Part VII

Catalog of Supersoft X-ray Sources

Catalog of Luminous Supersoft X-ray Sources

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1 Introduction

This catalog comprises an up-to-date list of luminous (>10^{36} erg/s) supersoft X-ray sources. Since most of the new sources are X-ray discoveries, the final inclusion in the group of luminous close binary supersoft sources has to await the optical identification. Only then a distinction is possible among the various and quite different types of objects which show a supersoft X-ray spectrum (i.e. emission only below 0.5 keV): single (i.e. non-interacting) white dwarfs, central stars of planetary nebulae, PG 1159 stars, symbiotic variables, magnetic cataclysmic variables, active galactic nuclei. An exception are F and G stars which also have supersoft X-ray spectra but which can readily recognised due to their optical brightness (low L_x/L_{opt} ratio). Due to this fact of necessary follow-up optical observations, it can well happen that a source is included in the catalog but later turns out to be of a different type. A rather recent example is RX J0122.9–7521 which has long been thought to be a SMC supersoft source (Kahabka et al. 1994), but has been identified as a galactic PG 1159 star (Cowley et al. 1995, Werner et al. 1996).
We include in this catalog accreting binary sources of high luminosity which are thought to be in a state of (steady or recurrent) hydrogen burning. Since CAL 83, the prototype, is known to have an ionisation nebula (Pakull and Motch 1989), and further supersoft binaries are expected to also have one, we include also sources associated with very luminous planetary nebulae. Not included are PG 1159 stars which reach similar magnitudes but form a rather distinct class of presently 27 members (Dreizler et al. 1995). Excluded are also supersoft active galactic nuclei which reach luminosities up to 10^{45} erg/s.
The first two supersoft X-ray sources, CAL 83 and CAL 87 (Long et al. 1981), have been discovered with Einstein satellite observations. However, ROSAT observations established these sources as a distinct class, and the majority of the X-ray measurements have been performed with the ROSAT position sensitive proportional counter (PSPC). The PSPC with its spectral resolution of about 50% below 1 keV has been used in nearly all cases to discover the supersoft X-ray spectrum. During the last years the high-resolution imager (HRI) has been used to improve the coordinates of the newly detected sources and to monitor their X-ray intensity. At these soft energies, the HRI countrates are typically a factor of 7.5–8 smaller than those of the PSPC (David et al. 1994, Greiner et al. 1996a).

2 Organisation

The catalog is organised as follows:

- The objects appear in order of increasing right-ascension (for equinox 2000.0) though this mixes SMC and M31 sources. Tab. 1 lists all sources according to their host galaxy with some important parameters for quick comparison.
- The original name of the source is written at the top left, and widely known secondary names on the right.
- The first two lines for each source contain the coordinates, the references for these coordinates and the discovery (in case these are different) and the type classification if the source is optically identified. If a source is not optically identified, we mark it as $\boxed{\text{unidentified}}$ below the type identification, and the R.A./Dec. numbers are the X-ray positions with uncertainties as given in the above section of ROSAT related issues. Otherwise, the optical positions are given with typical uncertainties of $1''$. All coordinates are equinox 2000.0. The reference in the "Coordinates" field refers to the most accurate position, i.e. for identified objects the optical position overrides the X-ray position. The "Discovery" reference refers to the first paper which realises the luminous supersoft X-ray emission. Some of the sources have been known already for decades at this time, so the "Coordinates" reference can be much earlier than the "Discovery" reference.
- The next block contains general data which are not specific to any wavelength range. For sources supposed to belong to an external galaxy, the galaxy name is given instead of the presently known distance. This is motivated by recent changes in the distance determination of the LMC which reduced from the standard 55 kpc to 47.3±0.8 kpc (Gould 1995). This in turn also affects the distance to M31 because the distance ratio of LMC and M31 is more accurately known than the corresponding absolute distances. The most recent SMC distance is 57.5 kpc (van den Bergh 1989). The galactic absorbing column (N_H^{gal}, Dickey and Lockman 1990) is given for comparison with the values derived from the X-ray fits given in the next block.
- Two blocks follow for data derived from X-ray and optical/UV measurements. Except the brightness estimates, all numbers are referenced. The temperature derived from the X-ray spectra is given as a range including the error estimates and specifying the model used: bb for the blackbody model and wd for white dwarf atmosphere models. It should be noted that for some sources the values for the best-fit absorption are for the blackbody model while the temperature is from the white dwarf model, i.e. this is not consistent (unfortunately the fitted absorbing column in white dwarf models is only rarely given in the literature).
- Finally, the references are given in full with all co-authors, and stating the important pieces of new information (this reflects purely the subjective view of the author, and you should contact me if something is missing or wrong.) The references are sorted in time of appearance, so that the numbers in the data blocks will not change when the catalog is updated.

