

AAVSO Eclipsing Binary Ephemeris for January 2007

all times U.T.

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	RT	TW	WZ	XZ	AB	XZ	OO	V342	V343	V346	RY	CX	WW	WW	ZZ	Y	SV	AL	RW	RZ	TV	AB	U	XX	EG	
	AND	AND	AND	AND	AND	AQL	AQL	AQL	AQL	AQL	AQR	AQR	AUR	AUR	BOO	CAM	CAM	CAM	CAP	CAS	CAS	CAS	CAS	CEP	CEP	CEP
MAX	9.3	8.8	11.6	10.0	9.3	9.3	9.2	9.0	10.6	9.0	8.8	10.7	5.7	5.7	6.8	10.6	8.6	10.5	9.8	6.4	7.3	10.2	6.7	8.5	9.6	
MIN	10.2	11.0	12.6	13.0	10.2	11.2	10.1	12.5	12.3	10.4	10.1	12.0	6.4	6.4	7.6	12.4	9.4	11.3	10.8	7.8	8.4	12.2	9.8	9.6	10.6	
DUR	3	11	4	3	3	7	3	7	4	4	5	3	5	5	5	10	3	5	6	4	4	4	4	4	3	
													(S)	(S)												
0- 1	2.5		3.5		6.5																					
1- 2	9.0				6.5								4.0		6.0		2.5					11.0				4.5
2- 3			5.5		6.5								10.5				7.0						2.0	2.5	6.5	
3- 4	6.0			8.5	6.0												11.5	2.0		2.5		4.5		10.5	11.0	
4- 5		2.5	8.0		6.0	0.5					1.5						1.5	10.0		7.0	8.0					
5- 6	3.5		0.5		6.0						4.0						6.0								2.0	
6- 7	9.5			2.0	6.0								5.5				10.5				3.5		2.0		4.5	
7- 8	0.5		2.5	10.5	6.0								11.5		7.5	1.0	2.0					7.0			6.5	
8- 9	7.0	5.5			5.5												5.5	9.5						2.5	8.5	
9-10			4.5		5.5						1.5						10.0								11.0	
10-11	4.0			3.5	5.5				2.5		4.0		0.5							2.0						
11-12	10.5		6.5		5.5					2.5		6.5				4.5	1.5		11.5			0.5	1.5	11.0	2.0	
12-13	1.5	8.0			5.0												9.0	9.5							4.0	
13-14	7.5		9.0		5.0					2.0											9.5				6.5	
14-15			1.5	5.5	5.0						1.5						3.5					3.0			8.5	
15-16	5.0				5.0				1.5		1.0	4.5		1.5			8.0	1.0		1.5	5.0			3.0	10.5	
16-17	11.0		3.5		5.0								8.0				9.0			6.0			1.0			
17-18	2.0				4.5											5.5	3.0			10.5	0.5			11.0	2.0	
18-19	8.5		5.5	7.0	4.5		1.5										7.5					5.5			4.0	
19-20					4.5						1.5														6.0	
20-21	5.5		8.0		4.5				1.5		4.5		2.5				2.0		8.5						8.0	
21-22			0.5		4.5									9.0											10.5	
22-23	3.0	10.0	9.0	4.0		0.5											6.5			1.0			1.0			
23-24	9.0		2.5		4.0	1.0											11.0			5.5	11.0	8.0		3.5		
24-25	0.0				4.0	1.0											1.0	0.5		10.0					1.5	
25-26	6.5		4.5	2.0	4.0	1.5					2.0						5.5	8.5			6.5			11.5	3.5	
26-27				10.5	4.0	1.5			3.0		4.5		4.0				10.0					1.5			6.0	
27-28	3.5		7.0		3.5	2.0						10.0					0.5				2.0	10.5	0.5		8.0	
28-29	10.0				3.5	2.5										3.5	5.0								10.0	
29-30	1.0		9.0	3.5	3.5	2.5					2.0						9.5	8.0								
30-31	7.0		1.5		3.5	3.0				0.5	4.5		5.0		10.5	4.0			1.0	9.5		4.0		3.5	1.5	
																										3.5

PREPARED BY G. SAMOLYK



	AI	YY	YY	RW	SZ	TU	CT	AV	SW	VX	CM	Y	SS	T	EW	FL	RU	RU	RW	BO	EQ	ER	FL	U	TY	
	DRA	ERI	ERI	GEM	HER	HER	HER	HYA	LAC	LAC	LAC	LEO	LIB	LMI	LYR	LYR	MON	MON	MON	MON	ORI	ORI	ORI	PEG	PEG	
MAX	7.2	8.4	8.4	9.6	10.2	10.6	9.9	10.2	9.2	10.9	8.5	9.5	10.4	10.2	11.2	8.7	10.6	10.6	9.1	10.8	10.3	9.5	10.5	9.7	10.5	
MIN	8.2	9.1	9.1	11.6	12.0	13.4	11.2	10.6	10.0	12.3	9.5	12.7	11.3	12.6	13.6	9.5	11.3	11.3	11.9	12.1	13.3	10.2	13.2	10.5	12.6	
DUR	4	3	3	5	4	5	4	4	3	4	4	5	6	6	5	4	5	5	5	5	4	3	3	3	6	
			(S)																							
0-1		1.0	5.0						3.5	3.0									7.5		9.5		1.0			
1-2	1.5	8.0	4.0					9.5	2.5	4.5											1.0	6.0	5.5	4.0		
2-3	6.0	7.0	3.0						1.5	6.5				2.5	2.5							2.0			4.5	
3-4	11.0	6.0	2.5					10.5	0.5			5.0	10.5			4.0		5.5				8.5		1.0		
4-5		5.5	1.5					3.0							1.0							5.0	8.0	4.0		
5-6		4.5	0.5					12.0	6.5					3.0			10.0					1.5				
6-7		3.5	7.5		11.0			4.0	5.5												6.5	8.0		1.0		
7-8	1.5	2.5	6.5						4.5		4.5											4.0	10.5	4.0		
8-9	6.0	2.0	5.5	9.5				5.5	4.0			6.5		3.5					9.5		0.5	0.5				
9-10	11.0	1.0	5.0			10.0			3.0																	
10-11		8.0	4.0					6.5	2.0										9.5	7.5		7.0		1.0		
11-12		7.0	3.0	6.5			10.5		1.0					4.0						10.5		3.5		4.0		
12-13		6.0	2.5					8.0			0.0											10.0				
13-14	1.0	5.5	1.5						7.0	0.5		8.0									5.0	6.0	2.0	1.0		
14-15	6.0	4.5	0.5	3.5				9.0	6.0	2.0				4.5		1.0					6.0	2.5		4.0		
15-16	10.5	3.5	7.5		11.0				5.0	4.0	5.5											9.0		7.0		
16-17		3.0	6.5					10.0	4.0	5.5						5.5	4.0					5.0	4.5	1.0		
17-18		2.0	6.0		2.0				3.5	7.5				5.0								1.5		4.0		
18-19		1.0	5.0			11.5		11.5	2.5			9.0										8.0		7.0		
19-20	1.0	8.0	4.0					4.0	1.5													4.5	7.0	1.0		
20-21	5.5	7.0	3.0						0.5		1.0			5.5								0.5		4.0		
21-22	10.5	6.0	2.5					5.0	7.5											8.0	6.0	7.0		7.0		
22-23		5.5	1.5						6.5									3.5				3.5	9.5	1.0		
23-24		4.5	0.5			0.5		6.0	5.5		6.0	10.5		6.0			8.0					10.0		4.0		
24-25		3.5	7.5		10.5				4.5													6.5		7.0		
25-26	1.0	3.0	6.5					7.5	3.5						11.5							2.5		1.0		
26-27	5.5	2.0	6.0		2.0				3.0					6.5							11.5	9.0		4.0		
27-28	10.5	1.0	5.0					8.5	2.0							3.0					5.5	2.0	1.0	7.0		
28-29		0.5	4.0	11.0					1.0	1.5	1.5											8.0		4.0		
29-30		7.0	3.5					10.0	8.0	3.0				7.0					7.5			4.5	3.5	7.0		
30-31		6.5	2.5						7.0	5.0		4.5								9.0	5.5				0.5	0.5

