

RELATIVE FREQUENCY OF THE WINDS AT THE FOLLOWING STATIONS, LYING WITHIN A PARALLEL OF SOUTH LATITUDE ABOUT 10° 35'.

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STATIONS.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Cape of Good Hope. Commission appointed by Government, 1865.....	64	5	1	323	442	353	71	586
Hobart Town, from the last 9 years' Mean, taken from the 25 years' tables, Observatory.....	185·65	68·42	53·35	186·00	79·00	106·66	88·55	338·90
Auckland, New Zealand, from records of the Principal Medical Officer, 1866.)	41	153	17	51	12	325	63	68

In comparing meteorological returns lately received from the above stations with those of Hobart Town, a remarkable difference is apparent in the conduct of the various currents of the atmospheric air, and the anomaly becomes much increased in looking for an authority to confirm its correctness. The parallel of latitude, including the three places, lies between 32° 17' 30" and 42° 52' 13". In this high latitude neither Professor Dove nor L. F. Kaemtz give any testimony of value, their authority seldom reaching further south than the Indian Ocean, or the region of the S.E. trade winds. In the Physical Atlas the belt comprising the above latitude is described as being situated in the N.W. currents of air; the author, however, in quoting Kaemtz (page 55), says that it is admitted the number of observations is not sufficient to warrant the conclusion that the exception given is well founded. Lieutenant, now Captain, Maury gives but little credit to any but westerly winds in the Southern Ocean; they are represented in his plate (8) by arrow-heads, and described by him as prevailing in high latitudes all along the South Seas, in a direction S.W. to N.W., inclined to W. It will appear on the face of the table that these authorities do not correspond with registered facts. At Auckland, the prevailing

currents are S.W., the next N.E. The N.W. and S.E. winds, which are by far the most frequent at Hobart Town, are considerably the least at Auckland. The E. and N.E. winds at the Cape of Good Hope are all but nil; at Auckland they are a maximum, and at Hobart Town a minimum. The S. and S.E. winds at the Cape are greatly in excess of any other, and at Auckland they are recorded the least of any, being for many months without a single register. It is not possible to account for this conflicting statement of the course of winds in the Southern Ocean, as being occasioned wholly by *local* circumstances, which may, and do in a temporary manner, influence some of our surface currents, but not to the extent apparent upon these records. It is, therefore, evident that a greatly extended series of observations must be made before the course of the winds of these Southern Latitudes can be definitely established.