



Observing list

A list of variable stars, all observed by INTEGRAL's Optical Monitoring Camera (OMC), is provided for you to observe for the *Explore the high-energy Universe* competition, see Table 1. These stars have been selected as they are visible from the northern hemisphere during the period of the competition (September 2011 – March 2012) and are easily observable with amateur telescopes. It is your choice how many stars you observe.

Table 1: *Variable stars selected for observation for the competition.*

The table provides the following information:

IOMC – Identification number of a star in INTEGRAL's OMC catalogue

Identifier – Name of the star in general star catalogues and databases

Variable type – Classification given to the different types of variable stars (a description of each type of variable listed here can be found in Variable_stars.pdf)

RA (J2000) (h:m:s) – Right Ascension (in hours, minutes and seconds): the celestial equivalent of longitude on Earth, but measured from an arbitrary point where the celestial equator and ecliptic intersect.

DEC (J2000) (d:m:s) – Declination (in degrees, arcminutes, arcseconds): the celestial equivalent of latitude on Earth, but is the angular distance of a celestial object north or south of the celestial equator.

V – Average magnitude (measured in the V band)

Period – Period of variability (in days)

IOMC	Identifier	Variable Type	RA (J2000) (h:m:s)	DEC (J2000) (d:m:s)	V (mag)	Period (days)
4014000047	V* V654 Cas	EA/SD	00 00 20.84	60 59 43.80	10.870	4.9421
3661000071	V* FM Cas	DCEP	00 14 28.14	56 15 13.25	9.159	5.8091
3665000048	V* SY Cas	DCEP	00 15 09.77	58 25 32.34	10.008	4.0711
4014000075	V* V363 Cas	DCEP(B)	00 15 14.34	60 20 27.71	10.599	0.546574
4014000077	V* MU Cas	EA	00 15 51.56	60 25 55.92	10.828	9.6530
3665000054	V* TV Cas	EA/SD	00 19 18.73	59 08 22.96	7.251	1.81259
4019000053	V* V745 Cas	EB	00 22 53.45	62 14 31.42	8.077	1.410598
4015000058	V* V379 Cas	DCEPS	00 26 35.97	60 47 55.90	9.150	4.3068
4015000062	V* DL Cas	DCEP	00 29 58.57	60 12 45.14	8.963	8.0008
4019000067	V* ZZ Cas	EB/KE	00 33 30.47	62 30 41.62	10.942	1.243523
4017000096	V* VW Cas	DCEP	01 05 48.24	61 45 17.89	10.715	5.9939
4030000074	V* OX Cas	EA/DM	01 09 00.14	61 28 14.66	9.923	2.48937
4038000052	V* BP Cas	DCEP	01 15 01.17	65 35 57.52	10.927	6.2724
4034000082	V* AQ Cas	EA/D	01 19 10.38	62 23 49.42	10.114	11.722
4031000095	V* XX Cas	EA/DM	01 29 34.56	60 58 05.92	9.528	3.06720



IOMC	Identifier	Variable Type	RA (J2000) (h:m:s)	DEC (J2000) (d:m:s)	V (mag)	Period (days)
4035000064	V* V646 Cas	EA/KE:	01 30 35.04	62 43 32.23	9.655	6.1626
4035000066	V* V636 Cas	DCEPS	01 32 43.27	63 35 38.54	7.181	8.3770
3679000049	V* RW Cas	DCEP	01 37 13.97	57 45 31.79	9.091	14.78
4032000050	V* BY Cas	DCEPS	01 47 11.86	61 25 20.78	10.359	3.2215
3696000039	V* VV Cas	DCEP	01 51 06.95	59 53 16.62	10.831	6.207
4036000082	V* V775 Cas	EA	01 51 50.51	63 27 14.94	9.715	5.3901
3697000044	V* VX Per	DCEP	02 07 48.52	58 26 34.94	9.302	10.883
4037000074	V* V395 Cas	DCEP	02 10 29.13	63 17 50.46	10.808	4.037
3716000021	V* CV Cam	EB	03 41 50.00	53 17 37.43	9.348	0.9733
3332000031	V* AR Per	RRAB	04 17 17.17	47 24 01.08	10.608	0.425550
2892000015	V* KR Per	EB/KE	04 37 08.96	44 12 39.56	10.851	0.996077
2898000017	V* AN Aur	DCEP	04 59 41.57	40 50 10.14	10.467	10.287
1871000034	V* CT Tau	EW/KE	05 58 50.08	27 04 41.81	10.553	0.6668261
3609000055	V* V394 Lac	EB	22 03 25.08	48 41 02.18	8.030	1.64993
3614000041	V* V401 Lac	EA	22 08 21.26	49 13 14.88	7.955	1.94982
3618000024	V* Y Lac	DCEP	22 09 02.92	51 02 44.16	9.232	4.323
3982000042	BD+53 2837	-	22 17 06.48	54 12 33.05	10.001	2.1777
3983000057	V* DG Lac	EA/SD	22 28 49.88	53 46 14.84	10.846	2.2064
3987000052	V* V413 Lac	ELL	22 30 05.73	54 47 23.39	9.689	1.5082
3983000061	V* ES Lac	EA/DM	22 32 06.29	53 57 31.61	10.866	4.459
4282000057	V* NN Cep	EA/DM	23 02 05.50	62 30 44.89	8.144	2.05830
4282000061	HD 218066	EA/DM	23 04 02.20	63 23 49.70	7.627	2.72917
4010000035	V* SW Cas	DCEP	23 07 09.97	58 33 18.54	9.776	5.4409
4010000040	V* PV Cas	EA/DM	23 10 02.43	59 12 08.96	9.744	1.750455
4284000053	V* RS Cas	DCEP	23 37 15.91	62 25 45.80	10.008	6.2961
4288000053	V* XX Cep	EA/SD	23 38 20.18	64 20 04.24	9.195	2.33734
4285000065	V* CD Cas	DCEP	23 45 02.49	63 00 14.94	10.749	7.8013
4012000054	V* QQ Cas	EB/DM	23 45 36.71	59 54 22.97	10.135	2.14207
4281000051	V* UU Cas	EB/DM	23 50 39.49	60 54 40.54	9.734	8.5196
4013000048	V* RY Cas	DCEP	23 52 06.98	58 44 31.52	10.042	12.139
4479000049	V* XY Cep	EA/SD	23 52 33.35	68 56 03.12	9.955	2.77449
4285000085	V* V375 Cas	EB/KE	23 57 09.31	63 00 22.54	10.004	1.473425
4285000087	V* DD Cas	DCEP	23 57 34.87	62 43 06.28	9.891	9.8123