

Surface Organisms.—The following species of Radiolaria are recorded from the surface at this Station :—

RADIOLARIA (Haeckel, Zool. pt. 40).

Stylatractus disetanius, Haeckel.

Stauracantha orthostaura, Haeckel.

Pristacantha polyodon, Haeckel.

Dodecaspis trizonia, Haeckel.

Hexaplagia collaris, Haeckel.

Lampromitra huxleyi, Haeckel.

Aulodendron australe, Haeckel.

Castanidium bromleyi, Haeckel.

Stations 170 and 170A (Soundings 292 and 293), New Zealand to Tongatabu (see Chart 27 and Diagram 12).

STATIONS 170
AND 170A.

July 14, 1874 ; lat. 29° 55' S., long. 178° 14' W.

Temperature of air at noon, 63°·8 ; mean for the day, 63°·1.

Temperature of water :—

Surface,	65·0	300 fathoms,	49·0
50 fathoms,	62·0	350 "	47·4
100 "	60·5	400 "	45·7
150 "	56·2	450 "	44·2
200 "	53·0	500 "	43·0
250 "	50·8		

Density at 60° F. :—

Surface,	1·02644	300 fathoms,	1·02575
100 fathoms,	1·02635	400 "	1·02573
200 "	1·02611		

At 6.30 A.M. shortened and furled sails, and got up steam. At 7 A.M. sounded in 520 fathoms, deposit Volcanic Mud (Station 170). Put trawl over. At 10 A.M. dingey went away with naturalists for surface collecting. At 10.40 A.M. hove up trawl with numerous specimens. At 11.45 A.M. put trawl over again, and sounded in 630 fathoms, deposit Volcanic Mud, bottom temperature 39°·5 (Station 170A), midway between Macaulay and Raoul or Sunday Islands. Obtained serial temperatures at intervals of 50 fathoms down to 500 fathoms. At 4.30 P.M. hove up trawl containing many specimens, and at 4.35 P.M. proceeded under steam. No albatrosses were noticed to-day, and yesterday only one specimen of *Diomedea exulans* and two specimens of *Diomedea melanophrys* were observed, so that this is probably the boundary of the albatross region. Cape pigeons, small black and white petrels, not bigger than stormy petrels, and large birds