

90° to 83°. The heat of the day was from 28° to 32°, which for this part of the torrid zone is very considerable. Sometimes, in the midst of the night, the vapours disappeared in an instant; and at the moment when I had arranged my instruments, clouds of brilliant whiteness collected at the zenith, and extended towards the horizon. On the 18th of October these clouds were so remarkably transparent, that they did not hide stars even of the fourth magnitude. I could distinguish so perfectly the spots of the moon, that it might have been supposed its disk was before the clouds. The latter were at a prodigious height, disposed in bands, and at equal distances, as from the effect of electric repulsions:—these small masses of vapour, similar to those I saw above my head on the ridge of the highest Andes, are, in several languages, designated by the name of *sheep*. When the reddish vapour spread lightly over the sky, the great stars, which in general, at Cumana, scarcely scintillate below 20° or 25°, did not retain even at the zenith, their steady and planetary light. They scintillated at all altitudes, as after a heavy storm of rain.* It was curious that the vapour did not affect the hygrometer at the surface of the earth. I remained a part of the night seated in a balcony, from which I had a view of a great part of the horizon. In every climate I feel a peculiar interest in fixing my eyes, when the sky is serene, on some great constellation, and seeing groups of vesicular vapours appear and augment, as around a central nucleus, then, disappearing, form themselves anew.

After the 28th of October, the reddish mist became thicker than it had previously been. The heat of the nights

* I have not observed any direct relation between the scintillation of the stars and the dryness of that part of the atmosphere open to our researches. I have often seen at Cumana a great scintillation of the stars of Orion and Sagittarius, when Saussure's hygrometer was at 85°. At other times, these same stars, considerably elevated above the horizon, emitted a steady and planetary light, the hygrometer being at 90° or 93°. Probably it is not the quantity of vapour, but the manner in which it is diffused, and more or less dissolved in the air, which determines the scintillation. The latter is invariably attended with a coloration of light. It is remarkable enough, that, in northern countries, at a time when the atmosphere appears perfectly dry, the scintillation is most decided in very cold weather.