

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
0	304,813.25	2,374,581.80	219.37	0.00
1	304,751.85	2,374,506.98	230.47	96.79
2	304,576.58	2,374,412.09	258.50	296.10
3	304,566.76	2,374,413.03	277.97	305.96
4	304,524.30	2,374,420.90	266.58	349.14
5	304,481.06	2,374,407.39	250.83	394.45
6	304,463.17	2,374,400.53	272.59	413.61
7	304,452.37	2,374,405.83	271.48	425.64
8	304,435.01	2,374,398.40	246.81	444.52
9	304,409.49	2,374,387.46	238.54	472.29
10	304,392.67	2,374,373.48	230.96	494.16
11	304,392.33	2,374,373.21	227.35	494.60
12	304,351.63	2,374,329.65	228.66	554.21
13	304,296.73	2,374,290.16	232.56	621.84
14	304,285.00	2,374,280.61	228.28	636.96
15	304,279.89	2,374,275.63	236.97	644.10
16	304,170.42	2,374,231.92	251.94	761.97
17	303,840.91	2,374,147.59	253.58	1,102.10
18	303,816.51	2,374,139.44	256.90	1,127.83
19	303,800.59	2,374,137.28	257.76	1,143.90
20	303,734.34	2,374,117.31	242.35	1,213.09
21	303,702.56	2,374,092.02	243.97	1,253.71
22	303,662.64	2,374,082.40	268.38	1,294.77
23	303,618.03	2,374,090.51	276.74	1,340.11
24	303,604.23	2,374,091.28	266.85	1,353.94
25	303,592.38	2,374,089.30	255.85	1,365.94
26	303,541.33	2,374,071.90	253.96	1,419.88
27	303,464.65	2,374,053.83	256.99	1,498.66
28	303,456.23	2,374,051.92	273.17	1,507.29
29	303,448.46	2,374,054.62	271.62	1,515.52
30	303,424.96	2,374,047.94	251.75	1,539.94
31	303,376.32	2,374,029.61	256.96	1,591.93
32	303,365.05	2,374,028.54	260.51	1,603.25
33	303,259.95	2,374,003.24	257.10	1,711.35
34	303,212.99	2,373,993.04	253.78	1,759.40
35	303,182.83	2,373,981.95	251.50	1,791.53
36	303,136.73	2,373,968.02	253.86	1,839.70
37	303,088.47	2,373,954.66	255.01	1,889.77
38	303,041.57	2,373,942.52	255.49	1,938.21
39	302,993.83	2,373,930.17	254.16	1,987.53
40	302,941.20	2,373,913.90	254.80	2,042.61
41	302,894.97	2,373,903.03	253.58	2,090.11
42	302,849.65	2,373,886.88	255.50	2,138.21
43	302,786.58	2,373,876.47	256.51	2,202.14
44	302,766.81	2,373,870.19	231.25	2,222.88
45	302,756.26	2,373,852.00	241.66	2,243.92
46	302,652.28	2,373,857.83	271.56	2,348.06
47	302,637.15	2,373,857.81	267.62	2,363.19
48	302,560.35	2,373,851.52	267.40	2,440.24
49	302,507.82	2,373,851.04	266.75	2,492.78
50	302,476.12	2,373,847.73	264.01	2,524.65

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
51	302,360.74	2,373,835.58	263.64	2,640.67
52	302,341.71	2,373,833.34	266.69	2,659.83
53	302,228.44	2,373,833.49	273.89	2,773.10
54	302,189.65	2,373,838.74	277.89	2,812.25
55	302,063.51	2,373,856.63	275.19	2,939.64
56	302,048.30	2,373,857.24	264.76	2,954.87
57	302,032.07	2,373,853.56	249.23	2,971.51
58	302,016.11	2,373,844.80	243.41	2,989.72
59	301,989.01	2,373,832.50	253.00	3,019.48
60	301,970.39	2,373,829.35	266.23	3,038.36
61	301,899.20	2,373,831.91	274.02	3,109.59
62	301,720.92	2,373,850.62	254.44	3,288.85
63	301,716.27	2,373,847.10	236.98	3,294.68
64	301,633.40	2,373,801.30	246.74	3,389.37
65	301,585.89	2,373,786.24	256.28	3,439.21
66	301,418.02	2,373,757.11	263.50	3,609.59
67	301,307.87	2,373,751.03	270.30	3,719.91
68	301,242.78	2,373,755.32	278.73	3,785.14
69	301,204.15	2,373,764.73	281.93	3,824.89
70	301,177.54	2,373,769.50	273.08	3,851.93
71	300,990.78	2,373,756.46	262.73	4,039.15
72	300,968.43	2,373,752.30	255.37	4,061.88
73	300,955.63	2,373,747.97	244.90	4,075.40
74	300,879.92	2,373,701.56	243.85	4,164.20
75	300,669.76	2,373,621.74	248.42	4,389.00
76	300,645.82	2,373,611.89	239.14	4,414.89
77	300,195.92	2,373,242.94	215.33	4,996.73
78	300,131.19	2,373,065.22	197.50	5,185.87
79	300,102.62	2,372,958.60	199.53	5,296.26
80	299,580.55	2,371,789.61	200.46	6,576.53
81	299,567.17	2,371,745.43	184.33	6,622.69
