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 1968 January 8

MINIMA OF ECLIPSING VARIABLES (VIII)

This report continues IBVS No. 180, and contains ~~140~~ observed heliocentric minima of 35 eclipsing variable stars. All are visual timings reduced by the tracing-paper method, except where noted. Linear elements in the 1958 General Catalogue of Variable Stars were used to compute the O - C's, unless otherwise specified. The number of estimates used for each minima is given under n.

J.D. hel. (2400000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>RT Andromedae</u>				
39665.811:	+24,719	-0.007:	16	Carl Anderson
39672.712	+24,730	-0.024	10	M. Baldwin
39677.745	+24,738	-0.023	12	M. Baldwin
39694.725	+24,765	-0.024	11	M. Baldwin
39701.640	+24,776	-0.027	11	M. Baldwin
39740.643	+24,838	-0.018	14	W. Lowder
39772.710:	+24,889	-0.026:	15	R. Swanberg
<u>XZ Andromedae</u>				
39744.668	+ 5,055	+0.060	16	W. Lowder
39744.673	+ 5,055	+0.065	20	L. Hazel
39748.742	+ 5,058	+0.062	16	R. Swanberg
39759.598	+ 5,066	+0.060	14	L. Hazel
<u>AB Andromedae</u>				
39672.771	+13,852	+0.058	9	M. Baldwin
39674.764	+13,858	+0.060	11	M. Baldwin
39675.762	+13,861	+0.062	13	M. Baldwin
39677.750	+13,867	+0.059	12	M. Baldwin
39679.737	+13,873	+0.055	11	M. Baldwin
39686.711	+13,894	+0.060	11	M. Baldwin
39694.679	+13,918	+0.062	12	M. Baldwin
39700.649	+13,936	+0.058	10	M. Baldwin
39701.648	+13,939	+0.060	10	M. Baldwin
39757.745	+14,108	+0.070	13	M. Baldwin
39761.724	+14,120	+0.066	11	M. Baldwin

J. D. hel. (2400000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>CX Aquarii</u>				
39707.737	+24,059	+0.021	14	R. Monske
39716.636	+24,075	+0.024	12	R. Monske
39737.760	+24,113	+0.021	14	R. Monske
39737.764	+24,113	+0.025	20	M. Baldwin
39756.668	+24,147	+0.025	13	M. Baldwin
39757.780	+24,149	+0.026	11	M. Baldwin
39761.672	+24,156	+0.026	15	M. Baldwin
<u>OO Aquilae</u>				
39671.650	+10,744.5	-0.031	10	M. Baldwin
39672.667	+10,746.5	-0.027	11	M. Baldwin
39674.690	+10,750.5	-0.031	13	M. Baldwin
39675.707	+10,752.5	-0.028	10	M. Baldwin
39677.730	+10,756.5	-0.032	9	M. Baldwin
39679.760	+10,760.5	-0.029	7	M. Baldwin
39695.724	+10,792	-0.029	10	S. Cook
39696.736	+10,794	-0.031	12	S. Cook
39714.736	+10,829.5	-0.022	10	R. Monske
39716.751	+10,833.5	-0.034	12	R. Monske
39735.756	+10,871	-0.034	11	R. Monske
39744.631	+10,888.5	-0.028	16	W. Lowder
<u>V346 Aquilae</u>				
39664.720	+ 7,534	-0.021	14	M. Baldwin
39674.680	+ 7,543	-0.018	17	M. Baldwin
39675.781	+ 7,544	-0.024	17	M. Baldwin
39715.617	+ 7,580	-0.016	14	R. Monske
39716.720	+ 7,581	-0.020	13	R. Monske
39736.635	+ 7,599	-0.019	14	R. Monske
39737.739	+ 7,600	-0.022	15	R. Monske
<u>WW Aurigae</u>				
39184.8586	+ 2,345	-0.0021	24pe	L. Kalish
<u>SV Camelopardalis</u>				
39686.792	+12,476	-0.020	12	M. Baldwin
39737.801	+12,562	-0.015	13	M. Baldwin
39762.703	+12,604	-0.022	15	M. Baldwin
39765.668	+12,609	-0.022	15	F. Chapman
39771.604:	+12,619	-0.017:	17	D. Livingston
<u>R Canis Majoris</u>				
39528.636	+ 3,533	+0.007	21	M. Baldwin

