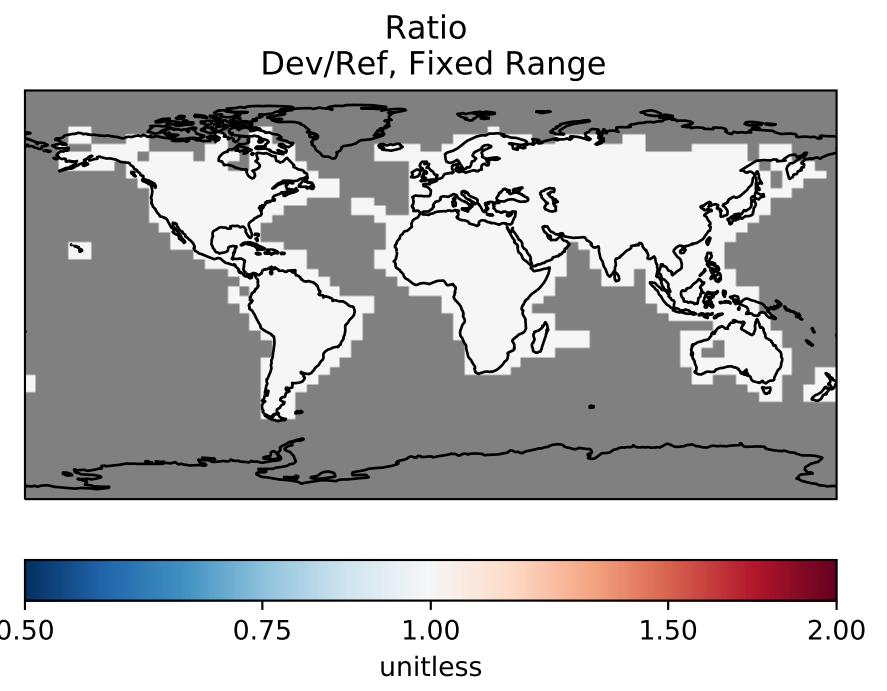
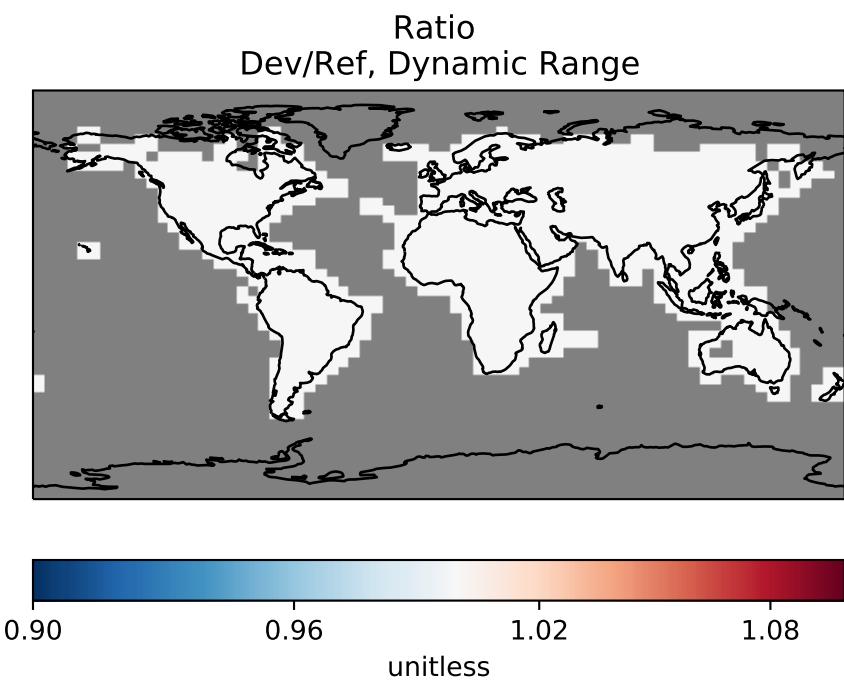
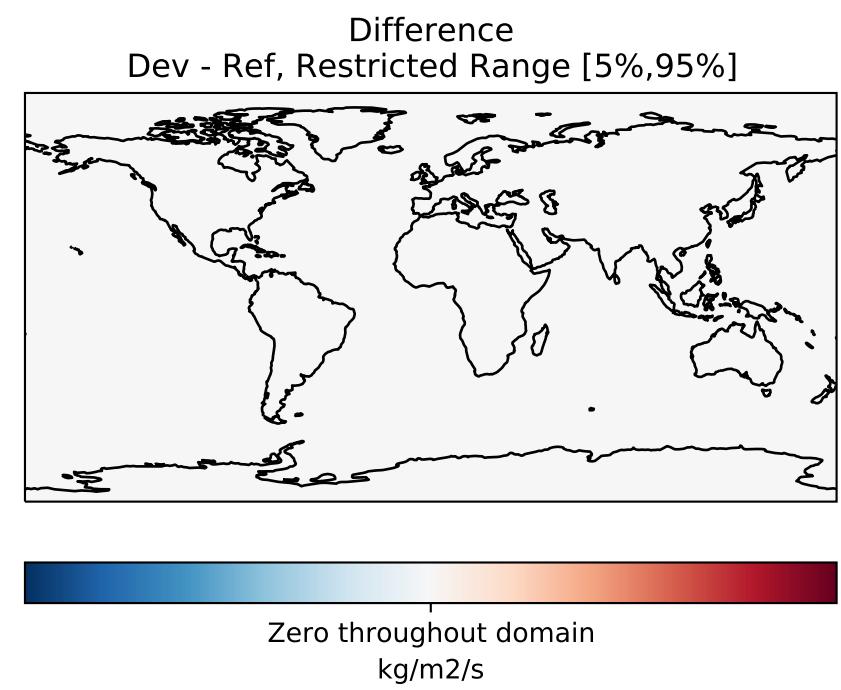
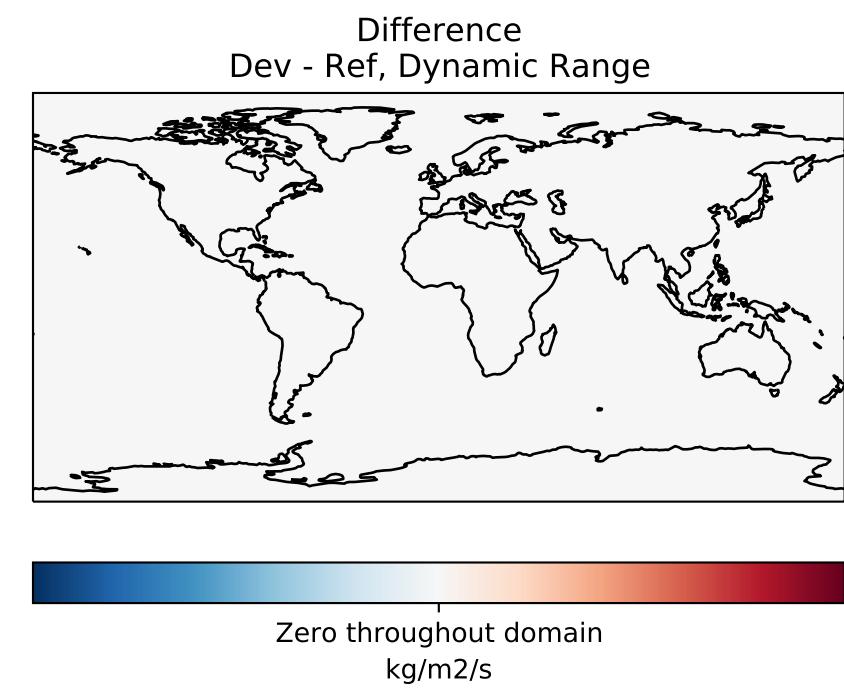
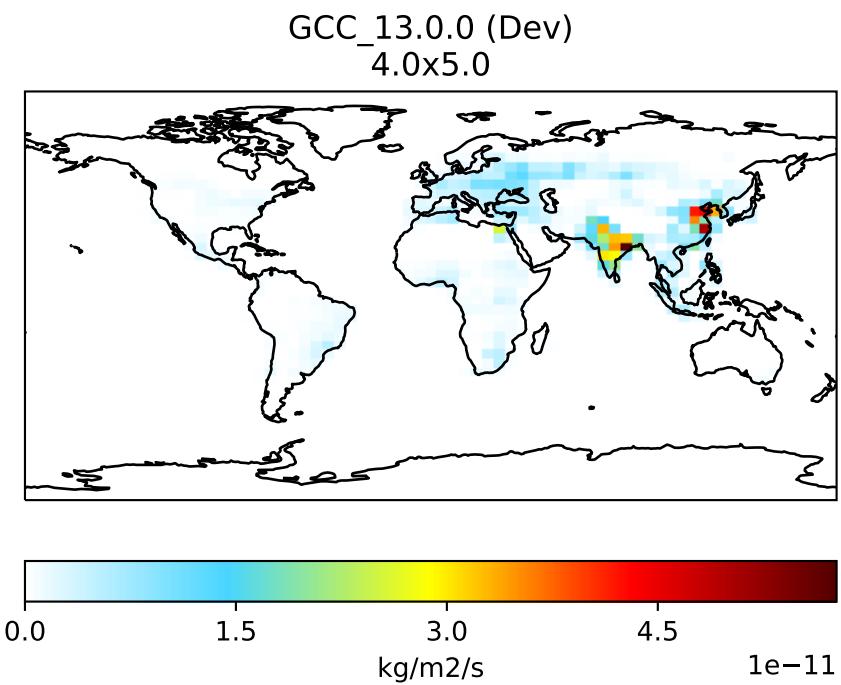
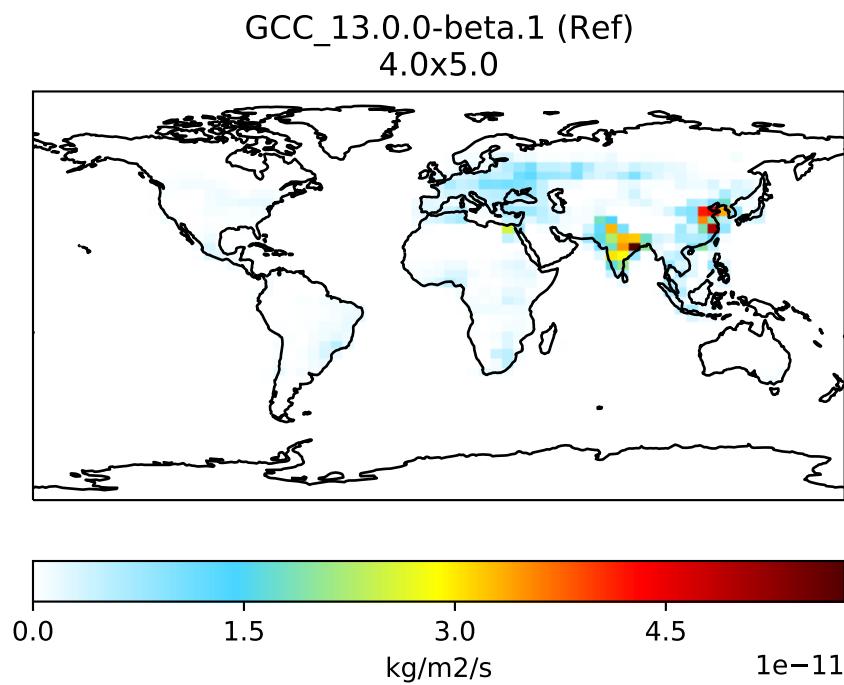
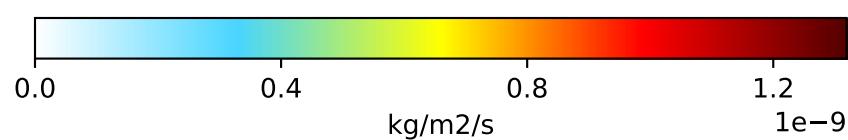
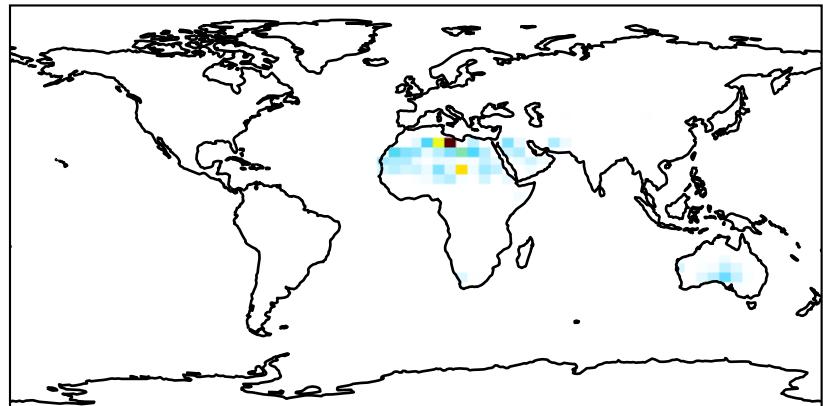


# EmisDST1\_Anthro (Jan2019)

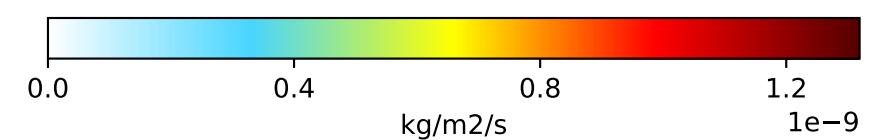
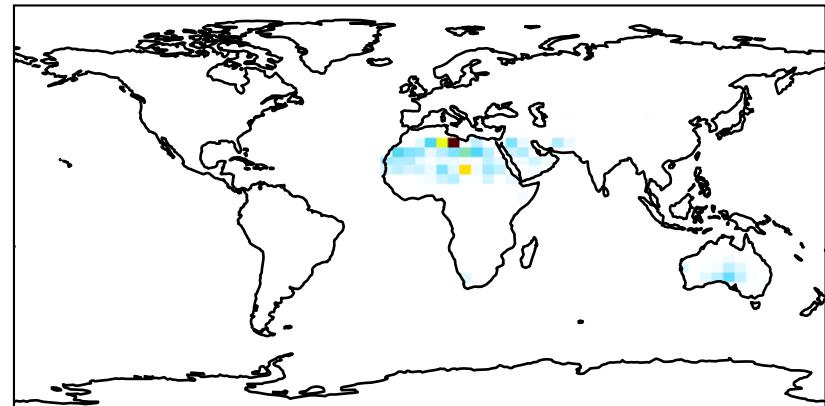


# EmisDST1\_Natural (Jan2019)

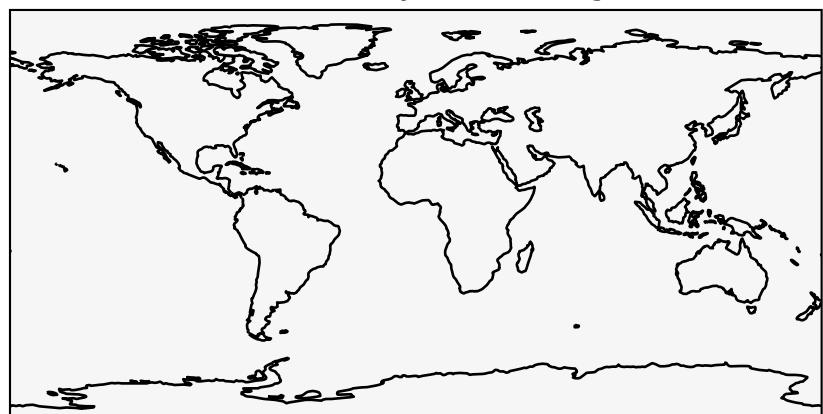
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0

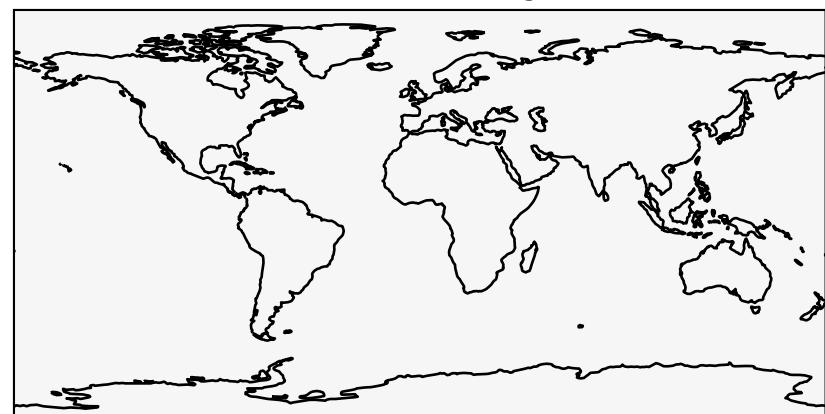


Difference  
Dev - Ref, Dynamic Range



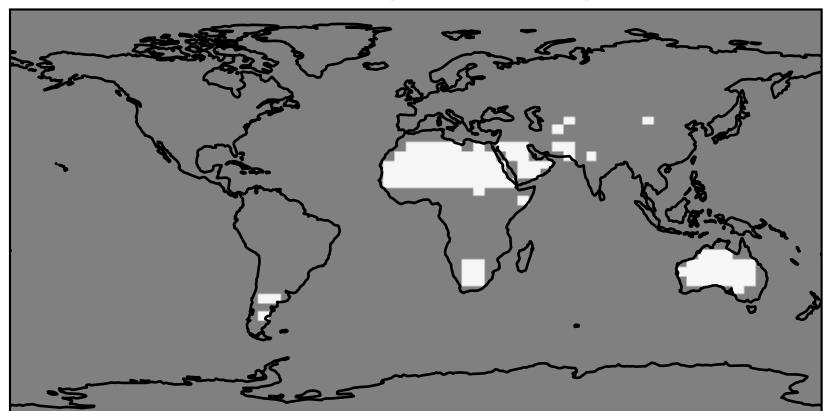
Zero throughout domain  
kg/m<sup>2</sup>/s

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



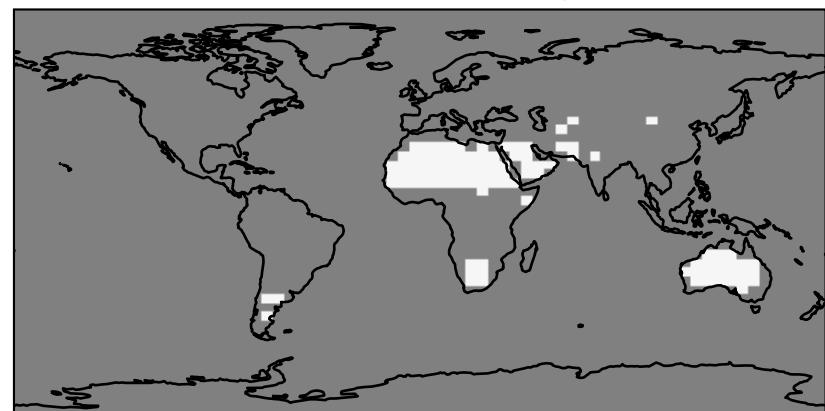
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



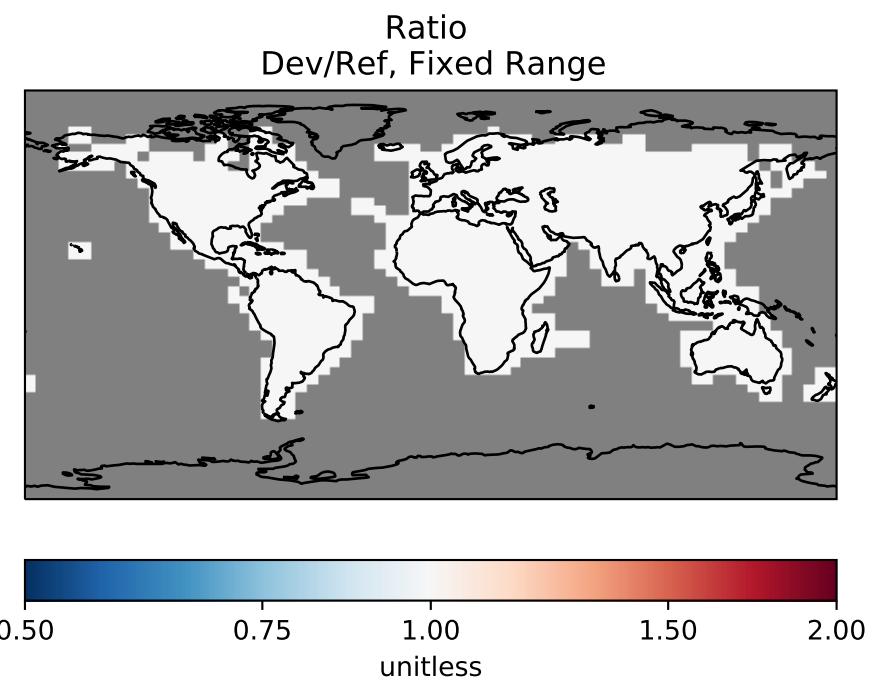
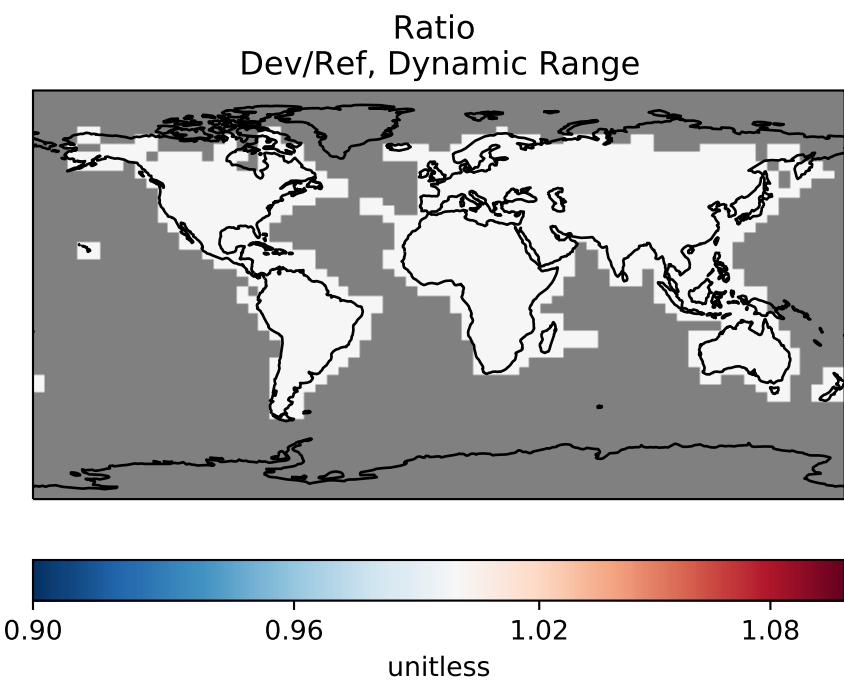
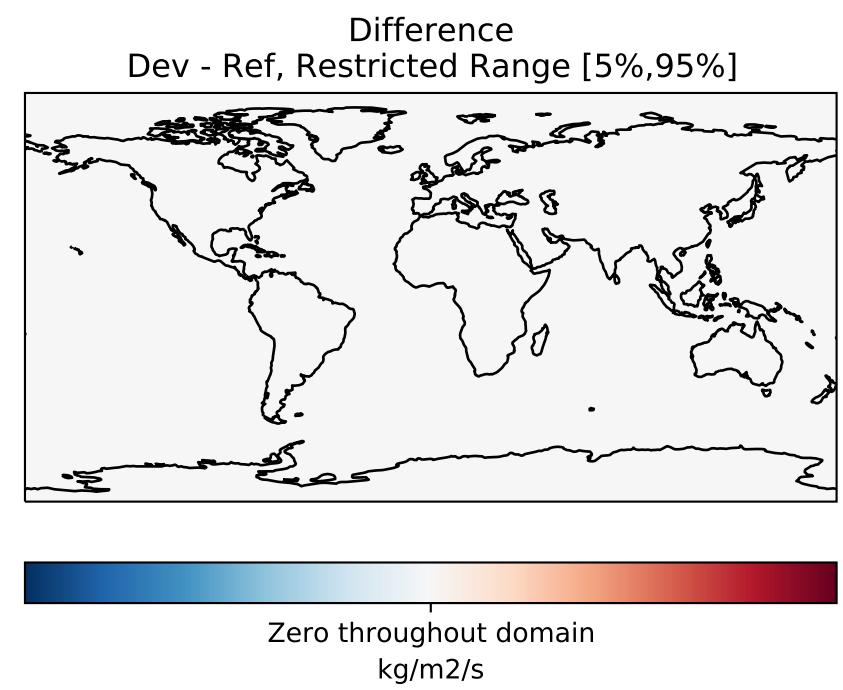
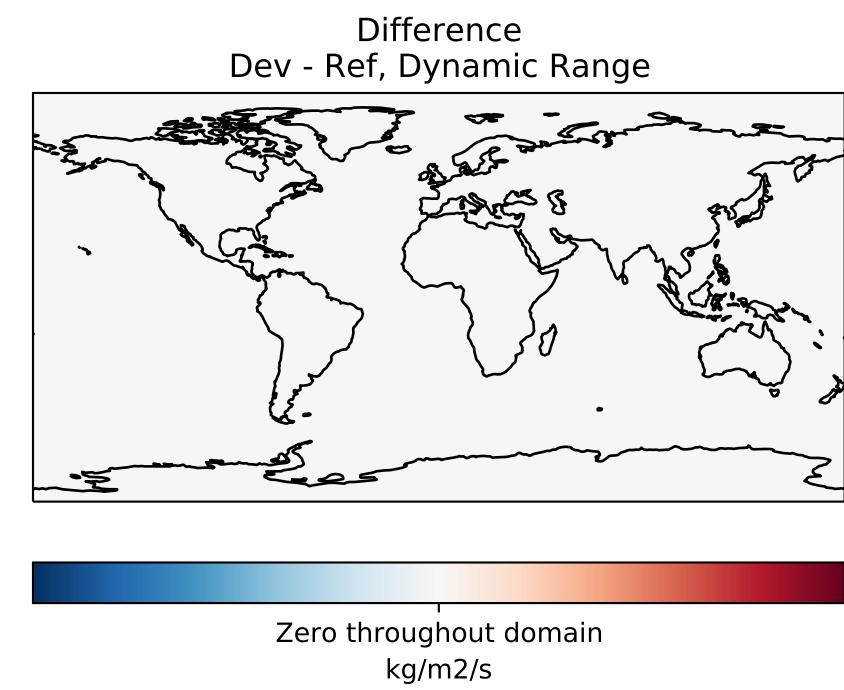
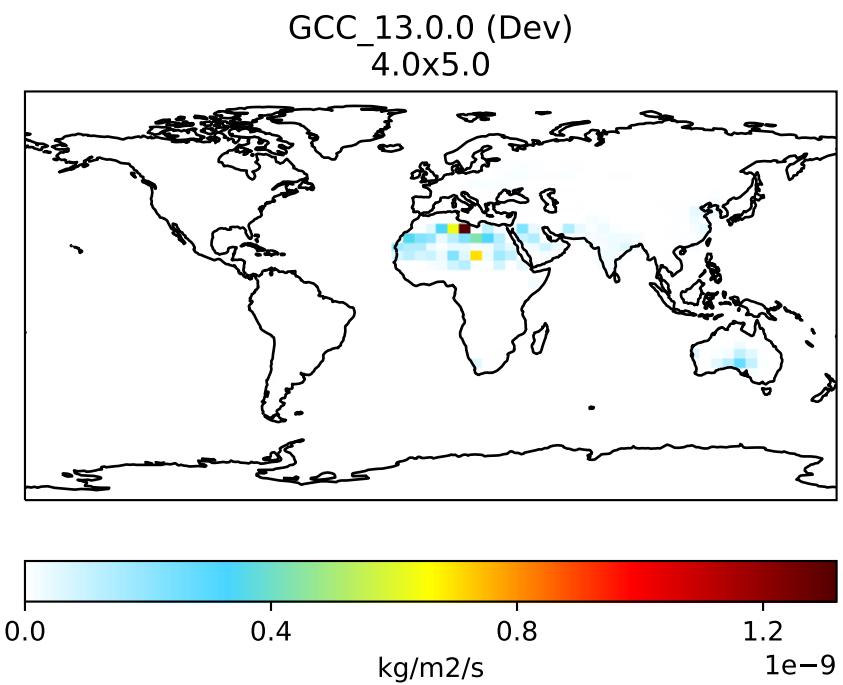
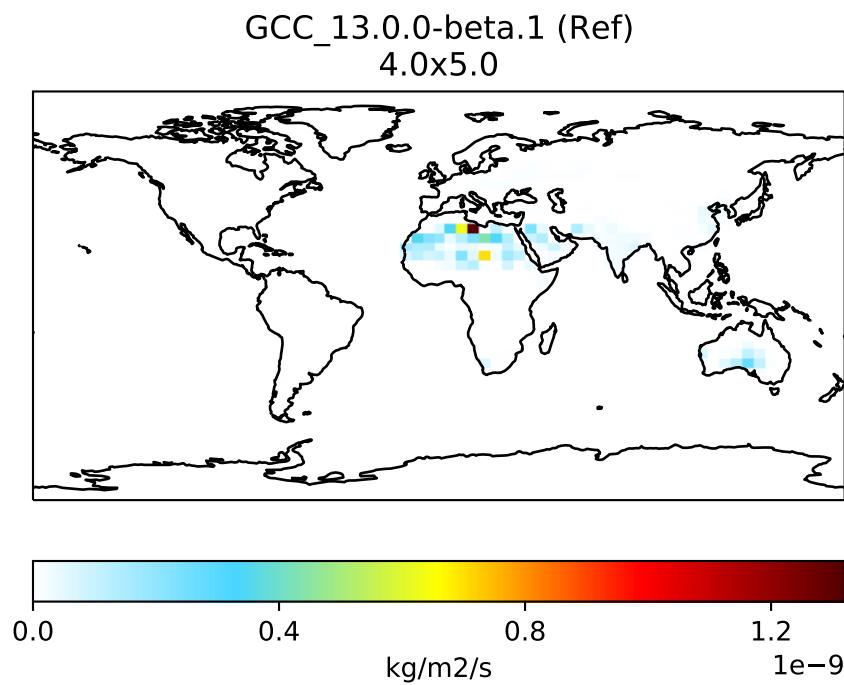
0.90      0.96      1.02      1.08  
unitless

Ratio  
Dev/Ref, Fixed Range



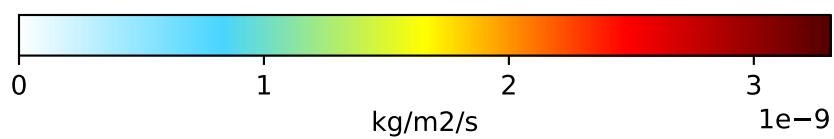
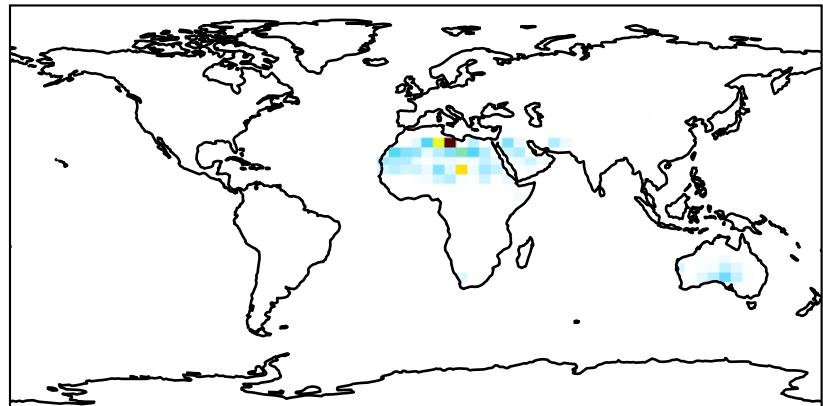
0.50      0.75      1.00      1.50      2.00  
unitless

# EmisDST1\_Total (Jan2019)

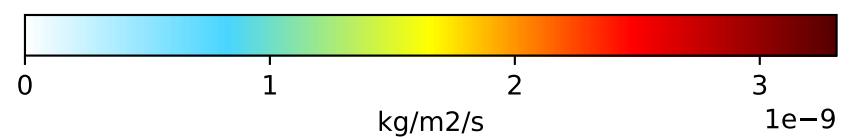
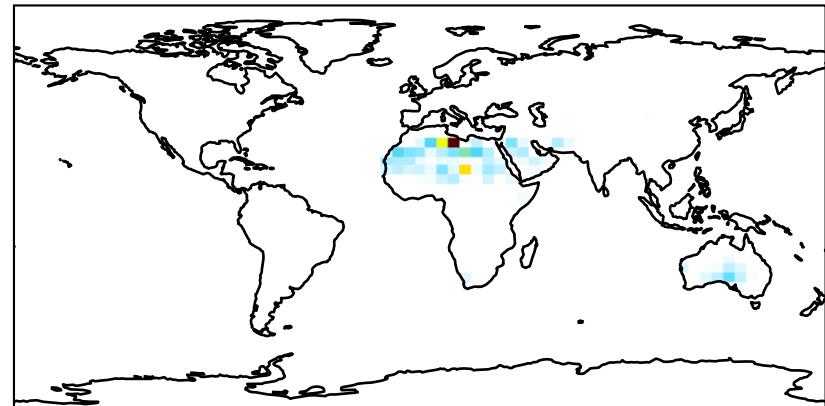


# EmisDST2\_Natural (Jan2019)

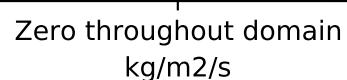
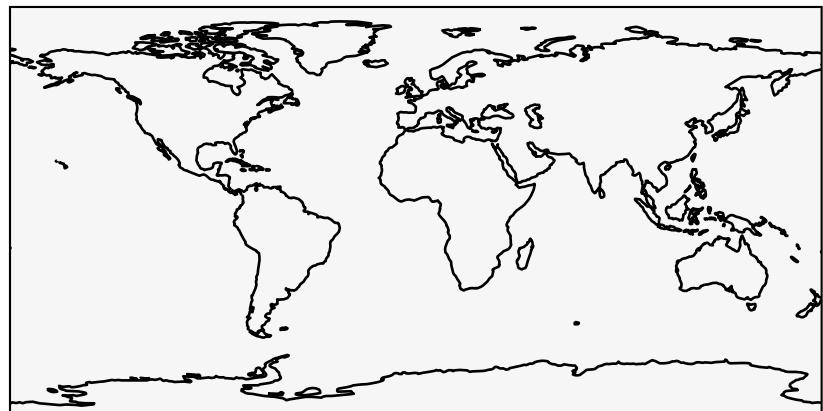
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



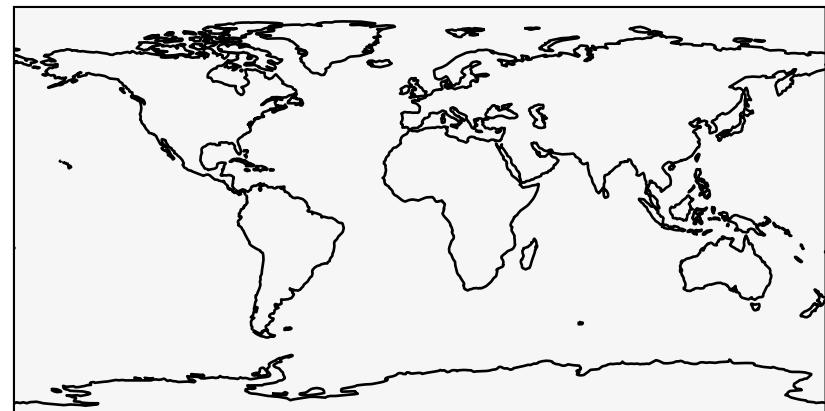
GCC\_13.0.0 (Dev)  
4.0x5.0



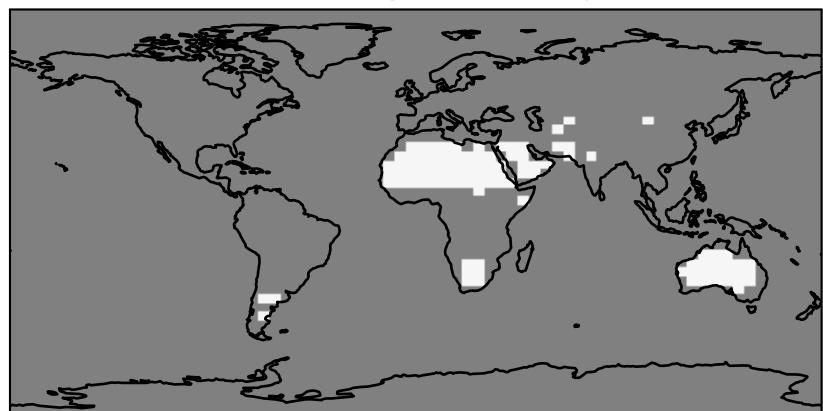
Difference  
Dev - Ref, Dynamic Range



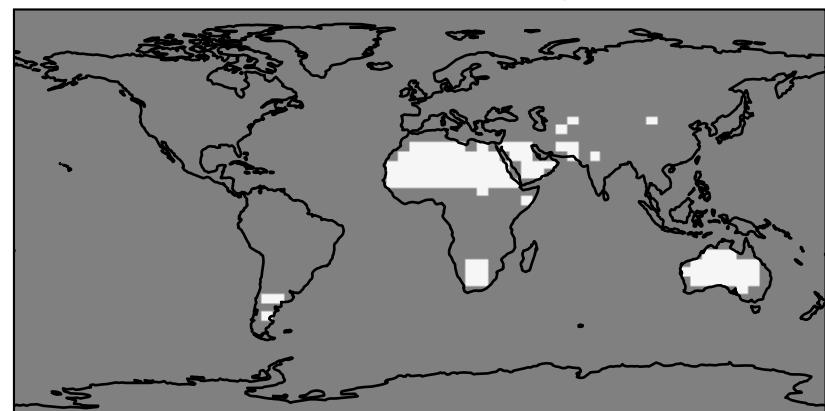
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

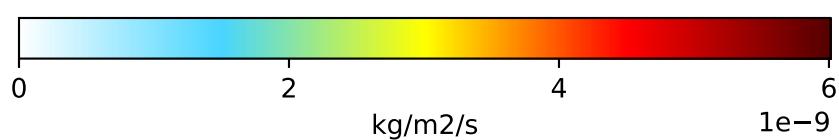
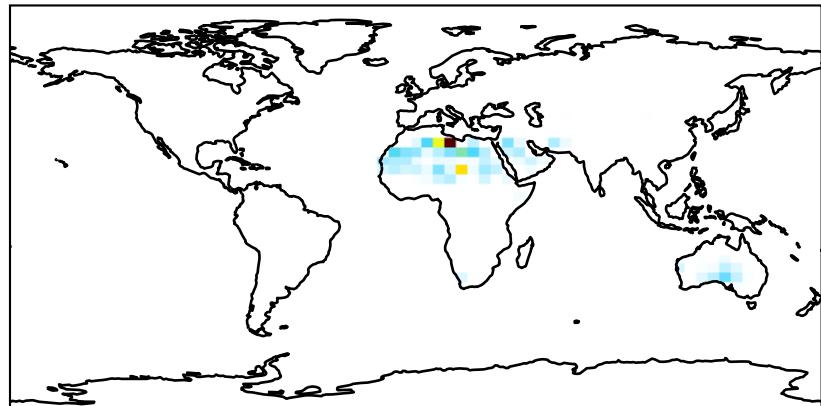


Ratio  
Dev/Ref, Fixed Range

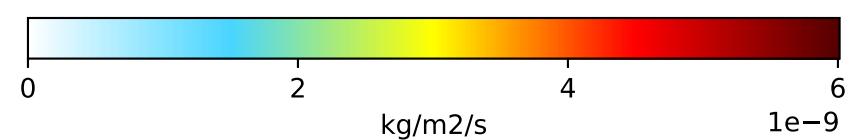
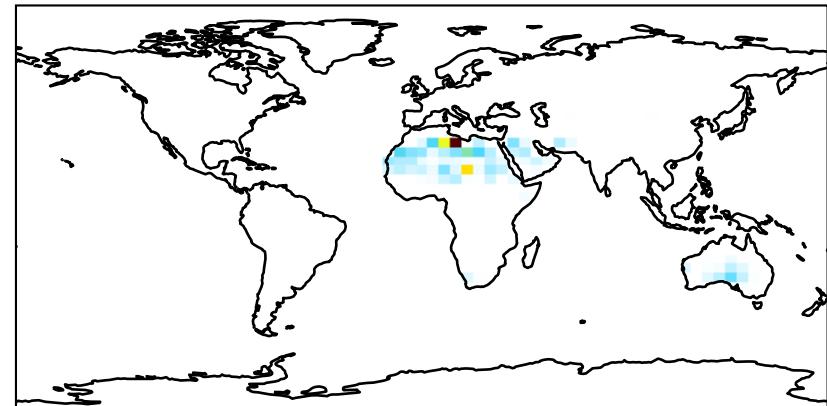


# EmisDST3\_Natural (Jan2019)

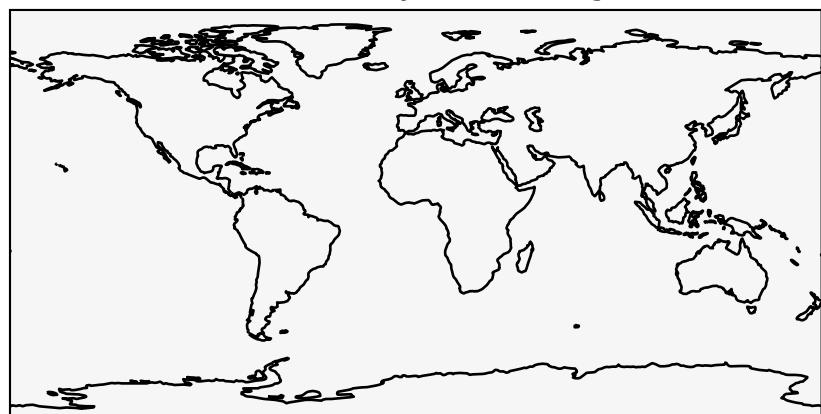
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0

