

AAVSO CIRCULAR

EDITOR JOHN E. BORTLE

No. 323

1997

September

The Following Data Covers Observations for August 1997
 Received by September 15, 1997. (August 0 is JD 2,450,661)
 Final Data Available From AAVSO Headquarters May Differ Somewhat From This Limited Sample
 Therefore All Requests For Data Should Be Directed To AAVSO Headquarters

NOVAE

0059+53	V723	Cas	(NB)	Rose to another maximum of 11.0 near JD670, then slowly returned to about 11.7 DLA,HSG,BEB,VED,HAR,CGF,PYG,MRV,FMR,VET,OCN,BRJ,OJR,BOS
0324+43	GK	Per	(NA)	Mean magnitude 13.2 FMR,OCN,BRJ,OJR,BOS,HSG,TOL,PYG
0617-00	V616	Mon	(XND)	At or near minimum, fainter than 13.1 OB
0634-62	RR	Pic	(NB)	Reported as magnitude 12.0 OB
1555+26	T	CrB	(NR)	At minimum, mean magnitude 10.0 PTI,MED,BTY,HAR,CGF,PYG,MKJ,FMR,MRV,OCN,BRJ, OJR,BOS,VDL,DLA,HSG,BEB,HAV,VED,HE
1616-17	U	Sco	(NR)	At or near minimum, fainter than 14.5 HAV,STR,MRV,BRJ,VET
1653-12	V841	Oph	(NB)	Reported as magnitude 13.1 CR,FMR,OCN,BRJ
1744-06	RS	Oph	(NR)	Varying in the range 10.4-11.7 OCN,BRJ,BOS,DLA,VED,HAR,MED,STR,OB,PYG,CR, MRV,VET
1747-30	Nv197	Sco	(N)	Reported as magnitude 14.0 on JD661 MRV
1804+45	DQ	Her	(NB)	Near magnitude 14.4 except when apparently caught in eclipse near 15.0 on JD675.408 & JD691.6694 GRI,TOL,PYG,FMR,BRJ,OCN
1811+41	V533	Her	(NA)	Currently magnitude 14.9 BRJ
1824-24	V3890	Sgr	(N)	Slowly fading from about 14.4 to 14.7 BRJ,MRV,FMR
1843+00	V603	Aql	(NA)	Mean magnitude 11.4 AAP,PYG,MED,BEB,VED,HSG,BRJ,OCN,FMR
1849+29	HR	Lyr	(NA)	Reported as magnitude 15.5-15.6 FMR,PYG
1900-01	V1425	Aql	(N)	Currently magnitude 15.4-15.6 OCN,PYG
1937+16	HM	Sge	(NC+M)	Holding steady at magnitude 11.2 BOS,VED,BTY,FMR,OCN,BRJ,OJR
1953+39	V1016	Cyg	(NC+M)	Magnitude 10.9 VED,BRJ,OCN,FMR,PYG
1956-56	RR	Tel	(NC)	Currently magnitude 10.9 OB
2016+21	PU	Vul	(NC)	Mean magnitude 11.7 RRB,VED,BTY,MED,CGF,FMR,BRJ,OCN,OJR
2027+52	V1974	Cyg	(N)	Reported as magnitude 15.9 FMR,PYG
2037+18	HR	Del	(NB)	Mean magnitude 11.9 PYG,BTY,VED,BEB,HSG,BOS,BRJ,OCN,FMR
2047+35	V1329	Cyg	(NC)	Brightening very slowly, mean magnitude 13.8 BTY,PYG,RRB,BRJ,VET,OCN,OJR
2137+42	Q	Cyg	(NA)	At magnitude 14.8-15.2 BRJ,FMR,PYG
2146+12	AG	Peg	(NC)	Mean magnitude 8.6 BEB,RRB,VED,PTI,FMR,OCN,BRJ,VDL,BOS
2231+52	DI	Lac	(N)	Magnitude 14.2 on JD672 OCN
2337+56	V705	Cas	(NB)	Steady at a mean magnitude of 14.2 BRJ,MRV,OCN,PYG,FMR

