

Temperature of water :—

STATION 301.

Surface, . . . . .	59·5	125 fathoms, . . . . .	48·4
25 fathoms, . . . . .	57·4	150 " . . . . .	46·5
50 " . . . . .	55·2	175 " . . . . .	45·2
75 " . . . . .	52·8	200 " . . . . .	44·2
100 " . . . . .	50·5	300 " . . . . .	42·0

Density at 60° F. :—

Surface, . . . . .	1·02539	100 fathoms, . . . . .	1·02517
25 fathoms, . . . . .	1·02521	200 " . . . . .	1·02521
50 " . . . . .	1·02519	300 " . . . . .	1·02521

Depth (1800 fathoms).

At 11.15 A.M. shortened and furled sails, proceeded under steam, and obtained temperatures down to 300 fathoms. At 1 P.M. completed temperatures and proceeded under steam and sail. *Diomedea exulans*, *Diomedea melanophrys* (?), *Procellaria maxima*, mutton birds, and Thalassidromas were seen.

Cape Tres Montes distant at noon, 684 miles; distance from Station 297, of November 11, 1875, 45 miles due E. Made good 40 miles. Amount of current 13 miles, direction N. 18° E.

Surface Organisms.—The tow-nets gave:—*Globigerina*, *Orbulina*, *Hastigerina*, Acanthometræ and other Radiolaria, Siphonophoræ, Copepods, *Salpæ*, &c.

ORGANISMS FROM SURFACE-NETS.

Station 302 (Sounding 447), Valparaiso to Gulf of Peñas (see Chart 40 and STATION 302. Diagram 21).

December 28, 1875; lat. 42° 43' S., long. 82° 11' W.

Temperature of air at noon, 55°·8; mean for the day, 53°·5.

Temperature of water :—

Surface, . . . . .	55·0	300 fathoms, . . . . .	41·1
25 fathoms, . . . . .	52·5	400 " . . . . .	40·1
50 " . . . . .	49·5	500 " . . . . .	39·1
75 " . . . . .	47·5	600 " . . . . .	38·2
100 " . . . . .	45·8	700 " . . . . .	37·5
125 " . . . . .	44·3	800 " . . . . .	36·9
150 " . . . . .	43·5	900 " . . . . .	36·5
175 " . . . . .	43·0	1000 " . . . . .	36·2
200 " . . . . .	42·5	1100 " . . . . .	36·0
225 " . . . . .	42·1	1200 " . . . . .	35·9
250 " . . . . .	41·8	1300 " . . . . .	35·8
275 " . . . . .	41·5	Bottom, . . . . .	35·6