

MAS RR Lyrae Ephemeris for April 2016

all times in U.T.

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	SW	XX	AT	SW	YZ	AA	BO	BR	TZ	BH	RS	ST	SW	SZ	TV	TW	UU	UY	UY	RW	TT	VZ	VZ
	AND	AND	AND	AQR	AQR	AQR	AQR	AQR	AUR	AUR	BOO	BOO	BOO	BOO	BOO	BOO	BOO	BOO	CAM	CNC	CNC	CNC	CNC
MAX	9.3	10.3	10.8	10.5	12.1	11.4	11.6	10.8	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	7.2	7.2
MIN	10.8	11.6	11.5	12.1	12.9	13.0	12.6	11.9	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	7.9	7.9
RISE	2	3	3	1	2	2	3	2	2	2	2	3	2	2	3	2	1	2	3	2	3	1	1
0- 1									5.0	5.0	9.0	8.5	11.0	4.0	2.5	8.5	1.5		5.0		2.5	7.5	3.5
1- 2		9.5			11.0	10.5				2.5	3.0			5.0	1.0	10.0	10.0	6.5	6.5	2.0	5.5		5.0
2- 3	10.5		9.0	10.0					4.0		6.0	5.0		6.0	7.0	11.5	8.0		1.5	4.0		2.5	6.5
3- 4				8.0					8.0		9.0	11.0		7.0	5.5		6.0	5.5	3.5	6.5		4.0	
4- 5						11.5	11.0		3.0		3.5	2.0	1.5	8.0	4.0	2.0	4.0		5.0	8.5	1.0	6.0	1.5
5- 6			11.5						7.0	5.0	6.5	8.0	2.0	9.5	2.5	3.5	2.0	4.5	6.5		4.0	7.5	3.0
6- 7	10.0	11.0			10.5				2.0	3.0	9.5		3.0	10.5	1.0	5.0	11.0	11.5	2.0		7.0		5.0
7- 8			7.5	11.5					6.0	1.0	4.0	4.5	3.5	11.5	7.0	6.5	9.0	3.0	3.5	2.5		2.5	6.5
8- 9				9.5				11.0	1.0		7.0	10.5	4.0		5.5	8.0	6.5	10.5	5.0	4.5		4.0	
9-10									5.0		1.0	1.5	5.0	1.0	4.0	9.5	4.5	2.0	7.0	7.0	2.5	5.5	1.5
10-11	9.5	2.0	9.5							5.5	4.0	7.5	5.5	2.5	2.5	11.0	2.5	9.5	2.0	9.0	5.5	7.5	3.0
11-12									4.0	3.5	7.5		6.0	3.5	1.0		11.5	1.0	3.5				5.0
12-13									8.5	1.5	1.5	4.0	6.5	4.5	7.0	1.5	9.5	8.0	5.5			2.0	6.5
13-14			11.5	10.5			11.5		3.0		4.5	10.0	7.5	5.5	5.5	3.0	7.5		7.0	3.0	1.5	4.0	
14-15		10.0		9.0					7.5		8.0		8.0	6.5	4.0	4.5	5.5	7.0	2.0	5.0	4.5	5.5	1.5
15-16			8.0			10.5			2.0	6.0	2.0	7.0	8.5	7.5	2.5	6.0	3.0		4.0	7.5	7.5	7.0	3.0
16-17									6.5	4.0	5.0		9.5	9.0	1.0	7.5	1.0	6.0	5.5	9.5			4.5
17-18	11.5				11.5				1.0	2.0	8.5	3.5	10.0	10.0	7.0	9.0	10.0		7.0			2.0	6.5
18-19			10.0						5.5		2.5	9.5	10.5	11.0	5.5	11.0	8.0	4.5	2.5	1.0	3.0	3.5	
19-20		11.5	1.0	10.0							5.5		11.5		4.0		6.0		4.0	3.0	6.0	5.5	1.0
20-21				8.0					4.5		8.5	6.5				2.5	1.0	4.0	3.5	5.5	5.5	7.0	3.0
21-22	11.0						11.5		8.5	4.5	3.0			2.0	1.0	2.5	2.0	11.0	7.0	8.0			4.5
22-23					10.5				3.5	2.5	6.0	3.0		3.0	7.0	4.0	10.5	2.5	2.5		1.5	2.0	6.0
23-24		2.0	8.5						7.5		9.0	9.0	1.5	4.0	5.5	6.0	8.5	9.5	4.0		4.5	3.5	8.0
24-25				11.5					2.5		3.5		2.0	5.0	4.0	7.5	6.5	1.5	5.5	1.5	8.0	5.5	1.0
25-26	10.5			9.5					6.5		6.5	5.5	3.0	6.0	2.5	9.0	4.5	8.5	7.5	3.5		7.0	2.5
26-27			10.5						1.5	5.0	9.5	11.5	3.5	7.0	1.0	10.5	2.5		2.5	6.0			4.5
27-28		10.0	1.5		9.5				5.5	2.5	4.0	2.5	4.0	8.5	7.0		11.5	7.5	4.0	8.0	3.5	2.0	6.0
28-29											7.0	8.5	5.0	9.5	5.5		9.0		6.0		6.5	3.5	7.5
29-30	10.0					11.0	10.5		4.5		1.0		5.5	10.5	4.0	2.5	7.0	6.5	1.0				5.0

