

**S3 Correlation Coefficients** The following figures are visual representations of the linear correlations between proxies at each site. The size and colour of each point is proportional to the Pearson  $r$  value. Only significant ( $p < 0.05$ ) correlations are plotted, and those that do not remain significant after linear detrending are shown as ghosted points.

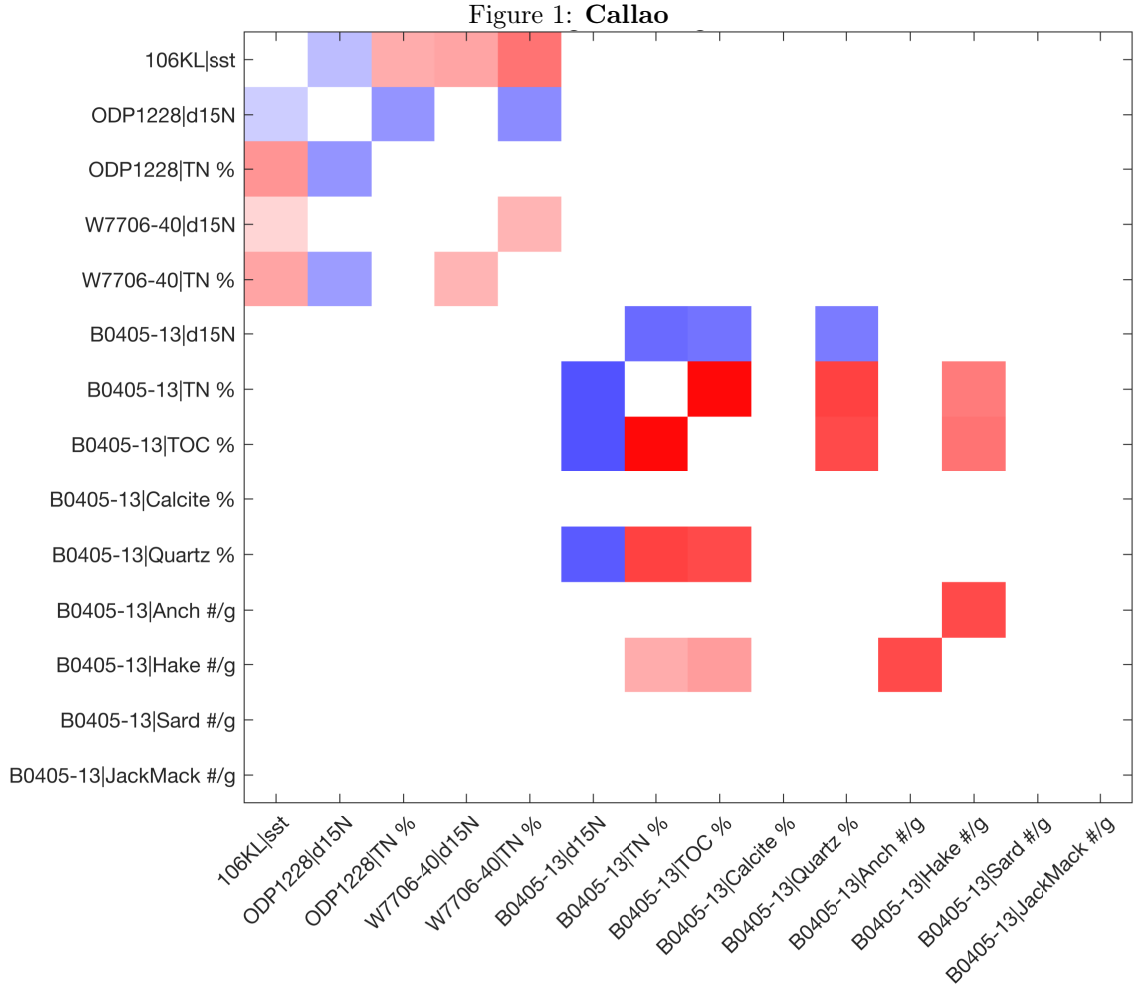


Figure 2: Effingham Inlet

