

Figure S1. Average bottom temperature and variability from survey data (Coefficient of Variation). Period covered includes 2000-2018. The polygon includes the middle shelf stations (50-100 m depth) which were included in the analysis of the temperature averages in Table 1.

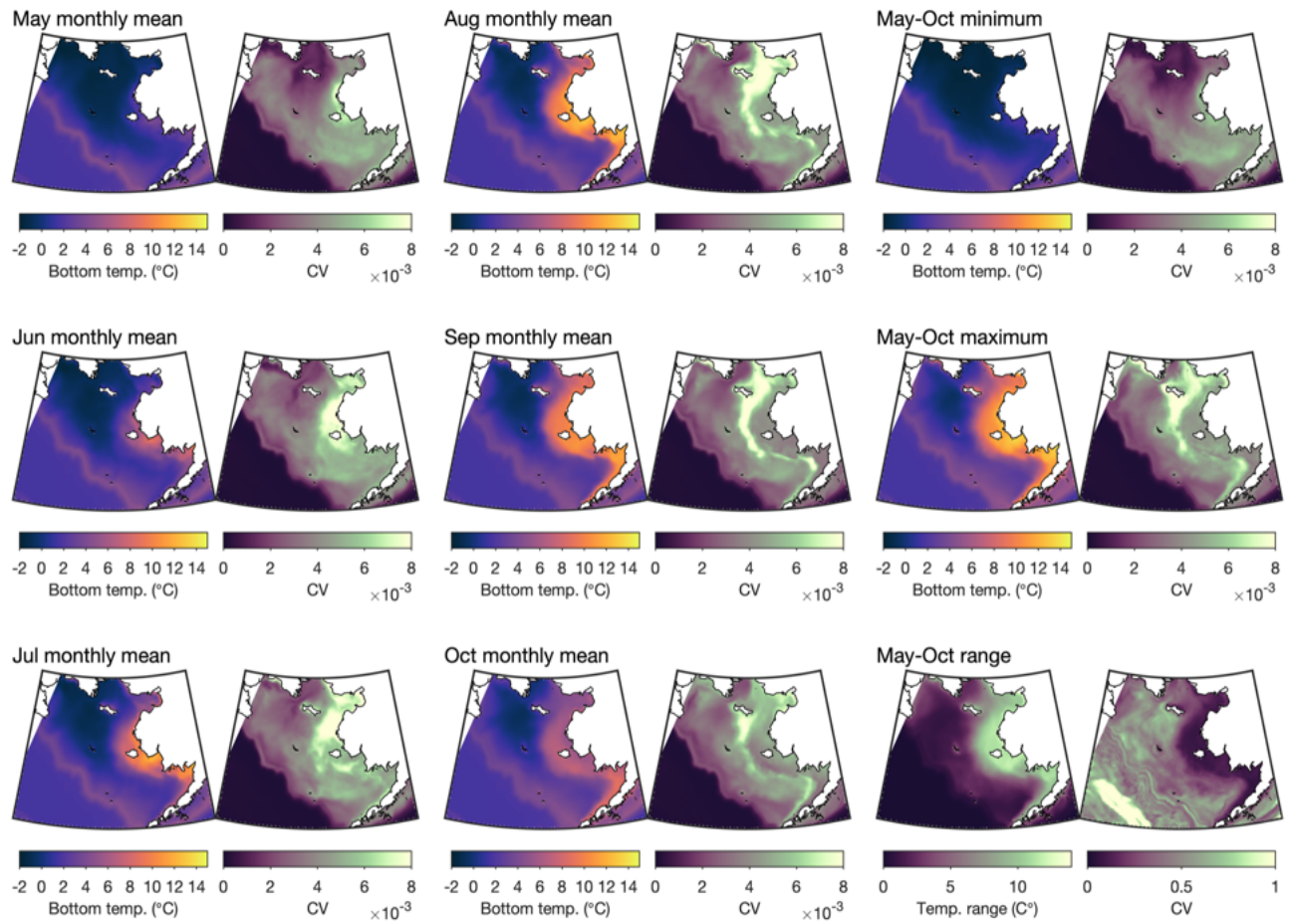


Figure S2. Temperature mean, coefficient of variation, max, min and range in the sampled area of the Bering Sea. Quantifications are from the ROMS Bering 10K model hindcast simulation for the months of May to October, and years 1990-2020 (`mu_cv_maps_B10K-K20_CORECFS_1990-2020`).

