

El Niño Update and Connections to Eastern Region

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Current ENSO Status

El Niño Advisory

El Niño conditions are present.*

Positive equatorial sea surface temperature (SST) anomalies continue across most of the Pacific Ocean.

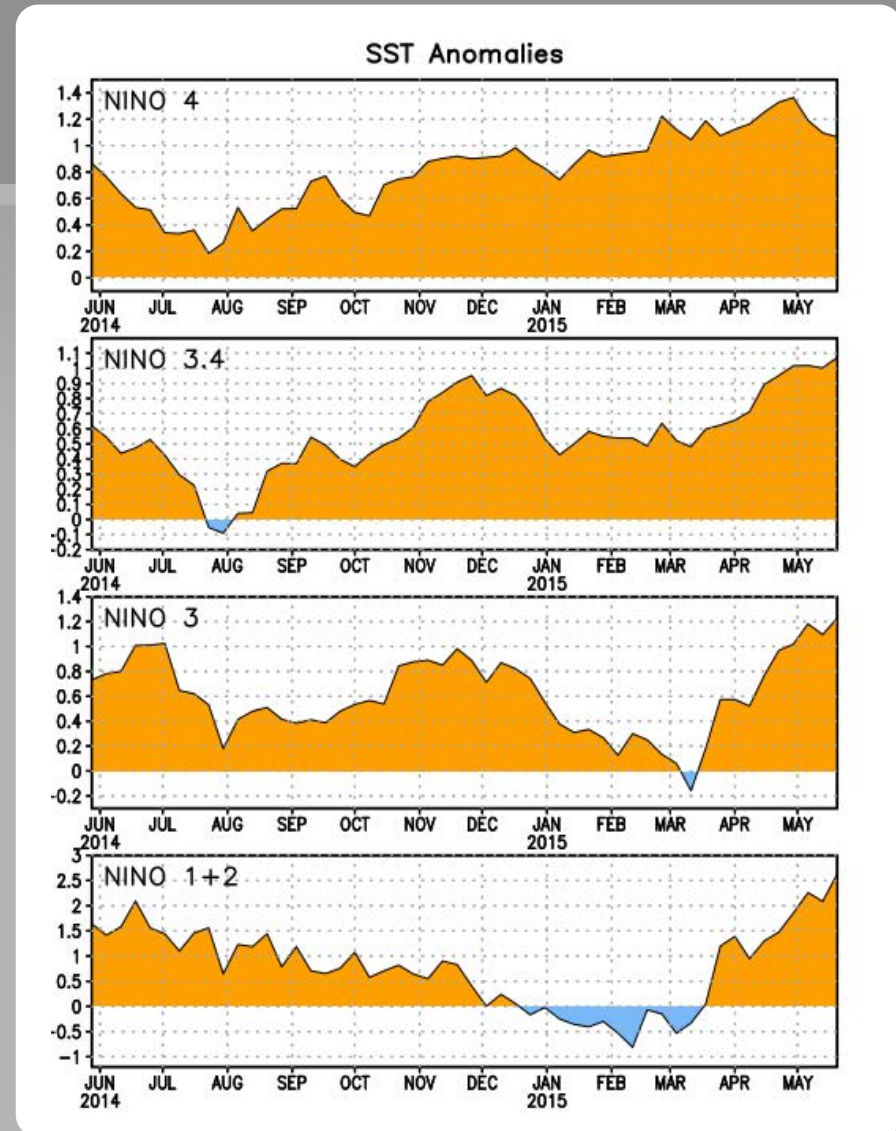
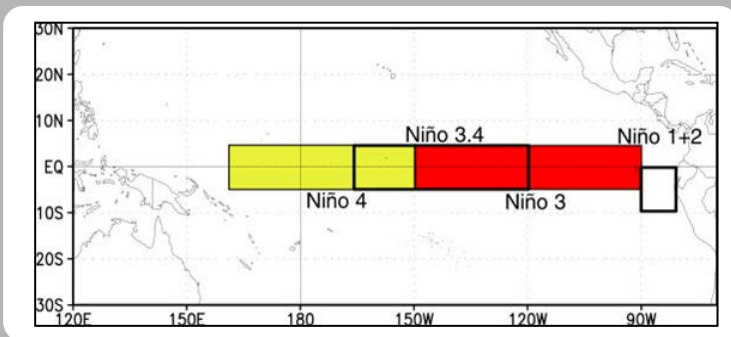
There is an approximately 90% chance that El Niño conditions will continue through Northern Hemisphere summer 2015, and a greater than 80% chance it will last through 2015.*

* Note: These statements are updated once a month (2nd Thursday of each month) in association with the ENSO Diagnostics Discussion, which can be found by clicking [here](#).