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	KV	SS	RV	RZ	VW	YZ	AN	XX	XZ	DM	RW	XZ	RX	BB	RR	GQ	TW	VX	VZ	AR	DL	DY	DY
	CNC	CVN	CAP	CAP	CAP	CAP	CAP	CYG	CYG	CYG	DRA	DRA	ERI	ERI	GEM	GEM	HER	HER	HER	HER	HER	HER	HER
MAX	11.9	11.2	10.2	12.5	12.6	11.0	12.0	11.4	9.1	11.2	11.0	9.6	9.2	10.9	10.7	13.6	10.5	9.9	10.7	10.6	11.0	10.2	10.2
MIN	13.0	12.5	11.6	13.5	13.5	11.6	13.0	12.5	10.5	12.7	12.0	10.3	10.1	11.9	11.9	14.6	11.8	10.4	12.0	11.6	12.4	10.6	10.6
RISE	2	2	2	3	2	3	5	1	3	2	2	3	3	2	2	2	2	2	2	2	1	1	1
0- 1	6.0	7.0					11.5	5.5	7.5	11.0	3.5	4.5					4.0	9.5	11.5	9.5		8.0	11.5
1- 2	6.0	6.0		10.5				10.5	6.0	7.5	11.5	3.5		2.5	5.0		8.5	7.5	9.0	8.0	6.5	5.5	9.0
2- 3	6.0	5.0	11.5		10.5	10.0		6.0	4.5		8.5	2.0	2.5			1.5	3.5	5.0	6.0	6.5	10.5	3.0	6.5
3- 4	6.0	3.5	9.0	11.0	9.0			1.5	3.0	9.5	6.0	1.0			4.5	4.5	8.5	3.0	3.0	5.5		11.0	4.0
4- 5	6.5	2.5						6.5	1.5		3.0	11.5					3.5		11.0	4.0	5.5	8.5	
5- 6	6.5	1.5		11.0		10.0	11.5	2.0	11.0		11.0	10.0	1.0	2.0	4.0		8.5	9.5	8.0	2.5	9.5	5.5	9.5
6- 7	6.5							7.0	9.0	8.0	8.0	9.0				1.0	3.5	7.5	5.0	1.0		3.0	6.5
7- 8	6.5	11.0	10.0	11.0	11.0			2.5	7.5		5.5	8.0			4.0	4.5	8.5	5.5	2.0	11.0	4.5	11.0	4.0
8- 9	6.5	10.0			9.5	10.5		7.5	6.0	10.5	3.0	7.0					3.5	3.0	10.0	9.5	8.5	8.5	
9-10	7.0	9.0		11.0				3.0	4.5	6.5	10.5	5.5		2.0	3.5		8.5		7.0	8.0		6.0	9.5
10-11	7.0	8.0					11.0	8.0	3.0		8.0	4.5				1.0	3.5	10.0	4.0	6.5		3.5	7.0
11-12	7.0	7.0	10.5	11.5		10.5		3.5	1.0	9.0	5.0	3.5			3.0	4.5	8.5	7.5		5.0	7.5	11.5	4.5
12-13	7.0	6.0						8.5	11.0		2.5	2.5	2.0		7.5		3.5	5.5	9.0	3.5		9.0	
13-14	7.0	5.0		11.5	10.5			4.0	9.0	11.5	10.5	1.0		1.5	3.0		8.0	3.5	6.0	2.0		6.5	10.0
14-15	7.5	4.0			9.0	10.5		9.0	7.5	7.5	7.5	11.5			7.5	1.0	3.5		3.0		6.5	3.5	7.5
15-16	7.5	3.0	11.5	11.5			11.0	4.5	6.0		5.0	10.5			2.5	4.5	8.0	10.0	11.0	10.5	11.0		4.5
16-17	7.5	2.0	9.0					10.0	4.5	10.0	2.0	9.0			7.0		3.5	8.0	8.0	9.0		9.5	
17-18	7.5			11.5		11.0		5.0	3.0		10.0	8.0		1.5	2.0		8.0	6.0	5.0	7.5	5.5	6.5	10.0
18-19	7.5	11.0			11.0			10.5	1.0		7.5	7.0			7.0		3.5	3.5	2.5	6.0	10.0	4.0	7.5
19-20	8.0	10.0		11.5	9.5			5.5	11.0	8.5	4.5	6.0			2.0	4.0	8.0		10.0	5.0			5.0
20-21	8.0	9.0	9.5			11.0	10.5	1.0	9.0		2.0	4.5			6.5		3.5	10.5	7.0	3.5	4.5	9.5	
21-22	8.0	8.0						6.5	7.5	11.0	9.5	3.5		1.0	1.5		8.0	8.0	4.5	2.0	9.0	7.0	10.5
22-23	8.0	7.0				9.0		1.5	6.0	7.0	7.0	2.5	1.5		6.0		3.0	6.0		11.5		4.5	8.0
23-24	8.0	6.0			12.0	11.0		7.0	4.5		4.0	1.5			1.0	4.0	8.0	4.0	9.0	10.5	3.5		5.5
24-25	8.5	5.0	10.5		10.5			2.5	3.0	9.5	1.5	11.5			6.0		3.0		6.5	9.0	8.0	10.0	3.0
25-26	8.5	4.0			9.0	9.0	10.5	7.5	1.0		9.5	10.5					8.0	10.5	3.5	7.5		7.5	11.0
26-27	8.5	3.0				11.5		3.0	11.0		6.5	9.5			5.5		3.0	8.5	11.0	6.0		4.5	8.5
27-28	8.5	2.0						8.0	9.0	8.0	4.0	8.5				4.0	8.0	6.0	8.5	4.5	7.0		5.5
28-29	8.5		11.0			9.5		3.5	7.5		1.0	7.0			5.0		3.0	4.0	5.5	3.0	11.5	10.0	3.0
29-30	9.0	11.5			11.0	11.5		8.5	6.0	10.5	9.0	6.0					8.0		2.5	1.5		7.5	11.0

