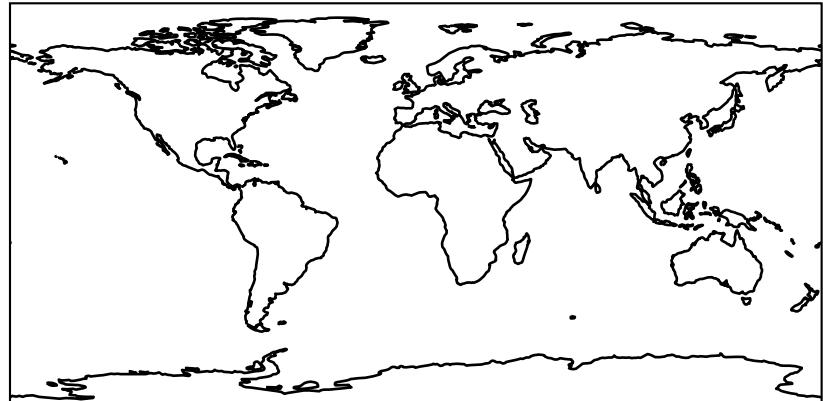


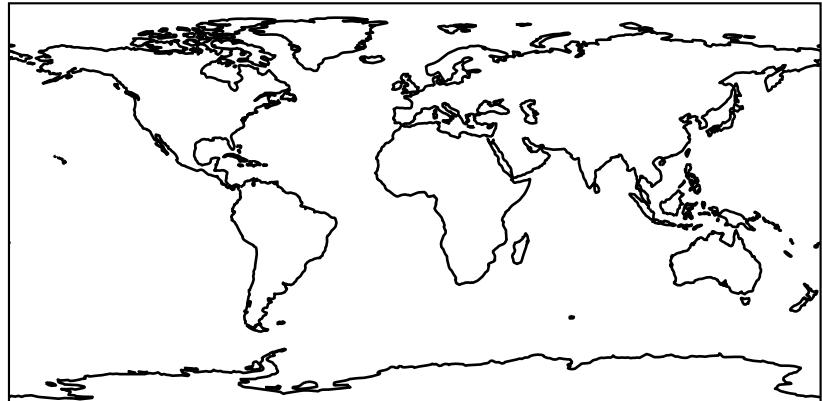
EmisALD2_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



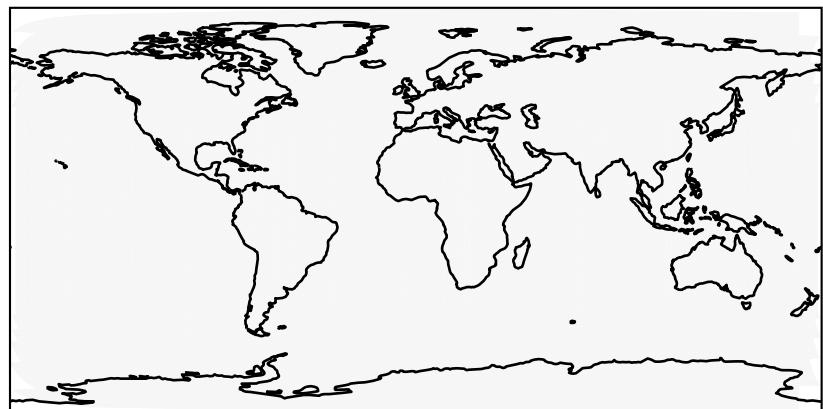
Zero throughout domain
kg/m²/s

GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



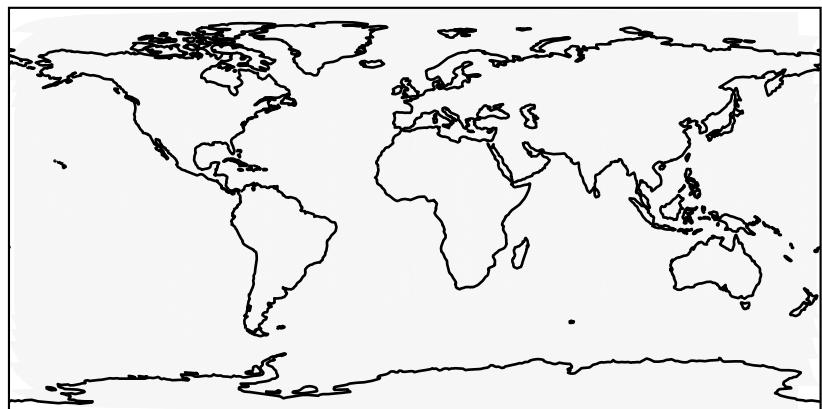
Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



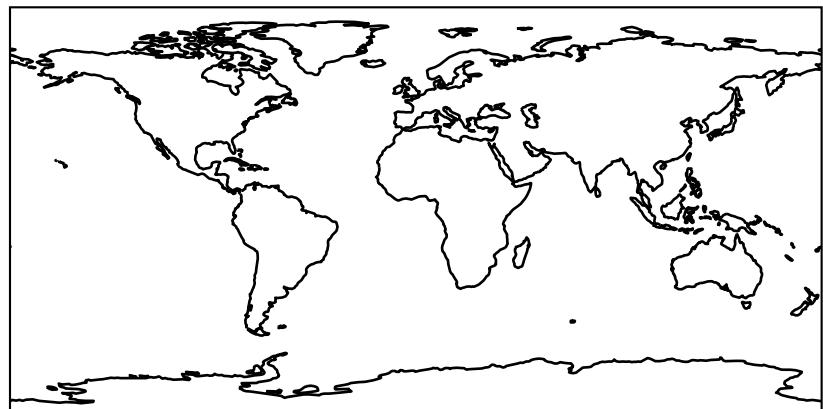
Zero throughout domain
kg/m²/s

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



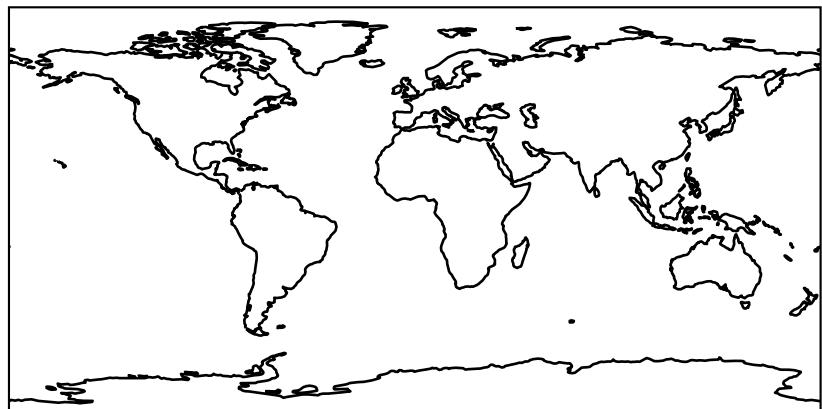
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



Undefined throughout domain
unitless

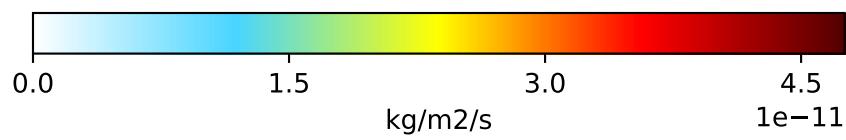
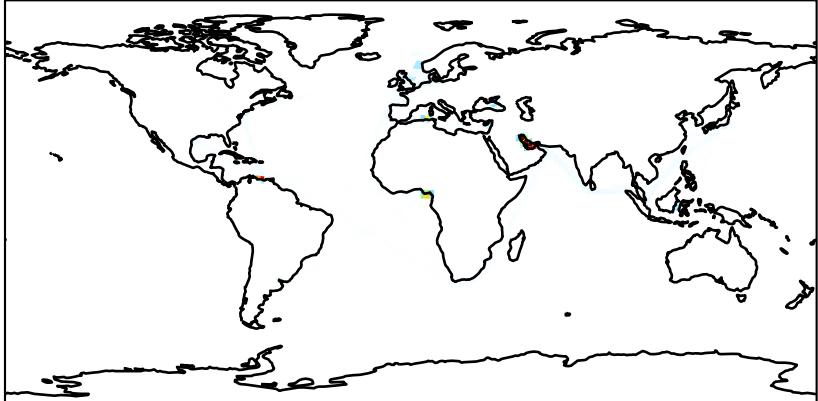
Ratio
Dev/Ref, Fixed Range



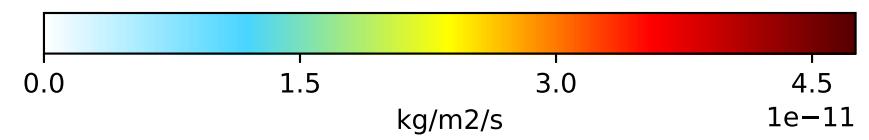
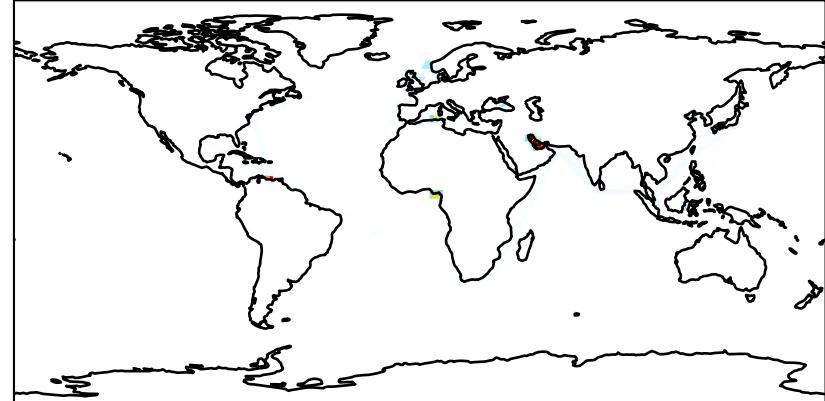
Undefined throughout domain
unitless

EmisALK4_Ship

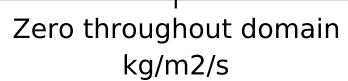
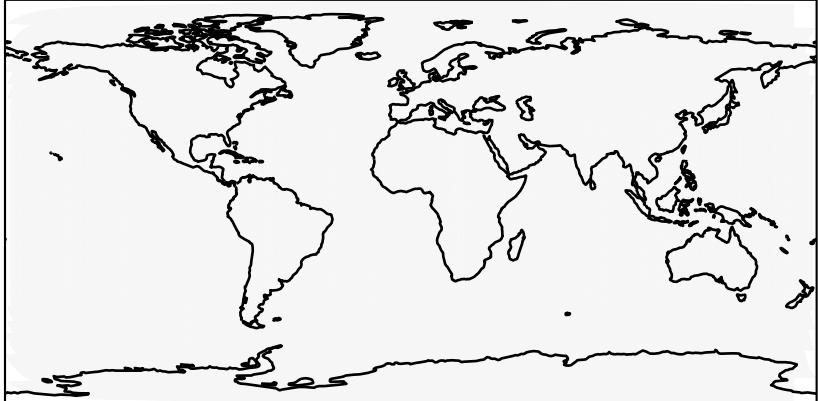
GCHP_13.2.0-beta.0 (Ref)
c48



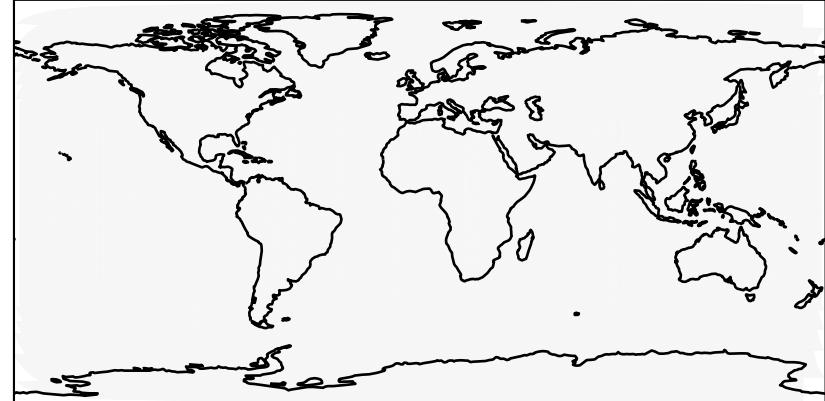
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



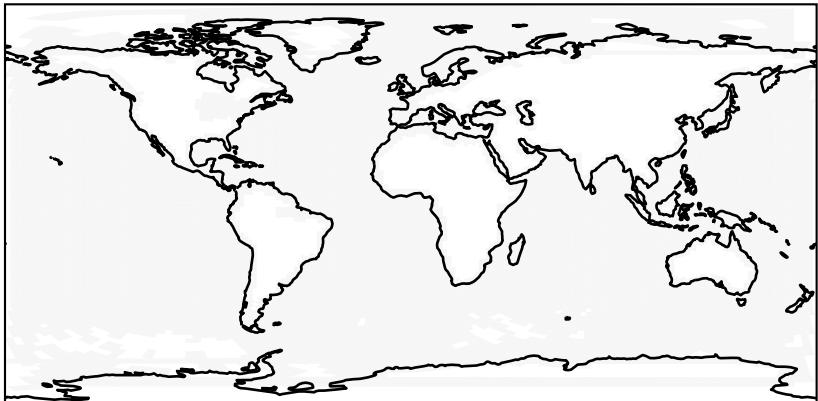
Difference
Dev - Ref, Dynamic Range



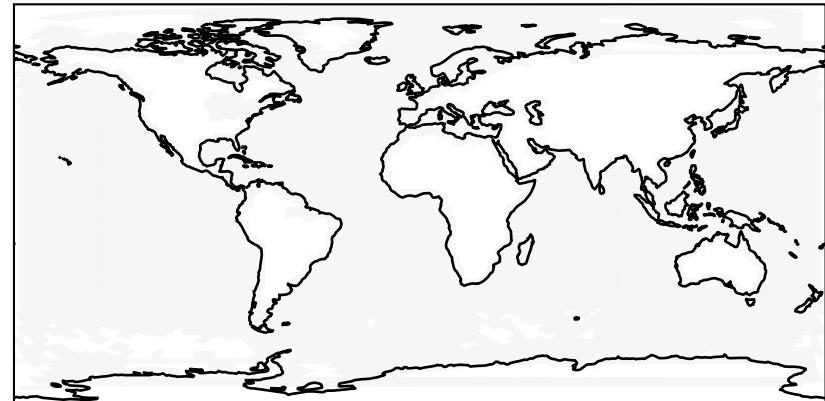
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

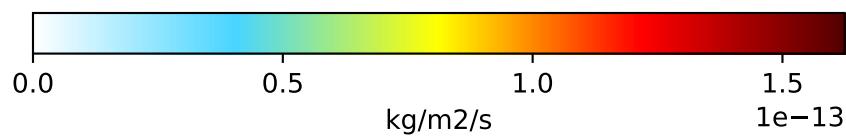
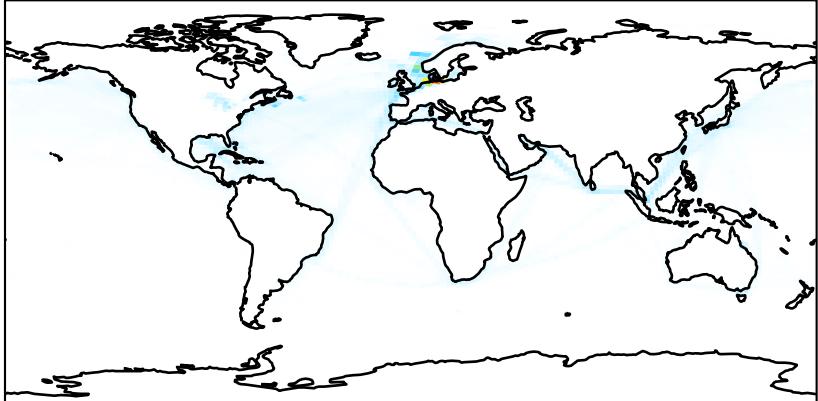


Ratio
Dev/Ref, Fixed Range

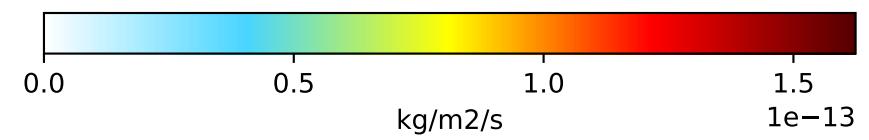


EmisBCPI_Ship

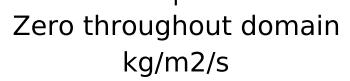
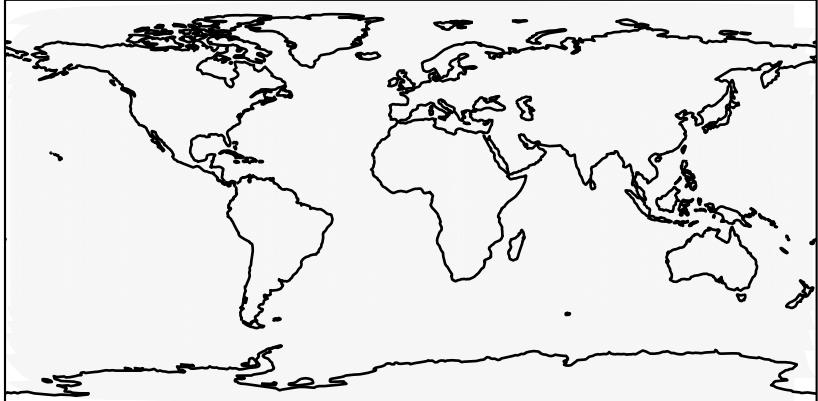
GCHP_13.2.0-beta.0 (Ref)
c48



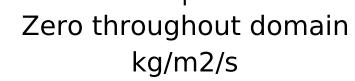
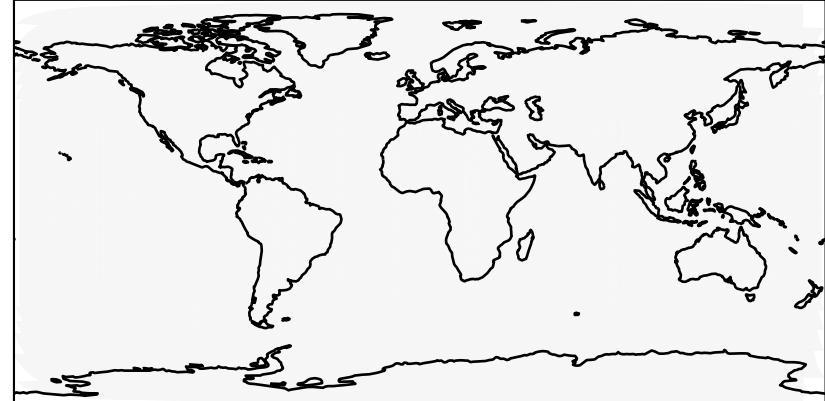
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



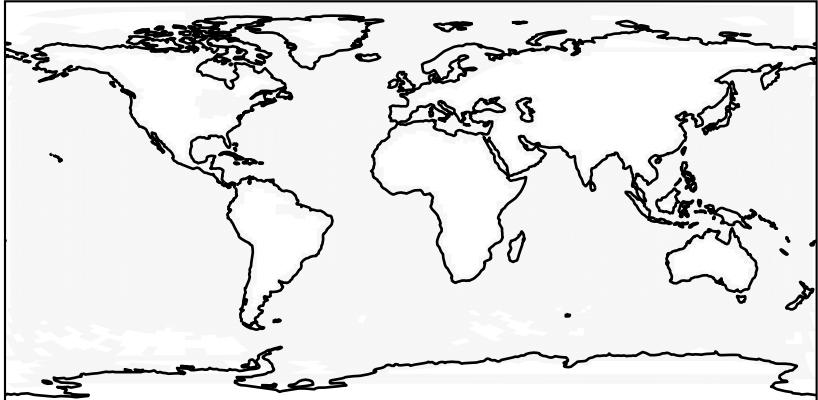
Difference
Dev - Ref, Dynamic Range



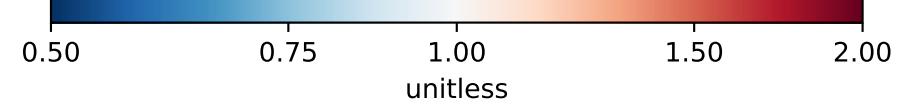
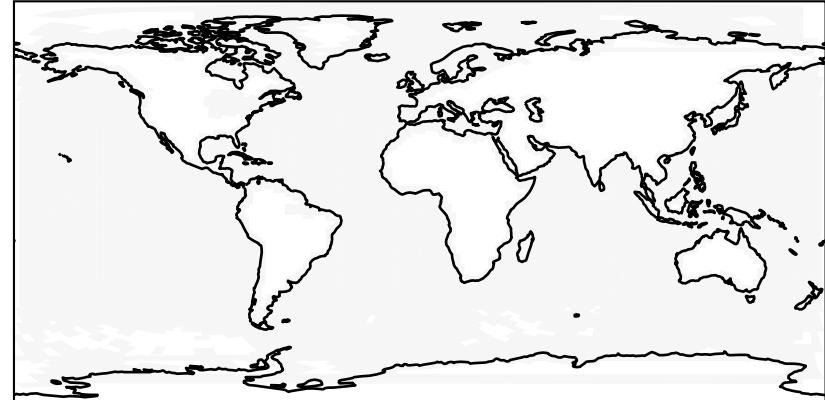
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

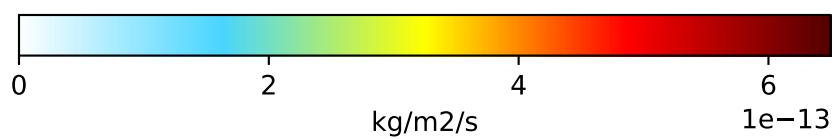
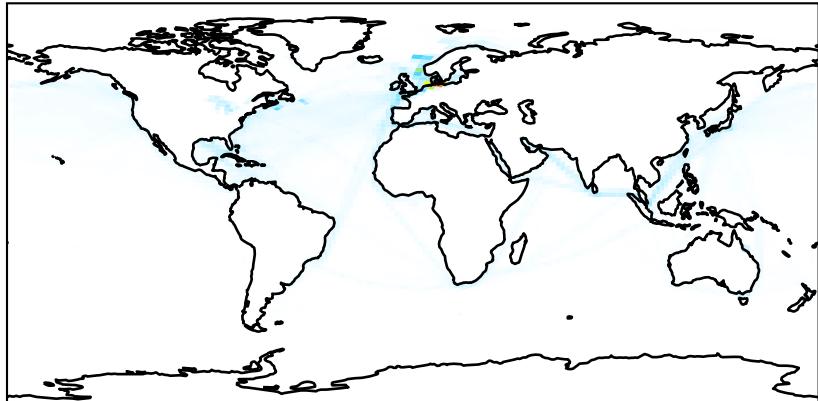


Ratio
Dev/Ref, Fixed Range

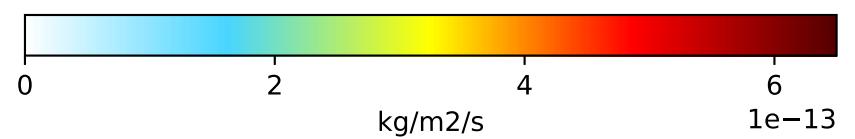
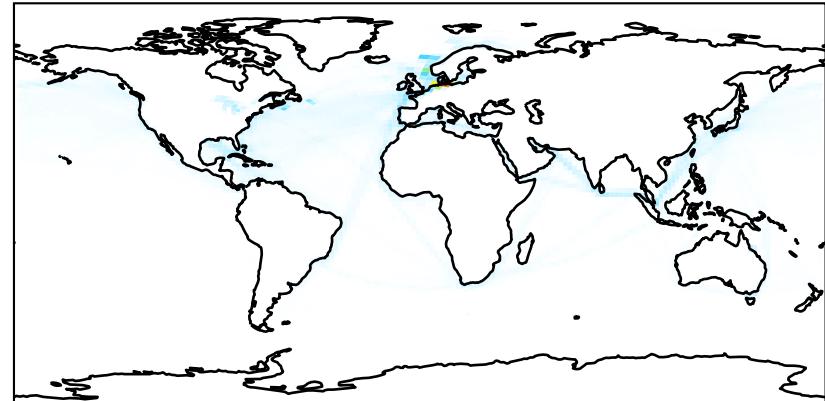