Niño Region SST Departures (°C) Recent Evolution

The latest weekly SST departures are:

Niño 4	1.1°C
Niño 3.4	1.1°C
Niño 3	1.2°C
Niño 1+2	2.6°C

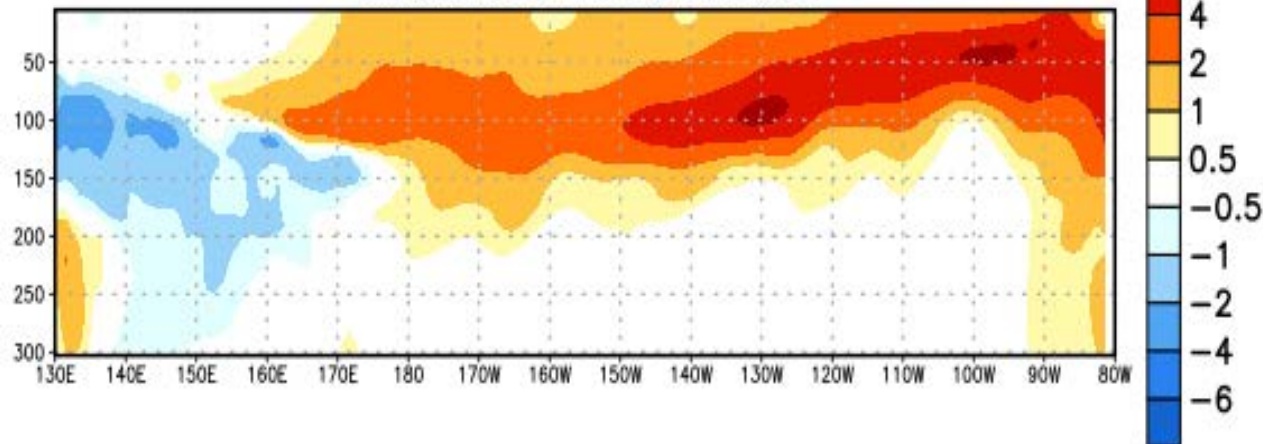


Sub-Surface Temperature Departures in the Equatorial Pacific

During the last two months, positive subsurface temperature anomalies were observed across most of the equatorial Pacific

EQ. Subsurface Temperature Anomalies (deg C)

