

1/12° Atlantic Projection simulation updates

Xiaobiao Xu (COAPS/FSU)
NNA Lobster Network All-Hands Meeting
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1

Plan for projection runs

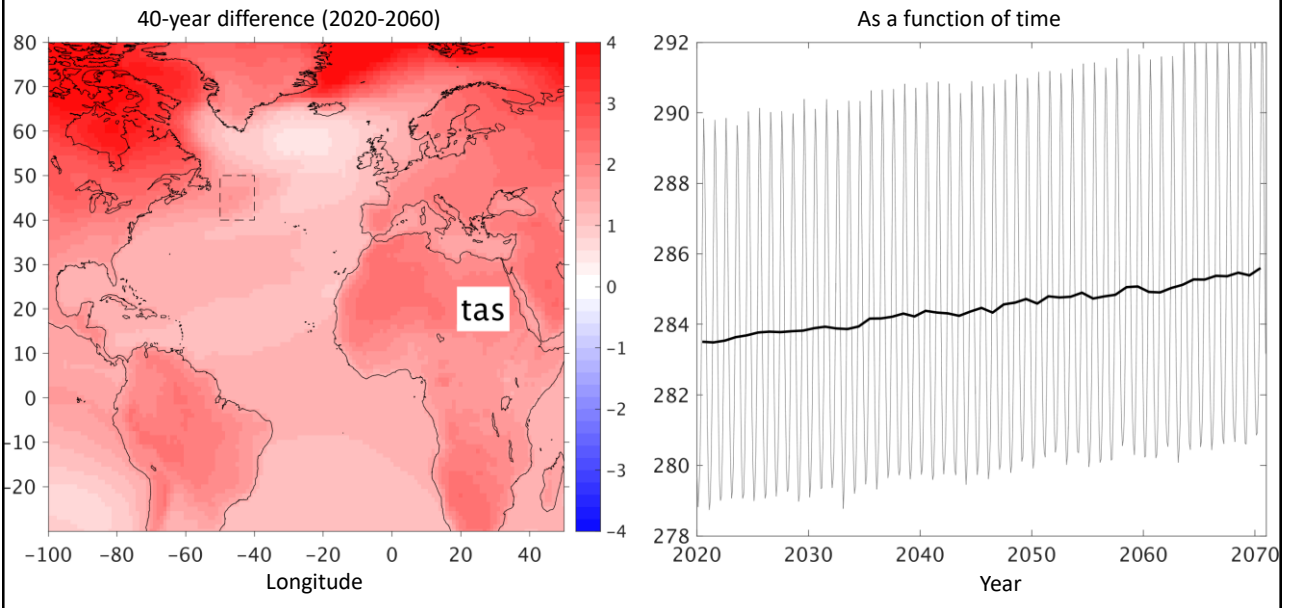
To restart from Atlantic simulation and integrated with the current normal year forcing + anomaly trend in the ensemble average of CIMP6 scenario SSP3-7.0 (<https://psl.noaa.gov/ipcc/cmip6/>) and integrate the simulation for 50 years.

Question for today's Update

- What is in CMIP6 projection (SSP3-7.0 scenario)?

