

Lower Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Feb 16	75.3	⁻⁶	₇	74.9	⁻¹⁹	₇	73.6	⁻³¹	₇	71.4	⁻⁴³	₇	68.4	⁻⁵⁴	₇	64.6	⁻⁶⁵	₆	60.1	⁻⁷⁴	₆	55.0	⁻⁸²	₅	49.2	⁻⁸⁹	₅	43.0	⁻⁹⁵	₄	36.4	⁻¹⁰⁰	₃	26.4	⁻¹⁰³	₂	16.1					
Feb 17	76.2	⁻⁶	₅	75.8	⁻¹⁹	₅	74.4	⁻³²	₅	72.2	⁻⁴⁴	₅	69.2	⁻⁵⁵	₅	65.4	⁻⁶⁵	₄	60.8	⁻⁷⁵	₄	55.6	⁻⁸³	₄	49.8	⁻⁹⁰	₃	43.5	⁻⁹⁶	₃	36.8	⁻¹⁰¹	₂	26.7	⁻¹⁰⁴	₂	16.3					
Feb 18	76.9	⁻⁶	₃	76.4	⁻¹⁹	₃	75.1	⁻³²	₂	72.8	⁻⁴⁴	₂	69.8	⁻⁵⁵	₂	65.9	⁻⁶⁶	₂	61.3	⁻⁷⁵	₂	56.1	⁻⁸⁴	₂	50.2	⁻⁹¹	₂	43.9	⁻⁹⁷	₁	37.1	⁻¹⁰²	₁	26.9	⁻¹⁰⁵	₁	16.5					
Feb 19	77.2	⁻⁶	₀	76.7	⁻¹⁹	₀	75.4	⁻³²	₀	73.1	⁻⁴⁴	₀	70.1	⁻⁵⁵	₀	66.2	⁻⁶⁶	₀	61.6	⁻⁷⁵	₀	56.3	⁻⁸⁴	₀	50.4	⁻⁹¹	₀	44.1	⁻⁹⁷	₀	37.3	⁻¹⁰²	₀	27.1	⁻¹⁰⁵	₀	16.5					
Feb 20	77.1	⁻⁶	₋₃	76.7	⁻¹⁹	₋₃	75.3	⁻³²	₋₃	73.1	⁻⁴⁴	₋₃	70.0	⁻⁵⁵	₋₃	66.2	⁻⁶⁶	₋₂	61.6	⁻⁷⁵	₋₂	56.3	⁻⁸⁴	₋₂	50.4	⁻⁹¹	₋₂	44.0	⁻⁹⁷	₋₂	37.2	⁻¹⁰²	₋₁	27.0	⁻¹⁰⁵	₋₁	16.5					
Feb 21	76.8	⁻⁶	₋₅	76.3	⁻¹⁹	₋₅	75.0	⁻³²	₋₅	72.8	⁻⁴³	₋₅	69.7	⁻⁵⁵	₋₄	65.9	⁻⁶⁵	₋₄	61.3	⁻⁷⁵	₋₄	56.0	⁻⁸³	₋₃	50.2	⁻⁹⁰	₋₃	43.8	⁻⁹⁶	₋₃	37.1	⁻¹⁰¹	₋₂	26.9	⁻¹⁰⁴	₋₁	16.4					
Feb 22	76.2	⁻⁶	₋₆	75.7	⁻¹⁹	₋₆	74.4	⁻³¹	₋₆	72.2	⁻⁴³	₋₆	69.2	⁻⁵⁴	₋₆	65.4	⁻⁶⁵	₋₅	60.8	⁻⁷⁴	₋₅	55.6	⁻⁸²	₋₄	49.8	⁻⁹⁰	₋₄	43.5	⁻⁹⁵	₋₃	36.8	⁻¹⁰⁰	₋₃	26.7	⁻¹⁰³	₋₂	16.3					
Feb 23	75.4	⁻⁶	₋₇	75.0	⁻¹⁹	₋₇	73.7	⁻³¹	₋₇	71.5	⁻⁴³	₋₇	68.5	⁻⁵⁴	₋₆	64.7	⁻⁶⁴	₋₆	60.2	⁻⁷³	₋₅	55.0	⁻⁸²	₋₅	49.3	⁻⁸⁹	₋₄	43.1	⁻⁹⁴	₋₄	36.4	⁻⁹⁹	₋₃	26.4	⁻¹⁰²	₋₂	16.2					
Feb 24	74.6	⁻⁶	₋₇	74.1	⁻¹⁹	₋₇	72.8	⁻³¹	₋₇	70.7	⁻⁴²	₋₇	67.7	⁻⁵³	₋₆	64.0	⁻⁶³	₋₆	59.5	⁻⁷²	₋₆	54.4	⁻⁸¹	₋₅	48.7	⁻⁸⁸	₋₄	42.6	⁻⁹³	₋₄	36.0	⁻⁹⁸	₋₃	26.1	⁻¹⁰¹	₋₂	16.0					
Feb 25	73.7	⁻⁶	₋₇	73.3	⁻¹⁸	₋₇	72.0	⁻³⁰	₋₇	69.9	⁻⁴²	₋₆	66.9	⁻⁵²	₋₆	63.2	⁻⁶³	₋₆	58.8	⁻⁷²	₋₅	53.8	⁻⁸⁰	₋₅	48.2	⁻⁸⁷	₋₄	42.1	⁻⁹²	₋₄	35.6	⁻⁹⁷	₋₃	25.8	⁻¹⁰⁰	₋₂	15.8					
Feb 26	72.9	⁻⁶	₋₆	72.5	⁻¹⁸	₋₆	71.2	⁻³⁰	₋₆	69.1	⁻⁴¹	₋₆	66.2	⁻⁵²	₋₆	62.5	⁻⁶²	₋₅	58.2	⁻⁷¹	₋₅	53.2	⁻⁷⁹	₋₄	47.6	⁻⁸⁶	₋₄	41.6	⁻⁹¹	₋₃	35.2	⁻⁹⁶	₋₃	25.5	⁻⁹⁹	₋₂	15.6					
Feb 27	72.1	⁻⁶	₋₆	71.7	⁻¹⁸	₋₆	70.4	⁻³⁰	₋₆	68.3	⁻⁴¹	₋₅	65.5	⁻⁵¹	₋₅	61.9	⁻⁶¹	₋₅	57.5	⁻⁷⁰	₋₄	52.6	⁻⁷⁸	₋₄	47.1	⁻⁸⁵	₋₄	41.2	⁻⁹⁰	₋₃	34.8	⁻⁹⁵	₋₂	25.3	⁻⁹⁸	₋₂	15.4					
Feb 28	71.4	⁻⁶	₋₅	71.0	⁻¹⁸	₋₅	69.7	⁻²⁹	₋₅	67.7	⁻⁴⁰	₋₅	64.8	⁻⁵¹	₋₅	61.3	⁻⁶¹	₋₄	57.0	⁻⁷⁰	₋₄	52.1	⁻⁷⁷	₋₄	46.7	⁻⁸⁴	₋₃	40.8	⁻⁸⁹	₋₃	34.5	⁻⁹⁴	₋₂	25.0	⁻⁹⁷	₋₁	15.3					
Mar 1	70.8	⁻⁶	₋₅	70.4	⁻¹⁸	₋₅	69.1	⁻²⁹	₋₄	67.1	⁻⁴⁰	₋₄	64.3	⁻⁵¹	₋₄	60.7	⁻⁶⁰	₋₄	56.5	⁻⁶⁹	₋₃	51.7	⁻⁷⁷	₋₃	46.3	⁻⁸³	₋₃	40.4	⁻⁸⁹	₋₂	34.2	⁻⁹³	₋₂	24.8	⁻⁹⁶	₋₁	15.2					
Mar 2	70.2	⁻⁶	₋₄	69.8	⁻¹⁷	₋₄	68.6	⁻²⁹	₋₄	66.6	⁻⁴⁰	₋₄	63.8	⁻⁵⁰	₋₃	60.3	⁻⁶⁰	₋₃	56.1	⁻⁶⁸	₋₃	51.3	⁻⁷⁶	₋₃	45.9	⁻⁸³	₋₂	40.1	⁻⁸⁸	₋₂	33.9	⁻⁹³	₋₂	24.6	⁻⁹⁶	₋₁	15.0					
Mar 3	69.8	⁻⁶	₋₃	69.4	⁻¹⁷	₋₃	68.1	⁻²⁹	₋₃	66.1	⁻⁴⁰	₋₃	63.3	⁻⁵⁰	₋₃	59.8	⁻⁵⁹	₋₃	55.7	⁻⁶⁸	₋₃	50.9	⁻⁷⁶	₋₂	45.6	⁻⁸²	₋₂	39.8	⁻⁸⁷	₋₂	33.7	⁻⁹²	₋₁	24.5	⁻⁹⁵	₋₁	14.9					
Mar 4	69.4	⁻⁶	₋₃	69.0	⁻¹⁷	₋₃	67.7	⁻²⁹	₋₂	65.7	⁻³⁹	₋₂	63.0	⁻⁵⁰	₋₂	59.5	⁻⁵⁹	₋₂	55.4	⁻⁶⁸	₋₂	50.6	⁻⁷⁵	₋₂	45.3	⁻⁸²	₋₂	39.6	⁻⁸⁷	₋₁	33.5	⁻⁹²	₋₁	24.3	⁻⁹⁴	₋₁	14.9					
Mar 5	69.1	⁻⁶	₋₂	68.6	⁻¹⁷	₋₂	67.4	⁻²⁸	₋₂	65.4	⁻³⁹	₋₂	62.7	⁻⁴⁹	₋₂	59.2	⁻⁵⁹	₋₁	55.1	⁻⁶⁷	₋₁	50.4	⁻⁷⁵	₋₁	45.1	⁻⁸¹	₋₁	39.4	⁻⁸⁷	₋₁	33.3	⁻⁹¹	₋₁	24.2	⁻⁹⁴	₀	14.8					
Mar 6	68.8	⁻⁶	₋₁	68.4	⁻¹⁷	₋₁	67.2	⁻²⁸	₋₁	65.3	⁻³⁹	₋₁	62.5	⁻⁴⁹	₋₁	59.1	⁻⁵⁹	₋₁	54.9	⁻⁶⁷	₋₁	50.2	⁻⁷⁵	₋₁	45.0	⁻⁸¹	₀	39.3	⁻⁸⁶	₀	33.2	⁻⁹¹	₀	24.1	⁻⁹⁴	₀	14.7					
Mar 7	68.8	⁻⁶	₀	68.4	⁻¹⁷	₀	67.2	⁻²⁸	₀	65.2	⁻³⁹	₀	62.4	⁻⁴⁹	₀	59.0	⁻⁵⁹	₀	54.9	⁻⁶⁷	₀	50.2	⁻⁷⁵	₀	44.9	⁻⁸¹	₀	39.3	⁻⁸⁶	₀	33.2	⁻⁹¹	₀	24.1	⁻⁹⁴	₀	14.7					
Mar 8	68.8	⁻⁶	₂	68.4	⁻¹⁷	₂	67.2	⁻²⁸	₂	65.2	⁻³⁹	₂	62.5	⁻⁴⁹	₂	59.0	⁻⁵⁹	₂	54.9	⁻⁶⁷	₁	50.2	⁻⁷⁵	₁	45.0	⁻⁸¹	₁	39.3	⁻⁸⁷	₁	33.2	⁻⁹¹	₁	24.1	⁻⁹⁴	₁	14.7					
Mar 9	69.0	⁻⁶	₃	68.6	⁻¹⁷	₃	67.4	⁻²⁹	₃	65.4	⁻³⁹	₃	62.7	⁻⁵⁰	₃	59.2	⁻⁵⁹	₃	55.1	⁻⁶⁸	₃	50.4	⁻⁷⁵	₂	45.1	⁻⁸²	₂	39.4	⁻⁸⁷	₂	33.3	⁻⁹²	₁	24.2	⁻⁹⁴	₁	14.8					
Mar 10	69.4	⁻⁶	₅	69.0	⁻¹⁷	₅	67.8	⁻²⁹	₅	65.8	⁻⁴⁰	₅	63.0	⁻⁵⁰	₄	59.6	⁻⁶⁰	₄	55.4	⁻⁶⁸	₄	50.7	⁻⁷⁶	₃	45.4	⁻⁸²	₃	39.6	⁻⁸⁸	₃	33.5	⁻⁹²	₂	24.3	⁻⁹⁵	₁	14.9					
Mar 11	70.0	⁻⁶	₇	69.6	⁻¹⁸	₇	68.4	⁻²⁹	₆	66.4	⁻⁴⁰	₆	63.6	⁻⁵⁰	₆	60.1	⁻⁶⁰	₆	55.9	⁻⁶⁹	₅	51.1	⁻⁷⁷	₅	45.8	⁻⁸³	₄	40.0	⁻⁸⁹	₄	33.8	⁻⁹³	₃	24.6	⁻⁹⁶	₂	15.0					
Mar 12	70.8	⁻⁶	₈	70.4	⁻¹⁸	₈	69.2	⁻²⁹	₈	67.1	⁻⁴¹	₈	64.3	⁻⁵¹	₇	60.8	⁻⁶¹	₇	56.5	⁻⁷⁰	₆	51.7	⁻⁷⁸	₆	46.3	⁻⁸⁴	₅	40.4	⁻⁹⁰	₄	34.2	⁻⁹⁴	₃	24.8	⁻⁹⁷	₂	15.2					
Mar 13	71.8	⁻⁶	₉	71.4	⁻¹⁸	₉	70.1	⁻³⁰	₉	68.1	⁻⁴¹	₉	65.2	⁻⁵²	₈	61.6	⁻⁶²	₈	57.3	⁻⁷¹	₇	52.4	⁻⁷⁹	₇	46.9	⁻⁸⁵	₆	41.0	⁻⁹¹	₅	34.7	⁻⁹⁶	₄	25.2	⁻⁹⁹	₃	15.4					
Mar 14	72.9	⁻⁶	₁₀	72.5	⁻¹⁸	₁₀	71.2	⁻³⁰	₁₀	69.1	⁻⁴²	₉	66.2	⁻⁵³	₉	62.6	⁻⁶³	₈	58.2	⁻⁷²	₈	53.2	⁻⁸⁰	₇	47.7	⁻⁸⁷	₆	41.6	⁻⁹²	₅	35.2	⁻⁹⁷	₄	25.6	⁻¹⁰⁰	₃	15.6					
Mar 15	74.2	⁻⁶	₁₀	73.7	⁻¹⁸	₁₀	72.4	⁻³¹	₁₀	70.3	⁻⁴³	₉	67.3	⁻⁵⁴	₉	63.6	⁻⁶⁴	₈	59.2	⁻⁷³	₈	54.1	⁻⁸¹	₇	48.5	⁻⁸⁸	₆	42.3	⁻⁹⁴	₅	35.8	⁻⁹⁹	₄	26.0	⁻¹⁰²	₃	15.9					
Mar 16	75.4	⁻⁶	₉	74.9	⁻¹⁹	₉	73.6	⁻³¹	₉	71.4	⁻⁴³	₈	68.4	⁻⁵⁴	₈	64.7	⁻⁶⁵	₈	60.2	⁻⁷⁴	₇	55.0	⁻⁸³	₆	49.3	⁻⁹⁰	₆	43.0	⁻⁹⁵	₅	36.4	⁻¹⁰⁰	₄	26.4	⁻¹⁰⁴	₃	16.1					
Mar 17	76.5	⁻⁶	₇	76.0	⁻¹⁹	₇	74.7	⁻³²	₇	72.5	⁻⁴⁴	₇	69.4	⁻⁵⁵	₆	65.6	⁻⁶⁶	₆	61.0	⁻⁷⁵	₅	55.8	⁻⁸⁴	₅	50.0	⁻⁹¹	₄	43.7	⁻⁹⁷	₄	36.9	⁻¹⁰²	₃	26.8	⁻¹⁰⁵	₂	16.4					
Mar 18	77.3	⁻⁶	₄	76.9	⁻¹⁹	₄	75.5	⁻³²	₄	73.3	⁻⁴⁴	₄	70.2	⁻⁵⁶	₄	66.3	⁻⁶⁶	₄	61.7	⁻⁷⁶	₃	56.4	⁻⁸⁴	₃	50.5	⁻⁹²	₃	44.1	⁻⁹⁸	₂	37.3	⁻¹⁰³	₂	27.								

2007

Moon Parallax and Semi-diameter

Upper Limb																																													
Altitude degrees																																													
	0			7			14			21			28			35			42			49			56			63			70			80			90								
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Feb 16	43.1	⁻⁶ ₇	42.6	⁻¹⁹ ₇	41.3	⁻³¹ ₇	39.1	⁻⁴³ ₇	36.1	⁻⁵⁴ ₇	32.4	⁻⁶⁵ ₆	27.9	⁻⁷⁴ ₆	22.7	⁻⁸² ₅	17.0	⁻⁸⁹ ₅	10.7	⁻⁹⁵ ₄	4.1	⁻¹⁰⁰ ₃	-5.9	⁻¹⁰³ ₂	-16.1																				
Feb 17	43.6	⁻⁶ ₅	43.1	⁻¹⁹ ₅	41.8	⁻³² ₅	39.6	⁻⁴⁴ ₅	36.6	⁻⁵⁵ ₅	32.7	⁻⁶⁵ ₄	28.2	⁻⁷⁵ ₄	23.0	⁻⁸³ ₄	17.2	⁻⁹⁰ ₃	10.9	⁻⁹⁶ ₃	4.2	⁻¹⁰¹ ₂	-5.9	⁻¹⁰⁴ ₂	-16.3																				
Feb 18	43.9	⁻⁶ ₃	43.5	⁻¹⁹ ₃	42.1	⁻³² ₂	39.9	⁻⁴⁴ ₂	36.9	⁻⁵⁵ ₂	33.0	⁻⁶⁶ ₂	28.4	⁻⁷⁵ ₂	23.2	⁻⁸⁴ ₂	17.3	⁻⁹¹ ₂	11.0	⁻⁹⁷ ₁	4.2	⁻¹⁰² ₁	-6.0	⁻¹⁰⁵ ₁	-16.5																				
Feb 19	44.1	⁻⁶ ₀	43.7	⁻¹⁹ ₀	42.3	⁻³² ₀	40.1	⁻⁴⁴ ₀	37.0	⁻⁵⁵ ₀	33.1	⁻⁶⁶ ₀	28.5	⁻⁷⁵ ₀	23.3	⁻⁸⁴ ₀	17.4	⁻⁹¹ ₀	11.0	⁻⁹⁷ ₀	4.2	⁻¹⁰² ₀	-6.0	⁻¹⁰⁵ ₀	-16.5																				
Feb 20	44.1	⁻⁶ ₋₃	43.6	⁻¹⁹ ₋₃	42.3	⁻³² ₋₃	40.1	⁻⁴⁴ ₋₃	37.0	⁻⁵⁵ ₋₃	33.1	⁻⁶⁶ ₋₂	28.5	⁻⁷⁵ ₋₂	23.2	⁻⁸⁴ ₋₂	17.4	⁻⁹¹ ₋₂	11.0	⁻⁹⁷ ₋₂	4.2	⁻¹⁰² ₋₁	-6.0	⁻¹⁰⁵ ₋₁	-16.5																				
Feb 21	43.9	⁻⁶ ₋₅	43.4	⁻¹⁹ ₋₅	42.1	⁻³² ₋₅	39.9	⁻⁴³ ₋₅	36.8	⁻⁵⁵ ₋₄	33.0	⁻⁶⁵ ₋₄	28.4	⁻⁷⁵ ₋₄	23.1	⁻⁸³ ₋₃	17.3	⁻⁹⁰ ₋₃	11.0	⁻⁹⁶ ₋₃	4.2	⁻¹⁰¹ ₋₂	-6.0	⁻¹⁰⁴ ₋₁	-16.4																				
Feb 22	43.6	⁻⁶ ₋₆	43.1	⁻¹⁹ ₋₆	41.8	⁻³¹ ₋₆	39.6	⁻⁴³ ₋₆	36.5	⁻⁵⁴ ₋₆	32.7	⁻⁶⁵ ₋₅	28.2	⁻⁷⁴ ₋₅	23.0	⁻⁸² ₋₄	17.2	⁻⁹⁰ ₋₄	10.9	⁻⁹⁵ ₋₃	4.2	⁻¹⁰⁰ ₋₃	-5.9	⁻¹⁰³ ₋₂	-16.3																				
Feb 23	43.1	⁻⁶ ₋₇	42.7	⁻¹⁹ ₋₇	41.4	⁻³¹ ₋₇	39.2	⁻⁴³ ₋₇	36.2	⁻⁵⁴ ₋₆	32.4	⁻⁶⁴ ₋₆	27.9	⁻⁷³ ₋₅	22.7	⁻⁸² ₋₅	17.0	⁻⁸⁹ ₋₄	10.8	⁻⁹⁴ ₋₄	4.1	⁻⁹⁹ ₋₃	-5.9	⁻¹⁰² ₋₂	-16.2																				
Feb 24	42.6	⁻⁶ ₋₇	42.2	⁻¹⁹ ₋₇	40.9	⁻³¹ ₋₇	38.7	⁻⁴² ₋₇	35.8	⁻⁵³ ₋₆	32.0	⁻⁶³ ₋₆	27.6	⁻⁷² ₋₆	22.5	⁻⁸¹ ₋₅	16.8	⁻⁸⁸ ₋₄	10.6	⁻⁹³ ₋₄	4.1	⁻⁹⁸ ₋₃	-5.8	⁻¹⁰¹ ₋₂	-16.0																				
Feb 25	42.1	⁻⁶ ₋₇	41.7	⁻¹⁸ ₋₇	40.4	⁻³⁰ ₋₇	38.3	⁻⁴² ₋₆	35.4	⁻⁵² ₋₆	31.7	⁻⁶³ ₋₆	27.3	⁻⁷² ₋₅	22.2	⁻⁸⁰ ₋₅	16.6	⁻⁸⁷ ₋₄	10.5	⁻⁹² ₋₄	4.0	⁻⁹⁷ ₋₃	-5.7	⁻¹⁰⁰ ₋₂	-15.8																				
Feb 26	41.7	⁻⁶ ₋₆	41.2	⁻¹⁸ ₋₆	40.0	⁻³⁰ ₋₆	37.9	⁻⁴¹ ₋₆	35.0	⁻⁵² ₋₆	31.3	⁻⁶² ₋₅	27.0	⁻⁷¹ ₋₅	22.0	⁻⁷⁹ ₋₄	16.4	⁻⁸⁶ ₋₄	10.4	⁻⁹¹ ₋₃	4.0	⁻⁹⁶ ₋₃	-5.7	⁻⁹⁹ ₋₂	-15.6																				
Feb 27	41.2	⁻⁶ ₋₆	40.8	⁻¹⁸ ₋₆	39.5	⁻³⁰ ₋₆	37.5	⁻⁴¹ ₋₅	34.6	⁻⁵¹ ₋₅	31.0	⁻⁶¹ ₋₅	26.7	⁻⁷⁰ ₋₄	21.7	⁻⁷⁸ ₋₄	16.2	⁻⁸⁵ ₋₄	10.3	⁻⁹⁰ ₋₃	3.9	⁻⁹⁵ ₋₂	-5.6	⁻⁹⁸ ₋₂	-15.4																				
Feb 28	40.8	⁻⁶ ₋₅	40.4	⁻¹⁸ ₋₅	39.2	⁻²⁹ ₋₅	37.1	⁻⁴⁰ ₋₅	34.3	⁻⁵¹ ₋₅	30.7	⁻⁶¹ ₋₄	26.4	⁻⁷⁰ ₋₄	21.5	⁻⁷⁷ ₋₄	16.1	⁻⁸⁴ ₋₃	10.2	⁻⁸⁹ ₋₃	3.9	⁻⁹⁴ ₋₂	-5.5	⁻⁹⁷ ₋₁	-15.3																				
Mar 1	40.5	⁻⁶ ₋₅	40.1	⁻¹⁸ ₋₅	38.8	⁻²⁹ ₋₄	36.8	⁻⁴⁰ ₋₄	34.0	⁻⁵¹ ₋₄	30.4	⁻⁶⁰ ₋₄	26.2	⁻⁶⁹ ₋₃	21.3	⁻⁷⁷ ₋₃	15.9	⁻⁸³ ₋₃	10.1	⁻⁸⁹ ₋₂	3.9	⁻⁹³ ₋₂	-5.5	⁻⁹⁶ ₋₁	-15.2																				
Mar 2	40.2	⁻⁶ ₋₄	39.7	⁻¹⁷ ₋₄	38.5	⁻²⁹ ₋₄	36.5	⁻⁴⁰ ₋₄	33.7	⁻⁵⁰ ₋₃	30.2	⁻⁶⁰ ₋₃	26.0	⁻⁶⁸ ₋₃	21.2	⁻⁷⁶ ₋₃	15.8	⁻⁸³ ₋₂	10.0	⁻⁸⁸ ₋₂	3.8	⁻⁹³ ₋₂	-5.5	⁻⁹⁶ ₋₁	-15.0																				
Mar 3	39.9	⁻⁶ ₋₃	39.5	⁻¹⁷ ₋₃	38.3	⁻²⁹ ₋₃	36.2	⁻⁴⁰ ₋₃	33.5	⁻⁵⁰ ₋₃	30.0	⁻⁵⁹ ₋₃	25.8	⁻⁶⁸ ₋₃	21.0	⁻⁷⁶ ₋₂	15.7	⁻⁸² ₋₂	9.9	⁻⁸⁷ ₋₂	3.8	⁻⁹² ₋₁	-5.4	⁻⁹⁵ ₋₁	-14.9																				
Mar 4	39.7	⁻⁶ ₋₃	39.2	⁻¹⁷ ₋₃	38.0	⁻²⁹ ₋₂	36.0	⁻³⁹ ₋₂	33.3	⁻⁵⁰ ₋₂	29.8	⁻⁵⁹ ₋₂	25.7	⁻⁶⁸ ₋₂	20.9	⁻⁷⁵ ₋₂	15.6	⁻⁸² ₋₂	9.9	⁻⁸⁷ ₋₁	3.8	⁻⁹² ₋₁	-5.4	⁻⁹⁴ ₋₁	-14.9																				
Mar 5	39.5	⁻⁶ ₋₂	39.1	⁻¹⁷ ₋₂	37.9	⁻²⁸ ₋₂	35.9	⁻³⁹ ₋₂	33.1	⁻⁴⁹ ₋₂	29.7	⁻⁵⁹ ₋₁	25.5	⁻⁶⁷ ₋₁	20.8	⁻⁷⁵ ₋₁	15.6	⁻⁸¹ ₋₁	9.8	⁻⁸⁷ ₋₁	3.8	⁻⁹¹ ₋₁	-5.4	⁻⁹⁴ ₀	-14.8																				
Mar 6	39.4	⁻⁶ ₋₁	39.0	⁻¹⁷ ₋₁	37.8	⁻²⁸ ₋₁	35.8	⁻³⁹ ₋₁	33.0	⁻⁴⁹ ₋₁	29.6	⁻⁵⁹ ₋₁	25.5	⁻⁶⁷ ₋₁	20.8	⁻⁷⁵ ₋₁	15.5	⁻⁸¹ ₀	9.8	⁻⁸⁶ ₀	3.8	⁻⁹¹ ₀	-5.3	⁻⁹⁴ ₀	-14.7																				
Mar 7	39.3	⁻⁶ ₀	38.9	⁻¹⁷ ₀	37.7	⁻²⁸ ₀	35.7	⁻³⁹ ₀	33.0	⁻⁴⁹ ₀	29.5	⁻⁵⁹ ₀	25.4	⁻⁶⁷ ₀	20.7	⁻⁷⁵ ₀	15.5	⁻⁸¹ ₀	9.8	⁻⁸⁶ ₀	3.8	⁻⁹¹ ₀	-5.3	⁻⁹⁴ ₀	-14.7																				
Mar 8	39.3	⁻⁶ ₂	38.9	⁻¹⁷ ₂	37.7	⁻²⁸ ₂	35.7	⁻³⁹ ₂	33.0	⁻⁴⁹ ₂	29.6	⁻⁵⁹ ₂	25.4	⁻⁶⁷ ₁	20.7	⁻⁷⁵ ₁	15.5	⁻⁸¹ ₁	9.8	⁻⁸⁷ ₁	3.8	⁻⁹¹ ₁	-5.3	⁻⁹⁴ ₁	-14.7																				
Mar 9	39.5	⁻⁶ ₃	39.1	⁻¹⁷ ₃	37.9	⁻²⁹ ₃	35.9	⁻³⁹ ₃	33.1	⁻⁵⁰ ₃	29.7	⁻⁵⁹ ₃	25.5	⁻⁶⁸ ₃	20.8	⁻⁷⁵ ₂	15.6	⁻⁸² ₂	9.8	⁻⁸⁷ ₂	3.8	⁻⁹² ₁	-5.4	⁻⁹⁴ ₁	-14.8																				
Mar 10	39.7	⁻⁶ ₅	39.3	⁻¹⁷ ₅	38.1	⁻²⁹ ₅	36.1	⁻⁴⁰ ₅	33.3	⁻⁵⁰ ₄	29.8	⁻⁶⁰ ₄	25.7	⁻⁶⁸ ₄	20.9	⁻⁷⁶ ₃	15.6	⁻⁸² ₃	9.9	⁻⁸⁸ ₃	3.8	⁻⁹² ₂	-5.4	⁻⁹⁵ ₁	-14.9																				
Mar 11	40.0	⁻⁶ ₇	39.6	⁻¹⁸ ₇	38.4	⁻²⁹ ₆	36.4	⁻⁴⁰ ₆	33.6	⁻⁵⁰ ₆	30.1	⁻⁶⁰ ₆	25.9	⁻⁶⁹ ₅	21.1	⁻⁷⁷ ₅	15.8	⁻⁸³ ₄	10.0	⁻⁸⁹ ₄	3.8	⁻⁹³ ₃	-5.4	⁻⁹⁶ ₂	-15.0																				
Mar 12	40.5	⁻⁶ ₈	40.1	⁻¹⁸ ₈	38.8	⁻²⁹ ₈	36.8	⁻⁴¹ ₈	34.0	⁻⁵¹ ₇	30.4	⁻⁶¹ ₇	26.2	⁻⁷⁰ ₆	21.4	⁻⁷⁸ ₆	16.0	⁻⁸⁴ ₅	10.1	⁻⁹⁰ ₄	3.9	⁻⁹⁴ ₃	-5.5	⁻⁹⁷ ₂	-15.2																				
Mar 13	41.1	⁻⁶ ₉	40.6	⁻¹⁸ ₉	39.4	⁻³⁰ ₉	37.3	⁻⁴¹ ₉	34.5	⁻⁵² ₈	30.9	⁻⁶² ₈	26.6	⁻⁷¹ ₇	21.6	⁻⁷⁹ ₇	16.2	⁻⁸⁵ ₆	10.2	⁻⁹¹ ₅	3.9	⁻⁹⁶ ₄	-5.6	⁻⁹⁹ ₃	-15.4																				
Mar 14	41.7	⁻⁶ ₁₀	41.3	⁻¹⁸ ₁₀	40.0	⁻³⁰ ₁₀	37.9	⁻⁴² ₉	35.0	⁻⁵³ ₉	31.3	⁻⁶³ ₈	27.0	⁻⁷² ₈	22.0	⁻⁸⁰ ₇	16.4	⁻⁸⁷ ₆	10.4	⁻⁹² ₅	4.0	⁻⁹⁷ ₄	-5.7	⁻¹⁰⁰ ₃	-15.6																				
Mar 15	42.4	⁻⁶ ₁₀	42.0	⁻¹⁹ ₁₀	40.7	⁻³¹ ₁₀	38.5	⁻⁴³ ₉	35.6	⁻⁵⁴ ₉	31.9	⁻⁶⁴ ₈	27.4	⁻⁷³ ₈	22.4	⁻⁸¹ ₇	16.7	⁻⁸⁸ ₆	10.6	⁻⁹⁴ ₅	4.1	⁻⁹⁹ ₄	-5.8	⁻¹⁰² ₃	-15.9																				
Mar 16	43.1	⁻⁶ ₉	42.7	⁻¹⁹ ₉	41.3	⁻³¹ ₉	39.2	⁻⁴³ ₈	36.2	⁻⁵⁴ ₈	32.4	⁻⁶⁵ ₈	27.9	⁻⁷⁴ ₇	22.7	⁻⁸³ ₆	17.0	⁻⁹⁰ ₆	10.7	⁻⁹⁵ ₅	4.1	⁻¹⁰⁰ ₄	-5.9	⁻¹⁰⁴ ₃	-16.1																				
Mar 17	43.7	⁻⁶ ₇	43.3	⁻¹⁹ ₇	41.9	⁻³² ₇	39.7	⁻⁴⁴ ₇	36.7	⁻⁵⁵ ₆	32.9	⁻⁶⁶ ₆	28.3	⁻⁷⁵ ₅	23.0	⁻⁸⁴ ₅	17.2	⁻⁹¹ ₄	10.9	⁻⁹⁷ ₄	4.2	⁻¹⁰² ₃	-5.9	⁻¹⁰⁵ ₂	-16.4																				
Mar 18	44.2	⁻⁶ ₄	43.8	⁻¹⁹ ₄	42.4	⁻³² ₄	40.2	⁻⁴⁴ ₄	37.1	⁻⁵⁶ ₄	33.2	⁻⁶⁶ ₄	28.6	⁻⁷⁶ ₃	23.3	⁻⁸⁴ ₃	17.4	⁻⁹² ₃	11.0	⁻⁹⁸ ₂	4.2	⁻¹⁰³ ₂	-6.0	⁻¹⁰⁶ ₁	-16.6																				
Mar 19	44.5	⁻⁷ ₁	44.1	⁻¹⁹ ₁	42.7	⁻³² ₁	40.4	⁻⁴⁴ ₁	37.3	⁻⁵⁶ ₁	33.4	⁻⁶⁶ ₁	28.8	⁻⁷⁶ ₁	23.5	⁻⁸⁵ ₁	17.5	⁻⁹² ₁	11.1	⁻⁹⁸ ₁	4.3	⁻¹⁰³ ₀	-6.0	⁻¹⁰⁶ ₀	-16.7																				
Mar 20	44.6	⁻⁷ ₋₂	44.1	⁻¹⁹ ₋₂	42.8	⁻³² ₋₂	40.5	⁻⁴⁴ ₋₂	37.4	⁻⁵⁶ ₋₂	33.5	⁻⁶⁶ ₋₂	28.8	⁻⁷⁶ ₋₂	23.5	⁻⁸⁵ ₋₂	17.6	⁻⁹² ₋₂	11.1	⁻⁹⁸ ₋₁	4.3	⁻¹⁰³ ₋₁	-6.1	⁻¹⁰⁶ ₋₁	-16.7																				
Mar 21	44.4	⁻⁶ ₋₅	43.9	⁻¹⁹ ₋₅	42.6	⁻³² ₋₅	40.3	⁻⁴⁴ ₋₅	37.3	⁻⁵⁵ ₋₅	33.4	⁻⁶⁶ ₋₅	28.7	⁻⁷⁶ ₋₄	23.4	⁻⁸⁴ ₋₄	17.5	⁻⁹¹ ₋₃	11.1	⁻⁹⁷ ₋₃	4.2	⁻¹⁰² ₋₂	-6.0	⁻¹⁰⁶ ₋₂	-16.6																				
Mar 22	44.0	⁻⁶ ₋₈	43.6	⁻¹⁹ ₋₈	42.2	⁻³² ₋₇	40.0	⁻⁴⁴ ₋₇	36.9	⁻⁵⁵ ₋₇	33.1	⁻⁶⁵ ₋₆	28.5	⁻⁷⁵ ₋₆	23.2	⁻⁸³ ₋₅	17.4	⁻⁹⁰ ₋₅	11.0	⁻⁹⁶ ₋₄	4.2	⁻¹⁰¹ ₋₃	-6.0	⁻¹⁰⁴ ₋₂	-16.5																				
Mar 23	43.5	⁻⁶ ₋₉	43.1	⁻¹⁹ ₋₉	41.7	⁻³¹ ₋₉	39.5	⁻⁴³ ₋₈	36.5	⁻⁵⁴ ₋₈	32.7	⁻⁶⁴ ₋₇	2																																

