

Meridional Parts Table

▼ ▼	0°		1°		2°		3°		4°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	0.0	-	60.0	16299.6	120.0	13916.4	180.1	12522.1	240.2	11532.5	60'
1'	1.0	30375.0	61.0	16242.7	121.0	13887.9	181.1	12503.1	241.2	11518.2	59'
2'	2.0	27992.1	62.0	16186.8	122.0	13859.6	182.1	12484.1	242.2	11504.0	58'
3'	3.0	26598.2	63.0	16131.8	123.0	13831.5	183.1	12465.3	243.2	11489.8	57'
4'	4.0	25609.2	64.0	16077.7	124.0	13803.7	184.1	12446.5	244.2	11475.6	56'
5'	5.0	24842.1	65.0	16024.4	125.0	13776.1	185.1	12427.9	245.2	11461.6	55'
6'	6.0	24215.3	66.0	15971.9	126.0	13748.7	186.1	12409.3	246.2	11447.6	54'
7'	7.0	23685.4	67.0	15920.2	127.0	13721.5	187.1	12390.9	247.2	11433.6	53'
8'	8.0	23226.4	68.0	15869.3	128.0	13694.5	188.1	12372.5	248.2	11419.7	52'
9'	9.0	22821.5	69.0	15819.1	129.0	13667.8	189.1	12354.3	249.2	11405.9	51'
10'	10.0	22459.3	70.0	15769.6	130.0	13641.2	190.1	12336.1	250.2	11392.1	50'
11'	11.0	22131.6	71.0	15720.8	131.0	13614.9	191.1	12318.1	251.2	11378.3	49'
12'	12.0	21832.5	72.0	15672.7	132.0	13588.7	192.1	12300.1	252.2	11364.6	48'
13'	13.0	21557.3	73.0	15625.3	133.0	13562.8	193.1	12282.3	253.2	11351.0	47'
14'	14.0	21302.5	74.0	15578.5	134.0	13537.0	194.1	12264.5	254.2	11337.4	46'
15'	15.0	21065.4	75.0	15532.4	135.0	13511.4	195.1	12246.8	255.2	11323.9	45'
16'	16.0	20843.5	76.0	15486.9	136.0	13486.1	196.1	12229.2	256.2	11310.5	44'
17'	17.0	20635.1	77.0	15441.9	137.0	13460.9	197.1	12211.7	257.2	11297.0	43'
18'	18.0	20438.6	78.0	15397.6	138.0	13435.9	198.1	12194.3	258.2	11283.7	42'
19'	19.0	20252.7	79.0	15353.8	139.0	13411.0	199.1	12177.0	259.2	11270.4	41'
20'	20.0	20076.4	80.0	15310.5	140.0	13386.4	200.1	12159.7	260.2	11257.1	40'
21'	21.0	19908.7	81.0	15267.8	141.0	13361.9	201.1	12142.6	261.3	11243.9	39'
22'	22.0	19748.7	82.0	15225.6	142.0	13337.6	202.1	12125.5	262.3	11230.7	38'
23'	23.0	19595.9	83.0	15183.9	143.0	13313.5	203.1	12108.5	263.3	11217.6	37'
24'	24.0	19449.6	84.0	15142.8	144.0	13289.5	204.1	12091.6	264.3	11204.6	36'
25'	25.0	19309.3	85.0	15102.1	145.0	13265.7	205.1	12074.8	265.3	11191.6	35'
26'	26.0	19174.4	86.0	15061.9	146.0	13242.1	206.1	12058.0	266.3	11178.6	34'
27'	27.0	19044.7	87.0	15022.1	147.0	13218.6	207.1	12041.4	267.3	11165.7	33'
28'	28.0	18919.7	88.0	14982.8	148.0	13195.3	208.1	12024.8	268.3	11152.8	32'
29'	29.0	18799.0	89.0	14944.0	149.0	13172.1	209.1	12008.3	269.3	11140.0	31'
30'	30.0	18682.5	90.0	14905.6	150.0	13149.1	210.1	11991.9	270.3	11127.2	30'
31'	31.0	18569.8	91.0	14867.6	151.0	13126.3	211.1	11975.6	271.3	11114.5	29'
32'	32.0	18460.6	92.0	14830.0	152.0	13103.6	212.1	11959.3	272.3	11101.8	28'
33'	33.0	18354.8	93.0	14792.8	153.1	13081.0	213.1	11943.1	273.3	11089.2	27'
34'	34.0	18252.2	94.0	14756.1	154.1	13058.6	214.1	11927.0	274.3	11076.6	26'
35'	35.0	18152.5	95.0	14719.7	155.1	13036.4	215.1	11910.9	275.3	11064.1	25'
36'	36.0	18055.7	96.0	14683.7	156.1	13014.2	216.1	11895.0	276.3	11051.6	24'
37'	37.0	17961.5	97.0	14648.0	157.1	12992.3	217.1	11879.1	277.3	11039.2	23'
38'	38.0	17869.8	98.0	14612.8	158.1	12970.4	218.1	11863.3	278.3	11026.8	22'
39'	39.0	17780.5	99.0	14577.9	159.1	12948.7	219.1	11847.5	279.3	11014.4	21'
40'	40.0	17693.5	100.0	14543.3	160.1	12927.2	220.2	11831.9	280.3	11002.1	20'
41'	41.0	17608.6	101.0	14509.1	161.1	12905.8	221.2	11816.3	281.3	10989.8	19'
42'	42.0	17525.8	102.0	14475.2	162.1	12884.5	222.2	11800.7	282.3	10977.6	18'
43'	43.0	17444.9	103.0	14441.7	163.1	12863.3	223.2	11785.3	283.3	10965.4	17'
44'	44.0	17365.8	104.0	14408.5	164.1	12842.3	224.2	11769.9	284.3	10953.3	16'
45'	45.0	17288.6	105.0	14375.6	165.1	12821.4	225.2	11754.6	285.3	10941.2	15'
46'	46.0	17213.0	106.0	14343.0	166.1	12800.6	226.2	11739.3	286.3	10929.1	14'
47'	47.0	17139.1	107.0	14310.7	167.1	12779.9	227.2	11724.1	287.3	10917.1	13'
48'	48.0	17066.7	108.0	14278.7	168.1	12759.4	228.2	11709.0	288.3	10905.1	12'
49'	49.0	16995.8	109.0	14247.0	169.1	12739.0	229.2	11693.9	289.3	10893.2	11'
50'	50.0	16926.4	110.0	14215.6	170.1	12718.7	230.2	11678.9	290.3	10881.3	10'
51'	51.0	16858.3	111.0	14184.5	171.1	12698.5	231.2	11664.0	291.3	10869.5	9'
52'	52.0	16791.5	112.0	14153.7	172.1	12678.5	232.2	11649.2	292.4	10857.7	8'
53'	53.0	16726.0	113.0	14123.1	173.1	12658.5	233.2	11634.4	293.4	10845.9	7'
54'	54.0	16661.8	114.0	14092.8	174.1	12638.7	234.2	11619.6	294.4	10834.2	6'
55'	55.0	16598.7	115.0	14062.8	175.1	12619.0	235.2	11605.0	295.4	10822.5	5'
56'	56.0	16536.7	116.0	14033.0	176.1	12599.4	236.2	11590.3	296.4	10810.8	4'
57'	57.0	16475.9	117.0	14003.5	177.1	12579.9	237.2	11575.8	297.4	10799.2	3'
58'	58.0	16416.1	118.0	13974.2	178.1	12560.5	238.2	11561.3	298.4	10787.6	2'
59'	59.0	16357.3	119.0	13945.2	179.1	12541.3	239.2	11546.9	299.4	10776.1	1'
60'	60.0	16299.6	120.0	13916.4	180.1	12522.1	240.2	11532.5	300.4	10764.6	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
		89°		88°		87°		86°		85°	

