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NEW GCVS DATA FOR SELECTED VARIABLES IN TELESCOPIUM

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In the course of our work on revision of positional information for all stars of the GCVS (Samus et al., 2002, 2003), we finished identifications with positional catalogs for variables in the constellation Telescopium. With accurate coordinates for these stars, we were able to retrieve their observations from the ASAS-3 data base (Pojmanski, 2002), often the only source of data making it possible to study sufficiently bright southern variables. These observations were analyzed using the period-search software developed by Dr. V.P. Goranskij for Windows environment. As a result, we obtained information significantly appending or improving that in the GCVS for 75 stars (of 350 GCVS variables, including those from the Name-Lists, in this constellation). In 57 cases, even the variability types were modified or completely changed. The relevant data are presented in Table 1. For short-period stars, the light elements in the Table are heliocentric. The epochs are minima for eclipsing and RV Tauri stars and maxima for other variables. Figures 1 and 2 contain sample light curves, plotted using ASAS-3 *V*-band observations, for some of the variables. Probably the most interesting of them are the two new RV Tauri stars, HI and NW Tel, earlier classified respectively as E: and I:, and a very-short-period CWB (or a very-long-period RR) variable PP Tel ($P = 1^d1$).

The information presented in this paper, along with accurate coordinates for all other GCVS stars in Telescopium, will be incorporated in the GCVS on-line version in May, 2004.

We wish to express our sincere thanks to Dr. V.P. Goranskij for providing us with his excellent period-search software. Thanks are due to Dr. M.L. Hazen for sending us many unpublished finding charts for Harvard variables. The work of the GCVS team is supported, in part, by grants from the Russian Foundation for Basic Research (grant 02-02-16069), The Federal Scientific and Technological Program “Astronomy”, the program “Non-Stationary Processes in Astronomy” of the Presidium of Russian Academy of Sciences, and the program of support for leading scientific schools of Russia (grant NSh-389-2003-2).

References:

- Pojmanski, G., 2002, *Acta Astronomica*, **52**, 397
Samus, N. N., Goranskii, V. P., Durlevich, O. V. *et al.*, 2002, *Astronomy Letters*, **28**, 174
Samus, N. N., Goranskii, V. P., Durlevich, O. V. *et al.*, 2003, *Astronomy Letters*, **29**, 468

