Table 1. Program Cepheids, their spectra and results for individual phases

Star	P, d	JD, 24+	ϕ	Telescope	T_{eff}, K	log g	V_t, km s^{-1}	[Fe/H]
V473 Lyr (s)	1.4908	49906.43160	0.793	OHP 1.93m	6163	2.45	4.20	−0.09
		49907.57360	0.559	OHP 1.93m	6113	2.60	4.50	−0.05
SU Cas(s)	1.9493	50674.95633	0.902	MDO 2.1m	6594	2.60	3.85	−0.02
		50675.96550	0.420	MDO 2.1m	6162	2.25	3.00	−0.00
		50678.93059	0.941	MDO 2.1m	6603	2.50	3.50	−0.01
		51473.79052	0.704	MDO 2.1m	6201	2.30	2.85	−0.00
EU Tau (s)	2.1025	51096.90943	0.172	MDO 2.1m	6203	2.00	3.00	−0.09
		51097.89587	0.641	MDO 2.1m	6014	2.20	3.30	−0.03
IR Cep (s)	2.1140	48821.46940	0.137	SAORAS 6m	6162	2.40	4.10	+0.00
TU Cas	2.1393	50674.90819	0.919	MDO 2.1m	6465	2.10	3.70	−0.07
		50675.91792	0.391	MDO 2.1m	5993	2.40	4.00	+0.03
		50677.89839	0.317	MDO 2.1m	6013	2.30	3.00	+0.07
		50678.91008	0.790	MDO 2.1m	6148	2.40	4.80	−0.05
		50735.76094	0.364	MDO 2.1m	5905	2.10	2.60	+0.09
		50739.76484	0.235	MDO 2.1m	6185	2.40	3.50	+0.05
		50740.77928	0.710	MDO 2.1m	5906	2.20	3.90	+0.08
		50741.79234	0.183	MDO 2.1m	6026	1.80	4.10	−0.06
		51053.90600	0.076	MDO 2.1m	6520	2.30	3.50	−0.03
		51095.78573	0.649	MDO 2.1m	5920	2.30	4.00	+0.09
		51097.81206	0.600	MDO 2.1m	5857	2.20	4.50	+0.08
DT Cyg (s)	2.4991	50379.65482	0.014	MDO 2.1m	6406	2.60	3.70	+0.14
		50383.55796	0.576	MDO 2.1m	6010	2.30	3.50	+0.08
		50674.86130	0.140	MDO 2.1m	6384	2.40	3.50	+0.08
V526 Mon (s)	2.6750	49022.42220	0.674	SAORAS 6m	6464	2.40	3.50	−0.13
V351 Cep (s)	2.8060	48853.50600	0.425	SAORAS 6m	5944	2.50	4.30	+0.03
		49203.37300	0.301	SAORAS 6m	6005	2.10	3.30	+0.02
VX Pup	3.0109	51231.52248	0.813	MSO 74in	6159	2.50	3.50	-0.12
SZ Tau(s)	3.1484	50379.86757	0.430	MDO 2.1m	5901	2.10	3.30	+0.12
		50380.89275	0.756	MDO 2.1m	5955	2.30	3.90	+0.06
		50482.66323	0.077	MDO 2.1m	6121	2.20	3.70	+0.03
V1334 Cyg (s)	3.3330	50676.84617	0.185	MDO 2.1m	6149	1.90	3.50	−0.02
		50738.72218	0.751	MDO 2.1m	6363	2.00	3.60	−0.05
		51093.72224	0.268	MDO 2.1m	6210	2.20	3.90	−0.02
BG Cru (s)	3.3427	51231.64722	0.188	MSO 74in	6101	2.00	3.80	−0.02
BD Cas (s)	3.6510	49572.49400	0.772	SAORAS 6m	6200	2.50	5.00	−0.11
		49577.33900	0.073	SAORAS 6m	6075	2.30	4.50	−0.12
		49578.34300	0.347	SAORAS 6m	5880	2.40	4.00	−0.04
RT Aur	3.7282	50736.01017	0.328	MDO 2.1m	5982	1.90	3.00	+0.03
		50736.96014	0.583	MDO 2.1m	5686	1.85	3.40	+0.07
		50739.91812	0.377	MDO 2.1m	5878	2.00	3.00	+0.08
DF Cas	3.8320	50505.18472	0.401	SAORAS 6m	5644	2.20	4.65	+0.13
SU Cyg	3.8455	50736.68203	0.415	MDO 2.1m	5956	2.10	3.20	−0.00
		50738.70189	0.940	MDO 2.1m	6314	2.40	4.50	−0.03
ST Tau	4.0325	51096.86237	0.869	MDO 2.1m	6519	2.50	4.40	−0.02
		51097.92470	0.132	MDO 2.1m	6268	2.00	3.50	−0.05
		51474.97888	0.594	MDO 2.1m	5676	1.80	3.90	−0.09
V1726 Cyg (s)	4.2360	51003.23100	0.109	SAORAS 6m	6349	2.20	5.20	−0.02
BQ Ser	4.2709	51659.96271	0.121	MDO 2.1m	6296	2.20	4.00	−0.10
		51660.96355	0.355	MDO 2.1m	6021	1.70	3.15	−0.02
		51661.96295	0.589	MDO 2.1m	5768	1.80	3.20	−0.00

MDO 2.1m - McDonald Observatory (USA), Struve 2.1-m reflector, R = 60,000, S/N > 100.
KPNO 4m - Kitt Peak National Observatory (USA), 4-m and coudé-feed telescope, R = 30,000 and 80,000 respectively, S/N ≈150 (except for CV Mon with a S/N of about 50).
CTIO 4m - Cerro Tololo Inter-American Observatory (Chile), 4-m telscope, R = 30,000, S/N > 100.
MSO 74in - Mount Stromlo Observatory (Australia), 74-inch telescope, R = 56,000, S/N ≤ 50.
