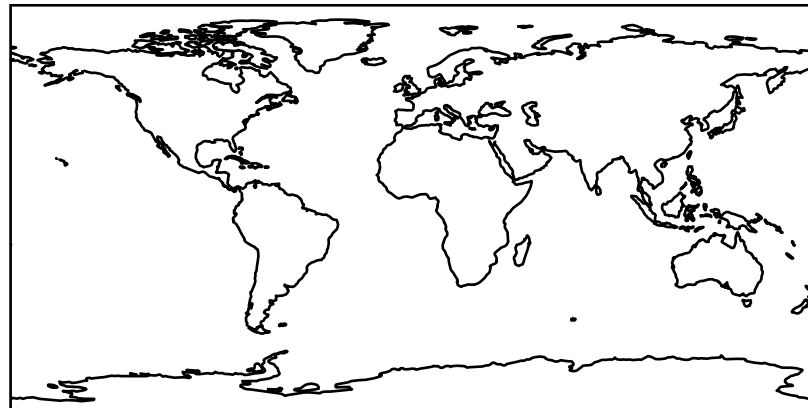# EmisALD2_Ship

GC_12.7.0-rc.1 (Ref)
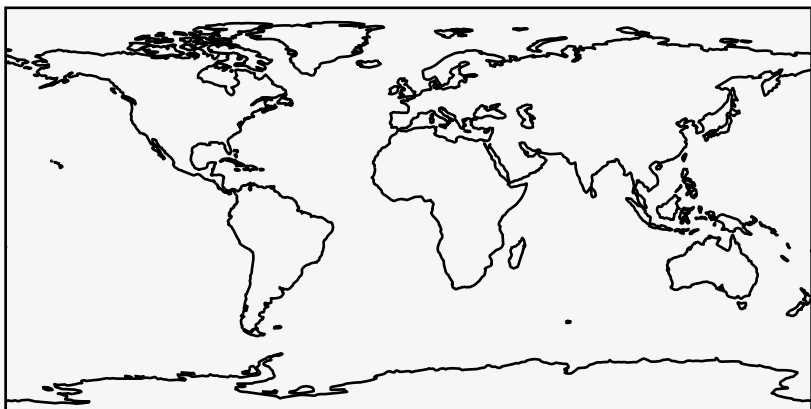### 4x5

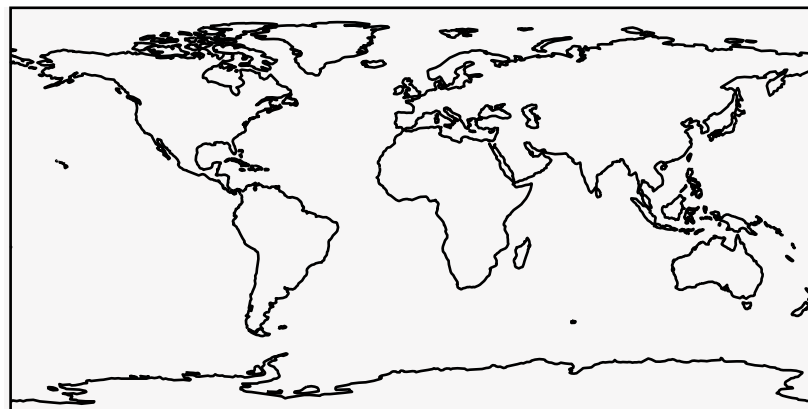Zero throughout domain
kg/m2/s

GC_12.7.0-rc.2 (Dev)
4x5

Zero throughout domain
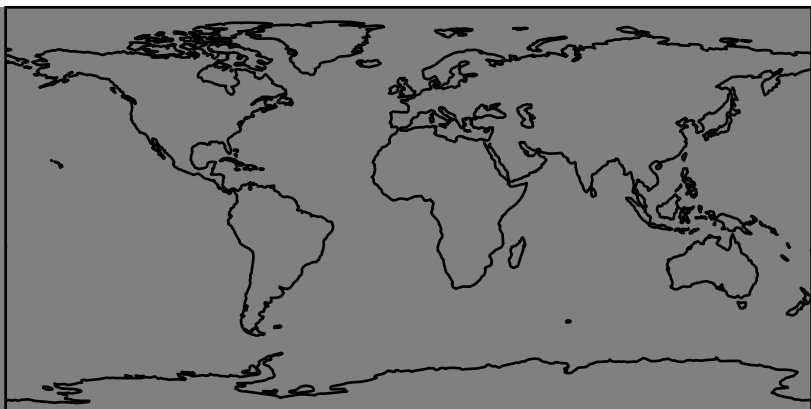kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

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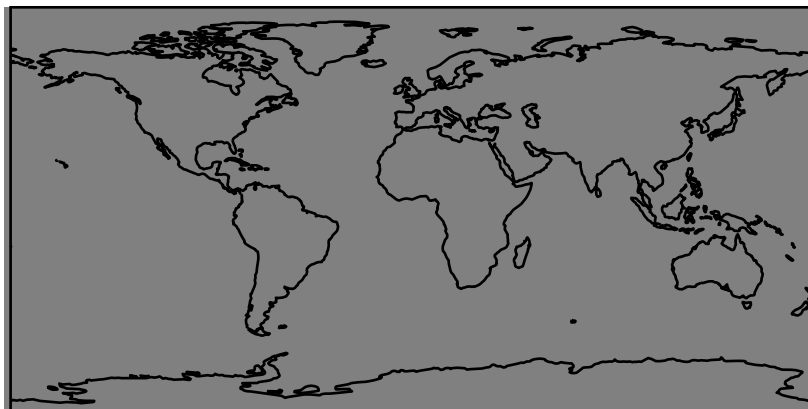### Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range
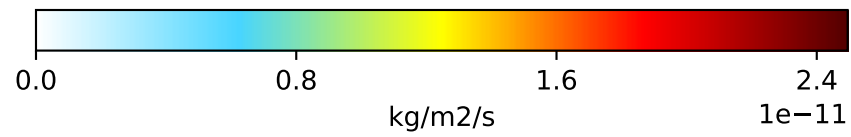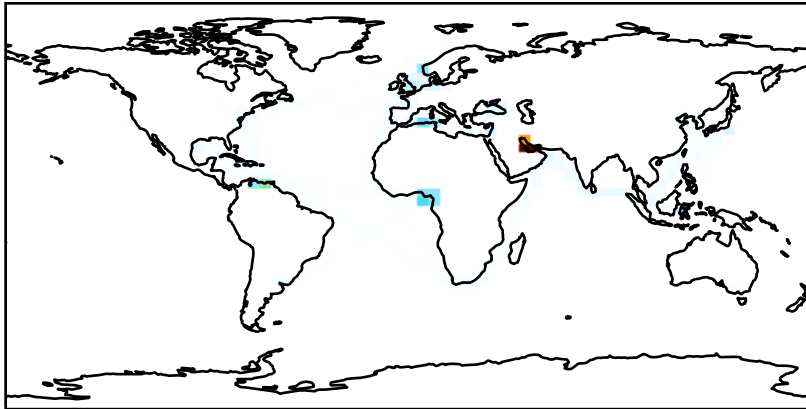
Undefined throughout domain
unitless
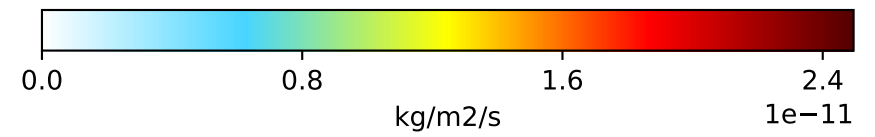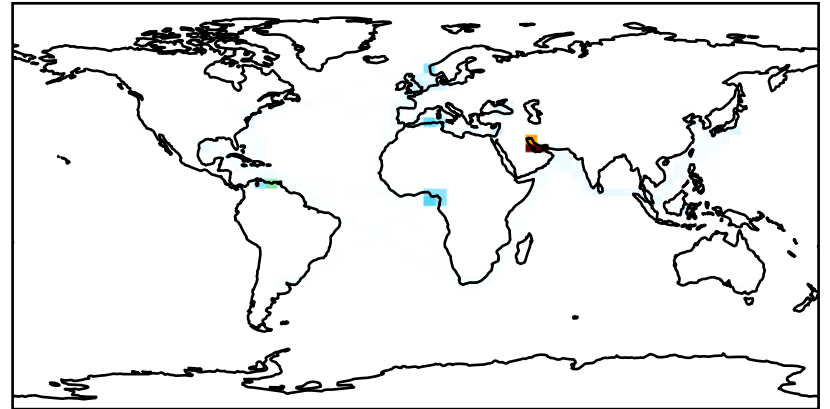
Fractional Difference
(Dev-Ref)/Ref, Fixed Range

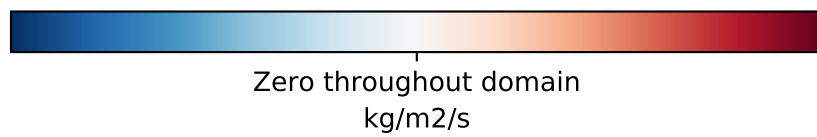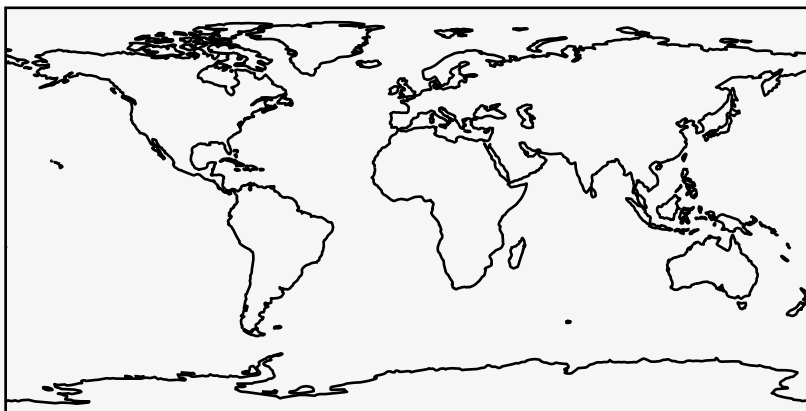Undefined throughout domain
unitless

EmisALK4_Ship

EmisBCPI_Ship

GC_12.7.0-rc.1 (Ref)
4x5
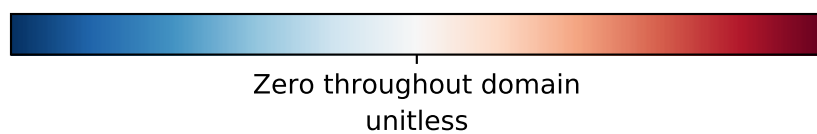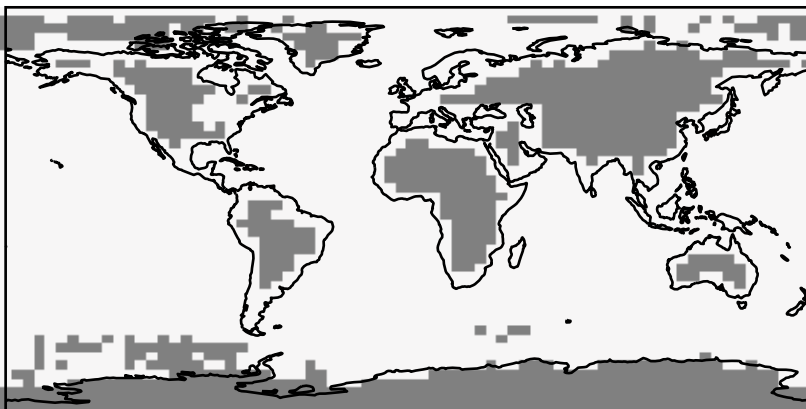
GC_12.7.0-rc.2 (Dev)
4x5

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

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
unitless

Zero throughout domain
unitless

EmisBCPO_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

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

Fractional Difference
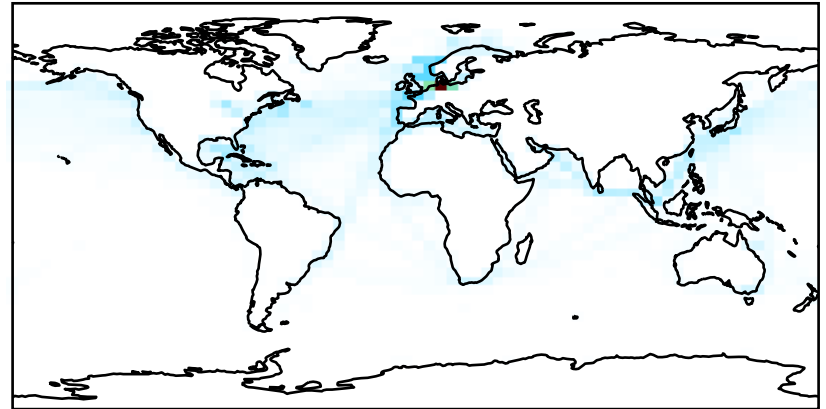(Dev-Ref)/Ref, Dynamic Range

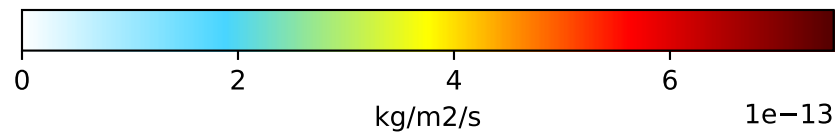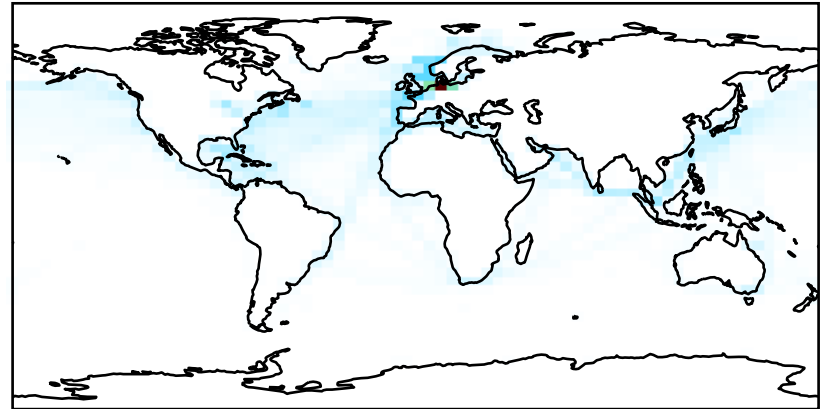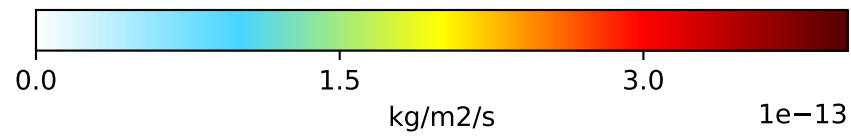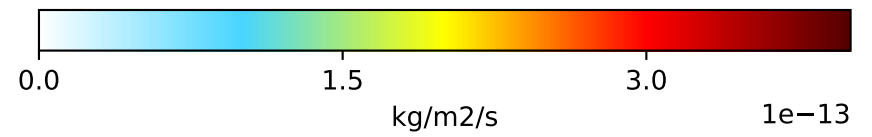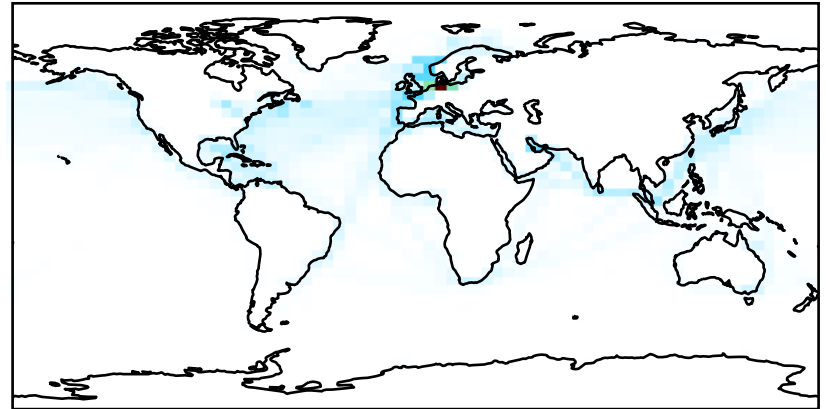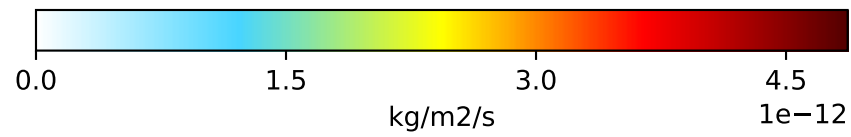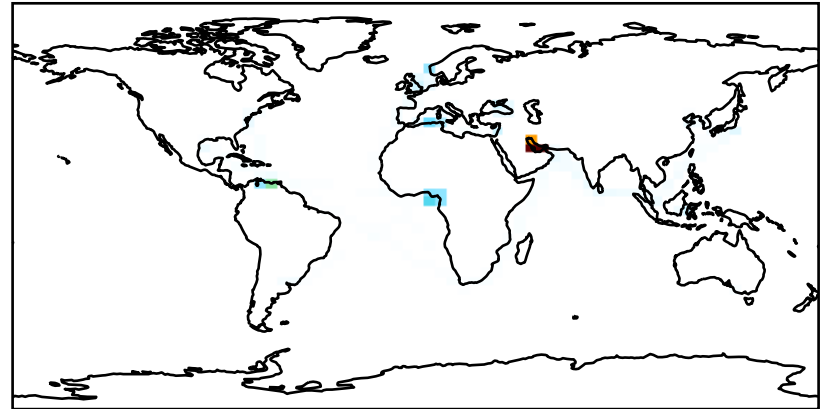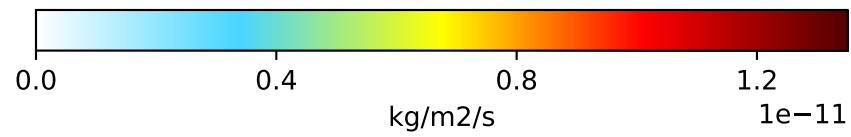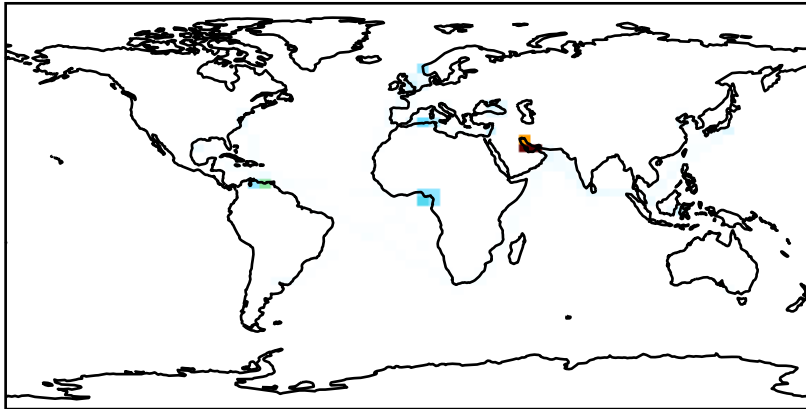Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
unitless