82	299,573.99	2,371,698.10	192.47	6,670.51
83	299,563.48	2,371,682.00	219.88	6,689.73
84	299,547.14	2,371,666.56	219.79	6,712.21
85	299,536.83	2,371,650.66	214.83	6,731.17
86	299,500.90	2,371,602.46	207.13	6,791.29
87	299,490.10	2,371,568.34	188.41	6,827.07
88	299,490.62	2,371,528.15	219.43	6,867.26
89	299,466.21	2,371,523.66	258.42	6,892.08
90	299,405.05	2,371,509.83	254.94	6,954.79
91	299,218.03	2,371,451.31	255.67	7,150.75
92	299,115.80	2,371,430.93	259.72	7,254.99
93	299,001.46	2,371,412.23	285.22	7,370.85
94	298,988.57	2,371,422.94	301.08	7,387.61
95	298,975.10	2,371,428.51	279.88	7,402.19
96	298,943.92	2,371,427.05	253.56	7,433.40
97	298,933.77	2,371,421.14	239.87	7,445.14
98	298,920.20	2,371,413.29	235.76	7,460.82
99	298,896.97	2,371,394.86	221.29	7,490.47
100	298,883.33	2,371,372.17	224.71	7,516.95
101	298,858.12	2,371,356.66	238.41	7,546.55

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
102	298,835.80	2,371,342.93	239.42	7,572.75
103	298,815.04	2,371,331.16	244.07	7,596.62
104	298,794.35	2,371,322.68	238.34	7,618.98
105	298,772.97	2,371,304.07	229.49	7,647.32
106	298,735.36	2,371,272.52	241.83	7,696.41
107	298,701.48	2,371,262.59	255.17	7,731.72
108	298,678.01	2,371,257.03	250.49	7,755.84
109	298,657.54	2,371,247.18	237.73	7,778.56
110	298,641.61	2,371,234.35	238.07	7,799.01
111	298,624.95	2,371,226.59	231.11	7,817.39
112	298,611.02	2,371,208.24	220.66	7,840.42
113	298,604.99	2,371,202.02	226.33	7,849.08
114	298,530.00	2,371,135.82	229.44	7,949.11
115	298,529.80	2,371,135.66	224.44	7,949.37
116	298,522.16	2,371,126.07	212.23	7,961.63
117	298,440.24	2,370,957.33	206.06	8,149.21
118	298,431.67	2,370,939.93	191.85	8,168.60
119	298,432.96	2,370,910.57	169.64	8,197.99
120	298,445.70	2,370,871.86	163.19	8,238.75
121	298,461.89	2,370,813.12	167.64	8,299.67
122	298,464.48	2,370,797.31	157.86	8,315.69
123	298,477.94	2,370,778.07	162.55	8,339.18
124	298,477.93	2,370,768.65	187.59	8,348.59
125	298,464.87	2,370,720.31	191.55	8,398.67
126	298,438.80	2,370,534.29	177.08	8,586.51
127	298,441.76	2,370,522.26	178.77	8,598.89
128	298,430.78	2,370,467.57	185.94	8,654.68
129	298,430.56	2,370,444.11	196.00	8,678.14
130	298,419.95	2,370,426.77	210.91	8,698.47
131	298,389.25	2,370,374.33	211.22	8,759.23
132	298,374.51	2,370,350.82	207.99	8,786.99
133	298,369.87	2,370,340.36	202.22	8,798.43
134	298,363.04	2,370,322.14	187.71	8,817.88
135	298,365.78	2,370,291.64	181.24	8,848.50
136	298,360.33	2,370,250.85	177.74	8,889.65
137	298,366.83	2,370,220.62	176.53	8,920.58
138	298,364.31	2,370,192.87	195.06	8,948.45
139	298,343.86	2,370,148.87	215.99	8,996.96
140	298,325.54	2,370,131.83	216.41	9,021.98
141	298,313.66	2,370,107.19	207.48	9,049.33
142	298,307.30	2,370,095.81	197.30	9,062.37
143	298,305.56	2,370,077.41	195.23	9,080.86
144	298,286.06	2,370,035.73	220.22	9,126.88
145	298,273.09	2,370,026.76	229.57	9,142.65
146	298,263.25	2,370,016.50	211.18	9,156.86
147	298,255.08	2,369,992.18	191.46	9,182.52
148	298,253.44	2,369,970.57	201.75	9,204.19
149	298,242.70	2,369,957.39	220.73	9,221.19
150	298,225.26	2,369,938.22	225.64	9,247.10
151	298,199.64	2,369,915.93	221.34	9,281.06
152	298,134.10	2,369,817.68	217.79	9,399.17

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
153	298,107.34	2,369,787.83	221.79	9,439.26
154	298,005.50	2,369,673.58	223.54	9,592.31
155	297,893.07	2,369,562.56	221.93	9,750.31
156	297,818.29	2,369,468.51	209.55	9,870.47
157	297,810.32	2,369,447.34	200.61	9,893.09
158	297,805.60	2,369,434.79	206.86	9,906.50
159	297,795.22	2,369,418.86	224.40	9,925.52
160	297,751.51	2,369,389.06	231.76	9,978.42
