

**Supplementary Materials**

As referenced in Section 3.4., In the booklet, the printed map had the same width as a A4 sheet and the length-width ratio of the map was maintained. An example of the experiment map in the A4 format is presented below.

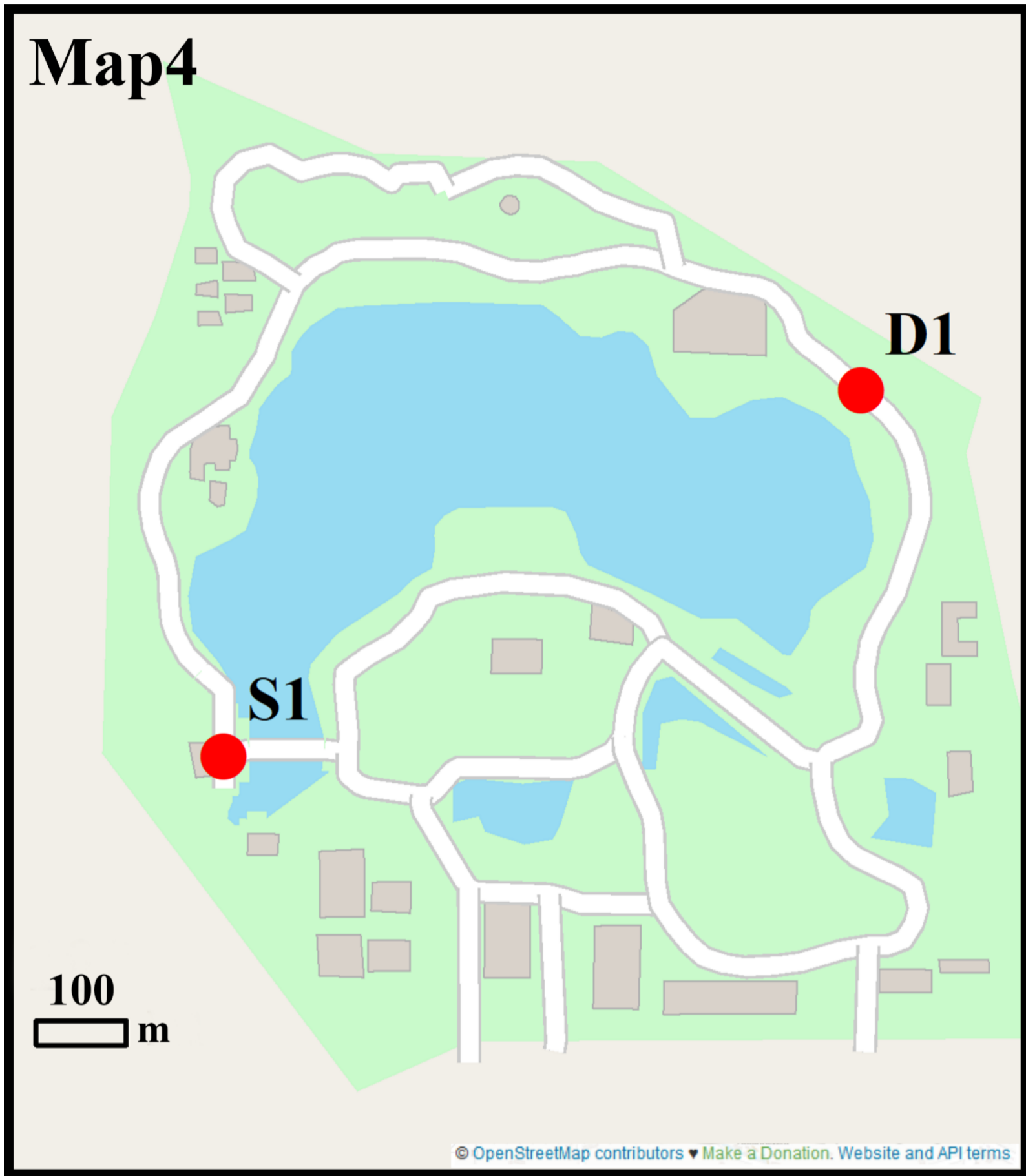
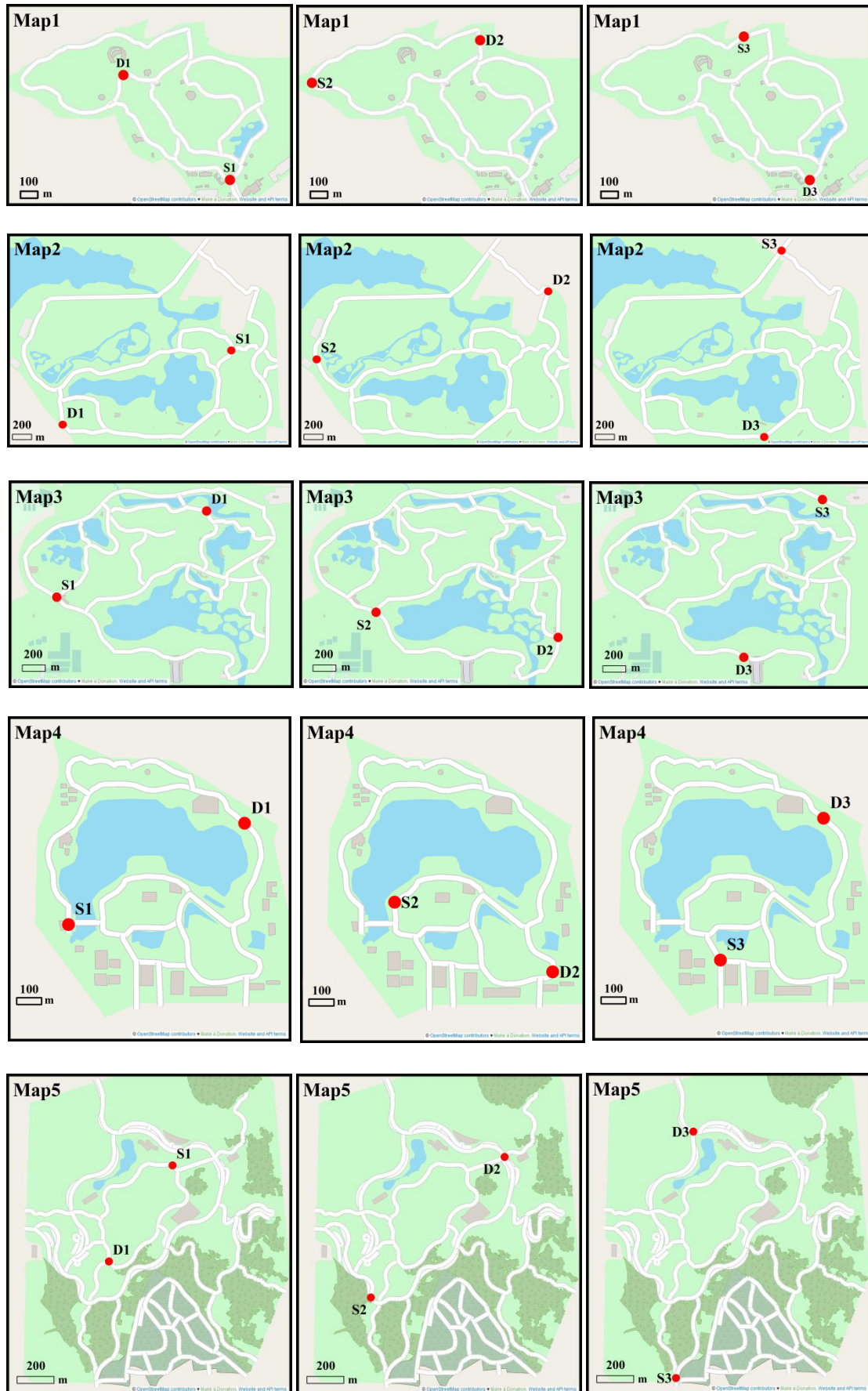


Figure S1. An example of printed experiment map.

As referenced in Section 4.1., the baseline maps with starting ( $S_n$ ) and destination ( $D_n$ ) points are presented below.



