Erratum 1. New Variable Stars Discovered by the APACHE Survey. I. Results After the First Observing Season

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In the article "New Variable Stars Discovered by the APACHE Survey. I. Results After the First Observing Season" (*JAAVSO*, 2014, **42**, 99–123), Table 1, which appears on pages 103–108, should be replaced with the table given here on the following pages. Columns 6 (Period) and 7 (Amplitude) were originally miswritten due to a production error.

Table 1. Variable stars discovered by APACHE during the first observing season. For stars with two periods indicated, that in parentheses is the one determined from the APACHE data, while the other is estimated from SuperWASP archive data. The amplitudes of the light curves are measured from APACHE data. Time T_0 corresponds to phase = 0 in the folded light curves.

No.	*Name*	*R.A. (2000)*	*Dec. (2000)*	*Mag V*	*Period (days)*	*Amplitude (mag)*	*T_0 (HJD–2455000)*	*Var. Type*	*Note*
1	UCAC4 744-001518	002.6931077	+58.6863575	14.86	7.55 (7.518)	~0.25	1146.3523197	ROT?	(1)
2	UCAC4 743-001636	002.7103159	+58.5618373	10.21	0.10625 (0.09603)	~0.02	1146.3523197	DSCT	(2)
3	UCAC4 758-009639	015.1541895	+61.5753528	14.27	1.20557	~0.6	1146.4105864	E	(3)
4	UCAC4 752-014548	018.8161518	+60.3735250	13.14	1.087	~0.3	1146.3866004	EB	
5	UCAC4 870-000885	018.9877518	+83.9571120	16.77	0.40861	~0.3	1273.2157609	EW	
—	UCAC4 872-000839	021.2561924	+84.2626639	16.17	?	—	RR?		(4)
6	UCAC4 728-026837	044.2308518	+55.5203950	16.38 (GSC2.3)	?	~0.4	1146.4709166	L	
7	UCAC4 618-013561	062.4040074	+33.4937250	12.83	?	~0.25	1162.5960791	L	
8	UCAC4 713-031969	063.5650233	+52.5300092	14.4	6.22	~0.4	1208.3673785	E	(5)
9	UCAC4 709-034533	074.7646086	+51.7157109	10.77	?	~0.05	1328.2561929	L	
10	UCAC4 610-021265	082.4603353	+31.9110003	13.59	0.80089 (0.80086)	~0.3	1210.5113093	EW	(6)
11	UCAC4 619-030850	092.0415889	+33.6711831	13.01	2.008 (2.009)	~0.27	1205.5239017	EB	(7)
12	UCAC4 521-023140	094.9127039	+14.0543662	12.47	~77?	~0.16	1270.3904921	L	(8)
13	UCAC4 624-036803	105.7816774	+34.7009262	15.90	0.21635 (WASP)	~0.25	1246.5895718	EW	(9)
14	UCAC4 715-044844	105.9254200	+52.8823920	13.22	0.3281 (0.32811)	~0.33	1205.4926955	EW	(10)
15	UCAC4 664-056989	179.4896992	+42.6626264	14.19	0.33651	~0.5	1353.4968403	RRab	(11)
16	UCAC4 609-049172	208.1377689	+31.6871487	13.47	0.35471 (0.35470)	~0.16	1301.7535576	EW	(12)
17	UCAC4 666-060394	232.1916465	+43.0916548	12.79	1.9756 (1.9788)	~0.1	1127.3672611	ROT	(13)
18	UCAC4 633-053996	250.3480433	+36.5047900	12.26	?	~0.1	1367.4885131	L	
19	UCAC4 633-054311	250.4026556	+36.4431934	15.06	?	~0.3	1367.4885131	L	(14)

