

**The Catalog of IPs and IP Candidates by Right Ascension**  
**Version 2021 with 202 objects**  
**(150 IPs/IP candidates and 52 others)**  
**2021 December 30**

Ironclad	Confirmed	Probable	Possible	Doubtful
****	****	***	**	*
39	32	26	53	52

	Var. Name	Alt. Name(s)	RA	Dec	P <sub>o</sub> (h)	P <sub>s</sub> (s)	Level
001	V1033 Cas	IGR J00234+6141 1RXS J002258.3+614111	00 22 57.63	+61 41 07.5	4.033	563.5	*****
002	V709 Cas	RX J0028.8+5917	00 28 48.83	+59 17 22.0	5.332898	312.78	*****
003	V515 And	XSS J00564+4548 1RXS J005528.0+461143	00 55 19.85	+46 12 56.9	2.731087	465.48493	****
004		1RXS J015317.9+744641 RX J0153.3+7446	01 53 21.01	+74 46 22.0	3.9396	1974?	***
—	TT Ari	1RXS J020653.0+151744	02 06 53.07	+15 17 41.5	3.3012		*
—	HP Cet	SDSS J023322.61+005059.5	02 33 22.61	+00 50 59.4	1.6013		*
005		LAMOST J024048.51+195226.9 CRTS J024048.5+195227	02 40 48.53	+19 52 27.0	7.3364	24.9328	****
006	XY Ari	H0253+193	02 56 08.15	+19 26 33.8	6.06471936	206.3	*****
007	GK Per	Nova Persei 1901	03 31 12.00	+43 54 15.2	47.9249	351.332	*****
—	AH Eri		04 22 38.13	-13 21 30.6	5.7384	2520??	*
008		IGR J04571+4527 1RXS J045707.4+452751	04 57 08.32	+45 27 50.0	6.19?	1218.7	****
009	V1062 Tau	H0459+246	05 02 27.47	+24 45 23.1	9.98119	3800	*****
010		Swift J0503.7-2819 1RXS J050350.6-282324	05 03 49.26	-28 23 08.0	1.360	975.2?	***
011	UU Col	RX J0512.2-3241	05 12 13.23	-32 41 39.7	~3.45	863.5	****
012		1RXS J052430.2+424449 RX J0524+42 “Paloma”	05 24 30.47	+42 44 50.2	2.6195	8758? 8175?	***
013		Swift J0525.6+2416 Swift J052522.48+241331.8 1RXS J052523.2+241331	05 25 22.70	+24 13 33.3		226.28?	***
014	TV Col	A0526-328	05 29 25.54	-32 49 03.5	5.486398	1909.7	*****
015	TW Pic	H0534-581	05 34 50.56	-58 01 41.7	6.06?	7186??	**
016		Swift J0535.2+2830	05 34 57.92	+28 28 37.2		1523	***
017	TX Col	1H0542-407	05 43 20.12	-41 01 54.3	5.691	1909.5	*****
—	FS Aur	1RXS J054748.5+283512	05 47 48.38	+28 35 11.1	1.428		*
—	LS Cam	HS 0551+7241	05 57 23.99	+72 41 52.5	3.417247		*

	Var. Name	Alt. Name(s)	RA	Dec	P <sub>o</sub> (h)	P <sub>s</sub> (s)	Level
018	V405 Aur	RX J0558.0+5353	05 57 59.29	+53 53 44.7	4.143012	545.4555	*****
—	AH Men	1H0551–819	06 11 43.99	–81 49 22.4	2.95		*
019		Swift J061223.0+701243.9	06 12 22.6	+70 12 43.4			**
—	V552 Aur	“Aur2” NSV 2872	06 14 09.89	+45 30 09.2	?	?	*
020	MU Cam	1RXS J062518.2+733433	06 25 16.25	+73 34 39.1	4.7186	1187.2184	*****
021	V902 Mon	IPHAS J062746.41+014811.3	06 27 46.40	+01 48 11.0	8.162	2210 ?	***
022	V647 Aur	1RXS J063631.9+353537	06 36 32.56	+35 35 43.2	3.46565	932.9123	****
