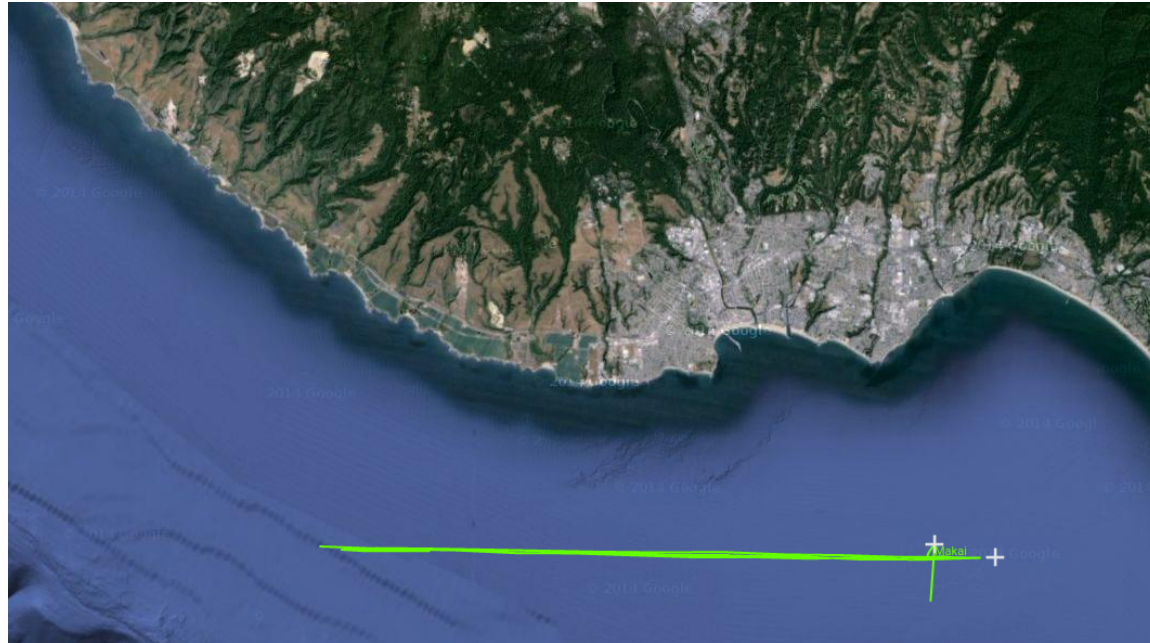
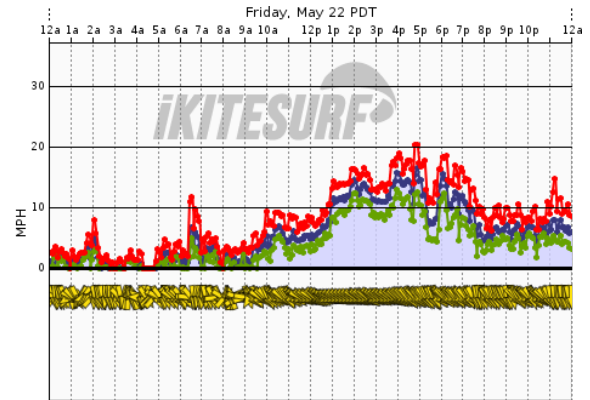
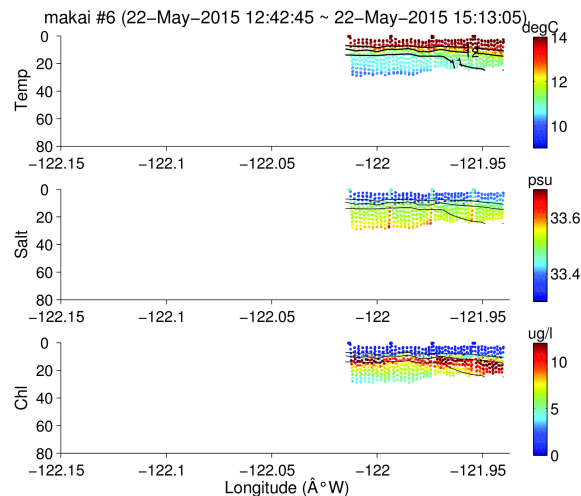
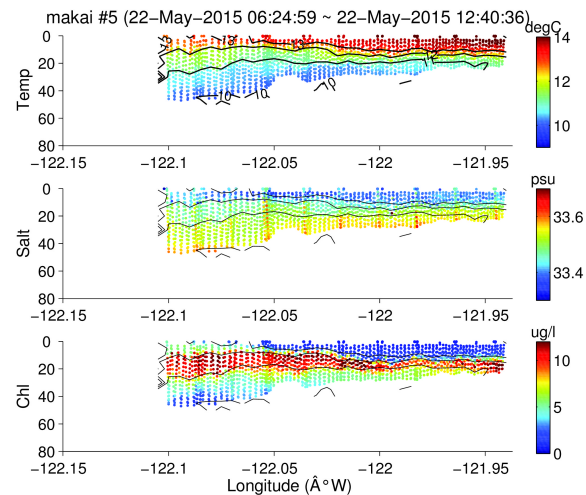


