The southeast Pacific Ocean is an oceanographic and meteorological in-situ data-sparse region. Satellites have provided the first opportunity to develop the climatology and monthly variability, with minimal aliasing, of several surface variables (e.g., geostrophic current, wind stress curl, wind divergence, phytoplankton abundance) important for the study of El Nino, La Nina, coastal upwelling, stratus clouds, and intermediate-water formation. The surface wind will be compared with numerical weather prediction data products.