Table continued on following pages

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No.	*Name*	*R.A. (2000)*	*Dec. (2000)*	*Mag V*	*Period (days)*	*Amplitude (mag)*	*T_0 (HJD–2455000)*	*Var. Type*	*Note*
20	UCAC4 633-054908	250.4621462	+36.4817620	11.82	?	~0.2	1367.4885131	L	(15)
21	UCAC4 652-057450	253.3608262	+40.3033556	14.83	1.47	~0.45	1420.4785809	EB	
22	UCAC4 592-063874	275.7670439	+28.3080614	14.01 (GSC2.3)	~60?	~0.2	1127.3682196	L	
23	UCAC4 533-077928	279.6991892	+16.4103631	15.12	?	~0.5	1166.3294430	L	
24	UCAC4 533-078069	279.8361324	+16.5350567	14.97 (GSC2.3)	?	~0.2	1166.3294430	L	
25	UCAC4 532-076755	279.8824256	+16.3173617	15.15	0.3199	~0.25	1166.3294430	EW	
26	UCAC4 533-078283	280.0367009	+16.5274503	14.58	?	~0.11	1166.3294430	L	
27	UCAC4 723-061541	283.8471103	+54.4308875	14.33	0.38399 (0.38399)	~0.7	1385.4985908	EW	(16)
28	UCAC4 723-061622	284.1744556	+54.5157323	13.34 (GSC2.3)	?	~0.35	1385.4876350	L	
29	UCAC4 479-089263	284.6627689	+05.7352287	11.68	0.744	~0.1	1473.4154161	RRc	(17)
30	UCAC4 491-099556	284.8352648	+08.1355764	N.A.	?	~0.15	1432.4879724	L	(18)
31	2MASS 18592325+0810247	284.846896	+08.173555	N.A.	?	~0.25	1432.4879724	L	(19)
32	UCAC4 491-099593	284.8855603	+08.0666542	16.48 (GSC2.3)	1.251	~0.35	1432.4879724	EW	
33	2MASS 19000738+0805125	285.030765	+08.086826	19.00 (GSC2.3)	?	~0.25	1432.4879724	L	
34	UCAC4 490-094834	285.0720153	+07.9374948	16.58 (GSC2.3)	?	~0.12	1432.4879724	L	
35	UCAC4 729-060138	290.8229630	+55.6600275	12.76	0.6902 (0.688)	~0.08	1434.3738137	ROT	(20)
36	UCAC4 728-061629	290.9937003	+55.5546067	14.81	0.36689 (0.3669)	~0.2	1434.3728183	EW	(21)
37	UCAC4 728-061766	291.4820559	+55.5007378	15.27 (GSC2.3)	0.189029 (0.1890)	~0.1	1434.3738137	DSCT	(22)

Table continued on following pages

Table 1. Variable stars discovered by APACHE during the first observing season. For stars with two periods indicated, that in parentheses is the one determined from the APACHE data, while the other is estimated from SuperWASP archive data. The amplitudes of the light curves are measured from APACHE data. Time T_0 corresponds to phase = 0 in the folded light curves, cont.

No.	*Name*	*R.A. (2000)*	*Dec. (2000)*	*Mag V*	*Period (days)*	*Amplitude (mag)*	*T_0 (HJD–2455000)*	*Var. Type*	*Note*
38	UCAC4 811-027074	294.4105074	+72.0363334	13.63	?	~0.2	1424.3380554	L	
39	UCAC4 610-092144	297.3880989	+31.8705942	14.72 (NOMAD)	?	~0.1	1127.5857519	L	
40	UCAC4 609-091131	297.4135403	+31.6445878	14.79 (NOMAD)	?	~0.15	1127.5857519	L	
41	UCAC4 609-091297	297.4814474	+31.7204662	17.27 (NOMAD)	?	~0.9	1127.5857519	L	
42	2MASS 19500382+3149132	297.515956	+31.820337	N.A.	?	~0.15	1127.5857519	L	
43	2MASS 19500885+3135499	297.536909	+31.597216	N.A.	?	~0.4	1127.5857519	L	
44	UCAC4 610-092592	297.5731206	+31.9941723	15.53 (NOMAD)	?	~0.2	1127.5857519	L	
45	2MASS 19502059+3152091	297.585806	+31.869217	17.38 (NOMAD)	?	~0.2	1127.5857519	L	
46	2MASS 19502935+3158417	297.622323	+31.978273	N.A.	?	~0.17	1127.5857519	L	
47	UCAC4 610-092815	297.6690953	+31.9639217	15.41 (NOMAD)	0.427	~0.5	1127.5857519	EW	
48	UCAC4 609-091797	297.7097806	+31.6965225	12.70	~40?	~0.13	1127.5857519	L	
49	UCAC4 608-095594	297.7998224	+31.5728037	15.22 (NOMAD)	?	~0.45	1127.5857519	L	
50	2MASS 19511471+3143128	297.811294	+31.720238	17.47	?	~0.14	1127.5857519	L	
51	UCAC4 623-096266	302.9632515	+34.4131084	15.28 (NOMAD)	9.8	~0.45	1416.5074270	PULS	(23)
52	UCAC4 623-096337	303.0224745	+34.4758434	15.87 (NOMAD)	~61?	~0.16	1416.5074270	L	

