

I have also those kept at Port Macquarie, to the north, and at Port Philip, to the south; the following are some of the results from them.

During the winter months, June, July, August, and September, on the eastern coast, they have the winds from the south to the west quarter, blowing strong and cold, not unlike our northeast winds, accompanied by rain. The quantity of rain which fell in the winter of 1840 was 35·25 inches; in 1841, 45·00 inches. The temperature during this season is from 40° to 78°, mean temperature, 66°. During the summer months, October, November, December, January, and February, easterly winds prevail, and the temperature varies from 56° to 90°; the mean temperature being about 78°. On the south coast, as appears from the tables kept at Port Philip, the winds pursue a reversed order; for during the summer months they are found to prevail from the southward and westward, whilst in winter they come from the eastward. The mean standing of the barometer seems to be higher at Port Philip than at Port Jackson and Port Macquarie; its range is within 0·5 in., and at the two latter places it seldom reached 30·000 in. During our stay at Sydney, the range of the barometer was generally higher than this. The temperature of the winter months varies from 35° to 65°: the mean is about 47°; and that of the summer months from 50° to 98°, the mean being 68°.

The above observations relative to the winds on the south and eastern coast, will serve to explain some of the difficulties that have resulted from vessels taking the southern route round New Holland, to proceed west. These, during some seasons of the year, have met constant head winds and storms. It would seem that the most feasible time to make the southern passage to the westward, is during the winter months. The probable cause of this difference is the immense vacuum which is formed on the vast plains in the interior of New Holland during the summer, that is supplied by these southerly winds. But it is not altogether certain that these winds prevail at any distance from the land. They were described to me rather as regular breezes, prevailing during the day, moderating towards night, and succeeded by light land-winds until the following morning. The intermediate months between the summer and winter, or those about the equinoxes, are attended with variable winds and uncertain weather, but from information I received, they do not appear to suffer here from very violent gales during these seasons. Severe gales are, however, experienced at these seasons at New Zealand, in the same latitude, of which I shall speak hereafter.

Our own results for the time we stayed in Australia will be found under their appropriate head. At Sydney I found a great variety of