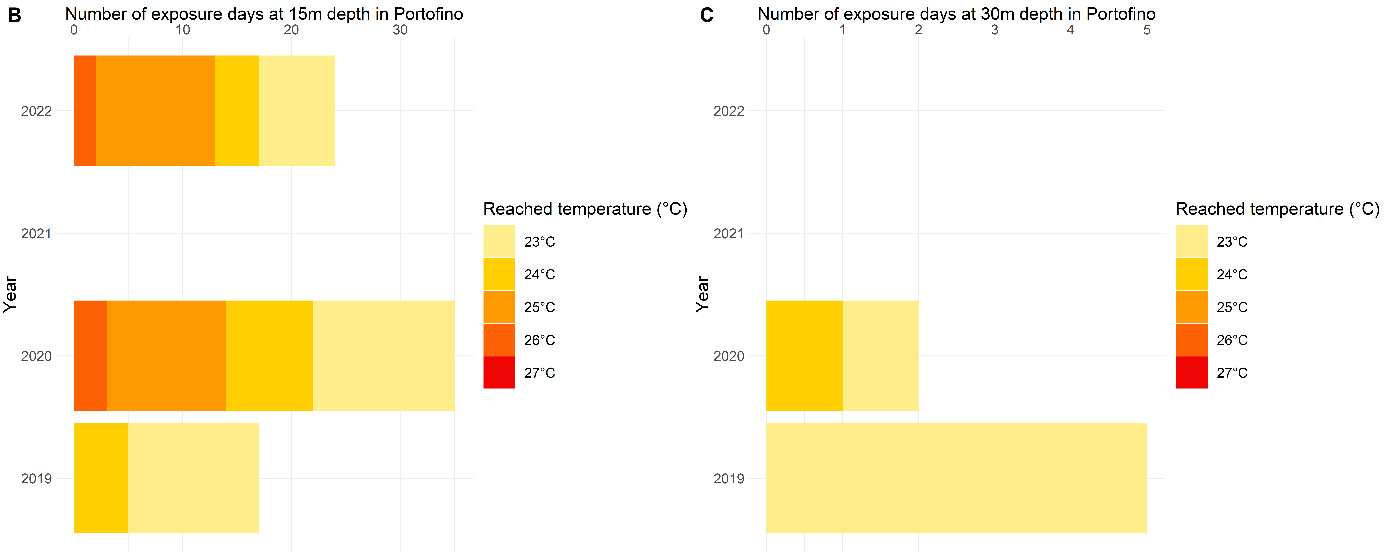
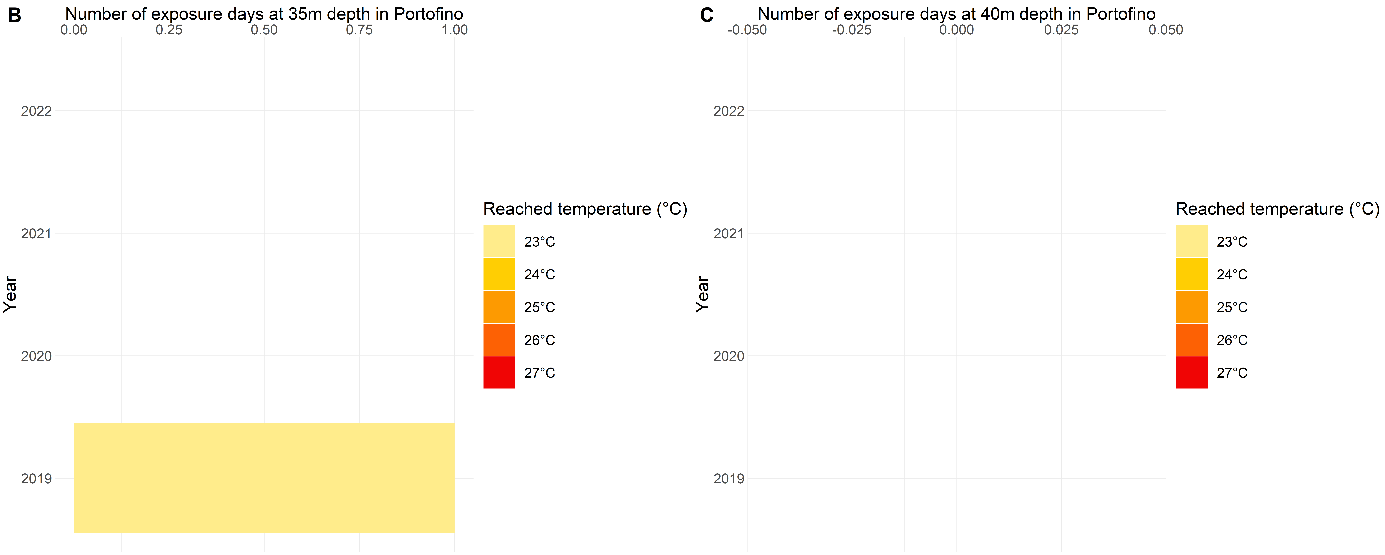
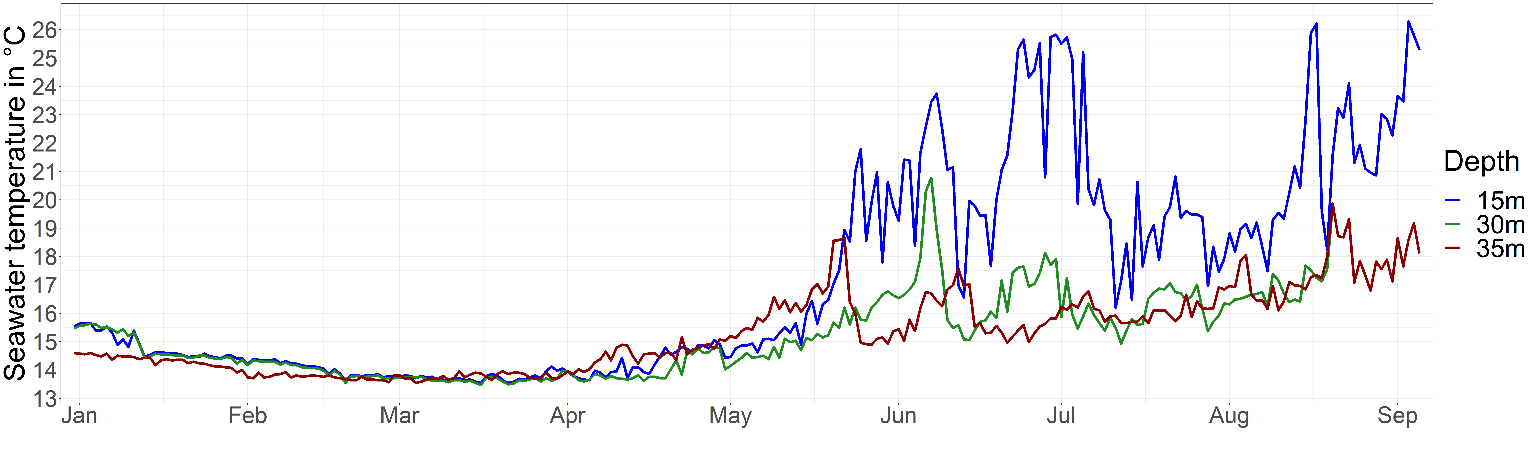
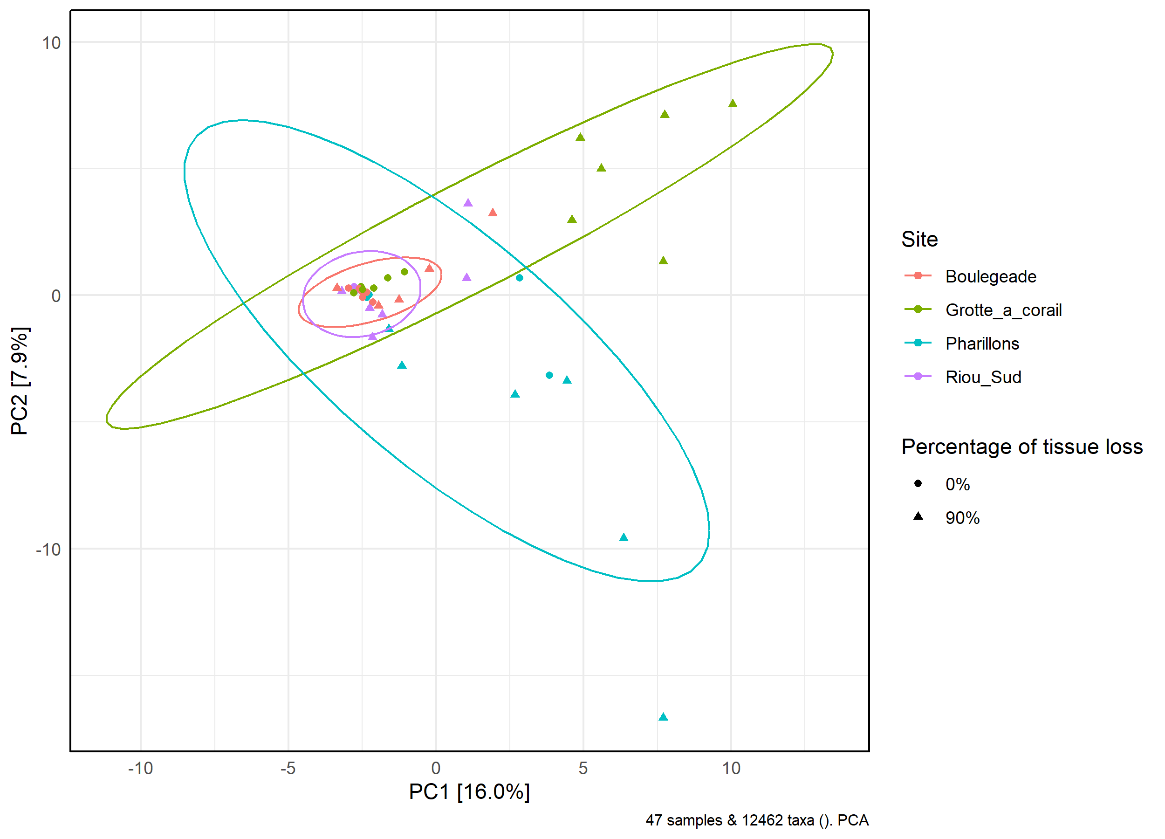
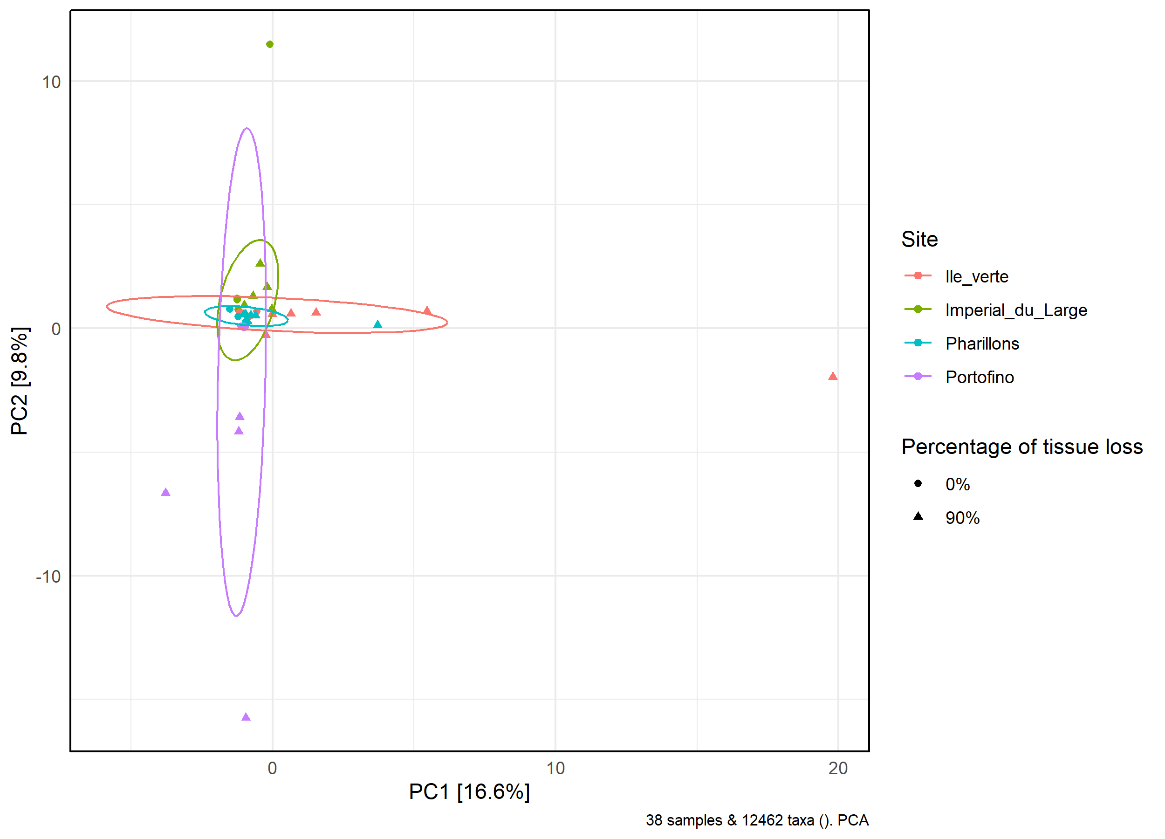
**Supplementary Information: Figures**

