

their number has risen to two thousand. Whenever one is observed, which has the diameter of Sirius or of Jupiter, we are sure of seeing the brilliant meteor succeeded by a great number of smaller ones. If the falling stars be very numerous during one night, it is probable that they will continue equally so during several weeks. It would seem, that in the higher regions of the atmosphere, near that extreme limit where the centrifugal force is balanced by gravity, there exists at regular periods a particular disposition for the production of bolides, falling-stars, and the Aurora Borealis.* Does the periodical recurrence of this great phenomenon depend upon the state of the atmosphere? or upon something which the atmosphere receives from without, while the earth advances in the ecliptic? Of all this we are still as ignorant as mankind were in the days of Anaxagoras.

With respect to the falling-stars themselves, it appears to me, from my own experience, that they are more frequent in the equinoctial regions than in the temperate zone; and more frequent above continents, and near certain coasts, than in the middle of the ocean. Do the radiation of the surface of the globe, and the electric charge of the lower regions of the atmosphere (which varies according to the nature of the soil and the positions of the continents and seas), exert their influence as far as those heights where eternal winter reigns? The total absence of even the smallest clouds, at certain seasons, or above some barren plains destitute of vegetation, seems to prove that this influence can be felt as far as five or six thousand toises high.

A phenomenon analogous to that which appeared on the 12th of November at Cumana, was observed thirty years previously on the table-land of the Andes, in a country studded with volcanoes. In the city of Quito there was seen in one part of the sky, above the volcano of Cayamba, such great numbers of falling-stars, that the mountain was thought to be in flames. This singular sight lasted more than an hour. The people assembled in the plain of Exido,

* Ritter, like several others, makes a distinction between bolides mingled with falling-stars and those luminous meteors which, enveloped in vapour and smoke, explode with great noise, and let fall (chiefly in the day-time) aërolites. The latter certainly do not belong to our atmosphere.