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The Variable Stars of the Large Magellanic Cloud

By Cecilia H. Payne-Gaposchkin

Smithsonian Institution
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The Variable Stars of the Large Magellanic Cloud*

Introduction

The results of the current study of the variable stars in the Large Magellanic Cloud have been summarized by S. Gaposhkin (1971). The total number of stars measured was 2,184, which included the variables published at Harvard (HV) and elsewhere before 1967 and 45 stars discovered in the course of the work. After measurement, 354 stars were rejected as not appreciably variable. Table 1 summarizes the 1,830 remaining stars by type. Bibliographic data for the variables previously known are given by Hodge and Wright (1967) and need not be repeated here.

The accepted variable stars are arranged in order of X coordinate in Table 2; types are indicated as follows: C = Cepheid; RR = RR Lyrae Star; L = long-period variable; Cyc = cyclic variable; W = W Virginis star or Type II Cepheid; I = irregular; R CrB = R Coronae Borealis star; SS = SS Cygni star; N = nova; v? = doubtful variability. Symbols with question marks indicate probable types for stars whose periods have not been found. Positions are given in Miss Leavitt's X and Y coordinates, which are expressed in seconds of arc and referred to right ascension (1900) $5^h25^m.7$ = +12125″ in X and declination (1900) −69° 0′ = +10554″ in Y. As noted by Hodge and Wright (1967), the published coordinates of some of the variables are incorrect. The positions of these stars, of the newly discovered variables, and of the stars whose positions were published in equatorial coordinates have been measured by triangulation, referred where possible to the X and Y coordinates of neighboring stars given by Miss Leavitt (*Harvard Annals*, volume 60, 1908). Such coordinates are marked with asterisks in Table 2. A few outlying stars were reduced to X and Y coordinates by means of the formulas given by Wesselink (1959). A list of duplicate and alternative names is given in Table 3.

The accuracy of the coordinates can be judged by comparing the published positions of the 17 stars that have inadvertently been announced twice to be variables, with the result that their positions have been twice measured independently. Table 4 contains the comparison. The original coordinate grid extended from 0″ to +24300″ in X and from 0″ to +20100″ in Y; positions outside these limits were given in right ascension and declination. The average difference of position for the 13 stars within the original grid is 19″.5, which corresponds to 0.325 mm on the plate. The average difference for four stars outside the grid is 60″.2, or 1 mm on the plate. The comparison reinforces the statement made by Miss Leavitt (1906) that the published positions serve for rough orientation only, and that marked charts are essential for positive identification. The difficulty of locating known variables is discussed by Hodge and Wright in their description of the procedure used in making their atlas of variable stars in the Large Cloud. A few variables that eluded even their precautions are indicated in the notes to Table 5.

The Cepheid Variables

The results for 1,110 Cepheid variables are given in Table 5, which is arranged as follows:

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Column 1: HV number.
2: Number assigned by Gaposhkin (1971).
3, 4: X and Y coordinates on Miss Leavitt's system.
5: Previously published period, if any. If two periods have been published, the later is given.
6: Period determined in the present study.
7: Logarithm of the period given in column 6.
8: Maximal magnitude, corrected for absorption.
9: Minimal magnitude, corrected for absorption.
10: Magnitude at mean intensity, corrected for absorption.
11: Amplitude.
12: Interval from minimum to following maximum.
13: Interval from mean increasing magnitude to maximum.
14: Interval from mean increasing magnitude to mean decreasing magnitude, or width of curve at mean magnitude.
15: Adopted absorption correction.
16: Date of one well-observed maximum.
17: Number of positive observations used in forming mean light curve.
18: Remarks: S = scatter; S! = large scatter; SM = scatter at maximum; Sm = scatter at minimum; P? = period doubtful; cc = close companion or companions; cr = crowded region.

The units in which each quantity is expressed are given at the heads of the corresponding columns. An asterisk after the HV number calls attention to the notes following the table; these are arranged in order of HV number, and approximate periods are given to facilitate reference.

The notes in the last column of Table 5 indicate the weight that can be assigned to the light curve. All the observed points are reduced with the period that has been deduced. For most of the stars the scatter is no greater than expected from the uncertainty of the estimates. If the scatter is unusually large, an attempt is made to assign the cause. Estimates of stars in crowded regions or with close companions are often thus affected. For other stars the adopted period may be in error or may be variable, or the light curve itself may be variable. A number of variable periods have been found. The periods of other stars, indicated by P? in the final column of Table 5, may not be correct. These periods are probably not grossly in error, and many of them agree rather closely with those previously published. Possibly the light curves are variable for some of the stars for which the scatter is most pronounced at maximum; well-known galactic stars that show this feature are TU Cassiopeiae and U Trianguli Austrinae, whose light curves display beat phenomena. Our material is too scattered in time for the disentangling of beats; such stars would repay more concentrated analysis.

The present study has almost doubled the number of Cepheids of known period in the Large Cloud; 537 new periods have been derived, and 574 were known previously. With the very few exceptions indicated in the notes to Table 5, the periods published earlier were of the right order. The ranges of HV 954, 991, 2489, 5921, 5974, 12000, 12001, 12026, 12424, 12518, and 12652 have probably been underestimated because of close companions or dense background. About a dozen stars previously judged not to be variable have been found to be periodic. A few stars, previously thought to be periodic (HV 2687, 2870, 5767, 5846, 11993, 12060, and 12496), now are considered to be irregular or assigned to the nonvariable list. The period published by Shapley and McKibben (1940) for HV 5767 may perhaps belong to HV 5752; the data given by Shapley and Nail (1953) for the eclipsing star HV 5846 may perhaps refer to HV 5864. The other discrepant stars may have been misidentified.

The Type II Cepheids

The 17 Type II Cepheids are listed in Table 6. They have been assigned to the class on the basis of shape and variability of light curve and of erratic variations of period. For many of them a mean light curve cannot be derived from all the observations, and light curves for well-observed intervals have been used. All are probably members of the Large Cloud. The data for HV 5690 are taken from Hodge and Wright (1968), who derived the period. The light-curve types (cr = crested, fl = flat) are those defined by Kwee (1967).

The RR Lyrae Stars

Data for the 29 RR Lyrae stars are given in Table 7; all are regarded as foreground objects.

In the area of the Small Cloud, 31 RR Lyrae stars were assigned to the foreground by Payne-Gaposchkin and Gaposchkin (1966). As the galactic latitudes of the Large and Small Clouds are respectively about $-32°$ and $-42°$, we should expect to find more RR Lyrae stars per square degree in front of the former, the more so on account of its larger angular diameter. Our Large Cloud list contains more bright RR Lyrae stars, and fewer faint ones, than were found for the Small Cloud. Possibly we underestimated the number of short-period variables that actually are members of the Small Cloud. It may be that the less complete survey of the Large Cloud is also in part responsible for the anomaly.

The two faint RR Lyrae stars, HV 13015 and 13016, were discovered by Gaposhkin in the faint cluster HS 83, listed by Hodge and Sexton (1966). They have nearly the same value of $<m>_0$, 16.64 and 16.56; if we adopt a modulus of 17.1, the cluster is 26 kpc from us, and about 29 kpc from the Large Cloud. Both variables are so close to the cluster that they must be members of it.

Long-period, Cyclic, and Irregular Variables

Tables 8, 9, and 10 enumerate the long-period, cyclic, and irregular variables (range one magnitude and greater). The median maximal magnitudes for the three groups are as follows:

Long-period variables	15.50 ± 0.55
Cyclic variables	14.29 ± 0.78
Irregular variables	15.14 ± 0.72

The long-period variables are arranged in order of period. Those that are certainly foreground stars are marked with two asterisks; those that are probably in the foreground, with one asterisk. Nail (1952) classes HV 2578 and 19984 as irregular.

The cyclic variables are enumerated in Table 9. They are distinguished from the long-period variables by their more irregular behavior, but an average cycle can be discerned. The stars HV 888, 996, 2255, 2700, 12407, 12420, and 12437 have been described as irregular by Nail (1952) or by Nail and Shapley (1955). The variations of HV 12501 are occasionally quite irregular.

Table 10 lists 60 irregular variables with ranges over a magnitude. Most of those for which no color is noted are probably red.

R Coronae Borealis Stars

The four R Coronae Borealis stars are given in Table 11. The brightest, HV 966 (W Mensae), has the characteristic spectrum F8:I p, recorded by Feast *et al.* (1960).

Systematic Corrections for Absorption

The photographic appearance of the Large Cloud gives evidence of localized absorptions. The systematic deviations of Cepheids in different regions from an average period-luminosity curve point in the same direction.

The gross features of the absorption can be approached by way of counts of galaxies and of deviations from the period-luminosity relation. Absorption for individual stars can be determined from accurate color excesses, measures of interstellar bands, and polarization.

Shapley and Nail (1951b) showed by means of galaxy counts that the transparency in the axis is very low and that few galaxies shine through either the clustered areas or the open regions in the center of the Large Cloud. The transparency increases radially and is essentially normal at the edges. They did not attempt to determine absorption for particular regions because of the uneven distribution of the field galaxies, but they considered that it might in some places amount to as much as a magnitude.

The deviations from the average period-luminosity curve were later used by Shapley and Nail (1952) to obtain quantitative values for the absorption in six regions of the Large Cloud. The reality of the differences was established, though on the basis of a relatively small number of Cepheids, 158 in all.

The same method has been used to determine the corrections for absorption from the whole of the Cepheid material covered by the present paper. The face of the Cloud was divided into regions $2000' \times 2000'$ in area. The deviations from the mean period-luminosity relation were determined for each area, and were combined and smoothed for a second approximation. In a circle about $3°.5$ from the dynamical center of the Cloud the absorption was adopted as zero.

The resulting corrections for absorption are shown in Table 12.

The corrections show many of the same features that had been pointed out by Shapley and Nail. By reference to the diagram given by Shapley and Nail (1951b) we can determine the average absorption given in our table for the five regions in which galaxy counts were made:

	Mean absorption
Border	0.24
Open regions	0.42
Clustered regions	0.43
Axis	0.60

As in the results from galaxy counts, the absorption is greatest in the axis, about the same in open and clustered regions, and least in the border regions (which are not, however, yet at the unobscured edges of the Cloud).

A more quantitative comparison can be made with the results derived by Shapley and Nail (1952) from the period-luminosity curve deviations. Their absorptions were expressed as differences from a mean; we have increased them by 0.38, the average difference between our values and theirs. The mean absorptions in various regions follow:

	Shapley and Nail	*Data herein*
A (region of NGC 1956)	0.64	0.57
B (center of axis)	0.47	0.60
C (region of 30 Doradus)	0.56	0.58
D (open region preceding 30 Doradus)	0.58	0.44
E (region of NGC 1783)	0.25	0.30
F (region of NGC 1866)	0.33	0.32

The relation of absorption to region is substantiated. Exact agreement cannot be expected, in view of revisions of the magnitude scales and of the much greater number of stars in our sample. An independent check on our zero point is furnished by the value of +0.07 for the (B-V) color excess of NGC 1866 used by Arp (1967), which gives a value of 0.28 for the photographic absorption, if the conventional value of 4 is used for the ratio of color excess to photographic absorption.

Another test of the plausibility of our corrections for absorption can be made by comparing them with the color excesses determined for individual stars in the same areas. Color excesses for bright stars in the Large Cloud have been obtained by Feast *et al.* (1960), and for individual clusters and associations by Westerlund (1961). In the following comparison, the color excesses have been multiplied by 4 to obtain photographic absorptions, and the visual absorptions by 4/3. The average photographic absorptions derived from the two sources have been assembled for six values of our photographic absorption in the corresponding areas:

Average Pg absorption	0.05	0.25	0.35	0.45	0.55	0.65
Feast *et al.* (1960)	0.20(8)	0.48(5)	0.40(6)	0.32(8)	0.68(6)	0.72(5)
Westerlund (1961)	—	0.40(1)	0.00(4)	—	0.51(3)	0.56(6)

Here again, close numerical agreement would hardly be expected, and the data of Westerlund show that some clusters, quite close together, have color excesses that differ considerably (e.g., NGS 2074, 2081, 2092, 2100). The point to be made is that color excesses lead to absorptions at least as great as those we have used. The average absorption for all stars studied by Feast *et al.* would be 0.44, and their greatest value is $1^m.28$, larger than any entry in our table.

The 4430 Å band absorption, studied by Hutchings (1966) in the Magellanic Clouds, contributes additional evidence of absorption within both Clouds. Absorption within the Small Cloud, deduced in the same way as for the Large Cloud, was described by Payne-Gaposchkin and Gaposchkin (1966). In this case also the evidence for the existence of absorption is fortified by the galaxy counts of Wesselink (1961a, b) and to some extent by those of Shapley and Nail (1951b) for the central regions of the Small Cloud.

It must, however, be emphasized that our corrections for absorption are based on gross structure. To correct each variable star individually is beyond our present means.

Table 13 contains a list of the eclipsing stars.

References

Arp, H.
1967. Analysis of Stellar Content and Cepheid Evolution in NGC 1866. *Astrophysical Journal*, 149: 91–106.

Cannon, A. J.
1936. The Henry Draper Extension. *Annals of Harvard College Observatory*, 100 (6) :205–226.

Feast, M. W., A. D. Thackeray, and A. J. Wesselink
1960. The Brightest Stars in the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, 121:337–385.

Gaposhkin, S.
1971. 1834 Variables in the LMC. [In preparation.]
Hodge, P. W., and J. A. Sexton
1966. 457 New Star Clusters of the Large Magellanic Cloud. *Astronomical Journal*, 71:363–368.
Hodge, P. W., and F. W. Wright
1967. The Large Magellanic Cloud. Smithsonian Publication 4699. Washington, D.C.: Smithsonian Institution Press.
1968. Studies of the Large Magellanic Cloud, X: Photometry of Variable Stars. *Astrophysical Journal*, supplement, 17:467–495.
Hutchings, J. B.
1966. 4430 Å Band Absorption in the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, 131:299–305.
Janes, K. A.
1964. Period Changes of the Cepheid Variable HV 953. *Astronomical Journal*, 69:131–132.
Kwee, K. K.
1967. Investigations on Population II Cepheids, III: Light-curves and Two-colour Diagrams. *Bulletin of the Astronomical Institute of the Netherlands*, 19:260–274.
Leavitt, H. S.
1906. 1777 Variables in the Magellanic Clouds. *Annals of the Harvard College Observatory*, 60:87–108.
Nail, V. McGibben
1952. New Variables and Periods in the Large Magellanic Cloud. *Harvard College Observatory Bulletin*, 921:1–4.
Nail, V. McKibben, and H. Shapley
1955. The Magellanic Clouds, XV: On the Tilt of the Large Cloud. *Proceedings of the National Academy of Science, U.S.A.*, 41:685–690.
Payne-Gaposchkin, C., and S. Gaposchkin
1966. Variable Stars in the Small Magellanic Cloud. *Smithsonian Contributions to Astrophysics*, 9: 1–205.
Shapley, H.
1931. Notes on the Large Magellanic Cloud, III: A Preliminary Determination of the Period-luminosity Relation. *Harvard College Observatory Bulletin*, 883:16–18.
Shapley, H., and V. McKibben
1940. A Summary of the Periods and Median Magnitudes of Magellanic Cloud Cepheids. *Harvard College Observatory Circular*, number 439, 5 pages.
Shapley, H., and V. McKibben
1951a. NGC 1866 and the Magellanic Cloud Variables. *Astronomical Journal*, 55:249–251.
1951b. Magellanic Clouds, I: Transparency. *Proceedings of the National Academy of Science, U.S.A.*, 37:133–138.
1952. Magellanic Clouds, III: Differential Absorption Within the Large Cloud. *Proceedings of the National Academy of Science, U.S.A.*, 38:281–286.
1953. Magellanic Clouds, V: Fifty Eclipsing Stars. *Proceedings of the National Academy of Science. U.S.A.*, 39:1–5.
1955a. The Magellanic Clouds, XIV: The Bar of the Large Cloud. *Proceedings of the National Academy of Science, U.S.A.*, 41:185–190.
1955b. Magellanic Clouds, XVII: Seven Notes on the Cepheid Variables. *Proceedings of the National Academy of Science, U.S.A.*, 41:829–836.
Wesselink, A. J.
1959 Some Formulae Connecting Harvard x and y Equatorial Coordinates and Standard Coordinates for the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, 119: 576–579.
1961a. The Dust Content of the Small Magellanic Cloud from Counts of Nebulae. *Monthly Notices of the Royal Astronomical Society*, 122:503–508.
1961b. Absorption and Reddening in the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, 122:509–512.
Westerlund, B.
1961. Population I in the Large Magellanic Cloud. *Uppsala Astronomic Observatory Annals*, 5(1): 58 pages.
Wooley, R. v. d. R., A. R. Sandage, O. J. Eggen, J. B. Alexander, L. Mather, E. Epps, and S. Jones.
1962. Studies in the Magellanic Clouds, IV: Photometry of Cepheids in Variable Field I, Large Magellanic Cloud. *Royal Observatory Greenwich-Cape Bulletin*, 58: 57 pages.

Abstract

Payne-Gaposchkin, Cecilia H. The Variable Stars of the Large Magellanic Cloud. *Smithsonian Contributions to Astrophysics*, number 13: 41 pages, 1971—The variable stars in the Large Magellanic Cloud have been studied on the basis of estimates made on all available plates at the Harvard College Observatory. Of the 2,184 stars measured, 1,830 have been judged to be variable. About 800,000 estimates were made.

The numerical data derived from a discussion of the material are listed in tabular form.

TABLES 1–13

TABLE 1.—*Variable stars in the Large Magellanic Cloud*

Cepheid variables	1110	Probable irregular variables	48
Probable Cepheids (no period found)	49	R Coronae Borealis stars	5
RR Lyrae stars	28	SS Cygni stars	1
Probable RR Lyrae stars (no period found)	2	Novae	3
Long-period variables	46	Eclipsing stars	79
Cyclic variables	23	Probable eclipsing stars (no period found)	17
W Virginis stars	17	Variability doubtful	81
Irregular variables	321		1830

TABLE 2.—*Variable stars arranged in order of X*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
12708	-10581	15252	RR	12218	852	19059	C	2242	2347	8720	I?	2252	3361	14108	C
12710	-6348	27355	L	2237	883	14198	C	12411	2400	4656	E	W 41	3375*	18205*	C
8033	-6319	1497	RR	2236	884	7673	I	12412	2400	5238	C	2253	3376	13163	E?
12711	-3250	14617	C	12232	987	20385	I	W 34	2401*	19047*	C	5517	3394	7508	C
12712	-2916	14768	C	12462	1026	4902	C	8037	2493*	2269*	C	12507	3408	10392	C
8034	-2475	3647	L	2238	1075	5955	I?	12222	2517	19569	C	12419	3426	5328	C
12718	-2412	17027	RR	12466	1104	13800	I	877	2520	13111	C	5518	3460	4480	C
12725	-1683	19565	I	12467	1122	4668	I	12904	2566*	6486*	C	12508	3468	5442	C
12717	-1224	7989	C	12469	1140	12816	v?	5504	2574	7606	v?	12511	3480	12774	C
12715	-988	5843	C	12470	1212	5004	C?	12497	2580	19740	I	5522	3530	13340	C
12714	-973	5237	E	12471	1212	8082	C	5506	2599	17624	L	12512	3534	13884	C
12730	-900*	20458*	C	12472	1218	7380	C	12910	2607*	6513*	C	879	3581	7918	C
12976	-864*	6756*	C	12473	1218	8910	C	12235	2607	21433	C	12238	3593	20777	v?
U 2	-852*	6639*	C	5497	1243	18679	C	2243	2612	3114	I	5524	3618	11474	I
12719	-842	8763	I	12474	1284	6600	C	12498	2622	7944	I	W 30	3630*	19101*	C
12728	-772	17247	C	13051	1285	15000	E	12499	2652	16398	C	2254	3695	19844	C
12720	-754	8256	C	12475	1332	9654	C	5508	2697	7340	v?	12420	3720	5400	Cyc
12722	-667	8356	C	U 11	1334	11608	C	12223	2709	19542	C	12226	3723	19272	C
12977	-584*	7933*	I	12476	1362	7320	C	2244	2717	13714	C	5525	3728	10432	v?
12727	-569	13948	C	2239	1415	17182	Cyc	2245	2725	7001	C	12421	3738	864	C
12716	-425	2807	C	12479	1416	8058	I	2246	2777	6856	I	12422	3738	1482	C
12732	-315	19751	RR	12480	1440	15714	I?	2247	2778	7690	I	12513	3744	15198	C
12734	-54	18056	I	12482	1452	14772	I	2248	2794	6642	C	878	3746	6094	C
12729	-41	13853	I	12483	1482	13578	C	12500	2796	8418	C	5526	3756	8623	C
12724	-33	6650	C	12484	1512	4872	E	2249	2800	15625	C	883	3767	11609	C
12735	-33	18755	v?	W 37	1518*	18194*	C	W 3	2810*	21168*	C	12514	3780	7662	C
12959	49*	17849*	C	2240	1575	13503	E	12413	2820	4734	I?	W 31	3786*	18632*	C
12733	58	17191	C	872	1597	14889	C	12501	2820	7860	Cyc	13012*	3787*	13975*	I
U 1	66	7978	C	12219	1608	19908	C	5510	2826	8002	v?	13013*	3791*	7688*	C
8036	172*	4450*	C	W 38	1647*	17714*	C	12737	2829	-165	E?	12239	3797	21604	RR
12463	202*	2657*	I	6098	1654*	21423*	C	12414	2832	2532	v?	2255	3800	5414	Cyc
12736	208	18964	C	12486	1655*	2509*	C	12224	2922	18912	C	12515	3804	9108	v?
13009*	222*	19032*	I	12961	1709*	7885*	C	12743	2922	25420	E?	12516	3804	12888	I?
12723	240	4052	C	12741	1738	23815	RR	12225	2946	18913	C	12740	3828	-639	C
12444	300	17280	C	12485	1740	7896	C	12502	2964	11724	C	W 28	3837*	19152*	C
12446	336	11814	C	12220	1749	18636	C	874	3004	4901	C	2257	3844	6140	C
12447	372	6450	C	12488	1776	16950	v?	12415	3012	882	C	886	3855	19734	C
13010*	390*	19046*	C	12406	1818	3600	C	875	3025	8114	C	12423	3882	546	C
12958	435	5609	I	12407	1818	4650	Cyc	12236	3042	20288	I?	12240	3883	21477	C
12448	492	4230	v?	12490	1872	17082	C	12503	3048	8412	C	13014*	3889*	12541*	E
5496	504	5670	I	2241	1885	18265	E	5511	3052	2876	C	12241	3908	12160	C
12450	540	16602	C	12408	1902	3552	C	880	3097	14178	C	W 42	3923*	17804*	C
12451	600	8538	I	W 2	1925*	21503*	C	873	3192	2557	C	2258	3926	15895	RR
12452	606	7824	C	12491	1962	15618	C	12504	3192	15726	C	5529	3965	13923	I
13011*	616*	19848*	RR?	W 18	1985	19649	C	12416	3198	2478	C	W 14	3965*	20194*	C
2235	617	17776	C	12492	2004	13572	I	12417	3216	1848	C	12965	3968	13871	I
12454	648	15720	I	12233	2088	19296	I	12505	3228	10200	C	5530	3996	16304	C
12455	660	6030	I	12409	2148	3384	C	2251	3228	18174	C	8040	3998*	3749*	C
2883	665*	24999*	L	W x	2226*	19686*	I	12506	3276	19488	I?	2259	4000	8348	E
12457	792	4740	I	12493	2232	8976	E	5514	3288	16914	C	12517	4008	9936	C
12217	792	19722	C	876	2274	15323	C	12237	3291	20123	C	13015*	4019*	10435*	RR
12459	810	18690	C	12234	2282	21083	C?	5513	3296*	9472*	C	12242	4026*	12402*	C
12460	826	14994	I	12495	2298	9120	Cyc	12418	3330	2028	C	2260	4030	11684	C

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
12518	4038	15402	C	12533	4620	20220	C	889	5186	10012	C	2315	5880	15384	C
13016*	4041*	10445*	RR	5541	4624	19128	C	2296	5190	10354	C	895	5889	11024	C
13017*	4048*	10432*	I	12534	4638	13800	C	12430	5196	888	C	2316	5904	8604	C
2261	4053	5579	C	2275	4640	15340	I	2297	5198	11354	C	13045*	5919*	20434*	E
12424	4068	3990	C	12747	4650	20719	C	12431	5202	3636	C	5579	5922	17640	C
W 43	4071	17898	C	12531	4653*	7247*	C	W 48	5202*	18397*	C	5580	5924	4635	I
882	4084	7945	C	12748	4664	21644	C	5557	5239	9523	v?	896	5924	11960	C
2262	4085	5764	C	5542	4676	5742	I?	5558	5242	4912	C	12322	5934	9270	C
2263	4087	11645	C	888	4678	16045	Cyc	12432	5244	4362	C	5581	5944	13412	E
12227	4095	19632	L	2276	4712	10648	I?	12541	5262	20058	C	893	5956	9473	C
884	4099	12937	L	12535	4722	12060	v?	5559	5268	6732	v?	12745	5973	44	C
5531	4103	19660	C	12536	4728	13164	C	5560	5272	4610	I	2317	6010	13087	C
12519	4110	15432	C	13019*	4734*	10639*	C?	12755	5273	20517	I	12543	6012	20292	C?
13018*	4120*	12972*	C	12742	4743	-219	C	892	5277	10770	C	12185	6030*	23108*	v?
W 13	4130*	20079*	C	2277	4744	8302	C	2298	5284	6167	I	5584	6032	4898	Cyc
5532	4140	4992	I	12750	4763	22935	I	12990	5314*	14706*		12759	6034	21054	I
881	4146	4733	C	12749	4767	20795	C	2299	5323	15154	C	12544	6042	3810	C
12520	4158	16080	C	2278	4786	5557	C	890	5327	9495	C	12323	6048	10062	E
5533	4196	16280	C	5543	4794	15560	C	6099	5359	21725	C	12186	6052*	23568*	C
W 25	4255*	19363*	C	2279	4805	10840	C	891	5363	9694	C	5586	6060	15910	C
5534	4260	9362	C	2280	4811	10514	C	5563	5384	13160	C	12973	6069*	15545*	I
12521	4260	19860	C	12537	4824	8928	C	2300	5385	9418	C	2319	6080	11104	C
2884	4272	22104	C	W 45	4824*	18253*	C?	12433	5412	1296	C	5587	6083	5634	E
12425	4278	2928	I	2281	4840	10924	W	12756	5437	22648	C	2320	6084	11186	C
12522	4296	19920	v?	12538	4872	13554	I?	W 47	5450*	18176*	C	898	6093	11283	C
12746	4305	21993	C	2282	4894	5829	C	5567	5510	16244	C	2321	6104	10873	C
12523	4320	12402	C	2283	4899	8095	C	2301	5524	3202	C	5589	6112	10001	C
W 49	4326*	20526*	C	887	4904	7773	C	13052*	5541*	9680*	E	5590	6116	19078	C?
12524	4332	9444	I	5547	4904	11418	I	2302	5547	4212	I	5591	6120	17656	C
12426	4350	4674	C	5564	4924*	264*	v?	5568	5554	5094	I	2322	6124	3748	I
W 44	4366*	17973*	C	2284	4932	13366	RR	2303	5563	12524	C	2323	6124	10500	RR
12525	4380	16422	C	5548	4942	12180	I	12321	5576	10823	I	2324	6124	12276	C
5536	4392	17016	C	5549	4955	13962	E	5569	5580	10660	C	5593	6144	3642	I
2266	4418	14874	I	2285	4987	10581	C	12434	5634	4410	C	5594	6166	17455	C
2267	4426	2223	C	2286	5026	12094	I	5570	5636	9762	v?	13023*	6182*	10584*	L
2269	4430	8624	I	2429	5028	3678	C	2304	5646	4247	I	5595	6194	11765	C
12427	4452	2778	C	5551	5031	5041	C	5571	5669	13555	C	2325	6195	11779	C
W 11	4453*	20615*	C	W 22	5036*	19885*	C	2305	5696	11874	C	2885	6197*	25088*	C
5537	4454	11206	v?	5552	5040	12936	v?	2306	5725	8705	I	5597	6219	8250	L
2270	4472	7746	C	2287	5074	14775	C	2307	5735	8907	C	5598	6228	12316	W
12526	4476	6648	E	5554	5080	2914	I	2308	5737	11753	I	2326	6235	9638	C
12527	4476	15294	C	2288	5085	8946	C	5572	5740	14676	I	2327	6241	11185	C
12964	4500*	7573*	C	13020*	5085*	12307*	I	2309	5763	10374	C	899	6244	10284	C
12528	4500	12156	C	12753	5090	20996	C	12972	5772*	14576*	C	5600	6274	8057	v?
2272	4520	5033	C	2289	5104	4073	I	2310	5777	12744	L	5602	6280	10316	I
12529	4530	4890	I	2290	5126	3098	C	2311	5807	9109	C	12974	6290*	16326*	C
12530	4548	12960	C	W 23	5126*	19528*	C	12744	5812	97	I	11979	6312	10398	I
885	4554	10046	C	13021*	5140*	12329*	C	5576	5835	4814	I	12187	6314*	21588*	C
12428	4560	870	C	2291	5144	10215	C	11978	5838	10251	v?	12324	6318	11850	E
5540	4582	3368	I	2292	5147	9224	C	2312	5845	17693	I	12545	6330	19470	I
2273	4586	15345	C	12540	5148	12288	I?	12758	5859	21194	C	5604	6337	12920	C
12532	4590	15474	C	2293	5154	9784	I?	2314	5861	5541	C	2328	6340	10294	C
2274	4596	11873	E	2294	5154	18230	C	13022*	5865*	10924*	C	894	6354	4202	L
12967	4613*	13814*	C	2295	5174	10195	C	2934	5872*	26948*	L	2329	6394	9294	E

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
5607	6396	16340	I	12192	6997*	23104*	C	12560	7494	5298	C	5658	8070	8660	C
12546	6402	18948	C	906	7000	10301	C	12769	7504	20273	C	11996	8100	9276	C
12547	6414	6526	C	11985	7008	9408	C	2355	7505	14436	C	2372	8127	9991	C
12761	6416	21368	I	12987	7009*	3475*	C	12197	7509	22677	C	914	8137	9668	C
12548	6420	18960	C	2887	7017	20273	I	2356	7522	9877	C	5660	8140	14016	I
2330	6445	4602	C	12554	7020	3240	C	12200	7523	22913	C	2373	8143	10871	C
5609	6447	11250	v?	5622	7023	10352	E?	5643	7540	17308	C	5662	8156	19906	C
12188	6455*	21722*	C	2344	7023	12965	C	12202	7555	22854	C	5663	8158	10184	C
2331	6475	4115	I	5624	7034	7574	C	12203	7559	22816	C	11997	8172	9924	C
12190	6501*	22902*	E	12555	7050	5628	C	2357	7564	13222	C?	12765	8175	476	C
5610	6518	19444	C	5625	7053	10831	v?	13025*	7575*	11471*	W	2888	8175	21611	C
12189	6525*	21979*	C	2345	7054	4933	C	12201	7578	22528	C	2374	8186	18573	E
900	6540	6135	C	12556	7056	20076	C	2358	7584	11484	C	12764	8214	-626	RR
2332	6544	12906	C	13024*	7068*	3211*	C	12561	7602	3780	C	6101	8216	21030	C
901	6546	9014	C	11986	7068	10386	I	5646	7602	14616	I	5665	8230	7864	v?
897	6566	3346	Cyc	11987	7068	14112	C	12204	7612	22854	C	5666	8235	8914	I
904	6586	10716	C	12557	7068	19380	I	5647	7620	17724	v?	11998	8235	9857	I
5612	6596	17218	I	12558	7068	20160	C	13053*	7623*	12059*	E	12767	8261	201	I
12751	6601	-622	C	5626	7070	10470	I?	12562	7650	19134	v?	6102	8264	20141	C
12978	6614*	17107*	I	910	7089	11202	E	12760	7654	-404	I	12207	8275	22316	C
12975	6630*	16840*	v?	5628	7100	10640	v?	2359	7654	9249	C	2375	8279	18667	C
12984	6634*	15635*	I?	2346	7104	8154	E?	12563	7662	1710	E	5667	8300	16916	I?
5614	6663	10116	C?	12194	7110	22633	C	2360	7665	16084	L	5669	8302	10876	E
5615	6668	1460	C	12193	7116	22375	C	2361	7666	11764	C	11999	8319	9168	E
11981	6678	12654	I	5629	7124	9937	I	2362	7675	13343	I?	12208	8349	23375	C
2333	6720	11157	v?	11988	7128	9516	I	11991	7692	8868	C	12971	8364*	20227*	C
2334	6738	13316	C	12196	7150	22934	C	5648	7704	13953	E?	12210	8369	22819	C
2335	6763	12477	C	2347	7163	5074	I	5649	7722	19290	C	12768	8371	61	I
5616	6774	12100	I?	12195	7164	23847	C	12982	7735*	16802*	I	12209	8372	22843	C
12763	6779	20721	C	908	7186	9985	C	12205	7741	22745	C	2376	8382	3918	E
5617	6782	18756	C	11989	7191	9555	I	11992	7747	10841	C	6103	8395	20686	L
2337	6786	13404	C	12766	7200	20743	C	2363	7786	16134	I	12212	8400	23288	I
5618	6802	4310	I?	2348	7224	18930	C	11994	7818	10542	C	916	8407	15670	I
2338	6820	1714	C	12757	7245	-600	C	12206	7819	23131	C	2377	8446	8751	I
2339	6826	9938	C	2349	7247	9448	C	2364	7824	10585	C	5670	8448	13146	C?
12979	6834*	16675*	C	2350	7254	6931	E	12762	7839	-683	C	12565	8460	20118	C
11982	6840	10206	I	12981	7270*	16592*	I	913	7849	9607	C	2889	8471*	21177*	I
902	6847	4645	C	5633	7302	9177	I	5651	7866	9377	C	5671	8472	9728	I?
12550	6864	1872	I	2351	7305	13853	W	2365	7880	4643	C	2378	8474	9764	C
12191	6876*	23625*	C	5634	7312	14956	v?	2366	7892	6419	C	12000	8490	10002	C
12551	6876	1002	C	2352	7344	5017	C	2367	7923	10464	C	2379	8499	13952	L
12980	6887*	16747*	I	2353	7354	5067	C	5635	7934	19044	I	2380	8504	6876	C
905	6888	10880	C	912	7372	13162	C?	5654	7940	16049	I	2381	8514	4344	C
12552	6936	3624	C	5636	7394	5558	I	12243	7947	28489	I	12566	8520	19440	C
12754	6937	3327	I	5637	7400	13866	R CrB	12969	7949*	19475*	C	5672	8522	19347	C
11983	6942	9066	C	5638	7402	4904	I	12970	7956*	20769*	I	12211	8526	22236	C
2340	6942	12491	I	12198	7409	22930	C	12983	7978*	17072*	I	5673	8538	6544	I
2341	6959	19037	C	12199	7414	22790	C	2368	7979	11900	C	12001	8544	9999	C
2342	6964	10026	I	2354	7432	17510	v?	2369	7985	17065	C	5674	8545	10340	C?
11984	6972	10674	L	911	7444	9484	C	5655	7998	4540	C	12773	8548	20164	C?
903	6977	3942	I	909	7454	4689	C	2370	7999	420	RR	12002	8549	9771	I
5621	6980	14928	v?	12770	7470	21229	C	5656	8006	17680	C	5675	8550	9100	C
12553	6990	3378	C	5640	7480	12798	I	2371	8060	9194	C	2382	8554	19684	C

