

### APPENDIX III. DEEP SEA PHOTOGRAPHY OF THE IZU-OGASAWARA TRENCH BOTTOM

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Deep sea bottom photography was carried out on sea floor at a depth of 9,200 m (uncorrected) in the Izu-Ogasawara Trench (St. 402) by means of an Egerton 35 mm deep sea camera (Model 372) and deep sea electronic flash (Model 382), combined with the wire test of No. 2 Winch of the R/V Hakurei-maru. Several distinct pictures were obtained. The location and depth are shown in Table AIII-1, together with the

Table AIII-1 Location and depth at St. 402, and photographing condition.

St. no.	GH76-1-402 (C5)
Date	January 15, 1976; 11: 27 (bottom hitting)—11: 48 (bottom leaving)
Location	28°32.2'N, 143°03.3'E (bottom hitting)—28°32.3'N, 143°04.0'E (bottom leaving)
Depth	9,200 m (uncorrected)
<i>Photographing condition</i>	
Distance	2 m
F. stop	5.6 m
Film	KODAK PLUS-Pan film with ASA 125, black-and-white 100 ft.

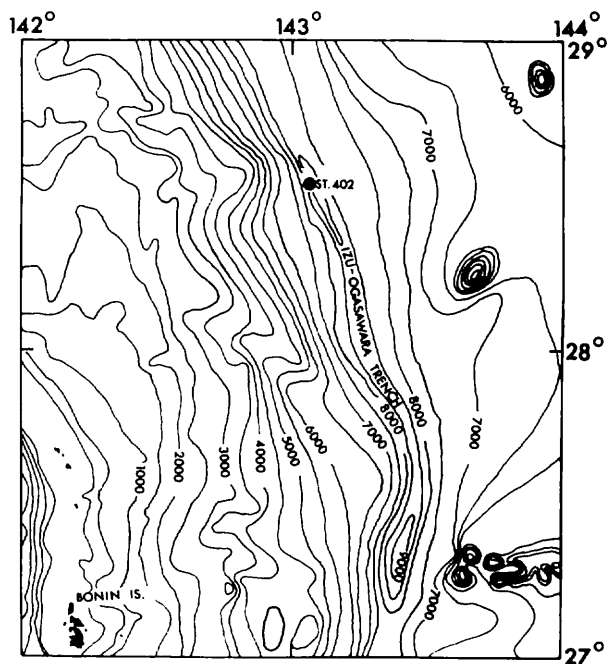


Fig. AIII-1 Location and topography of St. 402.

