

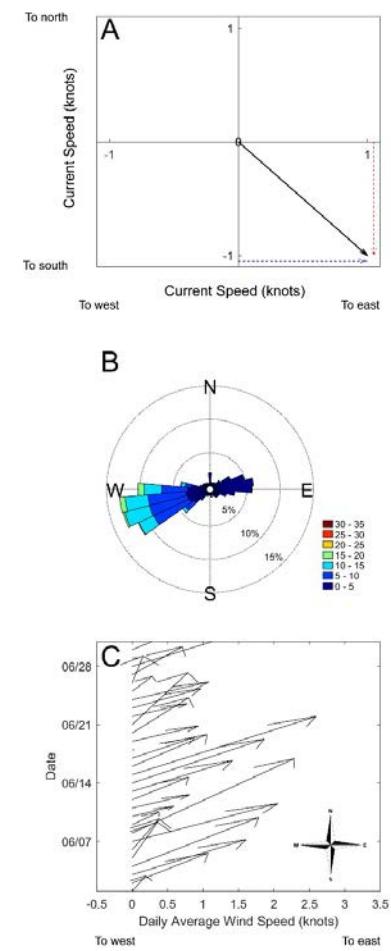
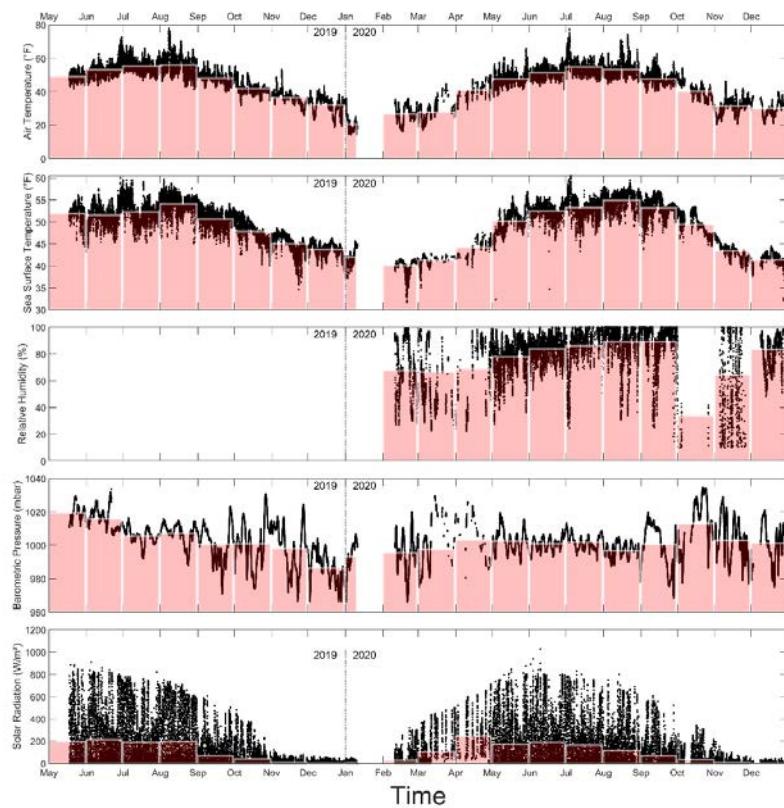
# Port Valdez Weather Buoy Analysis

