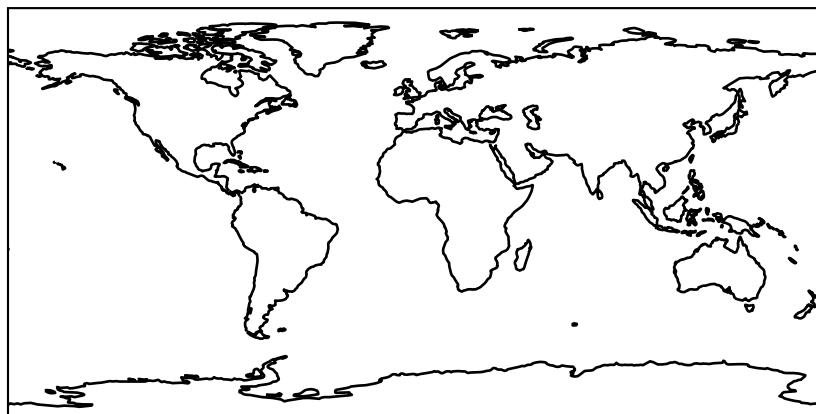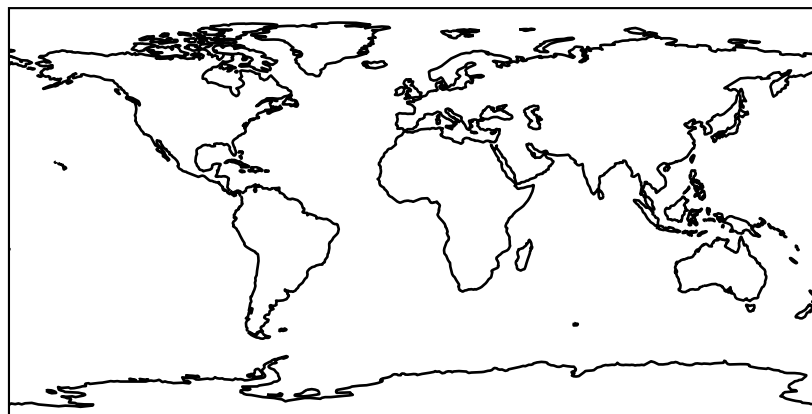# EmisALD2_Ship (AnnualMean)


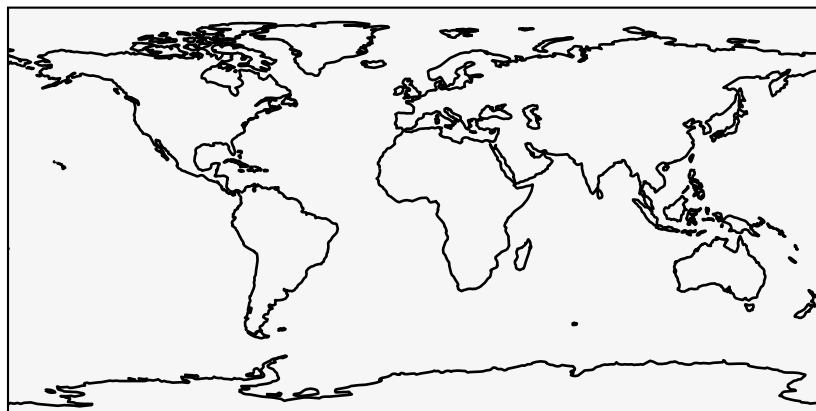
gcc-14.3.0-rc.0 (Ref)
4.0x5.0

Zero throughout domain
kg/m2/s
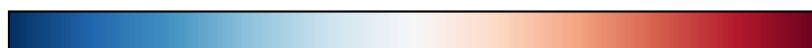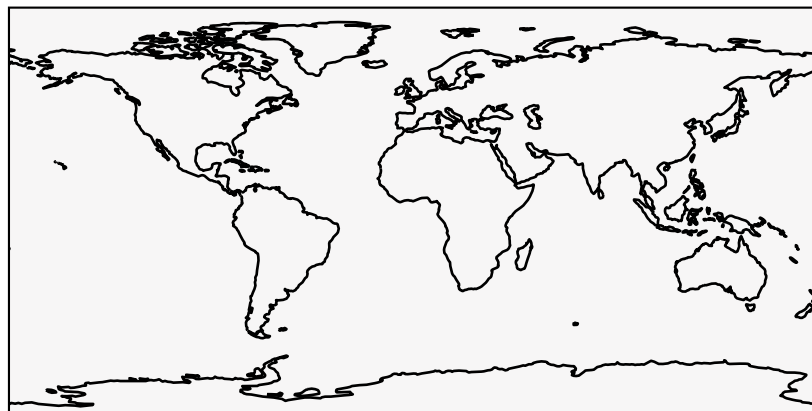
gcc-14.4.0-rc.0 (Dev)
4.0x5.0

Zero throughout domain
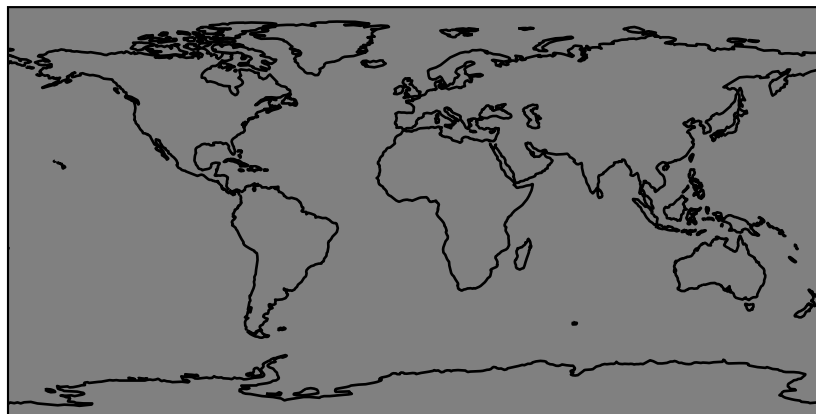kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

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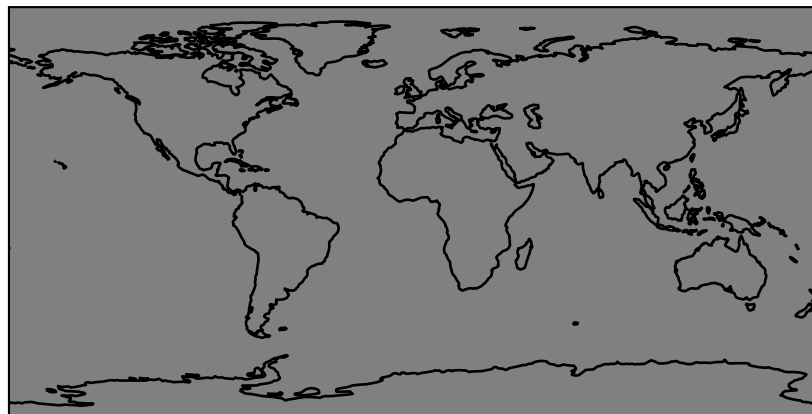Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range
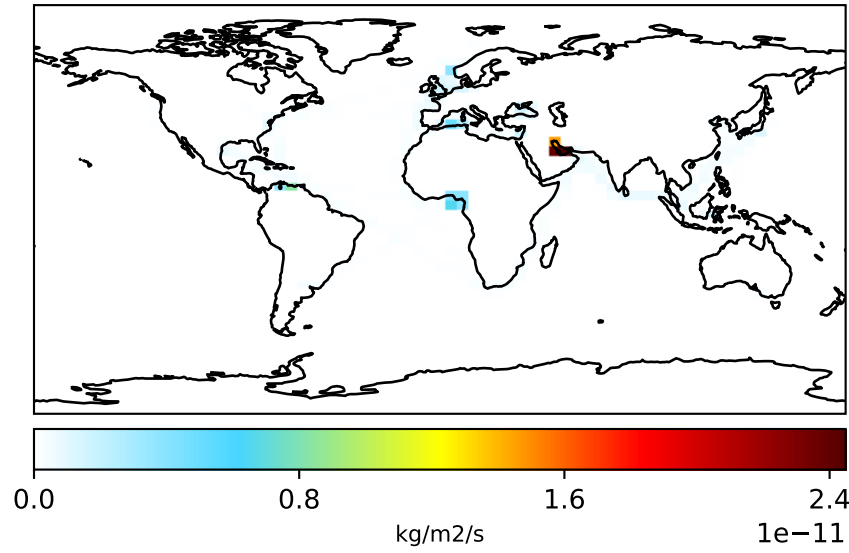
Undefined throughout domain
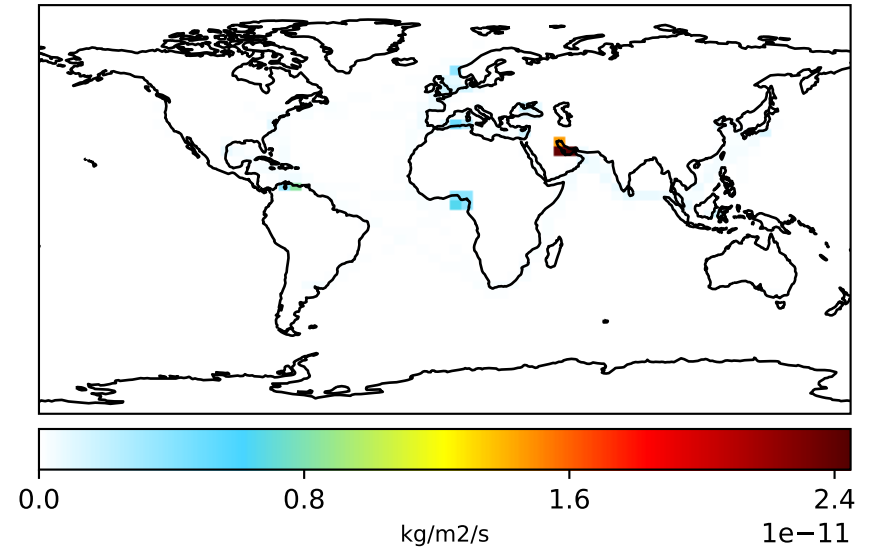unitless

Ratio
Dev/Ref, Fixed Range

Undefined throughout domain
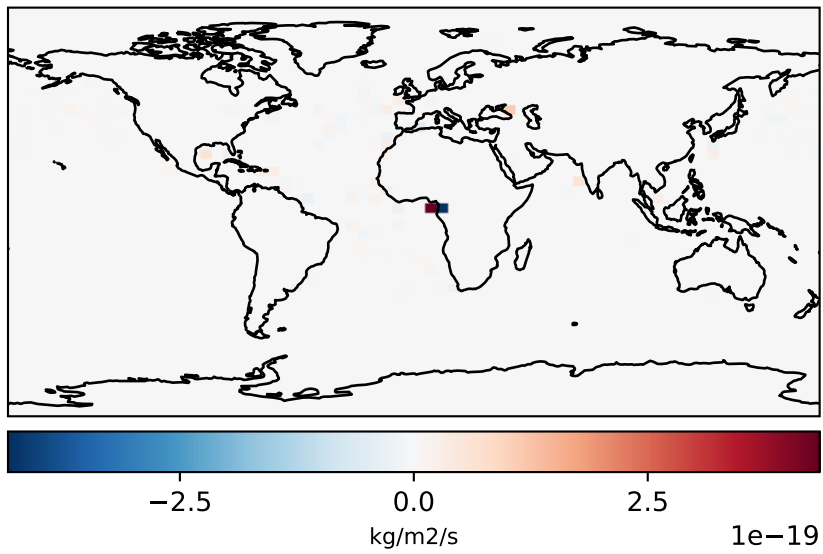unitless

# EmisALK4_Ship (AnnualMean)
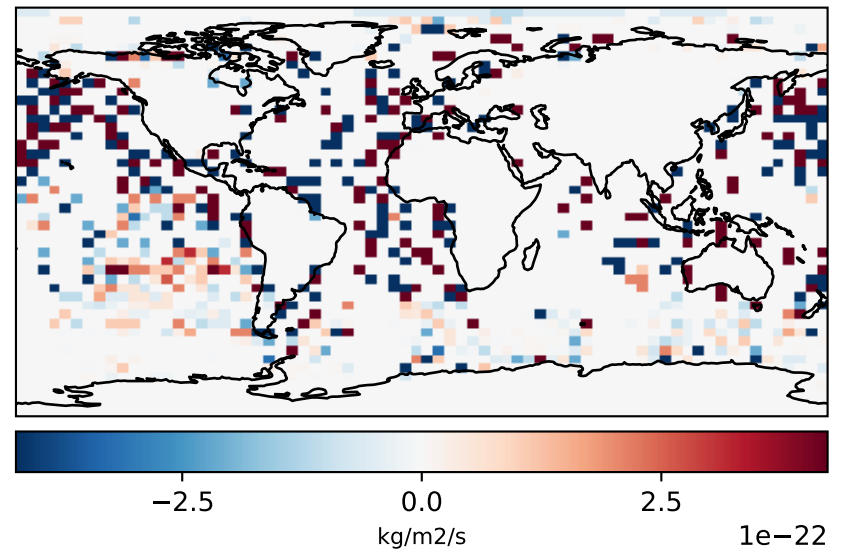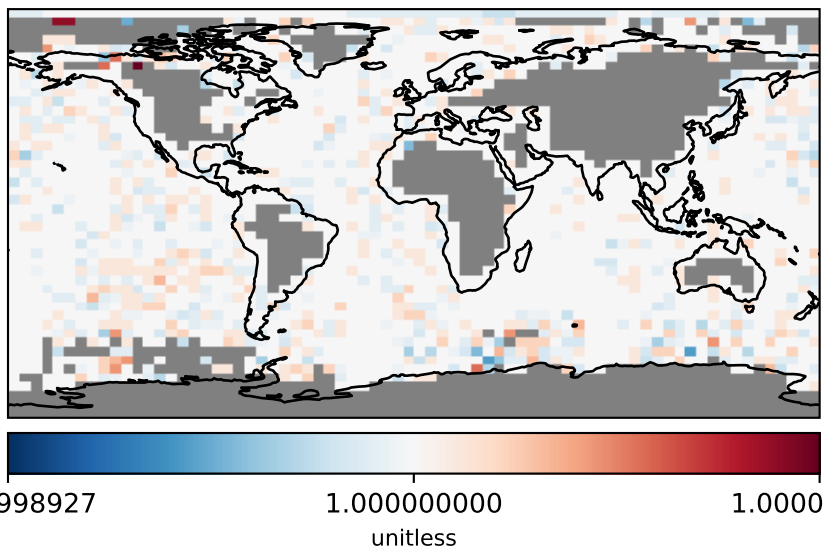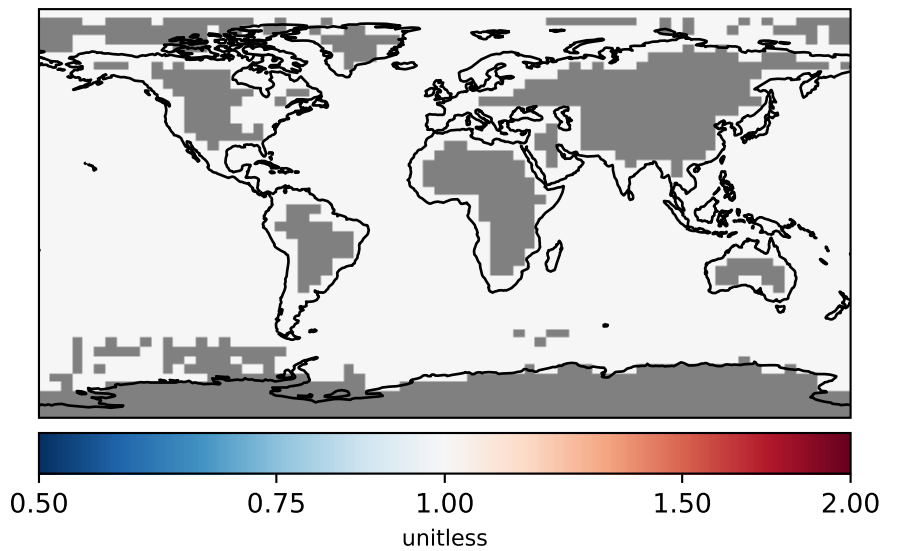
# EmisBCPI_Ship (AnnualMean)

