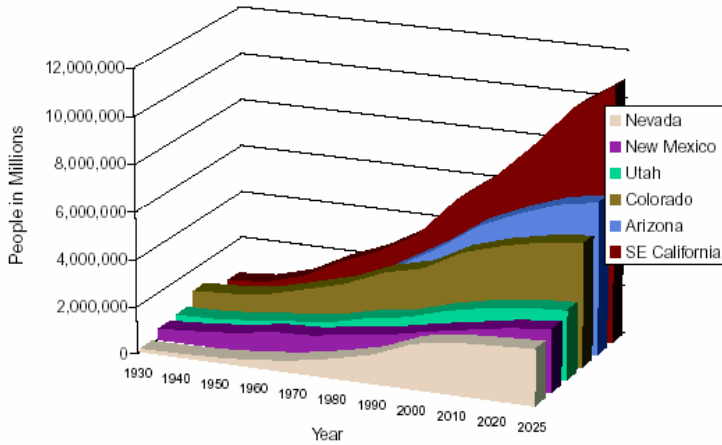


# Impacts of Climate Change in the Southwest

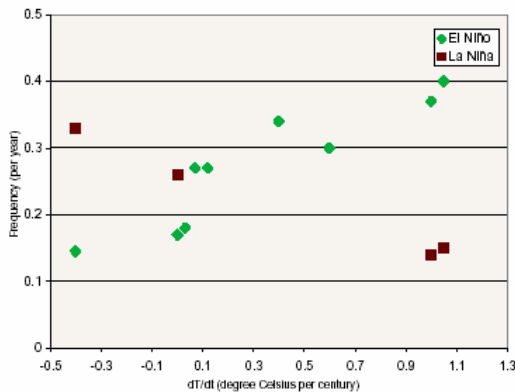
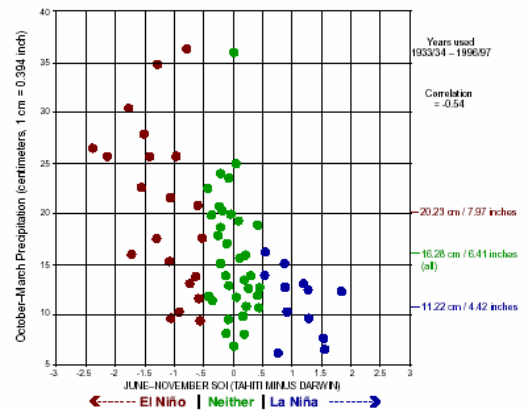
[www.ispe.arizona.edu/research/swassess](http://www.ispe.arizona.edu/research/swassess)

**Possible Impacts Include:** water, ranching, natural ecosystems, mining, human health, urban areas and energy



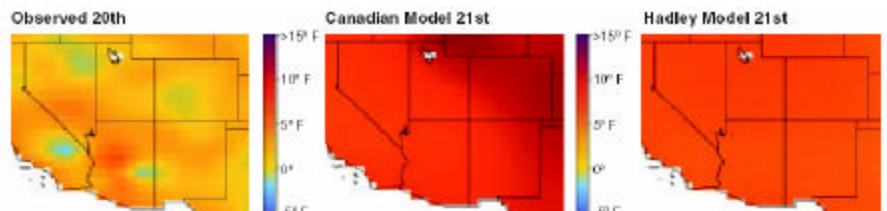
A growing population strains water resources, challenges urban planners, demands more energy and creates new problems for human health

Arizona's rainfall is partly determined by Pacific Ocean sea surface temperature (sst).

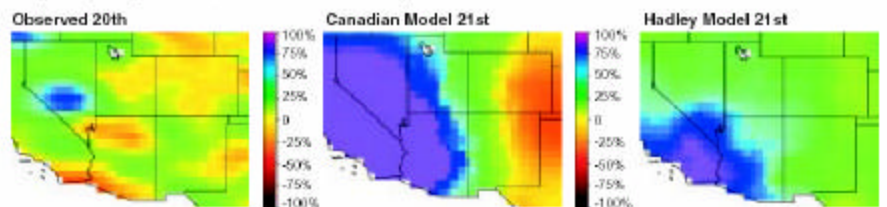


There is evidence to suggest that a warmer climate will create more El Niño conditions, in turn bringing more winter rain to the SW region.

Computer models can help us make predictions about future climate by illustrating the complex interactions of oceans, atmosphere and landforms. Global scale models run on powerful supercomputers. Regional scale models require even more detail and thus demand even more powerful computing.



**Figure 12.** Temperature trend comparisons between 20th century observation and modeled scenarios of the 21st century. Compiled by: Benjamin Felzer, National Center for Atmospheric Research



**Figure 13.** Precipitation trend comparisons between 20th century observation and modeled scenarios of the 21st century. Compiled by: Benjamin Felzer, National Center for Atmospheric Research