

MAS RR Lyrae Ephemeris for October 2015

all times in U.T.

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	SW	XX	AT	SW	TZ	YZ	AA	BO	BR	DN	TZ	BH	RS	ST	SW	SZ	TV	TW	UU	UY	UY	RW	TT	
	AND	AND	AND	AQR	AQR	AQR	AQR	AQR	AQR	AQR	AUR	AUR	BOO	BOO	BOO	BOO	BOO	BOO	BOO	BOO	BOO	CAM	CNC	CNC
MAX	9.3	10.3	10.8	10.5	11.6	12.1	11.4	11.6	10.8	10.7	11.2	11.1	9.8	10.6	11.3	12.0	10.8	10.8	11.2	10.6	11.5	10.7	11.0	
MIN	10.8	11.6	11.5	12.1	12.4	12.9	13.0	12.6	11.9	11.5	12.8	12.6	11.3	11.8	12.7	13.4	11.5	12.1	12.7	12.0	11.9	12.6	12.3	
RISE	2	3	3	1	3	2	2	3	2	3	2	2	2	3	2	2	3	2	1	2	3	2	3	
0- 1	3.0	2.5	7.5	8.0	7.5	3.0		1.5	4.0	3.5	7.0	7.5			3.0							0.5		
1- 2	0.5			6.0		5.5	4.0		3.0		11.5	5.5	2.5	0.5			12.0					2.0	7.5	
2- 3	8.0	6.5	4.0	4.0	0.5	8.0		3.5	2.0	1.0	6.0	3.0					3.0		2.5		3.5	10.0		
3- 4	5.5		9.5	2.0	4.0				1.0	7.5	10.5	12.0		12.0			1.5	10.5	0.5		5.0	12.0	8.5	
4- 5	2.5	10.5	0.5		7.5		5.0	5.5	0.5		5.0	10.0	3.0	3.0			0.0	12.5		1.0	0.5		12.0	
5- 6	10.5	4.0	6.0			2.0				5.0	9.5	8.0												
6- 7	7.5		11.5	7.0	0.5	4.5	1.0	7.5			4.0	5.5	0.5				12.0	2.5				3.5		
7- 8	5.0	8.0	2.5	5.0	4.0	7.0	6.0		9.5	2.5	8.5	3.5	3.5				3.0	4.0	3.0		5.5	8.0	7.5	
8- 9	2.0	1.0	8.0	3.0	7.5				8.5		12.5						0.5	1.5		1.0	0.5	10.0	10.5	
9-10	10.0	12.0		1.0			2.0	2.0	7.5	0.5	7.5	10.5	1.0	2.5			1.5	0.0				2.0		
10-11	7.5	5.0	4.5		0.5	1.5	7.5		6.5	6.5	11.5	8.0					2.5					4.0		
11-12	4.5		10.0		4.0	4.0		4.0	6.0		6.5	6.0						12.5				5.5		
12-13	1.5	9.0	1.0	6.5	7.5	6.5	3.0		5.0	4.5	10.5	4.0	1.5				3.5	12.0	4.0		0.5		9.0	
13-14	9.5	2.5	6.5	4.5			8.5	6.0	4.0		5.5					11.5	2.0	0.5	2.0		2.5	8.5	12.0	
14-15	7.0		12.0	2.5	0.5				3.0	2.0	9.5	10.5		2.0	12.0		0.5	2.0			4.0	10.5		
15-16	4.0	6.5	3.0	0.5	4.0	0.5	4.0	8.0	2.5	8.5	4.5	8.5	1.5		0.5			3.5			5.5			
16-17	1.5		8.5		7.5	3.0		0.5	1.5		8.5	6.5			1.0		12.5				1.0		7.5	
17-18	9.0	10.5		7.5		5.5			0.5	6.0	3.5	4.5			2.0		3.5			1.5	2.5		11.0	
18-19	6.5	4.0	5.0	5.5	0.5	8.0	5.0	2.5			7.5	2.5	2.0		2.5		2.0		2.5		4.0	6.5		