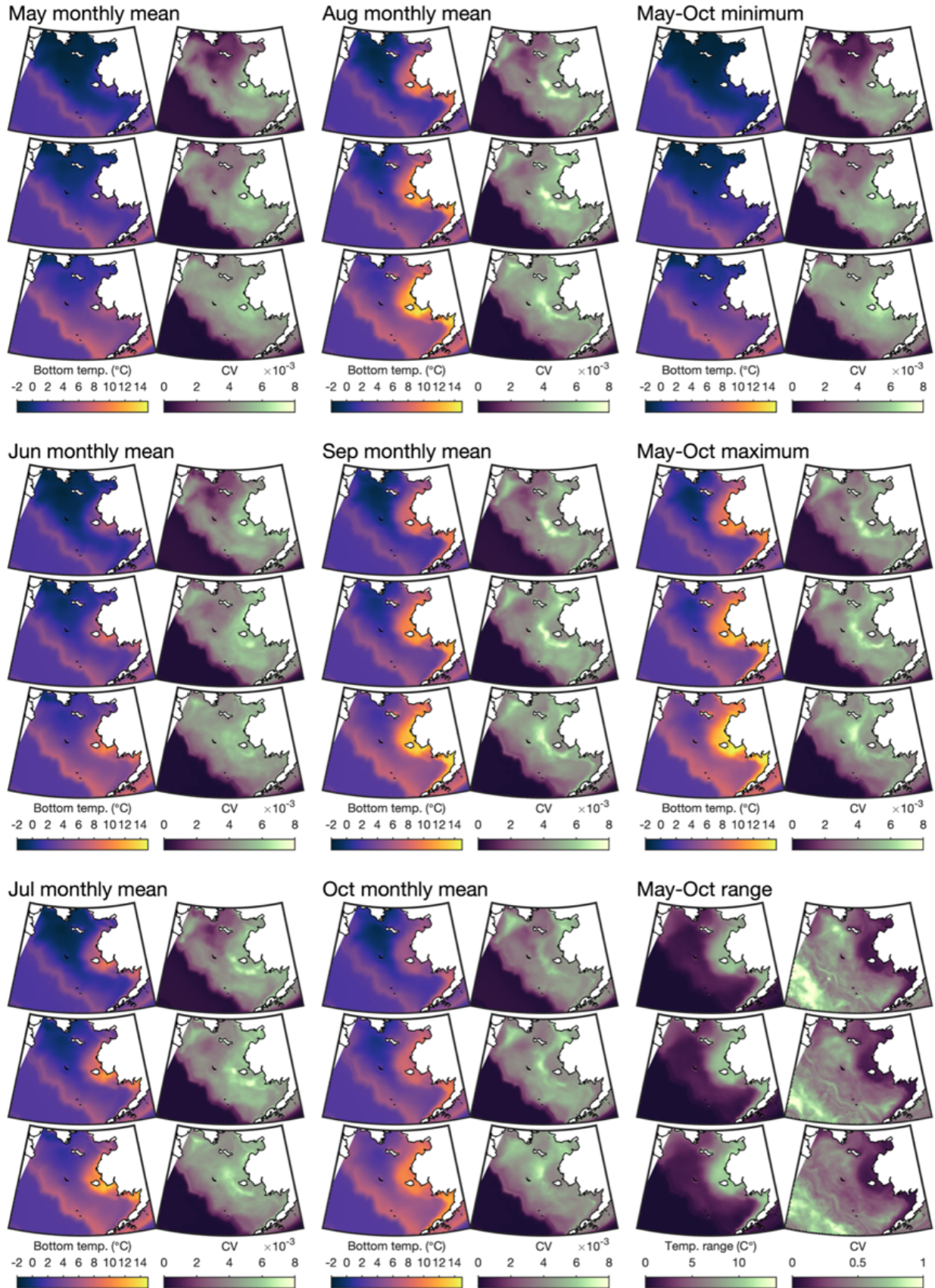


Figure S3. Bering10K long-term multi-model forecast of bottom temperature mean, coefficient of variation, max, min and range in the sampled area of the Bering Sea. Each metric is depicted by six sub-panels, with the mean (left) and coefficient of variation (right) for 1985-2015 (top), 2035-2065 (middle), and 2070-2100 (bottom). Metrics depict the mean of each quantity across the 3 forecast models.

