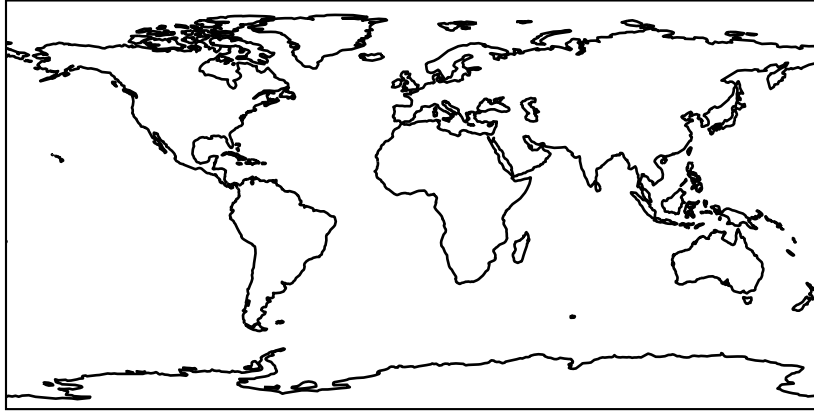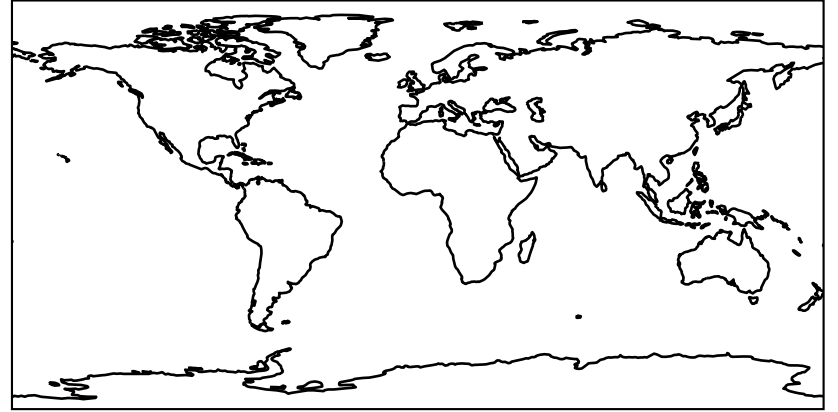# EmisALD2_Ship (AnnualMean)

### GCC_14.0.0 (Ref)
### 4.0x5.0

Zero throughout domain
kg/m2/s

### GCC_14.2.0 (Dev)
### 4.0x5.0

Zero throughout domain
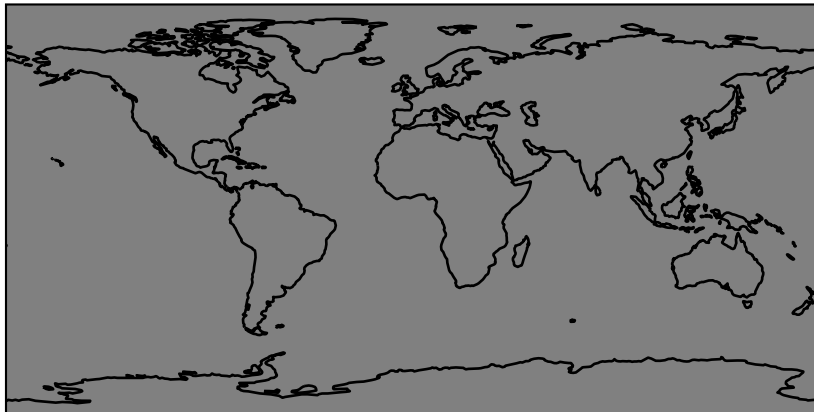kg/m2/s

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

Zero throughout domain
kg/m2/s

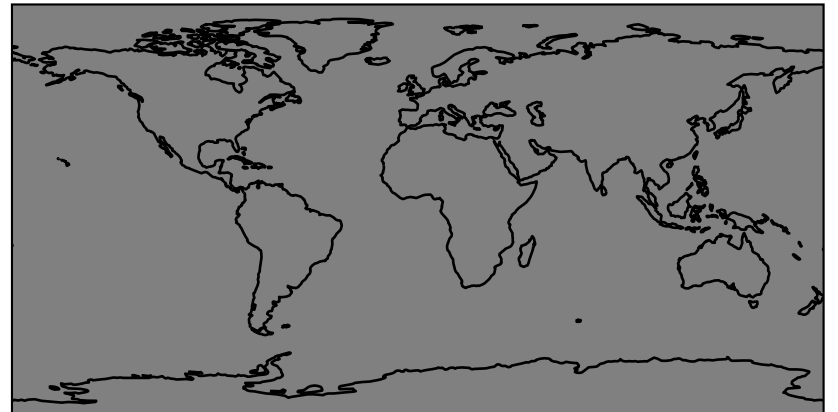### Difference
### Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

### Ratio
### Dev/Ref, Dynamic Range
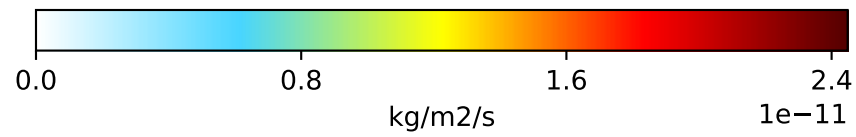
Undefined throughout domain
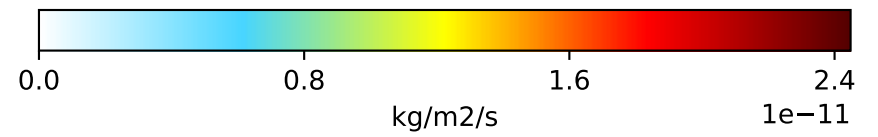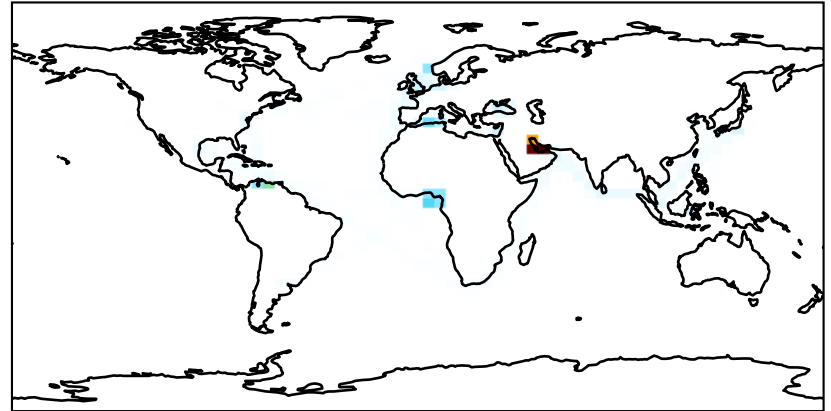unitless

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

Undefined throughout domain
unitless

# EmisALK4_Ship (AnnualMean)
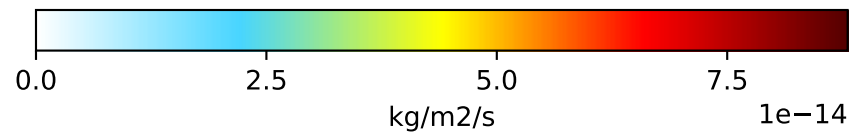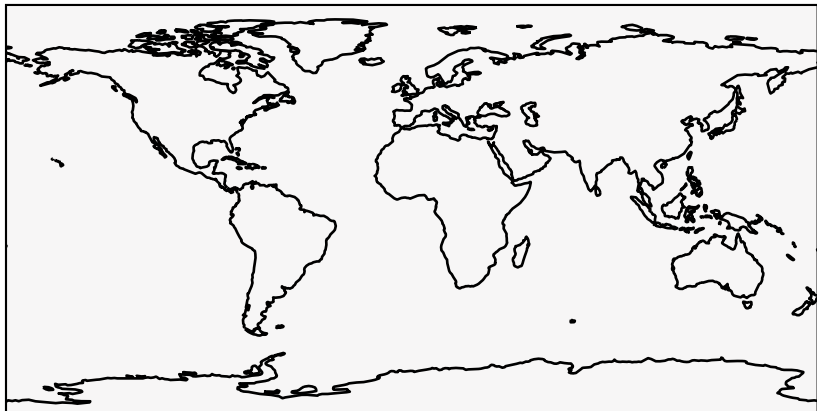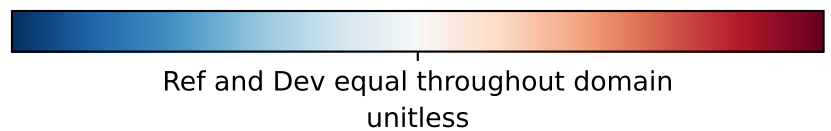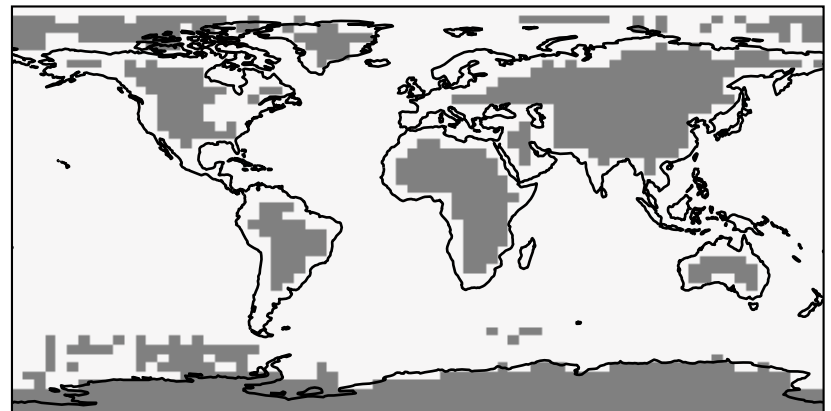
# EmisBCPI_Ship (AnnualMean)

# EmisBCPO_Ship (AnnualMean)

# EmisBENZ_Ship (AnnualMean)
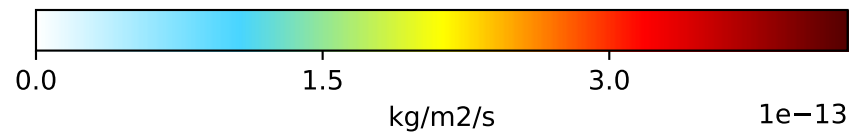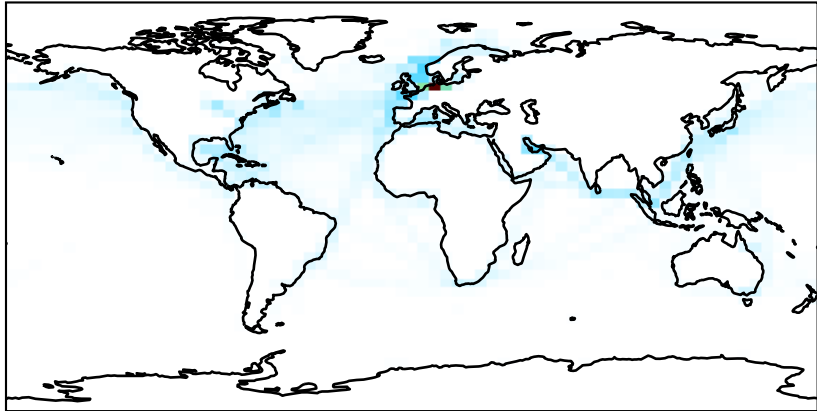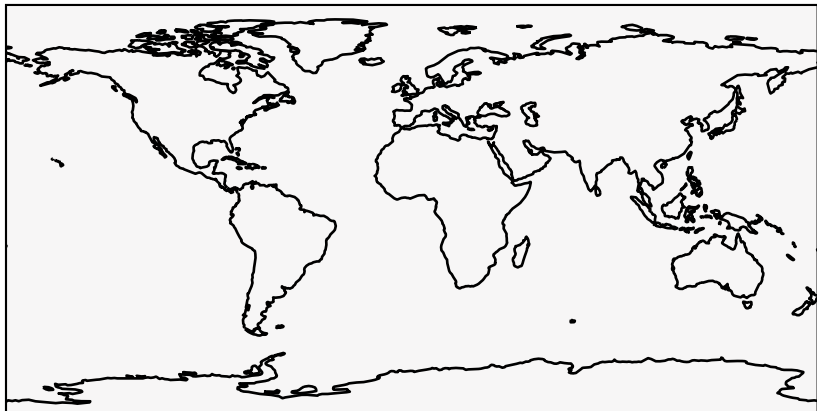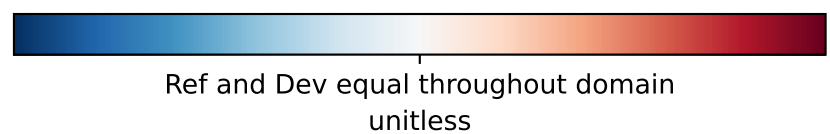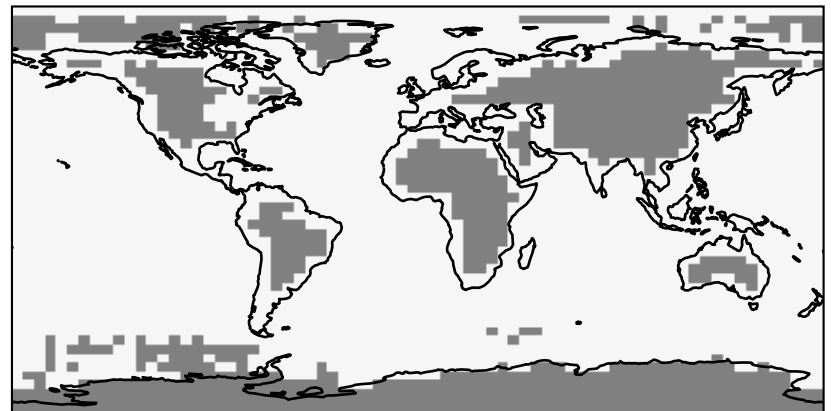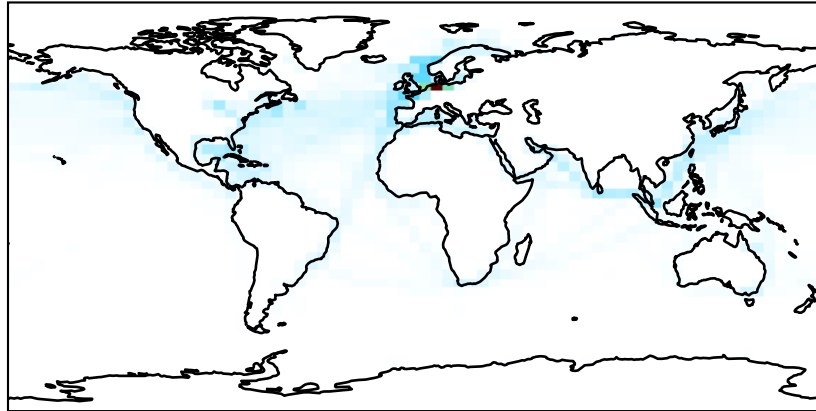
# EmisC2H2_Ship (AnnualMean)
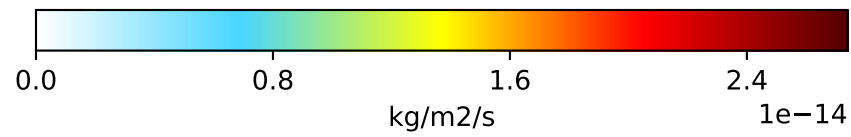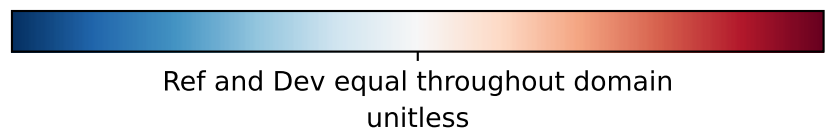
# EmisC2H4_Ship (AnnualMean)
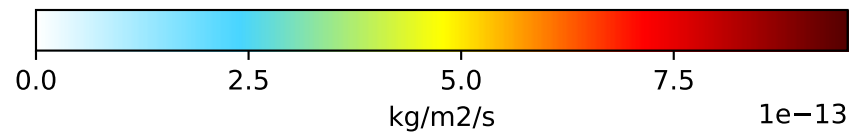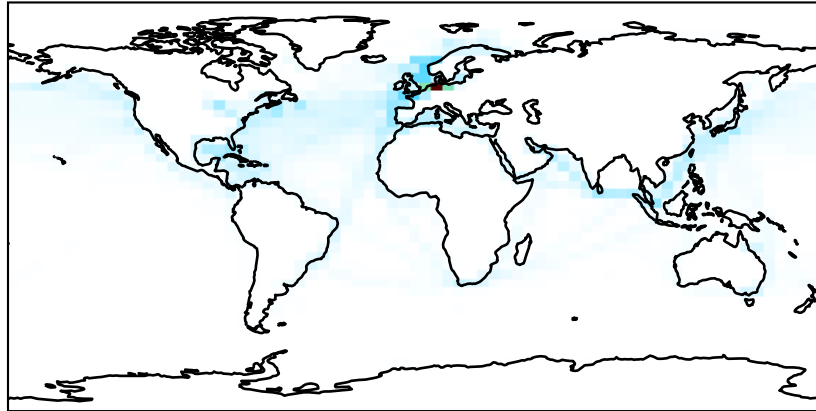


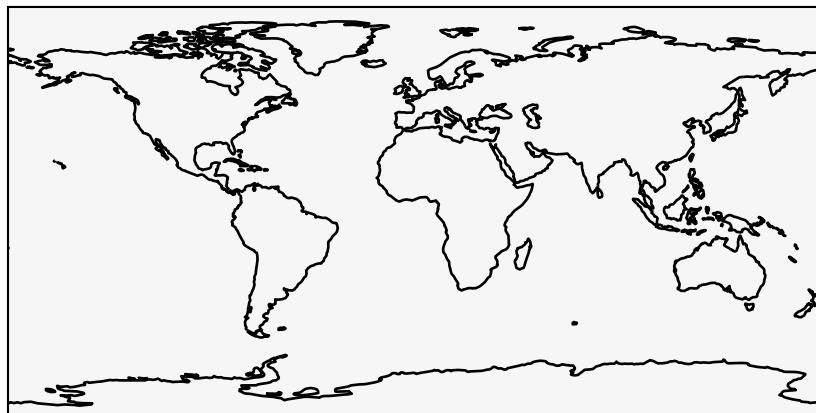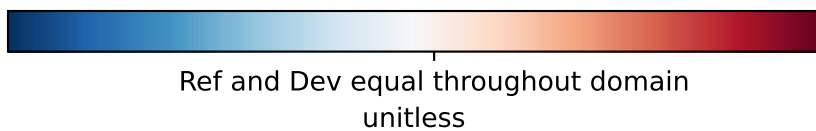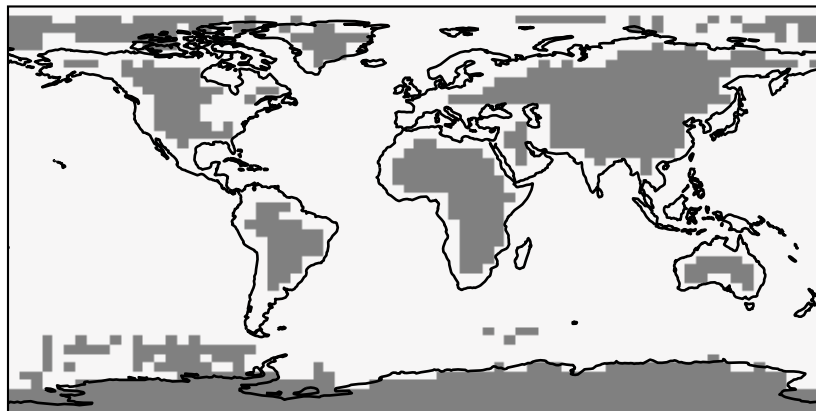GCC_14.0.0 (Ref)
4.0x5.0