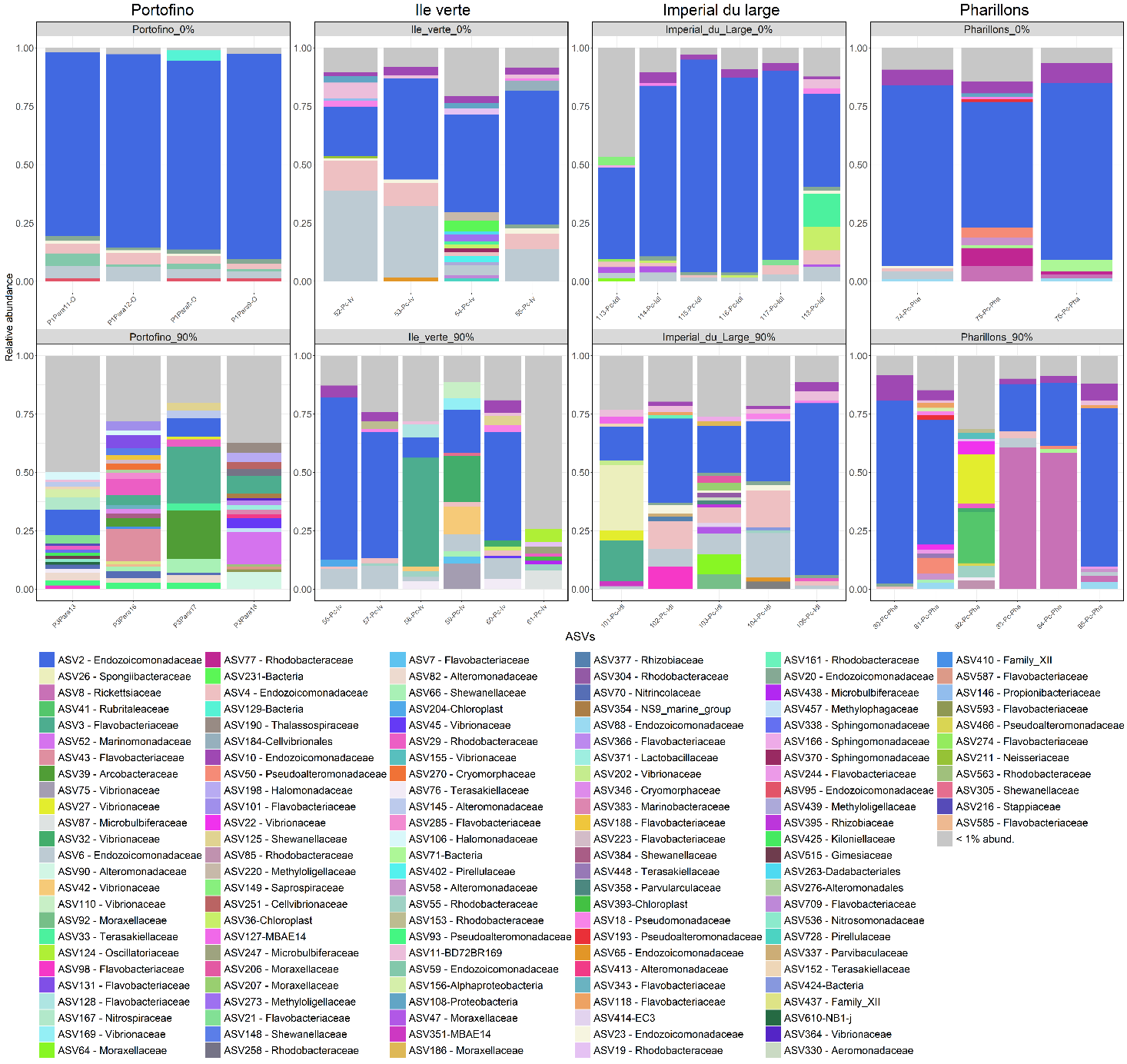
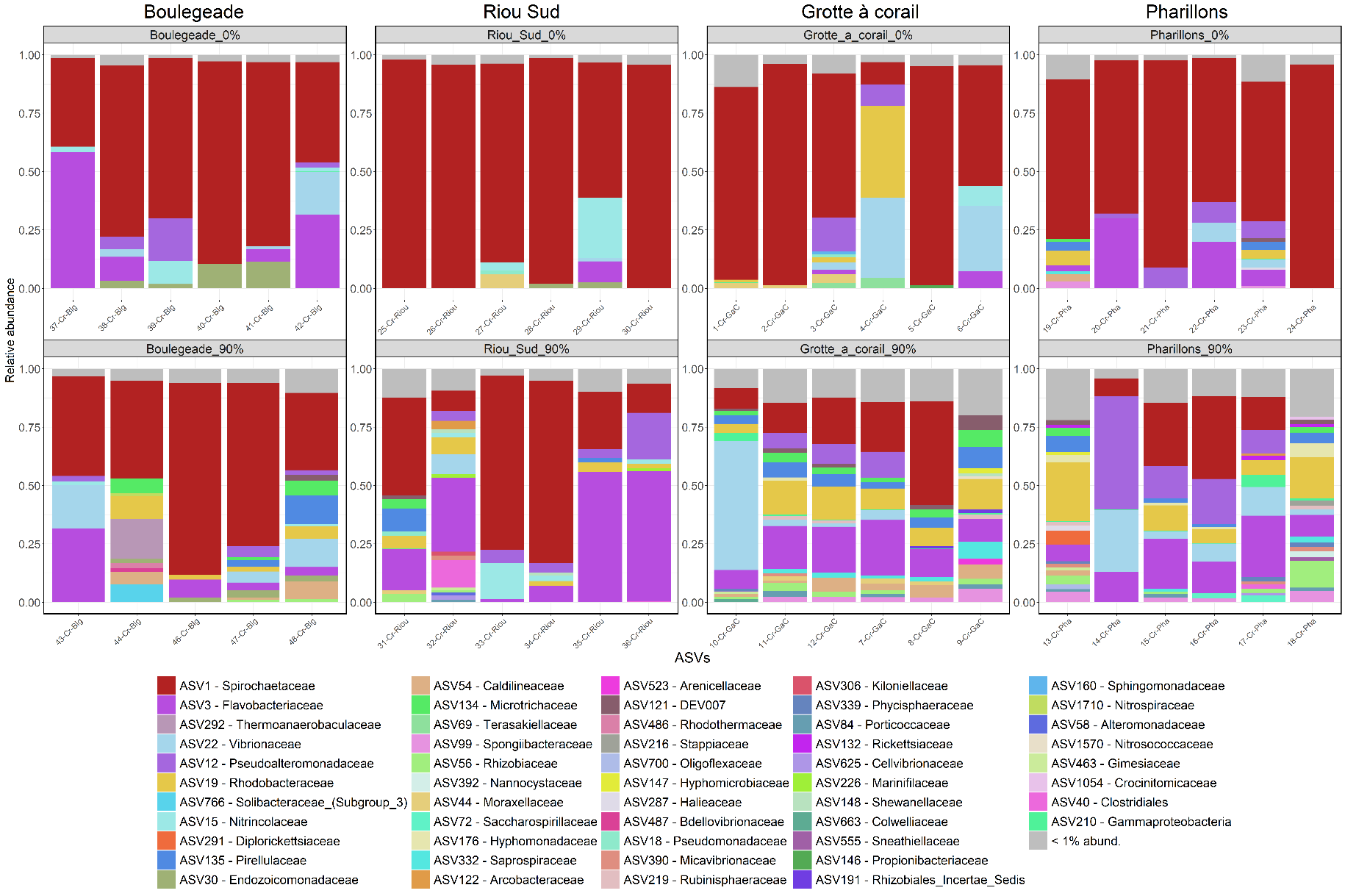


**Figure S1:** **Temperature regime in 2022 and in the past twenty years in Portofino.** Seawater temperature at 15 m, 30 m, and 35 m depth during the 2022 heatwaves (**A**), and number of exposure days at temperatures between 23°C and 27°C at 15 m (**B**), 30 m (**C**) and 35 m depth (**D**) over the past three years.

**Figure S2:** Rarefaction curves for all the samples of the two coral species.



**Figure S3:** Principal component analysis of the Aitchison distance matrix based on the composition of the bacterial community (ASV level) associated with *P.clavata* (A) and *C. rubrum* (B) grouped according to the site and health state of the corals.



**Figure S4:** Relative abundance of all ASVs associated with *C. rubrum* (**A**) and *P. clavata* (**B**) depending on the samples, collection site and the colony health status based on the tissue loss percentage (0% and 90%).