IRREGULAR AND UNUSUAL VARIABLES

0027+25B	DZ	And	(R CrB)	Mean magnitude 10.0 VDL,DPA,OJR,BRJ,VED,FMR
0039+40	EG	And	(Z And)	Mean magnitude 7.5 HUR,REP,BEB,VDL,OCN,BRJ,VED,PYG,HSG,FMR
0112+72	V635	Cas	(NL)	Reported as magnitude 15.3-15.4 PYG,FMR
0130+53	AX	Per	(Z And)	At minimum, magnitude 11.8 HAR,PYG,OJR,BRJ,DPA,OCN,FMR,VED
0216+42	3C 66A	(QSO)		Fell from 14.4 on JD662 to 15.0 by JD688 PYG
0228+55	DY	Per	(R CrB)	Two different sequences obviously in use, magnitude most probably near 12.2 BEB,OJR,MRV,BRJ,PYG,FMR
0232+60	V615	Cas	(XR)	Magnitude 10.8 FMR
0400+53	XX	Cam	(R CrB)	Magnitude 7.2 COL,VED,FMR,VDL
0515+32	UV	Aur	(Z And?)	Reported as magnitude 8.8 FMR
0534+61	BY	Cam	()	Magnitude 15.0-15.9 PYG,FMR
0539+09	FU	Ori	(FU Ori)	At magnitude 9.5 BEB
0543+19	SU	Tau	(R CrB)	Continues well below maximum, magnitude 13.9-14.1 HSG,MRV
0659-11	Z	CMa	(?)	Varying in the range 10.0-10.5 OB,FMR
0704-00	V651	Mon	(PN)	Steady at magnitude 11.2-11.3 OB
0725+24	NQ	Gem	(Z And)	Magnitude 8.2 FMR
1058+38	Mark. 421	(GAL)		Nuclear magnitude 12.9 FMR,HSG,PYG
1205+39	NGC 4151	(GAL)		Nuclear magnitude 11.4 FMR
1224+02	3C 273	(QSO)		Magnitude 12.8 FMR
1237-53	UW	Cen	(R CrB)	Continues at deep minimum, magnitude about 15.8 on JD683 CR
1239+37	TX	CVn	(Z And)	At minimum, magnitude 10.0 MRV,VDL,FMR,HSG,VED,PYG,BRJ
1319-53	DY	Cen	(R CrB)	Reported as magnitude 13.1 OB
1328-24	RW	Hya	(Z And)	Magnitude 8.8 AAA
1344+08	CR	Boo	()	About magnitude 15.6 HSG
1406-39	V504	Cen	(R CrB)	Current magnitude 13.1 OB
1428-39	V854	Cen	(R CrB)	Rose from 7.6 to 7.3 PLA
1435-68	AE	Cir	(R CrB)	Reported as magnitude 13.2 OB
1458-71	S	Aps	(R CrB)	Rose from 10.7 to 10.0 during the month AAA,OB
1510+83	Z	UMi	(R CrB)	Continues at deep minimum, magnitude 16.1-16.4 PYG,HSG,MRV
1533+19	LX	Ser	(?)	Magnitude 14.6-15.0 OCN,FMR,PYG
1544+28A	R	CrB	(R CrB)	At maximum, mean magnitude 6.1 HE,PLA,BEB,OCN,VET,BOS,DPA,OJR,MKJ,BTY,PYG, BRJ,COL,AAP,HAR,CGF,VED,HSG,MED,FMR,HUR,REP,HAV,VDL
1601+67	AG	Dra	(Z And)	Surprising scatter in the data, mean magnitude 9.2 PTI,VED,MED,HAR,COL, PYG,BRJ,HSG,FMR,HUR,BEB,TOL,HAV,VDL,OCN,DPA,OJR,MRV,MKJ,BTY
1614-15	V818	Sco	(XI)	Varying in the range 11.9-12.9 BRJ,OB,OCN

