

EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Applications and Economic Benefits (5)

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SPACE BORNE SAR OBSERVATIONS OF OCEANIC INTERNAL WAVES

Abstract

Sea surface manifestations of internal waves in the shallow continental shelf waters of North Bay of Bengal have been observed almost all seasons imaged by Synthetic Aperture Radar (SAR) images of ERS1/2 and Envisat ASAR missions during the period 1993 to 2004. Shoreward propagating short period IW packets are revealed particularly in summer stratified coastal waters Off Chilaka region. In summer waters, prominent short period shoreward propagating internal waves of consecutive imageries of ERS 1/2 SAR (12th and 13th April 1996) are studied. On 4th October 2003, Envisat ASAR imaged strong surface manifestations of huge internal wave groups wavelengths and those propagation discussed in detailed. In the research we also made an attempt for temporal distribution of IW signatures on SAR in North Bay of Bengal.