Weekend upwelling & Makai line

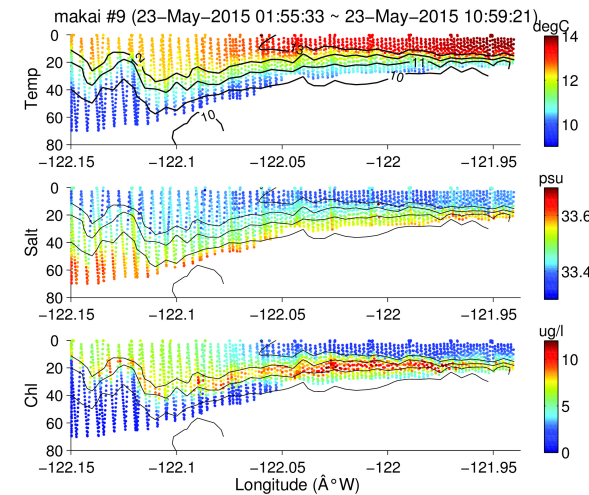
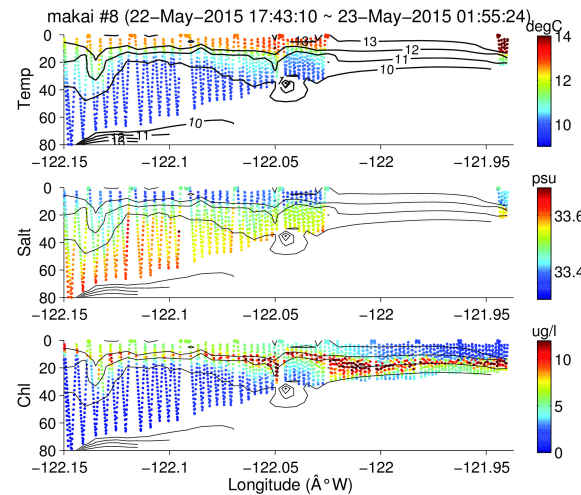
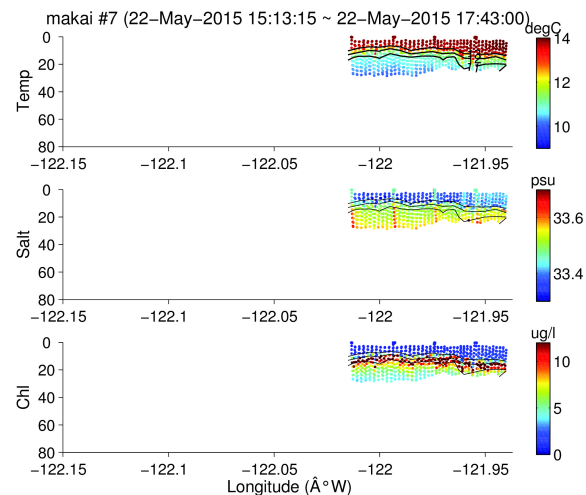