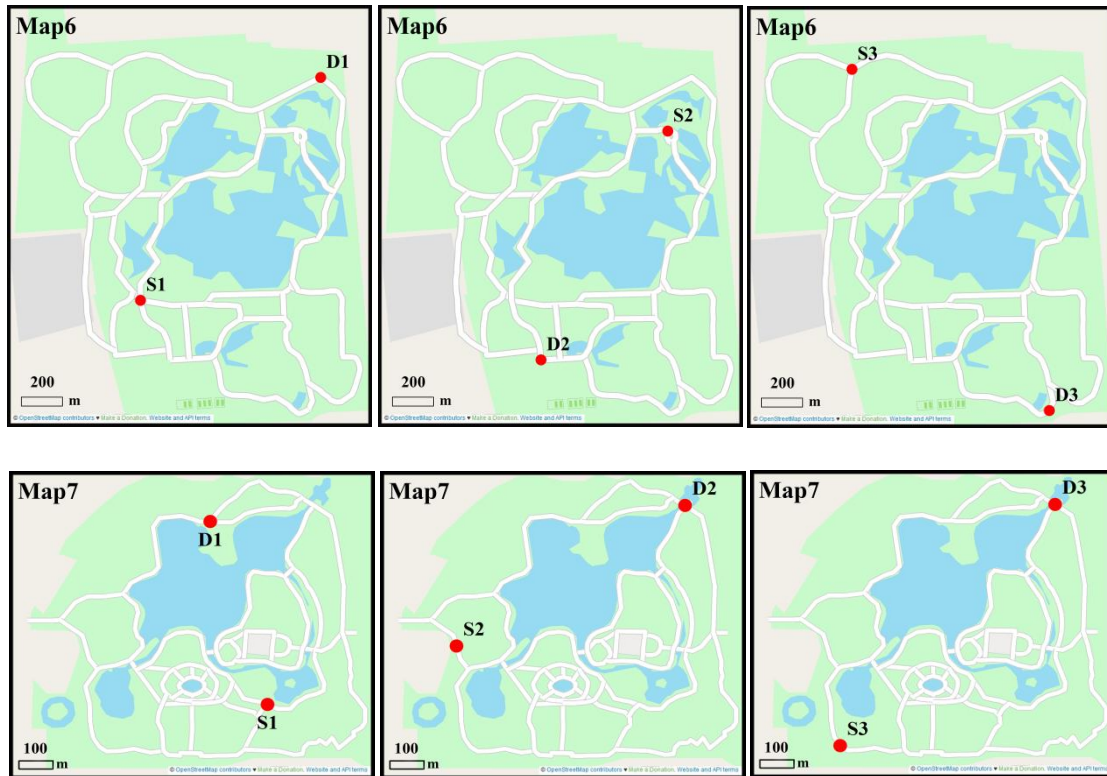
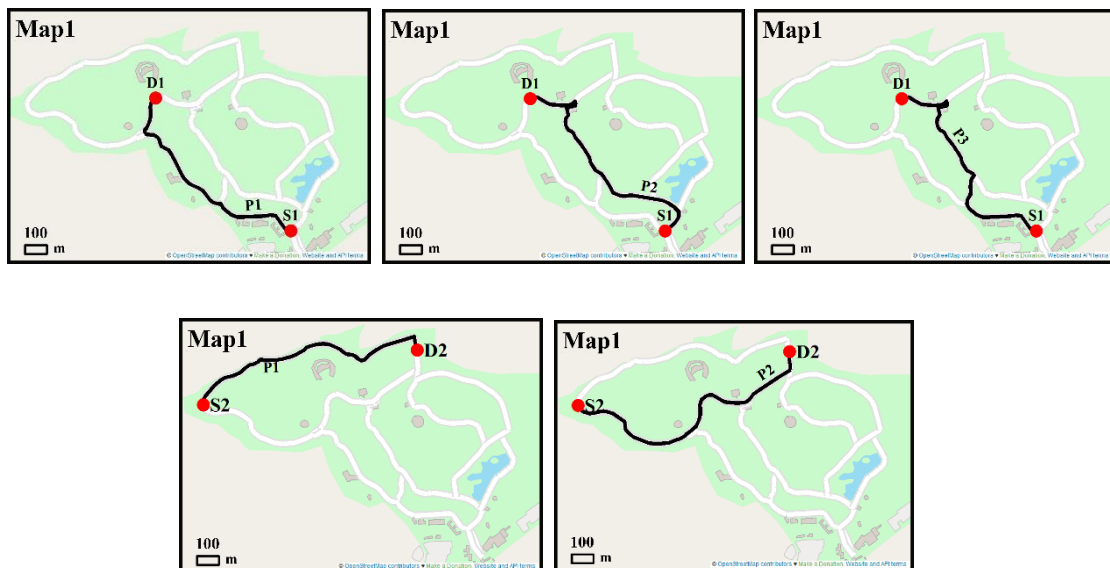
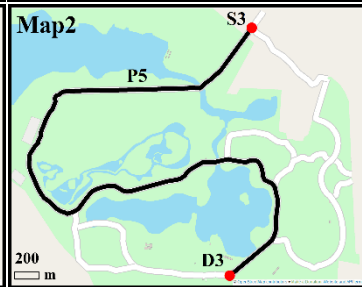
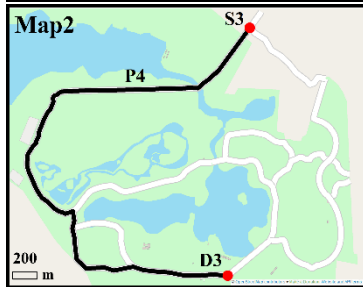
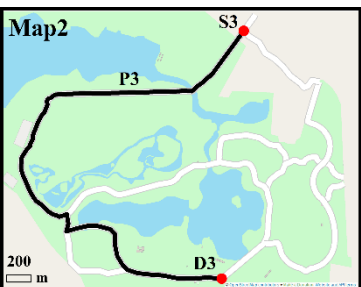
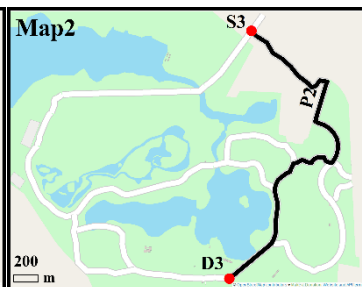
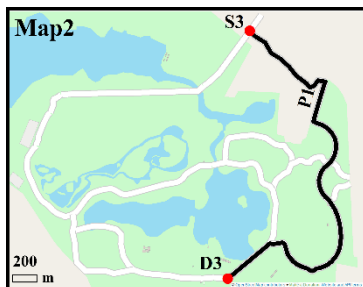
