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The All Sky Automated Survey. Variable Stars in the 0^h - 6^h Quarter of the Southern Hemisphere. *

by

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ABSTRACT

This paper describes the first part of the photometric data from the $9^\circ \times 9^\circ$ ASAS cameras monitoring the whole southern hemisphere in V-band. Data acquisition and reduction pipeline is described and preliminary list of variable stars is presented. Over 1,300,000 stars brighter than V=15 on 40,000 frames were analyzed and 3126 were found to be variable (1046 eclipsing, 778 regular pulsating, 132 Mira and 1170 other, mostly SR, IR and LPV stars). Periodic light curves have been classified using the fully automated algorithm, which is described in detail. Basic photometric properties are presented in the tables and thumbnail light curves are printed for reference. All photometric data is available over the INTERNET at http://www.astrouw.edu.pl/∼gp/asas/asas.html or http://archive.princeton.edu/∼asas.

Key words: *Catalogs -Stars:variables:general-Surveys*

1 Introduction

The All Sky Automated Survey (Pojmański 1997, 1998, 2000) has finally achieved its important goal - photometric monitoring of the large part of the sky (Paczyński 1997). After installing two wide-field ($9^\circ \times 9^\circ$) cameras in October 2000 (Pojmański 2001) ASAS gained capability to measure brightness of the observable stars on the nightly basis.

The prototype ASAS system using small commercial CCD camera, 135 mm f/1.8 telephoto lens and I-band (Schott RG-9, 3mm) filter was used in the years 1997-2000 to monitor 0.7% of the sky to the limiting magnitude of $I \sim 13$. During 3 years of operation it has collected over 50×10^6 measurements of over 150.000 stars and detected almost 4000 variable stars.

The instrument, data acquisition and reduction pipeline, the ASAS Catalog and summary of the variability search were described by Pojmański (1997, 1998, 2000),

In summer 2000 we have installed upgraded ASAS-3 system in the dome of the 10" astrograph in the Las Campanas Observatory (operated by the Carnegie Institution of Washington). New hardware consisted of the three independent instruments each equipped with the automated paralactic mount, imaging optics with standard filter, 2K × 2K (14 um pixels) CCD camera and dedicated computer.

Two wide-field systems are equipped with the Minolta 200/2.8 APO-G telephoto lenses giving superb sharpness (FWHM < 2 pixels) but also strong vignetting (40-50 % in the corners). Field of view is $8.8^\circ \times 8.8^\circ$. The two systems are equipped with standard I and V filters.

*Based on observations obtained at the Las Campanas Observatory of the Carnegie Institution of Washington.

Narrow field instrument is $D = 250$ mm, $F = 750$ mm Cassegrain system with three element, Wyne-type field corrector. It gives sharp images (FWHM < 2.2 pixels) in the field of 2° diameter. With 2048×2048 CCD field of view is $2.2^\circ \times 2.2^\circ$. This system has I filter in its optical path.

Three AP-10 (Apogee) commercial cameras were purchased for the project. High readout noise ($> 10e^-$) and 14 bit ADC were accepted as a trade-off for 5 sec readout time. Unfortunately two of three systems did not meet factory specifications (increased noise resulting in substantially reduced sensitivity, failed thermo-cooler) and had to be sent for repair after first months of operation. ASAS-3 was left with only wide-field V-band camera running.

2 Observations

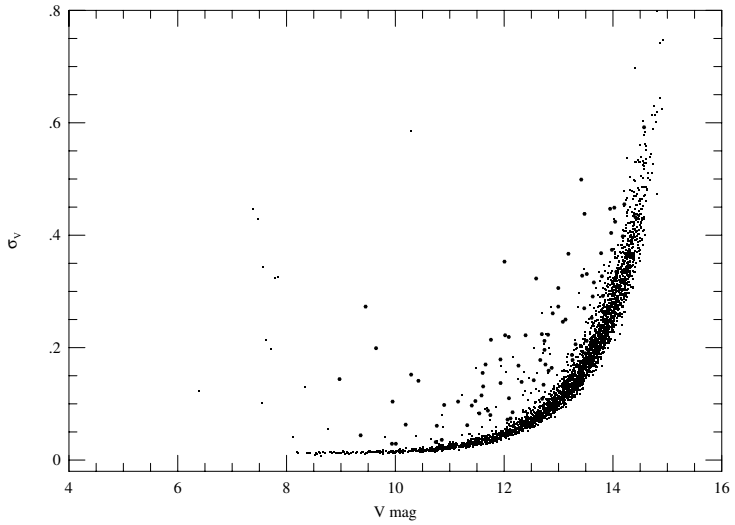

Fig. 1. Standard deviation σ_V *vs.* V-band magnitudes measured with the wide-field V camera and 3-minute exposures for the field centered on SMC. Larger dots denote detected variables. Small dots lying above 95 centile represent mostly "long-term" variables not recognized in this work.

Although mechanical quality of the mount allows for unguided exposures as long as 5-10 minutes for wide-field systems, only 3 minute exposures are taken in V-band giving the limiting magnitude of almost 15.0 and causing saturation of the stars brighter than $V = 8.5$.

The whole sky was divided into 709 $8^\circ \times 8^\circ$ fields of which 422 (60%) with $\delta < +20^\circ$ can be observed from Las Campanas (up to 300 on a single summer night). Due to the obscuration by the dome only fields with $\delta < +2^\circ$ were observed by the V instrument.

The routine observing schedule for each wide-field camera consists of cycling through the list of fields and picking up the one that is the most suitable for observation at the moment. Selection algorithm was not uniform enough, so equatorial fields were observed two times less often than the circumpolar ones.

Although the sky-flats are not best suited for the wide-field instruments we are using them both as the first order correction for vignetting and pixel-to-pixel sensitivity variation. Each night a series of sky-flat exposures is taken after the sunset, followed by the dark exposures.

Between 160 and 200 frames per night in V-band are taken each night (depending on the season), enabling camera to cover the whole available sky in less than two days. The raw data stream of one ASAS-3 instrument is about 1.5 GB per night. The loss-less

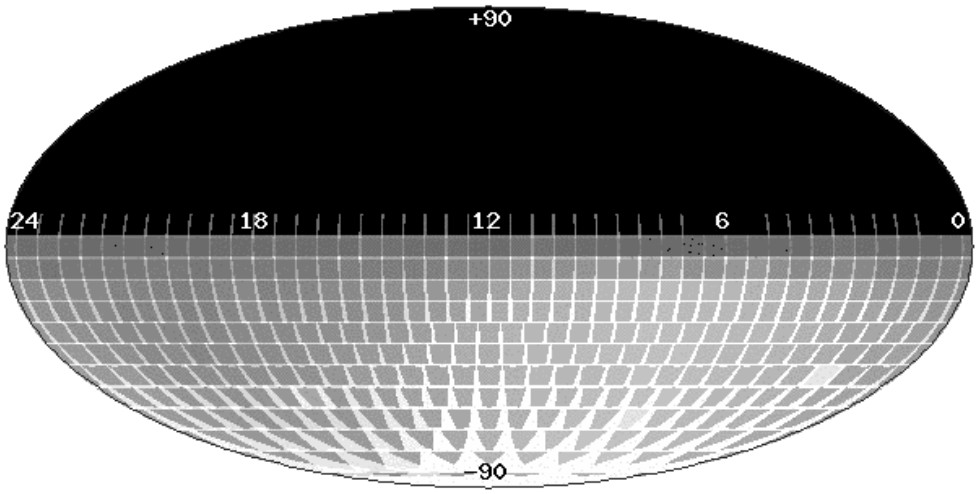

Fig. 2. Coverage of the sky with V-band observations after one year of ASAS-3 operation. White color corresponds to the area observed at least 250 times, dark gray - at least 30. Only fields centered within $0^{\rm h} < \alpha < 6^{\rm h}$ are analyzed in this paper.

compression reduces this stream to 0.7 GB per night (2-3 DAT-3 tapes per month), so we are considering some lossy compression in future.

3 Data Reduction

The data reduction pipe-line used for ASAS 1-2 observations was described by Pojmański (1998). ASAS-3 incorporates only some minor changes to that schematics.

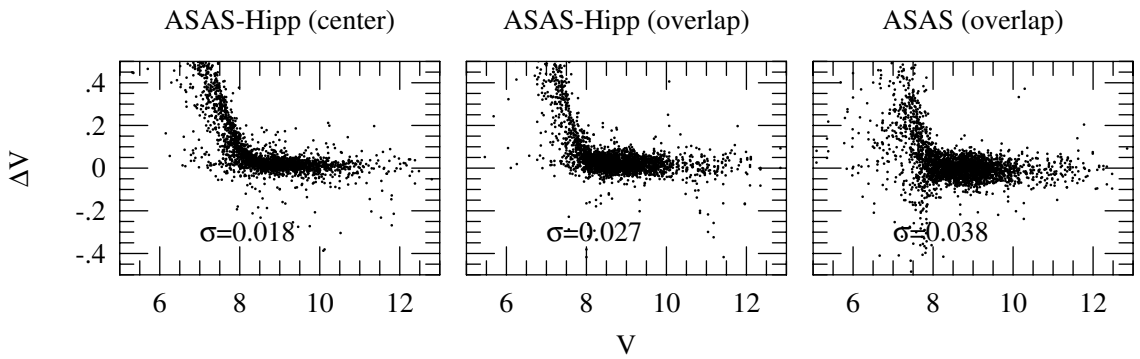

Fig. 3. Difference between Hipparcos and ASAS-3 magnitudes for all available stars.

Current optics gives sharp images and produces less scattered light than the previous one. In fact images can be so sharp (FWHM $\sim$ 1.4-1.6 pixels) that only aperture photometry can properly deal with them. Therefore we are now making simultaneous photometry through five apertures varying in size from 2 to 6 pixels in diameter. Each aperture data is process separately, so one can use data obtained with the smallest one for the faint objects and with the largest one for the brightest objects in the catalog.

Reducing ASAS-2 data we partly managed to correct photometry for saturation and bleeding and have included overexposed stars in the ASAS Catalog. Unfortunately current CCD cameras do not allow for such correction and current photometry of the saturated images is practically useless.

Less scattered light in the optics (partly due to the smaller opening: f/2.8 *vs.* f/1.8) have substantially improved the quality of the sky-flats allowing us to obtain good first-order correction of the vignetting.

The astrometry is now based on the ACT catalog. Using 3-d order polynomials in X and Y we usually obtain positional accuracy better than 0.2 pixels (< 3 arcsec).

The zero-point offset of our photometry is based on the Hipparcos (Perryman *et al.* 1997) data. A few hundred Hipparcos stars are usually located in each 9x9 deg field, We use them for precise offset calibration. The rms scatter between ASAS and Hipparcos calculated for all stars lying close to the frame center is about 0.015 mag (Fig. 3a) Close to the edges it is significantly larger (Fig. 3b) due to systematic effects caused by non-perfect flat-fielding. Erros are most prominent (Fig. 3c) when we compare brightness of the stars located in the overlapping areas of the neighboring fields (Fig. 3c).

The final catalog is divided in two parts now. The first, flexible one is relatively slow, but is capable to store information about all sources detected on the frame. This catalog is regularly analyzed and significant measurements are moved into the second, fast-access part of the catalog. The remaining data (usually single entries caused by the image flaws) are archived separately.

All data processing is normally done in real time on the instrument's computer, but due to the necessity of fine-tuning of many elements of the pipe-line we are reprocessing the data from the tapes at the Warsaw head-quarters.

4 Variability Search

Data analyzed in this paper cover the period of one year (2001) of unattended operation. During that time all southern sky has been covered with observations at least 50-150 times. Over 50.000 frames have been collected in V-band. More than 10.000 for $0^h - 6^h$ quarter of the Southern Hemisphere alone. 1.3 million stars have been measured in this area more than 40 times. These stars were subject to variability analysis similar to that performed for the ASAS-2 data (Pojmański 2000).

First, light curves for each star in the field were extracted and median magnitude and dispersion were calculated (in each aperture separately). These were plotted on the magnitude-dispersion diagram (Fig. 1) and stars lying above the 95% centile were selected for the further analysis.

For each suspected star AOV period analysis (Schwarzenberg-Czerny 1989) was performed. Stars with statistics value larger than 10. were accepted. The other stars were subject to long-term variability tests: variance analysis in variable-length bins and trend analysis (average number of consecutive observations showing the same direction of brightness change). Proper thresholds for these observables were selected after tests. Finally all stars showing dispersion above 99.9% centile were added to the set.

As many as 18.000 stars have passed selection criteria and had to be further inspected. About 3.200 have passed visual inspection. The large number of rejected stars was due to several reasons: First - small number of observations, which usually forces AOV algorithm to produce spurious (or at least hard to verify) frequencies. Second - trends (slopes) in brightness changes of some stars which were partly produced by the increasing defocus of the optics in the course of the last two months. We decided not to include any light variation of this kind, although we are convinced some of these are real. Third - saturation, which has disappeared for some stars after they've got defocused.

The relative number of the variable stars detected so far (0.2% of the total) is 10 times lower than that obtained by ASAS 1-2 in the selected fields. This has been caused by several factors.

First, we have investigated only stars above 95% centile in the magnitude-dispersion diagram. while previously we have inspected almost 75% of the stars, discovering many low-amplitude variables. This will be done also for current data, but not earlier than more efficient algorithms for data selection are worked out.

Second, data span is one year now *vs.* almost three years previously. Since we have also omitted most of the slowly varying objects much lower number of long-term variables has been discoverd. Previously we have discoverd about 400 periodic stars (0.26%) and 3400 long-term ones (2.2%), while now about 2200 (0.16%) periodic and 1000 (0.08%) long-term.

Third, number of data points for each star is on average several times smaller than in ASAS-2 database.

Fourth, data sampling was different - a few times per night previously *vs.* once per night now. This resulted in significant aliasing. We will solve this problem in future observing each field for some time in the "high frequency" mode - at least several times per night. As for now we can only present our best choice and try to improve lists available on the INTERNET as soon as new data are available.

506 variable stars observed by ASAS-2 are located in the currently analyzed region. 466 of them were observed by the ASAS-3 system. Most of the others were faint in I band, so probably were to faint for the V instrument. One was bright (053820-6937.4 $I \sim 9.69$), but since it is irregular variable it might have faded below our V detection limit. Only about 100 of 466 stars were detected to be variable in V-band by the present analysis.

62 other objects were selected by the detection algorithm but were rejected after visual inspection. Only 3 of these were of "periodic" type and in all cases primary rejection reason was small number of points and low power in spectrum. For example ASAS 053936-7958.6 with an amplitude of 0.1 and only 40 data points was not found to be variable by the present analysis, while ASAS-2 has easily detected its variability with almost 4000 measurements.

Most of the other light curves that did not pass visual inspection were of the "long-term" type and were rejected because their slow varaition or sparse data were not convincing enough.

The other 300 (65%) stars were not even preselected by the selection algorithm, again due to small number of data points or minuit brightness changes. In most cases however, plotting their light-curves folded with the known period clearly reveals periodic variation.

5 Variability Classification

Only 2.000 of the 18.000 stars in the initial set of the candidate variable stars were selected by a quite robust long-term selection algorithm. Almost 1.500 of them have passed visual inspection.

The other 16.000 stars were selected by the AOV algorithm, thus their folded light curves had to be inspected visually one by one. Unfortunately, the relative number of true variables dramatically decreases as the AOV statistics comes closer to threshold, making verification process highly non-efficient.

Survey catalogs do not necessary need to provide object classification, but their usefulness increases if they do. However, since volume of the data is growing rapidly, such step requires some automation providing necessary speed, repeatability and consistency.

Several attempts have been made so far to create classification machines based on neural networks and machine learning (e.g. Eyer and Blake 2002, Wozniak et al. 2002b)

or on direct parametric analysis (e.g. Udalski *et al.* 1999a, for cepheids, Ruciński 1993, 1997, Szymański, Kubiak, Udalski 2001 for contact binaries).

Here we propose simplified approach that mimics nonlinear neural network behavior. Its parameters ("weights") can be easily defined in terms of the light curve parameters. "Teaching" in this case is done by defining the multidimensional solids describing selected classes. Classification could then be done by selecting the closest solid in the multidimensional parametric space. To simplify our task we use carefully selected two-dimensional cross-section of that space.

Ruciński (1993, 1997) has shown that light curves of the contact configurations of W UMa systems can be easily described using only two coefficients, a_2 and a_4, of the cosine series $\sum a_i \cos(2\pi i\theta)$. We have extended this approach tested behavior of the semi-detached and detached configurations in the a_2-a_4 plane.

Several thousands theoretical light curves were calculated using the Wilson-Devinney (1971) code for a wide range of binary parameters: masses M_1, M_2 temperatures T_1, T_2 and radii R_1, R_2 characteristic for the main sequence O...M stars, periods P varying from the contact configuration to 100 days and inclinations i in the range of $60° - 90°$. For each combination of M_1, M_2 and P we have varied R_1 and R_2 between the main sequence and the Roche lobe sizes.

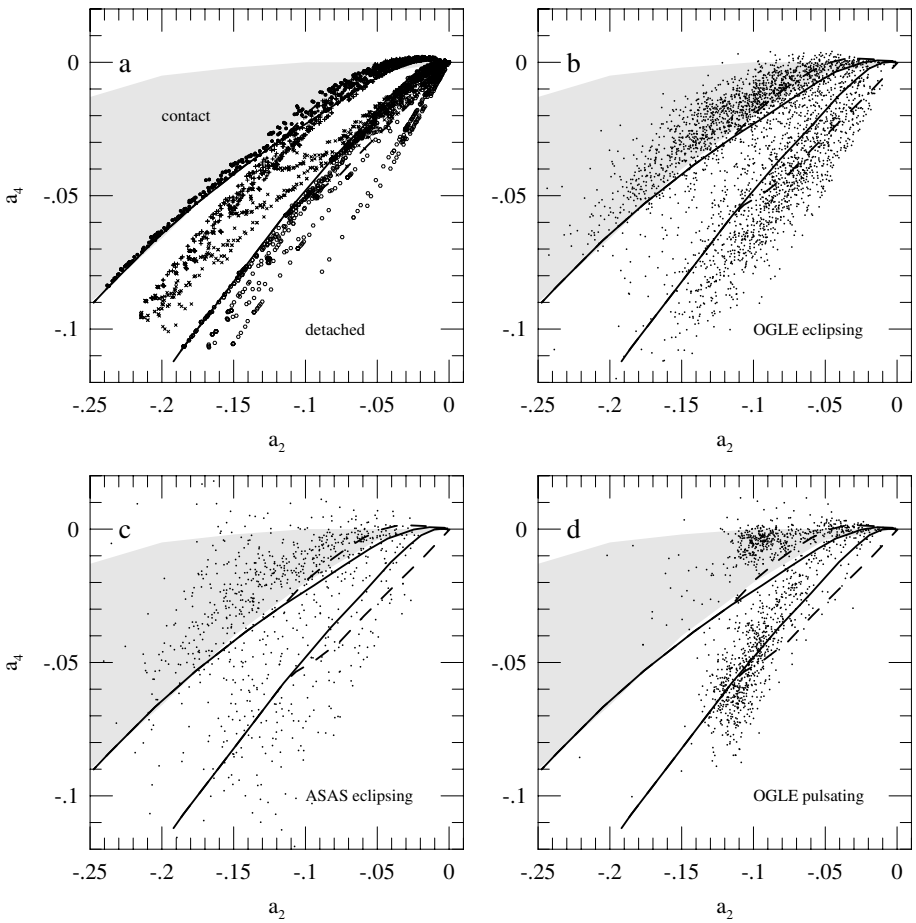

Fig. 4. Distribution of light curves in the a_2 - a_4 plane. a) Data obtained from the Wilson-Devinney simulation are plotted. Grey area encloses contact models calculated by Ruciński (1993). Two continuous lines delineate contact and detached configurations, while semi-detached systems are located between dashed lines. b) Eclipsing variables from the OGLE Bulge database (Wozniak 2002a). c) ASAS eclipsing binaries (this paper). d) OGLE Bulge pulsating variables.

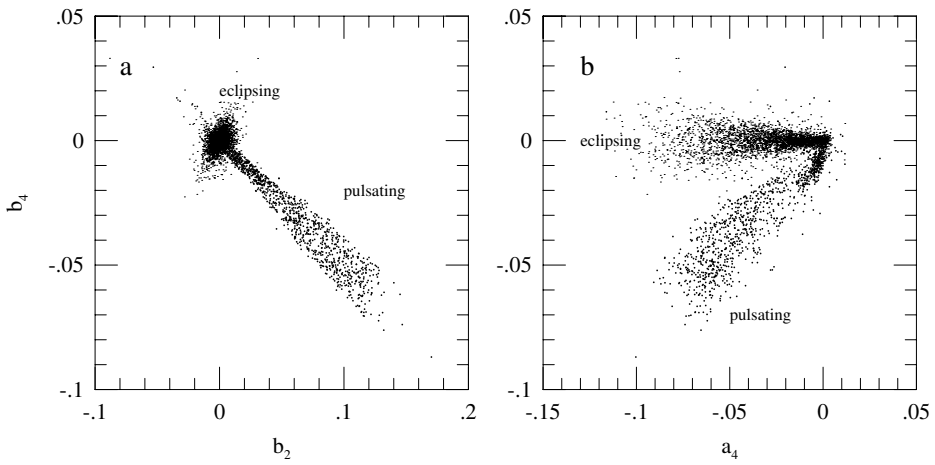

Fig. 5. Separation of eclipsing and pulsating variables in a) b_2 - b_4 and b) a_4 - b_4 planes. Data plotted are for the OGLE Bulge variables.

Harmonic series of the form:

$$\sum_{i=1}^{4}(a_i \cos(2\pi i\varphi) + b_i \sin(2\pi i\varphi)) \qquad (1)$$

was then fitted to all light curves.

Fig. 4a shows coefficients a_2 and a_4. Filled and open dots represent contact and detached configurations respectively, while pluses and crosses denote semi-detached configurations with primary and secondary filling its Roche lobe, respectively. Grey area covers contact configurations calculated by Ruciński (1993, Fig. 6).

Fig. 4a clearly indicates that in most cases contact, semi-detached and detached configurations can be unambiguously distinguished in the a_2-a_4 plane. However, looking at individual light curves one can note some confusion introduced by widely used EW, EB, EA classification of the light curves: contact or almost contact configurations do not necessary have minima of the same depth; there are frequent semi-detached configurations with equal minima; detached binaries do not necessary have flat maxima. Thus, although often used in such context, EW, EB and EA classes do not correspond entirely to the contact/detached discrimination. Since we feel that the later is physically more interesting, we would prefer to recognize "c", "sd", and "d" configurations. Thus we will classify as EC contact configurations lying above the upper line in Fig. 4a, as ED detached binaries located below the lower line, and as ESD remaining semi-detached systems located between the dashed lines.

In case of real data some additional steps have to be taken before applying Fourier decomposition. First the "base" frequency, f_0, that equals to the frequency of the eclipsing system and is half of the pulsation frequency for the pulsating stars has to be located in the power spectrum. AOV spectrum puts most of the power either into $2f_0$, f_0 or even $2/3f_0$, depending on the light curve shape and distribution of observations - complicating automation of the process.

Fortunately a slightly slower ORTPER code (AOV Multiharmonic Periodogram for Uneven Sampling, Schwarzenberg-Czerny, 1996) usually properly selects $2f_0$ for the pulsating stars and f_0 or $2f_0$ for eclipsing light curves. The final test on f_0 is done performing Fourier decomposition using f_0. In properly phased light curve we expect the a_2 term to be dominant, so if we obtain $a_4/a_2 > 1.$ we have to halve the initial value of f_0.

The second step necessary for direct comparison of the Fourier coefficients is consistent determination of the zero phase. We do that by locating minimum on the reconstructed light curve.

In the present work we use only the first 4 harmonics. This reduces our ability to recognize tiny features on the light curves in return for smaller coefficient scatter.

Large data set of uniform light curves is necessary to efficiently divide parametric volume into class solids. We have used 3 major sources of data: our own (ASAS) light curves that were provisionally classified into $DSCT$, $RRAB$, RRC, $DCEP$, EW, EB and EA classes; OGLE SMC and LMC cepheids (Udalski *et al.* 1999a, 1999b) carefully divided into $DCEP_{FU}$ and $DCEP_{FO}$ (fundamental and first overtone) classes; and subset of the OGLE Bulge variables (Wozniak 2002a), that were provisionally divided into pulsating and eclipsing groups.

In Fig. 4b the OGLE Bulge eclipsing variables (Wozniak 2002a) are plotted, while in Fig. 4c ASAS data from this paper. It is interesting that in case of OGLE data significant deficiency of the semi-detached systems could be spotted.

In Fig. 4d the OGLE Bulge pulsating stars are plotted to show that a_2-a_4 plane cannot be used for separating pulsating and eclipsing systems. Instead b_2-b_4 or a_4-b_4 coefficient pairs (Fig. 5ab) provide necessary segregation.

