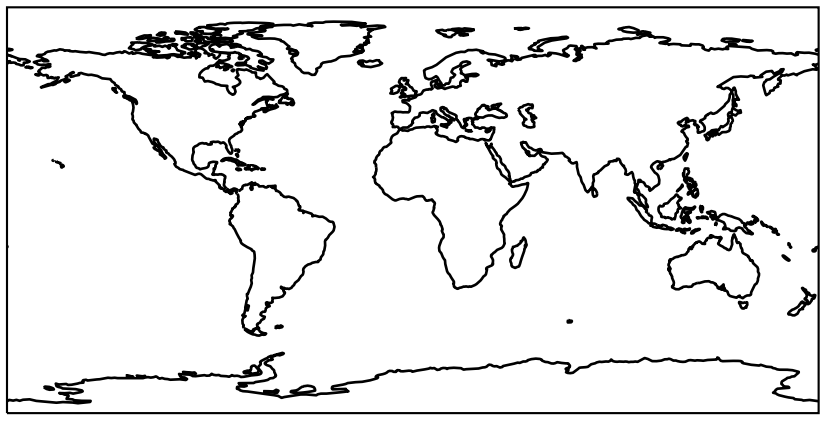
Difference
Dev - Ref, Restricted Range [5%,95%]





Zero throughout domain
kg/m2/s

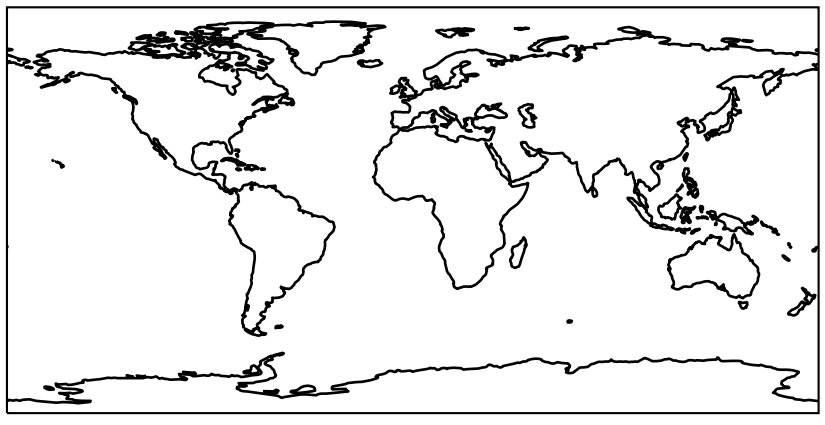
Ratio
Dev/Ref, Dynamic Range





Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

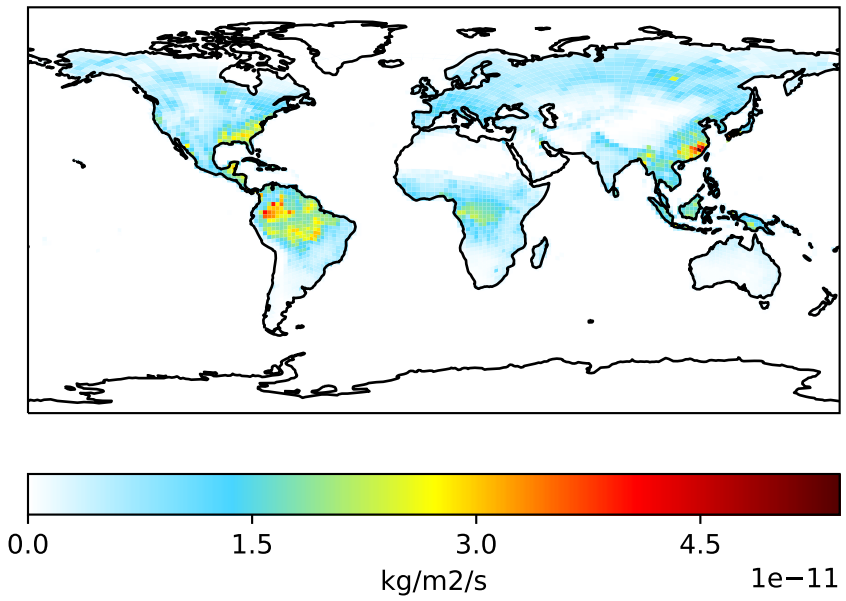




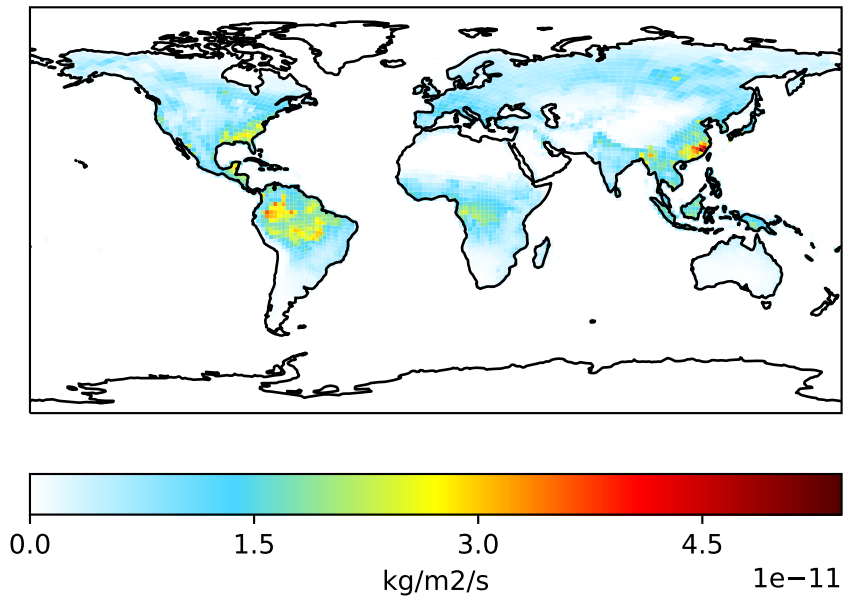
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# EmisEOH_Total (Jul2019)

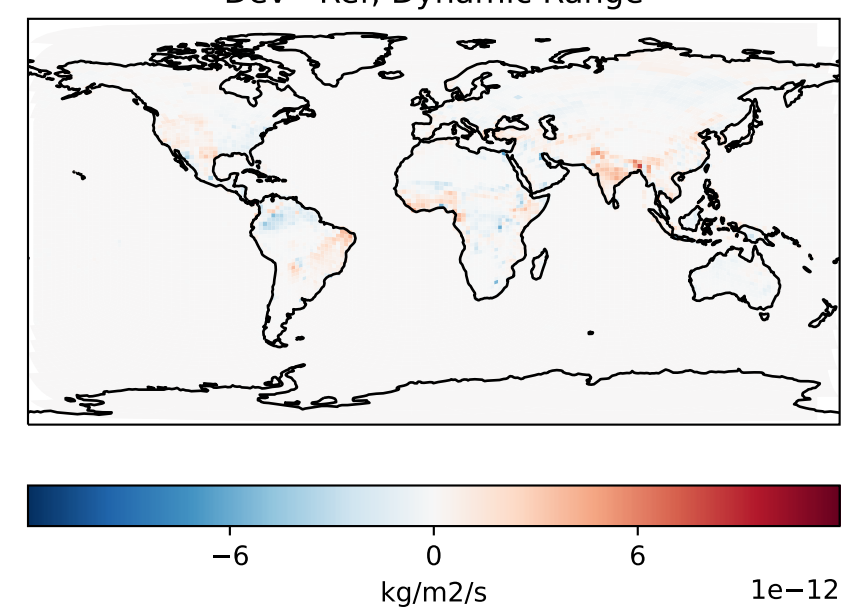
GCHP_13.0.0 (Ref)
c48



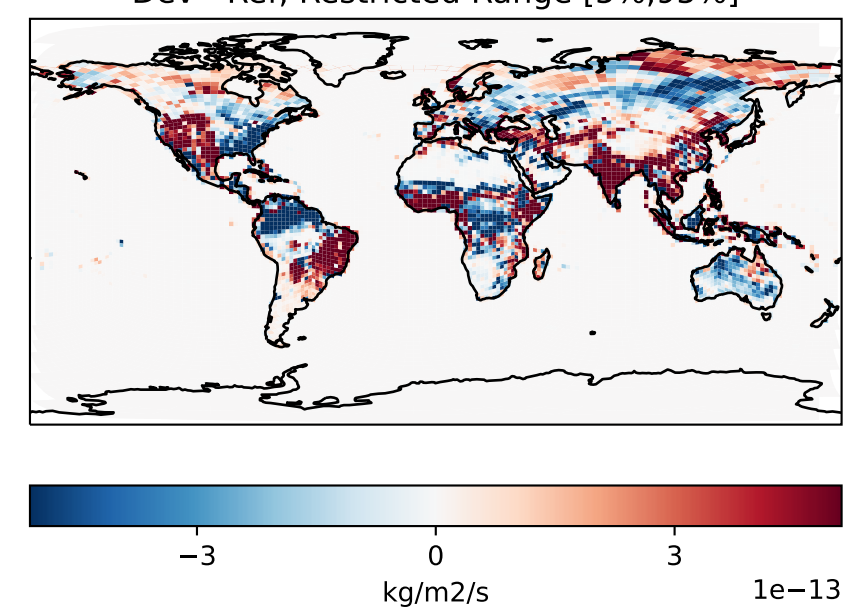

GCHP_13.2.0 (Dev)
c48



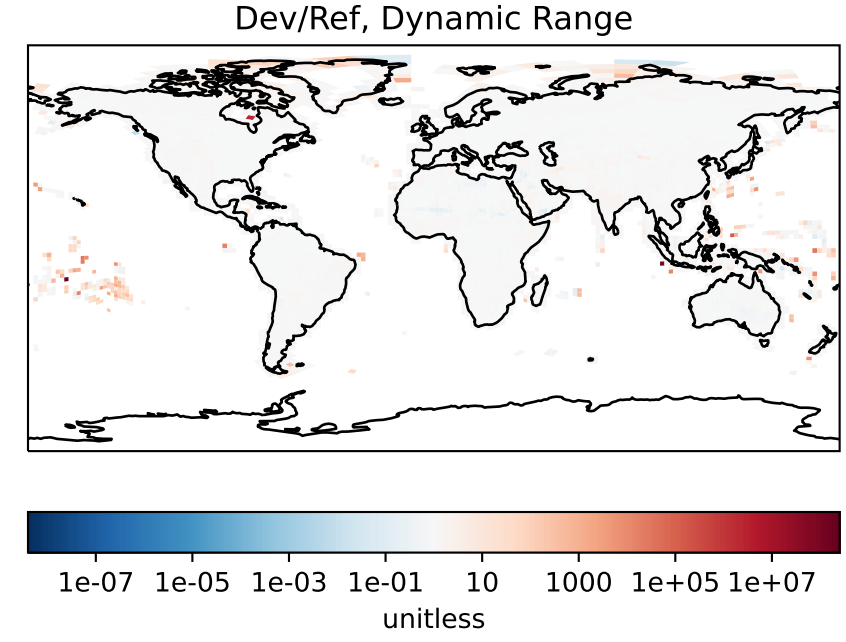

Difference
Dev - Ref, Dynamic Range



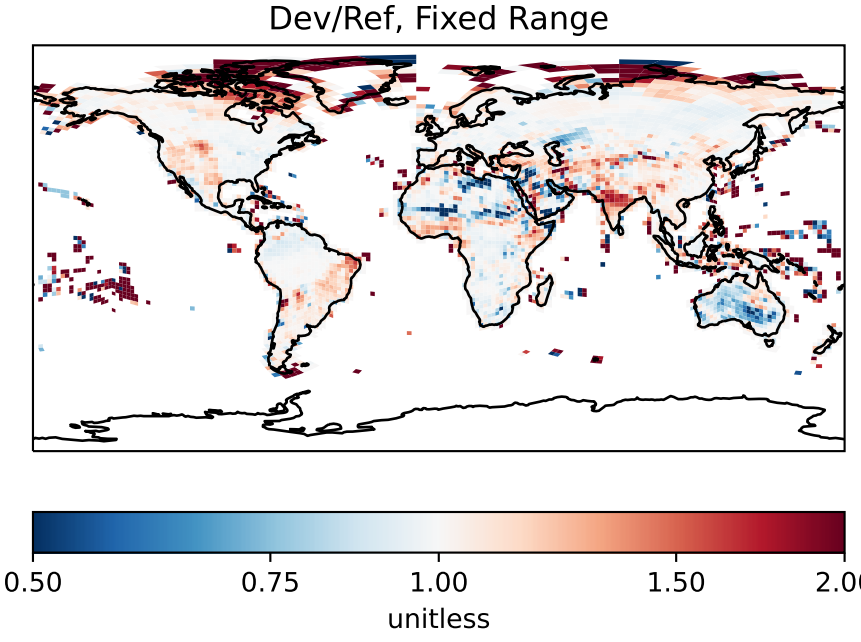

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

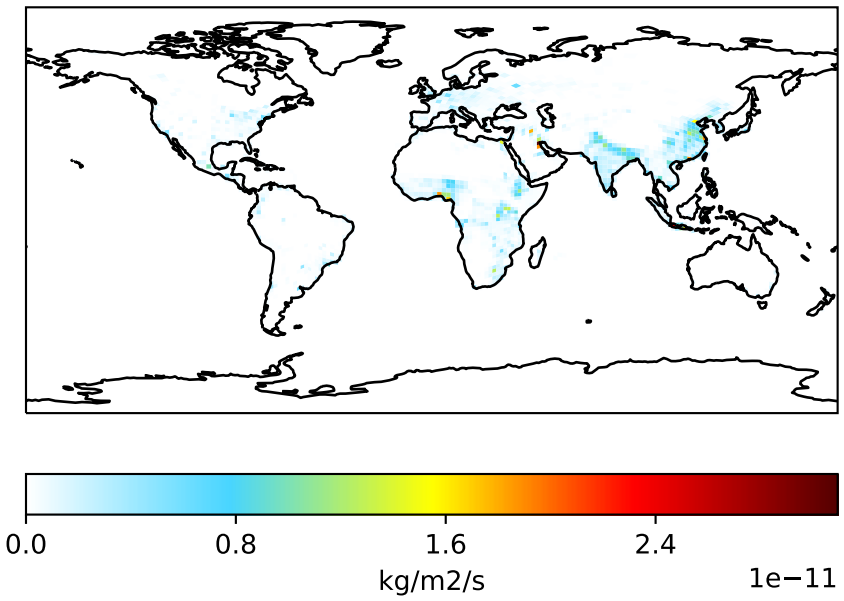



Ratio
Dev/Ref, Fixed Range

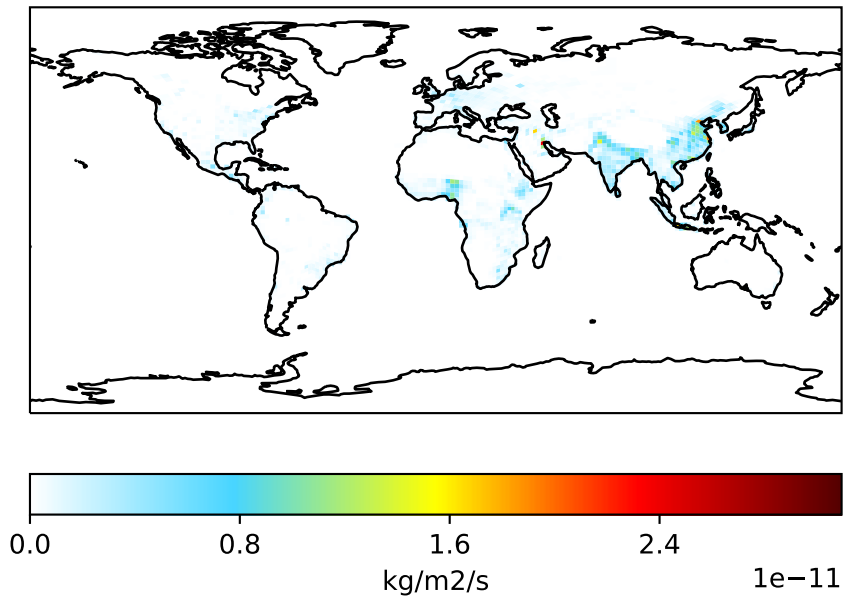


# EmisMOH_Anthro (Jul2019)

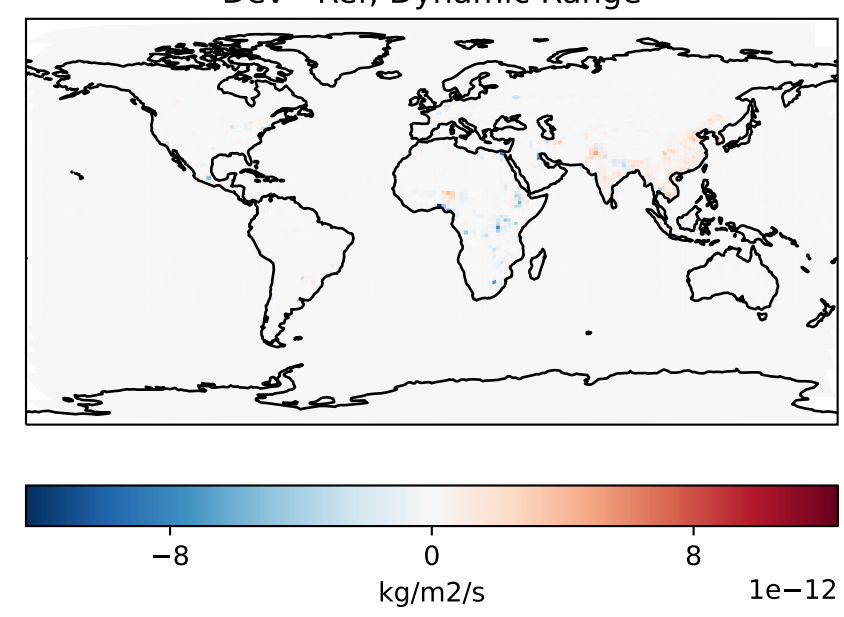
GCHP_13.0.0 (Ref)
c48



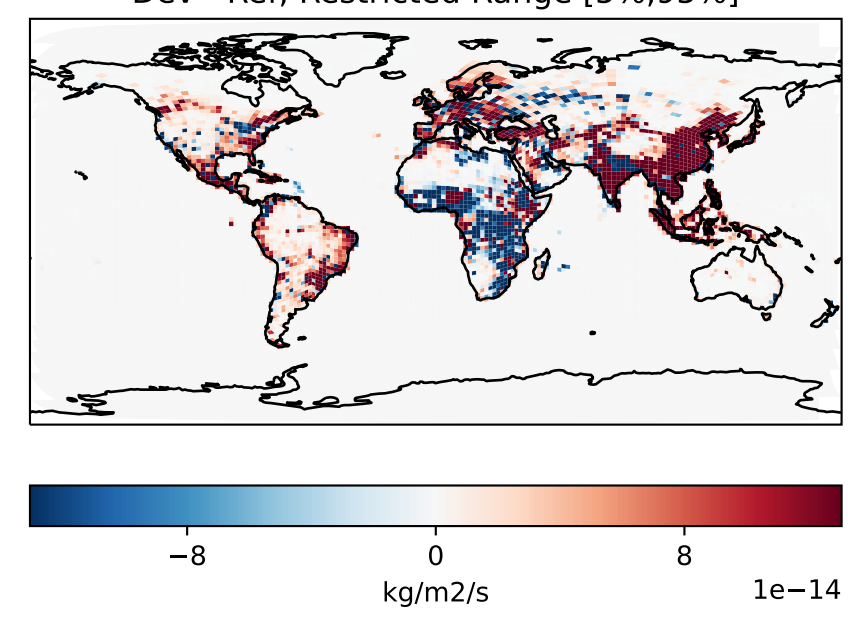

GCHP_13.2.0 (Dev)
c48



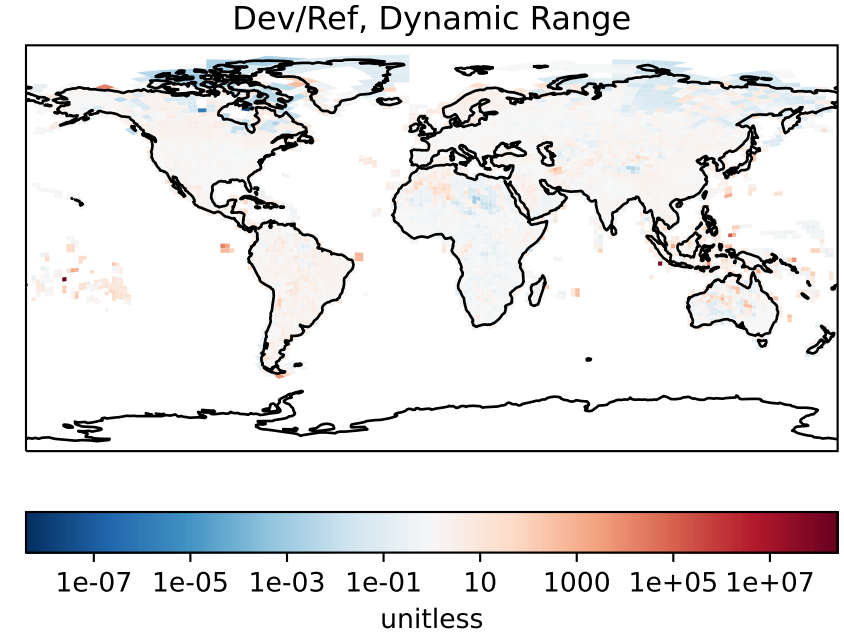

Difference
Dev - Ref, Dynamic Range



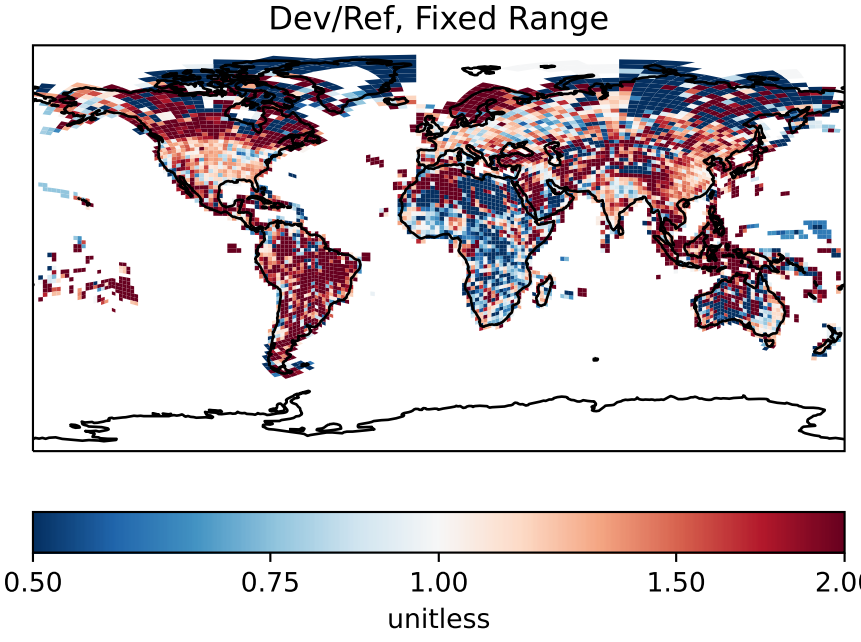

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

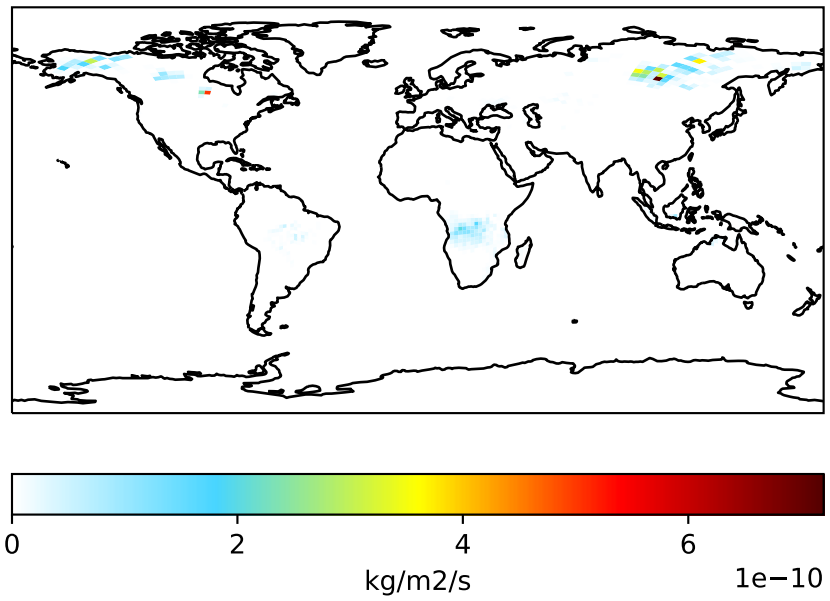



Ratio
Dev/Ref, Fixed Range

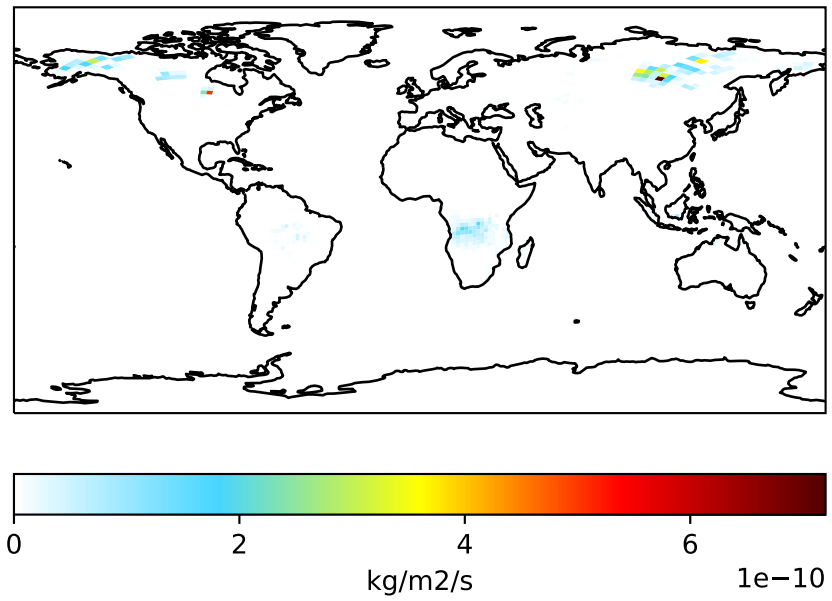


# EmisMOH_BioBurn (Jul2019)

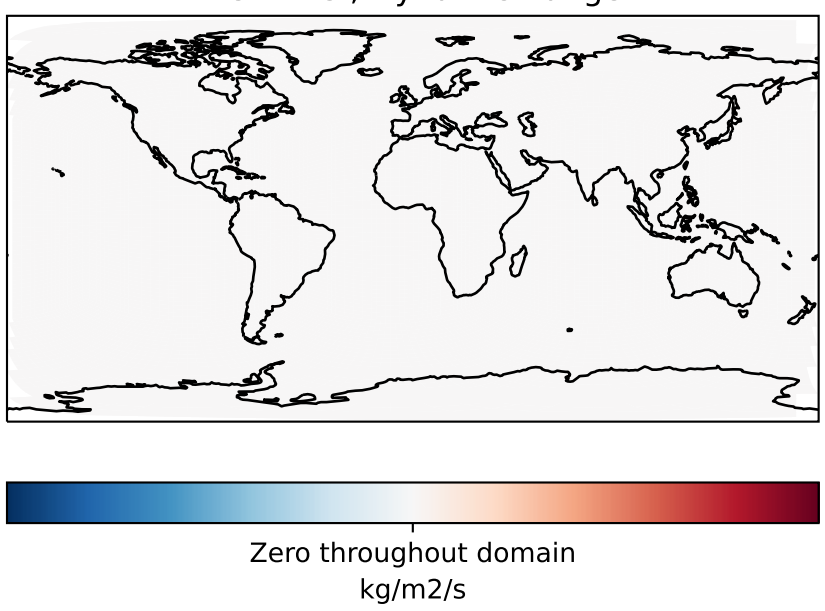
GCHP_13.0.0 (Ref)
c48



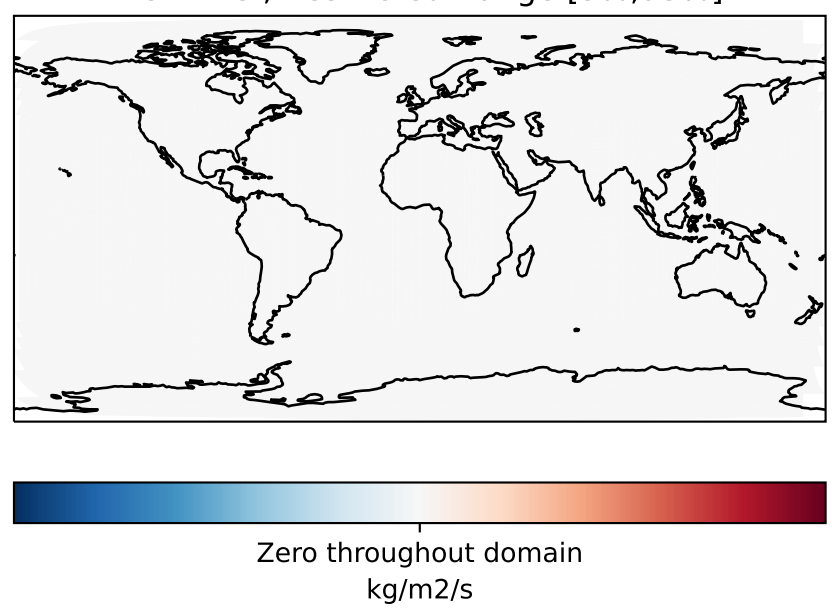

GCHP_13.2.0 (Dev)
c48



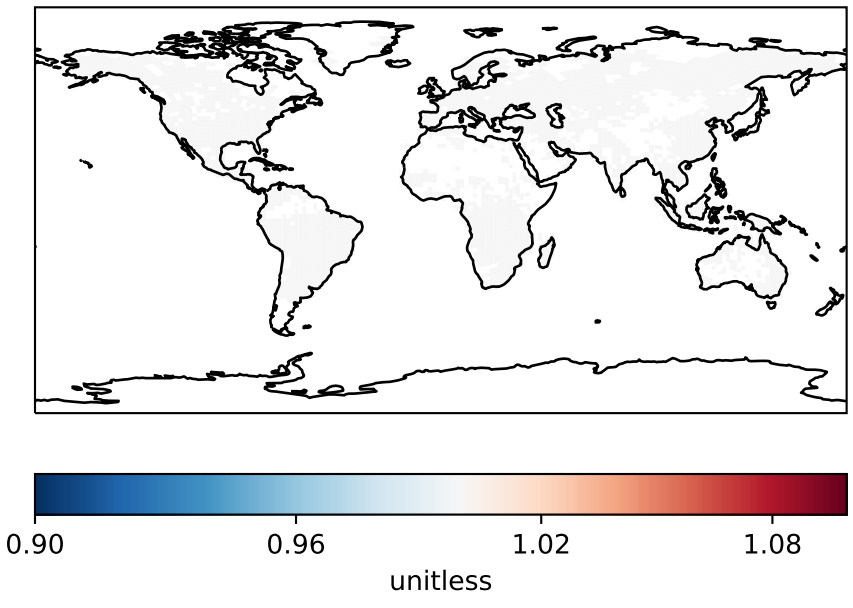

Difference
Dev - Ref, Dynamic Range



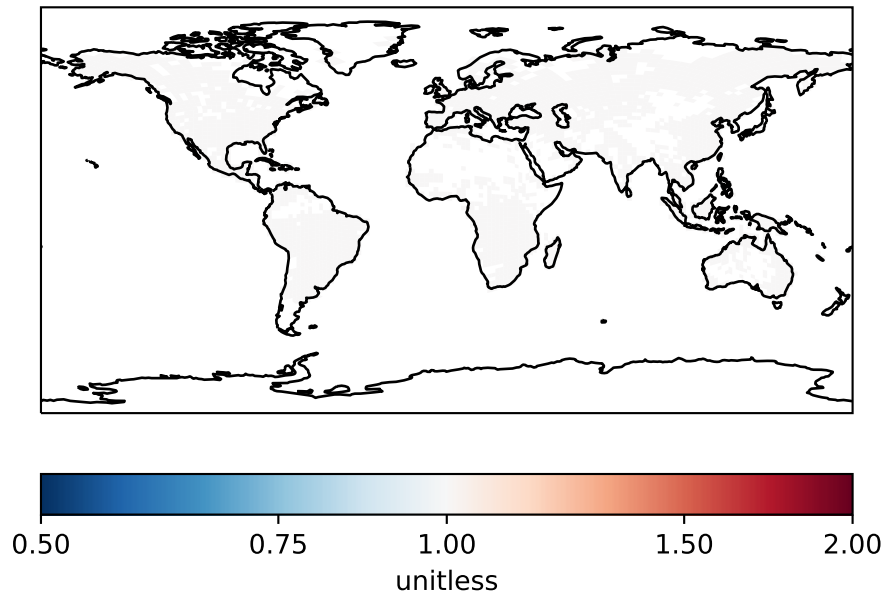

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

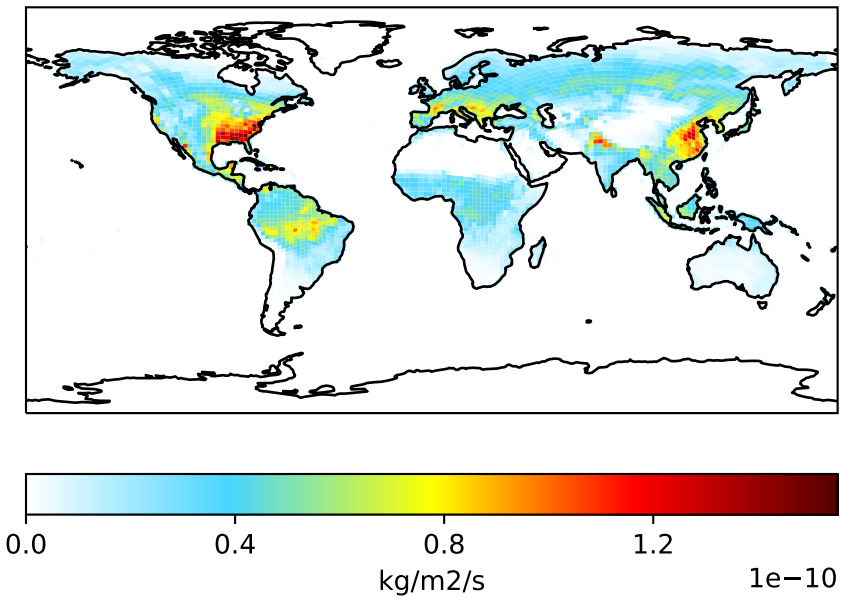



Ratio
Dev/Ref, Fixed Range

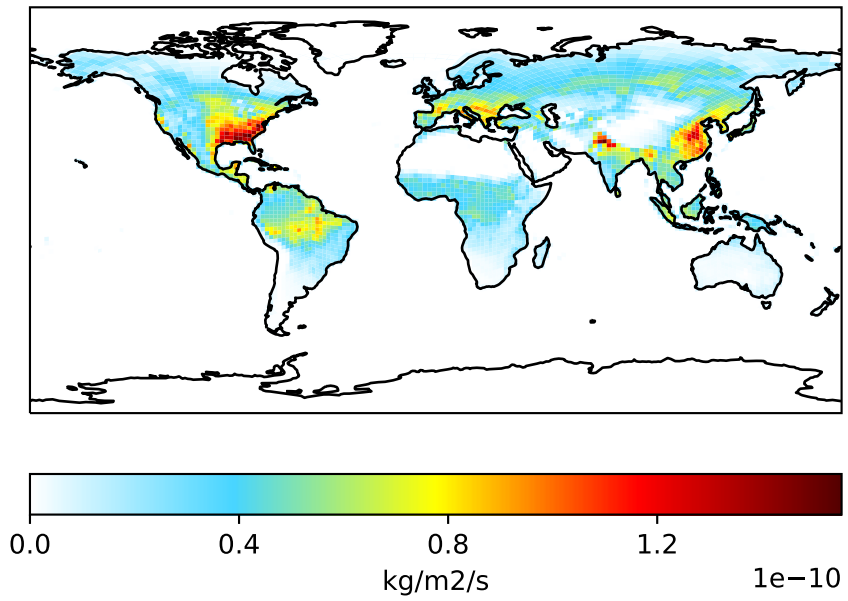


# EmisMOH_Biogenic (Jul2019)

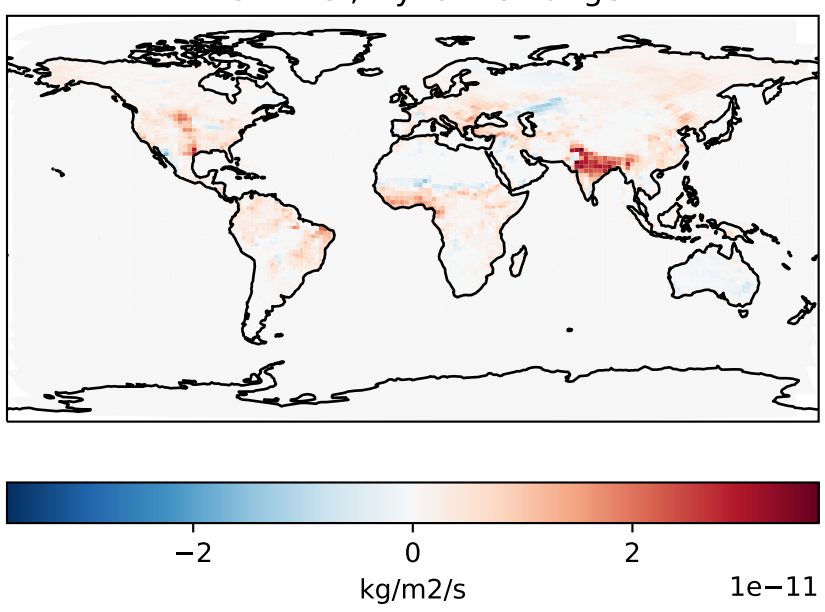
GCHP_13.0.0 (Ref)
c48



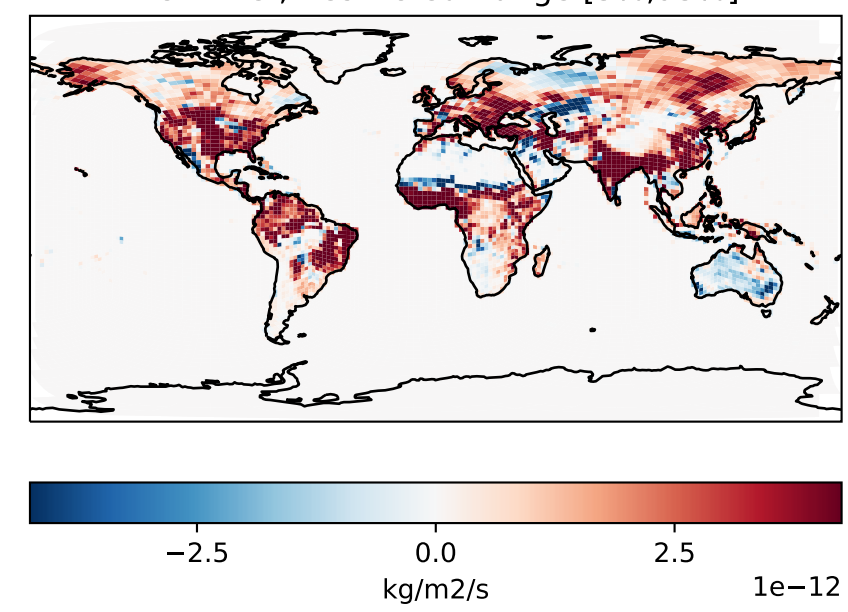

GCHP_13.2.0 (Dev)
c48



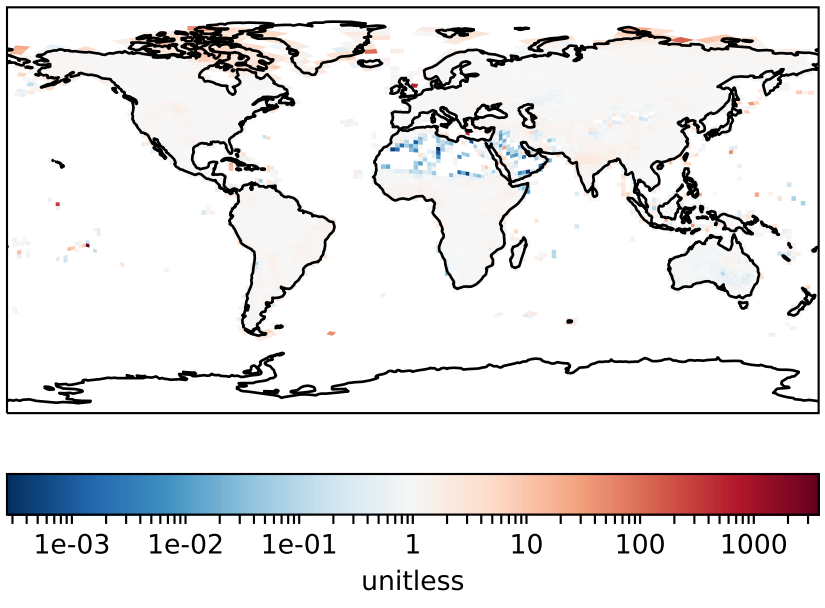

Difference
Dev - Ref, Dynamic Range



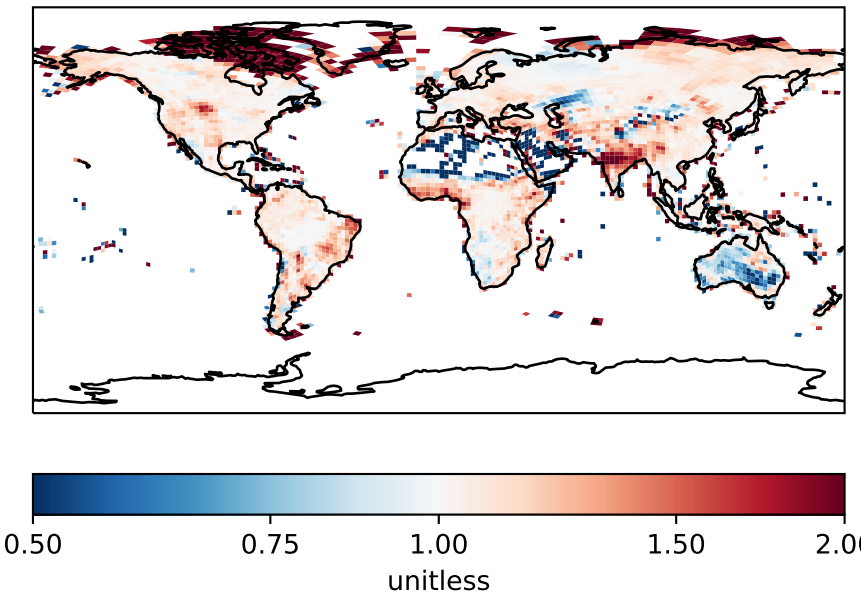

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

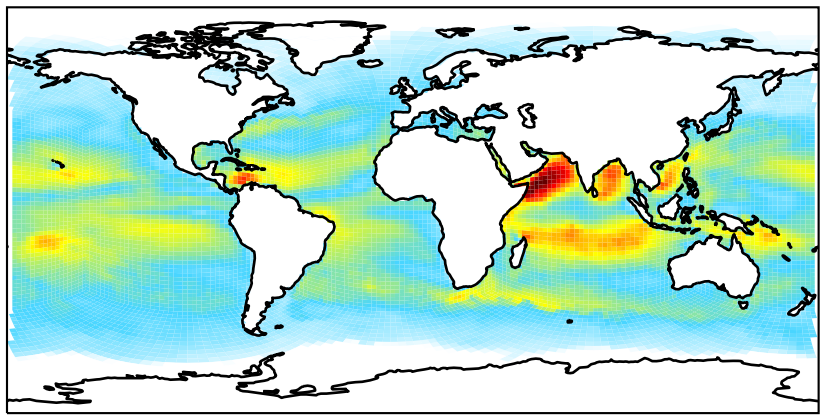


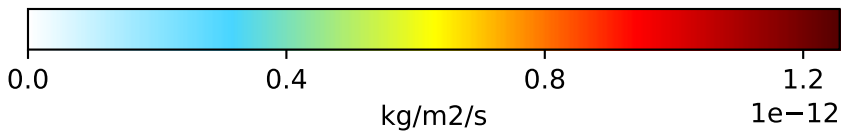

Ratio
Dev/Ref, Fixed Range



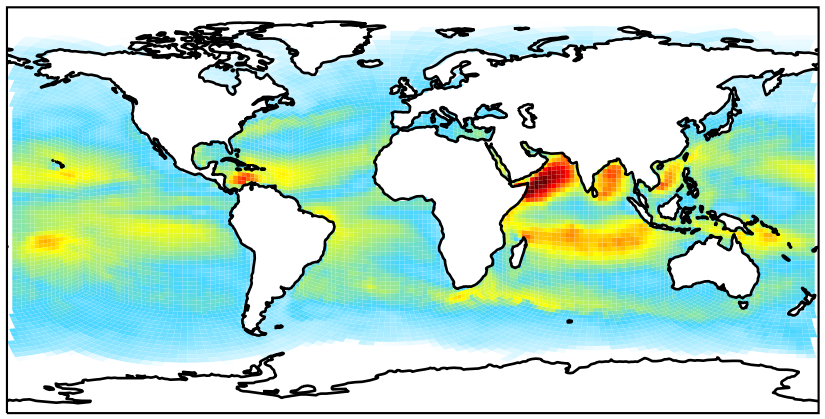
# EmisMOH_Ocean (Jul2019)

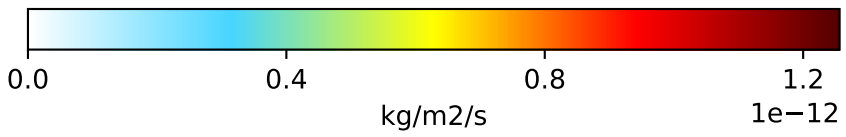
GCHP_13.0.0 (Ref)
c48



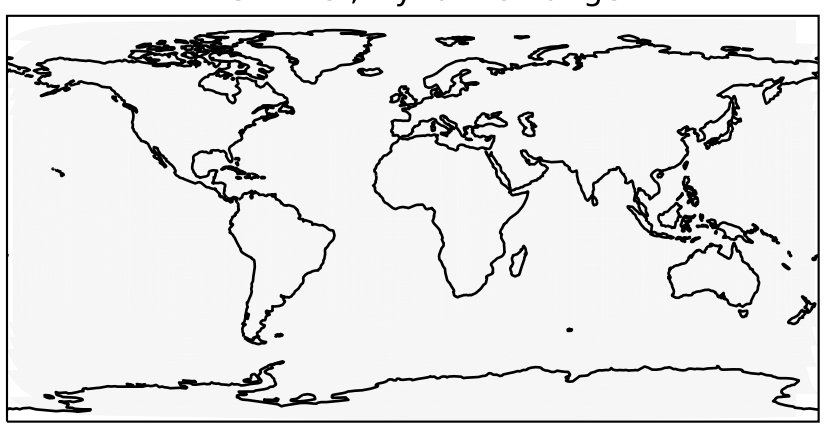


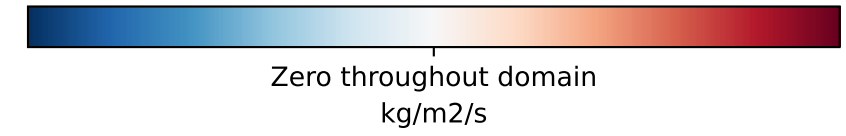

GCHP_13.2.0 (Dev)
c48



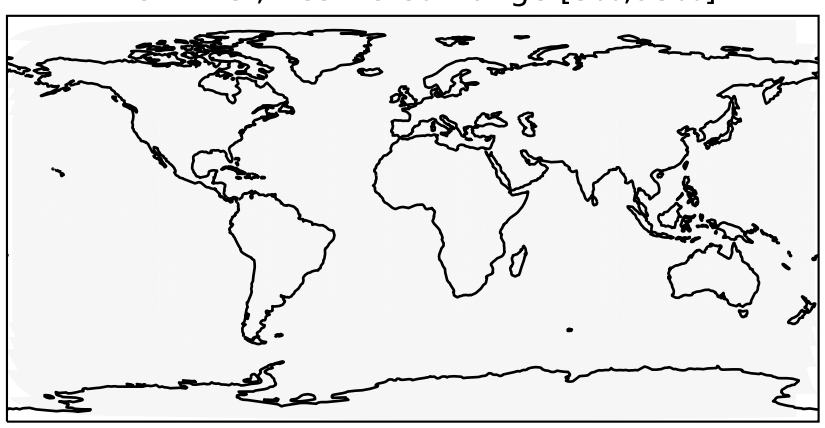


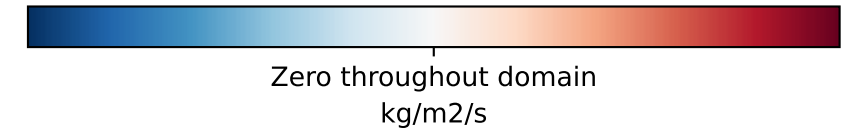

Difference
Dev - Ref, Dynamic Range



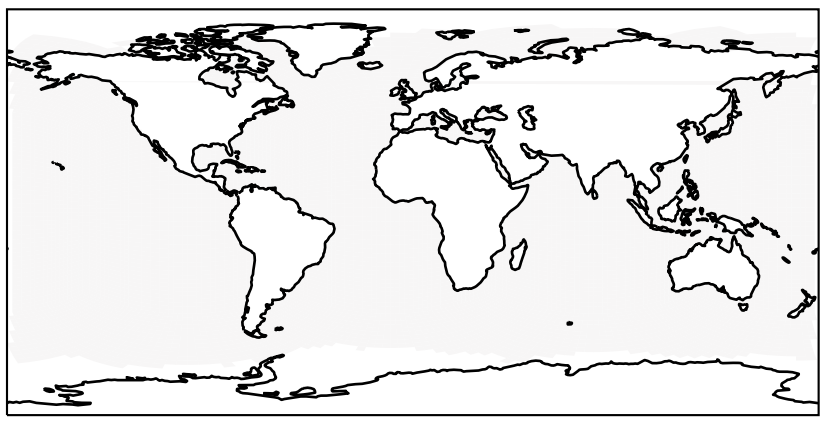


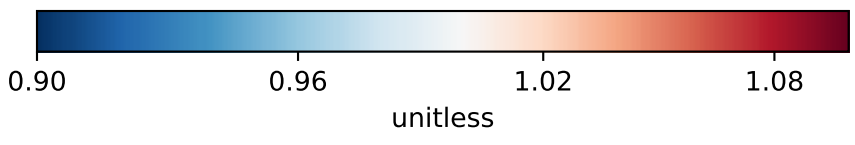

Difference
Dev - Ref, Restricted Range [5%,95%]



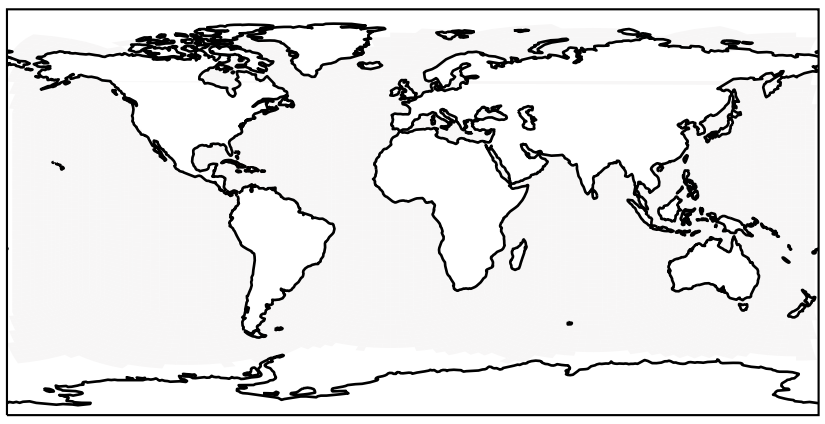


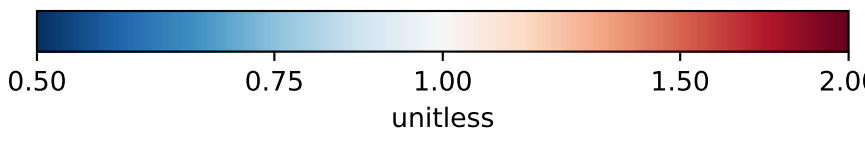

Ratio
Dev/Ref, Dynamic Range





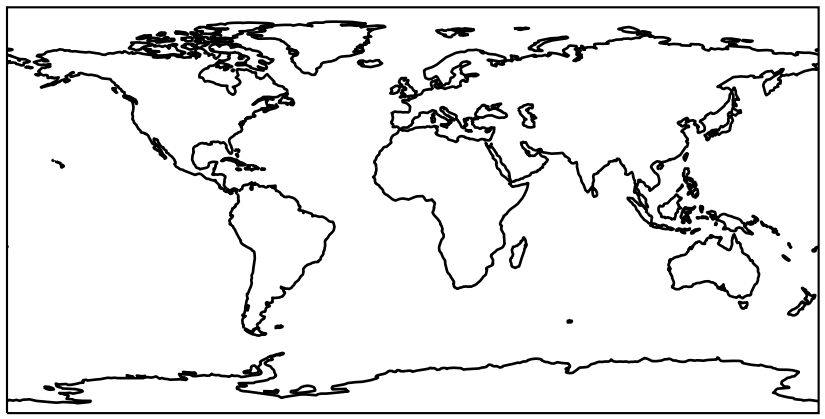

Ratio
Dev/Ref, Fixed Range





# EmisMOH_Ship (Jul2019)

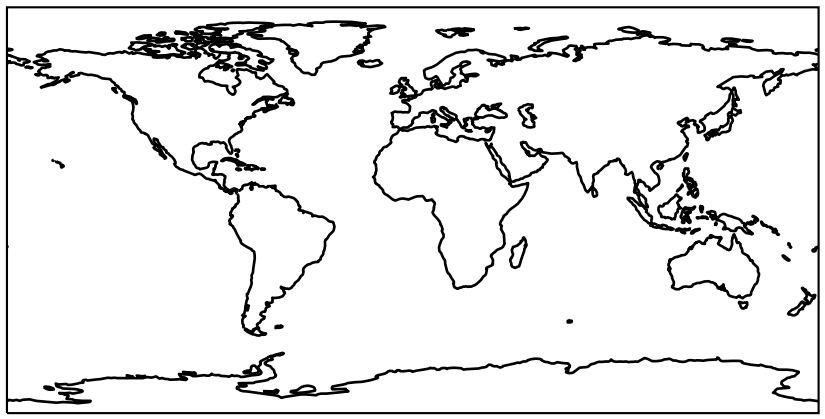
GCHP_13.0.0 (Ref)
c48





Zero throughout domain
kg/m2/s

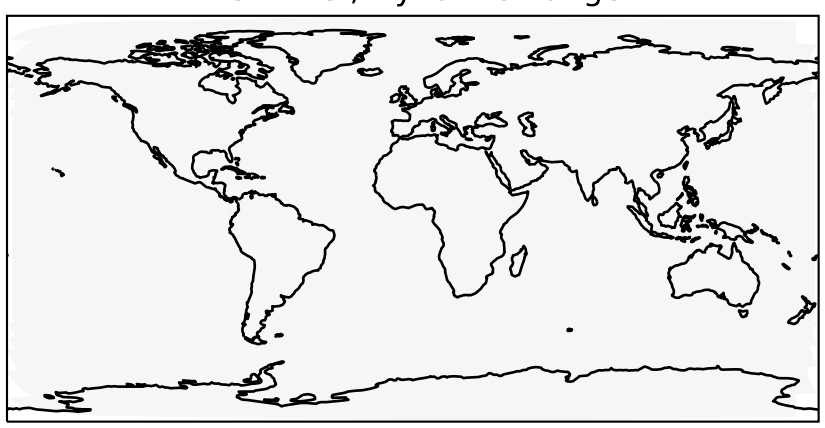
GCHP_13.2.0 (Dev)
c48





Zero throughout domain
kg/m2/s

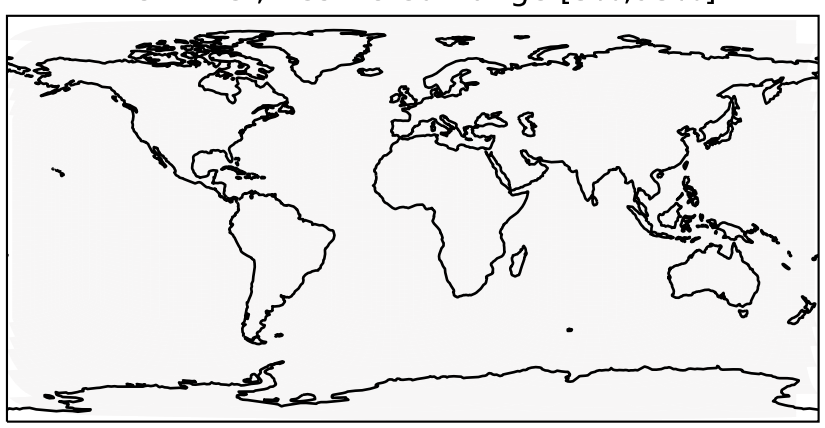
Difference
Dev - Ref, Dynamic Range





Zero throughout domain
kg/m2/s

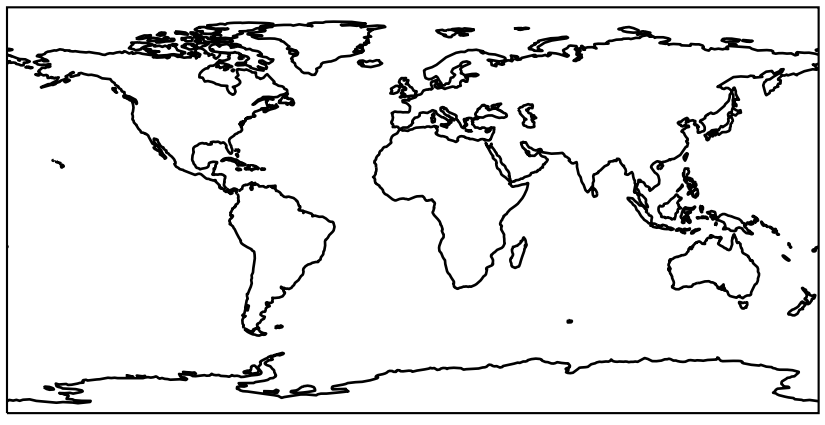
Difference
Dev - Ref, Restricted Range [5%,95%]