—		2PBC J0658.0–1746 1RXS J065806.3–174427	06 58 05.87	–17 44 24.4	2.379288	8565.4368	*
023	V418 Gem	1RXS J070407.9+262501	07 04 08.67	+26 25 10.8	4.36925	480.6700	*****
—		Swift J0706.8+0325 PBC J0706.7+0327 1RXS J070648.8+032450	07 06 48.96	+03 24 46.7	1.7018	6126.36	*
—	V348 Pup	1H0709–360	07 12 32.91	–36 05 38.4	2.444136		*
024		Swift J0717.8–2156 1RXS J071748.9–215306	07 17 48.26	–21 53 01.5	5.515	803.5	****
—	GI Mon	Nova Monocerotis 1918 HD 58756	07 26 47.10	–06 40 29.7	4.3248		*
025	BG CMi	3A0729+103	07 31 28.99	+09 56 23.1	3.2339650	913.50660	*****
026	V667 Pup	Swift J0732.5–1331	07 32 37.63	–13 31 09.4	5.611	512.42	*****
—	V436 Car	RX J0744.9–5257	07 44 57.94	–52 57 13.7	3.60		*
027		Swift J0746.2–1611 1RXS J074616.8–161127	07 46 17.11	–16 11 27.6	9.3842	2300 ?	**
028		Swift J0749.7–3218	07 49 31.98	–32 15 36.5			**
029	PQ Gem	RE 0751+14	07 51 17.32	+14 44 24.0	5.1926	833.41992	*****
—		SDSS J075653.11+085831.8	07 56 53.11	+08 58 31.8	3.29		*
030	HT Cam	RX J0757.0+6306	07 57 01.34	+63 06 02.0	1.43309	515.0592	*****
031	DW Cnc		07 58 53.01	+16 16 45.2	1.435024	2315.027	*****
032		1RXS J080114.6–462324 PBC J0801.2–46225	08 01 17.02	–46 23 27.5		1307.66	***
033	HZ Pup	Nova Puppis 1963 No. 1	08 03 22.84	–28 28 28.5	5.09	1210.9	*****
—	HM Cnc	RX J0806.3+1527 1BMW J080622.8+1527323	08 06 22.95	+15 27 31.0	0.0893		*
034	CP Pup	Nova Puppis 1942	08 11 46.06	–35 21 04.9	1.4743		**
035	V597 Pup	Nova Puppis 2007	08 16 17.96	–34 15 24.9	2.6687	524 ?	**
036		2PBC J0819.2–2508 2SXPS J081916.3–250707	08 19 16.21	–25 07 06.0			**
—		Swift J0820.6–2805 PBC J0820.4–2801 1RXS J082033.6–280457	08 20 34.09	–28 04 58.5	1.5:		*
—	AT Cnc		08 28 36.92	+25 20 03.1	4.839	1600 ?	*
037	WX Pyx	1E 0830.9–2238	08 33 05.76	–22 48 32.0	5.3 ?	1559.2	****
—	SW UMa		08 36 42.70	+53 28 38.1	1.3636		*
038	EI UMa	PG 0834+488 1H0832+488	08 38 21.99	+48 38 02.1	6.434	741.6	****

	Var. Name	Alt. Name(s)	RA	Dec	P <sub>o</sub> (h)	P <sub>s</sub> (s)	Level
039		IGR J08390-4833	08 38 49.10	-48 31 24.7	8 ?	1480.8	****
040		SDSS J084617.12+245344.1	08 46 17.12	+24 53 44.0	4.38687		**
—	VZ Pyx	H0857-242	08 59 19.82	-24 28 55.3	1.76	3020 ?	*
—		HS 0922+1333	09 24 55.92	+13 20 51.8	4.0395	14542.2	*
041		PBC J0927.8-6945	09 27 53.07	-69 44 41.9	4.790	1033.05	****
		Swift J0927.7-69451					
042		SDSS J093249.57+472523.0	09 32 49.58	+47 25 22.8	1.5878		**
043		Swift J0939.7-3224	09 39 49.64	-32 26 22.0	8.5104	2670 ?	**
		1RXS J093949.2-322620					
044	VZ Sex	1RXS J094432.1+035738	09 44 31.68	+03 58 05.3	3.569	2450 ?	***
—	HY Leo	HS 0943+1404	09 46 34.47	+13 50 57.7	4.42	4150 ?	*