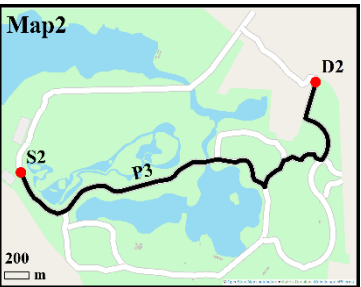
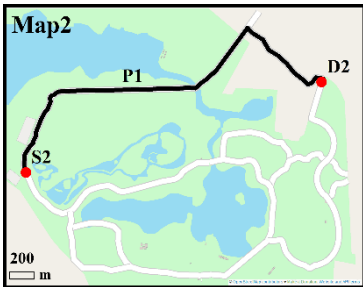
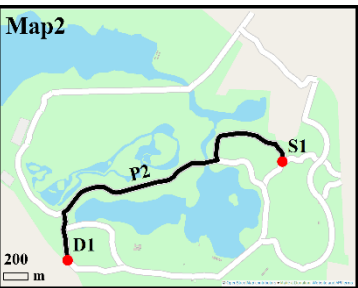
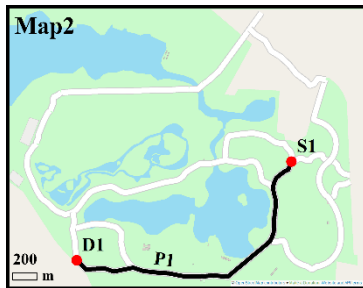
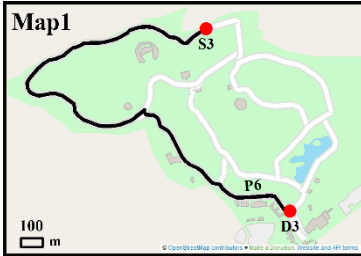
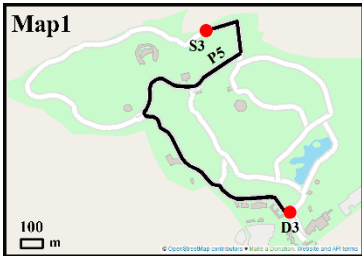
