

Effects of Climate Change on the Southwest



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Operated by Los Alamos National Security, LLC for the U.S. Department of Energy's NNSA



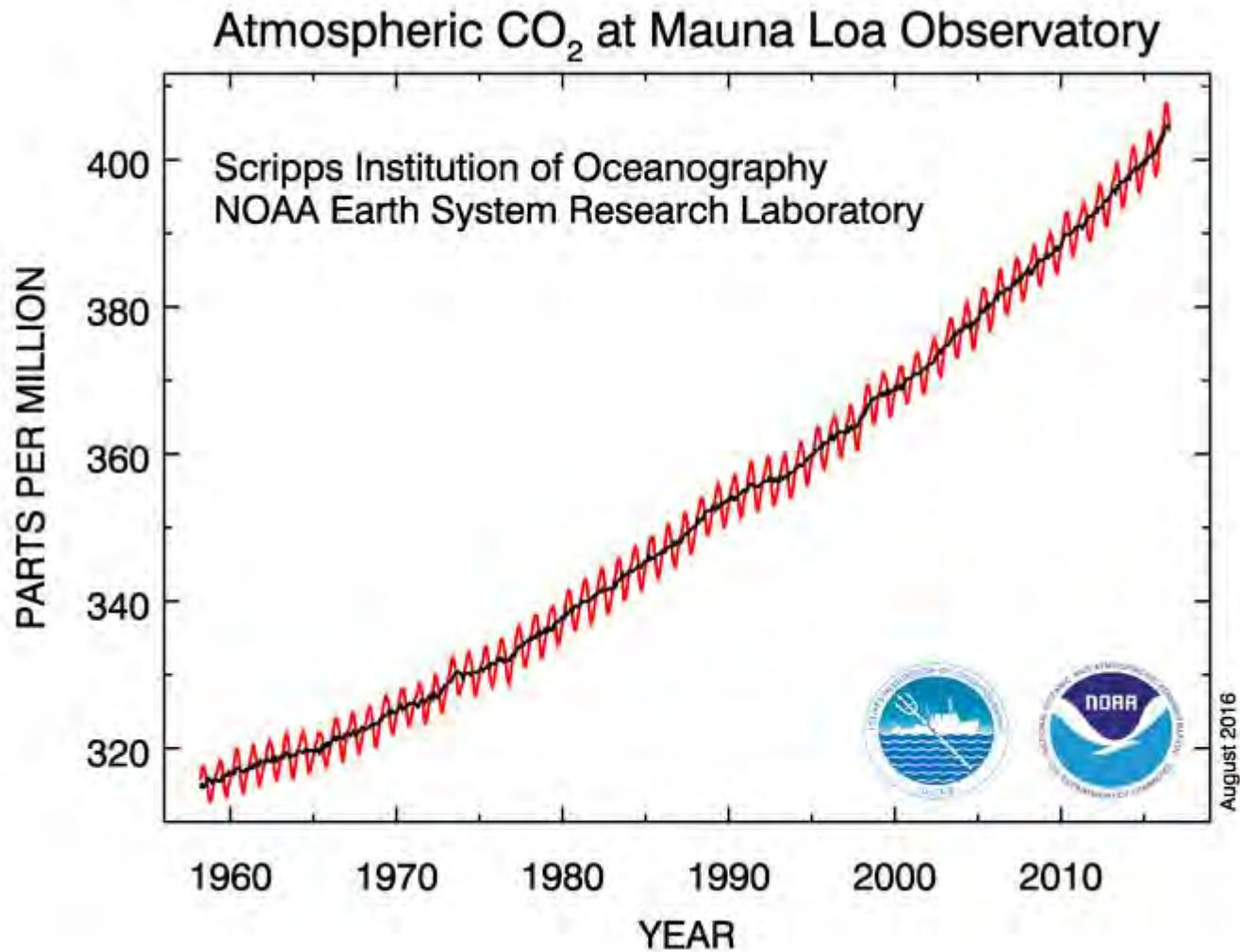
Climate Change: Why does it matter?