	Z	RT	RV	ST	XZ	beta	Y	U	V505	RW	AC	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU	
	PER	PER	PER	PER	PER	PER	PSC	SGE	SGR	TAU	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL	
MAX	9.9	10.6	10.3	9.7	10.6	2.2	9.0	6.4	6.4	8.0	10.5	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6	
MIN	12.4	12.0	12.7	13.2	12.7	3.5	12.0	9.1	7.6	12.5	12.3	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4	
DUR	6	4	8	5	4	8	7	6	5	4	6	4	4	4	4	3	6	3	3	4	4	3	
0- 1												0.5	0.5	7.5		3.0		3.5		3.5	6.5		
1- 2			11.5	3.0			11.5						4.5	6.5	7.0	3.0				4.5			
2- 3	2.5				2.5							1.5	8.5	6.0	1.0	3.0		5.0	3.5	6.0	5.0		
3- 4		9.0	11.0		6.5									5.5		3.0			9.0	7.0	11.5	0.5	
4- 5		5.5			10.0	8.5						2.5	2.5	4.5	7.5	3.0		6.5		8.0		3.5	
5- 6	4.0	2.0	10.5							7.0			6.5	4.0	1.5	3.0				9.5	10.0		
6- 7				10.0								3.5		3.0		3.0		8.0		10.5			
7- 8			9.5			5.0							1.0	2.5	7.5	3.0		0.5	1.0		8.0		
8- 9	5.0	11.5								1.5		4.5	5.0	2.0	2.0	3.0		9.5	6.0	0.5		3.5	
9-10		8.0	9.0	1.5	0.5								9.0	1.0		3.0		2.0	11.5	1.5	6.5		
10-11		4.5			4.0	2.0						5.5		0.5	8.0	3.0		11.0		3.0			
11-12	6.5	0.5	8.5		8.0									3.0		3.0		3.5		4.0			
12-13					11.5							6.5	7.5			3.0					5.0	11.5	3.0
13-14			7.5												8.5	3.0		5.0	3.5	6.5			
14-15	8.0	10.0		8.5			6.0					7.5	1.5		2.5	3.0			9.0	7.5	10.0		
15-16		6.5	7.0								0.5		5.5		3.0			6.5		9.0			
16-17		3.0								8.5		9.0	9.5		8.5	3.0	2.0			10.0	8.0	2.5	
17-18	9.0		6.5	0.5	2.0				0.5		1.5				3.0	3.0		8.0		11.0			
18-19					5.5		0.5					10.0	3.5			3.5		0.5	1.0		6.5		
19-20			6.0		9.5						3.0	2.5		8.0		9.0	3.5	3.5	9.5	6.0	1.0		
20-21	10.5	9.0											11.0		3.0	3.5		2.0	11.5	2.0		2.0	
21-22		5.5	5.0									3.5	2.0			3.5		11.0		3.5	11.5		
22-23		1.5		7.5									6.0		9.5	3.5	5.0	3.5		4.5			
23-24			4.5					0.5			4.5		10.0		3.5	3.5				5.5	10.0		
24-25						10.0										3.5		5.0	3.5	7.0		1.5	
25-26		11.0	4.0		3.5						5.5		4.5		10.0	3.5	6.5		9.0	8.0	8.0	5.0	
26-27		7.5			7.0								8.5		4.0	3.5		6.5		9.5			
27-28		4.0	3.5		11.0	7.0				10.5	6.5					3.5				10.5	6.5		
28-29		0.5														3.5				11.5			
29-30			2.5										2.5		10.0	3.5	8.0	8.0		11.5		1.5	
30-31				6.0		3.5			0.5	5.0			6.5	11.0	4.0	3.5		0.5	1.0	0.5		4.5	
													10.5	10.0		3.5		9.5	6.0	1.5	11.5		

	RT	TW	WZ	XZ	AB	V346	CX	WW	WW	ZZ	Y	SV	AL	RZ	TV	AB	U	XX	EG	R	UU	U	V	W	W
	AND	AND	AND	AND	AND	AQL	AQR	AUR	AUR	BOO	CAM	CAM	CAM	CAS	CAS	CAS	CEP	CEP	CEP	CMA	CMA	CRB	CRT	CRV	CRV
MAX	9.3	8.8	11.6	10.0	9.3	9.0	10.7	5.7	5.7	6.8	10.6	8.6	10.5	6.4	7.3	10.2	6.7	8.5	9.6	6.2	10.0	7.6	9.5	10.6	10.6
MIN	10.2	11.0	12.6	13.0	10.2	10.4	12.0	6.4	6.4	7.6	12.4	9.4	11.3	7.8	8.4	12.2	9.8	9.6	10.6	6.8	12.5	8.8	10.2	11.2	11.2
DUR	3	11	4	3	3	4	3	5	5	5	10	3	5	4	4	4	4	4	3	4	5	5	4	4	4
								(S)	(S)																(S)
0- 1					3.5					4.5		8.5							5.5				11.5	9.5	5.0
1- 2	4.5		3.5		3.0								7.5						7.5				4.0	4.5	9.0
2- 3	10.5			5.5	3.0							3.0			8.0	6.5			10.0	4.0				8.0	
3- 4	2.0		5.5		3.0		2.0					7.5		4.5						7.0			6.5		7.5
4- 5	8.0				3.0			6.5						9.0	3.5										7.0
5- 6					3.0					4.5		2.5	7.0					4.0	3.0				9.0	10.5	6.0
6- 7	5.0	2.0		7.0	2.5						1.5	7.0				9.0						9.0		5.5	10.0
7- 8					2.5							11.5													9.5
8- 9	2.5		2.5		2.5		2.0	1.0				1.5											4.5		8.5
9-10	8.5				2.5			7.5			8.5	6.0	7.0	4.0		2.5					4.0			8.0	
10-11		5.0	4.5	9.0	2.0					4.5		10.5		8.5		11.0				1.0	2.5		7.0		7.0
11-12	6.0				2.0										9.5					3.0	6.0	8.0		6.5	11.0
12-13			7.0		2.0							5.0						4.0	5.0	9.0			9.5	10.5	5.5
13-14	3.5			2.0	2.0		2.0	2.5				9.5	6.5		5.0	5.0				7.5		6.5			9.5
14-15	9.5				2.0				8.5											9.5					9.0
15-16			1.5		1.5							4.5		3.0	0.5								5.0		8.0
16-17	6.5				1.5							9.0		8.0									7.5		
17-18			3.5	3.5	1.5								6.0			7.5	11.0						7.5		7.0
18-19	4.0				1.5		2.5	3.5				3.5								5.0	1.5			6.0	10.5
19-20	10.0		5.5		1.5			10.0			6.5	8.0						4.5	7.0	5.0		10.0	10.0		5.5
20-21	1.5				1.0	1.0									11.5	1.0				9.0	8.0				9.5
21-22	7.5		8.0	5.5	1.0							2.5	5.5	2.5		9.5									8.5
22-23					1.0							7.0		7.5	7.0		10.5					4.0	5.5		8.0
23-24	5.0				1.0		2.5	5.0																	7.0
24-25	11.0		2.5		1.0				11.0			2.0			2.5	3.5				4.5	8.0		8.0	11.0	6.5
25-26	2.0			7.0								6.5	5.5							7.0					10.5
26-27	8.5		4.5									10.5						4.5	9.0				10.5	9.5	
27-28												1.0		2.0			10.5			11.0	3.5				9.0

	RV	Y	SW	WW	ZZ	BR	CG	V346	V387	V477	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY	YY	RW	SZ	TU	CT	AV
	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI	ERI	GEM	HER	HER	HER	HYA
MAX	9.0	7.0	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4	8.4	9.6	10.2	10.6	9.9	10.2
MIN	10.0	7.6	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1	9.1	11.6	12.0	13.4	11.2	10.6
DUR	4	6	5	5	4	4	3	5	3	4	4	4	3	4	5	5	5	4	3	3	5	4	5	4	4
																		(S)		(S)					
0- 1					8.0											7.5			5.5	1.5	8.0				11.0
1- 2	9.5						10.0							8.5				5.5	4.5						3.5
2- 3						8.5	1.0		3.0									10.0	3.5		10.5				
3- 4																			3.0	6.5	4.5		8.5		4.5
4- 5	9.5				2.5				1.0					2.0					2.0	6.0					
5- 6					9.0								10.5					5.0	1.0	5.0				10.5	6.0
6- 7						8.5	11.0													4.0	1.5				
7- 8	9.0						2.5								10.5			5.5	7.0	3.5		8.5			7.0
8- 9								10.0										10.0	6.5	2.5					
9-10					3.5														5.5	1.5					8.0
10-11	9.0				9.5	8.5									6.0	2.5			4.5	1.0					
11-12									2.0										4.0	7.5		10.5			9.5
12-13							3.5							5.5					3.0	7.0		10.0			2.0
13-14	8.5												1.0		1.5	9.0		5.0	2.0	6.0					10.5
14-15					4.0	8.5	1.0				1.5							10.0	1.0	5.0			9.0		3.0
15-16					10.5															4.0					
16-17	8.5				1.5									7.0					7.0	3.5		8.5			4.0
17-18		3.0																	6.5	2.5					
18-19						8.5			3.0									6.0	5.5	1.5					5.5
19-20	8.0				5.0		2.0												5.0	4.5	1.0				
20-21		3.0			11.0				1.5					9.0				10.0	4.0	7.5	9.5	10.5			6.5
21-22					2.0														3.0	7.0					
22-23	8.0					8.5		3.0		1.5									2.0	6.0					8.0
23-24		3.0	1.5											2.0		3.5			1.5	5.0	6.0				
24-25				3.5	5.5		3.5							10.5	7.0				8.0	4.5					9.0
25-26	7.5								4.5									5.0	7.5	3.5		8.5			
26-27		3.0			2.5	8.5												9.5	6.5	2.5	3.0				10.5
27-28								2.5			1.5			3.5	2.5				5.5	1.5					2.5

	SW	VX	CM	Y	SS	delt	T	EW	FL	RU	RU	RW	BO	U	SX	EQ	ER	FL	U	TY	AQ	Z	RT	RV	ST
	LAC	LAC	LAC	LEO	LIB	LIB	LMI	LYR	LYR	MON	MON	MON	MON	OPH	OPH	ORI	ORI	ORI	PEG	PEG	PEG	PER	PER	PER	PER
MAX	9.2	10.9	8.5	9.5	10.4	4.8	10.2	11.2	8.7	10.6	10.6	9.1	10.8	5.8	10.5	10.3	9.5	10.5	9.7	10.5	10.3	9.9	10.6	10.3	9.7
MIN	10.0	12.3	9.5	12.7	11.3	5.9	12.6	13.6	9.5	11.3	11.3	11.9	12.1	6.5	11.2	13.3	10.2	13.2	10.5	12.6	13.0	12.4	12.0	12.7	13.2
DUR	3	4	4	5	6	7	6	5	4	5	5	5	5	5	5	4	3	3	3	6	10	6	4	8	5

(S)

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

	XZ	beta	Y	RW	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	PER	PER	PSC	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.6	2.2	9.0	8.0	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.7	3.5	12.0	12.5	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	4	8	7	4	4	4	4	4	3	6	3	3	4	4	3

