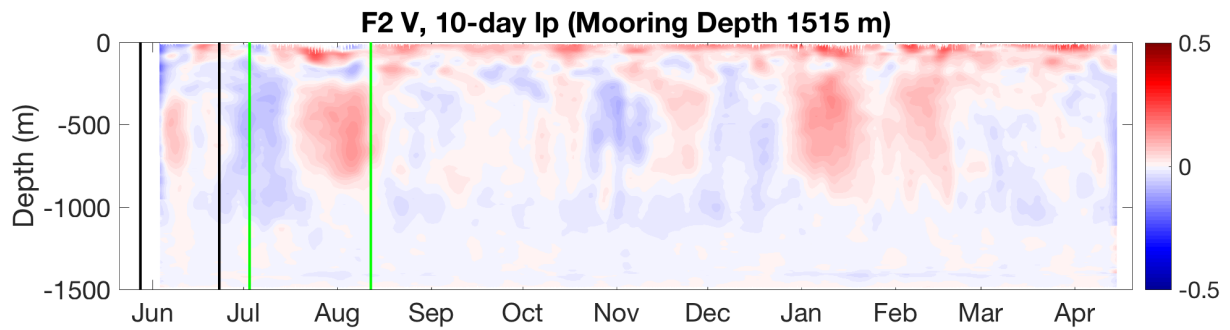
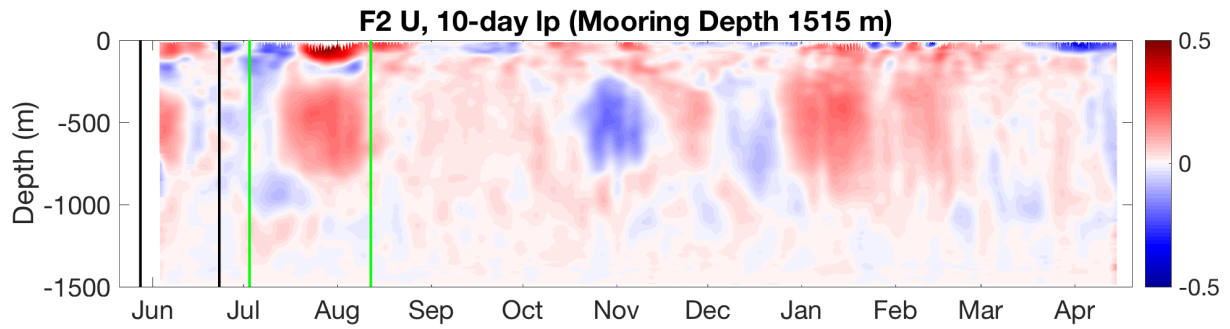
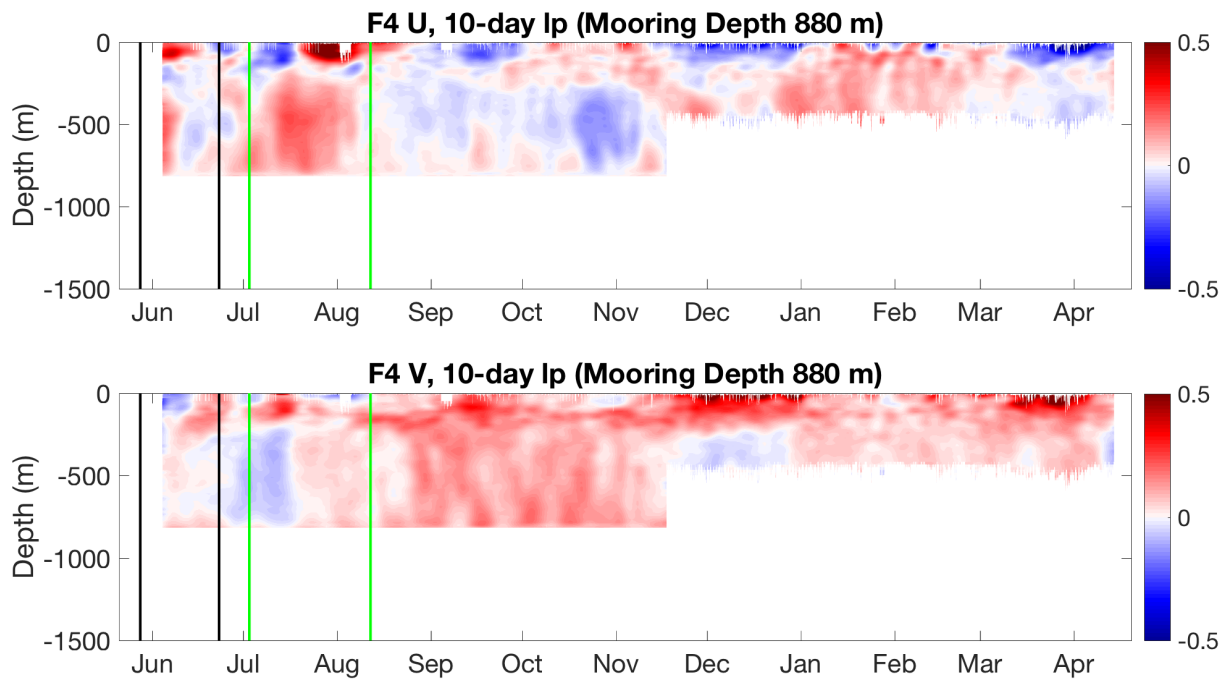


