# CORRECTION

**Open Access** 

# Correction: Swarm Thermal Ion Imager measurement performance



Johnathan K. Burchill<sup>1\*</sup><sup>®</sup> and David J. Knudsen<sup>1</sup>

## Correction: Earth, Planets Space (2022) 74:181 https://doi.org/10.1186/s40623-022-01736-w

Following publication of the original article (Burchill and Knudsen 2022), the authors reported an error in Appendix Equation B2 caused by an error in drafting the LaTeX form for the matrix. The authors wish to thank Martin Paces for bringing this mistake to their attention.

The original Appendix Equation B2 is:

$$R_{\text{NEC}\leftarrow\text{SVA}} = \begin{bmatrix} \frac{\nu_{N}}{\nu} & -\frac{\nu_{E}}{\nu} & -\frac{\nu_{N}\nu_{C}}{\nu\sqrt{\nu_{N}^{2}+\nu_{E}^{2}}} \\ \frac{\nu_{E}}{\nu} & \frac{\nu_{N}}{\nu} & -\frac{\nu_{E}\nu_{C}}{\nu\sqrt{\nu_{N}^{2}+\nu_{E}^{2}}} \\ \frac{\nu_{C}}{\nu} & 0 & \frac{\sqrt{\nu_{N}^{2}+\nu_{E}^{2}}}{\nu} \end{bmatrix}$$

The correct Appendix Equation B2 should read:

$$R_{\text{NEC}\leftarrow\text{SVA}} = \begin{bmatrix} \frac{v_N}{v} & -\frac{v_E}{\sqrt{v_N^2 + v_E^2}} & -\frac{v_N v_C}{v \sqrt{v_N^2 + v_E^2}} \\ \frac{v_E}{v} & \frac{v_N}{\sqrt{v_N^2 + v_E^2}} & -\frac{v_E v_C}{v \sqrt{v_N^2 + v_E^2}} \\ \frac{v_C}{v} & 0 & \frac{\sqrt{v_N^2 + v_E^2}}{v} \end{bmatrix}$$

The original article can be found online at https://doi.org/10.1186/s40623-022-01736-w.

\*Correspondence:

Johnathan K. Burchill

jkburchi@ucalgary.ca

<sup>1</sup> Department of Physics and Astronomy, University of Calgary, Calgary, AB, Canada



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.go/licenses/by/4.0/.

The original article (Burchill and Knudsen 2022) has been updated.

Published online: 11 March 2024

#### Reference

Burchill JK, Knudsen DJ (2022) Swarm Thermal Ion Imager measurement performance. Earth Planets Space 74:181. https://doi.org/10.1186/ s40623-022-01736-w

### **Publisher's Note**

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.