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NEW TIMES OF MINIMA OF SOME ECLIPSING VARIABLES

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Observatory and telescope:	
URSA: URSA Observatory at the University of Arkansas (ursa.uark.edu); 10-inch Schmidt-Cassegrain reflector.	
NFO: NFO WebScope near Silver City, NM, USA (www.nfo.edu); 24-inch classical Cassegrain.	

Detector:	URSA: 1020×1530 pixels SBIG ST8EN CCD cooled to (typ.) -20°C ; 1.15 arcsec square pixels; $20'(\text{N-S})\times 30'(\text{E-W})$ field of view.
	NFO: 2102×2092 pixels Kodak KAF 4300E CCD cooled to (typ.) -20 C ; 0.78 arcsec square pixels; $27'$ square field of view.

Method of data reduction:
Virtual measuring engine (Measure 2.0) written by C.H.S. Lacy (2005).

Method of minimum determination:
Kwee & van Woerden (1956)

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
AP And	54285.9143	0.0002	1	V	NFO
	54289.8826	0.0003	2	V	URSA
	54317.6601	0.0004	1	V	URSA
	54327.9778	0.0002	2	V	NFO
	54328.7708	0.0002	1	V	URSA
	54328.7713	0.0002	1	V	NFO
	54331.9456	0.0002	1	V	NFO
	54339.8823	0.0002	1	V	URSA
	54339.8830	0.0004	1	V	NFO
	54343.8510	0.0002	2	V	NFO
	54347.8194	0.0005	1	V	NFO
	54367.6601	0.0001	2	V	NFO
	54371.6281	0.0002	1	V	NFO
	54386.7074	0.0002	2	V	NFO
	54389.8824	0.0002	2	V	NFO
	54393.8503	0.0002	1	V	NFO
	54394.6440	0.0002	2	V	NFO
	54398.6122	0.0002	1	V	URSA
	54401.7867	0.0002	1	V	URSA

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
	54401.7865	0.0002	1	V	NFO
	54405.7550	0.0001	2	V	NFO
	54409.7229	0.0002	1	V	NFO
	54413.6914	0.0004	2	V	URSA
	54413.6911	0.0002	2	V	NFO
	54421.6278	0.0002	2	V	URSA
	54459.7226	0.0002	2	V	NFO
	54463.6909	0.0001	1	V	NFO
	54475.5954	0.0002	1	V	NFO
	54498.6113	0.0002	1	V	NFO
	55097.8142	0.0002	2	V	NFO
CO And	54321.8820	0.0003	2	V	URSA
	54332.8474	0.0003	2	V	NFO
	54343.8131	0.0003	2	V	URSA
	54365.7456	0.0003	2	V	URSA
	54365.7456	0.0002	2	V	NFO
	54387.6785	0.0002	2	V	NFO
	54409.6103	0.0003	2	V	URSA
	54418.7474	0.0004	1	V	NFO
	54420.5760	0.0005	2	V	URSA
	54734.9352	0.0003	2	V	NFO
	54736.7608	0.0003	1	V	URSA
	54745.9002	0.0003	2	V	NFO
	54747.7290	0.0002	1	V	NFO
	54756.8668	0.0002	2	V	NFO
	54758.6957	0.0002	1	V	NFO
	54767.8323	0.0002	2	V	NFO
	54778.8003	0.0005	2	V	URSA
	54778.7987	0.0002	2	V	NFO
	54789.7646	0.0003	2	V	NFO
	54800.7295	0.0003	2	V	NFO
	54811.6962	0.0003	2	V	NFO
	54822.6622	0.0005	2	V	URSA
CG Aur	54386.9152	0.0004	2	V	NFO
	54406.7684	0.0005	2	V	URSA
	54413.9894	0.0006	2	V	NFO
	54423.8644	0.0003	1	V	NFO
	54453.6973	0.0007	2	V	URSA
	54480.7714	0.0005	2	V	NFO
	54489.7942	0.0006	2	V	URSA
	54526.7436	0.0005	1	V	NFO
	54536.7228	0.0009	2	V	NFO
	54746.9401	0.0003	1	V	NFO
	54755.9590	0.0006	1	V	NFO
	54765.9411	0.0006	2	V	URSA
	54767.7473	0.0011	2	V	URSA
	54793.8649	0.0002	1	V	URSA
	54811.9147	0.0005	1	V	NFO
	54820.9374	0.0006	1	V	NFO
	54821.8891	0.0006	2	V	NFO
	54832.7197	0.0004	2	V	URSA
	54842.5937	0.0004	1	V	URSA
	54869.6646	0.0005	1	V	NFO
	54907.5671	0.0007	1	V	URSA