Table 1. Summary of all known supersoft X-ray sources with luminosities above 10^{36} erg/s excluding PG 1159-type stars and supersoft AGN. Given are for each source the name (column 1), the best fit X-ray temperature with bb indicating blackbody and wd white dwarf atmosphere models (2), the bolometric luminosity (3), the position (optical position if counterpart is identified, otherwise X-ray position which has a typical error of $\pm 20''$) (4), the type of system (SSS = Cal 83 like supersoft source; PN = planetary nebula; Sy = symbiotic system; N = Nova) (5), the binary period (6), the mass of WD (7), the mass of the companion (8) and References (9).

Name	Countrate$^{(1)}$ (cts/s)	$T^{(2)}$ (eV)	L_{bol} (erg/s)	Type	Period
		Large Magellanic Cloud			
RX J0439.8–6809	1.35	20–25 (wd)	$10–14\times10^{37}$	SSS	3.37 h
RX J0513.9–6951	<0.06–2.0	30–40 (bb)	$0.1–2\times10^{38}$	SSS	18.24 h
RX J0527.8–6954	0.004–0.25	18–45 (bb)	$1–10\times10^{37}$	SSS?	
RX J0537.7–7034	0.02	18–30 (bb)	$0.6–2\times10^{37}$		
CAL 83	0.98	20–50 (bb)	$1–10\times10^{38}$	SSS	1.04 d
CAL 87	0.09	65–75 (wd)	$6–20\times10^{37}$	SSS	10.6 h
RX J0550.0–7151	<0.02–0.9	25–40 (bb)			
		Small Magellanic Cloud			
1E 0035.4–7230	0.33	40–50 (wd)	$0.8–2\times10^{37}$	SSS	4.1 h
RX J0048.4–7332	0.19	25–45 (wd)	$1–8\times10^{38}$	Sy	
RX J0058.6–7146	<0.001–0.7	15–70 (bb)	2×10^{36}		
1E 0056.8–7154	0.29	30–40 (wd)	2×10^{37}	PN	
		Andromeda Galaxy (M31)			
RX J0037.4+4015	0.3×10^{-3}	43			
RX J0038.5+4014	0.8×10^{-3}	45			
RX J0038.6+4020	1.7×10^{-3}	43			
RX J0039.6+4054	0.4×10^{-3}	45			
RX J0040.4+4009	0.8×10^{-3}	42			
RX J0040.7+4015	1.3×10^{-3}	42			
RX J0041.5+4040	0.3×10^{-3}	40			
RX J0041.8+4059	0.5×10^{-3}	43			
RX J0042.4+4044	1.7×10^{-3}	43			
RX J0043.5+4207	2.2×10^{-3}	45			
RX J0044.0+4118	2.5×10^{-3}	42			
RX J0045.4+4154	$<10^{-5}$–0.03	70–90 (wd)	$5–10\times10^{37}$		
RX J0045.5+4206	3.1×10^{-3}	20-48 (bb)	7×10^{37}		
RX J0046.2+4144	2.1×10^{-3}	38			
RX J0046.2+4138	1.1×10^{-3}	40			
RX J0047.6+4205	1.0×10^{-3}	39			

Name	Countrate[1] (cts/s)	T[2] (eV)	L_{bol} (erg/s)	Type	Period
		Galactic Sources			
RX J0019.8+2156	2.0	25–37 (wd)	$3–9\times10^{36}$	SSS	15.85 h
RX J0925.7–4758	1.0	70–75 (wd)	$3–7\times10^{35}$[3]	SSS	3.5-4 d
GQ Mus	0.1	25–35 (bb)	$1–2\times10^{38}$	N	1.41 h
1E 1339.8+2837	0.01–1.1	20–45 (bb)	$0.12–10\times10^{35}$		
AG Dra	1.0	10–15 (bb)	1.4×10^{36}[3]	Sy	554 d
RR Tel	0.18	12 (wd)	1.3×10^{37}	Sy	387 d
Nova Cyg 1992	0.03–76		2×10^{38}	N	1.95 h

[1] Countrates in the ROSAT PSPC corrected for vignetting, i.e. absorbed on-axis count rates. Count rates in the HRI have been converted to PSPC rates using a conversion factor of PSPC/HRI = 7.8 (Greiner et al. 1996a).
[2] Temperatures for the M31 sources are the maximum blackbody temperatures derived from the hardness ratios at the appropriate absorbing column (Greiner et al. 1996b).
[3] Luminosity for assumed distance of 1 kpc.

