

Erratum to paper L. Petrov “The empirical
Earth rotation model from VLBI
observations”, Astrom. & Astrophys,
vol. 467, pp. 359–369, 2007

Unfortunatly, the errors in sign in equations 12, 13 at page 365 and equation 14 at page 14 were not found during proof-reading.

Corrected equations are presented below:

$$\widehat{\mathcal{M}}_a(t) = \widehat{\mathcal{R}}_3(\zeta_0) \cdot \widehat{\mathcal{R}}_2(-\theta_0) \cdot \widehat{\mathcal{R}}_3(z) \cdot \widehat{\mathcal{R}}_1(-\epsilon_0) \cdot \widehat{\mathcal{R}}_3(\Delta\psi) \cdot \widehat{\mathcal{R}}_1(\epsilon_0 + \Delta\epsilon) \cdot \widehat{\mathcal{R}}_3(-S) \quad (12)$$

$$S = S_0 + \pi - E_0 + (\Omega_n + \zeta_{01} + z_1 - E_1)t + (\zeta_{02} + z_2 - E_2)t^2 + \Delta\psi \cos \epsilon_0 - \sum_i^2 (E_i^c \cos \gamma_i t + E_i^s \sin \gamma_i t) \quad . \quad (13)$$

$$\begin{aligned} q_1^u &= Y_p(t) \\ q_2^u &= X_p(t) \\ q_3^u &= \kappa(UT1 - TAI)(t) - (E_0 + E_1 t + E_2 t^2) \\ &\quad - \sum_i^2 (E_i^c \cos \gamma_i t + E_i^s \sin \gamma_i t) + \int_{t_0}^t (\dot{\psi} + \Delta\dot{\psi}) \Delta\epsilon \sin \epsilon_0 dt \end{aligned} \quad (14)$$