161	297,706.92	2,369,348.65	239.86	10,038.59
162	297,677.49	2,369,339.03	229.05	10,069.55
163	297,643.80	2,369,270.60	203.32	10,145.83
164	297,591.95	2,369,131.38	202.66	10,294.40
165	297,581.66	2,369,109.22	206.93	10,318.82
166	297,550.69	2,369,053.24	208.11	10,382.80
167	297,497.81	2,368,950.65	204.63	10,498.22
168	297,401.27	2,368,711.62	205.24	10,756.00
169	297,383.01	2,368,677.97	204.12	10,794.29
170	297,372.29	2,368,648.13	197.43	10,826.00
171	297,361.02	2,368,606.32	191.26	10,869.30
172	297,356.32	2,368,570.32	188.46	10,905.60
173	297,350.22	2,368,533.83	189.26	10,942.60
174	297,343.01	2,368,488.48	182.88	10,988.52
175	297,343.71	2,368,476.24	175.36	11,000.79
176	297,346.13	2,368,453.30	177.19	11,023.85
177	297,345.96	2,368,429.26	180.05	11,047.89
178	297,346.27	2,368,371.08	182.39	11,106.07
179	297,344.52	2,368,351.39	191.85	11,125.84
180	297,326.90	2,368,299.12	201.61	11,180.99
181	297,304.91	2,368,251.09	200.18	11,233.82
182	297,301.60	2,368,239.33	192.62	11,246.04
183	297,298.31	2,368,219.66	188.22	11,265.98
184	297,294.80	2,368,190.82	184.83	11,295.03
185	297,292.44	2,368,141.15	182.21	11,344.76
186	297,291.70	2,368,116.40	190.53	11,369.52
187	297,282.33	2,368,089.75	192.40	11,397.77
188	297,281.40	2,368,079.96	169.21	11,407.61
189	297,295.88	2,368,051.56	164.23	11,439.48
190	297,301.81	2,367,976.66	176.61	11,514.62
191	297,302.54	2,367,958.21	179.27	11,533.08
192	297,302.16	2,367,931.01	182.54	11,560.28
193	297,300.19	2,367,904.70	171.29	11,586.67
194	297,308.08	2,367,884.88	162.27	11,608.00
195	297,314.81	2,367,857.37	159.08	11,636.32
196	297,324.09	2,367,839.98	152.49	11,656.03
197	297,343.42	2,367,801.92	153.05	11,698.72
198	297,360.29	2,367,768.79	167.75	11,735.90
199	297,359.45	2,367,749.27	170.85	11,755.43
200	297,367.13	2,367,729.03	148.34	11,777.09
201	297,381.75	2,367,713.08	135.72	11,798.72
202	297,455.62	2,367,641.85	135.97	11,901.34
203	297,497.70	2,367,595.14	144.70	11,964.21

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
204	297,783.34	2,367,071.06	154.96	12,561.08
205	297,794.17	2,367,043.56	163.46	12,590.64
206	297,799.85	2,367,015.82	174.56	12,618.95
207	297,799.45	2,366,983.08	180.34	12,651.69
208	297,800.34	2,365,484.78	180.36	14,149.99
209	297,800.02	2,365,460.56	177.86	14,174.22
210	297,802.60	2,365,431.26	171.06	14,203.62
211	297,936.27	2,364,845.45	167.66	14,804.49
212	297,938.52	2,364,834.71	217.68	14,815.46
213	297,932.46	2,364,834.42	286.68	14,821.53
214	297,915.11	2,364,847.10	306.67	14,843.02
215	297,905.91	2,364,854.07	305.53	14,854.56
216	297,875.21	2,364,874.71	287.07	14,891.56
217	297,865.83	2,364,874.75	259.25	14,900.93
218	297,861.11	2,364,872.86	231.78	14,906.02
219	297,855.57	2,364,865.04	202.43	14,915.60
220	297,840.93	2,364,778.15	190.03	15,003.72
221	297,835.73	2,364,750.08	198.23	15,032.26
222	297,825.84	2,364,729.79	210.84	15,054.84
223	297,810.90	2,364,708.99	222.33	15,080.45
224	297,784.63	2,364,686.13	233.64	15,115.27
225	297,624.70	2,364,587.39	239.64	15,303.23
226	297,580.91	2,364,563.10	240.98	15,353.30
227	297,580.88	2,364,563.08	247.26	15,353.34
228	297,453.43	2,364,525.45	254.49	15,486.23
229	297,361.13	2,364,501.45	252.74	15,581.60
230	297,338.13	2,364,493.11	247.30	15,606.07
231	297,308.68	2,364,479.08	241.54	15,638.68
232	296,954.28	2,364,262.22	239.17	16,054.17
233	296,925.83	2,364,245.67	240.10	16,087.08
234	296,910.93	2,364,237.21	239.44	16,104.21
235	296,843.34	2,364,195.78	245.02	16,183.50
236	296,726.73	2,364,156.87	250.30	16,306.42
237	296,712.51	2,364,151.42	237.91	16,321.65
238	296,703.66	2,364,143.10	227.03	16,333.80
239	296,653.66	2,364,096.95	232.80	16,401.84