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	DY	LS	SZ	UU	DG	DH	RR	SS	ST	TV	WW	AA	VY	U	SZ	SZ	SZ	RR	RZ	ST	AV	BH	DF
	HER	HER	HYA	HYA	HYA	HYA	LEO	LEO	LEO	LEO	LEO	LEO	LMI	LEP	LYN	LYN	LYN	LYR	LYR	OPH	PEG	PEG	SER
MAX	10.2	10.8	10.6	10.7	11.6	11.4	10.0	10.5	10.8	11.5	11.0	11.3	13.6	9.8	9.1	9.1	9.1	7.1	10.0	11.3	9.9	10.0	11.4
MIN	10.6	11.1	11.7	12.3	12.6	12.6	11.7	12.0	12.3	12.6	12.0	12.4	14.6	11.1	9.6	9.6	9.6	8.1	12.0	12.7	10.9	10.8	13.0
RISE	1	2	2	2	3	2	2	2	2	2	3	2	2	2	1	1	1	2	2	3	2	3	2
0- 1	4.5	7.0	5.5	2.0		1.5	9.5		5.5			2.5			1.5	4.5	7.5		5.5	7.0			9.0
1- 2		5.0	7.5	3.0			7.0	3.0	4.5	6.5	5.0	7.0			3.5	6.5	9.5	6.0	6.0	4.5	10.0	9.0	6.0
2- 3	10.0	3.0		4.5	1.5		5.0	9.0	3.5				2.0		5.5	8.5	3.0	9.5	6.5				3.0
3- 4	7.5	7.0		5.5			2.5		2.5	6.5		2.0	3.5	1.0	7.5	2.0	5.0		7.0	10.5	9.0		10.5
4- 5	4.5	5.0		6.5				6.0	1.5		5.0	7.0	4.5		1.0	4.0	7.0		7.5	8.5			7.5
5- 6		3.0	1.5	7.5	2.0		9.0			7.0			6.0		3.0	6.0	9.0	5.5	8.5	6.0	8.0		4.5
6- 7	10.5	7.0	3.5				6.5	3.0	11.0			2.0	7.0		5.0	8.0	2.0	8.5	9.0				1.5
7- 8	7.5	5.0	5.5				4.0	9.0	10.0	7.5	5.5	6.5	8.5		7.0	1.5	4.0		9.5				9.0
8- 9	5.0	3.0	7.0		2.5		2.0		8.5				9.5		9.0	3.5	6.5		10.0	9.5	11.0	10.5	6.0
9-10		7.0						6.5	7.5	8.0	1.0	2.0			2.5	5.5	8.5	4.5	10.5	7.0			3.0
10-11	10.5	5.0					8.0		6.5		6.0	6.5			4.5	7.5	1.5	8.0	11.0	5.0	9.5		10.5
11-12	8.0	3.0		2.0	3.0		6.0	3.5	5.5	8.5					6.5	9.5	3.5	11.0	11.5				8.0
12-13	5.5	7.0	1.5	3.0		7.0	3.5	9.5	4.5		1.5	1.5	2.0		8.5	3.0	5.5			11.0	8.5		5.0