▼ ▼	5°		6°		7°		8°		9°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	300.4	10764.6	360.7	10136.9	421.0	9605.8	481.6	9145.5	542.2	8739.1	60'
1'	301.4	10753.2	361.7	10127.3	422.1	9597.6	482.6	9138.3	543.2	8732.7	59'
2'	302.4	10741.7	362.7	10117.8	423.1	9589.4	483.6	9131.1	544.3	8726.3	58'
3'	303.4	10730.4	363.7	10108.3	424.1	9581.3	484.6	9124.0	545.3	8719.9	57'
4'	304.4	10719.0	364.7	10098.8	425.1	9573.2	485.6	9116.8	546.3	8713.6	56'
5'	305.4	10707.7	365.7	10089.4	426.1	9565.0	486.6	9109.7	547.3	8707.2	55'
6'	306.4	10696.5	366.7	10080.0	427.1	9556.9	487.6	9102.6	548.3	8700.9	54'
7'	307.4	10685.2	367.7	10070.6	428.1	9548.9	488.6	9095.5	549.3	8694.6	53'
8'	308.4	10674.0	368.7	10061.2	429.1	9540.8	489.6	9088.4	550.3	8688.3	52'
9'	309.4	10662.9	369.7	10051.8	430.1	9532.7	490.7	9081.4	551.3	8682.0	51'
10'	310.4	10651.7	370.7	10042.5	431.1	9524.7	491.7	9074.3	552.4	8675.7	50'
11'	311.4	10640.7	371.7	10033.2	432.1	9516.7	492.7	9067.3	553.4	8669.4	49'
12'	312.4	10629.6	372.7	10023.9	433.1	9508.7	493.7	9060.3	554.4	8663.2	48'
13'	313.4	10618.6	373.7	10014.7	434.1	9500.8	494.7	9053.3	555.4	8656.9	47'
14'	314.4	10607.6	374.7	10005.5	435.2	9492.8	495.7	9046.3	556.4	8650.7	46'
15'	315.4	10596.7	375.7	9996.3	436.2	9484.9	496.7	9039.3	557.4	8644.5	45'
16'	316.4	10585.8	376.8	9987.1	437.2	9477.0	497.7	9032.4	558.4	8638.3	44'
17'	317.5	10574.9	377.8	9978.0	438.2	9469.1	498.7	9025.4	559.5	8632.1	43'
18'	318.5	10564.0	378.8	9968.8	439.2	9461.2	499.8	9018.5	560.5	8625.9	42'
19'	319.5	10553.2	379.8	9959.7	440.2	9453.3	500.8	9011.6	561.5	8619.7	41'
20'	320.5	10542.5	380.8	9950.7	441.2	9445.5	501.8	9004.6	562.5	8613.5	40'
21'	321.5	10531.7	381.8	9941.6	442.2	9437.7	502.8	8997.8	563.5	8607.3	39'
22'	322.5	10521.0	382.8	9932.6	443.2	9429.8	503.8	8990.9	564.5	8601.2	38'
23'	323.5	10510.3	383.8	9923.6	444.2	9422.1	504.8	8984.0	565.5	8595.1	37'
24'	324.5	10499.7	384.8	9914.6	445.2	9414.3	505.8	8977.2	566.5	8588.9	36'
25'	325.5	10489.1	385.8	9905.6	446.2	9406.5	506.8	8970.3	567.6	8582.8	35'
26'	326.5	10478.5	386.8	9896.7	447.3	9398.8	507.8	8963.5	568.6	8576.7	34'
27'	327.5	10468.0	387.8	9887.8	448.3	9391.1	508.8	8956.7	569.6	8570.6	33'
28'	328.5	10457.4	388.8	9878.9	449.3	9383.4	509.9	8949.9	570.6	8564.5	32'
29'	329.5	10447.0	389.8	9870.0	450.3	9375.7	510.9	8943.1	571.6	8558.4	31'
30'	330.5	10436.5	390.8	9861.2	451.3	9368.0	511.9	8936.3	572.6	8552.4	30'
31'	331.5	10426.1	391.8	9852.3	452.3	9360.4	512.9	8929.6	573.6	8546.3	29'
32'	332.5	10415.7	392.9	9843.5	453.3	9352.7	513.9	8922.8	574.7	8540.3	28'
33'	333.5	10405.4	393.9	9834.8	454.3	9345.1	514.9	8916.1	575.7	8534.3	27'
34'	334.5	10395.0	394.9	9826.0	455.3	9337.5	515.9	8909.4	576.7	8528.2	26'
35'	335.5	10384.7	395.9	9817.3	456.3	9329.9	516.9	8902.7	577.7	8522.2	25'
36'	336.5	10374.5	396.9	9808.6	457.3	9322.3	517.9	8896.0	578.7	8516.2	24'
37'	337.5	10364.2	397.9	9799.9	458.4	9314.8	519.0	8889.3	579.7	8510.2	23'
38'	338.5	10354.0	398.9	9791.2	459.4	9307.2	520.0	8882.6	580.7	8504.2	22'
39'	339.6	10343.9	399.9	9782.6	460.4	9299.7	521.0	8876.0	581.8	8498.3	21'
40'	340.6	10333.7	400.9	9773.9	461.4	9292.2	522.0	8869.3	582.8	8492.3	20'
41'	341.6	10323.6	401.9	9765.3	462.4	9284.7	523.0	8862.7	583.8	8486.4	19'
42'	342.6	10313.5	402.9	9756.8	463.4	9277.3	524.0	8856.1	584.8	8480.4	18'
43'	343.6	10303.5	403.9	9748.2	464.4	9269.8	525.0	8849.5	585.8	8474.5	17'
44'	344.6	10293.4	404.9	9739.7	465.4	9262.4	526.0	8842.9	586.8	8468.6	16'
45'	345.6	10283.5	405.9	9731.1	466.4	9254.9	527.1	8836.3	587.8	8462.7	15'
46'	346.6	10273.5	406.9	9722.6	467.4	9247.5	528.1	8829.7	588.9	8456.8	14'
47'	347.6	10263.5	408.0	9714.2	468.4	9240.1	529.1	8823.2	589.9	8450.9	13'
48'	348.6	10253.6	409.0	9705.7	469.5	9232.8	530.1	8816.6	590.9	8445.0	12'
49'	349.6	10243.8	410.0	9697.3	470.5	9225.4	531.1	8810.1	591.9	8439.1	11'
50'	350.6	10233.9	411.0	9688.9	471.5	9218.1	532.1	8803.6	592.9	8433.3	10'
51'	351.6	10224.1	412.0	9680.5	472.5	9210.7	533.1	8797.1	593.9	8427.4	9'
52'	352.6	10214.3	413.0	9672.1	473.5	9203.4	534.1	8790.6	594.9	8421.6	8'
53'	353.6	10204.5	414.0	9663.7	474.5	9196.1	535.1	8784.1	596.0	8415.7	7'
54'	354.6	10194.8	415.0	9655.4	475.5	9188.8	536.2	8777.6	597.0	8409.9	6'
55'	355.6	10185.1	416.0	9647.1	476.5	9181.6	537.2	8771.2	598.0	8404.1	5'
56'	356.6	10175.4	417.0	9638.8	477.5	9174.3	538.2	8764.7	599.0	8398.3	4'
57'	357.6	10165.7	418.0	9630.5	478.5	9167.1	539.2	8758.3	600.0	8392.5	3'
58'	358.6	10156.1	419.0	9622.3	479.5	9159.9	540.2	8751.9	601.0	8386.7	2'
59'	359.7	10146.5	420.0	9614.0	480.6	9152.7	541.2	8745.5	602.1	8381.0	1'
60'	360.7	10136.9	421.0	9605.8	481.6	9145.5	542.2	8739.1	603.1	8375.2	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	84°		83°		82°		81°		80°		

▼ ▼	10°		11°		12°		13°		14°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	603.1	8375.2	664.1	8045.7	725.3	7744.6	786.8	7467.2	848.5	7210.1	60'
