

MAS RR Lyrae Ephemeris for September 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	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	1.5	11.0	2.0		1.0	7.5	3.0	5.0	7.0	8.5		5.0	4.0						3.0		2.5		
1- 2	9.0	4.5	7.5	9.5	4.5	10.0	8.0		6.0		7.5			3.5			4.5		1.0		4.0		
2- 3	6.5			7.5	7.5			7.0	5.0	6.0	11.5	11.5	1.5				3.0	1.0		3.5	6.0		9.0
3- 4	3.5	8.5	4.0	5.5		2.0	4.0		4.0		6.5	9.5	4.5				1.5	2.5			1.0	9.5	12.0
4- 5	1.0	2.0	9.5	3.5	1.0	4.5	9.0	9.0	3.5	3.5	10.5	7.5		6.0		1.0		4.0	5.5	2.5	2.5	12.0	
5- 6	8.5			1.5	4.0	7.0		2.0	2.5	10.0	5.5	5.5	2.0			2.0		5.5	3.5		4.5		
6- 7	6.0	6.0	6.0		7.5	9.0	5.0		1.5		9.5		5.0	3.0		3.0	4.5		1.5	1.0	6.0		
7- 8	3.0		11.5	8.5			10.0	3.5		8.0						4.0	3.0				1.0		10.5
8- 9	11.0	10.0	2.5	6.5	1.0	1.0	1.0		11.5		8.5	10.0	2.0		1.0		1.5				3.0		
9-10	8.5	3.5	8.0	4.5	4.0	3.5	6.0	5.5	10.5	5.5		8.0	5.5	5.5	1.5						4.5	10.0	
10-11	5.5			3.0	7.5	6.0			9.5		7.5	6.0				2.5			0.5	4.0	6.0		
11-12	2.5	7.5	4.5	1.0		8.5	2.0	7.5	9.0	3.0	12.0		2.5	2.5	3.0		4.5	2.0	2.0		1.5		9.5
12-13	10.5	0.5	10.0	10.0	0.5		7.0		8.0	9.5	6.5					3.5	3.0	3.5			3.0		
13-14	8.0	11.5	1.0	8.0	4.0			9.5	7.0		11.0	10.5				4.5	1.5	5.5			4.5		
14-15	5.0	4.5	6.5	6.0	7.5	2.5	3.0	2.5	6.0	7.0	5.5	8.5	3.0	5.0	5.0						6.0	8.5	
15-16	2.5			4.0		5.0	8.0		5.5		10.0	6.0							5.0		1.5	10.5	
16-17	10.0	9.0	3.0	2.0	0.5	7.5		4.5	4.5	4.5		4.0		2.0		1.5	4.5		3.0		3.0		11.0
17-18	7.5	2.0	8.5		4.0	10.0	4.0		3.5		9.0		3.5			2.5	3.0		0.5	2.5	4.5		
18-19	4.5			9.0	7.5		9.0	6.0	2.5	2.5		11.0				3.5	1.5				6.5		
19-20	2.0	6.0	5.0	7.0		2.0			2.0	9.0	8.0	8.5	1.0	4.5		4.5		2.0		1.5	1.5		
20-21	9.5		10.5	5.5	0.5	4.5	5.0	8.0	1.0			6.5	4.0						3.5	5.5	3.0	9.0	9.5
21-22	7.0	10.0	1.5	3.5	4.0	7.0	10.0	1.0	11.5	6.5	7.0	4.5		1.5			4.5	5.0	3.5		5.0	11.0	
22-23	4.0	3.5	7.0	1.5	7.5	9.5	1.0	10.0	11.0		11.0		1.5				3.0		1.5		6.5		
23-24	1.5						6.0	3.0	10.0	4.0	6.0	11.0	4.5				1.5				1.5		
24-25	9.0	7.5	3.5	8.5	0.5	1.0			9.0	10.5	10.0	9.0		4.0							3.5		
25-26	6.5	1.0	9.0	6.5	4.0	3.5	2.0	5.0	8.0	1.5		7.0	2.0						6.0		5.0		11.5
26-27	3.5	11.5		4.5	7.5	6.0	7.0		7.5	8.0	9.0	5.0	5.0	1.0			4.5		4.0		6.5	9.5	
27-28	1.0	5.0	5.5	2.5		8.5		7.0	6.5						1.0	1.0	3.0	1.5	2.0		2.0	11.5	
