

**Table 2.** The list of newly detected *INTEGRAL* hard X-ray sources based on 14 years of observations. This catalogue is only available in the online version of the paper.

No.	Name*	RA† (deg)	Dec† (deg)	Flux‡ (17–60 keV)	S/N	Type§	Ref¶	Hard X-ray/γ counterpart	Soft X-ray counterpart	Optical/IR counterpart
1	J00555+4610	13.876	46.173	1.42 ± 0.28	5.1	CV	1,2	Swift J0055.4+4612	XSS J00564+4548	
2	J01017+6519	15.440	65.330	0.61 ± 0.08	8.0					
3	J02145+5142	33.625	51.710	1.10 ± 0.19	5.7	AGN	1	Swift J0213.7+5147		
4	J03117+5028	47.934	50.472	0.70 ± 0.15	4.7	AGN	1	Swift J0311.9+5032	1RXS J031202.7+502922	2MASX J03120291+5029147
5	J06402–2552	100.050	-25.868	2.24 ± 0.32	7.0	AGN	1	Swift J0640.4–2554		ESO 490–26
6	J07141+0146	108.547	1.744	1.44 ± 0.24	6.0					
7	J07258+0054	111.471	-0.907	1.39 ± 0.22	6.3	AGN	1	Swift J0725.7–0055		QSO B0723–007
8	J07396–3143	114.908	-31.732	1.73 ± 0.21	8.1	AGN?	1	Swift J0739.7–3142		2MASX J07394469–3143024
9	J07433–2544	115.844	-25.736	1.22 ± 0.15	7.9	AGN?	1	Swift J0743.3–2546	1RXS J074315.6–254545	2MASX J07431472–2545501
10	J08004–4309	120.121	-43.160	0.58 ± 0.10	5.7		1	Swift J0800.7–4309		
11	J08215–1320	125.387	-13.339	0.98 ± 0.14	6.9	AGN?	3			NGC 2578, PGC023449
12	J08321–1808	128.022	-18.141	1.11 ± 0.15	7.3	AGN?	4,5,6		{ 1RXSJ083158.1–180828 } { 1SXPS J083158.6–180840 }	
13	J08398–1214	129.961	-12.243	1.80 ± 0.15	11.7	AGN?	5,1	Swift J0839.6–1213	1RXS J083950.7–121424	2E 2028
14	J08453–3529	131.329	-35.493	0.72 ± 0.12	6.0	AGN	1,7	Swift J0845.0–3531	1RXS J084521.7–353048	WISE J084521.37–353024.2
15	J09278–3935	141.965	-39.590	0.66 ± 0.12	5.7					
16	J09331–4725	143.302	-47.441	0.57 ± 0.09	6.2					
17	J11275–5319	171.898	-53.369	0.71 ± 0.11	6.5		8	PBC J1127.7–5320		
18	J11299–6557	172.490	-65.960	0.58 ± 0.10	5.8	AGN?	5		1RXS J112955.1–655542	2MASS J11295643–6555218
19	J12086–6327	182.157	-63.452	0.54 ± 0.09	6.0					
20	J12489–5930	192.161	-59.507	0.49 ± 0.09	5.5					
21	J12529–6351	193.241	-63.868	0.49 ± 0.09	5.5					
22	J14044–6146	211.029	-61.700	0.69 ± 0.08	8.1		1	Swift J1403.6–6146		
23	J14417–5533	220.427	-55.550	0.69 ± 0.09	7.4	AGN?	5		1RXS J144116.4–553329	2MASS J14411645–5533306
24	J14192–6048	214.819	-60.810	0.43 ± 0.09	5.1	PSR/PWN	1	Swift J1418.8–6055	AX J1418.7–6058	
25	J15550–4306	238.769	-43.090	0.50 ± 0.09	5.7					
26	J16459–2325	251.477	-23.428	1.39 ± 0.13	11.0					
27	J16494–1740	252.355	-17.676	0.80 ± 0.14	5.6	AGN?	4,9	4PBC J1649.3–1738	1SXPS J164920.9–173840	ESO 586–4
28	J17040–4305	256.010	-43.080	0.44 ± 0.07	6.2				1RXS J170406.3–430637	
29	J17098–2344	257.455	-23.747	0.63 ± 0.08	8.4	AGN?	5,6	4PBC J1709.7–2348	1RXS J170944.9–234658	2MASS J17094469–2346531
30	J17158–2124	258.959	-21.411	0.59 ± 0.08	7.5					
31	J17255–4509	261.380	-45.170	0.58 ± 0.08	7.1	AGN?	8,9	4PBC J1725.8–4510		2MASX J17253053–4510279
32	J17326–3445	263.169	-34.754	0.29 ± 0.06	5.2				1RXS J173251.1–344728	
33	J17327–4405	263.183	-44.103	0.62 ± 0.09	6.9					
34	J17422–2108	265.560	-21.106	0.25 ± 0.05	5.0		6		1SXPS J174211.7–210354	
35	J17528–2022	268.217	-20.367	0.43 ± 0.06	6.7		8	4PBC J1752.6–2020		
36	J17538–2544	268.463	-25.749	0.54 ± 0.05	10.5		10	Swift J1753.7–2544		
37	J17570–2500	269.266	-25.015	0.34 ± 0.05	6.4					
38	J17596–2315	269.907	-23.266	0.39 ± 0.06	6.9					
39	J18010–3045	270.271	-30.764	0.37 ± 0.05	7.2					
40	J18013–3222	270.326	-32.371	0.34 ± 0.05	6.4					
41	J18017–3542	270.371	-35.638	0.42 ± 0.06	7.0		8	4PBC J1801.7–3540		