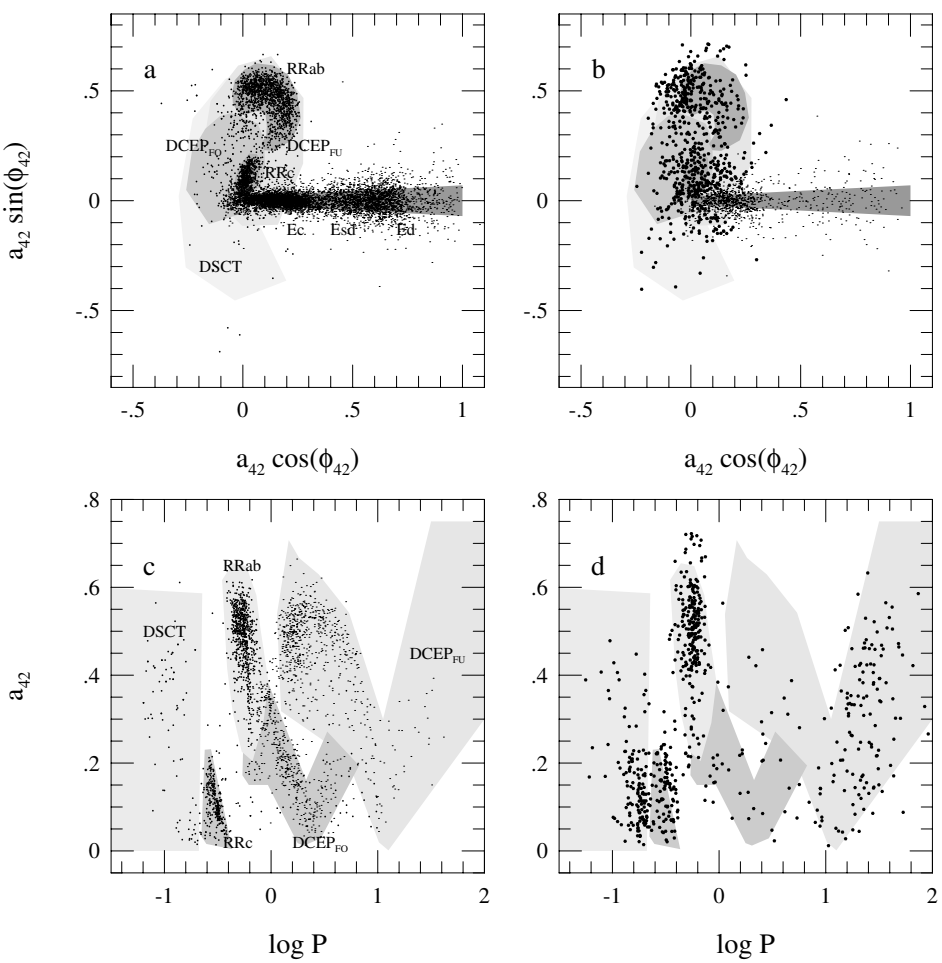

Fig. 6. Distribution of light curve parameters in the a_{42} - φ_{42} and $logP$ - a_{42} planes for OGLE (a,c) and ASAS (b,d) variables. Tiny dots in the upper panel are eclipsing binaries, while larger ones - pulsating.

Finally we need to recognize different types of pulsating stars. We have done this using $a_{42} = \frac{a_4}{a_2}$ *vs.* $\varphi_{42} = \varphi_4 - \varphi_2$ (radial coordinates, Fig. 6a,b) and $\log P$ *vs.* a_{42} (Fig.

6c,d) diagrams, on which categorized ASAS data and OGLE Bulge pulsating stars were plotted. The later one is an equivalent of the well known R_{21} *vs.* $\log P$ diagram used for cepheid classification. Although ASAS data were scattered, they provided necessary clues to define sharp polygons enclosing different classes of OGLE Bulge variables in both planes.

Besides the period P three other non-Fourier parameters describing light curves were needed to reduce the number of wrong classifications: two describing difference in minima and maxima levels and the third describing vertical asymmetry of the light curve (fraction of the measurements brighter than the average). They were necessary, because the fourth order harmonics could not properly recognize narrow, unequal minima or sharp maxima.

Process of automated classification is now straightforward: each class is described by a set of polygons in several cross-sections (planes) of the parametric space. In each plane score function is calculated: it equals 1.0 inside the polygon and decreases exponentially outside the polygon. The rate of decrease depends on the accuracy with which we determine the observable, so even large distances from the polygons could be accepted for noisy data. All scores are multiplied and the class with the highest result is selected as a winner. If other classes have similar scores (at least 75% of the maximum) multiple classification is accepted. If the highest score is below 0.50 uncertainty flag (:) is added, while for very low scores (less then 0.2) general class of $PULSE$ is applied. So far we have defined three eclipsing classes: EC, ESD, ED and six pulsating: $DSCT$, $RRAB$, RRC, $DCEP_{FU}$, $DCEP_{FO}$, M.

Such algorithm has many advantages. It is fast, easy to verify and very flexible. Adding new observables (like location in color-magnitude or period-luminosity diagrams, spectral type etc.) is instant and needs only defining a new polygon in the parametric space. The obvious disadvantage is that only predefined classes could be selected.

In this paper, using only one color photometric data, we are in fact classifying data according to the the light curve shape and period only. Therefore caution must be taken not to over-interpret results: Many RRC objects might be in fact EC or $DSCT$. The algorithm will usually recognize and mark such situations. $DCEP$ classes are based on SMC/LMC data and will not entirely correspond to Galactic objects. $DCEP_{FU}$ are usually easily recognized by their $RRAB$-like shapes, but around $\log P = 1.$ many sinusoidal cases are encountered and probability of wrong classification increases. M (Mira) class was defined for objects with $\Delta V > 2.$ and $P > 70^{\rm d}$, so some SR, IR and even CV objects might have been also classified as M.

We have discovered many "M" shaped variables, both in ASAS and OGLE data, with periods of tens of days. The algorithm tends to classify them as EC or ESD, implying they are contact or semi-detached giant stars. In fact in case of OGLE variables most of them are located close to the Red Clump (Udalski, 2002), so there is no inconsistency. That is why we did not restrict EC class to the short periods only.

Another problem with automated classification is caused by semiregular and irregular variables, which often show strong signal in the power spectrum. Unless detected by other means these stars have a good chance to be falsely classified. We have tried to define SR and IR classes in terms of long-term variations in the light curve, but results are not satisfactory yet. For the present analysis we decided to relay on the initial visual inspection of light curves, during which we have selected about 1100 irregular ones that were marked as $MISC$ and were not subject to automated classification. These are mostly semiregular (SR), irregular (IR), slow irregular (L), LBV and other less regularly changing stars with time scales of variation between 10 and 200 days.

6 The catalog

Current list of candidate variable stars in the first quarter of the Southern Hemisphere contains 3126 stars.

For each star the following data are provided: ASAS identification ID (coded from the star's α_{2000} and δ_{2000} in the form: $hhmmss-ddmm.m$), period P in days (or characteristic time scale of variation for irregular objects), T_0 - epoch of minimum brightness (for eclipsingi stars) or maximum brightness (for pulsating stars), V_{max} - brightness at maximum , ΔV - amplitude of variation, $Type$ - one of the predefined classes: EC, ESD, ED, $DSCT$, RRC, $RRAB$, $DCEP_{FU}$, $DCEP_{FO}$, M, $PULS$ and $MISC$.

67 stars marked with ":" were inspected visually, and in about 20 cases original classification was changed (in most cases for highly distorted ED curves, that were classified as pulsating ones). 680 objects have multiple classification. For 330 cases this is exclusively due to EC/ESD or ED/ESD confusion, but for 180 other this is a more serious EC/RRC or $EC/DSCT$ double classification. Quite often visual inspection may help to remove such degeneracy.

ELL and SR suffixes were added in several (54 and 45) cases for almost purely sinusoidal light curves and for evident long term changes respectively.

Search for detected variables in the SIMBAD database revealed only 800 matches with stars known to be variable (almost 200 of them are in the the SMC and LMC fields), so over 75% of stars are probably new detections.

Table 1 contains a compact version of the catalog. Only four columns are listed for each star: identification ID, period P, V, and ΔV. Column ID also contains some flags - ":" if classification was uncertain, "?" if multiple classes were assigned, "v" if SIMBAD lists a star to be variable. Table 2 summarizes classification results.

Figs. 7 through 39 in the Appendix show thumbnail pictures of all light curves. Only ID is given for each. For periodic variables phase in the range (-0.1 - 2.1) is plotted along the x-axis, while for Mira's and miscellaneous stars - HJD in the range (2451800-2452300). On the y-axis magnitudes are given. Larger ticks always mark 1 magnitude intervals and vertical span is never smaller than 1 mag.

The full catalog of variable stars observed by the ASAS system containing more classification details and complete photometric data is available over the INTERNET:

http://www.astrouw.edu.pl/~gp/asas/asas.html

or http://archive.pinceton.edu/~asas .

Table 1

ASAS Catalog of Variable Stars. 0^h - 6^h Quarter of the Southern Hemisphere.

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as EC.											
000108-3330.1	0.46658	11.51	0.43	000202-6653.3	0.326576	12.16	0.60	000309-3456.3	0.265418	12.40	0.47
000336-1452.4	1.05465	10.93	0.32	000424-7437.9 ?	0.47113	12.42	0.22	000425-5346.4	0.288260	13.82	0.97
000504-3727.0 ?	0.40251	12.43	0.32	000514-0732.6 ?	0.38617	12.57	0.97	000622-7621.8 ?	0.35196	13.65	0.66
000650-3537.5	0.38318	12.19	0.35	000815-2414.7 ?	0.262427	13.25	0.51	000909-6650.8	0.329324	12.39	0.44
000932-6905.4	0.36725	11.68	0.31	001215-0718.6 ?	0.76778	11.77	0.36	001229-1052.5 ?	0.76042	11.43	0.39
001313-5258.7	0.299992	12.04	0.36	001356-3820.4 ?	0.87903	12.26	0.31	001447-3914.6 v	0.36436	11.81	0.84
001508-5335.4	0.239485	13.44	0.69	001547-3105.7 v	0.320823	11.72	0.68	001721-7155.0 v	0.59483	10.06	0.51
001750-5223.0	0.38384	13.36	0.55	001846-3940.6 v	0.41361	9.19	0.28	001913-5608.9	0.289702	13.17	0.64
001913-6302.2 ?	0.262686	13.43	1.03	002021-2519.3 ?	0.41273	11.32	0.24	002102-7547.6	0.239260	12.10	0.79
002112-6251.6 ?	0.42100	12.23	0.49	002123-3925.1	0.326428	12.89	0.76	002322-4226.8 ?	0.62833	11.14	0.20
002328-2041.8	0.41469	9.86	0.47	002329-6831.5 ?	0.67250	12.23	0.24	002345-2223.9 ?	0.286220	13.13	0.32
002449-2744.3	0.313670	12.90	0.73	002539-4229.1	0.44929	10.16	0.20	002806-1648.0	0.46808	12.71	0.53
002811-7026.8	1.01637	10.80	0.41	002821-1453.3	0.40266	11.54	0.44	002821-2904.1	0.269896	12.00	0.55
002857-0812.7 ?	0.267421	12.59	0.45	003009-3114.8 ?	0.343184	12.60	0.54	003225-2452.6 v	0.56628	10.02	0.28
003336-4349.3 v	0.42240	11.06	0.69	003406-5103.0	174	9.58	0.17	003514-4143.2 ?	0.74857	9.47	0.29
003628-2540.4 v	0.51155	10.31	0.68	003647-1958.0 ?	0.336706	13.83	0.73	004009-2002.9 ?	0.46068	12.70	0.31
004111-4344.9 ?	0.36523	13.38	0.45	004114-1800.2 ?	0.207484	13.72	0.70	004240-2956.7	0.301682	11.05	0.42
004312-5008.7 ?	0.304819	13.56	0.58	004618-3108.6	0.54671	11.53	0.50	004625-1602.9 ?	0.89908	12.73	0.41
004634-3331.0	0.299138	12.59	0.83	004647-6002.5	0.46625	12.84	0.49	004717-1941.6	0.48881	11.31	0.40
004801-4240.0	0.42970	12.40	0.62	004843-6143.7 ?v	1.05386	9.39	0.20	004857-3718.6	0.37503	11.35	0.48
005008-4130.5	0.335422	11.74	0.34	005016-6318.5 ?	0.273454	13.25	0.58	005521-4427.7	0.340220	12.56	0.43
005530-1106.6	0.54326	10.13	0.52	005543-0205.6 v	0.52242	10.43	0.56	005702-7925.7 ?	0.55230	12.13	0.32
005735-5246.0	0.291417	12.16	0.33	005830-3659.9	14.55	11.13	0.28	005848-3027.1	0.41897	13.42	0.82
005853-0642.9 ?	0.318030	11.76	0.28	005856-7941.3	0.292275	13.24	0.52	010007-0744.5	0.70443	11.60	0.41
010055-7511.9	0.55933	12.70	0.63	010303-4531.3	0.350845	13.15	0.61	010327-1210.4	0.58662	10.21	0.24
011027-1749.2	0.34232	13.23	0.70	011031-1804.1	0.44542	11.93	0.44	011054-1857.6	0.46669	12.07	0.41
011113-7910.6 v	0.284032	12.28	0.87	011116-1425.3	0.60605	10.99	0.18	011213-1956.6 ?	0.39336	11.26	0.27
011236-6429.5	0.37226	11.71	0.48	011243-8051.1	42.7	10.44	0.23	011315-6411.6 ?	9.550	10.33	0.19
011509-6155.2 ?	0.45601	12.69	0.31	011520-5539.2 ?	0.37359	12.65	0.38	011612-0659.6	0.324740	12.66	0.63
011638-3942.5 v	0.37992	10.32	0.52	011816-4853.2	0.40504	12.96	0.46	011833-4217.5	0.293548	11.49	0.20
011910-2746.2	0.39666	12.30	0.48	012040-5702.5 ?	0.39063	11.70	0.30	012133-2907.8 v	0.42290	10.44	0.45
012244-7328.6 ?	0.75718	12.52	0.23	012336-2515.9 ?	0.291046	12.00	0.27	012350-6558.5 ?	0.38472	12.83	0.50
012450-3241.4	0.308971	11.45	0.58	012513-1144.3	0.35288	13.29	0.80	012755-2301.7 v	0.58621	11.06	0.63
012841-5037.0 ?	0.93595	12.05	0.26	012917-7243.4	181	11.59	0.74	013000-3040.5	0.284678	12.90	0.53
013003-1257.4	0.309407	13.16	0.77	013107-4359.6 v	0.71987	12.79	0.79	013416-0724.7	0.73471	11.85	0.43
013549-7546.0 ?	0.95085	11.60	0.10	013624-6500.6	0.41796	11.99	0.42	013711-3459.3 v	0.46426	11.02	0.96
013733-0208.4	0.83909	11.76	0.74	014226-4557.0 v	0.234724	12.65	0.67	014255-2007.5	0.36595	11.11	0.37
014434-7401.7 ?	0.256202	13.64	0.68	014447-7500.1 ?	0.320917	12.30	0.23	014450-7536.8	0.39699	13.59	0.74
014605-4934.1 ?	0.351035	10.32	0.22	014613-4656.9 ?	10.889	9.32	0.09	014656-0945.1 ?v	0.48596	10.92	0.73
014725-1704.0	0.282927	11.86	0.35	014838-5718.6 ?	52.7	11.42	0.16	014854-2053.6 v	0.316849	10.40	0.74
014957-0811.8 ?	0.44858	12.25	0.62	015017-7733.4 ?	0.268746	13.25	0.57	015024-4658.4 v	0.306617	12.23	0.55
015053-2515.3	0.43173	12.46	0.53	015216-2026.9	0.290812	13.24	0.69	015311-2105.7 ?	1.4777	11.45	0.14
015438-0409.2	0.38764	11.54	0.45	015531-2633.1	0.47923	11.77	0.37	015536-2432.8	0.42424	12.17	0.35
015606-0044.3 v	0.74078	10.96	0.50	015705-5051.0	191	11.01	0.39	015749-2740.4	0.341711	13.07	0.56
015911-1743.7 ?	0.44780	13.65	0.64	015915-7059.5	0.292020	11.58	0.44	015931-1130.8 ?	0.47145	12.19	0.31
015937-0331.0	0.63152	9.35	0.33	020012-1812.5 v	0.79044	10.58	1.03	020119-3704.9 v	0.308128	9.86	0.46
020156-4218.7 ?	1.8660	10.96	0.13	020332-3005.1	0.36814	10.68	0.35	020340-2500.8 ?	0.74346	13.44	0.70
020800-2858.7 ?	0.42204	11.98	0.32	020933-5945.1	0.36842	12.13	0.26	021147-7139.0	0.39085	11.30	0.24
021229-6911.5	0.36128	10.93	0.31	021306-3247.0 ?	0.311751	11.14	0.14	021503-6549.1 ?	0.297448	13.16	0.55
021544-2024.2 ?	0.41046	13.76	0.74	021552-3643.2	0.346348	12.27	0.73	021625-4312.2 ?	0.41656	12.71	0.34
021649-4145.2	0.37148	10.25	0.33	021900-2305.5 ?	0.61105	12.75	0.31	021940-6138.2	0.50904	9.64	0.45
022014-0252.0	0.64346	10.61	0.40	022133-4216.2	0.251578	12.86	0.44	022153-1740.7 v	0.338960	11.59	0.69
022211-6343.9 ?	0.297511	12.20	0.61	022358-1247.7 ?	0.80069	10.51	0.19	022406-5125.2	0.39060	12.56	0.46
022508-4239.5	0.40408	11.41	0.52	022517-2354.2	0.36267	12.47	0.68	022556-4921.9	0.35990	12.01	0.80
022611-4313.7	0.260948	13.26	0.64	022810-0659.4	0.36984	11.50	0.33	022830-2848.2 ?	0.54228	12.98	0.28
022846-0229.3	0.58467	11.56	0.72	022902-3025.8	0.38652	10.04	0.27	022917-7745.3 ?	0.60214	11.49	0.23
022938-7149.0 ?	0.289622	12.51	0.41	023056-1644.7	1.6531	11.66	0.40	023130-1252.4	0.258565	13.75	0.78
023135-1620.6 ?	0.292432	13.62	0.63	023152-3837.4	0.58873	9.91	0.38	023215-5002.6 ?	0.327647	11.91	0.29
023304-3627.9 ?	0.74267	12.55	0.30	023309-1717.6	0.290404	13.09	0.63	023432-3515.2	0.35629	12.60	0.62
023525-1518.7	2.8709	14.12	1.08	023830-4648.0 ?	0.66836	9.64	0.36	023833-1417.9 v	0.44079	9.47	0.58
023848-1859.1 ?	9.959	12.15	0.26	023930-7456.6	0.42418	12.06	0.27	023949-2618.1	0.49485	10.65	0.34
024010-4555.0	0.88986	10.67	0.41	024055-6644.1 ?	0.50557	12.64	0.28	024144-2601.8 v	0.61790	13.13	0.63
024145-6734.4 ?	0.35583	12.00	0.30	024207-5940.0	0.42135	11.79	0.19	024429-7636.8 ?:	0.45929	11.36	0.57
024507-1807.9	0.36493	10.94	0.47	024508-2821.1	0.86285	13.35	0.60	024526-5941.9	0.42882	12.48	0.52
024536-2932.1 ?	0.325294	12.92	0.31	024557-2918.8 ?	0.38751	12.55	0.63	024612-4017.9	0.53651	12.44	0.34
024633-7010.1 ?	0.41533	13.02	0.36	024746-5105.1	0.77569	10.12	0.36	024750-7539.6 ?	0.61363	12.29	0.41
024811-1518.1	0.36658	12.76	0.71	024828-2732.7	0.75220	9.96	0.27	024840-3309.2	0.35205	12.82	0.77
024959-1634.7	0.38264	12.62	0.47	025016-4649.2 ?	0.271753	12.48	0.53	025018-3241.8	0.322037	12.16	0.79
025115-2525.4	0.55927	10.14	0.23	025211-6925.7	0.42122	10.70	0.45	025616-2336.5	0.35219	12.49	0.47
025618-2705.5 ?	1.2576	14.60	1.02	025619-7431.1 ?	0.336582	12.80	0.47	025643-5210.4	0.37723	12.88	0.59
025853-4308.9	0.40598	12.65	0.49	025931-3238.9 v	0.72604	10.32	0.63	025958-1627.4	0.84475	10.13	0.32
030005-1108.5	0.77337	12.21	0.29	030031-7707.7 ?	0.56410	13.36	0.42	030050-4412.2	0.81368	11.57	0.31
030218-0238.0 ?	0.92650	11.54	0.27	030235-5625.1	0.42804	12.71	0.55	030254-1554.1	1.01565	10.07	0.31
030313-2036.9 v	0.334978	12.56	0.57	030315-2311.2	0.45660	11.72	0.47	030459-4214.0 ?	0.44585	11.54	0.22
030521-0619.9 ?	0.41130	11.26	0.34	030615-6521.6 ?	0.81988	10.22	0.16	030617-6812.5	0.41612	9.51	0.46
030701-5608.1 v	0.62511	10.96	0.78	030703-2602.5	0.52669	10.03	0.28	030707-7935.2	0.36216	13.52	0.54
030735-5721.9 ?	0.37646	11.85	0.41	030827-1609.1	0.47637	12.99	0.52	030953-0653.6 v	0.44528	11.15	0.56
031133-3257.8	0.45131	13.46	0.47	031141-0043.8	0.79359	12.22	0.56	031235-1931.9 v	0.62856	12.47	0.44
031246-1704.0	0.38469	13.11	0.47	031252-0744.3	0.36011	12.11	0.72	031341-8045.4	0.292302	12.77	0.44
031506-1707.9 ?	0.94768	13.26	0.29	031509-5144.2 ?	21.46	9.75	0.13	031529-1146.2	0.42979	10.82	0.28
031619-6718.9 ?	0.43043	13.59	0.56	031649-1956.5 ?	12.97	10.00	0.19	031740-5318.6 ?	0.39285	12.48	0.31
031751-3615.5	0.39508	12.05	0.67	031808-8231.4 ?	78.8	11.12	0.23	031909-3507.0 ?	2.2613	11.22	0.14
031916-3842.1	0.49110	10.18	0.45	031928-1944.0	0.37306	13.10	0.59	032027-1650.5 ?	0.307546	11.86	0.33
032038-5902.4 v	0.35496	13.64	0.68	032053-1703.5 ?	0.76784	11.73	0.24	032202-5112.8	8.746	12.16	0.23