28-29	8.5		11.0	0.5	0.5		3.0		5.5	5.5	8.0	11.5	2.0		2.0	2.0	1.5	3.0			3.5		
29-30	6.0	9.0	2.0	9.5	4.0		8.0	9.0	4.5			9.5	5.5	3.5	2.5	3.0		4.5			5.0		10.0

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	VZ	VZ	KV	SS	RV	RZ	VW	YZ	AN	RR	RU	RV	RX	RZ	UU	XX	XZ	DM	RW	XZ	RX	SV	BB
	CNC	CNC	CNC	CVN	CAP	CAP	CAP	CAP	CAP	CET	CET	CET	CET	CET	CET	CYG	CYG	CYG	DRA	DRA	ERI	ERI	ERI
MAX	7.2	7.2	11.9	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
MIN	7.9	7.9	13.0	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
RISE	1	1	2	2	2	3	2	3	5	2	3	3	3	2	3	1	3	2	2	3	3	5	2
0- 1			10.5		3.0	7.0	5.0	5.0	6.5	9.5	2.5		10.0			10.0	2.0	4.0	2.5	5.0		6.5	9.0
1- 2	10.0		10.5		0.5	2.5	3.5	7.0			7.0	5.5			5.5	5.0	0.5	10.5	10.0	4.0	8.5		
2- 3	12.0		10.5		9.0	7.5	2.5	3.0			11.0	11.5	3.0		10.5	0.5	10.0	6.5	7.5	3.0		9.5	
3- 4		9.0	10.5	5.0	6.5	2.5	1.0	5.0	2.5	4.0			6.5	4.0		5.5	8.5	2.5	4.5	1.5			
4- 5		11.0	11.0	4.0	4.0	7.5	7.0	0.5		6.5	5.0	8.0	10.0	4.5	6.5	1.0	7.0	9.0	2.0	0.5	7.0		9.0
5- 6			11.0	3.0	1.0	2.5	6.0	3.0	6.0	9.0	9.5			5.0	11.5	6.5	5.5	5.0	10.0	11.0	11.0	6.0	
6- 7	10.0		11.0	2.0		7.5	4.5	5.0		11.5		5.0	3.5	5.5	2.0	1.5	4.0	1.0	7.0	10.0			
7- 8	11.5		11.0	1.0	7.0	3.0	3.0	1.0			3.5	11.0	7.0	6.0	7.0	7.0	2.0	7.5	4.5	8.5		9.5	
8- 9		9.0	11.0		4.5	7.5	1.5	3.0	2.5	3.5	7.5		10.5	6.5		2.0	0.5	3.5	1.5	7.5	9.5		8.5
9-10		11.0	11.5		2.0	3.0	8.0	5.5		6.0	12.0	8.0		7.0	2.5	7.5	10.0	10.0	9.5	6.5			
10-11			11.5			8.0	6.5	1.0	6.0	8.5			4.0	7.5	8.0	3.0	8.5	6.0	7.0	5.5		6.0	
11-12	10.0		11.5		7.5	3.0	5.0	3.5		11.0	6.0	5.0	7.5	8.0		8.0	7.0	2.0	4.0	4.0	8.0		
12-13	11.5		11.5		5.0	8.0	3.5	5.5			10.0	10.5	11.0	8.5	3.5	3.5	5.5	8.5	1.5	3.0		9.5	8.5
13-14		9.0	11.5		2.5	3.0	2.5	1.5	2.5	3.0				9.0	8.5	8.5	4.0	4.5	9.0	2.0			12.0
14-15		10.5	12.0	5.5		8.0	1.0	3.5		5.5	4.5	7.5	4.0	9.5		4.0	2.0	0.5	6.5	1.0			
15-16			12.0	4.5	8.5	3.0	7.0	6.0	5.5	8.0	8.5		8.0	10.0	4.0	9.0	0.5	7.0	3.5	11.0	10.5	6.0	
16-17	9.5			3.0	6.0	8.0	6.0	1.5		10.5		4.5	11.5	10.5	9.0	4.5	10.0	3.0	1.0	10.0			8.0
17-18	11.5			2.0	3.5	3.5	4.5	3.5			2.5	10.5		11.0		9.5	8.5	9.0	9.0	9.0		9.5	11.5
18-19				1.0	1.0	8.0	3.0	6.0	2.0	2.5	7.0		4.5	12.0	5.0	5.0	7.0	5.5	6.0	7.5	9.0		