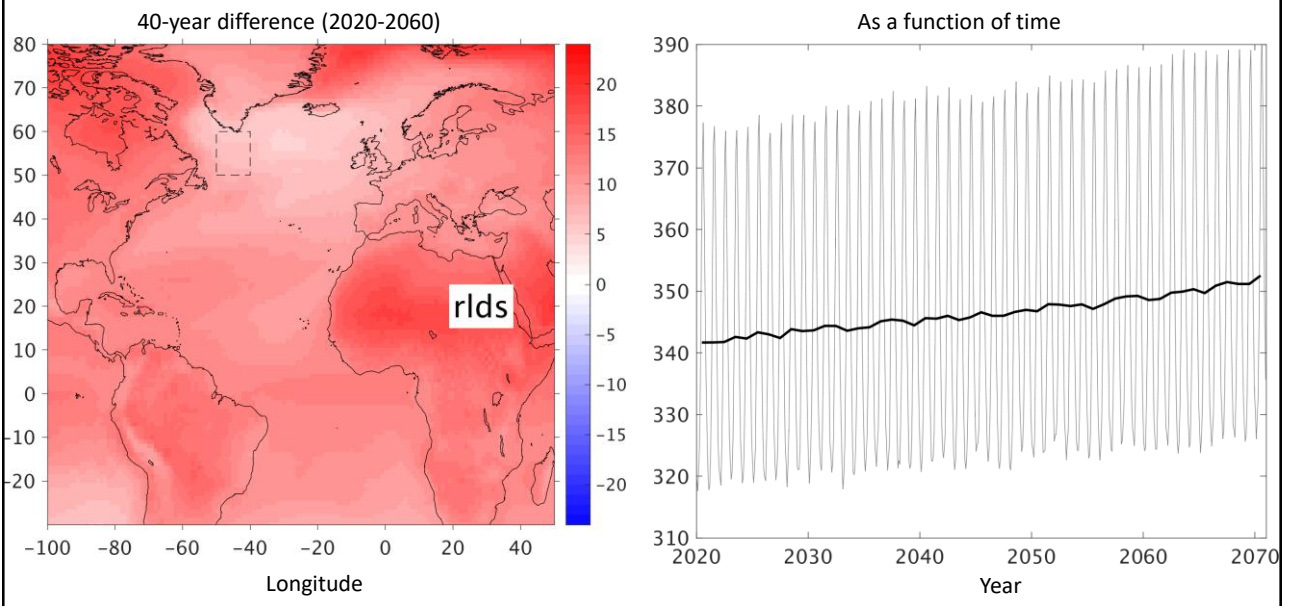
2

1) Atmospheric temperature



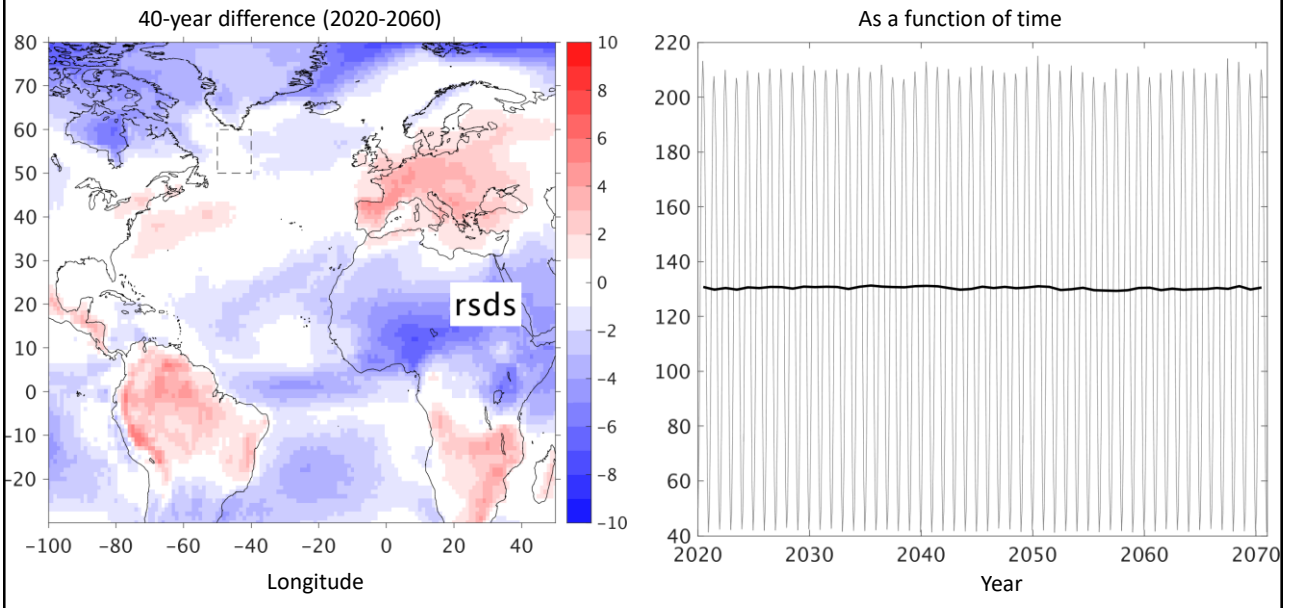
3

2) Surface heat flux (long-wave downward)