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as EC.											
032212-4001.0	0.335329	12.66	0.64	032351-4024.3 ?	0.55273	11.78	0.23	032439-0209.5	0.82571	12.31	0.53
032455-0559.5 ?	35.3	12.98	0.34	032513-4002.7	0.40473	12.64	0.59	032521-2037.6 ?	0.69259	14.18	0.80
032629-3101.3	0.63867	10.81	0.43	032635-5229.5 ?	0.36929	13.11	0.42	032709-5333.1	0.96640	11.26	0.17
032736-7250.9	0.309847	10.54	0.71	032754-5152.7 ?	0.52510	13.88	0.60	032812-2503.5	0.315501	11.37	0.65
033142-5927.4	0.37799	12.17	0.44	033148-2631.7	0.300162	13.89	0.73	033205-7259.0 ?	0.47139	12.18	0.28
033527-7445.0 ?	0.40170	12.98	0.56	033543-2021.1	0.327086	11.60	0.70	033623-0755.6	0.56809	11.69	0.52
033702-4131.7 v	0.292340	9.59	0.30	033710-7053.9 ?	0.41435	11.18	0.18	033725-0126.7	0.47504	11.09	0.38
033809-1913.4	0.341545	12.52	0.67	033856-3633.0 ?	0.38980	12.34	0.28	034135-1143.0 ?	0.40725	13.52	0.67
034202-5145.2	0.40921	10.82	0.51	034215-2008.8	0.282038	12.26	0.74	034327-3937.4 ?v	80.0	9.54	0.11
034340-4505.2 ?	0.35408	13.51	0.55	034347-7727.6	0.48606	10.61	0.35	034444-6105.8	0.284815	9.49	0.37
034703-0704.2	0.37772	11.04	0.42	034809-5839.8	0.42924	10.48	0.34	034901-1656.5	0.42369	12.76	0.44
034911-4236.9 v	0.82762	11.06	0.64	034927-0609.7 ?	0.53867	13.39	0.74	034931-0431.2	0.48018	9.03	0.40
034936-2441.2	0.49377	12.63	0.45	034949-0552.5 ?	0.36264	12.36	0.32	035014-1739.1	0.35215	12.19	0.41
035020-8017.4	0.62241	11.94	0.45	035036-6056.2 ?	0.85882	11.96	0.79	035120-0331.4	0.49090	12.38	0.46
035153-1031.8 v	0.50764	8.30	0.51	035200-2155.8	0.335164	10.69	0.43	035232-3111.7	0.36753	12.35	0.58
035248-2926.2	0.314441	9.92	0.35	035307-1701.2	0.46187	10.97	0.34	035320-7948.6 ?v	0.41244	9.07	0.18
035324-2902.4	0.33933	13.74	0.51	035422-3605.6	0.290447	13.52	0.53	035444-1456.1 ?v	0.63220	9.37	0.78
035454-1330.7 ?	0.86815	13.05	0.45	035511-4617.3	0.316715	12.40	0.29	035559-3513.7	0.46435	11.48	0.48
035643-1927.3	0.316366	13.56	0.43	035658-1451.2 ?	0.68161	12.83	0.46	035710-7414.6	1.0943	12.89	0.32
035734-5421.5 v	0.49010	8.29	0.69	035756-2623.1 ?	0.41021	12.14	0.38	035851-5110.6	0.310653	9.45	0.32
035943-4112.0 ?	2.0989	11.61	0.17	035951-4944.6 ?	0.42445	12.59	0.25	040053-4434.3	0.71782	12.36	0.43
040300-5750.7 ?	0.339716	11.87	0.42	040444-1624.8	0.49260	10.69	0.45	040455-3351.8 ?	0.46068	10.16	0.23
040508-0939.7 ?	0.34841	12.94	0.56	040528-6536.2	0.294770	11.91	0.40	040531-4341.7	0.340220	12.56	0.43
040550-5402.6	0.36012	11.51	0.36	040633-4729.4	0.40637	11.38	0.37	040637-2740.1 v	0.63848	10.16	0.59
040756-3848.9	0.40244	12.13	0.41	040822-0804.5 ?	0.42002	11.10	0.17	040855-6620.6	0.38658	12.88	0.47
040908-6007.5 ?	0.97527	11.75	0.35	040911-4906.9	0.285999	12.84	0.51	041025-2747.8 ?	0.38639	13.03	0.78
041037-3855.7	0.42693	10.55	0.33	041049-4949.8	0.335015	13.06	0.27	041138-4438.0 v	0.89456	9.42	0.21
041148-1147.5 v	0.41692	11.51	0.77	041208-1335.4 ?	0.45942	11.96	0.23	041209-1028.2 v	0.321499	8.37	0.67
041233-5843.1 ?	37.0	9.85	0.16	041321-3613.1	0.37046	11.87	0.33	041339-2433.5 ?	0.45701	12.74	0.25
041344-2804.1	0.63348	11.50	0.32	041419-4626.9 v	0.311635	11.48	0.86	041436-5441.9	0.45771	12.13	0.37
041450-0340.1 ?	0.41925	12.46	0.39	041451-6814.2	0.297281	12.47	0.39	041635-2506.3	0.38747	11.36	0.41
041731-6649.6 ?	0.53059	12.79	0.30	041805-7547.1 ?	0.47112	13.03	0.35	041813-0615.6	0.327760	12.43	0.39
041826-2157.9 ?	0.41593	12.27	0.41	041938-3004.7	0.346748	11.45	0.51	041946-0518.0	0.35383	12.66	0.53
042031-2813.9	0.40040	12.06	0.43	042041-2905.1 ?	0.292692	13.86	0.66	042049-0451.3	0.49090	11.35	0.34
042052-3945.7 ?	0.311885	11.98	0.20	042103-2629.5	0.39586	9.99	0.36	042134-3825.8 ?	0.37736	11.73	0.36
042149-4317.5 ?	4.728	10.21	0.08	042158-1756.5 ?	0.40819	12.01	0.21	042215-1004.6 ?	0.295518	10.26	0.20
042317-1302.7	0.67951	10.75	0.34	042401-5006.4 ?	0.310360	11.52	0.30	042509-1937.1	0.57386	12.96	0.48
042518-2347.4	0.57131	13.57	0.65	042534-4152.1	0.42528	11.19	0.28	042539-3803.6 v	0.94376	9.93	0.19
042549-6030.7 ?	0.56389	12.39	0.34	042559-2129.0 v	0.331925	10.71	0.63	042609-3420.9	0.48694	13.47	0.53
042708-1238.8	0.35763	12.46	0.55	042716-2135.0 ?	0.60109	10.54	0.26	042745-5812.0	0.90899	12.57	0.31
042844-4258.2 ?	0.61788	13.72	0.59	042851-4035.3 ?	0.312817	10.93	0.15	042925-3334.6 v	0.63419	9.98	0.47
043046-4813.9	0.35714	12.69	0.64	043128-0043.9 v	0.46561	12.46	0.57	043204-2401.2	0.50540	12.37	0.85
043249-7345.5	0.74382	12.01	0.37	043325-2356.3 v	0.62358	8.62	0.30	043345-7429.2 v	0.43503	13.13	0.53
043348-0754.7	0.85136	12.08	0.23	043423-3634.2	0.83006	11.04	0.27	043433-0919.2	0.46476	11.37	0.62
043437-3152.3 ?	0.84037	12.54	0.28	043450-1905.7 ?	0.55988	10.72	0.24	043559-0450.1 ?	0.58349	11.24	0.35
043639-0923.2 ?	0.35378	12.78	0.64	043842-0249.9	0.67095	11.65	0.48	043852-0931.9	0.37875	12.02	0.47
043933-5627.6	0.53523	12.72	0.38	043933-7146.6	1.6319	11.18	0.35	043940-3402.1	0.54515	11.67	0.50
043953-2900.3	0.53056	12.12	0.27	043953-3604.0	0.76315	10.52	0.33	043954-5634.2 ?	0.35473	13.16	0.57
044005-3027.5 ?	0.330880	13.27	0.69	044007-6131.5	0.47276	11.89	0.45	044017-2410.7	0.41632	13.75	0.73
044026-6617.9 ?	0.35466	12.80	0.38	044040-7149.6 ?	0.65980	10.44	0.20	044053-4326.3	0.91595	13.51	0.66
044106-0121.5 ?	0.221495	10.51	0.27	044120-2400.9	0.40537	13.28	0.97	044216-2549.5	0.254893	12.65	0.59
044308-1631.5	0.294096	13.51	0.63	044336-8448.6 v	1.1494	9.16	0.53	044439-2423.1 ?	0.41627	12.96	0.45
044447-5427.0	0.309680	10.92	0.35	044516-7060.0 ?	0.49562	9.80	0.22	044536-2353.0	0.33105	13.10	0.50
044624-4936.3	0.284723	13.16	0.62	044625-6620.8 ?	0.258164	10.93	0.23	044639-4737.6 ?	0.308405	13.11	0.34
044655-5903.6	0.49273	13.26	0.62	044659-1437.4	0.52725	10.91	0.60	044813-5348.1 v	0.49692	12.19	0.78
044853-0911.9	0.48963	13.71	0.89	044907-4953.9 ?	1.1197	10.05	0.16	044908-4908.1	0.40361	12.19	0.36
044925-1259.3 ?	0.47345	13.11	0.47	045022-1815.0	0.323727	11.78	0.45	045101-1214.4 ?	1.6922	9.52	0.10
045151-2934.3	0.38150	12.56	0.52	045156-1629.8	0.345823	10.90	0.32	045211-2511.7	0.57889	11.41	0.31
045218-0345.4 ?	0.48120	12.59	0.41	045319-4313.5	0.39325	12.02	0.36	045322-0322.9 v	0.61402	11.43	0.43
045343-4951.5 ?	0.42383	12.25	0.18	045417-5924.7 ?	0.294544	13.17	0.36	045450-1135.6 ?	0.43104	12.98	0.52
045540-1930.3 ?	0.80573	11.82	0.36	045555-2619.5 ?	0.34877	13.70	0.81	045657-3308.0	0.48253	10.60	0.63
045706-5516.7	0.41321	12.25	0.61	045707-7207.9 ?	0.41839	12.08	0.45	045713-3535.5 ?	0.65228	12.90	0.40
045720-3708.6	0.34152	12.88	0.76	045722-8022.9	0.36693	12.34	1.06	045724-1927.1	0.42337	13.33	0.55
045822-4930.2	0.47132	12.81	0.34	045841-8301.8 ?	0.95872	13.24	0.46	045858-2238.7 ?	0.46070	9.45	0.20
045920-1758.9 ?	0.315347	13.07	0.78	045948-6508.4 ?	0.343027	11.20	0.21	050048-7029.9 v	0.38735	11.35	0.43
050056-3007.9 ?	1.4572	12.98	0.40	050135-0838.6	0.313364	11.31	0.99	050204-0248.1	0.321983	11.05	0.72
050233-2359.0	0.320560	13.41	0.63	050308-0622.0	0.58479	11.52	0.39	050334-2521.9	0.41406	11.09	0.31
050417-1922.8	0.286919	11.70	0.46	050425-2051.3	1.11780	12.65	0.37	050437-2432.3	0.42866	10.41	0.32
050505-0733.7 v	0.92650	11.12	0.59	050512-5812.2 ?	0.323526	12.78	0.56	050530-6059.0 ?	38.8	9.98	0.16
050537-5755.6	0.55781	11.48	0.25	050611-0546.3	0.85811	11.28	0.35	050617-2007.8 v	0.44864	9.45	0.33
050617-2619.3	0.36020	13.05	0.53	050618-2007.9 v	0.44864	9.45	0.33	050631-3832.6	0.45560	11.30	0.46
050631-4833.3 ?	0.302175	13.41	0.48	050653-2611.2 ?	0.98917	11.30	0.13	050656-2936.0	0.39837	9.89	0.62
050734-5421.3	0.47623	12.96	0.31	050750-2319.2 ?	1.07747	11.63	0.15	050904-2727.2 ?	0.340474	13.52	0.44
050905-0741.7 ?	0.298088	13.17	0.75	050909-7707.9	0.36932	12.80	0.78	050922-1932.5	0.270842	12.30	0.41
050937-5618.5	1.03555	10.53	0.41	050957-2305.4	0.42874	11.45	0.39	051006-1146.0	0.60336	12.73	0.58
051009-5650.3	0.66997	11.11	0.27	051016-6133.1	0.41446	12.14	0.40	051101-6709.9 ?v	1.2358	12.96	0.35
051114-0833.4 v	0.42340	9.32	0.61	051130-5035.0 ?	0.54940	14.36	0.54	051134-1034.4	0.59444	11.25	0.45
051135-3120.4 ?	21.37	9.86	0.09	051207-2919.9	0.41311	12.33	0.65	051228-3741.5 ?	0.346387	12.42	0.25
051247-2308.1	0.43369	13.36	0.67	051301-2131.7	0.35608	11.92	0.46	051305-6624.7 ?	0.280563	13.19	0.38
051332-8719.7	0.38408	12.42	0.51	051339-3301.3	0.76465	9.35	0.19	051348-4027.2	0.67572	10.45	0.30
051353-1701.2	0.341836	11.66	0.55	051405-2802.8	0.309576	13.20	0.56	051452-2741.4 ?	0.51350	12.85	0.28
051459-7356.3	0.34572	11.78	0.39	051521-5509.2	0.54527	13.49	0.69	051527-5555.0 ?	0.43582	13.14	0.45
051531-2845.0 v	0.67234	9.56	0.39	051543-5624.7	0.42900	12.69	0.35	051649-2524.7 ?	0.40425	13.35	0.64
051700-5555.4	0.79037	10.32	0.51	051733-5447.2	1.2018	11.12	0.30	051738-3639.7	0.44432	11.66	0.41

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as EC.											
051757-1146.1 ?v	9.085	11.57	0.14	051758-3714.8	0.36139	13.37	0.50	051800-1730.5	0.58491	11.45	0.33
051801-6041.4 ?	0.248267	10.36	0.12	051832-6813.6 v	0.285461	11.00	0.71	051901-4556.6 ?	0.45727	11.89	0.23
051954-3554.1 v	0.56519	10.97	0.57	052025-0630.2	0.39026	13.47	0.49	052042-1215.1 ?	0.307820	13.00	0.36
052046-3232.5 ?	0.52963	12.82	0.35	052109-4449.3	0.55460	11.10	0.40	052117-0943.5 ?	0.46695	10.24	0.23
052121-3540.6 ?	0.37074	11.71	0.31	052126-2959.6 ?	0.97938	10.37	0.10	052134-6335.2	0.47379	12.15	0.38
052201-6852.3 ?v	49.8	13.17	0.48	052214-7156.3 v	0.77662	10.69	0.61	052234-4635.3	0.44342	11.33	0.47
052313-0907.7	0.40198	12.18	0.41	052446-1301.2 ?	0.306843	13.22	0.59	052452-2809.2	0.275778	10.61	0.37
052615-0642.4 ?	1.07166	12.59	0.47	052630-1950.2	0.319652	13.52	0.65	052642-4337.1	0.245713	12.96	0.81
052650-8135.2 v	0.46166	8.17	0.49	052651-6121.3	0.55720	12.87	0.68	052746-2357.9 ?	0.61936	11.86	0.39
052754-3125.9	0.312883	12.88	0.40	052819-1931.3	0.66466	9.65	0.38	052851-3010.2	0.302101	11.31	0.41
052941-1742.8 ?	0.229750	13.29	0.52	053030-1844.5 ?	0.51502	11.64	0.17	053042-4815.1 ?	10.710	9.82	0.12
053056-3844.3 ?	0.92980	10.25	0.19	053107-0757.7 ?	0.44333	11.88	0.43	053113-3610.1	0.330847	12.72	0.63
053115-5222.0	0.38654	11.37	0.47	053121-0723.7 ?	0.51746	11.95	0.29	053122-1540.1	0.36159	12.96	0.73
053123-5812.2	0.344282	11.81	0.66	053126-0058.6 ?	0.85222	10.39	0.23	053211-2302.0	0.47408	12.73	0.41
053259-1354.0	0.308853	12.72	0.58	053355-1204.4 ?	0.40681	11.13	0.20	053420-2606.6	0.298081	14.24	0.96
053458-3825.4 ?	0.261736	12.86	0.79	053558-4208.7 ?	0.74261	12.91	0.51	053602-2926.9	0.36670	12.27	0.47
053610-1827.2 ?	0.47277	12.97	0.33	053654-5304.9	0.51747	11.53	0.26	053717-2339.7	0.41111	11.85	0.39
053722-2618.0	0.35757	12.46	0.50	053728-7218.9 ?v	0.52777	12.04	0.88	053750-3756.2 ?	0.43477	12.73	0.37
053756-2358.0 ?	0.317048	13.69	0.97	053758-1602.9	0.323175	12.12	0.55	053808-3314.9	0.36942	12.97	0.50
053817-2731.2	0.319101	11.83	0.39	053845-0820.0	0.344270	11.92	0.73	053854-2315.8	0.50440	12.47	0.65
053905-1458.0 ?	0.97490	11.58	0.21	053920-4733.5 ?	0.33565	13.35	0.78	053930-0808.9 ?	0.44399	10.14	0.33
053959-5343.7 ?	10.954	11.90	0.32	054000-6828.7 v	0.36222	11.38	0.57	054010-4214.5	0.76226	11.80	0.40
054050-1126.0	0.65397	12.29	0.30	054134-6044.1	0.34702	12.15	0.68	054156-2440.1	0.76047	13.11	0.68
054159-1129.1	0.307690	12.87	0.44	054203-2730.2	0.45606	12.56	0.38	054220-5929.0 ?	0.38661	13.72	0.66
054236-2215.9	0.53189	13.43	0.59	054241-5316.5	0.232730	12.87	0.84	054311-5845.6	0.43708	10.12	0.45
054354-0243.6	0.43810	11.57	0.43	054546-1249.9 ?	0.70491	12.18	0.39	054651-2615.5 ?	0.47535	13.39	0.39
054829-2807.5	1.1694	11.95	0.29	054905-2554.4	0.313061	11.82	0.50	054911-1902.6	0.314238	13.74	0.84
054926-2352.5 ?	59.7	10.80	0.19	055000-0725.9	0.322599	12.22	0.84	055019-5520.3	0.41350	13.34	0.65
055209-2742.8	0.90342	12.28	0.27	055303-2322.5	0.33670	12.51	0.45	055317-5629.1	0.39317	11.43	0.30
055321-1703.7	0.33784	13.55	0.55	055426-1233.5	1.08746	11.12	0.37	055501-7241.6 v	0.343841	10.29	0.82
055558-0840.6	0.78805	12.96	0.52	055624-5919.5	0.61917	11.88	0.45	055708-2738.5	0.53583	12.74	0.78
055827-1739.8	0.41459	10.15	0.39	060011-1549.8	0.41690	12.02	0.40	060239-1108.5 ?	0.312823	10.88	0.19
060244-1927.2	0.40953	13.18	0.68	060501-1028.3 ?	0.42417	13.18	0.29	060646-2522.3 ?	0.32537	13.25	0.55
060706-1712.5	0.91461	12.99	0.48	060935-2119.9 ?	0.90967	11.09	0.30	061019-2333.4	0.77329	11.63	0.64
061059-2012.7 v	1.0703	9.57	0.79	061627-7426.8	0.63045	10.76	0.39	062252-7501.9	0.257701	11.46	0.46
064047-8815.4	0.43863	11.82	0.45	073106-8625.2	1.4893	12.20	0.77	084617-8833.7	0.267129	12.59	0.65
100123-8813.5 ?	0.65226	11.97	0.28	115933-8546.0 ?v	0.61128	11.61	0.27	123244-8726.4 v	0.338519	11.41	0.74
131308-8528.6 ?v	0.55245	11.51	0.27	213300-8325.2	9.266	10.94	0.23	221220-8453.8	0.52799	11.99	0.26
223203-7852.9	0.279247	11.73	0.54	223709-8728.8	0.84838	11.67	0.60	230401-8045.7 ?	37.6	10.72	0.17
231745-8239.4	0.45619	12.42	0.39	232348-7454.0	0.334050	11.38	0.38	232416-6222.1 v	0.35773	9.79	0.50
232658-6337.0 ?	0.75639	13.50	0.46	233214-8250.8	0.325393	12.91	0.57	233356-6911.2	0.95370	11.87	0.28
233607-5632.1	0.322861	13.05	0.53	233735-6512.9 ?	0.35841	13.31	0.53	233819-7742.4 ?	0.279352	13.59	0.81
233830-4512.4	0.40390	11.97	0.39	233858-3830.3 ?	0.48675	11.83	0.30	234239-6055.7	0.268751	13.20	0.63
234307-1852.5	0.48626	11.09	0.26	234336-3206.7 v	0.42409	11.98	0.50	234558-2113.7	0.303694	11.78	0.48
234716-7842.3	0.78917	13.85	0.58	234718-0805.2 v	0.48141	10.38	0.35	234750-6604.3	0.38054	13.05	0.54
234823-4054.7	0.34720	12.85	0.37	234933-1851.7	0.37430	13.57	0.63	235006-8444.3	0.62847	12.90	0.59
235103-0055.8	0.52159	12.80	0.52	235103-1904.5	0.47078	11.90	0.42	235151-4111.3	0.327418	13.16	0.47
235239-2135.2 ?	1.01014	10.96	0.24	235354-1923.1 ?	0.63267	13.67	0.79	235424-5756.5	0.58420	11.47	0.47
235451-2806.6	0.41360	11.47	0.22	235620-6411.5	0.38893	12.60	0.35	235620-6535.6 ?	0.49013	11.97	0.34
235621-7058.8	0.326685	12.36	0.51	235749-5027.0	0.43088	13.63	0.49	235818-3356.8	0.276060	12.59	0.88
235900-0931.6	0.256220	13.64	0.51								
Stars classified as ESD.											
000053-1717.5 ?	0.297986	12.66	0.59	000147-5714.5 ?	0.47035	11.03	0.20	000221-2929.6 ?	6.294	12.32	0.40
000229-5653.9 ?	26.55	10.15	0.11	000955-2808.6 ?	0.220859	11.70	0.15	001109-5150.3 ?	0.63829	13.41	0.77
002156-2240.4 ?	0.54045	11.95	0.12	002221-2936.8	0.64658	12.11	0.39	002257-2039.4 v	0.76730	10.35	0.32
002525-5741.0 ?	0.36059	12.18	0.20	002541-3449.7 ?	0.268644	9.39	0.11	002655-3952.9 ?v	0.75534	8.94	0.48
002657-5844.8 ?	0.352222	11.38	0.27	002807-7922.0 v	0.70110	13.08	0.78	002811-5919.4	1.9463	9.67	0.34
002845-5732.9	25.40	10.49	0.19	002904-1713.0 v	0.62162	9.87	0.17	003355-1608.7 ?	0.84474	12.22	0.38
003513-3256.0	0.50537	11.60	1.03	003537-4041.2 ?	0.78426	12.90	0.45	003544-2514.0 ?	1.3004	9.76	0.10
003831-1914.6 ?	1.1381	13.58	0.50	004004-7442.6	0.339826	10.73	0.10	004041-4258.5	0.83623	12.34	0.26
004430-3606.5	0.246539	9.62	0.15	004619-7251.0 ?v	0.37664	13.48	0.71	004642-5437.5	0.273367	10.89	0.34
005056-1747.0 ?	0.73511	10.85	0.45	005133-7559.2 ?	2.7054	13.18	0.66	005149-7159.9 ?v	0.87086	10.50	1.33
005235-4521.2 ?	0.61950	10.20	0.11	005633-7603.0 ?	0.267084	11.65	0.19	010129-7256.5 ?	5.393	13.28	0.68
010720-7524.1	0.63474	12.05	0.39	010946-2013.0 ?v	0.256486	9.29	0.19	011322-6139.8	9.365	13.14	0.37
011406-5349.9	0.78065	11.66	0.37	011839-1849.6	1.6884	12.31	0.30	011959-5816.5 ?	0.48990	11.27	0.16
012048-4742.8 ?	0.269707	12.16	0.26	012842-5356.2 ?	1.02464	10.95	0.35	013227-4954.3 ?	0.45495	11.36	0.22
013556-5228.7 ?	0.246048	11.45	0.15	013904-7840.7 ?	1.8990	12.07	0.28	014025-4138.0 ?v	0.33867	13.48	0.75
014253-5351.7 ?	0.36407	11.13	0.11	014831-8126.2 ?	0.316200	14.14	0.84	014933-1937.6 ?v	0.340812	11.20	0.70
015010-7412.9 ?	0.282760	13.78	0.68	015136-4310.6 ?v	0.90356	11.03	0.57	015200-2800.4	0.44384	9.84	0.33
015337-3116.8 ?	0.36877	12.57	0.26	015423-5344.9 ?	0.65621	12.33	0.38	015713-6923.7 ?	0.340337	12.60	0.26
015902-2901.9	0.294960	13.26	0.49	020230-8202.0 ?	0.47298	10.12	0.14	020345-1953.4 ?	0.303122	9.84	0.20
020352-4738.4 ?	0.35988	11.35	0.13	020511-0732.7 ?	0.44838	12.73	0.45	020643-0914.3 ?	0.50925	12.27	0.83
020850-1802.9	0.41471	13.45	0.60	020917-4718.1 ?	0.34632	12.27	0.30	021341-5942.0 ?	0.44999	10.78	0.22
021742-0816.7 ?	1.4634	11.16	0.33	021948-4702.7 ?	0.53997	11.40	0.20	022544-5013.0	0.270447	11.02	0.15
022721-1257.0 ?	0.67684	13.14	0.79	022837-5021.1 ?	0.87987	11.48	0.22	023018-3335.7	0.43177	12.73	0.35
023458+0005.9 ?	0.40647	11.50	0.21	023916-2349.7 ?	0.51378	11.55	0.17	024012-2645.0 ?	0.64670	12.44	0.33
024051-7326.2 ?	0.351287	9.83	0.14	024101-4836.8 ?	0.42280	13.10	0.53	024138-0307.7 ?	1.1158	12.95	0.51
024206-7326.2 ?	0.276255	12.36	0.57	024233-5739.6 ?	14.74	11.02	0.13	024425-4224.9 ?	0.37718	12.30	0.21
024658-3215.2 ?	0.63648	11.10	0.13	024951-7151.1 ?	0.44955	12.43	0.29	025030-0305.0 ?	1.4756	10.84	0.41
025237-6213.7 ?	0.55904	12.60	0.54	025305-2031.7 ?	0.45886	12.52	0.35	025414-4706.8 ?	0.266771	13.38	0.52
025535-0219.9	0.79274	11.59	0.54	025859-3523.8 ?	0.40742	12.00	0.34	030241-7332.9 ?	28.27	9.89	0.18
030503-3822.5	0.40277	12.33	0.61	030728-4155.5 ?	0.41976	12.59	0.48	031000-1206.3 ?	3.4177	12.55	1.24
031000-7303.1	0.283816	13.08	0.35	031013-5742.7 ?	0.266125	12.40	0.43	031029-5721.5 ?:	2.5041	11.46	0.19
031159-3759.2 ?	1.4225	12.57	0.25	031208-5248.9 ?	0.59487	12.51	0.33	031420-7127.6	40.8	10.48	0.12