I would like to emphasise that every user of this catalog should spare no pains to consult the original papers in order to avoid propagation of my errors in the literature. I will keep this catalog updated, and would appreciate (1) being informed on any errors users might discover and (2) getting preprints on supersoft sources to be included in the next version. An electronic version of this catalog will be available on the Web shortly after this volume has appeared (http://www.rosat.mpe-garching.mpg.de/˜jcg).

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RX J0019.8+2156

R.A.: $00^h19^m50\overset{s}{.}0$	LII: $113\overset{\circ}{.}30$	Discovery: [1]	**SSS**
Dec.: $+21°56'54''$	BII: $-40\overset{\circ}{.}33$	Coordinates: [3]	

General Data

D [kpc]: 2±1 [2]
N_H^{gal} [10^{21} cm^{-2}]: 0.429
L_{bol} [erg/s]: 3–9×10^{36} [2]
Orbital Period: 15.85 h [2]
Mass of central object [$M_\odot$]: 1.0–1.35 [4]
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 25-37 (wd)
N_H^{fit} [10^{21} cm^{-2}]: 0.4–1.1 [2]
Orbital Modulation: quasi-sinusoidal, 10% amplitude [2]
Variability: constant between 1990–1995 [2]

Optical/UV Data

Finding Chart: [3]
m_B [mag]: 12.3
m_V [mag]: 12.2
Orbital Modulation: 0.5 mag quasi-sinusoidal [2],[7]
Opt. Spectrum: [2]
UV Spectrum: [2],[8]
Opt. Variability: 3 different timescales: 2 hr, weeks-months, 40 yrs [2], [3]
UV Variability: 20% irregular [8]
Nebula [erg/s]:
Wind mass loss: 1000 km/s [2]

References

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1E 0035.4–7230 RX J0037.3–7214

R.A.: $00^h37^m19\overset{s}{.}8$ LII: $304\overset{\circ}{.}45$ Discovery: [3] **SSS**
Dec.: $-72°14'13''$ BII: $-44\overset{\circ}{.}85$ Coordinates: [5], [9]

General Data

D [kpc]: SMC
N_H^{gal} [10^{21} cm^{-2}]: 0.649
L_{bol} [erg/s]: 0.8–2×10^{37} [3], [4], [10]
Orbital Period: 4.1 h [6], [9]
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 40-50 (wd)
N_H^{fit} [10^{21} cm^{-2}]: 0.35–0.8 [4]
Orbital Modulation: strong, nearly sinusoidal [11], [9]
Variability: amplitude of factor 3, orbital variation not excluded [4]

Optical/UV Data

Finding Chart: [9] m_B [mag]: 20.0 m_V [mag]: 20.2
Orbital Modulation: sinusoidal, 0.4 mag amplitude [9]
Opt. Spectrum: [9],[12]
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [8]
Wind mass loss:

References

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RX J0037.4+4015

R.A.: $00^h37^m25\overset{s}{.}3$ LII: $120\overset{\circ}{.}04$ Discovery: [1]
Dec.: $+40°15'16''$ BII: $-22\overset{\circ}{.}54$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <43 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart:
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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RX J0038.5+4014

R.A.: $00^h38^m32\overset{s}{.}1$ LII: $120\overset{\circ}{.}27$ Discovery: [1]
Dec.: $+40°14'39''$ BII: $-22\overset{\circ}{.}56$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.62
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <45 (bb) [2]
Orbital Modulation:
Variability: no [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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RX J0038.6+4020

R.A.: $00^h 38^m 40\overset{s}{.}9$ LII: $120\overset{\circ}{.}30$ Discovery: [1]

Dec.: $+40°20'00''$ BII: $-22\overset{\circ}{.}47$ Coordinates: [1] unidentified

General Data

D [kpc]: M 31

N_H^{gal} [10^{21} cm^{-2}]: 0.62

L_{bol} [erg/s]:

Orbital Period:

Mass of central object [$M_\odot$]:

Mass of companion [$M_\odot$]:

Spectral type:

X-ray Data

T [eV]: <43 (bb) [2]

N_H^{fit} [10^{21} cm^{-2}]:

Orbital Modulation:

Variability: no [2]

Optical/UV Data

Finding Chart: [2]

m_B [mag]:

m_V [mag]:

Orbital Modulation:

Opt. Spectrum:

UV Spectrum:

Opt. Variability:

UV Variability:

Nebula [erg/s]:

Wind mass loss:

References

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RX J0039.6+4054

R.A.: $00^h39^m38\overset{s}{.}5$ LII: $120\overset{\circ}{.}53$ Discovery: [1]
Dec.: $+40°54'09''$ BII: $-21\overset{\circ}{.}91$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <45 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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RX J0040.4+4009

R.A.: $00^h40^m26\overset{s}{.}3$ LII: $120\overset{\circ}{.}65$ Discovery: [1]
Dec.: $+40°09'01''$ BII: $-22\overset{\circ}{.}67$ Coordinates: [1] unidentified