1'	604.1	8369.4	665.1	8040.5	726.3	7739.8	787.8	7462.8	849.5	7205.9	59'
2'	605.1	8363.7	666.1	8035.2	727.4	7735.0	788.8	7458.3	850.5	7201.8	58'
3'	606.1	8358.0	667.1	8030.0	728.4	7730.2	789.9	7453.9	851.6	7197.7	57'
4'	607.1	8352.2	668.2	8024.8	729.4	7725.4	790.9	7449.5	852.6	7193.6	56'
5'	608.1	8346.5	669.2	8019.6	730.4	7720.6	791.9	7445.0	853.6	7189.5	55'
6'	609.2	8340.8	670.2	8014.4	731.5	7715.8	792.9	7440.6	854.7	7185.4	54'
7'	610.2	8335.1	671.2	8009.2	732.5	7711.1	794.0	7436.2	855.7	7181.3	53'
8'	611.2	8329.4	672.2	8004.0	733.5	7706.3	795.0	7431.8	856.7	7177.2	52'
9'	612.2	8323.7	673.3	7998.9	734.5	7701.5	796.0	7427.4	857.8	7173.1	51'
10'	613.2	8318.1	674.3	7993.7	735.5	7696.8	797.0	7423.0	858.8	7169.0	50'
11'	614.2	8312.4	675.3	7988.5	736.6	7692.1	798.1	7418.6	859.8	7164.9	49'
12'	615.3	8306.8	676.3	7983.4	737.6	7687.3	799.1	7414.3	860.9	7160.8	48'
13'	616.3	8301.1	677.3	7978.2	738.6	7682.6	800.1	7409.9	861.9	7156.7	47'
14'	617.3	8295.5	678.4	7973.1	739.6	7677.9	801.2	7405.5	862.9	7152.7	46'
15'	618.3	8289.9	679.4	7968.0	740.7	7673.1	802.2	7401.1	864.0	7148.6	45'
16'	619.3	8284.3	680.4	7962.8	741.7	7668.4	803.2	7396.8	865.0	7144.5	44'
17'	620.3	8278.6	681.4	7957.7	742.7	7663.7	804.2	7392.4	866.0	7140.5	43'
18'	621.4	8273.0	682.4	7952.6	743.7	7659.0	805.3	7388.1	867.0	7136.4	42'
19'	622.4	8267.5	683.5	7947.5	744.8	7654.3	806.3	7383.7	868.1	7132.4	41'
20'	623.4	8261.9	684.5	7942.4	745.8	7649.7	807.3	7379.4	869.1	7128.3	40'
21'	624.4	8256.3	685.5	7937.3	746.8	7645.0	808.3	7375.1	870.1	7124.3	39'
22'	625.4	8250.7	686.5	7932.3	747.8	7640.3	809.4	7370.7	871.2	7120.3	38'
23'	626.4	8245.2	687.5	7927.2	748.9	7635.6	810.4	7366.4	872.2	7116.2	37'
24'	627.5	8239.7	688.6	7922.1	749.9	7631.0	811.4	7362.1	873.2	7112.2	36'
25'	628.5	8234.1	689.6	7917.1	750.9	7626.3	812.5	7357.8	874.3	7108.2	35'
26'	629.5	8228.6	690.6	7912.0	751.9	7621.7	813.5	7353.5	875.3	7104.2	34'
27'	630.5	8223.1	691.6	7907.0	752.9	7617.0	814.5	7349.2	876.3	7100.2	33'
28'	631.5	8217.6	692.6	7902.0	754.0	7612.4	815.5	7344.9	877.4	7096.2	32'
29'	632.5	8212.1	693.7	7896.9	755.0	7607.8	816.6	7340.6	878.4	7092.2	31'
30'	633.6	8206.6	694.7	7891.9	756.0	7603.2	817.6	7336.3	879.4	7088.2	30'
31'	634.6	8201.1	695.7	7886.9	757.0	7598.5	818.6	7332.0	880.5	7084.2	29'
32'	635.6	8195.6	696.7	7881.9	758.1	7593.9	819.7	7327.7	881.5	7080.2	28'
33'	636.6	8190.1	697.7	7876.9	759.1	7589.3	820.7	7323.5	882.5	7076.2	27'
34'	637.6	8184.7	698.8	7871.9	760.1	7584.7	821.7	7319.2	883.6	7072.2	26'
35'	638.6	8179.2	699.8	7866.9	761.1	7580.1	822.7	7314.9	884.6	7068.3	25'
36'	639.7	8173.8	700.8	7861.9	762.2	7575.5	823.8	7310.7	885.6	7064.3	24'
37'	640.7	8168.4	701.8	7857.0	763.2	7571.0	824.8	7306.4	886.7	7060.3	23'
38'	641.7	8162.9	702.8	7852.0	764.2	7566.4	825.8	7302.2	887.7	7056.4	22'
39'	642.7	8157.5	703.9	7847.1	765.2	7561.8	826.9	7298.0	888.7	7052.4	21'
40'	643.7	8152.1	704.9	7842.1	766.3	7557.3	827.9	7293.7	889.8	7048.5	20'
41'	644.7	8146.7	705.9	7837.2	767.3	7552.7	828.9	7289.5	890.8	7044.5	19'
42'	645.8	8141.3	706.9	7832.2	768.3	7548.1	829.9	7285.3	891.8	7040.6	18'
43'	646.8	8136.0	708.0	7827.3	769.3	7543.6	831.0	7281.0	892.9	7036.6	17'
44'	647.8	8130.6	709.0	7822.4	770.4	7539.1	832.0	7276.8	893.9	7032.7	16'
45'	648.8	8125.2	710.0	7817.5	771.4	7534.5	833.0	7272.6	894.9	7028.8	15'
46'	649.8	8119.9	711.0	7812.6	772.4	7530.0	834.1	7268.4	896.0	7024.8	14'
47'	650.9	8114.5	712.0	7807.7	773.4	7525.5	835.1	7264.2	897.0	7020.9	13'
48'	651.9	8109.2	713.1	7802.8	774.5	7521.0	836.1	7260.0	898.0	7017.0	12'
49'	652.9	8103.8	714.1	7797.9	775.5	7516.4	837.2	7255.8	899.1	7013.1	11'
50'	653.9	8098.5	715.1	7793.0	776.5	7511.9	838.2	7251.6	900.1	7009.2	10'
51'	654.9	8093.2	716.1	7788.1	777.5	7507.4	839.2	7247.5	901.1	7005.3	9'
52'	655.9	8087.9	717.1	7783.3	778.6	7502.9	840.2	7243.3	902.2	7001.4	8'
53'	657.0	8082.6	718.2	7778.4	779.6	7498.5	841.3	7239.1	903.2	6997.5	7'
54'	658.0	8077.3	719.2	7773.5	780.6	7494.0	842.3	7235.0	904.3	6993.6	6'
55'	659.0	8072.0	720.2	7768.7	781.6	7489.5	843.3	7230.8	905.3	6989.7	5'
56'	660.0	8066.7	721.2	7763.9	782.7	7485.0	844.4	7226.6	906.3	6985.8	4'
57'	661.0	8061.5	722.3	7759.0	783.7	7480.6	845.4	7222.5	907.4	6981.9	3'
58'	662.1	8056.2	723.3	7754.2	784.7	7476.1	846.4	7218.3	908.4	6978.1	2'
59'	663.1	8050.9	724.3	7749.4	785.8	7471.7	847.5	7214.2	909.4	6974.2	1'
60'	664.1	8045.7	725.3	7744.6	786.8	7467.2	848.5	7210.1	910.5	6970.3	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	79°		78°		77°		76°		75°		

▼ ▼	15°		16°		17°		18°		19°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	910.5	6970.3	972.7	6745.7	1035.3	6534.4	1098.2	6334.8	1161.5	6145.7	60'
1'	911.5	6966.5	973.8	6742.1	1036.3	6531.0	1099.3	6331.6	1162.5	6142.6	59'
2'	912.5	6962.6	974.8	6738.5	1037.4	6527.6	1100.3	6328.4	1163.6	6139.6	58'
3'	913.6	6958.8	975.8	6734.9	1038.4	6524.2	1101.4	6325.1	1164.7	6136.5	57'