1624-53	RZ	Nor	(R CrB)	Near magnitude 11.0	OB,AAA
1645-25	AS 210		(Z And)	Magnitude 12.8 on JD680	OCN
1648-30	CL	Sco	(Z And)	Still bright, magnitude 11.6	CR,FMR
1648-30	HK	Sco	(Z And)	Reported near magnitude 12.6	FMR,CR
1654+35	HZ	Her	(XPR)	In its high state, range 13.0-14.3	BTH,MKJ,BTY,OJR,VET,OCN,FMR,PYG,BRJ
1715+41	V825	Her	(NL)	Magnitude 13.9	OCN
1738-06	XX	Oph	(Unique)	Magnitude 8.9	VED,FMR,OCN
1746-17	V4334	Sgr	(?)	Reported as magnitude 11.1	BEB,OCN,FMR
1801-36	V618	Sgr	(R CrB)	Reported as fainter than magnitude 13.4	OB,FMR
1802-37	WX	CrA	(R CrB)	Fluctuating in the range 12.0-12.5	FMR,OB
1803+05	V426	Oph	(NL)	A magnitude 11.6 maximum near JD680, otherwise near 13.0	HAV,BEB,OCN,BRJ
1805-36	V725	Sgr	(Unique)	Fell from 12.3 on JD662 to 13.0 by JD684 and thereafter no longer detected	OB,FMR
1807+69	3C 371		(QSO)	Magnitude 15.4	GRI,FMR,HSG,PYG
1807-25	V3795	Sgr	(R CrB)	At maximum, magnitude 11.3	OCN,FMR,OB
1808-29	VZ	Sgr	(R CrB)	Very little data, reported as 14.4 on JD661 and 14.0? on JD667. Reported rising rapidly to maximum in September	BRJ,MRV
1808-29	V2756	Sgr	(Z And)	Magnitude 12.9-13.0	BRJ,MRV
1810+20	YY	Her	(Z And)	At minimum, mean magnitude 13.5	AAP,PYG,BRJ,HSG,FMR,OCN,MRV,BTY
1810-00A	FG	Ser	(Z And)	Magnitude about 11.8	BEB,OCN,BRJ,FMR,PYG
1811-46	RS	Tel	(R CrB)	Reported near magnitude 11.0	OB,AAA
1811-29	V2905	Sgr	(Z And)	Reported as magnitude 11.4	OCN,FMR,BRJ
1813+49	AM	Her	(AM+XR)	Continues in its low state, magnitude 14.8-15.2	TOL,HSG,BRJ,HAV,VET,GRI,MRV
1815-24	V1860	Sgr	(R CrB)	Magnitude 12.0	BRJ
1817-12	FR	Sct	(Z And)	Reported as magnitude 10.6	OCN,BRJ,FMR
1818+23	V443	Her	(Z And)	At minimum, magnitude 11.9	VED,PYG,BRJ,OJR,BTY,OCN,FMR
1818-24	GU	Sgr	(R CrB)	At maximum, magnitude 10.4	MRV,OB,BRJ,FMR,OCN
1825-29	V1017	Sgr	(Z And?)	Conflicting data, magnitude perhaps 13.0-13.3	STR,OB,BRJ
1834-23	V348	Sgr	(Unique)	Continues in its low state, reported fainter than magnitude 14.5	HAV,BRJ,VET,STR,OB
1838-21	MV	Sgr	(R CrB)	At maximum, magnitude 13.5	BRJ,OB,FMR
1840-38	V	CrA	(R CrB)	Fell from 12.7 on JD662 to 13.0 by JD690	OB
1848-19A	FN	Sgr	(Z And)	In very slow decline, magnitude 11.5	FMR,BRJ,HAV,BEB,OCN,OB
1848-19B	V4368	Sgr	(Z And?)	Steady at magnitude 10.4	HAV,OCN,BRJ,FMR
1902+15	V1413	Aql	(Z And?)	Reported as magnitude 12.4	OCN,PYG,BRJ
1903+17	SV	Sge	(R CrB)	At maximum, mean magnitude 10.6	DPA,OJR,BRJ,PYG,VED,HSG,FMR,OCN,GRI
1904+43	MV	Lyr	(NL)	The data shows a general decline from about 13.0 early in the month to near 14.0 by JD691	BTH,DPA,BTY,BOS,OJR,MRV,MKJ,STR,VET,OCN,HAV,FMR,HSG,AAP,PYG,BRJ
1910-33	RY	Sgr	(R CrB)	At maximum, range 6.2-6.6	PLA,HAV,OCN,OB,COL,HE,HAR,VED,AAA,FMR
1920+29	BF	Cyg	(Z And)	At minimum, mean magnitude 12.6	OCN,MKJ,OJR,BRJ,PYG,AAP,VED,FMR
1921+50	CH	Cyg	(Z And)	Mean magnitude 9.2	MED,VDL,HAR,PYG,HE,BRJ,MRV,BTH,OJR,DPA,OCN,VED,HAV,TOL,BEB,FMR,HSG
1922+11	V1302	Aql	(Unique)	Magnitude 11.3	BRJ,OCN,FMR
1941+18	QW	Sge	(Z And)	Significant scatter in the data but most likely 11.5-11.8 throughout much of the month with a rise underway by JD688. A major outburst reported during September	PYG,OCN,BRJ,FMR
1942+19	RZ	Vul	(Unique)	Mean magnitude 12.5	OJR,OCN,FMR,HSG,VED,PYG,BRJ
1946+35	CI	Cyg	(Z And)	At minimum, magnitude 11.1	BRJ,VED,PYG,MED,HSG,FMR,HUR,OCN,OJR
1955+33	V482	Cyg	(R CrB)	At maximum, mean magnitude 11.5	AAP,PYG,BRJ,VED,HSG,FMR,HUR,OCN,DPA,OJR
2007+20	FG	Sge	(Unique)	Very wide scatter in the data, probably in the range 10.0-10.5	MED,PYG,VED,BRJ,FMR,TOL,HAV,OCN,VET,STR,OJR,DPA,BTH,MKJ,MRV
2014+37A	P	Cyg	(S DOR)	Mean magnitude 4.9	REP,BEB,VDL,BTY,COL,VED,BRJ,PTI,MED,FMR,HUR,PLA
2020+41	V1515	Cyg	(FU Ori)	Magnitude 12.6	RRB,BTH,VED,FMR,OCN
2020+33	V404	Cyg	(XR)	At or near minimum, fainter than 15.5	BOS,STR,PYG
2020+16	CM	Del	(NL)	Magnitude 13.5-13.9	BTH,STR
2029+40	V1478	Cyg	(S DOR)	Reported as magnitude 13.5-13.6	OCN,RRB
2031+19	LT	Del	(Z And)	Magnitude 13.2	RRB
2055+43	V1057	Cyg	(INT?)	Mean magnitude 12.9	PYG,OCN,BOS,OJR,BRJ,BTH,BTY
2157-17	U	Aqr	(R CrB)	At maximum, magnitude 11.5	CR,OB,BRJ,PYG,OCN,FMR,VET
2158+41	BL	Lac	(BL Lac)	Continues to vary rapidly over short time spans, range 13.2-14.6	STR,MRV,VET,FMR,PYG
2258+59	UV	Cas	(R CrB)	Mean magnitude 10.8	DLA,OJR,DPA,OCN,VDL,BRJ,VED,PYG,MED,HSG,FMR,BEB
2328+48	Z	And	(Z And)	Declining from outburst, magnitude about 10.2	BEB,OCN,OJR,MRV,BRJ,PYG,VED,HSG,MED,FMR