240	296,622.02	2,364,077.41	244.36	16,439.03
241	296,527.12	2,364,043.64	249.66	16,539.76
242	296,498.83	2,364,032.73	245.55	16,570.08
243	296,482.51	2,364,024.13	238.85	16,588.53
244	296,284.01	2,363,887.71	236.90	16,829.39
245	296,262.72	2,363,874.57	231.41	16,854.41
246	296,236.36	2,363,847.75	220.63	16,892.01
247	296,056.70	2,363,607.08	214.36	17,192.35
248	295,943.09	2,363,425.14	212.67	17,406.84
249	295,907.60	2,363,371.24	215.81	17,471.38
250	295,684.68	2,363,088.54	212.09	17,831.39
251	295,675.08	2,363,068.78	202.32	17,853.36
252	295,639.31	2,362,963.17	207.19	17,964.86
253	295,614.77	2,362,929.00	215.67	18,006.93
254	295,602.64	2,362,912.10	220.50	18,027.74

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
255	295,581.83	2,362,891.52	225.33	18,057.00
256	295,581.47	2,362,891.17	226.53	18,057.51
257	295,548.73	2,362,861.41	223.30	18,101.74
258	295,530.02	2,362,838.20	224.64	18,131.56
259	295,513.34	2,362,824.40	237.31	18,153.21
260	295,429.28	2,362,783.77	242.56	18,246.57
261	295,388.35	2,362,761.00	246.11	18,293.41
262	295,300.92	2,362,731.41	248.02	18,385.71
263	295,281.15	2,362,722.08	224.56	18,407.58
264	295,281.12	2,362,722.02	204.39	18,407.65
265	295,267.75	2,362,692.53	226.88	18,440.02
266	294,968.63	2,362,579.92	267.03	18,759.64
267	294,903.84	2,362,596.91	275.65	18,826.62
268	294,861.63	2,362,594.40	282.18	18,868.90
269	294,743.40	2,362,656.65	295.86	19,002.52
270	294,375.02	2,362,820.36	290.98	19,405.63
271	294,344.59	2,362,830.24	281.48	19,437.63
272	294,307.95	2,362,833.42	283.36	19,474.41
273	294,188.74	2,362,881.01	295.18	19,602.76
274	294,092.78	2,362,933.32	301.71	19,712.06
275	292,823.80	2,363,815.73	304.05	21,257.68
276	292,759.20	2,363,858.14	313.15	21,334.96
277	292,750.46	2,363,869.75	331.74	21,349.49
278	292,696.88	2,364,020.75	342.34	21,509.71
279	292,656.26	2,364,164.42	341.41	21,659.02
280	292,637.34	2,364,212.70	340.74	21,710.88
281	292,613.93	2,364,288.71	327.67	21,790.41
282	292,606.40	2,364,295.60	304.77	21,800.62
283	292,375.72	2,364,413.60	296.41	22,059.72
284	292,312.29	2,364,444.16	287.80	22,130.13
285	292,284.35	2,364,449.02	275.98	22,158.49
286	292,262.27	2,364,449.83	270.97	22,180.58
287	292,233.03	2,364,449.75	272.67	22,209.83
288	292,215.34	2,364,451.45	278.39	22,227.60
289	292,185.57	2,364,457.39	285.32	22,257.95
290	292,159.71	2,364,466.48	287.22	22,285.36
291	292,136.21	2,364,472.81	284.12	22,309.71
292	291,843.66	2,364,541.17	281.30	22,610.13
293	291,710.68	2,364,563.31	278.33	22,744.94
294	291,674.54	2,364,567.88	277.69	22,781.37
295	291,651.02	2,364,571.25	276.26	22,805.14
296	291,632.69	2,364,572.65	267.31	22,823.52
297	291,570.25	2,364,561.96	262.16	22,886.86
298	291,545.34	2,364,559.35	277.61	22,911.91
299	291,521.88	2,364,568.45	303.41	22,937.07
300	291,285.24	2,364,810.28	282.86	23,275.42
301	291,251.06	2,364,797.91	251.80	23,311.77
302	291,205.81	2,364,784.50	256.75	23,358.97
303	291,179.77	2,364,779.91	264.78	23,385.40
304	291,142.17	2,364,779.61	275.96	23,423.01
305	291,115.03	2,364,785.57	287.93	23,450.80

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
306	291,091.63	2,364,795.73	292.20	23,476.30
307	291,059.25	2,364,808.11	289.56	23,510.98
308	291,043.84	2,364,813.18	284.28	23,527.19
309	291,023.11	2,364,816.96	274.72	23,548.27
310	291,007.14	2,364,816.71	276.18	23,564.24
311	290,982.47	2,364,822.53	293.03	23,589.58
312	290,963.01	2,364,835.07	302.79	23,612.73
313	290,962.34	2,364,835.50	288.39	23,613.53
314	290,928.31	2,364,837.88	277.00	23,647.64
315	290,911.80	2,364,840.79	283.21	23,664.40
316	290,882.19	2,364,849.51	284.73	23,695.27