PWSRCAC OSPR, 5 Aug 2021

Rob Campbell

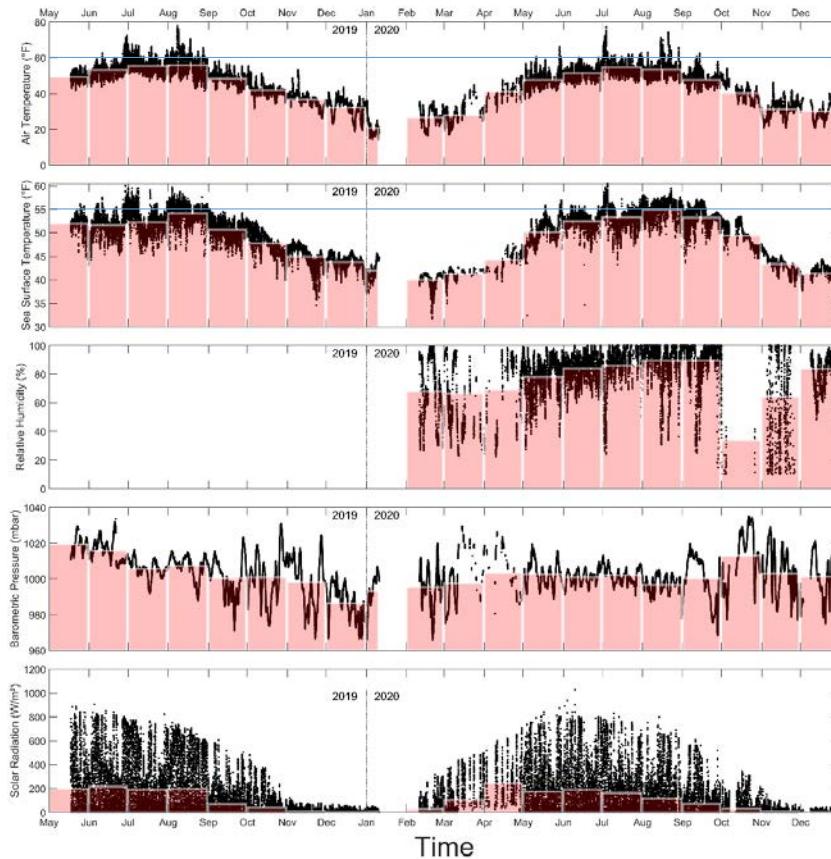


# Scalars vs vectors

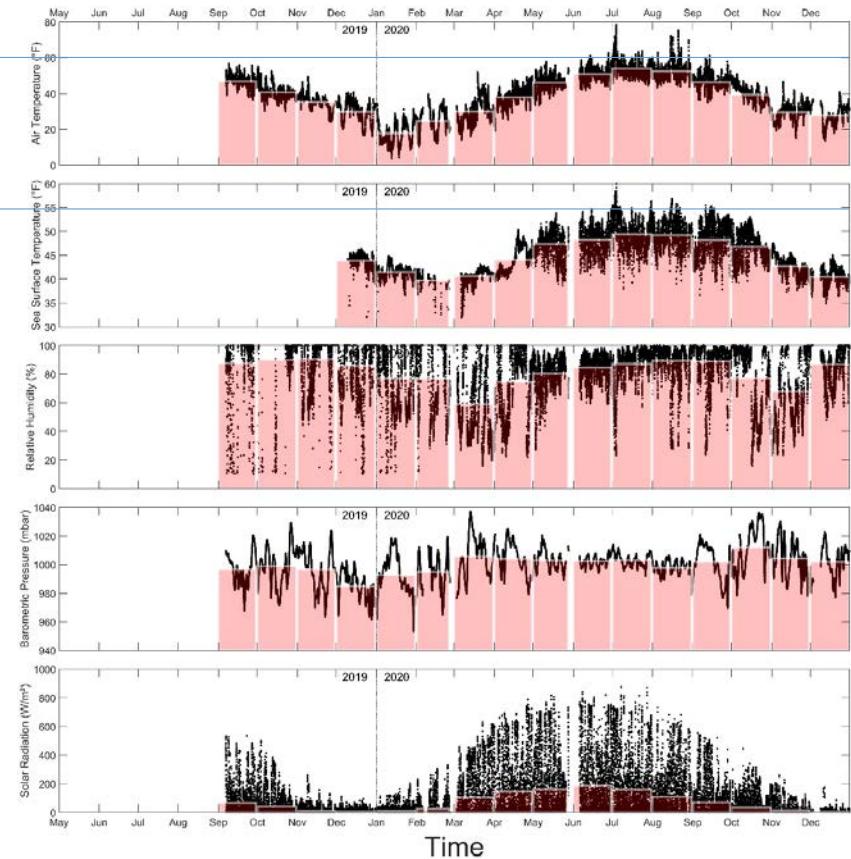


# Monthly averages – met and oceanographic

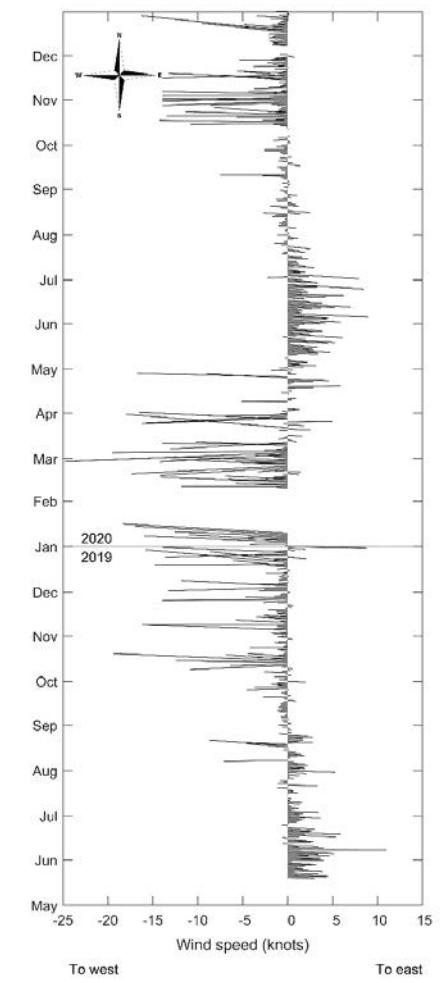
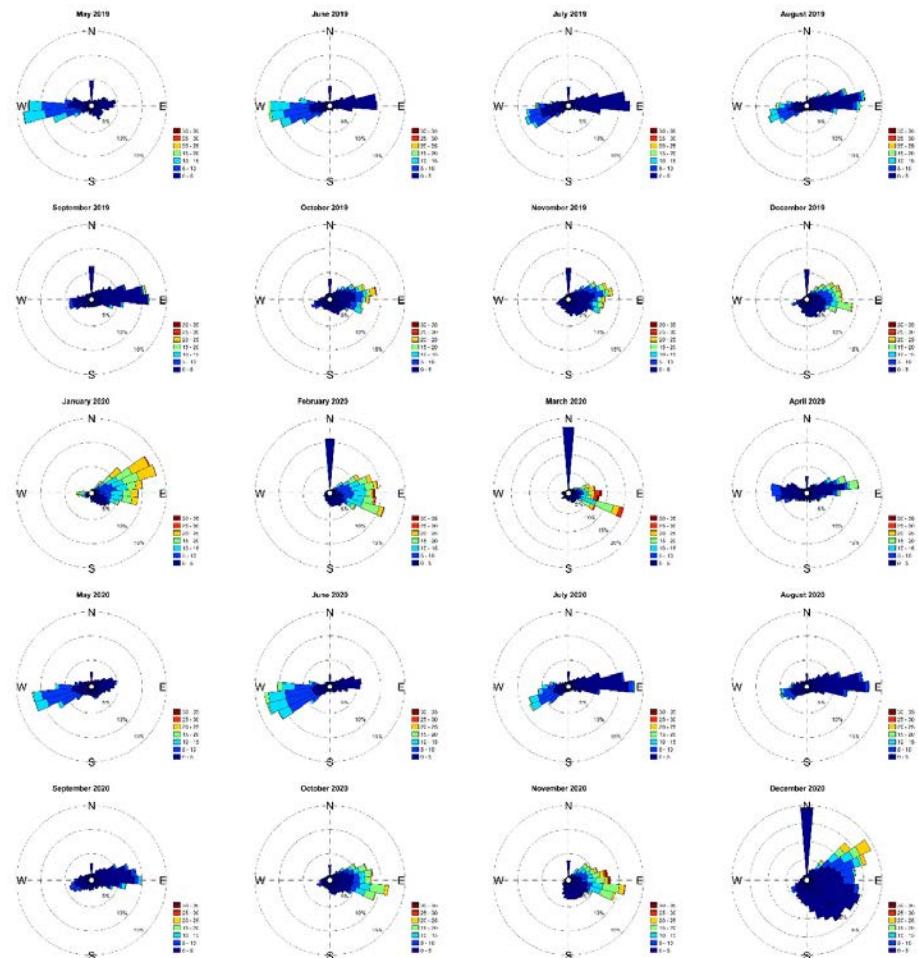
VMT