KEY TO OBSERVERS

AAA	A.Alves	CGF	G.Chaple	HAR	R.Hays	MRV	R.Modic	REP	P.Reinhard
AAP	P.Abbott	COL	P.Collins	HAV	R.Harvan	OB	D.Overbeek	RRB	R.Raphael
BEB	R.Berg	CR	T.Cragg	HE	L.Hiett	OCN	S.O'Connor	SCE	C.Scovil
\$BOS	E.Broens	DLA	A.Dill	HSG	G.Hanson	OJR	R.Ripero	STR	R.Stanton
BRJ	J.Bortle	\$DPA	A.Diepvens	HUR	G.Hurst	PLA	A.Filho	TOL	O.Trondal
BTH	T.Burrows	FMR	M.Fonovich	MED	K.Medway	PTI	M.Peattie	\$VDL	J.VanDerLooy
BTY	T.Benner	GRI	J.Griesé	MKJ	J.McKenna	PYG	G.Poyner	#VED	P.Vedrenne
								#VET	M.Verdenet

AAVSO CIRCULAR

EDITOR JOHN E. BORTLE

No. 328

1998

February

The Following Data Covers Observations for January 1998
 Received by February 15, 1998. (January 0 is JD 2,450,814)
 Final Data Available From AAVSO Headquarters May Differ Somewhat From This Limited Sample
 Therefore All Requests For Data Should Be Directed To AAVSO Headquarters

DWARF NOVAR

0006-12	WW	Cet	(836	12.9)	Active near this date?	CGF	
0043+56B	GX	Cas	814	14.3	Very brief outburst	PYG,HSG	
0058+40	RX	And	824	11.0	The star entered a standstill following this outburst	MKJ,DPA,SWT,CGF, VET,MUY,MRV,VED,HAR,MED,PYG,BRJ,HSG	
0109+37	FO	And	815	15.2	HSG		
			838	14.6	PYG,HSG		
0120+31	TY	Psc	(839	14.7)	Active near this date?	BRJ	
0130+50	KT	Per	824	12.2	MUY,CGF,MKJ,HSG,BRJ,PYG		
			836	12.4	VET,CGF,MKJ,PYG,MUY,HSG		
0139+37	AR	And	841	12.1	AAP,MUY,CGF,BRJ		
0201+14	TT	Ari	-	-	Steady near magnitude 10.8	MMI,VET,MUY,CGF,BRJ,PYG,VED	
0206+57A	TZ	Per	827	12.7	HUR,SWT,MKJ,CGF,VET,HSG,BRJ,PYG,MUY		
			845	13.1	Possibly still rising	BRJ,MKJ,CGF,DPA,SWT	
0207-63	WX	Hya	824	12.2	OB		
			835	12.6	CR,HJN,OB		
			845	12.6	HJN		
0211+40	KV	And	828	14.2	PYG,HSG		
0217+70	AM	Cas	815	12.7	HSG		
			827	12.6	CGF,SWT,HSG,BRJ		
			841	12.9	DPA,MKJ,CGF,BRJ		
0243+37	PY	Per	845	14.5	CGF		
0401+50	FO	Per	826	13.0	SWT,CGF,BRJ,HSG		
			836	12.9	OJR,BRJ,VET,HSG,CGF		
0409-71	VW	Hya	825	9.1	OB		
0518+00	BI	Ori	815	14.4	HSG		
			834	14.7	CGF		
0523-03	V1159	Ori	836	13.6	CR,PYG,BRJ,HSG		
			843	13.8	BRJ,CGF		
0541+25	FS	Aur	828	14.8	PYG		
0547-05	CN	Ori	819	12.2	OB,SWT,HSG,BRJ,PYG		
			836	12.1	VET,CGF,MKJ,SWT,OB,OJR,MUY,PYG,BRJ,HSG		
0605+47	SS	Aur	842	11.2	Slow rise to maximum	BEB,MMI,VED,HAR,MED,PYG,BRJ,HSG,MRV,MUY,CGF,MKJ,DPA	
0611+15	CZ	Ori	839	12.4	MUY,CGF,OB,PYG,BRJ,HSG		
0640-16	HL	CMa	819	11.8	MRV,OB,PYG,HSG		
			836	11.5	PYG,MUY,CR,VET,CGF,OB,HSG,BRJ		
0641+28	IR	Gem	844	14.1	BRJ,MUY,CGF,MKJ,SWT		
0725+06	SV	CMi	827	13.1	SWT		
0741-12	UY	Pup	816	13.5	OB,HSG		
0744-23	EV	Pup	834	13.1	HJN,OB		
0803+62	SU	UMa	834	11.8	Very brief outburst	SWT,MUY	
0804+28	YZ	Cnc	814	12.4	HSG,PYG,MRV		
			821	11.9	SWT		
			828	11.0	Supermaximum	MMI,BEB,MRV,MUY,VET,CGF,MKJ,SWT,HSG,BRJ,OJR,PYG,BRJ	
0814+73	Z	Cam	823	10.8	The star entered a standstill following this outburst	HAR,PYG,VED,BRJ, MRV,HSG,MUY,CGF,DPA,SWT	
0822+25	AT	Cnc	819	13.2	PYG		
			828	12.5	SWT		
			845	12.5	MUY,SWT,BRJ		
0854-24	VZ	Pyx	824	12.2	MRV		
0855+18	SY	Cnc	815	11.2	Approaching maximum again at the very end of the month	MRV,PYG,MUY,HSG	
0940+52	ER	UMa	816	13.1	HSG		
			821	13.4	HSG		
			828	12.5	MUY,BRJ,PYG,HSG		
0945+34	RZ	LMi	821	15.1	HSG		
			832	14.2	PYG,HSG		
0945+12	X	Leo	814	12.2	MRV,PYG		
			832	12.4	OB,SWT,PYG,HSG		
1010+72	CI	UMa	843	14.1	BRJ,CGF		
1049+30	SX	LMi	819	13.2	PYG,HSG		
1120-35	V442	Cen	829	11.8	OB		
1133+03	T	Leo	839	10.4	HSG,PYG		
1140-03	TW	Vir	820	14.7	Actual date of maximum earlier or later?	HSG	
			839	13.8	HSG		

