INUNDATION MAPPING USING MULTITEMPORAL SAR IMAGE CHANGE DETECTION

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ABSTRACT

The paper presents a change detection methodology for determining the inundation region using multitemporal Sentinel 1 SAR images captured before, during and after the flood in November, 2017 in Hue, Vietnam. Changes on the ground caused by this flood have been detected based on statistical similarity measures between multitemporal SAR images. The results have been validated by ground truth, produced a total accuracy of 87.3%.

BIG DATA ANALYTICS WITH GIS

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ABSTRACT

Advance increasing interest in large-scale, high- resolution, real-time geographic information system (GIS) applications and spatial big data processing, traditional GIS are not efficient enough to handle due to limited computational capabilities. Geospatial analytics in big data needed new approaches that are flexible. In this paper, the author group introduction to Geographic Information Systems (GIS) that are used to gather and present geospatial information of big data. At the same time we also use some GIS tools to to process and analyze big data processing experiments. This helps researchers understand different design methods and highlight open research issues in the field.