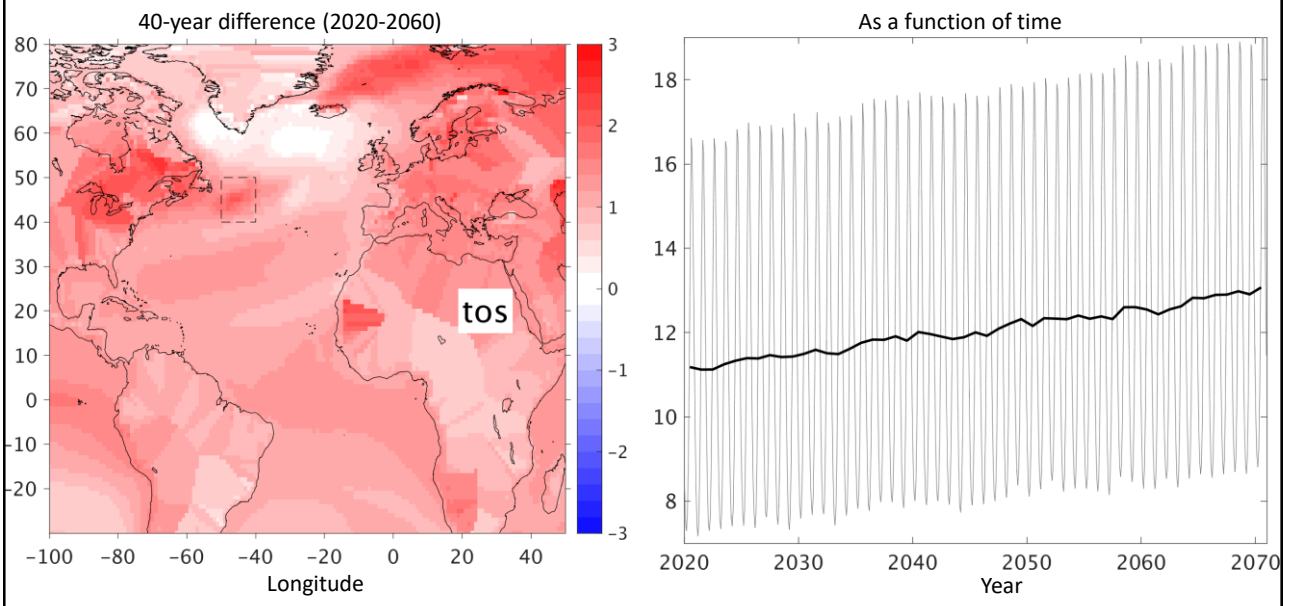
4

3) Surface heat flux (short-wave downward)



5

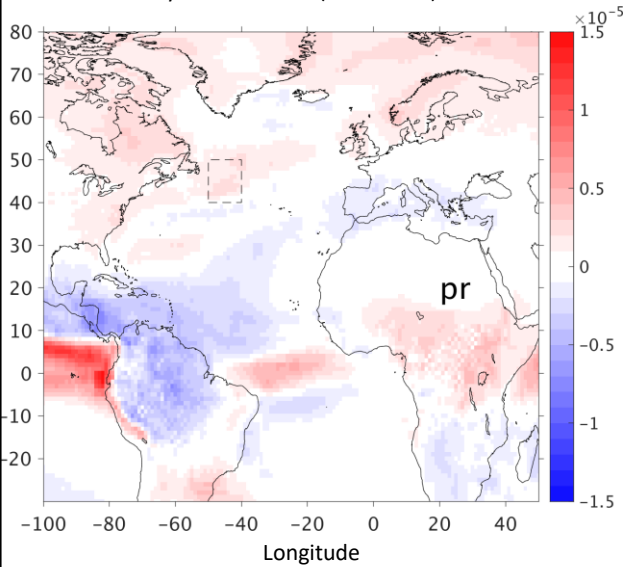
4) Sea surface temperature



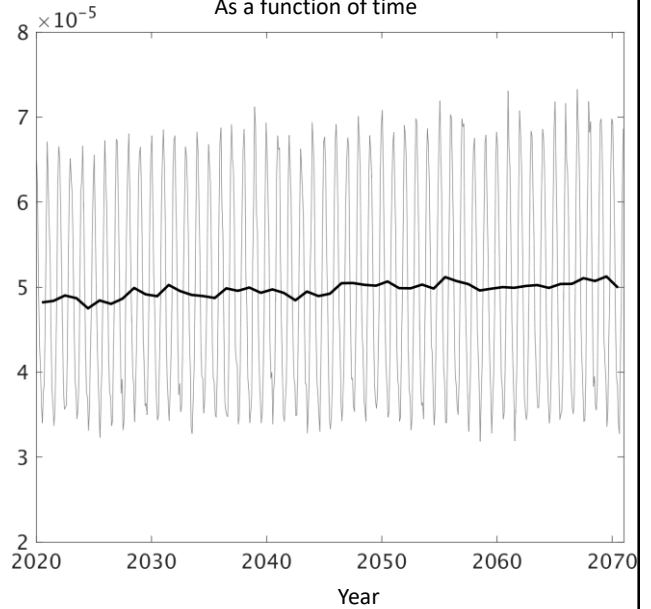
6

5) Precipitation

40-year difference (2020-2060)