# EmisBCPO_Ship (AnnualMean)

## gcc-14.3.0-rc.0 (Ref)
### 4.0x5.0

kg/m2/s

## gcc-14.4.0-rc.0 (Dev)
### 4.0x5.0

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

Ref and Dev equal throughout domain
unitless

## Ratio
### Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

# EmisBENZ_Ship (AnnualMean)

# EmisC2H2_Ship (AnnualMean)

# EmisC2H4_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
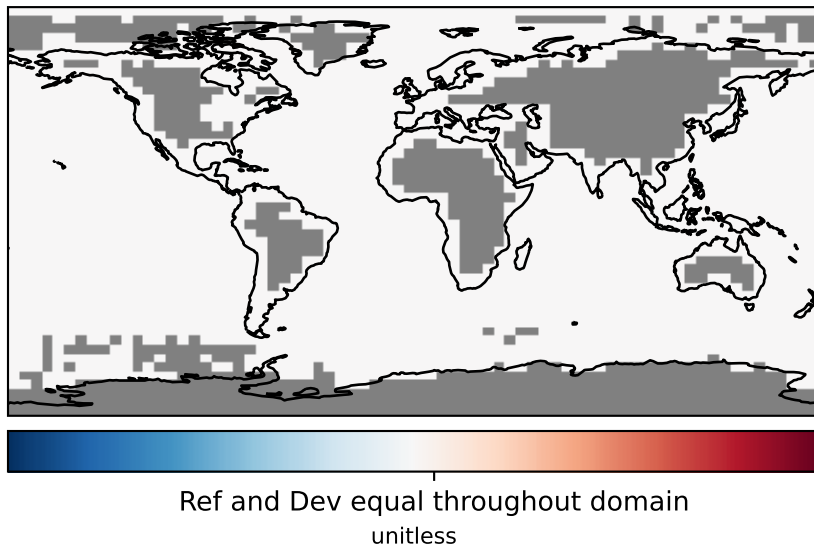4.0x5.0

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

kg/m2/s

Difference
Dev - Ref, Dynamic Range
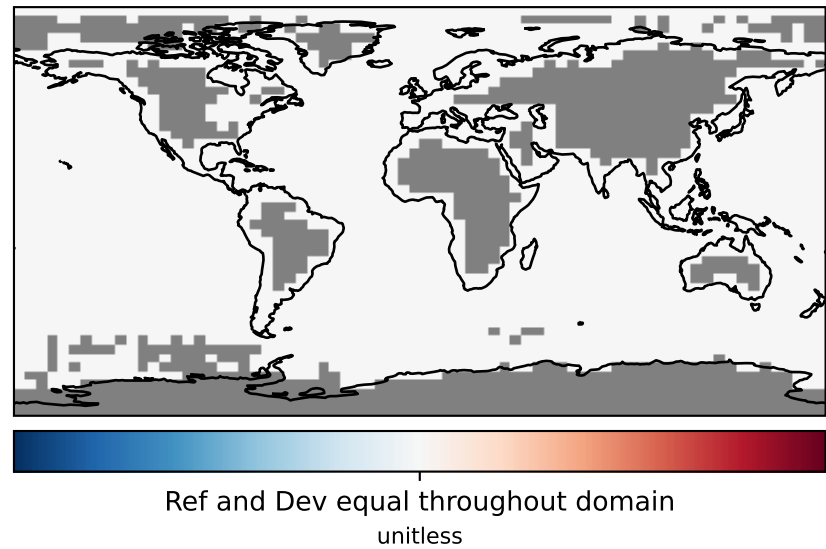
Difference
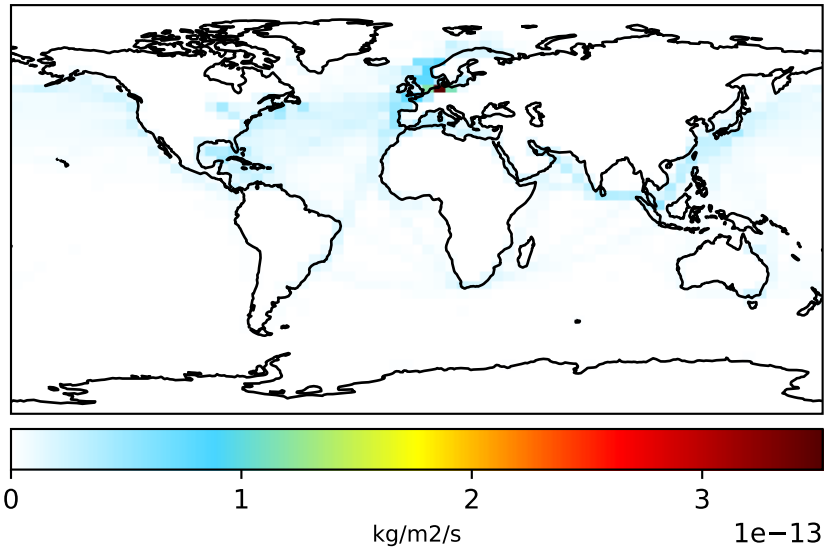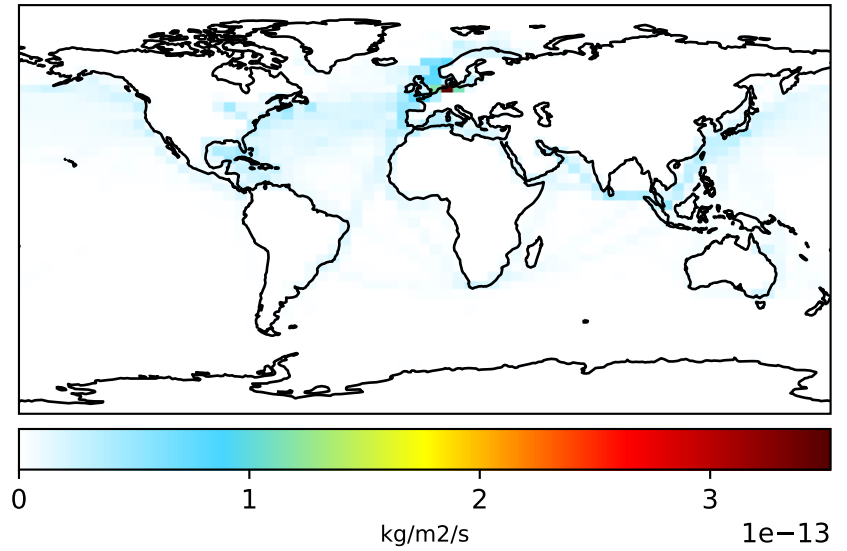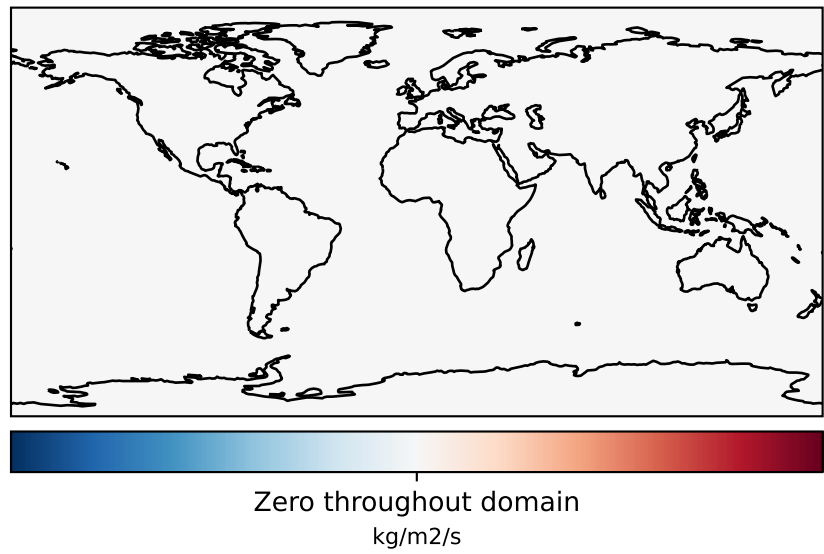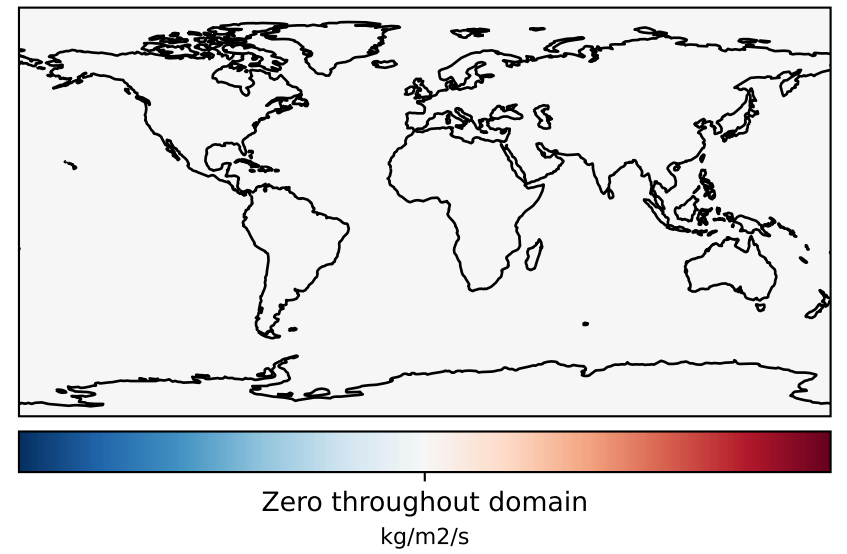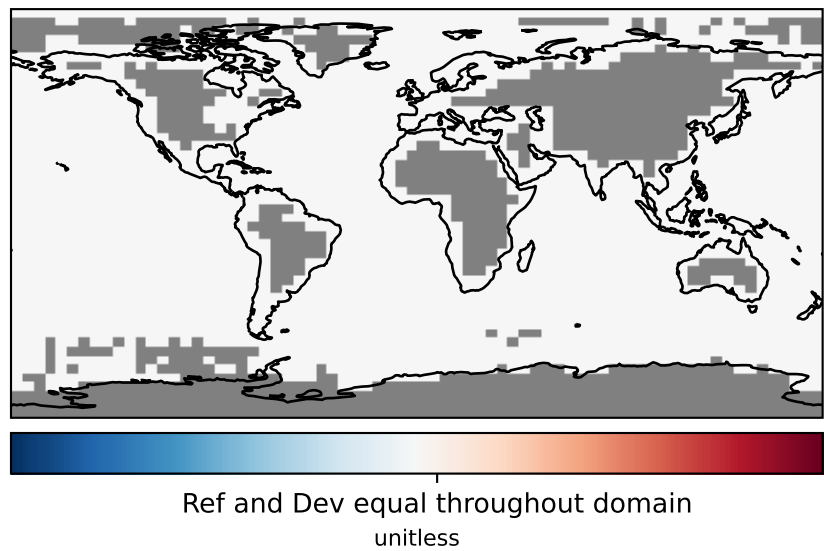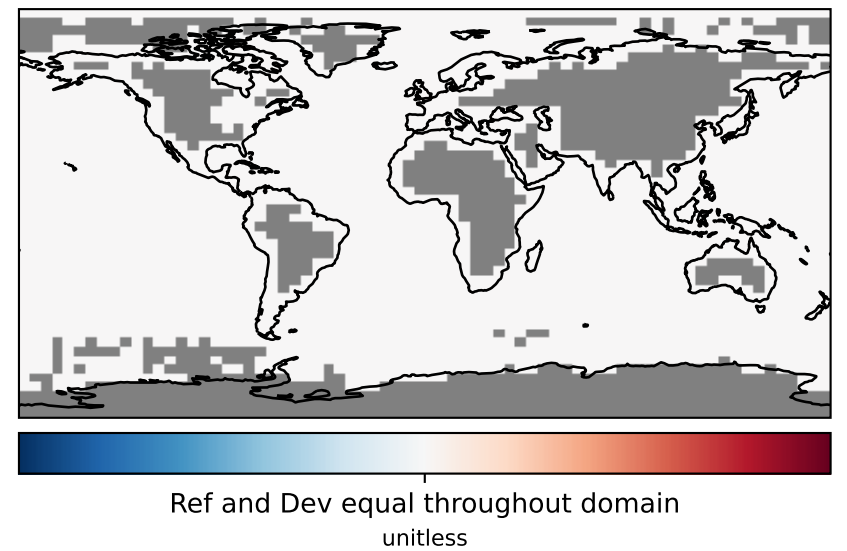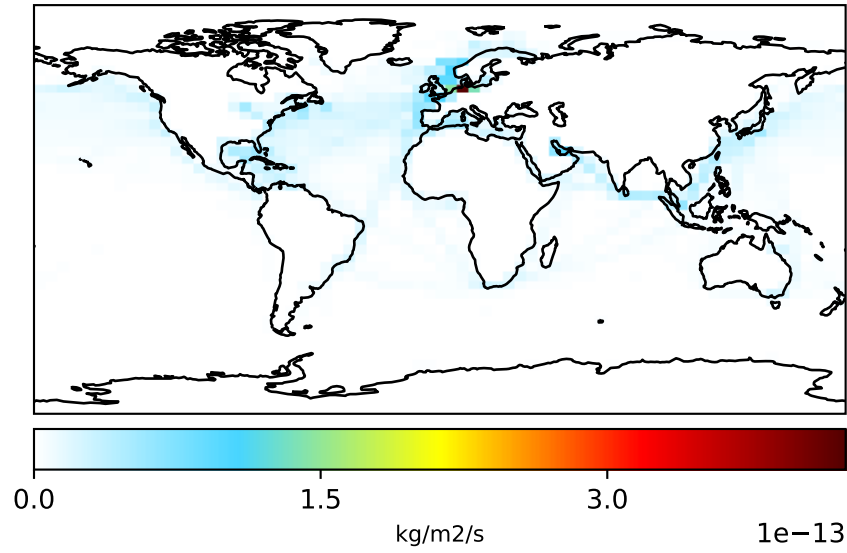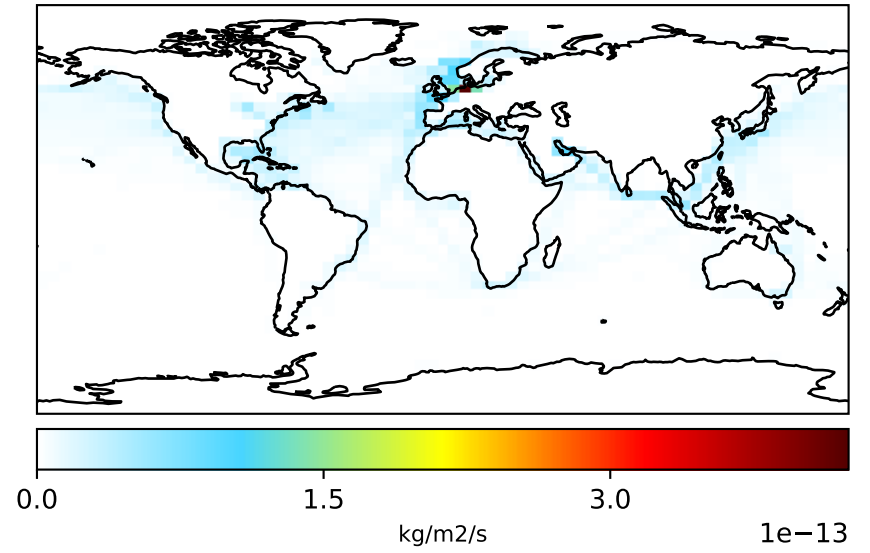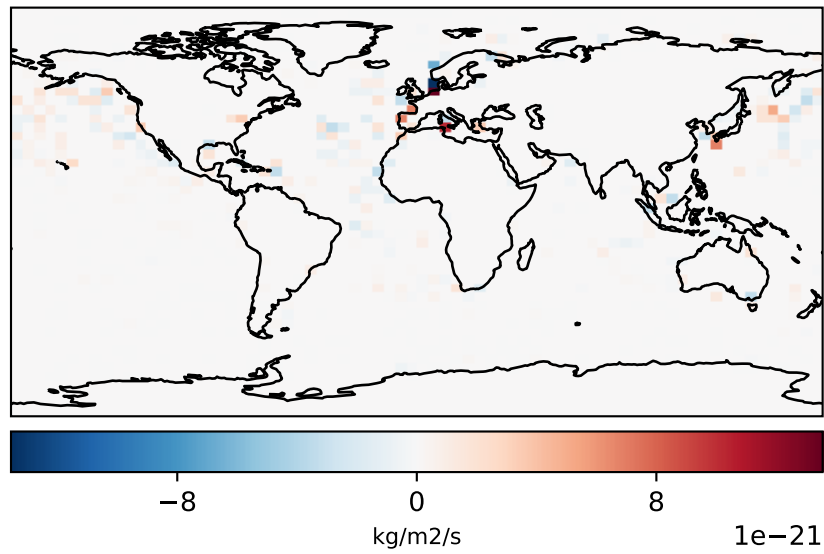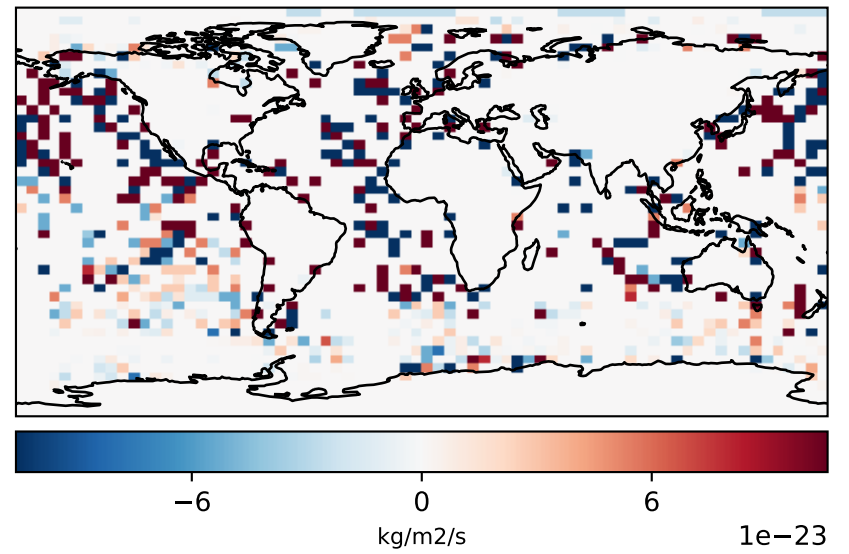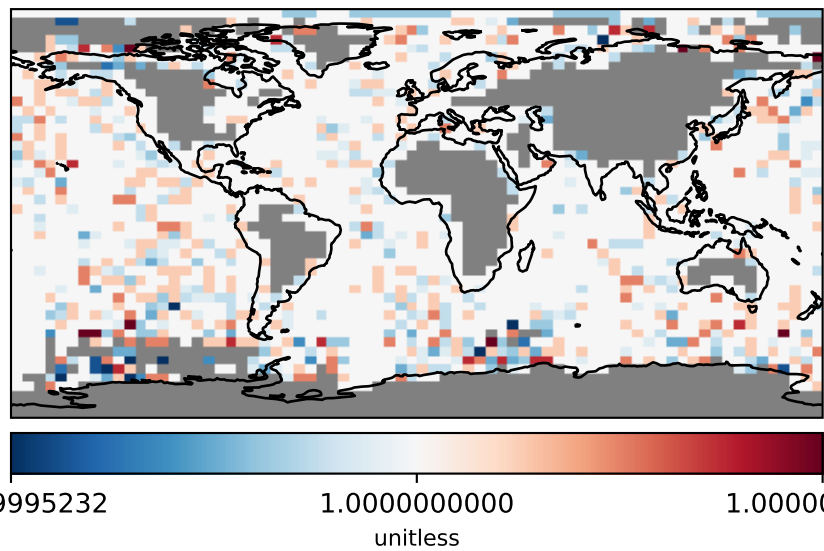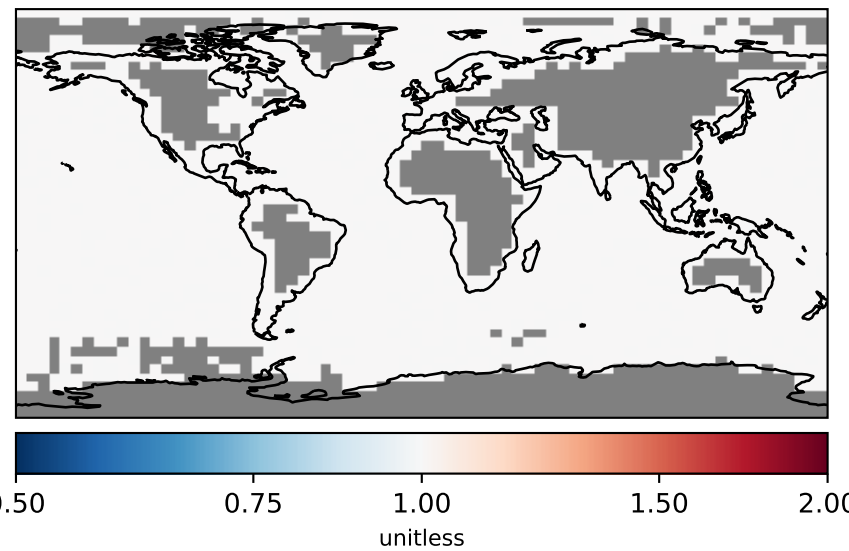Dev - Ref, Restricted Range [5%,95%]
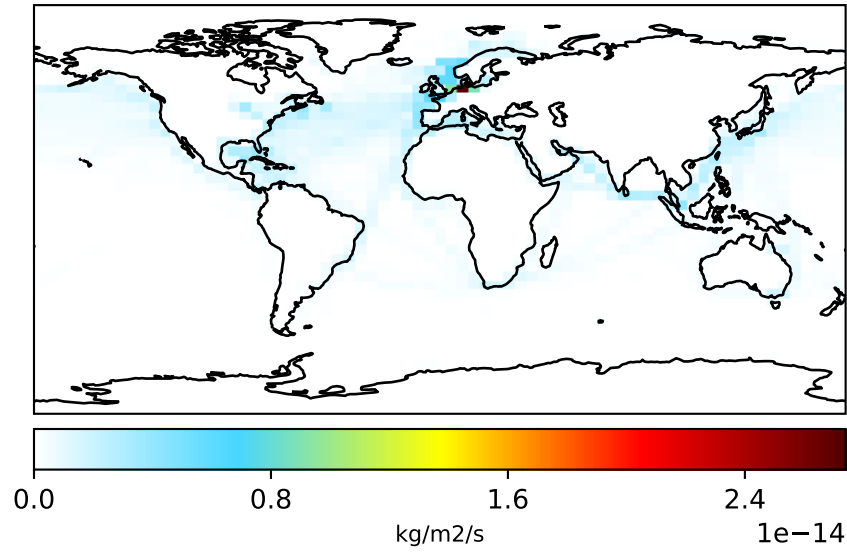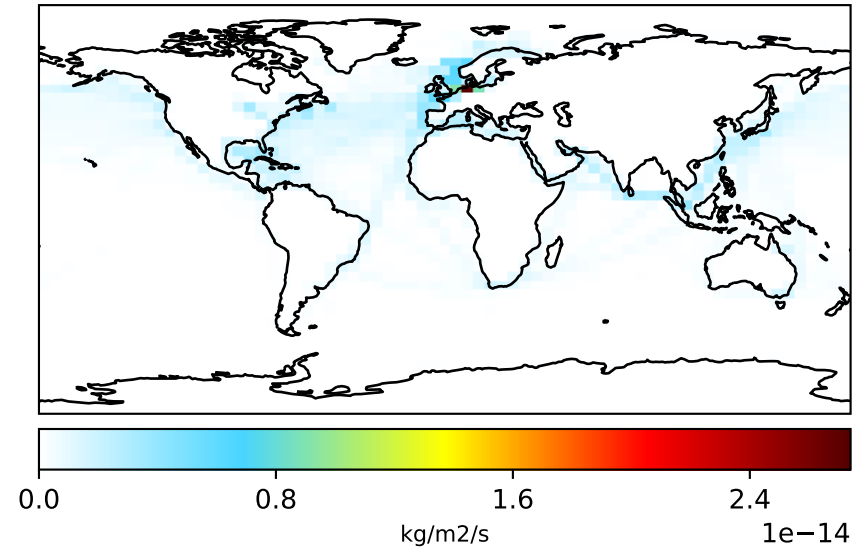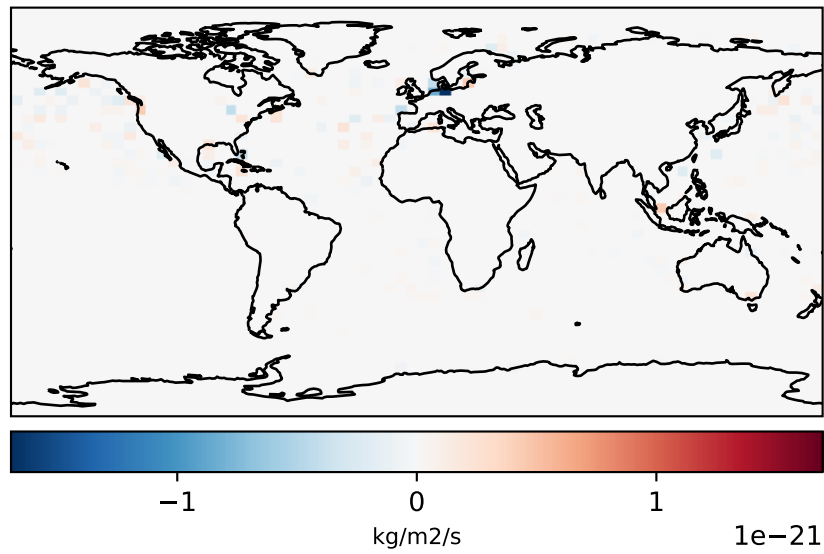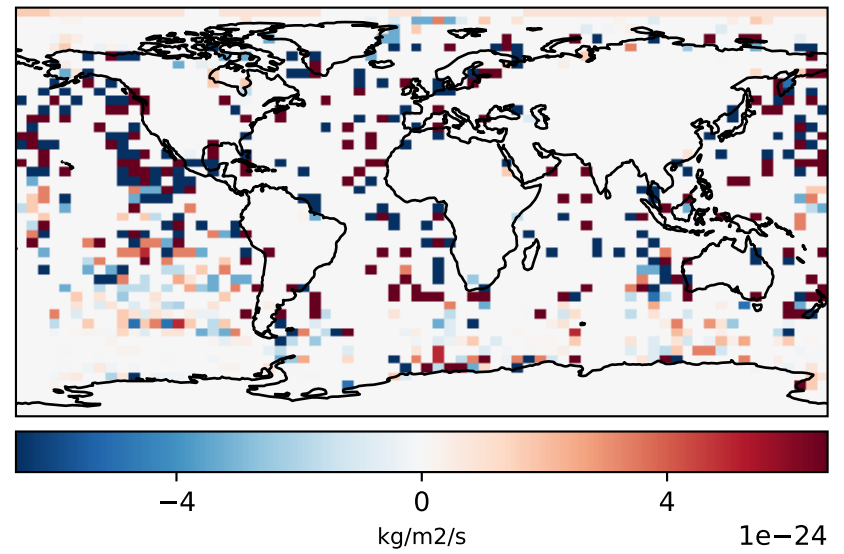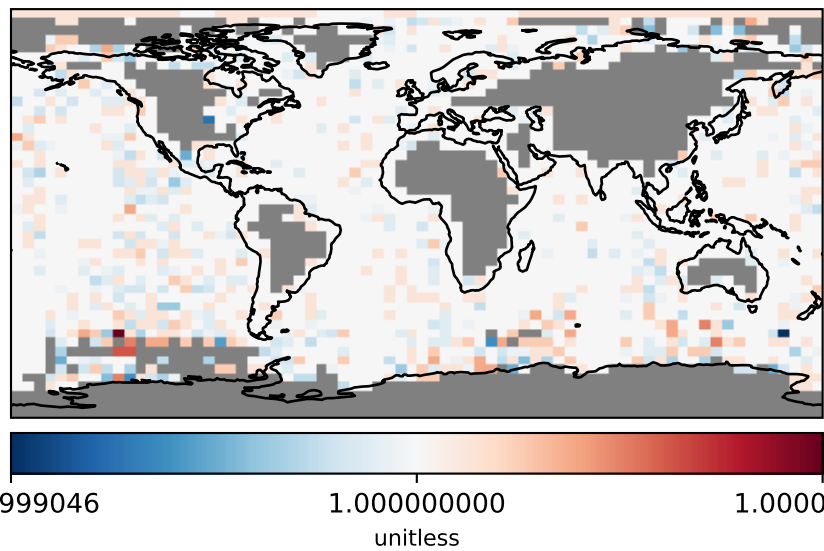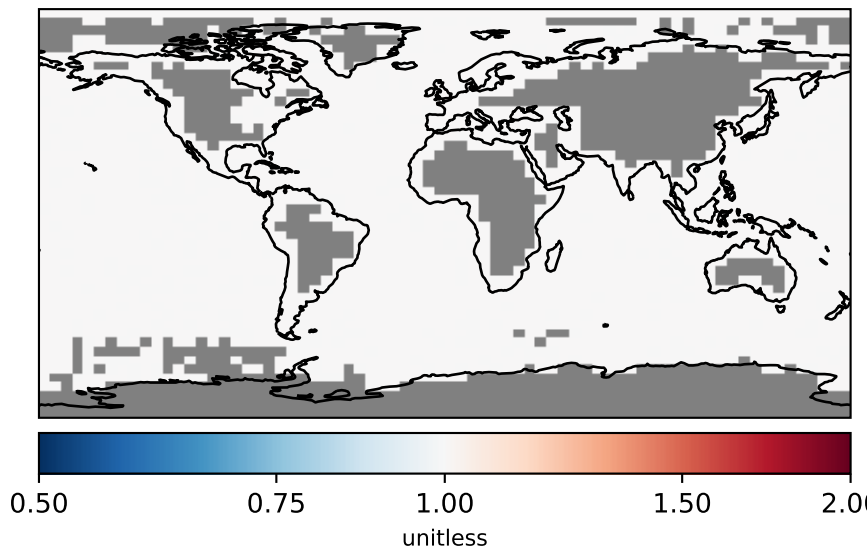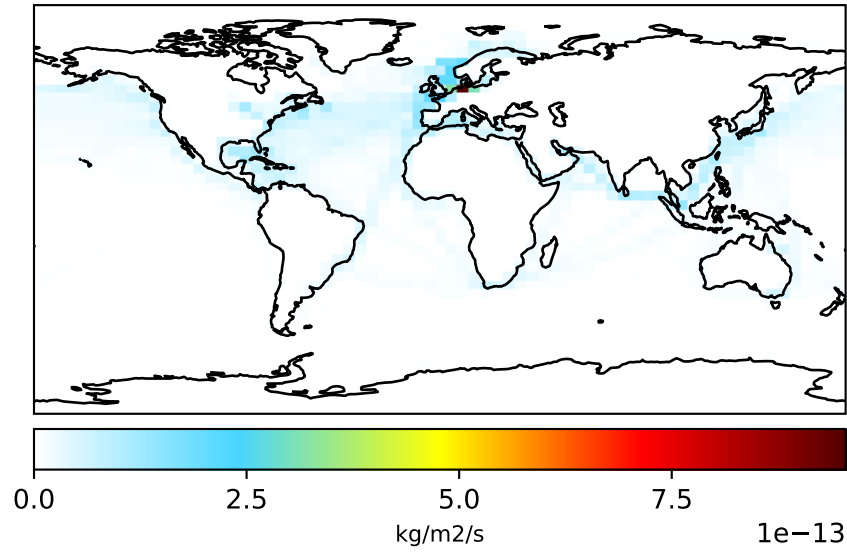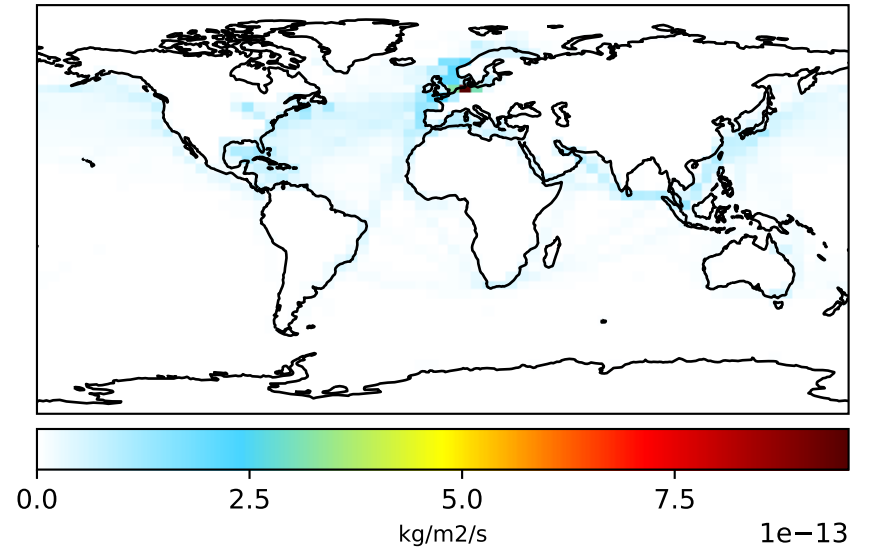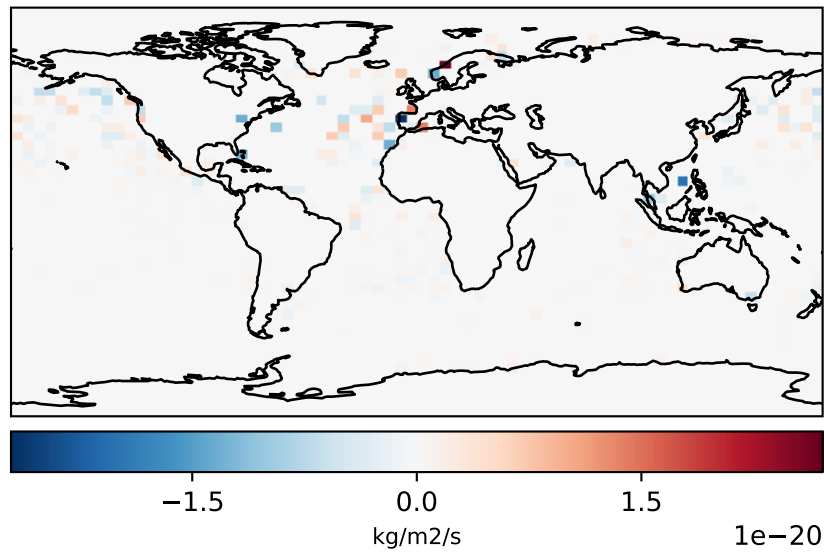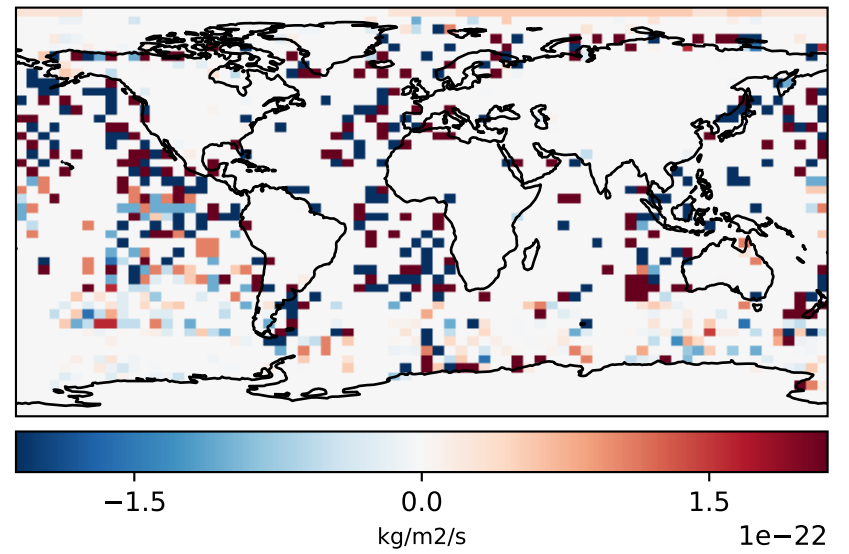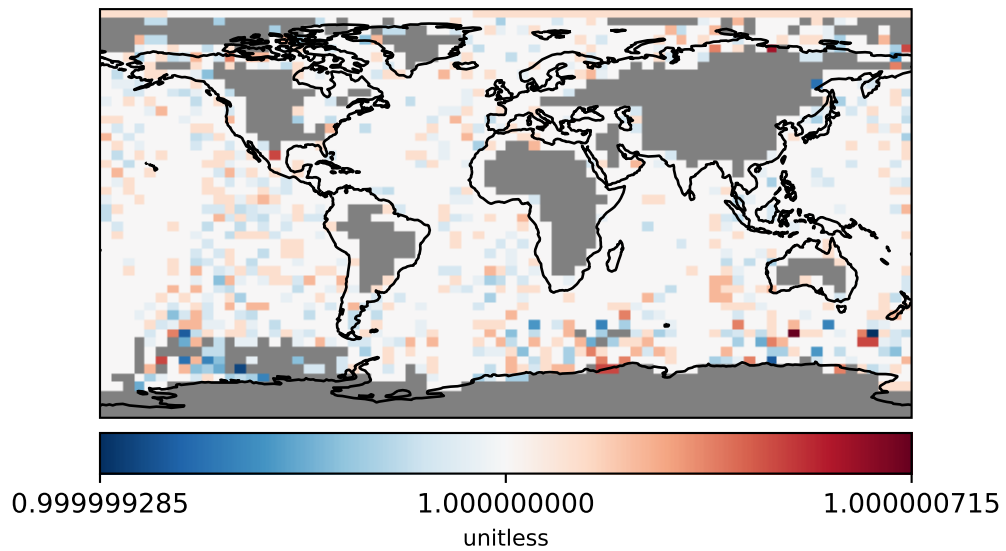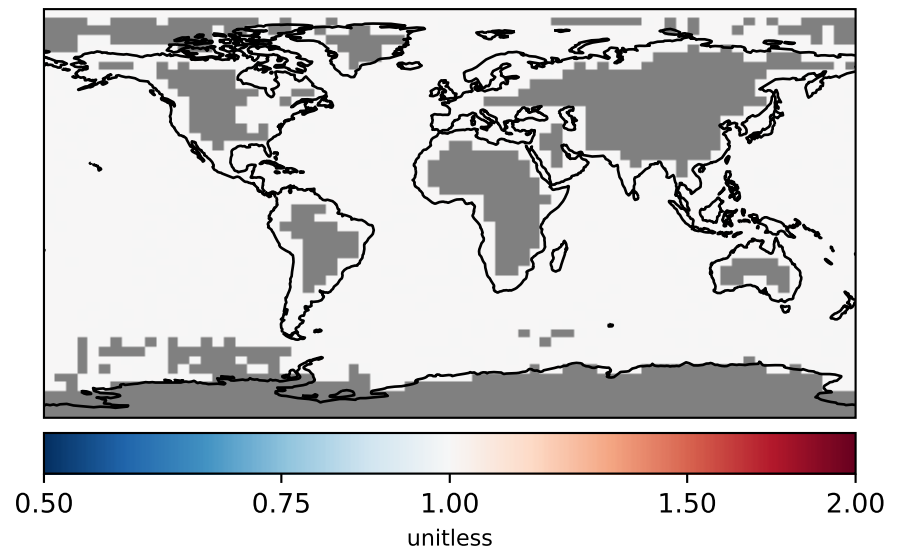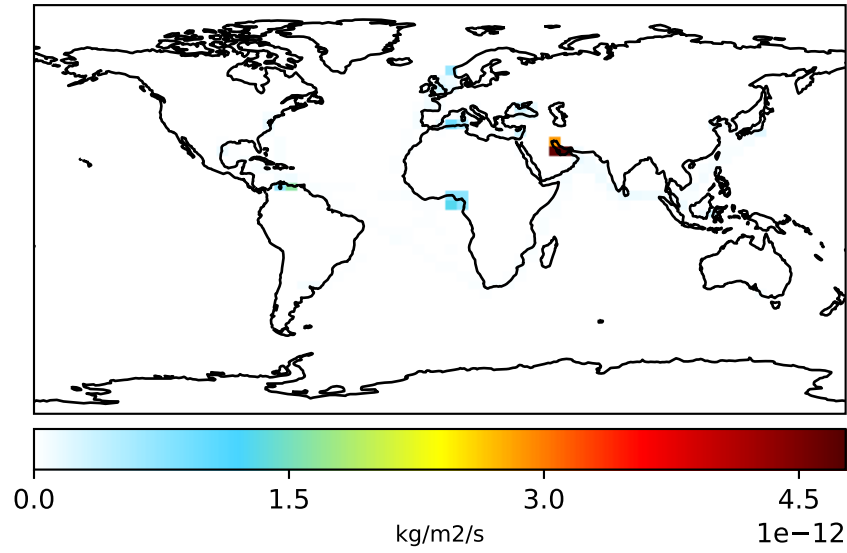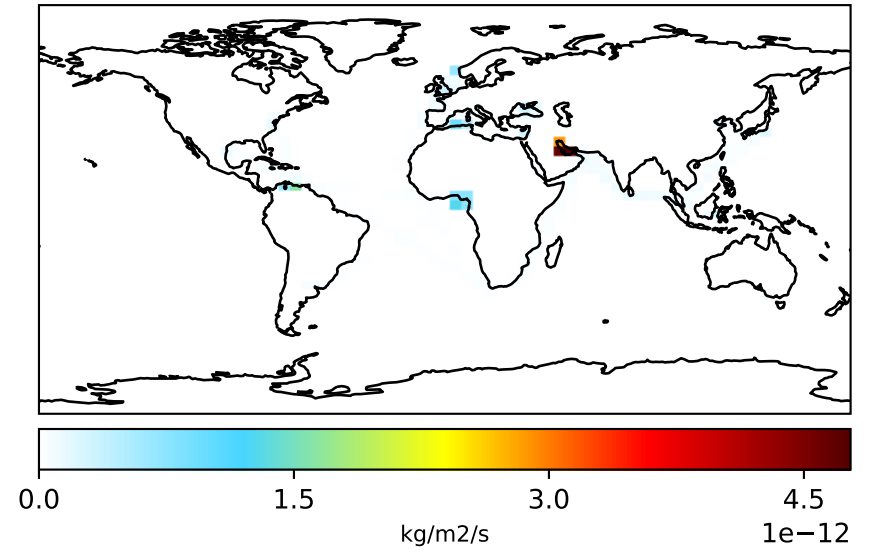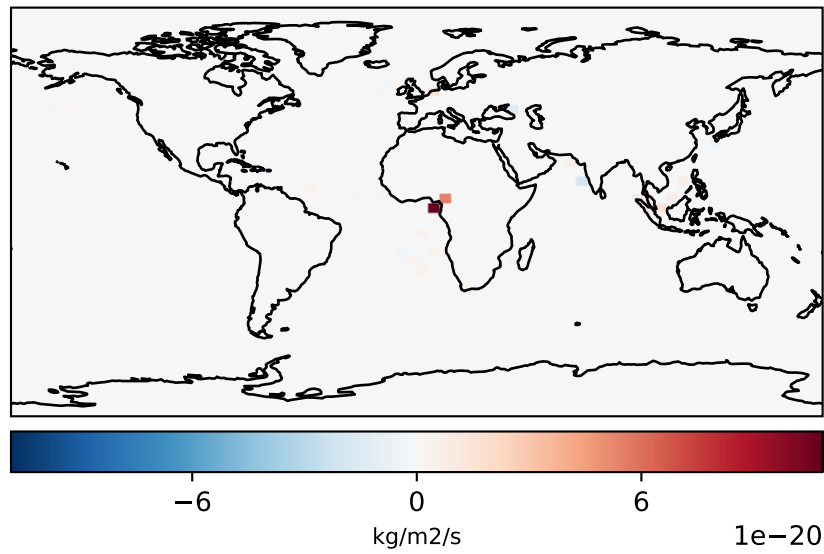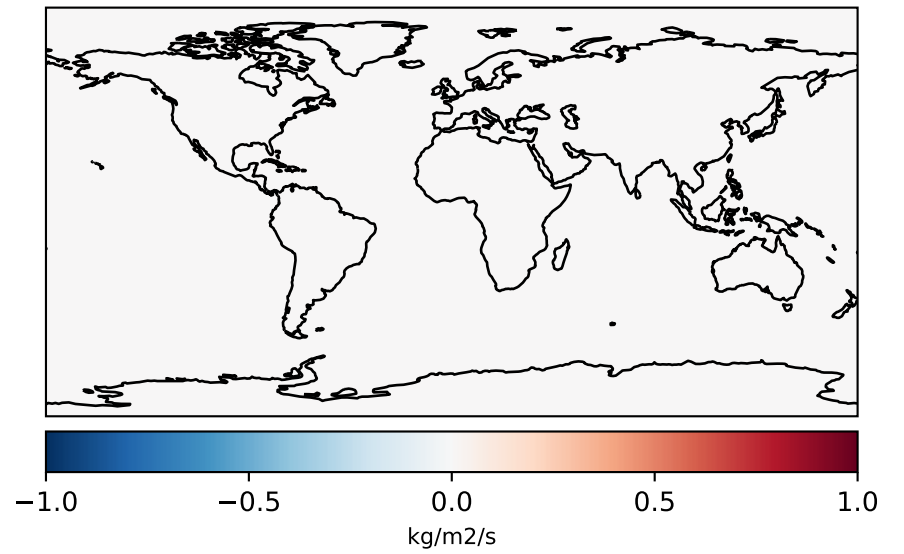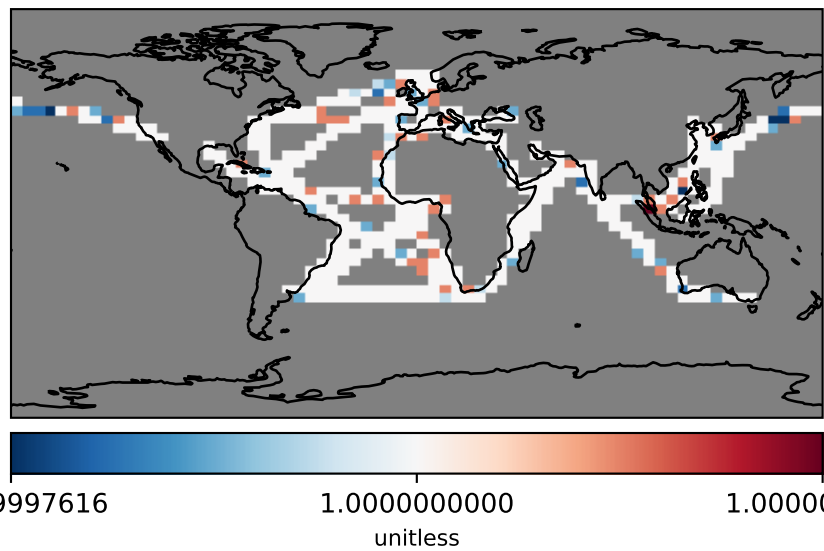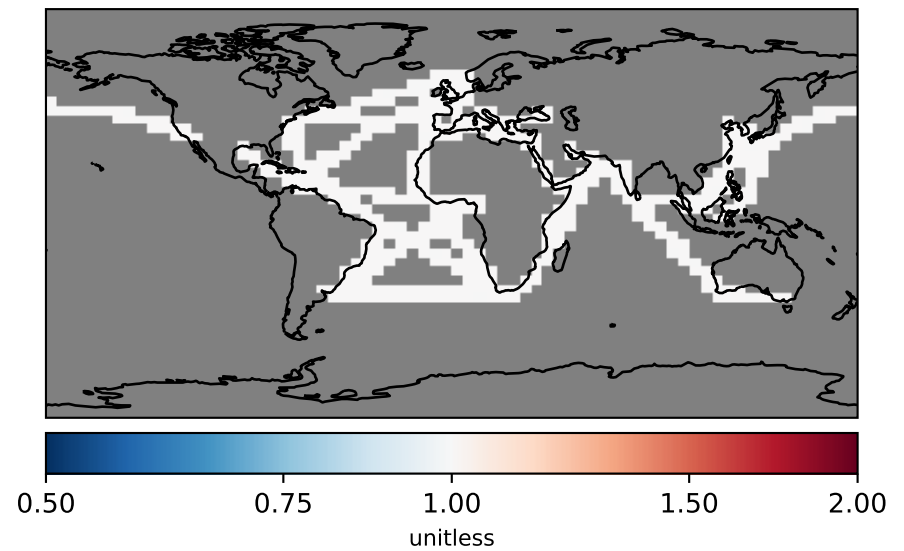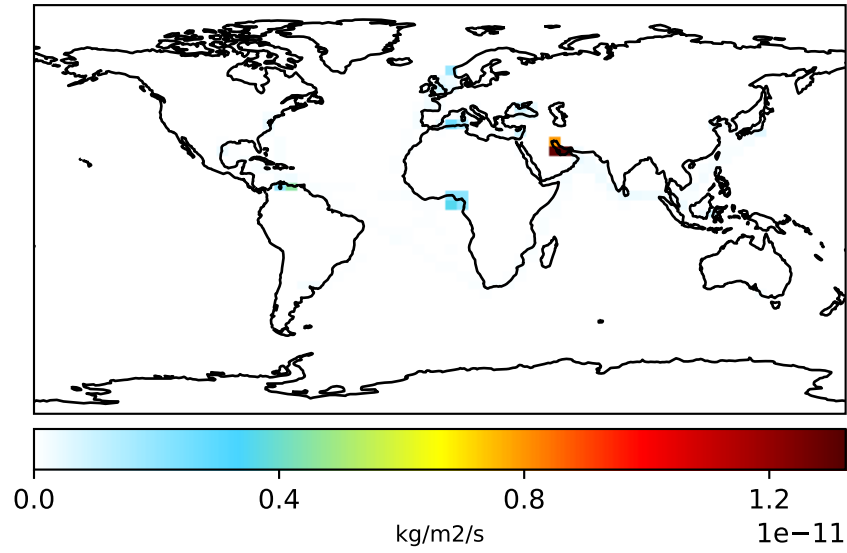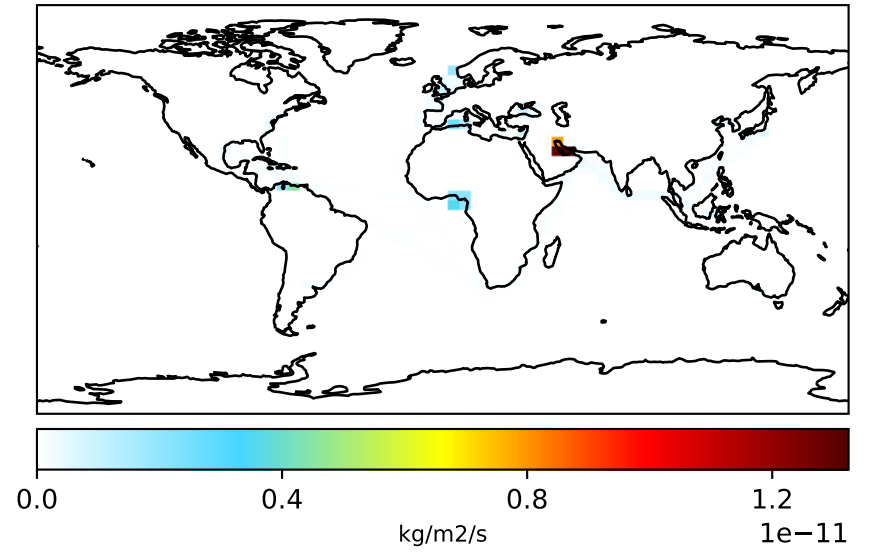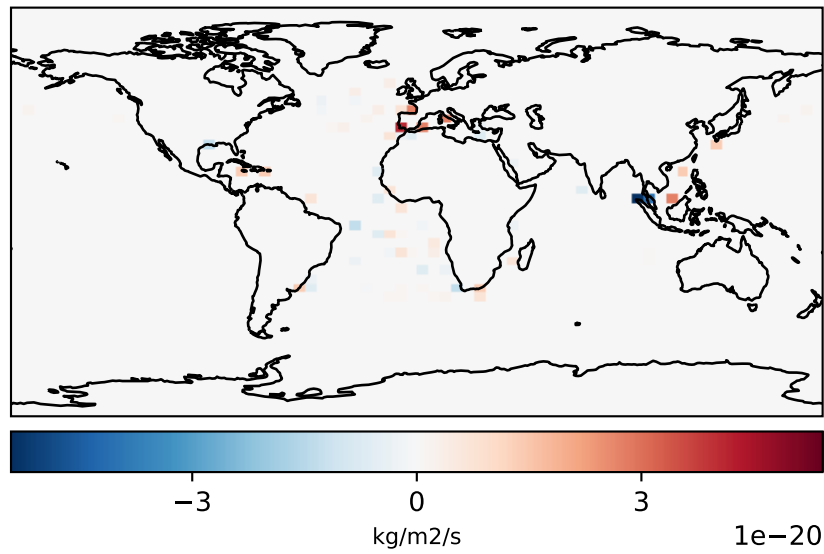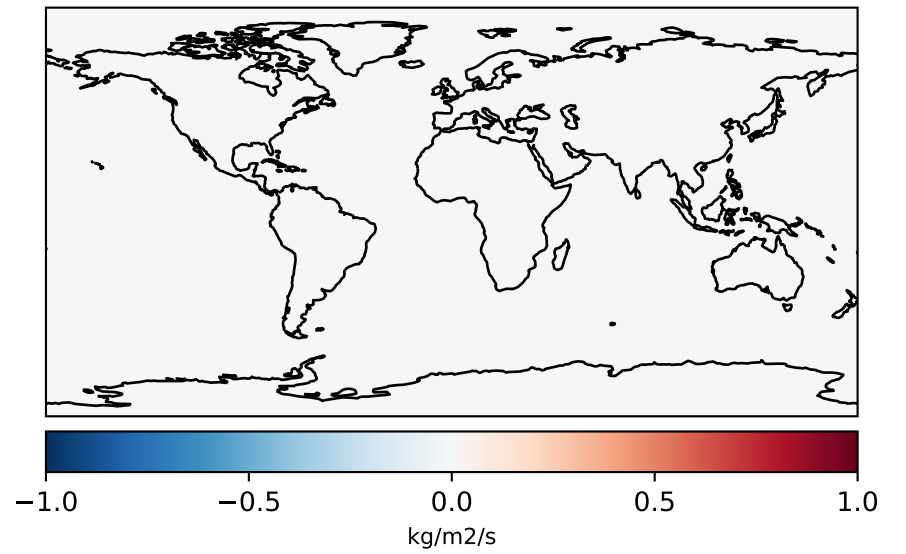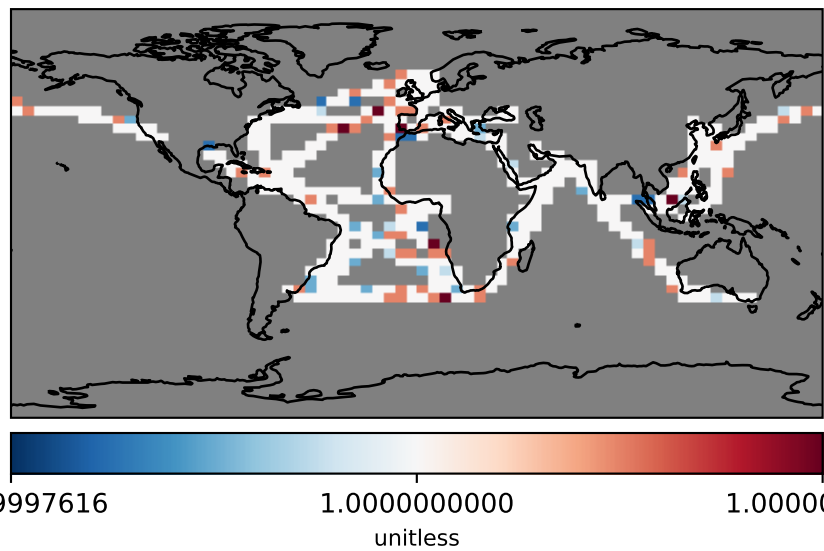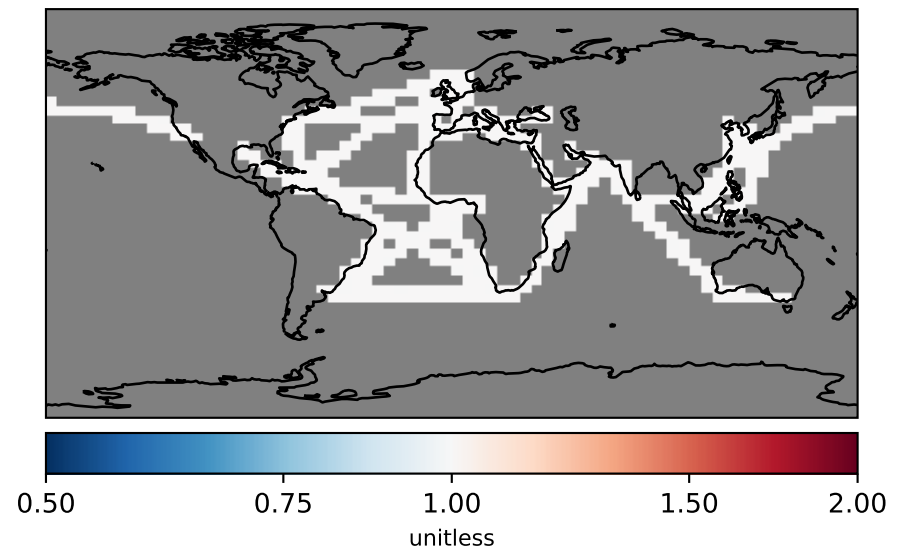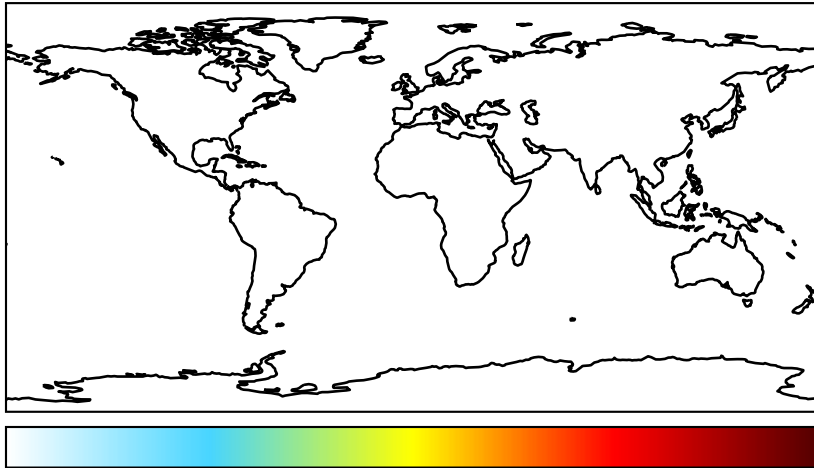
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