EmisBCPO_Ship

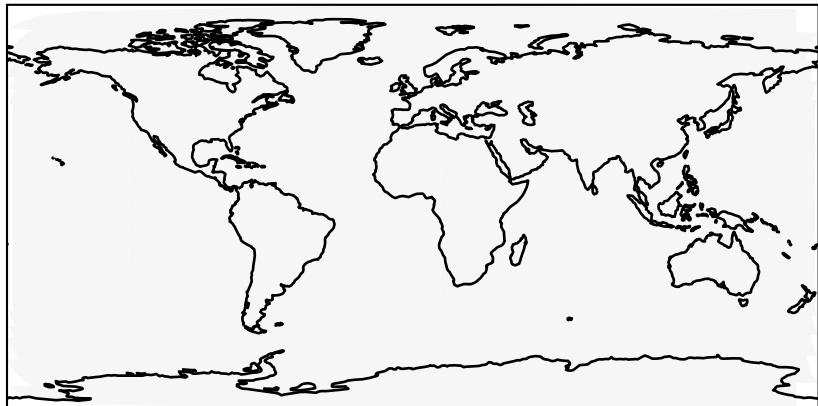
GCHP_13.2.0-beta.0 (Ref)
c48



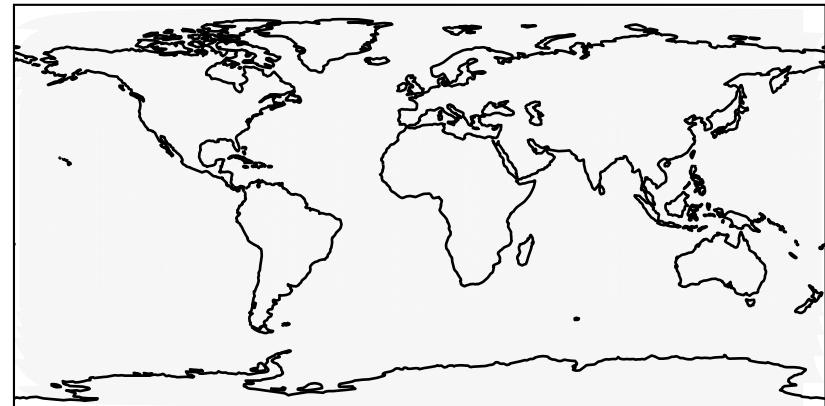
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



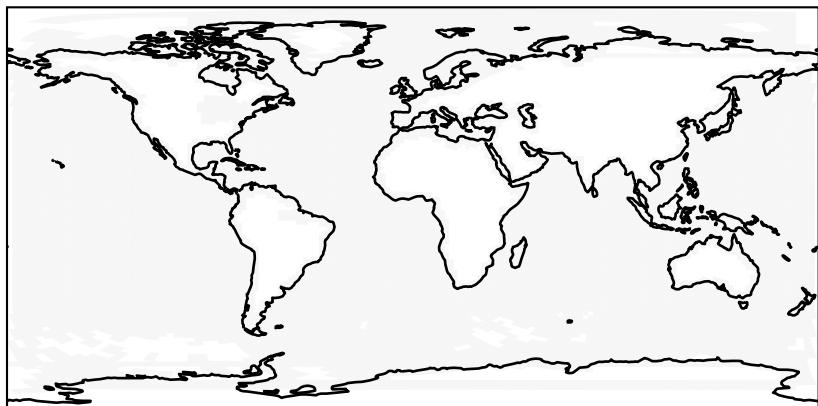
Difference
Dev - Ref, Dynamic Range



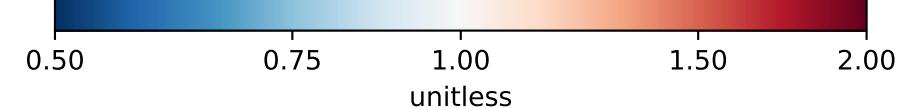
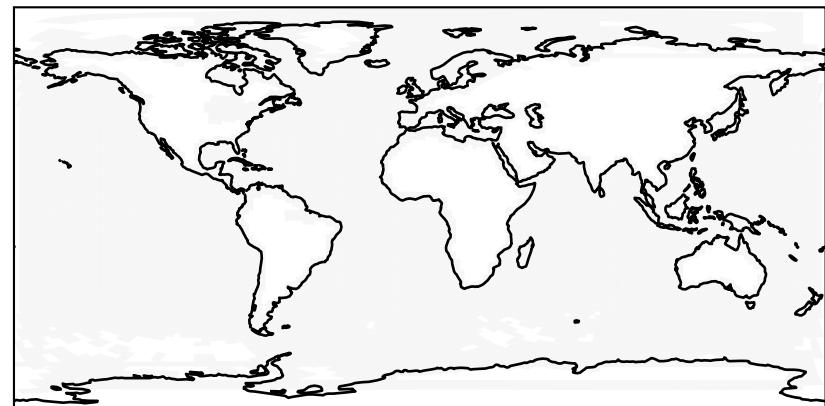
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

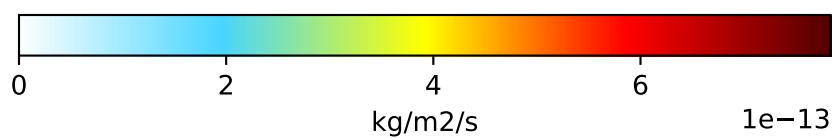
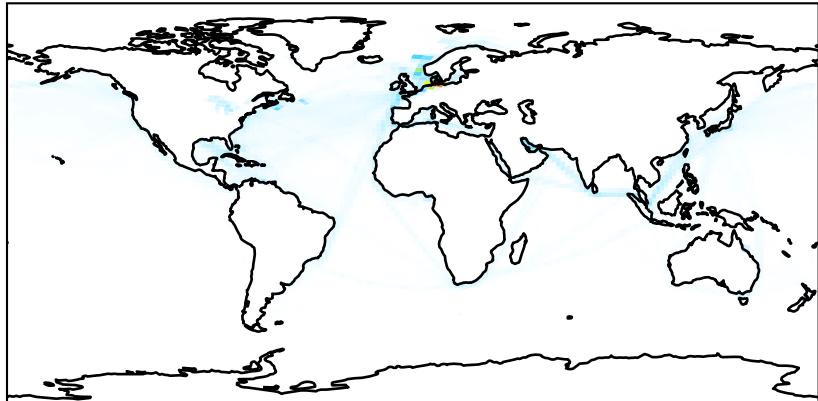


Ratio
Dev/Ref, Fixed Range

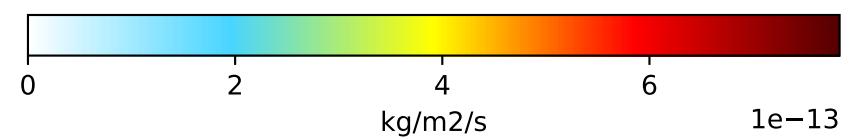
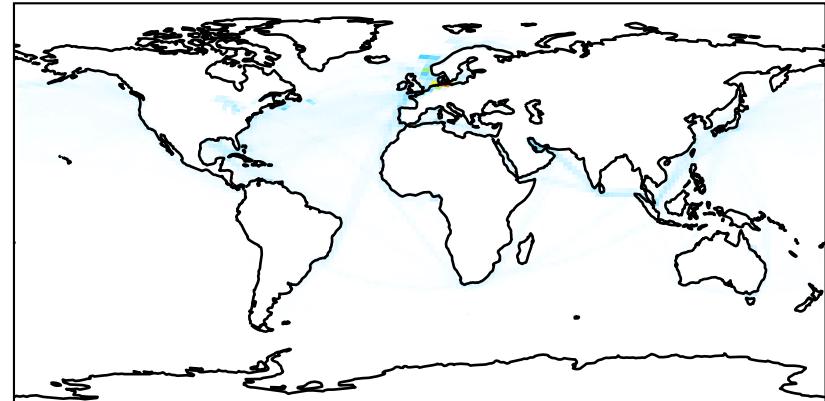


EmisBENZ_Ship

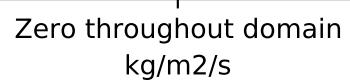
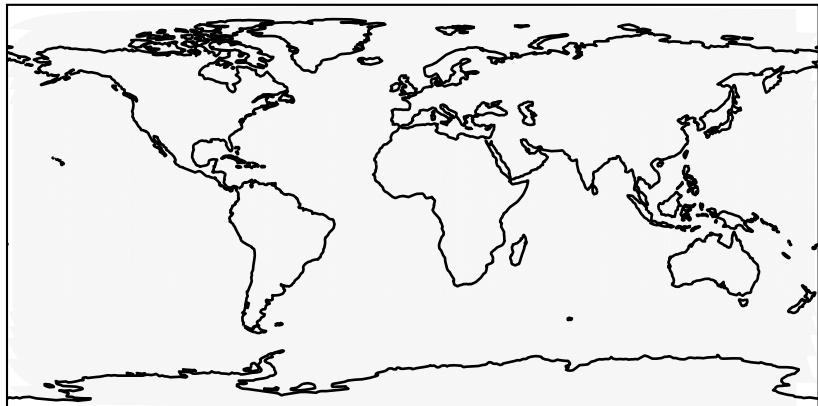
GCHP_13.2.0-beta.0 (Ref)
c48



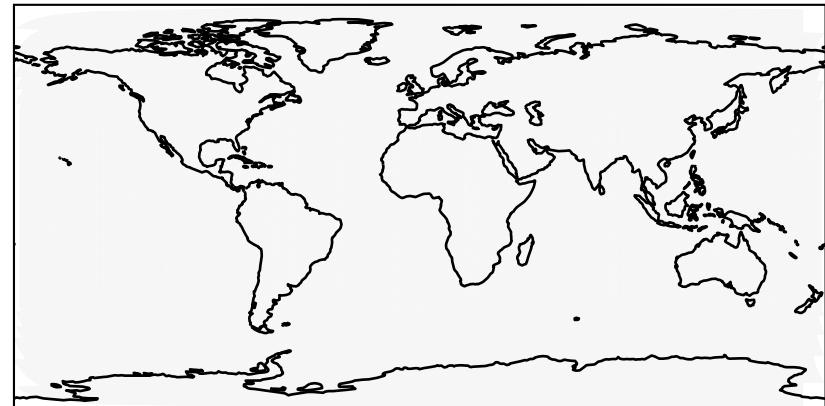
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



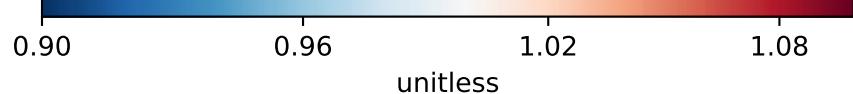
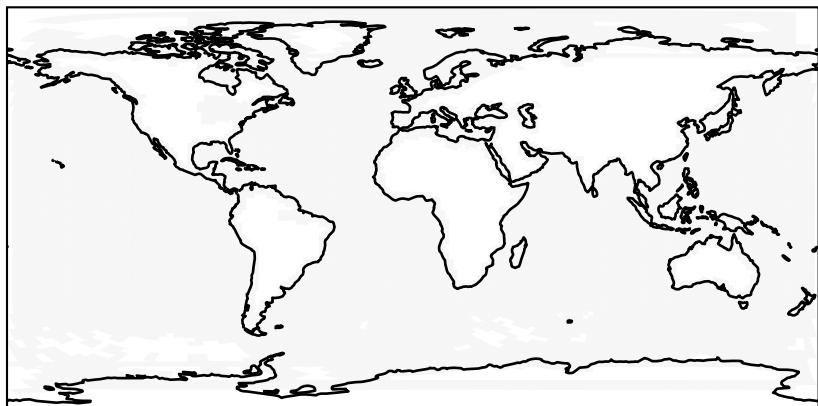
Difference
Dev - Ref, Dynamic Range



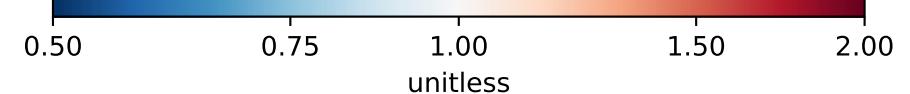
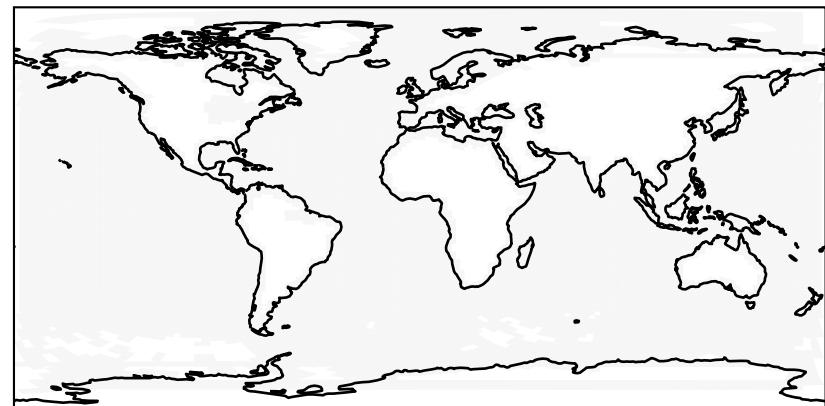
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

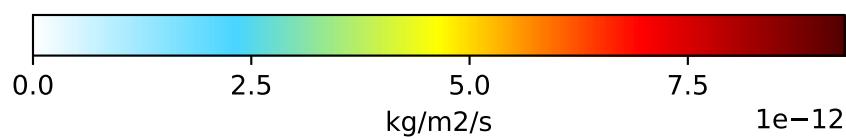
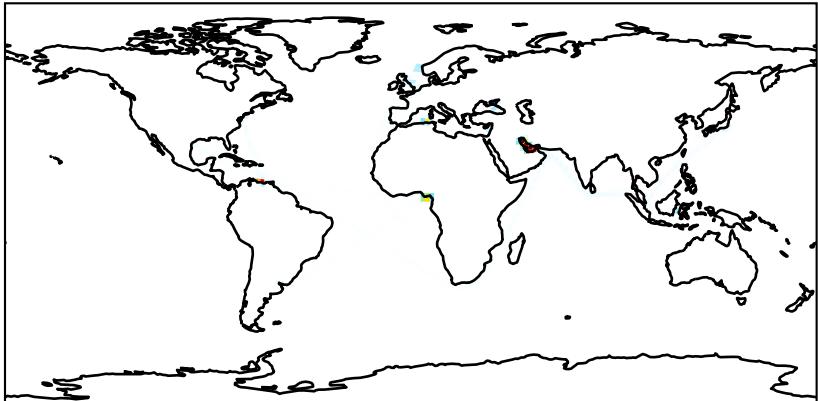


Ratio
Dev/Ref, Fixed Range

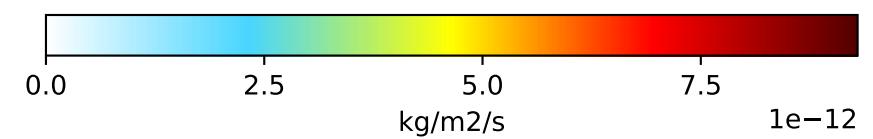
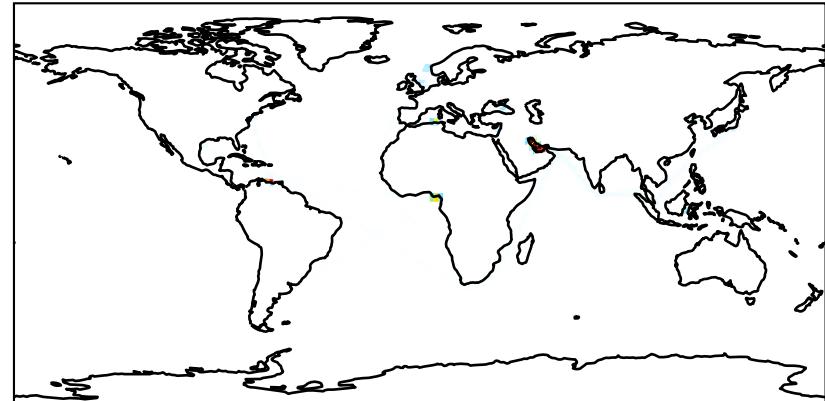


EmisC2H6_Ship

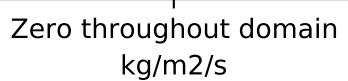
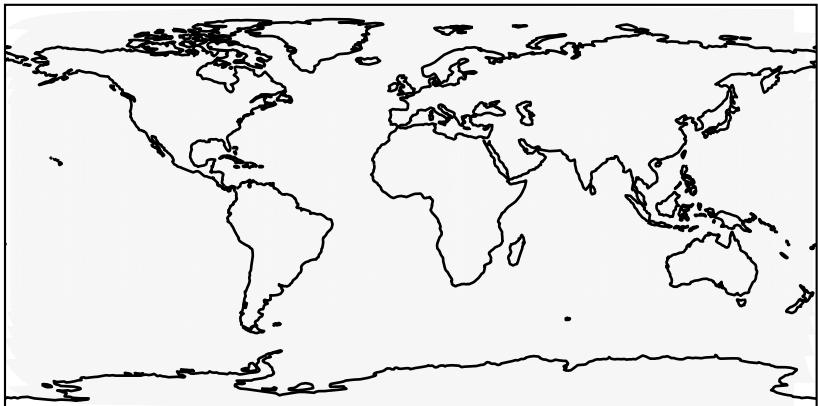
GCHP_13.2.0-beta.0 (Ref)
c48



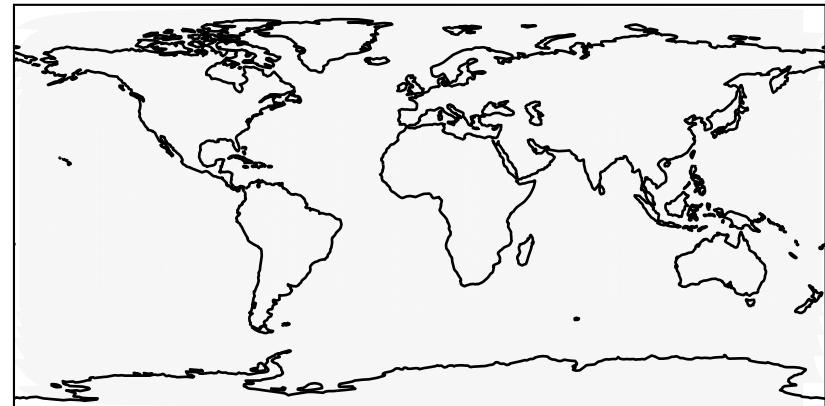
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



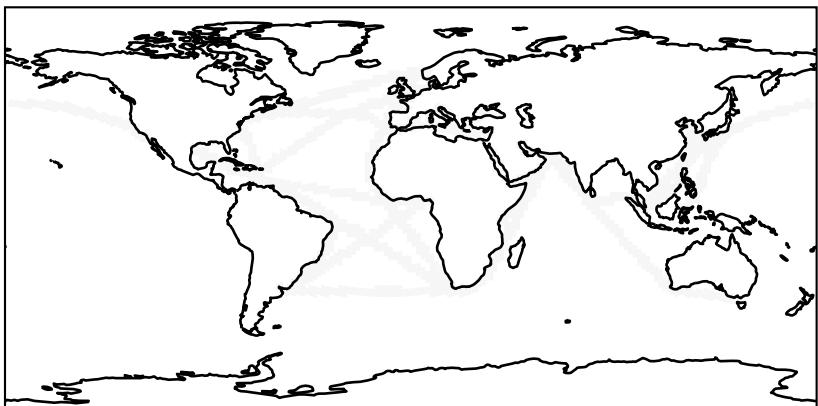
Difference
Dev - Ref, Dynamic Range



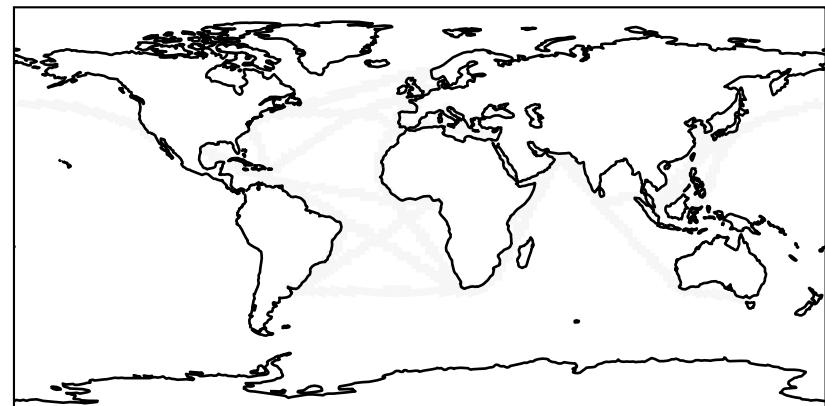
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

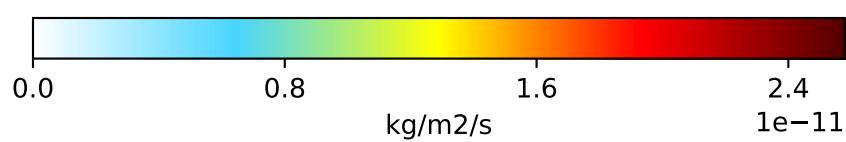
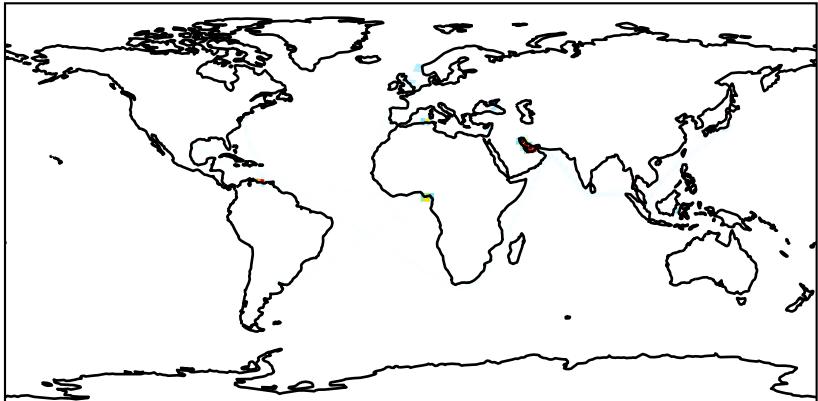


Ratio
Dev/Ref, Fixed Range

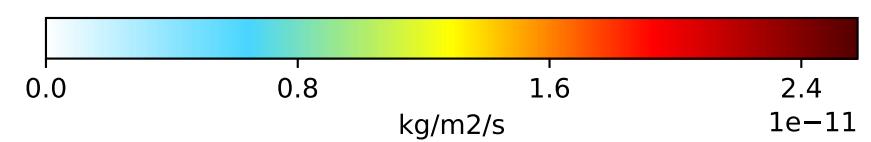
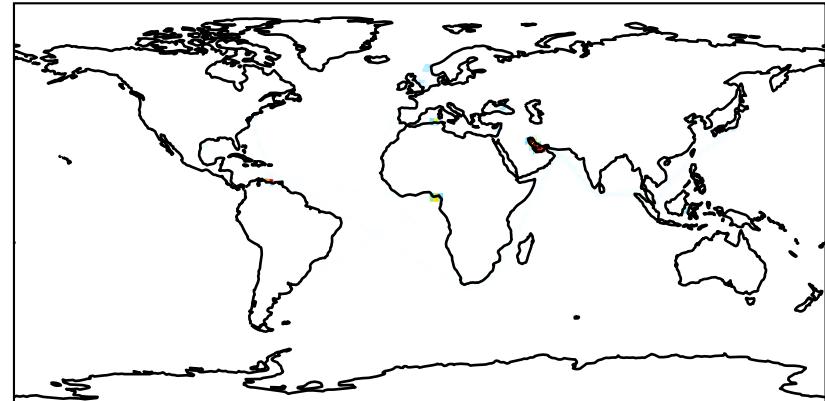


EmisC3H8_Ship

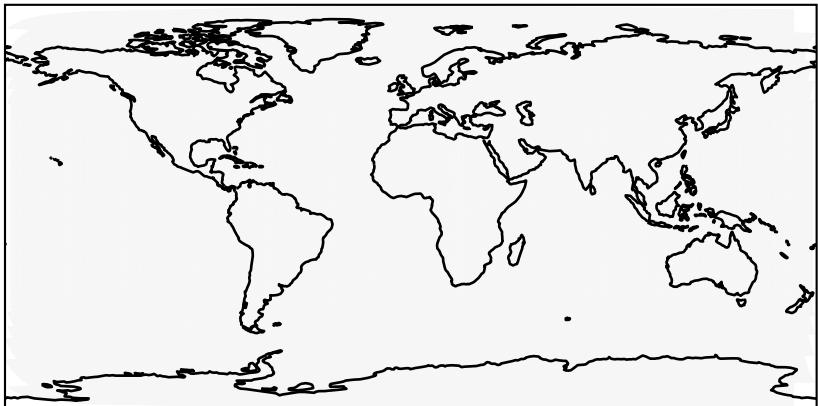
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

