UBVRI PHOTOMETRIC STANDARD STARS AROUND THE CELESTIAL EQUATOR: UPDATES AND ADDITIONS

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ABSTRACT

New broadband *UBVRI* photoelectric observations on the Johnson–Kron–Cousins photometric system have been made of 202 stars around the sky, and centered at the celestial equator. These stars constitute both an update of and additions to a previously published list of equatorial photometric standard stars. The list is capable of providing, for both celestial hemispheres, an internally consistent homogeneous broadband standard photometric system around the sky. When these new measurements are included with those previously published by Landolt (1992), the entire list of standard stars in this paper encompasses the magnitude range $8.90 < V < 16.30$, and the color index range $-0.35 < (B - V) < +2.30$.

Key words: catalogs – standards – stars: fundamental parameters – techniques: photometric

Online-only material: machine-readable and VO tables

1. INTRODUCTION

Over the past 35 years, the author has published photometric standard star papers (Landolt 1973, 1983, 1992, 2007a; Landolt & Uomoto 2007) wherein the *UBV* magnitudes and color indices always have been based on the defining paper of Johnson (1963), and the *RI* photometry has been based on the work of Cousins (1976). A summary of the author's observing and analysis procedures may be found in Landolt (2007b).

The current paper essentially is an update and extension of the photometry which appeared in Landolt (1992).

2. OBSERVATIONS

New broadband *UBVRI* photoelectric observations on the Johnson–Kron–Cousins photometric system have been made of 202 stars around the sky, and centered at the celestial equator. One hundred thirty-two of these 202 stars update magnitudes and color indices in Landolt (1992). The other 70 stars are completely new additions to that list of standard stars.

The new photometric results in this paper represent both an update of and addition to the list of photometric standard stars in Landolt (1992). Most of these photometric standard stars inhabit a band of less than 5° width, centered on the celestial equator, around the celestial sphere.

Stars whose photometry was upgraded came primarily from Landolt (1992). However, several brighter stars taken from Landolt (1983) also were observed and included. New photometric sequences have been established, anchored by blue stars which already were standard stars themselves (Landolt 1992). Examples of such stars are Feige 24 and G 93-48.

All of the new data in this paper were taken at the Cerro Tololo Inter-American Observatory (CTIO) 1.5 m telescope together with GaAs photomultipliers. The author always has tried to maintain the dictum (Landolt 2007b) that potential standard star data only should be obtained with one detector. However, the photomultipliers did not cooperate; four different GaAs photomultipliers were used during this observational program, albeit the majority of the data were collected with one photomultiplier.

A total of 224 nights were assigned over a nine-year time interval. Useful data were obtained on 150 of the assigned nights, implying that 66.7% of the nights were photometric. From another viewpoint, a total of 2206 night-time hours were assigned. Useful data were obtained during 1192 hr, indicating that 54.1% of the assigned hours were photometric. It should be noted that heretofore, the author always has quoted the number of nights which were photometric, which is the method used by most observers. There is a difference.

The initiation of this program encountered problems with successive photomultipliers. The photomultipliers with which data were obtained, including Universal Time (UT) dates were: a standby RCA31034, serial no. C20453 in cold box 58 in the interval 1993 June 14 through 1993 June 17; a Hamamatsu R943-02, serial no. EA 4267 in cold box 50 in the interval 1994 May 20 to 1995 July 24; the LSU C31034A-02 in cold box 60 in the interval 1996 March 13 through 1998 May 8; and an RCA 31034A-02 in KPNO cold box 53 in the interval 1998 July 7 through 2001 December 11. Forty-three nights of useful data were taken with the first three photomultipliers. One hundred sixteen nights of useful data were taken with the last identified photomultiplier.

Each photomultiplier had a history. The photomultiplier in cold box 58 was meant to be, and was used as, a standby as a search was made for a stable photomultiplier. Since its sensitivity was low, it was used for only one observing run, and contributed useful data on four nights of observing. After roughly one year of use, the Hamamatsu developed an instability. It was replaced by the LSU C31034A-02, so-called because the author's institution paid for it. That photomultiplier, C31034A-02, was a successor to RCA 31034A-02 models, and was manufactured by Burle Industries, which had purchased the old RCA tubes' division. The "LSU" photomultiplier also developed a problem, never successfully repeated or diagnosed in the laboratory. In order to be as confident as possible in data being acquired, a switch was made to the fourth photomultiplier, an RCA 31034A-02 in KPNO cold box 53. That tube became available with the closure of photoelectric photometry programs at Kitt Peak.

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All photomultipliers were operated at $-1600V$. None of the photomultipliers' sensitivity functions were available. Data for the RCA brand of photomultiplier have been tabulated in Landolt (1992) in Appendix B, Table 11, and are illustrated in Figures 52–54.

The filter set used throughout the observational program was CTIO's *UBVRI* filter set 3. Information describing the composition of that filter set may be found in Landolt (1983, Table III). The transmission characteristics of those filters are tabulated in Landolt (1992, Appendix B).

Between 20 and 25 *UBVRI* standard stars, as defined by Landolt (1992), were observed each night together with the program stars. A night's observations began and ended with a group of four or five standard stars. Similar groups were observed periodically throughout the night. Each of these groups contained stars closely spaced on the sky, and possessing as wide a color range as possible. A more complete outline of the author's observing philosophy has been given in Landolt (2007b).

A complete data set for a star consisted of a series of measures: *VBURIIRUBV*. A 14″0 diaphragm was used throughout the observing program. The integration or counting time depended upon the faintness of a particular star. The counting time never was less than 10 s per filter, and was as long as 60 s for the faintest stars. Data reduction procedures followed the precepts outlined by Schulte & Crawford (1961) and by Landolt (2007b). It should be noted that the author always has reduced the $(V - I)$ color index independently. That is, the author's $(V - I)$ color index values are not a direct combination of the $(V - R)$ and $(R - I)$ color indices.

Extinction coefficients were calculated from three or four standard stars possessing a range in color index that were followed from near the meridian over to an air mass of 2.1, or so. Each night's data were reduced using the primary extinction coefficients derived from that night, whenever possible. Average secondary extinction coefficients for a given run were used. Examples of the range in extinction coefficients which an observer in fact encounters have been tabulated in Landolt (2007b). Such tabulations should remind any observer of the perils in using mean extinction coefficients.

The final computer printout for each night's reductions contained the magnitude and color indices for each of the standard stars. Since the time of observation was recorded for each measurement, it was possible to plot the residuals in the *V* magnitude and in the different color indices for each standard star against UT for a given night. These plots permitted small corrections to be made to all program star measures. The corrections usually were less than a few hundredths of a magnitude. Such corrections took into account small changes in both atmospheric and instrumental conditions that occurred during the course of a night's observations.

3. DISCUSSION

The magnitudes and color indices for 132 stars which appeared in Landolt (1992) have been improved in accuracy via additional measurements. Further, new stars were added to some fields (e.g., Feige 24 and G 93-48) thereby creating photometric sequences with a more broad range in color index. There are 70 new additions to the photometric standard stars in this new edition.

The accuracy of the magnitude and color index transformations was checked via a comparison of the magnitudes and color indices of the stars from Landolt (1992) that were used as standards in this paper, with the magnitudes and color indices of these same stars obtained during this current project. The comparisons, the delta quantities, were in the sense of data from this project minus the corresponding magnitudes and color indices from Landolt (1992). The plots of these delta quantities as a function of the Landolt (1992) standard stars' magnitudes and color indices are not illustrated in this paper, since overall the general appearance of the plots is the same as in the author's previous papers (for example, see Figures 1–6 in Landolt 2007a). And, since four photomultipliers were used, this means a saving of 24 plots.

As in the past, an inspection of each plot, the delta quantities on the ordinate, and the color indices on the abscissas, show the presence of nonlinearities in the transformation process. Inspection of each figure allowed the nonlinear "break points" to be chosen. The break points for these data are the same as those found in Landolt (2007a). They are indicated in Table 1 along with the appropriate nonlinear transformation relations, which were derived by least-squares fitting from the plots of the delta quantities as a function of the Landolt (1992) standard stars' magnitudes and color indices.

The term "nonlinear" has been used by the author in the past (see, e.g., Landolt 1983, 1992, 2007a, 2007b; Landolt & Uomoto 2007) in describing the last step of the transformation process. Instead of using a polynomial relation, three linear relations with fixed break points have been utilized as an approximation to a polynomial relation.

The nonlinear transformation relations had the form in which a subscript "c" indicates "catalog" and subscript "obs" indicates "observed." As an example, the first line in Table 1 has the form:

$$(B - V)_c = -0.00212 + 1.03758(B - V)_{obs}$$
$$\pm\, 0.00284 \pm 0.01959, \tag{1}$$

i.e., each color index is corrected as a function of itself, for the case where $(B - V) < +0.1$. Note that the correction to the *V* magnitude has to be made after the $(B - V)$ nonlinear transformation correction has been done:

$$V_c = -0.00331 - 0.01849(B - V)_c + V_{obs}$$
$$\pm\, 0.00629 \pm 0.04330, \tag{2}$$

again, for $(B - V) < +0.1$.

The nonlinear transformation relations in Table 1 were applied to the recovered magnitudes and color indices of the standard stars used in this project. The data then were on the broadband *UBVRI* photometric system, as defined by the standard stars in Landolt (1992). This process was done separately for data collected with each photomultiplier. Next, the standard star magnitudes and color indices, now corrected for nonlinear transformation, were compared once again to the published values in the sense of corrected values minus published magnitudes and color indices. The fact that the nonlinear effects were corrected successfully could be illustrated with an additional 24 plots, not shown, again since their appearance is as in previous papers (for example, see Figures 7–12 in Landolt 2007a). Therefore, the data in this paper obtained with each photomultiplier have been transformed to the photometric system defined in Landolt (1992).

All the data obtained with the four photomultipliers, and corrected with nonlinear transformation relations, plus previous standard star data from Landolt (1992) for stars in common, were combined to produce Table 2, the final table of magnitudes and color indices. The data were weighted by the number of observations and inversely as the square of the mean error of a

Table 1
Nonlinear Coefficients

Instrument	Index	Zero	Error Zero	Slope	Error Slope	Color Range
T60RIPOS	$(B-V)_c$	−0.00212	±0.00284	+1.03758	±0.01959	$(B-V) < +0.1$
(four nights)	$(B-V)_c$	+0.00247	±0.00288	+1.00401	±0.00537	$+0.1 < (B-V) < +1.0$
	$(B-V)_c$	+0.02200	±0.00684	+0.98357	±0.00511	$(B-V) > +1.0$
	$(U-B)_c$	−0.07830	±0.07168	+0.88102	±0.08268	$(U-B) < −0.4$
	$(U-B)_c$	−0.01327	±0.00241	+0.97997	±0.01308	$−0.4 < (U-B) < +0.5$
	$(U-B)_c$	−0.00187	±0.02028	+1.00803	±0.01427	$(U-B) > +0.5$
	V_c	−0.00331	±0.00629	−0.01849	±0.04330	$(B-V) < +0.1$
	V_c	−0.00182	±0.00423	+0.00087	±0.00788	$+0.1 < (B-V) < +1.0$
	V_c	+0.01279	±0.01425	−0.00843	±0.01064	$(B-V) > +1.0$
	$(V-R)_c$	+0.00060	±0.00105	+1.00118	±0.01206	$(V-R) < +0.1$
	$(V-R)_c$	−0.00080	±0.00376	+1.00044	±0.01209	$+0.1 < (V-R) < +0.5$
	$(V-R)_c$	−0.00651	±0.00806	+1.01172	±0.01115	$(V-R) > +0.5$
	$(R-I)_c$	+0.00419	±0.01098	+1.05826	±0.11217	$(R-I) < +0.1$
	$(R-I)_c$	+0.00307	±0.00904	+0.99293	±0.03021	$+0.1 < (R-I) < +0.5$
	$(R-I)_c$	−0.00071	±0.01161	+0.99879	±0.01755	$(R-I) > +0.5$
	$(V-I)_c$	+0.01510	±0.01898	+1.09030	±0.10099	$(V-I) < +0.1$
	$(V-I)_c$	+0.00314	±0.00907	+0.99530	±0.01569	$+0.1 < (V-I) < +1.0$
	$(V-I)_c$	−0.00764	±0.01207	+1.00578	±0.00872	$(V-I) > +1.0$
T60RIPOS	$(B-V)_c$	+0.00165	±0.00309	+1.05912	±0.01650	$(B-V) < +0.1$
(15 nights)	$(B-V)_c$	+0.01182	±0.00003	+0.99045	±0.00402	$+0.1 < (B-V) < +1.0$
	$(B-V)_c$	+0.00878	±0.01056	+0.99121	±0.00816	$(B-V) > +1.0$
	$(U-B)_c$	−0.06096	±0.01787	+0.92517	±0.01867	$(U-B) < −0.4$
	$(U-B)_c$	−0.01741	±0.00238	+0.99853	±0.01315	$−0.4 < (U-B) < +0.5$
	$(U-B)_c$	−0.02518	±0.01176	+1.02363	±0.00934	$(U-B) > +0.5$
	V_c	+0.00066	±0.00139	−0.00343	±0.00741	$(B-V) < +0.1$
	V_c	+0.00106	±0.00208	−0.00283	±0.00383	$+0.1 < (B-V) < +1.0$
	V_c	−0.00457	±0.01004	+0.00429	±0.00776	$(B-V) > +1.0$
	$(V-R)_c$	+0.00124	±0.00110	+1.02139	±0.01164	$(V-R) < +0.1$
	$(V-R)_c$	−0.00010	±0.00169	+0.99970	±0.00546	$+0.1 < (V-R) < +0.5$
	$(V-R)_c$	+0.00484	±0.00462	+0.99576	±0.00633	$(V-R) > +0.5$
	$(R-I)_c$	+0.00055	±0.00281	+1.01751	±0.02488	$(R-I) < +0.1$
	$(R-I)_c$	+0.00368	±0.00299	+0.98764	±0.00958	$+0.1 < (R-I) < +0.5$
	$(R-I)_c$	−0.00782	±0.00329	+1.01033	±0.00457	$(R-I) > +0.5$
	$(V-I)_c$	+0.00010	±0.00670	+1.01246	±0.03104	$(V-I) < +0.1$
	$(V-I)_c$	+0.00229	±0.00233	+0.99721	±0.00406	$+0.1 < (V-I) < +1.0$
	$(V-I)_c$	−0.00862	±0.00514	+1.00647	±0.00357	$(V-I) > +1.0$
T60RIPOS	$(B-V)_c$	+0.00420	±0.00251	+1.05506	±0.01389	$(B-V) < +0.1$
(24 nights)	$(B-V)_c$	+0.01252	±0.00184	+0.98744	±0.00343	$+0.1 < (B-V) < +1.0$
	$(B-V)_c$	+0.00697	±0.00921	+0.99138	±0.00721	$(B-V) > +1.0$
	$(U-B)_c$	−0.05478	±0.01516	+0.92932	±0.01611	$(U-B) < −0.4$
	$(U-B)_c$	−0.01710	±0.00218	+0.98453	±0.01171	$−0.4 < (U-B) < +0.5$
	$(U-B)_c$	−0.02232	±0.01093	+1.03010	±0.00888	$(U-B) > +0.5$
	V_c	+0.00065	±0.00193	+0.00498	±0.01067	$(B-V) < +0.1$
	V_c	+0.00210	±0.00225	−0.00515	±0.00420	$+0.1 < (B-V) < +1.0$
	V_c	−0.00655	±0.00587	+0.00583	±0.00459	$(B-V) > +1.0$
	$(V-R)_c$	+0.00099	±0.00092	+1.01598	±0.01024	$(V-R) < +0.1$
	$(V-R)_c$	+0.00049	±0.00152	+0.99747	±0.00501	$+0.1 < (V-R) < +0.5$
	$(V-R)_c$	+0.00442	±0.00300	+0.99281	±0.00421	$(V-R) > +0.5$
	$(R-I)_c$	−0.00329	±0.00329	+0.98870	±0.03130	$(R-I) < +0.1$
	$(R-I)_c$	−0.00042	±0.00400	+0.99853	±0.01285	$+0.1 < (R-I) < +0.5$
	$(R-I)_c$	+0.00106	±0.00255	+0.99768	±0.00356	$(R-I) > +0.5$
	$(V-I)_c$	−0.00110	±0.00493	+1.00722	±0.02502	$(V-I) < +0.1$
	$(V-I)_c$	−0.00046	±0.00277	+0.99850	±0.00481	$+0.1 < (V-I) < +1.0$
	$(V-I)_c$	−0.00622	±0.00432	+0.99487	±0.00306	$(V-I) > +1.0$
CTKP53	$(B-V)_c$	+0.00127	±0.00154	+1.06192	±0.00880	$(B-V) < +0.1$
	$(B-V)_c$	+0.01091	±0.00106	+0.99029	±0.00202	$+0.1 < (B-V) < +1.0$
	$(B-V)_c$	+0.00781	±0.00624	+0.99172	±0.00485	$(B-V) > +1.0$
	$(U-B)_c$	−0.03057	±0.00923	+0.94734	±0.01053	$(U-B) < −0.2$
	$(U-B)_c$	−0.02134	±0.00157	+1.02212	±0.00948	$−0.2 < (U-B) < +0.5$
	$(U-B)_c$	−0.01422	±0.01110	+1.02218	±0.00868	$(U-B) > +0.5$
	V_c	+0.00068	±0.00129	−0.00536	±0.00750	$(B-V) < +0.1$
	V_c	+0.00002	±0.00114	+0.00123	±0.00222	$+0.1 < (B-V) < +1.0$
	V_c	−0.00244	±0.00633	+0.00106	±0.00515	$(B-V) > +1.0$

Table 1
(Continued)

Instrument	Index	Zero	Error Zero	Slope	Error Slope	Color Range
	$(V-R)_c$	+0.00030	±0.00052	+1.00034	±0.00588	$(V-R) < +0.1$
	$(V-R)_c$	−0.00052	±0.00101	+1.00150	±0.00334	$+0.1 < (V-R) < +0.5$
	$(V-R)_c$	−0.00387	±0.00237	+1.00617	±0.00335	$(V-R) > +0.5$
	$(R-I)_c$	−0.00129	±0.00098	+0.99863	±0.00963	$(R-I) < +0.1$
	$(R-I)_c$	−0.00118	±0.00114	+1.00367	±0.00369	$+0.1 < (R-I) < +0.5$
	$(R-I)_c$	−0.00254	±0.00185	+1.00343	±0.00277	$(R-I) > +0.5$
	$(V-I)_c$	−0.00215	±0.00289	+0.98744	±0.01413	$(V-I) < +0.1$
	$(V-I)_c$	+0.00014	±0.00123	+0.99962	±0.00219	$+0.1 < (V-I) < +1.0$
	$(V-I)_c$	−0.00587	±0.00310	+1.00431	±0.00227	$(V-I) > +1.0$

single observation via the relations (Barford 1967)

$$\text{weighted result} = \left(\frac{\omega_1 X_1/s_1^2 + \omega_2 X_2/s_2^2}{\omega_1/s_1^2 + \omega_2/s_2^2}\right), \qquad (3)$$

$$\text{weighted error} = \left(\frac{\omega_1 + \omega_2}{\omega_1/s_1^2 + \omega_2/s_2^2}\right)^{1/2}, \qquad (4)$$

where ω_i is the number of nights, X_i is the magnitude or color index, and s_i is the mean error of a single observation.

There are 595 photometric standard stars in Table 2. Of these 595 stars, 413 have five or more observations each. These 413 stars are the most robust to use for standardization purposes. Further, when choosing stars in Table 2 to use as standard stars, whenever possible, the observer should choose stars with many individual observations, as well as those with small errors.

Finding charts are provided via Figures 1–136. The coordinates in Table 2 were taken from the UCAC2 catalog (Zacharias et al. 2004) when possible. Positions for stars not in the UCAC2 catalog were taken from the 2MASS Point Source Catalogue (PSC), whose coordinates came from the Two Micron All Sky Survey (2MASS; Skrutskie et al. 2006).

Columns (4)–(9) in Table 2 give the final magnitude and color indices in the *UBVRI* photometric system as defined by Landolt (1992). Column (10) indicates the number of times n that each star was observed. Column (11) gives the number of nights m that each star was observed. The numbers in columns (4)–(9) are mean magnitudes and color indices. Hence, the errors tabulated in columns (12)–(17) are mean errors of the mean magnitude and color indices (see Landolt 1983, p. 450).

The 595 stars in Table 2, on average, have been observed 24 times each on 17 different nights. An error analysis for all the stars in Table 2 is given in Table 3. The numerical size of the average mean error of a single observation of a V magnitude or a color index for the 595 stars in Table 2 is given in column (2) of Table 3. Column (3) shows the average mean error of the mean observed magnitude or color index. Errors in column (2) for a single observation are as large as they are for $(U-B)$, $(R-I)$, and $(V-I)$, since red stars are faint in U and blue stars are faint in I.

Although accurate coordinates are necessary for individual stars in many circumstances, modern area detectors need knowledge of the coordinate center of a photometric sequence. Table 4 provides the coordinate centers for the *UBVRI* photometric sequences listed in Table 2. The field name is based on a Selected Area (SA), or on a star, usually a blue star, chosen from the literature years ago on the basis that it was blue. An exception is the T Phe field. T Phe is a Mira variable (= HD 2725 = CD−47 131 = CPD−47 50 = GSC 08024−01000) whose photometric

sequence was included in Landolt (1992) just because the author had completed the sequence in an area of the sky (near the Magellanic Clouds) where another photometric sequence would be of use. The current T Phe sequence has been enlarged from the sequence initially published in Landolt (1992); it also appears in Landolt (2007a).

The author has gone another step. Most of the SA fields are $60'$ or $70'$ on a side. Many detectors, however, encompass much smaller fields of view. Hence, where it makes sense to do so, the SA fields have been subdivided into smaller fields, usually $10'$ on a side, positioned to enclose as many standard stars as possible into the $10' \times 10'$ field of view. The smaller field within an SA has been named a subfield (SF), e.g., SA92 SF1 is subfield 1 within SA 92. The coordinates of the center of each SF are given in Table 4.

The range in magnitude and color index for each field or SF is given in Table 4. The last column in Table 4 lists the stars within each standard star field or SF. Those stars with fewer than five measures each appear in italics in the last column of Table 4. It is hoped that this information will aid in identifying which stars are to be used for a given SF during data reductions.

Some observers may find it to their advantage to redefine the centers for the SA fields to better fit their detectors' needs.

The magnitude distribution of the stars in Table 2 with five or more observations each is plotted in Figure 137 in 0.25 V mag bins. Figure 138 shows the $(B-V)$ color index range in 0.1 mag bins for these same stars.

Figures 139–145 have been plotted using data for the stars in Table 2 with five or more observations each. These figures show the mean error of a mean magnitude or color index, plotted as a function of magnitude or color index.

Figures 146 and 147 illustrate the $[(U-B), (B-V)]$ and $[(V-R), (R-I)]$ color–color plots for all stars with five or more measurements each. The two stars in Figure 146 which fall to the upper right of the main sequence are SA98-L5 $[(U-B) = −0.100; (B-V) = +1.900]$ and SA110-273 $[(U-B) = +1.000; (B-V) = +2.527]$. The associated photometric errors are large, especially for SA98-L5, and hence were not plotted in Figures 139–145. Similarly, the $(U-B)$ errors for the stars SA110-157, SA110-315, and SA110-273, large due to the small flux in the U-band, were not plotted in the relevant figures.

Cross-identifications are provided in Table 5. On occasion the very best coordinates and proper motion information is needed for standard stars. Hence, Table 5 presents the most recent coordinates and proper motions for the new standard stars in Table 2. All coordinates are for the epoch J2000.0. The 2MASS PSC positions come from the 2MASS (Skrutskie et al. 2006). The UCAC2 positions come from The Second USNO

Table 2
UBVRI Photometry of Standard Stars

| Star | α (J2000.0) | δ (J2000.0) | V | B−V | U−B | V−R | R−I | V−I | n | m | Mean Error of the Mean | | | | | |
| | | | | | | | | | | | V | B−V | U−B | V−R | R−I | V−I |
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
TPhe I	00 30 04.593	−46 28 10.17	14.820	+0.764	+0.338	+0.422	+0.395	+0.817	25	13	0.0026	0.0032	0.0072	0.0036	0.0098	0.0110
TPhe A	00 30 09.594	−46 31 28.91	14.651	+0.793	+0.380	+0.435	+0.405	+0.841	29	12	0.0028	0.0046	0.0071	0.0019	0.0035	0.0032
TPhe H	00 30 09.683	−46 27 24.30	14.942	+0.740	+0.225	+0.425	+0.425	+0.851	23	12	0.0029	0.0029	0.0071	0.0035	0.0077	0.0098
TPhe B	00 30 16.313	−46 27 58.57	12.334	+0.405	+0.156	+0.262	+0.271	+0.535	29	17	0.0115	0.0026	0.0039	0.0020	0.0019	0.0035
TPhe C	00 30 16.98	−46 32 21.4	14.376	−0.298	−1.217	−0.148	−0.211	−0.360	39	23	0.0022	0.0024	0.0043	0.0038	0.0133	0.0149
TPhe D	00 30 18.342	−46 31 19.85	13.118	+1.551	+1.871	+0.849	+0.810	+1.663	37	23	0.0033	0.0030	0.0118	0.0015	0.0023	0.0030
TPhe E	00 30 19.768	−46 24 35.60	11.631	+0.443	−0.103	+0.276	+0.283	+0.564	38	10	0.0017	0.0013	0.0025	0.0007	0.0016	0.0020
TPhe J	00 30 23.02	−46 23 51.6	13.434	+1.465	+1.229	+0.980	+1.063	+2.043	28	15	0.0023	0.0043	0.0059	0.0011	0.0015	0.0011
TPhe F	00 30 49.820	−46 33 24.07	12.475	+0.853	+0.534	+0.492	+0.437	+0.929	19	10	0.0008	0.0024	0.0095	0.0005	0.0014	0.0029
TPhe K	00 30 56.315	−46 23 26.04	12.935	+0.806	+0.402	+0.473	+0.429	+0.909	2	2	0.0007	0.0007	0.0163	0.0007	0.0001	0.0007
TPhe G	00 31 04.303	−46 22 51.35	10.447	+1.545	+1.910	+0.934	+1.086	+2.025	20	10	0.0008	0.0011	0.0049	0.0008	0.0016	0.0017
PG0029+024	00 31 42.20	+02 37 44.3	15.268	+0.362	−0.184	+0.251	+0.337	+0.593	5	2	0.0094	0.0174	0.0112	0.0161	0.0125	0.0067
HD 2892	00 32 12.153	+01 11 17.28	9.360	+1.322	+1.414	+0.692	+0.628	+1.321	18	13	0.0026	0.0022	0.0018	0.0017	0.0021	0.0017
BD −15 115	00 38 20.261	−14 59 54.14	10.885	−0.199	−0.838	−0.095	−0.110	−0.204	15	12	0.0015	0.0014	0.0019	0.0017	0.0019	0.0028
PG0039+049	00 42 06.121	+05 09 23.41	12.877	−0.019	−0.871	+0.067	+0.097	+0.164	4	3	0.0020	0.0030	0.0055	0.0035	0.0055	0.0045
BD −11 162	00 52 15.069	−10 39 46.09	11.184	−0.082	−1.115	+0.051	+0.092	+0.145	17	14	0.0015	0.0015	0.0031	0.0015	0.0014	0.0023
92 309	00 53 14.047	+00 46 02.14	13.842	+0.513	−0.024	+0.326	+0.325	+0.652	2	1	0.0035	0.0057	0.0028	0.0014	0.0035	0.0014
92 312	00 53 16.533	+00 48 28.90	10.598	+1.636	+1.992	+0.898	+0.906	+1.806	5	5	0.0014	0.0025	0.0061	0.0005	0.0006	0.0011
92 322	00 53 46.962	+00 47 34.91	12.676	+0.528	−0.002	+0.302	+0.305	+0.608	2	1	0.0007	0.0049	0.0028	0.0014	0.0007	0.0007
92 245	00 54 16.14	+00 39 54.6	13.818	+1.418	+1.189	+0.929	+0.907	+1.836	21	8	0.0028	0.0079	0.0301	0.0024	0.0024	0.0028
92 248	00 54 30.77	+00 40 16.9	15.346	+1.128	+1.289	+0.690	+0.553	+1.245	4	2	0.0255	0.0160	0.0955	0.0215	0.0145	0.0175
92 249	00 54 33.589	+00 41 05.39	14.325	+0.699	+0.240	+0.399	+0.370	+0.770	17	8	0.0049	0.0085	0.0114	0.0046	0.0065	0.0073
92 250	00 54 37.154	+00 38 57.57	13.178	+0.814	+0.480	+0.446	+0.394	+0.840	20	9	0.0022	0.0034	0.0074	0.0022	0.0022	0.0029
92 330	00 54 43.371	+00 43 26.09	15.073	+0.568	−0.115	+0.331	+0.334	+0.666	2	1	0.0141	0.0297	0.0163	0.0304	· · ·	0.0304
92 252	00 54 47.255	+00 39 24.55	14.932	+0.517	−0.140	+0.326	+0.332	+0.666	41	18	0.0033	0.0055	0.0082	0.0047	0.0072	0.0068
92 253	00 54 51.364	+00 40 19.73	14.085	+1.131	+0.955	+0.719	+0.616	+1.337	39	17	0.0032	0.0062	0.0221	0.0027	0.0043	0.0050
92 335	00 54 58.294	+00 44 00.63	12.523	+0.672	+0.208	+0.380	+0.338	+0.719	2	1	0.0007	0.0028	0.0049	· · ·	0.0014	0.0014
92 339	00 55 03.25	+00 44 11.0	15.579	+0.449	−0.177	+0.306	+0.339	+0.645	19	8	0.0087	0.0117	0.0126	0.0117	0.0197	0.0177
92 342	00 55 09.905	+00 43 12.88	11.615	+0.435	−0.037	+0.265	+0.271	+0.537	73	59	0.0008	0.0006	0.0016	0.0007	0.0007	0.0012
92 188	00 55 10.48	+00 23 09.2	14.751	+1.050	+0.751	+0.679	+0.573	+1.254	14	6	0.0096	0.0187	0.0551	0.0051	0.0043	0.0088
92 409	00 55 11.977	+00 55 57.53	10.627	+1.138	+1.136	+0.734	+0.625	+1.361	5	3	0.0031	0.0027	0.0085	0.0022	0.0027	0.0018
92 410	00 55 14.254	+01 01 51.05	14.984	+0.398	−0.134	+0.239	+0.242	+0.484	27	13	0.0058	0.0064	0.0083	0.0052	0.0102	0.0117
92 412	00 55 15.666	+01 01 54.33	15.036	+0.457	−0.152	+0.285	+0.304	+0.589	27	13	0.0054	0.0077	0.0133	0.0069	0.0094	0.0106
92 259	00 55 21.618	+00 40 31.00	14.997	+0.642	+0.108	+0.370	+0.452	+0.821	3	1	0.0115	0.0219	0.0214	0.0191	0.0202	0.0150
92 345	00 55 23.753	+00 51 07.19	15.216	+0.745	+0.121	+0.465	+0.476	+0.941	2	1	0.0007	0.0014	0.0339	0.0057	0.0113	0.0057
92 259	00 55 21.618	+00 40 31.00	14.997	+0.642	+0.108	+0.370	+0.452	+0.821	3	1	0.0115	0.0219	0.0214	0.0191	0.0202	0.0150
92 345	00 55 23.753	+00 51 07.19	15.216	+0.745	+0.121	+0.465	+0.476	+0.941	2	1	0.0007	0.0014	0.0339	0.0057	0.0113	0.0057
92 347	00 55 26.072	+00 50 48.86	15.752	+0.543	−0.097	+0.339	+0.318	+0.658	4	2	0.0255	0.0280	0.0355	0.0295	0.0755	0.0995
92 348	00 55 29.457	+00 44 32.78	12.109	+0.598	+0.056	+0.345	+0.341	+0.688	4	2	0.0010	0.0015	0.0035	0.0015	0.0005	0.0020
92 417	00 55 32.20	+00 53 07.3	15.922	+0.477	−0.185	+0.351	+0.305	+0.657	6	3	0.0127	0.0188	0.0318	0.0151	0.0678	0.0625
92 260	00 55 32.938	+00 38 23.07	15.071	+1.162	+1.115	+0.719	+0.608	+1.328	9	4	0.0090	0.0093	0.0477	0.0070	0.0057	0.0080
92 263	00 55 39.384	+00 36 19.50	11.782	+1.046	+0.844	+0.562	+0.521	+1.083	79	60	0.0008	0.0007	0.0018	0.0006	0.0006	0.0007
92 497	00 55 54.346	+01 11 42.13	13.642	+0.729	+0.257	+0.404	+0.378	+0.783	1	1	· · ·	· · ·	· · ·	· · ·	· · ·	· · ·
92 498	00 55 56.529	+01 10 40.86	14.408	+1.010	+0.794	+0.648	+0.531	+1.181	1	1	· · ·	· · ·	· · ·	· · ·	· · ·	· · ·

Table 2
(Continued)

											Mean Error of the Mean					
Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
92 500	00 55 57.986	+01 10 25.14	15.841	+1.003	+0.211	+0.738	+0.599	+1.338	1	1	⋯	⋯	⋯	⋯	⋯	⋯
92 425	00 55 58.180	+00 52 58.49	13.941	+1.191	+1.173	+0.755	+0.627	+1.384	36	19	0.0038	0.0067	0.0115	0.0023	0.0027	0.0038
92 426	00 55 59.594	+00 52 54.39	14.466	+0.729	+0.184	+0.412	+0.396	+0.809	8	4	0.0099	0.0131	0.0293	0.0078	0.0124	0.0120
92 501	00 56 00.113	+01 10 51.22	12.958	+0.610	+0.068	+0.345	+0.331	+0.677	1	1	⋯	⋯	⋯	⋯	⋯	⋯
92 355	00 56 05.678	+00 50 46.78	14.965	+1.164	+1.201	+0.759	+0.645	+1.406	15	7	0.0088	0.0124	0.0465	0.0070	0.0052	0.0090
92 427	00 56 06.648	+01 00 20.83	14.953	+0.809	+0.352	+0.462	+2.922	+3.275	2	1	0.0021	0.0085	0.0233	0.0014	0.0113	0.0092
92 502	00 56 08.126	+01 04 25.04	11.812	+0.486	−0.095	+0.284	+0.292	+0.576	1	1	⋯	⋯	⋯	⋯	⋯	⋯
92 430	00 56 15.198	+00 53 18.20	14.440	+0.567	−0.040	+0.338	+0.338	+0.676	35	18	0.0041	0.0052	0.0081	0.0029	0.0049	0.0051
92 276	00 56 26.598	+00 41 50.72	12.036	+0.629	+0.067	+0.368	+0.357	+0.726	21	11	0.0039	0.0022	0.0039	0.0031	0.0031	0.0052
92 282	00 56 46.817	+00 38 29.50	12.969	+0.318	−0.038	+0.201	+0.221	+0.422	27	15	0.0031	0.0023	0.0044	0.0017	0.0023	0.0033
92 507	00 56 50.777	+01 05 59.65	11.332	+0.932	+0.688	+0.507	+0.461	+0.969	3	2	0.0006	0.0046	0.0006	0.0012	0.0006	0.0012
92 508	00 56 51.196	+01 09 34.19	11.679	+0.529	−0.047	+0.318	+0.320	+0.639	3	2	0.0035	0.0046	0.0029	0.0058	0.0029	0.0029
92 364	00 56 52.235	+00 43 53.58	11.673	+0.607	−0.037	+0.356	+0.357	+0.714	4	2	0.0015	0.0015	0.0085	0.0045	0.0010	0.0055
92 433	00 56 53.726	+01 00 41.72	11.667	+0.655	+0.110	+0.367	+0.348	+0.716	3	2	0.0006	0.0035	0.0115	0.0029	0.0017	0.0023
92 288	00 57 17.005	+00 36 48.67	11.631	+0.858	+0.472	+0.491	+0.441	+0.932	72	57	0.0011	0.0007	0.0014	0.0006	0.0008	0.0011
F 11	01 04 21.676	+04 13 37.04	12.065	−0.239	−0.988	−0.118	−0.142	−0.259	91	75	0.0007	0.0007	0.0017	0.0006	0.0010	0.0011
F 11A	01 04 27.97	+04 11 55.4	14.475	+0.841	+0.454	+0.479	+0.426	+0.907	16	7	0.0027	0.0046	0.0128	0.0036	0.0075	0.0098
F 11B	01 04 28.389	+04 11 25.09	13.784	+0.747	+0.234	+0.437	+0.412	+0.849	14	7	0.0025	0.0026	0.0043	0.0021	0.0036	0.0055
F 16	01 54 34.633	−06 45 59.67	12.405	−0.008	+0.013	−0.007	+0.002	−0.004	59	46	0.0007	0.0007	0.0018	0.0008	0.0013	0.0013
93 407	01 54 37.126	+00 53 47.93	11.971	+0.852	+0.564	+0.487	+0.421	+0.908	5	3	0.0027	0.0031	0.0134	0.0031	0.0036	0.0027
93 317	01 54 37.728	+00 43 00.57	11.546	+0.488	−0.053	+0.293	+0.299	+0.592	53	44	0.0005	0.0006	0.0012	0.0006	0.0006	0.0006
93 333	01 55 05.218	+00 45 42.57	12.009	+0.833	+0.436	+0.469	+0.422	+0.892	54	44	0.0009	0.0012	0.0021	0.0007	0.0009	0.0009
93 424	01 55 26.364	+00 56 42.63	11.619	+1.083	+0.929	+0.553	+0.501	+1.056	55	44	0.0006	0.0010	0.0018	0.0006	0.0005	0.0006
G3 33	02 00 12.959	+13 03 07.01	12.298	+1.802	+1.306	+1.355	+1.752	+3.103	13	7	0.0032	0.0034	0.0098	0.0033	0.0017	0.0037
PG0220+132B	02 23 33.863	+13 28 03.98	14.216	+0.937	+0.319	+0.562	+0.496	+1.058	3	2	0.0081	0.0375	0.0583	0.0058	0.0127	0.0069
PG0220+132	02 23 38.419	+13 27 34.70	14.760	−0.132	−0.922	−0.050	−0.120	−0.170	5	3	0.0063	0.0112	0.0103	0.0098	0.0170	0.0264
PG0220+132A	02 23 39.989	+13 27 29.89	15.771	+0.783	−0.339	+0.514	+0.481	+0.995	3	2	0.0150	0.0699	0.0537	0.0110	0.0589	0.0479
F 22	02 30 16.627	+05 15 50.70	12.798	−0.052	−0.809	−0.103	−0.105	−0.206	80	70	0.0009	0.0007	0.0015	0.0007	0.0013	0.0013
PG0231+051E	02 33 28.872	+05 19 48.38	13.809	+0.677	+0.207	+0.383	+0.369	+0.752	15	8	0.0019	0.0014	0.0019	0.0006	0.0013	0.0019
PG0231+051D	02 33 34.00	+05 19 30.9	14.031	+1.077	+1.026	+0.671	+0.584	+1.252	19	11	0.0018	0.0022	0.0081	0.0011	0.0029	0.0034
PG0231+051A	02 33 40.067	+05 17 40.68	12.768	+0.711	+0.271	+0.405	+0.388	+0.794	16	10	0.0004	0.0011	0.0007	0.0005	0.0015	0.0017
PG0231+051	02 33 41.360	+05 18 43.63	16.096	−0.320	−1.214	−0.144	−0.373	−0.502	33	18	0.0055	0.0057	0.0028	0.0117	0.0627	0.0654
PG0231+051B	02 33 45.528	+05 17 33.30	14.732	+1.437	+1.279	+0.951	+0.991	+1.933	26	14	0.0017	0.0049	0.0119	0.0007	0.0015	0.0022
PG0231+051C	02 33 48.153	+05 20 26.36	13.707	+0.678	+0.078	+0.396	+0.385	+0.783	16	9	0.0009	0.0019	0.0011	0.0007	0.0012	0.0019
F 24	02 35 07.592	+03 43 56.79	12.412	−0.203	−1.182	+0.087	+0.361	+0.444	128	115	0.0010	0.0006	0.0017	0.0008	0.0010	0.0008
F 24A	02 35 16.611	+03 43 16.78	13.822	+0.525	+0.034	+0.314	+0.319	+0.635	20	10	0.0016	0.0025	0.0036	0.0016	0.0026	0.0031
F 24B	02 35 18.333	+03 42 40.37	13.546	+0.668	+0.188	+0.382	+0.367	+0.749	19	10	0.0018	0.0020	0.0035	0.0015	0.0021	0.0020
F 24C	02 35 26.318	+03 41 50.41	11.761	+1.133	+1.007	+0.598	+0.535	+1.127	18	9	0.0015	0.0012	0.0036	0.0005	0.0011	0.0008
94 171	02 53 38.805	+00 17 18.60	12.659	+0.817	+0.304	+0.480	+0.483	+0.964	18	9	0.0028	0.0035	0.0045	0.0035	0.0019	0.0038
94 296	02 55 19.985	+00 28 11.99	12.255	+0.750	+0.235	+0.415	+0.387	+0.803	2	1	0.0021	0.0014	0.0014	0.0021	0.0021	⋯
94 394	02 56 14.276	+00 35 11.57	12.273	+0.545	−0.047	+0.344	+0.330	+0.676	2	1	0.0028	0.0014	0.0014	0.0007	0.0014	0.0007
94 401	02 56 30.800	+00 40 06.88	14.293	+0.638	+0.098	+0.389	+0.369	+0.759	2	1	0.0014	0.0028	0.0120	0.0064	0.0035	0.0099
94 242	02 57 21.211	+00 18 38.67	11.725	+0.303	+0.110	+0.176	+0.184	+0.362	123	116	0.0005	0.0005	0.0012	0.0005	0.0006	0.0007
BD −2 524	02 57 39.679	−01 59 48.58	10.304	−0.111	−0.621	−0.048	−0.060	−0.108	88	78	0.0006	0.0006	0.0019	0.0004	0.0006	0.0006

Table 2
(Continued)

												Mean Error of the Mean					
Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
94 251	02 57 46.982	+00 16 02.72	11.204	+1.219	+1.281	+0.659	+0.586	+1.245	115	107	0.0005	0.0006	0.0018	0.0003	0.0004	0.0005
94 702	02 58 13.362	+01 10 54.30	11.597	+1.416	+1.617	+0.757	+0.675	+1.431	114	106	0.0006	0.0007	0.0028	0.0004	0.0004	0.0005
GD 50	03 48 50.19	−00 58 32.0	14.063	−0.276	−1.191	−0.147	−0.180	−0.325	47	28	0.0032	0.0036	0.0051	0.0042	0.0079	0.0102
95 15	03 52 40.330	−00 05 22.77	11.302	+0.712	+0.157	+0.424	+0.385	+0.809	2	1	0.0007	0.0007	0.0035	0.0014	0.0014	0.0028
95 16	03 52 40.63	−00 05 05.6	14.313	+1.306	+1.322	+0.796	+0.676	+1.472	4	2	0.0120	0.0160	0.0310	0.0135	0.0060	0.0090
95 301	03 52 41.167	+00 31 21.44	11.216	+1.293	+1.298	+0.692	+0.620	+1.311	51	44	0.0012	0.0005	0.0020	0.0005	0.0007	0.0012
95 302	03 52 42.176	+00 31 17.71	11.694	+0.825	+0.447	+0.471	+0.420	+0.891	29	20	0.0020	0.0015	0.0056	0.0013	0.0011	0.0017
95 96	03 52 54.194	+00 00 18.82	10.010	+0.147	+0.077	+0.079	+0.095	+0.174	71	56	0.0015	0.0012	0.0027	0.0010	0.0011	0.0013
95 97	03 52 57.503	−00 00 19.28	14.818	+0.906	+0.380	+0.522	+0.546	+1.068	2	1	0.0007	0.0226	0.0212	0.0028	0.0191	0.0212
95 98	03 53 00.23	+00 02 48.4	14.448	+1.181	+1.092	+0.723	+0.620	+1.342	2	1	0.0007	0.0014	0.0177	0.0092	0.0071	0.0163
95 100	03 53 00.791	+00 00 15.81	15.633	+0.791	+0.051	+0.538	+0.421	+0.961	3	1	0.0283	0.0785	0.1132	0.0144	0.0572	0.0439
95 101	03 53 04.14	+00 02 49.5	12.677	+0.778	+0.263	+0.436	+0.426	+0.863	2	1	0.0028	0.0028	0.0099	0.0064	0.0064	0.0120
95 102	03 53 07.588	+00 01 10.73	15.622	+1.001	+0.162	+0.448	+0.618	+1.065	3	1	0.0335	0.0803	0.0612	0.0115	0.0508	0.0618
95 252	03 53 10.636	+00 27 22.74	15.394	+1.452	+1.178	+0.816	+0.747	+1.566	6	3	0.0065	0.0257	0.0433	0.0090	0.0086	0.0131
95 190	03 53 13.251	+00 16 22.62	12.627	+0.287	+0.236	+0.195	+0.220	+0.415	44	22	0.0020	0.0017	0.0039	0.0017	0.0015	0.0021
95 193	03 53 20.593	+00 16 34.57	14.338	+1.211	+1.239	+0.748	+0.616	+1.366	20	10	0.0049	0.0063	0.0255	0.0042	0.0034	0.0058
95 105	03 53 21.329	−00 00 18.64	13.574	+0.976	+0.627	+0.550	+0.536	+1.088	1	1	. . .	. . .	. . .	. . .	. . .	. . .
95 106	03 53 25.190	+00 01 22.64	15.137	+1.251	+0.369	+0.394	+0.508	+0.903	2	1	0.0064	0.0615	0.0240	0.1520	0.0127	0.1407
95 107	03 53 25.66	+00 02 20.5	16.275	+1.324	+1.115	+0.947	+0.962	+1.907	2	1	0.0035	0.1068	0.1732	0.0438	0.0226	0.0212
95 112	03 53 40.114	−00 01 11.42	15.502	+0.662	+0.077	+0.605	+0.620	+1.227	1	1	. . .	. . .	. . .	. . .	. . .	. . .
95 41	03 53 41.201	−00 02 32.41	14.060	+0.903	+0.297	+0.589	+0.585	+1.176	1	1	. . .	. . .	. . .	. . .	. . .	. . .
95 42	03 53 43.68	−00 04 33.9	15.606	−0.215	−1.111	−0.119	−0.180	−0.300	41	18	0.0058	0.0073	0.0064	0.0075	0.0269	0.0276
95 317	03 53 44.183	+00 29 50.02	13.449	+1.320	+1.120	+0.768	+0.708	+1.476	24	11	0.0035	0.0067	0.0131	0.0033	0.0012	0.0035
95 263	03 53 47.002	+00 26 40.82	12.679	+1.500	+1.559	+0.801	+0.711	+1.513	19	10	0.0030	0.0034	0.0094	0.0023	0.0011	0.0028
95 115	03 53 47.821	−00 00 47.39	14.680	+0.836	+0.096	+0.577	+0.579	+1.157	1	1	. . .	. . .	. . .	. . .	. . .	. . .
95 43	03 53 48.609	−00 03 01.74	10.803	+0.510	−0.016	+0.308	+0.316	+0.624	16	10	0.0022	0.0020	0.0027	0.0027	0.0018	0.0035
95 271	03 54 16.298	+00 18 52.20	13.669	+1.287	+0.916	+0.734	+0.717	+1.453	15	7	0.0057	0.0080	0.0127	0.0023	0.0023	0.0036
95 328	03 54 19.470	+00 36 31.79	13.525	+1.532	+1.298	+0.908	+0.868	+1.776	23	11	0.0029	0.0054	0.0186	0.0027	0.0015	0.0031
95 329	03 54 23.90	+00 37 07.1	14.617	+1.184	+1.093	+0.766	+0.642	+1.410	13	6	0.0047	0.0103	0.0311	0.0044	0.0094	0.0089
95 330	03 54 30.757	+00 29 05.34	12.174	+1.999	+2.233	+1.166	+1.100	+2.268	47	23	0.0025	0.0026	0.0137	0.0020	0.0016	0.0028
95 275	03 54 44.246	+00 27 20.28	13.479	+1.763	+1.740	+1.011	+0.931	+1.944	40	20	0.0028	0.0054	0.0201	0.0022	0.0016	0.0025
95 276	03 54 45.878	+00 25 54.10	14.118	+1.225	+1.218	+0.748	+0.646	+1.395	14	7	0.0061	0.0102	0.0216	0.0040	0.0032	0.0051
95 60	03 54 49.54	−00 07 04.1	13.429	+0.776	+0.197	+0.464	+0.449	+0.914	20	10	0.0031	0.0031	0.0060	0.0029	0.0025	0.0034
95 218	03 54 49.948	+00 10 08.39	12.095	+0.708	+0.208	+0.397	+0.370	+0.767	20	14	0.0034	0.0022	0.0034	0.0020	0.0020	0.0027
95 132	03 54 51.685	+00 05 21.42	12.067	+0.445	+0.311	+0.263	+0.287	+0.546	41	35	0.0012	0.0013	0.0020	0.0010	0.0013	0.0020
95 62	03 55 00.406	−00 02 54.09	13.538	+1.355	+1.181	+0.742	+0.685	+1.428	22	11	0.0030	0.0053	0.0136	0.0019	0.0019	0.0028
95 137	03 55 03.73	+00 03 26.7	14.440	+1.457	+1.136	+0.893	+0.845	+1.737	1	1	. . .	. . .	. . .	. . .	. . .	. . .
95 139	03 55 04.67	+00 03 07.9	12.196	+0.923	+0.677	+0.562	+0.476	+1.039	3	2	0.0017	0.0046	0.0191	0.0023	0.0017	0.0035
95 66	03 55 06.519	−00 09 31.90	12.892	+0.715	+0.167	+0.426	+0.438	+0.864	2	1	0.0021	0.0071	0.0035	0.0007	0.0057	0.0049
95 227	03 55 08.76	+00 14 34.5	15.779	+0.771	+0.034	+0.515	+0.552	+1.067	14	7	0.0118	0.0289	0.0417	0.0115	0.0107	0.0150
95 142	03 55 09.394	+00 01 20.57	12.927	+0.588	+0.097	+0.371	+0.375	+0.745	22	11	0.0030	0.0030	0.0036	0.0019	0.0017	0.0028
95 74	03 55 31.141	−00 09 13.57	11.531	+1.126	+0.686	+0.600	+0.567	+1.165	40	35	0.0015	0.0013	0.0029	0.0013	0.0010	0.0013
95 231	03 55 38.828	+00 10 43.42	14.216	+0.452	+0.297	+0.270	+0.290	+0.560	26	13	0.0043	0.0045	0.0071	0.0045	0.0053	0.0076
95 284	03 55 41.552	+00 26 37.73	13.669	+1.398	+1.073	+0.818	+0.766	+1.586	20	9	0.0040	0.0078	0.0239	0.0027	0.0036	0.0049

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	V	B−V	U−B	V−R	R−I	V−I
											Mean Error of the Mean					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
95 285	03 55 44.114	+00 25 09.96	15.561	+0.937	+0.703	+0.607	+0.602	+1.210	2	1	0.0071	0.0255	0.0636	0.0071	0.0064	0.0134
95 149	03 55 44.444	+00 07 02.91	10.938	+1.593	+1.564	+0.874	+0.811	+1.685	17	11	0.0051	0.0039	0.0095	0.0024	0.0017	0.0029
95 236	03 56 13.342	+00 08 47.06	11.487	+0.737	+0.168	+0.419	+0.412	+0.831	43	39	0.0004	0.0010	0.0021	0.0008	0.0004	0.0010
96 21	04 51 15.760	−00 14 50.30	12.182	+0.490	−0.004	+0.299	+0.297	+0.598	2	1	0.0028	0.0007	0.0028	0.0057	0.0014	0.0035
96 36	04 51 42.401	−00 10 09.47	10.589	+0.247	+0.118	+0.133	+0.137	+0.271	73	63	0.0005	0.0006	0.0011	0.0005	0.0006	0.0008
96 737	04 52 35.366	+00 22 30.03	11.719	+1.338	+1.146	+0.735	+0.696	+1.432	62	53	0.0009	0.0010	0.0022	0.0004	0.0006	0.0007
96 409	04 52 58.515	+00 09 04.14	13.778	+0.543	+0.042	+0.340	+0.340	+0.682	2	1	0.0106	0.0007	0.0240	0.0085	0.0049	0.0127
96 83	04 52 58.856	−00 14 41.18	11.719	+0.181	+0.205	+0.092	+0.096	+0.189	76	65	0.0005	0.0005	0.0015	0.0005	0.0008	0.0008
96 235	04 53 18.870	−00 05 01.54	11.138	+1.077	+0.890	+0.557	+0.509	+1.066	70	60	0.0005	0.0007	0.0012	0.0003	0.0006	0.0005
G97 42	05 28 00.15	+09 38 38.3	12.443	+1.639	+1.259	+1.171	+1.485	+2.655	23	11	0.0017	0.0035	0.0186	0.0025	0.0031	0.0033
G102 22	05 42 09.273	+12 29 21.60	11.509	+1.621	+1.134	+1.211	+1.590	+2.800	20	10	0.0013	0.0027	0.0074	0.0034	0.0031	0.0042
GD 71C	05 52 12.777	+15 52 44.30	12.325	+1.159	+0.849	+0.655	+0.628	+1.274	19	11	0.0017	0.0022	0.0057	0.0012	0.0013	0.0017
GD 71E	05 52 20.51	+15 52 08.1	13.634	+0.824	+0.428	+0.472	+0.423	+0.892	14	7	0.0013	0.0027	0.0082	0.0012	0.0034	0.0037
GD 71B	05 52 21.530	+15 52 41.61	12.599	+0.680	+0.166	+0.404	+0.399	+0.800	19	11	0.0018	0.0020	0.0026	0.0015	0.0016	0.0015
GD 71D	05 52 24.788	+15 54 58.01	12.898	+0.570	+0.097	+0.359	+0.363	+0.719	19	11	0.0018	0.0020	0.0038	0.0017	0.0023	0.0024
GD 71	05 52 27.619	+15 53 13.23	13.033	−0.248	−1.110	−0.138	−0.166	−0.304	129	115	0.0011	0.0009	0.0010	0.0009	0.0017	0.0021
GD 71A	05 52 33.562	+15 51 59.38	12.643	+1.176	+0.897	+0.651	+0.621	+1.265	24	12	0.0013	0.0021	0.0051	0.0009	0.0009	0.0016
97 249	05 57 07.560	+00 01 11.50	11.735	+0.647	+0.101	+0.369	+0.354	+0.725	105	98	0.0007	0.0007	0.0011	0.0005	0.0006	0.0008
97 345	05 57 33.181	+00 21 16.54	11.605	+1.652	+1.706	+0.929	+0.843	+1.772	30	21	0.0015	0.0014	0.0092	0.0010	0.0007	0.0013
97 351	05 57 37.294	+00 13 43.99	9.779	+0.201	+0.092	+0.124	+0.140	+0.264	136	117	0.0005	0.0006	0.0012	0.0005	0.0006	0.0007
97 75	05 57 55.085	−00 09 28.55	11.483	+1.872	+2.100	+1.047	+0.952	+1.999	20	12	0.0038	0.0047	0.0101	0.0029	0.0016	0.0038
97 284	05 58 25.033	+00 05 13.57	10.787	+1.364	+1.089	+0.774	+0.726	+1.500	110	101	0.0006	0.0008	0.0020	0.0005	0.0005	0.0007
97 224	05 58 44.042	−00 05 10.37	14.085	+0.910	+0.341	+0.553	+0.547	+1.102	2	1	0.0127	0.0177	0.0049	0.0120	0.0127	· · ·
98 961	06 51 26.994	−00 15 36.06	13.089	+1.283	+1.003	+0.701	+0.662	+1.362	2	1	0.0021	0.0007	0.0014	0.0021	· · ·	0.0021
98 966	06 51 28.304	−00 16 25.44	14.001	+0.469	+0.357	+0.283	+0.331	+0.613	2	1	0.0035	0.0014	0.0021	0.0014	0.0191	0.0205
98 557	06 51 29.506	−00 25 06.29	14.780	+1.397	+1.072	+0.755	+0.741	+1.494	2	1	0.0007	0.0544	0.0269	0.0092	0.0297	0.0198
98 556	06 51 29.537	−00 24 50.78	14.137	+0.338	+0.126	+0.196	+0.243	+0.437	6	3	0.0053	0.0053	0.0131	0.0057	0.0045	0.0090
98 562	06 51 30.674	−00 18 58.70	12.185	+0.522	−0.002	+0.305	+0.303	+0.607	2	1	0.0028	0.0049	0.0035	0.0014	0.0014	· · ·
98 563	06 51 31.543	−00 26 25.60	14.162	+0.416	−0.190	+0.294	+0.317	+0.610	10	5	0.0051	0.0085	0.0073	0.0044	0.0079	0.0082
98 978	06 51 33.730	−00 11 31.53	10.574	+0.609	+0.094	+0.348	+0.321	+0.669	96	88	0.0004	0.0005	0.0011	0.0003	0.0004	0.0004
98 L1	06 51 39.022	−00 26 36.28	15.672	+1.243	+0.776	+0.730	+0.712	+1.445	3	2	0.0075	0.0462	0.0976	0.0110	0.0254	0.0318
98 580	06 51 39.76	−00 26 41.9	14.728	+0.367	+0.303	+0.241	+0.305	+0.547	4	2	0.0255	0.0185	0.0185	0.0125	0.0460	0.0395
98 581	06 51 39.901	−00 25 41.86	14.556	+0.238	+0.161	+0.118	+0.244	+0.361	7	3	0.0246	0.0280	0.0200	0.0193	0.0197	0.0155
98 L2	06 51 40.52	−00 21 59.0	15.859	+1.340	+1.497	+0.754	+0.572	+1.327	1	1	· · ·	· · ·	· · ·	· · ·	· · ·	· · ·
98 L3	06 51 42.24	−00 15 55.3	14.614	+1.936	+1.837	+1.091	+1.047	+2.142	4	2	0.0145	0.0265	0.1450	0.0090	0.0070	0.0110
98 L4	06 51 42.25	−00 16 21.3	16.332	+1.344	+1.086	+0.936	+0.785	+1.726	2	2	0.0580	0.0325	0.3429	0.0205	0.0368	0.0580
98 590	06 51 42.973	−00 22 18.91	14.642	+1.352	+0.853	+0.753	+0.747	+1.500	4	2	0.0110	0.0120	0.0525	0.0050	0.0105	0.0135
98 1002	06 51 43.094	−00 15 52.20	14.568	+0.574	−0.027	+0.354	+0.379	+0.733	4	2	0.0055	0.0065	0.0110	0.0070	0.0125	0.0130
98 614	06 51 48.634	−00 20 32.52	15.674	+1.063	+0.399	+0.834	+0.645	+1.480	2	1	0.0424	0.0474	0.0311	0.0226	0.0368	0.0580
98 618	06 51 49.579	−00 21 15.75	12.723	+2.192	+2.144	+1.254	+1.151	+2.407	14	7	0.0051	0.0075	0.0307	0.0035	0.0032	0.0045
98 624	06 51 51.798	−00 20 16.03	13.811	+0.791	+0.394	+0.417	+0.404	+0.822	2	1	0.0141	0.0240	0.0042	0.0014	0.0212	0.0198
98 626	06 51 52.394	−00 20 43.28	14.758	+1.406	+1.067	+0.806	+0.816	+1.624	2	1	0.0071	0.0028	0.0438	0.0092	0.0205	0.0113
98 627	06 51 53.01	−00 22 01.0	14.900	+0.689	+0.078	+0.428	+0.387	+0.817	2	1	0.0064	0.0170	0.0085	0.0007	0.0127	0.0127
98 634	06 51 55.741	−00 20 55.11	14.608	+0.647	+0.123	+0.382	+0.372	+0.757	2	1	0.0042	0.0049	0.0127	0.0113	0.0177	0.0064