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







	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	4	4	4	3	6	3	3	4	4	3

0- 1	3.0			4.0		6.5			9.5	8.5
1- 2			2.0	4.0						
2- 3				4.0		8.0			8.0	
3- 4				4.0				2.0		
4- 5	5.0		2.0	4.0		9.5	6.0	3.0	6.0	
5- 6				4.0		2.0		4.5		
6- 7				4.5	2.5			5.5	4.5	
7- 8	3.5		2.5	4.5		3.0		7.0		
8- 9				4.5				8.0	2.5	
9-10				4.5	4.0	4.5	3.5	9.0	9.5	
10-11			3.0	4.5			9.0			
11-12	5.5	6.0		4.5		6.0			8.0	
12-13		5.5		4.5	5.5					
13-14		5.0	3.0	4.5		7.5			6.0	
14-15	4.0	4.0		4.5				2.5		
15-16		3.5		4.5	7.0	9.0	6.0	4.0	4.5	
16-17		2.5	3.5	4.5		1.5		5.0		
17-18	2.0	2.0		4.5				6.0	2.5	10.0
18-19				4.5	8.5	3.0		7.5	9.5	
19-20			4.0	4.5				8.5		
20-21				4.5		4.5	3.5	10.0	7.5	
21-22	4.5			4.5	10.0		9.0			
22-23			4.5	4.5		6.0			6.0	
23-24				4.5						
24-25	2.5			4.5		7.5		2.0	4.0	
25-26			4.5	4.5				3.0		
26-27				4.5		9.0	6.0	4.5		
27-28				4.5				5.5	9.5	
28-29	5.0		5.0	4.5				6.5		
29-30				5.0		3.0		8.0	7.5	
30-31				5.0				9.0		

	RT	WZ	XZ	AB	V342	V343	V346	WW	WW	ZZ	Y	SV	AL	RZ	TV	AB	U	XX	EG	R	UU	U	V	W	W						
	AND	AND	AND	AND	AQL	AQL	AQL	AUR	AUR	BOO	CAM	CAM	CAM	CAS	CAS	CAS	CEP	CEP	CEP	CMA	CMA	CRB	CRT	CRV	CRV						
MAX	9.3	11.6	10.0	9.3	9.0	10.6	9.0	5.7	5.7	6.8	10.6	8.6	10.5	6.4	7.3	10.2	6.7	8.5	9.6	6.2	10.0	7.6	9.5	10.6	10.6						
MIN	10.2	12.6	13.0	10.2	12.5	12.3	10.4	6.4	6.4	7.6	12.4	9.4	11.3	7.8	8.4	12.2	9.8	9.6	10.6	6.8	12.5	8.8	10.2	11.2	11.2						
DUR	3	4	3	3	7	4	4	5	5	5	10	3	5	4	4	4	4	4	3	4	5	5	4	4	4						
								(S)	(S)																(S)						
0- 1																															
1- 2	7.5																								9.5	4.5					
2- 3										2.5		6.0			8.5											3.5	4.0	8.5			
3- 4	4.5																	6.0	5.5	5.5	3.5					8.0	3.5				
4- 5						9.0				8.0					4.0		8.0		7.5				6.0	2.5	7.0						
5- 6												5.0							10.0							6.5					
6- 7	8.0	3.5										9.5														8.5	6.0				
7- 8							9.5									3.5										5.0	9.5				
8- 9	5.5							3.0				4.5	9.5													9.0	4.5				
9-10												9.0						7.5					4.0	3.5	8.5						
10-11	2.5											3.5			10.0	6.0										7.5	3.0				
11-12	9.0											8.0	9.5	3.0						6.5	7.5		6.5	2.0	7.0						
12-13																										6.0					
13-14	6.0	2.5																								9.0	5.5				
14-15											4.0	3.0															4.5	9.5			
15-16	3.5		4.0									7.0				8.5											8.5	4.0			
16-17	9.5																										4.5	3.5	8.0		
17-18																		6.5	9.5								7.0	2.5			
18-19	7.0							5.5				6.5		2.0												7.0	6.5				
19-20																												6.0			
20-21	4.0																										9.5	9.5	5.0		
21-22												5.5															2.5	4.5	9.0		
22-23		3.5																									8.5	3.5			
23-24	7.5																										5.0	3.0	7.5		
24-25				2.5								4.5	8.0				6.5	7.0									7.0	2.0			
25-26	5.0			2.5								9.0		6.5													7.5	6.0			
26-27				2.5	9.5																							5.5			
27-28	2.0			2.5							9.5	4.0															4.5	4.5			
28-29	8.5			2.0				8.0				8.5	8.0														7.0	5.5	3.0	4.0	8.5
29-30		2.5				8.5																						9.0	3.5	8.0	3.5
																												3.0	5.5	2.5	7.0

AAVSO Eclipsing Binary Ephemeris for April 2007

all times U.T.

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	RV	SW	WW	ZZ	BR	CG	V346	V387	V477	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY	YY	RW	SZ	TU	CT	AV	SW
	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI	ERI	GEM	HER	HER	HER	HYA	LAC
MAX	9.0	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4	8.4	9.6	10.2	10.6	9.9	10.2	9.2
MIN	10.0	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1	9.1	11.6	12.0	13.4	11.2	10.6	10.0
DUR	4	5	5	4	4	3	5	3	4	4	4	3	4	5	5	5	4	3	3	5	4	5	4	4	3

(S) (S)

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



	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	4	4	4	4	3	6	3	3	4	4	3

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







	RW	AM	W	TX	VV	XZ	RU	AG	BU
	TAU	TAU	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	8.0	10.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.5	12.3	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	4	4	3	6	3	3	4	4	3

0- 1			5.5	5.5			8.5		5.5
1- 2			5.5		3.0				9.0
2- 3			5.5					9.0	
3- 4			5.5	7.5	4.5	3.5			
4- 5			5.5			9.0		7.5	5.0
5- 6			5.5		6.0				8.5
6- 7			5.5	9.0			3.0	5.5	
7- 8			5.5		7.5		4.0		
8- 9			5.5				5.5	4.0	
9-10			5.5		9.0	6.5	6.5		8.0
10-11			5.5				8.0		
11-12			5.5				9.0	9.0	
12-13			5.5		3.0				
13-14			5.5					7.5	7.5
14-15			6.0		4.5	3.5			
15-16			6.0			9.0		5.5	
16-17			6.0		6.0				
17-18			6.0				3.5	4.0	7.0
18-19	4.5		6.0		7.5		5.0		
19-20			6.0				6.0		
20-21			6.0		9.0	6.5	7.0	9.0	
21-22			6.0				8.5		7.0
22-23			6.0					7.0	
23-24			6.0		3.0				
24-25			6.0					5.5	
25-26		3.0	6.0		4.5	3.5			6.5
26-27			6.0			9.0		3.5	
27-28		4.0	6.0		6.0		3.0		
28-29			6.0				4.0		
29-30		5.5	6.0		7.5		5.5	9.0	
30-31			6.0				6.5		

	RT	WZ	XZ	AB	XZ	OO	V342	V343	V346	RY	CX	WW	Y	SV	AL	RW	RZ	TV	AB	U	EG	U	V	W	W	
	AND	AND	AND	AND	AQL	AQL	AQL	AQL	AQL	AQR	AQR	AUR	CAM	CAM	CAM	CAP	CAS	CAS	CAS	CEP	CEP	CRB	CRT	CRV	CRV	
MAX	9.3	11.6	10.0	9.3	9.3	9.2	9.0	10.6	9.0	8.8	10.7	5.7	10.6	8.6	10.5	9.8	6.4	7.3	10.2	6.7	9.6	7.6	9.5	10.6	10.6	
MIN	10.2	12.6	13.0	10.2	11.2	10.1	12.5	12.3	10.4	10.1	12.0	6.4	12.4	9.4	11.3	10.8	7.8	8.4	12.2	9.8	10.6	8.8	10.2	11.2	11.2	
DUR	3	4	3	3	7	3	7	4	4	5	3	5	10	3	5	6	4	4	4	4	3	5	4	4	4	
												(S)													(S)	
0- 1			7.5	7.0		6.0								3.5			7.5	4.0				7.0				
1- 2	7.5			6.5		6.5								8.0					4.5				5.5			
2- 3				6.5		6.5									4.5					4.0	5.5			6.0		
3- 4	5.0			6.5		7.0															7.5				5.5	
4- 5		7.0		6.5		7.5		6.0		7.0				7.5										5.0		
5- 6				6.5		7.5													7.0						4.0	
6- 7	8.5			6.0		8.0			6.0						4.5		7.0									
7- 8				6.0		8.5			8.5					6.5							4.0		5.0			
8- 9	5.5			6.0		8.5																	6.0		6.5	
9-10				6.0						7.0								5.5			5.0					
10-11				5.5										5.5	4.0	8.0					7.5			6.0	5.0	
11-12				5.5	7.5																			4.5		
12-13				5.5														6.5			3.5				3.5	
13-14	6.5	8.0		5.5										5.0									3.5		7.5	
14-15				5.5											3.5									7.0		
15-16	3.5							7.5													5.0				6.0	
16-17							6.5		5.0					4.0					5.5		7.0		6.5			
17-18								3.5	7.5					8.5										5.5	5.0	
18-19	7.0												7.0					6.0	7.0					4.0		
19-20			7.5																					8.0		
20-21	4.5													7.5					7.5				4.0		7.5	
21-22																					7.0			6.5		
22-23																							7.0		6.0	
23-24	8.0									8.0		3.5		7.0										5.0		
24-25																		5.5							4.5	
25-26	5.0																								3.5	
26-27					7.0									6.0										3.5		
27-28									6.5												4.5			7.5		
28-29	8.5							5.5				4.5	5.0			7.0		8.5	4.0		6.5		4.5		7.0	
29-30		8.0												5.0										6.0		
																		4.0					7.0		5.5	





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	XZ	RU	AG	BU
	UMA	UMI	VIR	VUL
MAX	10.1	10.7	8.8	10.6
MIN	11.7	11.4	9.4	11.4
DUR	3	4	4	3

0- 1	6.5	7.5	7.0	
1- 2				
2- 3			5.5	5.5
3- 4				
4- 5			3.5	
5- 6	3.5			
6- 7				5.0
7- 8		3.5		8.5
8- 9		4.5		
9-10		6.0	7.0	
10-11		7.0		5.0
11-12	6.5	8.5	5.5	8.0
12-13				
13-14			3.5	
14-15				4.5
15-16				7.5
16-17	3.5			
17-18				
18-19		4.0	7.0	4.0
19-20		5.5		7.5
20-21		6.5	5.5	
21-22		7.5		
22-23	6.5		3.5	
23-24				7.0
24-25				
25-26				
26-27				
27-28	3.5		7.0	6.5
28-29		3.5		
29-30		4.5	5.0	