unitless

# EmisC2H6_Ship (AnnualMean)

# EmisC3H8_Ship (AnnualMean)

# EmisCH2O_Ship (AnnualMean)

gcc-14.3.0-rc.0 (Ref)
4.0x5.0

Zero throughout domain
kg/m2/s

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

Zero throughout domain
kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

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

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

Undefined throughout domain
unitless

# EmisCO_Ship (AnnualMean)
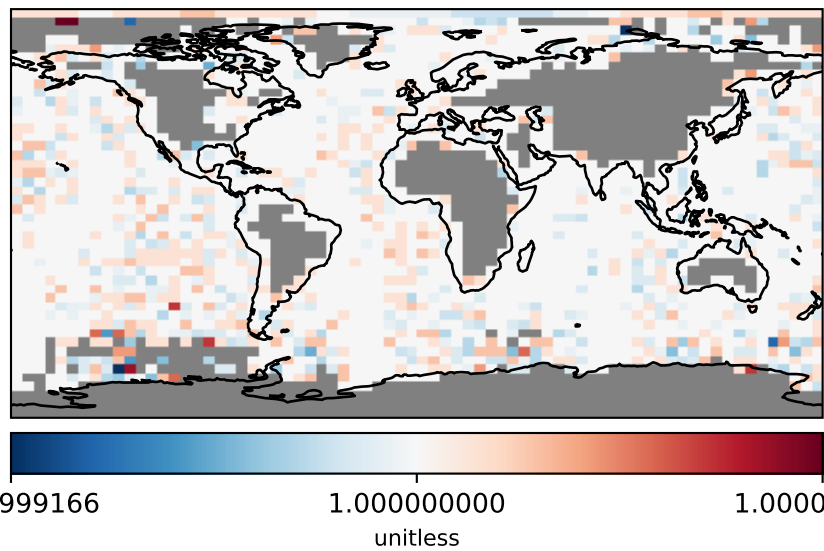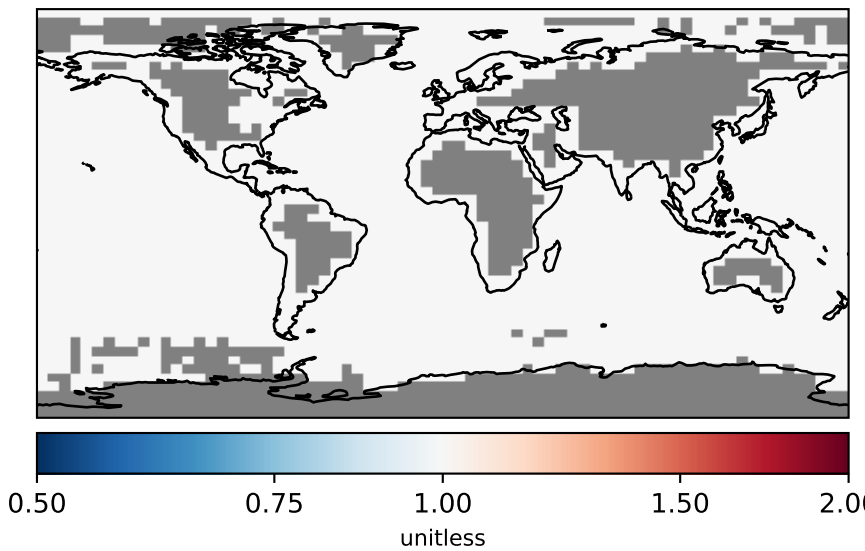
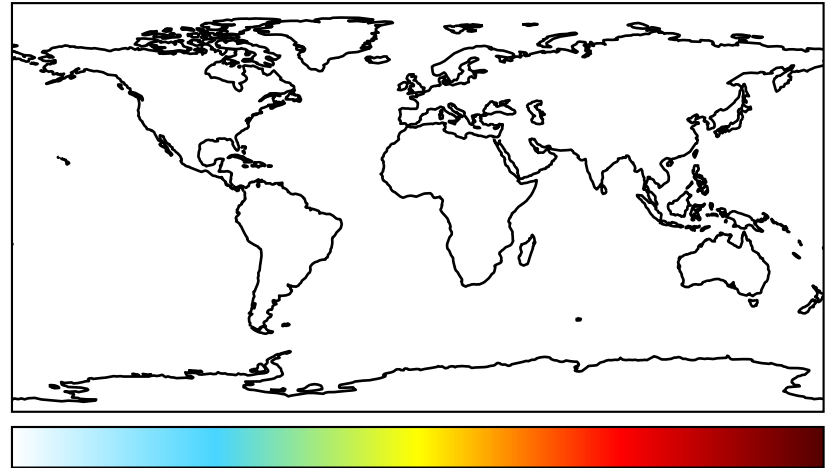# EmisEOH_Ship (AnnualMean)
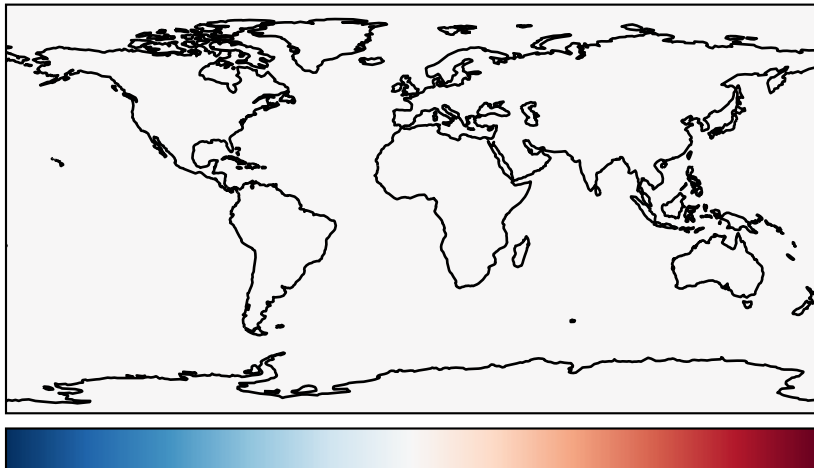


gcc-14.3.0-rc.0 (Ref)
4.0x5.0

Zero throughout domain
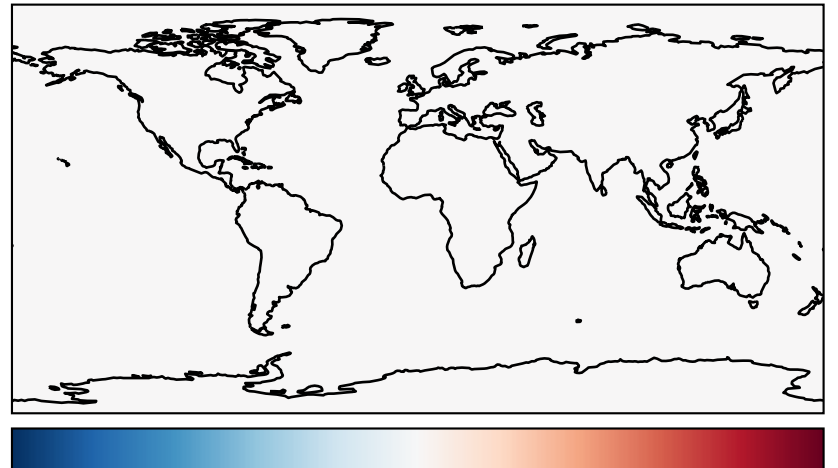kg/m2/s

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

Zero throughout domain
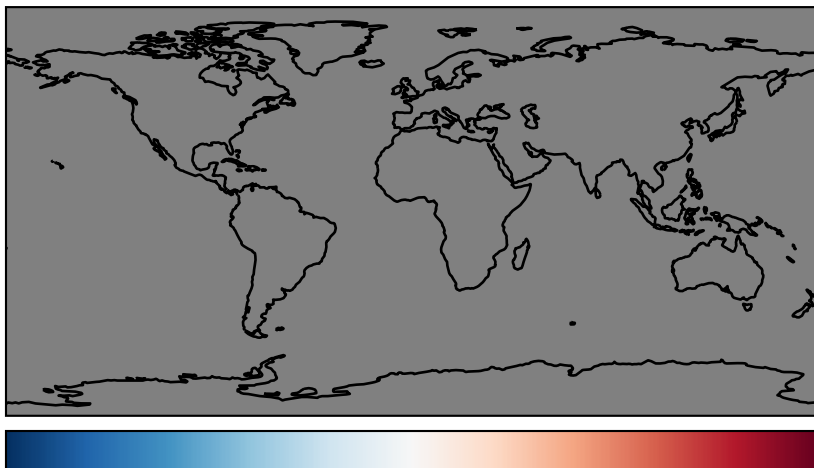kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

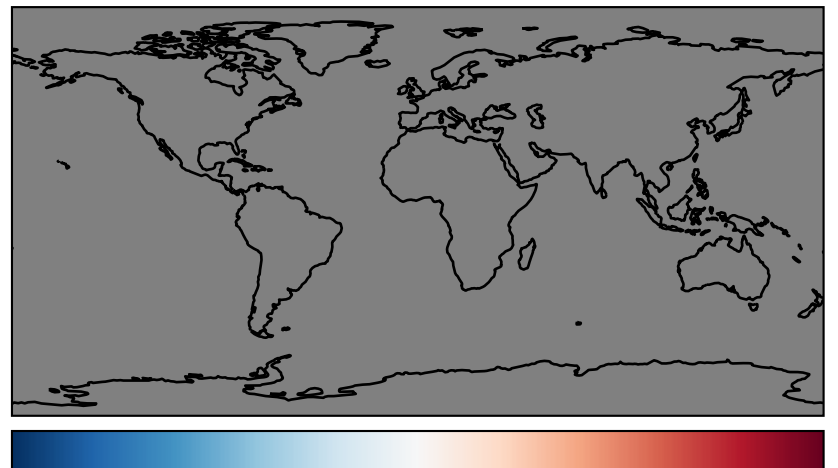Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Ratio
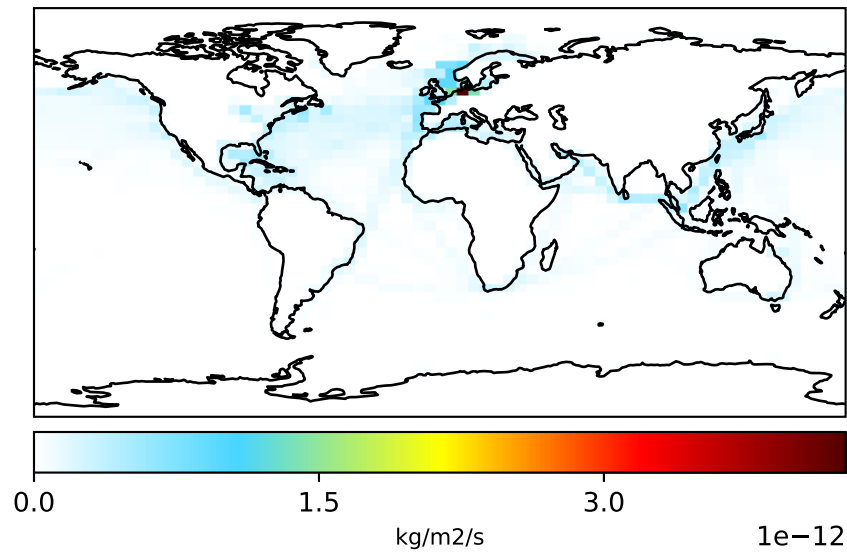Dev/Ref, Dynamic Range

