

STATION 215.

**Station 215** (Sounding 352), Samboangan to New Guinea (see Chart 31 and Diagrams 14 and 15).

February 12, 1875 ; lat.  $4^{\circ} 19' N.$ , long.  $130^{\circ} 15' E.$

Temperature of air at noon,  $80^{\circ} \cdot 3$  ; mean for the day,  $79^{\circ} \cdot 1.$

Temperature of water :—

Surface, . . . . .	81·8	400 fathoms, . . . . .	43·2
10 fathoms, . . . . .	77·7	500 " . . . . .	41·0
20 " . . . . .	76·1	600 " . . . . .	39·8
30 " . . . . .	75·4	700 " . . . . .	38·5
40 " . . . . .	75·1	800 " . . . . .	37·5
50 " . . . . .	74·5	900 " . . . . .	37·0
60 " . . . . .	73·4	1100 " . . . . .	36·0
70 " . . . . .	72·0	1300 " . . . . .	35·4
80 " . . . . .	70·6	1400 " . . . . .	35·4
90 " . . . . .	69·3	1500 " . . . . .	35·4
100 " . . . . .	68·0	1600 " . . . . .	35·4
200 " . . . . .	54·0	Bottom, . . . . .	35·4

Density at  $60^{\circ} F.$  :—

Surface, . . . . .	1·02597	200 fathoms, . . . . .	1·02579
50 fathoms, . . . . .	1·02593	400 " . . . . .	1·02560
100 " . . . . .	1·02627	Bottom, . . . . .	1·02572
150 " . . . . .	1·02584		

Depth, 2550 fathoms ; deposit, Red Clay, containing no carbonate of lime, but large numbers of Radiolaria (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At 7.30 A.M. got up steam. At 9 A.M. shortened and furled sails and proceeded under steam. At 9.30 A.M. sounded in 2550 fathoms. At 11.30 A.M. put over trawl. Obtained serial temperatures down to 1600 fathoms. The carbonic acid was determined in the bottom water, and amounted to 52·4 milligrammes per litre. At 4 P.M. commenced heaving in trawl, which came up at 7.15 P.M. containing one small shrimp and a few pumice-stones ; in the cavities of the pumice Mr. Murray recognised some arenaceous Foraminifera. The small oval arenaceous bodies, believed to be the excreta of Echinoderms, which were almost constantly present in the Blue Muds from the partially-enclosed seas stretching between Asia and Australia, in fact in all the deposits since leaving Cape York, were not observed in the deposit from this Station. No cloth was placed in the bottom of the cod of the trawl-net on this occasion, and Mr. Murray attributed the unsuccessful haul largely to this fact. At 7.30 P.M. made all plain sail. Boatswain birds and boobies were seen.