	W	RV	SW	WW	ZZ	BR	CG	V346	V387	V477	W	TT	TY	YY	FZ	Z	TW	UZ	UZ	AI	SZ	TU	CT	AV	SW
	CRV	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	HER	HER	HER	HYA	LAC
MAX	10.6	9.0	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.4	10.6	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	10.2	10.6	9.9	10.2	9.2
MIN	11.2	10.0	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	12.7	12.5	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	12.0	13.4	11.2	10.6	10.0
DUR	4	4	5	5	4	4	3	5	3	4	7	5	4	4	3	4	5	5	5	4	4	5	4	4	3
	(S)																								(S)
0- 1				5.5		6.5	9.0											8.0				3.5	3.0	8.0	
1- 2	4.0				5.0				9.0	3.5											8.0			7.5	
2- 3							6.0					5.5	9.0							6.5	4.0			6.5	
3- 4									7.0				4.0	5.5											5.5
4- 5					8.5	6.5	3.5																		4.5
5- 6									5.5			7.5							5.5			5.5			3.5
6- 7	5.0				5.5																				
7- 8							7.5			3.5				8.0	9.0		5.0				6.0				
8- 9	3.5				3.0	6.5								3.0	3.5								7.0		
9-10							5.0	7.0		4.5		4.5	4.5							6.5					8.5
10-11			6.0	4.5					8.5																7.5
11-12					6.5									7.0	7.0	4.5		3.0			8.0				7.0
12-13						6.5	8.5		6.5												4.0				6.0
13-14	5.0				3.5																				5.0
14-15							6.0		4.5				3.5	6.5	5.0	6.0				6.5		7.5			4.0
15-16	3.5									5.5			8.0								6.0			4.0	3.0
16-17					7.0	6.5	3.5																5.5		9.0
17-18															8.0										8.0
18-19	6.0				4.5						9.0			5.5		8.0			6.5						7.0
19-20							7.0		7.5																6.5
20-21	4.5		3.5			6.5		6.5										6.0		6.5	8.0				5.5
21-22				8.0		4.5			5.5				7.0		6.0						6.5	4.0			5.5
22-23	3.0									6.5				4.5											4.5
23-24				5.0							4.5														3.5
24-25						6.5	8.5											4.0					9.0	9.0	
25-26	5.5																				6.0				
26-27		6.0			8.5		6.0		8.5					9.0	4.0								3.5		8.5
27-28	4.0													4.0						6.0					7.5
28-29				5.5	6.5	3.5			7.0			7.0													6.5
29-30		6.0								7.5					8.0						8.0			3.5	6.0
30-31	6.5			3.0											8.0	4.5					3.5				5.0
																						4.0		4.5	4.0

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	VX	CM	Y	SS	delt	EW	FL	U	SX	U	TY	RT	ST	XZ	beta	Y	U	V505	V	X	RV	W	VV	XZ	RU
	LAC	LAC	LEO	LIB	LIB	LYR	LYR	OPH	OPH	PEG	PEG	PER	PER	PER	PER	PSC	SGE	SGR	TRI	TRI	TRI	UMA	UMA	UMA	UMI
MAX	10.9	8.5	9.5	10.4	4.8	11.2	8.7	5.8	10.5	9.7	10.5	10.6	9.7	10.6	2.2	9.0	6.4	6.4	10.9	8.9	11.4	9.1	10.1	10.1	10.7
MIN	12.3	9.5	12.7	11.3	5.9	13.6	9.5	6.5	11.2	10.5	12.6	12.0	13.2	12.7	3.5	12.0	9.1	7.6	11.9	12.0	12.5	9.9	11.0	11.7	11.4
DUR	4	4	5	6	7	5	4	5	5	3	6	4	5	4	8	7	6	5	4	4	4	3	3	3	4
0- 1						9.0																			
1- 2																					7.0				6.0
2- 3				4.5		8.0				7.5											7.0	7.0			7.0
3- 4					3.0																7.0				8.0
4- 5		7.5				6.5							7.5						8.5		7.0	8.5	6.5		
5- 6							3.0			7.5				9.0			7.0				7.0				
6- 7						5.5												4.0			7.0				
7- 8	4.0						7.0											8.5	6.5		7.0				
8- 9	5.5					4.0				7.5											7.0				
9-10	7.5	3.0											6.0								7.0	4.0	3.5		
10-11																6.0					7.0				4.0
11-12										7.5									9.0		7.0	5.5			5.0
12-13		8.0		6.0					3.0												7.0				6.5
13-14														7.0				6.5			7.0	7.0			7.5
14-15									4.5	7.5		8.5							7.0		7.0				9.0
15-16				3.0				3.0													7.0	8.5	6.5		
16-17									6.0												7.0				
17-18		3.5								7.5											7.0				
18-19							4.5		7.5												7.0				
19-20														8.0				4.5			7.0				
20-21		8.5					9.0	4.0		7.0		7.0		8.5				8.5			7.0	4.0	4.0	3.5	
21-22	3.0		4.0																8.0		7.0		9.0		4.5
22-23	5.0			7.5														4.5			7.0	5.5			6.0
23-24	6.5																			8.5	7.0				7.0
24-25	8.5																			8.0	7.5	7.0			8.0
25-26		4.5		4.5				4.5			6.5										7.5				
26-27			5.5							7.0					7.5			6.5			7.0	7.5	8.5	6.5	
27-28																					7.5				
28-29											8.5										8.5	7.5			
29-30										7.0			8.5								7.0	7.5			
30-31							5.5														7.5				
																					7.5	4.0	4.0	4.0	

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	AG	BU
	VIR	VUL
MAX	8.8	10.6
MIN	9.4	11.4
DUR	4	3

0- 1		
1- 2	3.5	6.0
2- 3		
3- 4		
4- 5		
5- 6		5.5
6- 7		9.0
7- 8		
8- 9	5.0	
9-10		5.0
10-11	3.5	8.5
11-12		
12-13		
13-14		5.0
14-15		8.0
15-16	7.0	
16-17		
17-18	5.0	4.5
18-19		7.5
19-20	3.5	
20-21		
21-22		4.0
22-23		7.5
23-24		
24-25	6.5	
25-26		3.5
26-27	5.0	7.0
27-28		
28-29	3.5	
29-30		3.0
30-31		6.5

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	RT AND	TW AND	WZ AND	XZ AND	AB AND	XZ AQL	OO AQL	V342 AQL	V343 AQL	V346 AQL	RY AQR	CX AQR	WW AUR	ZZ BOO	Y CAM	SV CAM	AL CAM	RW CAP	RZ CAS	TV CAS	AB CAS	XX CEP	EG CEP	U CRB	W CRV
MAX	9.3	8.8	11.6	10.0	9.3	9.3	9.2	9.0	10.6	9.0	8.8	10.7	5.7	6.8	10.6	8.6	10.5	9.8	6.4	7.3	10.2	8.5	9.6	7.6	10.6
MIN	10.2	11.0	12.6	13.0	10.2	11.2	10.1	12.5	12.3	10.4	10.1	12.0	6.4	7.6	12.4	9.4	11.3	10.8	7.8	8.4	12.2	9.6	10.6	8.8	11.2
DUR	3	11	4	3	3	7	3	7	4	4	5	3	5	5	10	3	5	6	4	4	4	4	3	5	4
0- 1			8.0	9.5	8.5										6.5	6.0		5.5	6.5		8.0				
1- 2	7.5				8.5							2.5											3.0		
2- 3		8.5			8.0		2.0		6.5			5.5					7.0						5.5		
3- 4	5.0		2.5	2.5	8.0		2.5					8.0				5.0							7.5		
4- 5					8.0		3.0		2.5							9.5						3.0	9.5		3.0
5- 6	2.0		4.5		8.0		3.0																		
6- 7	8.5				8.0		3.5	3.0		2.5		3.0				4.0	7.0		6.0	5.5					
7- 8			7.0	4.0	7.5		4.0			5.0		5.5				8.5					4.0			3.0	
8- 9	5.5				7.5		4.0			7.5		8.0												5.0	8.0
9-10			9.0		7.5		4.5									3.5								7.5	
10-11	3.0				7.5	5.5	5.0								4.5	8.0	6.5	9.5						9.5	
11-12	9.0			6.0	7.5		5.0					3.0	9.0									6.5	3.5		
12-13			3.5		7.0	8.5	5.5					5.5							5.5						2.5
13-14	6.5				7.0		6.0		8.0			8.0													
14-15			6.0		7.0		6.0										6.0							3.0	
15-16	4.0			7.5	7.0		6.5		4.5															5.0	
16-17			8.0		7.0		7.0	7.0													7.0	8.5		7.0	6.0
17-18					6.5		7.0			4.0	9.5	5.5												9.0	
18-19	7.0				6.5		7.5			6.5		8.5					5.5	4.5		2.5					
19-20				9.5	6.5		7.5			9.0	8.5											2.5	4.0		2.5
20-21	4.5				6.5		8.0																		
21-22			4.5		6.0		8.5				8.0				2.5	9.5								4.5	
22-23					6.0		8.5																	7.0	
23-24	8.0		7.0		6.0		9.0				7.0	8.5											5.0	9.0	3.5
24-25					6.0		9.5		9.5																
25-26	5.5		9.0		6.0	4.5	9.5				6.5														
26-27				4.5	5.5				6.0					8.5		3.5							4.0	2.5	
27-28	2.5				5.5	8.0				3.0	5.5	6.0				8.0	5.0			4.0	7.0		4.5		
28-29	8.5				5.5				2.0	5.5		8.5						8.5					6.5		
29-30					5.5					8.0	4.5												9.0		4.5
30-31	6.0		6.0	6.0	5.5																				
																	4.5		3.5		9.5				3.0