045		Swift J0958.0-4208	09 57 50.64	-42 08 35.5		296.22	***
		1RXS J095750.4-420801					
		CSS J095750.7-420836					
046		SDSS J100516.61+694136.5	10 05 16.58	+69 41 36.4	3.67		**
—	KO Vel	E1013-477	10 15 58.31	-47 58 09.4	10.1	?	*
		H1011-47					
—	V381 Vel	1RXS J101659.4-410332	10 16 59.02	-41 03 44.5	2.038	7388	*
		RX J1016.9-4103					
—	YY Sex	RX J1039.7-0507	10 39 46.99	-05 06 58.6	1.574		*
047	RZ Leo	SDSS J113722.25+014858.6	11 37 22.18	+01 48 58.9	1.825	220 ?	**
048	DO Dra	3A 1148+719	11 43 38.54	+71 41 20.8	3.96898	529.31	*****
		PG 1140+72					
049		ASASSN-18fk	12 08 57.25	+19 16 56.2		1320 ?	**
050		IGR J12123-5802	12 12 26.21	-58 00 20.5			**
		1RXS J121222.7-580118					
—		1ES 1210-646	12 13 14.78	-64 52 30.5		?	*
		SAXWFC J1213.2-6452.7					
		4U 1210-64					
051		IGR J12134-6015	12 13 23.95	-60 15 16.8			**
		1RXS J121324.5-601458					
—		XSS J12270-4859	12 27 57.72	-48 53 42.7			*
		1RXS J122758.8-485343					
—	AP Cru	Nova Crucis 1935	12 31 20.42	-64 26 25.1	5.12 ?	1837 ?	*
052	V1025 Cen	RX J1238-38	12 38 16.18	-38 42 45.6	1.410	2146.59	*****
053	EX Hya	4U1228-29	12 52 24.08	-19 14 57.5	1.6376123	4021.6162	*****
—	RR Cha	Nova Chameleontis 1953	13 26 23.74	-82 19 43.5	3.3624	1950 ?	*
—	V1039 Cen	Nova Centauri 2001	13 55 41.26	-64 15 57.5	5.92 ???	720 ?	*
054		IGR J14091-6108	14 08 45.98	-61 07 54.3		576.3	***
		Swift J1408.2-6113					
055		CXO J141430.1-651621	14 14 30.1	-65 16 23.3	17.8 ?	6120 ?	**
056	DD Cir	Nova Circini 1999	14 23 23.46	-69 08 45.3	2.339	670 ?	**
057		IGR J14257-6117	14 25 07.59	-61 18 58.1	4.05	509.5	***
		Swift J1424.8-6122					
058	V842 Cen	Nova Centauri 1986 No. 2	14 35 52.54	-57 37 35.5	3.94 ?	56.825	***
059		SDSS J144659.95+025330.3	14 46 59.96	+02 53 30.3	3.8	2920	***

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060		SAX J1452.8–5949	14 52 52.72	–59 49 07.9		437.4	**
—		IGR J14536–5522	14 53 40.93	–55 21 39.7	3.1564	11363	*
		1RXS J145341.1–552146					
		Swift J1453.4–5524					
061		IGR J15038–6021	15 04 15.71	–60 21 23.0			**
062		IGR J15094–6649	15 09 26.01	–66 49 23.3	5.88	809.42	*****
		1RXS J150925.7–664913					
063	V407 Lup	Nova Lupi 2016	15 29 01.77	–44 49 40.0	3.57	565 ?	***
		ASASSN-16kt					
—		CXOPS J154305.5–522709	15 43 05.50	–52 27 09.0	2.44		*
		CBS 7					
064	NY Lup	1RXS J154814.5–452845	15 48 14.59	–45 28 40.0	9.87	693.01	*****
065		IGR J15529–5029	15 52 46.94	–50 29 53.5			**
		CXOU J155246.9–502953					
066		IGR J16167–4957	16 16 37.76	–49 58 44.6	5.004		**
		1RXS J161637.1–495847					
067		IGR J16173–5023	16 17 28.24	–50 22 42.0			**