4'	914.6	6954.9	976.9	6731.3	1039.5	6520.8	1102.4	6321.9	1165.7	6133.4	56'
5'	915.6	6951.1	977.9	6727.6	1040.5	6517.4	1103.5	6318.7	1166.8	6130.4	55'
6'	916.7	6947.2	979.0	6724.0	1041.6	6514.0	1104.5	6315.5	1167.8	6127.3	54'
7'	917.7	6943.4	980.0	6720.4	1042.6	6510.6	1105.6	6312.3	1168.9	6124.3	53'
8'	918.7	6939.6	981.1	6716.8	1043.7	6507.2	1106.6	6309.0	1170.0	6121.2	52'
9'	919.8	6935.7	982.1	6713.2	1044.7	6503.8	1107.7	6305.8	1171.0	6118.2	51'
10'	920.8	6931.9	983.1	6709.6	1045.8	6500.4	1108.7	6302.6	1172.1	6115.1	50'
11'	921.9	6928.1	984.2	6706.1	1046.8	6497.0	1109.8	6299.4	1173.1	6112.1	49'
12'	922.9	6924.3	985.2	6702.5	1047.9	6493.6	1110.8	6296.2	1174.2	6109.0	48'
13'	923.9	6920.5	986.3	6698.9	1048.9	6490.2	1111.9	6293.0	1175.2	6106.0	47'
14'	925.0	6916.7	987.3	6695.3	1050.0	6486.9	1112.9	6289.8	1176.3	6103.0	46'
15'	926.0	6912.9	988.3	6691.7	1051.0	6483.5	1114.0	6286.6	1177.4	6099.9	45'
16'	927.0	6909.1	989.4	6688.2	1052.0	6480.1	1115.1	6283.4	1178.4	6096.9	44'
17'	928.1	6905.3	990.4	6684.6	1053.1	6476.7	1116.1	6280.2	1179.5	6093.9	43'
18'	929.1	6901.5	991.5	6681.0	1054.1	6473.4	1117.2	6277.1	1180.5	6090.8	42'
19'	930.1	6897.7	992.5	6677.5	1055.2	6470.0	1118.2	6273.9	1181.6	6087.8	41'
20'	931.2	6893.9	993.5	6673.9	1056.2	6466.7	1119.3	6270.7	1182.7	6084.8	40'
21'	932.2	6890.1	994.6	6670.4	1057.3	6463.3	1120.3	6267.5	1183.7	6081.8	39'
22'	933.3	6886.3	995.6	6666.8	1058.3	6460.0	1121.4	6264.3	1184.8	6078.7	38'
23'	934.3	6882.6	996.7	6663.3	1059.4	6456.6	1122.4	6261.2	1185.8	6075.7	37'
24'	935.3	6878.8	997.7	6659.7	1060.4	6453.3	1123.5	6258.0	1186.9	6072.7	36'
25'	936.4	6875.0	998.8	6656.2	1061.5	6449.9	1124.5	6254.8	1188.0	6069.7	35'
26'	937.4	6871.3	999.8	6652.6	1062.5	6446.6	1125.6	6251.7	1189.0	6066.7	34'
27'	938.4	6867.5	1000.8	6649.1	1063.6	6443.2	1126.6	6248.5	1190.1	6063.7	33'
28'	939.5	6863.8	1001.9	6645.6	1064.6	6439.9	1127.7	6245.3	1191.1	6060.7	32'
29'	940.5	6860.0	1002.9	6642.0	1065.7	6436.6	1128.8	6242.2	1192.2	6057.7	31'
30'	941.6	6856.3	1004.0	6638.5	1066.7	6433.3	1129.8	6239.0	1193.3	6054.7	30'
31'	942.6	6852.5	1005.0	6635.0	1067.8	6429.9	1130.9	6235.9	1194.3	6051.7	29'
32'	943.6	6848.8	1006.1	6631.5	1068.8	6426.6	1131.9	6232.7	1195.4	6048.7	28'
33'	944.7	6845.1	1007.1	6628.0	1069.9	6423.3	1133.0	6229.6	1196.4	6045.7	27'
34'	945.7	6841.3	1008.1	6624.5	1070.9	6420.0	1134.0	6226.5	1197.5	6042.7	26'
35'	946.7	6837.6	1009.2	6621.0	1072.0	6416.7	1135.1	6223.3	1198.6	6039.8	25'
36'	947.8	6833.9	1010.2	6617.5	1073.0	6413.4	1136.1	6220.2	1199.6	6036.8	24'
37'	948.8	6830.2	1011.3	6614.0	1074.1	6410.0	1137.2	6217.0	1200.7	6033.8	23'
38'	949.9	6826.5	1012.3	6610.5	1075.1	6406.7	1138.2	6213.9	1201.8	6030.8	22'
39'	950.9	6822.8	1013.4	6607.0	1076.2	6403.4	1139.3	6210.8	1202.8	6027.8	21'
40'	951.9	6819.0	1014.4	6603.5	1077.2	6400.1	1140.4	6207.7	1203.9	6024.9	20'
41'	953.0	6815.3	1015.5	6600.0	1078.3	6396.9	1141.4	6204.5	1204.9	6021.9	19'
42'	954.0	6811.7	1016.5	6596.5	1079.3	6393.6	1142.5	6201.4	1206.0	6018.9	18'
43'	955.1	6808.0	1017.5	6593.0	1080.4	6390.3	1143.5	6198.3	1207.1	6016.0	17'
44'	956.1	6804.3	1018.6	6589.6	1081.4	6387.0	1144.6	6195.2	1208.1	6013.0	16'
45'	957.1	6800.6	1019.6	6586.1	1082.5	6383.7	1145.6	6192.1	1209.2	6010.0	15'
46'	958.2	6796.9	1020.7	6582.6	1083.5	6380.4	1146.7	6189.0	1210.3	6007.1	14'
47'	959.2	6793.2	1021.7	6579.2	1084.6	6377.2	1147.7	6185.9	1211.3	6004.1	13'
48'	960.2	6789.5	1022.8	6575.7	1085.6	6373.9	1148.8	6182.7	1212.4	6001.2	12'
49'	961.3	6785.9	1023.8	6572.2	1086.7	6370.6	1149.9	6179.6	1213.4	5998.2	11'
50'	962.3	6782.2	1024.9	6568.8	1087.7	6367.3	1150.9	6176.5	1214.5	5995.3	10'
51'	963.4	6778.5	1025.9	6565.3	1088.8	6364.1	1152.0	6173.5	1215.6	5992.3	9'
52'	964.4	6774.9	1026.9	6561.9	1089.8	6360.8	1153.0	6170.4	1216.6	5989.4	8'
53'	965.4	6771.2	1028.0	6558.4	1090.9	6357.6	1154.1	6167.3	1217.7	5986.4	7'
54'	966.5	6767.6	1029.0	6555.0	1091.9	6354.3	1155.1	6164.2	1218.8	5983.5	6'
55'	967.5	6763.9	1030.1	6551.6	1093.0	6351.1	1156.2	6161.1	1219.8	5980.6	5'
56'	968.6	6760.3	1031.1	6548.1	1094.0	6347.8	1157.3	6158.0	1220.9	5977.6	4'
57'	969.6	6756.6	1032.2	6544.7	1095.1	6344.6	1158.3	6154.9	1221.9	5974.7	3'
58'	970.6	6753.0	1033.2	6541.3	1096.1	6341.3	1159.4	6151.8	1223.0	5971.8	2'
59'	971.7	6749.4	1034.3	6537.8	1097.2	6338.1	1160.4	6148.8	1224.1	5968.8	1'
60'	972.7	6745.7	1035.3	6534.4	1098.2	6334.8	1161.5	6145.7	1225.1	5965.9	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	74°		73°		72°		71°		70°		

▼ ▼	20°		21°		22°		23°		24°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	1225.1	5965.9	1289.2	5794.6	1353.7	5630.8	1418.6	5474.0	1484.1	5323.5	60'
1'	1226.2	5963.0	1290.3	5791.8	1354.8	5628.1	1419.7	5471.4	1485.2	5321.1	59'
2'	1227.3	5960.1	1291.3	5789.0	1355.8	5625.5	1420.8	5468.9	1486.2	5318.6	58'
