



# 1 Geological evolution of the NW corner of the Caribbean Plate

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The NW corner of the Caribbean Plate is complicated by the presence of a continental type block, the Chortis Block, within a mostly oceanic plate and a combination of a slip-strike boundary to the north running from the Belize-Guatemala border with a subduction zone to the west where the Cocos Plate is subducted beneath the Caribbean Plate, and an extinguished subduction zones to the north and south, were the Caribbean Plate was temporarily subducted beneath the Maya and Chortis Block. The migration of the Chortis block in an S-SW and then N direction was one of the mechanisms responsible for the changes observed among the ophiolitic complexes in Guatemala. We are introducing the idea of the pre-existence of a trench associated with the Motagua-Jalomáx slip-strike fault system near the north border of Honduras, currently filled up and destroyed by the northward migration of the Chortis Block. Also we introduce the idea of an orogenic event - The Chuacús Orogeny - probably the same age as the Laramide Orogeny in North America. We postulate that the Chuacús Orogeny pushed younger ophiolites complexes in Guatemala to the surface and is responsible for the metamorphic basin of Central Guatemala - The Chuacús Series.