

The astronomical observations made in the night of the 25th of April did not give me the latitude with satisfactory precision. The latitude of the mission of San Fernando appeared to me to be  $4^{\circ} 2' 48''$ . In Father Caulin's map, founded on the observations of Solano made in 1756, it is  $4^{\circ} 1'$ . This agreement proves the justness of a result which, however, I could only deduce from altitudes considerably distant from the meridian. A good observation of the stars at Guapasoso gave me  $4^{\circ} 2'$  for San Fernando de Atabapo. I was able to fix the longitude with much more precision in my way to the Rio Negro, and in returning from that river. It is  $70^{\circ} 30' 46''$  (or  $4^{\circ} 0'$  west of the meridian of Cumana).

On the 26th of April we advanced only two or three leagues, and passed the night on a rock near the Indian plantations or *conucos* of Guapasoso. The river losing itself by its inundations in the forests, and its real banks being unseen, the traveller can venture to land only where a rock or a small table-land rises above the water. The granite of those countries, owing to the position of the thin laminæ of black mica, sometimes resembles graphic granite; but most frequently (and this determines the age of its formation) it passes into a real gneiss. Its beds, very regularly stratified, run from south-west to north-east, as in the Cordillera on the shore of Caracas. The dip of the granite-gneiss is  $70^{\circ}$  north-west. It is traversed by an infinite number of veins of quartz, which are singularly transparent, and three or four, and sometimes fifteen inches thick. I found no cavity (druse), no crystallized substance, not even rock-crystal; and no trace of pyrites, or any other metallic substance. I enter into these particulars on account of the chimerical ideas that have been spread ever since the sixteenth century, after the voyages of Berreo and Raleigh,\* "on the immense riches of the great and fine empire of Guiana."

The river Atabapo presents throughout a peculiar aspect; you see nothing of its real banks formed by flat lands eight

\* Raleigh's work bears the high sounding title of "The Discovery of the large, rich, and beautiful Empire of Guiana." (*Lond.* 1596.) See also Raleghi admiranda Descriptio Regni Guianæ, auri abundantissimi (*Hondius, Noribergæ*, 1599.)