

tained  $90^\circ$ . The disappearance of one of those lunar halos was followed by the formation of a great black cloud, from which fell some drops of rain; but the sky soon resumed its fixed serenity, and we saw a long series of falling-stars and bolides, which moved in one direction, and contrary to that of the wind of the lower strata.

On the 23rd March, a comparison of the reckoning with the chronometric longitude, indicated the force of a current bearing towards W.S.W. Its swiftness, in the parallel of  $17^\circ$ , was twenty to twenty-two miles in twenty-four hours. I found the temperature of the sea somewhat diminished; in latitude  $12^\circ 35'$ , it was only  $25.9^\circ$  (air  $27.0^\circ$ ). During the whole day the firmament exhibited a spectacle which was thought remarkable even by the sailors, and which I had observed on a previous occasion (June 13th, 1799). There was a total absence of clouds, even of those light vapours called 'dry;' yet the sun coloured, with a fine rosy tint, the air and the horizon of the sea. Towards night, the sea was covered with great bluish clouds; and when they disappeared, we saw, at an immense height, fleecy clouds in regular spaces, and ranged in convergent bands. Their direction was from N.N.W. to S.S.E., or more exactly, N.  $20^\circ$  W., consequently contrary to the direction of the magnetic meridian.

On the 24th March, we entered the gulf which is bounded on the east by the coast of Santa Marta, and on the west by Costa Rica; for the mouth of the Magdalena and that of the Rio San Juan de Nicaragua, are on the same parallel, nearly  $11^\circ$  lat. The proximity of the Pacific Ocean, the configuration of the neighbouring lands, the smallness of the isthmus of Panama, the lowering of the soil between the gulf of Papagayo and the port of San Juan de Nicaragua, the vicinity of the snowy mountains of Santa Marta, and many other circumstances too numerous to mention, combine to create a peculiar climate in this gulf. The atmosphere is agitated by violent gales, known in winter by the name of the *brizotes de Santa Marta*. When the wind abates, the currents bear to N.E., and the conflict between the slight breezes (from E. and N.E.) and moon, of which the rays were  $22\frac{1}{2}^\circ$ ;  $22^\circ 52'$ ;  $38^\circ$ ;  $46^\circ$ . (North-west Passage, 1821.)