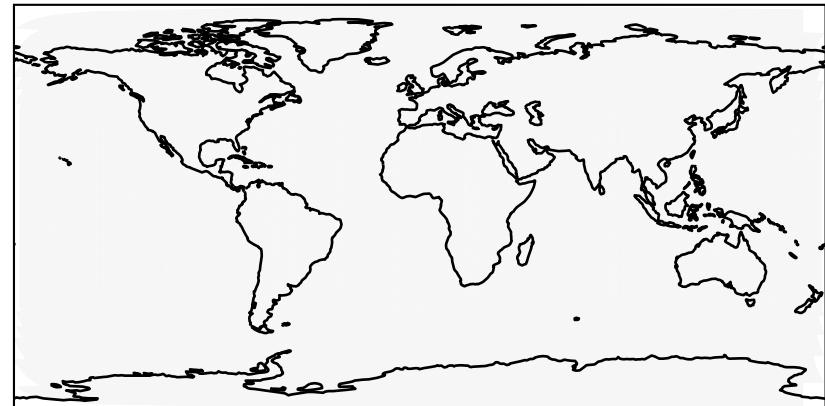


Difference
Dev - Ref, Dynamic Range



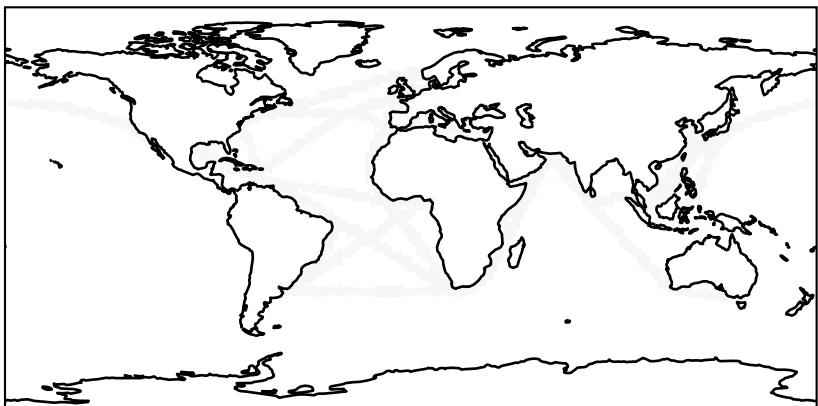
Zero throughout domain
kg/m²/s

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



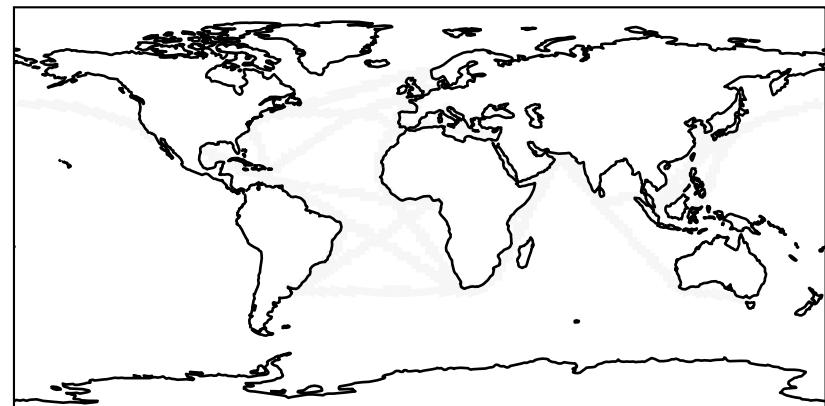
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

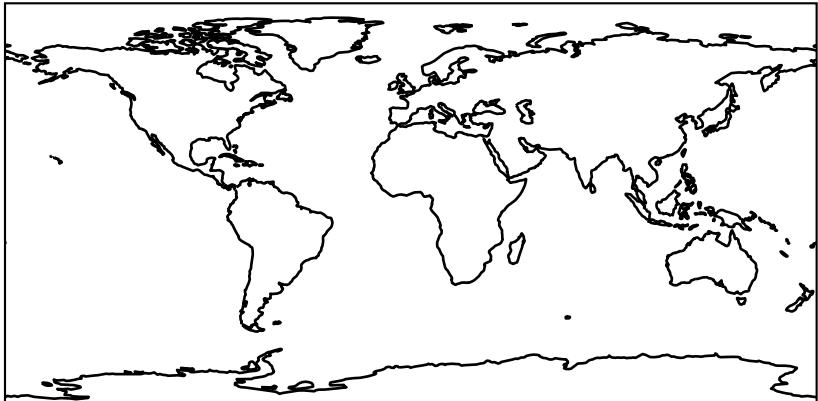
Ratio
Dev/Ref, Fixed Range



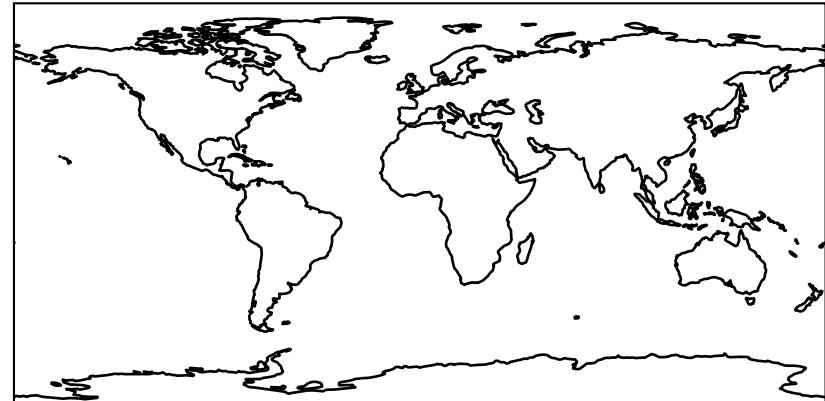
0.50 0.75 1.00 1.50 2.00
unitless

EmisCH2O_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



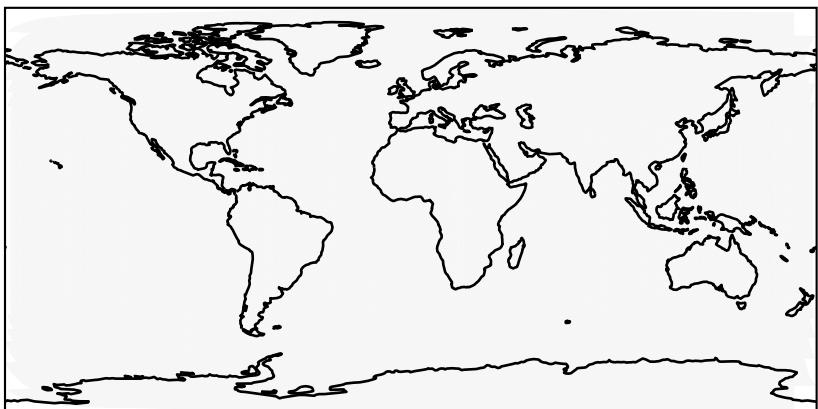
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



Zero throughout domain
kg/m²/s

Zero throughout domain
kg/m²/s

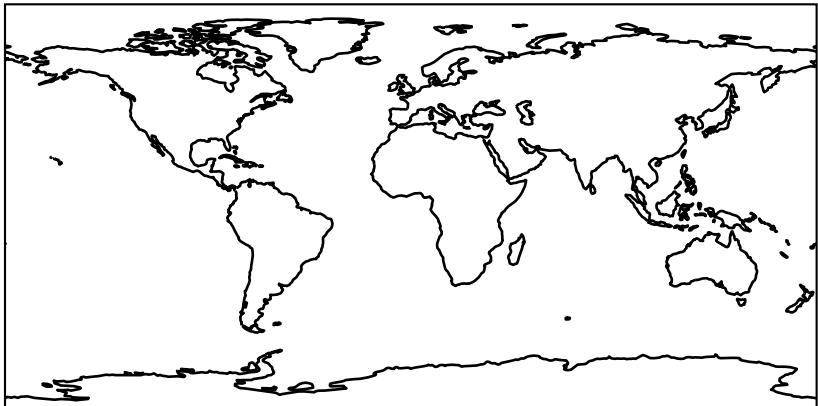
Difference
Dev - Ref, Dynamic Range



Zero throughout domain
kg/m²/s

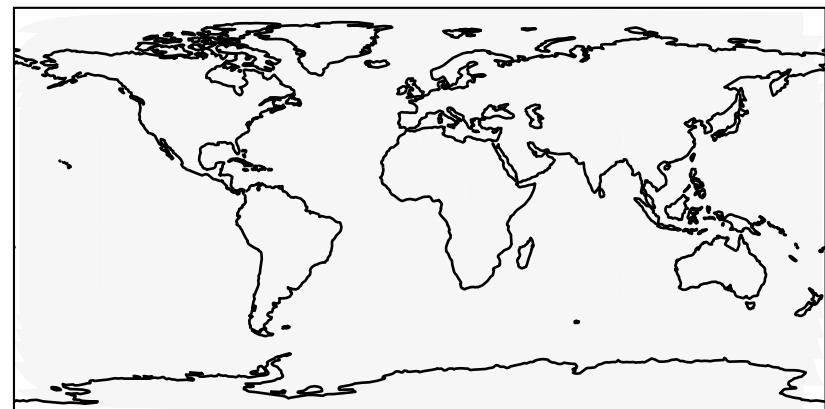
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



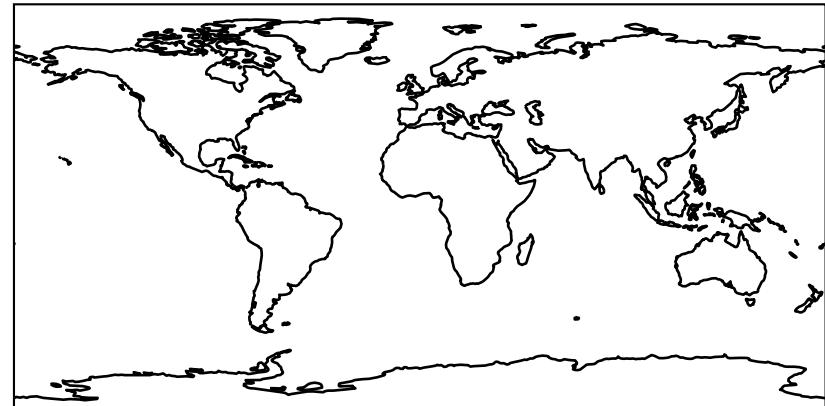
Undefined throughout domain
unitless

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



Zero throughout domain
kg/m²/s

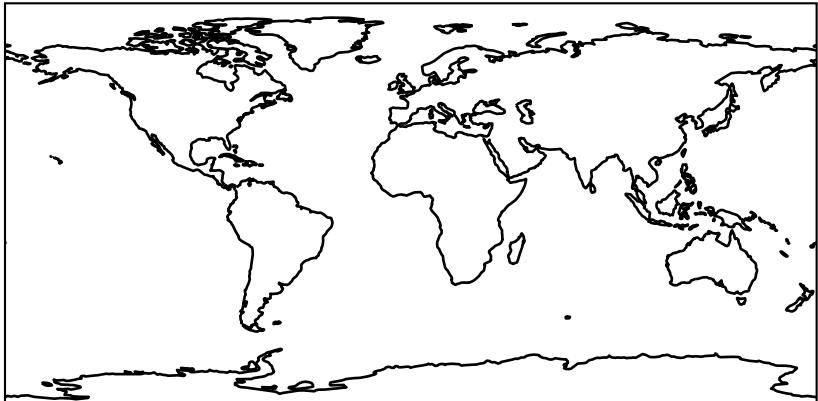
Ratio
Dev/Ref, Fixed Range



Undefined throughout domain
unitless

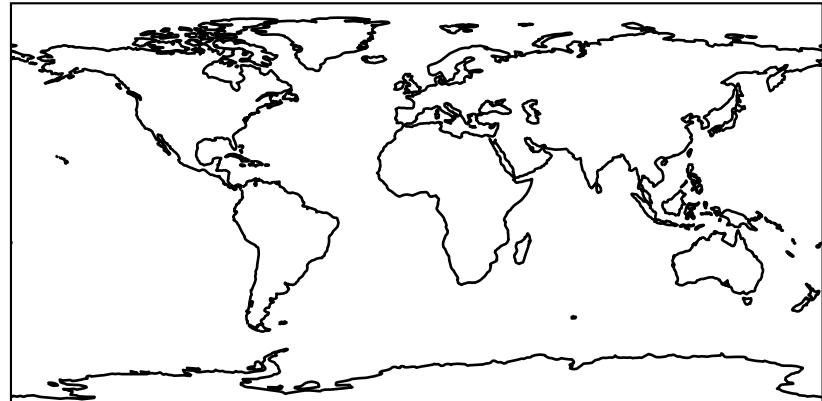
EmisCO2_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



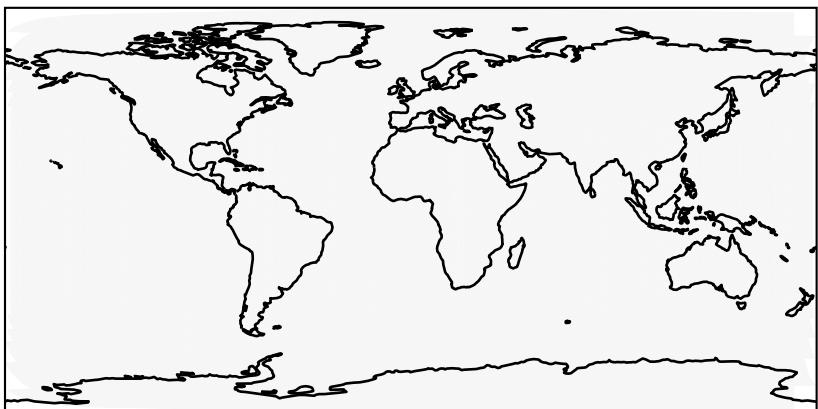
Zero throughout domain
kg/m²/s

GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



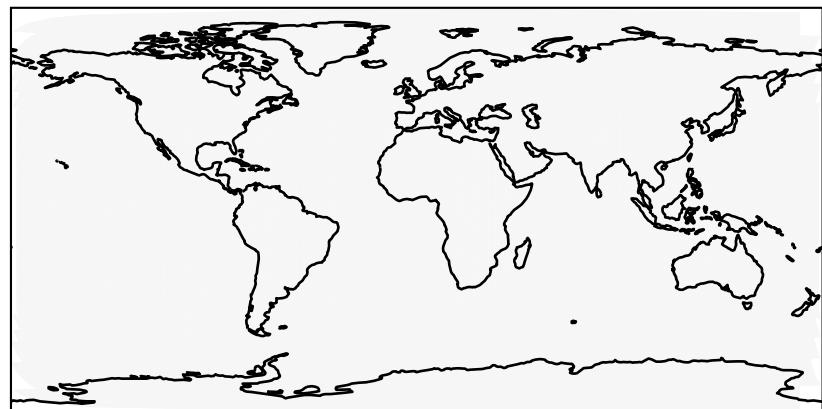
Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



Zero throughout domain
kg/m²/s

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



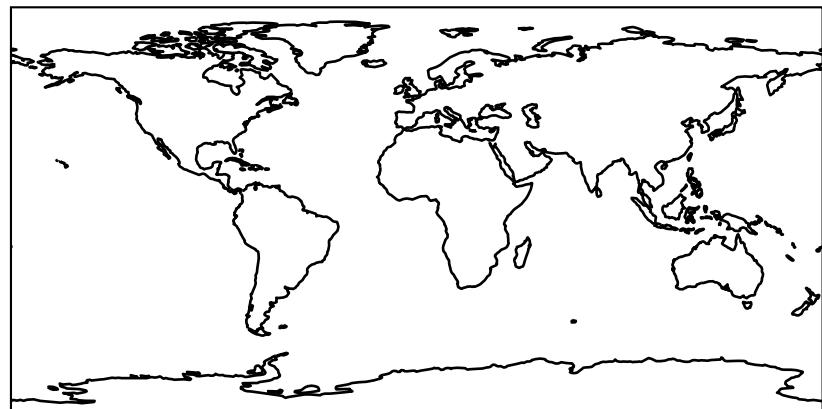
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



Undefined throughout domain
unitless

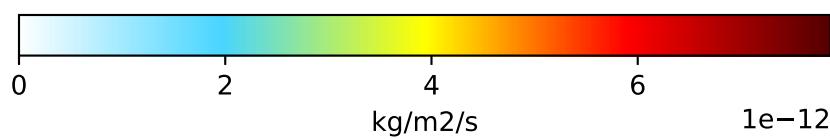
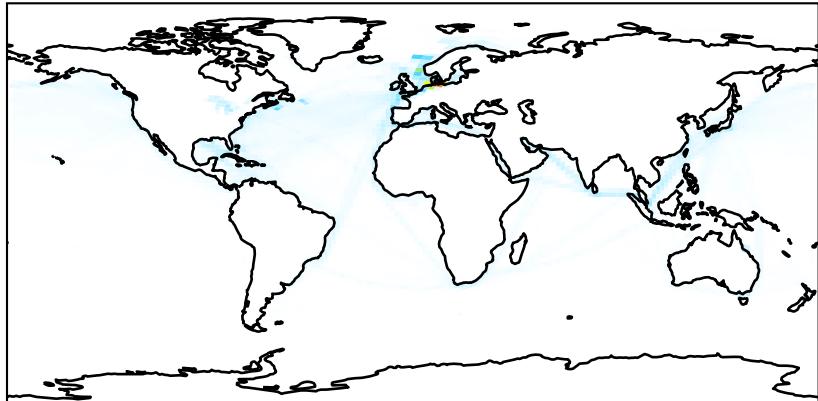
Ratio
Dev/Ref, Fixed Range



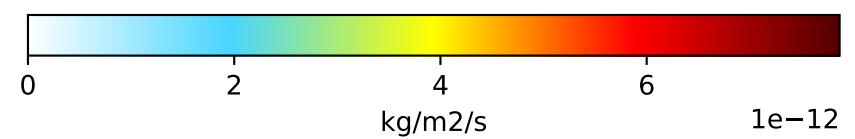
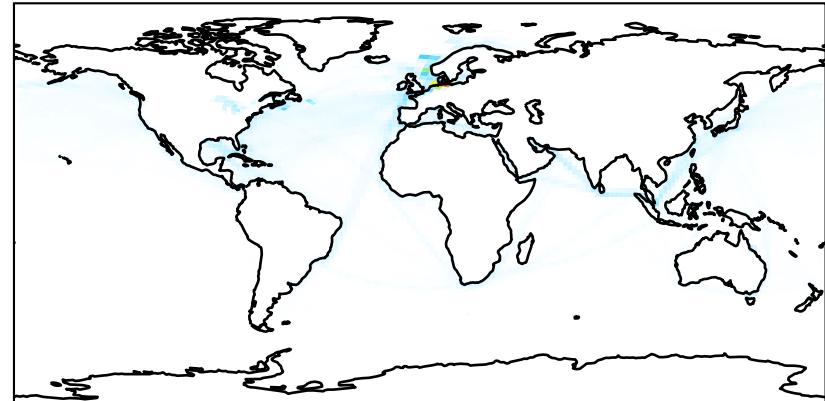
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unitless

EmisCO_Ship

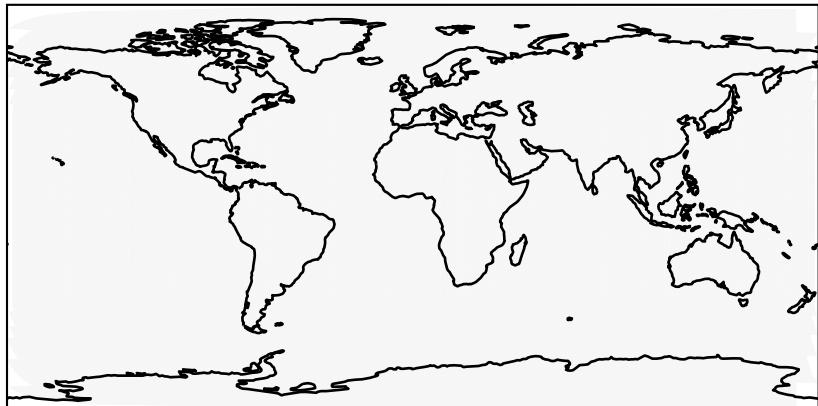
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

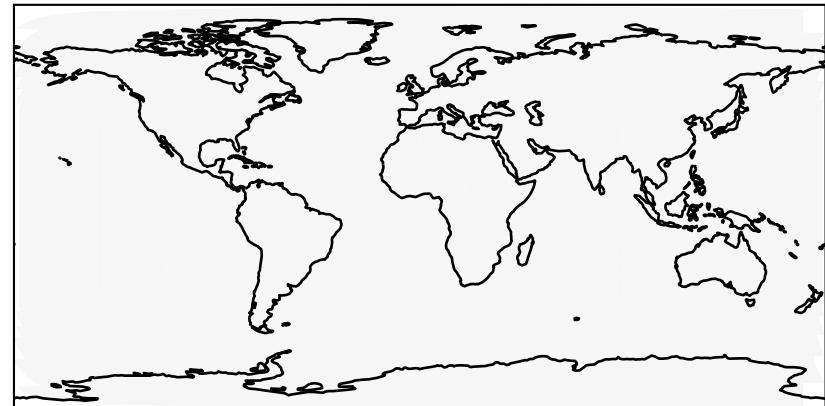


Difference
Dev - Ref, Dynamic Range



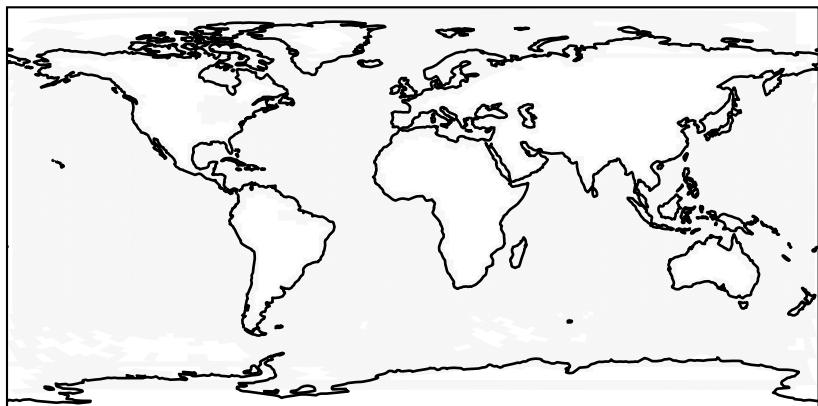
Zero throughout domain
kg/m2/s

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



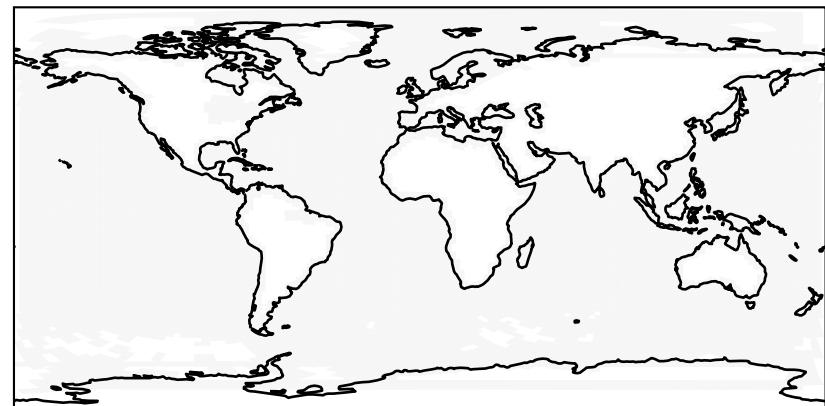
Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

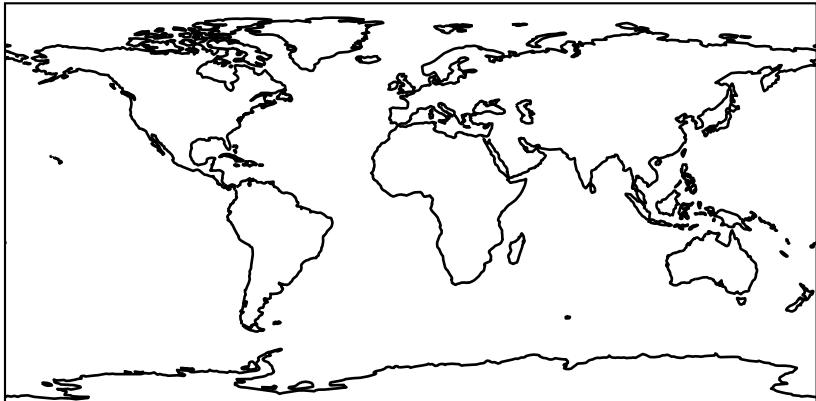
Ratio
Dev/Ref, Fixed Range



0.50 0.75 1.00 1.50 2.00
unitless

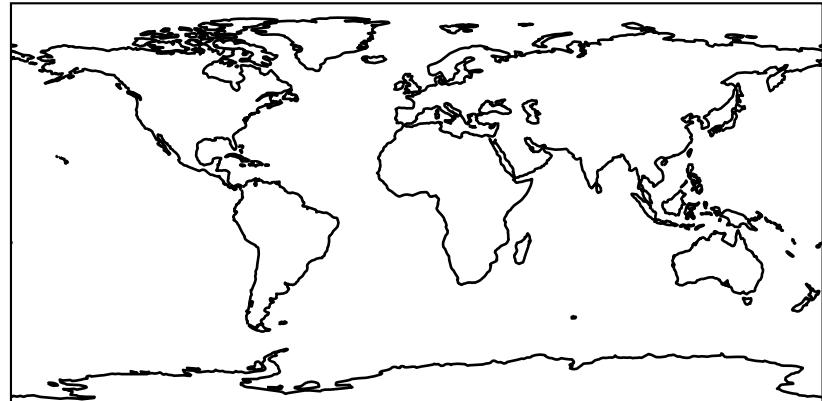
EmisEOH_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



