

directions; the blasts were very severe at intervals of ten minutes. At 8 A. M., a sudden shift of wind took place to the southwest; after which it moderated, and at noon the weather became clear, the wind still continuing from the southwest, while the upper stratum of clouds was now seen to pass over from the northeast. The following day the wind was in the same direction, with fine clear weather. Mr. Cunningham observes, that the houses were generally blown down after the change of wind occurred.

The natives relate the occurrence of a similar gale, which did great damage, about nine years before, destroying all the plantations; and, from their account, its changes took place in a similar manner, from the northeast to the southwest.

From the great fall of the barometer, and the fury and sudden change of the gale of the 16th, its centre must have passed over Apia.

Although these severe hurricanes do not happen very frequently at the Samoan Islands, yet, from reports that I received, I am disposed to believe that they occur very frequently between them and the Friendly Islands, where scarcely a season passes without some one of the islands suffering from one of these awful calamities.

It would therefore be advisable for our whale-ships to avoid cruising in the neighbourhood of these groups, during the season of the year that these storms are liable to occur, viz., from the middle of December to the end of March. Some ships have been almost made complete wrecks of, that were so unfortunate as to be overtaken by them.

At the Samoan Islands, curious atmospheric phenomena are not uncommon. I am indebted to the same source for several notices of halos, and of one in particular, which happened at Fasetootai, about twenty miles to the westward of Apia, on the 1st March, 1840. The day was very clear, and, till near noon, no clouds were seen; the sky was azure blue in the zenith, deepening into dark purple, or nearly black, on the horizon. At thirty minutes past noon, there was a white ring around the sun, of dazzling brightness, of five degrees width; beyond it, a ring of white hazy appearance, of the radius of fifteen degrees, a deep-blue colour still continuing between the sun and halo. At 1 P. M., prismatic colours spread over the whole, and were very bright. At two o'clock, they had heavy squalls at Fasetootai, with the wind at east-northeast. This phenomenon appears to have been local, for it was not observed at Apia, only twenty miles distant. The wind, however, during its continuance, was found to have changed to northwest-by-north, attended with heavy rain, and bad weather continued for a fortnight. Both Mr. Cunningham and