

	SW	XX	AT	TZ	BH	RS	ST	SW	SZ	TV	TW	UU	UY	UY	RW	TT	VZ	VZ	KV	SS	AN	RR	RV
	AND	AND	AND	AUR	AUR	BOO	BOO	BOO	BOO	BOO	BOO	BOO	BOO	CAM	CNC	CNC	CNC	CNC	CNC	CVN	CAP	CET	CET
MAX	9.3	10.3	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	11.9	11.2	12.0	9.3	10.3
MIN	10.8	11.6	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	7.9	7.9	13.0	12.5	13.0	10.3	11.2
RISE	2	3	3	2	2	2	3	2	2	3	2	1	2	3	2	3	1	1	2	2	5	2	3
0- 1				5.0	5.5		4.5	11.0	7.0	2.0	5.0	5.0		6.0	10.0	7.0	4.0	8.5	2.5	2.5			
1- 2	0.5			9.0	3.5	3.5	10.5	11.5	8.0		7.0	3.0	6.5	1.5			6.0	1.5	2.5	1.5			
2- 3		3.5	11.0	4.0	1.5	7.0		12.0	9.0	6.5	8.5			3.0	1.5		7.5	3.0	2.5				
3- 4			2.0	8.0			7.0		10.0	5.0	10.0	10.0	5.5	4.5	3.5	2.5	0.5	5.0	2.5	11.0			
4- 5				3.0		4.0			11.5	3.5	11.5	8.0		6.0	6.0	6.0	2.0	6.5	3.0	10.0			0.5
5- 6		1.0		7.0	6.0	7.0	4.0		12.5	2.0		6.0	4.5	1.5	8.0	9.0	4.0	8.0	3.0	9.0			
6- 7				2.0	4.0		10.0	2.5				3.5	11.5	3.0	10.5		5.5	1.5	3.0	8.0			
7- 8				6.0	2.0	4.5		3.0		6.5	3.5		3.5	4.5		1.5	7.5	3.0	3.0	7.0			
8- 9			0.5	1.0		7.5	6.5	3.5	3.0	5.0	5.0	10.5	10.5	6.5	2.0	4.5	0.5	4.5	3.0	6.0			
9-10				5.0			12.5	4.5	4.0	3.5	6.5	8.5		1.5	4.0	7.5	2.0	6.5	3.5	5.0			
10-11		2.0	11.5	9.5	6.5	5.0	3.5	5.0	5.5	2.0	8.0	6.5	9.5	3.0	6.5		4.0	8.0	3.5	4.0			
11-12				4.0	4.5	8.0	9.5	5.5	6.5		9.5	4.5		5.0	8.5		5.5	1.0	3.5	2.5		1.5	
12-13	2.0			8.5	2.0			6.5	7.5	6.5	11.0		8.5			3.0	7.0	3.0	3.5	1.5			
13-14				3.0		5.5	6.0	7.0	8.5	5.0				1.5		6.0		4.5	3.5				
14-15				7.5		8.5	12.0	7.5	9.5	3.5		9.0	7.0	3.5	2.5	9.0	2.0	6.0	4.0	11.0			
15-16				2.0	7.0			8.0	11.0	2.0	3.0	7.0		5.0	4.5		3.5	8.0	4.0	10.0	12.5		
16-17	1.5		1.0	6.5	4.5	6.0	9.0	9.0	12.0		4.5	5.0	6.0		7.0	2.0	5.5	1.0	4.0	9.0		1.0	
17-18				1.0	2.5	9.0		9.5		6.5	6.0			2.0	9.0	5.0	7.0	2.5	4.0	8.0			
18-19		1.0	12.0	5.5	0.5	3.0	5.5	10.0		5.0	7.5		5.0	3.5		8.0		4.5	4.0	7.0			
19-20						6.5	11.5	11.0		3.5	9.0	9.5	12.0	5.0	0.5		2.0	6.0	4.0	6.0			
20-21	1.0			4.5				11.5	3.5	2.0	10.5	7.5	3.5		2.5		3.5	8.0	4.5	5.0	12.0		
21-22				8.5	5.0	3.5	8.5	12.0	5.0		12.0	5.5	11.0	2.0	5.0	3.5	5.0	1.0	4.5	4.0		0.5	