3'	1228.3	5957.2	1292.4	5786.2	1356.9	5622.8	1421.9	5466.3	1487.3	5316.1	57'
4'	1229.4	5954.2	1293.5	5783.4	1358.0	5620.2	1423.0	5463.8	1488.4	5313.7	56'
5'	1230.5	5951.3	1294.6	5780.6	1359.1	5617.5	1424.1	5461.2	1489.5	5311.2	55'
6'	1231.5	5948.4	1295.6	5777.9	1360.2	5614.8	1425.2	5458.7	1490.6	5308.8	54'
7'	1232.6	5945.5	1296.7	5775.1	1361.2	5612.2	1426.2	5456.1	1491.7	5306.3	53'
8'	1233.7	5942.6	1297.8	5772.3	1362.3	5609.5	1427.3	5453.6	1492.8	5303.9	52'
9'	1234.7	5939.7	1298.8	5769.5	1363.4	5606.9	1428.4	5451.0	1493.9	5301.5	51'
10'	1235.8	5936.8	1299.9	5766.8	1364.5	5604.2	1429.5	5448.5	1495.0	5299.0	50'
11'	1236.9	5933.9	1301.0	5764.0	1365.6	5601.6	1430.6	5446.0	1496.1	5296.6	49'
12'	1237.9	5931.0	1302.1	5761.2	1366.6	5598.9	1431.7	5443.4	1497.2	5294.1	48'
13'	1239.0	5928.1	1303.1	5758.5	1367.7	5596.3	1432.8	5440.9	1498.3	5291.7	47'
14'	1240.0	5925.2	1304.2	5755.7	1368.8	5593.6	1433.9	5438.3	1499.4	5289.2	46'
15'	1241.1	5922.3	1305.3	5752.9	1369.9	5591.0	1434.9	5435.8	1500.5	5286.8	45'
16'	1242.2	5919.4	1306.4	5750.2	1371.0	5588.4	1436.0	5433.3	1501.6	5284.4	44'
17'	1243.2	5916.5	1307.4	5747.4	1372.0	5585.7	1437.1	5430.7	1502.7	5281.9	43'
18'	1244.3	5913.7	1308.5	5744.7	1373.1	5583.1	1438.2	5428.2	1503.8	5279.5	42'
19'	1245.4	5910.8	1309.6	5741.9	1374.2	5580.4	1439.3	5425.7	1504.9	5277.1	41'
20'	1246.4	5907.9	1310.6	5739.2	1375.3	5577.8	1440.4	5423.2	1506.0	5274.7	40'
21'	1247.5	5905.0	1311.7	5736.4	1376.4	5575.2	1441.5	5420.6	1507.1	5272.2	39'
22'	1248.6	5902.2	1312.8	5733.7	1377.4	5572.6	1442.6	5418.1	1508.2	5269.8	38'
23'	1249.6	5899.3	1313.9	5730.9	1378.5	5569.9	1443.7	5415.6	1509.3	5267.4	37'
24'	1250.7	5896.4	1314.9	5728.2	1379.6	5567.3	1444.7	5413.1	1510.4	5265.0	36'
25'	1251.8	5893.5	1316.0	5725.4	1380.7	5564.7	1445.8	5410.6	1511.5	5262.5	35'
26'	1252.8	5890.7	1317.1	5722.7	1381.8	5562.1	1446.9	5408.0	1512.6	5260.1	34'
27'	1253.9	5887.8	1318.2	5720.0	1382.9	5559.4	1448.0	5405.5	1513.7	5257.7	33'
28'	1255.0	5885.0	1319.2	5717.2	1383.9	5556.8	1449.1	5403.0	1514.8	5255.3	32'
29'	1256.0	5882.1	1320.3	5714.5	1385.0	5554.2	1450.2	5400.5	1515.9	5252.9	31'
30'	1257.1	5879.2	1321.4	5711.8	1386.1	5551.6	1451.3	5398.0	1517.0	5250.5	30'
31'	1258.2	5876.4	1322.5	5709.1	1387.2	5549.0	1452.4	5395.5	1518.1	5248.1	29'
32'	1259.3	5873.5	1323.5	5706.3	1388.3	5546.4	1453.5	5393.0	1519.2	5245.6	28'
33'	1260.3	5870.7	1324.6	5703.6	1389.3	5543.8	1454.6	5390.5	1520.3	5243.2	27'
34'	1261.4	5867.8	1325.7	5700.9	1390.4	5541.1	1455.6	5388.0	1521.4	5240.8	26'
35'	1262.5	5865.0	1326.8	5698.2	1391.5	5538.5	1456.7	5385.5	1522.5	5238.4	25'
36'	1263.5	5862.1	1327.8	5695.4	1392.6	5535.9	1457.8	5383.0	1523.6	5236.0	24'
37'	1264.6	5859.3	1328.9	5692.7	1393.7	5533.3	1458.9	5380.5	1524.7	5233.6	23'
38'	1265.7	5856.5	1330.0	5690.0	1394.8	5530.7	1460.0	5378.0	1525.8	5231.2	22'
39'	1266.7	5853.6	1331.1	5687.3	1395.8	5528.1	1461.1	5375.5	1526.9	5228.8	21'
40'	1267.8	5850.8	1332.1	5684.6	1396.9	5525.5	1462.2	5373.0	1528.0	5226.4	20'
41'	1268.9	5848.0	1333.2	5681.9	1398.0	5523.0	1463.3	5370.5	1529.1	5224.0	19'
42'	1269.9	5845.1	1334.3	5679.2	1399.1	5520.4	1464.4	5368.0	1530.2	5221.6	18'
43'	1271.0	5842.3	1335.4	5676.5	1400.2	5517.8	1465.5	5365.5	1531.3	5219.2	17'
44'	1272.1	5839.5	1336.4	5673.8	1401.3	5515.2	1466.6	5363.1	1532.4	5216.9	16'
45'	1273.1	5836.7	1337.5	5671.1	1402.3	5512.6	1467.7	5360.6	1533.5	5214.5	15'
46'	1274.2	5833.8	1338.6	5668.4	1403.4	5510.0	1468.7	5358.1	1534.6	5212.1	14'
47'	1275.3	5831.0	1339.7	5665.7	1404.5	5507.4	1469.8	5355.6	1535.7	5209.7	13'
48'	1276.4	5828.2	1340.8	5663.0	1405.6	5504.8	1470.9	5353.1	1536.8	5207.3	12'
49'	1277.4	5825.4	1341.8	5660.3	1406.7	5502.3	1472.0	5350.7	1537.9	5204.9	11'
50'	1278.5	5822.6	1342.9	5657.6	1407.8	5499.7	1473.1	5348.2	1539.0	5202.5	10'
51'	1279.6	5819.8	1344.0	5654.9	1408.9	5497.1	1474.2	5345.7	1540.1	5200.2	9'
52'	1280.6	5816.9	1345.1	5652.2	1409.9	5494.5	1475.3	5343.2	1541.2	5197.8	8'
53'	1281.7	5814.1	1346.1	5649.6	1411.0	5492.0	1476.4	5340.8	1542.3	5195.4	7'
54'	1282.8	5811.3	1347.2	5646.9	1412.1	5489.4	1477.5	5338.3	1543.4	5193.0	6'
55'	1283.8	5808.5	1348.3	5644.2	1413.2	5486.8	1478.6	5335.8	1544.5	5190.7	5'
56'	1284.9	5805.7	1349.4	5641.5	1414.3	5484.3	1479.7	5333.4	1545.6	5188.3	4'
57'	1286.0	5802.9	1350.4	5638.8	1415.4	5481.7	1480.8	5330.9	1546.7	5185.9	3'
58'	1287.1	5800.1	1351.5	5636.2	1416.5	5479.1	1481.9	5328.4	1547.8	5183.5	2'
59'	1288.1	5797.3	1352.6	5633.5	1417.5	5476.6	1483.0	5326.0	1548.9	5181.2	1'
60'	1289.2	5794.6	1353.7	5630.8	1418.6	5474.0	1484.1	5323.5	1550.0	5178.8	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	69°		68°		67°		66°		65°		

▼ ▼	25°		26°		27°		28°		29°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	1550.0	5178.8	1616.5	5039.4	1683.5	4904.9	1751.2	4775.0	1819.4	4649.2	60'
1'	1551.1	5176.4	1617.6	5037.1	1684.6	4902.7	1752.3	4772.9	1820.6	4647.2	59'