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
HP Aur	54387.8986	0.0003	1	V	NFO
	54397.8588	0.0002	1	V	URSA
	54404.9722	0.0002	1	V	URSA
	54404.9720	0.0002	1	V	NFO
	54432.7178	0.0002	2	V	URSA
	54469.7110	0.0004	2	V	URSA
	54486.7847	0.0007	2	V	URSA
	54489.6304	0.0003	2	V	URSA
	54521.6429	0.0002	1	V	NFO
	54536.5843	0.0004	2	V	URSA
	54737.9104	0.0001	1	V	URSA
	54769.9220	0.0002	2	V	URSA
	54777.7496	0.0002	1	V	URSA
	54779.8821	0.0003	2	V	URSA
	54787.7094	0.0001	1	V	URSA
	54789.8428	0.0003	2	V	URSA
	54849.6013	0.0002	2	V	URSA
	54866.6736	0.0003	2	V	URSA
	54881.6145	0.0002	1	V	URSA
	54908.6470	0.0002	1	V	URSA
	UW Boo	54906.8298	0.0010	2	V
V381 Cas	54334.9247	0.0003	2	V	URSA
V651 Cas	54360.9342	0.0001	1	V	URSA
	54393.8289	0.0001	1	V	URSA
	54402.8002	0.0002	1	V	URSA
	54408.7811	0.0001	1	V	URSA
	54439.6816	0.0001	1	V	URSA
	54466.5955	0.0001	1	V	URSA
	54467.5924	0.0002	1	V	URSA
	54469.5857	0.0001	1	V	URSA
	54727.7602	0.0001	1	V	URSA
	54732.7434	0.0001	1	V	URSA
	54735.7344	0.0001	1	V	URSA
	54750.6865	0.0001	1	V	URSA
	54766.6355	0.0002	1	V	URSA
	54767.6325	0.0001	1	V	URSA
	54769.6261	0.0002	1	V	URSA
	54779.5931	0.0002	1	V	URSA
	54786.5713	0.0001	1	V	URSA
	54792.5522	0.0001	1	V	URSA
	54793.5490	0.0001	1	V	URSA
	54795.5425	0.0001	1	V	URSA
	WW Cep	54304.6991	0.0003	1	V
54320.8009		0.0005	2	V	URSA
54334.6067		0.0006	2	V	URSA
54403.6196		0.0007	2	V	URSA
54419.7208		0.0002	1	V	URSA
54479.5287		0.0003	1	V	URSA
54649.7619		0.0001	1	V	URSA
54732.5776		0.0001	1	V	URSA
54741.7794		0.0001	1	V	URSA
WY Cep	54324.7841	0.0001	1	V	URSA
	54327.9077	0.0003	2	V	URSA

Times of minima:						
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.	
V456 Cyg	54227.9184	0.0001	1	V	NFO	
	54320.6032	0.0003	1	V	URSA	
	54373.6286	0.0002	2	V	NFO	
V974 Cyg	54636.8342	0.0005	1	V	NFO	
V1136 Cyg	54612.7989	0.0006	1	V	NFO	
BF Dra	54260.8543	0.0005	1	V	URSA	
	54305.6982	0.0003	1	V	URSA	
	54344.7510	0.0006	2	V	URSA	
	54361.7525	0.0004	1	V	NFO	
	54406.5972	0.0003	1	V	URSA	
	54406.5976	0.0002	1	V	NFO	
	54613.8163	0.0004	2	V	NFO	
	54731.7160	0.0002	1	V	NFO	
	54938.9325	0.0012	2	V	NFO	
	AC Gem	54466.6994	0.0004	1	V	NFO
		54735.9134	0.0006	1	V	URSA
LV Her	54331.7839	0.0003	2	V	NFO	
	54368.6548	0.0002	2	V	NFO	
	54589.8873	0.0002	2	V	NFO	
	54647.7332	0.0002	1	V	URSA	
	54647.7328	0.0006	1	V	NFO	
	54868.9645	0.0007	1	V	URSA	
WZ Leo	54483.9779	0.0013	2	V	NFO	
	54495.9464	0.0003	1	V	NFO	
	54502.9877	0.0007	1	V	NFO	
	54507.9173	0.0006	2	V	NFO	
	54567.7639	0.0003	1	V	NFO	
	54584.6621	0.0003	1	V	URSA	
	54584.6630	0.0003	1	V	NFO	
	54591.7031	0.0003	1	V	NFO	
V501 Mon	54422.8674	0.0005	2	V	NFO	
	54450.9531	0.0007	2	V	NFO	
	54454.8302	0.0004	1	V	NFO	
	54475.8934	0.0008	1	V	NFO	
	54787.9741	0.0006	2	V	NFO	
V506 Oph	54791.8490	0.0010	1	V	NFO	
	54179.9684	0.0001	1	V	NFO	
	54195.8747	0.0002	1	V	URSA	
	54222.9155	0.0002	2	V	NFO	
	54237.7616	0.0002	2	V	URSA	
	54238.8222	0.0002	2	V	URSA	
	54240.9431	0.0002	2	V	NFO	
	54256.8503	0.0002	2	V	NFO	
	54275.9374	0.0002	2	V	NFO	
	54289.7228	0.0002	2	V	URSA	
	54290.7834	0.0002	2	V	URSA	
	54306.6892	0.0002	2	V	URSA	
	54323.6566	0.0002	2	V	URSA	
	54556.9504	0.0002	2	V	NFO	
	54564.9038	0.0004	1	V	NFO	
	54572.8568	0.0003	2	V	NFO	
	54582.9305	0.0002	1	V	NFO	
54590.8842	0.0001	2	V	URSA		
54600.9580	0.0002	1	V	NFO		