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
2383	8555	9804	C	12004	9046	9263	v?	2424	9624	13236	I	12779	10229	-1064	RR
5676	8560	8769	I	12772	9058	-392	C	12007	9630	8754	v?	2446	10231*	15236*	L
12567	8562	4740	I	921	9061	9834	C	2425	9638	11687	E	2447	10235	11304	C
2384	8588	5313	C	2403	9073	14127	E	5717	9640	8180	I	5752	10240*	8196*	C
12568	8598	6144	C	920	9092	9179	C	929	9660	16615	C	2448	10248	9274	C
13026*	8602*	8001*	C	5703	9094	18970	I	2426	9676	8874	C	2449	10258	11923	C
2386	8605	4826	C	13028*	9096*	12086*	E?	2427	9681	9413	C	12011	10263	7752	C
2387	8612	4084	C	5704	9100	6366	v?	12006	9684	8142	C	2450	10263	13548	I
13027*	8629*	10382*	C	919	9110	6044	C	5720	9694	9932	I	2451	10270	6284	E
5679	8633	15915	I	2404	9124	3687	C	5721	9694	11964	I	5746	10276	10552	I
5680	8640	10403	L	12325	9126	12012	C	2428	9695	9580	C	5747	10277	9568	C
915	8651	9317	W	2405	9129	3906	C	5722	9720	19336	E?	2452	10282	10314	C
12569	8658	2934	v?	2406	9134	10204	C	928	9724	3752	L	5749	10304	8332	C
5682	8670	6956	L	2407	9153	8777	C	2429	9727	7085	I	932	10305	7978	C
2388	8670	19829	C	2408	9165	9838	C	2430	9728	8617	C	6105	10306	20688	C
2390	8685	6577	C	12968	9172*	19466*	I	12780	9732	20701	C	12781	10311	-843	I
2391	8689	17494	C	2409	9175	10121	C	2431	9734	6128	C	5750	10312	9064	C
5684	8700	13044	C	12572	9186	1272	C	5723	9738	9708	v?	5753	10328	12881	E
12774	8705	20739	C	12777	9194	20325	?	2432	9748	12591	C	2453	10357	8330	C
12985	8725	15730	I	2410	9203	10002	C	5724	9762	10016	I	934	10380	13986	C
2392	8727	8306	C	5709	9208*	13474*	I	2434	9793	2116	Cyc	2454	10407	18657	C
2393	8743	8568	C	5705	9212	9139	I	5725	9800	9680	I	5756	10410	7043	W
2394	8744	10746	C	2411	9214	8796	C	2435	9825	12950	E	5757	10416	8816	C
5685	8753	10323	C	12995	9216*	9904*	C	5729	9841	7400	C	2455	10432	7896	C
5686	8755	9817	C?	5706	9220	9960	C	2436	9845	8346	E	5758	10446	12640	v?
5687	8772	17660	I?	2412	9226	10254	C	5730	9864	15757	C	935	10464	13524	C
12775	8777	25150	C?	12573	9228	5832	C	5731	9889	10603	I	12015	10470	8466	C?
12570	8808	1983	I	2413	9253	10728	C	2438	9900	8604	C	933	10474	9546	C
2395	8808	4884	C	5707	9260	9802	C?	2439	9902	7802	C	5760	10484	8507	I
5689	8811	9888	I	2414	9269	8164	C	2440	9905	7707	I	2456	10491	9014	C
5690	8813	16512	I	5708	9283	10482	I	2441	9908	20130	I	12786	10513	20740	C?
5691	8818	9200	I	2415	9286	6787	C	2442	9917	7384	C	2457	10515	3029	L
5692	8820	9323	I	922	9286	8398	C	90	9918	9244	I	2458	10516	9162	C
2396	8835	8246	C	2417	9304	3975	C	5732	9922	9964	I	2459	10517	10058	I
2397	8856	8220	I	923	9321	8144	C	2443	9928	7293	C	2460	10524	11204	I
12771	8863	-2926	C	12574	9360	1398	C	5733	9940	7483	C	2461	10534	19822	C
5694	8871	5639	C	925	9393	7486	W	930	9957	12914	E	936	10564	7967	E
2398	8871	9993	C	2419	9418	6014	C	12577	9960	5232	v?	12787	10572	20868	C
5695	8880	8860	v?	2420	9444	18704	C	12008	9960	7800	C	2462	10580	5622	C
12776	8900	24304	C?	5712	9446	10014	I?	2444	10055	9955	W	5761	10584	10047	C
5696	8904	8360	C?	924	9454	4276	RR	5736	10063	9760	C	12578	10584	19788	E
5697	8948	9601	C	5713	9484	20016	I	5738	10108	7220	C	5762	10592	14450	I
2399	8952	6547	Cyc	926	9488	5436	C	5741	10120	9160	C	5763	10604	8657	I?
918	8962	9794	C	2421	9491	5888	C	2445	10127	8860	C	2463	10606	10093	C
2400	8973	8710	C	2422	9508	8795	C	13030*	10134*	9135*	C	2464	10653	6312	C
917	8980	9281	C	12575	9510	1398	C	12009	10140	7848	C	6106	10653	21711	I
5699	8980	9740	C	927	9514	8933	C	931	10142	3784	C	12784	10679	-878	C
2401	8985	16897	E	5714	9528	10086	I	12783	10150	21225	C	2465	10692	9730	C
12571	8988	19800	RR?	13029*	9543*	9330*	C	5743	10164	8056	I	5765	10696	6176	C
2402	9011	8144	C	2423	9560	7458	W	5744	10182	9308	I	5766	10700	6140	v?
12003	9030	8604	C	12778	9570	20825	C?	12010	10188	7800	C	5768	10714	17632	C
5701	9037	11265	C	12005	9573	9339	C	5745	10206	18034	I	6107	10721	20113	C
5702	9040	19042	I	12576	9618	4086	E	6104	10220	20687	C	2466	10726	8321	C

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
937	10728	6411	C	2482	11476	9192	C	2497	11980	8015	C	12595	12390	1698	C
12788	10740	20561	C	2484	11493	5200	C	12593	11982	20160	I	2522	12394	18516	W
12579	10752	3480	C	5793	11510	10820	I	949	11985	13144	I	5831	12400	4210	C
938	10846	10004	C	12024	11520	8178	C	2498	11987	5982	C	12806	12405	-593	C
12789	10850	21162	C	12795	11520	22717	C	2499	11999	7554	C	2523	12423	2504	C
5771	10862	5980	C	5794	11533	19076	E?	951	12001	13124	C	2524	12423	19235	C
939	10865	7275	C	5795	11552	6455	I	953	12002	15144	C	2525	12424	20106	E
5772	10873	7208	I?	2485	11579	6706	C	2500	12009	6006	C	2526	12432	8195	L
5773	10915	5825	I	13032*	11582*	6196*	C	954	12012	6827	C	2527	12436	2593	C
12580	10920	4692	C	2486	11584	1859	C	2501	12012	17634	I	958	12455	6931	C
5774	10922	9518	W	2487	11595	4580	C	2502	12013	6923	C	5833	12467	6065	I
2468	10967	7204	C	12585	11598	2784	C	2503	12034	7605	C	5834	12468	6028	C
12791	10967	20472	C	12025	11598	6966	C	2504	12039	3405	C	5835	12472	14956	I
12581	10986	19050	C	12026	11610	6204	C	2505	12044	11969	E	12805	12481*	24158*	C
12017	10994	8371	I	2488	11611	9094	C	2506	12048	7694	C	12040	12486	7200	C
5775	11000	13387	C	12796	11613	-258	C	5821	12068	4424	C	959	12494	7131	C
5776	11024	17966	C	947	11623	6985	C	952	12072	9414	C	12596	12510	828	I?
12792	11027	20467	I	12027	11628	6402	C	2507	12074	19637	C	2529	12525	7703	C
2469	11054	5941	v?	12586	11640	4680	C	5822	12092	18518	v?	5837	12529	15212	E
5778	11075	6056	v?	12587	11676	19368	C	2508	12109	7585	C	12996	12532	781	RR
2470	11084	10714	C	12326	11683*	6654*	L	12033	12126	11274	I	2530	12533	7824	I
5779	11106	6306	C?	5799	11706	9774	I	12594	12132	2532	C	2531	12544	7312	C
2471	11118	8807	C	12589	11718	19602	C	2510	12161	12418	C	961	12547	7235	C
5780	11118	9048	C	5800	11720	9381	C	12801	12179	20887	I	960	12553	8062	C
940	11124	10414	E	5801	11720	18180	I	5824	12203	10481	I	2532	12554	9582	Cyc
941	11155	8848	C	2489	11726	6726	C	955	12209	16206	C	5838	12560	5944	I
13031*	11164*	6259*	C	12797	11731	-669	C	2511	12214	6803	I?	12042	12576	7068	I
2472	11176	11524	C	948	11738	6585	C	2512	12216	7740	C	2534	12594	4694	C
942	11185	5983	I	2490	11744	5628	C	12988	12216	20960	C	962	12596	7567	C
943	11214	10357	C	5803	11744	8960	C	2513	12219	7156	C	12043	12636	7272	C
2473	11233	4745	C	2491	11756	13724	C	2514	12232	7240	C	12807	12638	23640	C
5783	11244	19976	C	5804	11780	19086	I	12804	12235	-1779	C	2536	12649	12369	C
12582	11268	816	C	5805	11784	17072	I	12905	12242*	10790*	C	966	12664	2321	R CrB
944	11280	7922	C	5809	11811	6395	C	2515	12249	7203	C	5840	12678	3090	C
12019	11286	7224	C	2890	11813	21590	I	956	12258	7524	C	12599	12684	19752	I
2474	11298	6315	C	2492	11820	8704	RR	12036	12276	7416	I	12044	12702	7140	I
12793	11304	22249	Cyc	5810	11825	8802	L	2583	12281	12167	I	5841	12710	5445	C
5787	11317	14160	C	12799	11825	21329	I	2516	12285	8442	C	2538	12734	12072	C
2475	11334	8154	v?	2493	11831	5994	I	12802	12287	20384	I	2539	12746	6559	C
12020	11352	6996	C	12800	11831	20682	I?	12911	12290*	10719*	C	2540	12749	6695	C
945	11395	6846	C	2494	11832	4779	C	5826	12298	6934	C	2541	12750	5394	C
946	11404	7959	I	5811	11846	11816	C?	12037	12300	6900	C	12045	12750	6126	C
12021	11411	5958	C	5812	11852	1215	I	2517	12300	7083	C	5842	12757	18519	I?
2476	11421	6704	C	12030	11856	6708	C	5827	12306	1313	v?	965	12760	7155	C
12022	11430	6672	C	12031	11862	7314	C	2518	12315	5894	C	12809	12762	23469	C
2477	11434	6554	C	950	11869	7304	C	957	12317	9946	I	2542	12775	6336	C
12583	11436	20100	C?	12592	11874	4818	I	5825	12319	7127	C	2543	12779	16774	E
5791	11439	9007	C	5813	11904	11683	I	5828	12320	5357	v?	964	12784	16495	Nova?
2478	11440	7634	C	5814	11906	17988	I	5829	12324	3343	W	968	12786	7184	C
2479	11462	8624	I	5815	11924	10380	I	2519	12339	5827	C	12046	12792	6528	C
2480	11467	7346	C	5816	11930	9540	E	2520	12353	7166	C	5845	12796	16636	C?
2481	11472	6010	C	5817	11935	5893	C	12228	12354	8352	E	12048	12798	8040	L
12023	11472	6996	C	12032	11952	7452	C	2521	12354	8353	C	2544	12803	9568	I

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
963	12803	17885	Cyc	975	13267*	7812*	C	5881	13722	6658	C	5902	14140	13883	v?
12812	12807	-816	C	978	13280	6746	C	988	13734	4291	C	12061	14166	9168	I
967	12820	5441	C	5865	13284	8044	C?	12816	13754	21606	C	2626	14202	9101	I
970	12840	7606	C	2574	13314	7106	C	5884	13764	10785	C	5904	14216	16184	I
2545	12841	5777	C	5867	13336	8400	v?	984	13766	8666	C	5905	14218	2500	C
2547	12847	6581	C	2575	13338	14775	L	12817	13773	21339	I	2627	14224	15995	I
2548	12854	8862	I	979	13345	7228	C	987	13774	6401	C	2628	14225	4933	C
2549	12865	667	C	2576	13353	6586	L	2592	13775	7576	C	5907	14226	6710	C
12049	12870	7092	C	5868	13360	7072	v?	2593	13780	3660	C	2629	14233	9773	E
12050	12912	6876	v?	5869	13373	13157	I	2594	13786	1984	C	5908	14236	6540	v?
12051	12918	5988	C	5870	13384	9840	L	2595	13796	16286	I	5909	14238	6793	C
13033*	12929*	6561*	L	2577	13385	429	I	12059	13806	7350	I	2630	14241	6741	C
12602	12936	2160	I	2578	13401	7350	L	2596	13808	8177	C	990	14249	19308	v?
2550	12936	19212	C?	12054	13410	6288	I	2597	13815	7753	E	13037*	14254*	25274*	C
972	12944	7146	C	12607	13422	18990	I	12613	13824	4314	C	5910	14256	6124	C
2551	12947	8514	I?	2579	13424	15785	C	2598	13838	8370	C	2633	14258	6771	C?
5847	12948	19876	I	12608	13428	18804	I	2599	13839	3685	C	2634	14259	6544	C
12052	12954	6846	C	5872	13434	19086	E	5890	13844	7326	I	995	14275	6936	C
969	12954	12485	C	981	13446	7471	E	989	13845	6833	C	5911	14282	10444	v?
2552	12957	7006	C	2580	13451	20264	C	12818	13862	20658	I	2635	14287	9544	I?
5849	12965	5376	v?	2581	13453	7026	C	992	13876	6324	C	13038*	14303*	23474*	C
2553	12974	18173	C	2582	13459	10233	C	2602	13886	10290	Cyc	2636	14314	15206	C
973	12996	6576	C	12609	13482	4422	I	12614	13890	20184	C?	2637	14326	15384	C
5495	13000	10296	I	5875	13484	10818	C	991	13901	6746	C	2638	14340	7945	C
5851	13002	6100	C	2584	13491	8564	C	12823	13905	194	C	12821	14340	23628	C
5852	13010	3470	I	2585	13492	9123	C	2603	13910	7530	C	12820	14346	25035	C?
12605	13020	4458	E	2586	13518	17774	L	2604	13915	9314	L	2640	14356	5905	I
2554	13021	6982	I	12819	13528	-758	I	2606	13916	7282	C	2641	14358	2174	I
2555	13034	19143	L	13034*	13541*	21445*	E?	2608	13943	7357	E	5912	14360*	7350*	C
974	13047	7347	C	983	13543	5729	C	2609	13946	2315	C?	2642	14360	18566	I?
2556	13047	9784	I	2587	13546	19254	C	5892	13948	18117	C	2643	14383	6613	C
971	13054	17255	C	12056	13548	10242	C	2610	13954	7308	C	2644	14385	6715	E?
2557	13055	2394	C	5876	13548	13394	E	5893	13960	20100	I	2646	14452	6714	C
5854	13056	17564	L	12057	13554	6600	C	12436	13968	18762	C	5914	14456	17536	I
12606	13062	3684	v?	2588	13554	8985	C	2612	14009	5483	C	2647	14465	10266	C
12811	13089	21254	I	13035*	13556*	21324*	I?	2612	14010	8110	C	2648	14467	17350	I?
2558	13132	6334	I	U 6	13588*	27518*	RR	2614	14014	7506	C	12617	14472	324	I
2560	13136	5506	C	2589	13605	7122	C	2615	14018	13327	E?	2649	14482	9234	I
12053	13176	10968	v?	5877	13612	17245	C	5895	14022	1386	I?	2650	14483	14314	C
5861	13188	15488	C	2590	13616	5496	C	2616	14026	8316	C	12822	14501	20611	I
2563	13197	7110	C	12610	13620	19008	E	5896	14028	16747	I	5915	14514	6336	C
2565	13214	9918	I	12058	13632	7182	I	12615	14058	19032	E	5916	14514	20033	I
2566	13217	12285	I	5878	13632	18356	I	12998	14066	9100	I	2651	14519	10386	E
2567	13227	11285	I	13036*	13646*	7213*	C	12826	14069	7	C	12829	14542	-162	C
2568	13233	7076	C	982	13654	9686	E	986	14074	15934	I	2653	14545	1441	C
5863	13233	10145	v?	2591	13657	7998	C	994	14075	6365	C	5917	14552	18306	v?
12813	13238	21313	C?	12994	13666	2587	C	2618	14084	3385	v?	996	14563	14165	Cyc
5864	13240	1517	E	12611	13668	2628	I	2619	14104	6965	C	2654	14564	5786	C
2569	13243	6741	C	12814	13672	22722	C	6108	14105	20641	I	2655	14581	8902	I
2570	13246	9135	I	12612	13680	19416	C?	2620	14112	8054	C	5920	14582	6950	C?
2571	13251	5386	C	980	13695	15482	C	2622	14115	3164	C	13008	14584	15400	v?
2572	13252	9039	L	985	13714	7055	C	2623	14125	16463	C	12618	14598	756	C
977	13265*	7805*	C?	12815	13714	21461	C	2624	14127	7034	C	2656	14600	12387	E

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
12619	14604	20040	C	2679	15108	8926	I	12330	15678	5280	C	2733	16274	18366	C
2657	14606	5266	C	2680	15140	16095	C	1005	15689	10884	C	2734	16276	4234	C
12620	14610	4128	L	5939	15140	17684	I	5961	15700	18613	I	5978	16283	14780	C
12830	14622	-493	Cyc	1000	15147	13894	C	12626	15702	3114	C	2735	16287	4912	C
12621	14628	2280	C	5940	15148	9080	C	2708	15719	6743	C	2736	16315	4946	C
2658	14632	5691	C	2681	15156	9336	I	2709	15721	5665	C	1012	16327	4254	C
2659	14634	14102	I?	5941	15156	17532	I?	13042*	15725*	6144*	C	2737	16344	5306	C
5921	14636	18516	C	2682	15157	13332	C	2710	15740	5642	C	2738	16352	18817	C
2660	14638	7155	C	999	15166	14530	C	5962	15742	1899	C	2739	16354	4310	C
5922	14648	11044	I	2683	15172	2241	C	12627	15744	2508	C	2740	16354	9601	I?
12824	14656	23055	C	12624	15180	3300	C	1002	15754	18573	C	12630	16374	3798	C
5923	14660	15820	I?	5942	15180	5720	I	12244	15755	-1739	E	1011	16411	5448	I
2661	14667	15955	C	2684	15215	5024	C	2711	15761	2650	C	5979	16426	5462	C
2662	14678	20180	C	5943	15220	18440	E	2712	15804	5682	C	2741	16434	5146	C
5924	14684	19363	C	12625	15220	19278	W	5963	15806	5316	E	12332	16440	6528	C
5925	14686	17796	I	2685	15232	11364	C	2713	15815	5876	C	2742	16463	3337	C
2663	14687	724	C	2686	15257	13464	C	2714	15825	6066	C	2743	16469	17658	I
997	14696	13181	C	2687	15260	10930	I	13043*	15848*	6578*	C	12631	16482	1632	W
5926	14705	6936	C	13041*	15264*	3098*	C	12851	15856	20482	C	1014	16487	5364	C
2664	14714	6394	C	12828	15293	21215	C	5966	15866	14373	I	1007	16493	13530	C
2666	14727	10554	C	2688	15311	6754	C	5967	15890	16380	I	12632	16494	20070	I?
12825	14734	20665	C	2689	15312	2274	C	12441	15893*	18008*	I	2744	16553	8947	E?
2667	14735	18502	C	2690	15316	6242	C	2715	15906	6812	C	2745	16557	12744	C
13000	14736	15273	v?	12328	15330	5454	C	5969	15928	18059	I	2746	16573	13619	C
5929	14760	12048	E	5945	15344	19686	I	5970	15940	11396	I	5981	16574	4488	C
5930	14814	10255	C	5946	15352	3024	C	2716	15946	5174	C	1016	16574	5319	C
2668	14833	7516	C	5947	15360	16202	I	2717	15953	5914	C	5982	16583	16216	C
12437	14838	18198	Cyc	5948	15388	2884	I	1004	15954	17745	Cyc	5983	16605	5228	C
2669	14845	8846	I?	5949	15404	17384	I	2718	15966	5865	C	2747	16626	12944	I
5932	14868	14552	C?	2691	15420	10674	E	2719	15986	5244	C	2748	16637	5177	C
2671	14874	5820	E?	2692	15422	4199	C	2720	15990	6124	C	2749	16654	9021	C
2672	14880	7614	C	2694	15435	7976	C	5971	15994	18612	C	2750	16655	5247	C
12438	14880	18426	I	5951	15436	4356	v?	2721	16004	5207	C	2751	16665	5041	C
12906	14882	13271	C	11088	15442	9994	I	2722	16008	18894	C	12999	16677	17353	C
12439	14886	13508	L	5954	15461	8160	C	2723	16016	4799	C	12333	16679	5093	C
5933	14888	17240	I	2695	15464	5698	C	2724	16022	5044	C	2752	16685	6433	C
12440	14892	17628	E	12329	15465	5742	C	5974	16030	5348	C	2753	16688	8872	I
2673	14903	1251	C	2696	15466	5994	C	1006	16035	8474	C	2754	16688	12308	I?
12907	14904	13276	(C)	2697	15467	11055	C	2725	16036	15776	C	12334	16692	4836	C
13039*	14916*	20553*	v?	1001	15475	14833	L	5975	16042	6068	C	12833	16692	23596	C
13040*	14926*	7511*	C	5957	15498	6386	C	1008	16043	5632	C	2755	16716	9042	C?
12327	14928	5598	C	2698	15506	6816	C	1009	16056	5661	C	5984	16722	5776	I
2674	14937	9572	I	2699	15514	6374	C	2726	16060	6207	C	13001	16724	6209	C
12827	14945	20555	C	5958	15515	16240	v?	2727	16099	6655	C	12335	16728	6342	C
5934	14958	4196	I?	1003	15543	11924	C	5976	16107	5980	C	2756	16731	6504	C
2675	14966	14795	C	2700	15550	17346	Cyc	2728	16113	8449	I	2757	16738	4705	C
5936	14980	18844	E	2701	15590	5074	v?	1010	16140	6484	C	12633	16746	1542	I
5937	14986	5918	C	2702	15594	6734	I	2729	16144	4696	C	5986	16763	17150	v?
2676	15003	17373	I	2703	15606	4746	C	12628	16200	4488	C	12336	16776	5160	C
13054*	15031*	19067*	E	2704	15619	7210	C	12331	16200	5328	Nova	2759	16785	5281	C
5938	15042	11238	C	2705	15634	16522	C	2731	16239	15234	E	12443	16806	18060	I
998	15052	15183	C	2706	15661	6214	C	2732	16269	8484	I	2761	16815	9024	I
2677	15066	10324	Cyc	2707	15671	5714	I	12629	16272	4236	I				

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
13044*	16827*	9027*	I	5999	17297	8264	I?	6027	18140	16706	v?	12657	19020	3222	C
12837	16830	-184	C	2783	17298	4644	C	2813	18155	16556	C	12658	19020	5076	C
5988	16830	4818	v?	6000	17302	15548	v?	12643	18162	18846	RR	2839	19045	9664	C
2762	16834	5375	C	2784	17304	5131	C	6029	18198	12572	E	12659	19050	14046	C
2763	16837	8066	L	2785	17308	15909	C	1020	18203	11346	E	12660	19062	17760	C
5989	16840	8126	E	6001	17312	3873	E?	12644	18222	5160	C	6043	19078	14580	v?
2764	16841	7650	I	6002	17317	9420	I	2814	18245	9381	C	2840	19093	19585	C
12832	16856	24906	C	2786	17323	18586	C	2815	18264	9033	C	12661	19094	18240	C
12839	16859	-1426	C	2787	17324	9946	C	6030	18264	12402	I	2841	19097	18514	C
2765	16864	9261	E	6003	17325	16298	I	2816	18266	15712	C	6044	19100	16060	C
12337	16878	5262	C	2788	17329	11914	C	6031	18271	16722	I	12062	19104	11436	C
13004	16879	5869	I	6004	17339	10920	C	1021	18274	8226	C	2842	19106	3849	C
5990	16889	3796	I	2789	17345	7667	C	2817	18278	17118	C	12841	19144	23158	C
2766	16889	5367	C	2790	17381	9560	C	6032	18280	16202	C	12843	19173	20657	C
13045*	16892*	8184*	E	2791	17402	4364	C	12645	18282	3540	C	12063	19194	8688	E
12634	16902	1860	E	2792	17406	7182	C	2818	18288	7057	v?	12662	19200	4920	C
12338	16908	5166	C	12836	17485	22867	I	6034	18298	16282	v?	2843	19224	17008	C
2767	16912	5303	C	2793	17574	11304	C	2819	18315	14801	I	6047	19248	17958	v?
12635	16920	3036	C	2794	17574	16738	C	12848	18381	200	I?	1023	19269	13038	C
12339	16920	5490	C	5994	17630*	8106*	I	2820	18400	5806	C	2844	19272	4717	C
12838	16932	-459	C	1019	17655	6044	C	12646	18402	4872	C	2845	19290	16970	C
12340	16974	5310	C	2795	17675	10752	C	2821	18414	13144	C	12663	19302	5688	C
5991	16980	11660	C?	6011	17677	16595	C	12647	18420	3210	C	12664	19320	3384	C
12341	16992	4578	C	2796	17686	11644	C	2823	18421	16249	I	2846	19337	14864	C
12834	16999	25287	C	2797	17706	16956	C	12648	18480	17826	C	6049	19358	17496	v?
12835	17031	20628	C	6012	17716	6787	C	1018	18480	18030	C	6050	19378	17522	C
2768	17050	6804	I	6013	17740	10659	C	12649	18492	2304	C	12665	19380	14952	C
2769	17050	14706	C	2798	17751	9629	I	12650	18492	5022	I?	2847	19395	16085	C
5980	17055*	5536*	C	2799	17782	15645	C	12651	18504	19824	C	6042	19407*	4785*	v?
13046*	17057*	3106*	Cyc	2800	17788	15166	I	2824	18525	11559	C	6051	19408	10325	C
1013	17060	14414	C	6015	17793	15306	C	2825	18584	15974	C?	12666	19452	2490	C
2771	17074	7806	C	2801	17807	16574	C	2826	18588	11403	C	12667	19458	3840	L
12342	17094	5106	C	6016	17808	13712	C	6038	18620	11839	C	12668	19488	4800	C
12343	17100	5306	I?	6017	17842	17960	C	2827	18633	18884	C	12064	19488	6576	C
5992	17117	17240	I	6018	17880	8453	C	2828	18643	5771	C	2848	19489	15408	C?
5993	17120	8863	I	2802	17906	16774	C	6039	18664	6264	I	6054	19509	12176	C
2772	17123	3679	C	2803	17909	15024	C	12652	18672	3822	C	12844	19512	23330	C
2773	17137	10945	C	6022	17920	16981	C	1022	18675	9300	E	6056	19530	7102	I
12636	17142	3072	C	6020	17933*	19681*	I	12653	18690	20190	C?	12065	19530	11064	C
2774	17144	11038	E	6023	17934	4632	C	2830	18695	16807	I?	6057	19542	6994	I
2775	17152	4969	C	2804	17934	18360	I	2831	18804	16128	C?	12842	19543	26775	R CrB
2776	17156	10864	I	12640	17940	2556	C	2832	18825	14658	C	2849	19574	16425	Cyc
2777	17185	5538	C	2805	17951	5014	C	12997	18831	20531	I	2850	19575	15448	I
12637	17196	5388	C	12641	17970	2322	I	2833	18845	17661	C	6063	19586*	7410*	C
1017	17207	9064	I	2807	17973	16748	C	2834	18852	19990	I	2851	19635	5280	C
2778	17219	7886	I	6025	17981	16607	C	2835	18877	7095	C	6059	19716	15895	C
5996	17220	17180	C	12642	18000	3888	C	6040	18884	16002	I	2852	19761	14077	I
5997	17224	18035	C	2808	18004	4507	C	12656	18918	996	C	6060	19772	10178	C
2779	17225	11146	C	2809	18033	13742	C	2836	18956	15957	C	2853	19772	13759	C
2780	17245	5500	C	2810	18043	14302	C	12909	18961	1155	C	6061	19782	13417	C?
2781	17254	9143	I	2811	18094	13733	C	2837	18969	13844	C	12845	19794	23001	C
2782	17263	17688	C	6026	18098	16122	I	12908	18982	1184	C	6062	19861	4723	I
12638	17268	19470	C	2812	18105	4173	C	2838	18997	14514	C	12669	19908	16278	C

TABLE 2.—*Variable stars arranged in order of X—continued*

HV	X	Y	Type	HV	X	Y	Type	HV	X	Y	Type
12856	19912	-1204	v?	2871	21054	15984	C	2882	23273	3883	L
2854	19946	17415	C	6078	21099	10974	E	12701	23304	15618	C
2855	19956	15354	C	12681	21180	13164	C	12858	23330	23155	C
2856	19983	16553	C	12862	21194	-626	I	12860	23577	22598	I
2857	19993	15678	I	2872	21244	17183	C	12703	23652	792	SS
2858	20004	16542	C	2873	21255	15287	C	12704	23682	14004	C
13047*	20007*	17474*	C	2875	21268	12681	C	12861	23693	21109	I
2859	20031	5800	C	2874	21275	16633	C	12079	23736	11274	C
12229	20040	7512	C	12682	21282	14472	C	12705	24072	8682	E?
2860	20097	13203	I	12683	21300	6480	C	6097	24227	14680	C
6064	20104	15944	C	12684	21330	7722	C	12867	24260	13715	C
12670	20148	2544	C?	12685	21336	7680	C	12863	24292	13432	I
12671	20148	15072	R CrB	2876	21417	16254	C	12864	24567	11638	v?
6070	20193*	8192*	W	6083	21470	17617	RR	12865	25193	12280	E?
12846	20194	22754	C	12686	21498	15228	C	12248	25224	12330	C
12672	20196	2784	C	12687	21564	10386	C	12080	25226	11115	C
12066	20232	7824	C	6085	21584	15818	C	12081	25512	11742	C
6065	20281	7545	C	12688	21612	16248	C	12247	25668	23676	L
2861	20302	14878	C	12853	21628	19244	C?	12254	25696	-7306	RR
12673	20304	19818	I	6086	21644	5653	C	12873	25763	3930	R CrB
12857	20339	-372	RR	6087	21656	14380	E?	12874	26127	1338	C
2862	20346	6734	W	6081	21686*	9259*	C	12871	26155	10513	RR
6066	20356	14545	C	12246	21765	27083	I?	12869	26250	11897	C
6067	20370	10857	C	2877	21881	12474	C	12249	26860	17189	L
12674	20370	16632	C	2878	21969	17206	W	12252	26922	9096	L
12067	20382	8442	C	12852	21978	23188	RR	12250	27052	16737	RR
2863	20405	17687	C	2879	22013	15082	C	12253	27421	10028	C
12675	20430	17172	C	12691	22020	5880	RR	12251	27762	16129	RR
12676	20448	16428	C	6089	22041	6091	C				
12068	20550	7302	C	12692	22080	13668	C				
6069	20558	9166	I	12693	22140	15552	C?				
2864	20629	17224	C	12072	22224	8796	C				
2865	20660	16283	C	12694	22236	14862	C				
6071	20668	12186	E?	6091	22316	13360	C				
6072	20680	13059	I	12074	22326	7482	C				
12245	20714	27073	RR	12695	22380	10836	I?				
12850	20748	21850	I	10642	22386	10224	Nova				
12849	20753	22288	C	6092	22423	16312	C				
13005	20755	17814	I	12854	22443	25869	L				
6073	20760	5658	I	2880	22491	15756	C				
2866	20855	15279	C	2881	22613	14571	I				
12677	20862	17898	v?	12696	22650	6882	C				
12069	20868	7080	C	12076	22686	8766	C				
6074	20904	13687	I	12697	22698	14520	C				
12070	20916	9108	L	6093	22820	10916	C				
12678	20922	14346	C	12077	22878	9348	C				
12679	20940	17640	C	12855	22912	24085	C				
2867	20944	16586	C	12231	22965	9105	C				
12680	21000	5268	C?	12698	22980	15690	C				
2868	21004	8097	C	12078	22992	12258	C				
13048*	21014*	16682*	C	12699	23040	1710	C				
2869	21020	15698	C	12700	23166	14742	C				
2870	21028	8109	v?	6096	23238	11726	L				

TABLE 3.—*Duplications and alternative names*

HV		HV		HV		HV		HV	
90	S Doradus	2685	Y Doradus	5733	TW Doradus	12223	W 19	12410	HV 8037
884	RX Doradus	2738	RU Doradus	5810	TX Doradus	12224	W 32	12458	HV 2236
886	W 21	2740	Z Doradus	5820	HV 5810 (TZ Doradus)	12225	W 33	12521	W 27
966	W Mensae	2761	RS Doradus	6035	UU Doradus	12226	W 29	12533	W 12
2235	HV 12738	2765	RR Doradus	6078	HV 12071	12230	UX Doradus	12549	HV 5610
2236	HV 12458	2874	HV 6080	6080	HV 2874	12237	W 16	12564	HV 6102
2241	W 39	2882	RU Mensae	6081	HV 12689	12238	W 15	12603	HV 12051
2251	W 40	2883	HV 8039	6098	W 1	12239	SX Doradus, W 6	12616	HV 2628
2254	W 20	2884	W 4	6100	HV 2934, U Doradus	12240	W 7	12623	HV 2683
2258	SW Doradus	2934	HV 6100, U Doradus	6102	HV 12564	12241	W 8	12689	HV 6081
2294	W 46	4004	RY Doradus, Nova 1926	7641	HV 12250, HD 271924	12242	W 50	12703	HV 12866
2323	SZ Doradus	4080	RZ Doradus	7862	Nova 1936	12245	UV Doradus	12738	HV 2235
2370	T Mensae	5497	W 36	8034	RT Mensae	12246	UW Doradus	12747	W 10
2397	TV Doradus	5531	W 26	8039	HV 2883	12247	UY Doradus	12748	W 5
2428	HV 5718	5541	W 24	12025	HV 12028	12248	UZ Doradus	12749	W 9
2435	RW Doradus	5557	SY Doradus	12028	HV 12025	12249	VV Doradus	12751	HV 12752
2492	TV Doradus	5602	TT Doradus	12035	HV 2512	12250	VW Doradus, HV 7641	12752	HV 12751
2512	HV 12035	5610	HV 12549	12051	HV 12603	12251	VX Doradus	12866	HV 12703
2628	HV 12616	5651	TU Doradus	12071	HV 6078	12252	SV Doradus	12989	HV 5732
2672	X Doradus	5718	HV 2428	12219	W 17	12254	RV Mensae		
2683	HV 12623	5732	HV 12989	12220	W 35	12255	RW Mensae		