GCC_14.2.0 (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
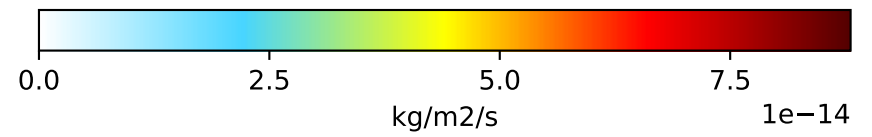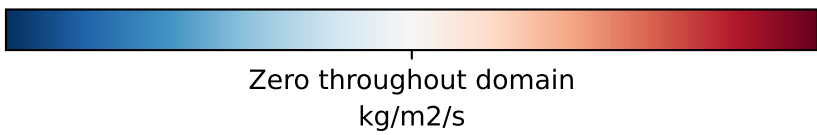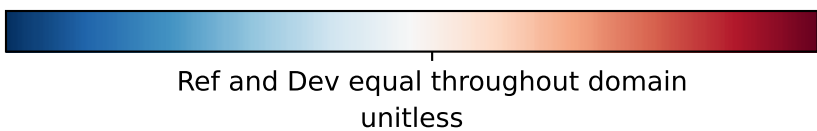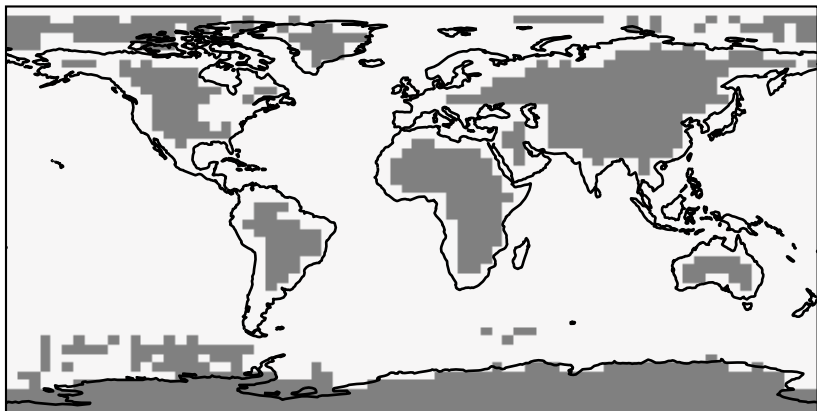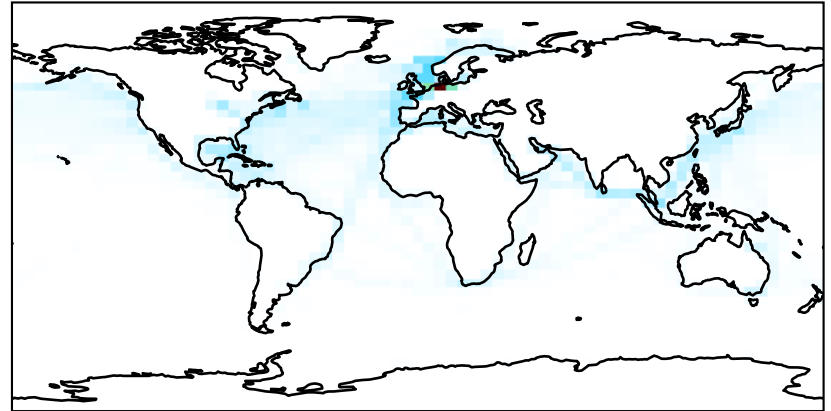
Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

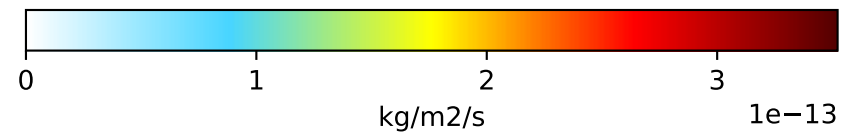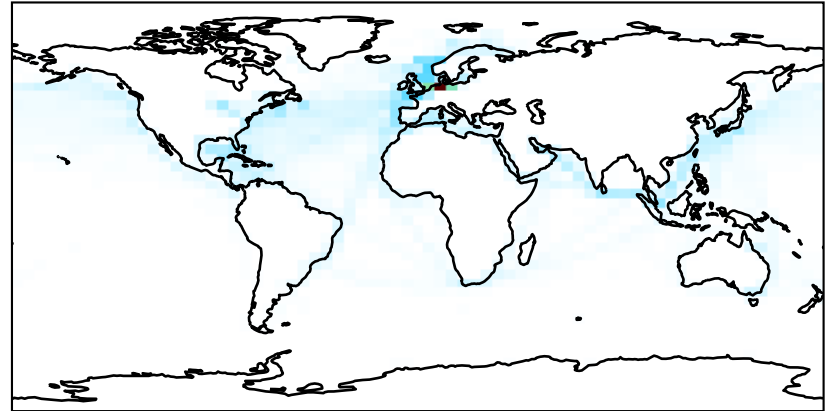Ref and Dev equal throughout domain
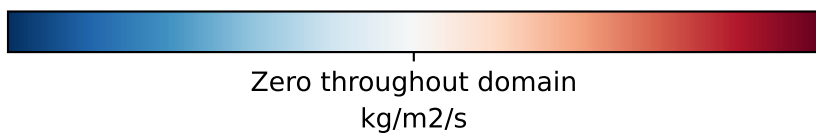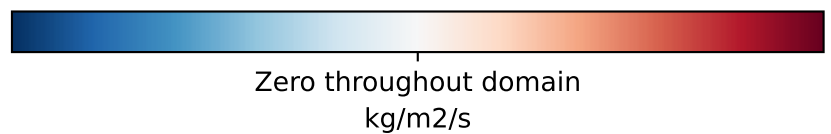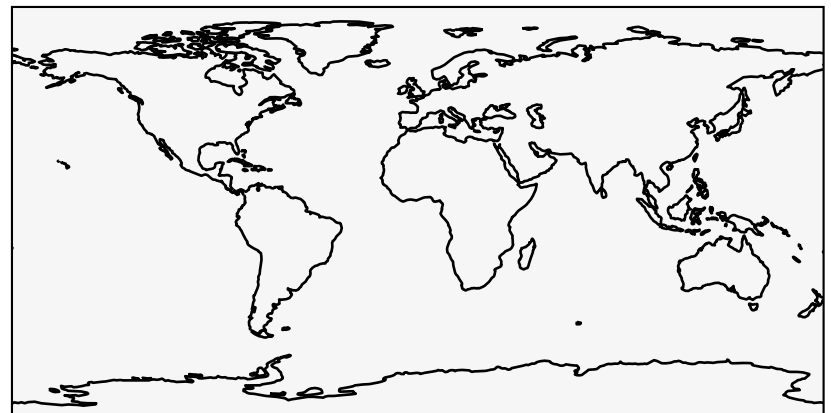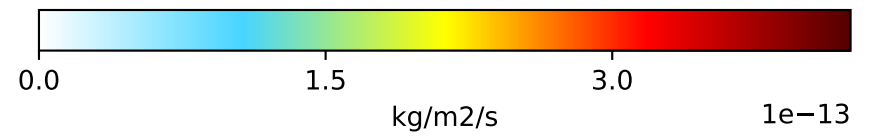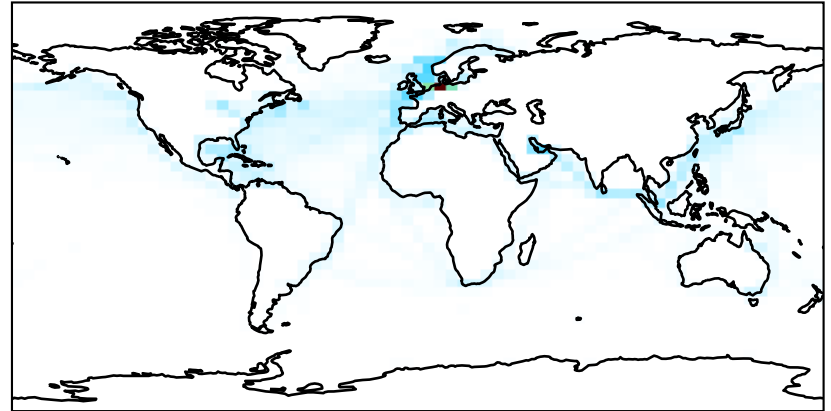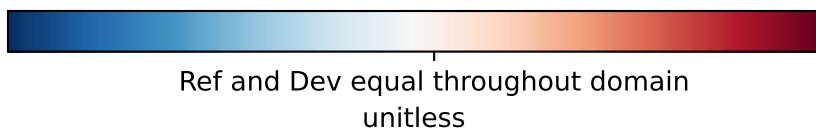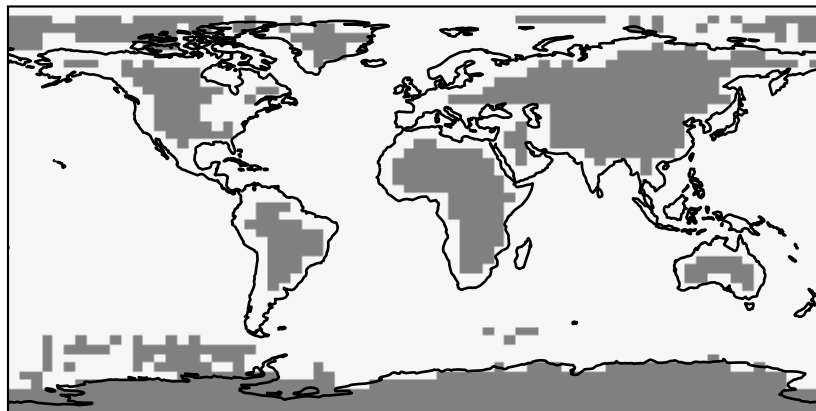unitless

Ref and Dev equal throughout domain
unitless
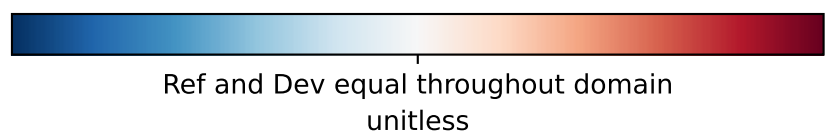
# EmisC2H6_Ship (AnnualMean)



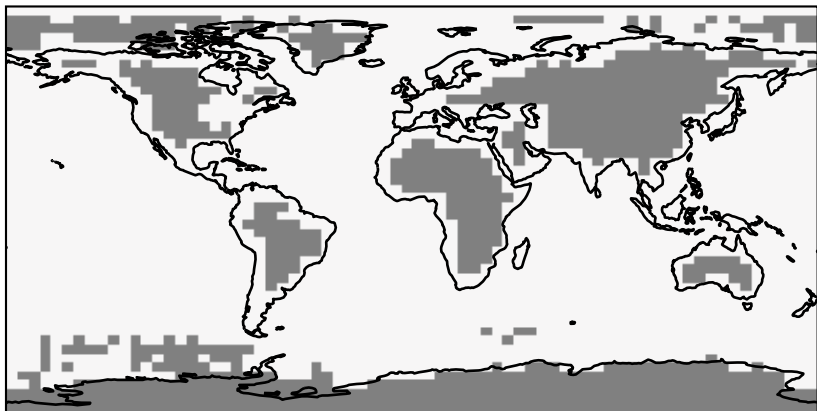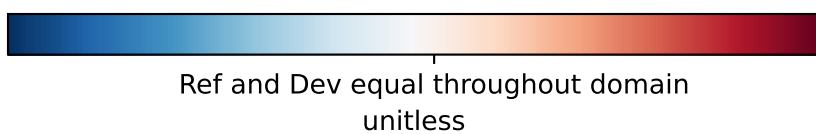GCC_14.0.0 (Ref)
4.0x5.0
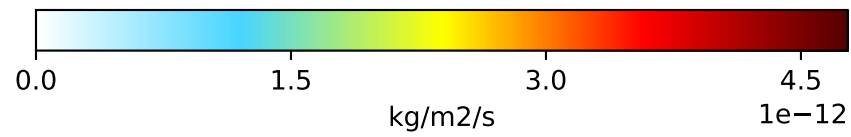
GCC_14.2.0 (Dev)
4.0x5.0

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
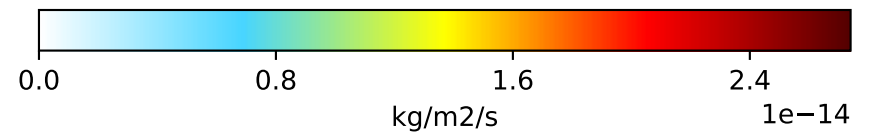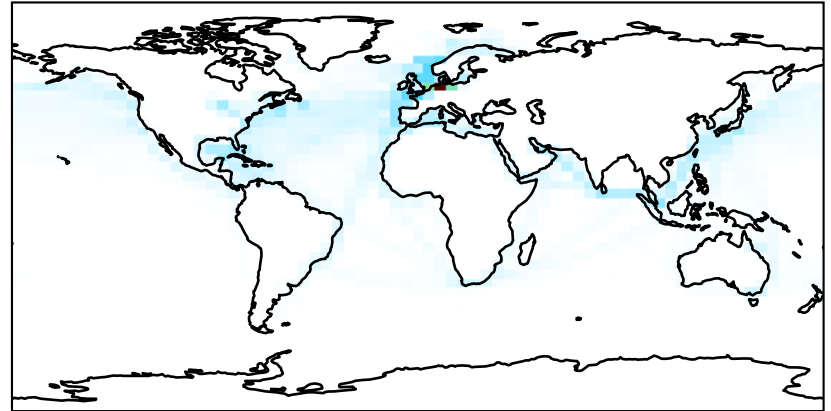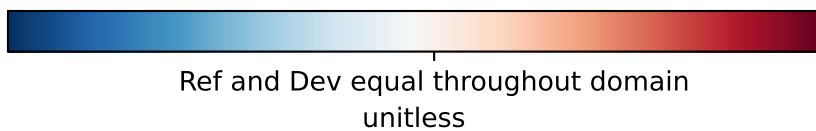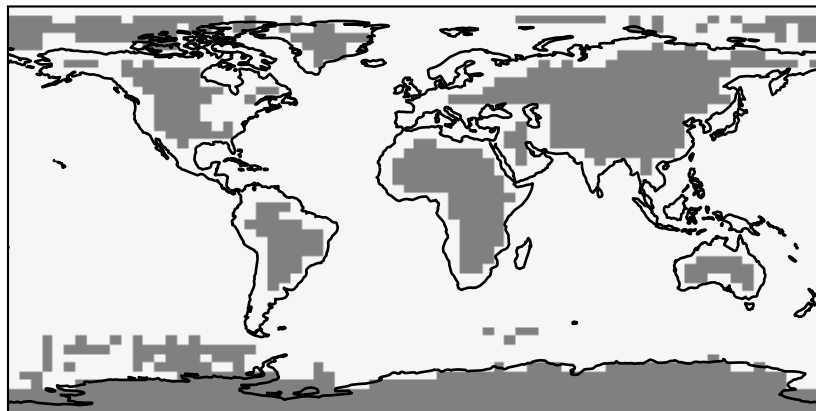
Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
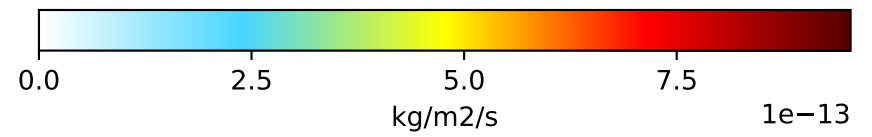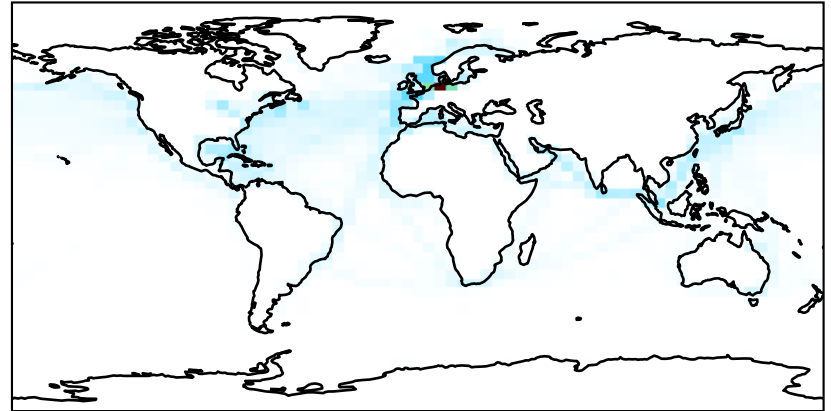unitless

Ref and Dev equal throughout domain
unitless
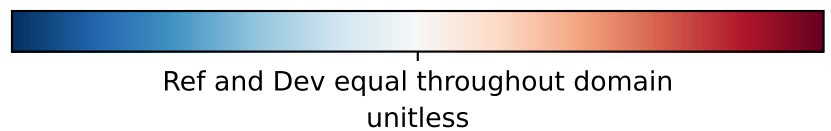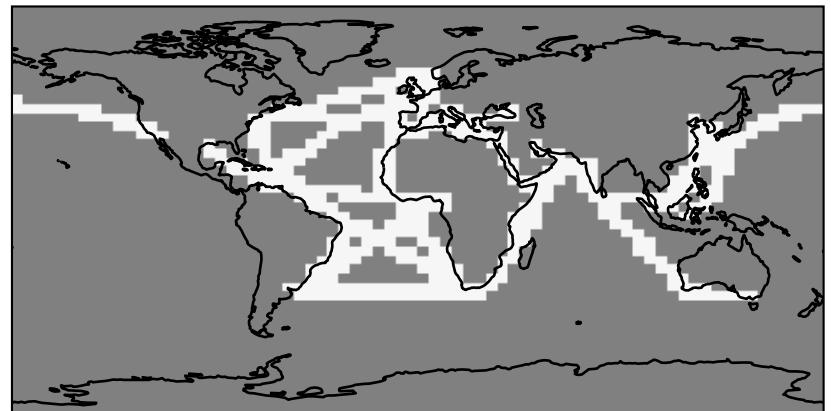
# EmisC3H8_Ship (AnnualMean)



