

# MONOS: Multiplicity Of Northern O-type Spectroscopic systems

## I. Project description and spectral classifications and visual multiplicity of previously known objects (*Corrigendum*)

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An inconsistency in the header information of some AstraLux files was detected after the publication of the paper. As a result, the heliocentric Julian date (HJD) of some of the observations was incorrectly listed in Table A.1. The error was half a day at

most and it only affects systems with long periods, so the difference is irrelevant for any orbit calculation given the uncertainties involved. Nevertheless, we provide an updated version of Table A.1 with the appropriate corrections.

## Appendix A: Additional figures and tables

Table A.1. Measurements for visual pairs using our AstraLux lucky images.

Pair	Even. date (YYMMDD)	HJD-2.4 · 10 <sup>6</sup> (d)	$\rho$ (")	$\theta$ (deg)	$\Delta i$ (mag)	$\Delta z$ (mag)	$\Delta z_n$ (mag)	$\Delta Y$ (mag)
HD 190 967 A,B	180920	58 382.3	1.124±0.006	145.14±0.21	5.20±0.01	4.80±0.01	...	...
HD 191 201 A,B	110915	55 820.4	0.984±0.001	83.32±0.01	...	1.78±0.03	...	...
	121001	56 202.4	0.983±0.001	83.36±0.03	...	1.81±0.01	...	...
	130916	56 552.4	0.980±0.001	83.51±0.01	1.78±0.02	...	...	...
HD 193 322 Aa,Ab	080614	54 632.6	0.065±0.001	113.45±2.21	...	0.16±0.01	...	...
	110913	55 818.4	0.067±0.001	129.82±3.18	...	0.23±0.03	...	...
	121001	56 202.4	0.074±0.003	134.55±1.89	...	0.14±0.01	...	...
	130915	56 551.4	0.066±0.002	136.12±2.31	0.32±0.06	0.19±0.02	...	...
	180920	58 382.3	0.067±0.001	150.55±1.00	...	0.22±0.03	...	...
HD 193 322 Aa,B	080614	54 632.6	2.719±0.003	245.22±0.08	...	1.63±0.01	...	...
	110913	55 818.4	2.728±0.003	245.01±0.08	...	1.65±0.01	...	...
	121001	56 202.4	2.744±0.003	244.80±0.08	...	1.61±0.01	...	...
	130915	56 551.4	2.735±0.003	245.00±0.08	1.72±0.02	1.64±0.02	...	...
	180920	58 382.3	2.758±0.003	244.89±0.08	...	1.65±0.02	...	...
HD 194 649 A,B	121002	56 203.4	0.399±0.004	212.12±0.04	...	0.91±0.05	...	...
	130916	56 552.5	0.399±0.001	212.53±0.13	0.99±0.06	...	...	...
	181128	58 451.3	0.400±0.002	213.11±0.27	0.96±0.01	0.93±0.02	...	...
ALS 15 133 A,B	181128	58 451.3	4.367±0.001	214.60±0.02	...	4.53±0.03	...	...
Cyg OB2-A11 A,B	181128	58 451.3	2.222±0.001	276.76±0.02	...	4.53±0.02	...	...
Cyg OB2-5 A,B	071113	54 418.3	0.931±0.008	54.92±0.12	2.75±0.07	2.96±0.08	...	...
	181128	58 451.3	0.932±0.008	55.28±0.03	...	...	3.00±0.03	3.06±0.04
Cyg OB2-22 A,Ba	110915	55 820.4	1.530±0.001	146.16±0.02	...	0.63±0.02	...	...
	130919	56 555.4	1.526±0.002	146.20±0.02	...	0.62±0.07	...	...
	180919	58 381.5	1.525±0.001	146.07±0.05	...	0.66±0.01	...	...
	181228	58 451.3	1.524±0.003	145.97±0.06	...	0.66±0.01	...	...
Cyg OB2-22 Ba,Bb	110915	55 820.4	0.217±0.003	180.28±1.00	...	2.50±0.14	...	...
	130919	56 555.4	0.206±0.019	178.96±1.94	...	2.53±0.38	...	...
	180919	58 381.5	0.191±0.024	174.15±5.44	...	2.16±0.13	...	...
	181228	58 451.3	0.215±0.009	181.73±3.18	...	2.33±0.08	...	...
Cyg OB2-1 A,B	130919	56 555.4	1.174±0.001	341.90±0.05	...	2.66±0.01	...	...
Cyg OB2-8 Aa,Ac	110915	55 820.4	3.110±0.050	339.85±0.10	...	5.65±0.10	...	...
	180920	58 382.4	3.106±0.050	339.89±0.10	...	5.83±0.10	...	...
HD 206 267 Aa,Ab	110913	55 818.4	0.091±0.006	220.64±6.27	...	1.63±0.30	...	...
	130916	56 552.6	0.112±0.007	203.58±1.59	1.95±0.30	...	...	...
	181227	58 450.3	0.105±0.007	196.18±9.00	...	...	2.02±0.06	...
HD 206 267 Aa,B	110913	55 818.4	1.803±0.010	319.30±0.20	...	5.72±0.13	...	...
	130916	56 552.6	1.778±0.010	319.74±0.20	5.73±0.25	...	...	...
	181227	58 450.3	1.787±0.010	319.43±0.20	...	...	5.55±0.07	...
ALS 12 502 A,B	130917	56 553.484	1.578±0.002	345.97±0.03	2.98±0.02	2.96±0.01	...	...
	181128	58 451.359	1.587±0.004	345.88±0.13	3.16±0.02	3.12±0.03	...	...
DN Cas A,B	181128	58 451.4	1.073±0.011	128.21±0.17	4.96±0.07	4.68±0.16	...	...
HD 16 429 Aa,Ab	080118	54 484.4	0.290±0.001	90.80±0.12	...	2.16±0.07	...	...
	110913	55 818.6	0.282±0.004	90.62±0.52	...	2.19±0.07	...	...
	130918	56 554.7	0.277±0.002	91.35±0.28	2.33±0.23	...	...	...
	181127	58 450.4	0.275±0.006	91.17±0.30	...	...	2.26±0.07	2.29±0.07
HD 16 429 Aa,B	080118	54 484.4	6.794±0.002	189.84±0.03	...	2.16±0.07	...	...
	110913	55 818.6	6.817±0.001	189.83±0.03	...	2.19±0.07	...	...
	130918	56 554.7	6.841±0.002	189.76±0.03	2.33±0.23	...	...	...
	181127	58 450.4	6.859±0.001	189.84±0.03	...	...	2.26±0.07	2.29±0.07
HD 16 429 Aa,D	080118	54 484.4	2.976±0.001	112.92±0.04	...	7.51±0.07	...	...
	110913	55 818.6	2.973±0.001	113.02±0.04	...	7.42±0.07	...	...
	130918	56 554.7	2.968±0.001	113.01±0.07	7.62±0.07	...	...	...
	181127	58 450.4	2.964±0.021	113.03±0.56	...	...	7.54±0.07	7.78±0.07
HD 17 505 A,B	110915	55 820.6	2.161±0.001	93.03±0.04	...	1.76±0.01	...	...
	180919	58 381.6	2.163±0.002	93.09±0.03	...	1.75±0.03	...	...
MY Cam A,B	130920	56 556.6	0.725±0.004	141.93±0.06	...	2.77±0.03	...	...
	180918	58 380.6	0.738±0.006	141.69±0.14	3.03±0.11	2.83±0.03	...	...
IU Aur A,B	110915	55 820.646	0.143±0.002	226.63±4.00	...	1.74±0.10	...	...
	121002	56 203.596	0.144±0.001	228.61±4.00	...	1.40±0.10	...	...
	181127	58 450.391	0.141±0.005	230.14±4.00	...	2.06±0.10	...	...
	181128	58 451.403	0.137±0.001	231.47±4.00	...	1.84±0.10	...	...
	181226	58 479.446	0.128±0.002	211.56±4.00	...	1.77±0.10	...	...

