



Use of satellite imagery, drones and 3D models, as an aid to geological field mapping

Author: *1Curtis Archie*

¹ curtis.archie@hotmail.com - presenter, Consultant, Trinidad and Tobago

Theme: Other

Key Words: Drones, field mapping

In an era of COVID-19 lockdowns and other safety concerns, in person geological field mapping has become challenging, however technology has come to our rescue. In preparation for any trip, current and legacy, Google Earth imagery, field guides and other publications are examined to determine the location of any features of interest and their accessibility.

Where outcrops are inaccessible due to steep cliffs, rocky headlands, dense vegetation or even fences in the field, software such as Drone Deploy can be used to program a drone to take photos or video in these difficult areas.

When processed these photos can be output as an orthomosaic GEOTIFF, a relative elevation GEOTIFF or 3D model of the area. Examples from Anglais Point, Quinam Bay, Palo Seco Bay, Murray Trace and the mouth of the Ciperu River will be used to highlight the impact of these technologies.