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	Mean Error of the Mean					
											V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
98 642	06 51 59.018	−00 21 31.71	15.290	+0.571	+0.318	+0.302	+0.393	+0.697	2	1	0.0191	0.0453	0.0120	0.0198	0.0021	0.0177
98 185	06 52 01.886	−00 27 21.57	10.537	+0.202	+0.114	+0.110	+0.122	+0.231	79	68	0.0010	0.0005	0.0012	0.0004	0.0006	0.0007
98 646	06 52 02.281	−00 21 15.97	15.839	+1.060	+1.426	+0.583	+0.504	+1.090	1	1	. . .	. . .	. . .	. . .	. . .	. . .
98 193	06 52 03.381	−00 27 18.41	10.026	+1.176	+1.152	+0.614	+0.536	+1.151	99	84	0.0005	0.0005	0.0016	0.0005	0.0004	0.0006
98 650	06 52 04.528	−00 19 38.29	12.271	+0.157	+0.110	+0.080	+0.086	+0.166	31	20	0.0020	0.0014	0.0041	0.0016	0.0022	0.0027
98 652	06 52 04.815	−00 21 55.63	14.817	+0.611	+0.126	+0.276	+0.339	+0.618	2	1	0.0113	0.0297	0.0177	0.0453	0.0240	0.0226
98 653	06 52 04.954	−00 18 18.26	9.538	−0.003	−0.102	+0.010	+0.009	+0.017	114	98	0.0007	0.0003	0.0008	0.0004	0.0005	0.0007
98 666	06 52 09.945	−00 23 32.01	12.732	+0.164	−0.004	+0.091	+0.108	+0.200	25	14	0.0034	0.0028	0.0042	0.0042	0.0030	0.0048
98 670	06 52 11.514	−00 19 16.37	11.930	+1.357	+1.325	+0.727	+0.654	+1.381	80	66	0.0005	0.0009	0.0036	0.0004	0.0005	0.0007
98 671	06 52 11.830	−00 18 25.30	13.385	+0.968	+0.719	+0.575	+0.494	+1.071	27	15	0.0037	0.0048	0.0108	0.0033	0.0035	0.0046
98 675	06 52 13.341	−00 19 40.36	13.398	+1.909	+1.936	+1.082	+1.002	+2.085	44	21	0.0026	0.0035	0.0283	0.0018	0.0018	0.0024
98 676	06 52 13.728	−00 19 20.15	13.068	+1.146	+0.666	+0.683	+0.673	+1.352	17	8	0.0032	0.0041	0.0107	0.0015	0.0218	0.0032
98 L5	06 52 15.73	−00 19 44.4	17.800	+1.900	−0.100	+3.100	+2.600	+5.800	6	3	0.1633	0.3266	0.4491	0.1225	0.0408	0.1225
98 682	06 52 16.504	−00 19 40.97	13.749	+0.632	+0.098	+0.366	+0.352	+0.717	13	7	0.0039	0.0039	0.0064	0.0017	0.0025	0.0039
98 685	06 52 18.468	−00 20 19.51	11.954	+0.463	+0.096	+0.290	+0.280	+0.570	22	14	0.0030	0.0021	0.0028	0.0023	0.0021	0.0034
98 688	06 52 18.874	−00 23 32.82	12.754	+0.293	+0.245	+0.158	+0.180	+0.337	21	11	0.0033	0.0024	0.0081	0.0037	0.0050	0.0074
98 1082	06 52 20.184	−00 14 13.63	15.010	+0.835	−0.001	+0.485	+0.619	+1.102	3	1	0.0058	0.0139	0.0225	0.0029	0.0133	0.0162
98 1087	06 52 21.099	−00 15 50.42	14.439	+1.595	+1.284	+0.928	+0.882	+1.812	12	5	0.0040	0.0141	0.0592	0.0035	0.0049	0.0072
98 1102	06 52 27.949	−00 13 43.08	12.113	+0.314	+0.089	+0.193	+0.195	+0.388	15	8	0.0034	0.0026	0.0059	0.0026	0.0036	0.0052
98 1112	06 52 34.895	−00 15 25.84	13.975	+0.814	+0.286	+0.443	+0.431	+0.874	5	2	0.0067	0.0040	0.0152	0.0054	0.0031	0.0076
98 1119	06 52 36.710	−00 14 31.61	11.878	+0.551	+0.069	+0.312	+0.299	+0.611	7	4	0.0023	0.0038	0.0042	0.0019	0.0042	0.0045
98 724	06 52 37.225	−00 19 20.39	11.118	+1.104	+0.904	+0.575	+0.527	+1.103	12	7	0.0035	0.0035	0.0052	0.0023	0.0023	0.0038
98 1122	06 52 37.558	−00 17 03.70	14.090	+0.595	−0.297	+0.376	+0.442	+0.816	25	12	0.0034	0.0060	0.0074	0.0038	0.0028	0.0046
98 1124	06 52 38.050	−00 16 33.43	13.707	+0.315	+0.258	+0.173	+0.201	+0.373	24	12	0.0035	0.0043	0.0080	0.0029	0.0051	0.0057
98 733	06 52 40.073	−00 17 14.67	12.238	+1.285	+1.087	+0.698	+0.650	+1.347	20	10	0.0034	0.0042	0.0060	0.0029	0.0022	0.0040
Ru 149G	07 24 11.928	−00 31 58.11	12.829	+0.541	+0.033	+0.322	+0.322	+0.645	18	12	0.0026	0.0040	0.0042	0.0021	0.0026	0.0040
Ru 149A	07 24 13.216	−00 32 53.11	14.495	+0.298	+0.118	+0.196	+0.196	+0.391	18	12	0.0066	0.0052	0.0111	0.0099	0.0085	0.0139
Ru 149F	07 24 14.077	−00 31 38.69	13.471	+1.115	+1.025	+0.594	+0.538	+1.132	19	11	0.0028	0.0078	0.0223	0.0021	0.0023	0.0034
Ru 149	07 24 14.372	−00 33 04.17	13.866	−0.129	−0.779	−0.040	−0.068	−0.108	46	30	0.0022	0.0027	0.0031	0.0022	0.0062	0.0069
Ru 149D	07 24 15.378	−00 32 47.84	11.480	−0.037	−0.287	+0.021	+0.008	+0.029	18	11	0.0019	0.0021	0.0028	0.0012	0.0019	0.0024
Ru 149C	07 24 17.312	−00 32 25.78	14.425	+0.195	+0.141	+0.093	+0.127	+0.222	18	11	0.0052	0.0042	0.0111	0.0061	0.0099	0.0106
Ru 149B	07 24 17.572	−00 33 06.18	12.642	+0.662	+0.151	+0.374	+0.354	+0.728	15	10	0.0021	0.0034	0.0049	0.0018	0.0026	0.0028
Ru 149E	07 24 18.409	−00 31 18.58	13.718	+0.522	−0.007	+0.321	+0.314	+0.637	12	8	0.0064	0.0049	0.0069	0.0035	0.0066	0.0087
Ru 152F	07 29 53.755	−02 04 51.80	14.564	+0.635	+0.069	+0.382	+0.315	+0.689	15	8	0.0052	0.0057	0.0096	0.0067	0.0176	0.0222
Ru 152E	07 29 54.256	−02 05 30.83	12.362	+0.042	−0.086	+0.030	+0.034	+0.065	12	8	0.0014	0.0020	0.0020	0.0014	0.0023	0.0029
Ru 152	07 29 58.476	−02 06 37.59	13.017	−0.187	−1.081	−0.059	−0.088	−0.147	48	33	0.0011	0.0017	0.0023	0.0012	0.0025	0.0027
Ru 152B	07 29 59.241	−02 05 57.46	15.019	+0.500	+0.022	+0.290	+0.309	+0.600	23	10	0.0046	0.0088	0.0181	0.0054	0.0175	0.0211
Ru 152A	07 30 00.483	−02 06 22.67	14.341	+0.543	−0.085	+0.325	+0.329	+0.654	14	8	0.0061	0.0086	0.0168	0.0051	0.0094	0.0131
Ru 152C	07 30 02.57	−02 05 39.3	12.222	+0.573	−0.013	+0.342	+0.340	+0.683	13	9	0.0025	0.0031	0.0033	0.0022	0.0019	0.0031
Ru 152D	07 30 06.076	−02 04 37.51	11.076	+0.875	+0.491	+0.473	+0.449	+0.921	14	10	0.0013	0.0016	0.0024	0.0011	0.0019	0.0019
99 6	07 53 33.338	−00 49 37.45	11.055	+1.252	+1.289	+0.650	+0.577	+1.227	49	38	0.0005	0.0010	0.0021	0.0005	0.0004	0.0007
99 367	07 54 11.855	−00 25 35.18	11.152	+1.005	+0.832	+0.531	+0.477	+1.007	54	44	0.0007	0.0009	0.0017	0.0004	0.0005	0.0007
99 408	07 55 13.012	−00 25 32.85	9.807	+0.402	+0.038	+0.253	+0.247	+0.500	57	46	0.0007	0.0006	0.0008	0.0006	0.0002	0.0007
99 438	07 55 54.270	−00 16 49.08	9.397	−0.156	−0.729	−0.060	−0.081	−0.142	148	130	0.0010	0.0005	0.0010	0.0004	0.0005	0.0006

Table 2
(Continued)

											Mean Error of the Mean					
Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
99 447	07 56 06.686	−00 20 42.37	9.419	−0.068	−0.220	−0.031	−0.041	−0.073	108	97	0.0006	0.0005	0.0008	0.0004	0.0004	0.0006
100 241	08 52 34.049	−00 39 48.96	10.140	+0.157	+0.106	+0.078	+0.085	+0.162	67	57	0.0006	0.0005	0.0009	0.0004	0.0004	0.0004
100 162	08 53 14.418	−00 43 30.35	9.150	+1.276	+1.495	+0.649	+0.552	+1.202	86	67	0.0009	0.0008	0.0012	0.0004	0.0006	0.0006
100 267	08 53 17.212	−00 41 29.35	13.027	+0.485	−0.062	+0.307	+0.302	+0.608	3	3	0.0069	0.0023	0.0133	0.0075	0.0040	0.0040
100 269	08 53 18.464	−00 41 09.81	12.350	+0.547	−0.040	+0.335	+0.331	+0.666	3	3	0.0035	0.0029	0.0150	0.0035	0.0029	0.0017
100 280	08 53 35.477	−00 36 41.16	11.799	+0.493	−0.001	+0.295	+0.291	+0.588	72	61	0.0007	0.0007	0.0010	0.0006	0.0006	0.0009
100 394	08 53 54.515	−00 32 22.08	11.384	+1.317	+1.457	+0.705	+0.636	+1.341	9	5	0.0080	0.0040	0.0087	0.0023	0.0027	0.0030
PG0918+029D	09 21 21.936	+02 47 28.28	12.272	+1.044	+0.821	+0.575	+0.535	+1.108	19	11	0.0021	0.0030	0.0071	0.0016	0.0018	0.0018
PG0918+029	09 21 28.217	+02 46 02.27	13.327	−0.271	−1.081	−0.129	−0.159	−0.288	45	27	0.0024	0.0024	0.0030	0.0019	0.0055	0.0063
PG0918+029B	09 21 32.924	+02 47 59.08	13.963	+0.765	+0.366	+0.417	+0.370	+0.787	20	11	0.0034	0.0072	0.0159	0.0025	0.0045	0.0056
PG0918+029A	09 21 35.107	+02 46 19.43	14.490	+0.536	−0.032	+0.325	+0.336	+0.661	29	14	0.0033	0.0058	0.0095	0.0039	0.0076	0.0085
PG0918+029C	09 21 42.306	+02 46 37.07	13.537	+0.631	+0.087	+0.367	+0.357	+0.722	21	10	0.0020	0.0028	0.0048	0.0015	0.0022	0.0028
BD −12 2918	09 31 19.37	−13 29 19.3	10.067	+1.501	+1.166	+1.067	+1.318	+2.385	13	9	0.0025	0.0028	0.0075	0.0039	0.0022	0.0042
PG0942−029D	09 45 08.637	−03 05 54.45	13.683	+0.576	+0.064	+0.341	+0.329	+0.668	13	8	0.0009	0.0029	0.0054	0.0015	0.0039	0.0044
PG0942−029A	09 45 09.90	−03 10 14.2	14.738	+0.888	+0.552	+0.563	+0.474	+1.035	16	8	0.0021	0.0021	0.0065	0.0023	0.0041	0.0050
PG0942−029B	09 45 11.574	−03 06 58.11	14.105	+0.573	+0.014	+0.353	+0.341	+0.693	13	8	0.0022	0.0014	0.0043	0.0018	0.0036	0.0041
PG0942−029	09 45 11.85	−03 09 21.0	14.012	−0.298	−1.177	−0.132	−0.165	−0.296	21	13	0.0022	0.0025	0.0031	0.0026	0.0058	0.0067
PG0942−029C	09 45 14.386	−03 06 40.28	14.950	+0.803	+0.338	+0.488	+0.395	+0.884	16	8	0.0024	0.0024	0.0049	0.0021	0.0045	0.0053
101 315	09 54 51.298	−00 27 31.09	11.249	+1.153	+1.056	+0.612	+0.559	+1.172	19	11	0.0037	0.0018	0.0067	0.0016	0.0011	0.0021
101 316	09 54 52.034	−00 18 34.51	11.552	+0.493	+0.032	+0.293	+0.291	+0.584	17	10	0.0027	0.0024	0.0036	0.0019	0.0029	0.0032
101 L1	09 55 29.09	−00 21 42.6	16.501	+0.757	−0.104	+0.421	+0.527	+0.947	4	1	0.0310	0.0340	0.0290	0.0225	0.0855	0.1070
101 320	09 55 32.924	−00 22 32.72	13.823	+1.052	+0.690	+0.581	+0.561	+1.141	11	7	0.0048	0.0103	0.0181	0.0039	0.0036	0.0045
101 L2	09 55 34.688	−00 18 50.10	15.770	+0.602	+0.082	+0.321	+0.304	+0.625	1	1	...	...	...	...	...	...
101 404	09 55 40.673	−00 18 22.23	13.459	+0.996	+0.697	+0.530	+0.500	+1.029	12	7	0.0040	0.0078	0.0095	0.0049	0.0032	0.0055
101 324	09 55 56.650	−00 23 15.10	9.737	+1.161	+1.145	+0.591	+0.519	+1.109	60	47	0.0005	0.0008	0.0018	0.0006	0.0007	0.0010
101 408	09 56 08.001	−00 12 41.28	14.785	+1.200	+1.347	+0.718	+0.603	+1.321	2	1	0.0240	0.0438	0.0170	0.0170	0.0120	0.0297
101 262	09 56 08.096	−00 29 50.50	14.295	+0.784	+0.297	+0.440	+0.387	+0.827	4	2	0.0045	0.0160	0.0205	0.0075	0.0100	0.0035
101 326	09 56 08.101	−00 27 10.94	14.923	+0.729	+0.227	+0.406	+0.375	+0.780	13	6	0.0078	0.0094	0.0128	0.0055	0.0111	0.0122
101 327	09 56 08.86	−00 25 53.5	13.441	+1.155	+1.139	+0.717	+0.574	+1.290	28	15	0.0032	0.0057	0.0098	0.0023	0.0017	0.0028
101 410	09 56 09.136	−00 14 02.23	13.646	+0.546	−0.063	+0.298	+0.326	+0.623	2	1	0.0085	0.0014	0.0021	0.0106	0.0035	0.0064
101 413	09 56 14.009	−00 11 54.86	12.583	+0.983	+0.716	+0.529	+0.497	+1.025	9	6	0.0023	0.0047	0.0103	0.0033	0.0040	0.0040
101 268	09 56 17.377	−00 31 57.05	14.380	+1.531	+1.381	+1.040	+1.200	+2.237	11	5	0.0078	0.0199	0.0769	0.0048	0.0036	0.0045
101 330	09 56 20.587	−00 27 22.12	13.723	+0.577	−0.026	+0.346	+0.338	+0.684	28	14	0.0038	0.0038	0.0051	0.0028	0.0057	0.0064
101 415	09 56 23.145	−00 16 53.02	15.259	+0.577	−0.008	+0.346	+0.350	+0.695	2	1	0.0028	0.0247	0.0021	0.0198	0.0134	0.0332
101 270	09 56 27.023	−00 35 44.15	13.711	+0.554	+0.055	+0.332	+0.306	+0.637	2	1	...	0.0014	0.0127	0.0049	0.0071	0.0014
101 278	09 56 54.467	−00 29 38.39	15.494	+1.041	+0.737	+0.596	+0.548	+1.144	2	1	0.0184	0.0226	0.0269	0.0198	0.0148	0.0346
101 L3	09 56 55.025	−00 30 25.47	15.953	+0.637	−0.033	+0.396	+0.395	+0.792	2	1	0.0233	0.0184	0.0707	0.0382	0.0488	0.0870
101 281	09 57 05.02	−00 31 43.2	11.576	+0.812	+0.415	+0.453	+0.412	+0.864	23	15	0.0023	0.0013	0.0031	0.0013	0.0009	0.0013
101 L4	09 57 07.76	−00 31 24.4	16.264	+0.793	+0.362	+0.578	+0.062	+0.644	2	1	0.0170	0.0141	0.0014	0.0191	0.2638	0.2807
101 L5	09 57 10.21	−00 30 40.3	15.928	+0.622	+0.115	+0.414	+0.305	+0.720	2	1	0.0106	0.0283	0.0863	0.0078	0.0134	0.0212
101 421	09 57 16.107	−00 17 18.20	13.180	+0.507	−0.031	+0.327	+0.296	+0.623	2	1	0.0021	0.0021	0.0035	0.0021	0.0007	0.0014
101 338	09 57 17.754	−00 21 00.34	13.788	+0.634	+0.024	+0.350	+0.340	+0.691	2	1	0.0071	0.0071	0.0042	0.0021	0.0035	0.0014
101 339	09 57 18.389	−00 25 01.80	14.449	+0.850	+0.501	+0.458	+0.398	+0.857	2	1	0.0099	0.0085	0.0099	0.0240	0.0042	0.0290
101 424	09 57 20.263	−00 16 25.88	15.058	+0.764	+0.273	+0.429	+0.425	+0.855	2	1	0.0276	0.0389	0.0191	0.0226	0.0205	0.0431

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	Mean Error of the Mean					
											V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
101 427	09 57 26.429	−00 17 16.96	14.964	+0.805	+0.321	+0.484	+0.369	+0.854	2	1	0.0269	0.0297	0.0014	0.0247	0.0113	0.0368
101 341	09 57 29.828	−00 21 53.80	14.342	+0.575	+0.059	+0.332	+0.309	+0.641	2	1	0.0113	0.0141	0.0071	0.0007	0.0078	0.0071
101 342	09 57 31.21	−00 21 50.9	15.556	+0.529	−0.065	+0.339	+0.419	+0.758	2	1	0.0141	0.0085	0.0085	0.0240	0.0021	0.0226
101 343	09 57 31.301	−00 22 55.34	15.504	+0.606	+0.094	+0.396	+0.338	+0.734	2	1	0.0276	0.0488	0.0177	0.0226	0.0255	0.0481
101 429	09 57 31.73	−00 18 15.2	13.496	+0.980	+0.782	+0.617	+0.526	+1.143	23	13	0.0039	0.0019	0.0060	0.0017	0.0020	0.0030
101 431	09 57 37.322	−00 17 53.28	13.684	+1.246	+1.144	+0.808	+0.708	+1.517	23	13	0.0056	0.0063	0.0102	0.0033	0.0029	0.0042
101 L6	09 57 39.54	−00 17 53.8	16.497	+0.711	+0.183	+0.445	+0.583	+1.024	2	1	0.0219	0.0092	0.0311	0.0113	0.1648	0.1732
101 207	09 57 52.495	−00 47 36.17	12.421	+0.513	−0.080	+0.320	+0.323	+0.645	26	18	0.0016	0.0018	0.0039	0.0014	0.0016	0.0015
101 363	09 58 18.722	−00 25 36.51	9.874	+0.260	+0.132	+0.146	+0.151	+0.297	57	48	0.0010	0.0006	0.0016	0.0007	0.0007	0.0010
GD 108A	10 00 39.585	−07 33 25.10	13.881	+0.789	+0.316	+0.458	+0.449	+0.909	15	8	0.0018	0.0032	0.0066	0.0010	0.0011	0.0011
GD 108B	10 00 42.665	−07 31 07.90	15.056	+0.839	+0.364	+0.463	+0.466	+0.924	20	9	0.0019	0.0043	0.0092	0.0029	0.0022	0.0048
GD 108	10 00 47.25	−07 33 31.0	13.563	−0.214	−0.943	−0.099	−0.118	−0.218	22	13	0.0025	0.0038	0.0039	0.0024	0.0026	0.0026
GD 108C	10 00 55.223	−07 30 29.59	13.819	+0.786	+0.345	+0.435	+0.393	+0.825	16	9	0.0011	0.0034	0.0037	0.0031	0.0020	0.0043
GD 108D	10 00 55.916	−07 34 51.83	14.235	+0.641	+0.078	+0.372	+0.357	+0.731	16	8	0.0010	0.0020	0.0050	0.0022	0.0042	0.0034
BD +1 2447	10 28 55.551	+00 50 27.56	9.650	+1.501	+1.238	+1.033	+1.225	+2.261	24	14	0.0027	0.0046	0.0082	0.0024	0.0016	0.0030
G162 66	10 33 42.763	−11 41 38.35	13.012	−0.165	−0.997	−0.126	−0.141	−0.266	88	71	0.0014	0.0010	0.0019	0.0009	0.0020	0.0025
G44 27	10 36 01.21	+05 07 12.8	12.636	+1.586	+1.088	+1.185	+1.526	+2.714	8	4	0.0120	0.0106	0.0106	0.0046	0.0039	0.0032
PG1034+001	10 37 03.803	−00 08 19.11	13.228	−0.365	−1.274	−0.155	−0.203	−0.359	33	16	0.0024	0.0024	0.0033	0.0026	0.0042	0.0054
G163 6	10 42 54.16	+02 47 20.6	14.706	+1.550	+1.228	+1.090	+1.384	+2.478	4	3	0.0070	0.0115	0.0655	0.0090	0.0015	0.0085
PG1047+003	10 50 02.825	−00 00 36.85	13.474	−0.290	−1.121	−0.132	−0.162	−0.295	32	18	0.0039	0.0030	0.0041	0.0037	0.0088	0.0110
PG1047+003A	10 50 05.653	−00 01 11.25	13.512	+0.688	+0.168	+0.422	+0.418	+0.840	15	7	0.0046	0.0049	0.0067	0.0026	0.0026	0.0036
PG1047+003B	10 50 07.915	−00 02 04.36	14.751	+0.679	+0.172	+0.391	+0.371	+0.764	13	5	0.0050	0.0086	0.0128	0.0022	0.0080	0.0086
PG1047+003C	10 50 13.682	−00 00 32.35	12.453	+0.607	−0.019	+0.378	+0.358	+0.737	11	6	0.0093	0.0024	0.0060	0.0036	0.0033	0.0045
G44 40	10 50 52.01	+06 48 29.3	11.675	+1.644	+1.213	+1.216	+1.568	+2.786	13	6	0.0033	0.0031	0.0092	0.0031	0.0017	0.0039
102 620	10 55 04.231	−00 48 18.88	10.074	+1.080	+1.025	+0.645	+0.524	+1.169	82	72	0.0006	0.0005	0.0014	0.0004	0.0006	0.0007
G45 20	10 56 28.91	+07 00 53.2	13.507	+2.034	+1.165	+1.823	+2.174	+4.000	19	10	0.0060	0.0069	0.0346	0.0073	0.0025	0.0062
102 1081	10 57 04.045	−00 13 12.87	9.903	+0.664	+0.258	+0.366	+0.332	+0.697	89	80	0.0007	0.0006	0.0013	0.0005	0.0006	0.0008
G163 27	10 57 35.18	−07 31 23.3	14.338	+0.288	−0.548	+0.206	+0.210	+0.417	26	15	0.0055	0.0047	0.0065	0.0041	0.0075	0.0082
G163 51E	11 07 22.332	−05 16 13.86	14.466	+0.611	+0.095	+0.381	+0.344	+0.725	1	1	0.0150	0.0150	0.0200	0.0150	0.0150	0.0150
G163 51B	11 07 32.846	−05 12 37.29	11.292	+0.623	+0.119	+0.355	+0.336	+0.692	6	3	0.0029	0.0016	0.0024	0.0012	0.0020	0.0029
G163 51C	11 07 33.782	−05 14 20.26	12.672	+0.431	−0.009	+0.267	+0.272	+0.540	6	3	0.0033	0.0049	0.0061	0.0024	0.0024	0.0045
G163 51D	11 07 34.915	−05 15 00.50	13.862	+0.844	+0.202	+0.478	+0.466	+0.945	6	3	0.0041	0.0029	0.0171	0.0045	0.0086	0.0114
G163 51A	11 07 37.196	−05 12 23.31	12.504	+0.666	+0.060	+0.382	+0.371	+0.753	6	3	0.0037	0.0020	0.0037	0.0037	0.0037	0.0057
G163 50	11 07 59.950	−05 09 26.10	13.057	+0.036	−0.696	−0.084	−0.072	−0.158	84	70	0.0009	0.0012	0.0014	0.0009	0.0016	0.0022
G163 51	11 08 06.539	−05 13 47.19	12.559	+1.499	+1.195	+1.080	+1.355	+2.434	47	34	0.0012	0.0021	0.0087	0.0010	0.0008	0.0012
BD +5 2468	11 15 30.897	+04 57 23.52	9.352	−0.114	−0.543	−0.035	−0.052	−0.089	42	35	0.0017	0.0010	0.0017	0.0006	0.0012	0.0013
HD 100340	11 32 49.941	+05 16 36.23	10.115	−0.234	−0.975	−0.104	−0.135	−0.238	37	28	0.0012	0.0010	0.0018	0.0005	0.0009	0.0011
BD +5 2529	11 41 49.593	+05 08 26.54	9.585	+1.233	+1.194	+0.783	+0.667	+1.452	35	27	0.0011	0.0012	0.0024	0.0009	0.0007	0.0011
G10 50	11 47 44.390	+00 48 16.40	11.153	+1.752	+1.318	+1.294	+1.673	+2.969	14	7	0.0024	0.0024	0.0078	0.0037	0.0021	0.0037
103 302	11 56 06.021	−00 47 54.36	9.859	+0.370	−0.057	+0.230	+0.236	+0.465	76	63	0.0007	0.0005	0.0009	0.0005	0.0007	0.0009
103 626	11 56 46.156	−00 23 14.71	11.836	+0.413	−0.057	+0.262	+0.274	+0.535	17	10	0.0034	0.0027	0.0032	0.0022	0.0015	0.0024
103 526	11 56 54.182	−00 30 13.47	10.890	+1.090	+0.936	+0.560	+0.501	+1.056	9	6	0.0005	0.0010	0.0005	0.0011	0.0005	0.0014
G12 43	12 33 17.38	+09 01 15.8	12.467	+1.846	+1.085	+1.530	+1.944	+3.479	13	6	0.0042	0.0053	0.0466	0.0053	0.0039	0.0033
104 306	12 41 03.619	−00 37 13.83	9.370	+1.592	+1.666	+0.832	+0.762	+1.591	89	68	0.0067	0.0030	0.0059	0.0020	0.0024	0.0033

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
104 423	12 41 35.959	−00 31 11.26	15.602	+0.630	+0.050	+0.262	+0.559	+0.818	2	1	0.0247	0.0389	0.0269	0.0361	0.1167	0.1520
104 428	12 41 41.284	−00 26 26.13	12.630	+0.985	+0.748	+0.534	+0.497	+1.032	25	16	0.0038	0.0028	0.0044	0.0024	0.0018	0.0036
104 L1	12 41 49.42	−00 21 01.2	14.608	+0.630	+0.064	+0.374	+0.364	+0.739	2	1	0.0007	0.0014	0.0127	0.0113	0.0163	0.0042
104 430	12 41 50.259	−00 25 52.44	13.858	+0.652	+0.131	+0.364	+0.363	+0.727	15	8	0.0052	0.0062	0.0085	0.0046	0.0041	0.0065
104 325	12 42 02.210	−00 41 35.93	15.581	+0.694	+0.051	+0.345	+0.307	+0.652	2	1	0.0163	0.0431	0.0219	0.0255	0.0148	0.0403
104 330	12 42 11.418	−00 40 41.44	15.296	+0.594	−0.028	+0.369	+0.371	+0.739	15	6	0.0103	0.0276	0.0155	0.0124	0.0214	0.0225
104 440	12 42 14.30	−00 24 46.3	15.114	+0.440	−0.227	+0.289	+0.317	+0.605	11	5	0.0081	0.0084	0.0103	0.0069	0.0232	0.0262
104 237	12 42 16.874	−00 51 18.21	15.395	+1.088	+0.918	+0.647	+0.628	+1.274	1	1	...	...	...	...	...	...
104 L2	12 42 19.621	−00 34 23.90	16.048	+0.650	−0.172	+0.344	+0.323	+0.667	4	2	0.0190	0.0265	0.0450	0.0295	0.0755	0.1000
104 443	12 42 19.813	−00 25 21.21	15.372	+1.331	+1.280	+0.817	+0.778	+1.595	3	2	0.0087	0.0023	0.1120	0.0139	0.0104	0.0202
104 444	12 42 20.021	−00 32 28.17	13.477	+0.512	−0.070	+0.313	+0.331	+0.643	2	1	0.0014	0.0099	0.0085	0.0021	0.0014	0.0007
104 334	12 42 20.425	−00 40 28.35	13.484	+0.518	−0.067	+0.323	+0.331	+0.653	24	16	0.0047	0.0031	0.0039	0.0029	0.0031	0.0047
104 335	12 42 20.894	−00 33 08.19	11.665	+0.622	+0.145	+0.357	+0.334	+0.691	4	2	0.0095	0.0010	0.0020	0.0035	0.0045	0.0070
104 239	12 42 22.91	−00 46 35.6	13.936	+1.356	+1.291	+0.868	+0.805	+1.675	7	3	0.0060	0.0087	0.0231	0.0045	0.0030	0.0057
104 336	12 42 24.64	−00 39 58.0	14.404	+0.830	+0.495	+0.461	+0.403	+0.865	14	6	0.0067	0.0072	0.0123	0.0059	0.0099	0.0104
104 338	12 42 30.142	−00 38 32.39	16.059	+0.591	−0.082	+0.348	+0.372	+0.719	8	5	0.0078	0.0219	0.0368	0.0088	0.0209	0.0170
104 339	12 42 33.298	−00 41 39.88	15.459	+0.832	+0.709	+0.476	+0.374	+0.849	1	1	...	...	...	...	...	...
104 244	12 42 34.235	−00 45 47.06	16.011	+0.590	−0.152	+0.338	+0.489	+0.825	2	2	0.0092	0.0057	0.0113	0.0035	0.0269	0.0290
104 455	12 42 52.116	−00 24 17.43	15.105	+0.581	−0.024	+0.360	+0.357	+0.716	13	7	0.0067	0.0144	0.0122	0.0053	0.0089	0.0122
104 456	12 42 53.505	−00 32 00.91	12.362	+0.622	+0.135	+0.357	+0.337	+0.694	4	2	0.0025	0.0025	0.0045	0.0035	0.0065	0.0080
104 457	12 42 54.195	−00 28 48.68	16.048	+0.753	+0.522	+0.484	+0.490	+0.974	9	4	0.0107	0.0187	0.0770	0.0183	0.0370	0.0213
104 460	12 43 02.86	−00 28 19.0	12.895	+1.281	+1.246	+0.813	+0.695	+1.511	36	28	0.0019	0.0014	0.0026	0.0006	0.0010	0.0015
104 461	12 43 06.031	−00 32 18.01	9.705	+0.476	−0.035	+0.288	+0.289	+0.579	112	90	0.0005	0.0006	0.0009	0.0004	0.0005	0.0005
104 350	12 43 14.204	−00 33 20.54	13.634	+0.673	+0.165	+0.383	+0.353	+0.736	14	7	0.0043	0.0035	0.0056	0.0032	0.0045	0.0061
104 470	12 43 22.314	−00 29 52.83	14.310	+0.732	+0.101	+0.295	+0.356	+0.649	3	1	0.0121	0.0092	0.0202	0.0133	0.0035	0.0150
104 364	12 43 45.986	−00 34 31.63	15.799	+0.601	−0.131	+0.314	+0.397	+0.712	2	1	0.0156	0.0488	0.0559	0.0085	0.0410	0.0495
104 366	12 43 53.17	−00 34 45.4	12.908	+0.870	+0.424	+0.517	+0.464	+0.982	1	1	...	...	...	...	...	...
104 479	12 43 55.279	−00 32 49.39	16.087	+1.271	+0.673	+0.657	+0.607	+1.264	2	1	0.0339	0.0276	0.3995	0.0028	0.0035	0.0071
104 367	12 43 58.453	−00 33 33.87	15.844	+0.639	−0.126	+0.382	+0.296	+0.679	2	1	0.0255	0.0212	0.0156	0.0177	0.0042	0.0226
104 484	12 44 20.526	−00 30 54.29	14.406	+1.024	+0.732	+0.514	+0.486	+1.000	2	1	0.0071	0.0184	0.0134	0.0057	0.0064	0.0120
104 485	12 44 23.810	−00 30 16.38	15.017	+0.838	+0.493	+0.478	+0.488	+0.967	2	1	0.0113	0.0339	0.0226	0.0014	0.0113	0.0099
104 490	12 44 33.454	−00 25 51.78	12.572	+0.535	+0.048	+0.318	+0.312	+0.630	12	8	0.0029	0.0032	0.0052	0.0023	0.0023	0.0026
104 598	12 45 16.779	−00 16 40.47	11.478	+1.108	+1.051	+0.667	+0.545	+1.214	88	76	0.0010	0.0008	0.0023	0.0004	0.0004	0.0005
PG1323−086	13 25 39.468	−08 49 19.12	13.481	−0.140	−0.681	−0.048	−0.078	−0.127	39	18	0.0019	0.0022	0.0026	0.0018	0.0045	0.0045
PG1323−086A	13 25 49.722	−08 50 23.53	13.591	+0.393	−0.019	+0.252	+0.252	+0.506	20	12	0.0257	0.0022	0.0045	0.0027	0.0047	0.0060
PG1323−086C	13 25 50.222	−08 48 38.94	14.003	+0.707	+0.245	+0.395	+0.363	+0.759	26	13	0.0031	0.0027	0.0076	0.0024	0.0041	0.0049
PG1323−086B	13 25 50.651	−08 50 55.10	13.406	+0.761	+0.265	+0.426	+0.407	+0.833	23	13	0.0019	0.0029	0.0042	0.0023	0.0023	0.0031
PG1323−086D	13 26 05.252	−08 50 36.19	12.080	+0.587	+0.005	+0.346	+0.335	+0.684	15	6	0.0023	0.0018	0.0036	0.0013	0.0026	0.0031
G14 55	13 28 21.082	−02 21 37.07	11.336	+1.491	+1.157	+1.078	+1.388	+2.462	5	2	0.0058	0.0049	0.0076	0.0067	0.0013	0.0063
105 505	13 35 24.773	−00 23 20.74	10.270	+1.422	+1.218	+0.910	+0.861	+1.771	6	3	0.0061	0.0102	0.0053	0.0053	0.0033	0.0069
105 437	13 37 16.748	−00 37 56.33	12.535	+0.248	+0.067	+0.136	+0.143	+0.279	7	3	0.0060	0.0038	0.0094	0.0053	0.0026	0.0076
105 815	13 40 02.492	−00 02 18.76	11.451	+0.381	−0.247	+0.267	+0.292	+0.559	61	51	0.0008	0.0007	0.0010	0.0005	0.0005	0.0006
BD +2 2711	13 42 19.004	+01 30 18.68	10.369	−0.163	−0.699	−0.072	−0.095	−0.168	94	78	0.0007	0.0006	0.0011	0.0005	0.0006	0.0008
32376437	13 42 23.215	+01 30 25.71	10.584	+0.499	+0.005	+0.304	+0.301	+0.606	10	8	0.0016	0.0016	0.0028	0.0006	0.0009	0.0016

The header "Mean Error of the Mean" spans columns (12)–(17).

Table 2
(Continued)

| Star | α (J2000.0) | δ (J2000.0) | V | B−V | U−B | V−R | R−I | V−I | n | m | Mean Error of the Mean | | | | | |
| | | | | | | | | | | | V | B−V | U−B | V−R | R−I | V−I |
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
HD 121968	13 58 51.167	−02 54 52.33	10.256	−0.185	−0.915	−0.074	−0.100	−0.173	90	75	0.0006	0.0006	0.0010	0.0004	0.0005	0.0006
PG1407−013B	14 10 24.181	−01 27 16.52	12.471	+0.970	+0.665	+0.537	+0.505	+1.037	17	10	0.0013	0.0016	0.0020	0.0012	0.0012	0.0016
PG1407−013	14 10 25.915	−01 30 16.61	13.758	−0.259	−1.133	−0.119	−0.151	−0.272	21	12	0.0012	0.0017	0.0033	0.0015	0.0033	0.0043
PG1407−013C	14 10 28.013	−01 25 03.05	12.462	+0.805	+0.298	+0.464	+0.448	+0.914	17	10	0.0015	0.0013	0.0031	0.0010	0.0016	0.0014
PG1407−013A	14 10 29.547	−01 29 10.18	14.661	+1.151	+1.049	+0.617	+0.569	+1.178	21	10	0.0023	0.0030	0.0116	0.0018	0.0018	0.0034
PG1407−013D	14 10 34.083	−01 27 14.00	14.872	+0.891	+0.420	+0.496	+0.472	+0.967	14	9	0.0024	0.0026	0.0104	0.0020	0.0058	0.0063
PG1407−013E	14 10 35.721	−01 26 31.42	15.182	+0.883	+0.600	+0.496	+0.417	+0.915	9	6	0.0036	0.0042	0.0144	0.0044	0.0068	0.0074
106 1024	14 40 06.997	+00 01 45.11	11.599	+0.332	+0.085	+0.196	+0.195	+0.390	35	27	0.0051	0.0022	0.0029	0.0019	0.0014	0.0029
106 700	14 40 50.944	−00 23 36.82	9.786	+1.364	+1.580	+0.730	+0.643	+1.374	88	77	0.0008	0.0006	0.0014	0.0005	0.0006	0.0008
106 575	14 41 38.499	−00 26 01.82	9.341	+1.306	+1.485	+0.676	+0.587	+1.268	39	30	0.0007	0.0007	0.0027	0.0005	0.0005	0.0006
106 485	14 44 14.083	−00 37 06.69	9.477	+0.378	−0.052	+0.233	+0.236	+0.468	47	36	0.0009	0.0007	0.0010	0.0004	0.0004	0.0006
PG1514+034	15 17 14.269	+03 10 27.92	13.997	−0.009	−0.955	+0.087	+0.126	+0.212	6	3	0.0078	0.0082	0.0102	0.0029	0.0065	0.0073
PG1525−071	15 28 11.57	−07 16 32.7	15.046	−0.211	−1.177	−0.068	+0.012	−0.151	20	13	0.0027	0.0005	0.0027	0.0020	0.0020	0.0071
PG1525−071D	15 28 12.00	−07 16 39.1	16.300	+0.393	+0.224	+0.405	+0.343	+0.756	15	8	0.0021	0.0714	0.0316	0.0108	0.0196	0.0085
PG1525−071A	15 28 13.416	−07 16 01.03	13.506	+0.773	+0.282	+0.437	+0.421	+0.862	15	8	0.0008	0.0015	0.0019	0.0006	0.0024	0.0026
PG1525−071B	15 28 14.39	−07 16 13.2	16.392	+0.729	+0.141	+0.450	+0.387	+0.906	17	8	0.0039	0.0043	0.0097	0.0037	0.0066	0.0066
PG1525−071C	15 28 16.502	−07 14 30.36	13.519	+1.116	+1.073	+0.593	+0.509	+1.096	16	9	0.0007	0.0028	0.0052	0.0010	0.0015	0.0012
PG1528+062B	15 30 39.542	+06 01 12.98	11.989	+0.593	+0.005	+0.364	+0.344	+0.711	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1528+062A	15 30 49.092	+06 01 24.09	15.553	+0.830	+0.356	+0.433	+0.389	+0.824	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1528+062	15 30 49.93	+06 00 56.2	14.767	−0.252	−1.091	−0.111	−0.182	−0.296	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1528+062C	15 30 55.616	+06 00 09.59	13.477	+0.644	+0.074	+0.357	+0.340	+0.699	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1530+057A	15 33 10.224	+05 33 42.93	13.711	+0.829	+0.414	+0.473	+0.412	+0.886	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1530+057	15 33 10.737	+05 32 26.88	14.211	+0.151	−0.789	+0.162	+0.036	+0.199	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1530+057B	15 33 17.446	+05 33 46.29	12.842	+0.745	+0.325	+0.423	+0.376	+0.799	1	1	⋯	⋯	⋯	⋯	⋯	⋯
107 544	15 36 48.097	−00 15 07.07	9.036	+0.399	+0.156	+0.232	+0.227	+0.458	54	39	0.0010	0.0006	0.0011	0.0006	0.0006	0.0008
107 970	15 37 25.830	+00 18 33.82	10.939	+1.596	+1.750	+1.142	+1.435	+2.574	57	47	0.0074	0.0017	0.0061	0.0020	0.0033	0.0040
107 568	15 37 52.713	−00 17 17.51	13.054	+1.149	+0.862	+0.625	+0.595	+1.217	15	7	0.0015	0.0028	0.0039	0.0021	0.0028	0.0028
107 1006	15 38 33.353	+00 14 19.11	11.713	+0.766	+0.278	+0.442	+0.420	+0.863	81	72	0.0006	0.0009	0.0018	0.0005	0.0007	0.0008
107 347	15 38 35.770	−00 35 57.69	9.446	+1.294	+1.302	+0.712	+0.652	+1.365	33	26	0.0011	0.0009	0.0015	0.0007	0.0007	0.0011
107 720	15 38 36.978	−00 02 24.92	13.121	+0.599	+0.088	+0.374	+0.355	+0.731	2	1	0.0057	0.0028	0.0106	0.0099	0.0028	0.0078
107 456	15 38 42.735	−00 19 47.02	12.919	+0.921	+0.589	+0.537	+0.478	+1.015	20	10	0.0020	0.0029	0.0045	0.0020	0.0025	0.0036
107 351	15 38 45.760	−00 32 06.30	12.342	+0.562	−0.005	+0.351	+0.358	+0.708	25	14	0.0020	0.0024	0.0040	0.0016	0.0022	0.0026
107 457	15 38 46.763	−00 20 15.17	14.910	+0.792	+0.350	+0.494	+0.469	+0.964	2	1	0.0021	0.0035	0.0099	0.0028	0.0064	0.0092
107 458	15 38 50.219	−00 24 26.45	11.676	+1.214	+1.189	+0.667	+0.602	+1.274	2	1	0.0042	0.0057	0.0049	0.0028	0.0007	0.0035
107 592	15 38 50.382	−00 17 09.17	11.847	+1.318	+1.380	+0.709	+0.647	+1.357	9	5	0.0033	0.0047	0.0133	0.0013	0.0023	0.0020
107 459	15 38 50.812	−00 22 33.77	12.284	+0.900	+0.427	+0.525	+0.517	+1.045	2	1	0.0014	0.0106	0.0099	0.0028	0.0007	0.0035
107 212	15 38 56.067	−00 45 31.71	13.383	+0.683	+0.135	+0.404	+0.411	+0.818	2	1	0.0064	0.0106	0.0198	0.0071	0.0085	0.0148
107 215	15 38 57.650	−00 43 06.59	16.046	+0.115	−0.082	−0.032	−0.475	−0.511	3	2	0.0266	0.0312	0.0092	0.0935	0.2991	0.3943
107 213	15 38 57.671	−00 44 15.06	14.262	+0.802	+0.261	+0.531	+0.509	+1.038	1	1	⋯	⋯	⋯	⋯	⋯	⋯
107 357	15 39 05.469	−00 39 12.16	14.418	+0.675	+0.025	+0.416	+0.421	+0.840	2	1	⋯	0.0035	0.0057	0.0120	0.0233	0.0113
107 359	15 39 09.04	−00 35 38.6	12.797	+0.580	−0.124	+0.379	+0.381	+0.759	6	3	0.0049	0.0069	0.0118	0.0029	0.0033	0.0053
107 599	15 39 09.457	−00 14 28.74	14.675	+0.698	+0.243	+0.433	+0.438	+0.869	17	7	0.0082	0.0121	0.0061	0.0053	0.0121	0.0155
107 600	15 39 10.065	−00 15 51.15	14.884	+0.503	+0.049	+0.339	+0.361	+0.700	9	4	0.0170	0.0130	0.0227	0.0097	0.0147	0.0203
107 601	15 39 13.88	−00 13 28.0	14.646	+1.412	+1.265	+0.923	+0.835	+1.761	33	13	0.0045	0.0073	0.0247	0.0035	0.0031	0.0038

Table 2
(Continued)

Star (1)	α (J2000.0) (2)	δ (J2000.0) (3)	V (4)	B−V (5)	U−B (6)	V−R (7)	R−I (8)	V−I (9)	n (10)	m (11)	V (12)	B−V (13)	U−B (14)	V−R (15)	R−I (16)	V−I (17)
													Mean Error of the Mean				
107 602	15 39 18.878	−00 15 29.94	12.116	+0.991	+0.585	+0.545	+0.531	+1.074	17	9	0.0027	0.0029	0.0070	0.0015	0.0022	0.0032
107 611	15 39 35.077	−00 12 35.76	14.329	+0.890	+0.455	+0.520	+0.447	+0.968	4	2	0.0065	0.0085	0.0165	0.0090	0.0105	0.0170
107 612	15 39 35.427	−00 15 07.45	14.256	+0.896	+0.296	+0.551	+0.530	+1.081	2	1	0.0057	0.0014	0.0035	0.0035	0.0007	0.0021
107 614	15 39 41.132	−00 13 10.80	13.926	+0.622	+0.033	+0.361	+0.370	+0.732	4	2	0.0065	0.0170	0.0150	0.0040	0.0130	0.0090
107 626	15 40 05.349	−00 17 28.95	13.468	+1.000	+0.728	+0.600	+0.527	+1.126	24	12	0.0045	0.0082	0.0118	0.0024	0.0022	0.0035
107 627	15 40 07.462	−00 17 22.68	13.349	+0.779	+0.226	+0.465	+0.454	+0.918	24	12	0.0055	0.0047	0.0049	0.0022	0.0027	0.0037
107 484	15 40 16.818	−00 21 14.93	11.311	+1.240	+1.298	+0.664	+0.577	+1.240	26	20	0.0006	0.0015	0.0038	0.0006	0.0008	0.0016
107 636	15 40 40.488	−00 14 53.10	14.873	+0.751	+0.121	+0.432	+0.465	+0.896	2	1	0.0134	0.0120	0.0177	0.0085	0.0417	0.0325
107 639	15 40 44.767	−00 17 10.24	14.197	+0.640	−0.026	+0.399	+0.404	+0.803	10	6	0.0161	0.0092	0.0202	0.0104	0.0095	0.0126
107 640	15 40 49.150	−00 16 47.53	15.050	+0.755	+0.092	+0.511	+0.506	+1.017	5	3	0.0250	0.0103	0.0322	0.0183	0.0161	0.0246
G153 41	16 17 55.241	−15 35 52.15	13.425	−0.210	−1.129	−0.133	−0.158	−0.289	39	27	0.0015	0.0016	0.0026	0.0010	0.0023	0.0025
G138 25	16 25 13.952	+15 40 54.25	13.513	+1.419	+1.265	+0.883	+0.796	+1.685	2	1	0.0007	0.0177	0.0382	0.0028	0.0028	0.0049
BD −12 4523	16 30 18.059	−12 39 45.34	10.072	+1.566	+1.195	+1.155	+1.499	+2.651	16	13	0.0021	0.0005	0.0019	0.0005	0.0016	0.0013
HD 149382	16 34 23.333	−04 00 52.02	8.943	−0.282	−1.143	−0.127	−0.135	−0.262	57	48	0.0008	0.0008	0.0022	0.0004	0.0007	0.0008
108 1332	16 35 21.401	−00 04 05.32	9.208	+0.380	+0.083	+0.225	+0.225	+0.449	76	60	0.0005	0.0007	0.0010	0.0004	0.0003	0.0005
PG1633+099	16 35 24.025	+09 47 49.90	14.396	−0.191	−0.990	−0.085	−0.114	−0.208	20	11	0.0016	0.0021	0.0031	0.0026	0.0085	0.0107
PG1633+099A	16 35 25.984	+09 47 53.19	15.259	+0.871	+0.305	+0.506	+0.506	+1.011	23	10	0.0032	0.0042	0.0037	0.0033	0.0078	0.0099
PG1633+099G	16 35 32.336	+09 50 30.74	13.749	+0.693	+0.079	+0.412	+0.389	+0.804	15	8	0.0016	0.0012	0.0044	0.0012	0.0015	0.0023
PG1633+099B	16 35 33.304	+09 46 20.71	12.968	+1.081	+1.017	+0.589	+0.503	+1.090	18	10	0.0016	0.0013	0.0051	0.0010	0.0013	0.0019
PG1633+099F	16 35 36.713	+09 49 40.34	13.768	+0.878	+0.254	+0.523	+0.522	+1.035	15	8	0.0020	0.0024	0.0048	0.0013	0.0022	0.0028
PG1633+099C	16 35 37.275	+09 46 15.80	13.224	+1.144	+1.146	+0.612	+0.524	+1.133	17	10	0.0017	0.0008	0.0022	0.0010	0.0014	0.0027
PG1633+099D	16 35 40.089	+09 46 41.57	13.689	+0.535	−0.021	+0.324	+0.323	+0.649	20	12	0.0016	0.0018	0.0028	0.0011	0.0018	0.0020
PG1633+099E	16 35 45.084	+09 49 24.53	13.113	+0.841	+0.337	+0.484	+0.471	+0.953	16	9	0.0021	0.0020	0.0037	0.0014	0.0018	0.0024
108 719	16 36 11.047	−00 25 29.07	12.690	+1.031	+0.648	+0.553	+0.533	+1.087	4	2	0.0045	0.0025	0.0005	0.0045	0.0025	0.0050
108 1848	16 36 58.442	+00 05 55.61	11.738	+0.559	+0.073	+0.331	+0.325	+0.657	1	1	⋯	⋯	⋯	⋯	⋯	⋯
108 475	16 37 00.595	−00 34 39.17	11.307	+1.380	+1.463	+0.743	+0.664	+1.408	113	98	0.0007	0.0006	0.0028	0.0004	0.0004	0.0007
108 1863	16 37 12.452	+00 02 30.58	12.244	+0.803	+0.378	+0.446	+0.398	+0.844	1	1	⋯	⋯	⋯	⋯	⋯	⋯
108 1491	16 37 13.934	−00 02 41.91	9.059	+0.964	+0.616	+0.522	+0.498	+1.020	77	62	0.0006	0.0005	0.0012	0.0003	0.0004	0.0005
108 551	16 37 47.788	−00 33 05.16	10.702	+0.180	+0.182	+0.100	+0.109	+0.209	144	114	0.0006	0.0004	0.0010	0.0004	0.0005	0.0006
108 1918	16 37 50.129	−00 00 36.41	11.384	+1.432	+1.839	+0.773	+0.661	+1.434	2	1	0.0007	0.0014	⋯	0.0042	⋯	0.0042
108 981	16 39 16.614	−00 25 06.98	12.071	+0.494	+0.237	+0.310	+0.312	+0.622	4	2	0.0025	0.0015	0.0075	0.0020	0.0030	0.0010
PG1647+056	16 50 18.461	+05 32 55.94	14.773	−0.173	−1.064	−0.058	−0.022	−0.082	7	3	0.0087	0.0087	0.0076	0.0102	0.0151	0.0163
Wolf 629	16 55 25.223	−08 19 21.30	11.759	+1.676	+1.256	+1.185	+1.525	+2.715	7	4	0.0042	0.0030	0.0034	0.0017	0.0013	0.0013
PG1657+078E	16 59 27.221	+07 44 01.26	14.486	+0.787	+0.284	+0.436	+0.413	+0.851	4	2	0.0020	0.0130	0.0095	0.0020	0.0105	0.0105
PG1657+078D	16 59 27.877	+07 42 59.71	16.156	+0.986	+0.599	+0.635	+0.592	+1.227	1	1	⋯	⋯	⋯	⋯	⋯	⋯
PG1657+078B	16 59 31.979	+07 42 07.34	14.724	+0.697	+0.039	+0.417	+0.420	+0.838	8	4	0.0016	0.0036	0.0041	0.0014	0.0014	0.0014
PG1657+078	16 59 32.216	+07 43 31.43	15.019	−0.142	−0.958	−0.079	−0.058	−0.128	17	8	0.0036	0.0033	0.0042	0.0058	0.0243	0.0299
PG1657+078A	16 59 33.207	+07 42 19.42	14.032	+1.068	+0.735	+0.569	+0.538	+1.105	10	5	0.0007	0.0007	0.0054	0.0026	0.0005	0.0027
PG1657+078C	16 59 35.270	+07 42 26.51	15.225	+0.837	+0.382	+0.504	+0.442	+0.965	5	2	0.0019	0.0020	0.0082	0.0044	0.0120	0.0070
BD −4 4226	17 05 13.783	−05 05 39.21	10.071	+1.415	+1.085	+0.970	+1.141	+2.113	6	3	0.0033	0.0012	0.0029	0.0004	0.0008	0.0012
109 71	17 44 06.792	−00 24 58.01	11.490	+0.326	+0.154	+0.187	+0.223	+0.409	65	56	0.0007	0.0006	0.0014	0.0006	0.0007	0.0009
109 381	17 44 12.269	−00 20 32.80	11.731	+0.704	+0.222	+0.427	+0.435	+0.862	70	57	0.0008	0.0010	0.0012	0.0004	0.0006	0.0008
109 949	17 44 13.616	−00 02 28.02	12.828	+0.806	+0.363	+0.500	+0.517	+1.020	2	1	0.0064	0.0007	0.0099	0.0078	0.0035	0.0113
109 956	17 44 14.54	−00 02 07.7	14.639	+1.283	+0.858	+0.779	+0.743	+1.525	2	1	0.0113	0.0198	0.0035	0.0184	0.0156	0.0346

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	Mean Error of the Mean					
											V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
109 954	17 44 15.844	−00 02 16.07	12.436	+1.296	+0.956	+0.764	+0.731	+1.496	9	5	0.0093	0.0060	0.0203	0.0017	0.0027	0.0033
109 199	17 45 02.635	−00 29 28.71	10.990	+1.739	+1.967	+1.006	+0.900	+1.904	3	2	0.0098	0.0040	0.0035	0.0035	0.0040	0.0046
109 231	17 45 19.964	−00 25 51.60	9.333	+1.465	+1.591	+0.787	+0.705	+1.494	90	65	0.0008	0.0008	0.0023	0.0004	0.0005	0.0006
109 537	17 45 42.448	−00 21 35.43	10.353	+0.609	+0.226	+0.376	+0.393	+0.769	76	55	0.0022	0.0010	0.0017	0.0008	0.0008	0.0013
G21 15	18 27 13.08	+04 03 46.7	13.889	+0.092	−0.598	−0.039	−0.030	−0.069	19	9	0.0046	0.0053	0.0067	0.0046	0.0094	0.0094
110 229	18 40 45.662	+00 01 49.78	13.649	+1.910	+1.391	+1.198	+1.155	+2.356	30	16	0.0031	0.0091	0.0225	0.0018	0.0020	0.0026
110 230	18 40 51.489	+00 02 23.28	14.281	+1.084	+0.728	+0.624	+0.596	+1.218	21	11	0.0031	0.0050	0.0116	0.0020	0.0044	0.0050
110 232	18 40 52.340	+00 01 54.78	12.516	+0.729	+0.147	+0.439	+0.450	+0.889	28	16	0.0032	0.0028	0.0045	0.0015	0.0019	0.0025
110 233	18 40 52.709	+00 00 50.85	12.771	+1.281	+0.812	+0.773	+0.818	+1.593	22	10	0.0028	0.0034	0.0070	0.0021	0.0015	0.0021
110 239	18 41 19.795	+00 00 13.58	13.858	+0.899	+0.584	+0.541	+0.517	+1.060	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 339	18 41 26.51	+00 08 25.4	13.607	+0.988	+0.776	+0.563	+0.468	+1.036	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 340	18 41 28.448	+00 15 23.00	10.025	+0.308	+0.124	+0.171	+0.183	+0.354	111	92	0.0008	0.0006	0.0014	0.0004	0.0006	0.0007
110 477	18 41 43.200	+00 26 42.78	13.988	+1.345	+0.715	+0.850	+0.857	+1.707	21	11	0.0072	0.0131	0.0375	0.0031	0.0039	0.0063
110 246	18 41 50.757	+00 05 04.51	12.706	+0.586	−0.129	+0.381	+0.410	+0.790	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 346	18 41 55.208	+00 09 58.39	14.757	+0.999	+0.752	+0.697	+0.646	+1.345	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 349	18 42 13.409	+00 10 15.21	15.095	+1.088	+0.668	+0.503	−0.059	+0.477	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 355	18 42 18.933	+00 08 24.22	11.944	+1.023	+0.504	+0.652	+0.727	+1.378	16	8	0.0027	0.0030	0.0045	0.0022	0.0022	0.0035
110 358	18 42 35.516	+00 15 01.97	14.430	+1.039	+0.418	+0.603	+0.543	+1.150	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 360	18 42 40.477	+00 09 10.71	14.618	+1.197	+0.539	+0.715	+0.717	+1.432	5	2	0.0094	0.0192	0.0291	0.0085	0.0031	0.0080
110 361	18 42 45.010	+00 08 04.70	12.425	+0.632	+0.035	+0.361	+0.348	+0.709	30	17	0.0022	0.0022	0.0029	0.0018	0.0020	0.0029
110 362	18 42 48.277	+00 06 27.77	15.693	+1.333	+3.919	+0.918	+0.885	+1.803	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 266	18 42 48.798	+00 05 06.44	12.018	+0.889	+0.411	+0.538	+0.577	+1.111	8	3	0.0014	0.0028	0.0039	0.0014	0.0021	0.0032
110 L1	18 42 50.187	+00 07 12.76	16.252	+1.752	+2.953	+1.066	+0.992	+2.058	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 364	18 42 52.785	+00 07 54.89	13.615	+1.133	+1.095	+0.697	+0.585	+1.281	15	7	0.0021	0.0067	0.0088	0.0015	0.0026	0.0021
110 157	18 42 56.472	−00 08 58.45	13.491	+2.123	+1.679	+1.257	+1.139	+2.395	7	3	0.0057	0.0257	0.1750	0.0034	0.0049	0.0057
110 365	18 42 57.444	+00 07 23.12	13.470	+2.261	+1.895	+1.360	+1.270	+2.631	45	20	0.0027	0.0091	0.0313	0.0021	0.0022	0.0034
110 496	18 42 59.294	+00 31 09.13	13.004	+1.040	+0.737	+0.607	+0.681	+1.287	9	4	0.0027	0.0060	0.0230	0.0020	0.0023	0.0043
110 273	18 42 59.542	+00 02 23.92	14.686	+2.527	+1.000	+1.509	+1.345	+2.856	5	2	0.0161	0.0783	1.3416	0.0040	0.0103	0.0107
110 497	18 43 02.506	+00 30 56.79	14.196	+1.052	+0.380	+0.606	+0.597	+1.203	5	2	0.0054	0.0063	0.0143	0.0067	0.0045	0.0063
110 280	18 43 06.960	−00 03 41.52	12.996	+2.151	+2.133	+1.235	+1.148	+2.384	25	12	0.0034	0.0144	0.0906	0.0018	0.0030	0.0036
110 499	18 43 07.663	+00 28 01.47	11.737	+0.987	+0.639	+0.600	+0.674	+1.273	23	13	0.0031	0.0029	0.0071	0.0019	0.0017	0.0029
110 502	18 43 10.111	+00 27 42.37	12.330	+2.326	+2.326	+1.373	+1.250	+2.625	38	19	0.0031	0.0047	0.0225	0.0019	0.0024	0.0041
110 503	18 43 11.696	+00 29 42.95	11.773	+0.671	+0.506	+0.373	+0.436	+0.808	26	14	0.0031	0.0020	0.0051	0.0018	0.0016	0.0022
110 504	18 43 11.712	+00 30 04.57	14.022	+1.248	+1.323	+0.797	+0.683	+1.482	5	2	0.0013	0.0063	0.0268	0.0036	0.0063	0.0080
110 506	18 43 18.927	+00 30 27.14	11.312	+0.568	+0.059	+0.335	+0.312	+0.652	2	1	0.0021	0.0021	0.0064	0.0007	0.0042	0.0042
110 507	18 43 19.126	+00 29 26.00	12.440	+1.141	+0.830	+0.633	+0.579	+1.206	2	1	0.0049	0.0057	0.0057	0.0042	⋯	0.0049
110 290	18 43 22.132	−00 01 15.40	11.898	+0.708	+0.196	+0.418	+0.418	+0.836	3	2	0.0029	0.0006	0.0046	0.0023	0.0029	0.0035
110 441	18 43 33.607	+00 19 40.72	11.122	+0.556	+0.108	+0.325	+0.335	+0.660	84	74	0.0006	0.0005	0.0011	0.0005	0.0006	0.0009
110 311	18 43 47.512	−00 00 20.63	15.505	+1.796	+1.179	+1.010	+0.864	+1.874	4	2	0.0180	0.0360	0.1255	0.0340	0.0830	0.1130
110 312	18 43 48.928	+00 00 06.03	16.093	+1.319	−0.788	+1.137	+1.154	+2.293	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 450	18 43 51.474	+00 22 58.46	11.583	+0.946	+0.683	+0.549	+0.626	+1.175	93	83	0.0006	0.0007	0.0017	0.0006	0.0007	0.0010
110 315	18 43 52.079	+00 00 49.33	13.637	+2.069	+2.256	+1.206	+1.133	+2.338	8	4	0.0067	0.0361	0.4639	0.0032	0.0057	0.0067
110 316	18 43 52.342	+00 01 04.22	14.821	+1.731	+4.355	+0.858	+0.910	+1.769	1	1	⋯	⋯	⋯	⋯	⋯	⋯
110 319	18 43 55.376	+00 02 00.32	11.861	+1.309	+1.076	+0.742	+0.700	+1.443	3	2	0.0110	0.0029	0.0035	0.0040	0.0017	0.0058