Pentad centered on 18 MAY 2015



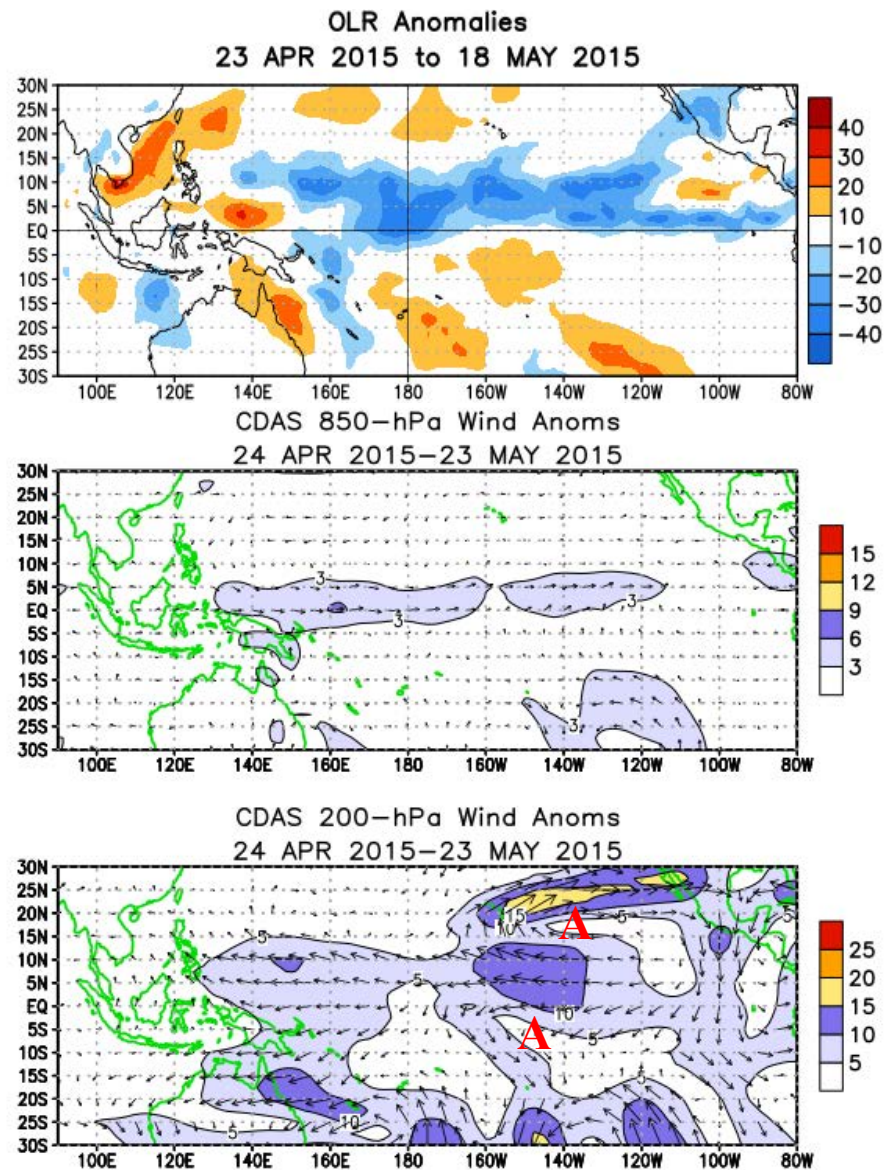
Most recent pentad analysis

Tropical OLR and Wind Anomalies During the Last 30 Days

Negative OLR anomalies (enhanced convection and precipitation) were evident near the Date Line and across the central and eastern tropical Pacific just north of the equator. Positive OLR anomalies (suppressed convection and precipitation) were