Lower Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Apr 3	68.7	⁻⁶ ₀	68.3	⁻¹⁷ ₀	67.1	⁻²⁸ ₀	65.1	⁻³⁹ ₀	62.4	⁻⁴⁹ ₀	58.9	⁻⁵⁹ ₀	54.8	⁻⁶⁷ ₀	50.1	⁻⁷⁵ ₀	44.9	⁻⁸¹ ₀	39.2	⁻⁸⁶ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Apr 4	68.7	⁻⁶ ₁	68.3	⁻¹⁷ ₁	67.1	⁻²⁸ ₁	65.1	⁻³⁹ ₁	62.4	⁻⁴⁹ ₁	58.9	⁻⁵⁹ ₁	54.8	⁻⁶⁷ ₁	50.1	⁻⁷⁵ ₁	44.9	⁻⁸¹ ₁	39.2	⁻⁸⁶ ₁	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Apr 5	68.8	⁻⁶ ₂	68.4	⁻¹⁷ ₂	67.2	⁻²⁸ ₂	65.2	⁻³⁹ ₂	62.5	⁻⁴⁹ ₂	59.0	⁻⁵⁹ ₂	54.9	⁻⁶⁷ ₂	50.2	⁻⁷⁵ ₂	45.0	⁻⁸¹ ₁	39.3	⁻⁸⁷ ₁	33.2	⁻⁹¹ ₁	24.1	⁻⁹⁴ ₁	14.7																	
Apr 6	69.1	⁻⁶ ₃	68.7	⁻¹⁷ ₃	67.5	⁻²⁹ ₃	65.5	⁻³⁹ ₃	62.7	⁻⁵⁰ ₃	59.3	⁻⁵⁹ ₃	55.1	⁻⁶⁸ ₃	50.4	⁻⁷⁵ ₂	45.2	⁻⁸² ₂	39.4	⁻⁸⁷ ₂	33.4	⁻⁹² ₁	24.2	⁻⁹⁵ ₁	14.8																	
Apr 7	69.5	⁻⁶ ₅	69.1	⁻¹⁷ ₅	67.9	⁻²⁹ ₄	65.9	⁻⁴⁰ ₄	63.1	⁻⁵⁰ ₄	59.6	⁻⁶⁰ ₄	55.5	⁻⁶⁸ ₄	50.7	⁻⁷⁶ ₃	45.4	⁻⁸² ₃	39.7	⁻⁸⁸ ₂	33.6	⁻⁹² ₂	24.4	⁻⁹⁵ ₁	14.9																	
Apr 8	70.1	⁻⁶ ₆	69.6	⁻¹⁸ ₆	68.4	⁻²⁹ ₆	66.4	⁻⁴⁰ ₆	63.6	⁻⁵⁰ ₅	60.1	⁻⁶⁰ ₅	55.9	⁻⁶⁹ ₅	51.1	⁻⁷⁷ ₄	45.8	⁻⁸³ ₄	40.0	⁻⁸⁹ ₃	33.8	⁻⁹³ ₃	24.6	⁻⁹⁶ ₂	15.0																	
Apr 9	70.8	⁻⁶ ₇	70.4	⁻¹⁸ ₇	69.1	⁻²⁹ ₇	67.1	⁻⁴⁰ ₇	64.3	⁻⁵¹ ₇	60.7	⁻⁶¹ ₆	56.5	⁻⁷⁰ ₆	51.6	⁻⁷⁷ ₅	46.3	⁻⁸⁴ ₅	40.4	⁻⁹⁰ ₄	34.2	⁻⁹⁴ ₃	24.8	⁻⁹⁷ ₂	15.2																	
Apr 10	71.7	⁻⁶ ₉	71.2	⁻¹⁸ ₈	70.0	⁻³⁰ ₈	67.9	⁻⁴¹ ₈	65.1	⁻⁵² ₈	61.5	⁻⁶² ₇	57.2	⁻⁷¹ ₇	52.3	⁻⁷⁸ ₆	46.8	⁻⁸⁵ ₅	40.9	⁻⁹¹ ₅	34.6	⁻⁹⁵ ₄	25.1	⁻⁹⁸ ₂	15.3																	
Apr 11	72.7	⁻⁶ ₉	72.3	⁻¹⁸ ₉	71.0	⁻³⁰ ₉	68.9	⁻⁴² ₉	66.0	⁻⁵² ₈	62.4	⁻⁶³ ₈	58.0	⁻⁷² ₇	53.0	⁻⁸⁰ ₇	47.5	⁻⁸⁷ ₆	41.5	⁻⁹² ₅	35.1	⁻⁹⁷ ₄	25.5	⁻¹⁰⁰ ₃	15.6																	
Apr 12	73.8	⁻⁶ ₁₀	73.4	⁻¹⁹ ₁₀	72.1	⁻³¹ ₉	70.0	⁻⁴² ₉	67.0	⁻⁵³ ₉	63.3	⁻⁶⁴ ₈	58.9	⁻⁷³ ₈	53.9	⁻⁸¹ ₇	48.3	⁻⁸⁸ ₆	42.1	⁻⁹⁴ ₅	35.7	⁻⁹⁸ ₄	25.9	⁻¹⁰² ₃	15.8																	
Apr 13	75.0	⁻⁶ ₉	74.6	⁻¹⁹ ₉	73.3	⁻³¹ ₉	71.1	⁻⁴³ ₉	68.1	⁻⁵⁴ ₈	64.3	⁻⁶⁴ ₈	59.9	⁻⁷⁴ ₇	54.7	⁻⁸² ₇	49.0	⁻⁸⁹ ₆	42.8	⁻⁹⁵ ₅	36.2	⁻¹⁰⁰ ₄	26.3	⁻¹⁰³ ₃	16.1																	
Apr 14	76.1	⁻⁶ ₈	75.7	⁻¹⁹ ₈	74.4	⁻³² ₈	72.2	⁻⁴⁴ ₇	69.1	⁻⁵⁵ ₇	65.3	⁻⁶⁵ ₇	60.8	⁻⁷⁵ ₆	55.6	⁻⁸³ ₆	49.8	⁻⁹¹ ₅	43.5	⁻⁹⁶ ₄	36.8	⁻¹⁰¹ ₃	26.7	⁻¹⁰⁵ ₂	16.3																	
Apr 15	77.1	⁻⁶ ₆	76.7	⁻¹⁹ ₆	75.3	⁻³² ₆	73.1	⁻⁴⁴ ₅	70.0	⁻⁵⁵ ₅	66.2	⁻⁶⁶ ₅	61.5	⁻⁷⁶ ₄	56.3	⁻⁸⁴ ₄	50.4	⁻⁹¹ ₄	44.0	⁻⁹⁷ ₃	37.2	⁻¹⁰² ₂	27.0	⁻¹⁰⁶ ₂	16.5																	
Apr 16	77.8	⁻⁷ ₃	77.3	⁻¹⁹ ₃	76.0	⁻³² ₃	73.7	⁻⁴⁴ ₂	70.6	⁻⁵⁶ ₂	66.7	⁻⁶⁷ ₂	62.1	⁻⁷⁶ ₂	56.8	⁻⁸⁵ ₂	50.8	⁻⁹² ₂	44.4	⁻⁹⁸ ₁	37.6	⁻¹⁰³ ₁	27.3	⁻¹⁰⁶ ₁	16.7																	
Apr 17	78.1	⁻⁷ ₋₁	77.7	⁻²⁰ ₋₁	76.3	⁻³² ₋₁	74.0	⁻⁴⁴ ₋₁	70.9	⁻⁵⁶ ₋₁	67.0	⁻⁶⁷ ₋₁	62.3	⁻⁷⁶ ₋₁	57.0	⁻⁸⁵ ₋₁	51.1	⁻⁹² ₋₁	44.6	⁻⁹⁸ ₀	37.7	⁻¹⁰³ ₀	27.4	⁻¹⁰⁷ ₀	16.7																	
Apr 18	78.0	⁻⁷ ₋₄	77.6	⁻¹⁹ ₋₄	76.2	⁻³² ₋₄	73.9	⁻⁴⁴ ₋₄	70.8	⁻⁵⁶ ₋₄	66.9	⁻⁶⁶ ₋₄	62.3	⁻⁷⁶ ₋₃	56.9	⁻⁸⁵ ₋₃	51.0	⁻⁹² ₋₃	44.5	⁻⁹⁸ ₋₂	37.7	⁻¹⁰³ ₋₂	27.3	⁻¹⁰⁶ ₋₁	16.7																	
Apr 19	77.5	⁻⁶ ₋₇	77.0	⁻¹⁹ ₋₇	75.7	⁻³² ₋₇	73.4	⁻⁴⁴ ₋₇	70.4	⁻⁵⁵ ₋₆	66.5	⁻⁶⁶ ₋₆	61.8	⁻⁷⁵ ₋₆	56.5	⁻⁸⁴ ₋₅	50.6	⁻⁹¹ ₋₄	44.2	⁻⁹⁷ ₋₄	37.4	⁻¹⁰² ₋₃	27.2	⁻¹⁰⁵ ₋₂	16.6																	
Apr 20	76.6	⁻⁶ ₋₉	76.2	⁻¹⁹ ₋₉	74.8	⁻³¹ ₋₉	72.6	⁻⁴³ ₋₈	69.6	⁻⁵⁴ ₋₈	65.7	⁻⁶⁵ ₋₈	61.2	⁻⁷⁴ ₋₇	55.9	⁻⁸³ ₋₆	50.1	⁻⁹⁰ ₋₆	43.7	⁻⁹⁶ ₋₅	37.0	⁻¹⁰¹ ₋₄	26.9	⁻¹⁰⁴ ₋₃	16.4																	
Apr 21	75.5	⁻⁶ ₋₁₀	75.1	⁻¹⁹ ₋₁₀	73.8	⁻³¹ ₋₁₀	71.6	⁻⁴³ ₋₉	68.6	⁻⁵⁴ ₋₉	64.8	⁻⁶⁴ ₋₈	60.3	⁻⁷³ ₋₈	55.1	⁻⁸¹ ₋₇	49.4	⁻⁸⁸ ₋₆	43.1	⁻⁹⁴ ₋₅	36.5	⁻⁹⁹ ₋₄	26.5	⁻¹⁰² ₋₃	16.2																	
Apr 22	74.3	⁻⁶ ₋₁₀	73.9	⁻¹⁸ ₋₁₀	72.6	⁻³⁰ ₋₁₀	70.4	⁻⁴² ₋₉	67.5	⁻⁵³ ₋₉	63.8	⁻⁶³ ₋₈	59.3	⁻⁷² ₋₈	54.2	⁻⁸⁰ ₋₇	48.6	⁻⁸⁷ ₋₆	42.4	⁻⁹³ ₋₅	35.9	⁻⁹⁸ ₋₄	26.1	⁻¹⁰¹ ₋₃	15.9																	
Apr 23	73.1	⁻⁶ ₋₉	72.7	⁻¹⁸ ₋₉	71.4	⁻³⁰ ₋₉	69.3	⁻⁴¹ ₋₉	66.4	⁻⁵² ₋₈	62.7	⁻⁶² ₋₈	58.4	⁻⁷¹ ₋₇	53.3	⁻⁷⁹ ₋₆	47.8	⁻⁸⁶ ₋₆	41.7	⁻⁹¹ ₋₅	35.3	⁻⁹⁶ ₋₄	25.6	⁻⁹⁹ ₋₃	15.7																	
Apr 24	72.0	⁻⁶ ₋₈	71.6	⁻¹⁸ ₋₈	70.3	⁻²⁹ ₋₈	68.2	⁻⁴¹ ₋₈	65.4	⁻⁵¹ ₋₇	61.8	⁻⁶¹ ₋₇	57.5	⁻⁷⁰ ₋₆	52.5	⁻⁷⁸ ₋₆	47.0	⁻⁸⁴ ₋₅	41.1	⁻⁹⁰ ₋₄	34.8	⁻⁹⁵ ₋₃	25.2	⁻⁹⁸ ₋₂	15.4																	
Apr 25	71.0	⁻⁶ ₋₇	70.6	⁻¹⁸ ₋₇	69.3	⁻²⁹ ₋₇	67.3	⁻⁴⁰ ₋₆	64.5	⁻⁵¹ ₋₆	60.9	⁻⁶⁰ ₋₆	56.7	⁻⁶⁹ ₋₅	51.8	⁻⁷⁷ ₋₅	46.4	⁻⁸³ ₋₄	40.5	⁻⁸⁹ ₋₄	34.3	⁻⁹³ ₋₃	24.9	⁻⁹⁶ ₋₂	15.2																	
Apr 26	70.2	⁻⁶ ₋₅	69.8	⁻¹⁷ ₋₅	68.6	⁻²⁹ ₋₅	66.5	⁻⁴⁰ ₋₅	63.7	⁻⁵⁰ ₋₅	60.2	⁻⁶⁰ ₋₄	56.0	⁻⁶⁸ ₋₄	51.2	⁻⁷⁶ ₋₄	45.9	⁻⁸³ ₋₃	40.1	⁻⁸⁸ ₋₃	33.9	⁻⁹² ₋₂	24.6	⁻⁹⁵ ₋₁	15.0																	
Apr 27	69.6	⁻⁶ ₋₄	69.2	⁻¹⁷ ₋₄	67.9	⁻²⁹ ₋₄	65.9	⁻³⁹ ₋₃	63.2	⁻⁵⁰ ₋₃	59.7	⁻⁵⁹ ₋₃	55.5	⁻⁶⁸ ₋₃	50.8	⁻⁷⁵ ₋₃	45.5	⁻⁸² ₋₂	39.7	⁻⁸⁷ ₋₂	33.6	⁻⁹² ₋₂	24.4	⁻⁹⁵ ₋₁	14.9																	
Apr 28	69.1	⁻⁶ ₋₂	68.7	⁻¹⁷ ₋₂	67.5	⁻²⁸ ₋₂	65.5	⁻³⁹ ₋₂	62.8	⁻⁴⁹ ₋₂	59.3	⁻⁵⁹ ₋₂	55.2	⁻⁶⁷ ₋₂	50.4	⁻⁷⁵ ₋₂	45.2	⁻⁸¹ ₋₁	39.5	⁻⁸⁷ ₋₁	33.4	⁻⁹¹ ₋₁	24.2	⁻⁹⁴ ₋₁	14.8																	
Apr 29	68.8	⁻⁶ ₋₁	68.4	⁻¹⁷ ₋₁	67.2	⁻²⁸ ₋₁	65.2	⁻³⁹ ₋₁	62.5	⁻⁴⁹ ₋₁	59.0	⁻⁵⁹ ₋₁	54.9	⁻⁶⁷ ₋₁	50.2	⁻⁷⁵ ₋₁	45.0	⁻⁸¹ ₋₁	39.3	⁻⁸⁶ ₋₁	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Apr 30	68.7	⁻⁶ ₀	68.3	⁻¹⁷ ₀	67.1	⁻²⁸ ₀	65.1	⁻³⁹ ₀	62.4	⁻⁴⁹ ₀	58.9	⁻⁵⁹ ₀	54.8	⁻⁶⁷ ₀	50.1	⁻⁷⁵ ₀	44.9	⁻⁸¹ ₀	39.2	⁻⁸⁶ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
May 1	68.7	⁻⁶ ₁	68.3	⁻¹⁷ ₁	67.1	⁻²⁸ ₁	65.1	⁻³⁹ ₁	62.4	⁻⁴⁹ ₁	58.9	⁻⁵⁹ ₁	54.8	⁻⁶⁷ ₁	50.1	⁻⁷⁵ ₁	44.9	⁻⁸¹ ₁	39.2	⁻⁸⁶ ₁	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
May 2	68.8	⁻⁶ ₂	68.4	⁻¹⁷ ₂	67.2	⁻²⁸ ₂	65.2	⁻³⁹ ₂	62.5	⁻⁴⁹ ₂	59.0	⁻⁵⁹ ₂	54.9	⁻⁶⁷ ₁	50.2	⁻⁷⁵ ₁	45.0	⁻⁸¹ ₁	39.3	⁻⁸⁷ ₁	33.2	⁻⁹¹ ₁	24.1	⁻⁹⁴ ₁	14.7																	
May 3	69.1	⁻⁶ ₃	68.7	⁻¹⁷ ₃	67.5	⁻²⁹ ₃	65.5	⁻³⁹ ₃	62.7	⁻⁵⁰ ₂	59.2	⁻⁵⁹ ₂	55.1	⁻⁶⁸ ₂	50.4	⁻⁷⁵ ₂	45.1	⁻⁸² ₂	39.4	⁻⁸⁷ ₁	33.4	⁻⁹² ₁	24.2	⁻⁹⁴ ₁	14.8																	
May 4	69.4	⁻⁶ ₄	69.0	⁻¹⁷ ₄	67.8	⁻²⁹ ₄	65.8	⁻⁴⁰ ₃	63.0	⁻⁵⁰ ₃	59.5	⁻⁵⁹ ₃	55.4	⁻⁶⁸ ₃	50.6	⁻⁷⁶ ₃	45.4	⁻⁸² ₂	39.6	⁻⁸⁸ ₂	33.5	⁻⁹² ₂	24.3	⁻⁹⁵ ₁	14.9																	
May 5	69.8	⁻⁶ ₅	69.4	⁻¹⁸ ₄	68.2	⁻²⁹ ₄	66.2	⁻⁴⁰ ₄	63.4	⁻⁵⁰ ₄	59.9	⁻⁶⁰ ₄	55.7	⁻⁶⁹ ₃	51.0	⁻⁷⁶ ₃	45.6	⁻⁸³ ₃	39.9	⁻⁸⁸ ₂	33.7	⁻⁹³ ₂	24.5	⁻⁹⁶ ₁	15.0																	
May 6	70.4	⁻⁶ ₅	70.0	⁻¹⁸ ₅	68.7	⁻²⁹ ₅	66.7	⁻⁴⁰ ₅	63.9	⁻⁵¹ ₅	60.4	⁻⁶⁰ ₄	56.2	⁻⁶⁹ ₄	51.4	⁻⁷⁷ ₄	46.0	⁻⁸⁴ ₃	40.2	⁻⁸⁹ ₃	34.0	⁻⁹⁴ ₂	24.7	⁻⁹⁶ ₂	15.1																	
May 7	71.0	⁻⁶ ₆	70.6	⁻¹⁸ ₆	69.4	⁻²⁹ ₆	67.3	⁻⁴¹ ₆	64.5	⁻⁵¹ ₆	60.9	⁻⁶¹ ₅	56.7	⁻⁷⁰ ₅	51.8	⁻⁷⁸ ₄	46.4	⁻⁸⁴ ₄	40.6	⁻⁹⁰ ₃	34.3	⁻⁹⁴ ₃	24.9	⁻⁹⁷ ₂	15.2																	
May 8	71.8	⁻⁶ ₇	71.4	⁻¹⁸ ₇	70.1	⁻³⁰ ₇	68.0	⁻⁴¹ ₇	65.2																																	

