The ROSAT All-Sky Survey Bright Source Catalogue

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The catalogue can be used for scientific purposes as long as the above publication is referenced.

Catalogue Format

Template:

```
....+...10....+...20....+...30....+...40....+...50....+...60....+...70....+...
---------------------++----------+----------+---+-----+----+----------+---------
       SrcNam            R.A.       Dec.     ?p npedm riv.   src-cps   ?src-cps
---------------------++----------+----------+---+-----+----+----------+---------
1RXS J121515.3+874154  183.81375  87.69833   8 _____ __..  1.247E-01 1.271E-02
```

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80....+...90....+..100....+..110....+..120....+..130....+..140....+..150..
+---------+------+-----+----+-----+----+-----+----+----+-----+-------+----
  bgr-cpsa    exp   hr1 ?hr1   hr2 ?hr2   ext extl srcl  extr PriFlgE vigf
+---------+------+-----+----+-----+----+-----+----+----+-----+-------+----
 7.921E-04    909 -0.18 0.10 -0.15 0.16     9    1  201   300 111111b 0.72
```

```
..+..160....+..170....+..180....+.
+------+------+---++-------------+
 orgdat moddat ...  field-id src#
+------+------+---++-------------+
 960531 000000   0  33001001_0028
```

Description of the columns:

shortcut	columns	description
srcnam	1- 21	ROSAT All-Sky Survey Catalogue **source name** A link to a broad band image is provided if this image is available (see ’i’-flag).
R.A.	24- 32	**Right Ascension**, equinox 2000.0 [decimal degrees]
Dec.	34- 42	**Declination**, equinox 2000.0 [decimal degrees]
?p	45- 46	total **positional error** (including 6" systematic error) [arcsec]
npemm	48- 52	**screening flags** ’T’ for ’true’, ’F’ or ’_’ for ’false’; ’.’ for ’not used’ **n**: nearby sources affecting SASS flux determination **p**: possible problem with position determination **e**: source extended beyond SASS extraction radius **d**: complex diffuse emission pattern **m**: source missed by SASS
riv?	54- 57	**’new data’ flags** ’T’ for ’true’, ’F’ or ’_’ for ’false’; ’.’ for ’not used’ **r**: source counts and extraction radius recalculated **i**: broad band image available (html link!) **v**: variability flag (not yet filled) .: dummy flag
src-cps	60- 68	**source countrate**, vignetting corrected [counts/sec]
?src-cps	70- 78	**error of source countrate**, vignetting corrected ?src-cps = 0 means: the error has not been determined. [counts/sec]
bgrcpsa	80- 88	**background countrate**, vignetting corrected [counts/sec/arcmin**2]
exp	90- 95	**exposure time** [sec]
hr1	97-101	**hardness ratio 1** Definition: **hr1 = (B - A) / (B + A)** , where A = countrate in PHA range 11 - 41 B = countrate in PHA range 52 - 201
?hr1	103-106	**error of hardness ratio 1** Note: true error of hr1 is probably bigger if >9.99: set to 9.99
hr2	108-112	**hardness ratio 2** Definition: **hr2 = (D - C) / (D + C)** , where C = countrate in PHA range 52 - 90 D = countrate in PHA range 91 - 201
?hr2	114-117	**error of hardness ratio 2** Note: true error of hr1 is probably bigger if >9.99: set to 9.99
ext	119-123	**source extent** The amount is specified, by which the source image exceeds the point spread function. [arcsec]
extl	125-128	**likelihood of source extent**

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                          if >9999.9: set to 9999
srcl      | 130-133 | likelihood of source detection algorithm
                          if >9999.9: set to 9999
extr      | 135-139 | extraction radius
                          if >9999.9 (Vela SNR!): set to 9999
                          [arcsec]
PriFlg    | 141-146 | priority flags
                          Sliding window detection history using either
                          the background map (M) or the local background (B);
                          0 = no detection, 1 = detection;
                          order of flags:
                            M-broad, L-broad, M-hard, L-hard, M-soft, L-soft
E         | 147-147 | PHA range with highest detection likelihood
                          A: 11-41, B: 52-201, C: 52-90, D: 91-201
                          ' ' or 'b' means 'broad'
vigf      | 149-152 | vignetting factor
orgdat    | 154-159 | date when source was included
                          format: yymmdd; 000000: removed
moddat    | 161-166 | date when source properties were changed
                          format: yymmdd; 000000: not changed
...       | 168-170 | dummy column
field-id  | 173-180 | identification number of SASS field
                          An overview of the field structure is available at URL
                          http://www.rosat.mpe-garching.mpg.de/survey/rass-bsc/sup/pspl
                          (mainly for internal use)
src#      | 182-185 | SASS source number (MASOL number) in SASS field
                          (mainly for internal use)
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PHA is an acronym for **Pulse Height Amplitude**.

For some sources not all of the information is available. This is indicated by a **value of 0** for the columns

?p, src-cps, ?src-cps, bgrcpsa, exp, extl, srcl, extr, priflg, vigf.

The values for the hardness ratios and errors

hr1, ?hr1, hr2, ?hr2

are not availbale, if all values are simultaneously at 0.

More information on the ROSAT All-Sky Survey Bright Source Catalogue can be found at URL **http://www.rosat.mpe-garching.mpg.de/survey/rass-bsc/** .

Feedback to: survey@rosat.mpe-garching.mpg.de (jer / 14-Jun-96)