Zero throughout domain
kg/m2/s

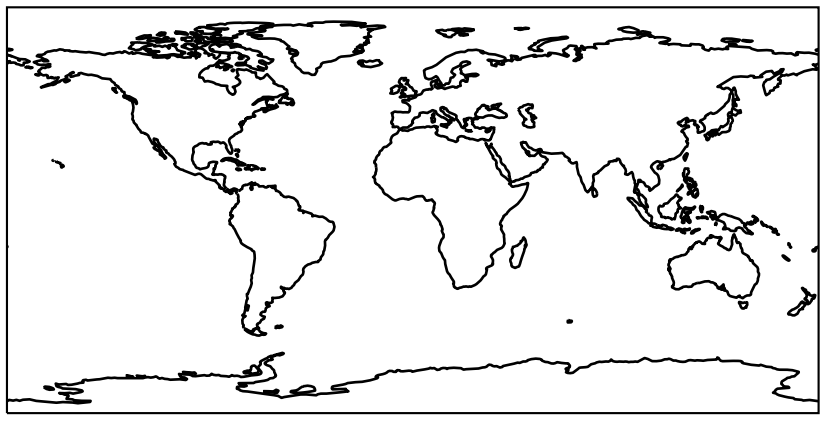
Ratio
Dev/Ref, Dynamic Range





Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

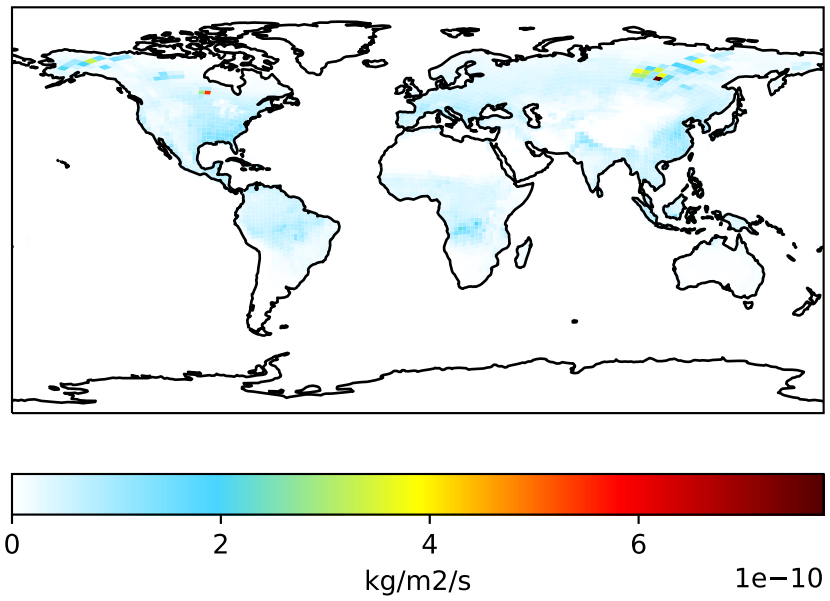




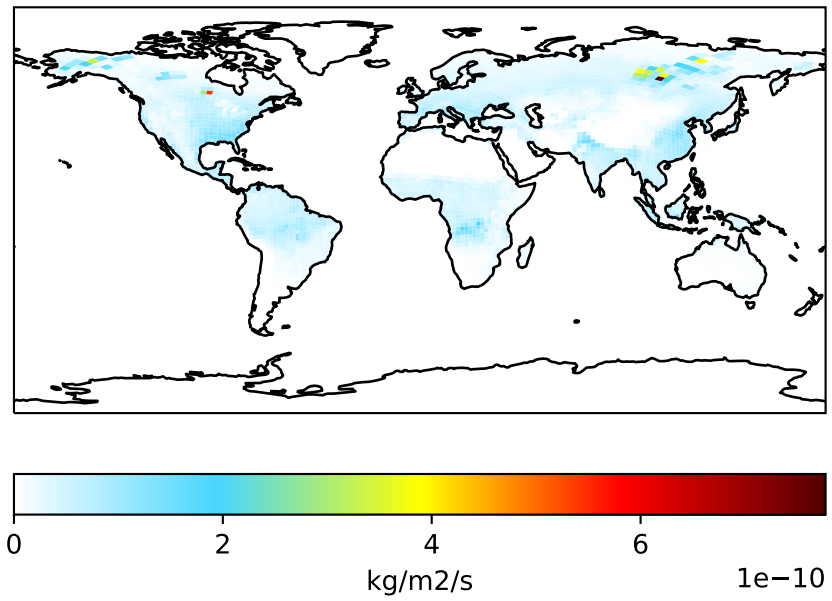
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unitless

# EmisMOH_Total (Jul2019)

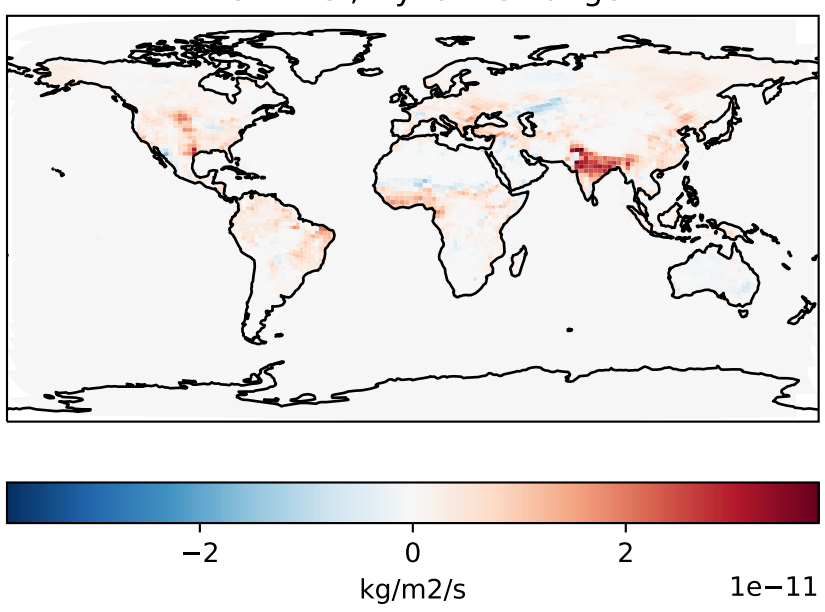
GCHP_13.0.0 (Ref)
c48



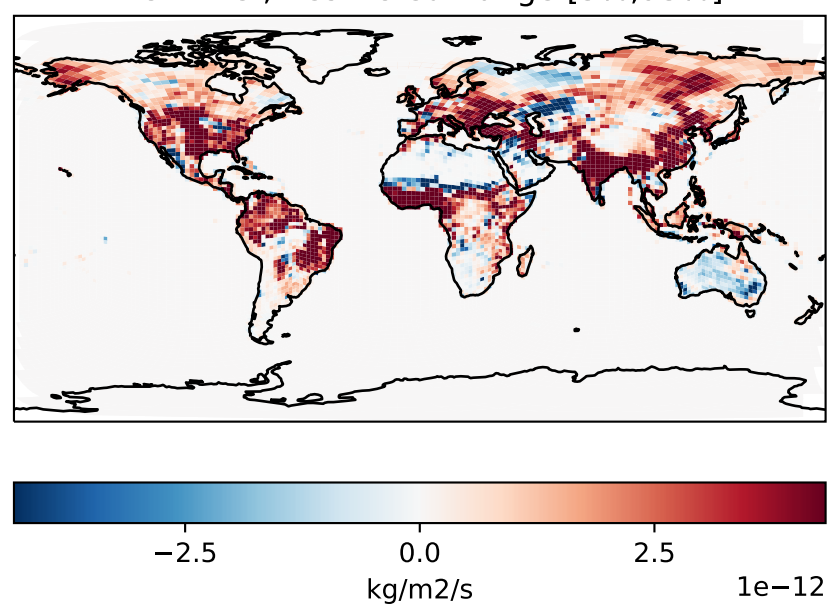

GCHP_13.2.0 (Dev)
c48



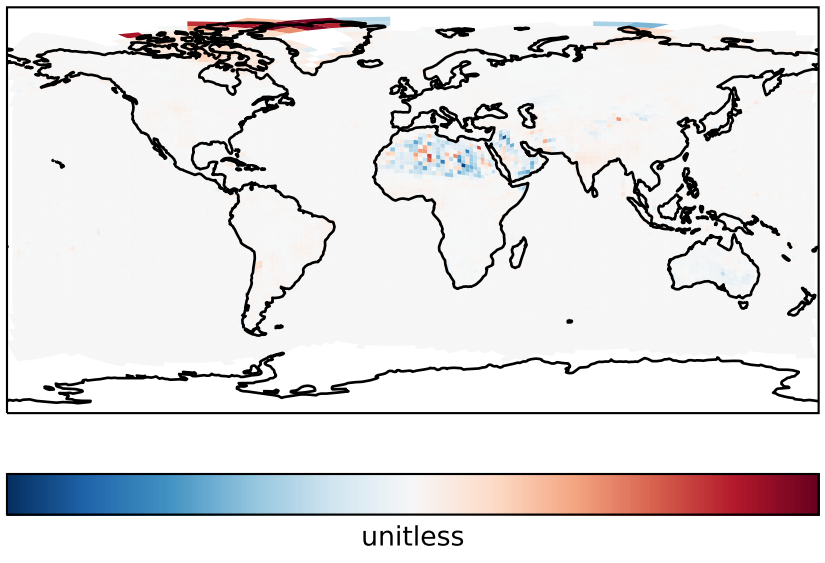

Difference
Dev - Ref, Dynamic Range



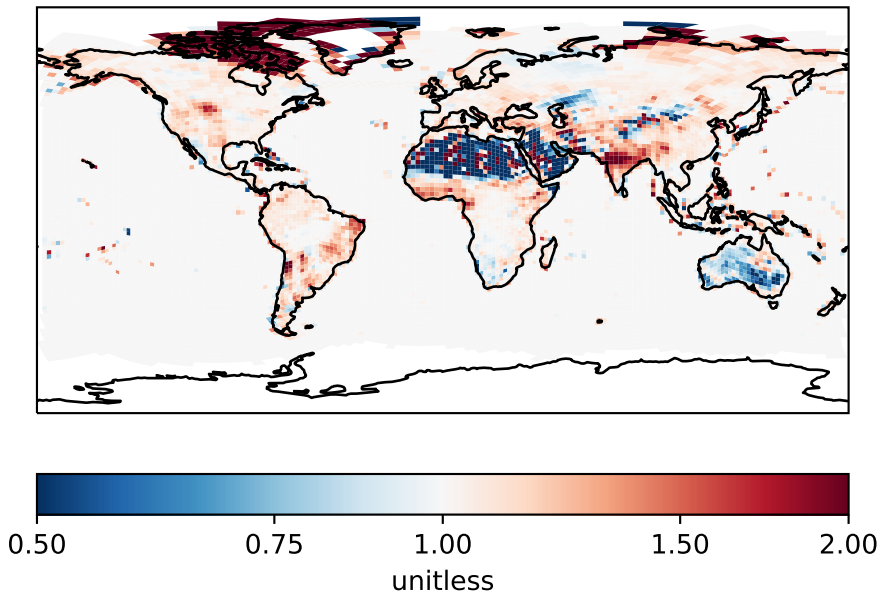

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

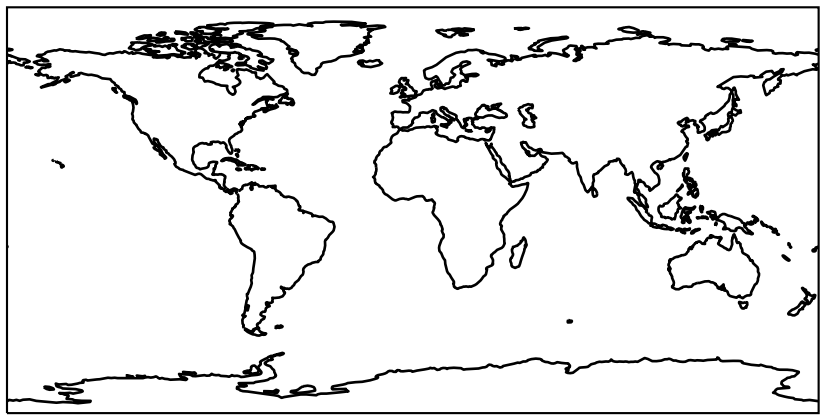



Ratio
Dev/Ref, Fixed Range



# EmisISOP_Anthro (Jul2019)

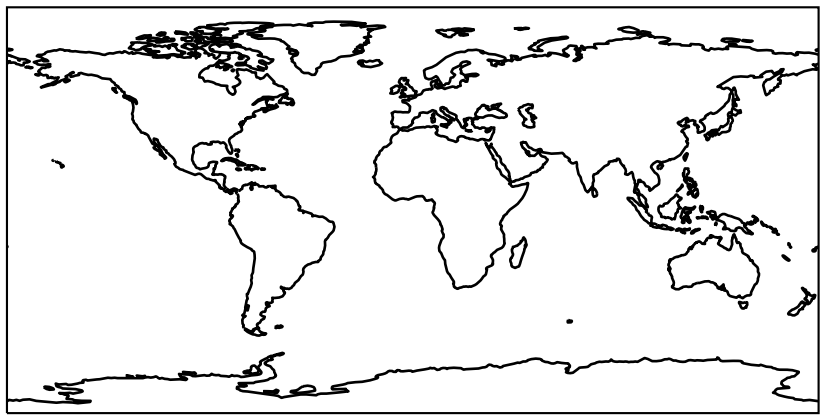
GCHP_13.0.0 (Ref)
c48





Zero throughout domain
kg/m2/s

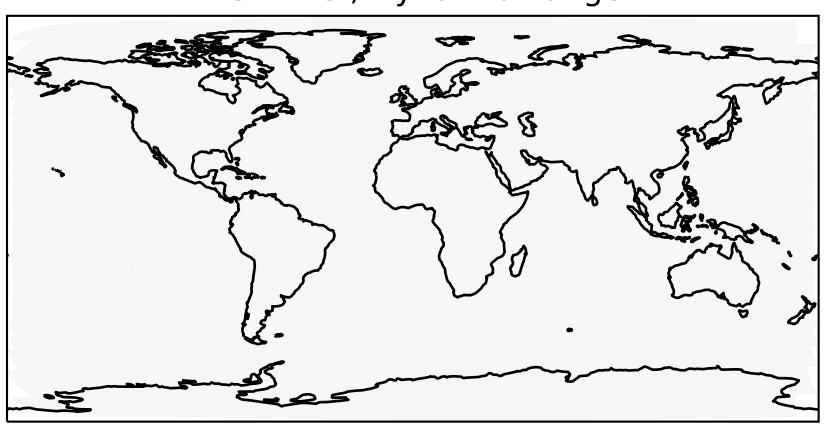
GCHP_13.2.0 (Dev)
c48





Zero throughout domain
kg/m2/s

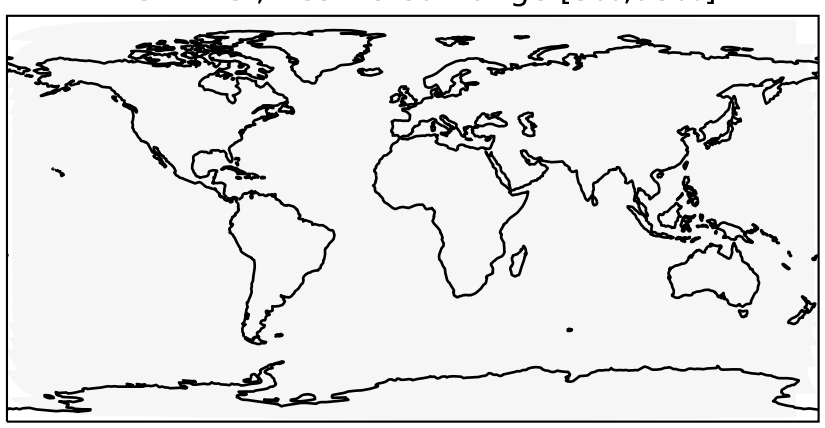
Difference
Dev - Ref, Dynamic Range





Zero throughout domain
kg/m2/s

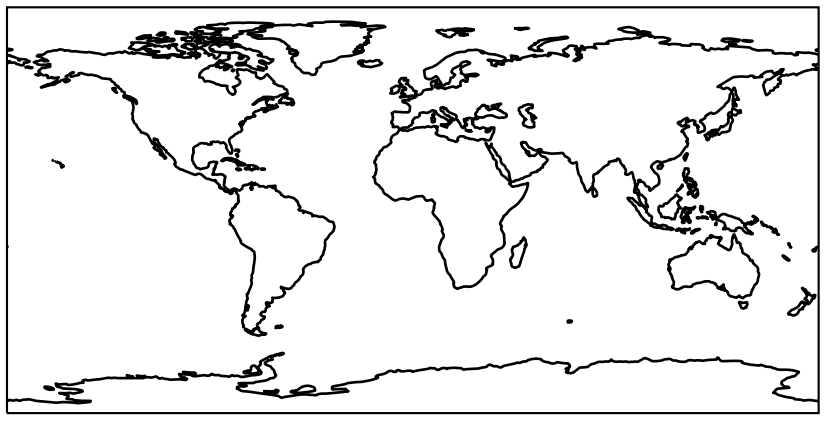
Difference
Dev - Ref, Restricted Range [5%,95%]





Zero throughout domain
kg/m2/s

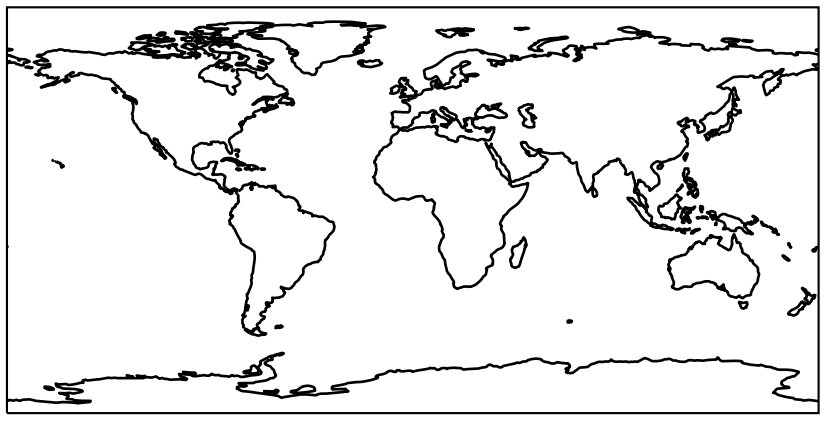
Ratio
Dev/Ref, Dynamic Range





Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

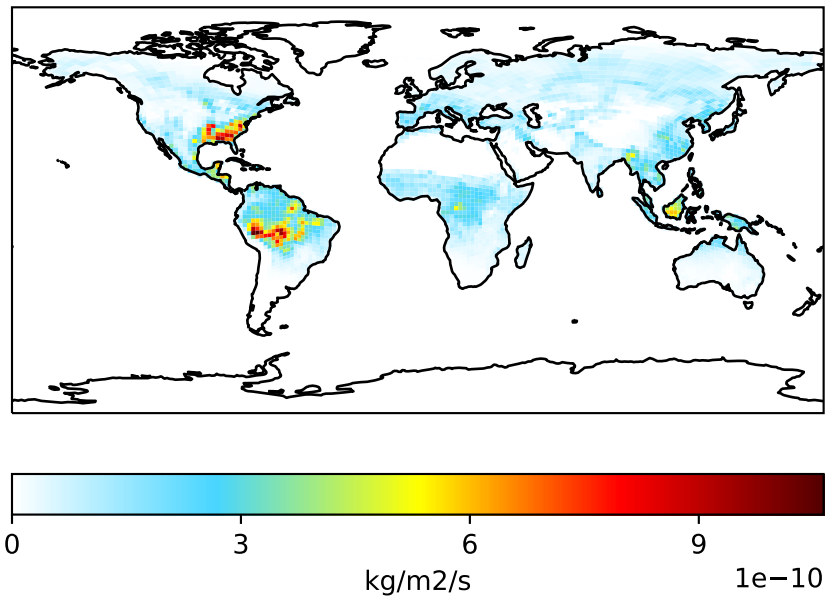




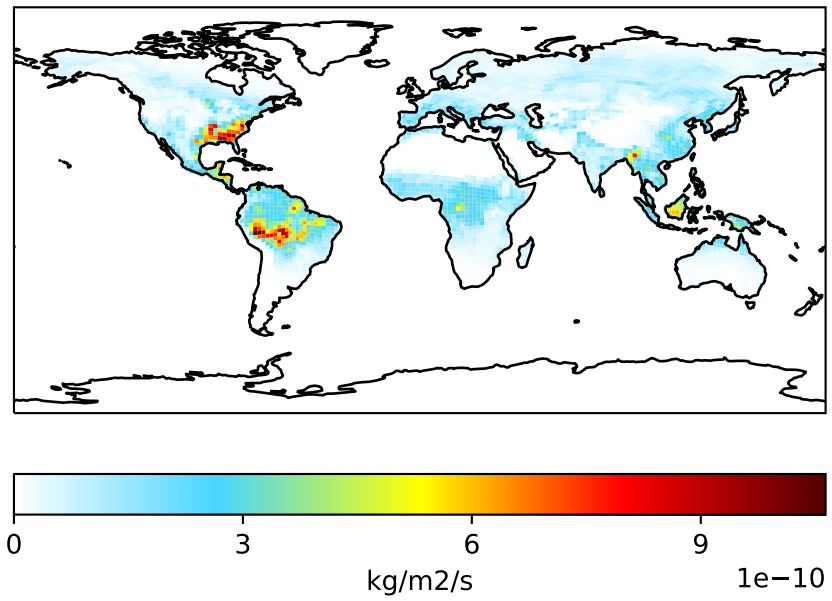
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# EmisISOP_Biogenic (Jul2019)