Makai line – 122.15°W to ESP north along 36.905°N

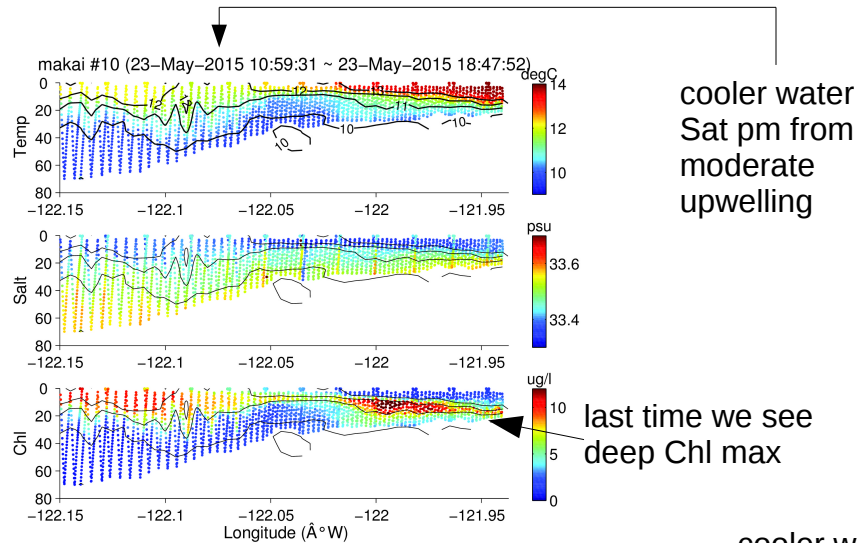
Friday 22 to Saturday 23 noon



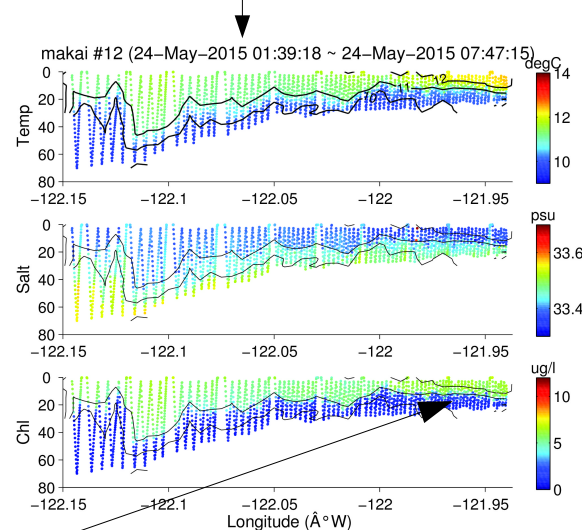
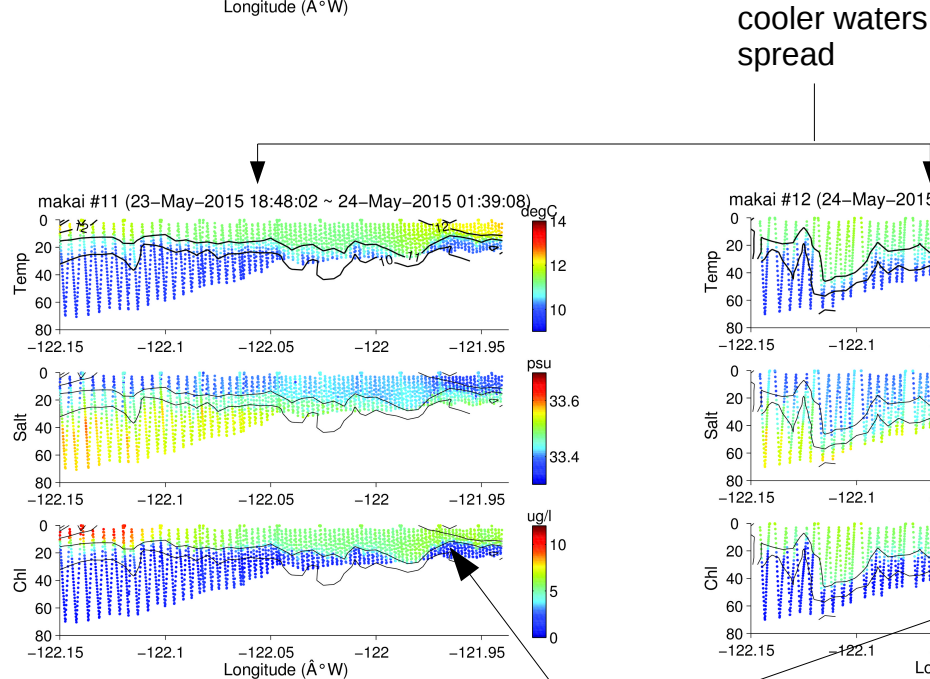
Mostly warm waters along the line, pretty weak NW weeks on Friday. Deep Chl maximum.