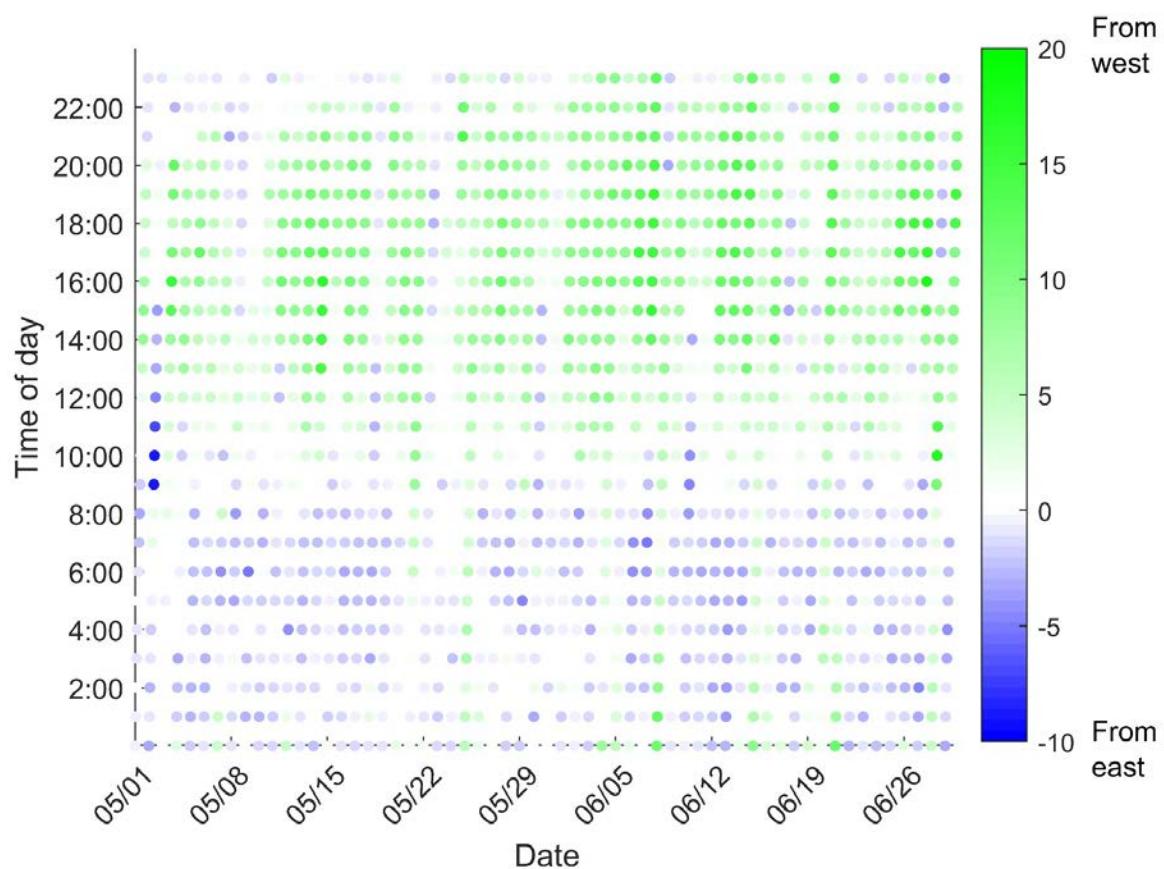
Duck Flats



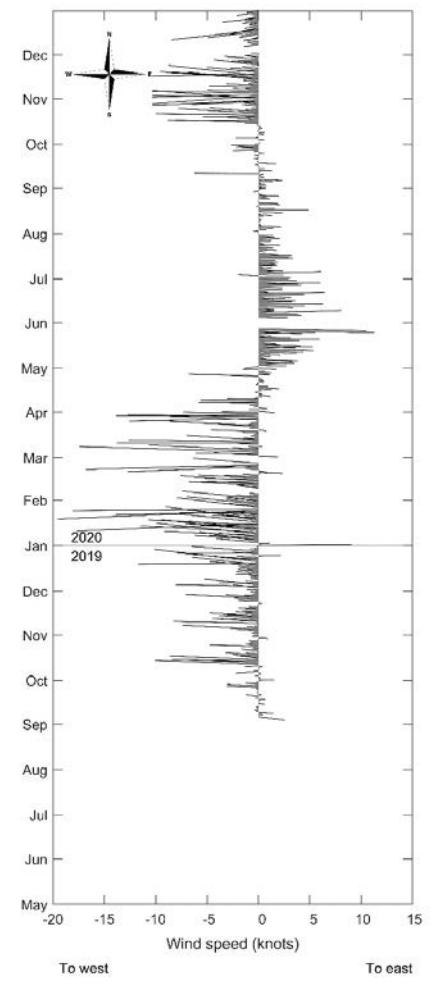
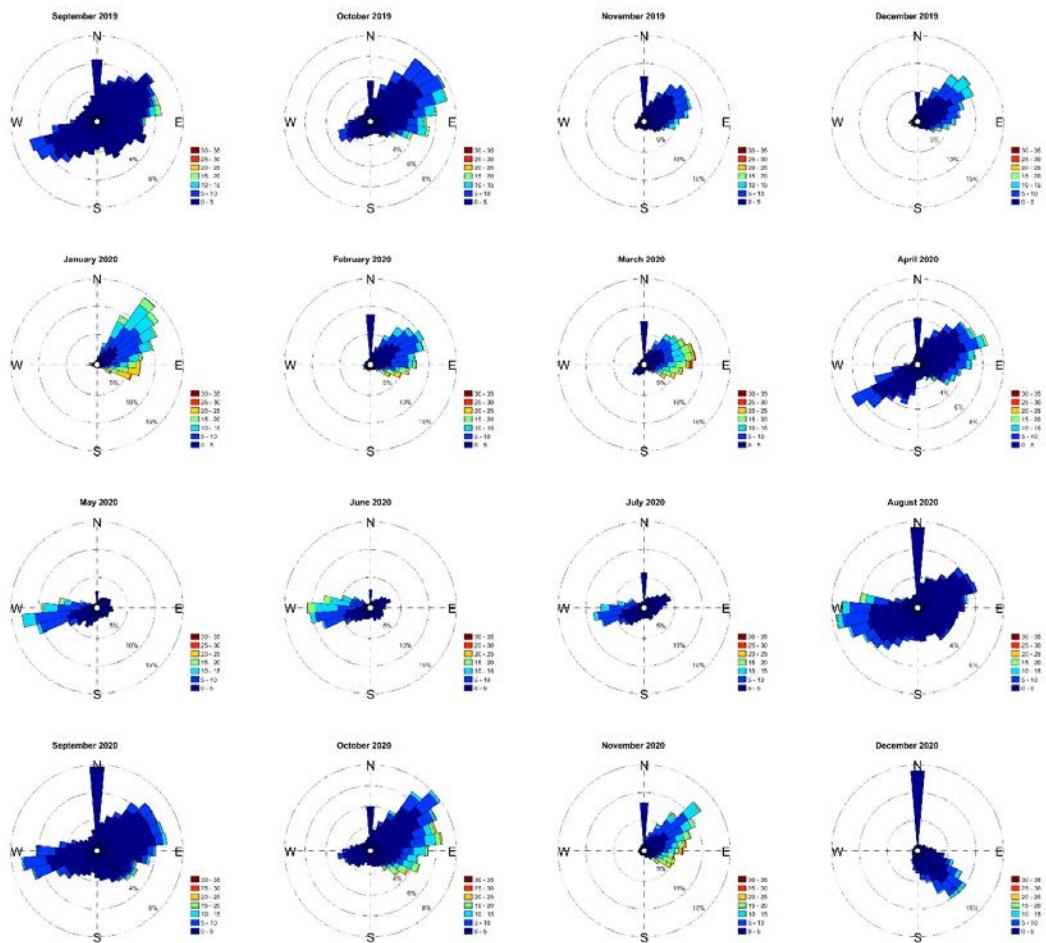
# Winds - VMT