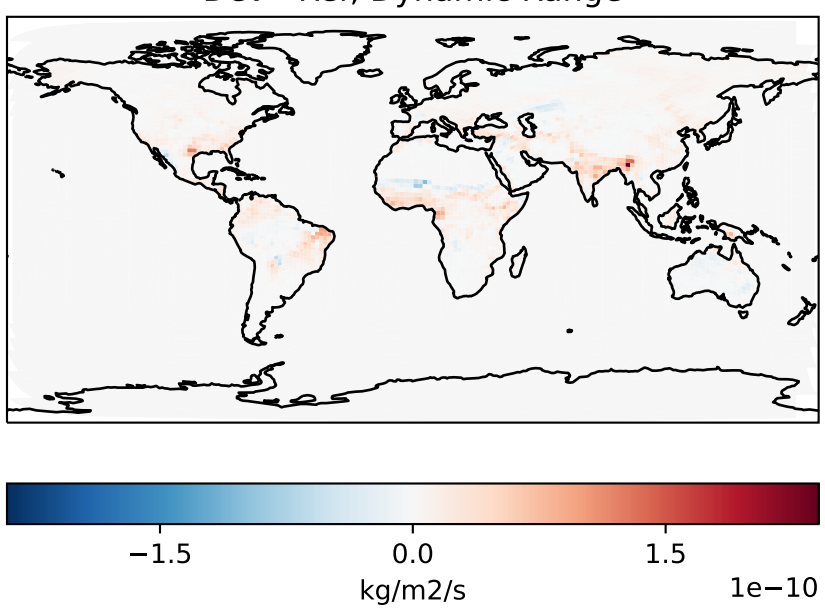
GCHP_13.0.0 (Ref)
c48



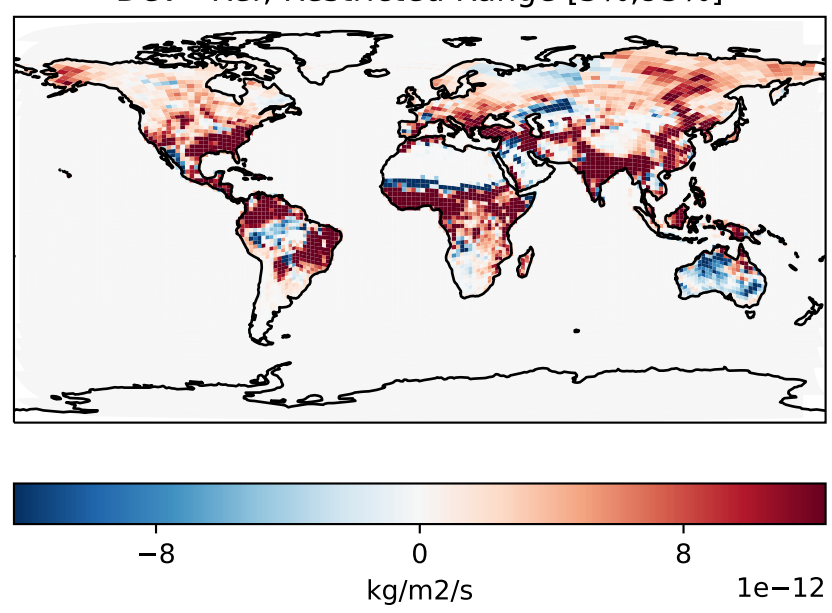

GCHP_13.2.0 (Dev)
c48



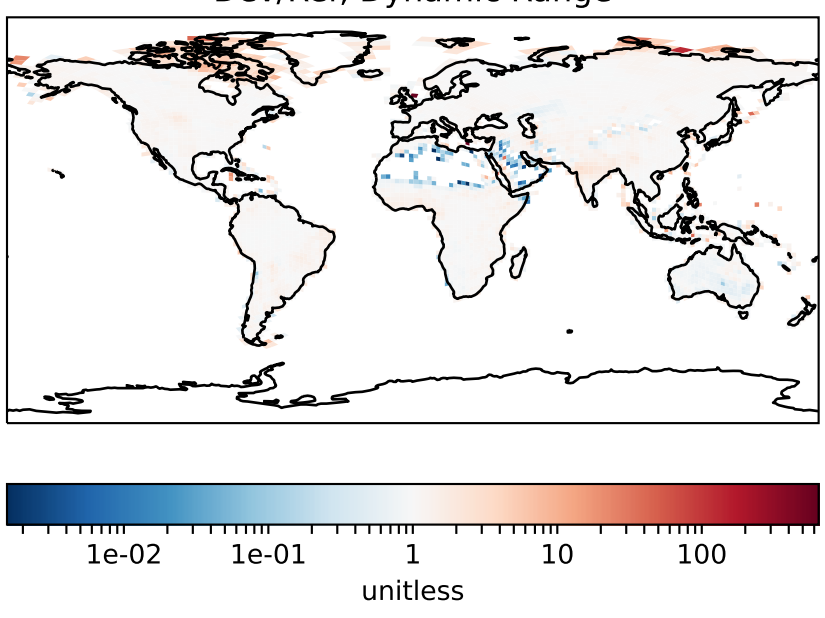

Difference
Dev - Ref, Dynamic Range



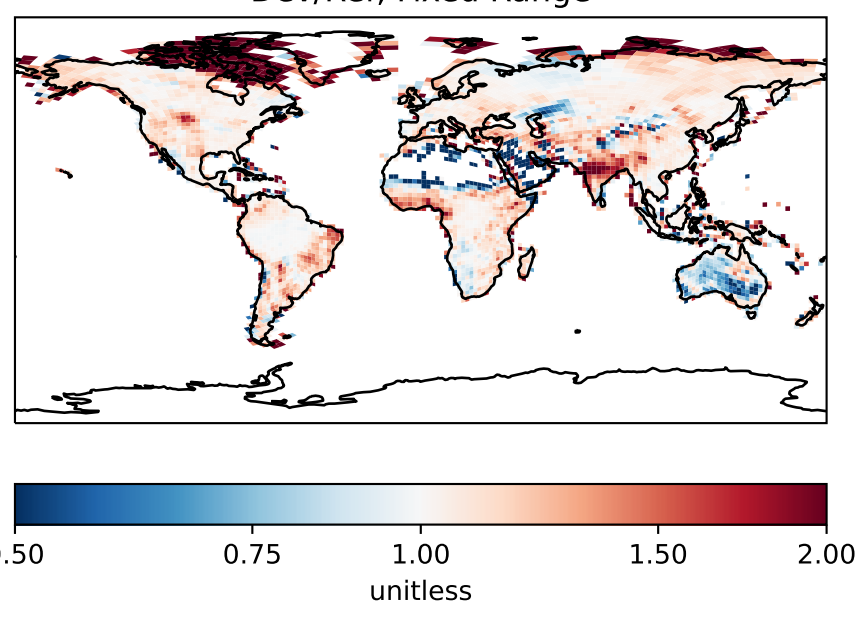

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

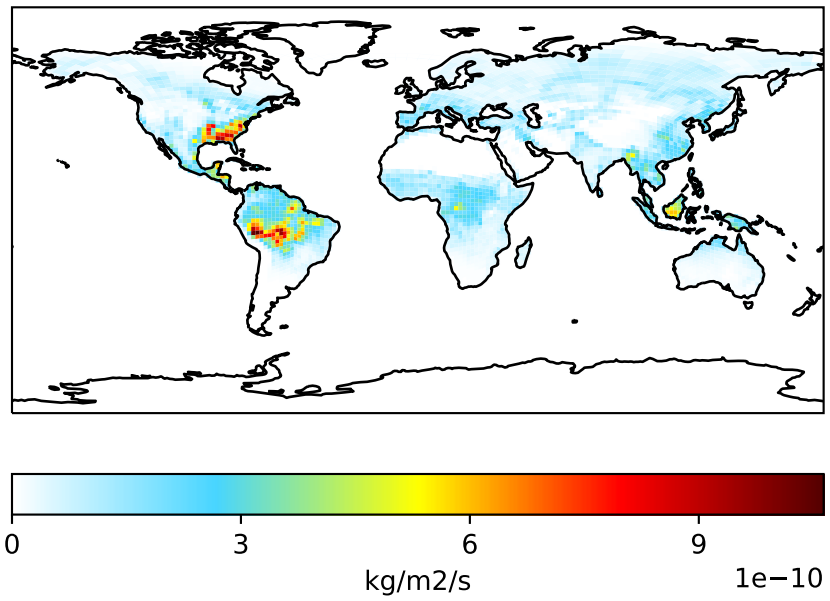



Ratio
Dev/Ref, Fixed Range

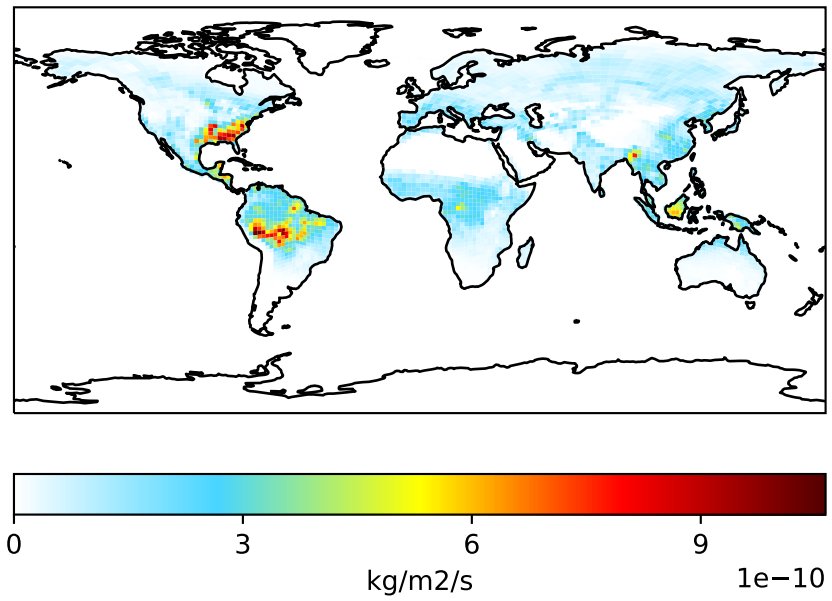


# EmisISOP_Total (Jul2019)

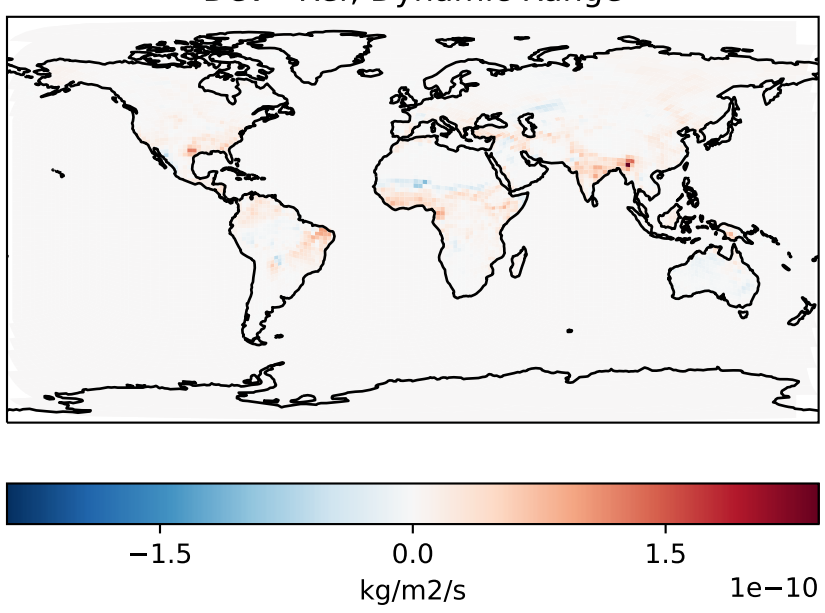
GCHP_13.0.0 (Ref)
c48



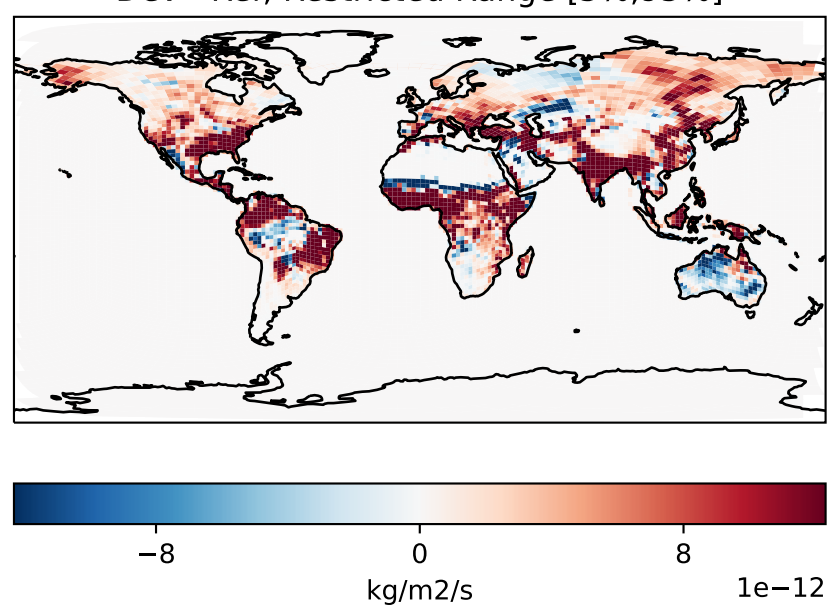

GCHP_13.2.0 (Dev)
c48



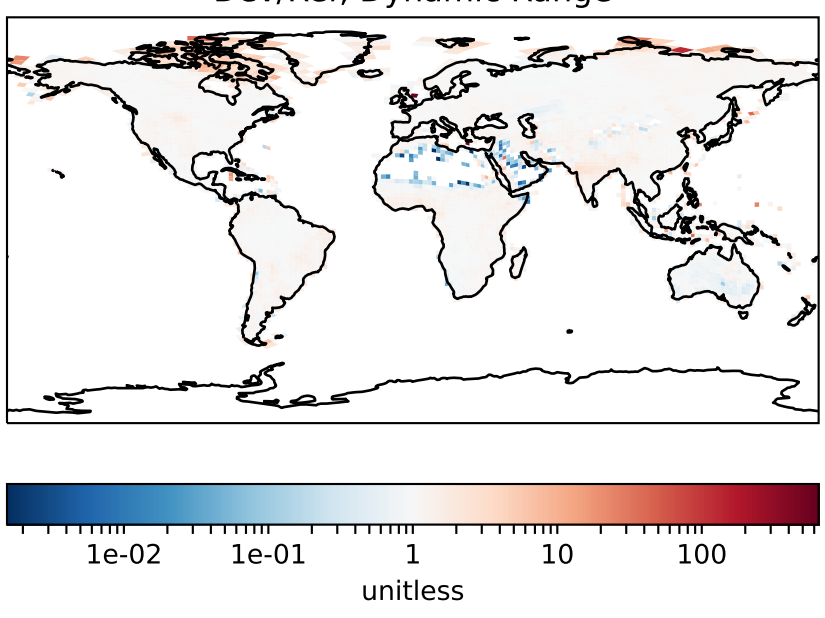

Difference
Dev - Ref, Dynamic Range



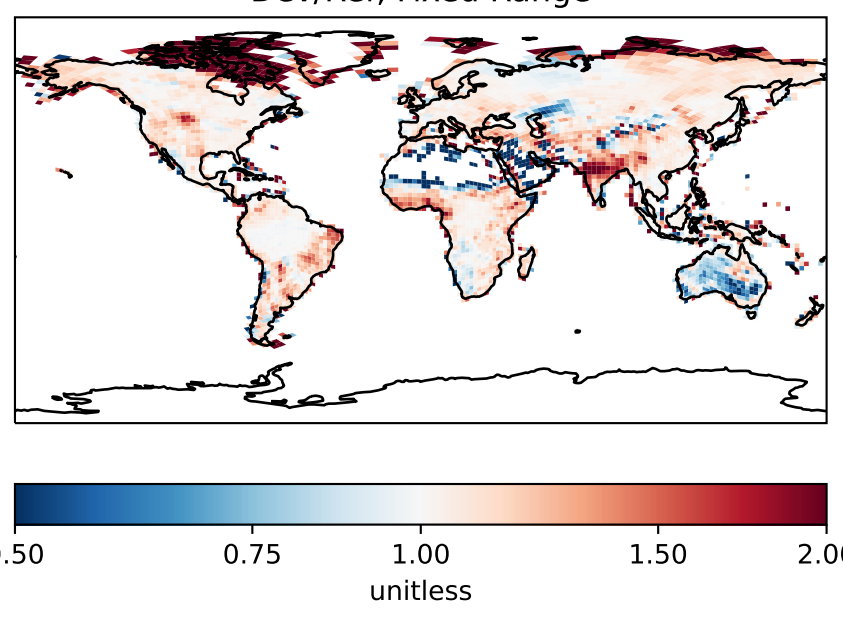

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

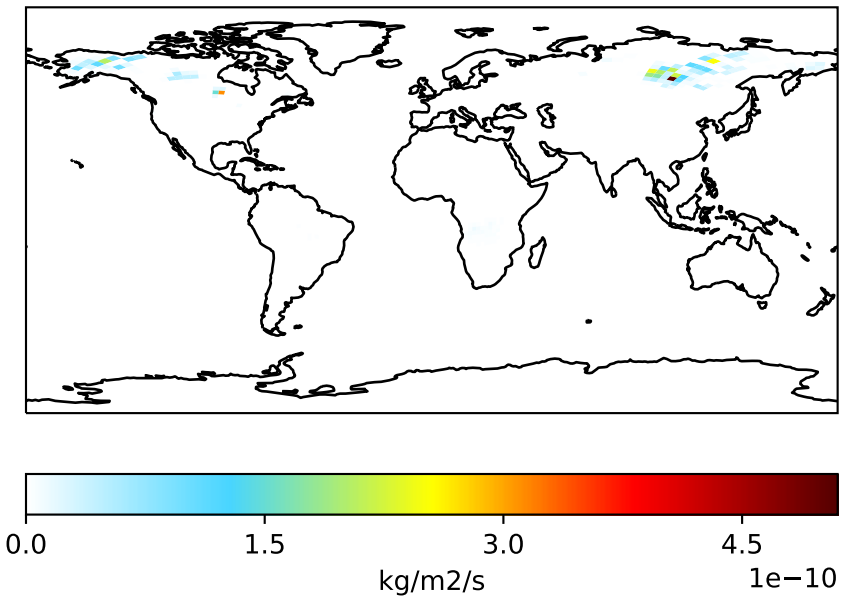



Ratio
Dev/Ref, Fixed Range

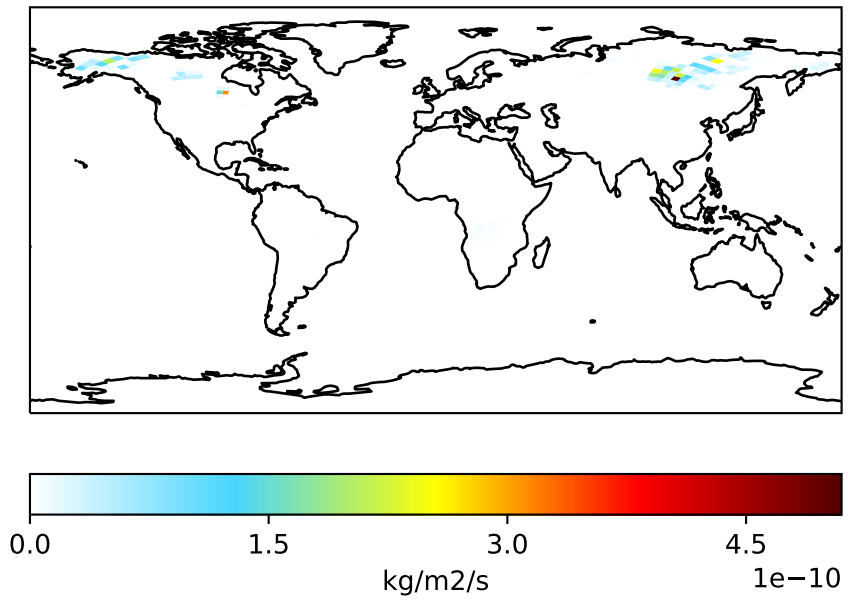


# EmisMTPA_BioBurn (Jul2019)

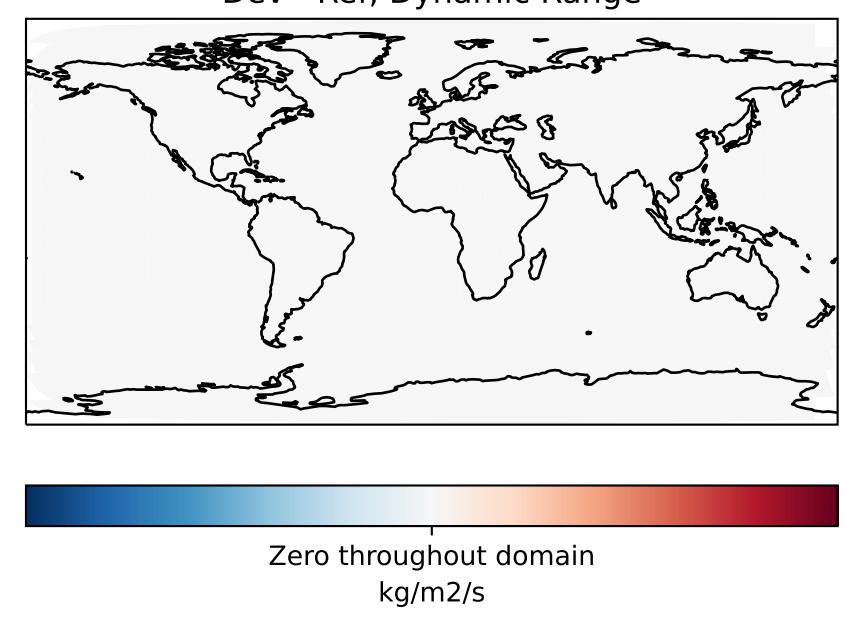
GCHP_13.0.0 (Ref)
c48



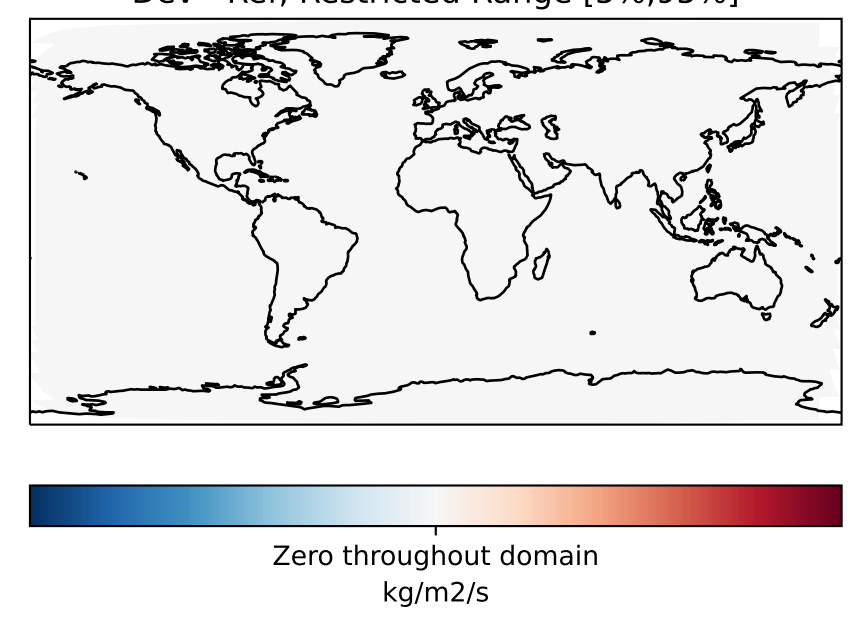

GCHP_13.2.0 (Dev)
c48



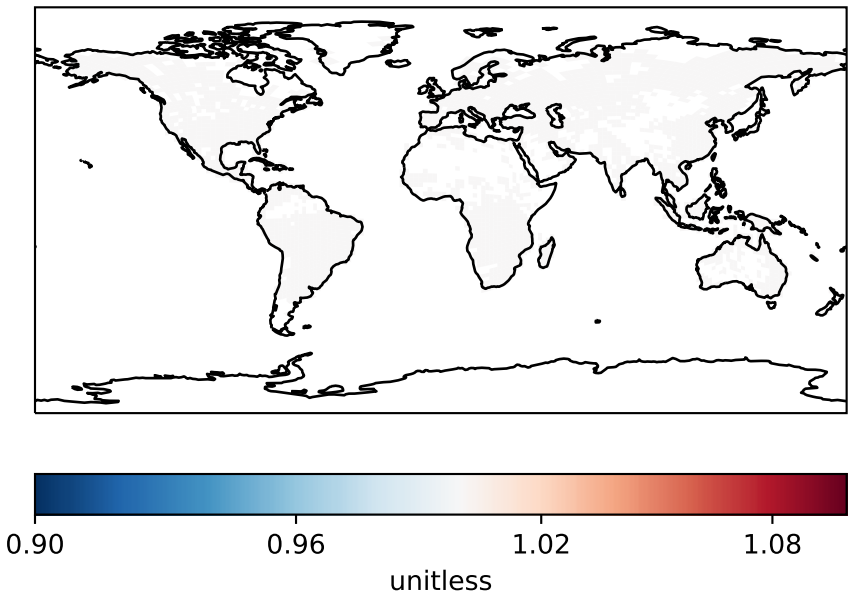

Difference
Dev - Ref, Dynamic Range



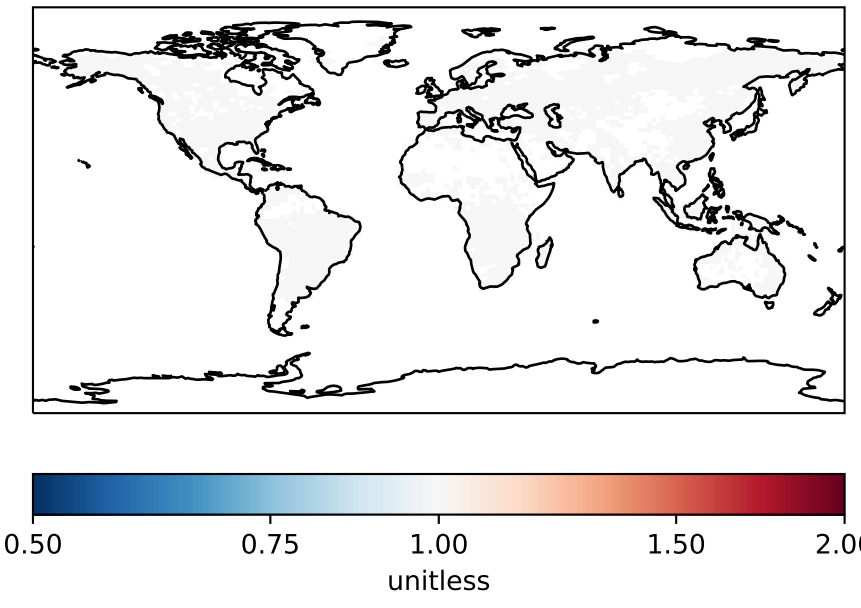

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

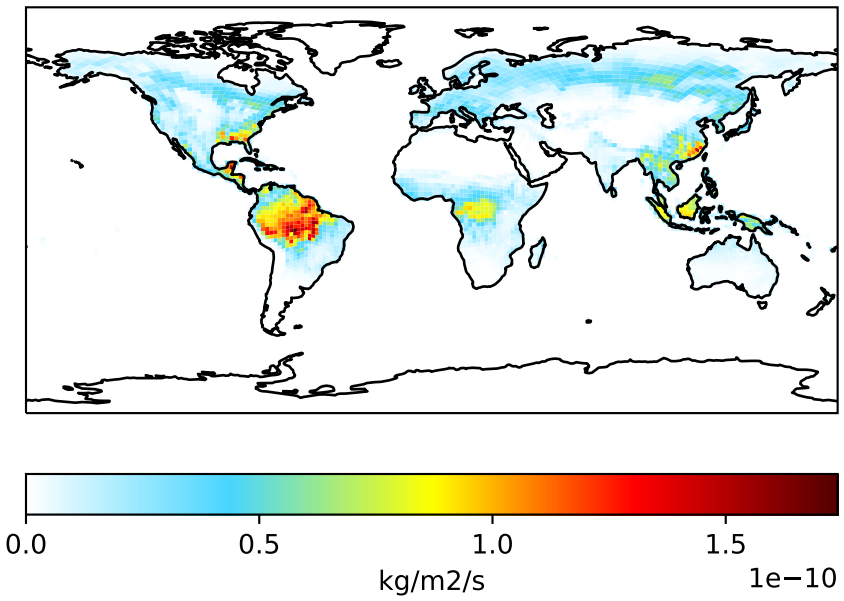



Ratio
Dev/Ref, Fixed Range

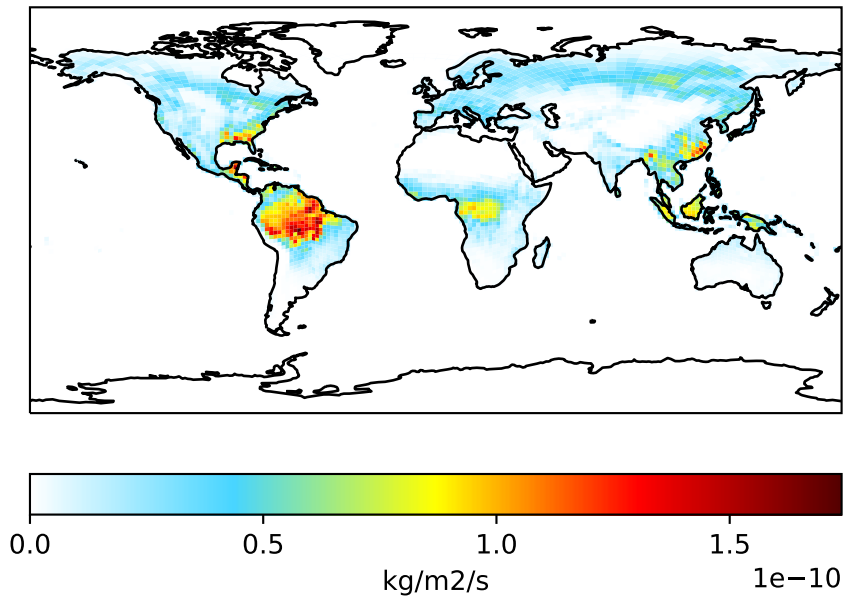


# EmisMTPA_Biogenic (Jul2019)

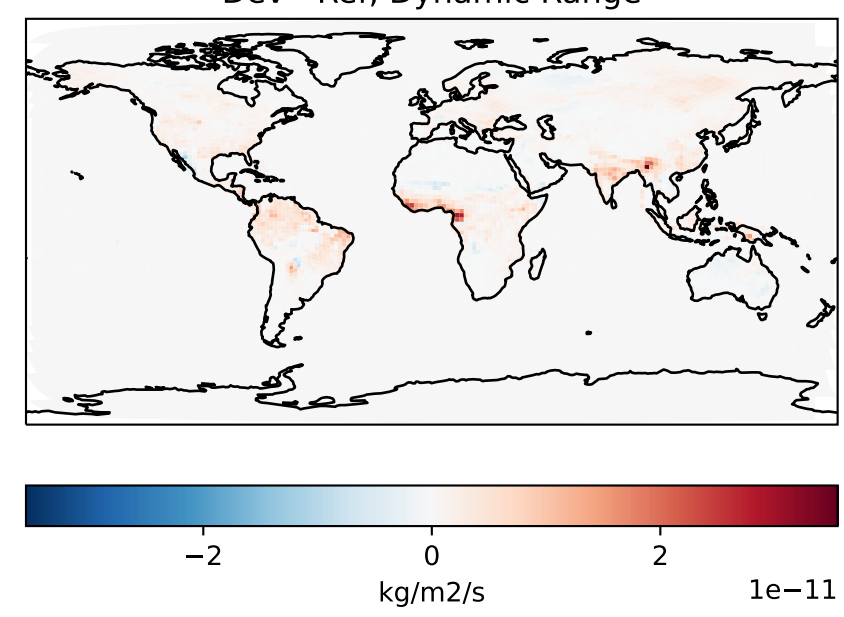
GCHP_13.0.0 (Ref)
c48



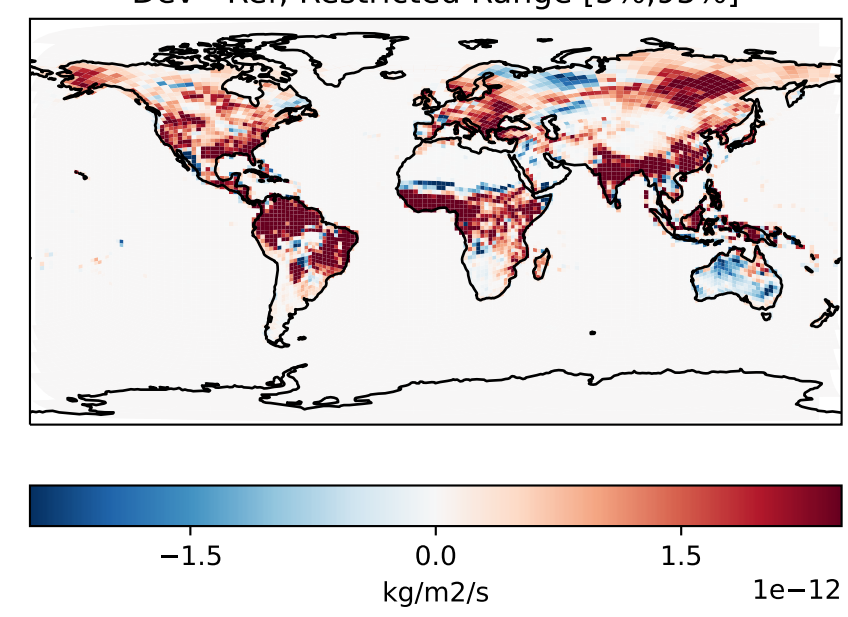

GCHP_13.2.0 (Dev)
c48



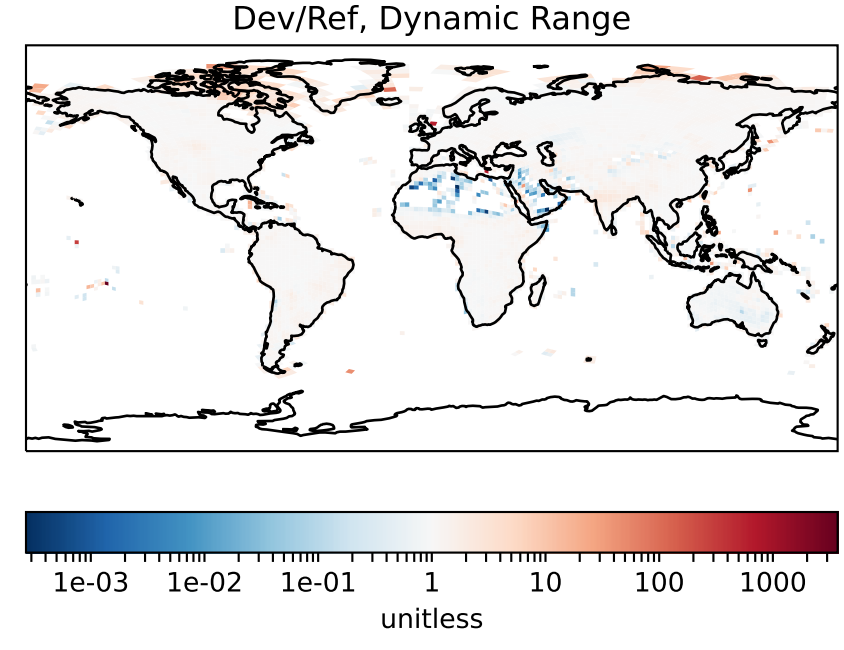

Difference
Dev - Ref, Dynamic Range



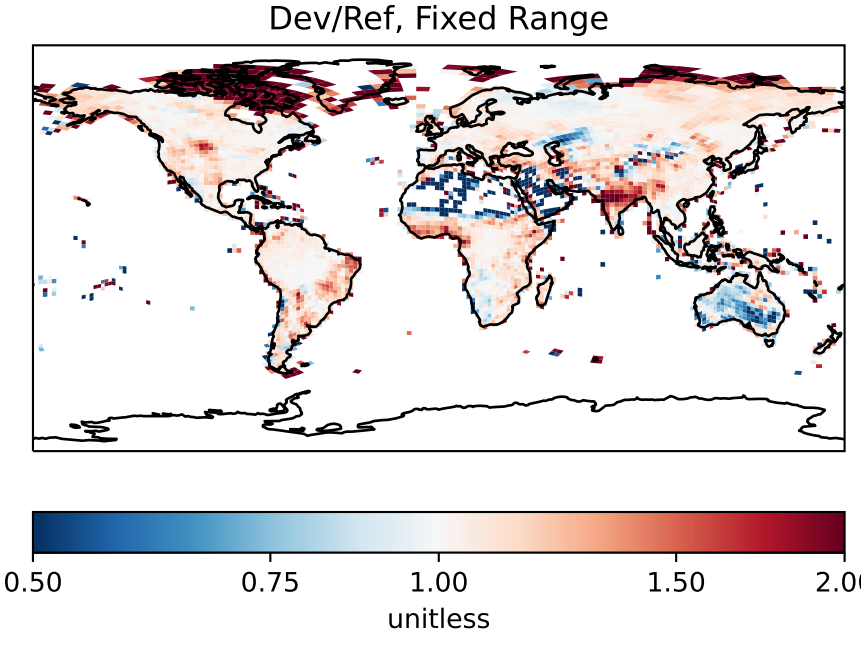

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

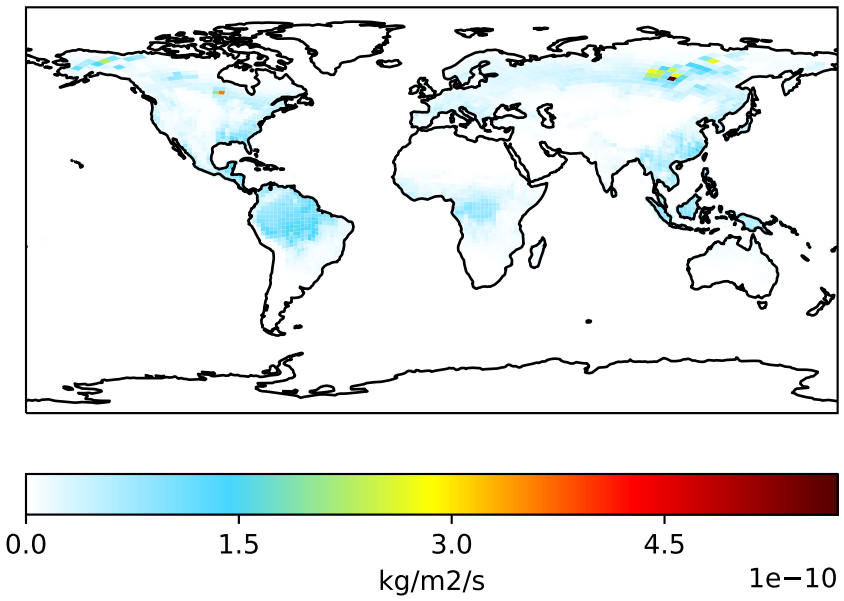



Ratio
Dev/Ref, Fixed Range

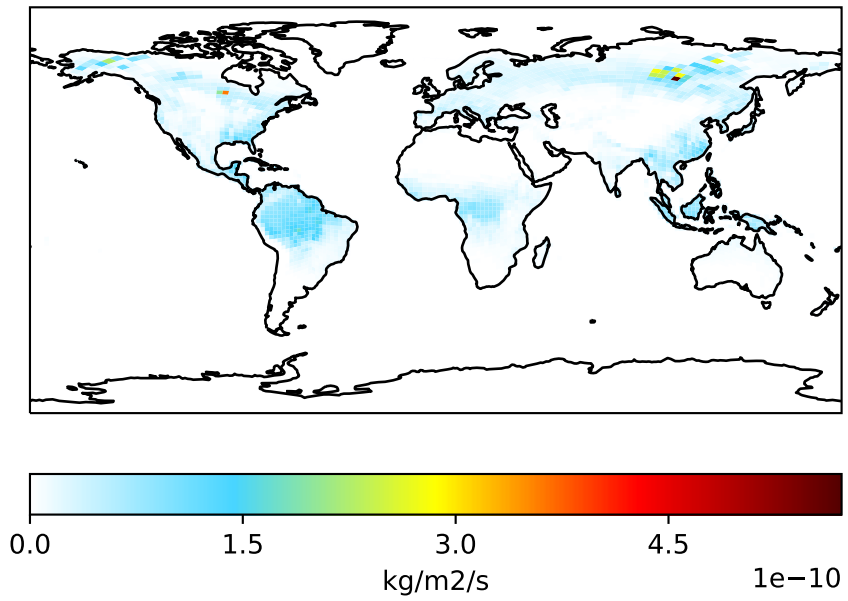


# EmisMTPA_Total (Jul2019)

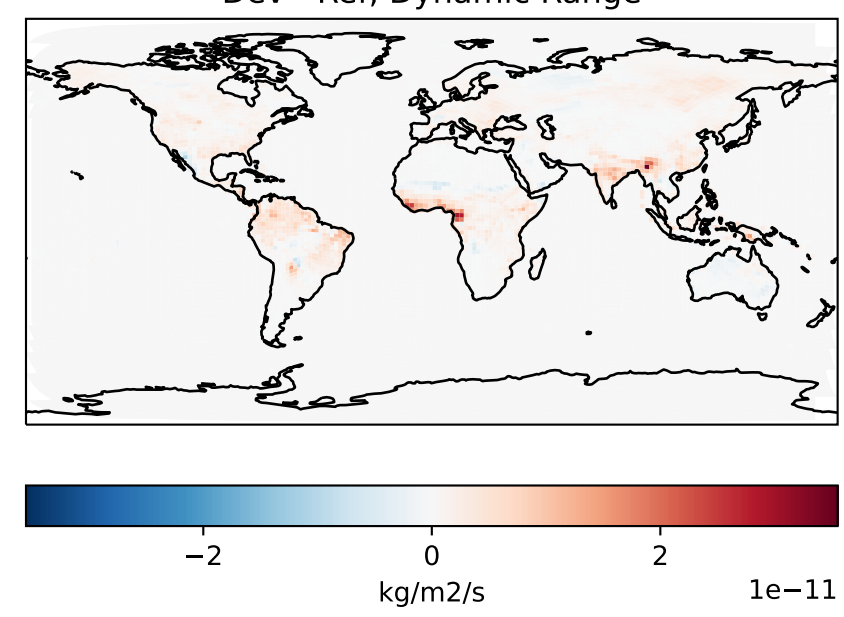
GCHP_13.0.0 (Ref)
c48



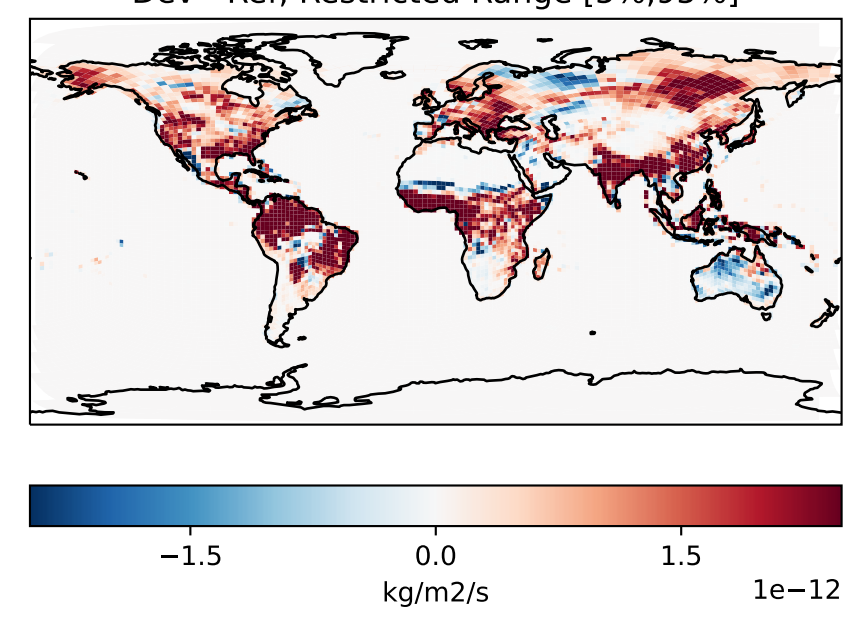

GCHP_13.2.0 (Dev)
c48



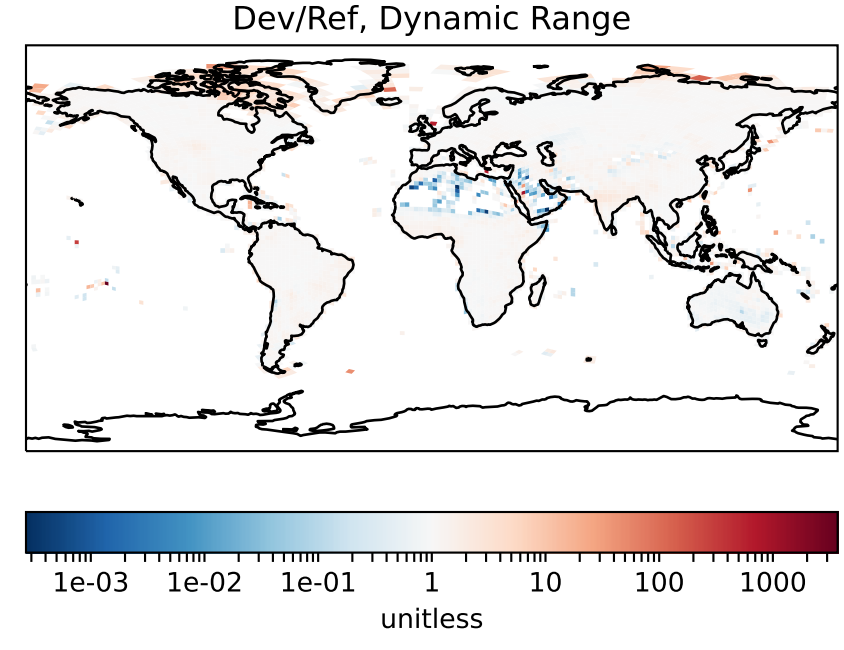

Difference
Dev - Ref, Dynamic Range



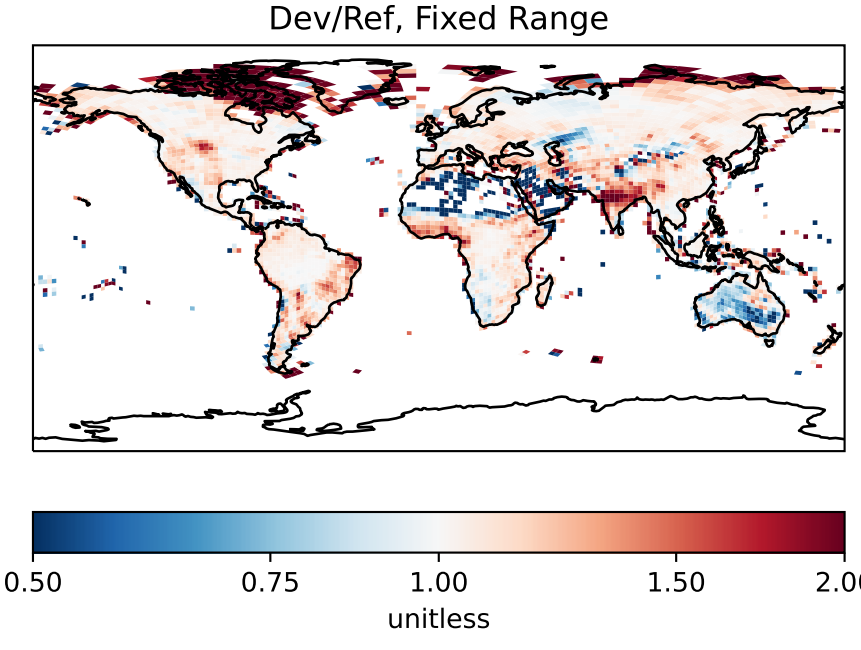

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

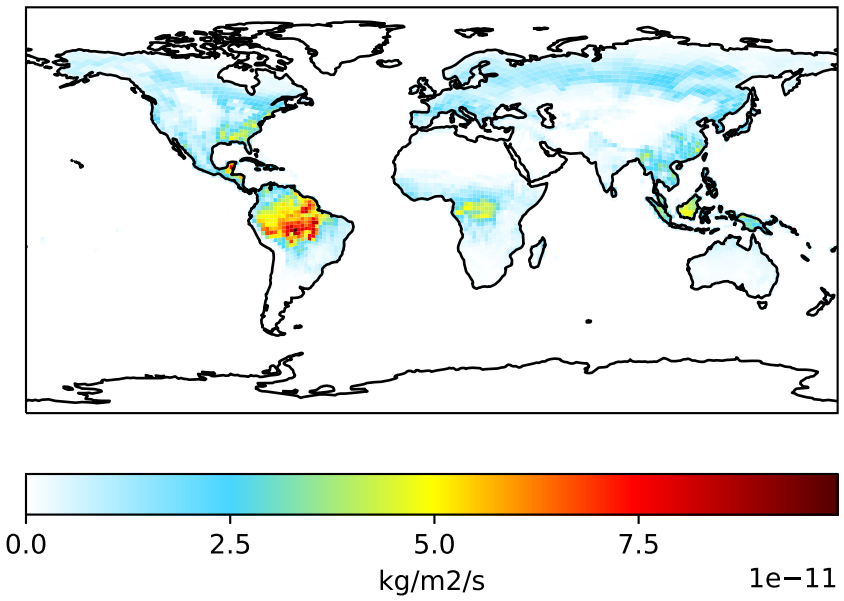



Ratio
Dev/Ref, Fixed Range

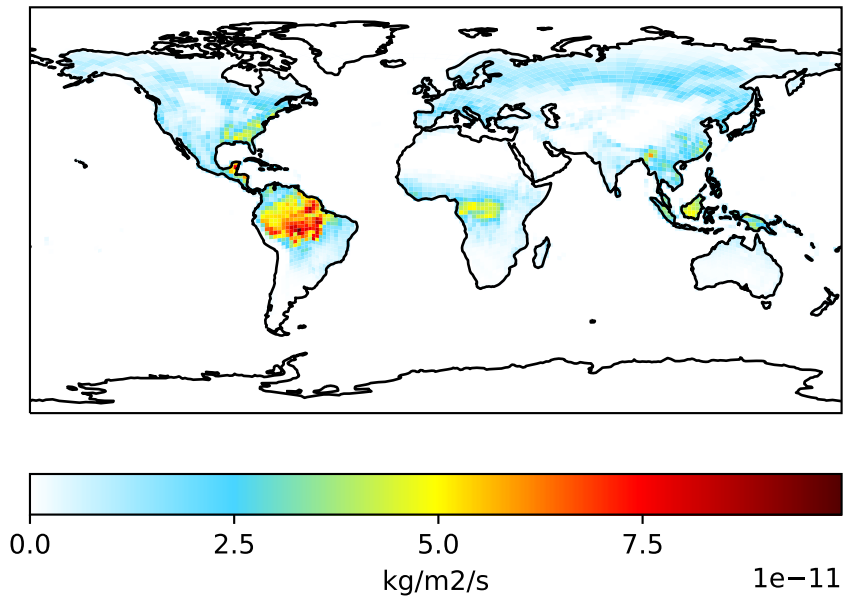


# EmisMTPO_Biogenic (Jul2019)

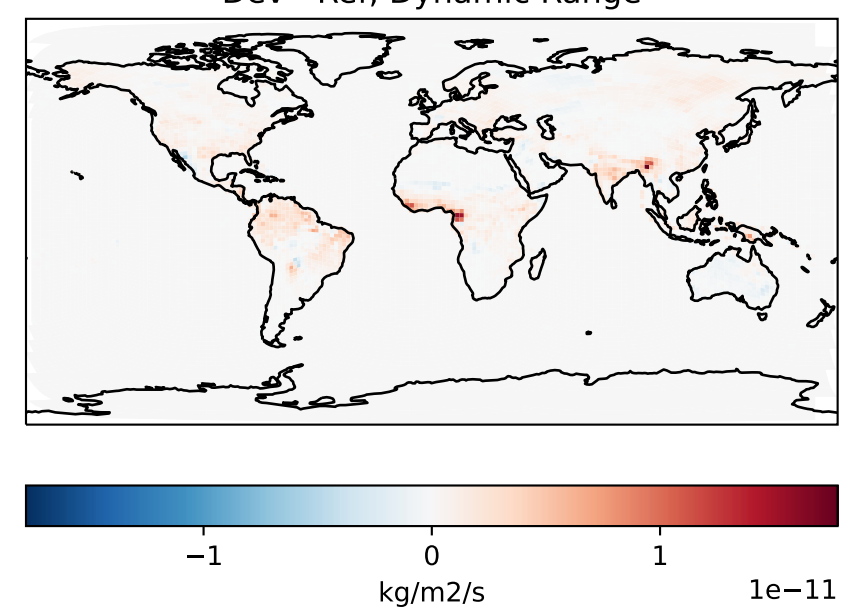
GCHP_13.0.0 (Ref)
c48



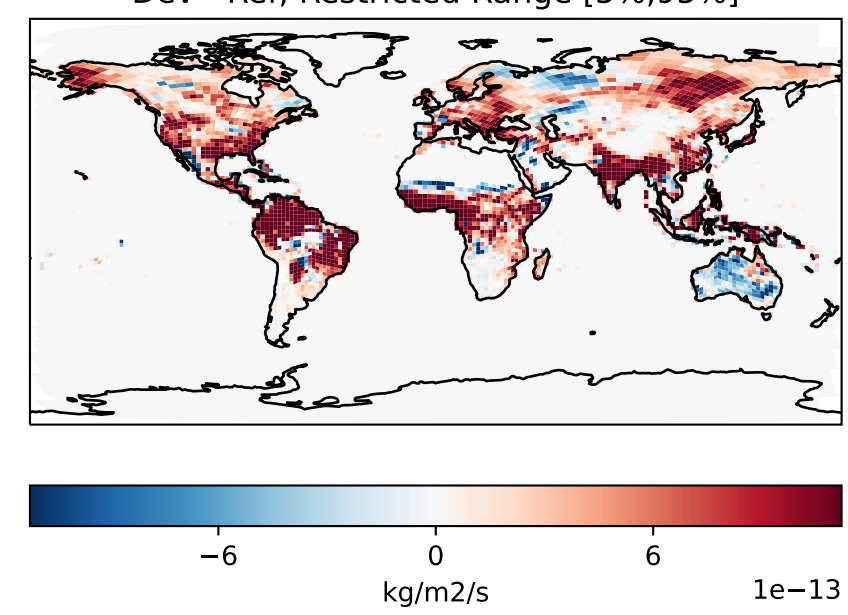

GCHP_13.2.0 (Dev)
c48



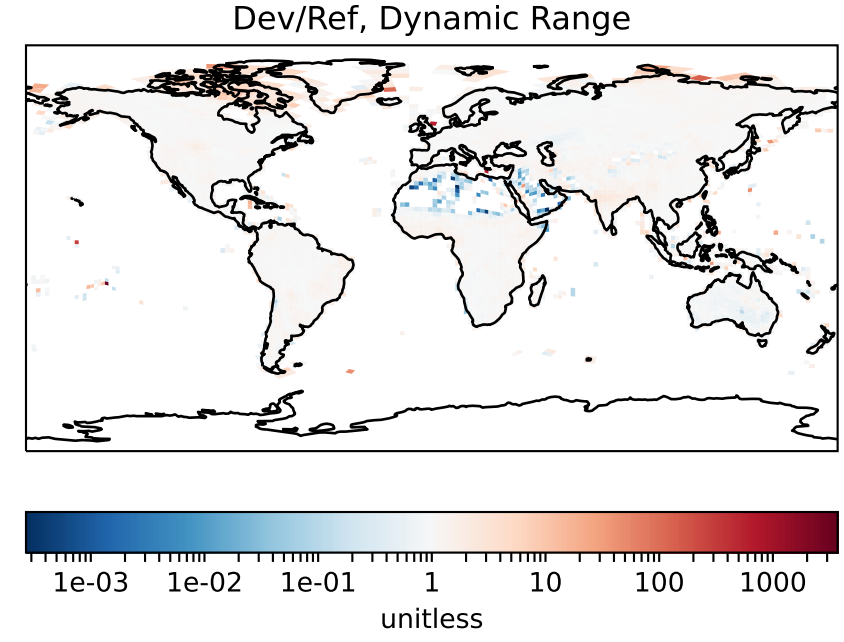

Difference
Dev - Ref, Dynamic Range



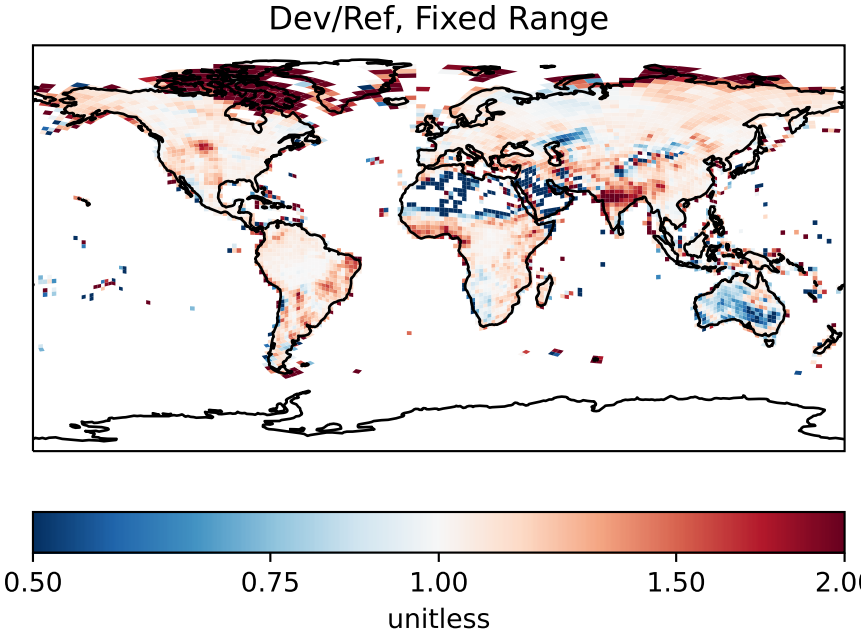

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

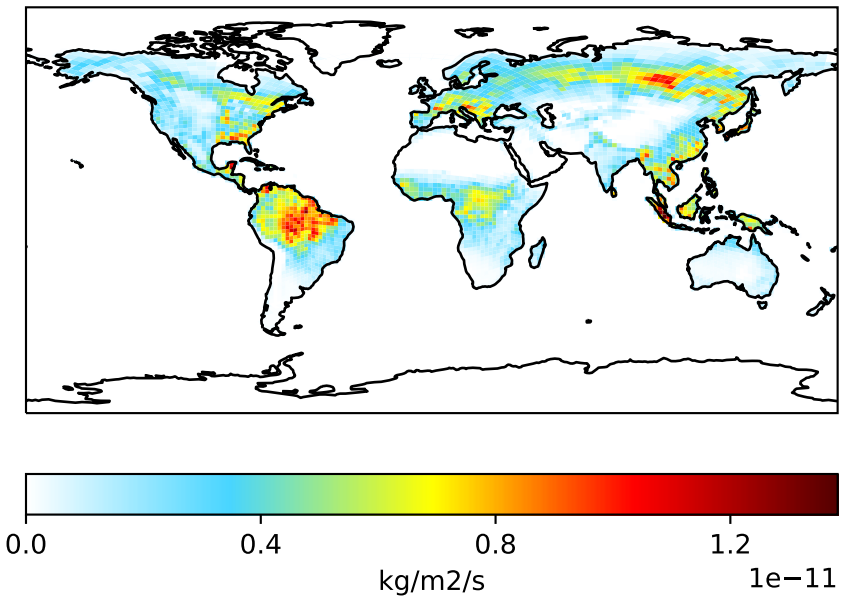



Ratio
Dev/Ref, Fixed Range

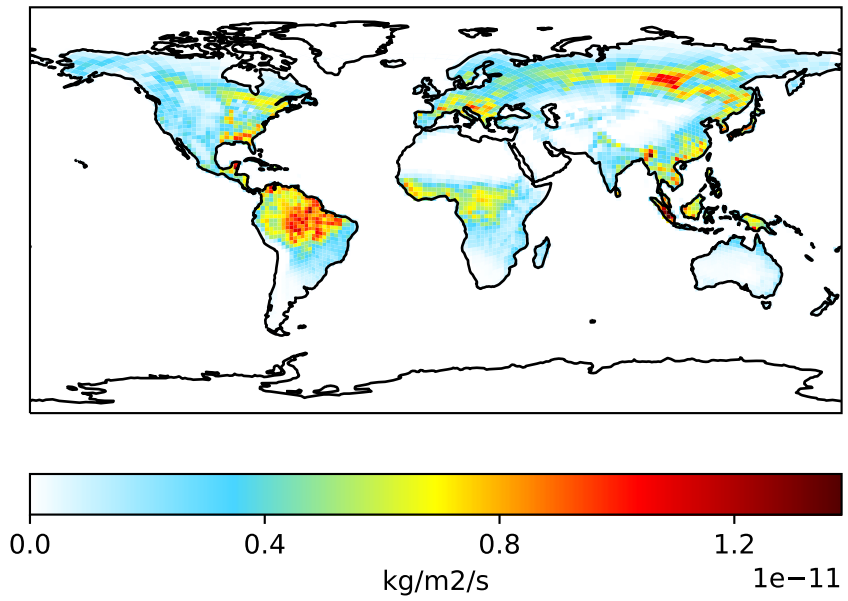


# EmisLIMO_Biogenic (Jul2019)

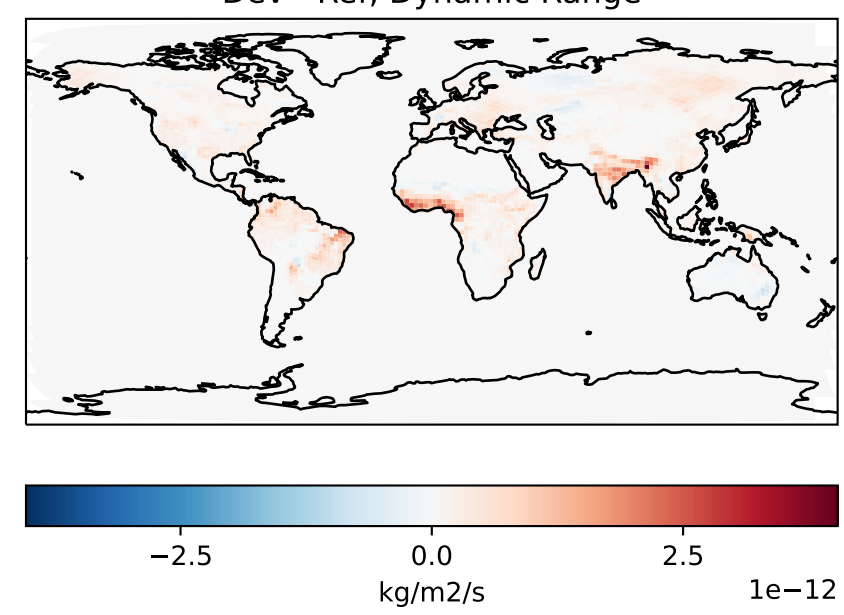
GCHP_13.0.0 (Ref)
c48



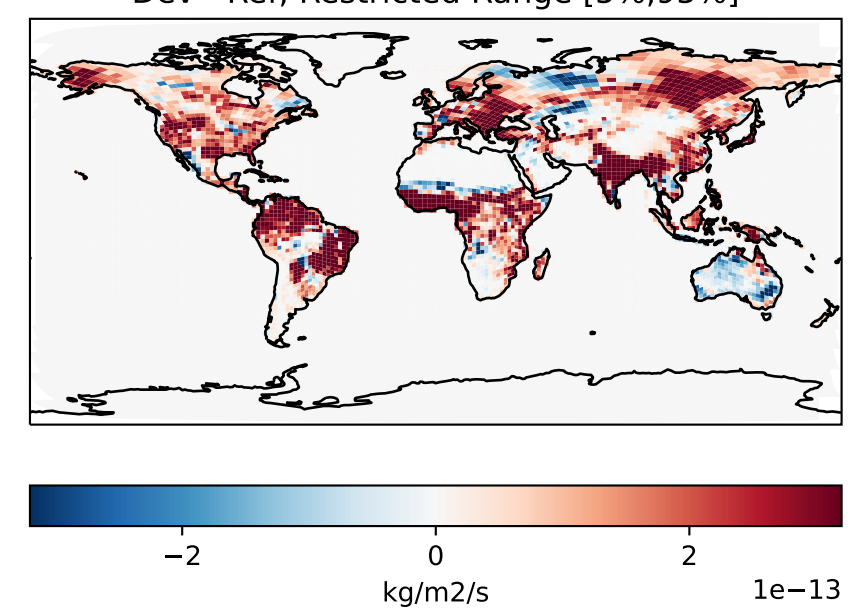

GCHP_13.2.0 (Dev)
c48



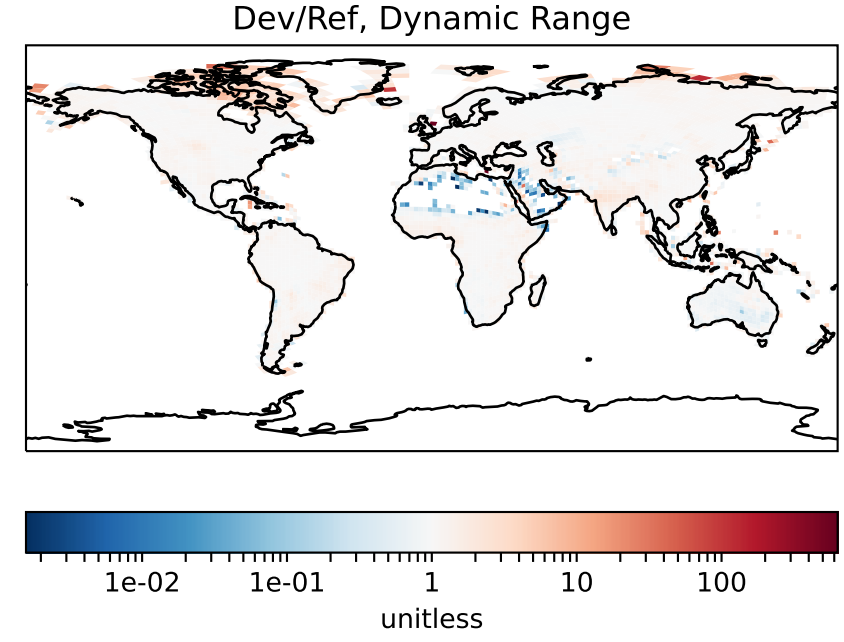

Difference
Dev - Ref, Dynamic Range



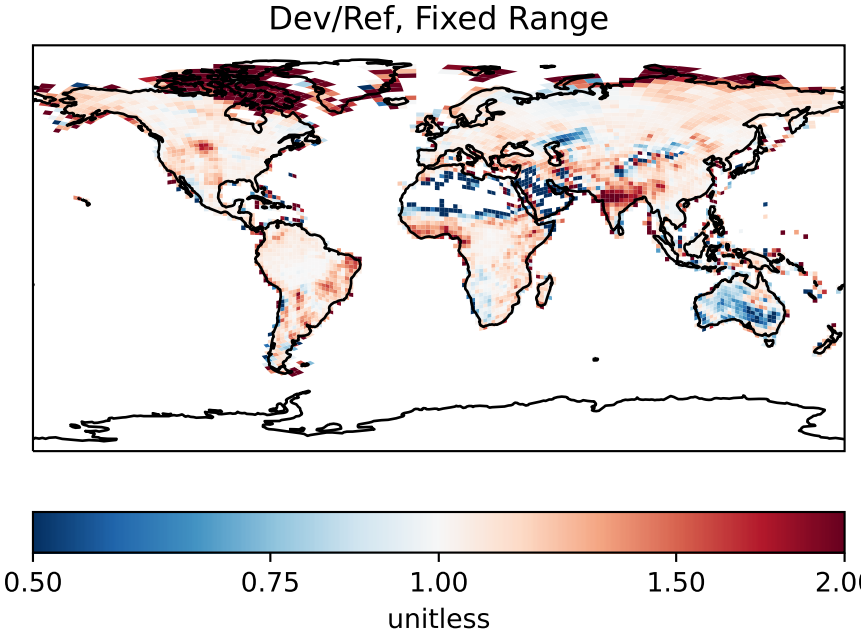

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

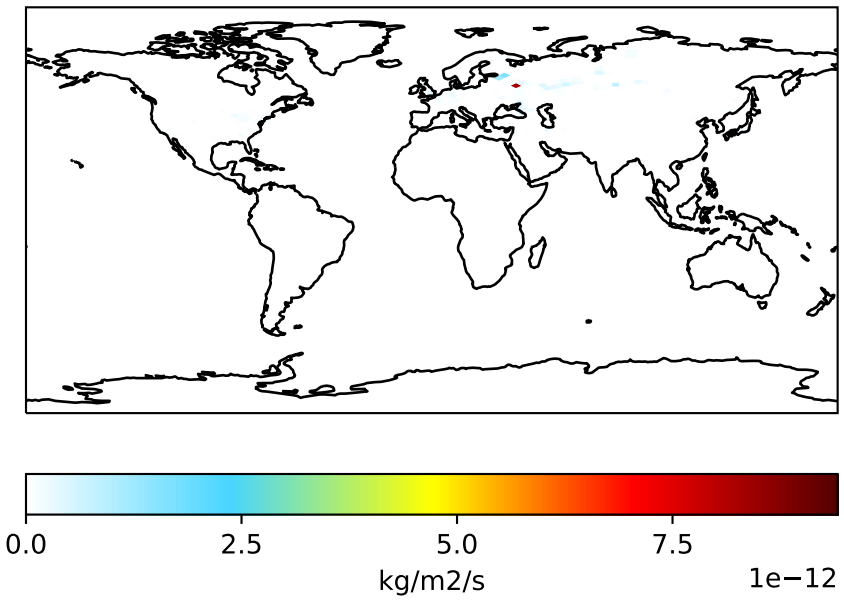



Ratio
Dev/Ref, Fixed Range

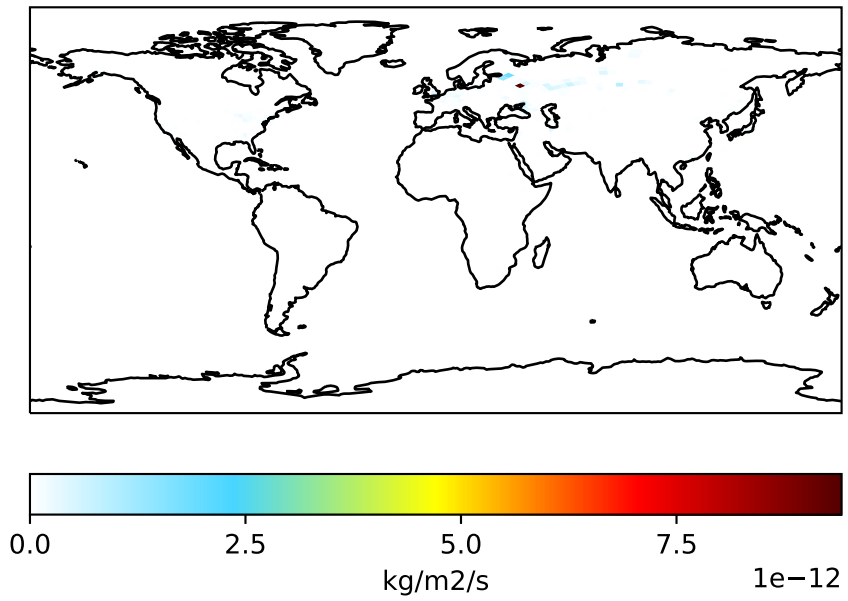


# EmisALK4_Aircraft (Jul2019)

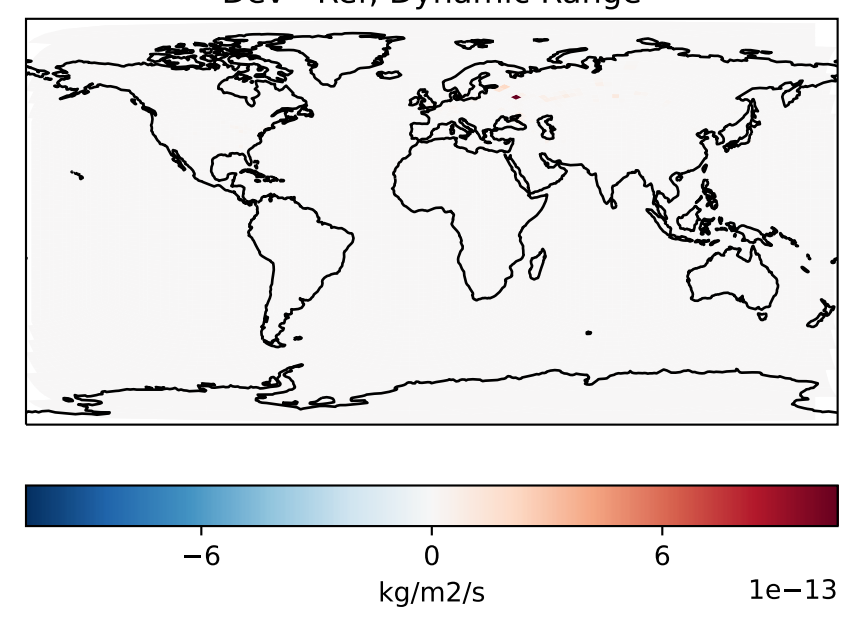
GCHP_13.0.0 (Ref)
c48



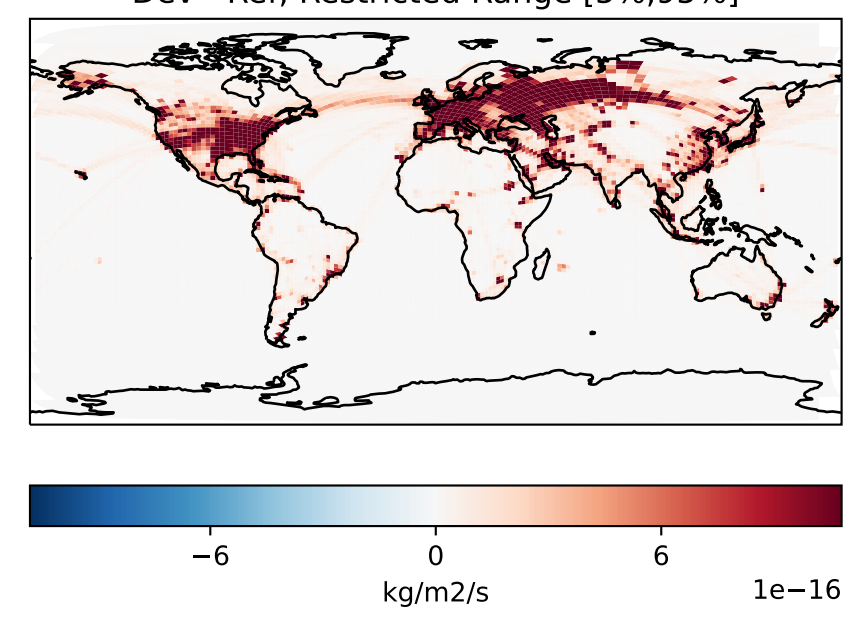

GCHP_13.2.0 (Dev)
c48



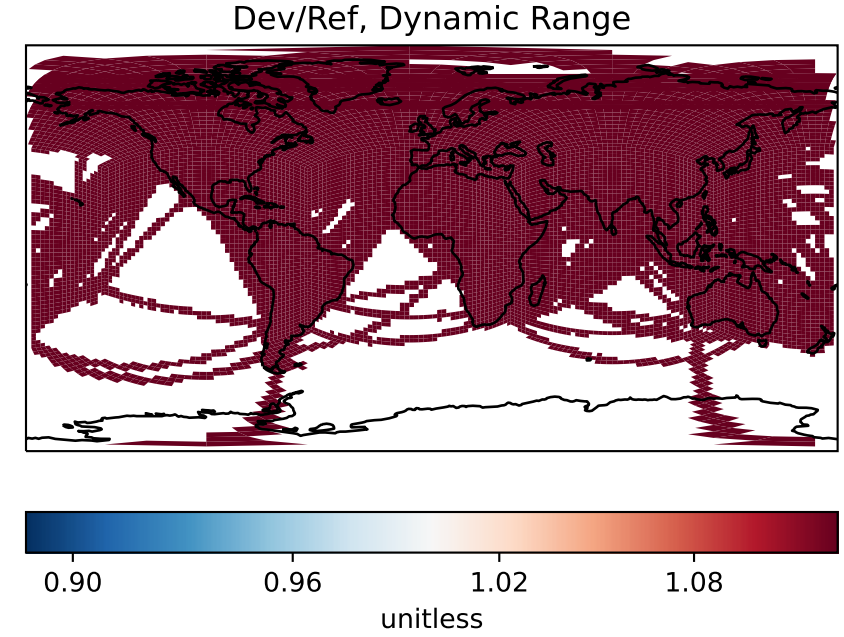

Difference
Dev - Ref, Dynamic Range



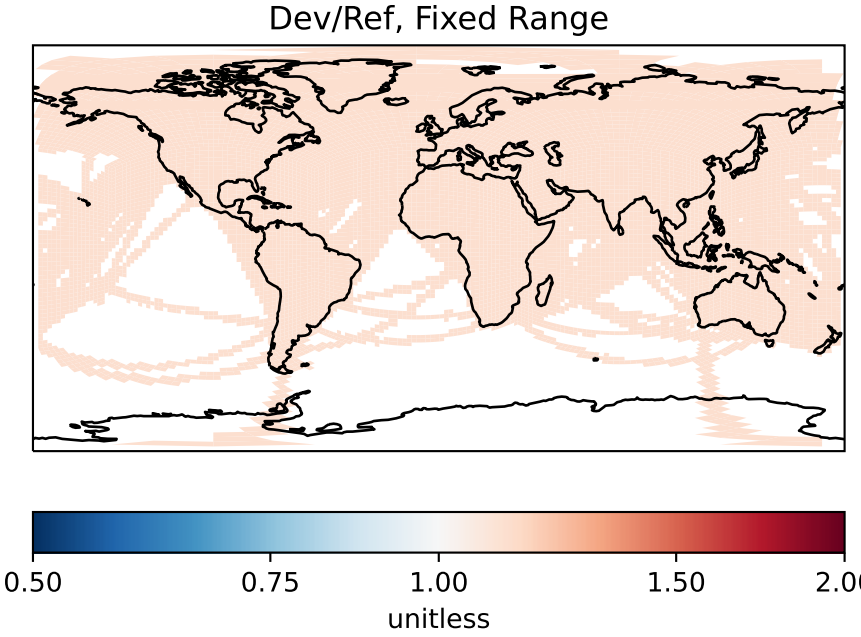

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

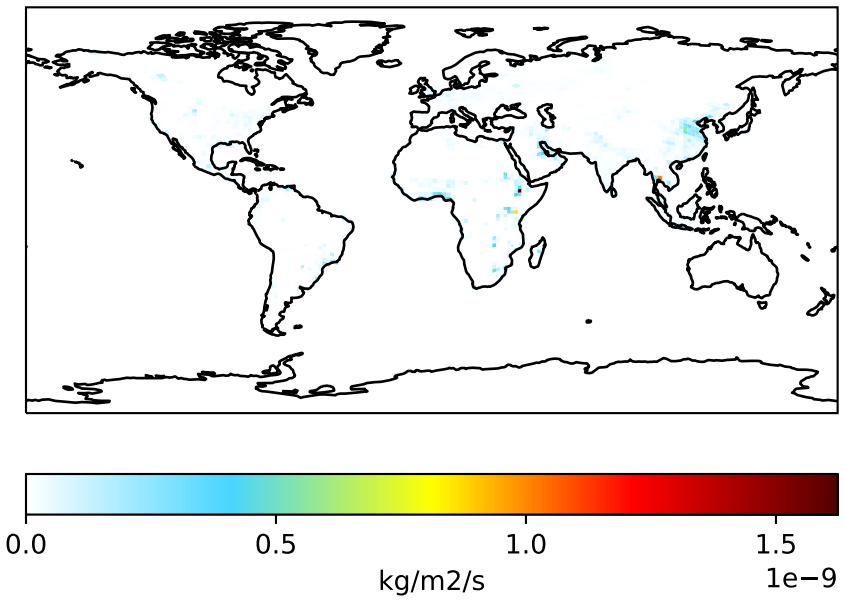



Ratio
Dev/Ref, Fixed Range

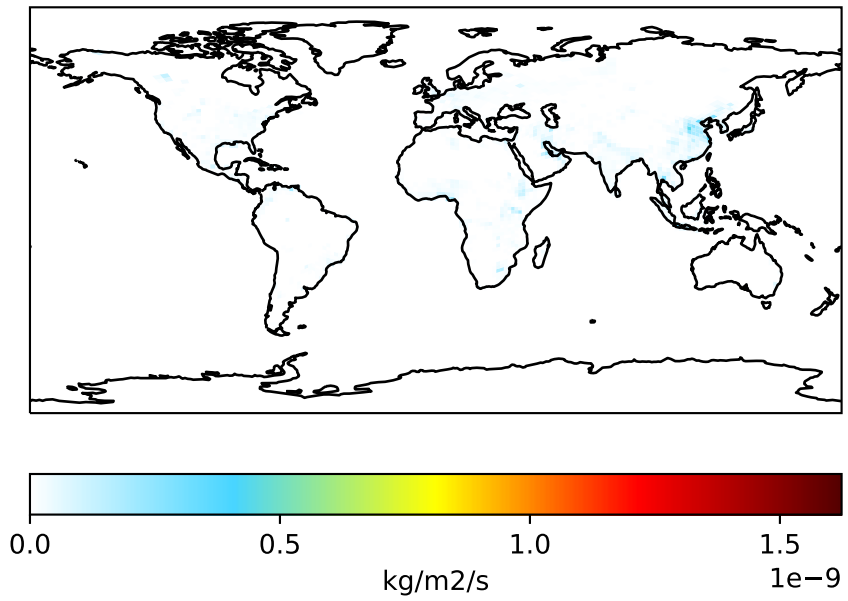


# EmisALK4_Anthro (Jul2019)

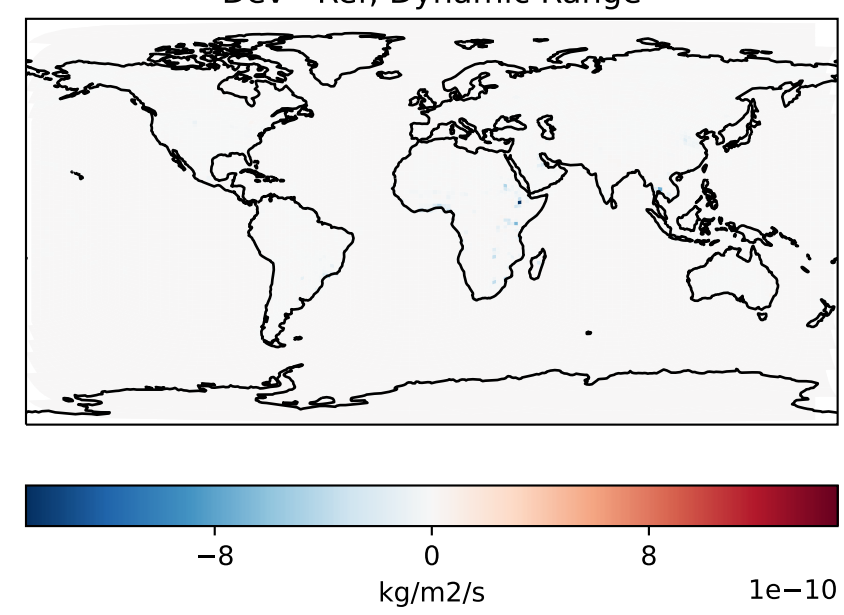
GCHP_13.0.0 (Ref)
c48



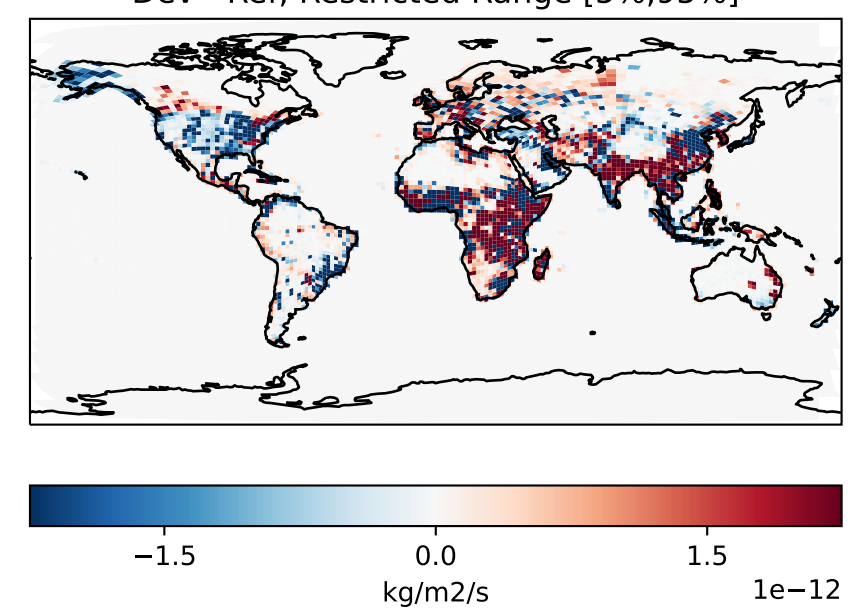

GCHP_13.2.0 (Dev)
c48



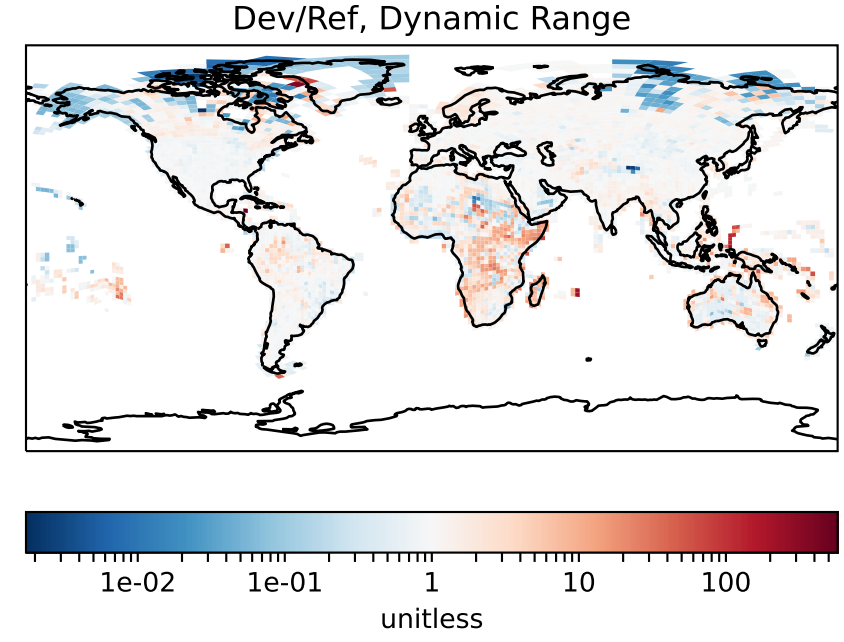

Difference
Dev - Ref, Dynamic Range



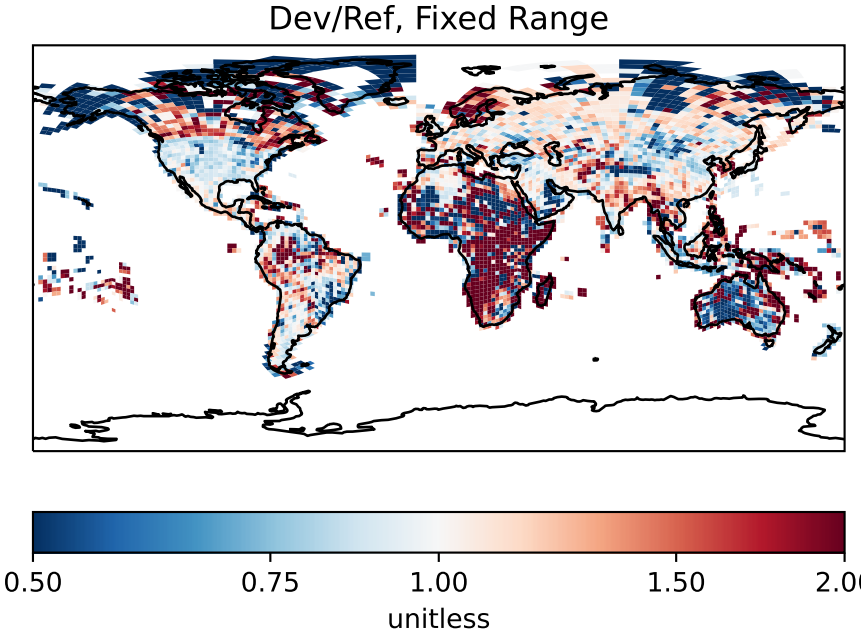

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

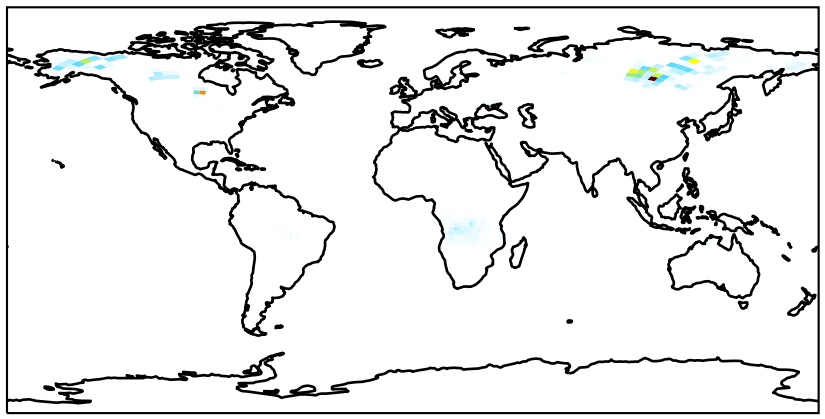


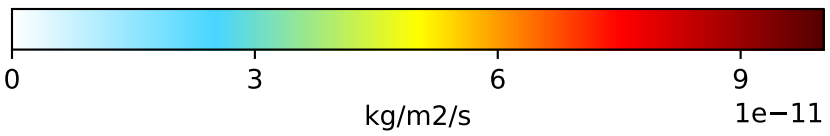

Ratio
Dev/Ref, Fixed Range



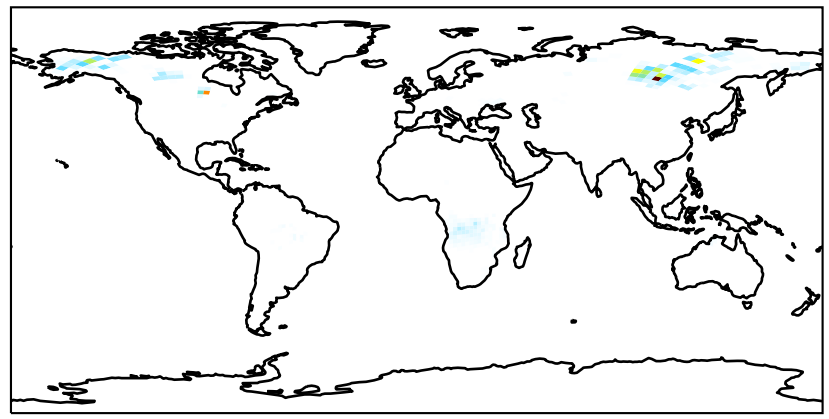
# EmisALK4_BioBurn (Jul2019)

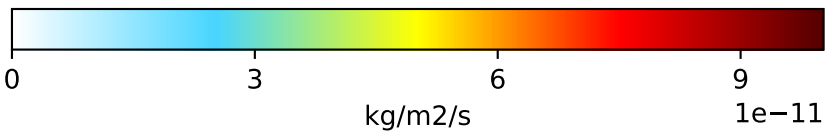
GCHP_13.0.0 (Ref)
c48



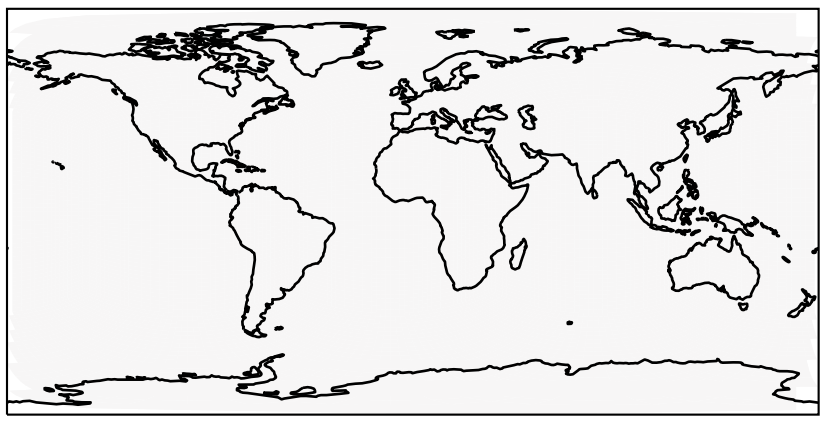


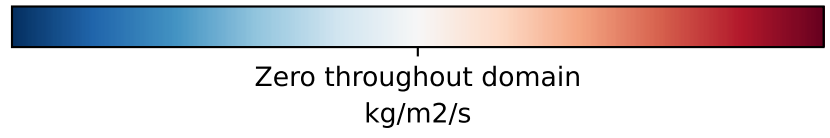

GCHP_13.2.0 (Dev)
c48



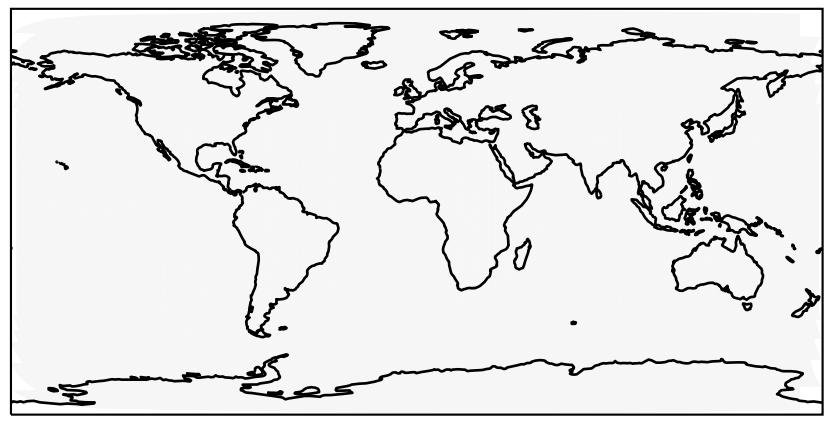


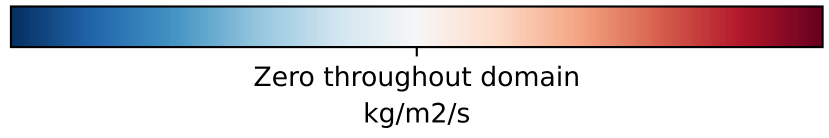

Difference
Dev - Ref, Dynamic Range



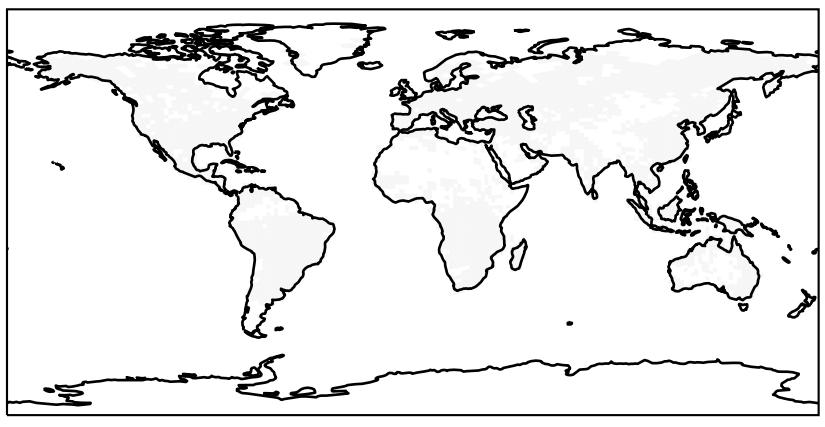


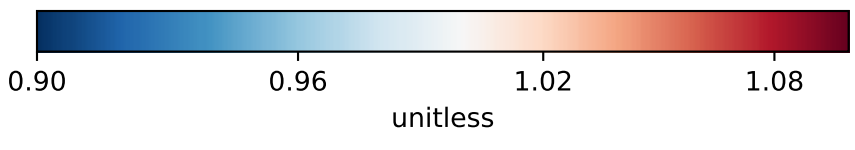

Difference
Dev - Ref, Restricted Range [5%,95%]