located near Papua New Guinea and northeastern Australia.

Anomalous low-level (850-hPa) westerly winds were located across most of the equatorial Pacific.

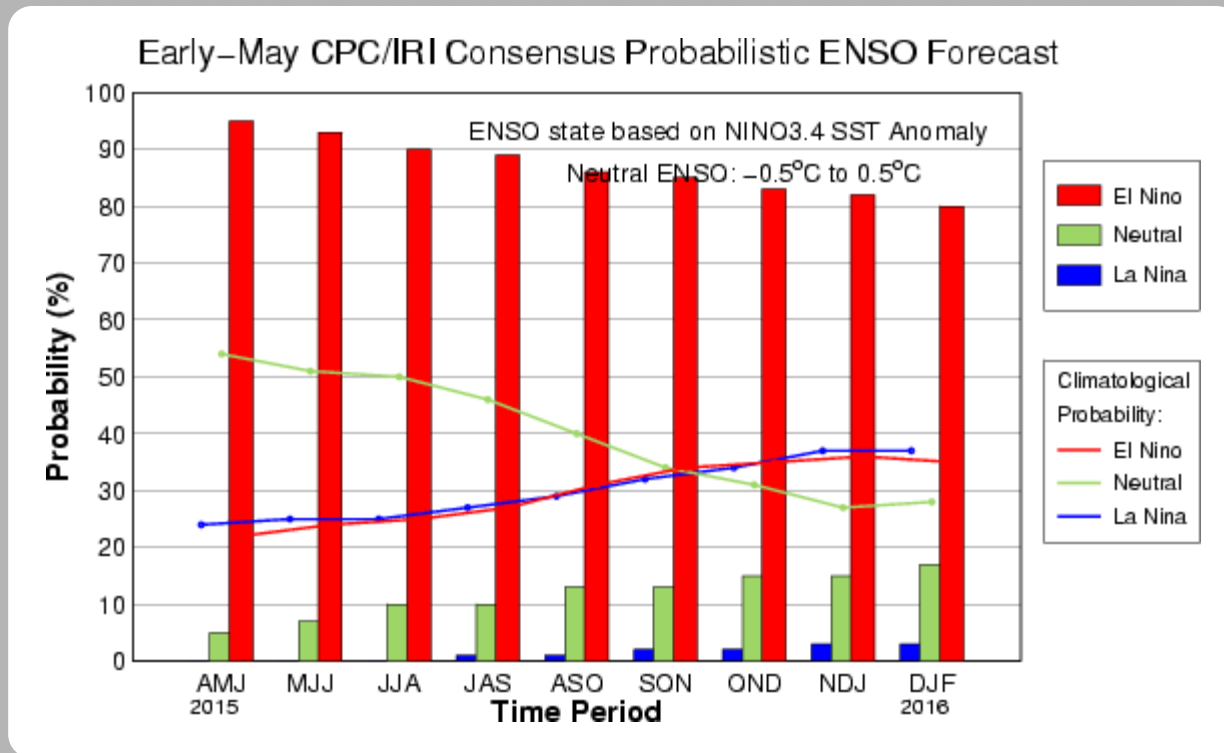
Anomalous upper-level (200-hPa) easterlies were observed over most of the equatorial Pacific. An anomalous anti-cyclonic couplet straddled the equator over the east-central tropical Pacific.