19-20	3.5		10.5	3.5	4.0						3.5	12.0	11.0		1.5	3.0	12.5	0.5		0.5	0.0	5.5	9.0	
20-21	1.0	8.0	1.0	2.0	7.0		1.0	4.5	9.5		6.5	9.0				1.0		11.5			1.0	11.0		
21-22	8.5	1.5	7.0			2.0	6.5		8.5	1.5	11.0	7.0	2.5			2.0	12.5	0.5			2.5		9.5	
22-23	6.0	12.0			0.5	4.5		6.5	8.0	7.5	5.5	5.0		4.0		3.0	3.5	2.0			4.0			
23-24	3.0	5.5	3.5	7.0	4.0	7.0	2.0		7.0		10.0	2.5					2.0	3.5	3.0		6.0			
24-25	0.5		9.0	5.0	7.0		7.5	8.5	6.0	5.5	4.5	11.5	3.0	1.0			0.5		1.0		1.0	7.0		
25-26	8.0	9.5		3.0				1.0	5.0		9.0	9.5								12.5	2.5	9.5	8.0	
26-27	5.5	3.0	5.5	1.0	0.5	1.5	3.0		4.5	3.0	3.5	7.5	0.5				12.5				4.5	11.5	11.0	
27-28	2.5		11.0		3.5	4.0	8.5	3.0	3.5		8.0	5.0	3.5	3.5			3.5				6.0			
28-29	10.5	7.0	1.5		7.0	6.5			2.5	0.5	12.0	3.0					2.0	11.0	3.5		1.0			
29-30	7.5	0.0	7.5	6.5			4.5	5.0	2.0	7.0	7.0	12.0	1.0	0.5			0.5		1.5		3.0		7.0	
30-31	5.0	11.0		4.5	0.5				1.0		11.0	10.0				12.0		1.5			4.5	7.5	10.0	

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	VZ	VZ	SS	RV	RZ	VW	YZ	AN	RR	RU	RV	RX	RZ	UU	XX	XZ	DM	RW	XZ	RX	SV	BB	RX
	CNC	CNC	CVN	CAP	CAP	CAP	CAP	CAP	CET	CET	CET	CET	CET	CET	CYG	CYG	CYG	DRA	DRA	ERI	ERI	ERI	FOR
MAX	7.2	7.2	11.2	10.2	12.5	12.6	11.0	12.0	9.3	10.8	10.3	11.0	11.2	11.5	11.4	9.1	11.2	11.0	9.6	9.2	9.6	10.9	11.1
MIN	7.9	7.9	12.5	11.6	13.5	13.5	11.6	13.0	10.3	12.1	11.2	11.7	12.4	12.4	12.5	10.5	12.7	12.0	10.3	10.1	10.2	11.9	12.5
RISE	1	1	2	2	3	2	3	5	2	3	3	3	2	3	1	3	2	2	3	3	5	2	2
0- 1	7.5	12.0	0.5	3.0		1.5	0.0	5.0	6.5			5.5	5.5	8.0	8.5	10.0	9.5	5.0	5.5		6.0		7.5
1- 2	9.5		10.5	0.5	4.0	0.0	2.5		9.0	4.5	3.5	9.5	6.0		3.5	8.5	6.0	2.5	4.5	7.0			12.0
2- 3	11.0					6.5	4.5		11.5	8.5	9.5		6.5	3.5	9.0	7.0	2.0	10.5	3.5	11.5	9.0	7.0	
3- 4		8.5		6.0	4.5	5.0	0.5	1.5	0.5			2.5	7.0	8.5	4.5	5.5	8.0	7.5	2.0			10.5	7.0
4- 5		10.0		3.5		3.5	2.5		3.0	3.0	6.5	6.0	7.5		9.5	3.5	4.5	5.0	1.0	5.5			12.0
5- 6	7.5	12.0		1.0	4.5	2.5	5.0	5.0	5.5	7.0	12.5	9.5	8.0	4.0	5.0	2.0	0.5	2.0	11.5	9.5	6.0		
6- 7	9.0					1.0	0.5		8.5		3.5		8.5	9.0	0.5	0.5	6.5	10.0	10.5			7.0	7.0
7- 8	11.0			7.0	4.5		3.0		11.0	1.0	9.0	3.0	9.0		5.5	10.0	3.0	7.0	9.0		9.0	10.0	11.5