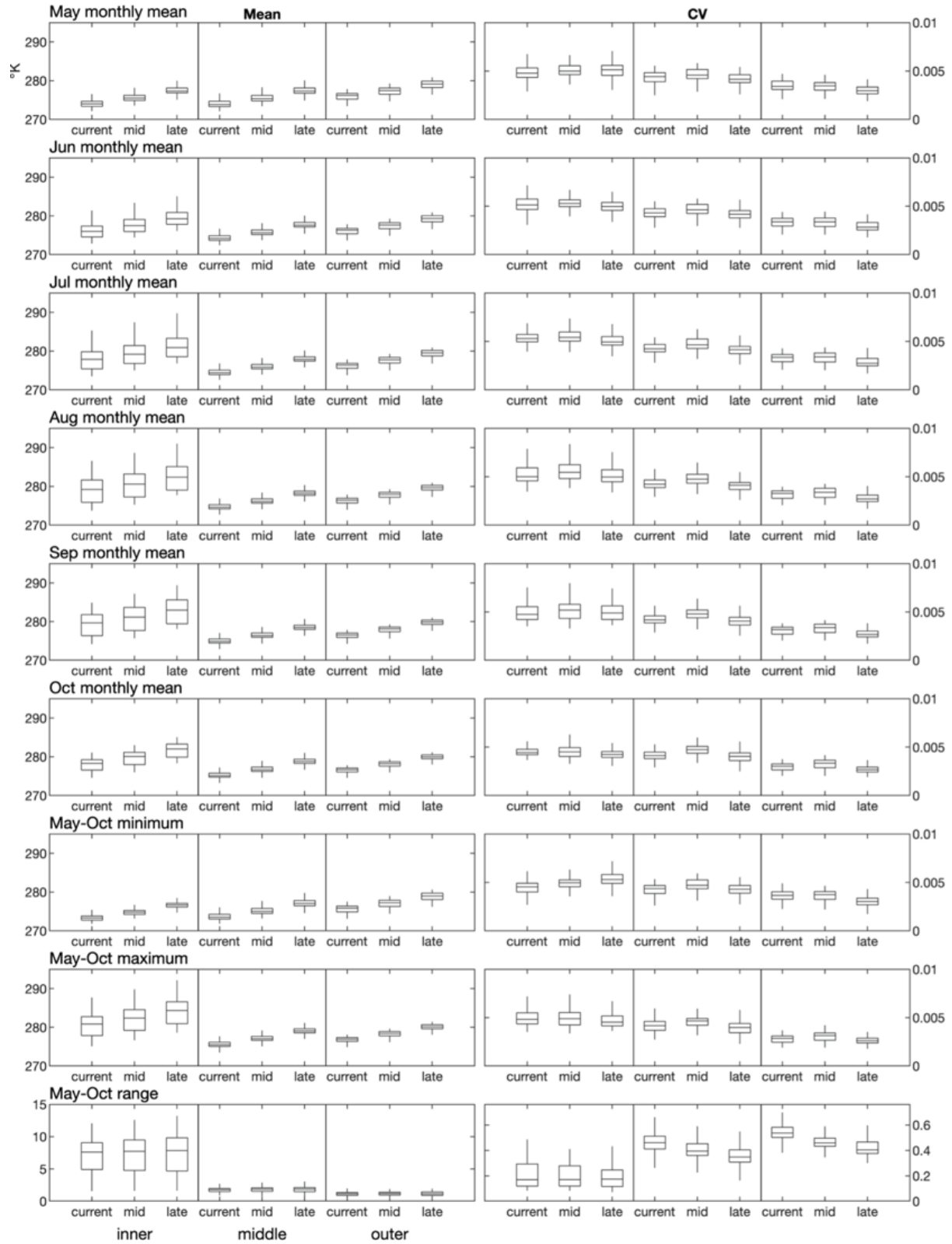


Figure S4. Bering10K long-term multi-model forecast of bottom temperature mean, coefficient of variation, max, min and range in the sampled area of the Bering Sea. Each boxplot depicts the distribution of grid cells within the inner, middle, and outer shelf regions (defined as <50, 50-100, and 100-200m, respectively) and for the metrics from the current, mid-century, and late-century time periods. Boxes depict the 25th-75th percentiles of data, with an additional central mark for median; whiskers extend to the most extreme non-outlier points, defined as within 1.5 times the interquartile range from either quartile.