CPC/IRI Probabilistic ENSO Outlook

Updated: 14 May 2015

The chance of El Niño is approximately 80-90% through 2015.



IRI/CPC Pacific Niño

3.4 SST Model Outlook

Almost all of the models indicate Niño 3.4 SST anomalies will remain greater than or equal to +0.5C through the end of 2015.

However, there is a large amount of spread in the potential strength of El Niño.

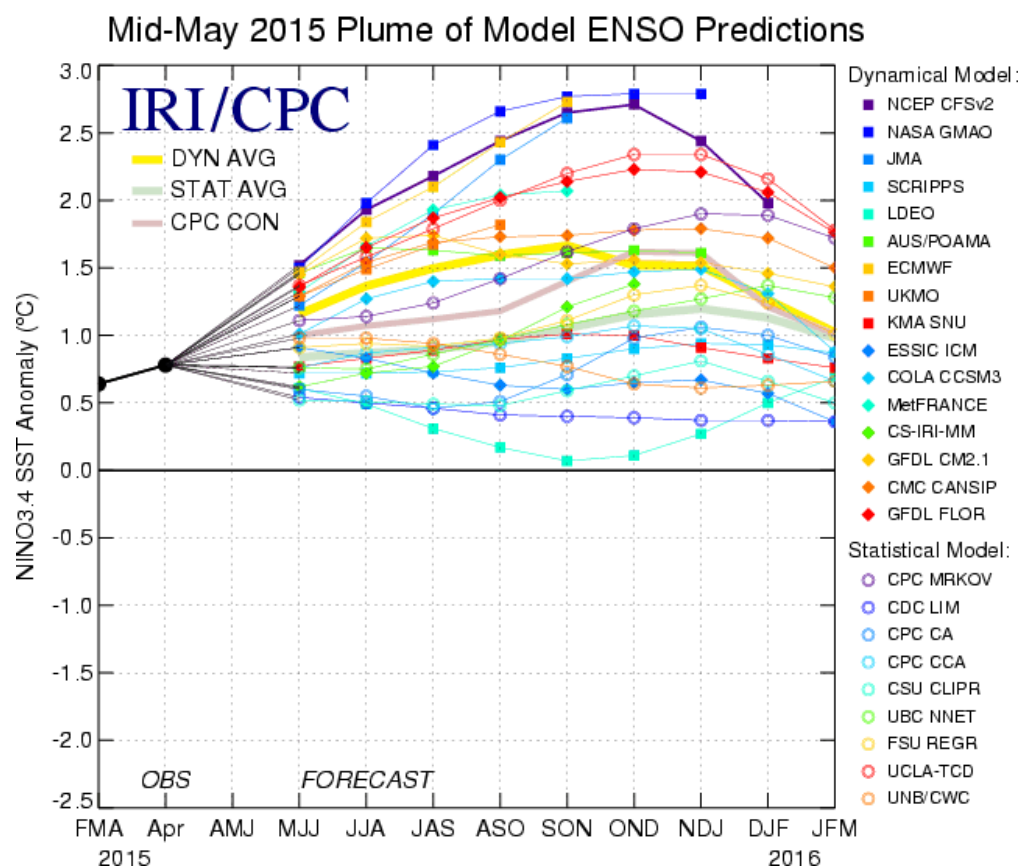


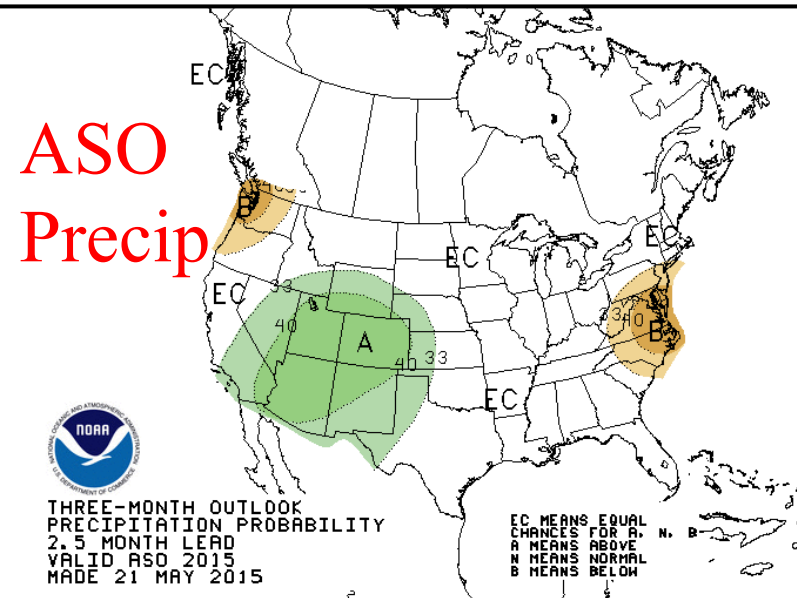
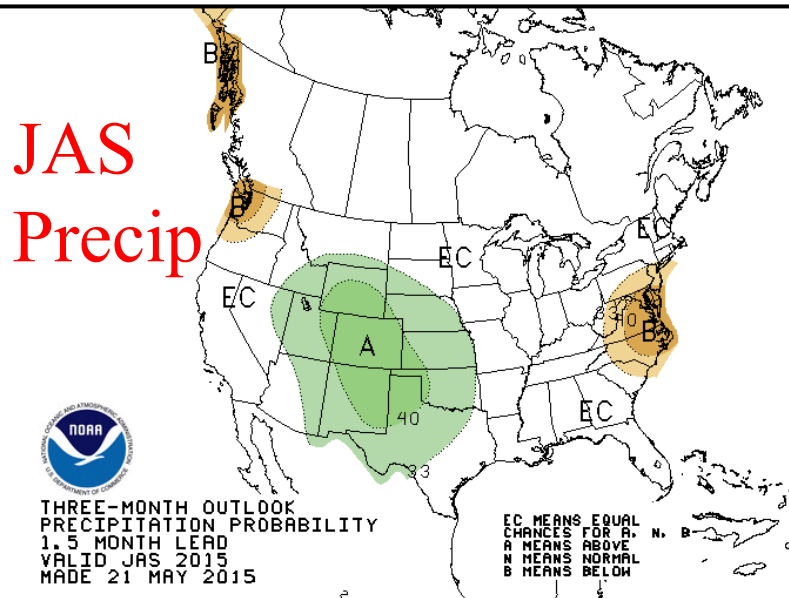
Figure provided by the International Research Institute (IRI) for Climate and Society (updated 19 May 2015).

