

Correction to “Stochastic simulation of cosmic ray modulation including a wavy heliospheric current sheet”

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[1] In the paper “Stochastic simulation of cosmic ray modulation including a wavy heliospheric current sheet” by K. Alanko-Huotari et al. (*Journal of Geophysical Research*, 112, A08101, doi:10.1029/2007JA012280, 2007), there are two printing errors in equations (12) and (14). The actual code used in the model computations, presented in the original paper, is correct with respect to these typos, which accordingly do not affect the results obtained.

[2] The correct equation (12) should read (first minus in the third line is replaced with plus)

$$\begin{aligned} \frac{\partial U}{\partial t} = & \frac{1}{r^2} \frac{\partial}{\partial r} \left(r^2 \kappa_{rr} \frac{\partial U}{\partial r} \right) + \frac{1}{r^2} \frac{\partial}{\partial \mu} \left((1 - \mu^2) \kappa_{\theta\theta} \frac{\partial U}{\partial \mu} \right) \\ & - \frac{1}{r^2} \frac{\partial}{\partial r} \left(r^2 \left(V_{sw} + \langle v_D \rangle_{R_r} + \langle v_D \rangle_{S_r} \right) U \right) \\ & + \frac{1}{r} \frac{\partial}{\partial \mu} \left(\sqrt{1 - \mu^2} \langle v_D \rangle_{R_\theta} U \right) + \frac{2}{3} \frac{V_{sw}}{r} \frac{\partial}{\partial T} (aTU). \end{aligned}$$

[3] The first equation in the correct equation (14) should read ($\kappa_{\theta\theta}$ is replaced with κ_{rr})

$$\begin{aligned} \Delta r = & \frac{1}{r^2} \frac{\partial}{\partial r} \left(r^2 \kappa_{rr} \right) \Delta t + \left(V_{sw} + \langle v_D \rangle_{R_r} + \langle v_D \rangle_{S_r} \right) \Delta t \\ & + R_{n1} \sqrt{2 \kappa_{rr}} \Delta t, \end{aligned}$$

while the second and third equations are correct in the original form.

[4] We acknowledge the thoroughness of Stefano Della Torre from the INFN Milano-Bicocca, who pointed our attention to one of the above printing errors.