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# Salt Fingers Observed in the Mediterranean Outflow Region (34°N, 11°W) Using a Towed Sensor

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### ABSTRACT

A towed microstructure instrument has been used to measure small-scale conductivity fluctuations in a quasi-horizontal plane, as well as local vertical gradients of temperature and conductivity. This instrument was towed in the Mediterranean Outflow region (34°N, 11°W) in July 1973, in an area where “step-like” vertical profiles of temperature and salinity had previously been observed. It was found that intense small-scale horizontal structure (1 cycle  $\text{cm}^{-1}$ ) occurred in the thermocline on the thin high-gradient sheets which separated the mixed layers of the step-like structure. Good general agreement between the observed dominant wavelength and amplitude of this structure, and expected theoretical salt finger wavelength and amplitude, strongly suggest that this activity was salt finger convection.

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