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	AV	SW	VX	CM	Y	SS	delt	EW	FL	U	SX	ER	U	TY	AQ	Z	RT	RV	ST	XZ	beta	Y	U	V505	RW	
	HYA	LAC	LAC	LAC	LEO	LIB	LIB	LYR	LYR	OPH	OPH	ORI	PEG	PEG	PEG	PER	PER	PER	PER	PER	PER	PSC	SGE	SGR	TAU	
MAX	10.2	9.2	10.9	8.5	9.5	10.4	4.8	11.2	8.7	5.8	10.5	9.5	9.7	10.5	10.3	9.9	10.6	10.3	9.7	10.6	2.2	9.0	6.4	6.4	8.0	
MIN	10.6	10.0	12.3	9.5	12.7	11.3	5.9	13.6	9.5	6.5	11.2	10.2	10.5	12.6	13.0	12.4	12.0	12.7	13.2	12.7	3.5	12.0	9.1	7.6	12.5	
DUR	4	3	4	4	5	6	7	5	4	5	5	3	3	6	10	6	4	8	5	4	8	7	6	5	4	
0- 1		3.0							6.5				4.0				8.0						8.0	4.5		
1- 2		2.0										9.0	7.0				4.5								9.0	
2- 3		9.0		5.0																						
3- 4		8.0											4.0							4.0						
4- 5		7.0	2.5			6.5				6.5			7.0		3.5					7.5						
5- 6		6.5	4.0																							
6- 7		5.5	6.0					9.5					4.0				7.0		7.0						2.5	
7- 8		4.5	7.5			3.5							7.0												7.0	
8- 9		3.5	9.5					8.5								2.5					9.5		2.0		7.0	
9-10		2.5								7.0			4.0													
10-11		9.5		5.5				7.0					7.0												9.0	
11-12		8.5							3.5							3.5						6.5				
12-13		7.5						6.0				9.0	4.0					9.0		5.5						
13-14		6.5							8.0				7.0				5.0									
14-15		6.0						4.5		8.0	3.5														5.0	
15-16		5.0																	5.5						9.0	
16-17		4.0						3.5			5.0		7.0			6.0										
17-18		3.0			3.5	5.0							10.0					8.0								
18-19	10.0			6.0				2.5			6.5		4.0				4.0	9.5					5.5			
19-20		9.0	3.5							8.5			7.0				7.5									
20-21		8.0	5.0								8.0		10.0						9.0						2.5	
21-22		7.0	7.0										4.0												7.0	8.0
22-23		6.0	8.5										6.5													
23-24	2.5	5.5											9.5					9.0								
24-25		4.5							5.5	9.5								6.5								
25-26		3.5																	8.0							
26-27		2.5		6.5					9.5				6.5	4.5												
27-28		9.5				6.5							9.5		8.5											5.0
28-29		8.5																		8.5						9.0
29-30		7.5											6.5	6.5								5.0				9.5
30-31		6.5				3.5	7.5						9.5													

8.0

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	AC	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.5	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	6	4	4	4	3	6	3	3	4	4	3

0- 1				7.5	7.5	3.5		9.0	5.0		10.0
1- 2					7.5		5.5		6.5		
2- 3		5.0			7.5				7.5		3.0
3- 4		9.0		8.0	7.5	5.0	7.0		8.5		6.0
4- 5					7.5						9.5
5- 6					7.5		8.5				
6- 7		7.0		8.5	7.5	6.5				3.0	2.5
7- 8	8.5				7.5						5.5
8- 9					7.5		2.5				9.0
9-10	9.5	5.5		8.5	7.5				3.5		
10-11		9.5			7.5		4.0	4.0	4.5		
11-12					7.5			9.0	5.5		5.5
12-13				9.0	7.5		5.5		7.0		8.5
13-14		7.5			7.5				8.0	5.0	
14-15					7.5		7.0		9.5		
15-16				9.5	8.0					3.0	5.0
16-17		6.0			8.0		8.5	6.5			8.0
17-18					8.0						
18-19				9.5	8.0						
19-20					8.0		2.5		2.5		4.5
20-21		8.0			8.0				4.0		8.0
21-22					8.0		4.0	4.0	5.0		
22-23					8.0				6.5	5.0	
23-24		6.5			8.0		5.5		7.5		4.0
24-25			9.5		8.0				8.5	3.0	7.5
25-26			8.5		8.0		7.0				
26-27			8.0		8.0						
27-28		8.5	7.0		8.0		8.5	6.5			3.5
28-29			6.5	5.0	8.0						7.0
29-30			6.0		8.0						
30-31		7.0			8.0		2.5		3.5		



	U	W	W	RV	SW	WW	ZZ	BR	CG	V346	V387	V477	W	TT	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY	YY	RW
	CRB	CRV	CRV	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI	ERI	GEM
MAX	7.6	10.6	10.6	9.0	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.4	10.6	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4	8.4	9.6
MIN	8.8	11.2	11.2	10.0	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	12.7	12.5	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1	9.1	11.6
DUR	5	4	4	4	5	5	4	4	3	5	3	4	7	5	4	4	3	4	5	5	5	4	3	3	5
							(S)															(S)		(S)	

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

	SZ	TU	CT	SW	VX	CM	Y	SS	delt	EW	FL	RU	RW	U	SX	EQ	ER	FL	U	TY	AQ	RT	RV	ST	XZ
	HER	HER	HER	LAC	LAC	LAC	LEO	LIB	LIB	LYR	LYR	MON	MON	OPH	OPH	ORI	ORI	ORI	PEG	PEG	PEG	PER	PER	PER	PER
MAX	10.2	10.6	9.9	9.2	10.9	8.5	9.5	10.4	4.8	11.2	8.7	10.6	9.1	5.8	10.5	10.3	9.5	10.5	9.7	10.5	10.3	10.6	10.3	9.7	10.6
MIN	12.0	13.4	11.2	10.0	12.3	9.5	12.7	11.3	5.9	13.6	9.5	11.3	11.9	6.5	11.2	13.3	10.2	13.2	10.5	12.6	13.0	12.0	12.7	13.2	12.7
DUR	4	5	4	3	4	4	5	6	7	5	4	5	5	5	5	4	3	3	3	6	10	4	8	5	4

(S)

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

	beta	Y	U	V505	RW	AC	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	PER	PSC	SGE	SGR	TAU	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	2.2	9.0	6.4	6.4	8.0	10.5	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	3.5	12.0	9.1	7.6	12.5	12.3	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	8	7	6	5	4	6	4	4	4	4	3	6	3	3	4	4	3
0- 1					9.5				4.5	5.0	8.0				4.5		3.0
1- 2				3.0					4.0		8.0		4.0		5.5		6.5
2- 3	5.0			7.5			7.0	5.0	3.0		8.0			9.0	7.0		10.0
3- 4			3.5		4.0			9.0	2.5	5.5	8.0		5.5		8.0		
4- 5							8.0		2.0		8.0				9.0	1.5	3.0
5- 6								3.5			8.0		7.0		10.5		6.0
6- 7							9.0	7.5			6.0	8.0					9.5
7- 8											8.5		8.5	6.5			
8- 9				5.5			10.0				8.5				1.5		2.5
9-10								5.5		6.5	8.5		10.0		2.5		5.5
10-11								10.0			8.5		2.5		4.0		9.0
11-12											8.5				5.0		
12-13		6.5						4.0		6.5	8.5		4.0	4.0	6.0		2.0
13-14			6.5					8.0			8.5			9.0	7.5	1.0	5.5
14-15				3.5	6.0						8.5		5.5		8.5		8.5
15-16				7.5						7.0	8.5	2.0			10.0		
16-17								6.0			8.5		7.0				1.5
17-18								10.5			8.5						5.0
18-19										7.5	8.5	3.5	8.5				8.0
19-20	10.0							4.5			8.5				2.0		
20-21				1.0				8.5			8.5		10.0		3.0	3.0	
21-22				5.5		7.5				7.5	8.5	5.0	2.5		4.5		4.5
22-23	6.5							2.5			8.5				5.5		8.0
23-24			10.0			8.5		7.0			8.5		4.0	4.0	7.0		
24-25										8.0	8.5			9.0	8.0		
25-26	3.5				7.5	9.5			10.5		8.5		5.5		9.0		4.0
26-27								5.0	10.0		8.5				10.5		7.5
27-28		8.0		3.5		10.5		9.0	9.5	8.5	8.5		7.0				10.5
28-29				8.0					8.5		8.5						
29-30								3.0	8.0		8.5		8.5		1.5	3.0	3.5



## AAVSO Eclipsing Binary Ephemeris for October 2007

all times U.T.