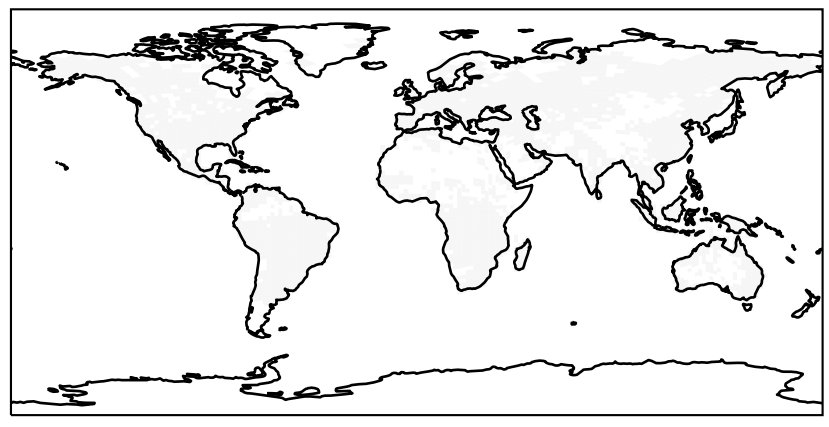


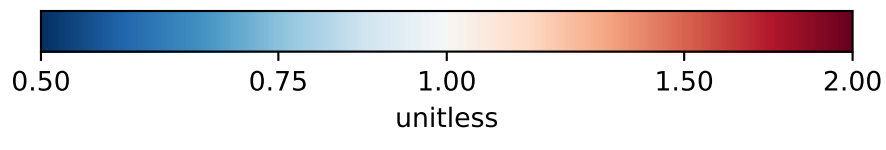

Ratio
Dev/Ref, Dynamic Range





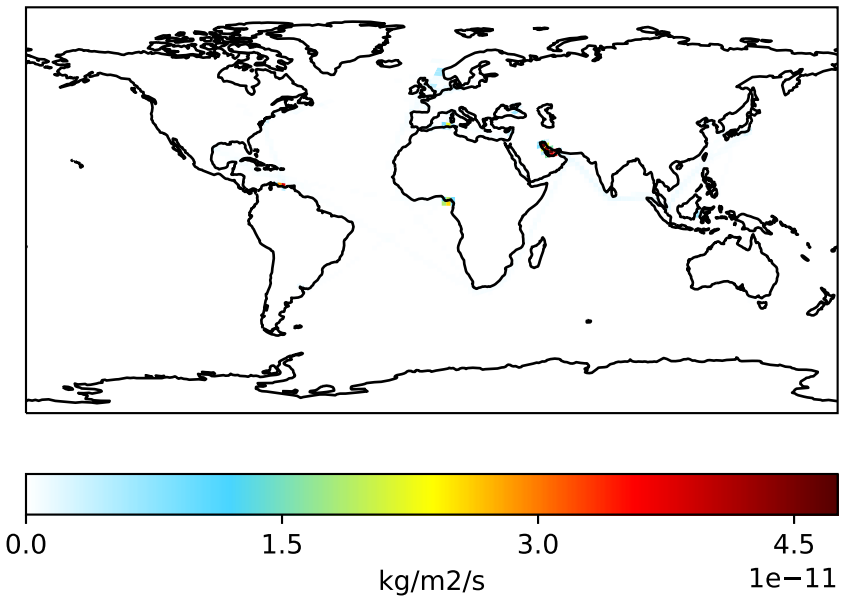

Ratio
Dev/Ref, Fixed Range



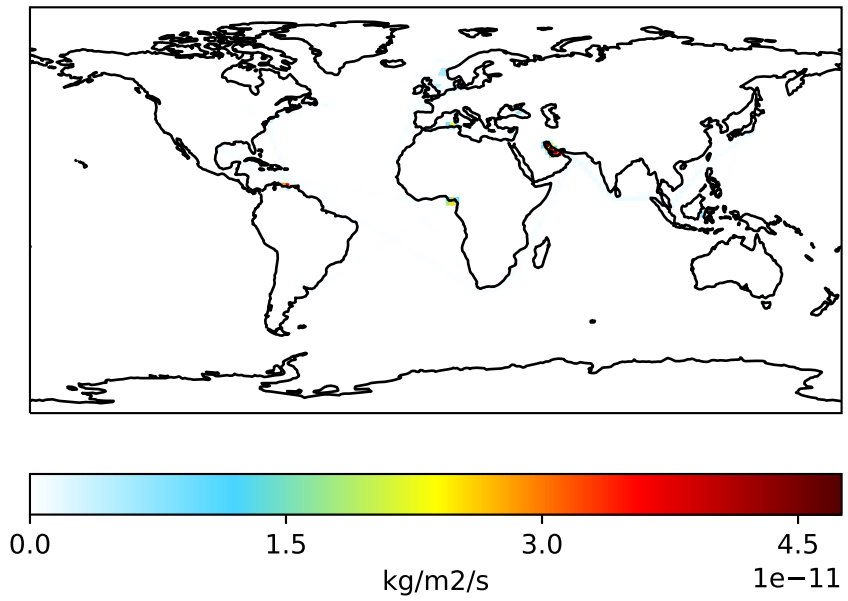


# EmisALK4_Ship (Jul2019)

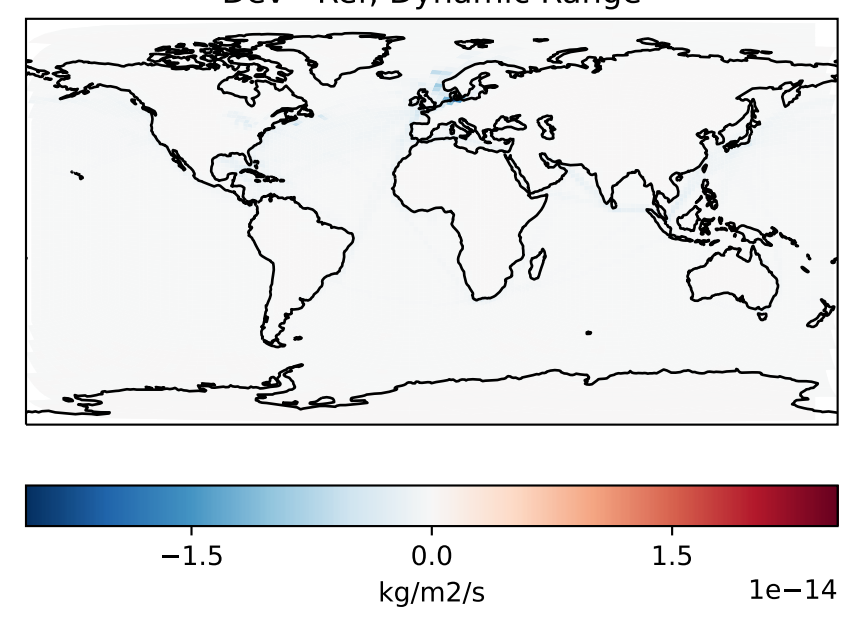
GCHP_13.0.0 (Ref)
c48



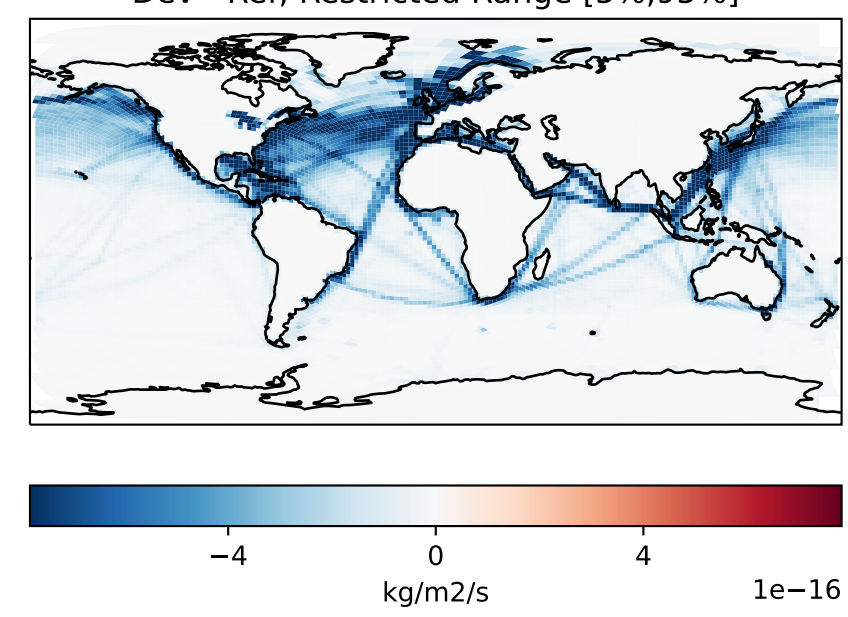

GCHP_13.2.0 (Dev)
c48



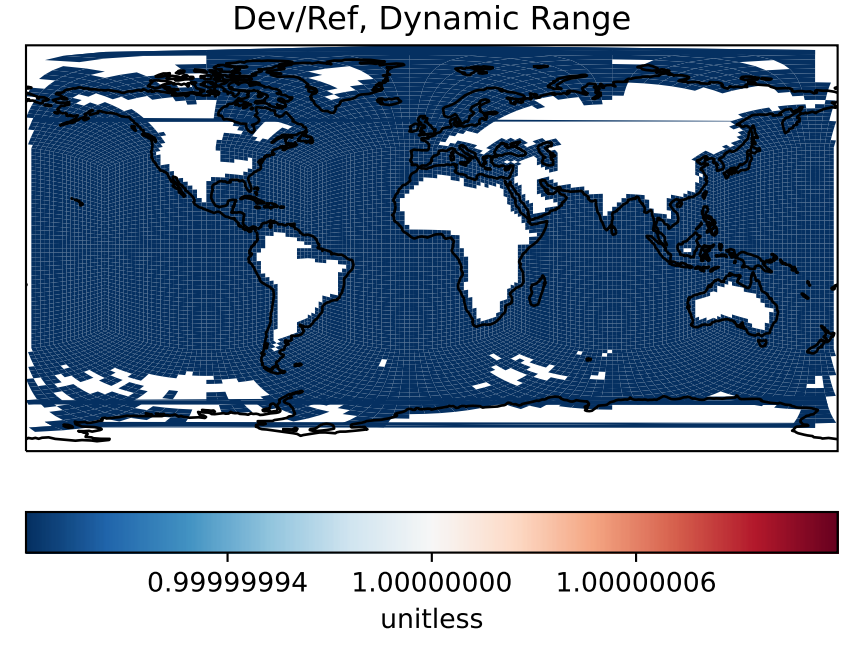

Difference
Dev - Ref, Dynamic Range



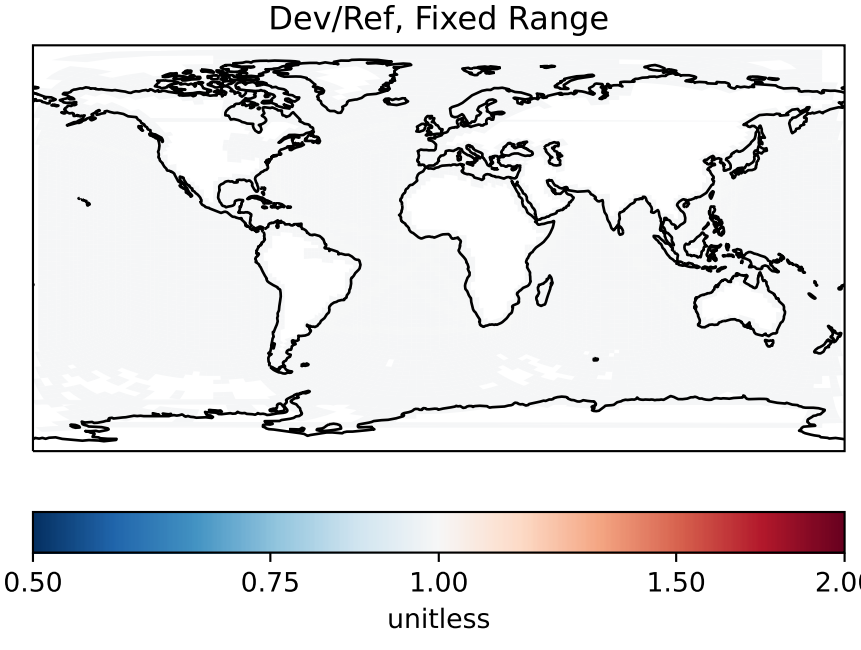

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

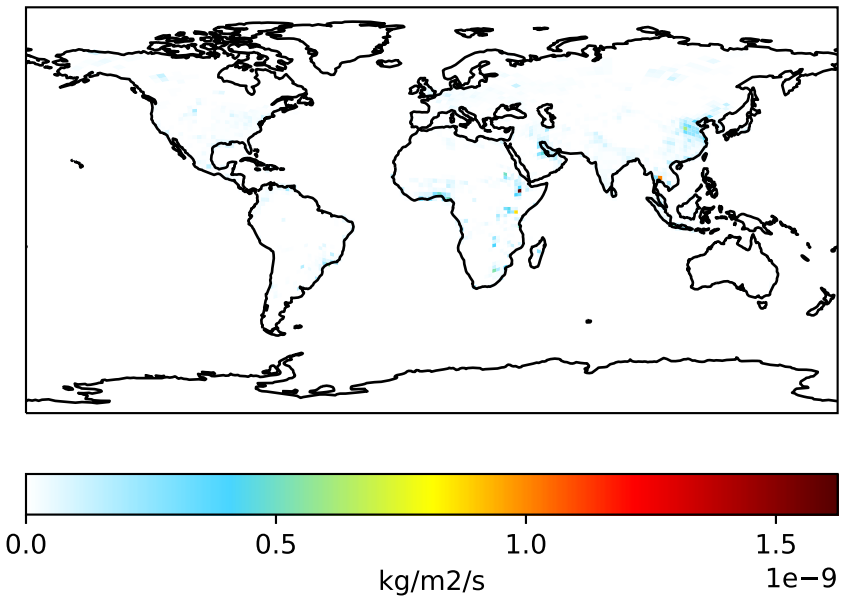



Ratio
Dev/Ref, Fixed Range

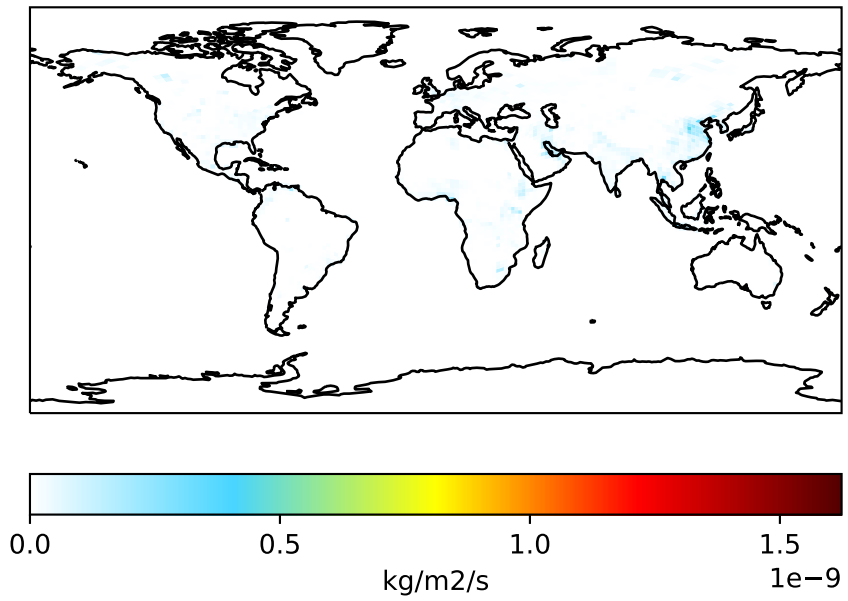


# EmisALK4_Total (Jul2019)

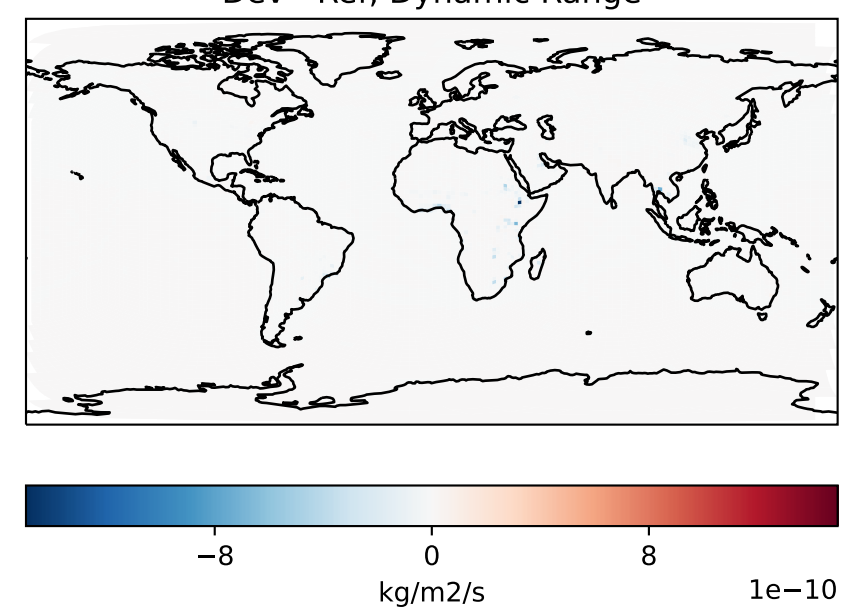
GCHP_13.0.0 (Ref)
c48



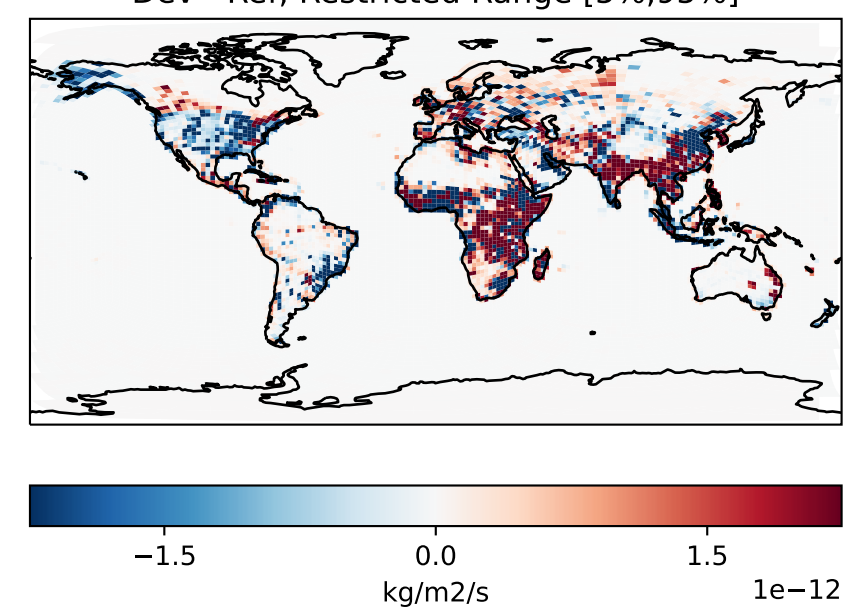

GCHP_13.2.0 (Dev)
c48



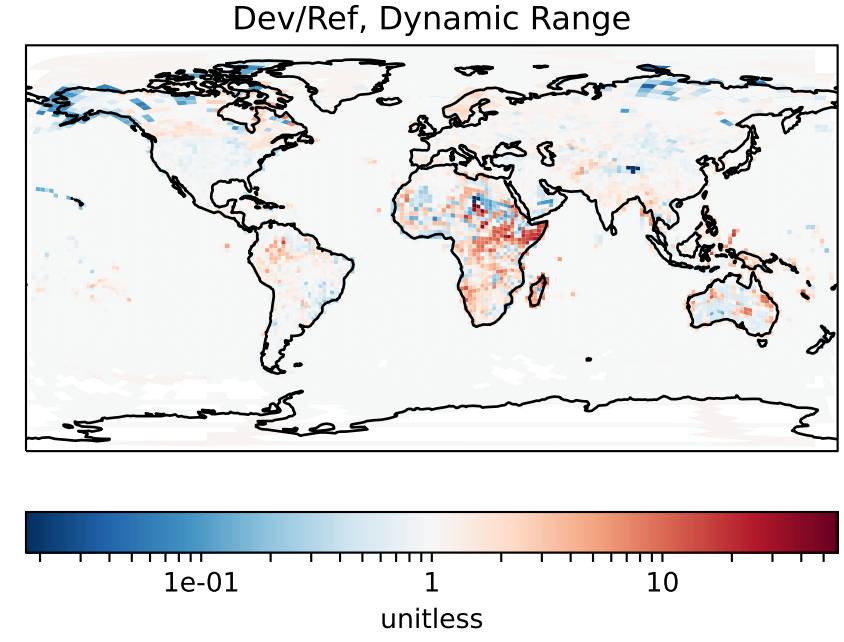

Difference
Dev - Ref, Dynamic Range



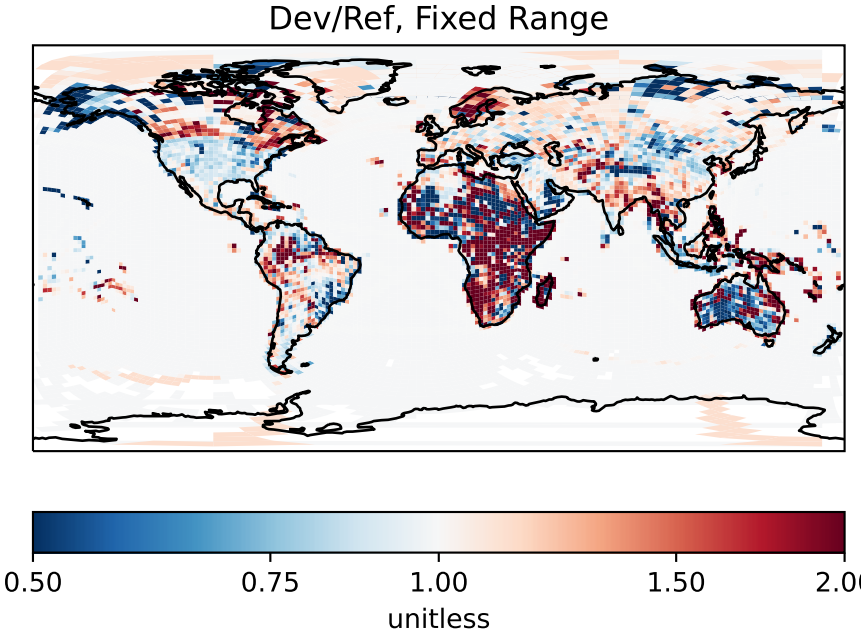

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

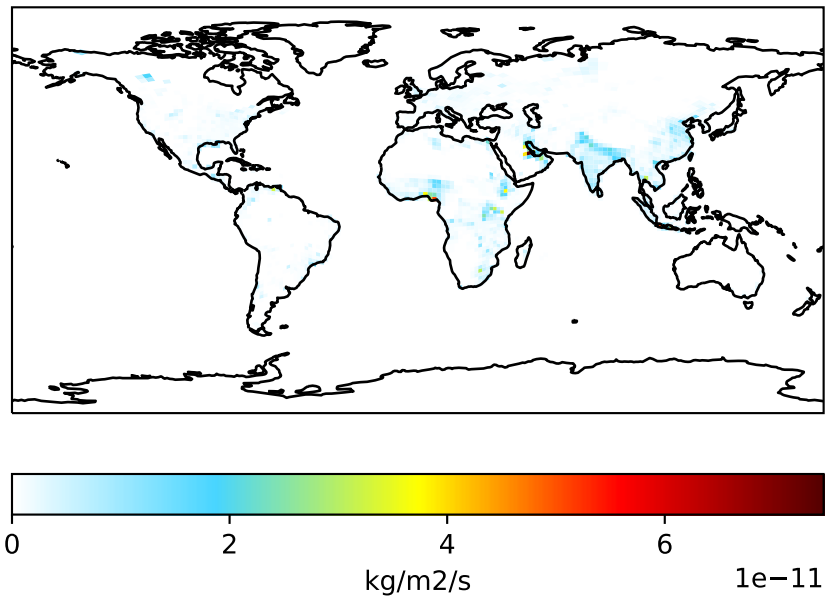



Ratio
Dev/Ref, Fixed Range

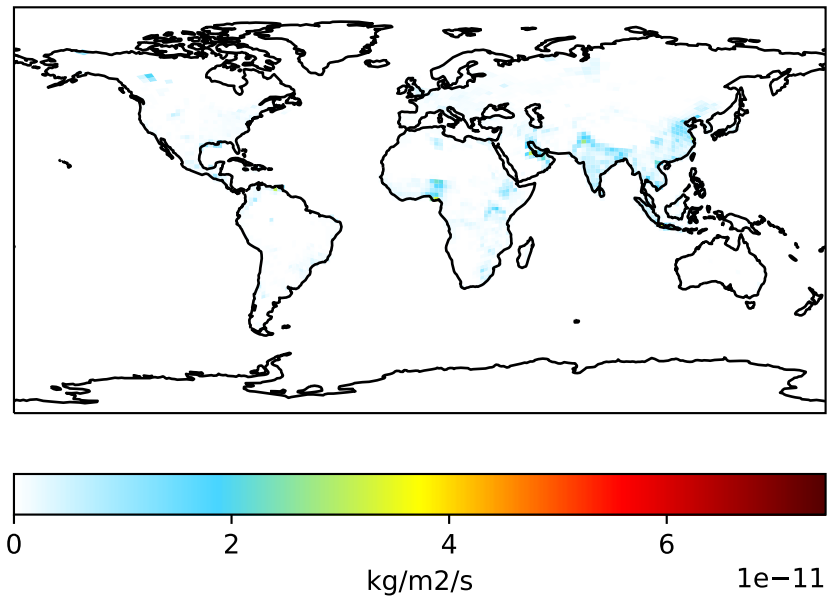


# EmisBENZ_Anthro (Jul2019)

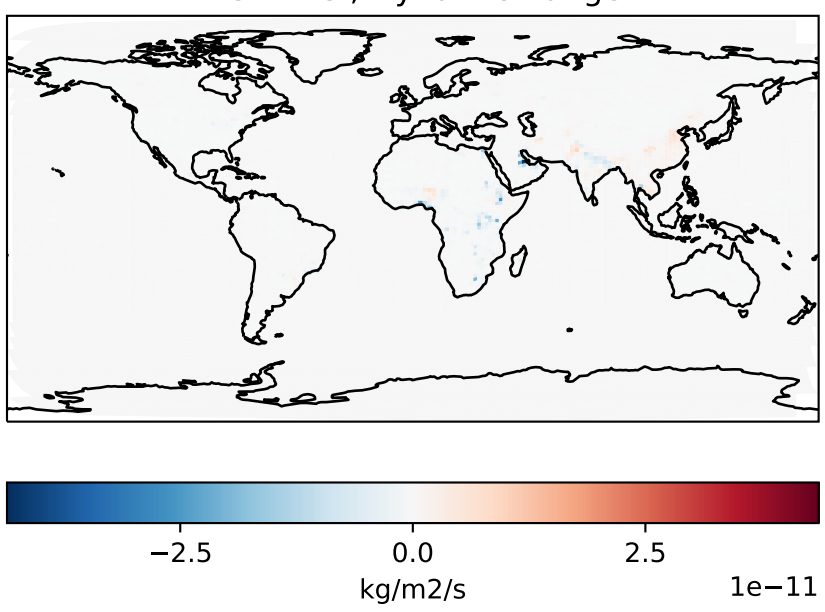
GCHP_13.0.0 (Ref)
c48



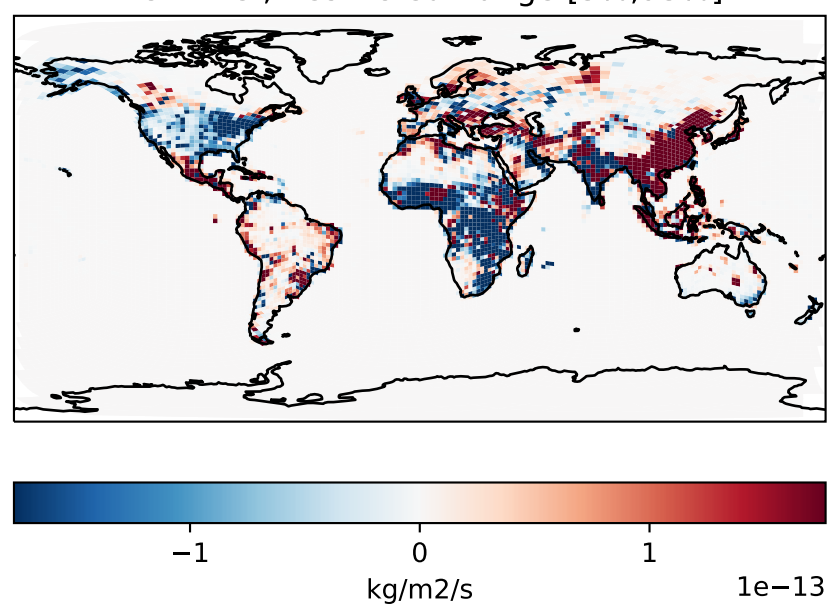

GCHP_13.2.0 (Dev)
c48



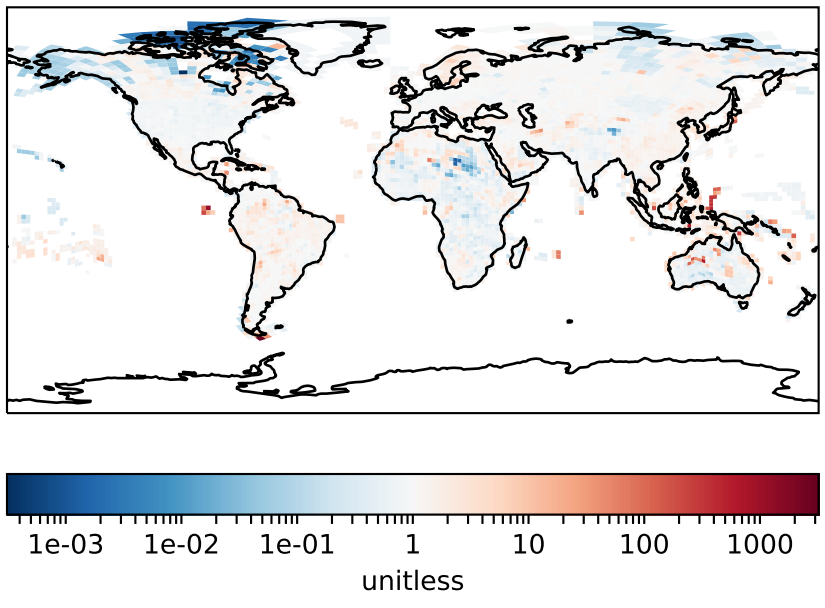

Difference
Dev - Ref, Dynamic Range



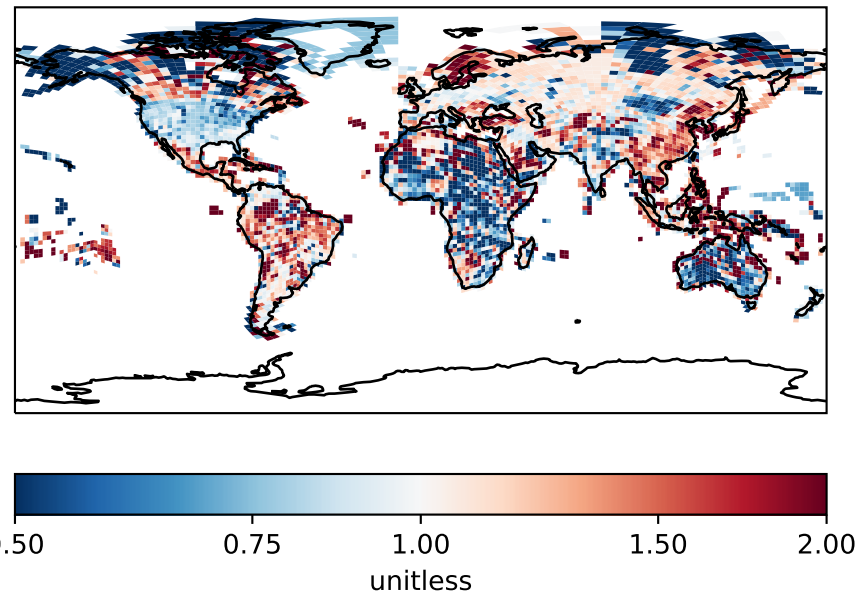

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

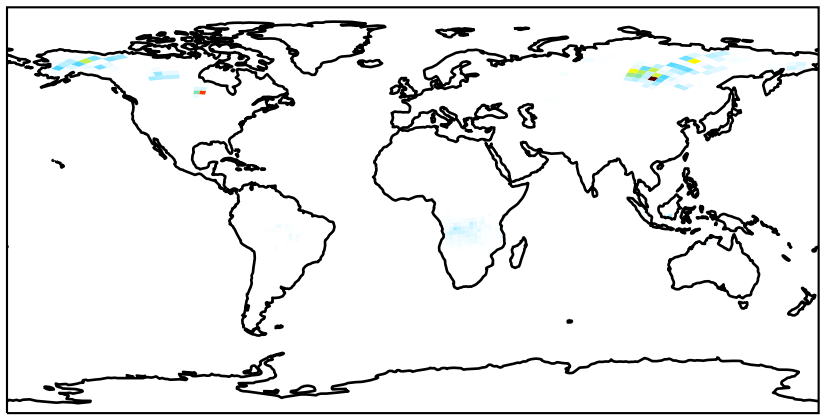


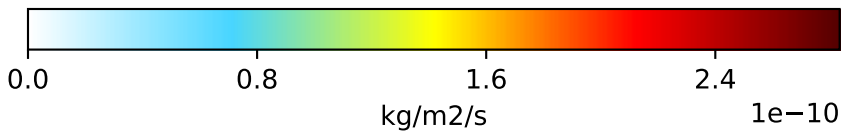

Ratio
Dev/Ref, Fixed Range



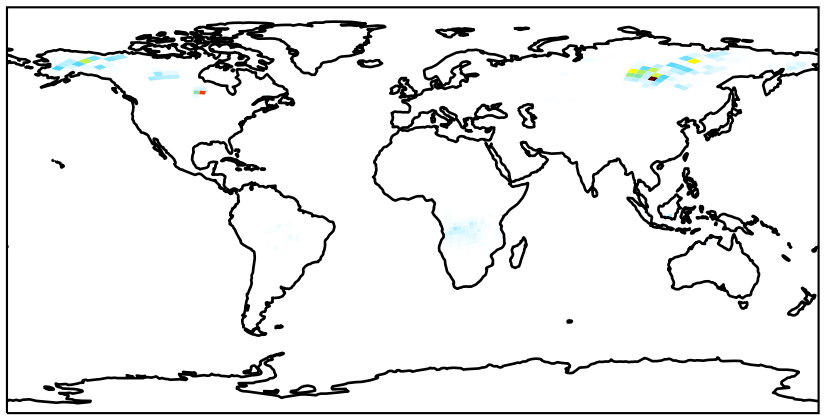
# EmisBENZ_BioBurn (Jul2019)

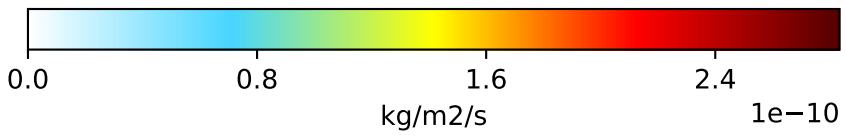
GCHP_13.0.0 (Ref)
c48



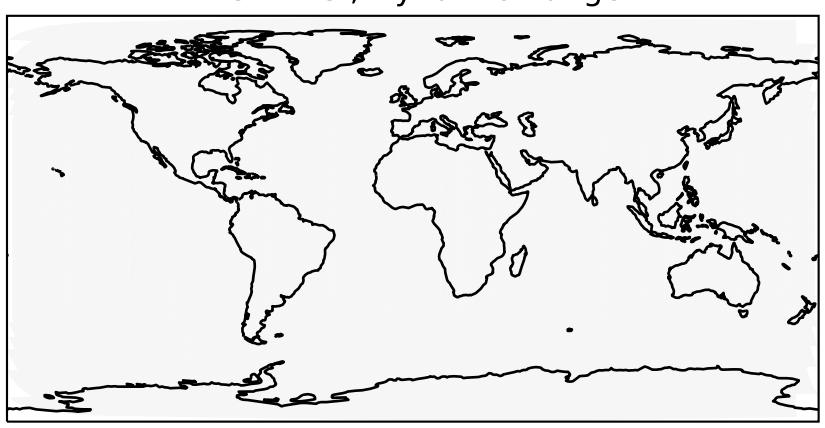


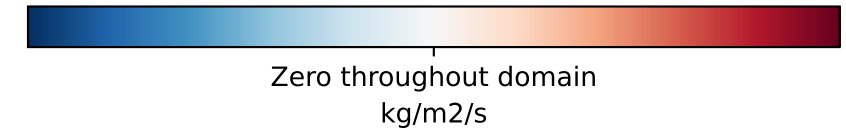

GCHP_13.2.0 (Dev)
c48



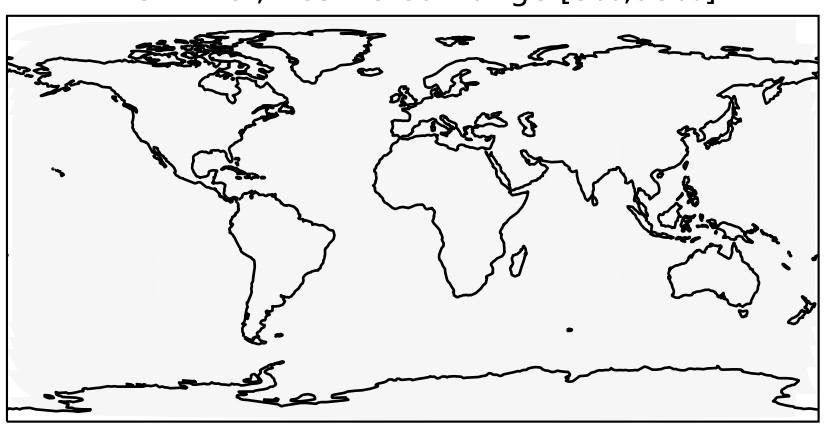


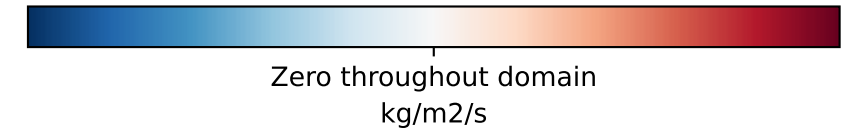

Difference
Dev - Ref, Dynamic Range



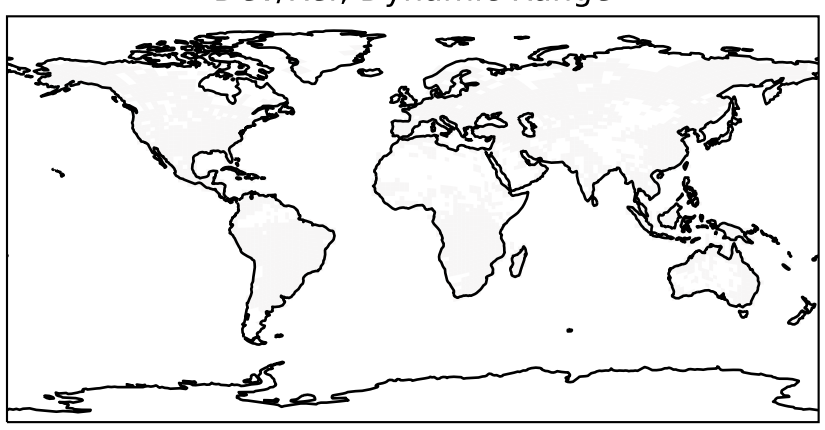


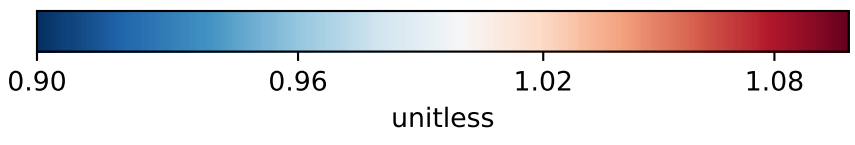

Difference
Dev - Ref, Restricted Range [5%,95%]