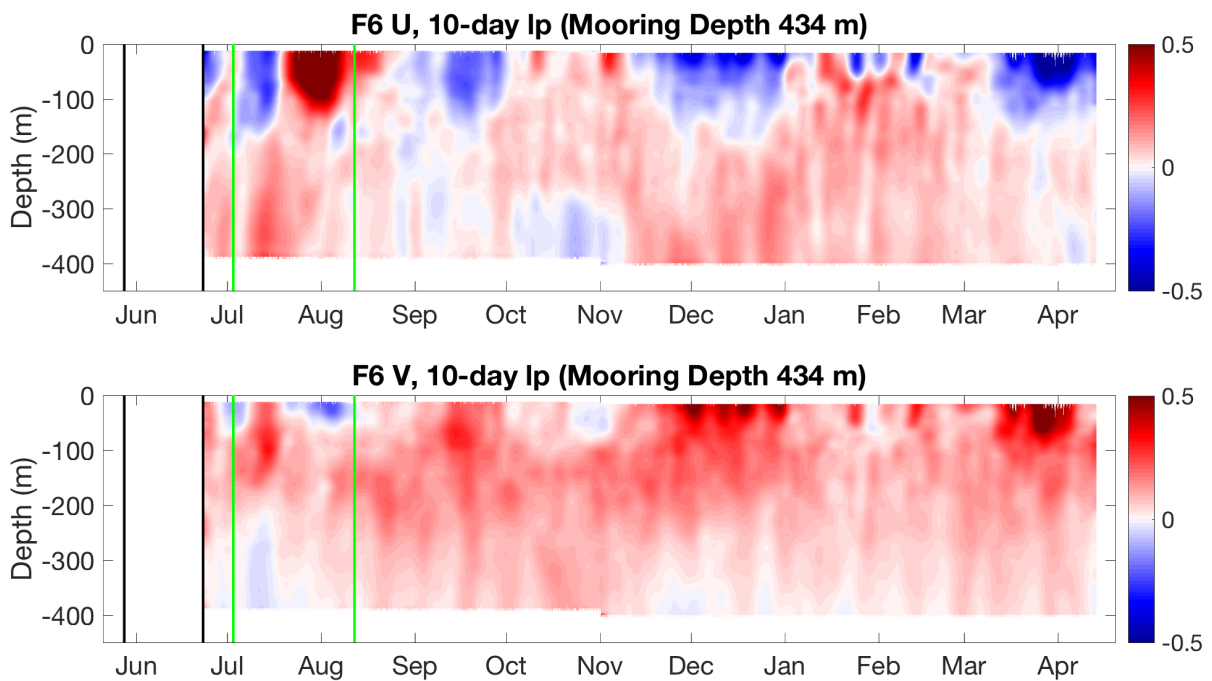
**FIGURES S1.** Zonal (top) and meridional (bottom) currents ( $\text{m s}^{-1}$ , shaded) 10-day low-pass filtered as measured at F1 at the northern edge of Velasco Reef from June 2016 through April 2017. As in Figure 7.



**FIGURES S2.** Zonal (top) and meridional (bottom) currents ( $\text{m s}^{-1}$ , shaded) 10-day low-pass filtered as measured at F2 at the northern edge of Velasco Reef from June 2016 through April 2017. As in Figure 7.



**FIGURES S3.** Zonal (top) and meridional (bottom) currents ( $\text{m s}^{-1}$ , shaded) 10-day low-pass filtered as measured at F4 at the northern edge of Velasco Reef from June 2016 through April 2017. As in Figure 7.



**FIGURES S4.** Zonal (top) and meridional (bottom) currents ( $\text{m s}^{-1}$ , shaded) 10-day low-pass filtered as measured at F6 at the northern edge of Velasco Reef from June 2016 through April 2017. As in Figure 7.