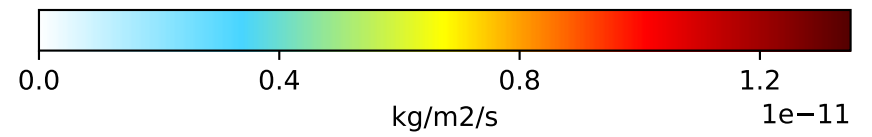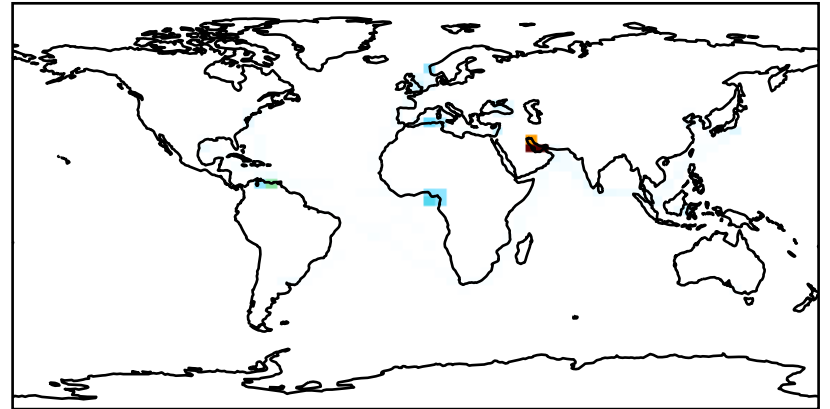Zero throughout domain
unitless

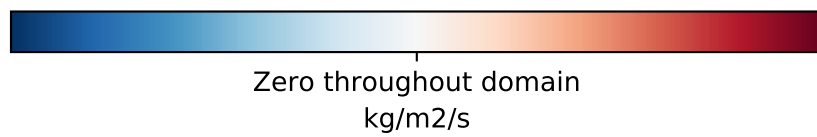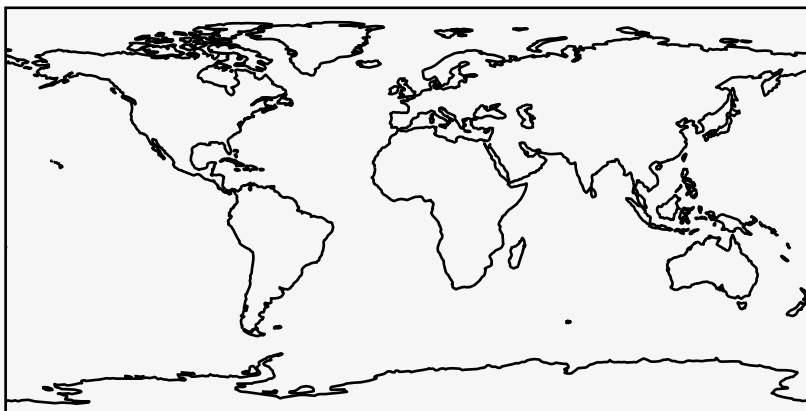# EmisBENZ_Ship

EmisC2H6_Ship

EmisC3H8_Ship

EmisCH2O_Ship

EmisCH4_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
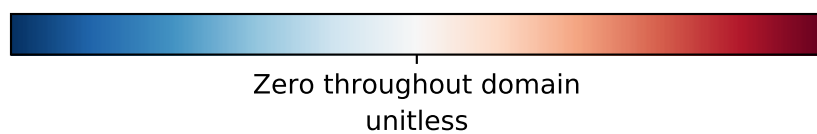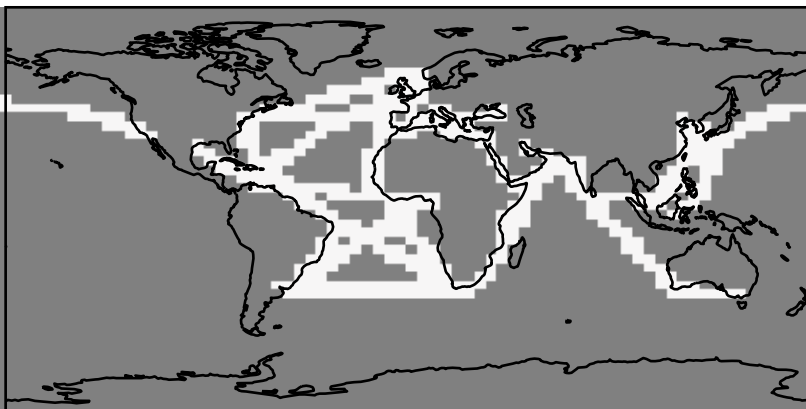4x5

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

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Undefined throughout domain
unitless

Undefined throughout domain
unitless

EmisCO_Ship
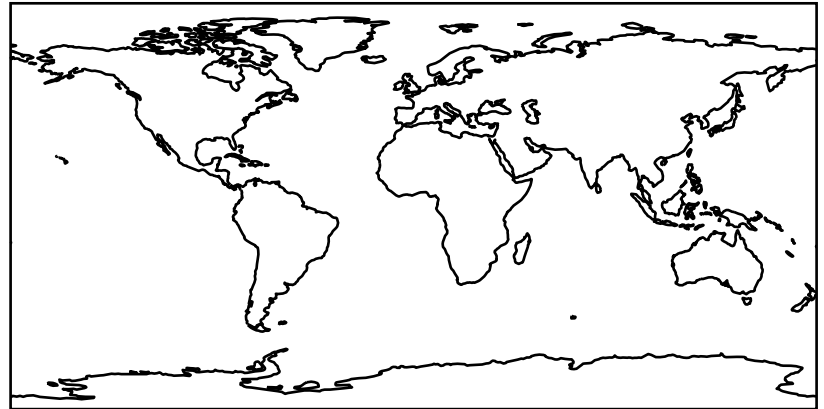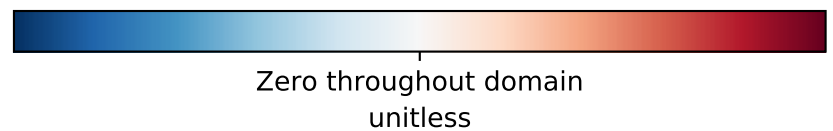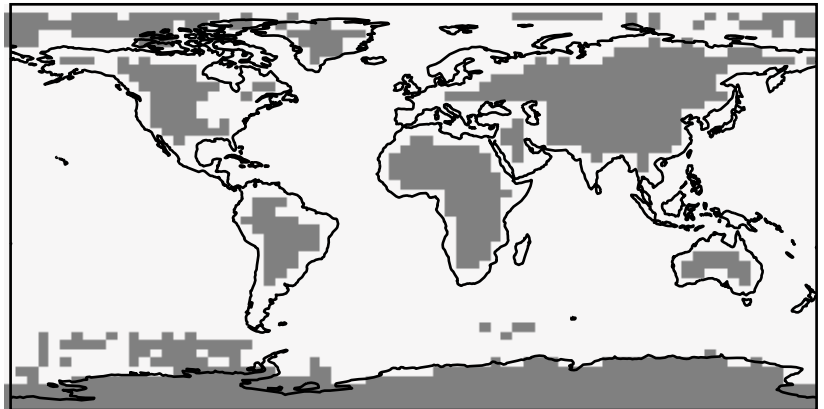
EmisEOH_Ship

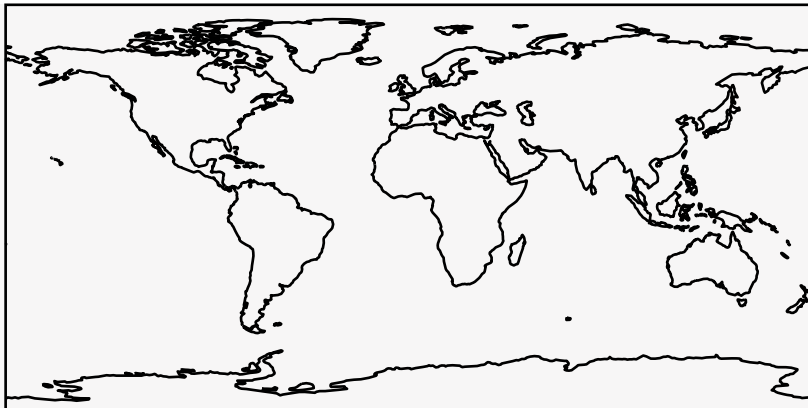## GC_12.7.0-rc.1 (Ref)
4x5

Zero throughout domain
kg/m2/s

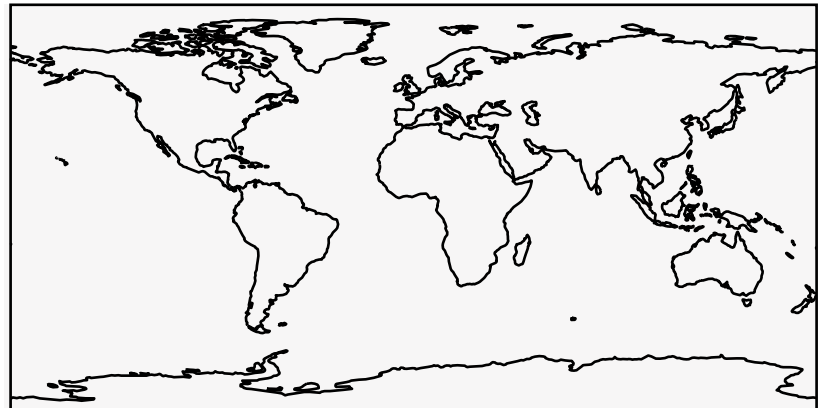## GC_12.7.0-rc.2 (Dev)
4x5

Zero throughout domain
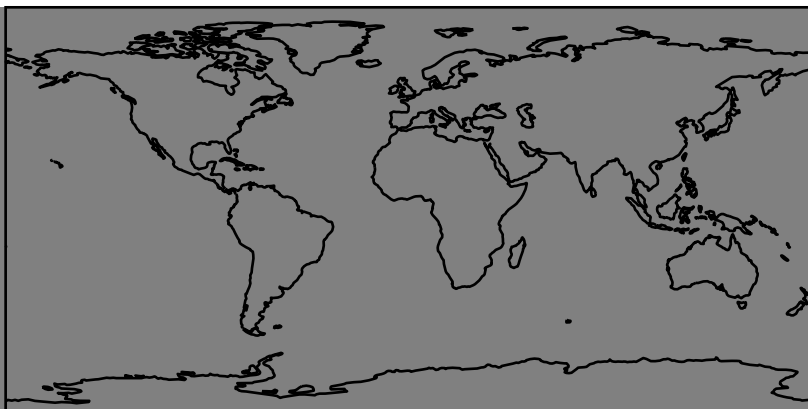kg/m2/s

Difference
Dev - Ref, Dynamic Range

Zero throughout domain
kg/m2/s

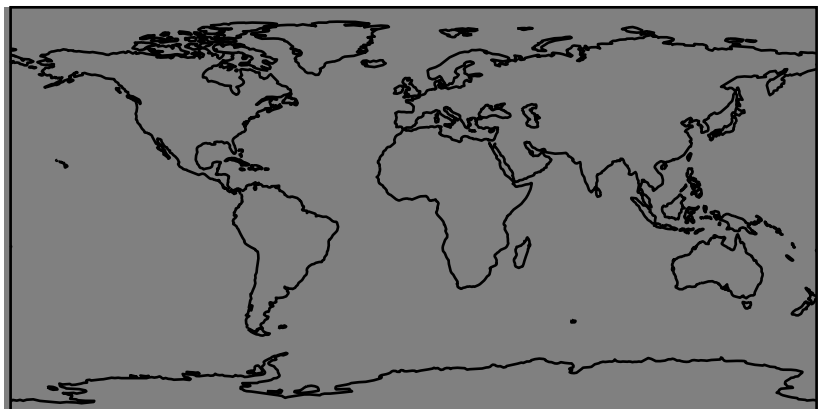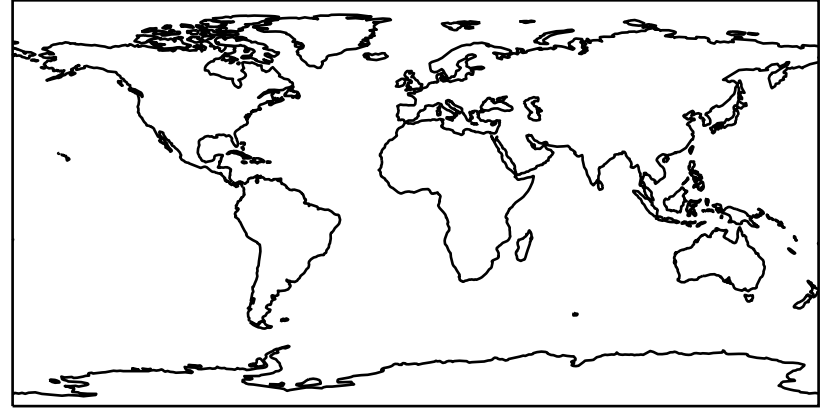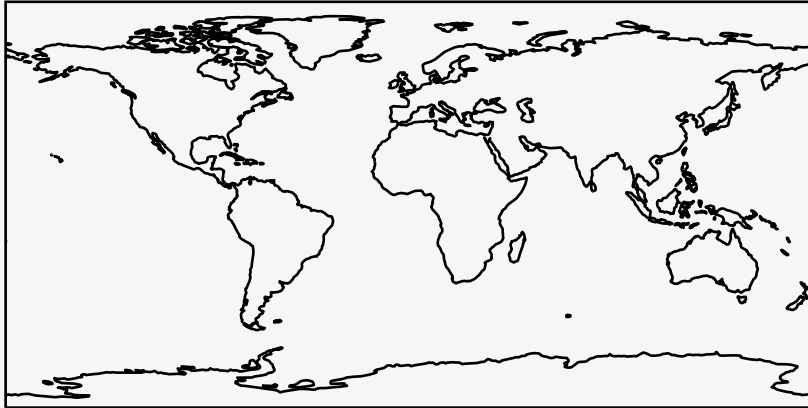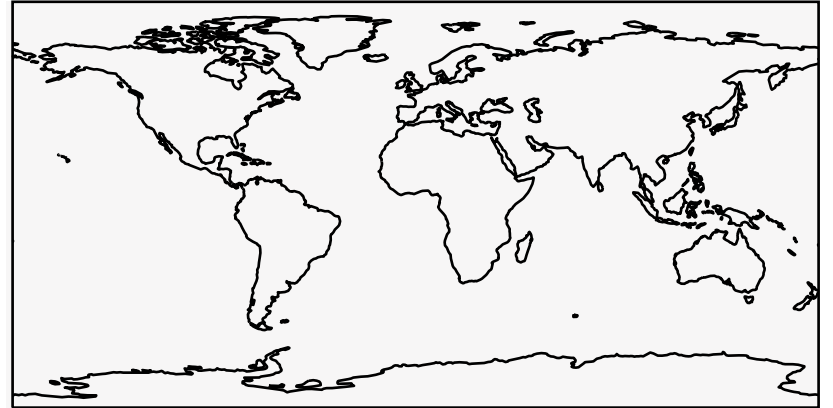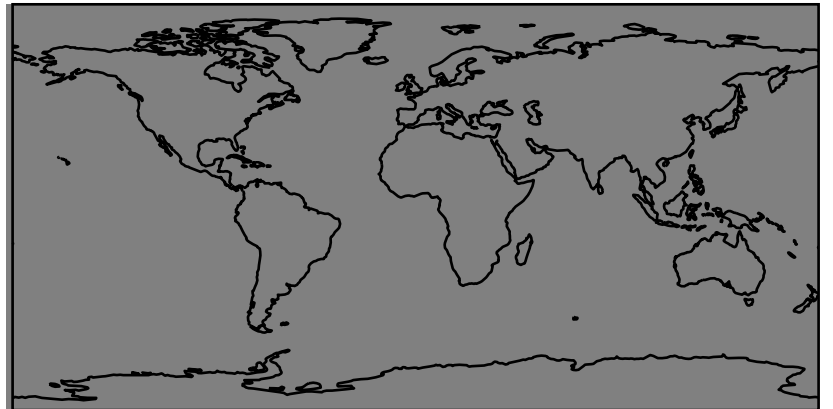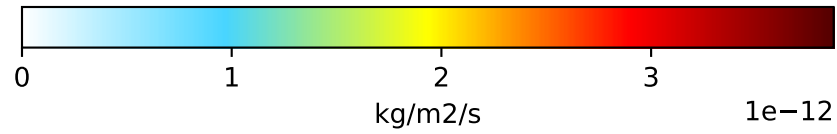## Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Fractional Difference
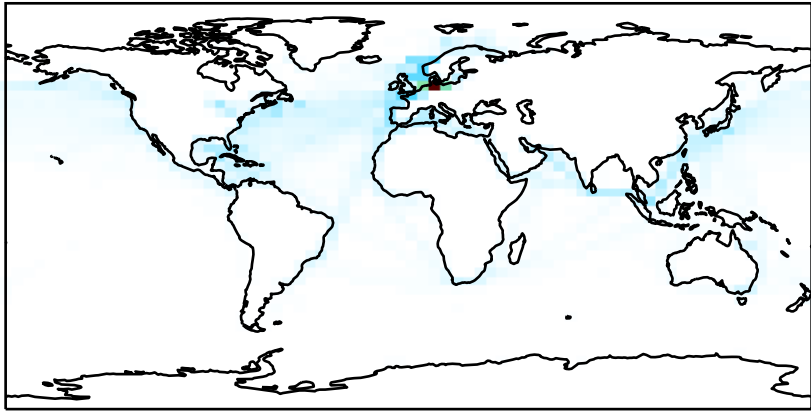### (Dev-Ref)/Ref, Dynamic Range