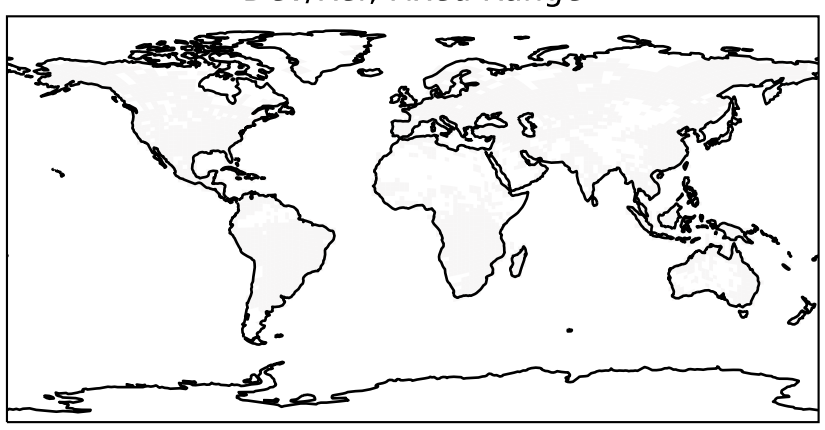


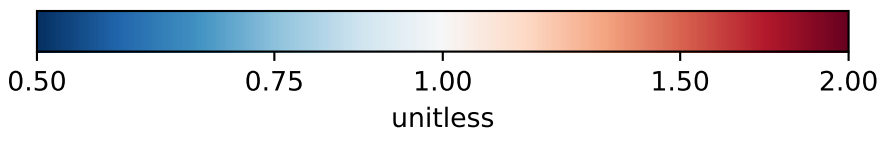

Ratio
Dev/Ref, Dynamic Range





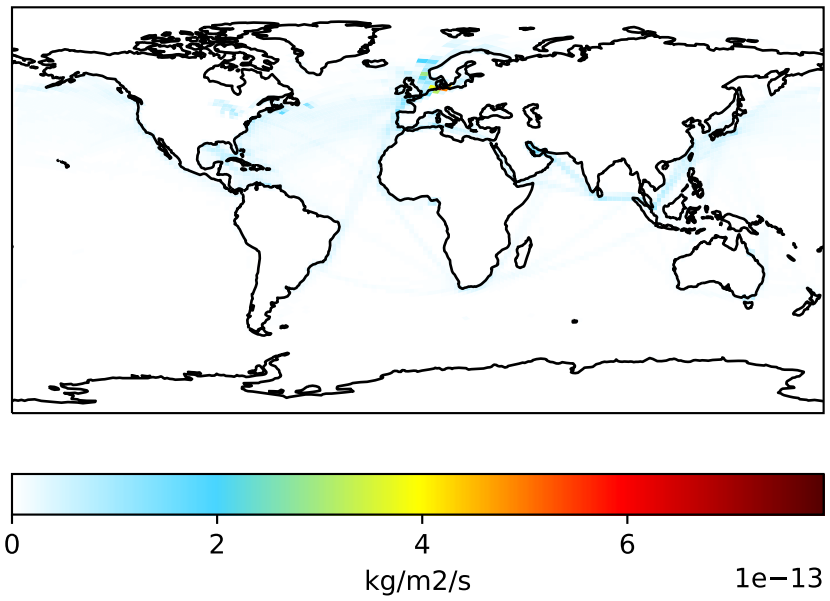

Ratio
Dev/Ref, Fixed Range



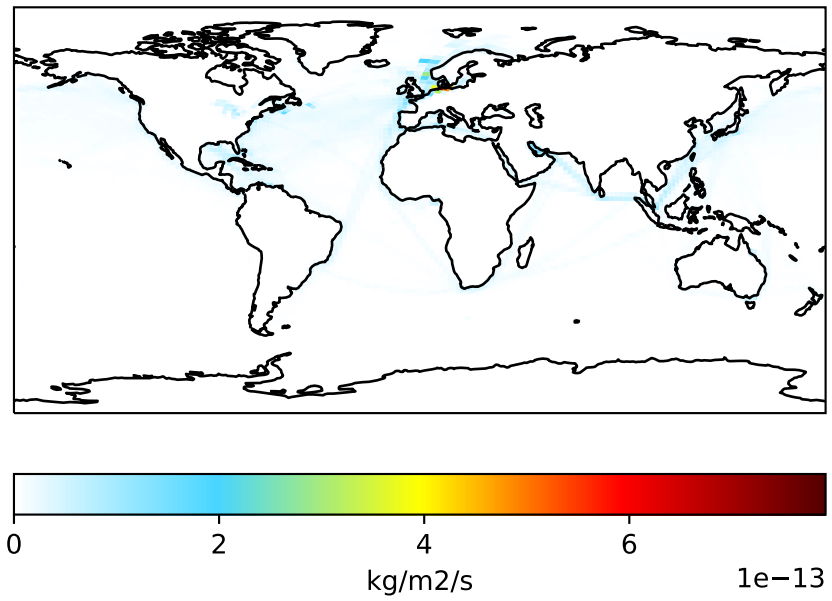


# EmisBENZ_Ship (Jul2019)

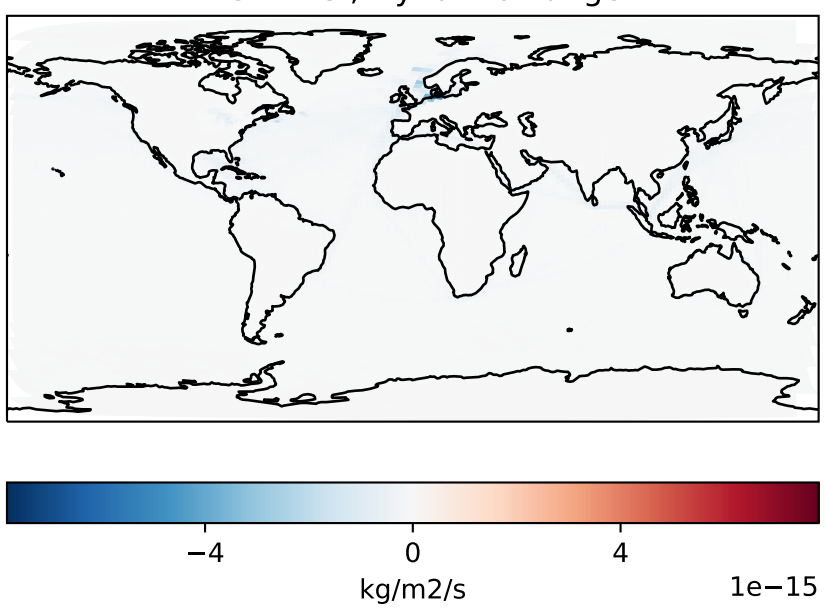
GCHP_13.0.0 (Ref)
c48



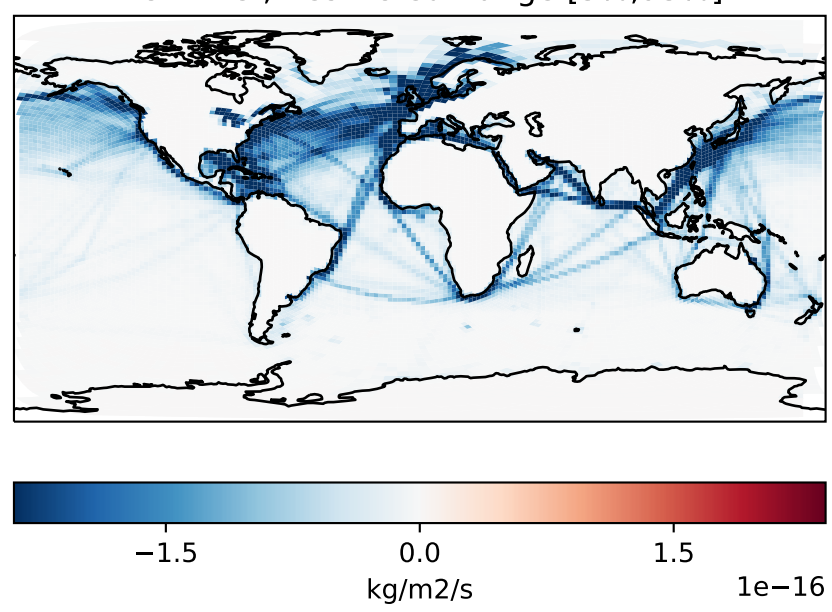

GCHP_13.2.0 (Dev)
c48



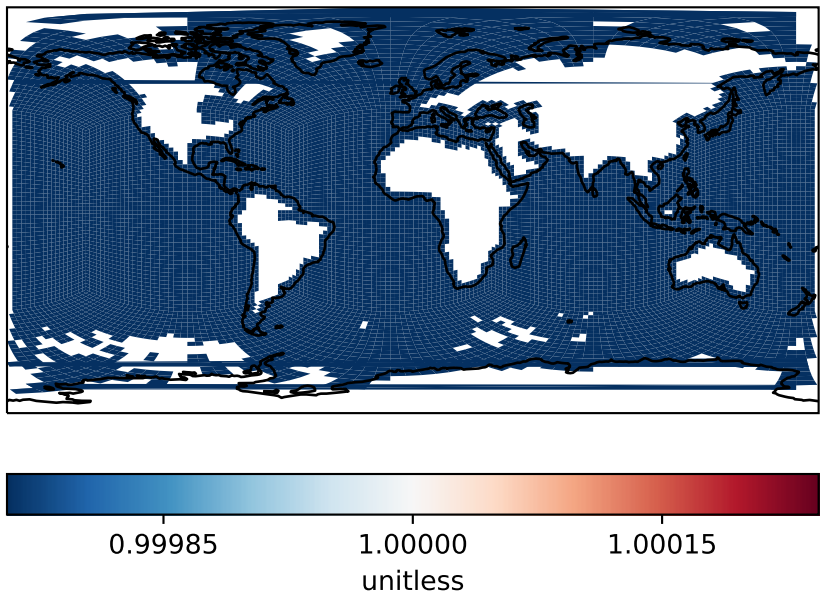

Difference
Dev - Ref, Dynamic Range



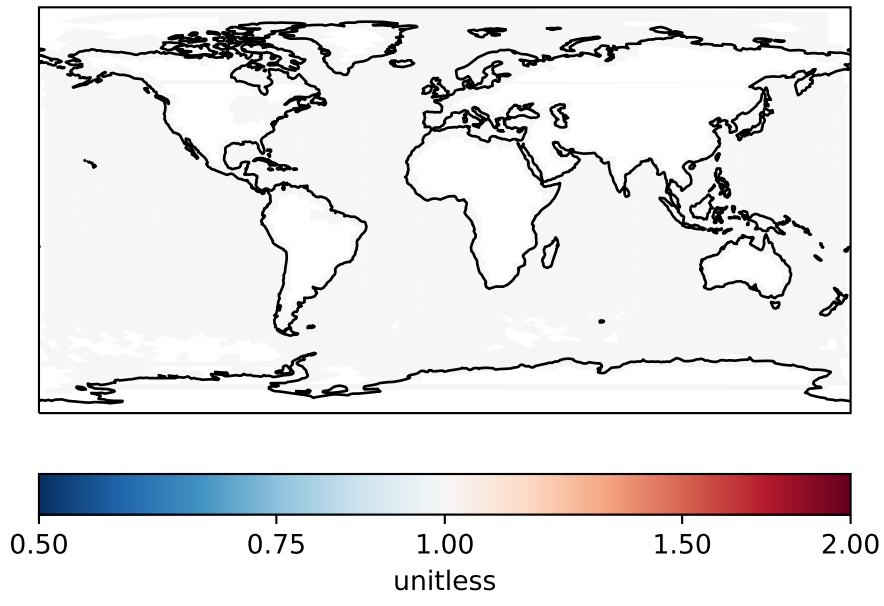

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

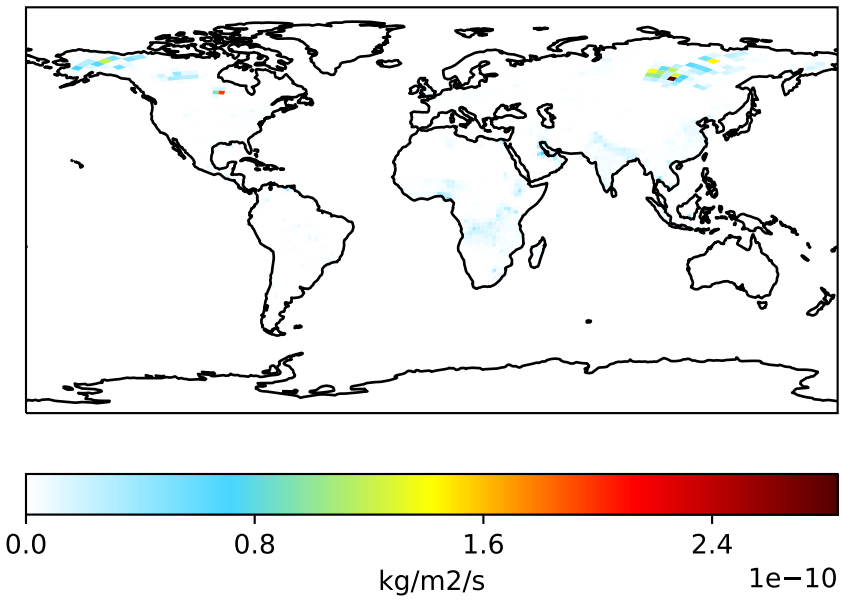



Ratio
Dev/Ref, Fixed Range

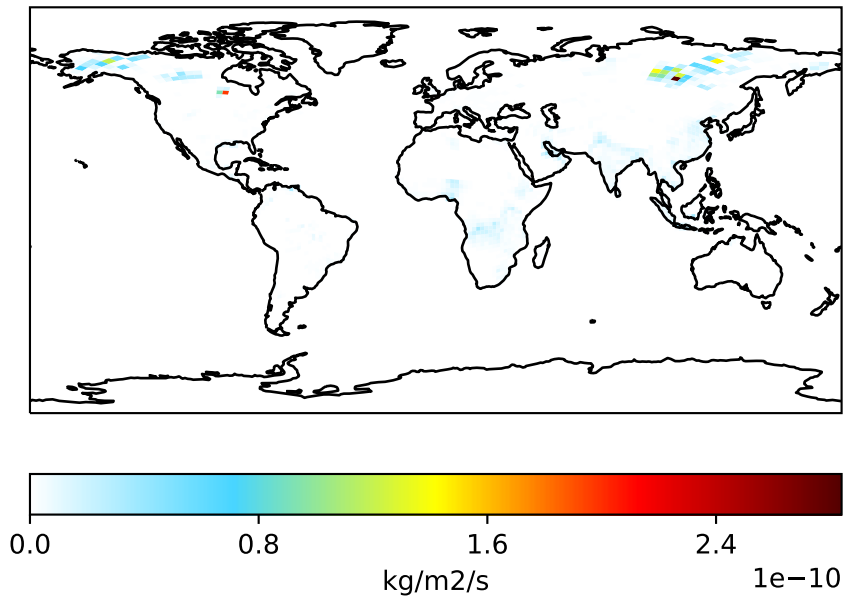


# EmisBENZ_Total (Jul2019)

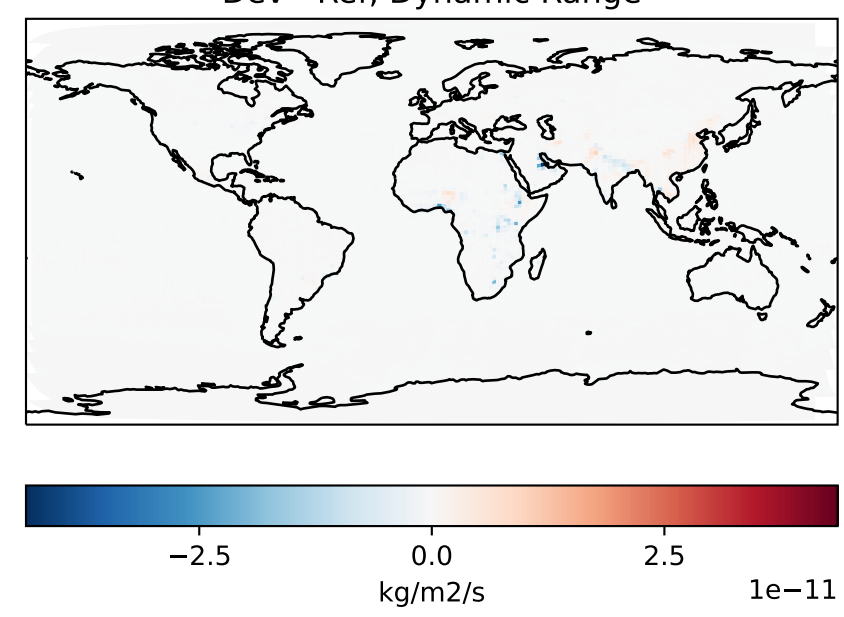
GCHP_13.0.0 (Ref)
c48



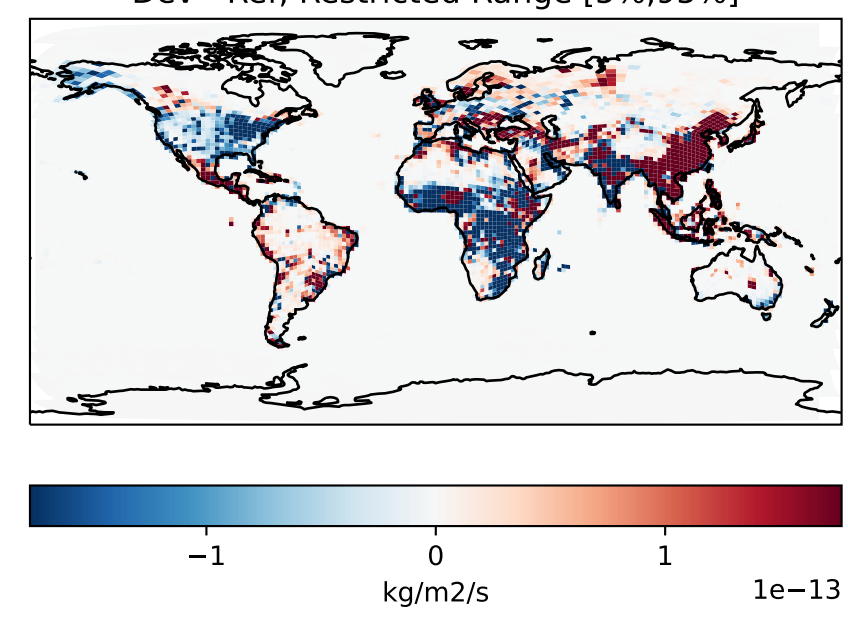

GCHP_13.2.0 (Dev)
c48



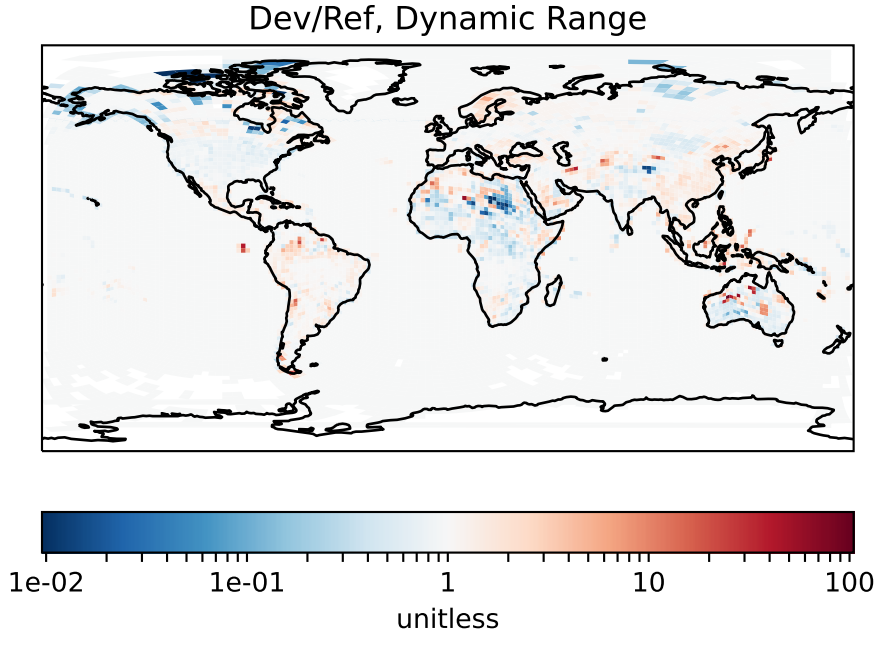

Difference
Dev - Ref, Dynamic Range



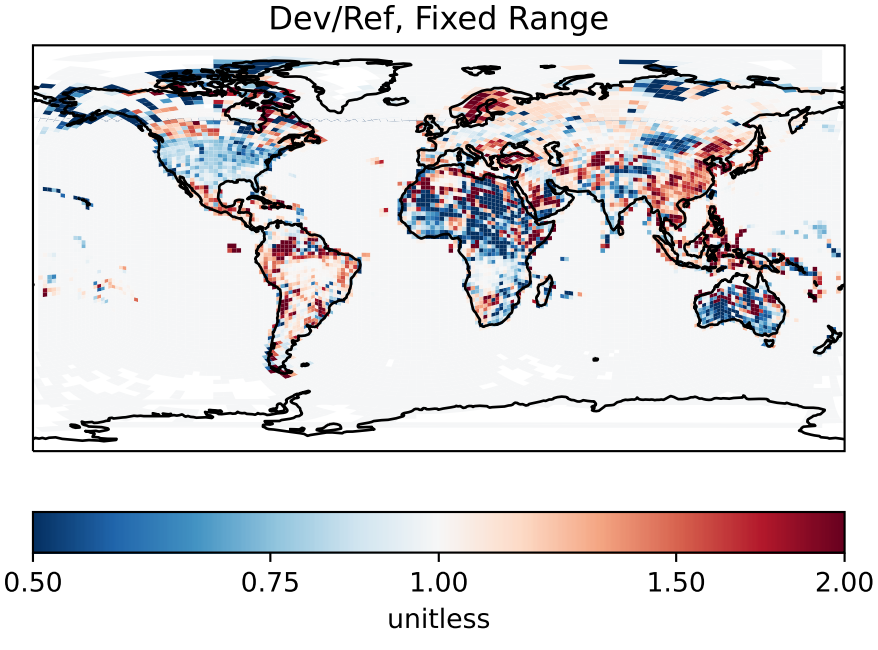

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

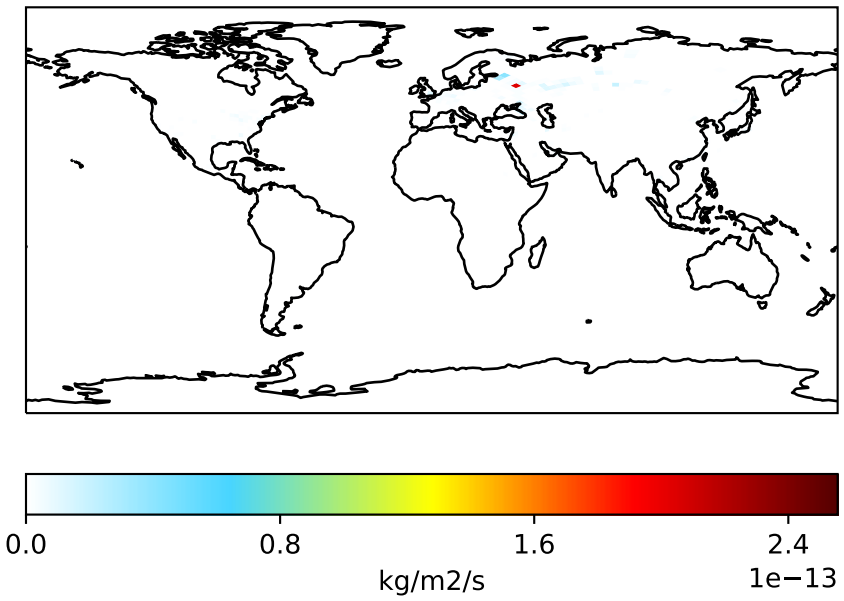



Ratio
Dev/Ref, Fixed Range

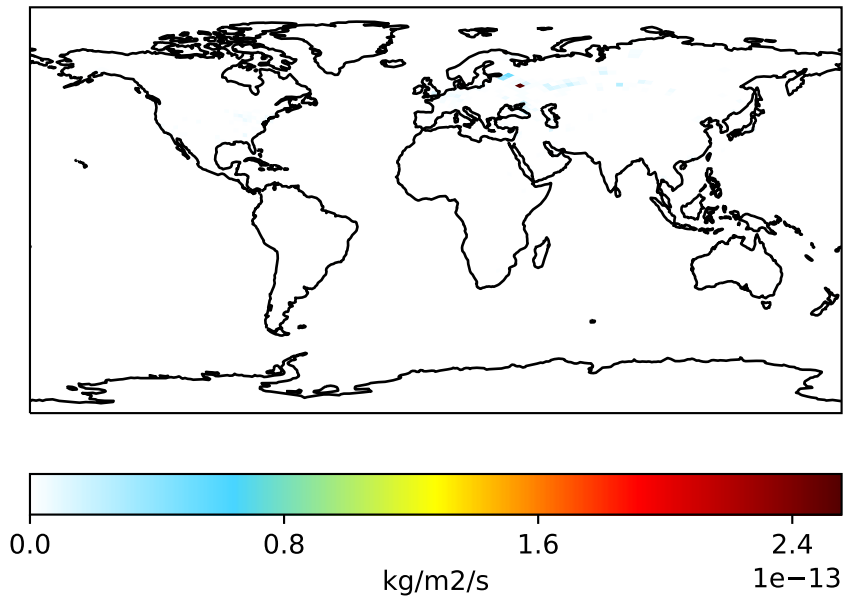


# EmisC2H6_Aircraft (Jul2019)

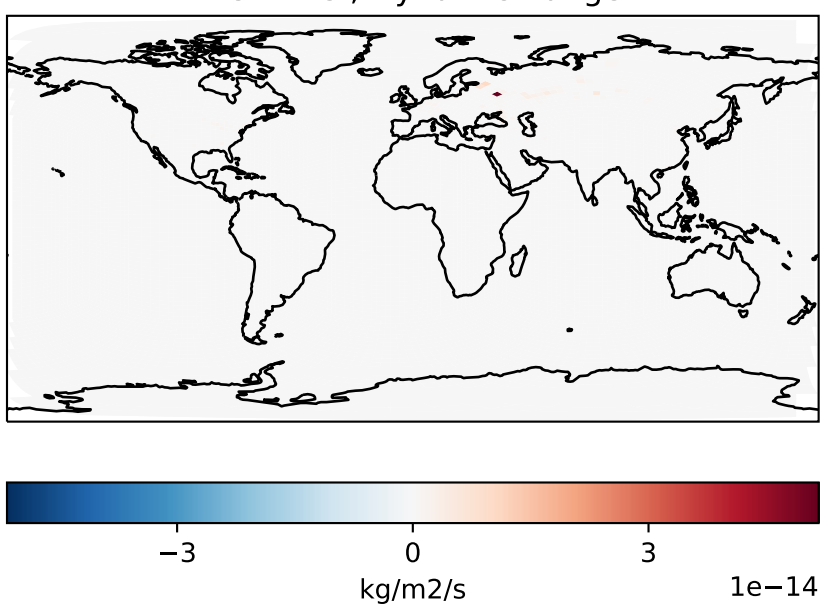
GCHP_13.0.0 (Ref)
c48



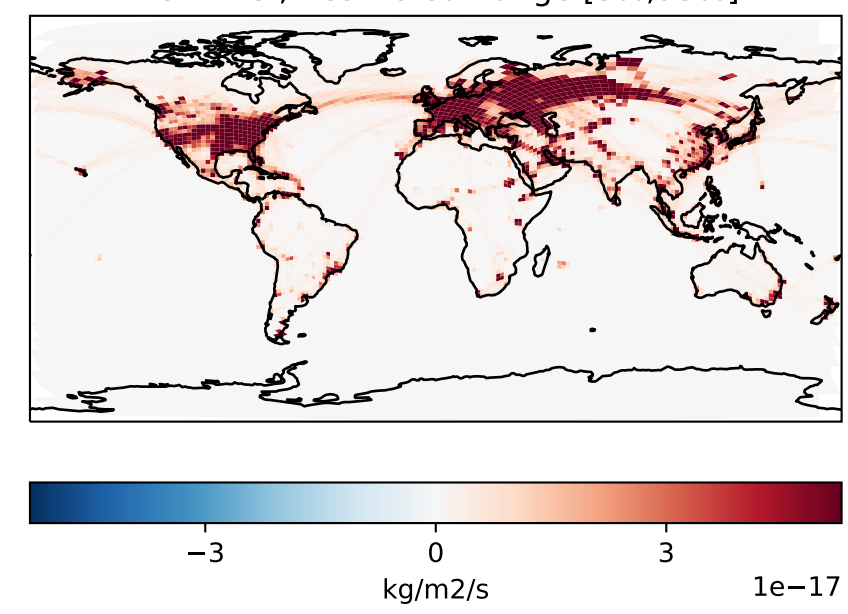

GCHP_13.2.0 (Dev)
c48



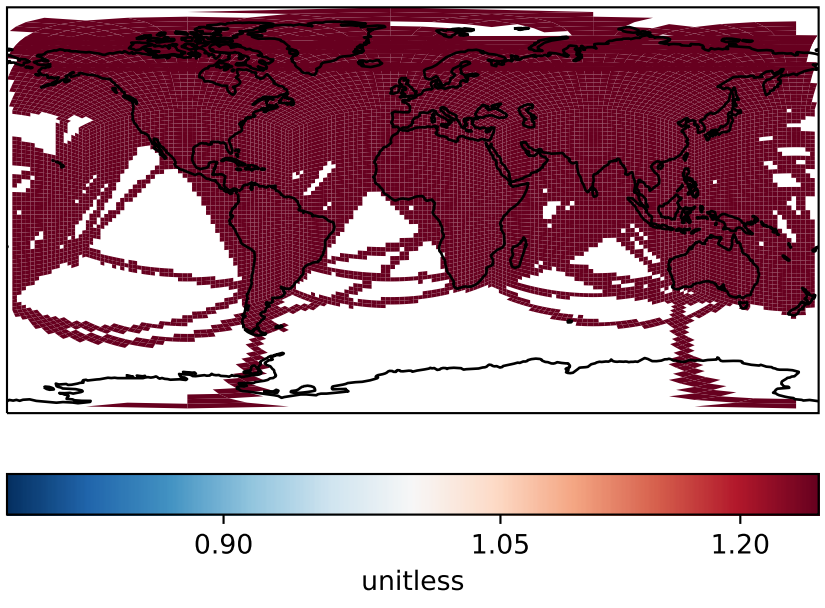

Difference
Dev - Ref, Dynamic Range



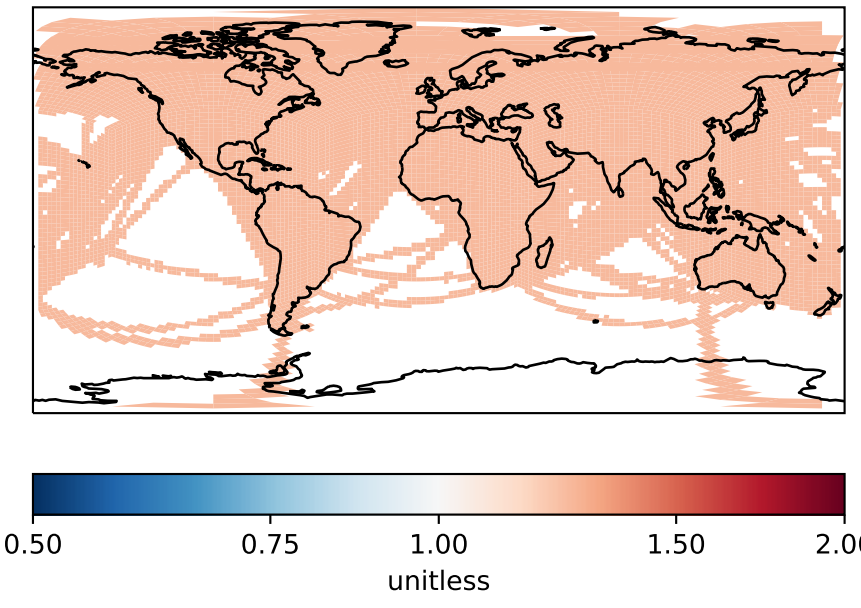

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

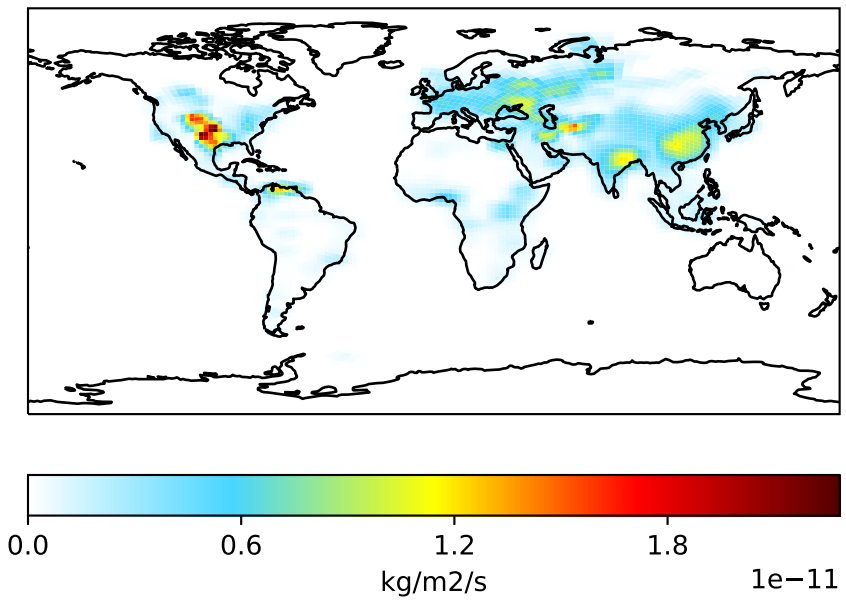



Ratio
Dev/Ref, Fixed Range

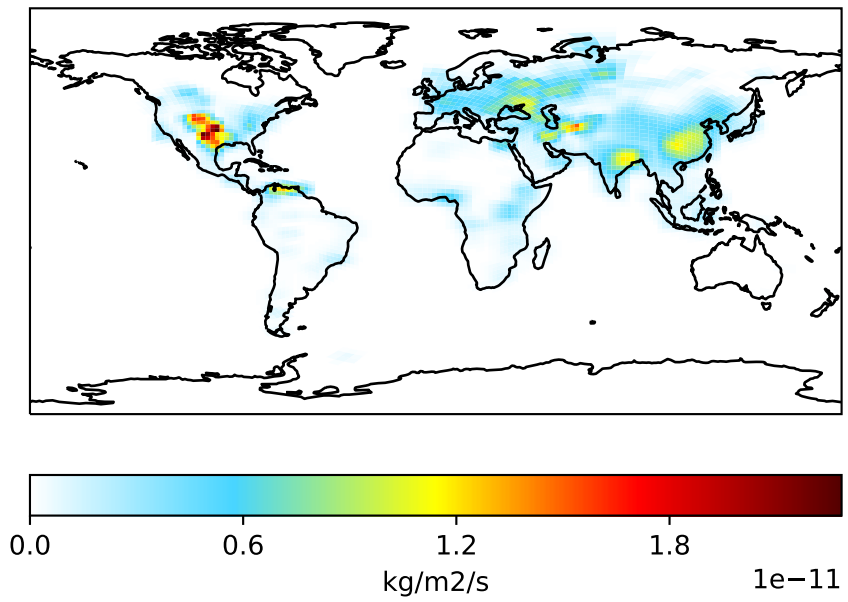


# EmisC2H6_Anthro (Jul2019)

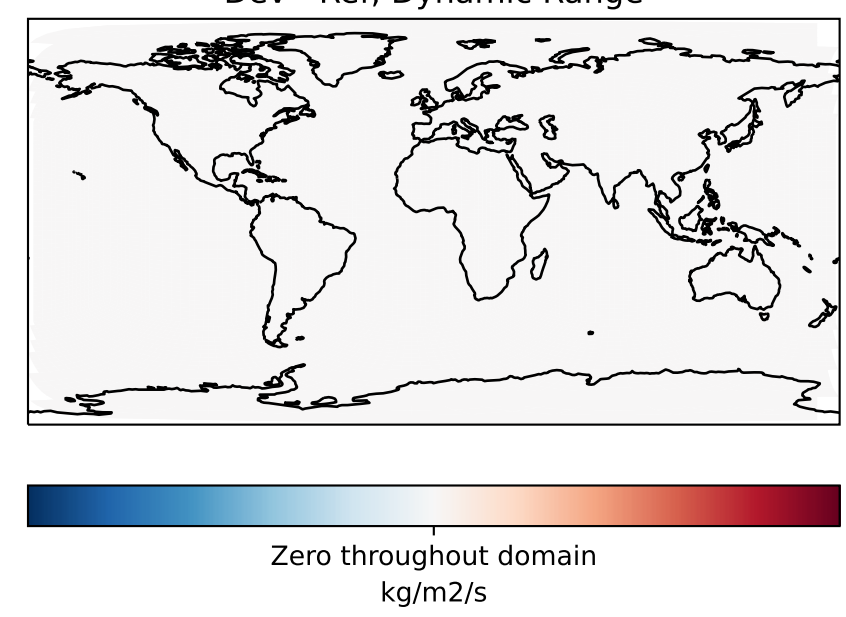
GCHP_13.0.0 (Ref)
c48



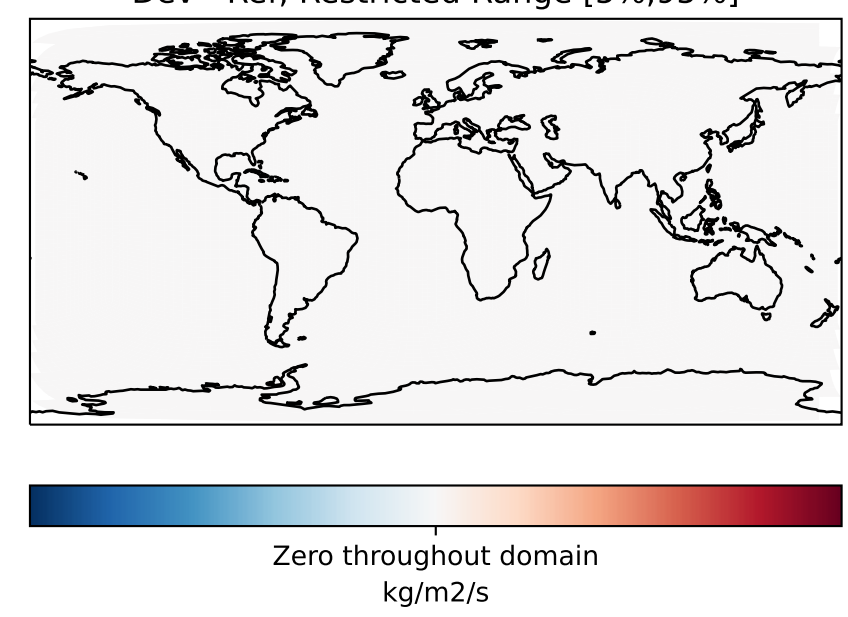

GCHP_13.2.0 (Dev)
c48



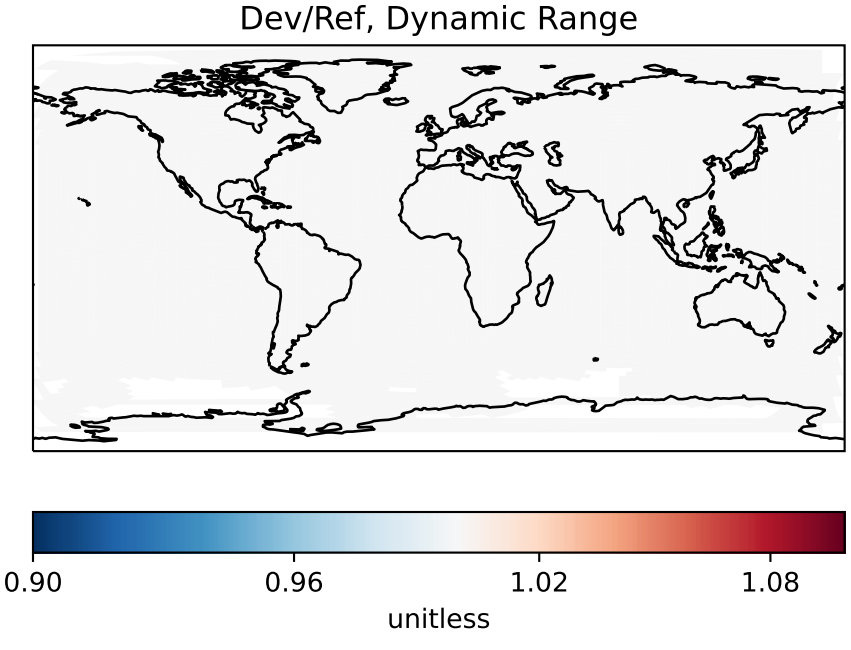

Difference
Dev - Ref, Dynamic Range



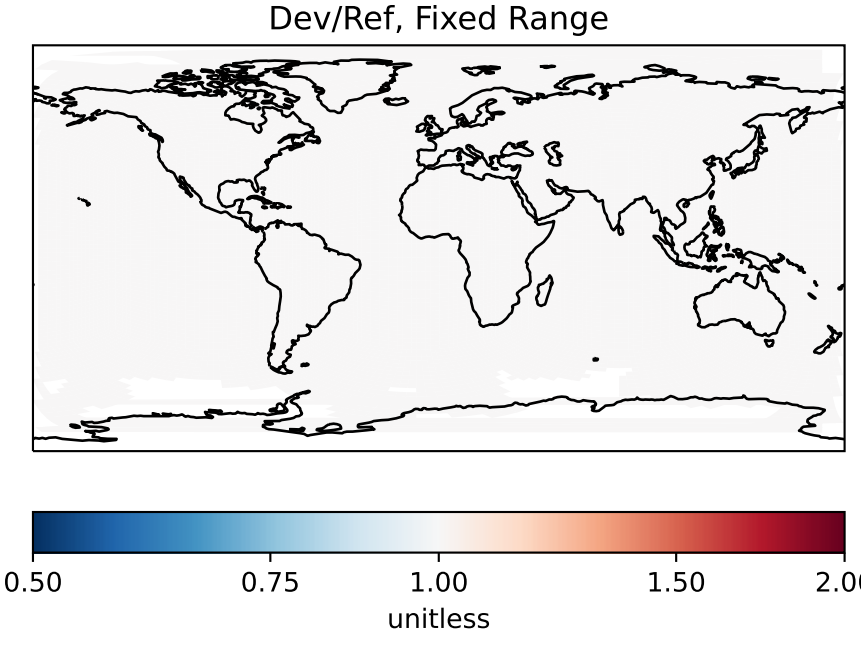

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

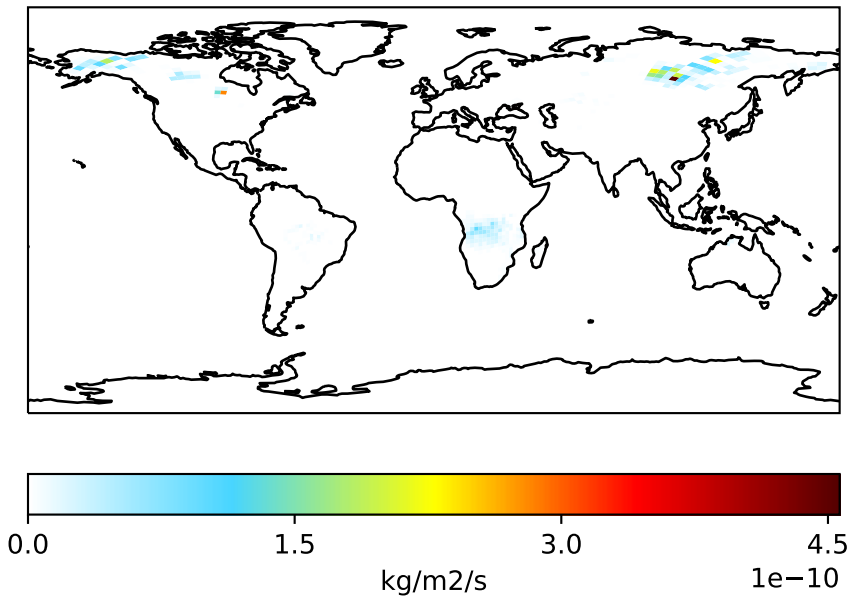



Ratio
Dev/Ref, Fixed Range

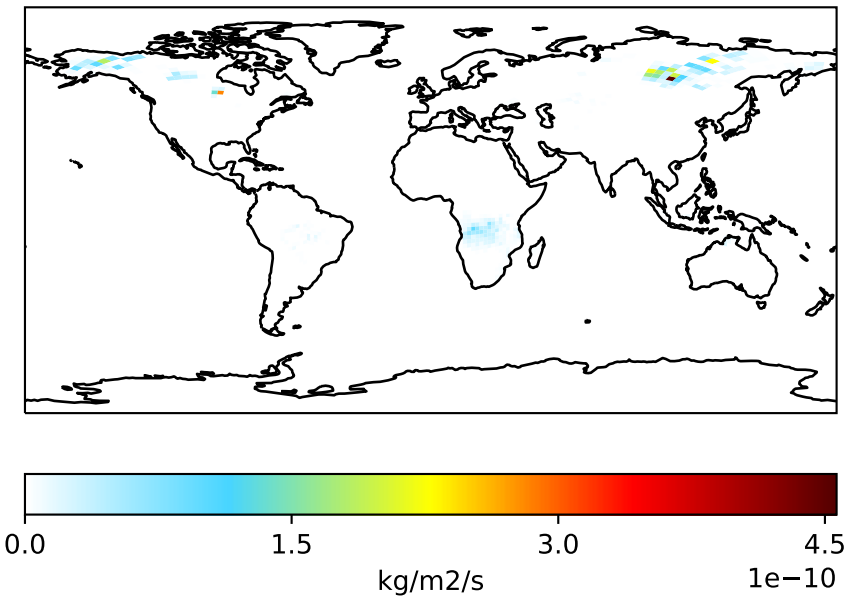


# EmisC2H6_BioBurn (Jul2019)

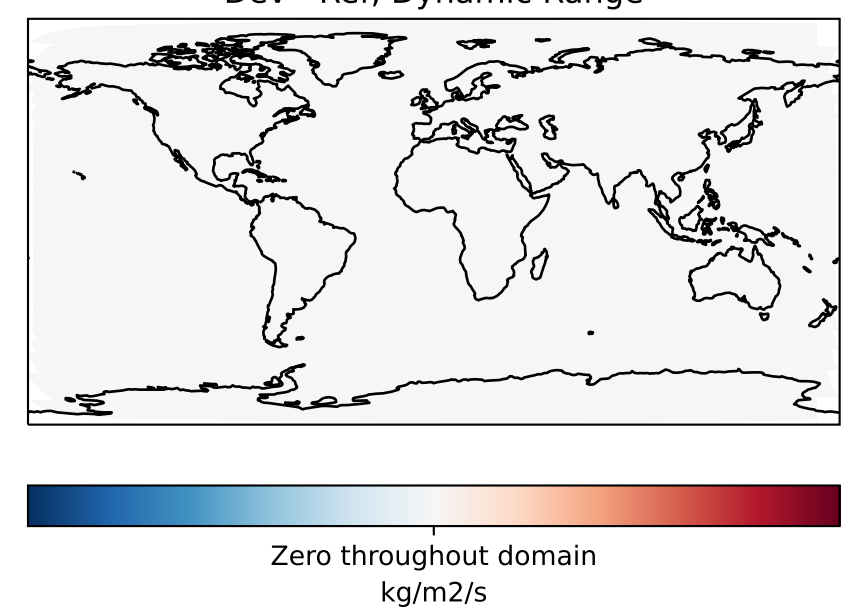
GCHP_13.0.0 (Ref)
c48



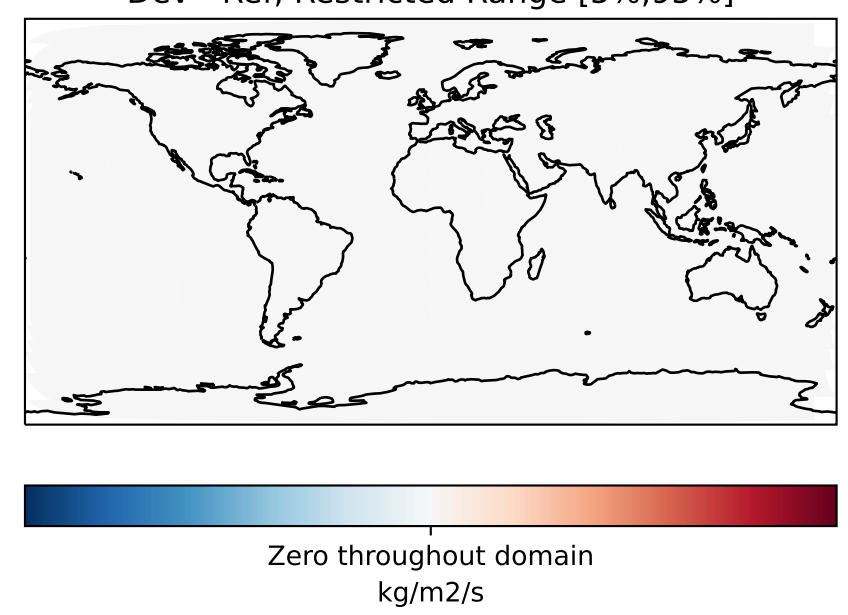

GCHP_13.2.0 (Dev)
c48



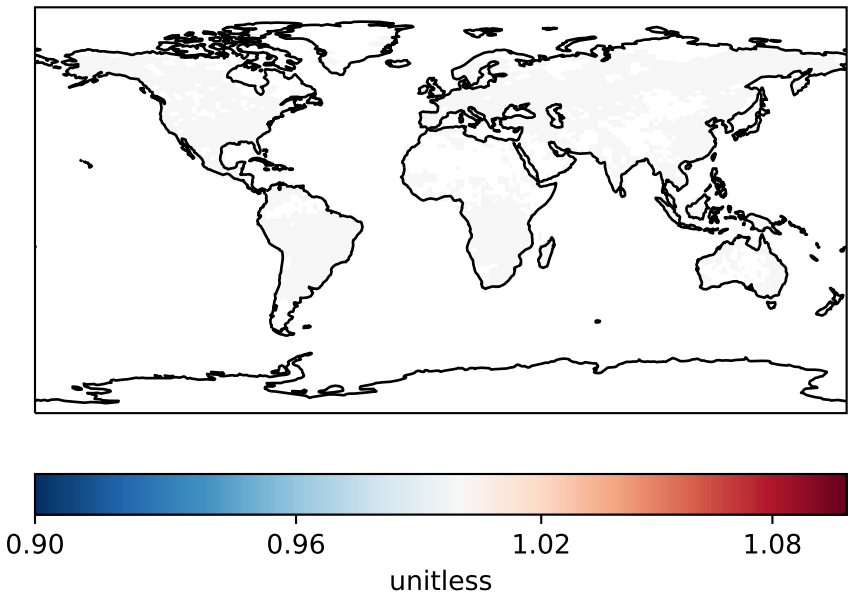

Difference
Dev - Ref, Dynamic Range



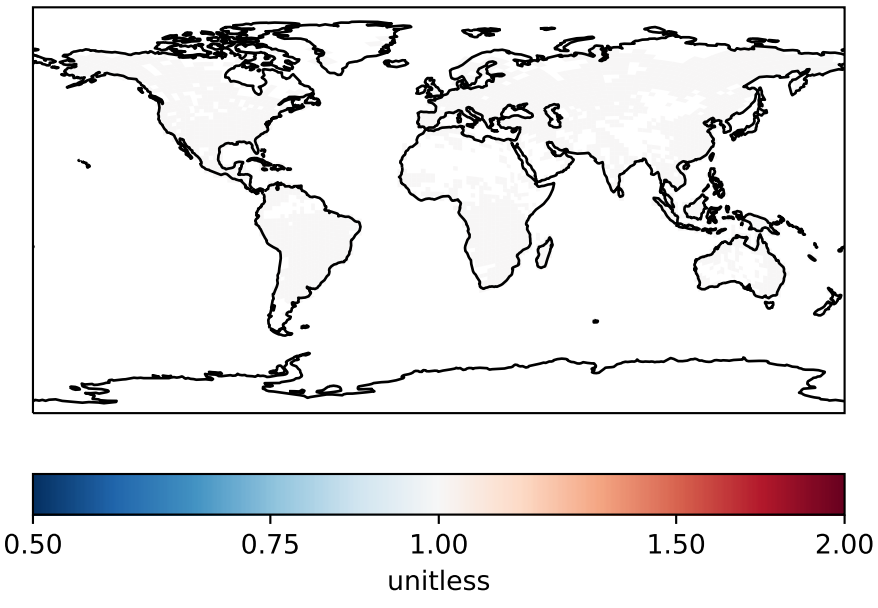

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

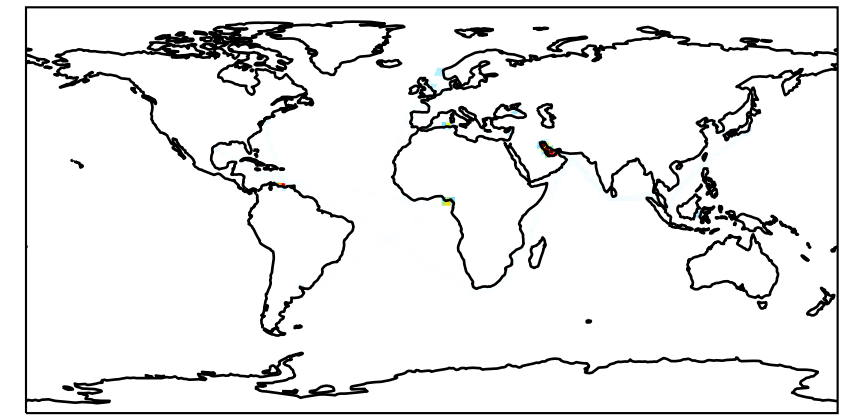


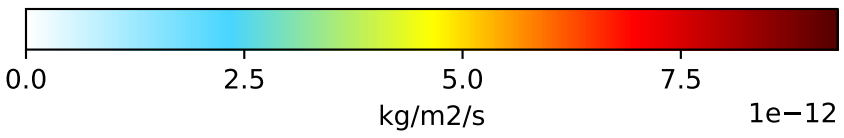

Ratio
Dev/Ref, Fixed Range



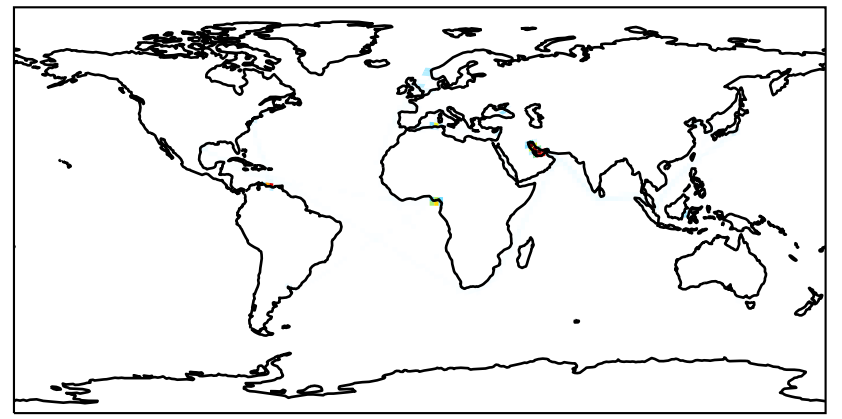
# EmisC2H6_Ship (Jul2019)

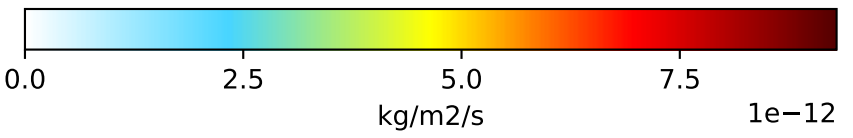
GCHP_13.0.0 (Ref)
c48



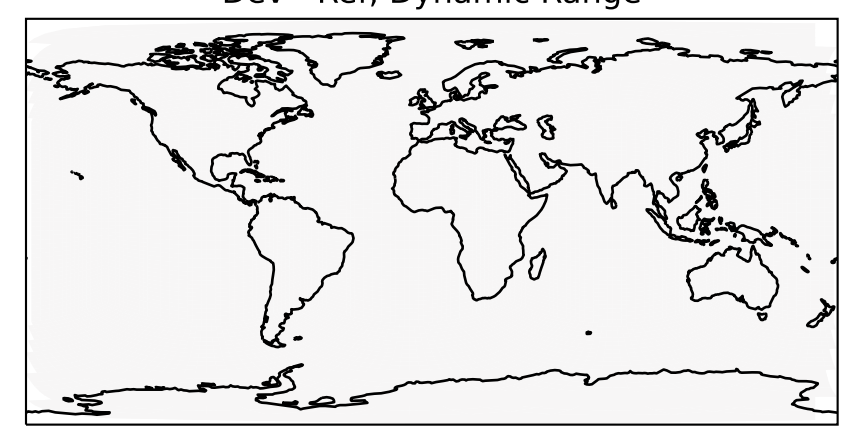


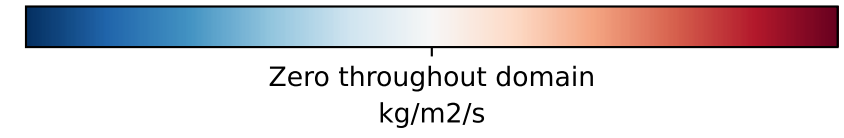

GCHP_13.2.0 (Dev)
c48





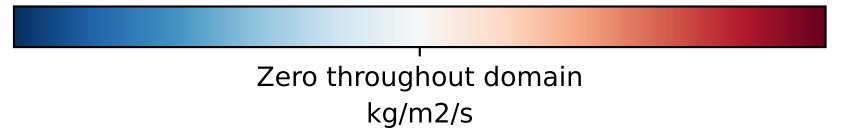

Difference
Dev - Ref, Dynamic Range



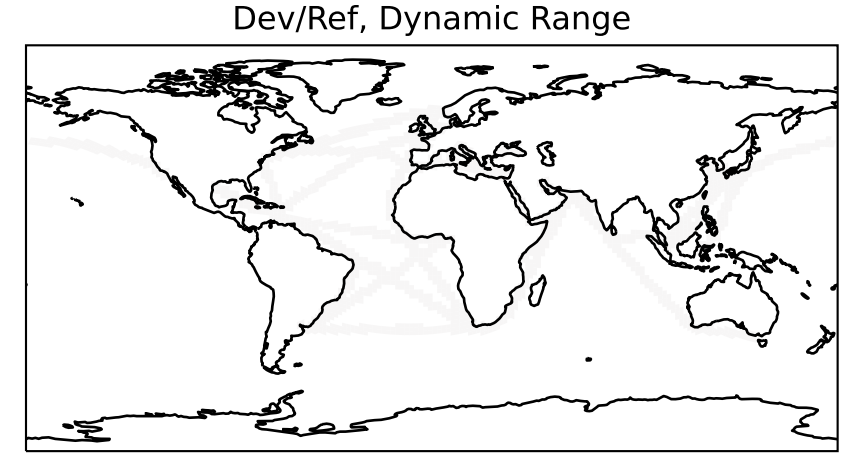


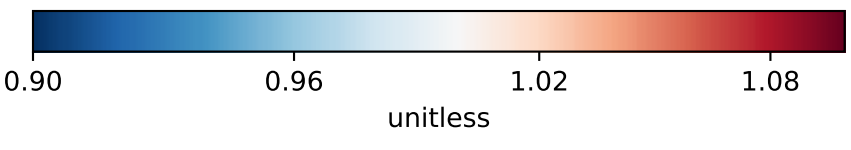

Difference
Dev - Ref, Restricted Range [5%,95%]



