

## **Sea Surface Temperatures From Satellite Imagery**

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Sea-surface temperature (SST) data from earth-orbiting satellites have been increasingly used in our oceanographic studies off Western Australia. The first images were received in the early 1980s, so WASTAC has an enviable collection of almost 25 years of sea temperature data. Our local studies have included (1) tracking the meanders and eddies in the Leeuwin Current (the dominant ocean current off Western Australia) and (2) deriving water temperatures at various sites along the coast where conventional surface measurements have not been available.

This talk will briefly outline the technical background to measuring SST from satellites (including the important atmospheric corrections), and then illustrate how the images can be used to track current patterns in the Leeuwin Current and its eddies as well as to derive a time-series of temperatures at selected sites. Validation of the satellite-derived temperatures against in situ measurements is also dealt with -- this gives us confidence in using the satellite data to determine the temperature regime at sites where students may have specific projects.