Table 2
(Continued)

| Star | α (J2000.0) | δ (J2000.0) | V | B−V | U−B | V−R | R−I | V−I | n | m | V | B−V | U−B | V−R | R−I | V−I |
| | | | | | | | | | | | | | Mean Error of the Mean | | | |
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
111 773	19 37 15.832	+00 10 58.24	8.965	+0.209	−0.209	+0.121	+0.145	+0.265	80	61	0.0009	0.0006	0.0003	0.0004	0.0006	0.0006
111 775	19 37 16.357	+00 12 05.56	10.748	+1.741	+2.017	+0.965	+0.897	+1.863	79	66	0.0010	0.0007	0.0037	0.0006	0.0005	0.0009
111 1925	19 37 28.639	+00 25 02.74	12.387	+0.396	+0.264	+0.226	+0.256	+0.483	30	17	0.0015	0.0012	0.0038	0.0005	0.0010	0.0009
111 1965	19 37 41.557	+00 26 50.94	11.419	+1.710	+1.865	+0.951	+0.877	+1.830	16	8	0.0018	0.0037	0.0090	0.0010	0.0010	0.0012
111 1969	19 37 43.288	+00 25 48.55	10.382	+1.959	+2.306	+1.177	+1.222	+2.400	58	47	0.0017	0.0014	0.0054	0.0008	0.0009	0.0013
111 2039	19 38 04.578	+00 32 12.54	12.395	+1.369	+1.237	+0.739	+0.689	+1.430	8	4	0.0021	0.0028	0.0120	0.0021	0.0021	0.0021
111 2088	19 38 21.254	+00 31 00.26	13.193	+1.610	+1.678	+0.888	+0.818	+1.708	8	4	0.0014	0.0042	0.0110	0.0018	0.0014	0.0018
111 2093	19 38 23.462	+00 31 25.44	12.538	+0.637	+0.283	+0.370	+0.397	+0.766	8	4	0.0025	0.0035	0.0071	0.0032	0.0021	0.0039
112 595	20 41 18.463	+00 16 28.06	11.352	+1.601	+1.991	+0.898	+0.903	+1.801	75	66	0.0014	0.0009	0.0035	0.0005	0.0007	0.0008
112 704	20 42 02.066	+00 19 08.22	11.452	+1.536	+1.742	+0.822	+0.746	+1.570	19	12	0.0030	0.0023	0.0076	0.0021	0.0018	0.0025
112 223	20 42 14.583	+00 08 59.70	11.424	+0.454	+0.016	+0.273	+0.274	+0.547	87	79	0.0007	0.0006	0.0015	0.0005	0.0007	0.0010
112 250	20 42 26.386	+00 07 42.50	12.095	+0.532	−0.025	+0.317	+0.323	+0.639	18	12	0.0021	0.0019	0.0042	0.0019	0.0019	0.0026
112 275	20 42 35.424	+00 07 20.22	9.905	+1.210	+1.294	+0.648	+0.569	+1.217	113	98	0.0001	0.0004	0.0016	0.0004	0.0005	0.0007
112 805	20 42 46.753	+00 16 08.08	12.086	+0.151	+0.158	+0.064	+0.075	+0.139	95	86	0.0006	0.0007	0.0017	0.0006	0.0012	0.0016
112 822	20 42 54.915	+00 15 01.90	11.548	+1.030	+0.883	+0.558	+0.502	+1.060	70	61	0.0007	0.0008	0.0022	0.0005	0.0007	0.0008
Mark A4	20 43 53.555	−10 45 05.17	14.767	+0.795	+0.176	+0.471	+0.475	+0.952	22	11	0.0020	0.0030	0.0040	0.0031	0.0036	0.0052
Mark A2	20 43 54.998	−10 45 31.29	14.540	+0.666	+0.096	+0.379	+0.371	+0.751	21	10	0.0028	0.0031	0.0046	0.0024	0.0050	0.0059
Mark A1	20 43 58.451	−10 47 12.27	15.911	+0.609	−0.014	+0.367	+0.373	+0.740	25	10	0.0040	0.0090	0.0136	0.0044	0.0128	0.0148
Mark A	20 43 59.227	−10 47 41.68	13.256	−0.246	−1.159	−0.114	−0.124	−0.238	88	71	0.0008	0.0008	0.0021	0.0008	0.0027	0.0029
Mark A3	20 44 03.82	−10 45 37.9	14.818	+0.938	+0.651	+0.587	+0.510	+1.098	22	10	0.0023	0.0034	0.0104	0.0021	0.0030	0.0045
Wolf 918	21 09 17.431	−13 18 09.01	10.869	+1.493	+1.139	+0.978	+1.083	+2.064	11	7	0.0021	0.0038	0.0051	0.0022	0.0025	0.0030
G26 7A	21 31 06.807	−09 46 35.55	13.047	+0.725	+0.279	+0.405	+0.371	+0.776	17	9	0.0016	0.0017	0.0025	0.0016	0.0020	0.0022
G26 7	21 31 18.637	−09 47 26.44	12.006	+1.664	+1.231	+1.298	+1.669	+2.968	25	12	0.0017	0.0006	0.0041	0.0011	0.0009	0.0015
G26 7C	21 31 23.333	−09 50 46.60	12.468	+0.624	+0.093	+0.354	+0.340	+0.695	12	6	0.0006	0.0013	0.0042	0.0005	0.0010	0.0010
G26 7B	21 31 26.454	−09 47 23.47	13.454	+0.562	+0.027	+0.323	+0.327	+0.652	16	9	0.0017	0.0021	0.0037	0.0018	0.0017	0.0029
113 440	21 40 34.426	+00 41 46.92	11.796	+0.637	+0.167	+0.363	+0.350	+0.715	2	1	0.0014	0.0014	0.0042	⋯	0.0028	0.0021
113 221	21 40 36.542	+00 21 03.31	12.071	+1.031	+0.874	+0.550	+0.490	+1.041	24	10	0.0016	0.0020	0.0055	0.0018	0.0014	0.0022
113 L1	21 40 47.382	+00 28 34.96	15.530	+1.343	+1.180	+0.867	+0.723	+1.594	2	1	0.0042	0.0509	0.1867	0.0049	0.0049	0.0007
113 337	21 40 49.456	+00 27 58.01	14.225	+0.519	−0.025	+0.351	+0.331	+0.682	5	3	0.0130	0.0058	0.0085	0.0072	0.0063	0.0116
113 339	21 40 55.675	+00 27 58.07	12.250	+0.568	−0.034	+0.340	+0.347	+0.687	31	18	0.0020	0.0020	0.0038	0.0014	0.0016	0.0025
113 233	21 40 59.227	+00 22 02.43	12.398	+0.549	+0.096	+0.338	+0.322	+0.661	2	1	0.0021	0.0014	0.0007	⋯	0.0007	0.0007
113 342	21 40 59.843	+00 27 36.65	10.878	+1.015	+0.696	+0.537	+0.513	+1.050	7	3	0.0015	0.0015	0.0060	0.0019	0.0023	0.0049
113 239	21 41 06.870	+00 22 33.87	13.038	+0.516	+0.051	+0.318	+0.327	+0.647	2	1	0.0057	0.0028	0.0042	0.0014	0.0035	0.0049
113 241	21 41 09.188	+00 25 48.20	14.352	+1.344	+1.452	+0.897	+0.797	+1.683	22	9	0.0019	0.0032	0.0056	0.0012	0.0031	0.0038
113 245	21 41 13.344	+00 21 52.76	15.665	+0.628	+0.112	+0.396	+0.318	+0.716	2	1	0.0092	0.0099	0.0021	0.0240	0.0106	0.0354
113 459	21 41 14.979	+00 43 04.64	12.125	+0.535	−0.018	+0.307	+0.313	+0.623	4	2	0.0070	0.0055	0.0070	0.0055	0.0060	0.0105
113 250	21 41 24.583	+00 20 41.01	13.160	+0.505	−0.003	+0.309	+0.316	+0.626	4	2	0.0025	0.0025	0.0165	0.0035	0.0045	0.0045
113 466	21 41 27.386	+00 40 15.56	10.003	+0.453	+0.003	+0.279	+0.283	+0.564	109	91	0.0004	0.0004	0.0009	0.0003	0.0005	0.0007
113 259	21 41 44.849	+00 17 40.05	11.744	+1.199	+1.220	+0.621	+0.544	+1.167	98	83	0.0005	0.0008	0.0017	0.0004	0.0005	0.0007
113 260	21 41 48.071	+00 23 52.81	12.406	+0.514	+0.069	+0.308	+0.298	+0.606	23	11	0.0044	0.0021	0.0029	0.0019	0.0015	0.0019
113 475	21 41 51.293	+00 39 20.78	10.304	+1.058	+0.841	+0.568	+0.528	+1.097	89	79	0.0004	0.0005	0.0012	0.0004	0.0006	0.0006
113 263	21 41 52.873	+00 25 37.60	15.481	+0.280	+0.074	+0.194	+0.207	+0.401	4	1	0.0100	0.0080	0.0250	0.0035	0.0120	0.0140
113 366	21 41 53.577	+00 29 22.85	13.537	+1.096	+0.896	+0.623	+0.588	+1.211	2	1	0.0007	0.0049	0.0049	0.0113	0.0021	0.0099
113 265	21 41 53.746	+00 18 04.21	14.934	+0.639	+0.101	+0.411	+0.395	+0.807	9	4	0.0180	0.0120	0.0163	0.0160	0.0170	0.0263

Table 2
(Continued)

Star	α (J2000.0)	δ (J2000.0)	V	B−V	U−B	V−R	R−I	V−I	n	m	Mean Error of the Mean					
											V	B−V	U−B	V−R	R−I	V−I
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
113 268	21 41 57.086	+00 19 55.88	15.281	+0.589	−0.018	+0.379	+0.407	+0.786	6	2	0.0033	0.0094	0.0229	0.0078	0.0208	0.0229
113 34	21 41 58.784	+00 01 06.97	15.173	+0.484	−0.054	+0.306	+0.346	+0.652	2	1	0.0014	0.0035	0.0205	0.0106	0.0127	0.0021
113 372	21 42 01.99	+00 28 38.9	13.681	+0.670	+0.080	+0.395	+0.370	+0.766	2	1	0.0042	0.0028	0.0141	0.0042	0.0099	0.0064
113 149	21 42 05.56	+00 09 25.7	13.469	+0.621	+0.043	+0.379	+0.386	+0.765	2	1	0.0078	0.0148	0.0099	0.0049	0.0085	0.0042
113 153	21 42 08.863	+00 15 04.78	14.476	+0.745	+0.285	+0.462	+0.441	+0.902	3	2	0.1051	0.0381	0.0502	0.0121	0.0139	0.0064
113 272	21 42 20.301	+00 20 58.51	13.904	+0.633	+0.067	+0.370	+0.340	+0.710	2	1	0.0014	0.0007	0.0255	0.0007	0.0134	0.0120
113 156	21 42 21.714	+00 12 10.06	11.224	+0.526	−0.057	+0.303	+0.314	+0.618	2	1	0.0035	0.0035	0.0057	0.0042	0.0007	0.0028
113 158	21 42 21.763	+00 14 09.73	13.116	+0.723	+0.247	+0.407	+0.374	+0.782	3	2	0.0035	0.0023	0.0040	0.0029	0.0046	0.0029
113 491	21 42 24.506	+00 43 54.63	14.373	+0.764	+0.306	+0.434	+0.420	+0.854	4	2	0.0025	0.0020	0.0185	0.0085	0.0095	0.0175
113 492	21 42 27.808	+00 38 21.96	12.174	+0.553	+0.005	+0.342	+0.341	+0.684	9	5	0.0033	0.0063	0.0063	0.0027	0.0033	0.0053
113 493	21 42 28.579	+00 38 11.53	11.767	+0.786	+0.392	+0.430	+0.393	+0.824	8	4	0.0039	0.0035	0.0064	0.0028	0.0018	0.0039
113 495	21 42 29.737	+00 38 07.96	12.437	+0.947	+0.530	+0.512	+0.497	+1.010	6	3	0.0024	0.0029	0.0053	0.0033	0.0037	0.0057
113 163	21 42 35.438	+00 16 45.54	14.540	+0.658	+0.106	+0.380	+0.355	+0.735	15	7	0.0041	0.0049	0.0093	0.0054	0.0083	0.0108
113 165	21 42 37.998	+00 15 33.15	15.639	+0.601	+0.003	+0.354	+0.392	+0.746	2	1	0.0007	0.0057	0.0297	0.0212	0.0431	0.0643
113 281	21 42 38.704	+00 18 56.66	15.247	+0.529	−0.026	+0.347	+0.359	+0.706	2	1	0.0078	0.0014	0.0311	0.0021	0.0368	0.0389
113 167	21 42 40.950	+00 16 08.62	14.841	+0.597	−0.034	+0.351	+0.376	+0.728	2	1	0.0007	0.0099	0.0240	0.0071	0.0141	0.0219
113 177	21 42 56.538	+00 14 43.80	13.560	+0.789	+0.318	+0.456	+0.436	+0.890	27	13	0.0052	0.0040	0.0060	0.0044	0.0037	0.0056
113 182	21 43 08.336	+00 14 49.98	14.370	+0.659	+0.065	+0.402	+0.422	+0.824	13	6	0.0144	0.0089	0.0089	0.0039	0.0086	0.0089
113 187	21 43 20.629	+00 16 54.22	15.080	+1.063	+0.969	+0.638	+0.535	+1.174	7	4	0.0060	0.0163	0.0299	0.0068	0.0042	0.0072
113 189	21 43 27.481	+00 17 20.91	15.421	+1.118	+0.958	+0.713	+0.605	+1.319	8	4	0.0138	0.0127	0.0714	0.0113	0.0074	0.0156
113 307	21 43 30.444	+00 18 04.17	14.214	+1.128	+0.911	+0.630	+0.614	+1.245	2	1	0.0049	0.0269	0.0035	0.0014	0.0219	0.0198
113 191	21 43 33.561	+00 15 54.39	12.337	+0.799	+0.223	+0.471	+0.466	+0.937	7	4	0.0042	0.0023	0.0045	0.0023	0.0023	0.0034
113 195	21 43 40.819	+00 17 21.83	13.692	+0.730	+0.201	+0.418	+0.413	+0.832	10	5	0.0051	0.0057	0.0101	0.0032	0.0038	0.0032
G93 48D	21 52 10.158	+02 21 25.52	13.664	+0.636	+0.120	+0.368	+0.362	+0.724	21	9	0.0016	0.0025	0.0033	0.0018	0.0028	0.0030
G93 48C	21 52 13.86	+02 21 52.9	12.664	+1.320	+1.260	+0.852	+0.759	+1.610	33	16	0.0005	0.0015	0.0054	0.0010	0.0011	0.0018
G93 48A	21 52 17.45	+02 23 14.2	12.856	+0.715	+0.278	+0.403	+0.365	+0.772	26	14	0.0017	0.0020	0.0032	0.0009	0.0018	0.0023
G93 48B	21 52 18.349	+02 23 10.40	12.416	+0.719	+0.194	+0.405	+0.383	+0.791	25	14	0.0019	0.0017	0.0038	0.0012	0.0014	0.0020
G93 48	21 52 25.379	+02 23 19.60	12.743	−0.011	−0.790	−0.096	−0.099	−0.195	106	90	0.0006	0.0007	0.0016	0.0006	0.0017	0.0018
PG2213−006F	22 16 12.898	−00 17 55.86	12.644	+0.678	+0.171	+0.395	+0.384	+0.781	30	15	0.0010	0.0011	0.0019	0.0006	0.0013	0.0014
PG2213−006C	22 16 17.674	−00 22 14.30	15.108	+0.726	+0.175	+0.425	+0.432	+0.853	34	17	0.0020	0.0030	0.0039	0.0020	0.0039	0.0047
PG2213−006E	22 16 21.309	−00 17 39.75	13.776	+0.661	+0.087	+0.397	+0.373	+0.778	3	3	0.0025	0.0029	0.0027	0.0029	0.0052	0.0032
PG2213−006B	22 16 21.757	−00 21 48.50	12.710	+0.753	+0.291	+0.427	+0.404	+0.831	24	13	0.0007	0.0014	0.0018	0.0005	0.0011	0.0012
PG2213−006D	22 16 22.59	−00 17 40.7	13.987	+0.787	+0.128	+0.486	+0.479	+0.967	34	16	0.0015	0.0015	0.0029	0.0009	0.0021	0.0022
PG2213−006A	22 16 23.206	−00 21 26.98	14.180	+0.665	+0.094	+0.407	+0.408	+0.817	32	17	0.0006	0.0007	0.0025	0.0016	0.0026	0.0030
PG2213−006	22 16 28.375	−00 21 13.51	14.137	−0.214	−1.176	−0.072	−0.132	−0.211	33	18	0.0010	0.0014	0.0006	0.0011	0.0044	0.0057
G156 31	22 38 33.592	−15 17 59.44	12.361	+1.993	+1.408	+1.648	+2.042	+3.684	20	8	0.0027	0.0049	0.0130	0.0027	0.0027	0.0029
114 531	22 40 36.756	+00 51 55.46	12.095	+0.733	+0.175	+0.421	+0.404	+0.824	55	44	0.0009	0.0011	0.0013	0.0006	0.0008	0.0009
114 637	22 40 42.570	+01 03 10.62	12.070	+0.801	+0.307	+0.456	+0.415	+0.872	15	8	0.0044	0.0018	0.0080	0.0026	0.0023	0.0028
114 446	22 41 03.873	+00 46 01.40	12.064	+0.737	+0.237	+0.397	+0.369	+0.769	2	1	0.0035	0.0035	0.0064	0.0035	0.0028	0.0007
114 654	22 41 26.140	+01 10 10.69	11.833	+0.656	+0.178	+0.368	+0.341	+0.711	6	3	0.0008	0.0037	0.0057	0.0016	0.0033	0.0037
114 656	22 41 35.072	+01 11 09.79	12.644	+0.965	+0.698	+0.547	+0.506	+1.051	5	1	0.0036	0.0067	0.0219	0.0040	0.0018	0.0049

Table 2
(Continued)

Star (1)	α (J2000.0) (2)	δ (J2000.0) (3)	V (4)	B−V (5)	U−B (6)	V−R (7)	R−I (8)	V−I (9)	n (10)	m (11)	Mean Error of the Mean V (12)	B−V (13)	U−B (14)	V−R (15)	R−I (16)	V−I (17)
114 548	22 41 36.833	+00 59 05.80	11.599	+1.362	+1.568	+0.738	+0.651	+1.387	64	54	0.0011	0.0013	0.0052	0.0007	0.0007	0.0010
114 750	22 41 44.703	+01 12 36.36	11.916	−0.037	−0.367	+0.027	−0.016	+0.010	68	57	0.0012	0.0005	0.0013	0.0010	0.0003	0.0013
114 755	22 42 07.584	+01 16 48.99	10.909	+0.570	−0.063	+0.313	+0.310	+0.622	23	18	0.0009	0.0009	0.0019	0.0006	0.0008	0.0013
114 670	22 42 09.288	+01 10 16.80	11.101	+1.206	+1.223	+0.645	+0.561	+1.208	16	10	0.0027	0.0015	0.0117	0.0020	0.0022	0.0020
114 176	22 43 10.181	+00 21 15.57	9.239	+1.485	+1.853	+0.800	+0.717	+1.521	60	43	0.0010	0.0013	0.0032	0.0006	0.0008	0.0009
HD 216135	22 50 28.229	−13 18 44.34	10.111	−0.119	−0.618	−0.052	−0.065	−0.119	27	20	0.0006	0.0011	0.0016	0.0011	0.0009	0.0012
G156 57	22 53 16.728	−14 15 49.32	10.192	+1.557	+1.179	+1.179	+1.543	+2.730	18	11	0.0017	0.0015	0.0035	0.0008	0.0014	0.0006
GD 246A	23 12 17.442	+10 46 12.87	12.962	+0.463	−0.047	+0.288	+0.296	+0.584	21	11	0.0019	0.0022	0.0034	0.0017	0.0015	0.0025
GD 246	23 12 21.63	+10 47 04.3	13.090	−0.318	−1.194	−0.148	−0.181	−0.328	113	97	0.0009	0.0009	0.0014	0.0008	0.0019	0.0021
GD 246B	23 12 28.998	+10 47 11.37	14.368	+0.919	+0.693	+0.512	+0.431	+0.944	20	9	0.0019	0.0028	0.0111	0.0023	0.0056	0.0070
GD 246C	23 12 30.920	+10 49 13.96	13.637	+0.879	+0.540	+0.484	+0.448	+0.933	20	10	0.0018	0.0015	0.0052	0.0016	0.0027	0.0031
F 108	23 16 12.408	−01 50 35.12	12.973	−0.237	−1.050	−0.106	−0.140	−0.245	118	100	0.0007	0.0007	0.0011	0.0009	0.0019	0.0021
PG2317+046	23 19 55.349	+04 52 34.60	12.876	−0.246	−1.137	−0.074	−0.035	−0.118	10	4	0.0085	0.0041	0.0079	0.0032	0.0028	0.0079
PG2331+055	23 33 44.468	+05 46 39.81	15.182	−0.066	−0.487	−0.012	−0.031	−0.044	2	1	0.0057	0.0071	0.0035	0.0078	0.0057	0.0127
PG2331+055A	23 33 49.373	+05 46 52.58	13.051	+0.741	+0.257	+0.419	+0.401	+0.821	2	1	0.0021	0.0014	0.0014	0.0014	0.0014	0.0014
PG2331+055B	23 33 51.128	+05 45 09.07	14.744	+0.819	+0.429	+0.481	+0.454	+0.935	2	1	0.0035	0.0007	0.0014	0.0035	0.0064	0.0021
PG2336+004B	23 38 38.287	+00 42 46.40	12.429	+0.517	−0.048	+0.313	+0.317	+0.627	10	5	0.0006	0.0008	0.0012	0.0003	0.0012	0.0012
PG2336+004A	23 38 42.579	+00 42 28.76	11.274	+0.686	+0.129	+0.394	+0.382	+0.769	10	5	0.0006	0.0006	0.0011	0.0007	0.0006	0.0009
PG2336+004	23 38 43.58	+00 42 59.3	15.885	−0.160	−0.781	−0.056	−0.048	−0.109	10	5	0.0070	0.0056	0.0007	0.0079	0.0125	0.0217
115 554	23 41 30.848	+01 26 25.21	11.812	+1.005	+0.548	+0.586	+0.538	+1.127	2	1	0.0042	0.0028	0.0028	0.0057	0.0021	0.0028
115 486	23 41 32.988	+01 16 44.80	12.482	+0.493	−0.049	+0.298	+0.308	+0.607	16	9	0.0025	0.0035	0.0047	0.0020	0.0020	0.0020
115 412	23 42 00.947	+01 09 01.74	12.209	+0.573	−0.040	+0.327	+0.335	+0.665	2	1	0.0021	0.0049	0.0035	0.0007	0.0021	0.0021
115 268	23 42 30.663	+00 52 10.93	12.494	+0.634	+0.077	+0.366	+0.348	+0.714	1	1	...	...	...	...	...	...
115 420	23 42 36.481	+01 05 58.82	11.160	+0.467	−0.019	+0.288	+0.293	+0.581	91	82	0.0006	0.0005	0.0008	0.0005	0.0006	0.0007
115 271	23 42 41.825	+00 45 13.14	9.693	+0.612	+0.109	+0.354	+0.349	+0.702	118	96	0.0005	0.0004	0.0008	0.0003	0.0005	0.0007
115 516	23 44 15.37	+01 14 12.7	10.431	+1.028	+0.760	+0.564	+0.534	+1.099	100	89	0.0006	0.0005	0.0012	0.0004	0.0004	0.0006
BD +1 4774	23 49 12.526	+02 24 04.42	8.993	+1.434	+1.105	+0.964	+1.081	+2.047	6	6	0.0012	0.0016	0.0020	0.0008	0.0016	0.0016
PG2349+002	23 51 53.228	+00 28 17.6	13.277	−0.191	−0.921	−0.103	−0.116	−0.219	11	5	0.0063	0.0106	0.0078	0.0057	0.0078	0.0060

Notes. Units of right ascension are hours, minutes, and seconds, and units of declination are degrees, arcminutes, and arcseconds.

(This table is also available in machine-readable and Virtual Observatory (VO) forms in the online journal.)

Table 3
Error Analysis for the Standard Stars in Table 2

	Mean Errors of a Single Observation	Mean Errors of the Mean
V	0.0144 ± 0.0011	0.0036 ± 0.0004
$B-V$	0.0191 ± 0.0022	0.0051 ± 0.0008
$U-B$	0.0492 ± 0.0085	0.0143 ± 0.0036
$V-R$	0.0115 ± 0.0008	0.0029 ± 0.0003
$R-I$	0.0166 ± 0.0013	0.0040 ± 0.0003
$V-I$	0.0207 ± 0.0015	0.0050 ± 0.0004

CCD Astrograph Catalogue (Zacharias et al. 2004). Although attempts have been made to eliminate them, users should be aware that there may be erroneous or spurious proper motions in Table 5 (see Levine 2005).

Spectral types for many of the SA stars, classified by Drilling, may be found in Drilling & Landolt (1979). In addition, there exists an all-sky comprehensive spectral classification file prepared by P. Skiff (2008, private communication). This file may be queried at the Simbad Strasbourgh VizieR Site[2] by entering "B/mk" in the catalog search area.

4. COMMENTS ON INDIVIDUAL STARS

A number of stars in Table 2 are of interest for several reasons. Therefore, in this section, additional references are given for selected stars. Most of these stars have additional identifications. A description follows next of the stellar nomenclature which the reader will encounter. These different star naming systems and catalogs are given in alphabetical order.

BD: The Bonner Durchmusterung is a multiple volume star catalog published between 1859 and 1862 by Argelander et al. (1859, 1861, 1862). It is a visual survey of stars in declination zones from +90° to −01°. The Sudliche Bonner Durchmusterung (Schoenfeld 1886) covers the declination range from −02° to −22°.

BPM: The Bruce Proper Motion survey was published by Luyten (1963a) in two volumes.

BPS: A catalog of candidate field horizontal-branch stars was published by Beers et al. (1988).

Ci: High proper motion stars published in the Publications of the Cincinnati Observatory. The prefix Ci 18 means the star was published in Publication No. 18; the prefix Ci 20 means the star appeared in Publication No. 20.

CD: The Cordoba Durchmusterung is a visual survey of southern stars in the declination zones −22° to −90°, carried out by Thome (1892, 1894, 1900, 1914, 1932), and published in the Resultados del Observatorio Nacional Argentino as an extension to the Bonner Durchmusterung (BD) Catalogue. The CD contains 613,959 records for stars brighter than 10.0 mag.

EGGR: An acronym made from the first initials of EGgen (Olin J. Eggen) and GReenstein (Jesse L. Greenstein). Earlier acronyms for the same stars were EG and GR. For additional details, and a summary of the papers wherein these stars were published, go into Simbad, look up Feige 22, for example, and click on EGGR 19.

FASTT: Stars in a list emanating from the Flagstaff Astrometric Scanning Transit Telescope (FASTT); see a paper by Henden & Stone (1998).

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2 See http://webviz.u-strasbg.fr/viz-bin/VizieR

Feige(F)stars: A search for faint blue stars (Feige 1958, 1959).

GCRV: General Catalogue of Stellar Radial Velocities (Wilson 1953).

G, **GD**, **and GR**: Proper motion stars published by Giclas and colleagues in the Lowell Observatory Bulletins (Giclas et al. 1971): Northern Hemisphere—the G numbered stars; Giclas et al. (1978): Southern Hemisphere Catalogue. Giclas et al. (1980): Summary catalog of the GD and GR stars. This latter group contained very blue (GD) or very red (GR) stars of little or no proper motion.

GJ: The nomenclature GJ pertains to stars in the Gliese & Jahreiß (1979) catalog of nearby stars.

GSC: The *Hubble Space Telescope* Guide Star Catalogue (GSC) acronym first appeared in Lasker et al. (1990).

HD: The Henry Draper catalog was published in the Annals of the Harvard College Observatory, vols. 91–99 in the time interval 1918–1924 (Cannon & Pickering 1918a, 1918b, 1919a, 1919b, 1920, 1921, 1922, 1923, 1924). It contains coordinates, magnitudes, and spectral types for 225,300 stars across the celestial sphere. These volumes form the basis for astronomical spectral classification, and are the source of the OBAFGKM terminology used in remembering the sequence of spectral classes.

IDS: The Index Catalogue of Visual Double stars (Jeffers et al. 1963) is a catalog of visual binary stars. The catalog contains measurements for 64,250 pairs.

LSPM: A catalog of 61,977 stars north of the celestial equator with proper motions greater than 0″.15 per year as presented by Lépine & Shara (2005).

Luyten devised several numbering systems for the white dwarf and high proper motion stars that he discovered.

1. **LFT**: A catalog of stars whose proper motions were greater than 0″.5 annually (Luyten 1955).
2. **LHS**: A summary catalog of stars whose proper motions were greater than 0″.5 annually (Luyten 1976, 1979a).
3. **LTT**: A catalog of stars in the southern hemisphere whose proper motions exceed 0″.2 annually (Luyten 1957).
4. **NLTT**: The New Luyten Two Tenths catalog (Luyten 1979b, 1979c, 1980a, 1980b); (Luyten & Hughes 1980) contains stars whose proper motions are greater than 0″.2 annually.

MARK: The naming situation for the star named Mark A and other stars in its sequence should have been explained long ago. Markarian & Lipovetskij (1973) published a list of galaxies with ultraviolet continua; the object designated Markarian 509 was one of these galaxies. Magnitskaya & Saakyan (1976) studied the light variation of Markarian 509. W. Wisniewski, knowing that this author was searching for blue stars as possible candidate standard stars, told him of the existence of a blue star near Markarian 509, star A in Magnitskaya and Saakyan's Markarian 509 sequence, and provided a chart of the blue star. This author arbitrarily named the star Mark A, and subsequent nearby stars Mark A1, Mark A2, and so on. The star Mark A is the only star in common between Magnitskaya and Saakyan's and the current photometric sequences. The stars named Mark A, etc. in this paper now have been correlated with modern catalogs; please see Table 5. Parenthetically, there exists still another sequence for Markarian 509 (Miller 1981); there are no Miller sequence stars in common with this paper.

NSV: The NSV terminology began with the New Catalogue of Suspected Variable Stars (Kukarkin & Kholopov 1982). One

Table 4
Field Centers for Sequences

Field Name	α (J2000.0)	δ (J2000.0)	FOV	No. of Stars	Range in V	Range in B−V	Range in U−B	Comments
TPhe	00:30:34.5	−46:28:08	15x15	11	10.45 ↔ 14.94	−0.30 ↔ +1.55	−1.22 ↔ +1.91	All stars except TPhe K
SA92	00:55:15.5	+00:47:26	70x70	41	10.60 ↔ 15.92	+0.32 ↔ +1.64	−0.18 ↔ +1.99	All stars except those with fewer than five measures
SA92 SF1	00:55:24.6	+00:39:46	10x10	4	11.62 ↔ 15.07	+0.43 ↔ +1.16	−0.04 ↔ +1.11	SA92 342, *259*, 260, 263
SA92 SF2	00:56:06.7	+00:52:03	10x10	4	13.94 ↔ 14.96	+0.57 ↔ +1.19	−0.04 ↔ +1.20	SA92 425, 426, 355, 430
SA92 SF3	00:57:01.9	+00:40:21	10x10	3	11.63 ↔ 12.97	+0.32 ↔ +0.86	−0.04 ↔ +0.47	SA92 282, 364, 288
F 11	01:04:25.0	+04:12:31	10x10	3	12.06 ↔ 14.47	−0.24 ↔ +0.84	−0.99 ↔ +0.45	All stars
SA93	01:55:01.8	+00:49:52	60x60	4	11.55 ↔ 12.01	+0.49 ↔ +1.08	−0.05 ↔ +0.93	All stars
PG0220+132	02:23:36.9	+13:27:47	10x10	3	14.22 ↔ 15.77	−0.13 ↔ +0.94	−0.92 ↔ +0.32	With caution
PG0231+051	02:33:38.5	+05:19:00	15x15	6	12.77 ↔ 16.10	−0.32 ↔ +1.44	−1.21 ↔ +1.28	All stars
F 24	02:35:17.0	+03:42:54	15x15	4	11.76 ↔ 13.82	−0.20 ↔ +1.13	−1.18 ↔ +1.01	All stars
SA94	02:55:56.1	+00:43:29	70x70	7	11.20 ↔ 14.29	+0.30 ↔ +1.42	−0.05 ↔ +1.62	All stars except those with fewer than five measures
SA94 SF1	02:57:34.1	+00:17:21	10x10	2	11.20 ↔ 11.72	+0.30 ↔ +1.22	+0.11 ↔ +1.28	SA94 242, 251
SA95	03:54:26.8	+00:13:48	70x70	44	10.01 ↔ 16.27	−0.21 ↔ +2.00	−1.11 ↔ +2.23	All stars except those with fewer than five measures
SA95 SF1	03:52:41.7	+00:31:20	10x10	2	11.22 ↔ 11.69	+0.82 ↔ +1.29	+0.45 ↔ +1.30	SA95 301, 302
SA95 SF2	03:53:16.9	+00:16:29	10x10	2	12.63 ↔ 14.34	+0.29 ↔ +1.21	+0.24 ↔ +1.24	SA95 190, 193
SA95 SF3	03:53:35.0	−00:01:07	10x10	8	10.80 ↔ 16.27	−0.21 ↔ +1.32	−1.11 ↔ +1.11	SA95 *105*, *106*, *107*, *112*, *41*, 42, *115*, 43
SA95 SF4	03:54:38.3	+00:27:30	10x10	3	12.17 ↔ 14.12	+1.23 ↔ +2.00	+1.22 ↔ +2.23	SA95 330, 275, 276
SA95 SF5	03:55:41.6	+00:08:53	10x10	2	10.94 ↔ 14.22	+0.45 ↔ +1.59	+0.30 ↔ +1.56	SA95 231, 149
SA95 SF6	03:55:58.9	+00:07:55	10x10	2	10.94 ↔ 11.49	+0.74 ↔ +1.59	+0.17 ↔ +1.56	SA95 149, 236
SA96	04:52:17.3	+00:03:50	70x70	6	10.59 ↔ 13.78	+0.18 ↔ +1.34	+0.00 ↔ +1.15	All stars except those with fewer than five measures
GD 71	05:52:23.2	+15:53:29	15x15	6	12.32 ↔ 13.63	−0.25 ↔ +1.18	−1.11 ↔ +0.90	All stars
SA97	05:57:55.8	+00:05:54	60x60	6	9.78 ↔ 14.09	+0.20 ↔ +1.87	+0.09 ↔ +2.10	All stars except those with fewer than five measures
SA97 SF1	05:57:35.2	+00:17:30	10x10	2	9.78 ↔ 11.61	+0.20 ↔ +1.65	+0.09 ↔ +1.71	SA97 345, 351
SA98	06:52:03.5	−00:19:27	30x30	46	9.54 ↔ 17.80	+0.00 ↔ +2.19	−0.30 ↔ +2.14	All stars except those with fewer than five measures
SA98 SF1	06:51:59.0	−00:22:50	10x10	27	9.54 ↔ 17.80	+0.00 ↔ +2.19	−0.10 ↔ +2.14	SA98 *L1*, *L2*, 581, 580, *590*, *614*, 618, *624*, *626*, *627*, *634*, *642*, 185, *646*, 193, 653, 650, *652*, 666, 671, 670, 676, 675, *L5*, 682, 685, 688
SA98 SF2	06:52:21.2	−00:18:38	10x10	22	9.54 ↔ 17.80	+0.00 ↔ +1.91	−0.30 ↔ +1.94	SA98 *646*, 653, 650, *652*, 666, 671, 670, 676, 675, *L5*, 682, 685, 688, *1082*, 1087, 1102, 1112, 1119, 1124, 1122, 724, 733
Ru149	07:24:15.2	−00:32:12	15x15	8	11.48 ↔ 14.49	−0.13 ↔ +1.11	−0.78 ↔ +1.02	All stars
Ru152	07:29:59.9	−02:05:38	15x15	7	11.08 ↔ 15.02	−0.19 ↔ +0.88	−1.08 ↔ +0.49	All stars
SA99	07:54:50.0	−00:33:13	60x60	5	9.40 ↔ 11.15	−0.16 ↔ +1.25	−0.73 ↔ +1.29	All stars
SA99 SF1	07:56:00.5	−00:18:46	10x10	2	9.40 ↔ 9.42	−0.16 ↔ -0.07	−0.73 ↔ -0.22	SA99 438, 447
SA100	08:53:14.3	−00:37:56	60x60	6	9.15 ↔ 13.03	+0.16 ↔ +1.32	−0.06 ↔ +1.50	All stars except those with fewer than five measures
SA100 SF1	08:53:25.0	−00:40:06	10x10	4	9.15 ↔ 13.03	+0.48 ↔ +1.28	−0.06 ↔ +1.50	SA100 162, 267, 269, 280
SA100 SF2	08:53:45.0	−00:34:32	10x10	2	11.38 ↔ 11.80	+0.49 ↔ +1.32	+0.00 ↔ +1.46	SA100 280, 394
PG0918+029	09:21:32.1	+02:47:01	15x15	5	12.27 ↔ 14.49	−0.27 ↔ +1.04	−1.08 ↔ +0.82	All stars
PG0942−029	09:45:11.5	−03:08:04	15x15	5	13.68 ↔ 14.95	−0.30 ↔ +0.89	−1.18 ↔ +0.55	All stars
SA101	09:56:35.0	−00:29:46	60x60	35	9.74 ↔ 16.50	+0.26 ↔ +1.53	−0.10 ↔ +1.38	All stars except those with fewer than five measures
SA101 SF1	09:54:51.7	−00:23:03	10x10	2	11.25 ↔ 11.55	+0.49 ↔ +1.15	+0.03 ↔ +1.06	SA101 315, 316
SA101 SF2	09:56:08.6	−00:27:36	10x10	6	9.74 ↔ 14.92	+0.58 ↔ +1.53	−0.03 ↔ +1.38	SA101 324, 326, 327, 262, 268, 330
GD 108	10:00:47.8	−07:32:41	10x10	5	13.56 ↔ 15.06	−0.21 ↔ +0.84	−0.94 ↔ +0.36	All stars
PG1047+033	10:50:08.3	−00:01:18	15x15	4	12.45 ↔ 14.75	−0.29 ↔ +0.69	−1.12 ↔ +0.17	All stars
SA102	10:56:04.1	−00:30:46	60x60	2	9.90 ↔ 10.07	+0.66 ↔ +1.08	+0.26 ↔ +1.02	All stars
G163 50/51	11:07:44.4	−05:12:50	15x15	7	11.29 ↔ 14.47	+0.04 ↔ +1.50	−0.70 ↔ +1.20	All stars except G163-51E
SA103	11:56:30.1	−00:35:35	60x60	3	9.86 ↔ 11.84	+0.37 ↔ +1.09	−0.06 ↔ +0.94	All stars
SA103 SF1	11:56:50.2	−00:26:44	10x10	2	10.89 ↔ 11.84	+0.41 ↔ +1.09	−0.06 ↔ +0.94	SA103 626, 526

Table 4
(Continued)

Field Name	α (J2000.0)	δ (J2000.0)	FOV	No. of Stars	Range in V	Range in B−V	Range in U−B	Comments
SA104	12:43:10.2	−00:33:59	70x70	34	9.37 ↔ 16.09	+0.44 ↔ +1.59	−0.23 ↔ +1.67	All stars except those with less than five measures
SA104 SF1	12:43:07.9	−00:30:50	10x10	6	9.71 ↔ 16.05	+0.48 ↔ +1.28	−0.04 ↔ +1.25	SA104 457, 456, 460, 461, 350, *470*
PG1323−086	13:25:52.4	−08:49:47	15x15	5	12.08 ↔ 14.00	−0.14 ↔ +0.76	−0.68 ↔ +0.27	All stars except PG1323−086A = NSV 19792
SA105	13:37:43.6	−00:20:08	70x70	3	10.27 ↔ 12.54	+0.25 ↔ +1.42	−0.25 ↔ +1.22	All stars
PG1407−013	14:10:30.0	−01:27:40	15x15	6	12.46 ↔ 15.18	−0.26 ↔ +1.15	−1.13 ↔ +1.05	All stars
SA106	14:42:10.5	−00:17:41	70x70	4	9.34 ↔ 11.60	+0.33 ↔ +1.36	−0.05 ↔ +1.58	All stars except SA106-1024 = IP Vir
PG1525−071	15:28:14.0	−07:15:35	15x15	5	13.51 ↔ 16.39	−0.21 ↔ +1.12	−1.18 ↔ +1.07	All stars
SA107	15:38:48.6	−00:13:29	70x70	30	9.04 ↔ 16.05	+0.12 ↔ +1.60	−0.12 ↔ +1.75	All stars except those with fewer than five measures
SA107 SF1	15:38:46.8	−00:20:48	10x10	5	11.68 ↔ 14.91	+0.79 ↔ +1.32	+0.35 ↔ +1.38	SA107 456, *457, 458*, 592, *459*
SA107 SF2	15:39:04.6	−00:15:19	10x10	5	11.85 ↔ 14.88	+0.50 ↔ +1.41	+0.05 ↔ +1.38	SA107 592, 599, 600, 601, 602
SA107 SF3	15:40:11.1	−00:19:19	10x10	3	11.31 ↔ 13.47	+0.78 ↔ +1.24	+0.23 ↔ +1.30	SA107 626, 627, 484
PG1633+099	16:35:34.6	+09:48:23	15x15	8	12.97 ↔ 15.26	−0.19 ↔ +1.14	−0.99 ↔ +1.15	All stars
SA108	16:37:19.0	−00:14:22	60x60	9	9.06 ↔ 12.69	+0.18 ↔ +1.43	+0.07 ↔ +1.84	All stars except those with fewer than five measures
PG1657+078	16:59:31.3	+07:43:04	15x15	6	14.03 ↔ 16.16	−0.14 ↔ +1.07	−0.96 ↔ +0.73	All stars except PG1657+078D
SA109	17:44:54.6	−00:15:48	60x60	8	9.33 ↔ 14.64	+0.33 ↔ +1.74	+0.15 ↔ +1.97	All stars except those with fewer than five measures
SA109 SF1	17:45:31.2	−00:23:44	10x10	2	9.33 ↔ 10.35	+0.61 ↔ +1.47	+0.23 ↔ +1.59	SA109 231, 537
SA110	18:42:20.5	+00:11:05	60x60	39	10.03 ↔ 16.25	+0.31 ↔ +2.53	−0.79 ↔ +4.36	All stars except those with fewer than five measures
SA110 SF1	18:41:02.7	+00:01:18	10x10	5	12.52 ↔ 14.28	+0.73 ↔ +1.91	+0.15 ↔ +1.39	SA110 229, 230, 232, 233, *239*
SA110 SF2	18:42:50.0	+00:05:47	10x10	8	12.02 ↔ 16.25	+0.63 ↔ +2.53	+0.04 ↔ +3.92	SA110 360, 361, *362*, 266, *L1*, 364, 365, 273
SA110 SF3	18:43:09.2	+00:29:26	10x10	8	11.31 ↔ 14.20	+0.57 ↔ +2.33	+0.06 ↔ +2.33	SA110 496, 497, 499, 502, 503, 504, *506*, 507
SA110 SF4	18:43:09.3	−00:05:07	10x10	3	11.90 ↔ 13.49	+0.71 ↔ +2.15	+0.20 ↔ +2.13	SA110 157, 280, 290
SA110 SF5	18:43:42.5	+00:21:20	10x10	2	11.12 ↔ 11.58	+0.56 ↔ +0.95	+0.11 ↔ +0.68	SA110 441, 450
SA111	19:37:49.7	+00:21:35	60x60	8	8.96 ↔ 13.19	+0.21 ↔ +1.96	−0.21 ↔ +2.31	All stars
SA111 SF1	19:37:16.1	+00:11:32	10x10	2	8.96 ↔ 10.75	+0.21 ↔ +1.74	−0.21 ↔ +2.02	SA111 773, 775
SA111 SF2	19:37:36.0	+00:25:57	10x10	3	10.38 ↔ 12.39	+0.40 ↔ +1.96	+0.26 ↔ +2.31	SA111 1925, 1965, 1969
SA111 SF3	19:38:14.0	+00:31:36	10x10	3	12.39 ↔ 13.19	+0.64 ↔ +1.61	+0.28 ↔ +1.68	SA111 2039, 2088, 2093
SA112	20:42:06.7	+00:13:14	60x60	7	9.90 ↔ 12.10	+0.15 ↔ +1.60	−0.03 ↔ +1.99	All stars
SA112 SF1	20:42:25.0	+00:08:10	10x10	3	9.90 ↔ 12.10	+0.45 ↔ +1.21	−0.03 ↔ +1.29	SA112 223, 250, 275
SA112 SF2	20:42:50.8	+00:15:35	10x10	2	11.55 ↔ 12.09	+0.15 ↔ +1.03	+0.16 ↔ +0.88	SA112 805, 822
Mark A	20:43:58.7	−10:46:24	15x15	5	13.26 ↔ 15.91	−0.25 ↔ +0.94	−1.16 ↔ +0.65	All stars
G26 7	21:31:16.6	−09:48:41	15x15	4	12.01 ↔ 13.45	+0.56 ↔ +1.66	+0.03 ↔ +1.23	All stars except G26-7 = BB Cap
SA113	21:42:07.6	+00:22:31	60x60	42	10.00 ↔ 15.66	+0.28 ↔ +1.34	−0.06 ↔ +1.45	All stars except those with fewer than five measures
SA113 SF1	21:40:52.9	+00:24:49	10x10	8	10.88 ↔ 15.53	+0.52 ↔ +1.34	−0.03 ↔ +1.45	SA113 221, *L1*, 337, 339, *233*, 342, *239*, 241
SA113 SF2	21:41:39.3	+00:39:48	10x10	2	10.00 ↔ 10.30	+0.45 ↔ +1.06	+0.00 ↔ +0.84	SA113 466, 475
SA113 SF3	21:42:27.1	+00:41:01	10x10	4	11.77 ↔ 14.37	+0.55 ↔ +0.95	+0.01 ↔ +0.53	SA113 491, 492, 493, 495
SA113 SF4	21:43:30.7	+00:16:59	10x10	5	12.34 ↔ 15.42	+0.73 ↔ +1.13	+0.20 ↔ +0.97	SA113 187, 189, *307*, 191, 195
G93 48	21:52:17.8	+02:22:23	15x15	5	12.42 ↔ 13.66	−0.01 ↔ +1.32	−0.79 ↔ +1.26	All stars
PG2213−006	22:16:20.6	−00:19:57	15x15	7	12.64 ↔ 15.11	−0.21 ↔ +0.79	−1.18 ↔ +0.29	All stars except PG2213−006E
SA114	22:41:53.5	+00:49:02	60x60	10	9.24 ↔ 12.64	−0.04 ↔ +1.49	−0.37 ↔ +1.85	All stars except those with fewer than five measures
SA114 SF1	22:41:52.2	+01:13:33	10x10	4	10.91 ↔ 12.64	−0.04 ↔ +1.21	−0.37 ↔ +1.22	SA114 656, 750, 755, 670
GD 246	23:12:24.2	+10:47:43	15x15	4	12.96 ↔ 14.37	−0.32 ↔ +0.92	−1.19 ↔ +0.69	All stars
PG2336+004	23:38:40.9	+00:42:44	15x15	3	11.27 ↔ 15.88	−0.16 ↔ +0.69	−0.78 ↔ +0.13	All stars
SA115	23:42:53.1	+01:05:49	60x60	7	9.69 ↔ 12.49	+0.47 ↔ +1.03	−0.05 ↔ +0.76	All stars except those with fewer than five measures