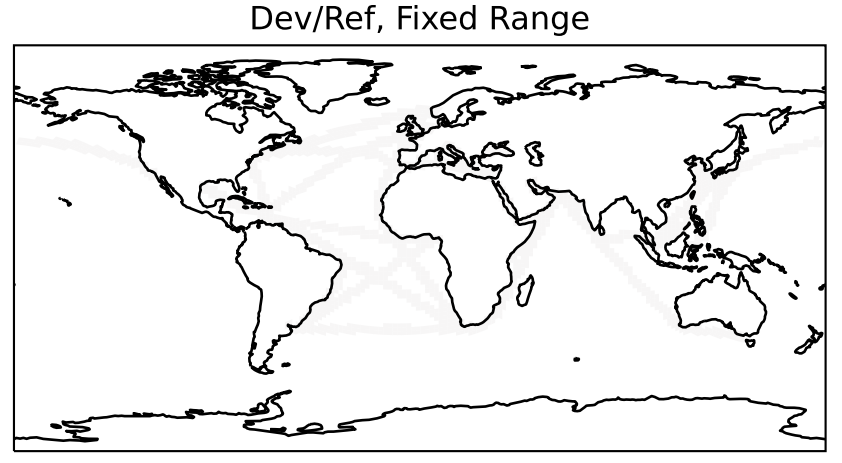


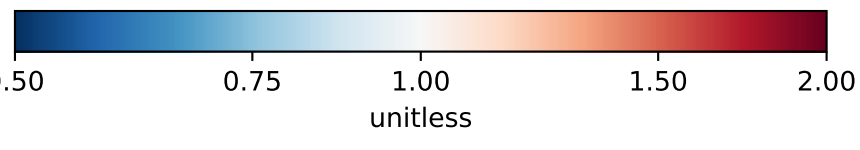

Ratio
Dev/Ref, Dynamic Range





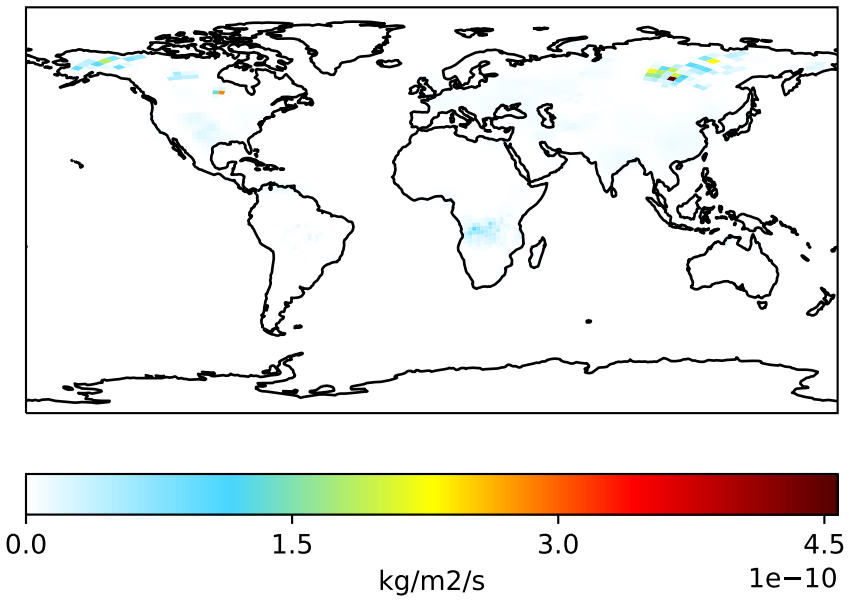

Ratio
Dev/Ref, Fixed Range



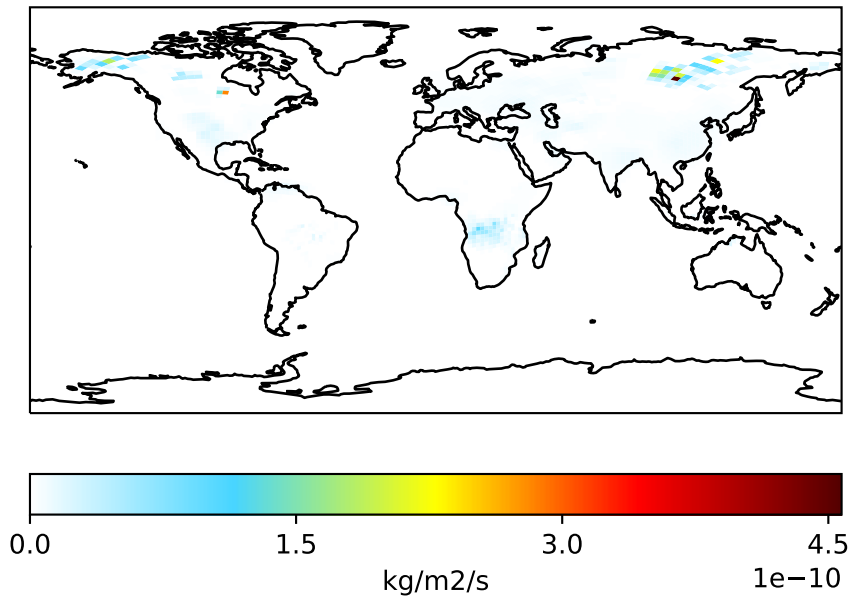


# EmisC2H6_Total (Jul2019)

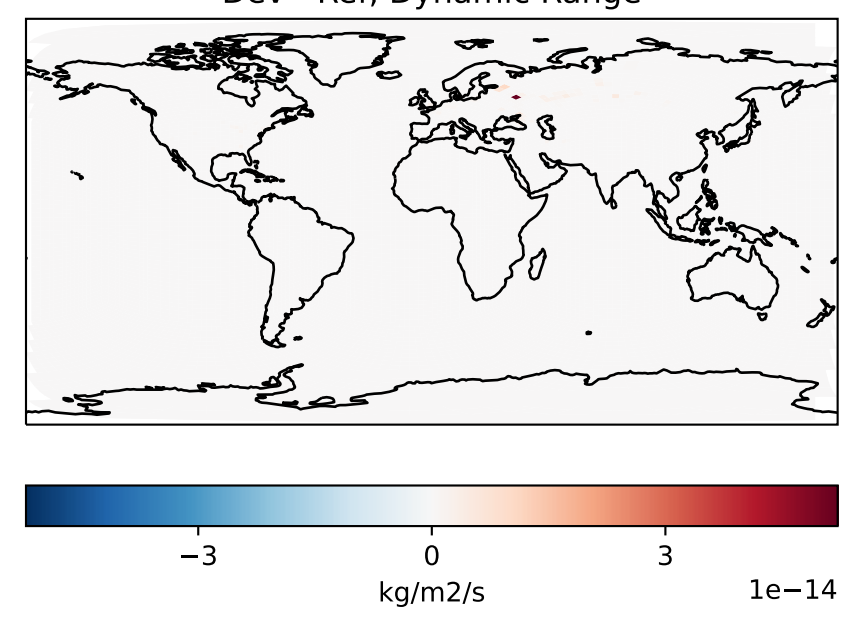
GCHP_13.0.0 (Ref)
c48



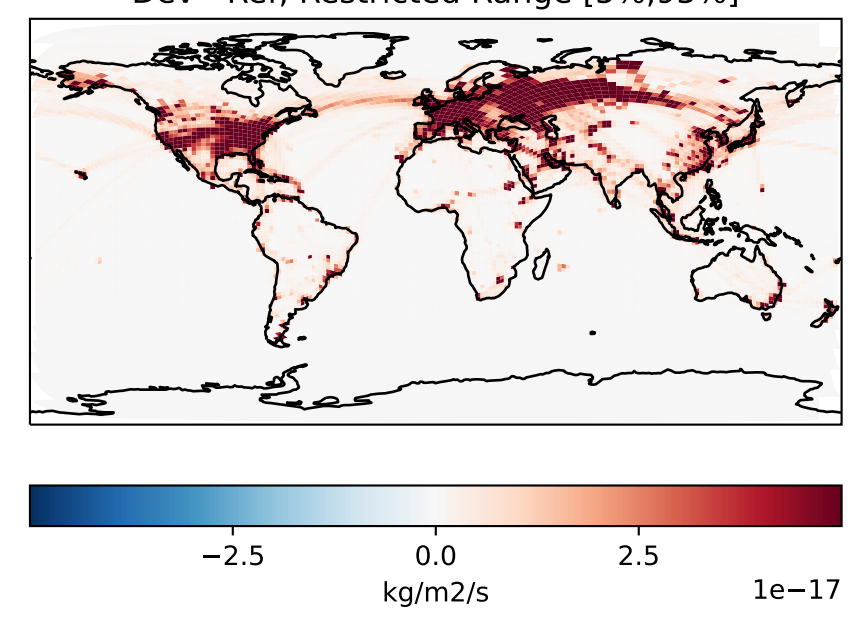

GCHP_13.2.0 (Dev)
c48



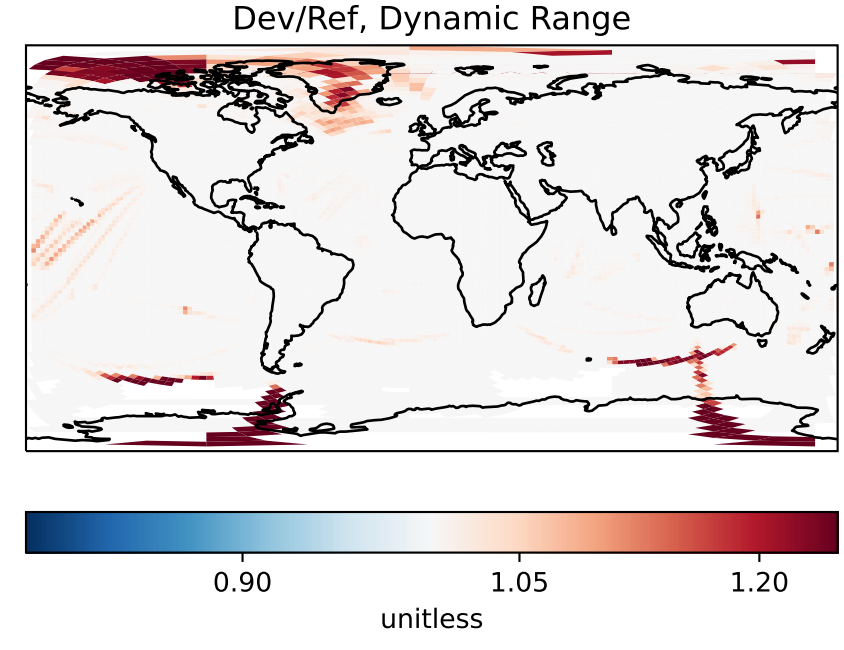

Difference
Dev - Ref, Dynamic Range



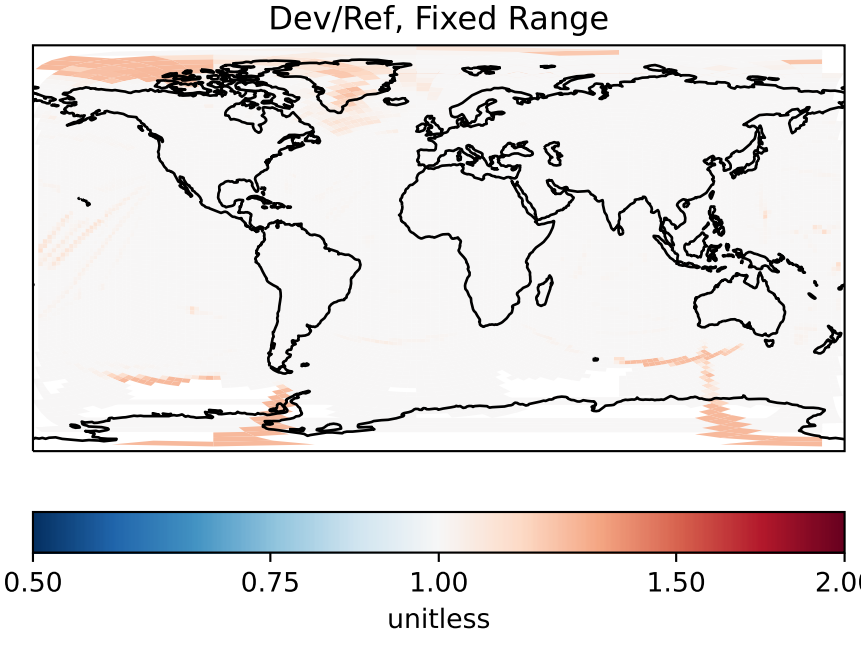

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

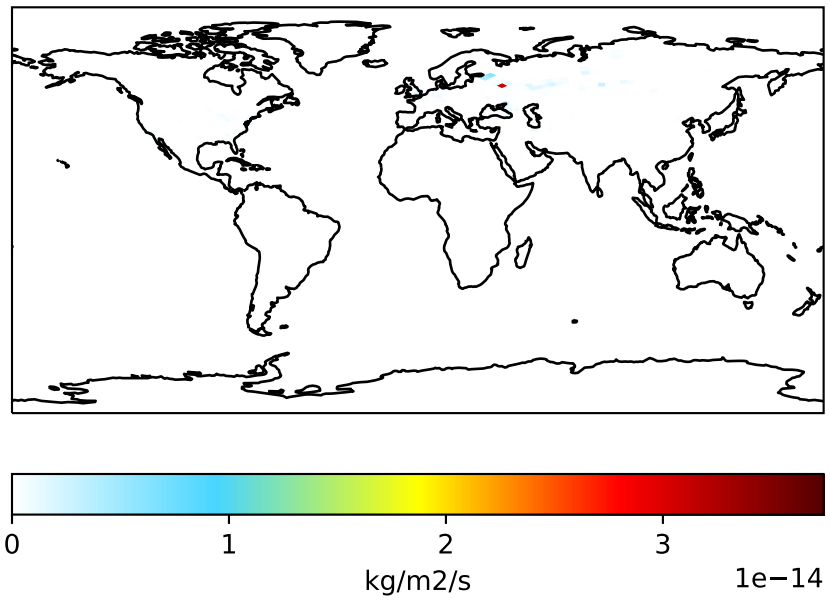



Ratio
Dev/Ref, Fixed Range

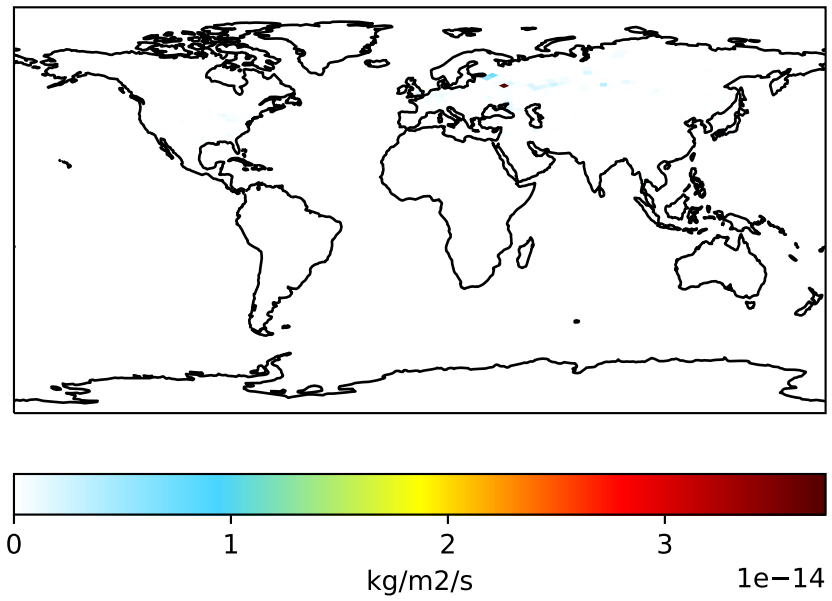


# EmisC3H8_Aircraft (Jul2019)

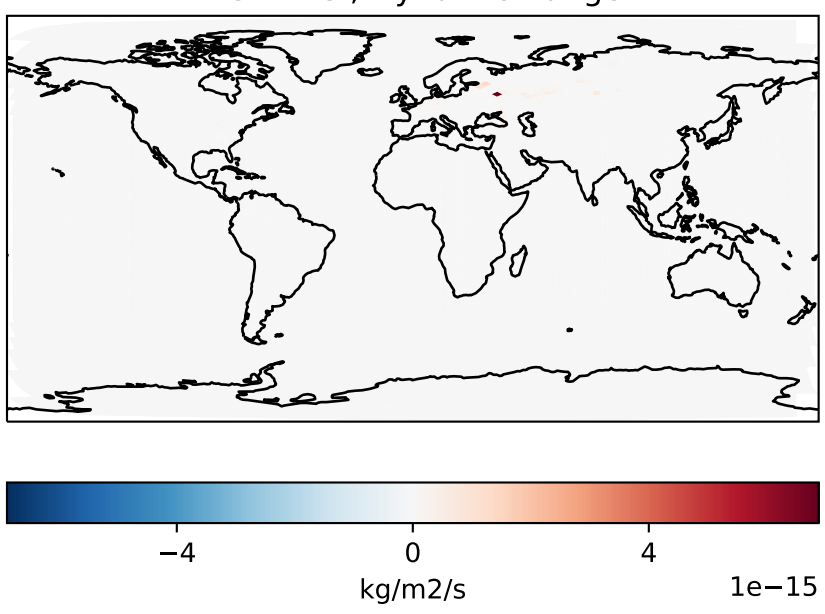
GCHP_13.0.0 (Ref)
c48



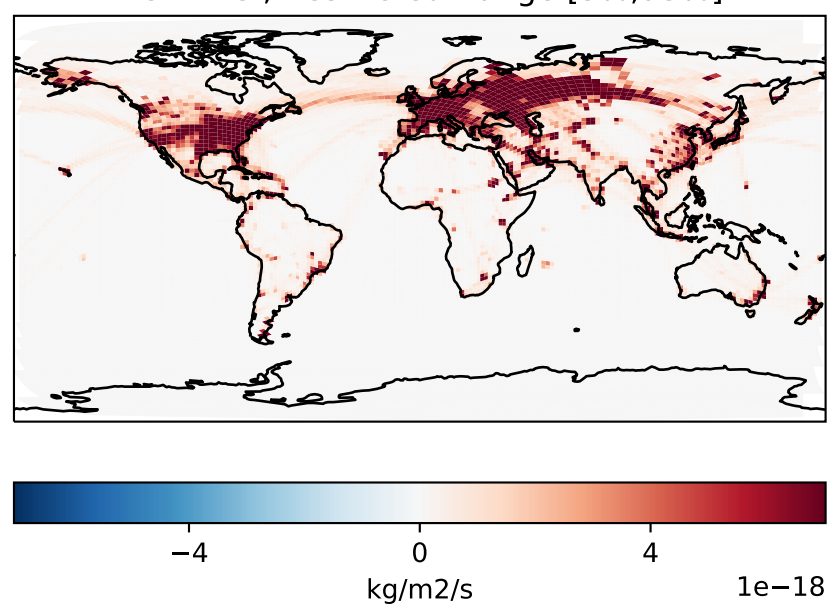

GCHP_13.2.0 (Dev)
c48



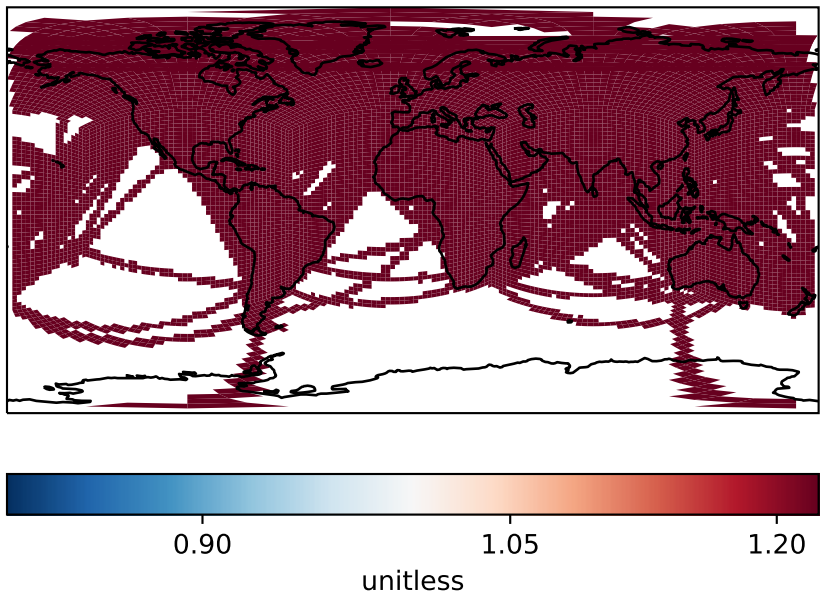

Difference
Dev - Ref, Dynamic Range



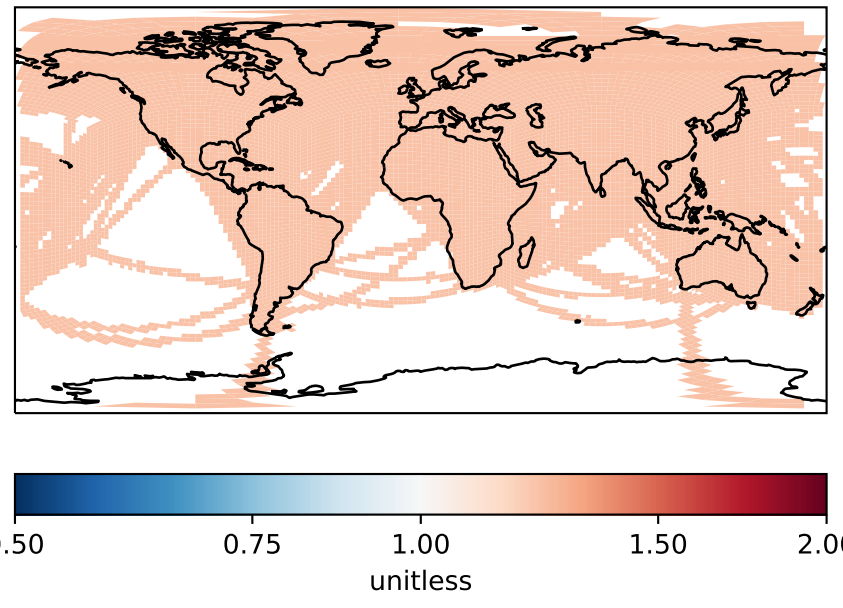

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

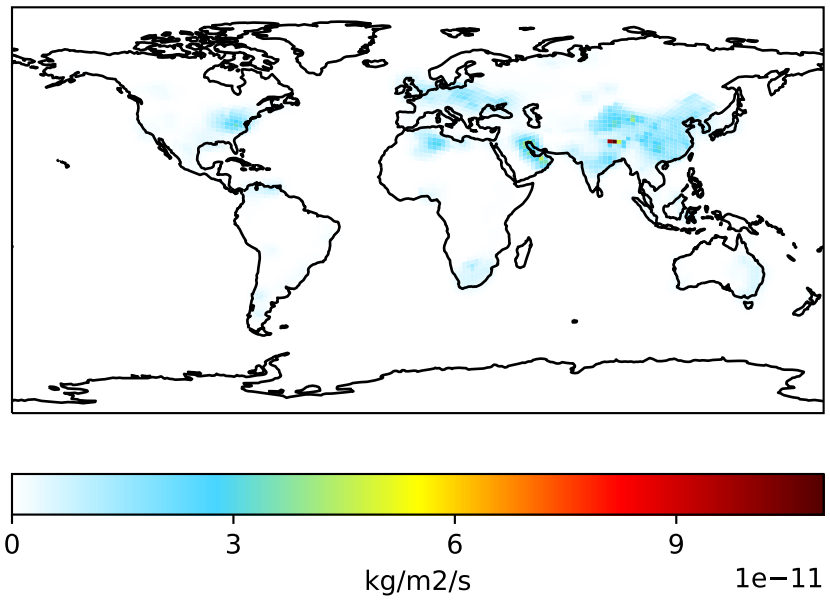



Ratio
Dev/Ref, Fixed Range

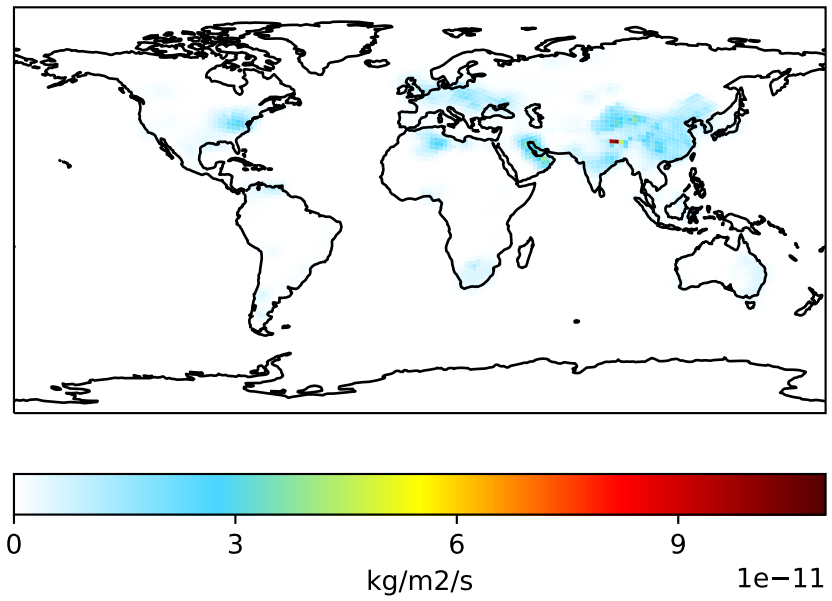


# EmisC3H8_Anthro (Jul2019)

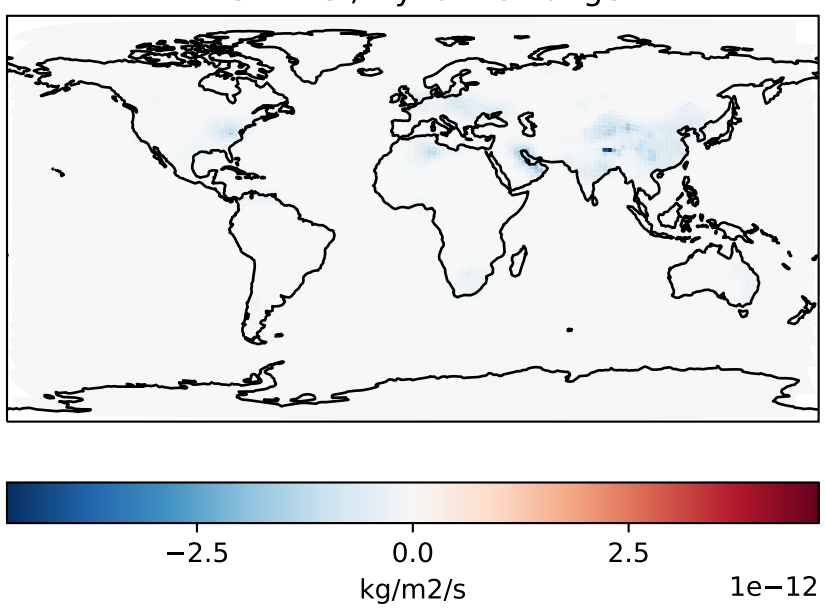
GCHP_13.0.0 (Ref)
c48



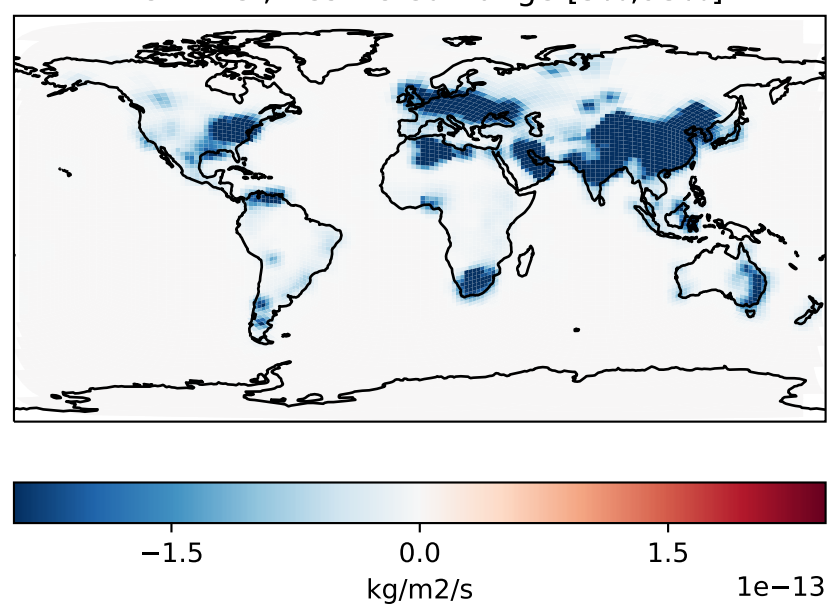

GCHP_13.2.0 (Dev)
c48



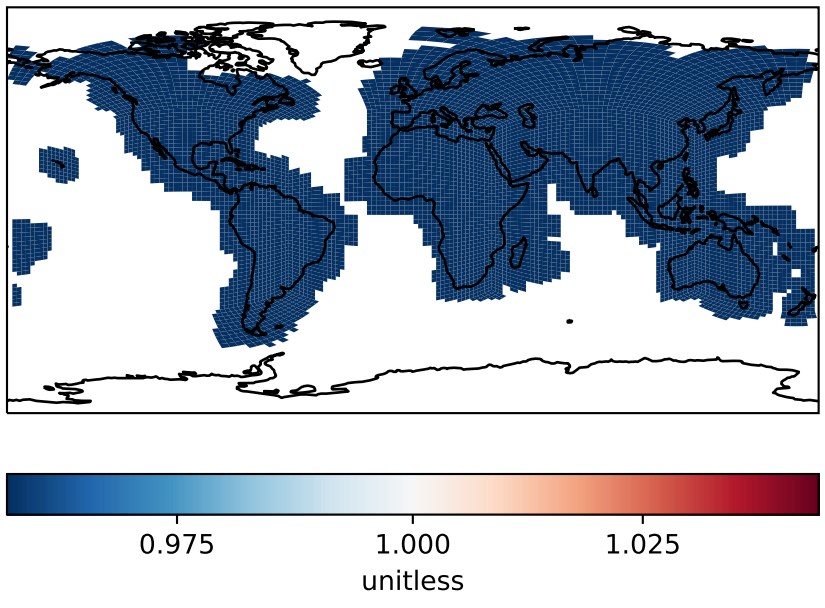

Difference
Dev - Ref, Dynamic Range



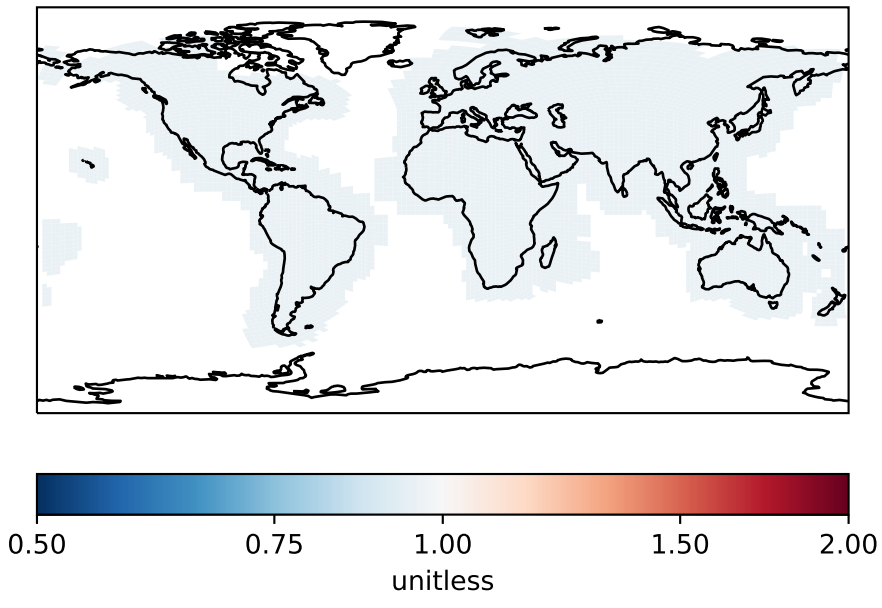

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

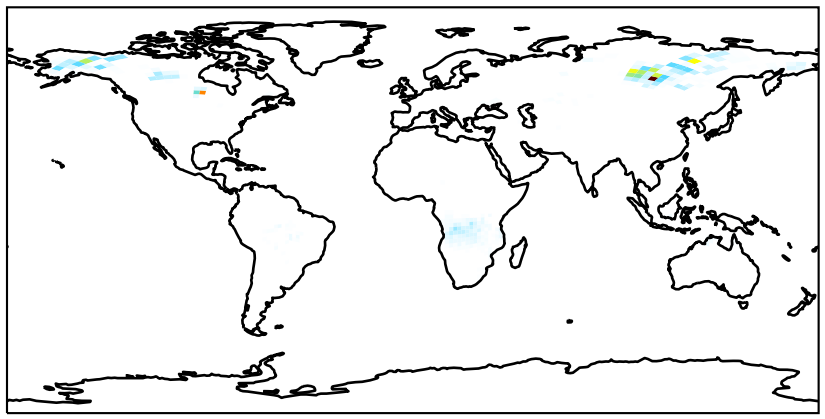


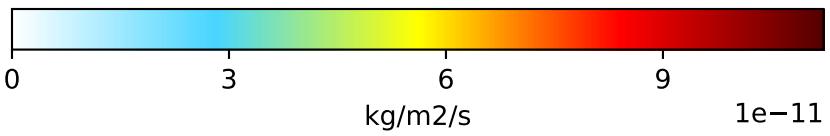

Ratio
Dev/Ref, Fixed Range



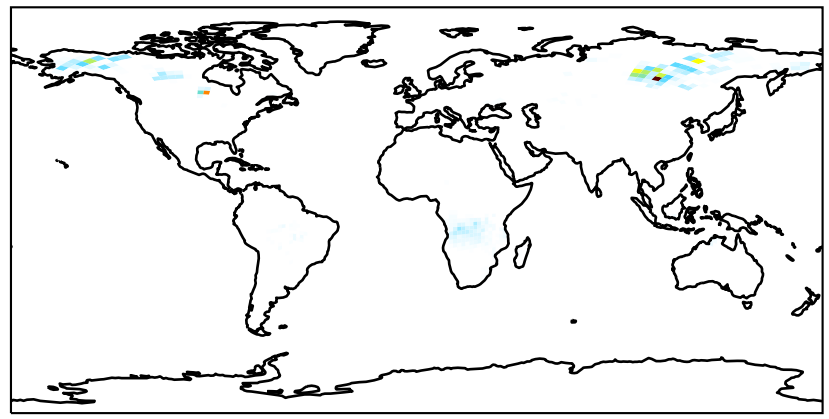
# EmisC3H8_BioBurn (Jul2019)

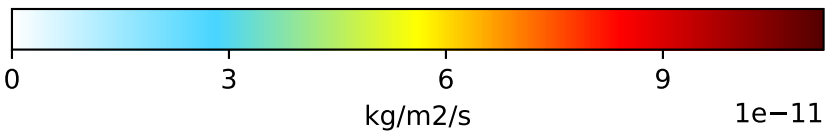
GCHP_13.0.0 (Ref)
c48



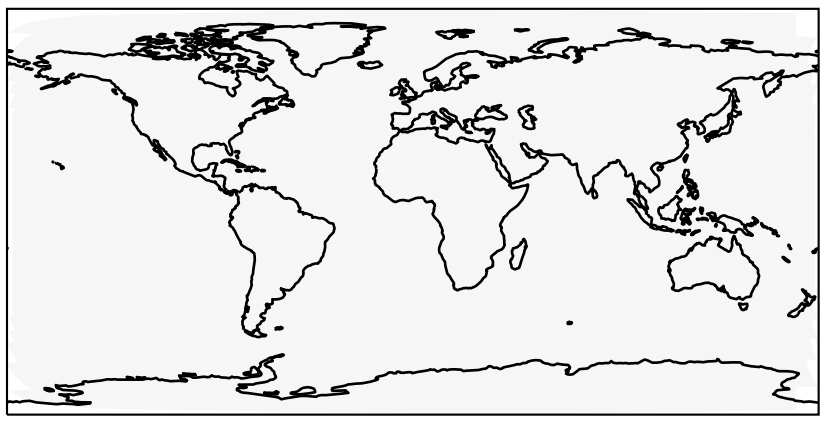


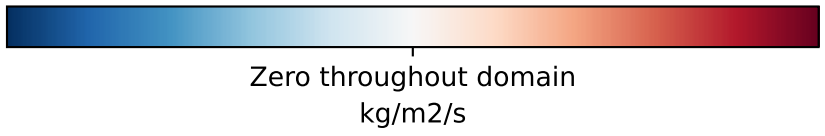

GCHP_13.2.0 (Dev)
c48



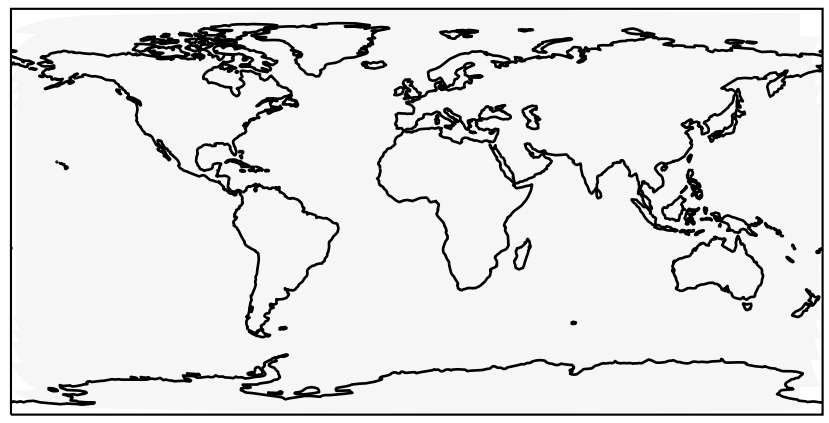


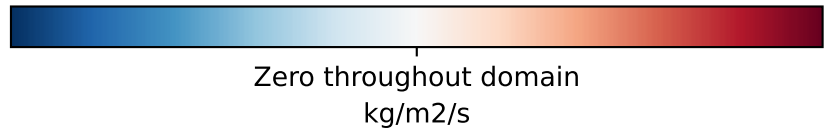

Difference
Dev - Ref, Dynamic Range



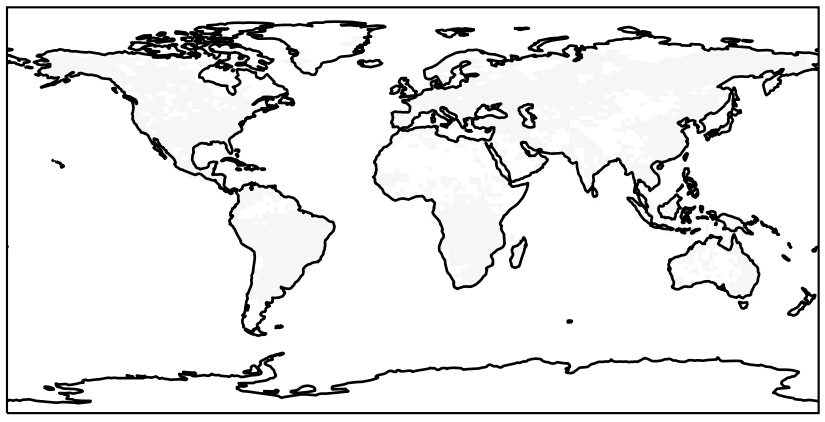


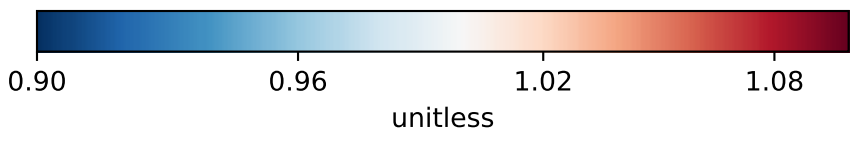

Difference
Dev - Ref, Restricted Range [5%,95%]



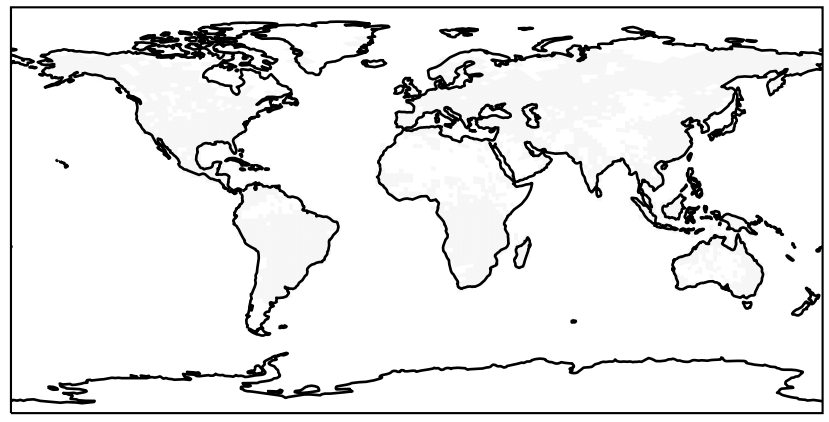


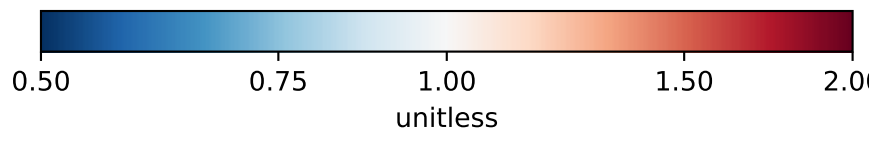

Ratio
Dev/Ref, Dynamic Range





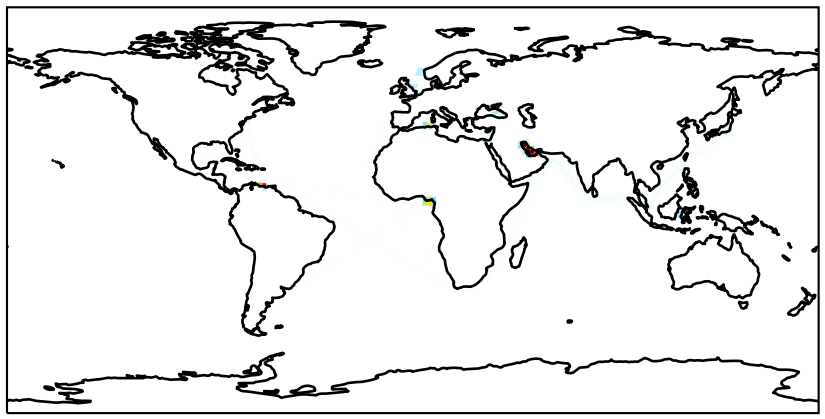

Ratio
Dev/Ref, Fixed Range

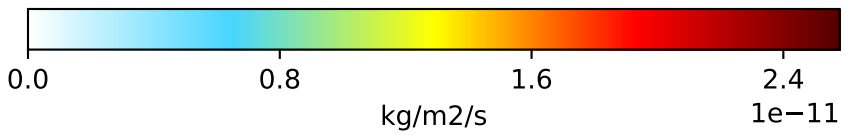




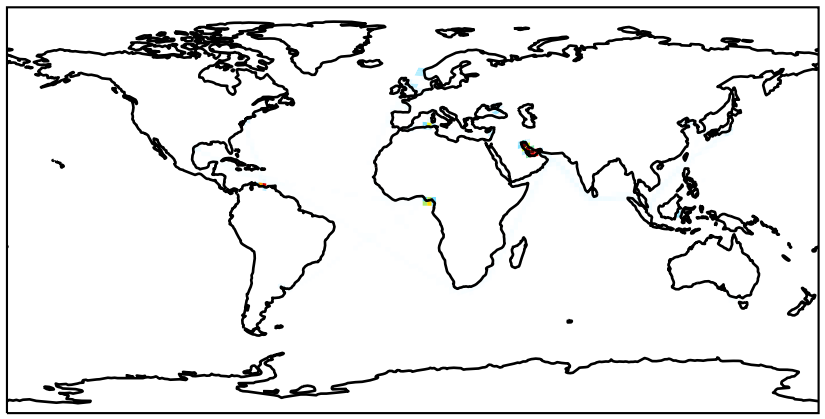
# EmisC3H8_Ship (Jul2019)

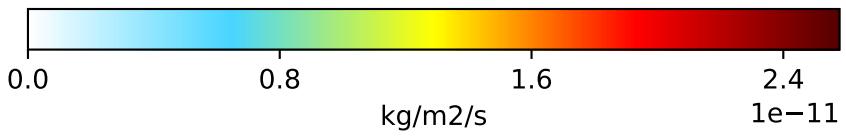
GCHP_13.0.0 (Ref)
c48



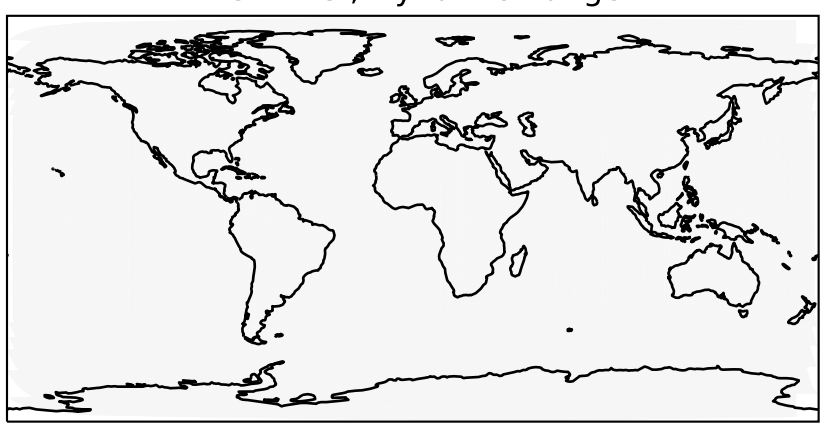


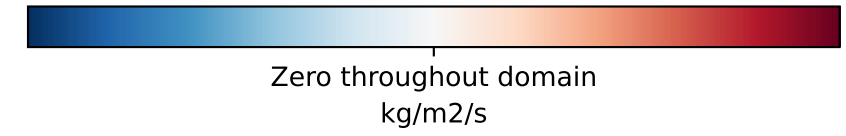

GCHP_13.2.0 (Dev)
c48



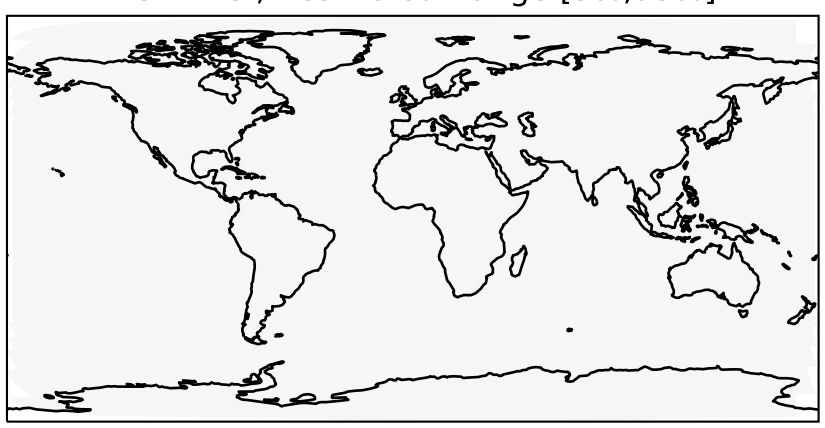


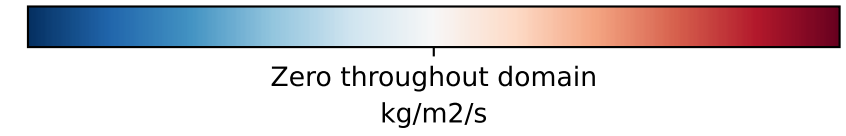

Difference
Dev - Ref, Dynamic Range



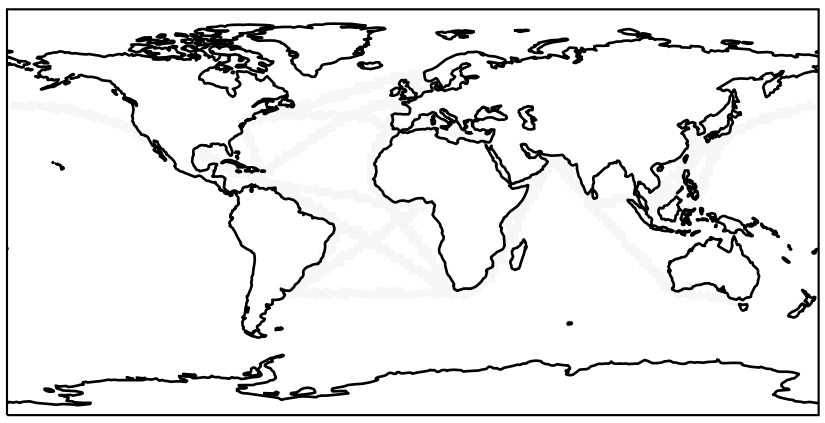


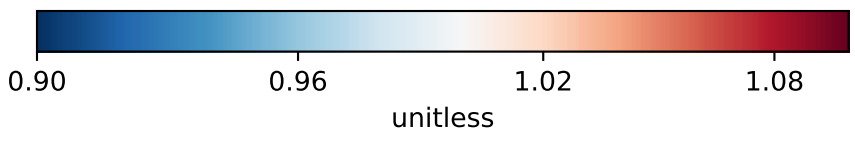

Difference
Dev - Ref, Restricted Range [5%,95%]



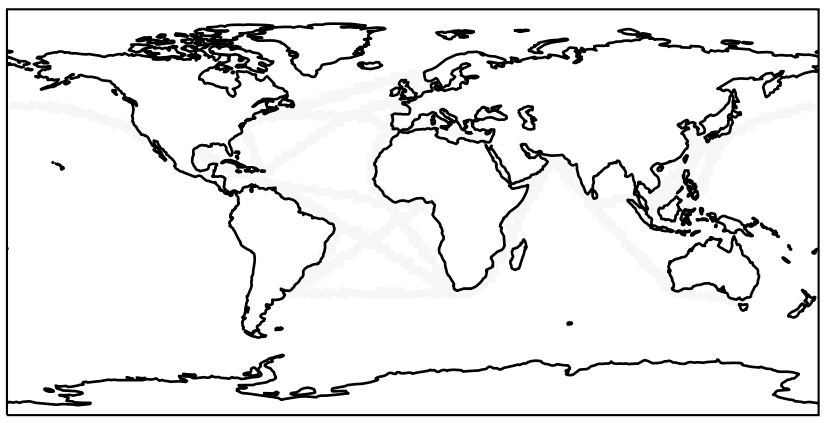


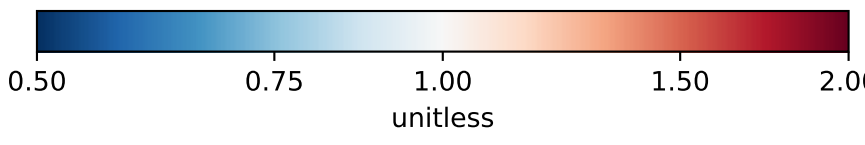

Ratio
Dev/Ref, Dynamic Range





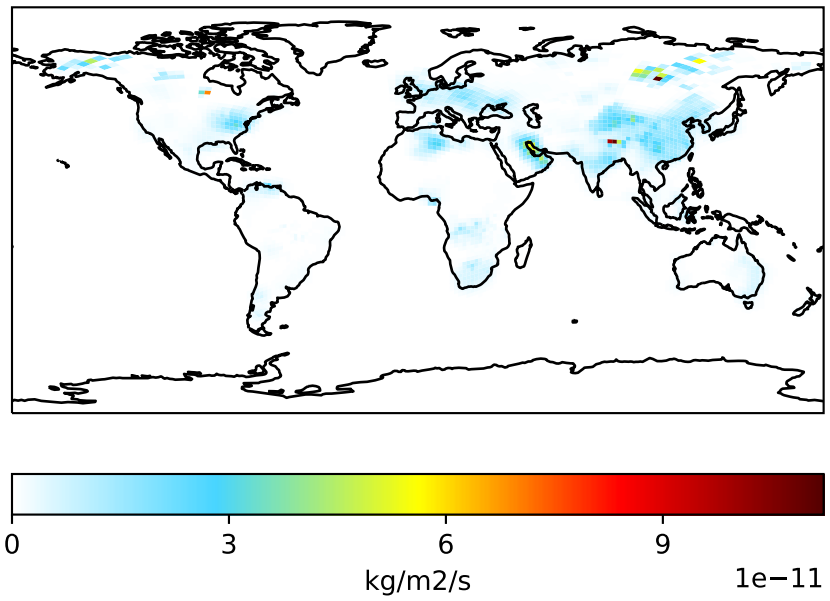

Ratio
Dev/Ref, Fixed Range



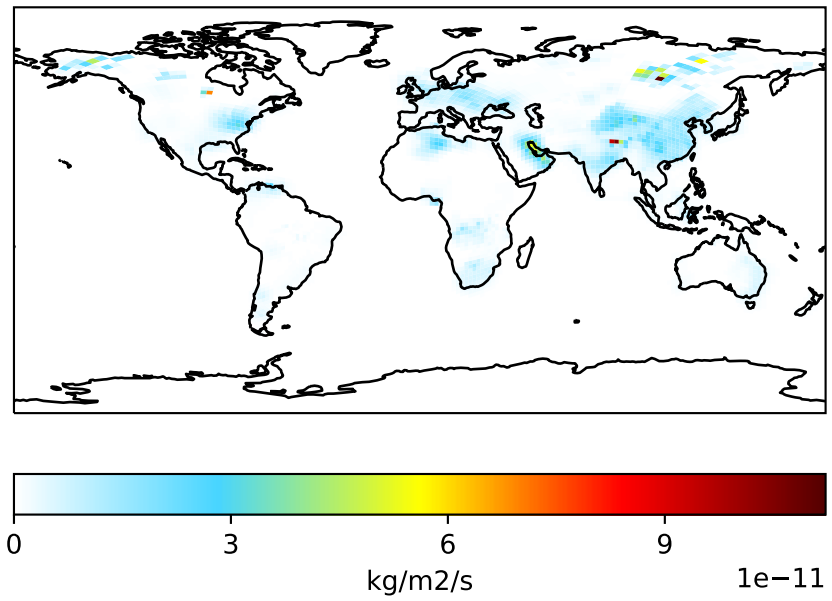


# EmisC3H8_Total (Jul2019)

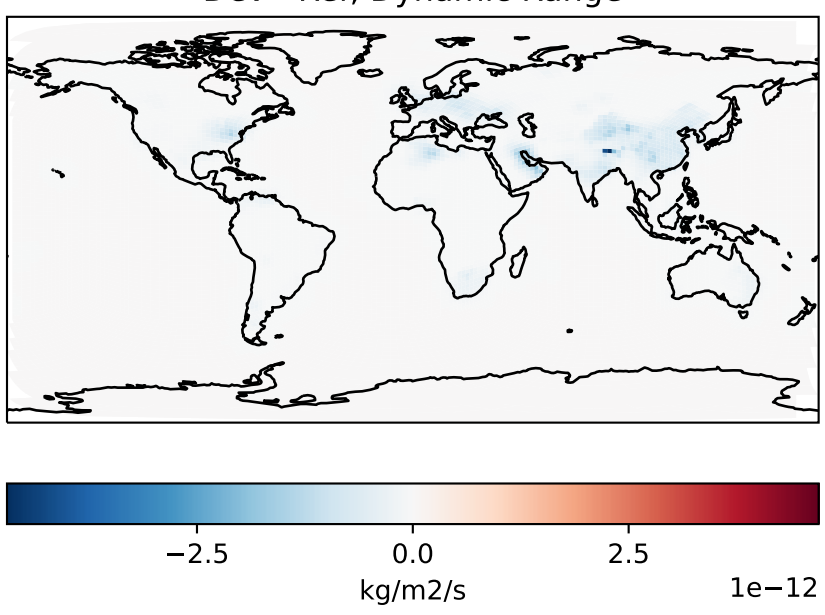
GCHP_13.0.0 (Ref)
c48



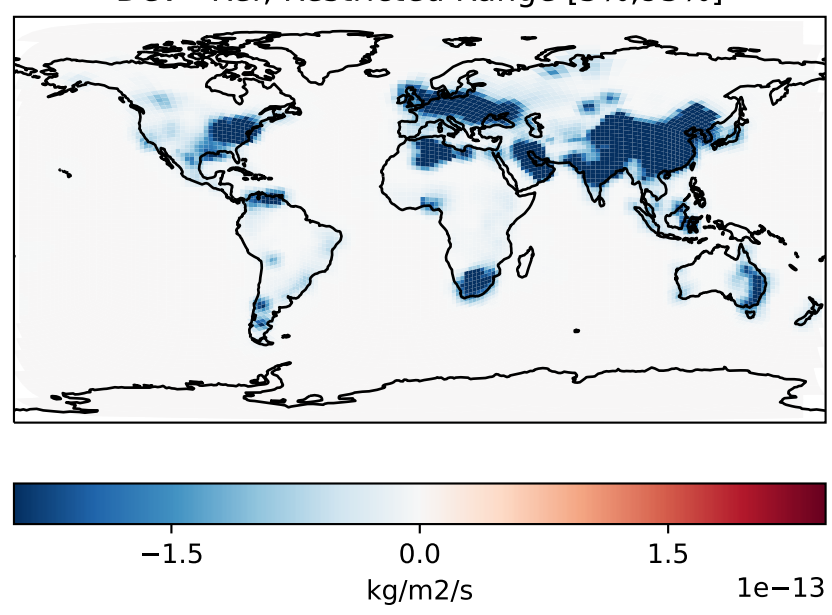

GCHP_13.2.0 (Dev)
c48



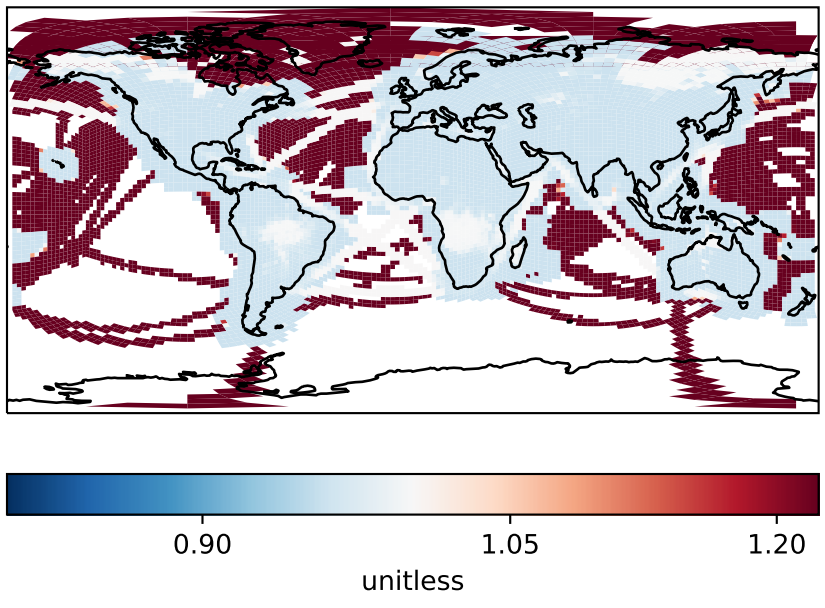

Difference
Dev - Ref, Dynamic Range



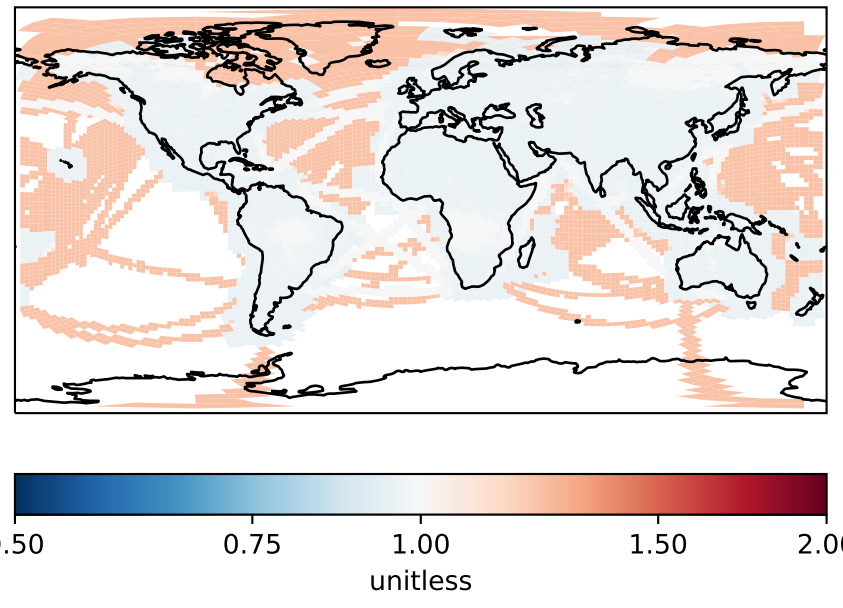

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

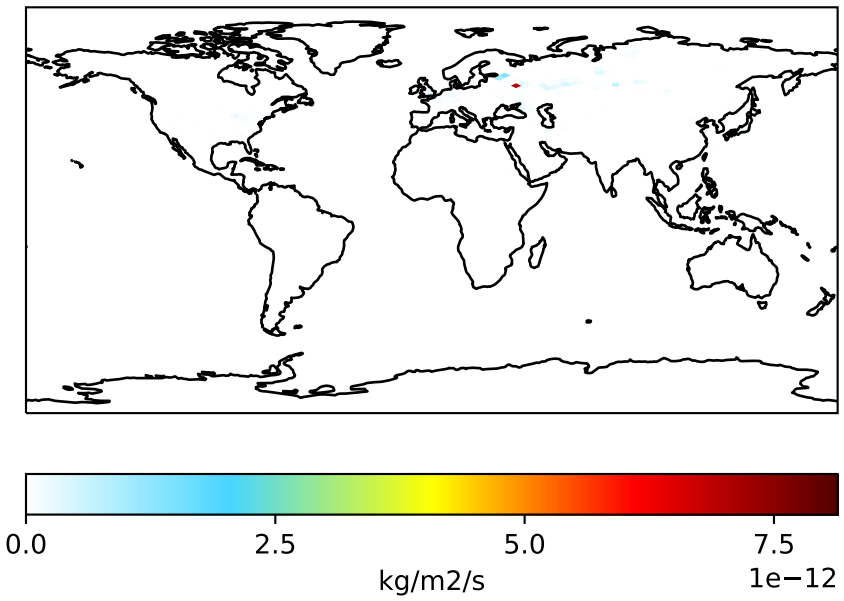



Ratio
Dev/Ref, Fixed Range

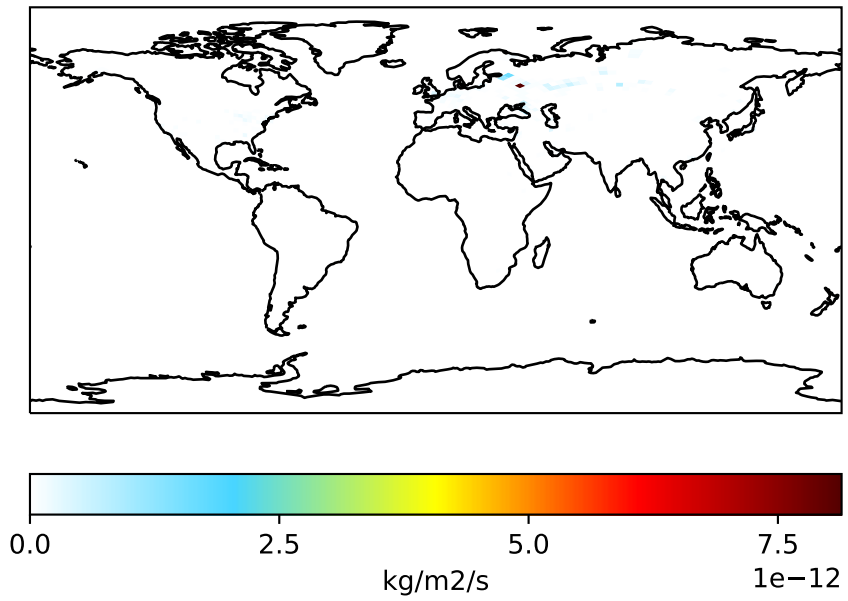


# EmisPRPE_Aircraft (Jul2019)

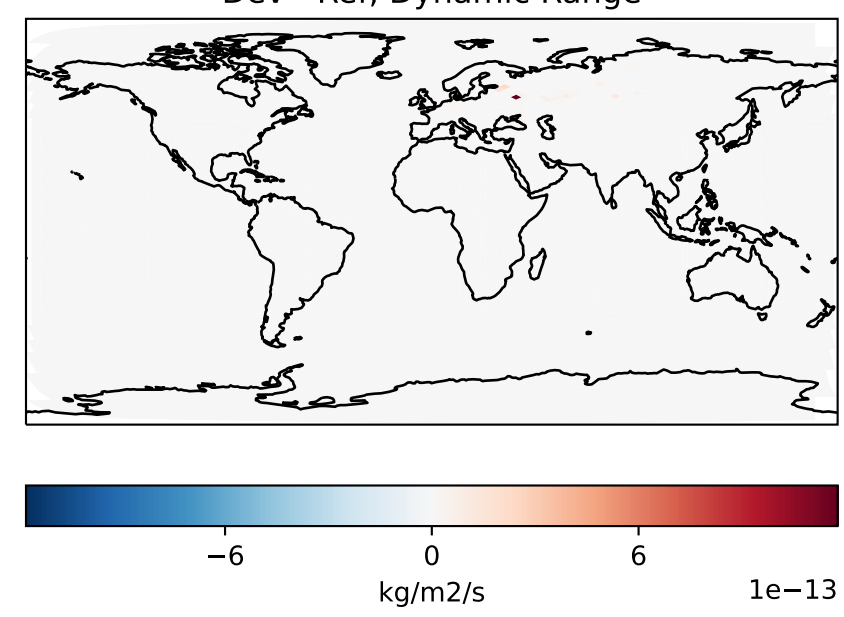
GCHP_13.0.0 (Ref)
c48



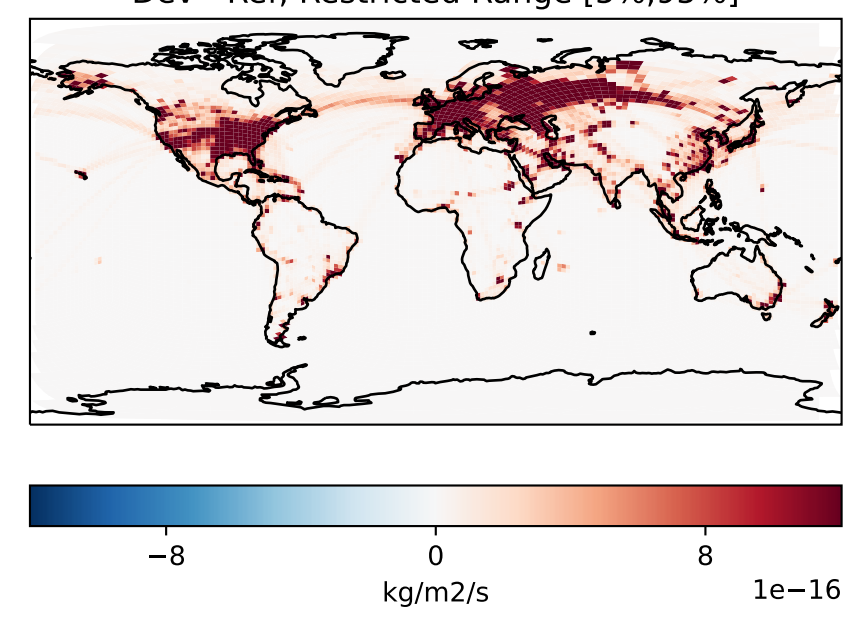

GCHP_13.2.0 (Dev)
c48



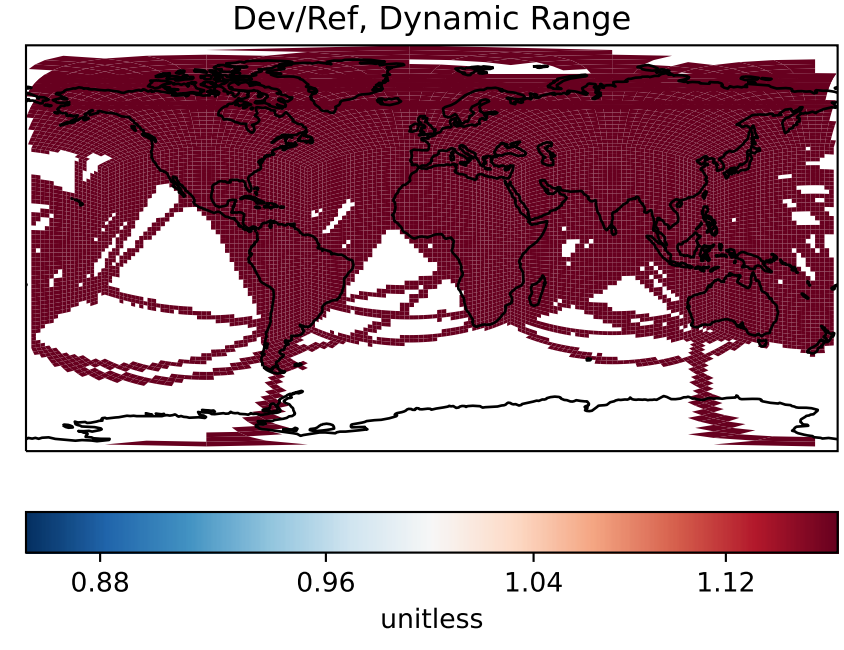

Difference
Dev - Ref, Dynamic Range



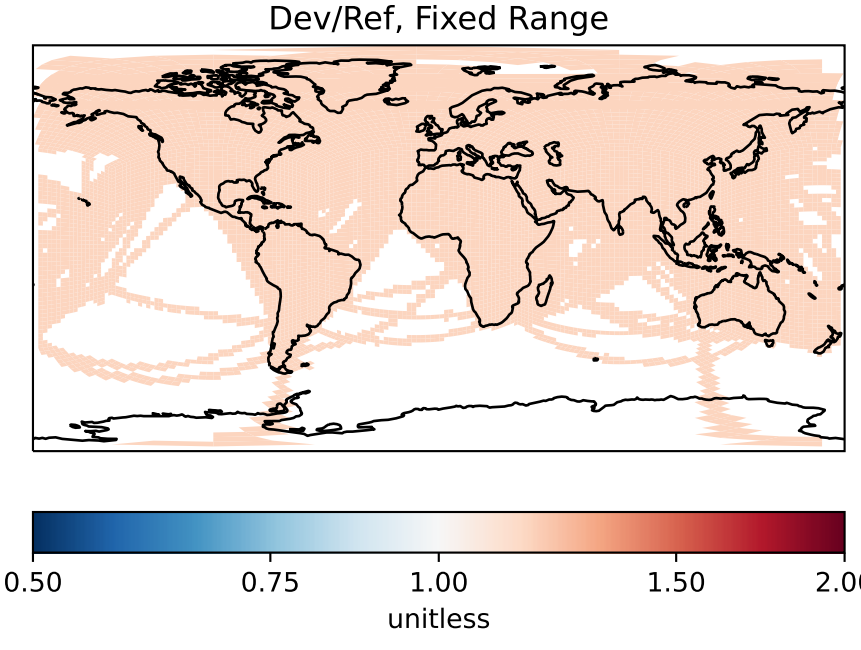

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

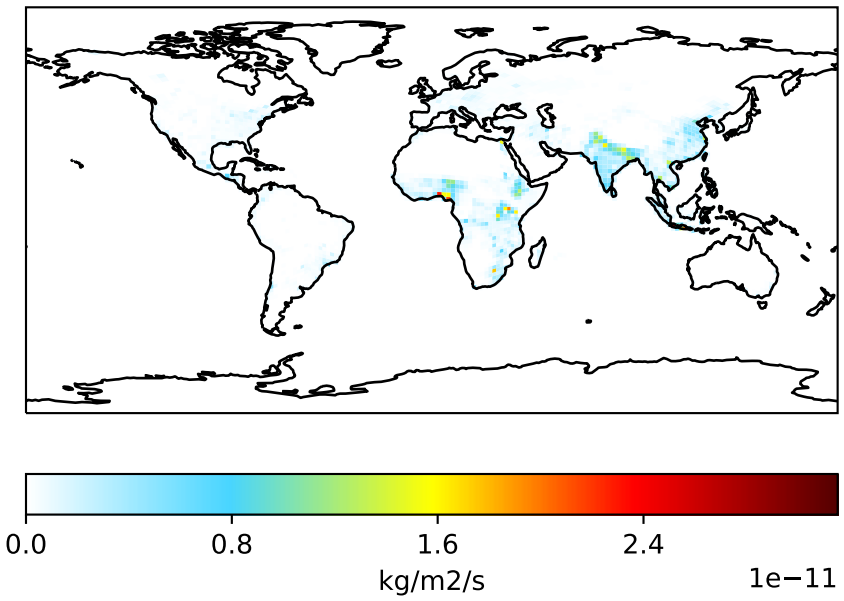



Ratio
Dev/Ref, Fixed Range

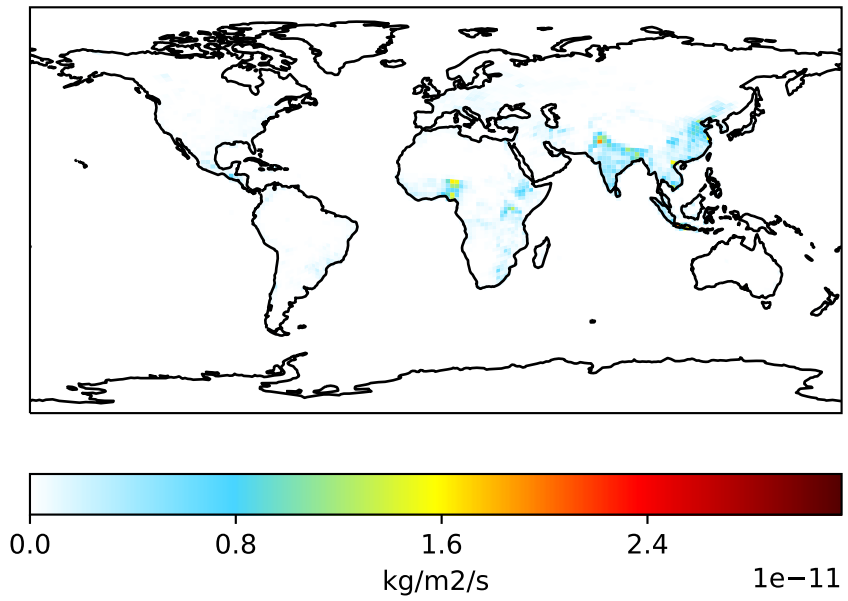


# EmisPRPE_Anthro (Jul2019)

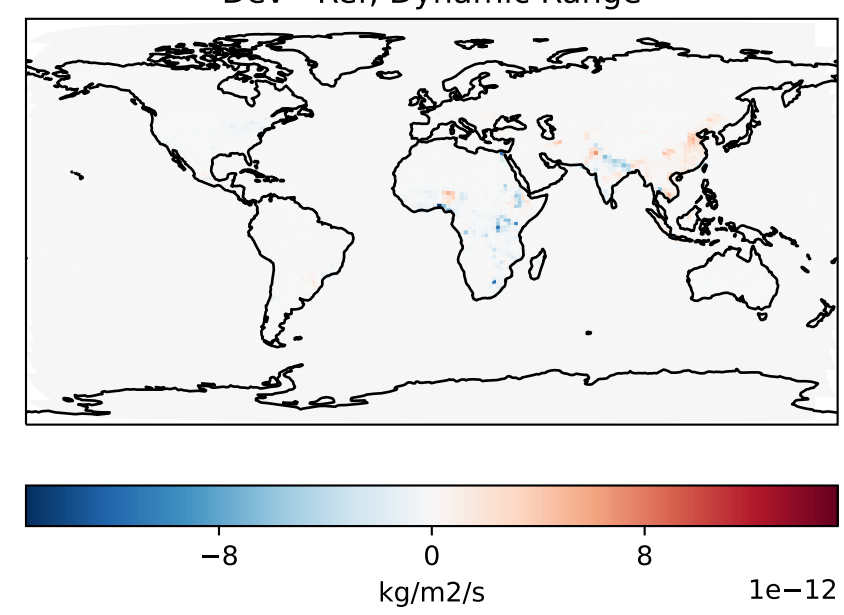
GCHP_13.0.0 (Ref)
c48



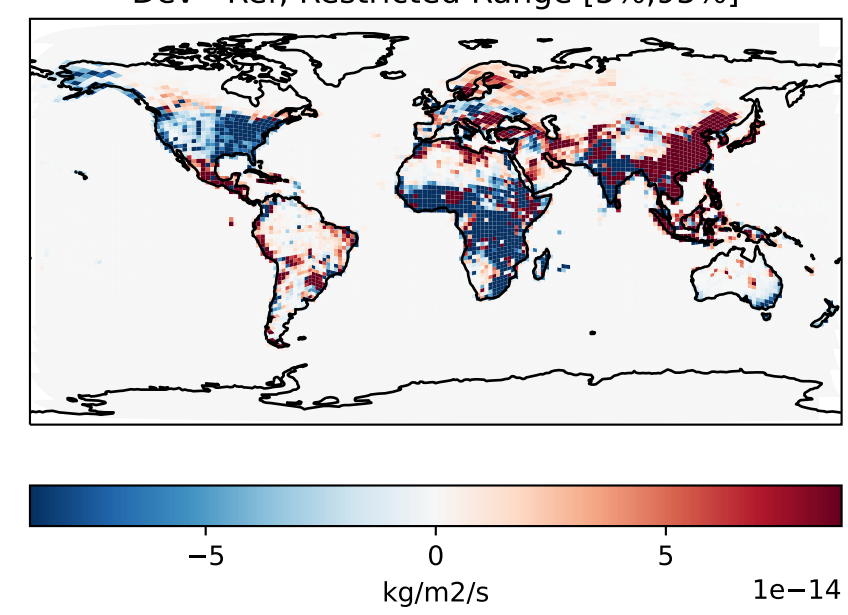

GCHP_13.2.0 (Dev)
c48



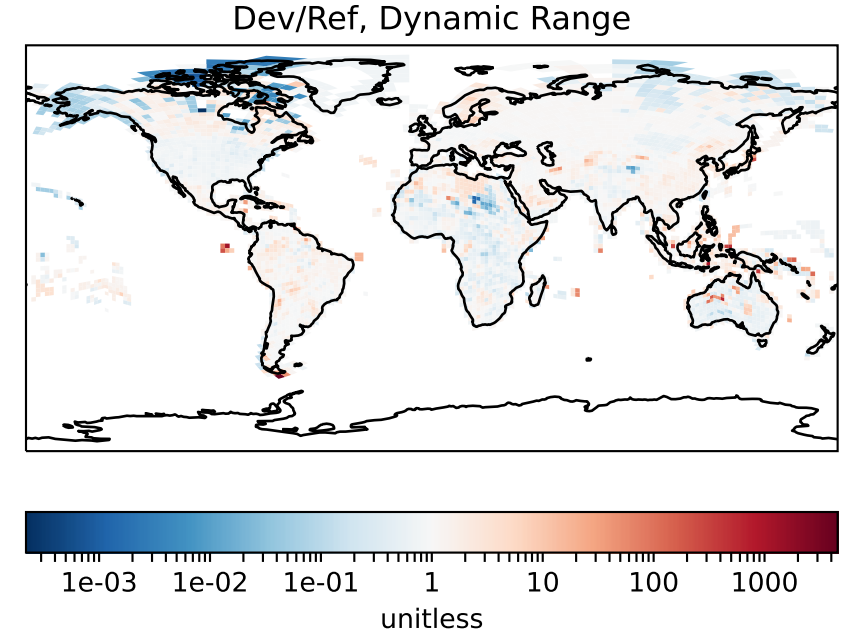

Difference
Dev - Ref, Dynamic Range



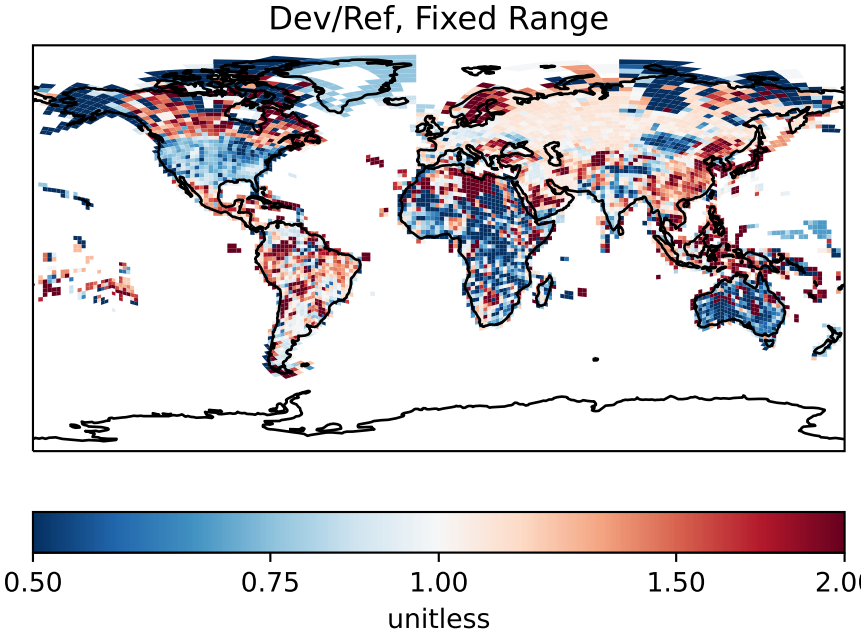

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

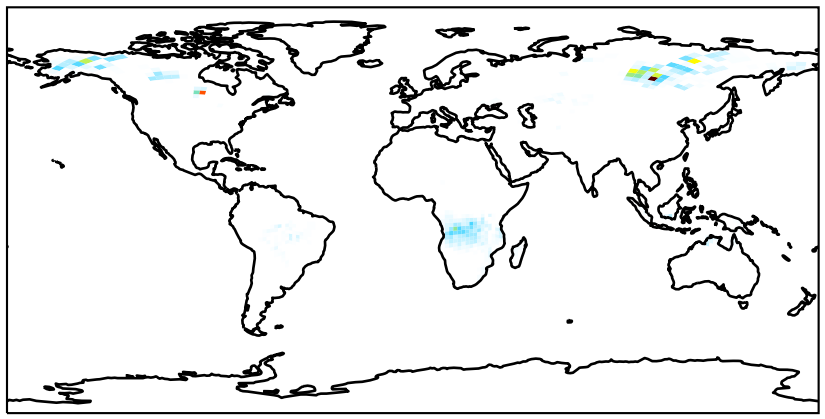


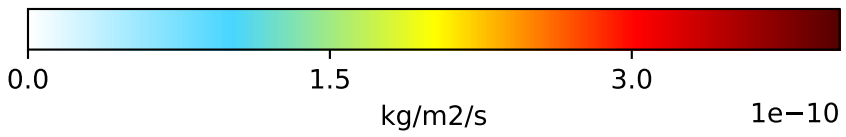

Ratio
Dev/Ref, Fixed Range



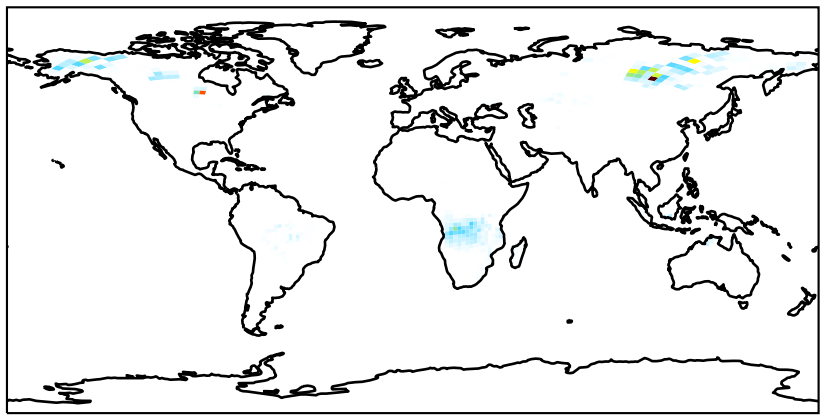
# EmisPRPE_BioBurn (Jul2019)

