

Station 246 (Sounding 388), Yokohama to Sandwich Islands (see Chart 36 and Diagram 17). STATION 246.

July 2, 1875 ; lat. 36° 10' N., long. 178° 0' E.

Temperature of air at noon, 73°·3 ; mean for the day, 73°·4.

Temperature of water :—

Surface, . . . . .	73·0	300 fathoms, . . . . .	46·9
10 fathoms, . . . . .	67·0	400 " . . . . .	41·8
20 " . . . . .	63·0	500 " . . . . .	39·7
30 " . . . . .	60·4	600 " . . . . .	38·3
40 " . . . . .	59·0	700 " . . . . .	37·4
50 " . . . . .	58·4	800 " . . . . .	37·0
75 " . . . . .	57·8	900 " . . . . .	36·7
100 " . . . . .	57·0	1000 " . . . . .	36·4
125 " . . . . .	56·2	1100 " . . . . .	36·1
150 " . . . . .	55·3	1200 " . . . . .	35·9
175 " . . . . .	54·2	1300 " . . . . .	35·6
200 " . . . . .	53·0	1400 " . . . . .	35·3
225 " . . . . .	52·0	1500 " . . . . .	35·1
250 " . . . . .	50·4	Bottom, . . . . .	35·1
275 " . . . . .	48·9		

Density at 60° F :—

Surface, . . . . .	1·02567	300 fathoms, . . . . .	1·02544
25 fathoms, . . . . .	1·02563	400 " . . . . .	1·02527
50 " . . . . .	1·02568	1000 " . . . . .	1·02531
100 " . . . . .	1·02563	Bottom, . . . . .	1·02572
200 " . . . . .	1·02544		

Depth, 2050 fathoms ; deposit, Globigerina Ooze, containing 56·07 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 5 A.M. put trawl over. At 6 A.M. brought ship to wind and sounded in 2050 fathoms. Obtained serial temperatures down to 1500 fathoms. The carbonic acid was determined in water from 1000 fathoms and from the bottom, and amounted respectively to 50·7 and 47·5 milligrammes per litre. At 1.30 P.M. commenced heaving in trawl, which came up at 3.45 P.M. with numerous specimens and many pumice-stones. At 4 P.M. proceeded under steam.

Honolulu distant at noon, 1554 miles. Made good 88 miles. Amount of current 28 miles, direction N. 14° E.

The following species are recorded in the Zoological Reports from the trawl at this Station :—