

Figure S1: Projected changes in average north west European shelf temperature at the sea surface and sea floor between 1990 and 2099. Projections show a rolling 20 year average changes since a 1990-2009 baseline period.

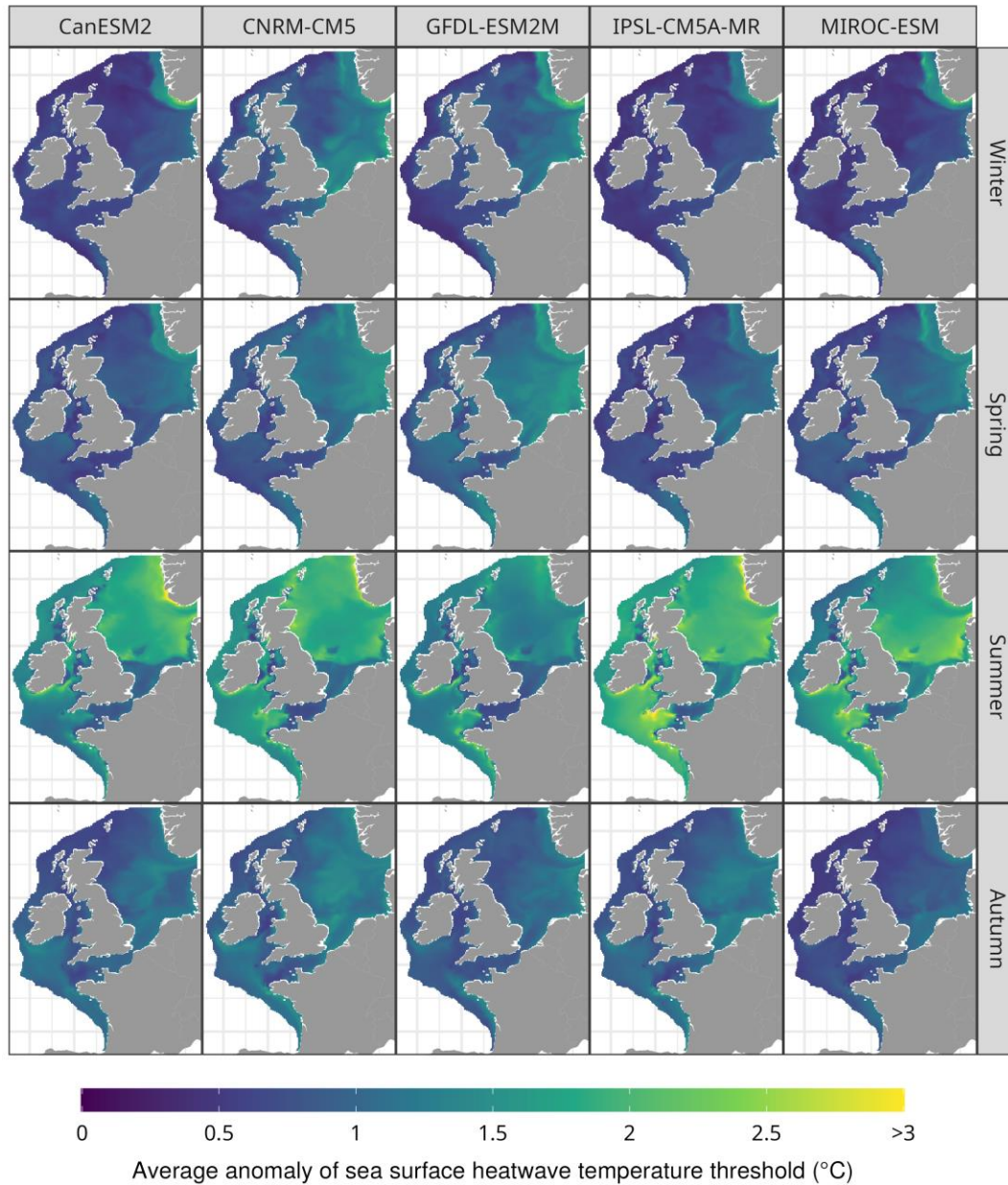


Figure S2: Average anomaly of climatological heatwave temperature threshold at the sea surface in each season, as derived from five dynamically downscaled climate models. The threshold is defined as the 90th percentile of climatological temperature on each day in the baseline period of 1990-2009 using an 11-day window centered on each day. The anomaly is defined as the difference between the threshold and the average temperature on each day.

