



UvA-DARE (Digital Academic Repository)

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

Kommers, J.M.; Lewin, W.H.G.; Kouveliotou, C.; van Paradijs, J.A.; Pendleton, G.N.; Meegan, C.A.; Fishman, G.J.

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.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <http://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

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 $\langle V/V_{\max} \rangle$ that include on-board-triggered bursts are incorrect. Owing to a programming error, whenever a value of C_{\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_{\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_{\max}/C_{\min} and C_{\min} for the nontriggered gamma-ray bursts (GRBs) listed in Table 3, nor does it affect the value of $\langle V/V_{\max} \rangle = 0.28 \pm 0.03$ computed for the nontriggered (only) GRB sample.

The correct value of $\langle V/V_{\max} \rangle$ for the on-board-triggered bursts detected by our off-line search is $\langle V/V_{\max} \rangle = 0.13 \pm 0.02$. For the *combined* nontriggered GRB candidates and on-board-triggered bursts, $\langle V/V_{\max} \rangle = 0.18 \pm 0.02$. This value is significantly lower than the value $\langle V/V_{\max} \rangle = 0.33 \pm 0.01$ 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.