U. S. Department of Commerce
Charles Sawyer, *Secretary*

Coast and Geodetic Survey
Robert F. A. Studds, *Director*

Special Publication No. 273

PLANE COORDINATE PROJECTION TABLES
SOUTH CAROLINA

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1952

For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 15 cents

National Oceanic and Atmospheric Administration

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January 1, 2006

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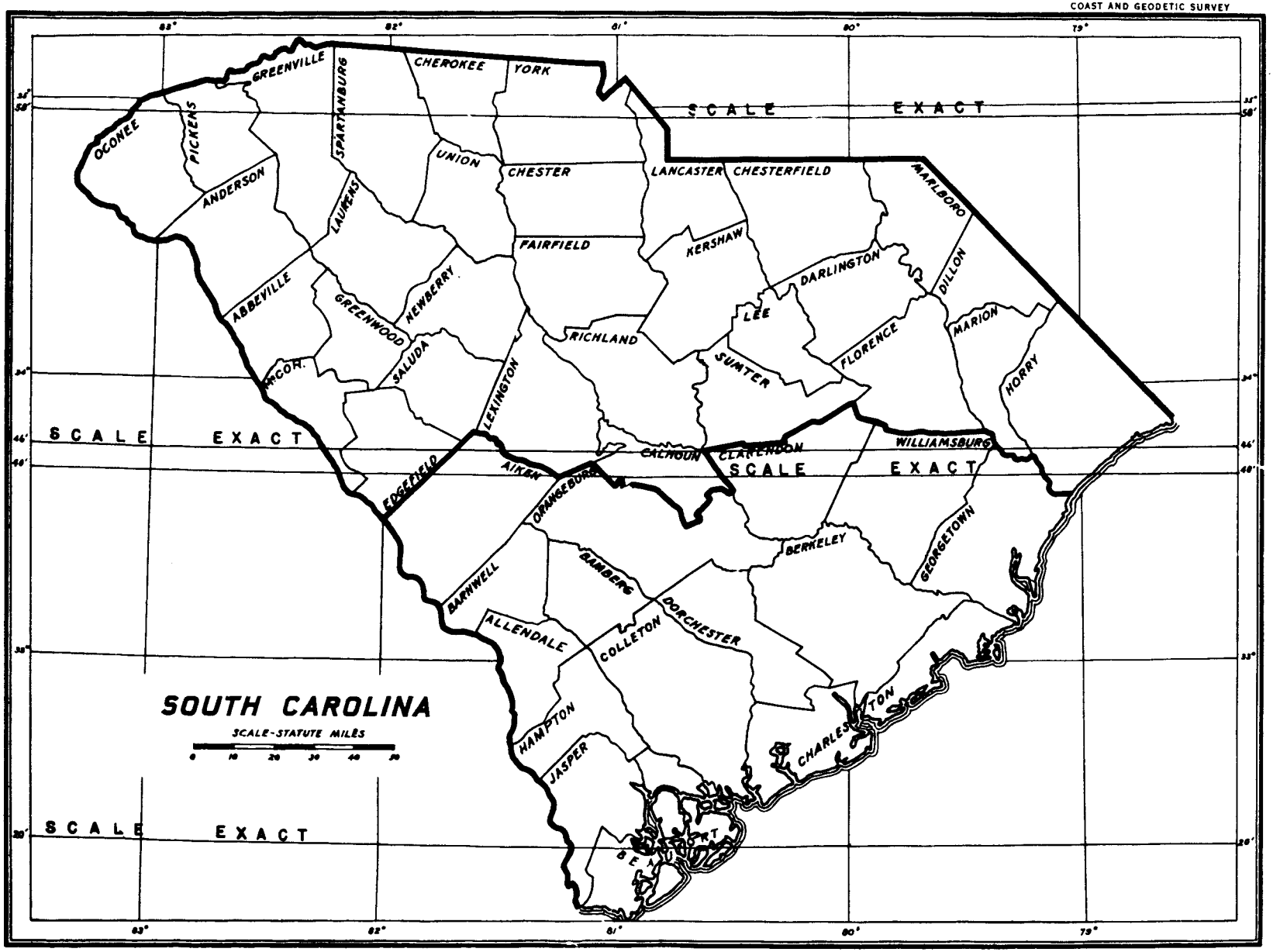

STATE PLANE-COORDINATE ZONES

Foreword

The plane coordinate system used in this State is based on the Lambert conformal conic projection with two standard parallels for each zone. The tables in this publication are to be used for the conversion of geographic positions to plane coordinates or plane coordinates to geographic positions. The constants of the projection are listed with the tables.

The methods of computation have been designed for machine calculation, using tables of natural trigonometric functions. A table of these functions has been published by the Coast and Geodetic Survey to ten decimal places with ten-second intervals for 0° to 6° in Special Publication No. 246 and is sold for a nominal sum by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

The formulas and sample computations which follow show the general methods for computing either type of coordinates.

Plane Coordinates from Geographic Positions

$$x = R \sin \theta + C$$

$$y = R_b - R \cos \theta$$

Grid azimuth = geodetic azimuth - θ + second term

where

R is the radius for the latitude of the station,

R_b is a constant for a zone,

θ is the mapping angle for the longitude of the station,

and

C is the value of x assigned to the Central Meridian for a zone.

The second term for the reduction of geodetic to grid azimuths may be neglected for most work. However, for lines five miles or more in length, if the same degree of accuracy is desired as is obtained by geographic computations, this term should be evaluated and used.

$$\text{Second term} = \frac{x_2 - x_1}{2\rho_0^2 \sin 1''}\left(y_1 - y_o + \frac{y_2 - y_1}{3}\right)$$

Geographic Positions from Plane Coordinates

The formulas show the method of computing R and θ from which the latitude and longitude may be obtained.

$$x' = x - C$$

$$\tan \theta = x' \div (R_b - y)$$

$$R = (R_b - y) \div \cos \theta$$

$$\Delta\lambda = \theta \div \ell$$

$$\lambda = \text{Central Meridian} - \Delta\lambda$$

where

R, R_b, θ, and C are the same as previously defined

and

ℓ is a constant for a zone.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 725 d

PLANE COORDINATES ON LAMBERT PROJECTION

(Condensed form for calculating-machine computation)

$X = R \sin\theta + C$ $\quad C = 2,000,000.00$ $\quad Y = R_b - R\cos\theta$ $\quad R_b = 31,127,724.75$ $\quad$ State - Zone S. Carolina - North $\quad$ Grid Az. = Geod. Az. $- \theta$

