Annales de la Société Géologique de Belgique, Tome 112 (fascicule 2) - 1989, pp. 311-312 Décembre 1990

PRELIMINARY STATEMENT ON THE ONSHORE AND OFFSHORE MESO-CENOZOIC TECTONIC DATA IN WESTERN BELGIUM AND NORTHERN FRANCE

by

C. DUPUIS,[1] J.P. COLBEAUX,[2] J.P. HENRIET,[3] M. DE BATIST,[3] Th. CAMELBEECK,[4] S. VANDYCKE.[1]

(1 figure)

ABSTRACT.- A first comparison between the onshore and offshore informations leads to a tectonic sketch of the South North-Sea and the Detroit du Pas-de-Calais (Strait of Dover). The more striking feature is that, significant structures (North Hinder and Gravelines structures) seem to extend offshore the transverse faults known in the Paleozoic beds of Pas-de-Calais and Boulonnais.

This set of deformations can be interpreted as reactions of the thick Meso-Cenozoic cover to fractures acting in the Paleozoic basement.

Towards the South, between the Zone de Cisaillement Nord-Artois and the Faille de Montreuil - Bassurelle, along the Weald Artois Axis, where the Meso-Cenozoic cover is thinner, the transverse faults, probably dependent upon the same fractures, have a dextral strike-slip character both in Paleozoic basement and in the Cretaceous strata.

The size and significance of this assumed deep faults are discussed in the framework of a model of this part of the Southern North-Sea.

1. *Faculté Polytechnique de Mons, Géologie fondamentale et appliquée, rue de Houdain, 9, B-7000 MONS.*
2. *U.E.R. des Sciences de la Terre, Université des Sciences et Techniques de Lille, F-59655 VILLENEUVE-D'ASCQ Cedex.*
3. *Rijksuniversiteit Gent - Renard Centre of Marine Geology, Krijgslaan, 281, B-9000 GENT.*
4. *Observatoire Royal de Belgique, Section de Géodynamique, Avenue Circulaire, 3, B-1180 UCCLE.*

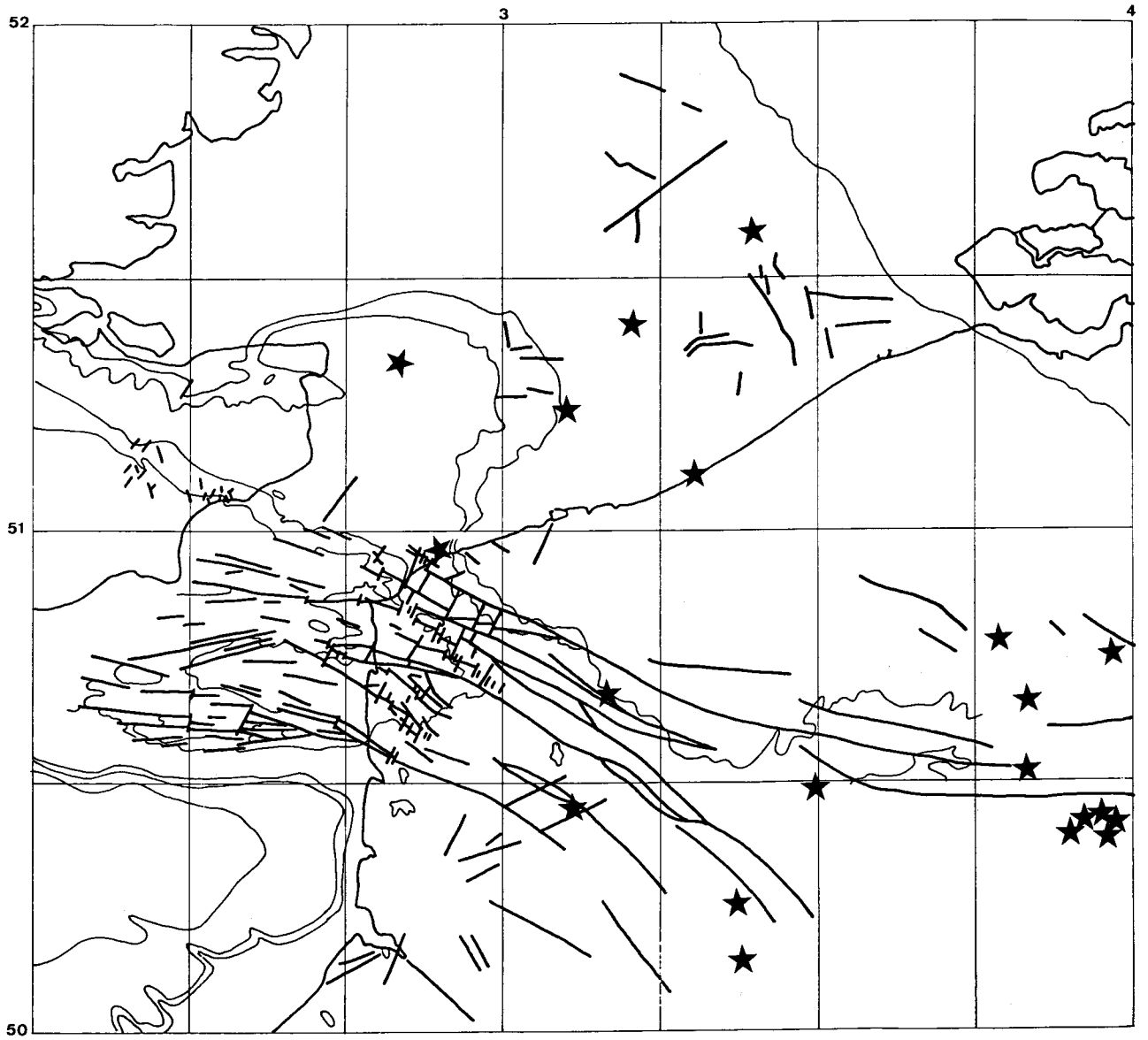

Fig.1.- Main faults (after Colbeaux *et al.*, 1977 and Henriet & de Batist, this issue) and epicentres (after Camelbeeck, this issue) onshore and offshore in western Belgium and northern France.