T a b l e 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as ESD.											
031612-2205.5 v	0.77195	12.55	0.75	031718-4709.0	0.304966	12.81	0.65	032048-3142.0	1.03480	10.03	0.23
032212-5725.1 ?	0.35588	12.87	0.48	032246-2105.4 ?	38.0	9.52	0.16	032428-1033.7 ?	0.46110	12.35	0.32
032736-7730.8 ?	14.88	11.62	0.12	032743-3854.3 ?	0.44747	12.27	0.82	032906-1949.5 ?	31.46	10.96	0.12
033010-8108.4 ?v	0.36951	13.19	0.97	033131-5000.4 ?	0.35984	13.14	0.40	033307-2417.0	0.54367	12.71	0.78
033437-0907.8 ?	0.54183	12.19	0.31	033520-8015.6	0.48877	12.01	0.29	033536-7540.3 ?	0.344403	12.20	0.29
033642-7908.2 ?	0.61399	10.23	0.12	033716-1938.4 ?	0.78522	12.00	0.23	033921-6425.5	0.57088	12.18	0.47
034019-3649.5 ?	0.76948	11.44	0.19	034242-5823.2	0.41940	11.31	0.15	034331-4515.5	0.70299	10.47	0.36
034400-5141.5 ?	1.4633	11.85	0.13	034512-3236.3	0.47655	12.08	0.51	034921-2052.5 ?v	0.84305	9.40	0.42
035046-1339.9 ?	0.286065	12.81	0.28	035210-3433.1 ?	0.46360	13.42	0.58	040004-2902.4 ?	1.6368	9.67	0.09
040013-3347.7 ?	1.0949	14.34	1.12	040014-0746.0	0.64048	10.79	0.48	040054-4052.1 ?	0.306390	13.45	0.60
040225-3200.4 ?	0.332681	12.47	0.85	040410-0758.4 ?	0.312262	13.17	0.35	040637-5634.5	0.77997	8.73	0.31
040938-3915.8 ?	26.29	12.69	0.28	041204-7228.9 ?	0.41580	13.72	0.79	041210-5906.0 ?	0.64190	11.25	0.46
041353-0113.0 ?	0.35175	11.22	0.26	041454-5415.4 ?	0.36325	12.30	0.45	041501-6932.2 v	0.74360	10.61	0.12
041652-0453.8 ?	0.286827	12.83	0.42	041707-4552.7 ?	0.81712	12.36	0.27	041723-2231.4	0.68401	13.05	0.58
041946-3235.2 ?	0.76435	11.93	0.26	042047-4515.4 v	0.51385	9.31	0.61	042143-5715.9 ?	0.84571	12.37	0.19
042401-4949.0 ?	40.1	10.10	0.17	042519-4430.0 ?	0.54308	13.27	0.50	042547-3506.9 ?	0.40511	12.80	0.43
042554-3426.4	13.68	10.55	0.20	042618-3349.6	0.86285	12.81	0.44	042701-0933.4 ?	0.46827	13.04	0.55
042702-3255.7 ?	3.0642	12.14	0.28	043052-6649.9 ?	0.319732	12.15	0.17	043544-2854.9	0.90760	11.64	0.45
043837-2034.9 ?	1.4186	13.45	1.01	044405-1945.7 ?	0.51803	12.81	0.45	044455-4137.2 ?	0.67735	12.04	0.40
044537-0547.6 ?	0.45854	13.03	0.57	044645-5201.5 v	1.5431	9.82	0.39	044703-2237.0	2.1529	10.00	0.12
044837-7610.5 ?v	0.75721	13.24	0.45	045249-1955.0 ?	1.10473	9.98	0.15	045509-6440.4 ?	0.37641	12.60	0.32
045641-3911.5 ?	0.58972	10.85	0.36	045707-1927.7 ?	0.36612	12.87	0.49	045716-6633.9 ?v	4.342	13.65	0.65
050032-0914.3	1.1193	12.31	0.55	050049-3212.7	0.333740	12.38	0.64	050136-3354.8 ?	0.309241	12.40	0.35
050208-2204.9 ?	6.880	8.68	0.17	050520-0806.8 ?	0.90323	12.55	0.40	050527-6743.3 v	4.049	11.01	0.61
050533-2610.2 ?	0.48011	11.24	0.20	050554-6810.8 ?v	0.93546	11.76	0.46	050628-3400.4	2.9382	12.43	0.77
050645-1534.1	0.40373	14.80	0.91	050726-1347.1 ?	0.49005	13.27	0.55	050728-0524.4 ?v	2.2549	10.42	0.17
050800-0550.6 v	0.82195	10.94	0.34	050805-4242.9	1.7161	11.30	0.28	050825-2326.7 ?	1.3994	13.62	0.99
050836-5709.6 ?	0.34554	13.19	0.50	050936-1019.2 ?	0.35724	13.65	0.73	050940-1247.7 ?	0.41426	11.54	0.22
051049-0832.5 ?	1.5556	10.80	0.14	051126-2636.1 ?	0.40699	12.96	0.40	051126-4413.1	0.73337	12.35	0.66
051153-0428.6	0.73746	10.91	0.44	051206-2928.8 ?	0.338587	12.57	0.31	051211-1312.0 v	0.91544	9.99	0.57
051338-0510.5 ?	1.1825	10.62	0.22	051414-2142.1 v	0.52944	11.48	0.89	051424-5321.8 ?	0.57897	12.85	0.49
051542-4219.8 ?	0.52459	10.87	0.21	051546-0644.6 ?	0.90317	10.86	0.23	051700-4852.2	0.57833	11.85	0.82
051947-4259.0	1.2309	12.25	0.51	052018-5605.8 ?	0.52235	12.69	0.25	052149-6519.0 ?	1.2670	12.91	0.34
052202-3430.3 ?	0.63198	10.41	0.16	052246-3917.1 ?:	5.062	10.40	0.62	052419-4614.1	1.00763	11.00	0.30
052526-2256.2 :	6.762	10.31	0.89	052625-3354.5 ?	0.42686	13.04	0.46	052727-6711.9 v	4.830	12.84	0.84
052818-1856.5 ?	0.65808	13.78	0.81	052833-6836.2 ?	0.57685	11.36	0.18	053253-2031.0 ?	0.72814	11.60	0.12
053423-0952.9	0.72431	12.71	0.94	053451-3025.2 v	0.51282	11.44	0.62	053516-1210.8 ?	0.67143	11.64	0.14
053647-3155.3 ?	0.32917	13.19	0.47	053948-2631.8	1.6040	12.54	1.08	053955-1240.2 ?	8.311	12.10	0.60
054029-4454.6 ?	0.64221	11.03	0.17	054234-3415.7 ?	2.6922	10.57	0.13	054250-3318.8 ?	0.34185	13.72	0.82
054632-1221.1 ?	2.0559	11.18	0.14	054654-2528.9	57.0	11.96	0.18	054852-1724.4 ?	0.87048	12.31	0.27
054921-0938.4 ?	0.35936	12.00	0.25	055015-0330.4	1.3684	11.73	0.49	055017-1100.7	0.90198	11.83	0.62
055252-1103.4	0.80630	10.97	0.54	055809-1112.1 ?	0.51565	13.07	0.60	055828-6056.9	13.23	11.11	0.22
055901-5421.6 ?	0.70736	13.05	0.36	060240-1646.0 ?	26.17	12.75	1.12	060247-2227.7 ?	0.342557	13.64	0.81
060249-2926.2 ?	0.67896	11.60	0.24	060424-1636.3	0.66361	11.07	0.45	060522-6947.0 ?	0.59303	12.15	0.28
060606-2539.0 ?	3.950	9.79	0.18	060900-2906.4 ?	0.48902	12.49	0.43	074401-8907.6	0.79802	12.82	0.53
221846-8438.4 ?	2.1349	11.66	0.18	221940-8359.1 ?	0.93756	13.00	0.68	225436-8327.9	0.52988	12.98	0.31
231336-7556.0	0.53091	11.96	0.68	232545-7257.8	0.67009	12.23	0.50	232748-8613.3 ?	1.3958	9.36	0.12
232906-6659.4 ?	0.35723	12.34	0.46	233041-6953.5	0.63147	11.32	0.23	233652-5742.8 ?	12.45	11.67	0.18
233803-5926.5 ?v	1.2658	11.30	1.67	233842-6047.8 ?	17.99	10.91	0.13	234008-6726.3 ?	1.09055	11.61	0.43
234425-0546.6 ?	0.328746	9.82	0.30	234520-3100.4 ?	0.88348	10.94	0.27	235117-8517.4 ?	0.46073	12.30	0.33
235157-5725.4	0.39258	11.06	0.23	235210-3200.7 ?	0.35007	12.46	0.41	235428-1236.6 ?	1.9837	12.24	0.57
235757-0109.8 ?	12.34	10.59	0.42								
Stars classified as ED.											
000030-3937.5 v	2.5545	10.79	1.22	001438-1948.7	1.4698	11.28	0.25	001855-7954.9 v	0.90310	11.28	0.77
003016-4628.0 v	5.414	12.46	1.11	003245-6535.1	0.92846	11.44	0.37	003449-5124.4	1.05861	12.98	1.07
003620-2120.8 ?	0.40949	13.47	0.53	003640-5557.8	0.91962	11.78	0.45	003655-0552.5	6.975	9.87	0.45
003713-6349.2 v	0.86588	9.88	0.36	004550-7849.3 v	3.5358	9.88	2.40	004817-2805.3	0.84664	10.18	0.19
005143-6457.3	2.3616	11.54	0.67	010319-3745.2	1.12264	10.78	0.75	010538-8003.7	8.070	10.10	0.44
010921-2408.3	2.4106	11.18	0.49	011328-3821.1	0.44559	11.78	0.33	011513-5149.1	1.7809	13.60	0.66
011748-8119.8	1.9251	12.28	0.67	011750-3753.4	0.97032	11.93	0.73	012424-2753.4	2.0654	10.62	0.18
012534-4148.6 v	6.883	10.70	0.76	012546-3956.2 ?v	1.2608	11.51	0.50	012940-8309.2	0.68986	12.87	0.45
013020-8332.0 v	4.489	11.42	1.10	013112-7556.9	1.06334	9.93	0.33	014101-0643.6 ?	2.3064	10.39	0.58
014122-5520.0	4.635	11.54	0.47	014613-7951.9	1.3170	10.67	0.38	015650-2111.7 v	2.2702	10.56	0.50
015838-5331.7 v	1.2381	9.63	0.98	020150-6447.1	2.3838	12.66	0.74	020902-3720.9	4.124	12.07	0.42
020931-8518.2	1.3303	9.90	0.64	021258-8124.0	7.458	10.51	0.41	022053-4856.7 ?	1.1936	10.44	0.56
022136-3712.8 v	2.4348	10.33	1.48	022915-7827.9	2.3250	10.07	0.58	023434-3438.3 ?v	4.278	11.30	0.84
023455-7315.5	1.05502	11.80	0.35	023526-1605.2 ?	1.6031	12.57	0.54	023539-4504.2 v	5.784	9.11	0.91
024458-1746.8 v	2.2323	9.30	0.29	024519-5407.4	2.4057	12.01	0.50	024644+0107.9	3.691	10.41	0.57
024946-3825.6	0.46322	11.70	0.64	025136-6734.3 ?v	0.68586	13.09	0.85	025701-0252.3 ?	1.2853	11.67	0.49
030518-1838.2 v	0.80613	12.47	1.56	030524-6641.1 v	6.682	11.45	0.81	030545-8545.0 v	0.90709	12.21	1.42
030807-2445.6 v	0.91820	10.16	0.55	030847-1927.6 v	1.2985	12.92	0.63	030956-4459.5 v	1.8721	9.26	0.39
031952-2436.8 v	2.4301	10.14	0.43	032123-1017.1 v	1.5575	11.68	0.88	032704-4552.9 v	2.6078	11.32	0.58
033113-4706.3 ?	1.6231	12.60	0.36	033240-7553.4 ?	1.05588	12.26	0.39	033431-3924.7 v	4.224	9.56	0.77
033615-6114.1	3.4927	11.94	0.57	033856-7224.5 v	0.81707	12.08	0.73	034351-8400.1 v	2.5996	11.44	1.22
034413-4116.8 v	0.72240	8.94	0.60	034512-1624.6 v	2.9597	8.86	0.49	034746-0836.7	2.8764	9.41	0.88
034944-8349.9	1.7927	11.40	0.34	035418-4306.6 v	7.259	11.91	0.82	035427-5834.7	1.8263	10.21	0.27
035858-1713.8 v	4.977	10.09	0.71	040057-7753.8 v	2.2756	12.23	0.80	040249-0926.0	3.4144	11.58	0.73
040310-7632.9	2.0358	9.97	0.33	040403-7427.2 v	2.8783	10.91	0.37	040506-3110.2 v	0.90140	8.52	0.50
040907-4828.6 v	2.3832	8.52	0.24	041947-3210.1 ?	0.64318	11.80	0.44	042347-2426.2	2.3038	10.25	0.44
042535-1848.0 v	2.6306	11.98	1.06	042535-6045.4 v	2.0846	8.71	0.45	042631-5214.5	0.58756	14.23	1.07
042641-2457.0 ?	1.2873	11.50	0.58	042735-2513.9 ?v	1.4267	10.40	0.41	043041-1913.7	1.7974	11.98	0.50
043201-1744.8 v	9.298	10.84	0.78	043650-3622.1	1.10473	11.58	0.26	043653-4456.2	1.9717	9.81	0.23
044300-3245.7	2.0054	11.19	0.36	044420-3141.3 ?	4.335	11.71	0.16	044733-8322.1	2.5695	11.81	1.68
044748-4759.3	1.07770	10.77	0.44	045021-4546.8 v	13.96	9.61	0.88	045304-0700.4	1.6224	11.35	0.29

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as ED.											
045605-4800.7 ?	2.2259	10.23	0.21	045907-2302.9	5.259	11.37	0.40	045927-7732.8 ?	1.03698	12.20	0.28
050040-1802.8	1.09577	11.68	0.41	050205-2842.8	3.3023	10.98	0.63	050322-4337.0	1.06362	13.09	0.44
050456-5308.4 ?v	0.86185	10.51	0.86	050513-2312.8	1.7545	12.82	0.69	050604-3509.1 ?	0.74615	11.75	0.29
050712-2054.8	1.2161	12.79	0.37	050717-1909.2	2.5258	10.93	0.59	051010-1452.3 v	773	11.63	1.20
051023-6846.4 ?	74.5	10.42	0.49	051433-2519.7	0.89307	12.58	0.50	051815-4534.8 v	1.8381	10.07	0.55
051837-5803.2 :	5.492	11.26	0.26	051950-3155.0 ?	1.4668	10.72	0.17	052041-5619.1	1.3445	10.84	0.43
052543-2935.2 :	4.271	12.02	0.74	052800-3334.6	6.186	11.28	0.73	052919-1617.3	0.66085	11.17	0.42
053104-1102.2	1.09203	11.11	0.56	053200-3320.5	0.73285	12.44	0.42	053503-6843.7	1.0864	12.20	0.41
053638-1247.0	3.0274	11.72	0.67	053854-3337.9 v	2.7520	11.84	0.47	054004-0119.7 v	4.633	10.58	0.81
054020-2901.4	2.4789	11.49	1.32	054136-1339.6	0.93301	11.96	0.87	054447-2250.9 v	3.723	9.45	0.49
054531-1746.6	7.979	10.64	0.28	054937-2114.4	2.0164	9.95	0.29	055010-5648.4	1.1685	8.91	0.27
055035-1022.0	2.6096	12.00	0.41	055655-7320.5 ?	2.9278	10.24	0.23	055708-0728.2	5.804	12.15	0.48
055918-2013.4 v	1.2885	9.83	1.50	060325-5528.4	3.3228	11.37	0.82	060352-2454.1 v	4.460	10.84	0.91
060450-1314.3	0.79702	12.40	0.71	060649-2137.6	4.288	11.33	1.93	060927-1501.7	0.87708	9.37	0.36
220923-8615.0	0.92688	11.67	0.62	230727-7818.3	1.9080	9.28	0.33	232326-6948.6 ?	1.03956	12.05	0.38
233023-5825.6 ?v	5.463	9.77	1.18	234621-5441.7	3.3178	12.38	0.64	235052-2316.7	1.4023	9.42	0.29
Stars classified as DSCT.											
000116-6037.0 v	0.122072	10.03	0.35	000316-7342.2 ?	0.201026	13.72	0.54	000410-5252.9 ?	0.131583	11.66	0.25
000412-2055.1	0.178994	11.57	0.17	001026-3739.9	0.153047	12.06	0.33	001123-1732.5 ?	0.177967	12.78	0.43
001513-7016.7 ?	0.209465	11.89	0.19	002134-1345.3 ?:	0.164569	12.43	0.28	002424-7102.9 ?	0.169003	10.99	0.32
002450-5235.8 ?	0.171659	13.19	0.49	002524-4655.5 ?v	0.218481	10.43	0.17	003323-4849.7 ?	0.165699	10.84	0.27
003344-1532.6	0.198584	10.43	0.15	004100-2541.9 ?	0.180747	12.07	0.23	004445-1503.6 ?:	0.137691	12.96	0.50
004753-3245.4 :	0.202992	10.61	0.08	004852-3625.0 ?	0.172294	12.07	0.18	004912-4322.5	0.130639	13.65	0.57
005115-5904.0 v	0.146458	13.09	0.63	005221-1907.4 ?	0.205720	13.50	0.50	010111-6843.1	0.091612	12.09	0.44
010435-1916.7 ?	0.177791	12.68	0.48	010844-0340.1	0.194607	11.44	0.83	011224-8541.0 ?	0.173886	12.74	0.37
012222-2906.9 ?	0.205090	10.61	0.08	012349-3643.7	0.127768	9.99	0.24	012555-3558.8 ?	0.154133	13.54	0.60
013437-3928.2	0.145186	12.09	0.23	014001-1024.5	0.173991	12.49	0.29	014435-7745.3 v	0.205717	14.35	1.38
014554-4730.2	0.150850	11.23	0.19	015245-7445.7	0.136873	10.04	0.08	015307-5056.5	0.091002	9.71	0.29
015307-6757.3 ?	0.140889	10.27	0.15	015455-2626.9	0.206455	12.48	0.21	015619-4040.3	0.191174	11.88	0.20
015724-2626.2 ?	0.211946	11.67	0.20	015736-3112.6	0.180976	11.76	0.21	020846-7020.8 ?	0.191314	13.10	0.47
021313-4054.8	0.115507	12.38	0.41	021923-8613.4	0.177578	13.08	0.55	021947-7037.8	0.146672	12.64	0.37
022531-1859.7 ?	0.186926	12.84	0.56	022818-4856.0 ?	0.174036	12.58	0.33	023134-3549.1	0.210595	11.83	0.31
023226-2848.2 ?	0.178662	12.07	0.18	023401-6536.6 v	0.199460	9.48	0.17	023546-5603.7 ?	0.172731	13.43	0.43
023836-5600.7 ?	0.186163	11.97	0.26	023903-1637.1	0.200669	14.31	0.66	024506-4128.3 ?	0.101698	12.17	0.23
024727-0936.2 ?	0.187181	11.01	0.22	024738-2702.4	0.134958	13.48	0.49	024754-4546.7	0.134506	12.03	0.15
025237-4927.1 ?	0.181748	10.49	0.41	025252-3754.5 ?	0.198962	11.68	0.14	025347-1307.7	0.185929	12.04	0.30
025508-4052.1 ?	0.206136	11.53	0.33	025743-3351.6	0.064873	11.36	0.20	025845-3833.3	0.121284	11.48	0.25
030503-5642.6 ?	0.196234	13.25	0.51	030737-1301.7	0.190600	11.33	0.27	031319-3100.4 ?	0.173388	12.90	0.39
031406-2035.5 ?	0.197313	10.34	0.14	031504-6429.2	0.220207	12.73	0.30	031636-4957.3	0.208692	11.19	0.23
031826-0950.4	0.144948	12.10	0.18	032246-7237.8	0.129425	12.07	0.33	032350-1439.8	0.145393	12.70	0.47
032917-2138.0	0.179375	13.33	0.43	033109-3742.7 ?	0.183400	11.50	0.21	033219-3539.3	0.060689	10.70	0.23
033627-4109.9	0.177565	12.48	0.36	033715-2832.6	0.056138	13.40	0.75	034018-2651.4 :	0.143222	13.82	0.98
034534-1123.2 ?	0.132551	13.13	0.79	040137-5342.1	0.094855	12.26	0.42	040320-8342.0	0.085660	11.88	0.30
040558-8344.2 ?	0.230377	12.41	0.33	041345-5256.8 ?	0.178287	13.21	0.36	042232-1325.8	0.201619	12.37	0.18
042337-6032.2 ?	0.173824	14.10	0.84	042750-1846.3	0.113415	11.01	0.27	043401-3334.0	0.200877	12.29	0.25
043616-1904.4 ?	0.192372	12.41	0.30	043623-4811.6 ?	0.192181	11.31	0.41	043720-2928.1 ?	0.169624	12.66	0.86
043748-6516.6 ?	0.138084	12.47	0.42	043907-4649.0	0.201566	12.80	0.40	044114-5505.9 ?	0.188373	12.10	0.35
044225-2617.5 ?	0.227757	12.32	0.21	044325-1028.9	0.188280	11.90	0.20	044526-4906.8 ?	0.201264	13.04	0.39
044916-1503.5 ?	0.167064	13.11	0.41	045338-2906.6 ?	0.192781	12.17	0.45	045425-6804.7	0.153416	12.20	0.28
045636-2740.8	0.078465	12.62	0.57	045800-4555.6	0.103096	12.89	0.90	045801-5011.2	0.093966	12.70	0.41
045956-5829.9	0.134604	8.75	0.22	050148-7614.3 ?	0.172780	12.55	0.29	050226-1525.2 ?	0.156772	13.20	0.47
050318-3449.7	0.144399	12.88	0.44	050402-2116.9 ?	0.153324	12.80	0.30	050545-1754.0 ?	0.172556	11.74	0.13
050645-5903.1 ?v	0.213593	9.34	0.22	050702-0047.6 ?v	0.215970	10.51	0.21	051144-6242.9 ?	0.195234	13.23	0.56
051512-3523.6 :	0.245344	12.99	1.04	051614-2955.1 ?	0.156993	12.40	0.50	051752-2552.3 ?	0.150510	13.69	0.58
052135-2448.0	0.169032	12.80	0.61	052301-1208.1 ?	0.164740	11.96	0.27	052707-8334.7	0.139924	11.98	0.28
053123-4731.9 ?	0.131549	13.26	0.48	053438-1756.0 ?	0.147025	12.99	0.33	053512-5801.2 v	0.104758	12.14	0.15
053607-1538.4 ?	0.175075	11.95	0.21	053652-0824.8 ?v	0.173241	12.54	0.28	053714-5158.2	0.143875	13.17	0.46
053940-5934.1	0.158203	12.95	0.46	054049-5527.8 ?	0.149118	12.46	0.40	054057-1810.6	0.160241	12.09	0.18
054215-1124.7 ?	0.155481	13.94	1.24	054252-1725.2 ?	0.111756	13.42	0.67	054514-2204.6 ?	0.178080	12.84	0.34
054727-1323.2 ?	0.172267	12.84	0.33	055933-1835.5 ?	0.197731	12.30	0.25	055941-3039.9 v	0.144938	9.54	0.16
060226-2526.9 ?	0.155634	12.95	0.66	060228-0807.1 :	0.200464	10.93	0.23	060521-5800.6 ?	0.181880	13.43	0.57
060726-7655.6	0.200137	9.57	0.23	154315-8648.1	0.142939	11.42	0.69	230125-8514.1	0.207031	12.75	0.39
233302-6722.2 ?	0.192630	11.08	0.19	233439-6341.1 ?	0.117861	12.60	0.26	233610-5006.9 ?	0.147404	12.71	0.37
233816-4129.5	0.197581	12.72	0.29	234003-4738.6	0.111420	11.37	0.47	234112-5341.7	0.219595	12.63	0.29
234203-4051.0	0.173522	13.38	0.69	234846-0808.7 v	0.197822	9.17	0.44	234849-6946.9	0.196619	12.11	0.27
235026-5337.8 ?	0.198453	12.05	0.23	235144-6728.8 ?	0.182003	10.99	0.18	235849-0853.3	0.177163	13.33	0.43
235951-3343.5	0.167164	11.22	0.64								
Stars classified as RRC.											
000507-1204.6 ?	0.35013	13.64	0.52	001231-1402.1	0.326337	13.33	0.58	003514-0415.0 ?	0.34463	12.92	0.81
003629-2011.7 ?	0.245848	11.50	0.22	004627-5750.5 ?	0.36789	13.61	0.54	004729-6522.3	0.40994	13.77	0.70
004929-2723.2 ?v	0.35471	13.33	0.52	005231-6110.5	0.287839	12.56	0.36	005409-5708.5 ?	0.297671	13.10	0.40
005618-4122.0 ?:	0.335374	12.68	0.29	005924-1556.6	0.289576	12.47	0.48	010029-4404.2 ?	0.325583	12.29	0.24
010117-4556.6	0.37377	11.82	0.30	011148-6355.3 ?	0.39644	13.35	0.57	011643-3759.6 ?	0.308660	13.19	0.58
011800-5511.4 ?	0.262641	12.08	0.33	011831-6755.1 v	0.40578	11.56	0.44	012138-7350.2 ?	0.263843	13.45	0.34
012301-7234.4	0.316314	13.06	0.54	013251-4715.8	0.317882	9.55	0.11	013344-5217.7	0.286989	12.90	0.57
013412-5026.5	0.336951	12.36	0.46	013450-3909.0 ?	0.288137	12.49	0.40	013931-3322.3	0.316309	12.40	0.45
014226-3027.6	0.273712	12.12	0.53	014312-2342.5	0.307141	12.36	0.55	014500-3003.6 v	0.37738	11.14	0.53
014525-1846.6	0.34542	13.18	0.51	015649-0650.0 ?	0.221601	11.65	0.23	015752-0532.1	0.301467	11.89	0.42
020010-2433.1	0.324301	12.39	0.40	020013-1728.7	0.258105	12.09	0.21	020728-5752.2 v	0.37503	10.90	0.43
020740-7748.8 v	0.310666	12.55	0.56	021012-2856.7	0.320204	12.19	0.53	022011-2325.4	0.329154	12.86	0.46
022358-4538.8 ?	0.319599	12.25	0.21	022637-4119.7 :	0.293921	10.14	0.11	023319-7336.7 v	0.287146	11.81	0.57
023706-4257.8 v	0.311326	8.84	0.52	024636-0002.4 :	0.40366	10.91	0.15	024728-3209.1	0.33697	13.36	0.62
025134-4748.1 v	0.311356	12.13	0.45	025344-2652.9 ?v	0.280430	13.62	0.62	025705-2826.9	0.39315	12.69	0.52
025928-3105.3 ?	0.324935	12.90	0.39	030015-0459.7 :	0.315903	12.66	0.50	030114-1059.7	0.36311	13.44	0.64