Station	Latitude / Longitude	R / θ	sin θ / cos θ	X / Y
1 Parker, 1935	34 46 25.081	30,482,285.50	+0.00365 33344	2,111,361.98
	80 37 45.085	+0 12 33.5560	0.99999 33266	645,642.67
	Grid azimuth to azimuth mark			172° 52' 53"
2 Beulah, 1902, r.1935	34 14 51.355	30,673,720.45	-0.01659 35390	1,491,014.42
	82 41 03.483	-0 57 02.8202	0.99986 23178	458,227.53
	Grid azimuth to azimuth mark			194° 03' 00"
3				
	Grid azimuth to azimuth mark			° ' "
4				
	Grid azimuth to azimuth mark			° ' "
5				
	Grid azimuth to azimuth mark			° ' "
6				
	Grid azimuth to azimuth mark			° ' "
7				
	Grid azimuth to azimuth mark			° ' "
8				
	Grid azimuth to azimuth mark			° ' "
9				
	Grid azimuth to azimuth mark			° ' "
10				
	Grid azimuth to azimuth mark			° ' "
11				
	Grid azimuth to azimuth mark			° ' "
12				
	Grid azimuth to azimuth mark			° ' "

M-2524-2

DEPARTMENT OF COMMERCE
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Form 762 b

6

GEODETIC POSITIONS FROM LAMBERT COORDINATES
(CALCULATING MACHINE COMPUTATION)

STATE – ZONE S. Carolina - North ℓ = 0.56449738

Station Parker, 1935

C	– 2,000,000.00	R_b	31,127,724.75
X	2,111,361.98	Y	– 645,642.67
$X' = X - C$	+ 111,361.98	$R_b - Y$	30,482,082.08
$\tan\theta = X' \div (R_b - Y)$	+ 0.00365 33587	θ	+ 753.5560
θ	+ 0° 12' 33.5560"	$\Delta\lambda = \theta \div \ell$	+ 1334.915
$\cos\theta$	0.99994 33266	$\Delta\lambda$	+ 0° 22' 14.915"
$R = (R_b - Y) \div \cos\theta$	30,482,285.50	Central Meridian	81° 00' 00.000"
ϕ	34° 46' 25.081"	λ = C.M. – $\Delta\lambda$	80° 37' 45.085"

Station Beulah, 1902, r. 1935

C	– 2,000,000.00	R_b	31,127,724.75
X	1,491,014.42	Y	– 458,227.53
$X' = X - C$	– 508,985.58	$R_b - Y$	30,669,497.22
$\tan\theta = X' \div (R_b - Y)$	– 0.01659 58241	θ	– 3422.8202
θ	– 0° 57' 02.8202"	$\Delta\lambda = \theta \div \ell$	– 6063.483
$\cos\theta$	0.99986 23178	$\Delta\lambda$	– 1° 41' 03.483"
$R = (R_b - Y) \div \cos\theta$	30,673,720.45	Central Meridian	81° 00' 00.000"
ϕ	34° 14' 51.355"	λ = C.M. – $\Delta\lambda$	82° 41' 03.483"

Station

C	–	R_b	
X		Y	–
$X' = X - C$		$R_b - Y$	
$\tan\theta = X' \div (R_b - Y)$		θ	"
θ	° ' "	$\Delta\lambda = \theta \div \ell$	"
$\cos\theta$		$\Delta\lambda$	° ' "
$R = (R_b - Y) \div \cos\theta$		Central Meridian	° ' "
ϕ	° ' "	λ = C.M. – $\Delta\lambda$	° ' "

Station

C	–	R_b	
X		Y	–
$X' = X - C$		$R_b - Y$	
$\tan\theta = X' \div (R_b - Y)$		θ	"
θ	° ' "	$\Delta\lambda = \theta \div \ell$	"
$\cos\theta$		$\Delta\lambda$	° ' "
$R = (R_b - Y) \div \cos\theta$		Central Meridian	° ' "
ϕ	° ' "	λ = C.M. – $\Delta\lambda$	° ' "

M-2545-2

Constants for South Carolina

Constant	North zone	South zone
C	2,000,000.00 ft.	2,000,000.00 ft.
Central Meridian	81° 00' 00".000	81° 00' 00".000
R_b	31,127,724.75 ft.	32,676,887.65 ft.
y_o	497,599.22 ft.	424,761.35 ft.
ℓ	0.564 49738	0.544 65157
$\frac{1}{2\rho_o^2 \sin 1''}$	2.361×10^{-10}	2.362×10^{-10}
$\log \frac{1}{2\rho_o^2 \sin 1''}$	0.373 1036 - 10	0.373 2337 - 10
$\log \ell$	9.75166 19306 - 10	9.73611 87599 - 10
log K	7.64196 78060	7.65215 09551

Lambert Projection for South Carolina - North

Table I.

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
33° 00'	31,127,724.75	0	101.09167	+987.1	1.0002273
01	31,121,659.25	6,065.50	101.09117	+957.5	1.0002205
02	31,115,593.78	12,130.97	101.09083	+928.3	1.0002137
03	31,109,528.33	18,196.42	101.09033	+899.5	1.0002071
04	31,103,462.91	24,261.84	101.09000	+871.0	1.0002006
05	31,097,397.51	30,327.24	101.08967	+842.9	1.0001941
33° 06'	31,091,332.13	36,392.62	101.08933	+815.1	1.0001877
07	31,085,266.77	42,457.98	101.08883	+787.7	1.0001814
08	31,079,201.44	48,523.31	101.08850	+760.6	1.0001751
09	31,073,136.13	54,588.62	101.08833	+733.9	1.0001690
10	31,067,070.83	60,653.92	101.08783	+707.6	1.0001629
33° 11'	31,061,005.56	66,719.19	101.08750	+681.6	1.0001569
12	31,054,940.31	72,784.44	101.08733	+656.0	1.0001510
13	31,048,875.07	78,849.68	101.08683	+630.7	1.0001452
14	31,042,809.86	84,914.89	101.08667	+605.8	1.0001395
15	31,036,744.66	90,980.09	101.08633	+581.3	1.0001338
33° 16'	31,030,679.48	97,045.27	101.08600	+557.1	1.0001283
17	31,024,614.32	103,110.43	101.08583	+533.3	1.0001228
18	31,018,549.17	109,175.58	101.08550	+509.8	1.0001174
19	31,012,484.04	115,240.71	101.08517	+486.7	1.0001121
20	31,006,418.93	121,305.82	101.08500	+464.0	1.0001068
33° 21'	31,000,353.83	127,370.92	101.08483	+441.6	1.0001017
22	30,994,288.74	133,436.01	101.08450	+419.6	1.0000966
23	30,988,223.67	139,501.08	101.08433	+398.0	1.0000916
24	30,982,158.61	145,566.14	101.08400	+376.7	1.0000867
25	30,976,093.57	151,631.18	101.08400	+355.8	1.0000819
33° 26'	30,970,028.53	157,696.22	101.08367	+335.2	1.0000772
27	30,963,963.51	163,761.24	101.08350	+315.0	1.0000725
28	30,957,898.50	169,826.25	101.08317	+295.2	1.0000680
29	30,951,833.51	175,891.24	101.08317	+275.7	1.0000635
30	30,945,768.52	181,956.23	101.08300	+256.6	1.0000591
33° 31'	30,939,703.54	188,021.21	101.08283	+237.9	1.0000548
32	30,933,638.57	194,086.18	101.08267	+219.5	1.0000505
33	30,927,573.61	200,151.14	101.08250	+201.4	1.0000464
34	30,921,508.66	206,216.09	101.08233	+183.8	1.0000423
35	30,915,443.72	212,281.03	101.08233	+166.5	1.0000383

Lambert Projection for South Carolina - North

Table I (Cont'd).

