The waters off the coast of Tasmania have become gradually warmer and saltier over the past 60 years according to a coast station time series, with sea surface temperatures rising at a rate more than double the global average. This is related to a strengthening and more southerly reach of the East Australian Current (EAC) extension. The station also shows a strong decadal timescale signal in temperature and salinity.

The dearth of observations in the region makes it a challenge to deduce the mechanisms. This talk will give an overview of the current state of understanding based on the available observations and also the use of ocean state estimates. The plan for sustained observations of the EAC system as part of the Integrated Marine Observing System will also be discussed.