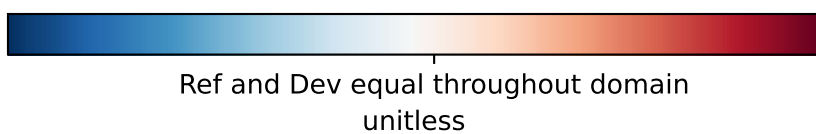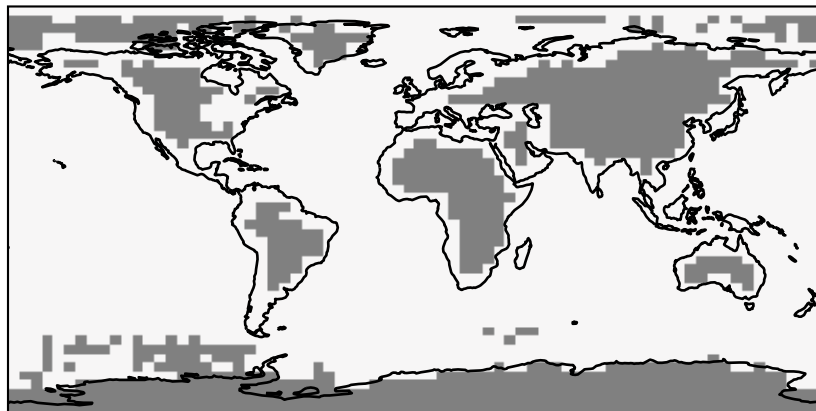GCC_14.0.0 (Ref)
4.0x5.0
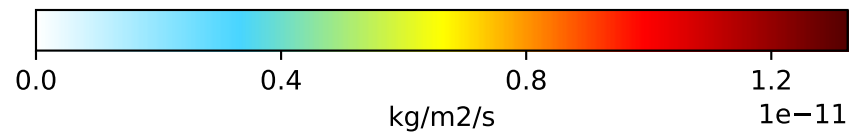
GCC_14.2.0 (Dev)
4.0x5.0

kg/m2/s

kg/m2/s

Difference
Dev - Ref, Dynamic Range

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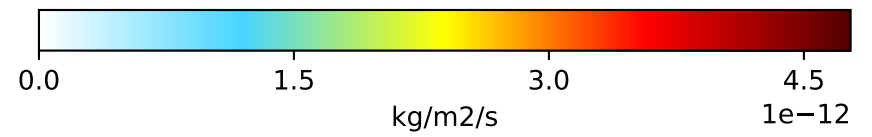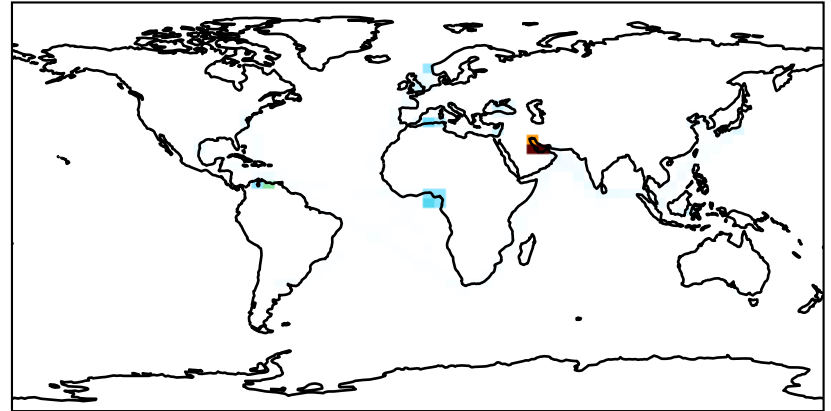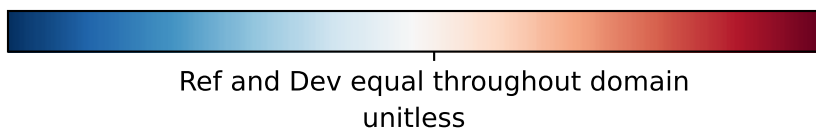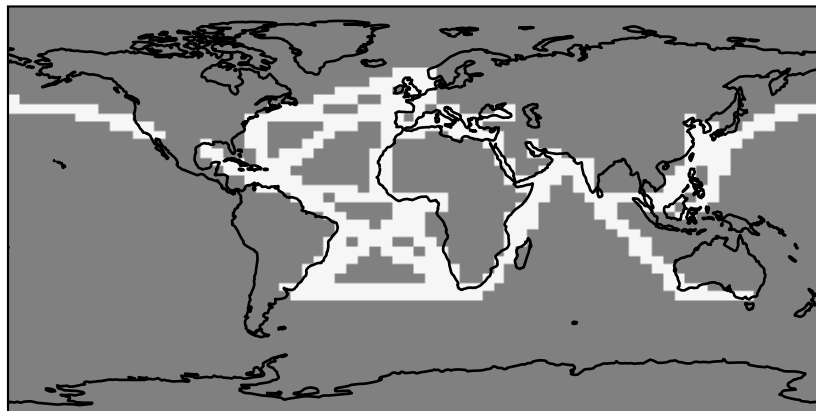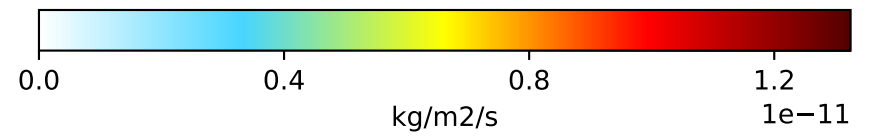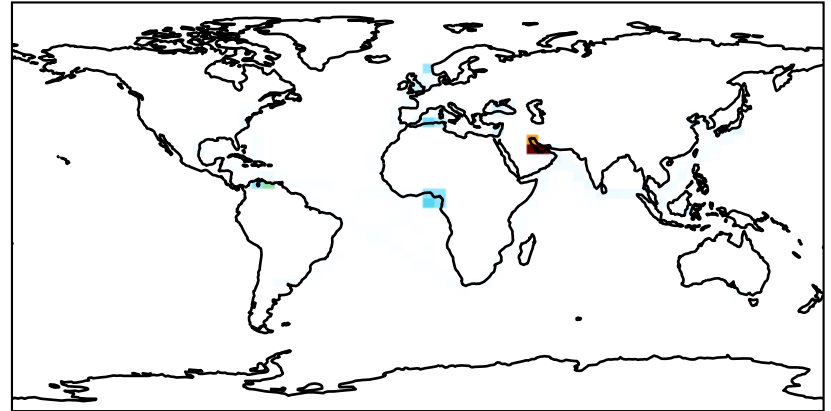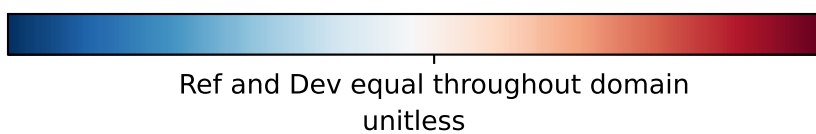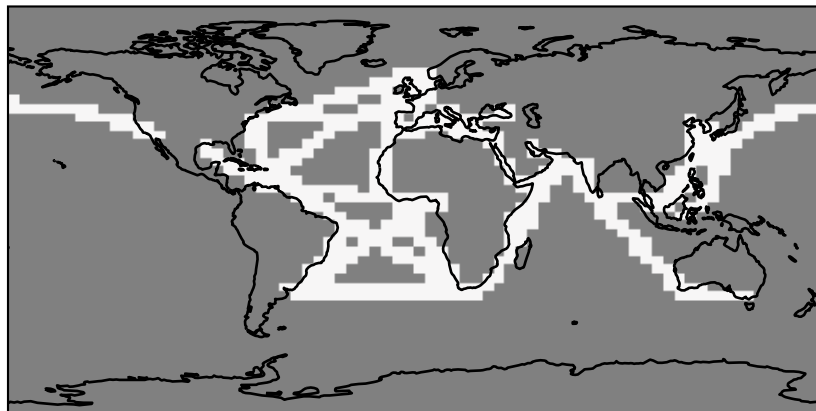Dev - Ref, Restricted Range [5%,95%]

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
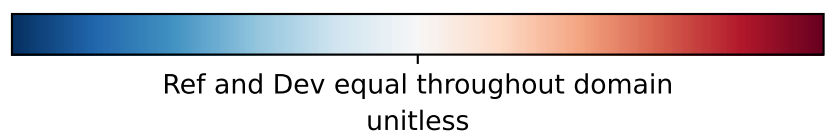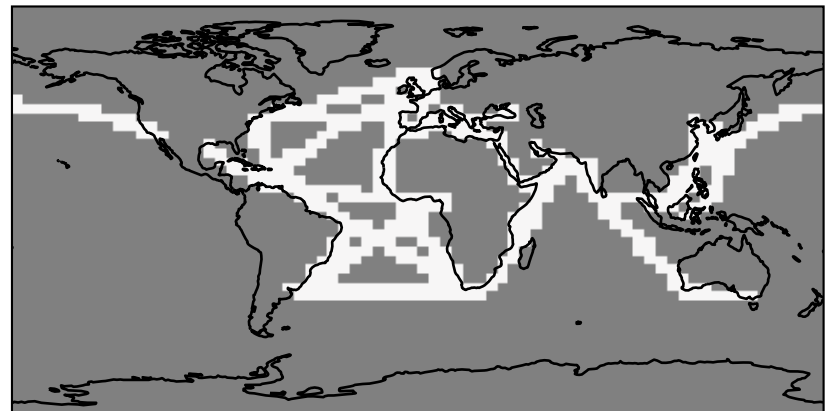
# EmisCH2O_Ship (AnnualMean)
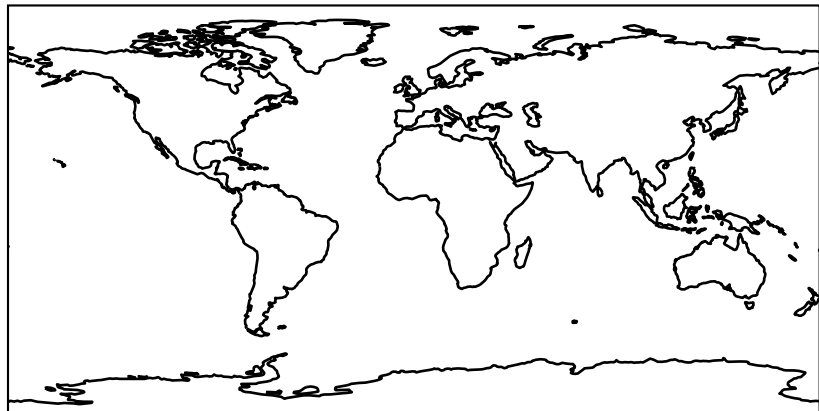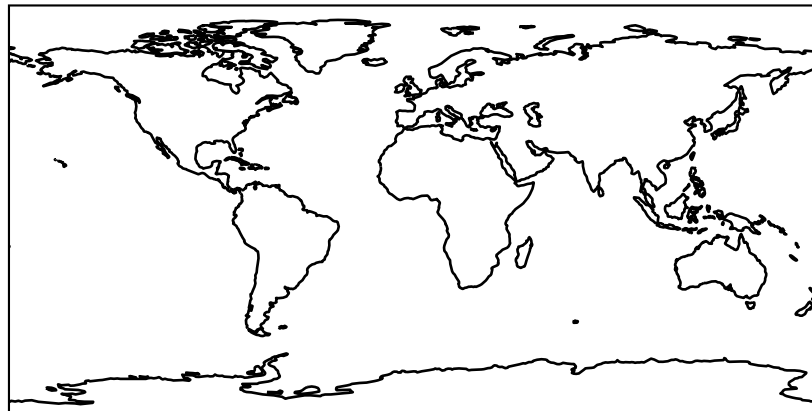
### GCC_14.0.0 (Ref)
### 4.0x5.0

### GCC_14.2.0 (Dev)
### 4.0x5.0

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s

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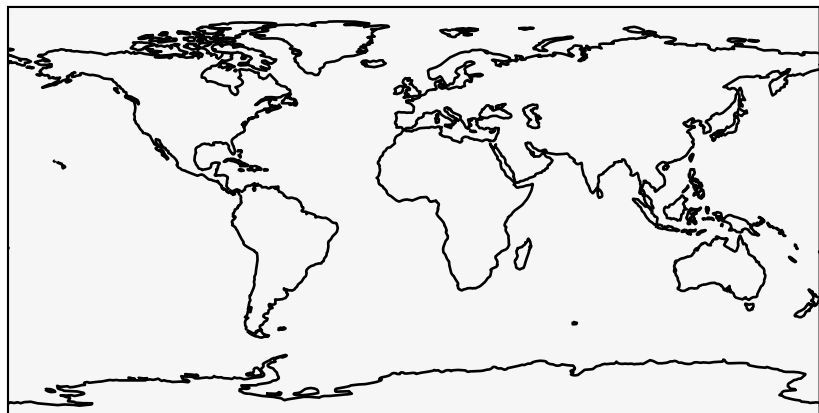
### Difference
### Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s
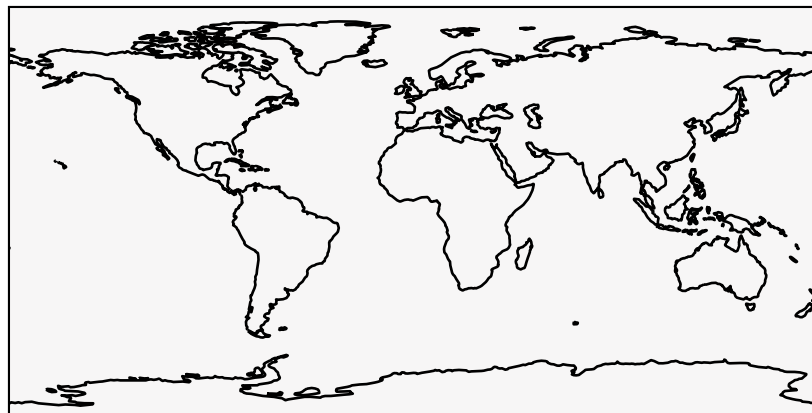
Zero throughout domain
kg/m2/s

### Ratio
### Dev/Ref, Dynamic Range
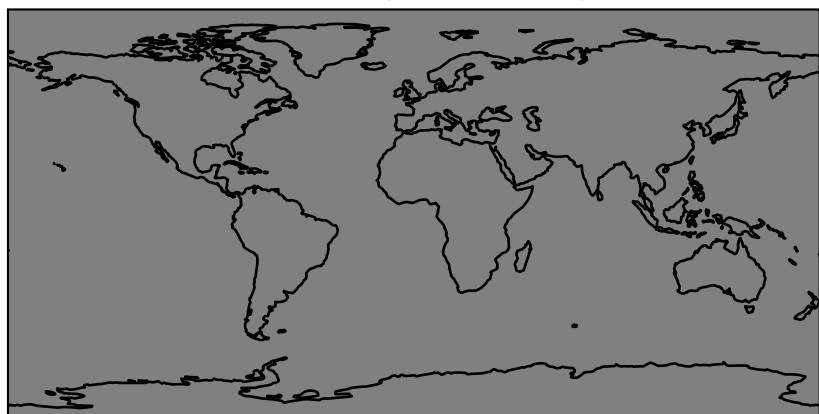
### Ratio
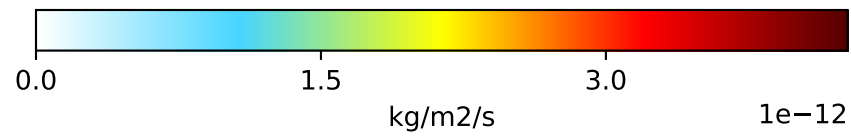### Dev/Ref, Fixed Range
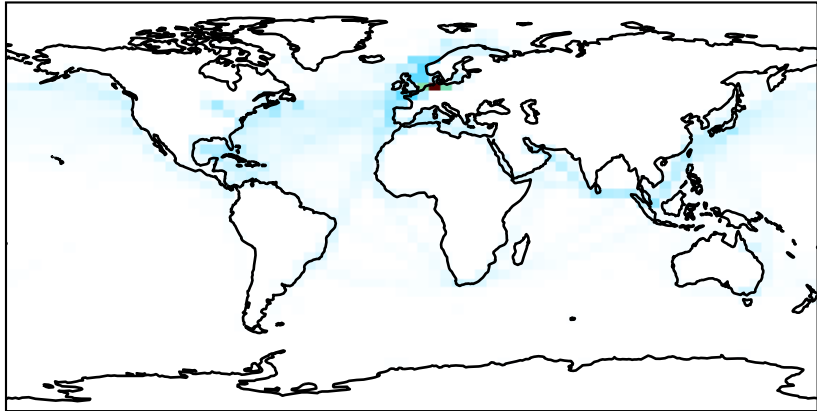
Undefined throughout domain
unitless
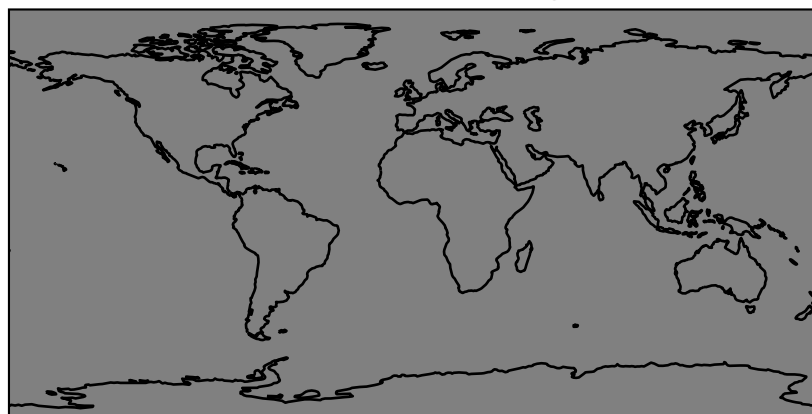
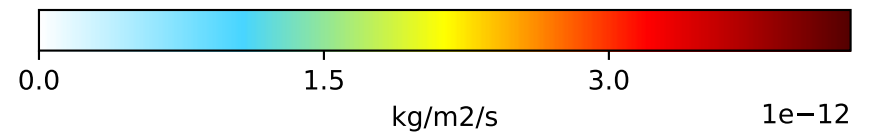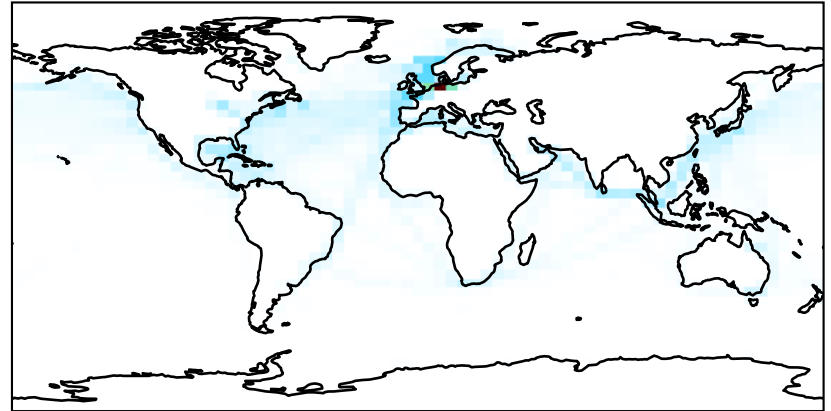Undefined throughout domain
unitless

