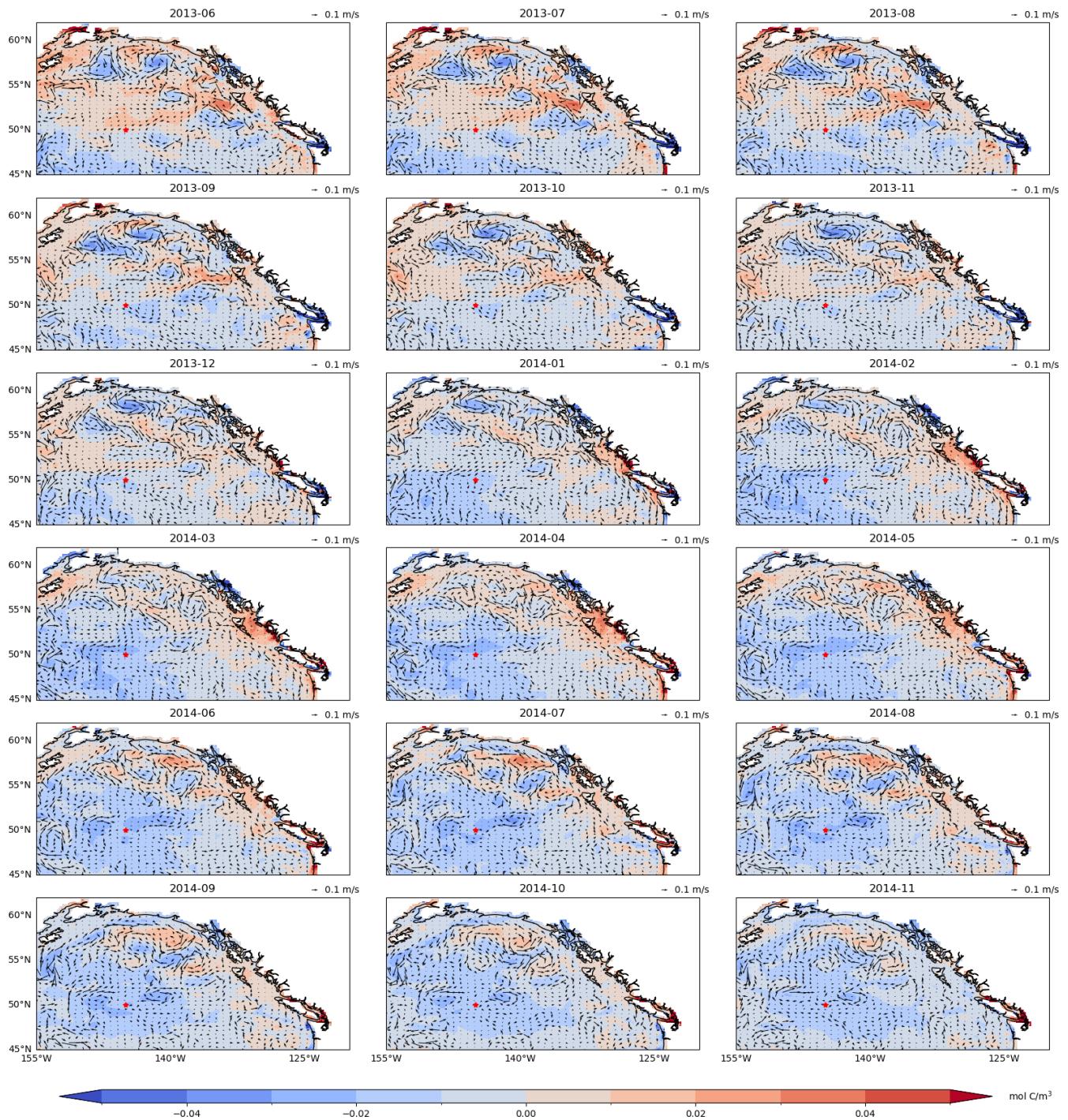
Figure S1: Climatology of DIC from the model. The star indicates the location of OSP.

5

Figure S2: Surface velocity (vectors) and DIC (colored shading) anomalies relative to 2010–2017, from June 2013 to November 2014. All variables have been detrended and deseasonalized. Velocities are smoothed using a 3-month moving average.