TABLE 4.—*Published coordinates of stars discovered twice*

HV	X	Y	=	HV	X	Y	Differences X	Differences Y
2235	617"	17776"		12738	632"	17790"	15"	14"
2236	834	7678		12458	804	17662	30	16
2428	9695	9580		5718	9686	9572	09	08
2512	12216	7740		12035	12210	7722	06	18
2628	14225	4933		12616	14232	4938	07	05
2683	15172	2241		12623	15168	2244	04	03
2874	21275	16633		6080	21275	16640	00	07
5610	6518	19444		12549	6510	19500	08	56
5732	9922	9964		12989	9922	9945	00	19
6078	21099	10974		12071	21096	10866	03	108
6081	21686*	9259*		12689	21630	9228	56	31
6102	8264	20141		12564	8268	20124	04	17
12025	11598	6966		12028	11628	6948	30	18
12051	12918	5988		12603	12942	5976	24	12
12703	23652	792		12866	23590	718	62	74
12751	6601	-622		12752	6644	-503	43	119
	R. A. (1900)	Dec.			R. A. (1900)	Dec.		
7641	6^h7^m9	-66°58'		12250	$6^h7^m53^s$	-66°55!4	18	40

TABLE 5.—*Cepheid variables*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
				d	d		m	m	m	m	p	p	p	m			
12024	1148	11520"	8178"	1.31289:	1.312879	0.1182	15.53	15.82	15.72	0.29	0.215	0.124	0.348	0.80	30314.443	404	
12833	1614	16692	23596	...	1.329630	0.1237	15.93	16.78	16.23	0.85	0.420	0.165	0.357	0.00	27457.374	183	P?
13032	1706	11582	6196	...	1.552986	0.1912	16.37	17.01	16.70	0.64	0.500	0.278	0.488	0.30	30620.435	270	P?
W 3	1729	2810	21168	1.56:	1.560856	0.1934	16.86	17.09	17.00	0.23	...	0.052:	0.323:	0.19	31669.558	96	P?
13024	1698	7068	3211	...	1.603227	0.2050	15.89	16.46	16.19	0.57	0.410	0.220	0.390	0.37	29518.630	279	P?
2661	527	14667	15955	1.60919	1.609188	0.2066	16.54	17.64	17.16	1.10	0.190	0.091	0.300	0.10	27750.440	295	
W 41	1743	3375	18205	1.6531	1.652668	0.2182	16.36	16.74	16.53	0.38	0.390	0.258	0.468	0.24	34747.398	226	
2657	523	14606	5266	...	1.728293	0.2376	15.95	16.41	16.20	0.46	0.440	0.204	0.446	0.51	29574.386	395	
12906	1648	14882	13271	1.746098	1.746098	0.2421	16.83	17.44	17.14	0.61	0.351	0.111	0.385	0.50	29627.308	243	S
5787	919	11317	14160	1.75249	1.752489	0.2437	17.02	17.34	17.17	0.32	0.295	0.091	0.286	0.23	29517.624	172	
2837	687	18969	13844	...	1.777408	0.2498	15.83	16.48	16.25	0.46	0.390	0.172	0.460	0.30	27658.646	406	
11994	1126	7818	10542	1.7946	1.794576	0.2540	15.67	16.90	16.16	1.23	0.275	0.054	0.274	0.80	32891.428	169	
12648	1465	18480	17826	...	1.810933	0.2579	16.43	16.71	16.56	0.28	0.440	0.201	0.465	0.17	24802.831	379	S
12911	1652	12290	10719	1.830334	1.830335	0.2625	16.36	16.67	16.49	0.31	0.450	0.253	0.482	0.46	27808.402	294	
12546	1384	6402	18948	...	1.894305	0.2774	16.25	16.72	16.45	0.47	0.350	0.179	0.440	0.28	25946.477	124	
12073	1182	22224	8796	...	1.909423	0.2809	16.31	16.70	16.48	0.39	0.450	0.260	0.491	0.19	32011.649	393	
11997	1128	8172	9924	1.92851	1.928468	0.2852	16.85	17.53	17.25	0.68	0.105	0.053	0.252	0.80	29577.384	231	
12904	1646	2566	6486	1.952288	1.952288	0.2905	15.77	16.38	16.00	0.48	0.285	0.144	0.488	0.38	32888.384	278	
2593	472	13780	3660	1.96784	1.967842	0.2940	16.11	16.58	16.33	0.47	0.440	0.277	0.487	0.25	26312.385	471	
12575	1408	9510	1398	...	1.975901	0.2958	16.06	16.92	16.40	0.86	0.380	0.182	0.481	0.32	27730.521	341	
5997	1038	17224	18035	...	2.013230	0.3039	15.95	16.97	16.59	1.02	0.140	0.088	0.363	0.00	26323.337	341	
5996	1037	17220	17180	...	2.028047	0.3071	16.15	17.02	16.54	0.87	0.475	0.242	0.430	0.06	27449.273	418	S;cc
13041	1715	15264	3097	...	2.052074	0.3122	16.22	16.66	16.41	0.44	0.480	0.263	0.497	0.44	25912.557	413	
12030	1152	11856	6708	2.075326	2.075357	0.3171	16.63	17.19	16.96	0.56	0.270	0.110	0.319	0.45	31439.379	354	
12635	1453	16920	3036	...	2.108810	0.3240	16.12	16.91	16.50	0.79	0.220	0.075	0.333	0.52	30712.555	198	
13018	1692	4120	12972	...	2.175243	0.3375	16.37	17.17	16.88	0.80	0.170	0.108	0.335	0.45	27799.446	372	
5881*	968	13722	6658	...	2.176175	0.3377	15.29	16.03	15.60	0.74	0.440	0.193	0.425	0.80	30695.559	386	S
5736*	889	10063	9760	...	2.176499	0.3378	15.61	16.15	15.84	0.54	0.420	0.211	0.480	0.48	27449.381	432	S
12675	1489	20430	17172	...	2.244099	0.3510	15.16	16.08	15.64	0.92	0.410	0.200	0.488	0.24	32564.392	338	S
5957	1010	15498	6386	2.26491	2.264819	0.3551	15.61	16.23	15.94	0.62	0.360	0.181	0.369	0.80	32919.383	393	S
2311	219	5807	9109	...	2.269616	0.3559	16.10	16.57	16.30	0.47	0.370	0.200	0.450	0.48	30057.321	410	
12068	1179	20550	7302	2.28498	2.285102	0.3589	15.88	16.79	16.38	0.91	0.190	0.107	0.386	0.33	29217.448	291	
12661	1475	19094	18240	...	2.292873	0.3604	16.56	17.52	17.09	0.96	0.200	0.100	0.371	0.05	32919.383	237	
12909	1650	18960	1155	2.204417:	2.305556	0.3628	15.82	15.99	15.89	0.17	...	...	...	0.22	...	61	
12559	1395	7224	18930	...	2.306759	0.3630	15.32	16.44	15.77	1.12	0.410	0.190	0.463	0.28	30605.532	438	
12676	1490	20448	16428	...	2.313180	0.3642	15.64	16.45	15.96	0.81	0.400	0.202	0.492	0.24	30641.580	331	
2750	609	16655	5247	2.3167	2.316536	0.3648	16.28	16.75	16.52	0.47	0.400	0.231	0.469	0.80	28051.635	414	
12327*	1257	14928	5598	4.71147	2.319214	0.3653	16.02	16.49	16.21	0.42	0.420	0.195	0.435	0.51	24824.683	169	S
12192	1197	6997	23104	...	2.320873	0.3657	15.69	16.42	15.99	0.73	0.410	0.205	0.460	0.12	25189.578	288:	
6097	1097	24227	14680	...	2.325590	0.3665	15.97	16.97	16.36	1.00	1.190	0.060	0.385	0.00	27658.646	133	
6013*	1047	17740	10659	...	2.326865	0.3668	16.00	16.61	16.28	0.71	0.475	0.225	0.483	0.40	26319.329	438	
2838*	688	18997	14514	4.539	2.332190	0.3678	15.98	17.20	16.72	1.22	0.150	0.095	0.385	0.25	28777.636	348	
12512	1353	3534	13884	...	2.335272	0.3683	15.59	16.87	16.51	1.28	0.220	0.063	0.335	0.39	32059.506	368	
12688	1501	21612	16248	...	2.335952	0.3685	15.98	17.07	16.65	1.09	0.250	0.086	0.262	0.24	26565.613	188	
12490	1337	1872	17082	...	2.364541	0.3737	15.97	17.18	16.78	1.21	0.150	0.072	0.312	0.29	31458.279	106	
5940	1001	15148	9080	2.36993	2.369910	0.3747	16.34	17.18	16.78	0.84	0.200	0.095	0.384	0.49	32059.637	401	
12032	1154	11952	7452	2.375	2.374998	0.3757	15.72	16.62	16.28	0.90	0.230:	0.086	0.347	0.80	29600.430	329	
12328	1258	15330	5454	2.3825	2.382586	0.3771	16.20	16.78	16.51	0.58	0.230	0.114	0.369	0.51	27421.312	344	
5604	797	6337	12920	...	2.383111	0.3771	16.02	17.12	16.60	1.10	0.140	0.073	0.348	0.47	27800.377	415	
12507	1350	3408	10392	...	2.391205	0.3786	15.83	16.57	16.27	0.74	0.190	0.090	0.360	0.44	29109.650	396	
12814	1597	13672	22722	...	2.392013	0.3788	15.70	16.83	16.29	1.13	0.215	0.095	0.330	0.00	25614.441	245	
12525	1366	4380	16422	...	2.393603	0.3791	16.19	17.15	16.64	0.96	0.155	0.084	0.250	0.32	28125.361	266	
12520	1361	4158	16080	...	2.396631	0.3796	16.25	17.11	16.72	0.86	0.210	0.072	0.262	0.32	31458.279	296	
W 38	1742	1647	17714	2.402	2.401497	0.3805	16.04	16.49	16.26	0.45	0.420	0.201	0.528	0.29	31860.308	113	
2315	222	5880	15384	2.41289	2.412833	0.3825	15.64	16.43	15.92	0.79	0.380	0.172	0.504	0.37	32888.384	216	
5563	775	5384	13160	...	2.415028	0.3829	16.20	16.70	16.36	0.50	0.400	0.243	0.493	0.45	27457.349	433	
2771	627	17074	7806	...	2.420604	0.3839	16.10	16.91	16.36	0.81	0.190	0.090	0.360	0.30	27426.396	120	Sm
2844	694	19272	4717	...	2.441807	0.3877	15.80	16.59	16.23	0.79	0.270	0.102	0.339	0.30	24084.690	285	
12080	1188	25226	11115	2.44364	2.443673	0.3880	15.42	16.90	16.27	1.46	0.265:	0.056	0.353	0.12	28511.475	119	
12697*	1508	22698	14520	...	2.444174	0.3882	15.76	17.15	16.61	1.59	0.220	0.083	0.303	0.30	13951.638	271	
2745	604	16557	12744	...	2.456443	0.3903	15.69	16.95	16.56	1.26	0.135	0.095	0.327	0.25	32891.329	428	
12769	1564	7504	20273	...	2.463375	0.3915	15.69	16.74	16.46	1.05	0.172	0.084	0.271	0.19	31680.576	90	
2391	292	8689	17494	...	2.481935	0.3948	16.49	17.30	16.92	0.81	0.210	0.092	0.376	0.39	32916.283	219	
5615	802	6668	1460	...	2.482924	0.3950	15.52	17.17	16.43	1.65	0.160	0.070	0.320	0.33	32888.384	232	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
11991	1124	7692"	8868"	...	$2^d.483926$	0.3951	$16^m.53$	$17^m.04$	$16^m.77$	$0^m.51$	$0^P.530$	$0^P.318$	$0^P.469$	$0^m.50$	27449.339	408	S
12051	1167	12918	5988	$2^d.495$	2.495009	0.3971	16.18	17.14	16.82	0.96	0.120	0.066	0.315	0.50	27681.594	391	
12832	1613	16856	24906	...	2.499125	0.3978	15.84	16.11	15.93	0.27	0.420	0.221	0.521	0.00	30665.587	217	
2809	662	18033	13742	2.505611	2.505608	0.3989	15.58	17.05	16.52	1.47	0.135	0.089	0.342	0.30	29970.551	387	
12206	1211	7819	23131	2.50579	2.505795	0.3989	15.80	17.17	16.58	1.37	0.150	0.096	0.382	0.12	25177.488	260	
12669	1483	19908	16278	...	2.507447	0.3992	16.42	17.36	16.92	0.94	0.145:	0.062	0.286	0.17	27426.329	196	
6054	1070	19509	12176	...	2.508926	0.3995	16.08	16.65	16.35	0.57	0.245	0.134	0.388	0.50	27449.381	307	
12640	1457	17940	2556	...	2.513505	0.4003	16.17	17.02	16.59	0.85	0.250	0.133	0.363	0.30	14394.519	181	
W 34	1740	2401	19047	2.518	2.518033	0.4011	15.70	16.86	16.45	1.09	0.300	0.070	0.332	0.24	27653.628	89	
2344	248	7023	12965	2.524408	2.524408	0.4022	16.41	17.00	16.76	0.59	0.235	0.094	0.372	0.47	29349.242	430	Sm
5910	979	14256	6124	2.52451	2.524500	0.4022	15.39	16.87	16.32	1.48	0.180	0.031	0.372	0.52	27807.317	246	
12663	1477	19302	5688	...	2.530216	0.4032	16.22	17.01	16.66	0.79	0.225	0.113	0.341	0.30	31109.536	320	
12025	1149	11598	6966	2.53	2.538438	0.4040	15.85	17.31	16.67	1.46	0.220	0.100	0.333	0.45	32919.292	380	
12426	1293	4350	4674	2.55022	2.550172	0.4066	15.66	16.64	16.10	0.98	0.150	0.100	0.343	0.31	29229.272	205	
12191	1196	6876	23625	...	2.550338	0.4066	15.66	16.30	15.89	0.64	0.440	0.251	0.501	0.12	29134.598	282	S;P?
2396	297	8835	8246	2.5534	2.553229	0.4071	16.19	16.86	16.51	0.67	0.260	0.139	0.377	0.51	29690.343	309	
W 44	1746	4366	17973	2.557	2.556746	0.4077	16.16	16.97	16.48	0.81	0.220	0.050	0.381	0.32	29219.342	198	
12019	1143	11286	7224	2.5745	2.574604	0.4107	16.28	16.83	16.57	0.55	0.205	0.097	0.359	0.45	29202.385	399	
2563*	444	13197	7110	...	2.578995	0.4115	15.61	16.00	15.81	0.39	0.450	0.219	0.500	0.80	30313.555	456	
2473	366	11233	4745	...	2.579249	0.4115	15.56	16.80	16.28	1.24	0.200	0.081	0.333	0.30	29584.400	388	
2476	369	11421	6704	2.5807	2.580624	0.4117	16.26	17.27	16.88	1.01	0.250	0.121	0.358	0.30	32056.622	398	
2592	471	13775	7576	2.5877	2.587749	0.4129	15.43	16.62	16.09	1.19	0.300	0.079	0.356	0.80	27801.283	401	
12621	1441	14628	2280	...	2.602018	0.4153	16.59	17.41	17.12	0.82	0.200	0.079	0.370	0.00	25952.512	429	
12208	1213	8349	23375	2.6036	2.603542	0.4156	15.39	16.40	15.99	1.01	0.210	0.131	0.322	0.14	25614.318	239	
12240	1238	3883	21477	2.6153	2.615289	0.4175	16.33	17.30	16.80	0.90	0.270	0.110	0.396	0.19	28846.402	99	
12849	1628	20753	22288	...	2.622428	0.4187	15.86	17.34	16.74	1.48	0.210	0.100	0.365	0.00	28783.610	149	
12500	1343	2796	8418	...	2.629441	0.4199	15.64	17.04	16.58	1.40	0.270	0.071	0.325	0.30	27426.396	307	
12340*	1270	16974	5310	2.6366	2.636690	0.4211	15.73	16.86	16.53	1.13	0.220	0.060	0.292	0.80	29698.256	330	
12199	1204	7414	22790	2.63911	2.639156	0.4215	16.30	17.21	16.89	0.91	0.220	0.117	0.378	0.12	30605.585	103	
12022	1146	11430	6672	2.632	2.655879	0.4242	16.47	17.17	16.93	0.70	0.290	0.079	0.300	0.45	29222.409	391	
2739	598	16354	4310	...	2.660481	0.4250	15.54	16.50	16.17	0.96	0.170	0.098	0.384	0.80	26565.613	324	
6063	1075	19586	7410	2.66188	2.661915	0.4252	15.95	16.53	16.19	0.58	0.240	0.084	0.293	0.30	32056.622	236	
6066	1078	20356	14545	...	2.673069	0.4270	16.32	16.95	16.71	0.63	0.270	0.082	0.381	0.30	29585.388	351	S;cc
5541	765	4624	19128	2.683	2.682248	0.4285	15.85	17.23	16.83	1.38	0.260	0.070	0.364	0.27	30057.264	108	
12337	1267	16878	5262	2.68263	2.682540	0.4285	15.99	16.80	16.49	0.81	0.160	0.079	0.380	0.80	26011.336	289	
6044	1065	19100	16060	...	2.684178	0.4288	16.06	17.29	16.86	1.23	0.185	0.075	0.322	0.30	27755.452	299	
W 23	1735	5126	19528	2.684	2.684422	0.4288	15.66	16.19	15.92	0.53	0.450	0.210	0.400	0.27	28034.592	108	
2820	672	18400	5806	2.6864	2.686222	0.4291	15.46	15.97	15.66	0.51	0.500	0.200	0.474	0.30	27670.646	381	
12964	1656	4500	7573	...	2.693697	0.4303	15.16	16.12	15.70	0.96	0.235	0.111	0.371	0.41	30639.590	344	
6099	1099	5359	21725	...	2.697405	0.4309	15.41	16.88	16.43	1.47	0.235	0.070	0.342	0.21	31701.496	99	
12746	1545	4305	21993	...	2.701342	0.4316	15.58	16.39	16.09	0.81	0.165	0.078	0.393	0.21	31712.462	103	
2571*	451	13251	5386	...	2.704255	0.4320	15.46	16.48	16.03	1.02	0.170	0.050	0.394	0.30	32915.336	391	cc
12528	1369	4500	12156	...	2.705461	0.4322	16.35	17.14	16.82	0.79	0.210	0.121	0.298	0.30	27457.349	320	S
12045	1162	12750	6126	2.707	2.706519	0.4324	15.78	16.62	16.22	0.84	0.220	0.109	0.381	0.50	26334.368	381	S
2380	283	8504	6876	2.705	2.707222	0.4325	15.16	16.33	15.87	1.17	0.210	0.095	0.367	0.30	30624.618	405	
12659	1473	19050	14046	...	2.707952	0.4326	16.27	17.18	16.78	0.91	0.210	0.080	0.415	0.25	29158.576	347	
987	115	13774	6401	2.70999	2.710040	0.4330	15.54	16.52	16.11	0.98	0.220	0.110	0.356	0.80	26713.474	421	
5536	762	4392	17016	...	2.712215	0.4333	15.91	16.75	16.35	0.84	0.300:	0.144	0.327	0.32	28034.592	132	
2419	318	9418	6014	...	2.713049	0.4335	15.45	16.04	15.74	0.59	0.450	0.204	0.444	0.47	16823.638	438	
12200	1205	7523	22913	2.7249	2.725011	0.4354	16.09	17.10	16.71	1.01	0.210	0.116	0.393	0.12	28846.402	95	
12699	1510	23040	1710	...	2.726384	0.4356	16.03	17.19	16.43	1.16	0.190	0.102	0.384	0.00	29577.384	129	
12503	1346	3048	8412	...	2.730979	0.4363	16.02	16.91	16.47	0.89	0.170	0.072	0.332	0.41	28035.597	264	
12831	1612	15856	20482	...	2.735886	0.4371	16.51	17.26	16.88	0.74	0.190	0.091	0.339	0.00	27807.399	166	
12637	1455	17196	5388	...	2.739259	0.4376	16.26	16.89	16.62	0.63	0.260	0.098	0.388	0.80	26710.335	241	S;cc
2725	585	16036	15776	2.74054	2.740470	0.4378	16.10	17.37	16.82	0.97	0.225	0.086	0.349	0.17	28862.406	335	S
5851	953	13002	6100	2.76214	2.762141	0.4412	16.25	17.02	16.74	0.77	0.225	0.100	0.444	0.44	26679.441	471	
5517	751	3394	7508	...	2.764082	0.4415	15.67	16.84	16.27	1.17	0.125	0.083	0.348	0.38	26303.577	310	
12527	1368	4476	15294	...	2.776666	0.4435	15.74	16.31	16.09	0.57	0.185	0.068	0.323	0.37	29574.386	401	
12572	1405	9186	1272	...	2.777397	0.4436	16.05	17.13	16.65	1.08	0.170	0.070	0.380	0.32	27728.464	258	
5706*	870	9220	9960	...	2.780315	0.4441	15.52	15.99	15.75	0.47	0.420	0.221	0.482	0.80	26055.296	454	
2783	639	17298	4644	2.78095	2.780766	0.4442	15.82	16.82	16.32	1.00	0.210	0.087	0.417	0.80	26410.272	325	
5684	843	8700	13044	...	2.788140	0.4453	15.98	16.36	16.15	0.38	0.580	0.311	0.471	0.30	26264.557	393	
5571	779	5669	13555	...	2.790858	0.4457	16.22	16.91	16.64	0.69	0.320	0.146	0.391	0.45	31303.647	386	Sm
2252	165	3361	14108	...	2.792457	0.4460	15.83	16.41	16.15	0.58	0.240	0.090	0.432	0.50	26572.627	397	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
5567	776	5510"	16244"	...	$2^d.793593$	0.4462	$15^m.96$	$17^m.00$	$16^m.58$	$1^m.04$	$0^p.245$	$0^p.064$	$0^p.351$	$0^m.32$	29189.469	218	
6038	1061	18620	11839	...	2.796497	0.4466	15.48	16.45	15.99	0.97	0.430	0.209	0.456	0.35	27801.321	409	S;P?
2557	441	13055	2394	...	2.804525	0.4478	16.19	17.06	16.69	0.87	0.180	0.085	0.364	0.25	31715.614	394	
12547	1385	6414	6526	...	2.808445	0.4485	16.32	17.28	16.92	0.96	0.225	0.101	0.375	0.30	32884.418	399	
12684	1497	21330	7722	...	2.809612	0.4486	16.20	16.80	16.53	0.60	0.230	0.110	0.363	0.33	30751.330	267	
12548	1386	6420	18960	...	2.810068	0.4487	16.18	17.09	16.72	0.91	0.250	0.075	0.275	0.28	29229.319	120	
12434*	1301	5634	4410	$2^d.81191$	2.811873	0.4490	15.63	16.78	16.32	1.15	0.170	0.081	0.398	0.31	23490.573	381	
13043	1717	15848	6758	...	2.830648	0.4519	15.96	16.86	16.53	0.90	0.160	0.072	0.391	0.80	26455.214	314	
2690	551	15316	6242	2.8397	2.839655	0.4533	15.38	16.55	16.20	1.17	0.190	0.101	0.312	0.52	29585.388	371	
12585	1417	11598	2784	2.844	2.844786	0.4541	15.54	16.56	16.15	1.02	0.180	0.106	0.357	0.29	26219.342	426	
5892*	971	13948	18117	2.84822	2.842425	0.4546	16.33	17.37	17.00	1.04	0.325:	0.123	0.336	0.03	33178.615	102	
967	96	12820	5441	...	2.849258	0.4547	15.52	16.43	16.03	0.91	0.335	0.161	0.438	0.30	27800.377	409	S!;P?;cr
2599	478	13839	3685	2.85286	2.852864	0.4553	15.60	16.74	16.41	1.14	0.160	0.069	0.335	0.25	26441.229	469	
5518	752	3460	4480	2.86634	2.866391	0.4573	15.51	16.89	16.07	1.38	0.160	0.070	0.302	0.31	24462.726	187	
2512	401	12216	7740	2.86845	2.868113	0.4576	15.49	16.39	16.09	0.90	0.265	0.070	0.314	0.80	32882.270	358	
12334	1264	16692	4836	2.870783	2.870783	0.4580	15.96	16.75	16.37	0.79	0.295	0.107	0.412	0.80	31496.277	330	
12827	1608	14948	20555	...	2.872422	0.4582	16.15	17.23	16.66	1.08	0.210	0.096	0.310	0.00	27455.457	152	
12668	1482	19488	4800	...	2.872958	0.4585	15.97	17.19	16.60	1.22	0.190	0.091	0.342	0.30	27426.296	209	
12694	1505	22236	14862	...	2.875152	0.4587	15.98	17.17	16.65	1.19	0.200	0.082	0.332	0.30	26322.343	283	
2712*	512	15804	5682	...	2.881716	0.4596	16.17	16.74	16.48	0.57	0.260	0.105	0.355	0.51	31734.601	393	
13031	1705	11164	6239	...	2.882962	0.4598	16.15	16.96	16.64	0.81	0.155	0.066	0.357	0.45	29349.242	326	
2746	605	16573	13619	2.88400	2.884108	0.4600	15.16	16.51	15.98	1.35	0.210	0.090	0.380	0.25	16855.573	439	
12704	1514	23682	14004	...	2.886711	0.4604	15.59	16.91	16.25	1.32	0.305	0.089	0.331	0.30	32228.270	92	
12074	1183	22326	7482	2.890775	2.890714	0.4610	16.39	17.23	16.93	0.84	0.120	0.088	0.377	0.26	27807.365	240	
13038	1712	14303	23474	...	2.891277	0.4611	15.98	16.69	16.41	0.71	0.210	0.077	0.371	0.00	27457.471	202	
5514	750	3288	16914	...	2.893263	0.4614	15.50	16.69	16.14	1.19	0.315:	0.063	0.289	0.27	29158.556	325	
12687	1500	21564	10386	...	2.893532	0.4614	15.75	16.76	16.29	1.02	0.230	0.094	0.361	0.37	27799.446	370	
2796	652	17686	11644	2.89383	2.893828	0.4615	16.23	17.07	16.74	0.84	0.180	0.096	0.347	0.00	23480.812	396	
W 13	1731	4130	20079	2.899	2.899035	0.4622	16.07	16.84	16.57	0.77	0.275:	0.143	0.395	0.21	30057.264	104	
12005	1135	9573	9339	2.9277	2.903828	0.4630	15.88	16.80	16.39	0.92	0.260	0.106	0.397	0.80	25952.512	429	S
12685	1498	21336	7680	...	2.904303	0.4630	16.23	16.80	16.54	0.57	0.225	0.097	0.352	0.33	29986.515	240	
12001	1132	8544	9999	2.9082	2.908203	0.4636	16.51	17.03	16.74	0.52	0.170	0.086	0.376	0.80	29229.272	339	
12657	1471	19020	3222	...	2.910246	0.4639	15.93	16.78	16.37	0.85	0.250	0.130	0.321	0.30	26245.582	232	
12534*	1374	4638	13800	...	2.913300	0.4643	16.00	16.66	16.35	0.66	0.225	0.104	0.370	0.30	27800.414	333	
2785	641	17308	15909	2.91360	2.913490	0.4644	16.18	16.98	16.60	0.80	0.220	0.095	0.405	0.17	26060.243	324	
2395	296	8808	4884	2.915	2.915153	0.4647	16.05	16.87	16.55	0.82	0.270	0.127	0.358	0.30	26956.619	400	
12000	1131	8490	10002	2.9164	2.916404	0.4648	16.58	17.00	16.74	0.42	0.240	0.112	0.452	0.80	28780.585	296	S
12995	1675	9216	9904	...	2.919571	0.4653	15.42	15.91	15.67	0.49	0.440	0.196	0.455	0.80	16816.768	450	S;P?
2780	636	17245	5500	...	2.924361	0.4660	15.49	16.55	16.13	1.06	0.260	0.102	0.332	0.80	27426.296	303	
12999	1679	16677	17353	...	2.925322	0.4662	15.76	16.96	16.36	1.20	0.260	0.098	0.429	0.27	27449.307	355	
12210*	1215	8369	22819	5.0831	2.930148	0.4669	16.01	17.00	16.56	0.99	0.245	0.155	0.396	0.14	28846.402	98	
12188	1193	6455	21722	2.933966	2.933896	0.4674	16.14	17.12	16.69	0.98	0.310	0.091	0.377	0.19	31674.592	101	
2534	421	12594	4694	...	2.935539	0.4677	15.80	16.45	16.11	0.65	0.440	0.212	0.462	0.30	29956.396	389	S;P?
12683	1496	21300	6480	...	2.936251	0.4678	16.24	16.89	16.60	0.65	0.280:	0.081	0.369	0.33	32030.615	337	
12211	1216	8526	22236	2.93996	2.940038	0.4683	16.32	16.94	16.72	0.62	0.245	0.135	0.282	0.14	31699.497	99	
12682	1495	21282	14472	...	2.941852	0.4686	16.01	16.99	16.58	0.98	0.200	0.132	0.353	0.30	31106.359	295	
956	85	12258	7524	2.94735	2.946671	0.4693	15.13	16.39	16.02	1.26	0.210:	0.112	0.313	0.80	23486.545	400	
12491	1338	1962	15618	...	2.947667	0.4695	15.81	16.57	16.22	0.76	0.210:	0.083	0.271	0.50	32891.286	155	
2449	343	10258	11923	...	2.949678	0.4698	15.82	16.84	16.36	1.02	0.215	0.083	0.368	0.30	29626.278	300	
12203	1208	7559	22816	2.954	2.954115	0.4705	16.46	17.35	16.93	0.89	0.230	0.118	0.408	0.12	30763.313	105	
12626	1444	15702	3114	...	2.956870	0.4708	16.05	16.87	16.57	0.82	0.230	0.122	0.390	0.44	31729.604	426	
2445	339	10127	8860	2.96036	2.960487	0.4714	15.05	15.85	15.43	0.80	0.220	0.103	0.431	0.80	26413.355	402	Sm;cc
12674	1488	20370	16632	...	2.961499	0.4715	15.73	16.99	16.38	1.26	0.230	0.082	0.333	0.24	27449.462	237	
5921	987	14636	18516	2.96480	2.964799	0.4720	16.36	16.96	16.63	0.60	0.300	0.150	0.450	0.00	26319.329	339	Sm
12796	1585	11613	-258	...	2.965111	0.4720	15.77	16.63	16.27	0.86	0.300	0.094	0.394	0.11	31107.535	145	
5912	981	14360	7350	2.97093	2.971177	0.4729	15.45	16.48	16.01	1.03	0.215	0.107	0.385	0.80	25952.512	434	
12551	1388	6876	1002	...	2.976545	0.4737	15.99	16.87	16.46	0.88	0.260:	0.118	0.366	0.33	27755.452	225	
5738	890	10108	7220	2.98039	2.980337	0.4743	15.82	16.58	16.26	0.76	0.210	0.093	0.358	0.45	26977.615	395	
2684	546	15215	5024	2.98276	2.982760	0.4746	15.61	16.76	16.34	1.15	0.195	0.084	0.379	0.51	29586.418	400	
5771	909	10862	5980	2.988	2.987063	0.4752	15.86	16.88	16.46	1.02	0.245	0.135	0.344	0.50	24081.749	402	
2808	661	18004	4507	...	2.987204	0.4753	16.68	17.08	16.91	0.40	0.175	0.105	0.390	0.53	26274.482	305	
12026	1150	11610	6204	2.997	2.996774	0.4767	15.80	16.65	16.28	0.85	0.230	0.107	0.397	0.45	26427.255	384	Sm
2364	267	7824	10585	2.99743	2.997359	0.4767	15.32	16.24	15.94	0.92	0.130	0.070	0.351	0.80	30314.443	140	
5533	760	4196	16280	...	2.997794	0.4768	15.86	16.42	16.14	0.56	0.230	0.090	0.375	0.32	26455.214	404	S;cc