Undefined throughout domain
unitless

Fractional Difference
(Dev-Ref)/Ref, Fixed Range
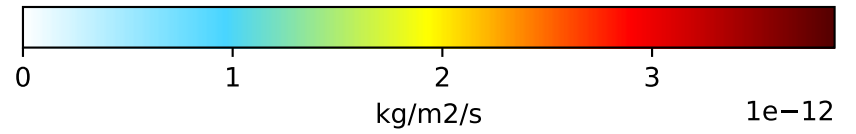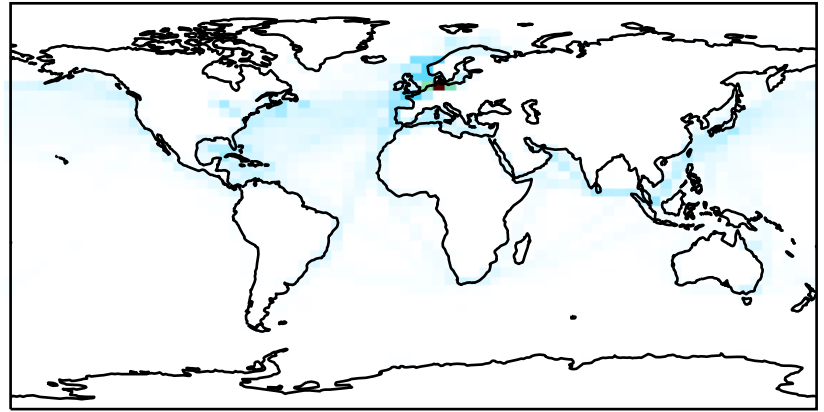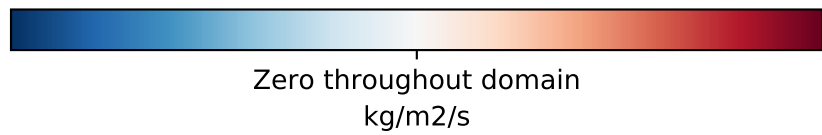

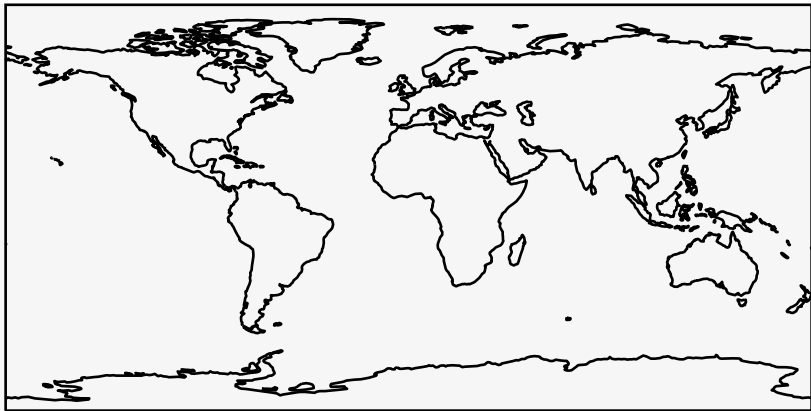Undefined throughout domain
unitless

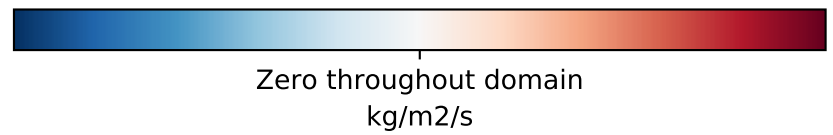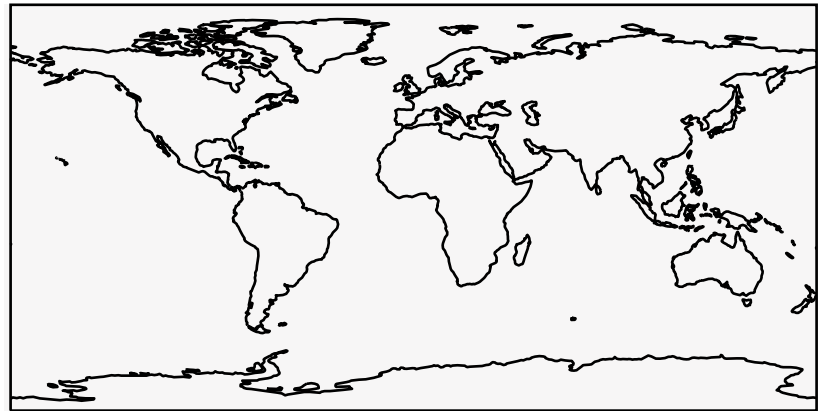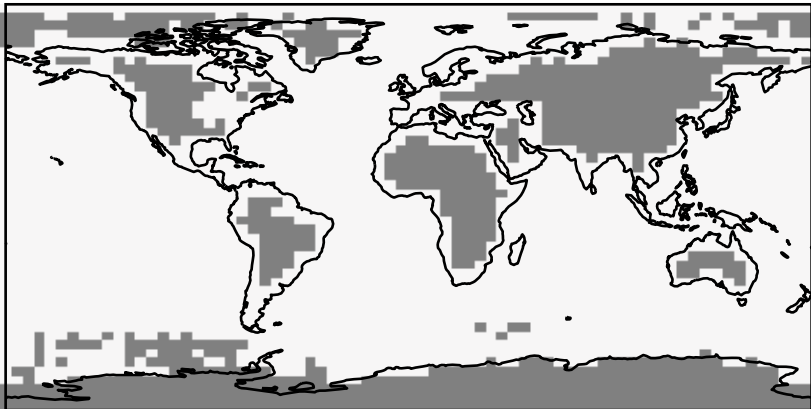# EmisHCOOH_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s

Difference
Dev - Ref, Dynamic Range

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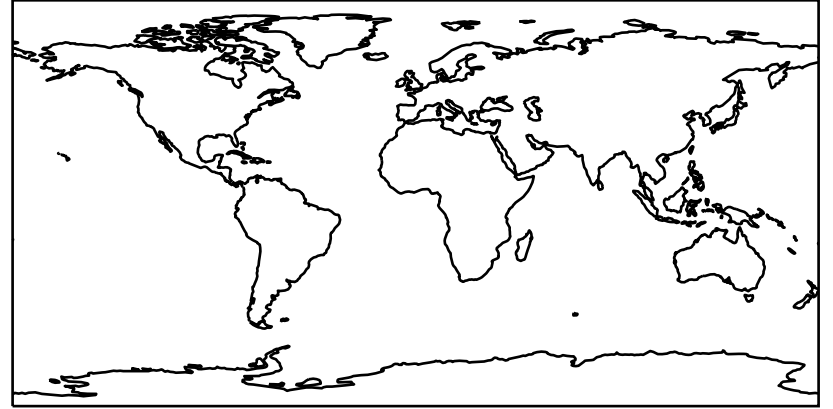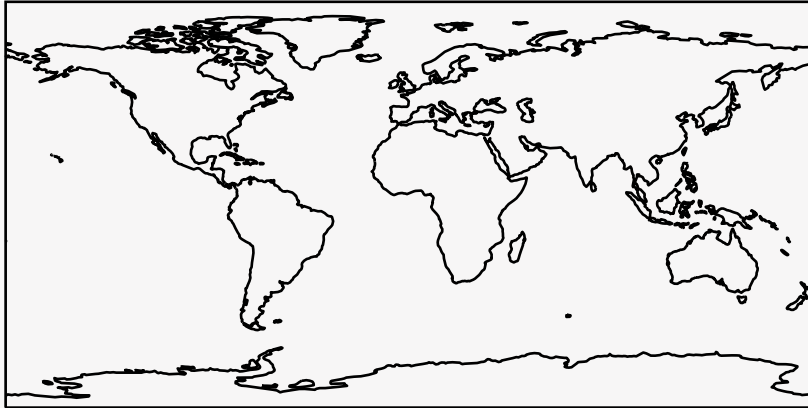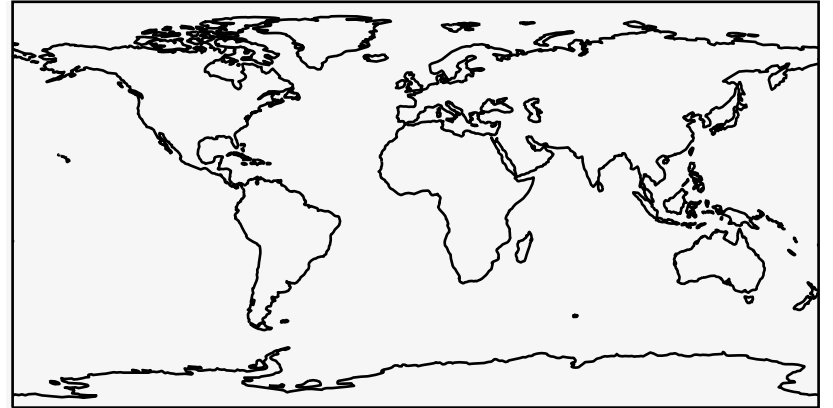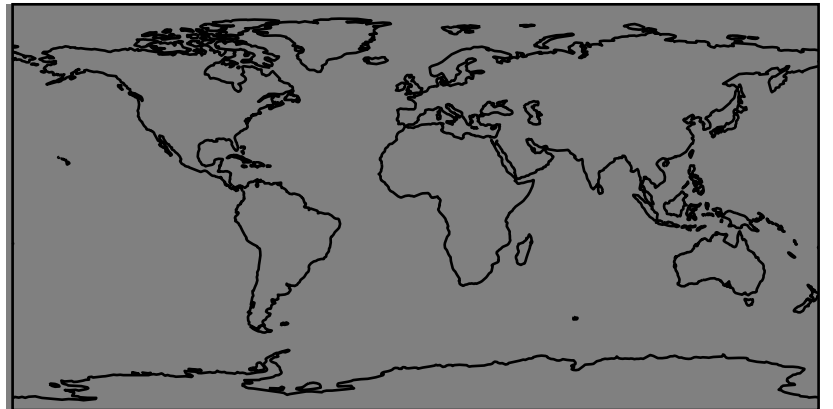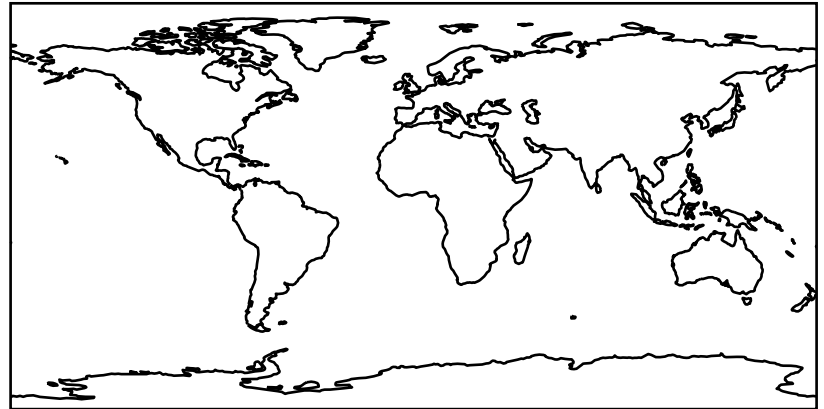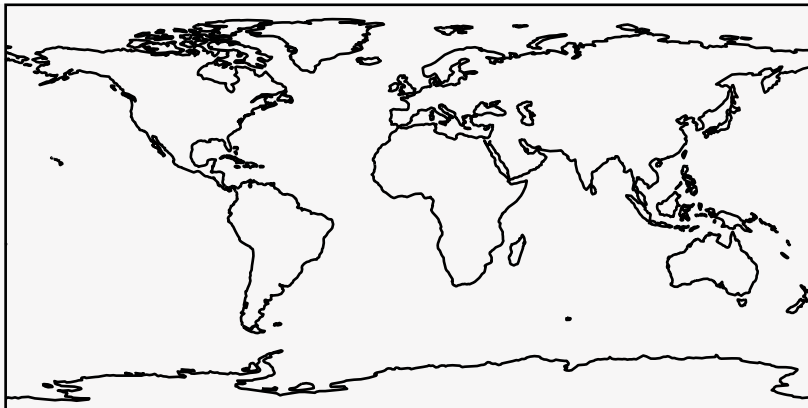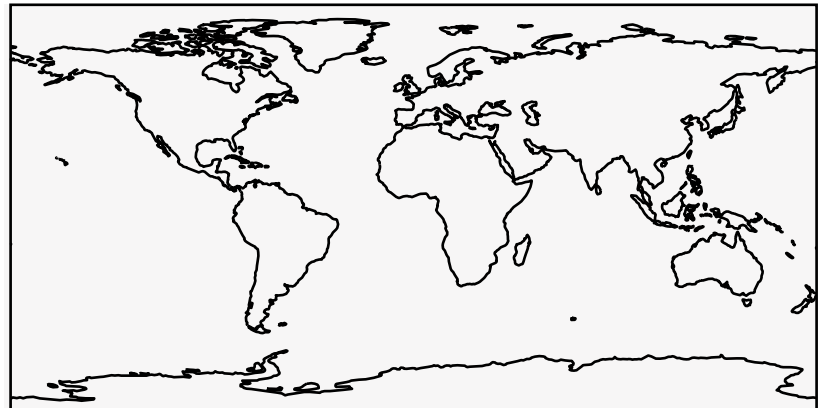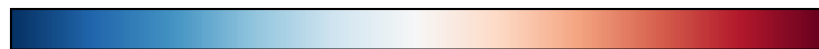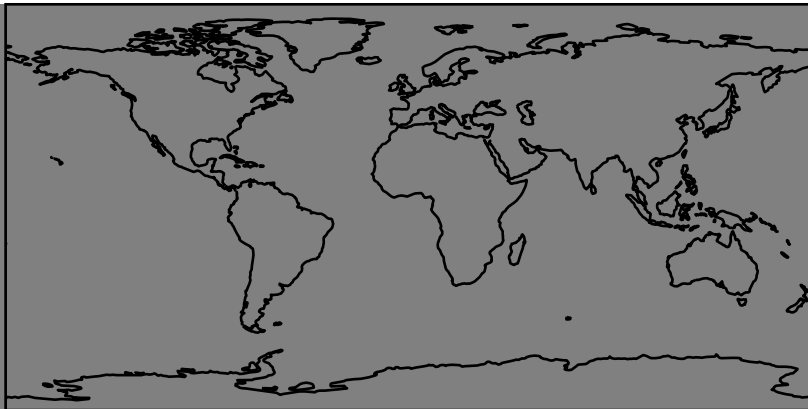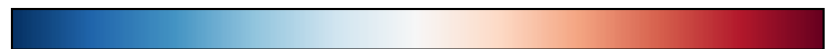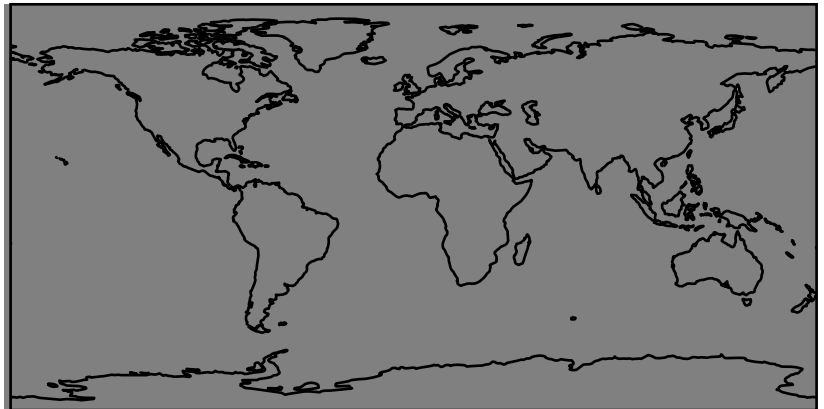Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Zero throughout domain
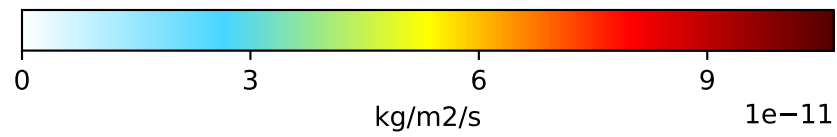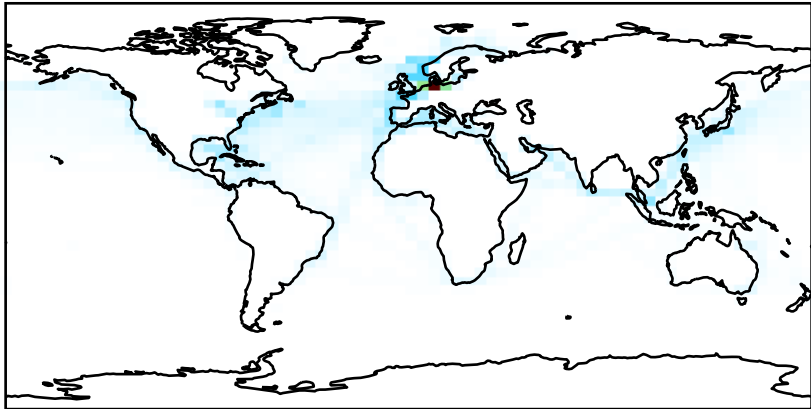kg/m2/s

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

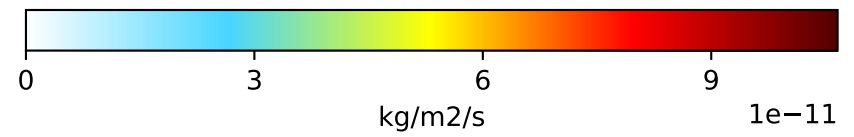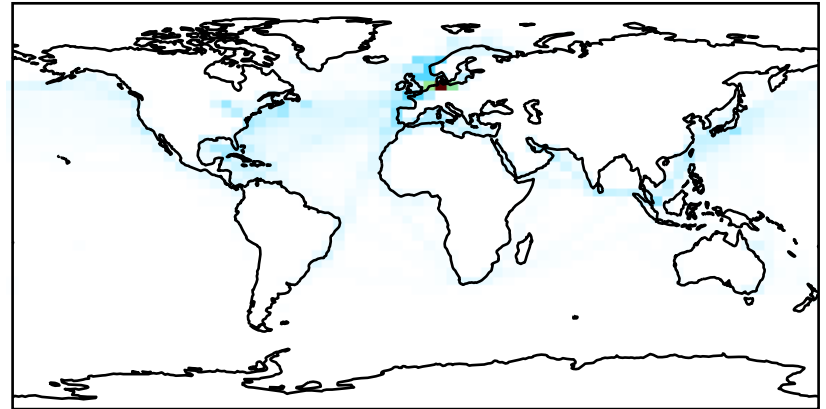Undefined throughout domain
unitless

