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## **Structural Map of the Caribbean** Bouysse, P.<sup>1</sup>, Pubellier M.<sup>1</sup>, Garcia, A.<sup>2</sup>

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The Caribbean is a geologically complex region with convergent and wrench plate boundary interactions. It is caught between the two continental masses of North & South Americas and two of the largest oceans, the Atlantic and Pacific. The main purpose of this map at 1:4M scale, is to put the stress on the cartographic expression of the different tectono-structural units. The map is conceived as an updated synthesis of the interpretation of geological and geophysical data compiled throughout years of oceanic cruises and onshore fieldwork.



After decades of surveys and investigations, the Caribbean still remains a highly debated spot on the globe. It is a mosaic of many blocks of different nature whose contours and ages are not always well-defined. The controversy encompass the following: i) Pacific vs. intra-American origin for the plate; and its implication on the formation of the intraplate basins ii) evolution of the "Great Cretaceous Volcanic arc" and its Cenozoic fragmentation; iii) polarity of the subduction of the different segments

of this arc through time; iv) age of the Yucatan basin; v) nature of the Nicaragua Rise relative to the COT with the oceanic basin; vi) mapping of the CLIP overlying the proto-Caribbean normal oceanic crust and vii) nature of the different oceanic versus ophiolitic assemblages docked onshore after the successive collisional events.

The main features appearing on the map are: main structural lines (subduction, transform faults, thrust faults, etc.), the oceanic crust and associated magmatic rocks in the offshore areas (with emphasis on the geodynamic origin of the main geological units); continental blocks, volcanic arcs, oceanic terranes and peridotites outcrops, hotspots tracks and Quaternary volcanoes among others.