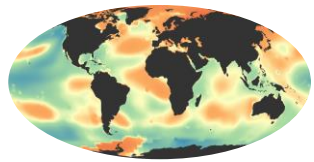
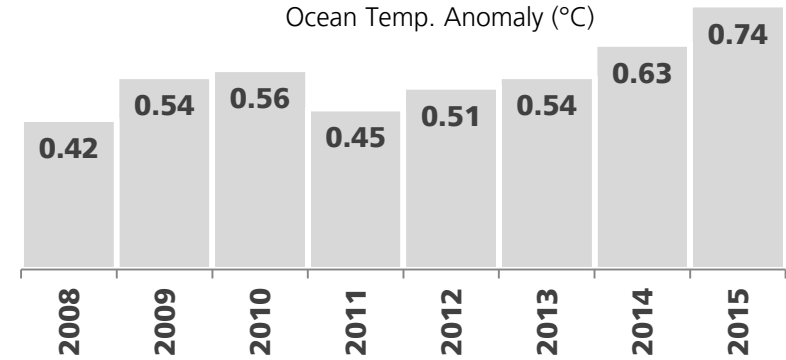


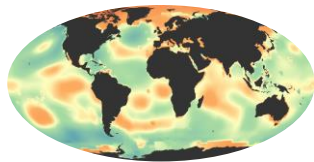
Sea Surface Temperature Anomalies

Sea surface temperature (SST) anomalies measure how much warmer or colder it is than normal* for a specific area and time of year. Since 2008, there has been a global SST warming trend with 2015 being the warmest year on record. Intense, yet periodic, SST anomalies seen during El Niño and La Niña events strongly influence worldwide temperatures and disrupt regional climate patterns. Warmer SSTs contribute to more cloud formation and rainfall, whereas colder SSTs are associated with dry conditions.

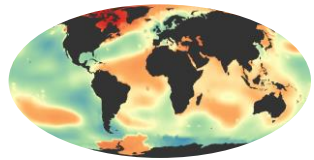
Annual Mean Global Ocean Temp. Anomaly (°C)