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <42 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart:
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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RX J0040.7+4015

R.A.: $00^h40^m43\overset{s}{.}2$ LII: $120\overset{\circ}{.}72$ Discovery: [1]
Dec.: $+40°15'18''$ BII: $-22\overset{\circ}{.}57$ Coordinates: [1] unidentified

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <42 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2] m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0041.5+4040

R.A.: $00^h41^m30\overset{s}{.}2$	LII: $120\overset{\circ}{.}90$	Discovery: [1]	
Dec.: $+40°40'04''$	BII: $-22\overset{\circ}{.}16$	Coordinates: [1]	$\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <40 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

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RX J0041.8+4059

R.A.: $00^h41^m49\overset{s}{.}9$	LII: $120\overset{\circ}{.}98$	Discovery: [1]	
Dec.: $+40°59'21''$	BII: $-21\overset{\circ}{.}85$	Coordinates: [1]	$\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.62
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <43 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0042.4+4044

R.A.: $00^h42^m27\overset{s}{.}6$ LII: $121\overset{\circ}{.}10$ Discovery: [1]
Dec.: $+40°44'32''$ BII: $-22\overset{\circ}{.}10$ Coordinates: [1] unidentified

General Data

D [kpc]: M 31
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.62
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <43 (bb) [2]
Orbital Modulation:
Variability: no [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: [2] m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
UV Spectrum:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0043.5+4207

R.A.: $00^h43^m35\overset{s}{.}9$ LII: $121\overset{\circ}{.}31$ Discovery: [1]
Dec.: $+42°07'30''$ BII: $-22\overset{\circ}{.}72$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data
D [kpc]: M 31
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.62
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data
T [eV]: <45 (bb) [2]
Orbital Modulation:
Variability: no [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data
Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References
[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position

RX J0044.0+4118

R.A.: $00^h44^m04\overset{s}{.}8$ LII: $121\overset{\circ}{.}45$ Discovery: [1]
Dec.: $+41°18'20''$ BII: $-21\overset{\circ}{.}54$ Coordinates: [1] unidentified

General Data

D [kpc]: M 31
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.62
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <42 (bb) [2]
Orbital Modulation:
Variability: no [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: [2] m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0045.4+4154

R.A.: $00^h45^m29\overset{s}{.}0$ LII: $121\overset{\circ}{.}75$ Discovery: [2]
Dec.: $+41°54'08''$ BII: $-20\overset{\circ}{.}96$ Coordinates: [2] unidentified

General Data

D [kpc]: M 31
L_{bol} [erg/s]: 5–10×10^{37} [2]
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.84
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <154 (wd) [2],[3]
Orbital Modulation:
Variability: transient [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: [4] m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum: UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: Wind mass loss:

References

[1] White N.E., Giommi P., Angelini L., Fantasia S., 1994, IAU Circ. 6064: X-ray discovery, position
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[3] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[4] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0045.5+4206

R.A.: $00^h45^m32\overset{s}{.}3$ LII: 121°.76 Discovery: [1]
Dec.: $+42°06'59''$ BII: −20°.74 Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.84
L_{bol} [erg/s]: 7×10^{37} [2]
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 20–48 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0046.2+4144

R.A.: $00^h46^m15\overset{s}{.}6$	LII: $121\overset{\circ}{.}90$	Discovery: [1]	
Dec.: $+41°44'36''$	BII: $-21\overset{\circ}{.}12$	Coordinates: [1]	$\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.84
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <38 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position, finding chart

RX J0046.2+4138

R.A.: $00^h46^m17\overset{s}{.}8$	LII: $121\overset{\circ}{.}90$	Discovery: [1]	
Dec.: $+41°38'48''$	BII: $-21\overset{\circ}{.}21$	Coordinates: [1]	unidentified

General Data

D [kpc]: M 31
N_H^{gal} [10^{21} cm^{-2}]: 0.84
L_{bol} [erg/s]:
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <40 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: no [2]

Optical/UV Data

Finding Chart:
m_B [mag]:
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position

RX J0047.6+4205

R.A.: $00^h47^m38\overset{s}{.}5$ LII: $122\overset{\circ}{.}18$ Discovery: [1]
Dec.: $+42°05'07''$ BII: $-20\overset{\circ}{.}78$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: M 31
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.84
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: <39 (bb) [2]
Orbital Modulation:
Variability: no [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

[1] Supper R., Hasinger G., Pietsch W., Trümper J., Jain A., Magnier E.A., Lewin W.H.G., van Paradijs J., 1996, A&A (in press): ROSAT data of M31, position
[2] Greiner J., Supper R., Magnier E.A., 1996, this volume p. 75: X-ray spectral data, position

