

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

	VZ	VZ	SS	RV	RZ	AN	RX	UU	S	XX	XZ	DM	RW	XZ	RR	GQ	TW	VX	VZ	AR	DL	DY	DY
	CNC	CNC	CVN	CAP	CAP	CAP	CET	CET	COM	CYG	CYG	CYG	DRA	DRA	GEM	GEM	HER	HER	HER	HER	HER	HER	HER
MAX	7.2	7.2	11.2	10.2	12.5	12.0	11.0	11.5	10.9	11.4	9.1	11.2	11.0	9.6	10.7	13.6	10.5	9.9	10.7	10.6	11.0	10.2	10.2
MIN	7.9	7.9	12.5	11.6	13.5	13.0	11.7	12.4	12.1	12.5	10.5	12.7	12.0	10.3	11.9	14.6	11.8	10.4	12.0	11.6	12.4	10.6	10.6
RISE	1	1	2	2	3	5	3	3	3	1	3	2	2	3	2	2	2	2	2	2	1	1	1
0- 1		1.5	6.0				11.0			3.5	9.5		6.5	2.5			9.5			9.5	7.5	3.5	7.0
1- 2		3.0	5.0	10.0					2.5	9.0	8.0	8.5	3.5	1.5			4.5	9.5	8.5	8.0			4.5
2- 3		5.0	4.0	7.5					6.5	4.0	6.5					4.0	9.5	7.0	5.5	7.0		9.0	2.0
3- 4	2.0		3.0							9.5	4.5		9.0	10.5			4.5	5.0	2.5	5.5	6.5	6.5	10.0
4- 5	4.0		2.0							4.5	3.0	7.0	6.0	9.5	5.0		9.5	3.0	10.5	4.0	11.0	4.0	7.5
5- 6								5.0		1.5		3.5	8.5				4.5		7.5	2.5			5.0
6- 7		3.0		8.5		11.0			9.0	5.5	11.0	9.5		7.5	4.5	4.0	9.5	9.5	4.5		5.5	9.5	2.0
7- 8		4.5	10.5								9.5	6.0	8.5	6.0			4.5	7.5	2.0	11.0	10.0	6.5	10.5
8- 9	2.0		9.0						3.0	6.0	8.0		5.5	5.0	4.0		9.5	5.0	9.5	9.5		4.0	7.5
9-10	3.5		8.0						7.5		6.0	8.0	3.0	4.0			4.5	3.0	6.5	8.0	4.5		5.0
10-11			7.0	9.0						6.5	4.5			3.0	4.0	3.5	9.5		4.0	6.5	9.0	9.5	2.5
11-12		3.0	6.0			11.0		11.0	1.5	2.0	3.0		8.0	1.5			4.5	9.5		5.0		7.0	10.5
12-13		4.5	5.0						6.0	7.0	1.5	6.5	5.5		3.5		9.5	7.5	8.5	3.5	3.5	4.5	8.0
13-14	2.0		4.0						10.0	2.5	11.0		2.5	11.0			4.5	5.5	6.0	2.0	8.0	2.0	5.5
14-15	3.5		3.0	10.0						7.5	9.5	9.0	10.5	9.5	3.0	3.5	9.0	3.5	3.0			10.0	3.0
15-16			2.0		7.0				4.0	3.0	8.0		8.0	8.5			4.5			10.5	2.5	7.5	
16-17		2.5				10.5			8.5	8.0	6.0		5.0	7.5	3.0		9.0	10.0	8.0	9.0	7.0	4.5	8.5
17-18		4.5			7.0					3.5	4.5	7.5	2.5	6.5			4.5	8.0	5.0	7.5		2.0	5.5
18-19	2.0		10.5	10.5					2.5	8.5	3.0		10.0	5.0	2.5	3.5	9.0	5.5	2.0	6.5		10.5	3.0
19-20	3.5		9.5	8.0	7.5				6.5	4.0	1.5	10.0	7.5	4.0			4.5	3.5	9.5	5.0	6.0	7.5	
20-21			8.5							9.0	11.0	6.0	4.5	3.0	2.0		9.0		7.0	3.5	10.5	5.0	8.5
21-22		2.5	7.5		7.5	10.5				4.5	9.5		2.0	2.0			4.0	10.0	4.0	2.0		2.5	6.0
22-23		4.0	6.5						5.0	9.5	8.0	8.5	10.0		2.0	3.0	9.0	8.0			5.0	10.5	3.5
23-24	1.5		5.5	9.0	7.5				9.5	5.0	6.0		7.0	11.0			4.0	6.0	9.0	10.5	9.5	8.0	
24-25	3.5		4.0								4.5		4.5	10.0	1.5		9.0	3.5	6.0	9.0		5.5	9.0
25-26	5.0		3.0		7.5				3.5	5.5	3.0	7.0	1.5	8.5			4.0	1.5	3.0	7.5	4.0	3.0	6.5
26-27		2.5	2.0			10.5			7.5				9.5	7.5		3.0	9.0	10.5		6.0	8.5		4.0
27-28		4.0		9.5	7.5					6.0	11.0	9.5	7.0	6.5			4.0	8.0	8.0	4.5		8.5	
28-29	1.5								2.0	1.5	9.5	5.5	4.0	5.5			9.0	6.0	5.0	3.0	3.0	5.5	9.5
29-30	3.0		10.5		8.0				6.0	7.0	8.0			4.0			4.0	4.0	2.0	1.5	7.5	3.0	6.5
30-31	5.0		9.5							2.0	6.0	8.0	9.0	3.0		3.0	9.0	2.0	10.0				4.0