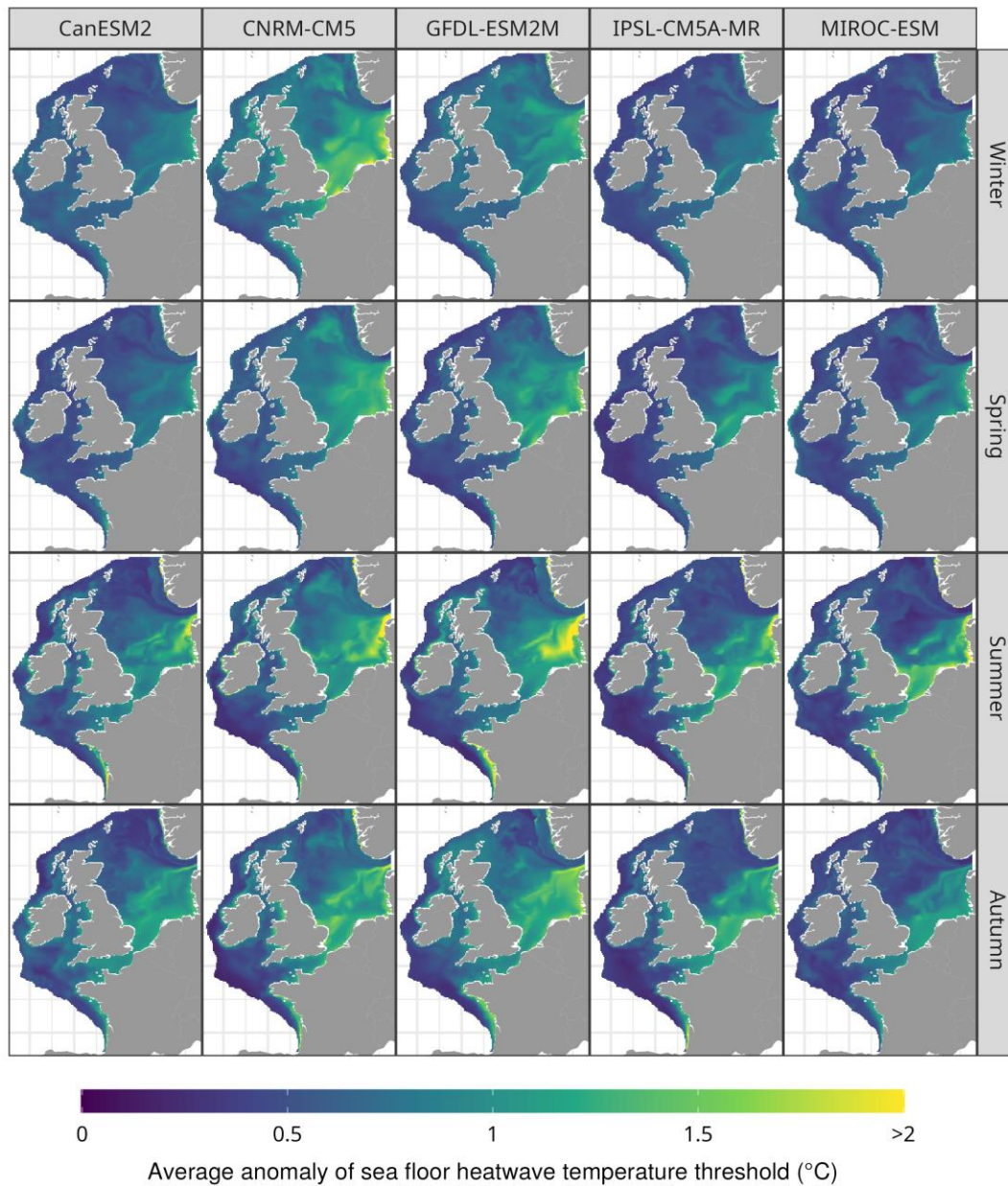


Figure S3: Average anomaly of climatological heatwave temperature threshold at the sea floor in each season, as derived from five dynamically downscaled climate models. The threshold is defined as the 90th percentile of climatological temperature on each day in the baseline period of 1990-2009 using an 11-day window centered on each day. The anomaly is defined as the difference between the threshold and the average temperature on each day.