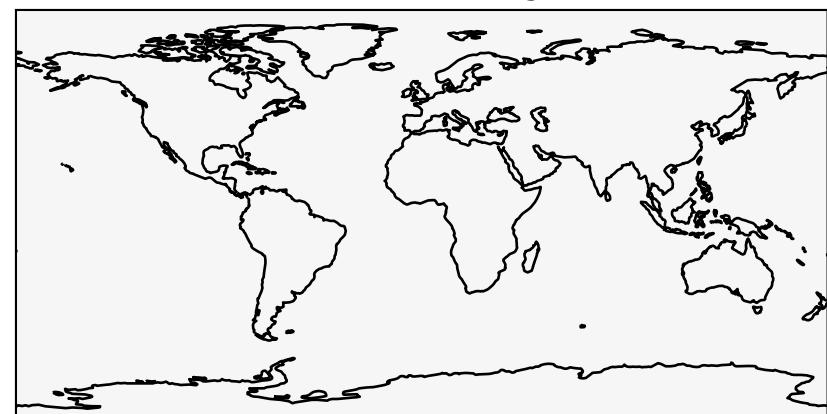


Difference  
Dev - Ref, Dynamic Range



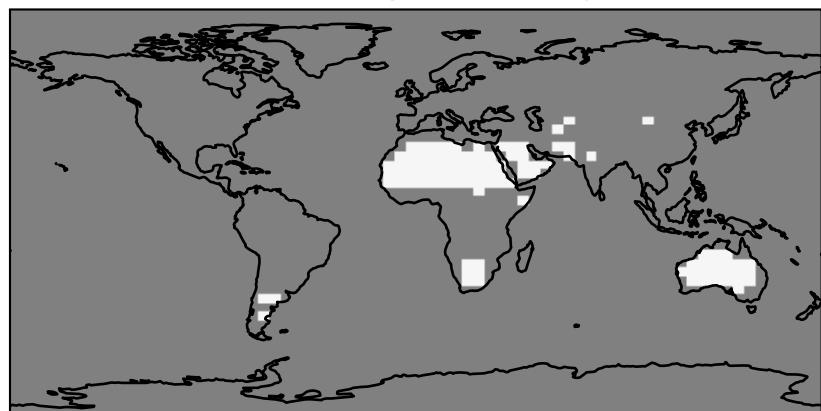
Zero throughout domain  
kg/m<sup>2</sup>/s

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



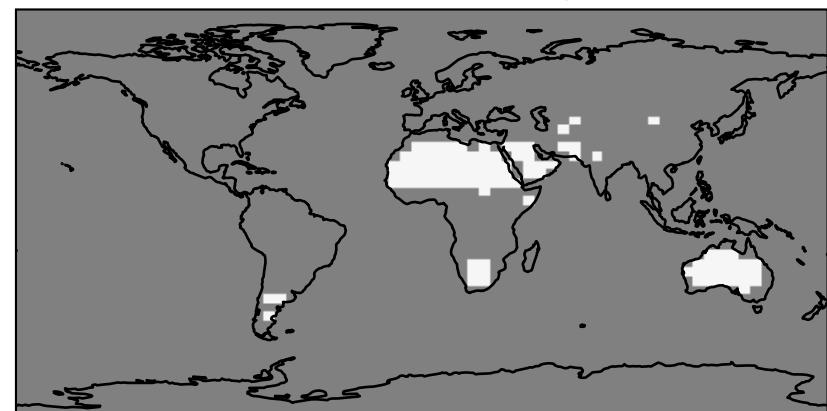
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08  
unitless

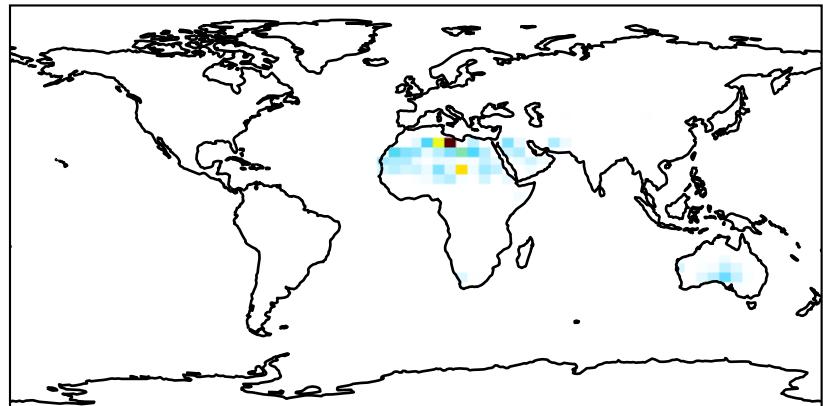
Ratio  
Dev/Ref, Fixed Range



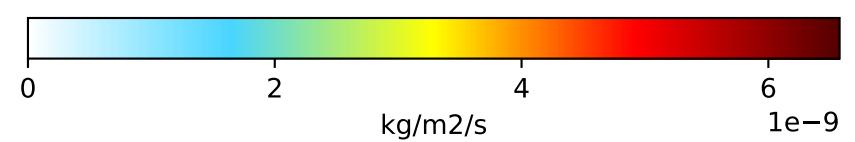
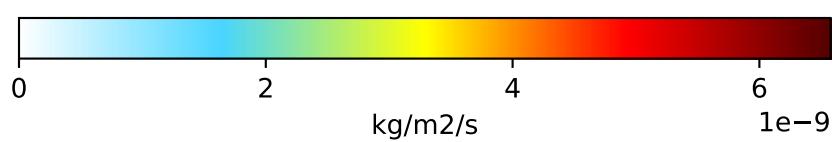
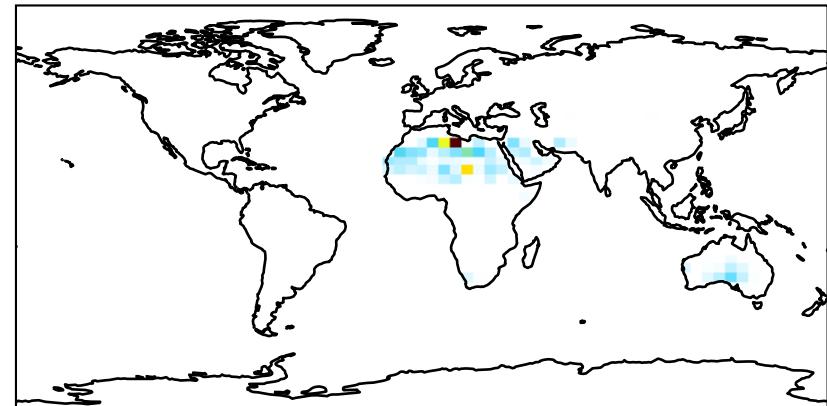
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisDST4\_Natural (Jan2019)

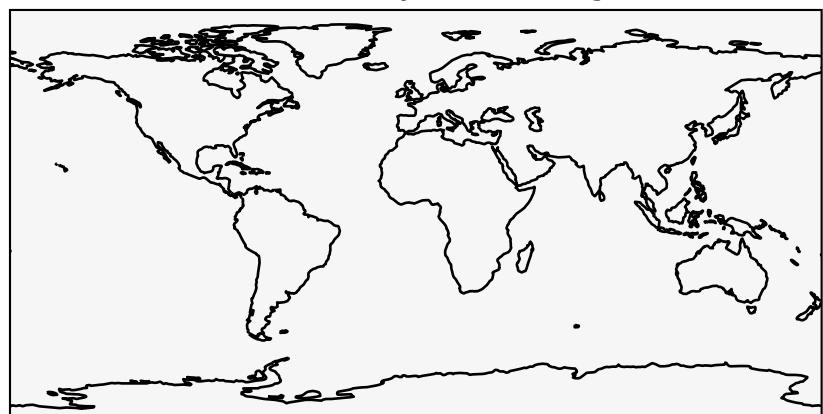
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0

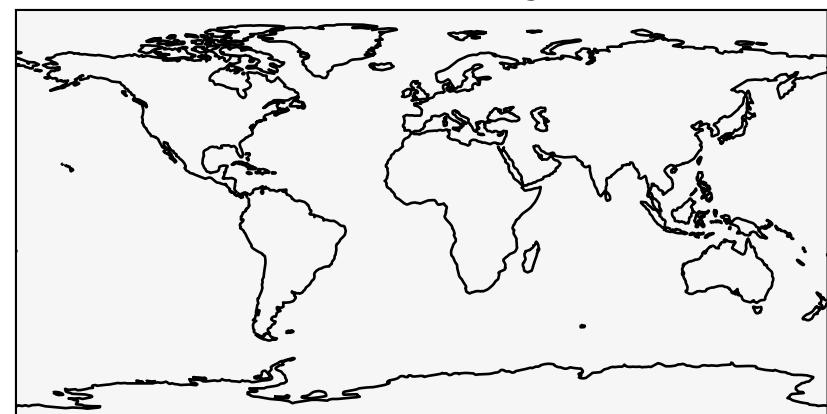


Difference  
Dev - Ref, Dynamic Range



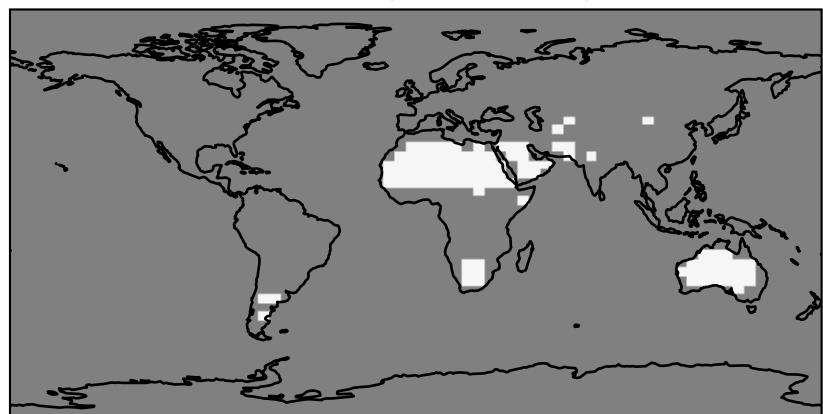
Zero throughout domain  
kg/m<sup>2</sup>/s

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



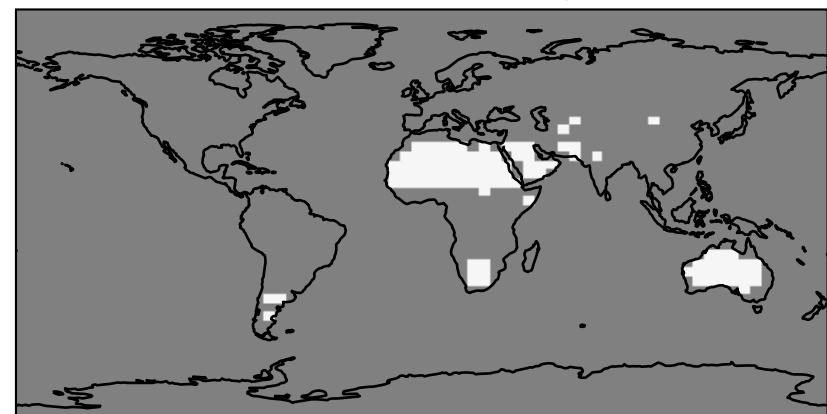
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



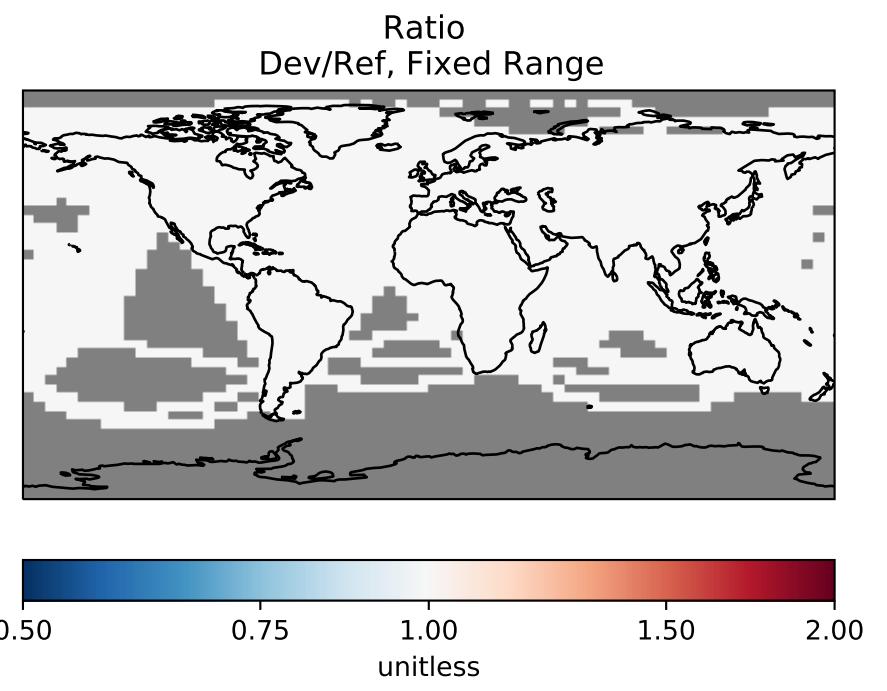
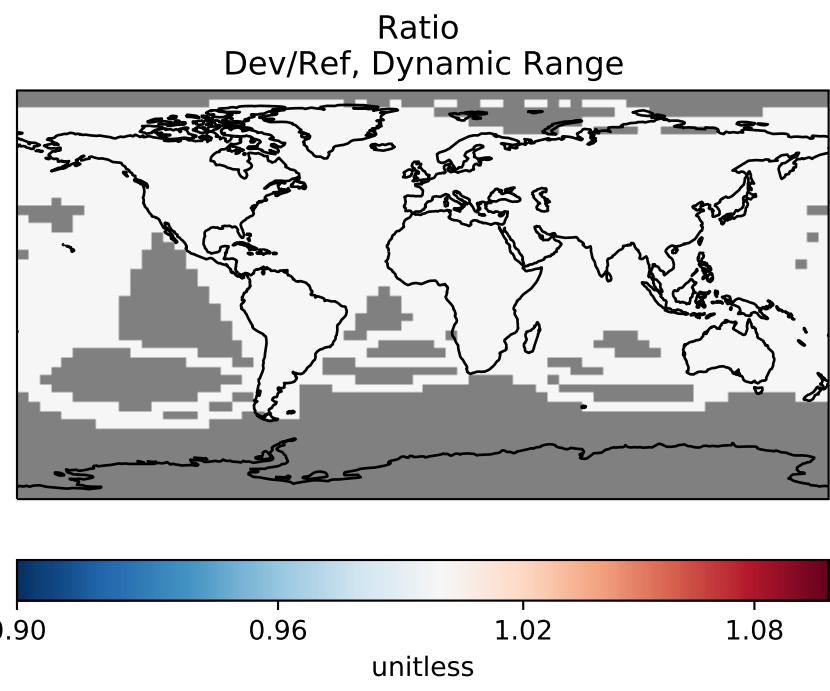
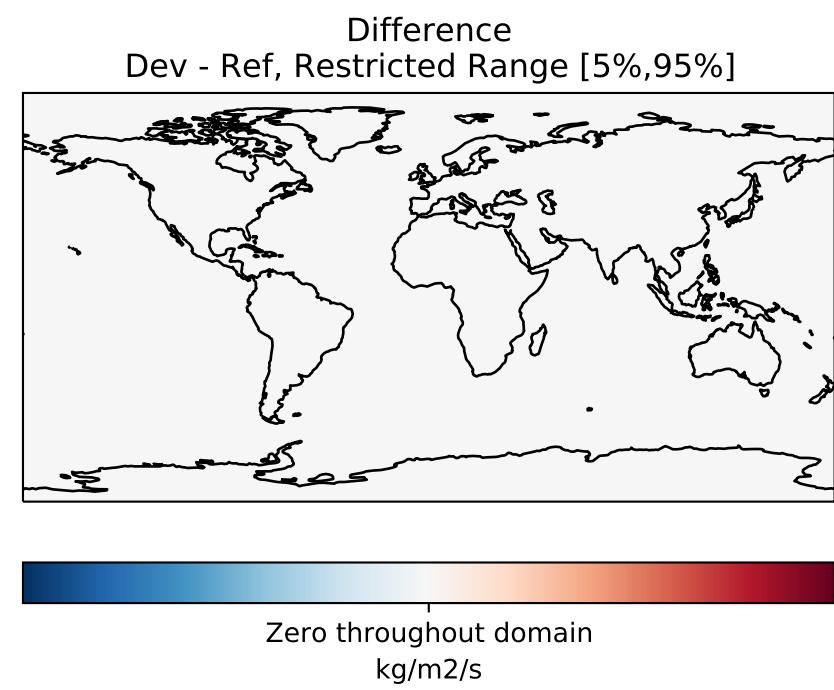
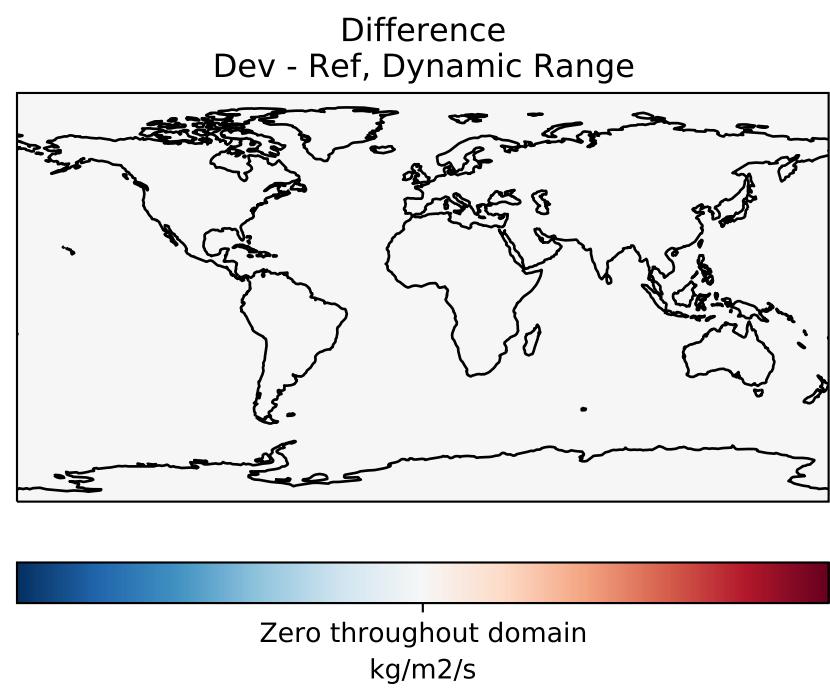
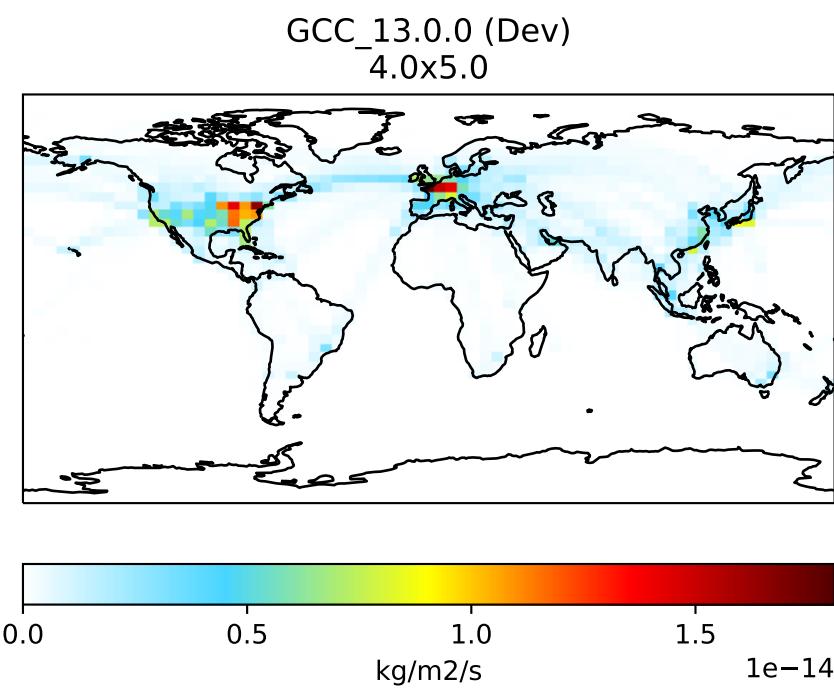
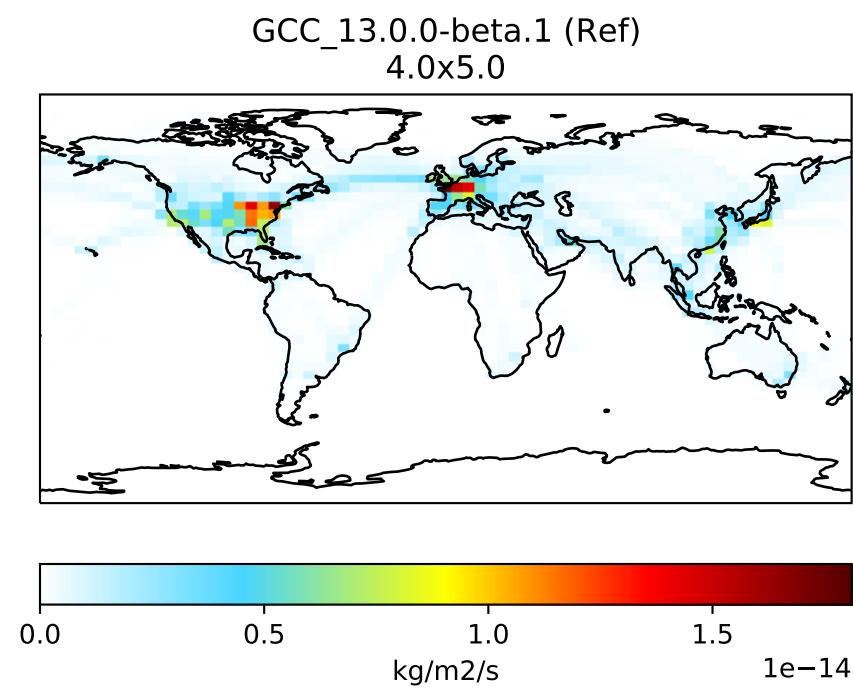
0.90 0.96 1.02 1.08  
unitless

Ratio  
Dev/Ref, Fixed Range



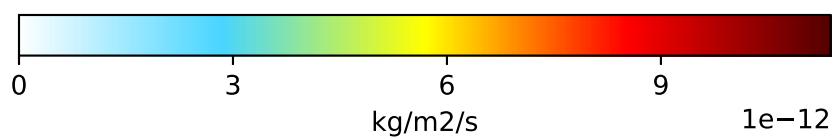
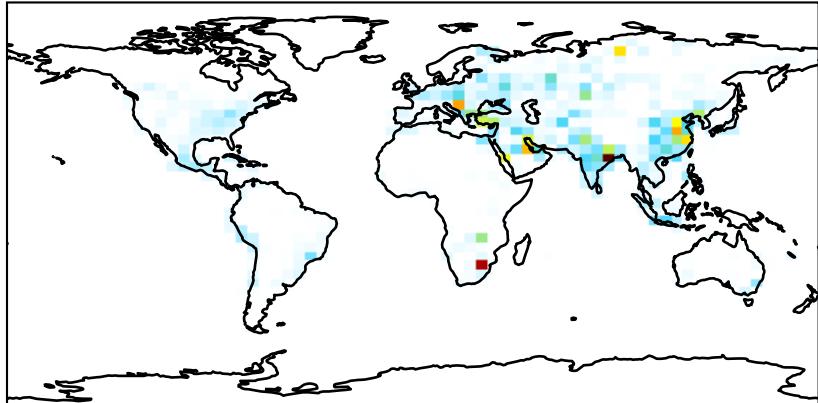
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisSO4\_Aircraft (Jan2019)

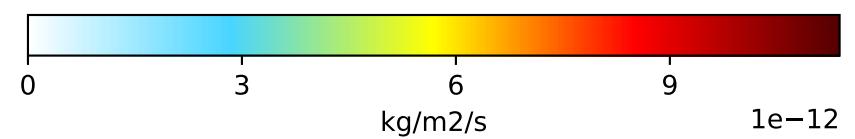
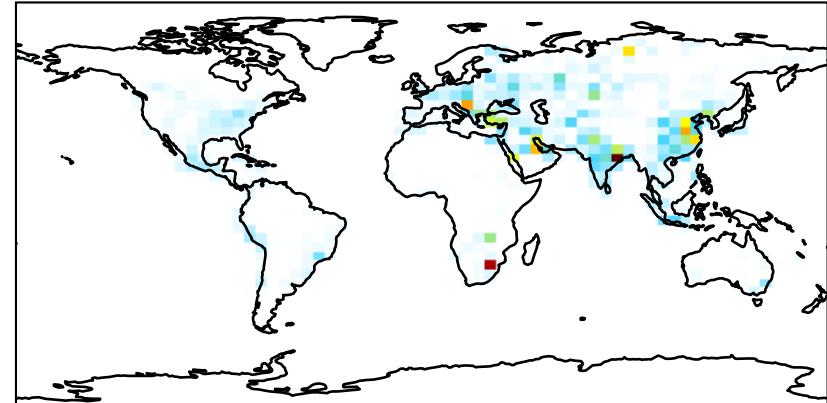


# EmisSO4\_Anthro (Jan2019)

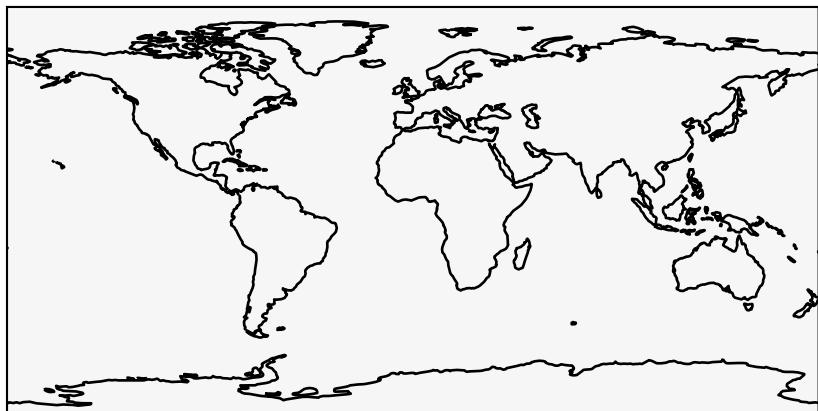
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0

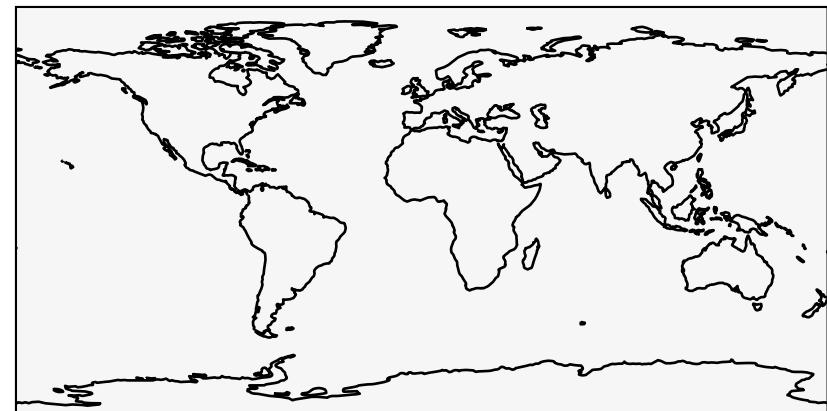


Difference  
Dev - Ref, Dynamic Range



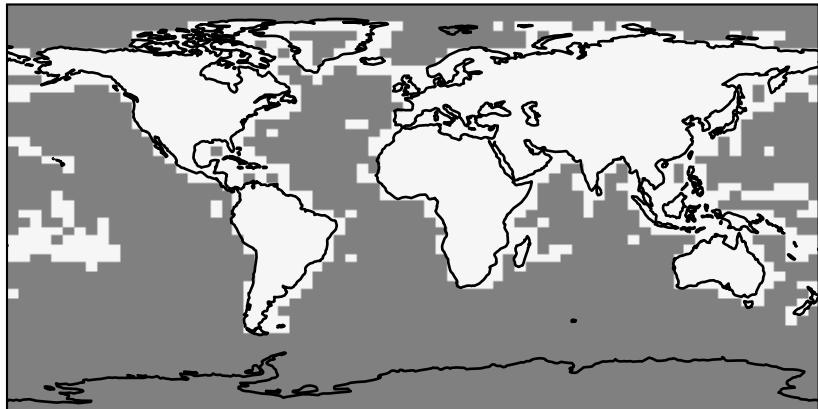
Zero throughout domain  
kg/m<sup>2</sup>/s

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



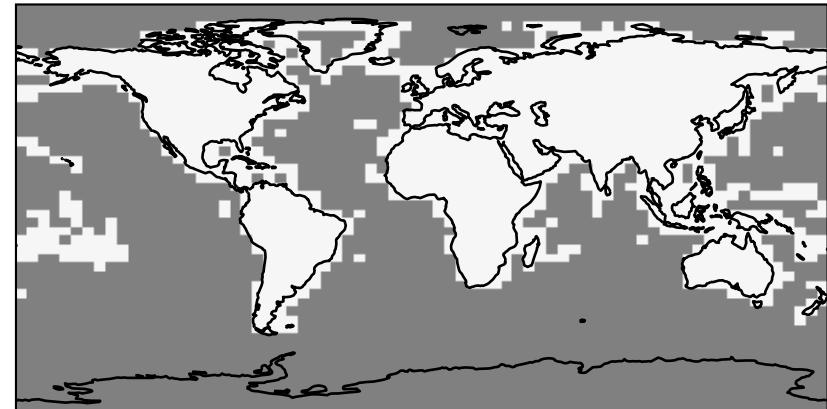
Zero throughout domain  
kg/m<sup>2</sup>/s

Ratio  
Dev/Ref, Dynamic Range



0.90 0.96 1.02 1.08  
unitless

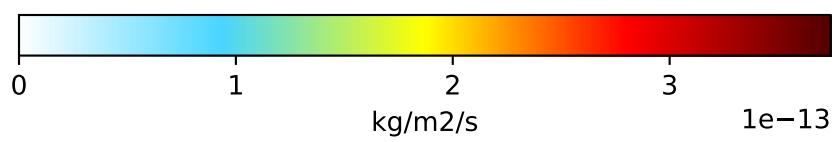
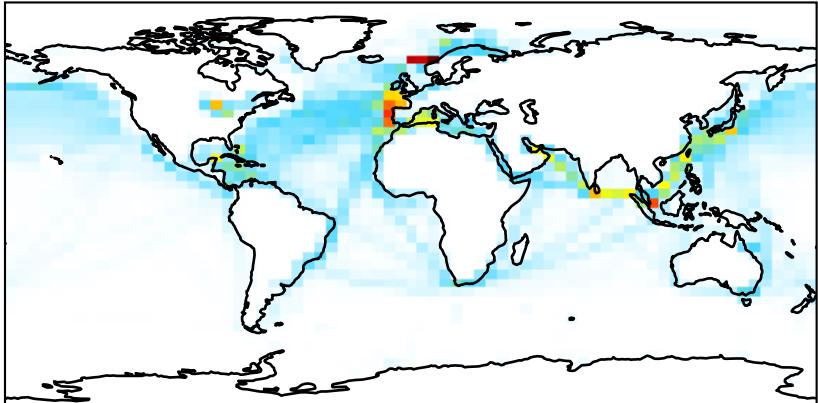
Ratio  
Dev/Ref, Fixed Range



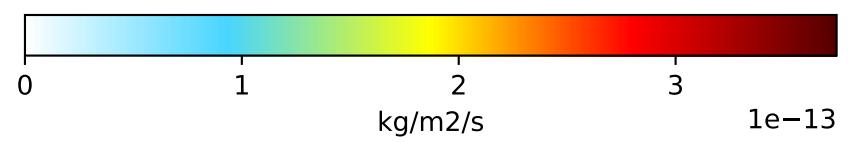
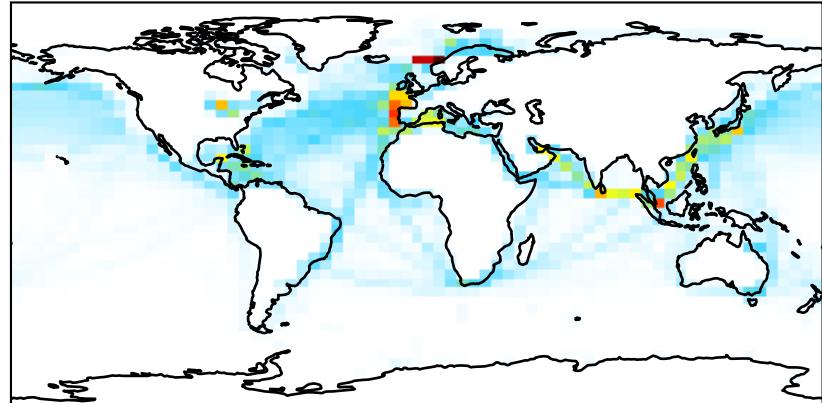
0.50 0.75 1.00 1.50 2.00  
unitless

# EmisSO4\_Ship (Jan2019)

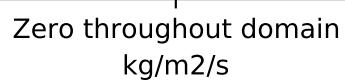
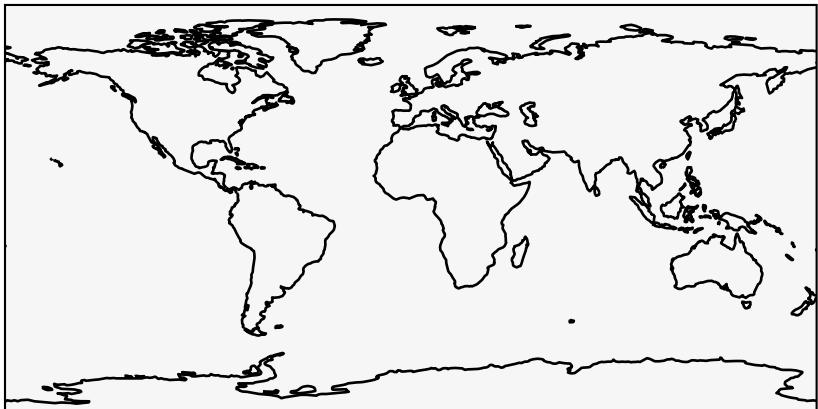
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



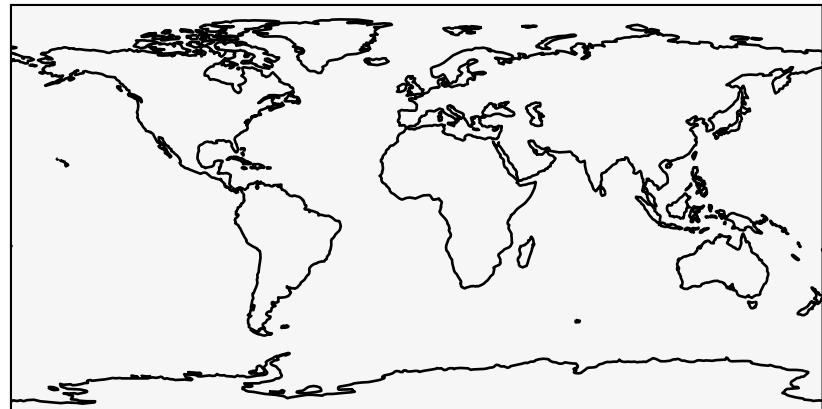
GCC\_13.0.0 (Dev)  
4.0x5.0



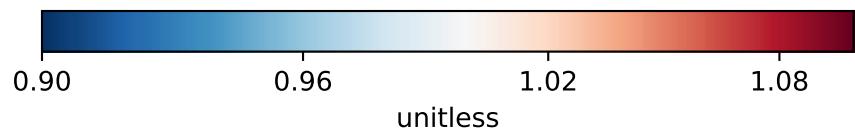
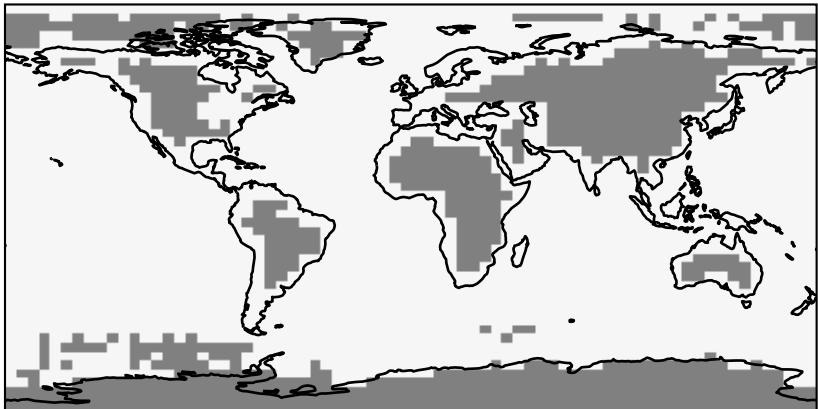
Difference  
Dev - Ref, Dynamic Range



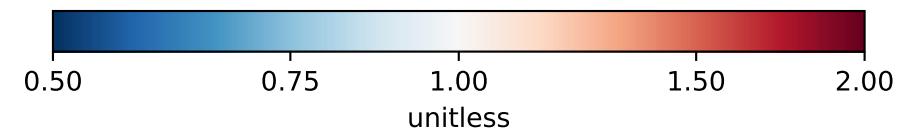
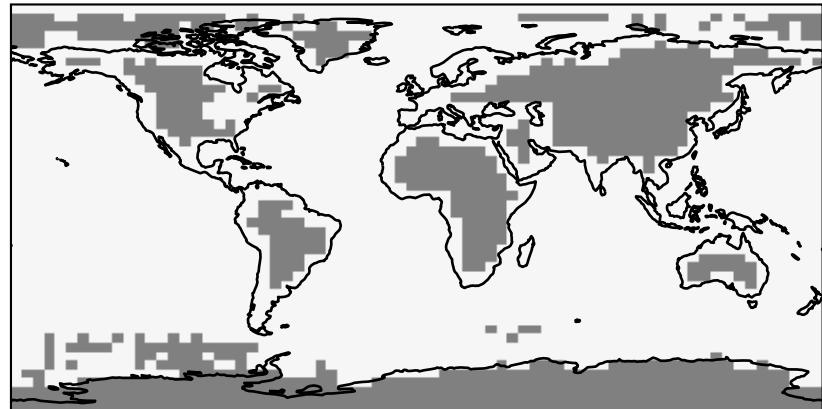
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

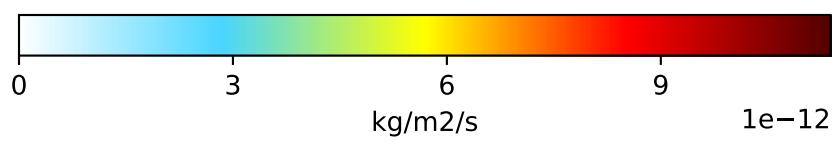
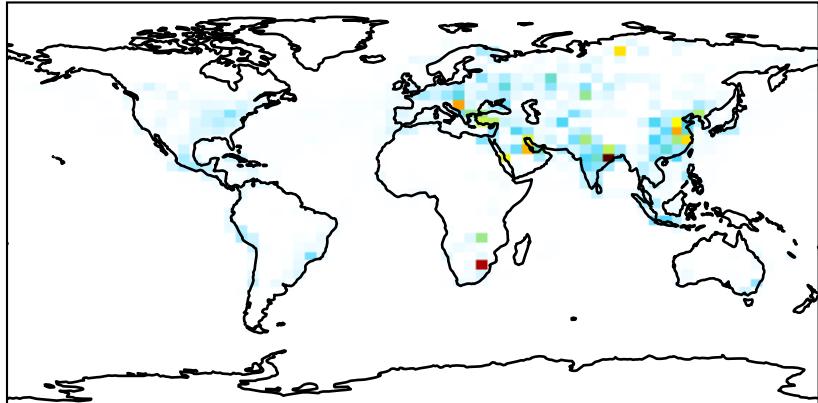


Ratio  
Dev/Ref, Fixed Range

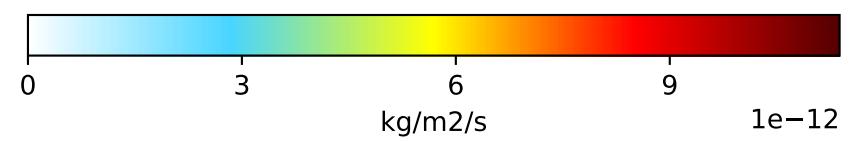
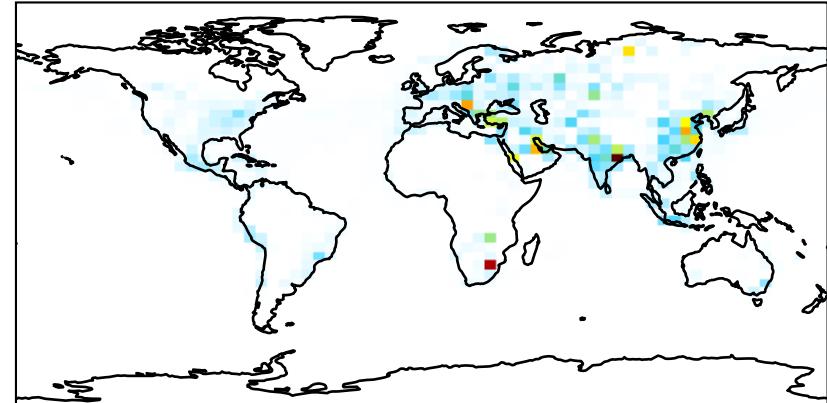