Undefined throughout domain
unitless

EmisHNO3_Ship

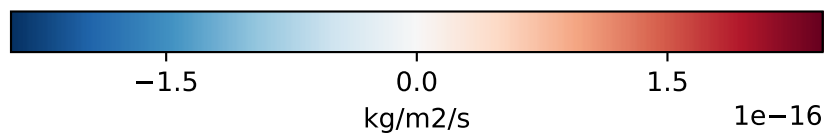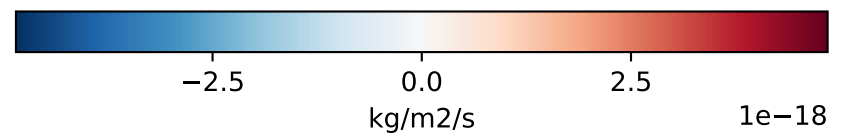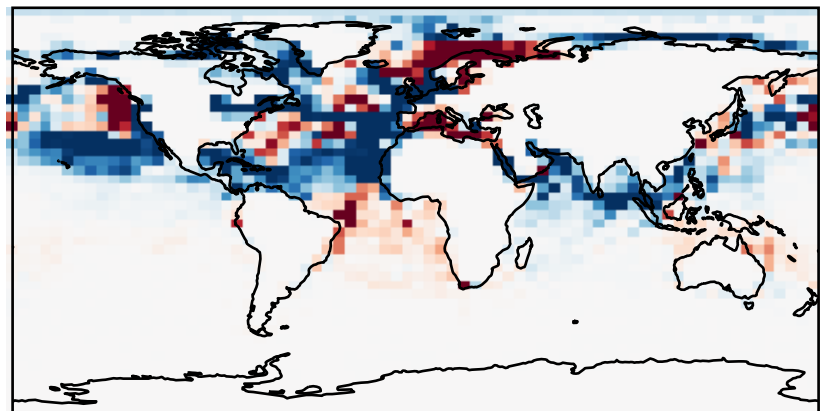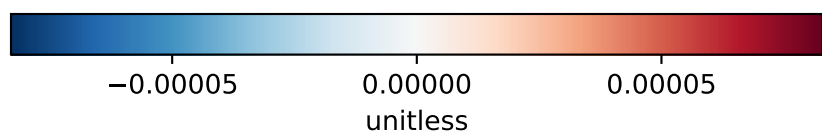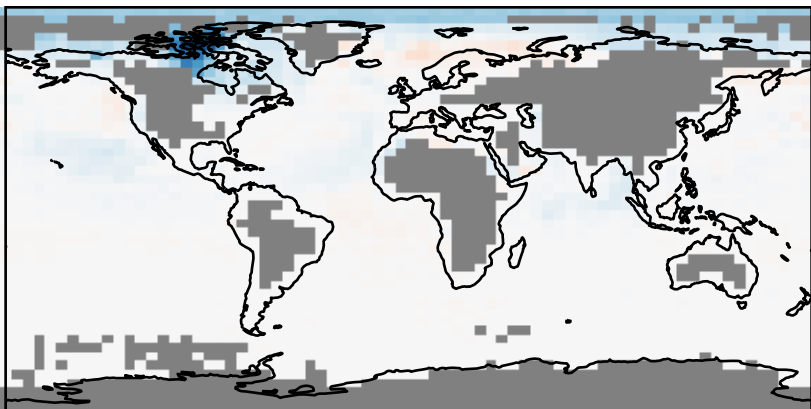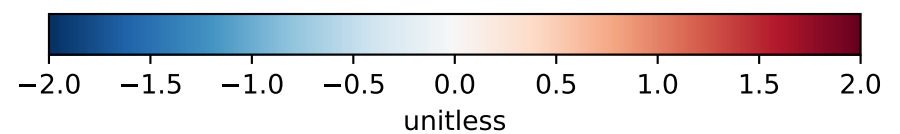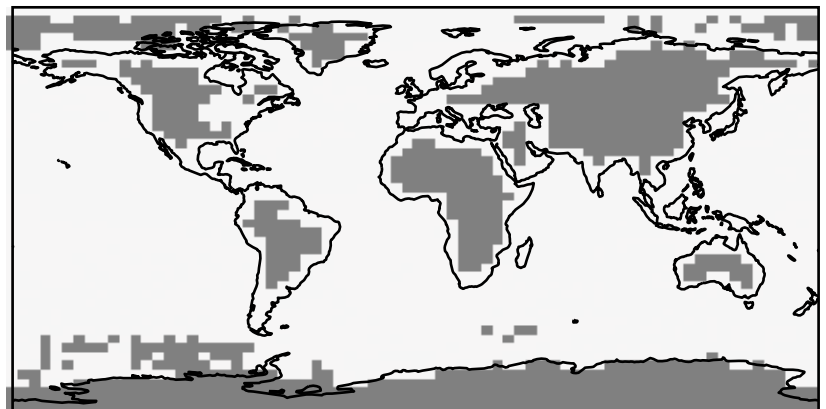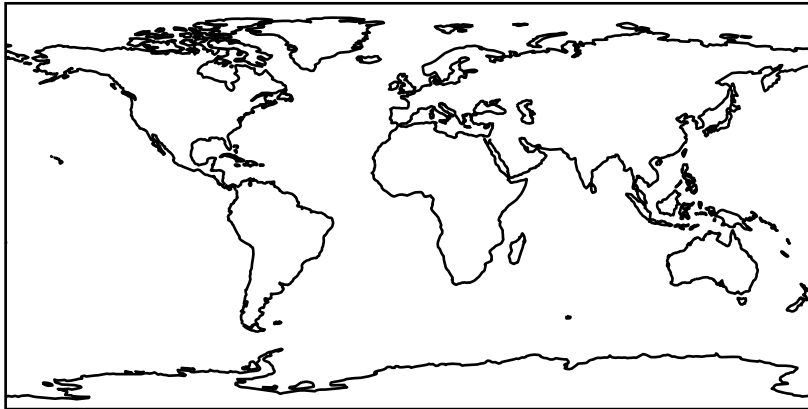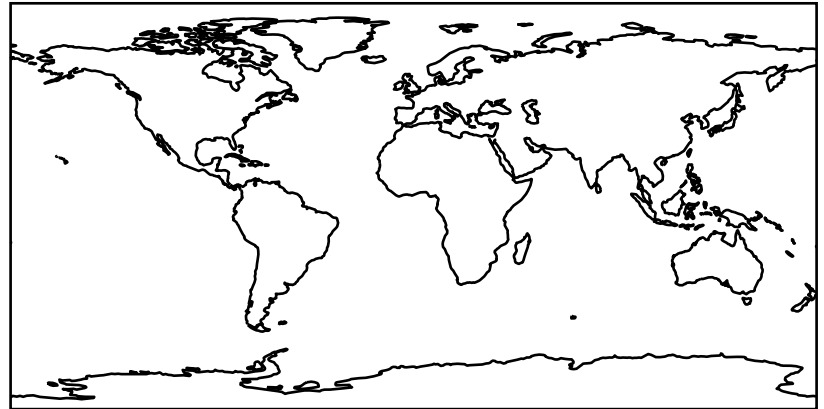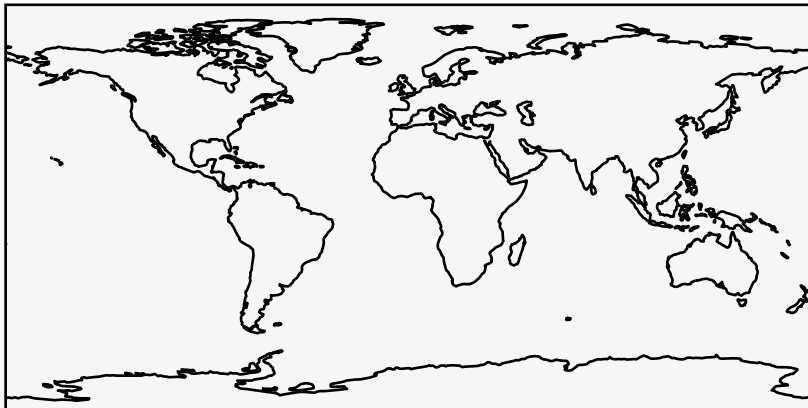| GC_12.7.0-rc.1 (Ref) 4x5	GC_12.7.0-rc.2 (Dev) 4x5
Difference Dev - Ref, Dynamic Range	Difference Dev - Ref, Restricted Range [5%,95%]
Fractional Difference (Dev-Ref)/Ref, Dynamic Range	Fractional Difference (Dev-Ref)/Ref, Fixed Range

EmisMEK_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

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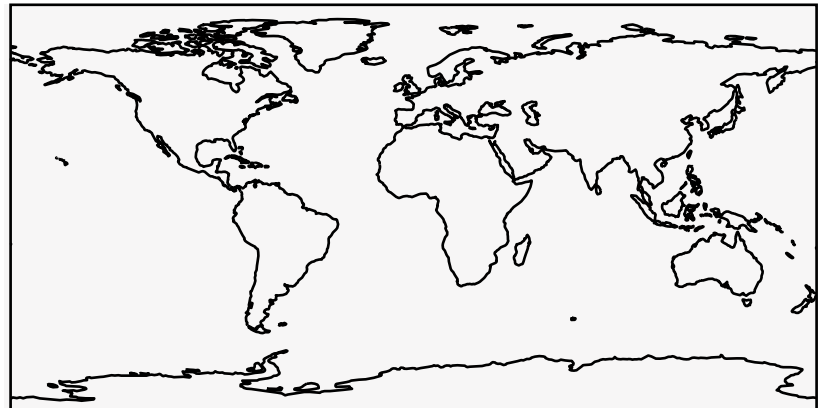
Zero throughout domain
kg/m2/s

Difference
Dev - Ref, Dynamic Range

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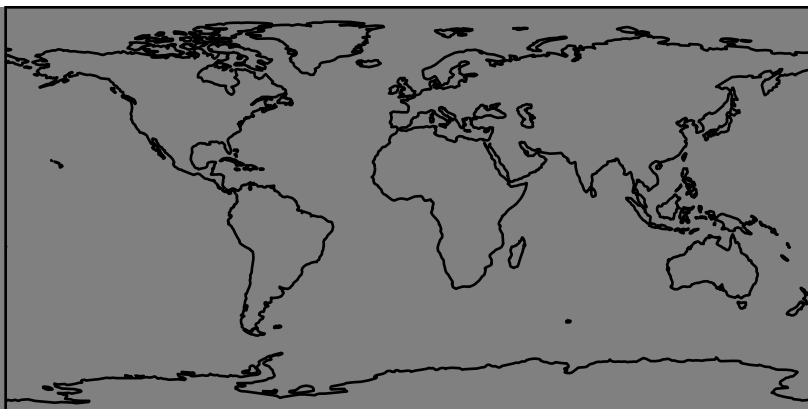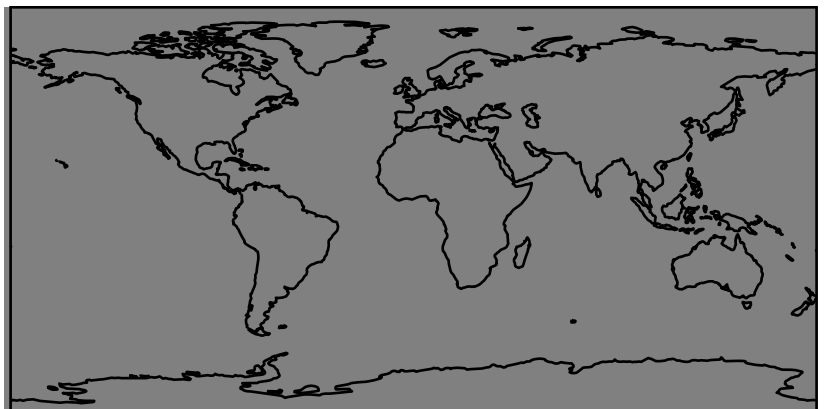Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

Zero throughout domain
kg/m2/s

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Undefined throughout domain
unitless

Undefined throughout domain
unitless

EmisMOH_Ship

GC_12.7.0-rc.1 (Ref)
4x5

Zero throughout domain
kg/m2/s

GC_12.7.0-rc.2 (Dev)
4x5

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

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range
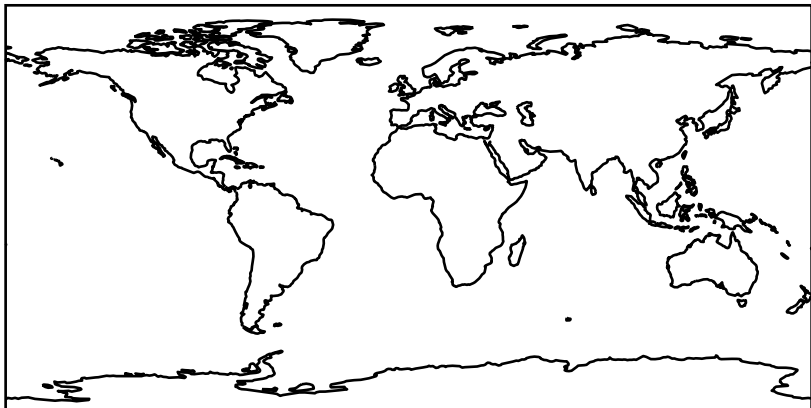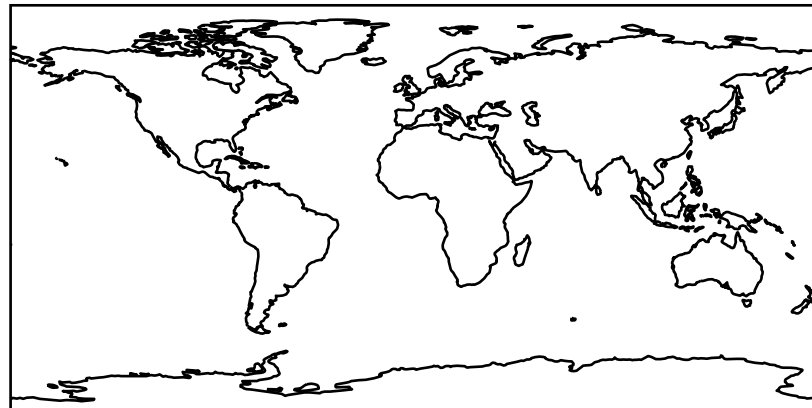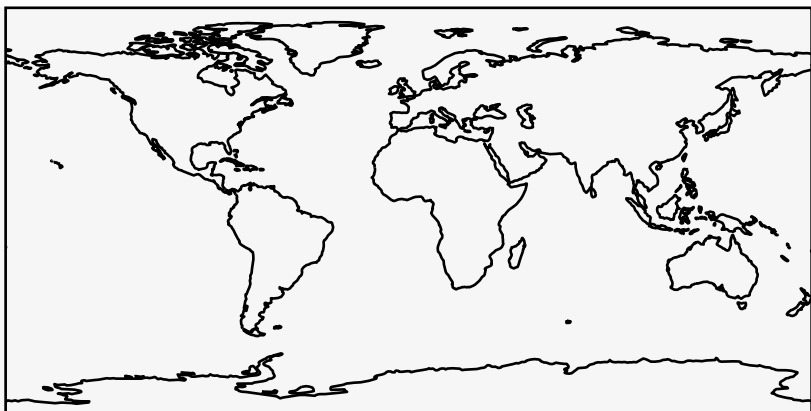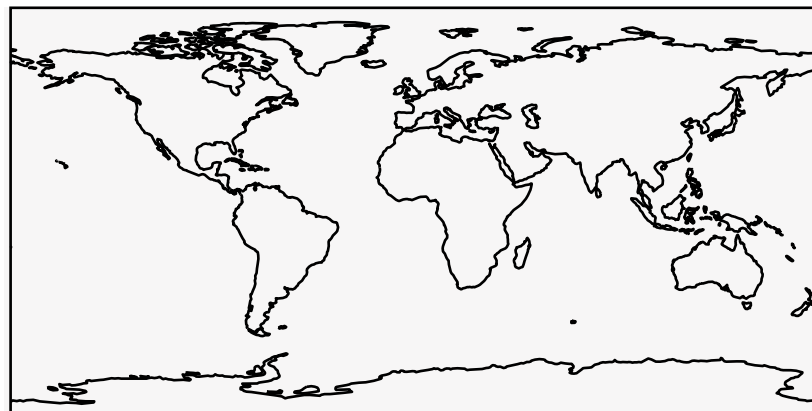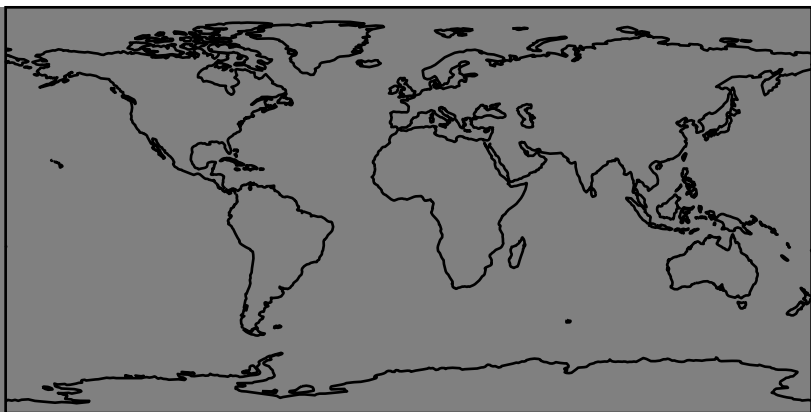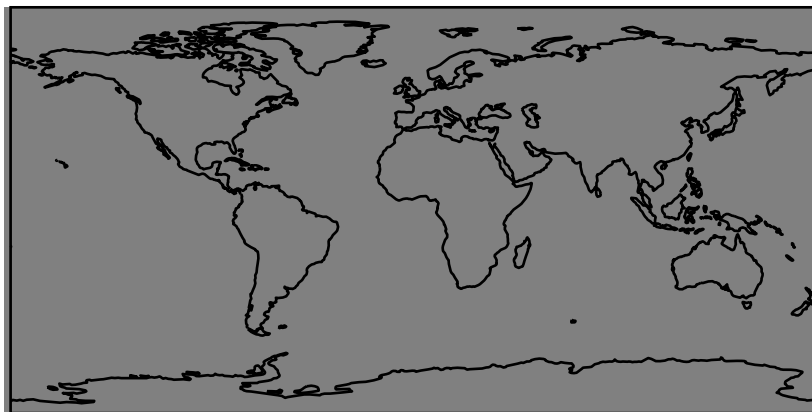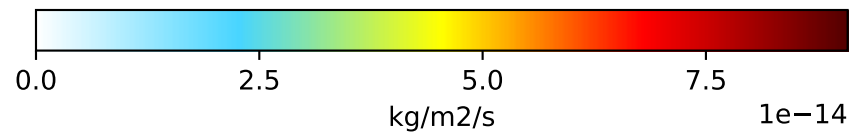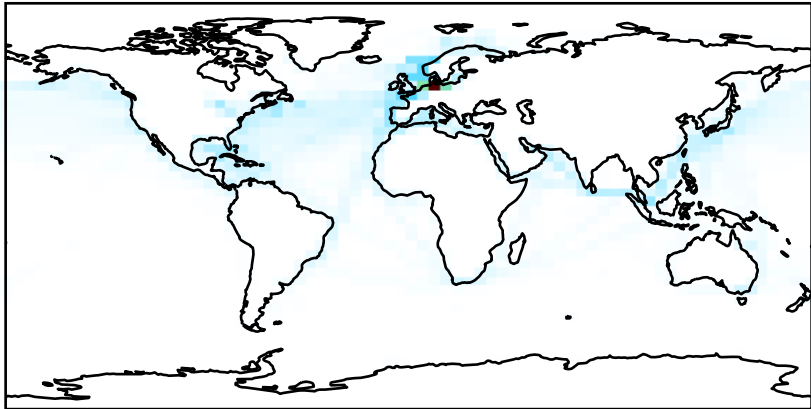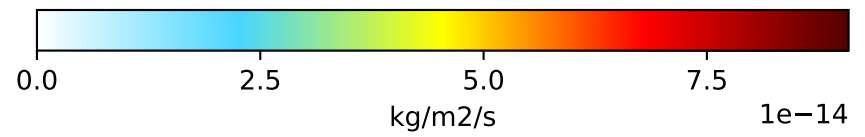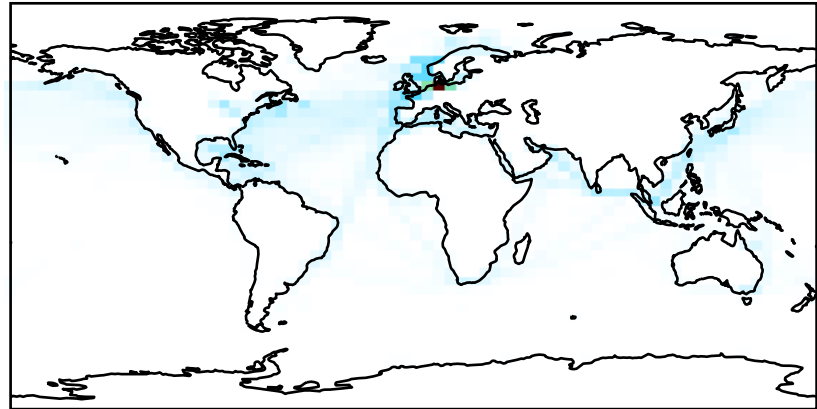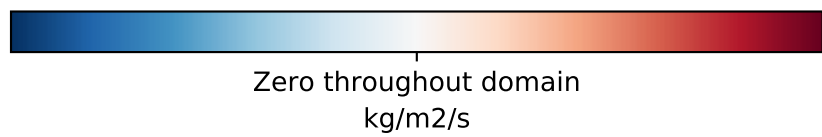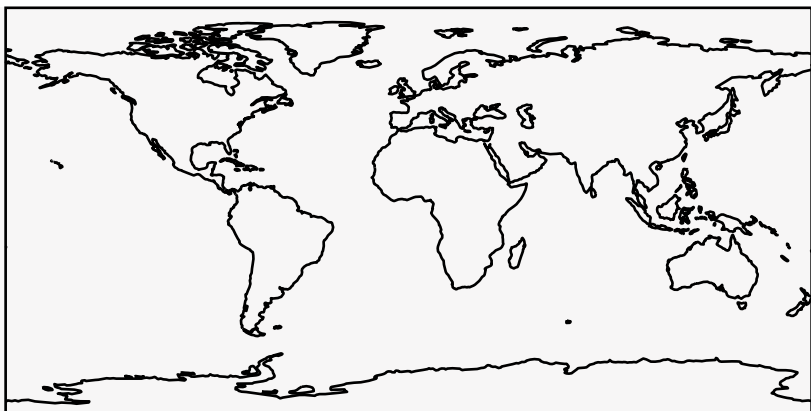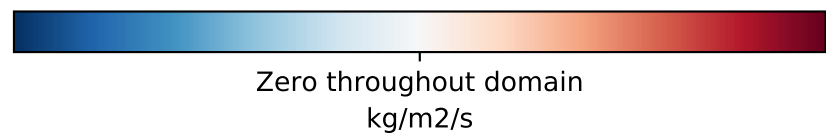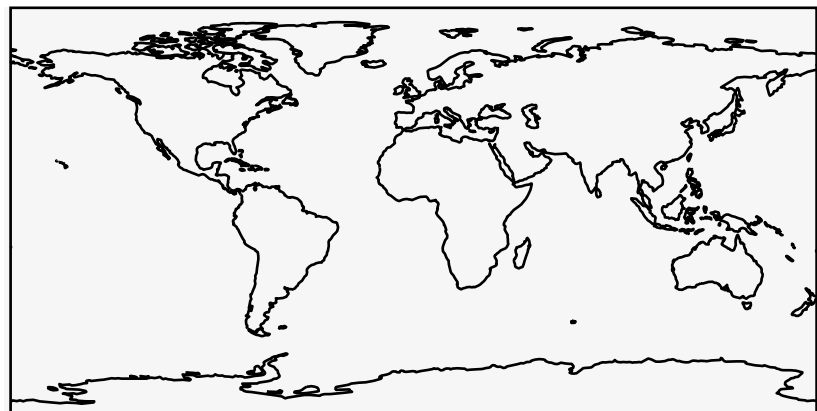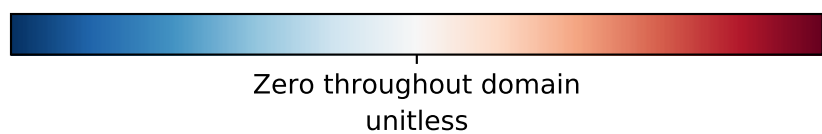