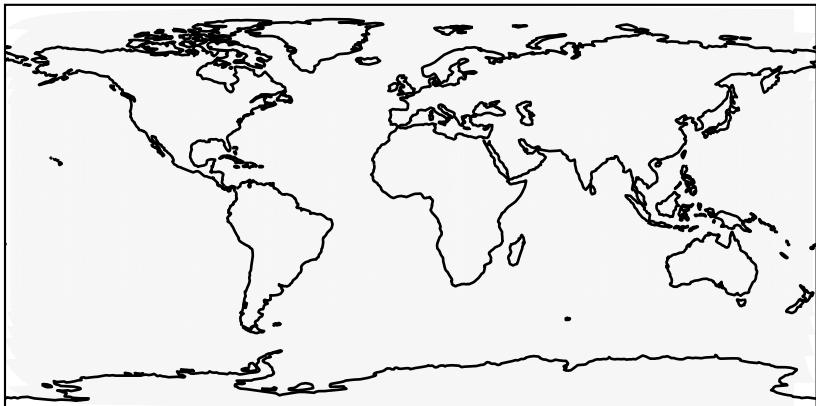
Zero throughout domain
kg/m²/s

GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



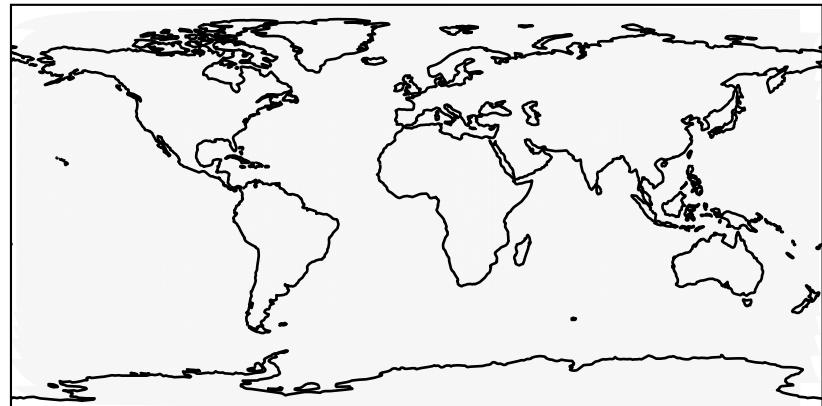
Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



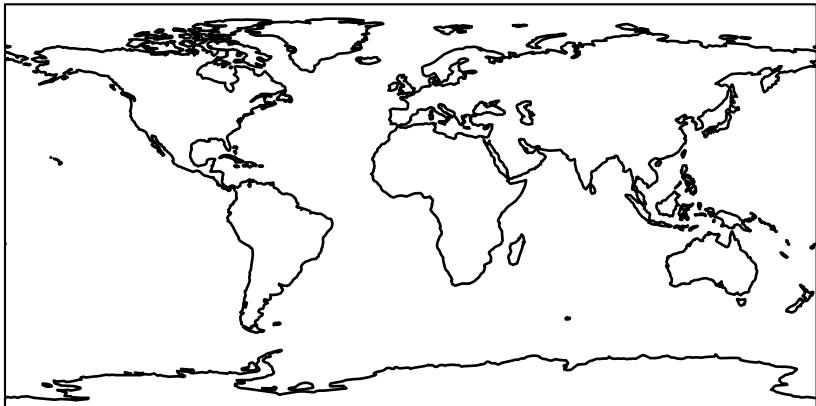
Zero throughout domain
kg/m²/s

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



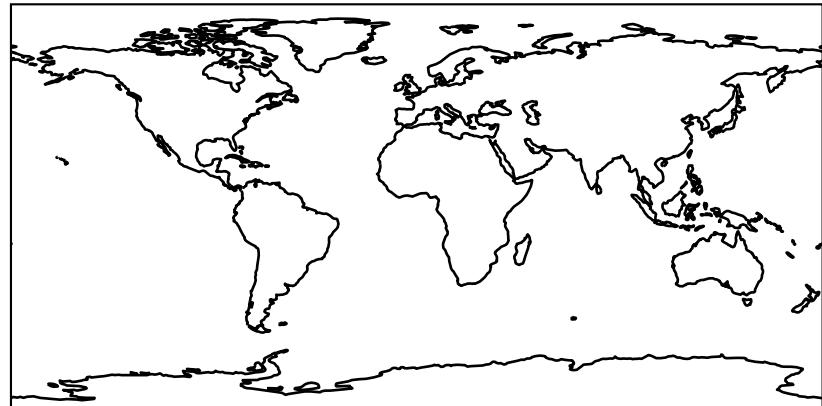
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range



Undefined throughout domain
unitless

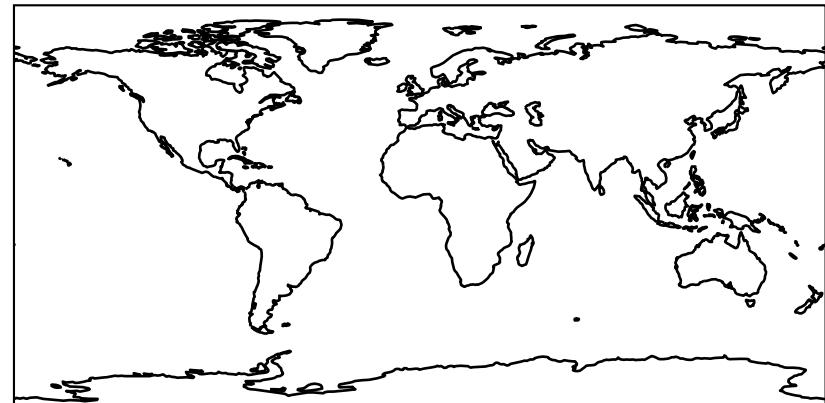
EmisHCOOH_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



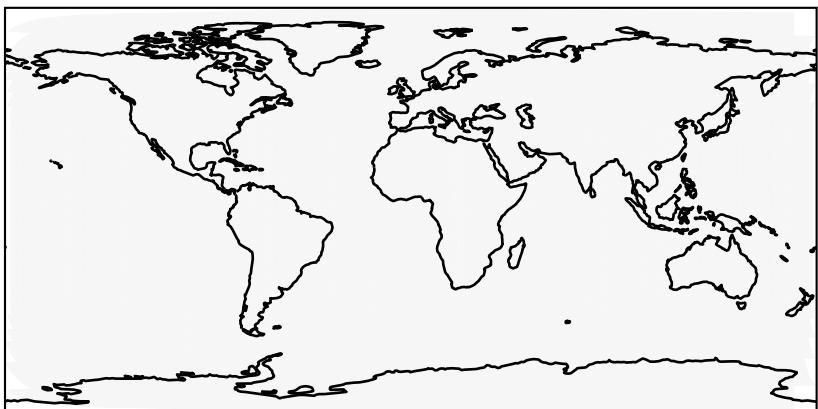
Zero throughout domain
kg/m²/s

GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



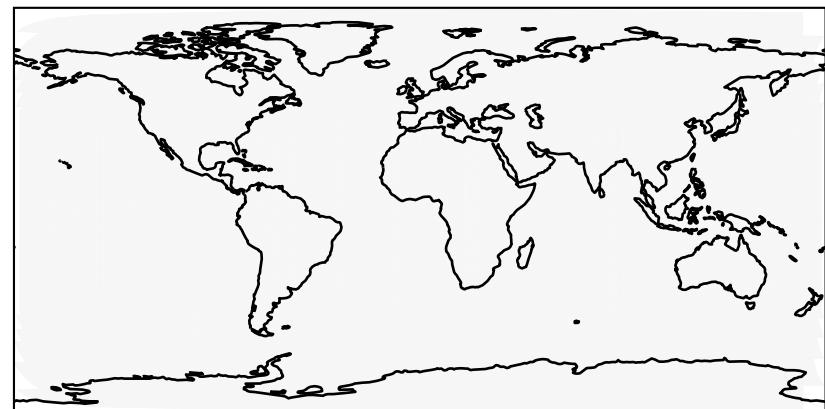
Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



Zero throughout domain
kg/m²/s

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



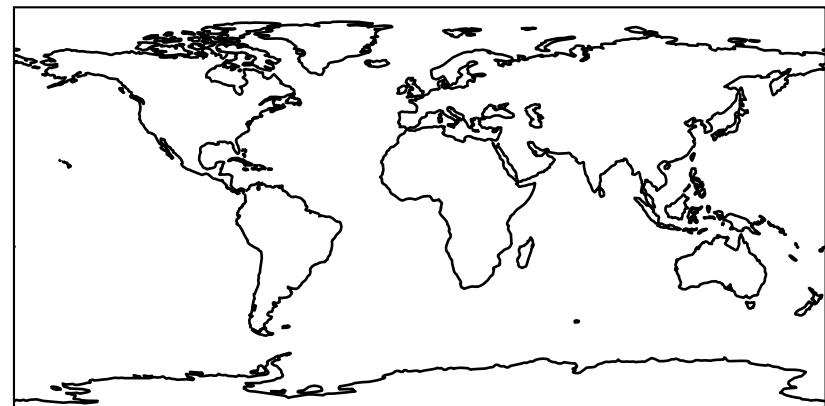
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



Undefined throughout domain
unitless

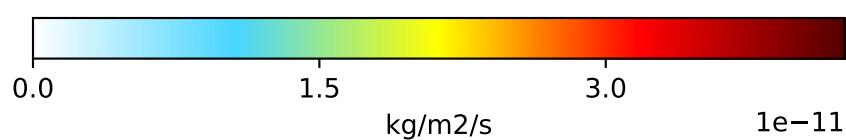
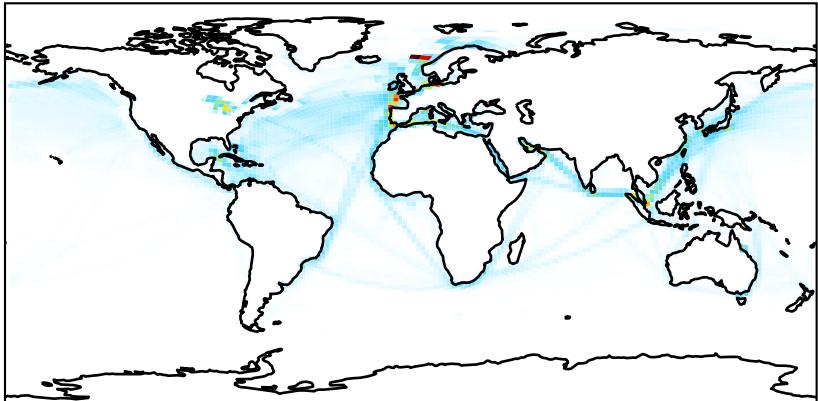
Ratio
Dev/Ref, Fixed Range



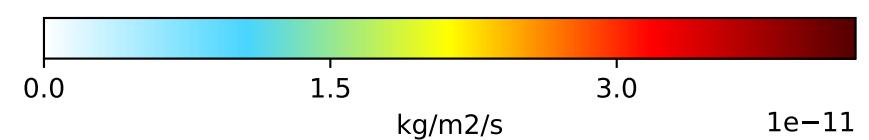
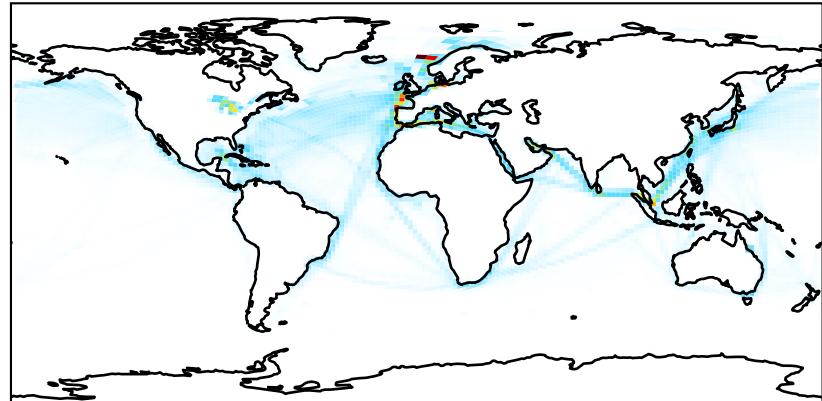
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EmisHNO3_Ship

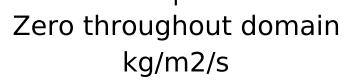
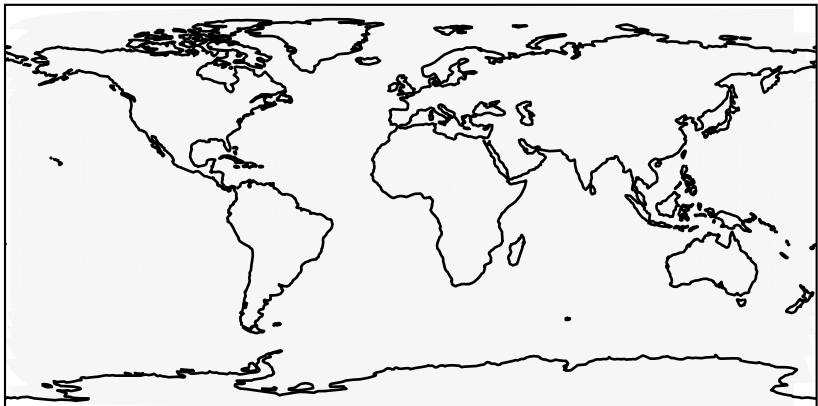
GCHP_13.2.0-beta.0 (Ref)
c48



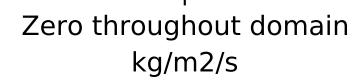
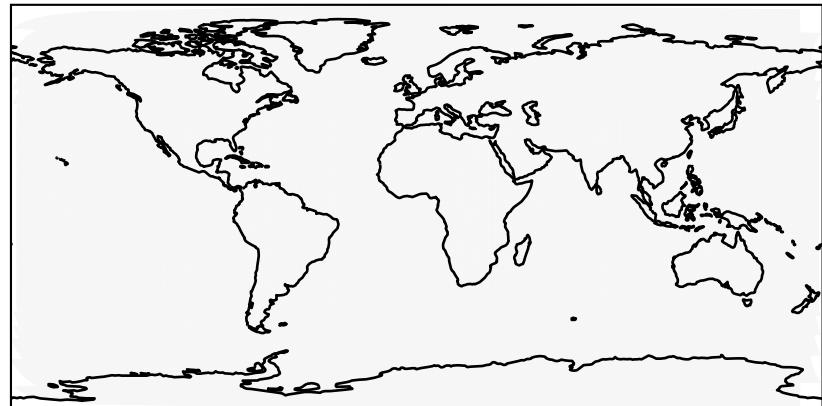
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



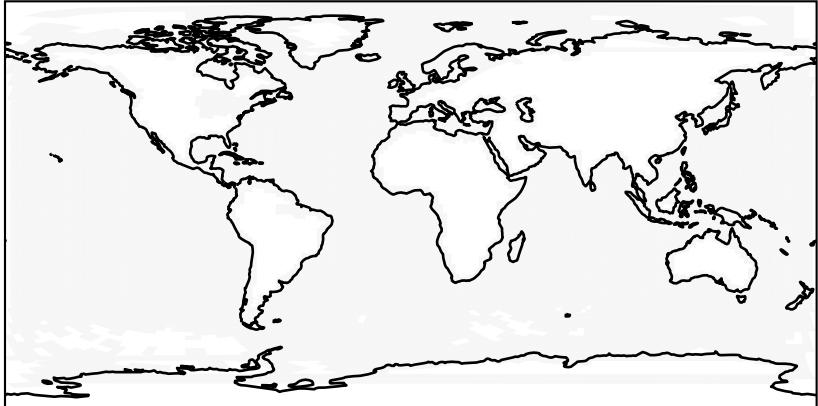
Difference
Dev - Ref, Dynamic Range



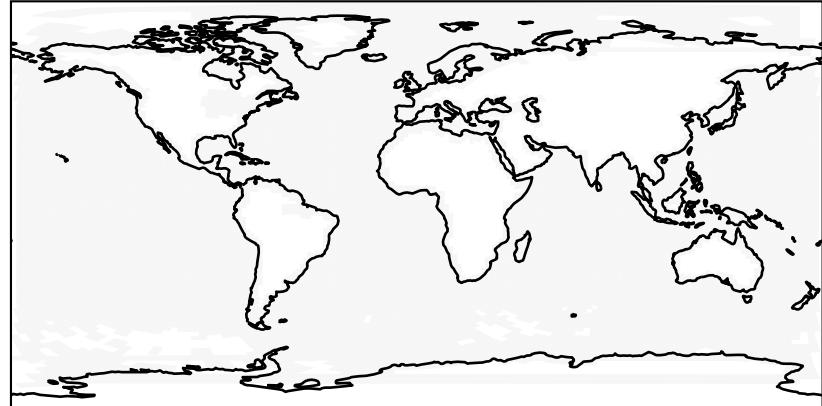
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

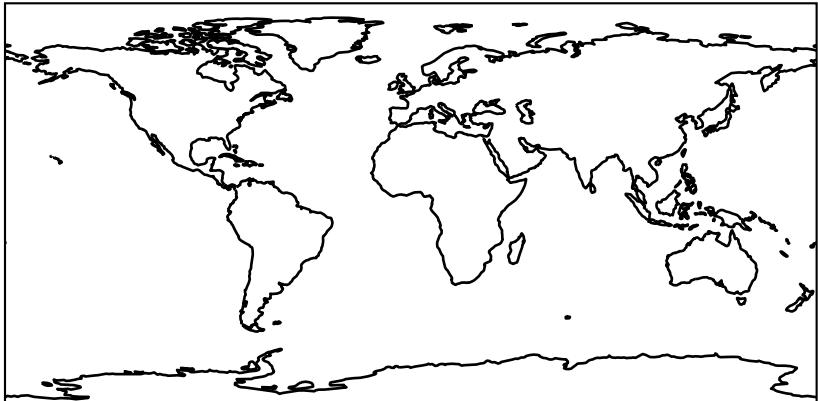


Ratio
Dev/Ref, Fixed Range

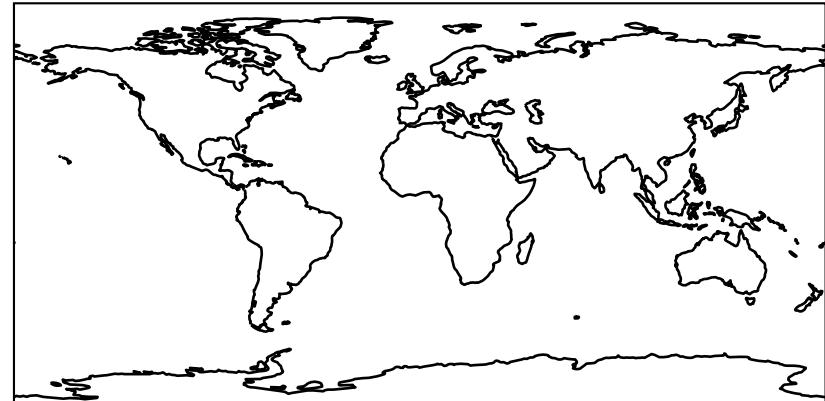


EmisMEK_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



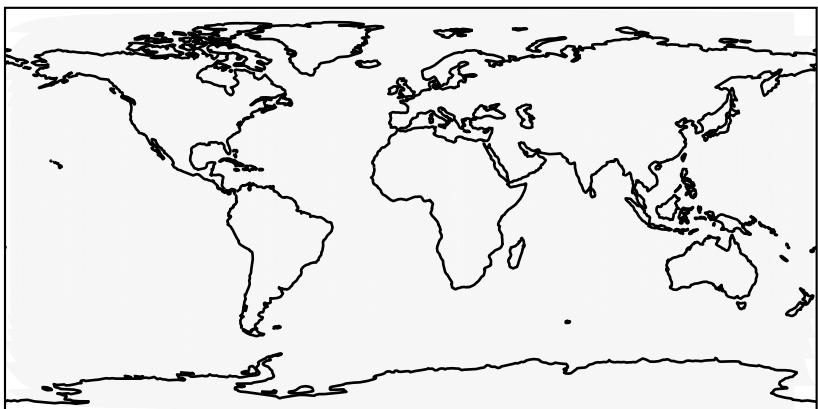
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



Zero throughout domain
kg/m²/s

Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



Zero throughout domain
kg/m²/s

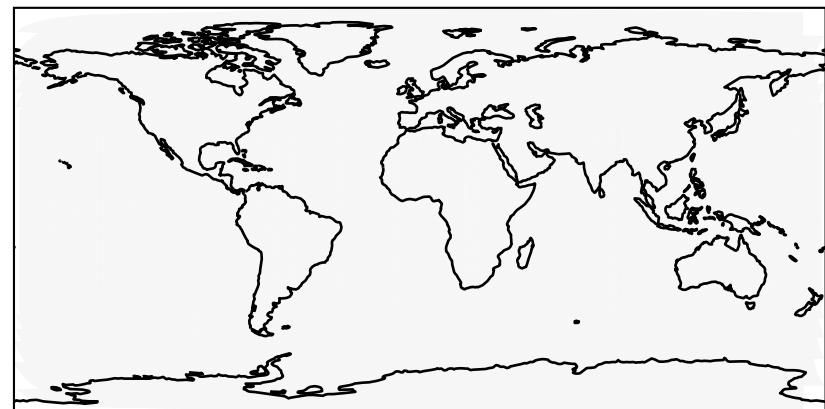
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



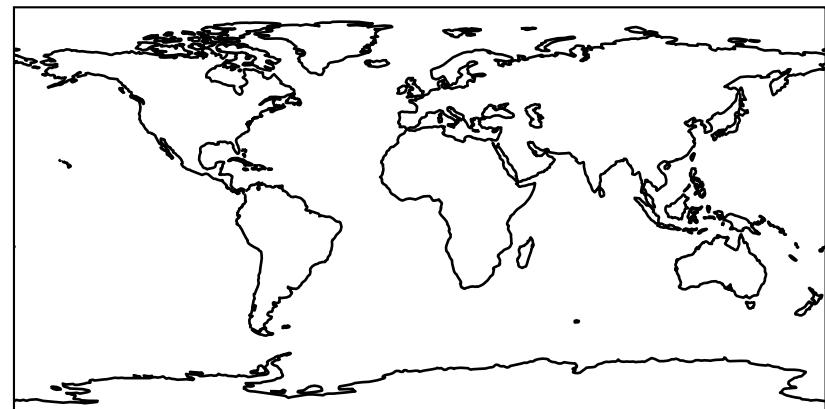
Undefined throughout domain
unitless

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



Zero throughout domain
kg/m²/s

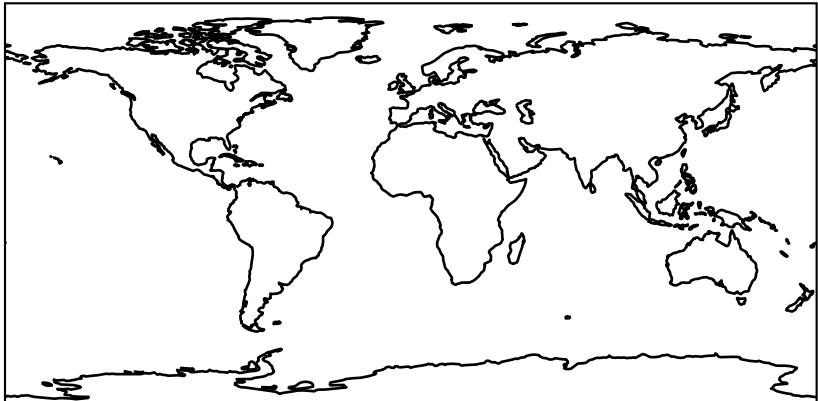
Ratio
Dev/Ref, Fixed Range



Undefined throughout domain
unitless

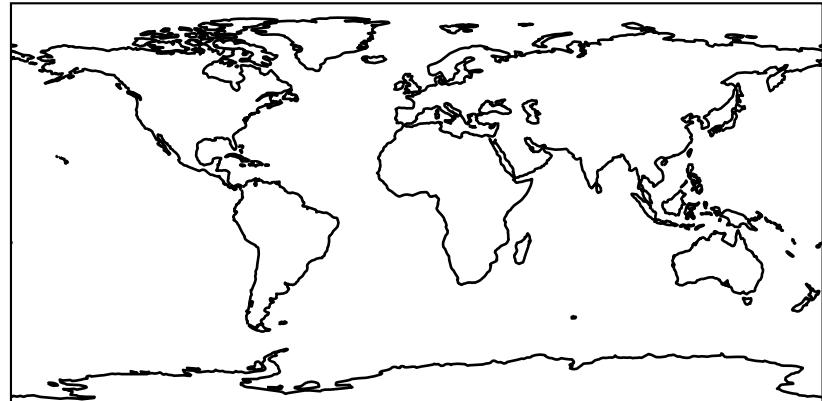
EmisMOH_Ship

GCHP_13.2.0-beta.0 (Ref)
c48



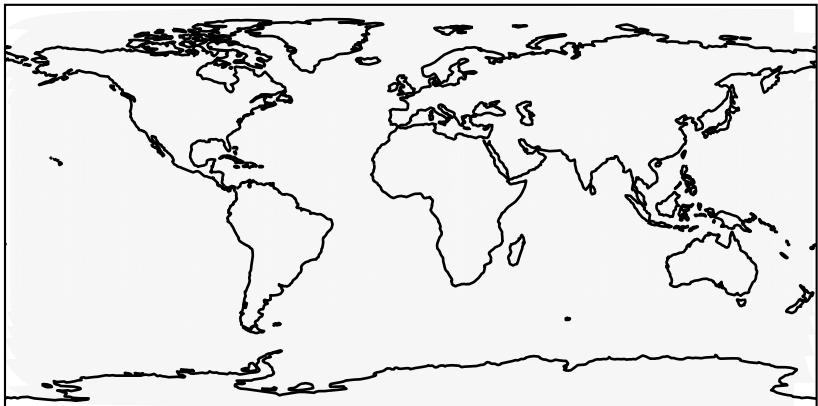
Zero throughout domain
kg/m²/s

GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



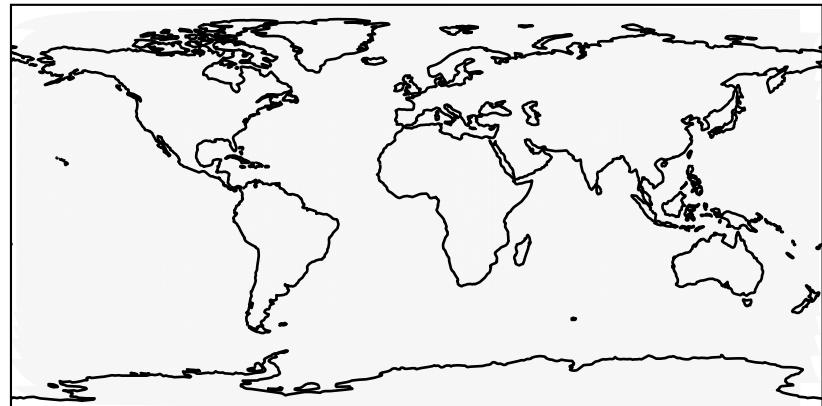
Zero throughout domain
kg/m²/s

Difference
Dev - Ref, Dynamic Range



Zero throughout domain
kg/m²/s

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



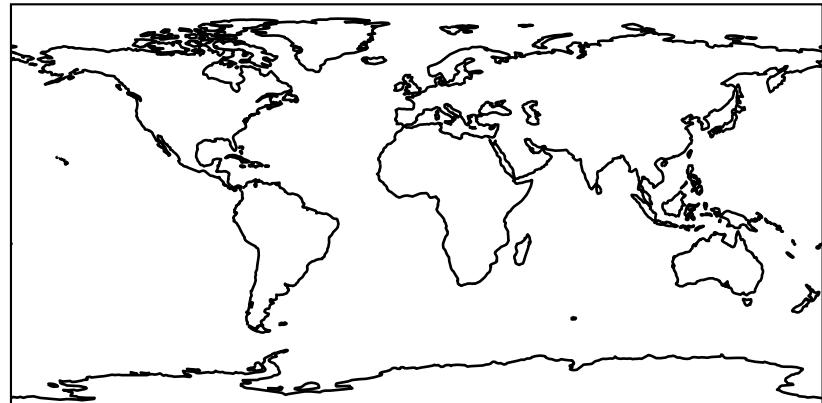
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