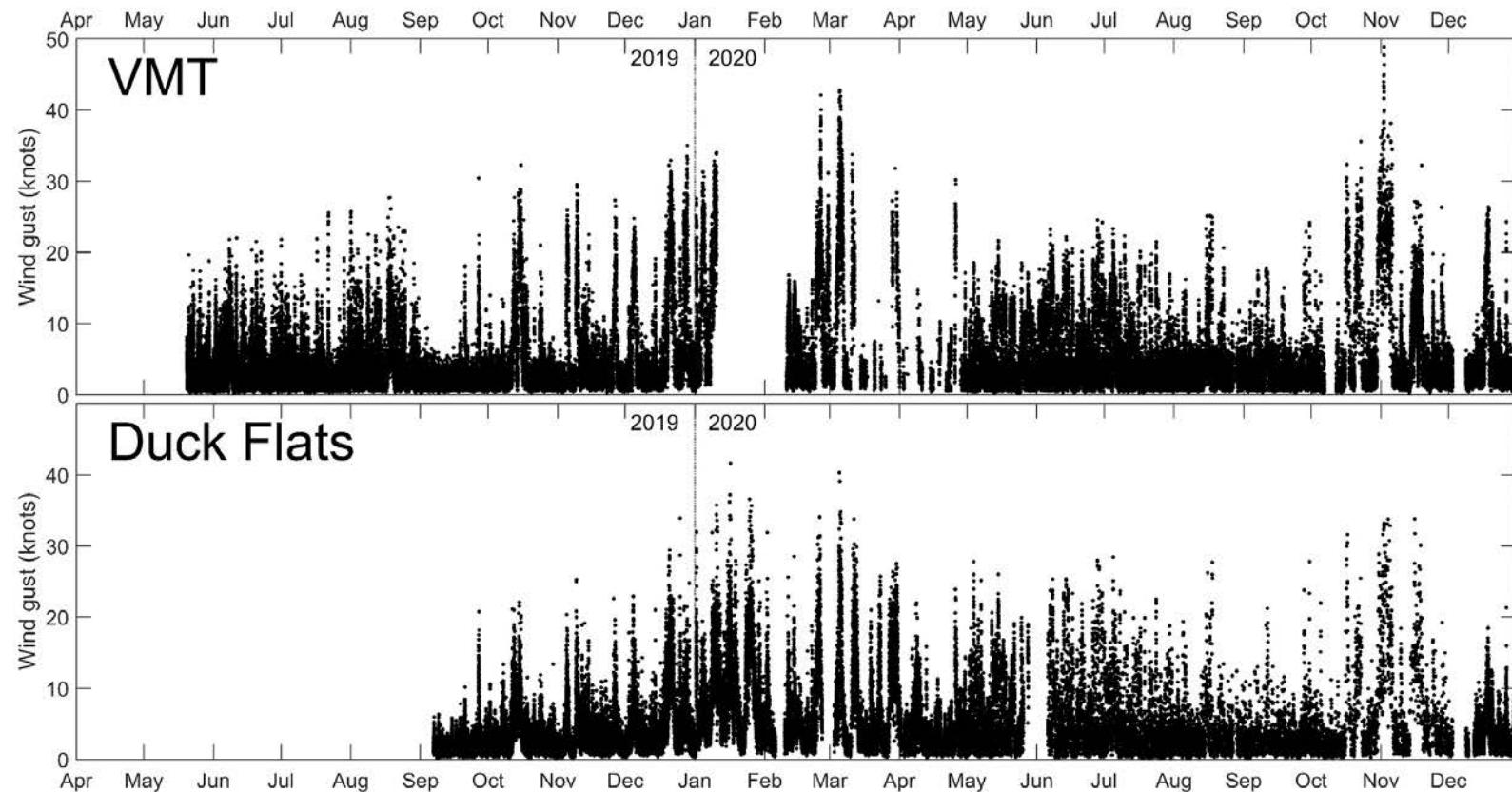
# Daily sea breezes at VMT



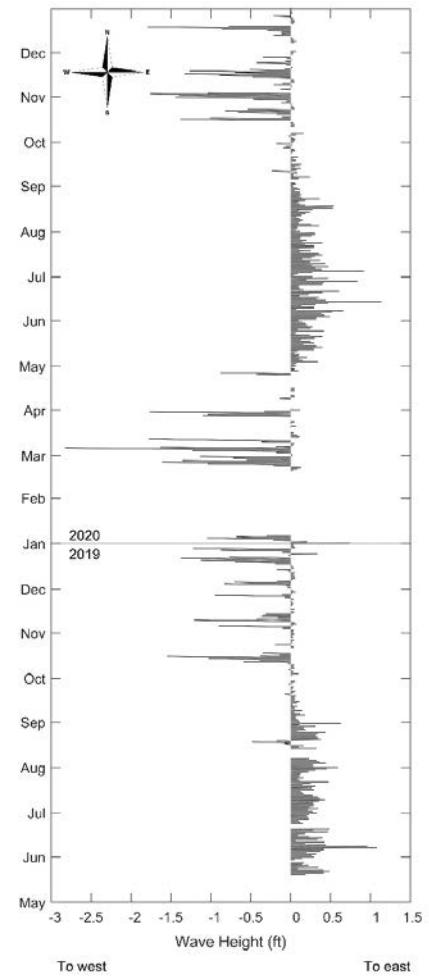
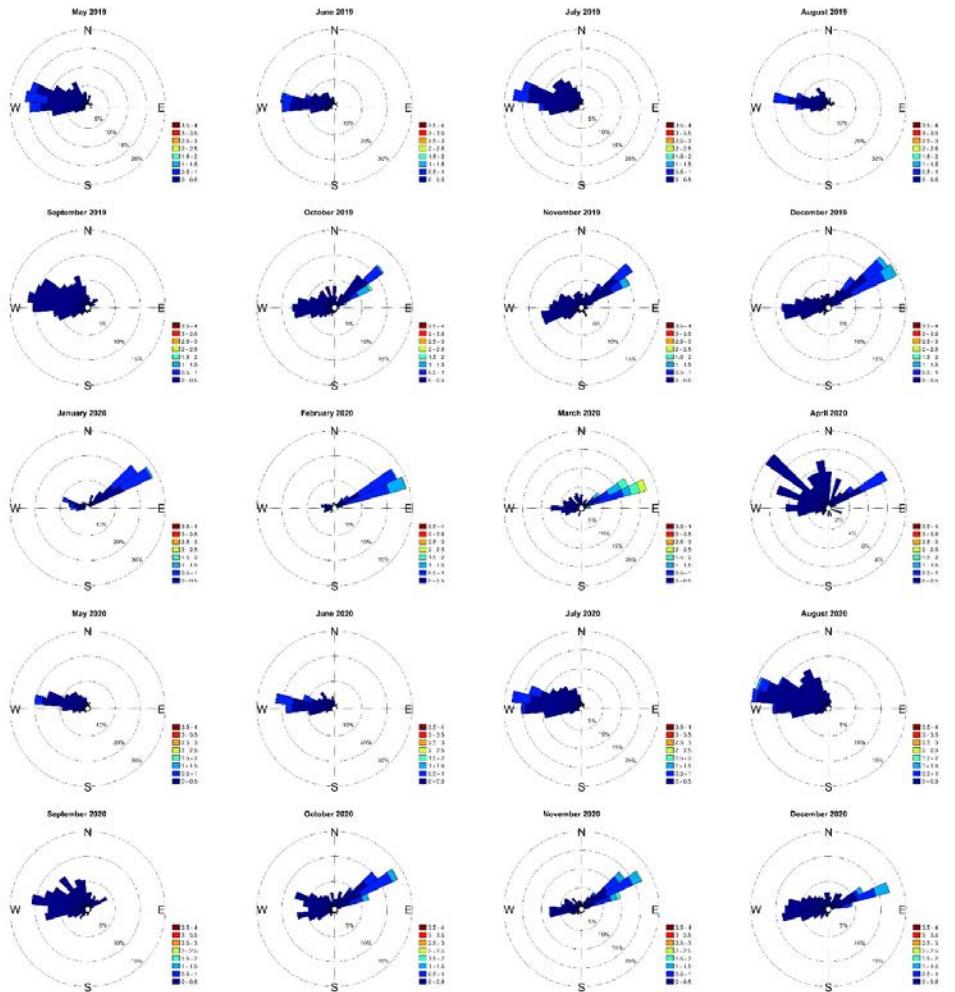
# Winds – Duck Flats