**Notes.** The evening date, heliocentric Julian date (HJD), separation ( $\rho$ ), position angle ( $\theta$ ), and magnitude difference are given in each case. Four different filters were used: SDSS  $i$  and  $z$ ,  $z_n$  (a narrow filter with a central wavelength similar to that of  $z$ ), as well as  $Y$ .

Table A.1. continued.

Pair	Even. date (YYMMDD)	HJD-2.4 · 10 <sup>6</sup> (d)	$\rho$ (")	$\theta$ (deg)	$\Delta i$ (mag)	$\Delta z$ (mag)	$\Delta z_n$ (mag)	$\Delta Y$ (mag)
	181227	58 480.485	0.131±0.001	221.41±4.00	...	1.82±0.10	...	...
IU Aur A,C	181127	58 450.391	4.012±0.005	162.36±0.08	...	7.85±0.10	...	...
IU Aur A,D	181127	58 450.391	3.592±0.010	122.21±0.12	...	8.87±0.10	...	...
15 Mon Aa,Ab	080117	54 483.4	0.109±0.004	252.26±1.29	...	1.49±0.13	...	...
	121002	56 203.6	0.118±0.004	260.30±3.80	...	1.45±0.17	1.49±0.01	...
	130920	56 556.7	0.127±0.004	259.51±2.62	...	1.26±0.20	...	...
	180918	58 380.7	0.138±0.004	268.10±1.00	...	...	1.67±0.10	...
	181128	58 451.5	0.135±0.004	268.79±1.00	...	...	1.48±0.06	...
15 Mon Aa,B	080117	54 483.4	2.977±0.003	213.58±0.02	...	3.04±0.02	...	...
	121002	56 203.6	2.981±0.003	213.75±0.02	...	3.04±0.02	3.02±0.03	...
	130920	56 556.7	2.985±0.003	213.88±0.05	...	2.97±0.10	...	...
	180918	58 380.7	3.001±0.007	214.02±0.02	...	...	3.15±0.10	...
	181128	58 451.5	2.991±0.003	213.94±0.04	...	...	2.99±0.02	...
HD 52 533 Aa,Ab	081021	54 761.7	0.634±0.015	269.03±1.34	...	3.48±0.12	...	...
HD 52 533 Aa,B	081021	54 761.7	2.640±0.006	187.83±0.19	...	5.68±0.29	...	...
HD 52 533 Aa,G	081021	54 761.7	2.883±0.018	246.86±0.41	...	8.18±0.43	...	...