

AL Double Stars Observing List, evening of 2012 Feb 1 at Cleveland, Ohio

Sunset 17:46, Twilight ends 19:17, Twilight begins 06:03, Sunrise 07:34, Moon rise 12:05, Moon set 03:24

Completely dark from 03:24 to 06:03. First Quarter Moon. All times local (EST).

Listing All Classes visible above the perfect horizon and in twilight or moonlight before 23:59.

Cls	Primary ID	Alternate ID	Con	RA (Ap)	Dec (Ap)	Mag	Size	Distance	Rise	Transit	Set
DVar	Polaris	Alpha UMi	UMi	02h46m52.0s	+89°19'22"	2		430 ly	-	18:27	-
Doub	HR 4893	HD 112028	Cam	12h49m24.8s	+83°20'25"	5.4		300 ly	-	4:28	-
DVar	41 Dra	HR 6810	Dra	17h59m07.5s	+80°00'05"	5.7		170 ly	-	9:37	-
Doub	Psi 1 Dra	31 Dra	Dra	17h41m41.9s	+72°08'50"	5.8		73 ly	-	9:20	-
DVar	Alfirk	Beta Cep	Cep	21h28m45.5s	+70°37'00"	3.2		590 ly	-	13:10	-
Doub	HD 209790	HIP 108917	Cep	22h04m05.1s	+64°41'26"	6.3		110 ly	-	13:45	-
Doub	12 Lyn	HR 2470	Lyn	06h47m22.2s	+59°25'42"	4.9		230 ly	-	22:27	-
DVar	Delta Cep	27 Cep	Cep	22h29m36.1s	+58°28'51"	3.9		980 ly	-	14:11	-
DVar	Achird	Eta Cas	Cas	00h49m50.5s	+57°53'03"	3.6		19 ly	-	16:31	-
DVar	HR 8281	HD 206267	Cep	21h39m18.7s	+57°32'47"	5.7		1200 ly	-	13:21	-
DVar	Miram	Eta Per	Per	02h51m37.1s	+55°56'58"	3.8		1300 ly	-	18:32	-
Doub	HD 224572	SAO 35947	Cas	23h59m37.3s	+55°49'39"	7.1			-	15:41	-
Doub	19 Lyn	HR 2783	Lyn	07h23m53.6s	+55°15'34"	6.9		360 ly	-	23:04	-
DVar	Kuma	Nu 2 Dra	Dra	17h32m29.1s	+55°09'41"	4.9		100 ly	-	9:11	-
DVar	Mizar	Zeta UMa	UMa	13h24m26.0s	+54°51'21"	2.1		78 ly	-	5:03	-
Doub	Mu Dra	21 Dra	Dra	17h05m34.2s	+54°27'01"	5.8		88 ly	-	8:44	-
DVar	1 Cam	DL Cam	Cam	04h33m02.4s	+53°56'20"	5.8			-	20:13	-
Doub	17 Dra	HR 6185	Dra	16h36m30.3s	+52°53'45"	5.1		400 ly	-	8:15	-
Doub	HR 890	HD 18537	Per	03h01m46.2s	+52°24'12"	5.2		800 ly	-	18:42	-
DVar	Asellus Tertius	Kappa 2 Boo	Boo	14h13m55.8s	+51°43'38"	4.5		160 ly	-	5:53	-
