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## Simulating Flood Exposure Due to Meteorological Extremes in GWMC

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### Abstract

Hazard assessment and forecasting are vital for enhancing the resilience of a region. The current research communication integrates Synthetic Aperture Radar and Multispectral Remote Sensing Satellites to determine the extent and exposure of floods in Greater Warangal Municipal Corporation (GWMC). GWMC is located in the tropical semi-arid zone and is characterized by a hot and dry climate and witnesses an average annual rainfall of 863 mm. Warangal was considered under the smart city mission of India in 2015, in this process of transformation urban areas are expanding at the cost of agrarian landscapes. Assessment of land use between 2016 and 2022 in GWMC indicates the built-up spaces that have

  
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