Table 1. New data on the variable stars in Telescopium

Star	RA (J2000)	Dec	Type	V	Epoch, JD 24...	P, days
RX	19 06 58.2	-45 58 14	LC	7.0- 8.7		
TZ	18 10 30.2	-54 59 46	SRA	11.9-13.3	52172	202
UX	18 16 34.8	-51 34 15	SRA	13.0-14.7	52432	201
UZ	18 17 40.1	-50 11 19	SRA	12.5-14.2	52082	190
VW	18 19 05.1	-56 54 47	SRA	12.4-14.6	52759	74
VX	18 18 41.7	-52 35 11	SRA	12.7-14.0	52898	117
XX	18 29 10.1	-56 42 00	SRB	12.2-12.9		46:
YZ	18 36 13.3	-50 38 14	SR	12.1-13.0		73:
AC	18 39 16.8	-56 39 44	SRA	11.9-13.8	52954	252
AE	18 39 42.7	-53 13 35	SRB	11.9-13.0		76:
AF	18 40 39.2	-56 06 01	SRB	11.6-12.6		96:
AG	18 41 12.8	-51 57 50	SRA	11.4-12.7	52453	115
AI	18 42 01.9	-50 06 30	SRA	11.9-12.4	52713	55
AK	18 43 48.8	-55 00 23	SRA	13.4-15.1	52919	150
AL	18 44 34.8	-53 28 15	SRA	11.8-13.5	52868	63.4
AN	18 46 39.1	-55 21 13	SRB	10.5-11.0		235 and 27
AO	18 46 30.5	-50 42 04	SRB	10.7-12.0		121:
AP	18 47 48.0	-55 33 05	M	10.7-(14.5	52930	156
AQ	18 49 17.2	-51 36 05	RRC	13.2-13.7	52122.637	0.32078
AS	18 49 31.3	-49 15 16	M	11.3-(14.6	52032	183
AT	18 50 02.6	-51 38 05	CWB	13.7-14.6	53067.89	1.97:
AU	18 50 03.7	-49 56 01	SRA	11.4-13.1	52787	159
AV	18 50 24.0	-50 51 35	EW	13.2-14.3	52415.861	0.416963
AY	18 15 26.1	-54 29 53	M	11.3-(14.5	52839	221
BC	18 24 05.0	-50 27 08	M	10.9-(13.9	52756	176
BE	18 27 19.9	-50 05 49	M	11.5-(14.3	52089	173
BG	18 27 57.4	-53 35 07	M	11.2-(14.1	52171	245
BH	18 49 31.7	-49 54 30	M	10.0-(14.3	52912	217
BK	18 47 40.5	-46 08 17	SRA	10.4-13.0	52509	153
BM	19 07 40.9	-50 02 42	M	11.4-(14.5	53088	391
BN	19 09 49.9	-48 09 23	M	10.3-14.1	52878	282
BR	20 23 59.9	-52 52 12	SRD	9.6-10.9		107:
CP	18 16 57.4	-54 54 58	RRAB	13.4-14.1	52535.518	0.47651
CT	18 17 36.2	-53 18 25	SRB	12.6-13.7		91:
CY	18 19 38.2	-51 29 52	RRAB	13.0-13.9	52725.785	0.43280
EE	18 28 58.5	-56 13 57	RRAB	13.1-14.4	52831.746	0.46794
EV	18 33 55.3	-51 21 11	RRAB	12.3-13.8	52838.805	0.44194
FG	18 36 03.5	-50 20 27	M	12.2-(15.3	52191	177
FL	18 36 53.7	-49 24 38	EB	14.0-14.8	52875.697	0.51178
FP	18 40 38.4	-52 45 24	RRAB	13.1-14.1	52865.751	0.40081
FR	18 41 49.6	-51 51 26	SRA	12.0-13.8	52500	174
FT	18 42 41.5	-52 50 52	RRAB	13.1-13.8	52415.840	0.64809
FU	18 43 23.7	-54 58 50	RRAB	12.5-13.8	52104.647	0.35969
GK	18 48 21.6	-49 35 04	RRAB	13.5-14.0	52428.715	0.81346
GR	18 52 22.3	-53 09 50	RRAB	12.4-13.4	52888.623	0.61196
GS	18 31 33.9	-47 52 42	M	12.1-(15.2	51985	329
GT	18 34 57.9	-52 35 10	RRAB	12.9-14.3	52081.660	0.40751
GU	18 35 29.3	-49 46 30	M:	12.5-(13.8	52178	166:
GV	19 02 20.1	-47 31 44	M	11.4-(15.4	52690	261
GW	19 30 12.8	-45 17 33	M	11.3-(14.6	52193	146
HI	18 55 22.6	-52 45 04	RVA	10.6-11.9	52955.5	66.5
HK	19 06 50.1	-52 29 43	SRA	10.8-12.6	52890	96
HL	19 31 05.6	-50 23 47	M	10.9-(14.3	52718	209
HM	19 34 10.5	-49 10 46	EA	12.0-13.8	52192.545	6.2318
HQ	19 55 12.2	-56 28 33	M	12.8-(14.7	52708	286
HT	20 00 17.2	-45 18 53	RRAB	12.9-14.1	52867.778	0.61658
LU	18 21 08.3	-46 32 57	EA	12.4-13.5	52086.66	1.57173
MS	18 31 11.1	-48 51 20	RRAB	13.4-13.9	52739.85	0.70897

Table 1. (Continuation)

