

7 Novembre - matin : Séance présidée par M. GALANOPOULOS -

7 - 1 - GRAVIMETRIC AND FIELD MAGNETIC MEASUREMENTS IN THE AREA OF THE
HON GRABEN IN LIBYA -

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The area in the west of the Sirte Basin in Libya is characterized by a number of graben structures striking NNW-SSE. The Hon Graben is the most important structure in that area.

Four Field Magnetic profiles in ΔT and ΔZ were measured across the Hon Graben together with a Gravimetric profile. The length of the profiles are between 60 km. and 90km..

The Bouguer anomaly is shown in Fig. 1 together with a tentative model for its interpretation. Density differences between 0,15 and 0.2 gm $^{-3}$ were assumed.

A representative ΔT profile and its first interpretation with the assumption of an induced magnetization of 65 $\%$ are shown in Fig. 2.

Both models in Fig. 1 and Fig. 2 are not in agreement, especially in the central and eastern part of the graben. It is suggested that the ΔT profile of the magnetic measurements reflects more the magnetization contrast between the nonmagnetic sediments and the underlying basement, while the Bouguer anomaly of the gravimetric measurements gives information of the density distribution within the Tertiary sediments.

For more detailed information further gravimetric and magnetic measurements are planned in that area for the near future.

Intervention à 7-1 -

P.F. BUROLLET - La Libye centrale est une région difficile pour une étude par profils isolés : le Paléozoïque est inégalement réparti. L'Ante-Cambrien est très hétérogène et toutes les cartes gravimétriques de Libye sont marquées par l'importance des anomalies de socle. Enfin, à l'Ouest du Fossé de Hon il est possible qu'existent des montées de basalte non visibles en surface mais apparentées à celles du Jebel Soda et de Garian.

Réponse - Nous connaissons ces faits mais nous n'avons malheureusement pas pu voir les cartes gravimétriques des Sociétés pétrolières.