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	R	UU	U	SW	WW	ZZ	BR	CG	V346	V387	V477	W	TT	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY	YY	RW	SZ
	CMA	CMA	CRB	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI	ERI	GEM	HER
MAX	6.2	10.0	7.6	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.4	10.6	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4	8.4	9.6	10.2
MIN	6.8	12.5	8.8	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	12.7	12.5	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1	9.1	11.6	12.0
DUR	4	5	5	5	5	4	4	3	5	3	4	7	5	4	4	3	4	5	5	5	4	3	3	5	4
																				(S)			(S)		
0- 1						8.5	5.5			8.0											4.5	7.5	11.5		3.5
1- 2					3.0			3.5								7.5		5.5		7.0	9.5	7.0	10.5		
2- 3						6.0		10.0	8.0	6.5			8.0			2.0	8.0					6.0	10.0		
3- 4								1.0			0.5	6.5		3.5	4.0							5.0	9.0		
4- 5	9.5				10.5	3.0	5.5	7.0		4.5				8.0				0.5					8.0		6.0
5- 6		11.5		3.0		9.5			2.0	11.0	9.0		4.5			5.0	1.5					11.0	7.0		1.5
6- 7			0.5					4.5		2.5					8.0				4.5		4.5	10.0	6.5		
7- 8					6.5			11.0		9.5					3.0						9.0	9.5	5.5		
8- 9							5.5	2.0		0.5		2.0	1.5			8.5						8.5			
9-10						4.0		8.5		7.5					2.5		3.0	3.0	10.5			7.5			3.5
10-11						10.0					1.5				7.0	7.0						7.0	10.5		
11-12					2.0	1.0		6.0		5.5					2.0					1.5		6.0	10.0		
12-13						7.0	5.0				10.0					6.5		11.0			4.5		9.0		
13-14	11.5							3.5	7.5	3.5						1.0	5.0				9.0		8.0	8.5	5.5
14-15				6.5	9.5	4.5		9.5		10.5					6.5				8.0			11.0	7.5		1.5
15-16						10.5		0.5		2.0				1.0	1.5	9.5		6.0				10.5	6.5		
16-17						2.0	5.0	7.0	1.5	8.5				6.0		4.5						9.5	5.5	5.5	
17-18						8.0					2.5						6.5					8.5			8.0
18-19		11.5						4.5		6.5					5.5			1.5			4.0	7.5			3.5
19-20						5.0		10.5							0.5	7.5			5.5		9.0	7.0	10.5		
20-21						11.5	5.0	2.0		5.0						2.5						6.0	10.0		
21-22	10.5				1.0	2.5		8.0								9.5		8.5					9.0		
22-23						8.5				3.0					5.0	4.5							8.0		5.5
23-24				10.0				5.5		9.5					9.5		5.5						11.0	7.5	1.5
24-25					8.5	6.0	5.0		7.0	1.0	3.5						1.5			3.0	4.0	10.5	6.5		
25-26								3.0		8.0			7.0		9.0			10.0			9.0	9.5			
26-27						3.0		9.5							4.0	9.0						8.5			8.0
27-28						9.5		0.5	0.5	6.0		7.5				3.5				9.0		8.0			3.5
28-29							5.0	7.0					4.0	3.5			3.0					7.0	11.0		
29-30						6.5				4.0					8.5	8.0			7.0				10.0		
30-31			4.5					4.5		11.0					3.0	6.5					4.0		9.0		



	RV	ST	XZ	beta	Y	U	V505	RW	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	PER	PER	PER	PER	PSC	SGE	SGR	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.3	9.7	10.6	2.2	9.0	6.4	6.4	8.0	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.7	13.2	12.7	3.5	12.0	9.1	7.6	12.5	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	8	5	4	8	7	6	5	4	4	4	4	4	3	6	3	3	4	4	3

0- 1						4.5				7.5	7.5	8.5	1.0	9.5	1.0		2.5		7.0
1- 2				2.0						11.5	6.5	3.0	1.0		10.0		4.0		
2- 3			1.0							1.5	6.0		1.0		2.5		5.0		
3- 4			5.0				1.5			5.5	5.5	9.0	1.0	11.0	11.5		6.0		3.5
4- 5			8.5				6.0			9.5	4.5	3.0	1.0		4.0		7.5		6.5
5- 6											4.0		1.0			9.0	8.5		10.0
6- 7	5.0							9.5		4.0	3.0	9.5	1.0		5.5		9.5		
7- 8										8.0	2.5	3.5	1.0				11.0	11.5	3.0
8- 9											2.0		1.0		7.0				6.0
9-10								4.0		2.0	1.0	10.0	1.0			1.0	0.5		9.5
10-11			2.5			8.0	4.0			6.0	0.5	4.0	1.0		8.5	6.5	2.0		
11-12			6.5							10.0			1.0		1.0		3.0		2.5
12-13			10.0	8.5	9.5							10.0	1.0		10.0		4.5		6.0
13-14										4.5		4.0	1.0		2.5		5.5		9.0
14-15	3.5									8.5			1.0		11.5		6.5		
15-16				5.0								10.5	1.0		4.0		8.0		2.0
16-17					3.5		2.0			2.5		4.5	1.0			9.0	9.0		5.5
17-18			0.5			2.0	6.0	11.5	6.0	6.5			1.0		5.5		10.5		8.5
18-19			4.0	2.0						10.5		11.0	1.0				11.5		
19-20	10.5		8.0						7.0	1.0		5.0	1.0		7.0			1.0	1.5
20-21			11.5					5.5		5.0			1.0			1.0	1.5		5.0
21-22									8.0	9.0		11.0	1.0		8.5	6.5	2.5		8.5
22-23	2.5											5.5	1.0		1.0		3.5		
23-24							4.0		9.0	3.0			1.5		10.0		5.0		1.0
24-25										7.0			1.5		2.5		6.0		4.5
25-26			2.0						10.0	11.0		5.5	1.5		11.5		7.5		8.0
26-27	11.5		5.5							1.5			1.5		3.5		8.5		11.0
27-28		9.5	9.0		11.0	5.5			11.5	5.5			1.5			9.5	9.5		1.0
28-29	11.0									9.5	11.5	6.0	1.5		5.0		11.0	1.0	4.0
29-30							2.0				11.0		1.5						7.5
30-31	10.0						6.5			3.5	10.0		1.5		6.5		0.5		11.0



	R	UU	U	V	W	W	SW	WW	ZZ	BR	CG	V346	V387	V477	W	TT	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY	
	CMA	CMA	CRB	CRT	CRV	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI	
MAX	6.2	10.0	7.6	9.5	10.6	10.6	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.4	10.6	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4	
MIN	6.8	12.5	8.8	10.2	11.2	11.2	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	12.7	12.5	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1	
DUR	4	5	5	4	4	4	5	5	4	4	3	5	3	4	7	5	4	4	3	4	5	5	5	4	3	
						(S)																	(S)			
0- 1		11.0							4.0				2.0	4.5		1.0			1.5					8.5	4.5	
1- 2									10.0	5.0	1.5		9.0		2.5					5.0	2.5	6.5			3.5	
2- 3									1.0		8.0		0.5												2.5	
3- 4								7.5	7.5				7.0				2.5	2.0	4.5						9.5	
4- 5					11.5						5.5	6.0					7.0								8.5	
5- 6				11.5		11.0			4.5	5.0			5.0							6.5				3.5	8.0	
6- 7	8.0		2.5				3.5				3.0							6.5				4.0	8.5	7.0		
7- 8	11.5								2.0		9.0		3.5	5.5				1.5	2.5						6.0	
8- 9									8.0		0.5														5.5	
9-10										5.0	6.5		1.5			1.5				8.5		10.0			4.5	
10-11									5.0				8.0			6.0	5.5	6.0							3.5	
11-12		7.0		11.5							4.0						0.5	0.5				1.5		3.5	10.5	
12-13									2.5				6.5							1.5	8.0			8.5	9.5	
13-14		11.0						6.5	8.5	5.0	1.5								10.0						8.5	
14-15	7.0										8.0		4.5	6.5				4.5	4.0			7.5			8.0	
15-16	10.0						7.0		6.0			5.5					0.5				3.0				7.0	
16-17											5.0		2.5				5.0			3.5					6.0	
17-18					11.5				3.0	4.5			9.5		6.5				7.0					3.5	5.5	
18-19									9.5		2.5		0.5					4.0	2.0					8.0	4.5	
19-20									0.5		9.0		7.5													3.5
20-21									6.5						8.0	3.0						5.0				10.5
21-22										4.5	6.5		5.5	7.5					8.0	5.0						9.5
22-23									4.0								4.0	3.0					11.0		9.0	
23-24	9.0							5.0	10.0		4.0		3.5				8.5							3.5	8.0	
24-25							10.5		1.0		10.0		10.5							8.0	6.5		2.5		8.0	7.0
25-26									7.5	4.5	1.5		1.5		3.5				7.0	3.0						6.0
26-27		11.0									7.5	5.0	8.5	0.5					2.0			8.5				5.5
27-28									4.5													8.5				4.5
28-29									11.0		5.0		6.5	8.5			3.0		6.0	8.5						11.5
29-30									2.0	4.5							7.5	6.5	1.0		4.0			3.0	10.5	

	YY	RW	SZ	TU	CT	AV	SW	VX	CM	Y	delt	EW	FL	RU	RU	RW	BO	SX	EQ	ER	FL	U	TY	AQ	Z
	ERI	GEM	HER	HER	HER	HYA	LAC	LAC	LAC	LEO	LIB	LYR	LYR	MON	MON	MON	MON	OPH	ORI	ORI	ORI	PEG	PEG	PEG	PER
MAX	8.4	9.6	10.2	10.6	9.9	10.2	9.2	10.9	8.5	9.5	4.8	11.2	8.7	10.6	10.6	9.1	10.8	10.5	10.3	9.5	10.5	9.7	10.5	10.3	9.9
MIN	9.1	11.6	12.0	13.4	11.2	10.6	10.0	12.3	9.5	12.7	5.9	13.6	9.5	11.3	11.3	11.9	12.1	11.2	13.3	10.2	13.2	10.5	12.6	13.0	12.4
DUR	3	5	4	5	4	4	3	4	4	5	7	5	4	5	5	5	5	5	4	3	3	3	6	10	6
	(S)														(S)										
0- 1	8.0			3.0			4.0	5.0	1.5			3.5			8.0					9.5		8.5			
1- 2	7.5		1.5				3.0	6.5												6.0	5.0	2.5	5.0		
2- 3	6.5	10.0					2.5	8.5				2.5								2.5		5.5			
3- 4	5.5						1.5	10.5	6.5								9.5			9.0		8.5			
4- 5	5.0						0.5			9.5		1.0	2.5						8.0	5.0	7.5	2.5	7.5		
5- 6	4.0	7.0	3.5				7.5													11.5		5.5			
6- 7	3.0						6.5		11.5				6.5							8.0		8.5			
7- 8	10.0						5.5									11.5				4.0	10.0	2.5	9.5		
8- 9	9.0	3.5				8.0	4.5		2.0											10.5		5.5			
9-10	8.5		5.5	4.5			3.5			11.0										7.0		8.5			
10-11	7.5		1.5			9.0	3.0													3.5		2.5			
11-12	6.5				3.0		2.0		7.0										8.0	10.0		5.5			
12-13	5.5					10.5	1.0	0.5									7.0			6.0		8.5		0.5	
13-14	5.0						7.5	2.5					7.0			4.5						2.5			
14-15	4.0		3.5			11.5	7.0	4.0												9.0		5.5			
15-16	11.0						6.0	6.0												5.5	4.0	8.5			
16-17	10.0						5.0	7.5	2.5													2.5			
17-18	9.0						4.0	9.5				4.0					1.5			8.0		5.5			
18-19	8.5		5.5				3.0	11.5							6.0			1.5		7.5	4.5	6.5	8.5		
19-20	7.5		1.5				2.5		7.5			8.5								11.0		2.5			
20-21	6.5				1.5		1.5							11.0						7.0		5.5			
21-22	6.0						0.5													3.5	9.0	8.5			
22-23	5.0	11.5					7.0													10.0		2.5			1.5
23-24	4.0		3.5			9.0	6.5													6.5		5.5		3.0	
24-25	11.0						5.5		3.0													8.5			
25-26	10.0	8.0		1.5		10.0	4.5							10.0					7.0	9.0		2.5			3.0
26-27	9.0						3.5			7.5										5.5		5.5			
27-28	8.5		5.5		4.5	11.5	2.5	1.5	8.0											8.5		8.5			
28-29	7.5	5.0	1.5				2.0	3.5					1.5			10.5				8.5		2.5			4.0
29-30	6.5						1.0	5.0			1.5									4.5		5.5	1.0		

