

Supplementary figures

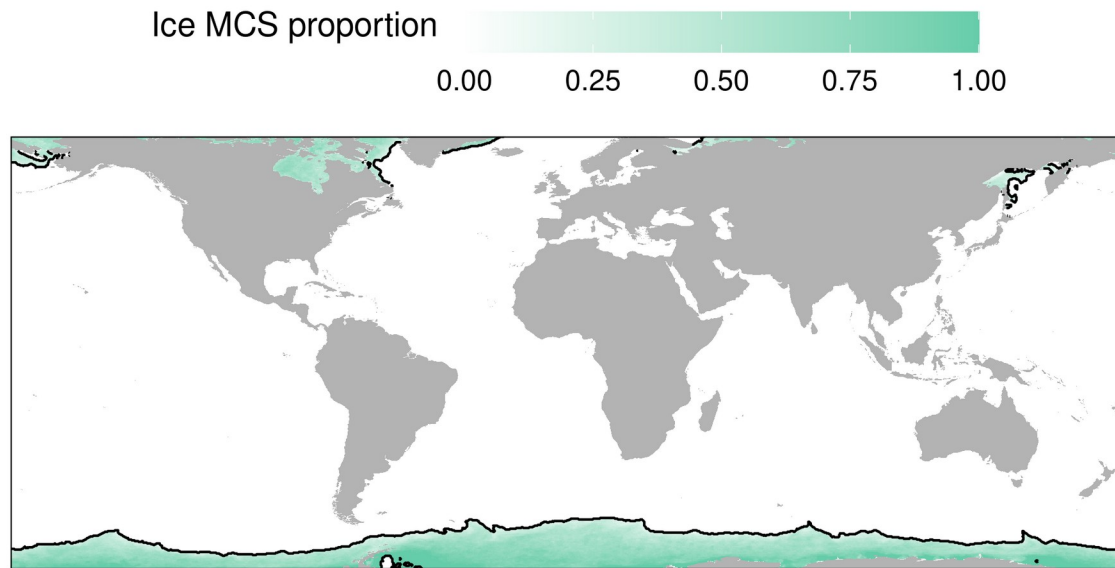
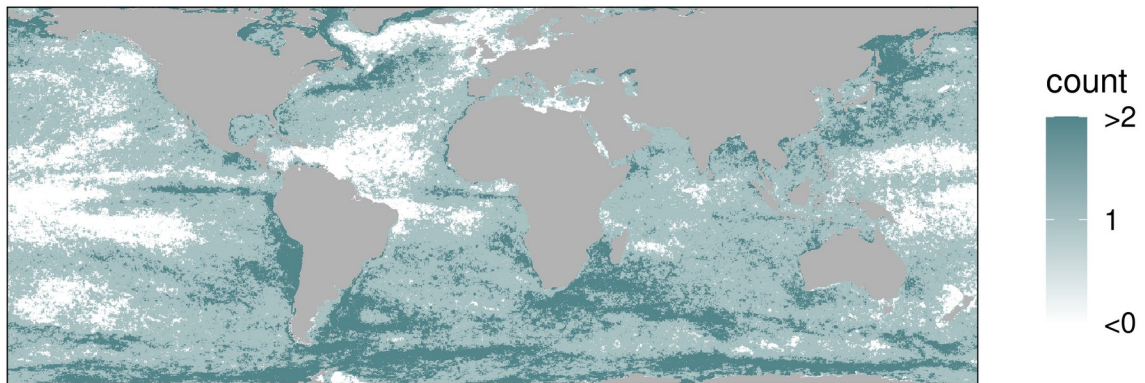
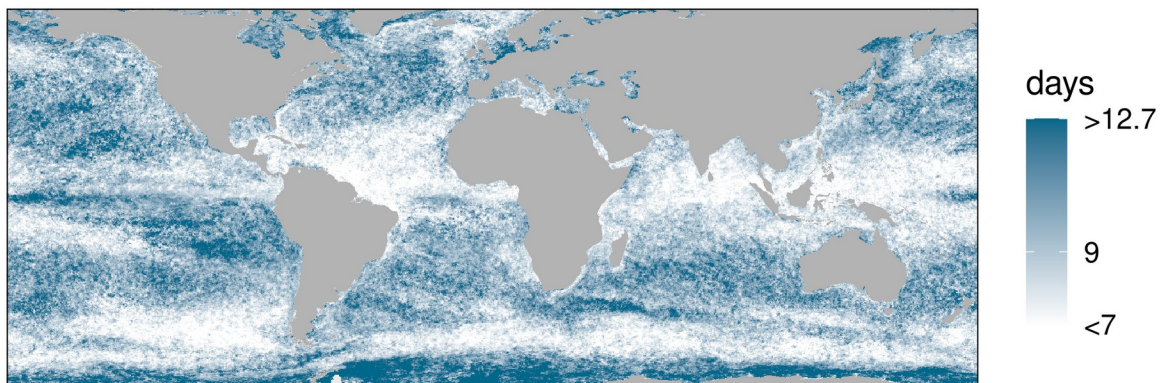


Figure S1: The areas of the ocean that have been denoted as “near-ice” are denoted by black contours and are determined when at least one marine cold-spells (MCSs) has been flagged as an “Ice” event at any point over the 39-year time series. Within these near-ice regions, values (green shading) show the proportion of MCSs that can be classified as “Ice” events. This “Ice” classification is determined whenever the 10th percentile threshold during a MCS is below -1.7°C at any point during the event. A proportion of 1.0 means that every MCS at the given pixel is classified as an “Ice” event. A proportion of 0.0 means none of the MCSs are “Ice” events. There are some areas within the near-ice regions that show values of zero, because, in the satellite record, these areas are always frozen (-1.8°C) so it is not possible to detect MCSs there.

