INTEGRATION OF REMOTE SENSING AND GIS IN MAPPING AREAS OF FLOOD INUNDATION RISK IN THUA THIEN HUE, VIETNAM

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ABSTRACT

MISTRACT Coastal lowland is suffering from the risk of flooding and subsequently lead to many social and environmental effects. Risk analysis is therefore necessary to minimize those effects. This paper presents an integration approach of remote sensing and GIS in risk analysis of flood inundation in a lowland area of Hue province, Vietnam. We use time series JERS-1 SAR data (between 1992 and 1998) to delineate annual inundation and flooding areas. Using supervised classification approach of Spot 5 (2005, 2006 year), we create land cover of the study area. Using hydrologic Tool in ArcGIS 9.1 for DEM, we derive many tributary stream and flow attributes at 1m, 2m, and 3m high of confluent of the main stream. Using these datasets and multicriteria analysis the map showing areas of flood inundation is created. Visualization of areas of flood inundation is also discussed. For all the applications are designed to the control of the contro

this paper chose the application of shr GIS software with its tools for spanishmally its spatial starrishes and and but all methods, object-oriented standase design in the management and analysis of spatial and male special of somer quality data in Fing Tau port and industrial areas Thereshills show that exiting these rechnicus s east be cost-effective and less time-consuming.