Climate Change Indicators

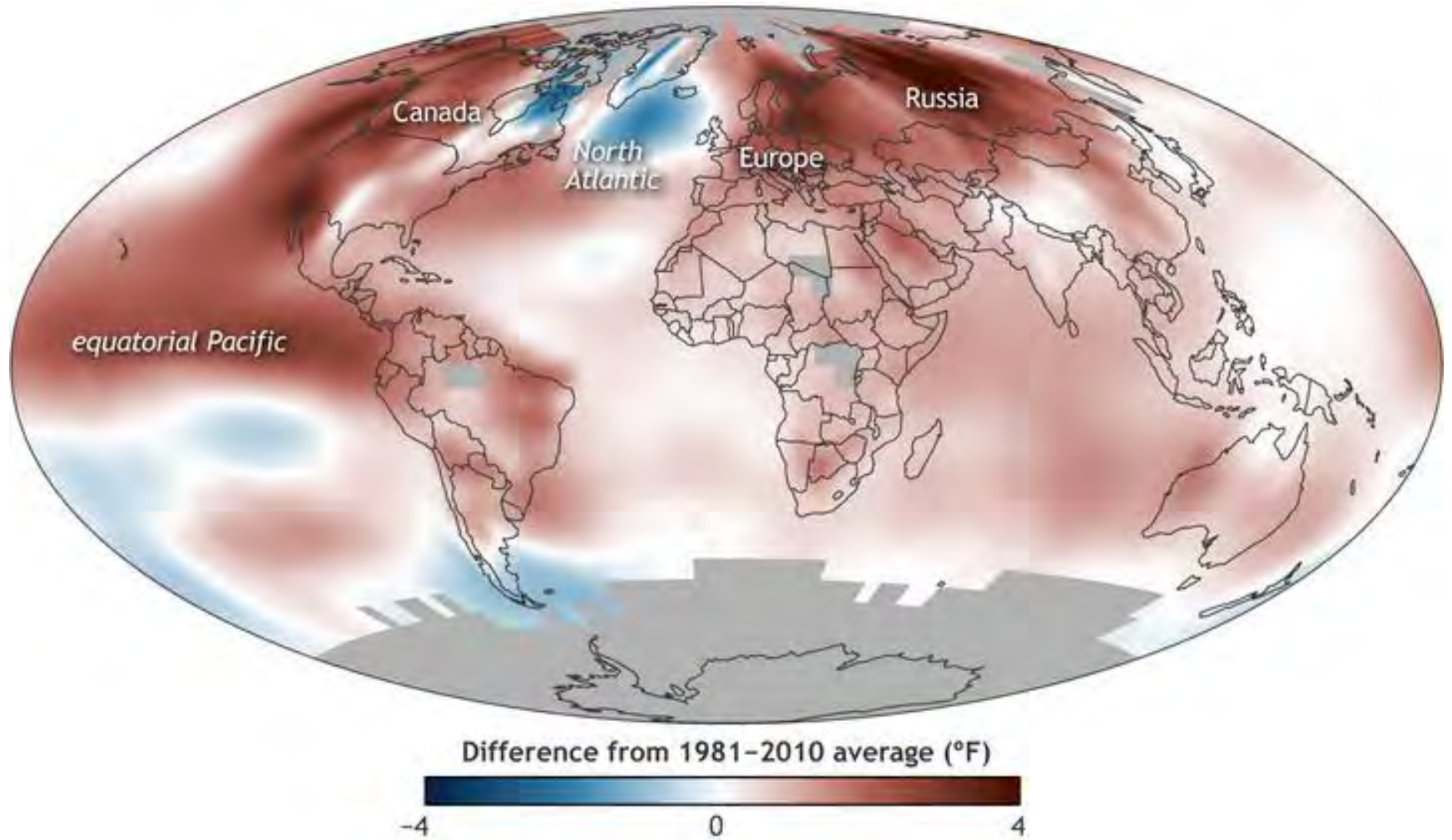
- Increasing greenhouse gases
- Increasing temperatures
- Increasing intensity of summer heat waves
- Increasing heavy precipitation events
- Melting sea ice
- Rising sea level