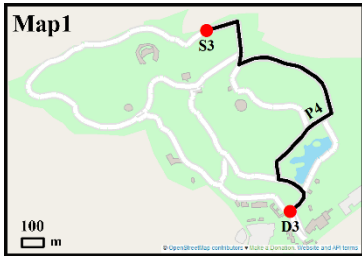
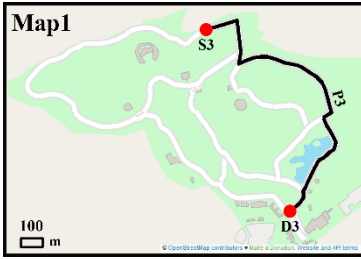
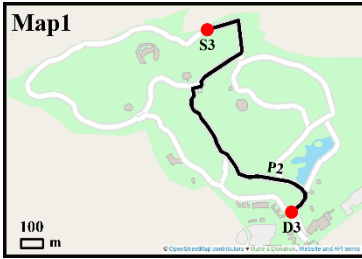
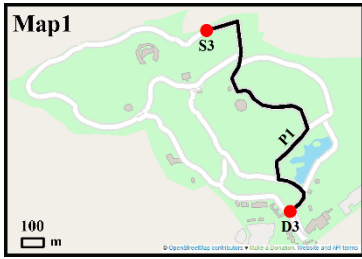
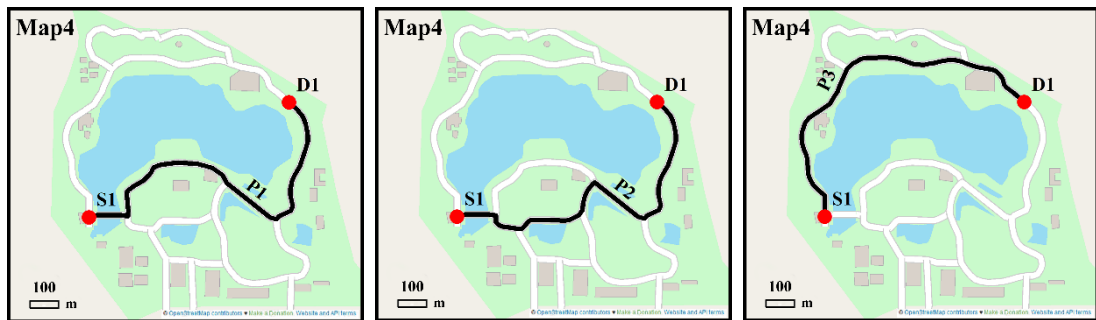
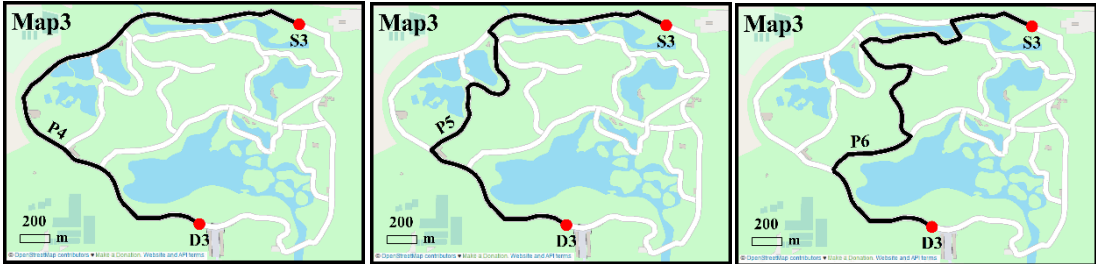
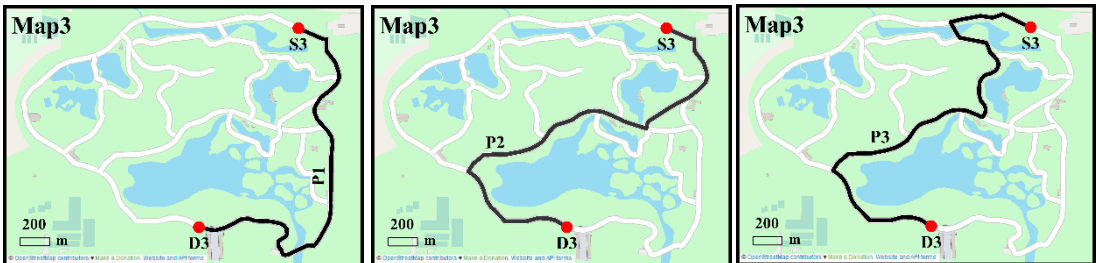