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No.	*Name*	*R.A. (2000)*	*Dec. (2000)*	*Mag V*	*Period (days)*	*Amplitude (mag)*	*T_0 (HJD–2455000)*	*Var. Type*	*Note*
53	UCAC4 621-098928	303.0456662	+34.0879998	13.90	0.1365	~0.07	1416.5076083	DSCT?	
54	UCAC4 622-095023	303.0508565	+34.2564675	14.06 (NOMAD)	?	~0.22	1416.5074270	L	(24)
55	UCAC4 622-095081	303.0868139	+34.3034262	17.07 (NOMAD)	~44?	~0.15	1416.5074270	L	
56	UCAC4 622-095314	303.2126174	+34.2968739	16.19 (NOMAD)	?	~0.12	1416.5074270	L	
57	UCAC4 623-096673	303.2543371	+34.4226409	14.72 (NOMAD)	?	~0.25	1416.5074270	L	
58	UCAC4 622-095521	303.3453327	+34.3789689	13.58	?	~0.3	1416.5074270	L	
59	UCAC4 622-095554	303.3731539	+34.3134381	14.99 (NOMAD)	?	~0.05	1416.5074270	L	
60	UCAC4 516-127264	303.6096042	+13.1699259	12.40	0.575	~0.2	1445.5441597	EW	
—	UCAC4 744-062741	306.3905642	+58.6538473	14.09	1.51?	~0.2	1127.3642954	ROT?	(25)
61	UCAC4 744-062753	306.4085277	+58.7603659	14.17 (GSC2.3)	0.4406 (0.4405)	~0.25	1127.3642954	EW	(26)
62	UCAC4 744-062788	306.5188756	+58.7358845	15.2 (GSC2.3)	0.3495	~0.45	1127.3642954	EW	
63	2MASS 20305052+5547074	307.710540	+55.785416	18.64 (GSC2.3)	?	~2.0	1417.5662968	L	
64	UCAC4 729-067019	307.8310009	+55.7983139	15.56 (GSC2.3)	?	~0.6	1417.5664087	L	
65	UCAC4 731-068791	308.1278424	+56.1299364	14.44	?	~0.4	1417.5664087	L	
66	UCAC4 621-112859	314.4579859	+34.1641767	13.84 (NOMAD)	?	~0.15	1432.5597351	L	(27)
67	UCAC4 617-116284	315.4994471	+33.3210739	14.90 (NOMAD)	?	~0.5	1127.3687558	L	
68	UCAC4 598-126361	317.6277274	+29.4905828	12.48	?	~0.2	1443.4864670	L	
69	UCAC4 621-122572	321.8936342	+34.0494003	12.09	0.43635 (0.438)	~0.1	1445.5736404	EW	(28)
70	UCAC4 590-130214	326.9765700	+27.9013675	12.71	~36	~0.2	1135.4185368	L	(29)

