

XII. AGE ASSIGNED TO DREDGED SILTSTONE SAMPLES AND PISTON CORE SAMPLES

*Michio Kato**

1. Dredged Siltstone Samples

During the present cruise, dredge sampling was carried out at 38 sites. At 20 of these, siltstone samples were recovered and in four of these, planktonic foraminifera were found (Table XII-1).

In this report, two foraminiferal events or datum planes are used to establish the relationship of these samples with the paleomagnetic time scale. These events or datum planes are selected from MAIYA *et al.* (1976).

Judging from the occurrences of the selected species, the age of the dredged siltstones are assigned to the intervals shown as lines on Fig. XII-1.

2. Piston Core Samples

Piston core sampling was carried out at 7 sites. Planktonic foraminifera were found. The results are given on Fig. XII-2.

The position of the Holocene-Pleistocene boundary is based upon the remarkable change in the coiling ratio of *Globigerina pachyderma* from sinistral to dextral, and the extinction level of *Globigerina umbilicate* as pointed out by UJIIÉ and ICHIKURA (1973).

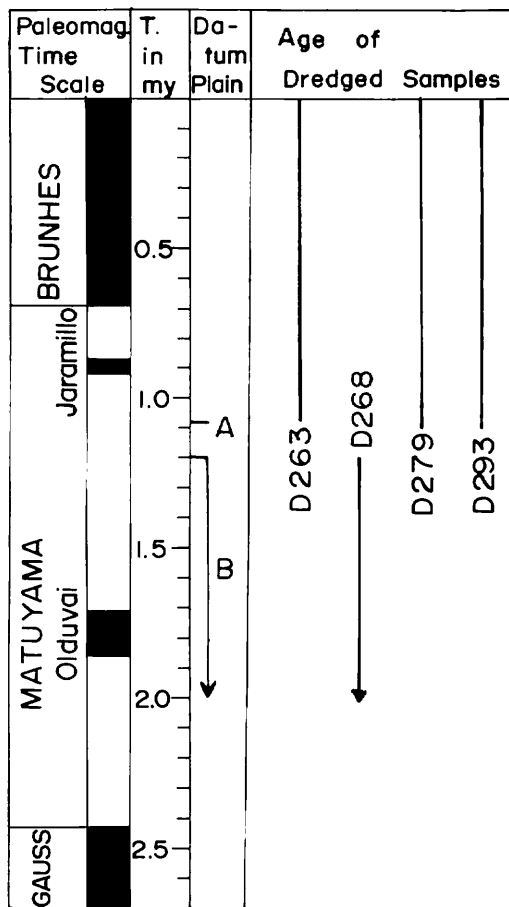
References

- MAIYA, S., SAITO, T., and SATO, T. (1976) Late Cenozoic foraminiferal biostratigraphy of Northwest Pacific sedimentary sequences. In Y. TAKAYANAGI and T. SAITO (eds.), *Progress in Micropaleontology-Selected Papers in Honor of Prof. K. Asano, Spec. Publ. Amer. Mus. Nat. Hist., New York.*, p. 395-422.
- UJIIÉ, H. and ICHIKURA, M. (1973) Holocene to uppermost Pleistocene planktonic foraminifers in a piston core from off San'in district, Sea of Japan. *Trans. Proc. Palaeont. Soc. Japan, N.S.*, no. 91, p. 137-150.

Table XII-1 Planktonic foraminifera from dredged siltstone samples.

D263	<i>Globigerina pachyderma</i> (EHRENBERG) (left coiling)
D268	<i>Globorotalia inflata praeinflata</i> MAIYA, SAITO and SATO <i>Globigerina pachyderma</i> (EHRENBERG) (right coiling) <i>Globigerina bulloides</i> d'ORBIGNY
D279	<i>Globigerina pachyderma</i> (EHRENBERG) (left coiling) <i>Globigerina umbilicata</i> ORR and ZAITZEFF
D293	<i>Globigerina pachyderma</i> (EHRENBERG) (left coiling)

*Faculty of Integrated Arts and Sciences, Hiroshima University.



A: Right-to-left coiling direction change of *Globigerina pachyderma*

B: Abundant occurrence of *Globorotalia inflata praeinflata*

Fig. XII-1 Age of dredged samples from GH78-2 Cruise. It is estimate within the interval shown as solid lines.

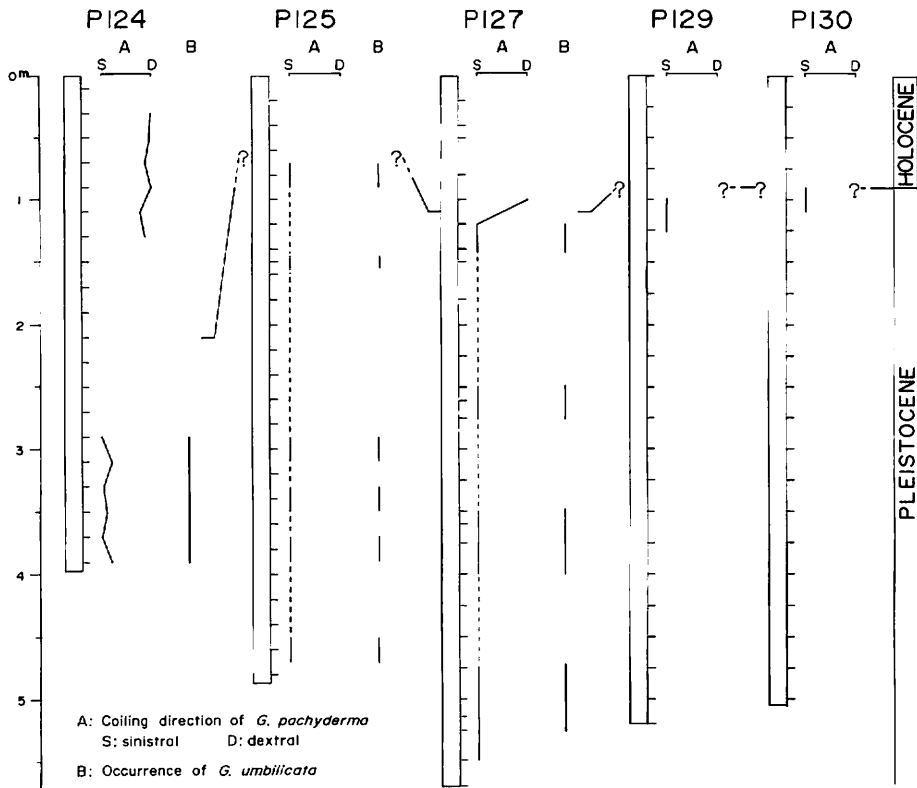


Fig. XII-2 Stratigraphic change of planktonic foraminiferal assemblages in 5 cores.