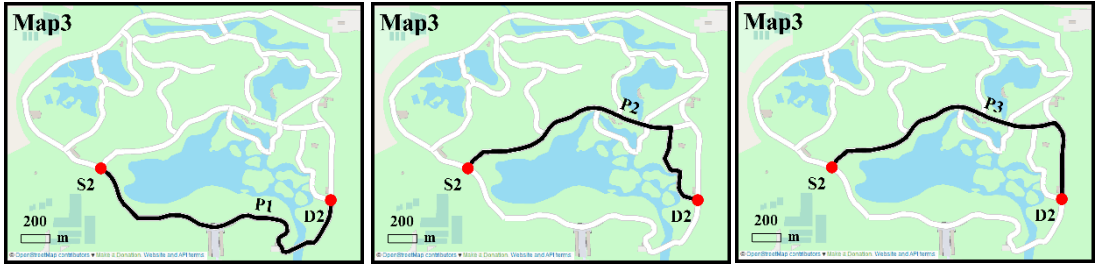
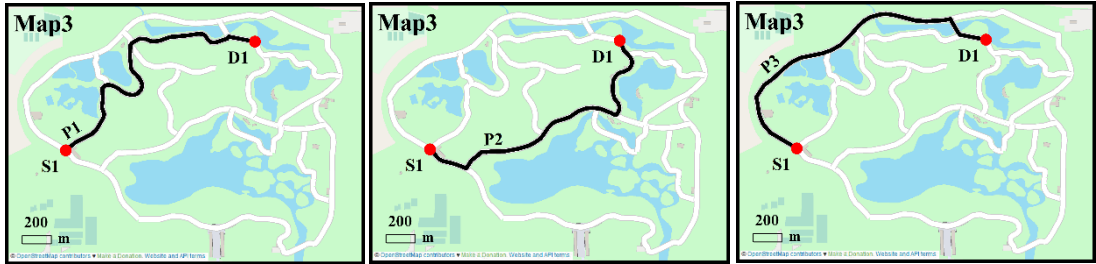


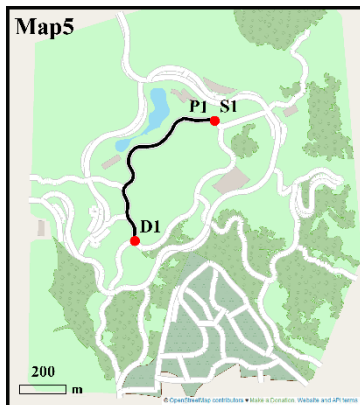
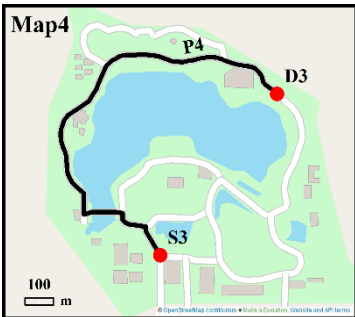
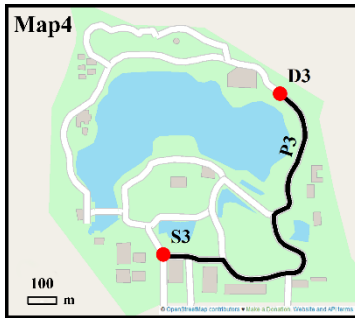
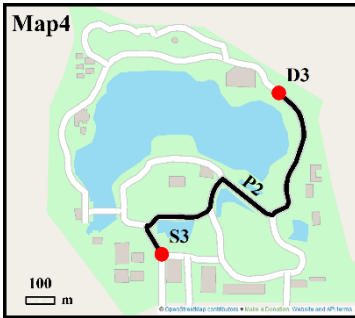