317	290,865.04	2,364,853.49	283.04	23,712.88
318	290,851.56	2,364,856.61	289.79	23,726.72
319	290,819.13	2,364,872.80	296.53	23,762.96
320	290,813.18	2,364,875.77	293.79	23,769.61
321	290,794.77	2,364,882.85	289.72	23,789.33
322	290,768.85	2,364,891.47	291.24	23,816.66
323	290,747.53	2,364,901.00	284.91	23,840.01
324	290,732.96	2,364,902.46	280.14	23,854.66
325	290,720.79	2,364,905.63	291.31	23,867.23
326	290,696.11	2,364,918.77	297.10	23,895.18
327	290,680.10	2,364,926.63	291.31	23,913.02
328	290,658.64	2,364,932.98	290.15	23,935.41
329	290,650.20	2,364,936.70	302.02	23,944.63
330	290,636.10	2,364,948.63	310.20	23,963.10
331	290,629.16	2,364,954.49	316.00	23,972.18
332	290,607.58	2,364,981.91	311.75	24,007.08
333	290,601.51	2,364,985.66	293.10	24,014.21
334	290,593.33	2,364,987.78	285.59	24,022.66
335	290,579.74	2,364,991.85	284.63	24,036.85
336	290,564.75	2,364,995.20	269.80	24,052.21
337	290,552.61	2,364,992.40	245.29	24,064.67
338	290,542.19	2,364,984.71	241.72	24,077.61
339	290,523.16	2,364,977.73	262.39	24,097.89
340	290,507.51	2,364,979.07	273.34	24,113.59
341	290,500.41	2,364,979.29	258.15	24,120.70
342	290,486.70	2,364,972.76	243.08	24,135.88
343	290,472.30	2,364,964.98	248.81	24,152.25
344	290,461.22	2,364,962.22	255.99	24,163.67
345	290,453.53	2,364,960.30	256.19	24,171.59
346	290,412.56	2,364,950.38	256.38	24,213.75
347	290,372.94	2,364,940.78	262.17	24,254.52
348	290,363.64	2,364,940.45	266.93	24,263.82
349	290,327.71	2,364,937.88	263.94	24,299.84
350	290,300.35	2,364,934.02	266.32	24,327.47
351	290,264.43	2,364,934.44	272.71	24,363.39
352	290,263.71	2,364,934.50	274.75	24,364.12
353	290,232.51	2,364,937.09	276.58	24,395.42
354	290,213.95	2,364,939.83	278.40	24,414.19
355	290,206.46	2,364,940.94	285.19	24,421.76
356	290,189.45	2,364,947.80	274.24	24,440.10

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
357	290,174.77	2,364,944.28	262.20	24,455.20
358	290,161.14	2,364,943.78	269.70	24,468.83
359	290,125.95	2,364,944.70	275.52	24,504.04
360	290,115.65	2,364,946.43	279.53	24,514.49
361	290,086.88	2,364,951.26	281.05	24,543.66
362	290,066.47	2,364,955.82	282.57	24,564.56
363	290,060.72	2,364,957.10	294.83	24,570.46
364	290,045.77	2,364,968.40	290.83	24,589.20
365	290,020.41	2,364,970.42	274.57	24,614.64
366	289,970.49	2,364,974.41	274.57	24,664.72
367	289,954.66	2,364,975.68	285.29	24,680.60
368	289,941.56	2,364,982.07	291.37	24,695.18
369	289,929.00	2,364,985.85	273.44	24,708.29
370	289,922.59	2,364,984.74	260.14	24,714.80
371	289,873.25	2,364,976.16	260.14	24,764.87
372	289,864.76	2,364,974.69	257.77	24,773.49
373	289,824.64	2,364,964.23	255.39	24,814.95
374	289,791.15	2,364,955.50	261.89	24,849.56
375	289,775.69	2,364,955.07	268.39	24,865.03
376	289,727.59	2,364,953.72	269.68	24,913.14
377	289,725.63	2,364,953.76	270.97	24,915.10
378	289,708.72	2,364,954.04	270.95	24,932.02
379	289,686.60	2,364,954.40	277.60	24,954.14
380	289,675.90	2,364,957.12	284.26	24,965.18
381	289,648.13	2,364,964.18	289.22	24,993.84
382	289,628.59	2,364,972.95	294.17	25,015.26
383	289,616.49	2,364,978.38	300.07	25,028.52
384	289,598.19	2,364,991.66	303.25	25,051.12
385	289,585.95	2,364,998.88	300.53	25,065.34
386	289,585.81	2,364,998.96	285.61	25,065.49
387	289,566.21	2,364,999.19	268.60	25,085.10
388	289,548.62	2,364,998.12	261.02	25,102.73
389	289,536.33	2,364,994.95	255.54	25,115.41
390	289,527.11	2,364,992.57	255.90	25,124.94
391	289,509.56	2,364,988.28	251.94	25,143.01
392	289,495.90	2,364,982.66	248.77	25,157.77
393	289,488.65	2,364,980.01	257.13	25,165.49
394	289,449.26	2,364,976.10	279.08	25,205.08