# EmisCO_Ship (AnnualMean)



GCC_14.0.0 (Ref)
4.0x5.0
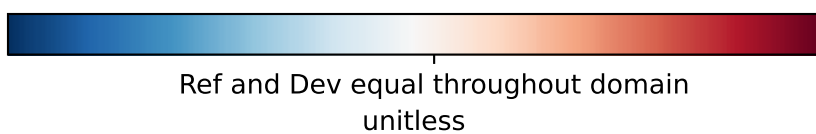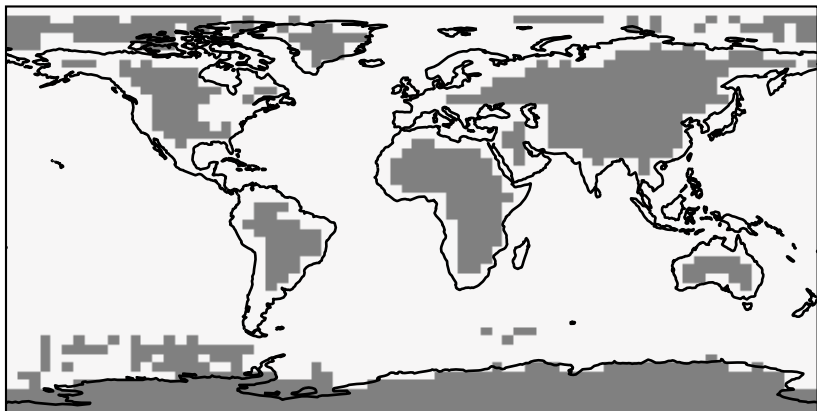
GCC_14.2.0 (Dev)
4.0x5.0

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
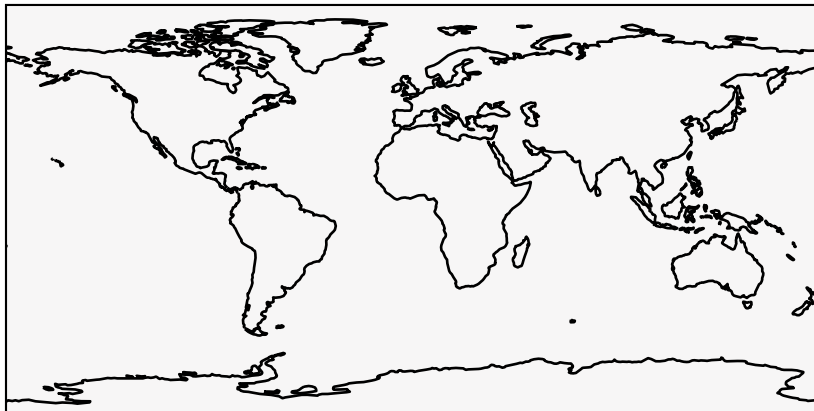Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

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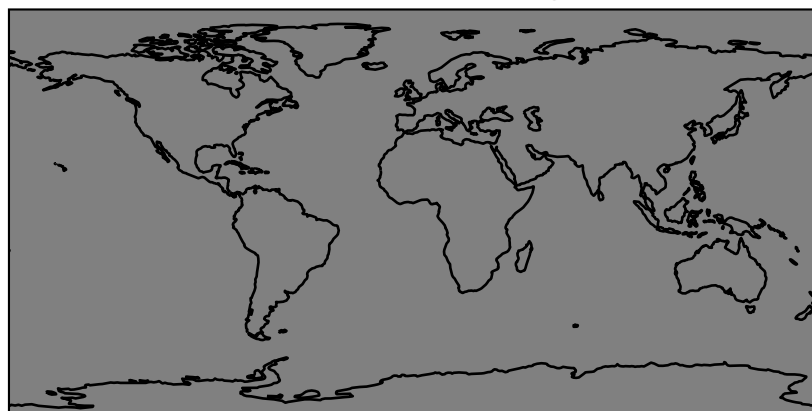
# EmisEOH_Ship (AnnualMean)

# EmisHCOOH_Ship (AnnualMean)

### GCC_14.0.0 (Ref)
### 4.0x5.0
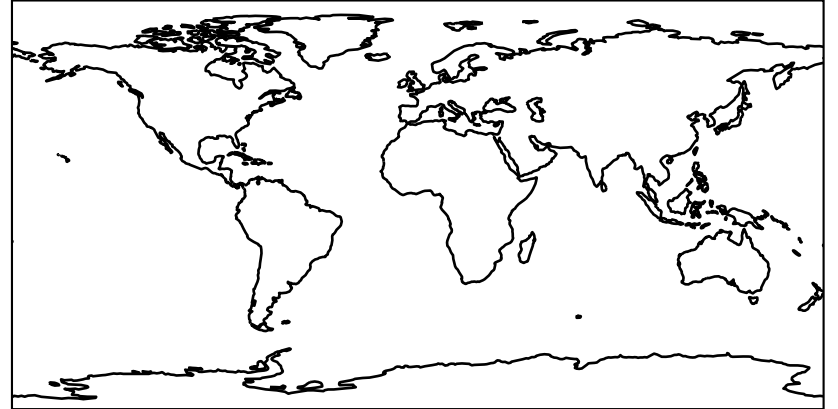
Zero throughout domain
kg/m2/s

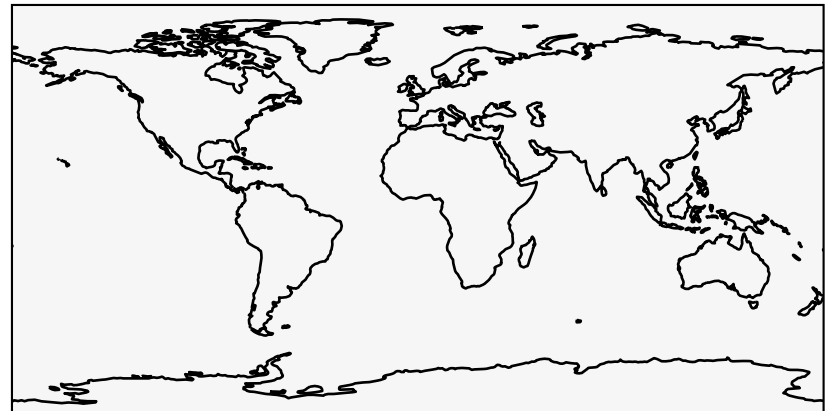### GCC_14.2.0 (Dev)
### 4.0x5.0

Zero throughout domain
kg/m2/s
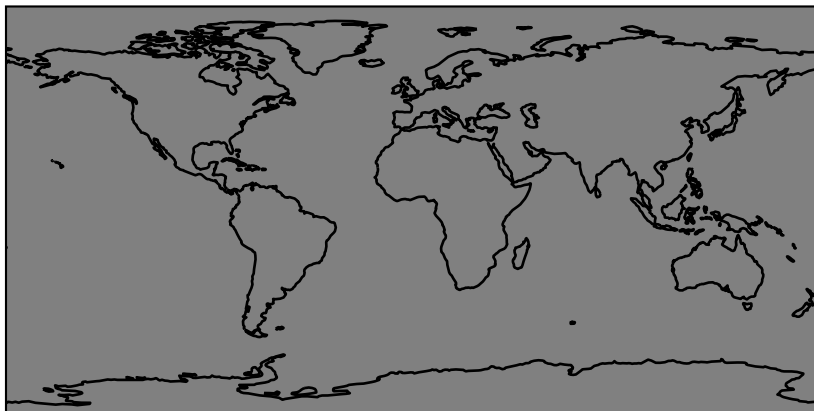
### Difference
### Dev - Ref, Dynamic Range

Zero throughout domain
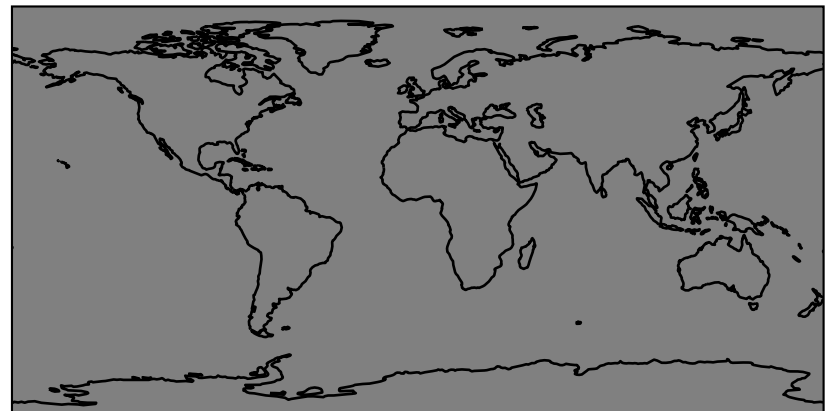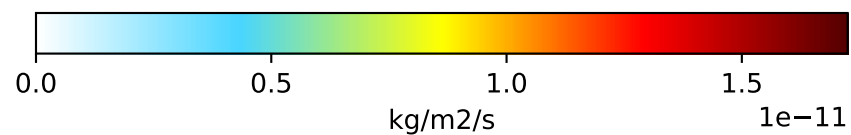kg/m2/s

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

Zero throughout domain
kg/m2/s

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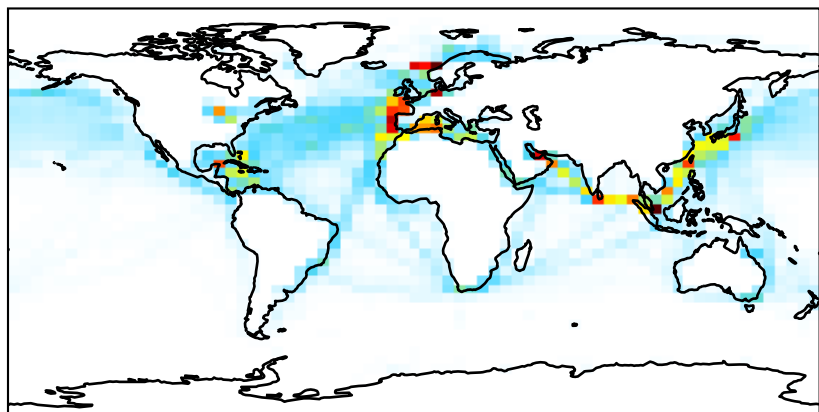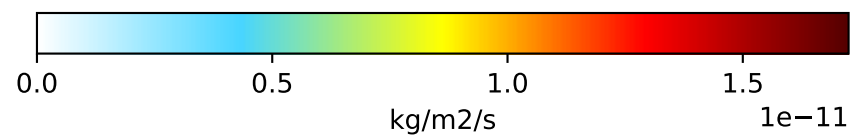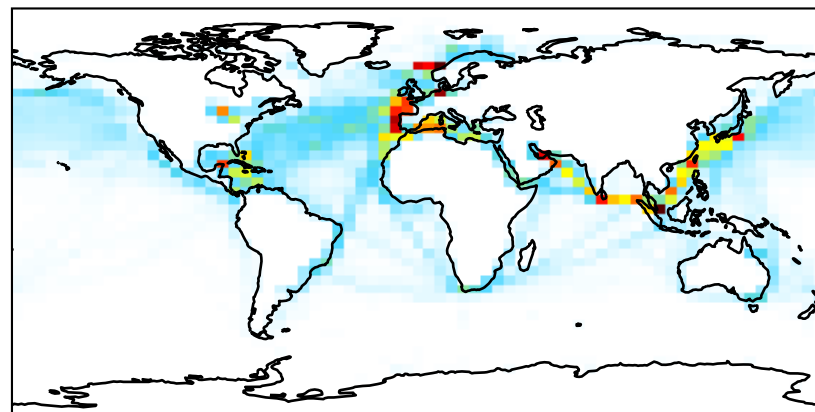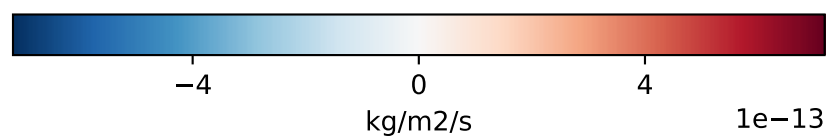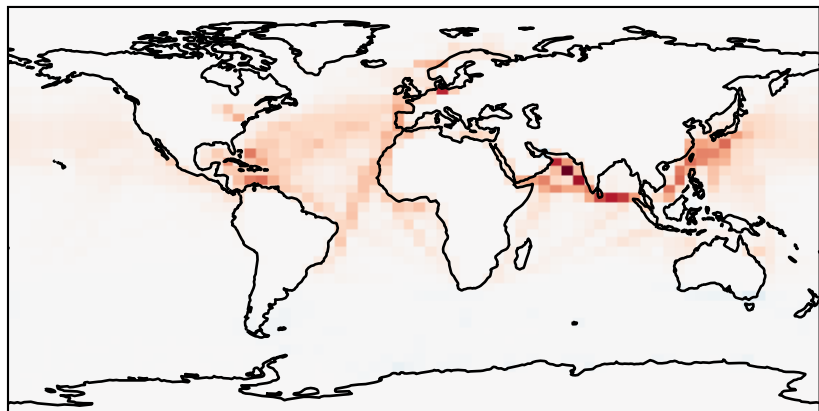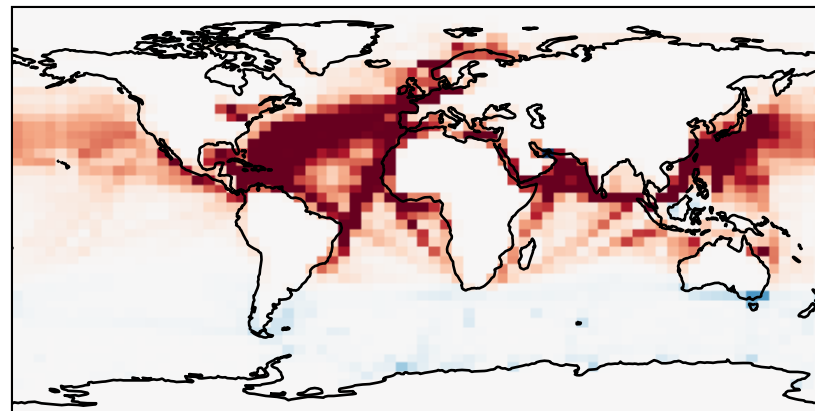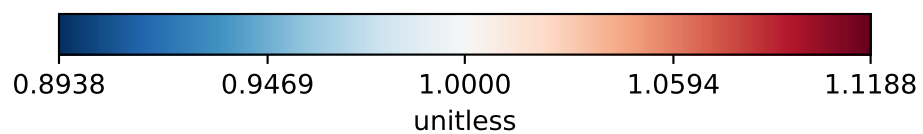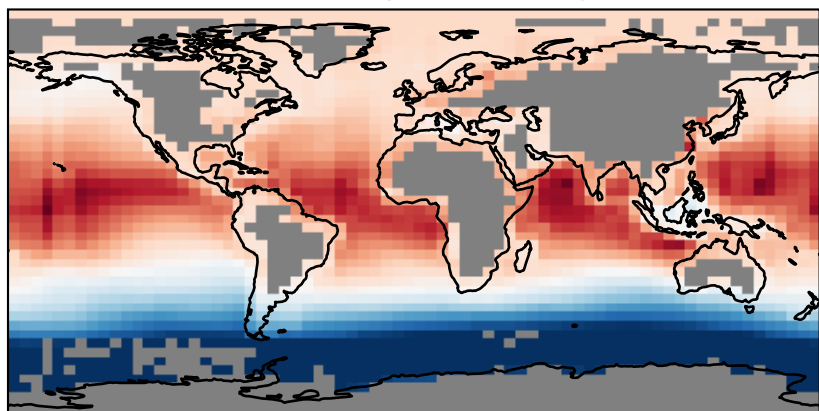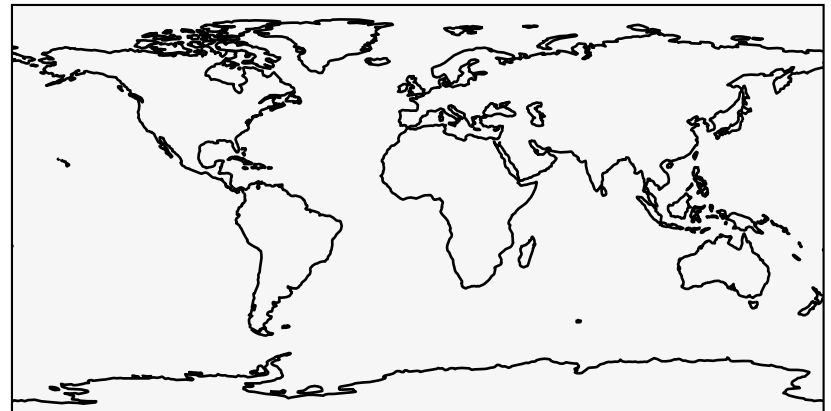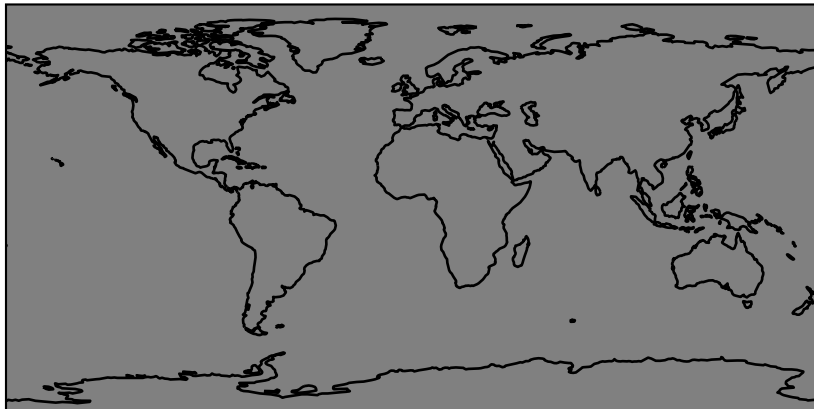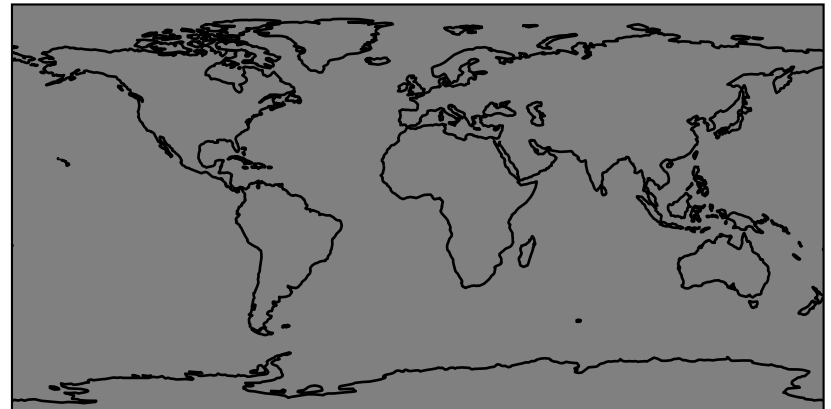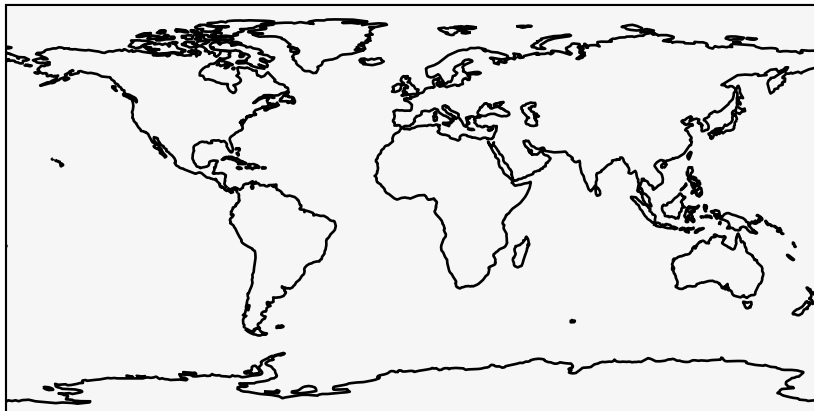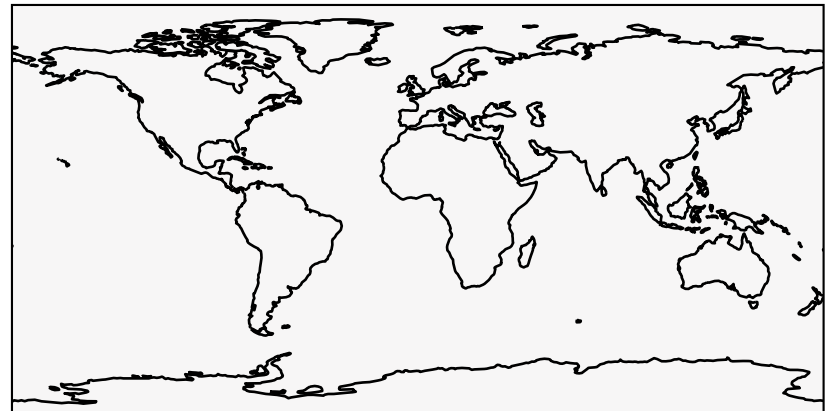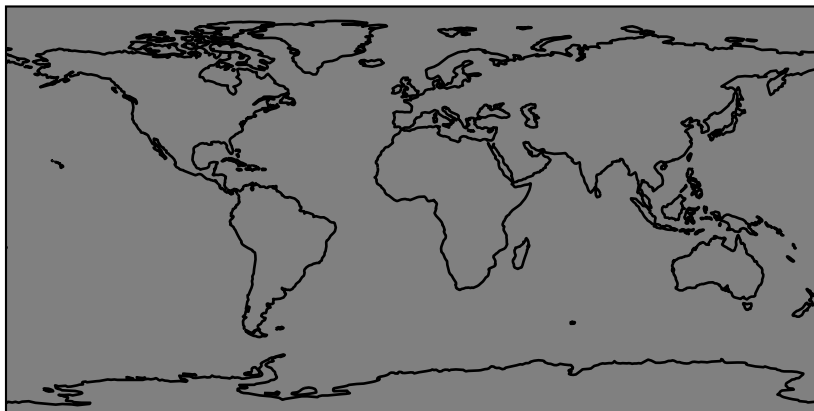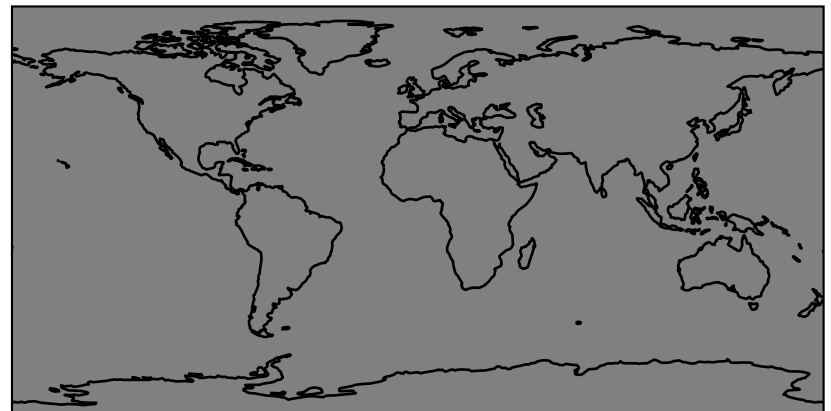### Dev/Ref, Dynamic Range