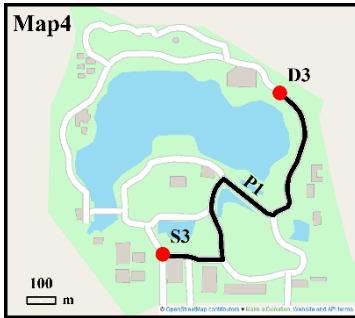
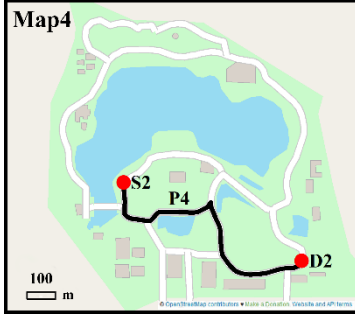
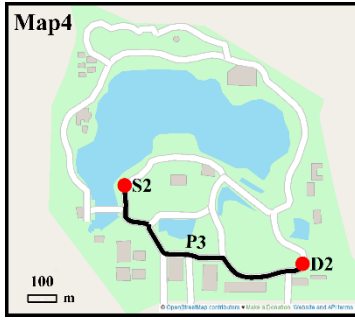
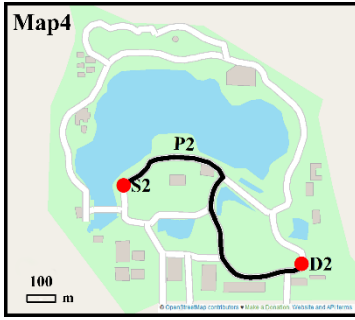
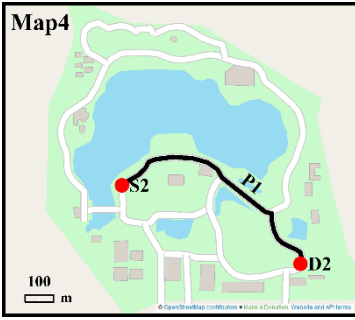
Figure S2. 21 baseline maps with starting ( $S_n$ ) and destination ( $D_n$ ) points.