Table 5
Accurate Coordinates and Proper Motions for the Stars in Table 2

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
TPhe I	00 30 04.593	−46 28 10.17	11909220	J00300459−4628102	13.6	−8.5	1
TPhe A	00 30 09.594	−46 31 28.91	11679110	J00300959−4631289	8.3	−2.0	1
TPhe H	00 30 09.683	−46 27 24.30	11909222	J00300968−4627243	11.2	−8.1	1
TPhe B	00 30 16.313	−46 27 58.57	11909226	J00301631−4627586	1.0	−5.4	1
TPhe C	00 30 16.98	−46 32 21.4	⋯	J00301697−4632214	−24	−22	2
TPhe D	00 30 18.342	−46 31 19.85	11679116	J00301834−4631198	2.3	1.3	1
TPhe E	00 30 19.768	−46 24 35.60	11909227	⋯	51.4	1.6	1
TPhe J	00 30 23.02	−46 23 51.6	⋯	J00302301−4623516	−16	−208	2
TPhe F	00 30 49.820	−46 33 24.07	11679132	J00304980−4633239	80.6	−10.2	1
TPhe K	00 30 56.315	−46 23 26.04	11909244	J00305632−4623260	−11.2	−1.6	1
TPhe G	00 31 04.303	−46 22 51.35	11909246	J00310430−4622513	14.3	5.6	1
PG0029+024	00 31 42.20	+02 37 44.3	⋯	J00314220+0237443	20	−26	2
HD 2892	00 32 12.153	+01 11 17.28	32135072	J00321215+0111171	7.8	−1.0	1
BD −15 115	00 38 20.261	−14 59 54.14	26365276	J00382025−1459541	7.1	1.4	1
PG0039+049	00 42 06.121	+05 09 23.41	33505322	J00420611+0509233	12.5	−13.4	1
BD −11 162	00 52 15.069	−10 39 46.09	27950061	J00521507−1039460	−30.4	−32.7	1
92 309	00 53 14.047	+00 46 02.14	31969306	J00531404+0046020	4.4	−10.2	1
92 312	00 53 16.533	+00 48 28.90	31969310	J00531653+0048286	−0.3	−5.5	1
92 322	00 53 46.962	+00 47 34.91	31969326	J00534695+0047348	0.2	−12.2	1
92 245	00 54 16.14	+00 39 54.6	⋯	J00541613+0039546	26	24	2
92 248	00 54 30.77	+00 40 16.9	⋯	J00543077+0040169	16	6	2
92 249	00 54 33.589	+00 41 05.39	31969347	J00543358+0041053	10.4	−10.6	1
92 250	00 54 37.154	+00 38 57.57	31969348	J00543714+0038574	40.1	−8.1	1
92 330	00 54 43.371	+00 43 26.09	31969351	J00544336+0043260	8.1	−10.6	1
92 252	00 54 47.255	+00 39 24.55	31969353	J00544723+0039244	−5.6	−18.2	1
92 253	00 54 51.364	+00 40 19.73	31969356	J00545136+0040198	20.3	−27.6	1
92 335	00 54 58.294	+00 44 00.63	31969359	J00545830+0044006	−14.7	−11.4	1
92 339	00 55 03.25	+00 44 11.0	⋯	J00550324+0044110	16	−10	2
92 342	00 55 09.905	+00 43 12.88	31969367	J00550990+0043129	−1.9	−1.4	1
92 188	00 55 10.48	+00 23 09.2	⋯	J00551047+0023092	−28	−40	2
92 409	00 55 11.977	+00 55 57.53	31969368	J00551195+0055572	−230.4	−127.6	1
92 410	00 55 14.254	+01 01 51.05	32135844	J00551424+0101508	4.1	−11.4	1
92 412	00 55 15.666	+01 01 54.33	32135847	J00551565+0101541	5.0	−9.1	1
92 259	00 55 21.618	+00 40 31.00	31969372	J00552161+0040312	−3.0	−10.2	1
92 345	00 55 23.753	+00 51 07.19	31969374	J00552375+0051075	2.6	−15.2	1
92 347	00 55 26.072	+00 50 48.86	31969376	J00552607+0050491	−3.5	−12.3	1
92 348	00 55 29.457	+00 44 32.78	31969377	J00552945+0044329	−2.1	−13.6	1
92 417	00 55 32.20	+00 53 07.3	⋯	J00553219+0053073	20	−6	2
92 260	00 55 32.938	+00 38 23.07	31969379	J00553292+0038233	1.9	−8.1	2
92 263	00 55 39.384	+00 36 19.50	31969386	J00553937+0036197	6.3	−2.3	1
92 497	00 55 54.346	+01 11 42.13	32135857	J00555434+0111420	6.1	−15.6	1
92 498	00 55 56.529	+01 10 40.86	32135859	J00555652+0110408	12.5	−1.6	1
92 500	00 55 57.986	+01 10 25.14	32135863	J00555798+0110250	10.8	−12.2	1
92 425	00 55 58.180	+00 52 58.49	31969395	J00555818+0052586	−25.5	−13.2	1
92 426	00 55 59.594	+00 52 54.39	31969397	J00555959+0052545	25.7	−4.6	1
92 501	00 56 00.113	+01 10 51.22	32135866	J00560011+0110512	−15.0	−18.8	1
92 355	00 56 05.678	+00 50 46.78	31969400	J00560568+0050468	7.5	−11.3	1
92 427	00 56 06.648	+01 00 20.83	32135867	J00560664+0100209	−1.4	−2.4	1
92 502	00 56 08.126	+01 04 25.04	32135868	J00560812+0104251	5.9	3.2	1
92 430	00 56 15.198	+00 53 18.20	31969404	J00561519+0053183	1.2	−8.3	1
92 276	00 56 26.598	+00 41 50.72	31969408	J00562659+0041508	3.5	−42.0	1
92 282	00 56 46.817	+00 38 29.50	31969418	J00564682+0038296	22.1	−7.3	1
92 507	00 56 50.777	+01 05 59.65	32135888	J00565077+0105596	20.7	13.5	1
92 508	00 56 51.196	+01 09 34.19	32135889	J00565119+0109340	−6.5	−20.2	1
92 364	00 56 52.235	+00 43 53.58	31969421	J00565223+0043534	16.5	−107.2	1
92 433	00 56 53.726	+01 00 41.72	32135891	J00565372+0100415	31.4	−36.7	1
92 288	00 57 17.005	+00 36 48.67	31969435	J00571700+0036487	3.3	4.4	1
F 11	01 04 21.676	+04 13 37.04	33161546	J01042167+0413369	12.1	−30.4	1
F 11A	01 04 27.97	+04 11 55.4	⋯	J01042796+0411554	40	28	2
F 11B	01 04 28.389	+04 11 25.09	33161551	J01042838+0411250	17.1	2.4	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
F 16	01 54 34.633	−06 45 59.67	29389699	J01543462−0645596	17.6	−4.4	1
93 407	01 54 37.126	+00 53 47.93	31971271	J01543712+0053477	78.9	−31.9	1
93 317	01 54 37.728	+00 43 00.57	31971272	J01543773+0043005	−9.3	−19.3	1
93 333	01 55 05.218	+00 45 42.57	31971295	J01550521+0045425	19.7	−2.3	1
93 424	01 55 26.364	+00 56 42.63	31971310	J01552636+0056425	4.8	−2.8	1
G3 33	02 00 12.959	+13 03 07.01	36403434	J02001278+1303112	−1092.0	−1772.9	1
PG0220+132B	02 23 33.863	+13 28 03.98	36404363	J02233386+1328041	−14.8	−0.4	1
PG0220+132	02 23 38.419	+13 27 34.70	36404369	J02233842+1327349	2.6	−0.7	1
PG0220+132A	02 23 39.989	+13 27 29.89	36404370	J02233999+1327301	5.2	−7.8	1
F 22	02 30 16.627	+05 15 50.70	33509154	J02301662+0515508	75.6	−23.5	1
PG0231+051E	02 33 28.872	+05 19 48.38	33509282	J02332886+0519483	−6.5	−9.9	1
PG0231+051D	02 33 34.00	+05 19 30.9	· · ·	J02333399+0519308	50	−36	2
PG0231+051A	02 33 40.067	+05 17 40.68	33509289	J02334005+0517405	−9.0	−46.7	1
PG0231+051	02 33 41.360	+05 18 43.63	33509290	J02334135+0518443	13.0	−7.6	1
PG0231+051B	02 33 45.528	+05 17 33.30	33509291	J02334552+0517332	15.1	−14.3	1
PG0231+051C	02 33 48.153	+05 20 26.36	33509293	J02334814+0520262	−24.5	−30.8	1
F 24	02 35 07.592	+03 43 56.79	32986671	J02350758+0343567	79.7	4.4	1
F 24A	02 35 16.611	+03 43 16.78	32986675	J02351660+0343167	7.8	−6.1	1
F 24B	02 35 18.333	+03 42 40.37	32986677	J02351833+0342403	18.8	−6.5	1
F 24C	02 35 26.318	+03 41 50.41	32986680	J02352632+0341503	−12.0	−7.6	1
94 171	02 53 38.805	+00 17 18.60	31800332	J02533880+0017183	18.0	10.3	1
94 296	02 55 19.985	+00 28 11.99	31800393	J02551998+0028118	18.2	−30.7	1
94 394	02 56 14.276	+00 35 11.57	31973543	J02561427+0035116	−5.7	1.2	1
94 401	02 56 30.800	+00 40 06.88	31973559	J02563080+0040068	−9.3	−5.5	1
94 242	02 57 21.211	+00 18 38.67	31800460	J02572121+0018387	−10.1	3.7	1
BD −2 524	02 57 39.679	−01 59 48.58	31100004	J02573967−0159485	4.8	−2.5	1
94 251	02 57 46.982	+00 16 02.72	31800477	J02574699+0016026	24.9	−7.3	1
94 702	02 58 13.362	+01 10 54.30	32140129	J02581336+0110543	−0.9	−3.4	1
GD 50	03 48 50.19	−00 58 32.0	· · ·	J03485018−0058320	89	−166	3
95 15	03 52 40.330	−00 05 22.77	31621836	J03524033−0005228	−5.3	−18.0	1
95 16	03 52 40.63	−00 05 05.6	· · ·	J03524062−0005056	−18	−22	2
95 301	03 52 41.167	+00 31 21.44	31975890	J03524116+0031213	1.8	−10.6	1
95 302	03 52 42.176	+00 31 17.71	31975891	J03524217+0031176	39.2	−44.1	1
95 96	03 52 54.194	+00 00 18.82	31802696	J03525419+0000188	13.4	−2.0	1
95 97	03 52 57.503	−00 00 19.28	31621852	J03525750−0000192	−6.6	−13.6	1
95 98	03 53 00.23	+00 02 48.4	· · ·	J03530022+0002483	−24	−64	2
95 100	03 53 00.791	+00 00 15.81	31802701	J03530078+0000158	10.4	−3.0	1
95 101	03 53 04.14	+00 02 49.5	· · ·	J03530414+0002494	−28	−62	2
95 102	03 53 07.588	+00 01 10.73	31802705	J03530758+0001108	3.5	−13.0	1
95 252	03 53 10.636	+00 27 22.74	31802706	J03531063+0027227	4.2	−4.6	1
95 190	03 53 13.251	+00 16 22.62	31802707	J03531324+0016227	0.5	−2.2	1
95 193	03 53 20.593	+00 16 34.57	31802711	J03532059+0016347	9.9	−10.0	1
95 105	03 53 21.329	−00 00 18.64	31621873	J03532131−0000186	−6.8	−16.3	1
95 106	03 53 25.190	+00 01 22.64	31802712	J03532518+0001227	9.5	−2.2	1
95 107	03 53 25.66	+00 02 20.5	· · ·	J03532565+0002204	0	0	2
95 112	03 53 40.114	−00 01 11.42	31621885	J03534011−0001113	−2.1	−3.1	1
95 41	03 53 41.201	−00 02 32.41	31621887	J03534120−0002323	15.0	−21.3	1
95 42	03 53 43.68	−00 04 33.9	· · ·	J03534367−0004338	−20	−96	2
95 317	03 53 44.183	+00 29 50.02	31802727	J03534418+0029500	7.7	−11.0	1
95 263	03 53 47.002	+00 26 40.82	31802729	J03534700+0026409	2.9	−9.8	1
95 115	03 53 47.821	−00 00 47.39	31621893	J03534782−0000472	6.1	−8.4	1
95 43	03 53 48.609	−00 03 01.74	31621894	J03534861−0003016	5.4	−12.7	1
95 271	03 54 16.298	+00 18 52.20	31802749	J03541629+0018521	7.2	−4.0	1
95 328	03 54 19.470	+00 36 31.79	31975937	J03541946+0036318	7.1	−3.2	1
95 329	03 54 23.90	+00 37 07.1	· · ·	J03542390+0037070	−40	−24	2
95 330	03 54 30.757	+00 29 05.34	31802755	J03543075+0029052	0.9	−9.3	1
95 275	03 54 44.246	+00 27 20.28	31802762	J03544424+0027203	4.2	−2.9	1
95 276	03 54 45.878	+00 25 54.10	31802764	J03544587+0025542	35.0	−18.4	1
95 60	03 54 49.54	−00 07 04.1	· · ·	J03544954−0007041	18	0	2
95 218	03 54 49.948	+00 10 08.39	31802765	J03544995+0010085	−6.3	−1.1	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
95 132	03 54 51.685	+00 05 21.42	31802767	J03545169+0005213	−2.7	−10.1	1
95 62	03 55 00.406	−00 02 54.09	31621933	J03550040−0002541	0.8	−1.9	1
95 137	03 55 03.73	+00 03 26.7	· · ·	J03550372+0003266	−36	−80	2
95 139	03 55 04.67	+00 03 07.9	· · ·	J03550467+0003078	−206	−78	2
95 66	03 55 06.519	−00 09 31.90	31621939	J03550651−0009320	5.6	−7.2	1
95 227	03 55 08.76	+00 14 34.5	· · ·	J03550876+0014345	64	−28	2
95 142	03 55 09.394	+00 01 20.57	31802779	J03550940+0001205	−7.7	−0.8	1
95 74	03 55 31.141	−00 09 13.57	31621950	J03553114−0009136	0.0	2.1	1
95 231	03 55 38.828	+00 10 43.42	31802795	J03553881+0010433	−0.2	−11.1	1
95 284	03 55 41.552	+00 26 37.73	31802796	J03554155+0026377	9.0	−0.5	1
95 285	03 55 44.114	+00 25 09.96	31802799	J03554412+0025099	2.9	−8.1	1
95 149	03 55 44.444	+00 07 02.91	31802800	J03554442+0007029	21.5	−20.0	1
95 236	03 56 13.342	+00 08 47.06	31802821	J03561334+0008471	14.7	40.8	1
96 21	04 51 15.760	−00 14 50.30	31625479	J04511575−0014502	4.8	−4.1	1
96 36	04 51 42.401	−00 10 09.47	31625515	J04514239−0010095	−13.8	−0.7	1
96 737	04 52 35.366	+00 22 30.03	31806521	J04523536+0022299	6.1	−11.7	1
96 409	04 52 58.515	+00 09 04.14	31806547	J04525851+0009040	13.1	−17.0	1
96 83	04 52 58.856	−00 14 41.18	31625601	J04525885−0014412	−1.4	−1.5	1
96 235	04 53 18.870	−00 05 01.54	31625631	J04531887−0005015	2.6	1.2	1
G97 42	05 28 00.15	+09 38 38.3	50060423	J05280015+0938382	−196.84	−759.52	5
G102 22	05 42 09.273	+12 29 21.60	36065524	J05420897+1229252	1988.5	−1571.7	1
GD 71C	05 52 12.777	+15 52 44.30	37320715	J05521278+1552442	−2.0	−5.4	1
GD 71E	05 52 20.51	+15 52 08.1	· · ·	J05522051+1552080	−4	−26	2
GD 71B	05 52 21.530	+15 52 41.61	37320756	J05522153+1552417	−7.7	−20.0	1
GD 71D	05 52 24.788	+15 54 58.01	37320774	J05522479+1554581	−1.0	−3.0	1
GD 71	05 52 27.619	+15 53 13.23	37320791	J05522761+1553137	76.4	−171.0	1
GD 71A	05 52 33.562	+15 51 59.38	37320816	J05523356+1551594	0.8	−4.6	1
97 249	05 57 07.560	+00 01 11.50	31814308	J05570756+0001115	15.2	1.2	1
97 345	05 57 33.181	+00 21 16.54	31814355	J05573318+0021165	7.5	−6.0	1
97 351	05 57 37.294	+00 13 43.99	31814365	J05573729+0013440	−0.2	−0.9	1
97 75	05 57 55.085	−00 09 28.55	31633143	J05575508−0009284	3.0	−6.0	1
97 284	05 58 25.033	+00 05 13.57	31814455	J05582504+0005137	−2.1	−4.9	1
97 224	05 58 44.042	−00 05 10.37	31633296	J05584404−0005104	−3.3	−16.0	1
98 961	06 51 26.994	−00 15 36.06	31648881	J06512699−0015359	−5.3	−6.7	1
98 966	06 51 28.304	−00 16 25.44	31648888	J06512830−0016254	−5.3	−7.4	1
98 557	06 51 29.506	−00 25 06.29	31648906	J06512950−0025062	−3.6	−12.0	1
98 556	06 51 29.537	−00 24 50.78	31648907	J06512953−0024507	6.5	0.0	1
98 562	06 51 30.674	−00 18 58.70	31648914	J06513067−0018587	−4.2	−9.8	1
98 563	06 51 31.543	−00 26 25.60	31648922	J06513154−0026255	0.9	3.0	1
98 978	06 51 33.730	−00 11 31.53	31648936	J06513373−0011314	24.8	−29.7	1
98 L1	06 51 39.022	−00 26 36.28	31648977	J06513902−0026362	−4.4	2.9	1
98 580	06 51 39.76	−00 26 41.9	· · ·	J06513975−0026418	0	0	2
98 581	06 51 39.901	−00 25 41.86	31648985	J06513990−0025418	−0.8	−6.0	1
98 L2	06 51 40.52	−00 21 59.0	· · ·	J06514052−0021590	0	0	2
98 L3	06 51 42.24	−00 15 55.3	· · ·	J06514224−0015552	0	0	2
98 L4	06 51 42.25	−00 16 21.3	· · ·	J06514225−0016212	0	0	2
98 590	06 51 42.973	−00 22 18.91	31649012	J06514297−0022187	4.2	−3.8	1
98 1002	06 51 43.094	−00 15 52.20	31649016	J06514309−0015522	−6.5	−1.5	1
98 614	06 51 48.634	−00 20 32.52	31649072	J06514863−0020324	4.5	2.6	1
98 618	06 51 49.579	−00 21 15.75	31649079	J06514957−0021156	−0.5	−8.1	1
98 624	06 51 51.798	−00 20 16.03	31649094	J06515180−0020159	−1.2	−12.7	1
98 626	06 51 52.394	−00 20 43.28	31649100	J06515239−0020431	3.6	−2.2	1
98 627	06 51 53.01	−00 22 01.0	· · ·	J06515301−0022009	0	0	2
98 634	06 51 55.741	−00 20 55.11	31649120	J06515574−0020549	−4.4	−11.4	1
98 642	06 51 59.018	−00 21 31.71	31649149	J06515901−0021316	5.1	7.3	1
98 185	06 52 01.886	−00 27 21.57	31649167	J06520189−0027215	0.5	0.6	1
98 646	06 52 02.281	−00 21 15.97	31649169	J06520228−0021158	−4.7	−16.5	1
98 193	06 52 03.381	−00 27 18.41	31649177	J06520338−0027183	1.2	−11.2	1
98 650	06 52 04.528	−00 19 38.29	31649181	J06520453−0019382	3.9	−3.4	1
98 652	06 52 04.815	−00 21 55.63	31649185	J06520481−0021556	−5.7	−0.1	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
98 653	06 52 04.954	−00 18 18.26	31649186	J06520495−0018182	0.6	−4.1	1
98 666	06 52 09.945	−00 23 32.01	31649224	J06520994−0023320	−13.1	3.1	1
98 670	06 52 11.514	−00 19 16.37	31649238	J06521151−0019164	−15.3	−8.1	1
98 671	06 52 11.830	−00 18 25.30	31649239	J06521183−0018253	2.6	−35.1	1
98 675	06 52 13.341	−00 19 40.36	31649252	J06521334−0019404	−13.2	3.2	1
98 676	06 52 13.728	−00 19 20.15	31649256	J06521372−0019202	−1.5	−3.2	1
98 L5	06 52 15.73	−00 19 44.4	· · ·	J06521573−0019443	0	0	2
98 682	06 52 16.504	−00 19 40.97	31649281	J06521650−0019410	−9.3	−12.1	1
98 685	06 52 18.468	−00 20 19.51	31649293	J06521846−0020196	−0.2	−2.7	1
98 688	06 52 18.874	−00 23 32.82	31649294	J06521887−0023328	−2.1	−8.1	1
98 1082	06 52 20.184	−00 14 13.63	31649307	J06522018−0014136	1.2	3.5	1
98 1087	06 52 21.099	−00 15 50.42	31649316	J06522110−0015504	−3.8	−4.6	1
98 1102	06 52 27.949	−00 13 43.08	31649364	J06522795−0013431	−1.4	−8.1	1
98 1112	06 52 34.895	−00 15 25.84	31649400	J06523490−0015258	16.7	−28.2	1
98 1119	06 52 36.710	−00 14 31.61	31649408	J06523670−0014315	−5.0	−6.3	1
98 724	06 52 37.225	−00 19 20.39	31649411	J06523722−0019203	5.3	−5.4	1
98 1122	06 52 37.558	−00 17 03.70	31649415	J06523755−0017036	0.5	−11.3	1
98 1124	06 52 38.050	−00 16 33.43	31649419	J06523804−0016333	5.0	−0.8	1
98 733	06 52 40.073	−00 17 14.67	31649442	J06524007−0017146	−6.5	−4.9	1
Ru 149G	07 24 11.928	−00 31 58.11	31483548	J07241193−0031581	3.0	−8.1	1
Ru 149A	07 24 13.216	−00 32 53.11	31483555	J07241322−0032531	1.4	−8.2	1
Ru 149F	07 24 14.077	−00 31 38.69	31483561	J07241407−0031386	−5.1	−8.4	1
Ru 149	07 24 14.372	−00 33 04.17	31483565	J07241437−0033040	−2.4	0.2	1
Ru 149D	07 24 15.378	−00 32 47.84	31483569	J07241538−0032478	−1.5	−1.5	1
Ru 149C	07 24 17.312	−00 32 25.78	31483580	J07241731−0032258	−5.6	−1.4	1
Ru 149B	07 24 17.572	−00 33 06.18	31483582	J07241757−0033061	−9.3	−13.6	1
Ru 149E	07 24 18.409	−00 31 18.58	31483590	J07241841−0031185	2.4	−5.9	1
Ru 152F	07 29 53.755	−02 04 51.80	30987589	J07295375−0204518	−1.7	6.2	1
Ru 152E	07 29 54.256	−02 05 30.83	30987593	J07295425−0205308	3.6	−0.3	1
Ru 152	07 29 58.476	−02 06 37.59	30987626	J07295847−0206375	8.1	−3.5	1
Ru 152B	07 29 59.241	−02 05 57.46	30987630	J07295923−0205574	−10.5	−6.4	1
Ru 152A	07 30 00.483	−02 06 22.67	30987640	J07300048−0206226	−4.4	0.1	1
Ru 152C	07 30 02.57	−02 05 39.3	· · ·	J07300256−0205392	20	−36	2
Ru 152D	07 30 06.076	−02 04 37.51	30987679	J07300607−0204374	−2.1	−3.1	1
99 6	07 53 33.338	−00 49 37.45	31491872	J07533333−0049374	−5.1	−2.4	1
99 367	07 54 11.855	−00 25 35.18	31671487	J07541185−0025351	−5.7	2.6	1
99 408	07 55 13.012	−00 25 32.85	31671719	J07551301−0025328	−10.8	−6.1	1
99 438	07 55 54.270	−00 16 49.08	31671865	J07555426−0016491	−18.6	17.0	1
99 447	07 56 06.686	−00 20 42.37	31671909	J07560668−0020423	−10.8	−5.1	1
100 241	08 52 34.049	−00 39 48.96	31500551	J08523405−0039489	2.7	−2.6	1
100 162	08 53 14.418	−00 43 30.35	31500612	J08531441−0043303	−10.7	−11.6	1
100 267	08 53 17.212	−00 41 29.35	31500618	J08531721−0041293	−15.3	16.0	1
100 269	08 53 18.464	−00 41 09.81	31500621	J08531846−0041097	−6.6	−5.8	1
100 280	08 53 35.477	−00 36 41.16	31500641	J08533547−0036411	9.8	−8.7	1
100 394	08 53 54.515	−00 32 22.08	31500680	J08535451−0032219	−1.4	−1.0	1
PG0918+029D	09 21 21.936	+02 47 28.28	32700638	J09212193+0247282	−15.6	−10.1	1
PG0918+029	09 21 28.217	+02 46 02.27	32700643	J09212821+0246023	−29.9	−23.3	1
PG0918+029B	09 21 32.924	+02 47 59.08	32700647	J09213291+0247589	−13.7	−24.4	1
PG0918+029A	09 21 35.107	+02 46 19.43	32700652	J09213510+0246193	−7.1	−7.5	1
PG0918+029C	09 21 42.306	+02 46 37.07	32700657	J09214229+0246370	−13.2	9.3	1
BD −12 2918	09 31 19.37	−13 29 19.3	50047023	J09311936−1329192	743.44	53.53	5
PG0942−029D	09 45 08.637	−03 05 54.45	30697716	J09450863−0305545	−0.9	11.4	1
PG0942−029A	09 45 09.90	−03 10 14.2	· · ·	J09450990−0310142	−12	6	2
PG0942−029B	09 45 11.574	−03 06 58.11	30697721	J09451157−0306581	0.9	1.6	1
PG0942−029	09 45 11.85	−03 09 21.0	· · ·	J09451184−0309210	28	−36	2
PG0942−029C	09 45 14.386	−03 06 40.28	30697724	J09451438−0306402	−14.0	−1.8	1
101 315	09 54 51.298	−00 27 31.09	31683965	J09545129−0027310	−0.9	−0.6	1
101 316	09 54 52.034	−00 18 34.51	31683967	J09545203−0018344	3.0	−10.3	1
101 L1	09 55 29.09	−00 21 42.6	· · ·	J09552909−0021426	4	4	2
101 320	09 55 32.924	−00 22 32.72	31683987	J09553292−0022325	−6.0	−10.0	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
101 L2	09 55 34.688	−00 18 50.10	31683992	J09553467−0018499	−7.5	−6.9	1
101 404	09 55 40.673	−00 18 22.23	31683997	J09554066−0018221	8.3	14.9	1
101 324	09 55 56.650	−00 23 15.10	31684005	J09555665−0023149	6.3	1.6	1
101 408	09 56 08.001	−00 12 41.28	31684013	J09560800−0012412	−27.9	9.9	1
101 262	09 56 08.096	−00 29 50.50	31684014	J09560809−0029503	7.2	−7.4	1
101 326	09 56 08.101	−00 27 10.94	31684015	J09560808−0027107	−5.6	−2.9	1
101 327	09 56 08.86	−00 25 53.5	· · ·	J09560885−0025535	2	−38	2
101 410	09 56 09.136	−00 14 02.23	31684017	J09560913−0014021	−15.5	1.7	1
101 413	09 56 14.009	−00 11 54.86	31684021	J09561401−0011547	−13.5	7.5	1
101 268	09 56 17.377	−00 31 57.05	31504802	J09561738−0031569	−231.2	20.2	1
101 330	09 56 20.587	−00 27 22.12	31684030	J09562058−0027219	−13.8	−1.8	1
101 415	09 56 23.145	−00 16 53.02	31684031	J09562313−0016529	−13.5	−4.9	1
101 270	09 56 27.023	−00 35 44.15	31504809	J09562701−0035440	−19.7	1.7	1
101 278	09 56 54.467	−00 29 38.39	31684049	J09565446−0029383	−18.9	8.2	1
101 L3	09 56 55.025	−00 30 25.47	31504823	J09565501−0030254	−13.1	3.7	1
101 281	09 57 05.02	−00 31 43.2	50054532	J09570501−0031431	4.9	−3.6	3
101 L4	09 57 07.76	−00 31 24.4	· · ·	J09570776−0031244	0	0	2
101 L5	09 57 10.21	−00 30 40.3	· · ·	J09571020−0030402	0	0	2
101 421	09 57 16.107	−00 17 18.20	31684059	J09571609−0017181	−4.5	−3.9	1
101 338	09 57 17.754	−00 21 00.34	31684063	J09571775−0021002	−30.9	3.1	1
101 339	09 57 18.389	−00 25 01.80	31684064	J09571839−0025017	−14.3	−3.1	1
101 424	09 57 20.263	−00 16 25.88	31684066	J09572026−0016257	−8.1	3.3	1
101 427	09 57 26.429	−00 17 16.96	31684070	J09572642−0017169	−25.4	−1.6	1
101 341	09 57 29.828	−00 21 53.80	31684075	J09572983−0021536	−9.0	−12.3	1
101 342	09 57 31.21	−00 21 50.9	· · ·	J09573121−0021508	2	6	2
101 343	09 57 31.301	−00 22 55.34	31684076	J09573129−0022553	−14.6	−3.1	1
101 429	09 57 31.73	−00 18 15.2	· · ·	J09573173−0018151	−24	38	2
101 431	09 57 37.322	−00 17 53.28	31684081	J09573732−0017531	4.7	−12.3	1
101 L6	09 57 39.54	−00 17 53.8	· · ·	J09573954−0017538	−2	4	2
101 207	09 57 52.495	−00 47 36.17	31504863	J09575249−0047361	−4.8	5.4	1
101 363	09 58 18.722	−00 25 36.51	31684119	J09581872−0025365	1.2	−5.5	1
GD 108A	10 00 39.585	−07 33 25.10	29096285	J10003957−0733250	−18.1	−4.8	1
GD 108B	10 00 42.665	−07 31 07.90	29096294	J10004266−0731078	−2.6	−10.6	1
GD 108	10 00 47.25	−07 33 31.0	· · ·	J10004725−0733310	−38	−4	2
GD 108C	10 00 55.223	−07 30 29.59	29096303	J10005522−0730298	1.5	−12.3	1
GD 108D	10 00 55.916	−07 34 51.83	29096304	J10005591−0734520	−5.3	−6.0	1
BD +1 2447	10 28 55.551	+00 50 27.56	32036240	J10285555+0050275	−602.7	−736.5	1
G162 66	10 33 42.763	−11 41 38.35	27664061	J10334277−1141383	−342.5	−27.2	1
G44 27	10 36 01.21	+05 07 12.8	· · ·	J10360120+0507128	−661	128	4
PG1034+001	10 37 03.803	−00 08 19.11	31685808	J10370381−0008193	−83.7	28.9	1
G163 6	10 42 54.16	+02 47 20.6	· · ·	J10425416+0247206	−241	−44	4
PG1047+003	10 50 02.825	−00 00 36.85	31686241	J10500281−0000369	−17.7	−35.5	1
PG1047+003A	10 50 05.653	−00 01 11.25	31686243	J10500563−0001112	−12.8	−10.8	1
PG1047+003B	10 50 07.915	−00 02 04.36	31686246	J10500790−0002043	−21.8	1.6	1
PG1047+003C	10 50 13.682	−00 00 32.35	31686253	J10501366−0000323	−34.5	17.6	1
G44 40	10 50 52.01	+06 48 29.3	· · ·	J10505201+0648292	−845	−815	4
102 620	10 55 04.231	−00 48 18.88	31507232	J10550424−0048188	−234.3	13.6	1
G45 20	10 56 28.91	+07 00 53.2	· · ·	J10562886+0700527	−3842	−2725	4
102 1081	10 57 04.045	−00 13 12.87	31686515	J10570403−0013128	4.1	−46.3	1
G163 27	10 57 35.18	−07 31 23.3	· · ·	J10573517−0731233	−816	90	4
G163 51E	11 07 22.332	−05 16 13.86	30020004	J11072232−0516137	−21.4	−5.6	1
G163 51B	11 07 32.846	−05 12 37.29	30020013	J11073284−0512373	−63.3	3.2	1
G163 51C	11 07 33.782	−05 14 20.26	30020015	J11073378−0514202	−13.1	4.7	1
G163 51D	11 07 34.915	−05 15 00.50	30020017	J11073491−0515004	−11.7	−19.6	1
G163 51A	11 07 37.196	−05 12 23.31	30020020	J11073719−0512232	−45.1	−13.6	1
G163 50	11 07 59.950	−05 09 26.10	30020043	J11075994−0509258	−70.8	−446.1	1
G163 51	11 08 06.539	−05 13 47.19	30020048	J11080654−0513468	−55.8	−462.4	1
BD +5 2468	11 15 30.897	+04 57 23.52	33399032	J11153089+0457235	−36.2	9.6	1
HD 100340	11 32 49.941	+05 16 36.23	33576046	J11324993+0516362	2.9	11.9	1
BD +5 2529	11 41 49.593	+05 08 26.54	33576304	J11414959+0508265	225.5	−469.3	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
G10 50	11 47 44.390	+00 48 16.40	32039206	J11474440+0048164	595.1	−1222.5	1
103 302	11 56 06.021	−00 47 54.36	31509611	J11560602−0047542	−48.2	12.2	1
103 626	11 56 46.156	−00 23 14.71	31688786	J11564615−0023146	16.7	−8.6	1
103 526	11 56 54.182	−00 30 13.47	31509641	J11565419−0030134	−15.3	13.1	1
G12 43	12 33 17.38	+09 01 15.8	⋯	J12331738+0901157	−1754	220	2
104 306	12 41 03.619	−00 37 13.83	31511246	J12410361−0037139	5.6	−34.3	1
104 423	12 41 35.959	−00 31 11.26	31511273	J12413596−0031114	−11.4	4.5	1
104 428	12 41 41.284	−00 26 26.13	31690438	J12414128−0026262	−5.4	−0.1	1
104 L1	12 41 49.42	−00 21 01.2	⋯	J12414942−0021012	0	0	2
104 430	12 41 50.259	−00 25 52.44	31690448	J12415026−0025525	−8.7	−7.6	1
104 325	12 42 02.210	−00 41 35.93	31511295	J12420221−0041361	−7.8	−9.9	1
104 330	12 42 11.418	−00 40 41.44	31511302	J12421142−0040413	−0.2	−20.3	1
104 440	12 42 14.30	−00 24 46.3	⋯	J12421429−0024463	−64	−4	2
104 237	12 42 16.874	−00 51 18.21	31511306	J12421687−0051179	12.0	−17.8	1
104 L2	12 42 19.621	−00 34 23.90	31511307	J12421962−0034238	−20.4	−9.1	1
104 443	12 42 19.813	−00 25 21.21	31690466	J12421981−0025211	−14.9	−1.8	1
104 444	12 42 20.021	−00 32 28.17	31511308	J12422002−0032280	−18.8	−11.9	1
104 334	12 42 20.425	−00 40 28.35	31511309	J12422042−0040282	−20.5	−6.6	1
104 335	12 42 20.894	−00 33 08.19	31511310	J12422089−0033081	−18.9	−7.7	1
104 239	12 42 22.91	−00 46 35.6	⋯	J12422291−0046356	−12	−34	2
104 336	12 42 24.64	−00 39 58.0	⋯	J12422463−0039579	0	−4	2
104 338	12 42 30.142	−00 38 32.39	31511314	J12423013−0038321	−12.0	1.3	1
104 339	12 42 33.298	−00 41 39.88	31511318	J12423329−0041398	−6.1	−8.6	1
104 244	12 42 34.235	−00 45 47.06	31511319	J12423423−0045469	−14.3	−15.2	1
104 455	12 42 52.116	−00 24 17.43	31690489	J12425211−0024175	−9.0	−3.3	1
104 456	12 42 53.505	−00 32 00.91	31511333	J12425351−0032009	−52.1	21.8	1
104 457	12 42 54.195	−00 28 48.68	31690490	J12425420−0028485	13.1	−12.0	1
104 460	12 43 02.86	−00 28 19.0	⋯	J12430286−0028190	−106	16	2
104 461	12 43 06.031	−00 32 18.01	31511338	J12430602−0032181	−13.4	1.5	1
104 350	12 43 14.204	−00 33 20.54	31511344	J12431420−0033205	0.0	−11.8	1
104 470	12 43 22.314	−00 29 52.83	31690513	J12432230−0029528	−9.5	3.6	1
104 364	12 43 45.986	−00 34 31.63	31511362	J12434598−0034316	−10.7	−15.0	1
104 366	12 43 53.17	−00 34 45.4	⋯	J12435317−0034454	−44	68	2
104 479	12 43 55.279	−00 32 49.39	31511369	J12435528−0032495	−22.7	−9.7	1
104 367	12 43 58.453	−00 33 33.87	31511371	J12435845−0033340	−5.7	−7.3	1
104 484	12 44 20.526	−00 30 54.29	31511384	J12442052−0030543	−12.1	−6.3	1
104 485	12 44 23.810	−00 30 16.38	31511386	J12442380−0030163	3.5	−13.7	1
104 490	12 44 33.454	−00 25 51.78	31690544	J12443346−0025517	1.5	−2.3	1
104 598	12 45 16.779	−00 16 40.47	31690570	J12451677−0016405	−136.1	−79.8	1
PG1323−086	13 25 39.468	−08 49 19.12	28735599	J13253946−0849190	−5.0	−11.5	1
PG1323−086A	13 25 49.722	−08 50 23.53	28735606	J13254972−0850234	−6.8	1.7	1
PG1323−086C	13 25 50.222	−08 48 38.94	28735607	J13255022−0848389	−8.8	−16.4	1
PG1323−086B	13 25 50.651	−08 50 55.10	28735608	J13255065−0850550	8.0	−25.9	1
PG1323−086D	13 26 05.252	−08 50 36.19	28735614	J13260525−0850361	−9.7	−10.3	1
G14 55	13 28 21.082	−02 21 37.07	31014804	J13282106−0221365	156.7	−492.5	1
105 505	13 35 24.773	−00 23 20.74	31692442	J13352477−0023209	36.6	187.5	1
105 437	13 37 16.748	−00 37 56.33	31513388	J13371673−0037563	−15.7	−10.8	1
105 815	13 40 02.492	−00 02 18.76	31692619	J13400249−0002188	−229.2	−81.0	1
BD +2 2711	13 42 19.004	+01 30 18.68	32376436	J13421900+0130187	−5.9	1.1	1
32376437	13 42 23.215	+01 30 25.71	32376437	J13422320+0130257	−8.1	−2.7	1
HD 121968	13 58 51.167	−02 54 52.33	30864100	J13585116−0254523	1.9	17.0	1
PG1407−013B	14 10 24.181	−01 27 16.52	31341930	J14102418−0127165	−17.7	8.8	1
PG1407−013	14 10 25.915	−01 30 16.61	31175908	J14102592−0130165	−16.2	−4.0	1
PG1407−013C	14 10 28.013	−01 25 03.05	31341933	J14102801−0125030	−0.6	−23.8	1
PG1407−013A	14 10 29.547	−01 29 10.18	31341935	J14102955−0129102	−11.1	−0.7	1
PG1407−013D	14 10 34.083	−01 27 14.00	31341939	J14103409−0127140	−12.0	8.8	1
PG1407−013E	14 10 35.721	−01 26 31.42	31341940	J14103573−0126314	−17.3	5.0	1
106 1024	14 40 06.997	+00 01 45.11	31874921	J14400699+0001451	0.6	0.8	1
106 700	14 40 50.944	−00 23 36.82	31695154	J14405094−0023368	−17.1	3.8	1
106 575	14 41 38.499	−00 26 01.82	31695195	J14413849−0026018	−30.9	−7.8	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
106 485	14 44 14.083	−00 37 06.69	31516218	J14441408−0037067	−6.3	13.0	1
PG1514+034	15 17 14.269	+03 10 27.92	32880871	J15171426+0310279	−1.8	−5.2	1
PG1525−071	15 28 11.57	−07 16 32.7	· · ·	J15281157−0716327	0	0	2
PG1525−071D	15 28 12.00	−07 16 39.1	· · ·	J15281200−0716391	0	0	2
PG1525−071A	15 28 13.416	−07 16 01.03	29290012	J15281341−0716008	−11.6	−19.2	1
PG1525−071B	15 28 14.39	−07 16 13.2	· · ·	J15281438−0716131	−10	4	2
PG1525−071C	15 28 16.502	−07 14 30.36	29290016	J15281649−0714301	−13.7	−10.9	1
PG1528+062B	15 30 39.542	+06 01 12.98	33944459	J15303955+0601129	−15.5	6.7	1
PG1528+062A	15 30 49.092	+06 01 24.09	33944469	J15304910+0601240	−7.7	1.8	1
PG1528+062	15 30 49.93	+06 00 56.2	· · ·	J15304993+0600561	6	−16	2
PG1528+062C	15 30 55.616	+06 00 09.59	33944476	J15305562+0600095	−14.5	6.3	1
PG1530+057A	15 33 10.224	+05 33 42.93	33766085	J15331022+0533429	−3.9	−0.1	1
PG1530+057	15 33 10.737	+05 32 26.88	33766087	J15331073+0532268	−25.9	−4.4	1
PG1530+057B	15 33 17.446	+05 33 46.29	33766098	J15331744+0533463	−3.9	−7.2	1
107 544	15 36 48.097	−00 15 07.07	31698581	J15364809−0015070	0.0	26.0	1
107 970	15 37 25.830	+00 18 33.82	31878389	J15372582+0018339	−6.1	−2.4	1
107 568	15 37 52.713	−00 17 17.51	31698655	J15375270−0017175	−12.8	−11.1	1
107 1006	15 38 33.353	+00 14 19.11	31878471	J15383334+0014189	20.8	−24.7	1
107 347	15 38 35.770	−00 35 57.69	31519434	J15383578−0035576	−23.3	−21.9	1
107 720	15 38 36.978	−00 02 24.92	31698708	J15383698−0002249	−13.8	−12.5	1
107 456	15 38 42.735	−00 19 47.02	31698718	J15384274−0019469	−31.2	8.7	1
107 351	15 38 45.760	−00 32 06.30	31519446	J15384576−0032062	−10.8	−5.1	1
107 457	15 38 46.763	−00 20 15.17	31698726	J15384676−0020150	−3.0	−2.1	1
107 458	15 38 50.219	−00 24 26.45	31698731	J15385022−0024263	−8.7	4.0	1
107 592	15 38 50.382	−00 17 09.17	31698732	J15385038−0017091	−3.3	0.4	1
107 459	15 38 50.812	−00 22 33.77	31698733	J15385082−0022337	−9.0	−16.3	1
107 212	15 38 56.067	−00 45 31.71	31519454	J15385605−0045316	−1.4	−16.1	1
107 215	15 38 57.650	−00 43 06.59	31519456	J15385765−0043064	−6.9	−17.4	1
107 213	15 38 57.671	−00 44 15.06	31519457	J15385766−0044149	13.5	−18.7	1
107 357	15 39 05.469	−00 39 12.16	31519465	J15390546−0039120	−14.0	−1.3	1
107 359	15 39 09.04	−00 35 38.6	· · ·	J15390904−0035386	−26	−76	2
107 599	15 39 09.457	−00 14 28.74	31698750	J15390944−0014288	−9.2	−7.5	1
107 600	15 39 10.065	−00 15 51.15	31698752	J15391005−0015513	−11.9	−2.2	1
107 601	15 39 13.88	−00 13 28.0	· · ·	J15391388−0013279	0	0	2
107 602	15 39 18.878	−00 15 29.94	31698756	J15391886−0015300	−13.5	−9.1	1
107 611	15 39 35.077	−00 12 35.76	31698773	J15393507−0012357	−11.0	19.5	1
107 612	15 39 35.427	−00 15 07.45	31698774	J15393542−0015074	−9.8	6.3	1
107 614	15 39 41.132	−00 13 10.80	31698783	J15394112−0013107	−5.9	−10.2	1
107 626	15 40 05.349	−00 17 28.95	31698814	J15400534−0017288	25.2	−7.2	1
107 627	15 40 07.462	−00 17 22.68	31698815	J15400746−0017225	2.7	−10.6	1
107 484	15 40 16.818	−00 21 14.93	31698829	J15401681−0021147	2.9	−12.7	1
107 636	15 40 40.488	−00 14 53.10	31698858	J15404049−0014529	6.3	−4.1	1
107 639	15 40 44.767	−00 17 10.24	31698867	J15404477−0017100	−9.2	−1.1	1
107 640	15 40 49.150	−00 16 47.53	31698873	J15404915−0016474	−14.1	3.3	1
G153 41	16 17 55.241	−15 35 52.15	26014608	J16175525−1535519	−172.2	−161.7	1
G138 25	16 25 13.952	+15 40 54.25	37376571	J16251394+1540551	+123.3	−1207.4	1
BD −12 4523	16 30 18.059	−12 39 45.34	· · ·	J16301808−1239434	−95.9	−1184.9	5
HD 149382	16 34 23.333	−04 00 52.02	30388151	J16342334−0400521	−7.2	−4.6	1
108 1332	16 35 21.401	−00 04 05.32	31703737	J16352141−0004052	−0.2	7.3	1
PG1633+099	16 35 24.025	+09 47 49.90	35229497	J16352402+0947499	−20.0	−14.6	1
PG1633+099A	16 35 25.984	+09 47 53.19	35229501	J16352598+0947531	5.9	−9.8	1
PG1633+099G	16 35 32.336	+09 50 30.74	35229514	J16353233+0950306	11.8	−29.7	1
PG1633+099B	16 35 33.304	+09 46 20.71	35229516	J16353330+0946206	8.0	−8.9	1
PG1633+099F	16 35 36.713	+09 49 40.34	35229520	J16353671+0949402	−3.7	−12.4	1
PG1633+099C	16 35 37.275	+09 46 15.80	35229521	J16353727+0946157	−1.2	−8.7	1
PG1633+099D	16 35 40.089	+09 46 41.57	35229527	J16354008+0946415	−4.3	−5.4	1
PG1633+099E	16 35 45.084	+09 49 24.53	35229536	J16354507+0949244	−4.6	−5.1	1
108 719	16 36 11.047	−00 25 29.07	31703819	J16361104−0025290	−15.6	11.7	1
108 1848	16 36 58.442	+00 05 55.61	31883730	J16365843+0005555	22.1	−8.5	1
108 475	16 37 00.595	−00 34 39.17	31524738	J16370059−0034391	−0.9	−2.3	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
108 1863	16 37 12.452	+00 02 30.58	31883761	J16371244+0002305	−16.2	−23.0	1
108 1491	16 37 13.934	−00 02 41.91	31703937	J16371392−0002420	3.5	−18.1	1
108 551	16 37 47.788	−00 33 05.16	31524830	J16374779−0033051	5.1	5.5	1
108 1918	16 37 50.129	−00 00 36.41	31704025	J16375013−0000362	−3.0	−9.8	1
108 981	16 39 16.614	−00 25 06.98	31704207	J16391661−0025069	−5.9	−0.9	1
PG1647+056	16 50 18.461	+05 32 55.94	33772779	J16501846+0532559	−0.5	−11.9	1
Wolf 629	16 55 25.223	−08 19 21.30	28934772	J16552527−0819207	−816.9	−898.3	1
PG1657+078E	16 59 27.221	+07 44 01.26	34484044	J16592722+0744013	−7.9	13.8	2
PG1657+078D	16 59 27.877	+07 42 59.71	34484045	J16592788+0742597	0.8	−6.7	1
PG1657+078B	16 59 31.979	+07 42 07.34	34484057	J16593198+0742074	−5.0	−1.5	1
PG1657+078	16 59 32.216	+07 43 31.43	34484060	J16593222+0743314	−9.7	−17.9	1
PG1657+078A	16 59 33.207	+07 42 19.42	34484063	J16593321+0742195	5.6	17.7	1
PG1657+078C	16 59 35.270	+07 42 26.51	34484068	J16593527+0742266	−11.0	−3.8	1
BD −4 4226	17 05 13.783	−05 05 39.21	30040735	J17051383−0505385	−915.3	−1130.4	1
109 71	17 44 06.792	−00 24 58.01	31714623	J17440678−0024580	−0.6	−1.9	1
109 381	17 44 12.269	−00 20 32.80	31714649	J17441226−0020328	−1.8	4.4	1
109 949	17 44 13.616	−00 02 28.02	31714655	J17441362−0002281	6.1	−5.6	1
109 954	17 44 15.844	−00 02 16.07	31714667	J17441583−0002160	0.6	1.5	1
109 956	17 44 14.54	−00 02 07.7	· · ·	J17441454−0002076	0	0	2
109 199	17 45 02.635	−00 29 28.71	31714849	J17450263−0029286	3.2	−0.7	1
109 231	17 45 19.964	−00 25 51.60	31714908	J17451996−0025515	1.9	−14.3	1
109 537	17 45 42.448	−00 21 35.43	31714993	J17454245−0021355	0.8	−1.2	1
G21 15	18 27 13.08	+04 03 46.7	· · ·	J18271307+0403467	−251	−289	4
110 229	18 40 45.662	+00 01 49.78	31906889	J18404566+0001496	−3.0	−1.4	1
110 230	18 40 51.489	+00 02 23.28	31906894	J18405149+0002232	21.0	3.0	1
110 232	18 40 52.340	+00 01 54.78	31906895	J18405233+0001547	−11.0	−26.1	1
110 233	18 40 52.709	+00 00 50.85	31906896	J18405270+0000508	−4.1	3.5	1
110 239	18 41 19.795	+00 00 13.58	31906923	J18411980+0000133	7.7	−5.3	1
110 339	18 41 26.51	+00 08 25.4	· · ·	J18412651+0008253	−62	−10	2
110 340	18 41 28.448	+00 15 23.00	31906929	J18412844+0015229	2.6	−7.0	1
110 477	18 41 43.200	+00 26 42.78	31906948	J18414320+0026427	−2.1	1.6	1
110 246	18 41 50.757	+00 05 04.51	31906958	J18415076+0005046	−52.4	−184.9	1
110 346	18 41 55.208	+00 09 58.39	31906963	J18415519+0009583	4.4	−15.7	1
110 349	18 42 13.409	+00 10 15.21	31906982	J18421339+0010153	−9.0	−3.8	1
110 355	18 42 18.933	+00 08 24.22	31906997	J18421893+0008242	−2.3	−3.6	1
110 358	18 42 35.516	+00 15 01.97	31907018	J18423551+0015019	−12.8	−18.3	1
110 360	18 42 40.477	+00 09 10.71	31907028	J18424047+0009108	−2.9	−9.6	1
110 361	18 42 45.010	+00 08 04.70	31907033	J18424501+0008047	1.5	−5.6	1
110 362	18 42 48.277	+00 06 27.77	31907038	J18424828+0006278	20.7	−18.1	1
110 266	18 42 48.798	+00 05 06.44	31907039	J18424879+0005064	0.5	4.5	1
110 L1	18 42 50.187	+00 07 12.76	31907041	J18425018+0007126	8.1	−2.6	1
110 364	18 42 52.785	+00 07 54.89	31907050	J18425278+0007548	5.6	−10.4	1
110 157	18 42 56.472	−00 08 58.45	31728178	J18425646−0008585	−1.9	−11.0	1
110 365	18 42 57.444	+00 07 23.12	31907060	J18425743+0007229	−1.2	−5.5	1
110 496	18 42 59.294	+00 31 09.13	32078214	J18425929+0031092	−1.7	−4.6	1
110 273	18 42 59.542	+00 02 23.92	31907063	J18425954+0002239	−5.4	1.6	1
110 497	18 43 02.506	+00 30 56.79	32078215	J18430250+0030569	−1.5	−7.8	1
110 280	18 43 06.960	−00 03 41.52	31728203	J18430697−0003415	3.8	−13.0	1
110 499	18 43 07.663	+00 28 01.47	31907077	J18430765+0028016	2.6	0.2	1
110 502	18 43 10.111	+00 27 42.37	31907082	J18431010+0027424	−5.0	−0.1	1
110 503	18 43 11.696	+00 29 42.95	31907085	J18431169+0029430	5.0	−6.0	1
110 504	18 43 11.712	+00 30 04.57	32078228	J18431171+0030047	9.5	−52.3	1
110 506	18 43 18.927	+00 30 27.14	32078242	J18431892+0030272	0.5	−10.6	1
110 507	18 43 19.126	+00 29 26.00	31907091	J18431912+0029262	1.5	−20.8	1
110 290	18 43 22.132	−00 01 15.40	31728252	J18432212−0001154	10	−10	2
110 441	18 43 33.607	+00 19 40.72	31907132	J18433361+0019407	2.7	−14.3	1
110 311	18 43 47.512	−00 00 20.63	31728343	J18434751−0000207	4.2	10.4	1
110 312	18 43 48.928	+00 00 06.03	31907164	J18434892+0000060	−6.1	−7.1	1
110 450	18 43 51.474	+00 22 58.46	31907173	J18435147+0022585	−0.8	−10.9	1
110 315	18 43 52.079	+00 00 49.33	31907176	J18435207+0000492	0.8	−2.0	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
110 316	18 43 52.342	+00 01 04.22	31907177	J18435234+0001041	−6.3	1.7	1
110 319	18 43 55.376	+00 02 00.32	31907184	J18435537+0002003	−0.2	−3.8	1
111 773	19 37 15.832	+00 10 58.24	31935531	J19371583+0010582	7.8	2.1	1
111 775	19 37 16.357	+00 12 05.56	31935533	J19371636+0012053	−1.8	−6.7	1
111 1925	19 37 28.639	+00 25 02.74	31935589	J19372865+0025026	2.3	−4.2	1
111 1965	19 37 41.557	+00 26 50.94	31935653	J19374157+0026507	1.2	5.8	1
111 1969	19 37 43.288	+00 25 48.55	31935665	J19374330+0025484	4.8	0.7	1
111 2039	19 38 04.578	+00 32 12.54	32100473	J19380457+0032125	−0.2	−12.7	1
111 2088	19 38 21.254	+00 31 00.26	32100555	J19382125+0031001	−4.2	−5.1	1
111 2093	19 38 23.462	+00 31 25.44	32100565	J19382345+0031253	1.7	−3.7	1
112 595	20 41 18.463	+00 16 28.06	31953023	J20411845+0016280	−0.9	−6.1	1
112 704	20 42 02.066	+00 19 08.22	31953178	J20420207+0019081	−3.9	0.4	1
112 223	20 42 14.583	+00 08 59.70	31953218	J20421458+0008596	5.3	−10.4	1
112 250	20 42 26.386	+00 07 42.50	31953253	J20422638+0007423	1.4	−9.1	1
112 275	20 42 35.424	+00 07 20.22	31953288	J20423542+0007202	−0.8	−11.1	1
112 805	20 42 46.753	+00 16 08.08	31953316	J20424674+0016079	8.9	11.6	1
112 822	20 42 54.915	+00 15 01.90	31953341	J20425491+0015019	−2.6	−12.7	1
Mark A4	20 43 53.555	−10 45 05.17	28113771	J20435356−1045051	1.5	−6.3	1
Mark A2	20 43 54.998	−10 45 31.29	28113774	J20435500−1045312	3.8	−1.6	1
Mark A1	20 43 58.451	−10 47 12.27	28113781	J20435846−1047121	−9.6	−2.0	1
Mark A	20 43 59.227	−10 47 41.68	28113783	J20435924−1047417	26.1	5.6	1
Mark A3	20 44 03.82	−10 45 37.9	· · ·	J20440382−1045378	4	−24	2
Wolf 918	21 09 17.431	−13 18 09.01	27211430	J21091740−1318080	721.0	−1992.3	1
G26 7A	21 31 06.807	−09 46 35.55	28468530	J21310681−0946354	4.0	−21.9	1
G26 7	21 31 18.637	−09 47 26.44	28468547	J21311859−0947263	1209.7	−60.8	1
G26 7C	21 31 23.333	−09 50 46.60	28468551	J21312333−0950465	46.6	−11.6	1
G26 7B	21 31 26.454	−09 47 23.47	28468553	J21312645−0947233	14.5	−25.4	1
113 440	21 40 34.426	+00 41 46.92	32126637	J21403442+0041469	−23.6	−7.3	1
113 221	21 40 36.542	+00 21 03.31	31960156	J21403654+0021032	−2.7	−2.9	1
113 L1	21 40 47.382	+00 28 34.96	31960174	J21404737+0028349	29.7	17.3	1
113 337	21 40 49.456	+00 27 58.01	31960183	J21404944+0027579	−0.9	2.6	1
113 339	21 40 55.675	+00 27 58.07	31960199	J21405567+0027580	2.6	−2.8	1
113 233	21 40 59.227	+00 22 02.43	31960207	J21405922+0022023	16.2	1.0	1
113 342	21 40 59.843	+00 27 36.65	31960209	J21405984+0027366	21.6	−2.0	1
113 239	21 41 06.870	+00 22 33.87	31960225	J21410686+0022339	4.8	0.2	1
113 241	21 41 09.188	+00 25 48.20	31960229	J21410919+0025480	−5.0	−36.7	1
113 245	21 41 13.344	+00 21 52.76	31960239	J21411334+0021527	4.5	−7.5	1
113 459	21 41 14.979	+00 43 04.64	32126705	J21411497+0043045	3.2	−1.5	1
113 250	21 41 24.583	+00 20 41.01	31960256	J21412457+0020411	−2.1	−4.1	1
113 466	21 41 27.386	+00 40 15.56	32126720	J21412738+0040155	20.0	7.4	1
113 259	21 41 44.849	+00 17 40.05	31960278	J21414484+0017399	−7.7	−0.8	1
113 260	21 41 48.071	+00 23 52.81	31960282	J21414807+0023528	−8.4	−6.9	1
113 475	21 41 51.293	+00 39 20.78	32126762	J21415130+0039208	11.3	−15.4	1
113 263	21 41 52.873	+00 25 37.60	31960290	J21415286+0025375	11.0	−3.9	1
113 366	21 41 53.577	+00 29 22.85	31960292	J21415357+0029228	4.4	−1.0	1
113 265	21 41 53.746	+00 18 04.21	31960293	J21415374+0018041	−17.4	−5.6	1
113 268	21 41 57.086	+00 19 55.88	31960296	J21415707+0019558	12.3	−11.7	1
113 34	21 41 58.784	+00 01 06.97	31960300	J21415876+0001069	−1.5	−5.2	1
113 372	21 42 01.99	+00 28 38.9	· · ·	J21420199+0028388	40	12	2
113 149	21 42 05.56	+00 09 25.7	· · ·	J21420555+0009256	−42	−28	2
113 153	21 42 08.863	+00 15 04.78	31960318	J21420885+0015047	−13.4	−12.0	1
113 272	21 42 20.301	+00 20 58.51	31960326	J21422029+0020584	6.5	−12.0	1
113 156	21 42 21.714	+00 12 10.06	31960328	J21422171+0012099	−0.3	−11.7	1
113 158	21 42 21.763	+00 14 09.73	31960329	J21422175+0014096	−8.0	−14.7	1
113 491	21 42 24.506	+00 43 54.63	32126827	J21422450+0043546	13.7	−8.5	1
113 492	21 42 27.808	+00 38 21.96	32126831	J21422780+0038220	10.8	−8.8	1
113 493	21 42 28.579	+00 38 11.53	32126834	J21422857+0038115	22.5	4.1	1
113 495	21 42 29.737	+00 38 07.96	32126836	J21422972+0038079	−10.8	0.7	1
113 163	21 42 35.438	+00 16 45.54	31960346	J21423544+0016453	−2.4	−11.0	1
113 165	21 42 37.998	+00 15 33.15	31960349	J21423799+0015330	1.4	−6.0	1

Table 5
(Continued)

Star Name	α (J2000.0)	δ (J2000.0)	UCAC2	2MASS-PSC	μ_α (mas yr^{-1})	μ_δ (mas yr^{-1})	μ Ref.
113 281	21 42 38.704	+00 18 56.66	31960351	J21423870+0018565	2.9	−5.5	1
113 167	21 42 40.950	+00 16 08.62	31960357	J21424095+0016084	−5.9	−4.0	1
113 177	21 42 56.538	+00 14 43.80	31960385	J21425653+0014437	13.5	−12.0	1
113 182	21 43 08.336	+00 14 49.98	31960403	J21430833+0014498	2.3	−0.2	1
113 187	21 43 20.629	+00 16 54.22	31960422	J21432062+0016540	20.0	10.1	1
113 189	21 43 27.481	+00 17 20.91	31960437	J21432747+0017207	−19.5	−30.9	1
113 307	21 43 30.444	+00 18 04.17	31960447	J21433044+0018040	1.5	−1.8	1
113 191	21 43 33.561	+00 15 54.39	31960457	J21433355+0015543	−16.7	−8.4	1
113 195	21 43 40.819	+00 17 21.83	31960473	J21434081+0017218	−1.5	−7.5	1
G93 48D	21 52 10.158	+02 21 25.52	32634316	J21521015+0221255	−13.5	−11.8	1
G93 48C	21 52 13.86	+02 21 52.9	· · ·	J21521385+0221528	104	−28	2
G93 48A	21 52 17.45	+02 23 14.2	· · ·	J21521745+0223141	40	−2	2
G93 48B	21 52 18.349	+02 23 10.40	32634333	J21521834+0223101	−12.6	−21.7	1
G93 48	21 52 25.379	+02 23 19.60	32634338	J21522538+0223192	14.7	−298.4	1
PG2213−006F	22 16 12.898	−00 17 55.86	31789827	J22161290−0017558	−7.2	−3.1	1
PG2213−006C	22 16 17.674	−00 22 14.30	31789833	J22161767−0022144	4.5	−3.7	1
PG2213−006E	22 16 21.309	−00 17 39.75	31789834	J22162130−0017398	−7.8	8.3	1
PG2213−006B	22 16 21.757	−00 21 48.50	31789835	J22162175−0021486	21.5	−3.5	1
PG2213−006D	22 16 22.59	−00 17 40.7	· · ·	J22162259−0017406	−26	−42	2
PG2213−006A	22 16 23.206	−00 21 26.98	31789837	J22162321−0021271	18.5	−7.7	1
PG2213−006	22 16 28.375	−00 21 13.51	31789841	J22162837−0021135	1.4	−8.8	1
G156 31	22 38 33.592	−15 17 59.44	26361351	J22383372−1517573	2310.5	2291.7	1
114 531	22 40 36.756	+00 51 55.46	32130708	J22403675+0051553	−25.5	−16.3	1
114 637	22 40 42.570	+01 03 10.62	32298957	J22404257+0103107	0.0	0.8	1
114 446	22 41 03.873	+00 46 01.40	32130726	J22410388+0046011	18.3	−19.0	1
114 654	22 41 26.140	+01 10 10.69	32298994	J22412613+0110106	30.0	−10.8	1
114 656	22 41 35.072	+01 11 09.79	32298999	J22413506+0111096	−0.6	−6.9	1
114 548	22 41 36.833	+00 59 05.80	32130756	J22413682+0059056	−0.5	−6.4	1
114 750	22 41 44.703	+01 12 36.36	32299009	J22414470+0112362	−12.5	−19.7	1
114 755	22 42 07.584	+01 16 48.99	32299026	J22420758+0116489	−71.3	−40.9	1
114 670	22 42 09.288	+01 10 16.80	32299027	J22420929+0110168	−9.8	−13.9	1
114 176	22 43 10.181	+00 21 15.57	31964435	J22431017+0021154	−4.7	−6.2	1
HD 216135	22 50 28.229	−13 18 44.34	27217250	J22502822−1318443	−18.6	−13.7	1
G156 57	22 53 16.728	−14 15 49.32	26801725	J22531672−1415489	951.0	−676.0	1
GD 246A	23 12 17.442	+10 46 12.87	35681338	J23121744+1046127	−4.3	−8.4	1
GD 246	23 12 21.63	+10 47 04.3	· · ·	J23122162+1047042	142	−10	2
GD 246B	23 12 28.998	+10 47 11.37	35681348	J23122900+1047114	0.9	−14.9	1
GD 246C	23 12 30.920	+10 49 13.96	35681353	J23123092+1049140	−3.4	−0.4	1
F 108	23 16 12.408	−01 50 35.12	31258980	J23161241−0150350	0.5	−17.5	1
PG2317+046	23 19 55.349	+04 52 34.60	33502128	J23195534+0452345	38.2	−23.0	1
PG2331+055	23 33 44.468	+05 46 39.81	33859266	J23334447+0546398	−1.5	−14.3	1
PG2331+055A	23 33 49.373	+05 46 52.58	33859271	J23334937+0546526	−3.8	−14.6	1
PG2331+055B	23 33 51.128	+05 45 09.07	33859274	J23335113+0545091	7.4	−10.4	1
PG2336+004B	23 38 38.287	+00 42 46.40	32133222	J23383829+0042463	10.4	−1.1	1
PG2336+004A	23 38 42.579	+00 42 28.76	32133226	J23384258+0042287	119.9	4.2	1
PG2336+004	23 38 43.58	+00 42 59.3	· · ·	J23384357+0042592	−4	−14	2
115 554	23 41 30.848	+01 26 25.21	32301616	J23413085+0126252	14.6	−8.5	1
115 486	23 41 32.988	+01 16 44.80	32301617	J23413299+0116446	0.2	−7.0	1
115 412	23 42 00.947	+01 09 01.74	32301638	J23420094+0109016	9.5	−2.0	1
115 268	23 42 30.663	+00 52 10.93	32133358	J23423066+0052109	−12.1	−5.1	1
115 420	23 42 36.481	+01 05 58.82	32301663	J23423648+0105589	−5.7	−6.7	1
115 271	23 42 41.825	+00 45 13.14	32133366	J23424182+0045131	62.0	28.2	1
115 516	23 44 15.375	+01 14 12.56	32301716	J23441536+0114126	30.2	−21.4	1
BD +1 4774	23 49 12.526	+02 24 04.42	32640241	J23491255+0224037	993.7	−966.7	1
PG2349+002	23 51 53.228	+00 28 17.6	31967221	J23515323+0028176	−17.9	−12.8	1

Notes. Units of right ascension are hours, minutes, and seconds, and units of declination are degrees, arcminutes, and arcseconds.

References. 1. Zacharias et al. (2004) [UCAC2]; 2. Monet et al. (2003) [USNO-B1.0 catalog]; 3. Klemola et al. (1987); 4. Lépine & Shara (2005); 5. Urban et al. (2004).

(This table is also available in machine-readable and Virtual Observatory (VO) forms in the online journal.)

can now most easily access variable and suspected variable star information by entering the Sternberg Astronomical Institute's Web site,[3] clicking on the "GCVS Research Group" (General Catalogue of Variable Stars), and then going to the appropriate catalog.

Oost: The Oost star numbers arise from a study of proper motion stars in 97 of the SAs (Oosterhoff 1936).

PG: The Palomar-Green (PG) star numbering system arose from a study of ultraviolet-excess objects by Green et al. (1986).

PHL: The PHL star names follow from a search for faint blue stars (Haro & Luyten 1962).

Ross: The Ross star numbers arise from a series of papers in the Astronomical Journal by F.E. Ross on high proper motion stars. The papers appeared in the time interval 1925-1939. See Luyten (1963b) for a summary.

Rubin: A search for faint blue stars in the galactic anti-center (Rubin et al. 1974). Readers should note that while the author has been using the nomenclature RU to identify "Rubin" sequence stars based on the work of Rubin et al. (1974), Simbad instead uses RL which is based on Rubin & Losee (1971). The numbering of stars listed in Rubin et al. (1974) is a continuation of the identification numbers used in Rubin & Losee (1971).

SA: The Kapteyn SAs were defined in 1915 and were distributed around the sky in declination zones separated by $15°$ as a basis for early galactic structure studies (reviewed by Blaauw & Elvius (1965)). Coordinates and magnitudes for stars in these 206 SAs were published by Pickering & Kapteyn (1918), Pickering et al. (1923, 1924). Charts for the SA stars have been published by Brun & Vehrenberg (1965).

WD: The WD numbering system exists for white dwarf stars. Excellent online sources of information for white dwarf stars include J. Holberg's Web site[4] and G. McCook and E. Sion's Web site.[5] A print description of the latter is in McCook & Sion (1999).

Wolf: Wolf star numbers are stars catalogued by M. Wolf in his studies of high proper motion stars. These papers appeared in the *Astronomische Nachrichten* in the time interval 1919–1931. See Luyten (1963b) for a summary.

Expanded comments, in the sense of increasing right ascension, follow for individual stars that appear in Table 2. Immediately following each star name is given, in brackets, an abbreviated right ascension and declination for that star, the idea being that one has an additional way of knowing the location on the sky while searching down the page for a star name.

T Phe B [00:30:16; −46:27:59] = RW Phe = AN 409.1929 = CD−47 128 = GSC 08024−00363. See note 1, Table 2 in Landolt (1992). RW Phe is a 5.4129 day eclipsing variable star discovered by Dartayet (1929). T Phe B is the sequence star "h" for the variable star T Phe in Fleming & Pickering (1907) and Campbell & Pickering (1913).

T Phe J [00:30:23; −46:23:52] = NLTT 290-35

T Phe F [00:30:50; −46:33:24] = GSC 08024−00830 = NSV 184. See comment by Dartayet (1929) that the T Phe sequence star "h1" might be variable. The sequence is in Fleming & Pickering (1907) and Campbell & Pickering (1913). The AAVSO (d) chart for T Phe (002546), plotted at a scale of $20'' = 1$ mm, is based on Fleming & Pickering (1907) and

Campbell & Pickering (1913). T Phe F here is the star marked as 132 on the AAVSO chart.

T Phe G [00:31:04; −46:22:51] = CD−47 134 = GSC 08024−00627

HD 2892 [00:32:12; +01:11:17] = BD +00 71 = GSC 00010−00965

BD −15 115 [00:38:20; −14:59:54] = GSC 05271−01721 = GCRV 20253

PG0039+049 [00:42:05; +05:09:44] = GSC 00017−00283 = WD 0039 + 04

BD −11 162 [00:52:15; −10:39:56] = GD 743 = GSC 05270−01692 = NSV 15190. Zwicky (1957) thought that the spectrum might be composite. Klemola (1962) finds $V =$ 11.23. Greenstein & Eggen (1966) indicated the spectrum to be composite, Op+G. Also see Greenstein & Sargent (1974). Dworetsky et al. (1982) found a spectral type of sdO+G and $V = 11.19$. Since their color indices differed by ∼0.05 mag from Greenstein & Sargent (1974), they suggested possible variability. That suggestion may be supported by the comment of Klemola (1962) that the spectrum looked like that of the Be star HD 14605.

SA 92-312 [00:53:16; +00:48:28] = BD +00 135 = GSC 00012−00120. Note that the identification chart and photometry for this star are correct in Landolt (1992), but the star was mistakenly labeled as SA92-235, and the incorrect declination appears in Table 2 of Landolt (1992).

SA 92-339 [00:55:03; +00:44:11] = GSC 00012−00212 = NSV 15199 (Landolt 1992)

SA 92-188 [00:55:10; +00:23:12] = GSC 00012−00957 = NSV 15200 (Landolt 1992)

SA 92-409 [00:55:14; +00:56:07] = BD +00 143 = G 1-31 = G 70-20 = GSC 00012−00042 = LTT 10323 = NLTT 3047

Feige 11 [01:04:22; +04:13:37] = GSC 00022−00821 = PG0101+039 = WD 0101+039

Feige 16 [01:54:08; −06:42:54] = GSC 04688−00087 = PHL 8054

G 3-33 [02:00:09; +13:04:04] = G 73-12 = GSC 00629−01255 = LFT 171 = LHS 11 = TZ Ari, a flare star

Feige 22 [02:30:17; +05:15:51] = GSC 00052−00736 = WD 0227+050 = EGGR 19 = GCRV 53109 = NSV 843

PG0231+051 [02:33:41; +05:18:40] = WD 0231+050

Feige 24 [02:35:08; +03:43:57] = GSC 00049−00886 = PG0232+035 = WD 0232+035 = NSV 864 = FS Cet

BD −2 524 [02:57:40; −01:59:49] = Feige 29 = GCRV 53619 = GSC 04700−00656

GD 50 [03:48:50; −00:58:33] = EGGR 288 = WD 0346−011 = GSC 04717−00588

SA 95-301 [03:52:41; +00:31:21] = BD +00 669p = GSC 00066−01075

SA 95-302 [03:52:42; +00:31:18] = BD +00 669s = GSC 00066−01159

SA 95-96 [03:52:54; +00:00:19] = BD −00 613 = HD 24401 = GSC 00066−00944

SA 95-107 [03:53:25; +00:02:18] = FASTT 89

SA 95-43 [03:53:49; −00:03:01] = BD −00 615 = NSV 1400 = GSC 04718−00282

SA 95-137 [03:55:04; +00:03:33] = GSC 00066−00895 = USNO-B1.0 0900-0039856

SA 95-139 [03:55:05; +00:03:13] = GSC 00066−00931 = USNO-B1.0 0900-0039860

G 97-42 [05:28:01; +09:39:07] = Ci 20 329 = LHS 1761 = G 102-3 = LSPM J0528+0938 = GSC 00704−00495 = LFT 411 = Ross 41 = GJ 203 = NLTT 15107

G 102-22 [05:42:05; +12:30:14] = LHS 31 = GSC 00722−00455 = V1352 Ori = LFT 425 = LTT 11704 = Ross 47 = Ci 20 344

GD 71 [05:52:28; +15:53:13] = EGGR 210 = LTT 11733 = WD 0549 + 158

SA 97-351 [05:57:37; +00:13:42] = BD +00 1231 = HD 290984 = GSC 00117−00727

SA 97-284 [05:58:25; +00:05:12] = BD +00 1237 = GSC 00117−01044

SA 98-978 [06:51:34; −00:11:28] = HD 292561 = GSC 04800−00469

SA 98-185 [06:52:02; −00:27:21] = BD −00 1466 = HD 292574 = GSC 04800−00923

SA 98-193 [06:52:04; −00:27:18] = HD 292575 = GSC 04800−01475

SA 98-653 [06:52:05; −00:18:19] = BD −00 1467 = HD 50188 = GSC 04800−01727

SA 99-6 [07:53:33; −00:49:37] = GSC 04833−00626 = NSV 3792

SA 99-408 [07:55:13; −00:25:33] = BD −00 1856 = GSC 04833−00597

SA 99-438 [07:55:54; −00:16:51] = BD +00 2129 = HD 64854 = GSC 04833−01301

SA 99-447 [07:56:07; −00:20:43] = BD +00 2131 = HD 64887 = GSC 04833−01280

SA 100-241 [08:52:35; −00:39:48] = BD −00 2081 = GSC 04865−00136

SA 100-162 [08:53:15; −00:43:29] = BD −00 2084 = GSC 04865−00508

PG0918+029 [09:21:28; +02:46:03] = WD 0918+029 = GSC 00231−01572, a spectroscopic binary

BD −12 2918 [09:31:18; −13:29:20] = Ci 20 533 = Ross 440 = GCRV 6166 = GJ 352 = GSC 05472−00348 = IDS 09265−1303 AB = LHS 2151 = NLTT 21974 = NSV 4515

SA 101-324 [09:55:57; −00:23:14] = BD +00 2586 = GSC 04896−01224

SA 101-268 [09:56:19; −00:31:55] = G 161-88 = GSC 04896−01184 = LTT 18091 = Oost 455 = NLTT 22984, a high proper motion star

SA 101-363 [09:58:19; −00:25:35] = BD +00 2593 = HD 86408 = GSC 04896−01300

GD 108 [10:00:47; −07:33:31] = PG0958−073 = WD 0958−073 = GSC 05476−00372

BD +1 2447 [10:28:56; +00:50:28] = Ci 20 580 = Ross 446 = GCRV 6576 = G 55-24 = G 162-60 = GJ 393 = GSC 00246−01068 = LFT 719 = NLTT 24467, a high proper motion star

G 162-66 [10:33:43; −11:40:39] = EGGR 70 = LTT 3870 = GSC 05495−00166 = NLTT 24689 = WD 1031−115, a white dwarf

G 44-27 [10:36:02; +05:07:11] = G 55-33 = GJ 398 = LHS 2285 = LSPM J1036+0507 = GSC 00259−00166 = NLTT 24797 = RY Sex, a flare star

PG1034+001 [10:37:04; −00:08:20] = WD 1034+001 = GSC 04912−00085, a white dwarf

G 163-6 [10:42:55; +02:47:22] = NLTT 25129 = GSC 00257−00154 = LSPM J1042+0247, a high proper motion star

PG1047+003 [10:50:03; −00:00:32] = GSC 04914−00003 = UY Sex, a variable star

G 44-40 [10:50:54; +06:48:57] = Ci 20 591 = GCRV 6733 = G 45-8 = LHS 294 = GJ 402 = Wolf 358 = GSC 00261−00224 = NLTT 25500 = J1050+0648 = EE Leo, a high proper motion star

SA 102-620 [10:55:06; −00:48:19] = BD −00 2387 = Ross 898 = G 163-22 = GSC 04914−00700 = NLTT 25717, a high proper motion star

G 45-20 [10:56:38; +07:02:23] = Ci 20 600 = Wolf 359 = GCRV 6780 = GJ 406 = GSC 00261−00377 = NLTT 25782 = CN Leo = LSPM J1056+0700, a flare star and a high proper motion star

SA 102-1081 [10:57:04; −00:13:10] = BD +00 2717 = GSC 04914−00950

G 163-27 [10:57:35; −07:31:23] = EGGR 74 = GSC 05500−01023 = LHS 2333 = GJ 1140 = NLTT 25836 = PG1055−073 = WD 1055−072, a white dwarf

G 163-50 [11:08:00; −05;09:26] = EGGR 76 = GSC 04927−00597 = WD 1105−048 = NLTT 26379 = PG1105−049 = IDS 11030−0436 A = GJ 1142 B = NSV 5096; a white dwarf

G 163-51 [11:08:07; −05:13:47] = GJ 1142 A = GSC 04927−01272 = NLTT 26385 = IDS 11029−0436 B, a high proper motion star

BD +5 2468 [11:15:31; +04:57:24] = HD 97859 = GSC 00266−00468 = NSV 18709, however the mean error of a single observation in Table 2 is only 0.011 mag

HD 100340 [11:32:50; +05:16:36] = BD +06 2461 = GSC 00277−00509

BD +5 2529 [11:41:50; +05:08:27] = Ross 911 = LHS 6212 = GCRV 62701 = G 11-14 = G 10-43 = GJ 9372 = NLTT 28274 = GSC 00278−00150, a high proper motion star

G 10-50 [11:47:44; +00:48:55] = Ci 20 662 = Ross 128 = GCRV 7139 = G 11-22 = GJ 447 = NLTT 28570 = GSC 00272−00665 = FI Vir, a flare star and a high proper motion star

SA 103-302 [11:56:06; −00:47:54] = BD +00 2860 = HD 103646 = GSC 04932−00143

SA 103-526 [11:56:54; −00:30:13] = BD +00 2862 = GSC 04932−00246

G 12-43 [12:33:20; +09:01:08] = Ci 20 716 = Wolf 424 = G 60-14 = GJ 473 = GSC 00874−00306 = NLTT 31083 = LHS 333 = GCRV 7553 = LSPM J1233+0901 = FL Vir, a flare star and a high proper motion star

SA 104-306 [12:41:04; −00:37:11] = BD +00 2969 = HD 110281 = GSC 04949−00729 = KR Vir, a semiregular pulsating star

SA 104-461 [12:43:07; −00:32:21] = BD +00 2975 = HD 110572 = GSC 04949−01047 = NSV 5889

PG1323−086 [13:25:39; −08:49:16] = WD 1323−085 = GSC 05544−00284

PG1323−086A [13:25:50; −08:50:24] = GSC 05544−00493 = NSV 19792 discovered to be variable by Landolt (1992) and independently by P. Schmidtke (1990, private communication)

G 14-55 [13:28:22; −02:21:28] = Ci 20 780 = Ross 486A = G 62-42 = GSC 04959−00178 = GCRV 7989 = IDS 13231−0151 A = NLTT 34200 = G 14-55A = GJ 512 A = NSV 6261

SA 105-505 [13:35:25; −00:23:38] = BD +00 3077 = GCRV 64221 = GJ 1173 = GJ 9413 = GSC 04966−01321 = NLTT 34546 = NSV 6329

SA 105-815 [13:40:04; −00:02:10] = G 64-12 = GSC 04967−00579 = NLTT 34822 = Wolf 1492

BD +2 2711 [13:42:19; +01:30:19] = GSC 00308−00229

UCAC2 32376437 [13:42:23; +01:30:26] This relatively bright star is just a bit too faint to appear in any of the older catalogs.