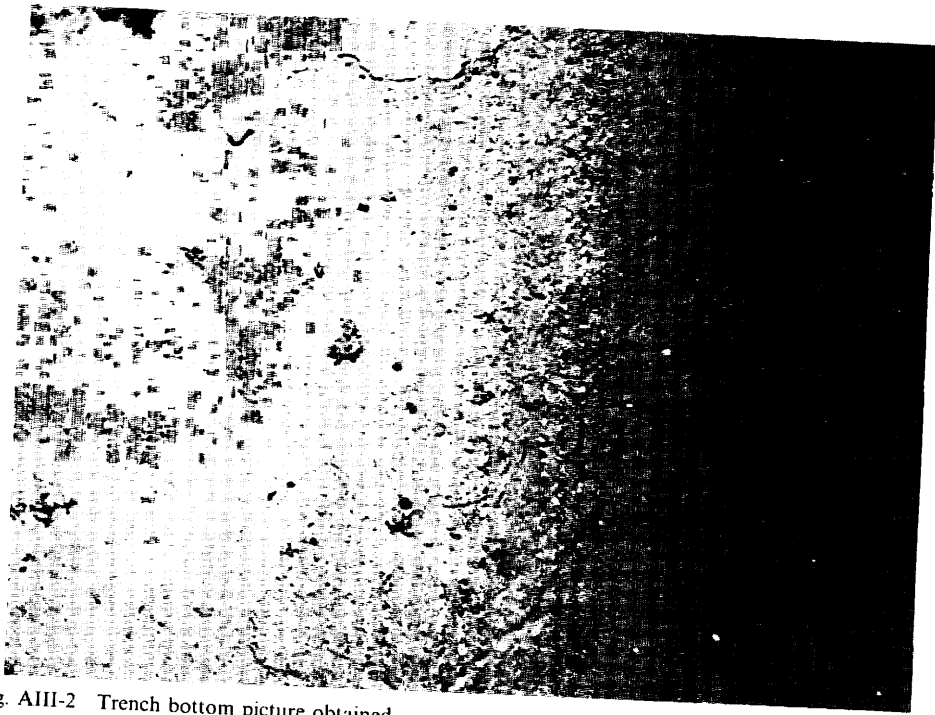
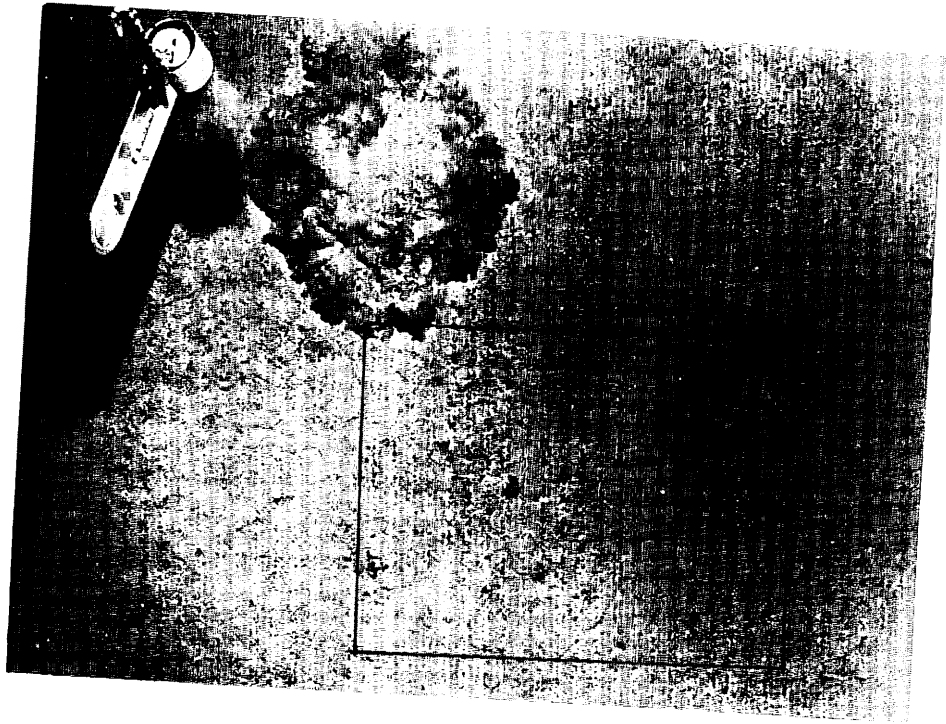


Fig. AIII-2 Trench bottom picture obtained.  
The lower figure shows the enlarged one of the quadrangle of solid line in the upper figure.

photographing condition.

The photographed sea bottom is situated in the western part of the trench bottom (Fig.AIII-1), and is nearly flat. The pictures obtained show numerous *lebensspuren* as seen in Fig. AIII-2. They are mostly represented by trails of about 3–5 mm width, which form continuous meandering grooves for a few meters crossing each other. In addition, small coprolites and burrows are found. The organisms which formed the *lebensspuren* are uncertain, although the picture shows evidence of active benthonic life. There is no evidence of bottom currents in the picture.

Microscopic observation of a very small amount of bottom sediment recovered, attached to the camera frame, shows that the bottom material at the station most likely consists of volcanic silt.