

EVALUATION OF REMOTELY SENSED IMAGES FOR THE DEVELOPMENT OF COASTAL ZONE DATABASES

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KEY WORDS: image data, coastal zone databases, GIS, feature extraction

ABSTRACT

The Center for Remote Sensing and Mapping Science and the Department of Geography at The University of Georgia, Athens, Georgia are working with the National Imagery and Mapping Agency to develop methodologies for using remotely sensed data in conjunction with existing map information in a GIS environment for littoral warfare data (LWD) and related database applications. High priority features that can be extracted from sensor data will be identified using a combination of interactive and automated feature extraction techniques to prepare LWD products in a time-critical GIS environment. As part of this study, a matrix is being prepared that will provide probabilities for extracting LWD features from image/map sources in individual, multiple and fused forms. A goal of this research is to develop LW databases in conjunction with a knowledge base and rules that will permit the features extracted from remotely sensed imagery to be retrieved and represented in the appropriate manner on cartographic products of 1:5,000 to 1:50,000 scale. It is anticipated that the methods developed using data for known test sites will be applicable to unknown sites around the world.