395	289,442.61	2,364,979.03	304.27	25,212.34
396	289,434.61	2,364,986.97	314.45	25,223.61
397	289,425.72	2,364,995.61	314.03	25,236.01
398	289,406.79	2,365,013.81	307.40	25,262.27
399	289,381.64	2,365,028.87	306.88	25,291.58
400	289,222.57	2,365,176.39	306.59	25,508.53
401	289,198.46	2,365,190.50	306.21	25,536.47
402	289,180.18	2,365,207.01	308.97	25,561.10
403	289,161.85	2,365,220.26	301.52	25,583.71
404	289,146.92	2,365,227.92	295.50	25,600.50
405	289,137.57	2,365,232.05	289.62	25,610.71
406	289,119.45	2,365,237.04	286.08	25,629.51
407	289,083.76	2,365,247.78	291.30	25,666.78

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
408	289,029.71	2,365,273.97	299.03	25,726.84
409	288,872.94	2,365,372.73	302.31	25,912.12
410	288,846.90	2,365,389.26	298.29	25,942.97
411	288,830.03	2,365,396.83	296.30	25,961.46
412	288,518.13	2,365,565.84	298.13	26,316.20
413	288,477.87	2,365,587.08	295.49	26,361.73
414	288,431.98	2,365,606.71	290.73	26,411.64
415	288,384.44	2,365,622.43	288.04	26,461.72
416	288,324.70	2,365,641.59	286.42	26,524.45
417	287,805.07	2,365,781.40	285.24	27,062.56
418	287,756.67	2,365,794.76	283.57	27,112.76
419	287,707.67	2,365,804.91	279.18	27,162.81
420	287,612.55	2,365,816.02	275.01	27,258.57
421	287,562.27	2,365,818.98	271.91	27,308.94
422	287,508.15	2,365,819.40	270.78	27,363.06
423	286,633.03	2,365,836.50	271.31	28,238.35
424	286,193.97	2,365,847.95	271.90	28,677.57
425	286,102.68	2,365,851.63	271.32	28,768.93
426	285,832.26	2,365,853.16	270.88	29,039.35
427	285,643.56	2,365,857.86	272.19	29,228.11
428	285,543.34	2,365,863.05	272.58	29,328.46
429	284,860.06	2,365,889.17	271.13	30,012.24
430	284,807.63	2,365,889.23	269.16	30,064.67
431	284,776.59	2,365,888.29	266.45	30,095.73
432	284,732.69	2,365,884.18	263.16	30,139.82
433	284,682.40	2,365,876.81	260.30	30,190.65
434	284,638.05	2,365,868.13	256.67	30,235.83
435	284,582.22	2,365,852.56	252.46	30,293.79
436	284,522.63	2,365,831.47	248.28	30,357.00
437	283,814.60	2,365,517.06	248.04	31,131.71
438	283,788.45	2,365,507.55	258.61	31,159.53
439	283,751.59	2,365,505.74	271.52	31,196.44
440	283,727.13	2,365,508.25	278.13	31,221.03
441	283,648.66	2,365,522.68	280.22	31,300.81
442	283,283.81	2,365,587.19	280.08	31,671.32
443	283,179.39	2,365,605.86	280.58	31,777.39
444	283,039.36	2,365,633.16	279.92	31,920.06
445	282,915.58	2,365,652.35	280.55	32,045.33
446	282,883.58	2,365,659.33	283.25	32,078.07
447	282,864.40	2,365,664.19	286.32	32,097.86
448	282,843.07	2,365,671.30	289.67	32,120.35
449	282,655.99	2,365,742.79	290.66	32,320.62
450	282,608.61	2,365,760.41	290.29	32,371.17
451	282,561.64	2,365,777.68	289.98	32,421.21
452	282,531.93	2,365,788.36	291.59	32,452.78
453	282,501.65	2,365,801.46	295.55	32,485.77
454	282,475.04	2,365,815.44	298.65	32,515.83
455	282,272.60	2,365,930.45	300.43	32,748.66
456	282,194.16	2,365,978.07	304.37	32,840.43
457	282,158.81	2,366,005.17	308.16	32,884.97
458	282,123.71	2,366,033.44	306.54	32,930.04

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
459	282,089.91	2,366,056.43	302.36	32,970.92
460	281,658.36	2,366,310.51	302.44	33,471.71
461	281,553.04	2,366,382.60	301.38	33,599.33
462	281,413.78	2,366,457.80	297.50	33,757.60
463	281,387.15	2,366,471.14	302.32	33,787.39
464	281,353.91	2,366,497.13	310.83	33,829.59
465	281,234.73	2,366,610.81	314.55	33,994.28
466	281,021.79	2,366,827.17	312.91	34,297.85
467	280,494.28	2,367,275.57	308.97	34,990.19
468	280,326.93	2,367,404.32	322.49	35,201.34
469	280,274.66	2,367,529.94	340.99	35,337.40
470	280,226.05	2,367,706.07	346.47	35,520.12
471	280,217.32	2,367,748.51	351.48	35,563.44
