

NEW SOUTH WALES.

Stations.	Altitude in Feet.	South Latitude.	East Longitude.
		Deg. min.	Deg. min.
Clarence River Heads	120	29 28	153 21
Inverell ...	1,953	29 48	159 10
Walgett ...	...	30 2	148 0
Bourke ...	456	30 3	145 58
Armidale ...	3,278	30 34	151 46
Gunnedah ...	925	31 1	150 15
Tamworth ...	1,271	31 7	150 55
Coonabarabran ...	...	31 16	149 18
Port Macquarie ...	53	31 25	152 54
Cobar ...	...	31 32	145 50
Menindie ...	...	32 23	142 26
Newcastle ...	112	32 55	152 50
Bathurst ...	2,200	33 24	149 37
Forbes ...	1,120	33 27	148 5
Mount Victoria ...	3,490	33 36	150 15
Sydney ...	155	33 51	151 12
Wentworth ...	144	34 8	142 0
Wollongong ...	67	34 25	150 56
Hay ...	...	34 30	144 56
Goulburn ...	2,129	34 45	149 45
Wagga Wagga ...	739	35 8	147 24
Cape St. George ...	175	35 12	150 45
Milton ...	...	35 14	150 20
Deniliquin ...	320	35 32	145 2
Kiandra ...	4,640	35 52	148 32
Moruya ...	50	35 53	150 6
Albury ...	572	36 6	147 0
Cooma ...	2,637	36 12	149 9
Eden ...	107	37 0	149 59

SOUTH AUSTRALIA.

Stations.	Latitude.	Longitude.	Height above M.S.L.
	Deg. min.	Deg. min.	Feet.
Port Darwin ...	12 28	130 51	70
Daly Waters ...	16 18	133 25	750
Alice Springs ...	23 41	133 37	2,100
Port Augusta ...	32 30	137 45	10
Adelaide ...	34 57	138 35	140
Eucla ...	31 45	128 58	7
Streaky Bay ...	32 50	134 12	40
Cape Borda ...	35 45	136 35	506
Robe ...	37 10	139 42	19
Mount Gambier ...	37 50	140 50	130
Cape Northumberland..	38 5	140 40	117
Strathalbyn...	35 16	138 55	220
Kapunda ...	34 32	138 57	800

VICTORIA.

Stations.	Latitude.	Longitude.	Height above M.S.L.
	Deg. min.	Deg. min.	Feet.
Echuca ...	36 7	144 48	314
Sandhurst ...	36 47	144 17	758
Omeo ...	37 6	147 36	2,108
Ararat ...	37 18	142 58	1,050
Upper Macedon ...	37 23	144 35	3,000
Ballarat ...	37 34	143 49	1,438
Gabo Island ...	37 35	149 55	50
Melbourne Observatory	37 50	144 59	91
Lakes entrance ...	37 52	148 1	...
Portland ...	38 20	141 35	37
Cape Schanck ...	38 28	144 53	277
Port Albert...	38 39	146 41	10
Cape Otway ...	38 54	143 31	270
Wilson's Promontory...	39 8	146 26	300

APPENDIX No. 2.—(Vide paragraph 154.)

The following extract from the Adelaide Meteorological Report for the month of May, 1879, was put in by Mr. Todd, and affords evidence of the easterly progressive motion of atmospheric disturbances:—

The mean barometer was about 0·06 inch to 0·07 below the average of the previous twenty-two years. It ranged high—or above 30—during the first half of the month, or until the 17th, attaining a maximum (30·485) at Adelaide on the 9th; and was below 30 from the 17th to the 29th, reaching a minimum (29·482) on the evening of the 20th, or 26·358 at Cape Borda on the morning of the 21st. The high pressure prevailed over the centre of Australia till the 17th, and the records of other colonies, as well as ships' logs, show that this area of high pressure extended not only over the whole of Australia, but far to the westward in the Indian Ocean, probably even to longitude 70° E., as vessels from the westward report high barometer, one stating that it stood as high as 30·400 for fourteen days during the first half of May. It was broken by a depression between the 10th and 12th at Eucla, where however, it was only slight, not going below 30·1; but more marked to the eastward, at Cape Northumberland, where the barometer fell from 30·45 on the 9th to 29·78 at midnight on the 12th and 13th; the depression was also slightly felt at Alice Springs, in the centre of the continent. The prominent barometrical feature of the month was the large depression, which commenced generally on the 15th, setting in from the westward. Thus Perth, on the west coast, reports a fall of about one-quarter of an inch between the 12th and 13th, but at Cape Borda the downward tendency did not commence till noon of the 15th, and Tasmania on the 16th. By ships' reports, the centre of this depression appears to have passed about 200 miles south of Cape Leuwin on the 19th. The minimum pressure at Perth occurred also on the 19th, 29·381; Eucla, 29·34, at 3 p.m. on the 20th; Cape Borda, 29·358, at 3 a.m. on the 21st; Cape Northumberland, 29·401, at 3 p.m. on the same day; and Hobart, 29·05, about midnight on 21st and 22nd. It reached New Zealand on the 25th, the barometer at Auckland falling to 29·497; Wellington, 29·290; and Dunedin, 29·293.

On the south coast this depression was preceded by rains between the 13th and 14th, the wind being from the S. along the coast as far as Cape Otway, and S.E. and southerly with high seas to Cape Howe, to the north of which along the east coast the winds were W and S.W., with a relatively low barometer, being four-tenths lower there than at Kangaroo Island. On the 15th the S.E. winds reached along the south coast from Wilson's Promontory to Kangaroo Island, with clouded skies, whilst at Eucla it was N.N.E. and overcast, under the influence of the advancing depression. On the east coast the winds were S. and S.E., the weather being generally clouded from Sydney round to Eucla, the barometer showing a rise of two-tenths at Cape Howe. On the 16th the wind was still from N.N.E. at Eucla, with falling barometer, but S.E. and easterly along south coast from Wilson's Promontory to Cape Borda, and southerly with heavy seas and rain on east coast; barometer steady then at Eucla. On the 17th wind still N.N.E. at Eucla, E. and S.E. along south coast from Cape Howe to Kangaroo Island, and southerly with high seas and falling barometer on east coast, accompanied with rain. On the 19th the wind was from N and N.E. in South Australia, and along the south coast to Melbourne; but on the east coast the general direction was westerly, with falling barometer and clear skies. On the 20th the wind was N.N.E. from Eucla throughout South Australia to Cape Otway, and westerly on east coast, the sky being clouded in South Australia and Victoria, also in the interior of New South Wales and along east coast. The north winds are maintained on the south coast, veering to the N.W. on the 22nd. Westerly through Bass's Straits and east coast on the 22nd and 23rd.

In connection with the extended area of high pressure prevailing during the first half of the month, and the subsequent large depression, the progress of which we have just traced, it may be well to call attention to a cyclonic disturbance to the west and south of the Mauritius, reported by Mr. Meldrum, as it seems not improbable that the disturbance just referred to here originated in the Indian Ocean, to the north of that island.

The following is extracted from the Monthly Notices of the Meteorological Society, Mauritius, 17th June, 1879, page 105:—

“Barometric depression of 25th April to 10th May, 1879: The mean height of the barometer on the 25th April was 30·103 inches, from which it gradually fell to 30·043 on the 29th. On the 30th April and 1st May it recovered a little, but in the evening of the 1st it began to go down again, and continued falling till the 5th, on which day its mean height was 29·895. It then began to rise, and on the 10th was at 30·033. The highest reading (corrected and reduced) was 0·146 at 9 a.m. on the 25th April, and the lowest, 29·862, at 3 p.m. on the 4th May.