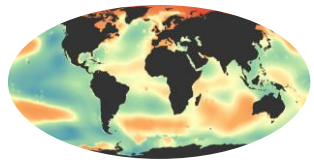
2008



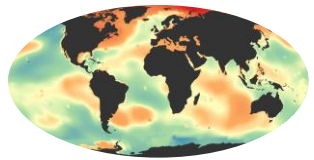
2009



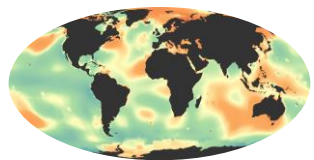
2010



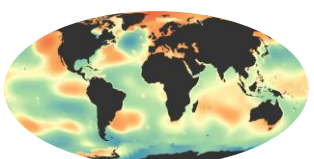
2011



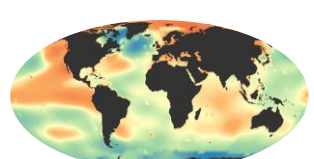
2012



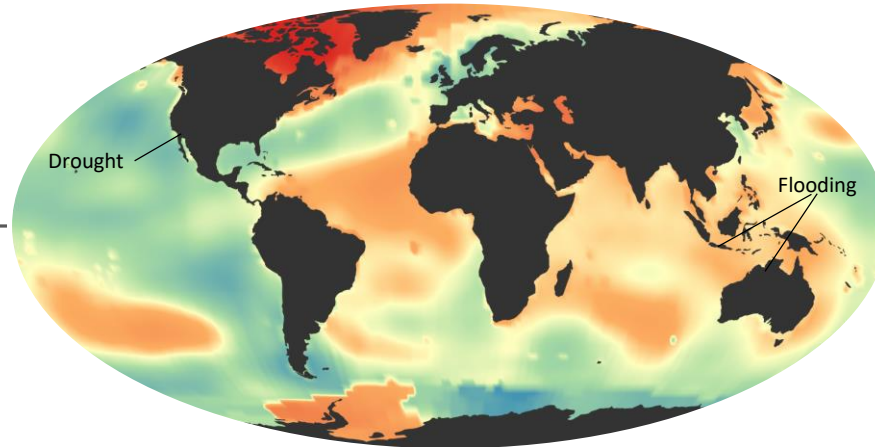
2013



2014

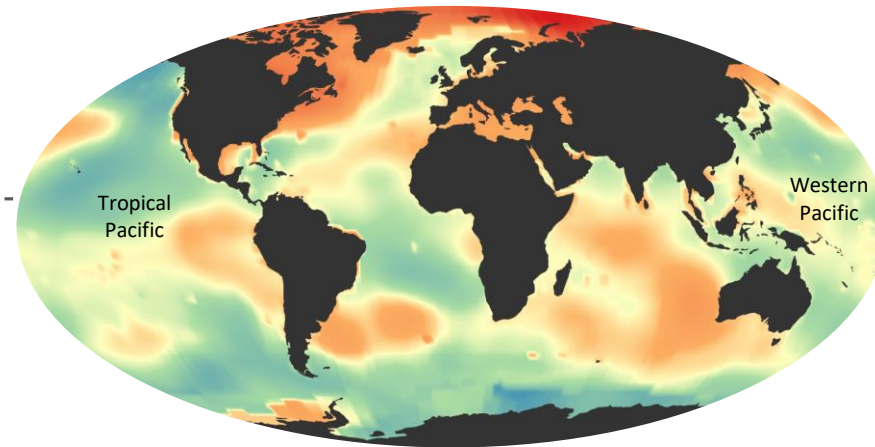


2015



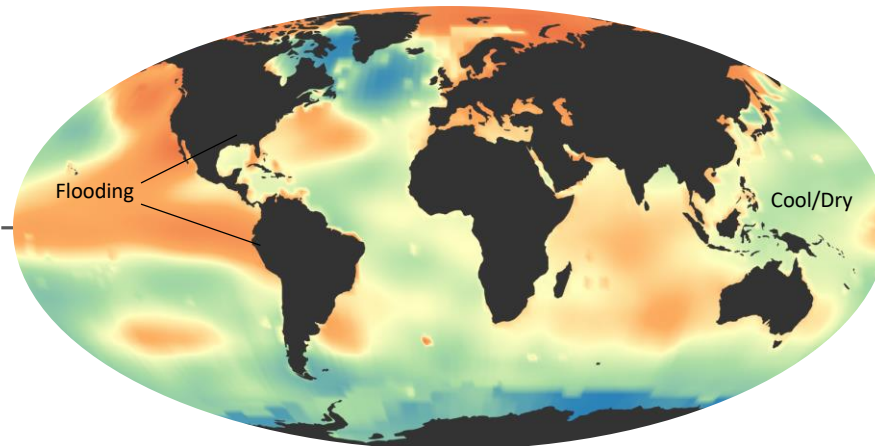
2010 La Niña

Light blue and green patterns over the tropical Pacific Ocean indicate a La Niña cooling trend. This leads to widespread drought conditions in the Southwestern United States. Conversely, a broad area of warm SSTs in the western Pacific leads to heavy rains and flooding around Australia and Southeast Asia.



2012 Neutral

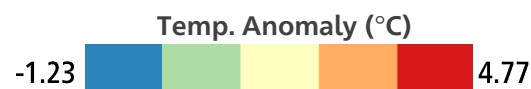
Light colored areas in the tropical Pacific Ocean correspond with a neutral period of SST anomalies. SSTs are relatively flat worldwide.



2015 El Niño

Dark red patterns over the tropical Pacific indicate a high intensity El Niño event. Extensive areas of the US experience late season warm weather along with flooding in the Southern and Midwestern States. Torrential rainfall and warm air engulf the western coast of South America, whereas Southeast Asia remains unusually dry and cool.

Data sources:
 NASA GISS Surface Temperature Analysis.
 NOAA Global Ocean Temperature Anomalies.
 Map created by Timothy Martin



* normal refers to the average temperature over a 30-year period from 1951 to 1980 for a specific location.