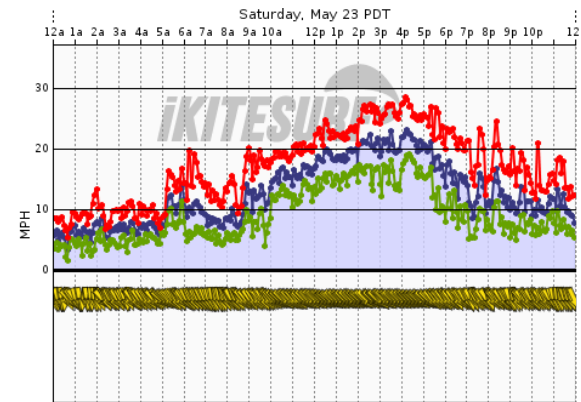
Saturday 23 noon to Sunday 24th morning



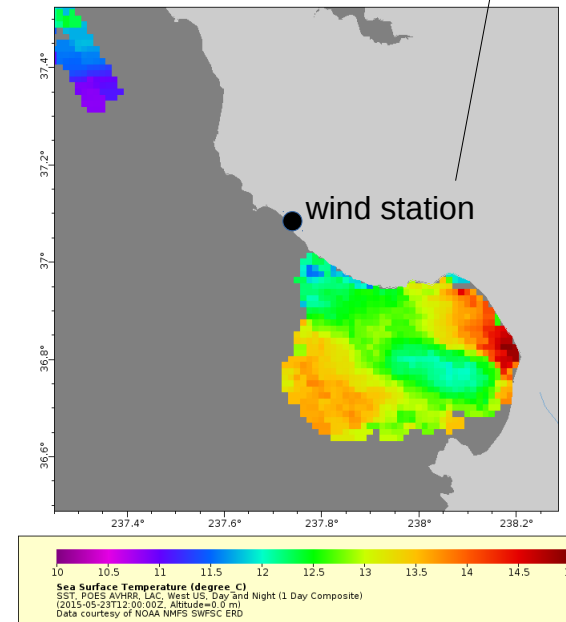
Moderate upwelling on Saturday that shows up as moderate cooling along the line. The bloom mostly disappears / moves to the surface.



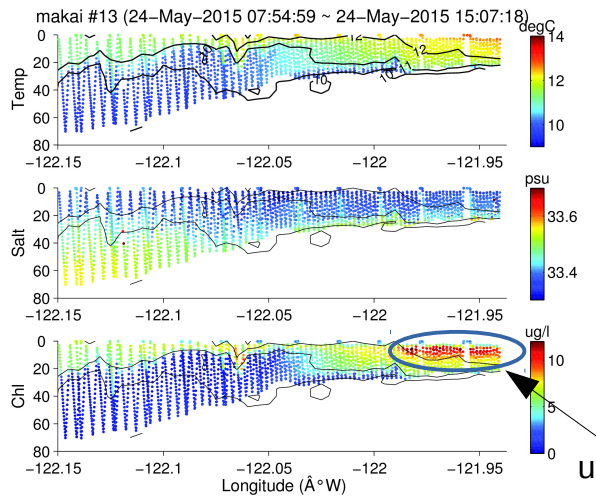
low surface chl



On Saturday: moderate upwelling winds (up) and somewhat weak upwelling plume (down)

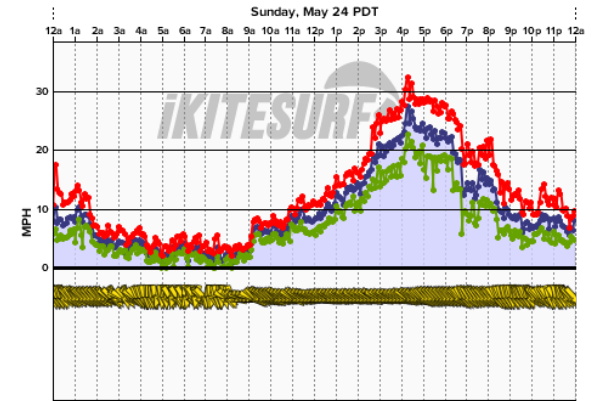
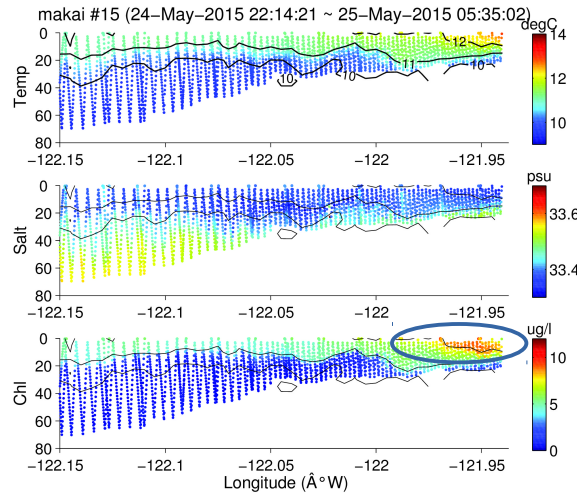
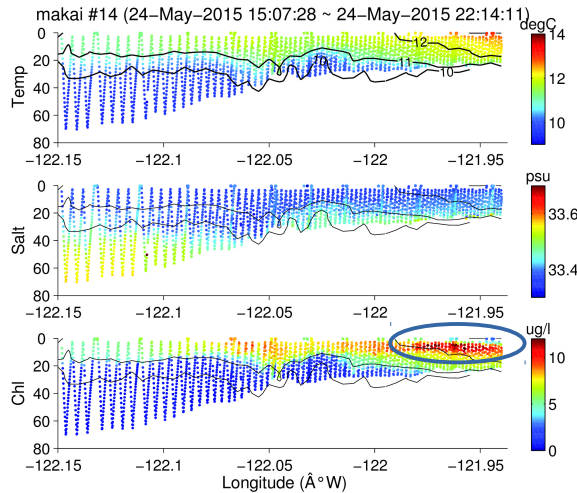