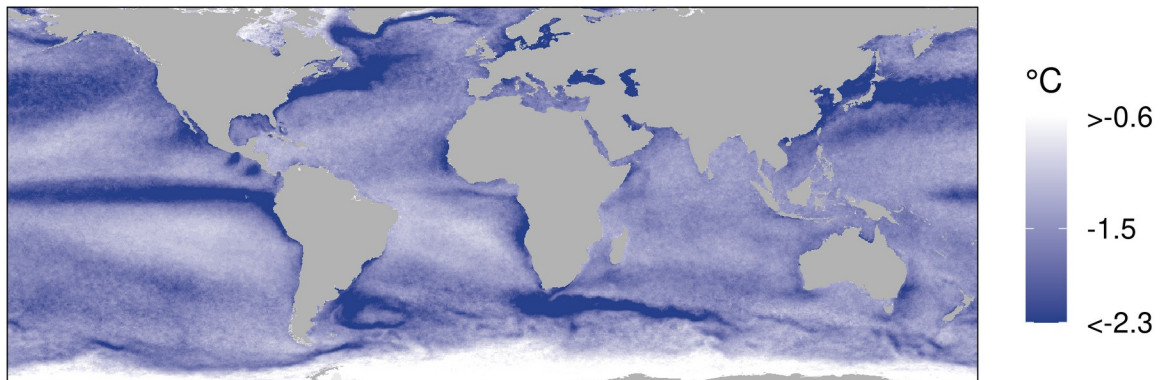
A) Median MCS annual count (n)



B) Median MCS duration (D)



C) Median MCS maximum intensity (i_{max})



D) Median MCS cumulative intensity (i_{cum})

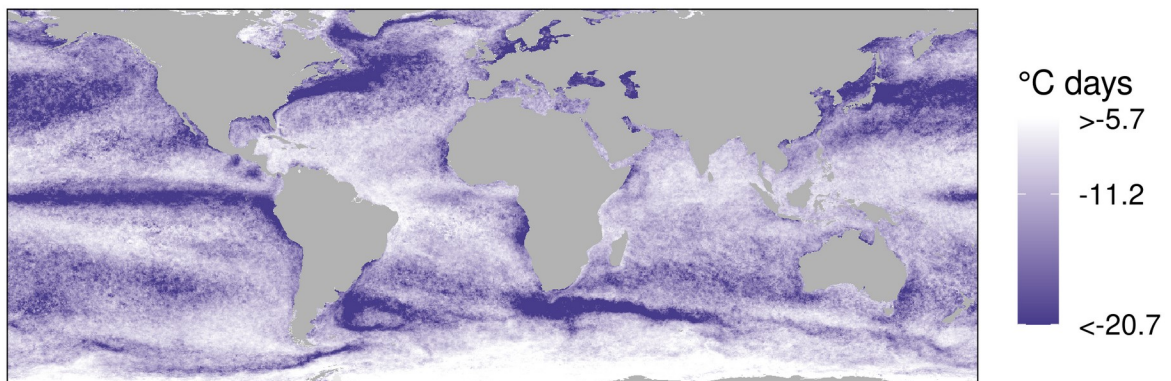


Figure S2: As in Figure 3, except with the median values per pixel, rather than the means. Note that the same broad patterns are seen in both, with only minor changes to the 5th, 50th, and 95th percentile values shown in the legends of each panel. The difference between the mean (Figure 3) and median (Figure S2) values is most pronounced in the count of events (panel A).

Sum of median maximum intensities ($i_{max,MHW} + i_{max,MCS}$)

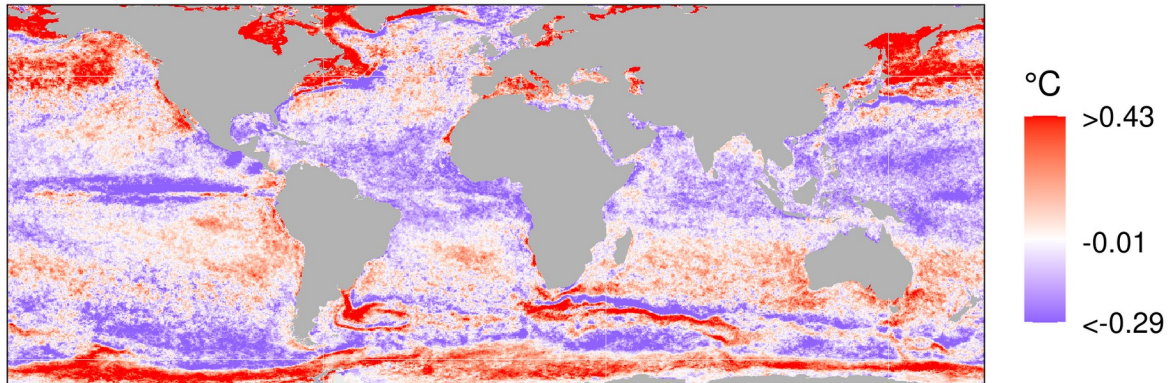


Figure S3: As in in Figure 6A, but with median values rather than means. Note that the same patterns are clearly visible with only minor changes to the 5th, 50th, and 95th percentile values in the legend.