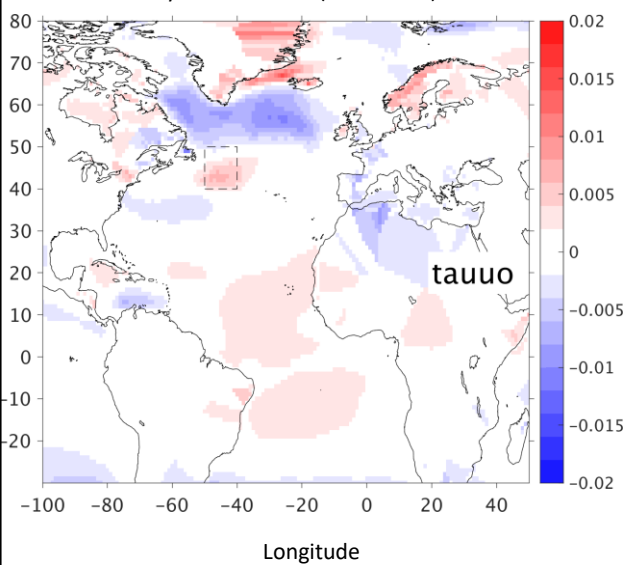
As a function of time



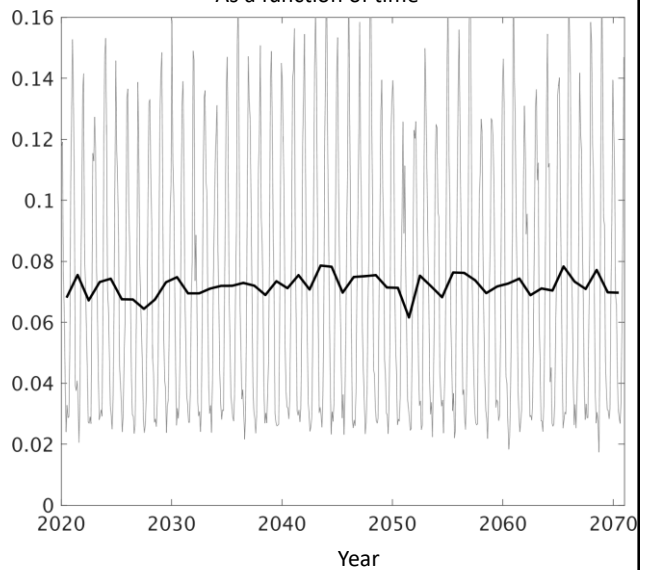
7

6) Wind stress (zonal)

40-year difference (2020-2060)

