flux is limited by the nearly saturated air, despite the strong winds, and is a mean loss for the ocean of $110.2\,\mathrm{W\,m^{-2}}$, significantly reduced from the $161.1\,\mathrm{W\,m^{-2}}$ for the NE Monsoon. Nevertheless, the first-order response of the ocean—a cooling and deepening of the mixed layer—is similar to that observed for the NE Monsoon.

7.1. Temperature and mixed layer depth

The surface temperatures during the first half of the SW Monsoon show a general cooling trend, with an abrupt end to the surface diurnal variability by the second week of June, when the wind stress begins to increase dramatically (Fig. 22). During the first half of the SW Monsoon record, many of the temperature records are from below the mixed layer and have high-frequency variability associated with the M2 internal tide. Temperatures within the mixed layer remain fairly constant before increasing slightly. As the mixed layer deepens, additional sensors fall within the mixed layer. From mid-July through mid-August, subsurface temperature records exhibit low-frequency variability (one to several week periods) not associated with surface processes. The mixed layer shoals abruptly in the last week of July. This is coincident with a strong reduction in the wind stress and a strong increase in the buoyancy flux. The superposition of what appears to be a

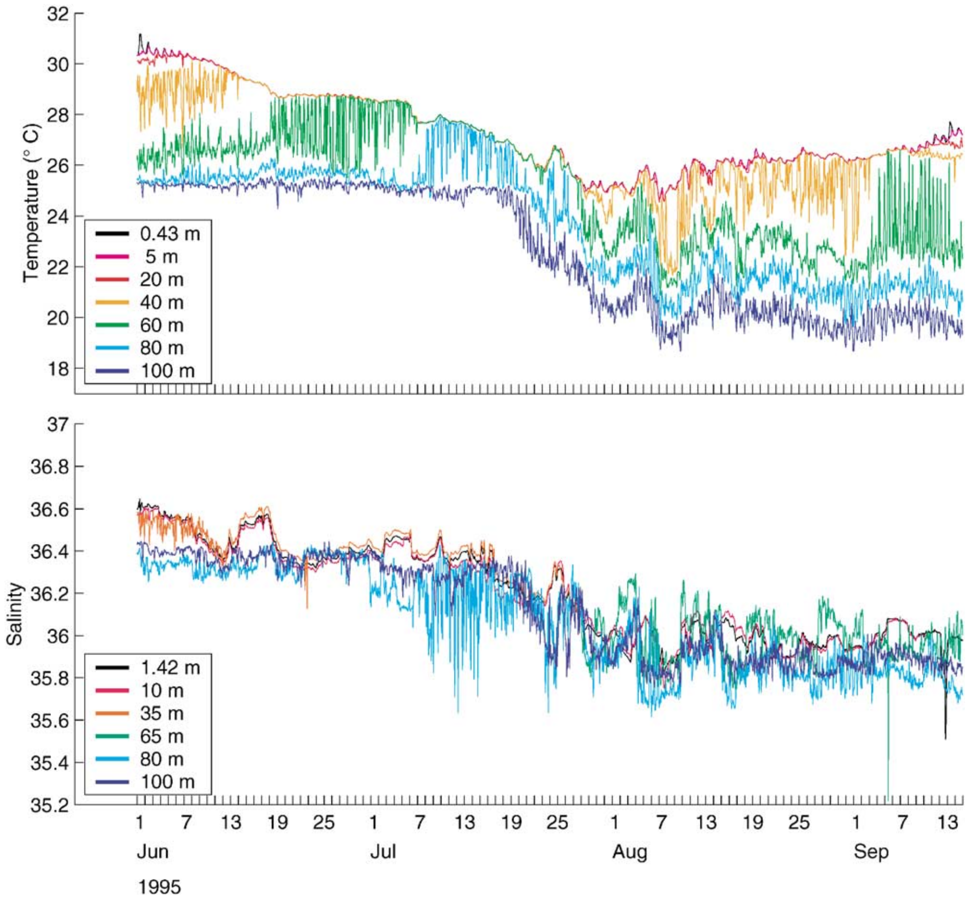

Fig. 22. The temperature (upper) and salinity (lower) at WHOI during the SW Monsoon. Selected depths are shown for temperature and salinity as labeled.