Lat.		R ft.	Y' Y value on central Meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
33°	36'	30,909,378.78	218,345.97	101.08217	+149.6	1.0000344
	37	30,903,313.85	224,410.90	101.08200	+133.0	1.0000306
	38	30,897,248.93	230,475.82	101.08200	+116.8	1.0000269
	39	30,891,184.01	236,540.74	101.08183	+100.9	1.0000232
	40	30,885,119.10	242,605.65	101.08183	+ 85.4	1.0000197
33°	41'	30,879,054.19	248,670.56	101.08167	+ 70.3	1.0000162
	42	30,872,989.29	254,735.46	101.08167	+ 55.5	1.0000128
	43	30,866,924.39	260,800.36	101.08150	+ 41.1	1.0000095
	44	30,860,859.50	266,865.25	101.08150	+ 27.1	1.0000062
	45	30,854,794.61	272,930.14	101.08150	+ 13.4	1.0000031
33°	46'	30,848,729.72	278,995.03	101.08150	0.0	1.0000000
	47	30,842,664.83	285,059.92	101.08150	- 12.9	0.9999970
	48	30,836,599.94	291,124.81	101.08150	- 25.5	0.9999941
	49	30,830,535.05	297,189.70	101.08133	- 37.7	0.9999913
	50	30,824,470.17	303,254.58	101.08150	- 49.6	0.9999886
33°	51'	30,818,405.28	309,319.47	101.08150	- 61.1	0.9999859
	52	30,812,340.39	315,384.36	101.08133	- 72.3	0.9999834
	53	30,806,275.51	321,449.24	101.08150	- 83.1	0.9999809
	54	30,800,210.62	327,514.13	101.08167	- 93.5	0.9999785
	55	30,794,145.72	333,579.03	101.08150	-103.5	0.9999762
33°	56'	30,788,080.83	339,643.92	101.08167	-113.2	0.9999739
	57	30,782,015.93	345,708.82	101.08167	-122.5	0.9999718
	58	30,775,951.03	351,773.72	101.08183	-131.5	0.9999697
	59	30,769,886.12	357,838.63	101.08183	-140.1	0.9999677
34°	00	30,763,821.21	363,903.54	101.08200	-148.3	0.9999659
34°	01'	30,757,756.29	369,968.46	101.08217	-156.2	0.9999640
	02	30,751,691.36	376,033.39	101.08217	-163.7	0.9999623
	03	30,745,626.43	382,098.32	101.08217	-170.8	0.9999607
	04	30,739,561.50	388,163.25	101.08250	-177.6	0.9999591
	05	30,733,496.55	394,228.20	101.08250	-184.0	0.9999576
34°	06'	30,727,431.60	400,293.15	101.08267	-190.0	0.9999563
	07	30,721,366.64	406,358.11	101.08283	-195.7	0.9999549
	08	30,715,301.67	412,423.08	101.08300	-201.0	0.9999537
	09	30,709,236.69	418,488.06	101.08317	-205.9	0.9999526
	10	30,703,171.70	424,553.05	101.08333	-210.5	0.9999515

Lambert Projection for South Carolina - North

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
34° 11'	30,697,106.70	430,618.05	101.08350	-214.7	0.9999506
12	30,691,041.69	436,683.06	101.08367	-218.6	0.9999497
13	30,684,976.67	442,748.08	101.08400	-222.1	0.9999489
14	30,678,911.63	448,813.12	101.08417	-225.2	0.9999481
15	30,672,846.58	454,878.17	101.08433	-227.9	0.9999475
34° 16'	30,666,781.52	460,943.23	101.08450	-230.3	0.9999470
17	30,660,716.45	467,008.30	101.08483	-232.3	0.9999465
18	30,654,651.36	473,073.39	101.08500	-234.0	0.9999461
19	30,648,586.26	479,138.49	101.08533	-235.3	0.9999458
20	30,642,521.14	485,203.61	101.08550	-236.2	0.9999456
34° 21'	30,636,456.01	491,268.74	101.08583	-236.8	0.9999455
22	30,630,390.86	497,333.89	101.08617	-237.0	0.9999454
23	30,624,325.69	503,399.06	101.08633	-236.8	0.9999455
24	30,618,260.51	509,464.24	101.08667	-236.3	0.9999456
25	30,612,195.31	515,529.44	101.08700	-235.4	0.9999458
34° 26'	30,606,130.09	521,594.66	101.08733	-234.1	0.9999461
27	30,600,064.85	527,659.90	101.08767	-232.5	0.9999465
28	30,593,999.59	533,725.16	101.08800	-230.5	0.9999469
29	30,587,934.31	539,790.44	101.08817	-228.1	0.9999475
30	30,581,869.02	545,855.73	101.08867	-225.4	0.9999481
34° 31'	30,575,803.70	551,921.05	101.08900	-222.3	0.9999488
32	30,569,738.36	557,986.39	101.08933	-218.9	0.9999496
33	30,563,673.00	564,051.75	101.08983	-215.1	0.9999505
34	30,557,607.61	570,117.14	101.09000	-210.9	0.9999514
35	30,551,542.21	576,182.54	101.09050	-206.3	0.9999525
34° 36'	30,545,476.78	582,247.97	101.09100	-201.4	0.9999536
37	30,539,411.32	588,313.43	101.09133	-196.1	0.9999548
38	30,533,345.84	594,378.91	101.09167	-190.4	0.9999562
39	30,527,280.34	600,444.41	101.09217	-184.4	0.9999575
40	30,521,214.81	606,509.94	101.09267	-178.0	0.9999590
34° 41'	30,515,149.25	612,575.50	101.09300	-171.2	0.9999606
42	30,509,083.67	618,641.08	101.09350	-164.1	0.9999622
43	30,503,018.06	624,706.69	101.09383	-156.6	0.9999639
44	30,496,952.43	630,772.32	101.09450	-148.7	0.9999658
45	30,490,886.76	636,837.99	101.09483	-140.5	0.9999676