J. D. hel. (2400000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>RZ Cassiopeiae</u>				
39701. 813	+18,696	-0.039	12	S. Cook
39737. 6737	+18,726	-0.0367	pe	A. Stokes
39749. 6255	+18,736	-0.0374	pe	A. Stokes
39761. 572 <sup>1</sup>	+18,746	-0.043	6	J. Ashbrook
39767. 560 <sup>1</sup>	+18,751	-0.031	5	J. Ashbrook
39785. 481 <sup>1</sup>	+18,765	-0.039	3	J. Ashbrook
39786. 680 <sup>1</sup>	+18,766	-0.035	15	J. Ashbrook
39805. 808 <sup>1</sup>	+18,783	-0.032	12	J. Ashbrook
39822. 524 <sup>1</sup>	+18,797	-0.049	6	J. Ashbrook
39823. 728 <sup>1</sup>	+18,798	-0.041	7	J. Ashbrook
39841. 659 <sup>1</sup>	+18,813	-0.038	4	J. Ashbrook
<u>TV Cassiopeiae</u>				
39704. 802	+10,806	-0.004	11	F. Sanner
<u>AB Cassiopeiae</u>				
39745. 606	+10,432	+0.066	22	L. Hazel
<u>ZZ Cygni</u>				
39759. 594	+29,624	-0.001	16	L. Hazel
<u>V477 Cygni</u>				
39748. 765	+ 2,941	-0.054	14	F. Sanner
39767. 544	+ 2,949	-0.050	12	F. Sanner
<u>Z Draconis</u>				
39530. 577	+ 4,613	+0.010	11	M. Baldwin
39534. 648	+ 4,616	+0.008	14	M. Baldwin
<u>TY Delphini</u>				
39707. 667	+ 9,812	-0.011	14	R. Monske
39738. 630	+ 9,838	-0.017	16	R. Monske
<u>VY Delphini</u>				
39735. 590	+17,577	+0.036	14	L. Hazel
<u>SZ Herculis<sup>2</sup></u>				
39654. 624	+ 3,090	+0.014	16	D. Livingston
39667. 706:	+ 3,106	+0.007:	21	L. Hazel
39735. 615	+ 3,189	+0.014	21	F. Chapman
39744. 612	+ 3,200	+0.012	7	H. Blake
39744. 614:	+ 3,200	+0.014:	23	D. Livingston
39748. 707	+ 3,205	+0.017	21	R. Swanberg
39757. 704	+ 3,216	+0.015	17	M. Baldwin

J. D. hel. (2400000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>UX Herculis</u>				
39650.673	+12,767	-0.053	17	L. Hazel
39667.716	+12,778	-0.048	18	L. Hazel
<u>CT Herculis</u>				
39664.723	+ 4,904	+0.095	18	M. Baldwin
<u>SW Lacertae</u>				
39674.780	+50,830	+0.048	8	M. Baldwin
39675.744	+50,833	+0.050	16	M. Baldwin
39679.760	+50,845.5	+0.057	13	M. Baldwin
39686.811	+50,867.5	+0.051	15	M. Baldwin
39694.670	+50,892	+0.054	12	M. Baldwin
39701.726	+50,914	+0.054	16	M. Baldwin
39707.661	+50,932.5	+0.056	13	M. Baldwin
39737.804	+51,026.5	+0.051	19	M. Baldwin
39751.596	+51,069.5	+0.053	12	H. Blake
39752.561:	+51,072.5	+0.055:	10	H. Blake
39756.732	+51,085.5	+0.057	20	R. Swanberg
39757.695	+51,088.5	+0.058	10	M. Baldwin
39761.706	+51,101	+0.060	20	M. Baldwin
39762.668	+51,104	+0.060	12	M. Baldwin
39764.578	+51,110	+0.046	15	F. Chapman
39766.664	+51,116.5	+0.047	11	F. Chapman
39770.676	+51,129	+0.051	20	R. Swanberg
<u>VX Lacertae</u>				
39736.648	+ 5,130	-0.022	14	L. Hazel
<u>UV Leonis</u>				
39558.683	+10,937	-0.007	12	M. Baldwin
39567.673	+10,952	-0.019	12	M. Baldwin
<u>FL Lyrae</u>				
39678.747	+ 2,673	+0.007	11	S. Cook
<u>RT Persei</u>				
39537.610	+ 7,475	-0.016	12	M. Baldwin
<u>ST Persei</u>				
39528.693	+ 3,776	-0.062	23	M. Baldwin
<u>UX Pegasi</u>				
39739.665	+ 7,323	-0.054	18	L. Hazel