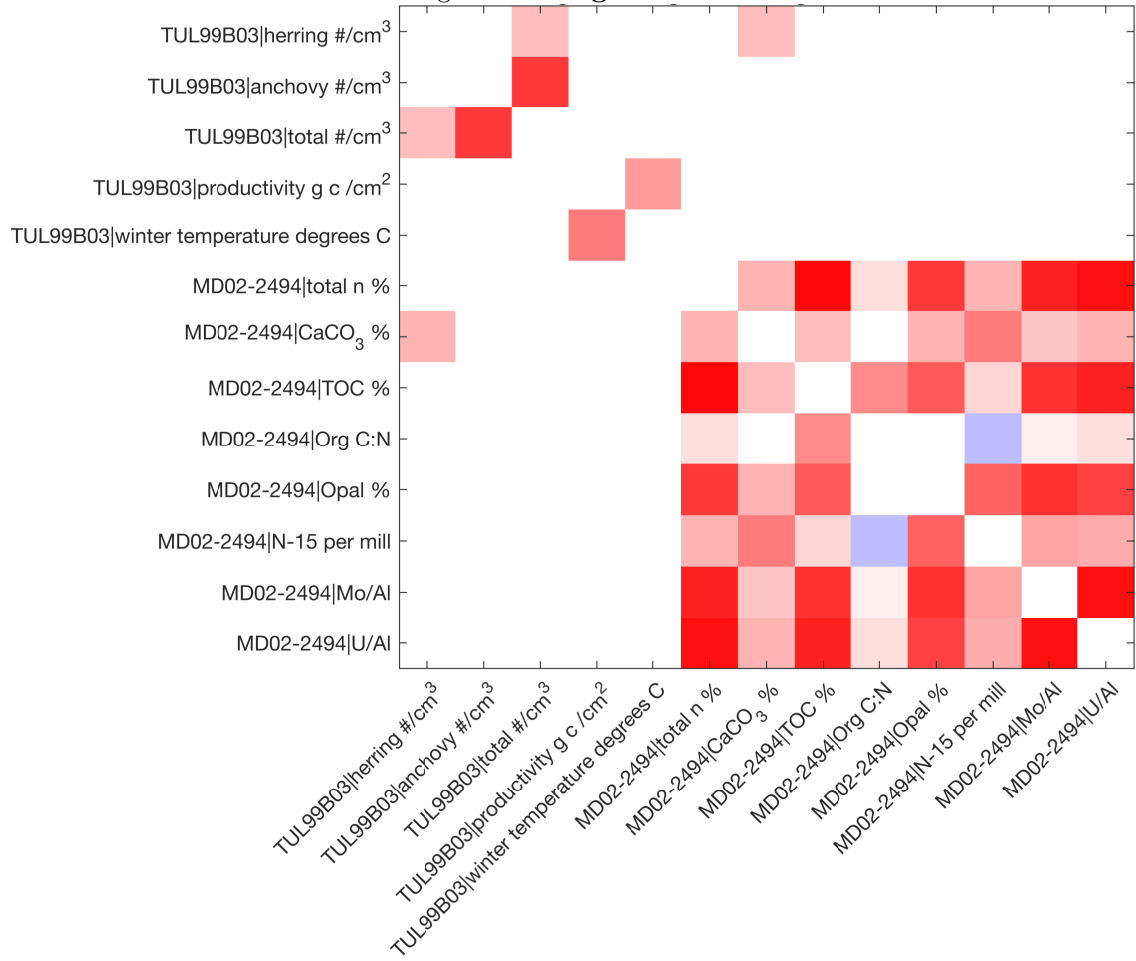


Figure 3: Guaymas Basin

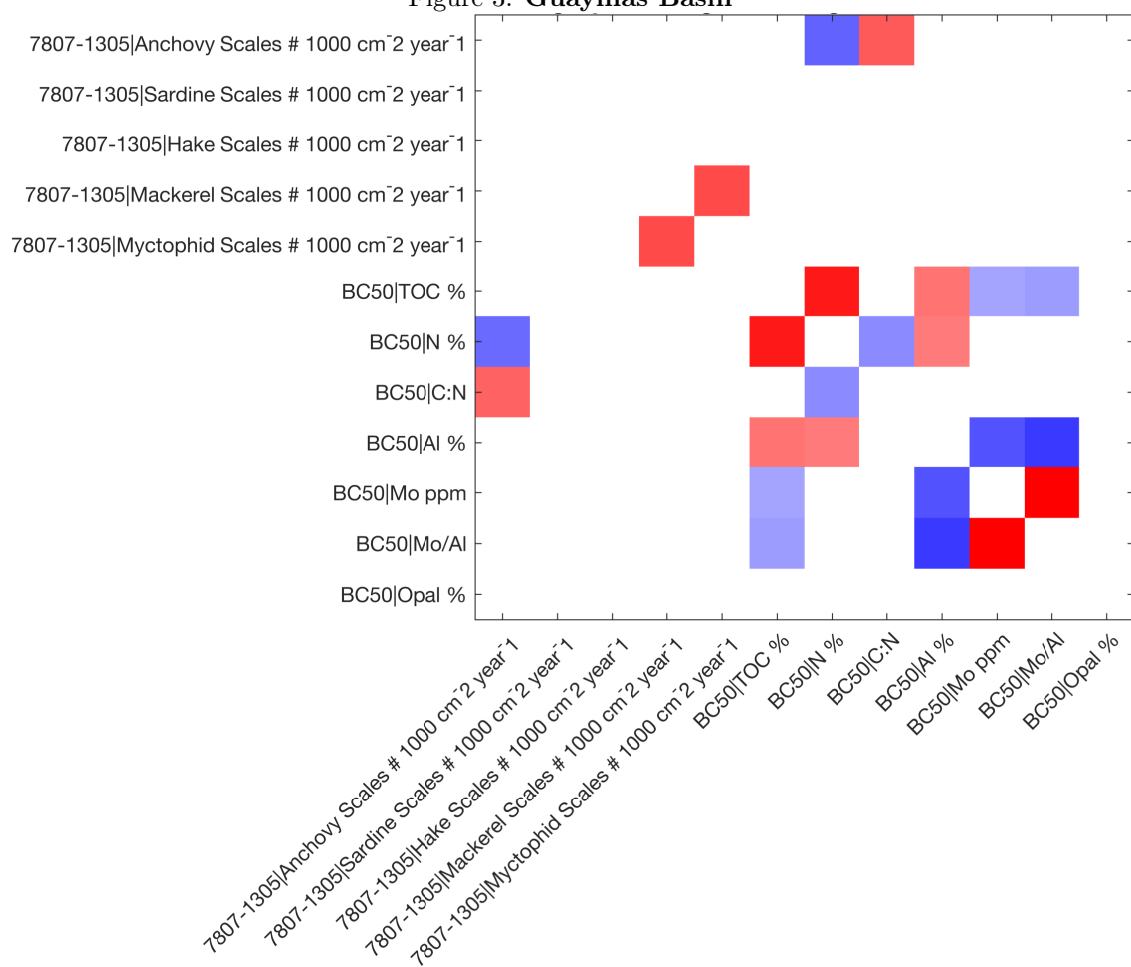


Figure 4: Mejillones Bay

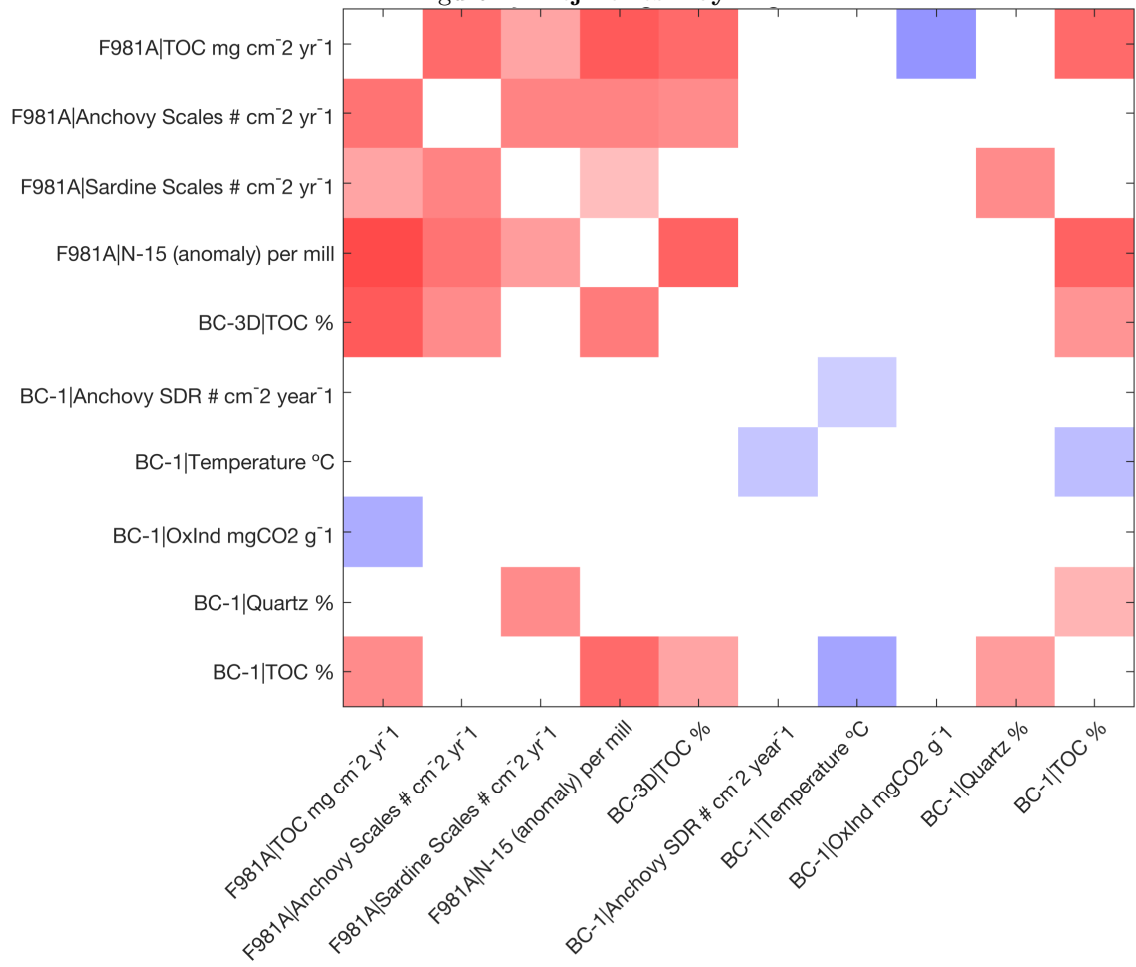


