

line, between two great basins of rivers, that is crossed by the equator. The river Amazon, according to the information which I obtained on its banks, is much less regular in the periods of its oscillations than the Orinoco; it generally begins, however, to increase in December, and attains its maximum of height in March.* It sinks from the month of May, and is at its minimum of height in the months of July and August, at the time when the Lower Orinoco inundates all the surrounding land. As no river of America can cross the equator from south to north, on account of the general configuration of the ground, the risings of the Orinoco have an influence on the Amazon; but those of the Amazon do not alter the progress of the oscillations of the Orinoco. It results from these data, that in the two basins of the Amazon and the Orinoco, the concave and convex summits of the curve of progressive increase and decrease correspond very regularly with each other, since they exhibit the difference of six months, which results from the situation of the rivers in opposite hemispheres. The commencement of the risings only is less tardy in the Orinoco. This river increases sensibly as soon as the sun has crossed the equator; in the Amazon, on the contrary, the risings do not commence till two months after the equinox. It is known that in the forests north of the line the rains are earlier than in the less woody plains of the southern torrid zone. To this local cause is joined another, which acts perhaps equally on the tardy swellings of the Nile. The Amazon receives a great part of its waters from the Cordillera of the Andes, where the seasons, as everywhere among mountains, follow a peculiar type, most frequently opposite to that of the low regions.

The law of the increase and decrease of the Orinoco is more difficult to determine with respect to space, or to the magnitude of the oscillations, than with regard to time, or the period of the maxima and minima. Having been able to measure but imperfectly the risings of the river, I report, not without hesitation, estimates that differ much from each other.† Foreign pilots admit ninety feet for the ordinary

* Nearly seventy or eighty days after our winter solstice, which is the summer solstice of the southern hemisphere.

† *Tuckey, Maritime Geogr.*, vol. iv, p. 309. *Hippisley, Exped. to*