Undefined throughout domain
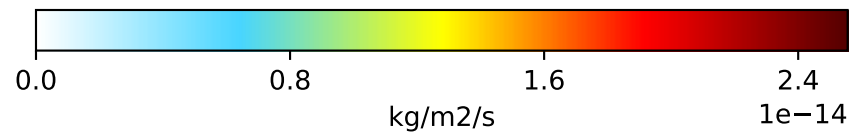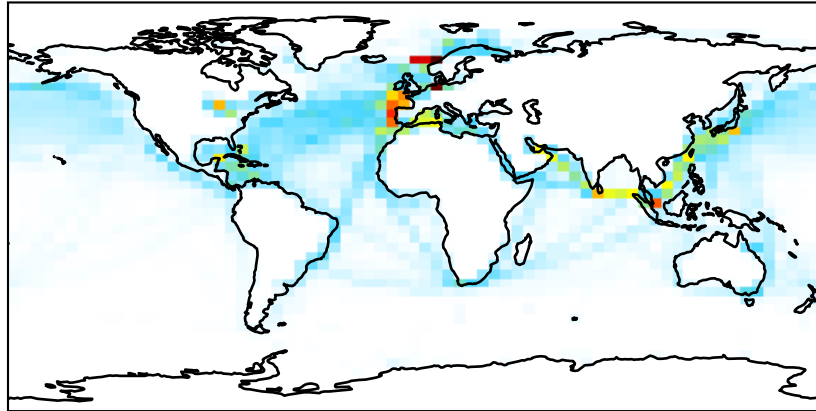unitless

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

Undefined throughout domain
unitless

# EmisHNO3_Ship (AnnualMean)
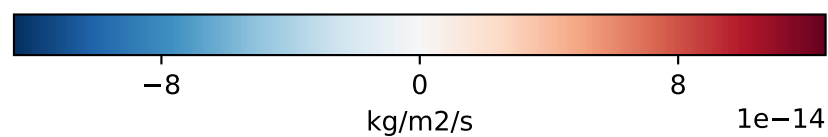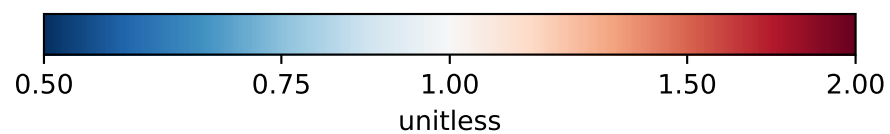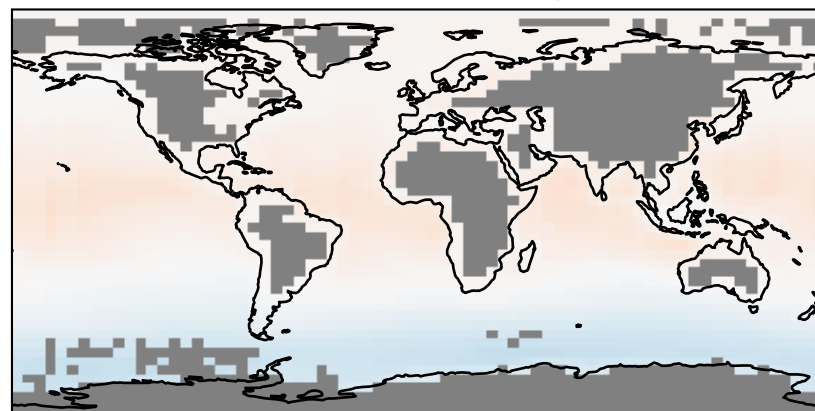
# EmisMEK_Ship (AnnualMean)

# EmisMOH_Ship (AnnualMean)

# EmisNH3_Ship (AnnualMean)

# EmisNO2_Ship (AnnualMean)

# EmisNO_Ship (AnnualMean)

# EmisO3_Ship (AnnualMean)

# EmisOCPI_Ship (AnnualMean)

# EmisOCPO_Ship (AnnualMean)

# EmispFe_Ship (AnnualMean)
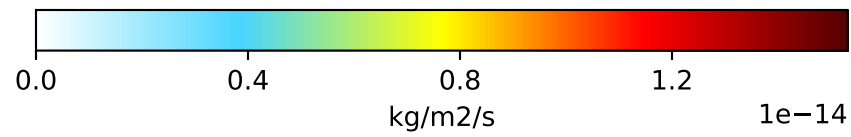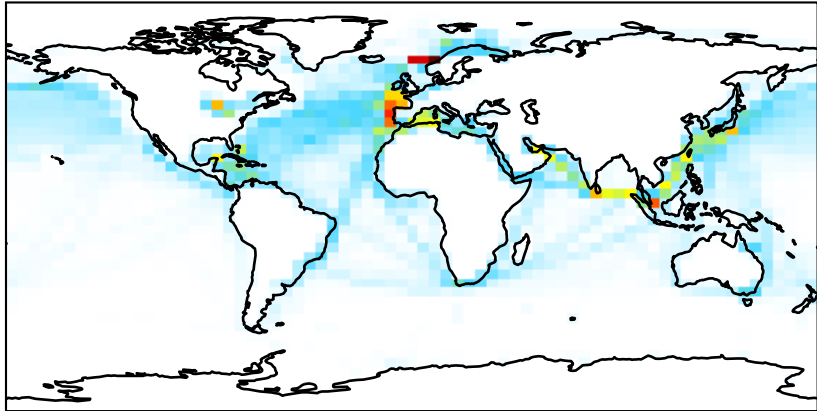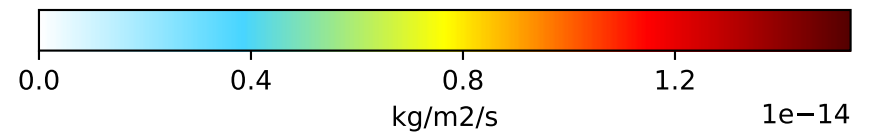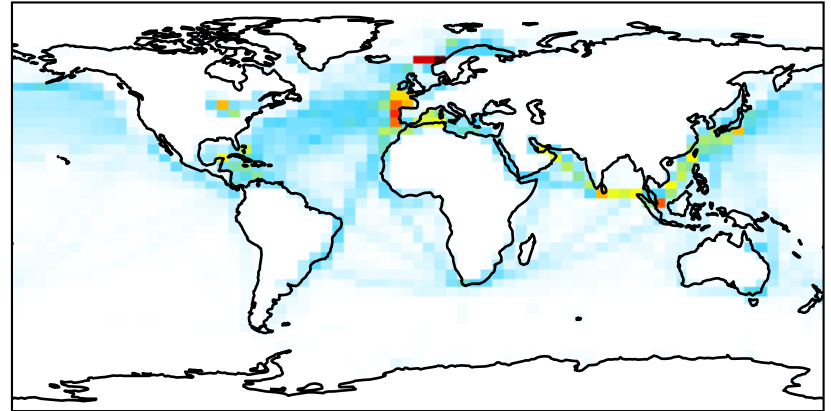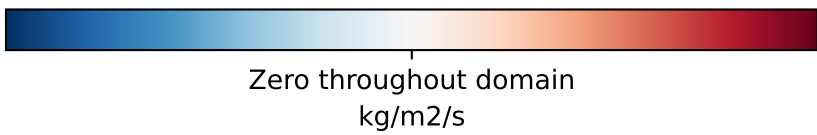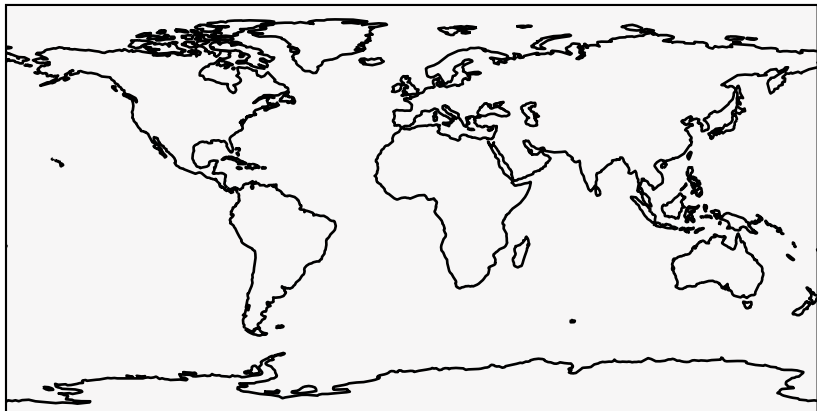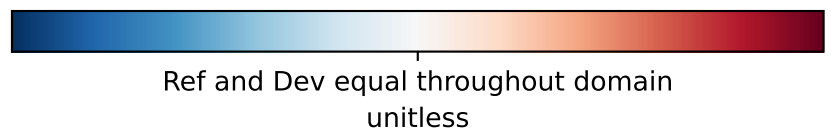
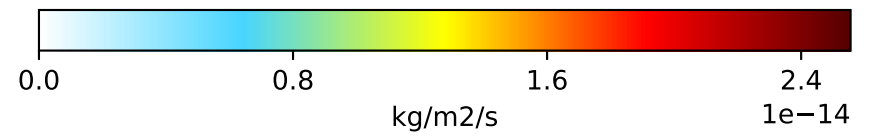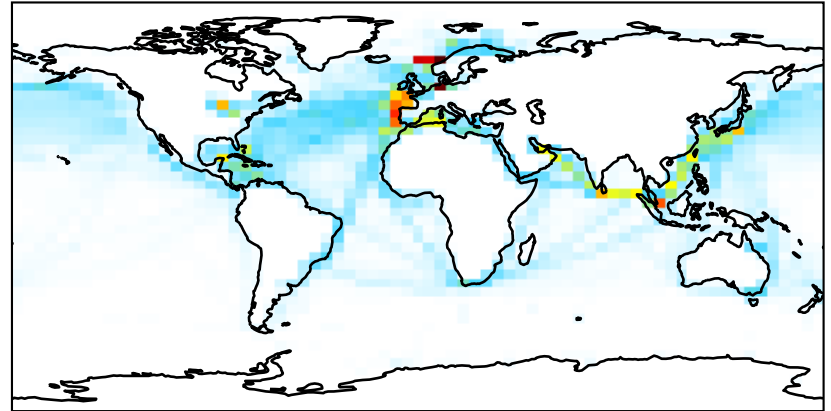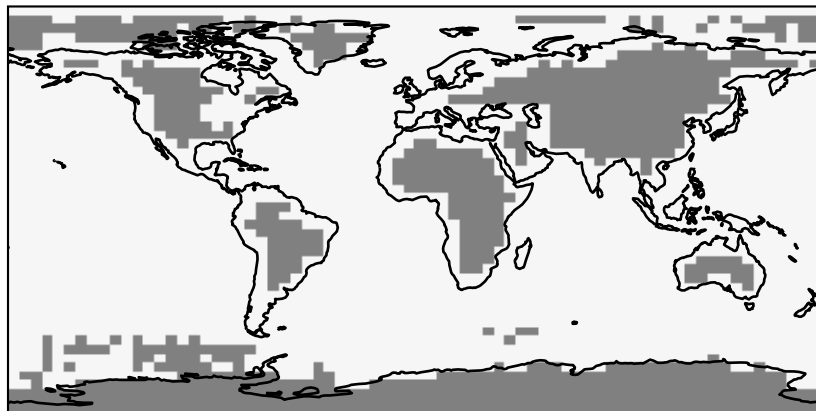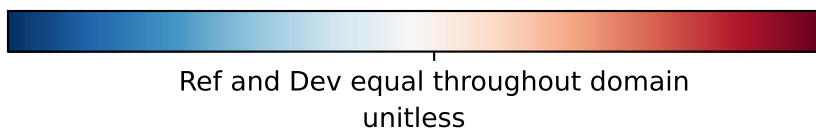# EmisPRPE_Ship (AnnualMean)
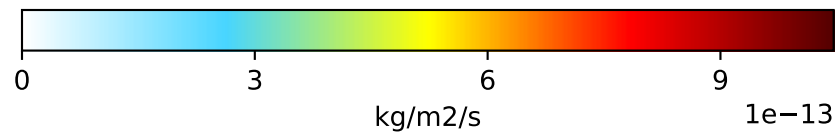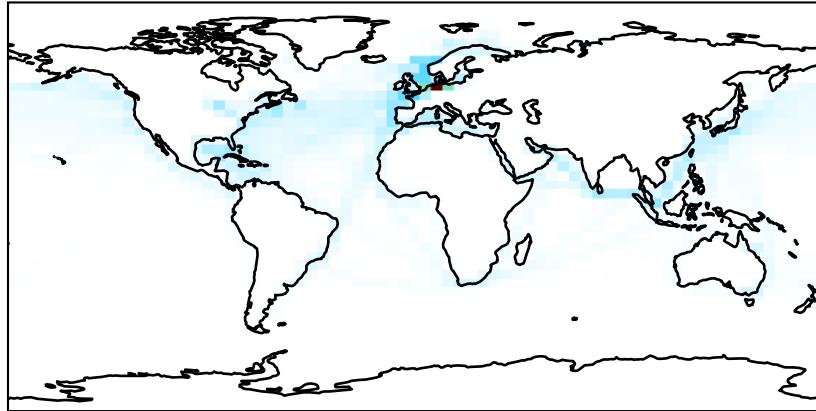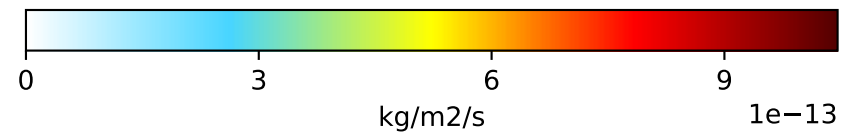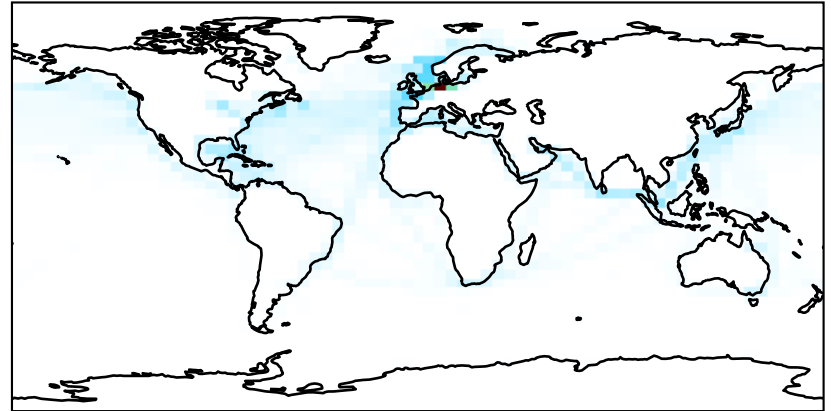