Undefined throughout domain
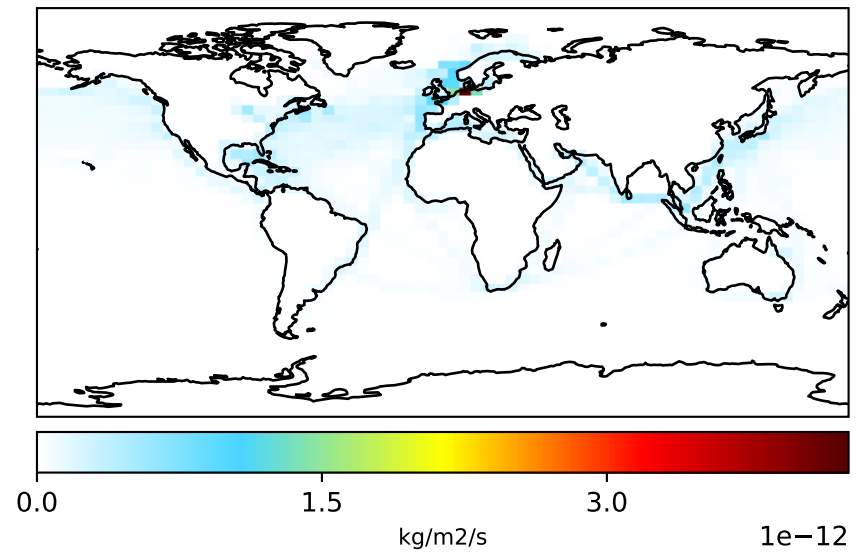unitless

Ratio
Dev/Ref, Fixed Range

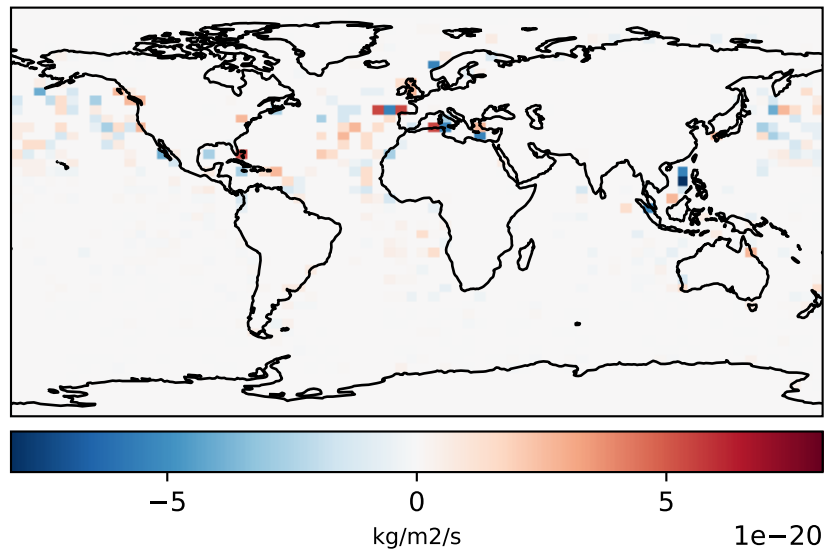Undefined throughout domain
unitless

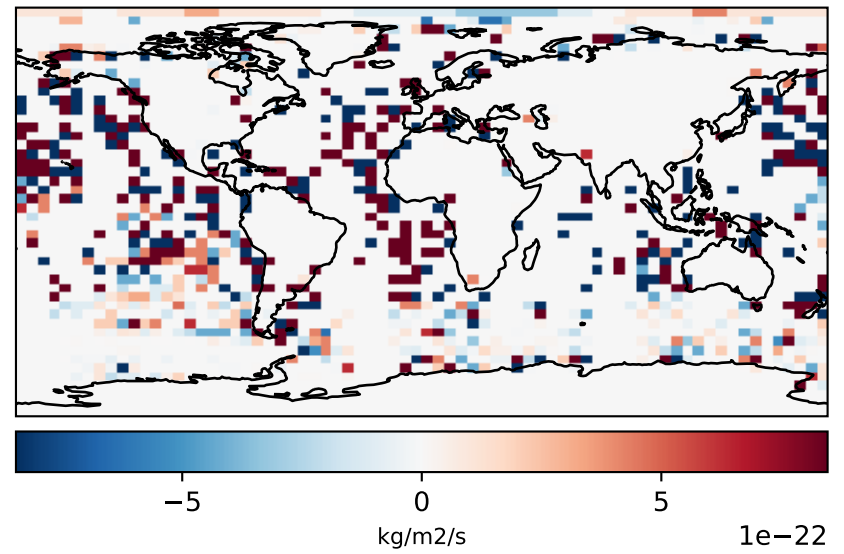# EmisHCOOH_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
4.0x5.0
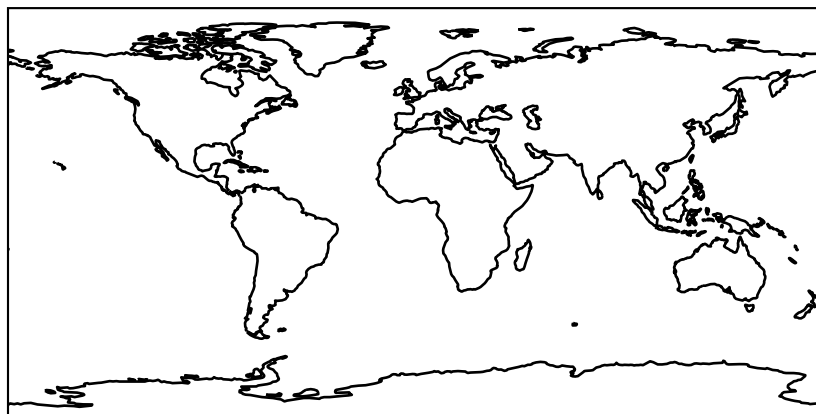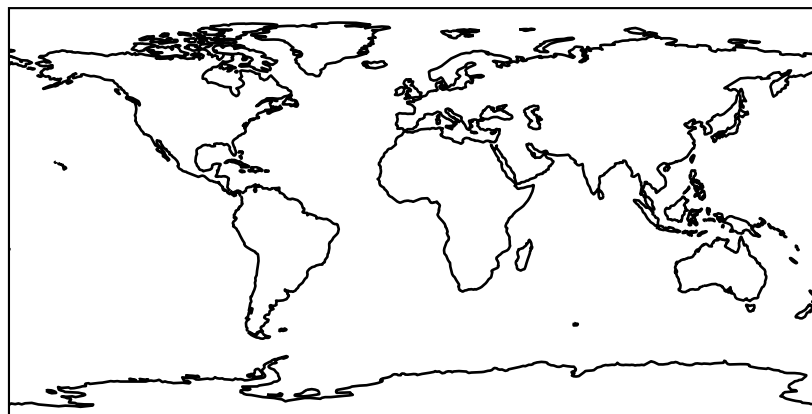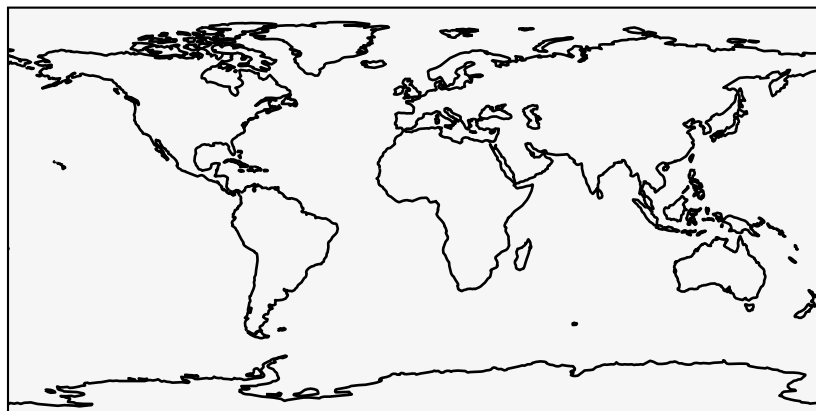
Zero throughout domain
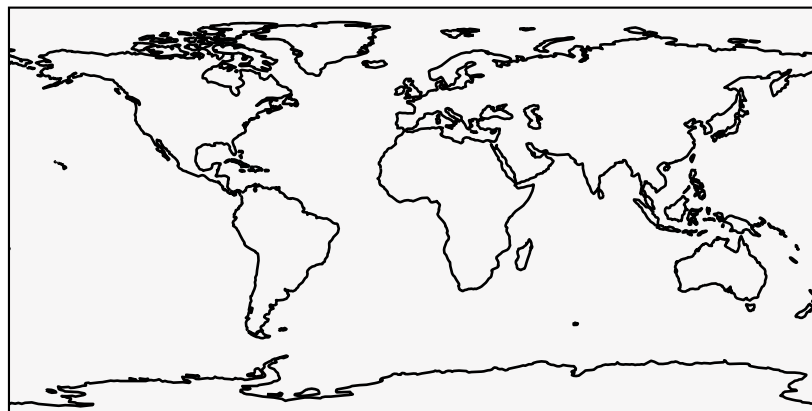kg/m2/s

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

Zero throughout domain
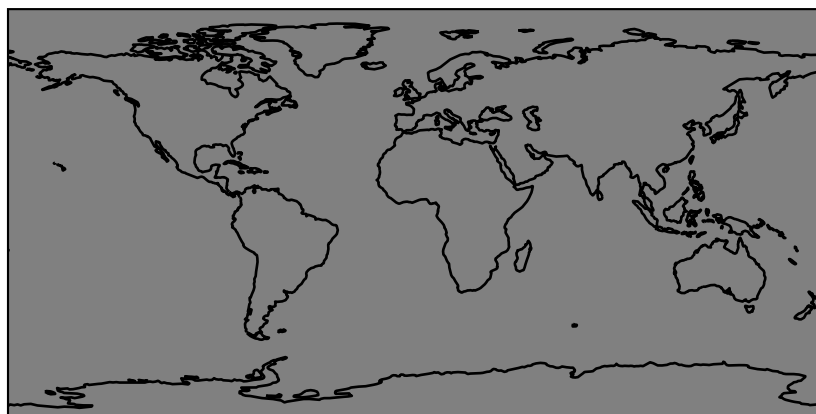kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

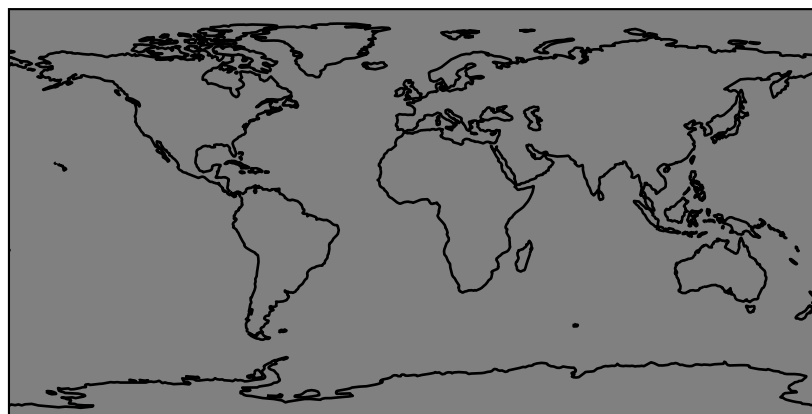Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Ratio
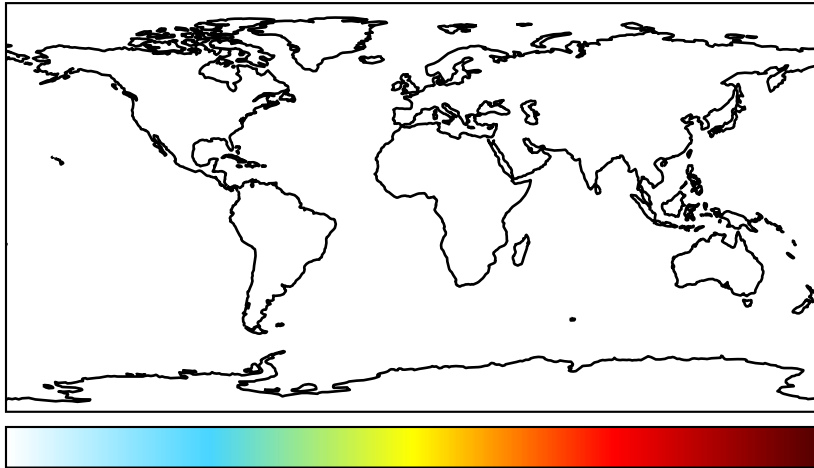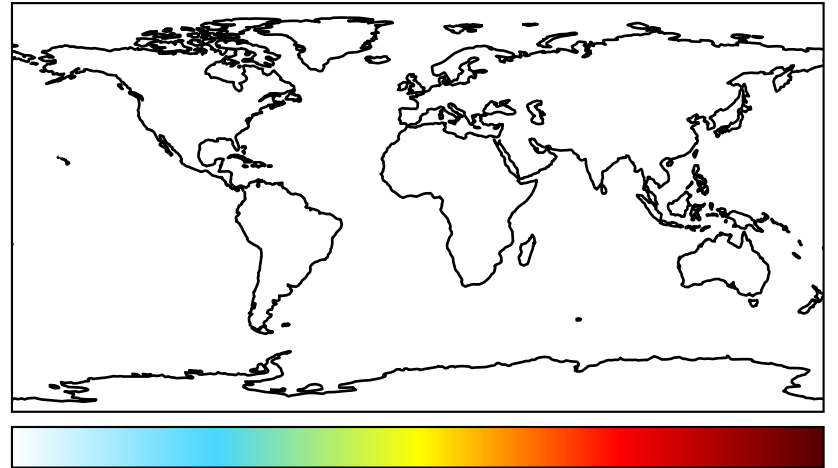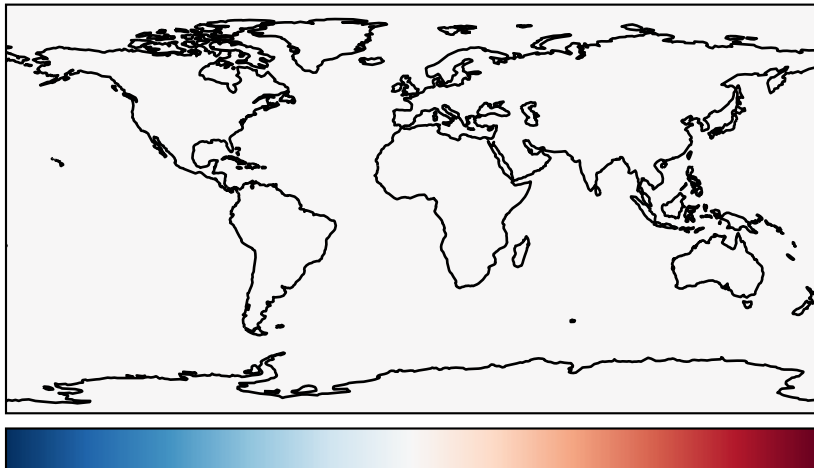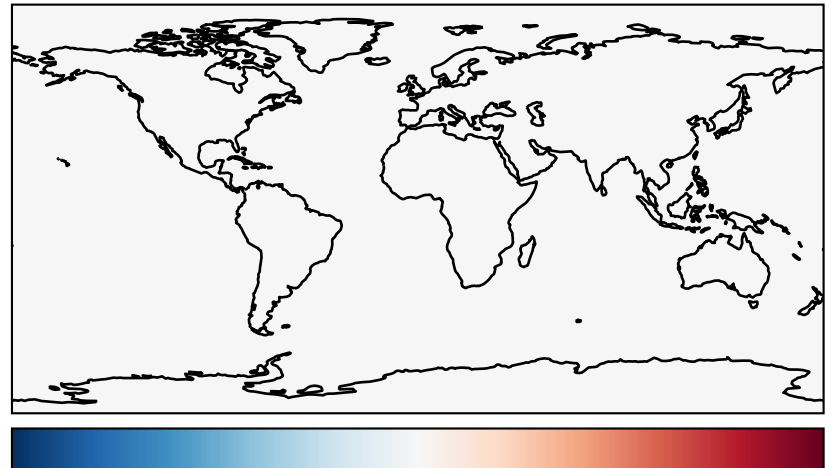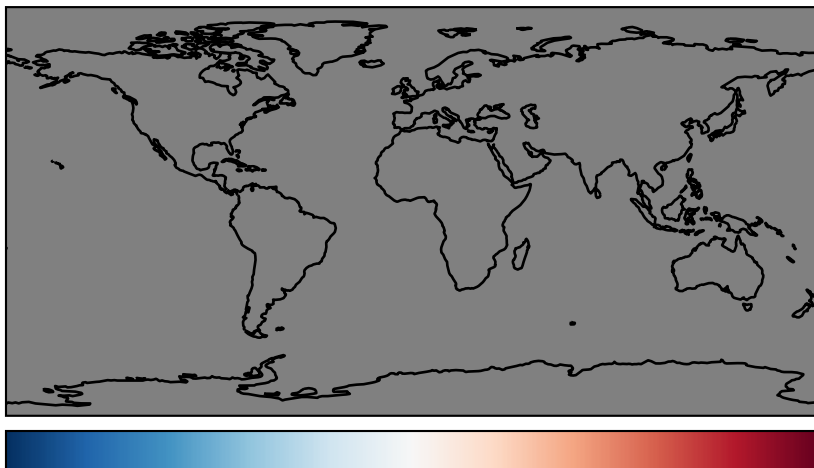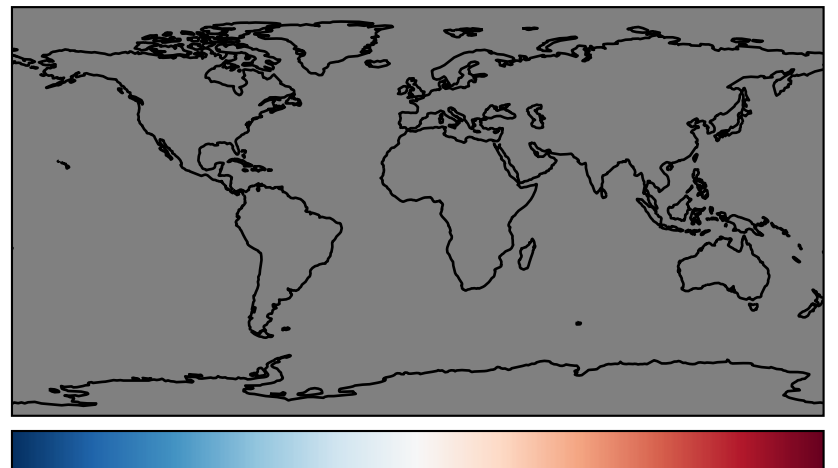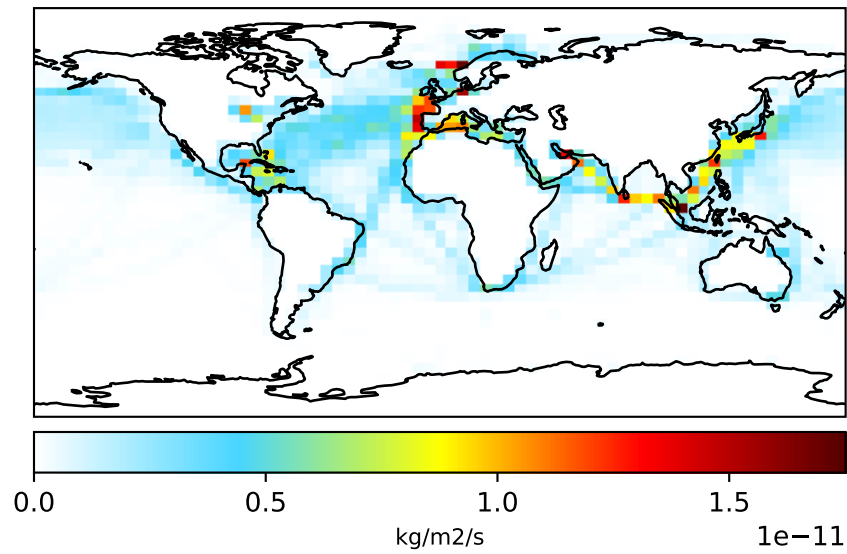Dev/Ref, Dynamic Range

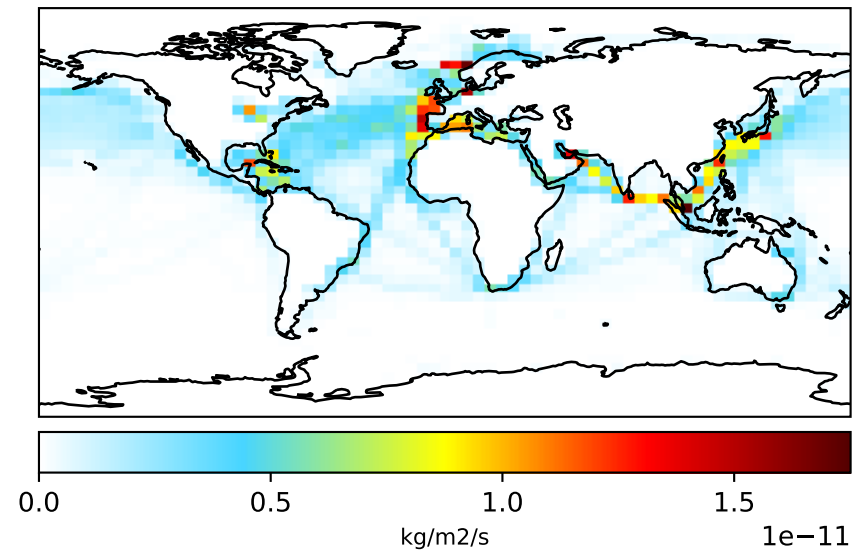Undefined throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

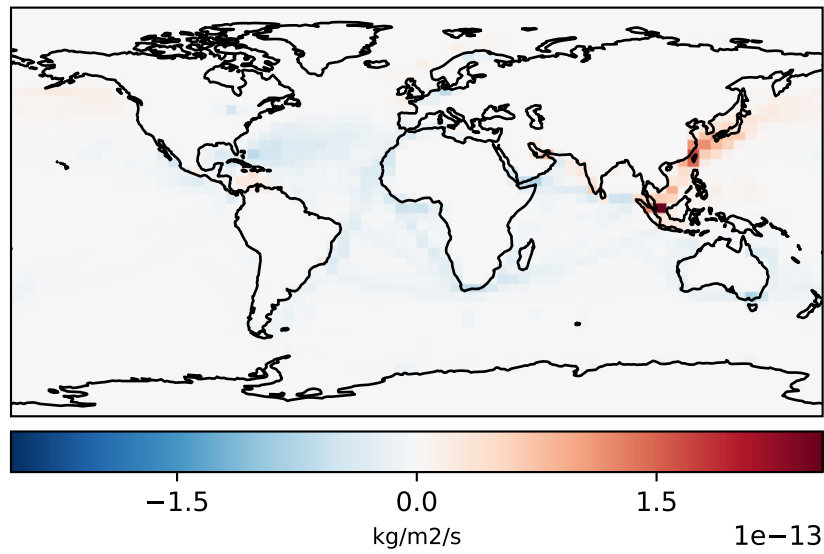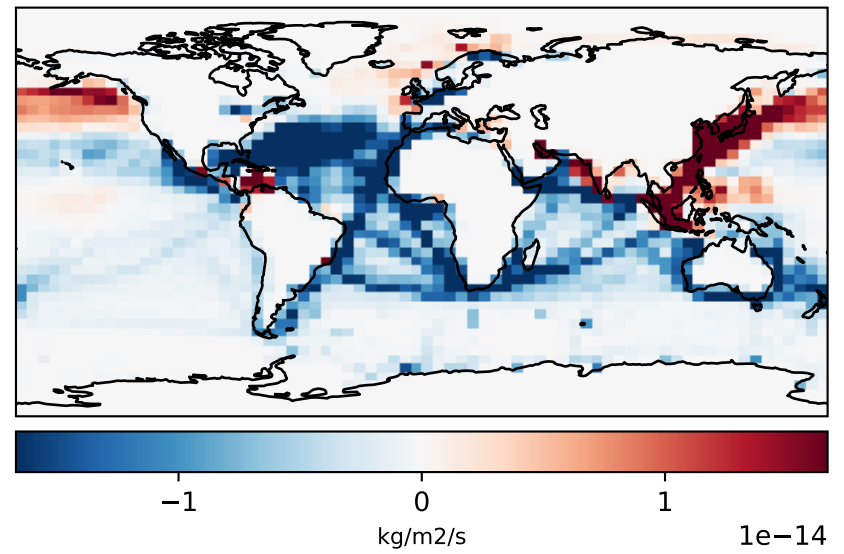Undefined throughout domain
unitless

# EmisHNO3_Ship (AnnualMean)
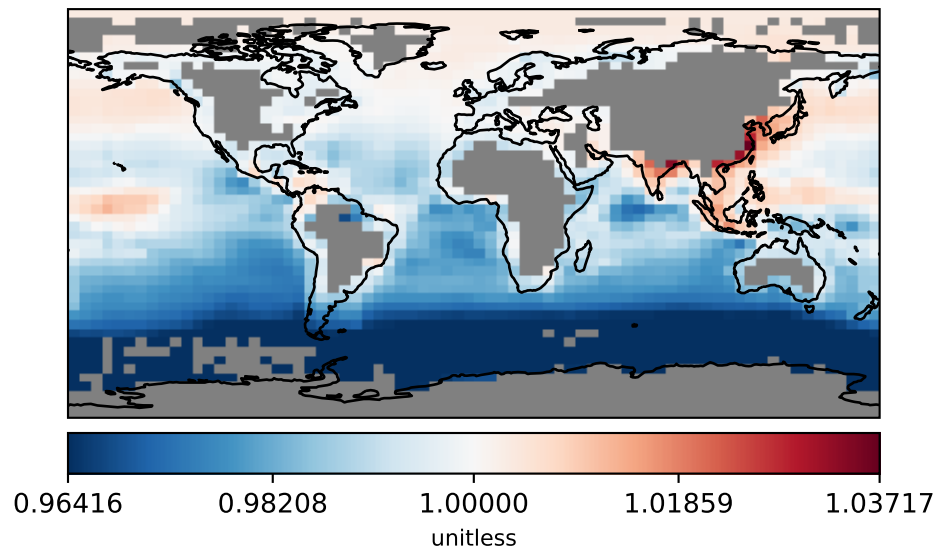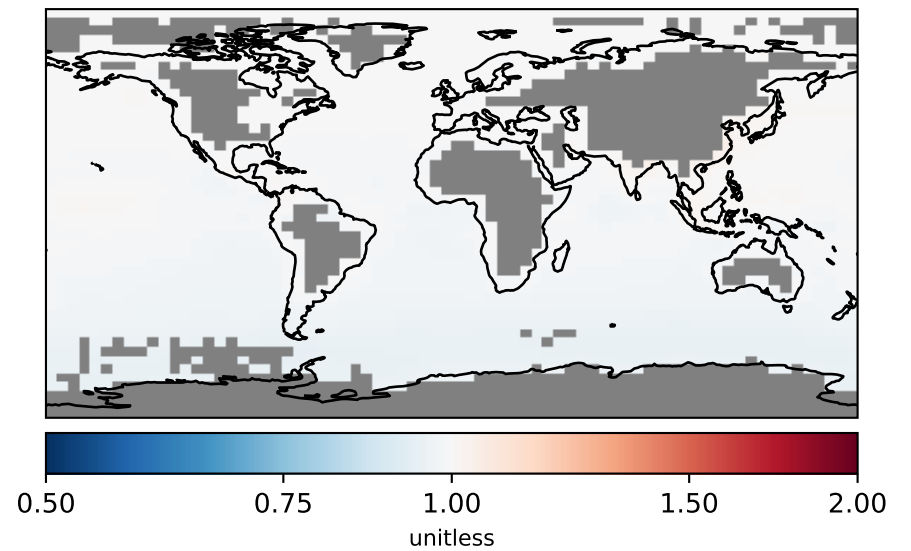
# EmisMEK_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
4.0x5.0

Zero throughout domain
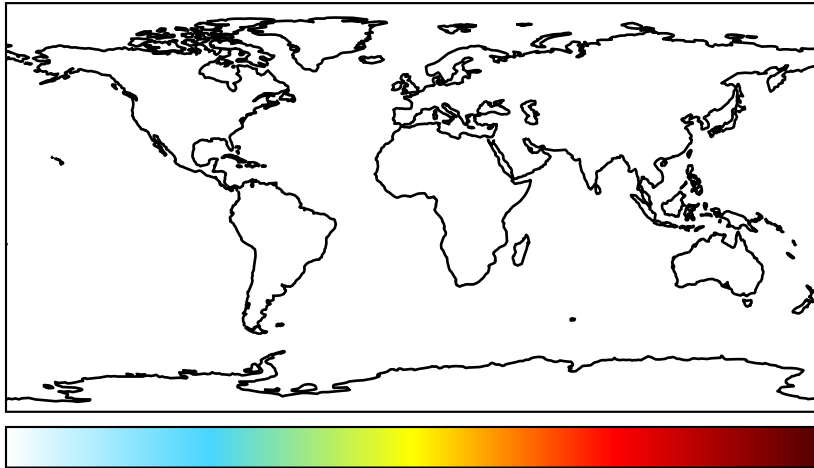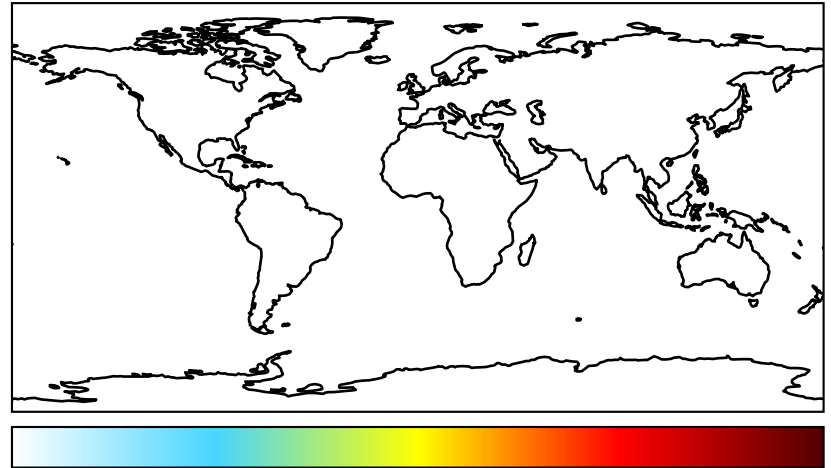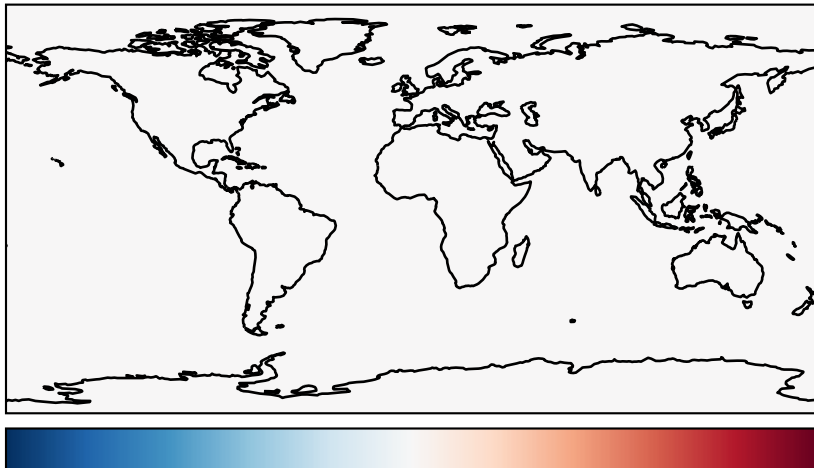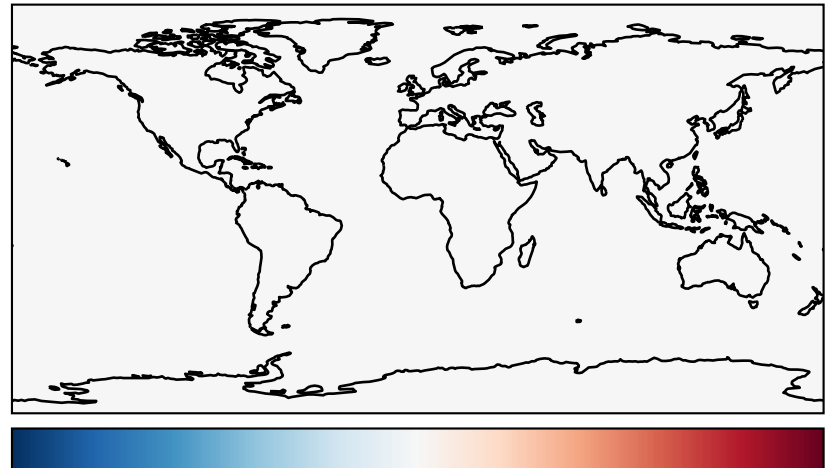kg/m2/s

