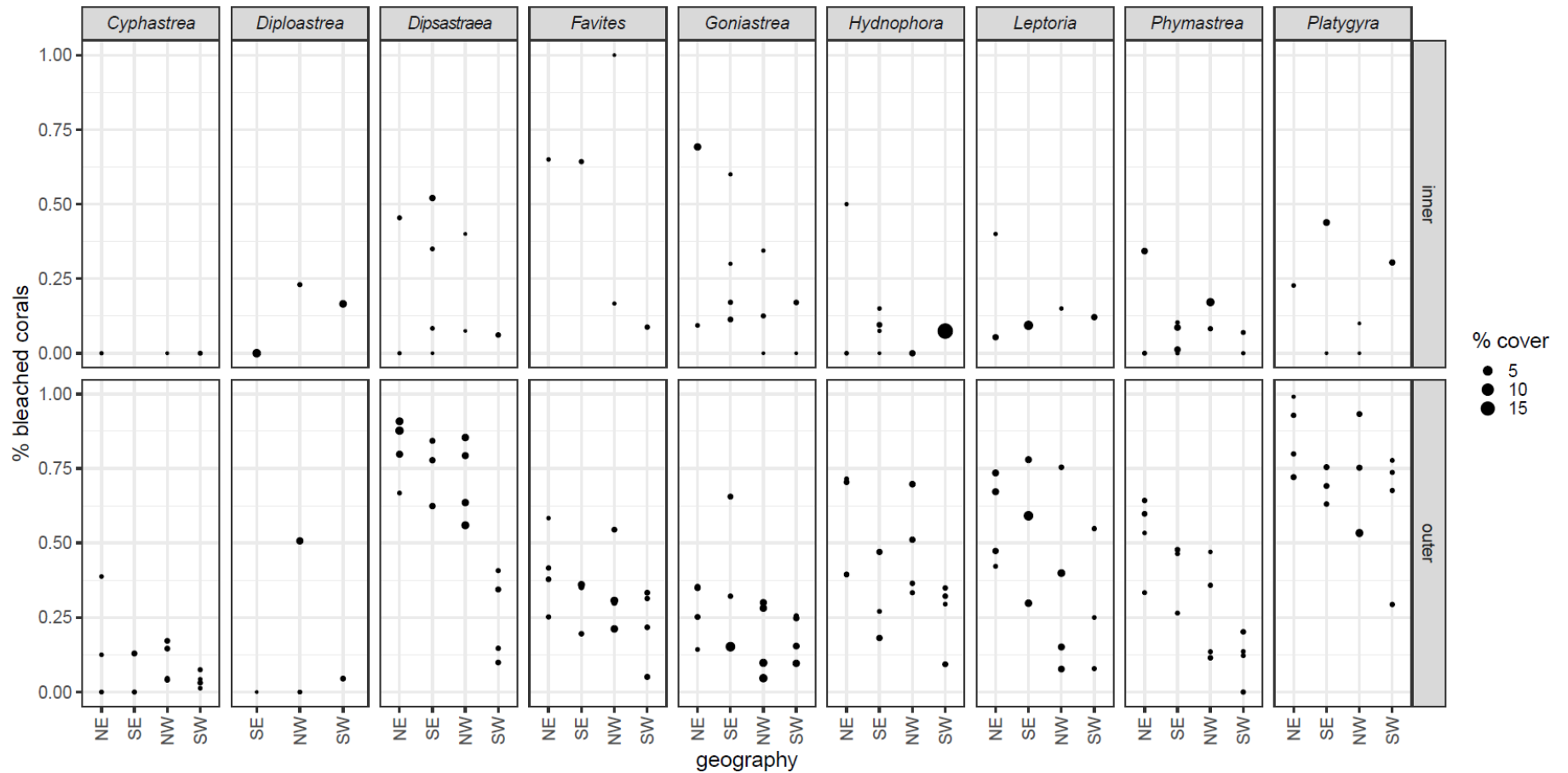
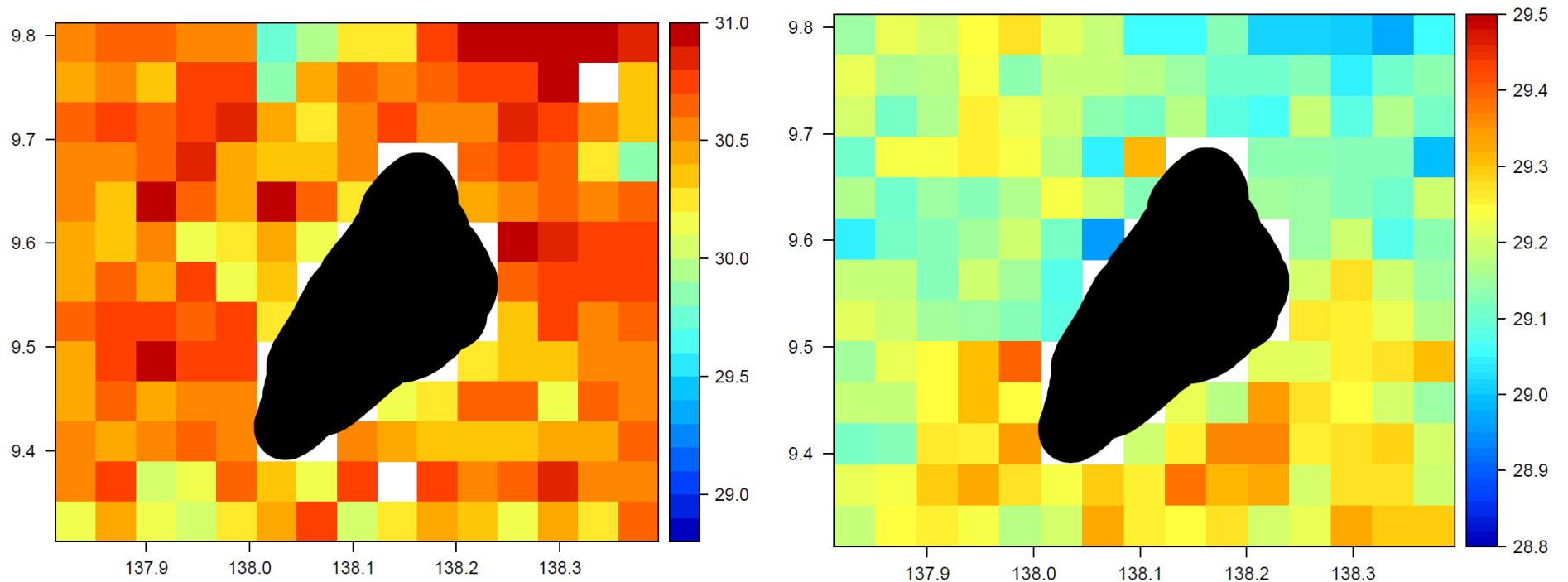


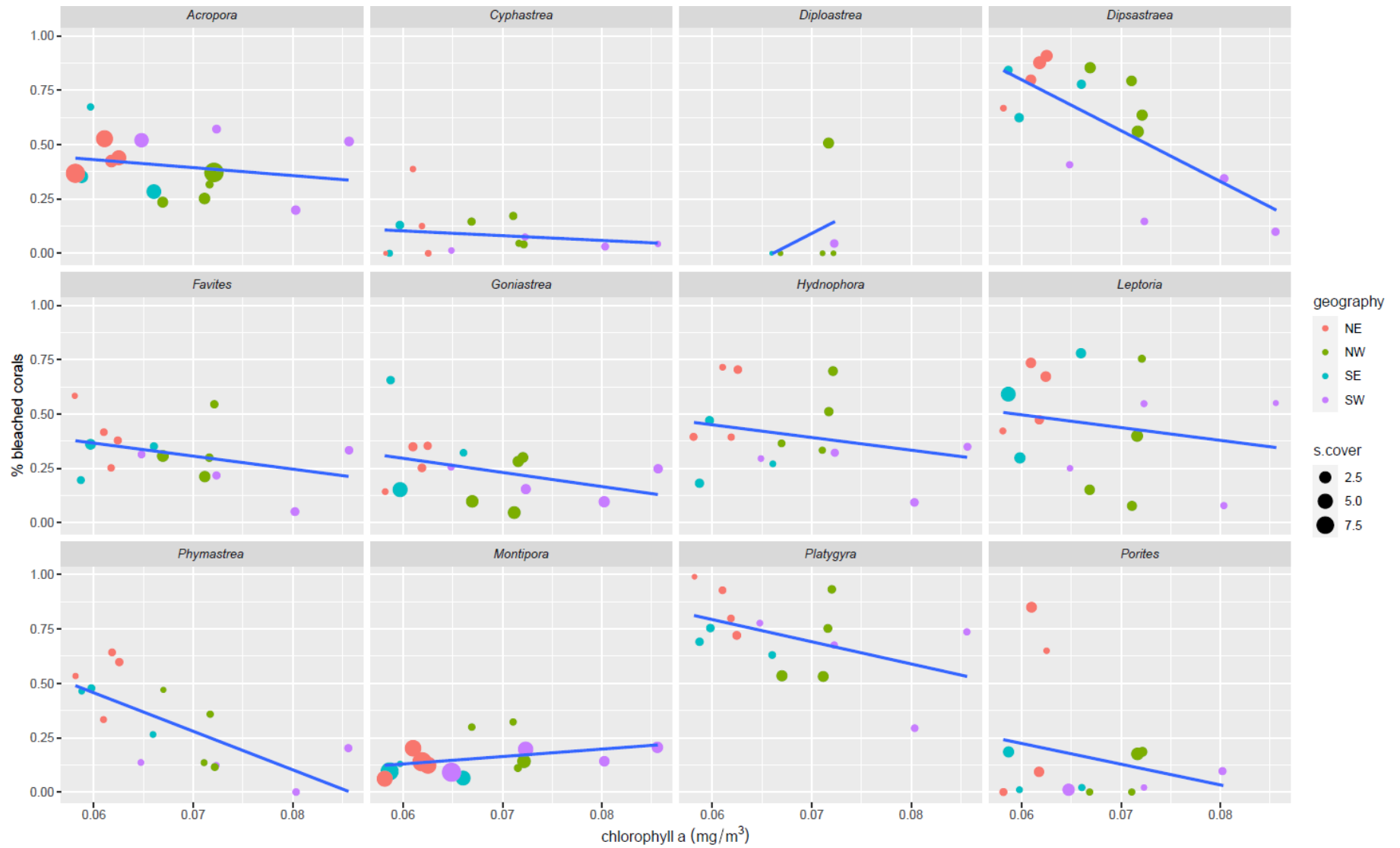
**Supplementary Figures**



**Supplementary Figure S1.** Coral cover and proportional contribution for genera in the family Merulinidae included in taxonomic analyses. All genera exceeded 0.5% of total coral cover for inner and outer sites. Circles represent individual sites within geographic quadrants, and circle size represents coral cover at the corresponding site.



**Supplementary Figure S2.** Sea surface temperatures ( $^{\circ}\text{C}$ ) for Yap (a) during the 2020 thermal-stress event and (b) between 2010 and 2020, obtained from NOAA Pathfinder server (<https://coastwatch.pfeg.noaa.gov/>).



**Supplementary Figure S3.** Linear regressions of chlorophyll-*a* and proportion bleached for outer reef coral genera. Colored dots indicate geographic quadrants and circle size represents coral cover at each site.