2007

Moon Parallax and Semi-diameter

		Upper Limb																																									
		Altitude degrees																																									
		0			7			14			21			28			35			42			49			56			63			70			80			90					
		'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Apr 3	3	39.3	-6	0	38.9	-17	0	37.7	-28	0	35.7	-39	0	32.9	-49	0	29.5	-59	0	25.4	-67	0	20.7	-75	0	15.5	-81	0	9.8	-86	0	3.8	-91	0	-5.3	-94	0	-14.7					
Apr 4	4	39.3	-6	1	38.9	-17	1	37.7	-28	1	35.7	-39	1	33.0	-49	1	29.5	-59	1	25.4	-67	1	20.7	-75	1	15.5	-81	1	9.8	-86	1	3.8	-91	0	-5.3	-94	0	-14.7					
Apr 5	5	39.3	-6	2	38.9	-17	2	37.7	-28	2	35.8	-39	2	33.0	-49	2	29.6	-59	2	25.5	-67	2	20.7	-75	2	15.5	-81	1	9.8	-87	1	3.8	-91	1	-5.3	-94	1	-14.7					
Apr 6	6	39.5	-6	3	39.1	-17	3	37.9	-29	3	35.9	-39	3	33.1	-50	3	29.7	-59	3	25.6	-68	3	20.8	-75	2	15.6	-82	2	9.9	-87	2	3.8	-92	1	-5.4	-95	1	-14.8					
Apr 7	7	39.7	-6	5	39.3	-17	5	38.1	-29	4	36.1	-40	4	33.3	-50	4	29.9	-60	4	25.7	-68	4	20.9	-76	3	15.7	-82	3	9.9	-88	2	3.8	-92	2	-5.4	-95	1	-14.9					
Apr 8	8	40.0	-6	6	39.6	-18	6	38.4	-29	6	36.4	-40	6	33.6	-50	5	30.1	-60	5	25.9	-69	5	21.1	-77	4	15.8	-83	4	10.0	-89	3	3.8	-93	3	-5.4	-96	2	-15.0					
Apr 9	9	40.5	-6	7	40.0	-18	7	38.8	-29	7	36.8	-40	7	34.0	-51	7	30.4	-61	6	26.2	-70	6	21.3	-77	5	15.9	-84	5	10.1	-90	4	3.9	-94	3	-5.5	-97	2	-15.2					
Apr 10	10	41.0	-6	9	40.5	-18	8	39.3	-30	8	37.2	-41	8	34.4	-52	8	30.8	-62	7	26.5	-71	7	21.6	-78	6	16.1	-85	5	10.2	-91	5	3.9	-95	4	-5.6	-98	2	-15.3					
Apr 11	11	41.6	-6	9	41.1	-18	9	39.9	-30	9	37.8	-42	9	34.9	-52	8	31.2	-63	8	26.9	-72	7	21.9	-80	7	16.4	-87	6	10.4	-92	5	4.0	-97	4	-5.6	-100	3	-15.6					
Apr 12	12	42.2	-6	10	41.8	-19	10	40.5	-31	9	38.4	-42	9	35.4	-53	9	31.7	-64	8	27.3	-73	8	22.3	-81	7	16.6	-88	6	10.5	-94	5	4.0	-98	4	-5.7	-102	3	-15.8					
Apr 13	13	42.9	-6	9	42.4	-19	9	41.1	-31	9	39.0	-43	9	36.0	-54	8	32.2	-64	8	27.7	-74	7	22.6	-82	7	16.9	-89	6	10.7	-95	5	4.1	-100	4	-5.8	-103	3	-16.1					
Apr 14	14	43.5	-6	8	43.1	-19	8	41.8	-32	8	39.6	-44	7	36.5	-55	7	32.7	-65	7	28.2	-75	6	22.9	-83	6	17.2	-91	5	10.9	-96	4	4.2	-101	3	-5.9	-105	2	-16.3					
Apr 15	15	44.1	-6	6	43.6	-19	6	42.3	-32	6	40.1	-44	5	37.0	-55	5	33.1	-66	5	28.5	-76	4	23.2	-84	4	17.4	-91	4	11.0	-97	3	4.2	-102	2	-6.0	-106	2	-16.5					
Apr 16	16	44.5	-7	3	44.0	-19	3	42.7	-32	3	40.4	-44	2	37.3	-56	2	33.4	-67	2	28.8	-76	2	23.4	-85	2	17.5	-92	2	11.1	-98	1	4.3	-103	1	-6.0	-106	1	-16.7					
Apr 17	17	44.7	-7	-1	44.2	-20	-1	42.8	-32	-1	40.6	-44	-1	37.5	-56	-1	33.6	-67	-1	28.9	-76	-1	23.5	-85	-1	17.6	-92	-1	11.1	-98	0	4.3	-103	0	-6.1	-107	0	-16.7					
Apr 18	18	44.6	-7	-4	44.1	-19	-4	42.8	-32	-4	40.5	-44	-4	37.4	-56	-4	33.5	-66	-4	28.8	-76	-3	23.5	-85	-3	17.6	-92	-3	11.1	-98	-2	4.3	-103	-2	-6.1	-106	-1	-16.7					
Apr 19	19	44.3	-6	-7	43.8	-19	-7	42.5	-32	-7	40.3	-44	-7	37.2	-55	-6	33.3	-66	-6	28.7	-75	-6	23.4	-84	-5	17.5	-91	-4	11.1	-97	-4	4.2	-102	-3	-6.0	-105	-2	-16.6					
Apr 20	20	43.8	-6	-9	43.4	-19	-9	42.0	-31	-9	39.8	-43	-8	36.8	-54	-8	32.9	-65	-8	28.3	-74	-7	23.1	-83	-6	17.3	-90	-6	10.9	-96	-5	4.2	-101	-4	-6.0	-104	-3	-16.4					
Apr 21	21	43.2	-6	-10	42.7	-19	-10	41.4	-31	-10	39.2	-43	-9	36.2	-54	-9	32.4	-64	-8	27.9	-73	-8	22.8	-81	-7	17.0	-88	-6	10.8	-94	-5	4.1	-99	-4	-5.9	-102	-3	-16.2					
Apr 22	22	42.5	-6	-10	42.1	-18	-10	40.8	-30	-10	38.6	-42	-9	35.7	-53	-9	31.9	-63	-8	27.5	-72	-8	22.4	-80	-7	16.7	-87	-6	10.6	-93	-5	4.1	-98	-4	-5.8	-101	-3	-15.9					
Apr 23	23	41.8	-6	-9	41.4	-18	-9	40.1	-30	-9	38.0	-41	-9	35.1	-52	-8	31.4	-62	-8	27.0	-71	-7	22.0	-79	-6	16.5	-86	-6	10.4	-91	-5	4.0	-96	-4	-5.7	-99	-3	-15.7					
Apr 24	24	41.2	-6	-8	40.7	-18	-8	39.5	-29	-8	37.4	-41	-8	34.5	-51	-7	30.9	-61	-7	26.6	-70	-6	21.7	-78	-6	16.2	-84	-5	10.3	-90	-4	3.9	-95	-3	-5.6	-98	-2	-15.4					
Apr 25	25	40.6	-6	-7	40.2	-18	-7	38.9	-29	-7	36.9	-40	-6	34.1	-51	-6	30.5	-60	-6	26.3	-69	-5	21.4	-77	-5	16.0	-83	-4	10.1	-89	-4	3.9	-93	-3	-5.5	-96	-2	-15.2					
Apr 26	26	40.1	-6	-5	39.7	-17	-5	38.5	-29	-5	36.5	-40	-5	33.7	-50	-5	30.2	-60	-4	26.0	-68	-4	21.2	-76	-4	15.8	-83	-3	10.0	-88	-3	3.8	-92	-2	-5.5	-95	-1	-15.0					
Apr 27	27	39.8	-6	-4	39.4	-17	-4	38.1	-29	-4	36.1	-39	-3	33.4	-50	-3	29.9	-59	-3	25.7	-68	-3	21.0	-75	-3	15.7	-82	-2	9.9	-87	-2	3.8	-92	-2	-5.4	-95	-1	-14.9					
Apr 28	28	39.5	-6	-2	39.1	-17	-2	37.9	-28	-2	35.9	-39	-2	33.2	-49	-2	29.7	-59	-2	25.6	-67	-2	20.8	-75	-2	15.6	-81	-1	9.9	-87	-1	3.8	-91	-1	-5.4	-94	-1	-14.8					
Apr 29	29	39.3	-6	-1	38.9	-17	-1	37.7	-28	-1	35.8	-39	-1	33.0	-49	-1	29.6	-59	-1	25.5	-67	-1	20.7	-75	-1	15.5	-81	-1	9.8	-86	-1	3.8	-91	0	-5.3	-94	0	-14.7					
Apr 30	30	39.3	-6	0	38.9	-17	0	37.7	-28	0	35.7	-39	0	33.0	-49	0	29.5	-59	0	25.4	-67	0	20.7	-75	0	15.5	-81	0	9.8	-86	0	3.8	-91	0	-5.3	-94	0	-14.7					
May 1	1	39.3	-6	1	38.9	-17	1	37.7	-28	1	35.7	-39	1	33.0	-49	1	29.5	-59	1	25.4	-67	1	20.7	-75	1	15.5	-81	1	9.8	-86	1	3.8	-91	0	-5.3	-94	0	-14.7					
May 2	2	39.4	-6	2	38.9	-17	2	37.7	-28	2	35.8	-39	2	33.0	-49	2	29.6	-59	2	25.5	-67	1	20.7	-75	1	15.5	-81	1	9.8	-87	1	3.8	-91	1	-5.3	-94	1	-14.7					
May 3	3	39.5	-6	3	39.1	-17	3	37.9	-29	3	35.9	-39	3	33.1	-50	2	29.7	-59	2	25.5	-68	2	20.8	-75	2	15.6	-82	2	9.9	-87	1	3.8	-92	1	-5.4	-94	1	-14.8					
May 4	4	39.7	-6	4	39.3	-17	4	38.1	-29	4	36.1	-40	3	33.3	-50	3	29.8	-59	3	25.7	-68	3	20.9	-76	3	15.6	-82	2	9.9	-88	2	3.8	-92	2	-5.4	-95	1	-14.9					
May 5	5	39.9	-6	5	39.5	-18	4	38.3	-29	4	36.3	-40	4	33.5	-50	4	30.0	-60	4	25.8	-69	3	21.0	-76	3	15.7	-83	3	10.0	-88	2	3.8	-93	2	-5.4	-96	1	-15.0					
May 6	6	40.2	-6	5	39.8	-18	5	38.6	-29	5	36.6	-40	5	33.8	-51	5	30.2	-60	4	26.0	-69	4	21.2	-77	4	15.9	-84	3	10.0	-89	3	3.8	-94	2	-5.5	-96	2	-15.1					
May 7	7	40.6	-6	6	40.2	-18	6	38.9	-29	6	36.9	-41	6	34.1	-51	6	30.5	-61	5	26.3	-70	5	21.4	-78	4	16.0	-84	4	10.1	-90	3	3.9	-94	3	-5.5	-97	2	-15.2					
May 8	8	41.0	-6	7	40.6	-18	7	39.4	-30	7	37.3	-41	7	34.4	-52	6	30.8	-62	6	26.6	-71	6	21.6	-79	5	16.2	-85	4	10.2	-91	4	3.9	-96	3	-5.6	-99	2	-15.4					
May 9	9	41.5	-6	8	41.1	-18	8	39.8	-30	8	37.7	-42	7	34.9	-52	7	31.2	-62	7	26.9	-72	6	21.9	-80	5	16.4	-86	5	10.4	-92	4	4.0	-97	3	-5.6	-100	2	-15.6					
May 10	10	42.1	-6	8	41.7	-19	8	40.4	-31	8	38.2	-42	8	35.3	-53	7	31.6	-63	7	27.2	-72	6	22.2	-81	6	16.6	-88	5	10.5	-93	4	4.0	-98	3	-5.7	-101	2	-15.8					
May 11	11	42.7	-6	8	42.2	-19	8	40.9	-31	8	38.8	-43	8	35.8	-54	7	32.0	-64	7	27.6	-73	6	22.5	-82	6	16.8	-89	5	10.6	-94	4	4.1	-99	3	-5.8	-102	2	-16.0					
May 12	12	43.2	-6	7	42.8	-19	7	41.4	-31	7	39.3	-43	7	36.3	-54	7	32.5	-65	6	28.0	-74	6	22.8	-83	5	17.0	-90	5	10.8	-96	4	4.1	-101	3	-5.9	-104	2	-16.2					
May 13	13	43.7	-6	6	43.3	-19	6	41.9	-32	6	39.7	-44	5	36.7	-55	5	32.9	-66	5	28.3	-75	4	23.0	-																			

Lower Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
May 19	75.6	⁻⁶	₋₉	75.2	⁻¹⁹	₋₉	73.9	⁻³¹	₋₉	71.7	⁻⁴³	₋₉	68.7	⁻⁵⁴	₋₈	64.9	⁻⁶⁴	₋₈	60.4	⁻⁷³	₋₇	55.2	⁻⁸²	₋₇	49.4	⁻⁸⁹	₋₆	43.2	⁻⁹⁴	₋₅	36.5	⁻⁹⁹	₋₄	26.5	⁻¹⁰²	₋₃	16.2					
May 20	74.5	⁻⁶	₋₁₀	74.1	⁻¹⁸	₋₁₀	72.8	⁻³⁰	₋₁₀	70.6	⁻⁴²	₋₉	67.7	⁻⁵³	₋₉	63.9	⁻⁶³	₋₈	59.5	⁻⁷²	₋₈	54.4	⁻⁸⁰	₋₇	48.7	⁻⁸⁷	₋₆	42.5	⁻⁹³	₋₅	36.0	⁻⁹⁸	₋₄	26.1	⁻¹⁰¹	₋₃	16.0					
May 21	73.3	⁻⁶	₋₁₀	72.9	⁻¹⁸	₋₉	71.6	⁻³⁰	₋₉	69.5	⁻⁴¹	₋₉	66.6	⁻⁵²	₋₈	62.9	⁻⁶²	₋₈	58.5	⁻⁷¹	₋₇	53.5	⁻⁷⁹	₋₇	47.9	⁻⁸⁶	₋₆	41.9	⁻⁹¹	₋₅	35.4	⁻⁹⁶	₋₄	25.7	⁻⁹⁹	₋₃	15.7					
May 22	72.2	⁻⁶	₋₉	71.8	⁻¹⁸	₋₈	70.5	⁻³⁰	₋₈	68.4	⁻⁴¹	₋₈	65.5	⁻⁵¹	₋₈	61.9	⁻⁶¹	₋₇	57.6	⁻⁷⁰	₋₇	52.7	⁻⁷⁸	₋₆	47.2	⁻⁸⁵	₋₅	41.2	⁻⁹⁰	₋₅	34.9	⁻⁹⁵	₋₄	25.3	⁻⁹⁸	₋₂	15.5					
May 23	71.1	⁻⁶	₋₇	70.7	⁻¹⁸	₋₇	69.5	⁻²⁹	₋₇	67.4	⁻⁴⁰	₋₇	64.6	⁻⁵¹	₋₆	61.0	⁻⁶⁰	₋₆	56.8	⁻⁶⁹	₋₆	51.9	⁻⁷⁷	₋₅	46.5	⁻⁸⁴	₋₄	40.6	⁻⁸⁹	₋₄	34.4	⁻⁹⁴	₋₃	24.9	⁻⁹⁶	₋₂	15.2					
May 24	70.3	⁻⁶	₋₆	69.9	⁻¹⁷	₋₅	68.6	⁻²⁹	₋₅	66.6	⁻⁴⁰	₋₅	63.8	⁻⁵⁰	₋₅	60.3	⁻⁶⁰	₋₅	56.1	⁻⁶⁸	₋₄	51.3	⁻⁷⁶	₋₄	45.9	⁻⁸³	₋₃	40.1	⁻⁸⁸	₋₃	33.9	⁻⁹³	₋₂	24.6	⁻⁹⁵	₋₂	15.0					
May 25	69.6	⁻⁶	₋₄	69.2	⁻¹⁷	₋₄	68.0	⁻²⁹	₋₄	66.0	⁻³⁹	₋₄	63.2	⁻⁵⁰	₋₃	59.7	⁻⁵⁹	₋₃	55.6	⁻⁶⁸	₋₃	50.8	⁻⁷⁵	₋₃	45.5	⁻⁸²	₋₂	39.7	⁻⁸⁷	₋₂	33.6	⁻⁹²	₋₂	24.4	⁻⁹⁵	₋₁	14.9					
May 26	69.1	⁻⁶	₋₂	68.7	⁻¹⁷	₋₂	67.5	⁻²⁸	₋₂	65.5	⁻³⁹	₋₂	62.8	⁻⁴⁹	₋₂	59.3	⁻⁵⁹	₋₂	55.2	⁻⁶⁷	₋₂	50.5	⁻⁷⁵	₋₂	45.2	⁻⁸²	₋₁	39.5	⁻⁸⁷	₋₁	33.4	⁻⁹¹	₋₁	24.2	⁻⁹⁴	₋₁	14.8					
May 27	68.9	⁻⁶	₋₁	68.5	⁻¹⁷	₋₁	67.3	⁻²⁸	₋₁	65.3	⁻³⁹	₋₁	62.5	⁻⁴⁹	₋₁	59.1	⁻⁵⁹	₋₁	55.0	⁻⁶⁷	₀	50.3	⁻⁷⁵	₀	45.0	⁻⁸¹	₀	39.3	⁻⁸⁷	₀	33.3	⁻⁹¹	₀	24.2	⁻⁹⁴	₀	14.8					
May 28	68.8	⁻⁶	₁	68.4	⁻¹⁷	₁	67.2	⁻²⁸	₁	65.2	⁻³⁹	₁	62.5	⁻⁴⁹	₁	59.0	⁻⁵⁹	₁	54.9	⁻⁶⁷	₁	50.2	⁻⁷⁵	₁	45.0	⁻⁸¹	₀	39.3	⁻⁸⁷	₀	33.2	⁻⁹¹	₀	24.1	⁻⁹⁴	₀	14.7					
May 29	68.9	⁻⁶	₂	68.5	⁻¹⁷	₂	67.3	⁻²⁸	₂	65.3	⁻³⁹	₂	62.6	⁻⁴⁹	₂	59.1	⁻⁵⁹	₂	55.0	⁻⁶⁷	₂	50.3	⁻⁷⁵	₁	45.0	⁻⁸²	₁	39.3	⁻⁸⁷	₁	33.3	⁻⁹¹	₁	24.2	⁻⁹⁴	₁	14.8					
May 30	69.1	⁻⁶	₃	68.7	⁻¹⁷	₃	67.5	⁻²⁹	₃	65.5	⁻³⁹	₃	62.8	⁻⁵⁰	₃	59.3	⁻⁵⁹	₂	55.2	⁻⁶⁸	₂	50.5	⁻⁷⁵	₂	45.2	⁻⁸²	₂	39.5	⁻⁸⁷	₂	33.4	⁻⁹²	₁	24.2	⁻⁹⁵	₁	14.8					
May 31	69.5	⁻⁶	₄	69.1	⁻¹⁷	₄	67.9	⁻²⁹	₄	65.9	⁻⁴⁰	₃	63.1	⁻⁵⁰	₃	59.6	⁻⁵⁹	₃	55.5	⁻⁶⁸	₃	50.7	⁻⁷⁶	₃	45.4	⁻⁸²	₂	39.7	⁻⁸⁸	₂	33.6	⁻⁹²	₂	24.4	⁻⁹⁵	₁	14.9					
Jun 1	69.9	⁻⁶	₄	69.5	⁻¹⁸	₄	68.3	⁻²⁹	₄	66.3	⁻⁴⁰	₄	63.5	⁻⁵⁰	₄	60.0	⁻⁶⁰	₄	55.8	⁻⁶⁹	₃	51.0	⁻⁷⁶	₃	45.7	⁻⁸³	₃	39.9	⁻⁸⁸	₂	33.8	⁻⁹³	₂	24.5	⁻⁹⁶	₁	15.0					
Jun 2	70.5	⁻⁶	₅	70.1	⁻¹⁸	₅	68.8	⁻²⁹	₅	66.8	⁻⁴⁰	₄	64.0	⁻⁵¹	₄	60.5	⁻⁶⁰	₄	56.2	⁻⁶⁹	₄	51.4	⁻⁷⁷	₃	46.1	⁻⁸⁴	₃	40.2	⁻⁸⁹	₃	34.0	⁻⁹⁴	₂	24.7	⁻⁹⁷	₁	15.1					
Jun 3	71.0	⁻⁶	₅	70.6	⁻¹⁸	₅	69.4	⁻²⁹	₅	67.3	⁻⁴¹	₅	64.5	⁻⁵¹	₅	60.9	⁻⁶¹	₄	56.7	⁻⁷⁰	₄	51.8	⁻⁷⁸	₄	46.4	⁻⁸⁴	₃	40.6	⁻⁹⁰	₃	34.3	⁻⁹⁴	₂	24.9	⁻⁹⁷	₁	15.2					
Jun 4	71.7	⁻⁶	₆	71.2	⁻¹⁸	₅	70.0	⁻³⁰	₅	67.9	⁻⁴¹	₅	65.1	⁻⁵²	₅	61.5	⁻⁶¹	₅	57.2	⁻⁷⁰	₄	52.3	⁻⁷⁸	₄	46.8	⁻⁸⁵	₃	40.9	⁻⁹¹	₃	34.6	⁻⁹⁵	₂	25.1	⁻⁹⁸	₂	15.3					
Jun 5	72.3	⁻⁶	₆	71.9	⁻¹⁸	₆	70.6	⁻³⁰	₆	68.6	⁻⁴¹	₅	65.7	⁻⁵²	₅	62.1	⁻⁶²	₅	57.7	⁻⁷¹	₄	52.8	⁻⁷⁹	₄	47.3	⁻⁸⁶	₄	41.3	⁻⁹¹	₃	34.9	⁻⁹⁶	₂	25.4	⁻⁹⁹	₂	15.5					
Jun 6	73.0	⁻⁶	₆	72.6	⁻¹⁸	₆	71.3	⁻³⁰	₆	69.2	⁻⁴²	₆	66.3	⁻⁵³	₅	62.7	⁻⁶³	₅	58.3	⁻⁷²	₅	53.3	⁻⁸⁰	₄	47.7	⁻⁸⁷	₄	41.7	⁻⁹²	₃	35.3	⁻⁹⁷	₃	25.6	⁻¹⁰⁰	₂	15.6					
Jun 7	73.8	⁻⁶	₆	73.3	⁻¹⁹	₆	72.0	⁻³¹	₆	69.9	⁻⁴²	₆	67.0	⁻⁵³	₅	63.3	⁻⁶³	₅	58.9	⁻⁷²	₅	53.8	⁻⁸¹	₄	48.2	⁻⁸⁸	₄	42.1	⁻⁹³	₃	35.6	⁻⁹⁸	₃	25.9	⁻¹⁰¹	₂	15.8					
Jun 8	74.5	⁻⁶	₆	74.1	⁻¹⁹	₆	72.7	⁻³¹	₆	70.6	⁻⁴³	₅	67.6	⁻⁵⁴	₅	63.9	⁻⁶⁴	₅	59.5	⁻⁷³	₄	54.4	⁻⁸¹	₄	48.7	⁻⁸⁸	₄	42.5	⁻⁹⁴	₃	36.0	⁻⁹⁹	₂	26.1	⁻¹⁰²	₂	15.9					
Jun 9	75.2	⁻⁶	₅	74.8	⁻¹⁹	₅	73.4	⁻³¹	₅	71.3	⁻⁴³	₅	68.3	⁻⁵⁴	₅	64.5	⁻⁶⁴	₄	60.0	⁻⁷⁴	₄	54.9	⁻⁸²	₄	49.1	⁻⁸⁹	₃	42.9	⁻⁹⁵	₃	36.3	⁻¹⁰⁰	₂	26.4	⁻¹⁰³	₁	16.1					
Jun 10	75.8	⁻⁶	₄	75.4	⁻¹⁹	₄	74.1	⁻³¹	₄	71.9	⁻⁴³	₄	68.9	⁻⁵⁴	₄	65.0	⁻⁶⁵	₃	60.5	⁻⁷⁴	₃	55.3	⁻⁸³	₃	49.6	⁻⁹⁰	₃	43.3	⁻⁹⁶	₂	36.6	⁻¹⁰¹	₂	26.6	⁻¹⁰⁴	₁	16.2					
Jun 11	76.3	⁻⁶	₃	75.9	⁻¹⁹	₃	74.5	⁻³²	₂	72.3	⁻⁴³	₂	69.3	⁻⁵⁵	₂	65.5	⁻⁶⁵	₂	60.9	⁻⁷⁵	₂	55.7	⁻⁸³	₂	49.9	⁻⁹⁰	₂	43.6	⁻⁹⁶	₁	36.9	⁻¹⁰¹	₁	26.8	⁻¹⁰⁴	₁	16.3					
Jun 12	76.6	⁻⁶	₀	76.2	⁻¹⁹	₀	74.8	⁻³²	₀	72.6	⁻⁴⁴	₀	69.6	⁻⁵⁵	₀	65.7	⁻⁶⁵	₀	61.2	⁻⁷⁵	₀	55.9	⁻⁸³	₀	50.1	⁻⁹¹	₀	43.8	⁻⁹⁶	₀	37.0	⁻¹⁰¹	₀	26.9	⁻¹⁰⁵	₀	16.4					
Jun 13	76.7	⁻⁶	₋₂	76.2	⁻¹⁹	₋₂	74.9	⁻³²	₋₂	72.7	⁻⁴⁴	₋₂	69.6	⁻⁵⁵	₋₂	65.8	⁻⁶⁵	₋₂	61.2	⁻⁷⁵	₋₁	56.0	⁻⁸³	₋₁	50.1	⁻⁹⁰	₋₁	43.8	⁻⁹⁶	₋₁	37.0	⁻¹⁰¹	₋₁	26.9	⁻¹⁰⁴	₋₁	16.4					
Jun 14	76.5	⁻⁶	₋₄	76.0	⁻¹⁹	₋₄	74.7	⁻³¹	₋₄	72.5	⁻⁴³	₋₄	69.4	⁻⁵⁵	₋₄	65.6	⁻⁶⁵	₋₄	61.0	⁻⁷⁵	₋₃	55.8	⁻⁸³	₋₃	50.0	⁻⁹⁰	₋₃	43.7	⁻⁹⁶	₋₂	36.9	⁻¹⁰¹	₋₂	26.8	⁻¹⁰⁴	₋₁	16.4					
Jun 15	75.9	⁻⁶	₋₆	75.5	⁻¹⁹	₋₆	74.2	⁻³¹	₋₆	72.0	⁻⁴³	₋₆	69.0	⁻⁵⁴	₋₆	65.2	⁻⁶⁴	₋₅	60.6	⁻⁷⁴	₋₅	55.4	⁻⁸²	₋₄	49.6	⁻⁸⁹	₋₄	43.4	⁻⁹⁵	₋₃	36.7	⁻¹⁰⁰	₋₃	26.6	⁻¹⁰³	₋₂	16.3					
Jun 16	75.2	⁻⁶	₋₈	74.7	⁻¹⁹	₋₈	73.4	⁻³¹	₋₈	71.3	⁻⁴²	₋₇	68.3	⁻⁵⁴	₋₇	64.5	⁻⁶⁴	₋₇	60.0	⁻⁷³	₋₆	54.9	⁻⁸¹	₋₅	49.1	⁻⁸⁸	₋₅	42.9	⁻⁹⁴	₋₄	36.3	⁻⁹⁹	₋₃	26.4	⁻¹⁰²	₋₂	16.1					
Jun 17	74.2	⁻⁶	₋₉	73.8	⁻¹⁸	₋₉	72.5	⁻³⁰	₋₈	70.4	⁻⁴²	₋₈	67.4	⁻⁵³	₋₈	63.7	⁻⁶³	₋₇	59.2	⁻⁷²	₋₇	54.2	⁻⁸⁰	₋₆	48.5	⁻⁸⁷	₋₅	42.4	⁻⁹³	₋₅	35.8	⁻⁹⁸	₋₄	26.0	⁻¹⁰¹	₋₂	15.9					
Jun 18	73.2	⁻⁶	₋₉	72.8	⁻¹⁸	₋₉	71.5	⁻³⁰	₋₈	69.4	⁻⁴¹	₋₈	66.5	⁻⁵²	₋₈	62.8	⁻⁶²	₋₇	58.4	⁻⁷¹	₋₇	53.4	⁻⁷⁹	₋₆	47.8	⁻⁸⁶	₋₅	41.8	⁻⁹¹	₋₅	35.3	⁻⁹⁶	₋₄	25.7								