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	P	P	P	m			
12223*	1222	2709"	19542"	3.0006	3.000681	0.4772	15.84	16.92	16.58	1.08	0.260:	0.113:	0.425	0.24	29602.400:	101	
12541	1380	5262	20058	...	3.000737	0.4772	15.63	16.93	16.42	1.30	0.260	0.127	0.410	0.21	28776.533	108	
2874	723	21275	16633	...	3.001696	0.4774	15.97	16.93	16.47	0.96	0.220	0.080	0.280	0.24	24637.498	274	
12476	1329	1362	7320	...	3.004150	0.4777	15.55	16.60	16.29	1.05	0.125:	0.066	0.226	0.40	32888.426	207	
12225	1224	2946	18913	3.0075	3.007363	0.4782	16.15	16.81	16.41	0.66	0.285	0.118	0.409	0.24	31284.652	100	
12222	1221	2517	19569	3.0076	3.007641	0.4782	15.94	16.89	16.50	0.95	0.250	0.130	0.361	0.24	13876.814	104	
12692	1503	22080	13668	...	3.008237	0.4783	15.84	17.18	16.66	1.34	0.190	0.100	0.379	0.26	23681.879	276	
5649	821	7722	19290	...	3.008808	0.4784	15.20	16.36	15.89	1.16	0.135	0.083	0.378	0.28	31712.462	407	
12638	1456	17268	19470	...	3.010005	0.4786	16.06	17.07	16.65	1.01	0.250	0.122	0.374	0.00	27802.499	348	
5924	989	14684	19363	...	3.016682	0.4795	16.61	17.59	17.08	0.98	0.160	0.073	0.438	0.00	23592.516	376	
5877	966	13612	17245	3.02142	3.021701	0.4803	16.11	16.98	16.59	0.87	0.125	0.075	0.360	0.00	29228.404	331	
6050	1068	19378	17522	...	3.023247	0.4805	16.18	16.89	16.50	0.71	0.240	0.130	0.415	0.30	30584.644	272	S
12418	1285	3330	2028	3.0250	3.024921	0.4807	15.38	16.15	15.87	0.77	0.230	0.100	0.330	0.33	28523.409	313	S;cc
13029	1703	9543	9330	...	3.025252	0.4808	16.06	17.07	16.62	1.01	0.200	0.096	0.427	0.51	26308.518	383	
2406	307	9134	10204	3.0280	3.028150	0.4812	15.40	16.53	16.14	1.13	0.290	0.085	0.365	0.80	24501.614	445	
6023	1054	17934	4632	...	3.028883	0.4813	16.31	17.14	16.74	0.83	0.260	0.077	0.397	0.30	26570.631	319	
5701	856	9037	11265	3.0300	3.029895	0.4814	15.88	17.12	16.60	1.24	0.195	0.095	0.326	0.80	27746.482	446	
2504	394	12039	3405	...	3.030641	0.4815	15.75	16.95	16.57	1.10	0.190	0.080	0.334	0.25	29697.250	406	
12774	1569	8705	20739	...	3.036928	0.4824	15.15	16.81	16.23	1.66	0.190	0.115	0.460	0.18	30605.584	104	
11985	1120	7008	9408	3.03785	3.037852	0.4826	16.68	17.13	17.00	0.55	0.370	0.163	0.431	0.50	23900.501	362	S
12582	1415	11268	816	...	3.043742	0.4834	15.25	16.15	15.80	0.90	0.300	0.102	0.332	0.22	28776.584	377	
2443	337	9928	7293	3.04596	3.045917	0.4837	15.28	16.27	15.87	0.99	0.190	0.072	0.353	0.47	23900.501	343	
12514	1355	3780	7662	...	3.047953	0.4840	16.38	17.13	16.74	0.75	0.195	0.074	0.338	0.38	27800.283	256	
12771	1566	8863	-2026	...	3.052534	0.4847	16.11	17.25	16.70	1.14	0.230	0.110	0.339	0.00	27723.592	144	
5672	836	8522	19347	...	3.062081	0.4860	14.81	15.25	15.01	0.44	0.510	0.295	0.505	0.19	26245.582	466	
13042	1716	15725	6144	...	3.068492	0.4869	15.16	15.52	15.34	0.36	0.470	0.219	0.479	0.52	24802.831	408	
12021	1145	11411	5958	3.0705655	3.070511	0.4872	15.98	17.20	16.75	1.22	0.140	0.094	0.326	0.50	27799.378	388	
13021	1695	5140	12329	...	3.072079	0.4874	15.54	16.41	16.03	0.87	0.190	0.080	0.408	0.30	27750.440	391	
12504	1347	3192	15726	...	3.075908	0.4880	16.17	16.80	16.55	0.63	0.230	0.075	0.286	0.34	23740.790	332	
2427	326	9681	9413	3.0781	3.077975	0.4883	15.15	15.99	15.61	0.84	0.250	0.116	0.426	0.80	27449.381	439	S
2500	390	12009	6006	3.07864	3.078574	0.4884	15.55	16.89	16.42	1.34	0.220	0.112	0.388	0.44	26412.253	393	
12431	1298	5202	3636	3.08348	3.083404	0.4890	16.45	16.81	16.67	0.36	0.275	0.113	0.491	0.33	28758.570	244	S;P?
5558	772	5242	4912	3.083935	3.083770	0.4891	15.92	17.28	16.71	1.36	0.250	0.078	0.319	0.31	29933.563	364	
5757	900	14016	8816	3.088049	3.088049	0.4897	15.68	16.04	15.85	0.38	0.430	0.160	0.426	0.80	24824.683	441	S;cr
2412	313	9226	10254	3.0882	3.088350	0.4897	15.73	16.76	16.35	1.03	0.230	0.139	0.431	0.51	27658.609	448	
12736	1538	208	18964	...	3.091213	0.4901	15.85	16.82	16.43	0.97	0.280	0.102	0.382	0.24	32056.587	282	
983	111	13543	5729	3.09369	3.092686	0.4905	14.73	15.83	15.36	1.10	0.095	0.066	0.290	0.50	26444.225	411	
12652	1468	18672	3822	...	3.094557	0.4906	16.27	17.06	16.68	0.79	0.160	0.070	0.381	0.30	30327.573	280	Sm
2654*	520	14564	5786	...	3.095786	0.4908	15.23	16.14	15.73	0.91	0.260	0.091	0.401	0.51	17590.584	427	S
12672	1486	20196	2784	...	3.100798	0.4915	15.80	16.75	16.23	0.95	0.300:	0.124	0.345	0.38	27746.482	211	
12202	1207	7555	22854	3.1011	3.101102	0.4915	16.36	17.23	16.80	0.87	0.485	0.185	0.466	0.12	30351.312	91	
12341	1271	16992	4578	3.102863	3.102777	0.4918	15.61	16.15	15.93	0.54	0.250	0.102	0.392	0.80	27800.414	408	
2353	256	7354	5067	...	3.108178	0.4925	15.23	15.61	15.43	0.38	0.430	0.148	0.384	0.50	31107.354	447	
12330	1260	15678	5280	3.10872	3.108916	0.4926	15.80	16.88	16.48	1.08	0.190	0.098	0.379	0.51	27421.344	390	
12196	1201	7150	22934	3.11306	3.113141	0.4932	16.41	16.95	16.73	0.54	0.255	0.143	0.398	0.12	25615.422	250	S
W 48	1749	5202	18397	3.113	3.113406	0.4932	15.61	16.78	16.36	1.17	0.325	0.097	0.372	0.27	31712.462	110	
2813	666	18155	16556	...	3.113521	0.4932	15.52	16.94	16.17	1.42	0.170	0.074	0.343	0.17	26011.336	404	
5780	917	11118	9048	3.11756	3.117557	0.4938	16.41	16.81	16.61	0.40	0.300	0.155	0.455	0.48	26573.635	421	
5834	944	12468	6028	3.12207	3.122456	0.4945	15.10	15.72	15.33	0.62	0.480	0.290	0.589	0.44	29626.278	419	
12636	1454	17142	3072	...	3.125514	0.4949	16.26	17.18	16.76	0.92	0.250	0.095	0.355	0.52	29526.598	296	
12224	1223	2922	18912	3.1276	3.127668	0.4952	15.64	16.81	16.26	1.17	0.280	0.150	0.433	0.24	31734.459	100	
12533	1373	4620	20220	3.129	3.128969	0.4954	15.55	16.50	16.18	0.95	0.310	0.152	0.420	0.21	29970.446	106	
2359	262	7654	9249	3.1291	3.129097	0.4954	15.93	16.96	16.47	1.03	0.220	0.105	0.393	0.50	28035.597	311	
2872	721	21244	17183	...	3.131142	0.4957	15.40	16.70	15.95	1.30	0.175	0.073	0.368	0.24	29199.447	196	
12521	1362	4260	19860	3.140	3.140185	0.4970	16.23	16.83	16.56	0.60	0.190	0.111	0.489	0.27	32063.618	106	
5522	753	3530	13340	...	3.140298	0.4970	16.06	16.80	16.46	0.74	0.260	0.098	0.403	0.50	27799.286	380	
5841	948	12710	5445	...	3.142666	0.4973	15.07	15.66	15.35	0.59	0.500	0.288	0.508	0.30	27807.399	414	S;cr
12197	1202	7509	22677	3.1437	3.143815	0.4975	16.20	17.04	16.69	0.84	0.230	0.082	0.316	0.12	25946.477	111	
12408	1276	1902	3552	3.14643	3.146274	0.4978	15.97	16.66	16.42	0.69	0.185	0.081	0.314	0.39	31669.633	69	
W 28	1737	3837	19152	...	3.148744	0.4981	16.63	16.89	16.71	0.26	0.300	0.148	0.423	0.24	27756.301	104	
2717	577	15953	5914	3.15	3.155211	0.4990	16.13	16.83	16.53	0.70	0.300	0.163	0.423	0.51	27808.282	390	
2689	550	15312	2274	...	3.162762	0.5001	16.01	16.70	16.45	0.69	0.350:	0.118	0.398	0.30	27800.377	428	
12972	1662	5772	14576	...	3.164948	0.5004	16.50	17.04	16.74	0.54	0.365	0.108	0.396	0.50	32916.283	212	
2545	430	12841	5777	3.16599	3.166099	0.5005	15.41	16.43	16.02	1.02	0.250	0.081	0.379	0.50	27449.307	426	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	p	p	p	m			
12502	1345	2964"	11724"	...	3.167435	0.5007	16.24	17.16	16.79	0.92	0.315	0.095	0.385	0.44	27786.315	352	
2254	167	3695	19844	3.1682	3.167912	0.5008	15.30	16.81	16.21	1.51	0.165	0.086	0.361	0.24	29597.318	105	
6107	1106	10721	20113	...	3.170877	0.5012	16.06	16.81	16.64	0.84	0.135	0.076	0.374	0.06	26565.613	327	
2863	713	20405	17687	...	3.172102	0.5013	16.24	17.57	16.96	1.33	0.155	0.100	0.340	0.24	30725.573	246	
5975	1021	16042	6068	3.17310	3.173259	0.5015	16.08	16.72	16.47	0.64	0.300:	0.092	0.311	0.80	26635.562	374	S;P?
12835	1616	17031	20628	...	3.179996	0.5024	15.73	17.02	16.58	1.29	0.290	0.113	0.381	0.00	30680.540	102	
12624	1442	15180	3300	...	3.182664	0.5028	16.12	17.28	16.84	1.16	0.300:	0.105	0.375	0.44	29188.552	438	
W 31	1739	3786	18632	3.190	3.188373	0.5036	16.51	16.91	16.74	0.40	0.300	0.160	0.410	0.24	29994.284	104	
12828	1609	15293	21215	...	3.188908	0.5036	15.70	16.64	16.17	0.94	0.240	0.114	0.375	0.00	31701.568	110	
12195	1200	7164	23847	3.1897	3.189845	0.5038	15.32	16.44	15.90	1.12	0.145	0.063	0.341	0.12	29597.318	233	
2866	716	20855	15279	...	3.192705	0.5042	15.69	16.83	16.36	1.14	0.175	0.092	0.392	0.30	31734.558	333	
12910	1651	2607	6513	3.192789	3.192789	0.5042	16.07	16.50	16.33	0.43	0.345:	0.080	0.397	0.38	32919.335	227	
W 47	1748	5450	18176	3.194	3.193286	0.5042	15.81	17.05	16.51	1.24	0.280	0.092	0.424	0.27	29128.579	117	
2710	570	15740	5642	3.19	3.194506	0.5044	15.89	16.68	16.39	0.79	0.320	0.125	0.380	0.51	27807.317	404	
2373	276	8143	10871	3.19737	3.197658	0.5048	15.37	16.57	16.03	1.20	0.175	0.114	0.369	0.51	24081.749	452	
2735	594	16287	4912	3.1987164	3.198793	0.5050	15.88	16.44	16.10	0.56	0.250	0.121	0.381	0.80	29697.250	355	S
2682	544	15157	13332	...	3.200306	0.5052	16.21	16.98	16.73	0.57	0.225	0.092	0.404	0.50	32070.603	417	
12194	1199	7110	22633	3.2049	3.204679	0.5058	15.90	16.79	16.40	0.89	0.275	0.114	0.409	0.12	30313.448	111	
6011	1045	17677	16595	...	3.205323	0.5059	15.17	15.54	15.33	0.37	0.520	0.226	0.417	0.30	16820.567	421	
2880	729	22491	15756	...	3.205471	0.5059	15.72	16.90	16.35	1.18	0.240	0.072	0.347	0.30	27658.646	258	
12994	1674	13666	2587	...	3.205786	0.5059	15.97	16.64	16.36	0.67	0.220	0.108	0.342	0.25	31717.626	432	
12748	1547	4664	21644	...	3.207072	0.5061	15.18	16.68	16.04	1.50	0.300	0.087	0.386	0.21	29104.658	103	
12462	1318	1026	4902	...	3.209305	0.5064	16.11	16.78	16.49	0.67	0.390	0.110	0.344	0.35	27670.574	176	
12329	1259	15465	5742	3.2110	3.210448	0.5065	15.39	16.34	15.99	0.95	0.310	0.097	0.417	0.51	29913.598	383	
12205	1210	7741	22745	3.2104	3.210385	0.5065	15.44	16.48	16.10	1.04	0.290	0.094	0.376	0.12	30669.451	113	
6089	1092	22041	6091	...	3.213127	0.5069	15.78	16.11	15.94	0.33	0.500	0.289	0.480	0.26	29627.308	379	
12419	1286	3426	5328	3.21345	3.213398	0.5070	16.07	16.82	16.43	0.75	0.250	0.072	0.330	0.31	26689.391	209	
5733*	888	9940	7483	...	3.215025	0.5072	15.30	15.57	15.44	0.27	0.425	0.188	0.463	0.47	16816.644	450	S;P?
12003	1133	9030	8604	3.21837	3.218520	0.5077	16.00	17.19	16.48	1.19	0.320	0.130	0.350	0.51	24360.895	425	
2688	549	15311	6754	3.222	3.221069	0.5080	15.17	16.34	15.94	1.17	0.235	0.089	0.346	0.80	29697.250	393	
12444	1306	300	17280	...	3.222563	0.5082	16.32	16.97	16.71	0.65	0.190:	0.108	0.268	0.29	32555.317	181	
2734	593	16276	4234	...	3.222920	0.5082	15.44	16.34	15.93	0.90	0.150	0.069	0.380	0.80	29129.635	358	
2368	271	7979	11900	3.2234	3.223412	0.5083	15.71	16.78	16.36	1.07	0.175	0.098	0.406	0.30	27807.476	441	
2742	601	16463	3337	...	3.224377	0.5084	15.80	16.61	16.20	0.81	0.190	0.079	0.416	0.52	31436.383	363	
12722	1527	-667	8356	...	3.229170	0.5091	15.94	16.78	16.35	0.84	0.296	0.099	0.344	0.44	31704.549	192	
2811	664	18094	13733	...	3.233839	0.5097	16.33	17.17	16.78	0.84	0.225	0.125	0.374	0.30	26684.383	381	
12056	1170	13548	10242	3.236	3.235550	0.5100	15.94	16.98	16.65	1.04	...	0.080	0.241	0.46	29222.409	225	
2610	485	13954	7308	3.24078	3.240796	0.5107	15.85	16.57	16.30	0.72	0.300	0.107	0.423	0.80	31740.496	425	
12189	1194	6525	21979	3.2460	3.246005	0.5113	16.06	17.00	16.56	0.94	0.245	0.156	0.410	0.12	31698.521	100	
12339	1269	16920	5490	3.24644	3.246479	0.5114	14.88	16.22	15.75	1.34	0.155	0.061	0.317	0.80	27456.276	391	
2856	706	19983	16553	...	3.249406	0.5118	15.94	16.77	16.45	0.83	0.230	0.110	0.376	0.17	29219.342	351	
2361	264	7666	11764	3.250875	3.250875	0.5120	16.37	17.23	16.85	0.86	0.240	0.094	0.415	0.30	27658.609	423	Sm
13037	1711	14254	25274	...	3.251272	0.5121	15.77	16.92	16.25	1.15	0.290	0.130	0.353	0.00	31674.592	245	
12450	1310	540	16602	...	3.251602	0.5121	15.72	16.88	16.50	1.16	0.190	0.079	0.325	0.30	31734.465	204	
5817	934	11935	5893	3.25300	3.252978	0.5123	15.70	16.55	16.20	0.85	0.340	0.102	0.348	0.50	32919.335	391	S;cc
12665	1479	19380	14952	...	3.255335	0.5126	15.83	16.75	16.36	0.92	0.220	0.100	0.354	0.25	26322.343	375	
2465	359	10692	9730	...	3.255826	0.5127	15.99	16.80	16.43	0.81	0.195	0.106	0.359	0.48	26444.225	444	S;cr
12662	1476	19200	4920	...	3.258032	0.5130	16.28	17.25	16.78	0.97	0.170	0.088	0.410	0.30	31738.589	289	
5978	1023	16283	14780	3.25924	3.259351	0.5131	15.36	16.07	15.74	0.71	0.215	0.096	0.410	0.30	29217.448	400	
1009	136	16056	5661	...	3.260579	0.5133	15.18	15.88	15.45	0.70	0.415	0.240	0.490	0.80	29204.484	397	
12780	1574	9732	20701	...	3.261702	0.5134	16.44	17.39	16.95	0.95	0.250:	0.092	0.390	0.18	13875.807	120	
12553	1390	6990	3378	...	3.266662	0.5141	15.98	17.00	16.56	1.02	0.270:	0.119	0.435	0.37	30023.355	112	S!
941	70	11155	8848	3.2676	3.267761	0.5143	16.01	16.81	16.52	0.80	0.280	0.132	0.358	0.48	23681.879	430	S
2721	581	16004	5207	3.26989	3.269442	0.5145	15.83	16.43	16.20	0.60	0.250	0.133	0.362	0.80	26689.391	367	
12758	1555	5859	21194	...	3.270552	0.5146	15.75	16.86	16.49	1.11	0.230	0.086	0.367	0.30	29970.446	109	
12733	1536	58	17191	...	3.272799	0.5149	16.14	17.01	16.67	0.87	0.150	0.090	0.337	0.29	28125.361	215	
2398	299	8871	9993	...	3.276832	0.5155	14.63	15.15	14.88	0.52	0.495	0.229	0.426	0.80	30319.479	454	S
2759*	617	16785	5281	...	3.278323	0.5156	16.15	16.96	16.59	0.81	0.230	0.106	0.353	0.80	29219.342	325	
12187	1192	6314	21588	3.2867	3.286560	0.5167	15.97	17.19	16.78	1.22	0.235	0.081	0.356	0.19	29970.446	103	
2839	689	19045	9664	3.29689	3.296827	0.5181	15.07	16.54	15.96	1.47	0.235	0.074	0.387	0.44	14391.543	354	
12967	1657	4613	13814	...	3.298404	0.5183	16.18	16.89	16.57	0.71	0.230	0.108	0.398	0.30	27799.482	343	S
5747	894	10277	9568	3.2992	3.299240	0.5184	16.61	16.98	16.82	0.37	0.275:	0.080	0.375	0.48	25886.539	453	
12523	1364	4320	12402	...	3.302991	0.5189	16.20	16.66	16.46	0.46	0.240:	0.072	0.377	0.45	29586.337	385	
5909*	978	14238	6793	3.30770	3.307157	0.5195	15.99	16.95	16.61	0.96	0.235	0.105	0.354	0.80	27807.283	355	S