13-14	3.0	5.0	3.0	4.5		6.5	1.5		3.5	9.0	6.0	6.5	3.0		2.0	5.0	8.0	4.0		8.5			2.0
14-15	11.0	3.0	5.0	5.5	3.0	6.0	10.0	6.5	2.5	1.0			4.5	2.0	4.0	7.0	1.0	7.0		6.0			9.5
15-16	8.5	7.0	6.5	6.5		5.0	7.5		1.5	9.5	1.5	1.5	5.5		6.0	9.0	3.0	10.0			11.5	11.5	6.5
16-17	5.5	5.0		8.0		4.5	5.5	3.5		1.5	6.5	6.0	7.0		8.0	2.5	5.0						3.5
17-18	3.0	3.0			3.5	4.0	3.0	9.5	10.5			11.0	8.0		1.5	4.5	7.0			10.0	10.5	9.5	11.0
18-19	11.0	7.0				3.5			9.5	2.0	2.0	1.5	9.5		3.5	6.5	9.5	6.0		7.5			8.0
19-20	8.5	5.0	1.0			3.0	9.5	7.0	8.5		7.0	6.0			5.5	8.5	2.5	9.5	3.5	5.0	9.0		5.0
20-21	6.0	3.0	3.0		4.0	2.5	7.0		7.5	2.5		11.0			7.5	2.0	4.5		4.0				2.0
21-22	3.5	7.0	4.5	1.0		2.0	5.0	4.0	6.5		2.5	1.0		1.5	1.0	4.0	6.5		4.5	11.0	8.0		9.5
22-23	11.5	5.0	6.5	2.0		1.5	2.5	10.0	5.5	3.0	7.0	6.0	2.0		3.0	6.0	8.5	5.5	5.0	8.5			6.5
23-24	9.0	3.0		3.0	4.5	1.0		1.0	4.5			10.5	3.0		5.0	8.0	2.0	8.5	5.5	6.5			3.5
24-25	6.5	7.0		4.5			9.0	7.0	3.5	3.5	2.5	1.0	4.5		7.0	1.5	4.0		6.5		11.0	11.0	11.0
25-26	3.5	5.0		5.5			6.5		2.0		7.5	5.5	5.5		9.0	3.5	6.0		7.0				8.0
26-27		3.0		6.5	5.0		4.5	4.0	1.0	4.0		10.5	7.0		2.5	5.5	8.0	4.5	7.5	10.0	10.0	9.0	5.0
27-28	9.0	7.0	2.5	8.0			2.0	10.0			3.0		8.0		4.5	7.5	1.5	8.0	8.0	7.5			2.0
28-29	6.5	5.0	4.0					1.0	10.5	4.0	8.0	5.5	9.5	1.0	6.5	9.5	3.5	11.0	8.5	5.0	8.5		9.5
29-30	4.0	3.0	6.0		5.5		8.5	7.5	9.5			10.5	10.5		8.5	3.0	5.5		9.0				6.5

	RV	TU
	UMA	UMA
MAX	10.1	9.2
MIN	11.2	10.2
RISE	3	3

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