

that the general climate should not experience any sensible change in the course of a few thousand years ; because that period is insufficient to affect the leading features of the physical geography of the globe.

Notwithstanding the apparent uncertainty of the seasons, it is found that the mean temperature of particular localities is very constant, when observations made for a sufficient series of years are compared.

Yet there must be exceptions to this rule ; and even the labours of man have, by the drainage of lakes and marshes, and the felling of extensive forests, caused such changes in the atmosphere as greatly to raise our conception of the more important influence of those forces to which, in certain latitudes, even the existence of land or water, hill or valley, lake or sea, must be ascribed. If we possessed accurate information of the amount of *local* fluctuation in climate in the course of twenty centuries, it would often, undoubtedly, be considerable. Certain tracts, for example, on the coast of Holland and of England consisted of cultivated land in the time of the Romans, which the sea, by gradual encroachments, has at length occupied. Here, at least, a slight alteration has been effected ; for neither the distribution of heat in the different seasons, nor the mean annual temperature of the atmosphere investing the sea, is precisely the same as that which rests upon the land.

In those countries, also, where earthquakes and volcanos are in full activity, a much shorter period may produce a sensible variation. The climate of the great table-land of Malpais in Mexico, must differ materially from that which prevailed before the middle of the last century ; for, since that time, six mountains, the highest of them rising sixteen hundred feet above the plateau, have been thrown up by volcanic eruptions. It is by the repetition of an indefinite number of such local revolutions, and by slow movements extending simultaneously over wider areas, as will be afterwards shown, that a general change of climate may finally be brought about.