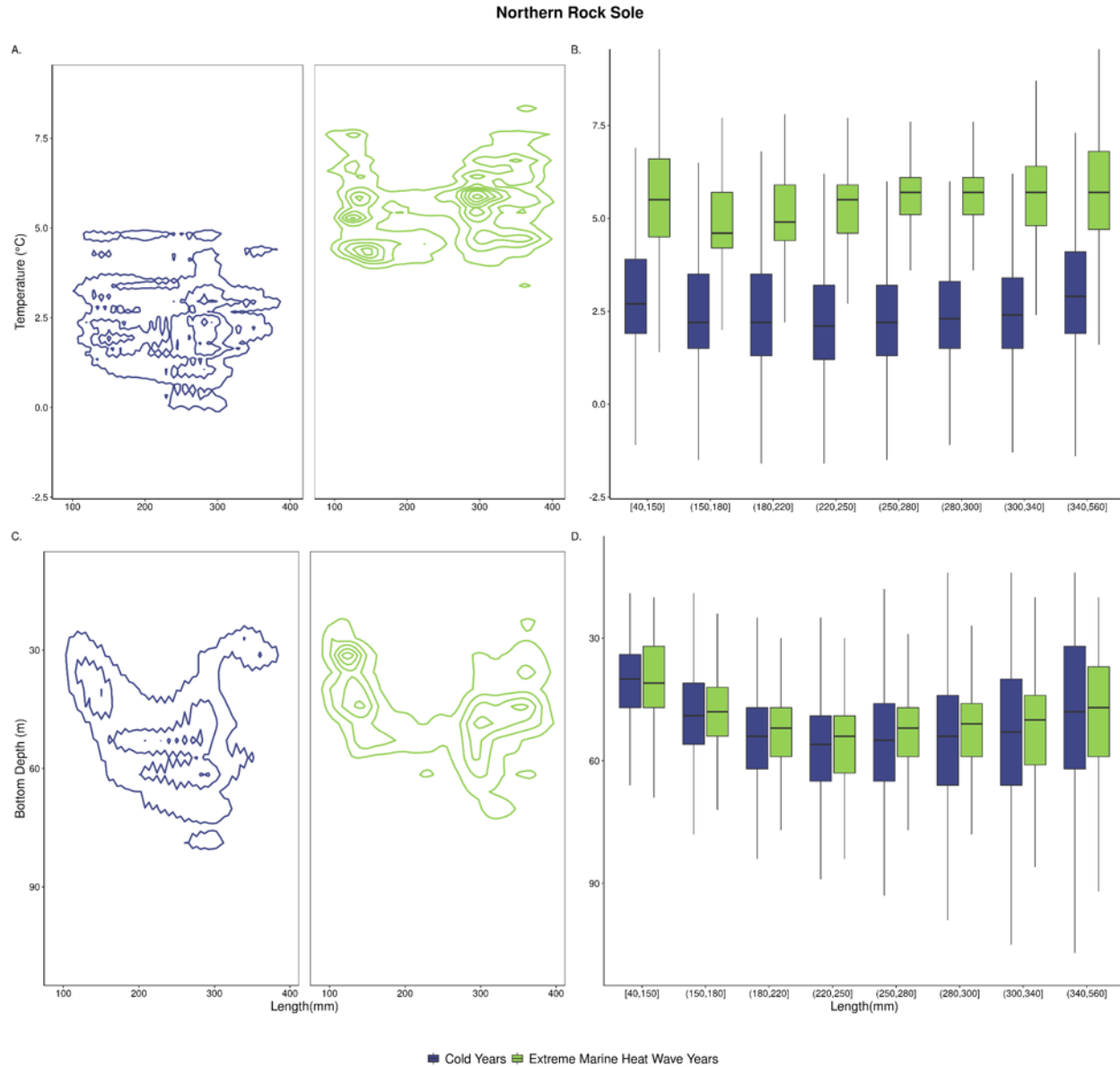


Figure S5. Northern rock sole (*Lepidopsetta polyxystra*). Row A and B: Contour plots and box plots of distribution by temperature for extreme warm (green) and cold (blue) years for different size categories. Boxes depict the 25th-75th percentiles of data, with an additional central mark for median; whiskers extend to the most extreme non-outlier points, defined as within 1.5 times the interquartile range from either quartile. Row C and D: Same as Row A and B, for bottom depth.