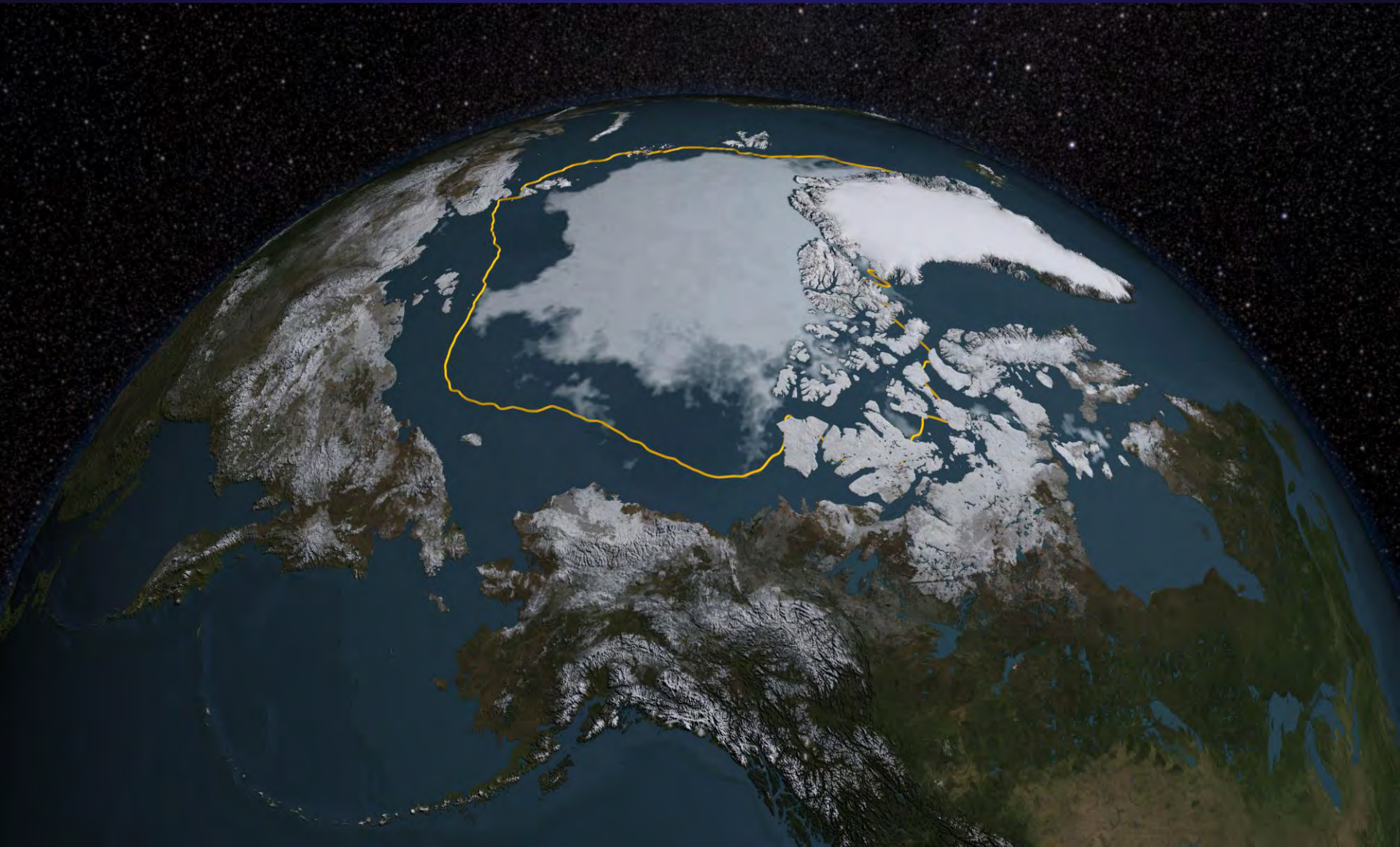
Carbon Dioxide



Temperature



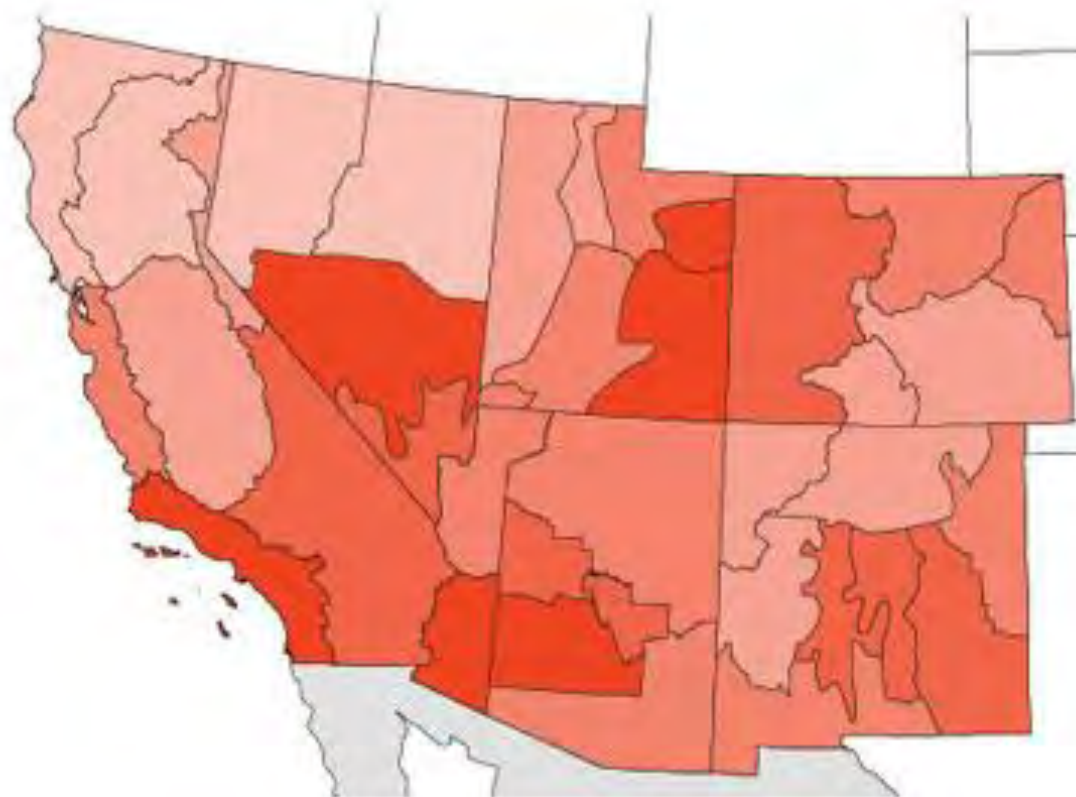
Sea Ice



Southwest States



Average Temperatures in the Southwest (2000-2013)

