Abstract View

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Observations of Horizontal Velocities and Vertical Displacements in the Equatorial Pacific Ocean Associated with the Early Stages of the 1982/83 El Niño

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ABSTRACT

Pacific near-equatorial absolute-velocity data and CTD–O_2 observations collected from the R.V. *Conrad* in the northern fall of 1982 are presented. Quite by chance, the cruise took place during the early stages of the 1982/83 El Niño. The data obtained are generally consistent with the fundamental ideas about El Niño onset, in that abnormal eastward flow near the surface and large thermocline depressions were observed. These changes are quantified by comparing with previously collected data and are discussed in terms of simple equatorially-trapped wave dynamics. The results indicate that first- and second-mode disturbances, probably Kelvin waves, were prominent in the equatorial Pacific in the fall of 1982.