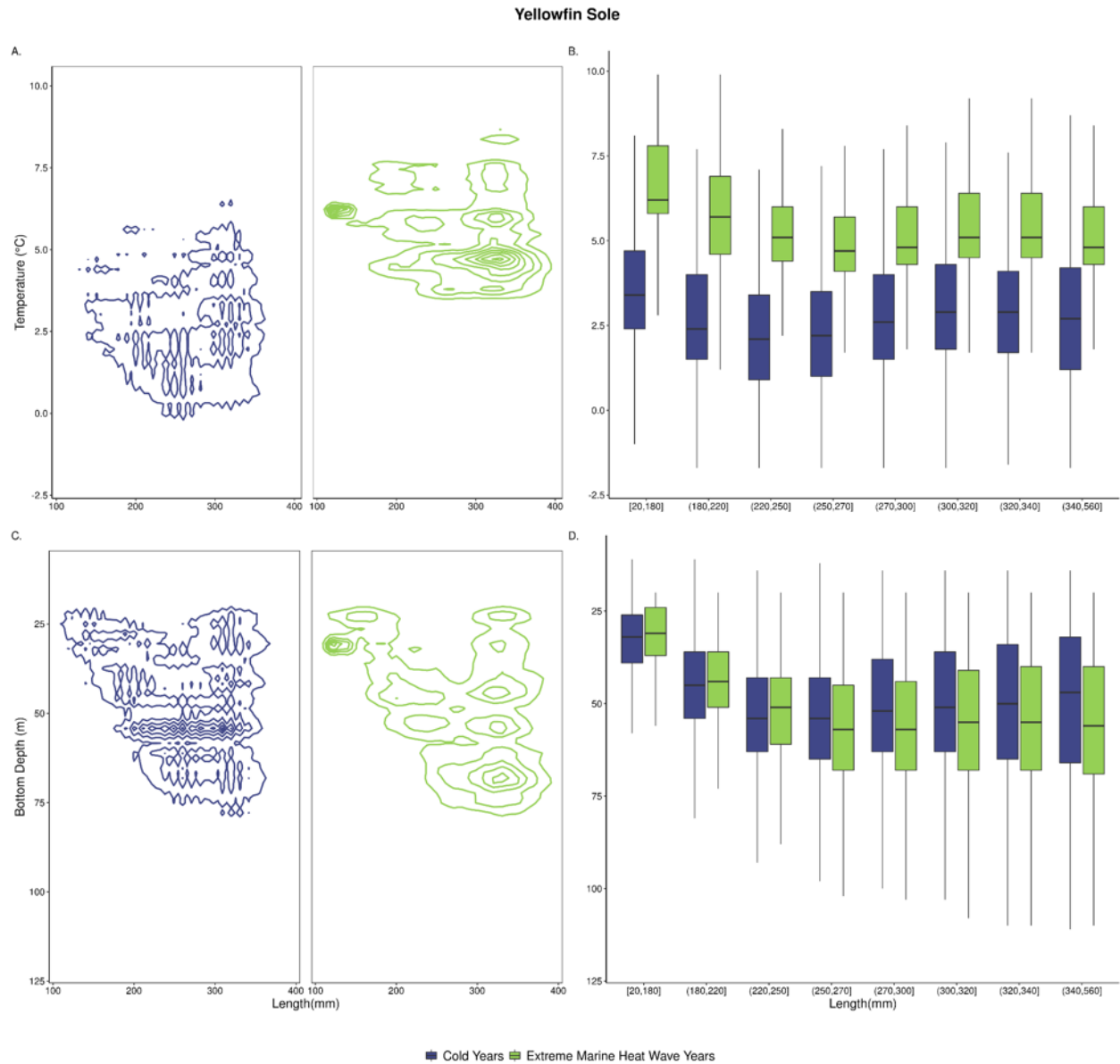


Figure S6. Yellowfin sole (*Limanda aspera*). Row A and B: Contour plots and box plots of distribution by temperature for extreme warm (green) and cold (blue) years for different size categories. Boxes depict the 25th-75th percentiles of data, with an additional central mark for median; whiskers extend to the most extreme non-outlier points, defined as within 1.5 times the interquartile range from either quartile. Row C and D: Same as Row A and B, for bottom depth.