In Eastern Region, El Niño impacts during the summer tend to be weak or insignificant

- If there is *anything* (i.e. questionable significance), ER tends to be drier than average during El Niño summers. See updated composites here:

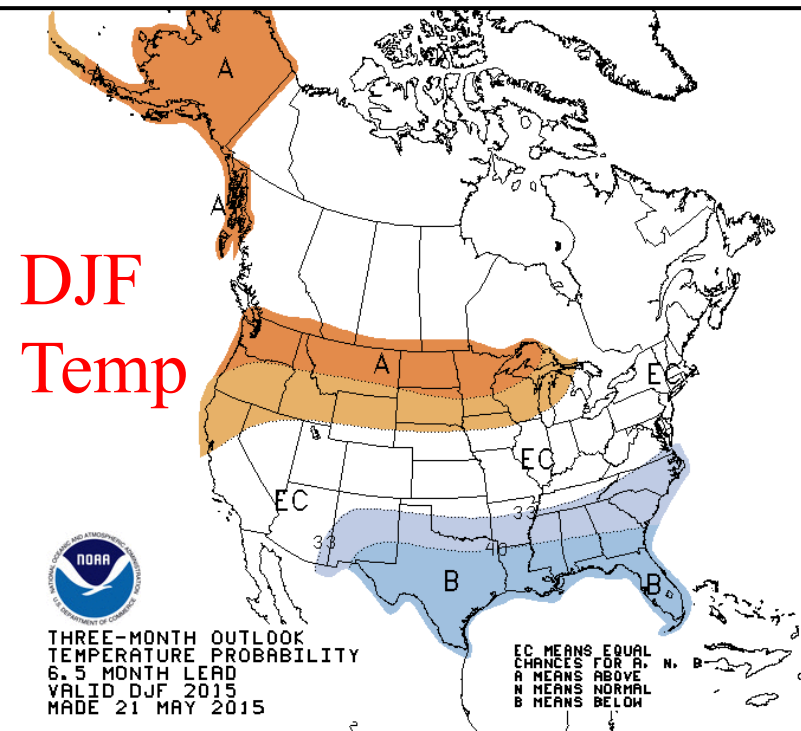
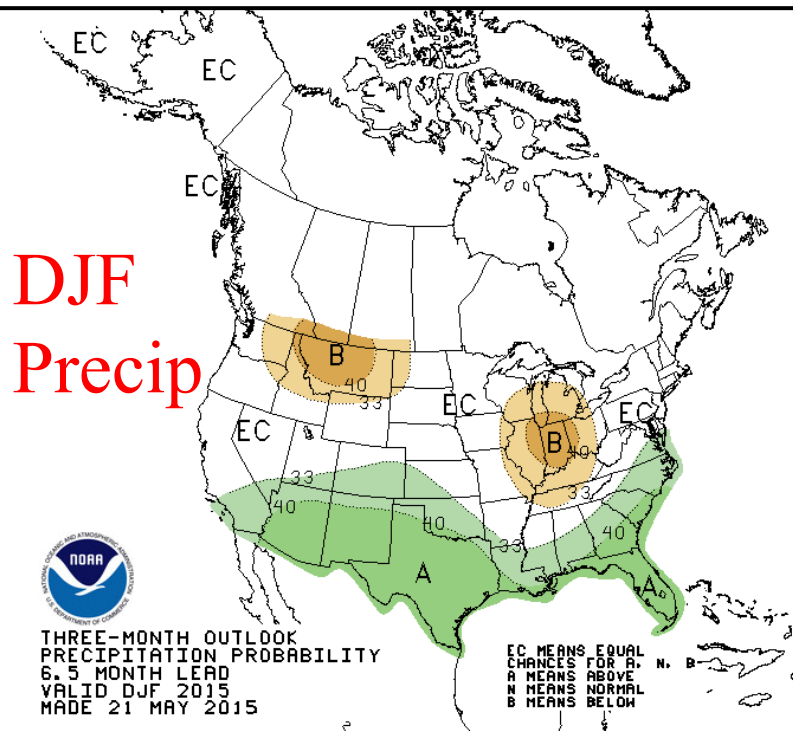
<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/composites/>

- Right now official CPC seasonal outlooks, which take in account more than just El Niño, do not favor dry except during JAS and ASO.



In Eastern Region, El Niño impacts during the winter are more significant (exact location is important)

- **Official CPC seasonal outlooks for the upcoming winter favor drier conditions in the Ohio valley and tilt towards wetter in the eastern Carolinas**
- **For temperature, mostly “EC” (climatology is best forecast) over Northeast, but tilt toward cooler conditions over the Carolinas.**



Summary

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ENSO Diagnostics Discussion http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.html

ENSO Blog <http://www.climate.gov/news-features/departments/enso-blog>