GCC_14.0.0 (Ref)
4.0x5.0

GCC_14.2.0 (Dev)
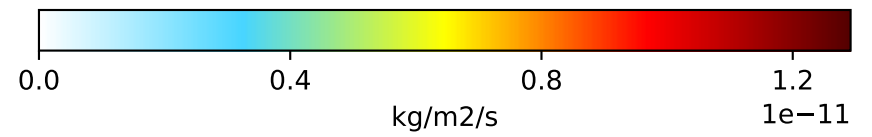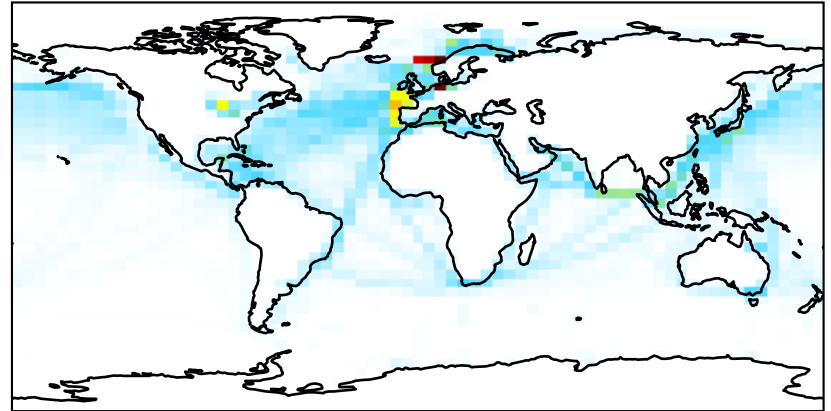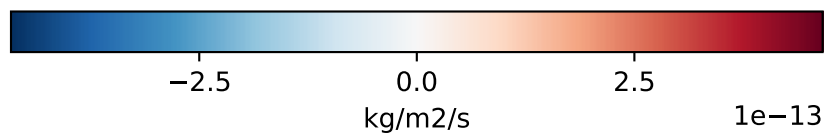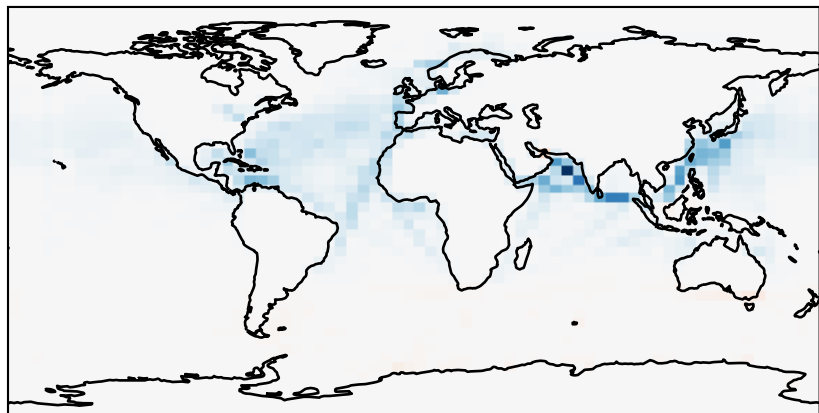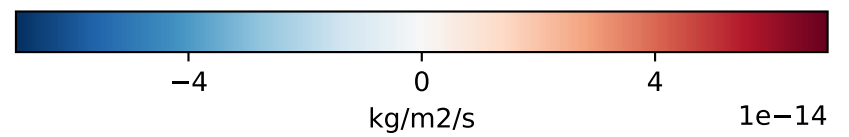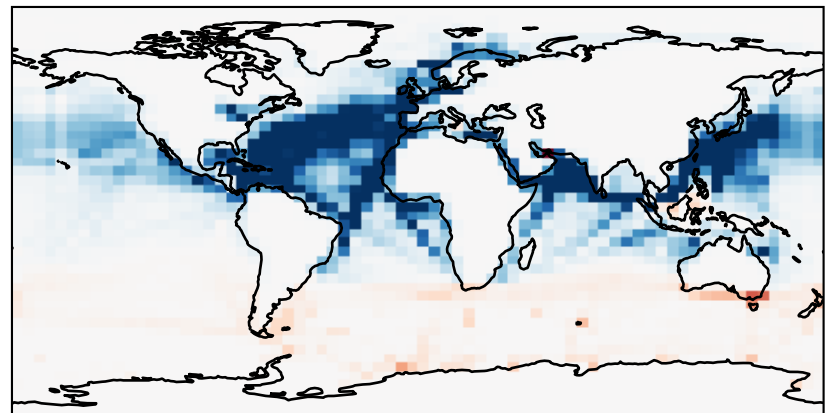4.0x5.0

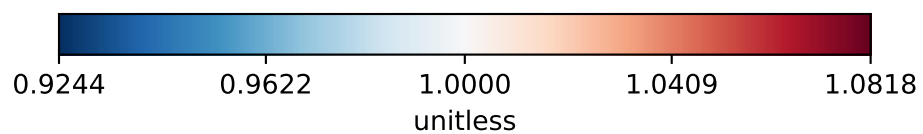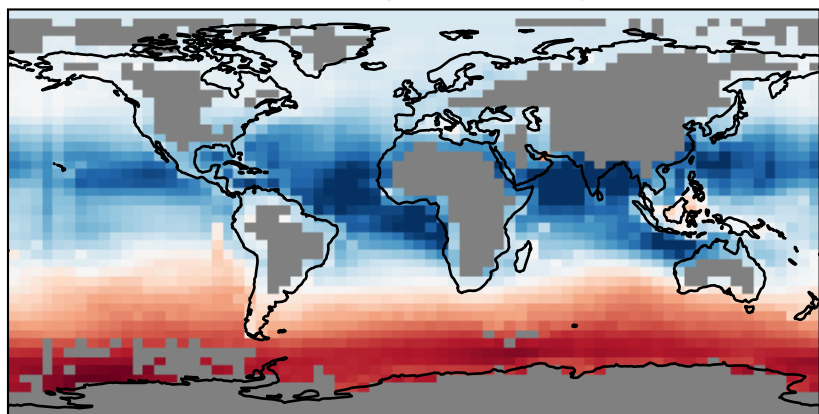kg/m2/s

kg/m2/s

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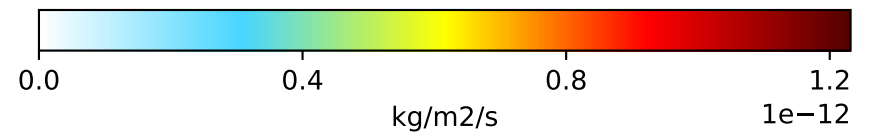
Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

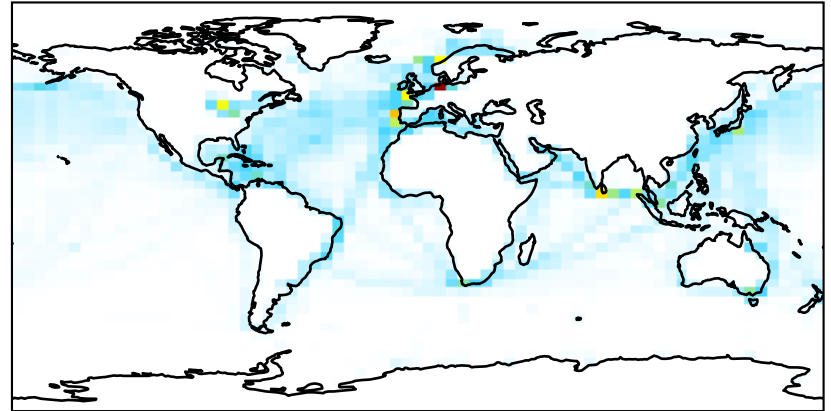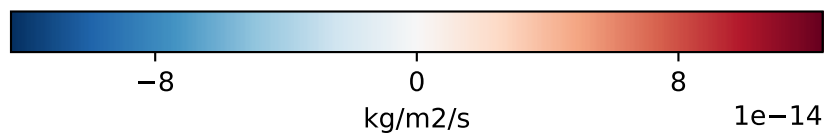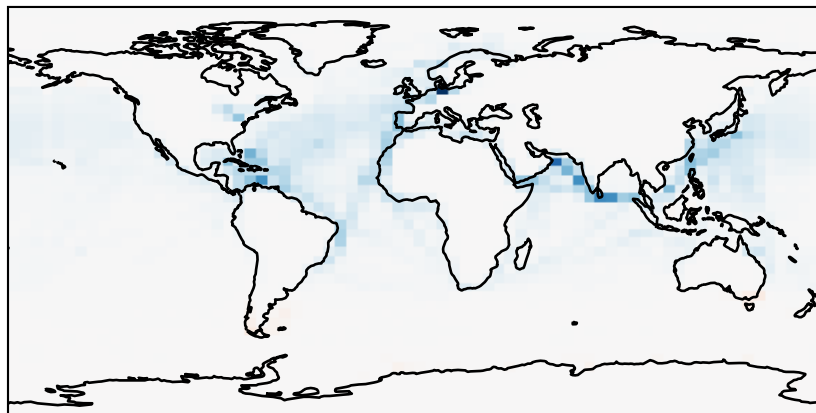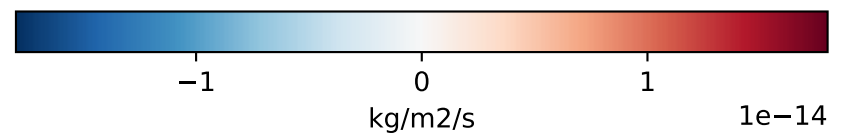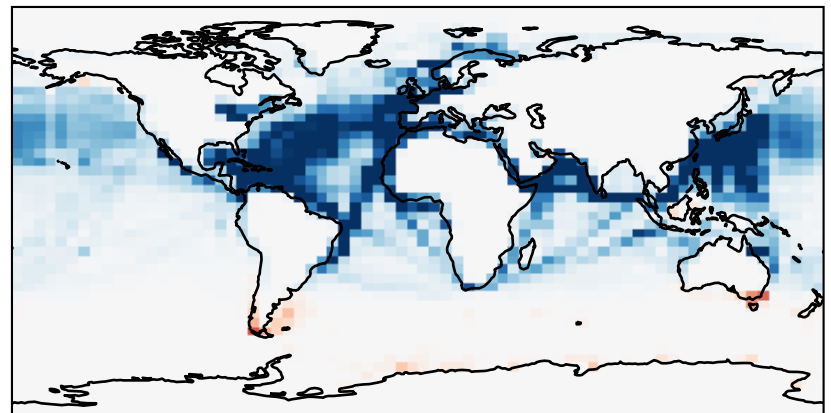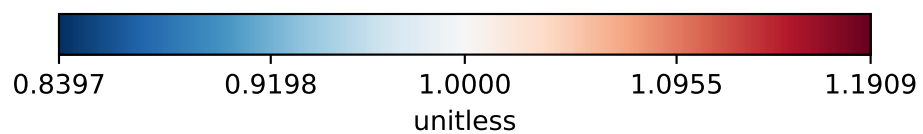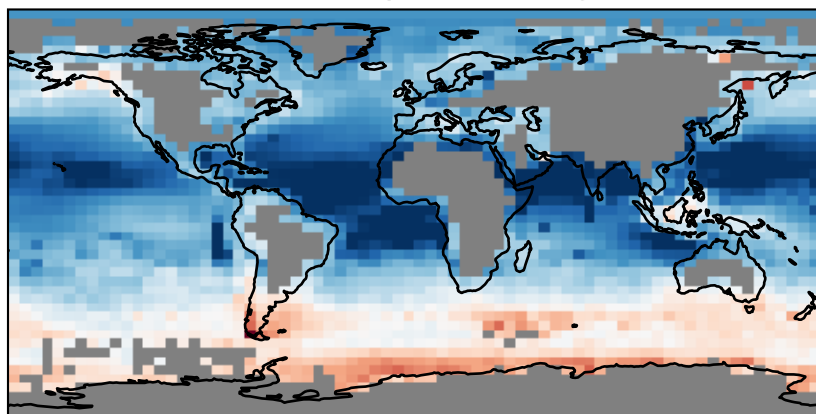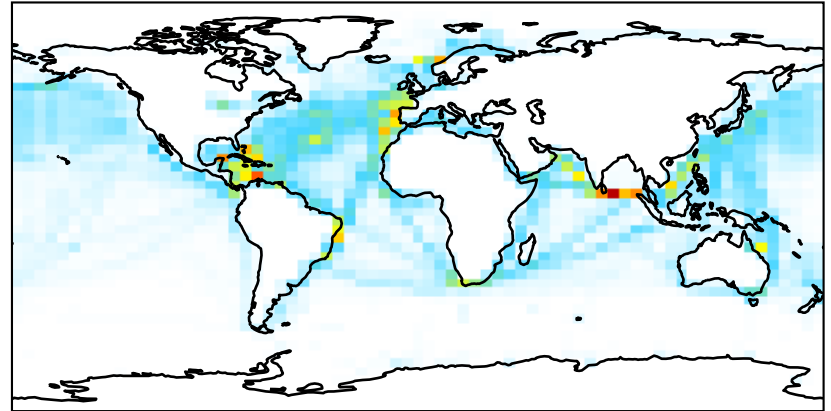Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

Ref and Dev equal throughout domain
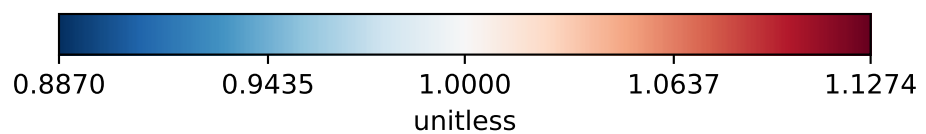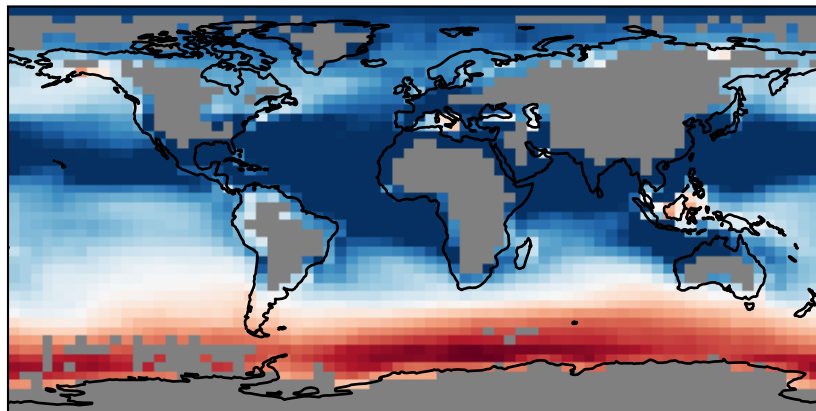unitless

# EmisSO2_Ship (AnnualMean)
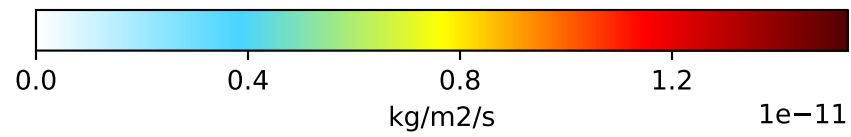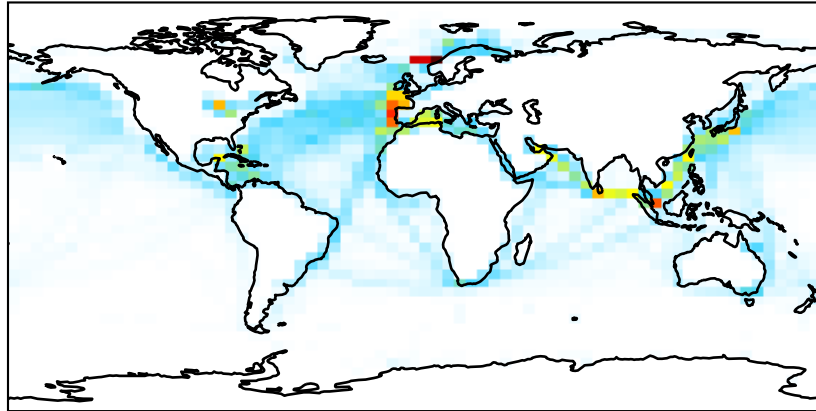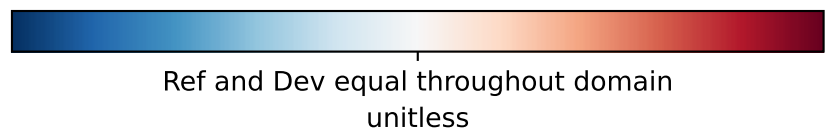
## GCC_14.0.0 (Ref)
### 4.0x5.0

## GCC_14.2.0 (Dev)
### 4.0x5.0



kg/m2/s

kg/m2/s

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

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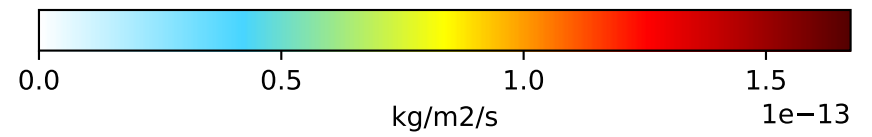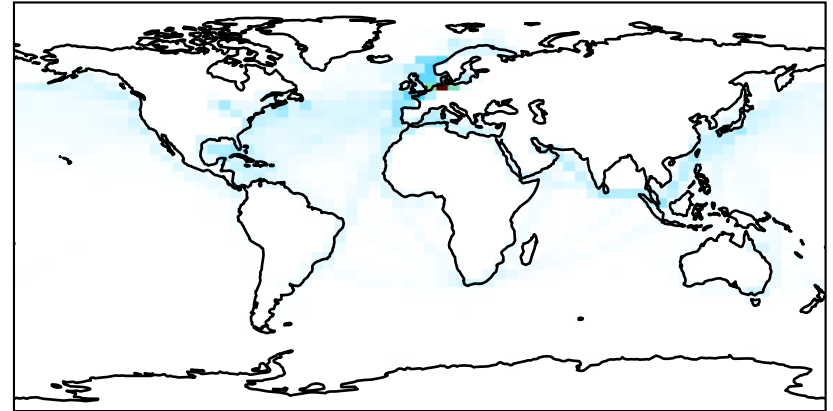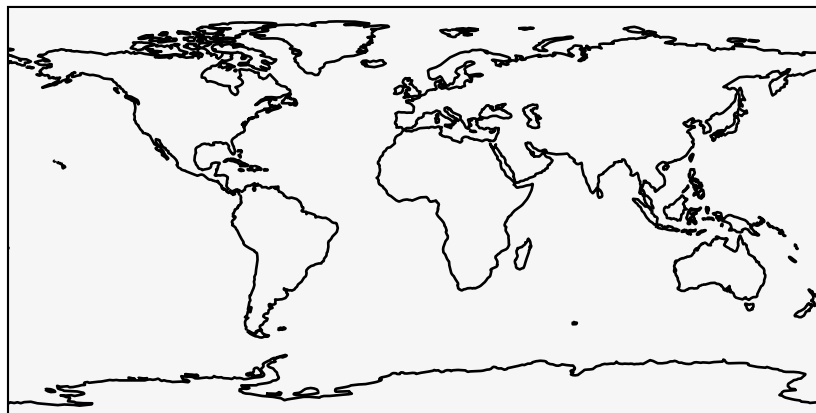### Dev - Ref, Restricted Range [5%,95%]