8- 9		8.0		4.5		5.5	5.0	1.5		5.5		6.5	9.5	5.0	1.0	8.5	9.0	4.5	8.0	8.0			
9-10		10.0	2.5	2.0	4.5	4.5	1.0		2.5	9.5	6.0	10.0	10.0		6.0	7.0	5.0	2.0	7.0	12.5			6.5
10-11	7.5	11.5	1.5			3.0	3.0	4.5	5.0		12.0		10.5	0.5	1.5	5.5	1.5	9.5	6.0		5.5	6.5	11.0
11-12	9.0		0.5		5.0	1.5	5.5		7.5	3.5	3.0	3.5	11.0	5.5	6.5	3.5	7.5	7.0	4.5	6.5		10.0	
12-13	10.5		11.0	5.0	0.0	0.0	1.0		10.5	8.0	9.0	7.0	11.5		2.0	2.0	4.0	4.0	3.5	11.0	9.0		6.0
13-14	12.5	8.0		2.5	5.0	6.5	3.0	1.0				10.5	12.0	1.0	7.0	0.5	10.0	1.5	2.5				11.0
14-15		10.0		0.0	0.0	5.0	5.5		2.0	2.0	6.0			6.5	2.5	10.0	6.0	9.5	1.0	5.0		6.5	
15-16	7.0	11.5			5.0	3.5	1.0	4.5	4.5	6.0	11.5	3.5			7.5	8.5	2.5	6.5	0.0	9.5	5.5	9.5	6.0
16-17	9.0			6.0	0.5	2.5	3.5		7.0	10.5	2.5	7.5		2.0	3.0	7.0	8.5	4.0	10.5				10.5
17-18	10.5			3.5	5.0	1.0	5.5		9.5		8.5		2.0	7.0	8.0	5.0	4.5	1.0	9.5		9.0		
18-19	12.5	8.0		1.0	0.5		1.5	1.0	12.5	4.5		0.5	2.5		3.5	3.5	1.0	9.0	8.0	8.0		6.0	5.5
19-20		9.5			5.5	5.5	3.5		1.5	8.5	5.5	4.0	3.0	2.5	8.5	2.0	7.0	6.5	7.0	12.0	12.5	9.5	10.0
20-21	7.0	11.5	2.5	6.5	0.5	4.5	6.0	4.5	4.0		11.5	7.5	3.5	8.0	4.0	0.5	3.0	3.5	6.0		5.5		
21-22	8.5		1.5	4.0	5.5	3.0	1.5		6.5	3.0	2.5		4.0		9.5	10.0	9.5	1.0	5.0	6.5			5.0
22-23	10.5		0.5	1.5	0.5	1.5	4.0		9.0	7.0	8.5	1.0	4.5	3.5	4.5	8.5	5.5	8.5	3.5	10.5	9.0	6.0	10.0
23-24	12.0	8.0	11.0		5.5	0.0	6.0	0.5	11.5			4.5	5.0	8.5	0.0	7.0	2.0	6.0	2.5			9.0	
24-25		9.5	10.0		1.0	6.5	1.5		1.0	1.0	5.0	8.0	5.5		5.0	5.0	8.0	3.0	1.5	4.5	12.5		5.0
25-26		11.0		5.0	5.5	5.0	4.0	4.0	3.5	5.5	11.0		6.0	4.0	0.5	3.5	4.0	0.5	0.5	9.0	5.5		9.5
26-27	8.5			2.5	1.0	3.5	6.0		6.0	9.5	2.0	1.5	6.5	9.0	6.0	2.0	0.5	8.5	10.5			5.5	
27-28	10.5				6.0	2.5	2.0		8.5		8.0	5.0	7.0		1.0	0.5	6.5	5.5	9.5		9.0	9.0	4.5
28-29	12.0	7.5			1.0	1.0	4.0	0.5	11.0	3.5		8.5	7.5	5.0	6.5	10.0	2.5	3.0	8.5	7.5		12.5	9.0
29-30		9.5		5.5	6.0		6.5		0.5	8.0	5.0				1.5	8.5	9.0	0.0	7.0	11.5	12.5		
30-31		11.0		3.0	1.0	5.5	2.0	4.0	3.0		11.0	1.5	8.5	0.5	7.0	7.0	5.0	8.0	6.0		5.5	5.5	4.0

