$$\tan\alpha = \frac{\Delta_{max}}{EP}$$

$$d = EP\tan\alpha_{max}$$

$$\begin{cases} t = \frac{JD-2451545}{365.25} \\ x = -1 + 2\frac{JD-626150.5}{2185000} \end{cases} \Rightarrow \begin{cases} JD = 365.25t + 2451545 \\ JD = \frac{2185000(x+1)}{2} + 626150.5 \end{cases}$$

$$\Rightarrow x = \frac{2\times365.25}{2185000}t + \frac{2}{2185000}(2451545 - 626150.5) - 1$$

$$a = \frac{2\times365.25}{2185000}$$

$$b = \frac{2}{2185000}(2451545 - 626150.5) - 1$$

$$X = A_0 + A_1 x + \sum_i C_i \sin(F_i t + P_i) + \sum_j C_j x \sin(F_j t + P_j) + \sum_k C_k x^2 \sin(F_k t + P_k)$$

$$X = A_0 + A_1(at + b) + \sum_i C_i \sin(F_i t + P_i) + \sum_j C_j (at + b) \sin(F_j t + P_j) + \sum_k C_k (at + b)^2 \sin(F_k t + P_k)$$

$$\frac{dX}{dt} = A_1 a + \sum_i C_i F_i \cos(F_i t + P_i) + \sum_j C_j [F_j (at + b) \cos(F_j t + P_j) + a \sin(F_j t + P_j)] + \sum_k C_k [F_k (at + b)^2 \cos(F_k t + P_k) + 2a(at + b) \sin(F_k t + P_k)]$$