1325-54	BV	Cen	821	12.6	OB	
1454+41	TT	Boo	841	13.2	MUY	
1552+72	SS	UMi	816	14.7	HSG	
1640+25	AH	Her	841	12.8	MRV,HSG	
1804+67	EX	Dra	820	13.1	PYG,HSG	
			845	12.9	CGF,BRJ	
1848+26	CY	Lyr	816	13.6	HSG	
			839	13.4	HSG	
1920+52	V1113	Cyg	816	14.2	PYG	
1934+30	EM	Cyg	839	12.7	HSG	
1944+36A	V811	Cyg	839	13.9	HSG	
1953+77	AB	Dra	821	13.1	Complex activity over a small range of magnitude all month	PYG,HSG
			826	12.7	BRJ,CGF	
			839	12.8	MUY,CGF,MRV,PYG,BRJ,HSG	
			845	13.0	CGF,BRJ	
2043+41	V516	Cyg	826	13.5	BRJ,PYG,CGF,HSG	
2138+43A	SS	Cyg	838	8.3	REP,HAR,MED,COL,VED,VDL,MMI,MRV,MUY,DPA,HSG,PYG,BRJ	
2318+17	IP	Peg	821	12.7	Brief outburst	MRV,CGF,MUY,BRJ,HSG
2335+12	HX	Peg	820	12.8	PYG,CGF,HSG,BRJ	
			834	12.8	CGF,HSG	

