with the Rio Guaviare, the sources of the Orinoco were sought towards the south-west, on the eastern back of the Andes, the risings of this river were attributed to a periodical melting of the snows. This reasoning was as far from the truth as that in which the Nile was formerly supposed to be swelled by the waters of the snows of Abyssinia. The Cordilleras of New Grenada, near which the western tributary streams of the Orinoco, the Guaviare, the Meta, and the Apure, take their rise, enter no more into the limit of perpetual snows, with the sole exception of the Paramos of Chita and Mucuchies, than the Alps of Abyssinia. Snowy mountains are much more rare in the torrid zone than is generally admitted; and the melting of the snows, which is not copious there at any season, does not at all increase at the time of the inundations of the Orinoco.

The cause of the periodical swellings of the Orinoco acts equally on all the rivers that take rise in the torrid zone. After the vernal equinox, the cessation of the breezes announces the season of rains. The increase of the rivers (which may be considered as natural pluviometers), is in proportion to the quantity of water that falls in the different regions. This quantity, in the centre of the forests of the Upper Orinoco and the Rio Negro, appeared to me to exceed 90 or 100 inches annually. Such of the natives, therefore, as have lived beneath the misty sky of the Esmeralda and the Atabapo, know, without the smallest notion of natural philosophy, what Eudoxus and Eratosthenes knew heretofore,* that the inundations of the great rivers are owing solely to the equatorial rains. The following is the usual progress of the oscillations of the Orinoco. Immediately after the vernal equinox (the people say on the 25th of March) the commencement of the rising is perceived. It is at first only an inch in twenty-four hours; sometimes the river again sinks in April; it attains its maximum in July; remains at the same level from the end of July till the 25th of August; and then decreases progressively, but more slowly than it increased. It is at its minimum in January and February. In both worlds the rivers of the northern torrid zone attain the greatest height nearly at the same period. The Ganges, the Niger, and the Gambia, reach the

* *Strabo*, lib. 17, p 789. *Diod. Sic.*, lib. 1, c. 5.