DVar	Iota Boo	21 Boo	Boo	14h16m36.4s	+51°18'19"	4.8		97 ly	-	5:55	-
DVar	31 Cyg	V695 Cyg	Cyg	20h13m59.6s	+46°46'43"	3.7		1400 ly	0:38	11:52	23:10
Doub	Almaak	Gamma 1 And	And	02h04m39.9s	+42°23'28"	2.1		350 ly	7:52	17:45	3:34
DVar	8 Lac	HR 8603	Lac	22h36m24.2s	+39°41'59"	5.7		640 ly	4:54	14:18	23:38
Doub	Epsilon 1 Lyr	4 Lyr	Lyr	18h44m43.6s	+39°40'54"	4.7		160 ly	1:03	10:23	19:46
DVar	61 Cyg	HR 8086	Cyg	21h07m27.0s	+38°48'11"	6		11 ly	3:33	12:49	22:01
DVar	Cor CAROLI	Alpha 2 CVn	CVn	12h56m37.1s	+38°14'50"	2.9		110 ly	19:29	4:35	13:46
DVar	Zeta 1 Lyr	6 Lyr	Lyr	18h45m10.6s	+37°37'00"	4.4		150 ly	1:21	10:23	19:29
DVar	Alkalurops	Mu 1 Boo	Boo	15h24m57.2s	+37°19'49"	4.3		120 ly	22:04	7:03	16:07
DVar	Theta Aur	37 Aur	Aur	06h00m35.5s	+37°12'45"	2.7		170 ly	12:42	21:41	6:39
Doub	Rho Her	75 Her	Her	17h24m05.4s	+37°07'59"	5.4			0:05	9:02	18:04
Doub	38 Lyn	HR 3690	Lyn	09h19m38.4s	+36°44'49"	3.8		120 ly	16:04	0:59	9:54
Doub	Zeta 2 CrB	7 CrB	CrB	15h39m50.3s	+36°35'32"	4.6		470 ly	22:25	7:18	16:16
DVar	HR 7140	HD 175635	Lyr	18h55m18.5s	+33°59'00"	6		1300 ly	1:58	10:33	19:12
DVar	Sigma CrB	17 CrB	CrB	16h15m08.2s	+33°49'27"	5.7		71 ly	23:20	7:53	16:31
DVar	Sheliak	Beta Lyr	Lyr	18h50m31.0s	+33°22'33"	3.2		880 ly	1:58	10:28	19:03
DVar	Delta Boo	49 Boo	Boo	15h15m59.9s	+33°15'55"	3.5		120 ly	22:25	6:54	15:28
Doub	Castor	Alpha Gem	Gem	07h35m24.8s	+31°51'31"	1.6		52 ly	14:54	23:15	7:36
DVar	6 Tri	TZ Tri	Tri	02h13m05.7s	+30°21'43"	5.2		310 ly	9:38	17:54	2:06
Doub	Iota Cnc	48 Cnc	Cnc	08h47m26.5s	+28°43'00"	6.6		190 ly	16:24	0:27	8:30
DVar	Albireo	Beta 1 Cyg	Cyg	19h31m12.0s	+27°59'06"	3.1		390 ly	3:10	11:09	19:12
Doub	65 Psc	HR 231	Psc	00h50m32.8s	+27°46'43"	7		350 ly	8:29	16:31	0:29
Doub	Izar	Epsilon Boo	Boo	14h45m31.7s	+27°01'08"	2.4		210 ly	22:30	6:24	14:22
DVar	Chi Tau	59 Tau	Tau	04h23m21.2s	+25°39'28"	5.4		270 ly	12:16	20:04	3:51