22-23				3.5	3.0	7.0			6.0	6.5		3.5		3.5	7.5	6.5	7.0	2.5	4.5	3.0			
23-24		2.5		7.5	1.0		5.0		7.0	5.0	2.5		10.0	5.0	9.5			4.5	4.5	2.0			
24-25			1.5	2.5		4.0	11.0		8.0	3.5	4.0	10.5		0.5			1.5	6.0	4.5				
25-26				6.5		7.0		2.5	9.0	2.0	5.5	8.5	8.5	2.0	1.0	2.0	3.5	7.5	5.0	11.5			
26-27				1.5	5.5		8.0	3.0	10.5		7.0	6.0		3.5	3.0	5.0	5.0	1.0	5.0	10.0			
27-28				5.5	3.5	4.5		3.5	11.5	6.5	8.5	4.0	7.5	5.5	5.5	8.0	6.5	2.5	5.0	9.0			
28-29					1.5	7.5	4.5	4.5	12.5	5.0	10.5			0.5	7.5		8.5	4.0	5.0	8.0			
29-30				4.5			10.5	5.0		3.5	12.0		6.5	2.0	10.0	1.0	1.5	6.0	5.0	7.0			
30-31				8.5		5.0		5.5		2.0		9.0		4.0		4.0	3.0	7.5	5.5	6.0			

	RZ	TY	S	XX	XZ	DM	RW	XZ	RX	SV	BB	RX	RR	GQ	TW	VX	VZ	AR	DL	DY	DY	DY	LS
	CET	CET	COM	CYG	CYG	CYG	DRA	DRA	ERI	ERI	ERI	FOR	GEM	GEM	HER	HER	HER	HER	HER	HER	HER	HER	HER
MAX	11.2	11.4	10.9	11.4	9.1	11.2	11.0	9.6	9.2	9.6	10.9	11.1	10.7	13.6	10.5	9.9	10.7	10.6	11.0	10.2	10.2	10.2	10.8
MIN	12.4	11.9	12.1	12.5	10.5	12.7	12.0	10.3	10.1	10.2	11.9	12.5	11.9	14.6	11.8	10.4	12.0	11.6	12.4	10.6	10.6	10.6	11.1
RISE	2	3	3	1	3	2	2	3	3	5	2	2	2	2	2	2	2	2	1	1	1	1	2
0- 1			8.5				2.5	3.0	1.0			1.0	3.5				7.0		10.0	6.0	9.5		
1- 2				5.0			10.5	1.5			0.5		8.5	3.0	7.0			10.5			7.0	10.5	5.0
2- 3			3.0	0.5			8.0	0.5		0.5			3.5	6.5				9.0				8.0	
3- 4			7.0	5.5	10.0		5.0	11.0				0.5	8.0		7.0	9.5	9.0	7.5	9.0	9.0			
4- 5			11.0		8.5		2.5	9.5	3.5				3.0			7.0	6.5	6.0		6.0	10.0		5.0
5- 6			1.5	6.5	6.5		10.5	8.5					7.5	3.0	7.0			4.5			7.0		
6- 7		1.5	5.5				7.5	7.5			3.5		2.5	6.5				3.0	8.0			8.0	
7- 8		0.5	9.5	7.0			5.0	6.5	2.0				7.5		7.0			8.5	12.5	9.0			5.0
8- 9							2.0	5.0					2.5			9.5	5.5			6.5	10.0		
9-10			4.0	7.5			10.0	4.0					7.0	3.0	7.0	7.5		10.0	7.0		7.5		
10-11			8.0		10.0		7.0	3.0			3.5		2.0	6.5			10.5	8.5	11.5			8.5	5.0
11-12			12.0	8.0	8.0		4.5	2.0					6.5		7.0		7.5	7.0		9.5		6.0	
12-13			2.0		6.5		1.5	0.5					2.0					5.5		7.0	10.5		
13-14			6.5	8.5			9.5	11.0					6.5	3.0	6.5	9.5		4.0	10.5		8.0		5.0
14-15			10.5				7.0	10.0	3.0		3.0		1.5	6.0		7.5	9.5	3.0				8.5	
15-16				9.0			4.0	8.5					6.0		6.5	5.5	6.5			9.5		6.0	