# EmisSO4\_Total (Jan2019)

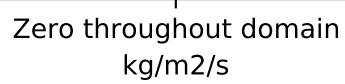
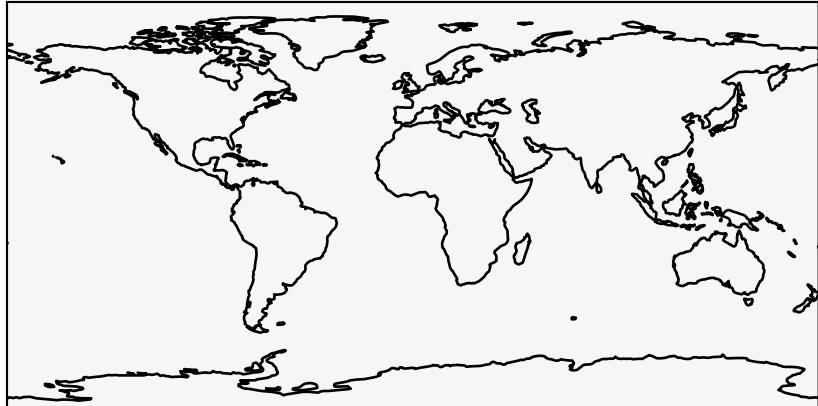
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



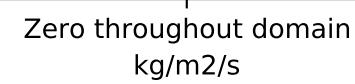
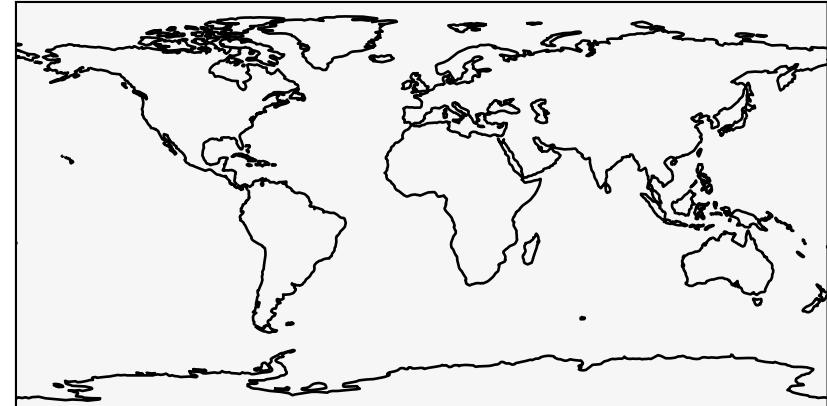
GCC\_13.0.0 (Dev)  
4.0x5.0



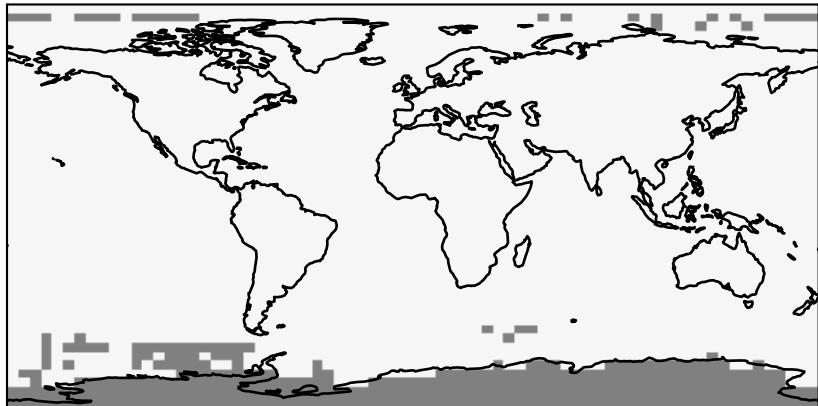
Difference  
Dev - Ref, Dynamic Range



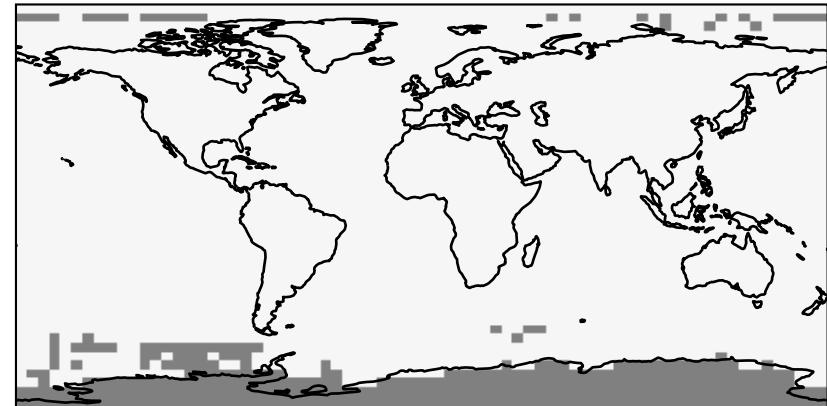
Difference  
Dev - Ref, Restricted Range [5%,95%]



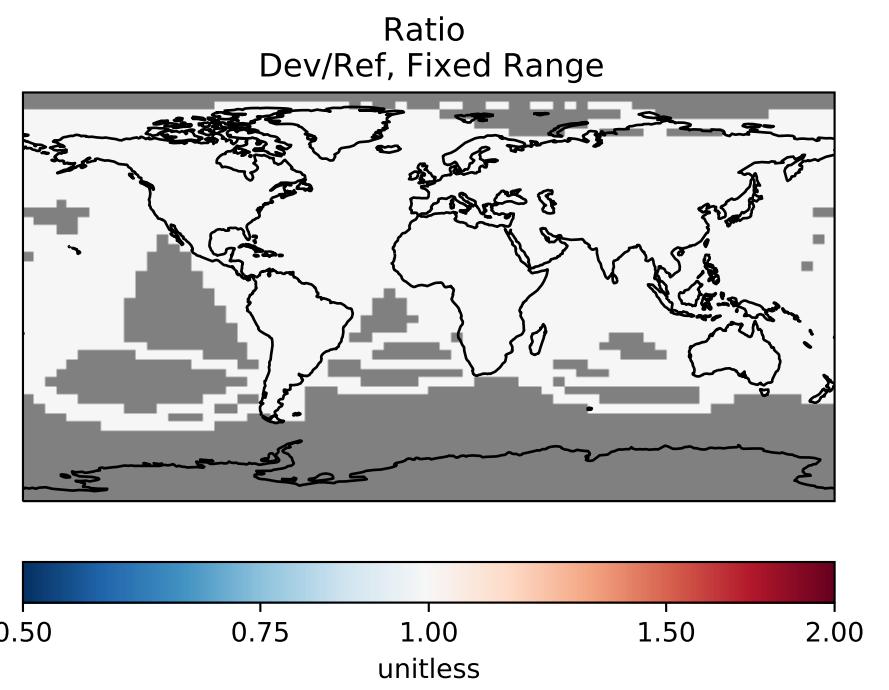
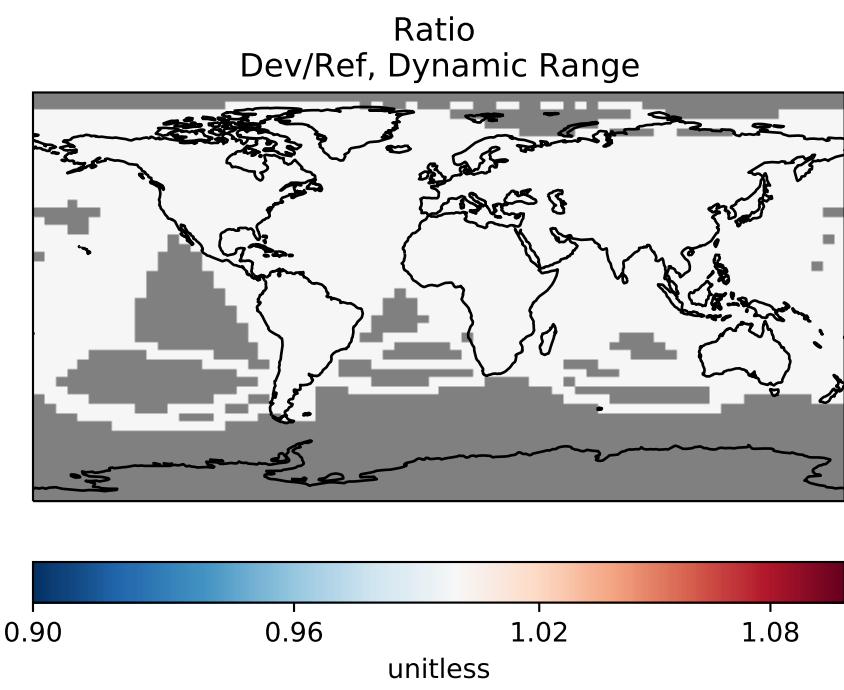
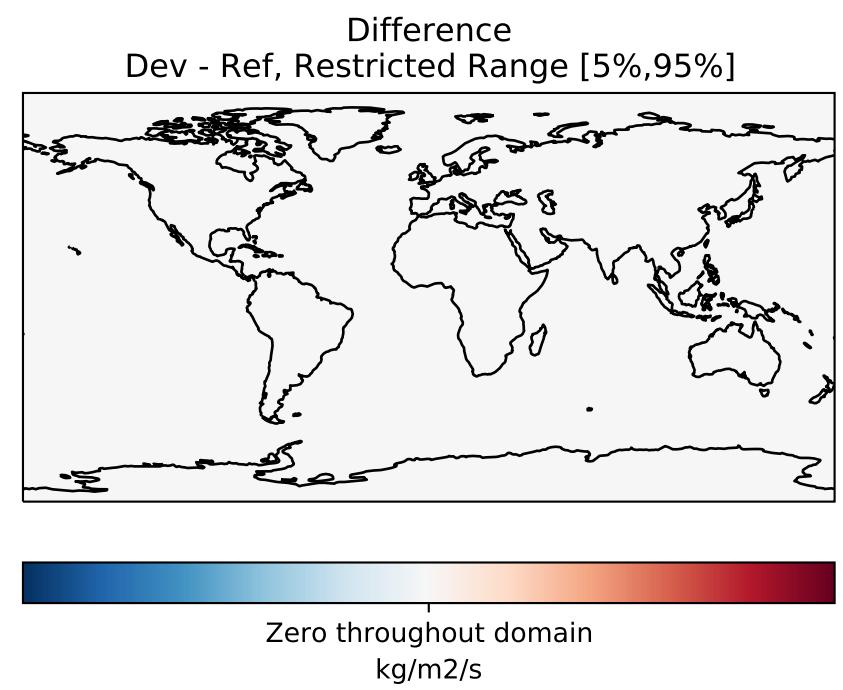
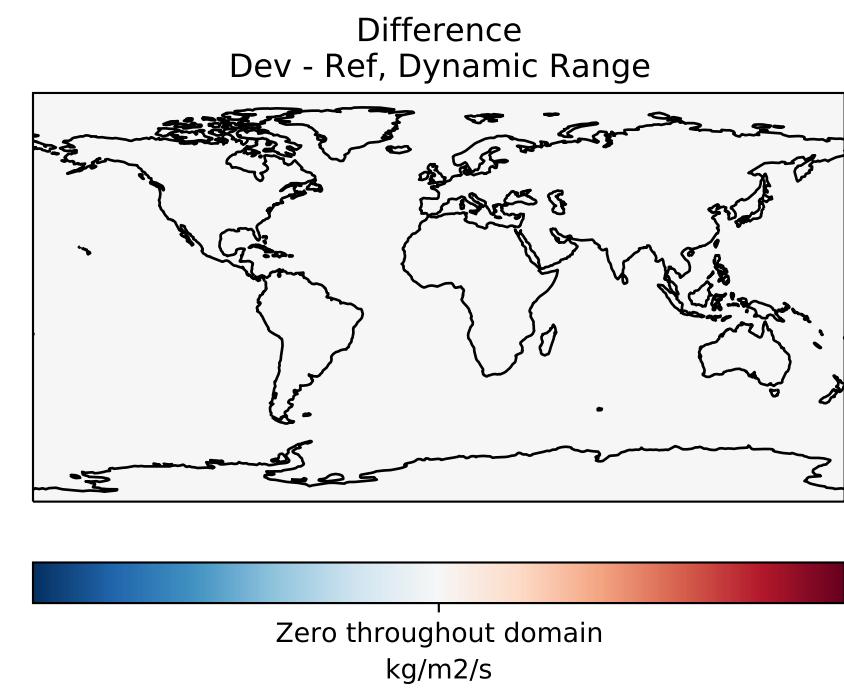
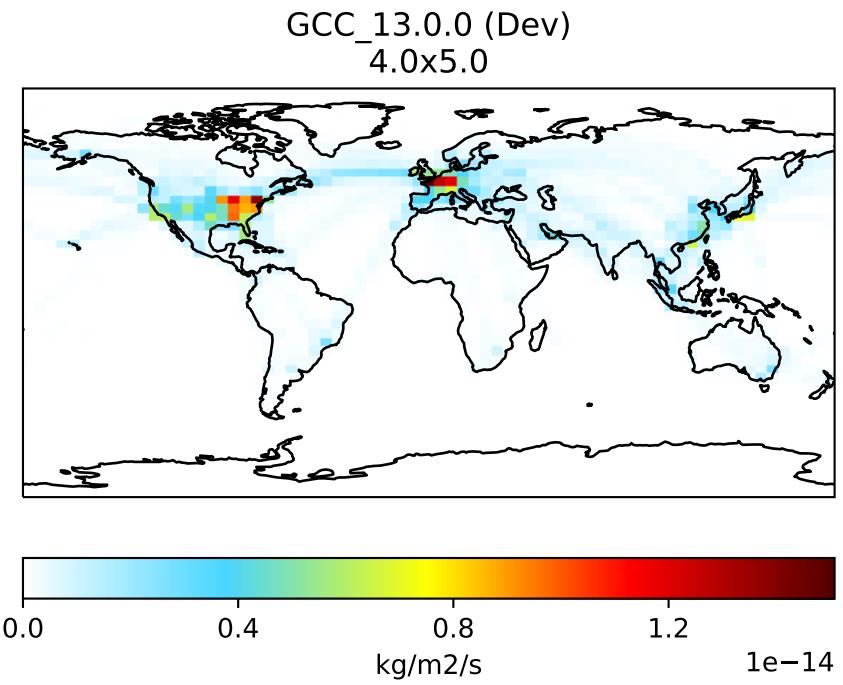
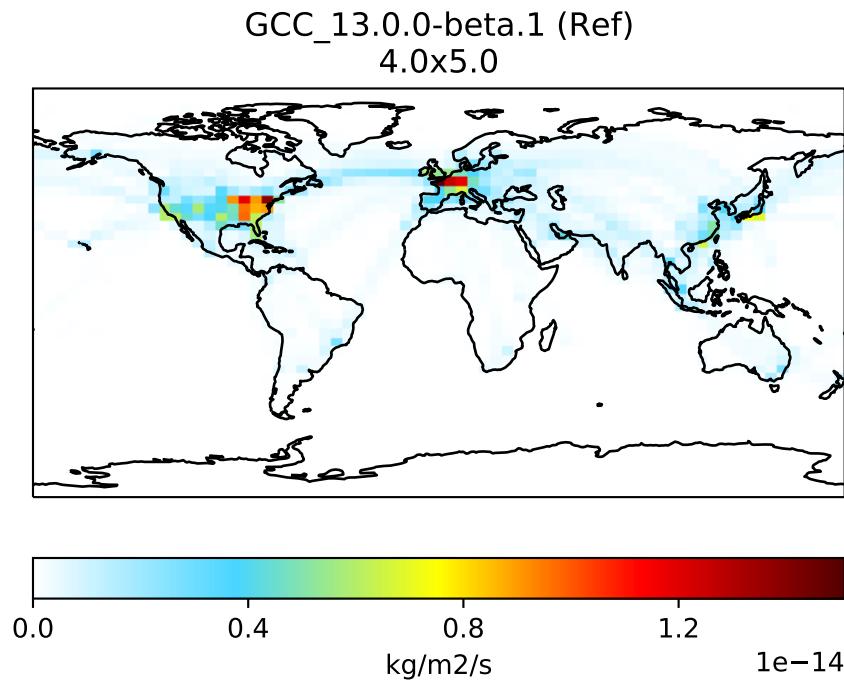
Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

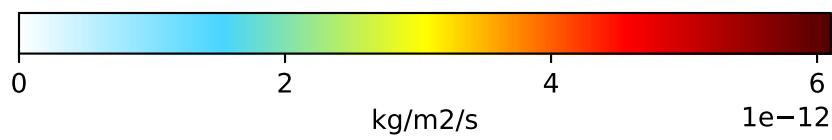
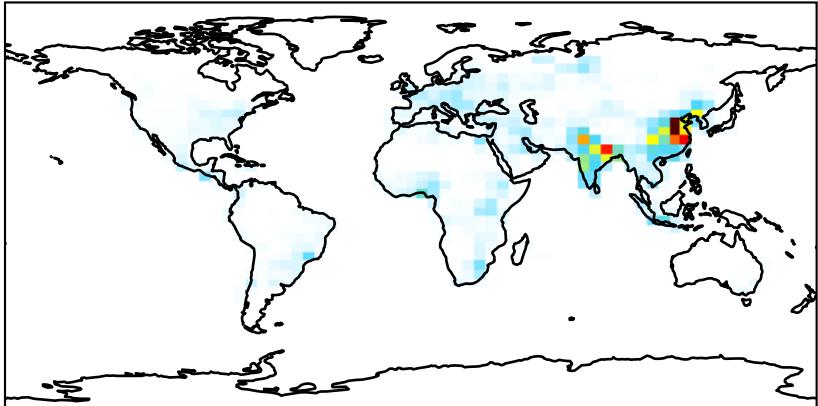


# EmisBCPI\_Aircraft (Jan2019)

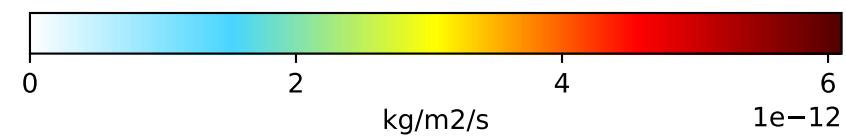
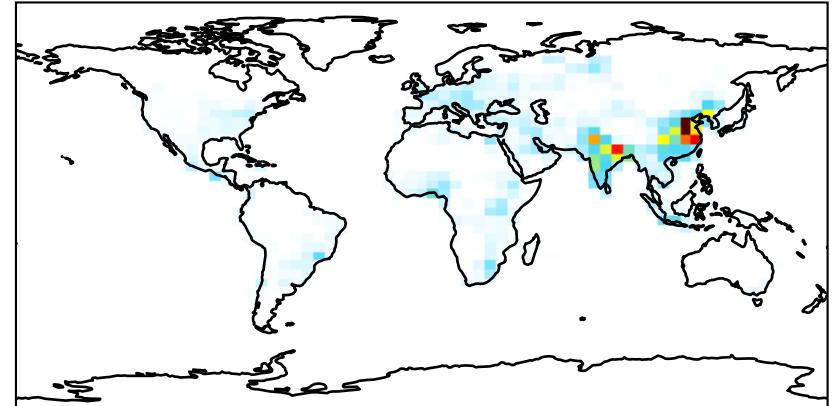


# EmisBCPI\_Anthro (Jan2019)

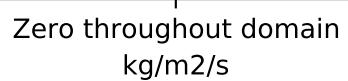
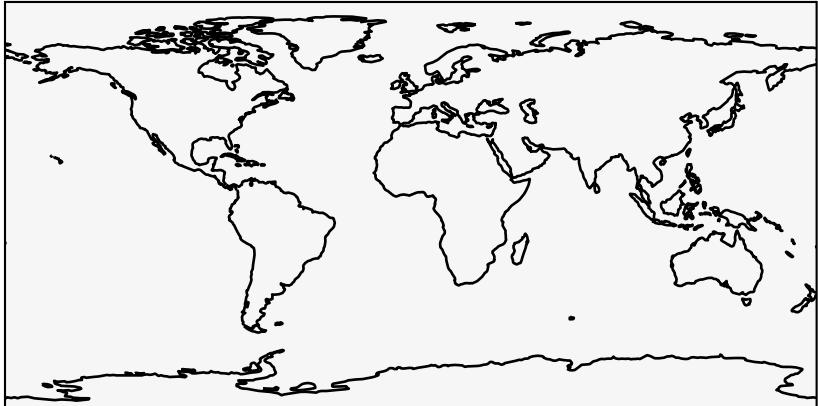
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



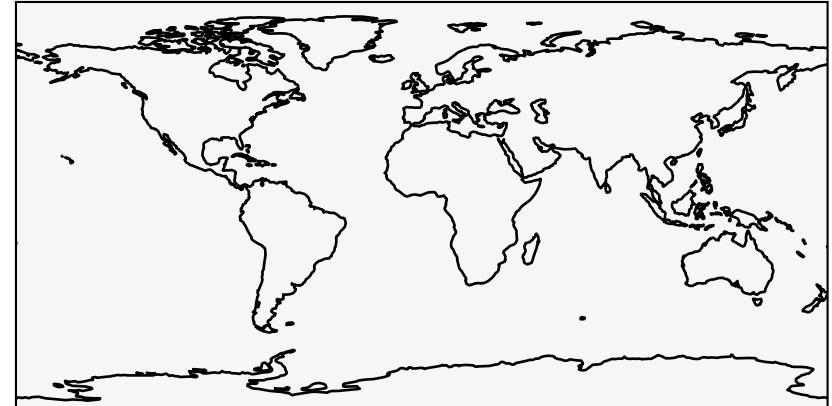
GCC\_13.0.0 (Dev)  
4.0x5.0



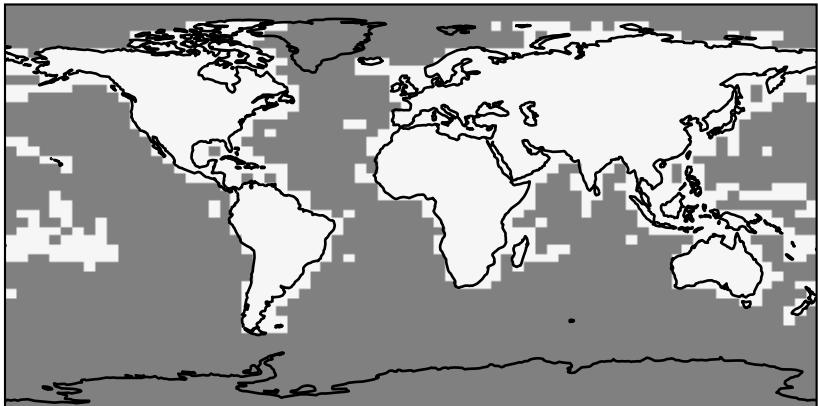
Difference  
Dev - Ref, Dynamic Range



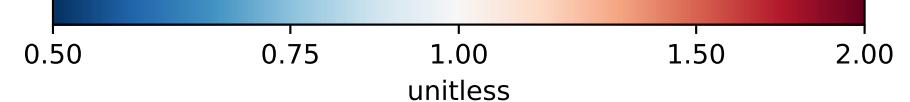
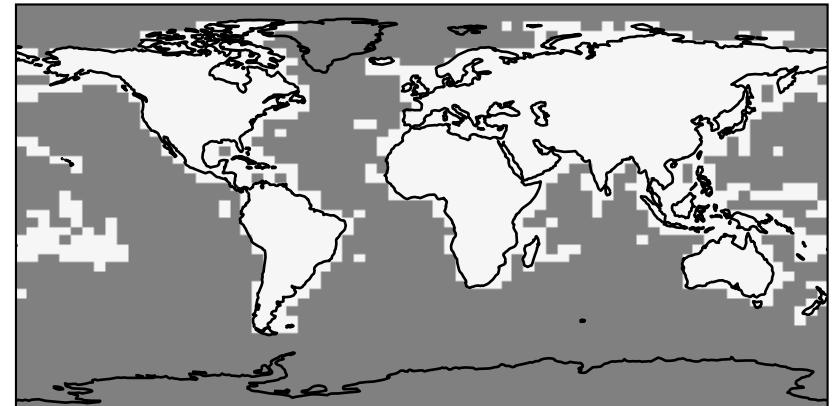
Difference  
Dev - Ref, Restricted Range [5%,95%]



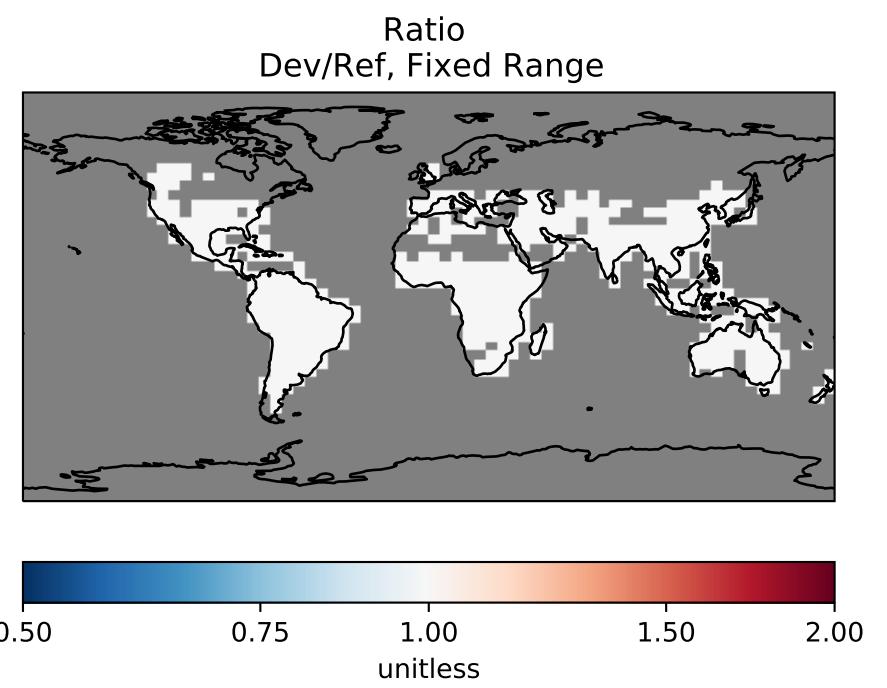
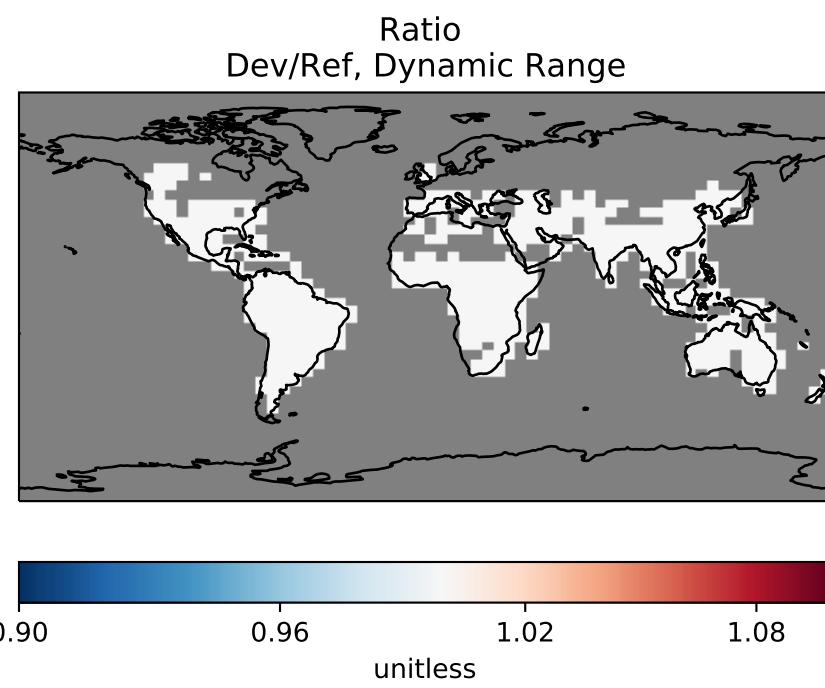
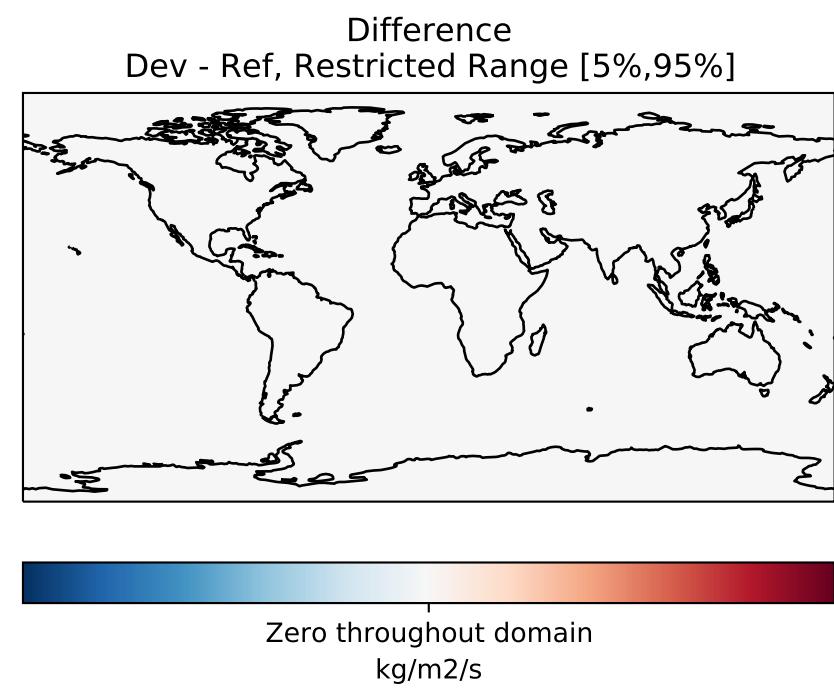
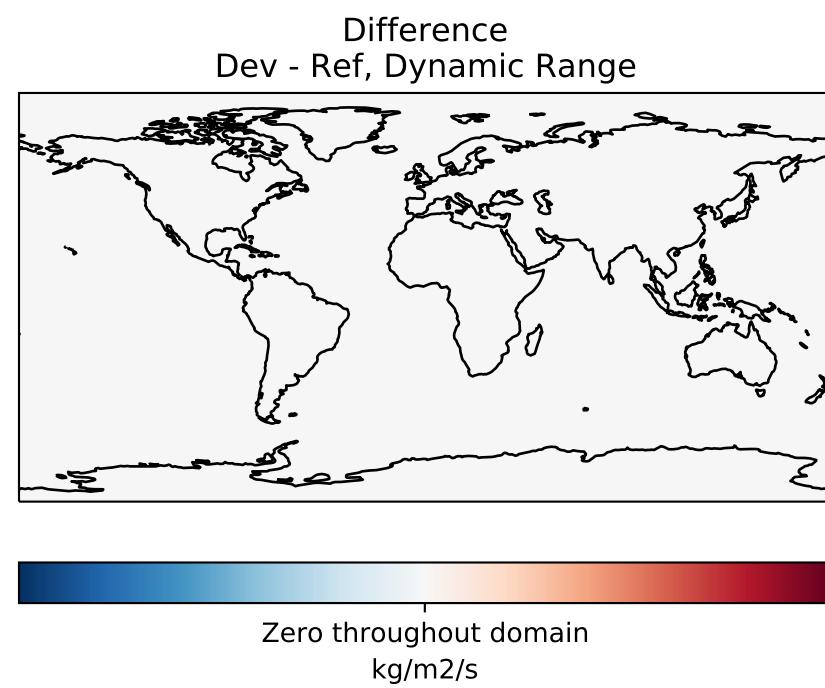
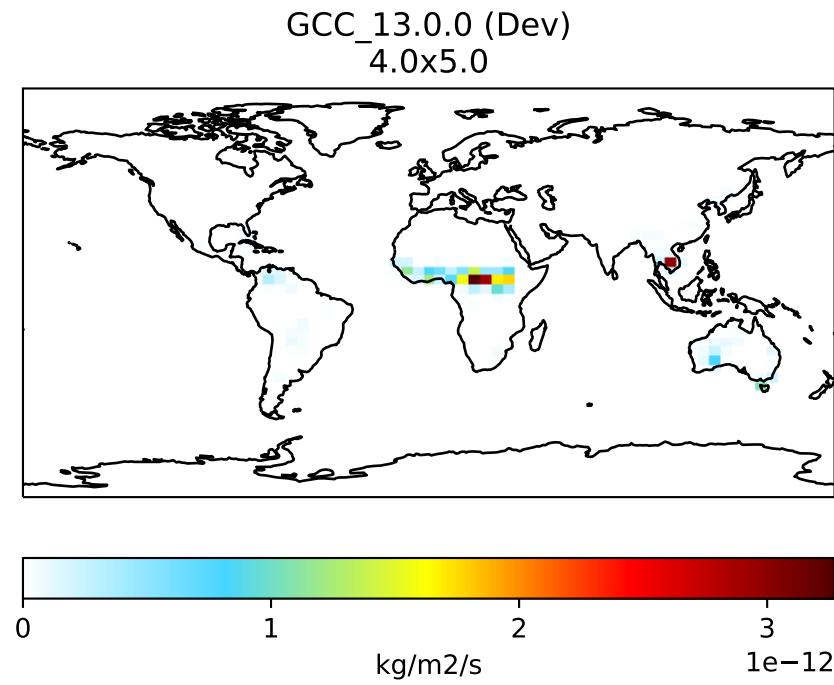
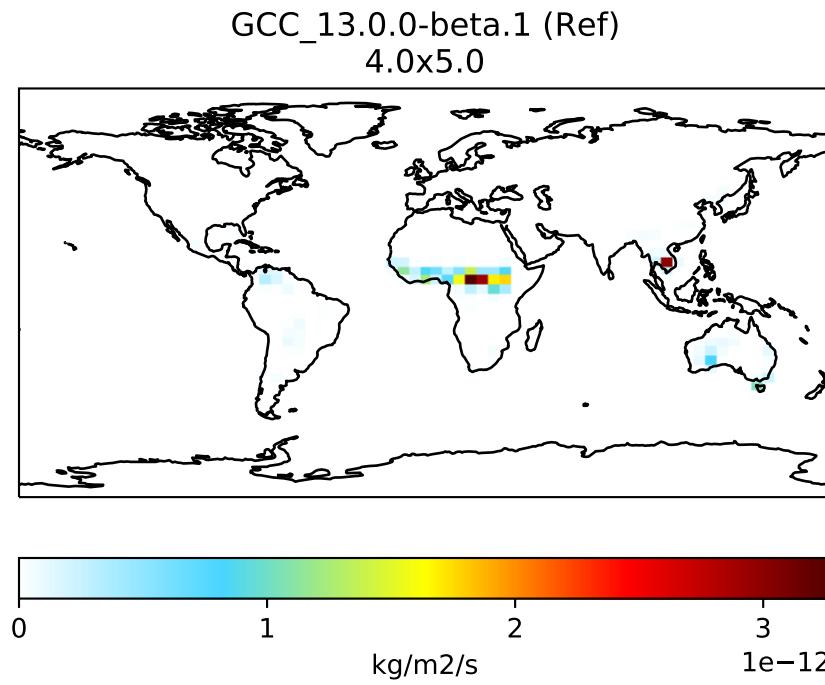
Ratio  
Dev/Ref, Dynamic Range



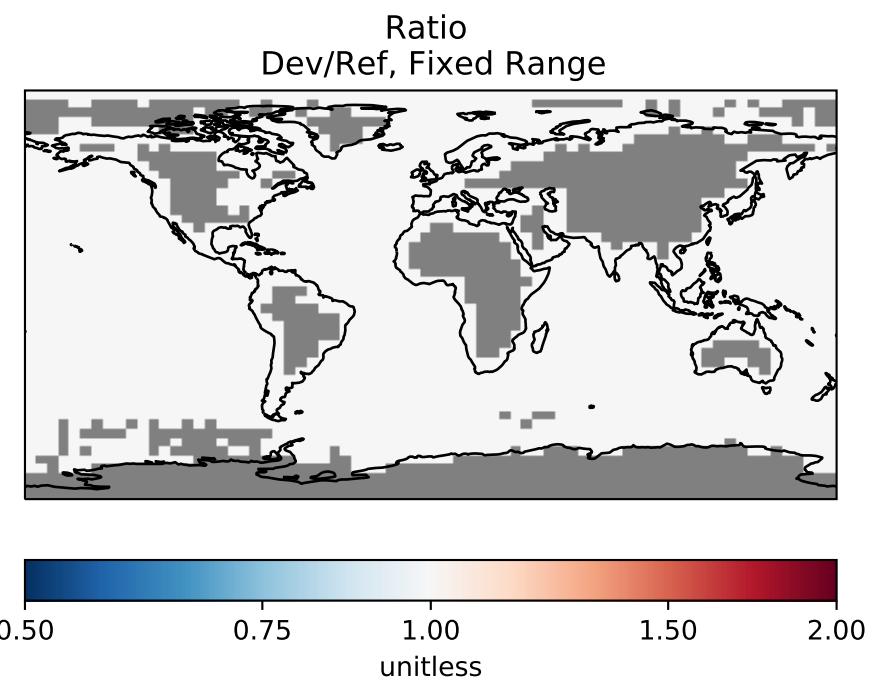
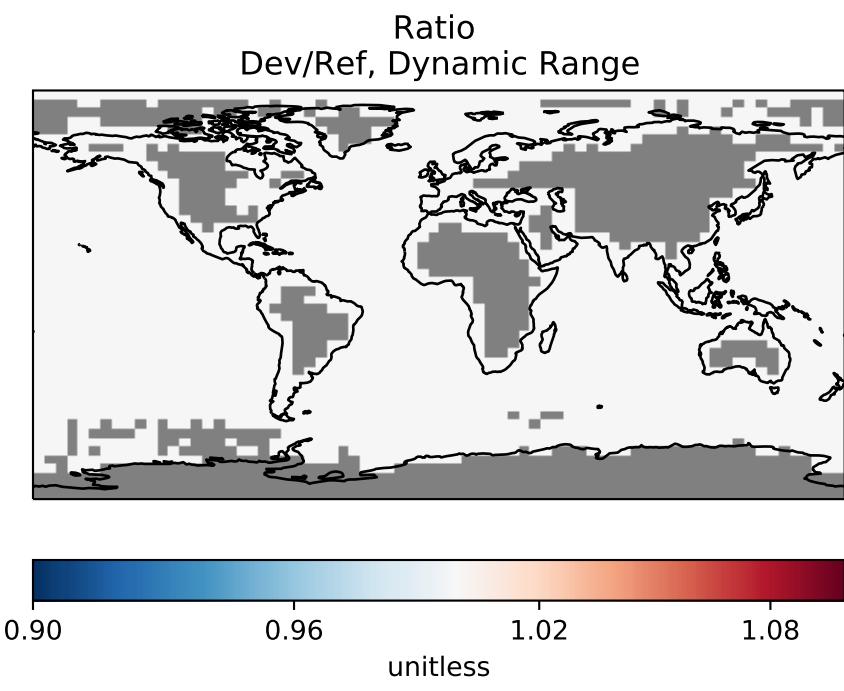
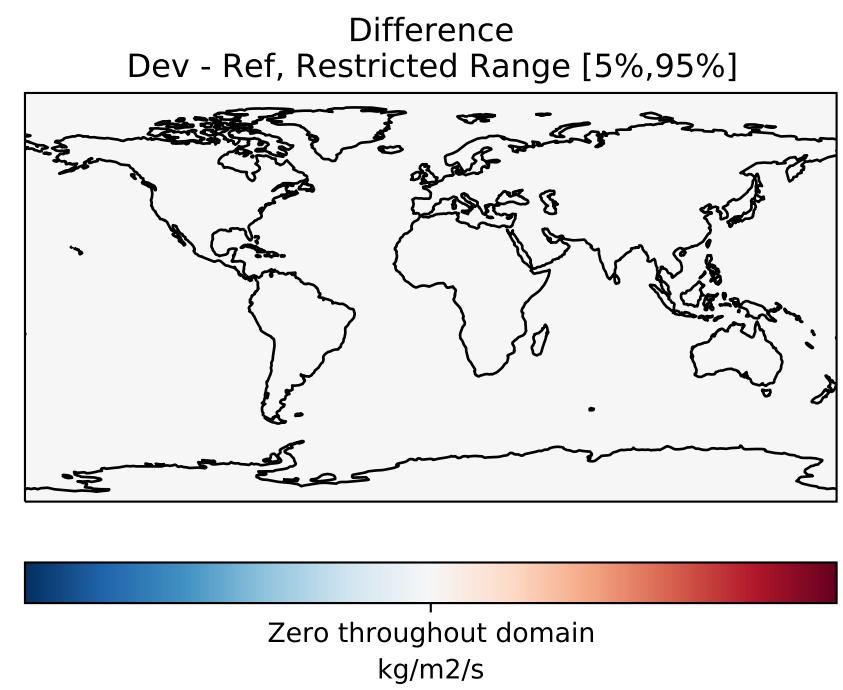
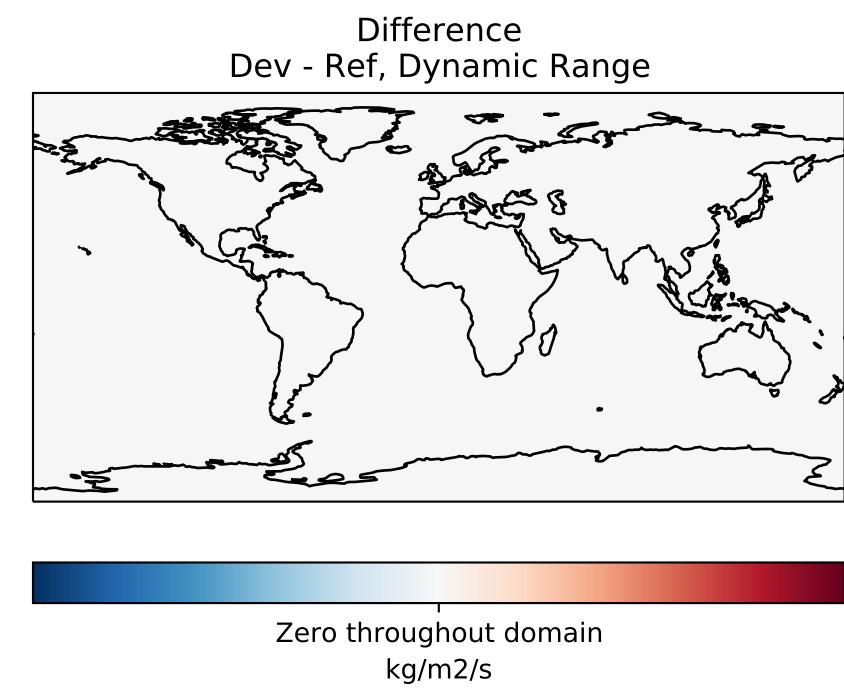
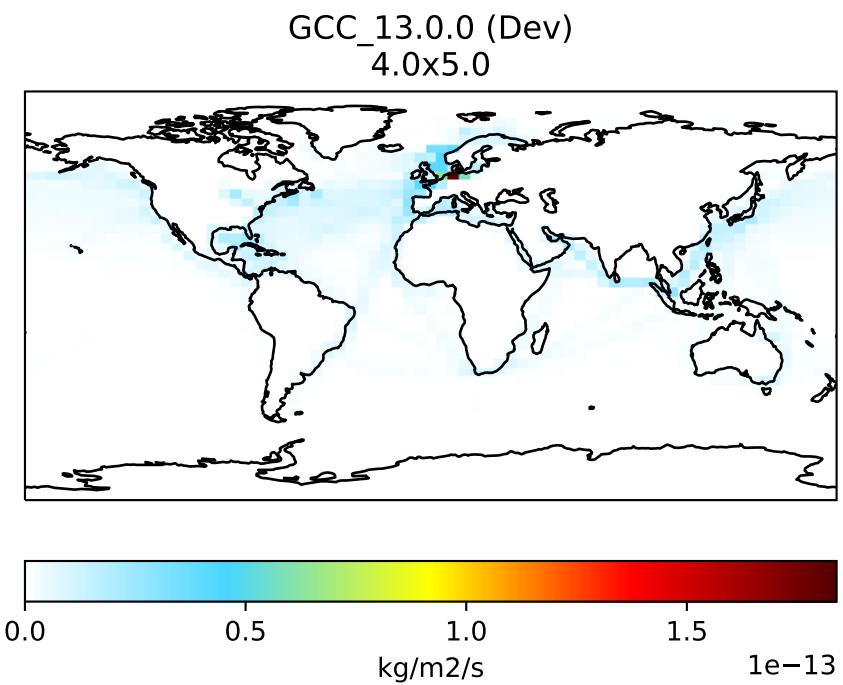
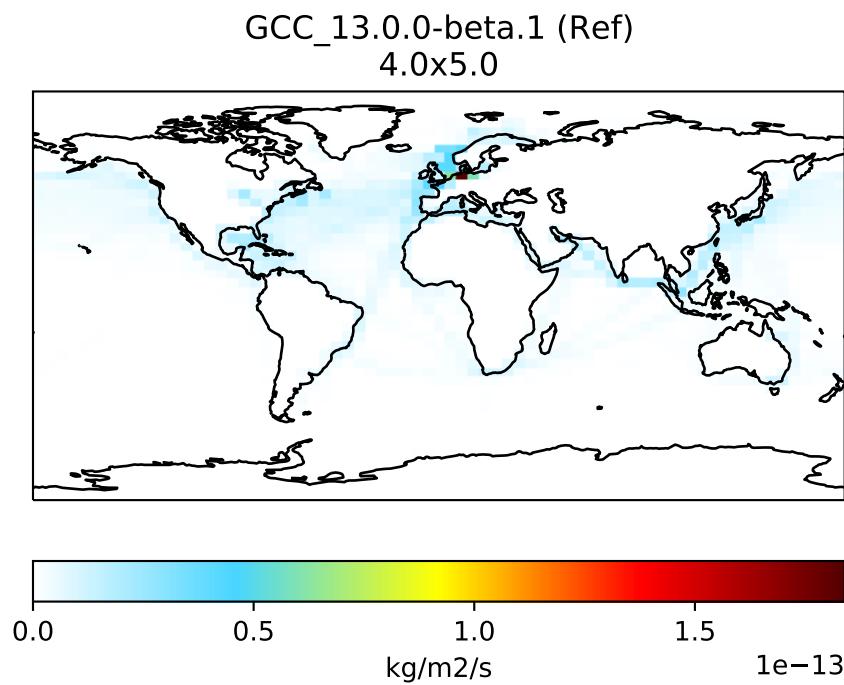
Ratio  
Dev/Ref, Fixed Range