SAORAS 6m - Special Astrophysical Observatory of the Russian Academy of Sciences (Russia), 6-m telescope, R = 14,000 and 25,000, S/N ≈ 70-100 (except for DF Cas, V924 Cyg and TX Del, where the S/N is below 70).
OHP 1.93m - Haute-Provence Observatoire (France), 1.93-m telescope, R = 40,000 , S/N > 150.

Table 1 (continued)

Star	P, d	JD, 24+	ϕ	Telescope	T_{eff}, K	log g	V_t, km s^{-1}	[Fe/H]
Y Lac	4.2338	51098.78394	0.936	MDO 2.1m	6330	2.00	4.00	−0.10
		51474.61215	0.858	MDO 2.1m	6006	1.70	4.45	−0.08
		51475.67351	0.103	MDO 2.1m	6258	1.80	4.00	−0.09
T Vul	4.4355	50381.66164	0.144	MDO 2.1m	6077	2.00	3.55	+0.02
		50382.67995	0.374	MDO 2.1m	5768	2.00	3.60	+0.03
		51095.55920	0.094	MDO 2.1m	6174	2.00	3.70	−0.01
FF Aql (s)	4.4709	50674.68472	0.987	MDO 2.1m	6425	2.10	4.90	−0.02
		50677.74557	0.672	MDO 2.1m	6083	2.00	4.80	+0.05
		50678.71213	0.888	MDO 2.1m	6421	2.10	5.40	+0.00
CF Cas	4.8752	50735.81552	0.980	MDO 2.1m	6115	2.00	4.00	−0.03
		50738.76114	0.584	MDO 2.1m	5454	1.70	4.30	+0.01
		51055.92310	0.641	MDO 2.1m	5439	1.70	4.40	−0.01
		51097.83265	0.238	MDO 2.1m	5704	1.90	3.70	+0.02
		51098.85759	0.448	MDO 2.1m	5428	1.30	3.40	−0.01
TV Cam	5.2950	44333.65000	0.090	KPNO 4m	6049	2.15	4.30	−0.06
BG Lac	5.3319	51055.83161	0.147	MDO 2.1m	5923	1.90	3.80	+0.01
		51056.81572	0.332	MDO 2.1m	5625	1.85	3.60	+0.02
		51097.77450	0.014	MDO 2.1m	6095	1.80	4.20	−0.06
δ Cep	5.3663	50379.68413	0.561	MDO 2.1m	5544	1.70	3.70	+0.08
		50741.70985	0.024	MDO 2.1m	6532	2.20	4.10	+0.05
V1162 Aql	5.3760	51774.74747	0.890	MDO 2.1m	5989	2.00	4.60	−0.03
		51775.64945	0.058	MDO 2.1m	5940	1.80	3.90	+0.04
CV Mon	5.3789	48878.97917	0.178	KPNO 4m	5897	2.00	4.10	−0.03
V Cen	5.4939	49116.54792	0.236	CTIO 4m	5705	2.10	3.90	+0.04
V924 Cyg (s:)	5.5710	48819.4062	0.702	SAORAS 6m	5910	1.80	5.00	−0.09
MY Pup (s)	5.6953	51231.46954	0.950	MSO 74in	6170	1.85	3.30	−0.12
Y Sgr	5.7734	50674.62981	0.911	MDO 2.1m	6078	1.90	4.40	+0.07
		51053.66761	0.564	MDO 2.1m	5490	1.60	3.90	+0.06
		51057.67128	0.257	MDO 2.1m	5841	1.55	3.90	+0.05
EW Sct	5.8233	51053.69933	0.722	MDO 2.1m	5728	1.80	3.50	+0.05
		51055.68163	0.062	MDO 2.1m	6155	2.30	5.00	+0.01
		51058.65288	0.572	MDO 2.1m	5655	1.70	3.40	+0.05
FM Aql	6.1142	50736.61650	0.942	MDO 2.1m	6255	1.80	4.10	+0.07
		50738.60784	0.267	MDO 2.1m	5750	1.50	3.50	+0.11
TX Del	6.1660	49165.12300	0.005	SAORAS 6m	6217	1.80	6.00	+0.23
V367 Sct	6.2931	51003.39510		SAORAS 6m	5891	2.10	4.25	−0.01
X Vul	6.3195	50738.66499	0.407	MDO 2.1m	5649	1.80	3.45	+0.09
		50739.67020	0.566	MDO 2.1m	5434	1.60	4.00	+0.05
		51097.69899	0.220	MDO 2.1m	5875	1.80	4.10	+0.09
AW Per	6.4636	50380.92178	0.994	MDO 2.1m	6423	2.15	4.30	−0.03
		50382.86865	0.295	MDO 2.1m	5989	1.90	3.60	+0.06
		50383.87798	0.451	MDO 2.1m	5836	2.00	3.70	+0.11
		50736.87128	0.065	MDO 2.1m	6627	1.70	3.90	−0.06
U Sgr	6.7452	50674.63784	0.550	MDO 2.1m	5388	1.50	4.00	+0.06
		50674.64319	0.551	MDO 2.1m	5416	1.70	4.00	+0.07
		50677.67816	0.001	MDO 2.1m	6145	1.90	4.70	+0.01
		50735.55199	0.581	MDO 2.1m	5347	1.60	4.00	+0.04
		50736.56445	0.731	MDO 2.1m	5399	1.70	5.20	+0.01
		50739.57384	0.178	MDO 2.1m	5876	1.70	4.00	+0.08