Star	RA (J2000)	Dec	Type	Mag	Epoch, JD 24...	P, days
MZ	20 07 45.7	-53 25 56	RRC	13.9-14.4	52902.501	0.35952
NR	18 31 12.9	-49 04 58	M	10.7-14.8	52839	196
NT	19 22 52.1	-50 23 23	M	10.3-(14.4)	52152	261
NU	18 12 58.9	-55 08 15	SRA	12.3-13.5	52841	61
NW	18 19 43.9	-51 15 53	RVA	11.0-12.1	52184.5	68.9
NY	19 06 02.2	-47 14 35	SRB	10.4-11.4		75:
NZ	19 23 01.6	-48 35 52	M	10.7-14.7	52931	195
OP	18 23 13.2	-47 06 04	M	12.0-(14.3)	52487	162
OU	18 45 15.5	-49 13 59	SRA	10.8-11.7	52935	75
OV	18 45 50.2	-47 55 55	RRAB	12.9-14.4	52759.878	0.62789
OW	18 54 24.9	-46 08 36	M	10.6-14.3	52878	225
OX	19 14 55.9	-47 35 05	M	11.5-(14.4)	53075	290
OY	19 39 28.7	-52 51 24	SRA	9.5-10.7	52195	123
PP	20 16 56.5	-51 15 11	CWB	12.8-14.2	52861.66	1.09068
PQ	19 10 25.4	-51 15 18	M	10.7-(14.5)	52741	240
PY	18 22 36.3	-48 45 32	SRA	10.6-12.4	52814	266
QT	19 55 54.7	-51 23 30	SRB	12.6-14.4		140:

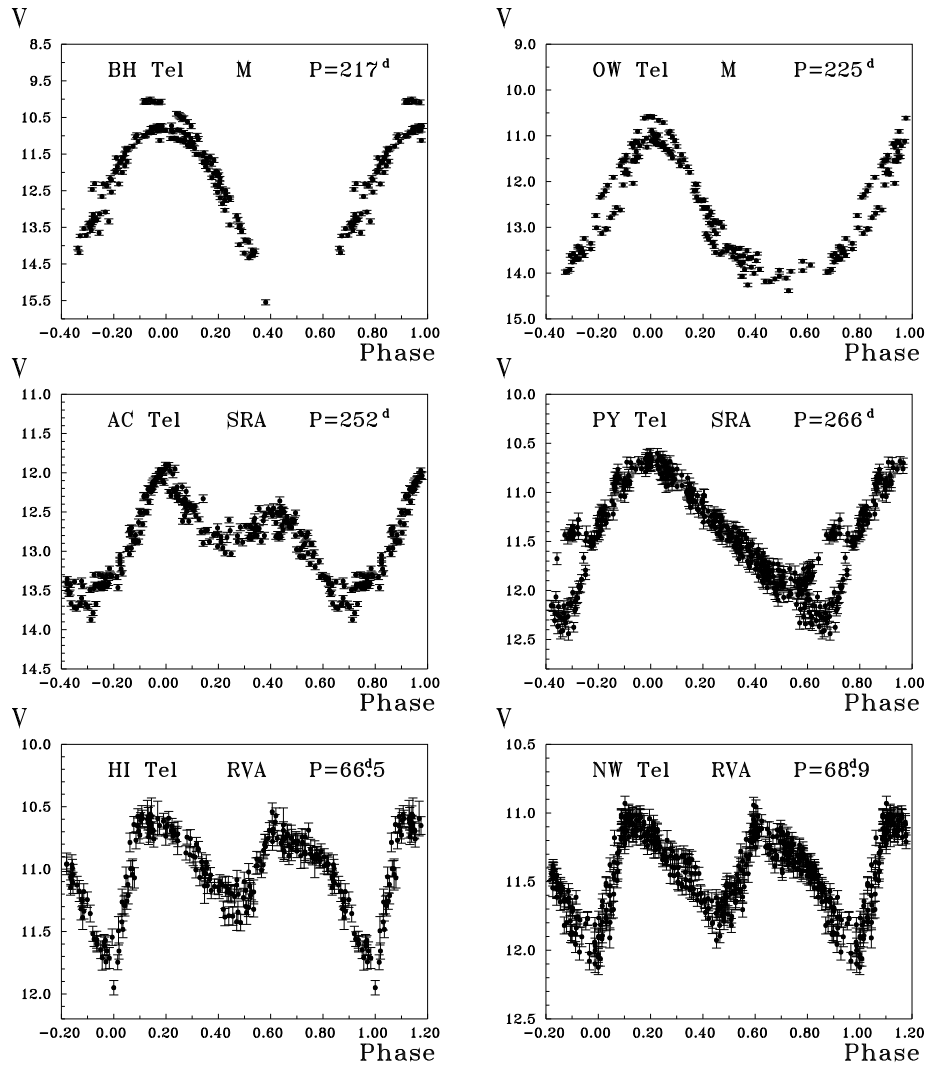


Figure 1. The sample light curves for 6 variables in Telescopium.