# EmisBCPI\_BioBurn (Jan2019)

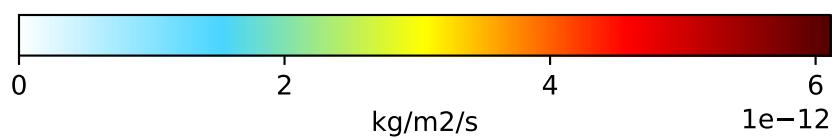
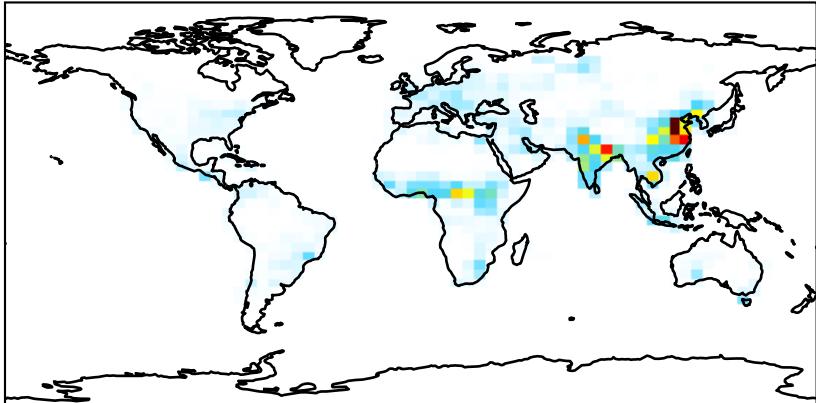


# EmisBCPI\_Ship (Jan2019)

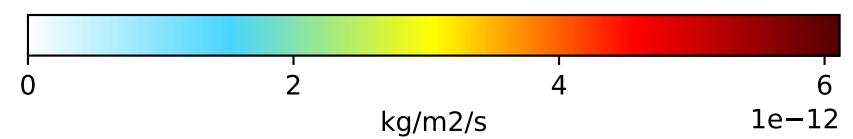
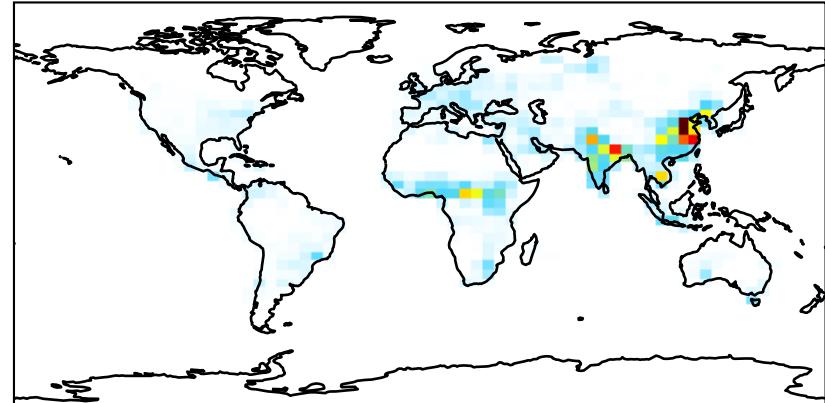


# EmisBCPI\_Total (Jan2019)

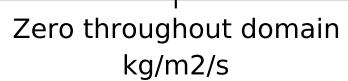
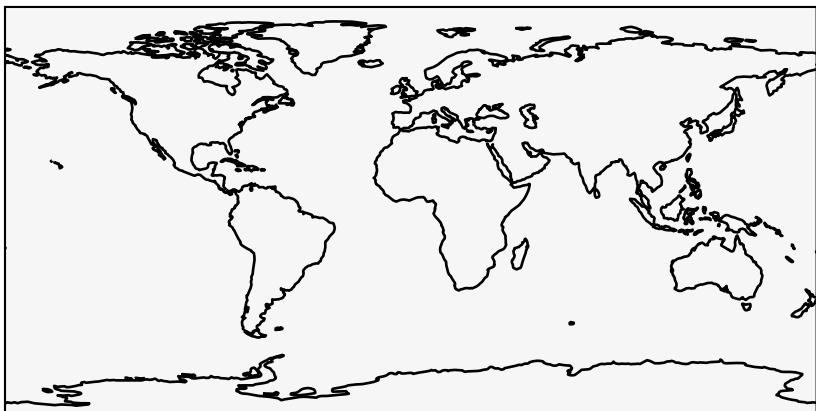
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



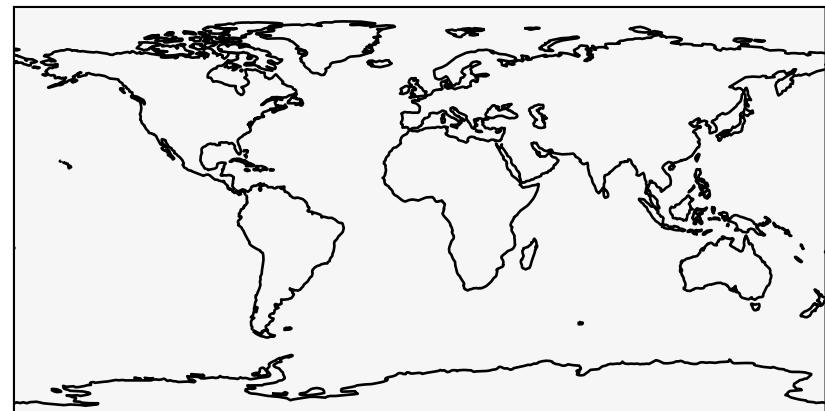
GCC\_13.0.0 (Dev)  
4.0x5.0



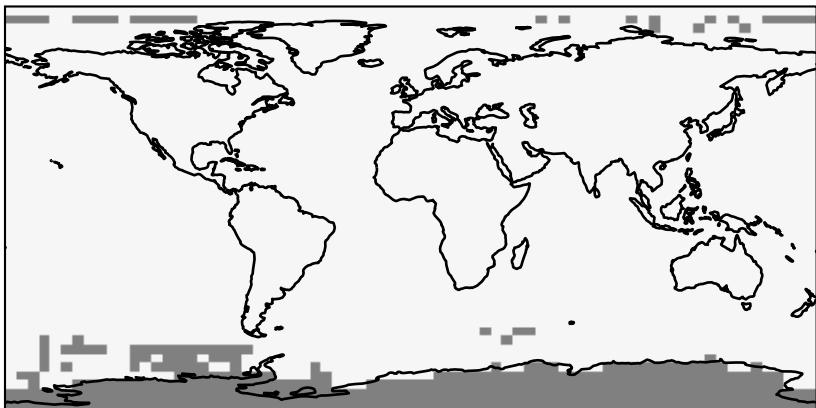
Difference  
Dev - Ref, Dynamic Range



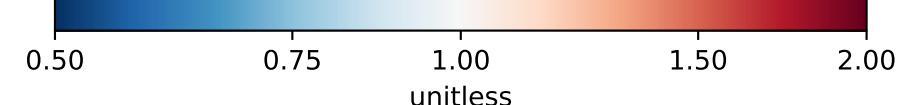
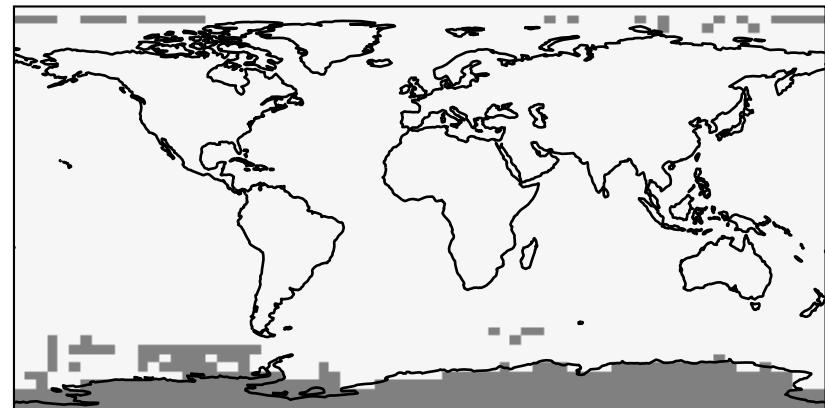
Difference  
Dev - Ref, Restricted Range [5%,95%]



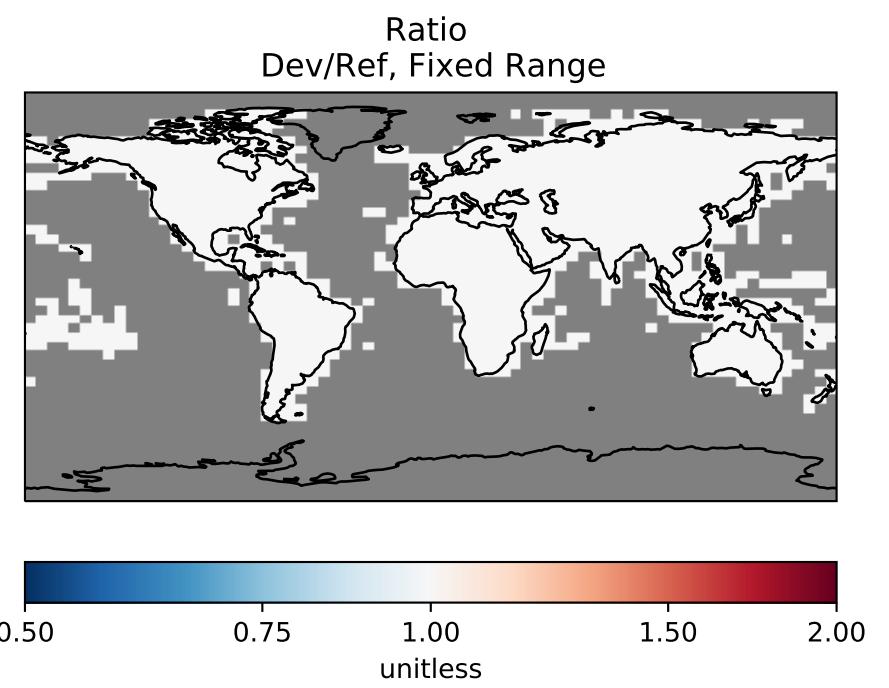
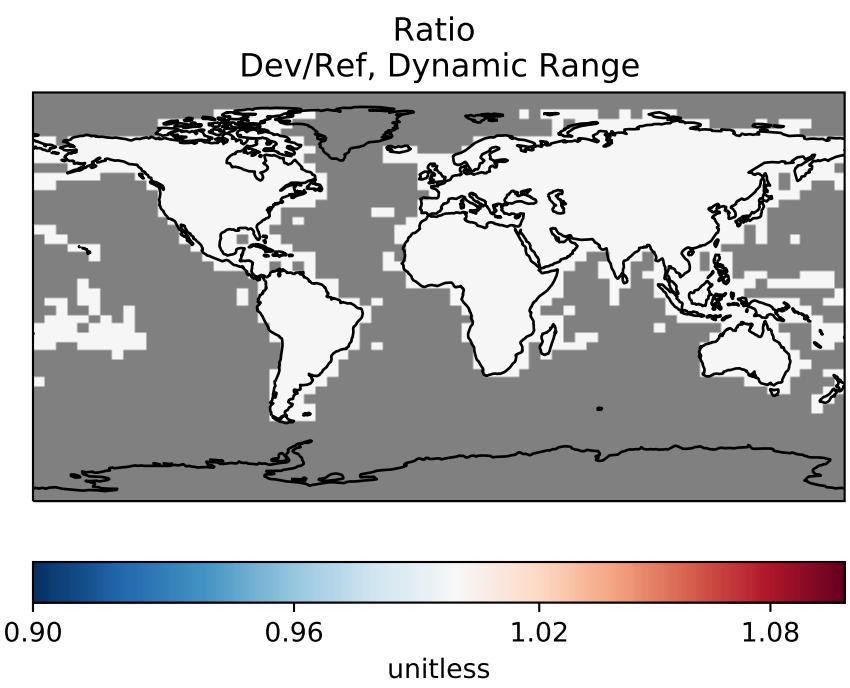
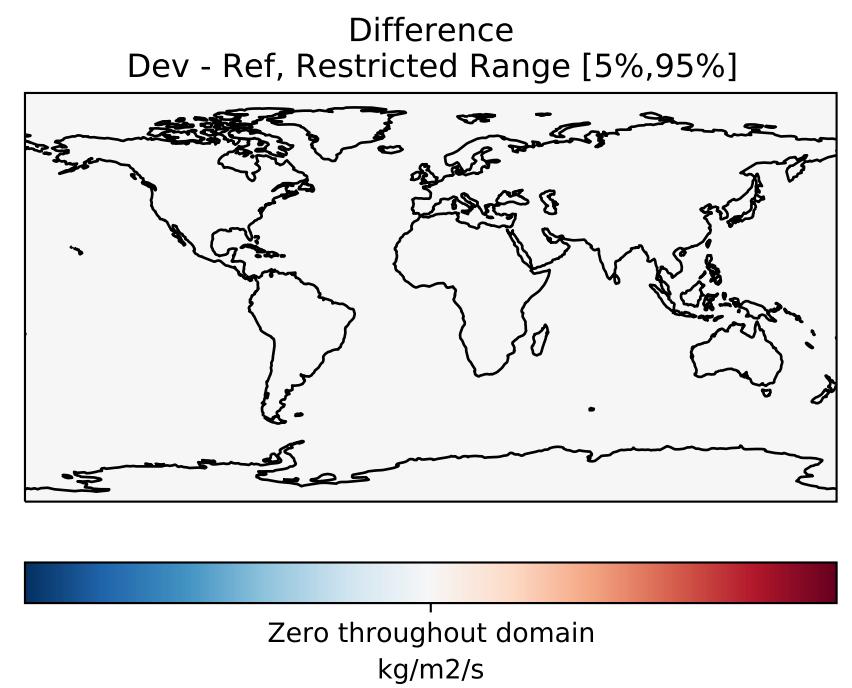
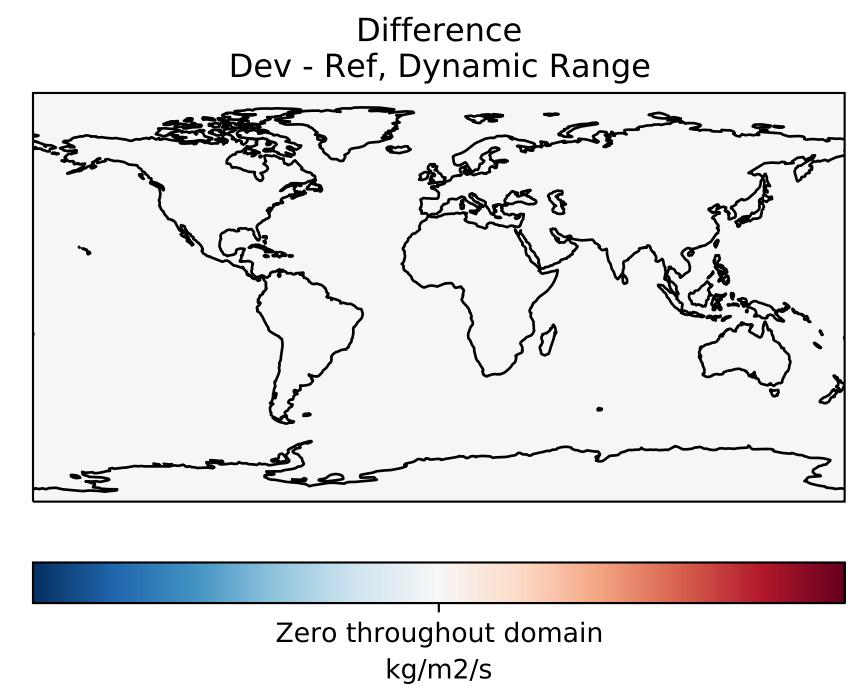
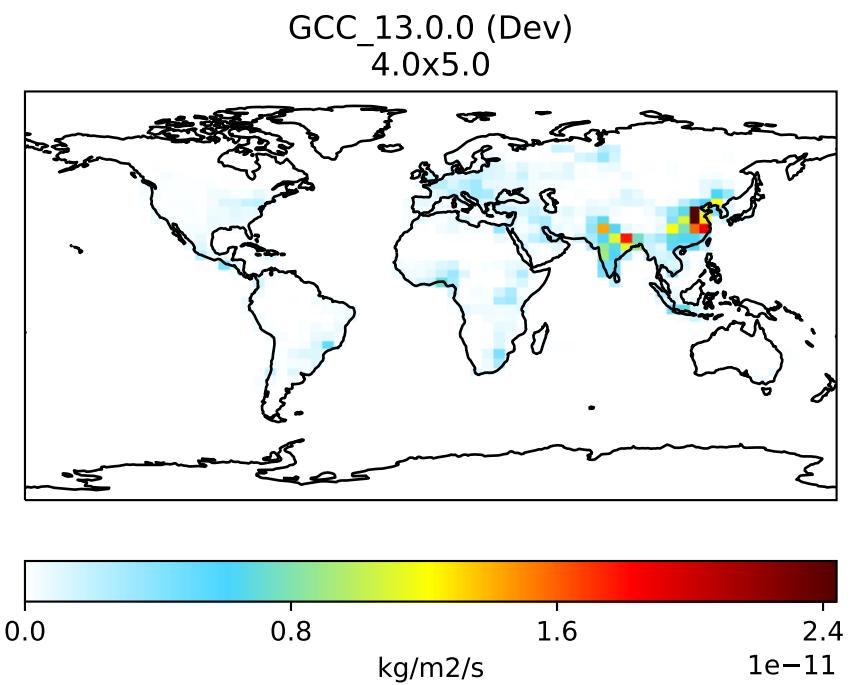
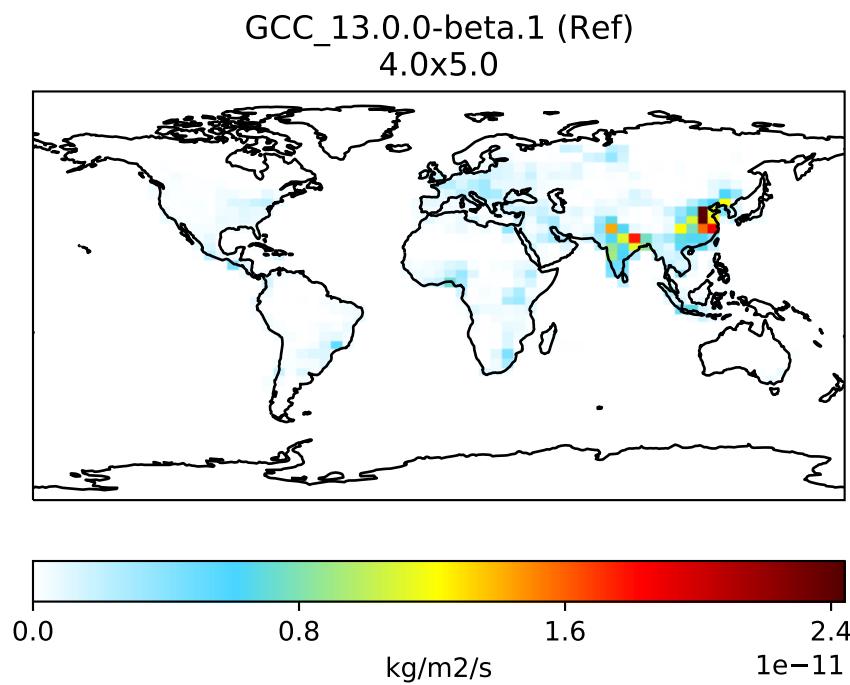
Ratio  
Dev/Ref, Dynamic Range



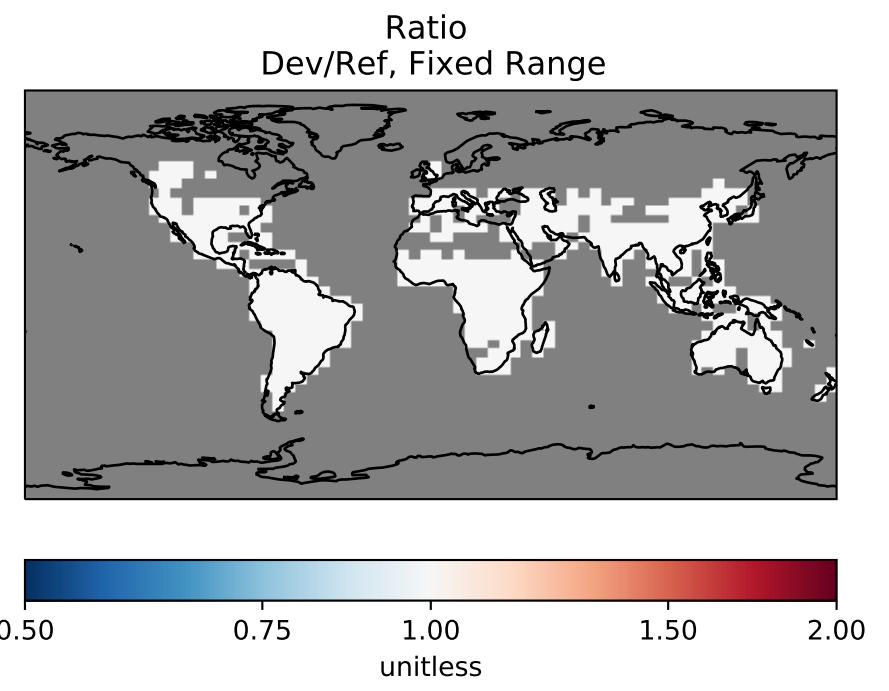
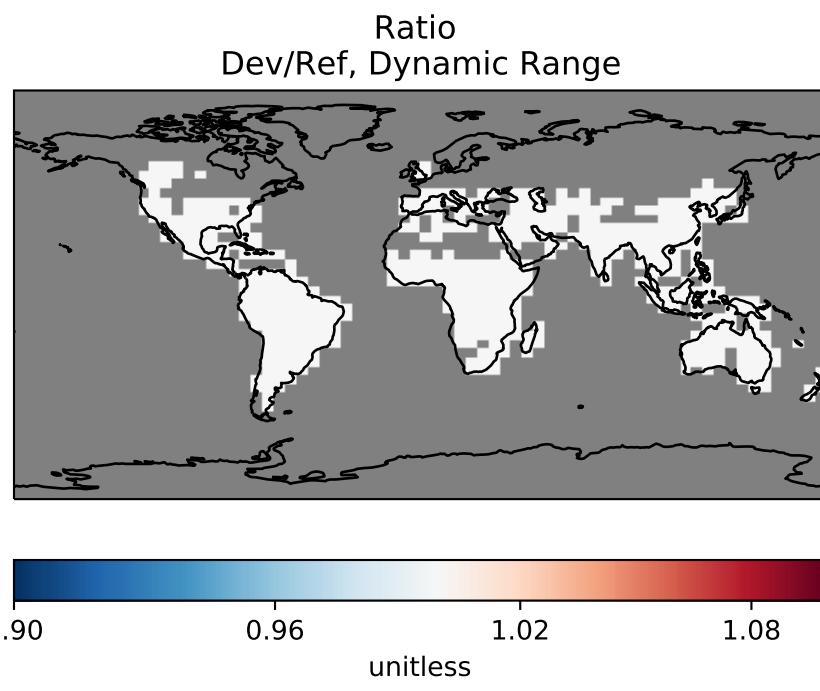
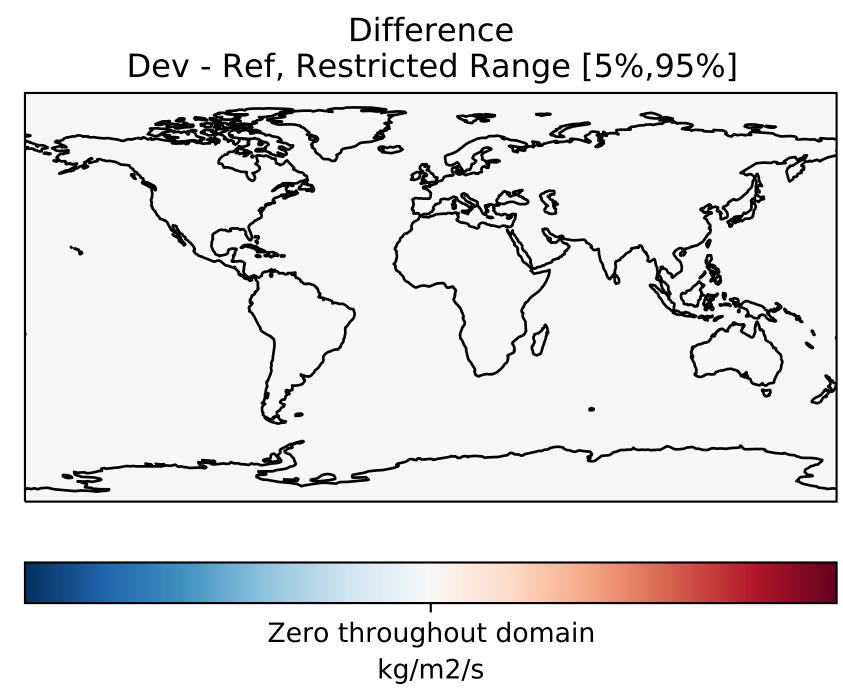
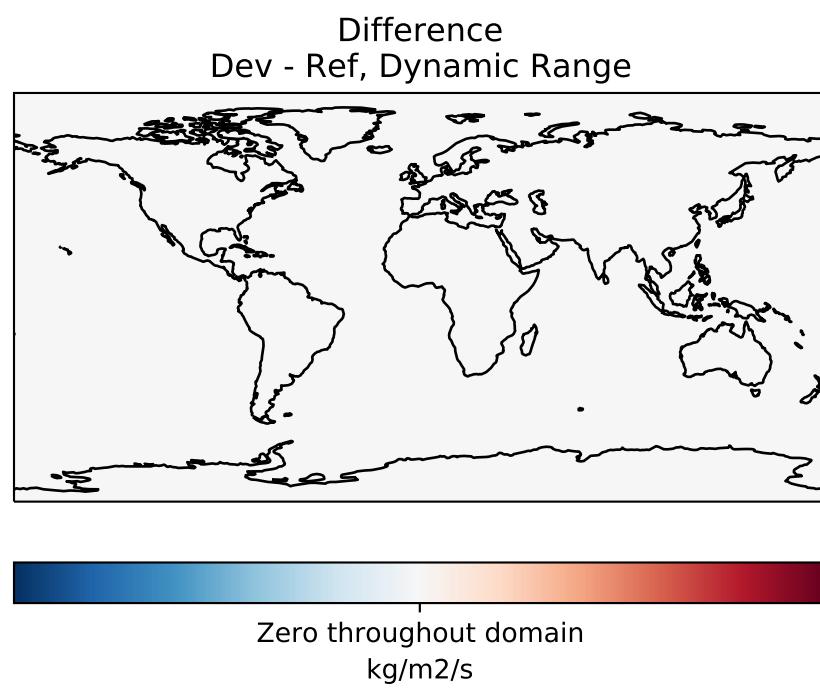
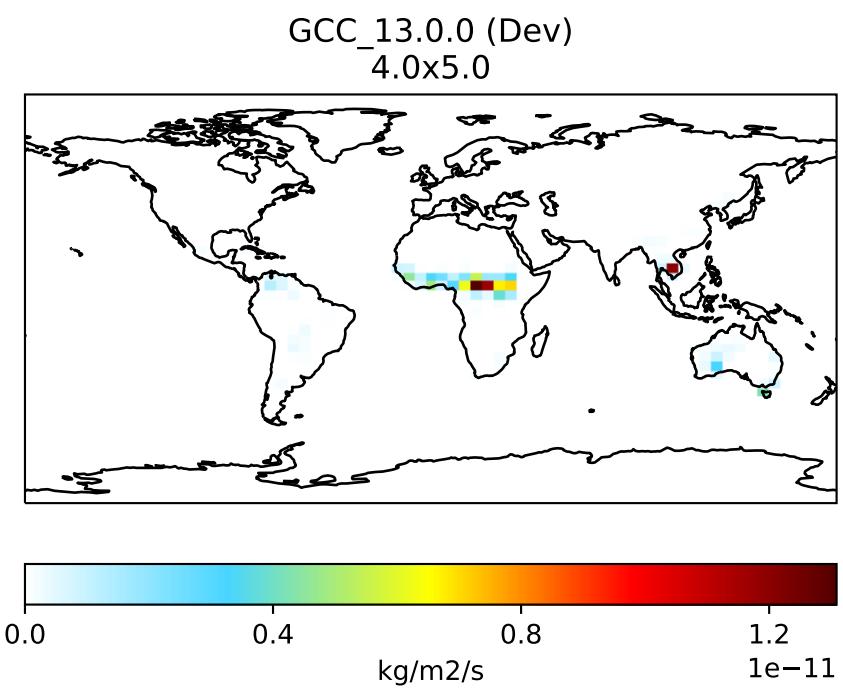
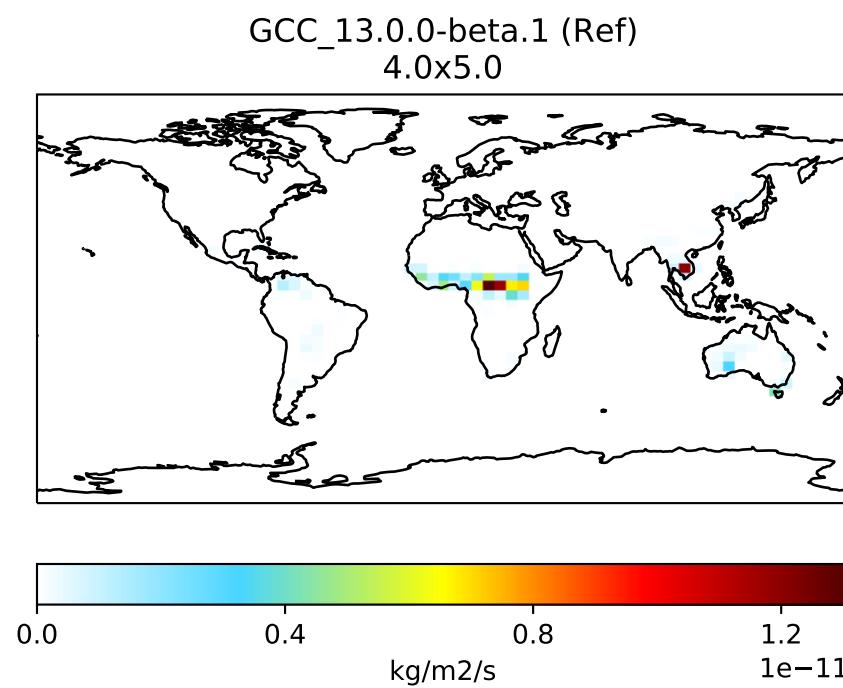
Ratio  
Dev/Ref, Fixed Range



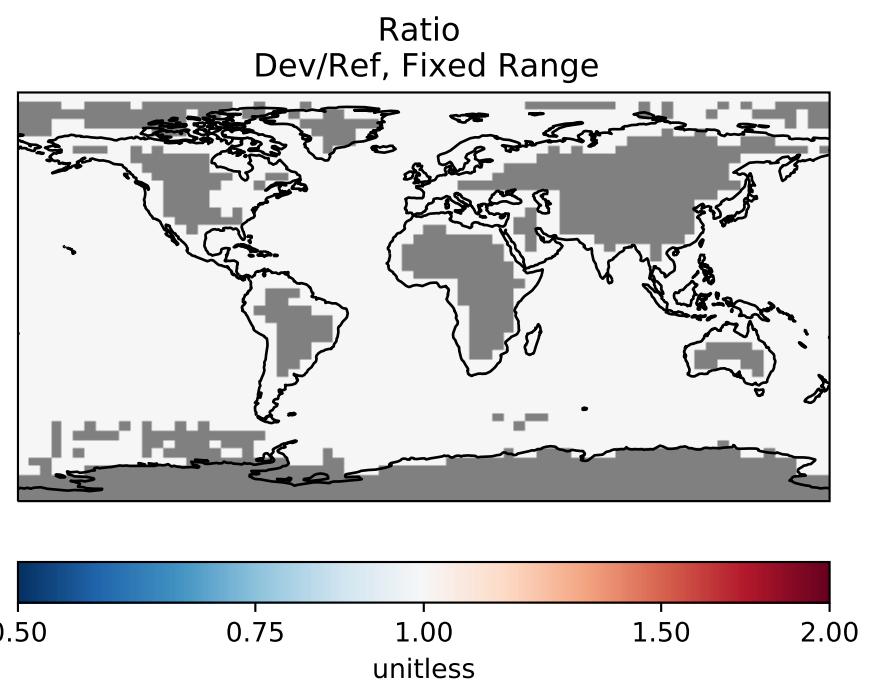
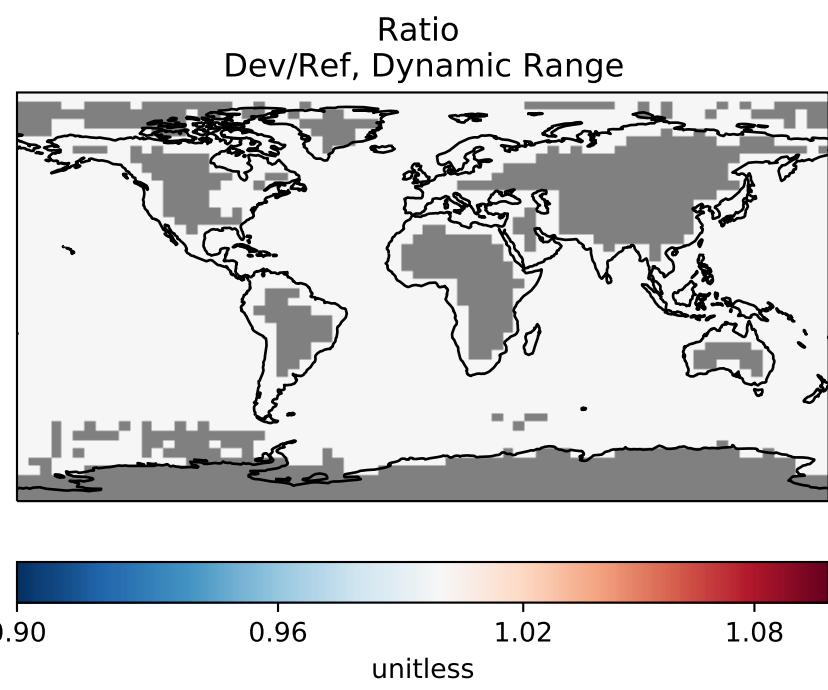
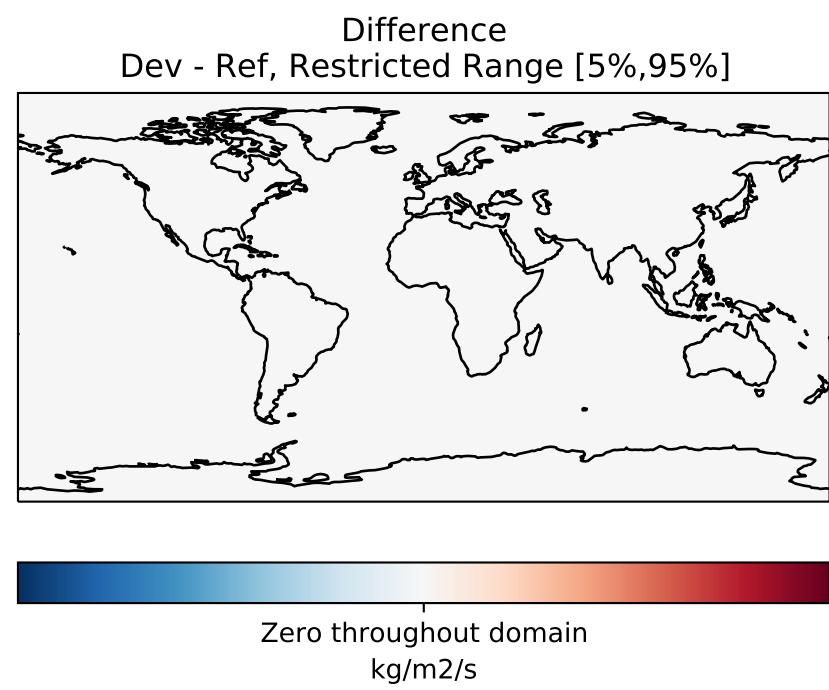
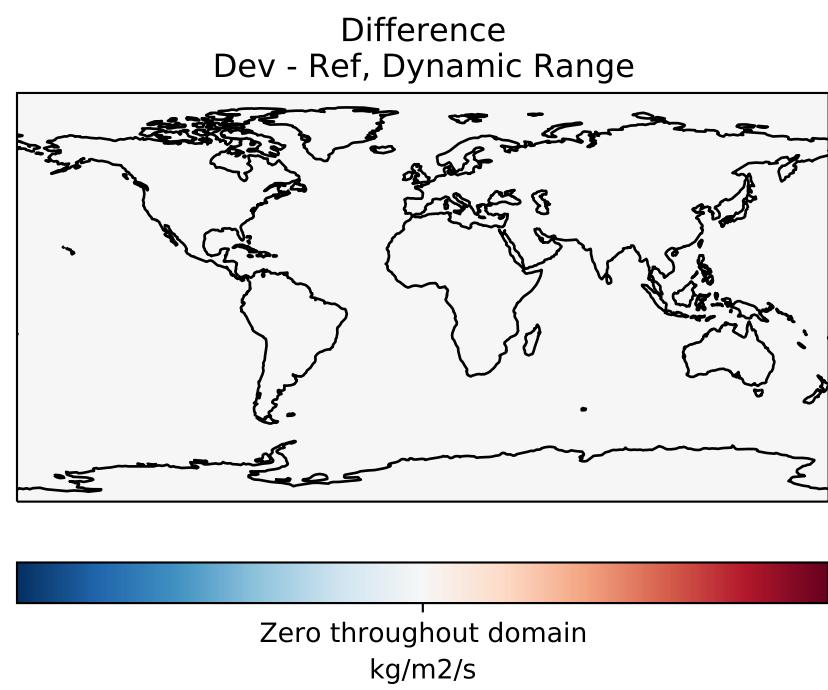
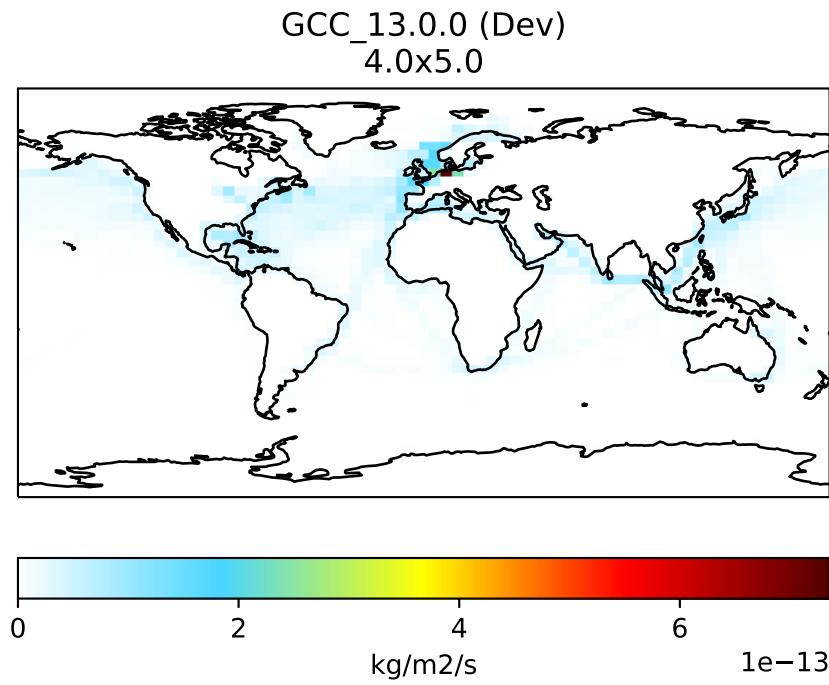
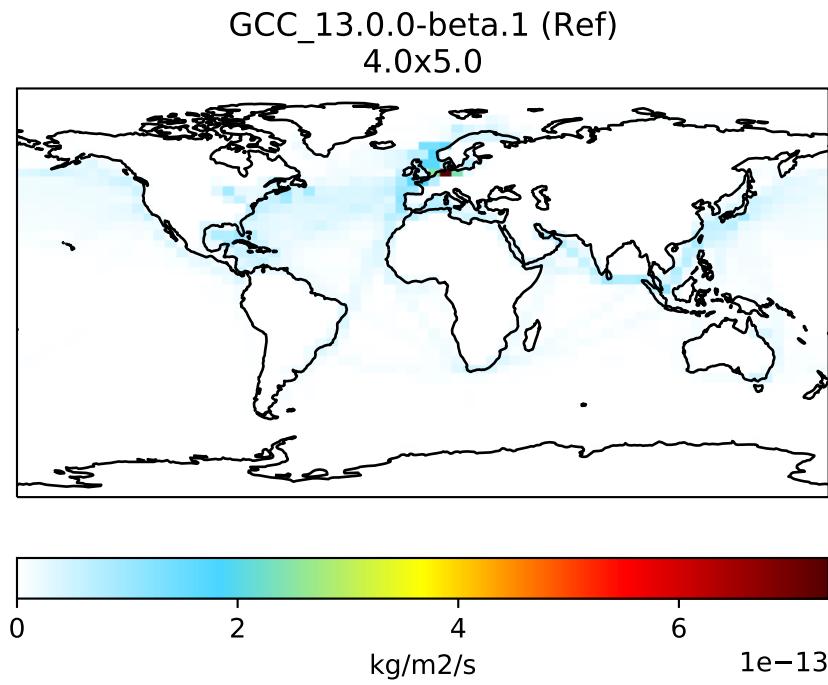
# EmisBCPO\_Anthro (Jan2019)