	RT	RV	ST	XZ	beta	Y	U	V505	RW	AC	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	PER	PER	PER	PER	PER	PSC	SGE	SGR	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	10.6	10.3	9.7	10.6	2.2	9.0	6.4	6.4	8.0	10.5	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.0	12.7	13.2	12.7	3.5	12.0	9.1	7.6	12.5	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	4	8	5	4	8	7	6	5	4	6	4	4	4	3	6	3	3	4	4	3
0- 1	2.0					5.0			7.5		7.5	9.5	6.5	1.5				2.0		0.5
1- 2		9.5			10.0					4.0		9.0	0.5	1.5		8.0	6.5	3.0		3.5
2- 3				3.5							2.0	8.0		1.5		0.5		4.5		7.0
3- 4	11.5	9.0		7.0					2.0	5.0	6.0	7.5	6.5	1.5		9.5		5.5	11.0	
4- 5	7.5		8.0	10.5	7.0						10.0	6.5	1.0	1.5		2.0		6.5		
5- 6	4.0	8.5					4.5		6.0			6.0		1.5		11.0		8.0	9.5	3.5
6- 7	0.5										4.0	5.5	7.0	1.5		3.5	4.0	9.0		6.5
7- 8		7.5			3.5				7.5	8.0	4.5	1.0	1.5				9.5	10.0		
8- 9											4.0			1.5		5.0		11.5		
9-10	10.0	7.0		1.5					8.5	2.5	3.5	7.5	1.5	1.5	5.5					3.0
10-11	6.5			5.0	0.5						6.5	2.5	1.5	1.5		6.5		1.0		6.0
11-12	3.0	6.5		8.5			2.5	9.5	9.5	10.5	2.0			1.5				2.5		
12-13			6.5								0.5	1.5	7.5	1.5	7.0	8.0	6.5	3.5	11.0	
13-14		5.5					3.0		10.5	4.5	0.5	2.0	1.5			0.5		5.0		2.5
14-15									4.0		9.0			1.5		9.5		6.0		6.0
15-16	8.5	5.0				6.5			11.5			8.0	1.5	8.5	2.0			7.0		
16-17	5.0										3.0		2.0	2.0		11.0		8.5		
17-18	1.5	4.5		2.5			0.5				7.0			2.0		3.5	4.0	9.5		2.0
18-19				6.5			4.5				11.0		8.5	2.0	10.0		9.5	11.0		5.5
19-20		4.0		10.0		1.0					1.0		2.5	2.0		5.0				8.5
20-21	11.0		5.5								5.0			2.0				0.5		
21-22	7.5	3.0			12.0						9.5		9.0	2.0	11.5	6.5		2.0	11.0	1.5
22-23	4.0								11.0				3.0	2.0				3.0		5.0
23-24		2.5					6.5				3.5			2.0		8.0	6.5	4.0		8.5
24-25				0.5	8.5			2.5			7.5		9.0	2.0		0.5		5.5		
25-26		2.0		4.0					5.5		11.5		3.0	2.0		9.5		6.5		1.5
26-27	9.5			8.0							1.5			2.0		2.0		8.0		4.5
27-28	6.0	1.5		11.5	5.5						6.0		9.5	2.0		11.0		9.0		8.0
28-29	2.5		4.0								10.0		3.5	2.0		3.5	4.0	10.0		
29-30													2.0				9.5	11.5		1.0

	RT	TW	WZ	XZ	AB	XZ	OO	V342	V343	V346	RY	CX	WW	WW	Y	SV	AL	RW	RZ	TV	AB	U	XX	EG	R	
	AND	AND	AND	AND	AND	AQL	AQL	AQL	AQL	AQL	AQR	AQR	AUR	AUR	CAM	CAM	CAM	CAP	CAS	CAS	CAS	CEP	CEP	CEP	CMA	
MAX	9.3	8.8	11.6	10.0	9.3	9.3	9.2	9.0	10.6	9.0	8.8	10.7	5.7	5.7	10.6	8.6	10.5	9.8	6.4	7.3	10.2	6.7	8.5	9.6	6.2	
MIN	10.2	11.0	12.6	13.0	10.2	11.2	10.1	12.5	12.3	10.4	10.1	12.0	6.4	6.4	12.4	9.4	11.3	10.8	7.8	8.4	12.2	9.8	9.6	10.6	6.8	
DUR	3	11	4	3	3	7	3	7	4	4	5	3	5	5	10	3	5	6	4	4	4	4	4	3	4	
														(S)												
0- 1	2.0		1.5		3.5								11.5		10.0			4.5	5.5					1.0	4.5	
1- 2	8.0		11.0		3.5										0.0	4.0		9.0		8.5	4.0	8.0	3.0	8.0		
2- 3			3.5		3.5			0.5							4.5				1.0					5.0	11.0	
3- 4	5.5			6.5	3.5							2.5			9.0										7.5	
4- 5	11.5	1.0	6.0		3.5							5.0		6.5							2.0				9.5	
5- 6	2.5				3.0										4.0	4.0				11.0					11.5	
6- 7	9.0		8.0		3.0										8.5	11.5		4.0			3.5	0.5	0.5		3.0	
7- 8			0.5	8.0	3.0										4.5		3.0	8.5	11.5						5.0	
8- 9	6.0	4.0	10.0		3.0	0.5		0.0		2.5	1.5				3.0						4.5		8.5	5.0		
9-10			2.5		3.0			2.5		5.0			7.5		7.5	3.5				7.0					7.0	6.5
10-11	3.5			1.0	2.5	3.5									12.0	12.0	11.5								9.5	10.0
11-12	9.5		5.0	9.5	2.5										2.0					2.5		3.5			11.5	
12-13	0.5	7.0			2.5										6.5			3.5			7.0				0.5	
13-14	7.0		7.0		2.5			2.0			2.5	2.5			11.0	3.0		8.0					0.5	2.5		
14-15				3.0	2.5						5.0		9.0		1.5	11.0									5.0	
15-16	4.0		9.0	11.5	2.0										6.0						0.5		8.5	7.0		
16-17	10.5	10.0	1.5		2.0										10.5					9.0	3.0				9.0	
17-18	1.5		11.0		2.0										2.5	0.5	3.0								11.0	5.5
18-19	7.5		3.5	4.5	2.0						2.5	3.5			5.0	10.5		3.0	8.5						0.5	8.5
19-20					2.0					1.5			10.0		9.5				7.5		3.0				2.5	12.0
20-21	5.0		6.0		1.5					4.0					10.0					4.0	11.5		1.0	4.5		
21-22	11.0				1.5											4.0	2.5					2.5			6.5	
22-23	2.0		8.0	6.5	1.5										8.5	10.5							9.0	9.0		
23-24	8.5		0.5		1.5		0.0	3.5			5.5	2.5	5.0								5.0				11.0	
24-25			10.0		1.0		0.5		3.5			5.5		11.0		3.5		2.0	2.5						0.0	
25-26	5.5		2.5		1.0	3.0	1.0				4.5				8.0	2.0			7.0						2.0	
26-27	12.0			8.0	1.0		1.0									10.0			11.5			2.5			4.5	7.5
27-28	3.0		5.0		1.0		1.5				4.0	0.0			0.5	2.5				10.0	7.5		1.0	6.5	11.0	
28-29	9.0				1.0		2.0					3.0	6.0			7.0									8.5	
29-30	0.0		7.0	1.0	0.5		2.0			0.5	3.0	5.5			11.5	1.5			5.5				9.5	11.0		
30-31	6.5		10.0	0.5			2.5			3.0				8.0	1.5	9.5		1.5		1.5						