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No.	*Name*	*R.A. (2000)*	*Dec. (2000)*	*Mag V*	*Period (days)*	*Amplitude (mag)*	*T_0 (HJD–2455000)*	*Var. Type*	*Note*
71	UCAC4 590-130270	327.0770353	+27.8228681	12.49	1.02500 (1.025)	~0.25	1127.3844791	EW	(30)
72	UCAC4 652-105561	327.4152459	+40.3802687	14.33	?	~0.35	1443.4839005	L	
73	UCAC4 588-128603	330.1270789	+27.4577517	12.72	4.21221 (1.29)	~0.08	1459.5047071	ROT?	(31)
74	UCAC4 789-036290	330.5805324	+67.6531512	16.00 (GSC2.3)	0.17 (0.34)	~0.15	1127.3607291	DSCT (EW)	(32)
75	UCAC4 788-037466	330.9508409	+67.4961639	14.29 (GSC2.3)	0.47	~0.4	1127.3602622	EA	
76	UCAC4 788-037537	331.1173995	+67.4969889	13.66 (GSC2.3)	?	~0.16	1127.3602622	L	
77	UCAC4 788-037577	331.2463553	+67.5745589	15.62 (GSC2.3)	0.36	~0.25	1127.3607291	EW	
78	UCAC4 726-083454	333.0765986	+55.1851717	14.67	?	~0.18	1127.3607291	L	
79	UCAC4 725-086173	333.2373680	+54.9382473	13.34	0.192835	~0.2	1127.3607291	DSCT?	
80	UCAC4 725-086241	333.2829348	+54.8638348	14.33	0.17234	~0.5	1443.4626241	DSCT?	
81	UCAC4 781-040386	333.4526621	+66.1133137	15.43	1.13	~0.2	1127.3604366	EB	
82	UCAC4 726-084171	333.5242624	+55.0744792	12.13	~50	~0.15	1127.3604366	L	
83	UCAC4 859-013147	343.6693409	+81.7063873	12.72	37	~0.17	1385.653719	L	
84	UCAC4 749-082493	352.8942900	+59.7192198	10.64	0.861	~0.2	1146.4200537	EW	

Table continued on next page

Table 1. Variable stars discovered by APACHE during the first observing season, cont.