2007

Moon Parallax and Semi-diameter

Upper Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
May 19	43.2	⁻⁶	₋₉	42.8	⁻¹⁹	₋₉	41.5	⁻³¹	₋₉	39.3	⁻⁴³	₋₉	36.3	⁻⁵⁴	₋₈	32.5	⁻⁶⁴	₋₈	28.0	⁻⁷³	₋₇	22.8	⁻⁸²	₋₇	17.0	⁻⁸⁹	₋₆	10.8	⁻⁹⁴	₋₅	4.1	⁻⁹⁹	₋₄	-5.9	⁻¹⁰²	₋₃	-16.2					
May 20	42.6	⁻⁶	₋₁₀	42.2	⁻¹⁸	₋₁₀	40.9	⁻³⁰	₋₁₀	38.7	⁻⁴²	₋₉	35.7	⁻⁵³	₋₉	32.0	⁻⁶³	₋₈	27.6	⁻⁷²	₋₈	22.5	⁻⁸⁰	₋₇	16.8	⁻⁸⁷	₋₆	10.6	⁻⁹³	₋₅	4.1	⁻⁹⁸	₋₄	-5.8	⁻¹⁰¹	₋₃	-16.0					
May 21	41.9	⁻⁶	₋₁₀	41.5	⁻¹⁸	₋₉	40.2	⁻³⁰	₋₉	38.1	⁻⁴¹	₋₉	35.2	⁻⁵²	₋₈	31.5	⁻⁶²	₋₈	27.1	⁻⁷¹	₋₇	22.1	⁻⁷⁹	₋₇	16.5	⁻⁸⁶	₋₆	10.5	⁻⁹¹	₋₅	4.0	⁻⁹⁶	₋₄	-5.7	⁻⁹⁹	₋₃	-15.7					
May 22	41.3	⁻⁶	₋₉	40.8	⁻¹⁸	₋₈	39.6	⁻³⁰	₋₈	37.5	⁻⁴¹	₋₈	34.6	⁻⁵¹	₋₈	31.0	⁻⁶¹	₋₇	26.7	⁻⁷⁰	₋₇	21.8	⁻⁷⁸	₋₆	16.3	⁻⁸⁵	₋₅	10.3	⁻⁹⁰	₋₅	3.9	⁻⁹⁵	₋₄	-5.6	⁻⁹⁸	₋₂	-15.5					
May 23	40.7	⁻⁶	₋₇	40.3	⁻¹⁸	₋₇	39.0	⁻²⁹	₋₇	37.0	⁻⁴⁰	₋₇	34.1	⁻⁵¹	₋₆	30.6	⁻⁶⁰	₋₆	26.3	⁻⁶⁹	₋₆	21.4	⁻⁷⁷	₋₅	16.0	⁻⁸⁴	₋₄	10.1	⁻⁸⁹	₋₄	3.9	⁻⁹⁴	₋₃	-5.5	⁻⁹⁶	₋₂	-15.2					
May 24	40.2	⁻⁶	₋₆	39.8	⁻¹⁷	₋₅	38.5	⁻²⁹	₋₅	36.5	⁻⁴⁰	₋₅	33.7	⁻⁵⁰	₋₅	30.2	⁻⁶⁰	₋₅	26.0	⁻⁶⁸	₋₄	21.2	⁻⁷⁶	₋₄	15.8	⁻⁸³	₋₃	10.0	⁻⁸⁸	₋₃	3.8	⁻⁹³	₋₂	-5.5	⁻⁹⁵	₋₂	-15.0					
May 25	39.8	⁻⁶	₋₄	39.4	⁻¹⁷	₋₄	38.2	⁻²⁹	₋₄	36.2	⁻³⁹	₋₄	33.4	⁻⁵⁰	₋₃	29.9	⁻⁵⁹	₋₃	25.7	⁻⁶⁸	₋₃	21.0	⁻⁷⁵	₋₃	15.7	⁻⁸²	₋₂	9.9	⁻⁸⁷	₋₂	3.8	⁻⁹²	₋₂	-5.4	⁻⁹⁵	₋₁	-14.9					
May 26	39.5	⁻⁶	₋₂	39.1	⁻¹⁷	₋₂	37.9	⁻²⁸	₋₂	35.9	⁻³⁹	₋₂	33.2	⁻⁴⁹	₋₂	29.7	⁻⁵⁹	₋₂	25.6	⁻⁶⁷	₋₂	20.8	⁻⁷⁵	₋₂	15.6	⁻⁸²	₋₁	9.9	⁻⁸⁷	₋₁	3.8	⁻⁹¹	₋₁	-5.4	⁻⁹⁴	₋₁	-14.8					
May 27	39.4	⁻⁶	₋₁	39.0	⁻¹⁷	₋₁	37.8	⁻²⁸	₋₁	35.8	⁻³⁹	₋₁	33.0	⁻⁴⁹	₋₁	29.6	⁻⁵⁹	₋₁	25.5	⁻⁶⁷	₀	20.8	⁻⁷⁵	₀	15.5	⁻⁸¹	₀	9.8	⁻⁸⁷	₀	3.8	⁻⁹¹	₀	-5.4	⁻⁹⁴	₀	-14.8					
May 28	39.3	⁻⁶	₁	38.9	⁻¹⁷	₁	37.7	⁻²⁸	₁	35.7	⁻³⁹	₁	33.0	⁻⁴⁹	₁	29.6	⁻⁵⁹	₁	25.4	⁻⁶⁷	₁	20.7	⁻⁷⁵	₁	15.5	⁻⁸¹	₀	9.8	⁻⁸⁷	₀	3.8	⁻⁹¹	₀	-5.3	⁻⁹⁴	₀	-14.7					
May 29	39.4	⁻⁶	₂	39.0	⁻¹⁷	₂	37.8	⁻²⁸	₂	35.8	⁻³⁹	₂	33.1	⁻⁴⁹	₂	29.6	⁻⁵⁹	₂	25.5	⁻⁶⁷	₂	20.8	⁻⁷⁵	₁	15.5	⁻⁸²	₁	9.8	⁻⁸⁷	₁	3.8	⁻⁹¹	₁	-5.4	⁻⁹⁴	₁	-14.8					
May 30	39.5	⁻⁶	₃	39.1	⁻¹⁷	₃	37.9	⁻²⁹	₃	35.9	⁻³⁹	₃	33.2	⁻⁵⁰	₃	29.7	⁻⁵⁹	₂	25.6	⁻⁶⁸	₂	20.8	⁻⁷⁵	₂	15.6	⁻⁸²	₂	9.9	⁻⁸⁷	₂	3.8	⁻⁹²	₁	-5.4	⁻⁹⁵	₁	-14.8					
May 31	39.7	⁻⁶	₄	39.3	⁻¹⁷	₄	38.1	⁻²⁹	₄	36.1	⁻⁴⁰	₃	33.3	⁻⁵⁰	₃	29.9	⁻⁵⁹	₃	25.7	⁻⁶⁸	₃	20.9	⁻⁷⁶	₃	15.7	⁻⁸²	₂	9.9	⁻⁸⁸	₂	3.8	⁻⁹²	₂	-5.4	⁻⁹⁵	₁	-14.9					
Jun 1	40.0	⁻⁶	₄	39.6	⁻¹⁸	₄	38.4	⁻²⁹	₄	36.3	⁻⁴⁰	₄	33.6	⁻⁵⁰	₄	30.0	⁻⁶⁰	₄	25.9	⁻⁶⁹	₃	21.1	⁻⁷⁶	₃	15.8	⁻⁸³	₃	10.0	⁻⁸⁸	₂	3.8	⁻⁹³	₂	-5.4	⁻⁹⁶	₁	-15.0					
Jun 2	40.3	⁻⁶	₅	39.9	⁻¹⁸	₅	38.6	⁻²⁹	₅	36.6	⁻⁴⁰	₄	33.8	⁻⁵¹	₄	30.3	⁻⁶⁰	₄	26.1	⁻⁶⁹	₄	21.2	⁻⁷⁷	₃	15.9	⁻⁸⁴	₃	10.0	⁻⁸⁹	₃	3.8	⁻⁹⁴	₂	-5.5	⁻⁹⁷	₁	-15.1					
Jun 3	40.6	⁻⁶	₅	40.2	⁻¹⁸	₅	39.0	⁻²⁹	₅	36.9	⁻⁴¹	₅	34.1	⁻⁵¹	₅	30.5	⁻⁶¹	₄	26.3	⁻⁷⁰	₄	21.4	⁻⁷⁸	₄	16.0	⁻⁸⁴	₃	10.1	⁻⁹⁰	₃	3.9	⁻⁹⁴	₂	-5.5	⁻⁹⁷	₁	-15.2					
Jun 4	41.0	⁻⁶	₆	40.6	⁻¹⁸	₅	39.3	⁻³⁰	₅	37.2	⁻⁴¹	₅	34.4	⁻⁵²	₅	30.8	⁻⁶¹	₅	26.5	⁻⁷⁰	₄	21.6	⁻⁷⁸	₄	16.1	⁻⁸⁵	₃	10.2	⁻⁹¹	₃	3.9	⁻⁹⁵	₂	-5.6	⁻⁹⁸	₂	-15.3					
Jun 5	41.4	⁻⁶	₆	40.9	⁻¹⁸	₆	39.7	⁻³⁰	₆	37.6	⁻⁴¹	₅	34.7	⁻⁵²	₅	31.1	⁻⁶²	₅	26.8	⁻⁷¹	₄	21.8	⁻⁷⁹	₄	16.3	⁻⁸⁶	₄	10.3	⁻⁹¹	₃	4.0	⁻⁹⁶	₂	-5.6	⁻⁹⁹	₂	-15.5					
Jun 6	41.8	⁻⁶	₆	41.3	⁻¹⁸	₆	40.0	⁻³⁰	₆	37.9	⁻⁴²	₆	35.0	⁻⁵³	₅	31.4	⁻⁶³	₅	27.0	⁻⁷²	₅	22.0	⁻⁸⁰	₄	16.5	⁻⁸⁷	₄	10.4	⁻⁹²	₃	4.0	⁻⁹⁷	₃	-5.7	⁻¹⁰⁰	₂	-15.6					
Jun 7	42.2	⁻⁶	₆	41.7	⁻¹⁹	₆	40.4	⁻³¹	₆	38.3	⁻⁴²	₆	35.4	⁻⁵³	₅	31.7	⁻⁶³	₅	27.3	⁻⁷²	₅	22.2	⁻⁸¹	₄	16.6	⁻⁸⁸	₄	10.5	⁻⁹³	₃	4.0	⁻⁹⁸	₃	-5.7	⁻¹⁰¹	₂	-15.8					
Jun 8	42.6	⁻⁶	₆	42.1	⁻¹⁹	₆	40.8	⁻³¹	₆	38.7	⁻⁴³	₅	35.7	⁻⁵⁴	₅	32.0	⁻⁶⁴	₅	27.5	⁻⁷³	₄	22.5	⁻⁸¹	₄	16.8	⁻⁸⁸	₄	10.6	⁻⁹⁴	₃	4.1	⁻⁹⁹	₂	-5.8	⁻¹⁰²	₂	-15.9					
Jun 9	43.0	⁻⁶	₅	42.5	⁻¹⁹	₅	41.2	⁻³¹	₅	39.1	⁻⁴³	₅	36.1	⁻⁵⁴	₅	32.3	⁻⁶⁴	₄	27.8	⁻⁷⁴	₄	22.7	⁻⁸²	₄	16.9	⁻⁸⁹	₃	10.7	⁻⁹⁵	₃	4.1	⁻¹⁰⁰	₂	-5.8	⁻¹⁰³	₁	-16.1					
Jun 10	43.3	⁻⁶	₄	42.9	⁻¹⁹	₄	41.6	⁻³¹	₄	39.4	⁻⁴³	₄	36.4	⁻⁵⁴	₄	32.6	⁻⁶⁵	₃	28.0	⁻⁷⁴	₃	22.9	⁻⁸³	₃	17.1	⁻⁹⁰	₃	10.8	⁻⁹⁶	₂	4.1	⁻¹⁰¹	₂	-5.9	⁻¹⁰⁴	₁	-16.2					
Jun 11	43.6	⁻⁶	₃	43.2	⁻¹⁹	₃	41.9	⁻³²	₂	39.7	⁻⁴³	₂	36.6	⁻⁵⁵	₂	32.8	⁻⁶⁵	₂	28.2	⁻⁷⁵	₂	23.0	⁻⁸³	₂	17.2	⁻⁹⁰	₂	10.9	⁻⁹⁶	₁	4.2	⁻¹⁰¹	₁	-5.9	⁻¹⁰⁴	₁	-16.3					
Jun 12	43.8	⁻⁶	₀	43.4	⁻¹⁹	₀	42.0	⁻³²	₀	39.8	⁻⁴⁴	₀	36.8	⁻⁵⁵	₀	32.9	⁻⁶⁵	₀	28.3	⁻⁷⁵	₀	23.1	⁻⁸³	₀	17.3	⁻⁹¹	₀	10.9	⁻⁹⁶	₀	4.2	⁻¹⁰¹	₀	-6.0	⁻¹⁰⁵	₀	-16.4					
Jun 13	43.8	⁻⁶	₋₂	43.4	⁻¹⁹	₋₂	42.1	⁻³²	₋₂	39.8	⁻⁴⁴	₋₂	36.8	⁻⁵⁵	₋₂	32.9	⁻⁶⁵	₋₂	28.4	⁻⁷⁵	₋₁	23.1	⁻⁸³	₋₁	17.3	⁻⁹⁰	₋₁	10.9	⁻⁹⁶	₋₁	4.2	⁻¹⁰¹	₋₁	-6.0	⁻¹⁰⁴	₋₁	-16.4					
Jun 14	43.7	⁻⁶	₋₄	43.3	⁻¹⁹	₋₄	41.9	⁻³¹	₋₄	39.7	⁻⁴³	₋₄	36.7	⁻⁵⁵	₋₄	32.8	⁻⁶⁵	₋₄	28.3	⁻⁷⁵	₋₃	23.0	⁻⁸³	₋₃	17.2	⁻⁹⁰	₋₃	10.9	⁻⁹⁶	₋₂	4.2	⁻¹⁰¹	₋₂	-5.9	⁻¹⁰⁴	₋₁	-16.4					
Jun 15	43.4	⁻⁶	₋₆	43.0	⁻¹⁹	₋₆	41.6	⁻³¹	₋₆	39.5	⁻⁴³	₋₆	36.4	⁻⁵⁴	₋₆	32.6	⁻⁶⁴	₋₅	28.1	⁻⁷⁴	₋₅	22.9	⁻⁸²	₋₄	17.1	⁻⁸⁹	₋₄	10.8	⁻⁹⁵	₋₃	4.1	⁻¹⁰⁰	₋₃	-5.9	⁻¹⁰³	₋₂	-16.3					
Jun 16	43.0	⁻⁶	₋₈	42.5	⁻¹⁹	₋₈	41.2	⁻³¹	₋₈	39.1	⁻⁴²	₋₇	36.1	⁻⁵⁴	₋₇	32.3	⁻⁶⁴	₋₇	27.8	⁻⁷³	₋₆	22.7	⁻⁸¹	₋₅	16.9	⁻⁸⁸	₋₅	10.7	⁻⁹⁴	₋₄	4.1	⁻⁹⁹	₋₃	-5.8	⁻¹⁰²	₋₂	-16.1					
Jun 17	42.4	⁻⁶	₋₉	42.0	⁻¹⁸	₋₉	40.7	⁻³⁰	₋₈	38.6	⁻⁴²	₋₈	35.6	⁻⁵³	₋₈	31.9	⁻⁶³	₋₇	27.5	⁻⁷²	₋₇	22.4	⁻⁸⁰	₋₆	16.7	⁻⁸⁷	₋₅	10.6	⁻⁹³	₋₅	4.1	⁻⁹⁸	₋₄	-5.8	⁻¹⁰¹	₋₂	-15.9					
Jun 18	41.8	⁻⁶	₋₉	41.4	⁻¹⁸	₋₉	40.1	⁻³⁰	₋₈	38.0	⁻⁴¹	₋₈	35.1	⁻⁵²	₋₈	31.4	⁻⁶²	₋₇	27.1	⁻⁷¹	₋₇	22.1	⁻⁷⁹	₋₆	16.5	⁻⁸⁶	₋₅	10.4	⁻⁹¹	₋₅	4.0	⁻⁹⁶	₋₄	-5.7	⁻⁹⁹	₋₂	-15.7					
Jun 19	41.2	⁻⁶	₋₈ </																																							

