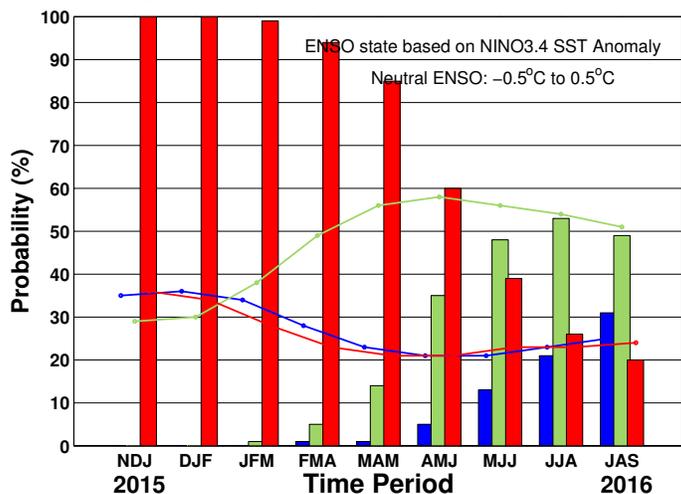


ENSO QUICK LOOK December 10, 2015

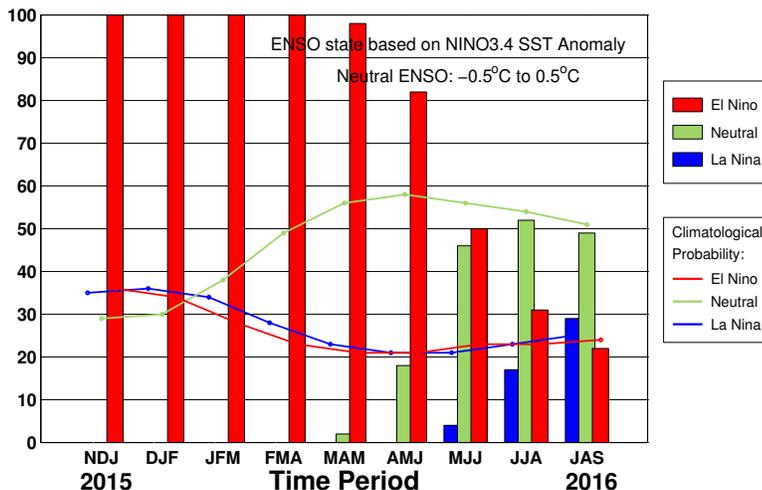
A monthly summary of the status of El Niño, La Niña and the Southern Oscillation, or “ENSO”, based on NINO3.4 index (120-170W, 5S-5N)

During early December 2015 the tropical Pacific SST was at a strong El Niño level. All atmospheric variables strongly support the El Niño pattern, including weakened trade winds and excess rainfall in the east-central tropical Pacific. The consensus of ENSO prediction models indicate continuation of strong El Niño conditions during the December-February 2015-16 season in progress. Further strengthening is possible, but not likely, into mid-winter 2015-16, with the event slowly weakening during spring 2016.

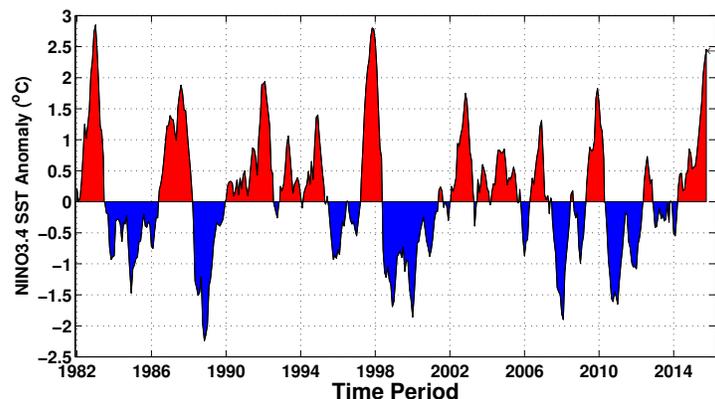
Early-Dec CPC/IRI Consensus Forecast¹



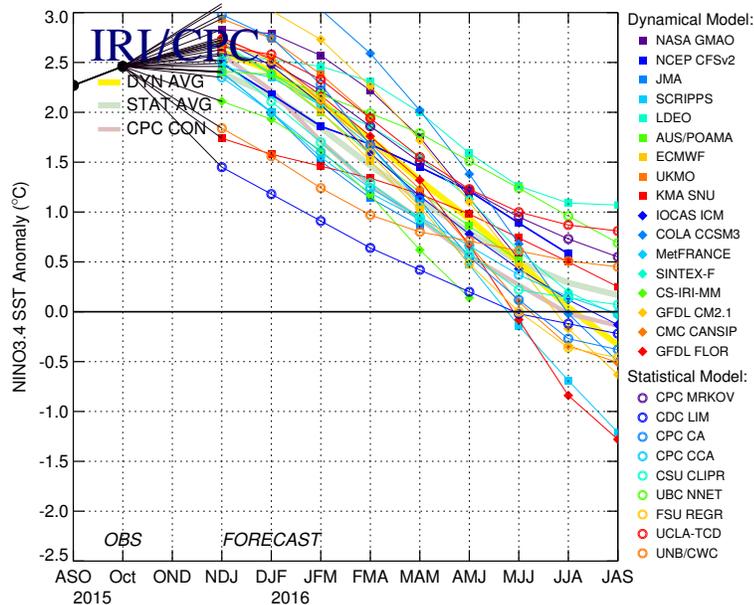
Mid-Nov IRI/CPC Plume-Based Forecast²



Historical NINO3.4 SST Anomaly



Mid-Nov 2015 Plume of Model ENSO Predictions



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

¹Based on a consensus of CPC and IRI forecasters, in association with the official CPC/IRI ENSO Diagnostic Discussion.

²Purely objective, based on regression, using equally weighted model predictions from the plume.