the heating influence of the sun. Similarly in the North Pacific from lat. 40° to 30° N. the temperature of the surface of the sea was half a degree lower than that of the air.

"These remarks apply only to the observations made strictly on the open sea. Near land, very large differences were recorded which varied with the season. Thus at Hong Kong, during the latter half of November 1874, the air was 3°·7 colder than the sea, being occasioned by the low temperature of the land at this season and the prevailing northerly wind. On the other hand, at Valparaiso in November and December of the following year the sea was 5°·8 colder than the air during the three weeks the Challenger was off that coast, the difference being caused by the cold oceanic current which sweeps northwards past that coast, and the rapid increase in the temperature of the air which takes place at this time of the year in Chili."

