



## Field Trip

19<sup>TH</sup>

CARIBBEAN GEOLOGICAL CONFERENCE 2011

Le Gosier - Guadeloupe - French West Indies

### The Pliocene-Pleistocene carbonate platform of Grande -Terre

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The Pliocene-Pleistocene Grande-Terre (GT) carbonate platform provides an excellent example of active margin platform with well-preserved outcrops. We will explore the sedimentary organization of this carbonate platform submitted to eustasy and fore-arc tectonics vertical motion. The visit will lead us to present the architecture of the depositional sequences through four stops.



#### **Papin Quarry : The Calcaires à rhodolithes inférieurs Formation.**

The Papin quarry represent the lowermost part of the section. It is composed of rhodolith-rich packstones to grainstones facies organized into aggradational elementary sequences.

#### **Poucet or Cocoyer outcrops : Upper Pliocene Emersion of the carbonate platform**

Poucet and Cocoyer sections show an erosional surface at the roof of the limestones "rhodolithes inférieurs" formation overlain by the upper Pliocene "volcano-sédimentaire" formation.

#### **Delair Quarry - Record of a transgressive track system.**

At the Quarry, the "Calcaires à Agaricia" Formation shows a major erosional surface overlain by retrograding beach to inner ramp deposits ending with high energy, inner ramp coral boudstones deposition a record of a complete transgressive track system.

#### **Anse-à l'Eau or Moule Porte d'Enfer cliffs - Outer ramp facies.**

Anse à l'Eau and Porte d'Enfer Cliffs, exhibit outer ramp facies of Grande-Terre formations with whitish wackestones displaying planktonic foraminifers, hardened parallel-bedded surface, volcanoclastic and carbonate deposits, coarse grained wackestone to packstone with large benthic foraminifers, bioclastic limestones and red alga with cross-stratification sets. The top of the cliff is the "Calcaire à Agaricia" Formation.