

## Correction to “Variation of the Martian ionospheric electron density from Mars Express radar soundings”

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[1] In the paper “Variation of the Martian ionospheric electron density from Mars Express radar soundings” by D. D. Morgan et al. (*Journal of Geophysical Research*, 113, A09303, doi:10.1029/2008JA013313, 2008), errors were discovered in equations (8) and (9).

[2] Equation (8) should read

$$t_{\text{delay},j} = \sum_{i=1}^j \Delta t_{\text{delay},i,j} = \frac{2}{c} \sum_{i=1}^j \int_{f_{\text{pe},i-1}}^{f_{\text{pe},i}} \frac{df_{\text{pe}}}{\alpha_i f_{\text{pe}} [1 - (f_{\text{pe}}/f_{s,j})^2]^{1/2}} \quad (8)$$

where the upper limit of the summation is  $j$ . Equation (9) should read

$$t_{\text{delay},j} = \sum_{i=1}^j \Delta t_{\text{delay},i,j} = \sum_{i=1}^j \frac{1}{c\alpha_i} \ln \left[ \frac{1 - \sqrt{1 - (f_{s,i}/f_{s,j})^2}}{1 + \sqrt{1 - (f_{s,i}/f_{s,j})^2}} \cdot \frac{1 + \sqrt{1 - (f_{s,i-1}/f_{s,j})^2}}{1 - \sqrt{1 - (f_{s,i-1}/f_{s,j})^2}} \right] \quad (9)$$

where the ratios of the various sounding frequencies are all squared.

[3] Let us stress that the correct equations were used for all calculations in the paper and that no results or conclusions are affected.

[4] We regret the errors.

### Reference

Morgan, D. D., D. A. Gurnett, D. L. Kirchner, J. L. Fox, E. Nielsen, and J. J. Plaut (2008), Variation of the Martian ionospheric electron density from Mars Express radar soundings, *J. Geophys. Res.*, 113, A09303, doi:10.1029/2008JA013313.

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