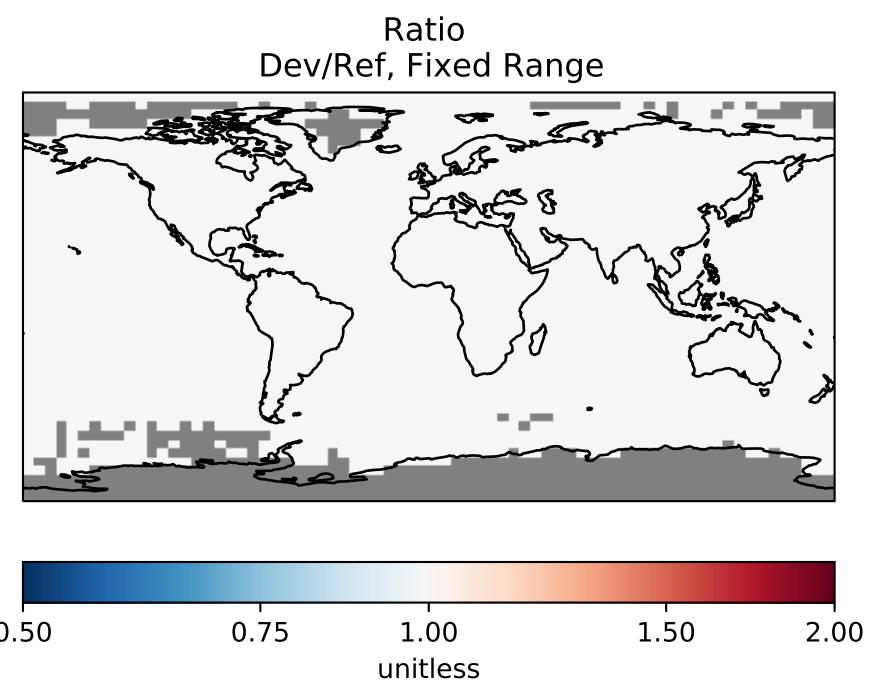
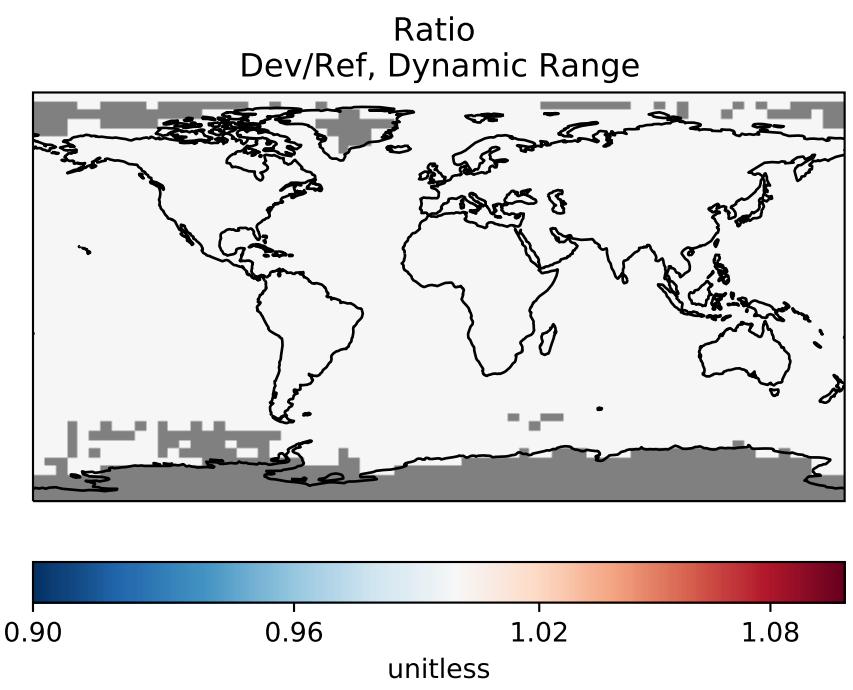
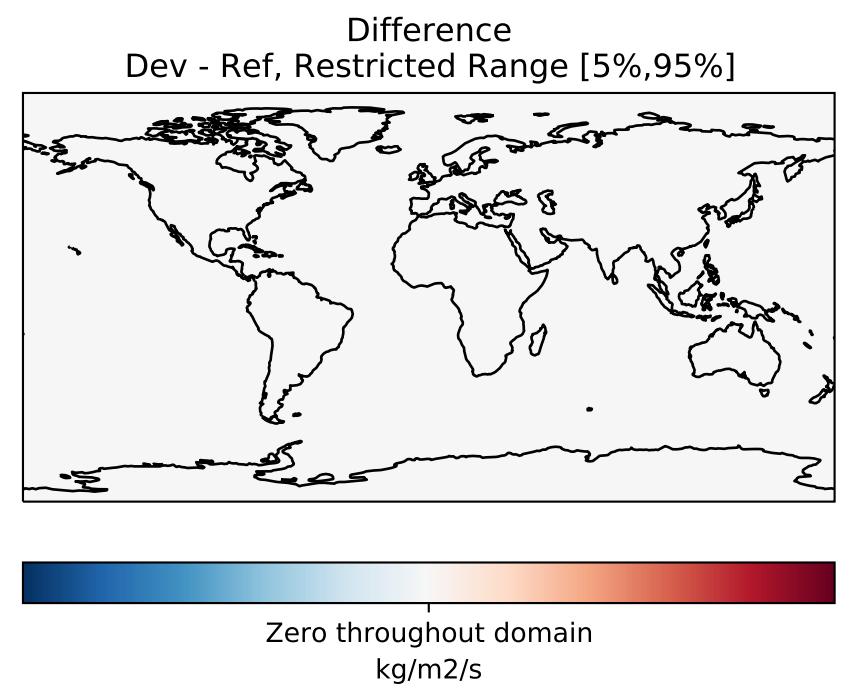
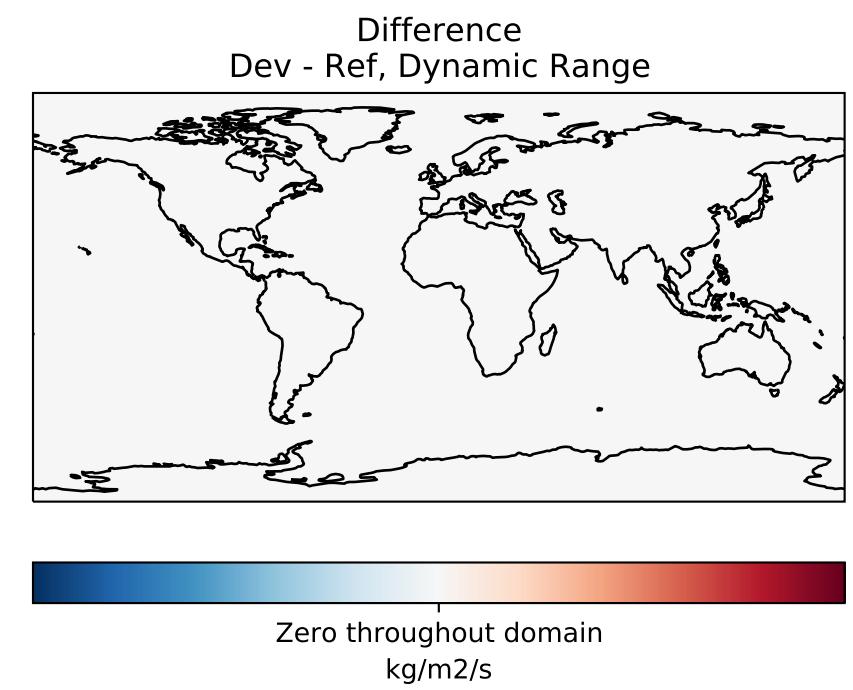
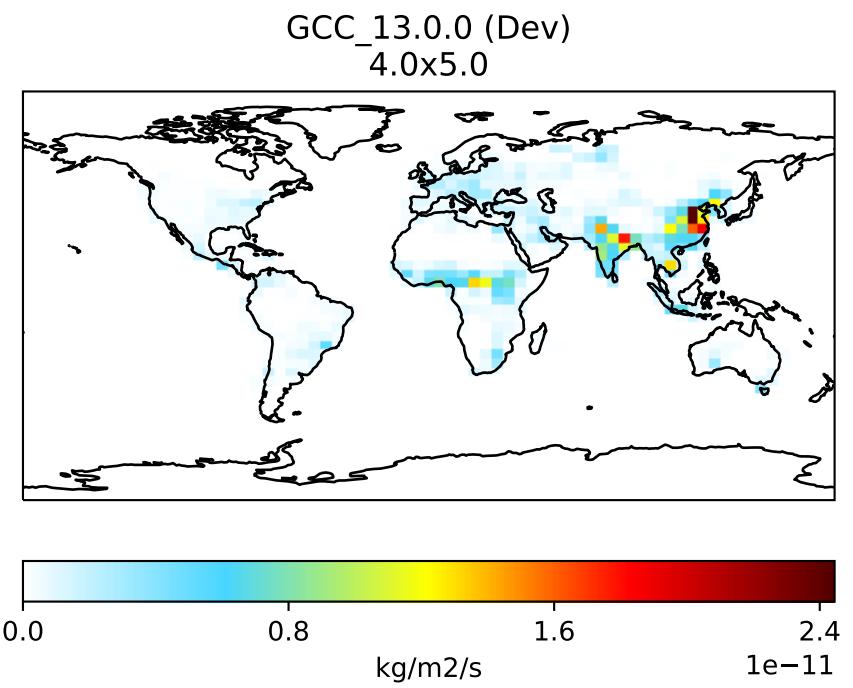
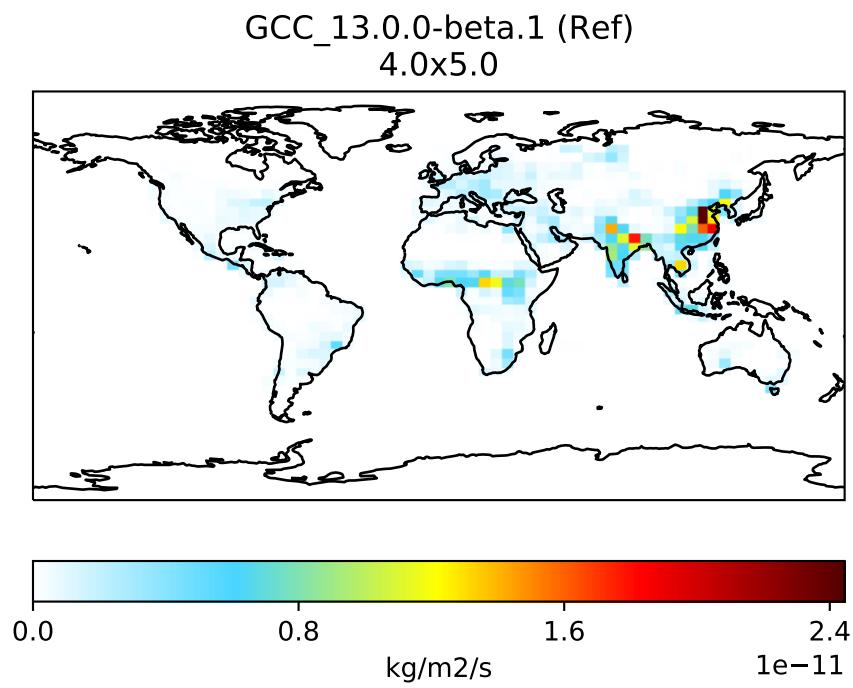
# EmisBCPO\_BioBurn (Jan2019)



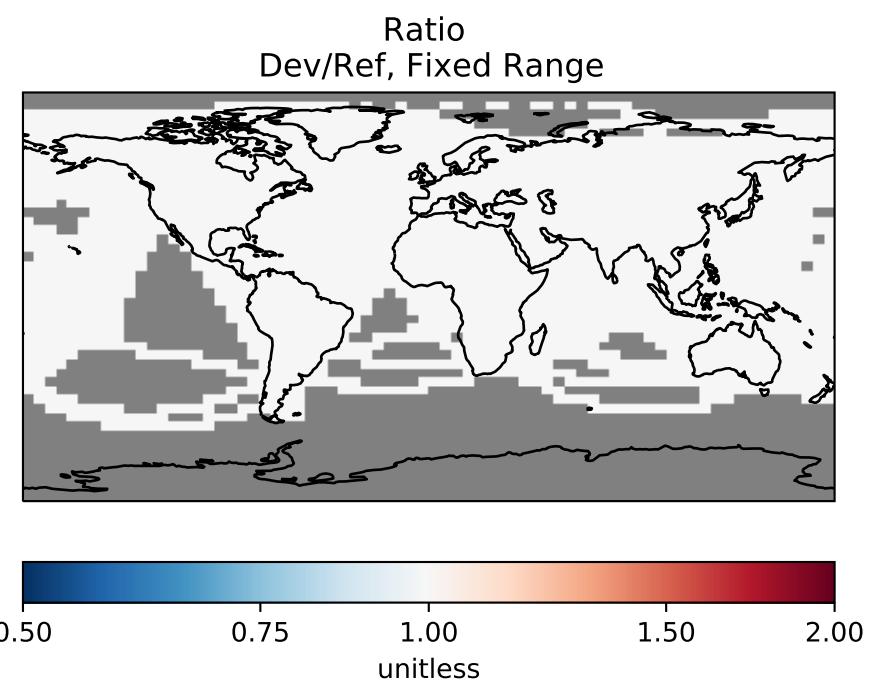
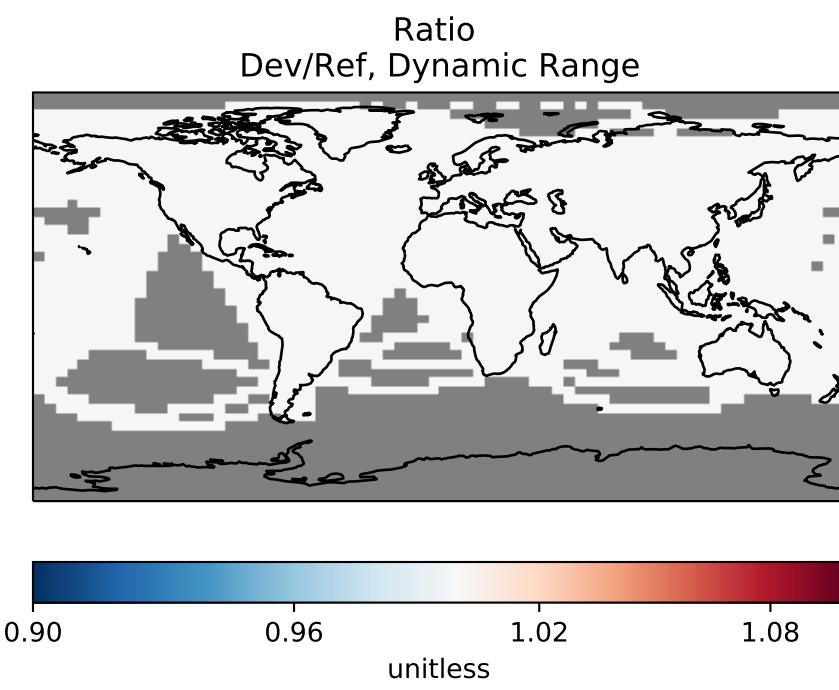
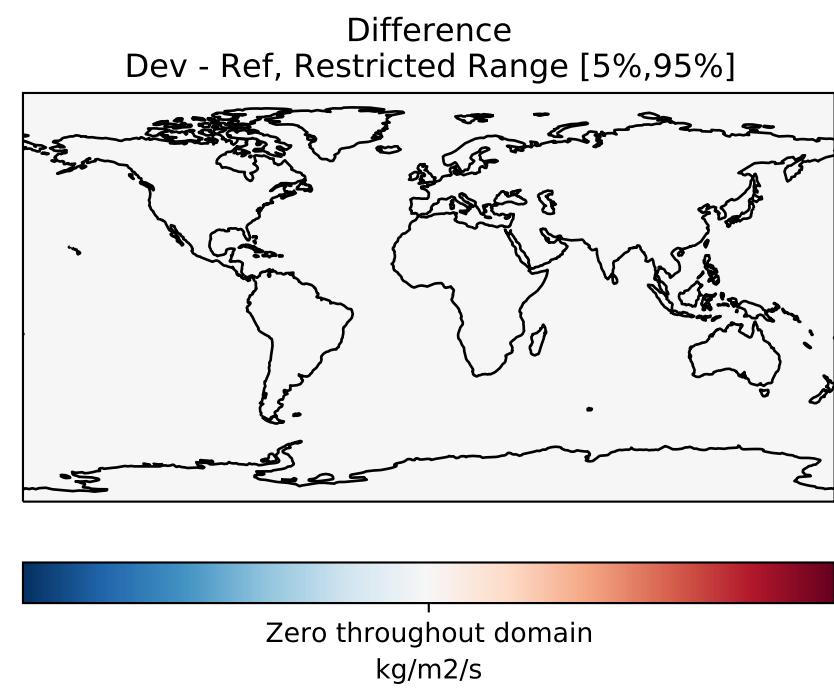
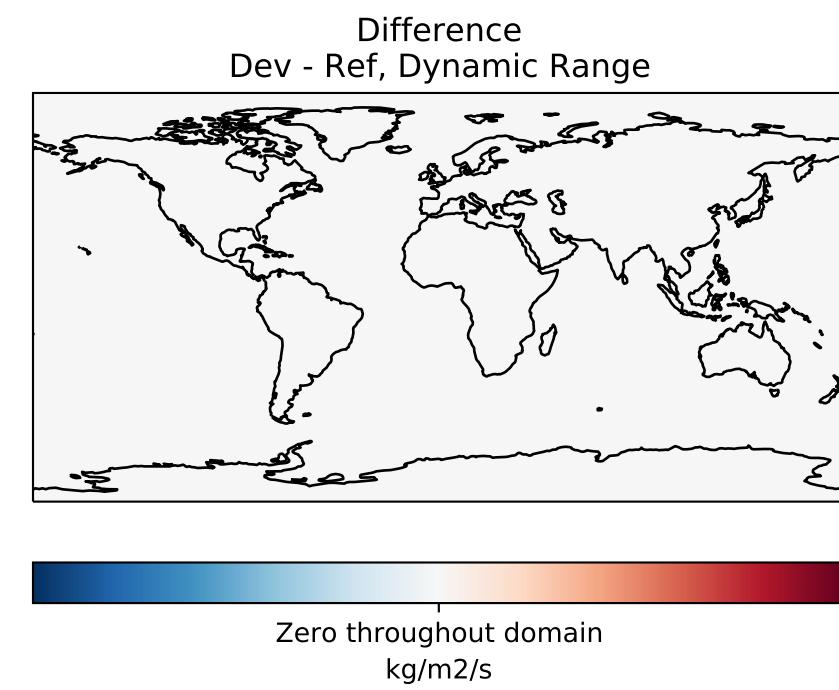
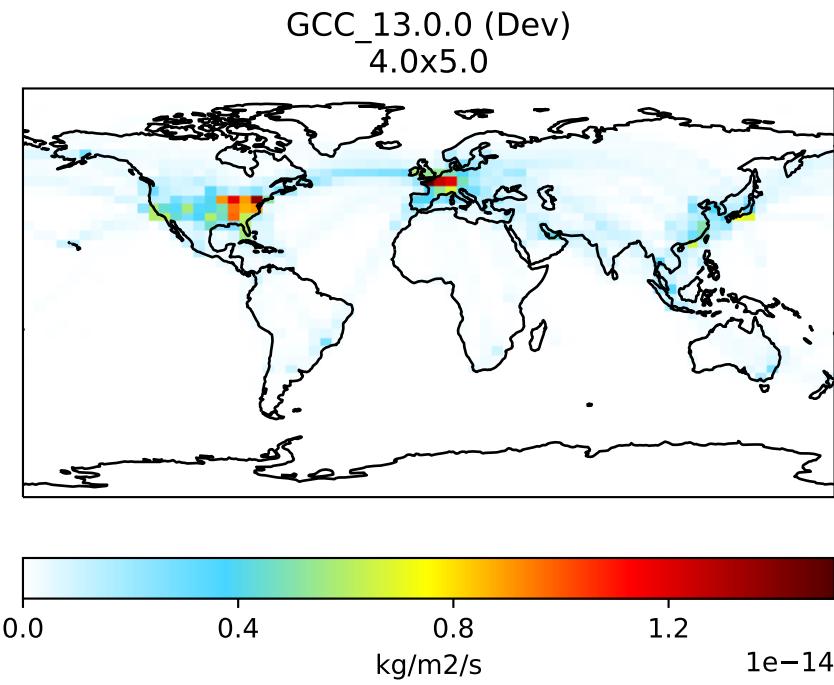
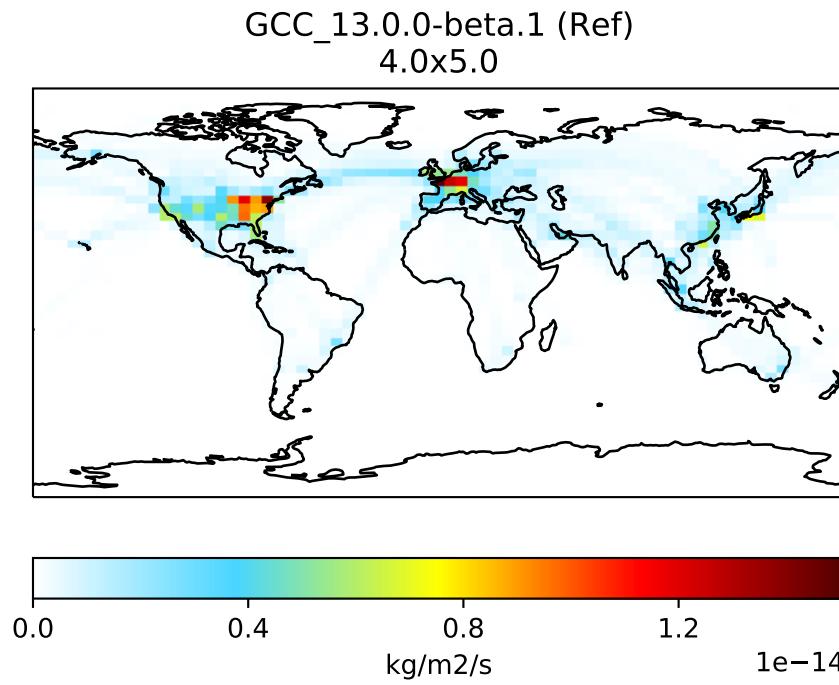
# EmisBCPO\_Ship (Jan2019)



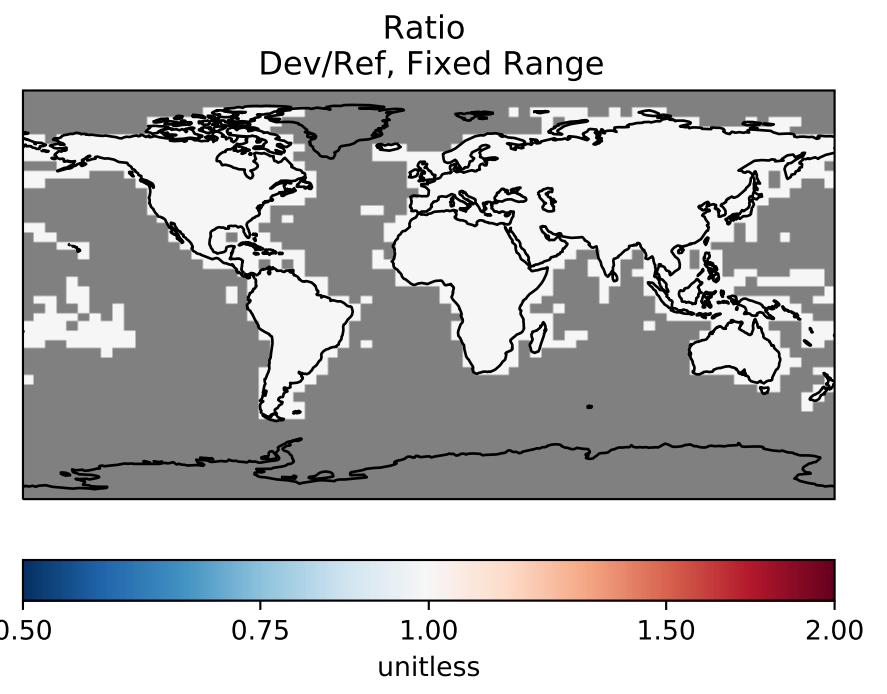
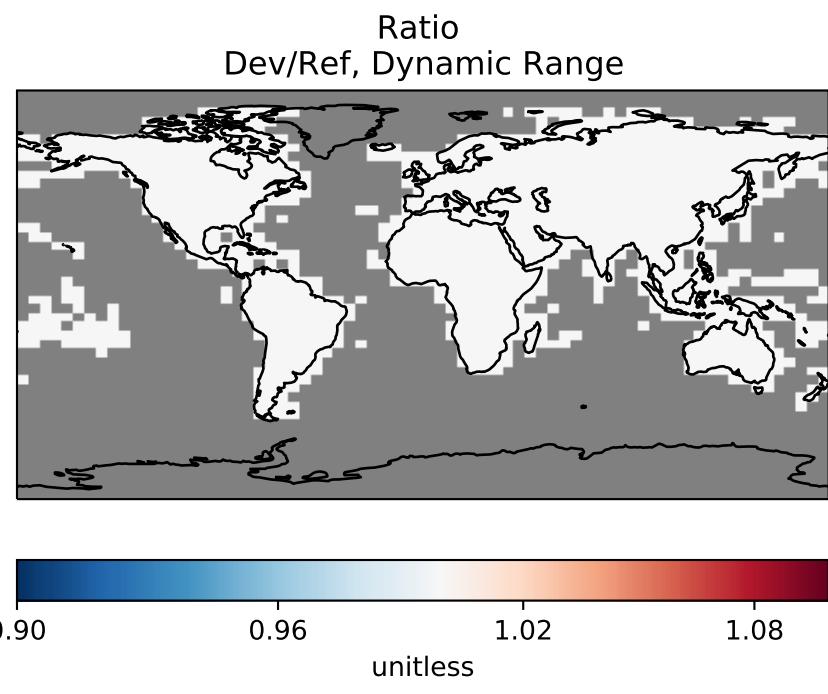
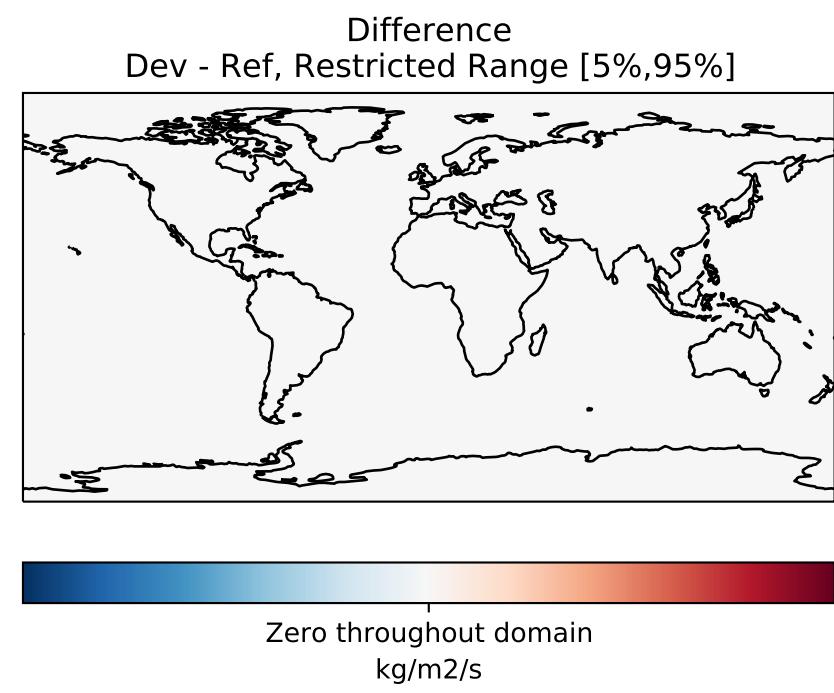
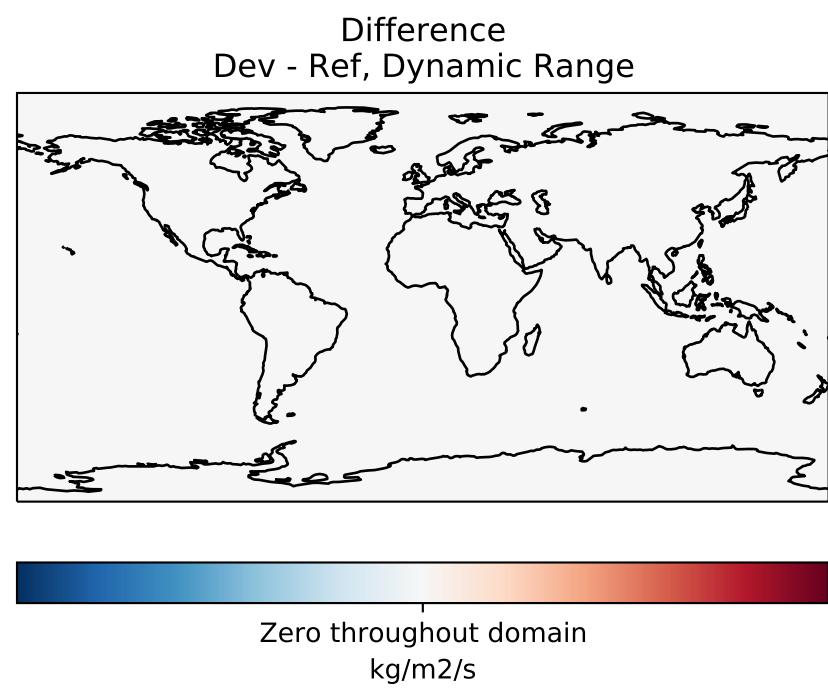
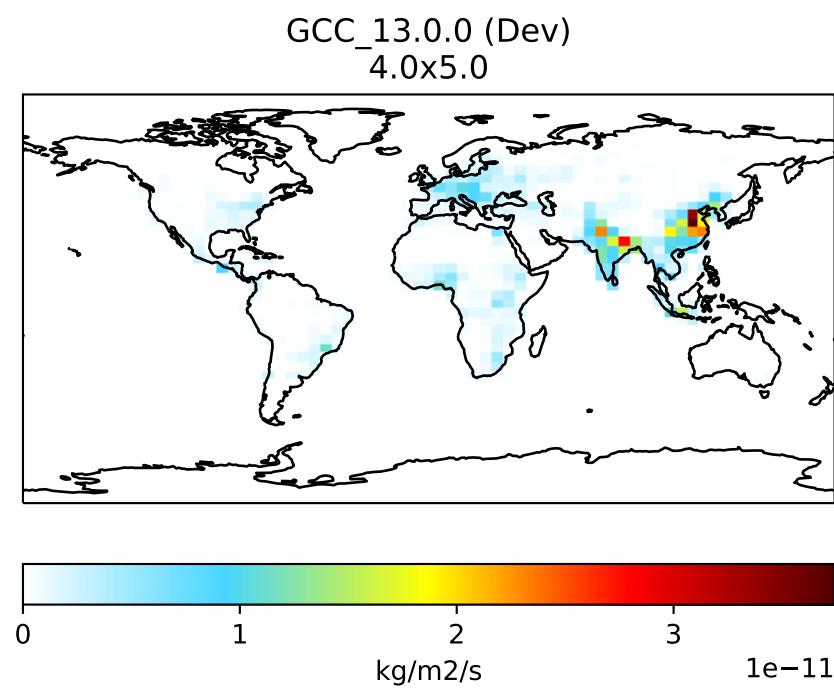
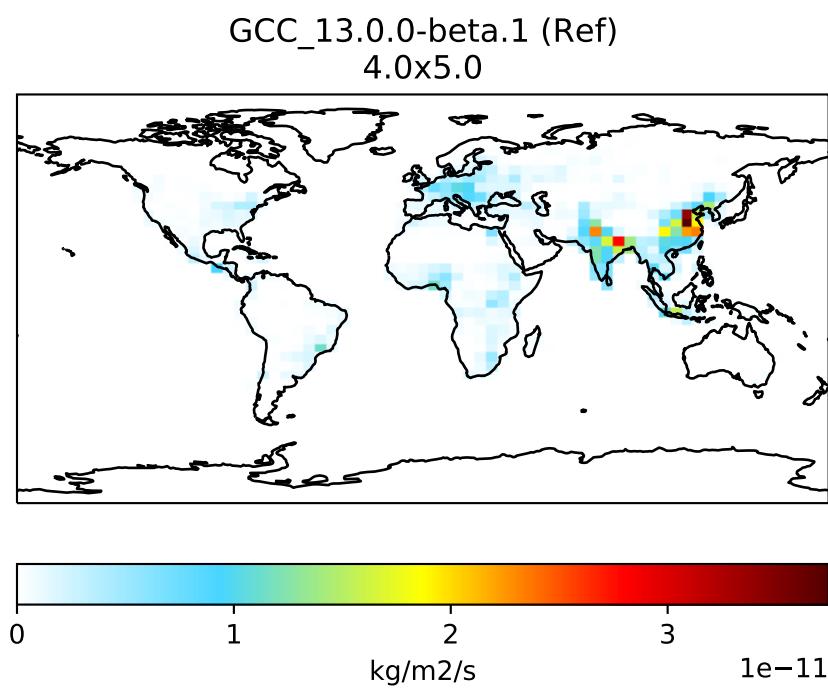
# EmisBCPO\_Total (Jan2019)