		1RXS J161728.1–502238					
068	V1460 Her	CRTS J162117.3+441254	16 21 17.37	+44 12 53.9	4.9884535	38.87126	****
069		1RXS J163100.5+695000	16 31 00.22	+69 50 01.3			**
		Gaia18cja					
—	V1084 Her	1RXS J164345.2+340236	16 43 45.70	+34 02 39.4	2.89344	1903 ?	*
070		IGR J16500–3307	16 49 55.63	–33 07 02.2	3.617	571.9	*****
		1RXS J164955.1–330713					
071		IGR J16547–1916	16 54 43.72	–19 16 31.2	3.715	546.6606	*****
		1RXS J165443.5–191620					
072		AX J1700.1–4157	17 00 04.35	–41 58 05.6		714.5	***
073		IGR J17014–4306	17 01 28.15	–43 06 12.5	12.8166	1859.11	*****
		Swift J1701.3–4304					
074		IGR J17040–4305	17 04 04.96	–43 05 38.1			**
075	V2400 Oph	RX J1712.6–2414	17 12 36.42	–24 14 44.7	3.43	927.66	****
—	V795 Her	PG 1711+336	17 12 56.17	+33 31 18.9	2.598		*
076		IGR J17195–4100	17 19 35.89	–41 00 53.6	4.006	1054	*****
		1RXS J171935.6–410054					
077	V2731 Oph	IGR J17303–0601	17 30 21.90	–05 59 31.8	15.421	127.9999	*****
		1RXS J173021.5–055933					
—	V2487 Oph	Nova Ophiuchi 1998	17 31 59.80	–19 13 56.2			*
078		AX J1740.1–2847	17 40 09.13	–28 47 25.8	2.1 ?	729	****
079	V3037 Oph	AX J1740.2–2903	17 40 16.10	–29 03 38.0	5.722	623	****
		2XMM J174016.0–290337					
—		IGR J17404–3655	17 40 26.86	–36 55 37.4			*
080		Suzaku J174035.6–301416	17 40 35.60	–30 14 16.0		432.1	***
		AX J1740.5–3014					
		SAX J1740.5–3013					
081		CXOGC J174517.4–290650	17 45 17.47	–29 06 50.6		321.5 ?	**
—		CXOGC J174531.7–290542	17 45 32.76	–29 05 43.0	4.645 ?		*

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082		CXOGC J174532.3–290251	17 45 32.33	–29 02 51.6		5612.9 ?	**
083		CXOGC J174534.5–290201	17 45 34.57	–29 02 01.0		971.6 ?	**
—		CXOGC J174535.6–290034	17 45 35.67	–29 00 34.8	2.75 ?		*
084		CXOGC J174541.8–290037	17 45 41.84	–29 00 37.6		1092.2 ?	**
085		CXOGC J174543.4–285841	17 45 43.49	–28 58 41.1		5313.7 ?	**
086		CXOUGC J174622.7–285218	17 46 22.74	–28 52 18.1		1745 ?	**
087		ASASSN-15fm	17 47 59.88	+03 28 59.7	6.94 ?	1114 ??	**
088		SAX J1748.2–2808	17 48 16.86	–28 07 51.0		593	***
—		AX J1749.2–2725	17 49 12.41	–27 25 37.6		220.4	*
089		CXOGBS J174954.5–294335	17 49 54.63	–29 43 35.5	8.60890	503.32	*****
090		XMMU J175035.2–293557	17 50 35.29	–29 35 57.0		510 ?	**
—	V697 Sco	Nova Scorpii 1941	17 51 21.83	–37 24 55.2	4.49	11900 ?	*
—		IGR J17528–2022	17 52 49.30	–20 24 15.5			*
091		IGR J18007–4146	18 00 42.71	–41 46 50.3			**
092		IGR J18017–3542	18 01 12.51	–35 38 12.2			**
093	V1323 Her	1RXS J180340.0+401214	18 03 39.66	+40 12 20.1	4.4021	1520.510	*****
094		CXOPS J180354.3–300005	18 03 54.41	–30 00 05.5		1028	***
