



Fig. 27. (a) The non-dimensional parameter  $L/h$  for the first 12 days of strong winds during the SW Monsoon, which generally stays out of the region between zero and one, indicating that shear production of turbulence is more important than convective production even at night. (b) The hourly averaged shear from the SIO-S mooring, showing a clear peak at the base of the mixed layer, modulated by the inertial period (and modulated in depth by a 12-h baroclinic tide). (c) The gradient Richardson number, based on the temperature structure from the WHOI mooring and the shear above, showing critical and near-critical values through the mixed layer, and particularly trapped to its base, coincident with the periods of strong shear. Local solar time (4.1 h ahead of UT) is used on this time axis.

vertical current shear (from the ADCP on the SIO-S mooring) does introduce noise to the estimation of the gradient Richardson number, most noticeable on June 14, 1995, when the mixed layer base at the WHOI mooring does not coincide

exactly with the maximum in shear observed at SIO-S.

Later in the SW Monsoon (after mid-July), when altimetry, velocities, and the one-dimensional budgets suggest the influence of strong