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

Zero throughout domain
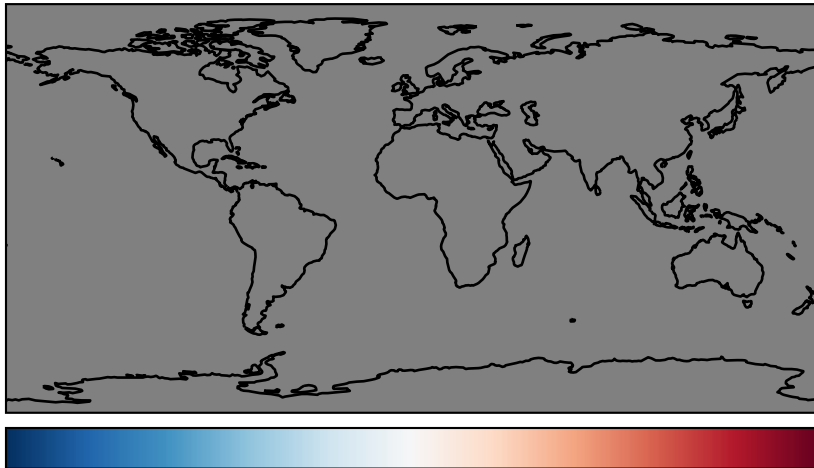kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

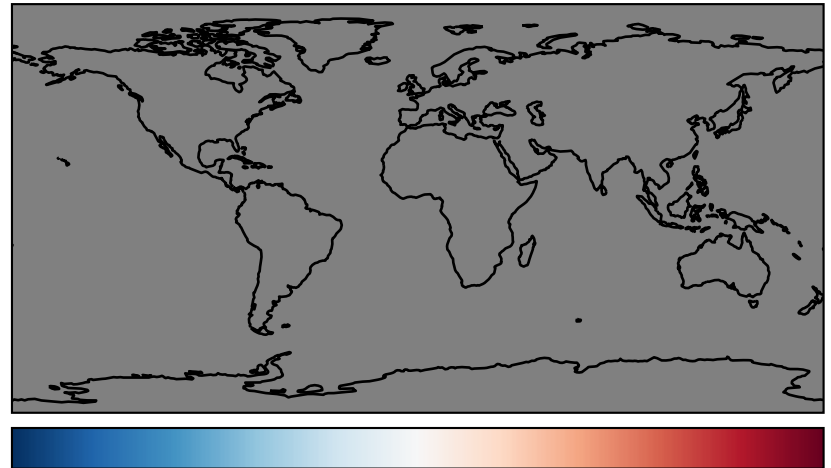Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Ratio
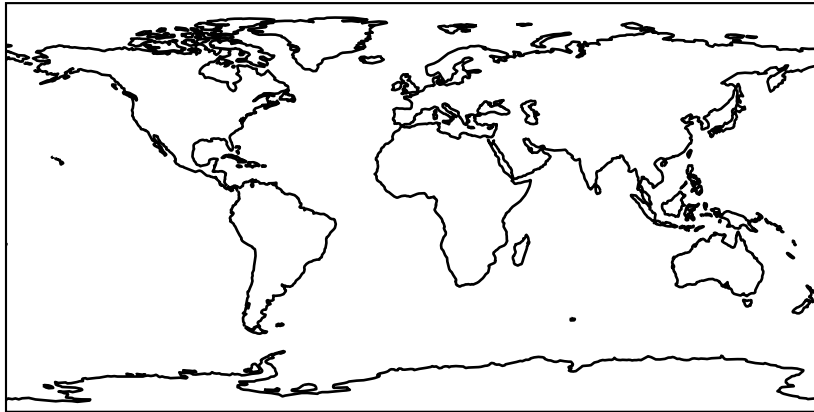Dev/Ref, Dynamic Range

Undefined throughout domain
unitless

Ratio
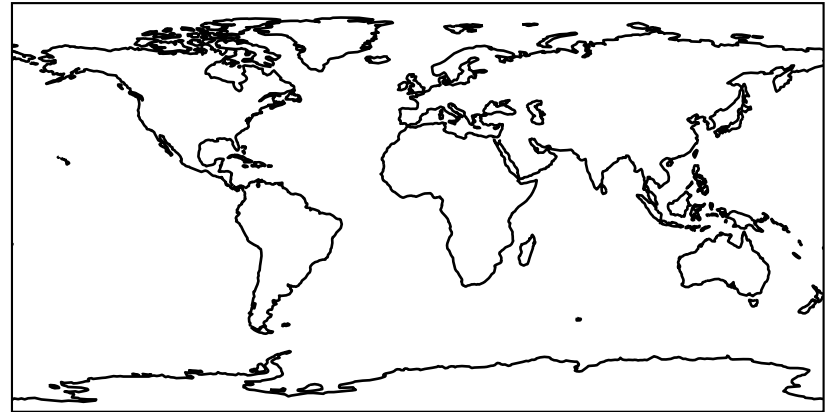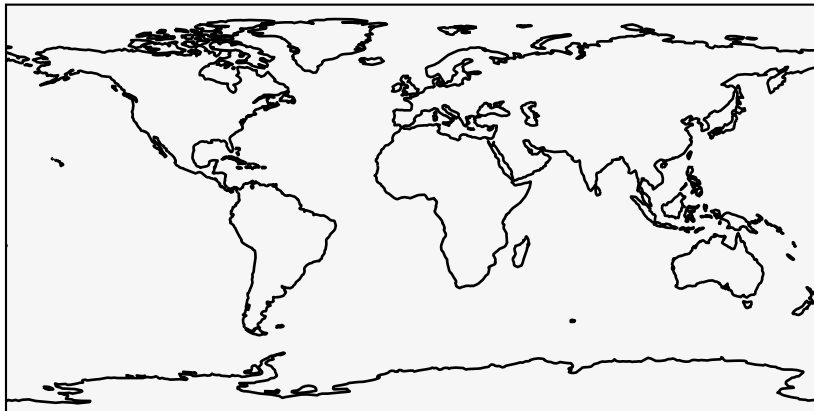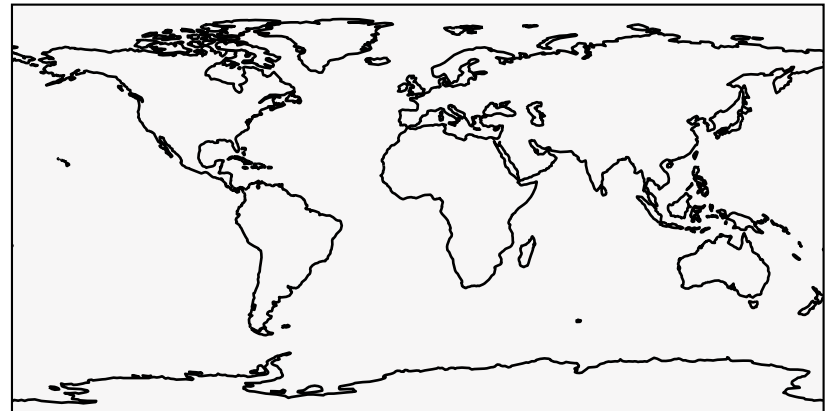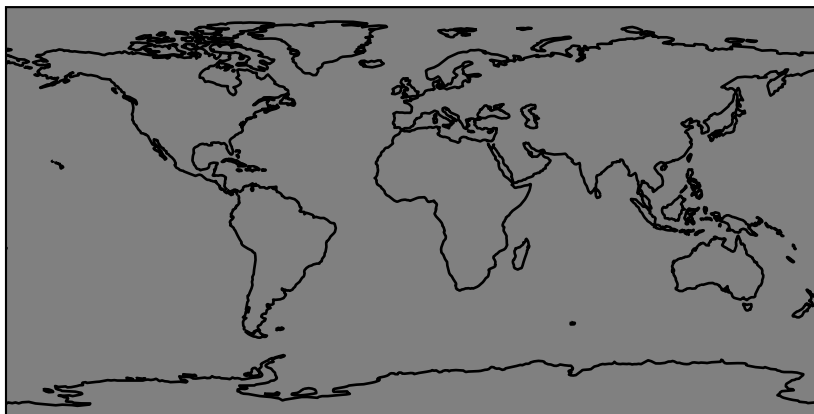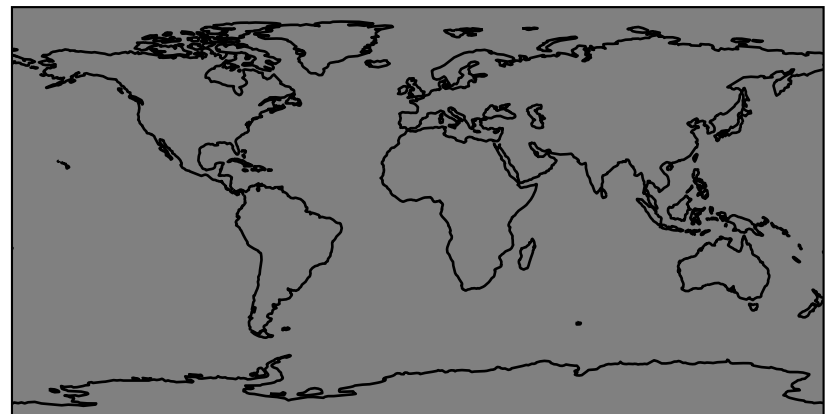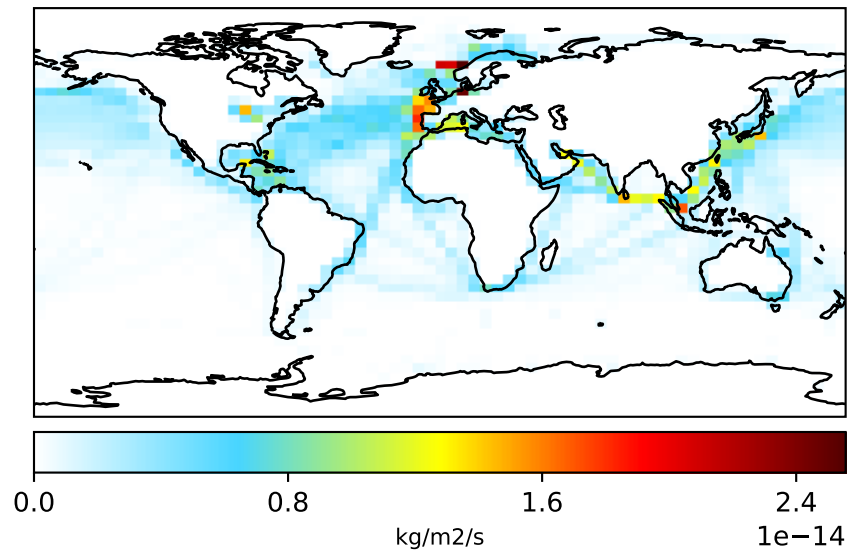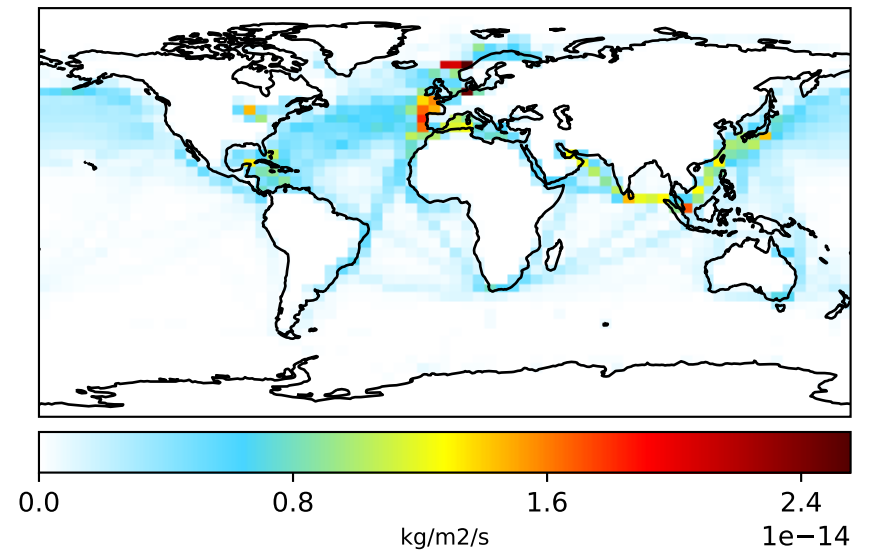Dev/Ref, Fixed Range

Undefined throughout domain
unitless

# EmisMOH_Ship (AnnualMean)

### gcc-14.3.0-rc.0 (Ref)
### 4.0x5.0

Zero throughout domain

kg/m2/s

### gcc-14.4.0-rc.0 (Dev)
### 4.0x5.0

Zero throughout domain

kg/m2/s

### Difference
### Dev - Ref, Dynamic Range

Zero throughout domain

kg/m2/s

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

Zero throughout domain

kg/m2/s

### Ratio
### Dev/Ref, Dynamic Range

Undefined throughout domain

unitless

### Ratio
### Dev/Ref, Fixed Range

Undefined throughout domain

unitless

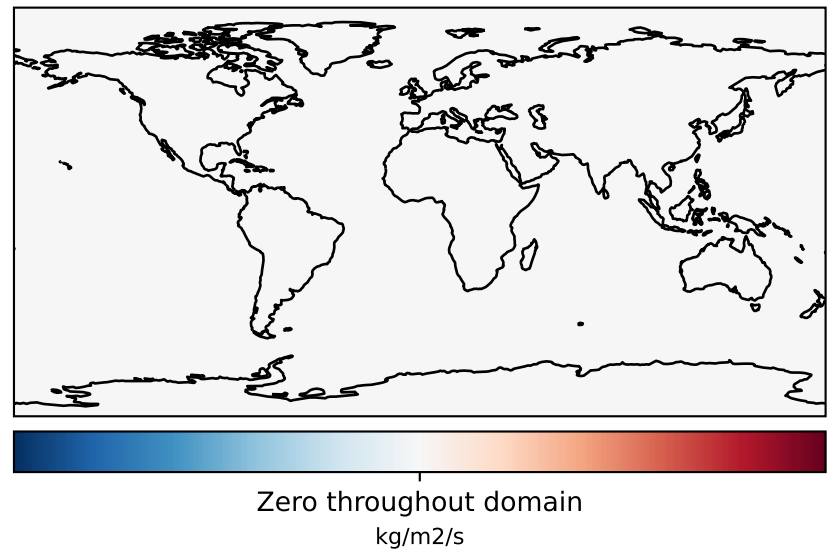# EmisNH3_Ship (AnnualMean)



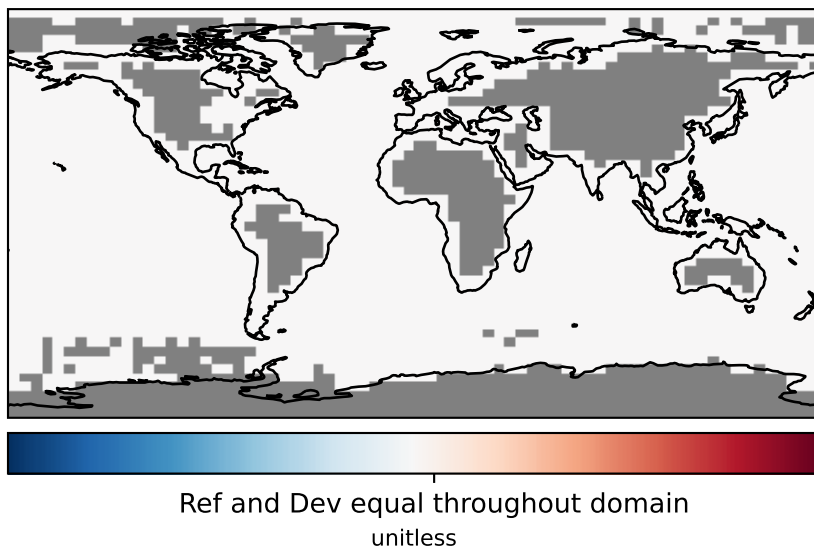gcc-14.3.0-rc.0 (Ref)
4.0x5.0

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

kg/m2/s
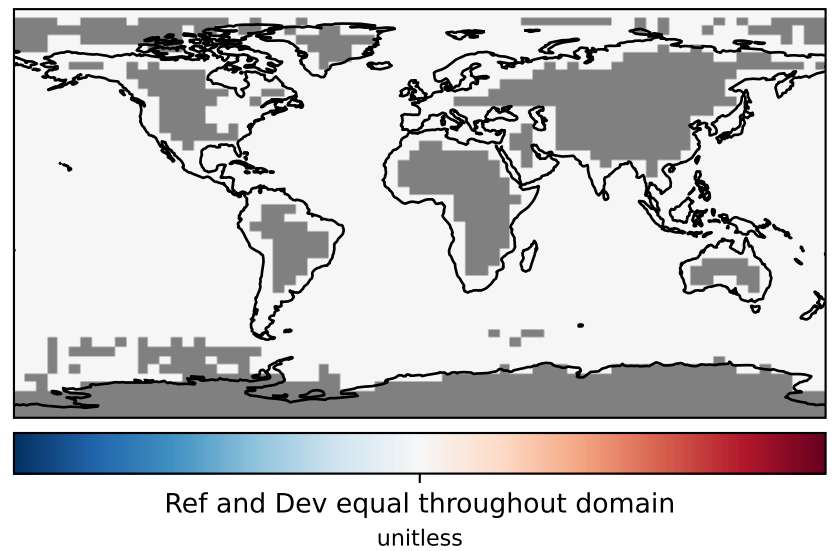
kg/m2/s

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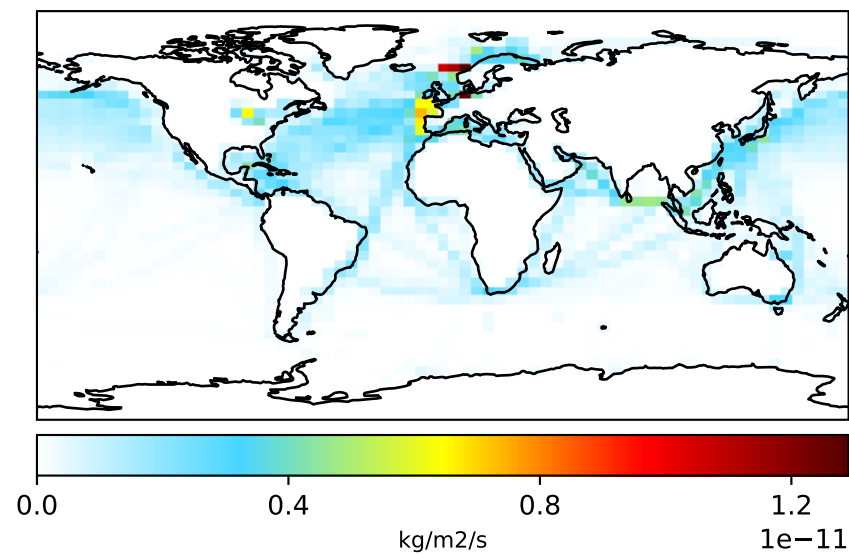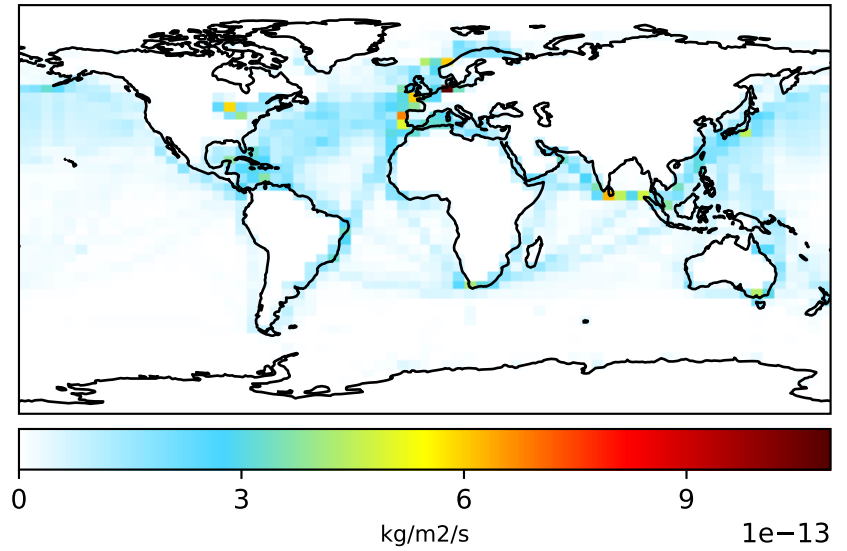
Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

Ref and Dev equal throughout domain
unitless
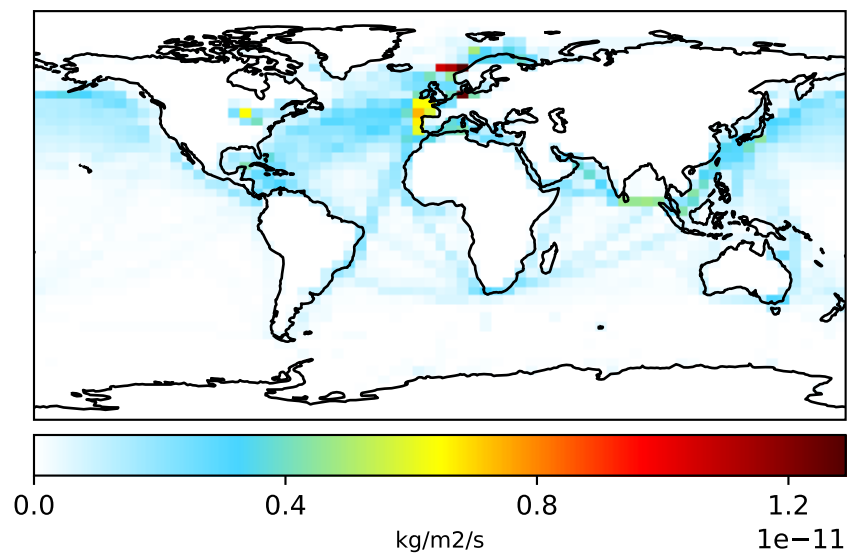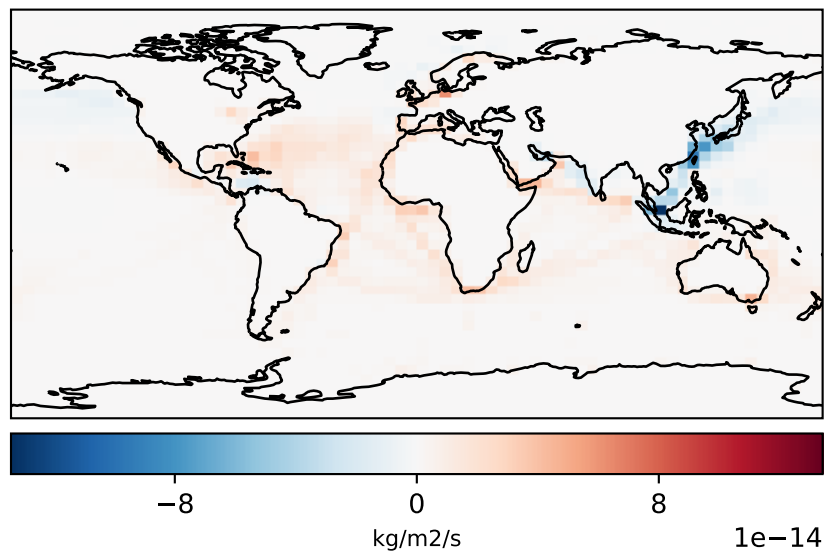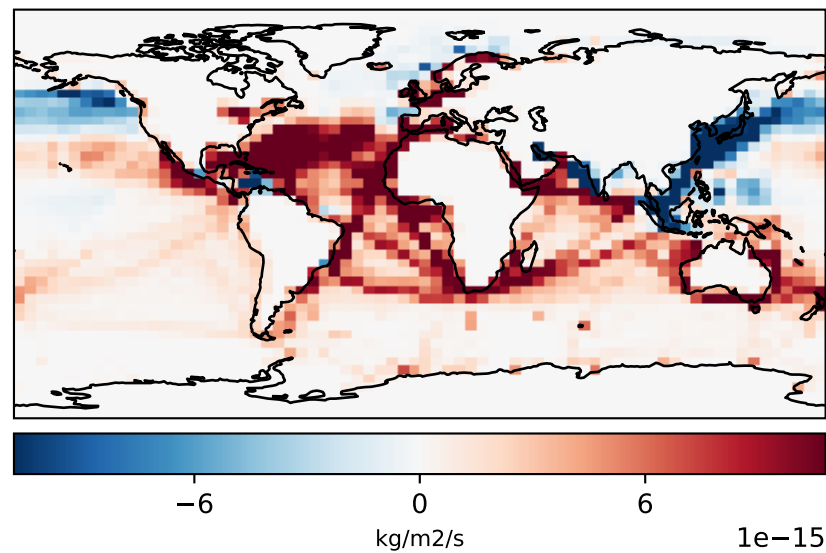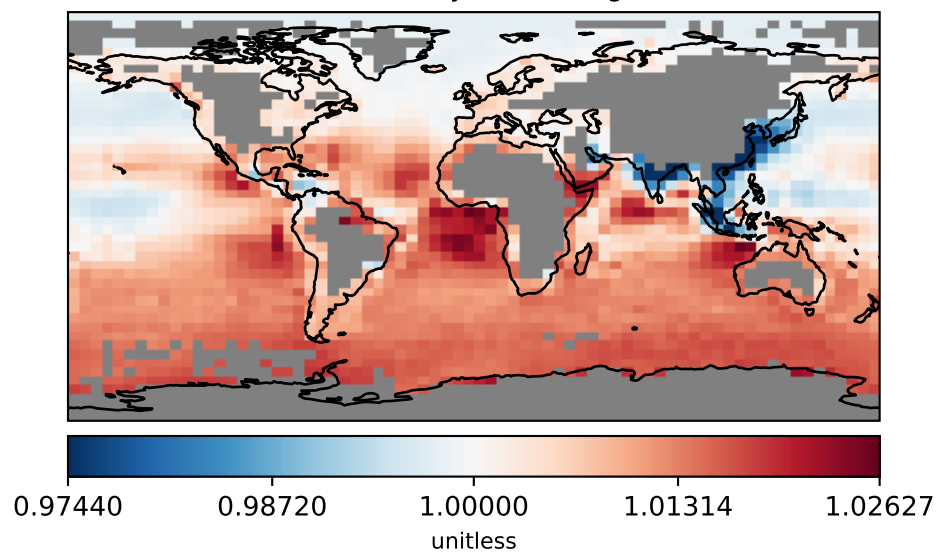
# EmisNO2_Ship (AnnualMean)
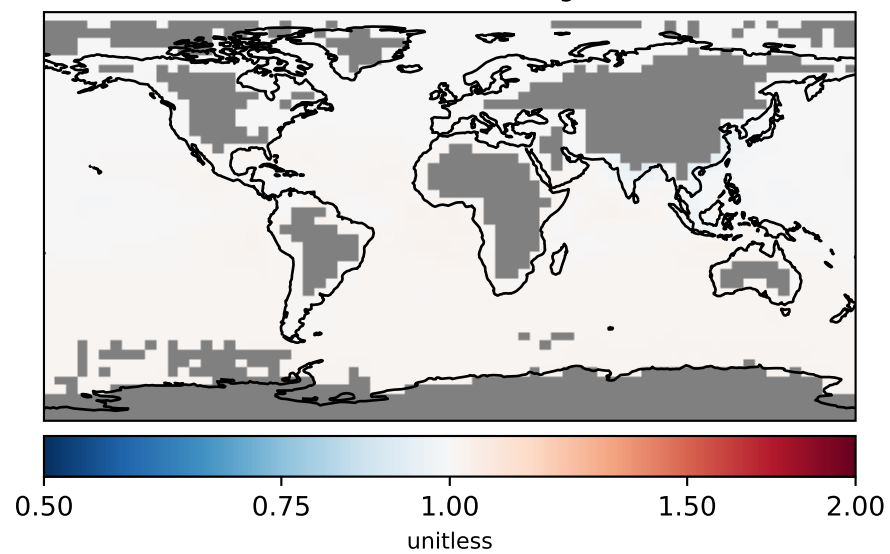
# EmisNO_Ship (AnnualMean)
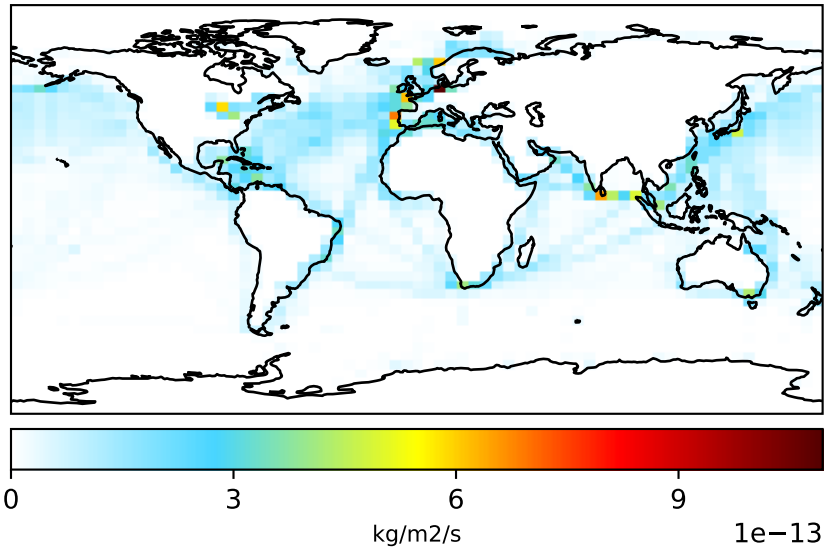