NOVAE

0059+53	V723	Cas	(NB)	Mean magnitude 12.0	AAP,MMI,PYG,HUR,DPA,MKJ,CGF,VET,VED,FMR,BRJ,MRV,HSG	
0324+43	GK	Per	(NA)	Mean magnitude 13.3	HUR,DPA,MKJ,CGF,VET,MUY,FMR,AAP,PYG,HSG,SWT,BRJ	
0617-00	V616	Mon	(XND)	At or near minimum, fainter than 13.8	MUY,OB	
0634-62	RR	Pic	(NB)	Reported as magnitude 11.8-12.0	OB	
0900-31	T	Pyx	(NR)	Continues at minimum, reported fainter than magnitude 13.5	MRV,OB	
1555+26	T	CrB	(NR)	At minimum, mean magnitude 10.2	KSP,HAR,MED,MRV,HSG,VED	
1616-17	U	Sco	(NR)	At or near minimum, fainter than 12.8	OB	
1744-06	RS	Oph	(NR)	At minimum, magnitude 10.9-11.3	MED,MRV	
1804+45	DQ	Her	(NB)	Reported as magnitude 14.5 using a CCD	FMR	
1811+41	V533	Her	(NA)	Magnitude 15.1	FMR	
1843+00	V603	Aql	(NA)	Reported as magnitude 11.3	FMR	
1849+29	HR	Lyr	(NA)	Magnitude 15.5 using a CCD	FMR	
1937+16	HM	Sge	(NC+M)	Magnitude reported as 11.1	FMR	
1953+39	V1016	Cyg	(NC+M)	Magnitude 10.9	MMI,BRJ,FMR,PYG,VED	
2016+21	PU	Vul	(NC)	Magnitude 11.4-11.6	MMI,FMR	
2027+52	V1974	Cyg	(N)	Reported as magnitude 16.1 using a CCD	FMR	
2037+18	HR	Del	(NB)	Magnitude 11.8-11.9	HSG,FMR	
2047+35	V1329	Cyg	(NC)	Steady near magnitude 13.7	PYG,BRJ	
2137+42	Q	Cyg	(NA)	Magnitude 14.9-15.1	PYG,FMR	
2146+12	AG	Peg	(NC)	Mean magnitude 8.6	COL,VED,FMR,MMI,PYG,DPA	
2337+56	V705	Cas	(NB)	Currently magnitude 14.6	PYG,MRV,BRJ,FMR	

IRREGULAR AND UNUSUAL VARIABLES

0027+25B	DZ	And	(R CrB)	Magnitude 10.1	VDL,DPA,MMI,BRJ,VED,FMR,VED	
0039+40	EG	And	(Z And)	Mean magnitude 7.5	BEB,HUR,PYG,MMI,HSG,VDL,MKJ,COL,FMR,VED	
0112+63	V635	Cas	(NL)	Reported as 15.2-15.5	FMR,PYG	
0130+53	AX	Per	(Z And)	At minimum, mean magnitude 11.8	HAR,VED,BRJ,MUY,FMR,DPA,PYG,MMI	
0216+42	3C 66A		(QSO)	Magnitude 14.9-15.4	PYG,FMR	
0219+27	RW	Tri	(NL)	Varying in the range 12.5-13.2	MUY,BRJ,FMR	
0219-79	SY	Hyi	(R CrB?)	Reportedly declined from 11.8 to 12.6 during the month	CR,OB	
0228+55	DY	Per	(R CrB)	Declined from about 14.0 early in the month to 14.5 by JD840	SWT,PYG,MRV,BRJ	
0313+41	NGC 1275		(GAL)	Nuclear magnitude 13.6 using a CCD	FMR	
0400+53	XX	Cam	(R CrB?)	Magnitude 7.3	VED,FMR,COL,VDL,BEB	
0427+05	BW	Tau	(GAL)	Reported as magnitude 14.2	FMR	
0434+50	FY	Per	(NL)	Magnitude 12.7-12.7	MMI,FMR,BRJ	
0515+32	UV	Aur	(Z And?)	Reportedly rose from about 10.0 on JD816 to 9.3 by JD826, then steady	VED,FMR	
0527-71	W	Men	(R CrB)	Magnitude 13.8	CR	
0539+09	FU	Ori	(FU Ori)	Mean magnitude 9.6	PTI,VED,BRJ,MUY,FMR,VDL,MMI	
0543+19	SU	Tau	(R CrB)	Rapid decline reported. Fell from 13.7 on JD815 to 14.6 on JD820, 15.0 on JD827, and 15.7 by JD838	OJR,MUY,FMR,MRV,BRJ,CR,VET,CGF,PYG,SWT,HSG	
0600-16	SS	Lep	(Z And)	Reported as magnitude 5.0	MMI,FMR,VED	
0609+28	KR	Aur	(Unique)	Magnitude 16.4 using a CCD	FMR	
0658+12	GH	Gem	(Z And)	Magnitude 13.1	FMR	
0659-11	Z	.CMA	(?)	Magnitude in the range 10.0-10.3	OB,VED,FMR	
0704-00	V651	Mon	(PN)	Becoming slightly variable again, range 10.7-11.2	SWT,PYG,OB,CR,FMR,MUY,VED	
0718-25	VY	CMA	(Unique)	Wide scatter in the data, perhaps near 9.2	COL,CR,FMR	
0720-03	BX	Mon	(Z And?)	Reported as magnitude 12.9	PYG	
0721-07	V694	Mon	(Z And)	Magnitude 10.6-10.7	VED	
0725+24	NQ	Gem	(Z And)	At minimum, magnitude 8.5	COL,FMR	
0849+20	OJ 287		(QSO)	Magnitude reported in the range 15.5-16.1	PYG	
1041-59	eta Car		(S DOR)	Magnitude 6.0	CR	