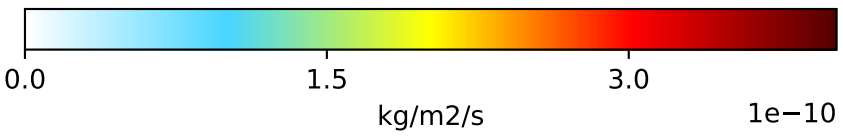
GCHP_13.0.0 (Ref)
c48



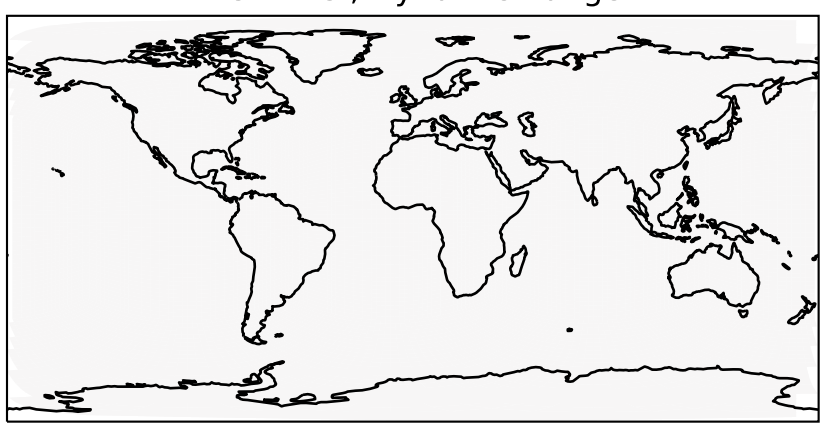


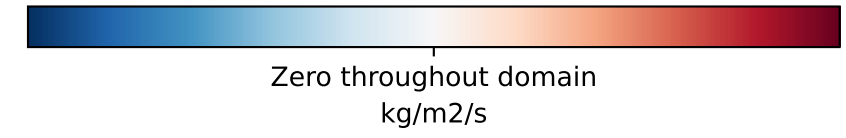

GCHP_13.2.0 (Dev)
c48



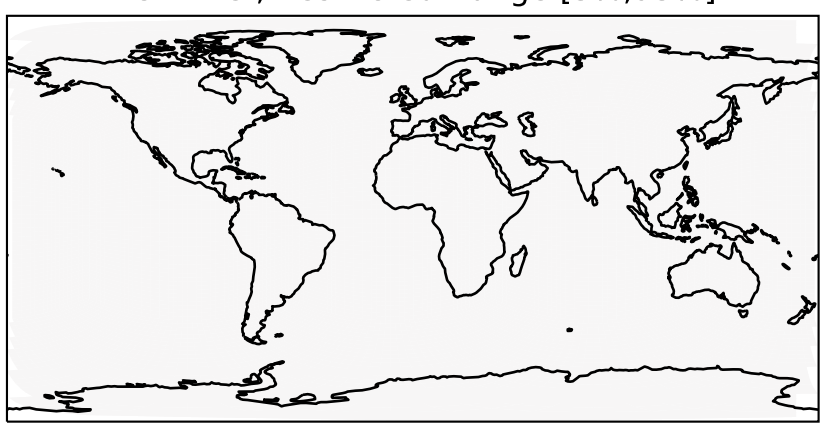


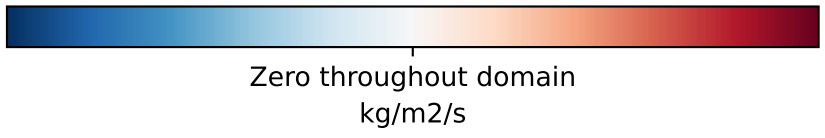

Difference
Dev - Ref, Dynamic Range



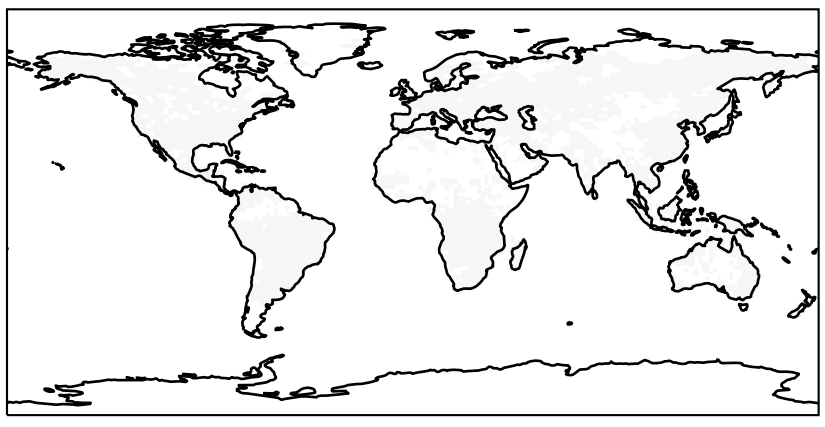


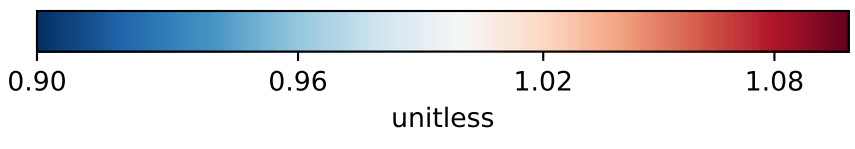

Difference
Dev - Ref, Restricted Range [5%,95%]



