



Why a strong El Niño did not develop in 2014

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Similarities between early 1997 and 2014 has prompted climate scientists to wonder if an El Niño matching the 1997 “El Niño of the century” could develop in 2014. Until April 2014, the equatorial Pacific exhibited positive heat content anomalies along with an eastward warm pool displacement similar to those found during the onset of strong El Niño events. Yet, in July 2014, the warm pool had retreated back to its climatological positions and equatorial temperature anomalies were much weaker than in mid-1997. Dedicated oceanic simulations reveal that these weak interannual anomalies can be attributed to differences in Westerly Wind Event (WWEs) sequences. In contrast with 1997, the lack of WWEs from April to June significantly limited the growth of eastern Pacific anomalies and the eastward warm pool displacement in 2014. The possible reasons for this lack of WWE activity in 2014 will be discussed.