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

# EmisSO4_Ship (AnnualMean)
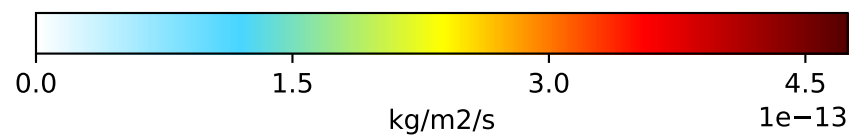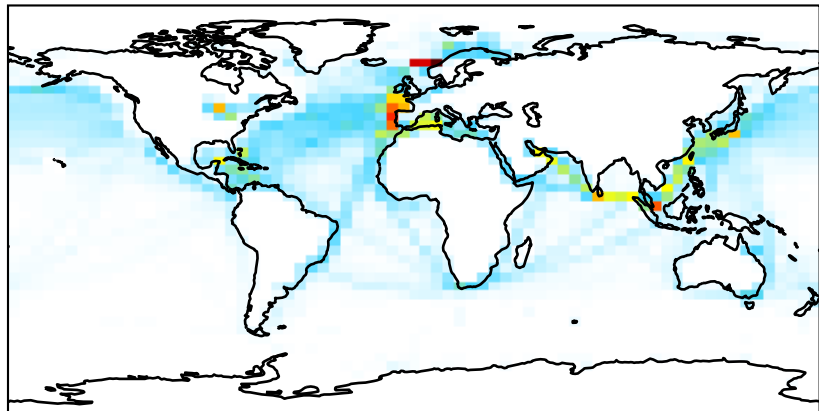


GCC_14.0.0 (Ref)
4.0x5.0

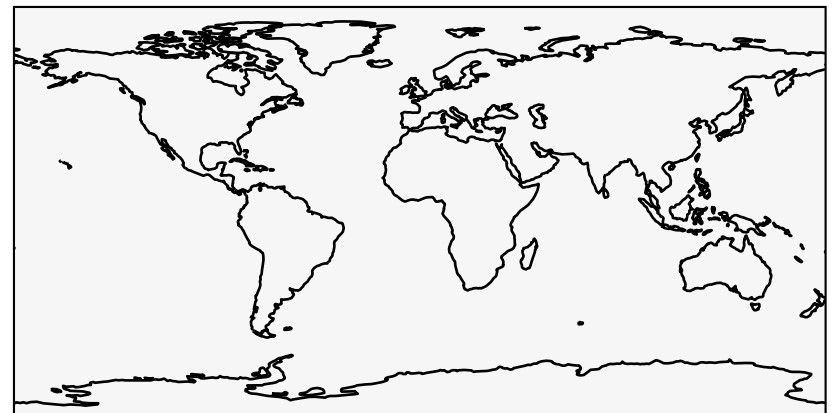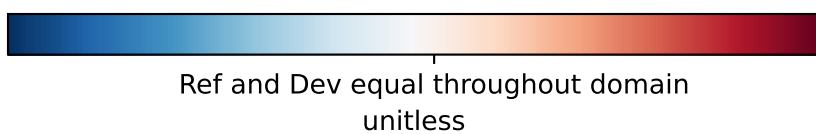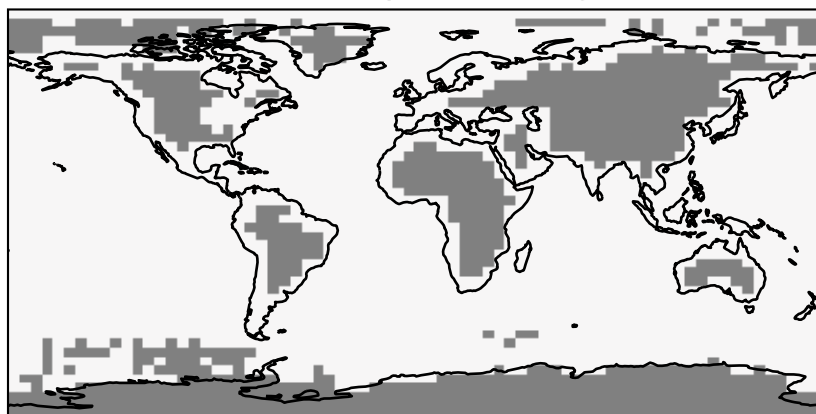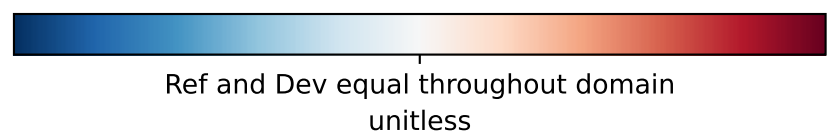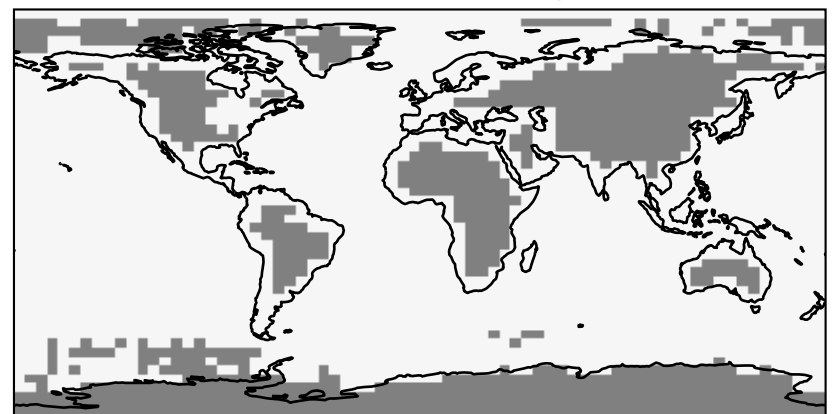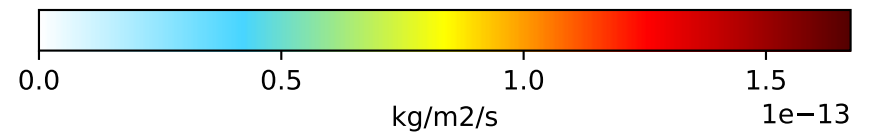GCC_14.2.0 (Dev)
4.0x5.0

kg/m2/s

Difference
Dev - Ref, Dynamic Range

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

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

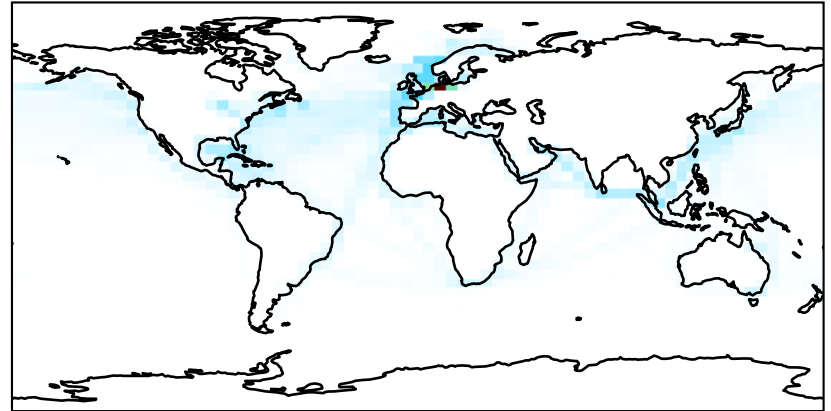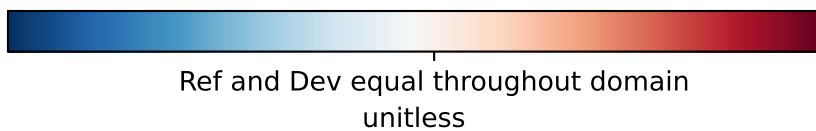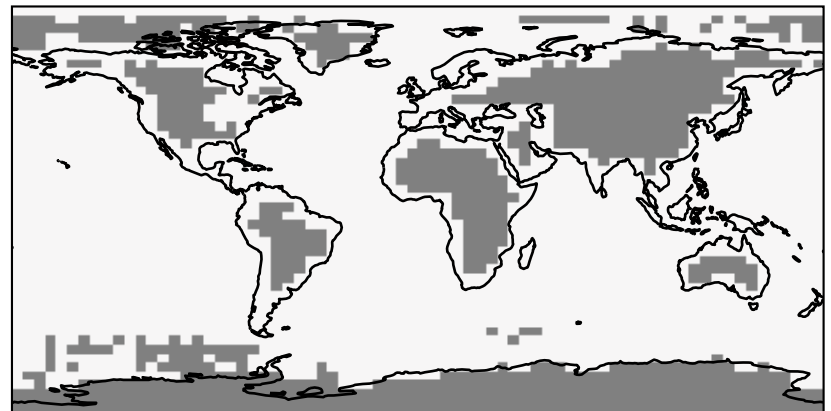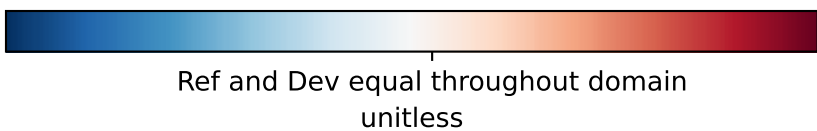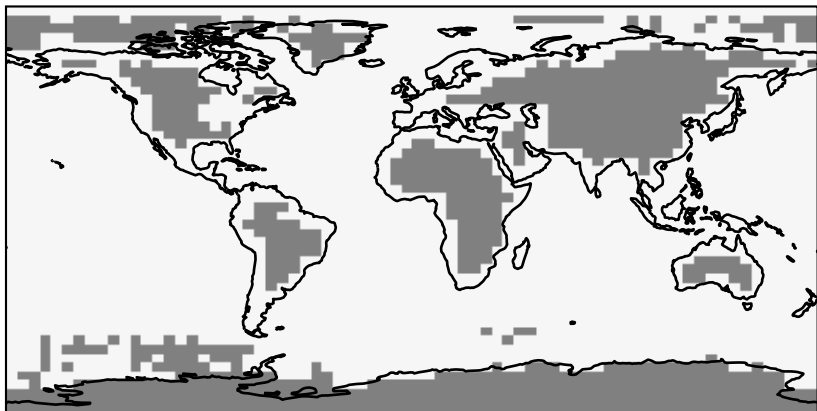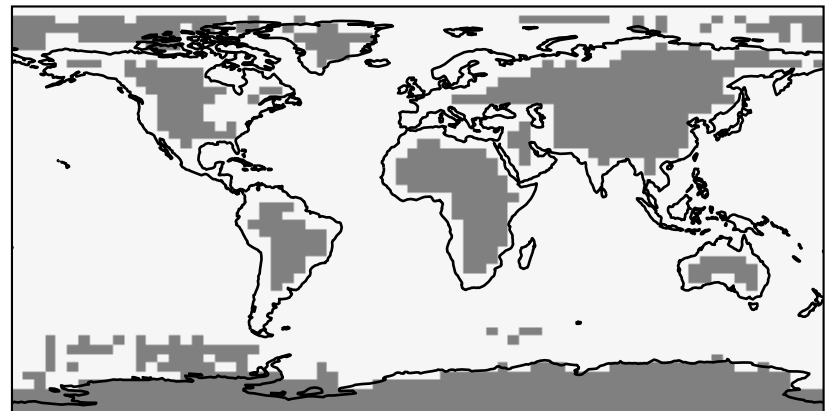Ref and Dev equal throughout domain
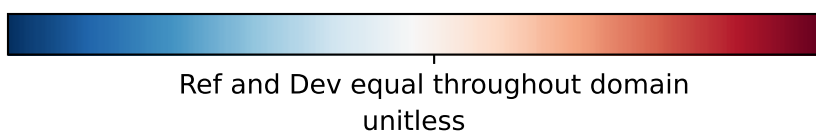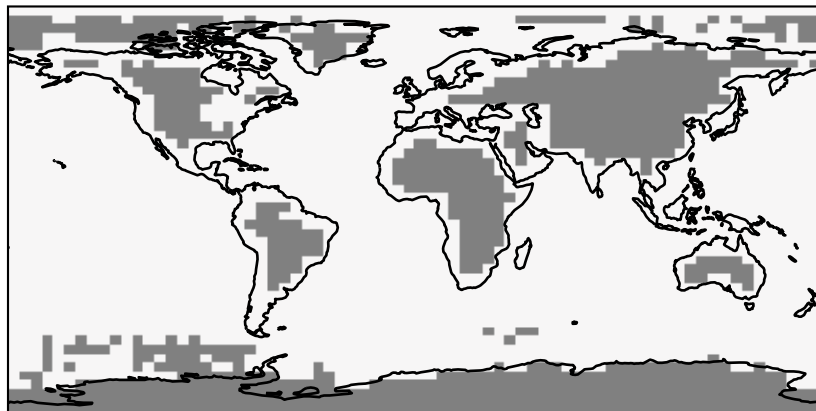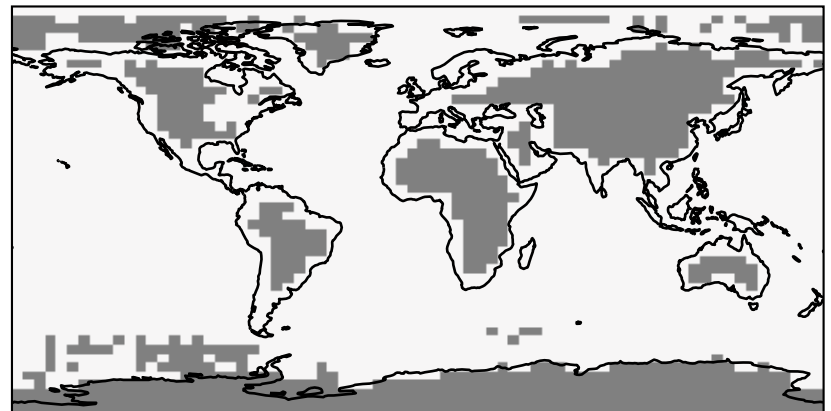unitless

Ref and Dev equal throughout domain
unitless

# EmisSOAP_Ship (AnnualMean)



GCC_14.0.0 (Ref)
4.0x5.0
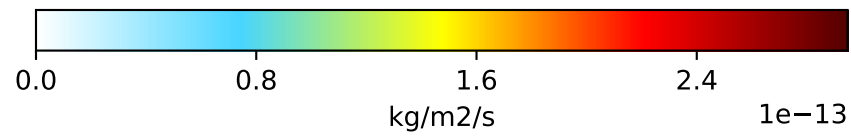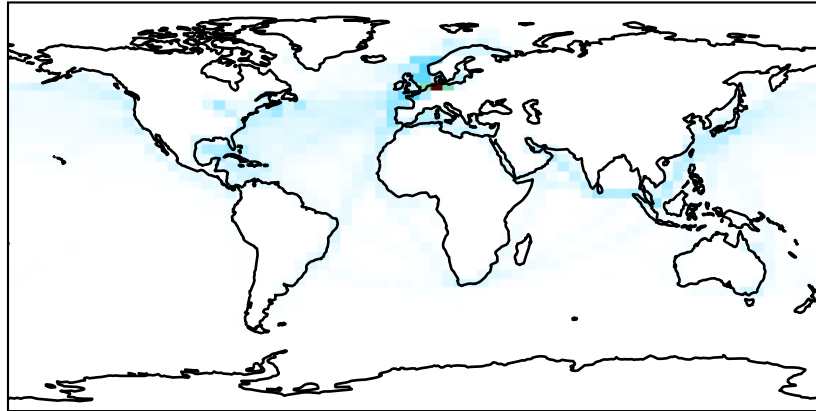
GCC_14.2.0 (Dev)
4.0x5.0

0.0  0.8  1.6  2.4
kg/m2/s                1e−13

0.0  0.8  1.6  2.4
kg/m2/s                1e−13

Difference
Dev - Ref, Dynamic Range

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

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s
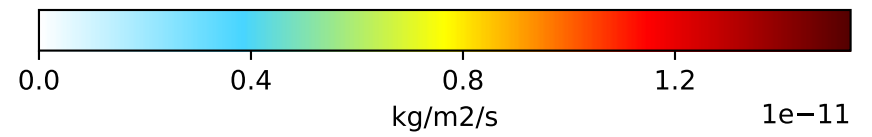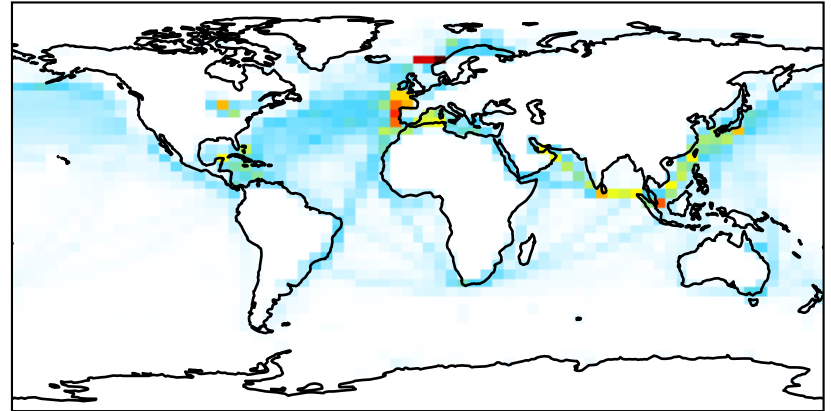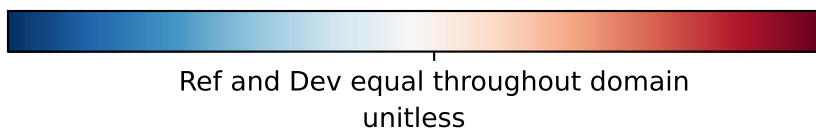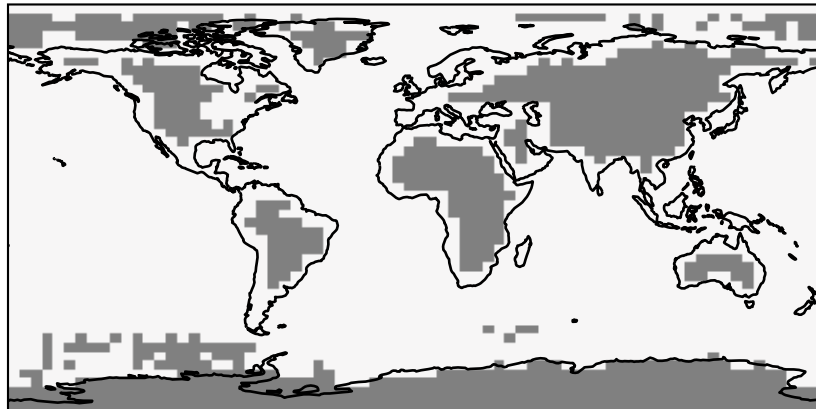
Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