095		1RXS J180431.1–273932	18 04 30.46	–27 39 33.3	4.99	493.97	*****
096		IGR J18048–1455	18 04 38.98	–14 56 47.2		~1500	***
		2XMMi J180438.7–145647					
097	DQ Her	Nova Herculis 1934	18 07 30.25	+45 51 32.8	4.646902	71.065583	*****
—	V426 Oph		18 07 51.69	+05 51 47.2	6.84754		*
098		IGR J18088–2741	18 08 39.77	–27 41 31.8	6.84 ?	854 ?	**
		CXOU J180839.8–274131					
099		IGR J18112–2641	18 10 58.38	–26 41 15.1			**
100	V533 Her	Nova Herculis 1963	18 14 20.49	+41 51 22.1	3.528	63.633 ?	***
101		IGR J18151–1052	18 15 03.85	–10 51 35.0		390.5	*****
102		IGR J18165–3912	18 16 35.95	–39 12 46.4			**
103		IGR J18173–2509	18 17 22.17	–25 08 42.5	1.53	1663.4	*****
		1RXS J181723.3–250831					
—		AX J1820.5–1434	18 20 30.09	–14 34 23.5	~1300	152.26	*
104		CXOU J182531.4–144036	18 25 31.47	–14 40 36.3	1.4?	781 ?	**
105		IGR J18293–1213	18 29 20.15	–12 12 50.4	6.92		**
106		IGR J18308–1232	18 30 49.94	–12 32 19.1	5.374 ?	1820	*****
		1RXS J183045.2–123225					
107		AX J1832.3–0840	18 32 19.30	–08 40 30.5		1549.1	*****
108		Swift J183920.1–045350	18 39 19.98	–04 53 53.3	5.6:	449.7	*****
109	V4745 Sgr	Nova Sagittarii 2003 No. 1	18 40 02.57	–33 26 55.4	4.9877	1490 ?	**
110		PBC J1841.1+0138	18 41 04.16	+01 37 55.8	5.325811	311.805	*****
111		IGR J18434–0508	18 43 11.43	–05 05 45.6		152.49	***
—	V603 Aql	Nova Aquilae 1918	18 48 54.65	+00 35 02.7	3.3125		*
112		ZTF J185139.81+171430.3	18 51 39.81	+17 14 30.2		742.1717	***
		ZTF18abnbzvx					
113		AX J1853.3–0128	18 53 30.61	–01 28 16.1	1.45	476.0	*****
		XMMU J185330.7–012815					
114	V1223 Sgr	4U1851–31	18 55 02.31	–31 09 50.0	3.365856	745.6	*****

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—	V373 Sct	Nova Scuti 1975	18 55 26.82	−07 43 06.1	<i>i</i>	258.3 ?	*
115	V1674 Her	Nova Herculis 2021	18 57 30.98	+16 53 39.6	3.6725	501.51	****
116	V4743 Sgr	Nova Sagittarii 2002 No. 3	19 01 09.34	−22 00 06.1	6.7176	1337	****
117	V1425 Aql	Nova Aquilae 1995	19 05 26.65	−01 42 03.4	6.1392	5188	***
—	V1082 Sgr	Swift J1907.3−2050	19 07 21.86	−20 46 50.6	20.8211		*
118		2PBC J1911.4+1412	19 11 24.87	+14 11 44.9		746.885	***
		Swift J1911.5+1422					
—	V407 Vul	RX J1914.3+2456	19 14 26.09	+24 56 43.3	0.1583	570	*
119		IGR J19173+0747	19 17 20.79	+07 47 52.7			**
120		IGR J19267+1325	19 26 26.99	+13 22 04.9	3.449	935.1	*****
		1RXS J102626.8+132153					
—	V1432 Aql	RX J1940.1−1025	19 40 11.41	−10 25 25.8	3.36563	12150	*
121	V2491 Cyg	Nova Cygni 2008 No. 2	19 43 01.97	+32 19 13.5			**
—		SRGA J194638.9+704552	19 46 38.08	+70 45 55.5			*
		1RXS J194639.7+704552					
