Summer 2020 Outlook
Winter 2020-21 Preview

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SW Antecedent Drought

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[Map showing antecedent drought conditions across the Southwest United States]
Recent Ocean Temperatures

Mix of warmer than average sea surface temperatures (SST) and cooler than average SSTs (1-3°C)

- Cooler SST's last year potentially hindered better moisture transport
- Conceivably could support more moisture surges into southern Arizona though trend towards cooling SST’s may negate this affect
Outlook: Jul/Aug/Sep 2020

Three-month averages
Shading indicates chances of above or below normal

Strongly favoring above normal temperatures
No tilt in odds regarding precipitation outcome
Equatorial Pacific waters have mostly been warmer than normal for a couple years now.

Water temperatures flirted with El Nino thresholds last winter, but the atmospheric circulation patterns did not hold an El Nino pattern.

Waters have been cooling abruptly in the tropical Pacific recently.

This may be the onset of a La Nina phase maturing later in the year.
El Niño/La Niña Outlook

Model Predictions of ENSO from May 2020

- IRI/CPC
- Observed
- Forecast
- Weak
- Moderate
- Strong
Early–June 2020 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: −0.5 °C to 0.5 °C

[Graph showing probabilities for different seasons (MJJ, JJA, JAS, ASO, SON, OND, NDJ, DJF, JFM) for La Niña, Neutral, and El Niño forecasts]
Outlook: Dec/Jan/Feb 2020-21

Three-month averages
Shading indicates chances of above or below normal

Better odds for above normal temperatures
Slight tilt towards drier precipitation outcome
Summary

- Odds point strongly to a warmer than average summer
- Very little tilt in summer rainfall odds exist given varying signals and randomness of monsoon storms
- Possibility of La Nina developing by late summer and lingering throughout the winter
- Should La Nina become the predominant seasonal oscillation, drier weather would become more favored in the fall and winter
Questions?

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