16-17			5.0					7.5					1.0					11.0	9.5	7.0	10.5		5.0
17-18		1.5	9.0	9.5	10.0		9.5	6.5	1.5				5.5	2.5	6.5			10.0			8.0		
18-19		1.0		5.0	8.0		6.5	5.5			3.0		1.0	6.0		10.0	8.5	8.5				9.0	
19-20	1.0		3.0	0.5	6.5	9.5	4.0	4.0					5.5		6.5	8.0	5.5	7.0	8.5	10.0		6.5	5.0
20-21	1.5		7.5	5.5				3.0					0.5			5.5		5.5		7.5			
21-22	2.0		11.5				9.0	2.0					5.0	2.5	6.5		10.5	4.0			8.5		
22-23			1.5	6.0			6.0	1.0			2.5			6.0			7.5		7.5		6.0	9.5	5.0
23-24			5.5				3.5	11.0					4.5		6.5	10.0			12.0	10.5		7.0	
24-25			10.0	6.5	10.0			10.0	2.5							8.0		11.0		7.5			
25-26					8.0		8.5	9.0					4.5	2.5	6.5	6.0	9.5	9.5	6.5		8.5		5.0
26-27			4.0	7.0	6.5		6.0	7.5			2.5			5.5			6.5	8.0	11.0		6.0	9.5	
27-28			8.5				3.0	6.5	1.0				4.0		6.5			6.5		10.5		7.0	
28-29			12.5	8.0				5.5					8.5		10.5			5.0		8.0			5.0
29-30		1.0	2.5				8.5	4.5					4.0	2.0	6.5	8.0	8.5	4.0	10.0		9.0		
30-31			6.5	8.5			5.5	3.0			2.0		8.5	5.5		6.0	6.0				6.5	10.0	

	SZ	UU	DG	DH	GO	RR	SS	ST	TV	WW	AA	VY	U	SZ	SZ	SZ	RR	RZ	ST	BH	KZ	DF	RV
	HYA	HYA	HYA	HYA	HYA	LEO	LEO	LEO	LEO	LEO	LEO	LMI	LEP	LYN	LYN	LYN	LYR	LYR	OPH	PEG	PUP	SER	UMA
MAX	10.6	10.7	11.6	11.4	11.6	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	10.0	11.3	11.4	10.1
MIN	11.7	12.3	12.6	12.6	12.2	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	10.8	12.8	13.0	11.2
RISE	2	2	3	2	3	2	2	2	2	3	2	2	2	1	1	1	2	2	3	3	3	2	3
0- 1				8.0	1.5	8.5	5.0	6.5			3.5	7.5		5.0	8.0	2.0		7.5	8.5		0.5	6.5	1.0
1- 2				7.5	8.0	6.0	11.0	5.5	5.0	4.5	8.0	9.0		7.0	1.0	4.0	9.0	8.5					10.5
2- 3		1.0	4.0	7.0		4.0	2.0	4.5		9.5		10.0	3.5		3.0	6.0	12.0	9.0			1.0		9.0
3- 4	1.5	2.0		6.5	6.0	1.5	8.0	3.0	5.5		3.0	11.5		2.5	5.5	8.0		9.5				8.5	7.5
4- 5	3.0	3.5		6.0		10.0		2.0		4.5	8.0			4.5	7.5	1.5		10.0	10.0		1.5	5.5	6.0
5- 6	5.0	4.5	4.5	5.5	3.5	8.0	5.0	1.0	6.0	9.5		1.5	1.0	6.5	0.5	3.5	8.0	10.5	7.5				4.5
6- 7	6.5	5.5		5.0		5.5	11.0				3.0	2.5		8.5	2.5	5.5	11.5	11.0			2.0	10.0	3.0
7- 8	8.5	6.5		4.5	1.5	3.5	2.0	10.5	6.5	5.0	8.0	4.0		2.0	4.5	7.5		11.5				7.0	1.5
8- 9		8.0	5.0	4.0	8.0	1.0	8.0	9.5				5.0		4.0	7.0	1.0		12.0			2.5		11.0
