An 80-Year Analysis of Tropical Cyclone Activity Along the West Coast of Mexico.

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ABSTRACT:

An 80 year time series of tropical cyclone activity along the immediate west coast of Mexico has been developed using ship reports form COADS and historical cyclone tracks held in the Mexican Meteorological Service's archieves. The study focuses on tropical cyclone activity within 500km of the Pacific coast line. Decadal variability in TC activity is found to be directly related to ENSO forcing as modulated by combined phases of the PDO and the AMO. Decadal fluctuations in TC activity in the near shore Pacific and Gulf of Mexico are examined relative to their phasing and related to decadal scale fluctuations in total summer precipitation in coastal sections of Mexico.