

the last, which perhaps had never before been employed, might be rendered nearly exact, by adding a scale of equal parts to the moveable frame of the telescope of the sextant. It was by taking the mean of a great number of valuations, that I saw the relative intensity of the light of the great stars decrease in the following manner: Sirius, Canopus, α Centauri, Acherner, β Centauri, Fomalhaut, Rigel, Procyon, Beteiguese, ϵ of the Great Dog, δ of the Great Dog, α of the Crane, α of the Peacock. These experiments will become more interesting when travellers shall have determined anew, at intervals of forty or fifty years, some of those changes which the celestial bodies seem to undergo, either at their surface or with respect to their distances from our planetary system.

After having made astronomical observations with the same instruments, in our northern climates and in the torrid zone, we are surprised at the effect produced in the latter (by the transparency of the air, and the less extinction of light), on the clearness with which the double stars, the satellites of Jupiter, or certain nebulae, present themselves. Beneath a sky equally serene in appearance, it would seem as if more perfect instruments were employed; so much more distinct and well defined do the objects appear between the tropics. It cannot be doubted, that at the period when equinoctial America shall become the centre of extensive civilization, physical astronomy will make immense improvements, in proportion as the skies will be explored with excellent glasses, in the dry and hot climates of Cumana, Coro, and the island of Margareta. I do not here mention the ridge of the Cordilleras, because, with the exception of some high and nearly barren plains in Mexico and Peru, the very elevated table-lands, in which the barometric pressure is from ten to twelve inches less than at the level of the sea, have a misty and extremely variable climate. The extreme purity of the atmosphere which constantly prevails in the low regions during the dry season, counterbalances the elevation of site and the rarity of the air on the table-lands. The elevated strata of the atmosphere, when they envelope the ridges of mountains, undergo rapid changes in their transparency.

The night of the 11th of November was cool and ex-