Undefined throughout domain
unitless

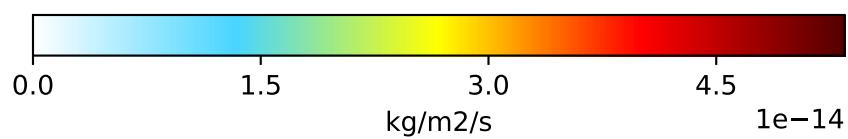
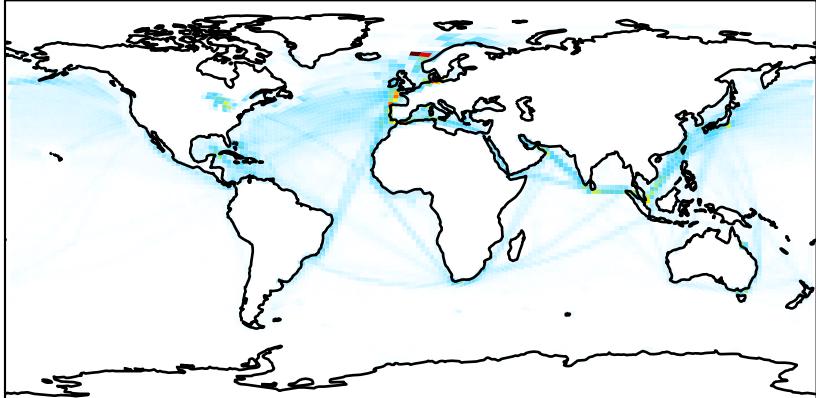
Ratio
Dev/Ref, Fixed Range



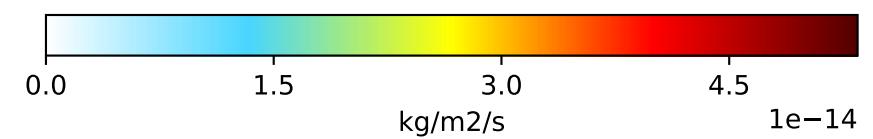
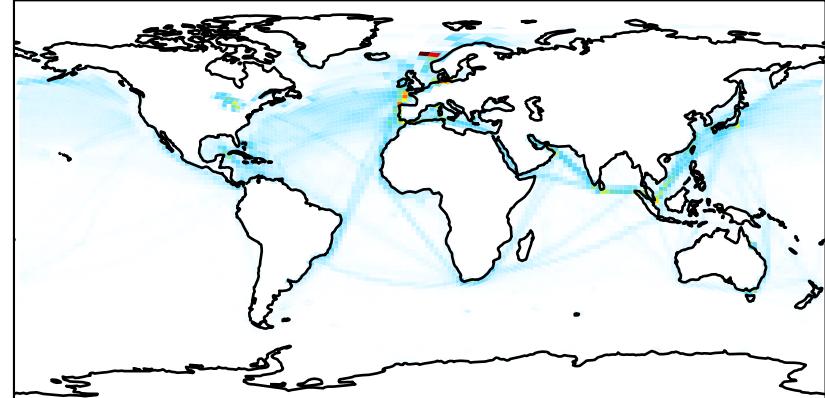
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EmisNH3_Ship

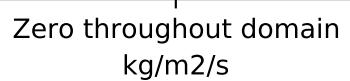
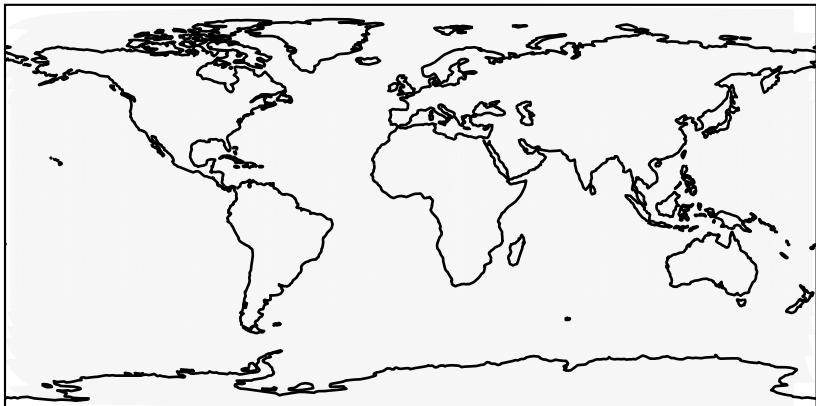
GCHP_13.2.0-beta.0 (Ref)
c48



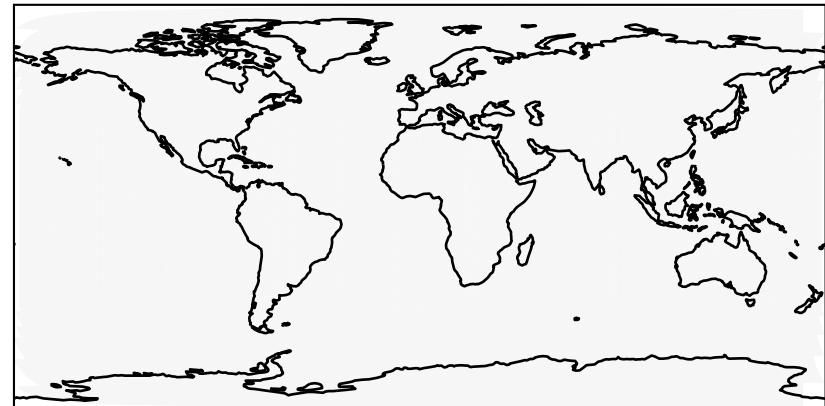
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



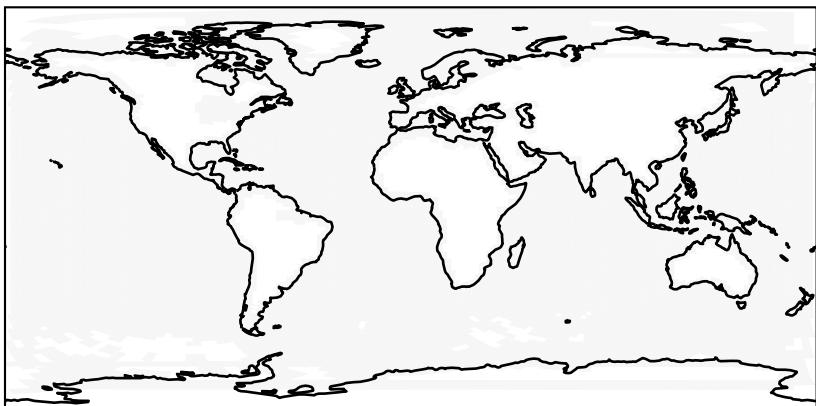
Difference
Dev - Ref, Dynamic Range



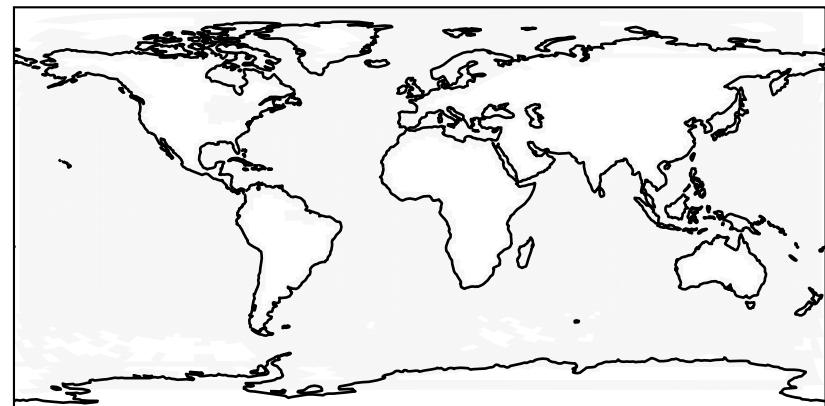
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

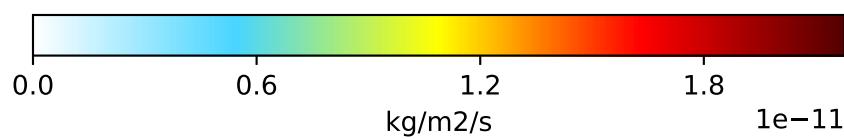
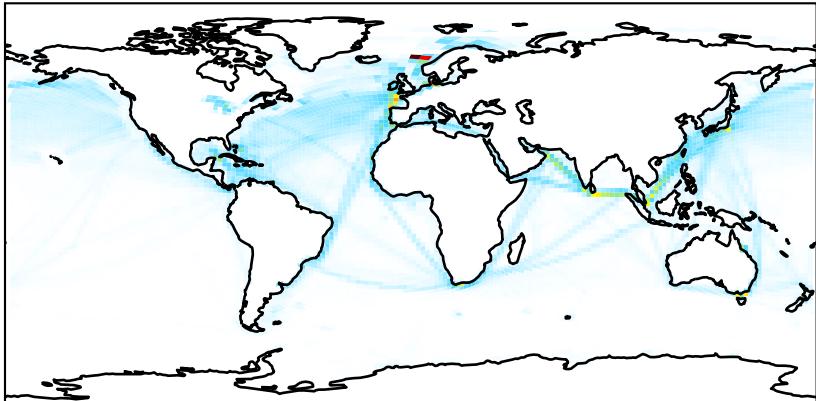


Ratio
Dev/Ref, Fixed Range

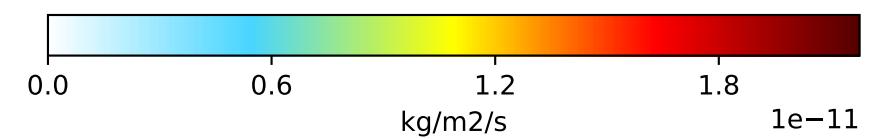
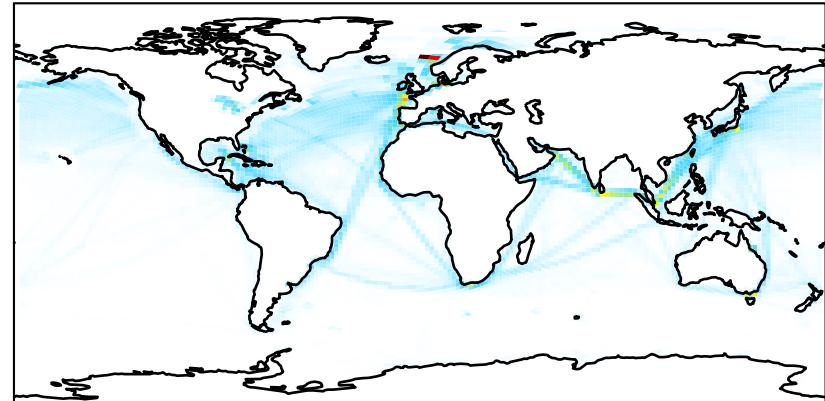


EmisNO2_Ship

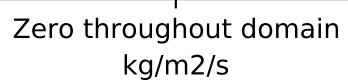
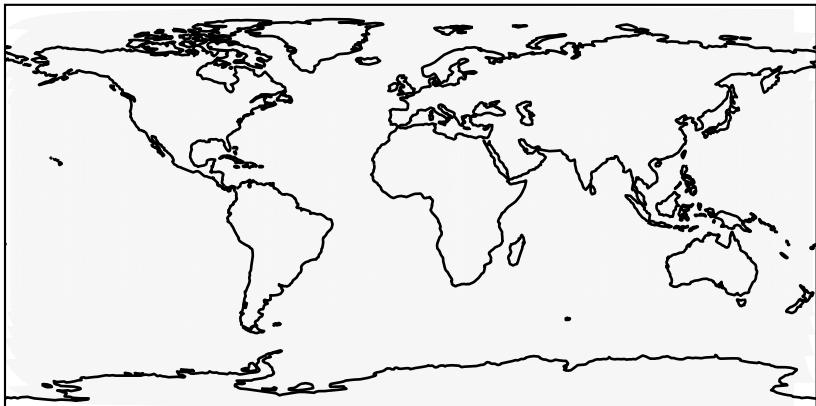
GCHP_13.2.0-beta.0 (Ref)
c48



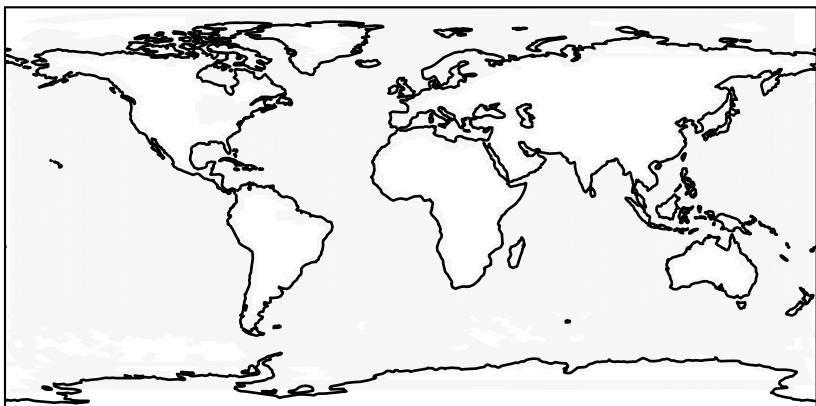
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



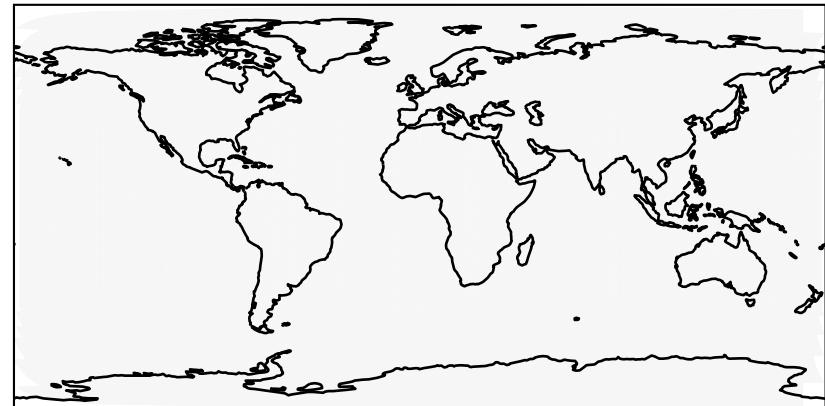
Difference
Dev - Ref, Dynamic Range



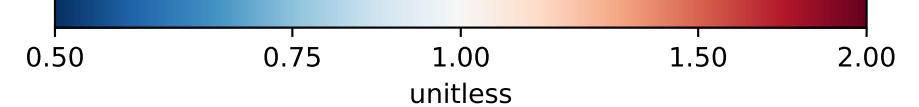
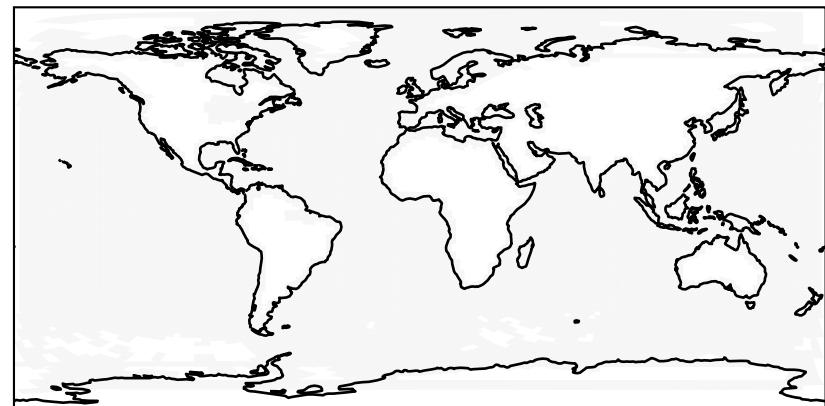
Ratio
Dev/Ref, Dynamic Range



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

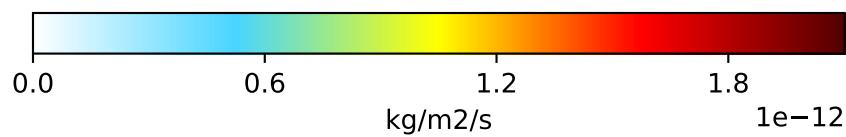
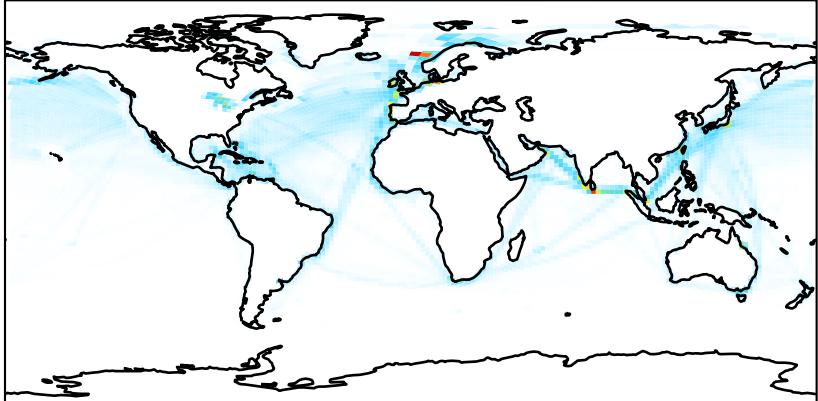


Ratio
Dev/Ref, Fixed Range

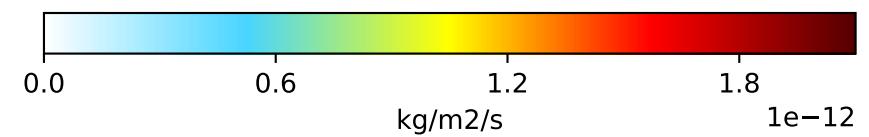
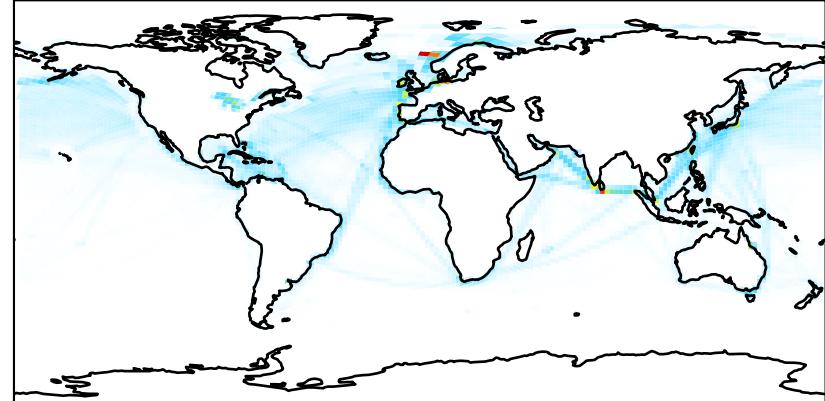


EmisNO_Ship

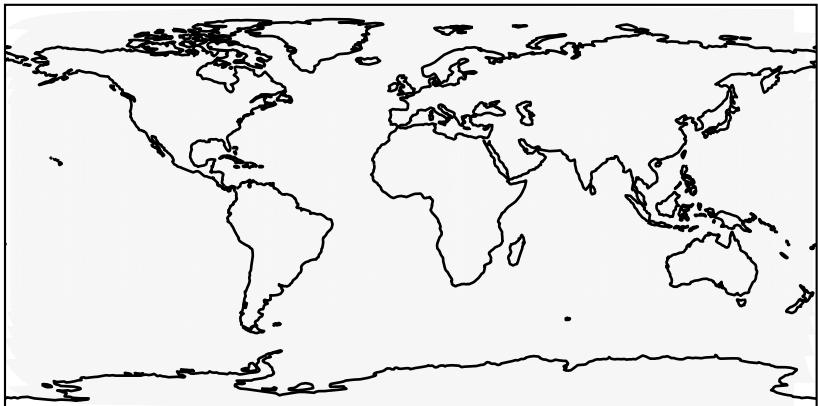
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

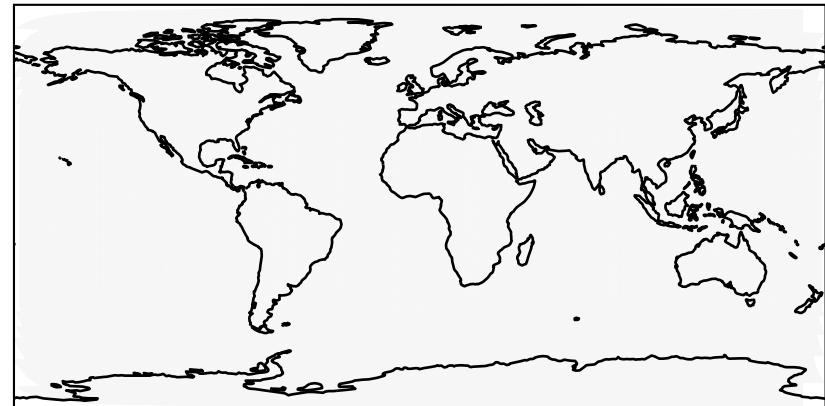


Difference
Dev - Ref, Dynamic Range



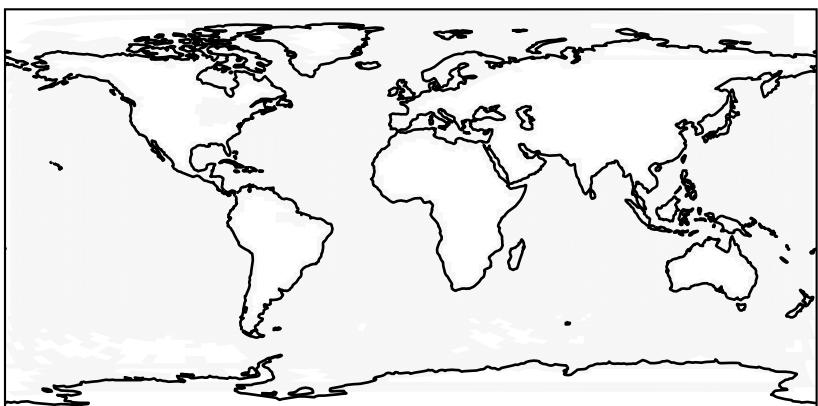
Zero throughout domain
kg/m²/s

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



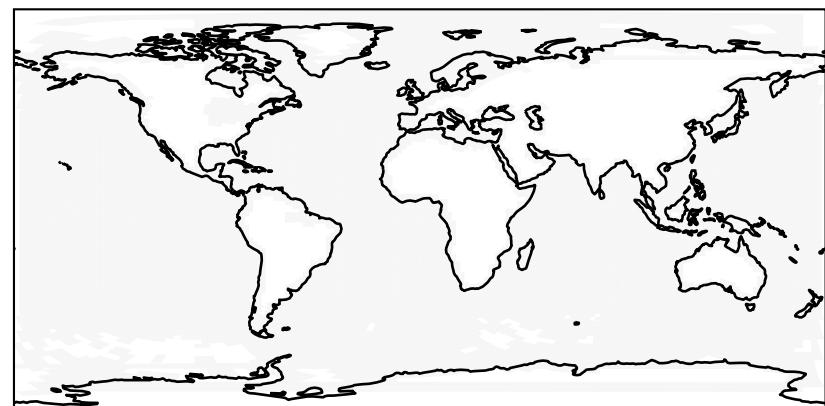
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