Notes: (1) Star 1SWASPJ001046.35+584111.0, 1837 points analyzed. APACHE data are less scattered than those of SWASP. (2) Star 1SWASPJ001050.47+583342.6, SWASP data with high scatter, 1969 of 2015 data analyzed (applying a 1-sigma clipping to the original data). (3) Eclipsing binary already known in VSX (Mis V1368) but the orbital period was not reported. (4) The light curve is discussed separately in Figure 2. No SWASP data available for this star. (5) Only the primary minimum detected. (6) Star 1SWASPJ052950.48+315439.8, 7033 of 7110 data points from SWASP analyzed (applying a 3-sigma clipping to the original data). The secondary minimum appears deeper in the light curve from the APACHE survey. Refer to Figure 3 for a comparison between SWASP and APACHE light curves. (7) Star 1SWASPJ060809.97+334016.5, 6223 of 6282 data points from SWASP analyzed (applying a 3-sigma clipping to the original data). The existence of a secondary minimum can be guessed from the APACHE light curve, while is not visible in SWASP data (not shown here). (8) Tentative period, but the phase coverage does not make possible a reliable estimation. (9) Star 1SWASPJ070307.60+344203.60, 4066 of 4305 data points analyzed (applying a 2-sigma clipping to the original data). Even with few data points, this faint star appears to be an eclipsing binary system in the APACHE photometry. From data in the SWASP public archive we derive the best period P=0.21635 day, that in this case we adopted for folding our data because is a far better estimate than that from APACHE data. This star is discussed separately in section 4. (10) Star 1SWASPJ070342.10+525256.8, noisy light curve, 1094 of 1258 data points from SWASP analyzed (applying a 1-sigma clipping to the original data). (11) Star 1SWASPJ115757.51+423945.5, 5509 data points analyzed. From APACHE photometry alone, because the data are few, we could only guess that the star has a short period (<1 day), but a reliable determination was not possible. SWASP photometry helped us in classifying the star's variability and estimating a reliable period. We show part of the APACHE light curve and the SWASP data in Figure 5. (12) Star 1SWASPJ135233.09+314113.8, 7348 of 7425 data points analyzed (applying a 3-sigma clipping to the original data). (13) Star 1SWASPJ152845.99+430530.1, 5387 of 5428 data points analyzed (applying a 3-sigma clipping to the original data). Spotted star. Color indexes B–V = 0.98, V–J = 1.78, V–K = 2.39. Tentantive spectral classification: dK3/dK4. (14) Appears in Kopacki et al. (2003). V from Sandquist et al. (2010). (15) Appears in Kopacki et al. (2003). (16) Star 1SWASPJ185523.32+542551.4, 11972 of 12016 data points analyzed (applying a 3-sigma clipping to the original data). (17) Observations in V band. Color indexes: B–V = 0.95, V–J = 1.7, V–K = 2.33. (18) In on-line archive images it appears as a blended object. Faint, no V available. (19) Faint object in on-line archive images. (20) Star 1SWASP192317.5+553936.2, 12861 of 12919 data points analyzed (applying a 3-sigma clipping to the original data). Results for this star are discussed separately in section 4. (21) Star 1SWASPJ192358.37+553316.9, 12469 of 12596 data points analyzed (applying a 3-sigma clipping to the original data). (22) Star 1SWASPJ192555.70+5530002.9, 12934 photometric points used in the analysis. (23) Undefined type of pulsating star. Modulation possibly due to rotation. We provide a more conservative uncertainty than that calculated as 1/timespan. (24) Star listed in the International Variable Star Index (NSVS J2012124+341522) and classified as L. The reported periodicity of 88 days is not found in our data that clearly show that the possible period should be longer. (25) Star 1SWASPJ202533.73+583913.9, 10637 of 10721 data points analyzed (applying a 3-sigma clipping to the original data). Because of its uncertain classification, this star is discussed separately in section 4. (26) Star 1SWASPJ202538.05+584537.4, 10485 of 10550 data points analyzed (applying a 3-sigma clipping to the original data). The primary minimum is not well sampled in the APACHE light curve. (27) Star listed in the International Variable Star Index (NSV 25408) and classified as an eclipsing binary, but without an estimate of the orbital period. No evidence for eclipses is present in the APACHE data. Rather, the star appears as an irregular variable. Thus we propose a change of variability status for this star. (28) Star 1SWASPJ212734.47+340257.9, 14781 of 14872 data points analyzed (applying a 3-sigma clipping to the original data). (29) Long periodicity, assumed tentatively nearly equal to 36 days by looking at the light curve. (30) Star 1SWASPJ214818.48+274922.0, 14086 of 14151 data points analyzed (applying a 3-sigma clipping to the original data). (31) Star 1SWASPJ220030.52+272728.8, 21352 of 21499 data points analyzed (applying a 3-sigma clipping to the original data). This star is discussed in detail in section 4. Even if the classification remains uncertain, based on SWASP data we suggest this could be a rotating star. (32) Difficult classification, faint star/noisy light curve. We propose two possibilities, with corresponding periodicities.

Erratum 2

JAAVSO Vol. 42, No. 1. Due to a production error, the running headings on pages 53–65 and on page 244 were mislabeled. "*JAAVSO Volume 41, 2013*" should read "*JAAVSO Volume 42, 2014*".

Erratum 3. The AAVSO Widow—or Should We Say Spouse?

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In the article "The AAVSO Widow—or Should We Say Spouse?" (*JAAVSO*, 2012, **40**, 77–91), the birth year of Margaret Stewart Lyon Yalden was incorrectly given on page 83. In section 4.2, first paragraph, "Born in 1865" should read "Born in 1858"; and, in the same paragraph, "Five years older than Ernest" should read "Twelve years older than Ernest."