Ref and Dev equal throughout domain
unitless

# EmisTOLU_Ship (AnnualMean)
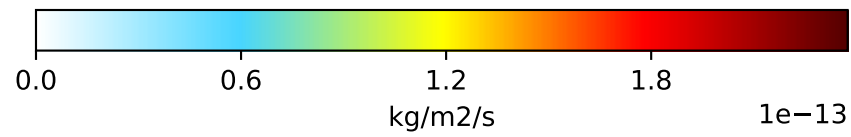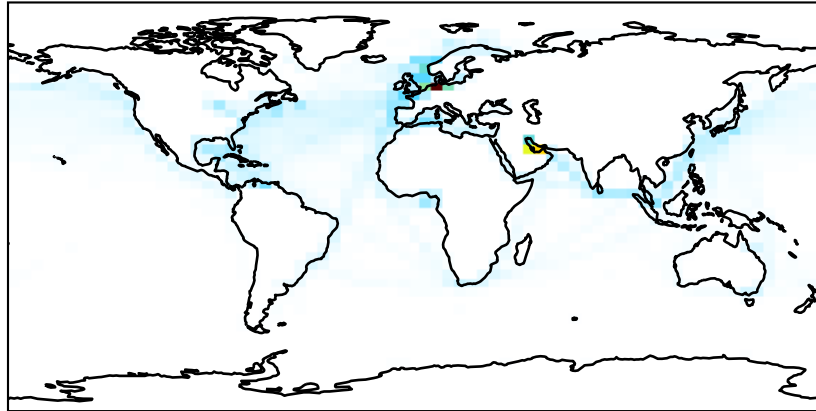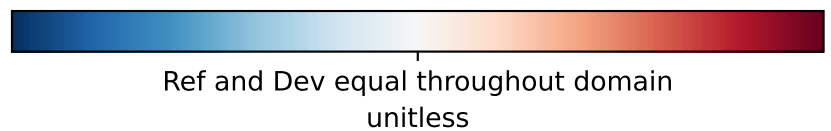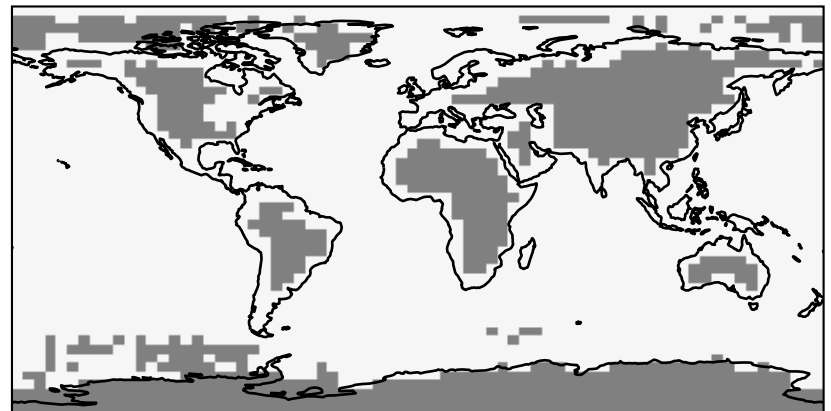
# EmisXYLE_Ship (AnnualMean)



GCC_14.0.0 (Ref)
4.0x5.0

GCC_14.2.0 (Dev)
4.0x5.0
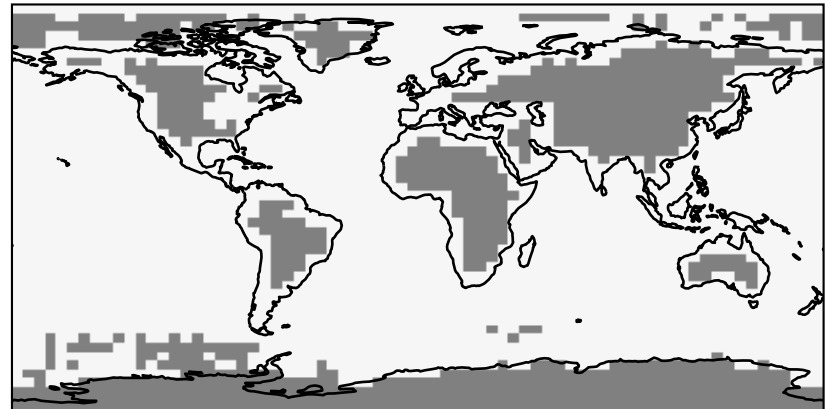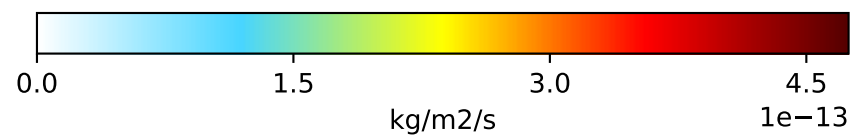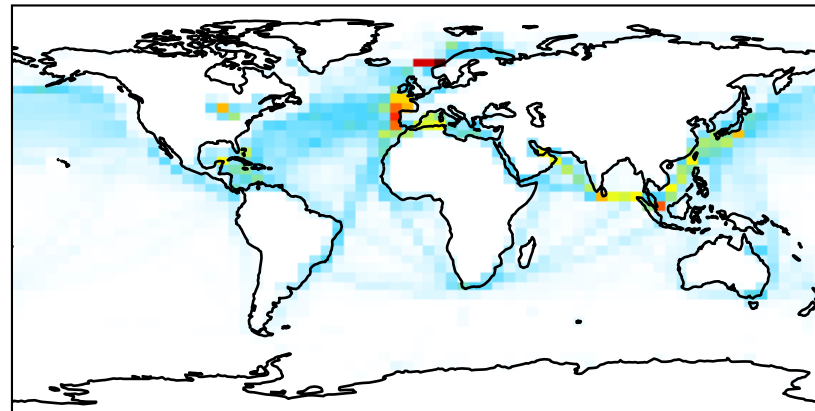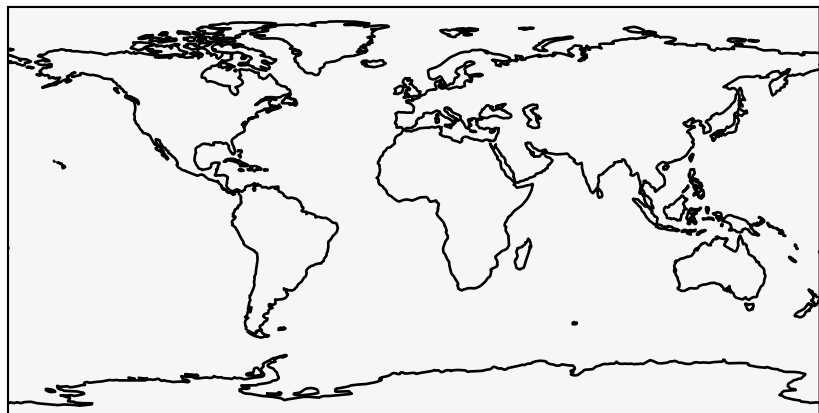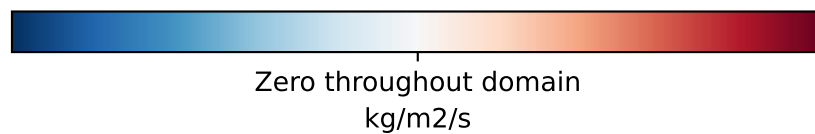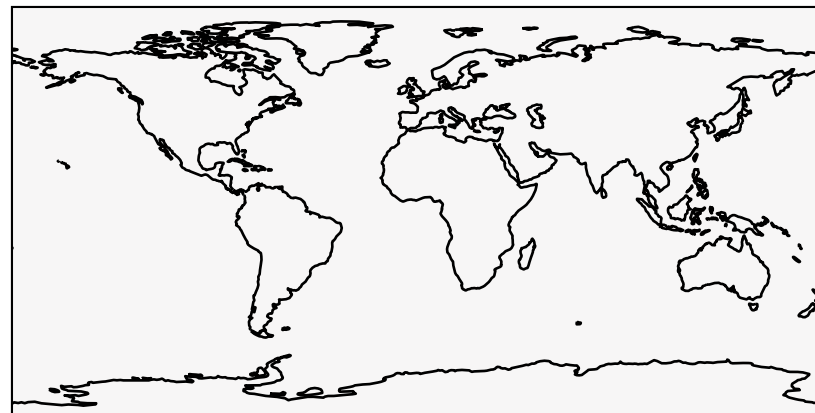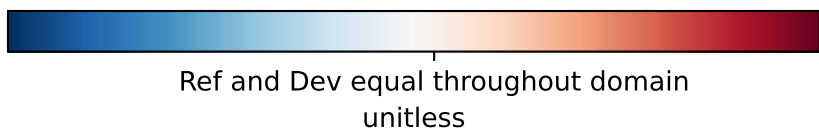
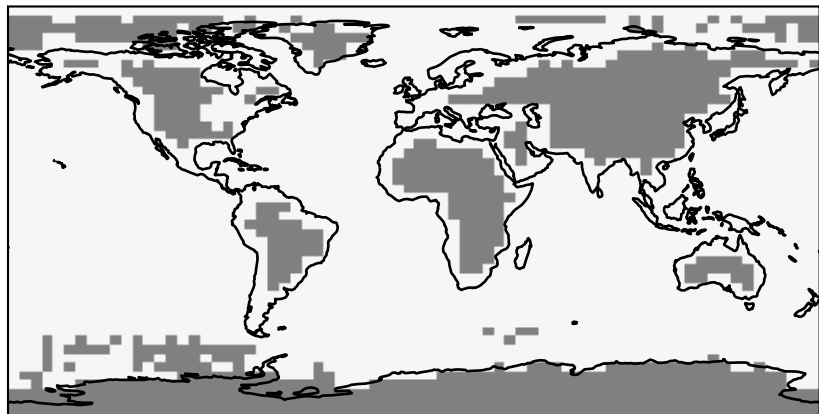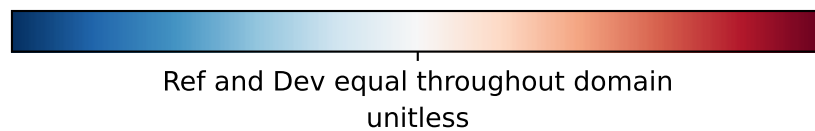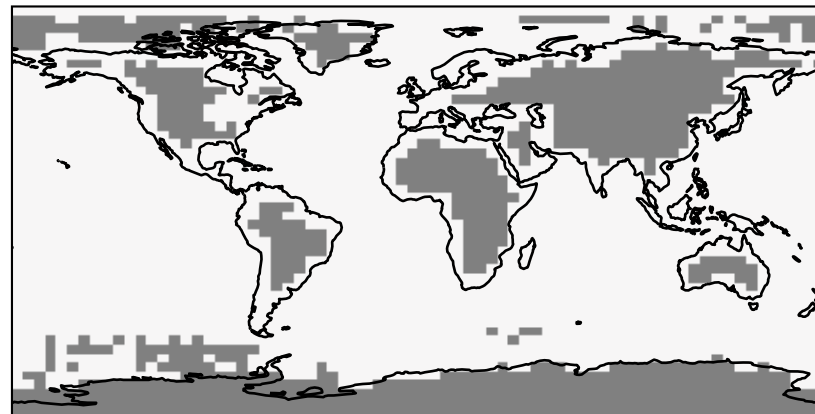kg/m2/s

kg/m2/s

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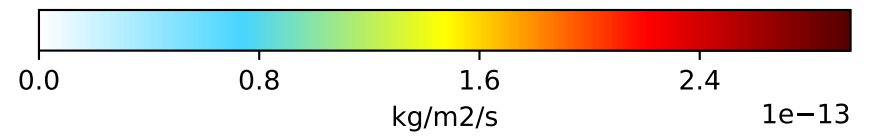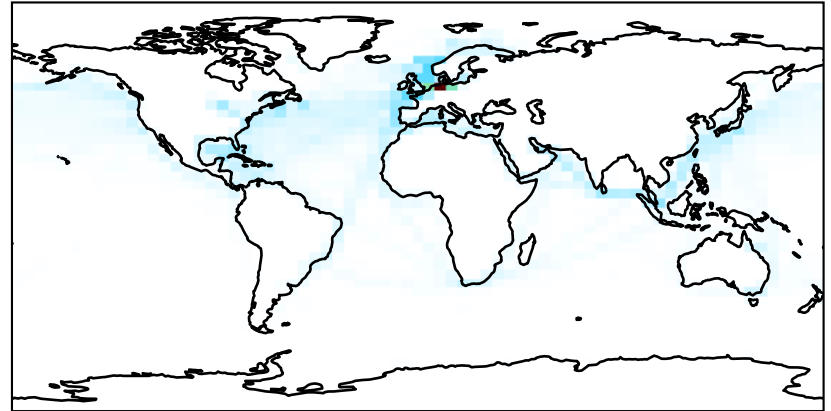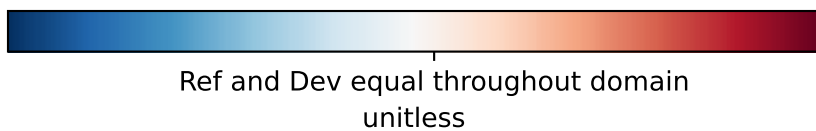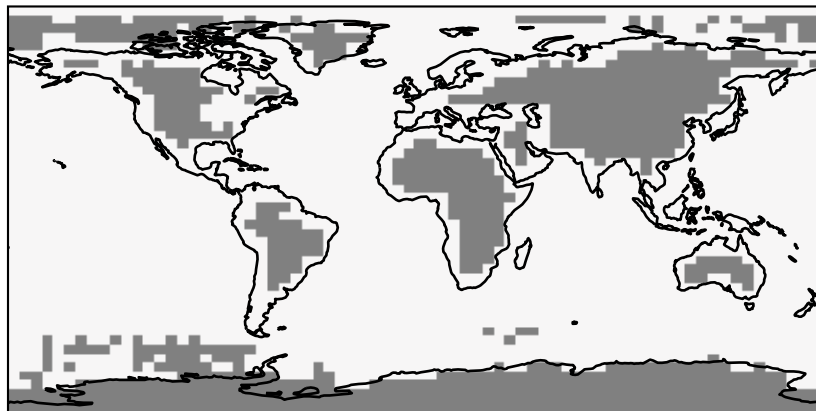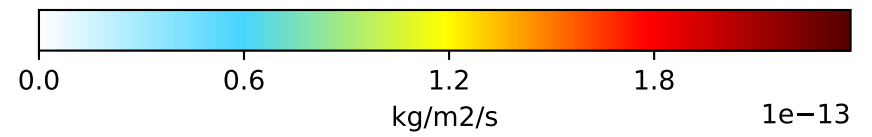
Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

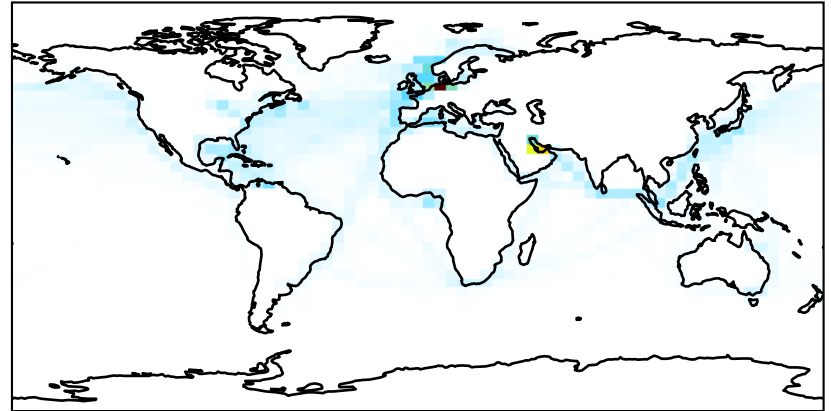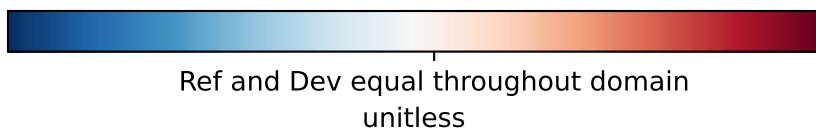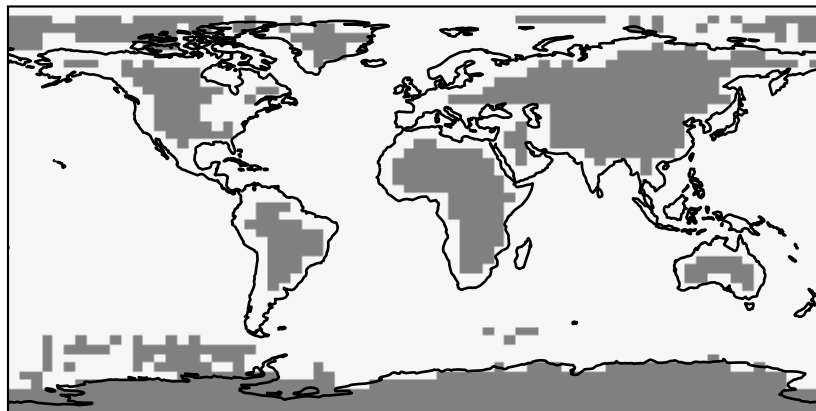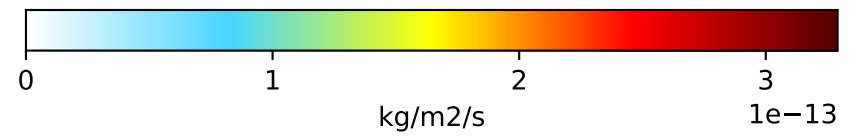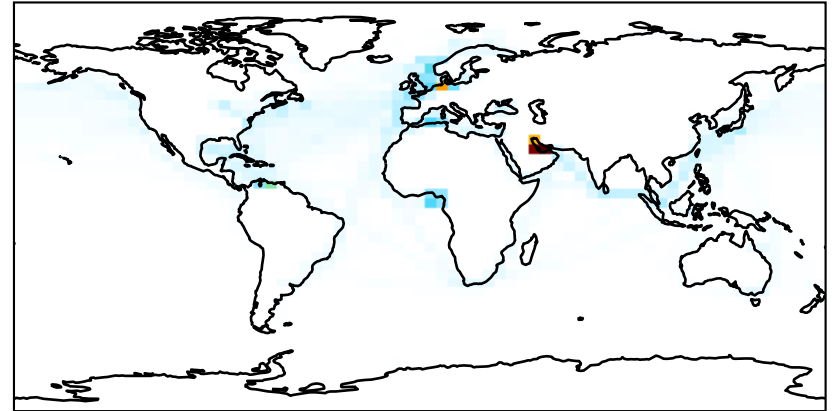Zero throughout domain
kg/m2/s

Ratio
Dev/Ref, Dynamic Range

Ratio
Dev/Ref, Fixed Range

Ref and Dev equal throughout domain
unitless

Ref and Dev equal throughout domain
unitless