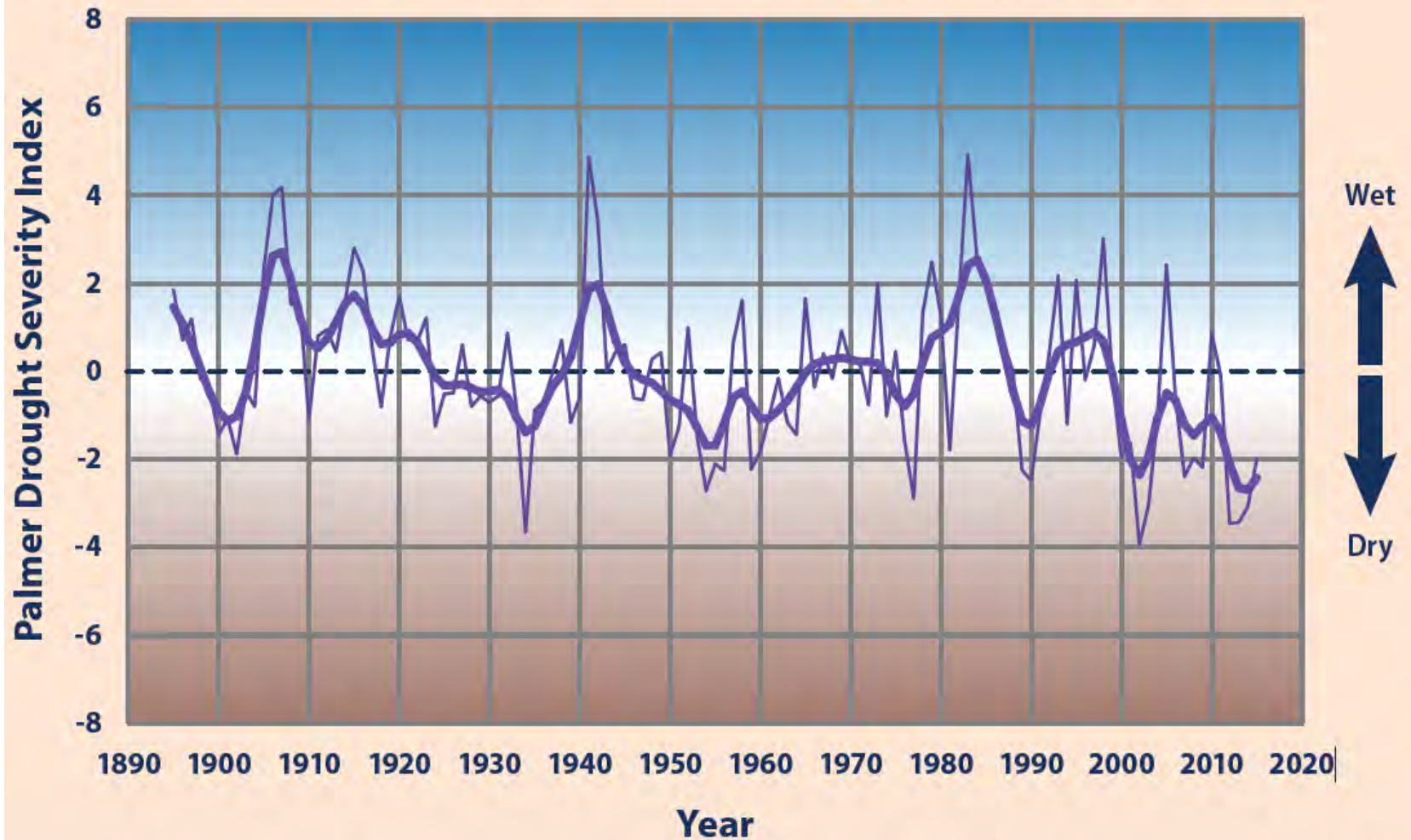


Temperature Increase (°F):



Drought

