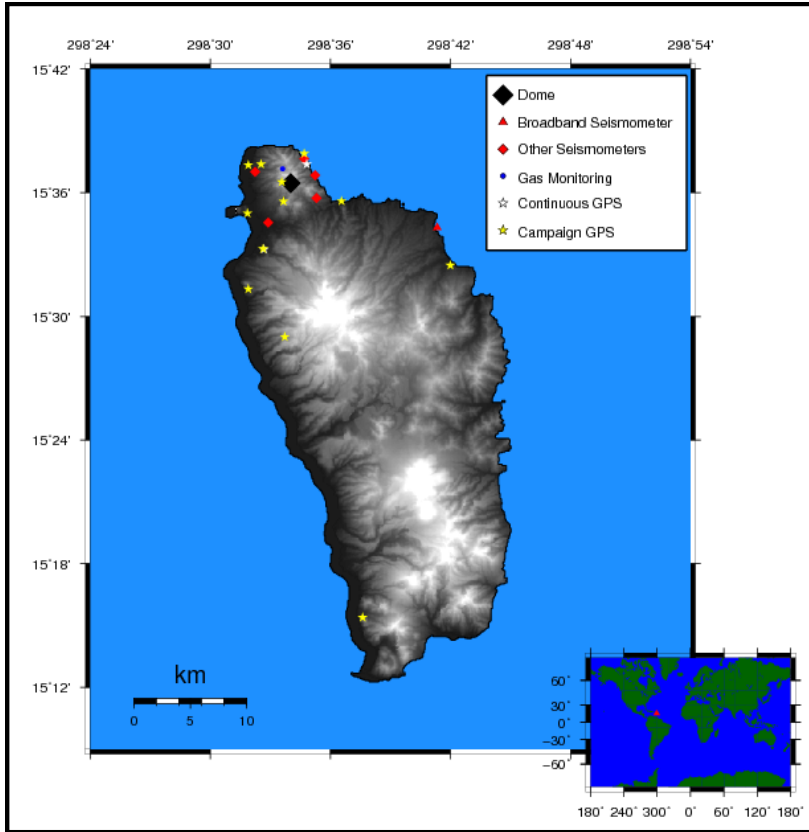


## WP 6: MONITORING CAPACITY AT TARGET VOLCANOES

### MORNE AUX DIABLES, DOMINICA



Location of monitoring equipment for Morne aux Diables

The island of Dominica, West Indies has one of the highest concentrations of potentially active volcanoes in the world (9 in total on the island which is ~750km<sup>2</sup>). However, there have been no magmatic eruptions in historic times.

Morne aux Diables is a stratovolcano located on the most northern tip of Dominica, with an elevation of 856m. Its northern boundary is a steep 3.8km linear cliff, suggesting a fault scarp. Morne aux Diables has 5 parasitic domes that form an east-west belt across the southern flanks.

Geologic deposits suggests eruptions have been dominated by block and ash flows and pyroclastic surges, although there is evidence of lithified ignimbrites, pumiceous surge deposits and lapilli fall out suggesting a more explosive Plinian-style past.

2 volcano tectonic seismic crises in the past 10 years (2003 and 2009-present) interpreted as the reawakening of a volcanic system. The locations of these events appeared in an arcuate zone of approx. 10km, with shallow depths and there is evidence to suggest a ring fault structure may be active in this area.

	Morne aux Diables
Broadband Seismometers	1
Short Period Geophones	5
Gas monitoring	1
EDM	-
Continuous GPS	2
Campaign GPS	12
Other	-