DVar	118 Tau	HR 1821	Tau	05h30m03.5s	+25°09'31"	5.5		430 ly	13:25	21:10	4:55
Doub	54 Leo	HR 4259	Leo	10h56m18.2s	+24°40'49"	4.3		290 ly	18:53	2:35	10:18
Doub	Lambda Ari	9 Ari	Ari	01h58m37.3s	+23°39'24"	4.8		130 ly	9:58	17:39	1:17
Doub	Wasat	Delta Gem	Gem	07h20m53.2s	+21°57'25"	3.5		59 ly	15:31	23:01	6:30
DVar	Psi 1 Psc	74 Psc	Psc	01h06m20.6s	+21°32'23"	5.3		240 ly	9:15	16:47	0:15
DVar	Algieba	Gamma 1 Leo	Leo	10h20m40.6s	+19°46'32"	2		130 ly	18:40	2:00	9:20
Doub	Gamma 1 Ari	HR 545	Ari	01h54m12.7s	+19°21'23"	4.6		140 ly	10:13	17:35	0:53
DVar	Xi Boo	37 Boo	Boo	14h51m57.7s	+19°02'48"	4.6		22 ly	23:13	6:30	13:51
Doub	24 Com	HR 4791	Com	12h35m44.4s	+18°18'21"	6.6		2600 ly	21:01	4:15	11:28
Doub	Tegmen	Zeta 1 Cnc	Cnc	08h12m56.8s	+17°36'27"	4.7		83 ly	16:42	23:53	7:03
DVar	Pi 1 Boo	29 Boo	Boo	14h41m18.6s	+16°21'47"	4.5		320 ly	23:14	6:20	13:30
Doub	Gamma 2 Del	12 Del	Del	20h47m12.8s	+16°10'08"	3.9		100 ly	5:20	12:29	19:34
DVar	Regulus	Alpha Leo	Leo	10h09m03.2s	+11°54'13"	1.4		77 ly	19:00	1:48	8:37
DVar	Meissa	Lambda Ori	Ori	05h35m50.4s	+09°56'24"	3.4		1100 ly	14:35	21:16	3:57
DVar	Enif	Epsilon Peg	Peg	21h44m46.5s	+09°55'54"	2.1		670 ly	6:41	13:26	20:07
DVar	Zeta Psc	86 Psc	Psc	01h14m23.9s	+07°38'34"	6.4		200 ly	10:19	16:55	23:28
Doub	Epsilon Mon	8 Mon	Mon	06h24m26.8s	+04°35'01"	4.3		130 ly	15:43	22:04	4:26
Doub	Kaffaljdhma	Gamma Cet	Cet	02h43m56.8s	+03°17'09"	3.5		82 ly	12:07	18:24	0:41
DVar	Alrisha	Alpha Psc	Psc	02h02m41.3s	+02°49'18"	3.8		140 ly	11:24	17:43	23:59
Doub	Zeta 1 Aqr	55 Aqr	Aqr	22h29m27.1s	+00°02'34"	3.7		100 ly	8:01	14:11	20:16
DVar	Delta Ori	34 Ori	Ori	05h32m39.5s	-00°16'43"	6.8			15:08	21:13	3:17
DVar	Porrima	Gamma Vir	Vir	12h42m18.1s	-01°31'07"	2.7		39 ly	22:21	4:21	10:21
DVar	Alnitak	Zeta Ori	Ori	05h41m24.2s	-01°56'22"	1.8		820 ly	15:23	21:21	3:20
DVar	Sigma Ori	48 Ori	Ori	05h39m23.2s	-02°35'47"	3.8		1100 ly	15:23	21:19	3:16
Doub	32 Eri	HR 1211	Eri	03h54m55.4s	-02°55'10"	6.1		1400 ly	13:40	19:35	1:30
DVar	HR 1895	HD 37022	Ori	05h35m54.1s	-05°23'06"	5.1			15:30	21:16	3:02
DVar	Theta 2 Ori	43 Ori	Ori	05h36m00.5s	-05°24'41"	5		1900 ly	15:30	21:16	3:02
DVar	Nair al Saif	Iota Ori	Ori	05h36m03.5s	-05°54'19"	2.8		1300 ly	15:32	21:16	3:00
DVar	HR 1887	HD 36960	Ori	05h35m40.1s	-05°59'51"	4.8		1900 ly	15:32	21:16	3:00
DVar	Beta Mon	11 Mon	Mon	06h29m26.4s	-07°02'40"	3.8		690 ly	16:29	22:09	3:50
DVar	Rigel	Beta Ori	Ori	05h15m09.0s	-08°11'28"	0.2		770 ly	15:19	20:55	2:31
Doub	55 Eri	HR 1506	Eri	04h44m11.7s	-08°46'36"	6		410 ly	14:50	20:24	1:58
Doub	94 Aqr	HR 8866	Aqr	23h19m44.7s	-13°23'34"	5.2		68 ly	9:40	15:01	20:18
DVar	Algorab	Delta Crv	Crv	12h30m31.4s	-16°35'04"	2.9		88 ly	23:05	4:09	9:14
Doub	Gamma Lep	13 Lep	Lep	05h45m00.0s	-22°26'55"	3.6		29 ly	16:44	21:25	2:06
Doub	Markab	HR 2948	Pup	07h39m21.5s	-26°50'01"	3.8		430 ly	18:58	23:19	3:40
Doub	Adara	Epsilon CMa	CMa	06h59m08.3s	-28°59'35"	1.5		430 ly	18:29	22:39	2:49
Doub	HD 100286	SAO 179967	Hya	11h32m54.4s	-29°19'52"	5.7		110 ly	23:04	3:12	7:20