122		AX J194939+2631	19 49 38.38	+26 31 49.0			**
—		IGR J19552+0044	19 55 12.48	+00 45 36.4	1.393326	4877.33	*
		1RXS J195512.0+004547					
123	V2306 Cyg	WGA J1958.2+3232	19 58 14.47	+32 32 41.9	4.371490	1466.67952	*****
124		Swift J2006.4+3645	20 06 22.39	+36 41 43.6	17.2842	172.7	*****
125	WZ Sge		20 07 36.58	+17 42 14.3	1.3605	27.87 ?	***
126		IGR J20084+3221	20 08 44.16	+32 18 18.1			**
127		Swift J201424.9+152930	20 14 24.91	+15 29 30.0	3.4386	491.26	***
		MGAB-V931					
128		RX J2015.6+3711	20 15 36.96	+37 11 22.9	12.7611	7196	****
129		NuSTAR J202421+3350.9	20 24 21.68	+33 50 50.0			**
—	V2467 Cyg	Nova Cygni 2007	20 28 12.47	+41 48 36.3	3.82 ?	2198.4???	*
130	AE Aqr		20 40 09.24	−00 52 14.8	9.8797346	33.07673996	*****
131		SRGA J204547.8+672642	20 45 48.02	+67 26 42.9	2.979 ?		**
		2RXS J204548.4+672629					
132		CTCV J2056−3014	20 56 52.19	−30 14 39.8	1.76	29.6	****
133		Swift J2059.6+4301 B	21 00 01.00	+43 02 11.0			**
		2SXPS J210000.9+430210					
—	V2275 Cyg	Nova Cygni 2001 No. 2	21 03 01.95	+48 45 53.0	7.54776	1475 ?	*
—		Lanning 386	21 08 33.97	+39 05 35.3	3.937241		*
134		IGR J21095+4322	21 09 23.86	+43 19 37.1			**
		1RXS J210923.6+431937					
135		1RXS J211336.1+542226	21 13 35.40	+54 22 33.0	4.17	1265.6	****
		Swift J2113.5+5422					
136		Swift J2116.5+5536	21 16 46.61	+53 33 54.0	6.555535		**
		1RXS J211648.0+533349					
137		Gaia18ckw	21 23 05.54	+15 08 48.6			**
		ZTF18absanfq					
138	V2069 Cyg	RX J2123.7+4217	21 23 44.82	+42 18 01.6	7.48039	743.40650	*****
139		Gaia19fld	21 31 50.81	+49 14 01.7			**
		ZTF19acfixfe					

Var. Name	Alt. Name(s)	RA	Dec	P <sub>o</sub> (h)	P <sub>s</sub> (s)	Level
140	1RXS J213344.1+510725 RX J2133.7+5107	21 33 43.63	+51 07 24.7	7.13834	570.8189	*****
141	Swift J2138.8+5544	21 38 49.91	+55 44 05.7	4.426	989.43	*****
—	LS Peg S193	21 51 57.96	+14 06 53.0	4.1946		*
142	FO Aqr H2215–086	22 17 55.38	–08 21 03.7	4.849430	1254.4446	*****
143	Swift J2237.2+6324	22 36 37.40	+63 29 33.6			**
144	V349 Aqr SDSS J223843.84+010820.7 “Aqr1”	22 38 43.83	+01 08 20.6	3.23	390.15	****
145	SRGA J225412.8+690658 2RXS J225416.1+690705	22 54 12.99	+69 07 06.0			**
146	AO Psc H2252–035	22 55 18.00	–03 10 40.3	3.591012	805.2034	*****
147	1RXS J230645.0+550816 1SWXRT J230642.7+550817	23 06 42.69	+55 08 20.1	3.26 ?	464.452	****
148	CC Scl 1RXS J231532.3–304855 EC 23128–3105	23 15 31.80	–30 48 48.6	1.4056136	389.49	****
149	V598 Peg SDSS J233325.92+152222.1	23 33 25.91	+15 22 22.1	1.3854	2499.6	****
150	V455 And HS 2331+3905	23 34 01.37	+39 21 38.6	1.351421	67.619685	****