RX J0048.4–7332 SMC 3

R.A.: $00^h48^m20\overset{s}{.}8$ LII: 303°.23 Discovery: [2] **Sy**
Dec.: –73°31′53″ BII: –43°.59 Coordinates: [1]

General Data

D [kpc]: SMC
N_H^{gal} [10^{21} cm^{-2}]: 0.516
L_{bol} [erg/s]: 1–8×10^{38} [5], [6]
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 25–45 (wd) [2], [6], [5]
N_H^{fit} [10^{21} cm^{-2}]: 1.2–7.0 [2]
Orbital Modulation:
Variability:

Optical/UV Data

Finding Chart: [1] m_B [mag]: m_V [mag]: 15.5
Orbital Modulation:
Opt. Spectrum: [1],[7] UV Spectrum:
Opt. Variability: 1.5 mag outburst in 1981 [1]
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [4] Wind mass loss:

References

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[2] Kahabka P., Pietsch W., Hasinger G., 1994, A&A 288, 538: ROSAT X-ray data on several SMC/LMC sources
[3] Vogel M., Morgan D.H., 1994, A&A 288, 842: IUE spectrum
[4] Remillard R.A., Rappaport S., Macri L.M., 1995, ApJ 439, 646: ionisation nebula limit
[5] Teeseling A. van, Heise J., Kahabka P., 1996, in Compact stars in binaries, IAU Symp. 165, Eds J. van Paradijs et al. , p. 445: WD atmosphere modelling
[6] Jordan S., Schmutz W., Wolff B., Werner K., Mürset U., 1996, A&A (in press): model atmosphere for optical, UV and X-ray emission including luminosity, mass loss and abundances
[7] Mürset U., Schild H., Vogel M., 1996, A&A (in press): optical spectrum

RX J0058.6–7146

R.A.: $00^h58^m35\overset{s}{.}8$ LII: $302\overset{\circ}{.}14$ Discovery: [1]
Dec.: $-71°46'02''$ BII: $-45\overset{\circ}{.}35$ Coordinates: [1] $\boxed{\text{unidentified}}$

General Data

D [kpc]: SMC
N_H^{gal} [10^{21} cm^{-2}]: 0.748
L_{bol} [erg/s]: 2×10^{36}
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 15-70 (bb)[1]
N_H^{fit} [10^{21} cm^{-2}]: 0.3–1.5 [1]
Orbital Modulation:
Variability: turn on within 2 days [1]

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [2]
Wind mass loss:

References

[1] Kahabka P., Pietsch W., Hasinger G., 1994, A&A 288, 538: ROSAT X-ray data on several SMC/LMC sources, X-ray turn on
[2] Remillard R.A., Rappaport S., Macri L.M., 1995, ApJ 439, 646: ionisation nebula limit

1E 0056.8–7154 SMC N67

R.A.: $00^h58^m37\overset{s}{.}0$ LII: $302\overset{\circ}{.}12$ Discovery: [7] **PN**
Dec.: $-71°35'48''$ BII: $-45\overset{\circ}{.}52$ Coordinates: [2]

General Data

D [kpc]: SMC
L_{bol} [erg/s]: 2×10^{37} [11]
Mass of central object [$M_\odot$]: 0.9
N_H^{gal} [10^{21} cm^{-2}]: 0.507
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 30-40 (wd) [11]
Orbital Modulation:
Variability: <20–40% [10], [9]
N_H^{fit} [10^{21} cm^{-2}]: 0.5 [11]

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]: 16.7
Orbital Modulation:
Opt. Spectrum: UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [3], [12] Wind mass loss:

References

[1] Henize K.G., 1956, ApJS 2, 315: position
[2] Aller L.H., Keyes C.D., 1987, ApJ 320, 159: position, UV spectrum
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[13] Teeseling A. van, Heise J., Kahabka P., 1996, in Compact stars in binaries, IAU Symp. 165, Eds J. van Paradijs et al. , p. 445: WD atmosphere modelling

RX J0439.8–6809

R.A.: $04^h39^m49\overset{s}{.}6$ LII: $279\overset{\circ}{.}87$ Discovery: [1] **SSS**
Dec.: $-68°09'02''$ BII: $-37\overset{\circ}{.}10$ Coordinates: [3],[5],[7]

General Data

D [kpc]: LMC
N_H^{gal} [10^{21} cm^{-2}]: 0.447
L_{bol} [erg/s]: 10–14$\times10^{37}$
Orbital Period: 3.37 h [6]
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 20-25 (wd) [7]
N_H^{fit} [10^{21} cm^{-2}]: 0.25–0.4 [7]
Orbital Modulation:
Variability: constant 1990–1994 [1]