Lambert Projection for South Carolina - North

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
34° 46'	30,484,821.07	642,903.68	101.09533	-131.9	0.9999696
47	30,478,755.35	648,969.40	101.09600	-122.9	0.9999717
48	30,472,689.59	655,035.16	101.09633	-113.6	0.9999738
49	30,466,623.81	661,100.94	101.09683	-103.9	0.9999761
50	30,460,558.00	667,166.75	101.09733	- 93.8	0.9999784
34° 51'	30,454,492.16	673,232.59	101.09800	- 83.3	0.9999808
52	30,448,426.28	679,298.47	101.09850	- 72.5	0.9999833
53	30,442,360.37	685,364.38	101.09900	- 61.3	0.9999859
54	30,436,294.43	691,430.32	101.09950	- 49.8	0.9999885
55	30,430,228.46	697,496.29	101.10017	- 37.9	0.9999913
34° 56'	30,424,162.45	703,562.30	101.10067	- 25.6	0.9999941
57	30,418,096.41	709,628.34	101.10117	- 13.0	0.9999970
58	30,412,030.34	715,694.41	101.10183	0.0	1.0000000
59	30,405,964.23	721,760.52	101.10250	+ 13.4	1.0000031
35° 00	30,399,898.08	727,826.67	101.10317	+ 27.2	1.0000063
35° 01'	30,393,831.89	733,892.86	101.10367	+ 41.3	1.0000095
02	30,387,765.67	739,959.08	101.10417	+ 55.8	1.0000128
03	30,381,699.42	746,025.33	101.10500	+ 70.7	1.0000163
04	30,375,633.12	752,091.63	101.10567	+ 85.9	1.0000198
05	30,369,566.78	758,157.97	101.10617	+101.5	1.0000234
35° 06'	30,363,500.41	764,224.34	101.10683	+117.4	1.0000270
07	30,357,434.00	770,290.75	101.10750	+133.8	1.0000308
08	30,351,367.55	776,357.20	101.10833	+150.5	1.0000347
09	30,345,301.05	782,423.70	101.10883	+167.6	1.0000386
10	30,339,234.52	788,490.23	101.10950	+185.0	1.0000426
35° 11'	30,333,167.95	794,556.80	101.11033	+202.8	1.0000467
12	30,327,101.33	800,623.42	101.11100	+221.0	1.0000509
13	30,321,034.67	806,690.08	101.11183	+239.6	1.0000552
14	30,314,967.96	812,756.79	101.11233	+258.5	1.0000595
15	30,308,901.22	818,823.53	101.11317	+277.8	1.0000640
35° 16'	30,302,834.43	824,890.32	101.11400	+297.4	1.0000685
17	30,296,767.59	830,957.16	101.11467	+317.5	1.0000731
18	30,290,700.71	837,024.04	101.11550	+337.9	1.0000778
19	30,284,633.78	843,090.97	101.11617	+358.7	1.0000826
20	30,278,566.81	849,157.94	101.11700	+379.8	1.0000875

Lambert Projection for South Carolina - North

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
35° 21'	30,272,499.79	855,224.96	101.11783	+401.3	1.0000924
22	30,266,432.72	861,292.03	101.11850	+423.2	1.0000974
23	30,260,365.61	867,359.14	101.11950	+445.5	1.0001026
24	30,254,298.44	873,426.31	101.12017	+468.1	1.0001078
25	30,248,231.23	879,493.52	101.12100	+491.1	1.0001131
35° 26'	30,242,163.97	885,560.78	101.12183	+514.4	1.0001184
27	30,236,096.66	891,628.09	101.12267	+538.2	1.0001239
28	30,230,029.30	897,695.45	101.12350	+562.3	1.0001295
29	30,223,961.89	903,762.86	101.12450	+586.8	1.0001351
30	30,217,894.42	909,830.33		+611.6	1.0001408

Lambert Projection for South Carolina - North

Table II.

1" of long. = 0".56449738 of θ

Long.	θ	Long.	θ	Long.	θ
78° 20'	+1° 30' 19".1748				
21	+1 29 45.3050	78° 56'	+1° 09' 59".8605	79° 31'	+0° 50' 14".4160
22	+1 29 11.4352	57	+1 09 25.9907	32	+0 49 40.5462
23	+1 28 37.5653	58	+1 08 52.1208	33	+0 49 06.6763
24	+1 28 03.6955	59	+1 08 18.2510	34	+0 48 32.8065
25	+1 27 29.8256	79° 00	+1 07 44.3811	35	+0 47 58.9366
78° 26'	+1 26 55.9558	79° 01'	+1 07 10.5113	79° 36'	+0 47 25.0668
27	+1 26 22.0859	02	+1 06 36.6415	37	+0 46 51.1970
28	+1 25 48.2161	03	+1 06 02.7716	38	+0 46 17.3271
29	+1 25 14.3463	04	+1 05 28,9018	39	+0 45 43.4573
30	+1 24 40.4764	05	+1 04 55.0319	40	+0 45 09.5874
78° 31'	+1 24 06.6066	79° 06'	+1 04 21.1621	79° 41'	+0 44 35.7176
32	+1 23 32.7367	07	+1 03 47.2922	42	+0 44 01.8477
33	+1 22 58.8669	08	+1 03 13.4224	43	+0 43 27.9779
34	+1 22 24.9970	09	+1 02 39.5526	44	+0 42 54.1081
35	+1 21 51.1272	10	+1 02 05.6827	45	+0 42 20.2382
78° 36'	+1 21 17.2574	79° 11'	+1 01 31.8129	79° 46'	+0 41 46.3684
37	+1 20 43.3875	12	+1 00 57.9430	47	+0 41 12.4985
38	+1 20 09.5177	13	+1 00 24.0732	48	+0 40 38.6287
39	+1 19 35.6478	14	+0 59 50.2033	49	+0 40 04.7588
40	+1 19 01.7780	15	+0 59 16.3335	50	+0 39 30.8890
78° 41'	+1 18 27.9081	79° 16'	+0 58 42.4637	79° 51'	+0 38 57.0192
42	+1 17 54.0383	17	+0 58 08.5938	52	+0 38 23.1493
43	+1 17 20.1685	18	+0 57 34.7240	53	+0 37 49.2795
44	+1 16 46.2986	19	+0 57 00.8541	54	+0 37 15.4096
45	+1 16 12.4288	20	+0 56 26.9843	55	+0 36 41.5398
78° 46'	+1 15 38.5589	79° 21'	+0 55 53.1144	79° 56'	+0 36 07.6699
47	+1 15 04.6891	22	+0 55 19.2446	57	+0 35 33.8001
48	+1 14 30.8192	23	+0 54 45.3748	58	+0 34 59.9303
49	+1 13 56.9494	24	+0 54 11.5049	59	+0 34 26.0604
50	+1 13 23.0796	25	+0 53 37.6351	80° 00	+0 33 52.1906
78° 51'	+1 12 49.2097	79° 26'	+0 53 03.7652	80° 01'	+0 33 18.3207
52	+1 12 15.3399	27	+0 52 29.8954	02	+0 32 44.4509
53	+1 11 41.4700	28	+0 51 56.0255	03	+0 32 10.5810
54	+1 11 07.6002	29	+0 51 22.1557	04	+0 31 36.7112
55	+1 10 33.7304	30	+0 50 48.2859	05	+0 31 02.8414

Lambert Projection for South Carolina - North

Table II (Cont'd).