2007

Moon Parallax and Semi-diameter

		Lower Limb																								
		Altitude degrees																								
		0	7	14	21	28	35	42	49	56	63	70	80	90												
		'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'
Jul 4	4	73.8 ⁻⁶ ₄	73.4 ⁻¹⁹ ₄	72.1 ⁻³¹ ₄	70.0 ⁻⁴² ₄	67.0 ⁻⁵³ ₄	63.3 ⁻⁶³ ₄	58.9 ⁻⁷² ₃	53.9 ⁻⁸¹ ₃	48.3 ⁻⁸⁸ ₃	42.2 ⁻⁹³ ₂	35.7 ⁻⁹⁸ ₂	25.9 ⁻¹⁰¹ ₁	15.8												
Jul 5	5	74.4 ⁻⁶ ₄	73.9 ⁻¹⁹ ₄	72.6 ⁻³¹ ₄	70.5 ⁻⁴² ₄	67.5 ⁻⁵³ ₃	63.8 ⁻⁶⁴ ₃	59.3 ⁻⁷³ ₃	54.3 ⁻⁸¹ ₃	48.6 ⁻⁸⁸ ₂	42.4 ⁻⁹⁴ ₂	35.9 ⁻⁹⁹ ₂	26.1 ⁻¹⁰² ₁	15.9												
Jul 6	6	74.8 ⁻⁶ ₃	74.4 ⁻¹⁹ ₃	73.1 ⁻³¹ ₃	70.9 ⁻⁴³ ₃	67.9 ⁻⁵⁴ ₃	64.2 ⁻⁶⁴ ₃	59.7 ⁻⁷³ ₂	54.6 ⁻⁸² ₂	48.9 ⁻⁸⁹ ₂	42.7 ⁻⁹⁴ ₂	36.1 ⁻⁹⁹ ₁	26.2 ⁻¹⁰² ₁	16.0												
Jul 7	7	75.2 ⁻⁶ ₂	74.7 ⁻¹⁹ ₂	73.4 ⁻³¹ ₂	71.3 ⁻⁴³ ₂	68.3 ⁻⁵⁴ ₂	64.5 ⁻⁶⁴ ₂	60.0 ⁻⁷⁴ ₂	54.9 ⁻⁸² ₂	49.1 ⁻⁸⁹ ₁	42.9 ⁻⁹⁵ ₁	36.3 ⁻¹⁰⁰ ₁	26.4 ⁻¹⁰³ ₁	16.1												
Jul 8	8	75.5 ⁻⁶ ₂	75.0 ⁻¹⁹ ₂	73.7 ⁻³¹ ₁	71.5 ⁻⁴³ ₁	68.5 ⁻⁵⁴ ₁	64.7 ⁻⁶⁴ ₁	60.2 ⁻⁷⁴ ₁	55.1 ⁻⁸² ₁	49.3 ⁻⁸⁹ ₁	43.1 ⁻⁹⁵ ₁	36.4 ⁻¹⁰⁰ ₁	26.5 ⁻¹⁰³ ₀	16.2												
Jul 9	9	75.7 ⁻⁶ ₀	75.2 ⁻¹⁹ ₀	73.9 ⁻³¹ ₀	71.7 ⁻⁴³ ₀	68.7 ⁻⁵⁴ ₀	64.9 ⁻⁶⁵ ₀	60.4 ⁻⁷⁴ ₀	55.2 ⁻⁸² ₀	49.5 ⁻⁸⁹ ₀	43.2 ⁻⁹⁵ ₀	36.5 ⁻¹⁰⁰ ₀	26.5 ⁻¹⁰³ ₀	16.2												
Jul 10	10	75.7 ⁻⁶ ₋₁	75.3 ⁻¹⁹ ₋₁	74.0 ⁻³¹ ₋₁	71.8 ⁻⁴³ ₋₁	68.8 ⁻⁵⁴ ₋₁	65.0 ⁻⁶⁵ ₋₁	60.4 ⁻⁷⁴ ₋₁	55.3 ⁻⁸² ₋₁	49.5 ⁻⁸⁹ ₀	43.2 ⁻⁹⁵ ₀	36.6 ⁻¹⁰⁰ ₀	26.5 ⁻¹⁰³ ₀	16.2												
Jul 11	11	75.6 ⁻⁶ ₋₂	75.2 ⁻¹⁹ ₋₂	73.9 ⁻³¹ ₋₂	71.7 ⁻⁴³ ₋₂	68.7 ⁻⁵⁴ ₋₂	64.9 ⁻⁶⁴ ₋₂	60.4 ⁻⁷⁴ ₋₂	55.2 ⁻⁸² ₋₂	49.4 ⁻⁸⁹ ₋₁	43.2 ⁻⁹⁵ ₋₁	36.5 ⁻¹⁰⁰ ₋₁	26.5 ⁻¹⁰³ ₋₁	16.2												
Jul 12	12	75.4 ⁻⁶ ₋₄	74.9 ⁻¹⁹ ₋₄	73.6 ⁻³¹ ₋₄	71.4 ⁻⁴³ ₋₄	68.4 ⁻⁵⁴ ₋₃	64.6 ⁻⁶⁴ ₋₃	60.1 ⁻⁷³ ₋₃	55.0 ⁻⁸² ₋₃	49.2 ⁻⁸⁹ ₋₂	43.0 ⁻⁹⁴ ₋₂	36.4 ⁻⁹⁹ ₋₂	26.4 ⁻¹⁰³ ₋₁	16.1												
Jul 13	13	74.9 ⁻⁶ ₋₅	74.5 ⁻¹⁹ ₋₅	73.1 ⁻³¹ ₋₅	71.0 ⁻⁴² ₋₅	68.0 ⁻⁵³ ₋₅	64.2 ⁻⁶⁴ ₋₄	59.8 ⁻⁷³ ₋₄	54.6 ⁻⁸¹ ₋₄	48.9 ⁻⁸⁸ ₋₃	42.8 ⁻⁹⁴ ₋₃	36.2 ⁻⁹⁹ ₋₂	26.3 ⁻¹⁰² ₋₁	16.0												
Jul 14	14	74.3 ⁻⁶ ₋₆	73.8 ⁻¹⁸ ₋₆	72.5 ⁻³⁰ ₋₆	70.4 ⁻⁴² ₋₆	67.4 ⁻⁵³ ₋₆	63.7 ⁻⁶³ ₋₅	59.3 ⁻⁷² ₋₅	54.2 ⁻⁸⁰ ₋₄	48.5 ⁻⁸⁷ ₋₄	42.4 ⁻⁹³ ₋₃	35.9 ⁻⁹⁸ ₋₃	26.0 ⁻¹⁰¹ ₋₂	15.9												
Jul 15	15	73.5 ⁻⁶ ₋₇	73.1 ⁻¹⁸ ₋₇	71.8 ⁻³⁰ ₋₇	69.7 ⁻⁴² ₋₇	66.7 ⁻⁵² ₋₆	63.1 ⁻⁶² ₋₆	58.7 ⁻⁷¹ ₋₅	53.6 ⁻⁷⁹ ₋₅	48.0 ⁻⁸⁶ ₋₄	42.0 ⁻⁹² ₋₄	35.5 ⁻⁹⁷ ₋₃	25.8 ⁻¹⁰⁰ ₋₂	15.7												
Jul 16	16	72.7 ⁻⁶ ₋₇	72.2 ⁻¹⁸ ₋₇	71.0 ⁻³⁰ ₋₇	68.9 ⁻⁴¹ ₋₇	66.0 ⁻⁵² ₋₆	62.3 ⁻⁶² ₋₆	58.0 ⁻⁷¹ ₋₆	53.0 ⁻⁷⁹ ₋₅	47.5 ⁻⁸⁵ ₋₄	41.5 ⁻⁹¹ ₋₄	35.1 ⁻⁹⁶ ₋₃	25.5 ⁻⁹⁹ ₋₂	15.6												
Jul 17	17	71.8 ⁻⁶ ₋₇	71.4 ⁻¹⁸ ₋₇	70.1 ⁻²⁹ ₋₇	68.0 ⁻⁴¹ ₋₆	65.2 ⁻⁵¹ ₋₆	61.6 ⁻⁶¹ ₋₆	57.3 ⁻⁷⁰ ₋₅	52.4 ⁻⁷⁸ ₋₅	46.9 ⁻⁸⁴ ₋₄	41.0 ⁻⁹⁰ ₋₄	34.7 ⁻⁹⁴ ₋₃	25.2 ⁻⁹⁷ ₋₂	15.4												
Jul 18	18	70.9 ⁻⁶ ₋₆	70.5 ⁻¹⁸ ₋₆	69.3 ⁻²⁹ ₋₆	67.2 ⁻⁴⁰ ₋₆	64.4 ⁻⁵¹ ₋₅	60.9 ⁻⁶⁰ ₋₅	56.6 ⁻⁶⁹ ₋₅	51.8 ⁻⁷⁷ ₋₄	46.4 ⁻⁸³ ₋₄	40.5 ⁻⁸⁹ ₋₃	34.3 ⁻⁹³ ₋₃	24.9 ⁻⁹⁶ ₋₂	15.2												
Jul 19	19	70.2 ⁻⁶ ₋₅	69.8 ⁻¹⁷ ₋₅	68.6 ⁻²⁹ ₋₅	66.6 ⁻⁴⁰ ₋₅	63.8 ⁻⁵⁰ ₋₄	60.2 ⁻⁶⁰ ₋₄	56.0 ⁻⁶⁸ ₋₄	51.2 ⁻⁷⁶ ₋₃	45.9 ⁻⁸³ ₋₃	40.1 ⁻⁸⁸ ₋₃	33.9 ⁻⁹³ ₋₂	24.6 ⁻⁹⁵ ₋₁	15.0												
Jul 20	20	69.6 ⁻⁶ ₋₃	69.2 ⁻¹⁷ ₋₃	68.0 ⁻²⁹ ₋₃	66.0 ⁻³⁹ ₋₃	63.2 ⁻⁵⁰ ₋₃	59.7 ⁻⁵⁹ ₋₃	55.6 ⁻⁶⁸ ₋₃	50.8 ⁻⁷⁶ ₋₂	45.5 ⁻⁸² ₋₂	39.8 ⁻⁸⁷ ₋₂	33.6 ⁻⁹² ₋₁	24.4 ⁻⁹⁵ ₋₁	14.9												
Jul 21	21	69.2 ⁻⁶ ₋₂	68.8 ⁻¹⁷ ₋₂	67.6 ⁻²⁹ ₋₂	65.6 ⁻³⁹ ₋₁	62.9 ⁻⁵⁰ ₋₁	59.4 ⁻⁵⁹ ₋₁	55.3 ⁻⁶⁸ ₋₁	50.5 ⁻⁷⁵ ₋₁	45.3 ⁻⁸² ₋₁	39.5 ⁻⁸⁷ ₋₁	33.4 ⁻⁹¹ ₋₁	24.3 ⁻⁹⁴ ₀	14.8												
Jul 22	22	69.0 ⁻⁶ ₀	68.6 ⁻¹⁷ ₀	67.4 ⁻²⁸ ₀	65.4 ⁻³⁹ ₀	62.7 ⁻⁴⁹ ₀	59.2 ⁻⁵⁹ ₀	55.1 ⁻⁶⁸ ₀	50.4 ⁻⁷⁵ ₀	45.1 ⁻⁸² ₀	39.4 ⁻⁸⁷ ₀	33.3 ⁻⁹¹ ₀	24.2 ⁻⁹⁴ ₀	14.8												
Jul 23	23	69.1 ⁻⁶ ₂	68.7 ⁻¹⁷ ₂	67.5 ⁻²⁹ ₂	65.5 ⁻³⁹ ₂	62.7 ⁻⁵⁰ ₂	59.3 ⁻⁵⁹ ₂	55.1 ⁻⁶⁸ ₂	50.4 ⁻⁷⁵ ₁	45.1 ⁻⁸² ₁	39.4 ⁻⁸⁷ ₁	33.4 ⁻⁹² ₁	24.2 ⁻⁹⁴ ₁	14.8												
Jul 24	24	69.3 ⁻⁶ ₄	68.9 ⁻¹⁷ ₄	67.7 ⁻²⁹ ₄	65.7 ⁻⁴⁰ ₃	62.9 ⁻⁵⁰ ₃	59.5 ⁻⁵⁹ ₃	55.3 ⁻⁶⁸ ₃	50.6 ⁻⁷⁶ ₃	45.3 ⁻⁸² ₂	39.6 ⁻⁸⁷ ₂	33.5 ⁻⁹² ₂	24.3 ⁻⁹⁵ ₁	14.8												
Jul 25	25	69.8 ⁻⁶ ₅	69.4 ⁻¹⁸ ₅	68.1 ⁻²⁹ ₅	66.1 ⁻⁴⁰ ₅	63.4 ⁻⁵⁰ ₅	59.9 ⁻⁶⁰ ₄	55.7 ⁻⁶⁹ ₄	50.9 ⁻⁷⁶ ₄	45.6 ⁻⁸³ ₃	39.8 ⁻⁸⁸ ₃	33.7 ⁻⁹³ ₂	24.5 ⁻⁹⁶ ₁	14.9												
Jul 26	26	70.4 ⁻⁶ ₆	70.0 ⁻¹⁸ ₆	68.7 ⁻²⁹ ₆	66.7 ⁻⁴⁰ ₆	63.9 ⁻⁵¹ ₆	60.4 ⁻⁶⁰ ₅	56.2 ⁻⁶⁹ ₅	51.4 ⁻⁷⁷ ₄	46.0 ⁻⁸⁴ ₄	40.2 ⁻⁸⁹ ₃	34.0 ⁻⁹⁴ ₃	24.7 ⁻⁹⁷ ₂	15.1												
Jul 27	27	71.1 ⁻⁶ ₇	70.7 ⁻¹⁸ ₇	69.5 ⁻³⁰ ₇	67.4 ⁻⁴¹ ₆	64.6 ⁻⁵¹ ₆	61.0 ⁻⁶¹ ₆	56.8 ⁻⁷⁰ ₅	51.9 ⁻⁷⁸ ₅	46.5 ⁻⁸⁵ ₄	40.6 ⁻⁹⁰ ₄	34.4 ⁻⁹⁵ ₃	24.9 ⁻⁹⁸ ₂	15.2												
Jul 28	28	72.0 ⁻⁶ ₇	71.6 ⁻¹⁸ ₇	70.3 ⁻³⁰ ₇	68.2 ⁻⁴¹ ₇	65.4 ⁻⁵² ₆	61.7 ⁻⁶² ₆	57.4 ⁻⁷¹ ₅	52.5 ⁻⁷⁹ ₅	47.0 ⁻⁸⁶ ₄	41.1 ⁻⁹¹ ₄	34.8 ⁻⁹⁶ ₃	25.2 ⁻⁹⁹ ₂	15.4												
Jul 29	29	72.8 ⁻⁶ ₇	72.4 ⁻¹⁸ ₇	71.1 ⁻³⁰ ₇	69.0 ⁻⁴² ₆	66.1 ⁻⁵² ₆	62.5 ⁻⁶² ₆	58.1 ⁻⁷² ₅	53.1 ⁻⁸⁰ ₅	47.6 ⁻⁸⁶ ₄	41.6 ⁻⁹² ₄	35.2 ⁻⁹⁷ ₃	25.5 ⁻¹⁰⁰ ₂	15.6												
Jul 30	30	73.6 ⁻⁶ ₆	73.2 ⁻¹⁸ ₆	71.9 ⁻³¹ ₆	69.8 ⁻⁴² ₆	66.9 ⁻⁵³ ₅	63.2 ⁻⁶³ ₅	58.8 ⁻⁷² ₅	53.7 ⁻⁸⁰ ₄	48.1 ⁻⁸⁷ ₄	42.0 ⁻⁹³ ₃	35.6 ⁻⁹⁸ ₂	25.8 ⁻¹⁰¹ ₂	15.8												
Jul 31	31	74.4 ⁻⁶ ₅	73.9 ⁻¹⁹ ₅	72.6 ⁻³¹ ₅	70.5 ⁻⁴² ₄	67.5 ⁻⁵³ ₄	63.8 ⁻⁶⁴ ₄	59.3 ⁻⁷³ ₄	54.3 ⁻⁸¹ ₃	48.6 ⁻⁸⁸ ₃	42.5 ⁻⁹⁴ ₃	35.9 ⁻⁹⁹ ₂	26.1 ⁻¹⁰² ₁	15.9												
Aug 1	1	74.9 ⁻⁶ ₃	74.5 ⁻¹⁹ ₃	73.2 ⁻³¹ ₃	71.0 ⁻⁴³ ₃	68.0 ⁻⁵⁴ ₃	64.3 ⁻⁶⁴ ₃	59.8 ⁻⁷³ ₃	54.7 ⁻⁸² ₂	49.0 ⁻⁸⁹ ₂	42.8 ⁻⁹⁴ ₂	36.2 ⁻⁹⁹ ₁	26.3 ⁻¹⁰³ ₁	16.0												
Aug 2	2	75.3 ⁻⁶ ₂	74.9 ⁻¹⁹ ₂	73.6 ⁻³¹ ₂	71.4 ⁻⁴³ ₂	68.4 ⁻⁵⁴ ₂	64.6 ⁻⁶⁴ ₂	60.1 ⁻⁷⁴ ₁	55.0 ⁻⁸² ₁	49.2 ⁻⁸⁹ ₁	43.0 ⁻⁹⁵ ₁	36.4 ⁻¹⁰⁰ ₁	26.4 ⁻¹⁰³ ₁	16.1												
Aug 3	3	75.6 ⁻⁶ ₁	75.1 ⁻¹⁹ ₁	73.8 ⁻³¹ ₁	71.6 ⁻⁴³ ₁	68.6 ⁻⁵⁴ ₁	64.8 ⁻⁶⁵ ₁	60.3 ⁻⁷⁴ ₀	55.1 ⁻⁸² ₀	49.4 ⁻⁸⁹ ₀	43.1 ⁻⁹⁵ ₀	36.5 ⁻¹⁰⁰ ₀	26.5 ⁻¹⁰³ ₀	16.2												
Aug 4	4	75.6 ⁻⁶ ₋₁	75.2 ⁻¹⁹ ₋₁	73.9 ⁻³¹ ₋₁	71.7 ⁻⁴³ ₋₁	68.7 ⁻⁵⁴ ₀	64.9 ⁻⁶⁵ ₀	60.4 ⁻⁷⁴ ₀	55.2 ⁻⁸² ₀	49.4 ⁻⁸⁹ ₀	43.2 ⁻⁹⁵ ₀	36.5 ⁻¹⁰⁰ ₀	26.5 ⁻¹⁰³ ₀	16.2												
Aug 5	5	75.6 ⁻⁶ ₋₂	75.1 ⁻¹⁹ ₋₂	73.8 ⁻³¹ ₋₁	71.6 ⁻⁴³ ₋₁	68.6 ⁻⁵⁴ ₋₁	64.8 ⁻⁶⁴ ₋₁	60.3 ⁻⁷⁴ ₋₁	55.2 ⁻⁸² ₋₁	49.4 ⁻⁸⁹ ₋₁	43.1 ⁻⁹⁵ ₋₁	36.5 ⁻¹⁰⁰ ₋₁	26.5 ⁻¹⁰³ ₀	16.2												
Aug 6	6	75.4 ⁻⁶ ₋₂	75.0 ⁻¹⁹ ₋₂	73.6 ⁻³¹ ₋₂	71.5 ⁻⁴³ ₋₂	68.5 ⁻⁵⁴ ₋₂	64.7 ⁻⁶⁴ ₋₂	60.2 ⁻⁷⁴ ₋₂	55.0 ⁻⁸² ₋₂	49.3 ⁻⁸⁹ ₋₁	43.0 ⁻⁹⁵ ₋₁	36.4 ⁻¹⁰⁰ ₋₁	26.4 ⁻¹⁰³ ₋₁	16.1												
Aug 7	7	75.1 ⁻⁶ ₋₃	74.7 ⁻¹⁹ ₋₃	73.4 ⁻³¹ ₋₃	71.2 ⁻⁴³ ₋₃	68.2 ⁻⁵⁴ ₋₃	64.4 ⁻⁶⁴ ₋₃	60.0 ⁻⁷³ ₋₂	54.8 ⁻⁸¹ ₋₂	49.1 ⁻⁸⁸ ₋₂	42.9 ⁻⁹⁴ ₋₂	36.3 ⁻⁹⁹ ₋₁	26.3 ⁻¹⁰² ₋₁	16.1												
Aug 8	8	74.7 ⁻⁶ ₋₄	74.3 ⁻¹⁹ ₋₄	73.0 ⁻³¹ ₋₄	70.8 ⁻⁴² ₋₃	67.9 ⁻⁵³ ₋₃	64.1 ⁻⁶⁴ ₋₃	59.7 ⁻⁷³ ₋₃	54.5 ⁻⁸¹ ₋₃	48.9 ⁻⁸⁸ ₋₂	42.7 ⁻⁹⁴ ₋₂	36.1 ⁻⁹⁹ ₋₂	26.2 ⁻¹⁰² ₋₁	16.0												
Aug 9	9	74.3 ⁻⁶ ₋₄	73.9 ⁻¹⁸ ₋₄	72.6 ⁻³¹ ₋₄	70.4 ⁻⁴² ₋₄	67.5 ⁻⁵³ ₋₄	63.7 ⁻⁶³ ₋₄	59.3 ⁻⁷² ₋₃	54.2 ⁻⁸¹ ₋₃	48.6 ⁻⁸⁷ ₋₃	42.4 ⁻⁹³ ₋₂	35.9 ⁻⁹⁸ ₋₂	26.0 ⁻¹⁰¹ ₋₁	15.9												
Aug 10	10	73.8 ⁻⁶ ₋₅	73.3 ⁻¹⁸ ₋₅	72.0 ⁻³⁰ ₋₅	69.9 ⁻⁴² ₋₅	67.0 ⁻⁵³ ₋₄	63.3 ⁻⁶³ ₋₄	58.9 ⁻⁷² ₋₄	53.8 ⁻⁸⁰ ₋₃	48.2 ⁻⁸⁷ ₋₃	42.1 ⁻⁹² ₋₃	35.6 ⁻⁹⁷ ₋₂	25.9 ⁻¹⁰⁰ ₋₁	15.8												
Aug 11	11	73.2 ⁻⁶ ₋₅	72.7 ⁻¹⁸ ₋₅	71.5 ⁻³⁰ ₋₅	69.4 ⁻⁴¹ ₋₅	66.4 ⁻⁵² ₋₅	62.8 ⁻⁶² ₋₅	58.4 ⁻⁷¹ ₋₄	53.4 ⁻⁷⁹ ₋₄	47.8 ⁻⁸⁶ ₋₃	41.8 ⁻⁹² ₋₃	35.3 ⁻⁹⁶ ₋₂	25.7 ⁻⁹⁹ ₋₂	15.7												
Aug 12	12	72.5 ⁻⁶ ₋₆	72.1 ⁻¹⁸ ₋₆	70.8 ⁻³⁰ ₋₆	68.7 ⁻⁴¹ ₋₅	65.8 ⁻⁵² ₋₅	62.2 ⁻⁶² ₋₅	57.9 ⁻⁷¹ ₋₄	52.9 ⁻⁷⁸ ₋₄	47.4 ⁻⁸⁵ ₋₄	41.4 ⁻⁹¹ ₋₃	35.0 ⁻⁹⁵ ₋₂	25.4 ⁻⁹⁸ ₋₂	15.5												
Aug 13	13	71.8 ⁻⁶ ₋₆	71.4 ⁻¹⁸ ₋₆	70.1 ⁻²⁹ ₋₆	68.1 ⁻⁴¹ ₋₅	65.2 ⁻⁵¹ ₋₅	61.6 ⁻⁶¹ ₋₅	57.3 ⁻⁷⁰ ₋₄	52.4 ⁻⁷⁸ ₋₄	46.9 ⁻⁸⁴ ₋₄	41.0 ⁻⁹⁰ ₋₃	34.														

2007

Moon Parallax and Semi-diameter

		Upper Limb																																									
		Altitude degrees																																									
		0			7			14			21			28			35			42			49			56			63			70			80			90					
		'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Jul 4	4	42.2 ⁻⁶ ₄	41.8 ⁻¹⁹ ₄	40.5 ⁻³¹ ₄	38.4 ⁻⁴² ₄	35.4 ⁻⁵³ ₄	31.7 ⁻⁶³ ₄	27.3 ⁻⁷² ₃	22.3 ⁻⁸¹ ₃	16.6 ⁻⁸⁸ ₃	10.5 ⁻⁹³ ₂	4.0 ⁻⁹⁸ ₂	5.7 ⁻¹⁰¹ ₁	15.8																													
Jul 5	5	42.5 ⁻⁶ ₄	42.1 ⁻¹⁹ ₄	40.8 ⁻³¹ ₄	38.6 ⁻⁴² ₄	35.7 ⁻⁵³ ₃	31.9 ⁻⁶⁴ ₃	27.5 ⁻⁷³ ₃	22.4 ⁻⁸¹ ₃	16.8 ⁻⁸⁸ ₂	10.6 ⁻⁹⁴ ₂	4.1 ⁻⁹⁹ ₂	5.8 ⁻¹⁰² ₁	15.9																													
Jul 6	6	42.8 ⁻⁶ ₃	42.3 ⁻¹⁹ ₃	41.0 ⁻³¹ ₃	38.9 ⁻⁴³ ₃	35.9 ⁻⁵⁴ ₃	32.1 ⁻⁶⁴ ₃	27.7 ⁻⁷³ ₂	22.5 ⁻⁸² ₂	16.9 ⁻⁸⁹ ₂	10.7 ⁻⁹⁴ ₂	4.1 ⁻⁹⁹ ₁	5.8 ⁻¹⁰² ₁	16.0																													
Jul 7	7	43.0 ⁻⁶ ₂	42.5 ⁻¹⁹ ₂	41.2 ⁻³¹ ₂	39.1 ⁻⁴³ ₂	36.1 ⁻⁵⁴ ₂	32.3 ⁻⁶⁴ ₂	27.8 ⁻⁷⁴ ₂	22.7 ⁻⁸² ₂	16.9 ⁻⁸⁹ ₁	10.7 ⁻⁹⁵ ₁	4.1 ⁻¹⁰⁰ ₁	5.8 ⁻¹⁰³ ₁	16.1																													
Jul 8	8	43.1 ⁻⁶ ₂	42.7 ⁻¹⁹ ₂	41.4 ⁻³¹ ₁	39.2 ⁻⁴³ ₁	36.2 ⁻⁵⁴ ₁	32.4 ⁻⁶⁴ ₁	27.9 ⁻⁷⁴ ₁	22.7 ⁻⁸² ₁	17.0 ⁻⁸⁹ ₁	10.8 ⁻⁹⁵ ₁	4.1 ⁻¹⁰⁰ ₁	5.9 ⁻¹⁰³ ₀	16.2																													
Jul 9	9	43.3 ⁻⁶ ₀	42.8 ⁻¹⁹ ₀	41.5 ⁻³¹ ₀	39.3 ⁻⁴³ ₀	36.3 ⁻⁵⁴ ₀	32.5 ⁻⁶⁵ ₀	28.0 ⁻⁷⁴ ₀	22.8 ⁻⁸² ₀	17.0 ⁻⁸⁹ ₀	10.8 ⁻⁹⁵ ₀	4.1 ⁻¹⁰⁰ ₀	5.9 ⁻¹⁰³ ₀	16.2																													
Jul 10	10	43.3 ⁻⁶ ₋₁	42.8 ⁻¹⁹ ₋₁	41.5 ⁻³¹ ₋₁	39.3 ⁻⁴³ ₋₁	36.3 ⁻⁵⁴ ₋₁	32.5 ⁻⁶⁵ ₋₁	28.0 ⁻⁷⁴ ₋₁	22.8 ⁻⁸² ₋₁	17.1 ⁻⁸⁹ ₀	10.8 ⁻⁹⁵ ₀	4.1 ⁻¹⁰⁰ ₀	5.9 ⁻¹⁰³ ₀	16.2																													
Jul 11	11	43.2 ⁻⁶ ₋₂	42.8 ⁻¹⁹ ₋₂	41.5 ⁻³¹ ₋₂	39.3 ⁻⁴³ ₋₂	36.3 ⁻⁵⁴ ₋₂	32.5 ⁻⁶⁴ ₋₂	28.0 ⁻⁷⁴ ₋₂	22.8 ⁻⁸² ₋₂	17.0 ⁻⁸⁹ ₋₁	10.8 ⁻⁹⁵ ₋₁	4.1 ⁻¹⁰⁰ ₋₁	5.9 ⁻¹⁰³ ₋₁	16.2																													
Jul 12	12	43.1 ⁻⁶ ₋₄	42.6 ⁻¹⁹ ₋₄	41.3 ⁻³¹ ₋₄	39.1 ⁻⁴³ ₋₄	36.1 ⁻⁵⁴ ₋₃	32.4 ⁻⁶⁴ ₋₃	27.9 ⁻⁷³ ₋₃	22.7 ⁻⁸² ₋₃	17.0 ⁻⁸⁹ ₋₂	10.7 ⁻⁹⁴ ₋₂	4.1 ⁻⁹⁹ ₋₂	5.9 ⁻¹⁰³ ₋₁	16.1																													
Jul 13	13	42.8 ⁻⁶ ₋₅	42.4 ⁻¹⁹ ₋₅	41.1 ⁻³¹ ₋₅	38.9 ⁻⁴² ₋₅	35.9 ⁻⁵³ ₋₅	32.2 ⁻⁶⁴ ₋₄	27.7 ⁻⁷³ ₋₄	22.6 ⁻⁸¹ ₋₄	16.9 ⁻⁸⁸ ₋₃	10.7 ⁻⁹⁴ ₋₃	4.1 ⁻⁹⁹ ₋₂	5.8 ⁻¹⁰² ₋₁	16.0																													
Jul 14	14	42.5 ⁻⁶ ₋₆	42.0 ⁻¹⁸ ₋₆	40.7 ⁻³⁰ ₋₆	38.6 ⁻⁴² ₋₆	35.6 ⁻⁵³ ₋₆	31.9 ⁻⁶³ ₋₅	27.5 ⁻⁷² ₋₅	22.4 ⁻⁸⁰ ₋₄	16.7 ⁻⁸⁷ ₋₄	10.6 ⁻⁹³ ₋₃	4.1 ⁻⁹⁸ ₋₃	5.8 ⁻¹⁰¹ ₋₂	15.9																													
Jul 15	15	42.0 ⁻⁶ ₋₇	41.6 ⁻¹⁸ ₋₇	40.3 ⁻³⁰ ₋₇	38.2 ⁻⁴² ₋₇	35.3 ⁻⁵² ₋₆	31.6 ⁻⁶² ₋₆	27.2 ⁻⁷¹ ₋₅	22.2 ⁻⁷⁹ ₋₅	16.6 ⁻⁸⁶ ₋₄	10.5 ⁻⁹² ₋₄	4.0 ⁻⁹⁷ ₋₃	5.7 ⁻¹⁰⁰ ₋₂	15.7																													
Jul 16	16	41.5 ⁻⁶ ₋₇	41.1 ⁻¹⁸ ₋₇	39.8 ⁻³⁰ ₋₇	37.7 ⁻⁴¹ ₋₇	34.9 ⁻⁵² ₋₆	31.2 ⁻⁶² ₋₆	26.9 ⁻⁷¹ ₋₆	21.9 ⁻⁷⁹ ₋₅	16.4 ⁻⁸⁵ ₋₄	10.4 ⁻⁹¹ ₋₄	4.0 ⁻⁹⁶ ₋₃	5.6 ⁻⁹⁹ ₋₂	15.6																													
Jul 17	17	41.0 ⁻⁶ ₋₇	40.6 ⁻¹⁸ ₋₇	39.4 ⁻²⁹ ₋₇	37.3 ⁻⁴¹ ₋₆	34.4 ⁻⁵¹ ₋₆	30.8 ⁻⁶¹ ₋₆	26.5 ⁻⁷⁰ ₋₅	21.6 ⁻⁷⁸ ₋₅	16.2 ⁻⁸⁴ ₋₄	10.2 ⁻⁹⁰ ₋₄	3.9 ⁻⁹⁴ ₋₃	5.6 ⁻⁹⁷ ₋₂	15.4																													
Jul 18	18	40.6 ⁻⁶ ₋₆	40.1 ⁻¹⁸ ₋₆	38.9 ⁻²⁹ ₋₆	36.9 ⁻⁴⁰ ₋₆	34.0 ⁻⁵¹ ₋₅	30.5 ⁻⁶⁰ ₋₅	26.2 ⁻⁶⁹ ₋₅	21.4 ⁻⁷⁷ ₋₄	16.0 ⁻⁸³ ₋₄	10.1 ⁻⁸⁹ ₋₃	3.9 ⁻⁹³ ₋₃	5.5 ⁻⁹⁶ ₋₂	15.2																													
Jul 19	19	40.1 ⁻⁶ ₋₅	39.7 ⁻¹⁷ ₋₅	38.5 ⁻²⁹ ₋₅	36.5 ⁻⁴⁰ ₋₅	33.7 ⁻⁵⁰ ₋₄	30.2 ⁻⁶⁰ ₋₄	26.0 ⁻⁶⁸ ₋₄	21.2 ⁻⁷⁶ ₋₃	15.8 ⁻⁸³ ₋₃	10.0 ⁻⁸⁸ ₋₃	3.8 ⁻⁹³ ₋₂	5.5 ⁻⁹⁵ ₋₁	15.0																													
Jul 20	20	39.8 ⁻⁶ ₋₃	39.4 ⁻¹⁷ ₋₃	38.2 ⁻²⁹ ₋₃	36.2 ⁻³⁹ ₋₃	33.4 ⁻⁵⁰ ₋₃	29.9 ⁻⁵⁹ ₋₃	25.8 ⁻⁶⁸ ₋₃	21.0 ⁻⁷⁶ ₋₂	15.7 ⁻⁸² ₋₂	9.9 ⁻⁸⁷ ₋₂	3.8 ⁻⁹² ₋₁	5.4 ⁻⁹⁵ ₋₁	14.9																													
Jul 21	21	39.6 ⁻⁶ ₋₂	39.2 ⁻¹⁷ ₋₂	38.0 ⁻²⁹ ₋₂	36.0 ⁻³⁹ ₋₁	33.2 ⁻⁵⁰ ₋₁	29.7 ⁻⁵⁹ ₋₁	25.6 ⁻⁶⁸ ₋₁	20.9 ⁻⁷⁵ ₋₁	15.6 ⁻⁸² ₋₁	9.9 ⁻⁸⁷ ₋₁	3.8 ⁻⁹¹ ₋₁	5.4 ⁻⁹⁴ ₀	14.8																													
Jul 22	22	39.5 ⁻⁶ ₀	39.1 ⁻¹⁷ ₀	37.9 ⁻²⁸ ₀	35.9 ⁻³⁹ ₀	33.1 ⁻⁴⁹ ₀	29.7 ⁻⁵⁹ ₀	25.5 ⁻⁶⁸ ₀	20.8 ⁻⁷⁵ ₀	15.6 ⁻⁸² ₀	9.8 ⁻⁸⁷ ₀	3.8 ⁻⁹¹ ₀	5.4 ⁻⁹⁴ ₀	14.8																													
Jul 23	23	39.5 ⁻⁶ ₂	39.1 ⁻¹⁷ ₂	37.9 ⁻²⁹ ₂	35.9 ⁻³⁹ ₂	33.1 ⁻⁵⁰ ₂	29.7 ⁻⁵⁹ ₂	25.5 ⁻⁶⁸ ₂	20.8 ⁻⁷⁵ ₁	15.6 ⁻⁸² ₁	9.9 ⁻⁸⁷ ₁	3.8 ⁻⁹² ₁	5.4 ⁻⁹⁴ ₁	14.8																													
Jul 24	24	39.6 ⁻⁶ ₄	39.2 ⁻¹⁷ ₄	38.0 ⁻²⁹ ₄	36.0 ⁻⁴⁰ ₃	33.3 ⁻⁵⁰ ₃	29.8 ⁻⁵⁹ ₃	25.6 ⁻⁶⁸ ₃	20.9 ⁻⁷⁶ ₃	15.6 ⁻⁸² ₂	9.9 ⁻⁸⁷ ₂	3.8 ⁻⁹² ₂	5.4 ⁻⁹⁵ ₁	14.8																													
Jul 25	25	39.9 ⁻⁶ ₅	39.5 ⁻¹⁸ ₅	38.3 ⁻²⁹ ₅	36.2 ⁻⁴⁰ ₅	33.5 ⁻⁵⁰ ₅	30.0 ⁻⁶⁰ ₄	25.8 ⁻⁶⁹ ₄	21.0 ⁻⁷⁶ ₄	15.7 ⁻⁸³ ₃	10.0 ⁻⁸⁸ ₃	3.8 ⁻⁹³ ₂	5.4 ⁻⁹⁶ ₁	14.9																													
Jul 26	26	40.2 ⁻⁶ ₆	39.8 ⁻¹⁸ ₆	38.6 ⁻²⁹ ₆	36.6 ⁻⁴⁰ ₆	33.8 ⁻⁵¹ ₆	30.2 ⁻⁶⁰ ₅	26.0 ⁻⁶⁹ ₅	21.2 ⁻⁷⁷ ₄	15.9 ⁻⁸⁴ ₄	10.0 ⁻⁸⁹ ₃	3.8 ⁻⁹⁴ ₃	5.5 ⁻⁹⁷ ₂	15.1																													
Jul 27	27	40.7 ⁻⁶ ₇	40.3 ⁻¹⁸ ₇	39.0 ⁻³⁰ ₇	37.0 ⁻⁴¹ ₆	34.1 ⁻⁵¹ ₆	30.6 ⁻⁶¹ ₆	26.3 ⁻⁷⁰ ₅	21.4 ⁻⁷⁸ ₅	16.0 ⁻⁸⁵ ₄	10.1 ⁻⁹⁰ ₄	3.9 ⁻⁹⁵ ₃	5.5 ⁻⁹⁸ ₂	15.2																													
Jul 28	28	41.1 ⁻⁶ ₇	40.7 ⁻¹⁸ ₇	39.5 ⁻³⁰ ₇	37.4 ⁻⁴¹ ₇	34.5 ⁻⁵² ₆	30.9 ⁻⁶² ₆	26.6 ⁻⁷¹ ₅	21.7 ⁻⁷⁹ ₅	16.2 ⁻⁸⁶ ₄	10.3 ⁻⁹¹ ₄	3.9 ⁻⁹⁶ ₃	5.6 ⁻⁹⁹ ₂	15.4																													
Jul 29	29	41.6 ⁻⁶ ₇	41.2 ⁻¹⁸ ₇	39.9 ⁻³⁰ ₇	37.8 ⁻⁴² ₆	34.9 ⁻⁵² ₆	31.3 ⁻⁶² ₆	26.9 ⁻⁷² ₅	22.0 ⁻⁸⁰ ₅	16.4 ⁻⁸⁶ ₄	10.4 ⁻⁹² ₄	4.0 ⁻⁹⁷ ₃	5.7 ⁻¹⁰⁰ ₂	15.6																													
Jul 30	30	42.1 ⁻⁶ ₆	41.7 ⁻¹⁸ ₆	40.4 ⁻³¹ ₆	38.3 ⁻⁴² ₆	35.3 ⁻⁵³ ₅	31.6 ⁻⁶³ ₅	27.2 ⁻⁷² ₅	22.2 ⁻⁸⁰ ₄	16.6 ⁻⁸⁷ ₄	10.5 ⁻⁹³ ₃	4.0 ⁻⁹⁸ ₂	5.7 ⁻¹⁰¹ ₂	15.8																													
Jul 31	31	42.5 ⁻⁶ ₅	42.1 ⁻¹⁹ ₅	40.8 ⁻³¹ ₅	38.6 ⁻⁴² ₄	35.7 ⁻⁵³ ₄	31.9 ⁻⁶⁴ ₄	27.5 ⁻⁷³ ₄	22.4 ⁻⁸¹ ₃	16.8 ⁻⁸⁸ ₃	10.6 ⁻⁹⁴ ₃	4.1 ⁻⁹⁹ ₂	5.8 ⁻¹⁰² ₁	15.9																													
Aug 1	1	42.8 ⁻⁶ ₃	42.4 ⁻¹⁹ ₃	41.1 ⁻³¹ ₃	38.9 ⁻⁴³ ₃	35.9 ⁻⁵⁴ ₃	32.2 ⁻⁶⁴ ₃	27.7 ⁻⁷³ ₃	22.6 ⁻⁸² ₂	16.9 ⁻⁸⁹ ₂	10.7 ⁻⁹⁴ ₂	4.1 ⁻⁹⁹ ₁	5.8 ⁻¹⁰³ ₁	16.0																													
Aug 2	2	43.1 ⁻⁶ ₂	42.6 ⁻¹⁹ ₂	41.3 ⁻³¹ ₂	39.1 ⁻⁴³ ₂	36.1 ⁻⁵⁴ ₂	32.4 ⁻⁶⁴ ₂	27.9 ⁻⁷⁴ ₁	22.7 ⁻⁸² ₁	17.0 ⁻⁸⁹ ₁	10.7 ⁻⁹⁵ ₁	4.1 ⁻¹⁰⁰ ₁	5.9 ⁻¹⁰³ ₁	16.1																													
Aug 3	3	43.2 ⁻⁶ ₁	42.8 ⁻¹⁹ ₁	41.4 ⁻³¹ ₁	39.3 ⁻⁴³ ₁	36.3 ⁻⁵⁴ ₁	32.5 ⁻⁶⁵ ₁	27.9 ⁻⁷⁴ ₀	22.8 ⁻⁸² ₀	17.0 ⁻⁸⁹ ₀	10.8 ⁻⁹⁵ ₀	4.1 ⁻¹⁰⁰ ₀	5.9 ⁻¹⁰³ ₀	16.2																													
Aug 4	4	43.2 ⁻⁶ ₋₁	42.8 ⁻¹⁹ ₋₁	41.5 ⁻³¹ ₋₁	39.3 ⁻⁴³ ₋₁	36.3 ⁻⁵⁴ ₀	32.5 ⁻⁶⁵ ₀	28.0 ⁻⁷⁴ ₀	22.8 ⁻⁸² ₀	17.0 ⁻⁸⁹ ₀	10.8 ⁻⁹⁵ ₀	4.1 ⁻¹⁰⁰ ₀	5.9 ⁻¹⁰³ ₀	16.2																													
Aug 5	5	43.2 ⁻⁶ ₋₂	42.8 ⁻¹⁹ ₋₂	41.4 ⁻³¹ ₋₁	39.3 ⁻⁴³ ₋₁	36.3 ⁻⁵⁴ ₋₁	32.5 ⁻⁶⁴ ₋₁	28.0 ⁻⁷⁴ ₋₁	22.8 ⁻⁸² ₋₁	17.0 ⁻⁸⁹ ₋₁	10.8 ⁻⁹⁵ ₋₁	4.1 ⁻¹⁰⁰ ₋₁	5.9 ⁻¹⁰³ ₀	16.2																													
Aug 6	6	43.1 ⁻⁶ ₋₂	42.7 ⁻¹⁹ ₋₂	41.3 ⁻³¹ ₋₂	39.2 ⁻⁴³ ₋₂	36.2 ⁻⁵⁴ ₋₂	32.4 ⁻⁶⁴ ₋₂	27.9 ⁻⁷⁴ ₋₂	22.7 ⁻⁸² ₋₂	17.0 ⁻⁸⁹ ₋₁	10.8 ⁻⁹⁵ ₋₁	4.1 ⁻¹⁰⁰ ₋₁	5.9 ⁻¹⁰³ ₋₁	16.1																													
Aug 7	7	42.9 ⁻⁶ ₋₃	42.5 ⁻¹⁹ ₋₃	41.2 ⁻³¹ ₋₃	39.0 ⁻⁴³ ₋₃	36.0 ⁻⁵⁴ ₋₃	32.3 ⁻⁶⁴ ₋₃	27.8 ⁻⁷³ ₋₂	22.6 ⁻⁸¹ ₋₂	16.9 ⁻⁸⁸ ₋₂	10.7 ⁻⁹⁴ ₋₂	4.1 ⁻⁹⁹ ₋₁	5.8 ⁻¹⁰² ₋₁	16.1																													
Aug 8	8	42.7 ⁻⁶ ₋₄	42.3 ⁻¹⁹ ₋₄	41.0 ⁻³¹ ₋₄	38.8 ⁻⁴² ₋₃	35.9 ⁻⁵³ ₋₃	32.1 ⁻⁶⁴ ₋₃	27.6 ⁻⁷³ ₋₃	22.5 ⁻⁸¹ ₋₃	16.8 ⁻⁸⁸ ₋₂	10.7 ⁻⁹⁴ ₋₂	4.1 ⁻⁹⁹ ₋₂	5.8 ⁻¹⁰² ₋₁	16.0																													
Aug 9	9	42.5 ⁻⁶ ₋₄	42.0 ⁻¹⁸ ₋₄	40.7 ⁻³¹ ₋₄	38.6 ⁻⁴² ₋₄	35.6 ⁻⁵³ ₋₄	31.9 ⁻⁶³ ₋₄	27.5 ⁻⁷² ₋₃	22.4 ⁻⁸¹ ₋₃	16.7 ⁻⁸⁷ ₋₃	10.6 ⁻⁹³ ₋₂	4.1 ⁻⁹⁸ ₋₂	5.8 ⁻¹⁰¹ ₋₁	15.9																													
Aug 10	10	42.2 ⁻⁶ ₋₅	41.7 ⁻¹⁸ ₋₅	40.5 ⁻³⁰ ₋₅	38.3 ⁻⁴² ₋₅	35.4 ⁻⁵³ ₋₄	31.7 ⁻⁶³ ₋₄	27.3 ⁻⁷² ₋₄	22.2 ⁻⁸⁰ ₋₃	16.6 ⁻⁸⁷ ₋₃	10.5 ⁻⁹² ₋₃	4.0 ⁻⁹⁷ ₋₂	5.7 ⁻¹⁰⁰ ₋₁	15.8																													
Aug 11	11	41.8 ⁻⁶ ₋₅	41.4 ⁻¹⁸ ₋₅	40.1 ⁻³⁰ ₋₅	38.0 ⁻⁴¹ ₋₅	35.1 ⁻⁵² ₋₅	31.4 ⁻⁶² ₋₅	27.1 ⁻⁷¹ ₋₄	22.1 ⁻⁷⁹ ₋₄	16.5 ⁻⁸⁶ ₋₃	10.4 ⁻⁹² ₋₃	4.0 ⁻⁹⁶ ₋₂	5.7 ⁻⁹⁹ ₋₂	15.7																													
Aug 12	12	41.5 ⁻⁶ ₋₆	41.0 ⁻¹⁸ ₋₆	39.8 ⁻³⁰ ₋₆	37.7 ⁻⁴¹ ₋₅	34.8 ⁻⁵² ₋₅	31.2 ⁻⁶² ₋₅	26.8 ⁻⁷¹ ₋₄	21.9 ⁻⁷⁸ ₋₄	16.3 ⁻⁸⁵ ₋₄	10.3 ⁻⁹¹ ₋₃	4.0 ⁻⁹⁵ ₋₂	5.6 ⁻⁹⁸ ₋₂	15.5																													
Aug 13	13	41.1 ⁻⁶ ₋₆	40.6 ⁻¹⁸ ₋₆	39.4 ⁻²⁹ ₋₆	37.3 ⁻⁴¹ ₋₅	34.5 ⁻⁵¹ ₋₅	30.9 ⁻⁶¹ ₋₅	26.6 ⁻⁷⁰ ₋₄ </																																			

