

of several thousand square leagues receives. However unequal may be the quantity of rain that falls during several successive years, in such or such a valley, the swellings of rivers that have a very long course, are little affected by these local variations. The swellings represent the average of the humidity that reigns in the whole basin; they follow annually the same progression, because their commencement and their duration depend also on the mean of the periods, apparently extremely variable, of the beginning and end of the rains in the different latitudes, through which the principal trunk and its various tributary streams flow. Hence it follows, that the periodical oscillations of rivers are, like the equality of temperature of caverns and springs, a sensible indication of the regular distribution of humidity and heat, which takes place from year to year on a considerable extent of land. They strike the imagination of the vulgar; as order everywhere astonishes, when we cannot easily ascend to first causes. Rivers that belong entirely to the torrid zone display in their periodical movements that wonderful regularity which is peculiar to a region where the same wind brings almost always strata of air of the same temperature; and where the change of the sun in its declination causes every year at the same period a rupture of equilibrium in the electric intensity, in the cessation of the breezes, and the commencement of the season of rains. The Orinoco, the Rio Magdalena, and the Congo or Zaire, are the only great rivers of the equinoctial region of the globe, which, rising near the equator, have their mouths in a much higher latitude, though still within the tropics. The Nile and the Rio de la Plata direct their course, in the two opposite hemispheres, from the torrid zone towards the temperate.*

As long as, confounding the Rio Paragua of Esmeralda

* In Asia, the Ganges, the Burrampooter, and the majestic rivers of Indo-China, direct their course *towards the equator*. The former flow from the temperate to the torrid zone. This circumstance of courses pursuing opposite directions (*towards the equator, and towards the temperate climates*) has an influence on the period and the height of the risings, on the nature and variety of the productions on the banks of the rivers, on the less or greater activity of trade; and, I may add, from what we know of the nations of Egypt, Meroë, and India, on the progress of civilization along the valleys of the rivers.