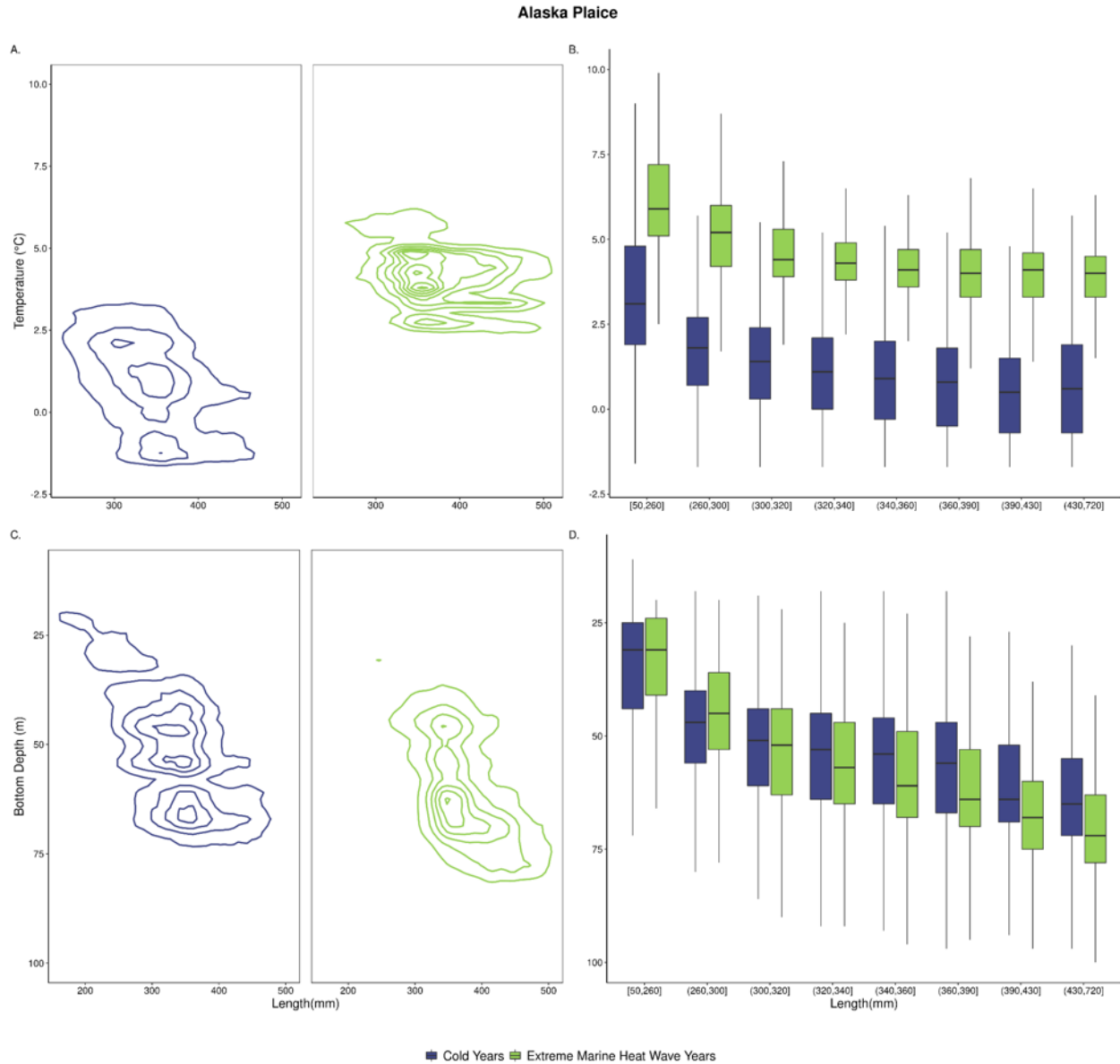


Figure S7. Alaska plaice (*Pleuronectes quadrituberculatus*). Row A and B: Contour plots and box plots of distribution by temperature for extreme warm (green) and cold (blue) years for different size categories. Boxes depict the 25th-75th percentiles of data, with an additional central mark for median; whiskers extend to the most extreme non-outlier points, defined as within 1.5 times the interquartile range from either quartile. Row C and D: Same as Row A and B, for bottom depth.