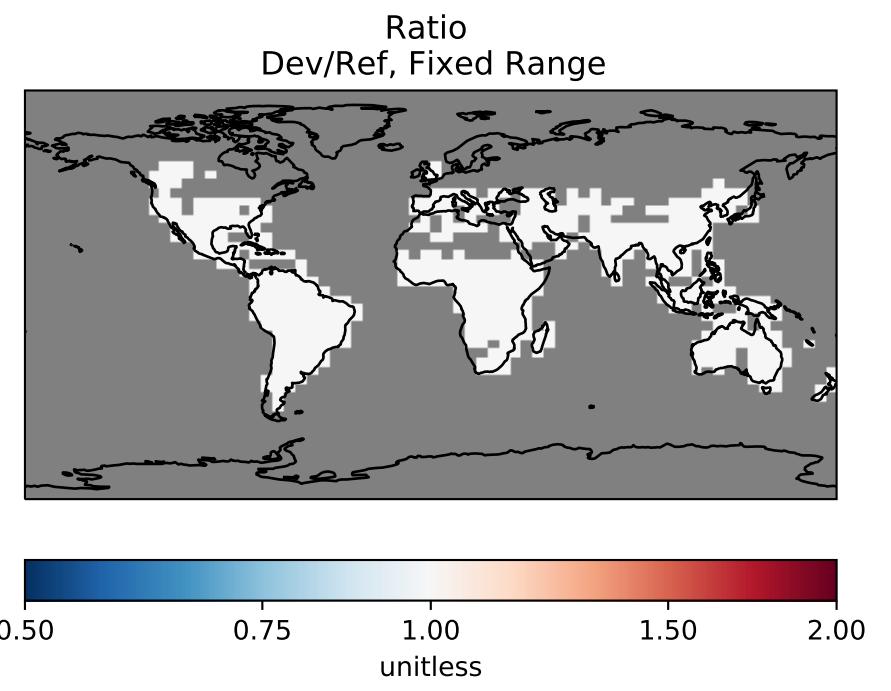
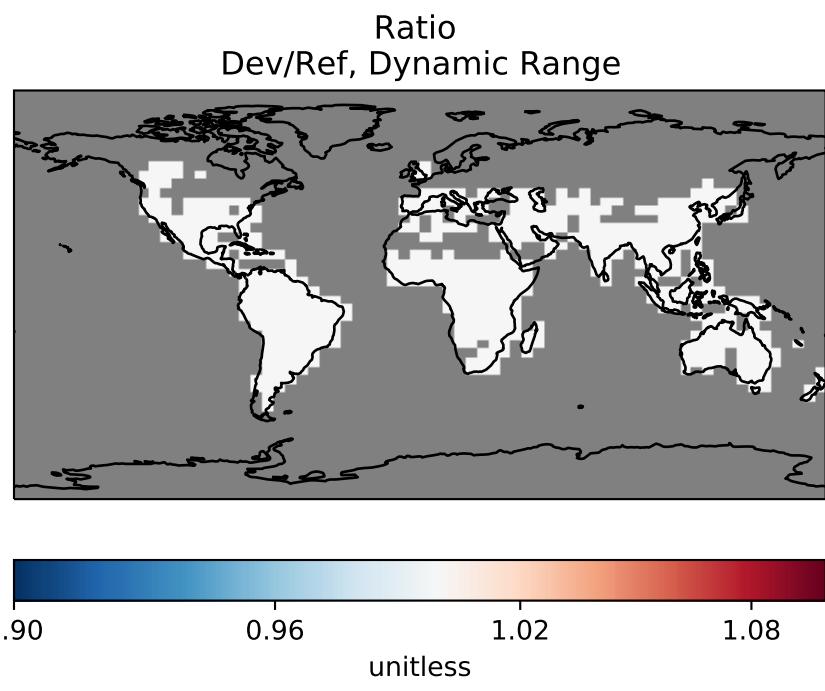
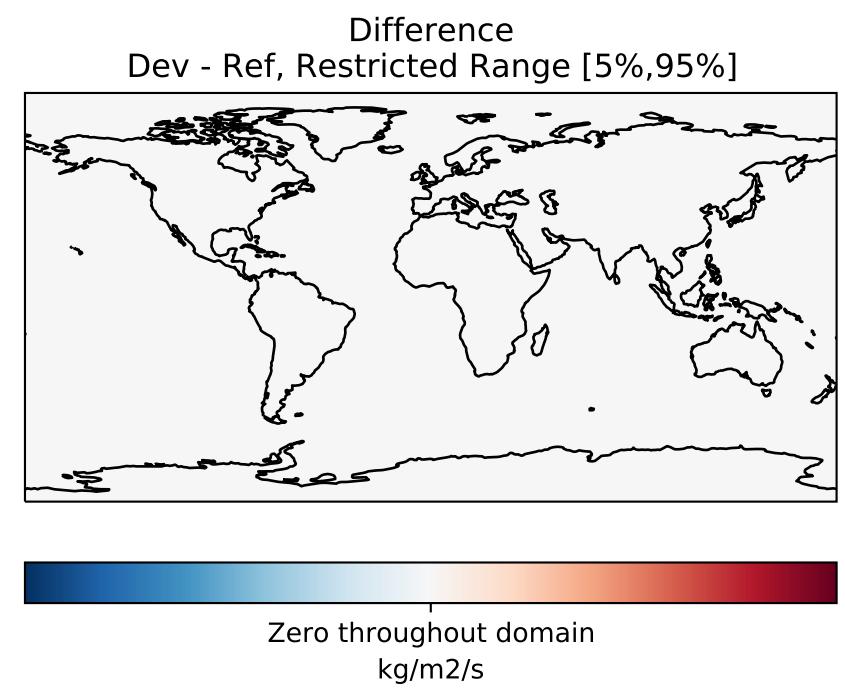
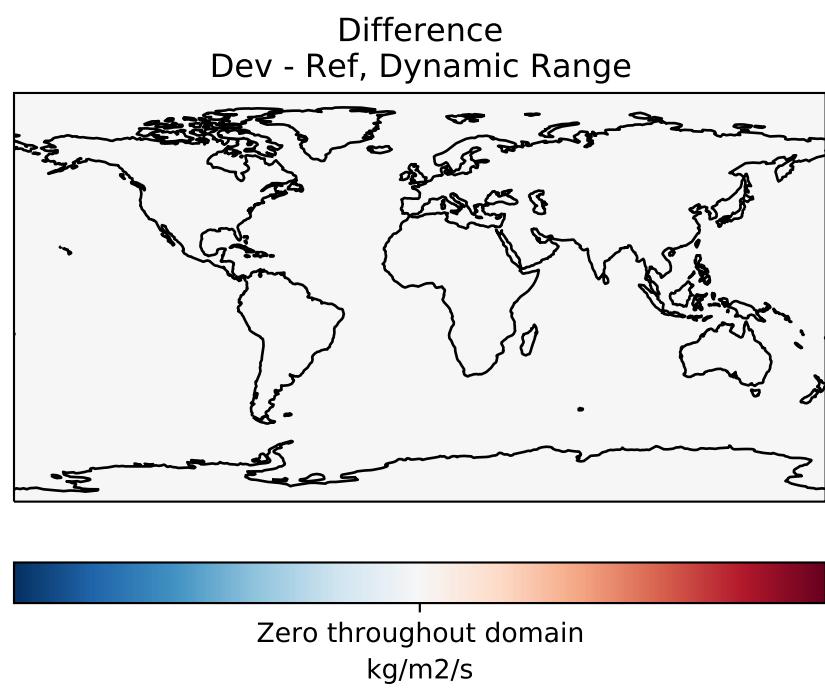
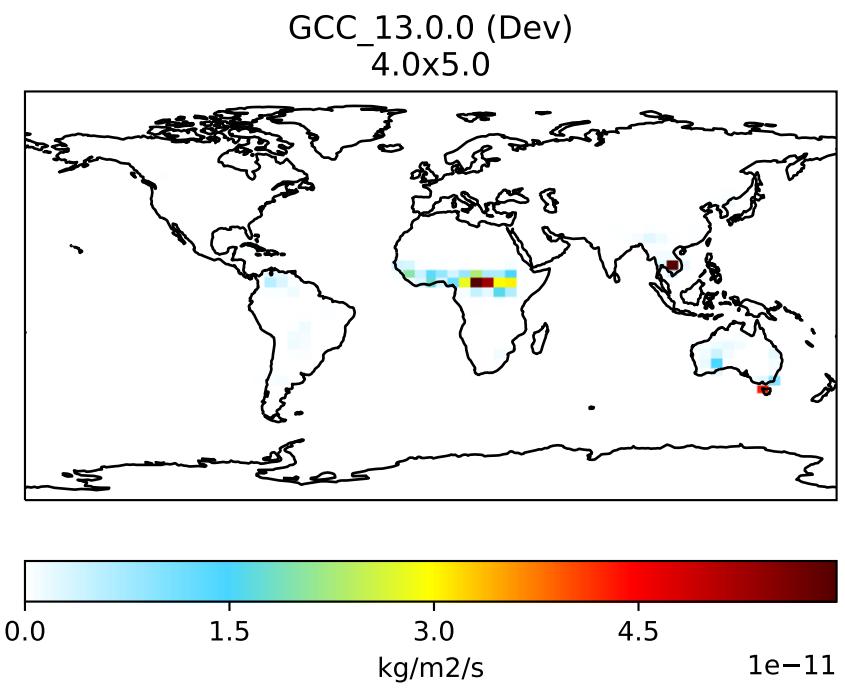
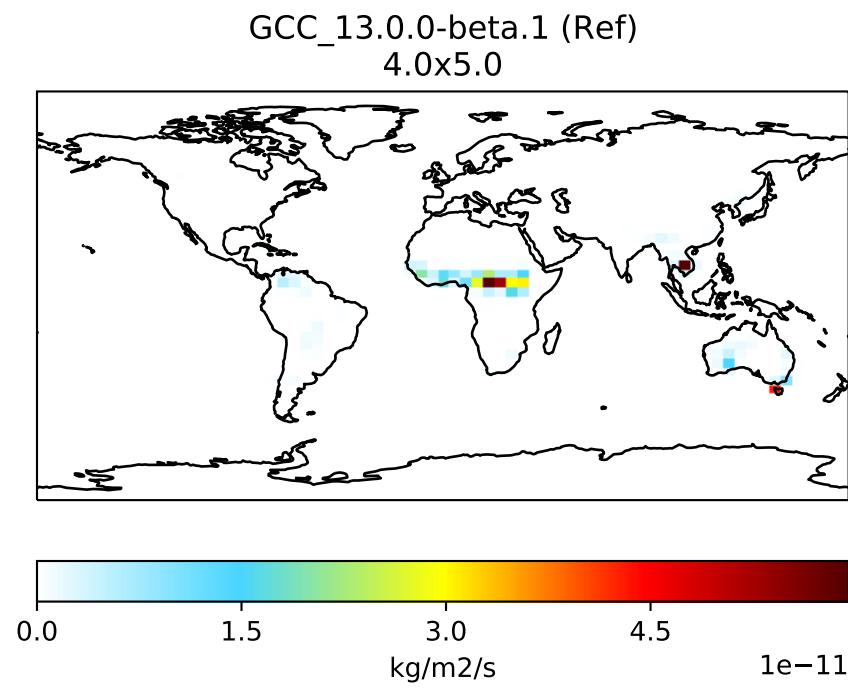
# EmisOCPI\_Aircraft (Jan2019)



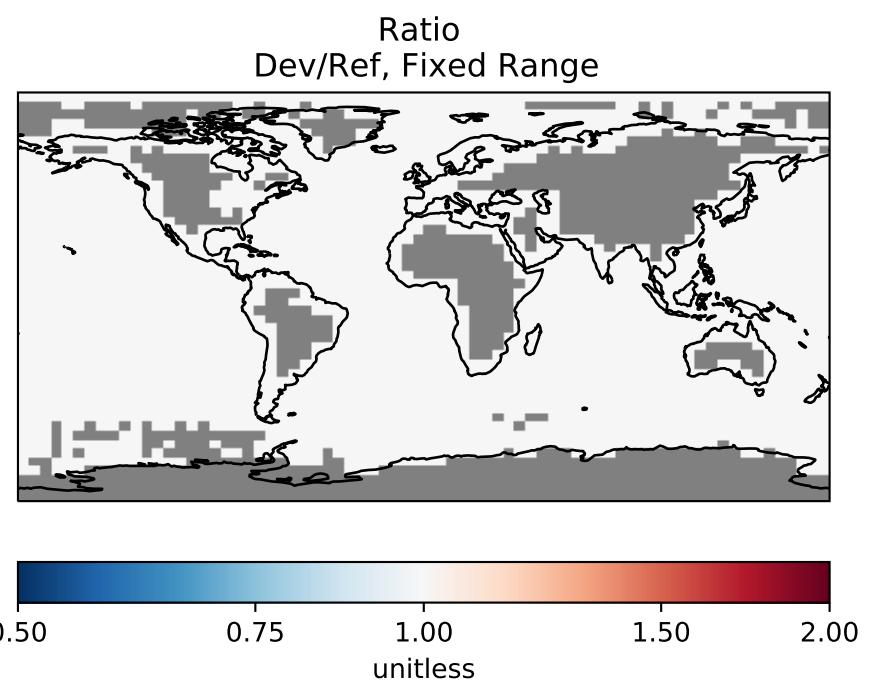
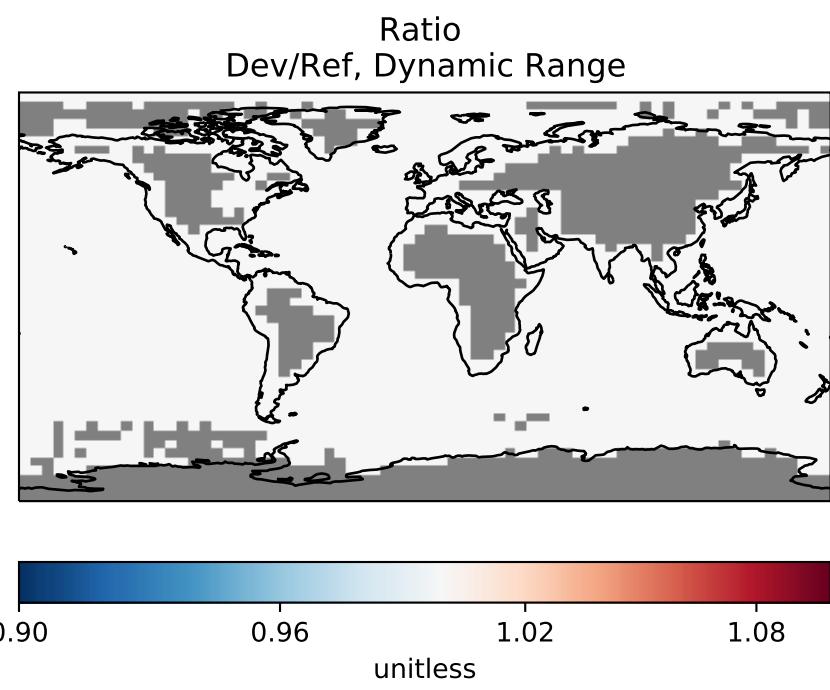
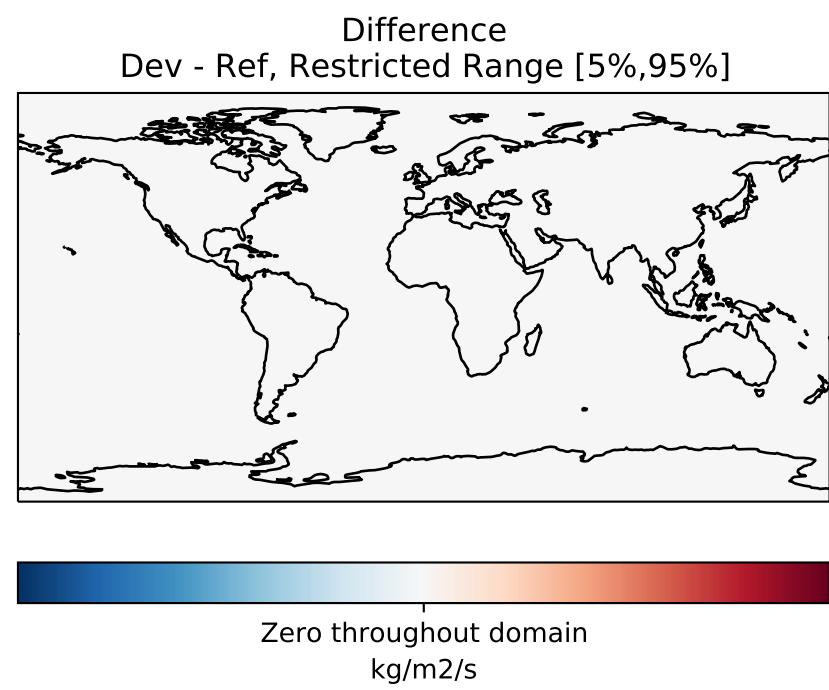
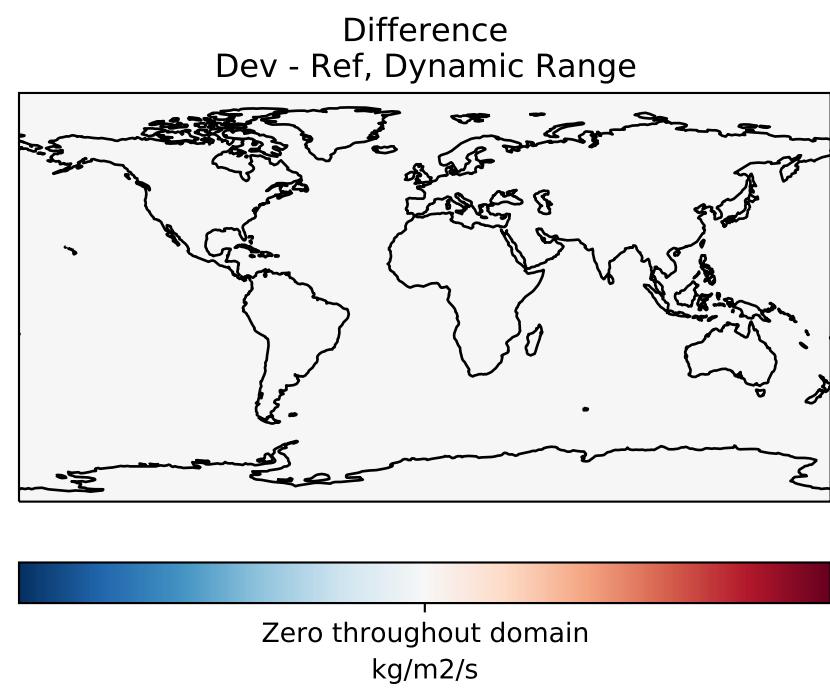
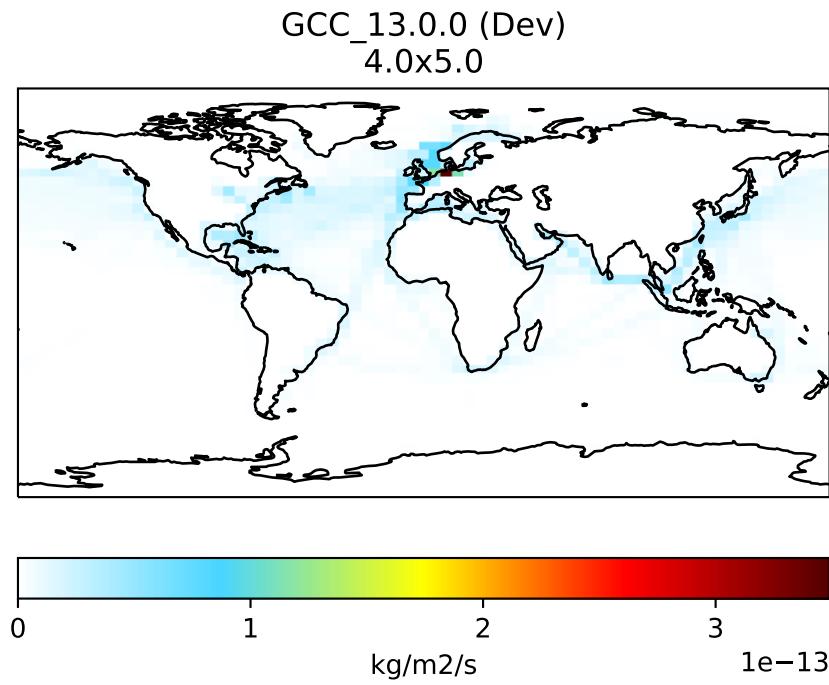
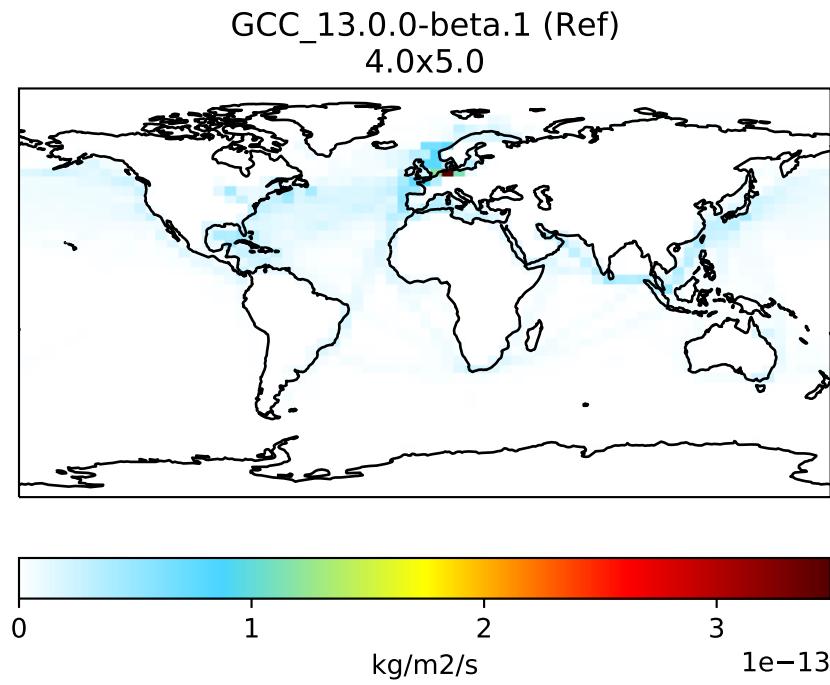
# EmisOCPI\_Anthro (Jan2019)



# EmisOCPI\_BioBurn (Jan2019)

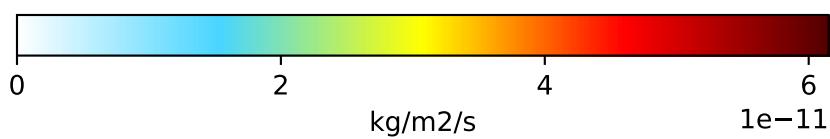
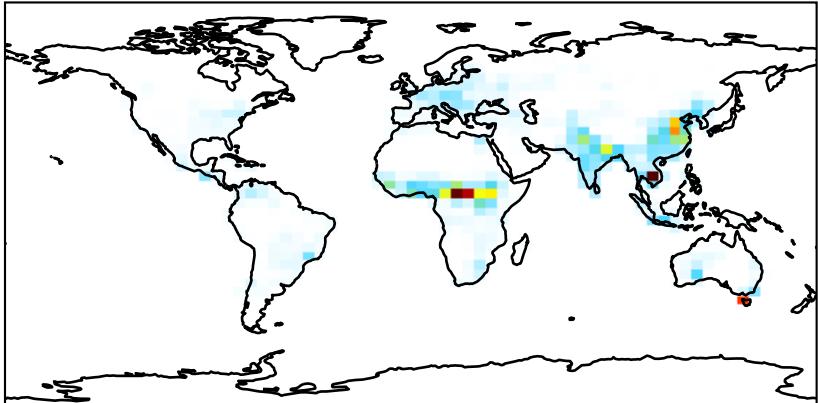


# EmisOCPI\_Ship (Jan2019)

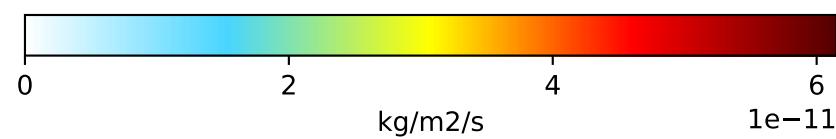
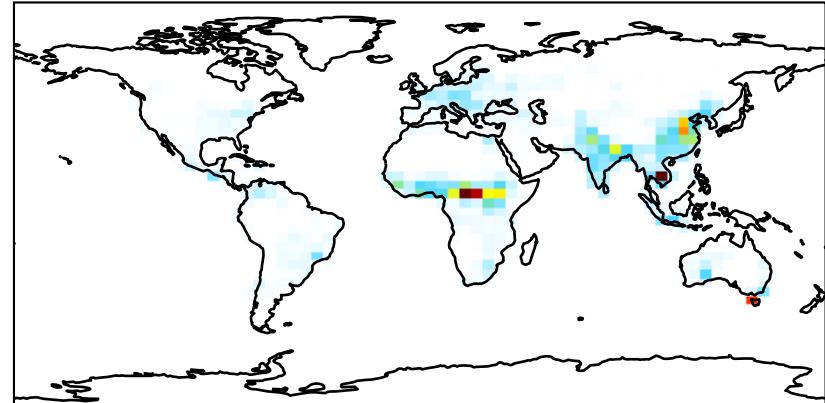


# EmisOCPI\_Total (Jan2019)

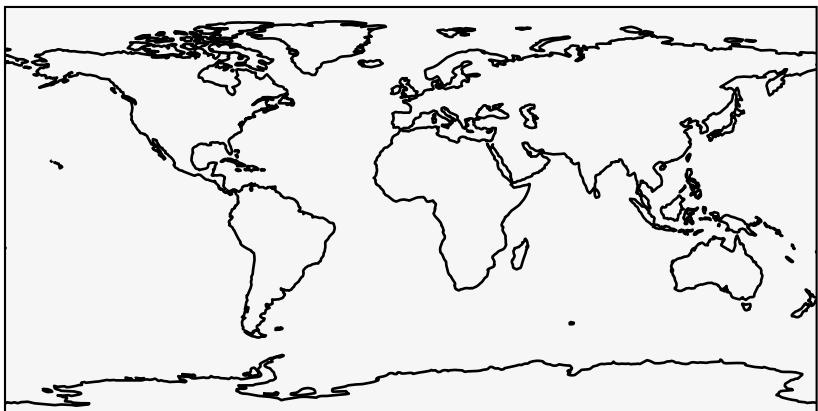
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



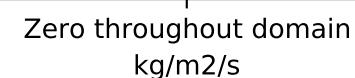
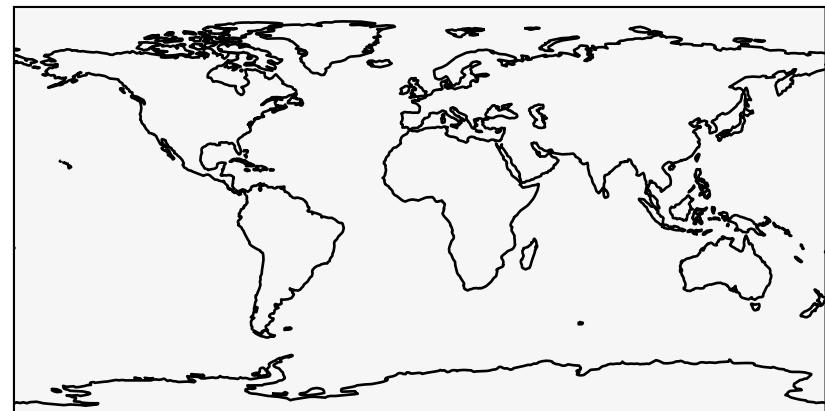
GCC\_13.0.0 (Dev)  
4.0x5.0



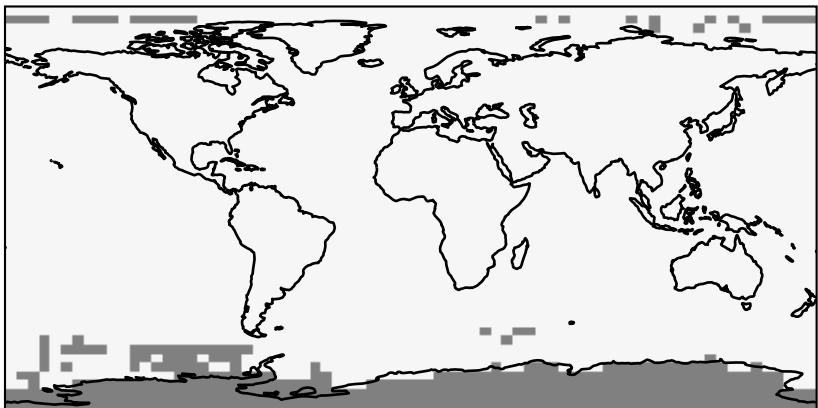
Difference  
Dev - Ref, Dynamic Range



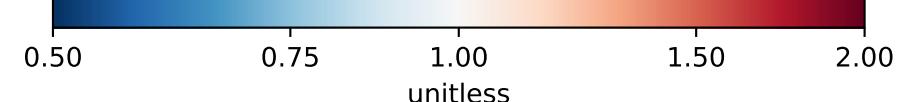
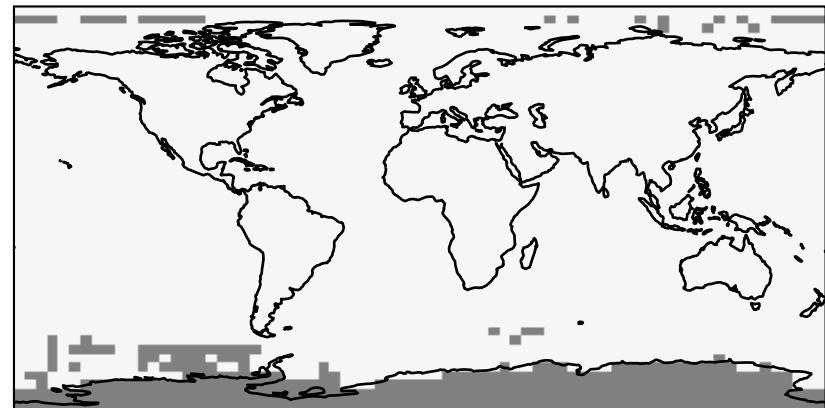
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

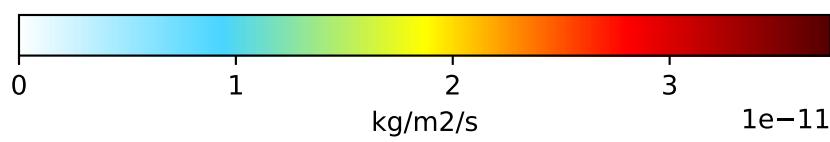
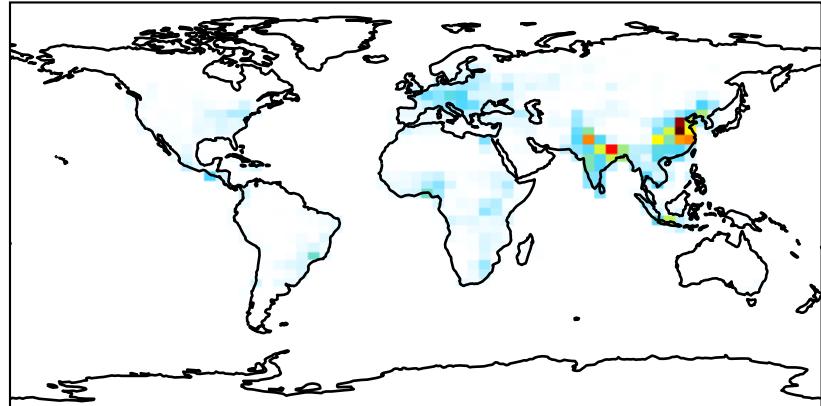


Ratio  
Dev/Ref, Fixed Range

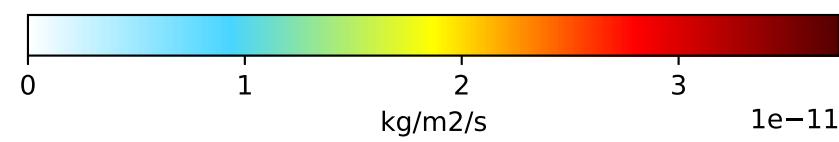
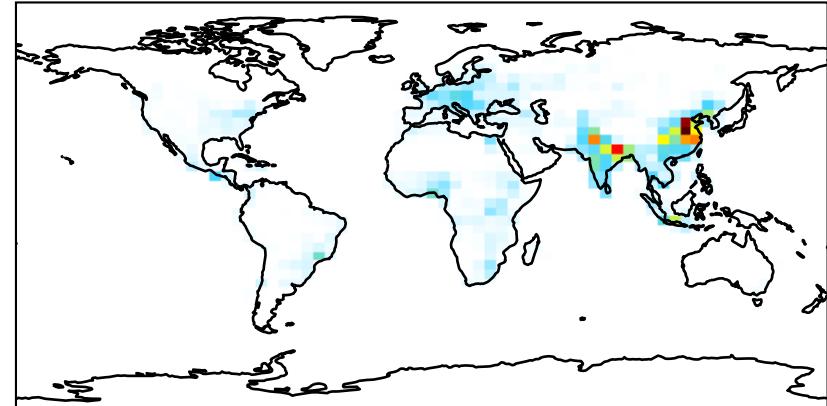


# EmisOCPO\_Anthro (Jan2019)

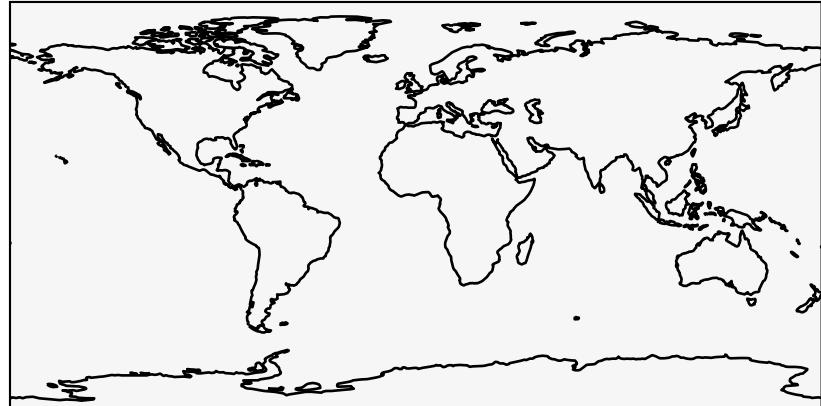
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0



Difference  
Dev - Ref, Dynamic Range



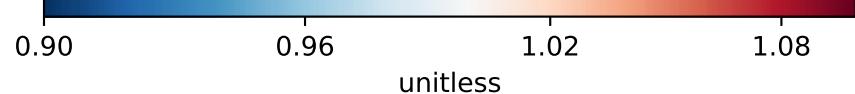
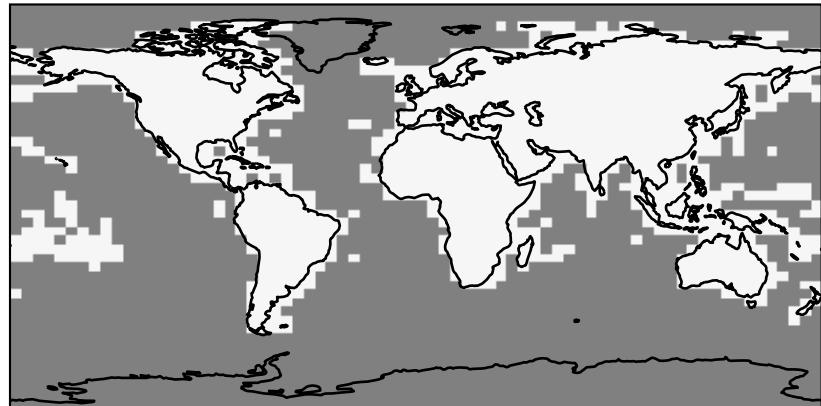
Zero throughout domain  
kg/m<sup>2</sup>/s

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

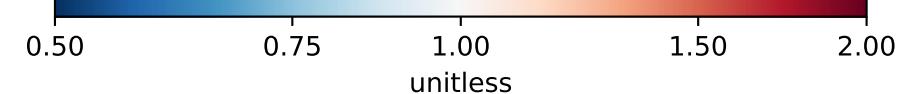
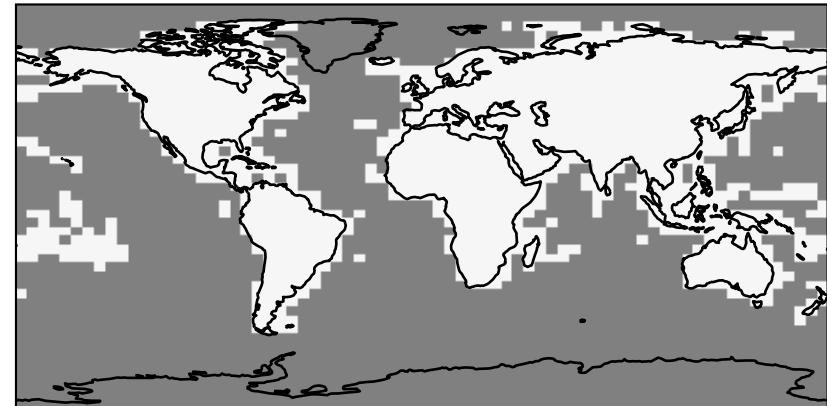


Zero throughout domain  
kg/m<sup>2</sup>/s

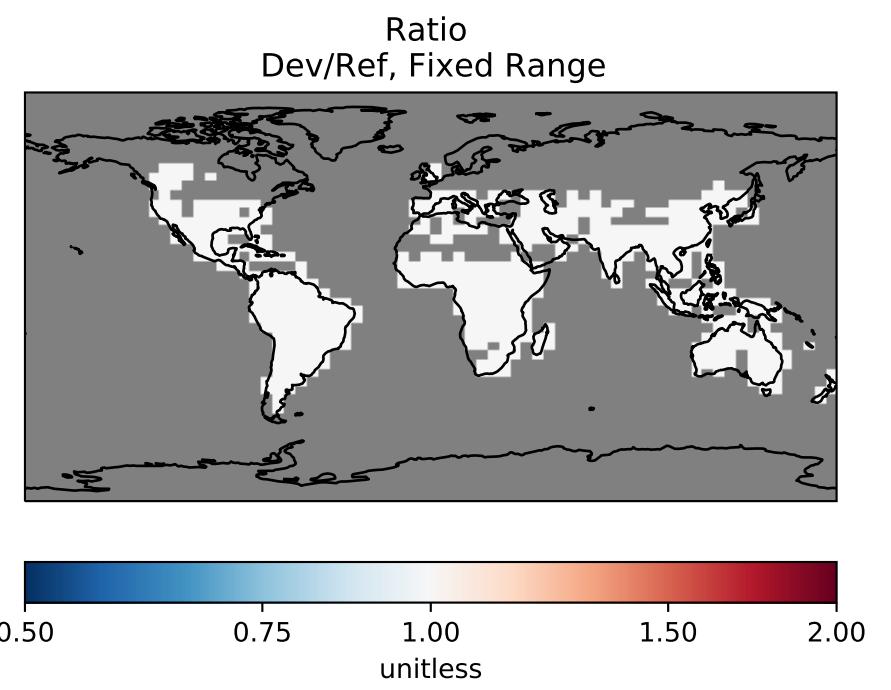
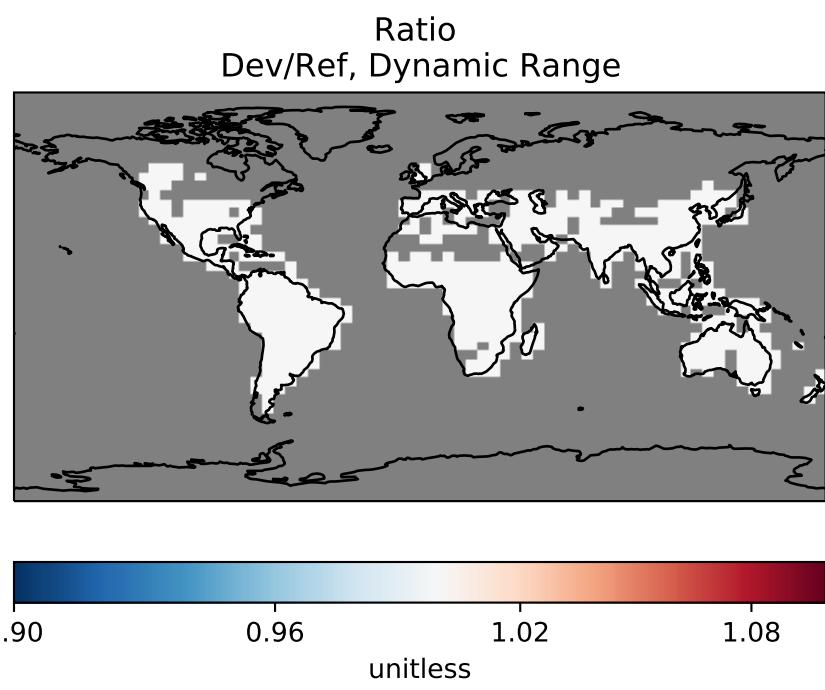
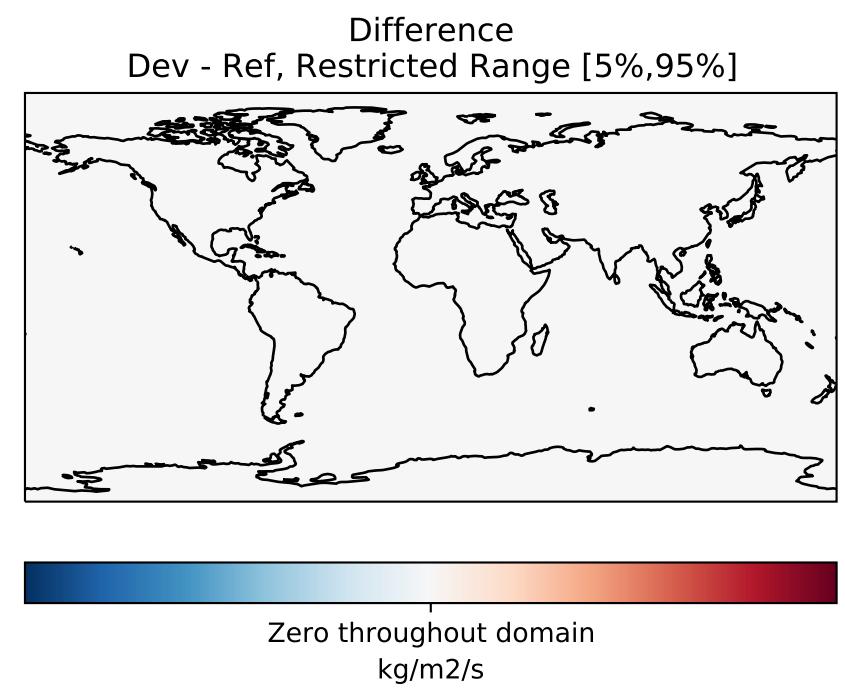
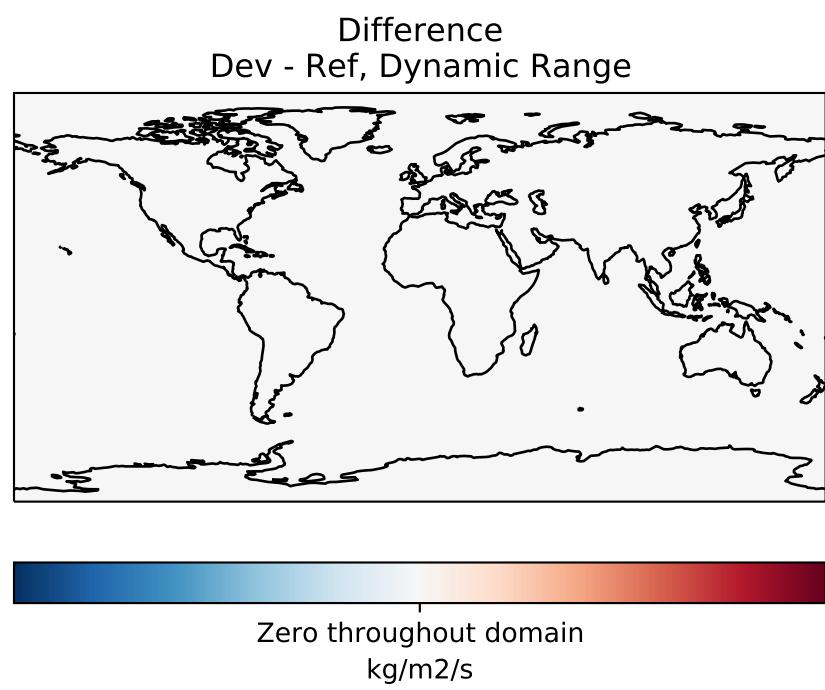
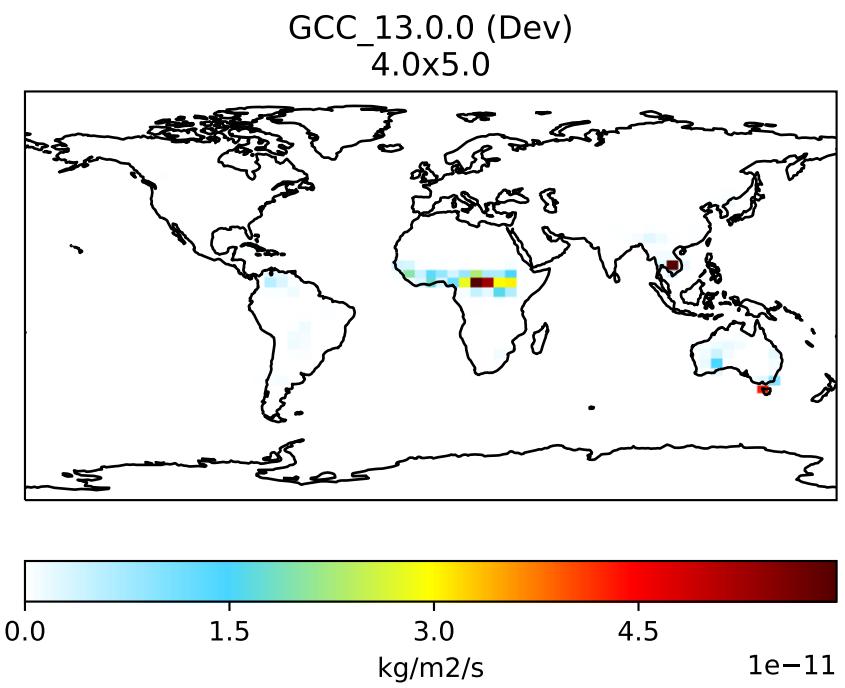
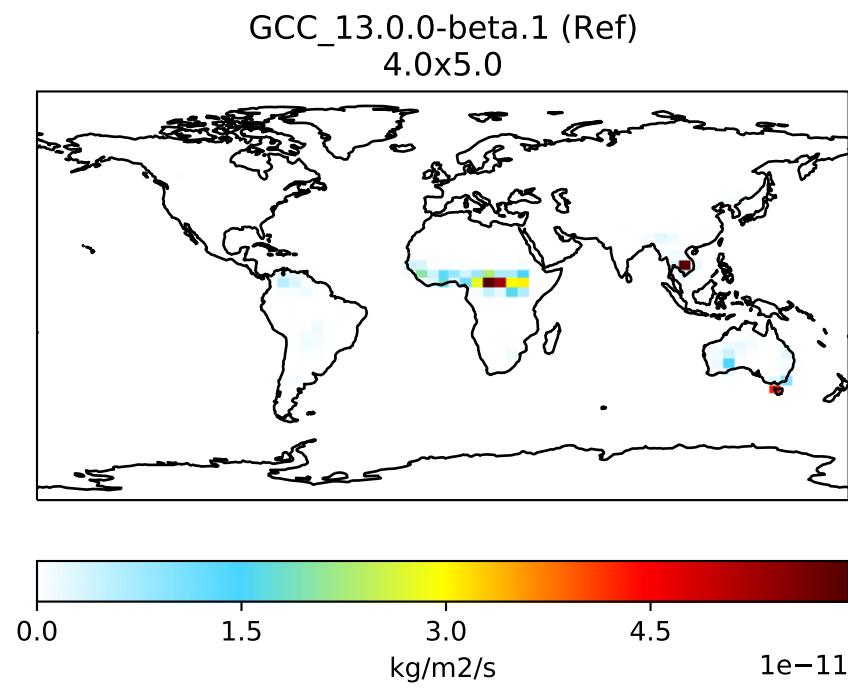
Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