J. D. hel. (240000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>Beta Persei</u>				
39714.775	+610	+0.006	20	R. Monske
39717.639 <sup>1</sup>	+611	+0.003	13	J. Ashbrook
39734.836	+617	-0.004	66pe	D. Henning and G. Gliba
39737.710 <sup>1</sup>	+618	+0.002	4	J. Ashbrook
39737.711	+618	+0.003	19	F. Sanner
39740.568 <sup>1</sup>	+619	-0.007	11	J. Ashbrook
39760.647	+626	+0.001	17	F. Sanner
39823.728 <sup>1</sup>	+648	+0.001	9	J. Ashbrook
39826.594 <sup>1</sup>	+649	-0.001	10	J. Ashbrook
39829.459 <sup>1</sup>	+650	-0.003	8	J. Ashbrook
<u>U Sagittae</u>				
39736.643	+ 6,687	+0.033	18	R. Monske
<u>V505 Sagittarii</u>				
39675.703	+ 5,208	-0.021	13	M. Baldwin
39694.633	+ 5,224	-0.017	7	M. Baldwin
39701.728	+ 5,230	-0.019	14	M. Baldwin
39707.654	+ 5,235	-0.007	7	M. Baldwin
39759.691	+ 5,279	-0.017	16	M. Baldwin
<u>RW Tauri</u>				
39534.618	+ 1,846	+0.007	24	M. Baldwin
<u>X Trianguli</u>				
39739.695	+ 5,192	+0.033	19	F. Chapman
39740.672	+ 5,193	+0.035	12	W. Lowder
39741.640	+ 5,194	+0.032	12	W. Lowder
39772.729	+ 5,226	+0.029	17	R. Swanberg
39777.586	+ 5,231	+0.031	19	F. Chapman
<u>W Ursae Minoris</u>				
36082.644 <sup>+</sup>	+ 1,543	+0.003	12	J. Ashbrook
37113.554 <sup>1</sup>	+ 2,149	+0.005	6	J. Ashbrook
37118.669 <sup>1</sup>	+ 2,152	+0.017	10	J. Ashbrook
37147.570 <sup>1</sup>	+ 2,169	-0.002	8	J. Ashbrook
39350.586 <sup>1</sup>	+ 3,464	+0.015	14	J. Ashbrook
39760.563 <sup>1</sup>	+ 3,705	+0.013	13	J. Ashbrook
<u>AW Vulpeculae</u>				
39734.660	+16,398	-0.015	13	R. Monske

J. D. hel. (2400000+)	<u>E</u>	<u>O - C</u>	<u>n</u>	<u>Observer</u>
<u>BU Vulpeculae</u> 39735.705	+10,787	+0.048	19	R. Monske

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- 1). Reduced with observer's mean light curve.
- 2). O - C's computed from elements in Sky and Tele. 25, 5, 277.
- 3). O - C's computed from elements in Sky and Tele. 27, 5, 316.