Evolution of the 2006-07 El Niño

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Coupled ocean-atmosphere interactions in the tropical Pacific have led to the onset of El Niño conditions in late 2006. ENSO forecast models predict that this warm event will probably be of weak-to-moderate amplitude and continue through at least boreal spring 2007. Though not as strong as the 1997-98 El Niño, the current warm event is expected to have significant impacts on patterns of weather variability worldwide.

This presentation will describe the evolution of conditions in the tropical Pacific during 2006-07, underscoring the importance of both episodic atmospheric forcing and large-scale low frequency ocean-atmosphere dynamics in the development of the current El Niño. Whether the recent spate of weak-to-moderate El Niño events since 1998 is indicative of a longer-term variation in the ENSO cycle will also be discussed. Finally, we will elaborate on the implications of recently observed variability in the tropical Pacific for our understanding and ability to predict ENSO.