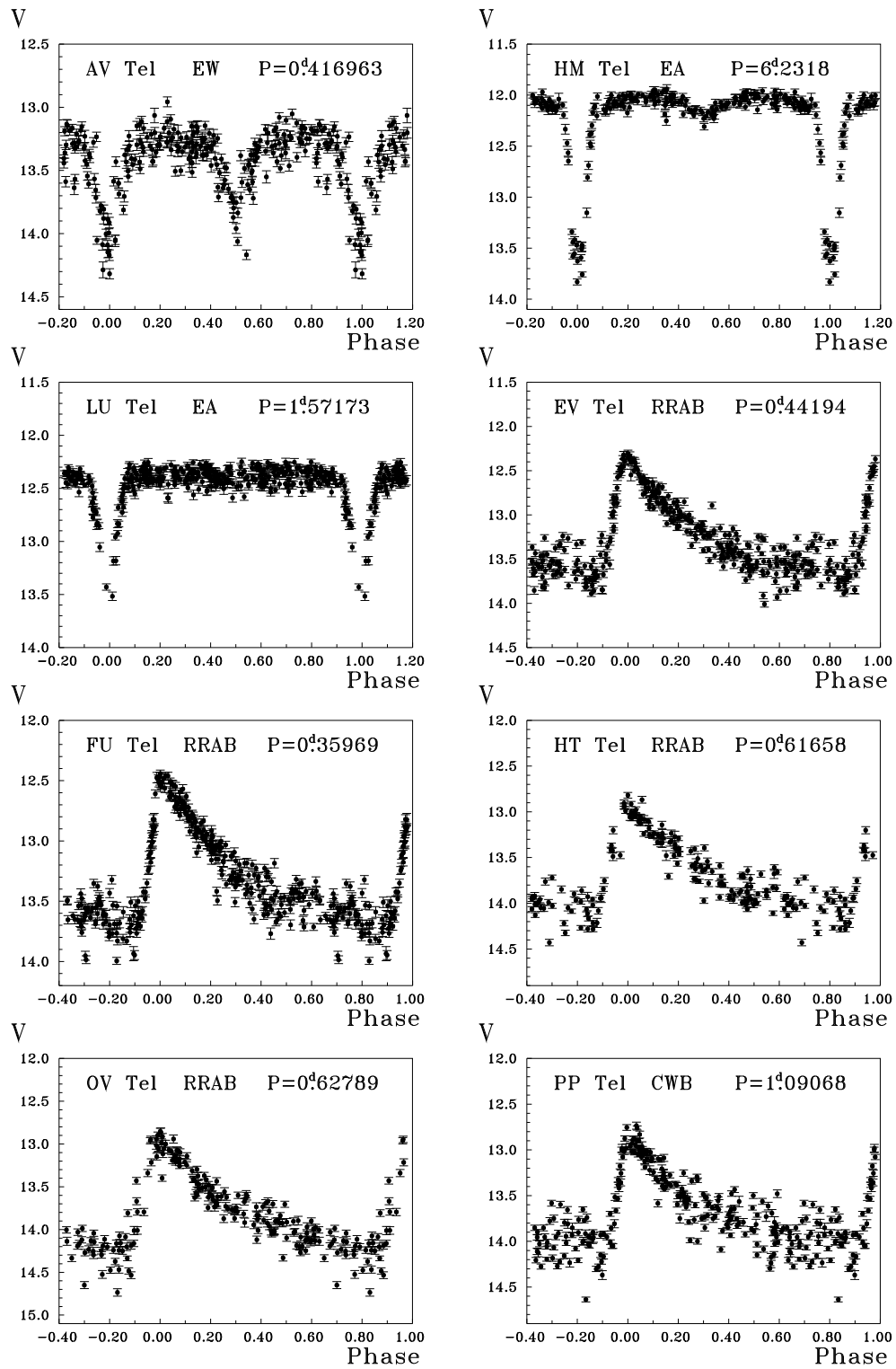


Figure 2. The sample light curves for 8 variables in Telescopium.