2'	1552.2	5174.1	1618.7	5034.9	1685.8	4900.5	1753.4	4770.7	1821.7	4645.1	58'
3'	1553.3	5171.7	1619.8	5032.6	1686.9	4898.3	1754.6	4768.6	1822.9	4643.0	57'
4'	1554.4	5169.4	1620.9	5030.3	1688.0	4896.1	1755.7	4766.5	1824.0	4641.0	56'
5'	1555.5	5167.0	1622.0	5028.0	1689.1	4893.9	1756.8	4764.3	1825.2	4638.9	55'
6'	1556.6	5164.6	1623.2	5025.8	1690.3	4891.7	1758.0	4762.2	1826.3	4636.9	54'
7'	1557.7	5162.3	1624.3	5023.5	1691.4	4889.5	1759.1	4760.1	1827.4	4634.8	53'
8'	1558.8	5159.9	1625.4	5021.2	1692.5	4887.4	1760.2	4758.0	1828.6	4632.8	52'
9'	1559.9	5157.6	1626.5	5018.9	1693.6	4885.2	1761.4	4755.9	1829.7	4630.7	51'
10'	1561.0	5155.2	1627.6	5016.7	1694.7	4883.0	1762.5	4753.7	1830.9	4628.7	50'
11'	1562.1	5152.9	1628.7	5014.4	1695.9	4880.8	1763.6	4751.6	1832.0	4626.6	49'
12'	1563.2	5150.5	1629.8	5012.1	1697.0	4878.6	1764.8	4749.5	1833.2	4624.6	48'
13'	1564.4	5148.2	1630.9	5009.9	1698.1	4876.4	1765.9	4747.4	1834.3	4622.5	47'
14'	1565.5	5145.8	1632.1	5007.6	1699.2	4874.2	1767.0	4745.3	1835.5	4620.5	46'
15'	1566.6	5143.5	1633.2	5005.4	1700.4	4872.0	1768.2	4743.2	1836.6	4618.4	45'
16'	1567.7	5141.1	1634.3	5003.1	1701.5	4869.9	1769.3	4741.0	1837.8	4616.4	44'
17'	1568.8	5138.8	1635.4	5000.8	1702.6	4867.7	1770.4	4738.9	1838.9	4614.3	43'
18'	1569.9	5136.5	1636.5	4998.6	1703.7	4865.5	1771.6	4736.8	1840.0	4612.3	42'
19'	1571.0	5134.1	1637.6	4996.3	1704.9	4863.3	1772.7	4734.7	1841.2	4610.2	41'
20'	1572.1	5131.8	1638.8	4994.1	1706.0	4861.1	1773.8	4732.6	1842.3	4608.2	40'
21'	1573.2	5129.4	1639.9	4991.8	1707.1	4859.0	1775.0	4730.5	1843.5	4606.1	39'
22'	1574.3	5127.1	1641.0	4989.6	1708.2	4856.8	1776.1	4728.4	1844.6	4604.1	38'
23'	1575.4	5124.8	1642.1	4987.3	1709.4	4854.6	1777.3	4726.3	1845.8	4602.1	37'
24'	1576.5	5122.4	1643.2	4985.1	1710.5	4852.4	1778.4	4724.2	1846.9	4600.0	36'
25'	1577.6	5120.1	1644.3	4982.8	1711.6	4850.3	1779.5	4722.1	1848.1	4598.0	35'
26'	1578.7	5117.8	1645.5	4980.6	1712.8	4848.1	1780.7	4720.0	1849.2	4596.0	34'
27'	1579.8	5115.5	1646.6	4978.3	1713.9	4845.9	1781.8	4717.9	1850.4	4593.9	33'
28'	1580.9	5113.1	1647.7	4976.1	1715.0	4843.7	1782.9	4715.8	1851.5	4591.9	32'
29'	1582.1	5110.8	1648.8	4973.8	1716.1	4841.6	1784.1	4713.7	1852.7	4589.9	31'
30'	1583.2	5108.5	1649.9	4971.6	1717.3	4839.4	1785.2	4711.6	1853.8	4587.8	30'
31'	1584.3	5106.2	1651.0	4969.4	1718.4	4837.2	1786.4	4709.5	1855.0	4585.8	29'
32'	1585.4	5103.8	1652.2	4967.1	1719.5	4835.1	1787.5	4707.4	1856.1	4583.8	28'
33'	1586.5	5101.5	1653.3	4964.9	1720.6	4832.9	1788.6	4705.3	1857.3	4581.7	27'
34'	1587.6	5099.2	1654.4	4962.6	1721.8	4830.8	1789.8	4703.2	1858.4	4579.7	26'
35'	1588.7	5096.9	1655.5	4960.4	1722.9	4828.6	1790.9	4701.1	1859.6	4577.7	25'
36'	1589.8	5094.6	1656.6	4958.2	1724.0	4826.4	1792.0	4699.0	1860.7	4575.7	24'
37'	1590.9	5092.3	1657.7	4955.9	1725.2	4824.3	1793.2	4697.0	1861.9	4573.6	23'
38'	1592.0	5089.9	1658.9	4953.7	1726.3	4822.1	1794.3	4694.9	1863.0	4571.6	22'
39'	1593.1	5087.6	1660.0	4951.5	1727.4	4820.0	1795.5	4692.8	1864.2	4569.6	21'
40'	1594.3	5085.3	1661.1	4949.2	1728.5	4817.8	1796.6	4690.7	1865.3	4567.6	20'
41'	1595.4	5083.0	1662.2	4947.0	1729.7	4815.7	1797.7	4688.6	1866.5	4565.6	19'
42'	1596.5	5080.7	1663.3	4944.8	1730.8	4813.5	1798.9	4686.5	1867.6	4563.5	18'
43'	1597.6	5078.4	1664.5	4942.6	1731.9	4811.4	1800.0	4684.4	1868.8	4561.5	17'
44'	1598.7	5076.1	1665.6	4940.3	1733.1	4809.2	1801.2	4682.4	1869.9	4559.5	16'
45'	1599.8	5073.8	1666.7	4938.1	1734.2	4807.1	1802.3	4680.3	1871.1	4557.5	15'
46'	1600.9	5071.5	1667.8	4935.9	1735.3	4804.9	1803.4	4678.2	1872.2	4555.5	14'
47'	1602.0	5069.2	1668.9	4933.7	1736.5	4802.8	1804.6	4676.1	1873.4	4553.5	13'
48'	1603.1	5066.9	1670.1	4931.5	1737.6	4800.6	1805.7	4674.1	1874.5	4551.4	12'
49'	1604.2	5064.6	1671.2	4929.2	1738.7	4798.5	1806.9	4672.0	1875.7	4549.4	11'
50'	1605.4	5062.3	1672.3	4927.0	1739.8	4796.3	1808.0	4669.9	1876.8	4547.4	10'
51'	1606.5	5060.0	1673.4	4924.8	1741.0	4794.2	1809.2	4667.8	1878.0	4545.4	9'
52'	1607.6	5057.7	1674.5	4922.6	1742.1	4792.1	1810.3	4665.8	1879.1	4543.4	8'
53'	1608.7	5055.4	1675.7	4920.4	1743.2	4789.9	1811.4	4663.7	1880.3	4541.4	7'
54'	1609.8	5053.1	1676.8	4918.2	1744.4	4787.8	1812.6	4661.6	1881.5	4539.4	6'
55'	1610.9	5050.8	1677.9	4916.0	1745.5	4785.6	1813.7	4659.6	1882.6	4537.4	5'
56'	1612.0	5048.6	1679.0	4913.8	1746.6	4783.5	1814.9	4657.5	1883.8	4535.4	4'
57'	1613.1	5046.3	1680.2	4911.6	1747.8	4781.4	1816.0	4655.4	1884.9	4533.4	3'
58'	1614.2	5044.0	1681.3	4909.3	1748.9	4779.2	1817.2	4653.4	1886.1	4531.4	2'
59'	1615.4	5041.7	1682.4	4907.1	1750.0	4777.1	1818.3	4651.3	1887.2	4529.4	1'
60'	1616.5	5039.4	1683.5	4904.9	1751.2	4775.0	1819.4	4649.2	1888.4	4527.4	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	64°		63°		62°		61°		60°		

▼ ▼	30°		31°		32°		33°		34°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	1888.4	4527.4	1958.0	4409.1	2028.4	4294.3	2099.5	4182.6	2171.5	4073.9	60'