HD 121968 [13:58:52; −02:55:12] = BD −02 3766 = GSC 04971−00048

PG1407−013 [14:10:26; −01:30:17] = GSC 04976−00391

SA 106-1024 [14:40:07; +00:01:45] = GSC 00326−01010 = IP Vir, a Delta Scuti star discovered by Landolt (1990)

SA 106-700 [14:40:52; −00:23:36] = BD +00 3222 = GSC 04985−00500

SA 106-575 [14:41:38; −00:26:02] = BD +00 3224 = GSC 04985−00517

SA 106-485 [14:44:14; −00:37:07] = BD +00 3229 = HD 129727 = GSC 04985−00159

PG1514+034 [15:17:14; +03:10:27] = EGGR 440 = GJ 3899 = WD 1514+033 = GSC 00340−00678

PG1525−071 [15:28:11; −07:16:27] = GSC 05015−00248

PG1528+062 [15:30:50; +06:00:56] = GSC 00362−00102

PG1530+057 [15:33:11; +05:32:27] = GSC 00358−00731

SA 107-544 [15:36:48; −00:15:07] = BD +00 3379 = HD 139197 = GSC 05016−00561

SA 107-347 [15:38:36; −00:35:58] = BD −00 2991 = HD 139513 = GSC 05017−00367

G 153-41 [16:17:55; −15:35:52] = EGGR 118 = NLTT 42430 = WD 1615−157 = GSC 06202−00265 = LTT 6497 = Oost 596

G 138-25 [16:25:14; +15:41:15] = LHS 418 = GSC 01506−01012 = NLTT 42743, a high proper motion star

BD −12 4523 [16:30:18; −12:39:08] = Ci 20 995 = GCRV 9490 = G 153-58 = GJ 628 = GSC 05635−00564 = LHS 419 = NLTT 42927 = Wolf 1061 = NSV 7768 = V2306 Oph, a high proper motion star

HD 149382 [16:34:23; −04:00:52] = BD −03 3967 = GCRV 9530 = GSC 05056−00274 = PG1631−039

SA 108-1332 [16:35:21; −00:04:05] = BD +00 3552 = HD 149506 = GSC 05048−00853 = IDS 16302+0008 A

PG1633+099 [16:35:24; +09:47:50] = GSC 00964−01526 = BPS CS 22878-0031

SA 108-1491 [16:37:14; −00:02:42] = BD +00 3554 = HD 149825 = GSC 05048−00933

SA 108-551 [16:37:47; −00:33:06] = BD −00 3152 = GSC 05049−00473

Wolf 629 [16:55:27; −08:18:53] = BD −08 4352C = GCRV 9744 = GJ 643 = LHS 427 = GSC 05642−01473 = IDS 16501−0809 C = NLTT 43797, a high proper motion star

PG1657+078 [16:59:32; +07:43:31] = GSC 00976−01448

BD −4 4226 [17:05:15; −05:05:05] = HD 154363B = Ci 20 1018 = Wolf 636 = GCRV 9854 = G 19-14 = GJ 654 = GSC 05072−00347 = IDS 16597−0456 B = NLTT 44131 = LHS 432 = NSV 8176, a high proper motion star

SA 109-231 [17:45:20; −00:25:51] = BD −00 3353 = GSC 05082−02064

SA 109-537 [17:45:42; −00:21:34] = BD −00 3356 = GSC 05082−01171

G 21-15 [18:27:13; +04:03:05] = EGGR 125 = GCRV 68202 = G 141-11 = NLTT 46505 = Ross 137 = WD 1824+040 = LSPM J1827+0403 = LSPM J1827+0403, a white dwarf

SA 110-340 [18:41:29; +00:15:22] = BD +00 3992 = HD 172652 = GSC 00447−00541

SA 110-246 [18:41:51; +00:05:20] = GSC 00447−00424 = NLTT 46871, a high proper motion star

SA 111-773 [19:37:16; +00:10:59] = BD −00 3800 = HD 185025 = GSC 00478−01575

SA 111-1969 [19:37:44; +00:25:48] = BD +00 4260 = GSC 00479−01376

SA 112-275 [20:42:36; +00:07:21] = BD −00 4073 = GSC 00511−02062

Wolf 918 [21:11:30; −13:08:22] = Ci 20 1261 = GJ 821 = NLTT 50633 = GSC 05783−00134 = LHS 65, a high proper motion star

G 26-7 [21:31:19; −09:47:26] = Ci 20 1288 = Wolf 922 = GCRV 72228 = GJ 831 = GSC 05790−00182 = NLTT 51428 = NSV 13753 = BB Cap

SA 113-466 [21:41:28; +00:40:14] = BD +00 4766 = GSC 00543−00227

SA 113-475 [21:41:51; +00:39:19] = BD +00 4767 = GSC 00543−00262

SA 113-492 [21:42:28; +00:38:21] = GSC 00543−01655 = IDS 21373+0010 B

SA 113-493 [21:42:29; +00:38:10] = GSC 00543−01668 = IDS 21373+0010 A

SA 113-495 [21:42:30; +00:38:07] = GSC 00543−00542 = IDS 21373+0010 C

G 93-48 [21:52:25; +02:23:20] = EGGR 150 = GJ 838.4 = NLTT 52306 = WD 2149+021 = GSC 00548−00105 = LSPM J2152+0223, a white dwarf

PG2213−006 [22:16:28; −00:21:15] = GSC 05225−00812

G 156-31 [22:38:28; −15:19:17] = GCRV 14217 = GJ 866 = GJ 866 A = LHS 68 = GSC 06386−00505 = NLTT 54407 = EZ Aqr, a flare star

SA 114-755 [22:42:08; +01:16:49] = BD +00 4910 = GSC 00568−00923

SA 114-176 [22:43:11; +00:21:16] = BD −00 4408 = HD 215141 = GSC 00568−01711

HD 216135 [22:50:28; −13:18:44] = BD −14 6357 = Feige 107 = GSC 05819−00618

G 156-57 [22:53:16; −14:15:38] = BD −15 6290 = Ci 20 1387 = GCRV 14365 = G 156-57A = GJ 876 = GJ 876 A = GSC 05819−00957 = LHS 530 = NLTT 55130 = LHS 530, a high proper motion star = IL Aqr

GD 246 [23:12:22; +10:47:04] = EGGR 233 = BPM 97895 = PG2309+105 = WD 2309+105 = GSC 01164−01078, a white dwarf

Feige 108 [23:16:12; −01:50:35] = EGGR 157 = PG2313−021 = GCRV 73935 = GSC 05243−00817 = WD 2313−021 = NSV 26050, a white dwarf

SA 115-271 [23:42:41; +00:45:10] = BD −00 4557 = GSC 00586−00979

SA 115-516 [23:44:15; +01:14:13] = BD +00 5040 = GSC 00586−00132

BD +1 4774 [23:49:13; +02:24:04] = Ci 18 3124 = GCRV 14913 = G 29-68 = G 31-6 = GJ 908 = GSC 00586−00610 = NLTT 58069 = NSV 14719 = BR Psc, a flare star, and a high proper motion star

PG2349+002 [23:51:53; +00:28:17] = GSC 00587−00489

REFERENCES

Argelander, F. W. A., Schoenfeld, E., & Krueger, A. 1859, Astronomische Beobachtungen auf der Sternwarte der Koeniglichen Rheinischen Freidrich-Wilhelms-Universitat zu Bonn, volume 3 (−01° to +19°)

Argelander, F. W. A., Schoenfeld, E., & Krueger, A. 1861, Astronomische Beobachtungen auf der Sternwarte der Koeniglichen Rheinischen Freidrich-Wilhelms-Universitat zu Bonn, volume 4 (+20° to +40°)

Argelander, F. W. A., Schoenfeld, E., & Krueger, A. 1862, Astronomische Beobachtungen auf der Sternwarte der Koeniglichen Rheinischen Freidrich-Wilhelms-Universitat zu Bonn, volume 5 (+41° to +90°)

Barford, N. C. 1967, Experimental Measurements: Precision, Error, and Truth (London: Addison-Wesley), 62

Beers, T. C., Preston, G. W., & Shectman, S. A. 1988, ApJS, 67, 461

Blaauw, A., & Elvius, T. 1965, in Galactic Structure, ed. A. Blaauw & M. Schmidt (Chicago, IL: Univ. of Chicago Press), 589

Brun, A., & Vehrenberg, H. 1965, Atlas of Harvard-Groningen Selected Areas (Duesseldorf: Treugesell-Verlag)

Campbell, L., & Pickering, E. C. 1913, Ann. Harv. Coll. Obs., 63, 143

Cannon, A. J., & Pickering, E. C. 1918a, Ann. Harv. Coll. Obs., 91, 1

Cannon, A. J., & Pickering, E. C. 1918b, Ann. Harv. Coll. Obs., 92, 1

Cannon, A. J., & Pickering, E. C. 1919a, Ann. Harv. Coll. Obs., 93, 1

Cannon, A. J., & Pickering, E. C. 1919b, Ann. Harv. Coll. Obs., 94, 1

Cannon, A. J., & Pickering, E. C. 1920, Ann. Harv. Coll. Obs., 95, 1

Cannon, A. J., & Pickering, E. C. 1921, Ann. Harv. Coll. Obs., 96, 1

Cannon, A. J., & Pickering, E. C. 1922, Ann. Harv. Coll. Obs., 97, 1

Cannon, A. J., & Pickering, E. C. 1923, Ann. Harv. Coll. Obs., 98, 1

Cannon, A. J., & Pickering, E. C. 1924, Ann. Harv. Coll. Obs., 99, 1

Cousins, A. W. J. 1976, MmRAS, 81, 25

Dartayet, M. 1929, Astron. Nachr., 237, 220

Drilling, J. S., & Landolt, A. U. 1979, AJ, 84, 783

Dworetsky, M. M., Whitelock, P. A., & Carnochan, D. J. 1982, MNRAS, 201, 901

Feige, J. 1958, ApJ, 128, 267

Feige, J. 1959, ApJ, 129, 600

Fleming, W. P. S. M., & Pickering, E. C. 1907, Ann. Harv. Coll. Obs., 47, 1

Giclas, H. L., Burnham, R., Jr., & Thomas, N. G. 1971, Lowell Proper Motion Survey Northern Hemisphere: The G Numbered Stars (Flagstaff, AZ: Lowell Observatory)

Giclas, H. L., Burnham, R., Jr., & Thomas, N. G. 1978, Lowell Obs. Bull., 8, 89

Giclas, H. L., Burnham, R., Jr., & Thomas, N. G. 1980, Lowell Obs. Bull., 8, 157

Gliese, W., & Jahreiß, H. 1979, A&AS, 38, 423

Green, R. F., Schmidt, M., & Liebert, J. 1986, ApJS, 61, 305

Greenstein, J. L., & Eggen, O. J. 1966, Vistas Astron., 8, 63

Greenstein, J. L., & Sargent, A. I. 1974, ApJS, 28, 157 (Table A6)

Haro, G., & Luyten, W. J. 1962, Bol. Obs. Tonantzintla Tacubaya, 3, 37

Henden, A. A., & Stone, R. C. 1998, AJ, 115, 296

Jeffers, H. M., van Denbos, W. H., & Greeby, F. M. 1963, Publications of the Lick Observatory, vol. 21 (Mount Hamilton, CA: Univ. of California)

Johnson, H. L. 1963, Basic Astronomical Data: Stars and Stellar Systems ed. K. A. Strand (Chicago, IL: Univ. of Chicago Press), 204

Klemola, A. R. 1962, AJ, 67, 740

Klemola, A. R., Jones, B. F., & Hanson, R. B. 1987, AJ, 94, 501

Kukarkin, B. V., & Kholopov, P. N. 1982, New Catalogue of Suspected Variable Stars (NSV) (Moscow: Publication Office "Nauka")

Landolt, A. U. 1973, AJ, 78, 959

Landolt, A. U. 1983, AJ, 88, 439

Landolt, A. U. 1990, PASP, 102, 1382

Landolt, A. U. 1992, AJ, 104, 340

Landolt, A. U. 2007a, AJ, 133, 2502

Landolt, A. U. 2007b, in ASP Conf. Ser. 364, The Future of Photometric, Spectrophotometric, and Polarimetric Standardization, ed. C. Sterken (San Francisco, CA: ASP), 27

Landolt, A. U., & Uomoto, A. K. 2007, AJ, 133, 768

Lasker, B. M., Sturch, C. R., McLean, B. J., Russell, J. L., Jenkner, H., & Shara, M. M. 1990, AJ, 99, 2019

Lépine, S., & Shara, M. M. 2005, AJ, 129, 1483

Levine, S. E. 2005, AJ, 130, 319

Luyten, W. J. 1955, A Catalogue of 1849 Stars with Proper Motions Exceeding 0.5 arcsec Annually (LFT) (Minneapolis, MN: The Lund Press)

Luyten, W. J. 1957, A Catalogue of 9867 Stars in the Southern Hemisphere with Proper Motions Exceeding 0.2 arcsec Annually (LTT) (Minneapolis, MN: The Lund Press)

Luyten, W. J. 1963a, Bruce Proper Motion Survey: The General Catalogue (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1963b, in Basic Astronomical Data: Stars and Stellar Systems, ed. K. A. Strand (Chicago, IL: Univ. of Chicago Press), 46

Luyten, W. J. 1976, A Catalogue of 1849 Stars with Proper Motions greater than 0.5 arcsec Annually (LHS) (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1979a, LHS Catalogue (2nd. ed.; Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1979b, New Luyten Catalogue of Stars with Proper Motions Larger than Two Tenths of an Arcsecond [NLTT], vol. 1 (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1979c, New Luyten Catalogue of Stars with Proper Motions Larger than Two Tenths of an Arcsecond [NLTT], vol. 2 (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1980a, New Luyten Catalogue of Stars with Proper Motions Larger than Two Tenths of an Arcsecond [NLTT], vol. 3 (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J. 1980b, New Luyten Catalogue of Stars with Proper Motions Larger than Two Tenths of an Arcsecond [NLTT], vol. 4 (Minneapolis, MN: Univ. of Minnesota)

Luyten, W. J., & Hughes, H. S. 1980, Proper Motion Survey with the 48-inch Schmidt Telescope LV: First Supplement to the NLTT Catalogue (Minneapolis, MN: Univ. of Minnesota)

Magnitskaya, O. V., & Saakyan, K. A. 1976, Astrofizika, 12, 431

Markarian, B. E., & Lipovetskij, V. A. 1973, Astrofizika, 9, 487

McCook, G. P., & Sion, E. M. 1999, ApJS, 121, 1

Miller, H. R. 1981, AJ, 86, 87

Monet, D. G., et al. 2003, AJ, 125, 984

Oosterhoff, P. T. 1936, ApJ, 83, 340

Pickering, E. C., & Kapteyn, J. C. 1918, Ann. Harv. Coll. Obs., 101, 1

Pickering, E. C., Kapteyn, J. C., & van Rhijn, P. J. 1923, Ann. Harv. Coll. Obs., 102, 276

Pickering, E. C., Kapteyn, J. C., & van Rhijn, P. J. 1924, Ann. Harv. Coll. Obs., 103, 343

Rubin, V. C., & Losee, J. M. 1971, AJ, 76, 1099

Rubin, V. C., Westpfahl, D., Jr., & Tuve, M. 1974, AJ, 79, 1406

Schoenfeld, E. 1886, Astronomische Beobachtungen auf der Sternwarte der Koeniglichen Rheinischen Freidrich-Wilhelms-Universitat zu Bonn, volume 8 (−02° to −22°)

Schulte, D. H., & Crawford, D. L. 1961, Kitt Peak Nat. Obs. Cont. No 10

Skrutskie, M. F., et al. 2006, AJ, 131, 1163

Thome, J. M. 1892, Resultados del Observatorio Nacional Argentino, 16, Part I (−22° to −32°)

Thome, J. M. 1894, Resultados del Observatorio Nacional Argentino, 17, Part II (−32° to −42°)

Thome, J. M. 1900, Resultados del Observatorio Nacional Argentino, 18, Part III (−42° to −52°)

Thome, J. M. 1914, Resultados del Observatorio Nacional Argentino, 21, Part IV (−52° to −62°)

Thome, J. M. 1932, Resultados del Observatorio Nacional Argentino, 21, Part V (−62° to −90°)

Urban, S. E., Zacharias, N., & Wycoff, G. L. 2004, VizieR Online Data Catalogue, I/294

Wilson, R. E. 1953, General Catalogue of Stellar Radial Velocities (Washington: Carnegie Institution of Washington), Publ. 601

Zacharias, N., Urban, S. E., Zacharias, M. I., Wycoff, G. L., Hall, D. M., Monet, D. G., & Rafferty, T. J. 2004, AJ, 127, 3043

Zwicky, F. 1957, Morphological Astronomy (Berlin: Springer-Verlag), 236
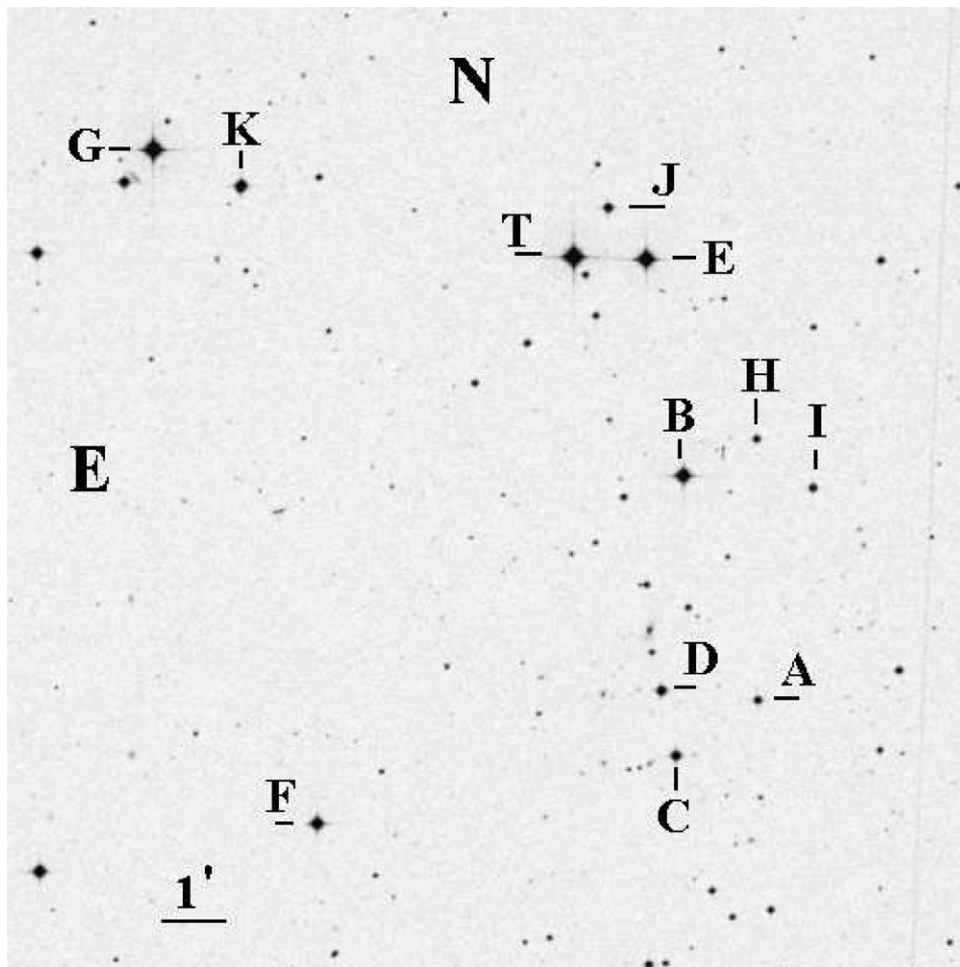
Figure 1. Field, 15′ on a side, of the sequence in the vicinity of the Mira variable star T Phe, marked as "T" in the figure.
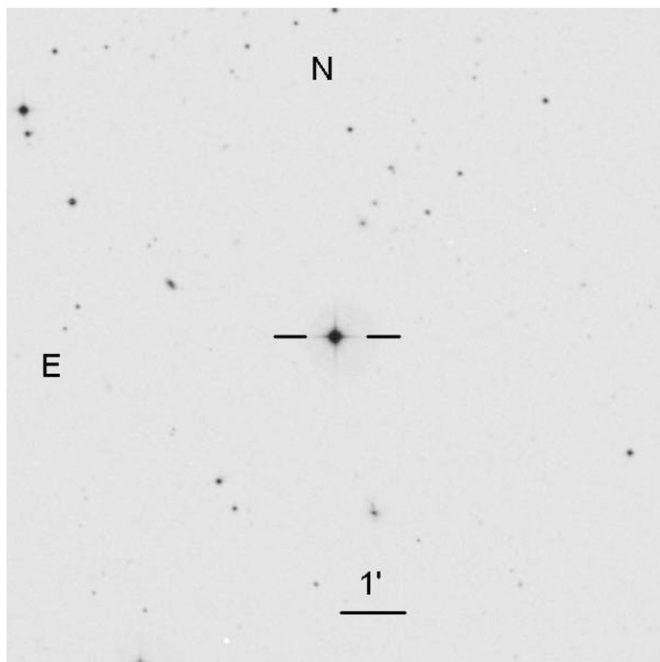
Figure 2. Field, 10′ on a side, of the star HD 2892.
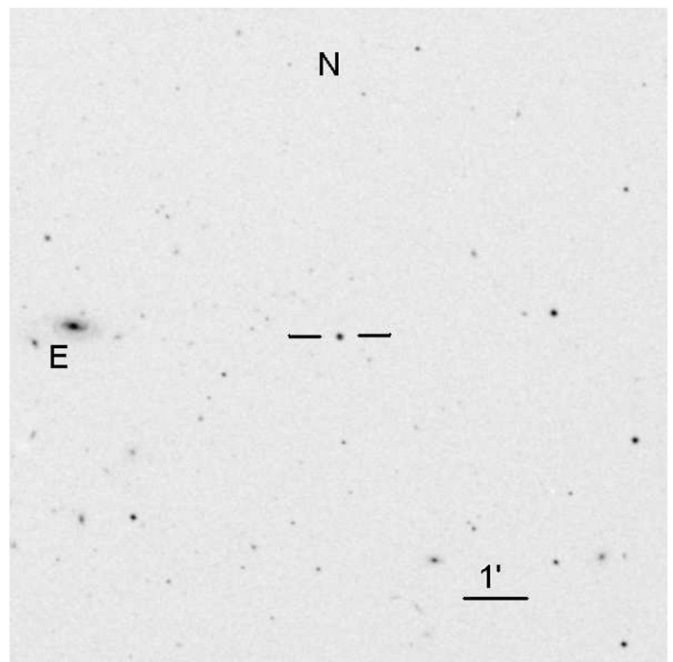
Figure 3. Field, 10′ on a side, of the star PG0029+024.
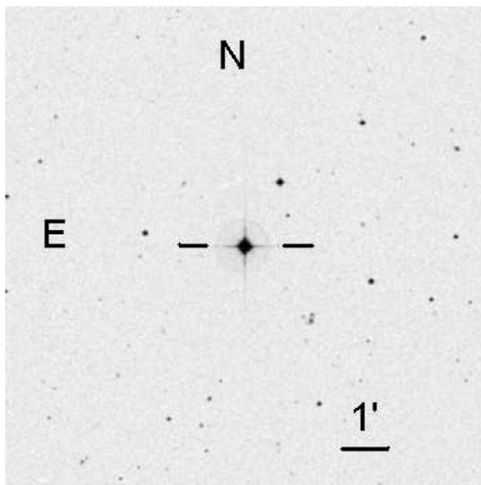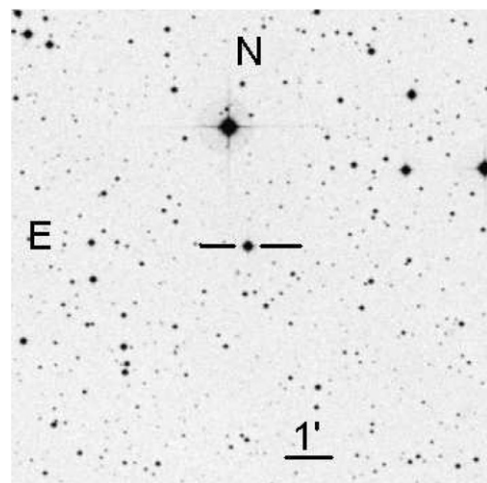
Figure 4. Field, 10′ on a side, of the star BD −15 115.
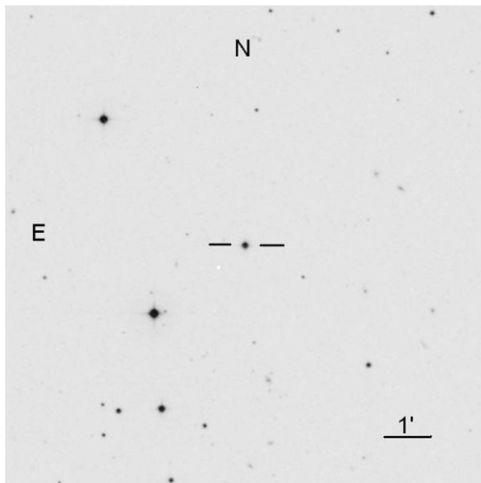
Figure 5. Field, 10′ on a side, of the star PG0039+049.
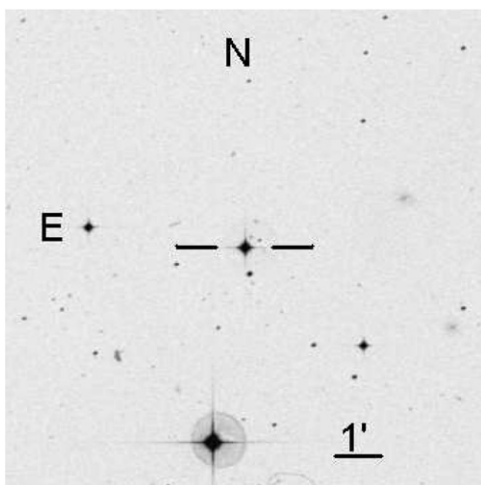
Figure 6. Field, 10′ on a side, of the star BD −11 162.
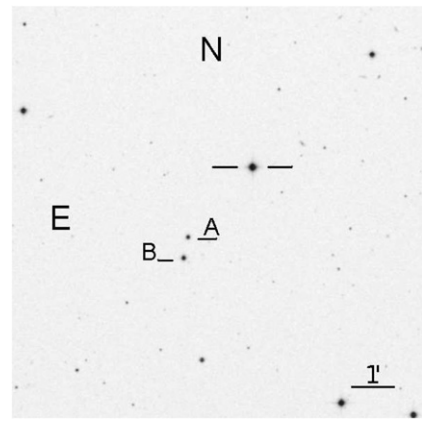
Figure 7. Field, 10′ on a side, of the star Feige 11.
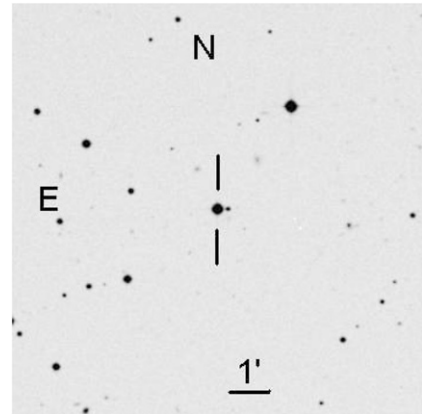
Figure 8. Field, 10′ on a side, of the star Feige 16.
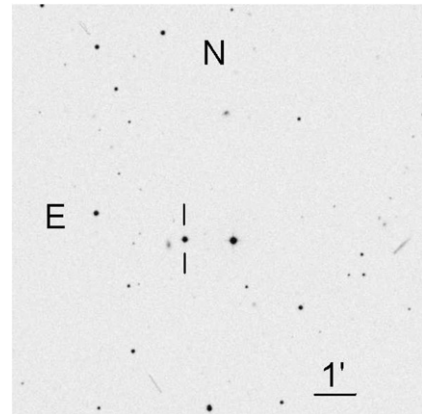
Figure 9. Field, 10′ on a side, of the star G 3-33.
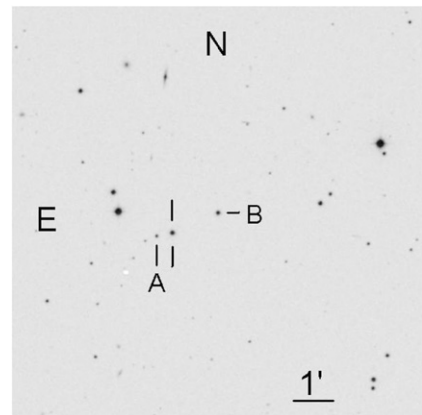
Figure 10. Field, 10′ on a side, of the star PG0220+132.
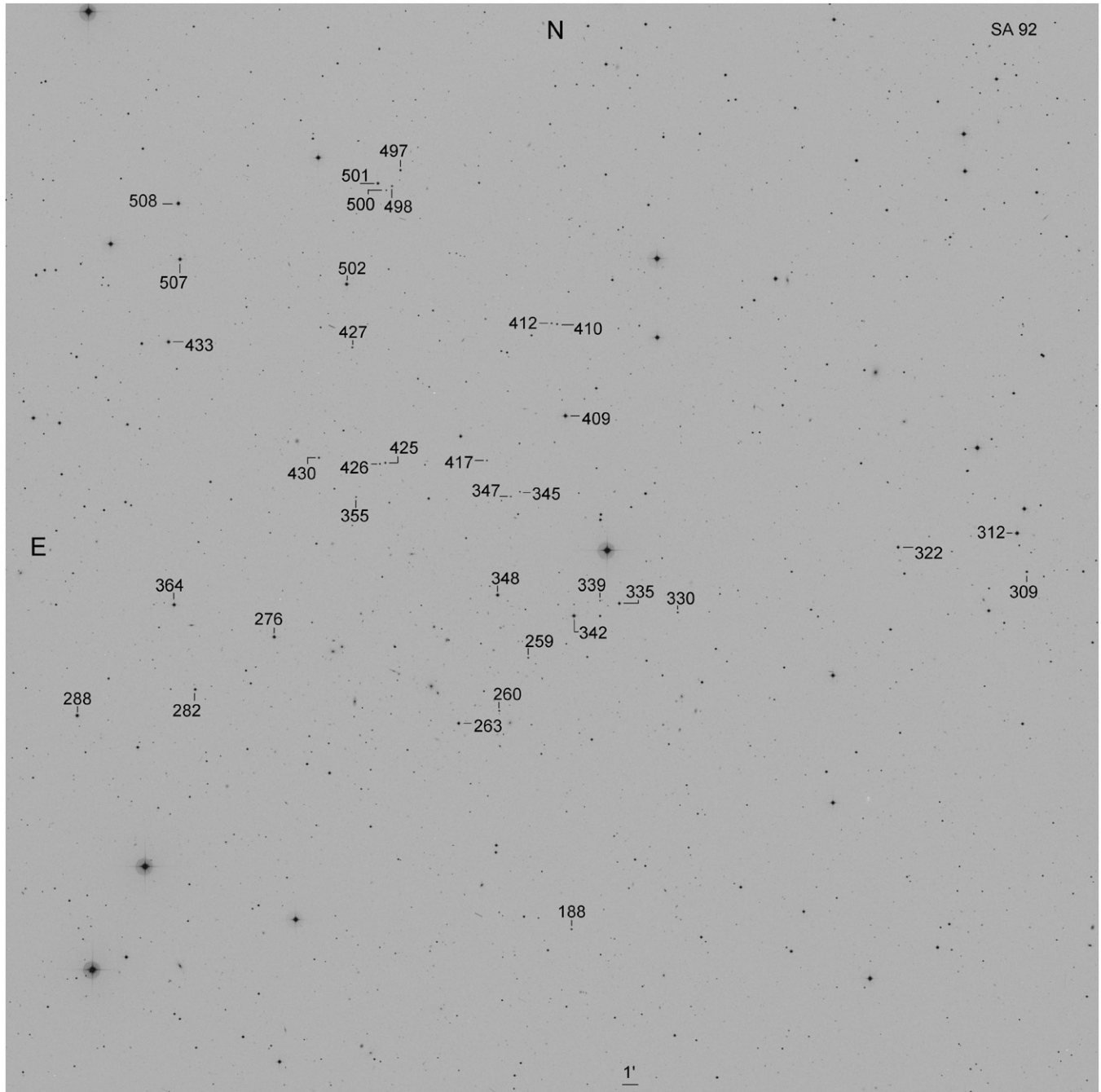
Figure 12. Field, 70′ on a side, of SA 92.
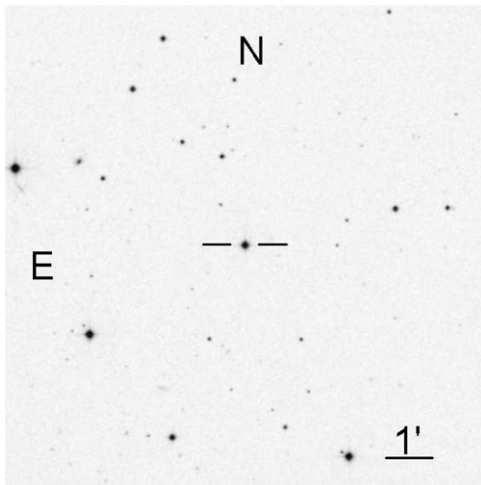
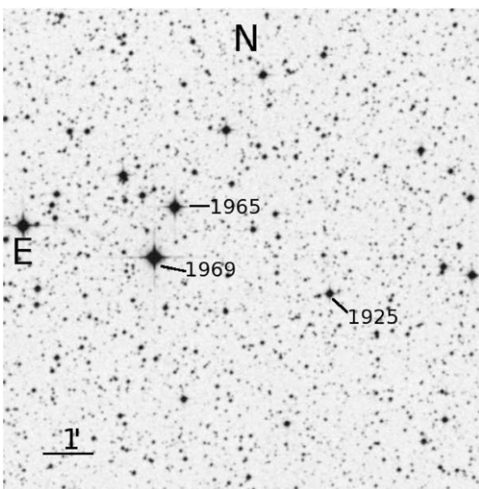**Figure 11.** Field, 10′ on a side, of the star Feige 22.
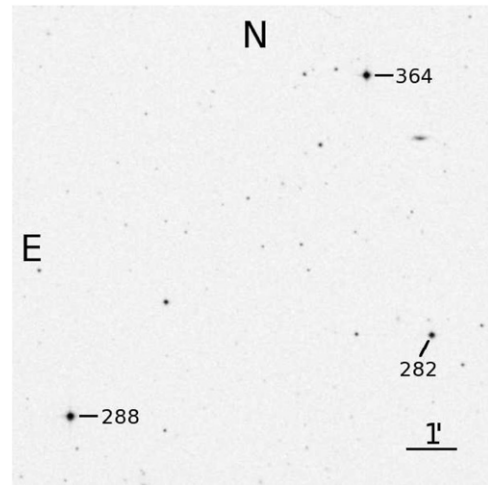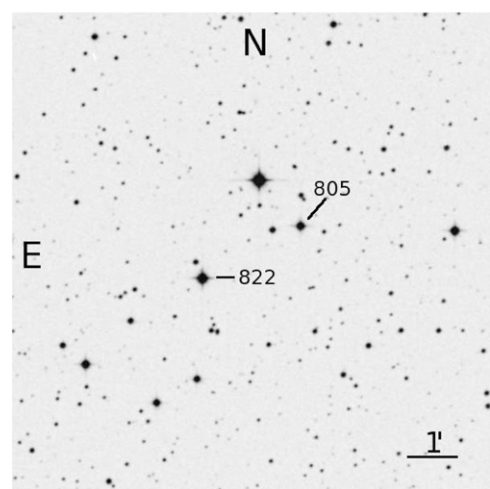

Figure 15. Field, 10′ on a side, of SA 92 SF3.
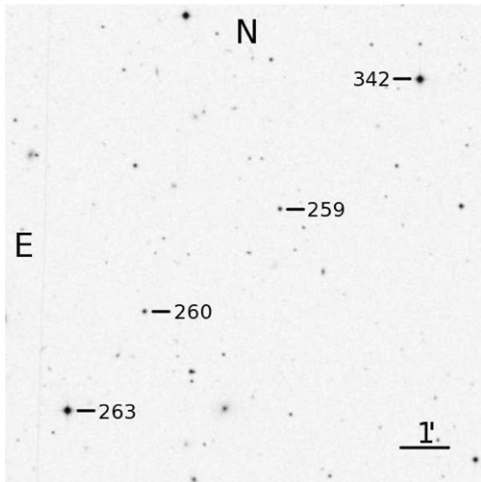
Figure 13. Field, 10′ on a side, of SA 92 SF1.
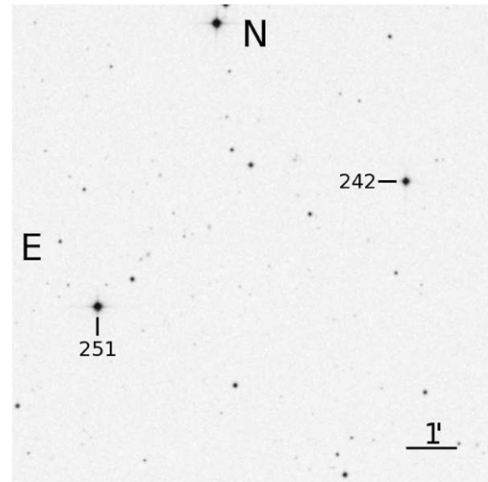
Figure 18. Field, 10′ on a side, of SA 94 SF1.
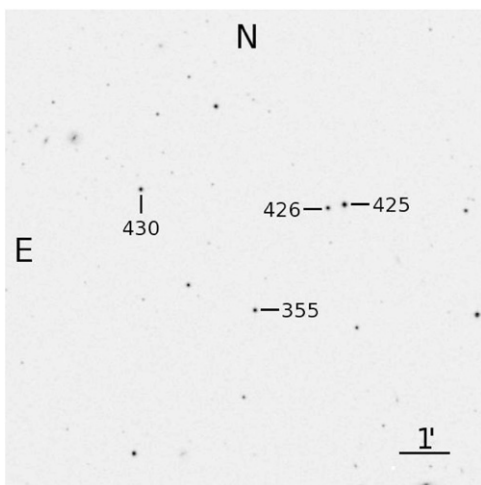
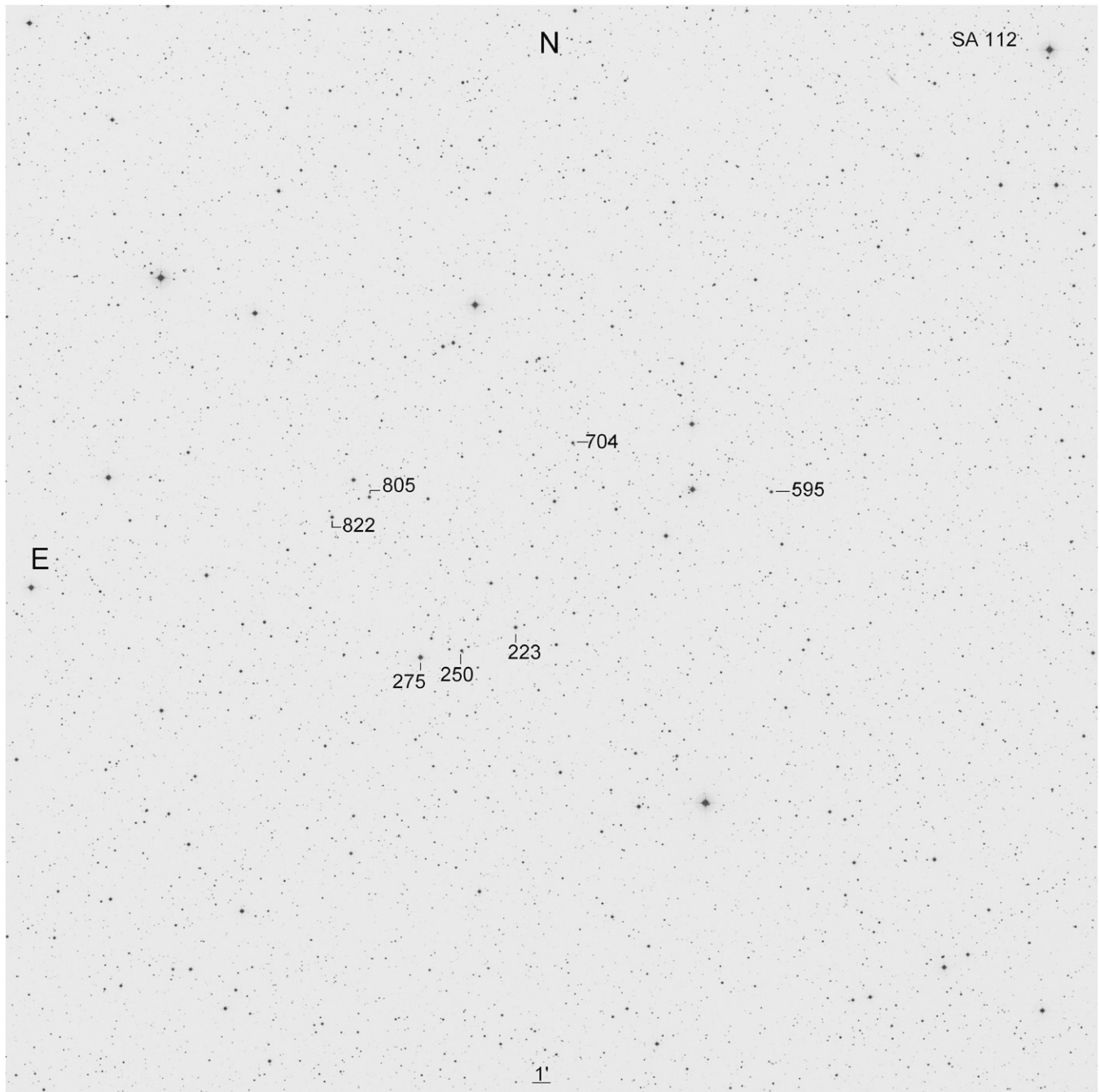**Figure 14.** Field, 10′ on a side, of SA 92 SF2.
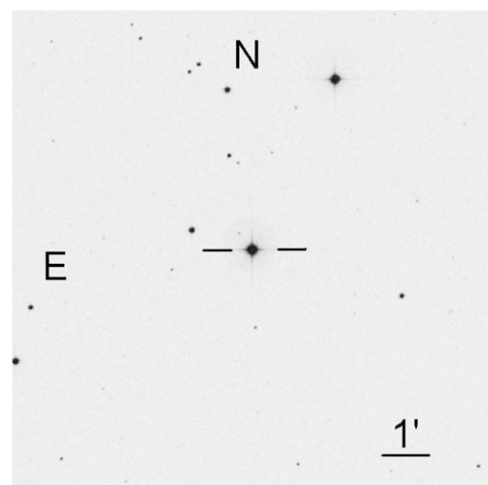
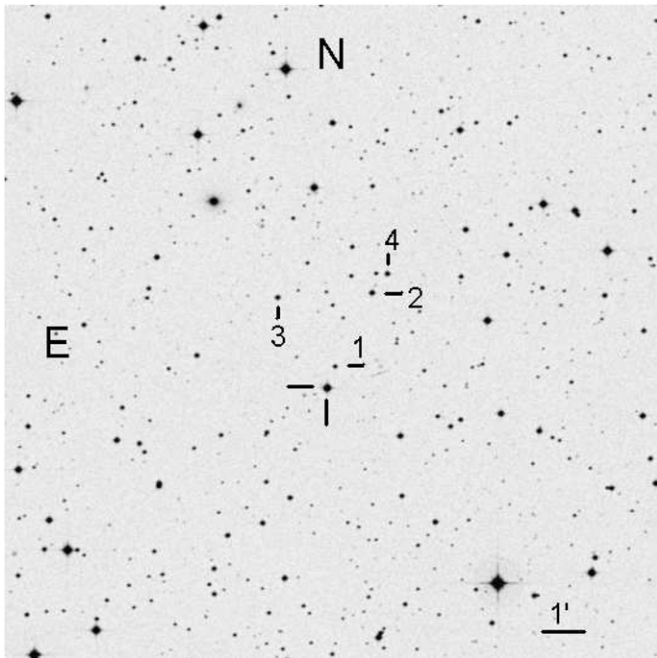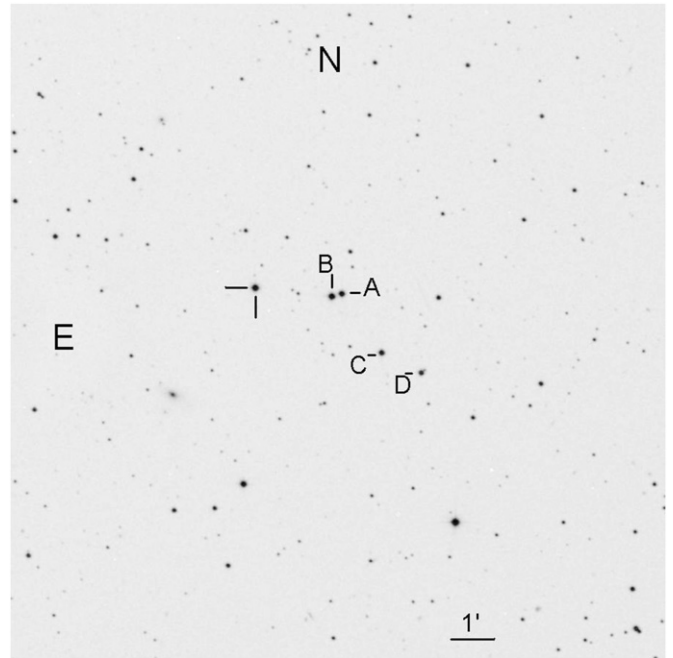**Figure 21.** Field, 10′ on a side, of the star BD −2 524.
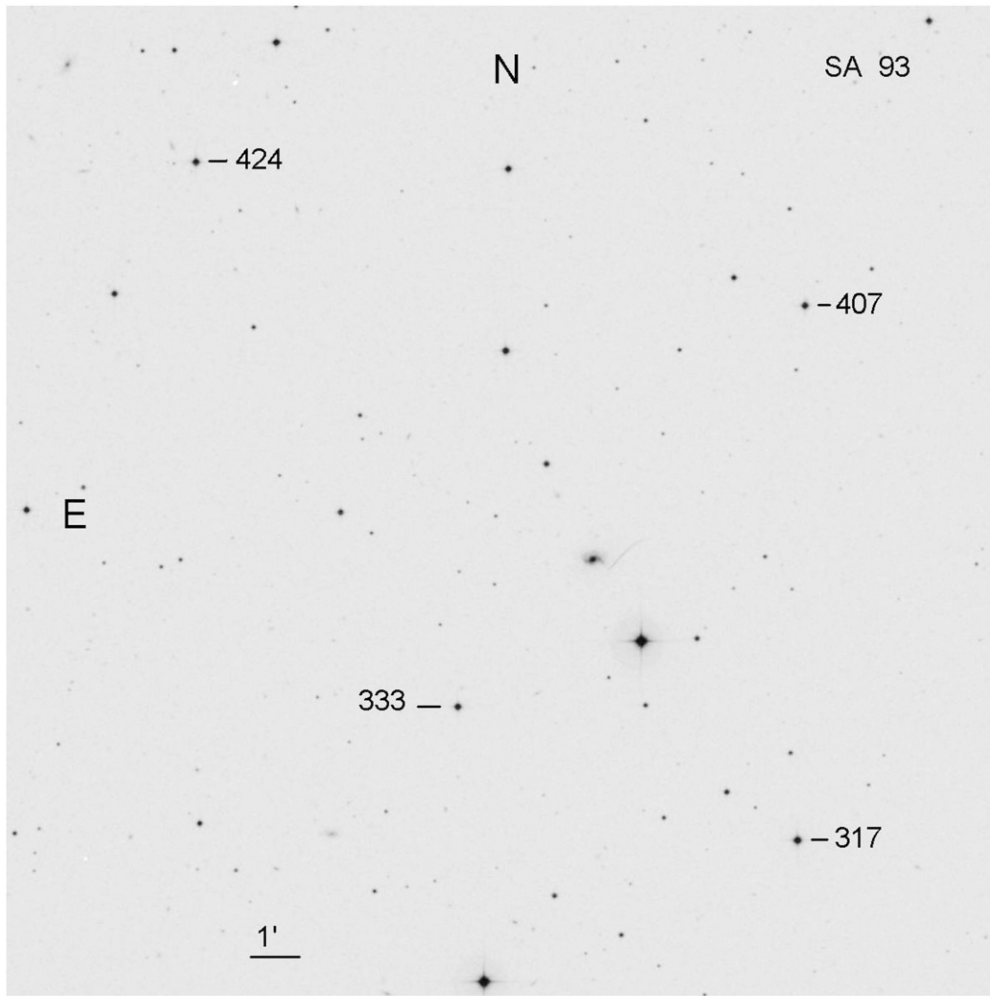
Figure 16. Field, 20′ on a side, of SA 93.
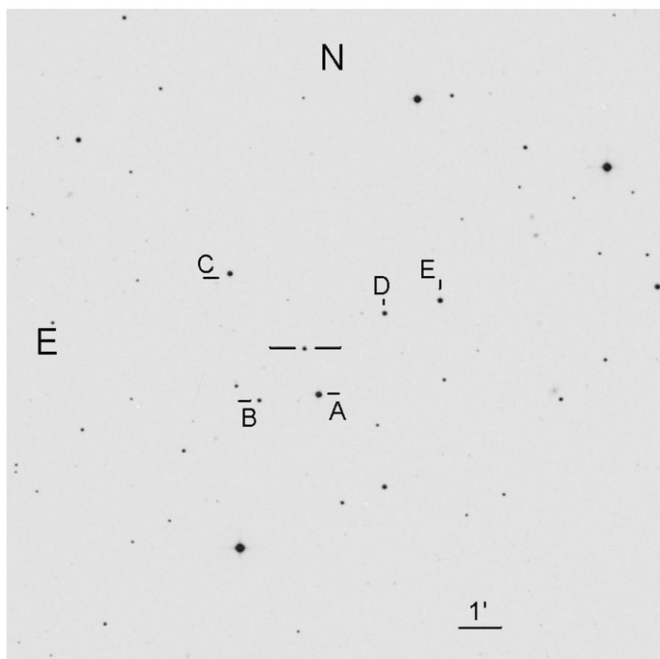
Figure 19. Field, 15′ on a side, of the sequence in the vicinity of the star PG0231+051.
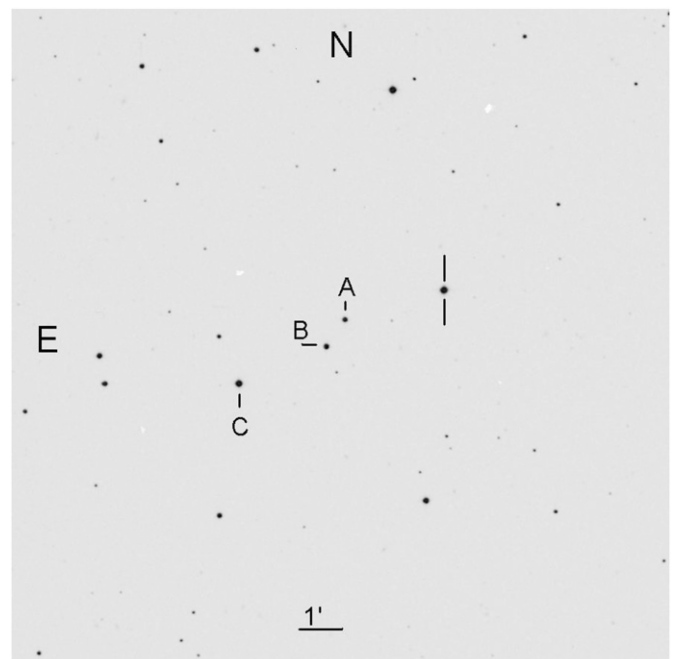
Figure 20. Field, 15′ on a side, of the sequence in the vicinity of the star Feige 24.
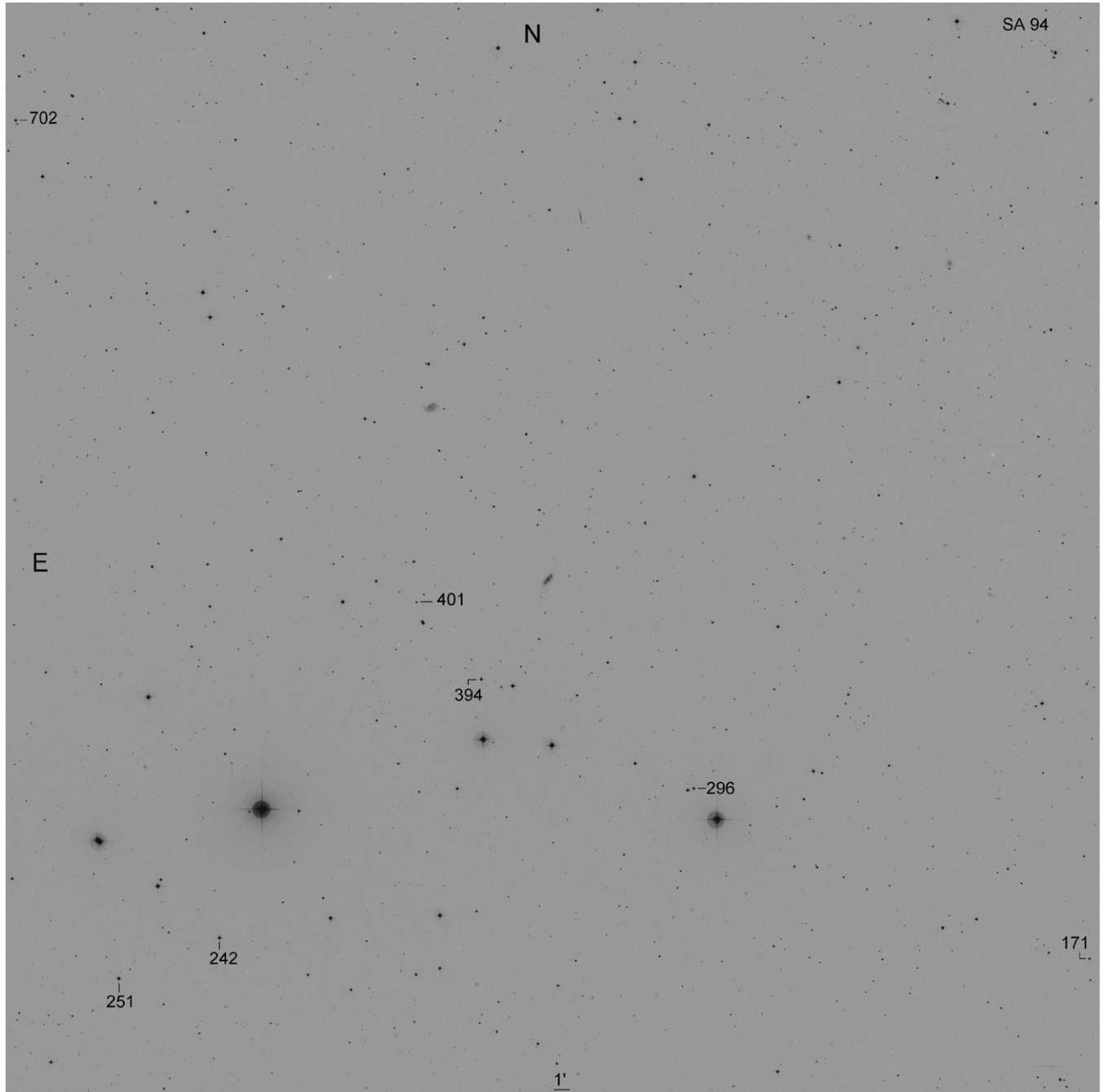
Figure 17. Field, 70′ on a side, of SA 94.
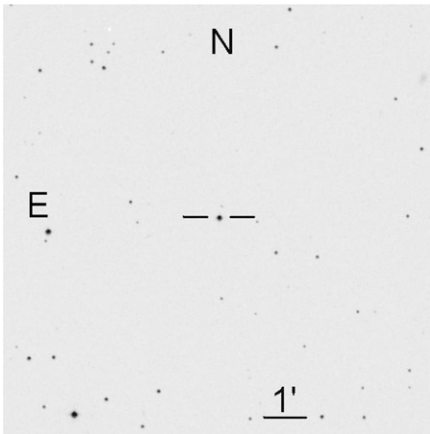
Figure 22. Field, 10′ on a side, of the star GD 50.
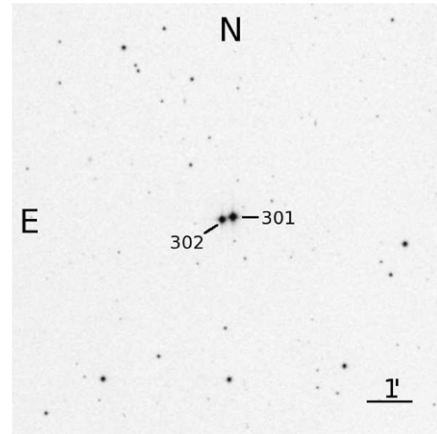
Figure 27. Field, 10′ on a side, of SA 95 SF1.
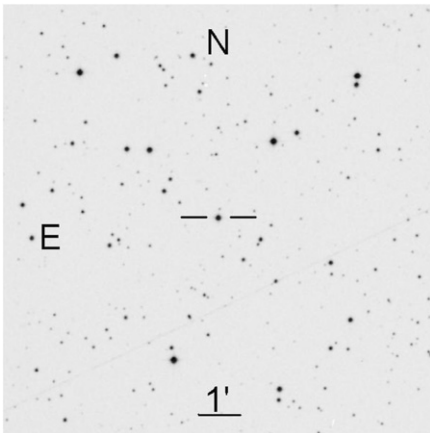
Figure 23. Field, 10′ on a side, of the star G 97-42.
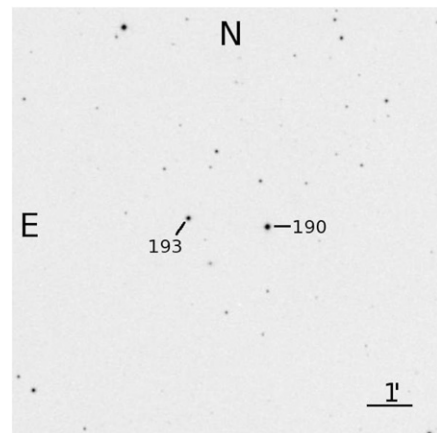
Figure 28. Field, 10′ on a side, of SA 95 SF2.
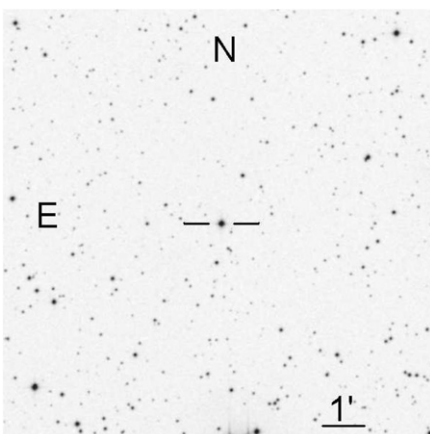
Figure 24. Field, 10′ on a side, of the star G 102-22.
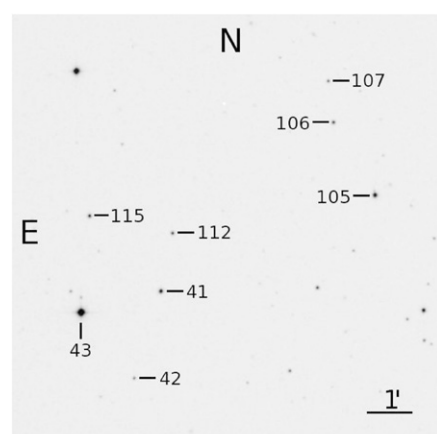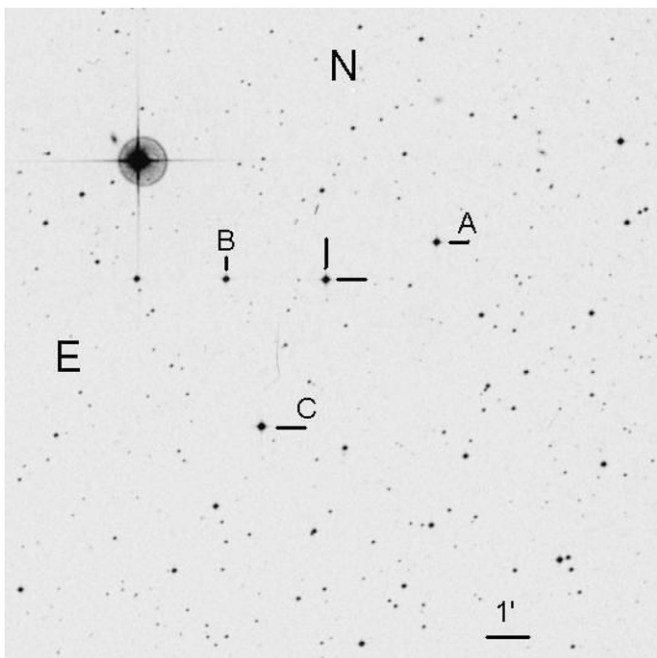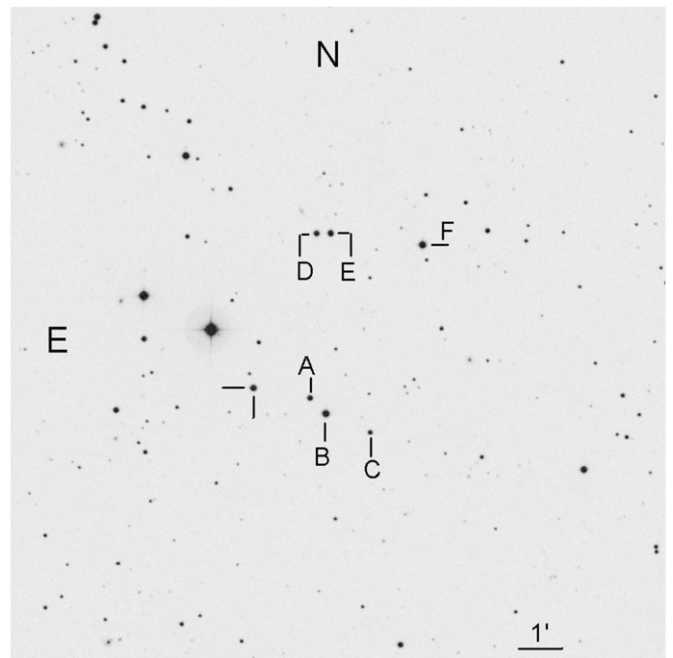