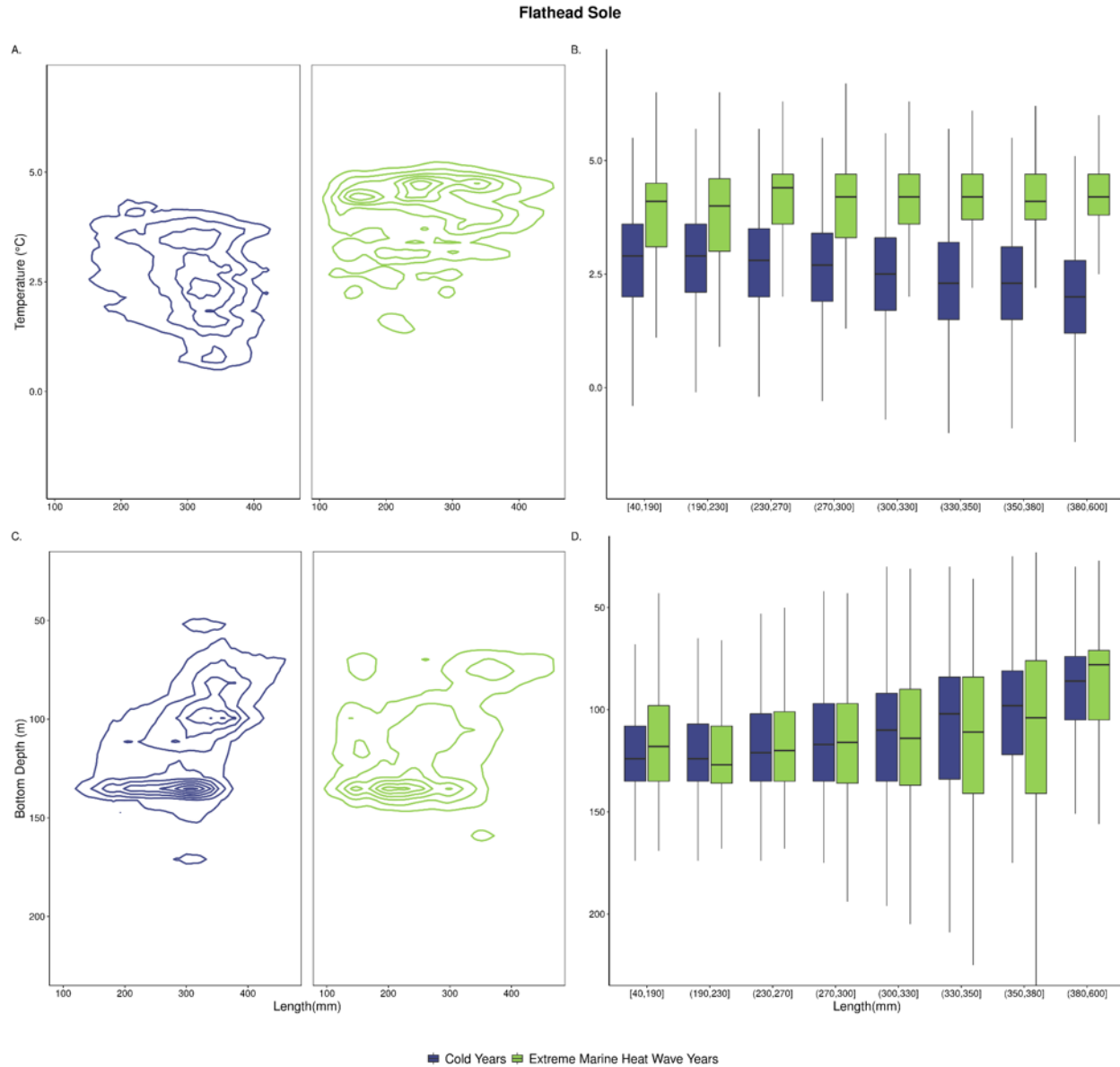


Figure S8. Flathead sole (*Hippoglossoides elassodon*). Row A and B: Contour plots and box plots of distribution by temperature for extreme warm (green) and cold (blue) years for different size categories. Boxes depict the 25th-75th percentiles of data, with an additional central mark for median; whiskers extend to the most extreme non-outlier points, defined as within 1.5 times the interquartile range from either quartile. Row C and D: Same as Row A and B, for bottom depth.