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max JD 2400000+	Obs	Rem.
					d		m	m	m	m		P	P	m			
2737	596	16344"	5306"	3.30938	3.309910	0.5198	15.78	16.30	16.07	0.52	0.234	0.092	0.379	0.80	26303.577	394	S
13040	1714	14926	7511	...	3.310864	0.5199	15.46	16.18	15.91	0.72	0.215	0.105	0.381	0.52	27457.382	372	
2846	696	19337	14864	...	3.311906	0.5201	15.38	16.45	15.98	1.07	0.220	0.078	0.382	0.25	31772.444	337	
5905	975	14218	2500	...	3.312339	0.5201	16.21	16.87	16.55	0.66	0.250	0.113	0.405	0.00	26264.557	378	
12069	1180	20868	7080	3.3131	3.312883	0.5202	15.84	16.86	16.21	1.02	0.190	0.089	0.327	0.33	13894.749	166	
12565	1399	8460	20118	...	3.315688	0.5206	16.37	16.97	16.72	0.60	0.365	0.149	0.454	0.18	17966.591	98	
5800	924	11720	9381	...	3.320896	0.5213	15.97	16.81	16.43	0.84	0.150	0.094	0.345	0.48	26322.343	343	
12821	1602	14340	23628	...	3.321245	0.5213	16.17	16.75	16.48	0.58	0.220	0.110	0.287	0.00	25617.348	211	
2471	364	11118	8807	3.3688	3.321487	0.5213	16.02	16.64	16.36	0.62	0.230:	0.141:	0.369:	0.48	16820.747	443	S;cr
12753	1550	5090	20996	...	3.327389	0.5221	16.47	17.04	16.75	0.57	0.260	0.114	0.436	0.21	28759.565	108	
2784	640	17304	5131	3.33370	3.333866	0.5230	15.56	16.85	16.35	1.29	0.200	0.095	0.319	0.80	23489.539	296	
2885	734	6197	25088	...	3.337006	0.5234	14.97	16.13	15.63	1.16	0.195	0.076	0.328	0.00	27425.437	238	
12763	1560	6779	20721	...	3.337146	0.5234	15.91	16.89	16.46	0.98	0.295	0.095	0.471	0.19	31330.638	103	
5685	844	8753	10323	3.3382	3.338296	0.5235	16.42	16.83	16.64	0.41	0.310	0.122	0.326	0.80	29517.624	257	
5511	748	3052	2876	3.34011	3.340114	0.5238	16.17	16.91	16.64	0.74	0.250	0.112	0.391	0.33	32537.390	339	
5791*	920	11439	9007	...	3.345746	0.5245	15.96	16.59	16.33	0.63	0.310	0.132	0.382	0.48	27746.482	477	
12027	1151	11628	6402	3.349	3.348536	0.5249	15.96	16.73	16.39	0.77	0.230	0.116	0.370	0.30	28035.597	374	
2458	352	15016	9162	3.35877	3.358868	0.5262	15.72	16.57	16.30	0.85	0.150	0.080	0.367	0.80	27422.272	426	
2378	281	8474	9764	3.3594	3.359598	0.5263	15.82	16.80	16.41	0.98	0.185	0.106	0.384	0.80	32012.641	436	
12594	1423	12132	2532	...	3.364952	0.5270	15.81	16.82	16.43	1.01	0.255	0.097	0.422	0.25	30325.344	417	
12219	1219	1608	19908	3.3716	3.371832	0.5279	15.61	16.73	16.48	1.12	0.245	0.091	0.383	0.24	31688.643	104	
2519	408	12339	5827	3.374115	3.374400	0.5282	15.81	16.52	16.23	0.71	0.335	0.156	0.418	0.50	26455.214	402	
12423	1290	3882	546	3.37430	3.374511	0.5282	15.99	16.99	16.51	1.00	0.250	0.077	0.319	0.31	29674.309	263	
W 25	1736	4255	19363	3.378	3.377851	0.5286	16.47	17.07	16.77	0.60	0.295	0.131	0.422	0.27	29602.400	101	
2630	500	14241	6741	3.380205	3.380602	0.5290	16.00	17.05	16.64	1.05	0.205	0.098	0.365	0.80	29869.637	445	
5768	908	10714	17632	...	3.384462	0.5295	15.28	15.92	15.62	0.64	0.450	0.198	0.436	0.27	30372.326	401	
6067	1079	20370	10857	3.3775	3.385768	0.5297	15.56	16.57	16.13	1.01	0.170	0.093	0.385	0.50	23705.769	349	
2316	223	5904	8604	3.3926	3.392599	0.5305	15.50	16.47	16.10	0.97	0.175	0.099	0.366	0.80	26573.635	393	
2803	658	17909	15024	...	3.393005	0.5306	15.02	16.49	15.87	1.47	0.210	0.079	0.406	0.17	30023.355	346	
2658	524	14632	5691	3.39730	3.397196	0.5311	15.69	16.73	16.11	1.04	0.190	0.073	0.415	0.51	27714.594	435	S!
12961	1655	1709	7885	...	3.398508	0.5313	15.95	17.11	16.34	1.16	0.205	0.083	0.286	0.40	26573.635	150	
12518	1359	4038	15402	...	3.405347	0.5322	15.96	16.52	16.21	0.56	0.270	0.132	0.340	0.37	31330.638	217	S
2624*	496	14127	7034	...	3.408970	0.5326	14.92	15.56	15.29	0.64	0.240	0.075	0.416	0.80	13875.807	444	S;cr
5809	927	11811	6395	3.40977	3.409671	0.5327	15.83	16.65	16.37	0.82	0.230	0.114	0.444	0.45	27413.374	425	
12686	1499	21498	15228	...	3.411351	0.5329	14.94	15.75	15.32	0.81	0.480	0.244	0.485	0.30	27802.552	394	S
2843	693	19224	17008	...	3.415382	0.5334	16.01	16.69	16.36	0.68	0.280	0.130	0.409	0.17	26988.563	356	
1008	135	16043	5632	3.417903:	3.418204	0.5338	15.03	15.63	15.31	0.60	0.500	0.219	0.468	0.80	24380.812	400	
5530	757	3996	16304	...	3.419856	0.5340	15.60	16.31	16.03	0.71	0.150	0.101	0.412	0.27	30646.367	461	
2428	327	9695	9580	3.41995	3.420114	0.5340	16.06	16.56	16.29	0.50	0.255	0.123	0.448	0.80	29586.337	425	S
12647	1464	18420	3210	...	3.425460	0.5347	15.61	17.27	16.58	1.66	0.140	0.056	0.342	0.30	26245.582	314	
12757	1554	7245	-600	...	3.426795	0.5349	15.35	17.12	16.39	1.77	0.180	0.071	0.289	0.00	31734.496	258	
12765	1562	8175	476	...	3.429241	0.5352	15.23	15.81	15.53	0.58	0.505:	0.244	0.477	0.00	28758.570	82	
12772	1567	9058	-392	...	3.430319	0.5353	16.17	17.42	16.84	1.25	0.230	0.189	0.373	0.00	31712.517	271	
970*	99	12840	7606	...	3.433641	0.5358	16.25	17.22	16.84	0.97	0.350	0.102	0.427	0.80	27799.378	452	S;cr
5776	914	11024	17966	...	3.438439	0.5364	15.86	16.49	16.26	0.63	0.240	0.113	0.403	0.27	29584.400	374	
12204	1209	7612	22854	3.43861	3.438788	0.5364	14.83	16.49	15.89	1.66	0.260	0.081	0.411	0.12	28408.592	113	
12987	1672	7009	3475	...	3.440813	0.5367	15.62	16.80	16.20	1.18	0.225	0.079	0.250	0.37	29222.409	203	
12201	1206	7578	22528	3.4439	3.443726	0.5370	15.78	16.98	16.35	1.20	0.130	0.087	0.406	0.12	27660.599	108	
12332	1262	16440	6528	3.444475	3.444148	0.5371	15.88	16.83	16.38	0.95	0.250	0.077	0.381	0.80	26055.296	374	
12574	1407	9360	1398	...	3.445318	0.5372	16.20	16.92	16.50	0.72	0.400	0.233	0.513	0.32	27457.502	317	S;P?
5697	854	8948	9601	3.44622	3.446351	0.5374	15.84	16.63	16.40	0.79	0.175	0.111	0.334	0.80	29587.337	444	SM
2612	486	14009	5483	3.44825	3.448252	0.5376	16.04	16.72	16.47	0.68	0.310	0.120	0.398	0.30	23740.790	383	
5930*	993	14814	10253	...	3.448495	0.5376	16.17	16.77	16.55	0.60	0.225	0.144	0.453	0.38	31113.506	395	
2713	573	15815	5876	3.45	3.448886	0.5377	16.09	16.68	16.43	0.59	0.195	0.114	0.413	0.51	31740.496	387	
2650	517	14483	14314	...	3.451406	0.5380	15.35	16.47	15.95	1.12	0.195	0.087	0.382	0.10	29586.382	432	
2807	660	17973	16748	...	3.454961	0.5384	15.24	16.76	16.20	1.52	0.190	0.120	0.370	0.06	23682.875	421	
12613	1434	13824	4314	...	3.465479	0.5398	15.73	16.89	16.41	1.16	0.210	0.109	0.388	0.30	31303.647	474	
12193	1198	7116	22375	3.4654	3.465528	0.5398	15.93	17.03	16.54	1.10	0.155	0.088	0.448	0.12	31708.568	113	
12229	1228	20040	7512	3.4689	3.468876	0.5402	15.64	16.46	16.05	0.82	0.290	0.117	0.425	0.33	26452.220	345	
12595	1424	12390	1698	3.469	3.474115	0.5408	15.43	16.51	16.06	1.08	0.280	0.119	0.359	0.12	27808.317	344	
926	55	9488	5436	...	3.477804	0.5413	15.44	16.64	16.15	1.20	0.240	0.089	0.359	0.42	26304.355	419	Sm
12619	1439	14604	20040	...	2.480646	0.5417	15.92	16.65	16.25	0.73	0.510	0.225	0.453	0.00	32838.602	366	S
12723	1528	240	4052	3.490	3.485681	0.5423	15.78	16.50	16.23	0.52	0.210	0.114	0.394	0.35	29956.456	256	Sm
2410	311	9203	10002	3.4859	3.485901	0.5423	15.22	16.37	15.88	1.15	0.220	0.081	0.380	0.80	27456.354	443	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
				d	d		m	m	m	m	p	p	p	m			
5663	829	8158"	10184"	3.4876	3.487602	0.5425	16.20	17.04	16.65	0.84	0.225:	0.106	0.394	0.80	28035.597	94	S;P?
6086	1090	21644	5653	...	3.493301	0.5432	15.60	16.98	16.41	1.38	0.235	0.079	0.386	0.38	27807.516	312	
12664	1478	19320	3384	...	3.496004	0.5436	16.43	16.94	16.68	0.51	0.245	0.120	0.365	0.30	26626.518	273	S
12969	1659	7949	19475	...	3.505156	0.5447	15.10	16.11	15.71	1.01	0.210	0.074	0.375	0.28	32884.277	455	
13022	1696	5865	10924	...	3.508987	0.5452	15.71	16.49	16.13	0.78	0.225	0.078	0.403	0.50	13875.807	485	
12235	1233	2607	21433	3.5096	3.509546	0.5452	15.77	16.80	16.39	1.03	0.240	0.097	0.337	0.19	29988.278	108	
12645	1462	18282	3540	...	3.513892	0.5458	15.88	16.33	16.12	0.45	0.455:	0.174	0.496	0.30	27800.507	383	
12552	1389	6936	3624	...	3.515841	0.5460	15.81	16.97	16.49	1.16	0.195:	0.093	0.326	0.37	29584.400	195	S:
2417	317	9304	3975	...	3.517437	0.5462	15.44	17.09	16.43	1.65	0.180	0.083	0.386	0.39	29956.396	396	
12198	1203	7409	22930	3.5230	3.522726	0.5469	15.72	16.67	16.24	0.95	0.195	0.115	0.425	0.12	13876.814	110	
12711	1518	-3250	14617	...	3.523000	0.5469	15.52	16.49	16.10	0.97	0.215	0.098	0.346	0.00	25179.516	292	
12855	1633	22912	24085	...	3.531141	0.5479	15.18	16.74	16.12	1.56	0.260	0.117	0.414	0.00	25592.391	161	
12730	1534	-900	20458	...	3.532103	0.5480	15.63	16.70	16.27	1.07	0.190	0.109	0.391	0.24	27750.477	284	
12628	1446	16200	4488	...	3.539059	0.5489	16.21	16.71	16.51	0.50	0.200:	0.120	0.366	0.80	24501.614	315	
12043	1160	12636	7272	...	3.545471	0.5497	15.64	16.59	16.23	0.95	0.395:	0.111:	0.339:	0.80	27799.286	260	S;cc
2736	595	16315	4946	3.548223	3.548223	0.5500	15.60	16.23	16.00	0.62	0.145	0.056	0.360	0.80	32838.602	376	
2762	619	16834	5375	3.55129	3.550687	0.5503	15.63	16.36	16.02	0.73	0.335	0.151	0.402	0.80	30639.590	389	S
12846	1626	20194	22754	...	3.551802	0.5504	15.44	16.10	15.80	0.66	0.140	0.074	0.349	0.00	25560.486	141	S;P?
975	104	13267	7812	3.4476	3.557605	0.5512	15.17	16.34	15.87	1.17	0.305	0.081	0.345	0.44	31873.316	358	S;cr
13010	1684	390	19046	...	3.564979	0.5521	16.01	16.92	16.48	0.91	0.240	0.126	0.404	0.24	29229.319	279	S;P?
12698	1509	22980	15690	...	3.566880	0.5523	15.09	16.58	15.92	1.49	0.280	0.081	0.292	0.30	27413.340	204	
945	74	11395	6846	3.5675	3.567324	0.5523	15.65	16.96	16.37	1.31	0.195	0.104	0.401	0.45	27456.533	423	
12508	1351	3468	5442	...	3.568269	0.5525	16.08	16.87	16.46	0.79	0.205:	0.075	0.308	0.31	29222.409	253	
2817	670	18278	17118	3.5744	3.574537	0.5532	15.32	16.53	16.12	1.21	0.155	0.086	0.353	0.17	27426.448	394	
980	108	13695	15482	3.5822	3.582142	0.5542	15.55	16.79	16.23	1.24	0.240	0.091	0.358	0.13	27749.409	429	
12336	1266	16776	5160	3.58366	3.583776	0.5543	16.00	16.87	16.52	0.87	0.240	0.093	0.336	0.80	32067.621	336	
2494	386	11832	4779	...	3.548084	0.5544	15.44	16.61	16.16	1.17	0.185	0.092	0.387	0.30	30375.358	406	
12580	1413	10920	4692	...	3.584134	0.5544	15.76	17.05	16.60	1.29	0.170	0.096	0.406	0.30	28405.640	484	
5624	808	7034	7574	...	3.585728	0.5546	16.08	17.02	16.66	0.94	0.210	0.143	0.374	0.30	30619.617	409	
11983	1118	6942	9066	3.58694	3.586787	0.5547	15.91	16.50	16.23	0.59	0.320	0.142	0.394	0.80	29577.384	402	
12642	1459	18000	3888	...	3.588040	0.5549	16.12	17.28	16.80	1.16	0.190	0.100	0.430	0.30	27456.387	351	
12447	1308	372	6450	...	3.590213	0.5551	15.92	17.16	16.63	1.24	0.205	0.105	0.342	0.40	31344.583	215	
2715	575	15906	6812	3.592	3.591791	0.5553	15.63	16.82	16.25	1.19	0.205	0.088	0.408	0.80	31321.627	328	
12747	1546	4650	20719	...	3.599172	0.5562	16.05	16.80	16.50	0.75	0.255	0.043	0.305	0.21	30665.492	109	
12627	1445	15744	2508	...	3.605028	0.5569	16.09	16.85	16.56	0.76	0.250	0.091	0.357	0.30	27808.317	369	
2498	388	11987	5982	3.605877	3.605740	0.5570	15.17	16.45	15.89	1.28	0.230	0.111	0.345	0.50	26689.546	411	
2472	365	11176	11524	3.606651	3.606651	0.5571	15.96	16.51	16.25	0.55	0.250	0.081	0.426	0.47	23667.868	371	
12696	1507	22650	6882	...	3.608886	0.5574	16.34	17.00	16.52	0.66	0.250	0.120	0.400	0.26	27801.321	250	
2704	564	15619	7210	3.6185	3.618529	0.5585	16.05	16.84	16.49	0.79	0.230	0.108	0.398	0.52	24802.831	433	
2697	557	15467	11055	3.61885	3.618799	0.5586	15.45	16.58	16.21	1.13	0.180	0.119	0.366	0.38	27755.452	425	
2355	258	7505	14436	...	3.622506	0.5591	15.58	16.54	16.05	0.96	0.190	0.089	0.399	0.42	31295.644	327	
2375	278	8279	18667	...	3.635811	0.5606	15.74	16.86	16.46	1.12	0.175	0.098	0.423	0.19	31055.568	405	
6092	1094	22423	16312	...	3.636864	0.5607	15.39	16.78	16.22	1.39	0.210	0.060	0.320	0.24	26341.332	300	
2824	675	18525	11559	3.6401	3.640081	0.5611	15.67	16.93	16.42	1.26	0.115	0.062	0.339	0.35	27746.482	371	
2683	545	15172	2241	...	3.641855	0.5613	16.19	16.78	16.45	0.59	0.350	0.200	0.491	0.30	27670.646	433	S;P?
5983	1028	16605	5228	3.64372	3.643925	0.5616	15.58	16.63	16.22	1.05	0.250:	0.098	0.332	0.80	29938.541	226	S
6060	1072	19772	10178	3.64559	3.645426	0.5617	15.98	16.59	16.22	0.61	0.150	0.091	0.372	0.50	26444.225	317	
5741	891	10120	9160	3.642297	3.646674	0.5619	15.97	16.61	15.99	0.64	0.240	0.119	0.456	0.80	28035.597	456	SM
6064	1076	20104	15944	...	3.647702	0.5620	14.87	16.70	16.03	1.83	0.275:	0.092	0.297	0.30	24408.850	357	
2851	701	19635	5280	...	3.647867	0.5620	15.71	16.91	16.37	1.20	0.250	0.105	0.364	0.30	24418.800	401	
12241	1239	3908	21260	3.6497	3.649496	0.5622	15.69	16.65	16.23	0.96	0.200	0.086	0.376	0.50	31670.593	100	
12217	1217	792	19722	3.6503	3.650301	0.5623	15.73	16.77	16.36	1.04	0.235	0.075	0.358	0.24	27474.272	276	SM
12558	1394	7068	20160	...	3.650586	0.5624	15.25	16.45	15.90	1.20	0.290	0.108	0.348	0.19	29134.598	103	
2792	648	17406	7182	3.6508	3.650861	0.5624	15.86	16.99	16.47	1.13	0.230	0.102	0.369	0.30	26453.220	403	
6022	1053	17920	16981	...	3.651906	0.5625	15.42	15.85	15.61	0.43	0.440	0.265	0.532	0.30	26571.611	430	
11992	1125	7747	10841	3.65247	3.652474	0.5626	15.81	16.82	16.29	1.01	0.200	0.092	0.412	0.80	27449.434	468	
12417	1284	3216	1848	3.65588	3.656039	0.5630	16.20	17.06	16.66	0.86	0.205	0.057	0.344	0.31	28104.540	270	
2698	558	15506	6816	3.6607	3.660697	0.5636	15.55	16.73	16.25	1.18	0.165	0.103	0.397	0.80	32888.426	414	
2478	371	11440	7634	3.6613	3.661220	0.5636	15.90	17.11	16.71	1.21	0.210	0.070	0.280	0.80	13946.555	393	
11987	1122	7068	14112	3.7840	3.665271	0.5641	15.58	16.17	15.89	0.59	0.470	0.180	0.429	0.42	27426.555	334	
12787	1579	10572	20868	...	3.676011	0.5654	15.49	16.88	16.23	1.39	0.135	0.042	0.384	0.06	25189.578	71	
2673	537	14903	1251	...	3.677589	0.5656	15.23	16.33	15.93	1.10	0.235	0.095	0.345	0.12	27801.321	160	
2833	683	18845	17661	...	3.679704	0.5658	15.40	16.64	16.10	1.24	0.250	0.121	0.377	0.17	27750.400	303	
2553	437	12974	18173	...	3.682087	0.5661	15.66	16.50	16.12	0.84	0.210	0.075	0.325	0.03	26960.603	325	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
5531	758	4103"	19660"	...	$3^d.685151$	0.5664	$15^m.63$	$16^m.77$	$16^m.35$	$1^m.14$	$0^P.205$	$0^P.101$	$0^P.393$	$0^m.27$	32030.655	100	
2290	198	5126	3098	$3^d.69615$	3.696502	0.5678	15.36	16.69	16.03	1.33	0.185	0.103	0.358	0.33	28523.279	253	
12226	1235	3723	19272	3.7051	3.705809	0.5689	16.08	16.85	16.55	0.77	0.345	0.187	0.472	0.24	31698.521	104	
5884	969	13764	10785	...	3.706839	0.5690	15.09	16.36	15.86	1.27	0.140	0.086	0.372	0.46	24757.436	429	
12052	1168	12954	6846	3.709	3.708652	0.5692	15.48	16.12	15.83	0.64	0.260	0.123	0.390	0.80	23667.868	429	
5589	787	6112	10001	3.7111	3.711277	0.5695	15.81	16.58	16.32	0.77	0.200	0.090	0.376	0.49	27746.482	407	
12740	1540	3828	-639	...	3.712356	0.5697	15.78	16.76	16.38	0.98	0.165	0.083	0.318	0.00	27718.396	317	
2638	507	14340	7945	...	3.712658	0.5697	15.81	16.64	16.33	0.77	0.230	0.100	0.387	0.52	31299.629	430	
5752	897	10240	8196	3.72403	3.724251	0.5710	16.21	16.93	16.63	0.72	0.220:	0.094	0.279	0.48	28761.607	273	
5656	825	8006	17680	...	3.726874	0.5713	16.12	16.89	16.59	0.77	0.200	0.109	0.362	0.39	26710.335	218	
2810	663	18043	14302	...	3.733372	0.5721	14.97	16.65	16.05	1.68	0.150	0.072	0.423	0.25	26330.340	436	
12237	1235	3291	20123	3.7347	3.734866	0.5723	15.32	16.60	16.11	1.28	0.200	0.075	0.354	0.19	29113.623	105	
12483	1332	1482	13578	...	3.735082	0.5723	15.53	16.49	16.17	0.97	0.255	0.085	0.341	0.24	26330.340	357	Sm
2718	578	15966	5865	3.7376	3.737122	0.5725	15.85	16.80	16.39	0.95	0.240	0.096	0.416	0.51	26635.562	390	
5971	1019	15994	18612	3.7446	3.744285	0.5734	15.48	16.52	16.05	1.04	0.230	0.091	0.396	0.00	24501.614	392	
2327	233	6241	11185	3.74487	3.744725	0.5734	16.04	16.60	16.34	0.56	0.200	0.107	0.367	0.80	29994.334	477	S;cc
13013	1687	3791	7688	...	3.749819	0.5740	15.94	16.45	16.20	0.51	0.315	0.125	0.430	0.38	28762.619	363	
12517	1358	4008	9936	...	3.750190	0.5741	15.57	16.52	16.09	0.95	0.195	0.089	0.362	0.30	27807.476	351	
995	122	14275	6936	3.76848	3.768733	0.5762	15.14	16.15	15.71	1.01	0.210	0.107	0.397	0.80	29869.637	447	Sm;cr
2587	466	13546	19254	...	3.772734	0.5767	15.41	16.18	15.79	0.77	0.221	0.110	0.422	0.03	32941.385	392	
12770	1565	7470	21229	...	3.772776	0.5767	15.90	17.05	16.45	1.15	0.220	0.103	0.493	0.19	29994.285	106	
2643	511	14383	6613	3.77584	3.775624	0.5770	15.36	16.55	16.04	1.19	0.230	0.111	0.454	0.80	29526.598	449	S;cr
2751	610	16665	5041	3.77768	3.777030	0.5771	15.90	16.74	16.37	0.84	0.280	0.099	0.332	0.80	26421.249	311	
2508	398	12109	7585	3.77957	3.779315	0.5774	15.20	15.98	15.63	0.78	0.300	0.139	0.406	0.80	31657.649	430	
12666	1480	19452	2490	...	3.780590	0.5776	15.44	16.57	16.02	1.13	0.240	0.086	0.358	0.30	23682.875	269	
2287	195	5074	14775	...	3.783679	0.5779	15.59	16.59	16.22	1.00	0.195	0.104	0.370	0.37	27449.273	521	S
13030	1704	10134	9135	...	3.787899	0.5784	16.26	17.07	16.64	0.81	0.245	0.144	0.426	0.80	32940.363	442	Sm
5946	1005	15352	3024	...	3.788700	0.5785	15.68	16.65	16.21	0.97	0.265	0.080	0.455	0.44	26960.603	446	S;cc
12008	1137	9960	7800	3.7908	3.790506	0.5787	16.24	16.74	16.49	0.50	0.270	0.143	0.425	0.47	30749.276	428	S
2757	616	16738	4705	3.79769	3.797573	0.5795	14.93	16.42	15.87	1.49	0.165	0.089	0.400	0.80	31321.627	345	
2404	305	9124	3687	...	3.800924	0.5799	15.29	17.00	16.19	1.71	0.225	0.093	0.383	0.39	31743.545	387	
2623	495	14125	16463	3.80321	3.804205	0.5803	15.81	17.10	16.55	1.29	0.300	0.111	0.406	0.00	27801.283	428	
12858	1635	23330	23155	...	3.809945	0.5809	16.30	17.10	16.83	0.80	0.320	0.147	0.372	0.00	29222.562	157	
2317	224	6010	13087	...	3.815364	0.5815	15.71	16.59	16.22	0.78	0.285	0.144	0.410	0.47	30641.384	405	
12556	1393	7056	20076	...	3.816965	0.5817	16.00	16.72	16.40	0.72	0.230	0.134	0.491	0.19	27653.628	103	
12874	1645	26167	1338	...	3.817561	0.5818	15.42	16.34	16.02	0.92	0.260:	0.106	0.361	0.00	29722.224	165	S;P?
12412	1279	2400	5238	3.81965	3.819406	0.5820	15.85	16.84	16.33	0.99	0.160	0.063	0.317	0.31	30352.282	148	
W 43	1745	4071	17898	3.826	3.826896	0.5828	15.15	16.39	15.65	1.24	0.320:	0.069	0.349	0.32	29553.600	400	
2390	291	8685	6577	...	3.829349	0.5831	14.78	16.39	15.83	1.61	0.190	0.103	0.379	0.47	16823.638	429	
W 42	1744	3923	17804	3.833	3.832738	0.5835	15.17	16.40	15.89	1.23	0.300	0.106	0.416	0.27	29933.563	218	
13027	1701	8629	10382	...	3.836583	0.5839	15.76	16.71	16.35	0.95	0.220	0.101	0.311	0.80	25915.512	348	S
12679	1492	20940	17640	...	3.861205	0.5867	15.73	16.63	16.18	0.90	0.205	0.108	0.370	0.24	29228.404	294	Sm
12701	1512	23304	15618	...	3.882546	0.5891	15.77	16.82	16.12	1.05	0.265	0.075	0.339	0.30	25850.638	211	
2699	559	15514	6374	3.88236	3.882556	0.5891	15.48	16.78	16.26	1.30	0.185	0.093	0.365	0.52	30977.564	387	
5981	1026	16574	4488	...	3.884144	0.5893	16.14	16.75	16.47	0.61	0.190	0.085	0.364	0.80	23681.879	363	
12618	1438	14598	756	...	3.885173	0.5894	15.05	15.59	15.36	0.54	0.240:	0.119	0.392	0.12	32207.379	138	
5803	925	11744	8960	3.8983	3.898543	0.5909	15.71	16.36	16.07	0.65	0.240	0.080	0.470	0.48	26713.474	500	
2474	367	11298	6315	...	3.902126	0.5913	15.62	16.73	16.24	1.11	0.260	0.121	0.390	0.45	27799.378	403	
2795*	651	17675	10752	3.913320	3.913390	0.5925	15.43	16.85	16.18	1.42	0.280	0.076	0.373	0.30	28861.401	414	
W 11	1730	4453	20615	3.916	3.916244	0.5929	15.36	16.25	15.83	0.89	0.225	0.124	0.427	0.21	30057.264	105	
12416	1283	3198	2478	3.92790	3.927593	0.5941	15.42	16.60	16.10	1.18	0.190	0.077	0.369	0.33	26689.391	253	S;P?
2867	717	20944	16586	...	3.929869	0.5944	15.71	16.96	16.47	1.25	0.240	0.105	0.350	0.24	31712.572	336	
2541	426	12750	5394	...	3.931435	0.5945	15.18	16.39	15.84	1.21	0.240	0.109	0.396	0.30	29994.482	413	S;cr
2812	665	18105	4173	...	3.934480	0.5949	15.79	16.98	16.29	1.19	0.210	0.110	0.394	0.30	26055.296	366	
6101	1100	8216	21030	...	3.935203	0.5950	14.60	16.66	15.87	2.06	0.170	0.092	0.377	0.18	31330.638	105	
12429	1296	5028	3678	3.93823	3.938441	0.5953	16.18	16.97	16.59	0.79	0.180	0.110	0.378	0.33	32060.575	246	
12325	1255	9126	12012	3.94036	3.940359	0.5955	16.06	16.86	16.51	0.80	0.240	0.080	0.350	0.30	25952.512	437	
2672	536	14880	7614	3.9414	3.941253	0.5956	14.75	15.79	15.32	1.04	0.215	0.099	0.403	0.52	16823.638	414	
5765	906	10696	6176	3.95	3.947296	0.5963	16.06	16.84	16.52	0.78	0.260	0.130	0.460	0.45	32940.457	413	
12756	1553	5437	22648	...	3.952154	0.5968	15.98	16.89	16.51	0.91	0.245	0.104	0.419	0.00	27422.391	264	
2767	624	16912	5303	3.95293	3.953061	0.5969	15.68	16.67	16.17	0.99	0.200	0.105	0.357	0.80	29904.563	347	S
2636	505	14314	15206	3.95304	3.953110	0.5969	15.54	16.32	15.97	0.78	0.170	0.085	0.345	0.10	26274.482	420	
2503	393	12034	7605	3.95372	3.953739	0.5970	14.52	15.72	15.26	1.20	0.225	0.089	0.414	0.80	25915.512	433	
2876	725	21417	16254	...	3.959115	0.5976	15.21	16.87	16.18	1.46	0.250	0.087	0.436	0.24	14638.713	315	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	p	p	p	m			
5591	789	6120"	17656"	...	3.968075	0.5986	16.16	17.12	16.68	0.96	0.260	0.123	0.403	0.50	28846.402	218	
2841	691	19097	18514	...	3.968649	0.5986	16.05	17.07	16.71	1.02	0.220	0.110	0.374	0.05	13894.749	335	
12066	1177	20232	7824	3.972241	3.972190	0.5990	15.62	16.53	16.17	0.91	0.240	0.094	0.392	0.33	29228.404	404	
6081	1087	21686	9259	3.93315	3.976001	0.5994	15.87	16.75	16.35	0.88	0.300	0.083	0.367	0.28	27807.365	398	
2840	690	19093	19585	...	3.983207	0.6002	15.70	17.00	16.44	1.30	0.210	0.126	0.335	0.05	29229.367	176	
2516	405	12285	8442	3.9861	3.986140	0.6005	15.64	16.58	16.17	0.94	0.210	0.116	0.352	0.47	26455.214	418	
11996	1127	8100	9276	3.99597	3.995780	0.6016	15.32	16.43	15.98	1.11	1.170	0.088	0.411	0.51	13877.808	407	
2696	556	15466	5994	4.005	4.004879	0.6026	15.52	16.54	16.14	1.02	0.220	0.097	0.406	0.51	29586.418	368	
2582	461	13459	10233	...	4.008901	0.6030	14.79	16.35	15.73	1.56	0.260	0.060	0.340	0.46	29204.484	254	
5617	804	6782	18756	...	4.012238	0.6034	15.39	16.67	16.11	1.28	0.420:	0.171	0.378	0.28	23667.868	127	
12630	1448	16374	3798	...	4.014216	0.6036	14.93	16.21	15.82	1.34	0.170	0.080	0.350	0.52	17563.728	394	
5915	983	14514	6336	4.01587	4.015871	0.6038	15.47	16.58	16.06	1.11	0.265	0.112	0.437	0.52	23667.868	322	
2786	642	17323	18586	4.01826	4.018917	0.6041	15.08	15.78	15.44	0.70	0.185	0.103	0.404	0.00	27422.272	388	
12834	1615	16999	25287	...	4.029752	0.6053	15.41	16.56	16.09	1.15	0.130	0.060	0.430	0.00	25210.570	222	Sm
12712	1519	-2916	14768	...	4.035578	0.6059	15.59	16.63	16.13	1.04	0.305	0.126	0.390	0.00	31688.643	286	S
961	90	12547	7235	4.12478	4.043683	0.6068	15.11	15.88	15.49	0.77	0.270	0.088	0.360	0.80	27800.507	364	S;cr
2581*	460	13453	7026	...	4.044015	0.6068	15.16	15.56	15.35	0.40	0.480	0.218	0.463	0.80	31066.565	459	S:;P?
2413	314	9253	10728	4.04529	4.045015	0.6069	15.34	16.49	16.01	1.15	0.255	0.078	0.334	0.51	27426.329	451	Sm
5821	935	12068	4424	...	4.047233	0.6072	16.19	16.80	16.55	0.61	0.210	0.086	0.386	0.30	27691.588	397	
12844	1624	19512	23330	...	4.053920	0.6079	15.67	16.94	16.30	1.27	0.340	0.138	0.465	0.00	25563.546	155	
13047	1721	20007	17474	...	4.057331	0.6082	15.05	15.75	15.41	0.70	0.315:	0.104	0.427	0.24	27800.320	380	S
5980	1025	17055	5536	4.06070	4.060822	0.6086	14.89	16.15	15.59	1.26	0.210	0.061	0.364	0.80	28066.622	361	
2485	377	11579	6706	4.0645	4.064262	0.6090	16.03	16.43	16.21	0.40	0.370:	0.214	0.458	0.45	23682.875	434	
2775	631	17152	4969	4.064264	4.064264	0.6090	15.14	16.50	15.82	1.36	0.190	0.078	0.360	0.80	26421.249	323	
2637	506	14326	15384	4.06812	4.068334	0.6094	15.45	16.35	15.96	0.90	0.260	0.095	0.419	0.10	27670.613	429	
12065	1176	19530	11064	4.071628	4.071628	0.6098	15.38	16.46	15.98	1.08	0.260	0.109	0.399	0.50	29228.404	324	
2506	396	12048	7694	4.07171	4.071783	0.6098	14.59	15.65	15.32	1.06	0.170	0.078	0.338	0.80	30639.590	421	
918	47	8962	9794	4.0748	4.074697	0.6101	14.63	15.91	15.49	1.28	0.205	0.126	0.371	0.80	31297.632	458	
2518	407	12315	5894	4.28070	4.076971	0.6103	15.51	16.31	15.99	0.80	0.250	0.125	0.450	0.50	16814.656	408	S;cr
12579	1412	10752	3480	...	4.079517	0.6106	15.49	16.43	16.07	0.94	0.200	0.119	0.475	0.29	29703.248	437	
2524	413	12423	19235	...	4.087899	0.6115	15.62	16.80	16.35	1.18	0.245	0.081	0.361	0.03	26689.391	430	
2703	563	15606	4746	4.088	4.088234	0.6115	15.18	16.38	15.87	1.20	0.230	0.095	0.420	0.51	31734.601	404	
5783	918	11244	19976	...	4.090097	0.6117	15.59	16.55	16.13	0.96	0.250	0.144	0.410	0.47	31314.617	369	S;cc
12587	1419	11676	19368	...	4.095943	0.6123	15.60	16.44	16.05	0.83	0.295	0.136	0.462	0.10	16816.768	377	
2666	531	14727	10554	...	4.097086	0.6125	15.26	15.82	15.52	0.56	0.370	0.190	0.490	0.50	27808.317:	413	S
12749	1548	4767	20795	...	4.103260	0.6131	15.09	15.83	15.45	0.74	0.385	0.135	0.411	0.21	13922.694	108	
12333	1263	16679	5093	4.10366	4.103608	0.6132	16.29	16.73	16.55	0.44	0.200	0.120	0.400	0.80	31321.627	323	
2726	586	16060	6207	4.10988	4.109882	0.6138	15.21	15.70	15.45	0.49	0.245	0.106	0.381	0.55	27457.469	390	S:
5643	819	7540	17308	...	4.112164	0.6141	16.09	16.90	16.50	0.81	0.200	0.110	0.444	0.50	28846.402	221	
979	107	13345	7228	4.1159	4.115919	0.6145	15.16	16.47	15.94	1.31	0.200	0.099	0.419	0.80	16820.747	458	
12338	1268	16908	5166	4.1169	4.117120	0.6146	15.54	16.71	16.28	1.17	0.180	0.111	0.341	0.80	27808.317	368	
2720	580	15990	6124	4.12111	4.120746	0.6150	14.92	15.50	15.29	0.58	0.190	0.105	0.414	0.80	27756.442	390	S
12678	1491	20922	14346	...	4.123761	0.6153	15.26	16.67	15.89	1.41	0.210	0.090	0.403	0.30	29574.386	309	S
12812	1595	12807	-816	...	4.129059	0.6159	15.50	16.32	15.95	0.82	0.235	0.096	0.311	0.00		200	
2634	503	14259	6544	4.13290	4.132897	0.6162	15.31	15.69	15.54	0.38	0.290	0.149	0.379	0.80	26410.272	463	S:M;P?;cr
2590	469	13616	5496	4.14592	4.145635	0.6176	13.93	15.70	15.02	1.77	0.165	0.087	0.376	0.50	27728.547	421	
2481	374	11472	6010	4.151911	4.151911	0.6182	15.82	16.77	16.35	0.95	0.240	0.112	0.432	0.45	27449.381	402	S;cr
12511	1352	3480	12774	...	4.153043	0.6184	15.76	16.53	16.20	0.77	0.230	0.114	0.434	0.50	27808.317	403	
2394	295	8744	10746	4.15419	4.153566	0.6184	15.80	16.52	16.22	0.72	0.275	0.124	0.472	0.30	24353.890	463	
2802	657	17906	16774	...	4.154616	0.6185	15.38	16.64	16.11	1.26	0.260	0.088	0.382	0.06	26322.343	423	
2411	312	9214	8796	4.15488	4.154716	0.6185	15.37	16.12	15.74	0.75	0.320	0.118	0.438	0.51	30639.590	427	S
5926	991	14705	6936	4.15550	4.154767	0.6185	15.57	16.45	16.06	0.88	0.260	0.158	0.388	0.80	32067.621	366	Sm
962	91	12596	7567	4.15576	4.156219	0.6187	15.27	16.38	15.79	1.11	0.290	0.100	0.371	0.80	13946.555	388	
5831	943	12400	4210	...	4.157814	0.6189	15.50	16.76	16.40	1.26	0.490	0.210	0.425	0.30	24053.784	482	S:
2596*	475	13808	8177	...	4.166300	0.6198	15.68	16.61	16.22	0.93	0.240	0.148	0.331	0.47	28040.645	356	
2560	443	13136	5506	4.16816	4.167763	0.6199	14.28	15.68	15.10	1.40	0.295	0.089	0.379	0.50	25850.638	417	
2832	682	18825	14658	4.1679	4.167859	0.6199	15.16	16.50	16.00	1.34	0.235	0.068	0.365	0.25	26960.603	420	
12424	1291	4068	3990	4.17063	4.170744	0.6202	15.66	16.43	16.14	0.77	0.175	0.064	0.312	0.33	31107.449	260	
5938	999	15042	11238	4.1743	4.174070	0.6206	15.62	16.60	16.14	0.98	0.310	0.131	0.405	0.38	26572.627	431	
12081	1189	25512	11742	...	4.176747	0.6208	14.87	15.35	15.06	0.58	0.250	0.159	0.441	0.12	32229.400	168	S
12530	1370	4548	12960	...	4.184775	0.6217	15.79	16.51	16.13	0.72	0.280	0.165	0.441	0.45	13894.749	379	
1010	137	16140	6484	4.1852	4.184922	0.6217	15.38	16.12	15.82	0.74	0.190	0.088	0.377	0.80	29574.507	435	
2769	626	17050	14706	4.18731	4.187190	0.6219	15.80	16.20	16.11	0.40	0.300:	0.121	0.393	0.17	27658.646	416	
2782	638	17263	17688	4.1888	4.188830	0.6221	15.09	16.07	15.67	0.98	0.205	0.082	0.400	0.06	27456.387	398	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
				d	d		m	m	m	m	P	P	P	m			
2328	234	6340"	10294"	4.2043	4.204182	0.6237	15.96	17.03	16.53	1.07	0.230	0.091	0.418	0.49	29629.338	418	
12010	1139	10188	7800	4.20583	4.205454	0.6238	15.65	16.54	16.13	0.89	0.240	0.100	0.435	0.48	30647.582	437	
989	117	13845	6833	4.20677	4.206771	0.6240	14.92	16.33	15.71	1.41	0.190	0.092	0.394	0.80	26977.615	444	
5861	956	13188	15488	4.213897	4.213697	0.6247	15.31	16.20	15.85	0.89	0.200	0.090	0.426	0.13	27808.317	412	
994*	121	14075	6365	5.49473	4.226712	0.6260	15.09	15.66	15.41	0.57	0.240	0.169	0.411	0.52	29956.560	442	
2723	583	16016	4799	4.23361	4.233611	0.6267	15.67	16.86	16.37	1.19	0.235	0.071	0.362	0.80	27426.555	385	S;cc
2668	533	14833	7516	...	4.237055	0.6271	15.51	16.00	15.82	0.49	0.290	0.151	0.436	0.52	27755.452	404	S;cc
6015	1048	17793	15306	...	4.239171	0.6273	15.82	16.64	16.15	0.72	0.320	0.140	0.470	0.17	28838.465	422	S
2879	728	22013	15082	...	4.246753	0.6281	15.18	16.69	15.86	1.51	0.240	0.108	0.417	0.30	32915.437	319	
2594	473	13786	1984	...	4.256569	0.6291	15.87	16.72	16.38	0.85	0.330	0.117	0.400	0.12	32035.638	396	
12432	1299	5244	4362	4.26723	4.266903	0.6301	15.43	16.36	16.11	0.93	0.200	0.090	0.346	0.31	27728.464	393	
12791	1582	10967	20472	...	4.276402	0.6311	16.02	17.13	16.56	1.11	0.240	0.130	0.389	0.06	32891.329	167	
2366	269	7892	6419	...	4.278722	0.6313	15.52	16.65	16.18	1.13	0.160	0.065	0.351	0.30	27413.340	414	
6085	1089	21584	15818	...	4.282968	0.6317	15.64	16.90	16.30	1.26	0.215	0.086	0.391	0.30	31113.468	336	
2407	308	9153	8777	4.28765	4.287484	0.6322	15.52	16.38	16.01	0.86	0.370	0.148	0.460	0.51	27807.365	451	S
2421	320	9491	5888	...	4.290094	0.6325	15.11	16.35	15.79	1.24	0.260	0.134	0.442	0.42	26594.599	428	
1021	147	18274	8226	4.36171	4.296931	0.6332	15.77	16.24	15.97	0.47	0.450	0.199	0.471	0.30	26577.631	381	
12422	1289	3738	1482	4.29911	4.298947	0.6334	15.88	16.83	16.36	0.95	0.200	0.101	0.369	0.31	30203.637	298	
5974	1020	16030	5348	4.29937	4.299216	0.6334	15.26	15.83:	15.57	0.57:	0.210	0.110	0.359	0.80	31111.542	422	S'
2384	287	8588	5313	4.301	4.303237	0.6338	15.01	16.38	15.88	1.37	0.240	0.089	0.379	0.50	29577.384	408	
12971	1661	8364	20227	...	4.313782	0.6349	15.46	16.40	15.81	0.94	0.360	0.195	0.536	0.18	27653.628	103	
12720	1526	-754	8256	...	4.315442	0.6350	15.69	16.95	16.39	1.26	0.265	0.085	0.355	0.43	28105.440	228	
5586	785	6060	15910	...	4.316251	0.6351	16.00	16.68	16.32	0.68	0.220	0.126	0.434	0.42	31670.593	217	
12436	1302	13968	18762	4.32251	4.323047	0.6358	14.71	15.79	15.27	1.08	0.210	0.109	0.427	0.03	13894.749	406	
5750	896	10312	9064	...	4.323910	0.6359	15.44	16.18	15.89	0.74	0.360:	0.209	0.459	0.80	13847.841	434	S';P?
2835	685	18877	7095	4.32481	4.324950	0.6360	15.73	16.72	16.35	0.99	0.195	0.105	0.363	0.30	29627.308	387	
12554	1391	7020	3240	...	4.332208	0.6367	15.01	16.71	15.93	1.70	0.225	0.087	0.343	0.37	23740.790	240	
12826	1607	14069	7	...	4.333088	0.6368	15.64	16.61	15.85	0.97	0.210	0.110	0.364	0.12	29574.507	86	
2859	709	20031	5800	4.331	4.333244	0.6368	15.35	16.34	15.91	0.99	0.175	0.095	0.381	0.38	23489.529	364	
2480	373	11467	7346	4.33345	4.333249	0.6368	14.79	16.15	15.57	1.36	0.260	0.101	0.382	0.80	23706.778	423	
2237	152	883	14198	...	4.333342	0.6368	15.85	16.78	16.24	0.93	0.255	0.094	0.376	0.00	26456.214	313	
2314	221	5861	5541	...	4.334723	0.6370	15.35	16.71	16.15	1.36	0.190	0.100	0.446	0.31	27449.434	398	
12789	1581	10850	21162	...	4.336158	0.6371	16.01	16.50	16.25	0.49	0.375	0.154	0.399	0.06	27681.634	96	
12681	1494	21180	13164	...	4.351122	0.6386	15.48	16.92	16.32	1.44	0.250	0.074	0.320	0.35	28861.401	388	
2788	644	17329	11914	4.355729	4.355729	0.6391	14.24	15.85	15.16	1.51	0.145	0.079	0.384	0.40	27457.277	496	
12532	1372	4590	15474	...	4.363502	0.6398	15.34	16.18	15.73	0.84	0.205	0.095	0.361	0.37	27747.424	395	
12660	1474	19062	17760	...	4.364406	0.6399	15.55	16.75	16.07	1.20	0.260	0.106	0.447	0.17	27421.344	321	Sm
6004	1044	17339	10920	4.3764	4.370653	0.6405	15.12	15.79	15.39	0.67	0.170	0.087	0.427	0.40	27800.283	352	
12845	1625	19794	23001	...	4.373578	0.6408	15.38	16.66	16.09	1.28	0.200	0.087	0.415	0.00	31697.592	155	
5569*	777	5580	10660	4.38106	4.381065	0.6416	15.44	16.47	16.02	1.03	0.280	0.130	0.399	0.80	26605.624	496	
2431	329	9734	6128	...	4.387175	0.6422	15.57	16.21	15.88	0.64	0.390	0.194	0.476	0.47	28078.413	433	S
5610	799	6518	19444	...	4.390837	0.6425	15.98	16.95	16.50	0.97	0.270	0.112	0.388	0.28	33104.662	120	
6051	1069	19408	10325	...	4.391238	0.6426	15.05	15.43	15.22	0.38	0.450	0.237	0.502	0.50	27800.377	472	S
5675	839	8550	9100	4.39528	4.395064	0.6430	15.64	16.46	16.09	0.82	0.390	0.170	0.412	0.51	27422.272	441	S;cc
12841	1621	19144	23158	...	4.402799	0.6437	15.73	16.55	16.16	0.82	0.260	0.138	0.449	0.00	30725.573	163	
2591	470	13657	7998	...	4.409657	0.6444	15.33	16.41	15.90	1.08	0.210	0.112	0.411	0.44	23681.879	446	
2709	569	15721	5665	4.41238	4.412665	0.6447	15.19	15.87	15.57	0.68	0.280	0.150	0.459	0.80	15371.729	412	
12544	1382	6042	3810	...	4.413823	0.6448	15.64	16.17	15.93	0.53	0.220	0.071	0.400	0.37	12697.847	410	
2692	553	15422	4199	4.423	4.421081	0.6455	15.10	16.37	15.79	1.27	0.195	0.094	0.399	0.80	26309.501	394	
12658	1472	19020	5076	...	4.425378	0.6459	15.60	17.09	16.43	1.49	0.290	0.099	0.390	0.30	27456.354	276	
12513	1354	3744	15198	...	4.425911	0.6460	15.88	16.24	16.08	0.36	0.225	0.114	0.347	0.34	29220.400	419	S
2706	566	15661	6214	4.427	4.427382	0.6461	14.83	16.03	15.49	1.20	0.240	0.109	0.383	0.52	26989.568	414	
12959*	1654	49	17849	...	4.432488	0.6466	15.44	16.55	16.10	1.11	0.180	0.106	0.472	0.29	27750.412	232	
6021	1093	22316	13360	...	4.439253	0.6473	15.89	16.88	16.35	0.99	0.265	0.088	0.333	0.26	27808.317	290	
2821	673	18414	13144	...	4.442683	0.6476	16.29	17.02	16.66	0.73	0.250	0.120	0.441	0.50	30725.573	404	
12573	1406	9228	5832	...	4.444091	0.6478	16.11	16.69	16.46	0.58	0.250	0.108	0.363	0.42	24462.726	414	SM
12561	1397	7602	3780	4.444	4.451302	0.6485	16.21	16.74	16.54	0.53	0.235	0.149	0.370	0.37	32012.641	357	SM
2393	294	8743	8568	4.45992	4.459786	0.6493	14.98	15.88	15.39	0.90	0.340	0.149	0.447	0.51	30373.292	456	S
5579	781	5922	17640	...	4.461095	0.6494	16.06	16.93	16.58	0.87	0.235	0.093	0.428	0.50	32024.604	220	
2547	431	12847	6581	4.46427	4.464869	0.6498	14.00	14.91	14.55	0.91	0.250	0.109	0.385	0.80	31325.618	508	
2799	655	17782	15645	...	4.473360	0.6506	14.92	15.59	15.24	0.67	0.290:	0.191	0.462	0.17	26988.563	433	S;P?
12046	1163	12792	6528	4.47565	4.475609	0.6509	15.12	15.73	15.41	0.61	0.390	0.162	0.372	0.80	26572.627	502	S;cc
5875	964	13484	10818	...	4.483777	0.6516	15.95	16.55	16.25	0.60	0.205	0.106	0.444	0.46	16855.573	438	
948	77	11738	6585	4.48358	4.483817	0.6516	15.23	16.19	15.80	0.96	0.185	0.103	0.391	0.45	29855.636	453	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
				d	d		m	m	m	m	P	P	P	m			
12062	1173	19104"	11436"	4.49057	4.491066	0.6524	15.82	16.91	16.56	1.09	0.310:	0.122	0.372	0.35	23490.574	371	
12869	1642	26250	11897	...	4.493412	0.6526	15.51	16.09	15.73	0.58	0.425	0.213	0.510	0.00	27730.561	162	
5662	828	8156	19906	...	4.501848	0.6534	15.65	16.59	16.17	0.94	0.260	0.109	0.403	0.19	27749.489	414	
12207	1212	8275	22316	4.50645	4.507106	0.6539	15.16	16.50	15.98	1.34	0.325	0.136	0.479	0.14	31699.497	103	
12979	1667	6834	16675	4.49	4.509710	0.6541	16.08	16.99	16.53	0.91	0.175	0.097	0.330	0.31	27800.320	162	
1018	*144*	*18480*	*18030*	...	4.512345	0.6544	15.91	16.68	16.38	0.77	*0.210*	*0.092*	0.379	*0.05*	27426.555	390	
6059	1071	19716	15895	...	4.520796	0.6552	15.33	16.78	16.22	1.45	0.250	0.097	0.343	0.25	29594.386	325	
2415	316	9286	6787	...	4.544532	0.6575	15.31	16.27	15.92	0.96	0.250	0.109	0.400	0.30	32940.457	434	
12485	1334	1740	7896	...	4.563433	0.6593	16.03	17.19	16.53	1.16	0.270	0.071	0.241	0.30	29229.272	139	
12825	1606	14734	20665	...	4.564918	0.6594	15.06	16.12	15.57	1.06	0.221	0.100	0.341	0.00	27455.359	231	
12766	1563	7200	20743	...	4.566406	0.6596	14.66	16.43	15.68	1.77	0.230	0.082	0.429	0.19	31670.593	105	
12646	1463	18402	4872	...	4.594667	0.6622	15.51	16.35	15.85	0.84	0.305	0.144	0.471	0.53	27449.434	377	
W 30	1738	3630	19101	4.605	4.605006	0.6632	15.67	16.35	16.05	0.68	0.245	0.125	0.394	0.24	27694.627	88	
2663	529	14687	724	...	4.607620	0.6635	15.45	16.23	15.87	0.78	0.250	0.130	0.430	0.12	30318.498	103	
5775	913	11000	13387	4.60889	4.609116	0.6636	15.55	16.13	15.81	0.58	0.310	0.156	0.430	0.50	15619.884	423	
12415	1282	3012	882	4.60980	4.609928	0.6637	15.11	16.32	15.82	1.21	0.190	0.097	0.389	0.31	32039.635	321	Sm
5699	855	8980	9740	4.6219	4.622290	0.6648	15.98	16.66	16.31	0.68	0.280	0.114	0.456	0.80	26956.619	438	
6102	1101	8264	20141	...	4.624947	0.6651	14.78	16.19	15.62	1.41	0.240	0.080	0.422	0.18	27653.628	106	
5907	976	14226	6710	4.62794	4.628109	0.6654	15.61	16.88	16.24	1.27	0.330	0.107	0.404	0.80	17965.607	449	
6012	1046	17716	6787	...	4.630875	0.6657	15.31	16.37	15.94	1.06	0.245	0.097	0.363	0.55	28082.610	413	
5694	851	8871	5639	4.625	4.631605	0.6657	16.14	16.85	16.51	0.71	0.220	0.136	0.403	0.42	24824.683	422	
2777	633	17185	5538	4.6337	4.633435	0.6659	15.25	16.43	15.95	1.18	0.205	0.078	0.392	0.80	31317.599	342	
2486	378	11584	1859	...	4.634700	0.6660	16.07	16.82	16.49	0.75	0.260	0.109	0.424	0.00	14391.543	429	
12795	1584	11520	22717	...	4.635843	0.6661	15.12	16.31	15.82	1.19	0.370:	0.153:	0.386:	0.04	27568.646	51	
12824	1605	14656	23055	...	4.637851	0.6663	15.14	16.18	15.66	1.04	0.215	0.104	0.431	0.00	30680.540	292	
2858	708	20004	16542	...	4.639467	0.6665	15.94	16.67	16.35	0.73	0.310	0.144	0.402	0.24	26710.335	353	
2616	490	14026	8316	...	4.641385	0.6666	15.22	16.40	15.92	1.18	0.230	0.098	0.449	0.49	29128.623	439	
2716	576	15946	5174	4.6503	4.650455	0.6675	15.53	16.42	16.06	0.89	0.220	0.080	0.323	0.51	29519.613	405	
12974	1663	6290	16326	4.64	4.654313	0.6679	15.22	16.33	15.77	1.11	0.320	0.072	0.328	0.31	23732.679	195	
2613	487	14010	8110	...	4.656570	0.6681	15.39	16.35	15.96	0.96	0.250	0.102	0.385	0.49	30647.582	440	SM;cr
W 22	1734	5036	19885	4.664	4.661959	0.6686	15.20	16.13	15.76	0.93	0.275	0.127	0.422	0.27	30318.343	109	
2724	584	16022	5044	4.662276	4.662276	0.6686	15.22	16.26	15.80	1.04	0.200	0.090	0.366	0.80	29229.404	398	
12788	1580	10740	20561	...	4.666980	0.6690	15.64	16.44	16.09	0.80	0.220	0.123	0.417	0.06	16820.838	168	
2584*	463	13491	8564	...	4.671871	0.6695	15.45	16.34	15.95	0.89	0.215	0.098	0.318	0.47	29938.541	181	
12322	1252	5934	9270	4.67591	4.675565	0.6698	15.07	16.05	15.66	0.98	0.195	0.106	0.389	0.80	16816.768	439	
12076	1184	22686	8766	4.675825	4.675630	0.6698	15.29	16.39	15.85	1.10	0.230	0.102	0.392	0.19	27426.555	412	
12430	1297	5196	888	4.6781	4.678122	0.6701	15.45	16.51	16.05	1.06	0.235	0.105	0.391	0.30	28762.619	310	
6025	1055	17981	16607	...	4.678306	0.6701	15.97	16.88	16.52	0.91	0.270	0.103	0.413	0.06	31740.496	406	S
2490	382	11744	5628	4.679786	4.680434	0.6703	14.46	15.86	15.21	1.40	0.265	0.120	0.416	0.50	15282.874	430	
5840	947	12678	3090	...	4.690298	0.6712	15.11	16.50	15.81	1.39	0.230	0.102	0.435	0.25	30712.555	444	
2334	240	6738	13316	4.691411	4.691270	0.6713	15.32	16.65	16.04	1.33	0.280	0.143	0.423	0.47	26686.569	425	
5526	756	3756	8623	...	4.692234	0.6714	15.77	16.93	16.51	1.16	0.165:	0.065	0.314	0.30	24084.690	376	
2741	600	16434	5146	4.69829	4.699037	0.6720	15.54	16.26	15.23	0.72	0.270	0.148	0.377	0.80	31738.589	383	S;cc
5982	1027	16583	16216	4.71003	4.709591	0.6730	15.55	16.40	15.97	0.85	0.360	0.194	0.472	0.06	30372.326	419	
2826	677	18588	11403	4.709949	4.709949	0.6730	15.48	16.59	16.08	1.11	0.255	0.128	0.415	0.35	29586.418	433	S
988	116	13734	4291	...	4.711115	0.6731	15.39	16.52	16.11	1.13	0.240	0.132	0.529	0.30	23682.875	474	
2422	321	9508	8795	4.71787	4.717670	0.6737	16.03	16.60	16.35	0.57	0.370	0.139	0.399	0.51	26989.568	450	S;cc
12838	1619	16932	-459	...	4.725181	0.6744	14.65	15.83	15.21	1.18	0.270	0.135	0.407	0.00	30766.438	144	
12649	1466	18492	2304	...	4.728253	0.6747	15.63	16.68	16.24	1.05	0.265	0.116	0.423	0.30	30619.617	346	S
12728	1532	-772	17247	...	4.740733	0.6758	15.81	16.80	16.36	0.99	0.270	0.145	0.368	0.29	29597.318	270	S
2345	249	7054	4933	...	4.743326	0.6761	15.60	16.28	15.95	0.68	0.250	0.127	0.425	0.50	27801.321	391	
943	72	11214	10357	...	4.744889	0.6762	15.28	15.75	15.52	0.47	0.390	0.187	0.477	0.47	24380.812	460	S
12231	1229	22965	9105	4.7508	4.751037	0.6768	15.35	16.12	15.72	0.77	0.240	0.101	0.407	0.19	25997.359	386	
W 49	1750	4326	20526	4.75	4.752030	0.6769	15.80	16.32	16.03	0.52	0.440	0.250	0.437	0.21	27681.560	100	
12409	1277	2148	3384	4.75222	4.752219	0.6769	15.15	15.70	15.42	0.55	0.430	0.139	0.400	0.33	31496.277	330	
2695	555	15464	5698	4.770	4.769995	0.6785	14.91	16.20	15.65	1.31	0.235	0.112	0.408	0.51	27457.382	407	
6018	1051	17880	8453	4.7833	4.783018	0.6797	15.47	16.48	16.01	1.01	0.300	0.167	0.424	0.47	30313.555	402	
6093	1095	22820	10916	4.78505	4.784772	0.6799	15.80	16.42	15.87	0.82	0.175	0.107	0.363	0.22	16820.747	156	
12006	1136	9684	8142	4.794	4.793335	0.6806	15.46	16.01	15.88	0.55	0.385	0.164	0.376	0.51	29956.456	453	S
2805	659	17951	5014	...	4.796451	0.6809	15.34	16.74	16.09	1.40	0.235	0.113	0.378	0.55	27456.309	316	
2456	350	10491	9014	4.813489	4.796868	0.6810	15.25	16.37	15.93	1.12	0.205	0.085	0.394	0.80	23490.573	432	
2660	526	14638	7155	4.80068	4.800695	0.6813	15.39	16.47	15.90	1.08	0.220	0.099	0.410	0.80	29927.447	386	S;cr
2408	309	9165	9838	4.80989	4.809889	0.6821	14.98	16.00	15.58	1.02	0.325	0.119	0.400	0.80	29674.309	461	SM
2320	226	6084	11186	4.81183	4.812400	0.6824	15.76	16.57	16.18	0.81	0.255	0.108	0.423	0.80	26567.629	512	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
							mag	mag	mag	mag	mag			mag			
2756	615	16731"	6504"	^{d}4.8128	^{d}4.812684	0.6824	15.66	16.88	16.38	1.22	0.200	P 0.093	P 0.405	0.80	27750.440	407	
2439	335	9902	7802	4.81317	4.913177	0.6824	15.91	16.68	16.19	0.77	0.250	0.142	0.436	0.47	27449.307	442	
12843	1623	19173	20657	...	4.819306	0.6830	14.86	16.45	15.70	1.59	0.260	0.142	0.438	0.00	29970.551	172	SM
12242*	1240	4026	21402	4.8190	4.819455	0.6830	15.45	16.09	15.73	0.64	0.350	0.180	0.518	0.21	32056.578	106	
12031	1153	11862	7314	4.8209	4.820753	0.6831	15.31	15.79	15.55	0.48	0.300	0.124	0.390	0.80	31328.617	289	S:cc
2365	268	7880	4643	...	4.825563	0.6836	14.73	16.38	15.65	1.65	0.190	0.071	0.390	0.38	31066.565	417	
2477	370	11434	6554	4.83101	4.931562	0.6841	15.15	16.49	15.89	1.34	0.225	0.091	0.386	0.45	31326.634	438	
2828	679	18643	5771	4.8326	4.832779	0.6842	15.25	16.48	15.97	1.23	0.300	0.109	0.382	0.30	29129.635	378	SM
6016	1049	17808	13712	...	4.834141	0.6843	15.18	16.25	15.87	1.09	0.170	0.105	0.406	0.25	27755.452	424	
2620	493	14112	8054	...	4.834278	0.6843	15.51	16.25	16.00	0.84	0.240	0.101	0.350	0.49	27449.434	438	
2875	724	21268	12681	...	4.836291	0.6845	15.62	17.03	16.40	1.31	0.230	0.100	0.349	0.35	26977.615	401	
2464	358	10653	6312	...	4.840927	0.6849	15.23	15.74	15.39	0.51	0.435	0.217	0.468	0.45	30372.326	421	S':cr
2708	568	15719	6743	4.85	4.852223	0.6859	15.71	16.59	16.22	0.88	0.275	0.132	0.409	0.80	26988.563	406	
12220	1220	1749	18636	4.8572	4.856809	0.6864	15.39	16.22	15.92	0.83	0.325	0.104	0.367	0.24	28776.533	107	
13001	1680	16738	6191	...	4.863233	0.6869	15.86	16.89	16.39	1.03	0.260	0.110	0.388	0.80	31113.506	403	
2303	211	5563	12524	4.8549	4.865517	0.6871	15.72	16.75	16.26	1.03	0.250	0.076	0.398	0.45	24824.683	433	
2614	488	14014	7506	4.87429	4.874532	0.6879	15.21	16.36	15.76	1.15	0.240	0.097	0.461	0.80	23732.679	463	
951	80	12001	13124	4.8806486	4.880782	0.6885	15.72	16.81	16.35	1.09	0.255:	0.118	0.382	0.50	27808.282	412	
12809	1594	12762	23469	...	4.907282	0.6908	15.63	16.48	16.11	0.85	0.200	0.090	0.371	0.00	27749.289	302	SM
2325	231	6195	11779	4.90747	4.907793	0.6909	15.62	16.55	16.12	0.93	0.255	0.119	0.424	0.49	26989.568	435	S
2383	286	8555	9804	4.9080	4.908609	0.6910	15.01	16.17	15.62	1.16	0.235	0.095	0.454	0.80	29938.541	418	
2387	289	8612	4084	...	4.910811	0.6911	15.67	16.19	15.85	0.52	0.225	0.116	0.472	0.30	24380.812	413	Sm
12335	1265	16728	6342	4.91681	4.917262	0.6917	16.29	17.09	16.74	0.80	0.210	0.102	0.402	0.80	29220.400	372	Sm
12057	1171	13554	6600	4.9205	4.919989	0.6920	15.28	16.09	15.73	0.81	0.270	0.149	0.411	0.80	27457.349	441	
2861	711	20302	14878	4.93822	4.938295	0.6936	15.36	16.67	16.08	1.31	0.225	0.092	0.336	0.30	13948.574	382	
2539	424	12746	6559	4.94254	4.943301	0.6940	14.43	15.68	15.05	1.25	0.200	0.098	0.433	0.80	17563.728	436	
6017	1050	17842	17960	...	4.961104	0.6956	15.00	16.36	15.73	1.36	0.185	0.091	0.431	0.06	29518.630	399	
12867	1641	24260	13715	...	4.972280	0.6966	15.49	16.46	15.97	0.97	0.210	0.109	0.370	0.00	30751.283	170	
W 18	1733	1985	19649	4.965	4.973135	0.6966	15.62	16.30	15.92	0.68	0.330	0.229	0.408	0.24	30725.473	106	
2388	290	8670	19829	...	4.989073	0.6980	15.36	16.48	15.95	1.12	0.265	0.124	0.410	0.19	29690.297	419	Sm
2845	695	19290	16970	...	4.991649	0.6982	15.33	16.39	15.94	1.06	0.280	0.096	0.350	0.17	29913.598	382	
2283	191	4899	8095	...	4.991811	0.6983	15.67	16.33	16.03	0.66	0.420	0.154	0.417	0.30	27456.387	357	S
2664	530	14714	6394	4.99600	4.995881	0.6986	15.08	15.93	15.56	0.85	0.300	0.141	0.441	0.52	29881.575	460	S:m;cr
12784	1577	10679	-878	...	4.999975	0.6990	15.25	16.40	15.67	1.15	0.210	0.110	0.445	0.11	27700.624	189	
2487	379	11595	4580	...	5.003029	0.6992	15.01	16.43	15.73	1.41	0.210	0.121	0.453	0.30	27756.336	419	
12472	1325	1218	7380	...	5.024925	0.7011	15.42	16.43	15.94	1.01	0.285	0.114	0.362	0.40	26577.631	261	
5534	761	4260	9362	...	5.026435	0.7013	14.28	15.35	14.81	1.07	0.270	0.107	0.437	0.48	27681.594	398	
12077	1185	22878	9348	5.044136	5.043768	0.7027	15.13	15.94	15.54	0.81	0.290	0.102	0.407	0.19	32061.610	424	
2529	417	12525	7703	5.04551	5.045553	0.7029	14.44	15.80	15.19	1.36	0.230	0.108	0.358	0.80	29586.337	455	
2569	449	13243	6741	5.04569	5.045572	0.7029	15.68	16.62	16.29	0.94	0.285:	0.105	0.380	0.80	27457.382	450	
2263	175	4087	11645	...	5.051475	0.7034	14.53	15.10	14.83	0.57	0.210	0.111	0.381	0.50	32882.314	417	
2719	579	15986	5244	5.0528	5.052854	0.7035	15.15	16.27	15.76	1.12	0.210	0.112	0.362	0.80	27801.283	405	
2482	375	11476	9192	5.0635	5.063445	0.7044	15.75	16.28	15.99	0.53	0.345	0.134	0.401	0.48	23489.539	420	
2330	236	6445	4602	...	5.066344	0.7047	15.43	17.11	16.21	1.68	0.200	0.101	0.358	0.38	27413.374	310	
12783	1576	10150	21225	...	5.068249	0.7048	15.45	16.22	15.87	0.77	0.210	0.060	0.379	0.06	14962.768	136	
12568	1401	8598	6144	...	5.071071	0.7051	15.12	16.83	16.08	1.71	0.200	0.115	0.420	0.47	27694.591	440	
12555	1392	7050	5628	...	5.073580	0.7053	15.48	16.49	16.00	1.01	0.215	0.096	0.501	0.38	26956.619	430	
5651*	822	7866	9377	...	5.076277	0.7055	15.26	15.85	15.54	0.59	0.380	0.210	0.579	0.50	32915.336	461	S:;P?
12209*	1214	8372	22843	2.92997	5.083381	0.7061	14.78	16.56	15.57	1.78	0.220	0.099	0.372	0.14	29113.623	112	
5749	895	10304	8332	5.10099	5.100678	0.7076	15.30	16.25	15.94	0.95	0.200:	0.087	0.332	0.48	27800.283	436	
2452	346	10282	10314	...	5.103191	0.7078	15.24	16.15	15.76	0.91	0.175	0.103	0.409	0.30	26989.568	447	
12342	1272	17094	5106	5.109026	5.108364	0.7083	15.22	16.44	15.90	1.16	0.220	0.119	0.413	0.80	30640.598	356	
2381	284	8514	4344	...	5.110254	0.7084	15.52	16.57	16.18	1.05	0.210	0.118	0.416	0.30	14391.543	392	
12715	1521	-988	5843	...	5.165473	0.7131	14.98	16.14	15.52	1.16	0.225	0.143	0.457	0.47	30591.641	294	S
931	60	10142	3784	...	5.174971	0.7139	15.61	16.48	16.15	0.87	0.250	0.100	0.405	0.29	27456.309	406	
5595	792	6194	11765	5.19044	5.190599	0.7152	15.29	16.36	15.84	1.07	0.225	0.096	0.461	0.80	23752.638	437	
13026	1700	8602	8001	...	5.191811	0.7153	16.21	16.86	16.56	0.65	0.285	0.134	0.477	0.51	31328.570	404	
1007	134	16493	13530	5.20207	5.202407	0.7162	13.97	15.69	14.89	1.72	0.170	0.100	0.389	0.50	27800.320	463	
W 37	1741	1518	18194	5.203	5.203134	0.7163	15.57	16.50	16.18	0.93	0.240	0.091	0.489	0.24	24962.270	107	
2814	667	18245	9381	5.20879	5.208959	0.7168	15.14	16.41	15.83	1.27	0.200	0.095	0.375	0.44	27456.354	391	
12427	1294	4452	2778	5.2296	5.229695	0.7185	15.16	15.99	15.67	0.83	0.230	0.089	0.384	0.33	31712.517	359	SM;cc
8040	1112	3998	3749	5.2389	5.239297	0.7193	14.86	16.32	15.73	1.46	0.225	0.102	0.380	0.33	28523.409	316	
2531	419	12544	7312	5.28622	5.285600	0.7231	14.89	15.73	15.31	0.84	0.255	0.120	0.371	0.80	29585.388	331	
2779	635	17225	11146	5.3217	5.321801	0.7261	15.55	16.08	15.83	0.43	0.300	0.150	0.413	0.40	16855.573	490	S:

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P.	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	P	P	P	m			
2794	650	17574"	16738"	...	5.311968	0.7269	15.24	16.43	15.83	1.19	0.250	0.142	0.479	0.30	32891.286	417	
13036	1710	13646	7213	...	5.337065	0.7273	14.76	15.60	15.19	0.84	0.280	0.110	0.362	0.80	27426.396	226	S
5937	998	14986	5918	5.34574	5.345405	0.7280	16.02	16.52	16.31	0.50	0.260	0.146	0.417	0.51	23737.848	438	S
2714	574	15825	6066	5.34491	5.345658	0.7280	15.16	16.18	15.61	1.02	0.240	0.146	0.400	0.52	29229.404	394	
5976	1022	16107	5980	5.3553	5.355150	0.7288	15.49	16.46	16.01	0.97	0.270	0.101	0.376	0.80	23875.507	366	
2871	720	21054	15984	...	5.363366	0.7294	14.76	16.22	15.57	1.46	0.240	0.110	0.360	0.30	16820.838	349	
12421	1288	3738	864	5.36466	5.364951	0.7296	15.51	16.67	16.22	1.16	0.290	0.161	0.411	0.31	12722.865	302	
2873	722	21255	15287	...	5.380915	0.7309	15.22	16.68	16.07	1.46	0.310	0.108	0.398	0.30	26577.631	341	
2430	328	9728	8617	5.38445	5.383686	0.7311	14.41	15.43	14.94	1.02	0.270:	0.111	0.401	0.51	23738.785	463	
2499	389	11999	7554	5.4080	5.407718	0.7330	15.16	15.97	15.51	0.81	0.240	0.121	0.411	0.80	16855.573	418	
2278*	186	4786	5557	...	5.415428	0.7336	14.58	15.66	15.17	1.08	0.300	0.108	0.418	0.31	27426.396	384	
2402	303	9011	8144	5.42935	5.429052	0.7347	15.04	16.43	15.86	1.39	0.235	0.097	0.390	0.51	27449.339	464	
2272	180	4520	5033	5.43124	5.430763	0.7349	15.31	16.50	15.88	1.19	0.240	0.107	0.461	0.31	26679.441	381	
12837	1618	16830	-184	...	5.447371	0.7362	14.91	16.11	15.44	1.20	0.200	0.103	0.419	0.00	30766.305	172	
12406	1274	1818	3600	5.46388	5.463884	0.7375	15.86	16.36	16.08	0.50	0.195	0.097	0.329	0.39	27799.286	201	S;P?
12459	1316	810	18690	...	5.483809	0.7391	14.74	15.48	15.14	0.74	0.200	0.103	0.442	0.24	31849.344	293	
992	120	13876	6324	5.488	5.488053	0.7394	15.10	16.12	15.82	1.02	0.225	0.122	0.382	0.44	31304.630	467	
2489	381	11726	6726	5.49245	5.492259	0.7398	15.57	16.32	16.03	0.75	0.300	0.109	0.383	0.45	30647.582	444	S:;cr
2484	376	11493	5200	...	5.504730	0.7407	15.18	16.56	15.87	1.38	0.315* 0.555	0.150	0.425	0.30	27747.424	420	
2869	719	21020	15698	...	5.507133	0.7409	14.85	16.44	15.80	1.59	0.290	0.109	0.349	0.30	29220.400	357	
12011	1140	10263	7752	5.5066	5.507276	0.7409	15.79	16.57	16.27	0.78	0.225	0.095	0.420	0.45	26977.615	462	
2797	653	17706	16956	...	5.545845	0.7440	15.57	16.93	16.26	1.46	0.220* 0.635	0.111	0.431	0.30	27426.296	412	
U 2	1724	-852	6639	5.5	5.548693	0.7442	14.59	15.76	15.28	1.17	0.325	0.106	0.373	0.44	27776.524	298	
2448	342	10248	9274	5.57221	5.572210	0.7460	14.65	15.70	15.26	1.05	0.285	0.117	0.388	0.80	27799.378	460	
5729	884	9841	7400	5.57578	5.575376	0.7463	15.78	16.64	16.30	0.86	0.270	0.105	0.401	0.47	27807.443	450	
959	88	12494	7131	5.6003	5.601348	0.7483	14.87	15.79	15.37	0.92	0.345	0.116	0.343	0.80	23752.638	370	
W 14	1732	3965	20194	5.605	5.606046	0.7487	15.48	16.54	16.04	1.05	0.285* 0.705	0.143	0.410	0.19	30319.440	107	
12023	1147	11472	6996	5.62597	5.636476	0.7502	15.61	16.39	15.92	0.78	0.320	0.160	0.566	0.45	26264.557	387	Sm;cr
5962	1013	15742	1899	...	5.652318	0.7522	15.37	16.63	15.98	1.26	0.240* 0.710:	0.129	0.469	0.12	29600.430	368	
2455	349	10432	7896	5.66855	5.668549	0.7535	15.41	16.00	15.82	0.59	0.345	0.154	0.455	0.45	23682.875	429	
2502	392	12013	6923	5.67292	5.673990	0.7539	15.36	16.43	15.96	1.07	0.230	0.084	0.392	0.80	23490.573	406	
2855	705	19956	15354	...	5.678491	0.7542	15.17	16.30	15.75	1.13	0.275	0.119	0.431	0.25	26686.569	391	
2409	310	9175	10121	5.68537	5.685371	0.7548	15.30	16.28	15.85	0.98	0.315* 0.690	0.144	0.466	0.80	26456.214	451	
2653	519	14545	1441	...	5.698306	0.7557	14.23	15.86	15.24	1.53	0.320	0.115	0.400	0.12	31113.506	387	
12908	1649	18982	1184	5.69926	5.699272	0.7558	14.79	15.66	15.20	0.87	0.300	0.161	0.509	0.22	30751.330	66	
947	76	11623	6985	5.73184	5.731660	0.7583	13.74	15.04	14.53	1.30	0.210	0.089	0.359	0.45	26988.563	472	
2646	513	14452	6714	5.73720	5.737202	0.7587	15.11	16.43	15.78	1.32	0.260* 0.630:	0.141	0.497	0.80	24380.812	451	S;cr
12020	1144	11352	6996	5.7382	5.738189	0.7588	15.61	16.30	15.94	0.69	0.335	0.123	0.448	0.45	26565.613	417	
8037	1111	2493	2269	5.75888	5.758876	0.7603	14.75	15.80	15.34	0.95	0.230* 0.650	0.116	0.367	0.33	27449.307	370	Sm
890	20	5327	9495	5.77721	5.777208	0.7617	14.50	15.02	14.77	0.52	0.225	0.085	0.401	0.80	26334.368	421	Sm
2349	252	7247	9448	5.7914	5.791394	0.7628	15.11	16.26	15.70	1.15	0.250* 0.710	0.100	0.390	0.50	26689.546	420	S;cc
2305	213	5696	11874	...	5.814021	0.7645	15.14	16.01	15.63	0.87	0.275	0.142	0.463	0.50	24637.498	447	
12560	1346	7494	5298	...	5.829922	0.7657	15.95	16.56	16.30	0.61	0.340* 0.520	0.168	0.445	0.50	31674.746	389	S;cc
12067	1178	20382	8442	5.845526	5.845878	0.7669	14.97	16.15	15.63	1.18	0.260	0.102	0.419	0.28	27456.309	439	
954	83	12012	6827	5.85	5.852807	0.7674	14.11	14.46	14.27	0.35	0.440	0.232	0.510	0.80	28157.556	467	S;cr
965	94	12760	7155	5.88311	5.883089	0.7696	14.43	15.62	15.14	1.19	0.255	0.115	0.401	0.80	27457.535	441	
12536	1376	4728	13164	...	5.917842	0.7722	15.19	16.29	15.79	1.10	0.265* 0.610:	0.104	0.377	0.30	27800.320	422	
12473	1326	1218	8910	...	5.920348	0.7723	15.01	16.63	15.82	1.62	0.235* 0.595:	0.083	0.334	0.47	31682.637	177	
2514	403	12232	7240	5.9378	5.936697	0.7735	14.57	15.88	15.26	1.31	0.300	0.122	0.412	0.80	29904.563	437	
2589	468	13605	7122	5.93803	5.938390	0.7737	15.20	16.07	15.54	0.87	0.295* 0.650:	0.126	0.522	0.80	26452.220	447	
2727	587	16099	6655	5.94997	5.949936	0.7745	14.84	15.49	15.24	0.65	0.235	0.085	0.384	0.80	27756.442	439	SM
2515	404	12249	7203	5.9137	5.975380	0.7764	15.30	16.08	15.77	0.78	0.240	0.100	0.379	0.80	29586.418	420	
2619	492	14104	6965	5.97746	5.977182	0.7765	14.03	15.64	14.99	1.61	0.280	0.126	0.410	0.80	29202.385	467	Sm;cr
2606	482	13916	7282	5.99272	5.992489	0.7776	14.77	16.41	15.75	1.64	0.270	0.112	0.372	0.80	32011.649	439	
950	79	11869	7304	6.0215	6.02148	0.7797	14.45	15.25	14.86	0.80	0.275* 0.685:	0.136	0.479	0.80	32070.603	453	
5826	939	12298	6934	6.05624	6.05511	0.7821	15.44	16.34	16.01	0.90	0.300* 0.625:	0.119	0.309	0.80	24501.614	328	
2729	589	16144	4696	6.133577	6.13358	0.7877	15.28	16.20	15.72	0.92	0.290	0.170	0.404	0.80	29217.448	387	
5954	1009	15461	8160	6.13595	6.13509	0.7879	15.95	16.28	16.11	0.33	0.285	0.150	0.415	0.49	31703.591	448	
922	51	9286	8398	6.16603	6.16587	0.7900	14.70	15.86	15.34	1.16	0.255	0.105	0.404	0.51	27746.482	453	
12651	1467	18504	19824	...	6.19179	0.7918	14.78	15.96	15.35	1.18	0.300* 0.550:	0.141	0.431	0.05	30314.493	119	
2711	571	15761	2650	...	6.21845	0.7937	15.16	16.51	15.88	1.35	0.285* 0.460:	0.125	0.443	0.30	30318.498	426	
2588	467	13554	8985	...	6.22719	0.7943	15.16	15.71	15.48	0.55	0.330	0.135	0.388	0.47	32940.413	454	
2842	692	19106	3849	...	6.29903	0.7993	15.22	16.45	15.90	1.23	0.300	0.100	0.404	0.30	24056.833	393	
2521	410	12354	8353	...	6.31082	0.8001	15.96	16.36	16.12	0.40	0.421	0.200	0.431	0.47	24408.850	431	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m		R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	m		P	P	m			
2470	363	11084"	10714"	...	6.31646	0.8005	15.25	16.01	15.71	0.76	0.270		0.130	0.474	0.47	29204.484	450	
2773	629	17137	10945	6.39005	6.34938	0.8027	15.40	16.19	15.85	0.79	0.270		0.109	0.428	0.40	29222.409	490	
2853	703	19772	13759	...	6.35561	0.8032	15.05	16.07	15.59	1.02	0.260		0.148	0.448	0.30	13946.555	406	S
2536	422	12649	12369	6.37075	6.37052	0.8042	14.17	15.44	14.78	1.27	0.330		0.126	0.473	0.50	29956.396	499	
991*	119	13901	6746	...	6.38248	0.8050	15.27	15.75	15.56	0.48	0.325		0.124	0.409	0.80	13951.594	450	S:;cr
939	68	10865	7275	6.39006	6.39006	0.8055	14.00	15.26	14.73	1.26	0.240		0.100	0.397	0.45	14391.543	453	
12064	1175	19488	6576	6.423515	6.39454	0.8058	15.07	16.05	15.74	0.98	0.320		0.183	0.419	0.30	26414.287	402	
5825	938	12319	7127	6.40660	6.40589	0.8066	15.19	15.88	15.57	0.69	0.340		0.078	0.452	0.80	32058.600	411	S;cr;cc
2468	361	10967	7204	6.41577	6.41545	0.8072	14.09	15.35	14.75	1.26	0.255*	0.680	0.108	0.367	0.45	27800.472	448	
12009	1138	10140	7848	6.4574	6.45834	0.8101	15.45	16.43	16.09	0.98	0.225*	0.690	0.136	0.469	0.45	28759.614	448	
937	66	10728	6411	...	6.48147	0.8117	14.39	16.23	15.38	1.84	0.225*	0.585	0.096	0.500	0.45	31314.617	421	
2801	656	17807	16574	...	6.50911	0.8135	14.56	15.67	15.11	1.14	0.245		0.095	0.407	0.06	26421.249	429	
2574	453	13314	7106	6.51737	6.51738	0.8141	15.03	16.17	15.58	1.14	0.250		0.123	0.421	0.80	29160.614	454	
2685	547	15232	11364	6.5415	6.54151	0.8157	14.57	15.88	15.13	1.31	0.280		0.116	0.500	0.38	27426.555	456	
2686	548	15257	13464	6.56392	6.56465	0.8172	15.22	16.51	16.01	1.29	0.235		0.093	0.407	0.50	29224.395	447	
12905	1647	12242	10790	6.603415	6.60297	0.8197	15.98	16.55	16.29	0.57	0.290		0.166	0.422	0.46	26323.337	322	
2790	646	17381	9560	6.60615	6.60643	0.8200	15.52	16.25	15.91	0.73	0.270		0.130	0.385	0.47	32011.649	353	
2766	623	16889	5367	6.61284	6.61291	0.8204	15.45	16.19	15.75	0.74	0.410*	0.700	0.180	0.485	0.80	31107.535	400	S:
2513	402	12219	7156	6.62006	6.62006	0.8209	15.25	15.96	15.65	0.71	0.275*	0.630	0.120	0.396	0.80	16820.747	434	SM;cr
944	73	11280	7922	6.632663	6.63266	0.8217	14.38	15.69	15.30	1.31	0.270*	0.660	0.120	0.440	0.80	29526.598	461	
2358	261	7584	11484	6.67690	6.67673	0.8246	15.04	16.19	15.61	1.15	0.300*	0.630	0.136	0.520	0.49	25849.645	436	
12988	1673	12216	20960	...	6.69537	0.8258	14.40	15.62	15.05	1.22	0.340*	0.720:	0.139	0.369	0.50	30750.278	167	
2438	334	9900	8604	6.734	6.73414	0.8283	14.87	16.28	15.67	1.41	0.255*	0.640	0.127	0.389	0.51	30725.518	458	
2523	412	12423	2504	...	6.78367	0.8315	15.44	16.12	15.79	0.68	0.400		0.170	0.430	0.00	30767.266	431	
12037	1157	12300	6900	6.80930	6.80941	0.8330	15.66	16.27	15.96	0.61	0.350		0.218	0.428	0.80	27457.349	434	S;P?
2520	409	12353	7166	6.81236	6.81355	0.8334	14.82	15.90	15.38	1.08	0.330*	0.568	0.159	0.480	0.80	26577.631	447	
12797	1586	11731	-669	...	6.82134	0.8339	14.45	15.41	14.95	0.97	0.310*	0.590	0.180	0.518	0.11	31710.605	212	
2392	293	8727	8306	6.83358	6.83298	0.8346	14.71	15.66	15.14	0.95	0.315*	0.685:	0.135	0.452	0.51	23465.597	464	
6065	1077	20281	7545	6.8036	6.83803	0.8349	15.44	15.81	15.62	0.37	0.370		0.170	0.470	0.33	29519.613	413	
13048	1722	21014	16682	...	6.85307	0.8359	15.19	16.34	15.87	1.35	0.240*	0.560	0.170	0.511	0.24	29926.449	380	
2337	242	6786	13404	6.86365	6.86365	0.8366	14.64	16.28	15.48	1.64	0.225*	0.575	0.106	0.514	0.30	32069.566	431	
914	43	8137	9668	6.8795	6.87862	0.8375	14.80	16.44	15.51	1.64	0.280		0.130	0.511	0.51	26628.518	470	
2279	187	4805	10840	...	6.89496	0.8385	14.81	15.92	15.48	1.11	0.285*	0.670	0.124	0.446	0.50	33160.623	513	
2405	306	9129	3906	...	6.92374	0.8403	15.61	16.37	15.97	0.76	0.370*	0.560	0.148	0.396	0.39	27799.446	413	S
2694	554	15435	7976	6.9363	6.93623	0.8411	14.15	15.73	15.02	1.58	0.310*	0.630	0.125	0.505	0.52	26453.220	454	
12079	1187	23736	11274	6.937026	6.93638	0.8411	14.79	15.85	15.26	1.06	0.305*	0.795:	0.131	0.516	0.00	25595.302	168	
12531	1371	4653	7247	...	6.95475	0.8423	14.83	15.60	15.32	0.77	0.265*	0.530	0.164	0.511	0.30	24084.690	415	
2628	499	14225	4933	...	6.97704	0.8437	14.74	15.51	15.14	0.77	0.270*	0.580	0.122	0.536	0.51	23907.499	426	
2382	285	8554	19684	...	7.02382	0.8466	15.24	16.29	15.75	1.05	0.280*	0.595	0.142	0.547	0.19	30373.325	443	
12428	1295	4560	870	7.06579	7.06419	0.8491	13.93	15.35	14.76	1.32	0.260*	0.535	0.114	0.570	0.30	14639.708	317	
935	64	10464	13524	7.0674	7.06714	0.8492	13.92	14.81	14.37	0.89	0.265*	0.640	0.156	0.442	0.50	27310.577	498	
919	48	9110	6044	...	7.06897	0.8494	14.56	15.80	15.23	1.24	0.240*	0.560	0.111	0.501	0.47	27746.482	443	
12049	1165	12870	7092	7.07058	7.07059	0.8495	15.25	15.94	15.55	0.69	0.320*	0.650	0.147	0.516	0.80	23527.510	427	
2491	383	11756	13724	7.1327	7.13282	0.8533	14.81	15.78	15.25	0.97	0.310*	0.560	0.149	0.513	0.37	24821.605	507	
12727	1531	-569	13948	...	7.15863	0.8548	14.41	15.69	14.99	1.28	0.290		0.152	0.454	0.00	25567.486	285	
2542	427	12775	6336	7.17067	7.17101	0.8556	14.87	16.14	15.37	1.27	0.310		0.130	0.463	0.44	29584.400	429	
2517	406	12300	7083	7.1829	7.18217	0.8563	14.62	15.69	15.12	1.07	0.300*	0.545	0.150	0.469	0.80	27799.286	454	
2752	611	16685	6433	7.1943	7.19430	0.8570	16.02	17.06	16.58	1.04	0.215*	0.590	0.104	0.536	0.80	29703.248	400	
1000	127	15147	13894	7.22643	7.22448	0.8588	14.61	15.68	15.07	1.07	0.245*	0.575	0.097	0.498	0.30	27807.399	465	
2568	448	13233	7076	7.22804	7.22747	0.8590	15.29	16.24	15.76	0.95	0.305*	0.640	0.133	0.536	0.80	30585.640	462	
920	49	9092	9179	7.2902	7.28971	0.8627	15.13	16.22	15.71	1.09	0.310*	0.590	0.160	0.551	0.51	26635.562	440	S
12040	1158	12486	7200	7.29581	7.29482	0.8630	15.06	15.72	15.28	0.66	0.320*	0.595	0.150	0.520	0.80	16855.573	410	
12586	1418	11640	4680	...	7.30776	0.8638	15.26	15.99	15.62	0.73	0.375*	0.680:	0.135	0.430	0.30	30057.321	495	S:;cc
2552	436	12957	7006	7.31764	7.31881	0.8644	14.45	16.03	15.25	1.58	0.335		0.160	0.550	0.80	31704.596	455	
6032	1059	18280	16202	...	7.35514	0.8666	15.23	15.76	15.49	0.53	0.275*	0.510	0.124	0.432	0.17	27426.396	419	
2386	288	8605	4826	...	7.36914	0.8674	15.01	16.37	15.73	1.36	0.305*	0.540	0.132	0.507	0.42	30639.590	423	
2341	246	6959	19037	...	7.37116	0.8675	14.97	16.23	15.55	1.26	0.240*	0.540	0.130	0.522	0.28	28759.565	132	
2309	217	5763	10374	7.3943	7.39432	0.8689	14.86	15.91	15.41	1.05	0.305*	0.625	0.143	0.525	0.80	31326.593	451	
2235	150	617	17776	...	7.39830	0.8691	14.75	16.19	15.34	1.44	0.255*	0.565	0.111	0.457	0.29	26312.385	362	
974	103	13047	7347	7.4427	7.44186	0.8717	14.30	15.36	14.81	1.06	0.295*	0.545	0.135	0.502	0.80	27808.402	482	
12433	1300	5412	1296	7.48923	7.48925	0.8744	15.22	16.27	15.63	1.05	0.300*	0.495	0.147	0.514	0.30	32035.634	321	
972	101	12944	7146	7.49603	7.49448	0.8747	14.35	15.71	14.95	1.36	0.270		0.118	0.518	0.80	17590.584	459	
12742	1542	4743	-219	...	7.49827	0.8750	15.00	16.09	15.62	1.09	0.300		0.128	0.437	0.00	28104.339	324	
1012	139	16327	4254	...	7.52015	0.8762	14.79	15.90	15.29	1.11	0.260*	0.545	0.128	0.489	0.80	26412.253	387	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m		R	W	dm	Max. JD 2400000+	Obs.	Rem.
927	56	9514"	8933"	$7^d.5282$	$7^d.52774$	0.8767	$15^m.44$	$14^m.36$	$15^m.81$	$1^m.45$	$0^P.320$*	0.620	$0^P.156$	$0^P.553$	$0^m.51$	13954.583	457	
2603	480	13910	7530	7.55024	7.55159	0.8780	14.21	15.76	15.08	1.55	0.290*	0.610	0.110	0.479	0.80	13951.594	473	
2686	718	21004	8097	7.64012	7.64012	0.8831	14.85	15.72	15.29	0.87	0.290*	0.520	0.110	0.450	0.28	29158.613	393	
2307	215	5735	8907	7.7059	7.70501	0.8868	13.53	14.92	14.35	1.39	0.285		0.093	0.493	0.80	26330.340	420	
960	89	12553	8062	...	7.75337	0.8895	14.46	14.92	15.15	1.30	0.285*	0.570	0.095	0.481	0.47	26605.624	470	
2497	387	11980	8015	7.7730	7.77250	0.8905	13.20	15.07	14.18	1.87	0.220*	0.540	0.091	0.491	0.80	24439.798	474	
12751	1549	6601	-622	...	7.83125	0.8938	14.53	16.03	15.27	1.50	0.295*	0.580	0.107	0.482	0.28	32040.574	327	
2295	203	5174	10195	7.8444	7.84554	0.8946	15.12	15.64	15.37	0.52	0.370*	0.645	0.155	0.496	0.80	26444.225	451	S!M
12976	1664	-864	6756	...	7.84621	0.8947	14.63	15.83	15.24	1.20	0.260*	0.485	0.095	0.431	0.44	31682.546	315	SM
2400	301	8973	8710	7.88041	7.88132	0.8966	14.99	16.09	15.45	1.10	0.310*	0.575	0.159	0.529	0.51	25997.359	458	
5730	885	9864	15757	...	7.89462	0.8973	15.70	16.41	15.96	0.71	0.300		0.116	0.556	0.40	31109.493	422	Sm
2335	241	6763	12477	7.9282	7.92690	0.8991	15.27	16.40	15.87	1.13	0.300*	0.460	0.159	0.502	0.47	13948.574	450	
1014	141	16487	5364	7.959287	7.96219	0.9010	14.00	15.32	14.49	1.32	0.400		0.189	0.470	0.80	27426.363	419	
917*	46	8980	9281	7.97722	7.97754	0.9019	15.00	16.09	15.45	1.09	0.300		0.130	0.545	0.51	23740.790	446	
6104	1103	10220	20687	...	7.98940	0.9025	14.48	15.56	15.01	1.04	0.380*	0.640	0.075	0.449	0.06	16820.838	245	
12581	1414	10986	19050	...	8.01920	0.9041	14.83	15.56	15.14	0.73	0.300*	0.495	0.120	0.494	0.10	27749.409	388	
2722	582	16008	18894	8.02652	8.02653	0.9045	13.87	15.12	14.52	1.25	0.330*	0.630	0.116	0.511	0.00	23752.638	406	
968	97	12786	7184	8.07161	8.07387	0.9071	14.31	15.69	14.97	1.38	0.300*	0.520	0.113	0.452	0.80	26710.335	423	
12805	1591	12481	24158	...	8.07585	0.9072	15.10	16.24	15.60	1.14	0.330*	0.600	0.128	0.513	0.00	28157.507	310	
12807	1593	12638	24630	...	8.07678	0.9072	15.05	16.35	15.66	1.30	0.320*	0.590	0.103	0.492	0.00	29690.297	304	
2884	733	4272	22104	8.13	8.12659	0.9099	14.61	15.69	15.04	1.08	0.315*	0.590	0.110	0.440	0.00	29229.319	105	
12700	1511	23166	14742	...	8.15255	0.9113	15.38	16.18	15.72	0.80	0.315*	0.480	0.107	0.442	0.30	26713.474	340	S
2426	325	9676	8874	8.17093	8.17178	0.9123	13.47	15.03	14.01	1.56	0.250*	0.555	0.125	0.537	0.51	31740.447	462	
908	37	7186	9985	8.1886	8.18860	0.9132	14.87	16.05	15.53	1.18	0.305*	0.600	0.125	0.505	0.50	26328.446	451	
2367	270	7923	10464	8.2115	8.21180	0.9144	14.65	15.92	15.13	1.27	0.300*	0.575	0.110	0.501	0.80	30318.554	217	
2748	607	16637	5177	8.276912	8.27691	0.9179	15.03	16.13	15.55	1.10	0.330*	0.630	0.159	0.500	0.55	31108.358	400	
2877	726	21881	12474	...	8.28142	0.9181	14.83	16.23	15.57	1.40	0.290*	0.515	0.120	0.475	0.35	16820.651	399	
12823	1604	13905	194	...	8.30194	0.9192	15.03	16.31	15.56	1.28	0.265*	0.545	0.092	0.477	0.12	31712.620	140	
2738	597	16352	18817	8.3285	8.32713	0.9205	14.78	15.86	15.22	1.08	0.250*	0.510	0.122	0.500	0.00	16820.651	400	
2705	565	15634	16522	8.382	8.33789	0.9211	14.70	15.49	15.11	0.79	0.290*	0.585	0.142	0.499	0.00	30585.640	437	
12218	1218	852	19059	8.340	8.33995	0.9212	15.76	16.36	15.99	0.60	0.310*	0.455	0.109	0.506	0.46	28408.592	296	
2300	205	5385	9418	8.36407	8.36407	0.9224	15.67	16.57	16.13	0.90	0.325*	0.515	0.175	0.500	0.80	28078.413	399	
2267	177	4426	2223	8.37485	8.37364	0.9229	14.66	16.02	15.04	1.36	0.250*	0.585	0.135	0.538	0.33	32878.323	326	S
2442	336	9917	7384	8.45730	8.46017	0.9274	14.78	16.00	15.38	1.22	0.290*	0.460	0.099	0.411	0.47	16816.644	474	SM
12806	1592	12405	-593	...	8.59011	0.9340	14.85	16.00	15.33	1.15	0.250*	0.475	0.091	0.472	0.00	30325.449	219	
12566	1400	8520	19440	...	8.61039	0.9350	15.31	15.87	15.52	0.56	0.465		0.294	0.543	0.19	24380.812	459	
2854	704	19946	17415	...	8.63489	0.9360	14.38	15.27	14.82	0.89	0.290*	0.460	0.140	0.482	0.17	14254.733	399	
2680	543	15140	16095	8.66934	8.66934	0.9380	14.74	15.67	15.22	0.93	0.320*	0.530	0.116	0.456	0.00	27426.329	439	
2414	315	9269	8164	8.6753	8.67284	0.9382	14.58	15.69	14.96	1.11	0.305		0.146	0.468	0.51	24802.831	461	
2466	360	10726	8321	8.69301	8.69231	0.9391	15.04	15.76	15.35	0.72	0.280	0.490*	0.128	0.466	0.80	16820.651	472	Sm;cr
896*	26	5924	11960	...	8.71269	0.9402	15.04	15.91	15.40	0.87	0.350*	0.615	0.148	0.459	0.50	14252.815	357	S
2733	592	16274	18366	...	8.72158	0.9406	14.66	15.11	14.83	0.45	0.280*	0.490	0.107	0.500	0.00	29199.447	405	
2461	355	10534	19822	...	8.73187	0.9411	14.22	15.17	14.80	0.95	0.290	0.500*	0.142	0.579	0.10	25926.526	382	
12452	1312	606	7824	...	8.73611	0.9413	14.44	15.57	14.99	1.13	0.265*	0.555	0.085	0.454	0.40	31055.563	316	
913	42	7849	9607	8.7712	8.77085	0.9430	14.24	15.53	14.77	1.29	0.345*	0.565	0.106	0.420	0.50	27457.502	475	
5513	749	3296	9472	...	8.83057	0.9460	14.88	15.83	15.42	0.95	0.270*	0.430	0.135	0.476	0.41	31321.627	262	
12717	1523	-1224	7989	...	8.84285	0.9466	14.83	16.47	15.86	1.64	0.315*	0.540	0.105	0.438	0.44	27681.594	306	
2332	238	6544	12906	...	8.89912	0.9493	14.85	15.86	15.30	1.01	0.260*	0.495	0.087	0.436	0.47	28758.570	436	
12589	1420	11718	19602	...	8.92879	0.9508	15.09	15.97	15.42	0.88	0.315*	0.541	0.155	0.502	0.10	29205.575	388	
2420	319	9444	18704	...	9.03465	0.9559	15.11	16.10	15.57	0.99	0.250	0.500*	0.088	0.528	0.19	13847.841	391	
5543	767	4794	15560	...	9.04748	0.9565	14.92	15.63	15.25	0.71	0.380		0.154	0.483	0.37	31524.315	570	
2297	205	5198	11354	9.05149	9.05220	0.9568	14.85	16.12	15.37	1.28	0.260*	0.555	0.109	0.500	0.50	32888.332	384	
12816	1599	13754	21606	...	9.10768	0.9594	14.33	15.31	14.79	0.98	0.400		0.217	0.471	0.02	13901.765	344	Sm
12829	1610	14542	-162	...	9.26674	0.9669	14.69	16.15	15.33	1.46	0.300*	0.505	0.105	0.504	0.00	29956.560	141	
971	100	13054	17255	9.29619	9.29696	0.9683	14.49	15.28	14.91	0.79	0.275*	0.550	0.125	0.504	0.00	12697.847	430	
5658	826	8070	8660	9.302	9.30198	0.9686	15.11	15.91	15.46	0.80	0.340	0.475*	0.118	0.440	0.5.	27426.396	394	
2510	399	12161	12418	...	9.39007	0.9727	14.71	15.96	15.21	1.25	0.390*	0.685:	0.234	0.555	0.50	28082.610	508	
2301	209	5524	3202	9.49767	9.49895	0.9777	14.52	15.19	14.82	0.67	0.300*	0.470	0.111	0.422	0.33	14639.708	335	
2248	162	2794	6642	...	9.52768	0.9790	14.22	14.97	14.59	0.75	0.400		0.158	0.427	0.38	13948.574	419	
952	81	12072	9414	9.5715	9.57148	0.9810	14.92	15.92	15.40	1.00	0.270	0.450*	0.127	0.453	0.47	31299.629	516	
2296	204	5190	10354	9.71100	9.71100	0.9873	13.60	14.84	14.09	1.24	0.295*	0.520	0.102	0.483	0.80	26303.577	451	
969	98	12954	12485	...	9.73945	0.9885	13.58	14.82	14.14	1.24	0.300*	0.475	0.127	0.475	0.50	28066.622	519	
12474	1327	1284	6600	...	9.85013	0.9934	14.66	15.45	15.10	0.79	0.305*	0.580	0.111	0.486	0.40	30948.612	322	
2372	275	8127	9991	9.9920	9.99088	0.9996	13.88	15.80	14.83	1.92	0.310*	0.480	0.086	0.416	0.80	26956.619	461	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m		R	W	dm	Max. JD 2400000+	Obs.	Rem.
							mag	mag	mag	mag	mag				mag			
2675	539	14966"	14795"	10^d0190	10^d02193	1.0010	14.72	15.72	15.11	1.00	0.255	0.470*	0.085	0.477	0.10	31076.380	432	
1016	142	16574	5319	10.0445	10.04289	1.0019	14.72	15.76	15.28	1.04	0.215	0.435*	0.133	0.380	0.80	32919.335	461	Sm
923	52	9321	8144	10.25397	10.25328	1.0108	14.66	15.19	14.92	0.53	0.305	0.495*	0.276	0.508	0.51	32919.335	461	S;cc
2371	274	8060	9194	10.347	10.34744	1.0148	14.42	15.56	15.11	1.14	0.320	0.430*	0.096	0.453	0.51	26710.335	463	
2816*	669	18266	15712	10.404	10.40423	1.0172	14.20	15.69	15.16	1.49	0.235	0.420*	0.057	0.400	0.25	30641.580	419	
2277	185	4744	8302	...	10.41150	1.0175	13.99	15.45	14.81	1.46	0.295	0.450*	0.083	0.420	0.48	13875.807	439	
6105	1104	10306	20688	...	10.43965	1.0187	15.69	16.63	15.79	0.95		0.515	0.236	0.397	0.06	29994.382	90	
2326	232	6235	9683	10.4698	10.46950	1.0199	14.62	15.63	15.05	1.01	0.300	0.475	0.128	0.490	0.50	24501.614	445	
5551	769	5031	5041	10.4867	10.48482	1.0206	15.17	16.15	15.59	0.98	0.325:	0.485*	0.097	0.489	0.31	27799.532	422	
12078	1186	22992	12258	10.6878	10.68778	1.0289	14.16	15.85	15.22	1.02		0.470	0.250	0.485	0.26	27807.283	293	
12537	1377	4824	8928	...	10.79579	1.0333	14.15	15.09	14.35	0.94	0.360	0.515*	0.195:	0.565	0.48	29869.637	444	
12486	1335	1655	2509	...	10.80027	1.0334	15.14	15.89	15.54	0.75	0.250	0.475*	0.155	0.366	0.39	27457.382	244	
2280	188	4811	10514	...	10.85872	1.0358	14.36	15.40	14.77	1.04	0.270	0.460*	0.074	0.354	0.50	27807.399	364	
12248*	1245	25224	12330	...	10.91235	1.0379	14.23	15.87	15.19	1.64	0.300:	0.445*	0.090:	0.522	0.00	26715.537	189	
2432	330	9748	12591	10.9245	10.92454	1.0384	13.63	14.67	14.09	1.04	0.300*	0.550	0.112	0.542	0.30	27799.532	447	
2847	697	19395	16085	...	10.95098	1.0395	14.63	15.36	14.88	0.73		0.500	0.270	0.500	0.17	31773.482	393	S;cc
2864	714	20629	17224	...	10.98412	1.0408	14.45	15.38	14.83	0.93		0.430	0.230	0.500	0.24	29222.409	383	
2598	477	13838	8370	...	10.99143	1.0410	13.66	14.75	14.16	1.09		0.430	0.223	0.493	0.47	28157.556	486	S;cr
921	50	9061	9834	11.0887	11.08690	1.0448	14.52	15.80	15.09	1.28	0.210	0.445*	0.032	0.538	0.80	27747.424	462	SM
999	126	15166	14530	11.2353	11.23490	1.0506	13.55	14.51	13.98	0.96	0.365	0.520*	0.165	0.570	0.10	27800.283	447	
2462	356	10580	5622	...	11.24543	1.0510	15.36	16.57	16.02	1.21	0.180	0.310*	0.040	0.398	0.00	32915.292	436	
12716	1522	-425	2807	...	11.24784	1.0511	14.71	15.66	15.18	0.95	0.290	0.475*	0.113	0.478	0.40	30970.634	320	S;P?
2585	464	13492	9123	...	11.26176	1.0516	14.65	15.63	15.14	0.98		0.435	0.159	0.454	0.47	24365.597	447	
2787	643	17324	9946	11.442	11.44324	1.0586	13.76	15.12	14.48	1.36		0.465	0.174	0.376	0.47	27800.507	428	
5979	1024	16426	5462	11.5276	11.53072	1.0619	14.78	15.59	15.20	0.81	0.240	0.480*	0.190	0.310	0.80	17563.728	441	
880	10	3097	14178	...	11.66878	1.0670	14.30	15.24	14.72	0.94	0.485*	0.640	0.196	0.465	0.50	26689.391	412	
905	35	6888	10880	11.85787	11.85790	1.0740	14.04	15.90	14.99	1.86	0.255	0.420*	0.179	0.477	0.80	28761.607	449	
906	36	7000	10301	11.909	11.90767	1.0758	14.81	16.10	15.57	1.29	0.230	0.380*	0.097	0.377	0.49	16814.656	445	
2299	207	5323	15154	...	12.06264	1.0815	13.74	15.23	14.36	1.49	0.290	0.440*	0.112	0.552	0.37	17966.591	217	
2662	528	14678	20180	...	12.07626	1.0819	14.09	14.81	14.42	0.72	0.270	0.500*	0.061	0.581	0.00	30318.441	344	
2815	668	18264	9033	11.98	12.08911	1.0824	14.69	15.52	15.17	0.83		0.440	0.239	0.543	0.44	26452.220	424	
12519	1360	4110	15432	...	12.19453	1.0862	14.51	15.51	14.99	1.00		0.395	0.185	0.491	0.37	27776.479	547	
12186	1191	6052	23568	12.24	12.24078	1.0878	14.78	16.06	15.46	1.28	0.180	0.370*	0.117	0.453	0.12	30763.313	301	
12745	1544	5973	44	...	12.24665	1.0880	13.96	15.81	15.30	1.85	0.200	0.355*	0.154	0.460	0.30	31682.637	328	
978	106	13280	6746	12.26302	12.26302	1.0886	14.75	15.71	15.27	0.96	0.220	0.435*	0.135	0.360	0.80	31657.649	437	SM
998	125	15052	15183	12.3207	12.31900	1.0906	13.80	15.09	14.44	1.29	0.240	0.355*	0.184	0.500	0.10	13894.749	448	S
12475	1328	1332	9654	...	12.32438	1.0908	14.89	15.94	15.39	1.05	0.165	0.325*	0.083	0.448	0.44	24418.800	407	
958	87	12455	6931	12.344	12.35644	1.0919	14.64	15.89	15.37	1.25	0.355	0.515*	0.116	0.381	0.80	32888.287	441	
12253	1250	27421	10028	12.569	12.57403	1.0995	14.31	16.22	15.37	1.91	0.200	0.370*	0.097	0.433	0.00	27449.310	187	
898	28	6093	11283	12.6235	12.62355	1.1012	14.89	15.95	15.44	1.06	0.220	0.410*	0.130	0.410	0.80	31106.359	522	
2285	193	4987	10581	12.631	12.63239	1.1015	13.72	15.07	14.54	1.35	0.200	0.350*	0.074	0.367	0.50	26414.287	518	
2865	715	20660	16283	...	12.64505	1.1019	14.20	15.21	14.53	1.01		0.430	0.218	0.500	0.24	26312.385	378	
874	4	3004	4901	12.6829	12.68181	1.1032	13.79	16.22	15.41	2.43	0.140	0.320*	0.069	0.296	0.31	29913.598	379	
2321	227	6104	10873	12.7233	12.72567	1.1047	14.54	16.10	15.36	1.56	0.210	0.430*	0.128	0.369	0.80	30318.343	421	SM;cc
12839	1620	16859	-1426	...	12.76976	1.1062	13.49	14.94	14.32	1.55		0.400	0.097	0.376	0.00	31170.316	196	
895	25	5889	11024	12.9144	12.91358	1.1111	13.66	15.50	14.70	1.84	0.200	0.380*	0.090	0.418	0.80	23740.790	530	
2527	416	12436	2593	...	12.94796	1.1122	14.23	16.07	15.30	1.84	0.215:	0.350*	0.070	0.383	0.00	27807.317	432	
2260	172	4030	11684	...	12.98721	1.1135	14.51	15.64	15.05	1.13	0.180	0.360*	0.102	0.423	0.50	26060.243	418	
997	124	14696	13181	...	13.14701	1.1188	14.28	15.61	15.07	1.33	0.206	0.370*	0.079	0.400	0.50	32915.292	468	
932	61	10305	7978	13.2802	13.28060	1.1232	13.93	15.65	14.89	1.72	0.155	0.365*	0.078	0.382	0.45	26594.599	343	
12656	1470	18918	996	13.3968	13.39984	1.1271	14.05	15.34	14.80	1.29		0.535	0.251	0.480:	0.22	27811.279	189	
2579	458	13424	15785	13.413	13.43133	1.1281	13.66	14.71	14.26	1.05	0.195	0.455*	0.229:	0.457:	0.13	27786.315	464	
2270	179	4472	7746	...	13.62491	1.1343	14.34	15.57	15.10	1.13	0.150	0.360*	0.089	0.366	0.30	27449.462	431	
2352	255	7344	5017	13.628	13.62611	1.1344	14.05	14.95	14.47	0.90		0.410	0.221	0.540	0.50	26689.391	464	
1019	145	17655	6044	13.64	13.65943	1.1354	13.85	14.88	14.32	1.03	0.210	0.415*	0.124	0.397	0.55	23706.778	437	
955	84	12209	16206	13.74	13.73189	1.1377	14.75	15.68	15.32	0.93	0.240	0.390*	0.100	0.414	0.00	17563.728	459	
12724	1529	-33	6650	...	13.74365	1.1381	14.31	15.97	15.24	1.66	0.225	0.400*	0.111	0.378	0.44	31682.546	304	
2538	423	12734	12072	...	13.86894	1.1420	14.30	15.32	14.82	1.02		0.430	0.189	0.441	0.24	30680.540	518	
2339	244	6826	9938	13.877	13.87952	1.1424	14.50	15.65	15.15	1.15	0.175	0.350*	0.186	0.497	0.50	27800.320	443	
911	40	7444	9484	13.915	13.91498	1.1435	13.68	15.48	14.61	1.80	0.210	0.380*	0.101	0.412	0.50	17933.607	430	
2463	357	10606	10093	13.95235	13.95416	1.1447	13.41	14.81	14.26	1.40		0.410	0.130	0.403	0.47	27807.365	491	
2244	158	2717	13714	...	13.96991	1.1452	13.91	14.96:	14.50	1.05	0.195	0.360*	0.090	0.377	0.50	23527.510	406	S!m
2647	514	14465	10266	...	14.18754	1.1519	15.09	16.44	15.63	1.05	0.185	0.470*	0.170	0.418	0.38	23706.778	342	S;cr
5655	824	7998	4540	...	14.21136	1.1526	13.92	15.11	15.04	2.19	0.180	0.340*	0.080	0.415	0.38	13946.555	417	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m		R	W	dm	Max. JD 2400000+	Obs.	Rem.
					d		m	m	m	m	p		p	p	m			
1006	133	16035"	8474"	14.21141	14.21213	1.1527	14.33	15.50	15.04	1.17	0.175	0.350*	0.070	0.351	0.47	14962.768	451	
12505	1348	3228	10200	...	14.38512	1.1579	15.06	16.11	15.36	1.05	0.205	0.360*	0.080	0.417	0.30	13875.807	385	
2324	230	6124	12276	14.4701	14.46577	1.1603	13.90	15.43	14.71	1.53	0.200	0.380*	0.114	0.427	0.47	29222.409	454	
887	17	4904	7773	...	14.48816	1.1610	13.73	15.27	14.67	1.54	0.155	0.350*	0.099	0.419	0.30	23741.834	445	
2282	190	4894	5829	...	14.66551	1.1663	14.43	15.90	15.25	1.44	0.145	0.350*	0.120	0.450	0.31	23681.879	434	
2356	259	7522	9877	15.1217	15.12173	1.1796	13.75	15.25	14.57	1.50	0.155	0.310*	0.060	0.360	0.50	24084.690	461	
2249*	163	2800	15625	15.22	15.21513	1.1823	13.89	15.28	14.76	1.39	0.120	0.310*	0.076	0.396	0.34	31681.586	604	
933	62	10474	9546	15.5441	15.54443	1.1916	14.20	15.93	15.21	1.73	0.156	0.305*	0.081	0.456	0.48	31332.626	477	
12762*	1559	7839	-683	...	15.64252	1.1943	13.69	15.37	14.83	1.68	0.170	0.325*	0.076	0.438	0.28	29674.309	336	
973	102	12996	6576	15.8398	15.84320	1.1998	12.88	14.76	13.91	1.88	0.165	0.305*	0.072	0.397	0.80	29927.447	532	
2262	174	4085	5764	15.85	15.84623	1.1999	13.75	15.26	14.59	1.51	0.255	0.385*	0.085	0.361	0.31	27426.396	424	
12471	1324	1212	8082	...	15.85133	1.2001	14.13	15.56	14.86	1.43	0.150	0.365*	0.124	0.379	0.44	29189.469	334	
892	22	5277	10770	15.9921	15.98754	1.2038	13.77	15.48	14.76	1.71		0.290	0.061	0.434	0.50	26565.613	541	
985	133	13714	7055	15.9908	15.99017	1.2038	14.27	15.81	15.03	1.54	0.140	0.330*	0.090	0.430	0.80	31701.606	464	
2772	628	17123	3679	...	16.15900	1.2084	14.06	15.73	15.09	1.67	0.190	0.315*	0.061	0.425	0.80	29205.575	414	
2549	433	12865	667	...	16.19669	1.2094	13.24	14.73	14.10	1.49		0.375	0.114	0.405	0.12	29690.343	440	
2667	532	14735	18502	16.2224	16.21852	1.2100	14.01	15.11	14.61	1.10		0.290	0.075	0.451	0.00	24418.800	432	
2273	181	4586	15345	...	16.83504	1.2262	14.52	15.65	15.11	1.13	0.085	0.325*	0.094	0.428	0.37	27660.599	570	
2580	459	13451	20264	16.92	16.92870	1.2286	13.32	14.72	13.92	1.40	0.190	0.355*	0.095	0.416	0.02	32888.384	316	
891	21	5363	9694	17.1792	17.19720	1.2354	13.42	15.22	14.59	1.80	0.180	0.300*	0.052	0.413	0.80	26455.214	459	
5594	791	6166	17455	...	17.20323	1.2356	14.19	15.38	14.81	1.19	0.185	0.360*	0.110	0.481	0.50	28078.413	227	
2261*	173	4053	5579	...	17.2476	1.2367	13.23	15.30	14.29	2.07	0.185	0.345*	0.086	0.420	0.31	23486.545	446	
2319	225	6080	11104	17.4584	17.45890	1.2420	14.67	16.27	15.47	1.60	0.150	0.345*	0.099	0.394	0.80	13875.807	530	
2888	736	8175	21611	...	17.51514	1.2434	13.65	15.87	14.51	2.22		0.305	0.092	0.445	0.18	31697.514	106	
2288	196	5085	8946	...	17.52095	1.2436	13.76	15.40	14.74	1.64	0.150	0.300*	0.063	0.361	0.48	16820.567	441	
2836	686	18956	15957	...	17.52783	1.2437	14.89	16.57	15.94	1.68	0.155	0.330*	0.100	0.393	0.25	32035.638	396	
2791	647	17402	4364	...	17.79264	1.2502	15.27	16.20	15.75	0.93	0.095	0.285*	0.075	0.380	0.80	29601.390	171	
901	31	6546	9014	18.4672	18.46584	1.2664	14.38	16.17	15.23	1.79	0.185	0.325*	0.065	0.359	0.50	27449.462	413	S
12499	1342	2652	16398	...	18.52663	1.2678	14.29	15.06	14.67	0.77		0.400	0.233	0.539	0.27	27426.396	610	S:
1005	132	15689	10884	18.709759	18.70976	1.2721	13.42	15.24	14.50	1.82	0.165	0.315*	0.059	0.412	0.38	27422.272	443	
2793*	649	17574	11304	19.1843	19.18428	1.2829	13.40	15.14	14.38	1.64	0.150	0.320*	0.080	0.421	0.40	28041.643	526	
2488	380	11611	9094	19.197	19.21054	1.2835	13.94	15.69	14.94	1.75	0.165	0.350*	0.084	0.393	0.48	29526.598	521	
U 11	1727	1334	11608	20.0743	20.0727	1.3026	13.76	15.09	14.51	1.33		0.305	0.103	0.382	0.30	17966.591	315	
2789	645	17345	7667	20.32	20.3188	1.3079	14.06	15.40	14.81	1.34	0.140	0.350*	0.092	0.408	0.55	13877.808	435	S;cc
885*	15	4554	10046	...	20.7032	1.3160	13.17	14.97	14.24	1.80		0.240	0.088	0.400	0.50	23875.527	446	
2454	348	10407	18657	...	20.7065	1.3161	13.76	14.91	14.28	1.15	0.215	0.405*	0.067	0.422	0.10	25886.539	394	
893	23	5956	9473	21.115	21.1124	1.3246	13.53	15.44	14.58	1.91	0.195	0.315*	0.067	0.413	0.80	29518.630	440	
2292	200	5147	9224	21.2549	21.2504	1.3274	12.89	14.30	13.64	1.41	0.100	0.310*	0.081	0.412	0.80	29641.294	431	
12804	1590	12235	-1779	...	21.2513	1.3274	14.12	15.48	14.89	1.36		0.345	0.115	0.449	0.00	31745.575	160	
2453	347	10357	8330	21.6113	21.6113	1.3347	13.99	15.43	14.91	1.44	0.200	0.390*	0.118	0.379	0.48	29674.309	444	SM;cr
2245	159	2725	7001	...	22.0803	1.3440	14.20	15.46	14.91	1.26		0.320	0.110	0.391	0.38	24824.683	388	
12446	1307	336	11814	...	22.2459	1.3473	13.35	14.61	14.11	1.27		0.240:	0.098	0.354	0.46	25644.344	314	
2291	199	5144	10215	22.3284	22.3284	1.3489	12.75	14.79	13.80	2.04	0.125	0.360*	0.085	0.421	0.80	23907.499	457	
U 1	1724	66	7978	22.5225	22.5583	1.3533	14.10	15.65	14.80	1.55	0.145	0.355*	0.085	0.391	0.50	31874.327	320	
876	6	2274	15323	...	22.7061	1.3561	13.67	15.41	14.74	1.74		0.305	0.060	0.390	0.50	30365.281	450	
984	112	13766	8666	...	23.0382	1.3624	13.28	15.12	14.24	1.84	0.125	0.315*	0.091	0.439	0.47	26456.214	381	
2749	608	16654	9021	23.1139	23.1052	1.3637	14.44	15.63	15.12	1.19		0.420	0.139	0.332	0.47	29204.484	403	
878	8	3746	6094	23.3	23.2959	1.3673	12.81	14.11	13.73	1.30	0.135		0.064	0.416	0.38	23737.848	442	
938	67	10846	10004	23.56	23.5699	1.3722	13.57	14.98	14.34	1.41	0.260		0.083	0.441	0.30	24824.683	493	
886	16	3855	19734	23.958	23.9611	1.3795	12.97	14.54	13.98	1.67	0.175		0.075	0.432	0.24	27660.599	107	
1013	140	17060	14414	24.15	24.1313	1.3826	13.49	14.96	14.39	1.47	0.185	0.365*	0.099	0.419	0.17	30318.441	456	
6098	1098	1654	21423	...	24.2375	1.3845	12.96	14.25	13.76	1.29	0.215		0.096	0.384	0.24	30701.363	113	
1003*	130	15543	11924	24.388661	24.4115	1.3876	13.27	14.56	13.99	1.29	0.180	0.345*	0.144	0.458	0.38	26710.335	486	
889	19	5186	10012	25.7798	25.8013	1.4116	13.03	14.88	14.11	1.85	0.325		0.081	0.329	0.50	27808.317	459	
12815*	1598	13714	21461	...	26.0628	1.4160	13.65	15.08	14.37	1.43	0.455		0.121	0.421	0.02	31683.579	348	
902*	32	6847	4645	26.39	26.3736	1.4212	12.16	14.16	13.28	2.00	0.150		0.070	0.456	0.50	26573.635	471	
1023	149	19269	13038	...	26.5386	1.4239	13.03	14.97	14.23	1.94	0.220		0.073	0.424	0.50	16820.567	450	
2507	397	12074	19637	...	26.9631	1.4308	14.11	15.38	14.88	1.27	0.220		0.097	0.398	0.03	29627.308	468	S
929	58	9660	16615	27.87	27.8619	1.4450	13.47	14.54	14.07	1.07	0.350		0.121	0.434	0.39	29600.430	449	
2251*	164	3228	18174	28.0	27.9863	1.4470	12.82	14.55	13.92	1.73	0.265		0.075	0.451	0.24	27751.582	617	
2540	425	12749	6695	28.2812	28.0805	1.4484	13.02	14.53	13.78	1.51	0.185		0.091	0.524	0.80	31299.629	481	S;cr
934	63	10380	13986	28.18648	28.1899	1.4501	13.64	15.25	14.56	1.61	0.330		0.086	0.420	0.50	27660.634	516	
8036	1110	172	4450	28.3607	28.3793	1.4530	12.96	15.33	14.61	2.37	0.195		0.085	0.410	0.35	30638.408	322	
872	2	1597	14889	...	29.8552	1.4750	13.85	14.90	14.43	1.05	0.200		0.101	0.431	0.50	28761.557	444	