Figure 29. Field, 10′ on a side, of SA 95 SF3.
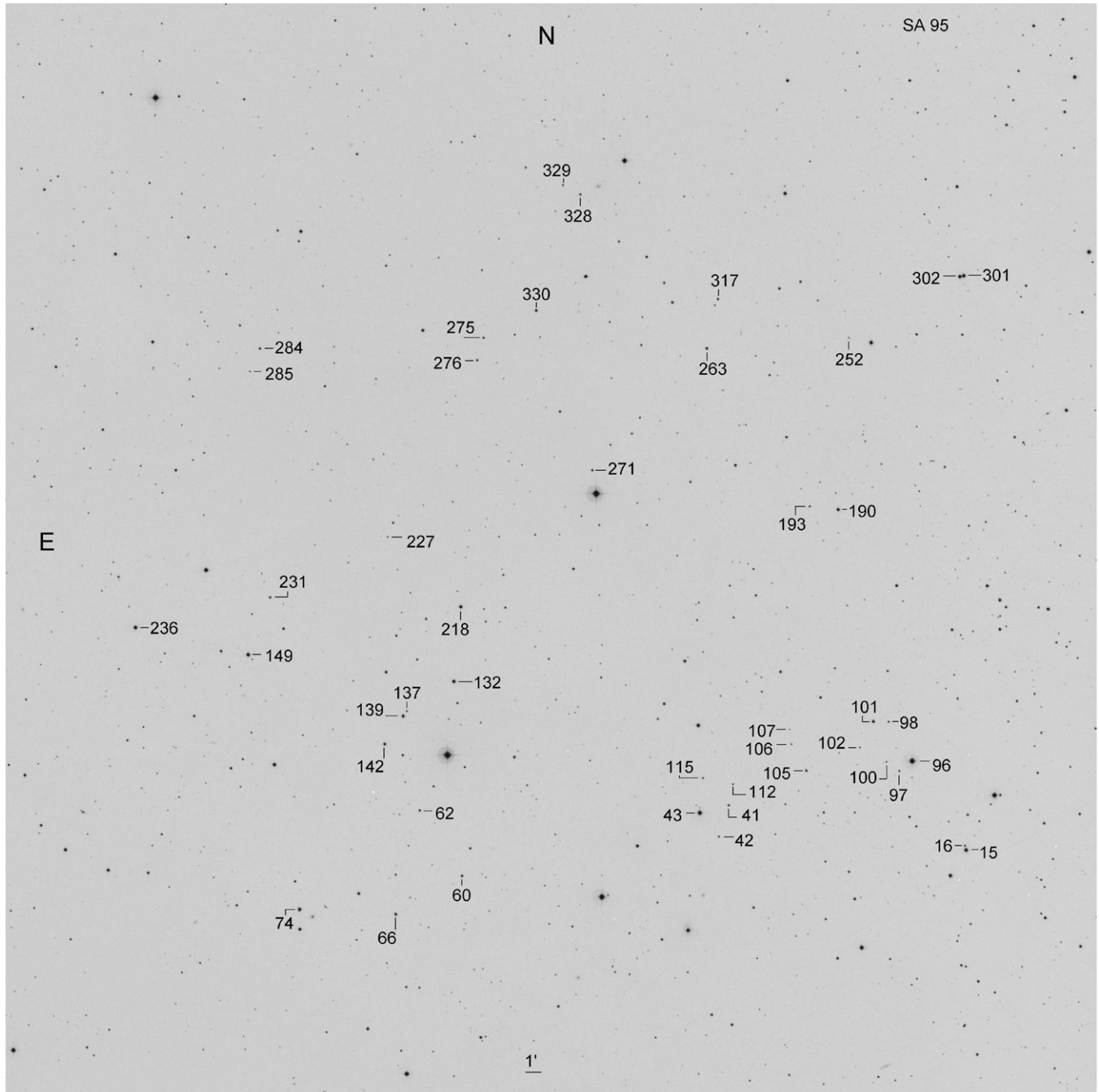
Figure 26. Field, 70′ on a side, of SA 95.
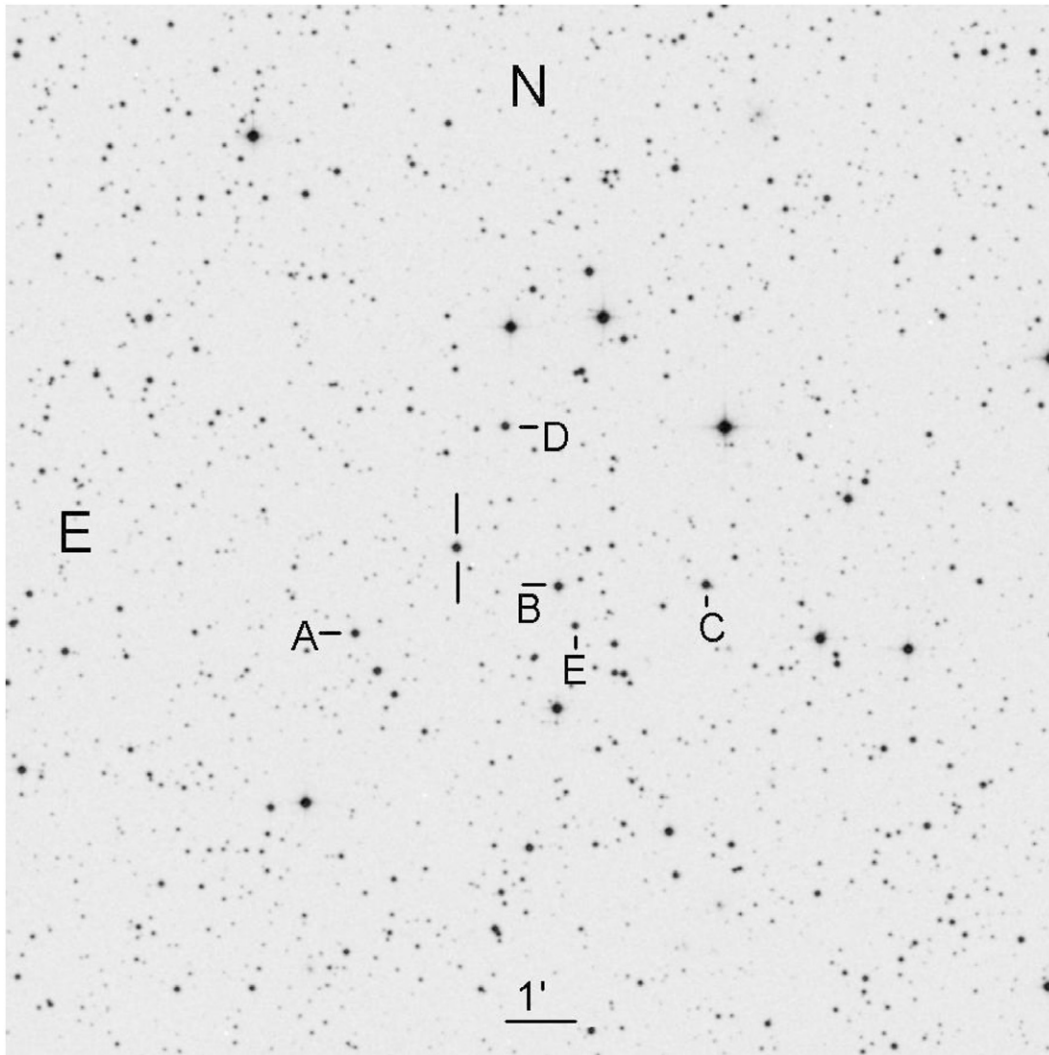
Figure 25. Field, 15′ on a side, of the sequence in the vicinity of the star GD 71.
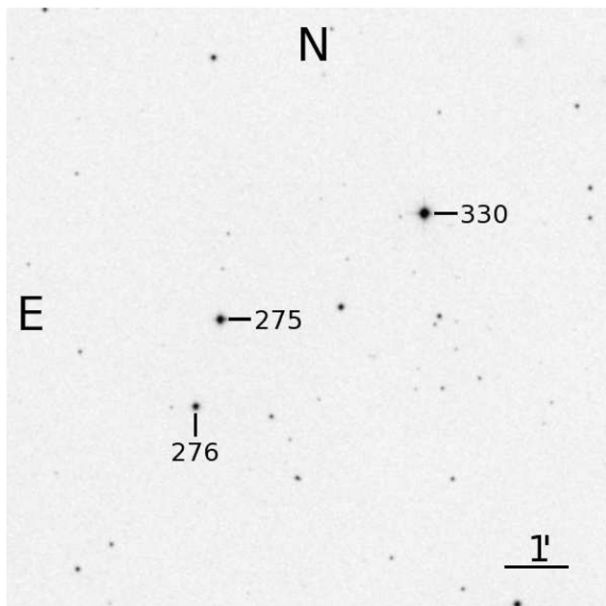
Figure 30. Field, 10′ on a side, of SA 95 SF4.
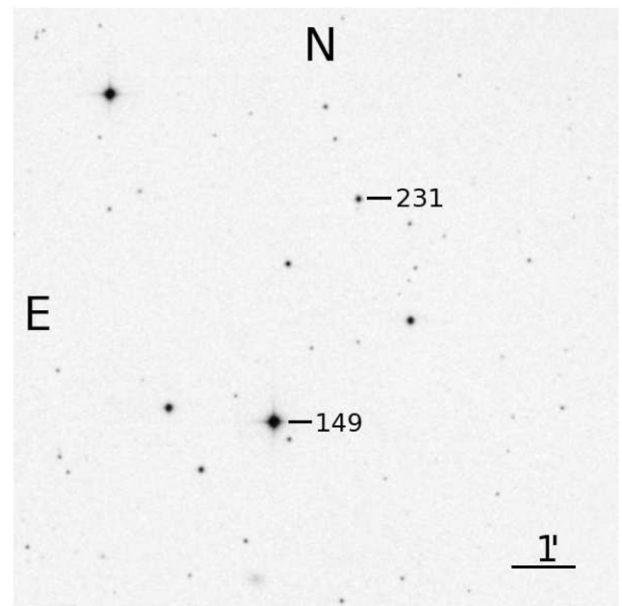
Figure 31. Field, 10′ on a side, of SA 95 SF5.
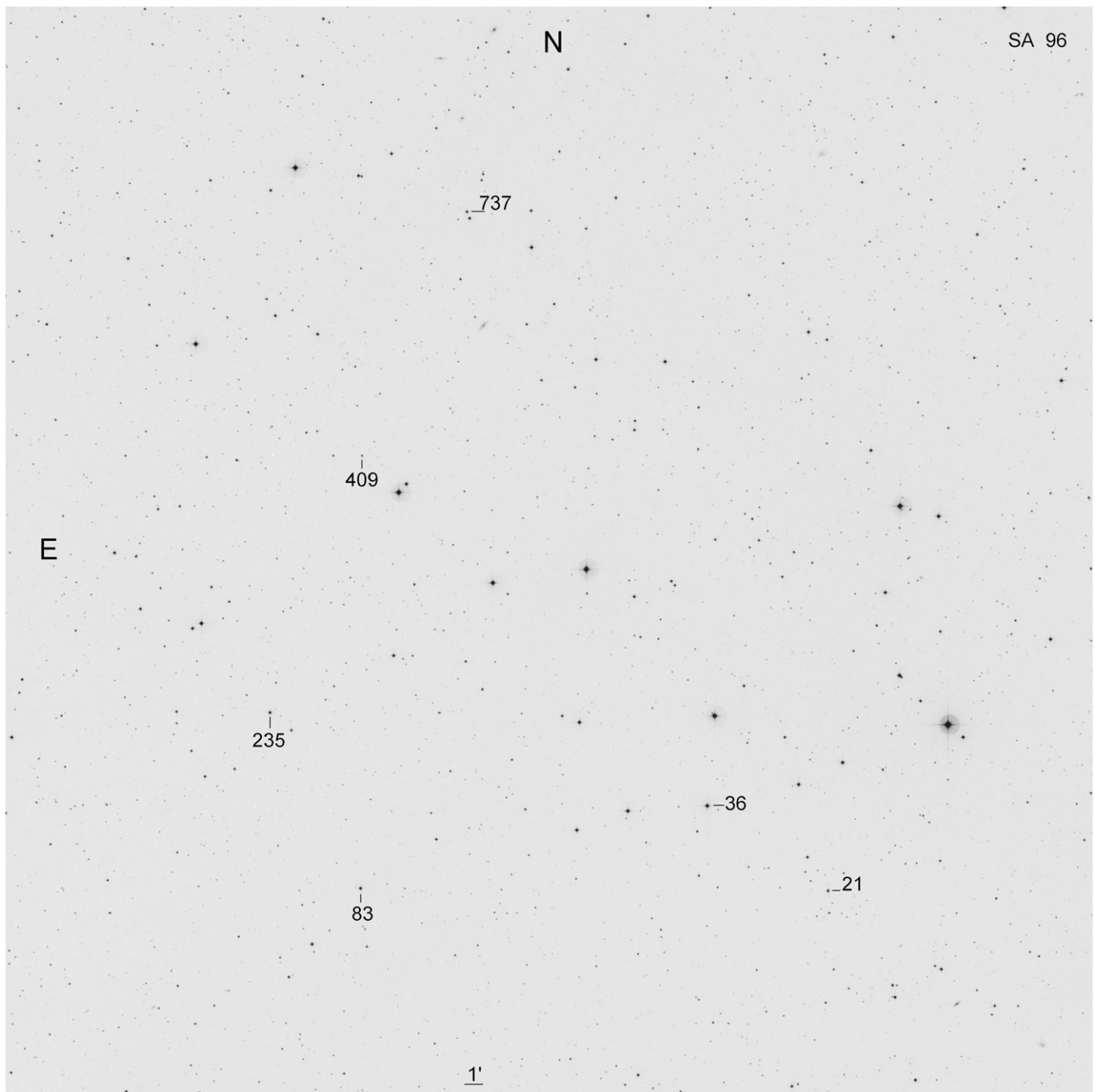
Figure 33. Field, 70′ on a side, of SA 96.
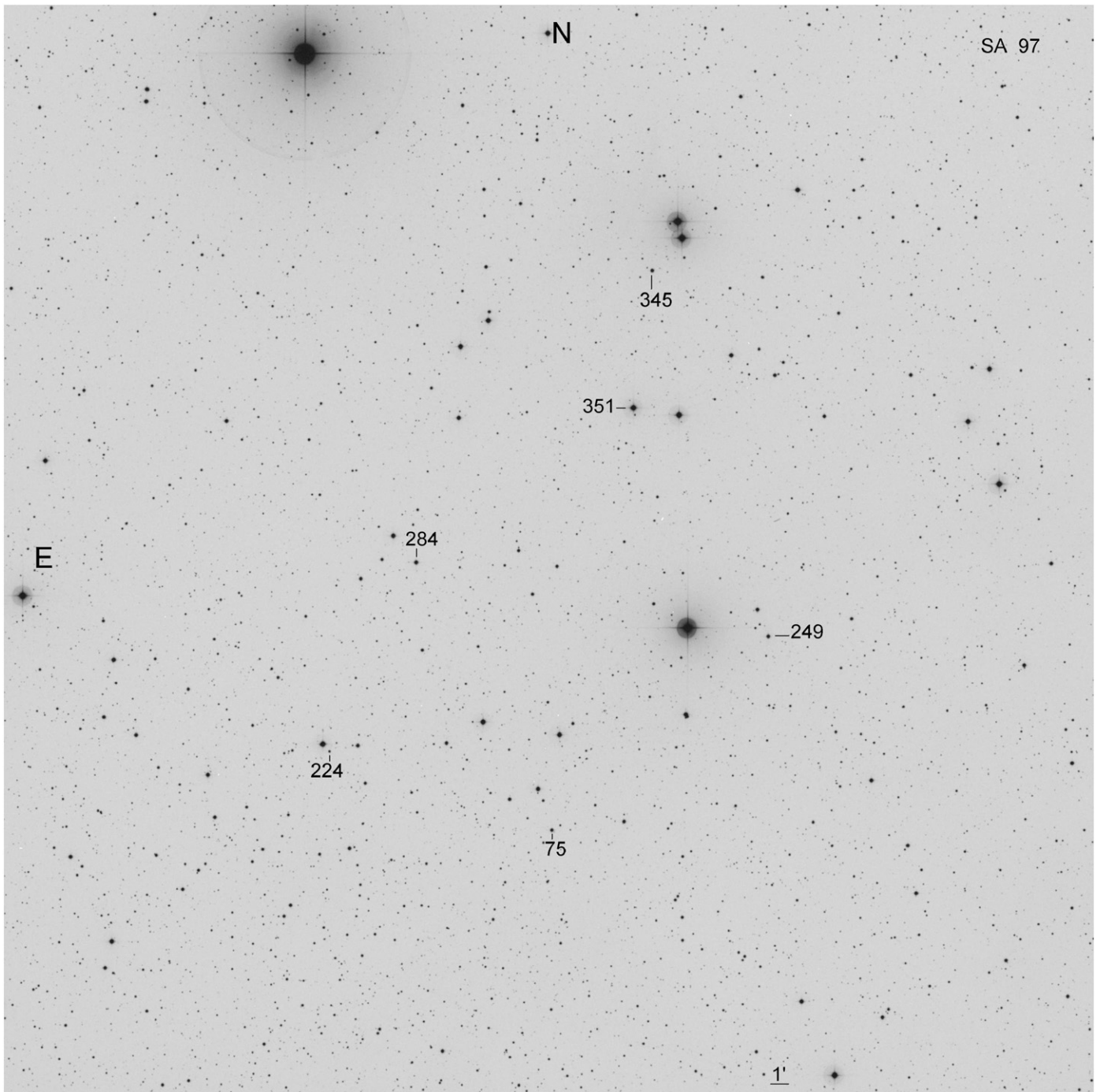
Figure 34. Field, 60′ on a side, of SA 97.
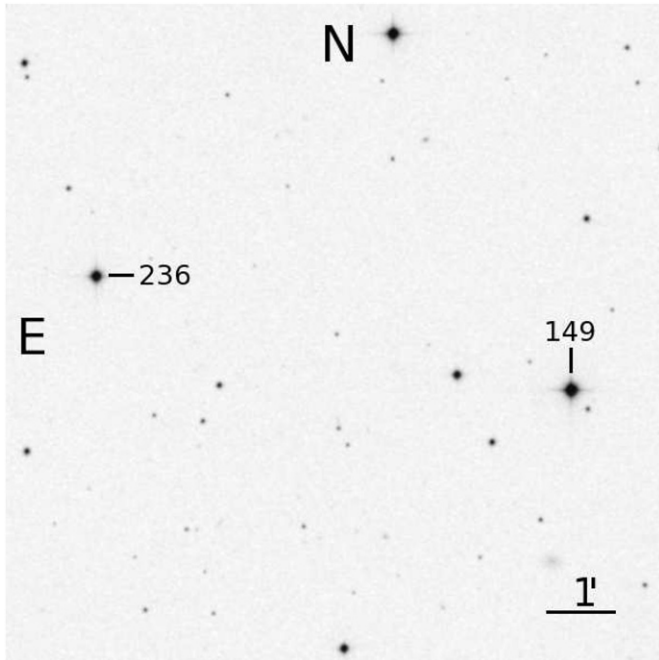
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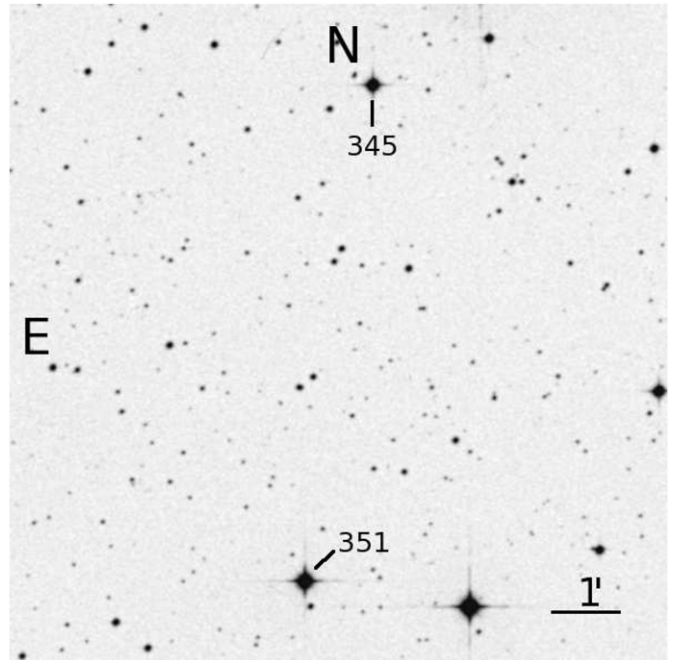
Figure 35. Field, 10′ on a side, of SA 97 SF1.
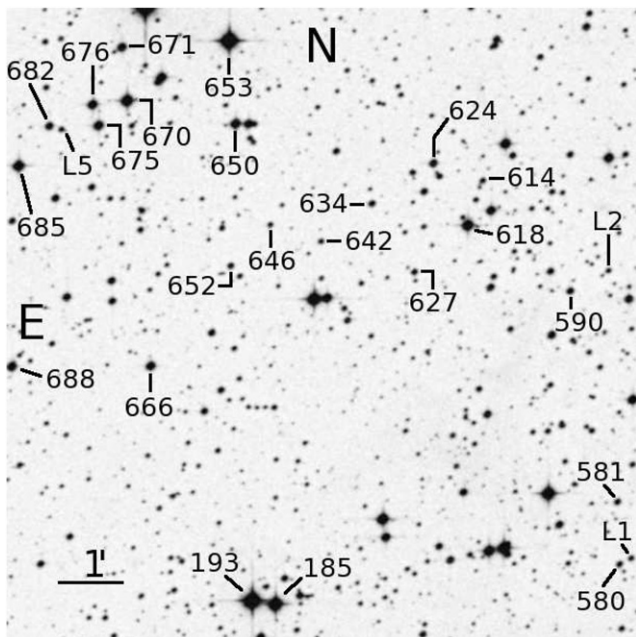
Figure 37. Field, 10′ on a side, of SA 98 SF1.
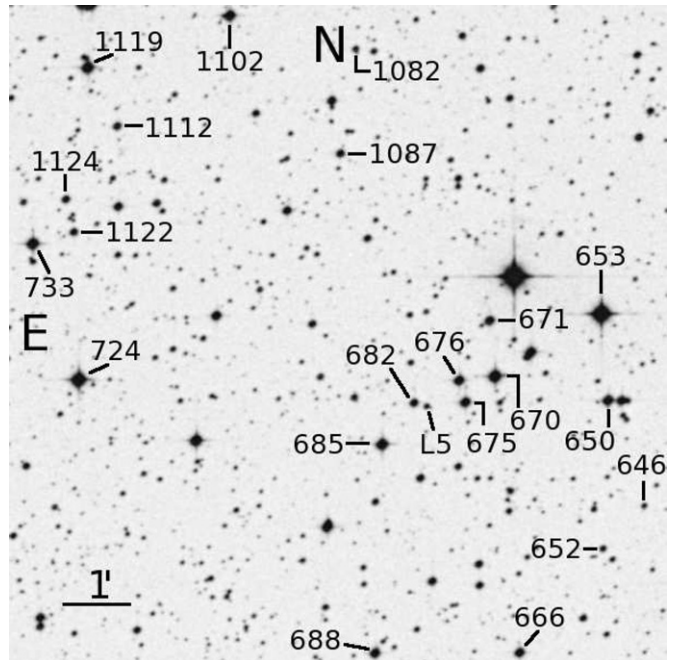
Figure 38. Field, 10′ on a side, of SA 98 SF2.
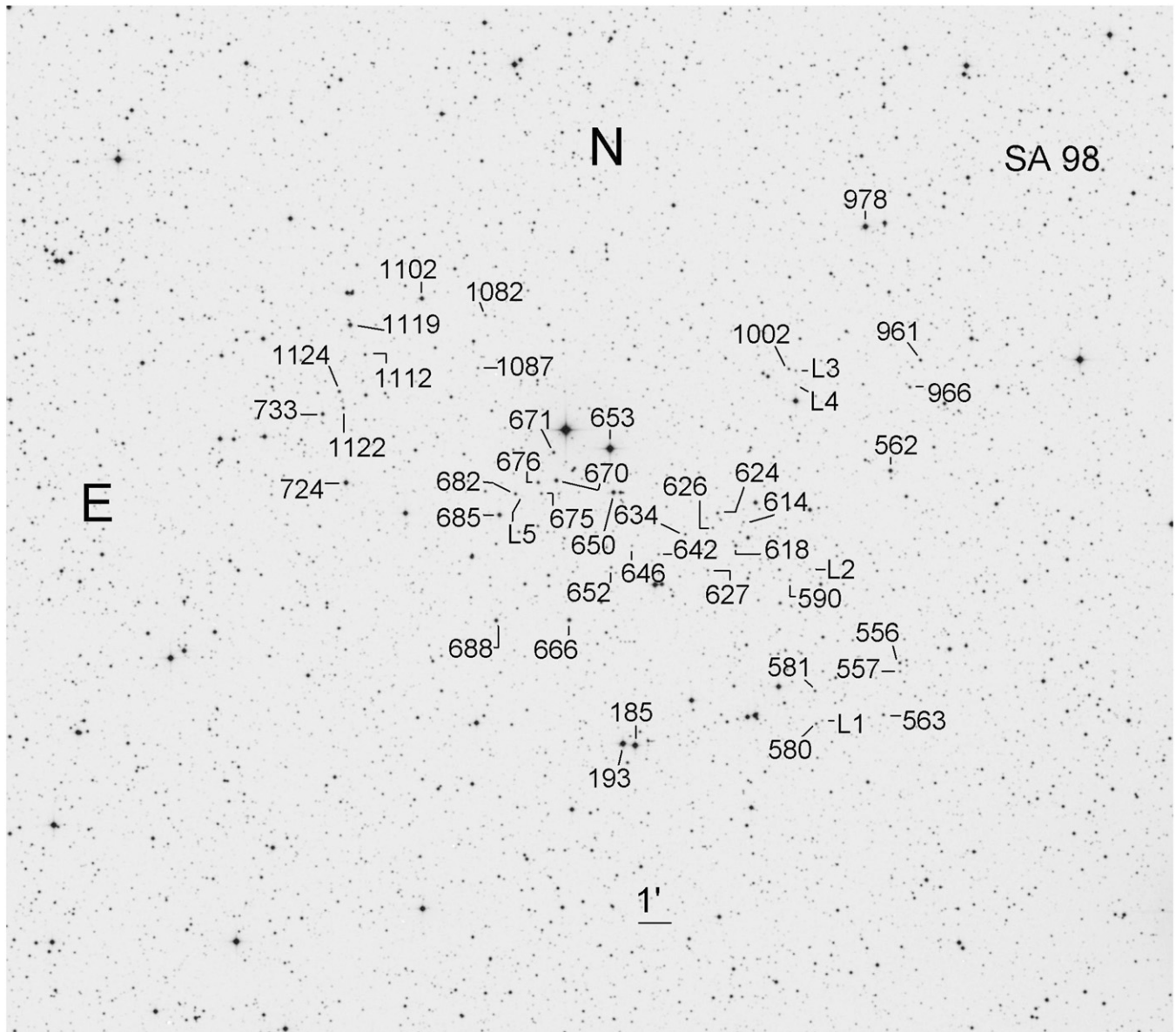
Figure 36. Field, 30′ on a side, of SA 98.
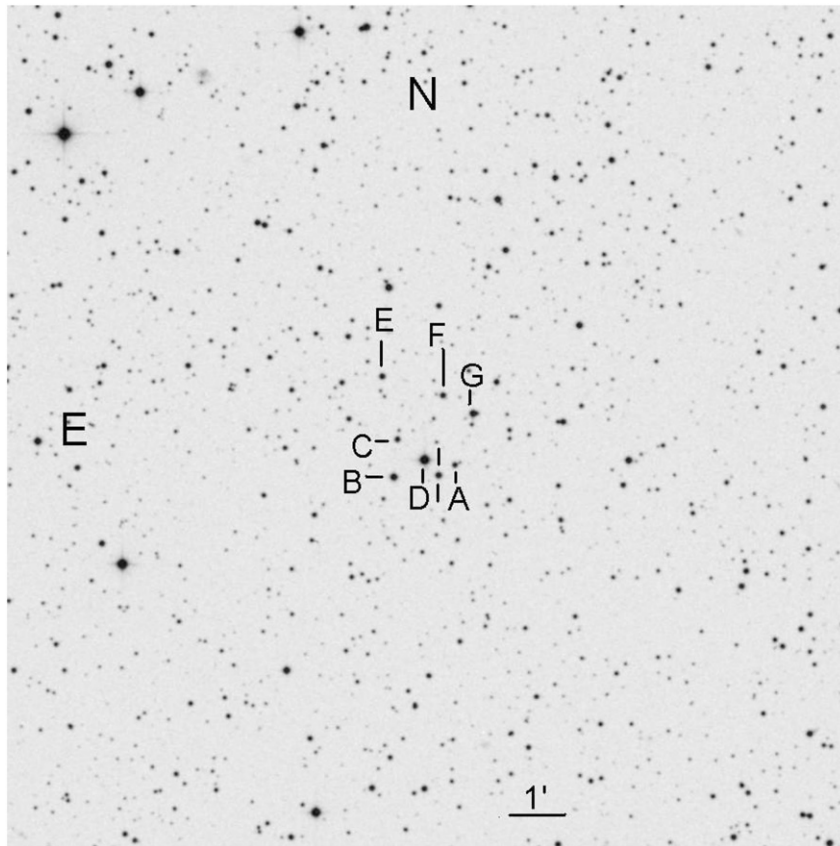
Figure 39. Field, 15′ on a side, of the sequence in the vicinity of the star Rubin 149.
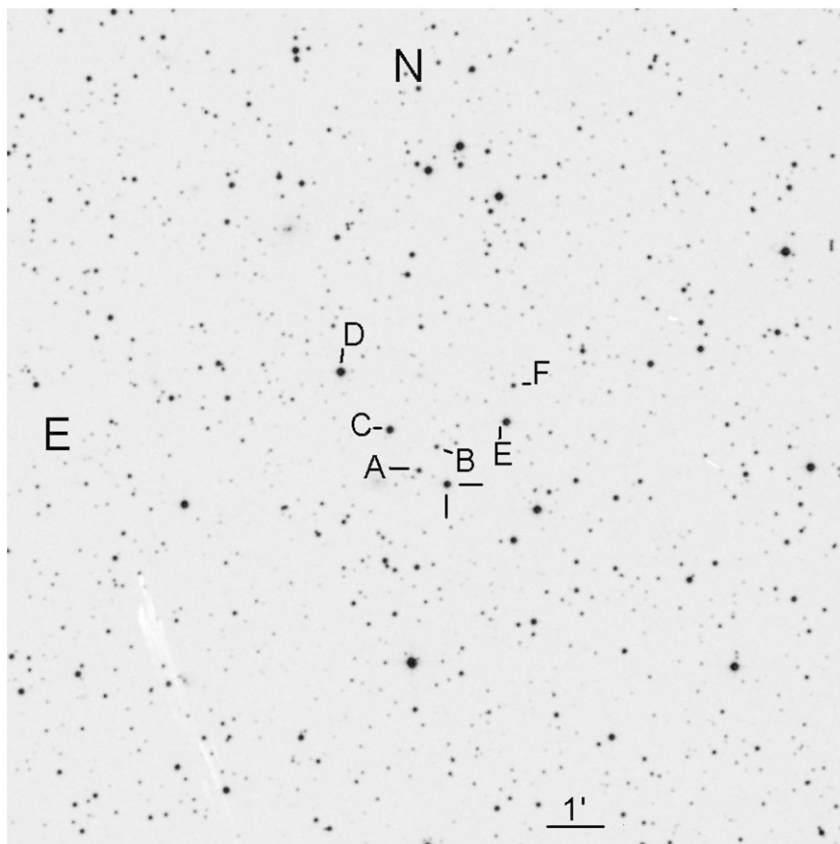
**Figure 40.** Field, 15′ on a side, of the sequence in the vicinity of the star Rubin 152.
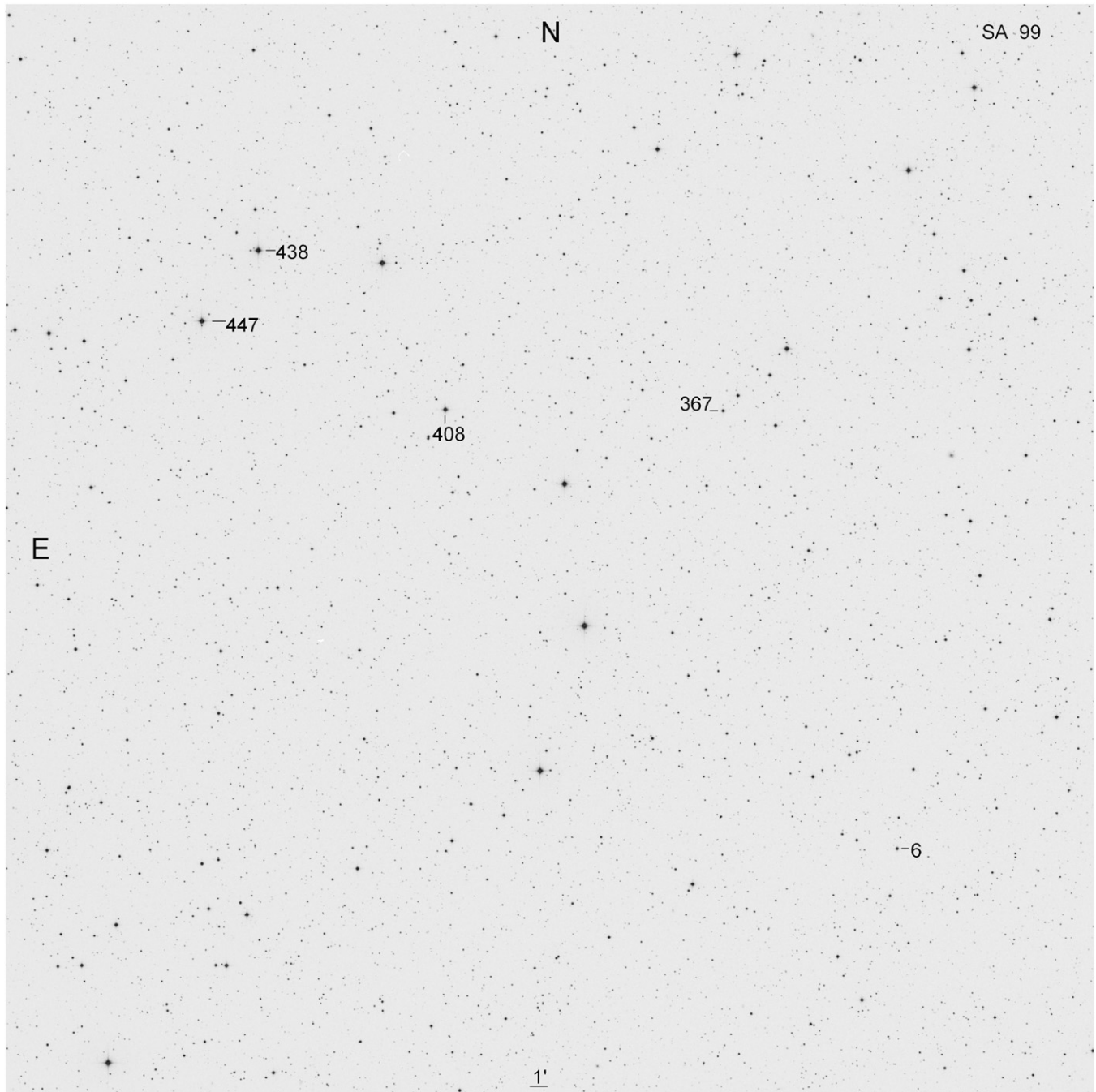
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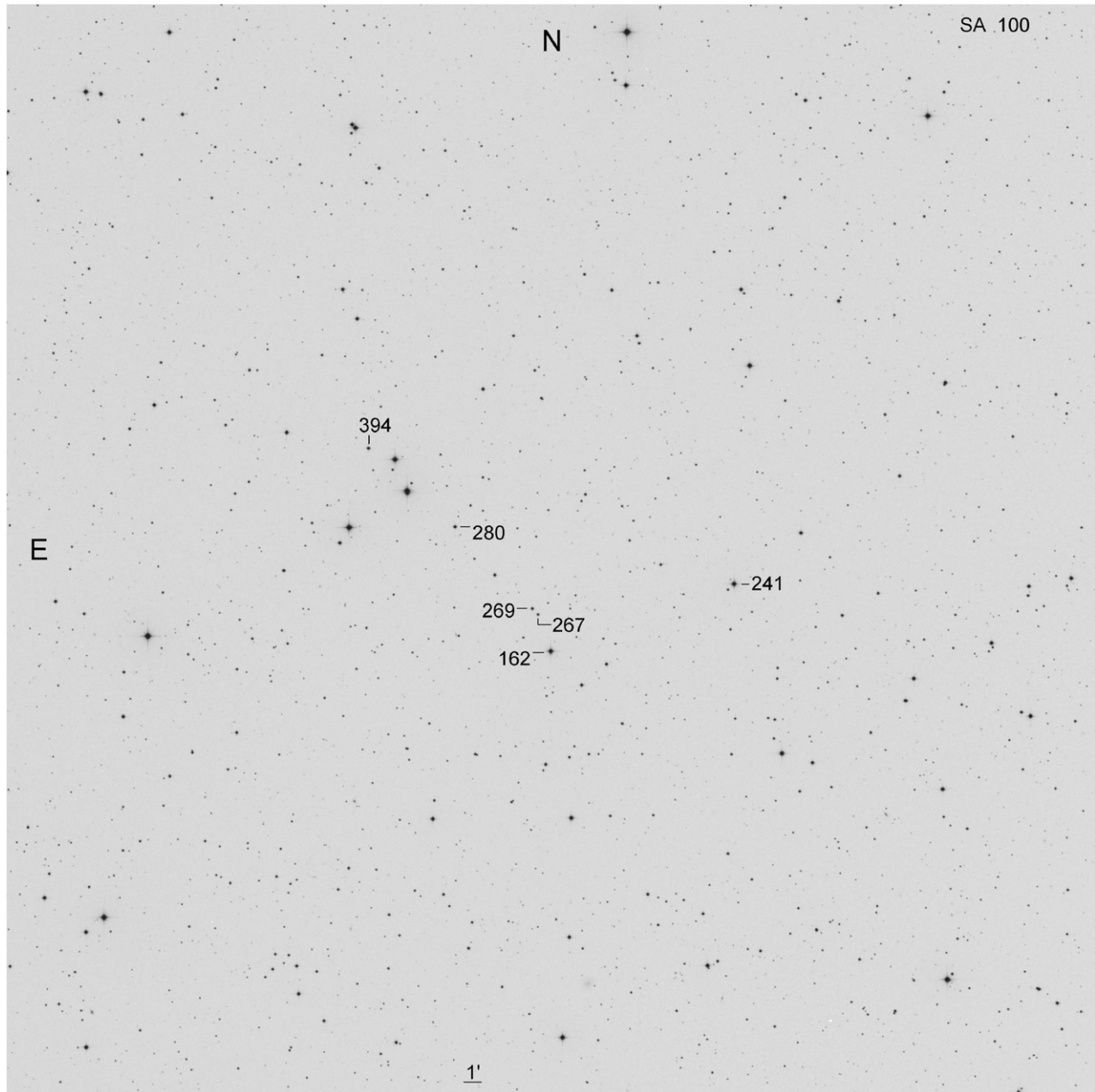
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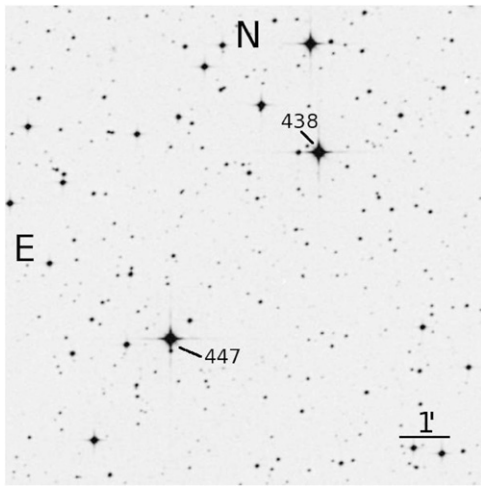
Figure 42. Field, 10′ on a side, of SA 99 SF1.
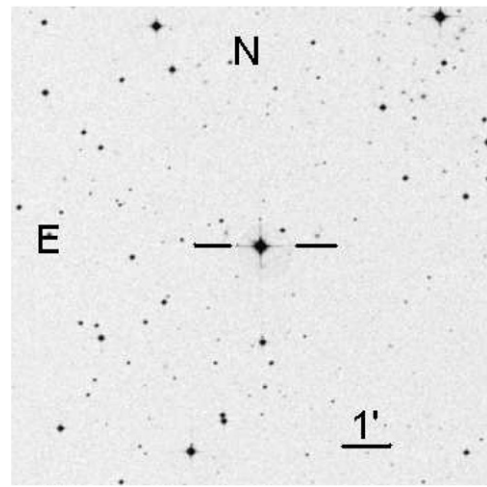
Figure 48. Field, 10′ on a side, of the star BD −12 2918.
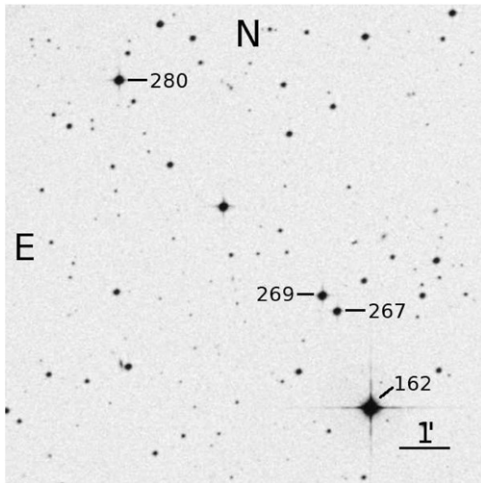
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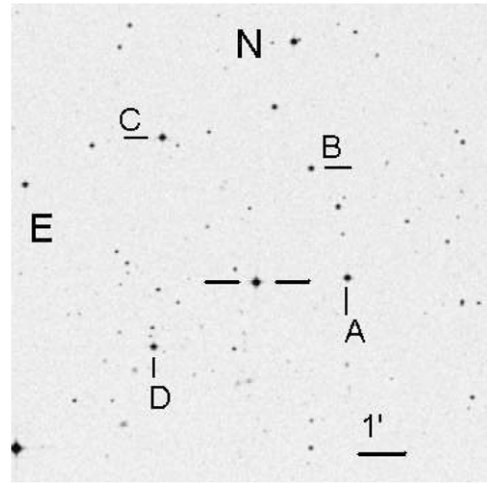
Figure 49. Field, 10′ on a side, of the star GD 108.
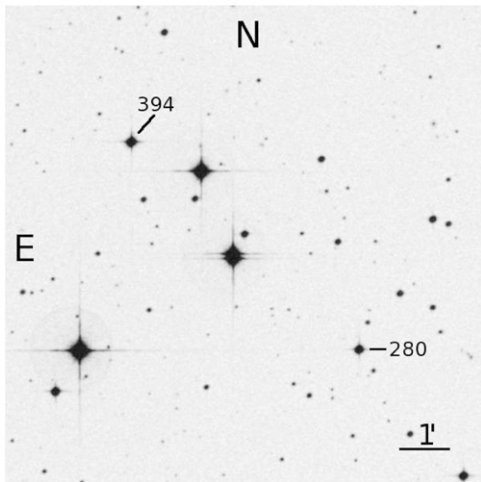
Figure 45. Field, 10′ on a side, of SA 100 SF2.
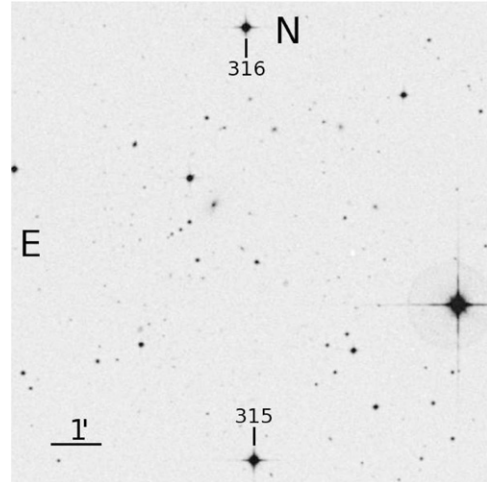
Figure 51. Field, 10′ on a side, of SA 101 SF1.
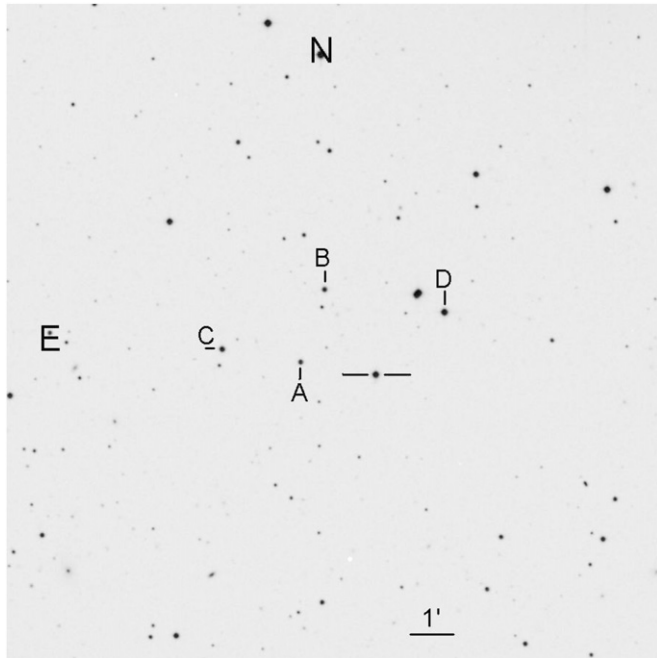
Figure 46. Field, 15′ on a side, of the sequence in the vicinity of the star PG0918+029.
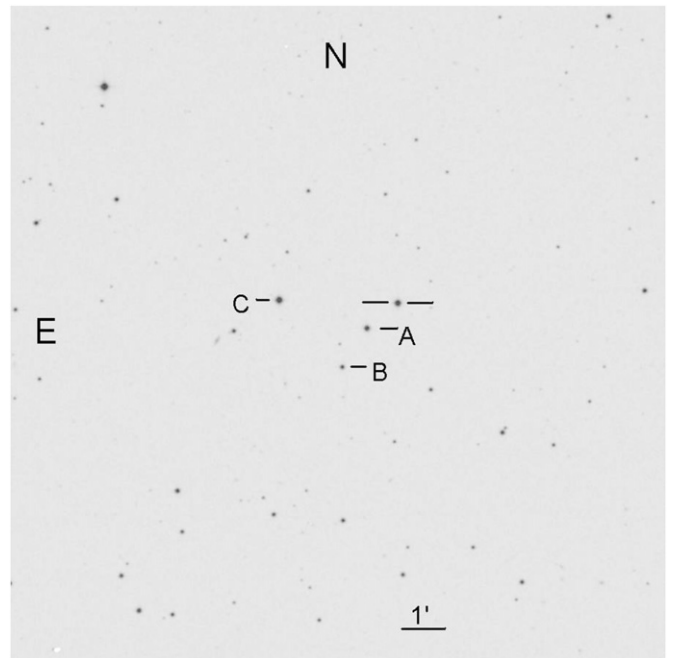
Figure 60. Field, 15′ on a side, of the sequence in the vicinity of the star PG1047+003.
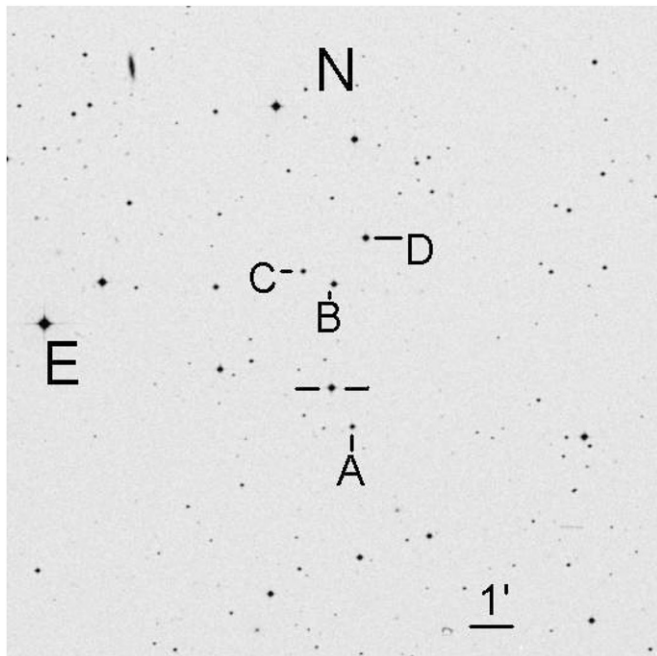
Figure 47. Field, 15′ on a side, of the sequence in the vicinity of the star PG0942−029.
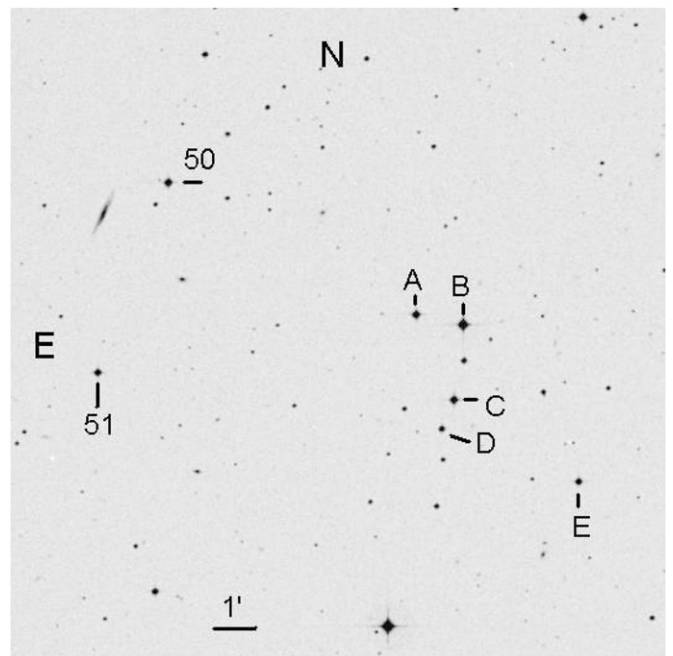
Figure 61. Field, 15′ on a side, of the sequence in the vicinity of the stars G 163-50 and G 163-51.
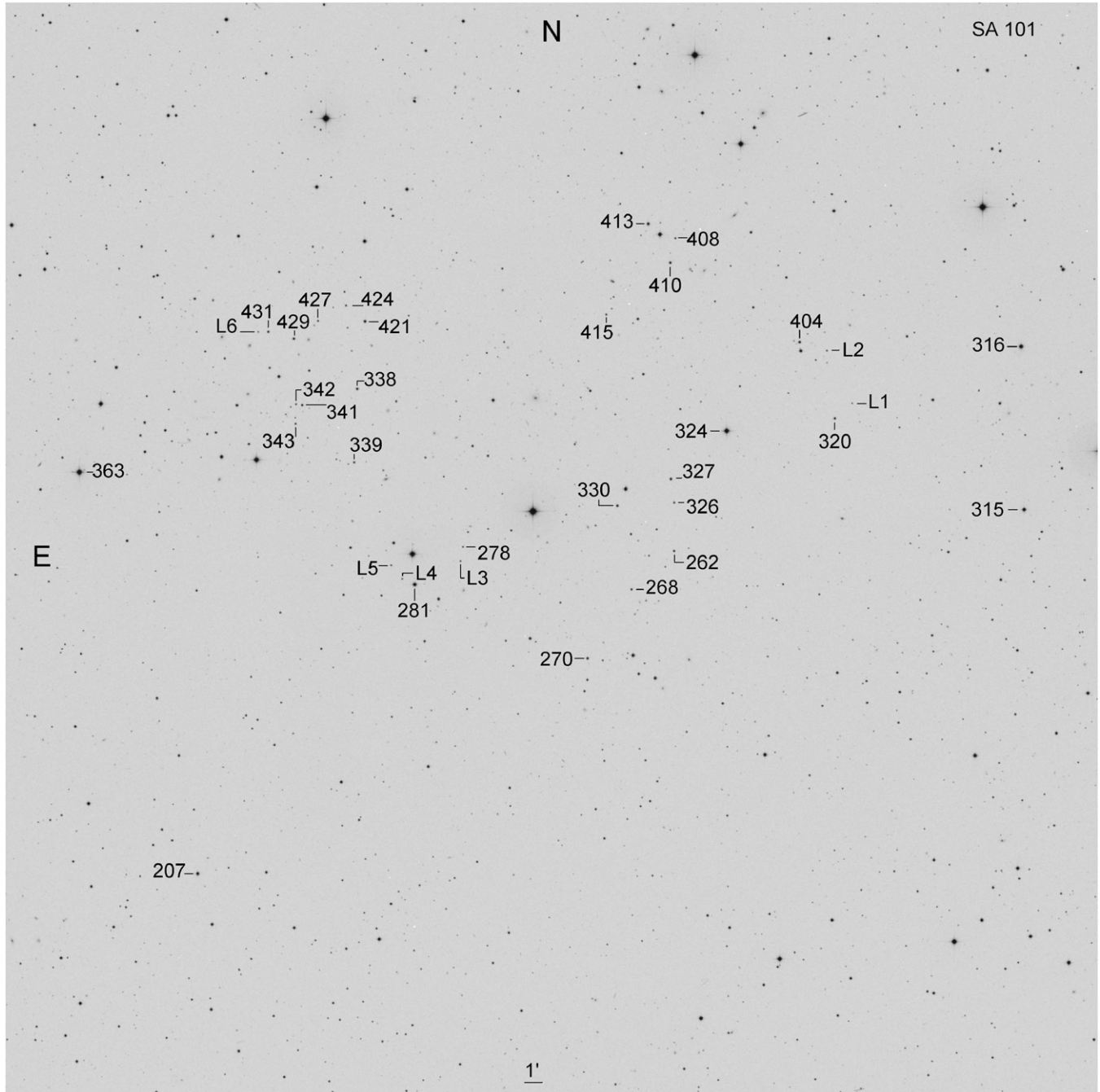
Figure 50. Field, 60′ on a side, of SA 101.
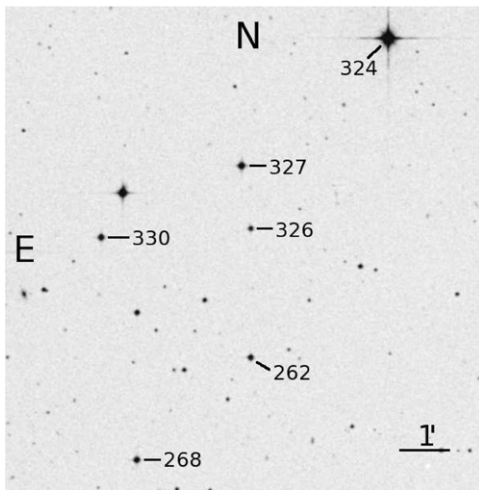
Figure 52. Field, 10′ on a side, of SA 101 SF2.
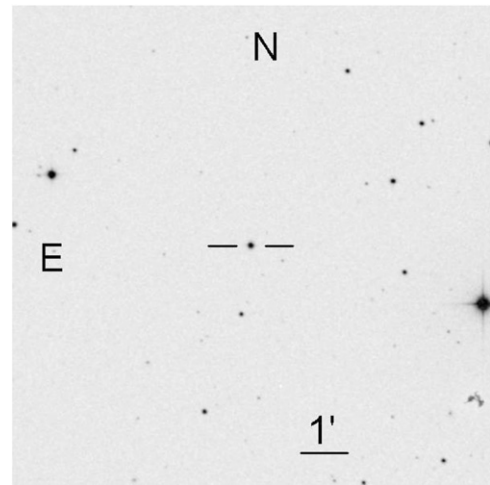
Figure 55. Field, 10′ on a side, of the star G 44-27.
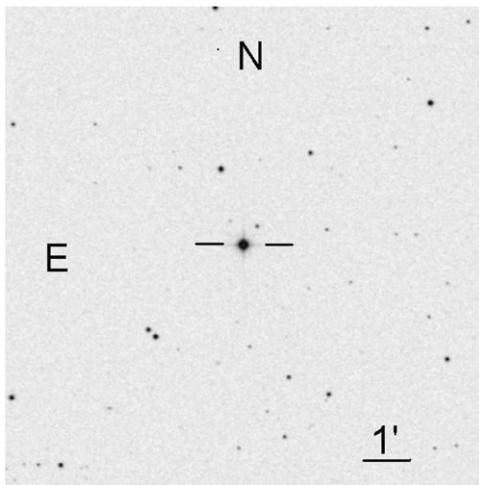
Figure 53. Field, 10′ on a side, of the star BD +1 2447.
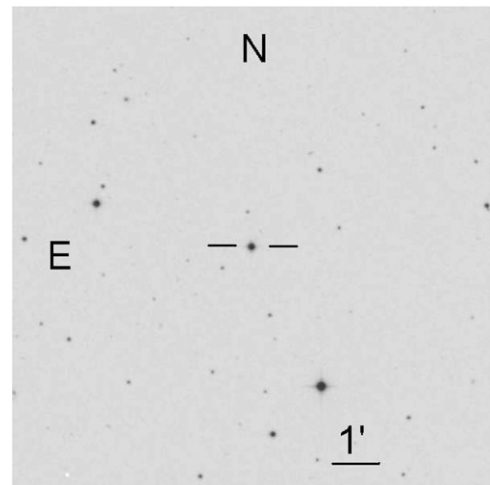
Figure 56. Field, 10′ on a side, of the star PG1034+001.
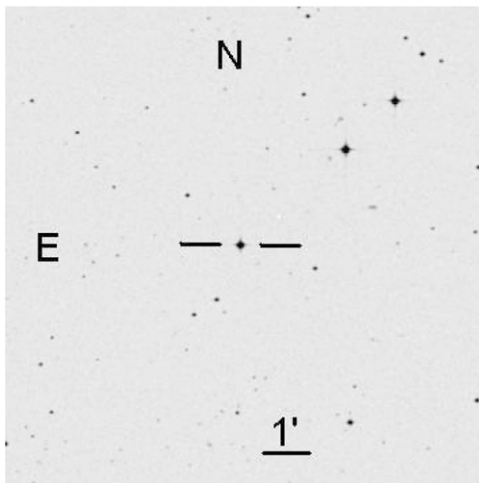
Figure 54. Field, 10′ on a side, of the star G 162-66.
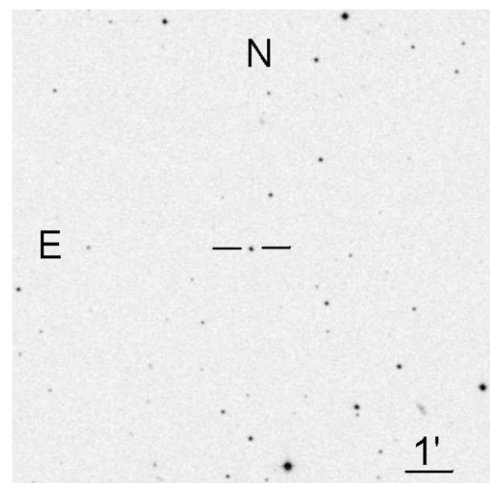
Figure 57. Field, 10′ on a side, of the star G 163-6.
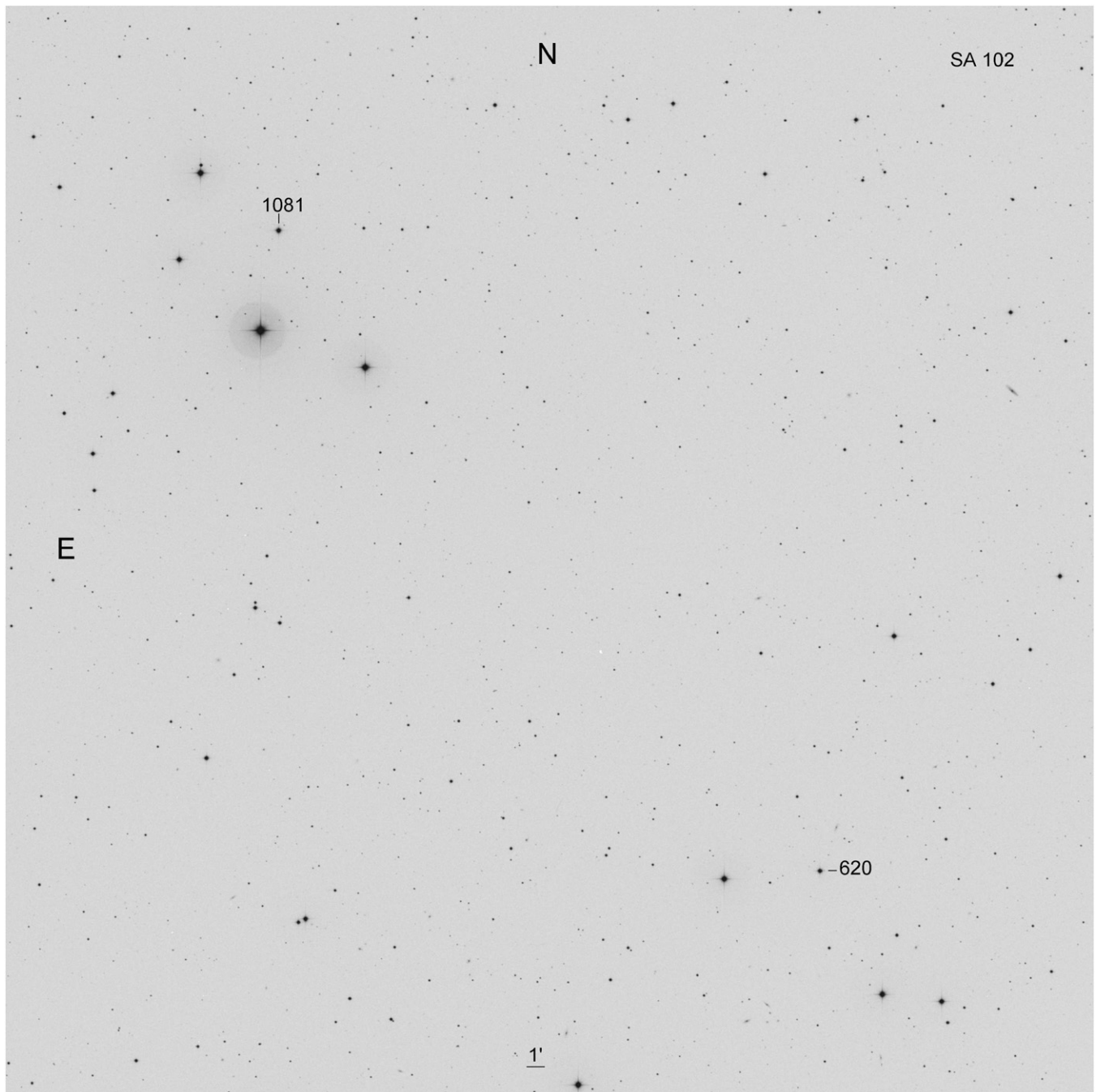
Figure 59. Field, 60′ on a side, of SA 102.
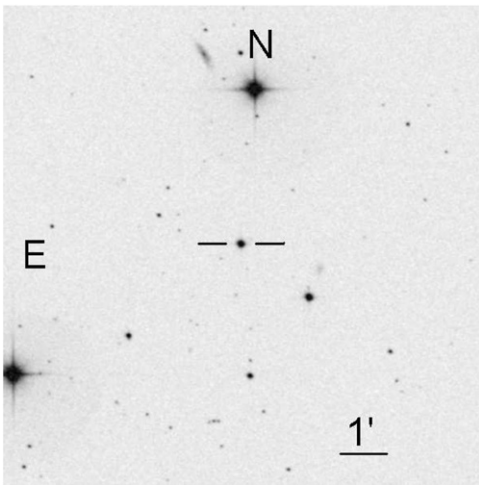
Figure 58. Field, 10′ on a side, of the star G 44-40.
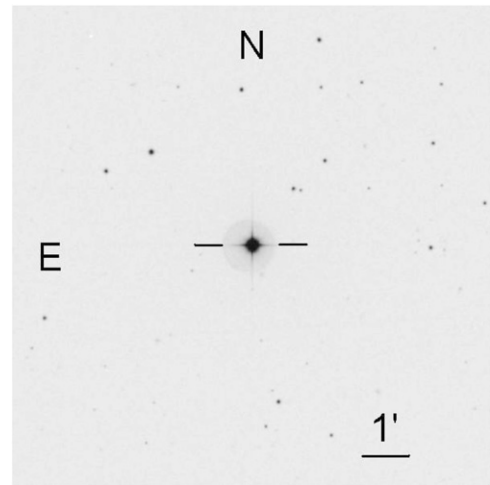
Figure 64. Field, 10′ on a side, of the star BD +5 2468.
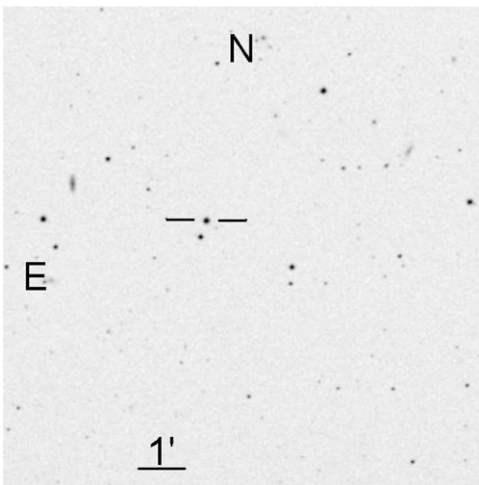
Figure 62. Field, 10′ on a side, of the star G 45-20.
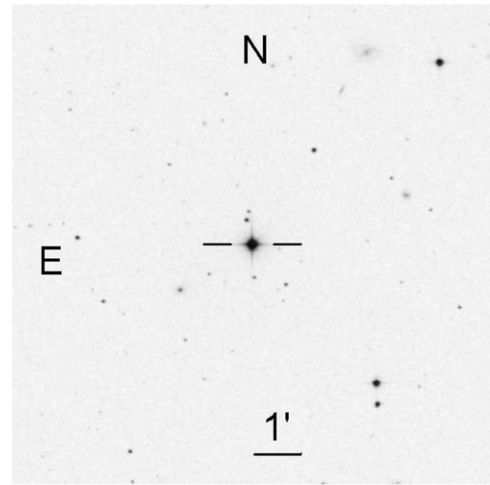
Figure 65. Field, 10′ on a side, of the star HD 100340.
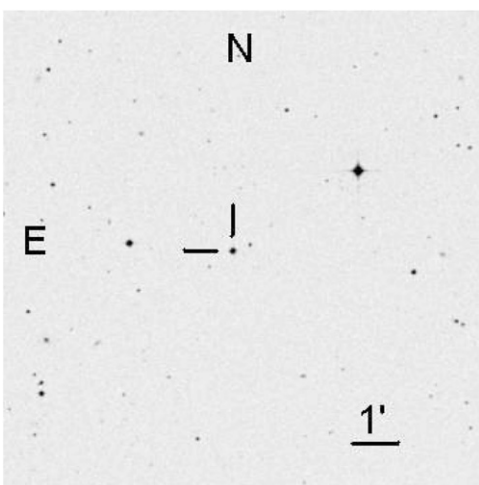
Figure 63. Field, 10′ on a side, of the star G 163-27.
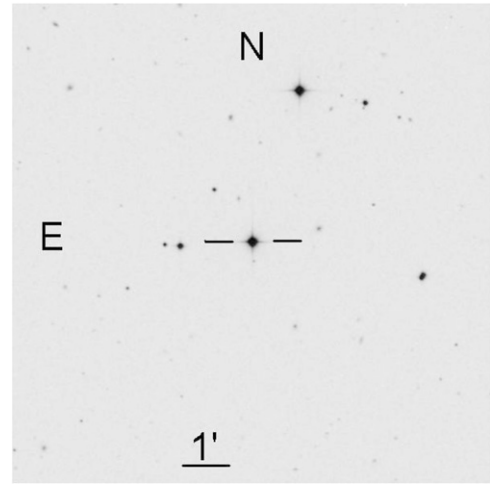
Figure 66. Field, 10′ on a side, of the star BD +5 2529.
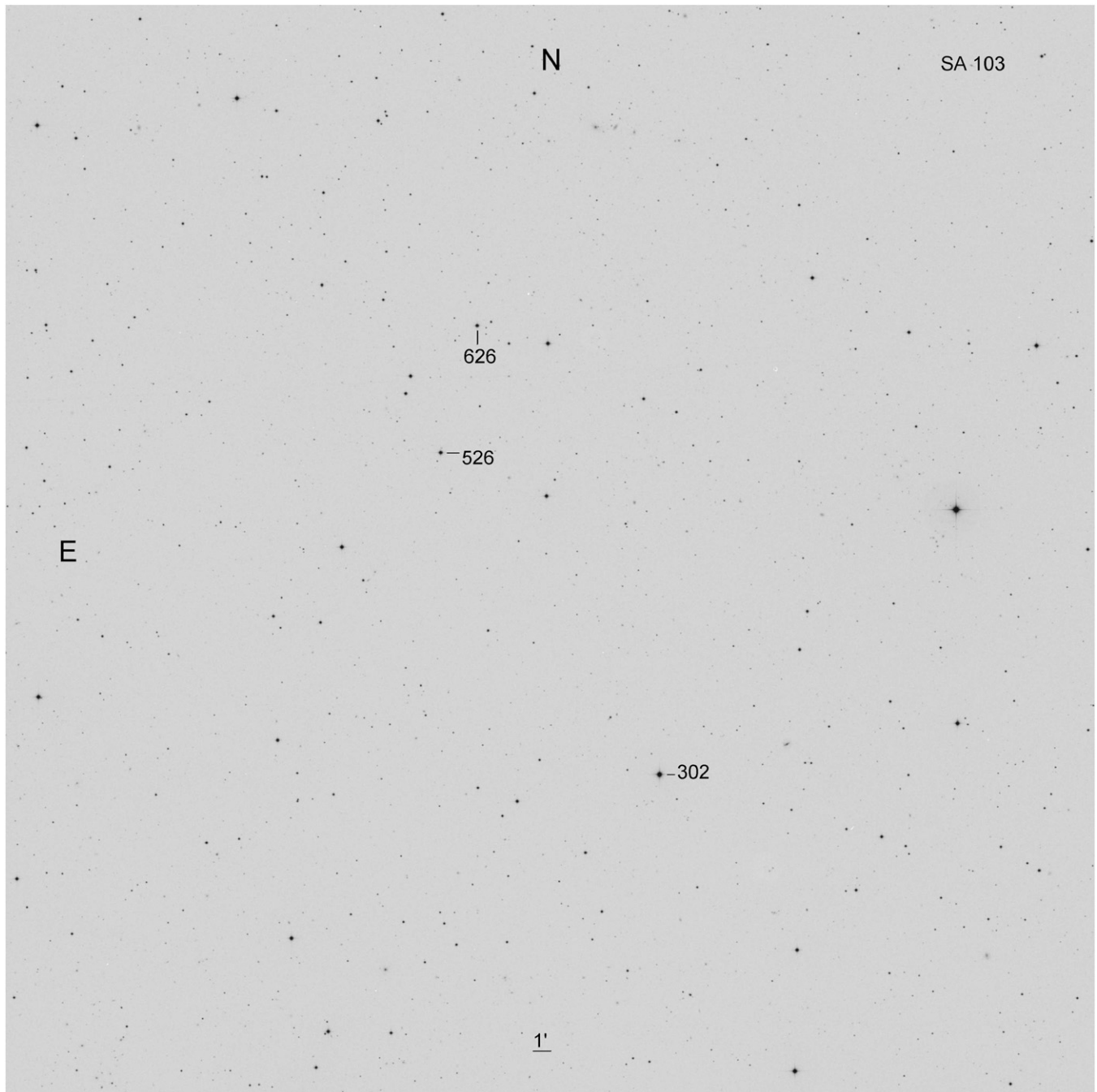
Figure 70. Field, 60′ on a side, of SA 103.
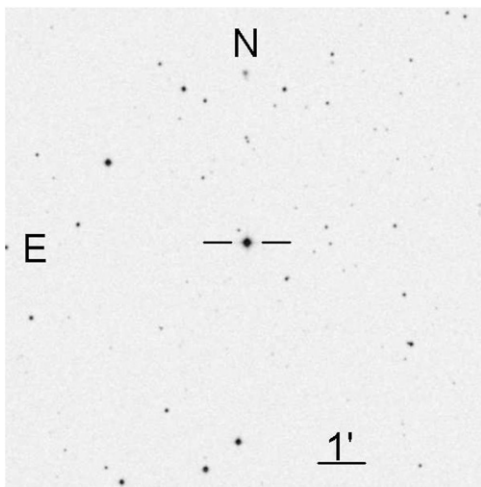
Figure 67. Field, 10′ on a side, of the star G 10-50.
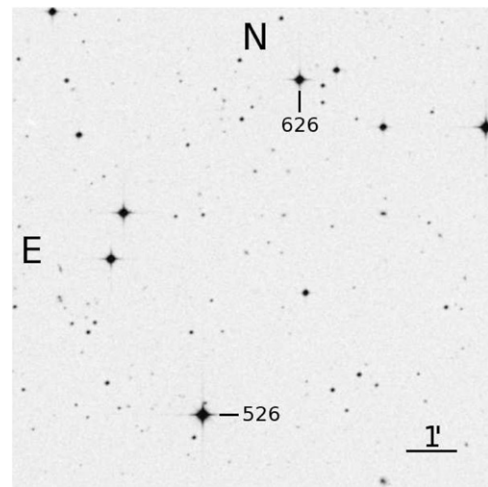
Figure 71. Field, 10′ on a side, of SA 103 SF1.
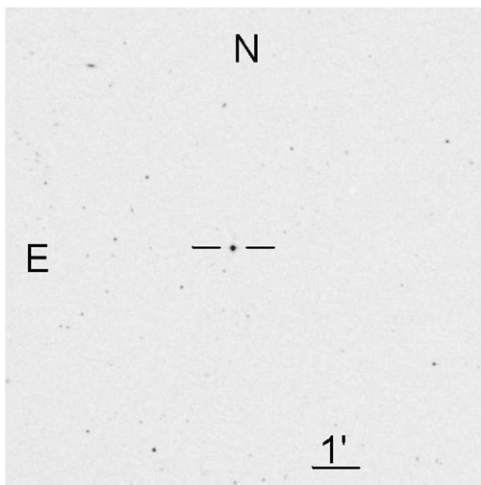
Figure 68. Field, 10′ on a side, of the star G 12-43.
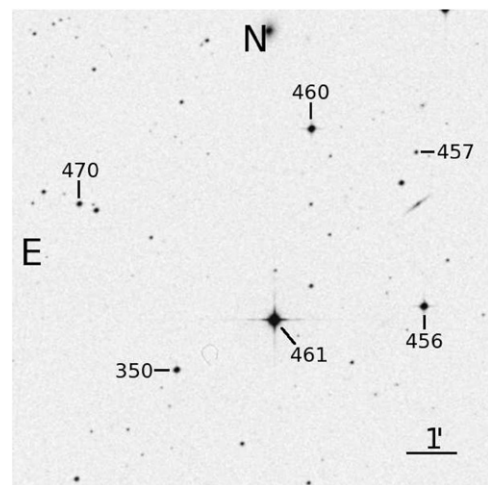
Figure 73. Field, 10′ on a side, of SA 104 SF1.
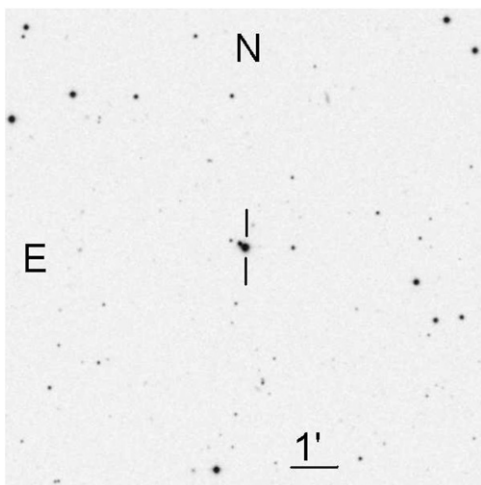
Figure 69. Field, 10′ on a side, of the star G 14-55.
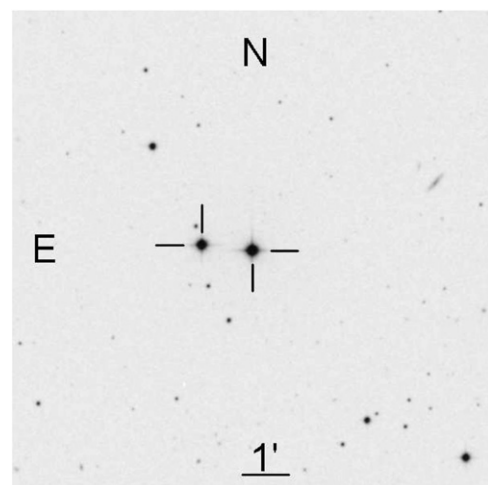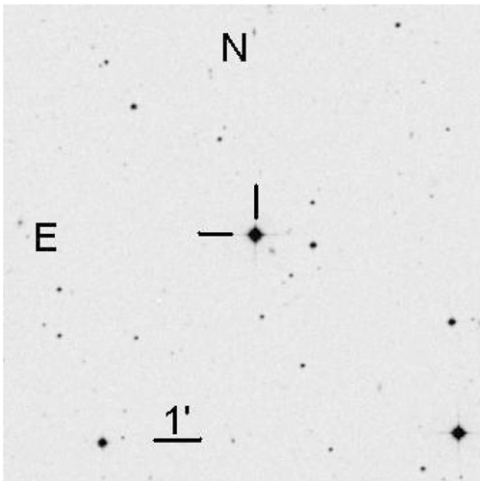

