Correction to "Improvement of ionospheric electron density estimation with GPSMET occultations using Abel inversion and VTEC information"

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[1] In the paper "Improvement of ionospheric electron density estimation with GPSMET occultations using Abel inversion and VTEC information'' by M. Garcia-Fernandez, M. Hernandez-Pajares, J. M. Juan, and J. Sanz (*Journal of Geophysical Research*, *108*(A9), 1338, doi:10.1029/2003JA009952, 2003), one of the equations contained an error. The changes to the current version are marked with bold. The current version of equation (3) is as follows:

$$L_I(p_j) = b_I + \alpha \cdot \Delta l_p \cdot F_p \cdot T_V(\lambda_p, \phi_p) + \alpha \cdot \sum_{k=0}^{j} \Delta l_{jk} \cdot T_V(\lambda_k, \phi_k) \cdot F(p_k)$$

This expression has a mistake in the third term of the right term; the correct version of the expression includes an extra summand as follows:

$$L_I(p_j) = b_I + \alpha \cdot \Delta l_p \cdot F_p \cdot T_V(\lambda_p, \phi_p) + \alpha \cdot \sum_{k=0}^{j} \Delta l_{jk} \cdot \left[T_V(\lambda_k, \phi_k) + T_V(\lambda'_k, \phi'_k)\right] \cdot F(p_k)$$

In order to account for this extra term, the text that follows the expression should be slightly changed as well. The current version (text of paragraph 6 after equation (3)) is as follows:

> "where Δl are the longitudes of the ray path in the corresponding layers and T_v are the known values of VTEC obtained from geographical and time interpolation of the Global Ionospheric Maps[...]"

The corrected version should be

> "where Δl are the longitudes of the ray path in the corresponding layers and **$T_v(\lambda_k, \phi_k)$ and $T_v(\lambda'_k, \phi'_k)$** are the known values of VTEC **at the two intersections of the ray with the same layer. These VTEC values** are obtained from geographical and time interpolation of the Global Ionospheric Maps[...]"

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