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as RRC.											
030405-3952.1 ?	0.300939	11.42	0.24	030433-4157.7	0.38991	12.41	0.55	030528-3058.7	0.304610	12.69	0.45
030615-2612.8 ?v	0.40614	13.43	0.57	031124-3719.5	0.322599	13.75	0.74	031238-7448.3	0.312059	13.63	0.62
031315-3008.2	0.283661	12.18	0.55	031320-1726.8	0.262896	13.61	0.50	031408-3446.4	0.312434	11.54	0.53
031535-1647.0 :	0.35132	14.52	0.91	031626-4249.0 ?	0.34517	13.60	0.85	032820-6458.7 v	0.35480	12.63	0.45
033021-5517.9	0.280492	13.72	0.42	033250-4830.5 ?	0.218309	12.30	0.28	033623-2129.1	0.316991	13.72	0.71
033634-0711.6	0.307785	12.10	0.24	033822-6259.1 ?	0.342568	9.67	0.10	034033-0856.9 ?	0.34561	12.05	0.45
034349-1328.3 ?	0.309994	13.61	0.53	035428-4930.6 ?	0.315495	11.62	0.22	035658-5446.4	0.264197	12.09	0.54
035813-6629.6 ?v	0.36058	11.43	0.53	040527-4637.5 ?	0.39313	13.65	0.54	040625-2339.6 v	0.327081	12.21	0.42
041056-6258.7	0.300575	13.08	0.56	041950-1559.1 ?	0.346849	11.25	0.16	043036-3608.3	0.244161	13.18	0.45
043741-3904.1 ?	0.36013	12.80	0.57	043753-7604.8	0.316099	13.20	0.56	043917-3251.8	0.286085	11.18	0.39
043930-3233.1 ?	0.35798	10.45	0.17	044146-1809.7 ?	0.293995	11.07	0.14	044850-3728.4 :	0.252144	13.95	1.03
045213-5620.8	0.35036	13.61	0.71	045815-2244.5	0.274048	12.11	0.41	045914-6935.8 v	0.328945	11.34	0.43
050319-0427.0 :	0.247440	11.39	0.14	051337-3342.7 ?	0.37181	12.96	0.60	051618-2936.3 ?	0.241792	10.70	0.10
051714-1142.0	0.236170	11.07	0.17	052545-1007.4 ?	0.38351	12.06	0.23	052840-5316.2	0.36797	13.48	0.59
053022-3234.8 ?	0.233120	11.79	0.22	053628-3837.0	0.37137	12.78	0.45	053830-3554.4 :	0.270632	13.31	0.82
053902-5925.9	0.40997	13.30	0.56	054449-2659.5	0.262611	12.22	0.21	054810-2001.4 ?v	0.225147	8.16	0.34
055122-6812.8 v	0.321775	11.87	0.44	055239-0551.6 :	0.37441	11.96	0.47	055251-8113.4 ?	0.256639	11.90	0.34
055322-5417.9 ?	0.245298	12.87	0.58	075836-8530.8 ?	0.224120	12.24	0.51	230724-7649.1 v	0.304971	13.14	0.40
230815-8403.9 ?	0.277365	13.13	0.55	232521-6750.1 :v	0.34966	12.95	0.88	233446-4854.3 ?	0.319542	11.07	0.44
234001-5001.3	0.309888	13.90	0.75	234106-4208.8 ?v	0.38049	12.83	0.49	234429-4210.3	0.34579	13.66	0.58
234439-0148.6	0.276854	12.23	0.38	235139-7334.4	0.326350	12.56	0.48	235408+0057.8	0.306258	10.39	0.43
235622-5329.4 ?:	0.42253	12.73	0.49	235721-6414.6 ?v	0.302975	9.48	0.31				
Stars classified as RRAB.											
000248-2456.7 v	0.49337	9.90	1.24	000301-7041.5	0.55381	13.27	0.91	000316-1125.1 :	0.36892	13.64	0.89
000348-1128.6 ?	0.74089	12.45	0.84	000405-1659.8 v	0.60606	11.94	0.66	000410-4108.2	0.52551	13.68	1.21
000452-5254.4 ?	0.58939	13.58	0.69	000602-3654.3 v	0.43911	13.38	0.63	000621-3517.2 v	0.57767	13.03	1.20
001141-0144.9 v	0.52974	11.83	1.05	001323-4255.2	0.74407	13.62	0.80	001528-6238.8	0.51605	12.72	1.15
001543-5853.1 v	0.62538	12.88	1.02	001611-3927.4	0.53158	13.56	1.28	002418-7616.9 v	0.56874	13.17	1.12
002443-6949.7 ?	0.72792	10.98	0.38	002649-4757.6 ?:	1.04301	11.69	0.22	002831-8054.7 ?v	0.59395	13.57	0.85
002843-4400.4	0.59993	12.64	0.81	003338-1529.2 v	0.57373	11.25	0.59	003358-1331.4	0.43725	12.91	1.32
003543-2141.0	0.56150	13.60	0.91	003640-5036.6 ?	0.56771	14.11	1.33	003706-4317.7	0.62756	13.57	0.70
003752-3952.0 v	0.58401	13.35	1.17	003857-5252.2	0.53054	13.69	1.21	004025-2134.6 v	0.56537	13.03	0.94
004115-6844.0	0.67805	13.44	0.75	004336-6843.5	0.68360	13.11	0.93	004453-2442.7	0.57050	13.12	0.91
004458-7352.9 ?	0.73288	12.55	0.54	004548-4355.2	0.58981	13.21	0.93	004554-6404.0	0.47387	13.86	1.16
005001-6238.1 v	0.41453	11.56	1.22	005031-4340.8	0.56705	13.80	1.30	005453-6642.5 v	0.60254	12.46	1.02
005559-2623.0 v	0.52064	13.11	1.09	005705-6855.2	0.59317	13.91	1.13	005712-1935.9	0.48053	12.53	1.06
005810-6323.8 v	0.64226	10.90	1.11	005829-1508.8	0.51716	13.07	1.14	010028-2812.3 v	0.46370	12.57	1.27
010040-1557.4 ?v	0.58629	11.16	1.00	010308-2530.3 ?	0.57506	13.62	1.06	010658-6423.0 ?	0.53067	13.97	1.07
010726-3218.6	0.55011	11.97	1.06	010949-4418.9 v	0.48436	12.77	1.04	010958-4207.7 ?v	0.61554	12.69	0.48
011022-7351.9 v	0.53329	14.04	1.08	011200-5002.8	0.68120	13.37	1.09	011506-5920.5 v	0.45677	12.71	1.21
011515-6255.5	0.52187	13.98	1.00	011815-3912.8 v	0.51094	10.48	1.23	011825-1724.9	0.62088	13.17	0.85
012254-2617.6 v	0.45168	13.02	1.29	012500-3438.9 v	0.42637	13.53	1.22	012612-1738.6	0.46005	13.51	1.33
012848-1127.2 ?	0.51669	12.83	1.02	013055-5935.2	0.53789	12.57	0.98	013113-7829.1 v	0.55576	12.45	0.78
013140-4957.3	0.46042	12.23	1.05	013524-3507.7 v	0.63702	11.65	0.87	013744-0954.2	0.56674	13.56	1.04
013922-3304.4 v	0.62201	12.67	0.51	014231-8000.6 v	0.34837	12.09	1.12	014237-3001.6	0.51455	13.09	1.26
014543-4526.0 v	0.55941	14.13	0.73	014721-7321.0 v	0.48758	13.61	1.02	014946-6614.8	0.56747	13.36	0.95
015136-4939.3	0.79292	13.14	0.75	015649-4421.1 v	0.58266	13.72	1.27	015920-4025.7 ?	0.52871	13.35	0.62
020345-1729.1	0.36206	11.34	0.18	020752-2651.9 v	0.49545	9.74	1.28	020925-5210.1 v	0.62557	13.80	1.11
021214-4422.3	0.68463	13.44	0.90	021356-4624.4	0.39641	13.59	1.24	021515-1048.0 v	0.62335	10.62	0.73
021931-7333.9 v	0.67535	12.70	0.92	022256-6725.1	0.61340	14.13	1.10	022536-5519.4	0.38710	14.07	0.72
022832-0821.5 v	0.51059	11.41	0.81	023020-5908.1	0.57290	11.90	0.63	023106-4406.0 :	0.56779	13.35	0.95
023303-7102.0 v	0.38691	13.95	1.18	023627-3736.0	0.57995	12.99	0.84	024457-4351.1	0.52851	13.66	1.22
024506-5007.0 ?	0.55207	12.82	0.92	024629-1357.0 ?	0.56154	13.57	0.97	024814-5435.2	0.58196	12.38	0.73
024819-4523.0	0.58725	13.93	1.50	024956-0125.2 v	0.54814	12.27	1.05	025010-2615.9 :	0.37043	12.40	0.71
025021-6415.7 ?v	0.57249	12.89	1.00	025118-2003.5	0.48820	13.51	1.15	025136-7210.3	0.58834	13.38	0.97
025336-6844.9	0.47921	13.80	0.63	025430-2824.1	0.60304	12.27	1.14	025546-5556.2	0.51810	12.63	1.10
025733-5946.3	0.68802	13.76	1.14	030015-4944.5	0.51948	14.19	1.07	030109-3807.7 v	0.80377	12.14	0.60
030313-5131.8	0.56291	13.76	1.02	030534-3116.1	0.49645	12.77	1.16	030811-3845.4	0.55011	13.77	0.85
030850-5711.5 v	0.73877	13.23	0.84	031100-3520.8	0.60840	13.38	1.07	031113-2629.0 v	0.59732	11.51	1.04
031119-2853.6	0.55356	12.87	0.82	031141-5804.0 v	0.46961	13.68	1.36	031158-0348.6	0.45589	13.42	1.27
031245-5655.1	0.65281	13.67	0.87	031346-1412.7 v	0.64859	12.49	0.97	031541-4519.8	0.53071	13.88	1.26
031826-4936.0 v	0.64367	12.03	1.19	031948-3331.0	0.63438	12.99	0.96	032145-5645.6	0.54559	12.89	0.85
032229-8122.1 v	0.45624	13.93	1.21	032234-3804.6	0.72941	13.20	0.80	032347-4801.3	0.56467	13.21	1.20
032429-4857.0	0.66219	12.48	0.68	032438-2334.7	0.62960	12.33	0.65	032520-6503.3 ?:v	0.49205	11.33	0.88
032601-4126.0 ?	0.53125	13.25	0.53	032749-3854.6	0.60889	13.33	0.91	033022-3603.2 v	0.60535	10.89	0.64
033103-4523.8	0.64962	13.54	0.50	033625-4937.3	0.54860	13.49	1.16	034307-1926.5	0.61509	13.26	1.00
034920-2310.6	0.63866	13.29	1.09	035618-2759.7 ?	0.62489	13.67	1.05	040011-1949.6	0.60224	12.36	0.54
040054-4923.8 :	0.71603	13.77	0.60	040142-7839.6 v	0.61872	13.35	1.37	040312-1951.2	0.60883	11.69	1.02
040327-8148.3 v	0.63158	13.21	1.17	040446-2643.0	0.60275	12.46	0.71	040500-4457.1	0.56685	12.87	0.48
040615-3050.0	0.44432	12.05	0.16	041021-2619.1	0.50879	13.94	1.48	041117-1350.9	0.55429	12.60	0.92
041148-3042.6 ?	0.68909	13.39	0.41	041321-3833.0	0.57650	12.43	0.76	041605-1434.0 v	0.48215	13.68	1.25
041749-4800.4	0.57608	12.00	0.92	041801-0342.8 ?	0.48719	10.95	0.15	042014-4236.2	0.47105	13.39	1.30
042055-2302.9 ?	0.58069	13.10	0.91	042116-3518.2 v	0.66278	12.53	1.19	042135-6640.2	0.45884	13.16	1.34
042245-8633.9 v	0.52348	13.61	0.75	042602-5116.7	0.48942	13.31	0.68	042640-3618.6 v	0.38653	12.58	0.84
042716-4828.0	0.61306	11.63	0.54	042805-1710.6 v	0.65691	13.11	1.19	043641-0440.2 ?	0.63054	12.65	0.38
043659-2244.2 ?	0.57406	13.68	0.72	043801-0845.3 v	0.48162	13.13	1.25	044030-7326.3 v	0.53712	12.91	1.02
044040-0911.4 v	0.66000	13.24	0.69	044200-2528.8	0.58750	14.25	0.82	044203-5133.6 v	0.73207	11.89	0.76
044525-2455.6	0.50502	13.09	1.17	044541-3458.7	0.65857	13.13	0.57	044620-6825.5 ?	0.51627	13.54	0.95
044753-1120.8	0.63998	12.85	0.50	044801-2531.4	0.54876	12.58	0.96	044901-4523.0 ?	0.58090	13.46	0.80
044944-1544.5 v	0.58725	9.36	0.87	045007-5039.4 v	0.44036	11.02	1.15	045018-4311.0	0.47275	12.70	0.30
045129-7137.7	0.68879	12.99	0.73	045314-3749.2 v	0.41979	11.62	1.26	045337-1926.0 v	0.56989	11.13	0.88
045426-6626.2 ?	0.60885	12.31	0.58	045618-2113.0 v	0.58148	10.13	1.19	045647-3512.8	0.58091	13.66	0.96
045833-7020.8 ?v	0.97341	12.74	1.07	050124-1849.5	0.59882	12.79	0.68	050138-3908.0 v	0.57088	12.46	1.01
050206-6716.9	0.52530	13.56	1.03	050332-6543.0 v	0.38661	13.68	1.06	050708-6853.3 v	0.49152	12.97	1.04

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as RRAB.											
050747-3351.9 v	0.48734	12.14	0.94	050838-5602.9 v	0.51609	12.25	0.93	050956-7138.7 v	0.40981	13.18	0.91
051001-4123.1	0.58679	13.66	1.09	051101-3851.6	0.55951	14.09	1.60	051118-0131.5	0.69491	11.60	0.47
051209-1053.8	0.56876	13.29	1.11	051320-5835.1	0.45873	13.48	0.81	051423-5353.9	0.54793	13.38	1.09
051508-4137.7 v	0.47882	10.75	0.90	051550-7036.7 v	0.55337	13.48	1.29	051623-7527.4	0.83396	13.20	0.70
051651-2728.4 v	0.53658	12.43	0.92	051703-0515.8 ?	0.36965	13.62	0.57	052122-6221.4	0.64967	12.18	0.43
052402-2247.4	0.64987	13.83	0.64	052406-6925.2 v	0.55311	13.78	1.36	052415-1406.0 v	0.56010	12.07	0.79
052722-5533.8	0.54634	13.77	1.17	052727-0351.6	0.58740	13.36	1.04	052945-6417.2 v	0.48284	13.13	1.15
053104-6434.3 ?	0.49124	9.29	0.14	053212-1305.6	0.53644	13.25	1.21	053436-7539.8 v	0.36430	13.54	0.91
053552-0508.2 :v	0.297630	12.40	0.38	053750-2247.5 ?	0.64660	12.58	0.29	053951-4925.7	0.61025	12.82	0.45
054230-1622.9	0.53890	12.01	0.99	054238-2557.3	0.51690	13.37	1.10	054343-2036.2	0.342338	14.28	1.15
054557-1441.5	0.59940	12.97	1.02	054838-1929.5	0.55879	13.25	1.00	054843-1627.0 ?:	0.37677	12.96	0.61
055109-7219.4	0.55888	13.67	1.20	055133-6041.6	0.44104	13.07	0.97	055620-1848.1	0.73075	12.87	0.63
055651-2740.0 v	0.46876	11.91	1.24	055740-2422.6	0.53818	14.00	1.08	060031-2136.3	0.58404	12.76	0.78
092907-8829.7 v	0.38355	12.65	0.67	142904-8838.7	0.64655	11.90	0.98	182858-8832.5 v	0.57302	13.32	0.99
194301-8746.9	0.58171	13.80	1.20	214719-8739.1 v	0.45803	12.53	0.96	215336-8246.8 v	0.62187	11.50	1.01
223645-7807.2 v	0.63902	12.48	0.69	231215-7434.7 v	0.39402	12.28	1.18	232933-7232.6 v	0.55005	12.29	0.98
233743-7950.0 v	0.41243	13.69	1.37	233951-3530.4	0.67750	12.67	0.40	234023-3818.9 v	0.58585	12.80	0.91
234033-5336.9	0.64335	13.22	0.74	234507-5000.0 ?	0.48061	12.93	0.27	234631-8130.0 v	0.58339	14.01	1.12
234854-4141.3	0.73826	13.97	0.81	234948-7411.6 v	0.55894	13.92	0.87	235033-7840.9 v	0.56772	12.83	0.74
235118-7416.2 v	0.56025	13.78	1.25	235401-0740.7	0.52891	12.09	0.87	235442-3328.8 v	0.61676	12.57	0.83
235522-2618.1 v	0.72775	12.29	0.75	235702-5826.0 :	0.68802	13.72	0.94	235807-3345.2	0.65024	13.68	1.16
235811-2000.7 ?	0.53128	13.60	0.90								
Stars classified as DCEP-FU.											
000614-3249.0 :v	150	7.62	1.69	001255-0341.6	74.4	11.40	0.19	001507-0320.0 ?	8.834	11.52	0.27
001902-4853.7	14.41	12.24	0.29	001912-7509.3 ?	9.190	11.32	0.16	002606-1542.3 ?	20.56	9.56	0.16
002737-8321.4	9.721	12.33	0.21	003005-3319.1	24.75	11.30	0.17	003041-4416.4	1.9007	13.02	1.02
003256-7349.4 v	15.85	14.31	1.02	003307-3201.3 ?	27.60	9.84	0.18	003510-5020.1 ?:	8.354	9.85	0.13
003918-7202.0 v	18.86	13.51	0.97	004045-7343.0 v	28.45	13.75	1.15	004156-7332.3 v	16.79	13.71	0.65
004224-7747.6	2.5716	10.29	0.09	004349-7336.8 v	32.08	13.45	1.25	004506-1854.2 v	106.1	12.53	0.97
004655-7242.9 v	65.7	12.09	1.05	005028-7245.1 v	84.6	11.69	0.71	005345-7217.3 v	73.7	12.00	0.71
005557-7159.0 v	42.6	12.92	0.85	005632-0809.1	31.06	11.98	0.28	005754-7224.8 v	33.12	13.11	1.28
005905-7203.8 v	16.24	13.90	0.89	005919-5954.7	5.868	13.00	0.53	010012-3818.6	20.43	10.57	0.21
010145-1208.1	26.89	10.09	0.18	010150-7205.8 ?v	50.2	12.84	0.66	010318-7233.1 v	17.24	13.69	0.76
010322-7054.3 :v	215	12.17	0.89	010416-7245.3 v	208	11.80	1.04	010424-7200.6 v	29.09	13.50	1.24
010647-7316.2	15.94	13.61	0.91	010718-7313.4 v	32.86	13.36	0.80	011241-2910.8 v	7.935	8.89	0.10
011355-5308.3 ?	14.36	10.06	0.18	011400-1222.0 ?	8.569	11.84	0.20	011423-7157.7	11.27	14.10	1.13
011428-7239.9	41.9	12.59	0.96	011658-7343.1 v	25.42	13.74	0.92	011753-7337.4 v	22.65	13.31	0.74
011948-6933.4	22.92	9.58	0.22	012000-8133.4 :v	108.0	12.60	1.19	012008-7254.2 ?v	20.06	13.23	0.80
012831-7347.8 v	28.94	13.03	1.29	013552-7353.3 v	15.16	13.72	0.92	014032-7430.4 v	33.36	12.70	1.23
014049-6729.7 ?	1.1228	13.85	1.47	014818-7303.5 v	17.67	13.85	0.79	015147-7334.1 ?	6.985	10.82	0.14
015825-2422.7 ?v	91.4	10.66	0.37	015930-3129.3 v	128	10.70	1.28	015939-1734.8	2.5005	11.13	0.11
020731-2053.2	42.4	10.64	0.22	020851-0721.5	8.932	10.24	0.19	020909-7626.2	53.2	12.06	0.55
021313-8042.6 ?	80.7	10.92	0.14	021710-6325.0	31.47	10.04	0.27	022049-7305.1 v	21.38	13.47	0.94
023010-6506.2 v	237	10.86	1.37	023425-0243.8	40.5	11.10	0.23	024704-4018.1 ?	21.20	11.84	0.21
025112-4753.2	13.18	11.74	0.43	030439-8114.0	17.90	9.99	0.11	031115-5701.5 ?	10.608	11.33	0.23
031332-3644.5 ?	38.2	11.39	0.19	031339-1026.5 v	2.2132	11.09	0.66	031347-1701.9	11.71	11.34	0.21
032642-5901.1	28.03	10.31	0.16	032738-8050.6	20.30	10.85	0.14	032740-5809.8	4.075	10.99	0.34
032919-0701.9	15.48	13.27	0.56	033149-6331.9 ?	2.7320	10.89	0.14	033410-4143.8 ?	15.35	11.46	0.26
033936-2922.0	22.33	12.77	0.26	034025-7054.6 ?	18.83	10.69	0.29	034037-6601.8	22.54	10.86	0.12
034103-3029.6	32.09	11.28	0.17	034324-6126.0 :	13.36	12.94	0.26	034325-4525.0	18.51	10.28	0.17
034951-2355.8 :v	125	11.89	0.74	035830-5016.4 ?	8.325	9.91	0.11	035937-3953.3	9.922	9.59	0.24
040404-3801.0	6.307	10.67	0.15	040730-3526.1 ?	28.89	10.71	0.17	040958-5520.2	9.209	13.86	0.67
041425-2049.5	11.39	9.39	0.11	041443-1852.2 ?	60.3	9.42	0.10	041847-3003.8	8.888	11.39	0.13
042538-2702.7 ?	11.96	11.42	0.20	043030-2806.5 ?	33.81	11.60	0.18	043332-7835.7	38.6	11.59	0.22
043939-0501.9	1.7829	11.19	0.47	044049-2150.9 ?	25.33	11.14	0.12	044312-3748.9 ?	45.7	11.41	0.14
044324-6913.7 v	8.864	14.01	0.90	044518-6916.6	21.17	13.37	0.39	044529-4656.4	16.38	12.91	0.30
044537-7015.0 v	28.34	13.10	1.22	044707-6917.7 v	22.52	13.62	1.12	044908-4400.4 ?	31.28	11.31	0.17
044955-6945.3 v	27.04	11.80	0.30	045004-6815.6 v	22.33	13.03	0.87	045110-5920.7 ?	21.82	11.83	0.16
045124-3817.4 ?	22.73	9.67	0.14	045205-0941.8	4.778	11.19	0.22	045247-6820.9	20.11	14.15	0.85
045319-3131.9	1.2215	13.07	0.59	045423-7054.1	34.5	12.47	1.05	045506-6728.6 v	29.85	13.32	0.66
045541-6625.7 v	98.2	11.79	0.53	045627-6922.9 v	30.32	12.55	0.38	045702-6759.7 v	45.1	13.05	0.65
045713-6723.0 v	22.70	13.17	0.76	045745-6542.5 v	24.21	12.64	0.76	045751-6750.3 v	13.98	13.59	0.74
045751-6957.4 v	23.34	13.06	1.17	045805-6927.2 v	36.8	12.92	1.01	045811-6957.0 v	39.4	12.57	1.06
045836-7006.6 v	17.28	13.46	1.39	045847-7003.7 v	15.89	13.77	0.83	045848-6719.0 v	15.22	13.21	0.63
045941-6927.4 v	31.80	12.96	1.12	045949-4328.0	16.72	11.59	0.29	050008-6827.0 v	133	11.68	1.37
050055-6638.2 v	27.89	12.64	1.05	050154-6854.3 v	20.78	13.10	0.75	050252-7142.1 ?	12.25	14.28	1.35
050308-6613.8 v	23.96	12.81	1.22	050308-6913.4 v	17.50	13.13	0.56	050326-6909.0	21.26	13.10	0.80
050346-6852.6 v	22.34	13.41	0.75	050349-6856.1 v	25.63	13.18	0.74	050609-7115.4	42.2	12.34	1.20
050615-6640.8	36.5	12.21	1.34	050620-8641.8 ?	7.980	11.30	0.21	050648-7002.2 v	47.4	12.45	1.03
050716-6853.0 v	52.2	12.07	0.40	050720-7027.2 v	26.36	12.83	1.21	050737-0140.1 :	6.416	12.34	0.26
050803-7157.6	15.63	13.69	1.30	050819-6846.7 v	30.40	12.74	0.73	050904-7021.9 v	13.64	14.02	0.83
050915-3813.2 ?v	50.6	9.35	0.26	050920-7027.4 v	37.5	12.43	1.13	051354-6703.8	48.4	12.25	1.29
051514-6549.1 v	17.57	13.70	1.42	051833-6712.9	27.96	13.66	0.82	051908-3740.6 ?	17.98	10.56	0.21
052018-6756.8 v	28.27	13.77	1.27	052032-3036.7 ?	54.4	10.72	0.15	052112-6903.1 v	23.61	13.16	0.89
052429-7217.1	21.29	13.52	0.89	052502-0052.4 :	70.6	10.71	0.22	052508-6738.7 v	48.1	11.88	1.09
052545-7402.7	20.72	11.93	0.21	052548-6721.2 v	13.77	13.57	1.26	052606-6710.9 ?	1.6510	12.29	0.37
052655-6958.9 v	28.12	13.09	0.71	052700-7138.6 v	16.32	13.60	1.29	052926-6614.4 v	16.89	13.77	1.21
053003-6556.1	26.10	13.10	1.21	053014-6926.3 v	23.09	13.15	0.67	053122-7057.4 v	52.5	12.46	1.01
053259-6643.5	16.19	13.67	1.01	053322-0309.9	65.0	11.35	0.23	053416-3626.0 v	22.35	9.53	0.18
053504-0508.2	5.671	10.59	0.24	053537-6832.1 v	24.28	12.82	1.23	053543-2955.7 ?v	3.1054	9.80	0.14
053550-6642.1 ?v	30.34	12.52	1.34	053813-2124.7 ?	17.93	11.25	0.12	053820-2021.6 :	89.9	12.14	0.67
053954-6750.2 v	24.12	13.49	0.93	054041-1058.2 :	116	12.93	0.91	054118-7211.9 v	12.73	13.82	1.39
054420-5523.5 :	17.95	11.45	0.41	055137-1432.2	1.08259	12.68	1.00	055223-2036.0 ?	25.54	9.95	0.09
060530-5513.2	151	10.25	1.09	072738-8622.6	60.6	11.93	0.38	100112-8844.6	43.5	10.70	0.27

