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Erratum: a search for nontriggered gamma-ray bursts in the BATSE database

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Publication date 1999

Published in Astrophysical Journal

Link to publication

Citation for published version (APA): Kommers, J. M., Lewin, W. H. G., Kouveliotou, C., van Paradijs, J. A., Pendleton, G. N., Meegan, C. A., & Fishman, G. J. (1999). Erratum: a search for nontriggered gamma-ray bursts in the BATSE database. Astrophysical Journal, 511, 514-514.

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ERRATUM

In the paper "A Search for Nontriggered Gamma-Ray Bursts in the BATSE Database" by Jefferson M. Kommers et al. (ApJ, 491, 704 [1997]), the values of $\langle V/V_{\rm max} \rangle$ that include on-board-triggered bursts are incorrect. Owing to a programming error, whenever a value of $C_{\rm min}$ was available for a burst listed in the 4B catalog, that catalog value (appropriate for the on-board burst trigger) overwrote the value appropriate for our more sensitive off-line search. Thus the values of $V/V_{\rm max}$ were overestimated by a factor of $\sim 2^{3/2}$ for the bursts that were triggered on board. This error does not affect the values of $C_{\rm max}/C_{\rm min}$ and $C_{\rm min}$ for the nontriggered gamma-ray bursts (GRBs) listed in Table 3, nor does it affect the value of $\langle V/V_{\rm max} \rangle = 0.28 \pm 0.03$ computed for the nontriggered (only) GRB sample.

The correct value of $\langle V/V_{\rm max} \rangle$ for the on-board-triggered bursts detected by our off-line search is $\langle V/V_{\rm max} \rangle = 0.13 \pm 0.02$. For the combined nontriggered GRB candidates and on-board-triggered bursts, $\langle V/V_{\rm max} \rangle = 0.18 \pm 0.02$. This value is significantly lower than the value $\langle V/V_{\rm max} \rangle = 0.33 \pm 0.01$ obtained from the 3B catalog. These corrections, therefore, significantly strengthen the conclusion of the paper: that the BATSE on-board trigger has not missed a significant population of faint gamma-ray bursts owing to the biases inherent in the on-board burst trigger mechanism.