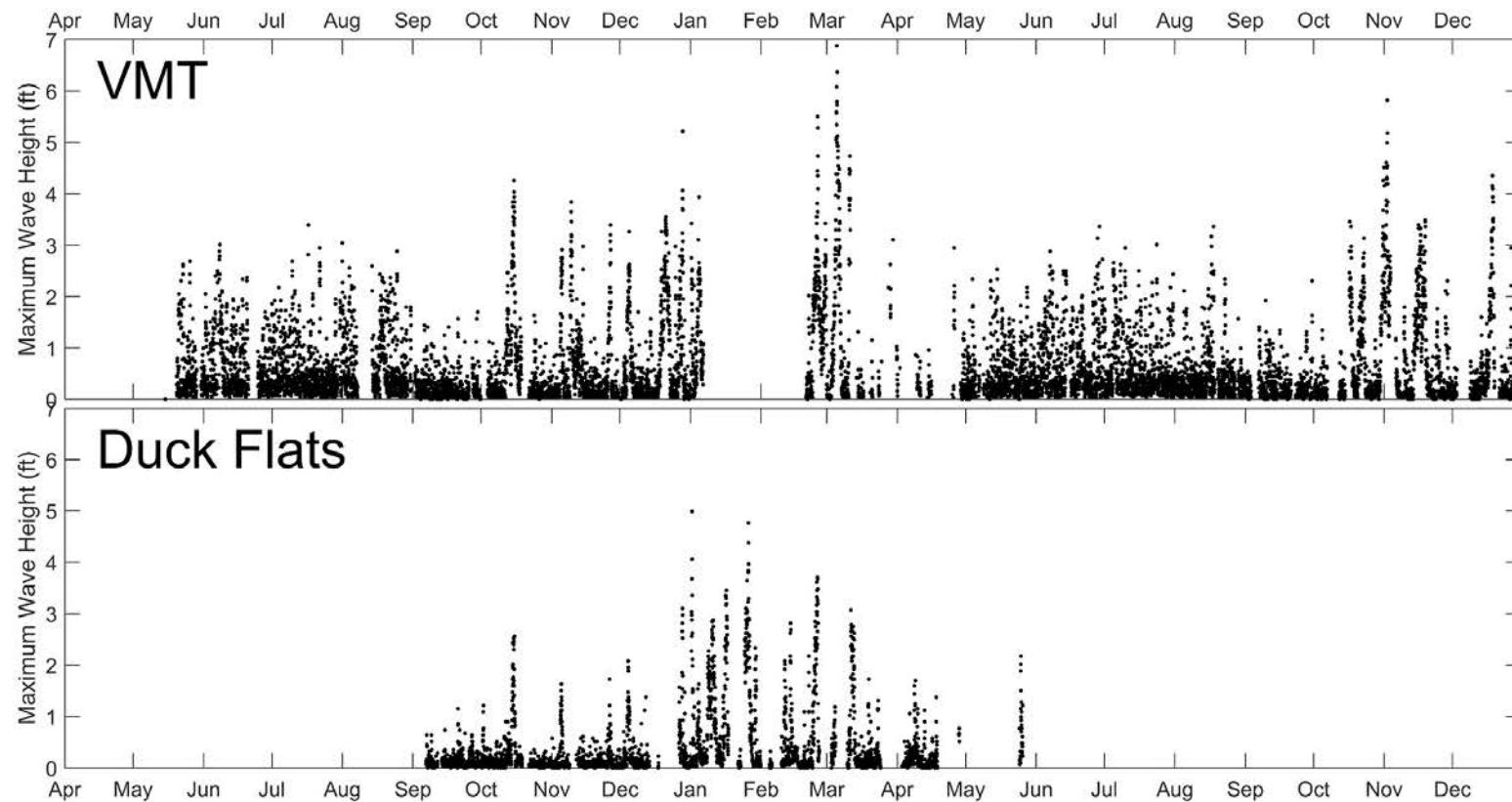
# Wind gusts



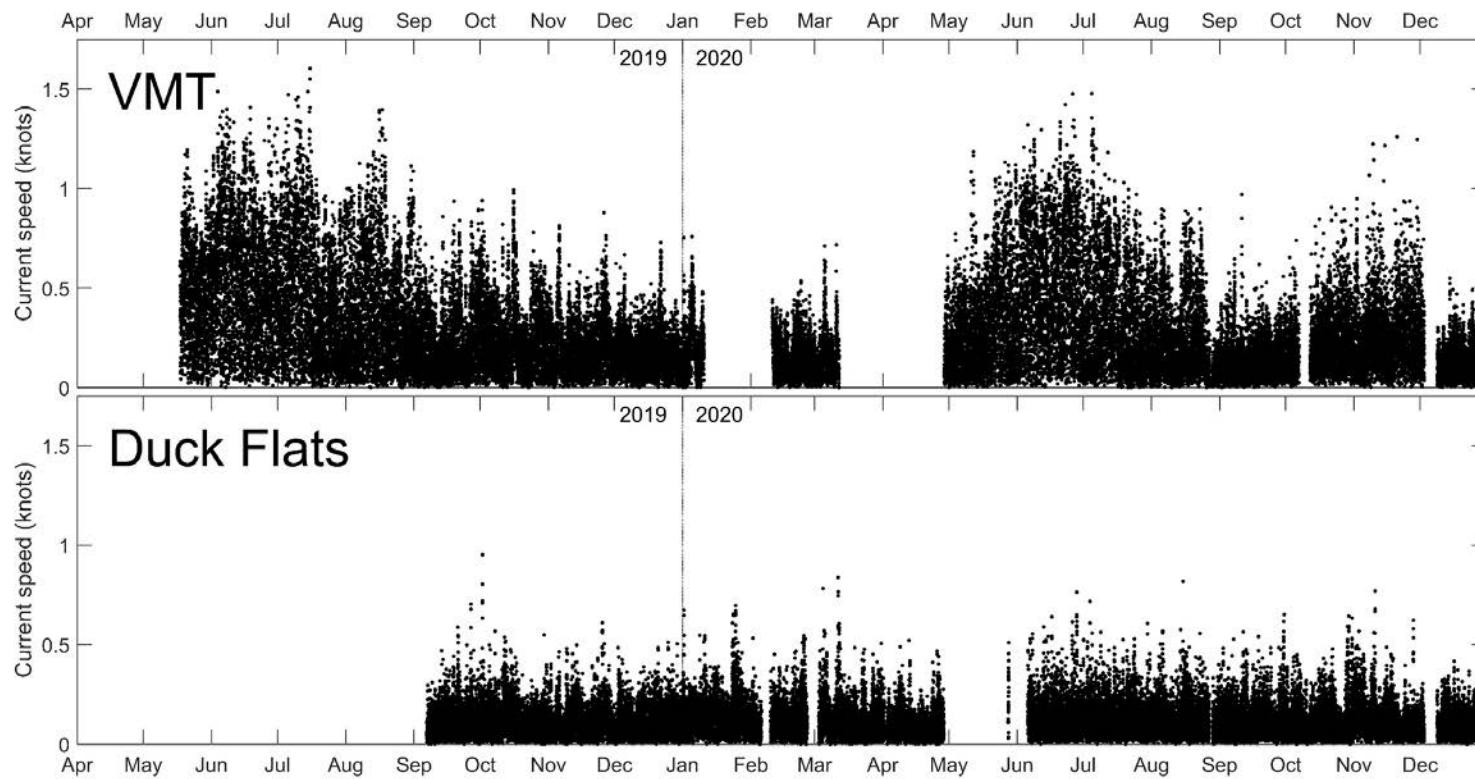
# Waves - VMT



# Max wave height

