

I-6. CORED MATERIAL

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Five cores were taken during the survey. Four of them were from the Southern Okinawa Trough and the other one was from the Philippine Basin. An Aoki-Type piston corer was used, which has six meters of core barrel, with 68 mm in diameter. The cored sites are given in Table I-1-4.

St. 190, P23, 240 cm L; Almost all of the core is composed of greenish-grey clay in the upper part and of yellowish-brown silt in the lower part, with spots of foraminifera fossils. Abundant burrows of benthonic organisms are present in the upper part, 0.1 to 0.5 mm in diameter. The lower most part of the core is composed of medium grained tuffaceous sand (Fig. I-6-1).

St. 191, P24, 462 cm L; The core is composed of turbidites beds. Each of the turbidites beds is a few to several centimeters in thickness and has a graded feature with tuffaceous fine to medium grained sand at the base. The lowermost part of the core is composed of a homogeneous dark-grey clay.

St. 196, P25, 513 cm L; The core is composed of turbidites beds. Many patches of fine grained sand are scattered in the upper clay part of the core. Each of the turbidites beds has a graded feature with fine grained sand at the base, in the middle part of the core. The lower part of the core has not been identified because it has been not extracted yet. The material at the edge of the cut barrel is composed of medium grained sand, which may suggest that the core inside the barrel is composed of the same material.

St. 198, P26, 515 cm L; The upper part of the core is composed of turbidites beds which have graded features with fine grained sand at the base. The middle and lower parts of the core are composed of clay spotted by abundant foraminifera fossils.

St. 202, P27, 564 cm L; The core is composed of yellowish-brown clay intercalated by a few tuffaceous silty to fine grained sand beds. Many burrows by benthonic organisms are spotted in the core. The upper part of the core has a high water content.

It is suggested from the sampled cores that thick turbidites are mainly deposited in the southern area of the Okinawa Trough. In the northern area of the trough turbidites are scarce and massive clayey to silty material is present.

Clayey material may be the predominant material of the sedimentary layers in the Northern Philippine Basin. Suggesting that pelagic sediments are the dominant type of sediment present.

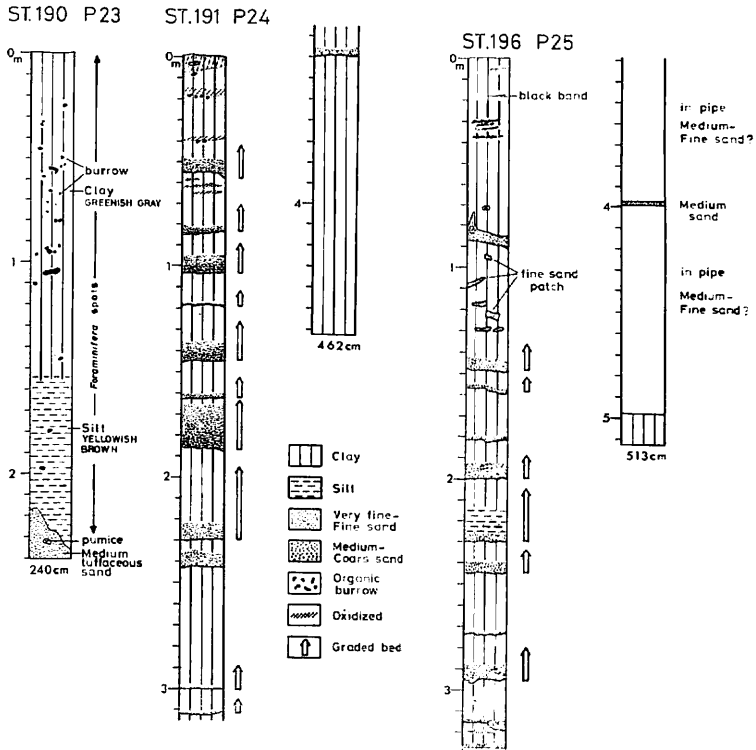


Fig. I-6-1a Columnar sections of piston cores.

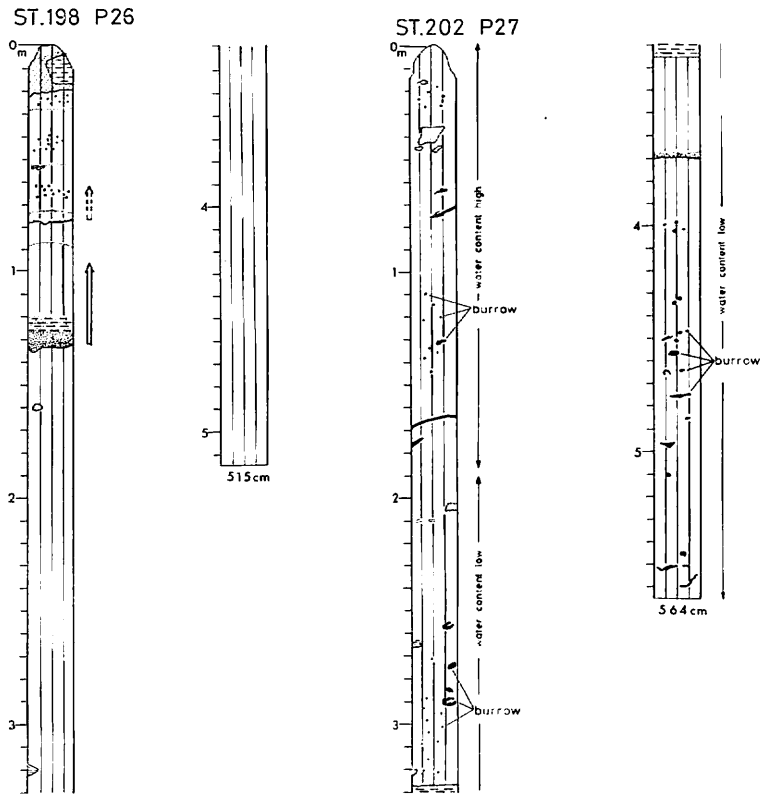


Fig. I-6-1b Columnar sections of piston cores.