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## **Petroleum system of offshore Cuba : a revaluation**

A large set of marine seismic lines recently recorded by CGG north from the Cuba island has been used to re-evaluate the petroleum potential of this area. Depth conversion has been performed (PSDM processing) and field campaign has been done to build new stratigraphic column of the formal Jurassic and Cretaceous margin. Extrapolation have been done offshore thanks to the existing ODP wells, and correlation are proposed between the seismic facies and the known formations. In addition of the source rock, oil and gas has been sampled from the wells and analysed with classical and isotopic geochemical approach. This new set of data clearly prove the existence of at least 2 petroleum systems in the north - North East area, especially on offshore Cuba. The silicoclastic synrift formation (Kimmeridgien/tithonic) have a good potential (S2 initial up to 20 mgHC/g) and may play a significant role on the final reserves, the formations has been sampled onland and the existence of the half grabens in the current offshore is visible on the seismic data. In the carbonate platform itself, the initial hydrogen index overpass 600 and the S2 16 mgHC/g but the characteristic of the Type-II source rock is unusual in term of kinetic and final product. A modelling of maturation/migration will be presented on one of the 2D section.