Sea surface temperature estimation from NOAA-AVHRR satellite data: Validation of algorithms applied to the northern coast of Chile Estimación de la temperatura superficial del mar desde datos satelitales NOAA-AVHRR: Validación de algoritmos aplicados a la

Parra, Juan C.

Morales, Luis

Sobrino, José A.

Romero, Juan

The present article applies and compares three split-window (SW) algorithms, which allowed the estimation of sea surface temperature using data obtained from the Advanced Very High Resolution Radiometer (AVHRR) on board the National Oceanic and Atmospheric Administration (NOAA) series of satellites. The algorithms were validated by comparison with in situ measurements of sea temperature obtained from a hydrographical buoy located off the coast of northern Chile (21°21'S, 70°6'W; Tarapacá Region), approximately 3 km from the coast. The best results were obtained by the application of the algorithm proposed by Sobrino & Raissouni (2000). The mean and standard deviation of the differences between the temperatures measured in situ and those estimated by SW were 0.3° and 0.8°K, respectively.