

SHIP DETECTION IN SOUTH AFRICAN OCEANS USING A COMBINATION OF SAR AND HISTORIC LRIT DATA

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Abstract

Regular surveillance of territorial sea areas is increasingly important for coastal nations as these marine areas are a valuable economic resource (e.g. for fisheries or oil extraction). The responsibility for the administration, law enforcement, environmental protection and sustainable management of this frontier can be very challenging as systematic surveillance of these areas is very costly and logistically cannot cover all areas all of the time. SAR data is very popular for ship detection as large areas can be observed within a single overpass. In this paper it is shown how ship detection using the classic CFAR algorithm can be improved by using historic LRIT data.