2007

Moon Parallax and Semi-diameter

Lower Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Aug 19	69.0	⁻⁶ ₁	68.6	⁻¹⁷ ₁	67.3	⁻²⁸ ₁	65.4	⁻³⁹ ₁	62.6	⁻⁴⁹ ₁	59.2	⁻⁵⁹ ₁	55.0	⁻⁶⁷ ₀	50.3	⁻⁷⁵ ₀	45.1	⁻⁸¹ ₀	39.4	⁻⁸⁷ ₀	33.3	⁻⁹¹ ₀	24.2	⁻⁹⁴ ₀	14.8																	
Aug 20	69.0	⁻⁶ ₂	68.6	⁻¹⁷ ₂	67.4	⁻²⁹ ₂	65.4	⁻³⁹ ₂	62.7	⁻⁵⁰ ₂	59.2	⁻⁵⁹ ₂	55.1	⁻⁶⁸ ₂	50.4	⁻⁷⁵ ₂	45.1	⁻⁸² ₁	39.4	⁻⁸⁷ ₁	33.3	⁻⁹² ₁	24.2	⁻⁹⁴ ₁	14.8																	
Aug 21	69.3	⁻⁶ ₄	68.9	⁻¹⁷ ₄	67.7	⁻²⁹ ₄	65.7	⁻⁴⁰ ₄	62.9	⁻⁵⁰ ₄	59.5	⁻⁵⁹ ₄	55.3	⁻⁶⁸ ₃	50.6	⁻⁷⁶ ₃	45.3	⁻⁸² ₃	39.6	⁻⁸⁷ ₂	33.5	⁻⁹² ₂	24.3	⁻⁹⁵ ₁	14.8																	
Aug 22	69.8	⁻⁶ ₆	69.4	⁻¹⁸ ₆	68.2	⁻²⁹ ₆	66.2	⁻⁴⁰ ₅	63.4	⁻⁵⁰ ₅	59.9	⁻⁶⁰ ₅	55.7	⁻⁶⁹ ₅	51.0	⁻⁷⁶ ₄	45.6	⁻⁸³ ₄	39.9	⁻⁸⁸ ₃	33.7	⁻⁹³ ₂	24.5	⁻⁹⁶ ₂	15.0																	
Aug 23	70.5	⁻⁶ ₇	70.1	⁻¹⁸ ₇	68.9	⁻²⁹ ₇	66.9	⁻⁴⁰ ₇	64.1	⁻⁵¹ ₆	60.5	⁻⁶¹ ₆	56.3	⁻⁶⁹ ₆	51.5	⁻⁷⁷ ₅	46.1	⁻⁸⁴ ₄	40.3	⁻⁸⁹ ₄	34.1	⁻⁹⁴ ₃	24.7	⁻⁹⁷ ₂	15.1																	
Aug 24	71.4	⁻⁶ ₈	71.0	⁻¹⁸ ₈	69.8	⁻³⁰ ₈	67.7	⁻⁴¹ ₈	64.9	⁻⁵² ₇	61.3	⁻⁶¹ ₇	57.0	⁻⁷⁰ ₆	52.1	⁻⁷⁸ ₆	46.7	⁻⁸⁵ ₅	40.8	⁻⁹⁰ ₄	34.5	⁻⁹⁵ ₃	25.0	⁻⁹⁸ ₂	15.3																	
Aug 25	72.4	⁻⁶ ₈	72.0	⁻¹⁸ ₉	70.7	⁻³⁰ ₈	68.6	⁻⁴¹ ₈	65.8	⁻⁵² ₈	62.1	⁻⁶² ₇	57.8	⁻⁷¹ ₇	52.8	⁻⁷⁹ ₆	47.3	⁻⁸⁶ ₅	41.3	⁻⁹² ₅	35.0	⁻⁹⁷ ₄	25.4	⁻¹⁰⁰ ₂	15.5																	
Aug 26	73.5	⁻⁶ ₈	73.0	⁻¹⁸ ₈	71.7	⁻³⁰ ₈	69.6	⁻⁴² ₈	66.7	⁻⁵³ ₇	63.0	⁻⁶³ ₇	58.6	⁻⁷² ₆	53.6	⁻⁸⁰ ₆	48.0	⁻⁸⁷ ₅	41.9	⁻⁹³ ₄	35.5	⁻⁹⁸ ₄	25.8	⁻¹⁰¹ ₂	15.7																	
Aug 27	74.5	⁻⁶ ₇	74.0	⁻¹⁹ ₇	72.7	⁻³¹ ₇	70.6	⁻⁴³ ₇	67.6	⁻⁵⁴ ₇	63.9	⁻⁶⁴ ₆	59.4	⁻⁷³ ₆	54.3	⁻⁸¹ ₅	48.7	⁻⁸⁸ ₅	42.5	⁻⁹⁴ ₄	36.0	⁻⁹⁹ ₃	26.1	⁻¹⁰² ₂	15.9																	
Aug 28	75.4	⁻⁶ ₆	74.9	⁻¹⁹ ₆	73.6	⁻³¹ ₆	71.4	⁻⁴³ ₅	68.4	⁻⁵⁴ ₅	64.7	⁻⁶⁵ ₅	60.2	⁻⁷⁴ ₄	55.0	⁻⁸² ₄	49.3	⁻⁸⁹ ₄	43.0	⁻⁹⁵ ₃	36.4	⁻¹⁰⁰ ₂	26.4	⁻¹⁰³ ₂	16.1																	
Aug 29	76.1	⁻⁶ ₄	75.6	⁻¹⁹ ₄	74.3	⁻³¹ ₃	72.1	⁻⁴³ ₃	69.1	⁻⁵⁵ ₃	65.2	⁻⁶⁵ ₃	60.7	⁻⁷⁵ ₃	55.5	⁻⁸³ ₂	49.7	⁻⁹⁰ ₂	43.4	⁻⁹⁶ ₂	36.7	⁻¹⁰¹ ₁	26.7	⁻¹⁰⁴ ₁	16.3																	
Aug 30	76.5	⁻⁶ ₁	76.0	⁻¹⁹ ₁	74.7	⁻³² ₁	72.5	⁻⁴⁴ ₁	69.4	⁻⁵⁵ ₁	65.6	⁻⁶⁵ ₁	61.0	⁻⁷⁵ ₁	55.8	⁻⁸³ ₁	50.0	⁻⁹⁰ ₁	43.7	⁻⁹⁶ ₁	36.9	⁻¹⁰¹ ₁	26.8	⁻¹⁰⁴ ₀	16.4																	
Aug 31	76.6	⁻⁶ ₋₁	76.2	⁻¹⁹ ₋₁	74.8	⁻³² ₋₁	72.6	⁻⁴⁴ ₋₁	69.6	⁻⁵⁵ ₋₁	65.7	⁻⁶⁵ ₋₁	61.2	⁻⁷⁵ ₋₁	55.9	⁻⁸³ ₋₁	50.1	⁻⁹⁰ ₋₁	43.7	⁻⁹⁶ ₋₁	37.0	⁻¹⁰¹ ₀	26.9	⁻¹⁰⁴ ₀	16.4																	
Sep 1	76.5	⁻⁶ ₋₃	76.0	⁻¹⁹ ₋₃	74.7	⁻³¹ ₋₃	72.5	⁻⁴³ ₋₃	69.5	⁻⁵⁵ ₋₃	65.6	⁻⁶⁵ ₋₂	61.1	⁻⁷⁵ ₋₂	55.8	⁻⁸³ ₋₂	50.0	⁻⁹⁰ ₋₂	43.7	⁻⁹⁶ ₋₂	36.9	⁻¹⁰¹ ₋₁	26.8	⁻¹⁰⁴ ₋₁	16.4																	
Sep 2	76.1	⁻⁶ ₋₄	75.7	⁻¹⁹ ₋₄	74.4	⁻³¹ ₋₄	72.2	⁻⁴³ ₋₄	69.1	⁻⁵⁴ ₋₄	65.3	⁻⁶⁵ ₋₄	60.8	⁻⁷⁴ ₋₃	55.6	⁻⁸³ ₋₃	49.8	⁻⁹⁰ ₋₃	43.5	⁻⁹⁵ ₋₂	36.8	⁻¹⁰⁰ ₋₂	26.7	⁻¹⁰⁴ ₋₁	16.3																	
Sep 3	75.6	⁻⁶ ₋₅	75.2	⁻¹⁹ ₋₅	73.9	⁻³¹ ₋₅	71.7	⁻⁴³ ₋₅	68.7	⁻⁵⁴ ₋₅	64.9	⁻⁶⁴ ₋₄	60.4	⁻⁷⁴ ₋₄	55.2	⁻⁸² ₋₄	49.4	⁻⁸⁹ ₋₃	43.2	⁻⁹⁵ ₋₃	36.5	⁻¹⁰⁰ ₋₂	26.5	⁻¹⁰³ ₋₁	16.2																	
Sep 4	75.0	⁻⁶ ₋₆	74.5	⁻¹⁹ ₋₆	73.2	⁻³¹ ₋₆	71.1	⁻⁴² ₋₅	68.1	⁻⁵³ ₋₅	64.3	⁻⁶⁴ ₋₅	59.8	⁻⁷³ ₋₄	54.7	⁻⁸¹ ₋₄	49.0	⁻⁸⁸ ₋₄	42.8	⁻⁹⁴ ₋₃	36.2	⁻⁹⁹ ₋₂	26.3	⁻¹⁰² ₋₂	16.1																	
Sep 5	74.3	⁻⁶ ₋₆	73.9	⁻¹⁸ ₋₆	72.6	⁻³⁰ ₋₆	70.4	⁻⁴² ₋₅	67.5	⁻⁵³ ₋₅	63.7	⁻⁶³ ₋₅	59.3	⁻⁷² ₋₄	54.2	⁻⁸⁰ ₋₄	48.6	⁻⁸⁷ ₋₄	42.4	⁻⁹³ ₋₃	35.9	⁻⁹⁸ ₋₂	26.0	⁻¹⁰¹ ₋₂	15.9																	
Sep 6	73.6	⁻⁶ ₋₆	73.2	⁻¹⁸ ₋₆	71.9	⁻³⁰ ₋₆	69.7	⁻⁴² ₋₅	66.8	⁻⁵² ₋₅	63.1	⁻⁶² ₋₅	58.7	⁻⁷² ₋₄	53.7	⁻⁸⁰ ₋₄	48.1	⁻⁸⁶ ₋₄	42.0	⁻⁹² ₋₃	35.5	⁻⁹⁷ ₋₂	25.8	⁻¹⁰⁰ ₋₂	15.8																	
Sep 7	72.9	⁻⁶ ₋₆	72.5	⁻¹⁸ ₋₆	71.2	⁻³⁰ ₋₅	69.1	⁻⁴¹ ₋₅	66.2	⁻⁵² ₋₅	62.5	⁻⁶² ₋₅	58.2	⁻⁷¹ ₋₄	53.2	⁻⁷⁹ ₋₄	47.6	⁻⁸⁶ ₋₃	41.6	⁻⁹¹ ₋₃	35.2	⁻⁹⁶ ₋₂	25.6	⁻⁹⁹ ₋₂	15.6																	
Sep 8	72.2	⁻⁶ ₋₅	71.8	⁻¹⁸ ₋₅	70.5	⁻³⁰ ₋₅	68.4	⁻⁴¹ ₋₅	65.6	⁻⁵¹ ₋₅	61.9	⁻⁶¹ ₋₄	57.6	⁻⁷⁰ ₋₄	52.7	⁻⁷⁸ ₋₄	47.2	⁻⁸⁵ ₋₃	41.2	⁻⁹⁰ ₋₃	34.9	⁻⁹⁵ ₋₂	25.3	⁻⁹⁸ ₋₂	15.5																	
Sep 9	71.6	⁻⁶ ₋₅	71.1	⁻¹⁸ ₋₅	69.9	⁻²⁹ ₋₅	67.8	⁻⁴¹ ₋₅	65.0	⁻⁵¹ ₋₅	61.4	⁻⁶¹ ₋₄	57.1	⁻⁷⁰ ₋₄	52.2	⁻⁷⁷ ₋₄	46.8	⁻⁸⁴ ₋₃	40.9	⁻⁹⁰ ₋₃	34.6	⁻⁹⁴ ₋₂	25.1	⁻⁹⁷ ₋₁	15.3																	
Sep 10	70.9	⁻⁶ ₋₅	70.5	⁻¹⁸ ₋₅	69.3	⁻²⁹ ₋₅	67.2	⁻⁴⁰ ₋₄	64.4	⁻⁵¹ ₋₄	60.9	⁻⁶⁰ ₋₄	56.6	⁻⁶⁹ ₋₄	51.8	⁻⁷⁷ ₋₃	46.4	⁻⁸³ ₋₃	40.5	⁻⁸⁹ ₋₃	34.3	⁻⁹³ ₋₂	24.9	⁻⁹⁶ ₋₁	15.2																	
Sep 11	70.4	⁻⁶ ₋₄	70.0	⁻¹⁸ ₋₄	68.7	⁻²⁹ ₋₄	66.7	⁻⁴⁰ ₋₄	63.9	⁻⁵⁰ ₋₄	60.4	⁻⁶⁰ ₋₄	56.2	⁻⁶⁹ ₋₃	51.3	⁻⁷⁶ ₋₃	46.0	⁻⁸³ ₋₃	40.2	⁻⁸⁸ ₋₂	34.0	⁻⁹³ ₋₂	24.7	⁻⁹⁶ ₋₁	15.1																	
Sep 12	69.9	⁻⁶ ₋₄	69.4	⁻¹⁷ ₋₄	68.2	⁻²⁹ ₋₄	66.2	⁻⁴⁰ ₋₃	63.4	⁻⁵⁰ ₋₃	59.9	⁻⁵⁹ ₋₃	55.8	⁻⁶⁸ ₋₃	51.0	⁻⁷⁶ ₋₃	45.7	⁻⁸² ₋₂	39.9	⁻⁸⁸ ₋₂	33.7	⁻⁹² ₋₂	24.5	⁻⁹⁵ ₋₁	15.0																	
Sep 13	69.4	⁻⁶ ₋₃	69.0	⁻¹⁷ ₋₃	67.8	⁻²⁹ ₋₃	65.8	⁻³⁹ ₋₃	63.0	⁻⁵⁰ ₋₃	59.5	⁻⁵⁹ ₋₂	55.4	⁻⁶⁸ ₋₂	50.6	⁻⁷⁵ ₋₂	45.4	⁻⁸² ₋₂	39.6	⁻⁸⁷ ₋₂	33.5	⁻⁹² ₋₁	24.3	⁻⁹⁴ ₋₁	14.9																	
Sep 14	69.1	⁻⁶ ₋₂	68.7	⁻¹⁷ ₋₂	67.5	⁻²⁸ ₋₂	65.5	⁻³⁹ ₋₂	62.7	⁻⁴⁹ ₋₂	59.2	⁻⁵⁹ ₋₂	55.1	⁻⁶⁷ ₋₁	50.4	⁻⁷⁵ ₋₁	45.1	⁻⁸¹ ₋₁	39.4	⁻⁸⁷ ₋₁	33.4	⁻⁹¹ ₋₁	24.2	⁻⁹⁴ ₋₁	14.8																	
Sep 15	68.8	⁻⁶ ₋₁	68.4	⁻¹⁷ ₋₁	67.2	⁻²⁸ ₋₁	65.3	⁻³⁹ ₋₁	62.5	⁻⁴⁹ ₀	59.1	⁻⁵⁹ ₀	54.9	⁻⁶⁷ ₀	50.2	⁻⁷⁵ ₀	45.0	⁻⁸¹ ₀	39.3	⁻⁸⁷ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Sep 16	68.8	⁻⁶ ₁	68.4	⁻¹⁷ ₁	67.2	⁻²⁸ ₁	65.2	⁻³⁹ ₁	62.5	⁻⁴⁹ ₁	59.0	⁻⁵⁹ ₁	54.9	⁻⁶⁷ ₁	50.2	⁻⁷⁵ ₁	45.0	⁻⁸¹ ₁	39.3	⁻⁸⁷ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Sep 17	68.9	⁻⁶ ₃	68.5	⁻¹⁷ ₃	67.3	⁻²⁸ ₂	65.3	⁻³⁹ ₂	62.6	⁻⁴⁹ ₂	59.1	⁻⁵⁹ ₂	55.0	⁻⁶⁸ ₂	50.3	⁻⁷⁵ ₂	45.0	⁻⁸² ₂	39.3	⁻⁸⁷ ₁	33.3	⁻⁹¹ ₁	24.2	⁻⁹⁴ ₁	14.8																	
Sep 18	69.2	⁻⁶ ₄	68.8	⁻¹⁷ ₄	67.6	⁻²⁹ ₄	65.6	⁻³⁹ ₄	62.8	⁻⁵⁰ ₄	59.4	⁻⁵⁹ ₄	55.2	⁻⁶⁸ ₃	50.5	⁻⁷⁶ ₃	45.2	⁻⁸² ₃	39.5	⁻⁸⁷ ₂	33.4	⁻⁹² ₂	24.3	⁻⁹⁵ ₁	14.8																	
Sep 19	69.7	⁻⁶ ₆	69.3	⁻¹⁸ ₆	68.1	⁻²⁹ ₆	66.1	⁻⁴⁰ ₆	63.3	⁻⁵⁰ ₅	59.8	⁻⁶⁰ ₅	55.7	⁻⁶⁹ ₅	50.9	⁻⁷⁶ ₄	45.6	⁻⁸³ ₄	39.8	⁻⁸⁸ ₃	33.7	⁻⁹³ ₃	24.4	⁻⁹⁶ ₂	14.9																	
Sep 20	70.5	⁻⁶ ₈	70.0	⁻¹⁸ ₈	68.8	⁻²⁹ ₇	66.8	⁻⁴⁰ ₇	64.0	⁻⁵¹ ₇	60.4	⁻⁶¹ ₆	56.2	⁻⁶⁹ ₆	51.4	⁻⁷⁷ ₅	46.0	⁻⁸⁴ ₅	40.2	⁻⁸⁹ ₄	34.0	⁻⁹⁴ ₃	24.7	⁻⁹⁷ ₂	15.1																	
Sep 21	71.4	⁻⁶ ₉	71.0	⁻¹⁸ ₉	69.7	⁻³⁰ ₉	67.7	⁻⁴¹ ₈	64.8	⁻⁵² ₈	61.2	⁻⁶¹ ₇	57.0	⁻⁷⁰ ₇	52.1	⁻⁷⁸ ₆	46.7	⁻⁸⁵ ₆	40.8	⁻⁹⁰ ₅	34.5	⁻⁹⁵ ₄	25.0	⁻⁹⁸ ₃	15.3																	
Sep 22	72.5	⁻⁶ ₁₀	72.0	⁻¹⁸ ₁₀	70.8	⁻³⁰ ₉	68.7	⁻⁴² ₉	65.8	⁻⁵² ₉	62.2	⁻⁶² ₈	57.8	⁻⁷¹ ₇	52.9	⁻⁷⁹ ₇	47.4	⁻⁸⁶ ₆	41.4	⁻⁹² ₅	35.0	⁻⁹⁷ ₄	25.4	⁻¹⁰⁰ ₃	15.5																	
Sep 23	73.6	⁻⁶ ₁₀	73.2	⁻¹⁹ ₁₀	71.9	⁻³¹ ₁₀	69.8	⁻⁴² ₉	66.9</																																	

