As the value of ε_1 does not change by 0″.6 from one epoch to another, we may, without appreciable error, use ε_0 for ε_1 in the formulæ (*b*) and (*c*). To use these equations, we first obtain k and Π_1 from the secular motion of the ecliptic, while n is computed for any epoch from the formula (*a*). We then easily develop the values of ε_1 and ψ in powers of the time by the equations (*c*). The values of n have no reference to any special coordinates. From the table of § 100 it will be seen that we may put

$$n = 2004''.79 - 2''.13\,\tau'$$

τ' being counted from 1850.

To find the value of Π_1 in each case, we remark that the instantaneous values of L given in § 100 show that the instantaneous node, or intersections of two consecutive ecliptics, moves with so near an approach to uniformity that we may take for the actual node between the ecliptics of any two epochs τ_1 and τ_2 the mean of the instantaneous nodes for those two epochs. For example, let it be required to find the value of Π_1 for the node of the ecliptic of 2100 on that of 1850. We have

For 2100	L = 175° 46′.63
For 1850, referred to eq. of 2100 .	L = 176 59.13
Concluded value of Π_1	Π_1 = 176 22.9

As the basis of our work we have computed the required quantities for the zero ecliptics of 1600, 1850, and 2100, respectively. The values of k and Π_1 for the ecliptics of two hundred and fifty years before and after these epochs are as follows:

Zero epoch.	− 250 Y		+ 250 Y	
	k	Π_1	k	Π_1
	″	° ′	″	° ′
1600	−118.48	168 20.0	+118.07	174 5.9
1850	−118.07	170 36.7	+117.64	176 22.9
2100	−117.64	172 53.4	+117.23	178 39.9