	UU	U	V	W	W	RV	SW	WW	ZZ	BR	CG	V346	V387	V477	W	TT	TY	YY	FZ	Z	TW	UZ	UZ	AI	YY
	CMA	CRB	CRT	CRV	CRV	CRV	CYG	CYG	CYG	CYG	CYG	CYG	CYG	CYG	DEL	DEL	DEL	DEL	DEL	DRA	DRA	DRA	DRA	DRA	ERI
MAX	10.0	7.6	9.5	10.6	10.6	9.0	9.3	9.9	10.7	9.4	11.0	11.8	11.5	8.3	9.4	10.6	9.6	11	10.2	10.8	7.8	9.9	9.9	7.2	8.4
MIN	12.5	8.8	10.2	11.2	11.2	10.0	11.8	13.2	12.0	10.5	11.8	13.6	12.3	9.2	12.7	12.5	10.8	12	11.3	13.6	9.5	10.7	10.7	8.2	9.1
DUR	5	5	4	4	4	4	5	5	4	4	3	5	3	4	7	5	4	4	3	4	5	5	5	4	3
					(S)																		(S)		
0- 1				12.0					8.0		2.5		4.5					1.5					8.0	2.0	
1- 2			11.0		11.0															1.5					1.0
2- 3				10.5					5.5				3.0						4.0	10.0		6.0		8.0	
3- 4					9.5			4.0		4.5	6.0			1.5											7.0
4- 5				9.0					2.5				1.0				2.0	0.5							6.5
5- 6											3.5		7.5							3.5			3.0	5.5	
6- 7			9.0																2.0	12.0			8.0	4.5	
7- 8	7.0			11.5					6.0	4.5	1.0	4.5	6.0				4.5					3.5		3.5	
8- 9			11.5		10.5		3.5																		3.0
9-10	11.0			10.0					3.0				4.0								5.0				2.0
10-11					9.5						5.0			2.0			1.0		0.0		9.5	9.5			1.0
11-12									0.5	4.5			2.0				5.5	4.0					3.0	8.0	
12-13									6.5		2.5												1.0	7.5	7.0
13-14			9.5		12.0			3.0					0.0			2.5			3.5	7.0	5.0				6.5
14-15		1.5		11.0		12.0			4.0				7.0												5.5
15-16			12.0		10.5					4.5	6.0							3.0					7.0		4.5
16-17				9.5					1.0				5.0								0.0				3.5
17-18						11.5	7.0		7.5		3.5			3.0			4.5		1.5	8.5			2.5	3.0	
18-19												3.5	3.0										7.5	2.0	
19-20									4.5	4.5	1.0				4.0			2.0							9.0
20-21	7.0		10.0		11.5	11.0					7.0		1.5						4.5	1.5		4.5			8.0
21-22				10.5					2.0				8.0								10.5				7.0
22-23	11.0				10.0				8.0		4.5														6.5
23-24						11.0		2.0		4.0			6.0				3.5	1.5				11.0		2.5	5.5
24-25		10.5							5.5		2.0			4.0					2.5	3.5	10.5			7.5	4.5
25-26													4.5										2.0		4.0
26-27				12.0					2.5									5.5							3.0
27-28			10.5		11.0				8.5	4.0	6.0		2.5					0.5	5.5		5.5				10.0
28-29				10.5									9.0						0.5	5.0			8.0		9.0
29-30									6.0		3.5	3.0	0.5				2.0							2.5	8.0
30-31													7.5				7.0	4.5			1.0			7.0	7.5

	YY	RW	SZ	TU	CT	AV	SW	VX	CM	Y	T	EW	FL	RU	RU	RW	BO	U	SX	EQ	ER	FL	U	TY	AQ
	ERI	GEM	HER	HER	HER	HYA	LAC	LAC	LAC	LEO	LMI	LYR	LYR	MON	MON	MON	MON	OPH	OPH	ORI	ORI	ORI	PEG	PEG	PEG
MAX	8.4	9.6	10.2	10.6	9.9	10.2	9.2	10.9	8.5	9.5	10.2	11.2	8.7	10.6	10.6	9.1	10.8	5.8	10.5	10.3	9.5	10.5	9.7	10.5	10.3
MIN	9.1	11.6	12.0	13.4	11.2	10.6	10.0	12.3	9.5	12.7	12.6	13.6	9.5	11.3	11.3	11.9	12.1	6.5	11.2	13.3	10.2	13.2	10.5	12.6	13.0
DUR	3	5	4	5	4	4	3	4	4	5	6	5	4	5	5	5	5	5	5	4	3	3	3	6	10
	(s)														(s)										
0- 1	6.0					5.0	7.5	7.0			7.0		5.5			8.0					1.0				
1- 2	5.0	1.5					7.0			9.0				5.0							7.5		2.5		
2- 3	4.0					6.0	6.0		4.0							6.0	7.5			6.5	3.5	5.5	5.5	3.0	
3- 4	3.5						5.0				7.5							0.5			10.0		8.0		
4- 5	2.5					7.5	4.0									3.5					6.5		2.0		5.5
5- 6	1.5						3.0		9.0												3.0	8.0	5.0	5.5	
6- 7	8.5					8.5	2.0			10.0	8.0				4.5						9.5		8.0		
7- 8	7.5		1.5				1.5					4.0									5.5		2.0		
8- 9	6.5					9.5	0.5							9.0							2.0	10.5	5.0	7.5	
9-10	6.0						7.0				8.5	3.0								6.5	8.5		8.0		
10-11	5.0					11.0	6.5		4.5												5.0		2.0		
11-12	4.0		3.5		11.5		5.5	1.0		11.5		1.5	3.0				5.0				1.0		5.0		
12-13	3.5						4.5	2.5			9.0										7.5		8.0		
13-14	2.5						3.5	4.5	9.5			0.5	7.5		8.5		10.5				4.0	2.5	2.0		
14-15	1.5						2.5	6.0													10.5		5.0		
15-16	8.5	9.5			1.5		1.5	8.0			9.5										7.0		8.0		
16-17	7.5		1.0				1.0													6.0	3.0	4.5	2.0		
17-18	7.0					7.0	7.5									12.0					9.5		5.0		
18-19	6.0	6.5					6.5		5.0	5.5	10.0								0.0		6.0		8.0		
19-20	5.0					8.0	6.0									9.5					2.0	7.0	2.0		
20-21	4.0		3.5				5.0														8.5		5.0		
21-22	3.5	3.0				9.5	4.0		10.0		10.5										11.5	5.0	8.0		
22-23	2.5						3.0						0.5										11.5	9.5	2.0
23-24	9.5					10.5	2.0		0.5	7.0						5.0					5.5	8.0	5.0		
24-25	8.5						1.0				10.5		4.5								4.0		8.0		
25-26	7.5		1.0			11.5	0.5	0.0													10.5		2.0		
26-27	7.0						7.0	2.0	5.5					7.5							7.0		5.0		
27-28	6.0						6.0	3.5			11.0										3.5		8.0		
28-29	5.0						5.5	5.5		8.5											11.5	10.0	2.0		
29-30	4.5		3.5	1.5			4.5	7.5	10.5												6.0		5.0		
30-31	3.5						3.5	9.0			11.5										5.0	2.5	3.5	8.0	

	Z	RT	RV	ST	XZ	beta	Y	U	V505	RW	AC	AM	V	X	RV	W	TX	VV	XZ	RU	AG	BU
	PER	PER	PER	PER	PER	PER	PSC	SGE	SGR	TAU	TAU	TAU	TRI	TRI	TRI	UMA	UMA	UMA	UMA	UMI	VIR	VUL
MAX	9.9	10.6	10.3	9.7	10.6	2.2	9.0	6.4	6.4	8.0	10.5	10.4	10.9	8.9	11.4	9.1	6.8	10.1	10.1	10.7	8.8	10.6
MIN	12.4	12.0	12.7	13.2	12.7	3.5	12.0	9.1	7.6	12.5	12.3	12.3	11.9	12.0	12.5	9.9	8.9	11.0	11.7	11.4	9.4	11.4
DUR	6	4	8	5	4	8	7	6	5	4	6	4	4	4	4	3	6	3	3	4	4	3
0- 1						2.0		1.0	0.5				4.0		10.0	2.0		5.0			11.0	4.0
1- 2	5.5		0.0									5.0	8.0		4.0	2.0						
2- 3		8.5			2.0									11.0		2.0				1.0		
3- 4		5.0		11.0	5.5							6.5	2.0	10.0	10.0	2.0		6.5		2.5	9.0	
4- 5	7.0	1.0			9.5		2.5						6.5	9.5	4.5	2.0			1.5	3.5		0.5
5- 6												7.5	10.5	9.0		2.0		8.0	6.5	5.0	7.5	4.0
6- 7				3.0						7.5			0.5	8.0	10.5	2.0		0.5	12.0	6.0		
7- 8	8.0	10.5										8.5	4.5	7.5	4.5	2.0		9.5		7.0		
8- 9		7.0											8.5	7.0		2.0		2.0		8.5		0.0
9-10		3.5														2.0		11.0		9.5		3.5
10-11	9.5				3.5					2.0		9.5		6.0	11.0	2.5		3.5	4.0	10.5	11.0	6.5
11-12				10.0	7.0			4.0					2.5	5.5	5.0	2.5			9.5	12.0		
12-13					11.0							10.5	7.0	5.0		2.5		5.0		0.5	9.0	
13-14	11.0	9.5								1.0		11.0	4.0	11.0	2.5					1.5		3.0
14-15		6.0		1.5		10.5						11.5	1.0	3.5	5.5	2.5		6.5		3.0		6.5
15-16		2.0											5.0	2.5		2.5			1.5	4.0		
16-17													9.0	2.0	11.5	2.5		8.0	6.5	5.5		
17-18					1.5	7.0					3.0			1.5	5.5	2.5		0.5		6.5		2.5
18-19		12.0			5.0					9.0			3.5	0.5		2.5		9.5		7.5		6.0
19-20		8.0		8.5	8.5		4.0				4.0		7.5		12.0	2.5		2.0		9.0	11.0	
20-21		4.5				4.0							11.5		6.0	2.5		11.0		10.0		
21-22		1.0								3.0	3.5	5.0		1.5	0.0	2.5		3.5	4.0	11.5	9.0	2.0
22-23				0.0									5.5			2.5			9.5			5.5
23-24						0.5					6.0		9.5		6.5	2.5		5.0		1.0		
24-25		10.5													0.5	2.5				2.5		
25-26		7.0			3.0						7.0		4.0			2.5		6.5		3.5		1.5
26-27		3.0			6.5								8.0		6.5	2.5	4.0			4.5		5.0
27-28				7.5	10.0			2.0	1.0		8.0				1.0	2.5		8.0	6.5	6.0		
28-29													2.0			2.5		0.5		7.0	10.5	
29-30										11.0	9.5		6.0		7.0	2.5	5.5	9.5		8.5		1.5
30-31		9.0											10.0		1.0	2.5		2.0		9.5	9.0	4.5
											10.5		0.5			2.5		11.0		10.5		