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Application of Unmanned Aerial Vehicle in Geohazard Mapping: Case Study Dominica

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Abstract : The recent development of unmanned aerial vehicles (UAVs) has been increasing the number of technical solutions that can be used to identify, map, and manage the effects of geohazards. UAVs are generally cheaper and more versatile than traditional remote-sensing techniques, and they can be therefore considered as a good alternative for the acquisition of imagery and other remote sensing data before, during and after a natural hazard event. This study aims to use UAV for investigating areas susceptible to high mobility flows such as debris flow in Dominica, especially after the 2017 Hurricane Maria. The use of UAVs in identifying, mapping and managing of natural hazards helps to mitigate the negative effects of natural hazards on livelihood, properties and the built environment.

Keywords : unmanned aerial vehicle (UAV), geohazards, remote sensing, mapping, Dominica
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