Optical/UV Data

Finding Chart: [1],[5],[6],[7]
m_B [mag]: 21.5
m_V [mag]: 21.7
Orbital Modulation: 0.15 mag [6]
Opt. Spectrum: [5],[7]
UV Spectrum:
Opt. Variability: marginal [5],[6],[7]
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [2]
Wind mass loss:

References

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[2] Remillard R.A., Rappaport S., Macri L.M., 1995, ApJ 439, 646: ionisation nebula limit
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RX J0513.9–6951 HV 5682

R.A.: $05^h13^m50\overset{s}{.}8$	LII: $280\overset{\circ}{.}80$	Discovery: [1]	**SSS**
Dec.: –69°51′47″	BII: $-33\overset{\circ}{.}69$	Coordinates: [1], [3], [7]	

General Data

D [kpc]: LMC

N_H^{gal} [10^{21} cm^{-2}]: 0.838

L_{bol} [erg/s]: 0.1–6×10^{38} [1]

Orbital Period: 0.76 d [7],[10],[13]

Mass of central object [$M_\odot$]: 1.3–1.4 [6]

Mass of companion [$M_\odot$]: >0.8 [7]

Spectral type:

X-ray Data

T [eV]: 30-40 (bb) [1]

N_H^{fit} [10^{21} cm^{-2}]: 0.9 [1]

Orbital Modulation: no

Variability: transient with on/off time scale of 4 weeks [1],[9]

Optical/UV Data

Finding Chart: [2], [3] m_B [mag]: 16.6 m_V [mag]: 16.7

Orbital Modulation: 0.1 mag [7],[10],[13]

Opt. Spectrum: [2],[3],[7],[10],[11],[12]   UV Spectrum: [2]

Opt. Variability: semi-regular 1 mag drops of ≈30 d duration [2],[7],[10],[11],[12]

UV Variability:

Nebula [erg/s]: <$10^{34.6}$ (OIII) [4]   Wind mass loss: 3800 km/s [2], [7]

References

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[13] Motch C., Pakull M.W., 1996, this volume p. 127: orbital period

RX J0527.8–6954

R.A.: $05^h27^m49\overset{s}{.}9$	LII: $280\overset{\circ}{.}56$	Discovery: [1],[2]	
Dec.: $-69°54'09''$	BII: $-32\overset{\circ}{.}50$	Coordinates: [9]	$\boxed{\text{unidentified}}$

General Data

D [kpc]:
N_H^{gal} [10^{21} cm^{-2}]: 0.622
L_{bol} [erg/s]: 1–10×10^{37}
Orbital Period:
Mass of central object [$M_\odot$]: 1.1–1.35 [8],[10]
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 18-45 (bb) [2]
N_H^{fit} [10^{21} cm^{-2}]: 0.7–1.0 [2]
Orbital Modulation:
Variability: steady decrease with 5 yr timescale, possibly periodic [9],[10]

Optical/UV Data

Finding Chart: [4],[10]
m_B [mag]: >19
m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: <$10^{34.6}$ (OIII) [6]
Wind mass loss:

References

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[10] Greiner J., Schwarz R., Hasinger G., Orio M., 1996, this volume p. 145: X-ray lightcurve, improved X-ray position (HRI), finding chart

RX J0537.7–7034 RX J0537.6–7033

R.A.: $05^h37^m43\overset{s}{.}0$ LII: $281\overset{\circ}{.}19$ Discovery: [1]
Dec.: –70°34′15″ BII: $-31\overset{\circ}{.}57$ Coordinates: [1] unidentified

General Data

D [kpc]:
L_{bol} [erg/s]: 0.6–2×10^{37} [1]
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.637
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 18-30 (bb) [1]
Orbital Modulation:
Variability: amplitude of factor 10 [2]
N_H^{fit} [10^{21} cm^{-2}]:

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]:
Wind mass loss:

References

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CAL 83 LHG 83

R.A.: $05^h43^m33\overset{s}{.}5$ LII: $278\overset{\circ}{.}56$ Discovery: [1] **SSS**
Dec.: $-68°22'23''$ BII: $-31\overset{\circ}{.}31$ Coordinates: [2]

General Data

D [kpc]: LMC
N_H^{gal} [10^{21} cm^{-2}]: 0.652
L_{bol} [erg/s]: 1–10×10^{38} [7]
Orbital Period: 1.04 d [5]
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 20-50 (bb)
N_H^{fit} [10^{21} cm^{-2}]: 0.7–0.85 [7]
Orbital Modulation: no
Variability:

Optical/UV Data

Finding Chart: [5]
m_B [mag]: 16.2–17.3
m_V [mag]: 16.2–17.3
Orbital Modulation: 0.22 mag sinusoidal [5]
Opt. Spectrum: [3]
UV Spectrum: [3],[4]
Opt. Variability: erratic
UV Variability: 50% irregular [3],[4]
Nebula [erg/s]: OIII ($10^{35.6}$), Hα ($10^{35.4}$)[6][9]
Wind mass loss:

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CAL 87 LHG 87

R.A.: $05^h46^m52\overset{s}{.}3$ LII: $281\overset{\circ}{.}75$ Discovery: [1] **SSS**
Dec.: $-71°08'38''$ BII: $-30\overset{\circ}{.}76$ Coordinates:

General Data

D [kpc]: LMC
N_H^{gal} [10^{21} cm^{-2}]: 0.749
L_{bol} [erg/s]: 6–20×10^{37} [12]
Orbital Period: 10.6 h [6]
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 65-75 (wd) [12]
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation: eclipse with amplitude of factor 3 [8]
Variability:

Optical/UV Data

Finding Chart: [6] m_B [mag]: 19.0 m_V [mag]: 18.9
Orbital Modulation: 2 mag eclipse with broad wings [5], [6]
Opt. Spectrum: [5] UV Spectrum: [11]
Opt. Variability:
UV Variability:
Nebula [erg/s]: <$10^{34.6}$ (OIII) [10] Wind mass loss:

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RX J0550.0–7151

R.A.: $05^h50^m00\overset{s}{.}2$ LII: $282\overset{\circ}{.}52$ Discovery: [1]
Dec.: $-71°52'09''$ BII: $-30\overset{\circ}{.}47$ Coordinates: [6] unidentified

General Data

D [kpc]:
L_{bol} [erg/s]:
Mass of central object [$M_\odot$]:
N_H^{gal} [10^{21} cm^{-2}]: 0.892
Orbital Period:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 25–40 (bb) [3],[6]
N_H^{fit} [10^{21} cm^{-2}]: 2.0 [3]
Orbital Modulation:
Variability: turn-off [6]

Optical/UV Data

Finding Chart: [6]
m_B [mag]:
m_V [mag]: >19.5
Orbital Modulation:
Opt. Spectrum:
UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: $<10^{34.6}$ (OIII) [2]
Wind mass loss:

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RX J0925.7–4758

R.A.: $09^h25^m46\overset{s}{.}2$	LII: $271\overset{\circ}{.}36$	Discovery: [1]	**SSS**
Dec.: $-47°58'17''$	BII: $1\overset{\circ}{.}88$	Coordinates: [1]	

General Data

D [kpc]: 0.4–2 [1]	N_H^{gal} [10^{21} cm^{-2}]: 13.0
L_{bol} [erg/s]: 3–7$\times10^{35}$ (D/1 kpc)^2 [4]	Orbital Period: 3.55–4.03 d [1], [3]
Mass of central object [$M_\odot$]:	Mass of companion [$M_\odot$]:
	Spectral type:

X-ray Data

T [eV]: 70-75 (wd) [4]	N_H^{fit} [10^{21} cm^{-2}]: 20–24 [4]
Orbital Modulation: possible [3]	
Variability: less than 50% [1]	

Optical/UV Data

Finding Chart: [1]	m_B [mag]: 19.2	m_V [mag]: 17.2
Orbital Modulation: 0.3 mag amplitude		
Opt. Spectrum: [1]	UV Spectrum:	
Opt. Variability:		
UV Variability:		
Nebula [erg/s]:	Wind mass loss:	

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GQ Mus — Nova Muscae 1983

R.A.: $11^h52^m02\overset{s}{.}5$ LII: $297\overset{\circ}{.}21$ Discovery: [6],[8] **N**
Dec.: $-67°12'24''$ BII: $-5\overset{\circ}{.}00$ Coordinates: [2]

General Data

D [kpc]: 4.7±1.5
N_H^{gal} [10^{21} cm^{-2}]: 4.24
L_{bol} [erg/s]: 1–2×10^{38} [8]
Orbital Period: 1.41 [7]
Mass of central object [$M_\odot$]: <1.1–1.25 [13]
Mass of companion [$M_\odot$]: <0.2 [8]
Spectral type:

X-ray Data

T [eV]: 25–35 (bb) [8]
N_H^{fit} [10^{21} cm^{-2}]: 1.0–3.4 [8]
Orbital Modulation: quasi-sinusoidal, 50% amplitude [14]
Variability: decline by factor >30 [12]

Optical/UV Data

Finding Chart: [3], [4]
m_B [mag]: 7–21
m_V [mag]: 7–21
Orbital Modulation: 0.2 mag [7]
Opt. Spectrum: [4],[7],[9],[11]
UV Spectrum: [4]
Opt. Variability: nova outburst and decline
UV Variability:
Nebula [erg/s]:
Wind mass loss:

