

Lithology of Triassic-Jurassic bedded chert in Dimanglet and Marinon Islands, North Palawan, Philippines

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Dimanglet Island and Marinon Island belong to the Calamian Islands of the North Palawan Block in the Philippines. Dimanglet Island is located approximately 6 km southwest of Coron City, south of Uson Island. Marinon Island is located 1.5 km northwest of Dimanglet Island. In the Dimanglet and Marinon sections, bedded cherts crop out continuously in the southwest shore of these islands. Lithology of bedded chert was examined by drawing a route map at a scale of 1:200. Samples for radiolarian analysis were collected at intervals of 1 m or less.

The investigated interval of the Dimanglet section is lithologically divided into three (northern, middle and southern) parts. The whole section is dated as Late Triassic to Early Jurassic by means of radiolarian. In the northern part, 100 m in length, the beds strike N 0-45 S and dip 34-54 W. Red cherts interbedded with yellow clayey cherts and silicified white cherts are observed in the northern two thirds of this part. Thick bedded cherts with striped structure (5-10 cm thick) is dominant in the southern one third of this part.

In the middle part, 75 m in length, brick red bedded cherts and silicified red cherts appear alternately. It may be tectonic repetition due to folding and/or faulting. There are some thick bedded cherts with striped structure (5-10 cm thick).

In the southern part, 50 m in length, a thick bedded chert (5-10 cm thick) is observed in the center of this part. Brick red bedded cherts are distributed in the north and south of this part. There is a chert bed with striped structure (4 cm thick).

The investigated interval of the Marinon section is 130 m along shoreline. Red to brick red bedded cherts are observed continuously. In the southernmost 20 m interval, thick bedded cherts with striped structure (5-20 cm thick) are common.