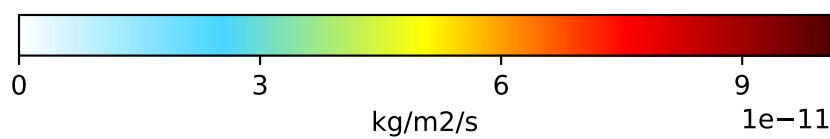
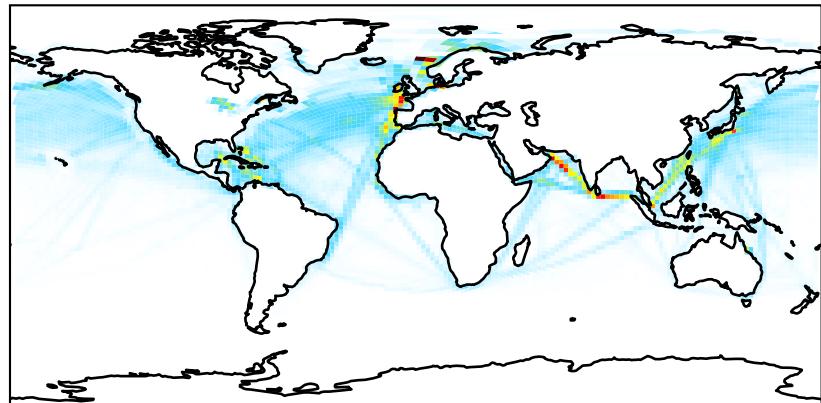
Ratio
Dev/Ref, Fixed Range



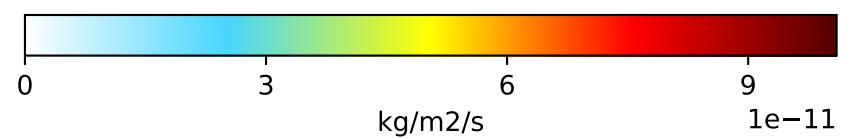
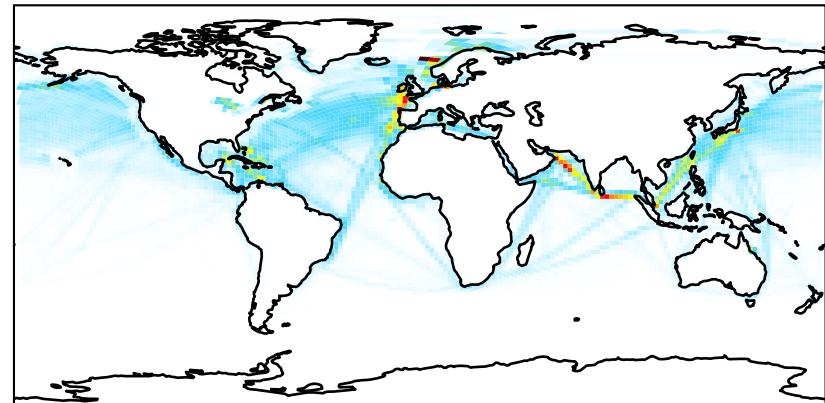
0.50 0.75 1.00 1.50 2.00
unitless

EmisO3_Ship

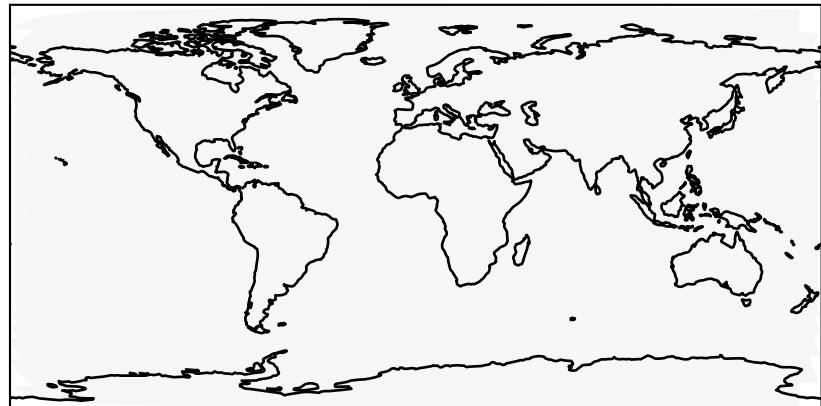
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

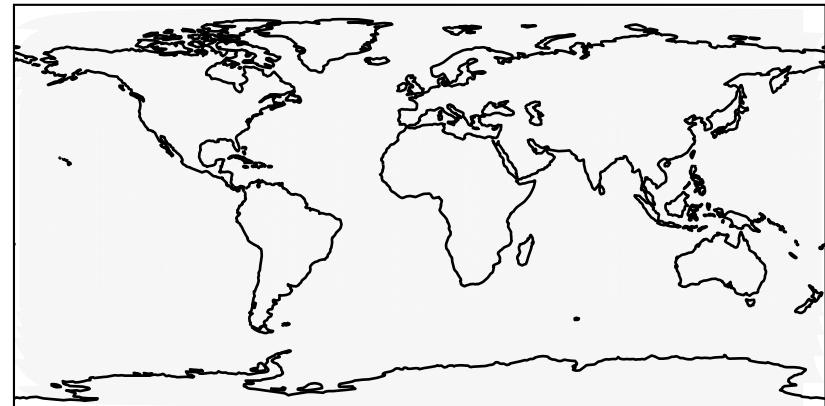


Difference
Dev - Ref, Dynamic Range



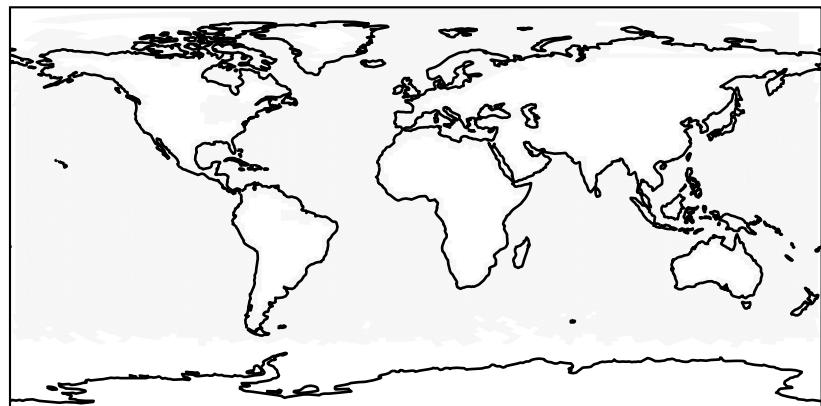
Zero throughout domain
kg/m²/s

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



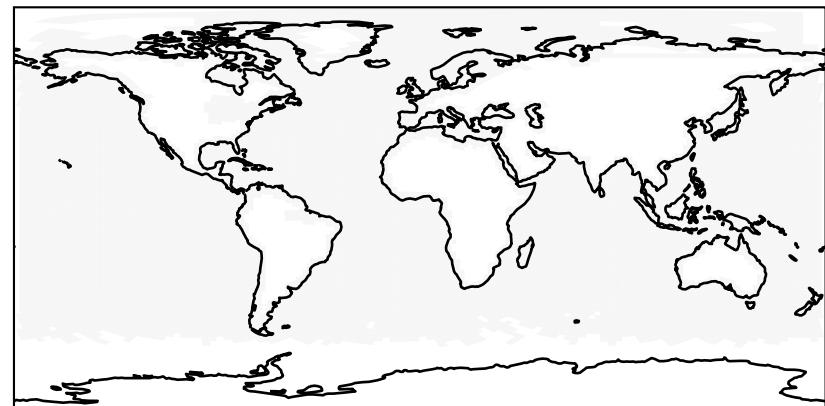
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

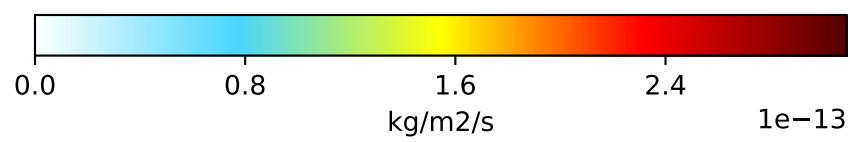
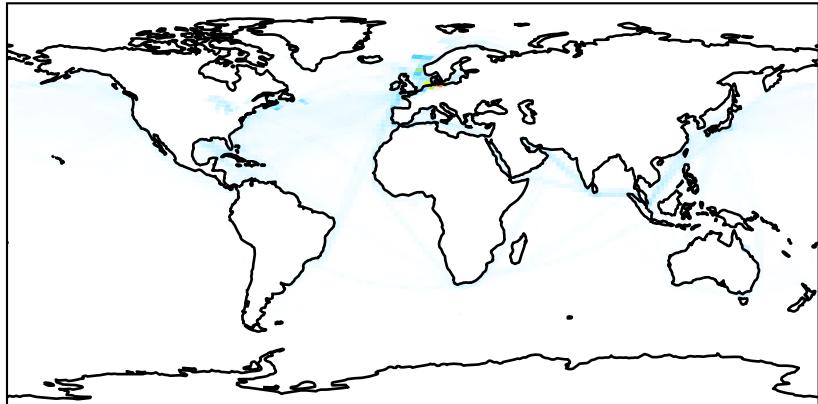
Ratio
Dev/Ref, Fixed Range



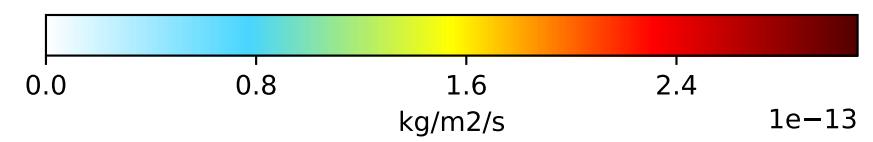
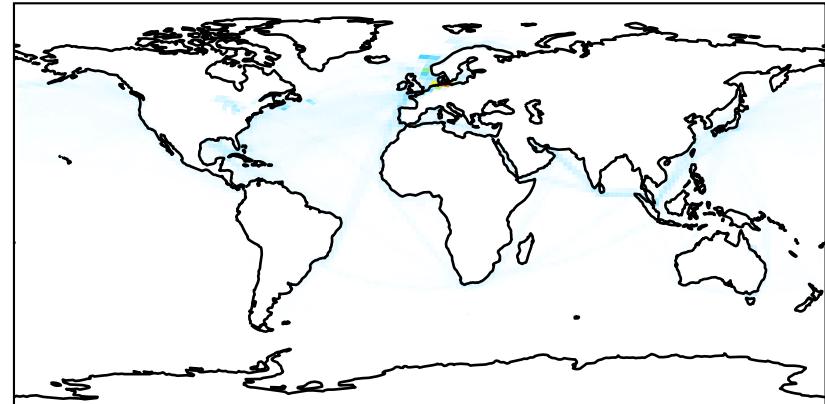
0.50 0.75 1.00 1.50 2.00
unitless

EmisOCPI_Ship

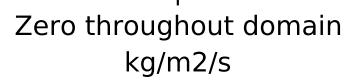
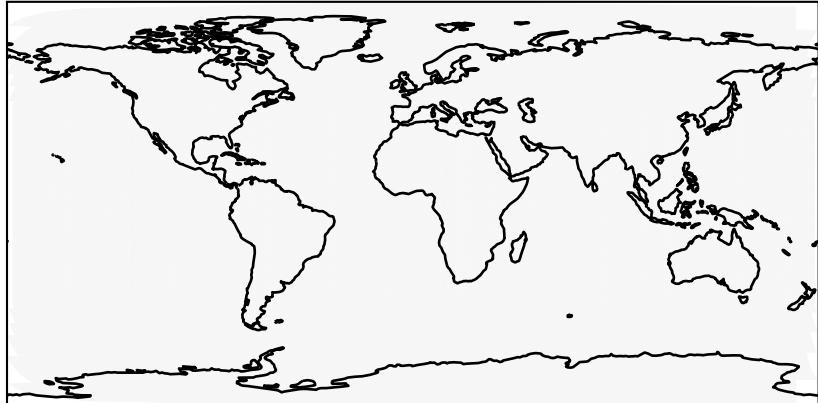
GCHP_13.2.0-beta.0 (Ref)
c48



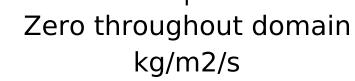
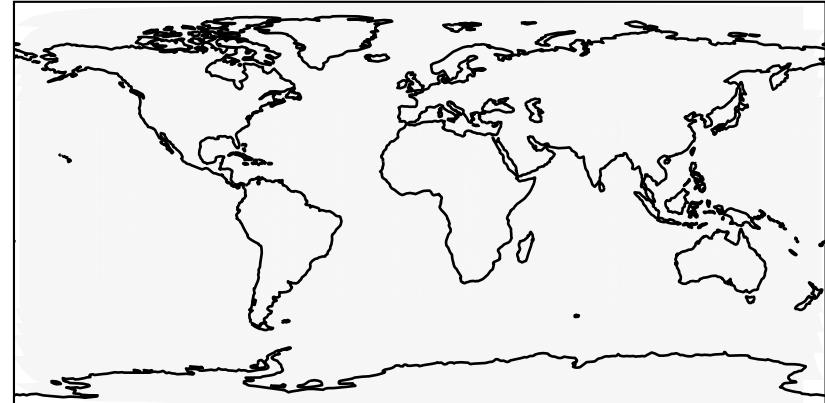
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



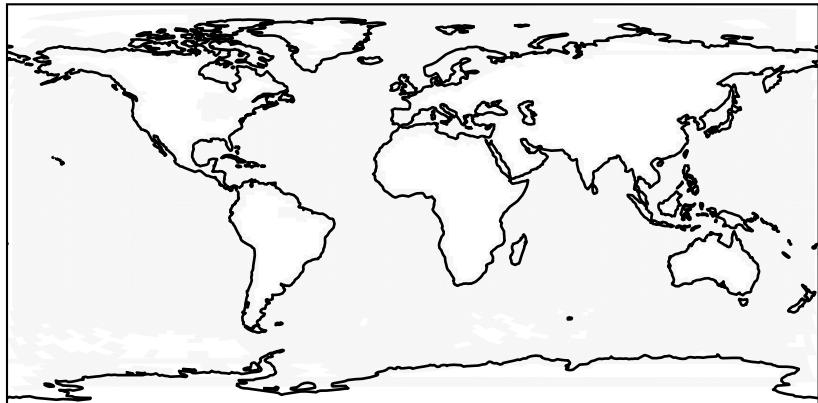
Difference
Dev - Ref, Dynamic Range



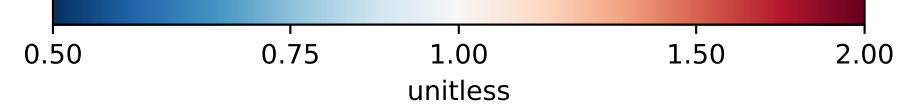
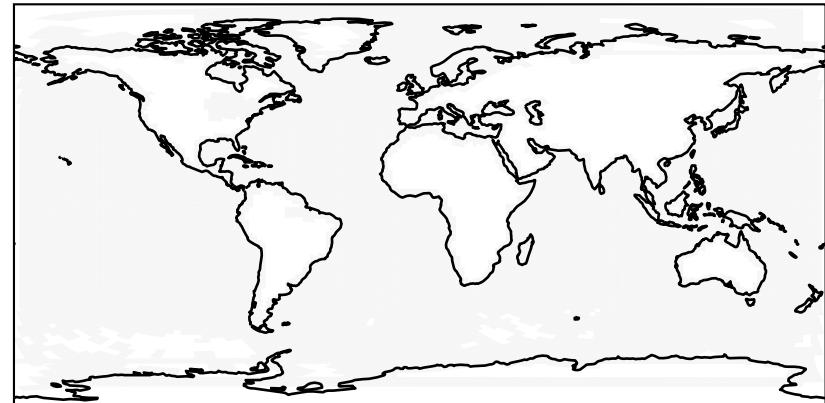
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

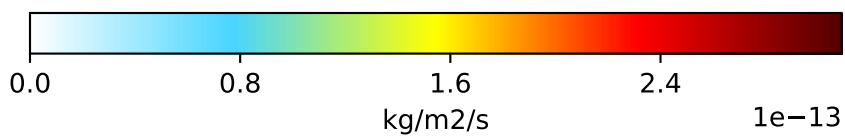
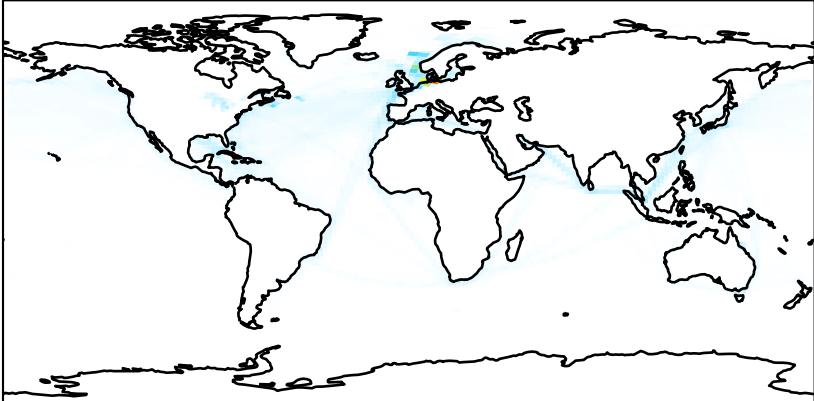


Ratio
Dev/Ref, Fixed Range

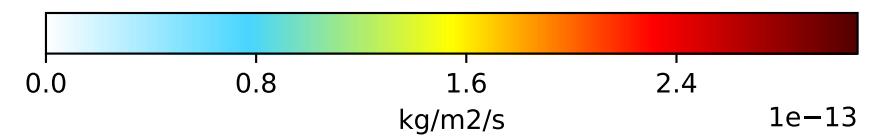


EmisOCPO_Ship

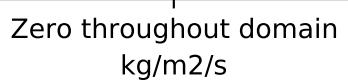
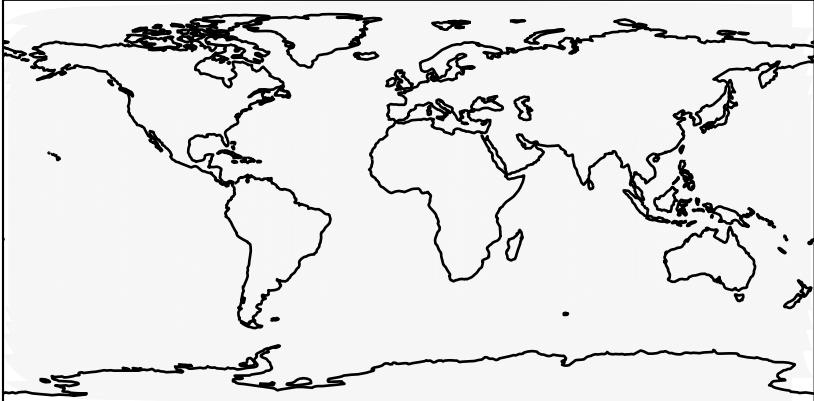
GCHP_13.2.0-beta.0 (Ref)
c48



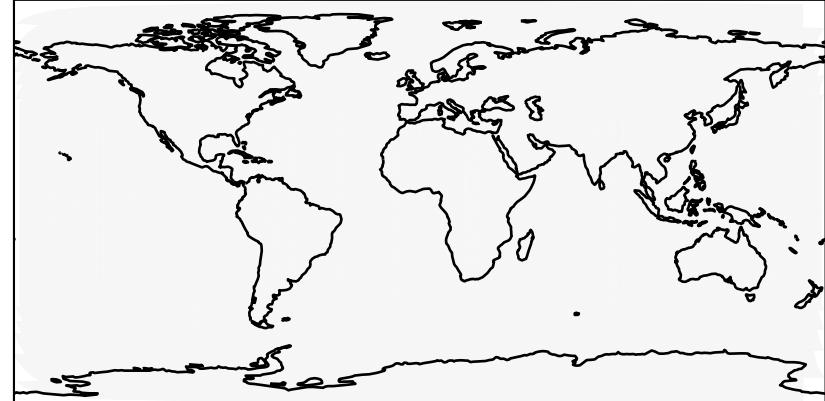
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



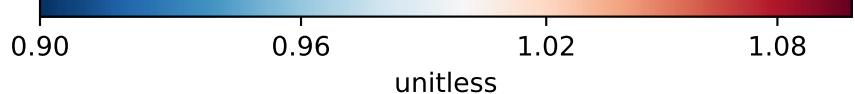
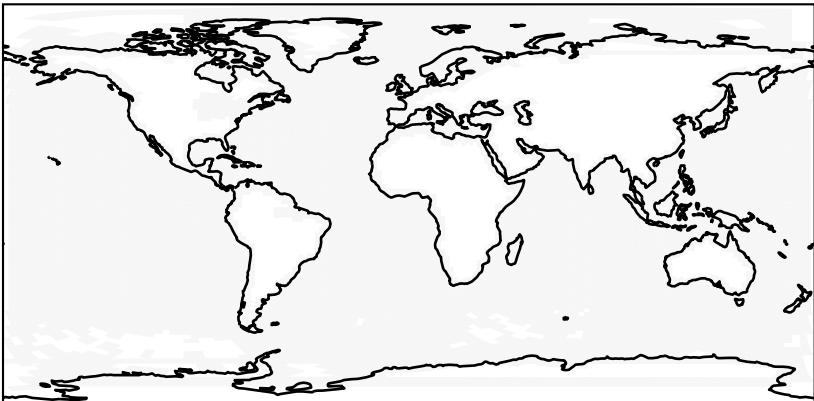
Difference
Dev - Ref, Dynamic Range



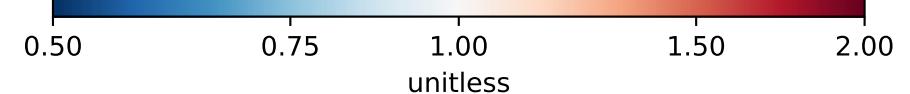
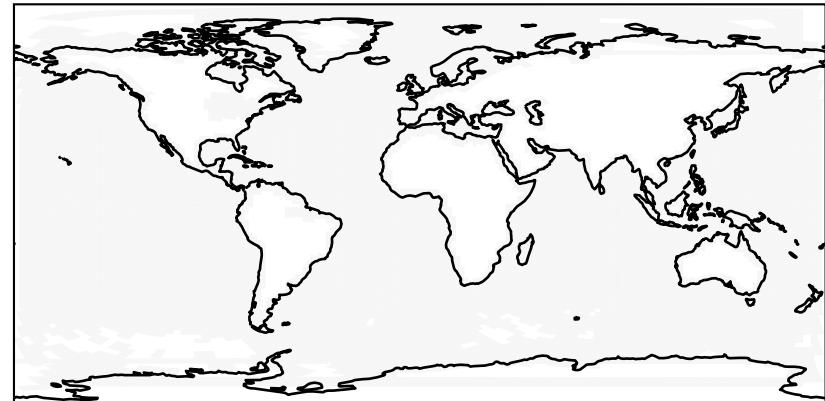
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

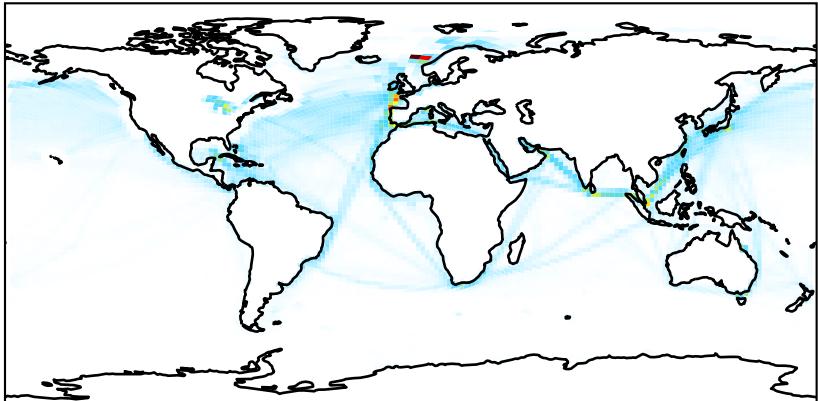


Ratio
Dev/Ref, Fixed Range

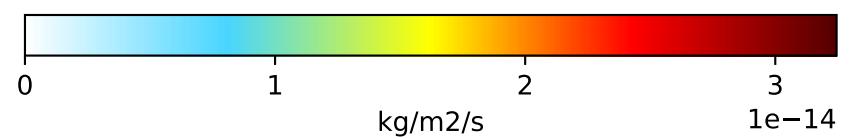
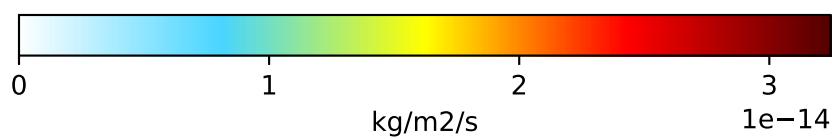
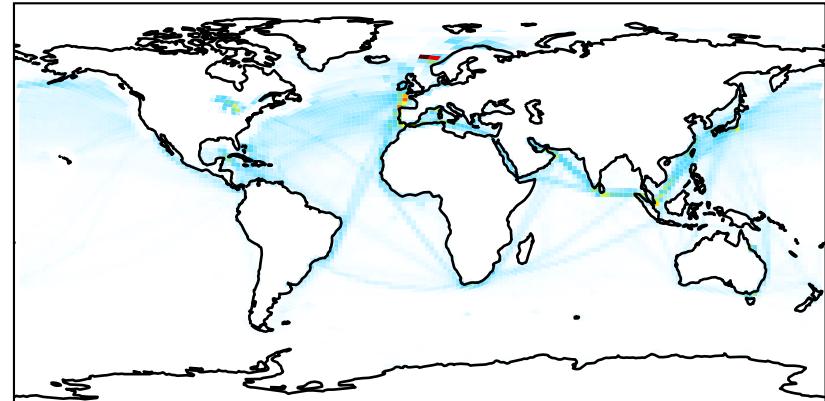


