Erratum to: A Trace-Time Framework for Prediction of Elevation Angle Over Land Mobile LEO Satellites Networks

Younes Seyedi · Fazel Rahimi

Published online: 26 May 2011
© Springer Science+Business Media, LLC. 2011

Erratum to: Wireless Pers Commun
DOI 10.1007/s11277-010-0094-5

Equations (12) and (17) are incorrect in the original publication.

(I) Equation (12):

$$\theta(t) = \tan^{-1} \left(\frac{\cos((\omega_E \cos i - \omega_S)t + \psi_0) \times \cos \gamma_m - \frac{Re}{R}}{\sin(\cos((\omega_E \cos i - \omega_S)t + \psi_0) \times \cos \gamma_m)} \right)$$

Should change to:

$$\theta(t) = \tan^{-1} \left(\frac{\cos((\omega_E \cos i - \omega_S)t + \psi_0) \times \cos \gamma_m - \frac{Re}{R}}{\sin(\cos^{-1}(\cos((\omega_E \cos i - \omega_S)t + \psi_0) \times \cos \gamma_m))} \right)$$

The online version of the original article can be found under doi:[10.1007/s11277-010-0094-5](https://doi.org/10.1007/s11277-010-0094-5).

Y. Seyedi (✉)

Department of Electrical and Computer Engineering, University of Tehran, Tehran, Iran
e-mail: yseyedi@ieee.org

F. Rahimi

Department of Aerospace Engineering, Sharif University of Technology, Tehran, Iran
e-mail: rahimi.fazel@gmail.com

(II) Equation (17):

$$\theta(t) = \tan^{-1} \left(\frac{\cos \left\{ (\omega_E \cos i - \omega_S)t + \cos^{-1} \left(\frac{\cos \left(\cos^{-1} \left(\frac{Re}{R} \cos \theta_C \right) - \theta_C \right)}{\cos \gamma_m} \right) \right\} \times \cos \gamma_m - \frac{Re}{R}}{\sin \left\{ \cos \left\{ (\omega_E \cos i - \omega_S)t + \cos^{-1} \left(\frac{\cos \left(\cos^{-1} \left(\frac{Re}{R} \cos \theta_C \right) - \theta_C \right)}{\cos \gamma_m} \right) \right\} \times \cos \gamma_m \right\}} \right)$$

Should change to:

$$\theta(t) = \tan^{-1} \left(\frac{\cos \left\{ (\omega_E \cos i - \omega_S)t + \cos^{-1} \left(\frac{\cos \left(\cos^{-1} \left(\frac{Re}{R} \cos \theta_C \right) - \theta_C \right)}{\cos \gamma_m} \right) \right\} \times \cos \gamma_m - \frac{Re}{R}}{\sin \left\{ \cos^{-1} \left\{ \cos \left\{ (\omega_E \cos i - \omega_S)t + \cos^{-1} \left(\frac{\cos \left(\cos^{-1} \left(\frac{Re}{R} \cos \theta_C \right) - \theta_C \right)}{\cos \gamma_m} \right) \right\} \times \cos \gamma_m \right\} \right\}} \right)$$