1058+38 Mark. 421 (GAL) Nuclear magnitude 12.8-13.1 HSG,FMR,PYG
 1209+39 NGC 4151 (GAL) Nuclear magnitude near 11.6 PYG,FMR
 1237-53 UW Cen (R CrB) Continues at minimum, fainter than 13.4 OB
 1239+37 TX CVn (Z And) At minimum, magnitude 10.0 MMI,PYG,VED,FMR
 1319-53 DY Cen (R CrB) Reported as magnitude 13.1 OB
 1344+08 CR Boo () Continues active. Reported bright again at 13.6 on JD816, followed by a rapid decline to 16.3 by JD820, recovery to 13.9 by JD824, and steady thereafter MRV,FMR,PYG
 1406-39 V504 Cen (R CrB) Varying in the range 12.6-13.1 OB
 1435-68 AE Cir (R CrB) Magnitude 13.0-13.2 OB
 1458-71 S Aps (R CrB) At maximum, magnitude 10.5 OB
 1510+83 Z UMi (R CrB) Rose from 13.4 to 12.3 during the month HSG,MMI,PYG,CGF,MRV,BRJ
 1533+19 LX Ser (NL) Reported as 15.0 on JD 844 using a CCD FMR
 1544+28A R CrB (R CrB) At maximum, mean magnitude 6.1 AAP,PYG,HSG,MRV,HAR,VED,FMR,COL,KSP,BEB
 1601+67 AG Dra (Z And) At or very near minimum, mean magnitude 9.8 REP,VED,COL,BRJ,VDL,PYG,MMI
 1614-15 V818 Sco (XI) Varying in the range 12.0-12.6 OB,FMR
 1615-59 RT Nor (R CrB) At maximum, magnitude 10.6-10.8 OB
 1624-53 RZ Nor (R CrB) Magnitude 11.2 OB
 1654+35 HZ Her (XPR) Very sparse data, magnitude 13.9-14.1 FMR
 1738-06 XX Oph (Unique) Magnitude 9.0 FMR
 1746-17 V4334 Sgr () Reported as magnitude 11.2 on JD844 FMR
 1807+69 3C 371 (QSO) Magnitude 15.3-15.4 PYG,FMR,HSG
 1810+20 YY Her (Z And) At minimum, magnitude 13.3-13.4 HSG,FMR
 1813+49 AM Her (AM+XR) Still in its low state, magnitude 14.8-15.0 FMR,HSG
 1902+15 V1413 Aql (Z And?) Reported magnitude 12.5 FMR
 1903+17 SV Sge (R CrB) A decline is reported. Fell from about 11.1 on JD816 to 12.5 by JD839 HSG,FMR
 1904+43 MV Lyr (NL) Conflicting data, either in the mid 13's or near 15.0 HSG,FMR
 1910-33 RY Sgr (R CrB) At maximum, magnitude 6.3 FMR
 1920+29 BF Cyg (Z And) At minimum, magnitude 12.4 MMI,BRJ,FMR
 1921+50 CH Cyg (Z And) Steady at a mean magnitude of 9.0 DPA,VDL,HUR,PYG,MMI,HSG,BRJ,HAR,MED,FMR,VED,COL
 1922+11 V1302 Aql (Unique) Magnitude 11.2 FMR
 1942+19 RZ Vul (Unique) Reported as magnitude 12.3 FMR
 1946+35 CI Cyg (Z And) At minimum, magnitude 11.0 MED,BRJ,VED,FMR,MMI,PYG
 1955+33 V482 Cyg (R CrB) At maximum, magnitude 11.2 PYG,FMR,MMI,BRJ
 2007+20 FG Sge (Unique) Magnitude 9.6-9.7 MMI
 2014+37A P Cyg (S DOR) Mean magnitude 4.9 REP,MED,FMR,VED,COL,VDL,HUR,AAP
 2020+41 V1515 Cyg (FU Ori) Magnitude 12.7 MMI,FMR
 2020+33 V404 Cyg (XR) At or near minimum, fainter than 14.8 PYG
 2055+43 V1057 Cyg (INT) Currently magnitude 13.1 HUR,BRJ,PYG
 2157-17 U Aqr (R CrB) At maximum, magnitude 11.4 FMR
 2158+41 BL Lac (BL Lac) Varying in the range 14.9-15.4 PYG,HSG,FMR
 2258+59 UV Cas (R CrB) Mean magnitude 10.9 MUY,VED,BRJ,MED,HSG,MMI,PYG,DPA,VDL,FMR
 2328+48 Z And (Z And) At minimum, mean magnitude 10.7 MKJ,PYG,MMI,HSG,BRJ,MRV,MED,MUY,VED,FMR

EDITOR'S NOTES

CORRECTION - In the last issue (#327) the star 0109+34 FO And was listed with the proper Harvard designation but identified as FN And.