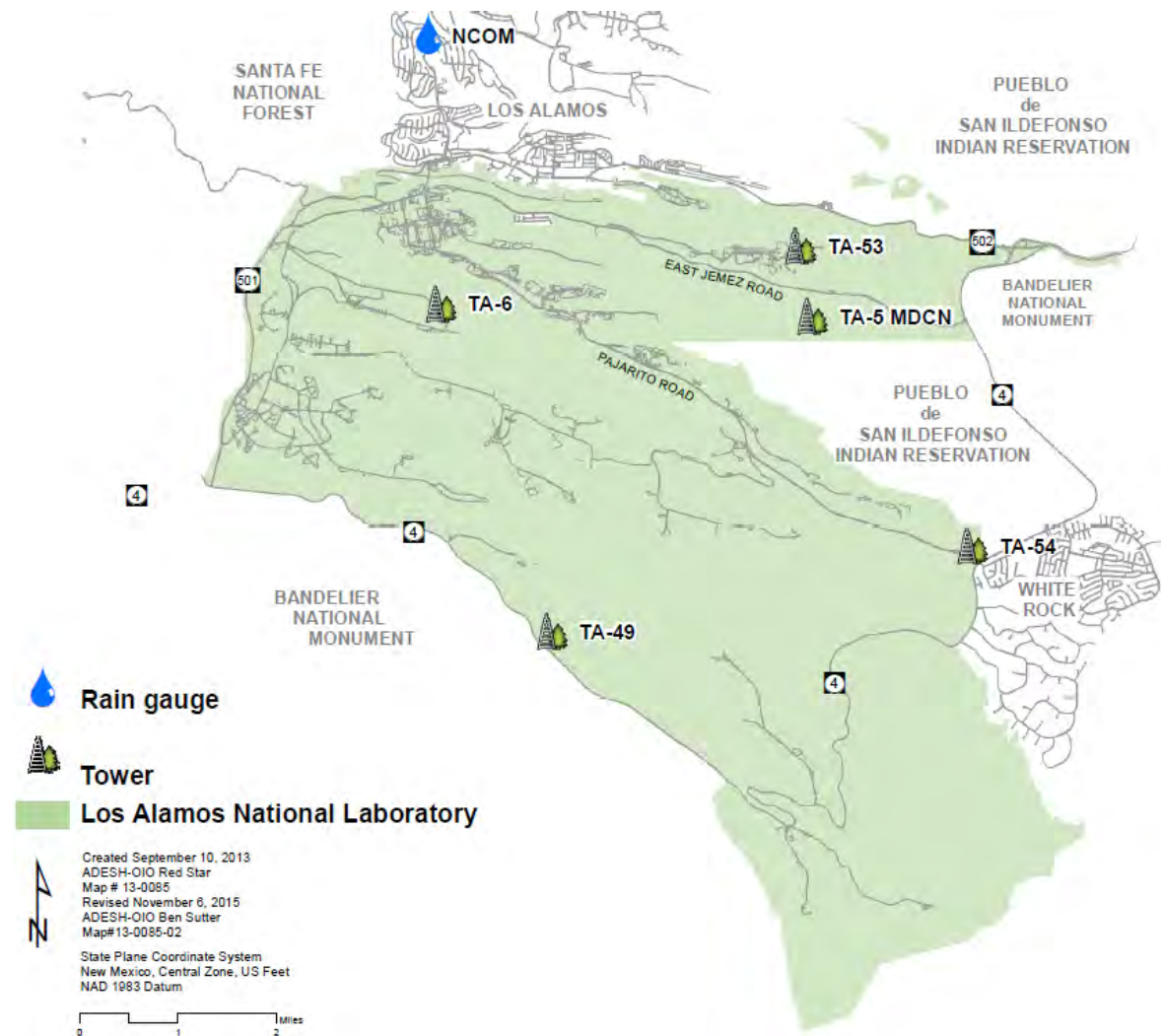
Drought Severity in the Southwestern United States, 1895–2015