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as DCEP-FU.											
222914-8149.7 ?	62.3	11.72	0.14	224542-8654.8	6.068	12.41	0.26	231359-7435.6 ?	18.81	10.79	0.11
231839-6752.5	2.5526	13.81	1.05	233049-8346.7 ?	21.41	10.60	0.16	235119-5250.6	43.3	12.50	0.30
235511-4958.4	12.45	10.59	0.19	235638-2738.7 ?	26.77	12.95	0.33	235930-8636.3 ?	14.96	12.27	0.22
Stars classified as DCEP-FO.											
000735-1146.5 ?	0.87971	11.14	0.17	002743-4126.3 ?	0.48520	10.58	0.12	003414-2911.3 ?	5.649	12.41	0.20
003418-4152.3 ?	0.51340	12.75	0.26	005218-6826.4	3.1286	12.08	0.18	005929-1206.9 ?	2.5932	12.04	0.14
010207-1234.1 ?	3.768	13.67	0.47	010241-4321.5 ?	0.88988	10.51	0.11	011329-0738.1	0.57969	11.94	0.29
012110-3729.5 :	0.63955	10.45	0.13	012943-4900.0 ?	0.57251	13.54	1.14	014028-1606.5 ?	1.5604	10.60	0.12
014508-1914.2 ?	2.5232	12.08	0.19	015523-3846.3 ?	0.89193	11.08	0.15	015656-4149.0	2.5599	12.44	0.25
020017-1620.7 v	0.82318	9.38	0.44	021947-1025.7 v	0.53187	10.79	0.25	022023-3221.6 :	0.62177	12.66	0.27
022821-3557.1	0.55974	14.12	0.86	023314-3112.8 ?	0.94820	10.18	0.18	024033-4034.9 :	0.49512	9.84	0.12
024755-1036.0 ?	0.75161	11.70	0.17	025357-3707.2	1.5735	12.71	0.24	025436-1315.5	0.69253	13.06	0.79
031152-1121.3 v	0.71388	9.68	0.59	031243-6524.0 v	0.54902	14.00	0.89	031305-8341.8 ?	0.71138	13.92	0.61
034338-2504.2 ?	0.55994	13.23	0.67	034612-2725.1 ?	0.61744	13.80	0.65	034731-4202.3 ?	0.55162	14.13	1.15
035525-3137.9 ?	0.73738	11.52	0.17	040037-6014.0 ?	3.2981	11.85	0.39	041015-7926.9 ?v	1.0912	13.42	0.64
041743-1754.4 ?	4.410	11.39	0.13	041928-1225.3 ?:	0.91161	12.02	0.20	042351-7654.7	0.65192	12.84	0.62
043142-0322.1	0.96551	12.03	0.22	043340-4437.7	1.6478	11.37	0.11	043516-4112.4	0.64100	12.68	0.29
043811-0726.3 ?	2.1092	10.52	0.13	044131-5216.6	0.54869	13.72	0.87	044315-4106.3 :	0.46628	10.39	0.14
044546-1748.7	0.91961	12.84	0.92	045037-1651.7	0.51627	11.62	0.14	045305-4844.6 ?	4.539	10.74	0.10
050421-2129.6	5.378	11.63	0.18	050601-6906.3 v	0.95220	13.79	1.15	050710-4923.1 ?	0.61643	13.77	0.79
050803-7903.8	0.58334	13.75	1.20	051222-2111.6	0.46053	13.41	0.58	051311-3031.8 ?	5.615	11.33	0.23
051605-6006.9	1.07032	12.09	0.24	051819-2522.4	1.2299	11.72	0.18	052652-2504.8 ?	0.48578	9.87	0.13
053236-0523.0 ?v	1.3269	11.98	0.39	053407-3245.6	0.58504	14.13	0.86	053559-2437.1 ?	0.54686	13.66	1.04
053600-3116.1 ?	4.140	12.67	0.27	054738-0707.6 ?	0.63001	11.30	0.23	054806-2959.3 :	0.51163	13.48	1.09
060138-2153.1 ?	0.52202	12.32	0.19	060537-2453.4 ?	0.87835	13.89	0.57	061712-7328.9	0.54226	11.24	0.73
073113-8432.3 v	0.55807	12.47	1.05	230450-7311.6 ?:	0.54612	14.29	0.93	231538-7848.9 v	0.62762	14.00	0.78
232152-6942.2	1.8732	9.96	0.12	232705-6540.6 :	0.52201	14.00	1.35	234624-5642.0 :	0.49061	13.91	1.18
Stars classified as MIRA.											
000208-1440.5 v	352	8.35	5.27	000736-2529.5 v	321	13.29	2.06	000837-3913.2 v	304	9.26	5.41
000842-8611.3 v	340	11.35	2.35	001522-3202.7 v	425	6.72	5.42	001654-3013.8 v	171	11.44	3.21
002231-1832.7	197	12.37	2.47	002308-6140.3 v	246	8.83	5.20	002404-0919.7 v	320	8.46	5.40
002912-3754.5 ?v	214	9.06	4.49	003026-4624.6 v	259	10.55	3.78	003419-4300.1 v	144	10.81	2.05
003503-5012.3 v	227	9.54	5.00	003939-8002.1 v	302	11.94	2.37	004930-3454.8 v	257	10.11	3.82
005300-6953.2 v	221	9.10	4.87	005712-7459.9 v	242	8.47	5.13	010529-3141.6 v	329	9.76	2.58
010645-0128.9 v	189	9.37	4.04	011028-7650.9 v	218	9.98	4.43	011136-3006.5	333	10.30	4.66
011402-5646.7	278	11.15	3.81	011953-5555.1 v	352	9.16	5.90	013334-7512.4 v	311	9.57	3.32
013407-1014.1 v	176	11.00	4.40	013426-1858.5 v	258	10.22	2.05	015329-4900.4 v	198	10.33	4.70
020534-5708.6 v	295	9.56	2.61	021600-2031.2	368	8.68	5.08	021921-0258.8 v	418	4.89	4.27
022148-6305.1 v	309	9.63	3.48	022516-5934.3 v	336	9.48	4.95	022602-0010.7 v	166	8.19	5.24
022735-6747.2	140	12.15	1.99	022915-2605.9	458	8.73	2.49	023124-4127.1 v	279	10.94	2.23
023158-1930.9	313	12.87	1.31	023344-1308.9 v	219	8.14	5.64	023552-6235.0 v	203	8.79	5.29
023723-2658.7 v	523	10.09	4.71	023835-5408.1 v	147	11.64	3.18	024422-2912.4 v	265	8.67	1.99
024745-5903.1 v	287	8.61	2.10	025353-4953.4 v	382	7.22	4.32	025816-1557.5	231	12.35	2.26
030052-5038.5 v	218	8.24	4.98	031118-2341.7 v	310	9.61	3.00	031153-1152.5 v	164	10.92	3.90
031926-0103.9 v	172	8.88	3.92	032844-5558.8 v	155	11.52	2.90	033229-7626.9 v	431	10.23	4.06
033412-1609.8 v	360	10.22	3.48	034431-2513.6 v	309	9.15	5.79	034748-6230.9 v	268	9.81	4.65
035003-5721.2 v	256	8.86	2.39	035029-2457.4 v	275	9.18	3.73	035155-7358.1	118	11.57	2.91
035247-4549.8 v	344	7.51	6.04	035343-5456.1	215	11.85	3.41	035514-2401.9 v	239	7.77	4.68
040412-4550.3	277	11.12	3.54	040551-5450.0	162	10.01	2.55	041131-2508.0 v	400	8.84	5.12
041741-6035.7 v	265	11.56	2.76	041755-1830.4	311	10.47	2.19	042020-5420.2	161	9.79	4.20
042850-5430.1	186	10.14	4.67	043333-6301.8 v	277	7.06	6.65	043648-7018.6 v	273	12.06	3.21
043917-7421.7 ?v	54.7	12.48	2.16	044030-3814.2 v	387	8.98	5.10	044148-0757.3	287	10.40	2.75
044509-2351.3 v	196	11.13	3.89	044550-5947.2 v	166	8.51	4.50	044730-5541.1 v	236	10.50	3.83
045059-2859.9	145	12.45	2.35	045524-0655.9 v	275	10.46	3.59	045701-8416.1 v	446	10.74	4.08
045936-1448.4 v	397	7.52	1.90	050135-6805.9 v	360	11.58	3.21	050417-2228.5	192	12.48	2.42
050451-2154.3 v	345	8.04	3.75	051009-6419.1 v	365	10.47	3.74	051057-4830.4 v	398	8.24	5.01
051102-0513.8 v	126	11.54	2.83	051506-4655.1 v	198	8.40	5.17	051639-4053.0 v	488	10.40	2.33
051820-1621.1 v	271	9.03	5.46	051917-3342.5 v	233	8.04	3.86	051926-1350.9 v	206	10.84	4.10
052145-1555.6 v	199	10.55	2.67	052241-1208.5	184	12.15	2.29	052428-1039.4 v	451	9.78	2.11
052544-1423.5 v	173	11.09	3.65	052606-8623.3 v	436	8.19	5.29	052613-0016.9 v	193	9.24	1.90
052613-2850.4	170	10.74	4.32	052901-0441.6 v	420	8.42	4.85	053221-1037.4 v	145	10.13	2.33
053246-2800.8 v	260	11.62	2.32	053410-5519.5 v	298	10.56	4.31	053600-4404.6 ?v	190	11.18	3.16
053656-1304.6	246	11.75	2.95	053717-5538.4 v	315	9.87	4.16	054053-7320.9	195	12.61	2.31
054134-0407.9 v	136	10.42	2.68	054233-2341.7 v	412	8.85	5.61	054906-2241.3	191	11.71	2.11
054957-5252.1	162	11.16	2.09	055033-2911.9 v	345	8.06	4.18	055329-5226.0	102	12.07	2.33
055412-2241.8 v	466	9.91	2.24	055938-2555.9 v	145	12.65	1.75	060316-1003.6 v	264	12.02	1.63
060913-2743.1	347	12.73	1.45	060932-6007.3 v	152	9.87	2.95	060946-1306.9 v	142	11.34	2.26
113924-8709.4	186	11.81	3.28	174436-8629.2 v	332	10.75	2.65	180844-8647.9 v	248	8.13	5.52
225223-7918.3 v	138	12.09	2.32	230109-8703.2 v	175	9.93	3.87	232340-6622.0 v	149	10.99	3.58
234349-1517.1 v	343	8.00	2.95	234405+0022.9	252	10.04	2.19	234917-4306.7	265	10.67	3.71
235627-4947.2 v	262	8.69	4.58	235630-5412.1	160	12.21	1.96	235726-6523.1 v	295	9.80	5.22
235754-0857.5	243	9.98	4.21	235844-3927.0 v	511	9.67	5.91	235905-5324.1 v	268	11.05	4.88
Stars classified as PULS.											
004145-7343.4 v	125	11.68	0.57	010401-7213.9 :v	16.63	13.45	0.88	012727-3645.8	10.442	11.04	0.34
015034-1739.0 v	222	9.86	1.20	031101-6527.8 :	64.2	12.09	0.59	033247-6356.4	134	12.03	1.42
035510-5330.5 v	166	10.35	1.48	044548-4300.9	66.77	13.38	1.61	045627-6441.7 v	112	11.72	1.29
Stars classified as MISC.											
000118-3551.7	25.67	9.84	0.35	000119-3505.9	37.3	10.77	0.27	000120-5834.8	53.6	9.53	0.33
000139-0345.4 v	150	12.82	1.04	000142-4229.3	32.44	10.71	0.29	000155-6707.7	228	12.74	2.41
000157-5250.1	30.95	10.78	0.26	000239-1926.7 v	72.8	9.69	0.35	000309-1050.5	68.2	12.01	0.89
000341-3906.9	72.6	11.65	0.59	000407-0818.7	64.9	12.27	0.57	000416-5815.9	88.9	11.01	0.18
000457-5554.1	34.49	10.50	0.25	000506+0043.8	68.5	10.79	0.58	000600-4840.8 v	41.6	9.79	0.25
000633-3849.0	37.2	11.41	0.23	000636-3235.6 v	71.3	8.97	0.56	000636-3746.5 v	53.3	9.54	0.41
000659-0846.7	43.1	9.59	0.20	000716-6338.3	39.7	10.12	0.78	000724-5212.2	42.3	10.73	0.29

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as MISC.											
000732-1954.5	59.1	13.12	0.49	000739+0120.8	1.9399	10.07	0.53	000819-4949.0	59.5	11.01	0.85
000829-2558.5 v	41.9	8.78	0.27	000842-1151.2	35.64	11.27	0.19	001027-5635.0	20.95	9.43	0.17
001152-4807.8	33.20	9.16	0.21	001201-2434.0	101.2	9.91	0.73	001202-5440.0	106.8	12.17	0.86
001205-1305.9	256	11.61	0.27	001215-8312.0	27.29	10.94	0.18	001217-3511.2	64.4	11.12	0.33
001230-7405.1 v	112	9.93	0.52	001237-1639.5	100.6	11.58	0.62	001246-1101.3	197	9.45	1.52
001256-2451.5	4.004	11.30	0.14	001330-7010.3	28.11	10.47	0.23	001347-0748.6	120	11.06	1.00
001512-6013.5 v	103.3	9.37	1.48	001513-6851.0 v	34.86	8.77	0.16	001521-4637.9	48.2	11.11	0.37
001549-7625.8	46.2	9.71	0.21	001714-0536.7	377	10.88	0.46	001724-7559.4	41.6	11.70	0.26
001854-7401.9 v	43.9	11.80	0.20	002020-5709.8 v	53.0	8.82	0.39	002023-2323.0 v	97.7	10.38	0.49
002108-4802.6	350	10.25	0.45	002109-0221.5	26.46	9.50	0.39	002209-7707.1	58.6	10.43	0.59
002219-8351.1	189	12.86	0.92	002251-5920.0	71.1	10.69	0.67	002258-7207.0 v	257	11.43	0.51
002331-7222.6 v	64.9	11.87	0.39	002334-1751.5	29.12	13.23	0.33	002340-2049.7	44.1	10.21	0.51
002411-1649.7	59.7	9.39	0.57	002417-7558.4	513	11.83	1.04	002430-3244.2	40.3	10.76	0.26
002431-0954.0	103.9	10.67	0.43	002458-7041.8	32.79	9.75	0.14	002504-7209.5 v	44.7	11.44	0.49
002602-3451.8	54.9	9.83	0.27	002656-7933.0 v	103.2	12.01	1.41	002706-0636.3 v	179	8.99	0.63
002708-8436.6	10.545	10.24	0.09	002718-6819.8	37.8	9.98	0.18	002808-8224.4	45.5	9.96	0.21
002941-2034.8	46.8	10.26	0.19	003030-5612.1 v	127	11.44	1.07	003037-7550.1	47.9	10.79	0.12
003114-1051.2	32.01	9.01	0.13	003125-0938.5	282	13.02	0.83	003222-1839.1	64.1	11.72	0.48
003256-0553.1	39.6	11.44	0.29	003314-1043.7 v	96.8	9.47	0.13	003320-0623.6	36.5	9.57	0.42
003336-4847.6	71.5	12.97	0.53	003547-7352.7 v	39.3	8.70	0.12	003606-5549.5 v	46.8	10.88	0.35
003613-5231.2	39.2	11.41	0.18	003615-1711.0	44.2	10.56	0.26	003629-3020.0 v	51.4	8.84	0.32
003651-4439.4	48.1	9.65	0.20	003723-3357.4	49.5	11.50	0.24	003753-8237.2 v	107.7	9.22	1.02
003859-1927.7	42.0	11.58	0.28	003925-6307.2	50.2	9.74	0.31	004108-2720.8	0.329590	10.38	0.20
004201-0938.9 v	163	8.71	0.30	004237-6740.4	78.8	11.38	0.63	004409-0214.8	73.0	8.98	0.40
004430-3339.2 v	31.76	9.00	0.25	004451-7615.3	79.5	12.41	0.42	004506-7305.5	324	12.51	0.63
004619-7240.6	421	12.86	0.85	004658-4758.8 v	69.1	9.22	0.50	004753-0119.0 v	98.2	11.59	1.29
004842-0631.9	25.67	10.17	0.34	004854-7322.7	213	12.69	0.55	004901-5605.8 v	510	10.41	0.18
004902-7259.6	300	12.40	0.59	004927-7318.3 v	384	11.59	0.23	004929-5545.9 v	38.7	9.62	0.33
004942-1141.0	59.2	10.34	1.07	004957-7337.7	141	12.75	0.29	005002-4843.8	200	9.91	1.08
005009-0223.4	447	11.90	0.75	005106-7243.4 v	420	11.16	0.22	005124-5937.8 v	75.5	9.66	0.38
005125-7238.8 v	425	12.49	0.63	005133-0814.9	43.1	9.67	0.75	005151-5550.4	64.8	12.08	0.49
005153-7211.6	341	12.79	0.57	005311-7304.1 v	326	11.95	0.21	005336-7301.6	211	12.69	0.32
005338-6115.9	10.828	9.48	0.12	005348-7202.2	1484	12.42	0.38	005354-7142.8	350	12.33	0.86
005444-7005.6	91.4	12.41	0.71	005455-8002.4 v	88.9	10.53	0.97	005507-7300.7	309	12.43	0.35
005536-7236.4 v	396	12.74	0.37	005553-7318.4 v	79.3	11.67	0.57	005606-5810.0	49.0	11.37	0.29
005611-1329.7	39.5	12.45	0.21	005627-7328.4	4.011	12.80	0.27	005827-2422.2	50.6	10.27	0.29
005931-7215.8 v	407	12.54	0.33	005935-7204.1 v	321	12.53	0.48	010014-4831.1	0.39889	12.97	0.60
010042-7210.6 v	351	12.46	0.61	010044-3228.4	248	11.25	0.40	010054-7251.7 v	394	11.64	0.66
010056-7137.9 v	400	11.68	1.62	010216-1050.3	56.4	9.99	0.24	010319-6421.8	73.3	9.31	0.40
010328-7252.2	513	11.71	0.48	010329-5645.6	145	11.60	0.45	010431-7032.4 v	47.2	8.80	0.40
010439-7201.4	412	12.06	0.65	010520-8152.6 v	48.7	12.10	0.54	010534-1131.9	48.6	12.21	0.39
010628-2055.6	58.4	10.73	0.34	010646-4904.0	27.30	10.78	0.15	010648-3615.1	35.53	10.18	0.14
010648-7216.3	379	11.55	0.59	010718-7228.1 v	318	10.08	0.32	010753-7210.7	256	12.13	0.25
010753-8631.2	82.3	11.57	0.24	010807-0750.7	48.3	11.31	0.33	010810-5114.0	40.1	10.69	0.12
010839-1703.8 v	56.6	8.70	0.43	010852-5530.4	59.7	10.74	0.27	010906-7238.5	85.1	9.43	0.51
010931-5249.7	34.18	10.64	0.26	010939-7320.0 v	545	11.56	1.10	011003-7236.9	377	12.86	1.67
011022-5433.7	24.43	9.71	0.16	011101-7136.5	69.2	11.45	0.34	011109-4241.4	63.9	9.35	0.67
011205-5145.1	41.5	8.88	0.19	011313-1655.2	34.76	10.05	0.14	011319-4004.4	53.0	11.09	0.98
011323-6734.9	28.34	11.11	0.26	011339-2617.2 v	50.7	10.68	0.37	011415-0210.7 v	325	8.60	0.59
011431-6722.1	39.3	10.35	0.21	011437-7348.9	129	13.00	0.56	011651-6101.1	211	11.53	1.24
011653-2350.7 v	67.8	9.62	0.64	011717-5851.1	46.5	11.49	0.26	011725-7343.6	38.9	11.04	0.32
011924-2314.2	34.61	10.81	0.29	012010-5145.4	38.8	9.19	0.21	012017-0944.9 v	21.75	9.12	0.16
012037-0824.9 v	151	9.23	0.56	012057-6938.4	73.4	11.89	0.53	012236-0456.2 v	96.6	9.87	0.30
012247-1609.0	67.7	13.49	0.78	012318-6231.4	48.9	9.83	0.33	012325-1515.3	17.52	10.15	0.15
012326-4359.4	99.0	12.40	0.67	012340-7823.2 v	83.9	12.66	0.74	012401-3736.0 v	46.6	9.07	0.27
012410-7223.5 v	341	12.50	0.50	012416-1646.8	51.3	10.48	0.49	012438-5733.8	33.67	10.30	0.17
012450-4245.8 v	19.37	8.94	0.11	012514-4555.6 v	29.18	8.68	0.35	012646-6224.5	52.9	10.60	0.36
012702-1837.8	72.8	10.48	0.21	012806-3142.2	61.4	10.21	0.60	012810-4524.6 v	107.1	11.71	0.99
012850-2729.1	31.04	11.85	0.17	012918-7302.0	186	11.47	0.22	013032-7318.7 v	391	12.40	0.76
013139-7056.0	70.5	9.36	0.15	013200-1649.4	98.3	11.38	0.32	013404-4314.5 v	53.2	9.88	0.43
013407-2246.7	21.24	9.04	0.15	013420-6431.1 v	40.4	9.00	0.21	013503-8255.7	49.2	11.97	0.44
013547-3837.1	25.29	8.64	0.16	013548-1122.5 v	218	9.58	1.50	013608-3511.2	127	11.67	0.70
013632-5019.8	0.174195	14.46	0.98	013732-3406.0	68.1	11.76	0.48	013935-0754.4	98.0	11.18	0.68
014000-1206.2	102.4	11.38	0.50	014030-6116.8	38.7	10.12	0.13	014124-6906.1	77.4	10.36	0.83
014138-5934.9	39.8	10.70	0.37	014224-4640.9 v	319	9.51	0.59	014318-3618.9	83.6	11.73	0.29
014348-6713.9	60.3	11.50	0.32	014352-3409.0	26.98	9.72	0.19	014420-2044.5	51.0	11.47	0.56
014423-3453.5	61.8	10.03	0.50	014438-7722.2 v	46.5	11.35	0.32	014458-8011.1 v	56.5	8.99	0.42
014532-4155.7 v	89.1	10.24	0.46	014553-2404.0 ?	53.2	10.93	0.23	014648-6448.8	71.2	10.95	0.33
014726-2658.1	26.36	11.56	0.15	014820-8300.1	138	10.34	0.23	014851-6439.4	63.3	9.88	0.33
014930-6917.8	42.9	11.11	0.25	014932-5421.4	52.3	10.21	0.25	014944-3537.9	69.8	10.00	0.35
014945-7134.3	99.0	10.21	0.41	014951-4258.2 v	46.9	9.87	0.21	014955-0451.6 v	58.1	8.56	0.61
015019-4716.2	44.0	10.41	0.33	015142-3648.3 v	46.7	9.34	0.23	015221-1505.3	45.2	9.72	0.37
015226-2646.0	63.6	9.73	0.08	015254-7209.2	51.9	10.11	0.48	015318-4614.4	123	12.29	0.58
015417-7622.8 v	62.4	9.91	0.32	015446-1809.1	337	10.90	0.73	015452-6616.0	58.3	11.43	0.49
015516-0219.4	71.6	12.10	0.41	015518-3548.2 v	63.9	9.19	0.79	015604-2526.3	30.54	9.65	0.11
015756-7830.5	31.15	9.26	0.28	015757-2628.9 v	79.5	9.45	0.57	015827-3648.9 v	100.5	9.48	0.35
020104-7805.5 v	53.7	10.71	0.19	020213-1619.9	39.2	10.09	0.17	020217-3057.5	386	11.05	0.70
020219-2751.6	107.0	11.35	0.37	020440-2018.0	43.6	11.79	0.46	020453-1344.1	34.54	11.20	0.23
020527-7448.6	44.3	12.68	0.59	020531-4834.4	79.2	9.98	0.41	020606-1012.7 v	80.9	9.25	0.33
020638-4035.8	55.2	11.90	0.32	020753-5645.6	70.7	10.85	0.12	020801-3619.1	66.2	11.57	0.56
020956-5909.3	0.317042	13.85	0.67	021008-5430.6 v	5.898	10.15	0.19	021011-5457.6	35.26	11.57	0.23
021029-1835.8	72.8	11.42	0.24	021106-5814.3 v	49.6	12.07	0.52	021140-2925.5 ?	28.14	9.89	0.21
021148-2341.7	79.6	10.00	0.37	021149-7129.1 v	85.9	9.01	0.78	021253-3224.8	0.267860	14.61	0.84
021255-6823.0	56.2	11.66	0.47	021327-2338.3	39.4	11.16	0.31	021411-8143.8 v	129	12.06	0.74