KEY TO OBSERVERS

AAP	P.Abbott	\$DPA	A.Diepvens	HUR	G.Hurst	MRV	R.Modic	PYG	G.Poyner
BEB	R.Berg	FMR	M.Fonovich	KSP	S.Knight	\$MUY	E.Muyllaert	REP	P.Reinhard
BRJ	J.Bortle	HAR	R.Hays	MED	K.Medway	OB	D.Overbeek	SWT	R.Stewart
CGF	G.Chaple	HJN	J.Hers	MKJ	J.McKenna	OJR	R.Ripero	\$VDL	J.VanDerLooy
COL	P.Collins	HSG	G.Hanson	MMI	M.Moeller	PTI	N.Peattie	#VED	P.Vedrenne
CR	T.Cragg							#VET	M.Verdenet

- Association Française des Observateurs d'Etoiles Variables

\$ - Vereniging Voor Sterrenkunde, Werkgroep Veranderlijke Sterren (Belgium)

Send all reports for the CIRCULAR to
 Editor: John E. Bortle
 39 Gold Road
 Stormville, NY 12582, U.S.A.
 e-mail: JBortle@AOL.com
 Send all requests for subscriptions or
data to: **AAVSO**
25 BIRCH STREET
CAMBRIDGE, MA 02138, U.S.A.
 e-mail: aavso@aavso.org

Associate Editors: Robert A. Leitner and
 Charles E. Scovill
 Stamford Observatory
 39 Scofieldtown Road
 Stamford, CT 06903 U.S.A.
 Members: \$10/year U.S.A. \$14 overseas airmail
 Nonmembers: \$25/yr U.S.A. \$30 overseas airmail
 Institutional subscription prices - write AAVSO
 Compiled February 25, 1998 ed: BRJ

THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS
25 Birch Street, Cambridge, MA 02138 USA
INTERNET: aavso@aavso.org
Tel. 617-354-0484 FAX 617-354-0665

AAVSO ALERT NOTICE 239 (June 6, 1997)

OUTBURST OF 2328+48 Z ANDROMEDAE

The prototype of the symbiotic class of variable stars, Z And, is undergoing an outburst, the first such since September 1985 (*see AAVSO Alert Notice 78*), when it brightened to visual magnitude 9.1 and was above minimum for approximately 290 days. Following the 1985 outburst, Z And had shown smaller-scale oscillations, until the beginning of the current outburst in mid-May. Recent observations of Z And reported to the AAVSO include:

Mar 29.8130, 10.8, M. Moeller, Timmendorfer Strand, Germany; 30.5063, 10.9, G. Hanson, Cave Creek, AZ; Apr 8.4847, 11.0, Hanson; 11.8, 10.7, H. Marx, Korntal-Munchingen, Germany; 16.4896, 10.8, Hanson; 21.1, 10.7, M. Fonovich, Plomin, Croatia; 28.4694, 10.9, Hanson; May 8.4646, 10.9, Hanson; 9.110, 10.7, G. Poyner, Birmingham, England; 11.117, 10.7, Poyner; 12.048, 10.7, Poyner; 14.042, 10.7, Poyner; 15.074, 10.7, Poyner; 20.071, 10.6, Poyner; 25.063, 10.6, Poyner; 26.073, 10.2, Poyner; 26.358, 10.1, R. Modic, Richmond Heights, OH; 27.1667, 10.3, J. Bortle, Stormville, NY; 27.4458, 10.2, Hanson; 28.363, 10.1, Modic; 29.4417, 10.0, Hanson; 30.045, 10.0, Poyner; 31.033, 9.7, Poyner; 31.093, 9.9, P. Schmeer, Bischmisheim, Germany; Jun 1.081, 9.8, Fonovich; 3.48, 9.8, Poyner; 3.4375, 9.8, Hanson; 4.364, 9.7, Modic; 6.342, 9.8, Modic.

The accompanying light curve of Z And shows 10-day means of the observations in the AAVSO International Database for the interval JD 2445000 - 2450600 (January 1982 - June 1997). 11,854 observations contributed by 312 observers from around the world were used to create the 10-day means shown. We thank each observer for his or her contribution.

Also accompanying are AAVSO 'b' and 'd' scale charts for Z And. Please use these charts to make your estimates of Z And and report your observations to AAVSO Headquarters. Please be sure to indicate the comparison stars you used. If you use a non-AAVSO sequence to make your observations, be sure to identify it when you report your observations.

REQUEST TO MONITOR 2138+43 SS CYGNI

Astronomers in England have informed us of their plans to observe the dwarf nova cataclysmic variable SS Cyg with the BeppoSAX broadband x-ray satellite when the star has its next outburst. Our assistance has been requested to monitor SS Cyg very closely and inform the astronomers as rapidly as possible when SS Cyg begins to brighten, so they may trigger the satellite observations in time to catch the star early in its outburst.

Please monitor SS Cyg closely, and telephone, fax, or email your observations to AAVSO Headquarters, particularly when you see the star brightening, i.e., becoming brighter than visual magnitude 11.5.