Cesar Manuel Sebastian Diez Chirinos, Universidad Nacional Ingenieria, Lima, Peru. Universidad Nacional Agraria La Molina, Lima, Peru.

The present work is realized to show the trends of the behavior of the temperatures on the Pacific Ocean between the latitudes of 20° N and 20° S and from the Western side a 95° W (close to American Continent) to Eastern one at 137° E (close to the Asian Continent). The data analyzed and processed was obtain from TAO Project of Pacific Marine Environmental Laboratory (PMEL) of National Oceanic and Atmospheric Administration (NOAA) of United States (NOAA 2000). Methodology used is a combination of statistics and mathematics. It means that, first of all, it is presented Time Series (Emery 2006), with statistics of the several buoys analyzed here, some Histograms (Wilks 2006) and finally lag correlations (Emery 2006) for several pair of buoys. The results are plotted indicating their values and/or time of beginning of the data collection, some of them from 1977 or later, so the data is processed at least for 10 years. What is presented here is that the Pacific Ocean could be treated as a couple Oceans connected to each other, due to the behavior of the Eastern side of the Pacific and the Western one or a basin with two well defined behavior (Pickard 2007). The software used here was Matlab from MathWorks Inc, which code was developed during two years to process all the data for NOAA.