1'	1889.5	4525.4	1959.2	4407.2	2029.6	4292.4	2100.7	4180.8	2172.7	4072.1	59'
2'	1890.7	4523.4	1960.3	4405.3	2030.7	4290.5	2101.9	4178.9	2173.9	4070.3	58'
3'	1891.8	4521.4	1961.5	4403.3	2031.9	4288.6	2103.1	4177.1	2175.1	4068.5	57'
4'	1893.0	4519.4	1962.7	4401.4	2033.1	4286.8	2104.3	4175.3	2176.3	4066.8	56'
5'	1894.2	4517.4	1963.8	4399.4	2034.3	4284.9	2105.5	4173.4	2177.5	4065.0	55'
6'	1895.3	4515.4	1965.0	4397.5	2035.5	4283.0	2106.7	4171.6	2178.7	4063.2	54'
7'	1896.5	4513.4	1966.2	4395.6	2036.6	4281.1	2107.9	4169.8	2179.9	4061.4	53'
8'	1897.6	4511.4	1967.4	4393.6	2037.8	4279.2	2109.1	4168.0	2181.1	4059.6	52'
9'	1898.8	4509.4	1968.5	4391.7	2039.0	4277.3	2110.3	4166.1	2182.3	4057.8	51'
10'	1899.9	4507.4	1969.7	4389.8	2040.2	4275.5	2111.5	4164.3	2183.6	4056.1	50'
11'	1901.1	4505.4	1970.9	4387.8	2041.4	4273.6	2112.7	4162.5	2184.8	4054.3	49'
12'	1902.2	4503.4	1972.0	4385.9	2042.5	4271.7	2113.9	4160.6	2186.0	4052.5	48'
13'	1903.4	4501.5	1973.2	4384.0	2043.7	4269.8	2115.0	4158.8	2187.2	4050.7	47'
14'	1904.6	4499.5	1974.4	4382.0	2044.9	4268.0	2116.2	4157.0	2188.4	4048.9	46'
15'	1905.7	4497.5	1975.5	4380.1	2046.1	4266.1	2117.4	4155.2	2189.6	4047.2	45'
16'	1906.9	4495.5	1976.7	4378.2	2047.3	4264.2	2118.6	4153.3	2190.8	4045.4	44'
17'	1908.0	4493.5	1977.9	4376.3	2048.5	4262.3	2119.8	4151.5	2192.0	4043.6	43'
18'	1909.2	4491.5	1979.0	4374.3	2049.6	4260.5	2121.0	4149.7	2193.2	4041.8	42'
19'	1910.3	4489.5	1980.2	4372.4	2050.8	4258.6	2122.2	4147.9	2194.4	4040.1	41'
20'	1911.5	4487.6	1981.4	4370.5	2052.0	4256.7	2123.4	4146.1	2195.7	4038.3	40'
21'	1912.7	4485.6	1982.6	4368.6	2053.2	4254.9	2124.6	4144.2	2196.9	4036.5	39'
22'	1913.8	4483.6	1983.7	4366.7	2054.4	4253.0	2125.8	4142.4	2198.1	4034.7	38'
23'	1915.0	4481.6	1984.9	4364.7	2055.6	4251.1	2127.0	4140.6	2199.3	4033.0	37'
24'	1916.1	4479.7	1986.1	4362.8	2056.7	4249.3	2128.2	4138.8	2200.5	4031.2	36'
25'	1917.3	4477.7	1987.2	4360.9	2057.9	4247.4	2129.4	4137.0	2201.7	4029.4	35'
26'	1918.5	4475.7	1988.4	4359.0	2059.1	4245.5	2130.6	4135.2	2202.9	4027.7	34'
27'	1919.6	4473.7	1989.6	4357.1	2060.3	4243.7	2131.8	4133.3	2204.1	4025.9	33'
28'	1920.8	4471.8	1990.8	4355.1	2061.5	4241.8	2133.0	4131.5	2205.3	4024.1	32'
29'	1921.9	4469.8	1991.9	4353.2	2062.7	4239.9	2134.2	4129.7	2206.6	4022.4	31'
30'	1923.1	4467.8	1993.1	4351.3	2063.9	4238.1	2135.4	4127.9	2207.8	4020.6	30'
31'	1924.3	4465.8	1994.3	4349.4	2065.0	4236.2	2136.6	4126.1	2209.0	4018.8	29'
32'	1925.4	4463.9	1995.5	4347.5	2066.2	4234.4	2137.8	4124.3	2210.2	4017.1	28'
33'	1926.6	4461.9	1996.6	4345.6	2067.4	4232.5	2139.0	4122.5	2211.4	4015.3	27'
34'	1927.7	4459.9	1997.8	4343.7	2068.6	4230.6	2140.2	4120.7	2212.6	4013.5	26'
35'	1928.9	4458.0	1999.0	4341.8	2069.8	4228.8	2141.4	4118.9	2213.8	4011.8	25'
36'	1930.1	4456.0	2000.1	4339.8	2071.0	4226.9	2142.6	4117.0	2215.1	4010.0	24'
37'	1931.2	4454.0	2001.3	4337.9	2072.2	4225.1	2143.8	4115.2	2216.3	4008.3	23'
38'	1932.4	4452.1	2002.5	4336.0	2073.3	4223.2	2145.0	4113.4	2217.5	4006.5	22'
39'	1933.6	4450.1	2003.7	4334.1	2074.5	4221.4	2146.2	4111.6	2218.7	4004.7	21'
40'	1934.7	4448.2	2004.8	4332.2	2075.7	4219.5	2147.4	4109.8	2219.9	4003.0	20'
41'	1935.9	4446.2	2006.0	4330.3	2076.9	4217.7	2148.6	4108.0	2221.1	4001.2	19'
42'	1937.0	4444.2	2007.2	4328.4	2078.1	4215.8	2149.8	4106.2	2222.4	3999.5	18'
43'	1938.2	4442.3	2008.4	4326.5	2079.3	4214.0	2151.0	4104.4	2223.6	3997.7	17'
44'	1939.4	4440.3	2009.5	4324.6	2080.5	4212.1	2152.2	4102.6	2224.8	3996.0	16'
45'	1940.5	4438.4	2010.7	4322.7	2081.7	4210.3	2153.4	4100.8	2226.0	3994.2	15'
46'	1941.7	4436.4	2011.9	4320.8	2082.9	4208.4	2154.6	4099.0	2227.2	3992.4	14'
47'	1942.9	4434.5	2013.1	4318.9	2084.0	4206.6	2155.8	4097.2	2228.4	3990.7	13'
48'	1944.0	4432.5	2014.2	4317.0	2085.2	4204.7	2157.0	4095.4	2229.7	3988.9	12'
49'	1945.2	4430.6	2015.4	4315.1	2086.4	4202.9	2158.2	4093.6	2230.9	3987.2	11'
50'	1946.4	4428.6	2016.6	4313.2	2087.6	4201.0	2159.4	4091.8	2232.1	3985.4	10'
51'	1947.5	4426.7	2017.8	4311.3	2088.8	4199.2	2160.6	4090.0	2233.3	3983.7	9'
52'	1948.7	4424.7	2019.0	4309.4	2090.0	4197.3	2161.8	4088.2	2234.5	3981.9	8'
53'	1949.9	4422.8	2020.1	4307.5	2091.2	4195.5	2163.0	4086.4	2235.7	3980.2	7'
54'	1951.0	4420.8	2021.3	4305.6	2092.4	4193.7	2164.2	4084.6	2237.0	3978.4	6'
55'	1952.2	4418.9	2022.5	4303.7	2093.6	4191.8	2165.5	4082.9	2238.2	3976.7	5'
56'	1953.3	4416.9	2023.7	4301.9	2094.8	4190.0	2166.7	4081.1	2239.4	3974.9	4'
57'	1954.5	4415.0	2024.8	4300.0	2096.0	4188.1	2167.9	4079.3	2240.6	3973.2	3'
58'	1955.7	4413.0	2026.0	4298.1	2097.1	4186.3	2169.1	4077.5	2241.8	3971.5	2'
59'	1956.8	4411.1	2027.2	4296.2	2098.3	4184.5	2170.3	4075.7	2243.1	3969.7	1'
60'	1958.0	4409.1	2028.4	4294.3	2099.5	4182.6	2171.5	4073.9	2244.3	3968.0	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	59°		58°		57°		56°		55°		

▼ ▼	35°		36°		37°		38°		39°		
	λ	c	λ	c	λ	c	λ	c	λ	c	