		50740.57748	0.326	MDO 2.1m	5710	1.70	4.00	+0.09
		50741.55532	0.471	MDO 2.1m	5475	1.60	4.00	+0.05
		50949.66389	0.326	MDO 2.1m	5705	1.70	4.00	+0.05
		51053.67960	0.746	MDO 2.1m	5441	1.80	5.50	+0.01
		51054.68627	0.896	MDO 2.1m	6077	2.10	5.50	+0.04
		51094.62511	0.817	MDO 2.1m	5746	2.00	6.00	+0.02
V496 Aql (s)	6.8071	51774.72348	0.910	MDO 2.1m	5822	1.70	4.25	+0.03
		51775.62763	0.043	MDO 2.1m	5841	1.70	4.00	+0.06
η Aql	7.1767	50739.66527	0.021	MDO 2.1m	6275	1.90	4.40	+0.04
		50741.62832	0.295	MDO 2.1m	5787	1.80	3.90	+0.06

Table 1 (continued)

Star	P, d	JD, 24+	ϕ	Telescope	T_{eff}, K	log g	V_t, km s^{-1}	[Fe/H]
BB Her	7.5080	51055.64149	0.665	MDO 2.1m	5265	1.60	4.10	+0.08
		51058.66436	0.068	MDO 2.1m	5988	1.80	4.30	+0.17
		51097.63866	0.259	MDO 2.1m	5750	1.80	4.20	+0.16
		51098.61695	0.389	MDO 2.1m	5556	1.70	4.20	+0.13
RS Ori	7.5669	51098.98467	0.012	MDO 2.1m	6367	1.80	3.70	−0.10
		51476.87338	0.952	MDO 2.1m	6666	2.10	4.40	−0.10
		51568.74952	0.094	MDO 2.1m	6193	1.70	3.90	−0.12
		51569.75694	0.228	MDO 2.1m	6043	1.60	3.70	−0.07
V440 Per (s)	7.5700	50738.81027	0.280	MDO 2.1m	6144	2.00	5.10	−0.03
		50741.86515	0.684	MDO 2.1m	5997	1.90	4.90	−0.08
		51098.90018	0.848	MDO 2.1m	6021	1.85	5.20	−0.06
W Sgr	7.5949	50741.55035	0.045	MDO 2.1m	6446	2.10	4.60	−0.04
		51053.62870	0.137	MDO 2.1m	6207	2.00	4.30	+0.02
		51056.63553	0.533	MDO 2.1m	5540	1.65	3.80	+0.01
RX Cam	7.9120	50735.89188	0.212	MDO 2.1m	5942	1.95	4.10	+0.07
		50736.84355	0.332	MDO 2.1m	5755	1.80	4.10	+0.06
		50741.88410	0.969	MDO 2.1m	6227	1.90	4.20	−0.02
W Gem	7.9138	51096.95531	0.009	MDO 2.1m	6003	1.85	4.05	−0.02
		51097.96579	0.137	MDO 2.1m	6021	1.80	3.90	−0.08
		51098.96898	0.264	MDO 2.1m	5704	1.90	4.50	−0.01
U Vul	7.9906	51055.76933	0.415	MDO 2.1m	5629	1.70	4.00	+0.09
		51056.73122	0.536	MDO 2.1m	5490	1.50	3.70	+0.08
		51475.65134	0.961	MDO 2.1m	6314	1.90	5.00	+0.01
DL Cas	8.0007	50381.76574	0.105	MDO 2.1m	5860	1.70	4.70	−0.02
		50382.75636	0.229	MDO 2.1m	5786	1.70	4.20	+0.02
		50736.74222	0.473	MDO 2.1m	5438	1.40	4.00	−0.05
AC Mon	8.0143	50505.35490	0.919	SAORAS 6m	6121	2.20	5.80	−0.07
V636 Cas (s)	8.3770	50735.78055	0.919	MDO 2.1m	5562	1.50	4.10	+0.05
		50736.77703	0.038	MDO 2.1m	5473	1.50	3.80	+0.06
		50737.79151	0.159	MDO 2.1m	5395	1.60	4.05	+0.07
S Sge	8.3821	50675.76850	0.051	MDO 2.1m	6135	2.00	4.30	+0.12
		50677.81371	0.295	MDO 2.1m	5855	1.80	3.80	+0.11
		50741.65318	0.911	MDO 2.1m	6093	2.10	4.95	+0.09
GQ Ori	8.6161	49022.30620	0.365	SAORAS 6m	5732	1.75	5.20	−0.03
V500 Sco	9.3168	51093.57083	0.340	MDO 2.1m	5359	1.40	3.80	−0.03
		51094.56998	0.447	MDO 2.1m	5243	1.40	3.80	−0.05
		51097.55554	0.768	MDO 2.1m	6050	1.80	4.00	+0.01
		51098.55823	0.875	MDO 2.1m	5969	1.70	4.40	−0.03
FN Aql	9.4816	50740.65730	0.794	MDO 2.1m	5698	1.65	4.70	−0.05
		51055.73047	0.024	MDO 2.1m	5922	1.90	4.90	−0.02
		51056.70025	0.126	MDO 2.1m	5729	1.55	3.70	+0.00
		51057.74039	0.236	MDO 2.1m	5464	1.50	3.50	+0.01
YZ Sgr	9.5536	50735.57390	0.249	MDO 2.1m	5496	1.30	3.65	+0.04
		50737.54744	0.456	MDO 2.1m	5223	1.20	3.90	+0.08
		50740.59629	0.775	MDO 2.1m	5906	1.80	4.80	+0.06
		51057.70299	0.967	MDO 2.1m	5943	1.50	4.10	+0.05
