

Plate 3. The negative rotary spectra using a 20 day window (Plate 2) are used to examine the relative phase throughout the water column. The surface currents at each time are rotated to 90 degrees (northward), and all other currents are rotated by the same amount. In summer, particularly along the southern moorings, the current direction within the mixed layer (about 90) is in the opposite direction of the currents below the mixed layer (about -90). During October through November, the level at which currents change directions deepens. The direction reversal is also apparent in the extended EOF analysis (Figure 3 and Figure 4).