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No.	Name*	RA† (deg)	Dec† (deg)	Flux‡ (17–60 keV)	S/N	Type§	Ref.¶	Hard X-ray/ $\gamma$ counterpart	Soft X-ray counterpart	Optical/IR counterpart
42	J18044–1829	271.107	-18.487	0.45 ± 0.07	6.3					
43	J18070–3507	271.750	-35.132	0.30 ± 0.06	4.9					
44	J18102–1751	272.555	-17.853	0.55 ± 0.07	7.4					
45	J18112–2641	272.854	-26.707	0.48 ± 0.06	8.7					
46	J18141–0606	273.525	-6.114	0.45 ± 0.09	5.1					
47	J18141–1823	273.538	-18.395	0.68 ± 0.07	9.0		8	4PBC J1814.1–1822		
48	J18147–3400	273.690	-34.010	0.54 ± 0.06	8.6					
49	J18165–3912	274.136	-39.202	0.61 ± 0.09	7.0					
50	J18172–1944	274.307	-19.740	0.55 ± 0.07	7.6					
51	J18184–2352	274.610	-23.880	0.96 ± 0.06	15.2	CV?	11		MACHO 311.37389.3983	
52	J18263–1345	276.576	-13.753	0.55 ± 0.08	6.6	PWN?		HESS J1825–137?		
53	J13545–5958	208.621	-59.982	0.54 ± 0.09	6.4					
54	J18434–0508	280.855	-5.138	0.52 ± 0.08	6.2		8,12	4PBC J1842.8–0506	Swift J184311.0–050539	
55	J18544+0839†	283.605	8.661	0.50 ± 0.08	6.7					
56	J19039+3348	285.948	33.825	1.05 ± 0.17	6.2	AGN	1	Swift J1903.9+3349		
57	J19071+0716	286.783	7.274	0.40 ± 0.07	5.7		5,13		{1SXPS J190706.3+072004 } {3XMM J190706.3+072003 }	
58	J19260+4136	291.517	41.608	0.66 ± 0.14	4.7	AGN	1	Swift J1926.9+4140	1RXS J192630.6+413314	2MASX J19263018+4133053
59	J19305+1851	292.632	18.857	0.78 ± 0.10	7.7	SNR?			1RXS J193029.9+185205	
60	J19421+3613	295.530	36.219	0.61 ± 0.09	6.6					
61	J19498+2534	297.470	25.557	0.52 ± 0.10	5.0		8,14	4PBC J1950.0+2532	AX J1949.8+2534	
62	J19577+3339	299.429	33.658	0.46 ± 0.08	5.6					
63	J19504+3318†	297.615	33.311	0.63 ± 0.09	7.4				1RXS J195020.5+331419	
64	J20063+3641	301.601	36.684	0.72 ± 0.08	9.1		1	Swift J2006.4+3645		
65	J20084+3221	302.124	32.350	0.68 ± 0.08	8.4		5,8	4PBC J2008.7+3221	1SXPS J200843.8+321824	
66	J20596+4303	314.914	43.054	0.57 ± 0.08	6.8		1	Swift J2059.6+4301A/B		
67	J21099+3533	317.490	35.560	0.71 ± 0.11	6.6					
68	J21133+3154	318.328	31.923	0.75 ± 0.15	4.8				1RXS J211319.3+315211	
69	J21382+3204	324.563	32.072	1.27 ± 0.24	5.4	AGN	1	Swift J2138.8–3207	1RXS J213833.0+320507	WISE J213833.43+320505.8
70	J21397+5949	324.945	59.832	0.78 ± 0.11	7.1	AGN	1	Swift J2139.7+5951	1RXS J213944.3+595016	WISE J213944.96+595015.1
71	J22018+5049	330.474	50.830	0.68 ± 0.10	6.7	AGN	1	Swift J2201.9+5057		87GB 215950.2+503417
72	J22455+3940	341.383	39.683	2.43 ± 0.45	5.4	AGN	1	Swift J2246.0+3941		3C452

\* *INTEGRAL* (IGR) name of the source. A dagger symbol † marks that the source is located in the region of high systematic noise, and that its measured flux should be **treated with caution**.

† Equatorial coordinates (right ascension and declination) are in standard J2000.0 epoch.

‡ The measured 17–60 keV flux of the source  $\times 10^{-11} \text{ erg cm}^{-2} \text{ s}^{-1}$ .

§ General astrophysical type of the object: AGN – active galactic nucleus, SNR – supernova remnant; CV – cataclysmic variable; PSR – isolated pulsar or pulsar wind nebula (PWN). A question mark indicates that the specified type should be confirmed.

¶ References. – (1) Baumgartner et al. (2013); (2) Bikmaev et al. (2006); (3) Paturel et al. (2003); (4) Massaro et al. (2013); (5) Edelson & Malkan (2012); (6) Evans et al. (2014); (7) Masetti et al. (2010); (8) Cusumano et al. (2010); (9) Skrutskie et al. (2006); Huchra et al. (2012); (10) Krimm et al. (2013); (11) Cieslinski et al. (2004); (12) Reynolds et al. (2013); (13) Rosen et al. (2016); (14) Sguera et al. (2015); Sugizaki et al. (2001);

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