S Nor	9.7542	49116.83715	0.550	CTIO 4m	5797	2.00	4.60	+0.06
		49497.47640	0.570	CTIO 4m	5677	1.90	5.80	+0.06
β Dor	9.8424	51231.44353	0.128	MSO 74in	5618	1.60	4.30	−0.01
ζ Gem	10.1507	50381.98995	0.815	MDO 2.1m	5740	1.70	4.50	+0.01
		50736.98149	0.787	MDO 2.1m	5741	1.70	4.50	+0.03
		50739.96631	0.081	MDO 2.1m	5593	1.40	3.50	+0.06
Z Lac	10.8856	51055.88242	0.903	MDO 2.1m	5899	1.70	4.30	+0.01
		51056.86659	0.993	MDO 2.1m	6432	1.90	4.50	−0.03
		51058.86037	0.177	MDO 2.1m	5722	1.50	3.80	+0.05
		51093.78777	0.385	MDO 2.1m	5241	1.20	3.30	+0.02
VX Per	10.8890	50739.78515	0.084	MDO 2.1m	5515	1.40	3.80	−0.03
		50740.81077	0.178	MDO 2.1m	5369	1.40	3.80	−0.03
		51095.81172	0.780	MDO 2.1m	5989	1.70	4.20	−0.07
		51096.77199	0.868	MDO 2.1m	6026	1.70	4.20	−0.05
V340 Nor(s:)	11.2870	49116.86597	0.193	CTIO 4m	5595	1.75	4.50	+0.00

Table 1 (continued)

Star	P, d	JD, 24+	ϕ	Telescope	T_{eff}, K	$\log g$	V_t, km s^{-1}	[Fe/H]
RX Aur	11.6235	50736.91146	0.171	MDO 2.1m	5856	1.65	4.10	−0.03
		50737.90348	0.257	MDO 2.1m	5677	1.45	3.70	−0.06
		51093.93187	0.885	MDO 2.1m	6111	1.60	4.40	−0.08
		51094.91699	0.970	MDO 2.1m	6312	1.70	4.30	−0.11
TT Aql	13.7547	51058.71730	0.895	MDO 2.1m	5630	1.65	5.10	+0.09
		51093.61314	0.432	MDO 2.1m	5080	1.10	3.60	+0.12
		51476.61856	0.276	MDO 2.1m	5335	1.15	3.60	+0.12
SV Mon	15.2328	50735.97014	0.704	MDO 2.1m	4916	1.05	4.70	−0.09
		50737.92962	0.832	MDO 2.1m	5263	1.40	6.80	−0.06
		50739.94097	0.964	MDO 2.1m	5482	1.40	4.90	−0.06
		50741.93497	0.095	MDO 2.1m	6141	1.50	4.60	−0.03
X Cyg	16.3863	51056.80718	0.020	MDO 2.1m	6039	1.65	4.70	+0.12
		51057.83565	0.083	MDO 2.1m	5741	1.5	4.20	+0.13
RW Cam	16.4148	50737.83335	0.182	MDO 2.1m	5368	1.15	3.60	+0.07
		50738.83656	0.243	MDO 2.1m	5227	1.05	3.70	+0.01
		50739.83773	0.304	MDO 2.1m	5108	0.95	3.40	+0.02
		51095.85239	0.993	MDO 2.1m	5969	1.85	5.00	+0.03
CD Cyg	17.0740	50676.85264	0.943	MDO 2.1m	5484	1.45	5.20	+0.09
		50677.84369	0.001	MDO 2.1m	6490	1.95	6.70	+0.01
		50736.69273	0.448	MDO 2.1m	5108	1.10	4.00	+0.15
Y Oph (s)	17.1269	50674.65908	0.936	MDO 2.1m	6013	1.75	5.60	+0.02
		50736.55133	0.551	MDO 2.1m	5561	1.80	5.40	+0.05
		50740.55568	0.784	MDO 2.1m	5709	1.90	5.80	+0.06
		51054.66483	0.128	MDO 2.1m	6153	1.90	5.80	+0.07
SZ Aql	17.1408	50735.60696	0.055	MDO 2.1m	5568	1.20	4.30	+0.18
		50737.65009	0.174	MDO 2.1m	5240	1.00	3.80	+0.13
		51055.69289	0.722	MDO 2.1m	5454	1.45	6.00	+0.15
		51057.71991	0.840	MDO 2.1m	6559	2.00	6.00	+0.13
YZ Aur	18.1932	44332.70000	0.390	KPNO 4m	5175	1.65	4.70	−0.05
WZ Sgr	21.8498	50674.61198	0.196	MDO 2.1m	5350	1.20	4.30	+0.21
		50677.72586	0.339	MDO 2.1m	5099	0.70	3.50	+0.21
		50737.58366	0.078	MDO 2.1m	5786	1.10	4.70	+0.15
SW Vel	23.4410	49116.49905	0.348	CTIO 4m	5010	1.00	4.40	+0.01
X Pup	25.9610	50383.94934	0.308	MDO 2.1m	5654	1.10	4.40	−0.00
		51095.95617	0.734	MDO 2.1m	4925	0.70	5.10	−0.08
		50562.60378	0.190	MDO 2.1m	6224	1.55	5.40	−0.06
T Mon	27.0246	50379.88342	0.113	MDO 2.1m	5811	1.40	4.90	+0.12
		50381.97924	0.191	MDO 2.1m	5468	1.10	4.30	+0.15
		50382.91306	0.225	MDO 2.1m	5346	1.05	4.20	+0.11
		50383.91603	0.262	MDO 2.1m	5238	1.00	3.90	+0.12