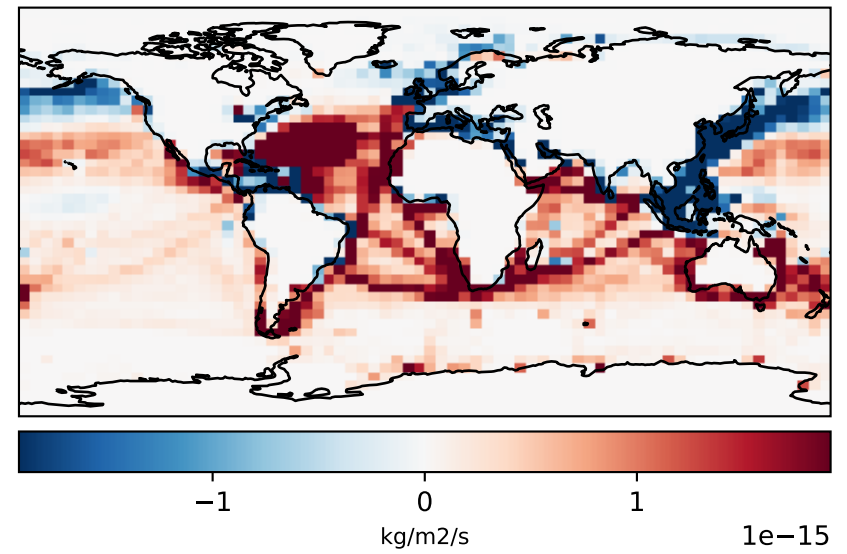gcc-14.3.0-rc.0 (Ref)
4.0x5.0

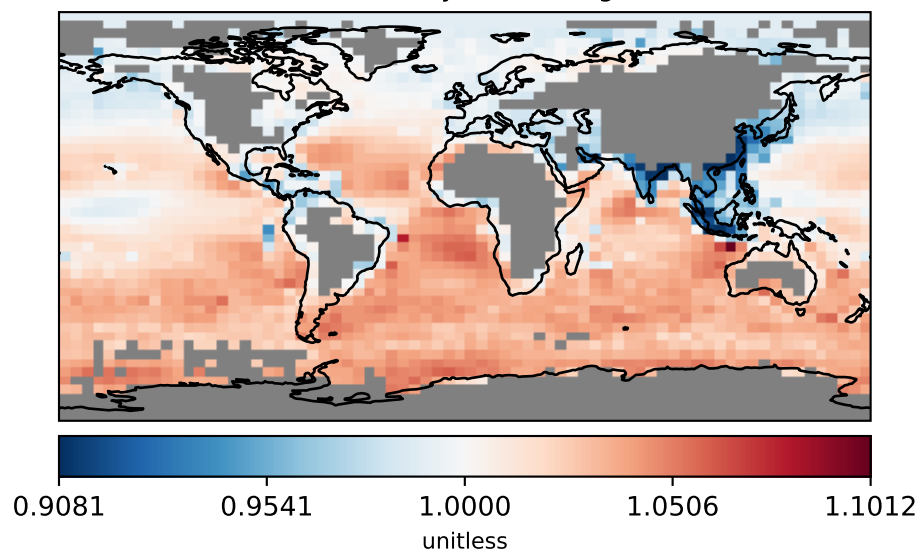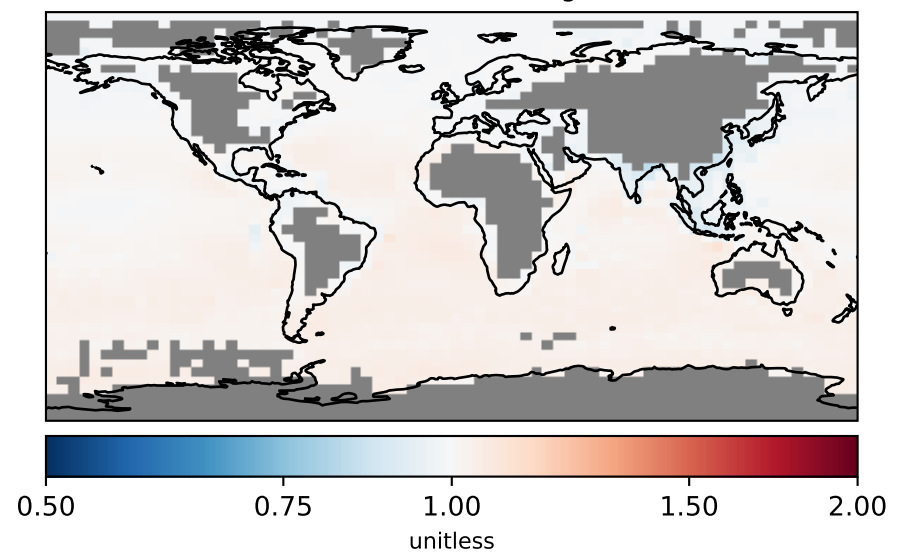gcc-14.4.0-rc.0 (Dev)
4.0x5.0

kg/m2/s

Difference
Dev - Ref, Dynamic Range

Difference
Dev - Ref, Restricted Range [5%,95%]
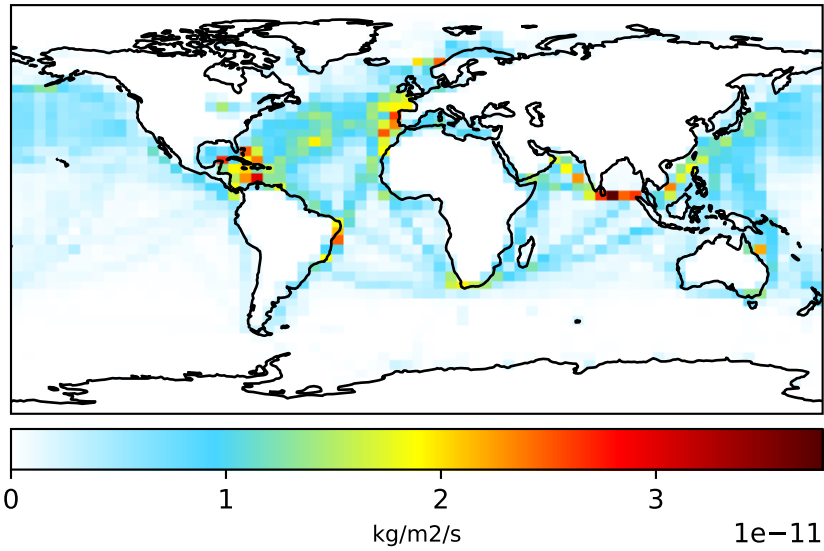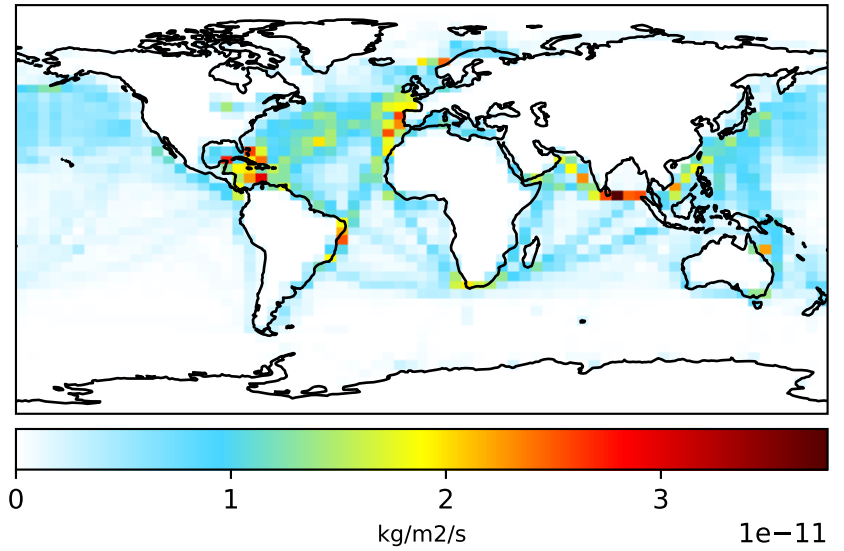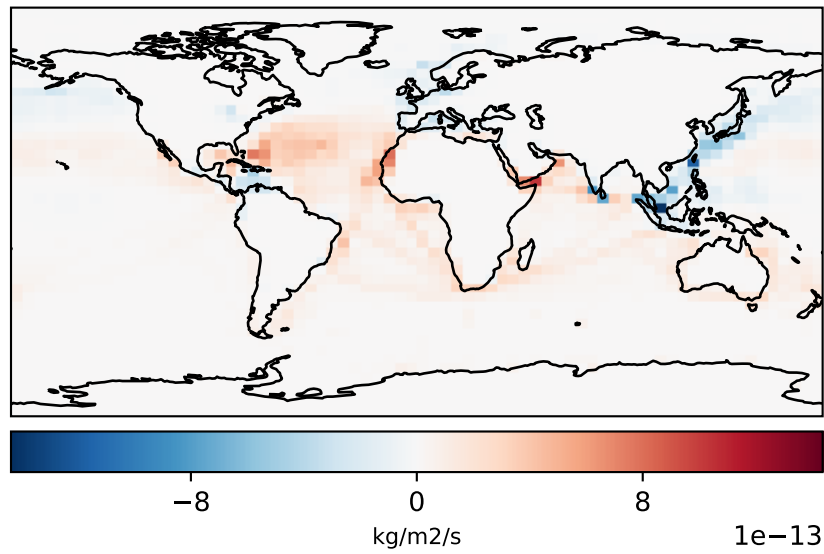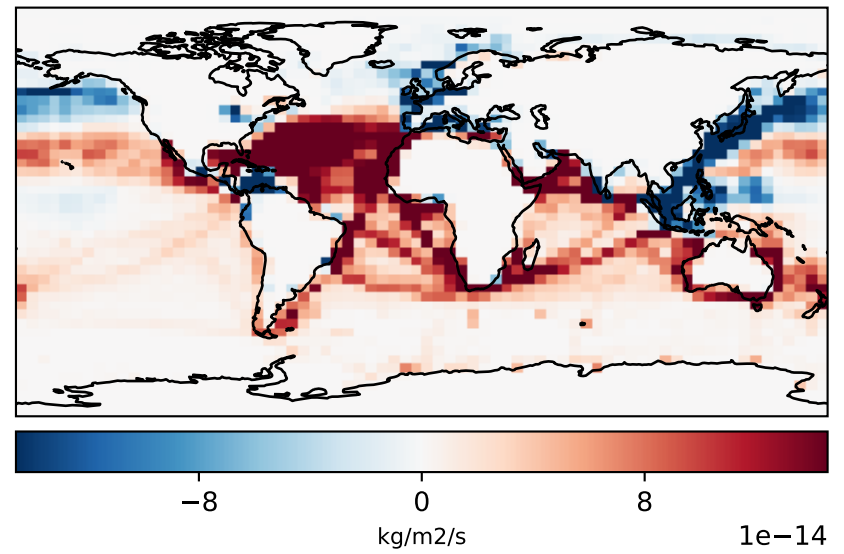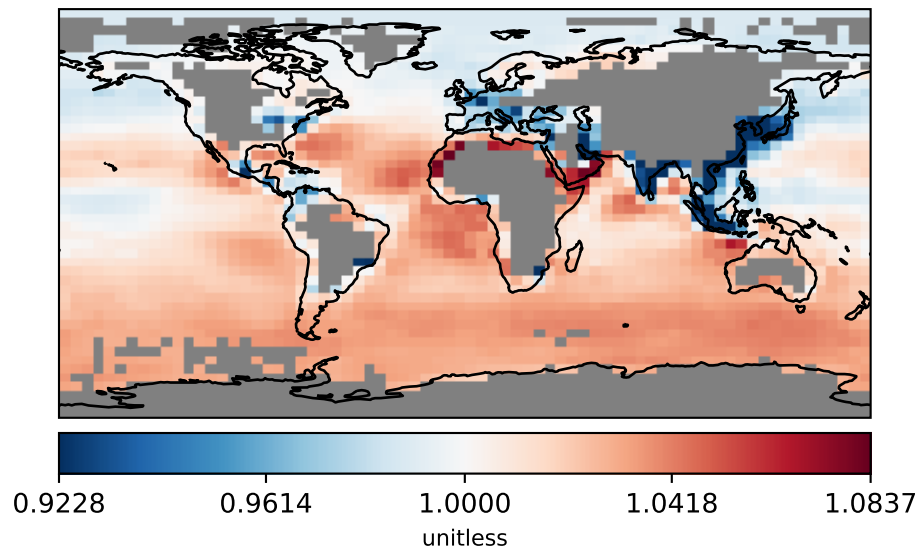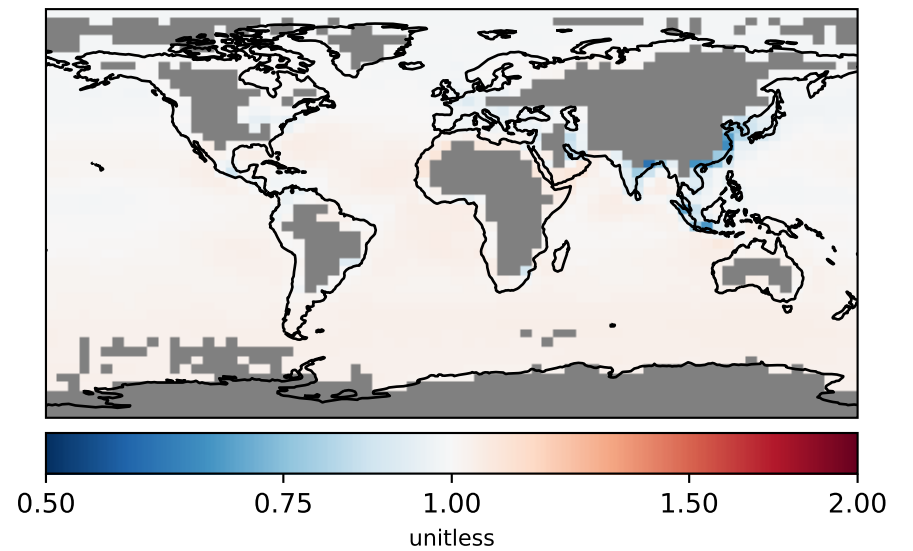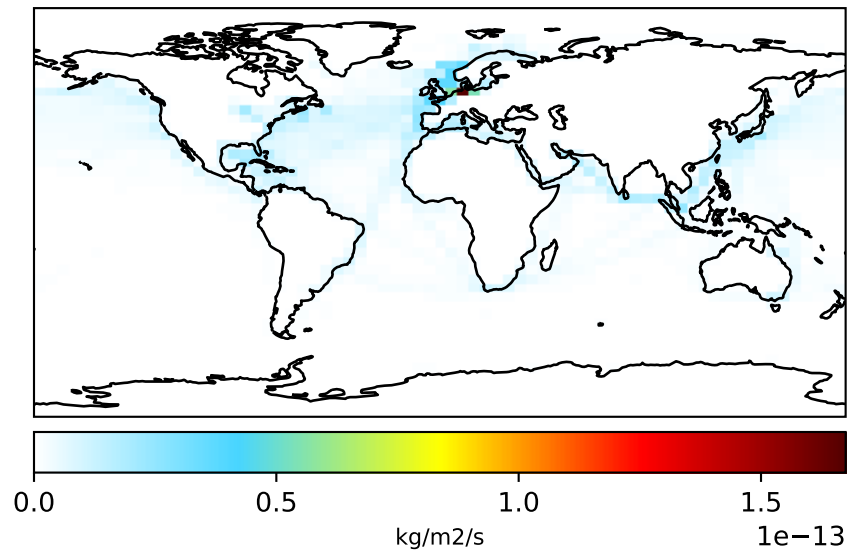
kg/m2/s
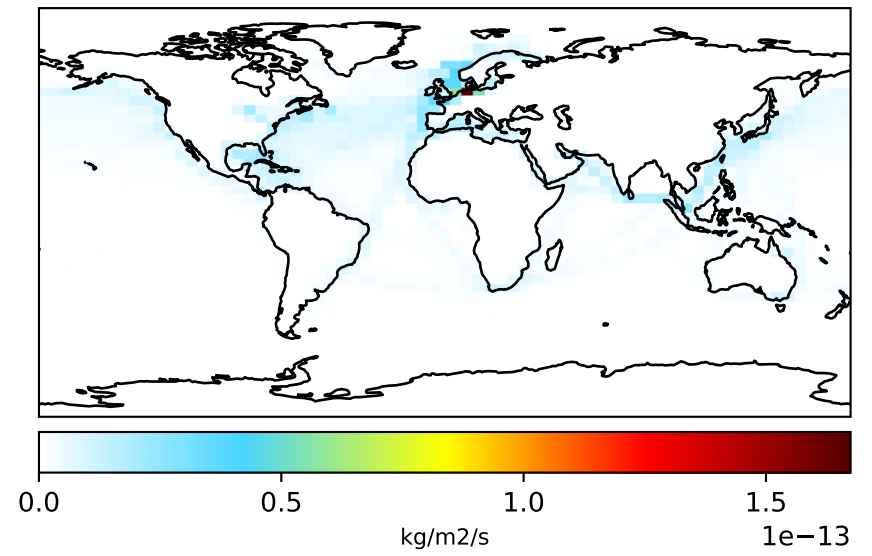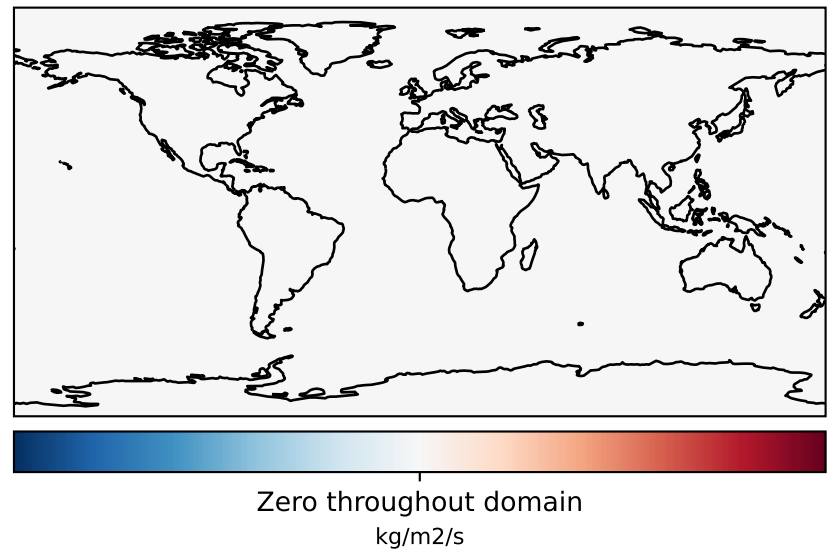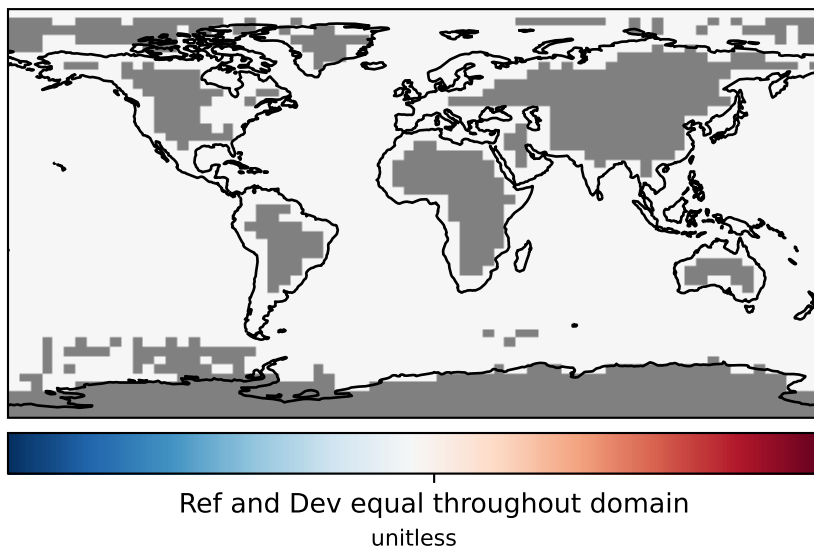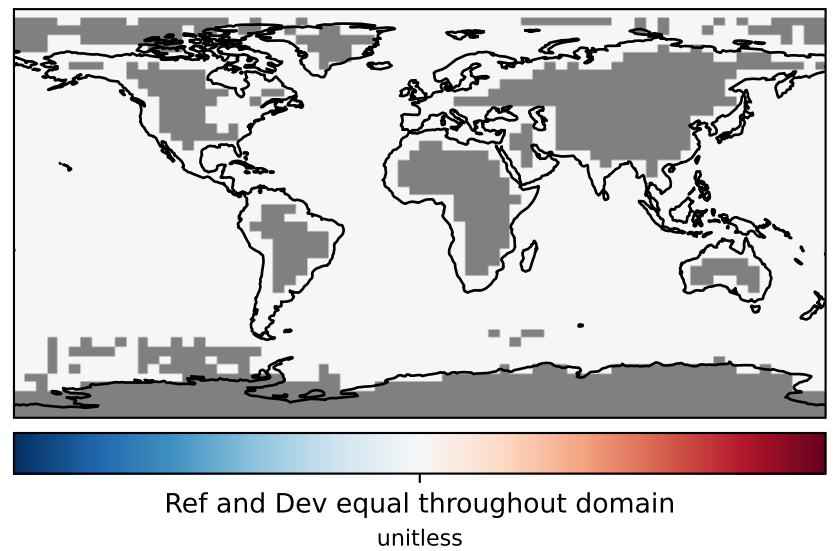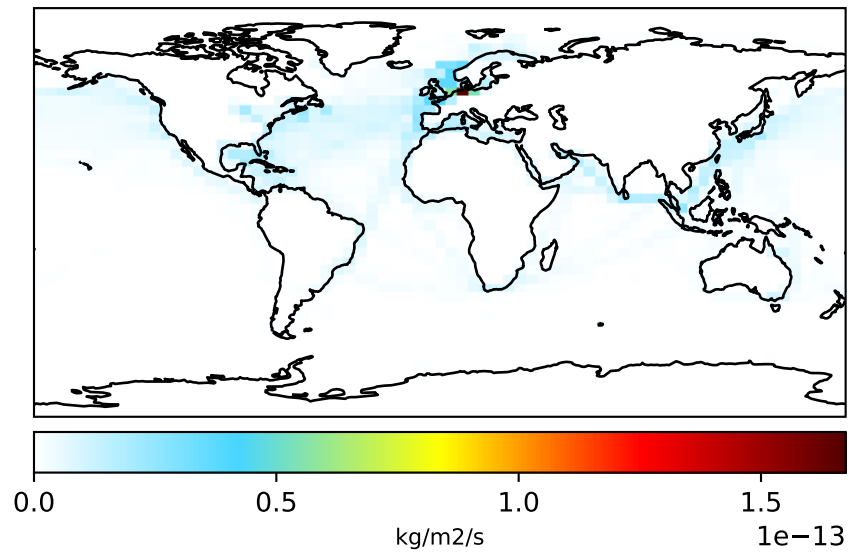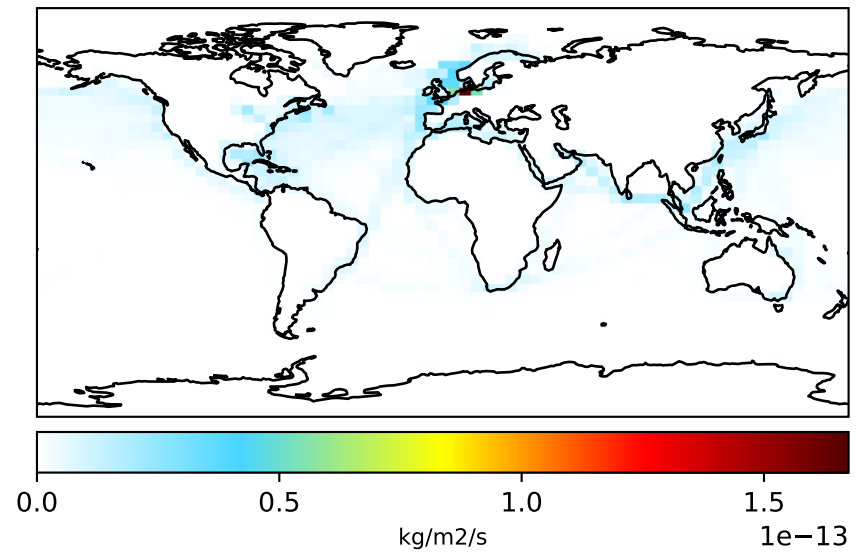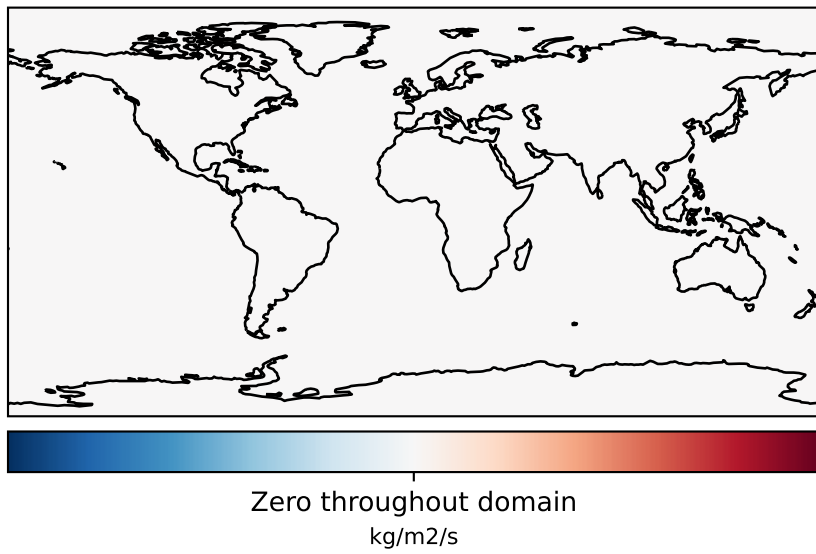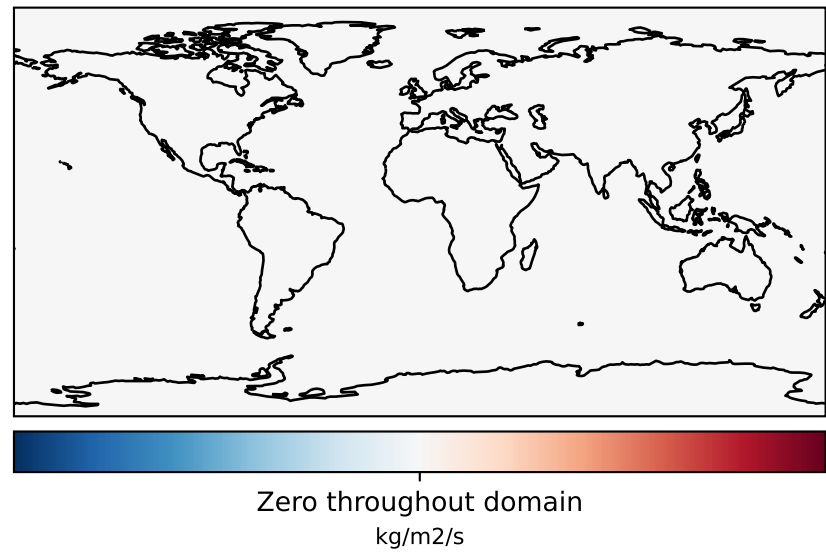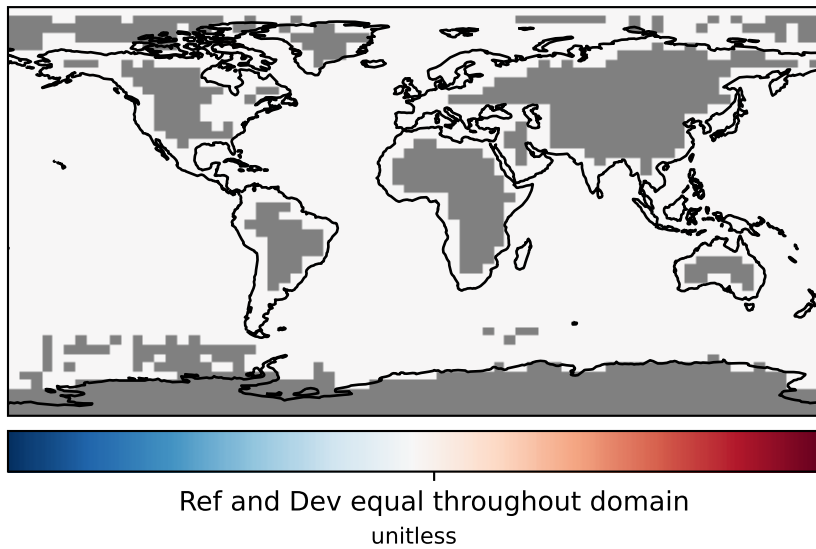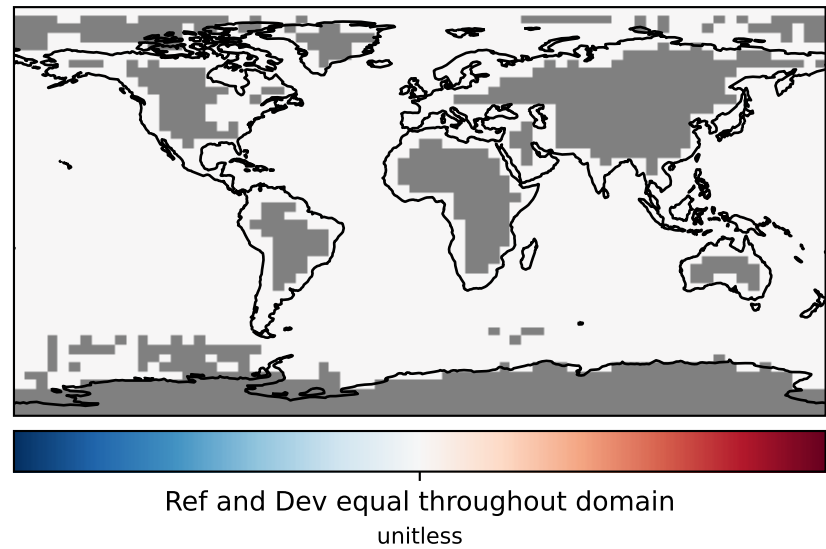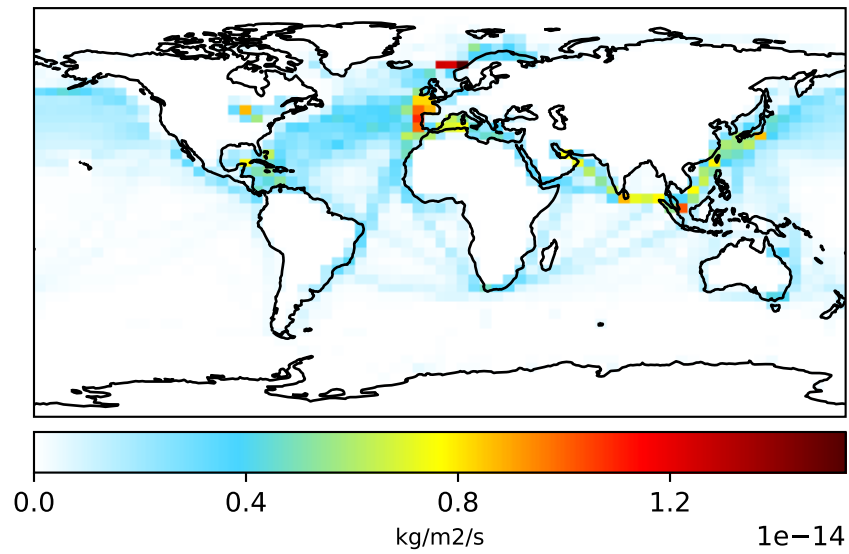
Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