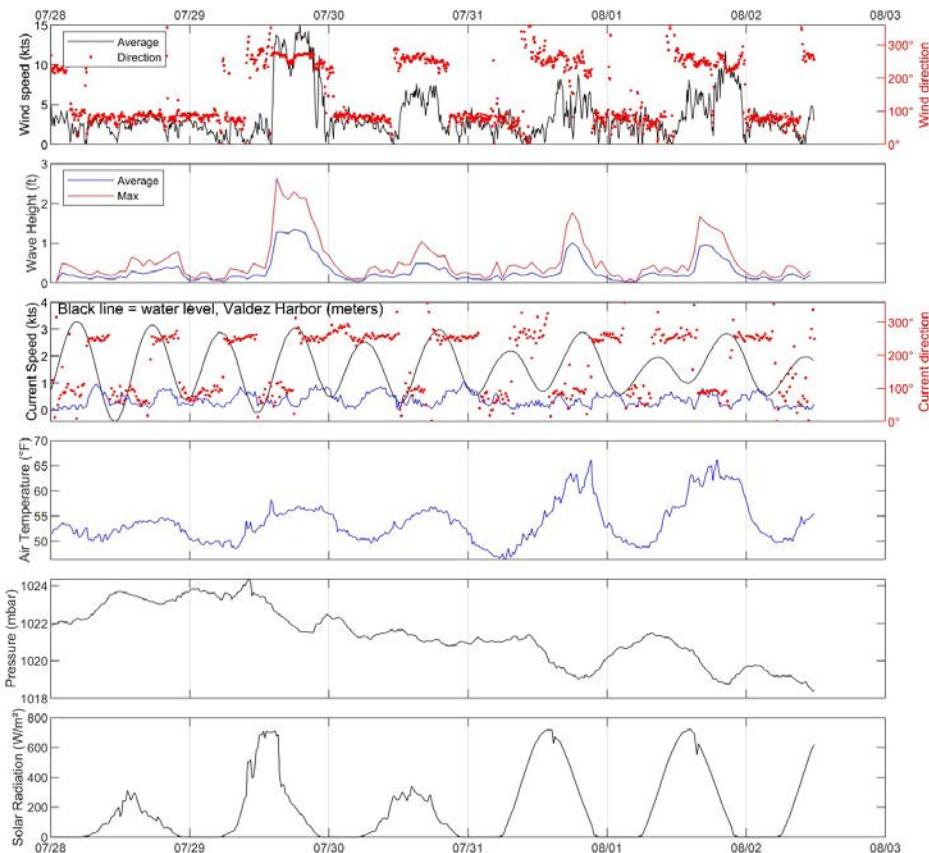


# Surface currents

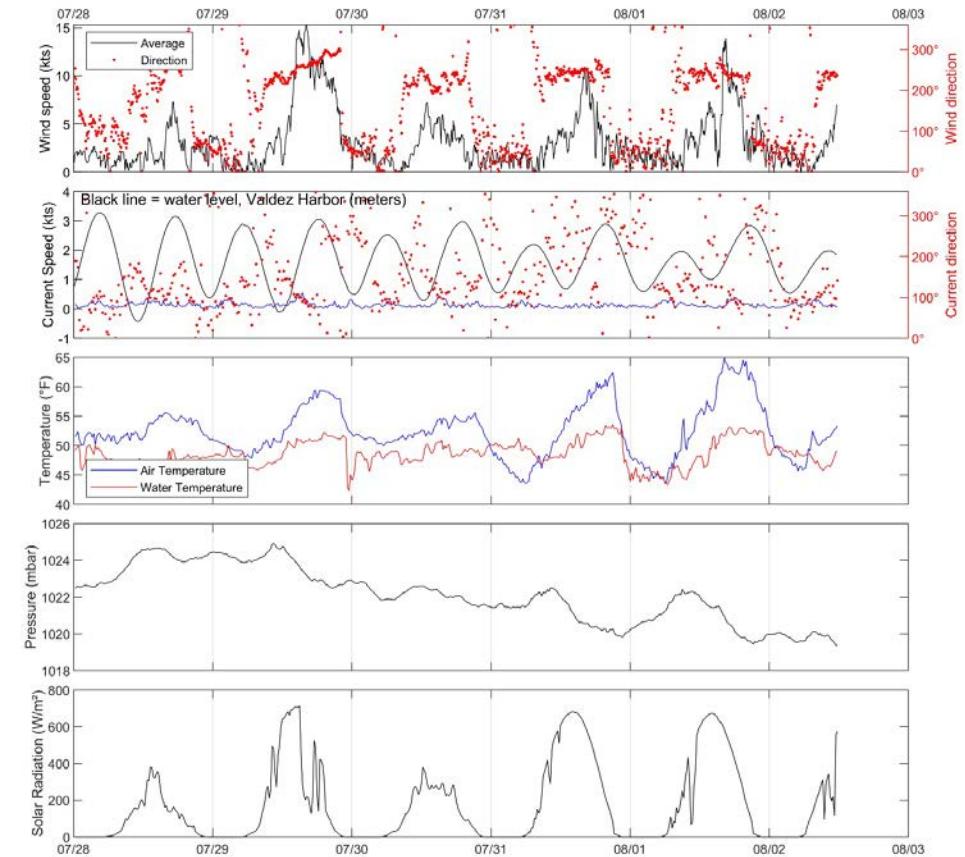


# Tidal currents

VMT



Duck Flats



# Detiding

