



Influence of the hurricanes on the Yucatán current

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The variability of the Yucatán current may be forced by the passage of a hurricane. Observations of current time series from September 2002 through April 2006 show important changes in the current velocity. To study the influence of the hurricane on the current, measurements of the current velocity are acquired in different points in the Cayman Sea near the coast of the Yucatán peninsula during hurricane seasons that include intense hurricanes like Isidore in 2002, Ivan in 2004 or the hurricanes Emily and Wilma in 2005. The passage of a hurricane affects the current during various days, changing its intensity or orientation and the effects are not the same at all depths. Lag time is observed in the occurrence of changes between the different instrumental moorings and the different depths.