Figure 5: **Pisco**

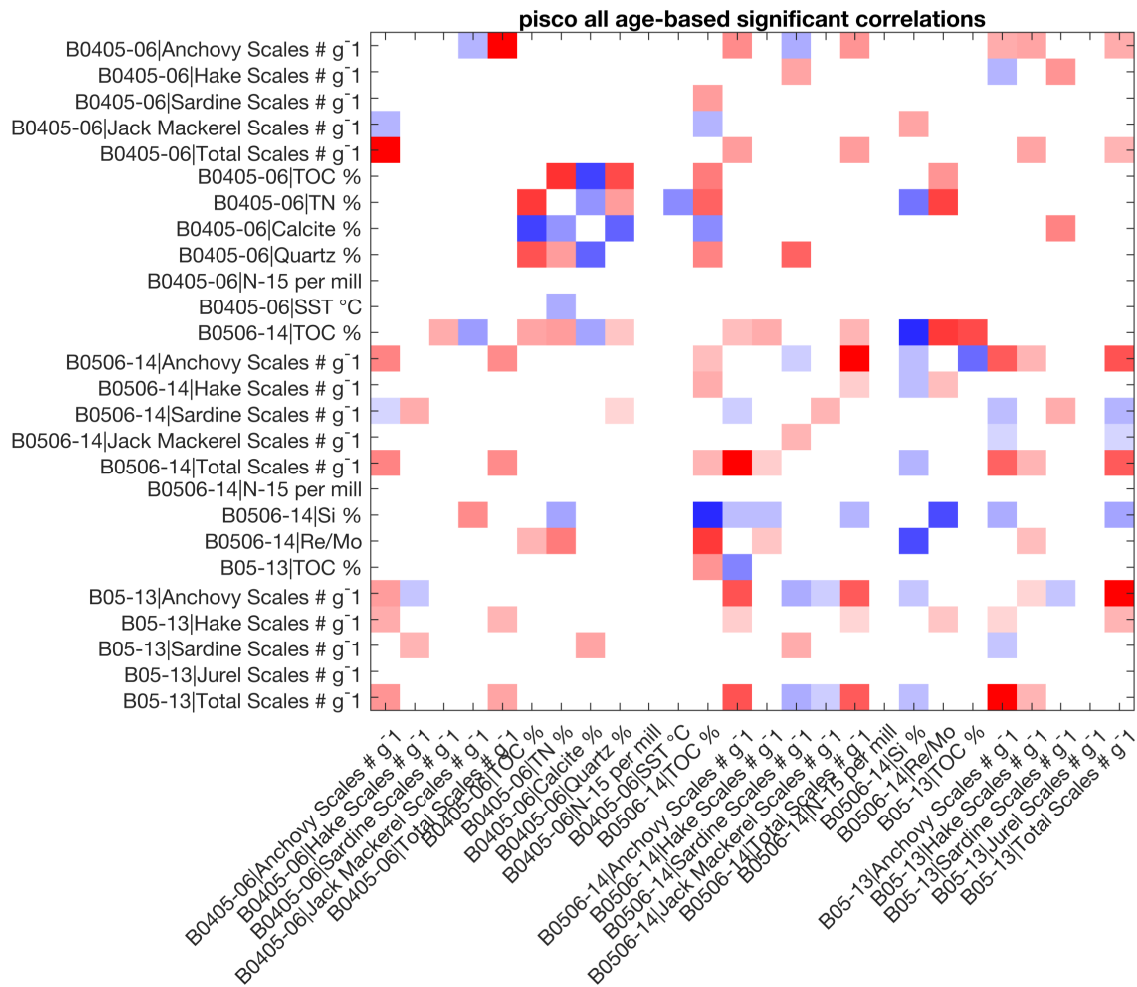


Figure 6: Saanich Inlet

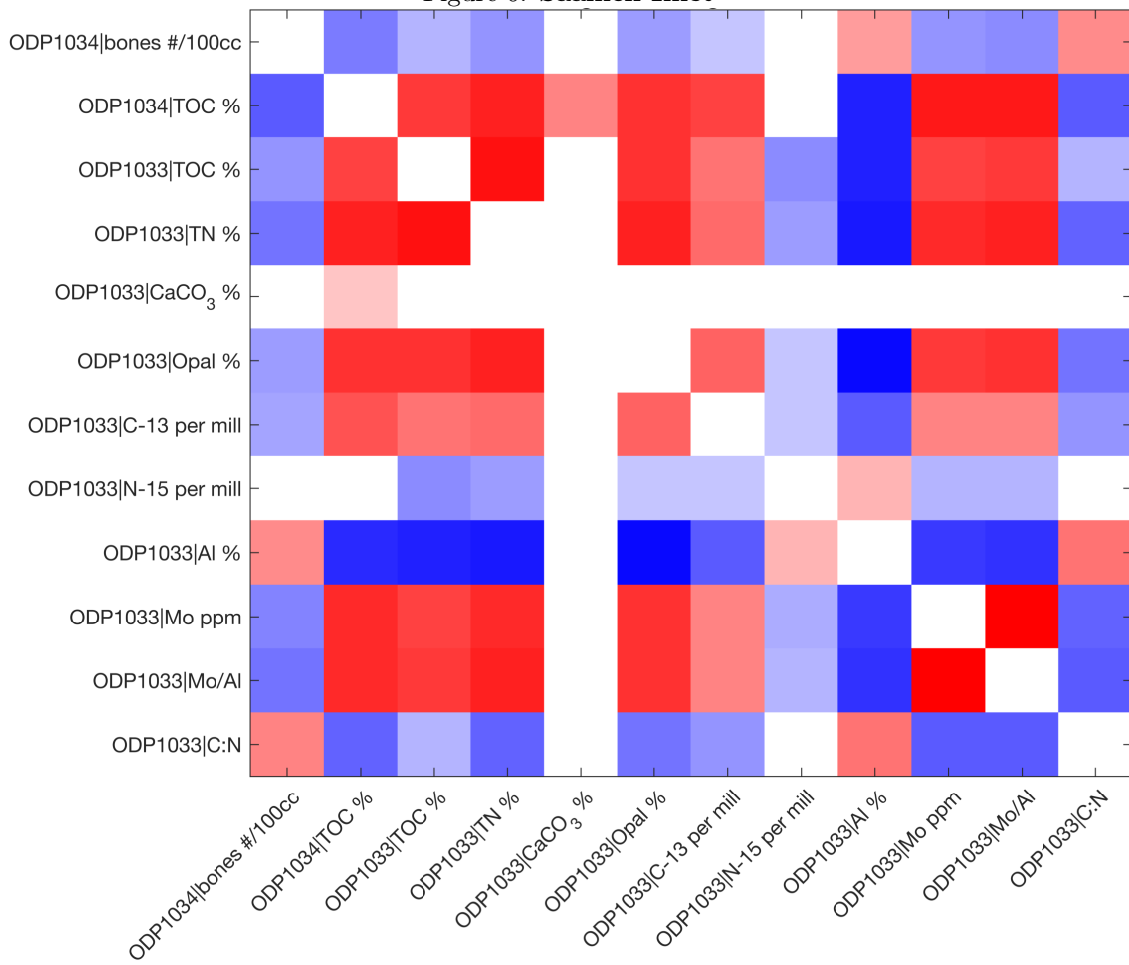


