

The other view that the phonolite had burst through the lava appears to be untenable in view of the facts above stated.

Of the similar hills in Christmas Harbour, Table Mountain consists of columnar basalt with large cavities filled with olivine. The columns starting normally to the cylindrical surface of the enclosing rock curve upwards, and, unlike the phonolite, are continued well into the mass of the hill; the top of this hill is covered with loose fragments of basaltic columns. Specimens were not obtained from the junction of the columnar with the bedded rock; in fact there appeared to have been next to no fusion between the two. The corresponding hill on the south side of the harbour is formed entirely of volcanic conglomerate, intersected here and there by dikes, some of which show on the outside the obsidian-like bands produced by rapid cooling, which were observed in considerable abundance at Tristan da Cunha.

The rocks collected at Kerguelen were felspathic basalt, dolerite, anamesite, augite-andesite, phonolite, nephelinic rocks; trachyte, limburgite and palagonitic tufa.

The weather at Kerguelen is cold and boisterous, the prevailing wind being northwest (W. by N. true) at all seasons of the year, but this wind is often deflected on the lee side by the steep valleys and fjords which intersect the island; usually taking the direction of the valleys, which act as funnels, the wind descends in heavy gusts or willy-waughts, raising large masses of spoundrift. So violent are these gusts that Sir James Ross observes he was frequently obliged to throw himself on the ground, and the man whose duty it was to register the tides was actually driven into the water and nearly drowned, whilst the vessels moored at the head of Christmas Harbour were sometimes laid over on their beam ends, and the sheet anchor had always to be kept in readiness. On one occasion the whole body of his astronomical observatory was moved nearly a foot, and had not the lower framework been sunk to a good depth it would probably have been blown into the sea. The astronomers who visited Kerguelen for the purpose of observing the transit of Venus also complained of the violence of these squalls, which on one occasion tore a heavy shutter off one of the observing huts and carried it to a distance of more than 30 yards, and two of the "Volage's" boats were capsized when under sail. The westerly wind meeting the island is divided, curving round Capes François and Challenger, so that on the lee side the wind has a northerly tendency north of Mount Campbell and a southerly southward of that mountain.

Vessels proceeding from Royal Sound towards Christmas Harbour with a S.W. wind will probably meet with a N.N.W. wind off Cape Digby, or bound to Royal Sound with a N.W. wind after rounding Cape Digby will meet the wind at S.W.

During the continuance of the northwest wind the weather is squally with passing showers of rain or snow, the sky cloudy, but not so cloudy as altogether to exclude the sun, and the tops of the hills are frequently cloud-capped. On the western or weather side of