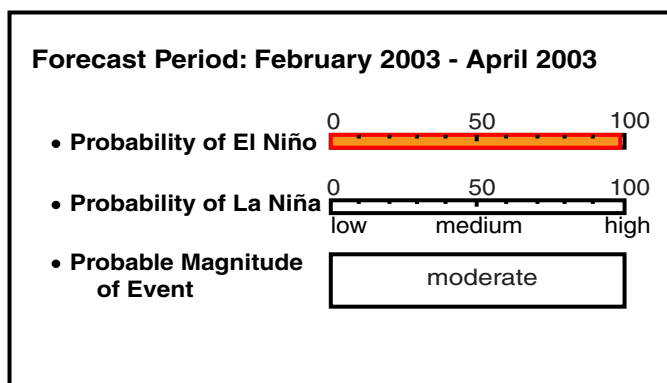


ENSO QUICK LOOK December 16, 2002

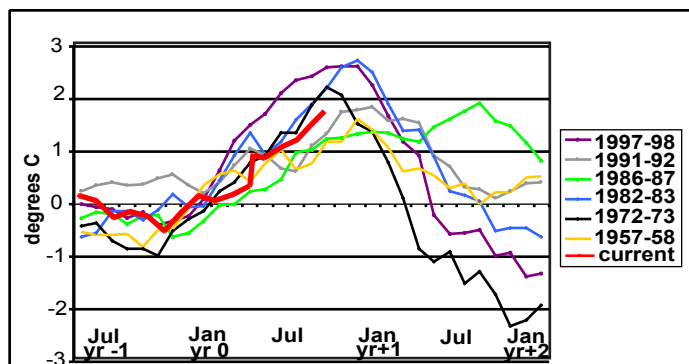
A monthly summary of the status of El Niño, La Niña and the Southern Oscillation , or "ENSO"

The IRI's assessment is that there is a virtually 100% probability that El Niño conditions will continue for the remainder of 2002 and into the first 2 to 4 months of 2003. This assessment is based on the collective forecasts of various ENSO prediction models, as well as on the experience of the several oceanographers and atmospheric scientists familiar with the El Niño phenomenon. This probability is the same as that given one month ago. This episode has become a moderate El Niño, but remains significantly weaker than the 1997-98 event. The associated climate effects in most regions are likely to be weaker than those associated with the 1997-98 El Niño, but may nonetheless be substantial in some regions.

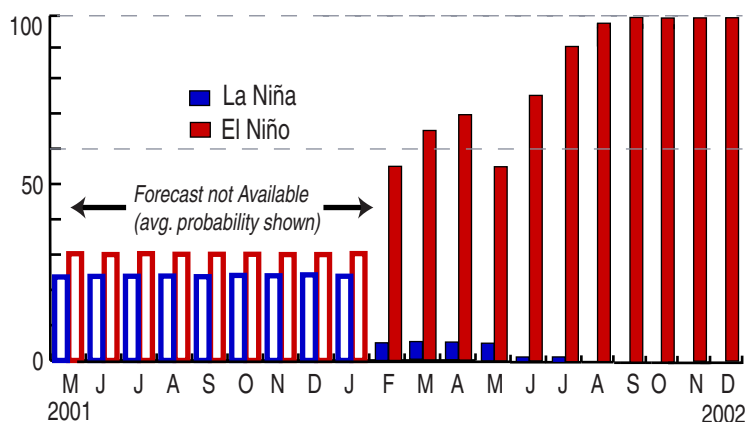
Current ENSO Forecast Summary *



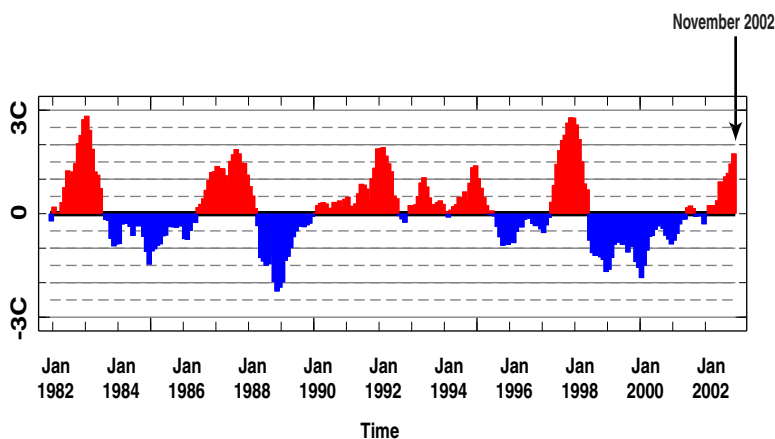
Current Conditions vs. Past El Niño**



ENSO Probabilities over the past year



Historical Sea Surface Temperature Index**



Historically Speaking

El Niño and La Niña events tend to develop during the period Apr-Jun and they:

- *Tend to reach their maximum strength during Dec-Feb*
- *Typically persist for 9-12 months, though occasionally persisting for up to 2 years*
- *Typically recur every 2 to 7 years*

* Probability of an El Niño refers to the likelihood of a sustained (that is, over several seasons) warming across a broad region of the eastern and central tropical Pacific, not just along coastal South America.

** Based on sea surface temperature departures from the long-term average over the "NINO 3.4" region (120-170W, 5S-5N).