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	SS	RR	TW	VX	VZ	AR	DL	DY	DY	DY	LS	SZ	UU	DG	DH	RR	SS	ST	TV	WW	AA	U	SZ	
	FOR	GEM	HER	HER	HER	HER	HER	HER	HER	HER	HER	HYA	HYA	HYA	HYA	LEO	LEO	LEO	LEO	LEO	LEO	LEP	LYN	
MAX	9.4	10.7	10.5	9.9	10.7	10.6	11.0	10.2	10.2	10.2	10.8	10.6	10.7	11.6	11.4	10.0	10.5	10.8	11.5	11.0	11.3	9.8	9.1	
MIN	10.6	11.9	11.8	10.4	12.0	11.6	12.4	10.6	10.6	10.6	11.1	11.7	12.3	12.6	12.6	11.7	12.0	12.3	12.6	12.0	12.4	11.1	9.6	
RISE	2	2	2	2	2	2	1	1	1	1	2	2	2	3	2	2	2	2	2	3	2	2	1	
0- 1		6.0	3.5			2.0		1.5			0.5								8.0	12.0			11.0	
1- 2		10.5			4.5	0.5			2.5														4.5	
2- 3		6.0	3.5	4.0	1.5		1.0		0.0	3.5	2.5		8.5		10.5	11.5						7.0	6.5	
3- 4		10.5		1.5						1.0	0.5		9.5		8.0		12.5		8.5	12.0	11.0		8.5	
4- 5		5.5	3.5					2.0					10.5				11.5						10.5	
5- 6		10.0			3.5	6.0			3.0		2.5	10.0	12.0				10.5					5.0	3.5	
6- 7		5.0	3.0		1.0	4.5	4.5		0.5	4.0	0.5	12.0			12.0				8.5	12.0		9.0	6.0	
7- 8		9.5		4.0		3.0				1.5				12.0	9.5	12.0							8.0	
8- 9		5.0	3.0	2.0	5.5	2.0		2.5			2.5				11.5								10.0	
9-10	11.5	9.5			2.5	0.5	3.5			3.5		0.5			11.0					9.0	11.5	6.5	12.0	
10-11	11.0	4.5	3.0						0.5						10.5							10.5	5.0	
11-12	11.0	9.0								1.5	2.5				10.0	11.5							7.5	
12-13	10.5		3.0	4.5	4.5		2.5	2.5			0.5	9.5		8.0	9.5	9.0	12.0			9.5	11.5		9.5	
13-14	10.5	9.0		2.0	2.0	6.0		0.0	3.5			11.5	8.5		9.0								8.5	11.5
14-15	10.0		3.0	0.0		4.5			1.0		2.5		9.5		8.5		12.0					12.0	4.5	
15-16	10.0	8.5				3.0	1.5			2.0	0.5		10.5	8.5			11.0			9.5	11.5		6.5	
16-17	9.5		3.0		4.0	1.5		3.0					12.0			11.0	10.0						6.0	9.0
17-18	9.5	8.0			1.0	0.0		0.5	4.0		2.5					8.5	12.5						10.0	11.0
18-19	9.5		3.0	2.5			0.5		1.5		0.5			9.0						10.0	11.0		4.0	
19-20	9.0	8.0		0.0	6.0		4.5			2.5		9.0											6.0	
20-21	9.0	12.5	3.0		3.0			3.5			2.5	11.0											8.0	8.0
21-22	8.5	7.5			0.0	5.5		0.5			0.5			9.5	10.5			10.5	10.5	11.0	11.5		10.5	
22-23	8.5	12.0	3.0			4.0	3.5		1.5						8.0								12.5	
23-24	8.0	7.0		2.5	5.0	2.5				2.5	2.5							11.0				5.5	5.5	