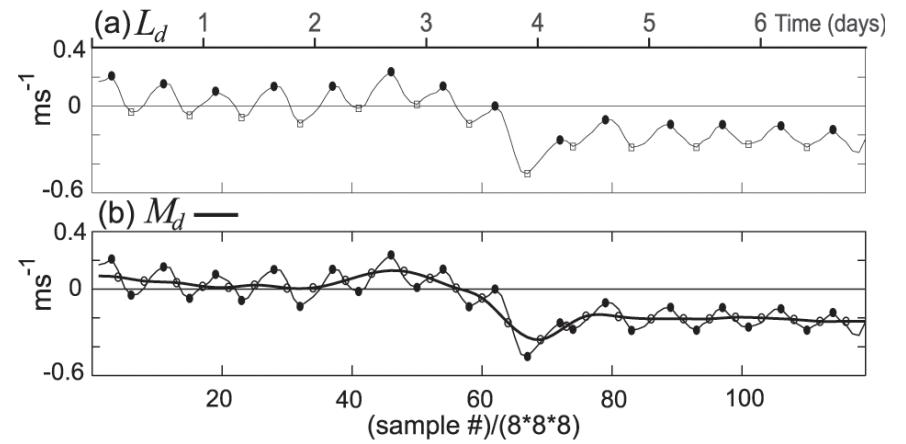
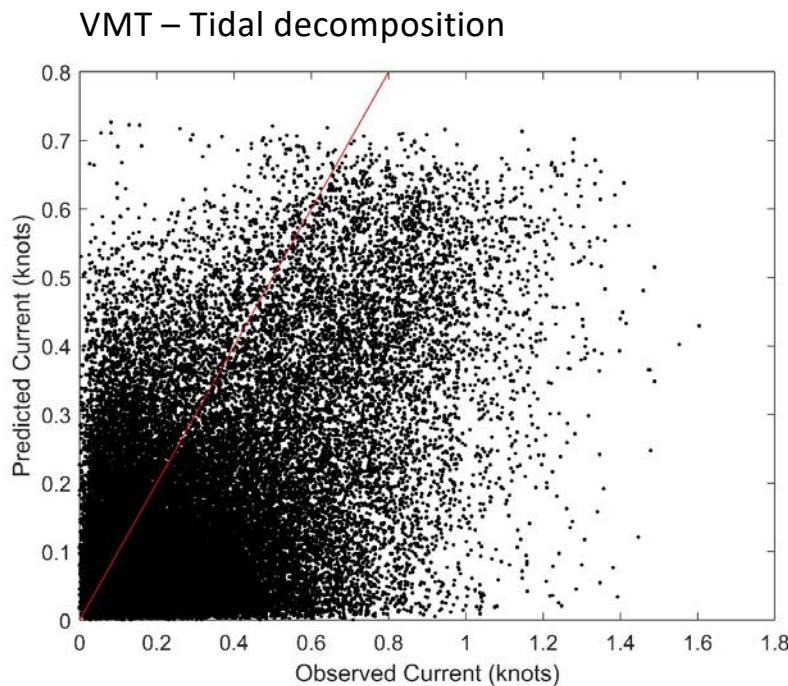
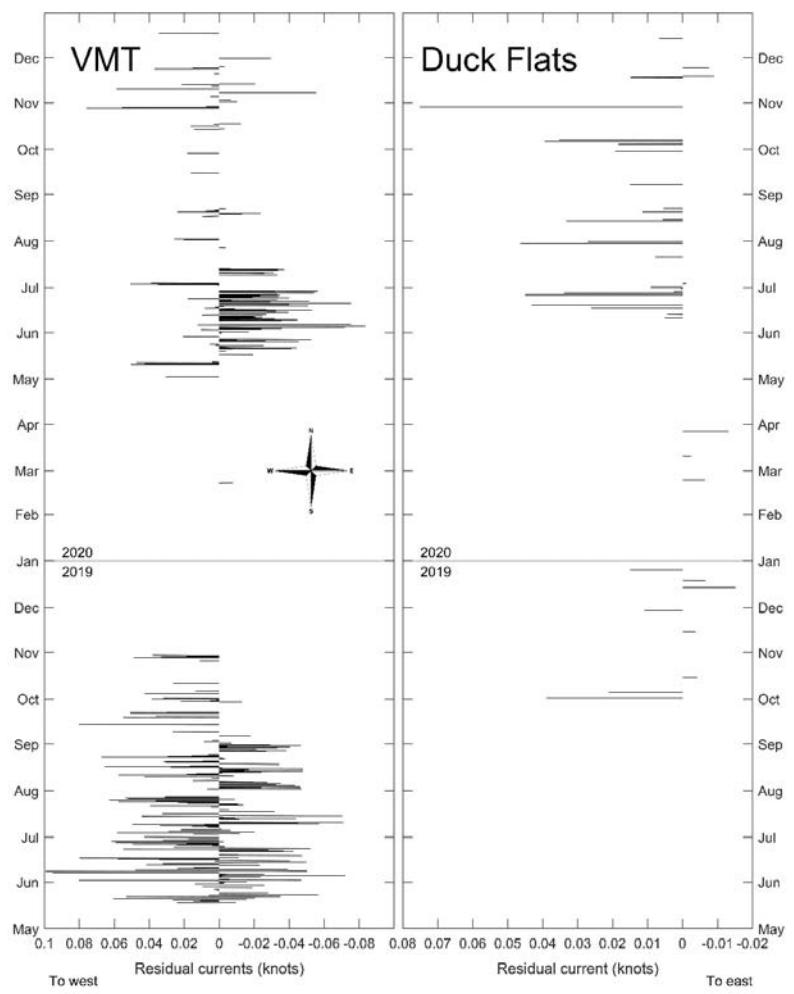
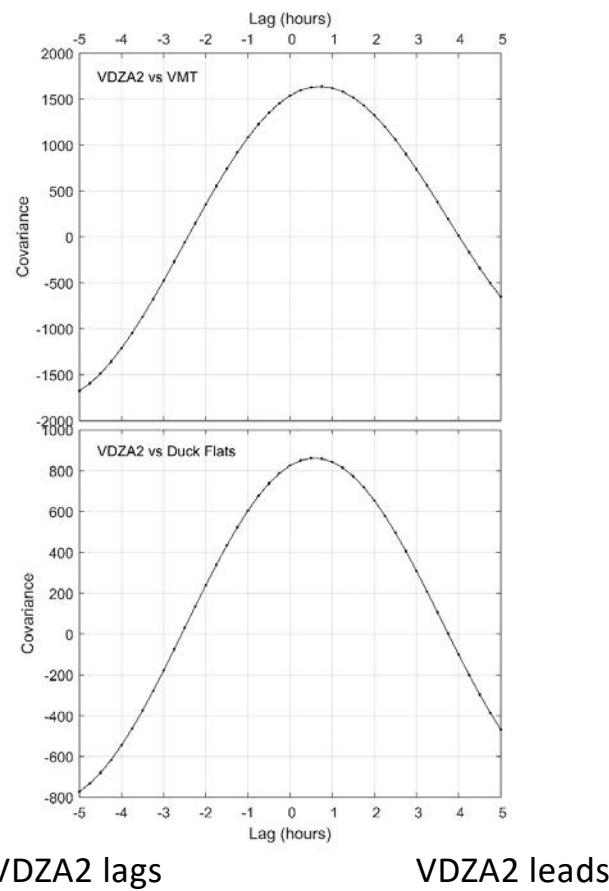