T a b l e 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as MISC.											
021446-5837.7	41.9	9.41	0.25	021511-1324.4	45.4	10.41	0.41	021712-7925.4 v	44.8	12.02	0.53
021741-5639.9	81.9	11.13	0.45	021829-6821.1	68.7	10.87	0.34	022145-3759.6	167	10.83	0.88
022243-1012.2 v	60.3	8.77	0.40	022332-4034.3	68.2	12.22	1.10	022458-5548.8	47.8	10.99	0.28
022508-1324.0 v	73.8	10.92	0.18	022552-2955.7	44.0	13.02	0.49	022600-1631.2	45.9	10.72	0.35
022607-5814.5	390	10.97	1.08	022729-1844.6	1.4186	11.84	0.18	022748-5736.8	69.6	11.30	0.24
022806+0005.2	141	11.48	0.56	022808-5542.4	36.7	11.07	0.15	022855-1553.8	51.5	9.41	0.33
022856-3630.3	32.29	10.97	0.35	022902-1637.2	40.3	10.38	0.56	023143-1430.3	68.2	10.67	0.69
023145-6222.6	43.5	10.74	0.27	023216-5502.8	113	12.88	0.50	023221-1359.7	33.86	10.34	0.20
023237-1643.6	65.2	9.96	0.91	023243-4550.7	35.9	11.10	0.23	023334-4010.5	157	9.79	0.14
023440-0247.7 v	21.02	8.64	0.15	023442-2053.8	126	11.17	0.49	023507-5935.9	125	12.93	1.55
023527-6011.0 ?	52.2	10.04	0.15	023535-6118.0	39.7	11.22	0.42	023553-1900.1	60.1	11.04	0.48
023716-0253.2	278	11.01	0.99	023747-4537.2 v	43.9	8.66	0.32	023916-2927.3	52.0	11.63	0.54
024003-0859.7	29.06	10.44	0.24	024042-5025.7	27.70	9.50	0.12	024101-6806.0	22.80	10.22	0.09
024129-3731.5	81.7	12.42	0.44	024156+0031.6	273	9.97	0.57	024210-3848.4	33.00	10.61	0.38
024229-8131.6	28.40	11.16	0.16	024230-8804.4	47.6	11.61	0.26	024234-3345.9	51.7	11.54	0.36
024235-6246.0	35.1	11.22	0.14	024258-2607.1 v	90.5	8.68	0.37	024412-2001.8	26.82	10.00	0.17
024415-5418.1 v	64.6	8.84	0.38	024452-1347.6	50.0	10.59	0.24	024528-1359.5	75.8	8.89	0.32
024542-3121.5	59.8	10.28	0.31	024642-4131.5 v	68.8	9.60	0.63	024749-3838.1	61.7	9.93	0.32
024820-6150.1	67.0	11.77	0.26	024924-8218.7	48.9	12.85	0.47	024943-6948.7 v	59.5	8.65	0.34
024947-3512.5	35.8	10.27	0.41	025006-8609.5	138	12.61	0.67	025314-3746.3 v	148	10.08	1.53
025351-7952.0	61.0	11.06	0.14	025402-7009.2	85.6	9.53	0.55	025416-3910.7	39.1	10.68	0.65
025429-7556.7	311	10.37	0.11	025434-2725.4 v	26.63	11.51	0.24	025453-5157.2 v	27.63	8.79	0.13
025502-4411.0	60.5	10.88	0.35	025619-6611.3	43.7	10.45	0.20	025620-2507.1 v	79.7	11.02	0.52
025721-1615.7	68.5	12.49	0.43	025728-4931.4	32.82	9.41	0.30	025858-1320.7 v	51.3	8.63	0.43
030027-1335.3 v	48.9	10.78	0.33	030035-8803.1	252	11.82	1.86	030036-2701.8	33.84	11.97	0.17
030129-0850.4	64.6	11.31	0.20	030203-8002.1 v	424	10.46	1.47	030227-7652.0	62.9	12.56	0.43
030311-2660.0	66.5	10.60	1.12	030313-8538.3 v	50.3	8.86	0.23	030349-1413.5 v	33.46	9.55	0.23
030409-7318.8	61.6	12.33	0.67	030456-5820.0	0.97723	10.98	0.35	030521-5218.0	73.1	10.35	0.58
030540-3827.8	98.6	11.22	0.16	030615-3942.5	64.0	11.23	0.55	030638+0109.5	37.3	10.07	0.59
030754-2709.0	30.33	10.53	0.22	030838-2626.8 v	42.0	8.65	0.25	030842-7547.4 v	85.7	11.35	0.98
030943-6442.5 v	61.1	11.39	0.75	030954-2731.4	117	11.53	0.42	031002-4047.7	61.9	12.48	0.46
031108-8453.6	57.0	10.62	0.14	031222-7259.1	81.3	9.25	0.29	031333-4633.7	57.5	10.64	0.19
031336-0239.5	46.0	10.16	0.25	031454-6657.1 v	59.0	11.10	0.32	031500-1008.0	17.90	12.16	0.22
031544-4532.4 v	20.45	9.04	0.16	031547-5750.0	95.7	12.07	0.39	031555-7636.3	56.3	11.55	0.23
031618-2727.3	50.9	10.97	0.21	031625-1935.2	71.3	10.69	0.22	031853-3129.2	160	11.45	0.58
031939-6918.2 v	119	11.32	0.97	032009-7136.2 v	44.2	10.22	0.92	032016-0006.5	335	9.65	0.85
032020-7551.2	51.0	10.46	0.38	032029-0342.0	68.8	11.58	0.38	032110-1713.9 v	163	10.90	1.19
032124-1950.6	47.0	12.25	0.44	032130-2127.4 v	83.6	8.94	0.93	032229-3936.3	19.03	10.16	0.12
032242-3041.6	41.6	11.24	0.19	032255-7923.7	39.3	10.79	0.29	032258-7047.3	309	10.15	0.31
032323-8503.8	449	12.37	1.03	032336-1953.0 v	80.1	10.39	0.69	032353-2520.4	160	11.87	0.31
032433-5409.2	85.5	10.62	0.40	032503-7856.9	47.7	10.62	0.38	032509-1221.3 v	173	9.33	0.74
032512-7839.9 v	50.4	8.50	0.18	032535-8139.2 ?	27.09	10.57	0.18	032659-5333.8 v	24.57	9.10	0.18
032705-0416.0	76.4	11.46	0.75	032719-0730.7	75.5	9.95	0.21	032737-8233.8	119	11.86	0.51
032822-1524.2	77.8	11.76	0.43	032846-6041.4	93.6	10.58	0.49	032935-2824.2 v	90.2	9.49	1.16
032958-0655.6	52.4	10.91	0.29	033015-4138.9	27.01	9.32	0.21	033029-7150.4	53.5	10.85	0.31
033042-0156.4	58.8	9.85	0.33	033104-1524.8 v	70.0	11.68	0.98	033104-6829.5	29.75	10.92	0.27
033124-7527.4 v	146	12.77	1.38	033227-2539.5 v	77.5	7.93	0.50	033313-5324.6	22.39	9.27	0.11
033316-0606.7	411	11.49	0.39	033324-6000.9	39.8	11.34	0.25	033405-4718.7	105.6	12.46	0.92
033425-2537.7	106.6	11.19	0.94	033454-6459.9	51.1	11.16	0.24	033516-5105.8	64.5	11.74	0.36
033553-6911.6 v	32.29	8.55	0.12	033620-6129.4 v	18.82	9.28	0.11	033630-3219.6	40.9	9.97	0.25
033718-8516.7	51.9	10.08	0.23	033719-5225.5	53.0	10.41	0.24	033739-5148.0	25.71	9.20	0.15
033745-5523.8 v	255	8.41	0.56	033926-5745.6 v	40.1	11.67	0.69	033953-1337.8	151	10.88	0.58
034116-1045.1 v	191	9.03	0.90	034136-3750.4	151	11.07	0.18	034207-1347.2	66.6	12.80	0.26
034234-1450.7	54.7	9.19	0.42	034252-4909.6	26.93	11.63	0.23	034303-3527.1	43.2	12.22	0.28
034319-2929.1	45.2	9.71	0.30	034418-3739.0	31.35	10.59	0.12	034428-7640.0	284	11.76	0.18
034459-1526.8	0.33948	13.67	0.61	034520-4723.3 v	206	11.58	1.64	034546-1157.9	49.1	11.71	0.15
034552-5054.7	95.5	12.47	0.23	034629-5557.3	246	13.40	1.27	034639-4931.3	42.2	10.09	0.22
034702-6646.2	50.0	10.04	0.30	034740-6641.6 v	79.3	8.15	0.98	034746-1952.1	54.5	11.23	0.28
034750-6232.2 v	75.0	11.43	0.36	034900-6952.7 v	201	8.78	0.90	034910-2155.2	114	11.48	0.31
035027-8608.5	41.7	9.18	0.34	035116-0015.9 v	171	11.01	0.52	035127-0122.3 v	127	8.45	0.45
035157-3032.9	117	11.91	0.42	035204-3539.0	102.0	10.41	0.18	035214-4904.3	80.0	9.02	0.36
035216-0703.2	96.8	12.50	0.51	035230-0843.2	37.1	9.64	0.18	035257-7402.6 v	274	11.62	0.85
035302-4410.3	38.0	10.88	0.24	035342-1116.1	341	12.51	1.36	035411-3654.1	169	11.25	0.43
035442-2914.4 v	42.5	9.99	0.22	035443-8802.8	70.7	12.39	0.32	035504-4710.2	127	9.04	0.26
035620-3228.9 v	184	10.80	1.63	035620-3948.6	35.5	10.79	0.21	035803-7205.1	99.5	9.38	0.26
035822-5021.5 ?	44.6	11.00	0.16	035900-0118.4	80.7	10.92	0.26	035924-4554.8	69.8	11.02	0.44
035928-4222.4	39.7	11.25	0.18	035939-1224.8	42.5	9.67	0.11	035947-5824.3	163	13.20	0.55
035957-5823.8	43.3	11.19	0.20	040016-5242.7	31.55	9.97	0.15	040019-0623.1 v	22.83	8.41	0.24
040024-2741.4	21.70	9.20	0.10	040031-1559.5	45.2	11.14	0.25	040053-5515.8	146	9.66	0.85
040101-3726.8	91.0	11.93	1.16	040125-5214.7	62.2	12.35	0.56	040210-6422.7	60.3	11.49	0.24
040215-3954.1	16.58	12.20	0.21	040224-7754.1	29.93	10.91	0.16	040251-7532.8	35.9	10.16	0.18
040258-7950.7 v	133	9.31	0.62	040326-3922.7 v	48.4	9.01	0.25	040329-1121.8 ?	64.2	11.30	0.35
040340-1329.2	36.2	9.05	0.18	040416-3039.9	52.5	12.02	0.25	040418-2036.7	39.2	8.93	0.05
040419-1543.6 v	118	8.57	0.56	040436-3016.8	200	11.85	0.92	040521-4541.4	55.0	12.58	0.46
040537-2518.4	52.0	11.18	0.33	040558-1838.9 v	145	10.35	0.26	040602-0915.7	50.4	12.38	0.70
040650-0740.4 v	147	10.11	1.10	040705-1329.0	80.9	12.69	0.50	040717-2800.5	44.5	9.84	0.21
040719-6026.8 v	65.5	9.21	0.53	040724-3929.9 v	55.9	8.80	0.28	040738-1701.6	48.2	9.27	0.27
040752-7313.6	178	11.57	0.20	040814-5353.7	33.80	10.38	0.28	040821-5752.5	41.6	11.00	0.28
040826-7036.5	116	10.49	0.55	040831-0439.8	91.0	12.78	0.73	040850-2525.8	40.0	11.54	0.43
040856-0806.0 v	53.2	8.90	0.24	040907-0914.2 v	208	9.96	1.26	040920-1326.4	80.1	11.26	0.73
040936-8151.3 v	9.685	9.54	0.38	040941-6631.5	68.1	10.43	0.23	041010-0851.5	28.72	10.32	0.13
041027-3435.2	37.8	11.13	0.21	041038-8647.1	45.7	9.80	0.23	041058-3153.8	50.9	10.38	0.56
041104-2003.1 v	24.43	9.03	0.10	041210-5815.4	67.0	11.82	0.29	041210-7636.2	89.3	10.99	0.56
041228-6508.8 v	123	12.65	1.41	041239-0747.8	145	13.34	0.88	041337-5035.2 v	51.2	8.82	0.45

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as MISC.											
041359-3132.7	8.317	10.63	0.16	041404-4413.4	28.13	10.70	0.17	041505-5300.6 v	74.8	8.80	0.49
041521-0630.3	41.5	10.39	0.21	041540-5325.8	131	11.03	0.39	041641-0912.0	76.8	11.42	0.89
041657-6247.7	131	11.07	0.53	041704-1213.3	69.8	12.44	1.23	041707-2501.0 v	138	10.31	1.04
041712-8344.8	116	12.39	0.33	041737-0923.3	31.44	12.43	0.30	041746-1006.2	33.21	9.74	0.31
041954-1548.5	85.1	11.52	0.33	041956-4303.8	62.9	12.20	0.47	041957-7046.7	175	13.31	0.52
041958-1843.3 v	78.6	11.16	0.57	042019-1024.5	252	12.62	1.89	042033-1554.9	56.8	11.48	0.25
042110-0310.3	78.6	10.96	0.59	042120-0250.0	119	13.34	0.71	042131-8500.7	30.46	9.82	0.18
042142-6339.5	72.6	9.84	0.35	042144-1403.8 v	271	11.82	0.26	042203-2241.1	39.4	10.02	0.37
042212-6559.2	57.6	11.65	0.42	042221-4623.3	76.1	11.01	0.43	042235-0530.1 v	127	9.96	0.42
042241-5032.2	59.0	11.34	0.34	042338-0547.6	32.87	12.62	0.32	042355-7802.4	50.3	12.81	0.62
042401-6707.1 v	99.9	12.28	0.97	042447-3745.7	51.3	10.55	0.39	042515-5128.3	0.200940	9.36	0.13
042518-3612.5	50.0	9.90	0.28	042525-1136.9	68.6	11.14	0.48	042554-3448.7	22.47	10.05	0.12
042559-3618.3	110	12.16	1.13	042627-0915.7	116	10.61	0.54	042659-7054.0	35.3	11.55	0.27
042706-0022.9	32.6	10.62	0.22	042724-4635.6	91.4	11.80	0.53	042740-6854.0	50.6	13.81	0.51
042742-3213.3	68.2	10.83	0.94	042756-2912.8	49.8	9.09	0.24	042822-0148.6	151	12.41	0.40
042917-8448.3 v	50.8	8.53	0.25	042941-4033.3	51.0	11.97	0.37	043006-1305.4	63.4	11.13	0.46
043007-0803.2 v	197	9.84	0.20	043032-1720.0	54.3	9.87	0.21	043051-2817.5	22.77	11.51	0.13
043053-8229.5	30.90	10.30	0.26	043056-0414.6	69.7	11.86	0.53	043116-0201.4	71.5	10.25	0.38
043140-6358.7	85.2	10.50	0.40	043211-6750.6	31.23	10.67	0.15	043215-1029.7	60.1	9.83	0.14
043257-7807.7 v	79.2	9.09	0.48	043321-4605.9	156	13.53	0.61	043329-1233.5	66.4	10.86	0.15
043331-3334.8	95.2	12.02	0.56	043358-5147.1	35.5	11.96	0.24	043406-0706.9	0.251433	13.52	0.53
043435-1054.5	127	13.29	0.95	043554-8615.3	140	12.76	0.49	043601-3030.9	52.1	11.29	0.41
043603-3953.7	46.1	10.75	0.28	043607-2731.3	64.3	11.94	0.69	043608-2003.2	106.0	9.71	0.54
043613-0516.2	175	9.39	0.67	043634-2734.7 v	158	9.48	0.42	043658-2403.0	54.8	11.44	0.50
043701-2945.7	81.0	11.14	0.28	043707-1238.3	50.5	11.11	0.20	043712-1841.1	121	11.27	0.83
043739-1740.9	98.2	11.45	0.49	043812-6218.2	96.5	10.27	0.62	043827-1710.9	429	12.59	0.64
043923-3027.4 v	46.9	8.93	0.28	043924-5212.0	80.2	9.59	0.19	043926-3211.0	58.6	11.29	0.30
043933-0348.7	43.3	9.55	0.32	043935-8408.1	71.4	10.92	0.55	043938-5636.8	35.5	9.82	0.23
043945-2946.0	79.0	11.30	0.43	044003-3924.3	96.7	10.99	0.39	044003-5223.4 v	30.58	9.16	0.13
044006-6344.0	301	12.97	1.08	044016-2954.8	43.9	11.75	0.27	044016-5336.6	43.0	11.73	0.27
044033-1412.0 v	80.0	10.42	0.30	044037-5236.0	0.169289	13.86	0.55	044128-8235.2	41.5	10.22	0.32
044139-0153.3	194	11.22	0.49	044142-3314.9 v	98.8	9.67	0.70	044244-6301.7	89.1	12.13	0.38
044412-5009.1	32.60	11.35	0.38	044421-1240.2	72.8	10.06	0.48	044437-7043.0 v	65.7	14.01	1.04
044458-0237.1	90.2	11.08	0.93	044500-3722.0	89.1	11.81	0.24	044502-5906.0	84.9	13.11	0.87
044540-2212.7	42.1	10.30	0.27	044557-3441.4	39.2	11.12	0.15	044653-5847.6	46.7	10.26	0.27
044704-1819.1	33.42	10.45	0.18	044714-7504.6	19.88	9.73	0.09	044723-7831.0	75.4	11.90	0.35
044905-6747.2	434	12.15	0.43	044909-1949.2	192	11.22	1.67	044925-6649.8 v	29.62	9.67	0.25
044926-2932.6	188	11.64	0.68	045039-7633.3	77.9	13.41	0.44	045109-5041.5	41.7	10.08	0.21
045116-2407.3	133	13.23	1.10	045119-0549.6	64.2	9.41	0.43	045121-6929.2	290	12.46	0.47
045133-0335.5	58.1	9.72	0.44	045158-6654.9	46.8	11.29	0.37	045213-4100.3	29.10	9.06	0.17
045245-3914.0	42.2	13.82	0.66	045252-0001.9 :	0.288233	11.46	0.23	045254-6655.9	393	11.22	0.23
045255-1711.4	29.58	10.68	0.22	045319-6305.7	51.6	11.85	0.35	045328-0534.9 v	83.9	10.73	0.69
045331-6917.9	135	12.78	0.60	045409-6832.5	394	12.93	0.85	045414-6912.6	330	10.04	0.16
045426-2810.0	161	10.46	0.19	045434-4414.9	48.5	10.57	0.20	045437-6920.4	512	10.97	0.42
045439-1355.0	48.7	11.06	0.44	045440-6904.6 v	509	12.50	0.76	045441-0728.0	89.6	11.79	0.41
045448-3614.3	42.1	9.64	0.17	045459-5305.6	49.4	12.01	0.37	045503+0025.1	65.6	10.47	0.61
045510-4956.7 v	48.0	8.21	0.28	045516-6919.2 v	512	12.77	0.60	045522-0300.0	56.2	10.95	0.26
045532-6650.6 v	402	11.83	0.56	045550-2742.2 v	24.15	8.45	0.12	045616-0858.2	103.6	11.94	0.47
045648-6939.9	512	12.30	0.72	045652-0632.1 v	63.6	11.45	0.33	045706-0147.3 v	270	12.14	0.84
045727-6623.4	142	12.76	0.56	045731-7009.0 v	391	12.38	1.29	045736-8708.3 ?	58.0	12.40	0.55
045742-6517.0	20.82	9.73	0.11	045820-1734.3	70.9	11.40	0.54	045822-1641.8	79.7	9.95	0.51
045832-0604.1 v	127	11.51	1.91	045856-7848.5	51.5	11.23	0.40	045906-2145.0	14.81	11.69	0.25
045909-6540.1	345	9.79	0.32	045930-1627.4	40.1	10.69	0.19	045931-4120.2	77.6	12.30	0.63
045933-3406.6	97.9	11.29	0.50	045939-2656.7	36.8	11.51	0.21	045940-2551.3	156	11.77	0.47
045954-4750.4	151	12.77	0.82	050017-3401.2	84.6	10.98	0.38	050041-6628.5	131	10.75	0.16
050046-1300.3	56.7	11.78	0.39	050049-6550.9	447	12.54	0.61	050106-0439.8	53.3	10.54	0.57
050129-6842.8	409	12.85	0.50	050133-0451.8	33.97	11.28	0.21	050140-5648.3	0.41592	8.79	0.18
050141-1826.1	79.6	11.05	0.60	050147-6859.3	24.35	9.23	0.14	050201-2648.7	49.0	11.64	0.31
050227-6509.1	39.0	11.19	0.19	050231-3854.1	62.3	11.04	0.37	050232-3129.7	39.8	10.47	0.30
050247-2944.1	108.1	12.28	0.71	050300-5405.9 v	42.7	8.80	0.23	050324-1630.6	16.44	10.03	0.13
050332-2436.5 ?	27.24	11.37	0.23	050357-1859.1 ?	21.53	11.17	0.16	050405-7022.8 v	511	12.37	0.44
050414-6716.2 v	418	11.57	0.59	050415-6715.1	42.6	10.96	0.20	050425-2211.1	63.7	11.96	0.56
050445-2837.0	98.7	9.86	0.13	050503-6918.5 v	156	13.05	0.55	050507-8043.6	98.7	10.77	0.38
050524-2832.5	26.50	10.56	0.10	050527-1628.0	48.8	9.46	0.16	050542-1409.6	43.2	10.43	0.15
050547-5533.7	53.5	11.45	0.37	050557-7035.4	412	12.98	0.81	050559-7048.2 v	293	12.72	0.80
050701-2220.2	38.8	10.49	0.16	050706-3741.9 v	69.1	8.68	0.19	050706-7032.7 v	349	11.71	0.25
050806-6819.1	411	13.85	1.01	050811-6617.8	54.7	12.71	0.56	050816-5013.1	63.4	9.83	0.32
050838-4947.6	51.4	11.28	0.50	050847-3431.0 v	195	8.21	1.00	050851-2425.5 v	108.9	8.77	0.90
050855-2043.9	66.7	13.17	0.57	050904-0320.1	61.4	9.85	0.35	050907-1122.5	75.4	12.19	1.11
050911-6936.2	99.0	10.71	0.21	050920-7650.9	62.8	10.23	0.40	050928-2650.4	196	11.73	0.59
051013-6026.3 v	43.4	8.72	0.28	051112-4534.6 v	79.6	8.54	0.43	051118-6526.1 v	391	12.07	0.34
051127-3301.0	56.5	10.25	0.37	051131-6129.1	60.7	11.16	0.23	051200-0820.3	96.6	11.93	0.50
051217-8744.7	68.4	10.93	0.62	051218-3438.3 ?	20.26	10.34	0.18	051229-0233.5	168	11.94	0.38
051246-6719.7 v	376	12.32	1.08	051333-6720.7 v	607	11.94	0.37	051344-2003.3	98.7	12.95	0.98
051345-4932.8 v	253	8.71	1.28	051448-6911.5	63.5	11.00	0.72	051449-6727.4 v	420	12.33	0.63
051502-7734.9	20.56	12.24	0.17	051505-0939.7	76.7	10.89	0.26	051510-3453.6	51.2	12.15	0.44
051516-6933.1	273	12.15	0.61	051534-6532.6	54.9	10.82	0.35	051535-5309.4	80.1	12.12	0.81
051536-1550.2	28.21	9.94	0.25	051547-6355.9	71.7	9.59	0.88	051600-0948.6 v	41.2	9.90	0.31
051600-3417.5	78.3	11.32	0.32	051632-1358.1	65.8	11.51	0.32	051643-5456.7	38.5	11.65	0.30
051644-1758.7	64.0	11.62	0.30	051650-2435.5 ?v	60.1	9.12	0.42	051652-1140.6	106.7	12.35	0.62
051653-1711.7	108.4	11.77	0.22	051700-2220.2	35.6	10.72	0.17	051703+0016.2	81.0	11.81	0.35
051726-0528.2	45.9	8.84	0.25	051745-3938.5 ?	15.35	11.77	0.30	051757-6808.7 v	410	13.33	0.66
051806-1406.8	39.5	11.42	0.32	051807+0001.3	350	10.14	0.88	051831-3106.2	73.0	10.59	0.59
051831-6806.5	362	12.69	0.78	051846-2212.8 v	26.96	8.44	0.13	051852-0001.3	149	11.51	0.21