1" of long. = 0".56449738 of θ

Long.	θ	Long.	θ	Long.	θ
80° 06'	+0° 30' 28".9715	80° 41'	+0° 10' 43".5270	81° 16'	−0° 09' 01".9175
07	+0 29 55.1017	42	+0 10 09.6572	17	−0 09 35.7873
08	+0 29 21.2318	43	+0 09 35.7873	18	−0 10 09.6572
09	+0 28 47.3620	44	+0 09 01.9175	19	−0 10 43.5270
10	+0 28 13.4921	45	+0 08 28.0476	20	−0 11 17.3969
80° 11'	+0 27 39.6223	80° 46'	+0 07 54.1778	81° 21'	−0 11 51.2667
12	+0 27 05.7525	47	+0 07 20.3080	22	−0 12 25.1365
13	+0 26 31.8826	48	+0 06 46.4381	23	−0 12 59.0064
14	+0 25 58.0128	49	+0 06 12.5683	24	−0 13 32.8762
15	+0 25 24.1429	50	+0 05 38.6984	25	−0 14 06.7461
80° 16'	+0 24 50.2731	80° 51'	+0 05 04.8286	81° 26'	−0 14 40.6159
17	+0 24 16.4032	52	+0 04 30.9587	27	−0 15 14.4858
18	+0 23 42.5334	53	+0 03 57.0889	28	−0 15 48.3556
19	+0 23 08.6636	54	+0 03 23.2191	29	−0 16 22.2254
20	+0 22 34.7937	55	+0 02 49.3492	30	−0 16 56.0953
80° 21'	+0 22 00.9239	80° 56'	+0 02 15.4794	81° 31'	−0 17 29.9651
22	+0 21 27.0540	57	+0 01 41.6095	32	−0 18 03.8350
23	+0 20 53.1842	58	+0 01 07.7397	33	−0 18 37.7048
24	+0 20 19.3143	59	+0 00 33.8698	34	−0 19 11.5747
25	+0 19 45.4445	81° 00	0 00 00.0000	35	−0 19 45.4445
80° 26'	+0 19 11.5747	81° 01'	−0 00 33.8698	81° 36'	−0 20 19.3143
27	+0 18 37.7048	02	−0 01 07.7397	37	−0 20 53.1842
28	+0 18 03.8350	03	−0 01 41.6095	38	−0 21 27.0540
29	+0 17 29.9651	04	−0 02 15.4794	39	−0 22 00.9239
30	+0 16 56.0953	05	−0 02 49.3492	40	−0 22 34.7937
80° 31'	+0 16 22.2254	81° 06'	−0 03 23.2191	81° 41'	−0 23 08.6636
32	+0 15 48.3556	07	−0 03 57.0889	42	−0 23 42.5334
33	+0 15 14.4858	08	−0 04 30.9587	43	−0 24 16.4032
34	+0 14 40.6159	09	−0 05 04.8286	44	−0 24 50.2731
35	+0 14 06.7461	10	−0 05 38.6984	45	−0 25 24.1429
80° 36'	+0 13 32.8762	81° 11'	−0 06 12.5683	81° 46'	−0 25 58.0128
37	+0 12 59.0064	12	−0 06 46.4381	47	−0 26 31.8826
38	+0 12 25.1365	13	−0 07 20.3080	48	−0 27 05.7525
39	+0 11 51.2667	14	−0 07 54.1778	49	−0 27 39.6223
40	+0 11 17.3969	15	−0 08 28.0476	50	−0 28 13.4921

Lambert Projection for South Carolina - North

Table II (Cont'd).

1" of long. = 0".56449738 of θ

Long.	θ	Long.	θ	Long.	θ
81° 51'	-0° 28' 47".3620	82° 26'	-0° 48' 32".8065	83° 01'	-1° 08' 18".2510
52	-0 29 21.2318	27	-0 49 06.6763	02	-1 08 52.1208
53	-0 29 55.1017	28	-0 49 40.5462	03	-1 09 25.9907
54	-0 30 28.9715	29	-0 50 14.4160	04	-1 09 59.8605
55	-0 31 02.8414	30	-0 50 48.2859	05	-1 10 33.7304
81° 56'	-0 31 36.7112	82° 31'	-0 51 22.1557	83° 06'	-1 11 07.6002
57	-0 32 10.5810	32	-0 51 56.0255	07	-1 11 41.4700
58	-0 32 44.4509	33	-0 52 29.8954	08	-1 12 15.3399
59	-0 33 18.3207	34	-0 53 03.7652	09	-1 12 49.2097
82° 00	-0 33 52.1906	35	-0 53 37.6351	10	-1 13 23.0796
82° 01'	-0 34 26.0604	82° 36'	-0 54 11.5049	83° 11'	-1 13 56.9494
02	-0 34 59.9303	37	-0 54 45.3748	12	-1 14 30.8192
03	-0 35 33.8001	38	-0 55 19.2446	13	-1 15 04.6891
04	-0 36 07.6699	39	-0 55 53.1144	14	-1 15 38.5589
05	-0 36 41.5398	40	-0 56 26.9843	15	-1 16 12.4288
82° 06'	-0 37 15.4096	82° 41'	-0 57 00.8541	83° 16'	-1 16 46.2986
07	-0 37 49.2795	42	-0 57 34.7240	17	-1 17 20.1685
08	-0 38 23.1493	43	-0 58 08.5938	18	-1 17 54.0383
09	-0 38 57.0192	44	-0 58 42.4637	19	-1 18 27.9081
10	-0 39 30.8890	45	-0 59 16.3335	20	-1 19 01.7780
82° 11'	-0 40 04.7588	82° 46'	-0 59 50.2033	83° 21'	-1 19 35.6478
12	-0 40 38.6287	47	-1 00 24.0732	22	-1 20 09.5177
13	-0 41 12.4985	48	-1 00 57.9430	23	-1 20 43.3875
14	-0 41 46.3684	49	-1 01 31.8129	24	-1 21 17.2574
15	-0 42 20.2382	50	-1 02 05.6827	25	-1 21 51.1272
82° 16'	-0 42 54.1081	82° 51'	-1 02 39.5526	83° 26'	-1 22 24.9970
17	-0 43 27.9779	52	-1 03 13.4224	27	-1 22 58.8669
18	-0 44 01.8477	53	-1 03 47.2922	28	-1 23 32.7367
19	-0 44 35.7176	54	-1 04 21.1621	29	-1 24 06.6066
20	-0 45 09.5874	55	-1 04 55.0319	30	-1 24 40.4764
82° 21'	-0 45 43.4573	82° 56'	-1 05 28.9018	83° 31'	-1 25 14.3463
22	-0 46 17.3271	57	-1 06 02.7716	32	-1 25 48.2161
23	-0 46 51.1970	58	-1 06 36.6415	33	-1 26 22.0859
24	-0 47 25.0668	59	-1 07 10.5113	34	-1 26 55.9558
25	-0 47 58.9366	83° 00	-1 07 44.3811	35	-1 27 29.8256

Table I.

