

Table 1: XDBS Catalog column descriptions

Column name	Units	Descriptions
Be_star		BeSS name
Type		BeSS Stellar spectral type
RA	deg	Optical Right Ascension, decimal degree (J2000)
DEC	deg	Optical Declination, decimal degree (J2000)
Xcat		Which X-ray catalog was used to determine fluxes ^a
Xidentifier		X-ray catalog source name or identifier ^b
Gamma ⁱ		X-ray spectral photon index
Fb ⁱ	erg s ⁻¹ cm ⁻²	Broad-band X-ray flux (0.5–7 keV)
Fs ⁱ	erg s ⁻¹ cm ⁻²	Soft-band X-ray flux (0.5–1.2 keV)
Fm ⁱ	erg s ⁻¹ cm ⁻²	Medium-band X-ray flux (1.2–2 keV)
Fh ⁱ	erg s ⁻¹ cm ⁻²	Hard-band X-ray flux (2–7 keV)
HRms ⁱ		Medium-Soft Hardness Ratio (Fm–Fs)/(Fm+Fs)
HRhm ⁱ		Hard-Medium Hardness Ratio (Fh–Fm)/(Fh+Fm)
DR3Name		<i>Gaia</i> DR3 Name
Plx	mas	<i>Gaia</i> DR3 Parallax
RPlx		<i>Gaia</i> DR3 Parallax divided by its standard error
PM ^j	mas yr ⁻¹	<i>Gaia</i> DR3 Proper motion
epsi	mas	<i>Gaia</i> DR3 Excess noise
sepsi		<i>Gaia</i> DR3 Significance of excess noise
RUWE		<i>Gaia</i> DR3 Renormalised unit weight error
G ^j	mag	<i>Gaia</i> DR3 G band magnitude
BP ^j	mag	<i>Gaia</i> DR3 BP band magnitude
RP ^j	mag	<i>Gaia</i> DR3 RP band magnitude
Teff	K	<i>Gaia</i> DR3 Effective temperature
Gflux ⁱ	erg s ⁻¹ cm ⁻²	Optical (G band) flux ^c
dist ⁱ	pc	<i>Gaia</i> eDR3 geometric distance ^d
J ^j	mag	2MASS J band magnitude
H ^j	mag	2MASS H band magnitude
K ^j	mag	2MASS K band magnitude
W1 ^j	mag	WISE W1 band magnitude ^e
W2 ^j	mag	WISE W2 band magnitude ^e
W3 ^j	mag	WISE W3 band magnitude ^e
W4 ^j	mag	WISE W4 band magnitude ^e
Vsini	km s ⁻¹	BeSS projected rotational velocity
Vtran ⁱ	km s ⁻¹	Transverse velocity ^f
LX ⁱ	erg s ⁻¹	X-ray broadband luminosity
fX20 ⁱ		(Broadband) X-ray to (G band) optical flux ratio
match_flag		1–questionable matches; 2–no <i>Gaia</i> matches; 0–others
Class		Source class ^g
ref		Classification reference ^h

^a CX0 for CSCv2, XMM for 4XMM-DR11, and XRT for 2SXPS; ^b 2CXO source name for CSCv2, 4XMM source name for 4XMM-DR11, and numerical unique source identifier for 2SXPS; ^c The G band zero point (2.5×10^{-9} erg s⁻¹ cm⁻² Å⁻¹) and the effective band width (4053 Å) are taken from the VO Filter Profile Service; ^d Unreliable distances with RPlx < 5 are removed; ^e For W1 and W2, we use all three WISE catalogs, prioritized in the order of the AllWISE, CatWISE2020 and unWISE catalogs. W3 and W4 are only available from the AllWISE catalog; ^f Calculated from PM and dist; ^g GCA for γ Cas analogs, HMGB for high-mass γ -ray binaries; ^h 1–SIMBAD (Wenger et al.2000), 2–Smith et al.(2016), 3–Liu et al.(2006), 4–Nazé et al.(2020), 5–Nazé & Motch(2018), 6–Doroshenko et al.(2021), 7–Fortin et al.(2022); ⁱ These columns have corresponding asymmetric uncertainty columns with positive uncertainty column names leading with “E_” and negative uncertainty column names leading with “e_”; ^j These columns have corresponding symmetric uncertainty columns with their names leading with “e_”.