Los Alamos

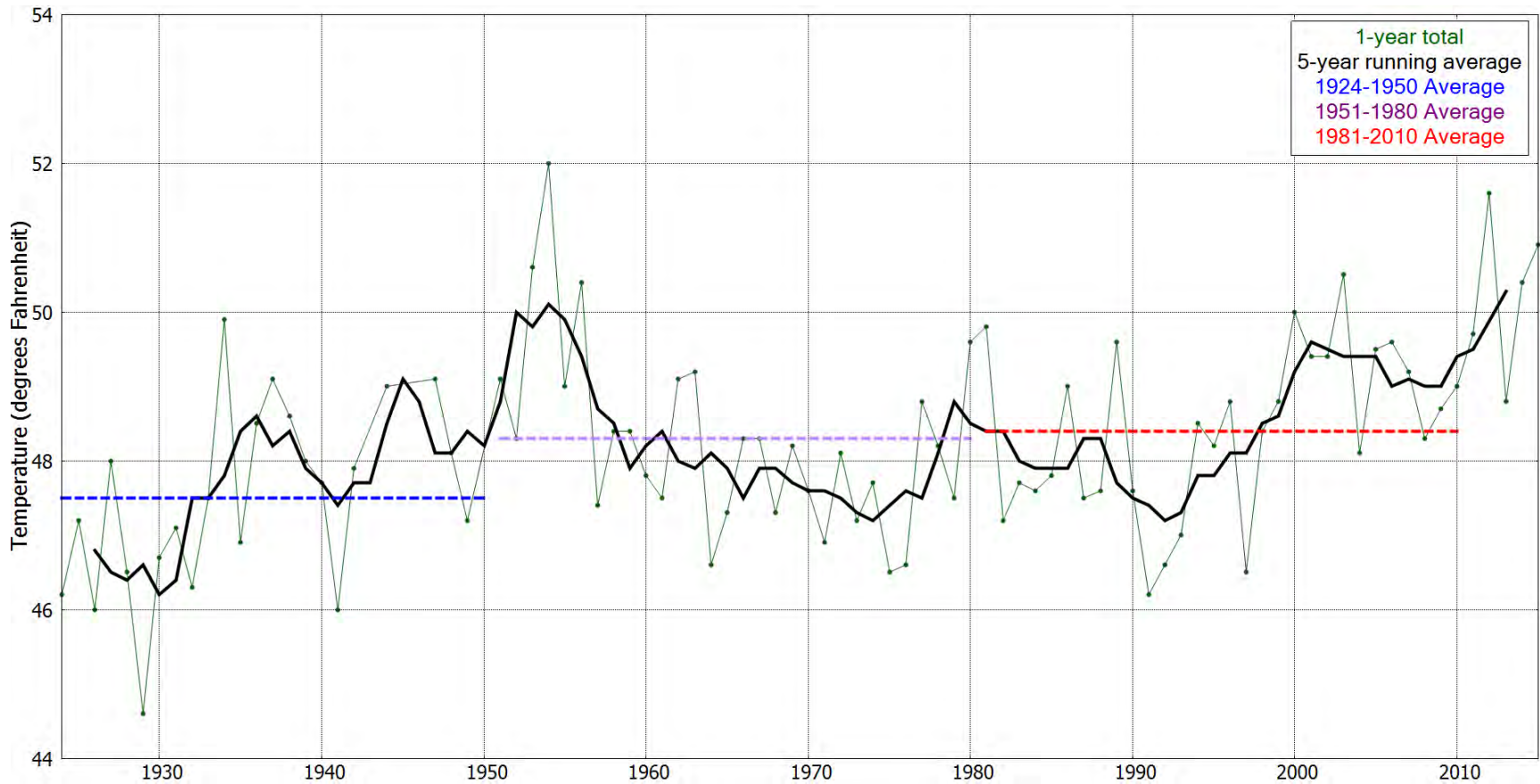


Meteorology Observation Sites

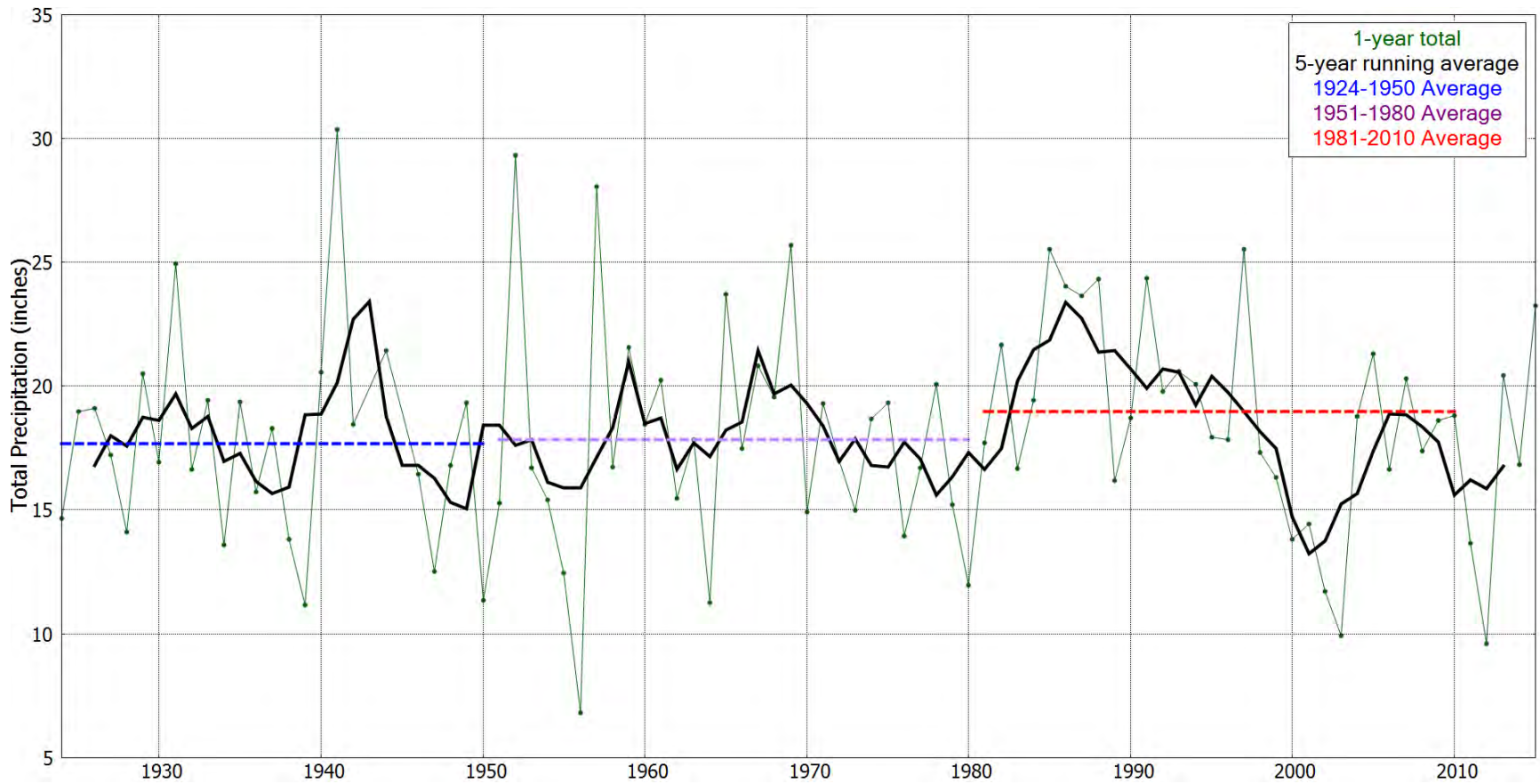


This map was created for work processes associated with the 2008 Environmental Surveillance Report. All other uses for this map should be confirmed with LANL EP WES staff.