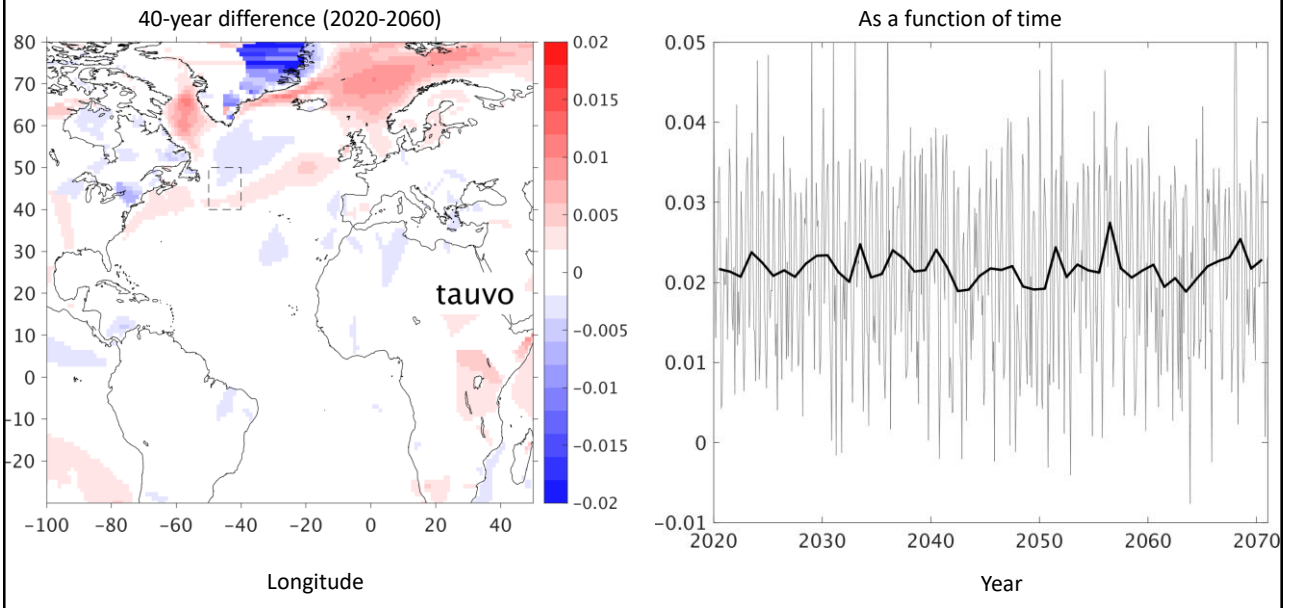


As a function of time



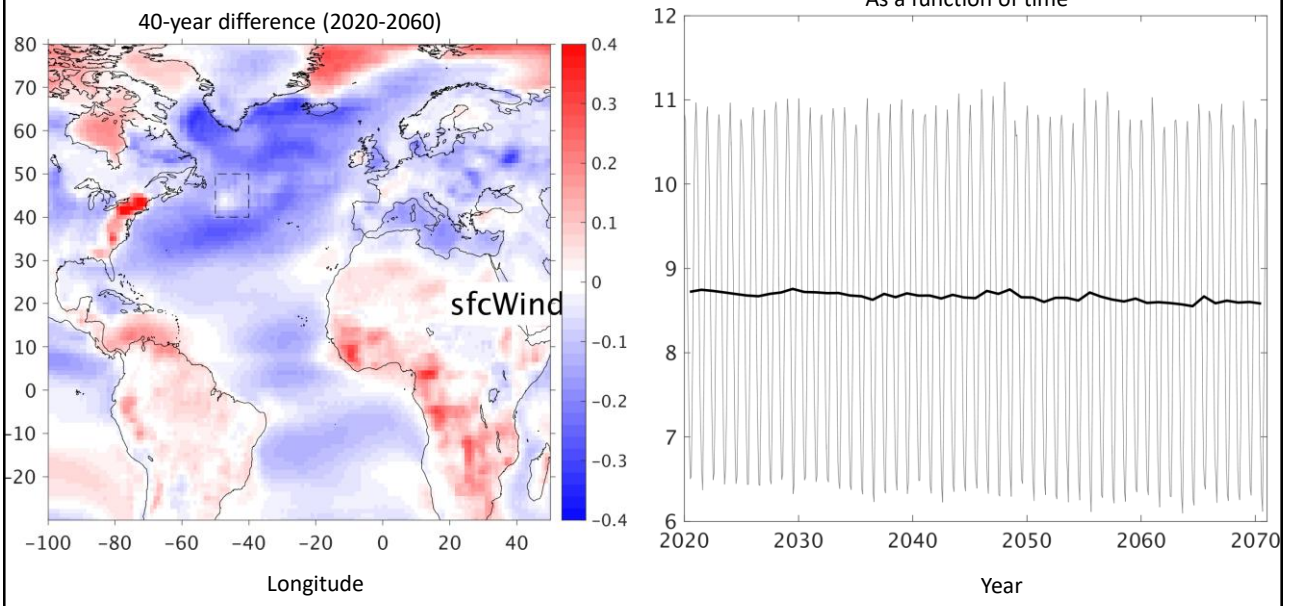
8

7) Wind stress (meridional)



9

8) Wind speed



10

Summary:

- For the ensemble average of the CMIP6 (SSP3-7.0 scenario), there is a clean signature of warming in the atmosphere and, through heat flux, ocean surface.
- There is also some changes in wind stress that may impact the ocean circulation, but the changes are overall relatively small.