

Erratum

Kopacz, P. 2012. On geometric properties of spherical conics and generalization of π in navigation and mapping, *Geodesy and Cartography* 38(4): 141–151. DOI:10.3846/20296991.2012.756995.

In the original version of the article ‘On geometric properties of spherical conics and generalization of π in navigation and mapping’ by Piotr Kopacz, first published on 21st December 2012, the mistakes were introduced to formula 12 (online) and formula 17 (print).

Formula 12 wrongly appeared as:

Substituting $AC = d$ and $AS = CS = l$ and recalling the length of the conical circle (10) the value of function $\tilde{\pi}: \mathbb{R}^2 \rightarrow \mathbb{R}$ equals:

$$\pi(l, \beta) = \frac{L(l, \beta)}{d(l, \beta)} = \frac{\pi - \beta}{\sqrt{2 \left(1 - \cos \frac{\beta}{2} \right)}}. \quad (12)$$

It should have appeared as:

Substituting $AC = d$ and $AS = CS = l$ and recalling the length of the conical circle (10) the value of function $\tilde{\pi}: \mathbb{R}^2 \rightarrow \mathbb{R}$ equals:

$$\tilde{\pi}(l, \beta) = \frac{L(l, \beta)}{d(l, \beta)} = \frac{2\pi - \beta}{\sqrt{2 \left(1 + \cos \frac{\beta}{2} \right)}}. \quad (12)$$

Formula 17 wrongly appeared as:

$$\varepsilon(x) = \left| \frac{\tilde{\pi}(x) - \pi}{\tilde{\pi}(x)} \right| 100\% \xrightarrow{r = \frac{\pi}{2} - x} \varepsilon(r) = \left| 1 - \frac{r}{\sin r} \right| 100\%. \quad (17)$$

It should have appeared as:

$$\varepsilon(x) = \left| \frac{\tilde{\pi}(x) - \pi}{\tilde{\pi}(x)} \right| 100\% \xrightarrow{r = \frac{\pi}{2} - x} \varepsilon(r) = \left| 1 - \frac{r}{\sin r} \right| 100\%. \quad (17)$$

We apologise to the author for these errors.

A corrected version can now be found at T&F Online, DOI:10.3846/20296991.2012.756995.