SV Vul	44.9948	48876.62947	0.669	KPNO 4m	4880	1.00	5.00	−0.03
		48878.76771	0.717	KPNO 4m	4883	1.00	5.00	−0.04
		49981.67704	0.237	KPNO 4m	5314	0.70	4.90	+0.05
		49982.71400	0.260	KPNO 4m	5274	0.70	4.70	+0.04
		49983.66534	0.282	KPNO 4m	5209	0.70	4.70	+0.02
		49984.66494	0.304	KPNO 4m	5188	0.60	4.60	+0.02
		49985.69595	0.327	KPNO 4m	5155	0.50	4.50	−0.01
		49986.66211	0.348	KPNO 4m	5120	0.50	4.50	+0.01
		50379.58714	0.085	MDO 2.1m	5805	1.20	5.80	+0.08
		50381.55138	0.129	MDO 2.1m	5611	0.95	5.30	+0.06
		50382.56326	0.151	MDO 2.1m	5548	0.95	5.10	+0.07
		50383.57136	0.174	MDO 2.1m	5432	0.80	5.00	+0.02
		50672.75472	0.604	MDO 2.1m	4896	1.00	5.00	−0.03
		50674.77562	0.649	MDO 2.1m	4876	1.00	5.00	−0.02
		50675.75208	0.671	MDO 2.1m	4873	1.00	5.00	−0.03
		50677.79466	0.716	MDO 2.1m	4861	1.00	5.00	−0.04
		50738.69196	0.070	MDO 2.1m	5856	1.20	5.90	+0.10
		51058.75536	0.188	MDO 2.1m	5398	0.80	5.00	+0.07
		51094.73986	0.988	MDO 2.1m	6110	1.60	6.80	+0.04
		51096.69223	0.031	MDO 2.1m	5977	1.40	6.20	+0.09
		51098.76320	0.077	MDO 2.1m	5755	1.05	5.60	+0.08
		51473.62697	0.414	MDO 2.1m	5005	0.50	4.80	−0.02
		51473.64877	0.414	MDO 2.1m	4995	0.50	4.80	+0.00
S Vul	68.4640	51055.75037	0.908	MDO 2.1m	5881	1.10	8.70	+0.02
		51058.73003	0.951	MDO 2.1m	5950	1.00	8.00	−0.05
		51095.66963	0.491	MDO 2.1m	5166	0.50	6.60	−0.05

Table 2. Averaged relative-to-solar elemental abundance for program Cepheids

Star	C	O	Na	Mg	Al	Si	S	Ca	Sc	Ti	V	Cr	Mn
V473 Lyr (s)	−0.34	−0.24	0.01	−0.14	−0.06	−0.03	0.09	−0.10	−0.05	−0.06	−0.04	−0.08	−0.22
SU Cas (s)	−0.24	−0.02	0.20	−0.24	0.05	0.07	0.11	−0.01	−0.13	0.13	0.08	0.12	0.07
EU Tau (s)	−0.24	−0.05	0.24	−0.28	−0.01	0.04	0.09	−0.05	−0.07	0.03	−0.05	−0.02	−0.05
IR Cep (s)	−0.04	–	0.28	−0.39	0.12	0.17	0.34	−0.06	−0.03	0.09	0.26	−0.12	−0.02
TU Cas	−0.19	−0.03	0.15	−0.19	0.14	0.10	−0.03	−0.02	−0.19	0.05	0.02	0.02	0.06
DT Cyg (s)	−0.12	0.01	0.33	0.04	0.17	0.12	0.15	0.05	−0.01	0.21	0.14	0.18	0.19
V526 Mon (s)	−0.28	−0.52	0.11	−0.09	–	−0.01	0.05	−0.08	−0.20	−0.04	−0.18	−0.02	−0.14
V351 Cep (s)	−0.19	−0.09	0.17	−0.30	−0.03	0.07	0.26	−0.10	0.01	0.08	0.08	0.03	−0.03
VX Pup	–	–	0.08	–	–	−0.06	–	−0.33	−0.13	−0.01	−0.02	−0.16	−0.10
SZ Tau (s)	−0.20	−0.02	0.25	–	0.14	0.07	0.19	0.02	0.02	0.06	0.10	0.18	0.09
V1334 Cyg (s)	−0.30	−0.23	0.18	−0.31	0.15	0.08	0.11	−0.03	−0.01	0.02	−0.01	−0.03	0.03
BG Cru (s)	−0.18	0.08	0.24	–	0.29	0.07	–	−0.01	−0.33	0.13	0.15	−0.04	−0.01
BD Cas (s)	−0.14	−0.09	−0.03	−0.26	−0.09	0.03	0.26	−0.19	−0.23	−0.06	−0.06	−0.14	−0.13
RT Aur	−0.22	−0.01	0.29	−0.14	0.13	0.12	0.19	0.09	0.05	0.10	0.05	0.08	0.11
DF Cas	−0.30	–	0.16	−0.33	–	0.03	0.39	−0.18	−0.09	0.00	−0.01	0.11	−0.12
SU Cyg	−0.21	−0.25	0.23	−0.16	0.17	0.04	0.02	0.01	−0.11	0.01	0.06	0.02	0.02
ST Tau	−0.27	−0.29	0.23	−0.18	0.03	0.03	0.04	−0.04	−0.11	0.10	−0.07	−0.04	−0.02
V1726 Cyg (s)	−0.22	–	0.29	−0.12	0.07	0.11	0.17	−0.16	−0.05	0.15	–	−0.07	0.00
BQ Ser	−0.15	−0.13	0.12	−0.14	0.14	0.07	0.13	−0.05	−0.17	0.03	−0.01	0.04	−0.04
Y Lac	−0.26	−0.37	0.13	−0.24	0.13	0.03	−0.04	−0.05	−0.26	−0.03	0.02	−0.07	−0.09
T Vul	−0.26	0.00	0.13	−0.31	0.12	0.04	0.12	0.03	−0.19	0.00	0.00	0.10	0.01
