

Surface Organisms.—The following species is recorded from the surface at this Station :—

STATION 191.
ORGANISMS FROM
SURFACE-NETS.

FISHES (Günther, Zool. pt. 78).

Psenes arafurensis, n.sp.

In addition, the following are recorded in the note-books :—*Peridinium* abundant, very few Diatoms, a few Oscillatoriaceæ, *Orbulina*, *Diphyes* and other Siphonophoræ, *Sagitta*, *Saphirina*, *Hyperia*, *Lucifer*, and other Crustacea, small Lamellibranch shells, Heteropods (*Cardiopoda placenta*), several species of Pteropods and larvæ, including *Theceurybia* [= *Halopsyche*], several species of *Salpa*, *Appendicularia*, and small fishes.

Station 191A (Sounding 324), Arrou Islands to Banda (see Charts 31 and 32, and STATION 191A. Diagram 14).

September 24, 1874 ; lat. 5° 26' S., long. 133° 19' E.

Temperature of air at noon, 82°·8 ; mean for the day, 81°·1.

Temperature of water :—

Surface,	81·5	125 fathoms,	63·0
25 fathoms,	80·0	150 „	59·0
50 „	75·5	175 „	54·7
75 „	71·5	200 „	51·5
100 „	67·5	Bottom,	40·7

Density at 60° F. at surface, 1·02579 ; bottom, 1·02581.

Depth, 580 fathoms ; deposit, Green Mud, containing 40·20 per cent. of carbonate of lime (see Murray and Renard, Deep-Sea Deposits Chall. Exp.).

At daylight observed land ahead. Got up steam. At 6 A.M. sounded in 580 fathoms. Obtained serial temperatures at intervals of 25 fathoms down to 200 fathoms. At 7.30 A.M. completed observations and made all plain sail. At 9.30 A.M. observed native proas pulling for ship and coming alongside, with inhabitants of the island of Great Ki. At 11.45 A.M. got up steam, and sounded in 100 fathoms, no bottom. At 12.20 P.M. proceeded under steam. Rounded the north end of Great Ki Island. At 2.30 P.M. shortened and furled sails. Observed Little Ki Island ahead. At 6.30 P.M. stopped and anchored in 7 fathoms off the island. Native boats came alongside with flags flying, and to the sound of the native drum. Later in the evening the natives performed various dances on the upper deck. Exhibited blue lights for their amusement.