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MAPPING SEA CLIFFS ON DOMINICA USING PHOTO MOSAICS

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Paper No. 37

Presentation Time: 8:00 AM-12:00 PM

MAPPING SEA CLIFFS ON DOMINICA USING PHOTO MOSAICS

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Mapping on islands covered by rain forest presents challenges due to the extremely limited exposure of bedrock. In general, exposures are limited to road cuts, quarries, and sea cliffs. While the first two are easily accessible, the last one provides the most reliable series of exposures for most islands, and generally forms the largest exposures. However, these outcrops are frequently difficult to impossible to reach from land, due to a lack of roads and/or strong surf right to the bases of the cliffs. Therefore, in July 2007, we chartered a boat to circumnavigate the island of Dominica in the Lesser Antilles to map and photograph the sea cliffs all around the island. The results provide modifications to the published geological map of the island and hitherto unknown details on the geology of the Miocene, Pliocene, and Pleistocene-to-Recent volcanic centers. For example, an area previously mapped as part of the oldest sequence on the island (Miocene), has been identified as a megabreccia that is part of the Pleistocene sequence of the Grande Soufriere Hills volcanic center, and is now identified as much more extensive than was known from exposures accessible from land. Detailed stratigraphic sections of selected sequences will be presented to illustrate the effectiveness of this technique.

Session No. 143--Booth# 52

[Mineralogy/Crystallography; Petrology; Volcanology \(Posters\)](#)

Tuesday, 30 October 2007: 8:00 AM-12:00 PM

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