

# ETUDE GRANULOMETRIQUE DES CONGLOMERATS INTERCALES DANS LE FLYSCH DU PELOPONNESE SEPTENTRIONAL; LEUR SIGNIFICATION STRUCTURALE

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L'existence des passages conglomératiques intercalés dans les niveaux supérieurs des flyschs éo-oligocènes de la Zone du Gavrovo (Peloponèse Septentrional, Grèce) montre une différenciation de la taille des apports détritiques provenant du continent adjacent.

La nature des galets, compris dans ces conglomérats, est principalement calcaire, mais aussi on retrouve des radiolarites lydiennes et grès. Leur provenance est surtout pin-dique. Les conglomérats sont classés dans le groupe «extraformationnels petromictes» et présentent par endroits un granoclassement normal (positif) ou, même, ils sont du tout organisés.

L'étude des paramètres granulométriques des éléments des conglomérats montre une divergence des paléocourants soit vers le Nord soit vers le Sud. Cette divergence est contrôlée par le relief du fond sous-marin. Ce relief était marqué par l'existence, déjà, du Mont Skolis. Ce fait montre que le Skolis doit avoir son origine à des événements compressifs précoces. Ces événements ont été produits avant la fin de la sédimentation terrigène et le paroxysme orogénique (Oligocène sup.) lequel a donné la structure écaillée du Mont Skolis.

## THE ROLE OF SEA LEVEL CHANGES IN THE SEDIMENTATION OF THE N. AEGEAN DURING U. QUATERNARY

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This paper is a synthesis of a number of works carried out at the shelf and the deep areas of the N. Aegean, and its purpose is to study the effects of sea level changes in the sedimentation.

At the shelf sector, two transgressions of wide areal extent were distinguished, which represent the rises of the sea level during the beginning of the Holocene and the U. Pleistocene. Between these two transgressions, four minor ones were recognized which have different ages and positions. Also a number of deltaic and coastal deposits at the greater shelf and the shelf break were identified, formed apparently during periods of regressions or low sea level.

At the deep areas, after the shelf break and toward the deep basins of the N. Aegean Trough, a series of alternating of transparent and opaque sets of reflectors were observed. The transparent sets exhibit homogenous thickness and distribution, while the opaque ones usually fill basins where their thickness increases.

From the correlation of the characteristic horizons between the two sectors it is concluded that during periods of regressions, coarse grained material was deposited at the outer shelf and part of it was deposited at the deeper areas, forming the opaque layers. On the other hand during periods of transgressions, the coarse sediments were trapped at the inner shelf, allowing only the fines to be deposited at the deep areas, forming the transparent reflectors.

Taking into account the well known world sea level curves as well as the stratigraphic and tectonic data collected, the relevant sea level curve for the last 130.000 yr. for the studied area was constructed. From the curve it is evident that sea level changes in the order of a few tens of meters and duration of a few thousand years played a decisive role in sedimentation. On the contrary tectonism contributed only to the formation of the shelf break and the general setting of the sedimentary depressions, without affecting, in these time spans, the sediment distribution and accumulation.

## **LANDFORMS AND PROCESSES ASSOCIATED WITH THE EXHUMATION OF THE PLUTONIC BASAL SURFACE IN THE AREA OF THE AEGEAN ARCHIPELAGO**

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In the presented paper the author gives a survey of the main processes and dominant landforms that are associated with the stripping of the plutonic basal surface from deeply weathered paleosol covers. In the last decade several Greek scientists, above all A. Psilovikos (1981, 1982), L. Sotiriadis (1981) and E.G. Vavliakis (1981), have investigated the relict peneplains whose various components were subject to considerable remolding. All these landforms developed primarily cryptogenically under autochthonous, chemically weathered material. Exhumation took place in the course of the Oldest, Older and Younger Pleistocene when these covers were easily removed. Recent times represent a period of rigorous modification of this once subcutaneous relief. The analysis is based on extensive, detailed fieldwork on the islands of Seriphos, Mykonos, Ikaria, and Naxos and includes comparisons with Siphnos, Syros, and Samos, though igneous rocks either do not occur there or are of no significance.

Sheetwash which started from the pediments of Plio/Pleistocene and older Pleistocene age and from the Younger Pleistocene glacis may be regarded as the main agent of denudation being responsible for the removal of the weathered materials. Rills formed by initial