Sunday 24th day & night

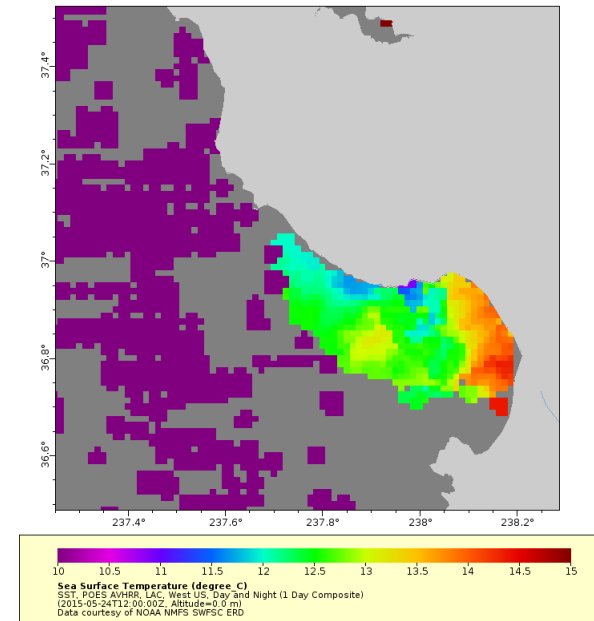


Stronger but shorter winds that lead to more weak upwelling and somewhat cool waters along the line. Stronger bloom in the upwelling shadow.