Figure 7: Santa Barbara Basin

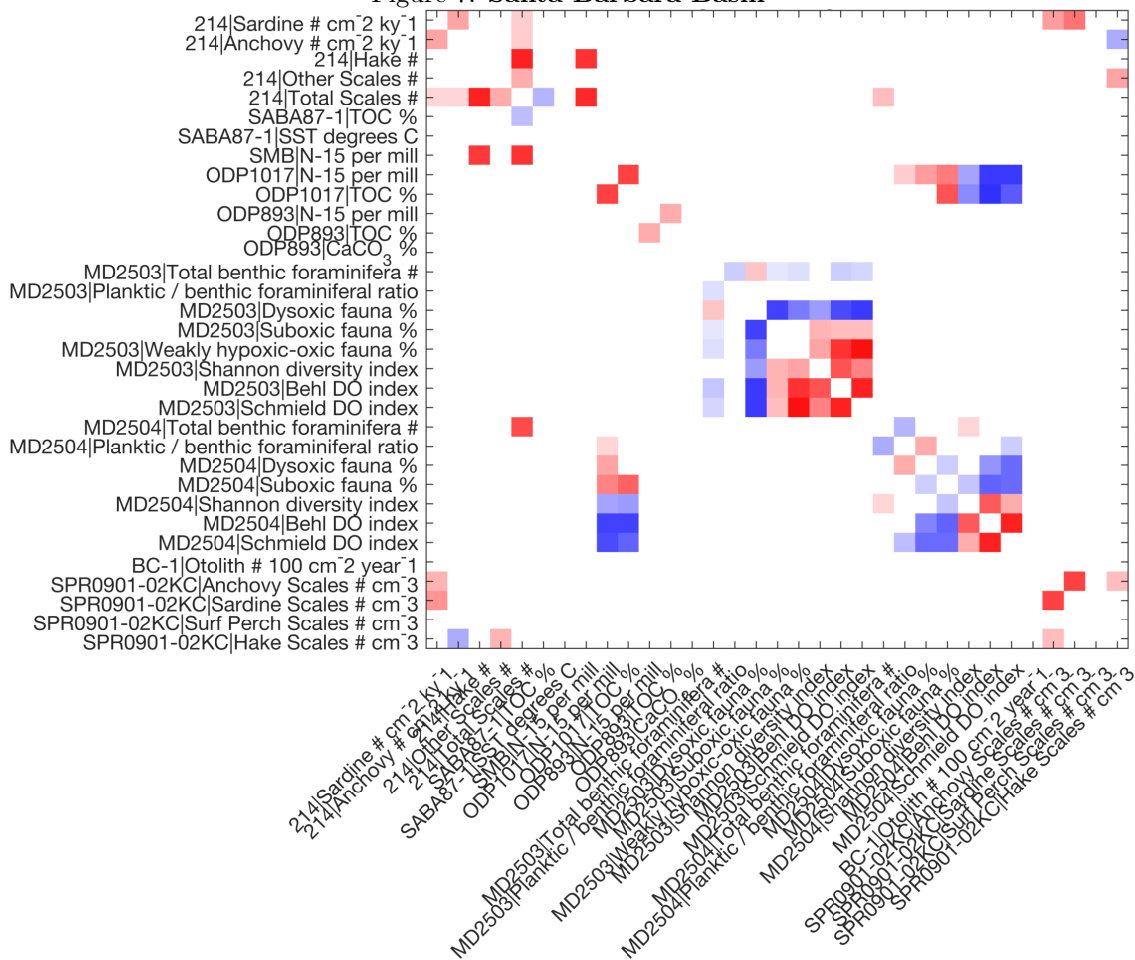


Figure 8: Soledad Basin

soledad all age-based significant correlations