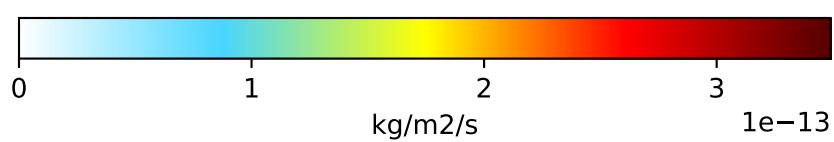
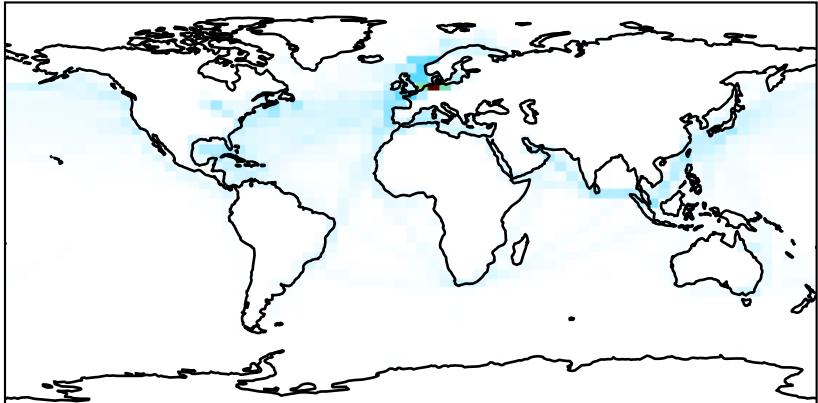


# EmisOCPO\_BioBurn (Jan2019)

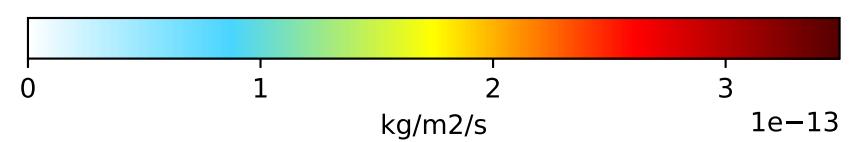
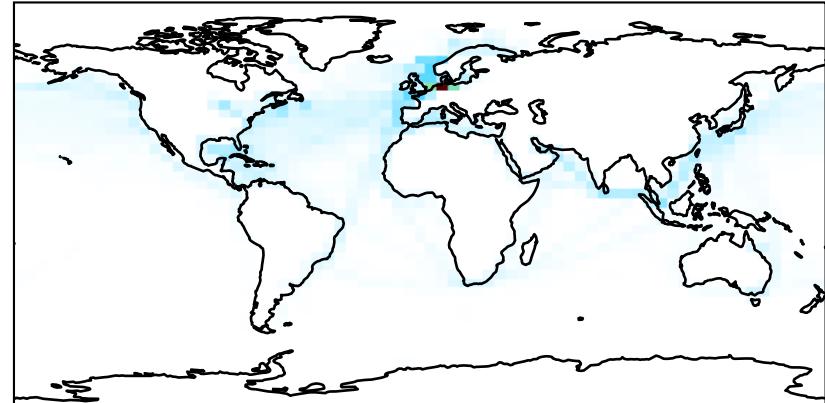


# EmisOCPO\_Ship (Jan2019)

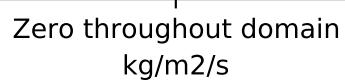
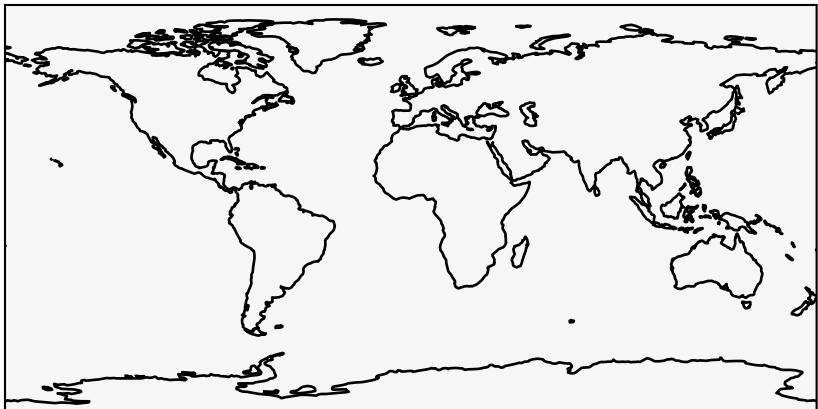
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



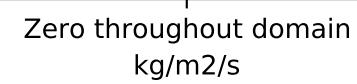
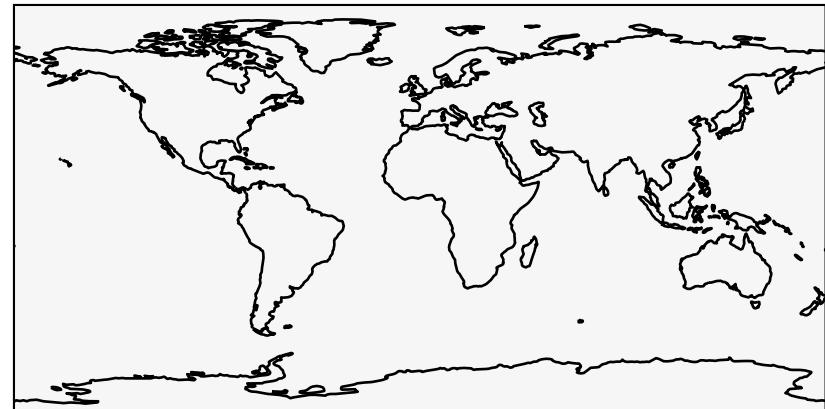
GCC\_13.0.0 (Dev)  
4.0x5.0



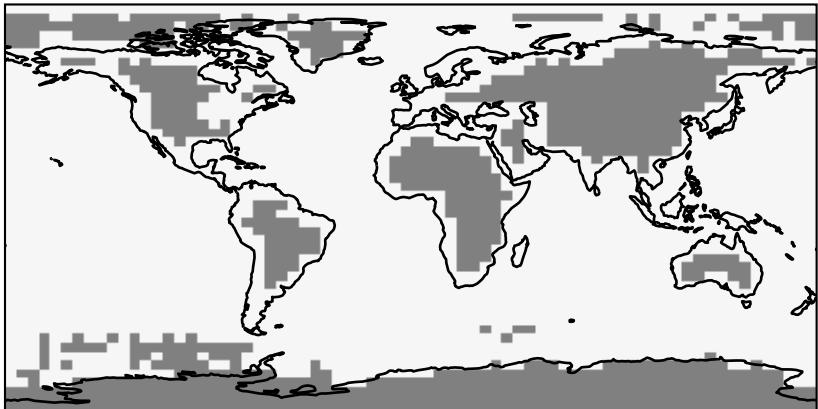
Difference  
Dev - Ref, Dynamic Range



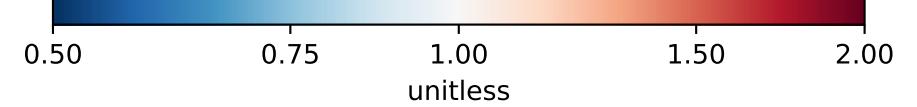
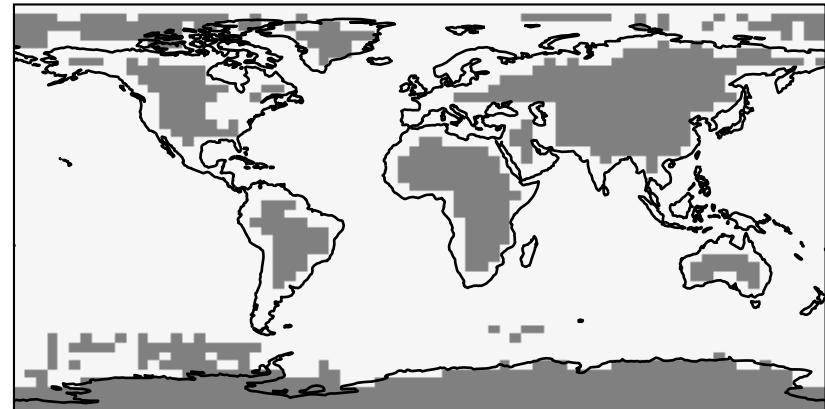
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

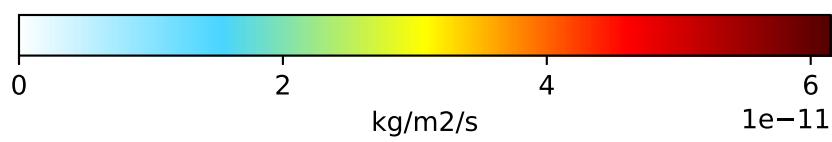
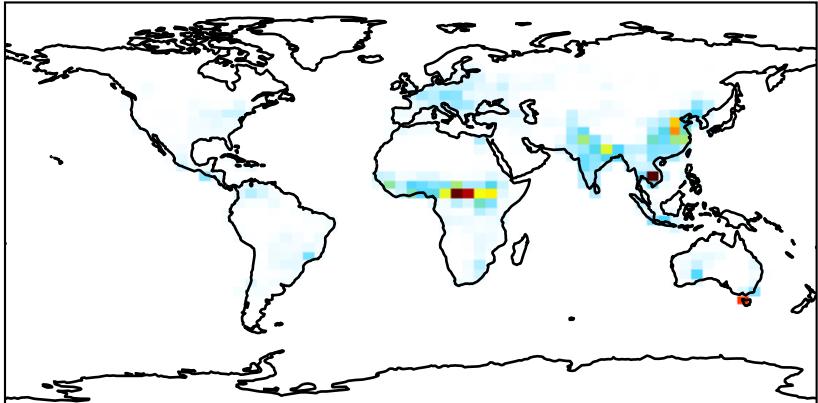


Ratio  
Dev/Ref, Fixed Range

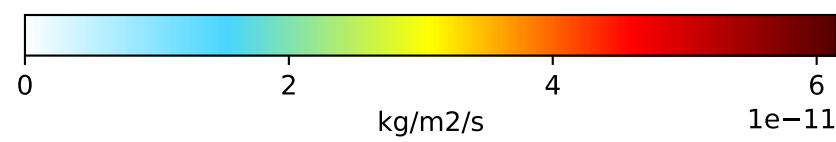
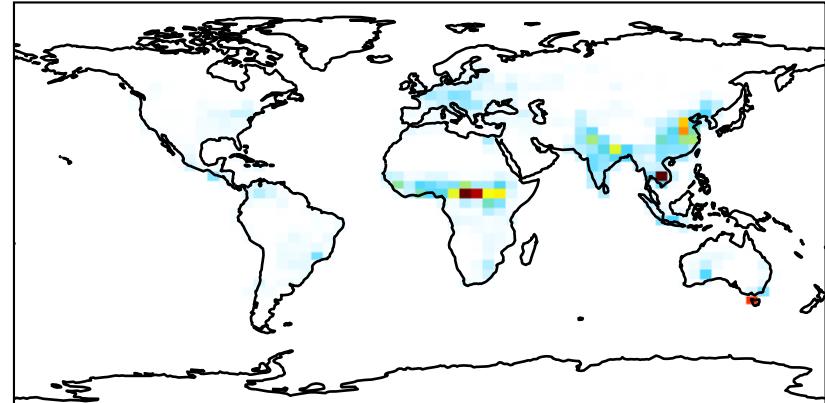


# EmisOCPO\_Total (Jan2019)

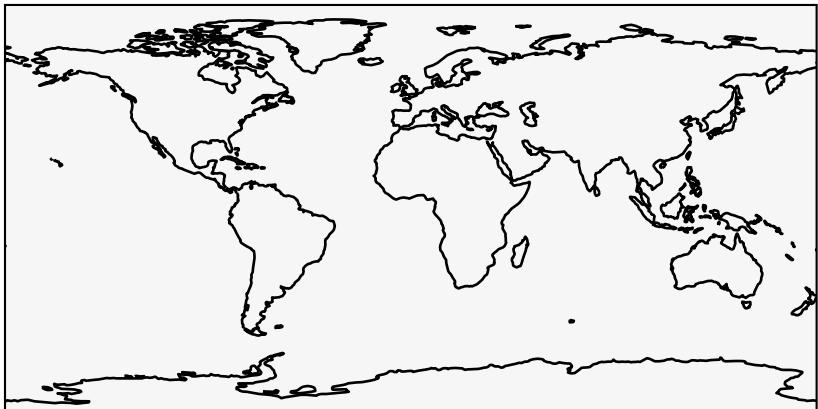
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0

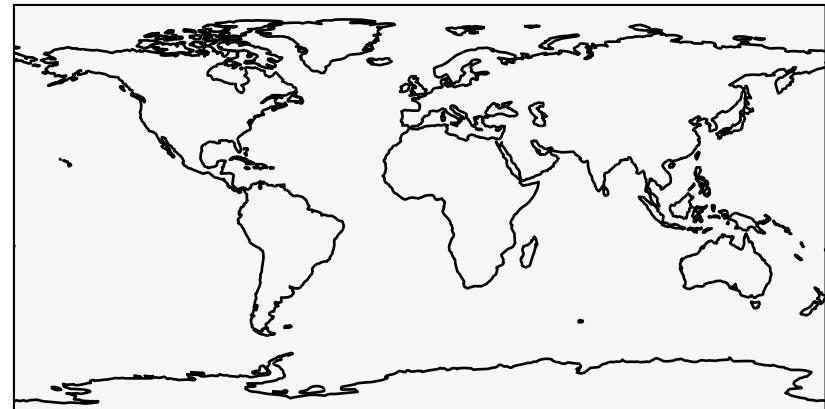


Difference  
Dev - Ref, Dynamic Range



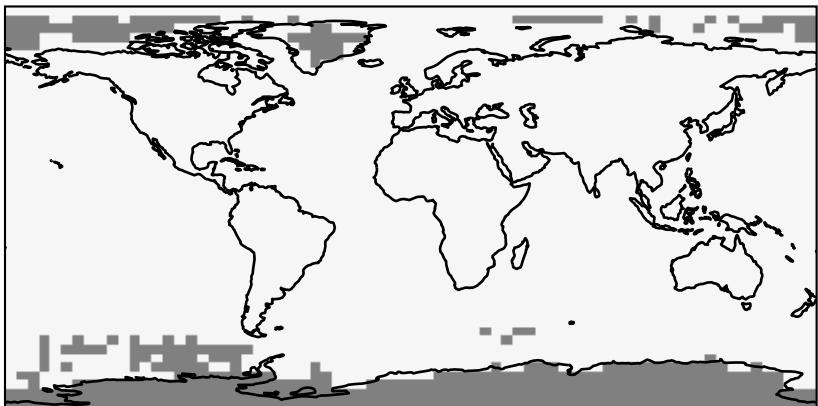
Zero throughout domain  
kg/m²/s

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

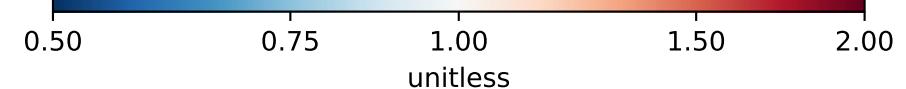
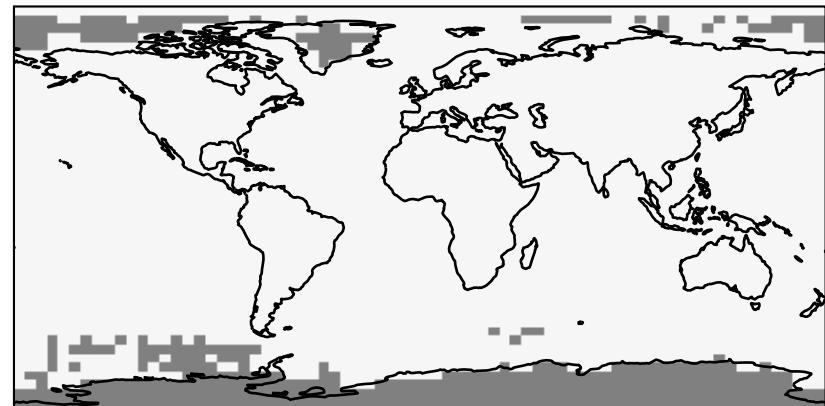


Zero throughout domain  
kg/m²/s

Ratio  
Dev/Ref, Dynamic Range

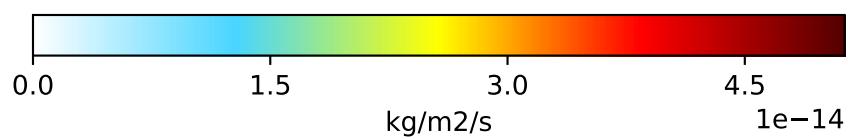
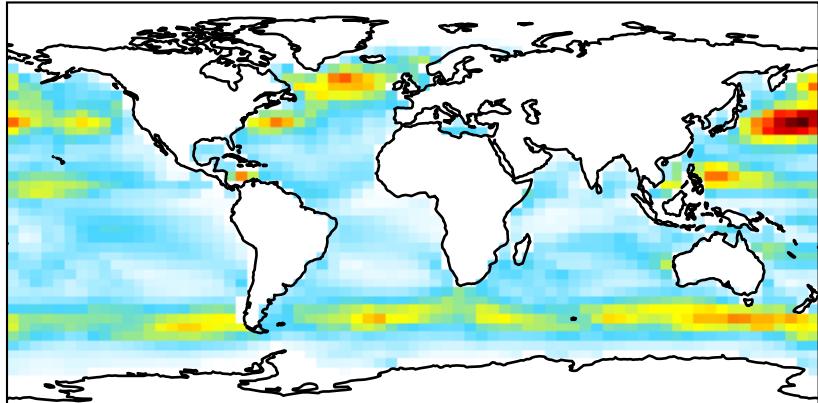


Ratio  
Dev/Ref, Fixed Range

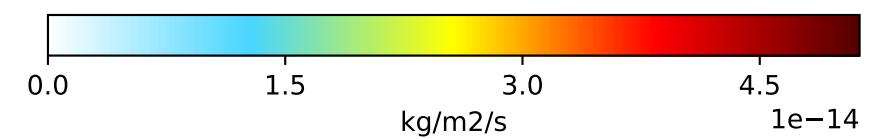
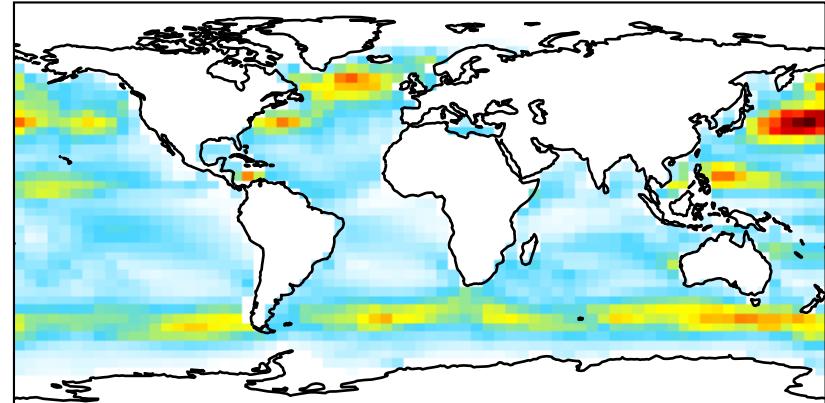


# EmisBrSALA\_Natural (Jan2019)

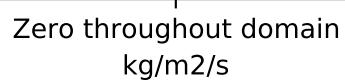
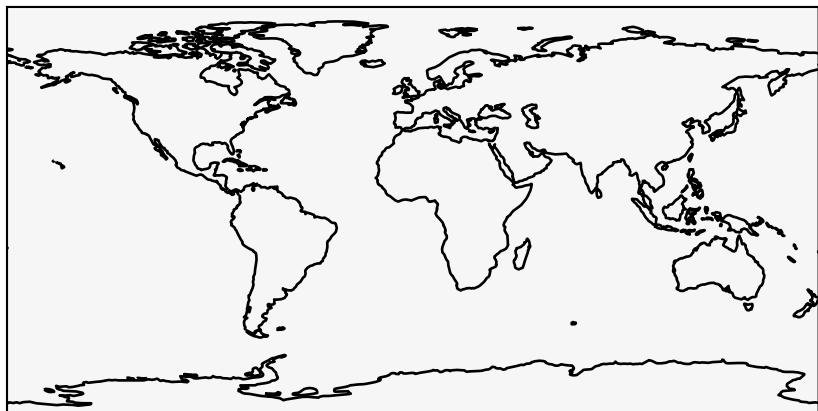
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



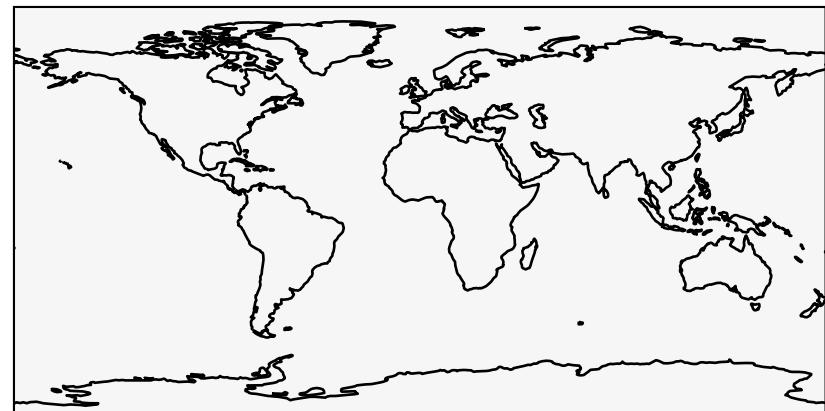
GCC\_13.0.0 (Dev)  
4.0x5.0



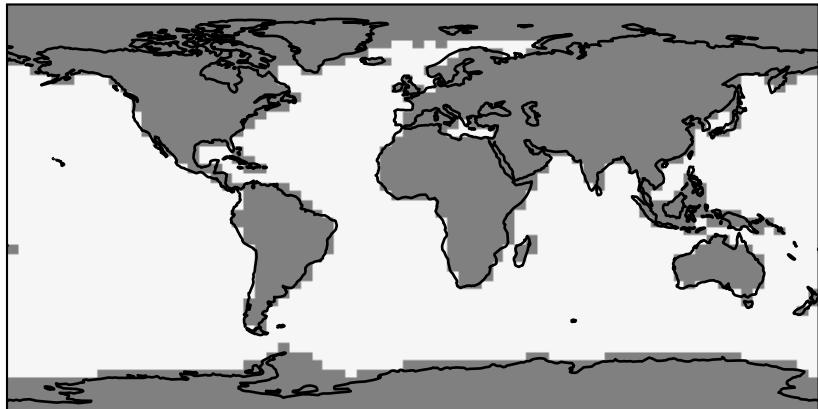
Difference  
Dev - Ref, Dynamic Range



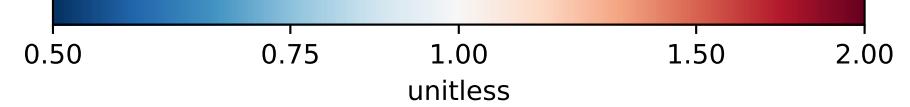
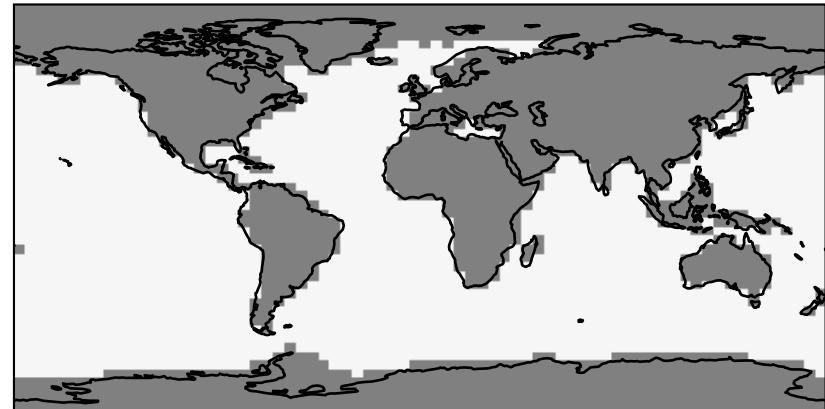
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

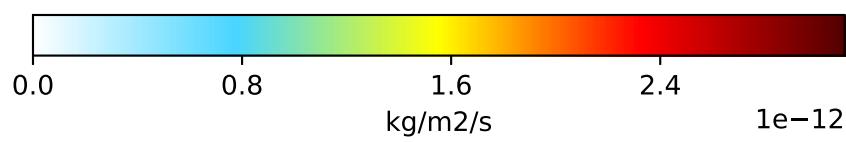
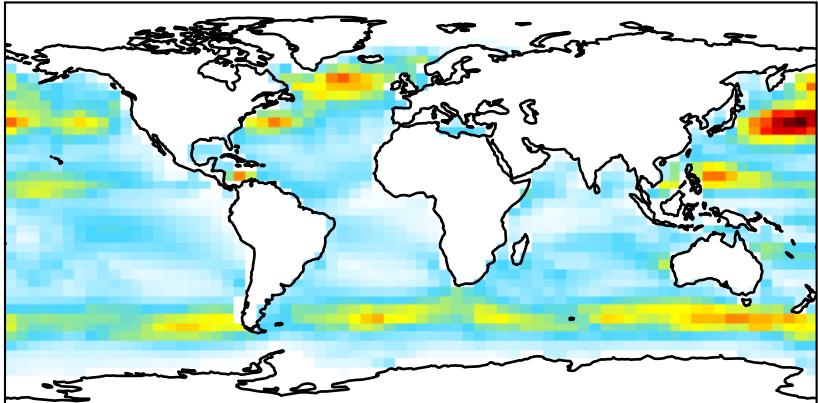


Ratio  
Dev/Ref, Fixed Range

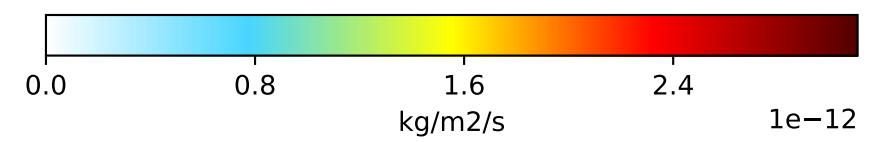
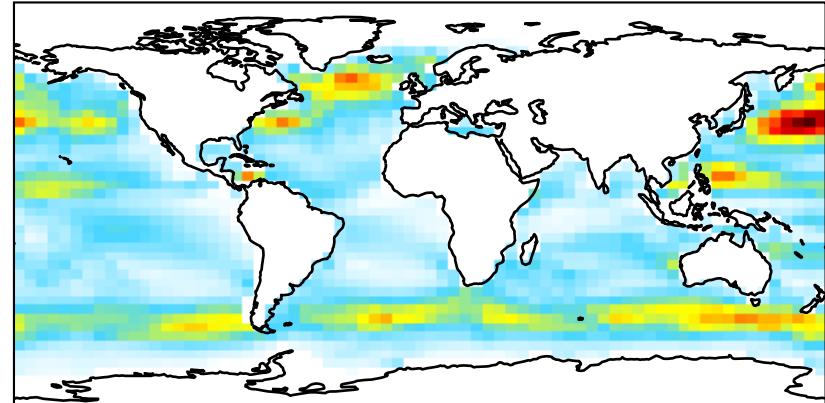


# EmisBrSALC\_Natural (Jan2019)

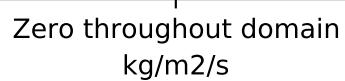
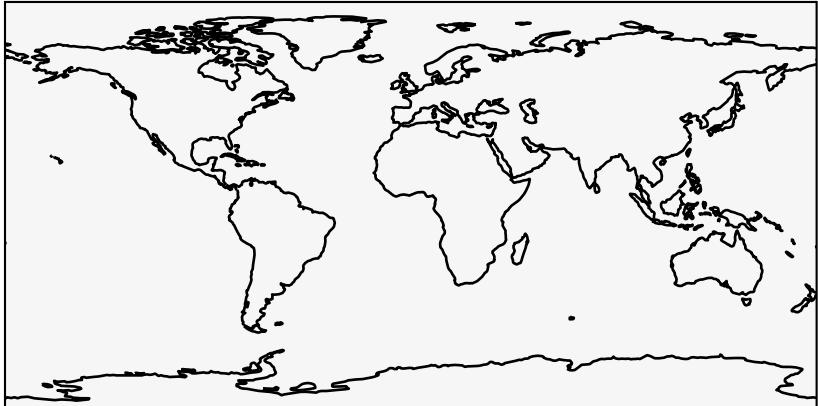
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



GCC\_13.0.0 (Dev)  
4.0x5.0



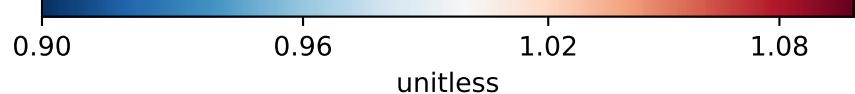
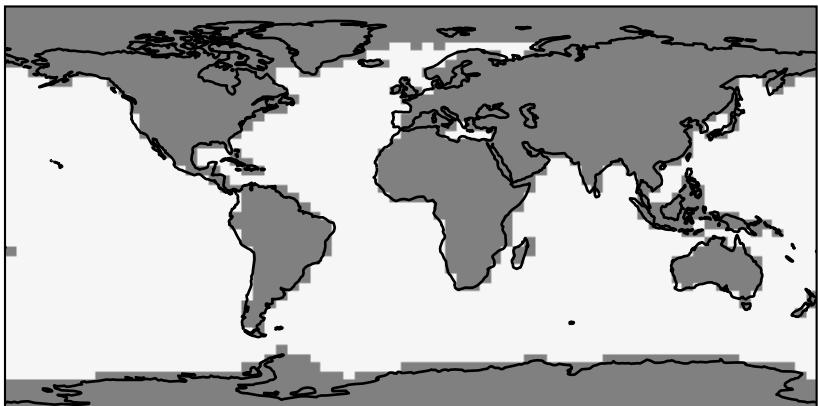
Difference  
Dev - Ref, Dynamic Range



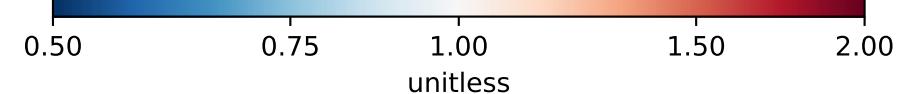
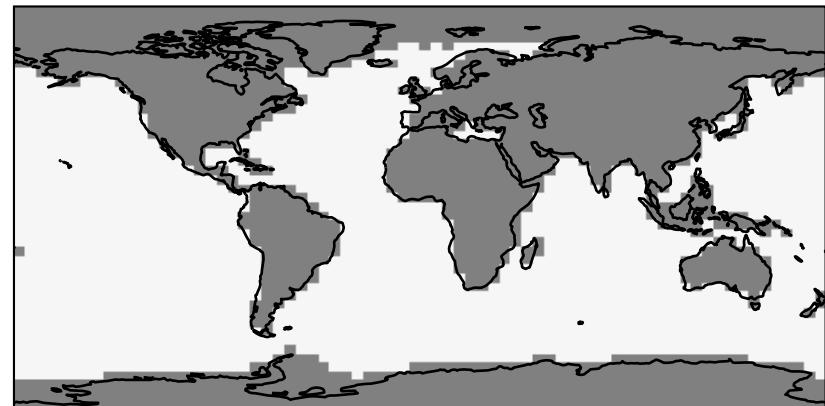
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

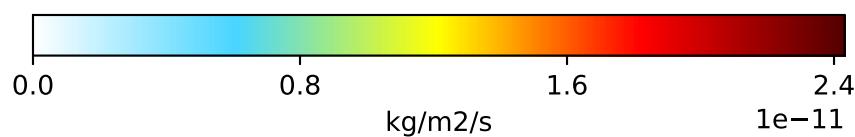
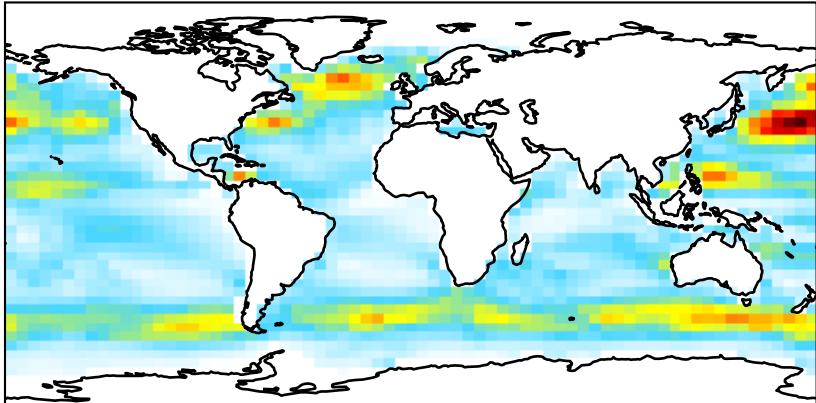


Ratio  
Dev/Ref, Fixed Range

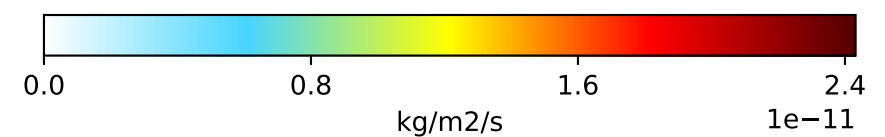
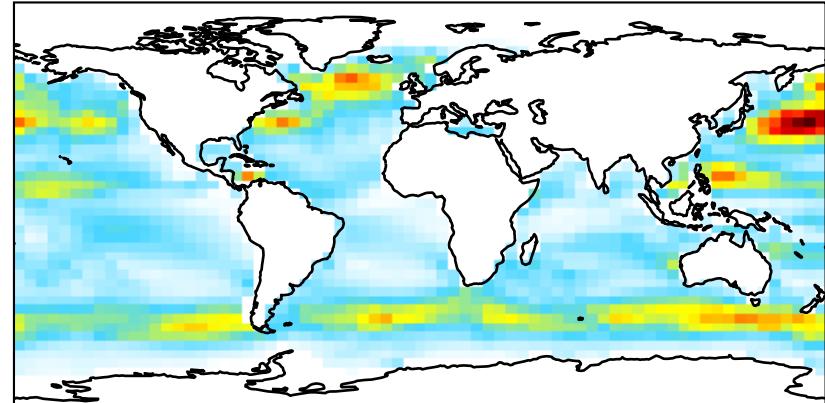


# EmisSALA\_Natural (Jan2019)

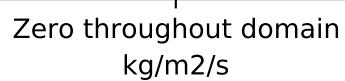
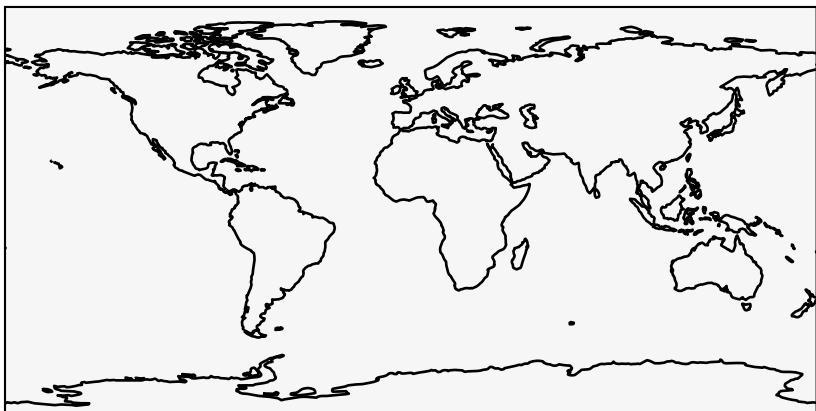
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



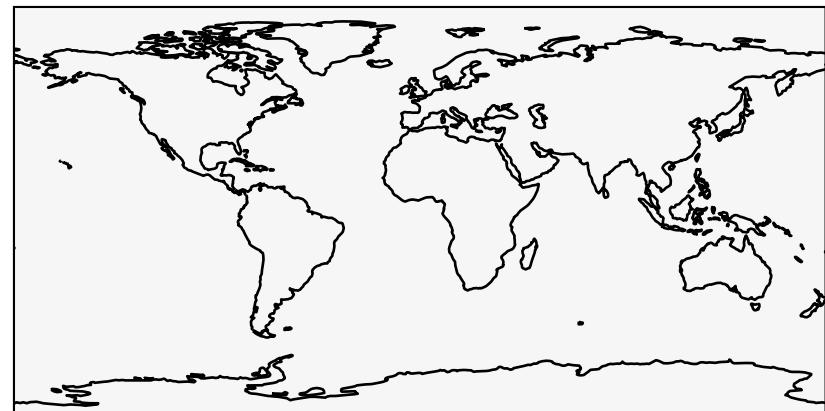
GCC\_13.0.0 (Dev)  
4.0x5.0



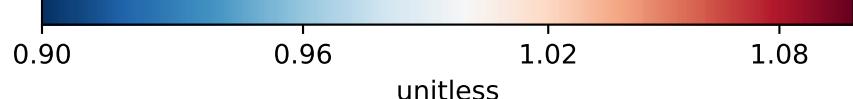
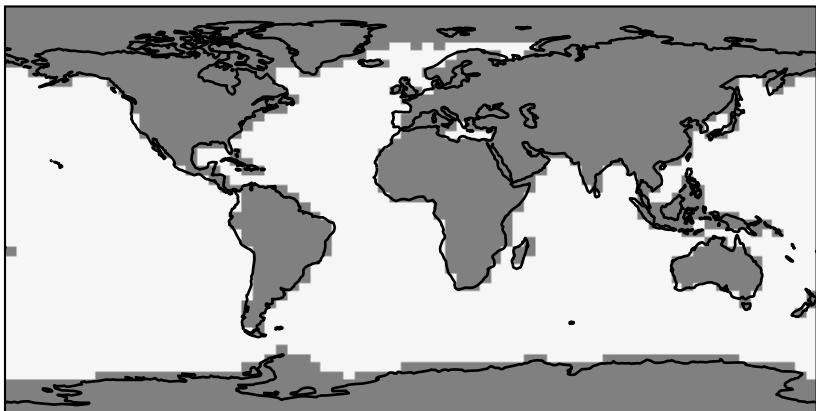
Difference  
Dev - Ref, Dynamic Range