FF Aql (s)	−0.31	−0.23	0.25	−0.24	0.12	–	0.01	−0.03	−0.11	0.09	0.14	0.06	0.04
CF Cas	−0.19	0.06	0.09	−0.21	0.10	0.01	0.10	−0.01	−0.04	−0.00	−0.06	0.06	−0.01
BG Lac	−0.17	0.10	0.17	−0.25	0.08	0.04	0.09	−0.01	−0.11	0.03	−0.05	0.06	0.04
Del Cep	−0.17	0.01	0.20	−0.16	0.16	0.10	0.15	0.01	0.01	0.04	0.09	0.06	0.17
V1162 Aql (s)	−0.14	−0.19	0.13	−0.19	0.13	0.06	–	−0.03	−0.21	−0.03	−0.02	0.02	−0.01
CV Mon	−0.25	0.02	0.03	−0.32	−0.05	0.01	0.08	−0.19	−0.14	0.10	0.30	0.04	−0.05
V Cen	−0.17	0.02	0.01	–	0.11	0.03	0.14	−0.03	0.00	0.09	0.03	−0.04	−0.11
V924 Cyg (s:)	−0.30	–	−0.04	−0.38	0.09	−0.04	0.05	−0.21	−0.37	−0.21	0.01	−0.09	0.10
MY Pup (s)	−0.36	−0.12	0.14	−0.36	0.03	−0.08	−0.14	−0.13	−0.17	−0.09	−0.09	−0.18	−0.24
Y Sgr	−0.14	−0.06	0.22	−0.03	0.27	0.12	0.17	0.04	−0.24	0.01	0.07	0.17	0.11
EW Sct	−0.07	−0.04	0.07	−0.10	0.15	0.08	0.15	−0.01	−0.09	0.09	0.08	0.05	0.08
FM Aql	−0.24	−0.19	0.32	0.00	0.33	0.17	0.24	0.17	−0.17	0.15	0.10	0.19	0.11
TX Del	0.06	0.16	0.48	−0.22	–	–	–	0.16	–	0.17	0.15	–	0.38
V367 Sct	−0.38	–	0.21	−0.48	0.21	0.05	0.15	−0.15	0.07	0.24	0.06	−0.05	−0.13
X Vul	−0.16	0.03	0.18	−0.20	0.17	0.08	0.20	−0.04	−0.09	0.08	0.04	0.12	0.08
AW Per	−0.23	−0.03	0.24	−0.27	0.07	0.06	0.18	−0.03	−0.15	0.01	0.15	0.27	0.10
U Sgr	−0.16	0.03	0.20	−0.17	0.22	0.07	0.15	0.03	−0.16	0.06	0.03	0.10	0.06
V496 Aql (s)	−0.20	−0.15	0.24	−0.12	0.10	0.11	0.13	−0.03	0.10	0.06	0.06	0.09	0.05
Eta Aql	−0.20	−0.10	0.19	−0.19	0.23	0.12	0.08	−0.02	−0.18	0.03	0.02	0.22	0.12
BB Her	−0.10	0.04	0.40	−0.01	0.23	0.15	–	−0.01	0.07	0.09	0.07	0.10	0.30
RS Ori	−0.45	−0.18	0.06	−0.30	0.02	0.02	0.00	−0.06	−0.19	0.11	−0.12	−0.09	−0.11
V440 Per (s)	−0.34	−0.21	0.05	−0.33	0.06	0.00	−0.06	−0.16	−0.14	0.05	0.00	−0.06	−0.04
W Sgr	−0.25	0.02	0.18	−0.25	−0.01	0.04	0.11	−0.01	−0.12	0.03	0.03	0.03	0.03
RX Cam	−0.25	−0.11	0.18	−0.23	0.06	0.05	0.04	−0.05	0.04	0.10	0.03	0.08	0.02
W Gem	−0.27	−0.12	0.18	−0.28	0.10	0.03	0.05	−0.08	0.05	0.09	0.00	−0.02	−0.02
U Vul	−0.18	−0.03	0.18	−0.16	0.12	0.09	0.17	−0.05	−0.28	0.05	0.02	0.10	0.01
DL Cas	−0.31	−0.01	0.11	0.11	0.14	0.02	0.21	0.01	−0.16	0.03	−0.04	0.10	0.07
AC Mon	−0.42	–	0.24	−0.40	–	−0.02	−0.15	−0.10	−0.07	0.12	–	−0.08	−0.19
V636 Cas (s)	−0.17	−0.09	0.29	−0.07	0.09	0.08	0.12	0.15	0.25	0.05	0.05	0.30	0.10
S Sge	−0.12	0.04	0.24	−0.22	0.14	0.16	0.17	0.03	0.27	0.12	0.17	0.22	0.19
GQ Ori	−0.37	−0.12	0.17	0.11	0.04	0.00	0.04	−0.25	–	0.06	0.04	0.01	−0.14
V500 Sco	−0.20	−0.13	0.13	−0.23	0.08	0.02	0.06	−0.09	−0.13	−0.06	−0.10	−0.07	−0.03
FN Aql	−1.31	−0.08	0.19	−0.21	0.10	0.00	−0.02	−0.07	−0.07	0.04	0.01	−0.04	−0.12
YZ Sgr	−0.07	−0.07	0.31	−0.22	0.18	0.12	0.18	0.00	–	0.03	0.03	0.09	0.07
S Nor	−0.23	−0.19	0.27	−0.24	0.16	0.05	0.10	−0.03	0.01	0.05	0.02	−0.08	−0.10
Beta Dor	−0.31	−0.08	0.07	−0.30	0.07	0.00	−0.04	−0.18	−0.11	0.01	−0.05	−0.04	0.03
Zeta Gem	−0.24	−0.12	0.25	−0.15	0.07	0.04	0.03	−0.06	0.13	0.06	0.02	0.00	0.05
Z Lac	−0.32	−0.10	0.23	−0.23	0.07	0.05	0.14	0.04	−0.18	0.07	−0.02	0.05	0.05
VX Per	−0.25	−0.15	0.15	−0.31	0.03	0.00	0.04	−0.12	−0.05	−0.03	−0.11	−0.06	−0.09
V340 Nor(s:)	−0.08	0.07	0.29	−0.30	0.00	0.03	0.18	−0.16	−0.12	0.00	−0.07	0.01	−0.03
RX Aur	−0.29	−0.02	0.18	−0.20	0.04	0.05	−0.01	−0.09	−0.31	0.05	−0.07	0.04	0.08