	DY	LS	SZ	UU	DG	DH	GO	RR	SS	ST	TV	WW	AA	VY	SZ	SZ	SZ	RR	RZ	ST	AV	BH	DF
	HER	HER	HYA	HYA	HYA	HYA	HYA	LEO	LEO	LEO	LEO	LEO	LEO	LMI	LYN	LYN	LYN	LYR	LYR	OPH	PEG	PEG	SER
MAX	10.2	10.8	10.6	10.7	11.6	11.4	11.6	10.0	10.5	10.8	11.5	11.0	11.3	13.6	9.1	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	12.2	11.7	12.0	12.3	12.6	12.0	12.4	14.6	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	3	2	2	2	2	3	2	2	1	1	1	2	2	3	2	3	2
0- 1	10.5	2.0		2.5		4.5				6.5		3.5		5.0	2.5	5.0		10.5	3.5	9.0	8.5		
1- 2	8.0			3.5		4.0	3.0	5.5		5.5	2.0		5.5	6.0	4.5		1.5		4.0	6.5			8.0
2- 3	5.5	4.0		5.0		3.5		3.5	7.5	4.5				7.5	6.5		3.5	3.5	4.5	4.0	7.0	10.5	5.0
3- 4	3.0	2.0				2.5				3.5	2.5	3.5				2.5	5.5	7.0	5.0				2.0
4- 5			1.5			2.0			4.5	2.0			5.5		2.0	4.5		10.0	5.5	10.0		8.5	9.5
5- 6	8.5	4.0	3.0			1.5					3.0				4.0	6.5			6.0	8.0			6.5
6- 7	5.5	2.0					5.0	5.0	1.5			4.0			6.0		3.0	3.0	6.5	5.5			3.5
7- 8	3.0							3.0			3.5		5.0			2.0	5.0	6.0	7.0		9.0		
8- 9		4.0					3.0							2.5		4.0		9.0	7.5				8.0
9-10	8.5	2.0							4.5		3.5	4.5		3.5	3.5	6.0				8.0	9.0	8.0	5.0
10-11	6.0							7.0		7.5			5.0	5.0	5.5		2.5		8.5	7.0			2.0
11-12	3.5	4.0		2.5				4.5	2.0	6.5	4.0			6.0		1.5	4.5	5.0	9.0	4.5	6.5	10.0	9.5
12-13		2.0	3.0	3.5				2.5		5.0		5.0		7.5		3.5	6.5	8.5	9.5				6.5
13-14	9.0		4.5	5.0			5.0			4.0	4.5		5.0		2.5	5.5			10.5	10.5		8.0	3.5
14-15	6.5	4.0							5.0	3.0					5.0		2.0		11.0	8.0			
15-16	4.0	2.0					3.0	6.5		2.0	5.0	5.0					4.0	4.5		5.5			8.0
16-17								4.0	2.0				4.5			3.0	6.0	7.5			8.5		5.0
17-18	9.5	4.0						1.5			5.5				2.0	5.0		11.0					2.0
18-19	6.5	2.0										5.5		2.0	4.0					9.5	7.5	11.0	9.5
19-20	4.0		2.5						5.0		6.0		4.5	3.5	6.5		3.5	3.5		7.0			6.5
20-21		4.0	4.0				5.0	6.0						4.5		2.5	5.5	7.0		4.5		9.0	3.5
21-22	9.5	2.0			1.5			3.5	2.5	7.0	6.5	6.0		6.0	1.5	4.5		10.0					
22-23	7.0			2.5		4.5	3.0			6.0			4.5	7.0	3.5	6.5				3.0	10.5		8.0
23-24	4.5	4.0		3.5		4.0				5.0					5.5		3.0	3.0	3.5	8.0	9.0		5.0
24-25	2.0	2.0		5.0	2.0	3.5			5.5	4.0						2.0	5.0	6.0	4.0	6.0			2.0
25-26	10.0					3.0		5.0		3.0			4.0			4.0		9.5	4.5	3.5	8.0		9.5
26-27	7.5	4.0	2.0			2.5		3.0	2.5	2.0		1.5			3.0	6.0			5.0				6.5
27-28	4.5	2.0	4.0		2.5	2.0	5.0								5.0		2.5		5.5	9.5	7.0	10.5	3.5
28-29	2.0												4.0	2.0		1.5	4.5	5.5	6.0	7.0			
29-30	10.0	4.0					3.0	7.0	5.5			2.0		3.5		3.5	6.5	8.5	6.5	4.5		8.5	8.0
30-31	7.5	2.0		2.5				4.5						4.5	2.5	5.5			7.0				5.0

all times in U.T.

	RV	TU
	UMA	UMA
MAX	10.1	9.2
MIN	11.2	10.2
RISE	3	3
0- 1	6.5	4.5
1- 2	5.0	7.5
2- 3	3.5	
3- 4	2.0	
4- 5		2.5
5- 6	10.0	5.0
6- 7	8.5	8.0
7- 8	7.0	
8- 9	5.5	
9-10	4.0	3.0
10-11	2.5	5.5
11-12		8.5
12-13	10.5	
13-14	9.0	
14-15	7.5	3.5
15-16	6.0	6.0
16-17	4.5	9.0
17-18	3.0	
18-19		
19-20	11.0	4.0
20-21	9.5	6.5
21-22	8.0	
22-23	6.5	
23-24	5.0	1.5
24-25	3.5	4.0
25-26	2.0	7.0
26-27		
27-28	10.0	
28-29	8.5	2.0
29-30	7.0	4.5
30-31	5.5	7.5