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
	54605.7299	0.0002	2	V	URSA
	54607.8509	0.0003	2	V	URSA
	54625.8780	0.0002	2	V	URSA
	54625.8782	0.0002	2	V	NFO
	54631.7105	0.0003	1	V	NFO
	54632.7710	0.0002	1	V	NFO
	54648.6772	0.0002	1	V	URSA
	54648.6765	0.0003	1	V	NFO
	54726.6186	0.0002	2	V	URSA
	54727.6783	0.0003	2	V	NFO
	54752.5992	0.0001	1	V	NFO
	54865.0047	0.0003	1	V	URSA
	54881.9711	0.0002	1	V	URSA
	54915.9048	0.0002	1	V	URSA
	54916.9655	0.0002	1	V	NFO
	54924.9187	0.0002	2	V	NFO
	54974.7598	0.0006	2	V	NFO
	54984.8325	0.0003	1	V	NFO
	54999.6791	0.0003	1	V	NFO
IM Per	54364.7974	0.0004	2	V	URSA
	54373.8136	0.0002	2	V	NFO
	54392.9735	0.0002	1	V	NFO
	54400.8664	0.0003	2	V	NFO
	54408.7535	0.0002	1	V	NFO
	54409.8810	0.0005	2	V	URSA
	54409.8827	0.0004	2	V	NFO
	54416.6436	0.0004	2	V	NFO
	54487.6514	0.0003	1	V	NFO
	54505.6866	0.0003	1	V	NFO
	55109.8221	0.0007	1	V	NFO
V482 Per	54193.6316	0.0006	2	V	NFO
	54402.8237	0.0003	1	V	NFO
	54408.9423	0.0004	2	V	URSA
	54764.9399	0.0005	1	V	URSA
	54764.9392	0.0004	1	V	NFO
	54774.7265	0.0006	1	V	URSA
	54786.9621	0.0005	1	V	NFO
	54801.6414	0.0008	1	V	NFO
	54812.6523	0.0006	2	V	URSA
	54840.7884	0.0005	1	V	URSA
	54840.7874	0.0005	1	V	NFO
	54845.6802	0.0004	1	V	NFO
	54867.7018	0.0004	1	V	URSA
	54867.7024	0.0004	1	V	NFO
V514 Per	54370.8736	0.0004	2	V	NFO
	54411.8034	0.0005	1	V	NFO
	54412.7129	0.0007	2	V	NFO
	54422.7193	0.0006	1	V	URSA
	54422.7215	0.0010	1	V	NFO
	54503.6717	0.0005	2	V	NFO
	54733.7953	0.0005	1	V	URSA
	54742.8921	0.0004	1	V	URSA
	54742.8907	0.0010	1	V	NFO
	54753.8085	0.0006	1	V	NFO