EmispFe_Ship

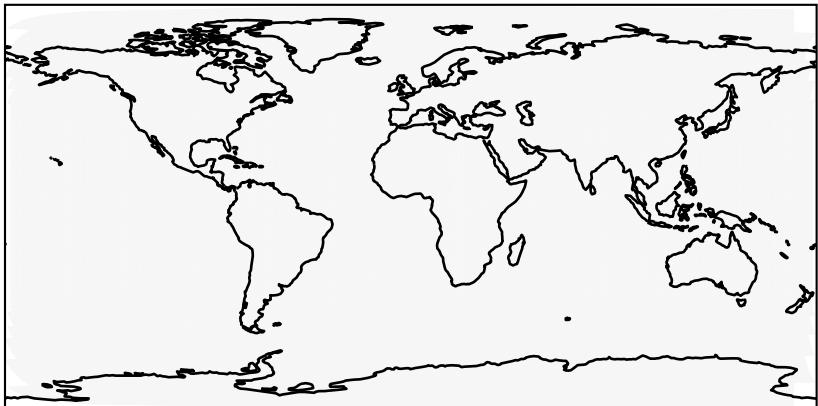
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

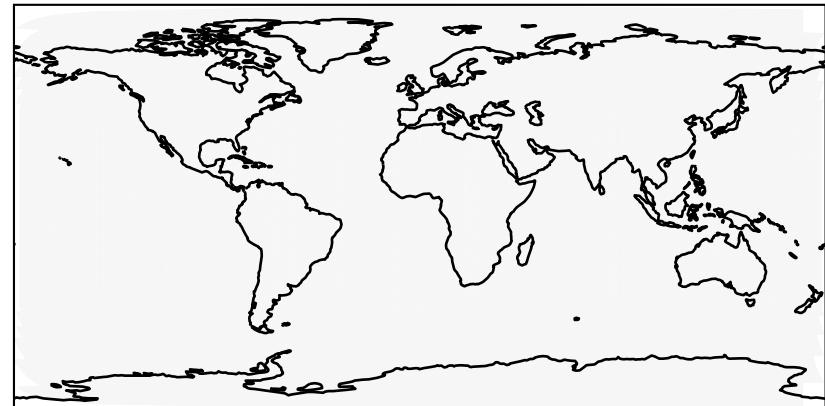


Difference
Dev - Ref, Dynamic Range



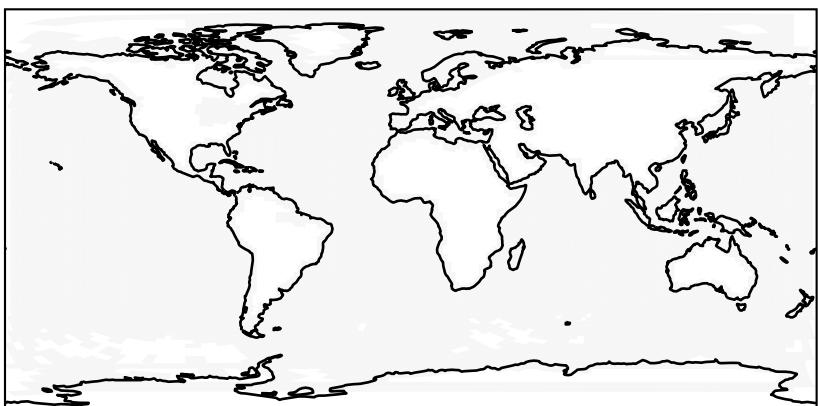
Zero throughout domain
kg/m²/s

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



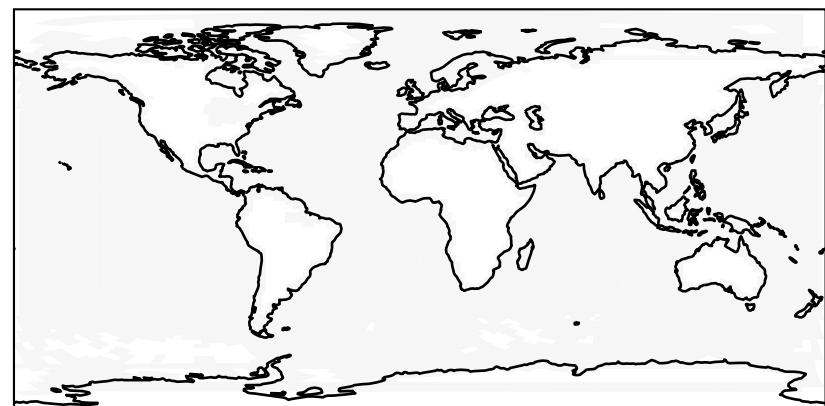
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

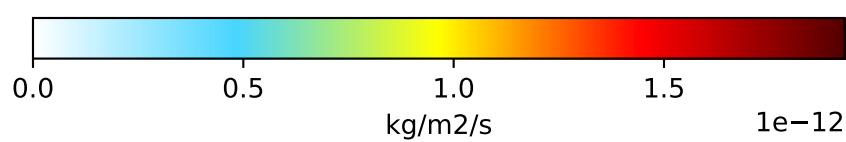
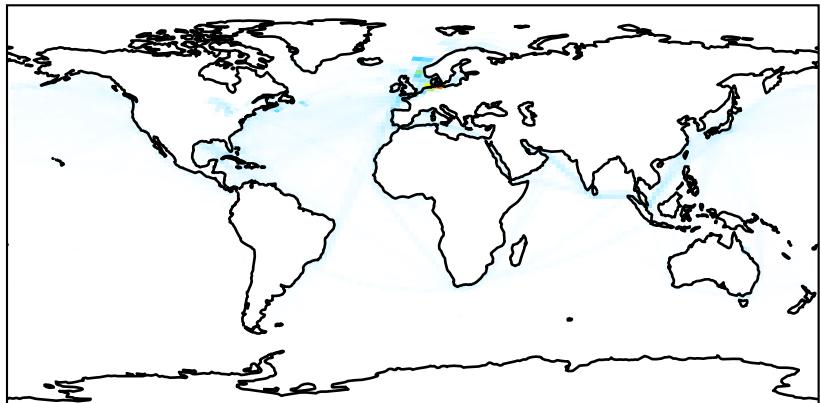
Ratio
Dev/Ref, Fixed Range



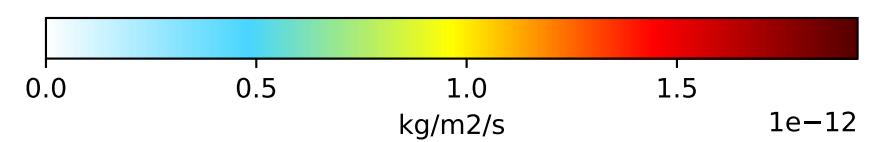
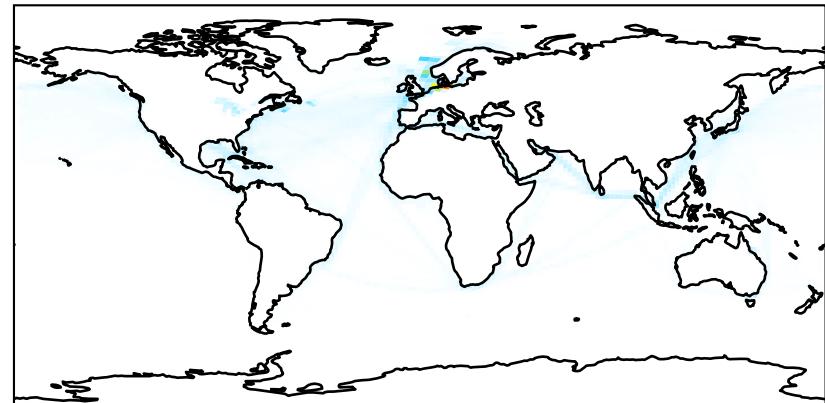
0.50 0.75 1.00 1.50 2.00
unitless

EmisPRPE_Ship

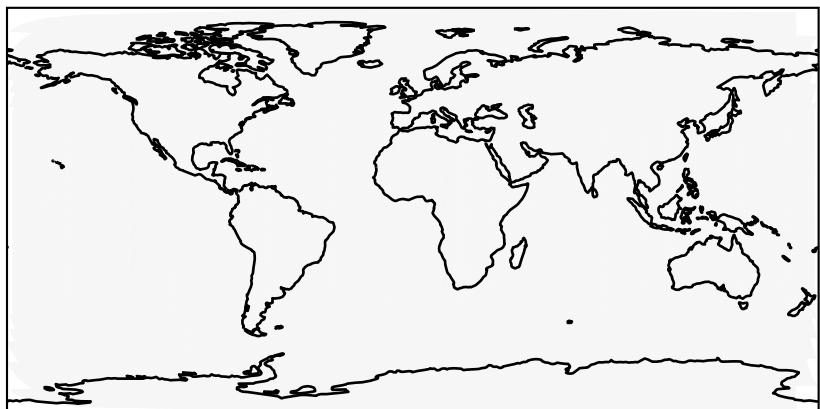
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

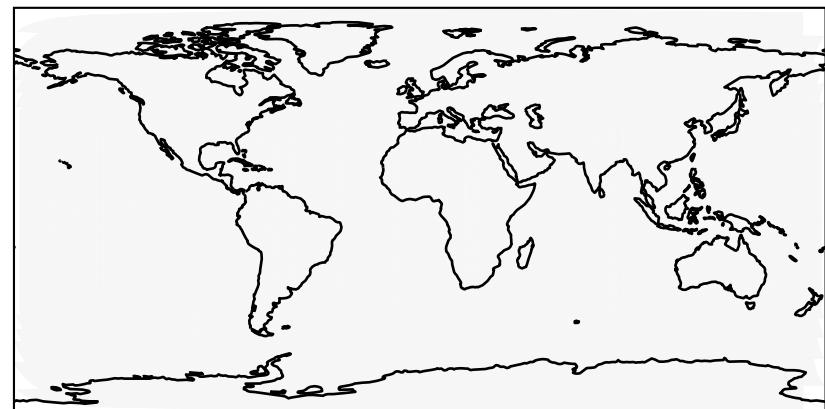


Difference
Dev - Ref, Dynamic Range



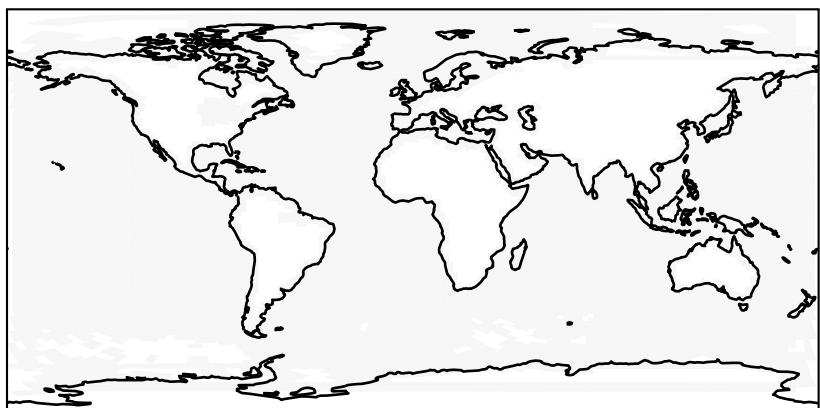
Zero throughout domain
kg/m²/s

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



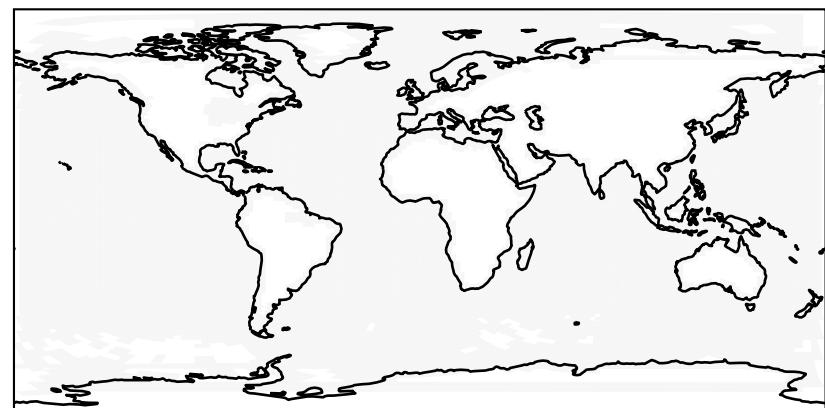
Zero throughout domain
kg/m²/s

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

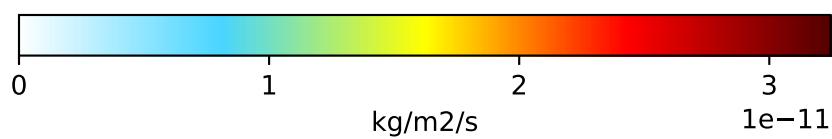
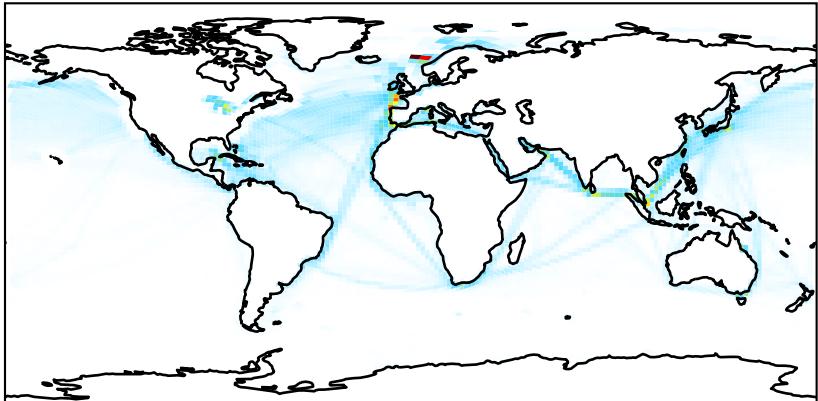
Ratio
Dev/Ref, Fixed Range



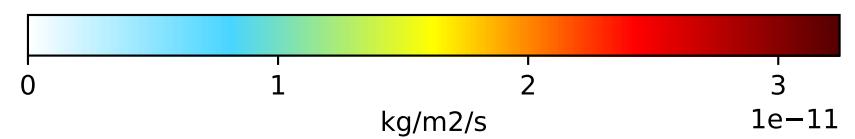
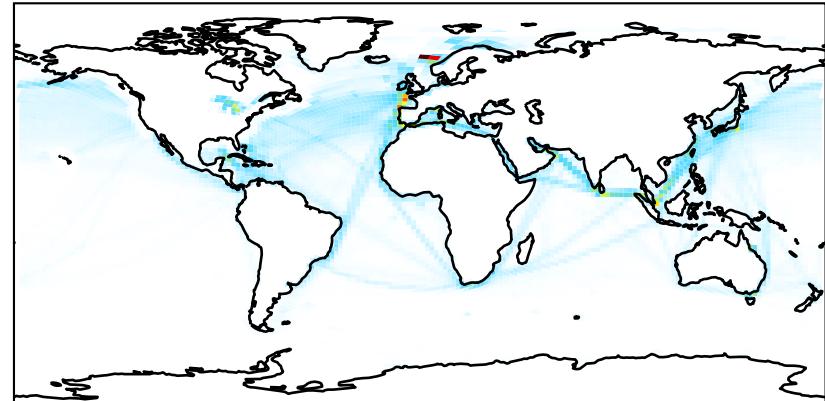
0.50 0.75 1.00 1.50 2.00
unitless

EmisSO2_Ship

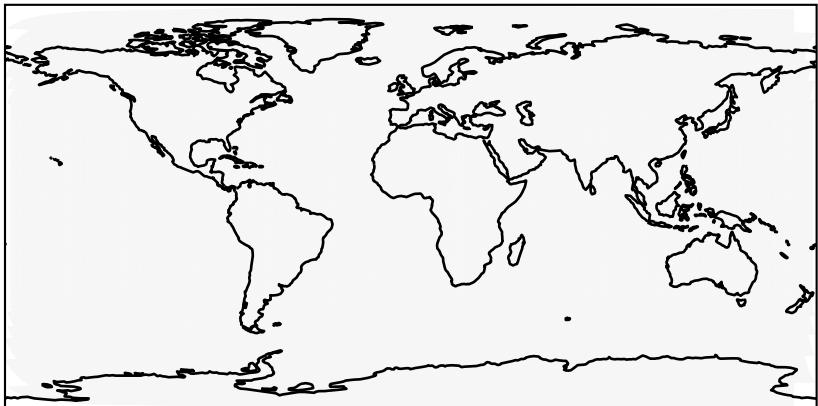
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

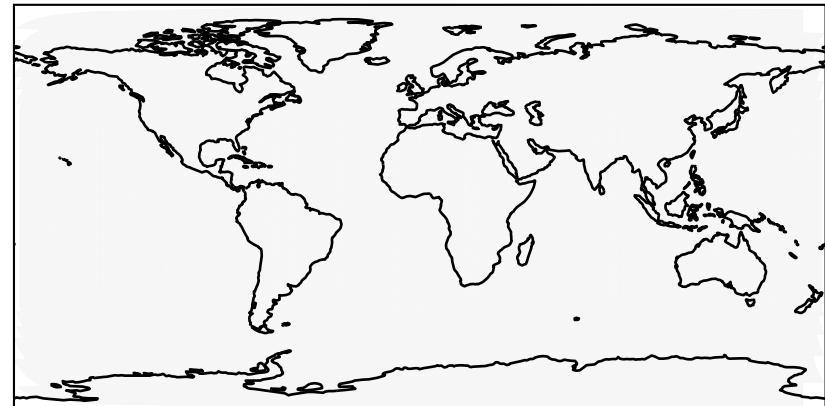


Difference
Dev - Ref, Dynamic Range



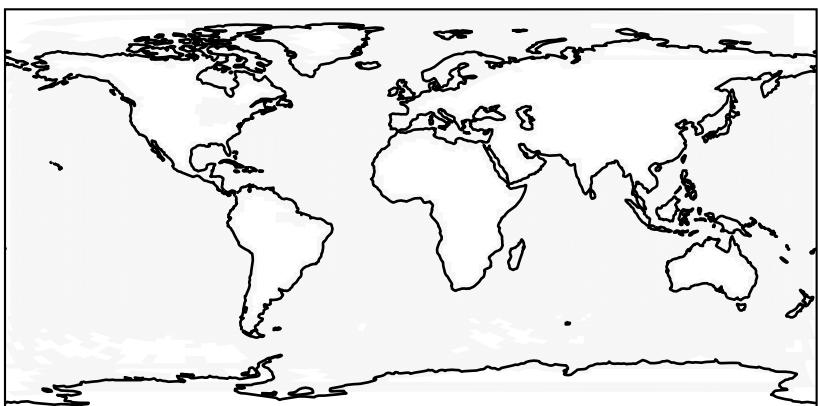
Zero throughout domain
kg/m²/s

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



Zero throughout domain
kg/m²/s

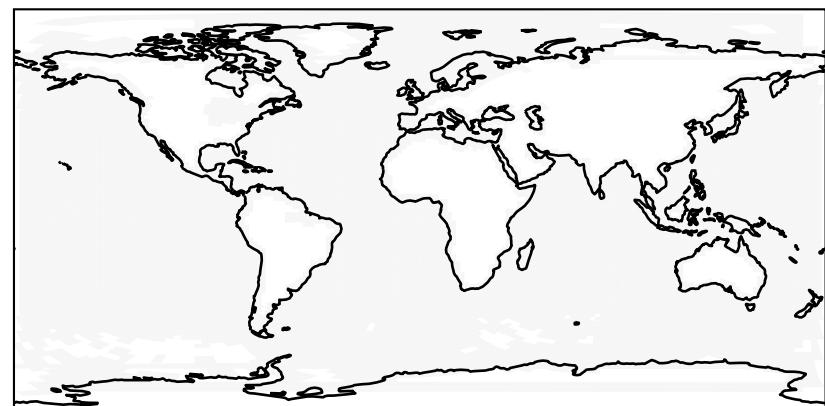
Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08

unitless

Ratio
Dev/Ref, Fixed Range

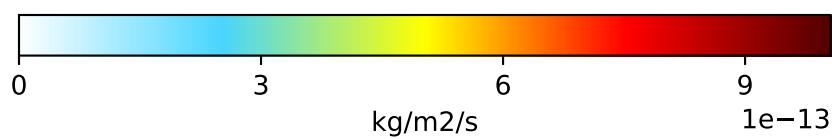
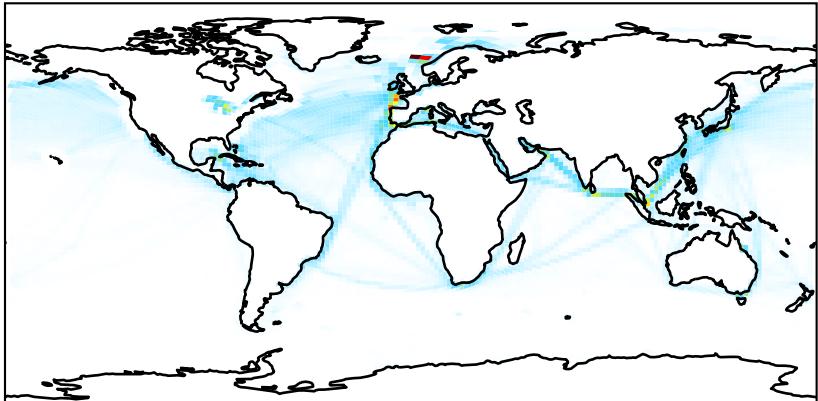


0.50 0.75 1.00 1.50 2.00

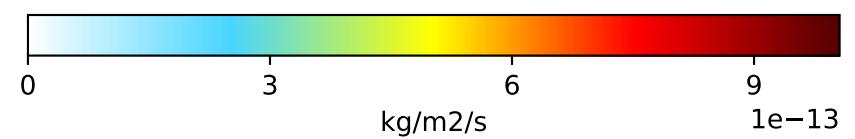
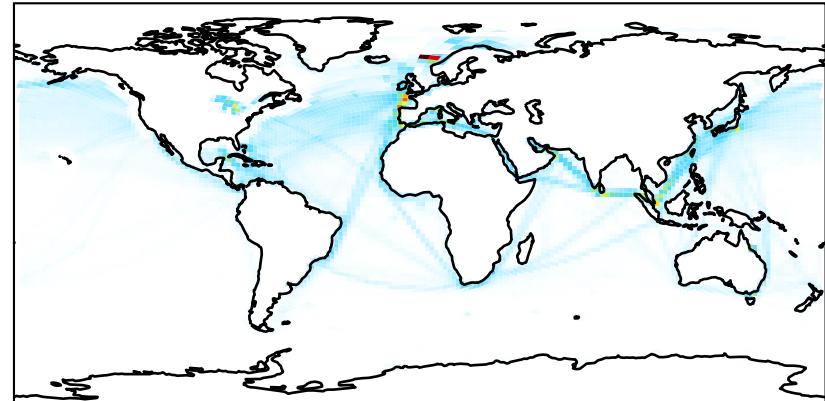
unitless

EmisSO4_Ship

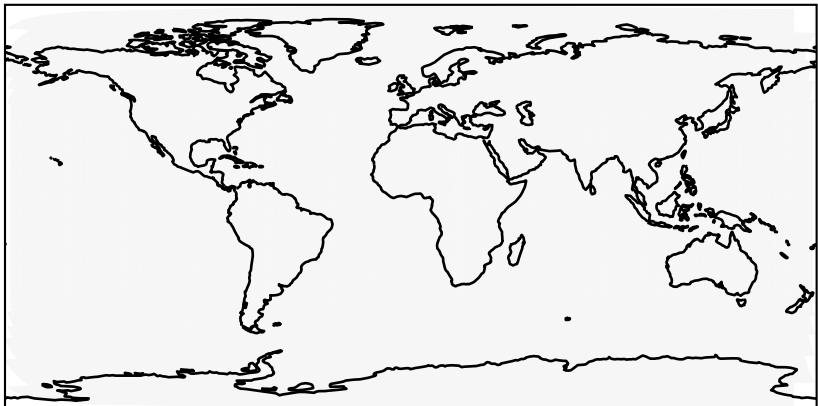
GCHP_13.2.0-beta.0 (Ref)
c48



GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48

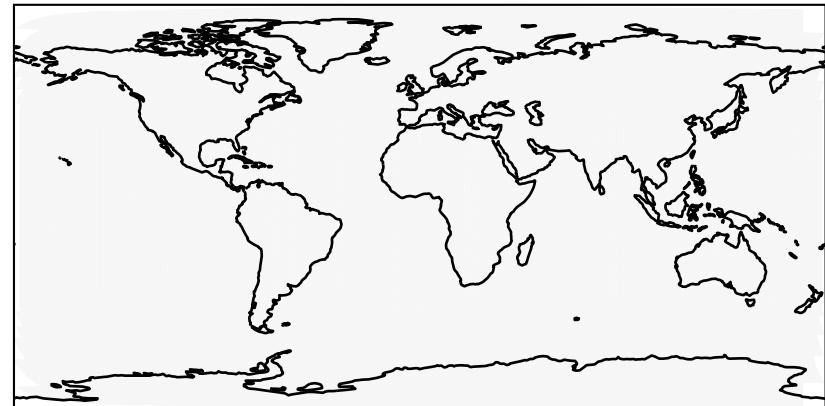


Difference
Dev - Ref, Dynamic Range



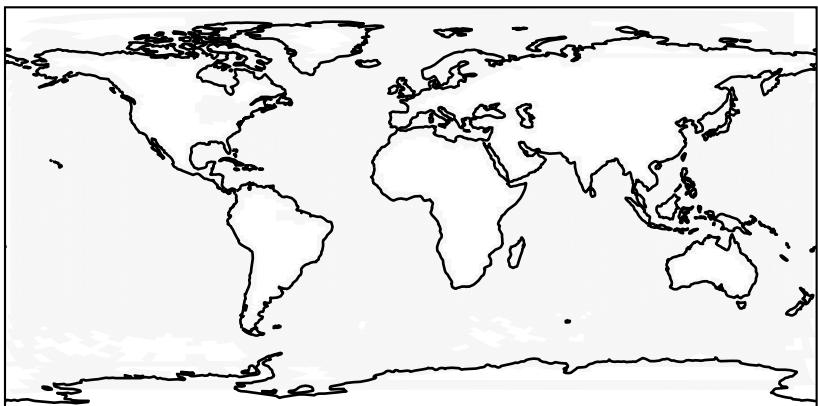
Zero throughout domain
 $\text{kg/m}^2/\text{s}$