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
31° 50'	32,676,887.65	0	101.06367	+600.7	1.0001383
51	32,670,823.83	6,063.82	101.06333	+575.4	1.0001325
52	32,664,760.03	12,127.62	101.06317	+550.5	1.0001268
53	32,658,696.24	18,191.41	101.06283	+526.0	1.0001211
54	32,652,632.47	24,255.18	101.06250	+501.8	1.0001155
55	32,646,568.72	30,318.93	101.06217	+478.0	1.0001101
31° 56'	32,640,504.99	36,382.66	101.06200	+454.5	1.0001047
57	32,634,441.27	42,446.38	101.06167	+431.4	1.0000993
58	32,628,377.57	48,510.08	101.06133	+408.7	1.0000941
59	32,622,313.89	54,573.76	101.06117	+386.3	1.0000889
32° 00	32,616,250.22	60,637.43	101.06100	+364.3	1.0000839
32° 01'	32,610,186.56	66,701.09	101.06067	+342.6	1.0000789
02	32,604,122.92	72,764.73	101.06050	+321.3	1.0000740
03	32,598,059.29	78,828.36	101.06033	+300.4	1.0000692
04	32,591,995.67	84,891.98	101.06000	+279.8	1.0000644
05	32,585,932.07	90,955.58	101.05983	+259.6	1.0000598
32° 06'	32,579,868.48	97,019.17	101.05983	+239.8	1.0000552
07	32,573,804.89	103,082.76	101.05950	+220.3	1.0000507
08	32,567,741.32	109,146.33	101.05933	+201.2	1.0000463
09	32,561,677.76	115,209.89	101.05917	+182.4	1.0000420
10	32,555,614.21	121,273.44	101.05900	+164.0	1.0000378
32° 11'	32,549,550.67	127,336.98	101.05883	+146.0	1.0000336
12	32,543,487.14	133,400.51	101.05867	+128.3	1.0000295
13	32,537,423.62	139,464.03	101.05867	+111.0	1.0000256
14	32,531,360.10	145,527.55	101.05850	+ 94.0	1.0000216
15	32,525,296.59	151,591.06	101.05833	+ 77.4	1.0000178
32° 16'	32,519,233.09	157,654.56	101.05833	+ 61.2	1.0000141
17	32,513,169.59	163,718.06	101.05817	+ 45.4	1.0000105
18	32,507,106.10	169,781.55	101.05800	+ 29.9	1.0000069
19	32,501,042.62	175,845.03	101.05800	+ 14.8	1.0000034
20	32,494,979.14	181,908.51	101.05800	0.0	1.0000000
32° 21'	32,488,915.66	187,971.99	101.05783	- 14.4	0.9999967
22	32,482,852.19	194,035.46	101.05783	- 28.4	0.9999935
23	32,476,788.72	200,098.93	101.05783	- 42.1	0.9999903
24	32,470,725.25	206,162.40	101.05767	- 55.4	0.9999872
25	32,464,661.79	212,225.86	101.05783	- 68.4	0.9999842

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
32° 26'	32,458,598.32	218,289.33	101.05767	- 81.0	0.9999813
27	32,452,534.86	224,352.79	101.05767	- 93.2	0.9999785
28	32,446,471.40	230,416.25	101.05767	-105.1	0.9999758
29	32,440,407.94	236,479.71	101.05767	-116.6	0.9999732
30	32,434,344.48	242,543.17	101.05767	-127.7	0.9999706
32° 31'	32,428,281.02	248,606.63	101.05783	-138.5	0.9999681
32	32,422,217.55	254,670.10	101.05783	-148.9	0.9999657
33	32,416,154.08	260,733.57	101.05783	-159.0	0.9999634
34	32,410,090.61	266,797.04	101.05783	-168.7	0.9999612
35	32,404,027.14	272,860.51	101.05783	-178.0	0.9999590
32° 36'	32,397,963.67	278,923.98	101.05800	-187.0	0.9999569
37	32,391,900.19	284,987.46	101.05800	-195.6	0.9999550
38	32,385,836.71	291,050.94	101.05817	-203.8	0.9999531
39	32,379,773.22	297,114.43	101.05833	-211.7	0.9999513
40	32,373,709.72	303,177.93	101.05833	-219.2	0.9999496
32° 41'	32,367,646.22	309,241.43	101.05850	-226.3	0.9999479
42	32,361,582.71	315,304.94	101.05850	-233.1	0.9999463
43	32,355,519.20	321,368.45	101.05867	-239.5	0.9999449
44	32,349,455.68	327,431.97	101.05883	-245.5	0.9999435
45	32,343,392.15	333,495.50	101.05900	-251.2	0.9999422
32° 46'	32,337,328.61	339,559.04	101.05917	-256.5	0.9999409
47	32,331,265.06	345,622.59	101.05933	-261.4	0.9999398
48	32,325,201.50	351,686.15	101.05950	-266.0	0.9999388
49	32,319,137.93	357,749.72	101.05967	-270.2	0.9999378
50	32,313,074.35	363,813.30	101.05983	-274.1	0.9999369
32° 51'	32,307,010.76	369,876.89	101.06000	-277.6	0.9999361
52	32,300,947.16	375,940.49	101.06017	-280.7	0.9999354
53	32,294,883.55	382,004.10	101.06050	-283.5	0.9999347
54	32,288,819.92	388,067.73	101.06067	-285.9	0.9999342
55	32,282,756.28	394,131.37	101.06083	-287.9	0.9999337
32° 56'	32,276,692.63	400,195.02	101.06117	-289.6	0.9999333
57	32,270,628.96	406,258.69	101.06133	-290.9	0.9999330
58	32,264,565.28	412,322.37	101.06167	-291.8	0.9999328
59	32,258,501.58	418,386.07	101.06183	-292.4	0.9999327
33° 00	32,252,437.87	424,449.78	101.06217	-292.6	0.9999326

