

Calcareous nannofossil biostratigraphy of Middle to Late Cretaceous sections in the Philippines

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A detailed calcareous nannofossil biostratigraphic analysis was conducted on selected Cretaceous sections in the Philippines in order to refine the ages of these sedimentary units and to determine the paleoceanographic and/or paleoclimatic significance of the calcareous nannofossil assemblages. For this study, two sections were examined: (1) Upper Cretaceous deep-sea limestones of the Kinabuan Formation (Luzon Island), and (2) Middle Cretaceous mudstone and fine-grained sandstone interbeds of the Yop Formation (Catanduanes Island). The Middle Cretaceous section on Catanduanes Island is also significant since it was previously thought to straddle the Cenomanian-Turonian boundary, and consequently the oceanic anoxic event 2

(OAE2; Fernando *et al.*, 2016). Higher resolution samples that were collected during recent fieldwork will be used to establish a more detailed nannofossil biostratigraphy of the section, which will then be compared with available geochemical/isotope data in order to verify the existence of OAE2 in this part of the western Pacific Region.

References

- Fernando, A.G.S., Magtoto, C.Y., Guballa, J.D.S. & Peleolampay, A.M. 2016. Calcareous nannofossils from Cretaceous units in Catanduanes Island, Philippines. *Bulletin of the National Museum of Nature and Science. Series C*, **42**: 1–13.