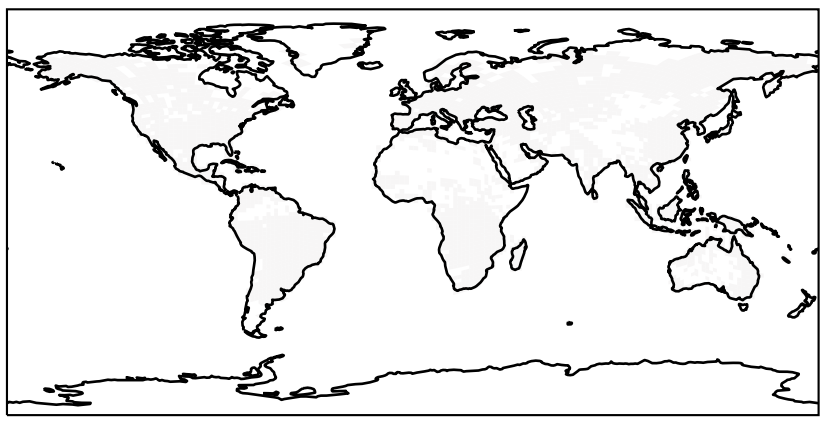


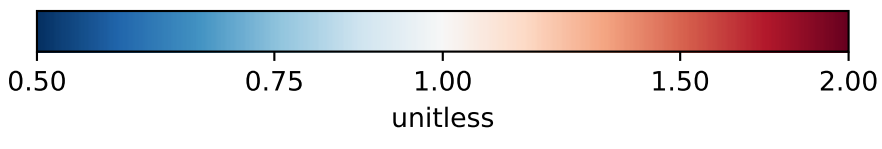

Ratio
Dev/Ref, Dynamic Range





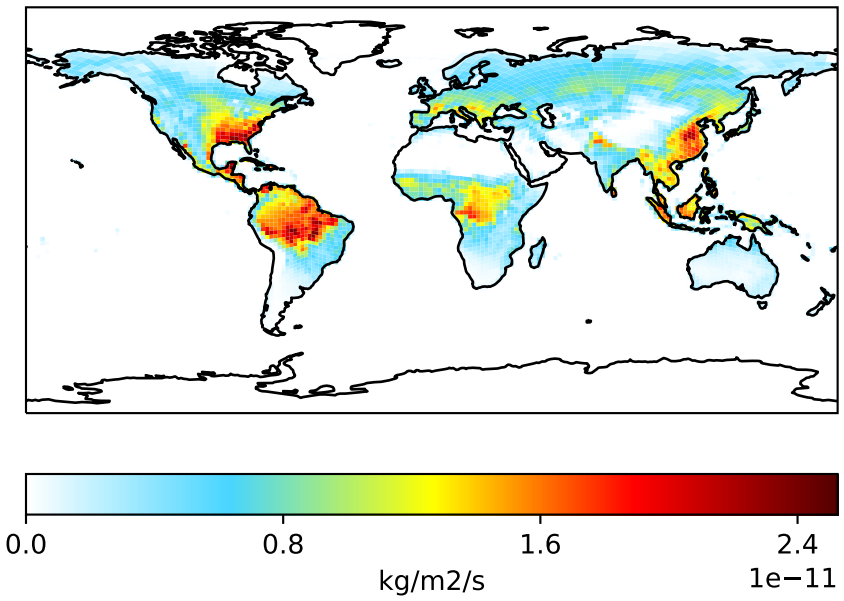

Ratio
Dev/Ref, Fixed Range



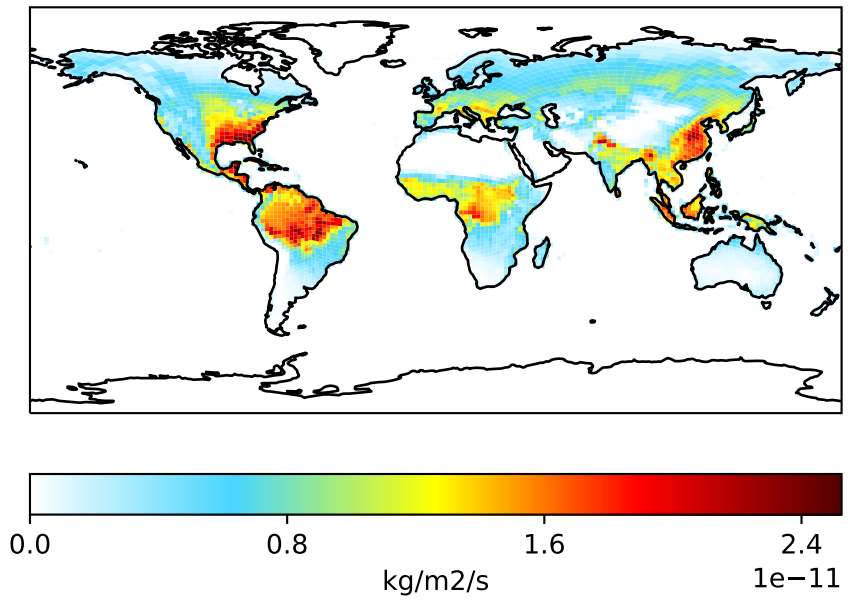


# EmisPRPE_Biogenic (Jul2019)

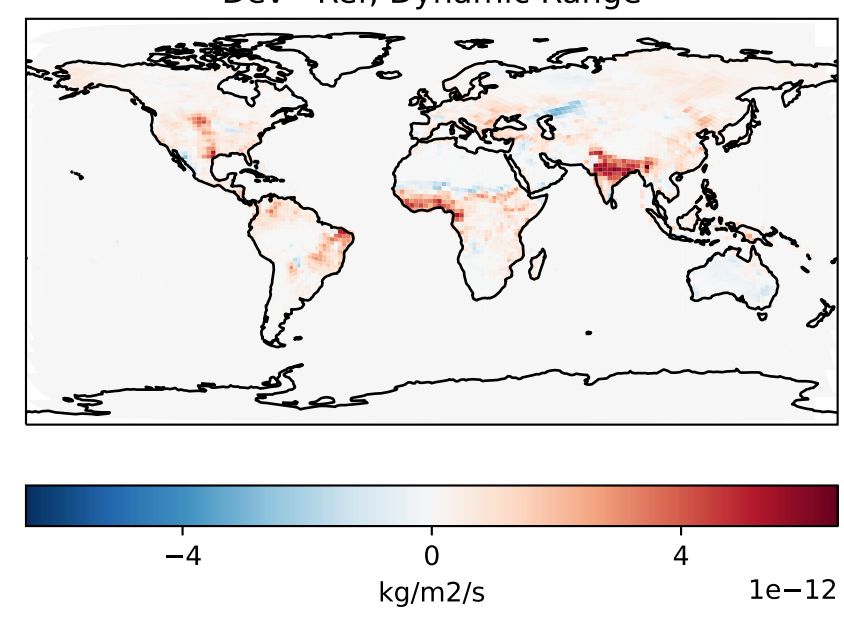
GCHP_13.0.0 (Ref)
c48



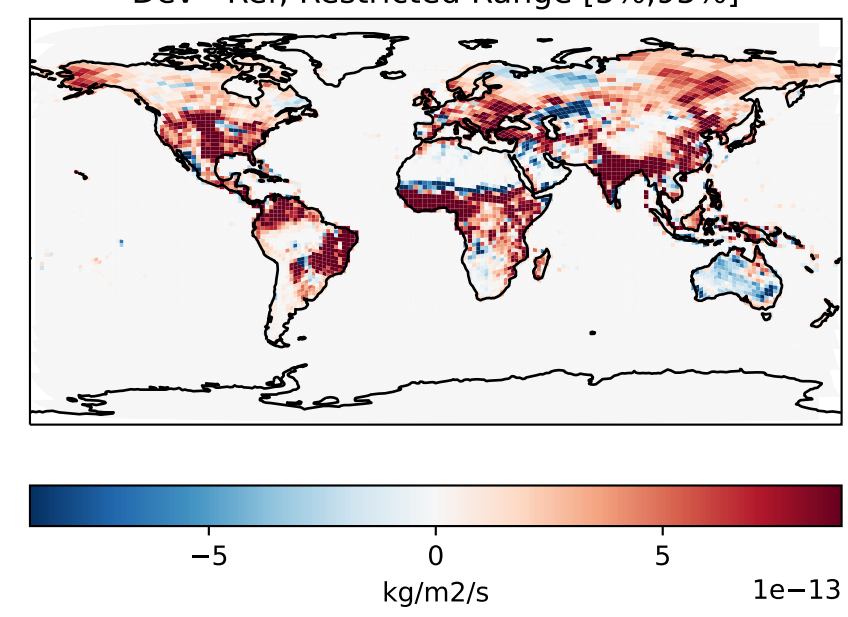

GCHP_13.2.0 (Dev)
c48



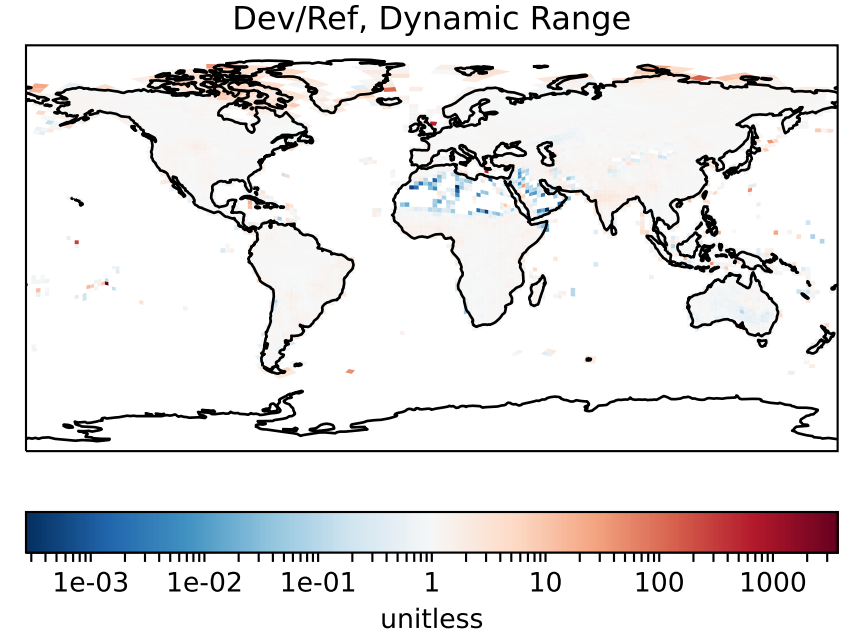

Difference
Dev - Ref, Dynamic Range



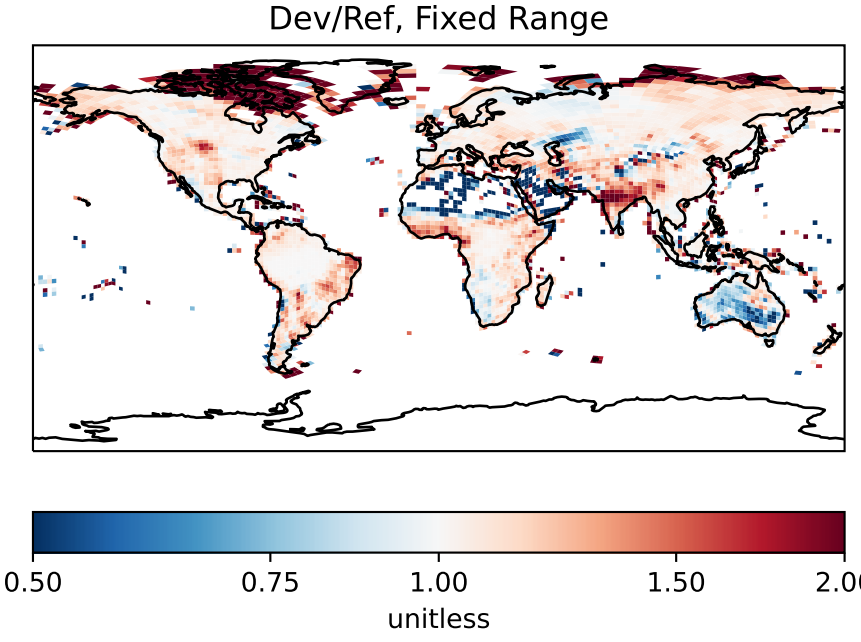

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

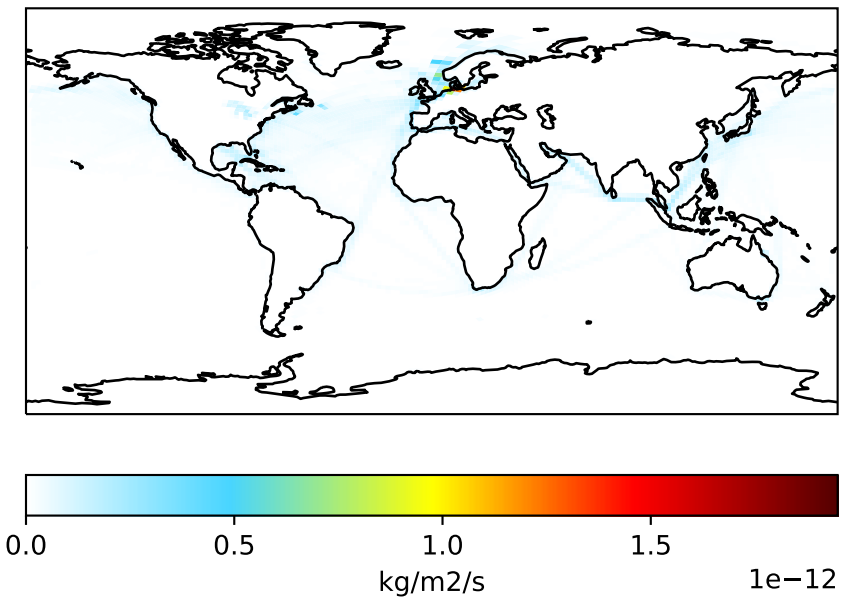



Ratio
Dev/Ref, Fixed Range

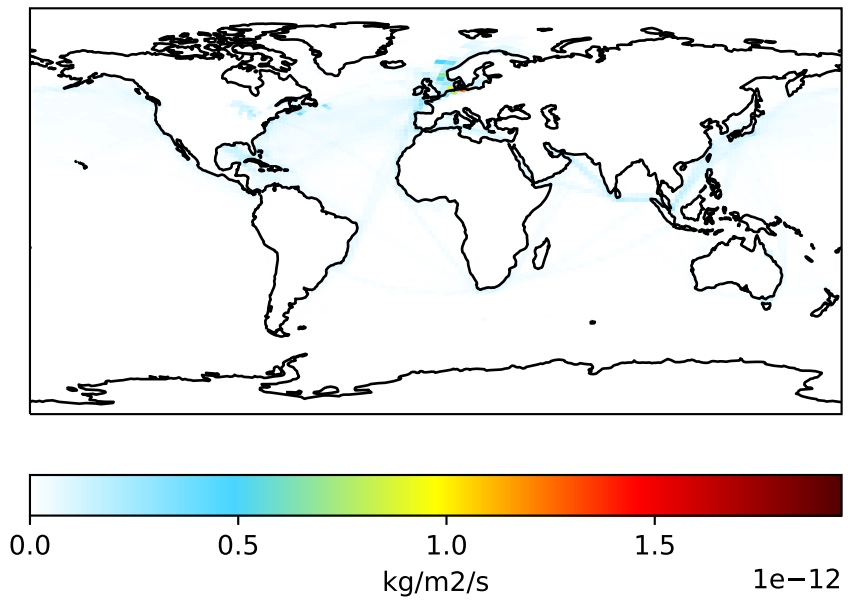


# EmisPRPE_Ship (Jul2019)

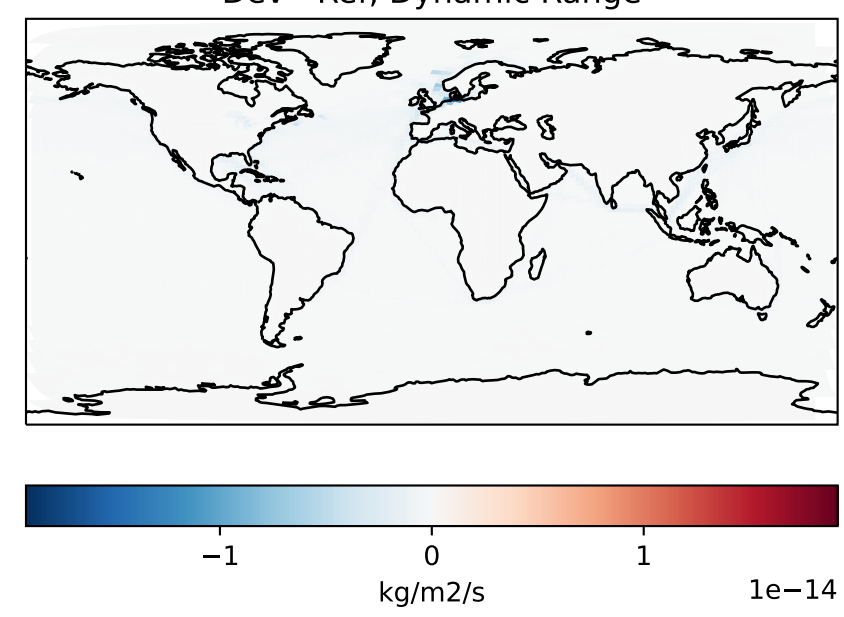
GCHP_13.0.0 (Ref)
c48



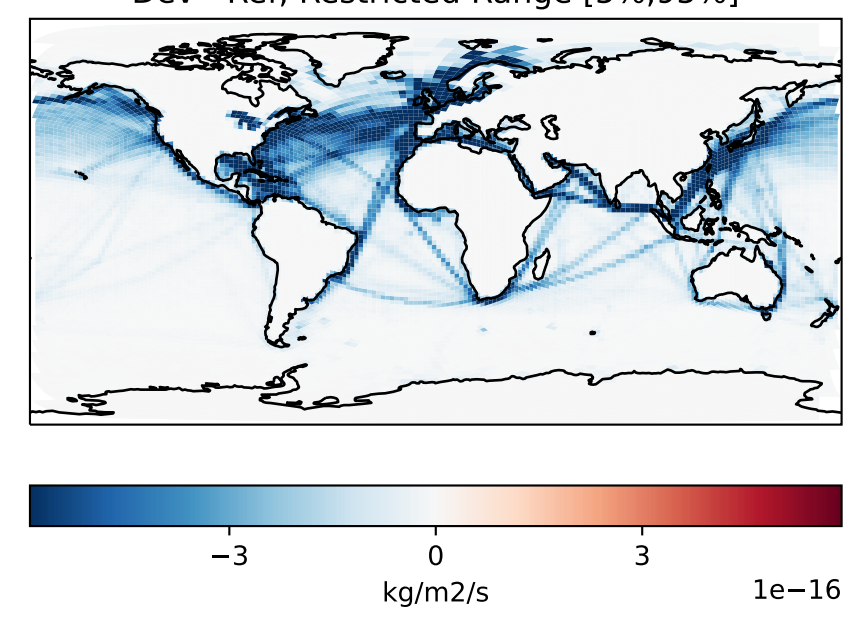

GCHP_13.2.0 (Dev)
c48



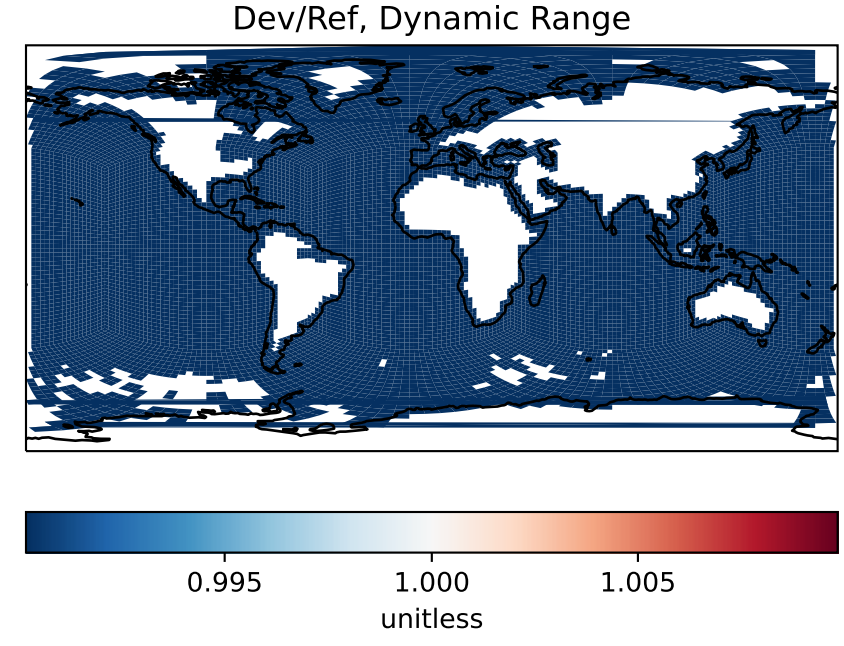

Difference
Dev - Ref, Dynamic Range



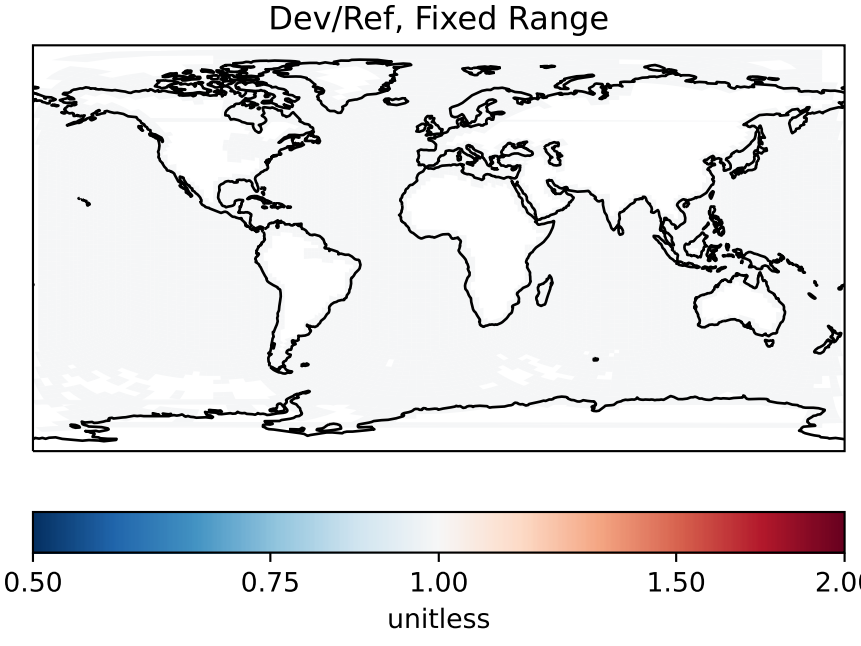

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

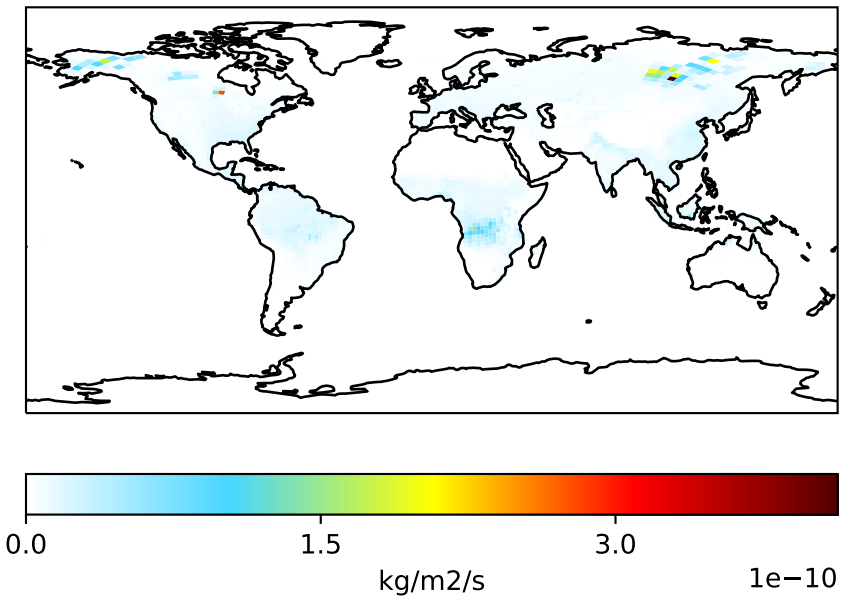



Ratio
Dev/Ref, Fixed Range

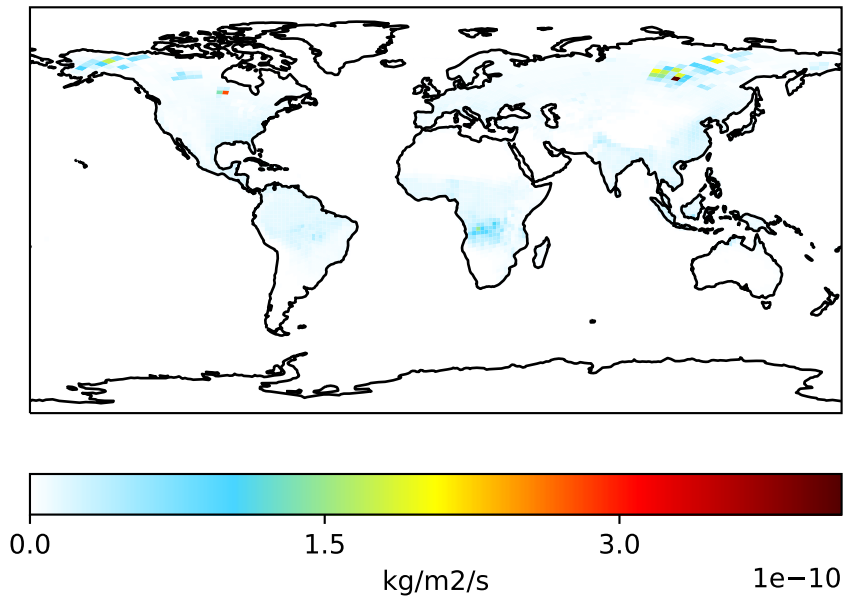


# EmisPRPE_Total (Jul2019)

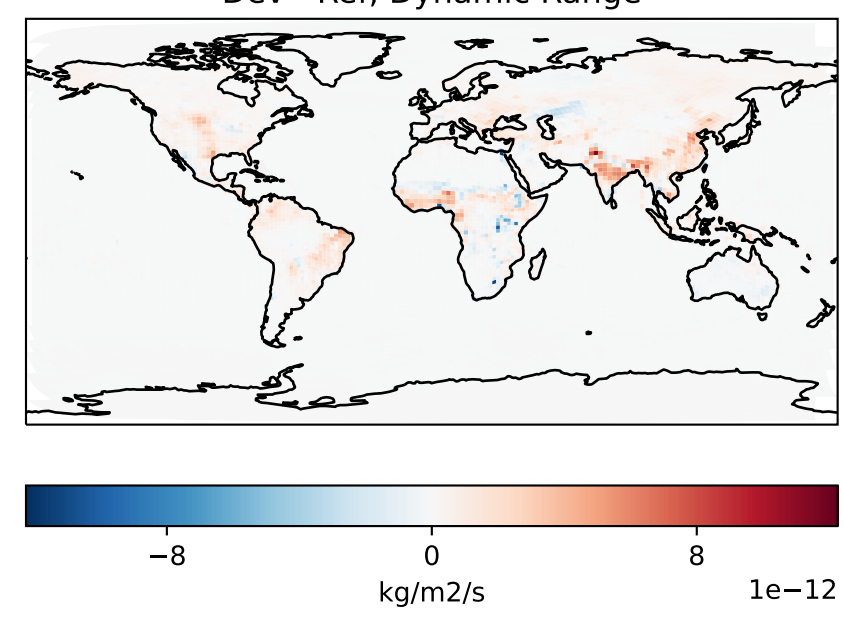
GCHP_13.0.0 (Ref)
c48



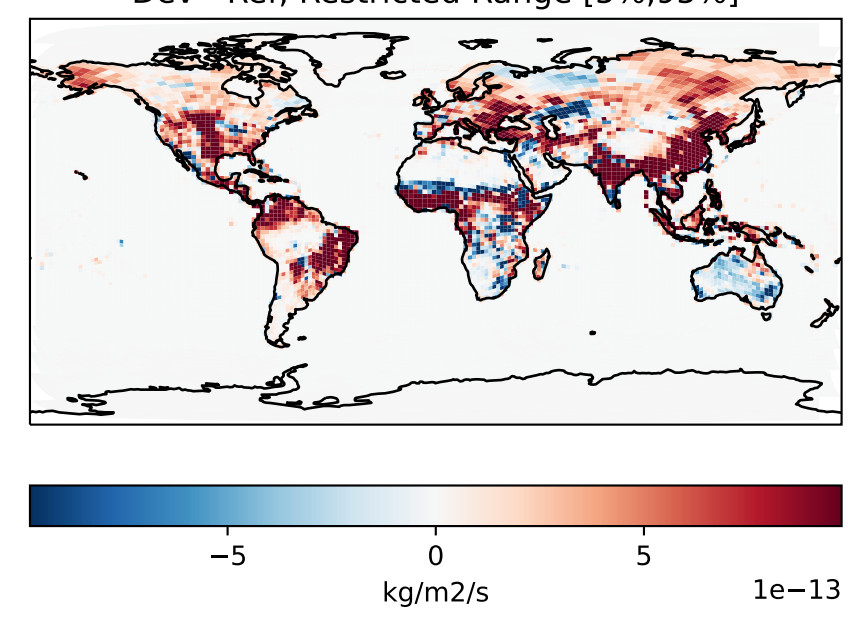

GCHP_13.2.0 (Dev)
c48



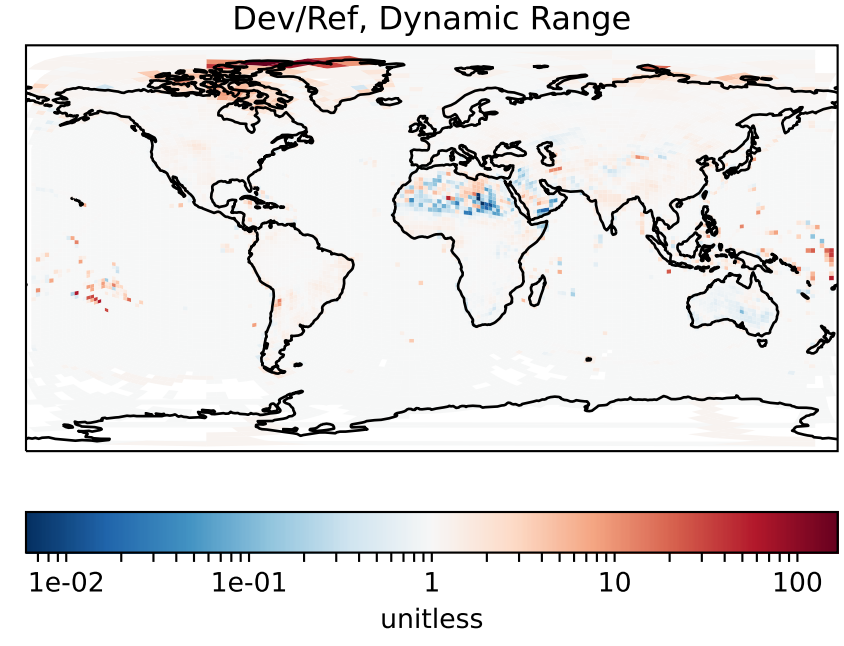

Difference
Dev - Ref, Dynamic Range



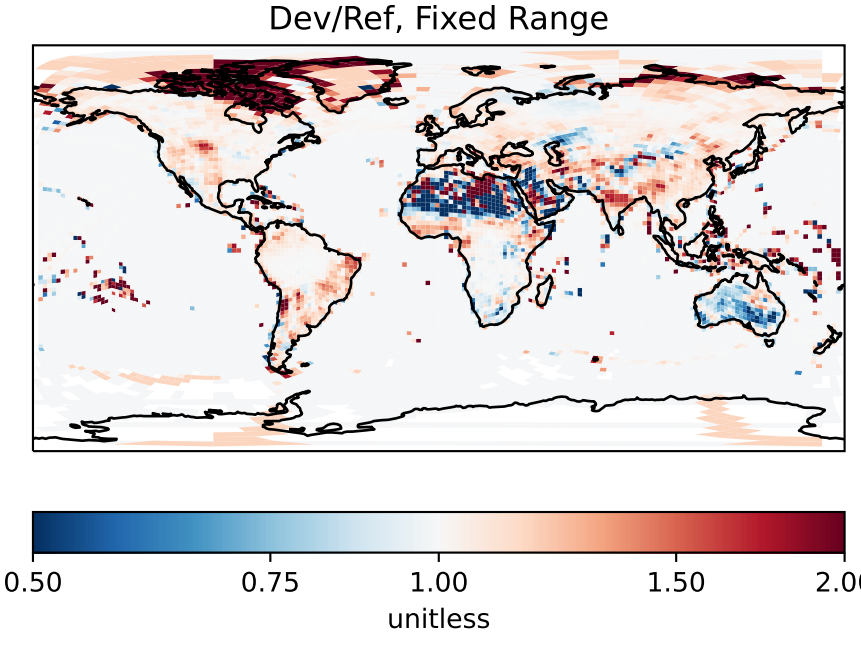

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

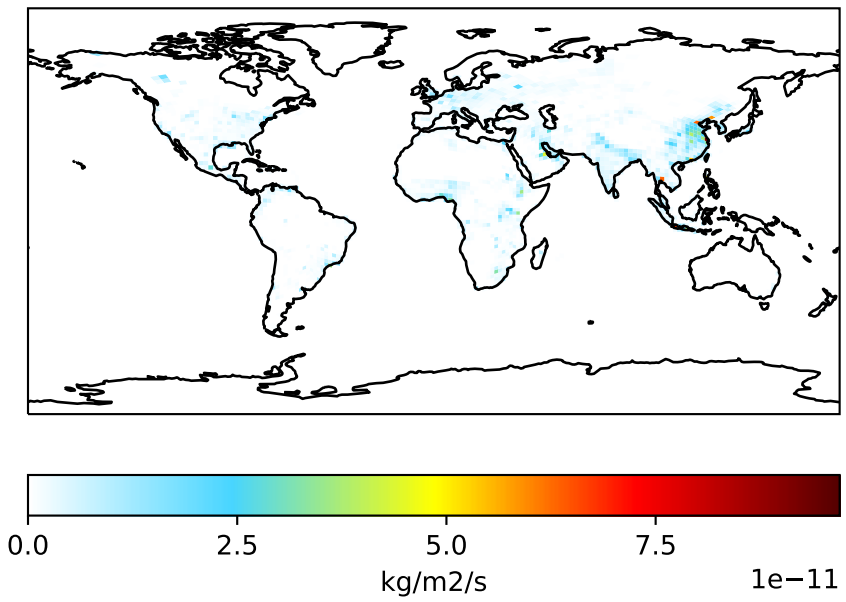



Ratio
Dev/Ref, Fixed Range

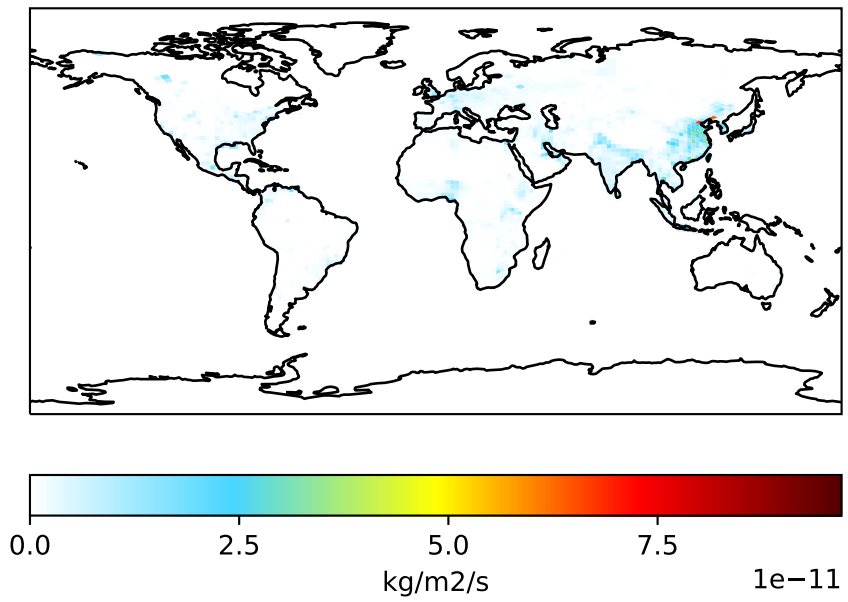


# EmisTOLU_Anthro (Jul2019)

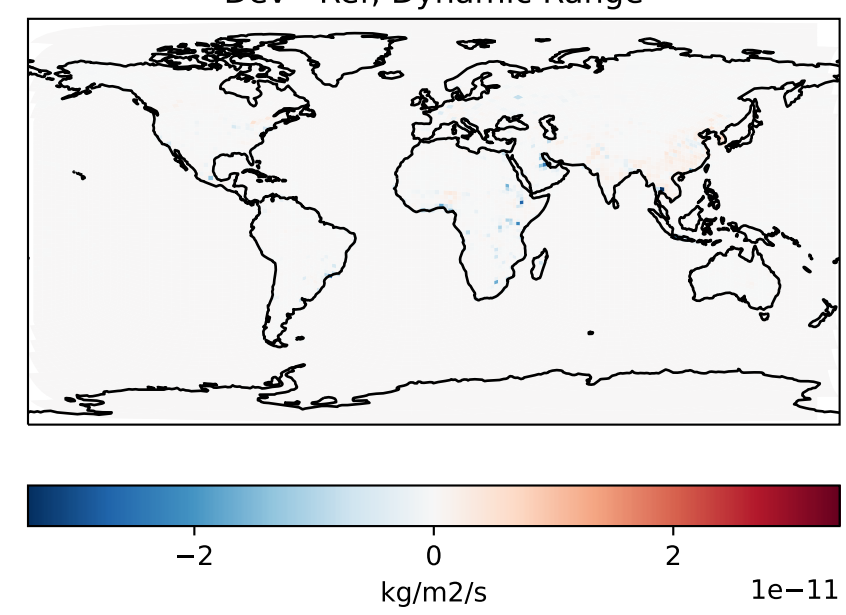
GCHP_13.0.0 (Ref)
c48



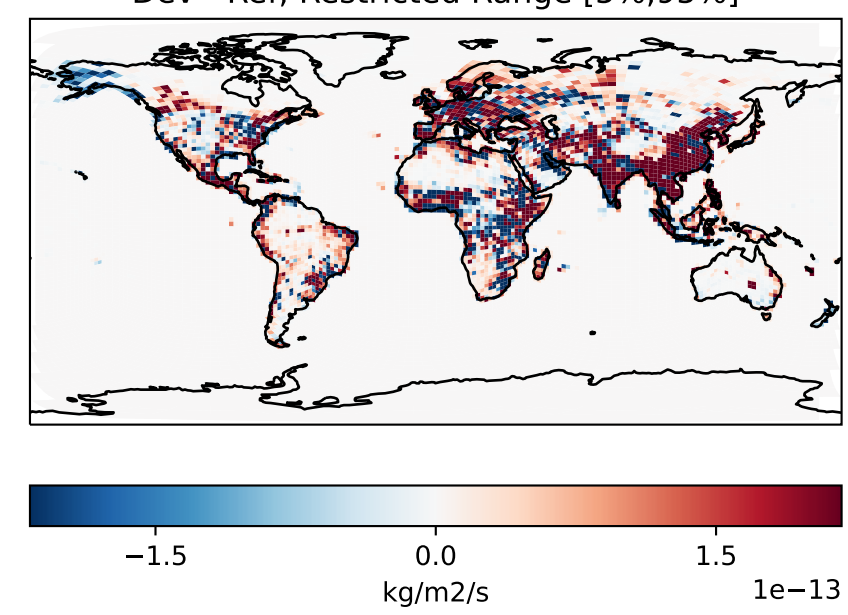

GCHP_13.2.0 (Dev)
c48



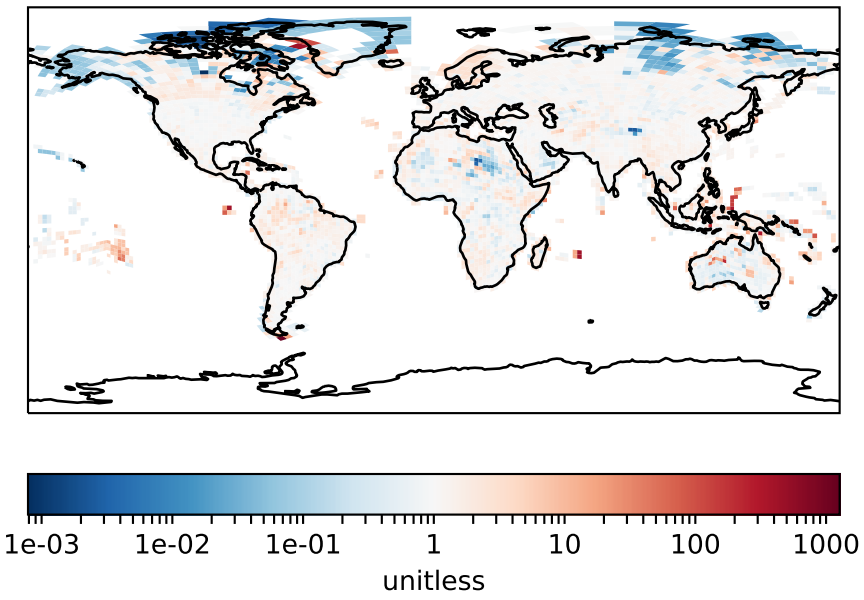

Difference
Dev - Ref, Dynamic Range



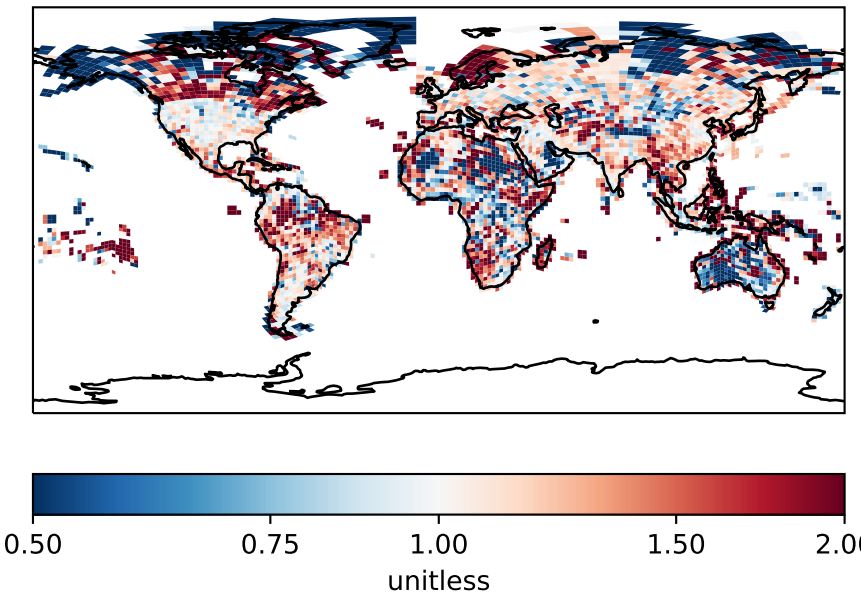

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

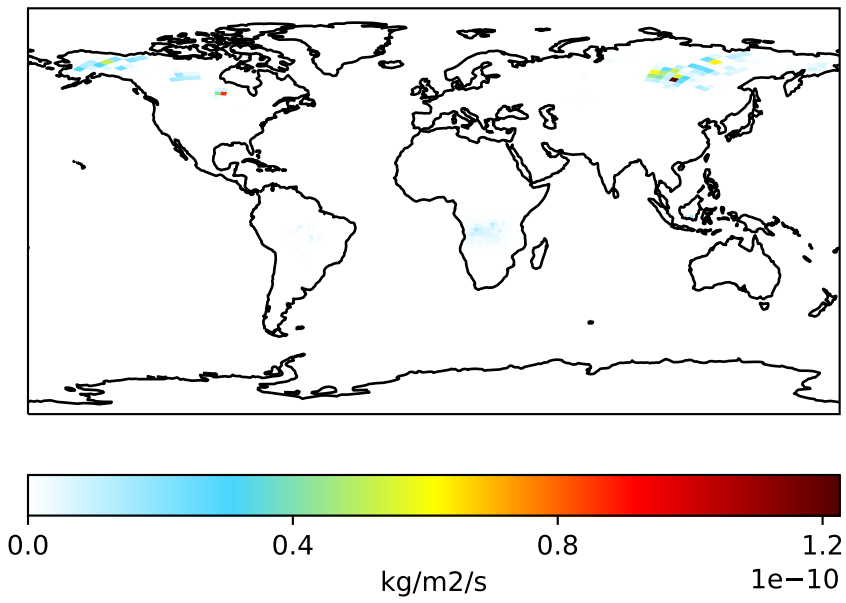



Ratio
Dev/Ref, Fixed Range

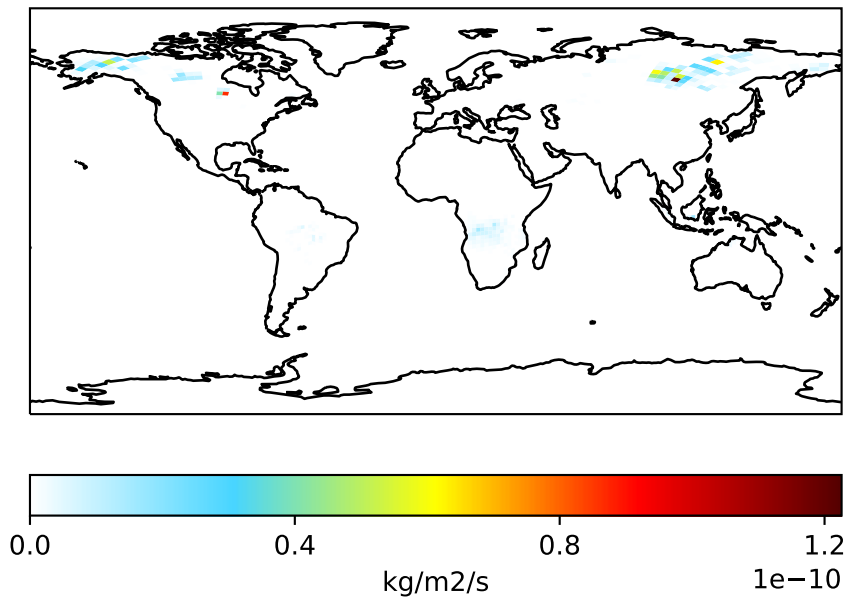


# EmisTOLU_BioBurn (Jul2019)

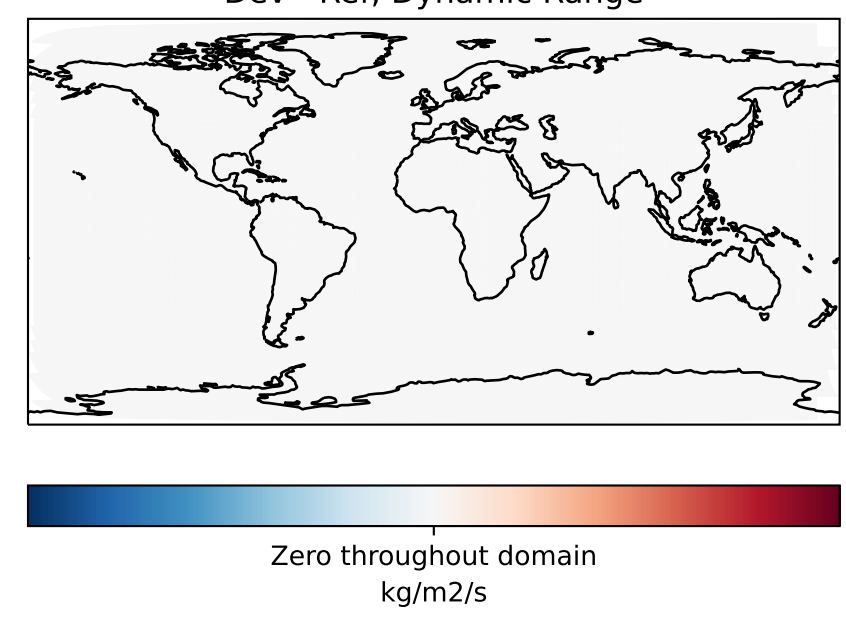
GCHP_13.0.0 (Ref)
c48



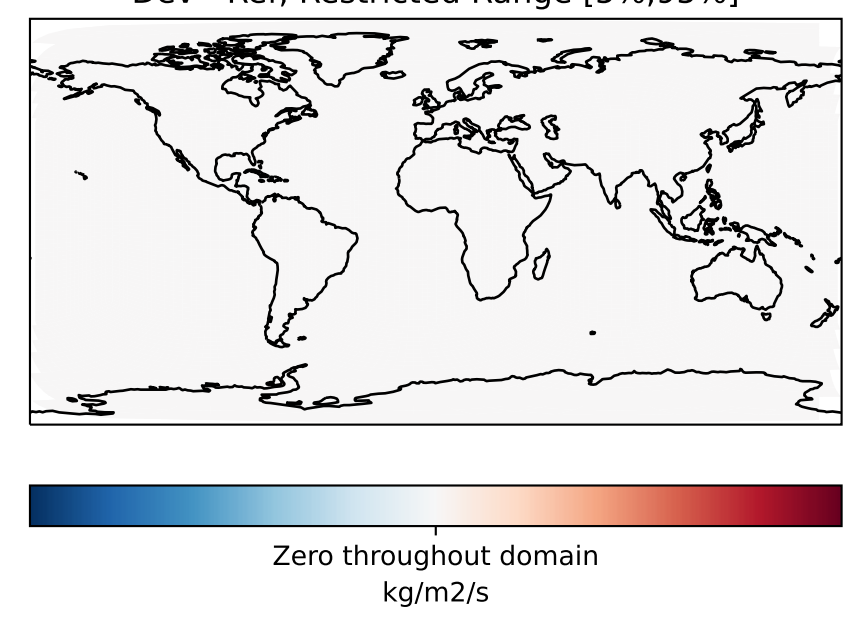

GCHP_13.2.0 (Dev)
c48



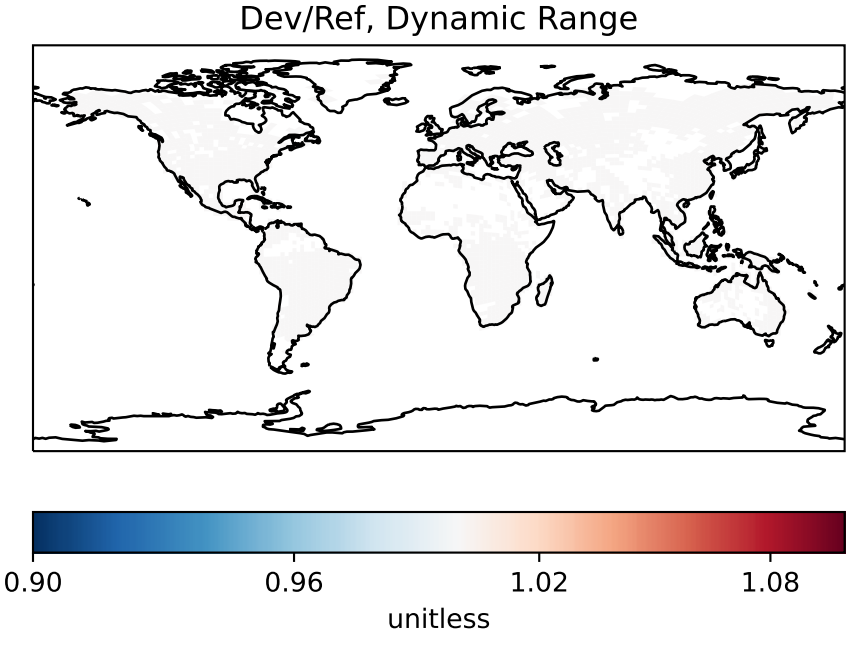

Difference
Dev - Ref, Dynamic Range



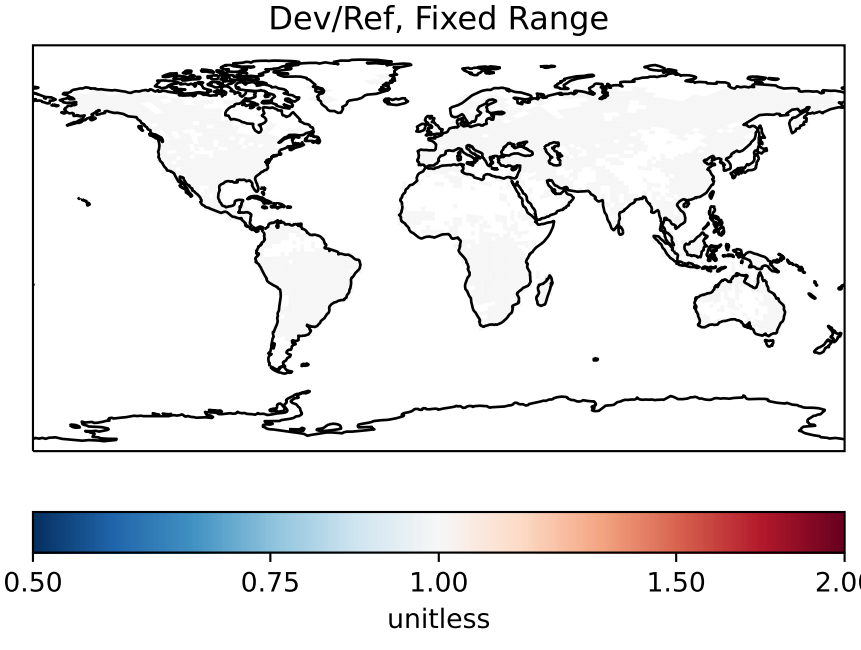

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

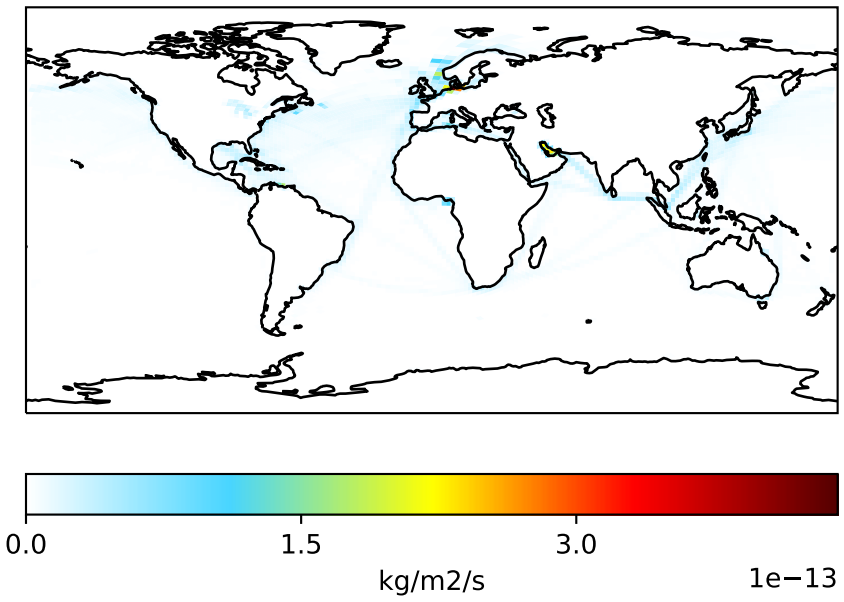



Ratio
Dev/Ref, Fixed Range

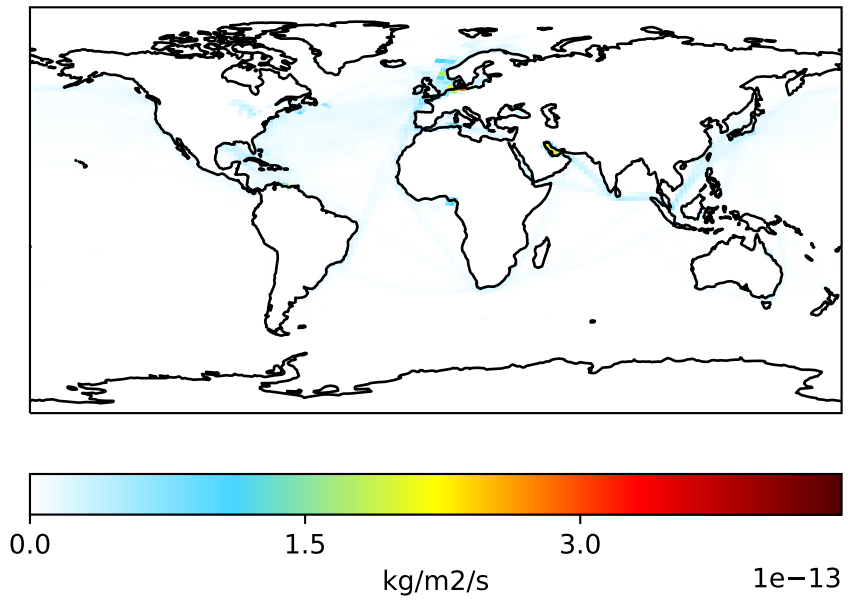


# EmisTOLU_Ship (Jul2019)

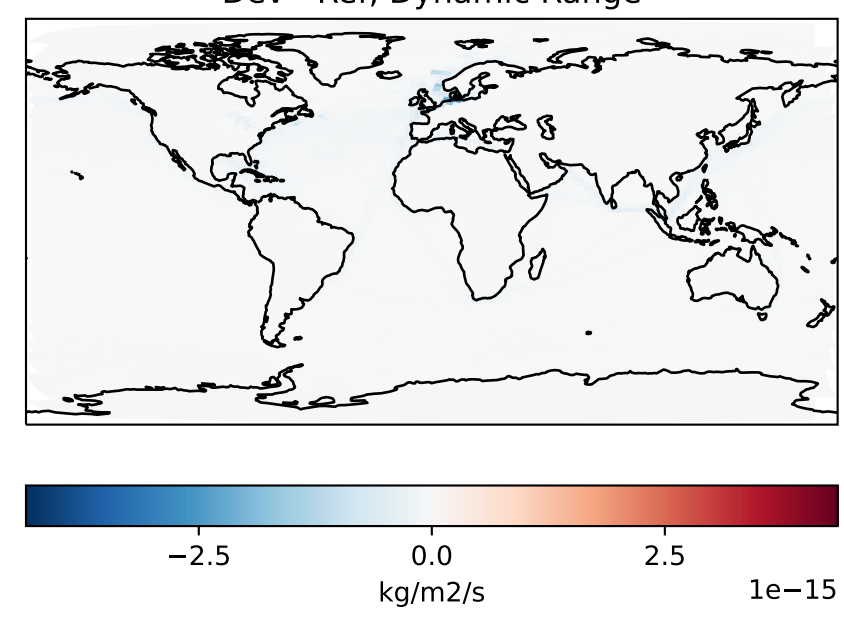
GCHP_13.0.0 (Ref)
c48



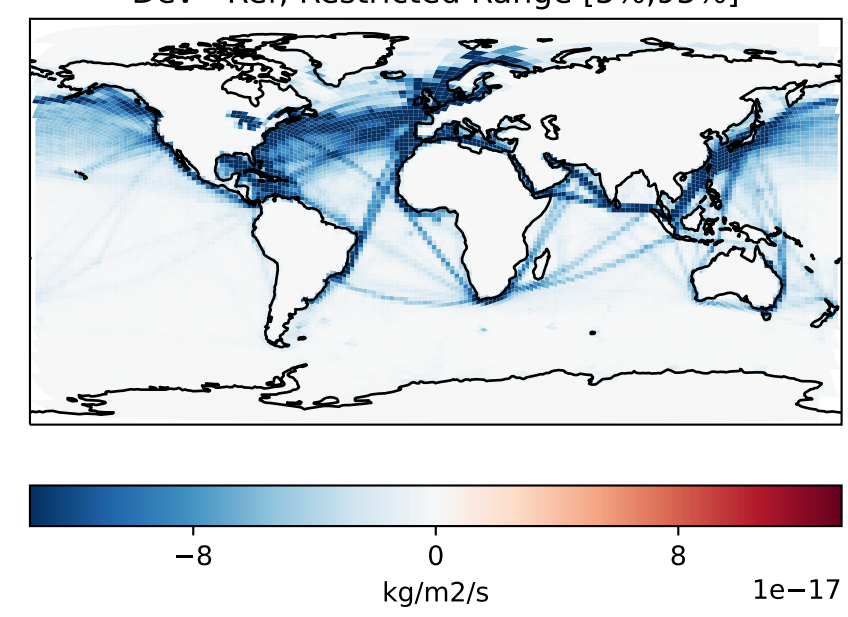

GCHP_13.2.0 (Dev)
c48



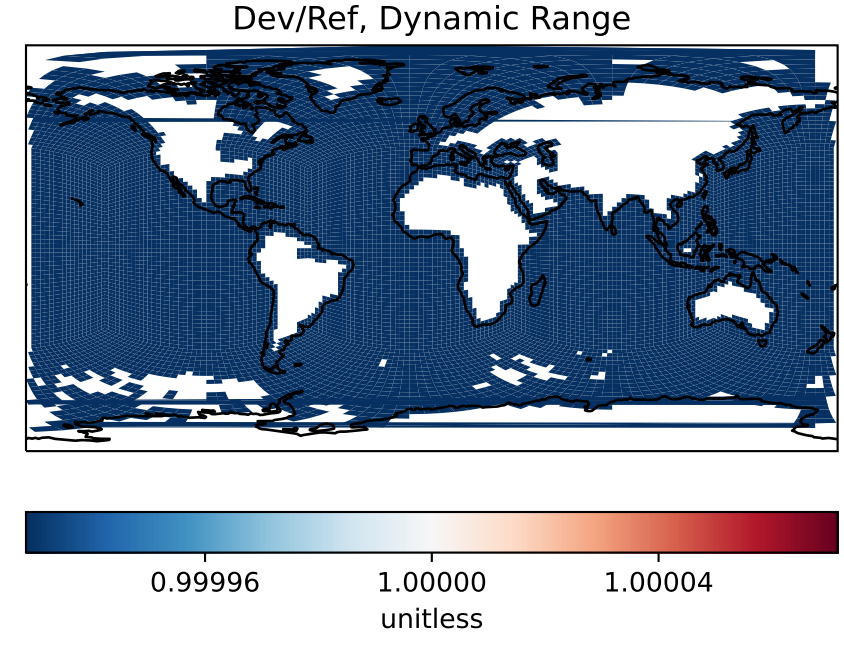

Difference
Dev - Ref, Dynamic Range



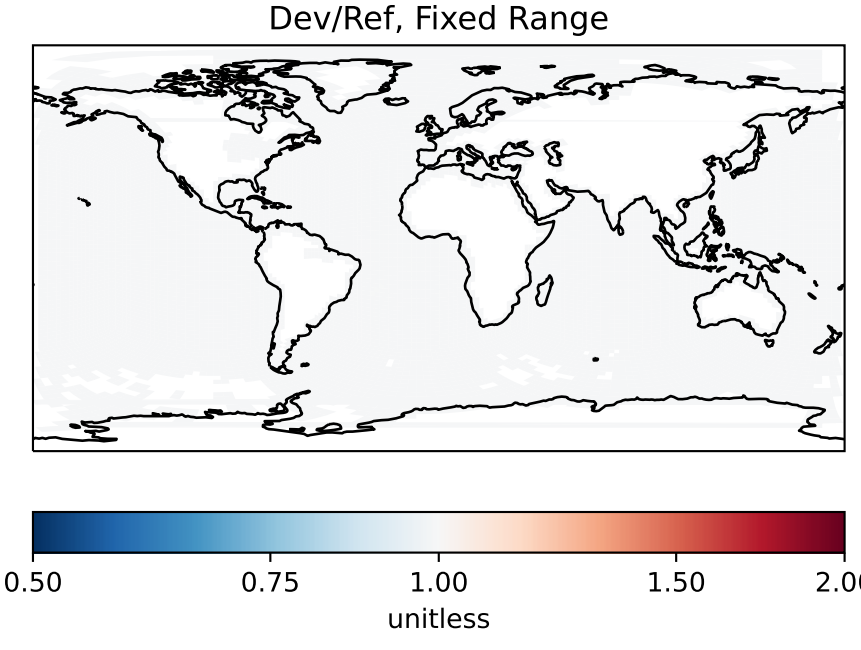

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

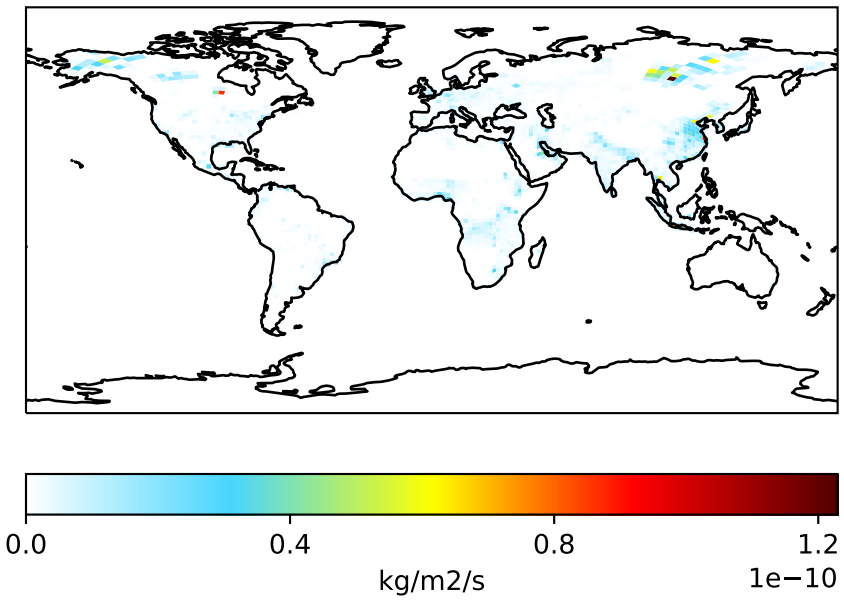



Ratio
Dev/Ref, Fixed Range

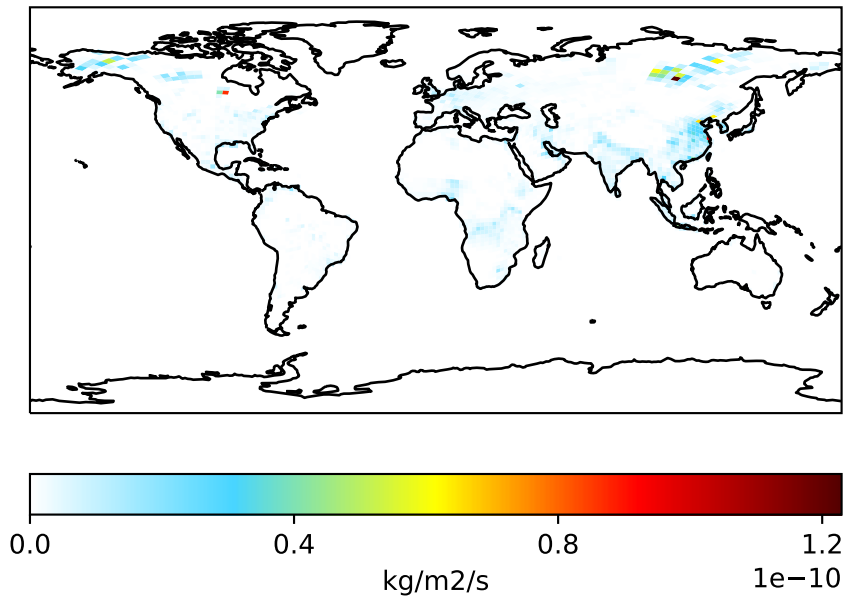


# EmisTOLU_Total (Jul2019)

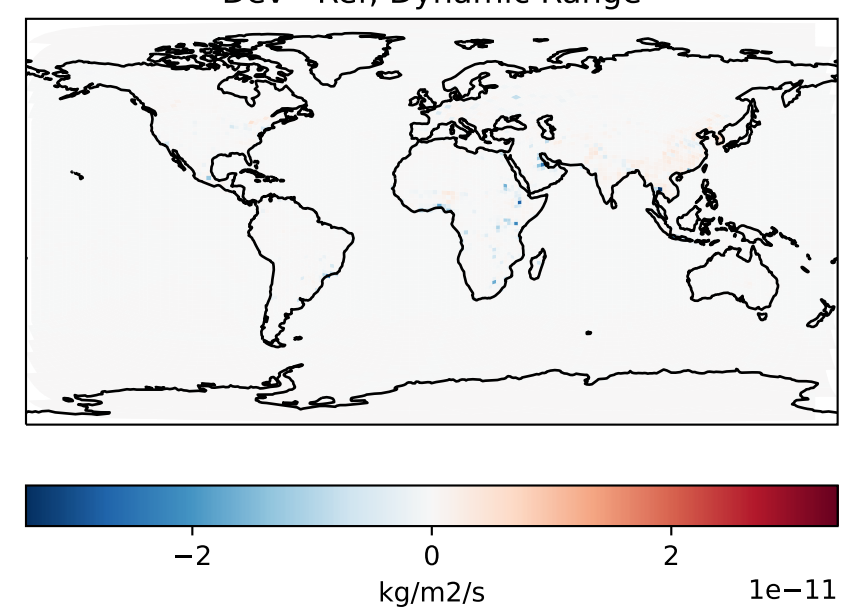
GCHP_13.0.0 (Ref)
c48



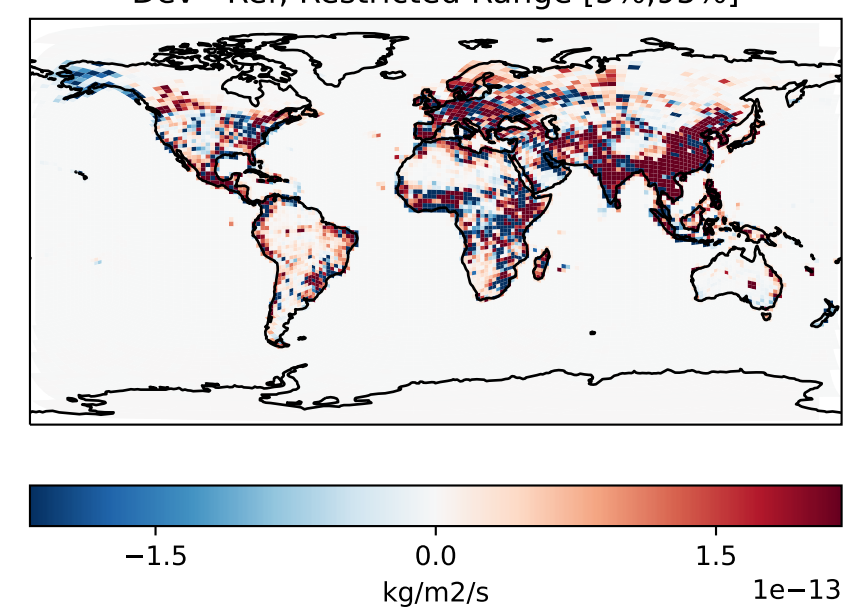

GCHP_13.2.0 (Dev)
c48



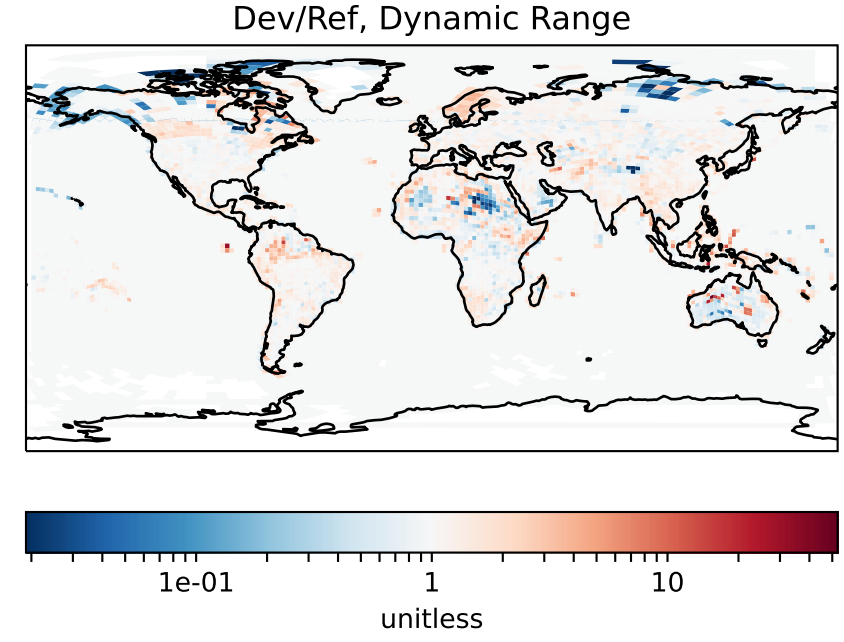

Difference
Dev - Ref, Dynamic Range



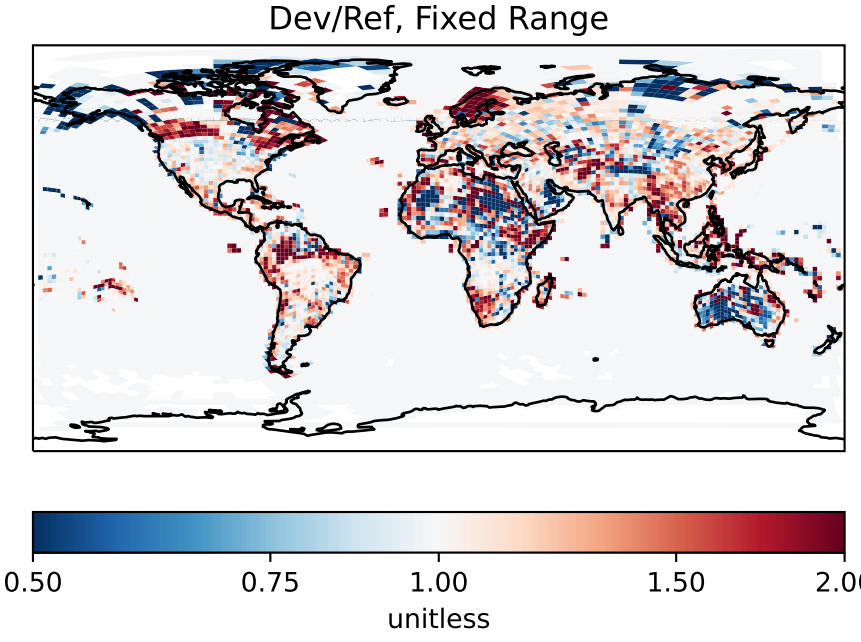

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

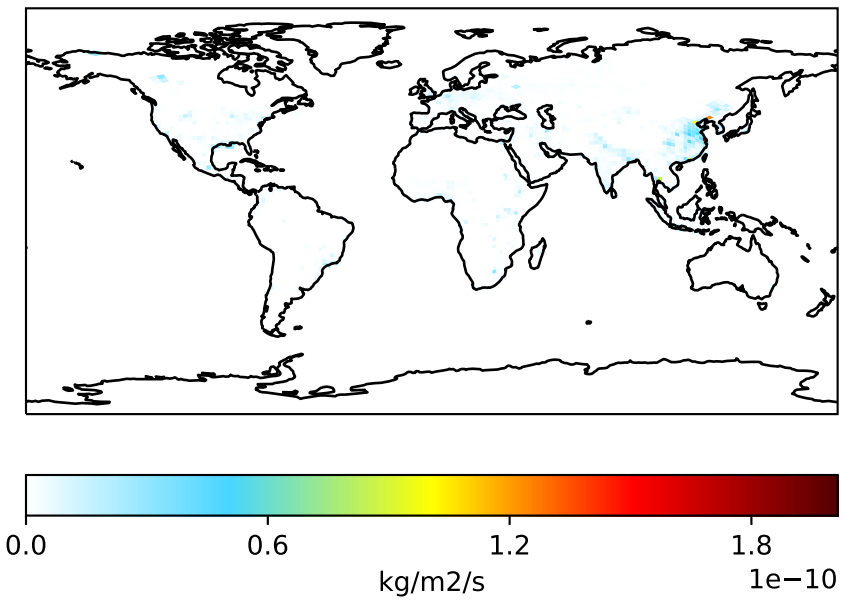



Ratio
Dev/Ref, Fixed Range

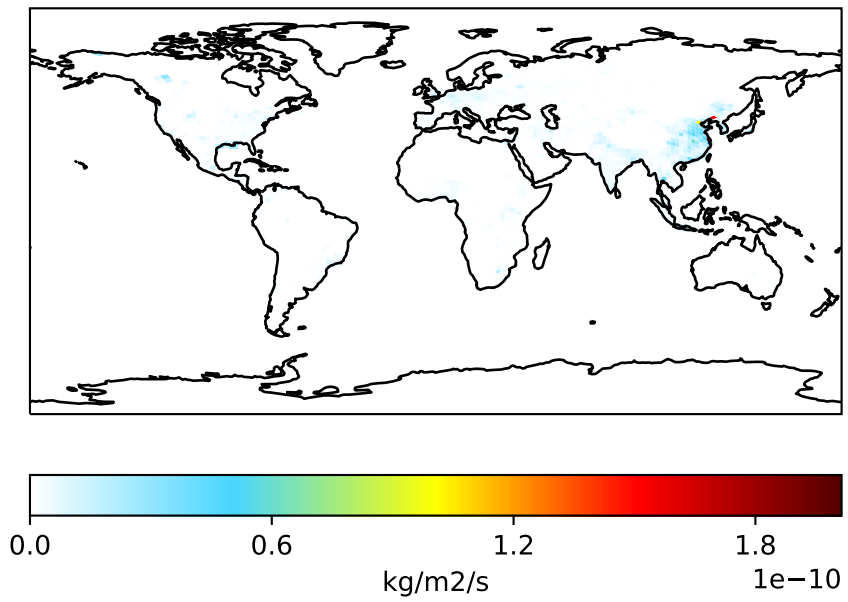


# EmisXYLE_Anthro (Jul2019)

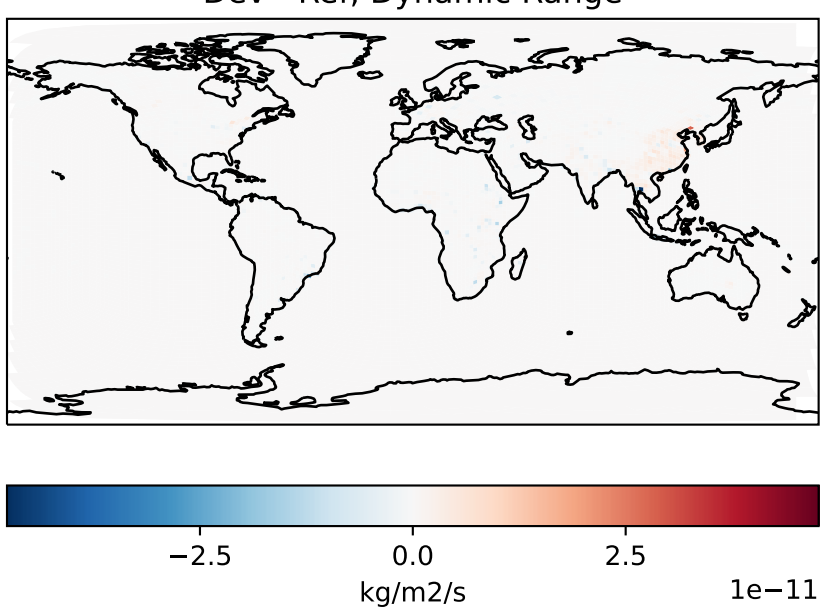
GCHP_13.0.0 (Ref)
c48



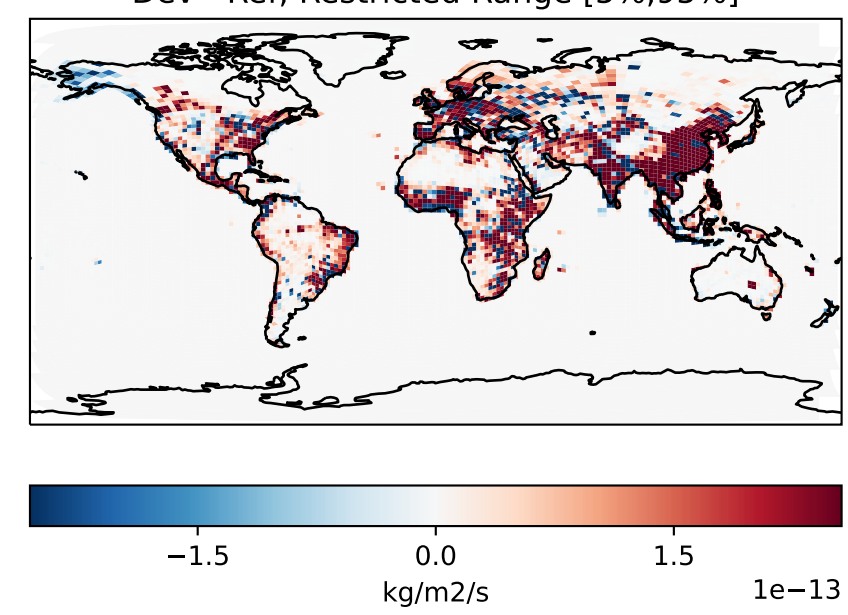

GCHP_13.2.0 (Dev)
c48



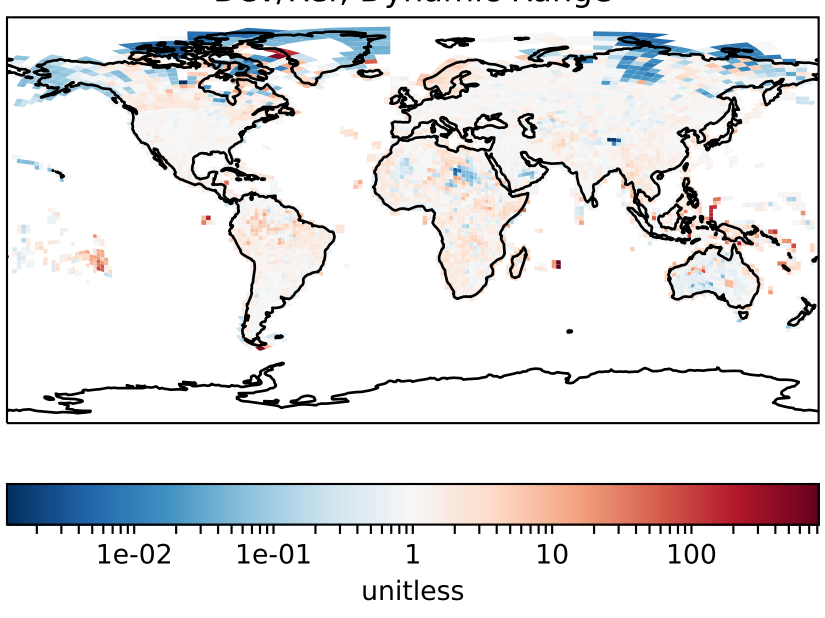

Difference
Dev - Ref, Dynamic Range



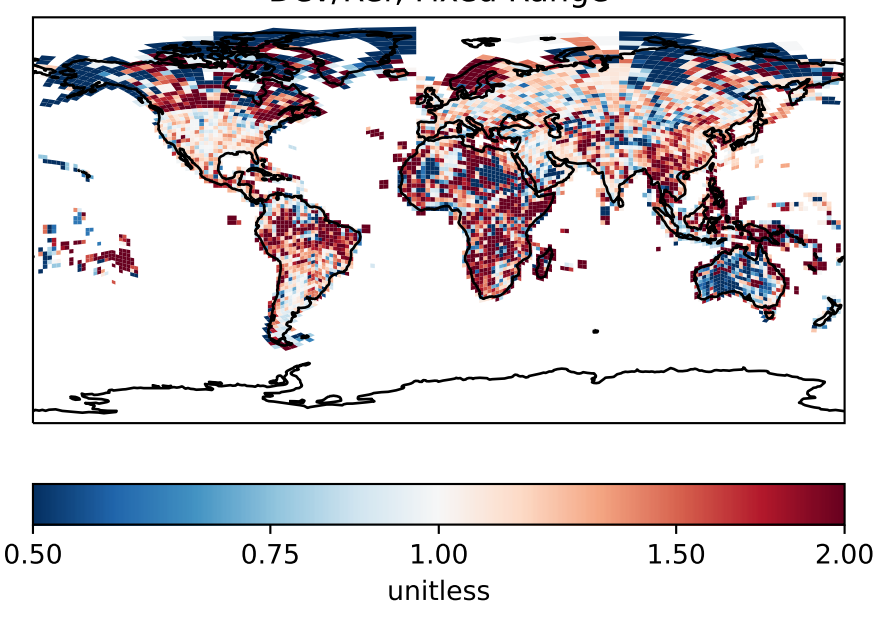

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

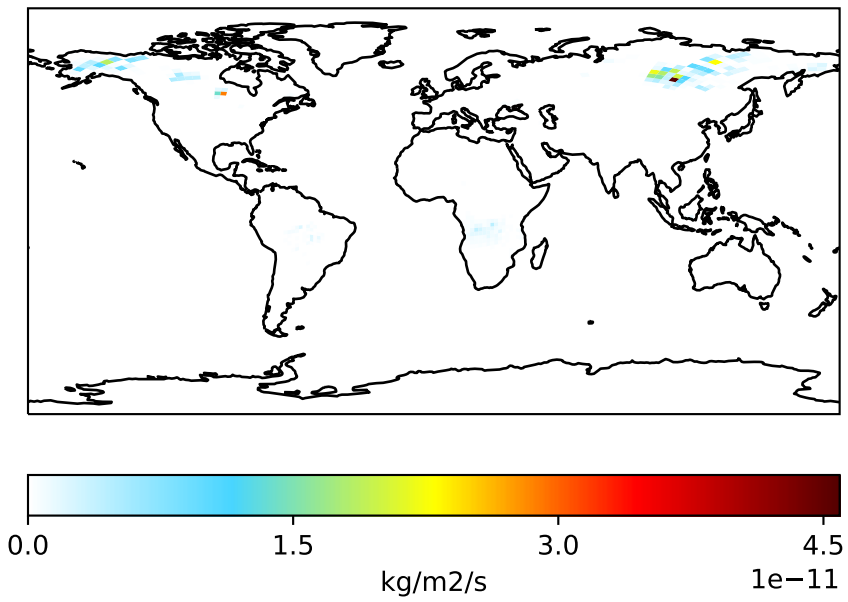



Ratio
Dev/Ref, Fixed Range

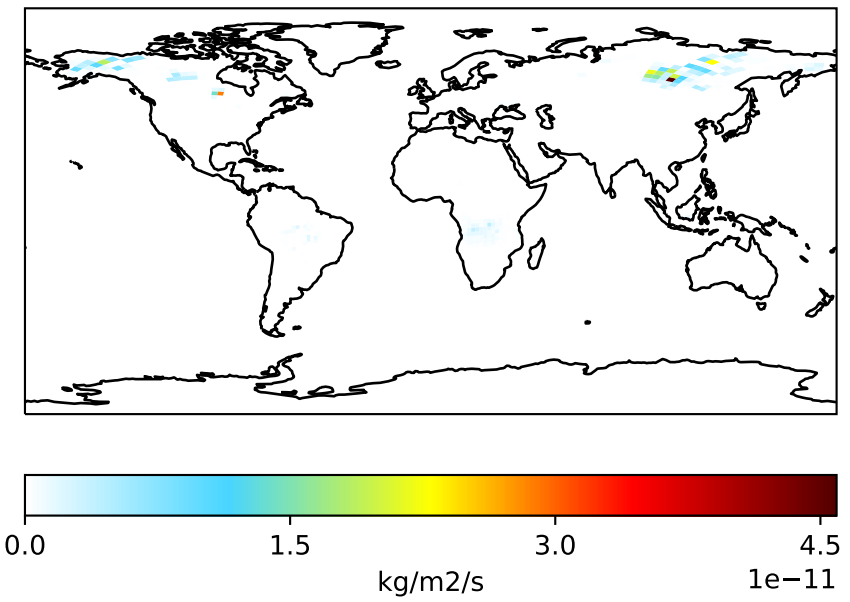


# EmisXYLE_BioBurn (Jul2019)

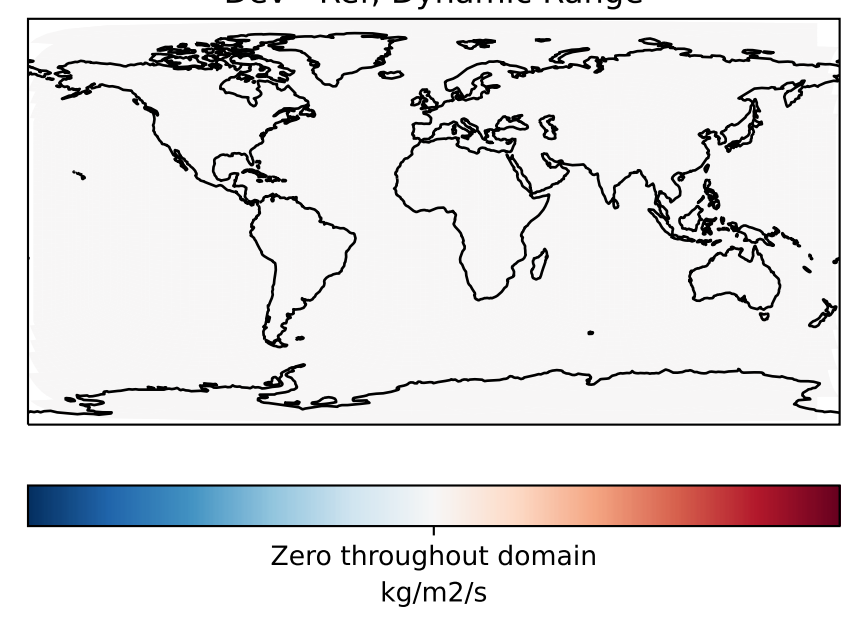
GCHP_13.0.0 (Ref)
c48



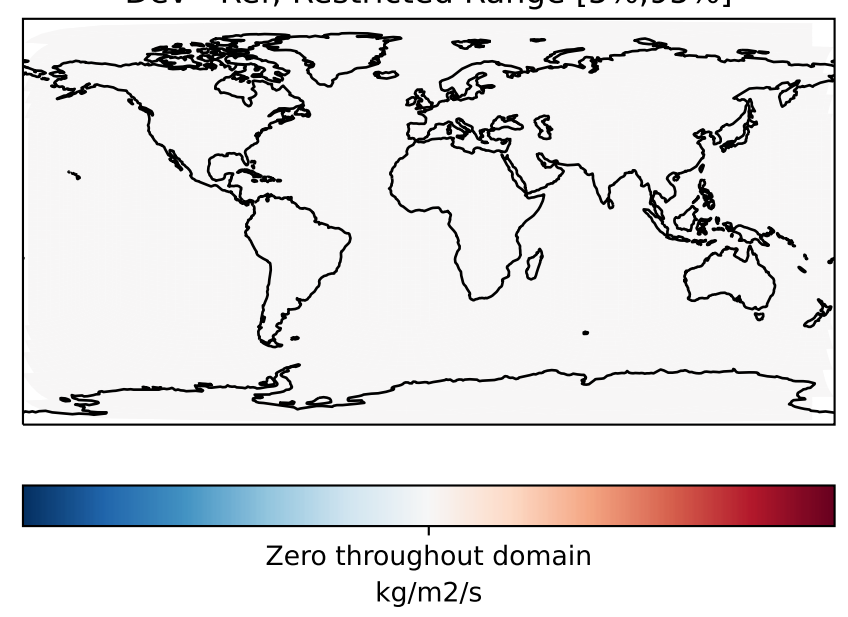

GCHP_13.2.0 (Dev)
c48



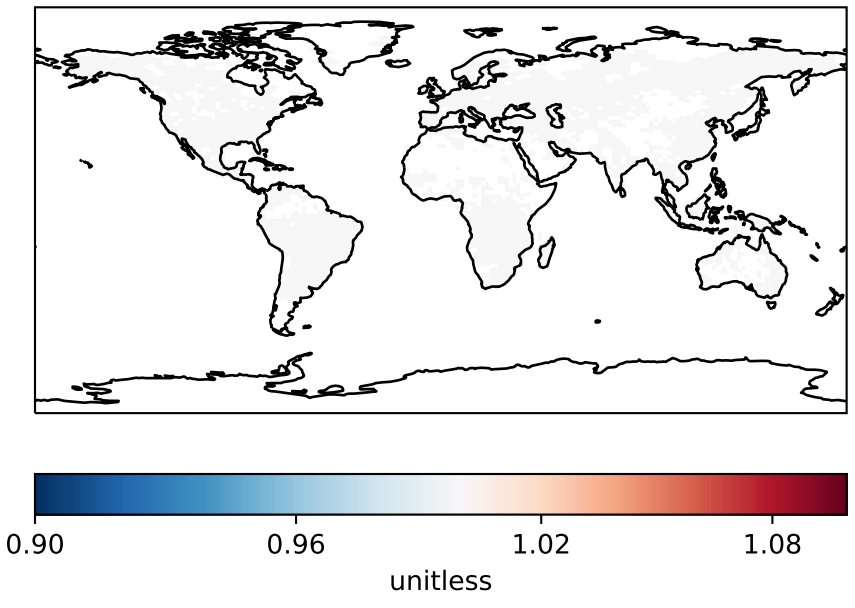

Difference
Dev - Ref, Dynamic Range



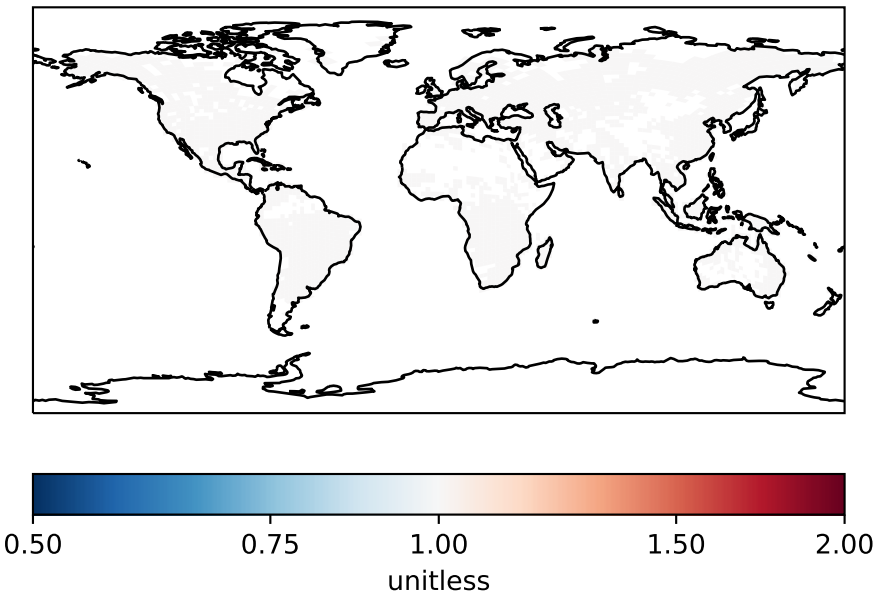

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

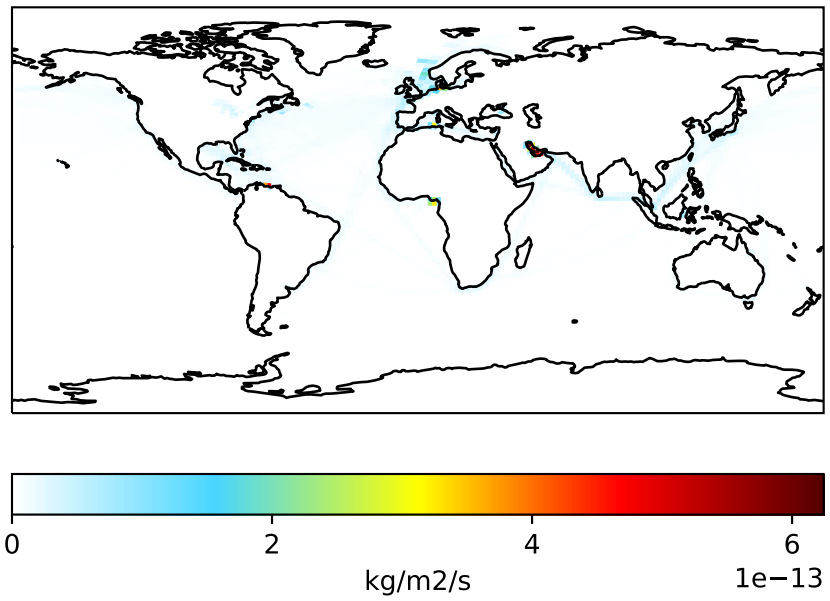



Ratio
Dev/Ref, Fixed Range

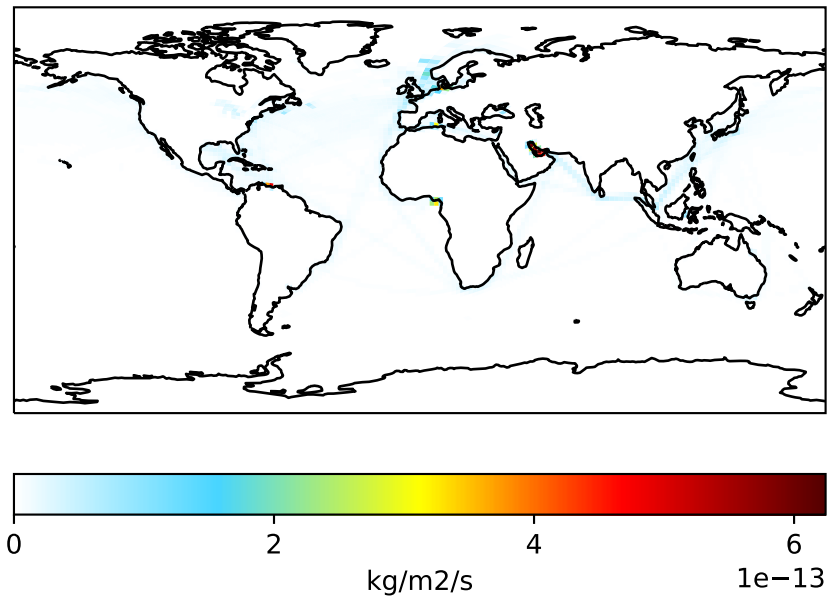


# EmisXYLE_Ship (Jul2019)

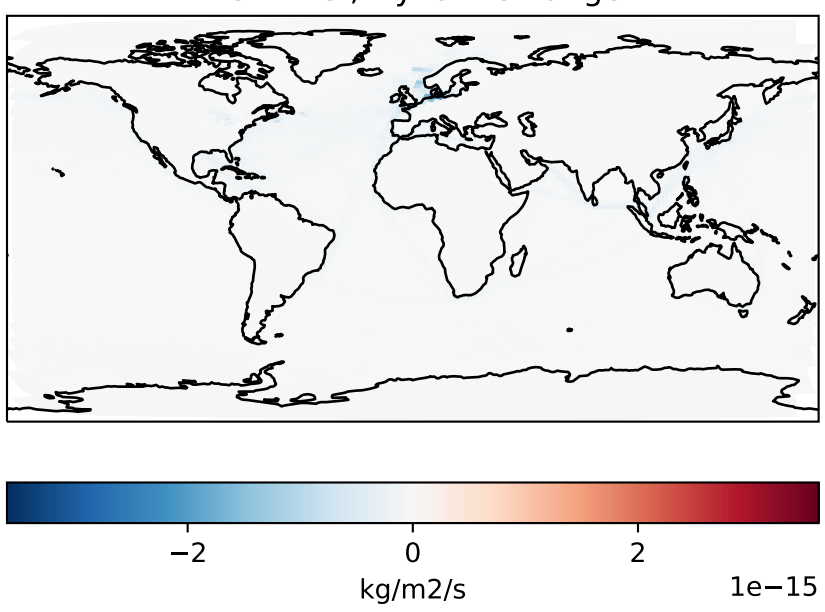
GCHP_13.0.0 (Ref)
c48



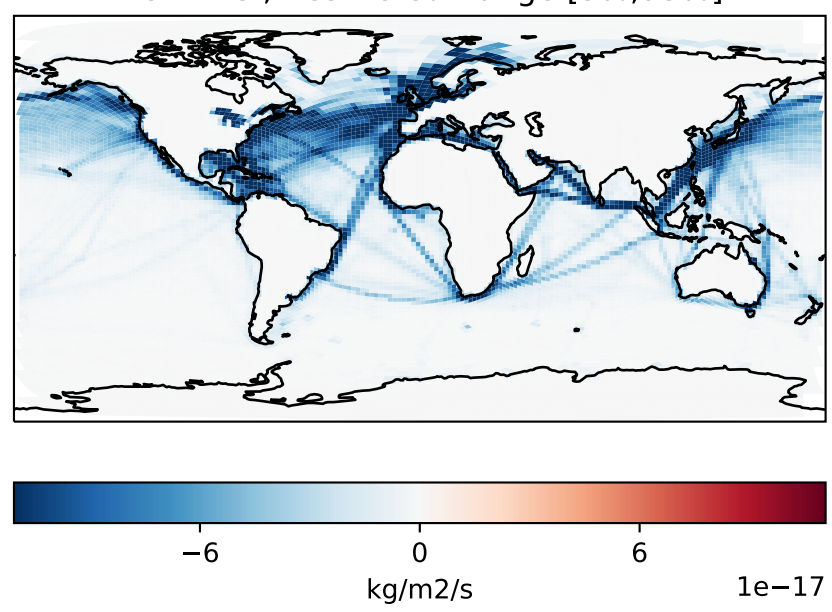

GCHP_13.2.0 (Dev)
c48



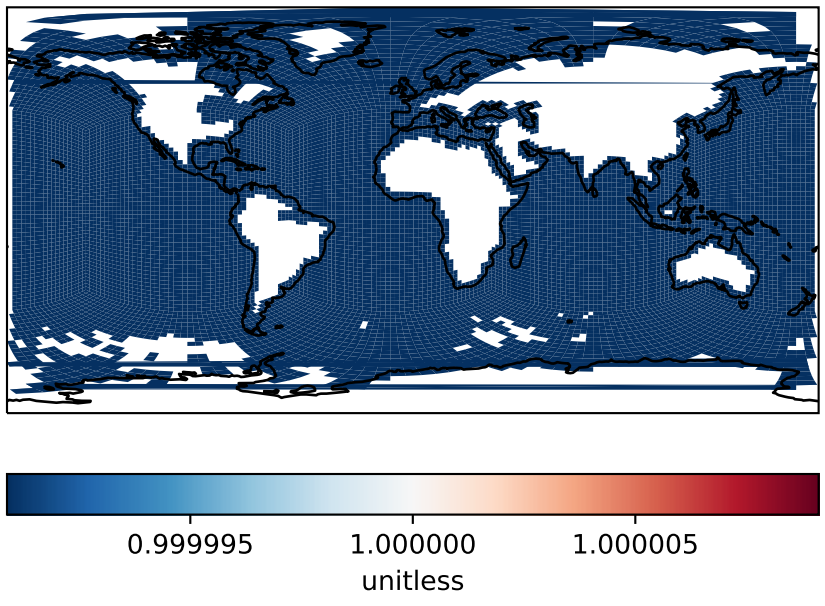

Difference
Dev - Ref, Dynamic Range



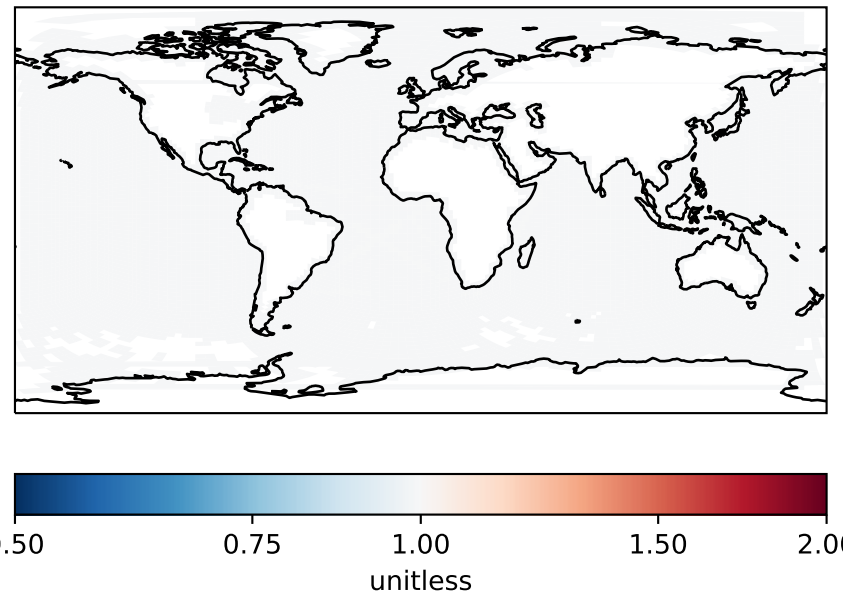

Difference
Dev - Ref, Restricted Range [5%,95%]




Ratio
Dev/Ref, Dynamic Range

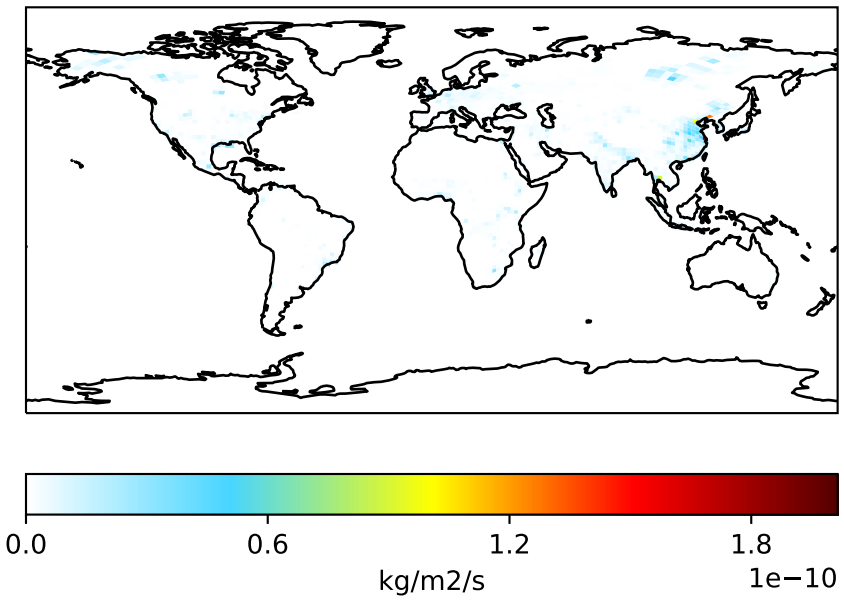



Ratio
Dev/Ref, Fixed Range

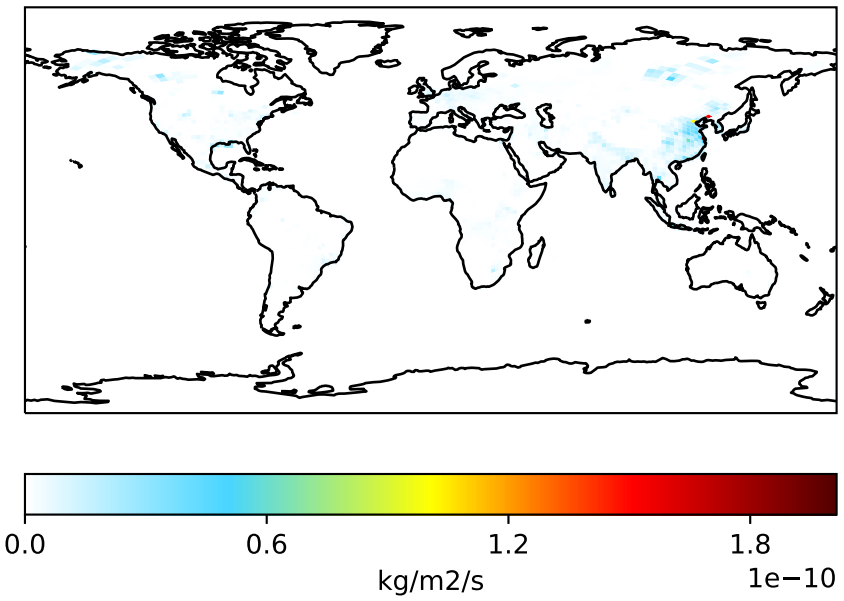


# EmisXYLE_Total (Jul2019)

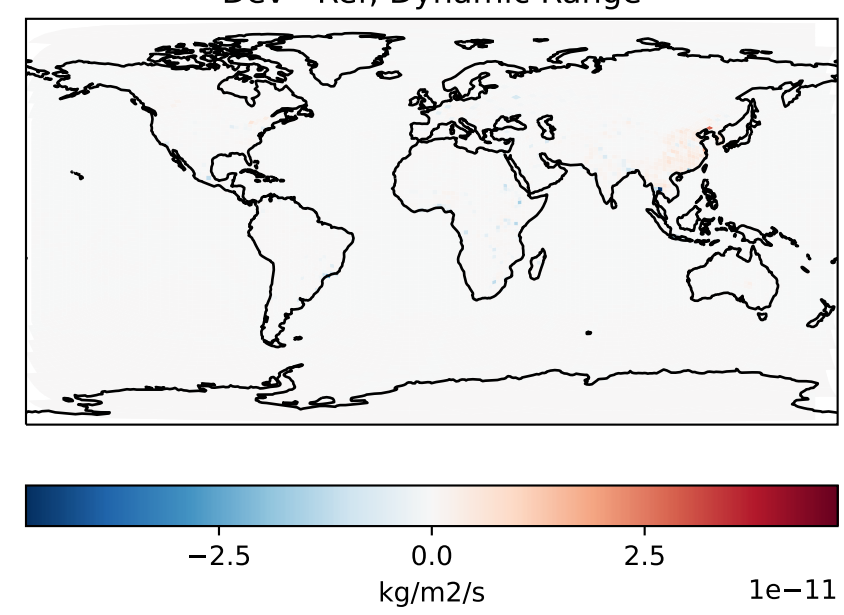
GCHP_13.0.0 (Ref)
c48



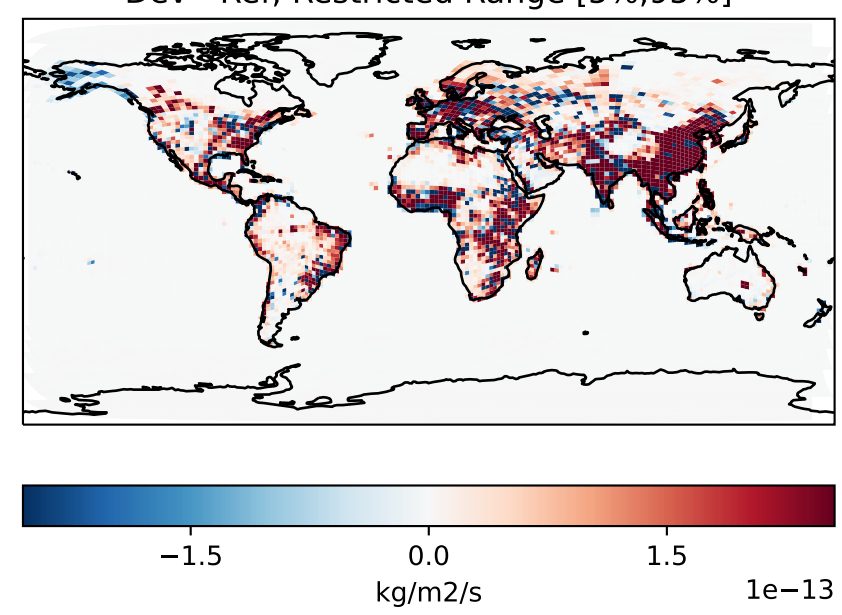

GCHP_13.2.0 (Dev)
c48



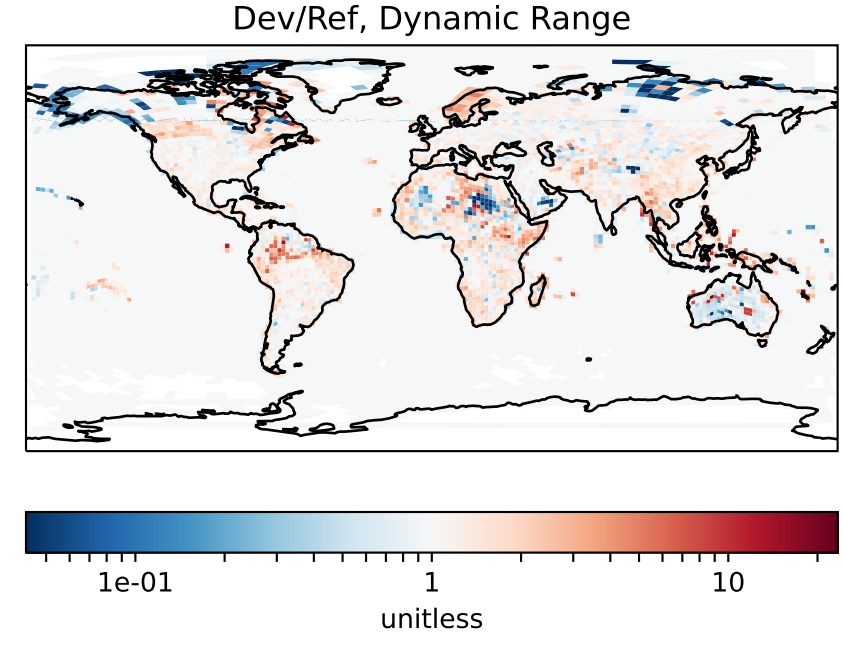

Difference
Dev - Ref, Dynamic Range




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




Ratio
Dev/Ref, Dynamic Range




Ratio
Dev/Ref, Fixed Range