Lambert Projection for South Carolina - South

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
33° 01'	32,246,374.14	430,513.51	101.06250	-292.4	0.9999327
02	32,240,310.39	436,577.26	101.06283	-291.9	0.9999328
03	32,234,246.62	442,641.03	101.06300	-291.0	0.9999330
04	32,228,182.84	448,704.81	101.06333	-289.7	0.9999333
05	32,222,119.04	454,768.61	101.06367	-288.1	0.9999337
33° 06'	32,216,055.22	460,832.43	101.06400	-286.1	0.9999341
07	32,209,991.38	466,896.27	101.06433	-283.8	0.9999347
08	32,203,927.52	472,960.13	101.06467	-281.1	0.9999353
09	32,197,863.64	479,024.01	101.06500	-278.0	0.9999360
10	32,191,799.74	485,087.91	101.06533	-274.5	0.9999368
33° 11'	32,185,735.82	491,151.83	101.06583	-270.7	0.9999377
12	32,179,671.87	497,215.78	101.06600	-266.5	0.9999386
13	32,173,607.91	503,279.74	101.06650	-261.9	0.9999397
14	32,167,543.92	509,343.73	101.06700	-257.0	0.9999408
15	32,161,479.90	515,407.75	101.06733	-251.7	0.9999420
33° 16'	32,155,415.86	521,471.79	101.06767	-246.0	0.9999434
17	32,149,351.80	527,535.85	101.06817	-240.0	0.9999447
18	32,143,287.71	533,599.94	101.06850	-233.6	0.9999462
19	32,137,223.60	539,664.05	101.06900	-226.8	0.9999478
20	32,131,159.46	545,728.19	101.06933	-219.7	0.9999494
33° 21'	32,125,095.30	551,792.35	101.07000	-212.2	0.9999511
22	32,119,031.10	557,856.55	101.07033	-204.4	0.9999529
23	32,112,966.88	563,920.77	101.07083	-196.2	0.9999548
24	32,106,902.63	569,985.02	101.07117	-187.6	0.9999568
25	32,100,838.36	576,049.29	101.07183	-178.6	0.9999589
33° 26'	32,094,774.05	582,113.60	101.07233	-169.3	0.9999610
27	32,088,709.71	588,177.94	101.07283	-159.6	0.9999633
28	32,082,645.34	594,242.31	101.07333	-149.5	0.9999656
29	32,076,580.94	600,306.71	101.07367	-139.1	0.9999680
30	32,070,516.52	606,371.13	101.07433	-128.3	0.9999705
33° 31'	32,064,452.06	612,435.59	101.07500	-117.1	0.9999730
32	32,058,387.56	618,500.09	101.07550	-105.6	0.9999757
33	32,052,323.03	624,564.62	101.07600	- 93.7	0.9999784
34	32,046,258.47	630,629.18	101.07650	- 81.4	0.9999813
35	32,040,193.88	636,693.77	101.07717	- 68.7	0.9999842

Lambert Projection for South Carolina - South

Table I (Cont'd).

Lat.	R ft.	Y' Y value on central meridian feet	Tabular difference for 1 sec. of lat. feet	Scale in units of 7th place of logs	Scale expressed as a ratio
33° 36'	32,034,129.25	642,758.40	101.07767	- 55.7	0.9999872
37	32,028,064.59	648,823.06	101.07833	- 42.3	0.9999903
38	32,021,999.89	654,887.76	101.07900	- 28.6	0.9999934
39	32,015,935.15	660,952.50	101.07950	- 14.5	0.9999967
40	32,009,870.38	667,017.27	101.08000	0.0	1.0000000
33° 41'	32,003,805.58	673,082.07	101.08083	+ 14.9	1.0000034
42	31,997,740.73	679,146.92	101.08133	+ 30.1	1.0000069
43	31,991,675.85	685,211.80	101.08217	+ 45.7	1.0000105
44	31,985,610.92	691,276.73	101.08267	+ 61.6	1.0000142
45	31,979,545.96	697,341.69	101.08333	+ 77.9	1.0000179
33° 46'	31,973,480.96	703,406.69	101.08400	+ 94.6	1.0000218
47	31,967,415.92	709,471.73	101.08467	+111.7	1.0000257
48	31,961,350.84	715,536.81	101.08550	+129.1	1.0000297
49	31,955,285.71	721,601.94	101.08600	+146.9	1.0000338
50	31,949,220.55	727,667.10	101.08683	+165.1	1.0000380
33° 51'	31,943,155.34	733,732.31	101.08750	+183.6	1.0000423
52	31,937,090.09	739,797.56	101.08817	+202.5	1.0000466
53	31,931,024.80	745,862.85	101.08900	+221.8	1.0000511
54	31,924,959.46	751,928.19	101.08967	+241.5	1.0000556
55	31,918,894.08	757,993.57	101.09050	+261.5	1.0000602
33° 56'	31,912,828.65	764,059.00	101.09117	+281.9	1.0000649
57	31,906,763.18	770,124.47	101.09200	+302.6	1.0000697
58	31,900,697.66	776,189.99	101.09267	+323.7	1.0000745
59	31,894,632.10	782,255.55	101.09350	+345.2	1.0000795
34° 00	31,888,566.49	788,321.16	101.09433	+367.1	1.0000845
34° 01'	31,882,500.83	794,386.82	101.09517	+389.3	1.0000896
02	31,876,435.12	800,452.53	101.09583	+411.9	1.0000948
03	31,870,369.37	806,518.28	101.09683	+434.9	1.0001001
04	31,864,303.56	812,584.09	101.09750	+458.3	1.0001055
05	31,858,237.71	818,649.94	101.09833	+482.0	1.0001110
34° 06'	31,852,171.81	824,715.84	101.09933	+506.1	1.0001165
07	31,846,105.85	830,781.80	101.10000	+530.6	1.0001222
08	31,840,039.85	836,847.80	101.10100	+555.4	1.0001279
09	31,833,973.79	842,913.86	101.10183	+580.6	1.0001337
10	31,827,907.68	848,979.97		+606.2	1.0001396

Lambert Projection for South Carolina - South

Table II.

1" of long. = 0".54465157 of θ

Long.	θ	Long.	θ	Long.	θ
78° 45'	+1° 13' 31".6777				
46	+1 12 58.9986	79° 21'	+0° 53' 55".2303	79° 56'	+0° 34' 51".4620
47	+1 12 26.3195	22	+0 53 22.5512	57	+0 34 18.7829
48	+1 11 53.6404	23	+0 52 49.8721	58	+0 33 46.1038
49	+1 11 20.9613	24	+0 52 17.1930	59	+0 33 13.4247
50	+1 10 48.2822	25	+0 51 44.5139	80° 00	+0 32 40.7457
78° 51'	+1 10 15.6032	79° 26'	+0 51 11.8349	80° 01'	+0 32 08.0666
52	+1 09 42.9241	27	+0 50 39.1558	02	+0 31 35.3875
53	+1 09 10.2450	28	+0 50 06.4767	03	+0 31 02.7084
54	+1 08 37.5659	29	+0 49 33.7976	04	+0 30 30.0293
55	+1 08 04.8868	30	+0 49 01.1185	05	+0 29 57.3502
78° 56'	+1 07 32.2077	79° 31'	+0 48 28.4394	80° 06'	+0 29 24.6711
57	+1 06 59.5286	32	+0 47 55.7603	07	+0 28 51.9920
58	+1 06 26.8495	33	+0 47 23.0812	08	+0 28 19.3129
59	+1 05 54.1704	34	+0 46 50.4021	09	+0 27 46.6338
79° 00	+1 05 21.4913	35	+0 46 17.7230	10	+0 27 13.9547
79° 01'	+1 04 48.8122	79° 36'	+0 45 45.0439	80° 11'	+0 26 41.2756
02	+1 04 16.1331	37	+0 45 12.3648	12	+0 26 08.5965
03	+1 03 43.4540	38	+0 44 39.6857	13	+0 25 35.9174
04	+1 03 10.7749	39	+0 44 07.0066	14	+0 25 03.2383
05	+1 02 38.0958	40	+0 43 34.3275	15	+0 24 30.5592
79° 06'	+1 02 05.4167	79° 41'	+0 43 01.6484	80° 16'	+0 23 57.8801
07	+1 01 32.7376	42	+0 42 28.9693	17	+0 23 25.2011
08	+1 01 00.0586	43	+0 41 56.2903	18	+0 22 52.5220
09	+1 00 27.3795	44	+0 41 23.6112	19	+0 22 19.8429
10	+0 59 54.7004	45	+0 40 50.9321	20	+0 21 47.1638
79° 11'	+0 59 22.0213	79° 46'	+0 40 18.2530	80° 21'	+0 21 14.4847
12	+0 58 49.3422	47	+0 39 45.5739	22	+0 20 41.8056
13	+0 58 16.6631	48	+0 39 12.8948	23	+0 20 09.1265
14	+0 57 43.9840	49	+0 38 40.2157	24	+0 19 36.4474
15	+0 57 11.3049	50	+0 38 07.5366	25	+0 19 03.7683
79° 16'	+0 56 38.6258	79° 51'	+0 37 34.8575	80° 26'	+0 18 31.0892
17	+0 56 05.9467	52	+0 37 02.1784	27	+0 17 58.4101
18	+0 55 33.2676	53	+0 36 29.4993	28	+0 17 25.7310
19	+0 55 00.5885	54	+0 35 56.8202	29	+0 16 53.0519
20	+0 54 27.9094	55	+0 35 24.1411	30	+0 16 20.3728

