

the season of drought, from December to March, had been constantly, in the day-time, from 1.7 to 2 lines, becomes extremely variable from the month of March. It appears *nil* during whole days; and then for some hours the pith-balls diverge three or four lines. The atmosphere, which is generally, in the torrid as well as in the temperate zone, in a state of positive electricity, passes alternately, for eight or ten minutes, to the negative state. The season of rains is that of storms; and yet a great number of experiments made during three years, prove to me that it is precisely in this season of storms we find the smallest degree of electric tension in the lower regions of the atmosphere. Are storms the effect of this unequal charge of the different superincumbent strata of air? What prevents the electricity from descending towards the earth, in air which becomes more humid after the month of March? The electricity at this period, instead of being diffused throughout the whole atmosphere, appears accumulated on the exterior envelope, at the surface of the clouds. According to M. Gay-Lussac it is the formation of the cloud itself that carries the fluid toward its surface. The storm rises in the plains two hours after the sun has passed the meridian; consequently a short time after the moment of the maximum of diurnal heat within the tropics. It is extremely rare in the islands to hear thunder during the night, or in the morning. Storms at night are peculiar to certain valleys of rivers, having a peculiar climate.

What then are the causes of this rupture of the equilibrium in the electric tension of the air? of this continual condensation of the vapours into water? of this interruption of the breezes? of this commencement and duration of the rainy seasons? I doubt whether electricity have any influence on the formation of vapours. It is rather the formation of these vapours that augments and modifies the electrical tension. North and south of the equator, storms or great explosions take place at the same time in the temperate and in the equinoctial zone. Is there an action propagated through the great aërial ocean from the temperate zone towards the tropics? How can it be conceived, that in that zone where the sun rises constantly to so great a height above the horizon, its passage through