		Lower Limb																																									
		Altitude degrees																																									
		0			7			14			21			28			35			42			49			56			63			70			80			90					
		'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Oct 4	4	73.4	⁻⁶	₋₈	72.9	⁻¹⁸	₋₈	71.6	⁻³⁰	₋₇	69.5	⁻⁴¹	₋₇	66.6	⁻⁵²	₋₇	62.9	⁻⁶²	₋₆	58.5	⁻⁷¹	₋₆	53.5	⁻⁷⁹	₋₅	47.9	⁻⁸⁶	₋₅	41.9	⁻⁹²	₋₄	35.4	⁻⁹⁶	₋₃	25.7	⁻⁹⁹	₋₂	15.7					
Oct 5	5	72.4	⁻⁶	₋₇	72.0	⁻¹⁸	₋₇	70.7	⁻³⁰	₋₇	68.7	⁻⁴¹	₋₆	65.8	⁻⁵²	₋₆	62.1	⁻⁶¹	₋₆	57.8	⁻⁷⁰	₋₅	52.9	⁻⁷⁸	₋₅	47.3	⁻⁸⁵	₋₄	41.4	⁻⁹¹	₋₄	35.0	⁻⁹⁵	₋₃	25.4	⁻⁹⁸	₋₂	15.5					
Oct 6	6	71.6	⁻⁶	₋₆	71.2	⁻¹⁸	₋₆	69.9	⁻²⁹	₋₆	67.9	⁻⁴⁰	₋₆	65.0	⁻⁵¹	₋₅	61.4	⁻⁶¹	₋₅	57.1	⁻⁷⁰	₋₅	52.2	⁻⁷⁷	₋₄	46.8	⁻⁸⁴	₋₄	40.9	⁻⁹⁰	₋₃	34.6	⁻⁹⁴	₋₃	25.1	⁻⁹⁷	₋₂	15.3					
Oct 7	7	70.9	⁻⁶	₋₅	70.5	⁻¹⁸	₋₅	69.2	⁻²⁹	₋₅	67.2	⁻⁴⁰	₋₅	64.4	⁻⁵¹	₋₅	60.8	⁻⁶⁰	₋₄	56.6	⁻⁶⁹	₋₄	51.7	⁻⁷⁷	₋₄	46.3	⁻⁸³	₋₃	40.5	⁻⁸⁹	₋₃	34.2	⁻⁹³	₋₂	24.8	⁻⁹⁶	₋₁	15.2					
Oct 8	8	70.3	⁻⁶	₋₄	69.8	⁻¹⁷	₋₄	68.6	⁻²⁹	₋₄	66.6	⁻⁴⁰	₋₄	63.8	⁻⁵⁰	₋₄	60.3	⁻⁶⁰	₋₄	56.1	⁻⁶⁸	₋₃	51.3	⁻⁷⁶	₋₃	45.9	⁻⁸³	₋₃	40.1	⁻⁸⁸	₋₂	33.9	⁻⁹³	₋₂	24.6	⁻⁹⁶	₋₁	15.0					
Oct 9	9	69.7	⁻⁶	₋₃	69.3	⁻¹⁷	₋₃	68.1	⁻²⁹	₋₃	66.1	⁻⁴⁰	₋₃	63.3	⁻⁵⁰	₋₃	59.8	⁻⁵⁹	₋₃	55.7	⁻⁶⁸	₋₃	50.9	⁻⁷⁶	₋₂	45.6	⁻⁸²	₋₂	39.8	⁻⁸⁷	₋₂	33.7	⁻⁹²	₋₁	24.4	⁻⁹⁵	₋₁	14.9					
Oct 10	10	69.3	⁻⁶	₋₃	68.9	⁻¹⁷	₋₃	67.7	⁻²⁹	₋₃	65.7	⁻³⁹	₋₃	62.9	⁻⁵⁰	₋₂	59.5	⁻⁵⁹	₋₂	55.3	⁻⁶⁸	₋₂	50.6	⁻⁷⁵	₋₂	45.3	⁻⁸²	₋₂	39.6	⁻⁸⁷	₋₁	33.5	⁻⁹¹	₋₁	24.3	⁻⁹⁴	₋₁	14.8					
Oct 11	11	69.0	⁻⁶	₋₂	68.6	⁻¹⁷	₋₂	67.4	⁻²⁸	₋₂	65.4	⁻³⁹	₋₂	62.6	⁻⁴⁹	₋₂	59.2	⁻⁵⁹	₋₂	55.1	⁻⁶⁷	₋₁	50.3	⁻⁷⁵	₋₁	45.1	⁻⁸¹	₋₁	39.4	⁻⁸⁷	₋₁	33.3	⁻⁹¹	₋₁	24.2	⁻⁹⁴	₋₁	14.8					
Oct 12	12	68.8	⁻⁶	₋₁	68.4	⁻¹⁷	₋₁	67.2	⁻²⁸	₋₁	65.2	⁻³⁹	₋₁	62.4	⁻⁴⁹	₋₁	59.0	⁻⁵⁹	₋₁	54.9	⁻⁶⁷	₋₁	50.2	⁻⁷⁵	₋₁	44.9	⁻⁸¹	₋₁	39.3	⁻⁸⁶	₀	33.2	⁻⁹¹	₀	24.1	⁻⁹⁴	₀	14.7					
Oct 13	13	68.7	⁻⁶	₀	68.2	⁻¹⁷	₀	67.0	⁻²⁸	₀	65.1	⁻³⁹	₀	62.3	⁻⁴⁹	₀	58.9	⁻⁵⁹	₀	54.8	⁻⁶⁷	₀	50.1	⁻⁷⁵	₀	44.9	⁻⁸¹	₀	39.2	⁻⁸⁶	₀	33.2	⁻⁹¹	₀	24.1	⁻⁹⁴	₀	14.7					
Oct 14	14	68.7	⁻⁶	₁	68.3	⁻¹⁷	₁	67.1	⁻²⁸	₁	65.1	⁻³⁹	₁	62.3	⁻⁴⁹	₁	58.9	⁻⁵⁹	₁	54.8	⁻⁶⁷	₁	50.1	⁻⁷⁵	₁	44.9	⁻⁸¹	₁	39.2	⁻⁸⁶	₁	33.2	⁻⁹¹	₁	24.1	⁻⁹⁴	₀	14.7					
Oct 15	15	68.8	⁻⁶	₃	68.4	⁻¹⁷	₃	67.2	⁻²⁸	₃	65.2	⁻³⁹	₂	62.5	⁻⁴⁹	₂	59.0	⁻⁵⁹	₂	54.9	⁻⁶⁷	₂	50.2	⁻⁷⁵	₂	45.0	⁻⁸¹	₂	39.3	⁻⁸⁷	₁	33.2	⁻⁹¹	₁	24.1	⁻⁹⁴	₁	14.7					
Oct 16	16	69.1	⁻⁶	₄	68.7	⁻¹⁷	₄	67.5	⁻²⁹	₄	65.5	⁻³⁹	₄	62.8	⁻⁵⁰	₄	59.3	⁻⁵⁹	₃	55.2	⁻⁶⁸	₃	50.4	⁻⁷⁵	₃	45.2	⁻⁸²	₃	39.5	⁻⁸⁷	₂	33.4	⁻⁹²	₂	24.2	⁻⁹⁵	₁	14.8					
Oct 17	17	69.6	⁻⁶	₆	69.2	⁻¹⁷	₆	68.0	⁻²⁹	₅	66.0	⁻⁴⁰	₅	63.2	⁻⁵⁰	₅	59.7	⁻⁶⁰	₅	55.6	⁻⁶⁸	₄	50.8	⁻⁷⁶	₄	45.5	⁻⁸³	₃	39.7	⁻⁸⁸	₃	33.6	⁻⁹³	₂	24.4	⁻⁹⁵	₂	14.9					
Oct 18	18	70.3	⁻⁶	₇	69.9	⁻¹⁸	₇	68.7	⁻²⁹	₇	66.6	⁻⁴⁰	₇	63.8	⁻⁵¹	₆	60.3	⁻⁶⁰	₆	56.1	⁻⁶⁹	₆	51.3	⁻⁷⁷	₅	46.0	⁻⁸⁴	₄	40.1	⁻⁸⁹	₄	34.0	⁻⁹⁴	₃	24.6	⁻⁹⁷	₂	15.1					
Oct 19	19	71.2	⁻⁶	₉	70.8	⁻¹⁸	₉	69.5	⁻³⁰	₈	67.5	⁻⁴¹	₈	64.6	⁻⁵¹	₈	61.1	⁻⁶¹	₇	56.8	⁻⁷⁰	₇	51.9	⁻⁷⁸	₆	46.5	⁻⁸⁵	₅	40.6	⁻⁹⁰	₅	34.4	⁻⁹⁵	₄	25.0	⁻⁹⁸	₂	15.2					
Oct 20	20	72.2	⁻⁶	₁₀	71.8	⁻¹⁸	₁₀	70.5	⁻³⁰	₉	68.5	⁻⁴¹	₉	65.6	⁻⁵²	₉	62.0	⁻⁶²	₈	57.6	⁻⁷¹	₇	52.7	⁻⁷⁹	₇	47.2	⁻⁸⁶	₆	41.2	⁻⁹²	₅	34.9	⁻⁹⁶	₄	25.3	⁻⁹⁹	₃	15.5					
Oct 21	21	73.4	⁻⁶	₁₀	73.0	⁻¹⁸	₁₀	71.7	⁻³¹	₁₀	69.6	⁻⁴²	₁₀	66.6	⁻⁵³	₉	63.0	⁻⁶³	₉	58.6	⁻⁷²	₈	53.6	⁻⁸⁰	₇	48.0	⁻⁸⁷	₆	41.9	⁻⁹³	₅	35.4	⁻⁹⁸	₄	25.7	⁻¹⁰¹	₃	15.7					
Oct 22	22	74.6	⁻⁶	₁₀	74.2	⁻¹⁹	₁₀	72.9	⁻³¹	₁₀	70.7	⁻⁴³	₉	67.8	⁻⁵⁴	₉	64.0	⁻⁶⁴	₈	59.6	⁻⁷⁴	₈	54.5	⁻⁸²	₇	48.8	⁻⁸⁹	₆	42.6	⁻⁹⁵	₅	36.0	⁻¹⁰⁰	₄	26.2	⁻¹⁰³	₃	16.0					
Oct 23	23	75.9	⁻⁶	₉	75.4	⁻¹⁹	₉	74.1	⁻³¹	₉	71.9	⁻⁴³	₈	68.9	⁻⁵⁵	₈	65.1	⁻⁶⁵	₇	60.5	⁻⁷⁵	₇	55.4	⁻⁸³	₆	49.6	⁻⁹⁰	₅	43.3	⁻⁹⁶	₅	36.6	⁻¹⁰¹	₄	26.6	⁻¹⁰⁴	₃	16.2					
Oct 24	24	76.9	⁻⁶	₇	76.5	⁻¹⁹	₇	75.1	⁻³²	₆	72.9	⁻⁴⁴	₆	69.9	⁻⁵⁵	₆	66.0	⁻⁶⁶	₆	61.4	⁻⁷⁶	₅	56.1	⁻⁸⁴	₅	50.3	⁻⁹¹	₄	43.9	⁻⁹⁷	₄	37.1	⁻¹⁰²	₃	27.0	⁻¹⁰⁶	₂	16.5					
Oct 25	25	77.7	⁻⁷	₄	77.3	⁻¹⁹	₄	75.9	⁻³²	₃	73.7	⁻⁴⁴	₃	70.6	⁻⁵⁶	₃	66.7	⁻⁶⁷	₃	62.0	⁻⁷⁶	₃	56.7	⁻⁸⁵	₂	50.8	⁻⁹²	₂	44.4	⁻⁹⁸	₂	37.5	⁻¹⁰³	₁	27.3	⁻¹⁰⁶	₁	16.6					
Oct 26	26	78.2	⁻⁷	₀	77.7	⁻²⁰	₀	76.3	⁻³²	₀	74.1	⁻⁴⁴	₀	71.0	⁻⁵⁶	₀	67.1	⁻⁶⁷	₀	62.4	⁻⁷⁶	₀	57.0	⁻⁸⁵	₀	51.1	⁻⁹²	₀	44.6	⁻⁹⁸	₀	37.7	⁻¹⁰³	₀	27.4	⁻¹⁰⁷	₀	16.7					
Oct 27	27	78.2	⁻⁷	₋₄	77.7	⁻¹⁹	₋₃	76.3	⁻³²	₋₃	74.1	⁻⁴⁴	₋₃	71.0	⁻⁵⁶	₋₃	67.0	⁻⁶⁷	₋₃	62.4	⁻⁷⁶	₋₃	57.0	⁻⁸⁵	₋₂	51.1	⁻⁹²	₋₂	44.6	⁻⁹⁸	₋₂	37.7	⁻¹⁰³	₋₁	27.4	⁻¹⁰⁶	₋₁	16.7					
Oct 28	28	77.7	⁻⁶	₋₇	77.3	⁻¹⁹	₋₆	75.9	⁻³²	₋₆	73.7	⁻⁴⁴	₋₆	70.6	⁻⁵⁶	₋₆	66.7	⁻⁶⁶	₋₅	62.0	⁻⁷⁶	₋₅	56.7	⁻⁸⁴	₋₅	50.8	⁻⁹¹	₋₄	44.4	⁻⁹⁷	₋₃	37.5	⁻¹⁰²	₋₃	27.3	⁻¹⁰⁶	₋₂	16.6					
Oct 29	29	76.9	⁻⁶	₋₉	76.5	⁻¹⁹	₋₉	75.2	⁻³²	₋₈	72.9	⁻⁴³	₋₈	69.9	⁻⁵⁵	₋₈	66.0	⁻⁶⁵	₋₇	61.4	⁻⁷⁵	₋₇	56.1	⁻⁸³	₋₆	50.3	⁻⁹⁰	₋₅	43.9	⁻⁹⁶	₋₅	37.2	⁻¹⁰¹	₋₄	27.0	⁻¹⁰⁴	₋₂	16.5					
Oct 30	30	75.9	⁻⁶	₋₁₀	75.5	⁻¹⁹	₋₁₀	74.1	⁻³¹	₋₉	72.0	⁻⁴³	₋₉	68.9	⁻⁵⁴	₋₉	65.1	⁻⁶⁴	₋₈	60.6	⁻⁷⁴	₋₇	55.4	⁻⁸²	₋₇	49.6	⁻⁸⁹	₋₆	43.3	⁻⁹⁵	₋₅	36.7	⁻¹⁰⁰	₋₄	26.6	⁻¹⁰³	₋₃	16.3					
Oct 31	31	74.7	⁻⁶	₋₁₀	74.3	⁻¹⁹	₋₁₀	73.0	⁻³¹	₋₁₀	70.8	⁻⁴²	₋₉	67.9	⁻⁵³	₋₉	64.1	⁻⁶³	₋₈	59.7	⁻⁷³	₋₈	54.5	⁻⁸¹	₋₇	48.9	⁻⁸⁸	₋₆	42.7	⁻⁹³	₋₅	36.1	⁻⁹⁸	₋₄	26.2	⁻¹⁰¹	₋₃	16.0					
Nov 1	1	73.6	⁻⁶	₋₉	73.1	⁻¹⁸	₋₉	71.8	⁻³⁰	₋₉	69.7	⁻⁴¹	₋₉	66.8	⁻⁵²	₋₈	63.1	⁻⁶²	₋₈	58.7	⁻⁷¹	₋₇	53.7	⁻⁷⁹	₋₆	48.1	⁻⁸⁶	₋₆	42.0	⁻⁹²	₋₅	35.5	⁻⁹⁷	₋₄	25.8	⁻¹⁰⁰	₋₃	15.8					
Nov 2	2	72.4	⁻⁶	₋₈	72.0	⁻¹⁸	₋₈	70.7	⁻³⁰	₋₈	68.7	⁻⁴¹	₋₈	65.8	⁻⁵²	₋₇	62.1	⁻⁶¹	₋₇	57.8	⁻⁷⁰	₋₆	52.9	⁻⁷⁸	₋₆	47.3	⁻⁸⁵	₋₅	41.4	⁻⁹⁰	₋₄	35.0	⁻⁹⁵	₋₃	25.4	⁻⁹⁸	₋₂	15.5					
Nov 3	3	71.4	⁻⁶	₋₇	71.0	⁻¹⁸	₋₇	69.8	⁻²⁹	₋₇	67.7	⁻⁴⁰	₋																														

		Upper Limb																																									
		Altitude degrees																																									
		0			7			14			21			28			35			42			49			56			63			70			80			90					
		'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Oct 4	4	41.9	⁻⁶	₋₈	41.5	⁻¹⁸	₋₈	40.2	⁻³⁰	₋₇	38.1	⁻⁴¹	₋₇	35.2	⁻⁵²	₋₇	31.5	⁻⁶²	₋₆	27.1	⁻⁷¹	₋₆	22.1	⁻⁷⁹	₋₅	16.5	⁻⁸⁶	₋₅	10.5	⁻⁹²	₋₄	4.0	⁻⁹⁶	₋₃	-5.7	⁻⁹⁹	₋₂	-15.7					
Oct 5	5	41.4	⁻⁶	₋₇	41.0	⁻¹⁸	₋₇	39.7	⁻³⁰	₋₇	37.6	⁻⁴¹	₋₆	34.7	⁻⁵²	₋₆	31.1	⁻⁶¹	₋₆	26.8	⁻⁷⁰	₋₅	21.8	⁻⁷⁸	₋₅	16.3	⁻⁸⁵	₋₄	10.3	⁻⁹¹	₋₄	4.0	⁻⁹⁵	₋₃	-5.6	⁻⁹⁸	₋₂	-15.5					
Oct 6	6	40.9	⁻⁶	₋₆	40.5	⁻¹⁸	₋₆	39.3	⁻²⁹	₋₆	37.2	⁻⁴⁰	₋₆	34.3	⁻⁵¹	₋₅	30.8	⁻⁶¹	₋₅	26.5	⁻⁷⁰	₋₅	21.6	⁻⁷⁷	₋₄	16.1	⁻⁸⁴	₋₄	10.2	⁻⁹⁰	₋₃	3.9	⁻⁹⁴	₋₃	-5.6	⁻⁹⁷	₋₂	-15.3					
Oct 7	7	40.5	⁻⁶	₋₅	40.1	⁻¹⁸	₋₅	38.9	⁻²⁹	₋₅	36.8	⁻⁴⁰	₋₅	34.0	⁻⁵¹	₋₅	30.4	⁻⁶⁰	₋₄	26.2	⁻⁶⁹	₋₄	21.4	⁻⁷⁷	₋₄	16.0	⁻⁸³	₋₃	10.1	⁻⁸⁹	₋₃	3.9	⁻⁹³	₋₂	-5.5	⁻⁹⁶	₋₁	-15.2					
Oct 8	8	40.2	⁻⁶	₋₄	39.8	⁻¹⁷	₋₄	38.5	⁻²⁹	₋₄	36.5	⁻⁴⁰	₋₄	33.7	⁻⁵⁰	₋₄	30.2	⁻⁶⁰	₋₄	26.0	⁻⁶⁸	₋₃	21.2	⁻⁷⁶	₋₃	15.8	⁻⁸³	₋₃	10.0	⁻⁸⁸	₋₂	3.8	⁻⁹³	₋₂	-5.5	⁻⁹⁶	₋₁	-15.0					
Oct 9	9	39.9	⁻⁶	₋₃	39.5	⁻¹⁷	₋₃	38.2	⁻²⁹	₋₃	36.2	⁻⁴⁰	₋₃	33.5	⁻⁵⁰	₋₃	30.0	⁻⁵⁹	₋₃	25.8	⁻⁶⁸	₋₃	21.0	⁻⁷⁶	₋₂	15.7	⁻⁸²	₋₂	9.9	⁻⁸⁷	₋₂	3.8	⁻⁹²	₋₁	-5.4	⁻⁹⁵	₋₁	-14.9					
Oct 10	10	39.6	⁻⁶	₋₃	39.2	⁻¹⁷	₋₃	38.0	⁻²⁹	₋₃	36.0	⁻³⁹	₋₃	33.2	⁻⁵⁰	₋₂	29.8	⁻⁵⁹	₋₂	25.6	⁻⁶⁸	₋₂	20.9	⁻⁷⁵	₋₂	15.6	⁻⁸²	₋₂	9.9	⁻⁸⁷	₋₁	3.8	⁻⁹¹	₋₁	-5.4	⁻⁹⁴	₋₁	-14.8					
Oct 11	11	39.4	⁻⁶	₋₂	39.0	⁻¹⁷	₋₂	37.8	⁻²⁸	₋₂	35.8	⁻³⁹	₋₂	33.1	⁻⁴⁹	₋₂	29.6	⁻⁵⁹	₋₂	25.5	⁻⁶⁷	₋₁	20.8	⁻⁷⁵	₋₁	15.5	⁻⁸¹	₋₁	9.8	⁻⁸⁷	₋₁	3.8	⁻⁹¹	₋₁	-5.4	⁻⁹⁴	₋₁	-14.8					
Oct 12	12	39.3	⁻⁶	₋₁	38.9	⁻¹⁷	₋₁	37.7	⁻²⁸	₋₁	35.7	⁻³⁹	₋₁	33.0	⁻⁴⁹	₋₁	29.5	⁻⁵⁹	₋₁	25.4	⁻⁶⁷	₋₁	20.7	⁻⁷⁵	₋₁	15.5	⁻⁸¹	₋₁	9.8	⁻⁸⁶	₀	3.8	⁻⁹¹	₀	-5.3	⁻⁹⁴	₀	-14.7					
Oct 13	13	39.2	⁻⁶	₀	38.8	⁻¹⁷	₀	37.6	⁻²⁸	₀	35.7	⁻³⁹	₀	32.9	⁻⁴⁹	₀	29.5	⁻⁵⁹	₀	25.4	⁻⁶⁷	₀	20.7	⁻⁷⁵	₀	15.5	⁻⁸¹	₀	9.8	⁻⁸⁶	₀	3.8	⁻⁹¹	₀	-5.3	⁻⁹⁴	₀	-14.7					
Oct 14	14	39.3	⁻⁶	₁	38.9	⁻¹⁷	₁	37.7	⁻²⁸	₁	35.7	⁻³⁹	₁	32.9	⁻⁴⁹	₁	29.5	⁻⁵⁹	₁	25.4	⁻⁶⁷	₁	20.7	⁻⁷⁵	₁	15.5	⁻⁸¹	₁	9.8	⁻⁸⁶	₁	3.8	⁻⁹¹	₁	-5.3	⁻⁹⁴	₀	-14.7					
Oct 15	15	39.3	⁻⁶	₃	38.9	⁻¹⁷	₃	37.7	⁻²⁸	₃	35.7	⁻³⁹	₂	33.0	⁻⁴⁹	₂	29.6	⁻⁵⁹	₂	25.5	⁻⁶⁷	₂	20.7	⁻⁷⁵	₂	15.5	⁻⁸¹	₂	9.8	⁻⁸⁷	₁	3.8	⁻⁹¹	₁	-5.3	⁻⁹⁴	₁	-14.7					
Oct 16	16	39.5	⁻⁶	₄	39.1	⁻¹⁷	₄	37.9	⁻²⁹	₄	35.9	⁻³⁹	₄	33.2	⁻⁵⁰	₄	29.7	⁻⁵⁹	₃	25.6	⁻⁶⁸	₃	20.8	⁻⁷⁵	₃	15.6	⁻⁸²	₃	9.9	⁻⁸⁷	₂	3.8	⁻⁹²	₂	-5.4	⁻⁹⁵	₁	-14.8					
Oct 17	17	39.8	⁻⁶	₆	39.4	⁻¹⁷	₆	38.2	⁻²⁹	₅	36.2	⁻⁴⁰	₅	33.4	⁻⁵⁰	₅	29.9	⁻⁶⁰	₅	25.8	⁻⁶⁸	₄	21.0	⁻⁷⁶	₄	15.7	⁻⁸³	₃	9.9	⁻⁸⁸	₃	3.8	⁻⁹³	₂	-5.4	⁻⁹⁵	₂	-14.9					
Oct 18	18	40.2	⁻⁶	₇	39.8	⁻¹⁸	₇	38.6	⁻²⁹	₇	36.5	⁻⁴⁰	₇	33.7	⁻⁵¹	₆	30.2	⁻⁶⁰	₆	26.0	⁻⁶⁹	₆	21.2	⁻⁷⁷	₅	15.8	⁻⁸⁴	₄	10.0	⁻⁸⁹	₄	3.8	⁻⁹⁴	₃	-5.5	⁻⁹⁷	₂	-15.1					
Oct 19	19	40.7	⁻⁶	₉	40.3	⁻¹⁸	₉	39.0	⁻³⁰	₈	37.0	⁻⁴¹	₈	34.1	⁻⁵¹	₈	30.6	⁻⁶¹	₇	26.3	⁻⁷⁰	₇	21.5	⁻⁷⁸	₆	16.0	⁻⁸⁵	₅	10.2	⁻⁹⁰	₅	3.9	⁻⁹⁵	₄	-5.5	⁻⁹⁸	₂	-15.2					
Oct 20	20	41.3	⁻⁶	₁₀	40.9	⁻¹⁸	₁₀	39.6	⁻³⁰	₉	37.5	⁻⁴¹	₉	34.6	⁻⁵²	₉	31.0	⁻⁶²	₈	26.7	⁻⁷¹	₇	21.8	⁻⁷⁹	₇	16.3	⁻⁸⁶	₆	10.3	⁻⁹²	₅	3.9	⁻⁹⁶	₄	-5.6	⁻⁹⁹	₃	-15.5					
Oct 21	21	42.0	⁻⁶	₁₀	41.5	⁻¹⁸	₁₀	40.2	⁻³¹	₁₀	38.1	⁻⁴²	₁₀	35.2	⁻⁵³	₉	31.5	⁻⁶³	₉	27.1	⁻⁷²	₈	22.1	⁻⁸⁰	₇	16.5	⁻⁸⁷	₆	10.5	⁻⁹³	₅	4.0	⁻⁹⁸	₄	-5.7	⁻¹⁰¹	₃	-15.7					
Oct 22	22	42.7	⁻⁶	₁₀	42.2	⁻¹⁹	₁₀	40.9	⁻³¹	₁₀	38.8	⁻⁴³	₉	35.8	⁻⁵⁴	₉	32.1	⁻⁶⁴	₈	27.6	⁻⁷⁴	₈	22.5	⁻⁸²	₇	16.8	⁻⁸⁹	₆	10.6	⁻⁹⁵	₅	4.1	⁻¹⁰⁰	₄	-5.8	⁻¹⁰³	₃	-16.0					
Oct 23	23	43.4	⁻⁶	₉	42.9	⁻¹⁹	₉	41.6	⁻³¹	₉	39.4	⁻⁴³	₈	36.4	⁻⁵⁵	₈	32.6	⁻⁶⁵	₇	28.1	⁻⁷⁵	₇	22.9	⁻⁸³	₆	17.1	⁻⁹⁰	₅	10.8	⁻⁹⁶	₅	4.1	⁻¹⁰¹	₄	-5.9	⁻¹⁰⁴	₃	-16.2					
Oct 24	24	44.0	⁻⁶	₇	43.5	⁻¹⁹	₇	42.2	⁻³²	₆	40.0	⁻⁴⁴	₆	36.9	⁻⁵⁵	₆	33.0	⁻⁶⁶	₆	28.5	⁻⁷⁶	₅	23.2	⁻⁸⁴	₅	17.3	⁻⁹¹	₄	11.0	⁻⁹⁷	₄	4.2	⁻¹⁰²	₃	-6.0	⁻¹⁰⁶	₂	-16.5					
Oct 25	25	44.4	⁻⁷	₄	44.0	⁻¹⁹	₄	42.6	⁻³²	₃	40.4	⁻⁴⁴	₃	37.3	⁻⁵⁶	₃	33.4	⁻⁶⁷	₃	28.7	⁻⁷⁶	₃	23.4	⁻⁸⁵	₂	17.5	⁻⁹²	₂	11.1	⁻⁹⁸	₂	4.2	⁻¹⁰³	₁	-6.0	⁻¹⁰⁶	₁	-16.6					
Oct 26	26	44.7	⁻⁷	₀	44.2	⁻²⁰	₀	42.9	⁻³²	₀	40.6	⁻⁴⁴	₀	37.5	⁻⁵⁶	₀	33.6	⁻⁶⁷	₀	28.9	⁻⁷⁶	₀	23.6	⁻⁸⁵	₀	17.6	⁻⁹²	₀	11.1	⁻⁹⁸	₀	4.3	⁻¹⁰³	₀	-6.1	⁻¹⁰⁷	₀	-16.7					
Oct 27	27	44.7	⁻⁷	₋₄	44.2	⁻¹⁹	₋₃	42.9	⁻³²	₋₃	40.6	⁻⁴⁴	₋₃	37.5	⁻⁵⁶	₋₃	33.6	⁻⁶⁷	₋₃	28.9	⁻⁷⁶	₋₃	23.6	⁻⁸⁵	₋₂	17.6	⁻⁹²	₋₂	11.1	⁻⁹⁸	₋₂	4.3	⁻¹⁰³	₋₁	-6.1	⁻¹⁰⁶	₋₁	-16.7					
Oct 28	28	44.4	⁻⁶	₋₇	44.0	⁻¹⁹	₋₆	42.6	⁻³²	₋₆	40.4	⁻⁴⁴	₋₆	37.3	⁻⁵⁵	₋₆	33.4	⁻⁶⁶	₋₅	28.7	⁻⁷⁶	₋₅	23.4	⁻⁸⁴	₋₅	17.5	⁻⁹¹	₋₄	11.1	⁻⁹⁷	₋₃	4.2	⁻¹⁰²	₋₃	-6.0	⁻¹⁰⁶	₋₂	-16.6					
Oct 29	29	44.0	⁻⁶	₋₉	43.5	⁻¹⁹	₋₉	42.2	⁻³²	₋₈	40.0	⁻⁴³	₋₈	36.9	⁻⁵⁵	₋₈	33.1	⁻⁶⁵	₋₇	28.5	⁻⁷⁵	₋₇	23.2	⁻⁸³	₋₆	17.3	⁻⁹⁰	₋₅	11.0	⁻⁹⁶	₋₅	4.2	⁻¹⁰¹	₋₄	-6.0	⁻¹⁰⁴	₋₂	-16.5					
Oct 30	30	43.4	⁻⁶	₋₁₀	43.0	⁻¹⁹	₋₁₀	41.6	⁻³¹	₋₉	39.4	⁻⁴³	₋₉	36.4	⁻⁵⁴	₋₉	32.6	⁻⁶⁴	₋₈	28.1	⁻⁷⁴	₋₇	22.9	⁻⁸²	₋₇	17.1	⁻⁸⁹	₋₆	10.8	⁻⁹⁵	₋₅	4.1	⁻¹⁰⁰	₋₄	-5.9	⁻¹⁰³	₋₃	-16.3					
Oct 31	31	42.7	⁻⁶	₋₁₀	42.3	⁻¹⁹	₋₁₀	41.0	⁻³¹	₋₁₀	38.8	⁻⁴²	₋₉	35.9	⁻⁵³	₋₉	32.1	⁻⁶³	₋₈	27.6	⁻⁷³	₋₈	22.5	⁻⁸¹	₋₇	16.8	⁻⁸⁸	₋₆	10.7	⁻⁹³	₋₅	4.1	⁻⁹⁸	₋₄	-5.8	⁻¹⁰¹	₋₃	-16.0					
Nov 1	1	42.1	⁻⁶	₋₉	41.6	⁻¹⁸	₋₉	40.3	⁻³⁰	₋₉	38.2	⁻⁴¹	₋₉	35.3	⁻⁵²	₋₈	31.6	⁻⁶²	₋₈	27.2	⁻⁷¹	₋₇	22.2	⁻⁷⁹	₋₆	16.6	⁻⁸⁶	₋₆	10.5	⁻⁹²	₋₅	4.0	⁻⁹⁷	₋₄	-5.7	⁻¹⁰⁰	₋₃	-15.8					
Nov 2	2	41.4	⁻⁶	₋₈	41.0	⁻¹⁸	₋₈	39.7	⁻³⁰	₋₈	37.6	⁻⁴¹	₋₈	34.7	⁻⁵²	₋₇	31.1	⁻⁶¹	₋₇	26.8	⁻⁷⁰	₋₆	21.8	⁻⁷⁸	₋₆	16.3	⁻⁸⁵	₋₅	10.3	⁻⁹⁰	₋₄	4.0	⁻⁹⁵	₋₃	-5.6	⁻⁹⁸	₋₂	-15.5					
Nov 3	3	40.8	⁻⁶	₋₇	40.4	⁻¹⁸	₋₇	39.2	⁻²⁹	₋₇	37.1	⁻⁴⁰	₋₇	34.3	⁻⁵¹	₋₆	30.7	⁻⁶¹																									