TT Aql	−0.09	0.13	0.28	−0.19	0.20	0.11	0.33	0.08	0.12	0.04	−0.01	0.09	0.14
SV Mon	−0.84	−0.28	0.28	−0.16	0.10	0.00	−0.10	−0.09	−0.30	−0.06	−0.16	−0.07	−0.16
X Cyg	−0.29	0.05	0.26	−0.09	0.18	0.13	0.13	0.04	–	0.21	0.11	0.23	0.11
RW Cam	−0.14	−0.05	0.19	−0.23	0.12	0.07	0.18	0.02	0.12	0.04	−0.02	0.06	0.05
CD Cyg	−0.18	−0.11	0.23	−0.37	0.19	0.09	0.28	0.08	0.03	0.08	0.06	0.05	0.10
Y Oph (s)	−0.14	−0.01	0.12	−0.31	0.14	0.03	0.15	−0.15	0.33	0.06	0.05	0.03	0.04
SZ Aql	−0.01	−0.04	0.28	−0.12	0.28	0.17	0.24	0.14	0.11	0.14	0.12	0.19	0.20
WZ Sgr	0.03	0.13	0.39	0.01	0.28	0.28	0.51	0.19	0.12	0.23	0.17	0.19	0.15
SW Vel	−0.13	0.18	0.17	0.16	0.04	−0.03	0.17	−0.16	0.08	−0.06	−0.14	0.14	−0.12
X Pup	−0.29	−0.11	0.18	–	0.10	−0.05	0.02	0.06	−0.18	−0.08	−0.16	−0.07	0.07
T Mon	−0.27	0.08	0.35	–	0.10	0.13	–	0.09	–	0.06	0.03	0.27	0.14
SV Vul	0.02	−0.01	0.04	−0.10	0.13	0.06	0.16	−0.04	–	0.02	−0.08	0.02	−0.02
S Vul	−0.34	−0.40	0.21	–	0.22	−0.03	0.22	−0.04	–	0.03	0.04	0.10	−0.06

Table 2 (continued)

Star	Fe	Co	Ni	Cu	Zn	Y	Zr	La	Ce	Nd	Eu	Gd
V473 Lyr (s)	−0.06	−0.13	−0.11	−0.10	0.12	0.10	0.02	0.20	0.11	0.03	−0.02	0.00
SU Cas (s)	−0.01	−0.19	0.00	0.34	0.18	0.19	0.02	0.21	−0.04	0.12	0.02	−0.20
EU Tau (s)	−0.06	−0.02	−0.08	0.21	–	0.07	−0.08	0.16	−0.18	−0.02	0.01	0.18
IR Cep (s)	−0.01	−0.20	−0.07	−0.47	–	0.03	0.16	–	0.05	−0.11	–	–
TU Cas	0.03	−0.08	−0.04	0.15	0.46	0.17	0.01	0.24	−0.05	0.08	0.11	0.17
DT Cyg (s)	0.11	0.23	0.14	0.42	0.20	0.46	−0.06	0.21	0.01	0.25	0.20	0.33
V526 Mon (s)	−0.13	0.04	−0.07	–	–	–	−0.11	0.41	–	0.25	0.16	–
V351 Cep (s)	0.03	−0.01	0.00	−0.05	0.14	0.19	−0.01	0.26	−0.10	0.12	–	0.16
VX Pup	−0.13	–	−0.18	0.25	–	0.10	–	–	–	0.35	−0.15	–
SZ Tau (s)	0.08	−0.01	0.02	–	0.39	0.17	−0.03	0.31	0.06	0.23	0.15	–
V1334 Cyg (s)	−0.04	−0.29	−0.10	0.39	–	0.18	−0.15	0.21	−0.17	0.13	0.13	–
BG Cru (s)	−0.02	−0.06	−0.16	−0.68	–	−0.04	−0.04	–	0.28	−0.14	0.25	–
BD Cas (s)	−0.07	0.09	−0.26	−0.14	–	0.01	0.13	0.41	0.19	−0.25	–	0.30
RT Aur	0.06	−0.09	0.05	0.15	0.24	0.24	−0.04	0.14	−0.17	0.07	0.01	0.01
DF Cas	0.13	−0.30	0.04	−0.43	–	0.06	0.22	–	0.07	0.38	0.28	–
SU Cyg	−0.00	−0.01	−0.11	0.15	–	0.16	0.01	0.27	−0.19	0.08	0.06	0.10
ST Tau	−0.05	−0.33	−0.04	0.19	0.02	0.18	−0.13	0.17	−0.10	0.14	0.04	0.13
V1726 Cyg (s)	−0.02	–	−0.15	–	–	0.14	–	–	–	0.24	0.31	–
BQ Ser	−0.04	−0.17	−0.07	0.08	0.35	0.13	−0.10	0.13	−0.09	0.22	0.07	0.20
Y Lac	−0.09	–	−0.15	0.18	–	0.12	−0.24	0.11	−0.35	0.16	0.00	–
T Vul	0.01	0.01	−0.02	0.25	0.30	0.13	−0.02	0.20	−0.03	0.14	0.08	−0.12
FF Aql (s)	0.02	−0.13	0.01	0.45	–	0.31	−0.11	0.25	−0.13	0.08	0.17	0.22
CF Cas	−0.01	−0.15	−0.03	−0.11	0.25	0.11	−0.19	0.14	−0.17	0.04	0.06	−0.02
BG Lac	−0.01	−0.13	−0.03	0.10	0.28	0.14	−0.12	0.07	−0.17	0.05	0.02	0.18
Del Cep	0.06	−0.02	0.01	0.55	0.36	0.27	−0.14	0.25	−0.08	0.17	0.02	–
V1162 Aql (s)	0.01	−0.15	−0.02	0.28	0.14	0.21	−0.21	0.09	−0.24	0.02	−0.06	−0.23
CV Mon	−0.03	–	−0.08	−0.05	–	0.01	0.00	0.19	−0.03	0.29	0.13	–
V Cen	0.04	−0.21	0.11	0.16	0.37	0.35	0.18	0.26	0.02	0.28	0.20	–
V924 Cyg (s:)	−0.09	–	−0.14	0.12	–	−0.18	–	–	–	0.04	–	–
MY Pup (s)	−0.12	−0.10	−0.04	−0.25	−0.09	−0.03	−0.16	0.17	−0.10	−0.07	−0.04	–