0'	2244.3	3968.0	2318.0	3864.6	2392.6	3763.8	2468.3	3665.2	2544.9	3568.8	60'
1'	2245.5	3966.2	2319.2	3862.9	2393.9	3762.1	2469.5	3663.6	2546.2	3567.2	59'
2'	2246.7	3964.5	2320.5	3861.2	2395.1	3760.4	2470.8	3661.9	2547.5	3565.6	58'
3'	2248.0	3962.7	2321.7	3859.5	2396.4	3758.8	2472.1	3660.3	2548.8	3564.0	57'
4'	2249.2	3961.0	2322.9	3857.8	2397.6	3757.1	2473.3	3658.7	2550.1	3562.5	56'
5'	2250.4	3959.3	2324.2	3856.1	2398.9	3755.5	2474.6	3657.1	2551.4	3560.9	55'
6'	2251.6	3957.5	2325.4	3854.4	2400.1	3753.8	2475.9	3655.5	2552.7	3559.3	54'
7'	2252.8	3955.8	2326.6	3852.7	2401.4	3752.1	2477.2	3653.8	2553.9	3557.7	53'
8'	2254.1	3954.0	2327.9	3851.0	2402.7	3750.5	2478.4	3652.2	2555.2	3556.1	52'
9'	2255.3	3952.3	2329.1	3849.4	2403.9	3748.8	2479.7	3650.6	2556.5	3554.5	51'
10'	2256.5	3950.6	2330.4	3847.7	2405.2	3747.2	2481.0	3649.0	2557.8	3552.9	50'
11'	2257.7	3948.8	2331.6	3846.0	2406.4	3745.5	2482.2	3647.4	2559.1	3551.4	49'
12'	2259.0	3947.1	2332.8	3844.3	2407.7	3743.9	2483.5	3645.7	2560.4	3549.8	48'
13'	2260.2	3945.4	2334.1	3842.6	2408.9	3742.2	2484.8	3644.1	2561.7	3548.2	47'
14'	2261.4	3943.6	2335.3	3840.9	2410.2	3740.6	2486.1	3642.5	2563.0	3546.6	46'
15'	2262.6	3941.9	2336.6	3839.2	2411.4	3738.9	2487.3	3640.9	2564.3	3545.0	45'
16'	2263.9	3940.2	2337.8	3837.5	2412.7	3737.3	2488.6	3639.3	2565.6	3543.5	44'
17'	2265.1	3938.4	2339.0	3835.8	2414.0	3735.6	2489.9	3637.7	2566.8	3541.9	43'
18'	2266.3	3936.7	2340.3	3834.1	2415.2	3734.0	2491.2	3636.1	2568.1	3540.3	42'
19'	2267.5	3935.0	2341.5	3832.4	2416.5	3732.3	2492.4	3634.4	2569.4	3538.7	41'
20'	2268.8	3933.2	2342.8	3830.7	2417.7	3730.7	2493.7	3632.8	2570.7	3537.1	40'
21'	2270.0	3931.5	2344.0	3829.1	2419.0	3729.0	2495.0	3631.2	2572.0	3535.6	39'
22'	2271.2	3929.8	2345.2	3827.4	2420.2	3727.4	2496.2	3629.6	2573.3	3534.0	38'
23'	2272.4	3928.1	2346.5	3825.7	2421.5	3725.7	2497.5	3628.0	2574.6	3532.4	37'
24'	2273.7	3926.3	2347.7	3824.0	2422.8	3724.1	2498.8	3626.4	2575.9	3530.8	36'
25'	2274.9	3924.6	2349.0	3822.3	2424.0	3722.4	2500.1	3624.8	2577.2	3529.3	35'
26'	2276.1	3922.9	2350.2	3820.6	2425.3	3720.8	2501.4	3623.2	2578.5	3527.7	34'
27'	2277.3	3921.2	2351.5	3818.9	2426.5	3719.1	2502.6	3621.6	2579.8	3526.1	33'
28'	2278.6	3919.4	2352.7	3817.3	2427.8	3717.5	2503.9	3619.9	2581.1	3524.5	32'
29'	2279.8	3917.7	2353.9	3815.6	2429.1	3715.8	2505.2	3618.3	2582.4	3523.0	31'
30'	2281.0	3916.0	2355.2	3813.9	2430.3	3714.2	2506.5	3616.7	2583.7	3521.4	30'
31'	2282.3	3914.3	2356.4	3812.2	2431.6	3712.6	2507.7	3615.1	2585.0	3519.8	29'
32'	2283.5	3912.5	2357.7	3810.5	2432.8	3710.9	2509.0	3613.5	2586.3	3518.2	28'
33'	2284.7	3910.8	2358.9	3808.9	2434.1	3709.3	2510.3	3611.9	2587.6	3516.6	27'
34'	2285.9	3909.1	2360.2	3807.2	2435.4	3707.6	2511.6	3610.3	2588.9	3515.1	26'
35'	2287.2	3907.4	2361.4	3805.5	2436.6	3706.0	2512.9	3608.7	2590.2	3513.5	25'
36'	2288.4	3905.7	2362.7	3803.8	2437.9	3704.4	2514.1	3607.1	2591.5	3512.0	24'
37'	2289.6	3903.9	2363.9	3802.1	2439.1	3702.7	2515.4	3605.5	2592.7	3510.4	23'
38'	2290.9	3902.2	2365.1	3800.5	2440.4	3701.1	2516.7	3603.9	2594.0	3508.8	22'
39'	2292.1	3900.5	2366.4	3798.8	2441.7	3699.4	2518.0	3602.3	2595.3	3507.3	21'
40'	2293.3	3898.8	2367.6	3797.1	2442.9	3697.8	2519.3	3600.7	2596.6	3505.7	20'
41'	2294.5	3897.1	2368.9	3795.4	2444.2	3696.2	2520.5	3599.1	2597.9	3504.1	19'
42'	2295.8	3895.4	2370.1	3793.8	2445.5	3694.5	2521.8	3597.5	2599.2	3502.6	18'
43'	2297.0	3893.7	2371.4	3792.1	2446.7	3692.9	2523.1	3595.9	2600.5	3501.0	17'
44'	2298.2	3891.9	2372.6	3790.4	2448.0	3691.3	2524.4	3594.3	2601.8	3499.4	16'
45'	2299.5	3890.2	2373.9	3788.8	2449.3	3689.6	2525.7	3592.7	2603.1	3497.9	15'
46'	2300.7	3888.5	2375.1	3787.1	2450.5	3688.0	2526.9	3591.1	2604.4	3496.3	14'
47'	2301.9	3886.8	2376.4	3785.4	2451.8	3686.4	2528.2	3589.5	2605.7	3494.7	13'
48'	2303.2	3885.1	2377.6	3783.7	2453.1	3684.7	2529.5	3587.9	2607.0	3493.2	12'
49'	2304.4	3883.4	2378.9	3782.1	2454.3	3683.1	2530.8	3586.3	2608.3	3491.6	11'
50'	2305.6	3881.7	2380.1	3780.4	2455.6	3681.5	2532.1	3584.7	2609.7	3490.1	10'
51'	2306.9	3880.0	2381.4	3778.7	2456.9	3679.8	2533.4	3583.1	2611.0	3488.5	9'
52'	2308.1	3878.3	2382.6	3777.1	2458.1	3678.2	2534.6	3581.5	2612.3	3486.9	8'
53'	2309.3	3876.6	2383.9	3775.4	2459.4	3676.6	2535.9	3579.9	2613.6	3485.4	7'
54'	2310.6	3874.9	2385.1	3773.7	2460.7	3675.0	2537.2	3578.3	2614.9	3483.8	6'
55'	2311.8	3873.2	2386.4	3772.1	2461.9	3673.3	2538.5	3576.8	2616.2	3482.3	5'
56'	2313.0	3871.4	2387.6	3770.4	2463.2	3671.7	2539.8	3575.2	2617.5	3480.7	4'
57'	2314.3	3869.7	2388.9	3768.7	2464.5	3670.1	2541.1	3573.6	2618.8	3479.1	3'
58'	2315.5	3868.0	2390.1	3767.1	2465.7	3668.4	2542.4	3572.0	2620.1	3477.6	2'
59'	2316.8	3866.3	2391.4	3765.4	2467.0	3666.8	2543.6	3570.4	2621.4	3476.0	1'
60'	2318.0	3864.6	2392.6	3763.8	2468.3	3665.2	2544.9	3568.8	2622.7	3474.5	0'
	c	λ	c	λ	c	λ	c	λ	c	λ	▲ ▲
	54°		53°		52°		51°		50°		

