

our era, and could not have been made either much before or much after this interval of time. (1)

Certainly, this result would be very striking if the length of the year of Sirius had been directly decided by observations made on Sirius itself. But experimental astronomers affirm, that it is impossible that the heliacal rising of a star could serve as the basis of these exact observations on such a subject, particularly in a climate where *the circumference of the horizon is always so much loaded with vapours, that on fine nights, stars of the second and third magnitude are never seen within a few degrees of the edge of the horizon, and that the sun itself, at its rising and setting, is entirely obscured.*(2) They maintain, that if the length of the year had not been discovered by some other means, they would have been mistaken in one or two days. (3) They do not doubt then that this duration of three hundred and sixty-five days and a quarter, is that of the tropical year, inaccurately determined by the observation of the shadow, or by that of the point where the sun rose daily, and ignorantly identified with the heliacal year of Sirius; so that it would be mere chance which determined with so much accuracy the duration of the latter for the epoch in question. (4)

(1) See the great work on Egypt. Antiq. Mem. v. i. p. 803; the ingenious Memoir of M. Fourier, entitled, 'Recherches sur les Sciences et le Gouvernement de l'Egypte.'

(2) These are the words of the late M. Nouet, astronomer to the expedition to Egypt. See Volney's 'Recherches Nouvelles sur l'Histoire Ancienne,' v. iii.

(3) Delambre Abrégé d'Astronomie, p. 217, and in his note on the Paranatellons. Hist. de l'Astr. du Moyen Age, p. 52.

(4) Deambre's Report on M. de Paravey's Memoir concerning the Sphere, in the 8th vol. of the New Annals of Voyages.