19-20		10.5				3.5	1.5	1.5		5.0	11.0	7.5	8.0		10.0	10.0	5.5	1.5	3.5	6.5			
20-21					6.5	8.5	8.0	4.0	5.5	7.5			11.5			5.5	3.5	8.0	0.5	5.5		6.0	8.0
21-22	9.5				4.0	3.5	6.5	6.0		10.0	5.0	4.0			5.5	1.0	2.0	4.0	8.5	4.5	7.5		11.5
22-23	11.5				1.5	8.5	5.0	2.0			9.5	10.0	5.0		10.5	6.0	0.5	10.0	6.0	3.0	11.5	9.5	
23-24						3.5	3.5	4.0	2.0				8.5			1.5	10.0	6.5	3.0	2.0			
24-25		10.5			7.5	8.5	2.5	6.5		4.5	3.5	7.0			6.5	6.5	8.5	2.5	11.0	1.0			7.5
25-26					5.0	4.0	1.0	2.0	5.5	7.0	7.5				11.5	2.0	7.0	8.5	8.0	11.0	10.0	6.0	11.0
26-27	9.5			4.5	2.5	8.5	7.0	4.5		9.5	12.0	4.0	5.5		2.0	7.0	5.5	5.0	5.5	10.0			
27-28	11.0			3.5		4.0	5.5	6.5		12.0		10.0	9.0	4.0	7.0	2.5	3.5	1.0	2.5	9.0		9.5	
28-29				2.5	8.0		4.5	2.0	1.5		6.0			4.5		8.0	2.0	7.0	10.5	8.0	8.5		7.5
29-30		10.0		1.5	5.5	4.0	3.0	4.5		3.5	10.0	6.5	2.0	5.0	2.5	3.0	11.5	3.5	8.0	6.5			10.5

	RX	SS	RR	TW	VX	VZ	AR	DL	DY	DY	DY	LS	SZ	UU	DG	DH	RR	WW	U	SZ	SZ	SZ	RR
	FOR	FOR	GEM	HER	HER	HER	HER	HER	HER	HER	HER	HER	HYA	HYA	HYA	HYA	LEO	LEO	LEP	LYN	LYN	LYN	LYR
MAX	11.1	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	11.0	9.8	9.1	9.1	9.1	7.1
MIN	12.5	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	11.1	9.6	9.6	9.6	8.1
RISE	2	2	2	2	2	2	2	1	1	1	1	2	2	2	3	2	2	3	2	1	1	1	2
0- 1	10.5	8.0	11.0	4.0				2.0	4.5		1.0		12.0						7.5	10.5		7.5	
1- 2		7.5			4.5	6.0		6.5	2.0	5.5		4.0		10.5					11.5		7.0	9.5	2.5
2- 3	5.5	7.5	10.5	4.0	2.5	3.0	8.5			3.0		2.5		11.5						6.0	9.0	12.0	5.5
3- 4	10.5	7.5					7.0	1.0				4.0					11.5			8.0	11.0		8.5
4- 5		7.0	10.5	4.0		8.0	5.5	5.5	5.0		1.5	4.0							9.5	10.0		7.0	
5- 6		7.0				5.0	4.0		2.5			2.5									6.5	9.0	1.5
6- 7	10.0	6.5	10.0	4.0	5.0	2.0	2.5			3.5											8.5	11.0	4.5
7- 8		6.5			3.0		1.5	4.5		1.0	4.5	4.0	11.5				10.0	7.0	7.5	10.5			8.0
8- 9		6.0	9.5	4.0	0.5	7.0			5.5		2.0	2.5					11.0		11.0	9.5		6.5	11.0
9-10	9.5	6.0				4.0			2.5											11.5	6.0	8.5	0.5
10-11		5.5	9.5	4.0		1.5	8.5	3.5		3.5		4.0						10.5			8.0	10.5	4.0
11-12		5.5			5.0		7.0			1.0	4.5	2.5			10.0				8.5	7.0	10.0		7.0
12-13	9.5	5.5	9.0	4.0	3.0	6.0	5.5		5.5		2.0			10.5						9.0	12.0	6.0	10.5
13-14		5.0			1.0	3.0	4.0	2.5	3.0			4.0		12.0			10.5	11.0		11.0		8.0	