472	280,200.20	2,367,928.86	349.51	35,744.60
473	280,190.09	2,367,965.17	350.04	35,782.30
474	280,186.72	2,368,009.25	355.61	35,826.50
475	280,183.68	2,368,048.76	358.85	35,866.13
476	280,184.36	2,368,067.47	10.20	35,884.85
477	280,196.60	2,368,104.46	11.06	35,923.82
478	280,198.48	2,368,132.60	7.26	35,952.02
479	280,203.02	2,368,156.67	24.92	35,976.51
480	280,217.45	2,368,174.39	29.45	35,999.36
481	280,227.12	2,368,201.31	25.23	36,027.97
482	280,240.86	2,368,224.46	29.55	36,054.89
483	280,259.41	2,368,258.75	16.84	36,093.87
484	280,263.39	2,368,301.97	6.11	36,137.28
485	280,267.77	2,368,337.90	5.64	36,173.47
486	280,274.28	2,368,423.89	9.59	36,259.71
487	280,281.99	2,368,452.97	21.51	36,289.79
488	280,302.99	2,368,492.19	29.32	36,334.27
489	280,312.99	2,368,509.17	31.11	36,353.99
490	280,336.36	2,368,546.97	26.64	36,398.43
491	280,358.72	2,368,603.57	19.78	36,459.28
492	280,381.94	2,368,674.97	15.77	36,534.36
493	280,393.03	2,368,721.10	8.47	36,581.81
494	280,396.41	2,368,777.77	10.77	36,638.58
495	280,410.63	2,368,821.22	18.13	36,684.29
496	280,520.85	2,369,157.71	22.82	37,038.38
497	280,555.57	2,369,224.41	22.85	37,113.57
498	280,563.89	2,369,249.72	18.94	37,140.21
499	280,567.78	2,369,260.61	7.95	37,151.78
500	280,565.16	2,369,300.23	353.04	37,191.49
501	280,558.25	2,369,338.95	357.28	37,230.82
502	280,566.27	2,369,437.09	1.99	37,329.29
503	280,565.84	2,369,473.12	349.81	37,365.32
504	280,557.27	2,369,497.07	340.30	37,390.75
505	280,546.59	2,369,526.90	350.52	37,422.44
506	280,546.83	2,369,545.29	2.97	37,440.83
507	280,551.36	2,369,595.20	357.41	37,490.95
508	280,545.22	2,369,628.74	345.72	37,525.05
509	280,445.52	2,369,932.13	342.41	37,844.40

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
510	280,432.11	2,369,976.05	347.19	37,890.32
511	280,427.94	2,370,003.47	0.12	37,918.06
512	280,446.96	2,370,125.02	6.74	38,041.08
513	280,457.30	2,370,253.86	6.82	38,170.34
514	280,542.98	2,370,792.28	4.07	38,715.53
515	280,541.35	2,370,895.73	0.86	38,819.00
516	280,544.42	2,370,962.83	7.01	38,886.16
517	280,552.27	2,371,001.77	14.28	38,925.88
518	280,558.78	2,371,022.84	12.88	38,947.94
519	280,599.28	2,371,290.90	1.73	39,219.04
520	280,568.44	2,371,634.23	0.59	39,563.75
521	280,573.29	2,371,678.19	20.50	39,607.98
522	280,587.77	2,371,699.10	20.71	39,633.41
523	280,589.94	2,371,717.48	350.25	39,651.92
524	280,574.15	2,371,749.53	336.91	39,687.65
525	280,425.06	2,372,160.31	346.96	40,124.65
526	280,420.44	2,372,203.37	347.63	40,167.96
527	280,405.52	2,372,247.68	340.47	40,214.71
528	280,300.57	2,372,529.06	343.99	40,515.03
529	280,284.47	2,372,607.70	343.57	40,595.29
530	280,224.62	2,372,761.23	318.36	40,760.08
531	280,110.09	2,372,822.17	299.15	40,889.81
532	279,971.82	2,372,902.94	320.72	41,049.94
533	279,962.92	2,372,929.02	327.25	41,077.50
534	279,911.46	2,372,977.58	312.95	41,148.26
535	279,867.79	2,373,017.69	299.49	41,207.55
536	279,751.52	2,373,051.95	291.20	41,328.76
537	279,578.11	2,373,136.45	303.44	41,521.66
538	279,332.35	2,373,349.38	307.83	41,846.84
539	278,817.29	2,373,706.80	310.75	42,473.77
540	278,798.01	2,373,727.28	320.38	42,501.89
541	278,712.80	2,373,844.64	321.20	42,646.92
542	278,697.84	2,373,861.48	314.83	42,669.45
543	278,510.23	2,374,026.18	296.20	42,919.10
544	278,494.52	2,374,029.27	278.70	42,935.10
545	278,482.10	2,374,030.64	296.39	42,947.60
546	278,444.68	2,374,070.04	314.42	43,001.94
547	278,422.19	2,374,090.55	313.20	43,032.38
548	278,376.34	2,374,134.90	311.58	43,096.17
549	278,061.58	2,374,390.76	308.93	43,501.80
550	277,990.59	2,374,447.75	310.91	43,592.84
551	277,949.47	2,374,486.18	315.21	43,649.12