unitless
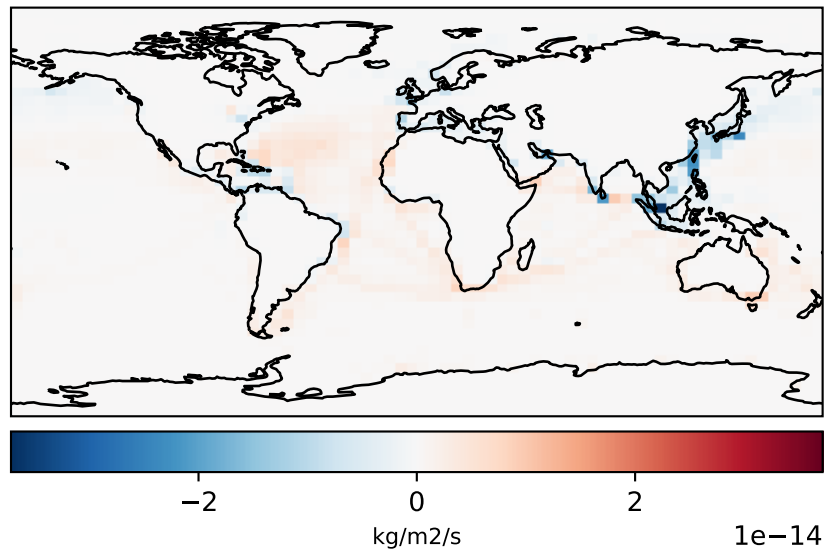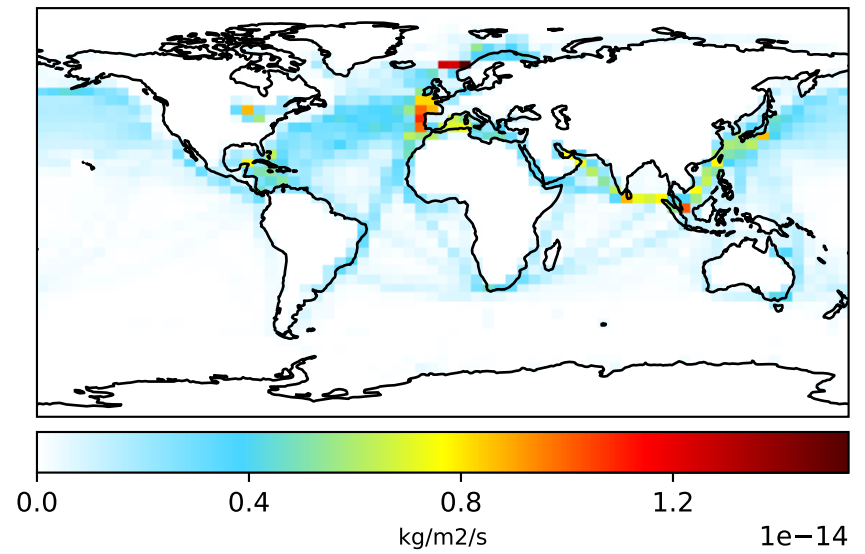
# EmisO3_Ship (AnnualMean)
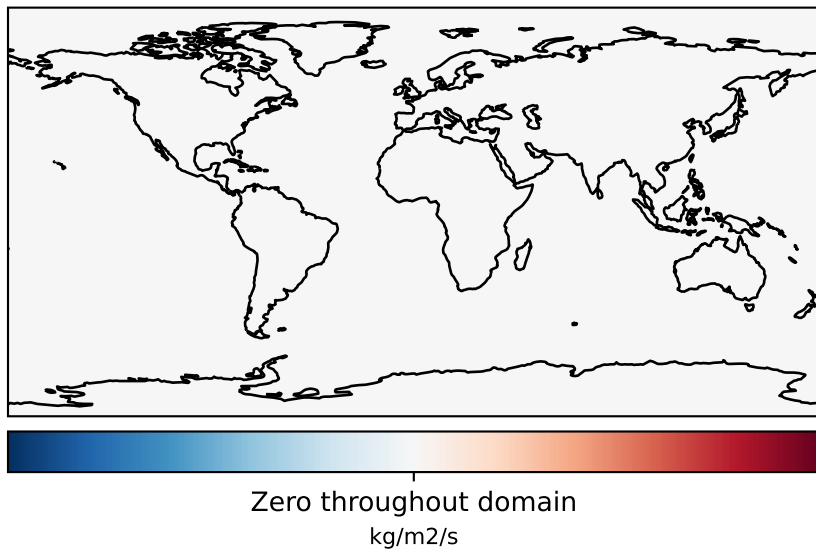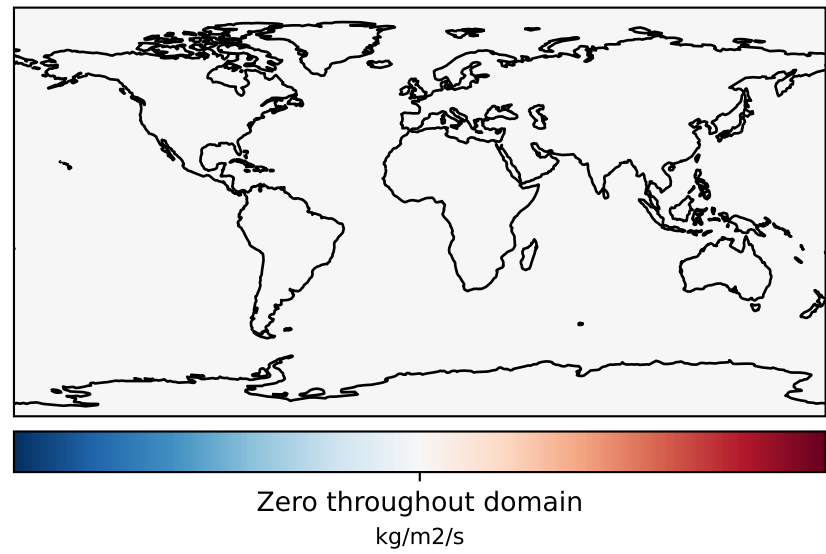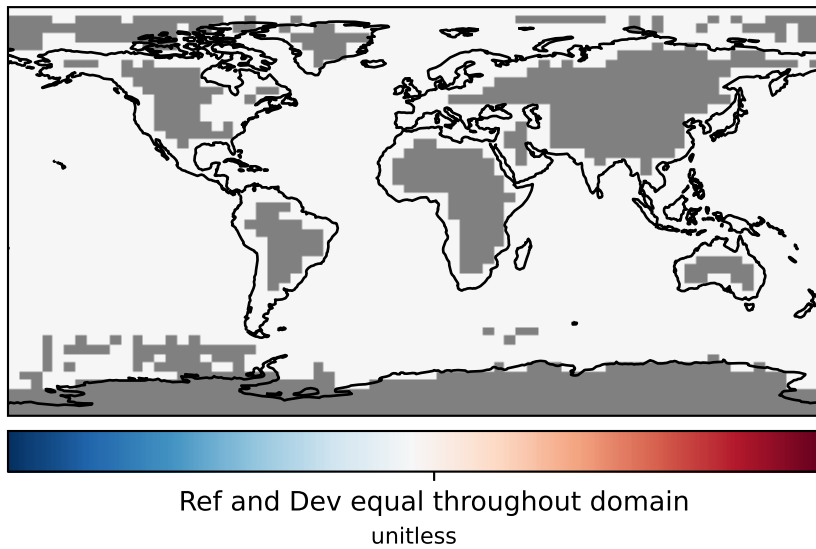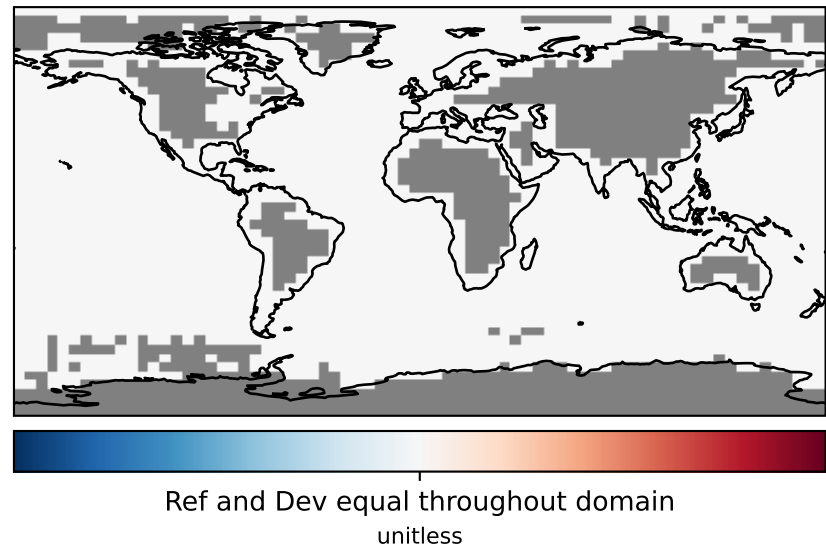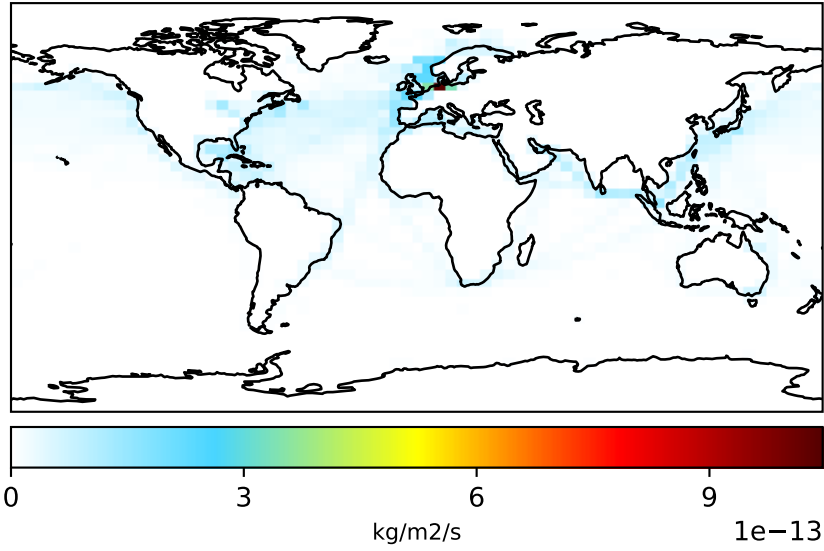
# EmisOCPI_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
4.0x5.0

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

kg/m2/s

Difference
Dev - Ref, Dynamic Range

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

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

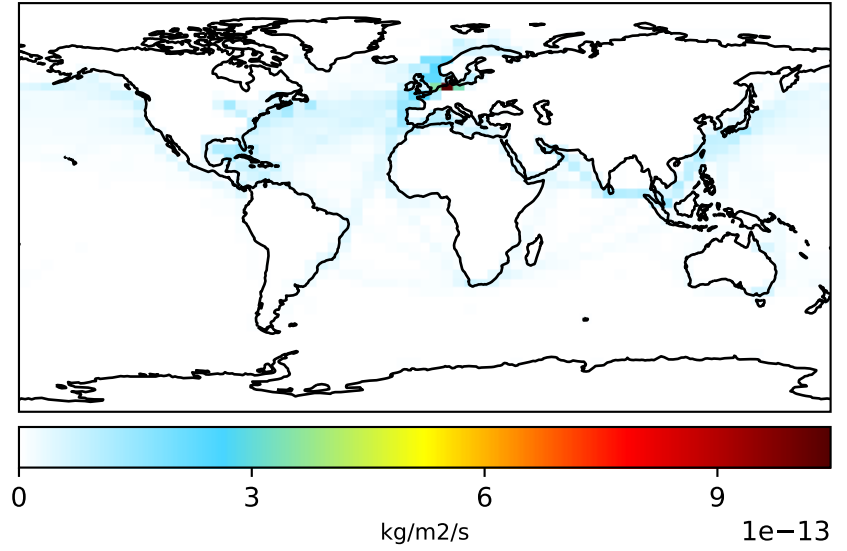Ref and Dev equal throughout domain
unitless
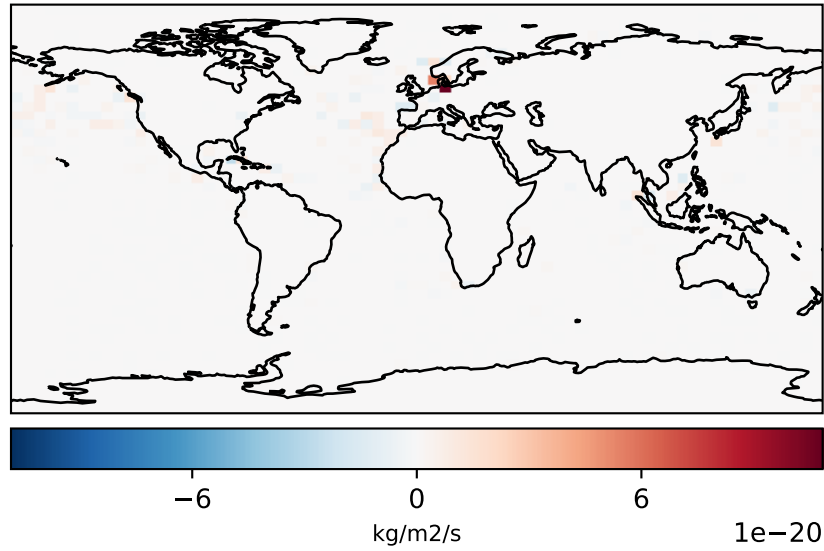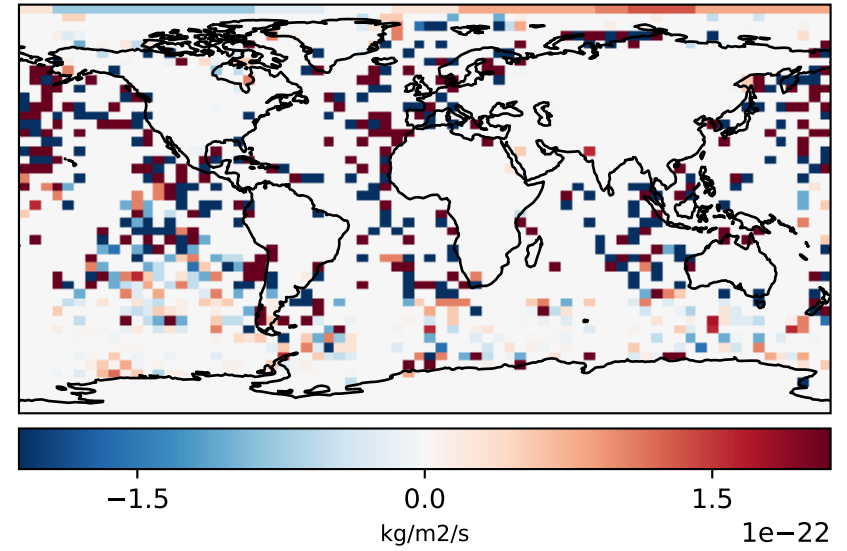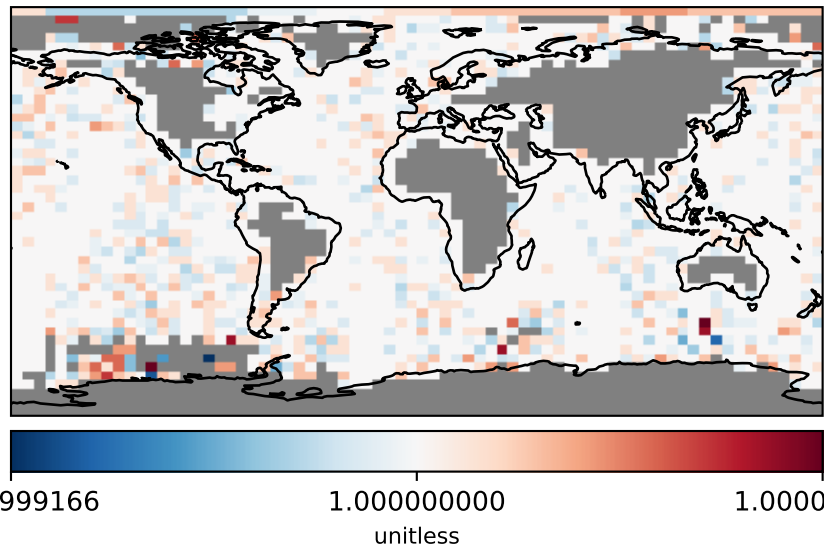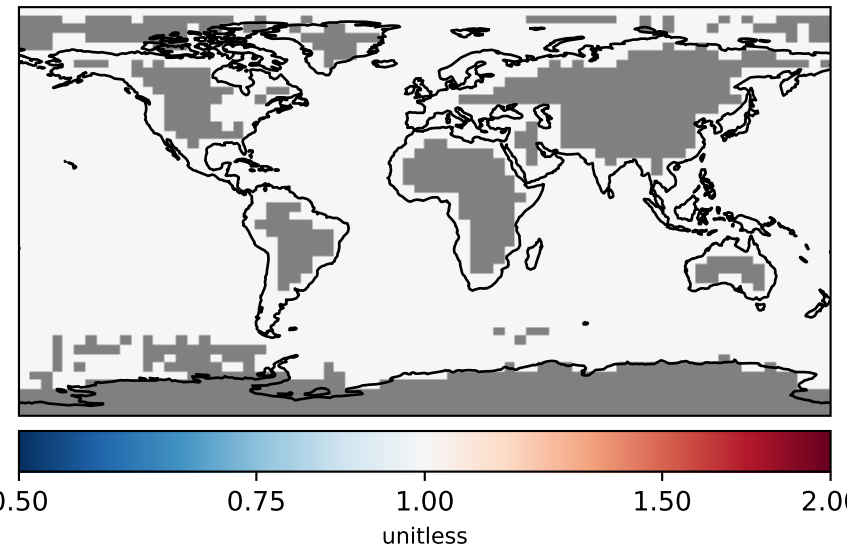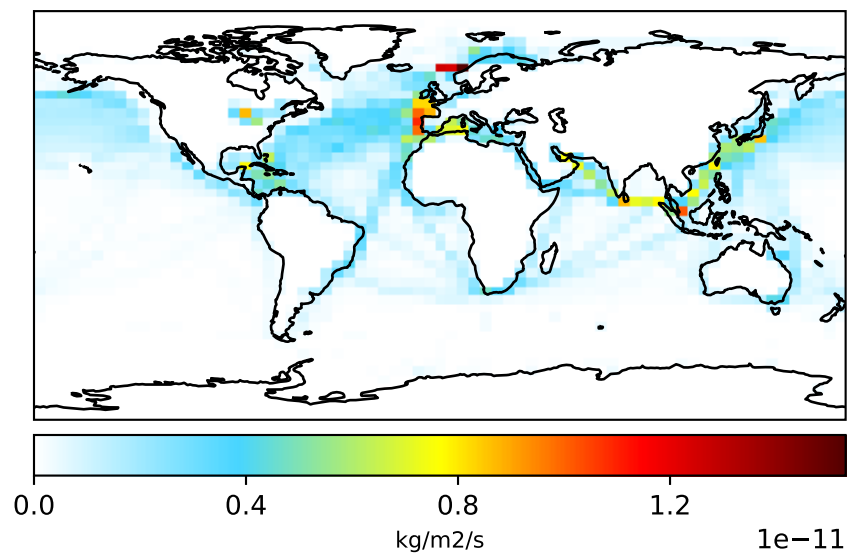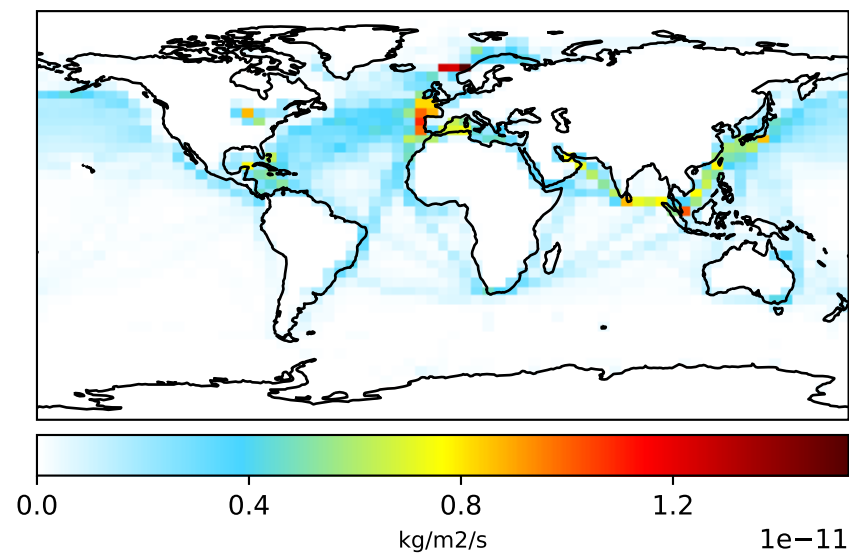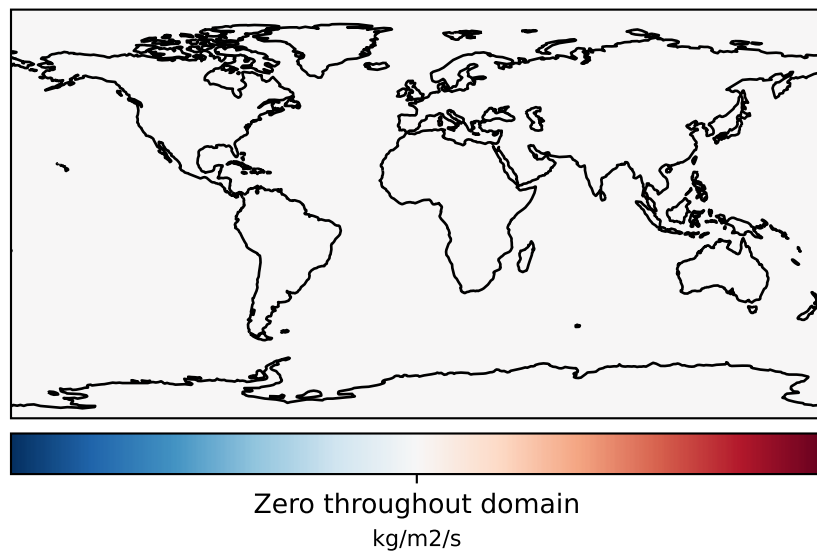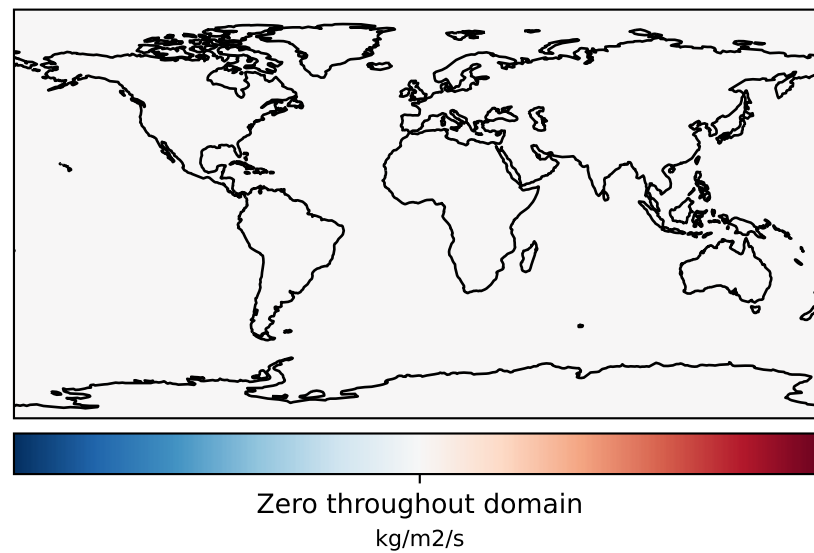
# EmisOCPO_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
4.0x5.0

