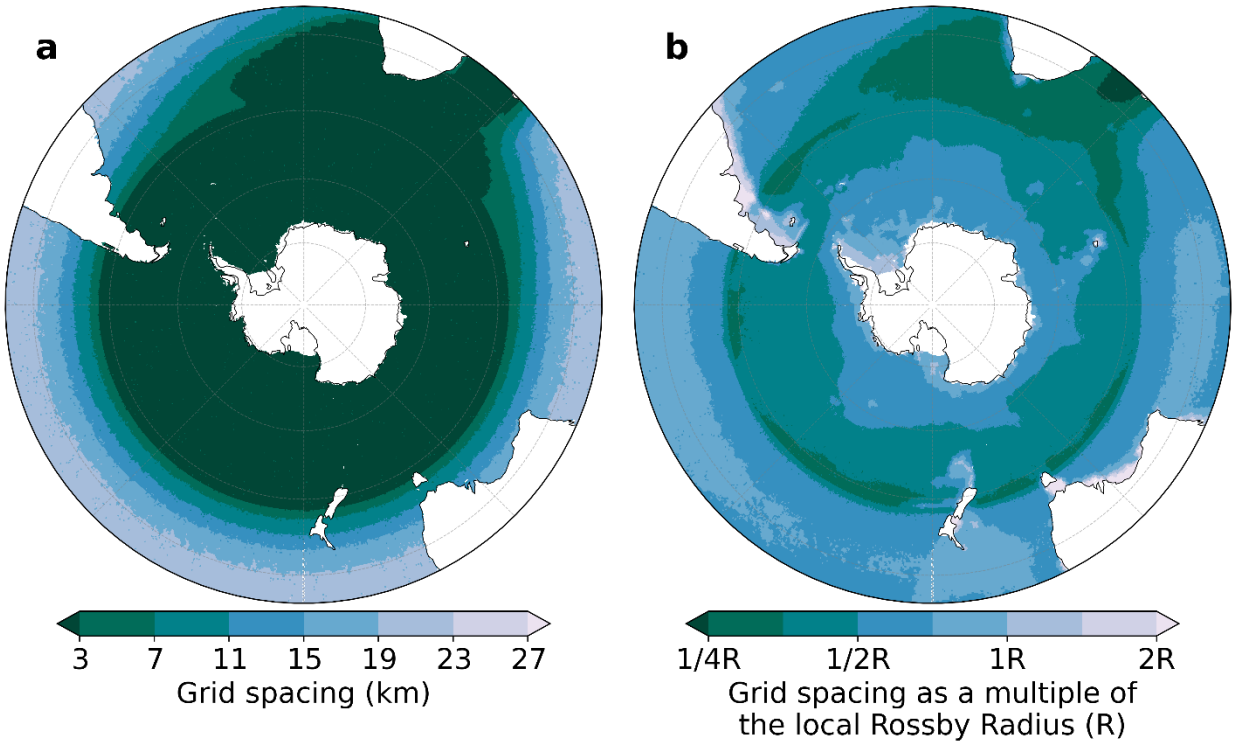
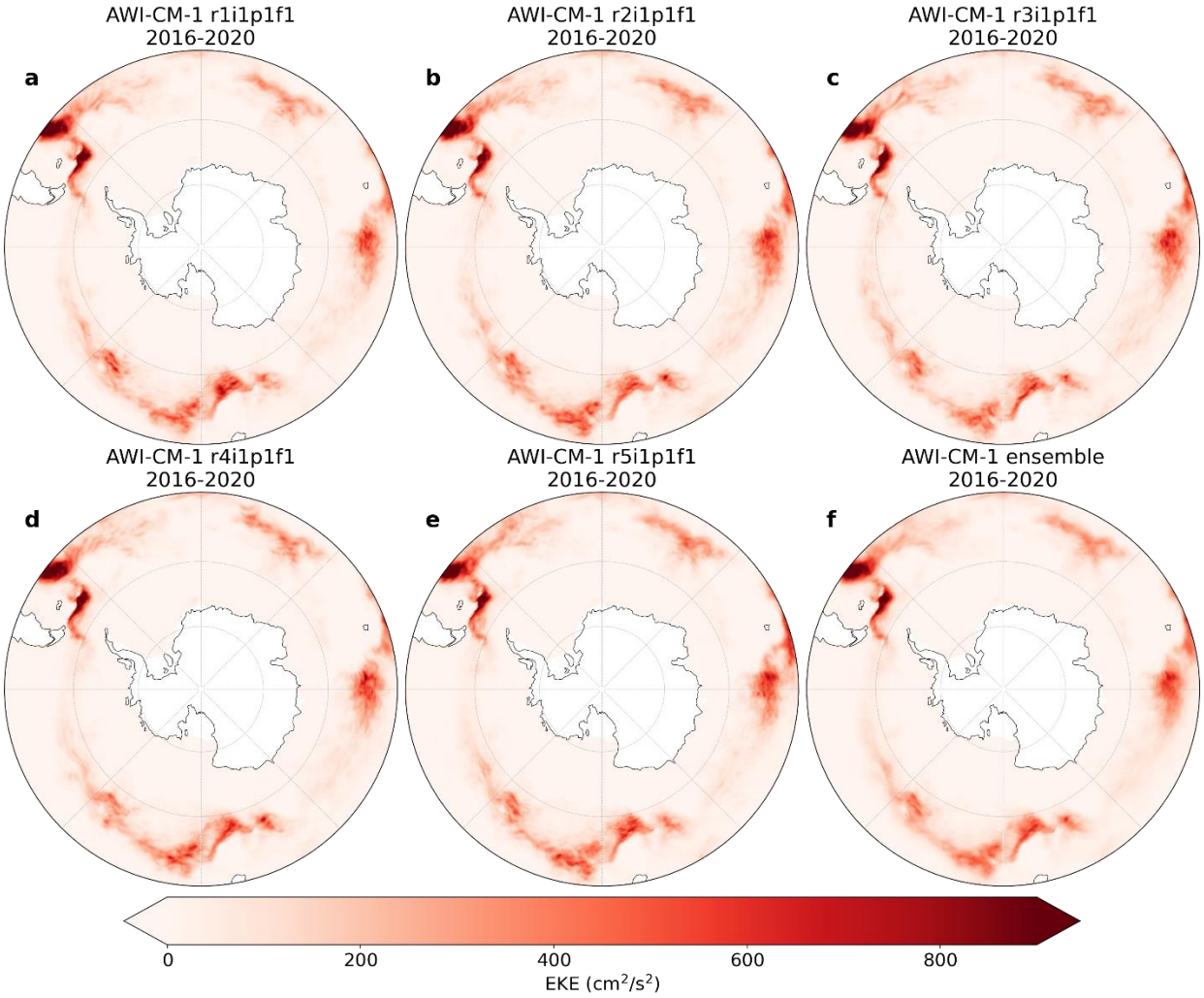
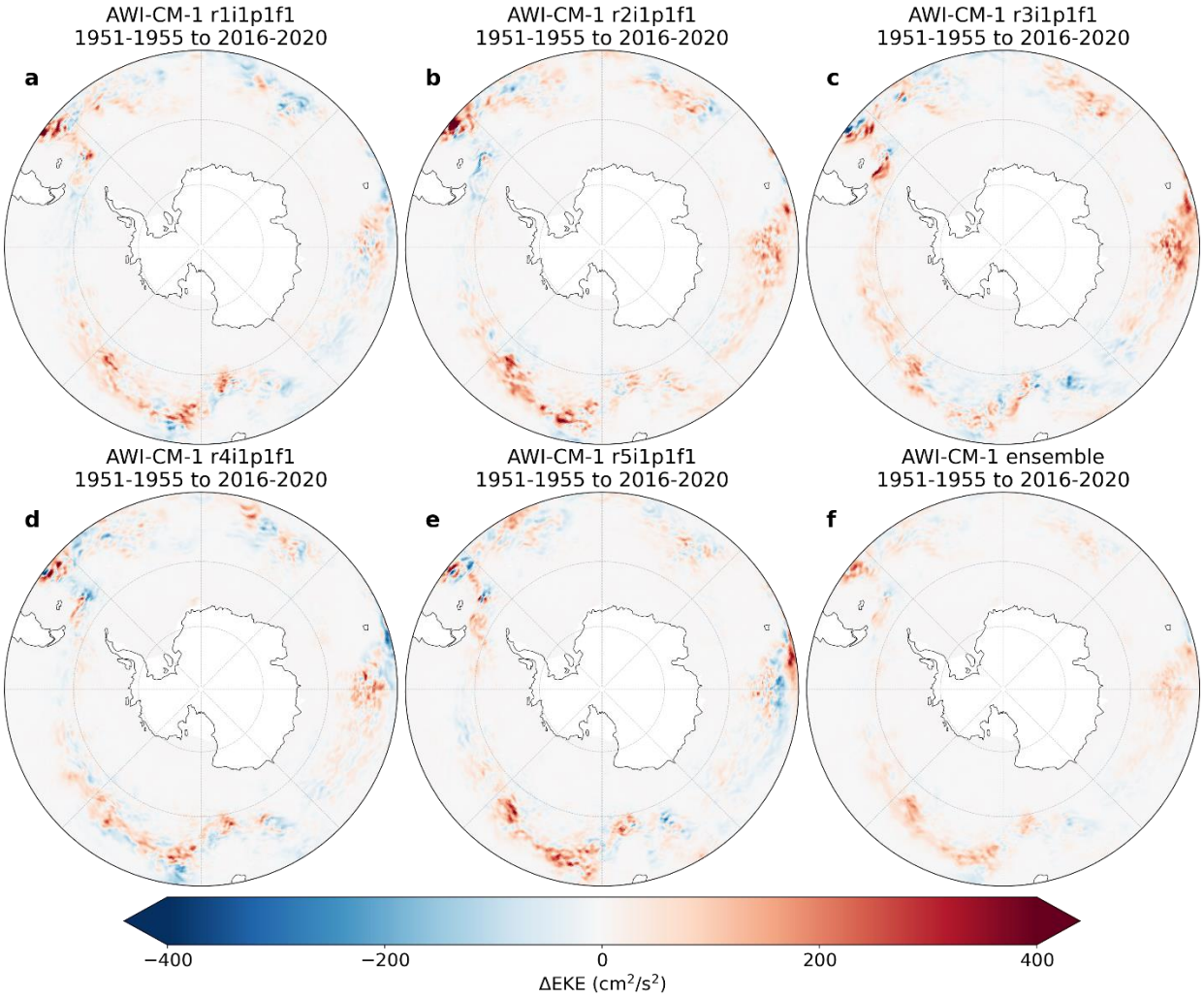
Supplementary figures



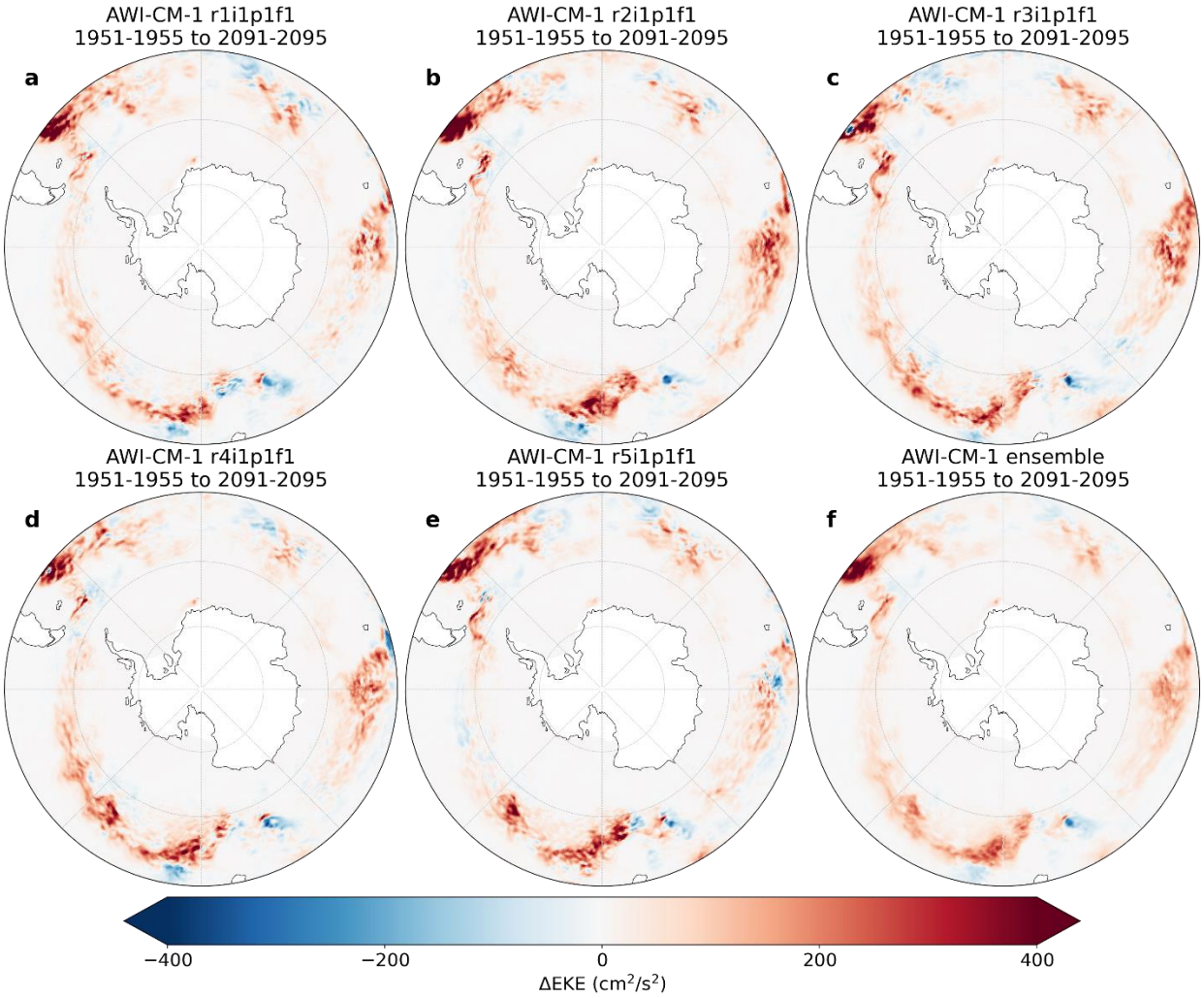
Supplementary Figure 1. Grid resolution of the SO3 mesh. a) grid resolution expressed as approximate node spacing. **b)** Grid resolution expressed as a multiple of the local Rossby radius.



Supplementary Figure 2. Ensemble spread of mean EKE. Mean EKE during 2016-2020 in **(a-e)** each member of the AWI-CM-1 ensemble and **(f)** the ensemble mean.



Supplementary Figure 3. Ensemble spread of EKE change between 1951-1955 and 2016-2020. EKE change in **(a-e)** each member of the AWI-CM-1 ensemble and **(f)** the ensemble mean.



Supplementary Figure 4. Ensemble spread of EKE change between 1951-1955 and 2091-2095. EKE change in **(a-e)** each member of the AWI-CM-1 ensemble and **(f)** the ensemble mean.