Figure 80. Field, 10′ on a side, of the stars BD +2 2711 (right) and UCAC2 32376437 (left).
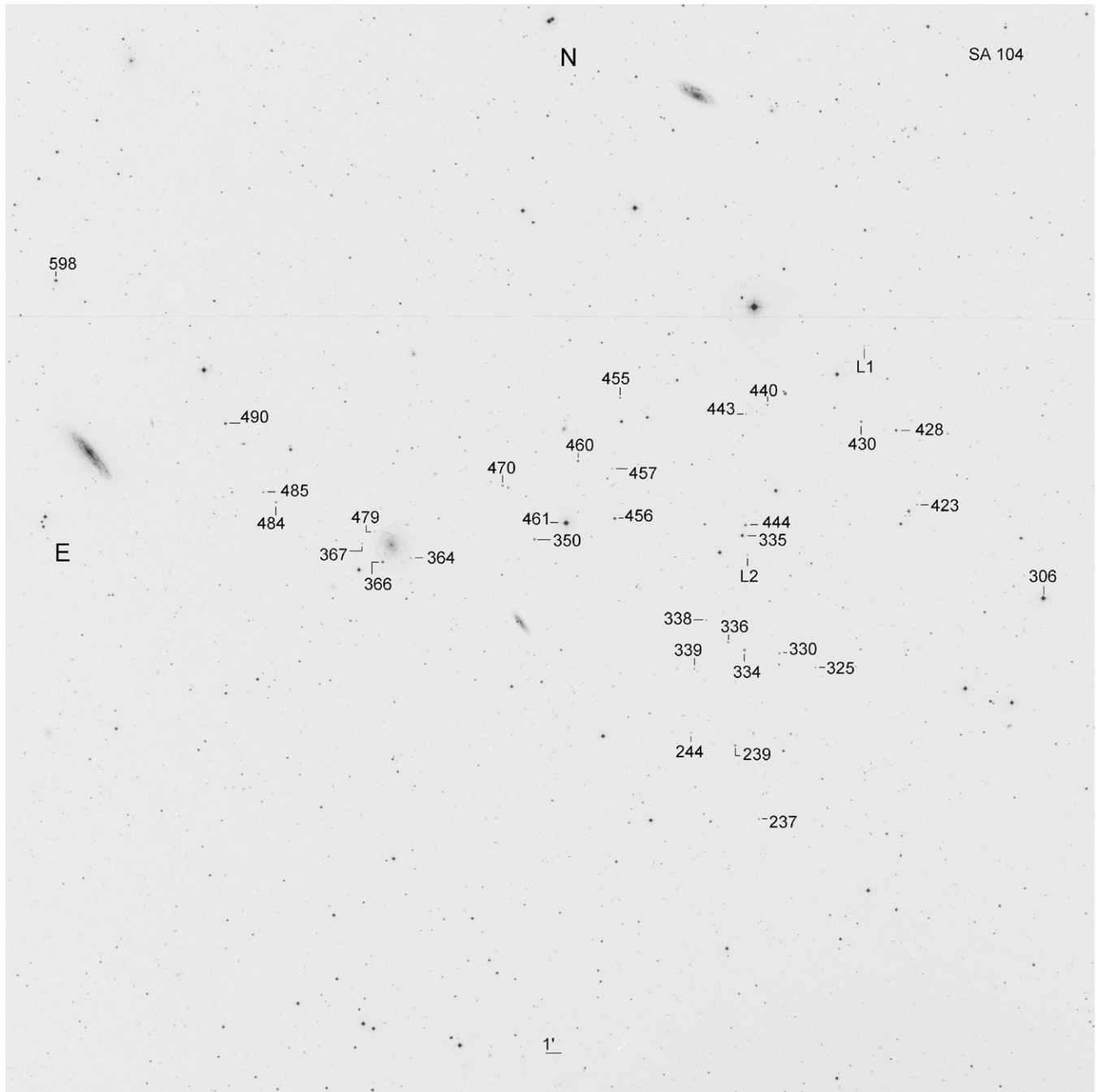
Figure 72. Field, 70′ on a side, of SA 104.
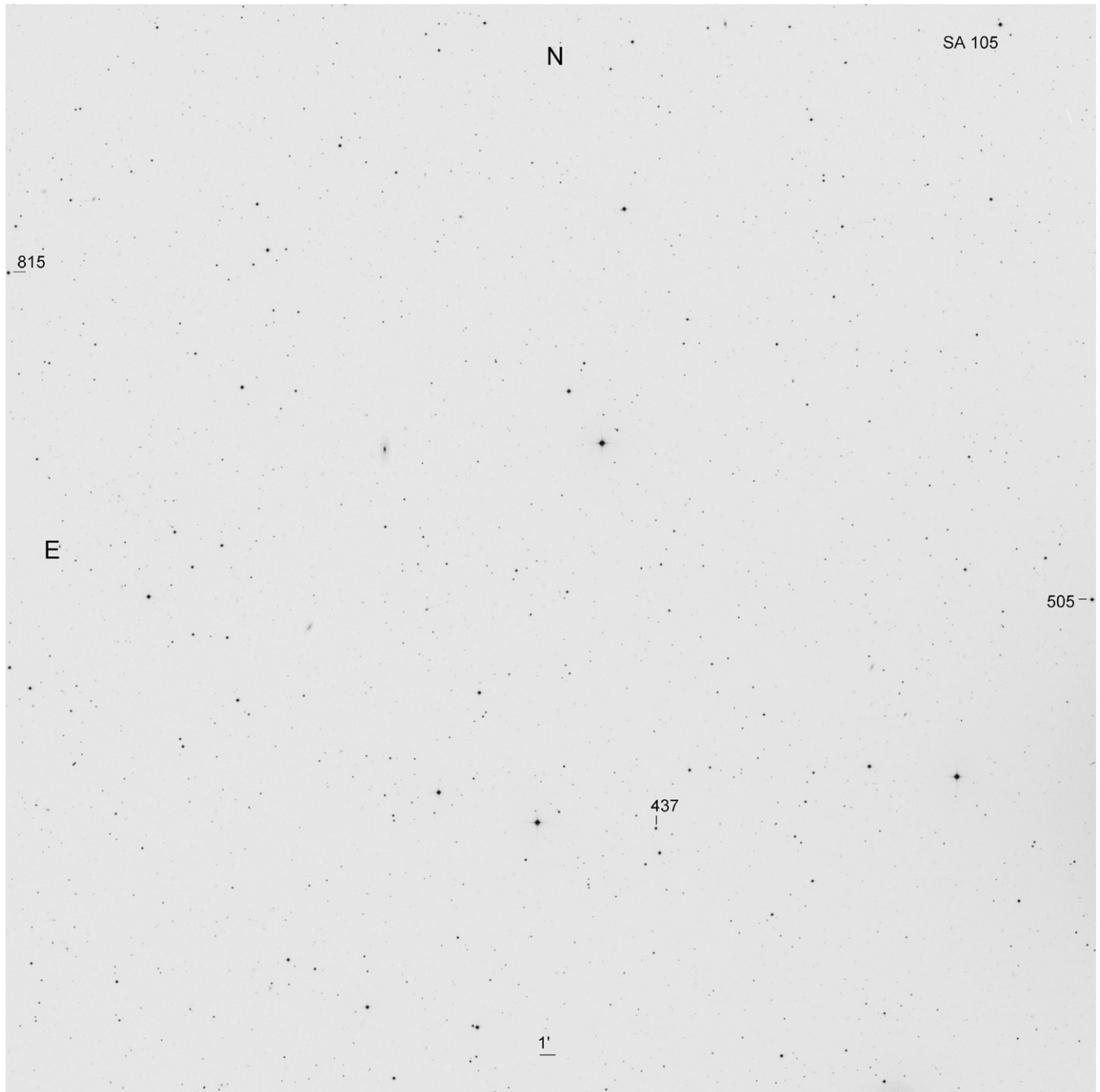
Figure 74. Field, 70′ on a side, of SA 105.
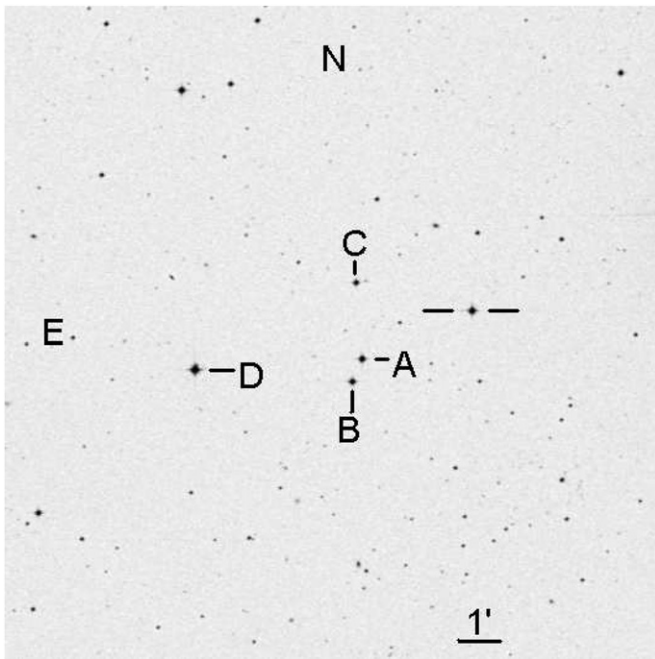
Figure 75. Field, 15′ on a side, of the sequence in the vicinity of the star PG1323−086.
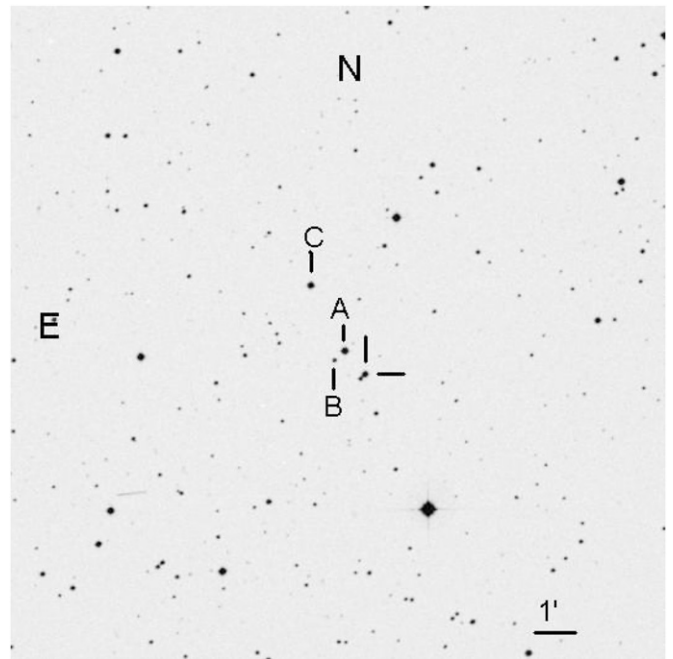
Figure 77. Field, 15′ on a side, of the sequence in the vicinity of the star PG1525−071.
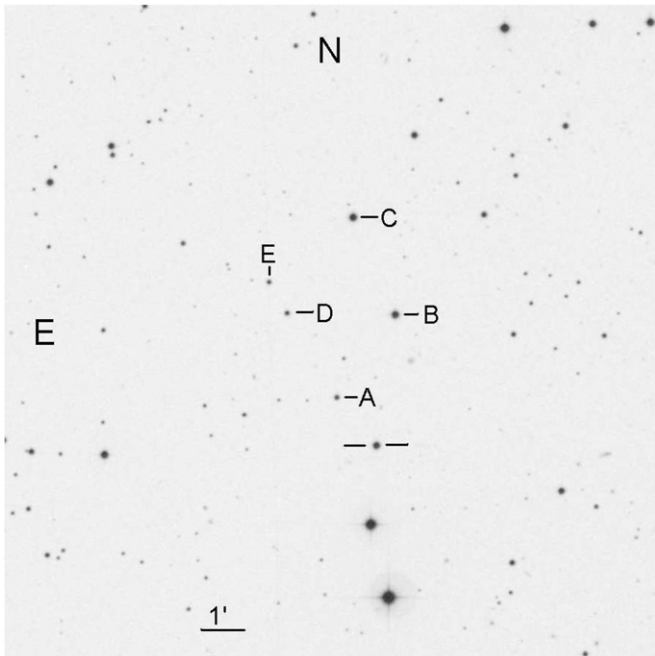
Figure 76. Field, 15′ on a side, of the sequence in the vicinity of the star PG1407−013.
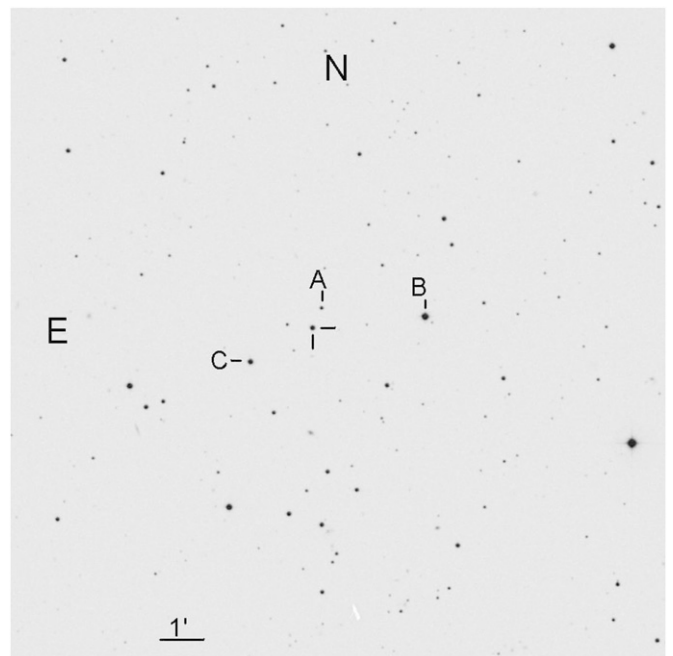
Figure 78. Field, 15′ on a side, of the sequence in the vicinity of the star PG1528+062.
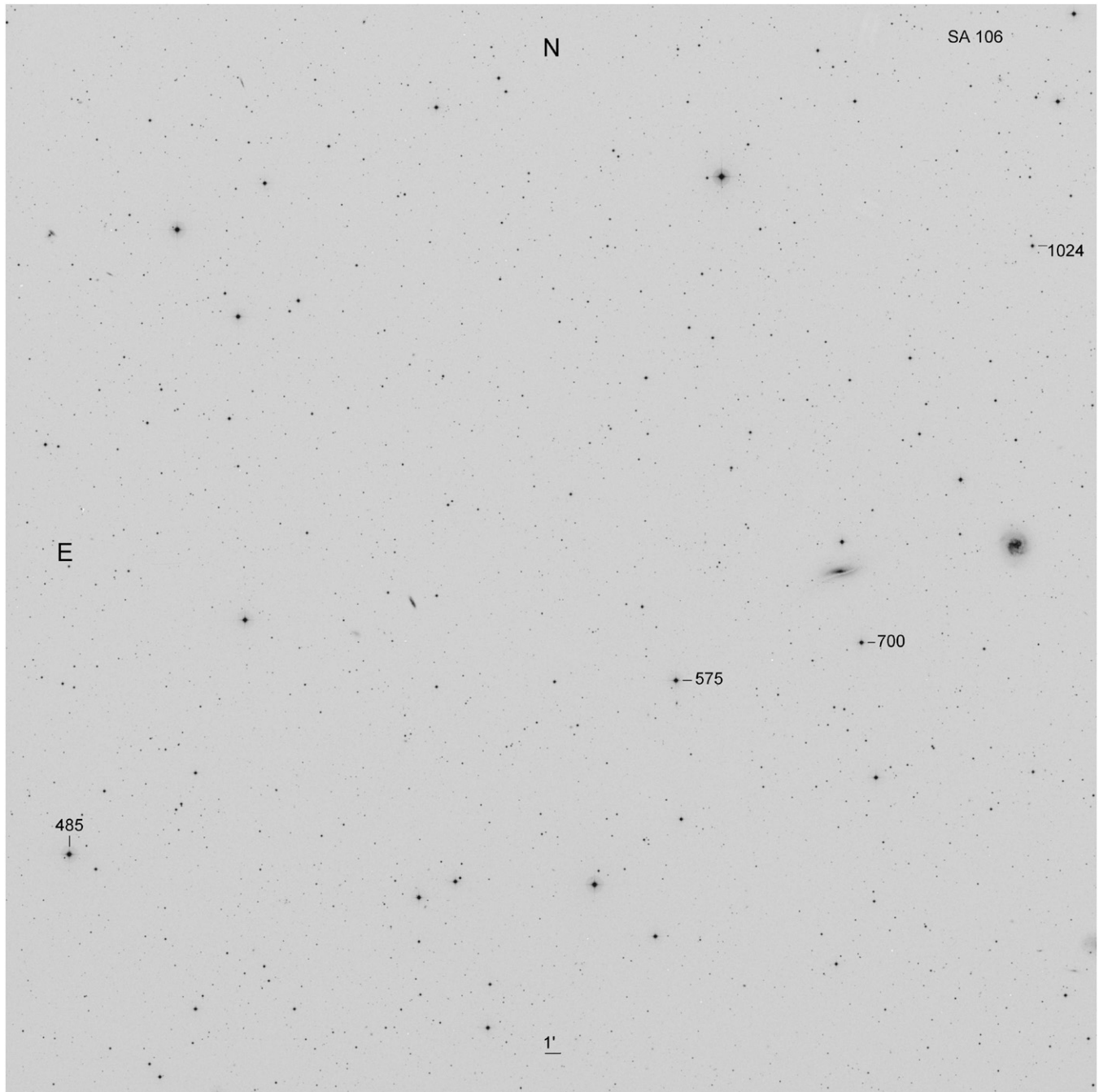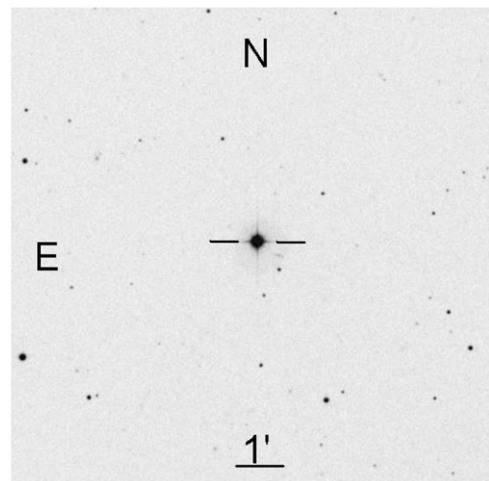
Figure 79. Field, 70′ on a side, of SA 106.
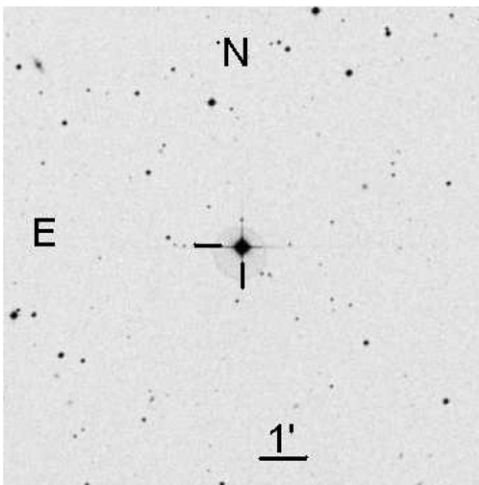
Figure 81. Field, 10′ on a side, of the star HD 121968.
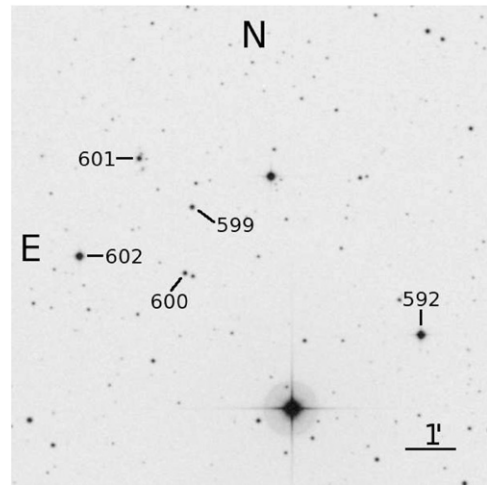
Figure 86. Field, 10′ on a side, of SA 107 SF2.
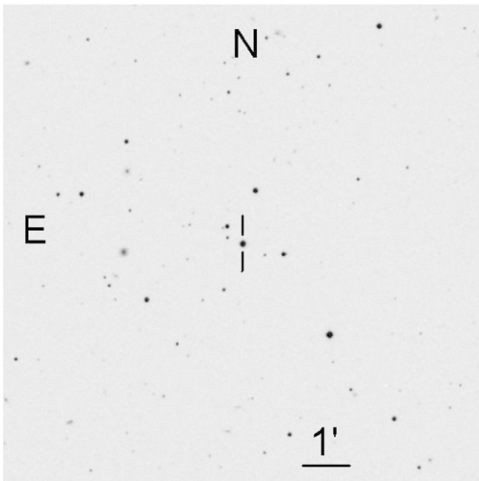
Figure 82. Field, 10′ on a side, of the star PG1514+034.
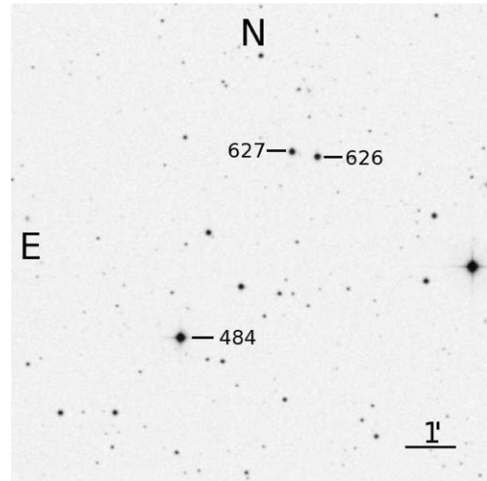
Figure 87. Field, 10′ on a side, of SA 107 SF3.
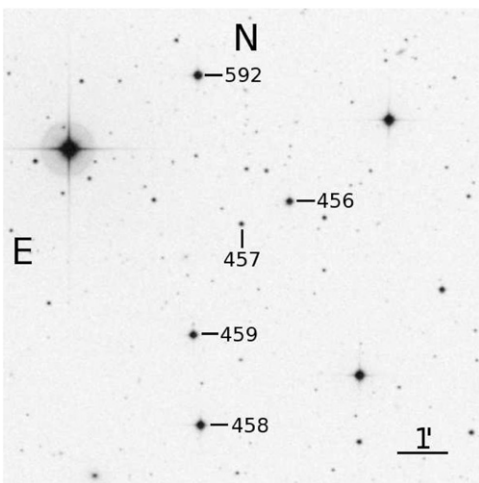
Figure 85. Field, 10′ on a side, of SA 107 SF1.