Lower Limb																																										
Altitude degrees																																										
	0			7			14			21			28			35			42			49			56			63			70			80			90					
	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t	'	a	t
Nov 19	74.2	⁻⁶ ₁₀	73.7	⁻¹⁹ ₉	72.4	⁻³¹ ₉	70.3	⁻⁴² ₉	67.3	⁻⁵⁴ ₈	63.6	⁻⁶⁴ ₈	59.2	⁻⁷³ ₇	54.1	⁻⁸¹ ₇	48.5	⁻⁸⁸ ₆	42.3	⁻⁹⁴ ₅	35.8	⁻⁹⁹ ₄	26.0	⁻¹⁰² ₃	15.9																	
Nov 20	75.3	⁻⁶ ₉	74.9	⁻¹⁹ ₉	73.6	⁻³¹ ₉	71.4	⁻⁴³ ₈	68.4	⁻⁵⁴ ₈	64.6	⁻⁶⁵ ₇	60.1	⁻⁷⁴ ₇	55.0	⁻⁸² ₆	49.2	⁻⁹⁰ ₅	43.0	⁻⁹⁵ ₅	36.4	⁻¹⁰⁰ ₄	26.4	⁻¹⁰⁴ ₃	16.1																	
Nov 21	76.4	⁻⁶ ₇	76.0	⁻¹⁹ ₇	74.6	⁻³² ₇	72.4	⁻⁴⁴ ₇	69.4	⁻⁵⁵ ₇	65.5	⁻⁶⁶ ₆	61.0	⁻⁷⁵ ₆	55.7	⁻⁸⁴ ₅	49.9	⁻⁹¹ ₅	43.6	⁻⁹⁷ ₄	36.9	⁻¹⁰² ₃	26.8	⁻¹⁰⁵ ₂	16.4																	
Nov 22	77.3	⁻⁶ ₅	76.8	⁻¹⁹ ₅	75.5	⁻³² ₅	73.3	⁻⁴⁴ ₅	70.2	⁻⁵⁶ ₄	66.3	⁻⁶⁶ ₄	61.7	⁻⁷⁶ ₄	56.4	⁻⁸⁴ ₃	50.5	⁻⁹² ₃	44.1	⁻⁹⁸ ₃	37.3	⁻¹⁰³ ₂	27.1	⁻¹⁰⁶ ₁	16.6																	
Nov 23	77.9	⁻⁷ ₂	77.4	⁻¹⁹ ₂	76.1	⁻³² ₂	73.8	⁻⁴⁴ ₂	70.7	⁻⁵⁶ ₂	66.8	⁻⁶⁷ ₂	62.2	⁻⁷⁶ ₁	56.8	⁻⁸⁵ ₁	50.9	⁻⁹² ₁	44.5	⁻⁹⁸ ₁	37.6	⁻¹⁰³ ₁	27.3	⁻¹⁰⁶ ₁	16.7																	
Nov 24	78.1	⁻⁷ ₋₂	77.7	⁻¹⁹ ₋₂	76.3	⁻³² ₋₂	74.0	⁻⁴⁴ ₋₂	70.9	⁻⁵⁶ ₋₂	67.0	⁻⁶⁷ ₋₁	62.3	⁻⁷⁶ ₋₁	57.0	⁻⁸⁵ ₋₁	51.1	⁻⁹² ₋₁	44.6	⁻⁹⁸ ₋₁	37.7	⁻¹⁰³ ₋₁	27.4	⁻¹⁰⁶ ₀	16.7																	
Nov 25	77.9	⁻⁶ ₋₅	77.5	⁻¹⁹ ₋₅	76.1	⁻³² ₋₅	73.8	⁻⁴⁴ ₋₅	70.7	⁻⁵⁶ ₋₅	66.8	⁻⁶⁶ ₋₄	62.2	⁻⁷⁶ ₋₄	56.8	⁻⁸⁴ ₋₄	50.9	⁻⁹² ₋₃	44.5	⁻⁹⁸ ₋₃	37.6	⁻¹⁰³ ₋₂	27.3	⁻¹⁰⁶ ₋₁	16.7																	
Nov 26	77.3	⁻⁶ ₋₈	76.8	⁻¹⁹ ₋₈	75.5	⁻³² ₋₈	73.3	⁻⁴⁴ ₋₇	70.2	⁻⁵⁵ ₋₇	66.3	⁻⁶⁶ ₋₇	61.7	⁻⁷⁵ ₋₆	56.4	⁻⁸⁴ ₋₅	50.5	⁻⁹¹ ₋₅	44.1	⁻⁹⁷ ₋₄	37.3	⁻¹⁰² ₋₃	27.1	⁻¹⁰⁵ ₋₂	16.6																	
Nov 27	76.3	⁻⁶ ₋₁₀	75.9	⁻¹⁹ ₋₉	74.6	⁻³¹ ₋₉	72.4	⁻⁴³ ₋₉	69.3	⁻⁵⁴ ₋₉	65.5	⁻⁶⁵ ₋₈	60.9	⁻⁷⁴ ₋₇	55.7	⁻⁸² ₋₇	49.9	⁻⁸⁹ ₋₆	43.6	⁻⁹⁵ ₋₅	36.9	⁻¹⁰⁰ ₋₄	26.8	⁻¹⁰³ ₋₃	16.3																	
Nov 28	75.2	⁻⁶ ₋₁₀	74.8	⁻¹⁹ ₋₁₀	73.4	⁻³¹ ₋₁₀	71.3	⁻⁴² ₋₁₀	68.3	⁻⁵³ ₋₉	64.5	⁻⁶⁴ ₋₉	60.0	⁻⁷³ ₋₈	54.9	⁻⁸¹ ₋₇	49.1	⁻⁸⁸ ₋₆	42.9	⁻⁹⁴ ₋₅	36.3	⁻⁹⁹ ₋₄	26.4	⁻¹⁰² ₋₃	16.1																	
Nov 29	73.9	⁻⁶ ₋₁₀	73.5	⁻¹⁸ ₋₁₀	72.2	⁻³⁰ ₋₁₀	70.1	⁻⁴² ₋₉	67.1	⁻⁵³ ₋₉	63.4	⁻⁶³ ₋₈	59.0	⁻⁷² ₋₈	54.0	⁻⁸⁰ ₋₇	48.3	⁻⁸⁷ ₋₆	42.2	⁻⁹² ₋₅	35.7	⁻⁹⁷ ₋₄	25.9	⁻¹⁰⁰ ₋₃	15.8																	
Nov 30	72.7	⁻⁶ ₋₉	72.3	⁻¹⁸ ₋₉	71.0	⁻³⁰ ₋₉	68.9	⁻⁴¹ ₋₉	66.0	⁻⁵² ₋₈	62.4	⁻⁶² ₋₈	58.0	⁻⁷¹ ₋₇	53.1	⁻⁷⁸ ₋₆	47.5	⁻⁸⁵ ₋₆	41.5	⁻⁹¹ ₋₅	35.1	⁻⁹⁵ ₋₄	25.5	⁻⁹⁸ ₋₃	15.6																	
Dec 1	71.6	⁻⁶ ₋₈	71.2	⁻¹⁸ ₋₈	69.9	⁻²⁹ ₋₈	67.9	⁻⁴⁰ ₋₇	65.0	⁻⁵¹ ₋₇	61.4	⁻⁶¹ ₋₇	57.1	⁻⁷⁰ ₋₆	52.2	⁻⁷⁷ ₋₆	46.8	⁻⁸⁴ ₋₅	40.9	⁻⁸⁹ ₋₄	34.6	⁻⁹⁴ ₋₃	25.1	⁻⁹⁷ ₋₂	15.3																	
Dec 2	70.6	⁻⁶ ₋₆	70.2	⁻¹⁸ ₋₆	69.0	⁻²⁹ ₋₆	66.9	⁻⁴⁰ ₋₆	64.1	⁻⁵⁰ ₋₆	60.6	⁻⁶⁰ ₋₅	56.4	⁻⁶⁹ ₋₅	51.5	⁻⁷⁶ ₋₄	46.2	⁻⁸³ ₋₄	40.3	⁻⁸⁸ ₋₃	34.1	⁻⁹³ ₋₃	24.8	⁻⁹⁶ ₋₂	15.1																	
Dec 3	69.9	⁻⁶ ₋₅	69.5	⁻¹⁷ ₋₅	68.2	⁻²⁹ ₋₅	66.2	⁻⁴⁰ ₋₄	63.4	⁻⁵⁰ ₋₄	59.9	⁻⁵⁹ ₋₄	55.8	⁻⁶⁸ ₋₄	51.0	⁻⁷⁶ ₋₃	45.7	⁻⁸² ₋₃	39.9	⁻⁸⁷ ₋₃	33.7	⁻⁹² ₋₂	24.5	⁻⁹⁵ ₋₁	15.0																	
Dec 4	69.3	⁻⁶ ₋₃	68.9	⁻¹⁷ ₋₃	67.7	⁻²⁸ ₋₃	65.7	⁻³⁹ ₋₃	62.9	⁻⁴⁹ ₋₃	59.4	⁻⁵⁹ ₋₃	55.3	⁻⁶⁸ ₋₂	50.6	⁻⁷⁵ ₋₂	45.3	⁻⁸² ₋₂	39.6	⁻⁸⁷ ₋₂	33.5	⁻⁹¹ ₋₁	24.3	⁻⁹⁴ ₋₁	14.8																	
Dec 5	68.9	⁻⁶ ₋₂	68.5	⁻¹⁷ ₋₂	67.3	⁻²⁸ ₋₂	65.3	⁻³⁹ ₋₁	62.6	⁻⁴⁹ ₋₁	59.1	⁻⁵⁹ ₋₁	55.0	⁻⁶⁷ ₋₁	50.3	⁻⁷⁵ ₋₁	45.0	⁻⁸¹ ₋₁	39.3	⁻⁸⁷ ₋₁	33.3	⁻⁹¹ ₋₁	24.2	⁻⁹⁴ ₀	14.8																	
Dec 6	68.7	⁻⁶ ₀	68.3	⁻¹⁷ ₀	67.1	⁻²⁸ ₀	65.1	⁻³⁹ ₀	62.4	⁻⁴⁹ ₀	59.0	⁻⁵⁹ ₀	54.9	⁻⁶⁷ ₀	50.1	⁻⁷⁵ ₀	44.9	⁻⁸¹ ₀	39.2	⁻⁸⁶ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Dec 7	68.7	⁻⁶ ₁	68.3	⁻¹⁷ ₁	67.1	⁻²⁸ ₁	65.1	⁻³⁹ ₁	62.4	⁻⁴⁹ ₁	58.9	⁻⁵⁹ ₁	54.8	⁻⁶⁷ ₁	50.1	⁻⁷⁵ ₁	44.9	⁻⁸¹ ₁	39.2	⁻⁸⁶ ₀	33.2	⁻⁹¹ ₀	24.1	⁻⁹⁴ ₀	14.7																	
Dec 8	68.8	⁻⁶ ₂	68.4	⁻¹⁷ ₂	67.2	⁻²⁸ ₂	65.2	⁻³⁹ ₂	62.5	⁻⁴⁹ ₂	59.0	⁻⁵⁹ ₂	54.9	⁻⁶⁷ ₁	50.2	⁻⁷⁵ ₁	45.0	⁻⁸¹ ₁	39.3	⁻⁸⁷ ₁	33.2	⁻⁹¹ ₁	24.1	⁻⁹⁴ ₁	14.7																	
Dec 9	69.0	⁻⁶ ₃	68.6	⁻¹⁷ ₃	67.4	⁻²⁹ ₃	65.4	⁻³⁹ ₂	62.7	⁻⁵⁰ ₂	59.2	⁻⁵⁹ ₂	55.1	⁻⁶⁸ ₂	50.4	⁻⁷⁵ ₂	45.1	⁻⁸² ₂	39.4	⁻⁸⁷ ₁	33.3	⁻⁹² ₁	24.2	⁻⁹⁴ ₁	14.8																	
Dec 10	69.3	⁻⁶ ₃	68.9	⁻¹⁷ ₃	67.7	⁻²⁹ ₃	65.7	⁻⁴⁰ ₃	63.0	⁻⁵⁰ ₃	59.5	⁻⁵⁹ ₃	55.3	⁻⁶⁸ ₃	50.6	⁻⁷⁶ ₂	45.3	⁻⁸² ₂	39.6	⁻⁸⁷ ₂	33.5	⁻⁹² ₁	24.3	⁻⁹⁵ ₁	14.8																	
Dec 11	69.8	⁻⁶ ₄	69.3	⁻¹⁷ ₄	68.1	⁻²⁹ ₄	66.1	⁻⁴⁰ ₄	63.3	⁻⁵⁰ ₄	59.8	⁻⁶⁰ ₃	55.7	⁻⁶⁸ ₃	50.9	⁻⁷⁶ ₃	45.6	⁻⁸³ ₂	39.8	⁻⁸⁸ ₂	33.7	⁻⁹³ ₂	24.5	⁻⁹⁶ ₁	14.9																	
Dec 12	70.2	⁻⁶ ₅	69.8	⁻¹⁸ ₅	68.6	⁻²⁹ ₅	66.6	⁻⁴⁰ ₄	63.8	⁻⁵¹ ₄	60.3	⁻⁶⁰ ₄	56.1	⁻⁶⁹ ₄	51.3	⁻⁷⁷ ₃	45.9	⁻⁸³ ₃	40.1	⁻⁸⁹ ₂	33.9	⁻⁹³ ₂	24.6	⁻⁹⁶ ₁	15.0																	
Dec 13	70.8	⁻⁶ ₅	70.4	⁻¹⁸ ₅	69.2	⁻²⁹ ₅	67.1	⁻⁴⁰ ₅	64.3	⁻⁵¹ ₅	60.7	⁻⁶¹ ₄	56.5	⁻⁷⁰ ₄	51.7	⁻⁷⁷ ₄	46.3	⁻⁸⁴ ₃	40.4	⁻⁸⁹ ₃	34.2	⁻⁹⁴ ₂	24.8	⁻⁹⁷ ₂	15.2																	
Dec 14	71.5	⁻⁶ ₆	71.0	⁻¹⁸ ₆	69.8	⁻³⁰ ₆	67.7	⁻⁴¹ ₆	64.9	⁻⁵¹ ₅	61.3	⁻⁶¹ ₅	57.0	⁻⁷⁰ ₅	52.1	⁻⁷⁸ ₄	46.7	⁻⁸⁵ ₄	40.8	⁻⁹⁰ ₃	34.5	⁻⁹⁵ ₃	25.1	⁻⁹⁸ ₂	15.3																	
Dec 15	72.2	⁻⁶ ₇	71.8	⁻¹⁸ ₇	70.5	⁻³⁰ ₆	68.4	⁻⁴¹ ₆	65.5	⁻⁵² ₆	61.9	⁻⁶² ₆	57.6	⁻⁷¹ ₅	52.7	⁻⁷⁹ ₅	47.2	⁻⁸⁶ ₄	41.2	⁻⁹¹ ₄	34.9	⁻⁹⁶ ₃	25.3	⁻⁹⁹ ₂	15.5																	
Dec 16	73.0	⁻⁶ ₇	72.6	⁻¹⁸ ₇	71.3	⁻³⁰ ₇	69.2	⁻⁴² ₇	66.3	⁻⁵³ ₆	62.6	⁻⁶³ ₆	58.3	⁻⁷² ₆	53.3	⁻⁸⁰ ₅	47.7	⁻⁸⁷ ₄	41.7	⁻⁹² ₄	35.2	⁻⁹⁷ ₃	25.6	⁻¹⁰⁰ ₂	15.6																	
Dec 17	73.9	⁻⁶ ₇	73.4	⁻¹⁹ ₇	72.1	⁻³¹ ₇	70.0	⁻⁴² ₇	67.1	⁻⁵³ ₇	63.4	⁻⁶³ ₆	59.0	⁻⁷³ ₆	53.9	⁻⁸¹ ₅	48.3	⁻⁸⁸ ₅	42.2	⁻⁹³ ₄	35.7	⁻⁹⁸ ₃	25.9	⁻¹⁰¹ ₂	15.8																	
Dec 18	74.8	⁻⁶ ₇	74.3	⁻¹⁹ ₇	73.0	⁻³¹ ₇	70.9	⁻⁴³ ₇	67.9	⁻⁵⁴ ₆	64.1	⁻⁶⁴ ₆	59.7	⁻⁷⁴ ₆	54.6	⁻⁸² ₅	48.9	⁻⁸⁹ ₄	42.7	⁻⁹⁵ ₄	36.1	⁻⁹⁹ ₃	26.2	⁻¹⁰³ ₂	16.0																	
Dec 19	75.6	⁻⁶ ₆	75.2	⁻¹⁹ ₆	73.9	⁻³¹ ₆	71.7	⁻⁴³ ₆	68.7	⁻⁵⁴ ₆	64.9	⁻⁶⁵ ₅	60.4	⁻⁷⁴ ₅	55.2	⁻⁸³ ₄	49.4	⁻⁹⁰ ₄	43.2	⁻⁹⁶ ₃	36.5	⁻¹⁰¹ ₃	26.5	⁻¹⁰⁴ ₂	16.2																	
Dec 20	76.4	⁻⁶ ₅	76.0	⁻¹⁹ ₅	74.6	⁻³² ₅	72.4	⁻⁴⁴ ₅	69.4	⁻⁵⁵ ₄	65.5	⁻⁶⁵ ₄	61.0	⁻⁷⁵ ₄	55.8	⁻⁸³ ₃	49.9	⁻⁹¹ ₃	43.6	⁻⁹⁶ ₃	36.9	⁻¹⁰¹ ₂	26.8	⁻¹⁰⁵ ₁	16.4																	
Dec 21	77.0	⁻⁶ ₃	76.5	⁻¹⁹ ₃	75.2	⁻³² ₂	73.0	⁻⁴⁴ ₂	69.9	⁻⁵⁵ ₂	66.0	⁻⁶⁶ ₂	61.4	⁻⁷⁵ ₂	56.2	⁻⁸⁴ ₂	50.3	⁻⁹¹ ₂	44.0	⁻⁹⁷ ₁	37.2	⁻¹⁰² ₁	27.0	⁻¹⁰⁵ ₁	16.5																	
Dec 22	77.3	⁻⁶ ₀	76.8	⁻¹⁹ ₀	75.5	⁻³² ₀	73.3	⁻⁴⁴ ₀	70.2	⁻⁵⁵ ₀	66.3	⁻⁶⁶ ₀	61.7	⁻⁷⁶ ₀	56.4	⁻⁸⁴ ₀	50.5	⁻⁹¹ ₀	44.1	⁻⁹⁷ ₀	37.3	⁻¹⁰² ₀	27.1	⁻¹⁰⁵ ₀	16.6																	
Dec 23	77.3	⁻⁶ ₋₃	76.8	⁻¹⁹ ₋₃	75.5	⁻³² ₋₃	73.2	⁻⁴⁴ ₋₃	70.2	⁻⁵⁵ ₋₃	66.3	⁻⁶⁶ ₋₃	61.7	⁻⁷⁵ ₋₂	56.4	⁻⁸⁴ ₋₂	50.5	⁻⁹¹ ₋₂	44.1	⁻⁹⁷ ₋₂	37.3	⁻¹⁰² ₋₁	27.1	⁻¹⁰⁵ ₋₁	16.5																	
Dec 24	76.9	⁻⁶ ₋₆	76.4	⁻¹⁹ ₋₆	75.1	⁻³² ₋₆	72.9	^{-44</}																																		

