

## *Erratum*

# **Accurate early positions for *Swift* GRBs: enhancing X-ray positions with UVOT astrometry**

M. R. Goad<sup>1</sup>, L. G. Tyler<sup>1</sup>, A. P. Beardmore<sup>1</sup>, P. A. Evans<sup>1</sup>, S. R. Rosen<sup>1,3</sup>, J. P. Osborne<sup>1</sup>, R. L. C. Starling<sup>1</sup>, F. E. Marshall<sup>2</sup>, V. Yershov<sup>3</sup>, D. N. Burrows<sup>4</sup>, N. Gehrels<sup>2</sup>, P. W. A. Roming<sup>4</sup>, A. Moretti<sup>5</sup>, M. Capalbi<sup>6</sup>, J. E. Hill<sup>7</sup>, J. Kennea<sup>4</sup>, S. Koch<sup>4</sup>, and D. Vanden Berk<sup>4</sup>

<sup>1</sup> Department of Physics and Astronomy, University of Leicester, LE1 7RH, UK  
e-mail: mrg@star.le.ac.uk

<sup>2</sup> NASA Goddard Space Flight Center, Greenbelt, MD 20771, USA

<sup>3</sup> Mullard Space Science Laboratory, Department of Space and Climate Physics, University College London, Holmbury St. Mary, Dorking, Surrey, RH5 6NT, UK

<sup>4</sup> Pennsylvania State University, University Park, PA 16802, USA

<sup>5</sup> INAF-Osservatorio Astronomica di Brera, via Bianchi 46, 23807 Merate (Lc), Italy

<sup>6</sup> ASI Science Data Center, Via Galileo Galilei, 00044 Frascati, Italy

<sup>7</sup> Universities Space Research Association, 10211 Wincopin Circle, Suite 500, Columbia, MD 21044-3432, USA

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In our original manuscript (Goad et al. 2007, DOI: 10.1051/0004-6361:20078436), our representation of the matrix formulation describes the transformation from XRT to UVOT detector coordinate systems (a reflection followed by a rotation plus an offset) is transcribed incorrectly. The equation used in our automated astrometric correction software is correctly represented as:

$$\begin{pmatrix} U_{\text{detx}_p} \\ U_{\text{dety}_p} \end{pmatrix} = \alpha \begin{pmatrix} \cos \theta & -\sin \theta \\ -\sin \theta & -\cos \theta \end{pmatrix} \begin{pmatrix} X_{\text{detx}} \\ X_{\text{dety}} \end{pmatrix} + \begin{pmatrix} \delta \\ \epsilon \end{pmatrix}. \quad (1)$$

The published UVOT-enhanced GRB positions have always used the matrix formulation described here and therefore remain unchanged by this purely typographical error. Additionally the quoted values for the coefficients given in our original manuscript are those appropriate to the transformation as described here and also remain unchanged.

We thank Vanessa McBride (University of Southampton) for noting the typographical error in our original manuscript and would like to apologise for any inconvenience this may have caused.