24-25	8.0	11.5	3.0	0.5	2.0	1.5		3.5		0.0	0.5		8.5	10.0						10.5	11.0	9.5	7.5	
25-26	8.0	7.0				11.0	2.5	1.0					9.5		12.0		12.0	11.0					9.5	
26-27	7.5	11.5	2.5						2.0		2.5	9.0	10.5		10.0		11.0						12.0	
27-28	7.5	6.5			4.0					3.0	0.5	10.5	12.0	10.5				10.0	11.5	11.0	10.5	7.0	5.0	
28-29	7.0	11.0	2.5	3.0	1.0		1.5	4.0		0.5		12.5										11.0	7.0	
29-30	7.0	6.0		0.5		5.5		1.5			2.5				12.5			12.0					9.0	
30-31	6.5	11.0	2.5		6.0	4.0			2.5		0.5			10.5	12.0	11.5				11.5	10.5	5.0	11.0	

	SZ	SZ	RR	RZ	ST	AV	BH	RU	DF	RV	TU
	LYN	LYN	LYR	LYR	OPH	PEG	PEG	SCL	SER	UMA	UMA
MAX	9.1	9.1	7.1	10.0	11.3	9.9	10.0	9.3	11.4	10.1	9.2
MIN	9.6	9.6	8.1	12.0	12.7	10.9	10.8	10.8	13.0	11.2	10.2
RISE	1	1	2	2	3	2	3	2	2	3	3
0- 1	5.0	8.0	0.0	4.5	0.0	4.0	10.0			4.5	
1- 2	7.0	10.0	3.0	5.0		8.0	1.5			3.0	
2- 3	9.0	12.0	6.5	6.0		2.5	8.0			1.5	
3- 4	11.0	5.5		6.5	3.5	7.0		9.5	0.0	11.0	9.0
4- 5	4.5	7.5		7.0	1.5	1.5	6.5	9.0		9.5	11.5
5- 6	6.5	9.5	2.5	7.5		5.5		8.5		8.0	
6- 7	8.5	11.5	5.5			0.5	4.5	8.5	1.5	6.5	
7- 8	10.5	5.0	9.0			4.5		8.0		5.0	
8- 9	4.0	7.0			2.5	8.5	2.5	8.0		3.5	9.5
9-10	6.0	9.0	1.5		0.0	3.5	9.5	7.5		2.0	12.0
10-11	8.0	11.0	5.0			7.5	0.5	7.0	0.0	0.5	
11-12	10.0	4.5	8.0			2.0	7.5	7.0		10.0	
12-13	12.0	6.5			4.0	6.5		6.5		8.5	
13-14	5.5	8.5	1.0		1.5	1.0	5.5	6.0	2.0	7.0	9.5
14-15	7.5	10.5	4.0			5.0		6.0		5.5	
15-16	9.5	4.0	7.5	0.5		9.5	4.0	5.5		4.0	
16-17	11.5	6.0		1.0		4.0		5.0		2.5	
17-18	5.0	8.0	0.0	1.5	2.5	8.0	2.0	5.0	0.5	1.0	
18-19	7.0	10.0	3.5	2.0	0.5	3.0	8.5	4.5		10.5	10.0
19-20	9.0	12.0	6.5	2.5		7.0	0.0	4.5		9.0	
20-21	11.0	5.5		3.0		1.5	7.0	4.0	2.0	7.5	
21-22	4.5	7.5		3.5	4.0	6.0		3.5		6.0	
22-23	6.5	9.5	2.5	4.5	1.5	0.5	5.0	3.5		4.5	
23-24	8.5	11.5	5.5	5.0		4.5		3.0		3.0	10.5
24-25	10.5	5.0	9.0	5.5		9.0	3.0	2.5	0.5	1.5	0.0
25-26	4.0	7.0		6.0		3.5	10.0	2.5		11.0	
26-27	6.0	9.0	1.5	6.5	3.0	7.5	1.5	2.0		9.5	
27-28	8.0	11.0	5.0	7.0	0.5	2.5	8.0	1.5	2.0	8.0	
28-29	10.0	4.5	8.0	7.5		6.5		1.5		6.5	11.0
29-30	12.0	6.5				1.0	6.0	1.0		5.0	
30-31	5.5	8.5	1.0		4.0	5.5		0.5		3.5	