Lambert Projection for South Carolina - South

Table II (Cont'd).

1" of long. = 0".54465157 of θ

Long.	θ	Long.	θ	Long.	θ
80° 31'	+0° 15' 47".6937	81° 06'	−0° 03' 16".0746	81° 41'	−0° 22' 19.8429
32	+0 15 15.0146	07	−0 03 48.7537	42	−0 22 52.5220
33	+0 14 42.3355	08	−0 04 21.4328	43	−0 23 25.2011
34	+0 14 09.6564	09	−0 04 54.1118	44	−0 23 57.8801
35	+0 13 36.9774	10	−0 05 26.7909	45	−0 24 30.5592
80° 36'	+0 13 04.2983	81° 11'	−0 05 59.4700	81° 46'	−0 25 03.2383
37	+0 12 31.6192	12	−0 06 32.1491	47	−0 25 35.9174
38	+0 11 58.9401	13	−0 07 04.8282	48	−0 26 08.5965
39	+0 11 26.2610	14	−0 07 37.5073	49	−0 26 41.2756
40	+0 10 53.5819	15	−0 08 10.1864	50	−0 27 13.9547
80° 41'	+0 10 20.9028	81° 16'	−0 08 42.8655	81° 51'	−0 27 46.6338
42	+0 09 48.2237	17	−0 09 15.5446	52	−0 28 19.3129
43	+0 09 15.5446	18	−0 09 48.2237	53	−0 28 51.9920
44	+0 08 42.8655	19	−0 10 20.9028	54	−0 29 24.6711
45	+0 08 10.1864	20	−0 10 53.5819	55	−0 29 57.3502
80° 46'	+0 07 37.5073	81° 21'	−0 11 26.2610	81° 56'	−0 30 30.0293
47	+0 07 04.8282	22	−0 11 58.9401	57	−0 31 02.7084
48	+0 06 32.1491	23	−0 12 31.6192	58	−0 31 35.3875
49	+0 05 59.4700	24	−0 13 04.2983	59	−0 32 08.0666
50	+0 05 26.7909	25	−0 13 36.9774	82° 00	−0 32 40.7457
80° 51'	+0 04 54.1118	81° 26'	−0 14 09.6564	82° 01'	−0 33 13.4247
52	+0 04 21.4328	27	−0 14 42.3355	02	−0 33 46.1038
53	+0 03 48.7537	28	−0 15 15.0146	03	−0 34 18.7829
54	+0 03 16.0746	29	−0 15 47.6937	04	−0 34 51.4620
55	+0 02 43.3955	30	−0 16 20.3728	05	−0 35 24.1411
80° 56'	+0 02 10.7164	81° 31'	−0 16 53.0519	82° 06'	−0 35 56.8202
57	+0 01 38.0373	32	−0 17 25.7310	07	−0 36 29.4993
58	+0 01 05.3582	33	−0 17 58.4101	08	−0 37 02.1784
59	+0 00 32.6791	34	−0 18 31.0892	09	−0 37 34.8575
81° 00	0 00 00.0000	35	−0 19 03.7683	10	−0 38 07.5366
81° 01'	−0 00 32.6791	81° 36'	−0 19 36.4474	82° 11'	−0 38 40.2157
02	−0 01 05.3582	37	−0 20 09.1265	12	−0 39 12.8948
03	−0 01 38.0373	38	−0 20 41.8056	13	−0 39 45.5739
04	−0 02 10.7164	39	−0 21 14.4847	14	−0 40 18.2530
05	−0 02 43.3955	40	−0 21 47.1638	15	−0 40 50.9321

CORRECTIONS TO NATURAL SCALE RATIOS*
(in units of the 7th decimal place)

For Lambert Projection

Δφ' as argument

Δφ'	Corr'n (Plus)	Δφ'	Corr'n (Plus)
1	0	31	34
2	0	32	36
3	0	33	38
4	1	34	40
5	1	35	43
6	1	36	45
7	2	37	48
8	2	38	51
9	3	39	53
10	4	40	56
11	4	41	59
12	5	42	62
13	6	43	65
14	7	44	68
15	8	45	71
16	9	46	74
17	10	47	77
18	11	48	81
19	13	49	84
20	14	50	88
21	15	51	91
22	17	52	95
23	19	53	98
24	20	54	102
25	22	55	106
26	24	56	110
27	26	57	114
28	27	58	118
29	29	59	122
30	32	60	126

Δφ' is the difference in latitude in minutes of the ends of the line.

For Lambert or transverse Mercator Projection

Δy or Δx	Corr'n (Plus)
10,000	0
20,000	0
30,000	1
40,000	2
50,000	2
60,000	3
70,000	5
80,000	6
90,000	8
100,000	10
110,000	11
120,000	14
130,000	16
140,000	19
150,000	21
160,000	24
170,000	27
180,000	31
190,000	34
200,000	38
210,000	42
220,000	46
230,000	50
240,000	55
250,000	59
260,000	64
270,000	69
280,000	74
290,000	80
300,000	86
310,000	91
320,000	97
330,000	103
340,000	110
350,000	116

*Scale ratio interpolated for mean latitude or mean x' of the ends of a line and corrected by the above table is a true mean value accurate to within one in the seventh decimal place.

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