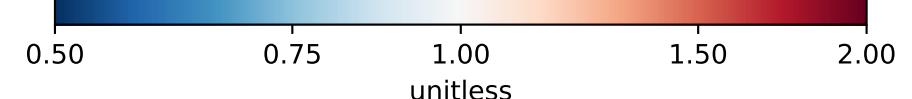
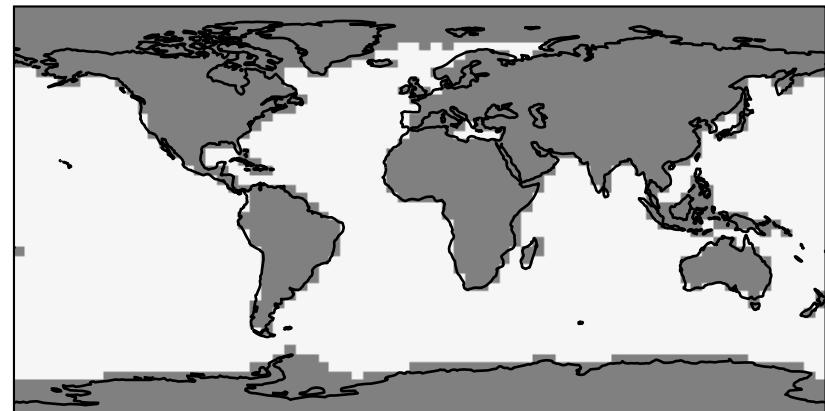
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

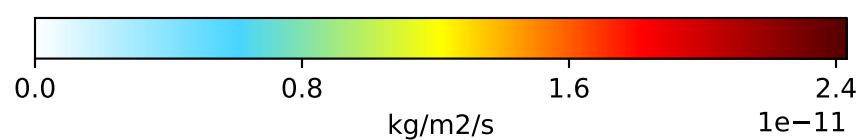
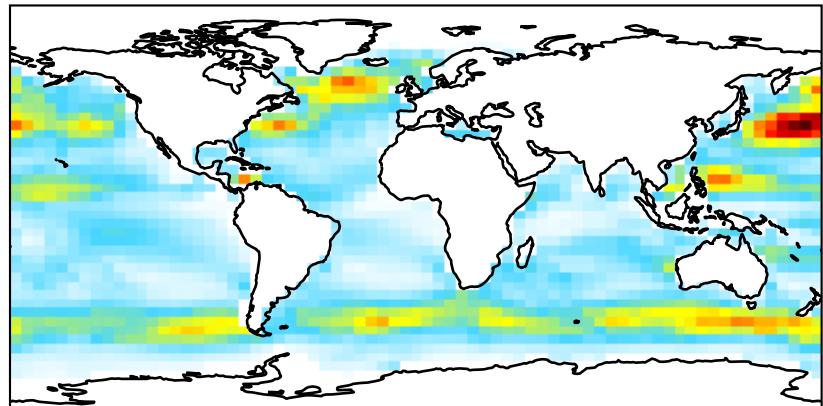


Ratio  
Dev/Ref, Fixed Range

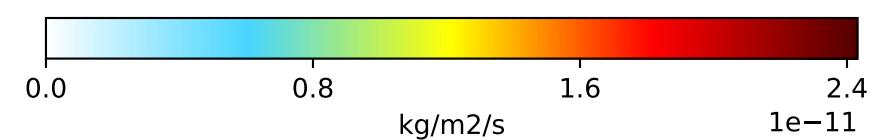
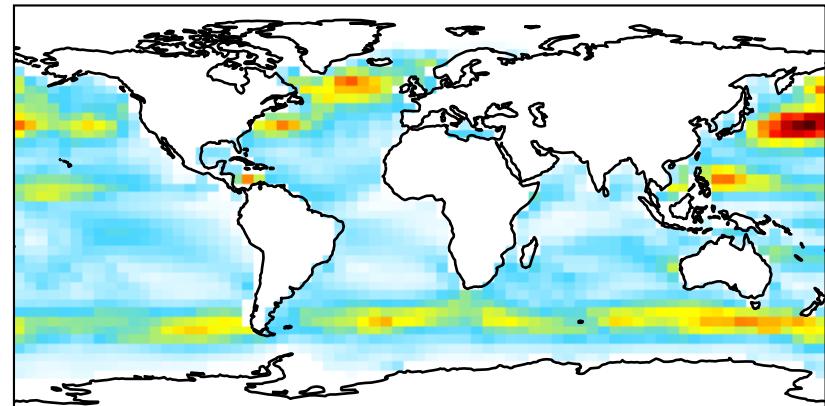


# EmisSALAAL\_Natural (Jan2019)

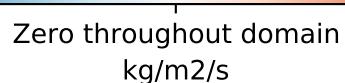
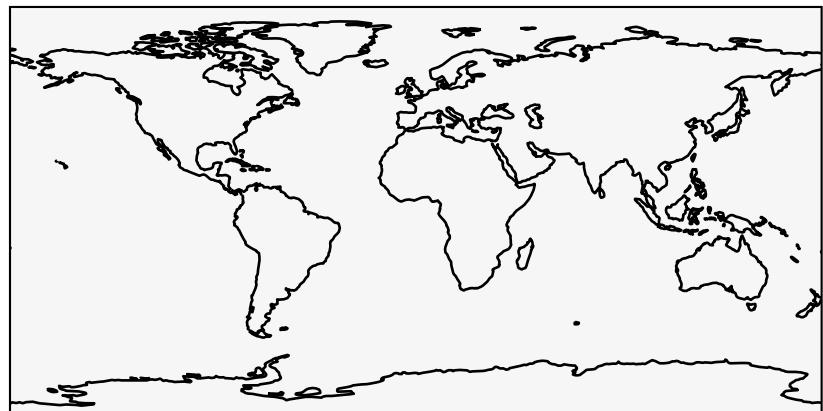
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



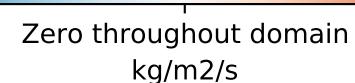
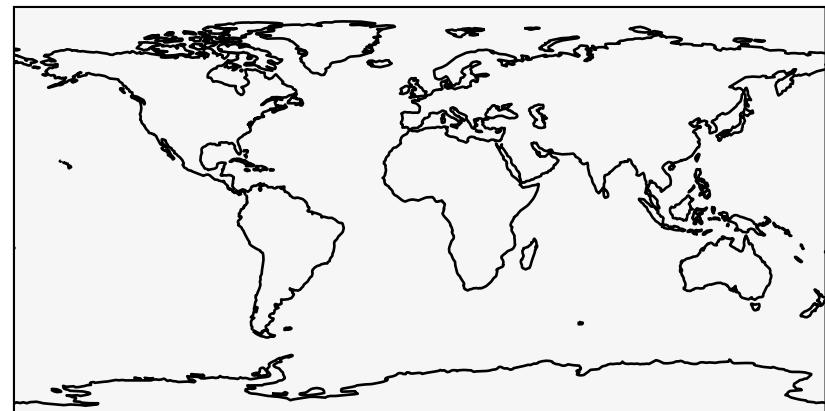
GCC\_13.0.0 (Dev)  
4.0x5.0



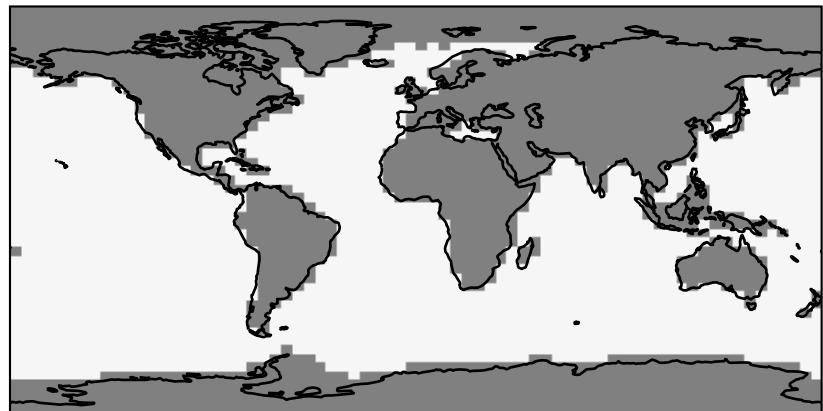
Difference  
Dev - Ref, Dynamic Range



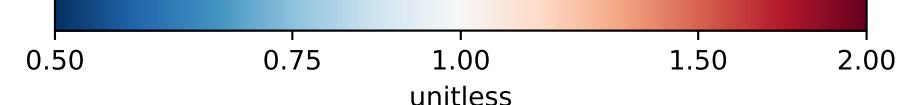
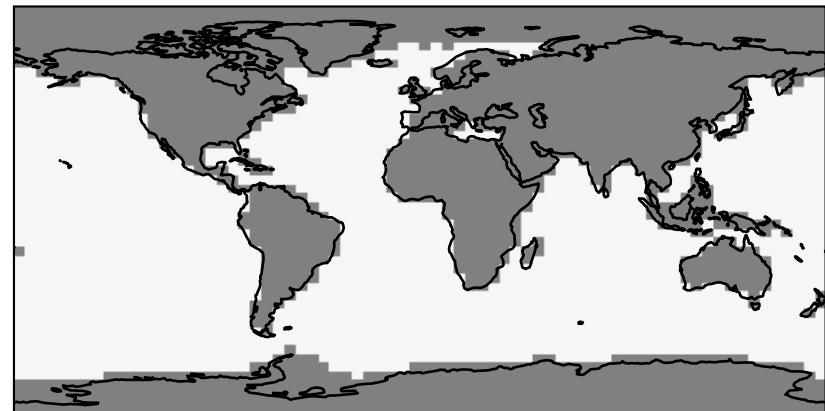
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

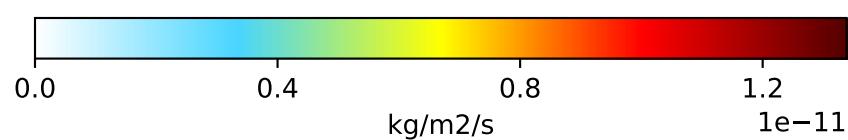
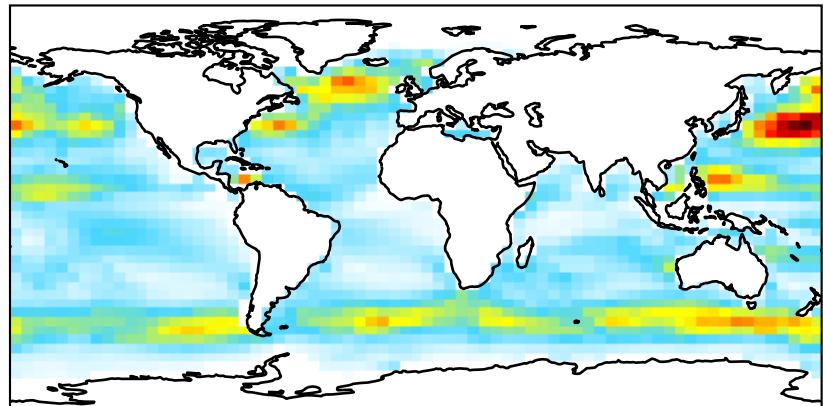


Ratio  
Dev/Ref, Fixed Range

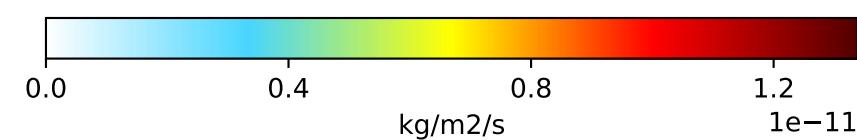
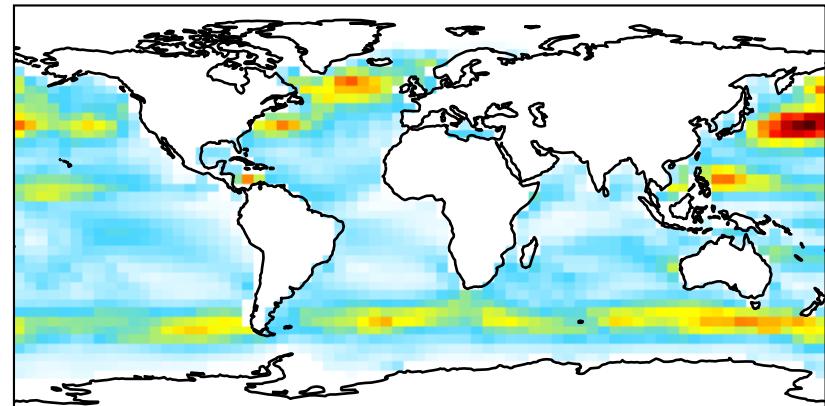


# EmisSALACL\_Natural (Jan2019)

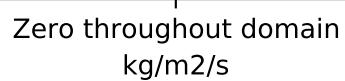
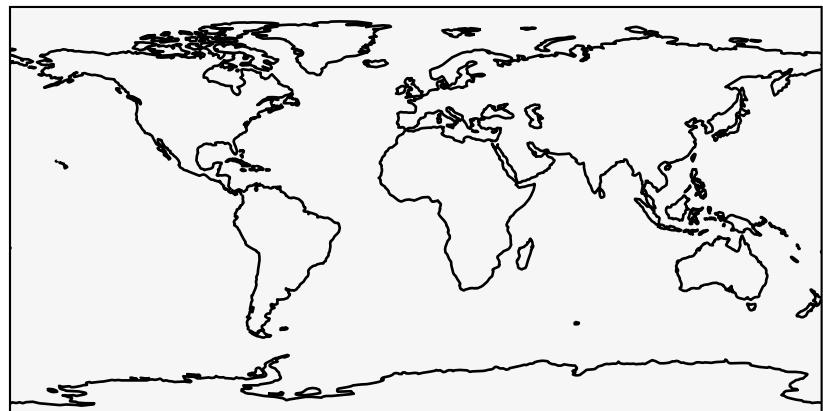
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



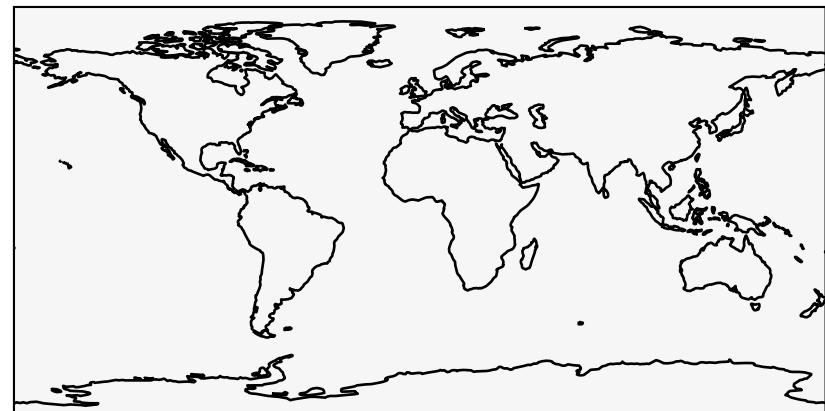
GCC\_13.0.0 (Dev)  
4.0x5.0



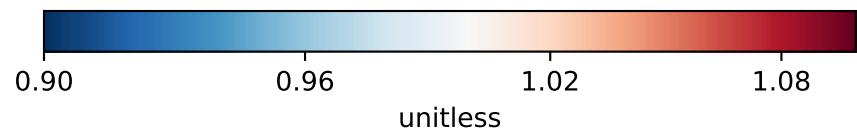
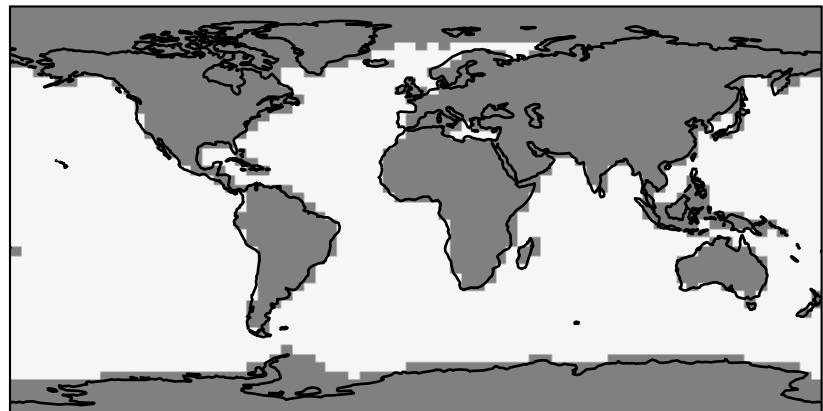
Difference  
Dev - Ref, Dynamic Range



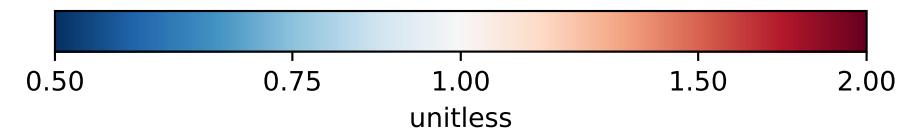
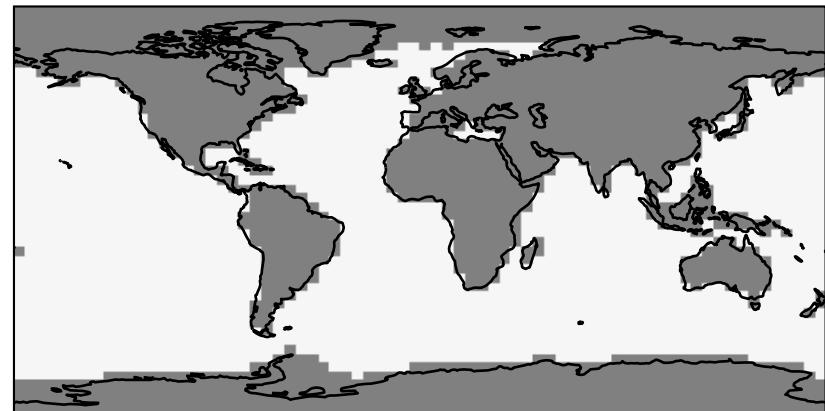
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

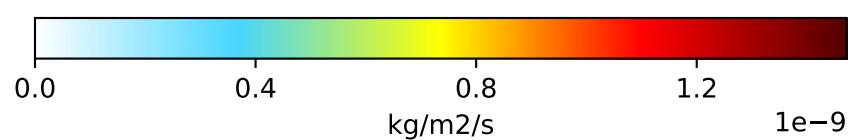
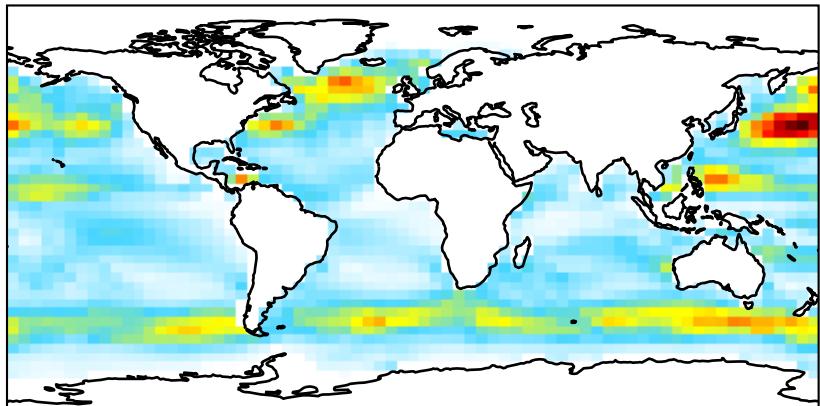


Ratio  
Dev/Ref, Fixed Range

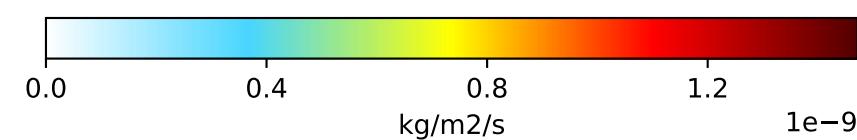
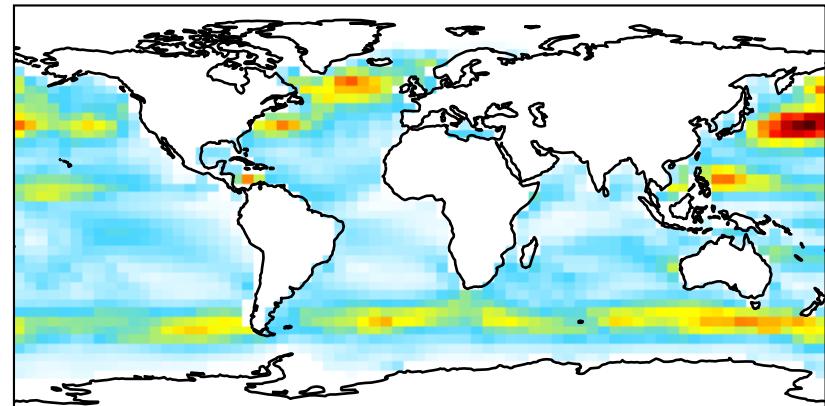


# EmisSALC\_Natural (Jan2019)

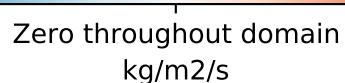
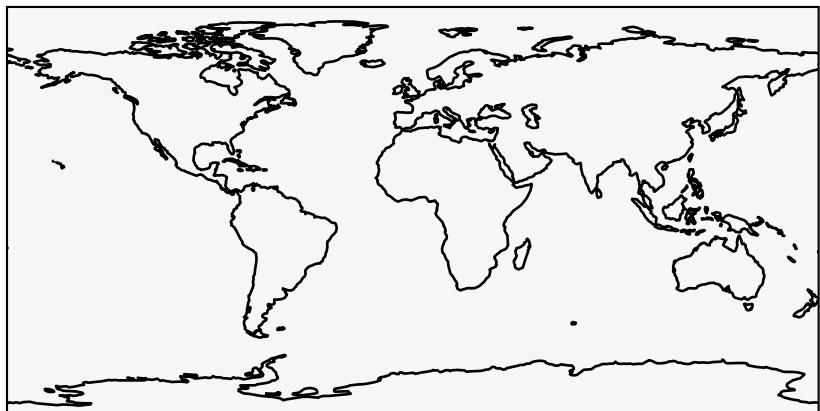
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



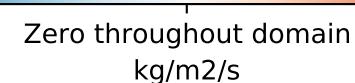
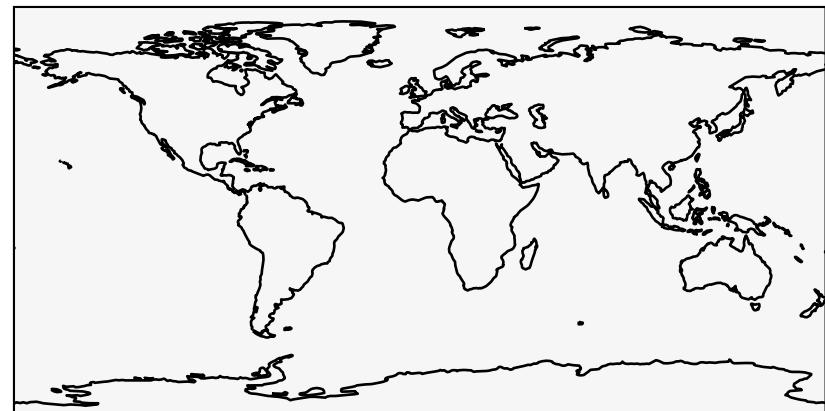
GCC\_13.0.0 (Dev)  
4.0x5.0



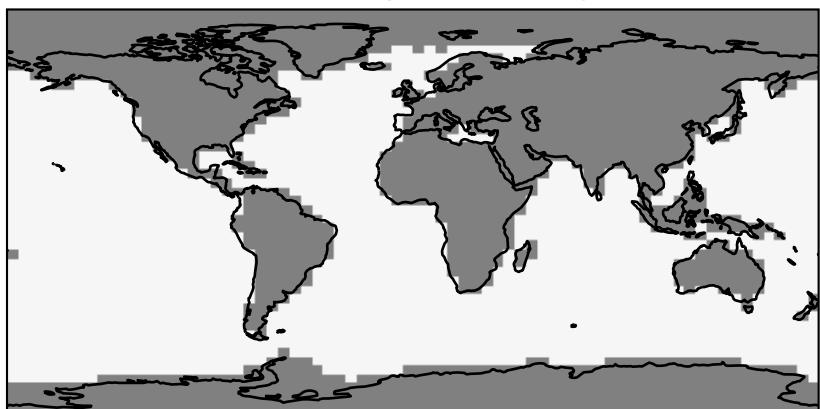
Difference  
Dev - Ref, Dynamic Range



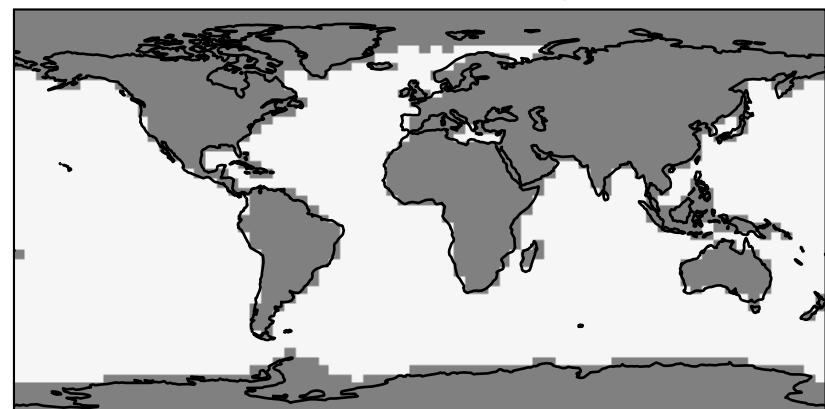
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

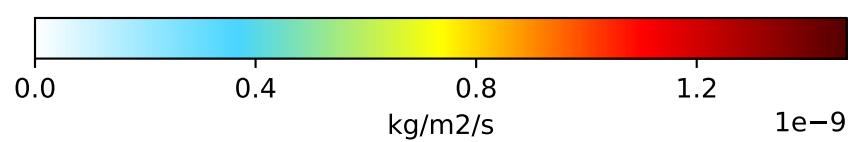
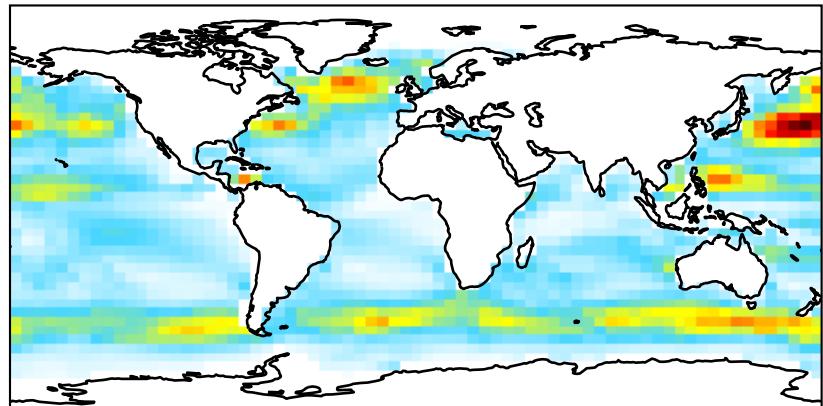


Ratio  
Dev/Ref, Fixed Range

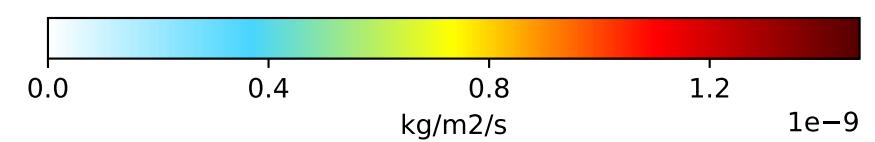
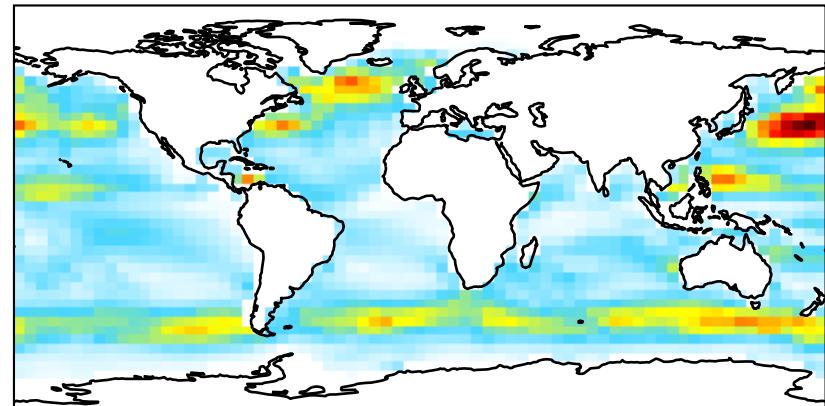


# EmisSALCAL\_Natural (Jan2019)

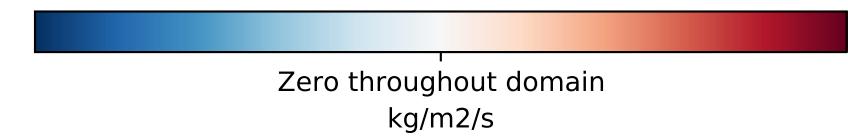
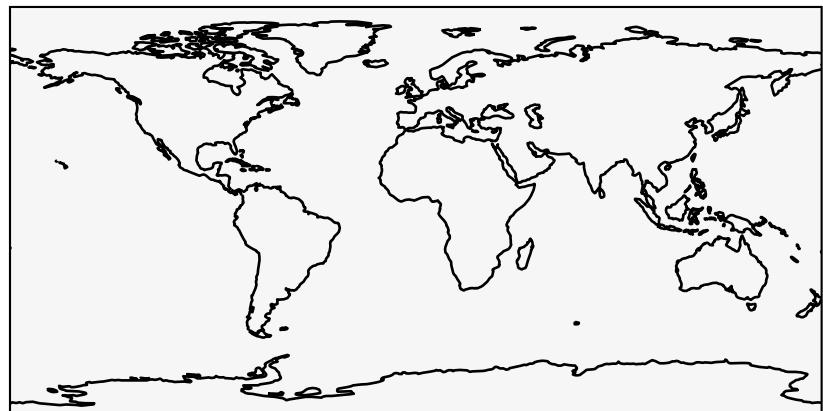
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



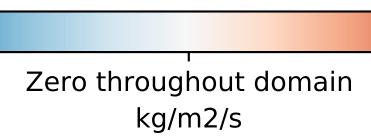
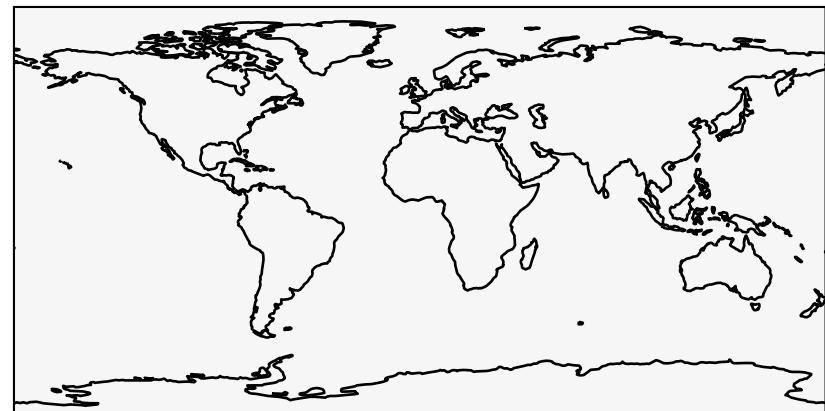
GCC\_13.0.0 (Dev)  
4.0x5.0



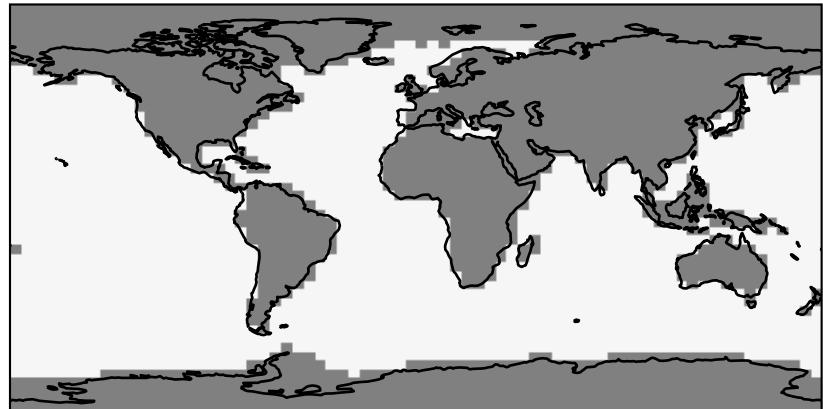
Difference  
Dev - Ref, Dynamic Range



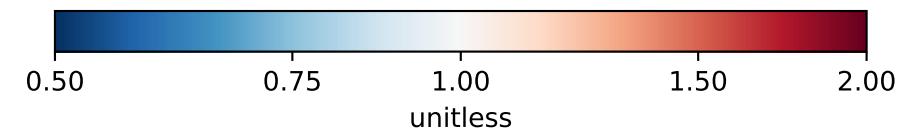
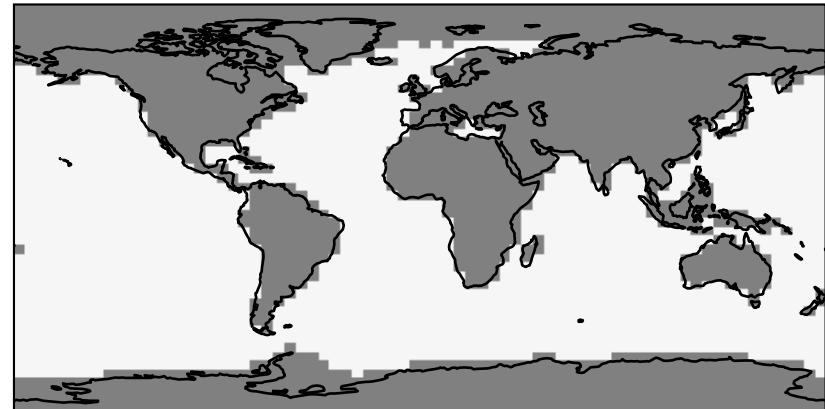
Difference  
Dev - Ref, Restricted Range [5%,95%]



Ratio  
Dev/Ref, Dynamic Range

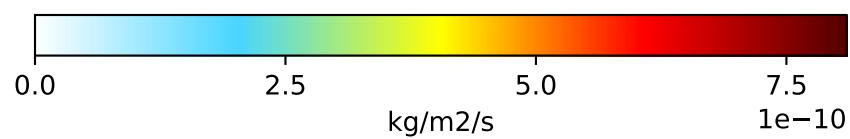
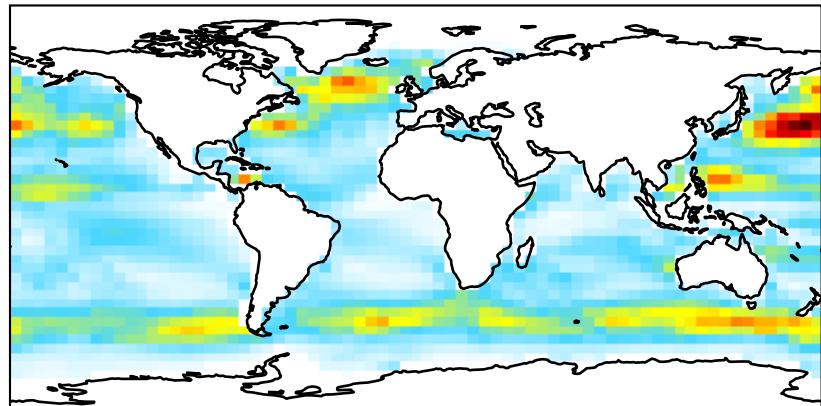


Ratio  
Dev/Ref, Fixed Range

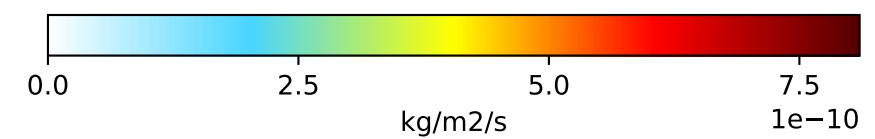
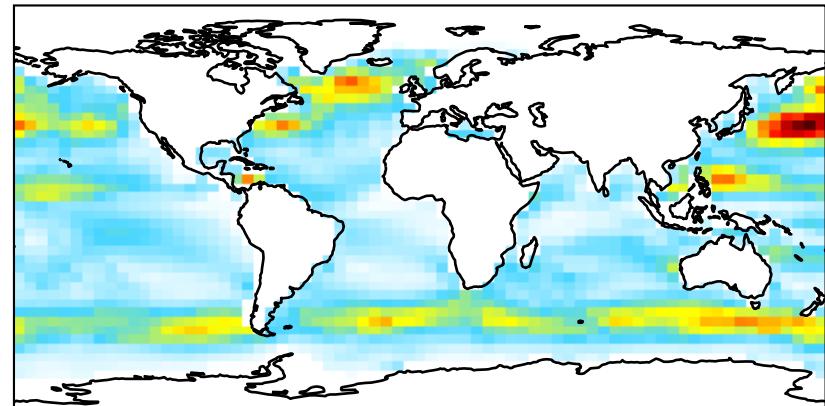


# EmisSALCCL\_Natural (Jan2019)

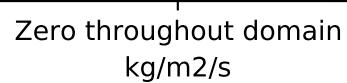
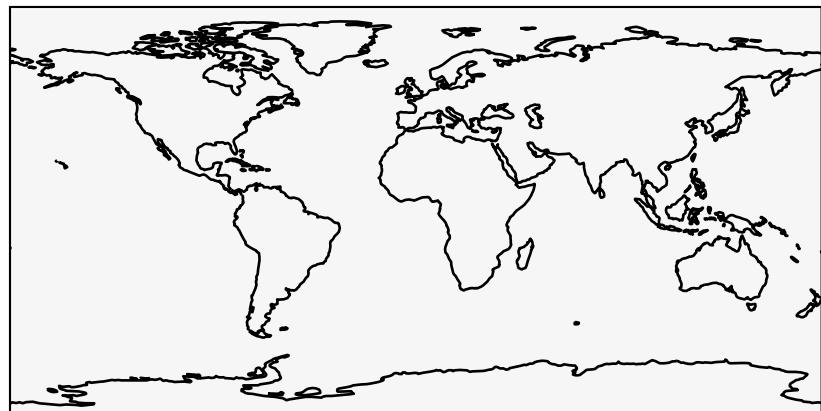
GCC\_13.0.0-beta.1 (Ref)  
4.0x5.0



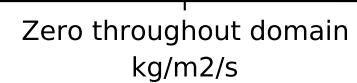
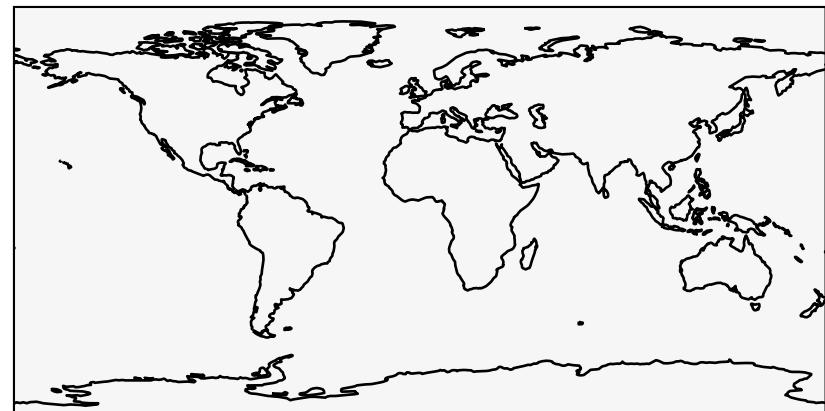
GCC\_13.0.0 (Dev)  
4.0x5.0



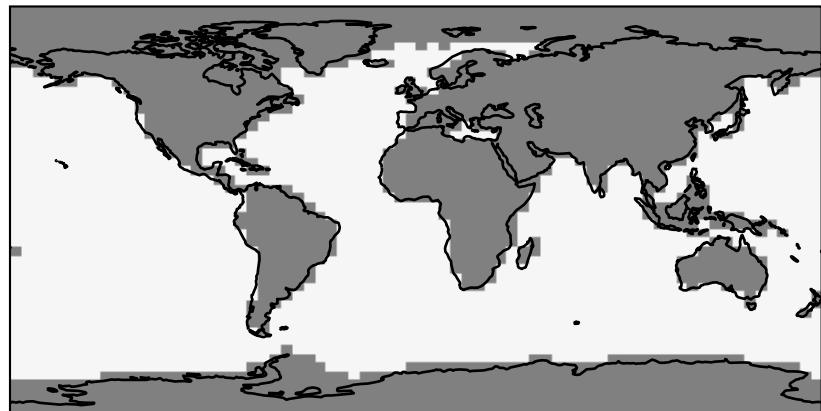
Difference  
Dev - Ref, Dynamic Range



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



Ratio  
Dev/Ref, Dynamic Range



Ratio  
Dev/Ref, Fixed Range

