Seminar Geosains Kebangsaan 2007 (NGC 07)
Universiti Malaysia Sabah, Kota Kinabalu, Sabah
7 – 9 June 2007

UCAP UTAMA III

OVERVIEW OF SABAH STRATIGRAPHY

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ABSTRACT

This paper discussed the stratigraphy of Sabah according to the latest findings and data from the previous researcher. The oldest rock unit in Sabah is made up of fragmented ophiolites blocks and overlain by clastic sediments. Clastic sediments form the major back bone of mountain ranges of Sabah. Numerous formation names have been established by the Geological Survey of Malaysia to describe the different sedimentary rocks. The outcrops of the sedimentary units are dominated by Paleogene sequence and considered to be the thick apron over the oceanic crust basement. The Paleogene highly deformed deep marine sediments unconformably overlain by less deformed Late Neogene shallow marine units. In a vertical relation, the Paleogene and the Neogene sequences are separated by melanges. A wider distribution of carbonate facies all over Sabah area occurred during the Late Oligocene. The limestone facies are exposed at Kudat Peninsula, Beluran, Sukau and Sapulut. Numerous chaotic assemblages have been classified by the Geological Survey of Malaysia to differentiate the rock associations. In the present study, the chaotic assemblages denote units, which are made of blocks of various nature and origin embedded in a pervasively shared shale matrix. Almost all are classified rock units under these assemblages contain the same rock associations with varying percentage among the units. However, the term melange has been widely used for the rock series. The nature of the rock blocks are very heterogeneous which is consists of ophiolitic blocks, volcanic materials, limestone, clastic from older formations and the size of the blocks reach hundreds of meters with varying ratio of sand to shale matrix. The major matrix component is composed of pervasively seared shale. Some of the shale matrix collected form different locations rich in *Orbulina sp.* The volcanic facies form the prominent feature of the Dent and Semporna peninsular. The facies were formed from series of Tertiary volcanisms which pile up to form stratovolcanic layers. This volcanic rocks association were deposited in a shallow to neritic marine environments in Early to Middle Miocene times. The younger formations formed after the latest tectonics in Sabah during Late Pliocene, estimated to be after the intrusions of Kinabalu batholith.