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
	54762.9037	0.0005	1	V	NFO
	54794.7391	0.0009	2	V	NFO
	54795.6452	0.0005	1	V	NFO
	54803.8337	0.0012	2	V	NFO
	54865.6842	0.0005	2	V	NFO
	55094.8967	0.0005	2	V	NFO
	55104.9025	0.0009	1	V	NFO
	55105.8154	0.0006	2	V	NFO
AQ Ser	54210.7929	0.0003	2	V	URSA
	54221.7613	0.0004	1	V	NFO
	54242.8536	0.0002	2	V	NFO
	54259.7283	0.0003	2	V	NFO
V335 Ser	54616.7031	0.0002	1	V	URSA
	54616.7032	0.0002	1	V	NFO
TY Tau	54403.7429	0.0005	2	V	URSA
	54404.9722	0.0002	2	V	URSA
	54410.7442	0.0003	1	V	URSA
	54411.8215	0.0003	1	V	URSA
	54412.8990	0.0002	1	V	URSA
	54413.9757	0.0006	1	V	URSA
	54419.9011	0.0004	2	V	URSA
	54437.6785	0.0002	1	V	URSA
	54451.6849	0.0002	1	V	URSA
	54453.8400	0.0003	1	V	URSA
	54465.6896	0.0003	1	V	URSA
	54466.7673	0.0002	1	V	URSA
	54477.5404	0.0004	1	V	URSA
	54479.6950	0.0003	1	V	URSA
	54486.6969	0.0006	2	V	URSA
	54499.6275	0.0005	2	V	URSA
	54506.6298	0.0002	1	V	URSA
	54526.5625	0.0007	2	V	URSA
	54732.8767	0.0004	1	V	URSA
	54733.9552	0.0003	1	V	URSA
	54740.9554	0.0006	2	V	URSA
	54766.8121	0.0005	2	V	URSA
	54767.8898	0.0004	2	V	URSA
	54768.9673	0.0010	2	V	URSA
	54774.8930	0.0003	1	V	URSA
	54779.7399	0.0005	2	V	URSA
	54786.7446	0.0002	1	V	URSA
	54787.8229	0.0003	1	V	URSA
	54792.6688	0.0004	2	V	URSA
	54795.9019	0.0008	2	V	URSA
	54822.8342	0.0009	2	V	URSA
	54842.7657	0.0004	1	V	URSA
	54848.6930	0.0005	2	V	URSA
	54849.7702	0.0006	2	V	URSA
	54853.5409	0.0004	1	V	URSA
	54882.6298	0.0002	1	V	URSA
CF Tau	54384.8710	0.0004	1	V	NFO
	54406.9206	0.0003	1	V	NFO
	54734.8615	0.0004	1	V	URSA

Times of minima:					
Star name	Time of min. HJD 2400000+	Error	Type	Filter	Rem.
V1094 Tau	54438.6645	0.0002	1	V	URSA
	54447.6544	0.0003	1	V	NFO
BP Vul	54346.7370	0.0002	1	V	NFO
	54347.6682	0.0002	2	V	NFO
	54380.6558	0.0006	2	V	NFO
	54381.6640	0.0001	1	V	NFO
	54632.9003	0.0002	2	V	NFO
	54740.6289	0.0001	1	V	URSA
	55097.6520	0.0003	1	V	NFO
BT Vul	54206.8771	0.0004	1	V	URSA
	54234.8349	0.0003	2	V	URSA
	54314.7229	0.0007	2	V	URSA
	54319.8561	0.0002	1	V	URSA
	54326.7036	0.0002	1	V	URSA
	54327.8448	0.0001	1	V	NFO
	54346.6742	0.0006	2	V	URSA
	54346.6746	0.0002	2	V	NFO
	54358.6558	0.0002	1	V	NFO
	54362.6500	0.0002	2	V	NFO
	54370.6370	0.0002	2	V	NFO
	54379.7680	0.0004	2	V	NFO
	54382.6213	0.0002	1	V	NFO
	54398.5972	0.0003	1	V	NFO
	54402.5932	0.0004	2	V	URSA
	54402.5930	0.0004	2	V	NFO
	54410.5817	0.0004	2	V	NFO
	54458.5123	0.0007	2	V	URSA
	54586.8975	0.0004	1	V	NFO
	54594.8854	0.0002	1	V	NFO
	54614.8562	0.0004	2	V	NFO
	54618.8507	0.0002	1	V	NFO
	54642.8155	0.0003	2	V	NFO
	54722.6994	0.0003	1	V	NFO
	54726.6930	0.0007	2	V	URSA
	54734.6810	0.0005	2	V	URSA
	54739.8167	0.0005	1	V	NFO
	54746.6643	0.0003	1	V	NFO
	54754.6533	0.0002	1	V	NFO
	54762.6415	0.0002	1	V	NFO
	54774.6239	0.0004	2	V	URSA
	54778.6189	0.0001	1	V	NFO
	54794.5946	0.0002	1	V	NFO
	54986.8895	0.0005	2	V	NFO
	54998.8704	0.0002	1	V	NFO
	55106.7132	0.0004	2	V	NFO

Remarks:

A sample of the observations has been published by Lacy, Hood & Straughn (2001). Mean deviations between independently timed eclipses by the two telescopes (URSA & NFO) are not significantly larger than expected based on the error estimates, implying that the estimated timing errors are realistic.

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