Significance of Mesozoic Radiolarian Chert in Sabah and Sarawak

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Mesozoic radiolarian cherts are exposed in west Sarawak and Sabah. The cherts are dated by detailed studies of the radiolarian faunas. The oldest datable chert is from the Serian Volcanics which is Plienbachian-Toarcian, Early Jurassic. The chert sequence at the base of Pedawan Formation yielded late Tithonian-Berriasian radiolarians. Three different ages were identified from the chert blocks of the Lubok Antu mélange; late Tithonian, Valanginian to Barremian and Albian-Cenomanian. The age of the chert from the ophiolitic and mélange associations in Sabah ranges from Valanginian to Cenomanian. The environment of deposition is determined by using rock association. All the cherts were deposited in deep-marine environment. The occurrence of bedded chert was very much related to the plankton productivity. There were high productivities during the Early Jurassic and Early to early Late Cretaceous.