Undefined throughout domain
unitless

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Undefined throughout domain
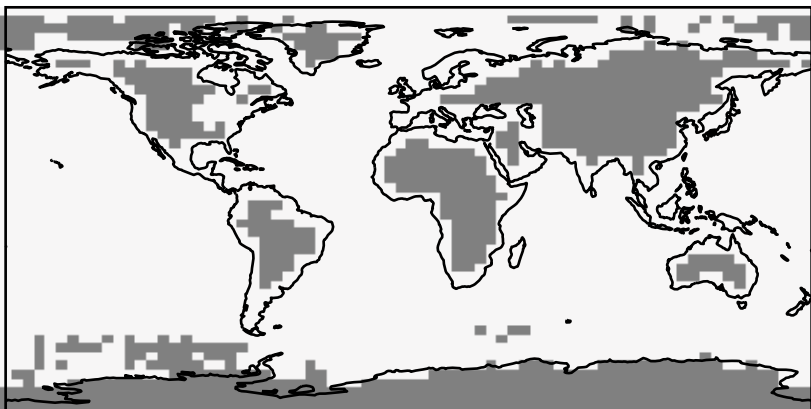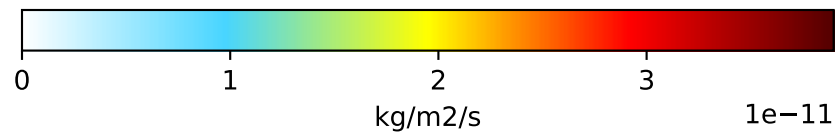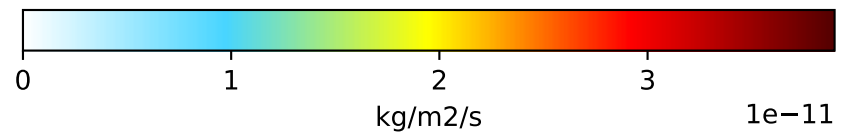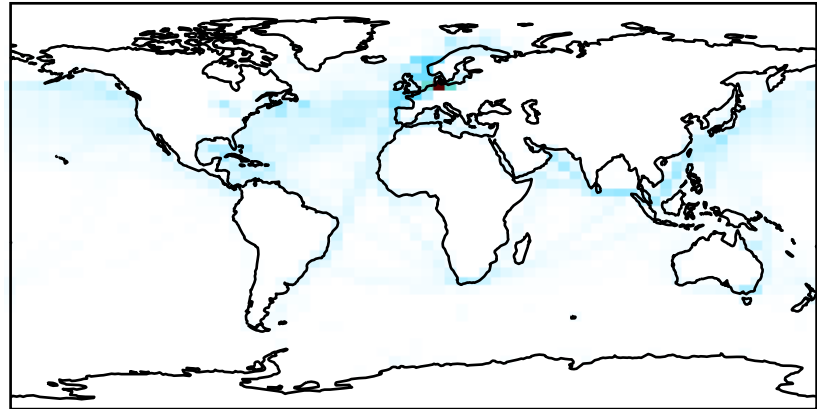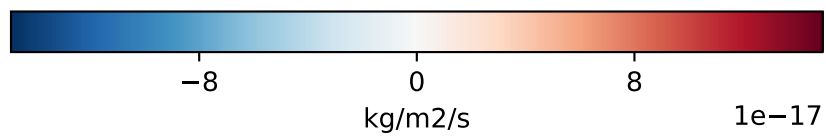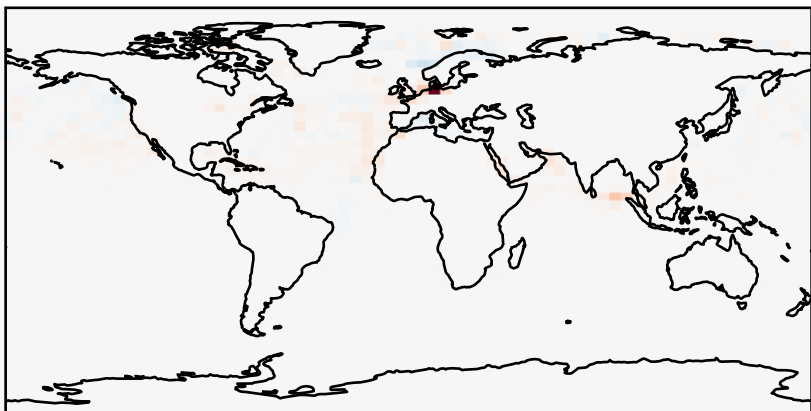unitless

EmisNH3_Ship

GC_12.7.0-rc.1 (Ref)
4x5
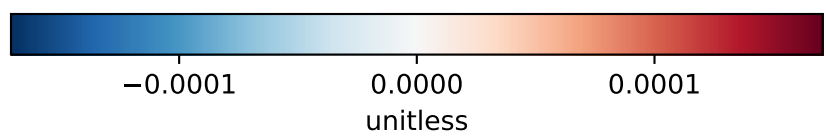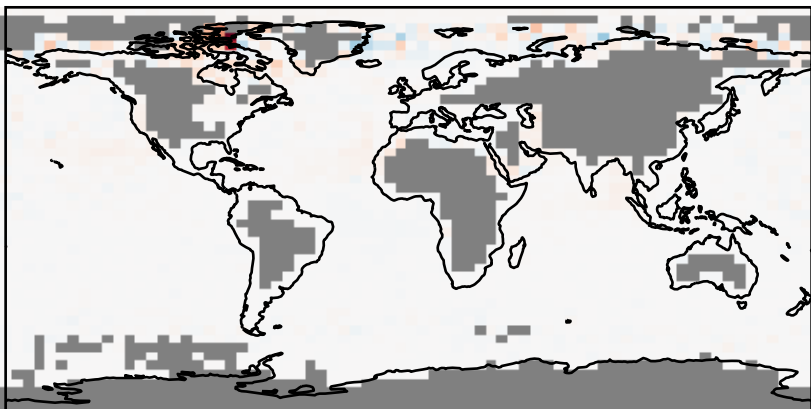
GC_12.7.0-rc.2 (Dev)
4x5

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

Fractional Difference
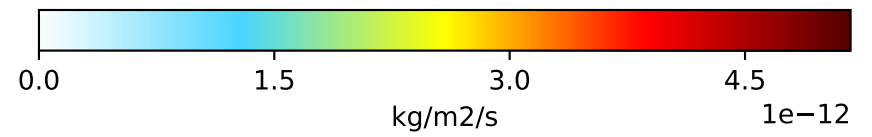(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

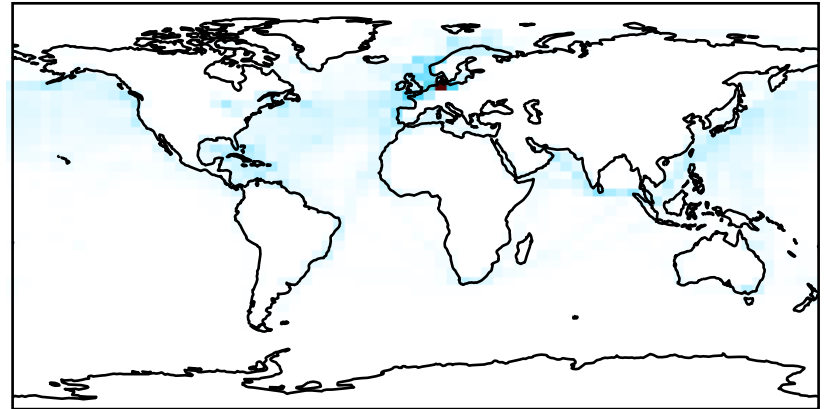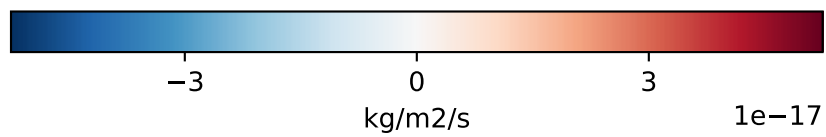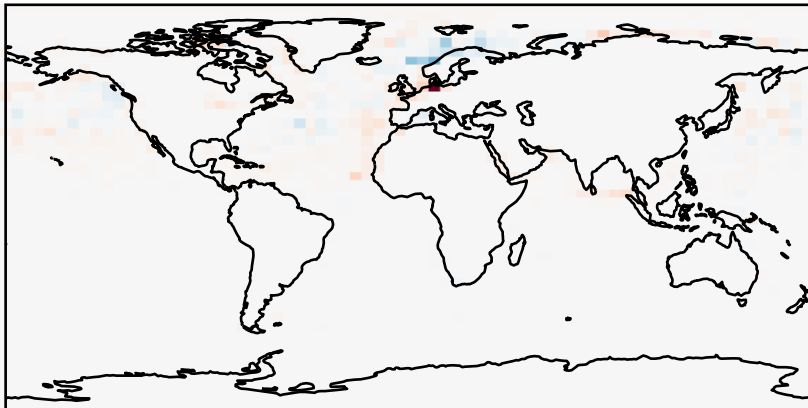Zero throughout domain
unitless

Zero throughout domain
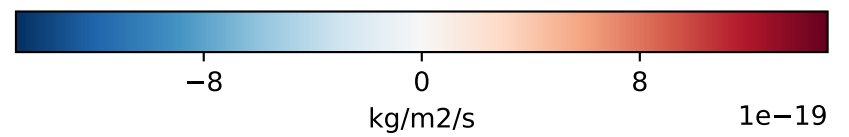unitless

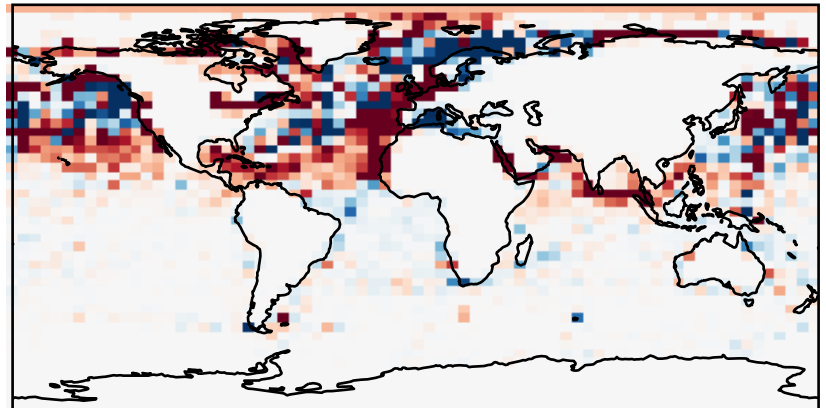# EmisNO2_Ship
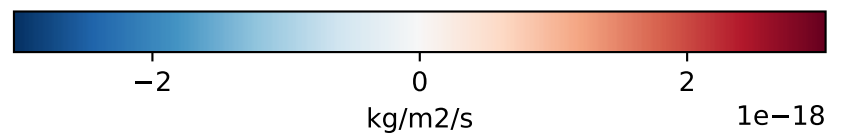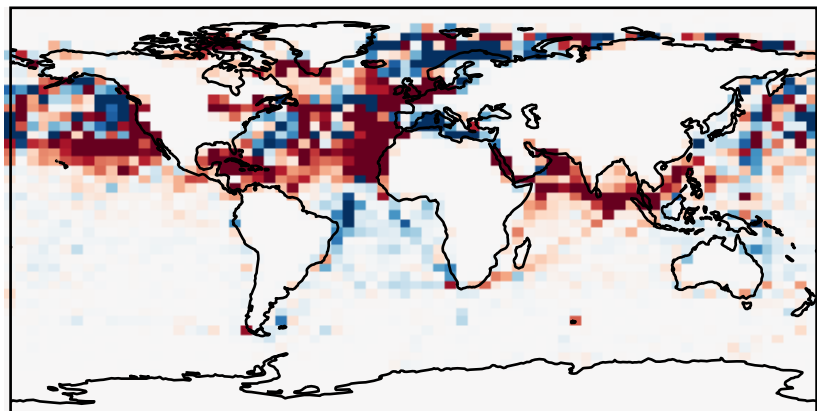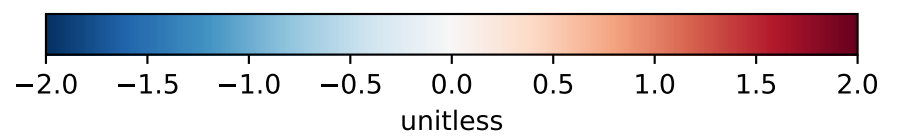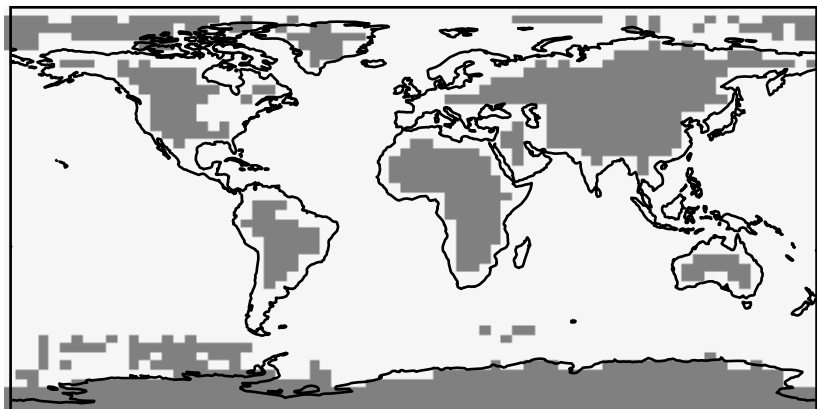
EmisNO_Ship