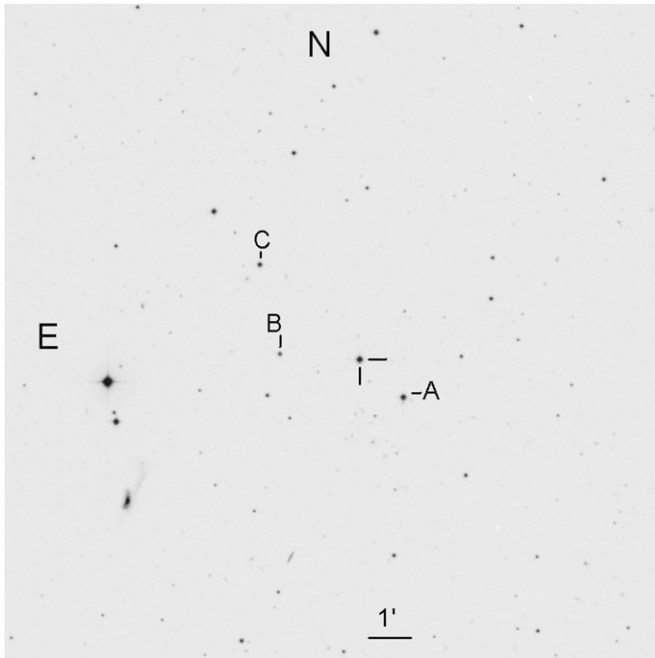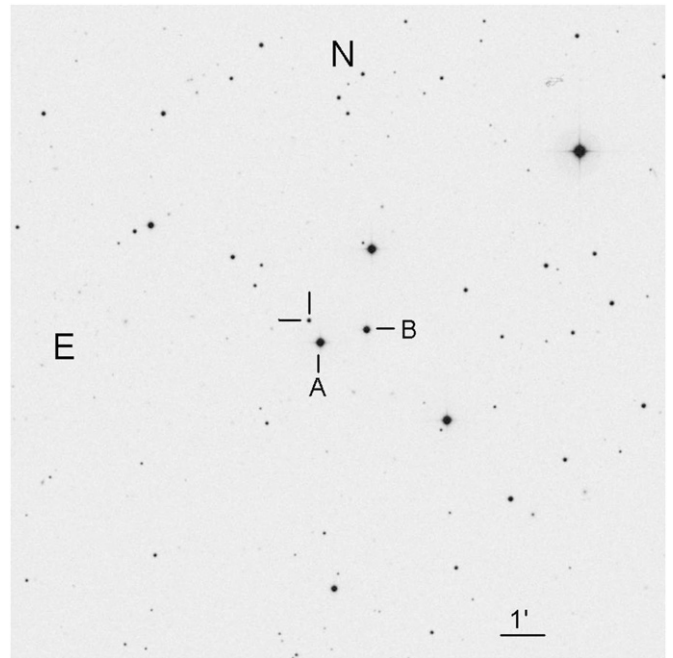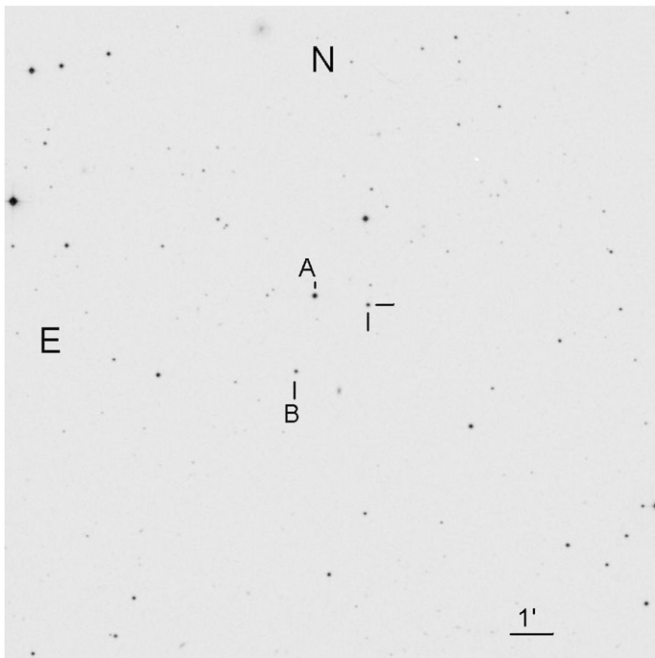**Figure 88.** Field, 10′ on a side, of the star G 153-41.
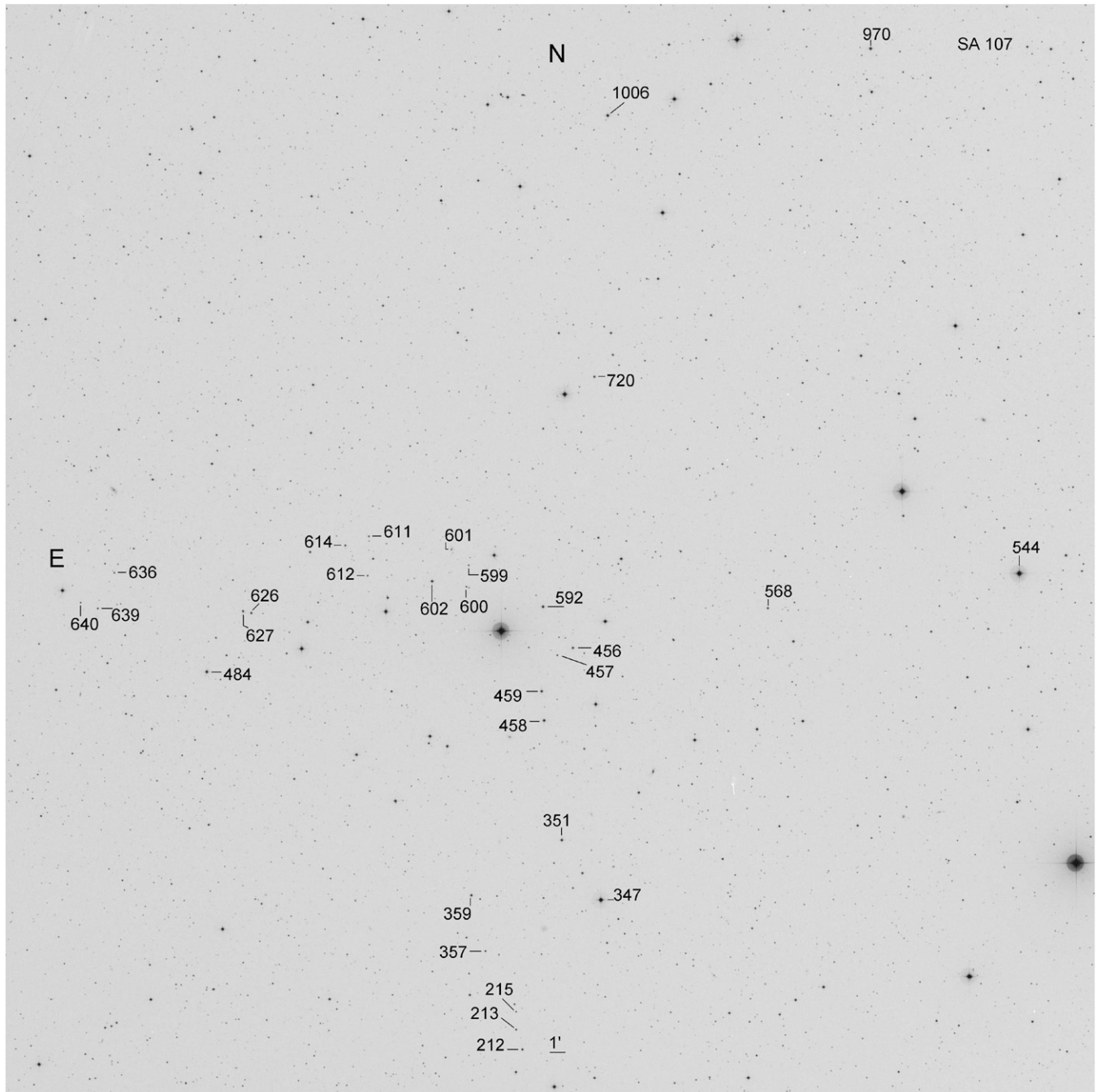
Figure 84. Field, 70′ on a side, of SA 107.
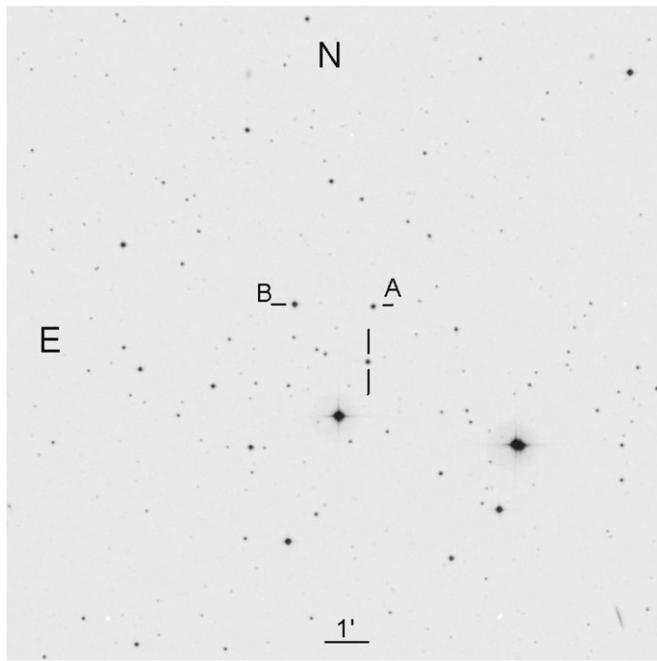
Figure 83. Field, 15′ on a side, of the sequence in the vicinity of the star PG1530+057.
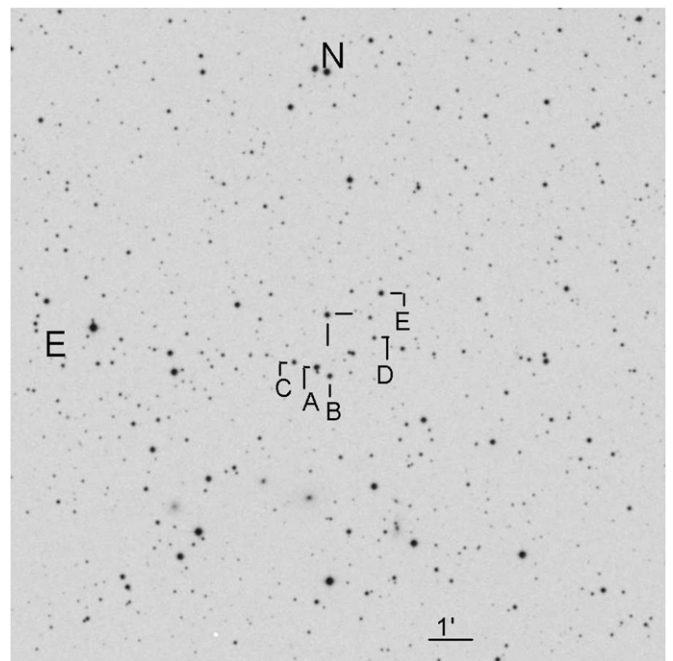
Figure 96. Field, 15′ on a side, of the sequence in the vicinity of the star PG1657+078.
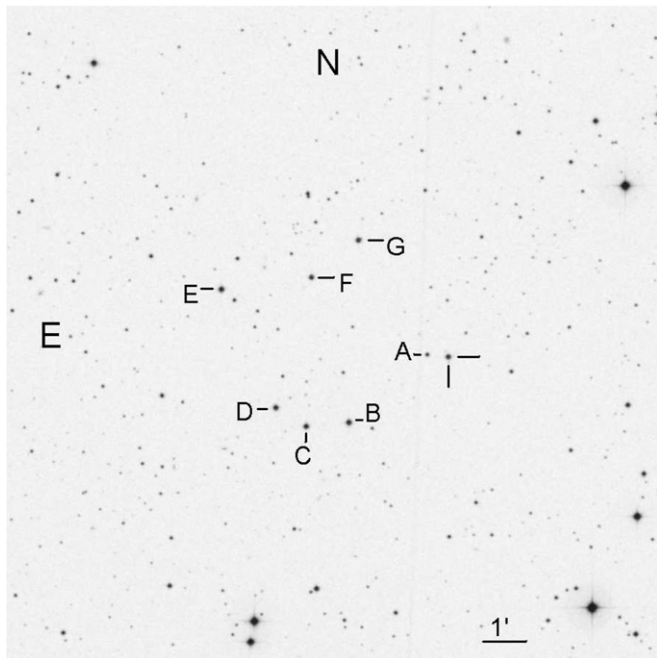
Figure 95. Field, 15′ on a side, of the sequence in the vicinity of the star PG1633+099.
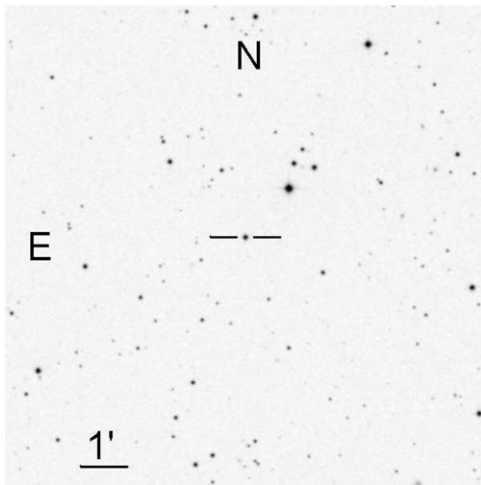
Figure 89. Field, 10′ on a side, of the star G 138-25.
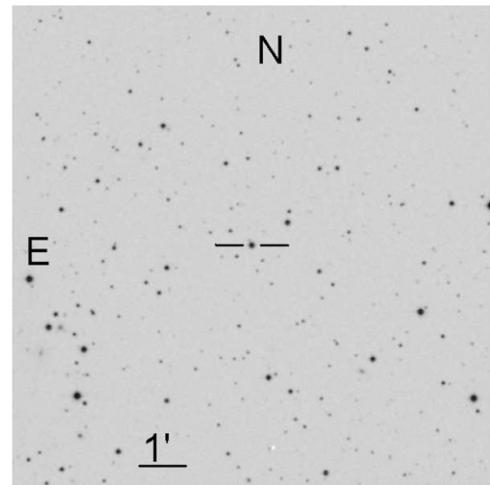
Figure 92. Field, 10′ on a side, of the star PG1647+056.
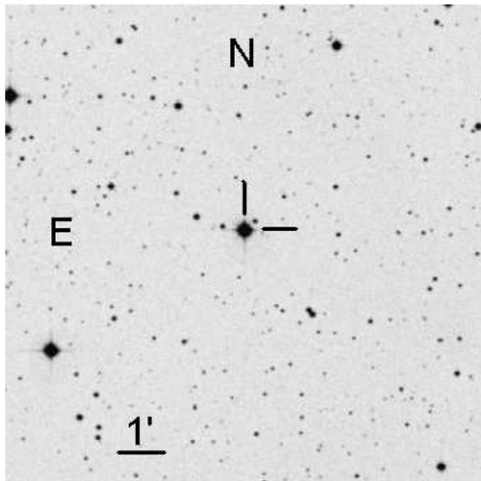
Figure 90. Field, 10′ on a side, of the star BD −12 4523.
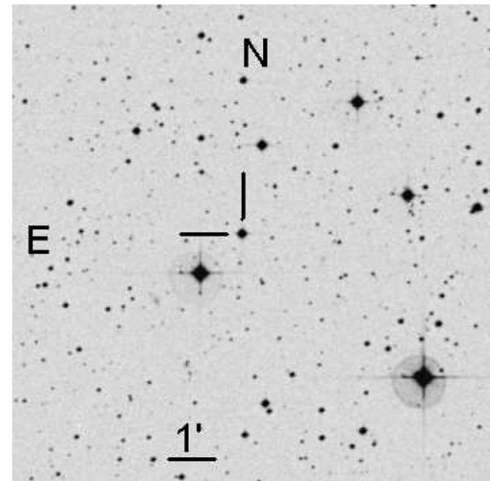
Figure 93. Field, 10′ on a side, of the star Wolf 629.
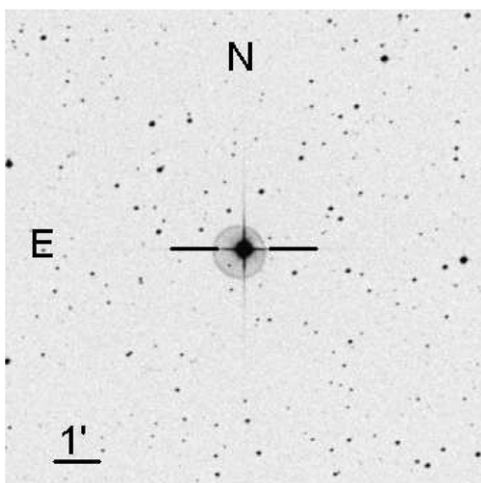
Figure 91. Field, 10′ on a side, of the star HD 149382.
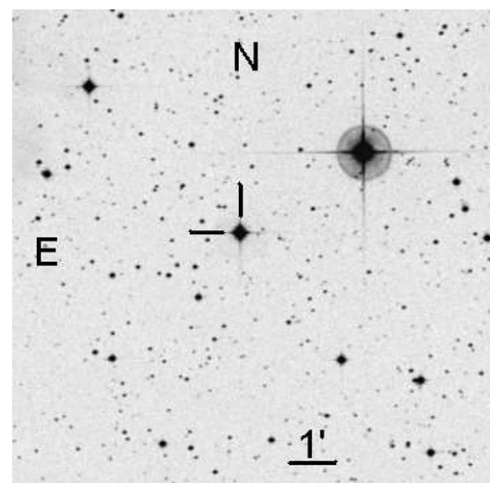
Figure 97. Field, 10′ on a side, of the star BD −4 4226.
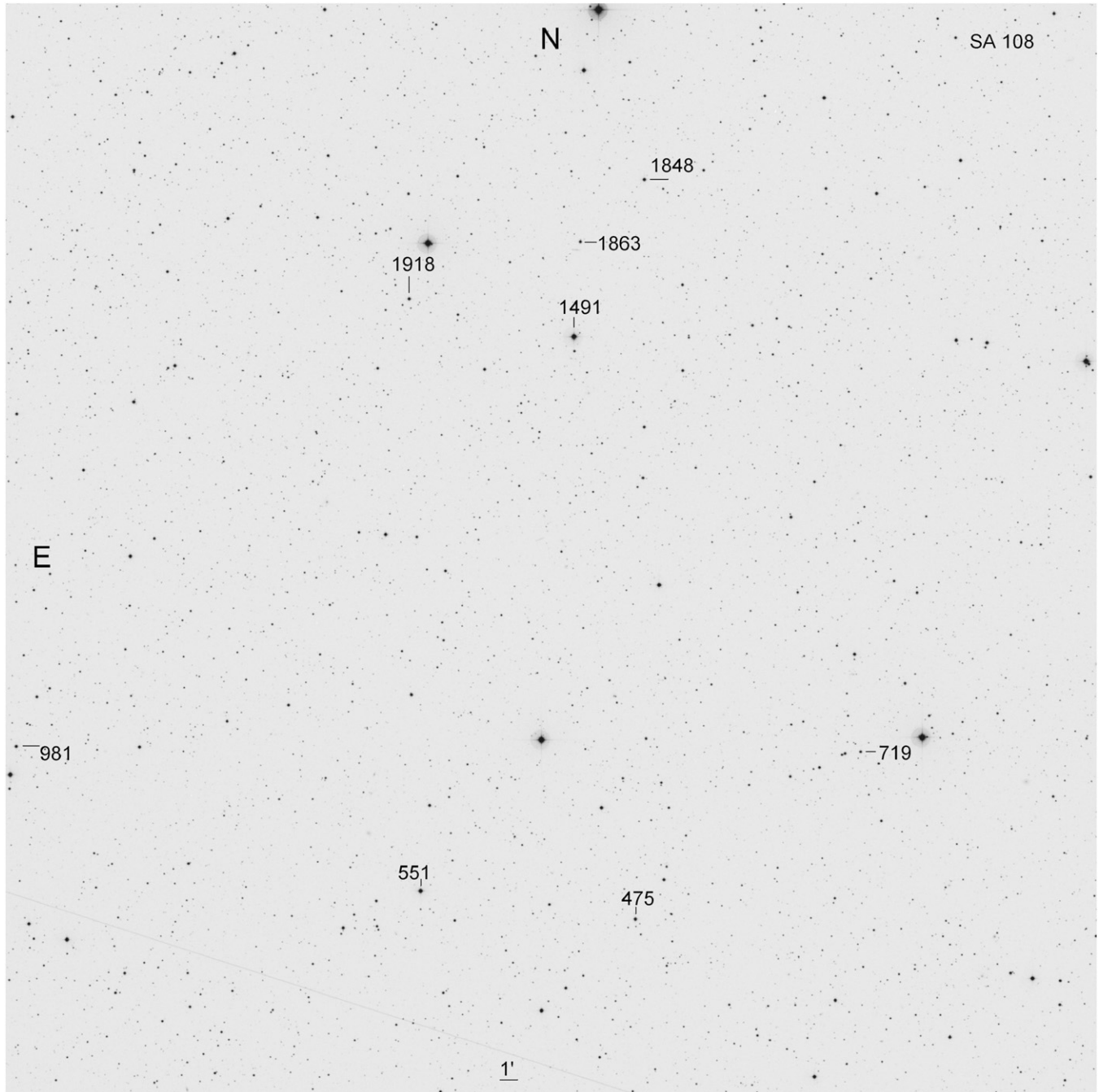
Figure 94. Field, 60′ on a side, of SA 108.
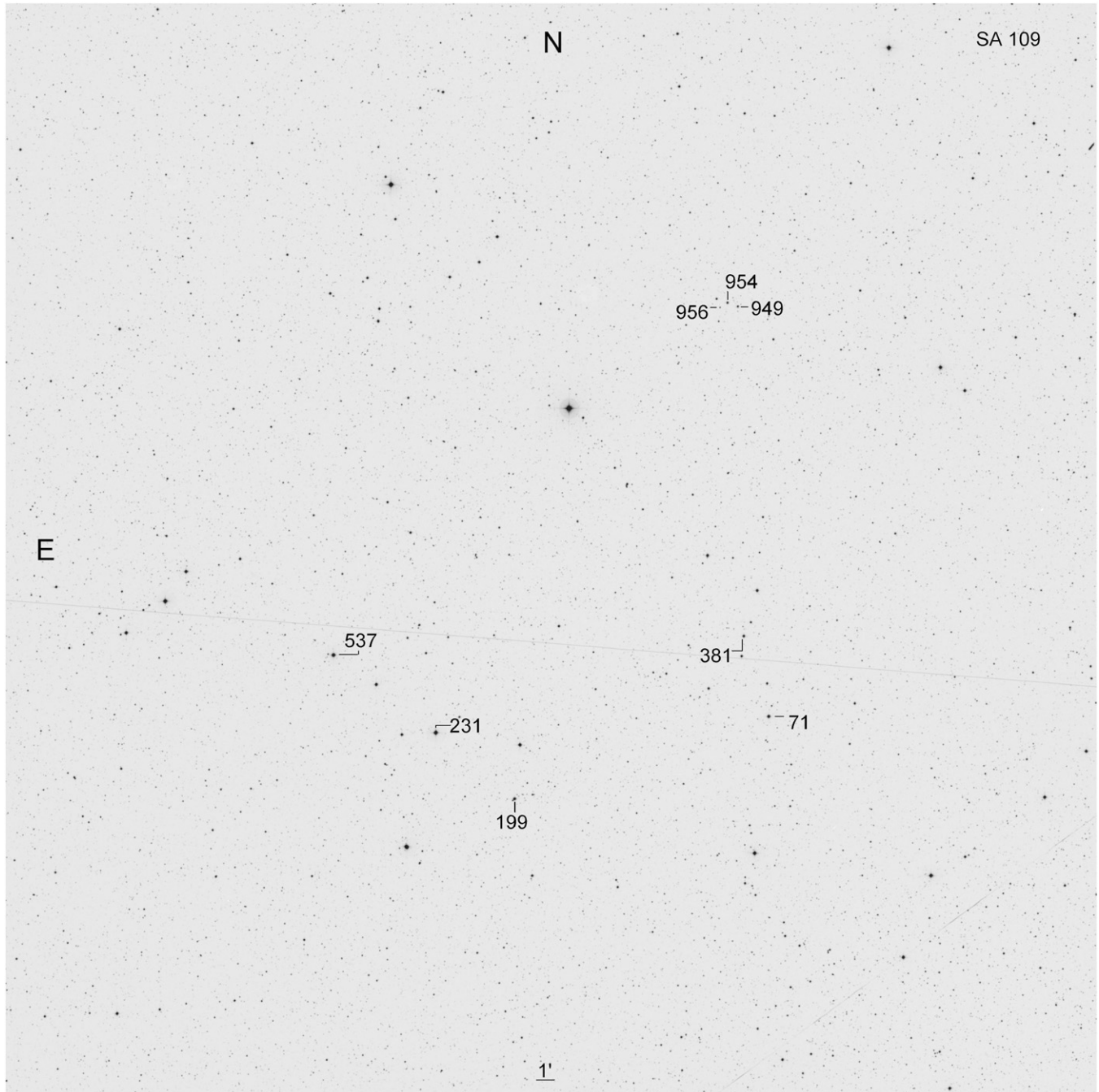
Figure 99. Field, 60′ on a side, of SA 109.
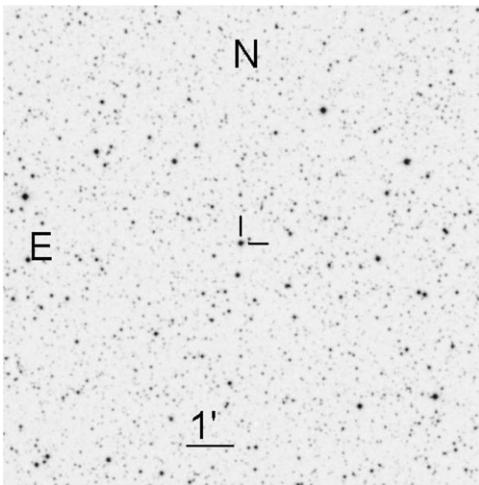
Figure 98. Field, 10′ on a side, of the star G 21-15.
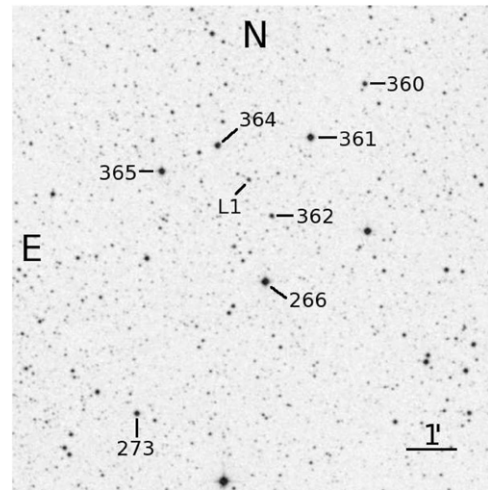
Figure 103. Field, 10′ on a side, of SA 110 SF2.
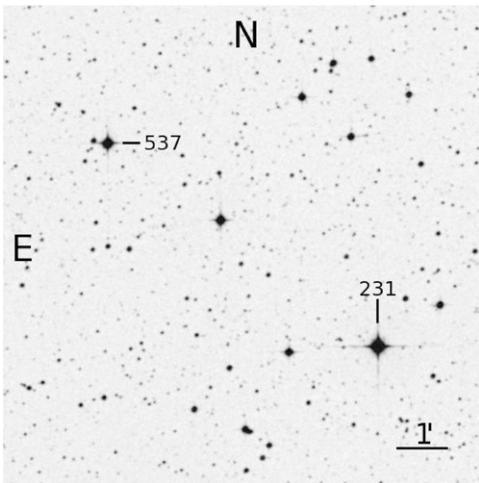
Figure 100. Field, 10′ on a side, of SA 109 SF1.
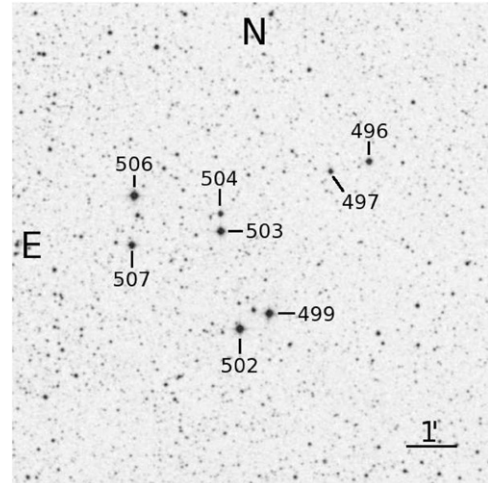
Figure 104. Field, 10′ on a side, of SA 110 SF3.
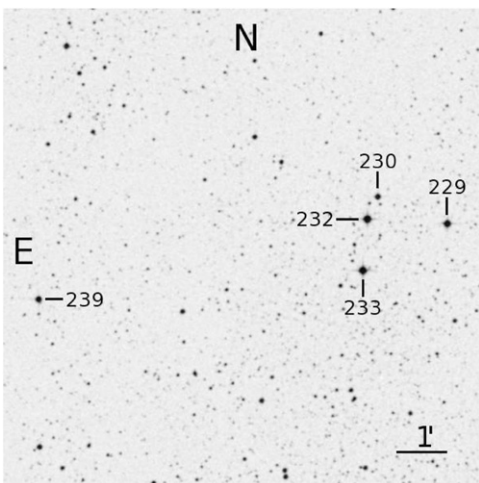
Figure 102. Field, 10′ on a side, of SA 110 SF1.
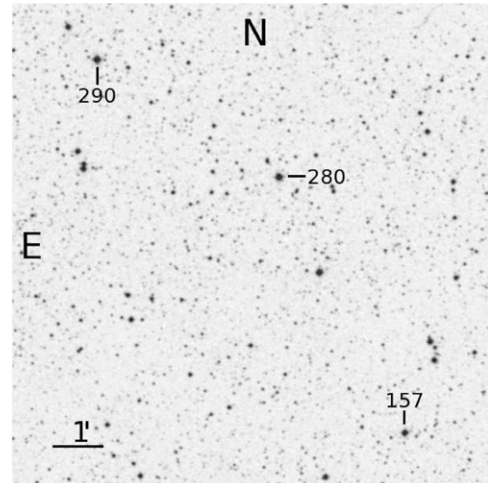
Figure 105. Field, 10′ on a side, of SA 110 SF4.
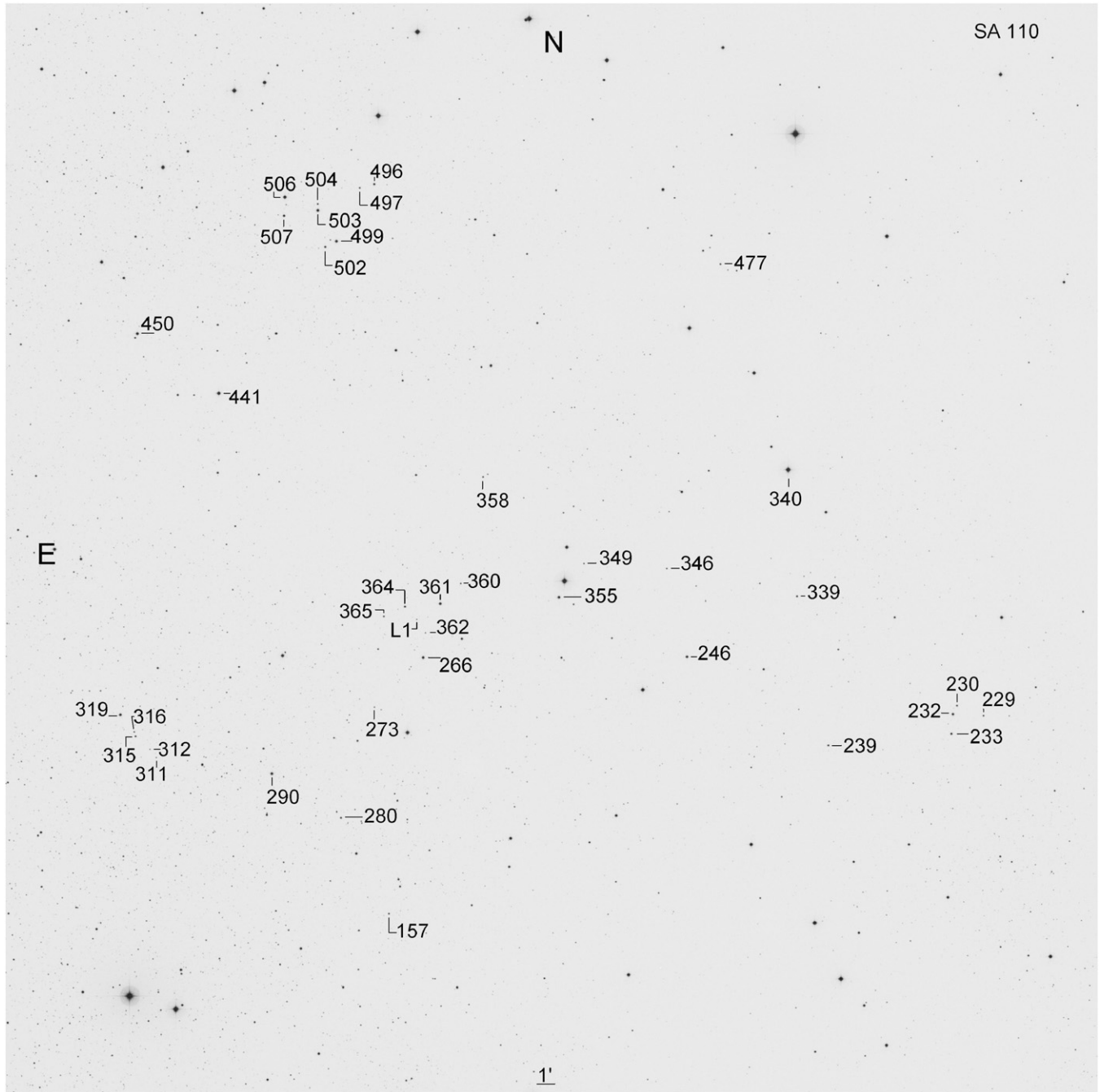
Figure 101. Field, 60′ on a side, of SA 110.
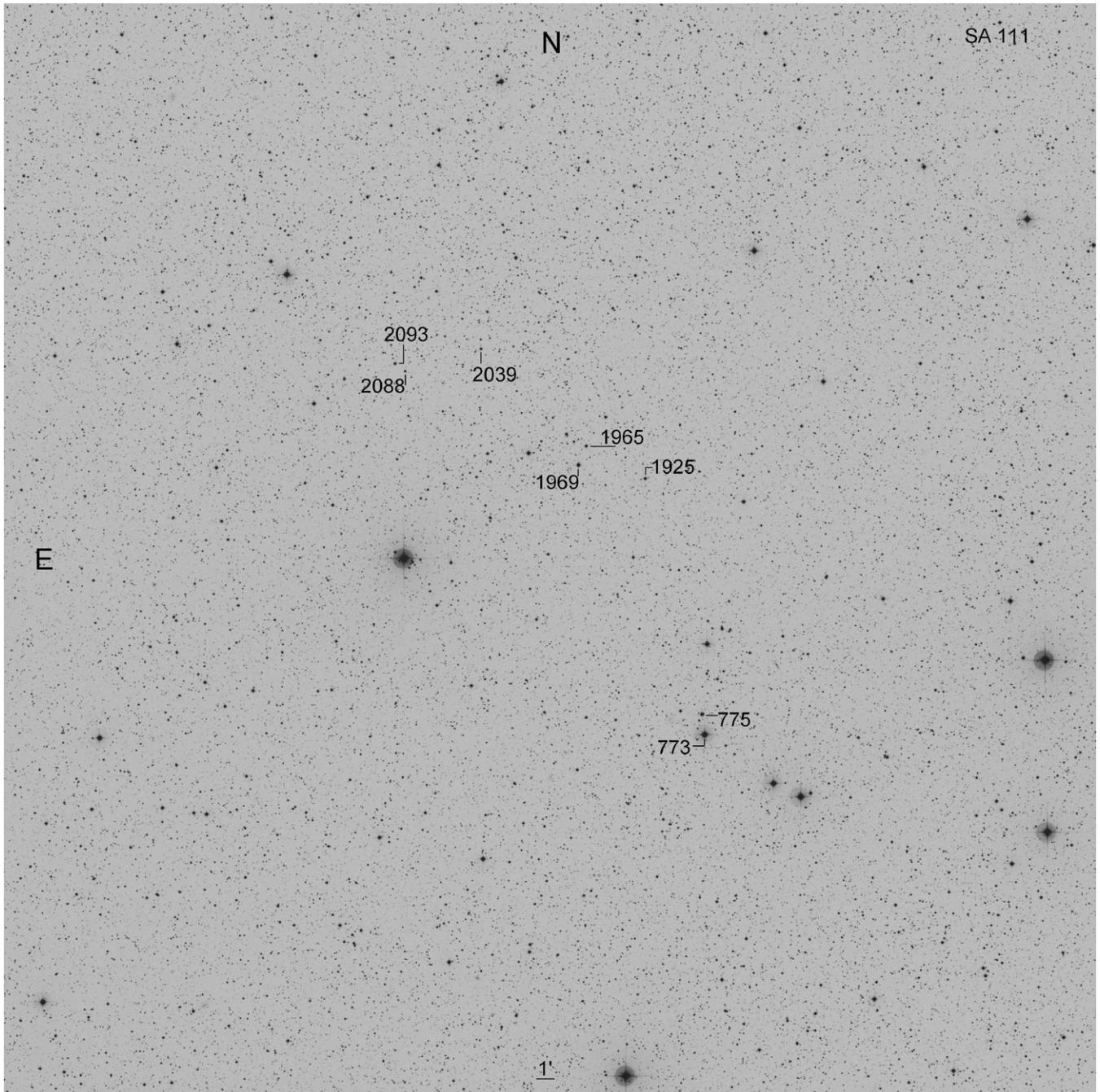
Figure 107. Field, 60′ on a side, of SA 111.
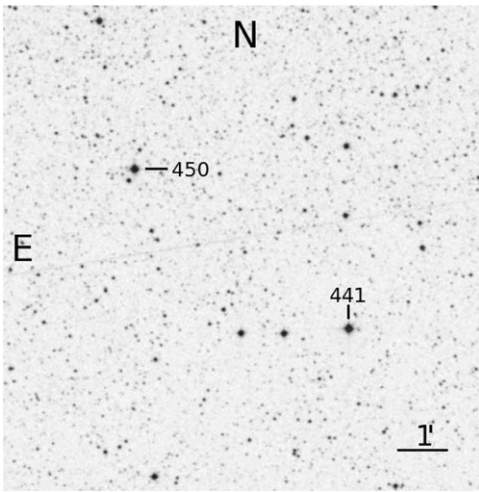
Figure 106. Field, 10′ on a side, of SA 110 SF5.
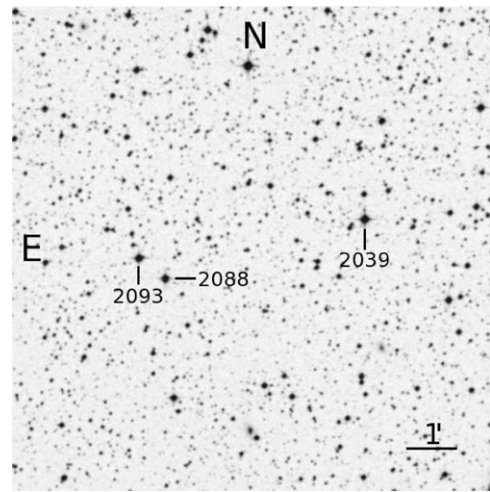
Figure 110. Field, 10′ on a side, of SA 111 SF3.
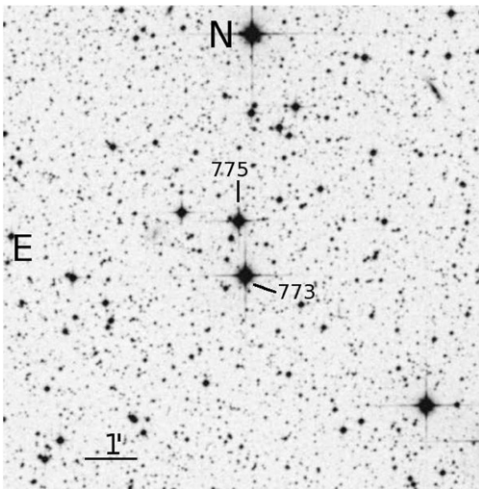
Figure 108. Field, 10′ on a side, of SA 111 SF1.
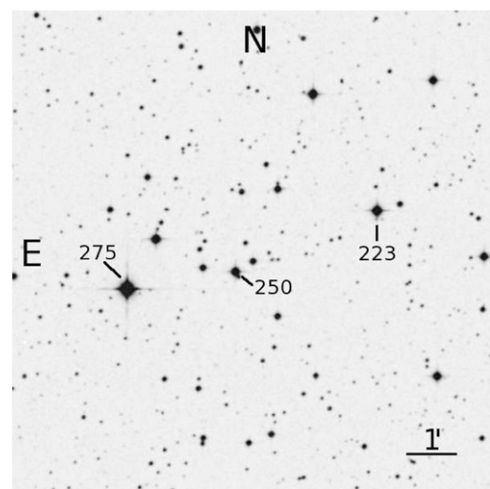
Figure 112. Field, 10′ on a side, of SA 112 SF1.

Figure 109. Field, 10′ on a side, of SA 111 SF2.

Figure 113. Field, 10′ on a side, of SA 112 SF2.

Figure 111. Field, 60′ on a side, of SA 112.

Figure 114. Field, 15′ on a side, of the sequence in the vicinity of the star Mark A.

Figure 116. Field, 15′ on a side, of the sequence in the vicinity of the star G 93-48.

Figure 115. Field, 15′ on a side, of the sequence in the vicinity of the star G 26-7.

**Figure 117.** Field, 15′ on a side, of the sequence in the vicinity of the star PG2213−006.
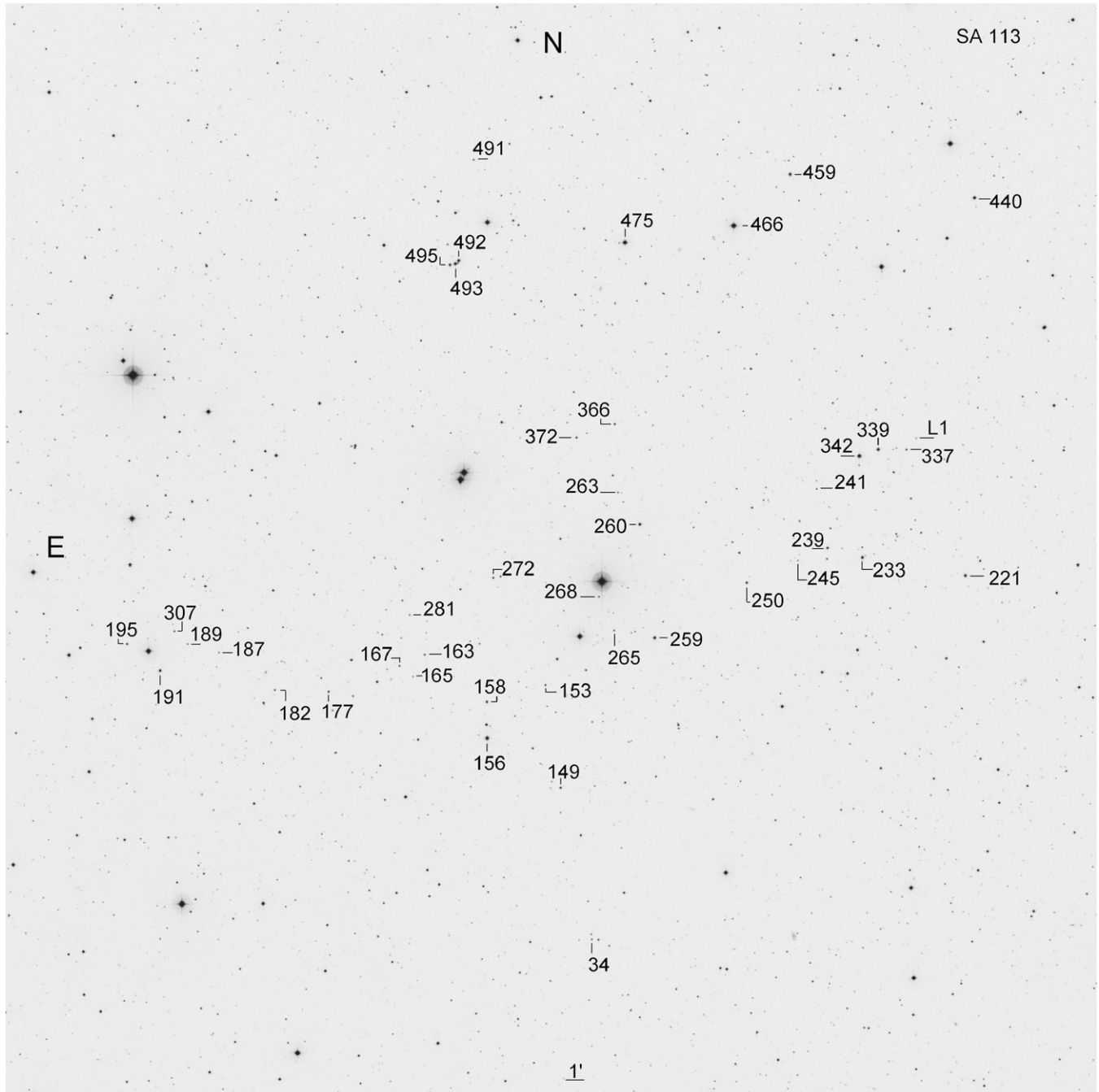
Figure 118. Field, 60′ on a side, of SA 113.
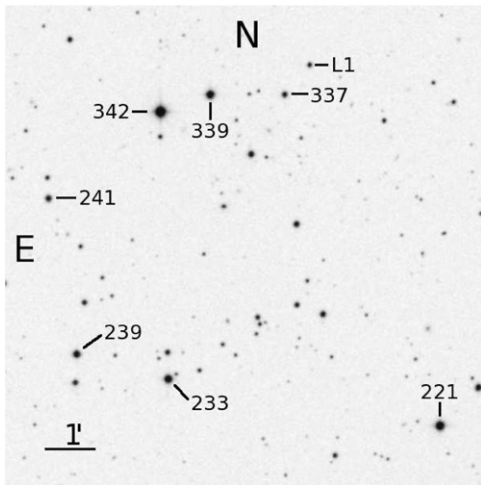
Figure 119. Field, 10′ on a side, of SA 113 SF1.
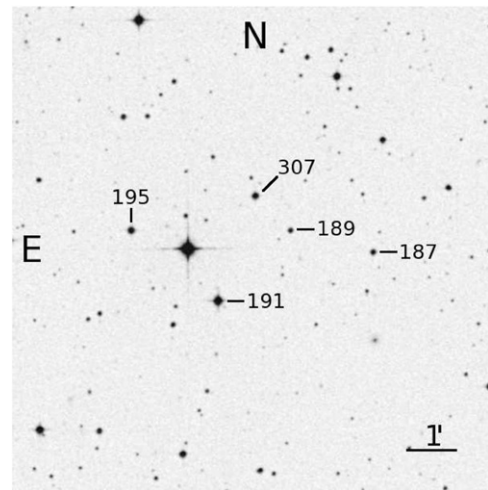
Figure 122. Field, 10′ on a side, of SA 113 SF4.
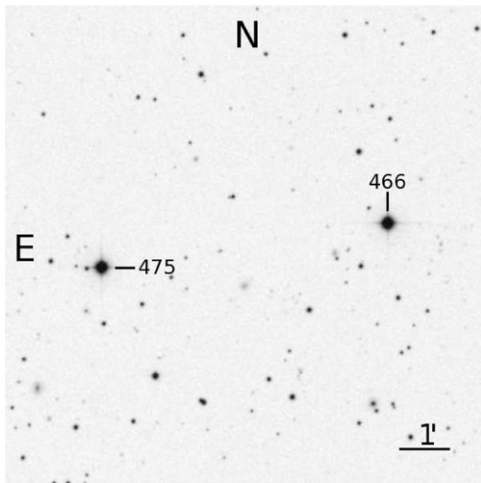
Figure 120. Field, 10′ on a side, of SA 113 SF2.
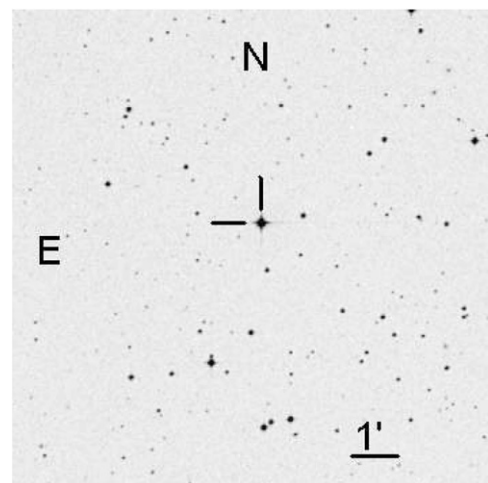
Figure 123. Field, 10′ on a side, of the star Wolf 918.
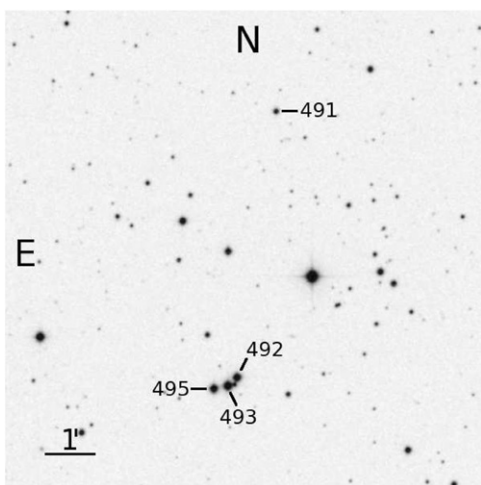
Figure 121. Field, 10′ on a side, of SA 113 SF3.
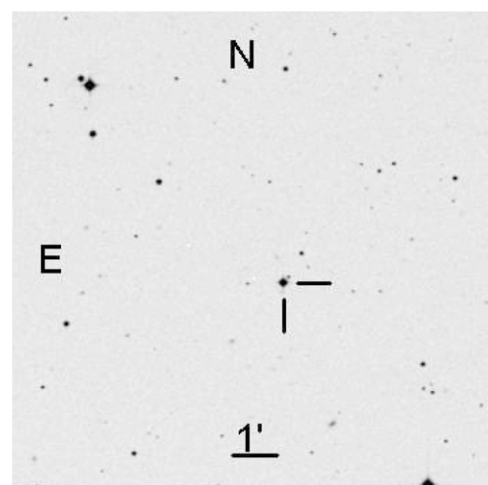
Figure 124. Field, 10′ on a side, of the star G 156-31.
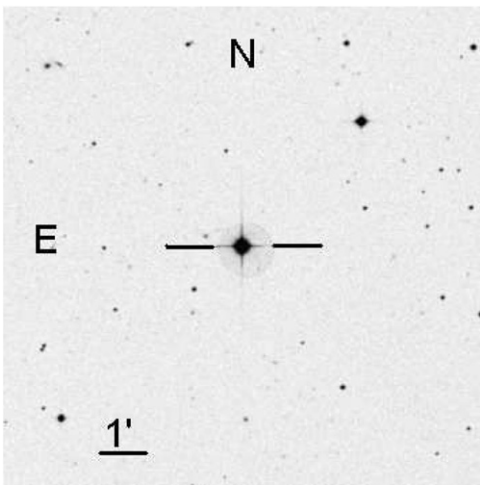
Figure 125. Field, 10′ on a side, of the star HD 216135.
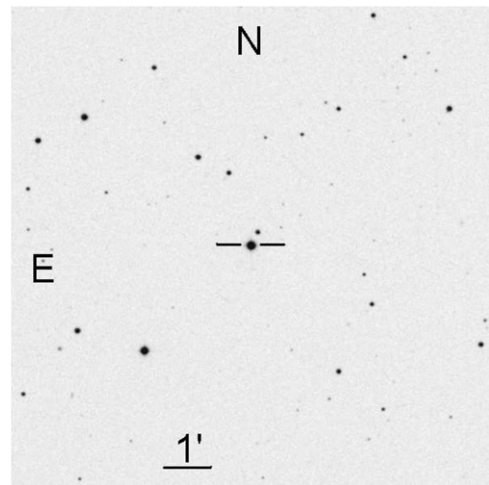
Figure 128. Field, 10′ on a side, of the star PG2317+046.

Figure 126. Field, 10′ on a side, of the star G 156-57.
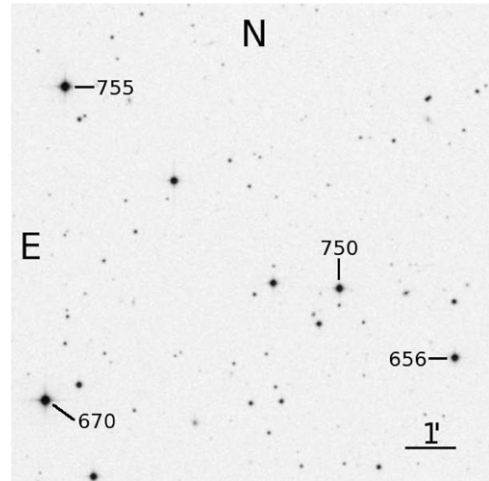
Figure 130. Field, 10′ on a side, of SA 114 SF1.
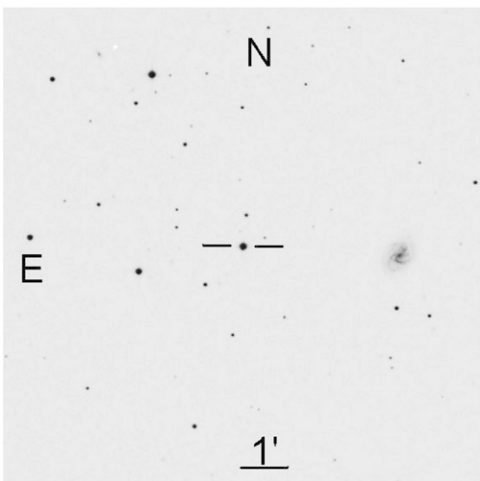
Figure 127. Field, 10′ on a side, of the star Feige 108.

Figure 134. Field, 10′ on a side, of the star BD +1 4774.
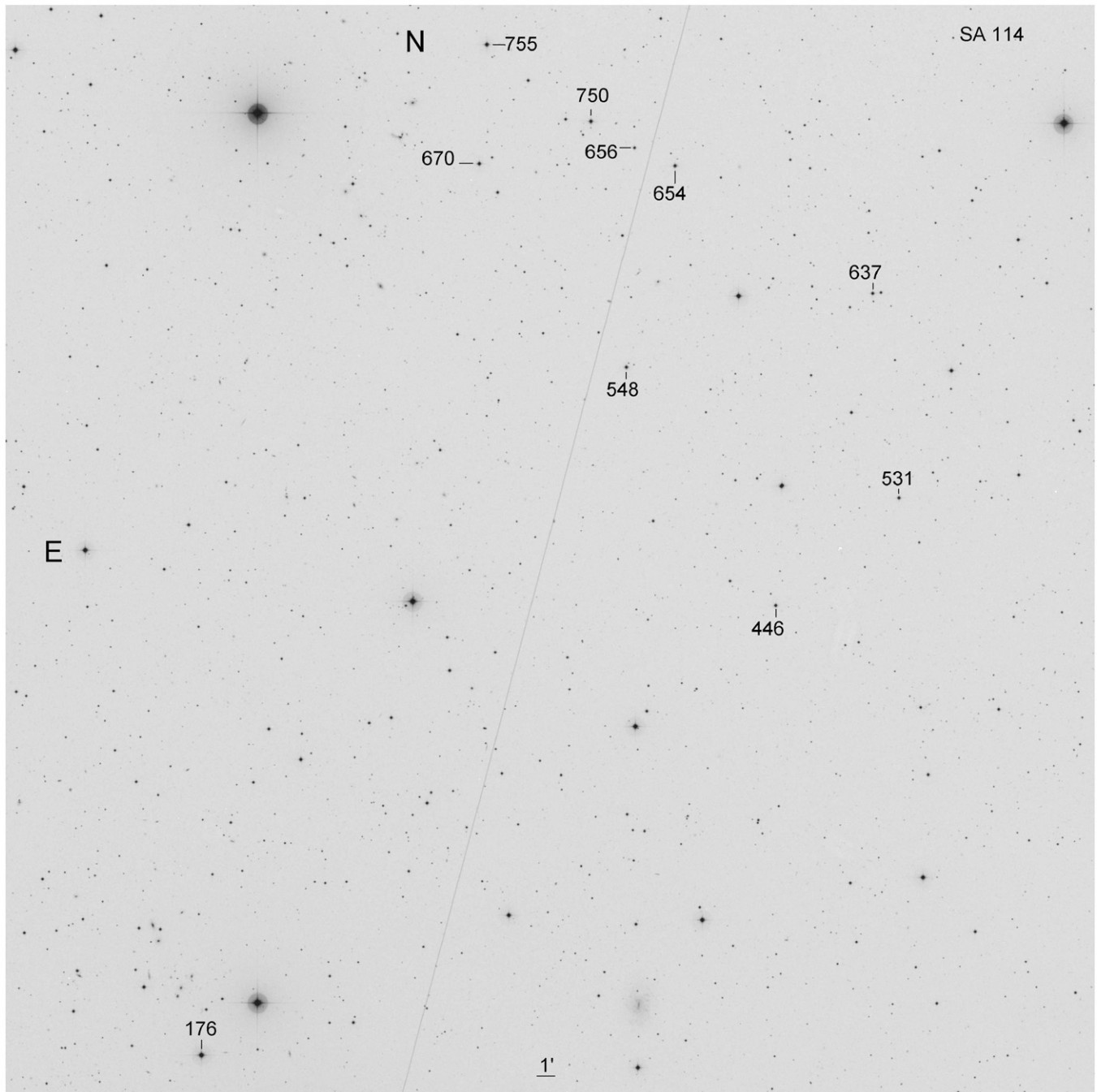
Figure 129. Field, 60′ on a side, of SA 114.

Figure 131. Field, 15′ on a side, of the sequence in the vicinity of the star GD 246.

Figure 133. Field, 15′ on a side, of the sequence in the vicinity of the star PG2336+004.

Figure 132. Field, 15′ on a side, of the sequence in the vicinity of the star PG2331+055.
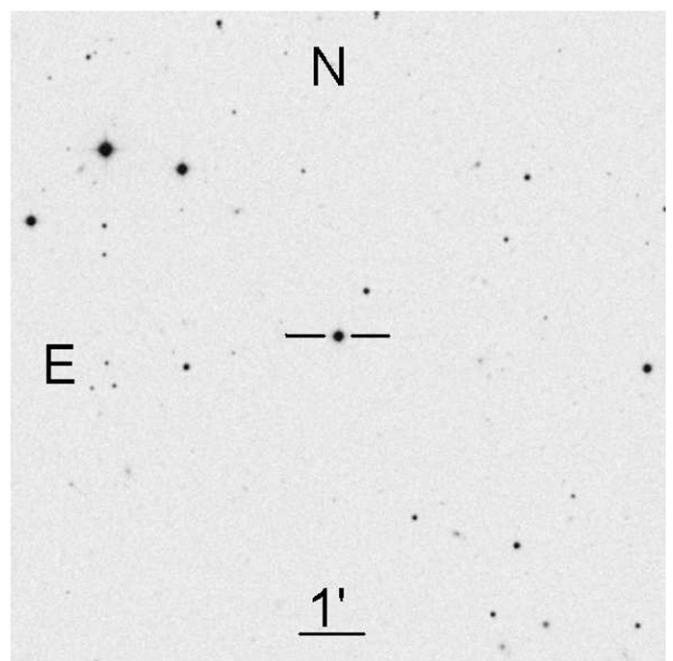
Figure 136. Field, 10′ on a side, of the star PG2349+002.
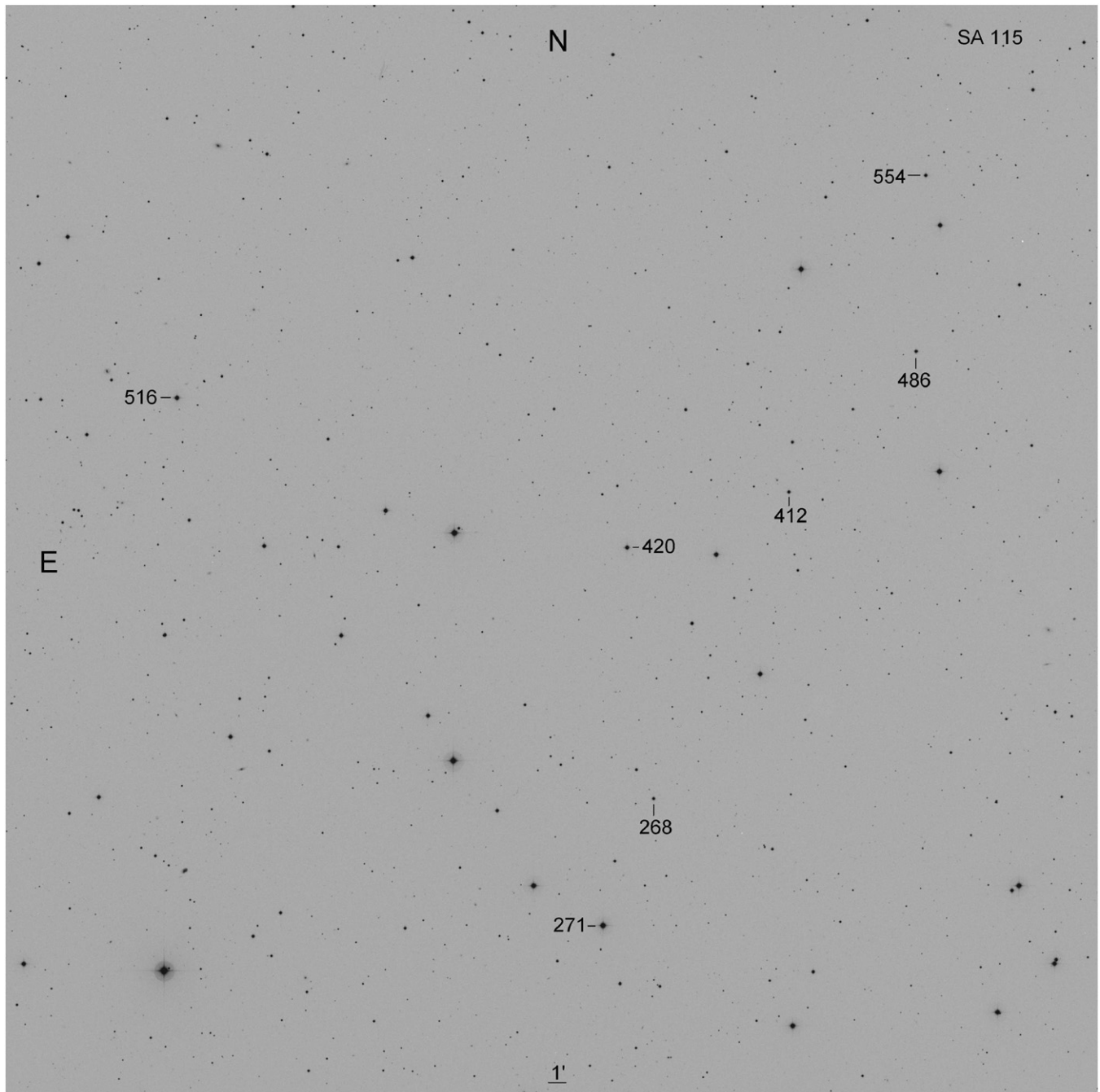
Figure 135. Field, 60′ on a side, of SA 115.
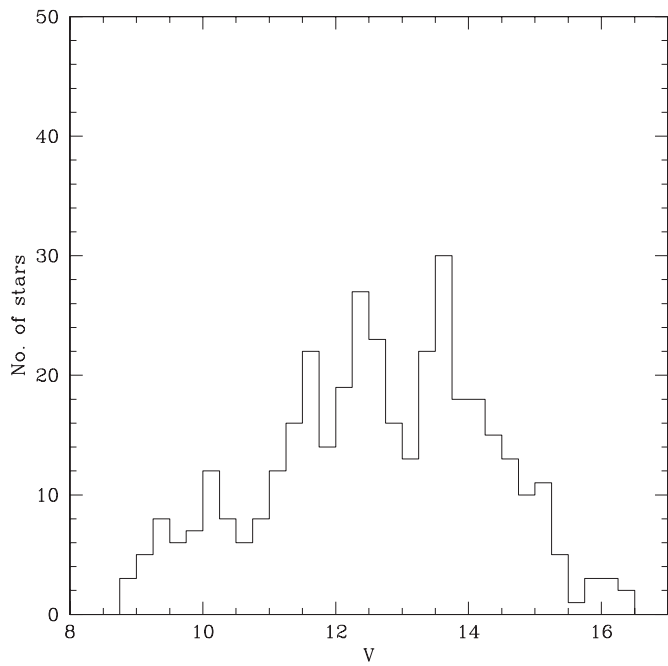
Figure 137. Magnitude distribution for the standard stars listed in Table 2 with five or more measures in intervals of 0.25 *V* mag.
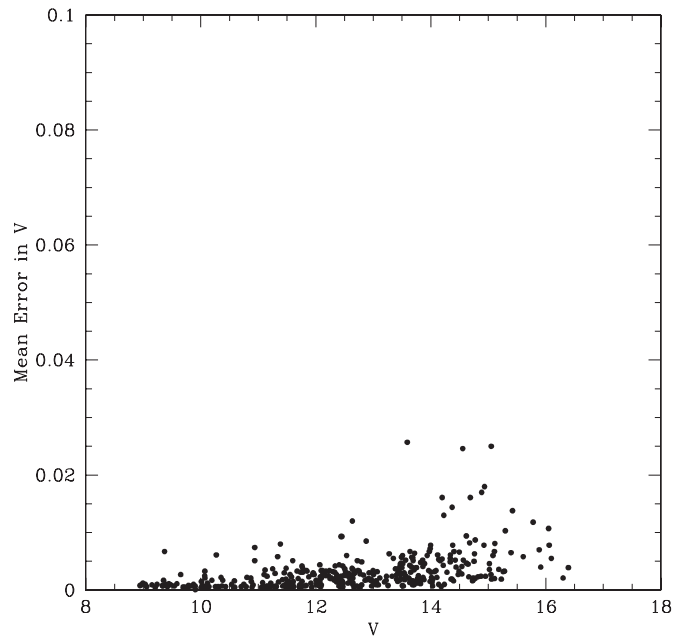
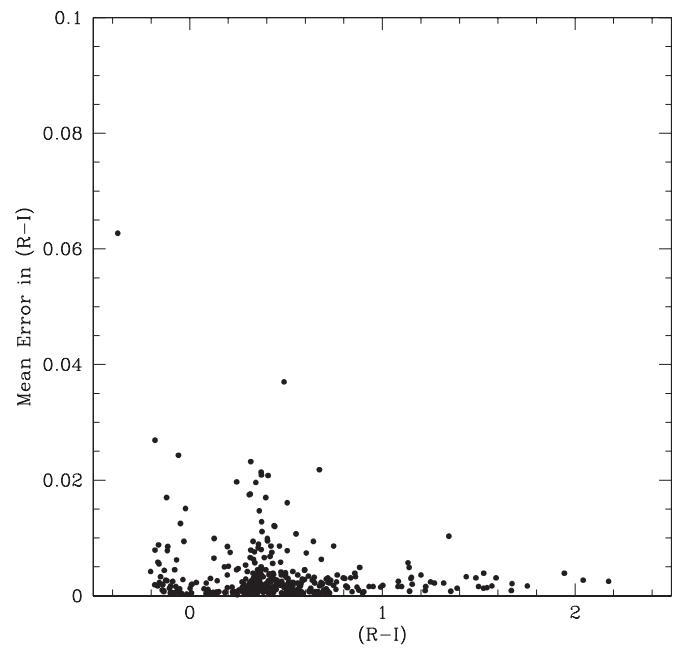**Figure 139.** Mean error of the mean of a single observation in *V* for the standard stars as a function of *V*.
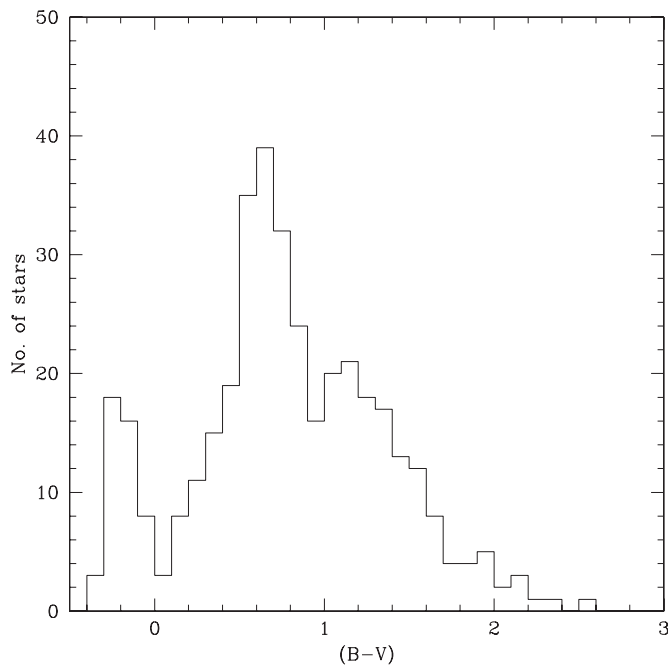
Figure 138. Distribution in $(B - V)$ color index for the standard stars listed in Table 2 with five or more measures in intervals of 0.1 mag.
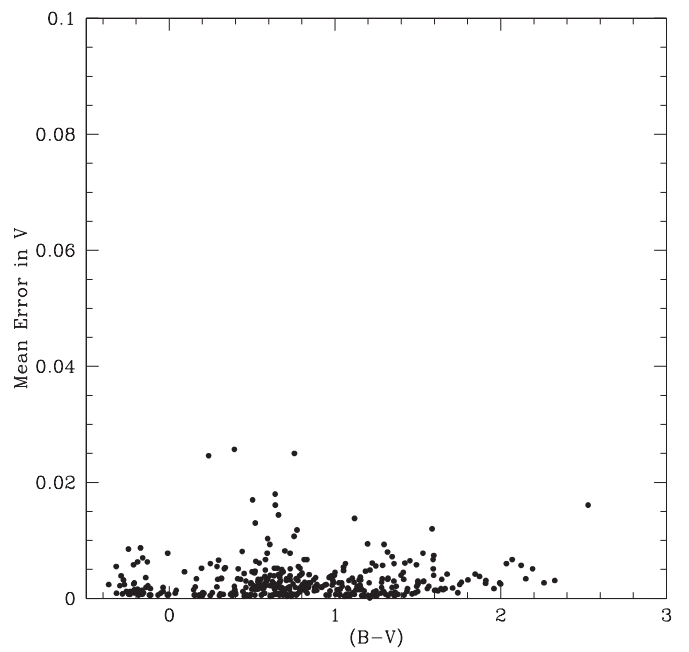
Figure 140. Mean error of the mean of a single observation in *V* for the standard stars as a function of $(B - V)$.
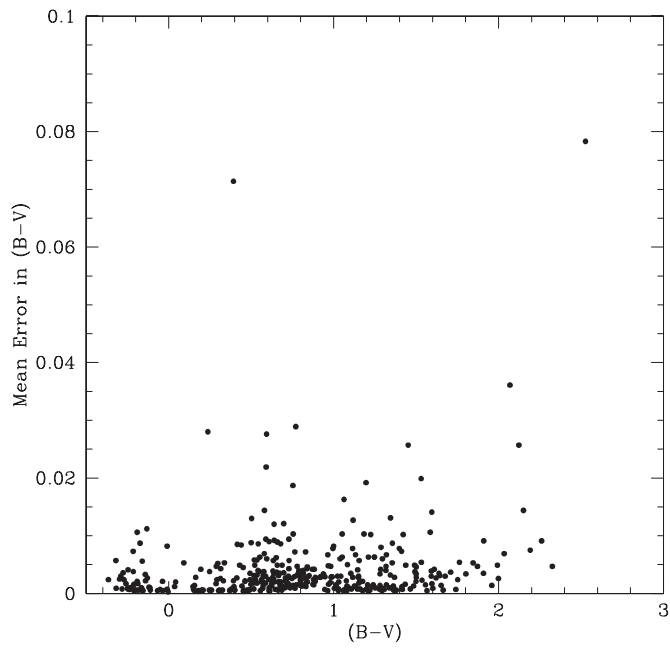
Figure 141. Mean error of the mean of a single observation in $(B - V)$ for the standard stars as a function of $(B - V)$.
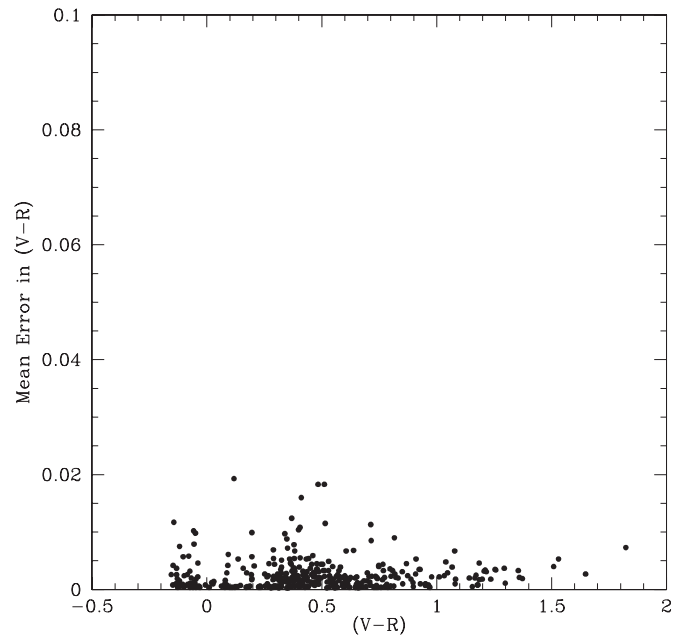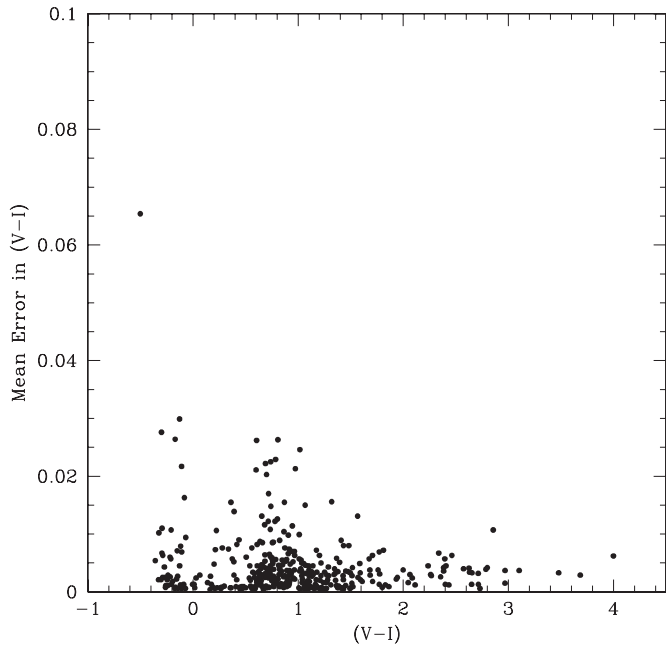

Figure 143. Mean error of the mean of a single observation in $(V - R)$ for the standard stars as a function of $(V - R)$.
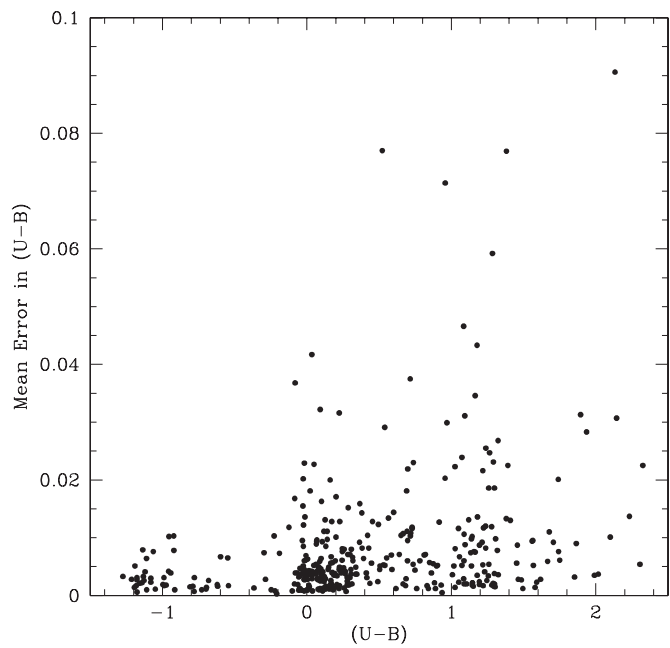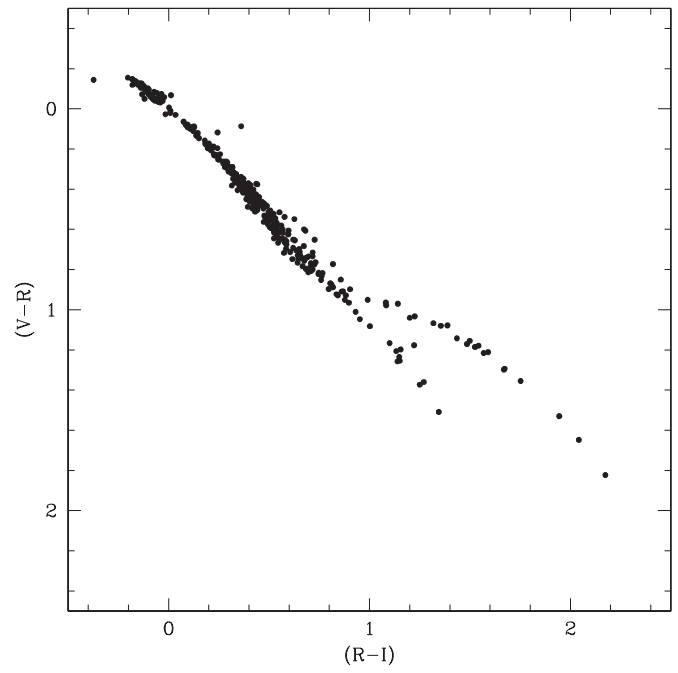

Figure 142. Mean error of the mean of a single observation in $(U - B)$ for the standard stars as a function of $(U - B)$.
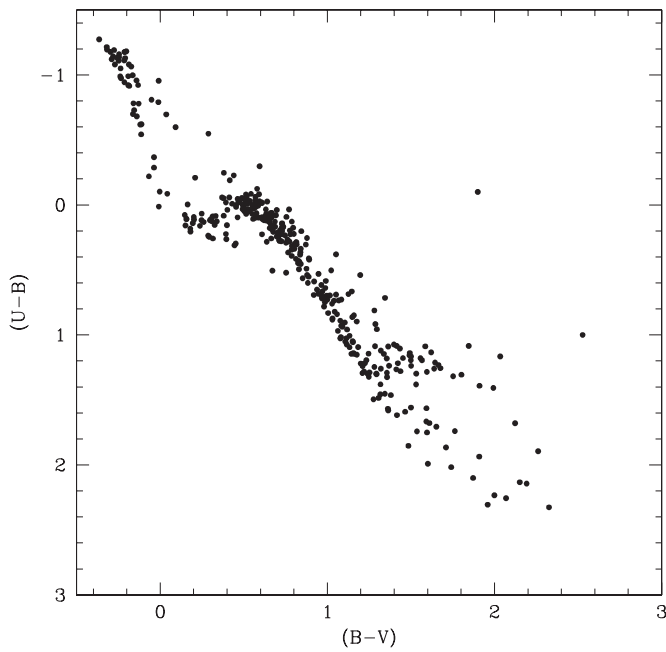

Figure 144. Mean error of the mean of a single observation in $(R - I)$ for the standard stars as a function of $(R - I)$.

Figure 145. Mean error of the mean of a single observation in $(V - I)$ for the standard stars as a function of $(V - I)$.

Figure 147. $[(V - R), (R - I)]$ color–color plot for stars measured in this paper with five or more observations.

Figure 146. $[(U - B), (B - V)]$ color–color plot for stars measured in this paper with five or more observations.