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

kg/m2/s

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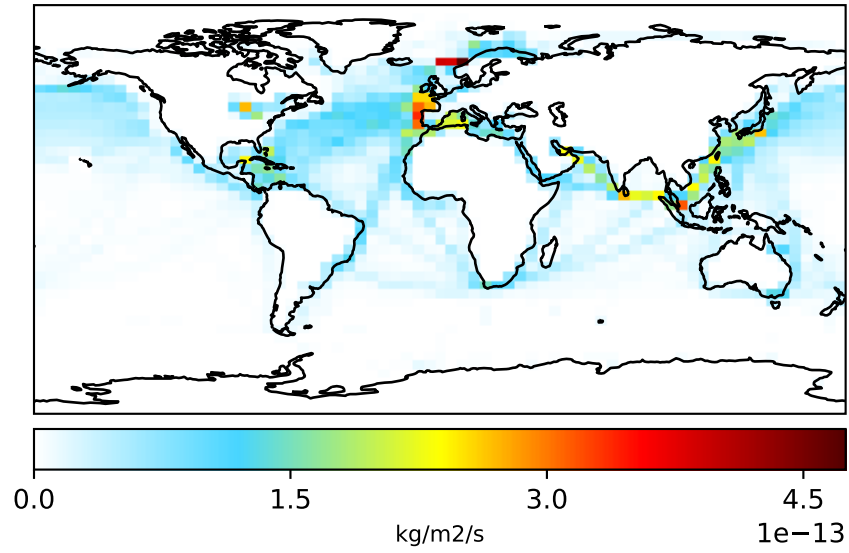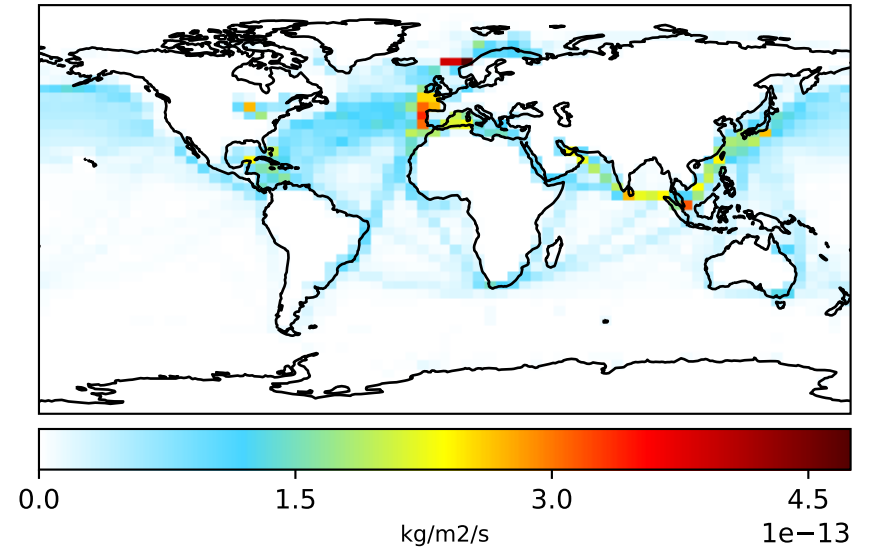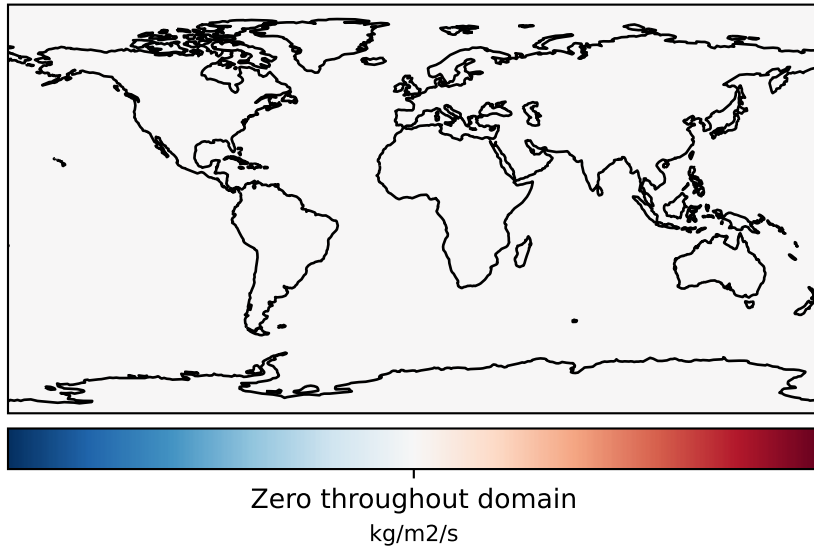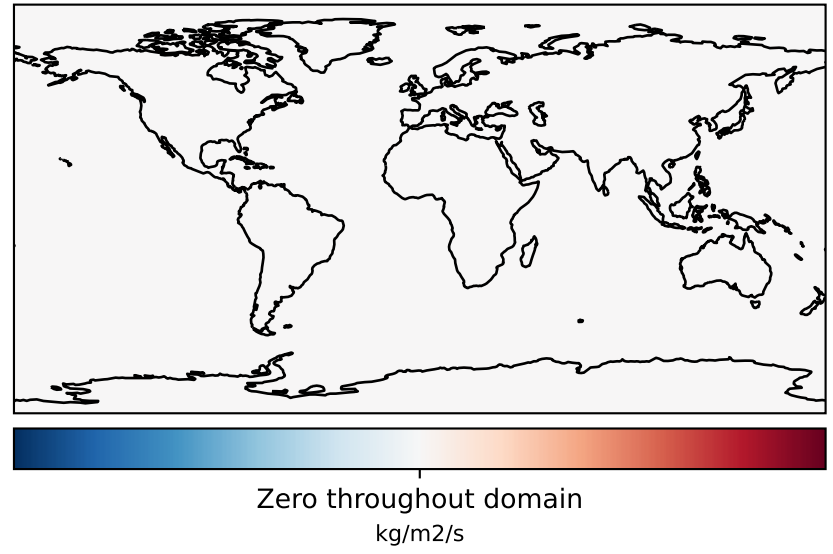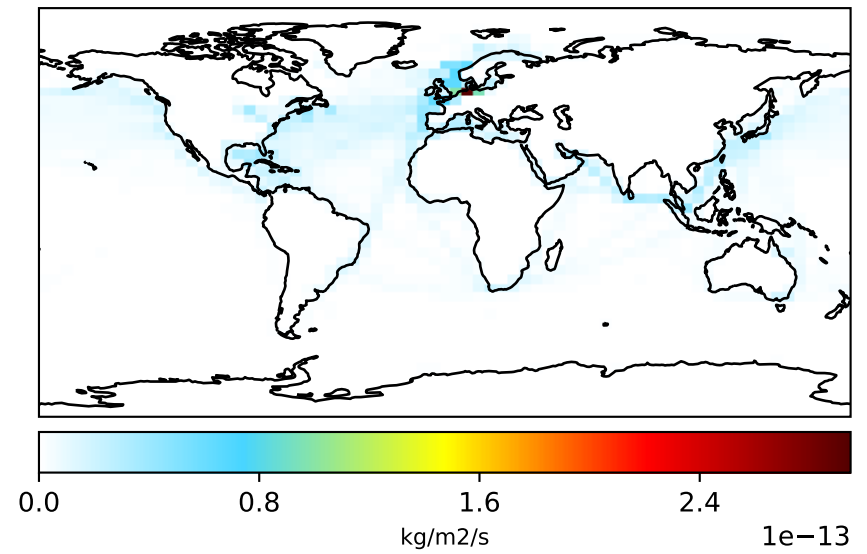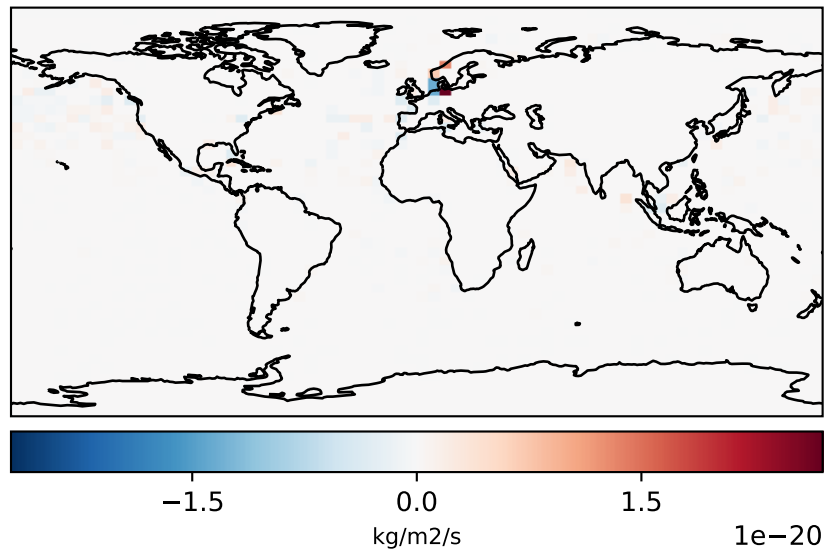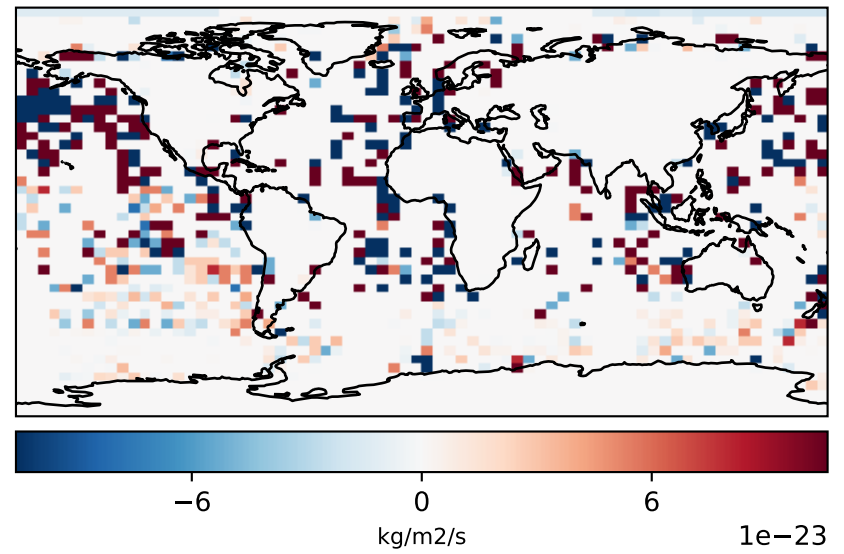
Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

# EmispFe_Ship (AnnualMean)

# EmisPRPE_Ship (AnnualMean)
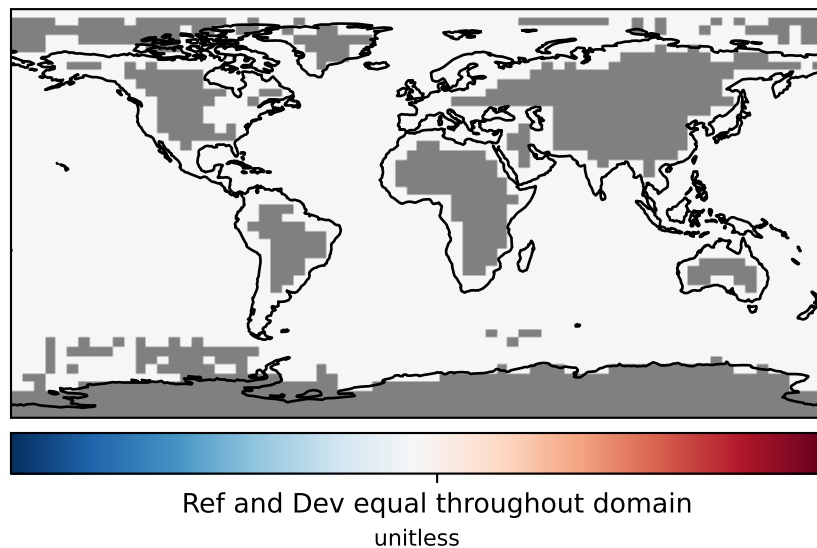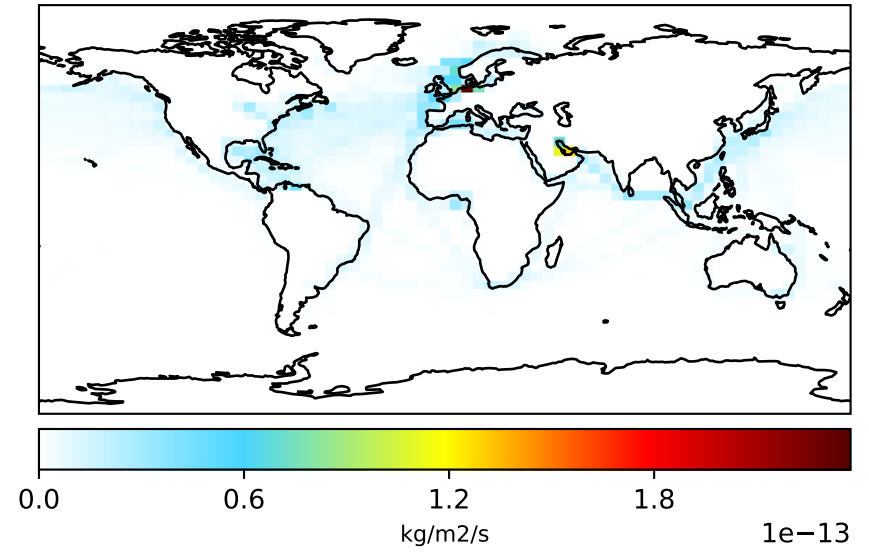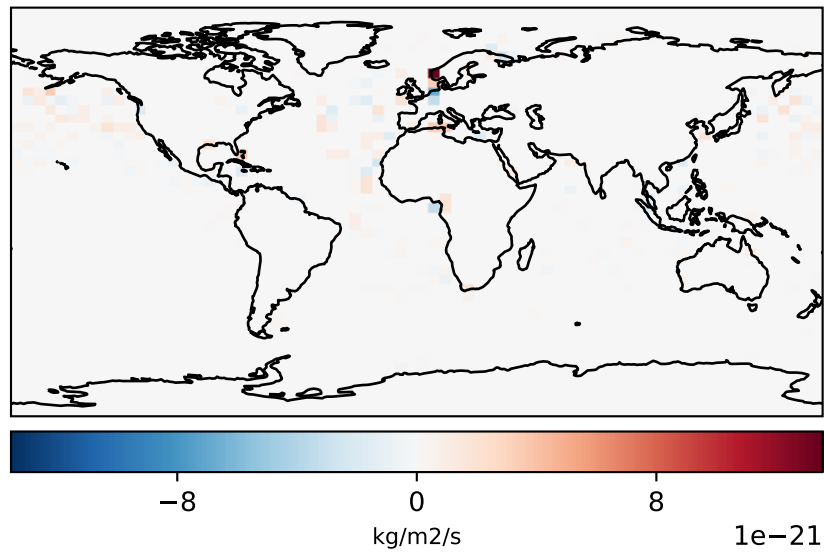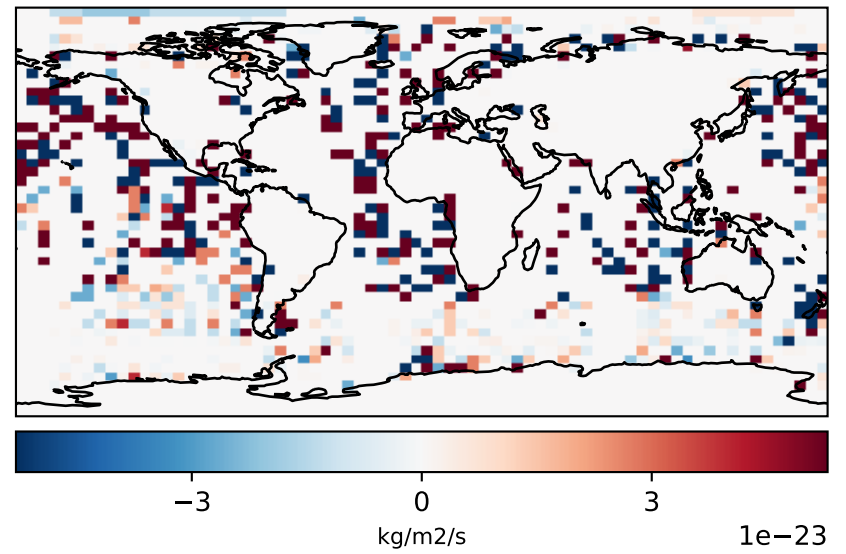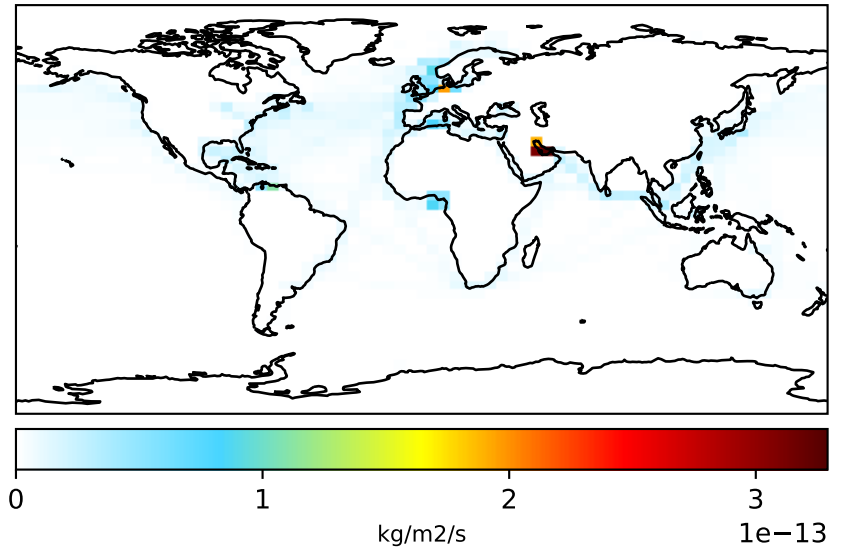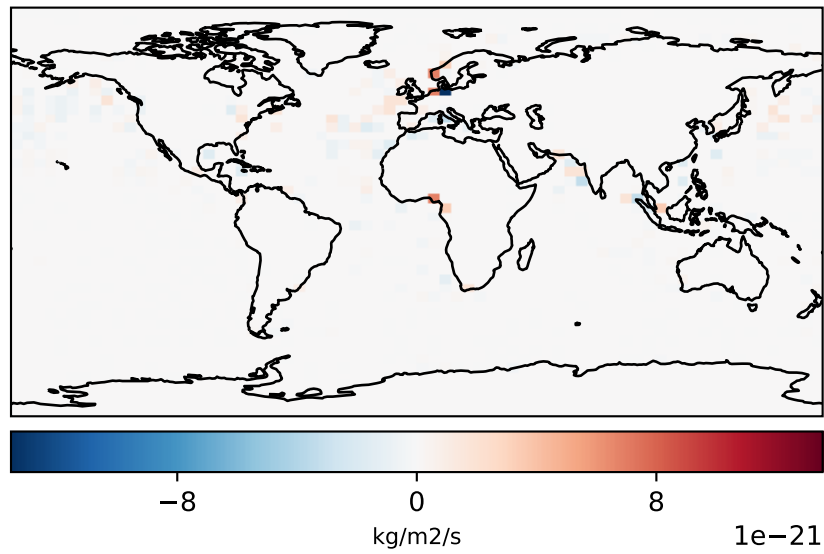
# EmisSO2_Ship (AnnualMean)
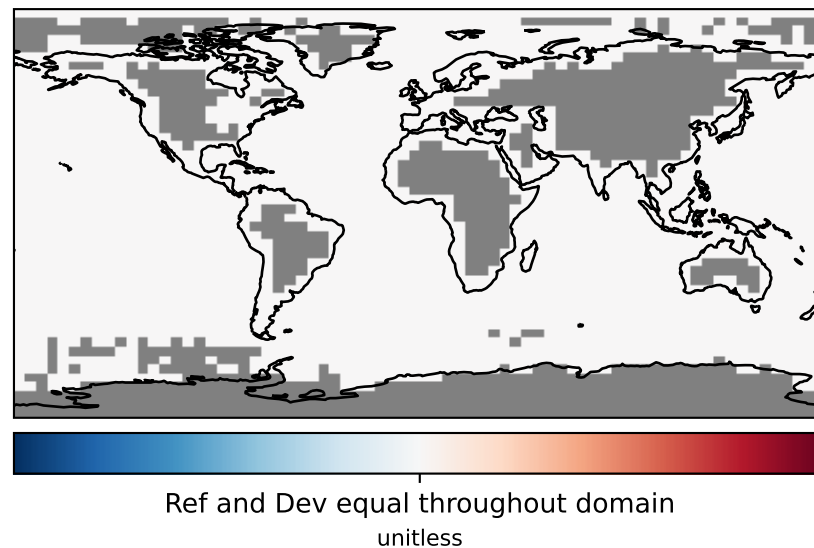
# EmisSO4_Ship (AnnualMean)



gcc-14.3.0-rc.0 (Ref)
4.0x5.0

kg/m2/s

gcc-14.4.0-rc.0 (Dev)
4.0x5.0

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

Ref and Dev equal throughout domain
unitless

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless
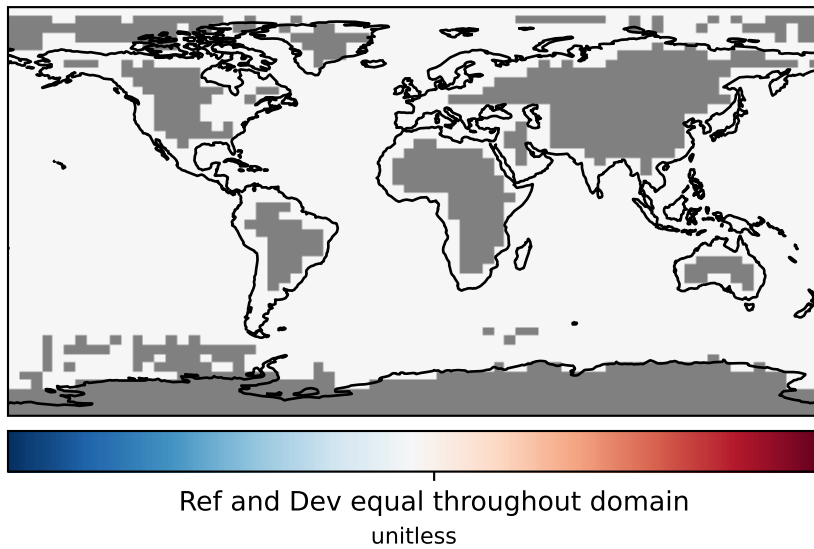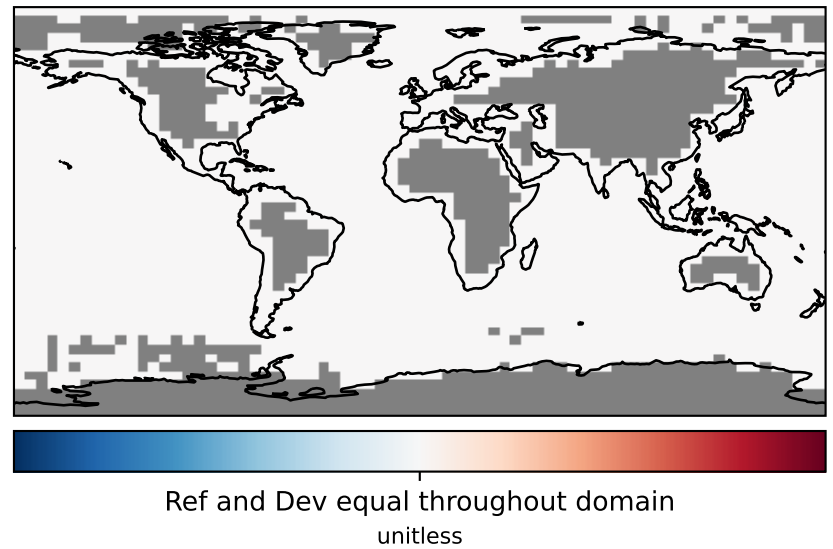
# EmisSOAP_Ship (AnnualMean)
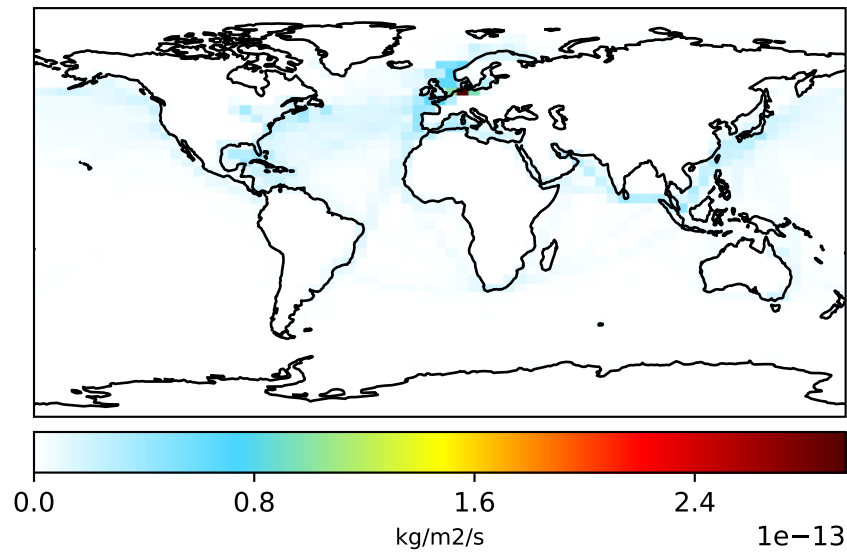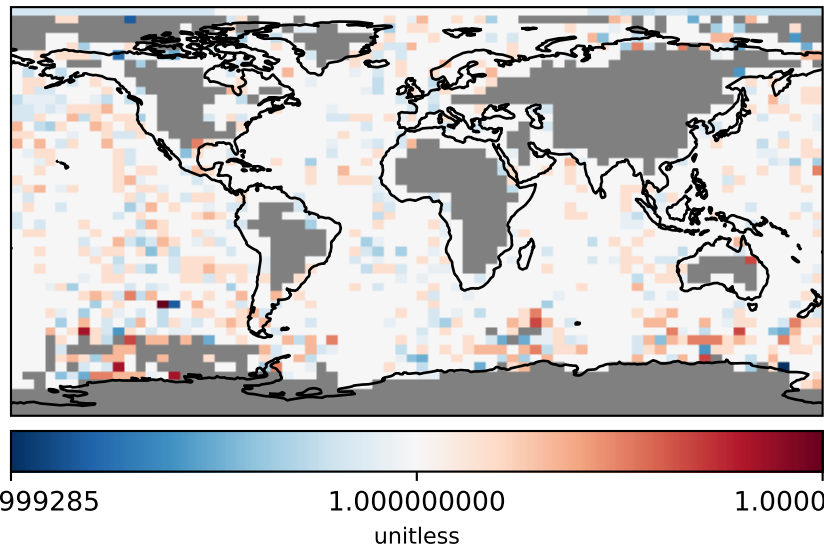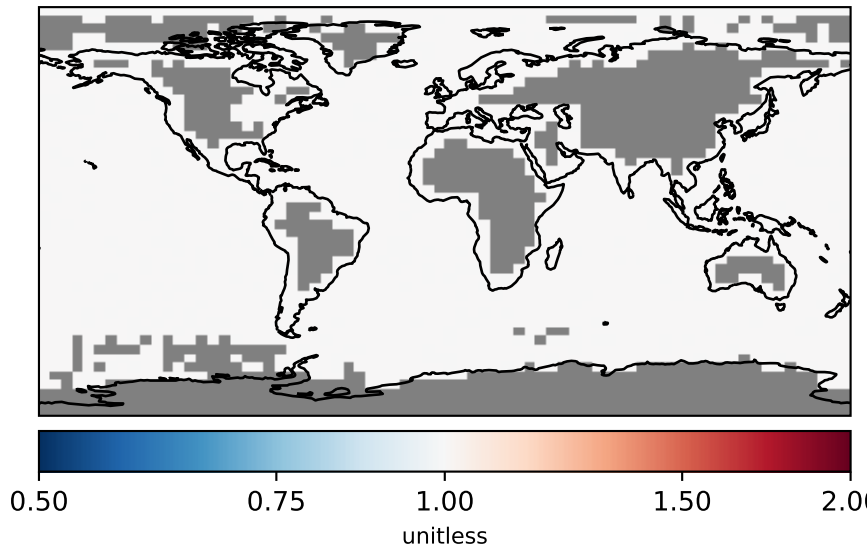
EmisTOLU_Ship (AnnualMean)
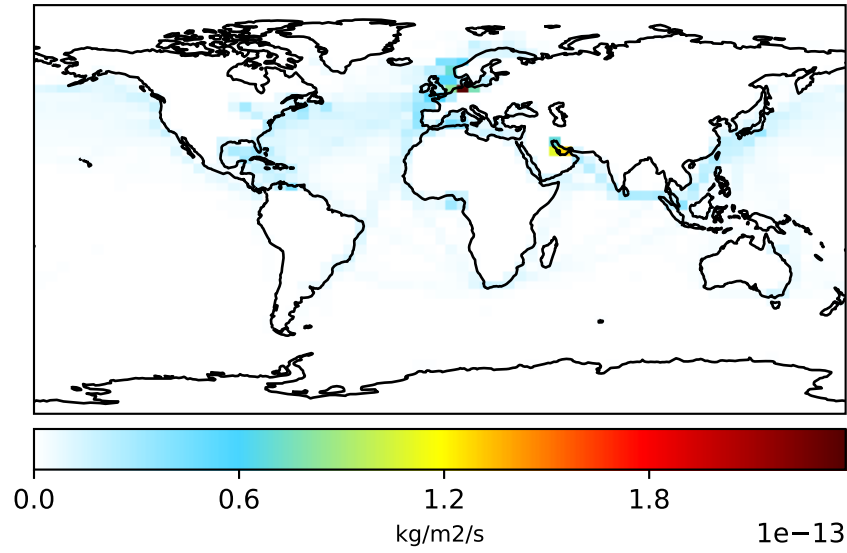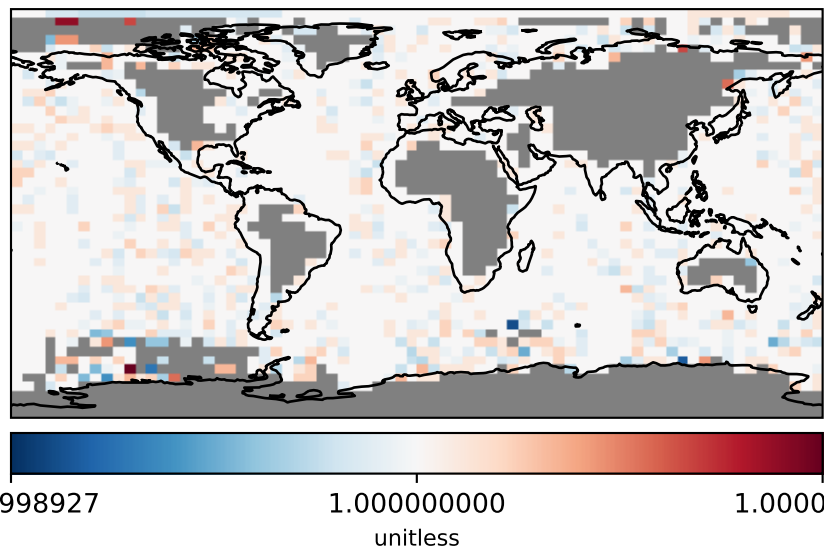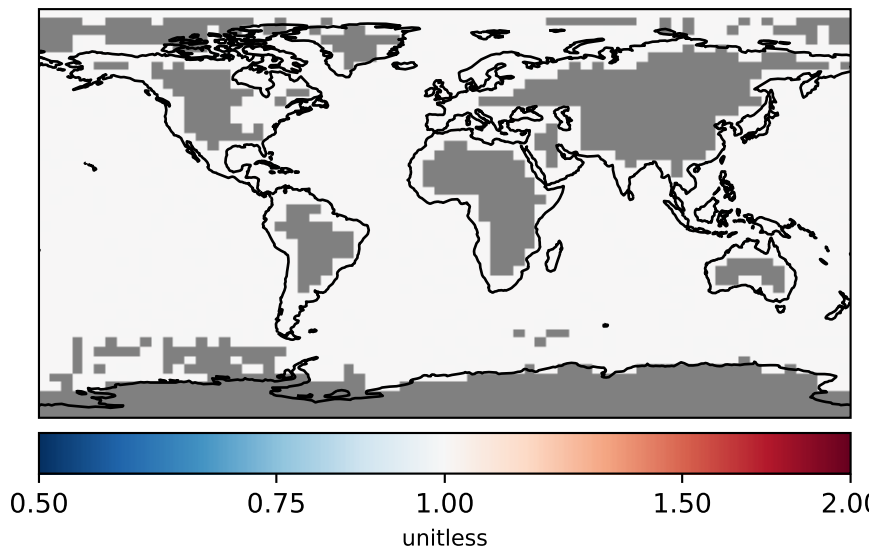
# EmisXYLE_Ship (AnnualMean)