

eighteenth century mariners were little interested by anything not having immediate relation to the course of a ship, and the demands of navigation.

However brilliant the zodiacal light in the dry valley of Tuy, I have observed it more beautiful still at the back of the Cordilleras of Mexico, on the banks of the lake of Tezcuco, eleven hundred and sixty toises above the surface of the ocean. In the month of January, 1804, the light rose sometimes to more than 60° above the horizon. The Milky Way appeared to grow pale compared with the brilliancy of the zodiacal light; and if small, bluish, scattered clouds were accumulated toward the west, it seemed as if the moon were about to rise.

I must here relate another very singular fact. On the 18th of January, and the 15th of February, 1800, the intensity of the zodiacal light changed in a very perceptible manner, at intervals of two or three minutes. Sometimes it was very faint, at others it surpassed the brilliancy of the Milky Way in Sagittarius. The changes took place in the whole pyramid, especially toward the interior, far from the edges. During these variations of the zodiacal light, the hygrometer indicated considerable dryness. The stars of the fourth and fifth magnitude appeared constantly to the naked eye with the same degree of light. No stream of vapour was visible: nothing seemed to alter the transparency of the atmosphere. In other years I saw the zodiacal light augment in the southern hemisphere half an hour before its disappearance. Cassini admitted "that the zodiacal light was feebler in certain years, and then returned to its former brilliancy." He thought that these slow changes were connected with "the same emanations which render the appearance of spots and faculæ periodical on the solar disk." But this excellent observer does not mention those changes of intensity in the zodiacal light which I have several times remarked within the tropics, in the space of a few minutes. Mairan asserts, that in France it is common enough to see the zodiacal light, in the months of February and March, mingling with a kind of Aurora Borealis, which he calls 'undecided,' and the nebulous matter of which spreads itself all around the horizon, or appears toward the west. I very much doubt, whether, in the observations I