FIG. 3. (a) Low frequency decimated time series  $L_d$  ( $SP_d = 5120$  s) generated during stage 1, with identified maxima (black dots) and minima (white squares). (b) The (decimated) mean  $M_d$  is a spline fit (heavy curve) to averages (white dots) of successive maxima and minima (black dots).

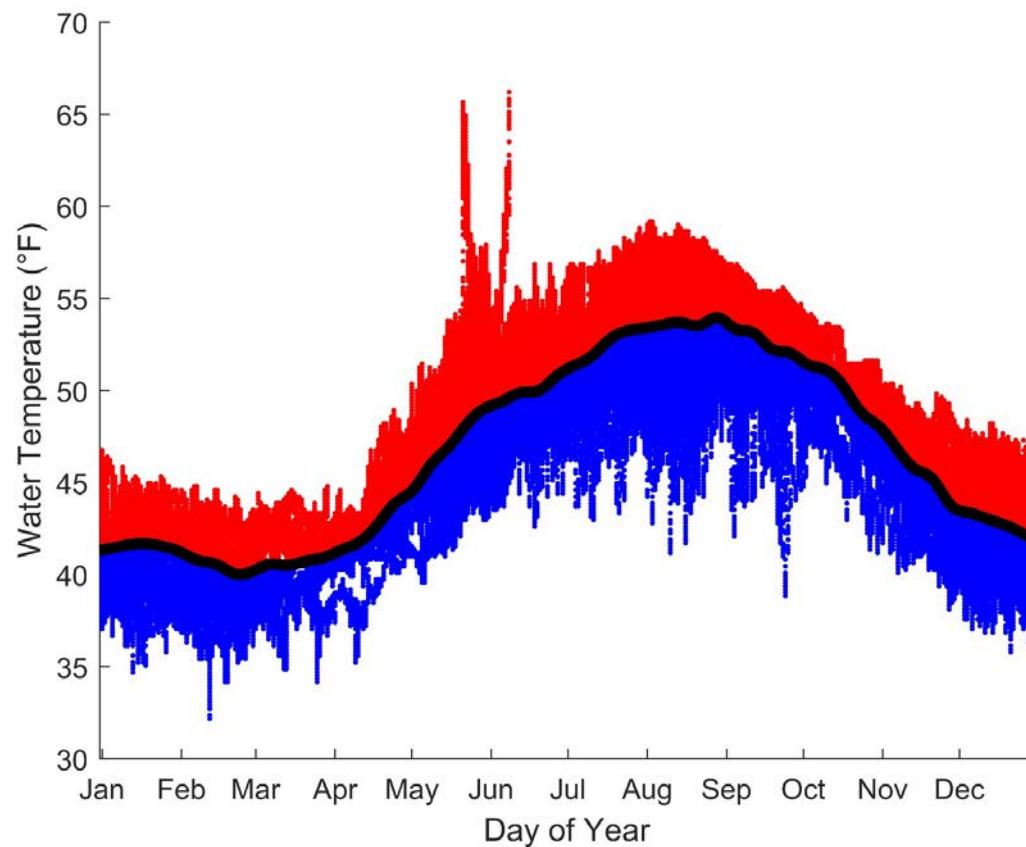
# Detided surface currents



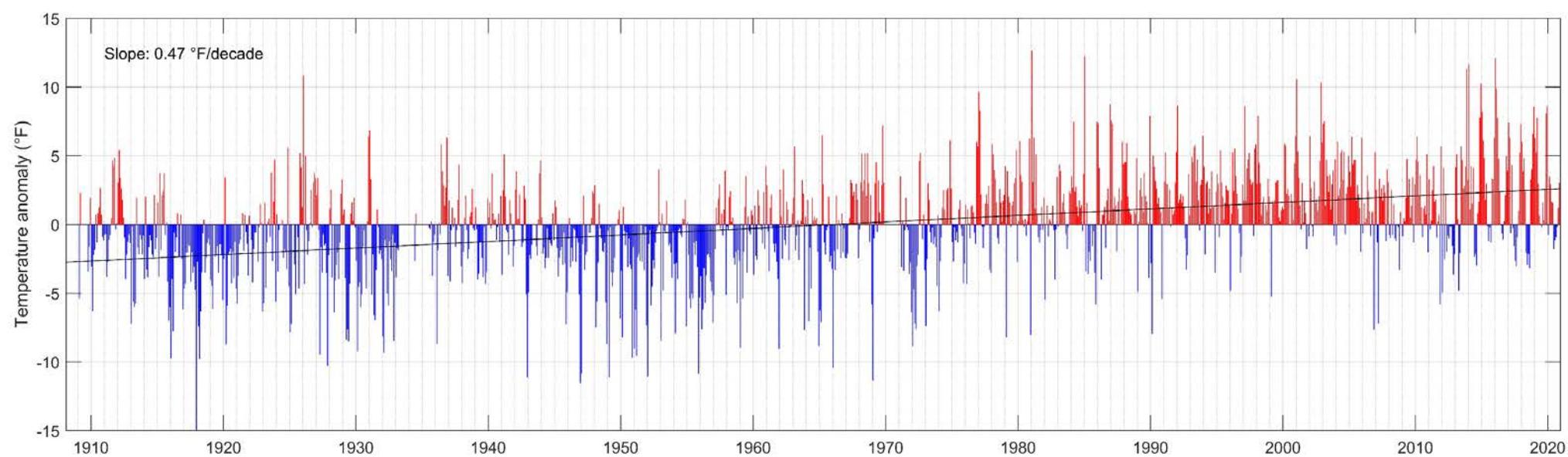
# Covariance with Valdez tide station VRZA2



# Temperature anomalies



# VDZ monthly air temperature anomaly 1908-2020



# Buoy air temperature anomalies 2019-2020