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as MISC.											
051857-6756.2 v	394	12.22	0.42	051917-6751.8 v	43.6	9.71	0.22	051921-1957.0	0.38423	14.13	0.56
051931-6841.2	118	11.78	0.63	051945-1824.6	52.9	12.59	0.58	051952-1752.4	365	10.45	0.77
051954-6804.1 v	376	12.22	0.40	052013-1811.3	83.4	13.01	0.51	052024-6933.4 v	438	12.03	0.86
052045-5628.4	41.6	12.19	0.28	052056-6546.1	436	11.43	0.31	052056-6639.7	2.1021	13.99	1.26
052107-3833.2	159	12.61	0.39	052133-0635.8	110	11.19	1.43	052135-8624.8	63.6	12.79	0.48
052147-7119.7	335	11.46	0.26	052156-6549.8 v	348	12.29	0.72	052158-5701.0	137	11.46	0.65
052158-8448.8 ?	23.59	10.39	0.14	052200-2937.1	54.0	11.78	0.48	052222-3030.7	49.4	10.53	0.19
052228-4650.2	106.2	11.16	0.44	052248-1910.6	102.3	11.96	0.72	052249-6607.8	236	12.20	0.39
052252-1613.7	37.1	10.08	0.19	052259-2032.9	59.6	9.46	0.27	052303-0630.8	76.1	12.45	0.41
052306-0702.2	68.7	10.26	0.64	052320-2428.1	99.4	12.71	0.63	052321-0434.3 v	428	9.60	1.07
052411-7001.1	37.5	9.68	0.22	052422-1020.8	54.2	8.94	0.26	052423-6246.5	20.61	10.07	0.11
052429-0608.8 v	115	9.26	1.01	052500-4308.8	32.81	8.49	0.18	052510-1922.5	54.0	10.27	0.37
052528-2010.5	37.1	10.90	0.38	052542-1808.1	64.0	12.38	0.73	052545-6904.9	199	13.48	0.75
052554-4352.4	29.35	10.25	0.11	052558-7011.1 v	3.1595	11.88	0.23	052612-5336.6	36.2	11.94	0.20
052616-6607.0 v	265	13.06	1.27	052622-6621.5	475	11.45	0.22	052624-6952.4	311	12.12	0.29
052630-6416.0	35.6	9.49	0.20	052632-1659.4	63.1	10.42	0.43	052634-0019.5	50.2	12.07	0.66
052643-6724.5	360	11.54	0.37	052650-0913.7 v	154	11.77	1.81	052701-4802.8	62.8	12.79	0.49
052725-0035.2	54.4	10.83	0.42	052730-6714.2 v	149	12.68	0.48	052734-6653.5 v	403	12.89	1.49
052745-5110.7	49.9	9.92	0.19	052751-6910.8 v	201	12.56	0.76	052802-6607.4	433	12.94	0.57
052804-4535.9	84.9	11.22	0.58	052805-5720.5	176	10.65	1.23	052815-6658.9 v	184	12.66	0.50
052816-5908.9 v	15.54	8.72	0.09	052817-1222.4	29.54	12.26	0.27	052820-6724.3	159	10.52	0.19
052828-6913.0	415	10.81	0.45	052829-6807.1	391	12.28	0.60	052834-1651.8	191	12.84	0.53
052836-6826.3 v	422	12.21	0.66	052845-6858.1	402	11.97	0.42	052901-4821.8	52.4	8.73	0.31
052908-6912.3	253	12.73	0.43	052911-0608.1 v	30.05	10.48	0.87	052921-6847.5 v	104.4	11.92	0.22
052923-2211.8	36.8	10.97	0.27	052931-5402.8	42.2	10.67	0.15	052942-6857.4	507	11.25	0.80
052945-5339.5	28.70	10.26	0.33	052946-2745.9	62.5	11.66	0.65	052946-6905.8	100.3	12.02	0.46
052953-6907.4	452	11.44	0.78	052955-6718.6 v	385	12.16	0.62	053005-5248.7	70.9	11.86	0.59
053019-7302.1	161	10.88	0.50	053021-6720.1 v	511	12.54	0.53	053022-6919.7	66.9	10.66	0.17
053031-1303.4	74.7	12.41	0.35	053036-6859.4 v	188	13.02	0.98	053041-6915.5 v	512	12.08	0.94
053101-0323.4	85.2	12.19	1.07	053111-6635.6	356	11.88	0.33	053114-1028.8	129	9.67	0.20
053118-7900.5 v	11.10	8.82	0.30	053138-6630.1	438	11.62	1.17	053146-1408.2	58.5	10.65	0.32
053153-6640.7	425	12.44	1.08	053218-4019.6	51.9	10.31	0.18	053219-3157.1	171	10.30	0.82
053230-2226.2	37.4	9.97	0.24	053232-6549.6	53.1	9.41	0.59	053244-5054.5	47.5	9.89	0.30
053251-6310.2	47.9	11.60	0.43	053255-2646.1	57.4	11.84	0.46	053300-0607.0 v	408	11.73	0.91
053300-6835.9	440	11.70	0.28	053301-7157.7 v	82.7	12.09	0.76	053308-6648.1 v	428	12.30	0.94
053313-5846.2	55.6	9.95	0.31	053314-6703.8	166	12.79	0.41	053315-7422.1 v	35.6	11.88	0.26
053325-6622.3	156	12.39	0.36	053326-1216.9	173	12.21	1.03	053328-6704.3 v	163	12.18	0.40
053342-1621.6 v	108	12.78	0.50	053352-6911.2 v	362	13.34	0.85	053357-5826.6	35.36	10.13	0.14
053409-4013.7	50.9	12.16	0.81	053414-2343.0	54.3	11.28	0.34	053421-5629.9	357	13.07	0.98
053422-6225.4	205	11.05	1.58	053450-2704.3	43.3	11.74	0.45	053451-3828.8	23.79	9.79	0.14
053453-7414.1	60.6	10.29	0.46	053456-7539.0	137	11.44	0.60	053458-2643.2	22.77	11.83	0.22
053500-5156.5	52.8	10.89	0.43	053514-1423.8	0.35030	12.50	0.22	053514-6743.9 v	342	12.96	1.22
053539-0825.2	406	11.71	0.74	053541-6641.3 v	392	12.36	0.49	053544-3049.6 v	100.3	8.70	0.46
053601-6650.7	70.0	12.40	0.47	053612-3319.7	46.7	11.51	0.31	053620-2020.0	41.7	11.24	0.20
053625-6941.5	171	11.96	0.17	053630-5730.2	21.90	9.87	0.13	053642-3603.4	80.5	11.37	0.51
053657-5557.6	127	9.94	0.35	053700-3027.2	40.8	8.85	0.18	053700-7526.6	120	11.86	0.62
053704-3453.1	112	13.06	0.75	053713-0635.0	50.3	9.94	1.27	053727-3344.3	79.2	11.70	0.55
053735-7346.7	160	11.92	0.61	053753-5519.6	38.7	9.66	0.15	053756-2316.9	187	11.92	0.46
053832-4547.8	101.6	8.96	0.61	053853-1402.4 v	445	10.42	0.29	053914-4641.8	74.9	11.76	0.41
053917-8450.4	116	13.28	0.60	053926-5125.4	163	11.76	1.40	053929-7404.7	116	12.12	0.61
053940-1456.6	31.09	10.92	0.28	053943-0809.2 v	409	11.76	1.52	053955-4504.2	39.2	9.78	0.23
054004-1505.2	42.6	11.58	0.28	054005-4105.2	283	10.38	1.61	054023-2149.7	101.5	11.89	0.51
054041-7203.1	55.5	9.86	0.29	054049-3124.1	18.35	8.68	0.15	054051-0530.5 v	69.4	12.42	0.49
054059-2757.2 v	61.8	8.38	0.59	054059-6918.6 v	188	13.08	0.54	054108-3908.7	31.81	9.91	0.23
054111-6938.0 v	329	12.66	0.59	054112-1652.5 v	38.9	8.65	0.14	054123-1743.2	45.9	11.99	0.24
054128-2047.0	80.1	10.85	0.51	054130-7002.0	24.00	9.06	0.20	054149-1402.5	49.5	9.26	0.20
054149-2103.1	278	12.77	1.17	054210-1333.7	49.9	11.74	0.28	054232-1914.0	33.64	10.33	0.18
054240-5625.1 v	106.9	10.19	1.05	054241-7515.0 v	309	8.11	2.03	054253-5937.3	70.7	10.74	0.46
054256-2218.8	48.7	11.89	0.34	054257-1726.6 v	460	10.97	0.79	054304-1336.0	42.0	12.00	0.35
054317-8804.1	426	12.46	0.33	054324-1444.0	86.7	12.08	0.35	054328-6828.2	30.84	10.22	0.22
054339-0504.0 v	36.5	13.28	1.27	054346-6741.9 v	103.6	9.70	0.54	054353-2331.7	33.53	9.13	0.10
054416-5701.2	161	11.48	0.32	054426-5801.5	21.78	9.90	0.46	054444-7627.3	127	11.90	0.65
054450-6729.6	73.7	11.60	0.42	054508-2932.3	32.76	9.06	0.26	054530-1903.5	57.7	10.64	0.48
054549-2709.6	46.4	11.65	0.32	054634-2027.9	24.89	8.38	0.14	054648-1204.0	77.7	12.58	0.57
054649-7551.1	191	11.34	0.58	054720-2315.3	46.3	9.84	0.26	054722-2233.6	162	11.74	1.13
054728-2147.4	195	12.06	1.25	054740-0727.8	57.2	12.45	0.73	054745-0708.8	379	12.86	0.58
054747-6022.1	79.1	12.53	0.67	054754-1737.6	44.0	10.57	0.27	054813-1809.6	111.2	9.23	0.24
054840-2224.5	38.4	10.19	0.18	054841-7003.2	79.1	12.31	0.51	054907-2216.6 ?	24.26	9.52	0.21
054937-2606.3	96.4	11.17	0.17	055019-1745.5	36.6	9.06	0.25	055050-8543.0	67.3	12.21	0.40
055102-7001.4	47.4	11.96	0.43	055103-1930.9	69.0	11.59	0.26	055119-1308.1	162	12.43	0.67
055130-1246.9	54.9	9.18	0.34	055141-1031.8	57.0	12.02	0.35	055152-2916.9	180	12.22	1.15
055202-0716.5	74.9	12.87	0.51	055213-1852.0	41.3	11.56	0.18	055218-1214.2	138	11.47	0.48
055252-0447.9	39.6	10.82	0.34	055315-2157.9	49.1	11.78	0.37	055321-6056.9	127	12.76	0.86
055326-1525.9	64.0	12.10	0.63	055327-2307.5	32.68	9.31	0.37	055335-6112.6	69.3	9.62	0.20
055338-1327.9	70.5	9.32	0.33	055341-2013.9	55.3	12.50	0.58	055343-1024.0	361	11.81	2.04
055354-5505.6 v	47.4	8.66	0.19	055358-0625.3 v	85.1	10.90	0.84	055406-2509.2	42.1	11.63	0.40
055423-2550.1	104.7	12.30	0.72	055430-0343.2	279	12.02	0.86	055445-6947.2	254	12.75	0.71
055451-1526.2	78.6	11.24	0.86	055458-1829.3	164	10.46	0.32	055508-5457.0	27.21	9.71	0.19
055554-0758.1	106	12.82	0.51	055559-1535.3	30.22	11.75	0.25	055559-2123.0	52.0	9.12	0.22
055616-0803.8 v	96.3	10.89	0.48	055648-5925.4 v	74.5	8.81	0.61	055717-1317.3	52.0	11.95	0.48
055734-5538.4	70.7	12.49	0.52	055742-1916.3	77.5	11.64	0.53	055746-3036.5	54.1	11.93	0.40
055815-0948.0	50.7	11.89	0.36	055907-1052.6 v	120	9.24	0.86	055915-2254.7	24.11	12.10	0.20
055940-1627.9 ?	25.19	10.86	0.24	060048-5510.2	71.5	10.87	0.40	060049-0739.1	0.284760	11.47	0.30
060056-0929.7	49.2	12.69	0.36	060109-2733.4	20.52	8.93	0.09	060127-1417.3	67.1	13.25	0.86

Table 1

Continued

ID	P	V	ΔV	ID	P	V	ΔV	ID	P	V	ΔV
Stars classified as MISC.											
060128-0354.1	27.96	10.85	0.20	060130-2527.9	90.9	12.49	1.17	060139-1558.1	55.7	9.98	0.46
060143-6931.5	61.4	11.43	0.52	060150-7035.6 v	193	10.03	1.36	060151-2106.3 v	424	10.12	0.61
060151-2127.7	64.4	11.41	0.36	060201-0422.0	48.5	9.19	0.21	060205-7040.5 v	31.21	8.52	0.16
060246-1943.7	73.5	10.02	0.64	060249-2100.1	21.84	12.22	0.20	060306-5754.7	57.7	11.17	0.44
060346-6942.6 v	122	8.95	0.45	060349-1217.8	67.3	10.59	0.25	060400-0357.8 v	54.5	10.87	0.35
060421-1709.7	45.9	11.90	0.22	060457-2212.5	108.7	12.60	0.86	060520-2505.6	128	9.81	0.49
060524-5729.6	127	10.76	0.34	060600-6040.7	33.96	9.73	0.25	060612-0830.3 v	85.2	10.92	0.31
060617-0705.9	336	12.54	1.93	060628-0927.3	31.21	10.30	0.17	060639-2706.1	48.7	9.91	0.19
060643-1245.5	121	12.47	0.85	060645-1239.0	127	11.24	0.74	060649-6044.6	121	11.75	0.87
060652-0812.0	51.1	10.86	0.36	060701-0254.9	26.13	9.35	0.78	060741-2052.4	63.9	8.86	0.19
060810-1406.8	49.0	10.87	0.24	060834-0042.8 v	87.3	11.19	0.53	060848-1302.4	150	12.67	0.30
060912-1428.8	58.1	12.92	0.65	060920-2104.6	38.9	10.73	0.27	060925-1306.1	45.2	11.01	0.30
060942-8541.4	59.6	11.95	0.34	060947-2228.8 v	168	10.41	0.65	060949-1143.7	84.7	9.94	0.39
060951-2231.8 v	47.3	9.53	0.48	061046-6024.0	62.8	10.90	0.64	061248-7736.7	52.8	11.55	1.67
061446-7659.7	27.22	11.28	0.23	062432-8343.0	62.8	10.69	0.58	064333-8555.8	316	13.61	0.93
064624-8538.4	320	11.18	0.24	064629-8450.5	203	12.92	1.31	064951-8243.6	184	10.37	0.62
065208-8517.8	146	11.56	0.37	074530-8449.7	300	12.68	1.76	075342-8727.4	128	11.14	0.56
080813-8556.6	54.1	10.88	0.36	091527-8714.5	77.4	13.37	0.80	092930-8721.6	60.2	11.09	0.50
094432-8713.6	39.2	10.11	0.19	095013-8725.3	15.13	10.69	0.12	100512-8615.0	48.4	11.98	0.37
102744-8617.9	48.2	11.03	0.26	110752-8632.4	157	12.87	0.87	111701-8835.6	51.8	11.57	0.34
112039-8704.1	166	11.70	0.31	114738-8622.9	110.1	12.66	1.07	120449-8723.1	127	11.54	0.40
122647-8702.0 ?	57.9	11.45	0.36	124002-8530.7	71.5	11.96	0.42	125351-8609.9	47.5	12.13	0.61
125353-8727.4 v	54.5	10.03	0.36	130015-8520.2	53.8	10.65	0.39	132030-8552.4 v	253	8.81	0.48
140041-8519.4	20.2	10.75	0.28	140634-8522.9	26.8	9.76	0.17	155630-8547.5 v	167	11.32	1.43
162726-8602.7	63.9	11.21	0.64	164538-8611.8	77.7	12.37	0.65	165107-8708.2 v	59.0	9.09	0.32
170225-8703.3	32.46	11.21	0.33	171030-8623.0	222	9.97	1.85	171931-8638.5 v	84.5	11.77	2.30
182927-8654.3	93.5	12.83	0.42	192802-8813.4	75.8	12.09	0.31	193325-8900.4	53.9	10.83	0.40
202901-8605.2	153	11.92	0.32	203912-8437.6	79.4	11.75	0.70	204429-8713.6	54.9	12.00	0.43
212153-8627.9	29.10	8.68	0.21	215503-8606.7	32.06	9.80	0.14	215650-8151.5	158	12.10	0.53
220020-8654.1	89.1	10.67	0.87	222132-8024.9	91.1	12.10	0.63	222201-8440.0 v	310	8.22	0.65
223301-8039.8	48.8	9.95	0.32	223908-8011.3	40.3	11.37	0.16	224737-7827.3	302	13.51	1.85
224759-7834.0	46.0	10.92	0.40	225242-8618.5	29.50	10.43	0.16	225636-8359.0	41.4	11.63	0.31
225937-7745.6	394	11.48	0.36	230409-7856.5	156	9.27	0.53	230856-8425.8	80.6	9.71	0.53
231138-8357.9	100.8	8.86	0.69	231447-7507.5	74.5	10.67	0.89	231708-8548.1	79.0	10.39	0.62
231818-8523.3	255	11.52	0.36	231908-8702.2	0.200480	11.04	0.14	232054-8434.2	28.40	9.40	0.19
232310-6212.3	42.3	11.21	0.33	232348-7128.0	77.6	10.62	0.55	232511-7606.3 v	40.8	8.33	0.26
232513-7703.0 v	263	11.85	2.00	232641-6901.0	130	11.03	0.80	232859-6002.0	166	12.86	0.74
232903-6446.0 v	79.7	9.30	0.59	232950-8213.9	86.1	12.89	0.76	233003-6821.1	55.8	11.30	0.44
233524-5503.1 v	39.8	10.78	0.56	233614-8331.0	86.6	12.13	0.69	233713-6044.2	45.8	9.44	0.22
233849-6923.0	56.2	11.61	0.35	233951-5549.9	50.8	11.94	0.50	234303-0730.2	61	8.77	0.24
234406-3405.2	61.1	10.83	0.64	234423-5829.6	38.5	10.03	0.21	234523-0208.8	47.7	10.11	0.38
234547-6257.7	42.4	10.83	0.22	234708-4548.9	78.9	10.93	1.12	234945-4317.1 v	57.6	10.01	0.29
235007-1417.8	84.7	10.16	0.49	235010-8651.1	68.7	11.19	0.63	235054-3517.8	159	12.07	0.60
235115-0245.8	127	12.22	1.14	235215-1551.3 v	139	8.26	1.89	235258-7752.9 v	48.2	11.01	0.28
235331-1000.3	16.14	9.04	0.17	235440-3046.1 v	46.8	9.98	0.24	235442-7700.5	106.9	11.71	0.49
235514-4459.8	49.1	11.96	0.49	235651-7928.1	46.2	10.15	0.40	235705-5213.3	50.0	10.10	0.37
235905-5634.6 v	244	7.14	1.77	235935-2952.0	218	10.52	0.11	235952-3452.2	67.1	11.75	0.24

Table 2

Number of various types of variable stars detected on 5000 sq. deg by ASAS-3 V camera.

Type	Count	Type	Count
$DCEP_{FU}$	192	EC	655
$DCEP_{FO}$	69	ESD	250
$DSCT$	148	ED	141
$RRAB$	247	M	132
RRC	113	$MISC$	1170
$PULS$	9		

7 Conclusions

We have presented preliminary results of the search for variable stars in the southern hemisphere. Only a quarter of available data covering right ascension between $0^{\rm h}$ - $6^{\rm h}$ has been presented in this paper. Over 3000 variable stars were found so far among 1,300,000

stars brighter than $V \sim 15$ mag. Comparison to the ASAS-2 data suggests, that number of variable stars should increase 3-10 times, as more observations are collected.

Most of these stars belong to the "periodic" class, as we have not included many candidate objects with the "long-term" variation. There is a large subset of bright ($V < 12$ mag) detached binaries - useful for distance scale calibration - perfect targets for small size spectroscopic instruments.

Fully automated classification algorithm that we have described in this paper, efficiently separates stars into predefined classes. For a good quality data its efficiency reaches 100% in those regions of the parametric space, where the classes do not overlap. For poor data or overlapping regions alternative classes are always proposed. Currently our algorithm works properly only if the highest peak in the power spectrum corresponds to the true frequency or one of its harmonics, which is not necessary true for noisy, poorly sampled data. What is still missing is a robust algorithm that will allow to separate light curves into strictly periodic and irregular ones.

However, at this time we feel it is better to publish imperfect data and to allow a broad range of astronomers to see the diversity of raw results and to work on variety of scientific topics. Note a recent paper by Pietrukowicz (2001), who used the past ASAS data to determine period changes in cepheids in the LMC.

Processing of the remaining ASAS data is in progress, so we plan to release next parts of this catalog soon. Also, four ASAS instruments are taking data, covering the whole southern sky each night. Over 120,000 images have been collected so far in V, I and R bands, covering the whole hemisphere more than 300 times. Soon real time photometry will be achieved, finally allowing us to setup the Early Warning System.

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This research has made use of the SIMBAD database, operated at CDS, Strasbourg, France.

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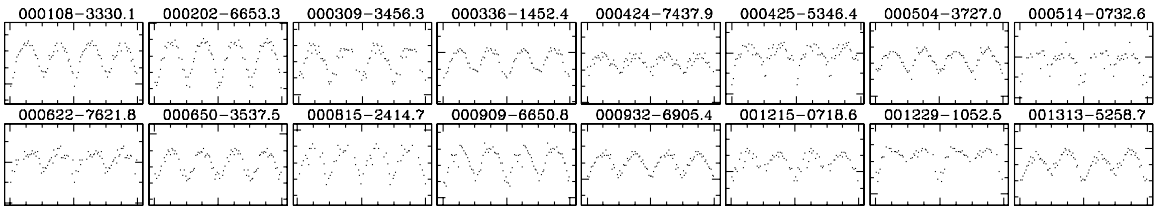
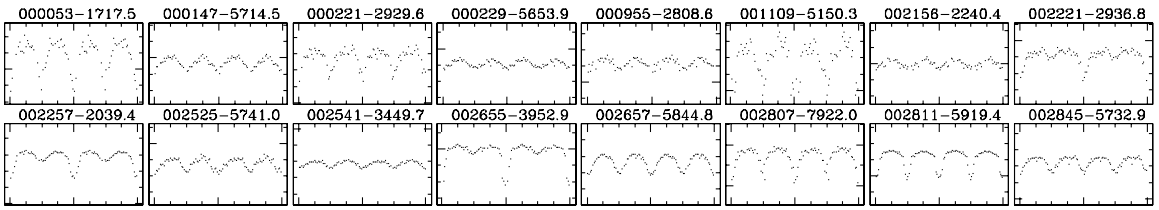
Appendix.

ASAS Atlas of Variable Stars. 0^h - 6^h Quarter of the Southern Hemisphere.

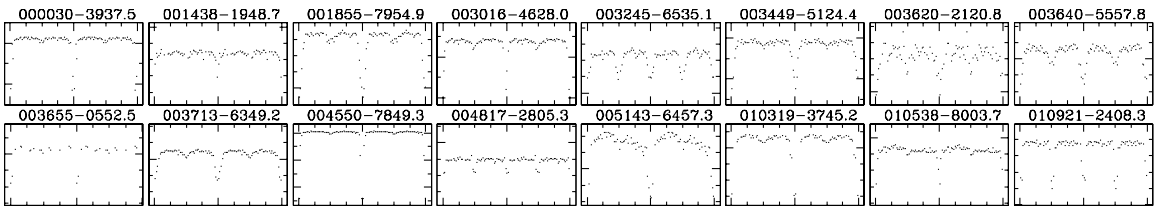
Only first 16 light curves of each type are presented here. Complete set of thumbnails can be obtained from
http://www.astrouw.edu.pl/∼gp/asas/appendix.ps.gz or
http://archive.princeton.edu/∼asas/appendix.ps.gz



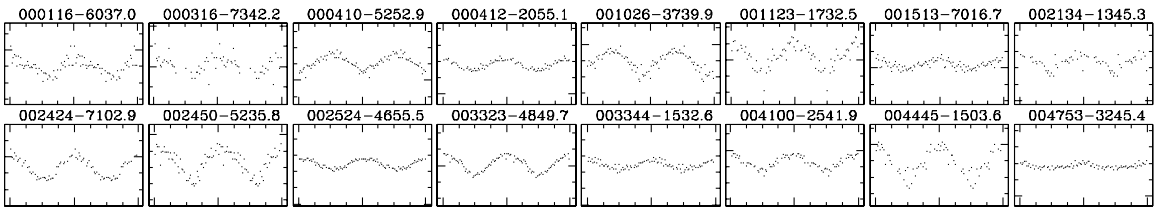
Stars classified as EC.



Stars classified as ESD.



Stars classified as ED.



Stars classified as DSCT.

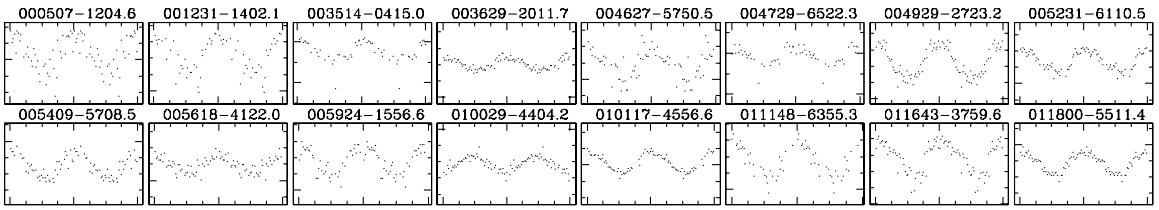
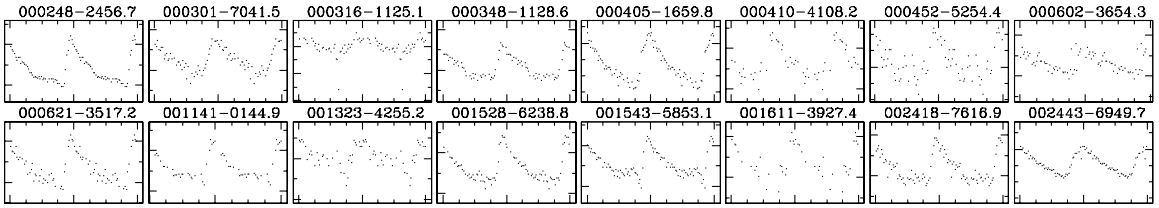
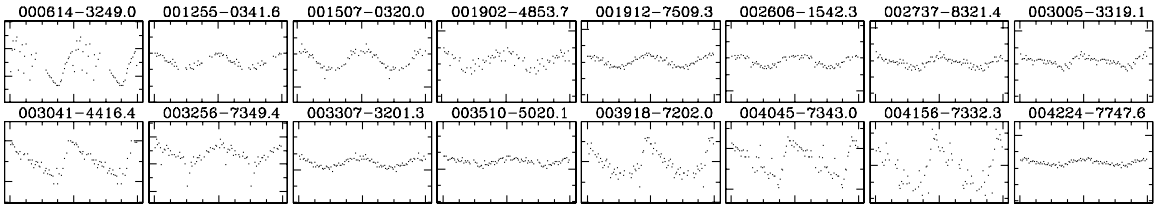


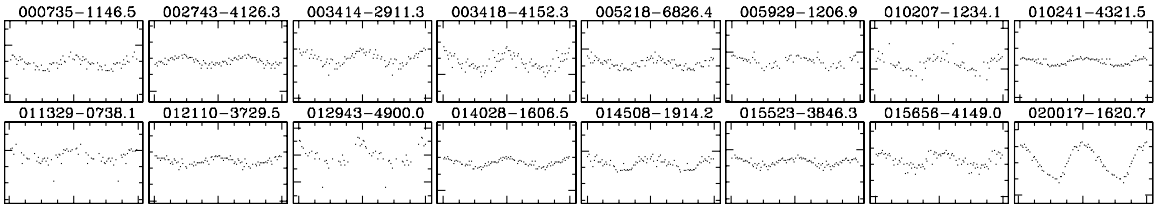
Fig. 7. Stars classified as RRC.



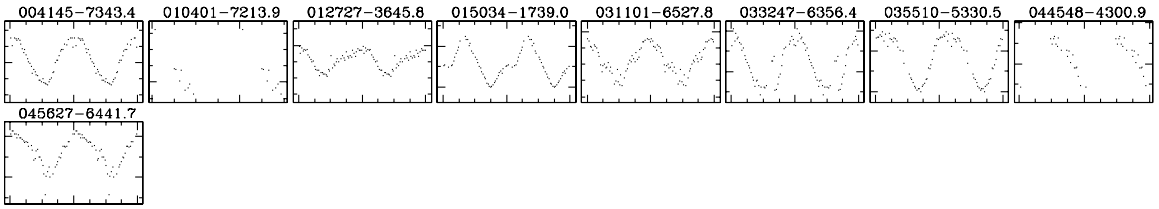
Stars classified as RRAB.



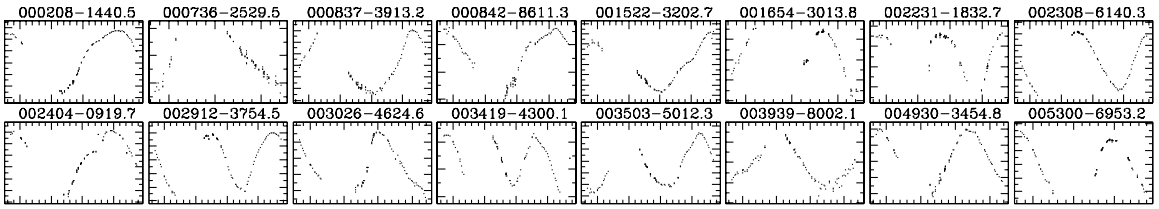
Stars classified as DCEP-FU.



Stars classified as DCEP-FO.



Stars classified as PULS.



Stars classified as MIRA.

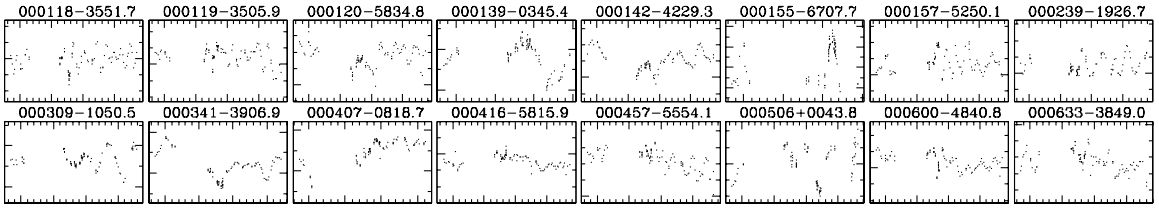


Fig. 8. Stars classified as MISC.