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



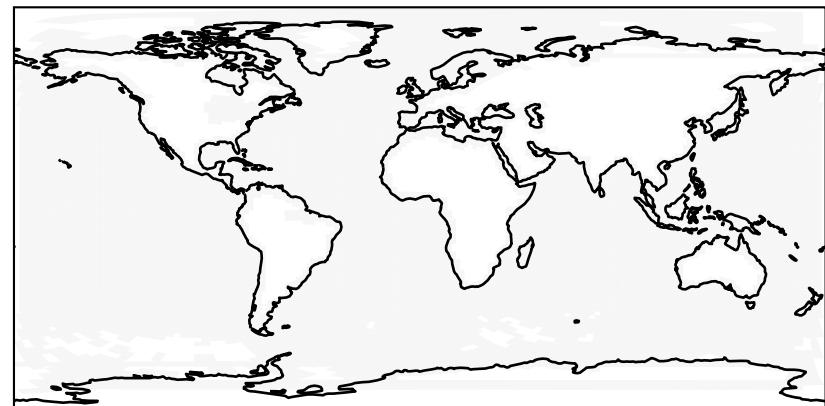
Zero throughout domain
 $\text{kg/m}^2/\text{s}$

Ratio
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08
unitless

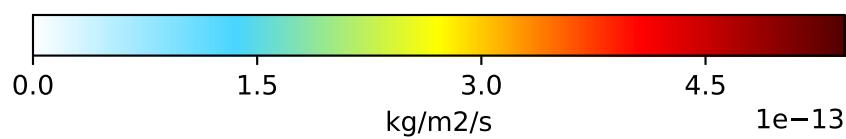
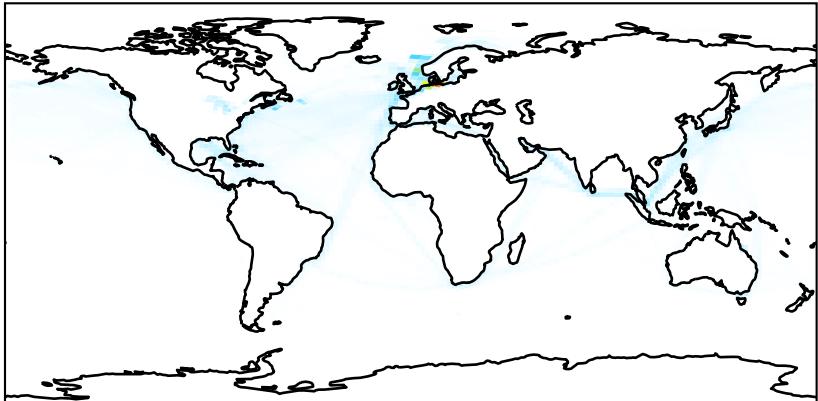
Ratio
Dev/Ref, Fixed Range



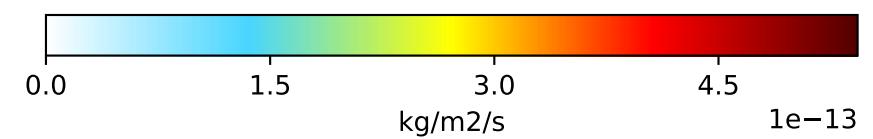
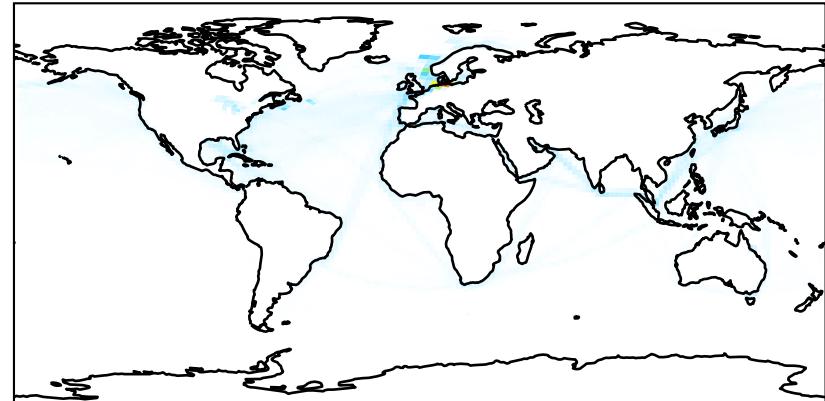
0.50 0.75 1.00 1.50 2.00
unitless

EmisSOAP_Ship

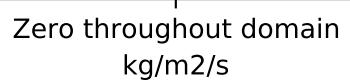
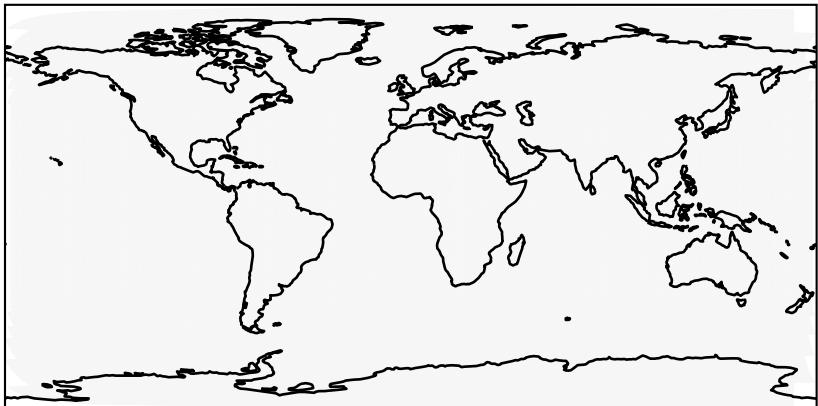
GCHP_13.2.0-beta.0 (Ref)
c48



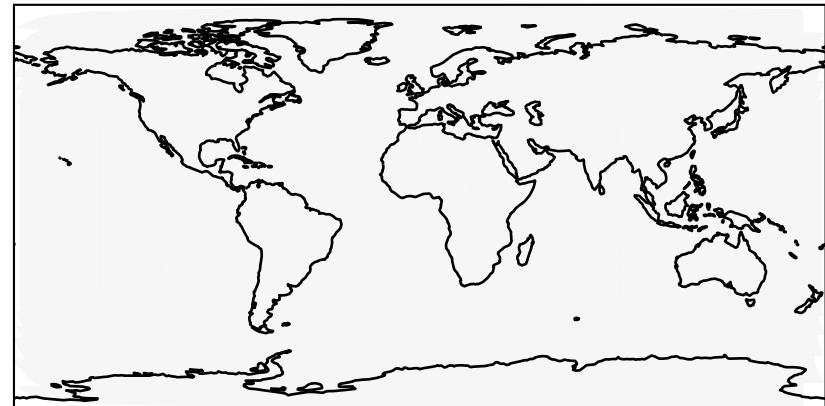
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



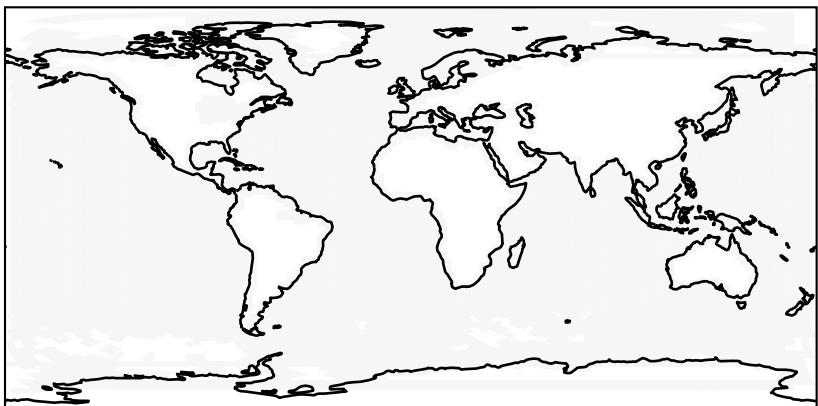
Difference
Dev - Ref, Dynamic Range



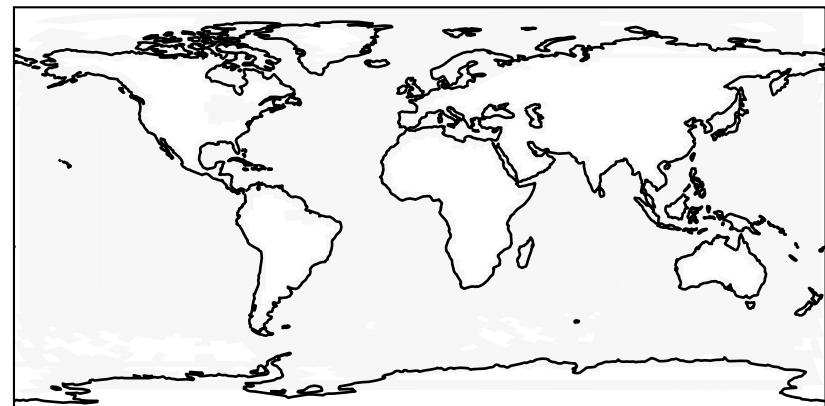
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

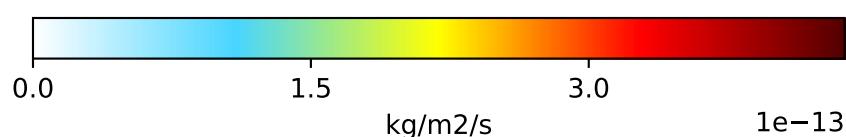
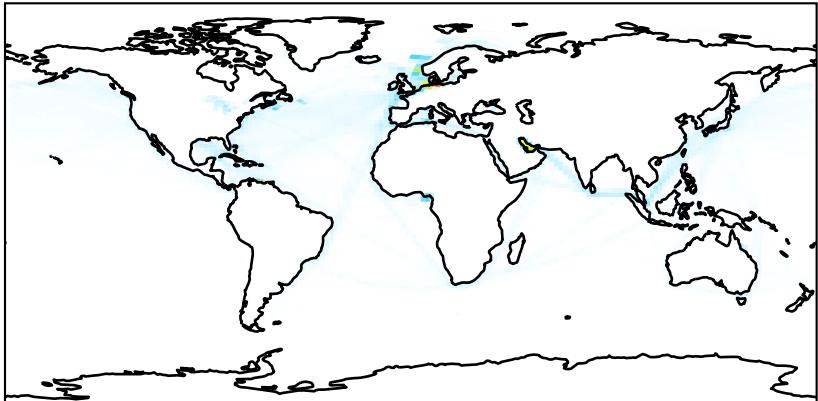


Ratio
Dev/Ref, Fixed Range

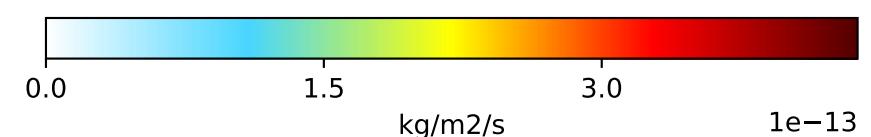
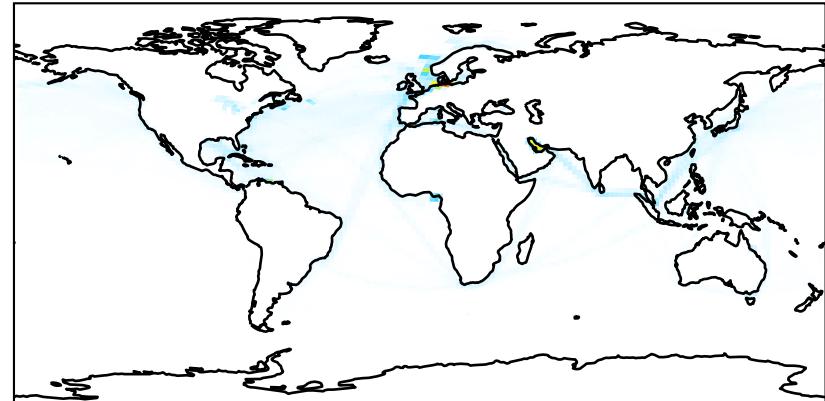


EmisTOLU_Ship

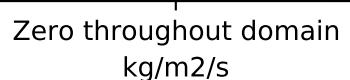
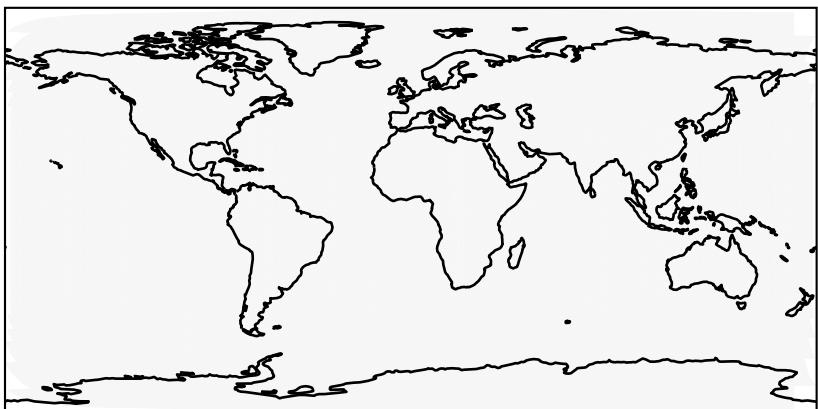
GCHP_13.2.0-beta.0 (Ref)
c48



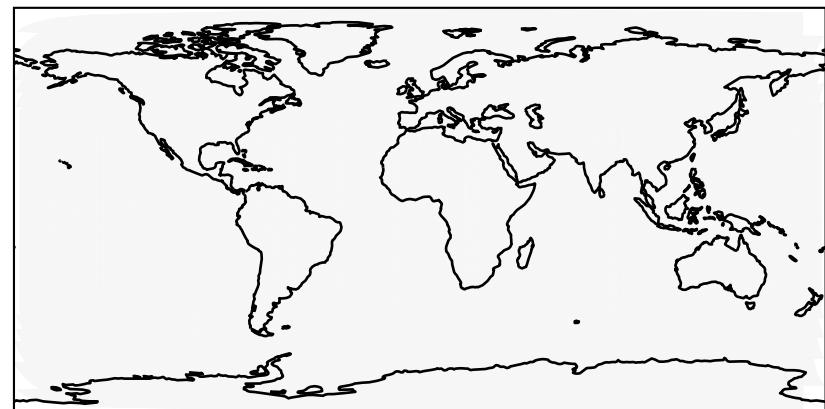
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



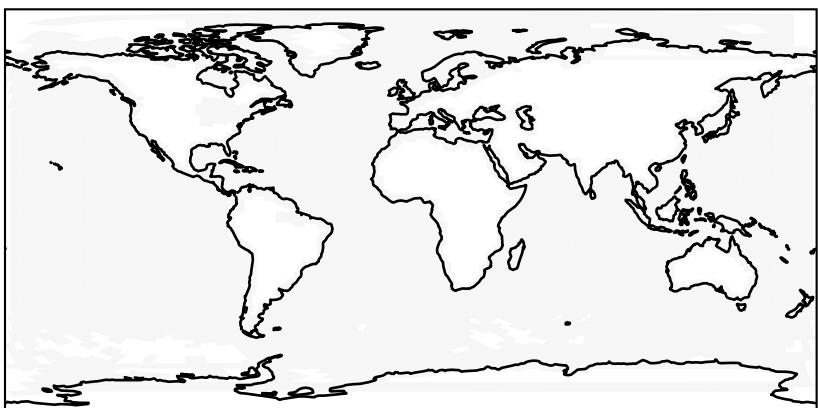
Difference
Dev - Ref, Dynamic Range



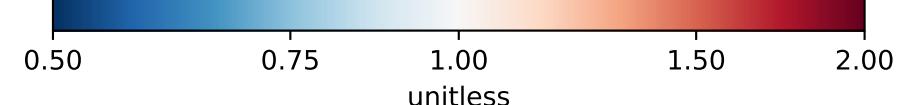
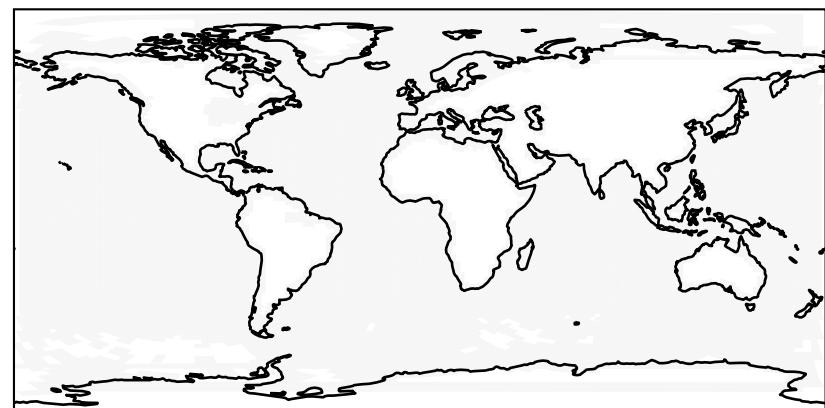
Difference
Dev - Ref, Restricted Range [5%,95%]



Ratio
Dev/Ref, Dynamic Range

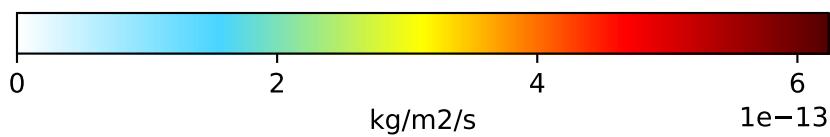
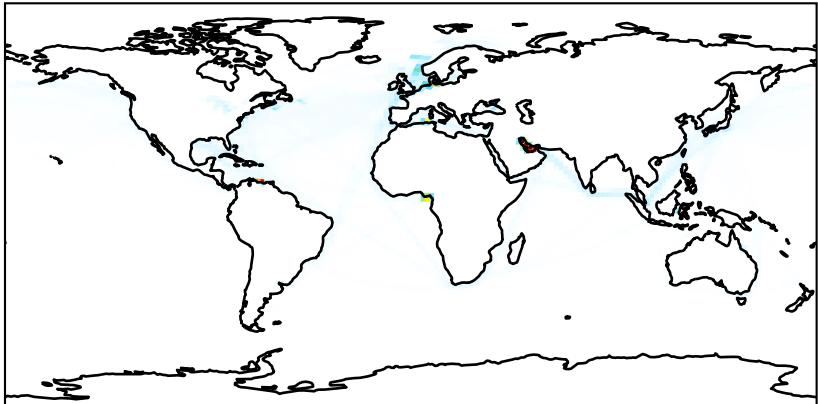


Ratio
Dev/Ref, Fixed Range

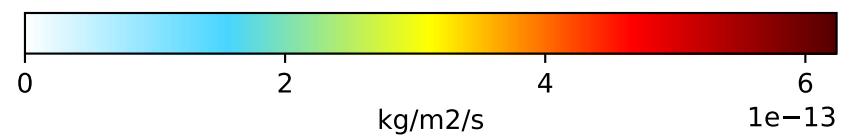
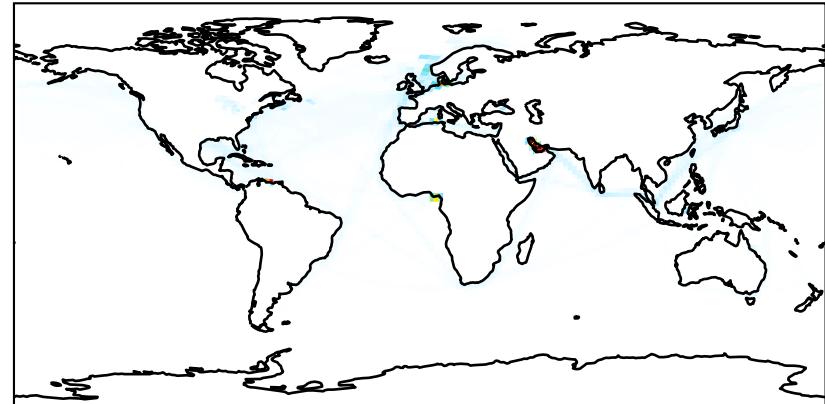


EmisXYLE_Ship

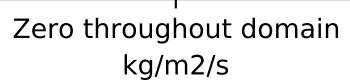
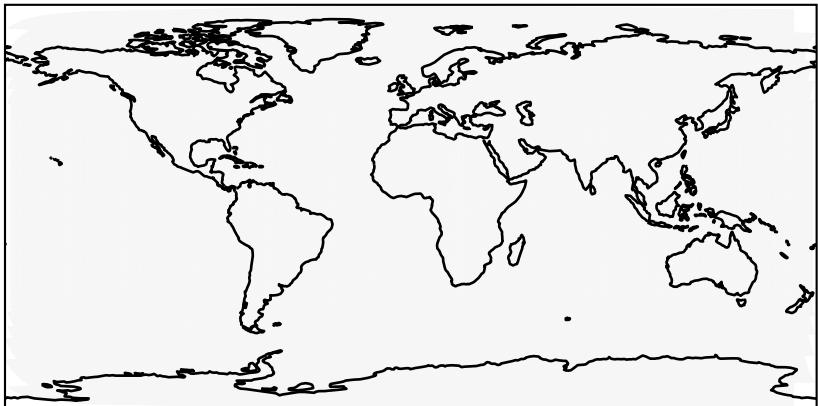
GCHP_13.2.0-beta.0 (Ref)
c48



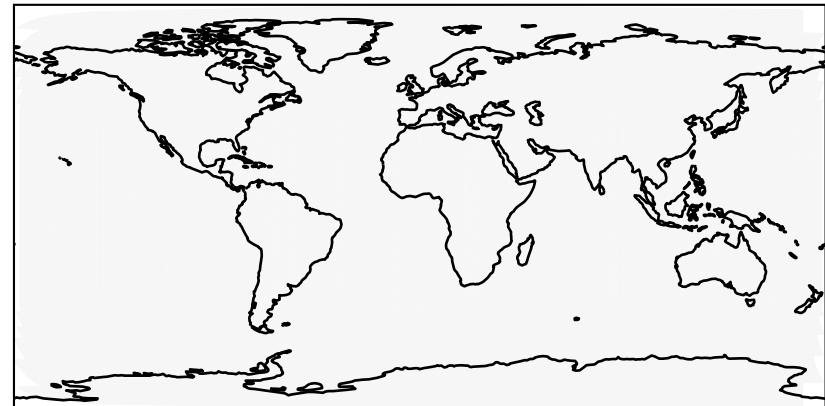
GCHP_13.2.0-beta.0-LuoWetdep (Dev)
c48



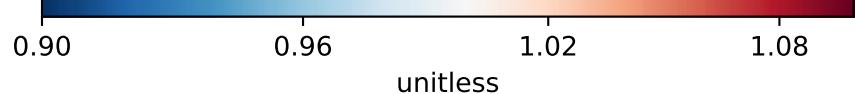
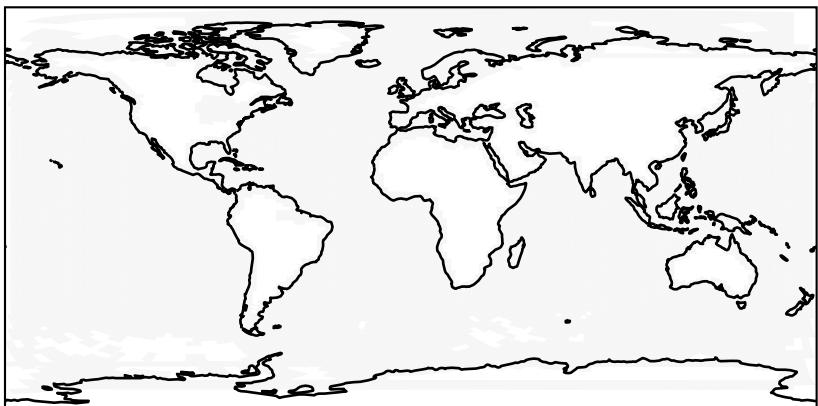
Difference
Dev - Ref, Dynamic Range



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



Ratio
Dev/Ref, Dynamic Range



Ratio
Dev/Ref, Fixed Range

