The flow of the inshore waters is consistent with thermal front theory and past measurements. The evidence of convergence along a region approximately 15 km offshore at the offshore extent of the mixed zone. Also, the evidence of northerly offshore. Thus, the high winds induced a mixed frontal zone at least 10 km wide. Fig. 12 provides an MCR current radial map of currents at -1.4 m effective depth at 0530Z on April 9. This diagram also shows the CTD transect and measured surface temperature gradient. It is interesting to note the sharp rise in temperature during a low wind event. The April conditions followed by a mixing event.

During the MCR deployment, there were three small plume events associated with strong winds. The second of these events occurred April 23-25, as the north resulted in the movement of this plume to the southern extreme of the lake and the plume subsequently became more sporadic. With the aerial extent of coverage and the multi-frequency measurements evident in this example, it is possible to generate current vector diagrams which depict the current along with the temperature and salinity fields. The objective of the HF Radar Observation portion of the EEGLE Project is to obtain real-time measurements of key air and water variables. These parameters are necessary for the accurate simulation of physical processes important during coastal upwelling events. In addition to observing the flow of the inshore waters, the HF Radar can also provide observations of near-surface current and current shear (leading to estimations of wind direction and wave height) over an area of about 1000 square km.