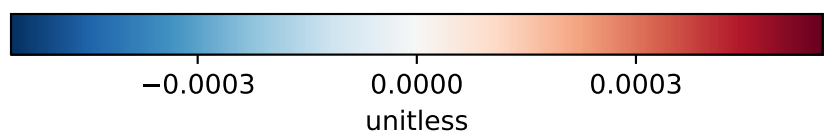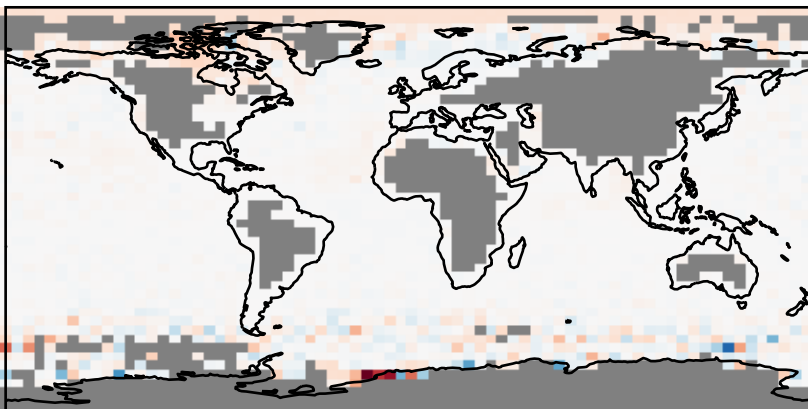GC_12.7.0-rc.1 (Ref)
4x5

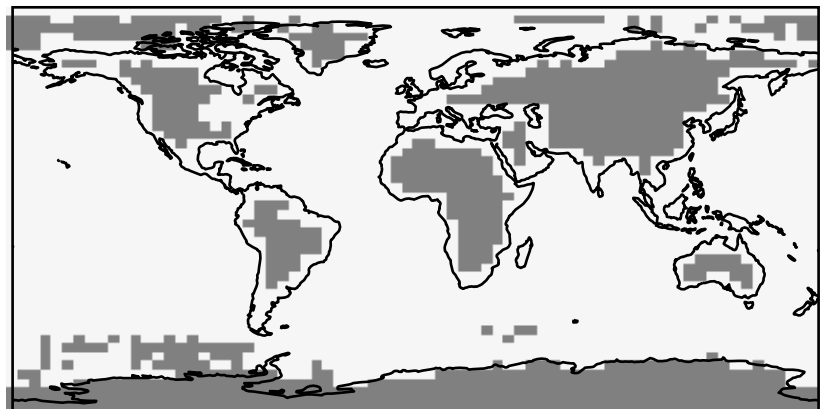GC_12.7.0-rc.2 (Dev)
4x5

Difference
Dev - Ref, Dynamic Range

Difference
Dev - Ref, Restricted Range [5%,95%]
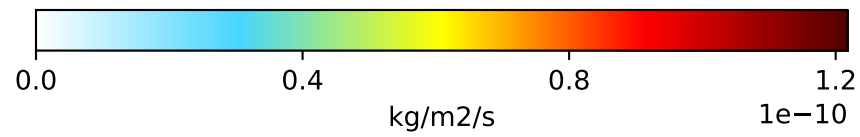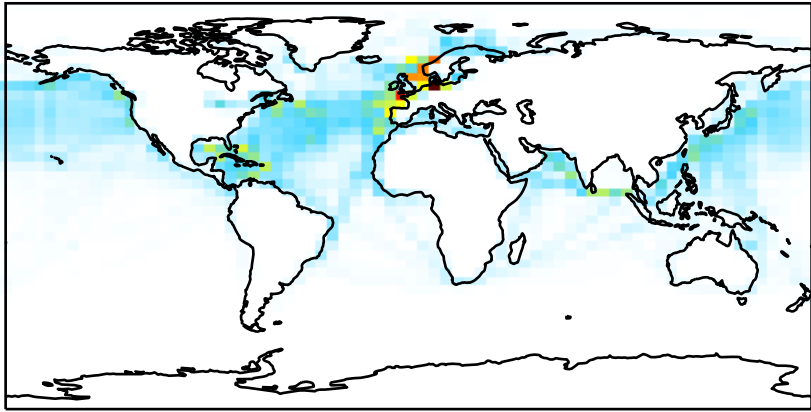
Fractional Difference
(Dev-Ref)/Ref, Dynamic Range
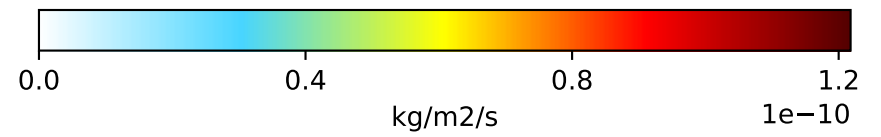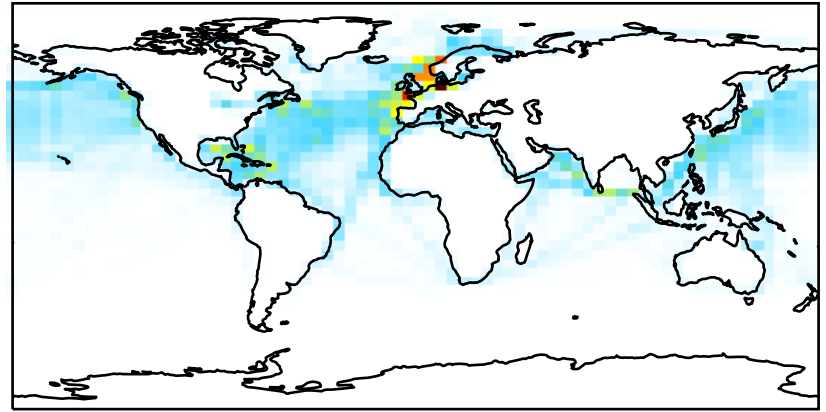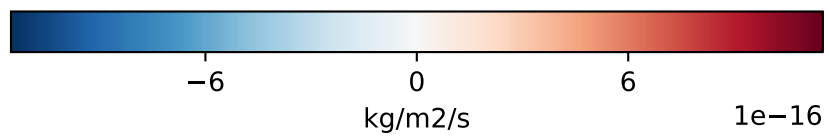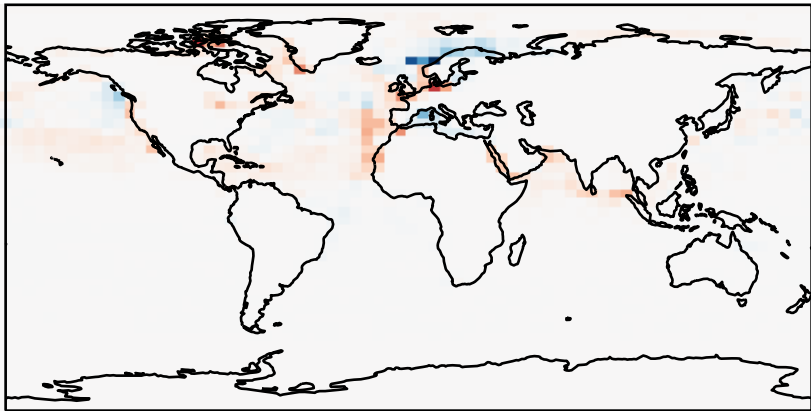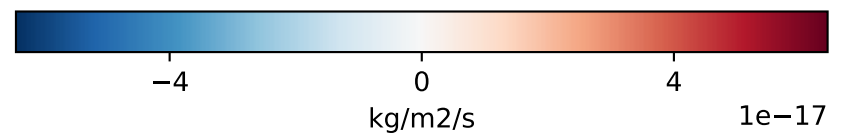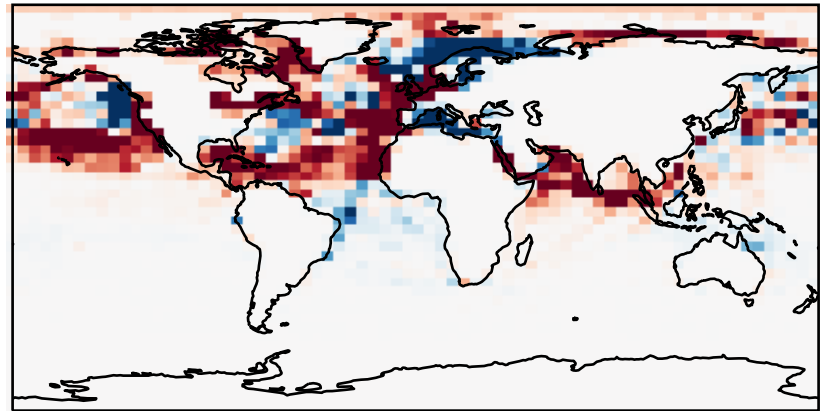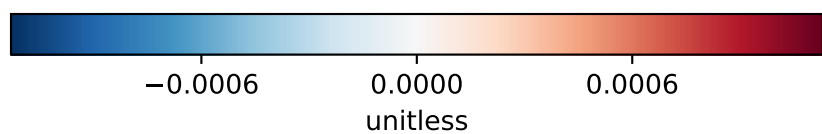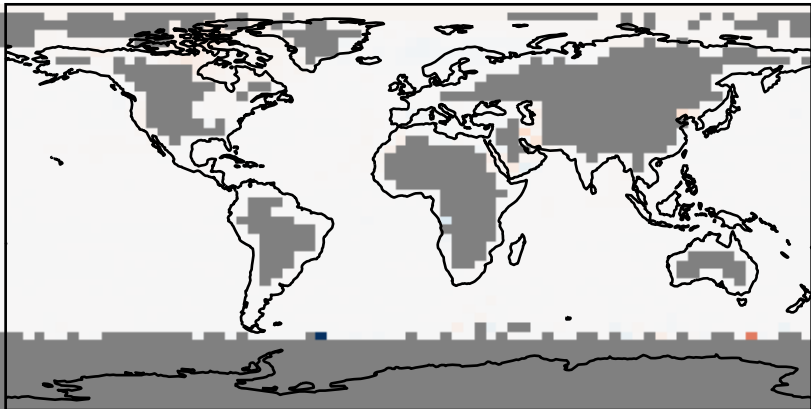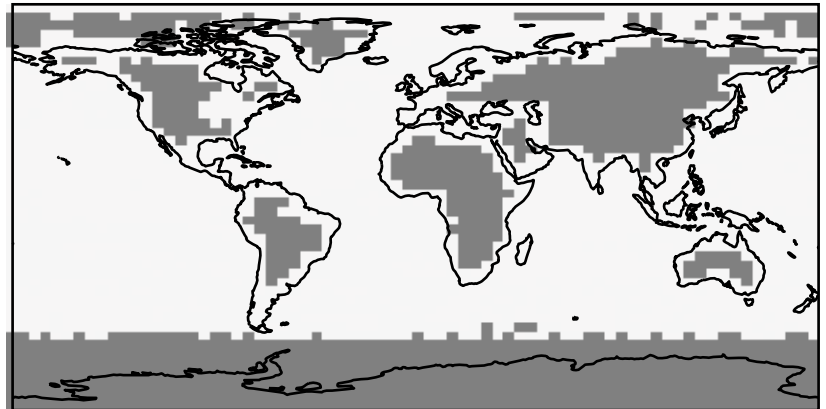
Fractional Difference
(Dev-Ref)/Ref, Fixed Range

EmisO3_Ship

| GC_12.7.0-rc.1 (Ref) | GC_12.7.0-rc.2 (Dev) |
| 4x5 | 4x5 |

Difference
Dev - Ref, Dynamic Range

Difference
Dev - Ref, Restricted Range [5%,95%]
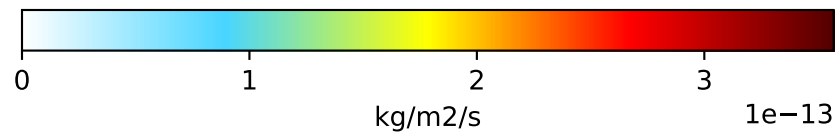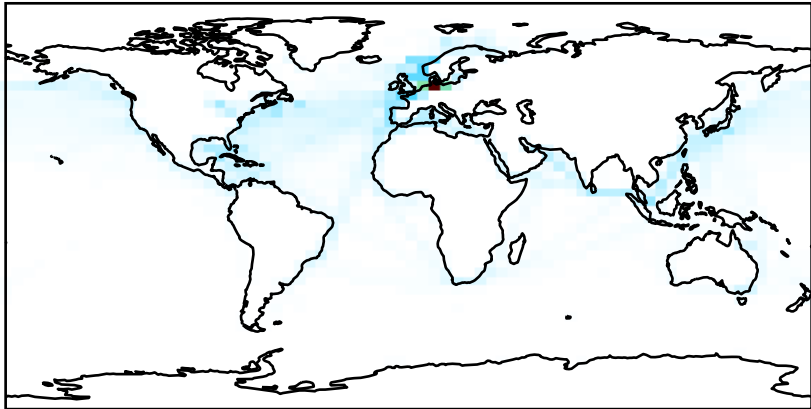
Fractional Difference
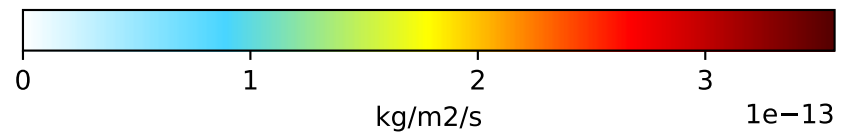(Dev-Ref)/Ref, Dynamic Range
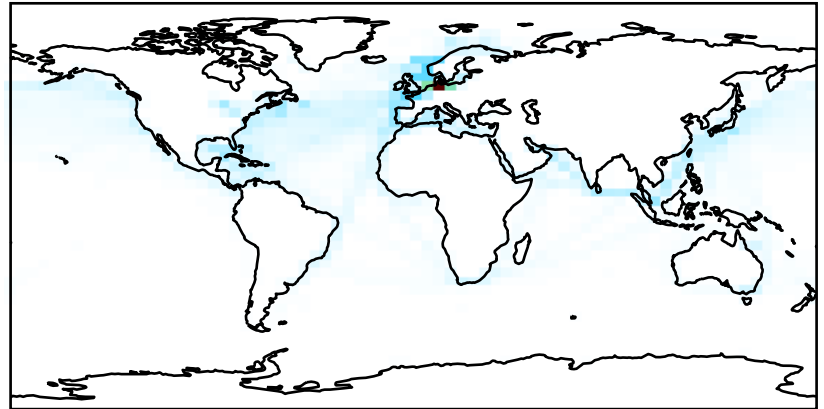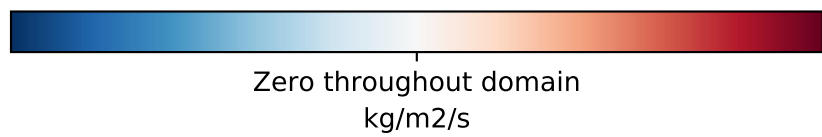
Fractional Difference
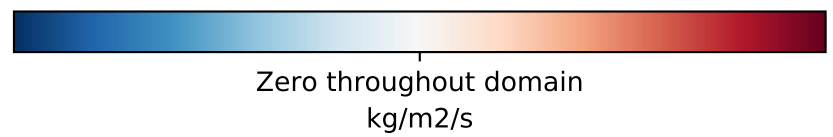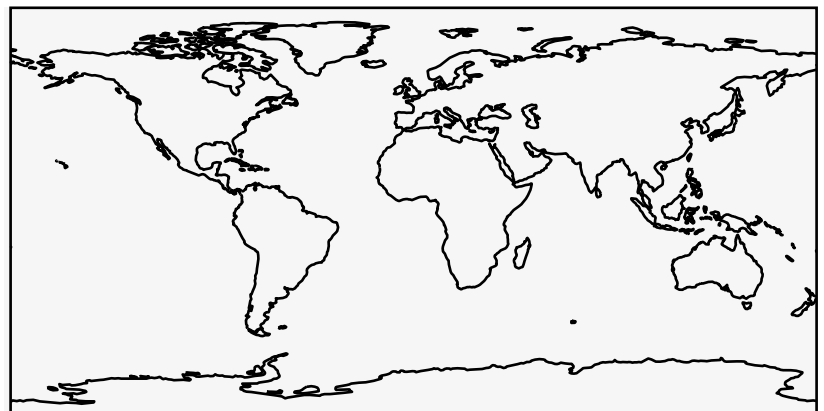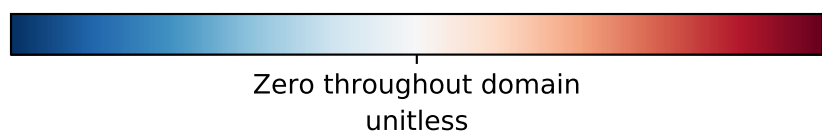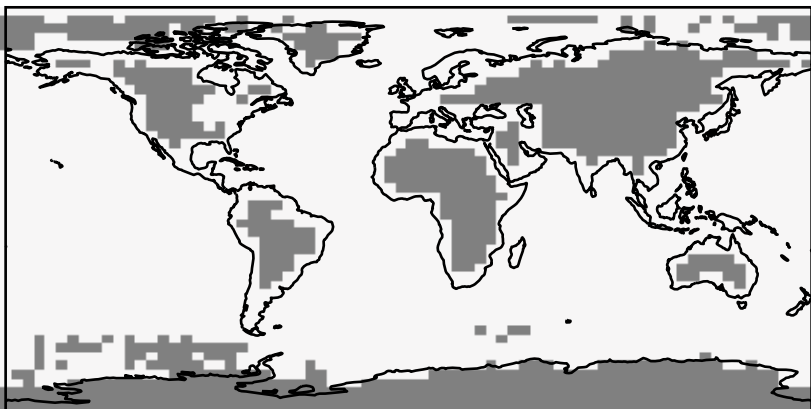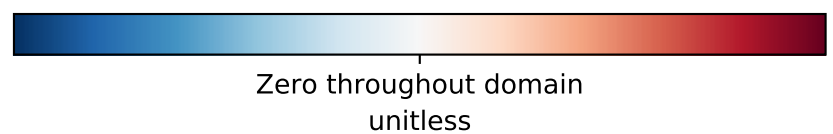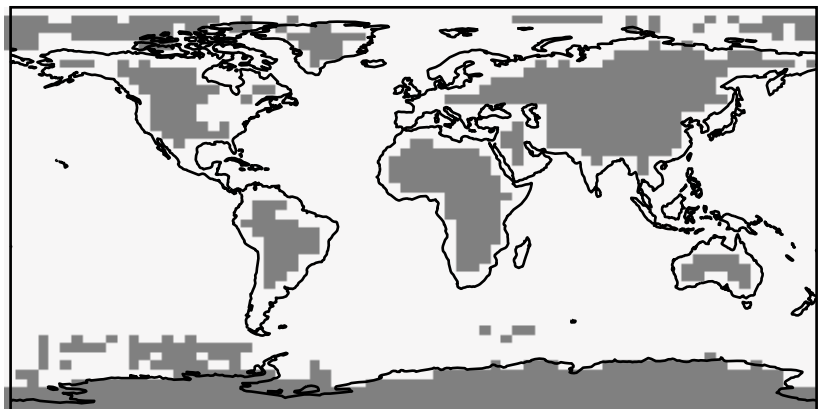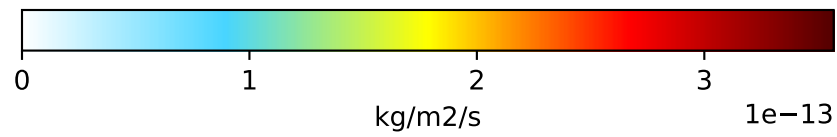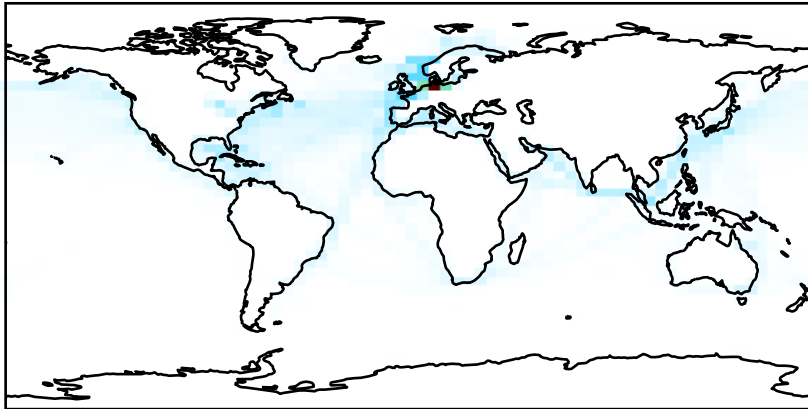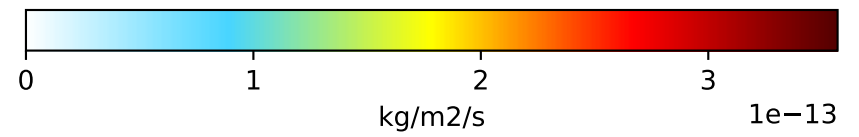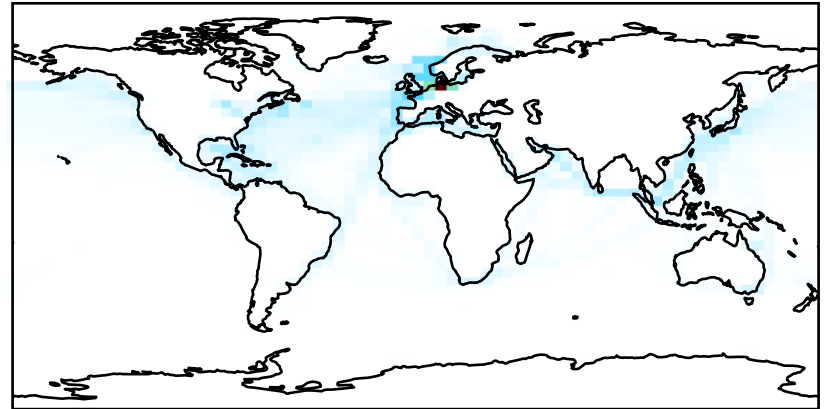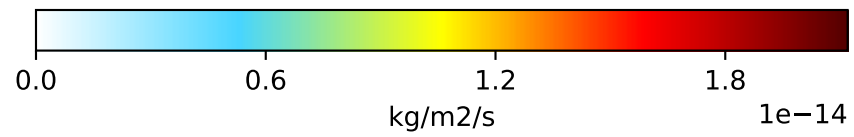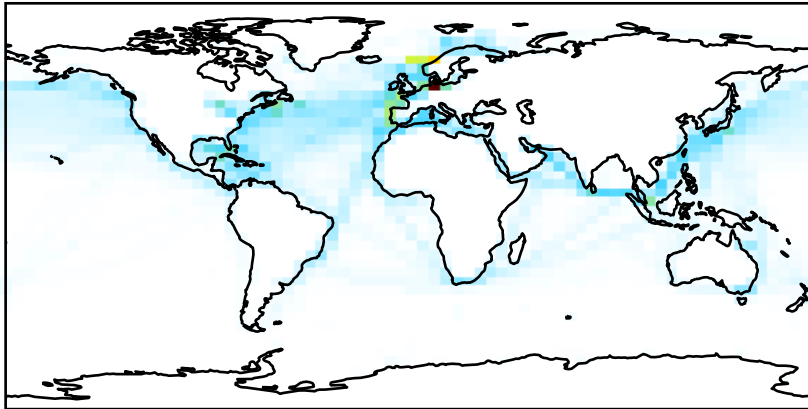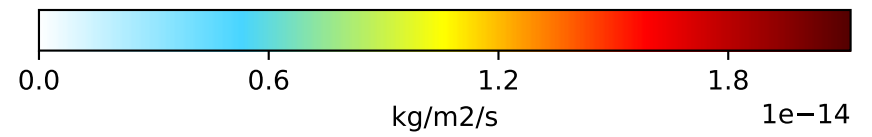(Dev-Ref)/Ref, Fixed Range