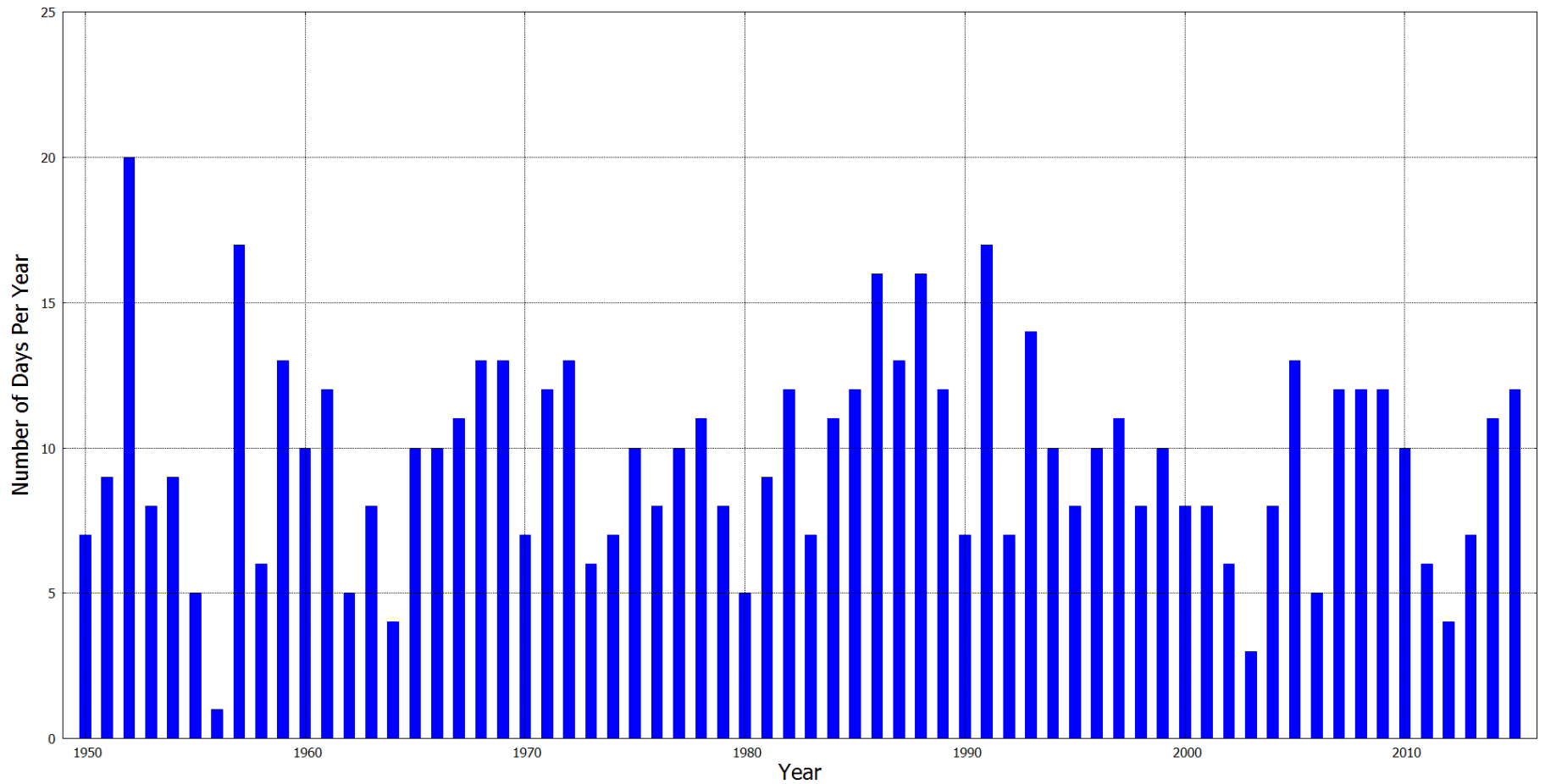
Los Alamos - Temperature



Los Alamos - Precipitation



Los Alamos – Days > 0.5 inches of precipitation



Summary

- **Climate change observed in the Southwest has similar trends to the trends across the globe**
- **Los Alamos has measured an increase in temperature**
- **Los Alamos shows no trend in precipitation and frequency of heavy precipitation**