upwelling shadow bloom

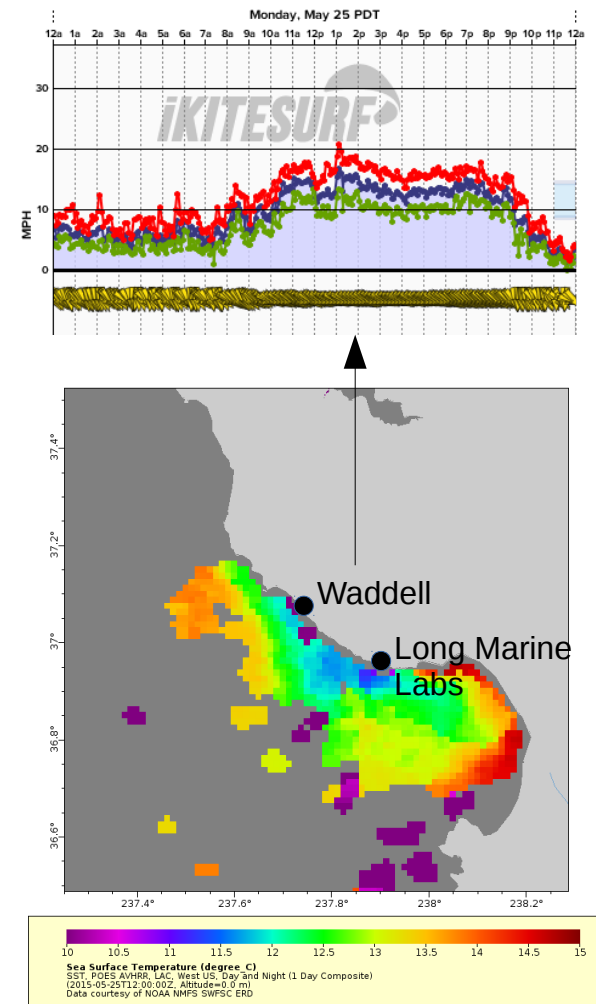
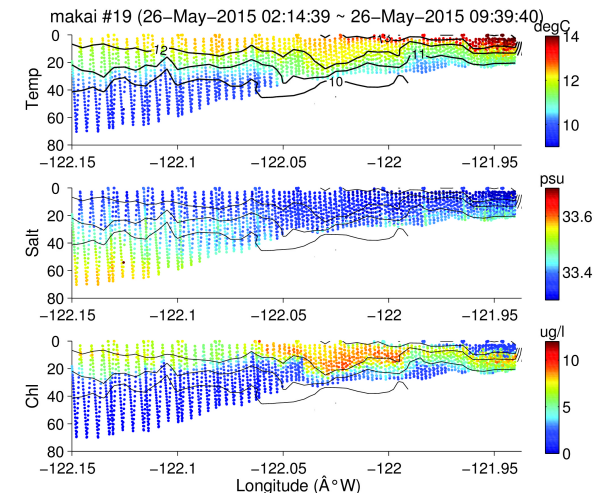
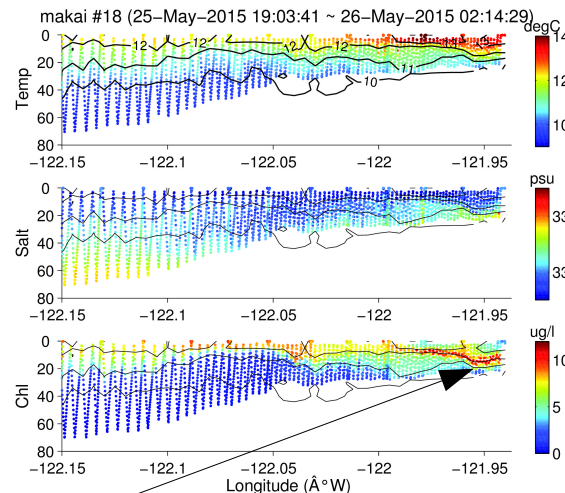
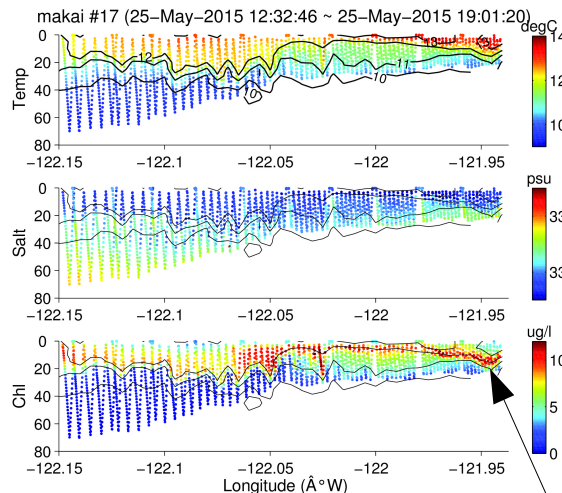
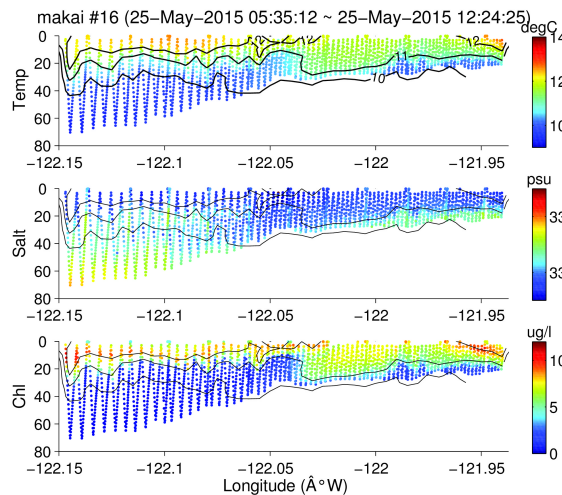


On Sunday: stronger but shorter-lived upwelling winds (up) and possibly upwelling closer to Santa Cruz (down).



Monday 25th day & night

Weaker winds and warmer waters along the line. A deep Chl maximum seems to reform at least in the east. Satellite indicates cooler waters just north of the line – winds were stronger at Long Marine Labs than Waddell so upwelling center possibly moved south(?).



deep Chl max again