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1E 1339.8+2837 RX J1342.1+2822

R.A.: $13^h42^m09\overset{s}{.}8$ LII: $42\overset{\circ}{.}23$ Discovery: [3]
Dec.: $28°22'45''$ BII: $78\overset{\circ}{.}71$ Coordinates: [3] unidentified

General Data

D [kpc]: 10.4 kpc (M3) [2]
N_H^{gal} [10^{21} cm^{-2}]: 0.11
L_{bol} [erg/s]: 1.2×10^{34}–1.2×10^{36} [3]
Orbital Period:
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]: 20-45 (bb)
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: transient [3]

Optical/UV Data

Finding Chart: m_B [mag]: m_V [mag]:
Orbital Modulation:
Opt. Spectrum: UV Spectrum:
Opt. Variability:
UV Variability:
Nebula [erg/s]: Wind mass loss:

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AG Dra BD+67 922

R.A.: $16^h01^m40\overset{s}{.}9$ LII: $100\overset{\circ}{.}29$ Discovery: [10],[11] **Sy**
Dec.: $+66°48'10''$ BII: $40\overset{\circ}{.}97$ Coordinates: [2]

General Data

D [kpc]: 0.7–4 kpc
N_H^{gal} [10^{21} cm^{-2}]: 0.315
L_{bol} [erg/s]: 1.4×10^{36} (D/1 kpc)^2 [11]
Orbital Period: 554 d [5]
Mass of central object [$M_\odot$]:
Mass of companion [$M_\odot$]:
Spectral type: K3III–K0Ib [3],[8]

X-ray Data

T [eV]: 10–15 (bb) [10],[11]
N_H^{fit} [10^{21} cm^{-2}]: 0.4 [11]
Orbital Modulation: not clear [10],[11]
Variability: major drop during optical outbursts [10],[11]

Optical/UV Data

Finding Chart: [1]
m_B [mag]: 8–11.2
m_V [mag]: 8–9.8
Orbital Modulation: 0.5 mag in U [5]
Opt. Spectrum: [3]
UV Spectrum: [6],[7]
Opt. Variability: series of outbursts, possibly 15 yr period [4]
UV Variability: factor 2–5 during outburst [7],[10]
Nebula [erg/s]:
Wind mass loss: 100 km/s [7]

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RR Tel — HV 3181

R.A.: $20^h04^m18\overset{s}{.}5$ LII: $342\overset{\circ}{.}16$ Discovery: [9] **Sy**
Dec.: $-55°43'34''$ BII: $-32\overset{\circ}{.}24$ Coordinates: [3]

General Data

D [kpc]: 2.6 kpc [8]
L_{bol} [erg/s]: 1.3×10^{37} [9]
Mass of central object [$M_\odot$]: >0.9 [9]
N_H^{gal} [10^{21} cm^{-2}]: 0.439
Orbital Period: 385–388 d [2],[4]
Mass of companion [$M_\odot$]:
Spectral type: M-giant [7]

X-ray Data

T [eV]: 12 (wd) [9]
N_H^{fit} [10^{21} cm^{-2}]: 0.17
Orbital Modulation:
Variability:

Optical/UV Data

Finding Chart: [3] m_B [mag]: 7–14 m_V [mag]: 7–14
Orbital Modulation: 2.5 mag amplitude [2]
Opt. Spectrum: [5] UV Spectrum: [6]
Opt. Variability: outburst 1944/45 and decline [2],[3]
UV Variability: marginal
Nebula [erg/s]: Wind mass loss:

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V1974 Cyg — Nova Cyg 1992

R.A.: $20^h30^m31\overset{s}{.}2$ LII: $345\overset{\circ}{.}92$ Discovery: [11] **N**
Dec.: $-52°37'53''$ BII: $-36\overset{\circ}{.}06$ Coordinates: [1]

General Data

D [kpc]: 1.8–3.2 [12]
N_H^{gal} [10^{21} cm^{-2}]: 0.325
L_{bol} [erg/s]: 2×10^{38} [6]
Orbital Period: 1.95 h [9]
Mass of central object [$M_\odot$]: 0.75–1.1 [12],[13]
Mass of companion [$M_\odot$]:
Spectral type:

X-ray Data

T [eV]:
N_H^{fit} [10^{21} cm^{-2}]:
Orbital Modulation:
Variability: full outburst lightcurve [11]

Optical/UV Data

Finding Chart: [2]
m_B [mag]:
m_V [mag]: 4.5–21
Orbital Modulation: 0.2 mag [9]
Opt. Spectrum: [4],[10]
UV Spectrum: [5]
Opt. Variability:
UV Variability: [5],[7]
Nebula [erg/s]:
Wind mass loss:

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