552	277,869.23	2,374,573.30	313.65	43,767.56
553	277,842.15	2,374,595.99	311.11	43,802.89
554	277,820.04	2,374,616.08	313.92	43,832.76
555	277,648.75	2,374,790.89	314.29	44,077.51
556	277,477.02	2,374,951.05	307.84	44,312.33
557	277,442.09	2,374,973.46	300.61	44,353.84
558	277,387.06	2,375,003.39	300.27	44,416.47
559	277,104.65	2,375,179.84	304.14	44,749.47
560	276,991.79	2,375,262.67	307.51	44,889.47

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
561	276,979.55	2,375,272.50	308.89	44,905.17
562	276,940.64	2,375,304.02	303.07	44,955.25
563	276,916.66	2,375,316.31	262.55	44,982.19
564	276,903.01	2,375,304.01	236.98	45,000.56
565	276,885.34	2,375,296.13	269.55	45,019.90
566	276,854.47	2,375,309.32	292.30	45,053.48
567	276,635.80	2,375,395.33	285.54	45,288.45
568	276,614.13	2,375,399.00	278.44	45,310.43
569	276,577.14	2,375,403.72	280.31	45,347.71
570	276,560.16	2,375,407.75	280.85	45,365.17
571	276,525.22	2,375,412.87	285.24	45,400.48
572	276,478.84	2,375,431.75	292.15	45,450.56
573	276,443.31	2,375,446.22	282.90	45,488.92
574	276,431.62	2,375,446.96	273.64	45,500.64
575	276,393.11	2,375,449.41	269.62	45,539.23
576	276,381.65	2,375,448.53	265.60	45,550.72
577	276,331.71	2,375,444.69	265.60	45,600.80
578	276,323.23	2,375,444.04	283.70	45,609.31
579	276,287.90	2,375,465.95	301.80	45,650.88
580	276,245.33	2,375,492.34	301.80	45,700.96
581	276,202.77	2,375,518.73	301.80	45,751.04
582	276,191.23	2,375,525.88	301.81	45,764.62
583	276,183.37	2,375,530.76	297.13	45,773.88
584	276,177.92	2,375,533.01	262.83	45,779.77
585	276,153.58	2,375,514.81	236.38	45,810.16
586	276,135.91	2,375,504.43	250.82	45,830.65
587	276,092.84	2,375,498.46	263.64	45,874.14
588	276,062.13	2,375,495.86	257.65	45,904.96
589	276,041.76	2,375,488.50	248.84	45,926.61
590	276,027.72	2,375,482.70	232.47	45,941.81
591	276,012.67	2,375,463.02	226.86	45,966.59
592	275,996.65	2,375,452.33	246.95	45,985.84
593	275,982.64	2,375,449.25	268.98	46,000.19
594	275,971.44	2,375,451.30	286.38	46,011.58
595	275,927.03	2,375,469.58	292.41	46,059.60
596	275,897.07	2,375,481.96	304.66	46,092.02
597	275,879.51	2,375,500.70	302.22	46,117.70
598	275,857.96	2,375,507.52	302.06	46,140.30
599	275,831.18	2,375,535.81	307.74	46,179.25
600	275,776.20	2,375,566.18	274.89	46,242.07
601	275,759.38	2,375,560.35	240.75	46,259.86
602	275,741.24	2,375,545.46	265.31	46,283.34
603	275,710.13	2,375,563.41	292.09	46,319.26
604	275,663.42	2,375,575.21	295.77	46,367.43
605	275,623.25	2,375,605.87	296.15	46,417.96
606	275,420.80	2,375,659.90	286.28	46,627.50
607	275,390.73	2,375,669.46	286.17	46,659.05
608	275,339.73	2,375,682.84	288.07	46,711.77
609	275,164.09	2,375,751.79	287.49	46,900.47
610	274,188.73	2,375,986.67	278.64	47,903.71
611	274,162.66	2,375,988.37	278.45	47,929.83

10 SDU-SF ruta puntos X Y

Vértice	X	Y	Angulo	Distancia Acumulada (m)
612	273,853.50	2,376,060.68	287.17	48,247.34
613	273,542.84	2,376,181.01	290.36	48,580.49
614	273,143.51	2,376,322.78	309.49	49,004.23
615	273,139.69	2,376,329.25	332.71	49,011.75
616	273,133.61	2,376,342.89	340.69	49,026.68
617	273,128.50	2,376,362.52	351.40	49,046.97
618	273,126.59	2,376,404.34	350.24	49,088.83
619	273,121.23	2,376,421.97	351.14	49,107.26
620	273,121.11	2,376,430.20	334.87	49,115.48
621	273,103.21	2,376,445.51	319.42	49,139.04
622	273,056.72	2,376,520.74	329.26	49,227.48
623	273,029.07	2,376,569.11	333.94	49,283.19
624	273,004.31	2,376,629.31	302.24	49,348.28
625	271,889.50	2,376,567.73	269.29	50,464.79
626	271,858.39	2,376,568.68	274.03	50,495.92
627	271,820.62	2,376,572.85	276.55	50,533.91
628	271,124.81	2,376,655.83	276.80	51,234.66