TABLE 5.—*Cepheid variables—continued*

HV	LMV	X	Y	Publ. P	P	log P	M_0	m_0	$\langle m \rangle_0$	A	M - m	R	W	dm	Max. JD 2400000+	Obs.	Rem.
				d	d		m	m	m	m	m	p	p	m			
875	5	3097"	8114"	30.355	30.3545	1.4822	12.80	14.14	13.48	1.34	0.310	0.124	0.431	0.41	24408.850	429	
904	34	6586	10716	30.39975	30.3902	1.4827	12.76	14.25	13.57	1.49	0.210	0.109	0.469	0.49	23752.638	438	
1002*	129	15754	18573	30.43	30.427	1.4835	12.95	14.76	13.89	1.77	0.180	0.081	0.462	0.00	13896.571	408	
899	29	6244	10284	31.027	31.0232	1.4917	11.86	13.73	12.92	1.87	0.210	0.081	0.451	0.49	26635.562	469	
882	12	4084	7975	31.813	31.8164	1.5027	13.77	15.64	14.66	1.87	0.170	0.063	0.434	0.30	31107.354	448	S
5761	903	10584	10047	...	31.9645	1.5047	13.03	14.44	13.66	1.41	0.215	0.084	0.419	0.47	31669.633	474	S;cr;cc
873*	3	3192	2557	34.344	34.348	1.5359	12.01	13.44	12.91	1.43	0.250	0.098	0.483	0.33	26444.225	399	S
881	11	4146	4733	35.755	35.7603	1.5534	13.10	14.70	13.89	1.60	0.190	0.109	0.451	0.31	14254.733	341	
2294	202	5154	18230	36.536	36.5310	1.5627	12.02	13.95	13.11	1.93	0.230	0.091	0.414	0.27	31711.452	134	
879	9	3581	7918	...	36.782	1.5656	12.94	14.75	13.86	1.81	0.200	0.088	0.454	0.38	27454.363	426	
909*	38	7454	4689	37.585	37.588	1.5750	13.14	14.69	13.70	1.55	0.270	0.127	0.527	0.38	12724.621	449	
2257*	169	3844	6140	39.26	39.294	1.5943	12.36	14.02	13.43	1.66	0.180	0.078	0.448	0.38	26932.157	437	
2338	243	6820	1714	42.15	42.151	1.6428	12.90	14.92	13.83	2.02	0.215	0.101	0.479			391	
877	7	2520	13111	45.1651	45.155	1.6547	13.18	14.32	13.75	1.16	0.285	0.156	0.455			422	
900*	30	6540	6135	47.52	47.52	1.6769	11.80	13.65	12.63	1.85	0.250	0.094	0.392	0.30	32882.314	444	
953*	82	12002	15144	47.82607	47.931	1.6806	12.59	13.75	13.22	1.16	0.260	0.151	0.471	0.13	17933.607	488	
2369	272	7985	17065	48.267	48.267	1.6837	11.53	13.61	12.39	2.08	0.220	0.079	0.338	0.50	27457.535	239	
2622	494	14115	3164	...	52.271	1.7183	13.11	14.31	13.61	1.20	0.265	0.143	0.518	0.30	30058.323	508	
2827*	678	18633	18884	...	79.781	1.8953	12.56	13.15	12.82	0.59	0.350	0.174	0.516	0.05	27799.331	408	
5497*	743	1243	18679	98.86	99.003	1.9956	12.31	13.21	12.68	0.90	0.290	0.194	0.468	0.24	30701.363	331	
2447*	341	10235	11304	118.6394	118.639	2.0742	12.02	13.03	12.38	1.01	0.545	0.241	0.455	0.47	28157.556	491	
883	13	3767	11609	134.1	133.583	2.1257	11.96	14.02	12.93	2.06	0.320	0.183	0.507	0.44	23682.875	429	