Y Sgr	0.06	−0.07	0.03	–	0.38	0.31	−0.08	0.13	−0.15	0.10	−0.03	0.00
EW Sct	0.04	−0.10	−0.01	0.11	0.34	0.22	−0.12	0.29	−0.07	0.17	0.06	–
FM Aql	0.08	0.02	0.09	0.26	–	0.16	−0.01	0.23	−0.17	0.14	0.09	–
TX Del	0.24	–	0.17	–	–	0.07	–	0.13	−0.34	−0.38	–	–
V367 Sct	−0.01	0.03	−0.01	−0.02	–	−0.06	−0.15	0.45	–	0.18	0.36	–
X Vul	0.08	−0.11	0.07	0.07	0.35	0.23	−0.11	0.15	−0.15	0.10	0.03	0.04
AW Per	0.01	−0.01	0.04	0.57	0.51	0.11	−0.02	0.25	−0.11	0.10	0.11	−0.12
U Sgr	0.04	−0.12	0.01	0.02	0.24	0.22	−0.11	0.14	−0.12	0.05	0.01	−0.03
V496 Aql (s)	0.05	−0.09	0.03	–	0.33	0.14	−0.10	0.09	−0.23	0.02	−0.01	−0.09
Eta Aql	0.05	−0.27	0.04	0.28	0.14	0.23	−0.14	0.26	−0.19	0.10	0.04	−0.05
BB Her	0.15	−0.04	0.15	0.19	0.39	0.32	0.00	0.11	−0.17	0.02	0.08	–
RS Ori	−0.10	−0.01	−0.13	0.12	0.21	0.16	−0.12	0.18	−0.20	0.04	0.00	0.07
V440 Per (s)	−0.05	−0.13	−0.05	0.16	0.06	0.26	−0.13	0.30	−0.10	0.14	0.14	0.12
W Sgr	−0.01	−0.08	−0.04	0.21	0.22	0.20	−0.11	0.23	−0.07	0.06	−0.01	0.11
RX Cam	0.03	−0.14	0.03	0.20	0.14	0.23	−0.06	0.27	−0.17	0.10	0.09	0.15
W Gem	−0.04	−0.21	−0.07	0.11	0.16	0.23	−0.09	0.28	−0.10	0.15	0.10	0.07
U Vul	0.05	−0.09	0.05	0.13	0.31	0.21	−0.10	0.13	−0.06	0.13	0.02	0.02
DL Cas	−0.01	−0.04	0.00	−0.19	0.47	0.21	0.16	0.12	0.09	0.12	0.11	−0.05
AC Mon	−0.07	–	−0.11	−0.61	–	0.05	–	0.39	–	0.35	0.28	–
V636 Cas (s)	0.06	−0.09	0.09	−0.07	0.30	0.18	−0.11	0.16	−0.11	0.12	0.02	0.06
S Sge	0.10	0.00	0.12	0.26	0.39	0.28	0.02	0.29	−0.09	0.13	0.15	0.02
GQ Ori	−0.03	−0.01	−0.15	–	–	0.29	–	0.25	–	−0.16	0.09	–
V500 Sco	−0.02	−0.18	−0.06	−0.02	0.21	0.19	−0.19	0.18	−0.10	0.08	0.03	−0.24
FN Aql	−0.02	−0.14	−0.05	0.09	0.15	0.16	−0.07	0.23	−0.09	0.12	0.08	0.12
YZ Sgr	0.05	−0.06	0.03	0.11	0.22	0.35	−0.09	0.14	−0.10	0.01	0.02	−0.01
S Nor	0.05	−0.10	−0.07	−0.17	–	0.11	0.14	0.35	−0.10	0.00	0.02	–
Beta Dor	−0.01	−0.19	−0.04	−0.45	0.14	0.02	0.03	0.18	0.05	−0.05	0.04	0.20
Zeta Gem	0.04	−0.10	0.02	0.03	0.17	0.19	−0.07	0.21	−0.13	0.08	0.06	−0.06
Z Lac	0.01	−0.13	−0.02	0.14	0.25	0.20	−0.07	0.26	−0.04	0.12	0.06	0.09
VX Per	−0.05	−0.20	−0.10	0.05	0.18	0.16	−0.12	0.21	−0.13	0.08	0.03	0.00
V340 Nor(s:)	0.00	−0.13	0.01	−0.06	–	0.07	–	0.13	−0.25	−0.11	−0.06	0.12
RX Aur	−0.07	−0.15	−0.07	0.28	0.30	0.09	−0.11	0.28	−0.21	0.08	0.10	0.12
TT Aql	0.11	−0.07	0.08	0.05	0.41	0.28	−0.06	0.20	−0.09	0.14	0.05	0.01
SV Mon	−0.03	−0.28	−0.12	−0.07	0.16	0.26	−0.08	0.25	−0.14	0.13	0.03	–
X Cyg	0.12	0.06	0.09	0.24	0.35	0.33	−0.03	0.29	0.02	0.15	0.14	0.14
RW Cam	0.04	−0.08	0.05	−0.08	0.45	0.17	−0.04	0.25	−0.11	0.10	0.06	0.02
CD Cyg	0.07	−0.03	0.05	0.01	0.32	0.31	−0.10	0.23	−0.07	0.17	0.08	0.10
Y Oph (s)	0.05	−0.05	0.03	0.07	0.14	0.33	−0.04	0.28	−0.07	0.21	0.13	0.08
SZ Aql	0.15	−0.02	0.03	0.05	0.42	–	0.04	0.21	−0.12	0.15	0.12	0.12
WZ Sgr	0.17	0.12	0.21	0.13	0.35	0.30	−0.08	0.24	−0.08	0.18	0.15	0.08
SW Vel	0.01	−0.25	−0.06	−0.41	0.30	0.21	–	0.23	0.00	0.22	0.16	0.10
X Pup	−0.03	−0.25	−0.08	−0.13	0.26	0.14	0.01	0.27	−0.09	0.22	0.09	−0.04
T Mon	0.13	−0.03	0.05	–	0.34	–	0.04	0.30	0.02	0.22	0.15	–
SV Vul	0.03	−0.13	0.00	−0.16	0.22	0.26	−0.08	0.20	−0.13	0.05	0.04	0.03
S Vul	−0.02	−0.22	0.02	0.03	–	0.22	−0.06	0.18	−0.25	0.15	0.02	−0.01