14-15		5.0	8.5	3.5			2.5			4.0		2.5	11.0		10.5						7.5	10.0	3.0
15-16	9.0	4.5				8.0	1.0			1.5	5.0								10.5	6.5	9.5		6.5
16-17			8.5	3.5	5.5	5.0		1.5			2.5	4.0				11.5		11.0		8.5	11.5		9.5
17-18				8.5	3.0	2.5		6.0	3.5			2.5			11.0	11.0	12.0			10.5		7.5	
18-19	8.5		8.0	3.5	1.0		8.0		1.0	4.5						10.5	9.5		8.0		6.5	9.5	2.5
19-20				8.5		7.0	6.5	0.5		2.0	5.5	4.0						11.5		6.0	9.0	11.5	5.5
20-21			7.5	3.5		4.5	5.0	5.0			2.5	2.5			11.5					8.0	11.0		9.0
21-22	8.5			8.5	5.5	1.5	3.5		3.5				11.0								10.0		7.0
22-23			7.5	3.5	3.5		2.0		1.0	4.5		4.0					11.5	12.0	10.0	12.0	6.0	9.0	1.5
23-24				8.5	1.5	6.5	1.0	4.0		2.0	5.5	2.5		10.5	11.5						8.0	11.0	5.0
24-25	8.0		7.0	3.5		3.5					3.0	0.5		12.0						7.5	10.5		8.0
25-26			11.5	8.5		0.5			4.0			4.0							7.5	9.5		6.5	
26-27			7.0	3.5	6.0	8.5	8.0	3.0	1.5	5.0		2.5							11.5	11.5		8.5	1.0
27-28	7.5		11.5	8.0	3.5	5.5	6.5			2.5	6.0	0.5					11.0				7.5	10.5	4.0
28-29			6.5	3.5	1.5	2.5	5.0					3.5	4.0							7.0	9.5		7.0
29-30			11.0	8.0			3.5	2.0	4.5		0.5	2.5							9.5	9.0	12.0	6.0	10.5

	RZ	ST	AV	BH	RU	DF	RV	TU
	LYR	OPH	PEG	PEG	SCL	SER	UMA	UMA
MAX	10.0	11.3	9.9	10.0	9.3	11.4	10.1	9.2
MIN	12.0	12.7	10.9	10.8	10.8	13.0	11.2	10.2
RISE	2	3	2	3	2	2	3	3

0- 1	1.0		2.5	7.0	8.0	4.0	5.5	11.0
1- 2	1.5	4.5	6.5		7.5	1.0	4.0	0.5
2- 3	2.0	2.0	1.5	5.0	7.5		2.5	
3- 4	2.5		5.5	12.0	7.0		1.0	
4- 5	3.0		9.5	3.0	7.0	2.5	10.5	
5- 6	3.5	5.5	4.5	10.0	6.5		9.0	11.5
6- 7	4.0	3.0	8.5	1.5	6.0		7.5	1.0
7- 8	4.5	1.0	3.0	8.0	6.0	4.0	6.0	
8- 9	5.0		7.0		5.5	1.0	4.5	
9-10	5.5		2.0	6.5	5.0		3.0	
10-11	6.0	4.5	6.0		5.0		1.5	
11-12	6.5	2.0	1.0	4.5	4.5	3.0	11.0	1.5
12-13	7.5		5.0	11.0	4.0		9.5	
13-14	8.0		9.0	2.5	4.0		8.0	
14-15	8.5	5.5	4.0	9.5	3.5	4.5	6.5	
15-16	9.0	3.5	8.0	0.5	3.5	1.5	5.0	
16-17	9.5	1.0	2.5	7.5	3.0		3.5	2.0
17-18			6.5		2.5		2.0	
18-19			1.5	5.5	2.5	3.0	11.5	
19-20		4.5	5.5				10.0	
20-21		2.0	9.5	4.0			8.5	
21-22			4.5	10.5		4.5	7.0	
22-23			8.5	2.0		1.5	5.5	
23-24	1.0	6.0	3.0	8.5			4.0	
24-25	1.5	3.5	7.5				2.5	10.5
25-26	2.0	1.0	2.0	7.0		3.0	1.0	
26-27	2.5		6.0				10.5	
27-28	3.0		1.0	5.0	11.5		9.0	
28-29	3.5	5.0	5.0	12.0	11.0	4.5	7.5	
29-30	4.0	2.5	9.0	3.0	10.5	1.5	6.0	11.0