EmisOCPI_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

kg/m2/s

1e−13

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

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range
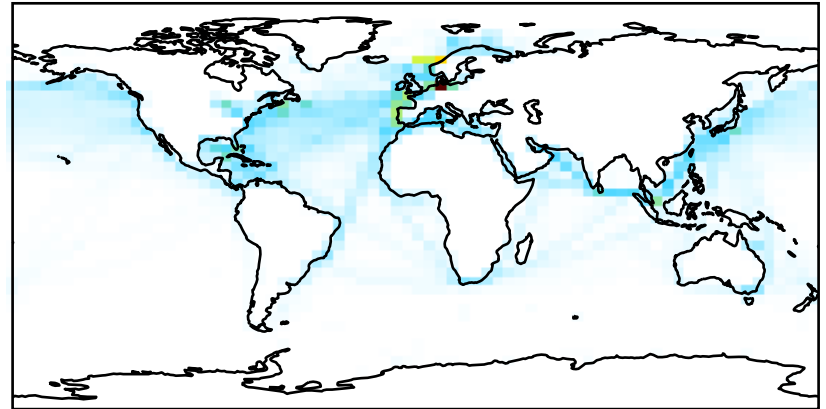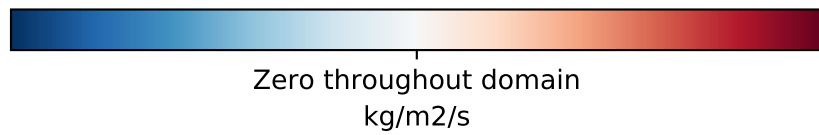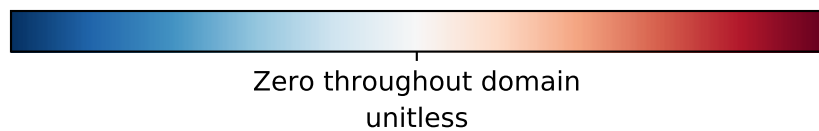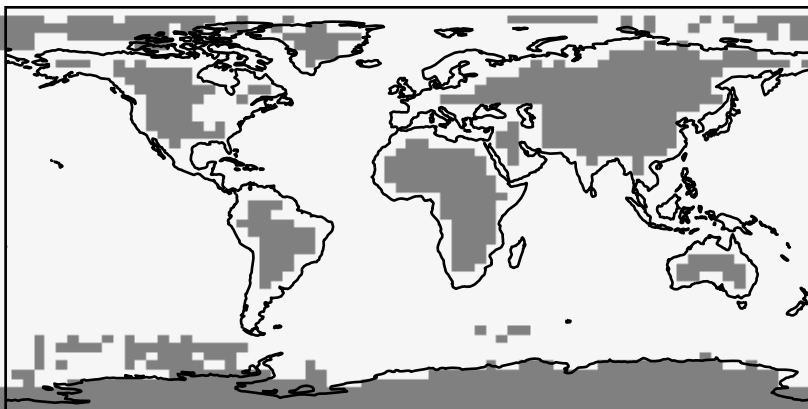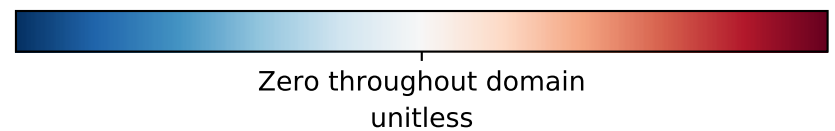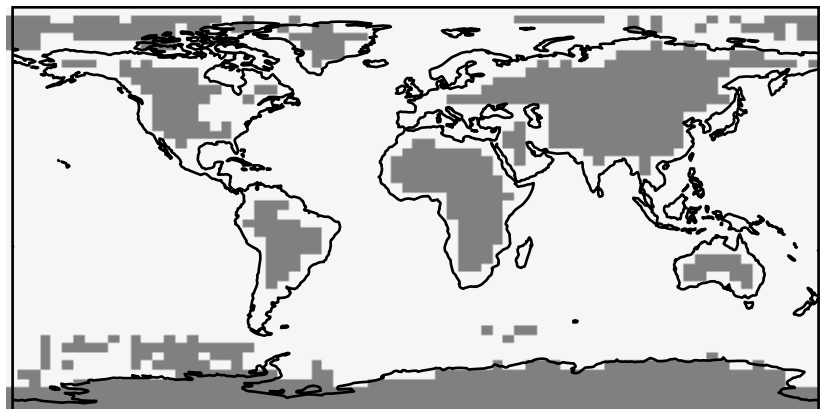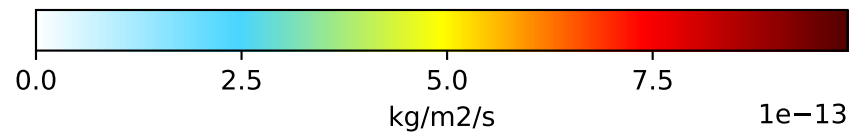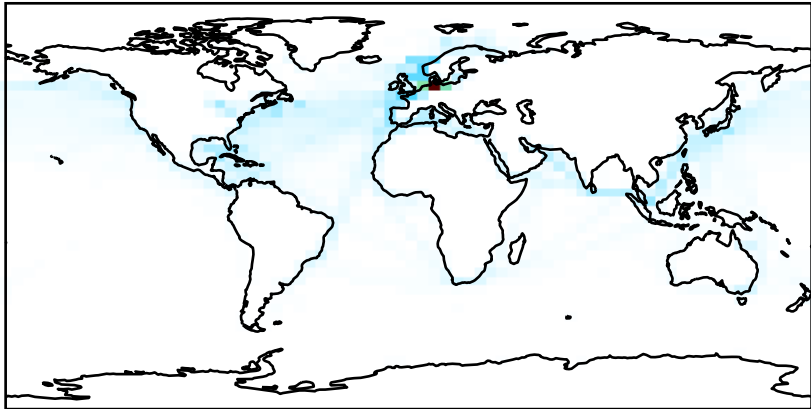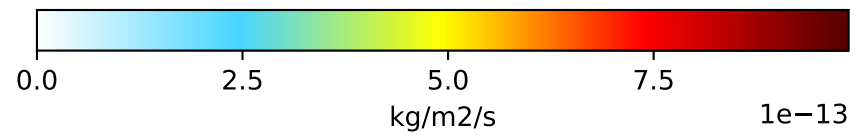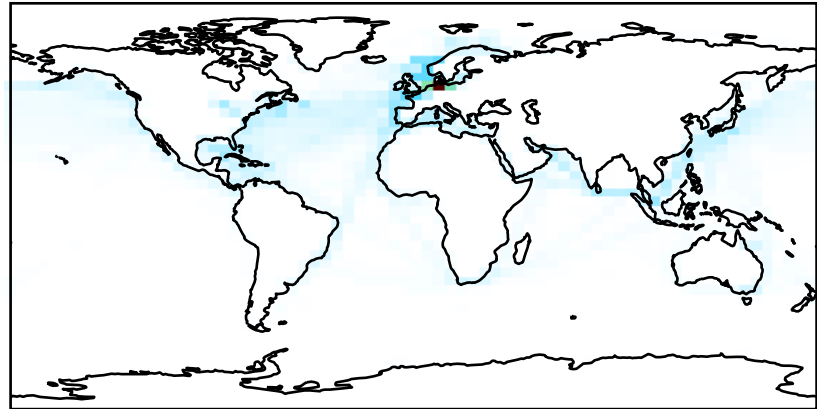
Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
unitless

Zero throughout domain
unitless

EmisOCPO_Ship

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

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

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
unitless
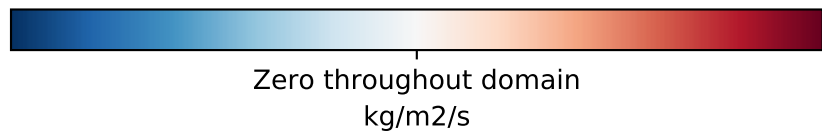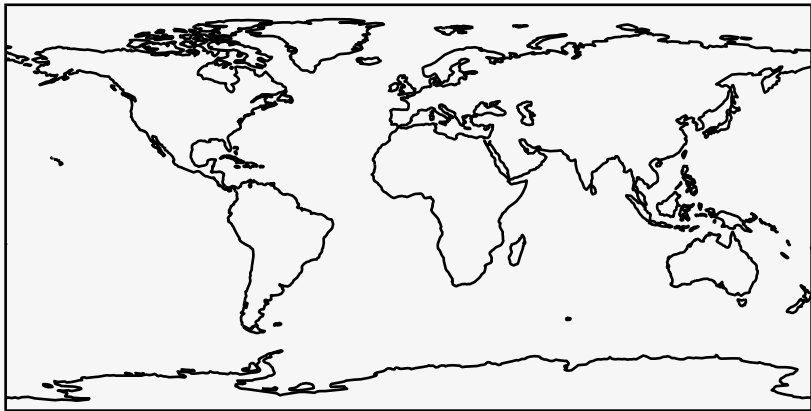
Zero throughout domain
unitless

EmispFe_Ship

EmisPRPE_Ship

GC_12.7.0-rc.1 (Ref)
4x5

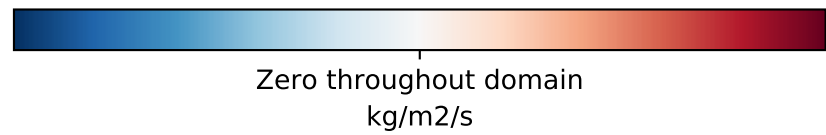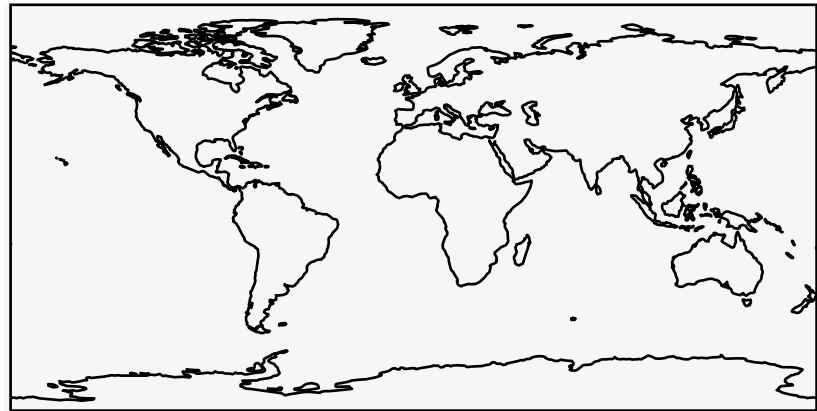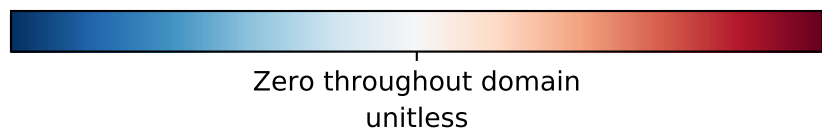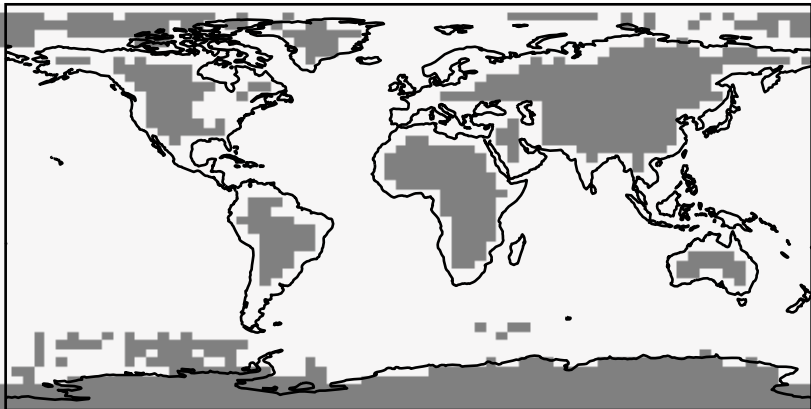GC_12.7.0-rc.2 (Dev)
4x5