9-10		9.0		3.5		9.5		8.5	7.0	0.5	3.0	6.5	3.0	6.0		3.0	7.5		9.0				9.5
10-11	1.0			3.0	6.0	7.5	5.5	7.5		5.5	7.5	7.5		8.0	2.0	5.0	10.5				2.5	8.5	8.0
11-12	2.5		5.5	2.5		5.0	11.5	6.5	7.5			9.0		1.5	4.0	7.0						5.5	6.5
12-13	4.5			2.0	3.5	2.5	2.5	5.0		1.0	3.0	10.0	0.5	3.5	6.0	0.5				12.5	3.0		5.0
13-14	6.5	1.0		1.5			8.5	4.0	8.0	5.5	7.5	11.5		5.5	8.5	2.5			10.0			10.0	3.5
14-15	8.0	2.0	5.5	1.0	1.5	9.0		3.0		7.5	1.5	1.0		7.5	1.5	4.5	10.0		8.0		3.5	7.0	2.0
15-16		3.5			8.0	6.5	5.5	2.0	8.0	1.0	2.5	1.0		1.0	3.5	6.5						4.0	
16-17		4.5				4.5		1.0		6.0	7.5	2.5	2.5	3.0	5.5	8.5					4.0		10.0
17-18	0.5	5.5	6.0		6.0	2.0	2.5	11.5	8.5		12.0	3.5		5.0	7.5	2.0						8.5	8.5
18-19	2.5	7.0				10.5	8.5	10.5		1.5	2.5	5.0		7.0	1.0	4.0	9.0		9.0		4.5	5.5	7.0
19-20	4.0	8.0			3.5	8.5		9.5	9.0	6.5	7.0	6.0			3.0	6.0	12.0						5.5
20-21	6.0	9.0	6.5			6.0	6.0	8.0	1.5		12.0	7.5		2.5	5.0	8.0					5.0	10.0	4.0
21-22	7.5		0.5		1.5	4.0		7.0	9.5	2.0	2.5	8.5		4.5	7.0	1.5		7.0		12.0		7.0	2.5
22-23				8.5	8.0	1.5	3.0	6.0	1.5	7.0	7.0	10.0		6.5	0.5	3.5	8.0	7.5	10.5		5.5	4.0	1.0
23-24			7.0	8.0		10.0	9.0	5.0	10.0		11.5	11.0	2.0	8.5	2.5	5.5	11.5	8.0	8.0				10.5
24-25		1.0	1.0	7.0	6.0	8.0		4.0	2.0	2.0	2.0			1.5	4.5	7.5		8.5			6.0	8.5	9.0
25-26	2.0	2.0		6.5		5.5	6.0	3.0	10.5	7.0	7.0	1.0		4.0	6.5	1.0		9.0				5.5	7.5
26-27	3.5	3.5	7.5	6.0	3.5	3.5		2.0	2.5		11.5	2.5		6.0		3.0	7.5	9.5			6.5		6.0
27-28	5.5	4.5	1.5	5.5		1.0	3.0	1.0		2.5	2.0	3.5	3.5	8.0	2.0	5.0	10.5	10.0	9.0			10.0	4.5
28-29	7.5	5.5		5.0	1.5	9.5	9.0	11.0	3.0	7.5	6.5	5.0		1.0	4.0	7.0		10.5			7.0	7.0	3.0
29-30		7.0	7.5	4.5	8.0	7.5		10.0			11.5	6.0		3.0	6.0			11.0				4.0	1.5
30-31		8.0	2.0	4.0		5.0	6.5	9.0	3.5	3.0	2.0	7.5	1.0	5.5	8.0	2.5	6.5	11.5					11.0

all times in U.T.

	TU
	UMA
MAX	9.2
MIN	10.2
RISE	3
0- 1	3.0
1- 2	5.5
2- 3	8.5
3- 4	11.0
4- 5	0.5
5- 6	3.5
6- 7	6.0
7- 8	9.0
8- 9	11.5
9-10	1.0
10-11	4.0
11-12	6.5
12-13	9.5
13-14	12.0
14-15	1.5
15-16	4.5
16-17	7.0
17-18	10.0
18-19	
19-20	2.0
20-21	4.5
21-22	7.5
22-23	10.5
23-24	
24-25	2.5
25-26	5.0
26-27	8.0
27-28	10.5
28-29	
29-30	3.0
30-31	5.5