Rhodobacterales **Prochlorococcus** Flavobacteriales Synecococcus b d a C 2017-2018 2017-2018 2017-2018 Not Significant 1.50 Mean Alpha Diversity Per Cruise R-Squared = 0.639Not Significant p-value = 0.017 2017-2018 Not Significant 1.25 .00 -2014-2016 2014-2016 Not Significant 2014-2016 2014-2016 R-Squared = 0.548 Not Significant 0.75 Not Significant p-value = 0.006 SAR 11 Clade Dinoflagellates Syndiniales **Diatoms** 3.2 **e** h 2017-2018 g 2017-2018 R-Squared = 0.558 2017-2018 2017-2018 Mean Alpha Diversity Per Cruise Not Significant p-value = 0.033 R-Squared = 0.642 R-Squared = 0.726 2.8 p-value = 0.017 p-value = 0.007 2014-2016 2014-2016 2014-2016 R-Squared = 0.446 R-Squared = 0.468 R-Squared = 0.7422.0 p-value = 0.018 p-value < 0.001 p-value = 0.014 2014-2016 Not Significant 0.25 0.10 0.15 0.20 Nearshore-Offshore Slope in Nitracline (m/km) Metazoans Haptophytes Chlorophytes Phase k 2017-2018 2014-2016 2017-2018 **Not Significant** 3.0 2017-2018 Mean Alpha Diversity Per Cruise Not Significant 2017-2018 Not Significant 2019 2.5 Season 2014-2016 2014-2016 Winter Not Significant 2014-2016 2.0 Not Significant Spring R-Squared = 0.396 Summer p-value = 0.028 \triangle Fall 0.25 0.25 0.10 0.15 0.20 0.20 0.15 0.20 0.25 0.10 0.15 0.10 Nearshore-Offshore Nearshore-Offshore Nearshore-Offshore Slope in Nitracline (m/km) Slope in Nitracline (m/km) Slope in Nitracline (m/km)