HV	*Period*	
873	34.348	Abrupt increase of period after JD 23000.
885	20.703	Slight increase of period after JD 16800, probably abrupt.
896	8.712	Earlier Harvard investigators considered it not variable.
900	47.5	Period decreased abruptly from $47^d.5195$ to $47^d.5174$ near JD 24500.
902	26.7	$M = 26573.635 + 26^d.6736\ E - 3^d.4 \times 10^{-5}\ E^2$.
909	37.6	$M = 12724.621 + 37^d.5881\ E + 6^d.28 \times 10^{-5}\ E^2$.
917	7.977	Poor distribution of observations due to period near 8 days.
953	47.8	Period varies erratically between $47^d.799$ and $47^d.932$; see Janes (1964).
970	3.433	Irregular?, Shapley and Nail (1955a).
991	6.382	Earlier Harvard investigators considered it not variable.
994	4.226	Period published by Shapley and Nail (1955b) is an error of transcription; their records show that the correct period was derived.
1002	30.4	$M = 13896.571 + 30^d.427\ E + 3^d.2 \times 10^{-5}\ E^2$.
1003	24.4	$M = 13952.072 + 24^d.4115\ E - 3^d.37 \times 10^{-5}\ E^2$.
2249	15.215	Period slightly and erratically variable.
2251	28.0	$M = 27751.582 + 27^d.9863\ E - 5^d.4 \times 10^{-5}\ E^2$.
2257	39.3	$M = 26932.157 + 39^d.2937\ E + 3^d.63 \times 10^{-5}\ E^2$.
2261	17.25	Period changed from $17^d.2476$ to $17^d.2566$ at about JD 23000. Published curve refers to the interval after JD 23000.
2278	5.415	Period may have decreased slightly between JD 16800 and 24000. Early observations omitted from published curve.
2447	118.6	Period erratically variable. Published curve refers to the interval from JD 28000 to 31000.
2563	2.578	Earlier Harvard investigators considered it not variable.
2571	2.704	Period may be decreasing very slightly.
2581	4.044	Star certainly variable, though earlier regarded as not variable.
2584	4.671	$M = 29938.541 + 4^d.671610\ E + 1^d.2 \times 10^{-6}\ E^2$.
2596	4.166	Period may have decreased slightly between JD 23000 and 32000.
2624	3.409	Earlier Harvard investigators considered it not variable.
2654	3.095	Earlier Harvard investigators considered it not variable.
2712	2.881	Earlier Harvard investigators considered it not variable.
2759	3.278	Earlier Harvard investigators considered it not variable.
2793	19.18	Period increasing; phases corrected empirically in forming mean light curve.
2795	3.913	$M = 14253.089 + 3^d.913390\ E - 3^d.06 \times 10^{-8}\ E^2$.
2816	10.404	Period increased by about 10^{-3} days after JD 16800, probably abruptly; phases corrected empirically.
2827	78.6	Period increased from $78^d.58$ to $79^d.78$, probably abruptly.
2838	2.332	Period 4.539 given by Shapley (1931); discrepancy unexplained; identification?

HV	Period	
5497	99.0	Period has increased since JD 17000.
5569	4.381	Period has decreased slightly after JD 13000; phases empirically corrected.
5651	5.076	Regarded as an RR Lyrae star by Shapley and Nail (1955a), no period given.
5706	2.780	Earlier Harvard investigators considered it not variable.
5733	3.215	Regarded as an RR Lyrae star by Shapley and Nail (1955a), no period given.
5736	2.176	Earlier Harvard investigators considered it not variable.
5791	3.345	Earlier Harvard investigators considered it not variable.
5881	2.176	Earlier Harvard investigators doubted variability.
5892	2.842	Not the star marked in their atlas by Hodge and Wright (1967), which is not variable. The correct star was found by searching the area and verified by our agreement with the period published by Shapley and Nail (1955b).
5909	3.307	Period may be variable; observations before JD 17000 omitted.
5930	3.448	Earlier Harvard investigators considered it not variable.
6013	2.326	Earlier Harvard investigators doubted variability.
12209	5.083	Data published by Shapley and Nail (1951a) refer to star marked 12210 in Hodge-Wright atlas (1967).
12210	2.930	Data published by Shapley and Nail (1951a) refer to star marked 12209 in Hodge-Wright atlas (1967).
12223	3.000	Maximum probably not covered by our observations.
12242	4.819	Not the star marked 12242 in the Hodge-Wright atlas (1967). Correct 12242 is W 50, not identified as such by Woolley, Sandage, Eggen, Alexander, Mather, Epps, and Jones (1962). Verified by examination of discovery chart for 12242 and by similarity of our period and light curve to those of W 50.
12248	10.912	Nail (1952) regards as an RR Lyrae star, no period given.
12327	2.319	Our period differs from that given by Shapley and Nail (1955a); identification?
12340	2.637	Period may have decreased slightly since JD 13000; dP/P is about −0.000064 in 10,000 days.
12434	2.811	Period has decreased by about $0^d.00005$ between JD 16000 and 33000, perhaps steadily.
12534	2.913	$M = 13954.711 + 2^d.91330\ E - 5^d.6 \times 10^{-8}\ E^2$.
12697	2.444	$M = 13951.638 + 2^d.444289\ E + 1^d.27 \times 10^{-8}\ E^2$.
12762	15.642	Period may have increased slightly between JD 13900 and 23000.
12815	26.062	Period may be increasing slightly.

TABLE 6.—*Population II Cepheids*

HV	LMV	X	Y	Period	log P	M	m	$\bar{m}$	$\bar{m}_0$	Curve type	Obs.
5774	912	10922	9518	11.439	1.059	16.97	17.66	17.32	16.84	cr	297
5598	794	6228	12316	14.251	1.154	16.49	16.96	16.72	16.25	fl	374
5756	899	10410	7043	17.568	1.245	16.68	17.10	16.89	16.44	cr	439
13025	1690	7575	11471	21.474	1.332	16.84	17.99	17.42	16.93	cr	419
5690	...	8813	16512	30.299	1.481	...	...	15.70			(420)
12631	1440	16482	1632	31.137	1.493	15.55	16.37	15.96	15.79	cr	143
5829	942	12324	3343	31.521	1.499	15.25	16.70	15.98	15.73	cr	463
2281	189	4840	10924	31.594	1.500	15.73	16.41	16.07	15.77	fl	501
2862	712	20346	6734	34.60	1.539	15.02	15.96	15.49	15.16	cr	397
2444	338	10055	9955	35.90	1.555	14.96	15.82	15.39	14.91	fl	436
2522	411	12394	18516	36.40	1.561	14.83	15.78	15.30	15.27	cr	389
12625	1443	15220	19278	37.21	1.571	15.95	16.62	16.28	16.28	fl	381
6070	1081	20193	8192	37.64	1.576	15.60	16.08	15.84	15.56	cr?	417
2351	254	7305	13853	40.88	1.612	15.61	16.33	15.97	15.67	cr	418
2423	322	9560	7458	40.80	1.610	16.17	16.82	16.50	16.03	fl	456
915	44	8651	9317	47.76	1.679	15.03	15.78	15.40	14.89	fl	451
925	54	9393	7486	50.87	1.706	16.50	17.20	16.85	16.38	fl	430

HV

5774 JD 13000 to 17000, $11^d.476$; 23000 to 27000, $11^d.458$; 27000 on, $11^d.439$.

5756 JD 13000 to 27000, $17^d.616$; 27000 to 31400, $17^d.568$; 31400 to 34750, $17^d.604$.

5690 Period variable.

5829 JD 13000 to 30000, $32^d.622$; 30000 on, $32^d.672$. Curve variable.

2281 Period erratically variable; a few minima reach 16.60.

HV

2862 Period erratically variable.

2522 Curve very variable; quiescent intervals; light curve derived from 15 cycles of maximal variation.

2351 JD 13900 to 26000, $40^d.566$, 26000 on, $40^d.876$.

2423 JD 26400 to 29600, $41^d.235$; 29600 to 33600, $40^d.798$.

925 Small erratic variations of period; light curve refers to JD 27000 to 28000.

TABLE 7.—*RR Lyrae stars*

HV	LMV	X	Y	Publ. P	P	log P	M	m	⟨m⟩	A	M - m	R	W	Max. JD 2400000+	Obs.
2370*	273	7999	420	$0^d.41$	$0^d.409841$	-0.3784	13.03	14.11	13.62	1.08	0.215	0.138	0.448	30590.575	338
6083	1088	21470	17617	...	0.452991	-0.3439	15.89	16.95	16.66	1.06	0.245	0.110	0.378	31803.508	315
12708	1516	-10581	15252	...	0.458837	-0.3383	13.42	14.83	14.22	1.41	0.150	0.075	0.427	28135.359	146
12852*	1630	21978	23188	...	0.471993:	-0.3261	16.83	17.43	17.04	0.60	0.381	0.115	0.412	31702.609	80
12779	1573	10229	-1064	...	0.473026	-0.3251	16.62	17.64	17.00	1.02	0.235:	0.113	0.252	30963.620	139
U 6	1726	13588	27518	0.48268	0.482837	-0.3162	11.83	13.02	12.53	1.19	0.160	0.087	0.364	30767.272	333
12871	1643	26155	10513	...	0.484627	-0.3146	15.96	16.90	16.57	0.94	0.130	0.092	0.259	29703.248	105
12741	1541	1738	23815	...	0.493706	-0.3065	15.91	16.88	16.47	0.99	0.240	0.117	0.391	25201.492	226
8033	1108	-6319	1497	...	0.520998	-0.2832	15.62	16.46	16.11	0.84	0.150	0.106	0.365	30949.626	297
2258*	170	3926	15895	0.525	0.525444	-0.2799	13.55	14.59	14.17	1.04	0.130	0.083	0.395	31796.572	602
12857	1634	20339	-372	...	0.532723	-0.2735	13.99	15.57	14.87	1.58	0.170	0.117	0.439	31855.411	191
12254	1251	25696	-7306	0.542	0.542291	-0.2658	12.80	13.98	13.37	1.18	0.450	0.248	0.506	31172.239	132
2492	384	11820	8704	0.5531257	0.553133	-0.2572	14.19	14.99	14.67	0.80	0.115	0.086	0.395	27799.286	490
924	53	9454	4276	...	0.553379	-0.2570	13.80	15.09	14.59	1.29	0.208	0.077	0.375	26452.220	448
12996	1676	12532	781	...	0.563111	-0.2494	15.92	16.70	16.38	0.78	0.180	0.096	0.364	27426.396	346
12718	1524	-2412	17027	...	0.563688	-0.2490	16.17	16.92	16.63	0.75	0.180	0.124	0.376	29994.284	282
12251*	1248	27762	16129	...	0.564878	-0.2480	14.37	15.17	14.84	0.80	0.260	0.088	0.338	32210.281	202
12764	1561	8214	-626	...	0.564947	-0.2480	16.44	17.25	16.88	0.81	0.155	0.070	0.325	31303.621	256
12250	1247	27052	16737	0.57056	0.570578	-0.2437	12.80	13.82	13.33	1.02	0.190	0.090	0.320	28875.378	209
13016*	1690	4041	10445	...	0.580050:	-0.2365	15.85	17.00	16.64:	1.15:	0.240:	0.050:	0.319:	31328.570	64
2284	192	4932	13366	...	0.586755	-0.2315	16.13	16.92	16.64	0.79	0.220	0.131	0.321	24408.850	402
12643	1460	18162	18846	...	0.625576	-0.2033	14.74	15.85	15.49	1.08	0.180	0.113	0.359	28071.603	363
12691	1502	22020	5880	...	0.629058	-0.2013	15.25	16.48	15.97	1.23	0.145	0.076	0.345	23486.545	303
12239	1237	3797	21604	0.63148	0.631486	-0.1996	13.72	14.93	14.54	1.21	0.335:	0.104	0.337	30669.451	113
12245	1242	20714	27073	0.63216	0.633278	-0.1984	14.57	16.18	15.48	1.61	0.165	0.078	0.398	32208.347	184
13015*	1689	4019	10435	...	0.664298	-0.1776	15.82	17.02	16.56	1.20	0.225	0.136	0.381	31107.449	364
2323	229	6124	10500	0.688203	0.688199	-0.1623	15.39	16.39	16.00	1.00	0.175	0.106	0.387	32030.615	425
W 2	1728	1925	21503	...	0.760150	-0.1191	16.14	16.68	16.34	0.54	0.215	0.120	0.366	28034.592	105
12732*	1535	-315	19751	...	0.862007:	-0.0645	16.31	16.77	16.50	0.46	0.295	0.168	0.438	31683.579	266

TABLE 8.—*Long-period variables*

HV	X	Y	Period	M	m	M_0	HV	X	Y	Period	M	m	M_0
2883**	665	24999	109.0	12.87	15.14	...	928**	9724	3752	410	13.87	15.38	...
2457*	10515	3029	136	15.76	17.71	...	6096	23278	11726	416	15.88	17.40	15.66
12710*	-6348	27355	147	15.58	16.72	...	2555	13034	19143	449	14.29	16.18	...
12854*	22443	25869	147	14.92	16.05	...	5597	6219	8250	468	15.00	17.78	14.50
5680	8640	10403	151	17.15	18.35	16.64	2578	13401	7350	470	16.96	18.43	16.52
13023	6182	10584	161	16.24	17.80	...	2586	13518	17774	487	14.70	16.85	14.70
2882**	23273	3883	172	10.96	13.25	...	5854	13056	17564	524	14.70	16.03	14.70
2572	13252	9039	201	15.47	17.50	14.94	12048	12798	8040	528	15.69	17.53	15.22
13033	12929	6561	239	16.49	17.89	16.05	2576	13353	6586	534	16.02	17.37	15.58
8034**	-2475	3647	249	12.50	17.15	...	6103	8395	20686	560	14.77	16.20	14.59
2526	12432	8195	252	16.73	18.24	16.26	1001*	15475	14833	590	12.25	16.68	...
12439	14886	13508	266	16.62	18.74	16.43	12227	4095	19632	596	15.02	17.06	14.75
12252*	26922	9096	282	12.87	17.10	...	2310	5777	12744	598	16.07	18.29	15.62
12620	14610	4128	321	16.77	18.80	16.16	2446	10237	15236	602	15.33	17.73	15.10
884**	4099	12937	335	12.66	18.07	...	5506	2599	17624	618	15.70	17.10	15.43
12247*	25668	23676	346	13.94	17.32	...	12070	20916	9108	621	15.83	17.38	15.55
2575	13338	14775	350:	16.30	18.27	16.17	11984	6972	10674	623	15.70	17.25	15.21
12249*	26860	17189	351	12.62	17.32	...	5870	13384	9840	627	14.30	17.09	13.83
2379	8499	13952	355	15.89	18.45	15.40	2604	13915	9314	664	13.93	16.07	13.46
5810	11825	8802	372	15.47	17.89	14.99	12667	19458	3840	664	15.88	18.03	15.30
2934**	5872	26948	390	8.12	14.60	...	894	6354	4202	705	15.10	16.64	14.72
12326	11494	7040	397	15.35	17.45	14.90	2360	7665	16084	790	13.85	17.11	...
2763	16837	8066	400	15.40	17.54	14.93							

HV

2882 Spectrum K7e, Cannon (1936); Me, Feast, Thackeray, and Wesselink (1960).
8034 RT Mensae.
12252 SV Doradus.
884 RX Doradus; spectrum M7, Cannon (1936).
12247 UY Doradus.
12249 VV Doradus.
5810 TX Doradus.
2394 RT Mensae = HV 6100. Spectrum M7e, Cannon (1936).

HV

12326 Period given as $2^d.22$ by Shapley and Nail (1955a). Hodge and Wright (1967) note that the published position is incorrect. The star measured is the one marked in the Hodge-Wright atlas. Another star must have been measured by Shapley and Nail.
2576 Period may be 267 days.
1001 Spectrum M 2, Westerlund (1961).
5506 Period may be 309 days.
5870 Spectrum M 1.5, Westerlund (1961).

HV

2258 Period erratically variable; phases empirically corrected.
2370 T Mensae: $M = 30590.575 + 0^d.409841\ E + 8^d.1 \times 10^{-6}\ E^2$
12251 Scatter; systematic difference between Bruce (A) and Metcalf (MF) plates, empirically corrected.

HV

12732 Period doubtful; close companions.
12852 Scatter; close companion.
13015 In the faint cluster HS 83, Hodge and Sexton (1966).
13016 In the faint cluster HS 83.

TABLE 9.—*Cyclic variables*

HV	X	Y	Cycle	M	m	M_0	HV	X	Y	Cycle	M	m	M_0
2434	9793	2116	200-300	15.36	16.10	14.93	12420	3720	5400	640	14.36	15.84	13.84
12830*	14622	-493	210	12.62	14.54	12.62	13046	17057	3106	646	16.62	18.76	16.18
2849	19574	16425	375	15.22	18.25	15.05	2532	12554	9582	650	14.37	16.37	13.77
2677	15066	10324	400	15.26	17.62	14.84	12501	2820	7860	675	13.58	15.84	13.02
2700	15550	17346	404	14.83	16.47	14.78	2239	1415	17182	700	13.72	15.12	13.25
12437	14838	18198	422	14.42	15.68	14.37	996	14563	14165	760	13.15	16.15	12.80
12495	2298	9120	499	14.10	16.00	13.48	2255	3800	5414	830	14.48	16.98	13.96
5584	6032	4898	500:	16.61	18.29	16.07	888	4678	16045	850	12.80	15.30	12.36
897	6566	3346	515	15.15	17.35	14.67	12793	11304	22249	1000:	14.72	16.20	14.52
1004	15954	17745	555	13.79	15.95	13.74	2399	8952	6547	1020:	15.70	17.40	15.13
963	12804	17885	600	13.03	14.65	12.82	12407	1818	4650	1465:	14.44	14.96	13.89
2602	13886	10290	600	13.43	15.30	12.85							

TABLE 10.—*Irregular variables of large range*

HV	X	Y	M	m	M_0	Color	HV	X	Y	M	m	M_0	Color
916	8407	15670	14.72	16.68	14.21	red	5654	7940	16049	14.44	16.43	13.90	very red
942	11185	5983	14.44	17.74	13.96		5666	8235	8914	15.24	16.84	14.58	
949	11985	13144	16.21	17.33	15.72	red	5691	8818	9200	14.91	16.84	14.25	
957	12317	9946	13.87	14.84	13.27	red	5703	9094	18970	15.74	16.74	15.27	
968	12804	17885	13.03	14.65	12.82	red	5713	9484	20016	15.20	16.87	14.89	
2238	1075	5955	15.50	17.36	14.95		5714	9528	10086	15.93	17.13	15.35	
2275	4640	15340	15.49	16.77	15.04		5743	10164	8056	15.83	17.18	15.25	
2306	5725	8705	13.75	14.75	13.10	red	5762	10592	14450	13.71	14.91	13.25	
2308	5737	11753	16.18	17.22	15.58		5773	10915	5825	16.45	17.45	15.97	
2397	8856	8220	15.31	16.51	14.65		5804	11780	19086	15.23	16.23	14.98	
2450	10263	13548	12.88	14.00	12.39	very red	5847	12948	19876	14.96	16.00	14.75	
2479	11462	8264	15.29	16.66	14.71	red	5869	13373	13157	17.07	18.16	16.66	
2493	11831	5994	15.78	18.50	15.30		5914	14456	17536	13.00	15.37	12.95	very red
2530	12533	7824	14.46	15.56	13.91		5933	14888	17240	13.74	15.61	13.69	very red
2556	13047	9784	14.84	16.35	14.23	red	5939	15140	17684	14.38	15.38	14.33	
2565	13214	9918	13.43	14.43	12.83	very red	5967	15890	16380	15.58	16.85	15.53	red
2566	13217	12285	13.29	14.35	12.88	very red	5970	15940	11396	15.85	16.95	15.43	red
2570	13246	9135	14.85	16.05	14.25		6002	17317	9420	16.18	17.65	15.55	red
2627	14224	15995	14.91	16.44	14.66	red	6042	19407	4785	15.75	18.19	15.23	
2635	14287	9544	14.50	15.50	13.86		11979	6312	10398	15.50	16.50	14.93	
2649	14482	9234	13.91	15.09	13.27		11982	6840	10206	15.27	16.40	14.70	
2655	14581	8902	15.75	16.78	15.11	blue	12042	12576	7068	15.01	16.33	14.46	
2740	16354	9601	16.00	17.00	15.37	red	12454	648	15720	16.18	17.50	15.79	
2747	16626	12944	13.69	18.61	13.29	very red	12524	4332	9444	15.27	17.12	14.62	
2761	16815	9024	15.20	16.22	14.57	red	12570	8808	1983	15.47	16.81	15.11	
2768	17050	6804	15.70	16.75	15.05		12602	12936	2160	15.38	16.52	15.08	
2852	19761	14077	15.43	16.54	15.08	red	12611	13668	2628	14.10	15.18	13.80	
5576	5835	4814	15.04	16.16	14.56	red	12873	25763	3930	15.36	17.50	15.36	
5593	6144	3642	14.82	15.93	14.34	very red	12998	14066	9100	15.72	17.25	15.08	very red
5629	7124	9937	14.36	15.41	13.72	blue	13011	616	19898	15.70	17.00	15.28	

HV

957 Spectrum M 0.5, Westerlund (1961).

2397 Shapley and Nail (1955a) assign to RR Lyrae class; probably a different star.

2493 Shapley and Nail (1955a) assign to long-period variables, period 552^d5.

HV

2565 Westerlund (1961) gives B-V = 2.38.

2627 Spectrum M 1.5, Westerlund (1961).

2740 Shapley (1931) gives period 23^d045; star perhaps confused with HV 2749.

TABLE 11.—*R Coronae Borealis stars*

HV	X	Y	M	m	M_0
966	12664	2321	13.37	17.57	13.07
5637	7400	13866	16.38	18.20	15.80
12671	20148	15072	14.47	16.81	14.03
12842	19543	26775	14.15	17.92	14.15

TABLE 12.—*Adopted corrections for absorption*

Y \ X	-1000	1000	3000	5000	7000	9000	11000	13000	15000	17000	19000	21000	23000	25000	27000	29000
1000	0.00	0.00	0.38	0.37	0.41	0.28	0.24	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000	0.00	0.00	0.42	0.38	0.46	0.36	0.32	0.23	0.11	0.17	0.00	0.00	0.00	0.00	0.00	
3000	0.59	0.50	0.45	0.41	0.48	0.43	0.39	0.30	0.38	0.44	0.44	0.32	0.00	0.00	0.00	
5000	0.63	0.55	0.52	0.48	0.54	0.52	0.48	0.48	0.55	0.59	0.52	0.47	0.00	0.00	0.00	
7000	0.59	0.57	0.56	0.55	0.55	0.57	0.53	0.55	0.68	0.65	0.59	0.44	0.41	0.00	0.00	
9000	0.69	0.67	0.62	0.65	0.64	0.66	0.58	0.60	0.64	0.63	0.59	0.40	0.24	0.00	0.00	
11000	0.33	0.47	0.60	0.60	0.57	0.58	0.51	0.58	0.42	0.58	0.52	0.47	0.29	0.25	0.21	
13000	0.17	0.38	0.58	0.55	0.58	0.55	0.49	0.41	0.32	0.40	0.41	0.47	0.25	0.21	0.00	
15000	0.27	0.39	0.44	0.45	0.54	0.51	0.46	0.32	0.25	0.29	0.35	0.44	0.33	0.25	0.00	
17000	0.43	0.47	0.41	0.44	0.54	0.56	0.45	0.21	0.05	0.13	0.17	0.25	0.19	0.00	0.00	
19000	0.00	0.42	0.33	0.39	0.42	0.47	0.25	0.21	0.14	0.07	0.07	0.12	0.00	0.00	0.00	
21000	0.00	0.22	0.30	0.41	0.32	0.31	0.17	0.14	0.08	0.05	0.00	0.01	0.00	0.00	0.00	
23000	0.00	0.00	0.00	0.27	0.11	0.12	0.20	0.11	0.02	0.06	0.07	0.01	0.19	0.00	0.00	
25000	0.00	0.00	0.00	0.00	0.00	0.12	0.10	0.10	0.16	0.01	0.00	0.00	0.19	0.00	0.00	

TABLE 13.—*Eclipsing stars in the Large Magellanic Cloud*

HV	LMV	X	Y	Publ. P	P	M_o	m_o	$\langle M \rangle_o$	Normal Min. JD 2400000+	Obs. Rem.
910	39	7089	11202	1.331	4.022348	15.42	16.62	15.92	29577.384	463
930	59	9957	12914	...	57.640209	15.31	16.16	16.12	27413.340	449
936	65	10564	7967	10.032	10.031599	14.19	16.17	14.76	29627.308	460
940	69	11124	10414	3.01988	3.019670	15.25	16.43	15.80	23683.870	461
981	109	13446	7471	8.48601	8.486443	15.66	17.22	15.91	29926.449	484
982	110	13654	9686	...	5.335268	14.43	15.15	15.03	29189.469	476
1020	146	18203	11346	...	1.727032	14.93	15.38	15.02	27807.443	518
1022	148	18675	9300	2.5221	2.522100	15.35	16.21	15.69	26977.615	426
2240	155	1575	13503	...	65.724613	14.96	16.29	...	26572.627	425
2241	156	1885	18265	4.34263	4.342634	13.54	14.25	13.91	29219.342	606 Note
2259	171	4000	8348	...	27.110557	14.31	15.18	...	31713.545	449
2274	182	4596	11873	5.7261	5.725868	14.76	15.79	15.68	31299.629	419
2329	235	6394	9294	4.1764	4.176394	15.58	16.67	15.98	32915.336	458
2348	251	7206	8728	1.99001	1.989998	14.24	14.97	14.64	32875.527	475
2350	253	7254	6931	...	0.494735:	15.82	15.98	15.98	26412.253	423
2374	277	8186	18573	...	28.494087	14.70	15.44	15.35	31304.638	468
2376	279	8382	3918	...	96.015632	14.83	17.18	...	26335.447	429
2401	302	8985	16897	...	2.944762	14.50	15.31	14.90	27807.476	162 Note
2403	304	9073	14127	...	1.311646	15.76	16.39	16.25	16814.656	348
2425	324	9638	11687	5.8686217	5.868613	15.85	16.63	16.13	27454.363	460
2435	332	9825	12950	...	0.285464	11.19	11.46	11.44	24802.831	467 Note
2436	333	9845	8346	3.011	3.011150	16.32	17.49	16.42	26453.220	450
2451	345	10270	6284	...	3.046652	16.69	17.18	16.80	27449.462	428
2505	395	12044	11969	...	0.992202	14.85	15.60	15.51	24053.784	517
2525	414	12424	20106	...	18.778215	14.33	14.57	14.45	25189.578	452
2543	428	12779	16774	2.414	4.829052	12.11	13.07	12.62	27449.339	454
2597	476	13815	7753	0.645	0.645038	16.82	17.54	16.90	32151.341	446
2608	483	13943	7357	2.917	2.917229	16.82	17.87	16.48	25940.528	460
2629	500	14233	9773	...	2.853311	14.36	15.49	14.74	30647.582	450
2651	518	14519	10386	...	2.913524	14.65	15.74	15.24	31332.626	462
2656	522	14600	12387	...	1.133110	14.85	15.33	15.31	16820.747	468
2691	552	15420	10674	1.2555	1.255542	15.80	16.43	16.26	31111.542	436
2731	590	16239	15234	...	8.809874	15.10	15.57	15.27	30751.283	417
2765	622	16864	9261	...	2.149396	13.95	14.75	14.53	27456.309	460
2774	630	17144	11038	3.65242	3.652368	15.42	16.28	15.72	23737.848	526
5549	768	4955	13962	...	6.065863	14.68	15.56	14.95	28758.570	435
5581	783	5944	12412	5.916	5.916005	15.25	15.99	15.52	31304.630	449
5587	786	6083	5634	...	3.161266	14.97	15.81	15.42	27426.448	448
5669	833	8302	10876	4.591	4.591410	15.97	16.83	16.14	29927.447	363
5753	898	10328	12881	...	0.825964	14.85	15.49	15.40	27807.516	538
5816	933	11930	9540	...	3.388762	16.57	17.01	16.83	32023.644	458
5837	945	12529	15212	3.41755	3.417261	16.32	16.90	16.52	29222.409	422
5864	958	13240	1517	...	3.426488	15.15	16.11	15.51	29129.635	431 Note
5872	963	13434	19086	...	1.363170	15.47	16.30	16.01	25997.359	400
5876	965	13548	13394	...	1.270806	16.73	17.17	17.09	23529.516	385 Note
5929	992	14760	12048	...	1.113113	15.13	15.72	15.72	28041.643	469
5936	997	14980	18844	...	2.805073	15.14	15.84	15.32	23486.545	404
5943	1003	15220	18440	...	3.662789	14.21	14.99	14.77	31740.496	425

TABLE 13.—*Eclipsing stars in the Large Magellanic Cloud—continued*

HV	LMV	X	Y	Publ. P	P	M_0	m_0	$\langle m \rangle_0$	Normal Min. JD 2400000+	Obs.	Rem.
5963	1014	15806	5316	3.257	3.256682	15.78	16.37	16.29	27457.311	424	
5989	1032	16840	8126	1.3069	1.306882	15.42	15.77	15.68	26571.611	428	
6029	1058	18198	12572	...	2.235541	15.19	15.99	15.60	30725.573	454	
6078	1086	21099	10974	7.283745	7.284011	15.00	16.09	15.06:	28777.636	411	
11999	1130	8319	9168	2.008036	2.008016	15.11	17.27	15.16	27801.321	463	
12063	1174	19194	8688	8.75493	8.756720	16.44	17.54	...	27807.283	264	
12190	1195	6501	22902	7.18282	7.182824	14.23	15.43	14.46	30672.446	340	
12228	1227	12354	8352	...	5.874405	16.72	17.52	...	34748.337	423	
12244	1241	15755	-1739	...	0.527775	13.11	14.16	13.27	27810.311	199	Note
12323	1253	6048	10062	...	8.492785	16.05	17.17	16.24	26322.343	428	
12324	1254	6318	11850	2.656	2.656155	16.42	17.29	16.76	29926.449	431	
12411	1278	2400	4656	...	0.391060:	14.35	14.83	14.83	...		Note
12440	1305	14892	17628	1.92149	3.843006	14.38	15.60	14.71	27807.399	444	
12484	1333	1512	4872	...	3.350134	15.22	16.12	16.10	31783.295	324	
12493	1340	2232	8976	...	4.995080	14.91	15.95	15.15	29674.309	203	
12526	1367	4476	6648	...	2.707848	16.41	17.20	16.59	31796.415	354	
12563	1398	7662	1710	...	6.306562	15.80	16.68	15.95	32011.649	376	
12576	1409	9618	4086	...	1.174005	16.91	17.61	16.97	23732.679	395	
12578	1411	10584	19788	...	2.480380	15.05	15.75	15.69	29927.447	382	
12605	1428	13020	4458	...	2.109131	15.82	16.44	16.38	24418.800	508	
12610	1431	13620	19008	...	3.163656	16.30	17.26	16.68	30647.582	402	
12615	1436	14058	19032	...	1.809526	14.44	15.15	14.80	28878.403	418	
12634	1452	16902	1860	...	1.189185	14.83	15.67	15.49	26304.355	407	
12714	1520	-973	5237	...	1.404264	13.28	14.18	13.35	30640.401	321	
13014	1688	3889	12541	...	1.042171	15.98	16.41	16.30	26303.577	411	
13045	1719	5919	20434	...	39.715	15.27	16.04	...	31702.512	107	
13051	1752	1285	15000	...	3.945147	16.00	17.05	16.18	29690.297	231	
13052	1753	5541	9680	...	1.817637	16.35	17.09	17.05	27746.482	325	
13053	1754	7623	12059	...	5.726557	16.48	17.85	16.67	27421.344	360	
13054	1755	15031	19067	...	3.584743	15.58	16.33	15.85	30314.493	384	

HV

2241 W 39.

2350 The period is uncertain; no light curve is given by Gaposhkin (1971).

2401 The published statement that this star is not variable was apparently based only on a study of unsuitable Bache plates.

2435 RW Doradus, a foreground W Ursae Majoris star.

5864 Perhaps the star intended in Harvard Reprint 368 under the name HV 5846. The period given there for this star, 1.715033, is nearly half that determined by us for HV 5864. HV 5846 is a red star, which we conclude is not variable.

5876 Perhaps an RR Lyrae star with half the period. Scatter.

12244 Probably a foreground star.

12411 Perhaps a foreground W Ursae Majoris star; period doubtful, and no mean light curve derived.

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