kg/m2/s

1e−13

Difference
Dev - Ref, Dynamic Range

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

Zero throughout domain
kg/m2/s

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

Fractional Difference
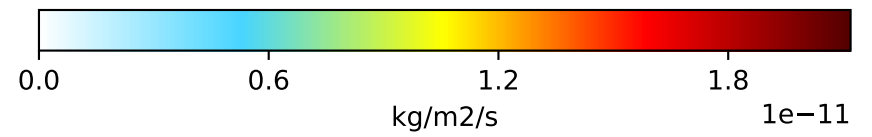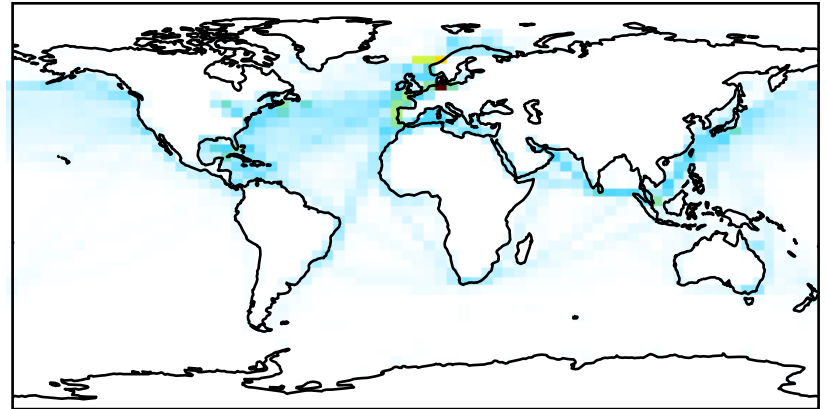(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
unitless
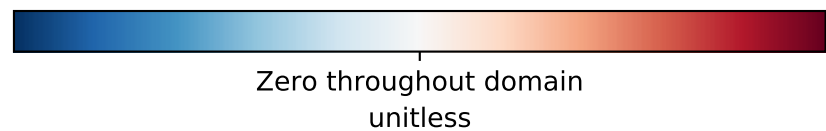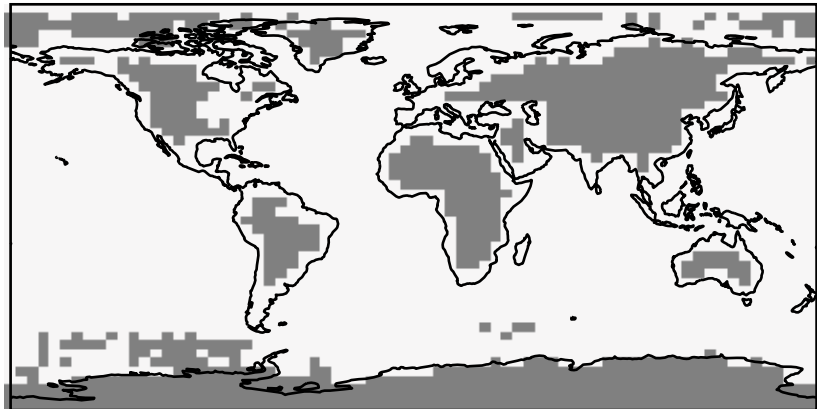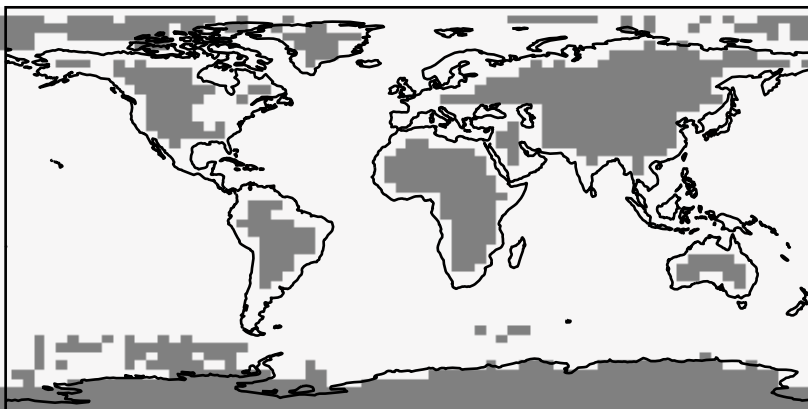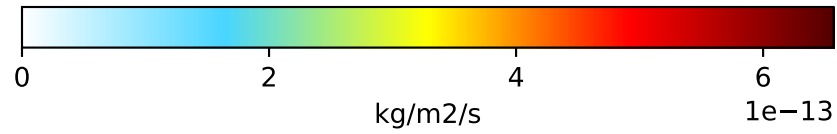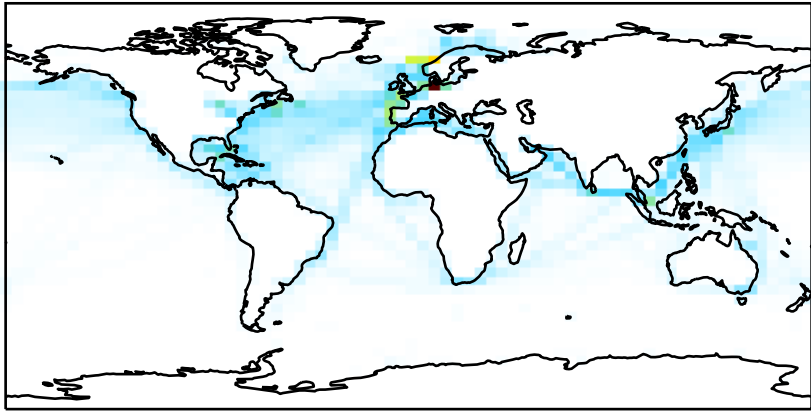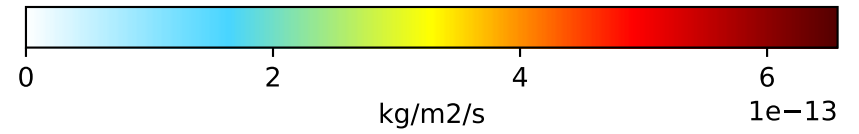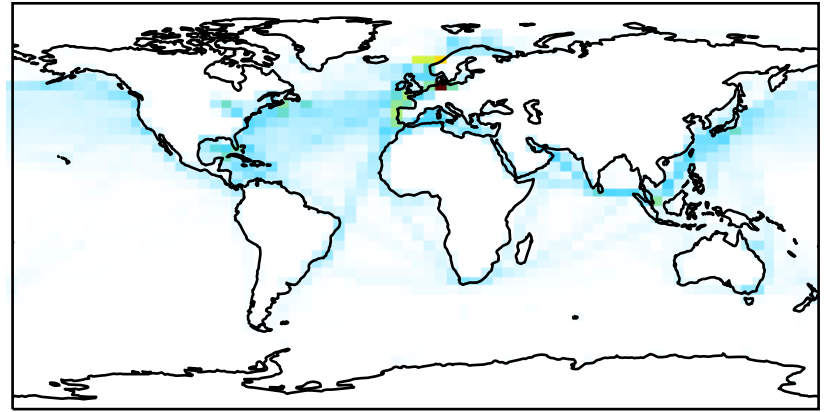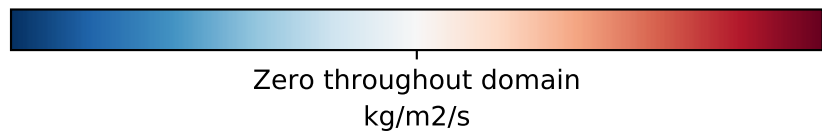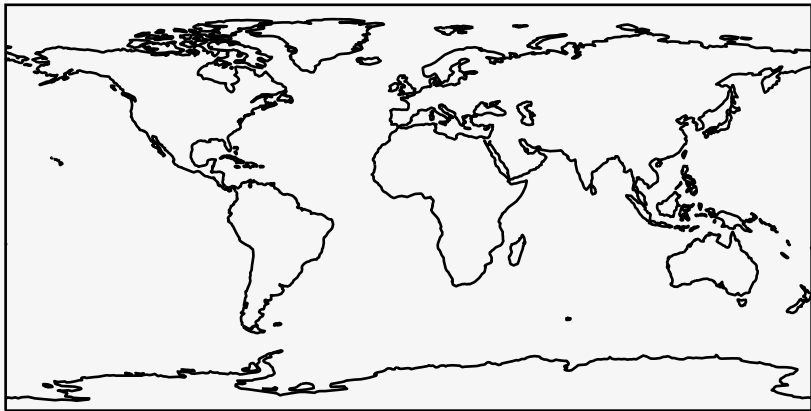
EmisSO2_Ship
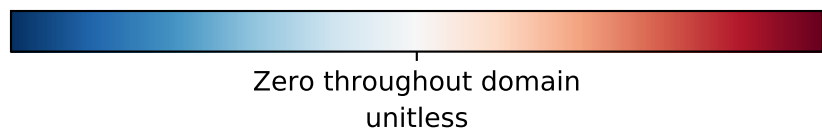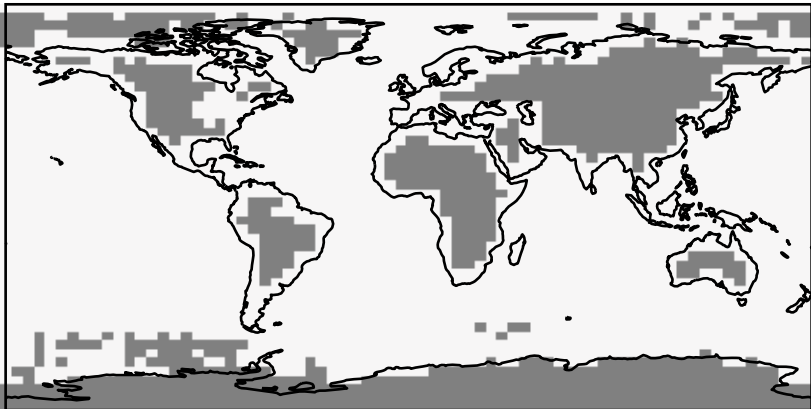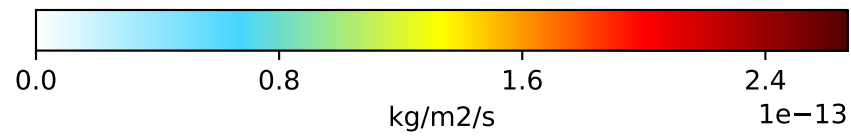

GC_12.7.0-rc.1 (Ref)
4x5

GC_12.7.0-rc.2 (Dev)
4x5

0.0   0.6   1.2   1.8
kg/m2/s   1e−11

0.0   0.6   1.2   1.8
kg/m2/s   1e−11

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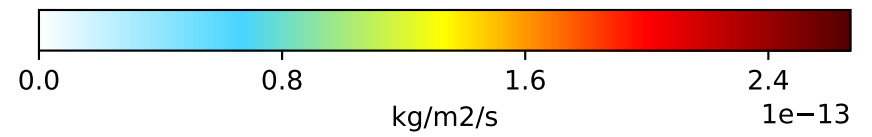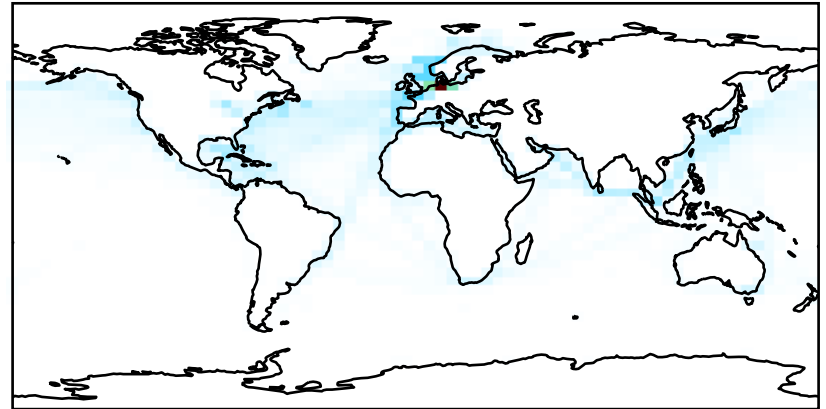
Difference
Dev - Ref, Restricted Range [5%,95%]

Zero throughout domain
kg/m2/s

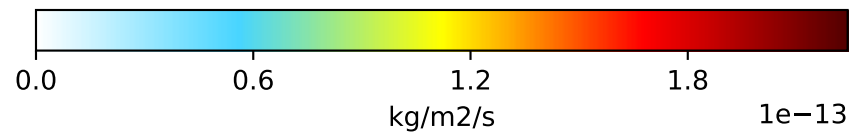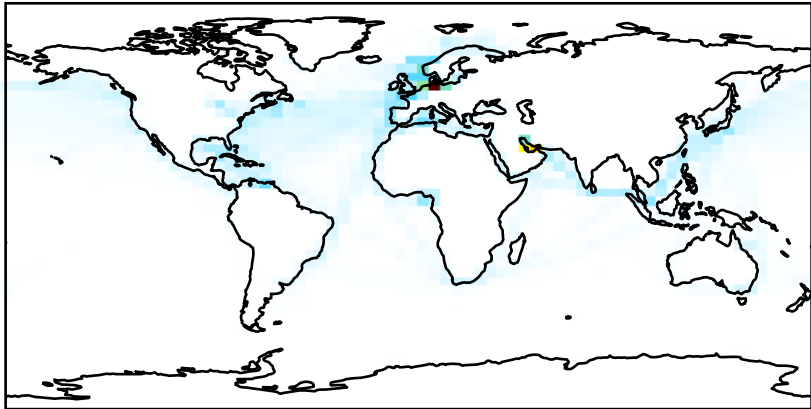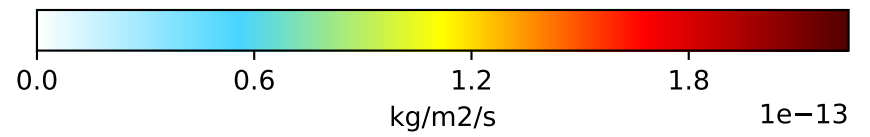Zero throughout domain
kg/m2/s

Fractional Difference
(Dev-Ref)/Ref, Dynamic Range

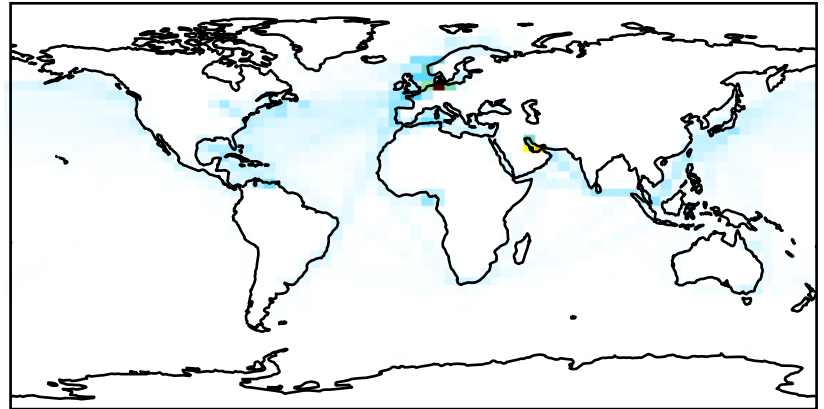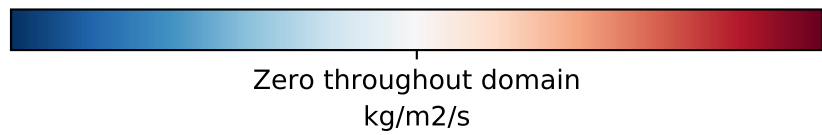Fractional Difference
(Dev-Ref)/Ref, Fixed Range

Zero throughout domain
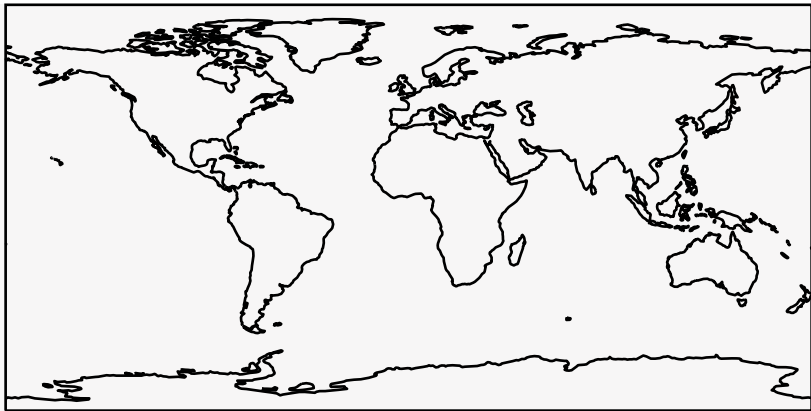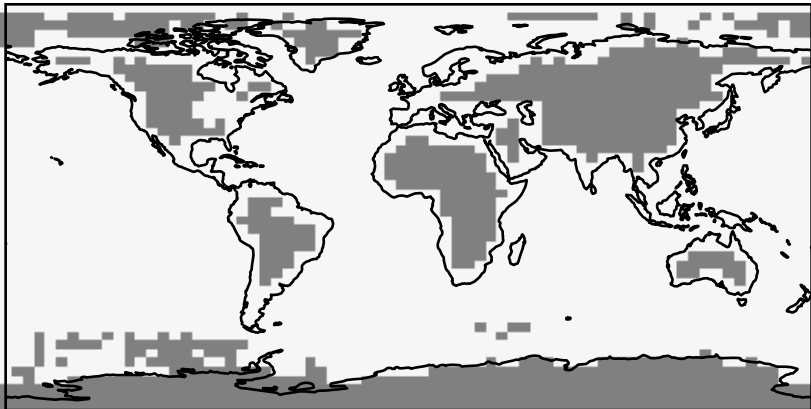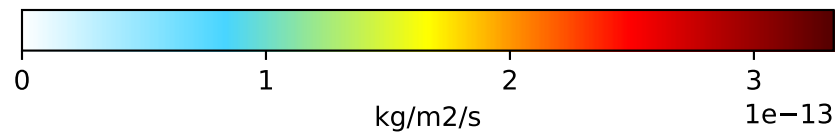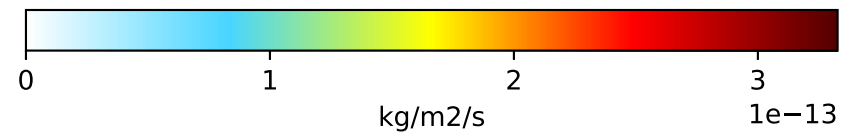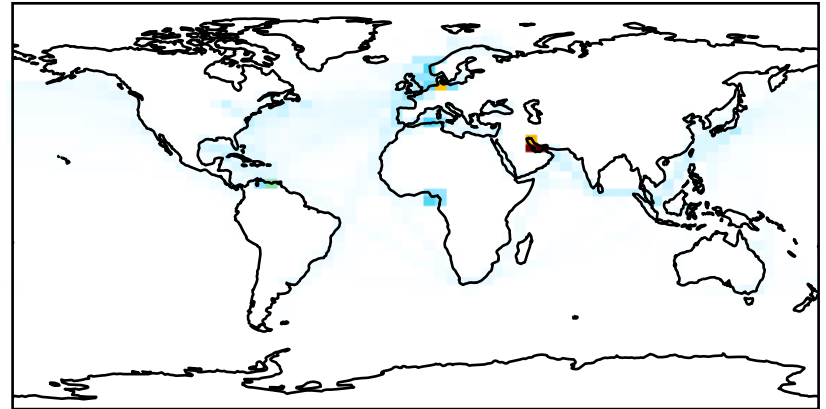unitless

Zero throughout domain
unitless

EmisSO4_Ship

EmisSOAP_Ship

EmisTOLU_Ship

EmisXYLE_Ship