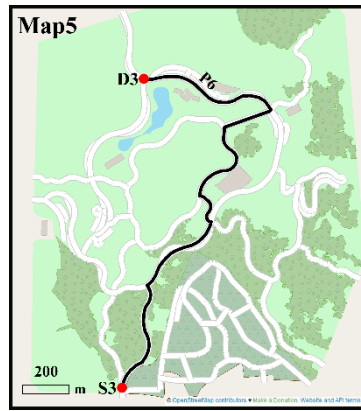
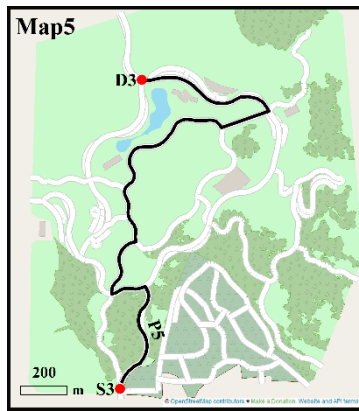
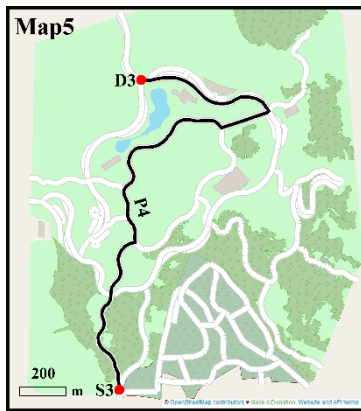
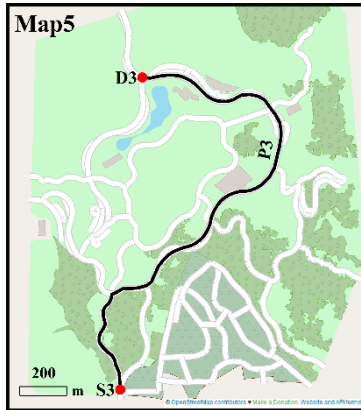
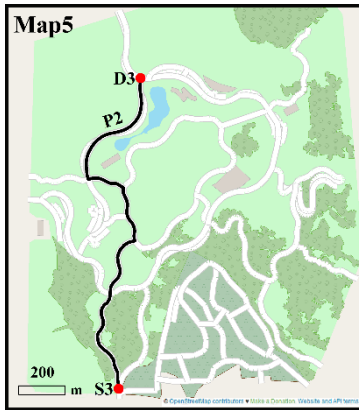
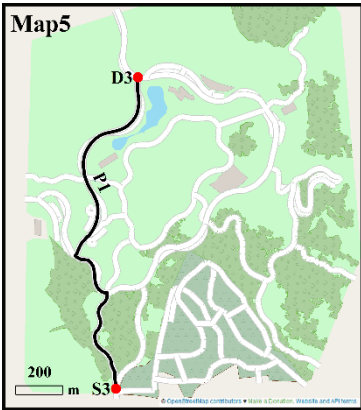
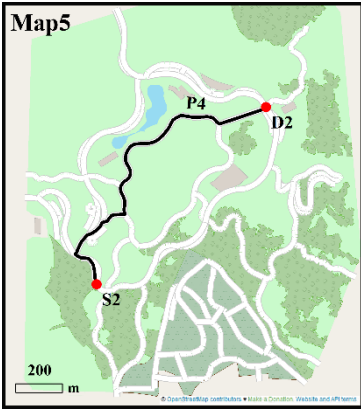
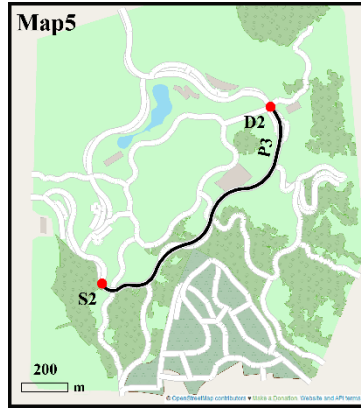
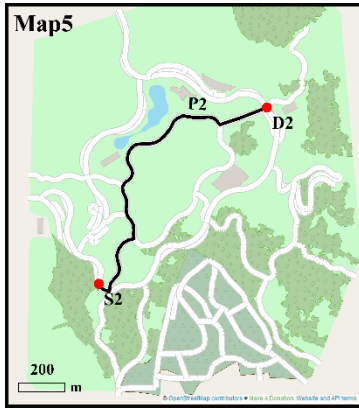
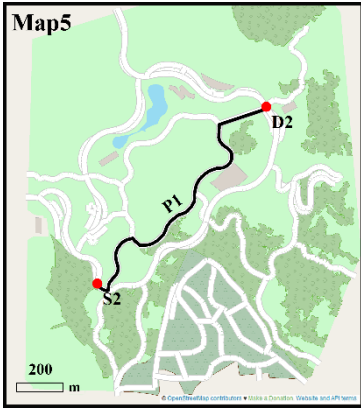
As referenced in Section 4.1., the routes chosen by participants on the baseline maps are presented below, and the geometric information of these routes are showed in Table S1.

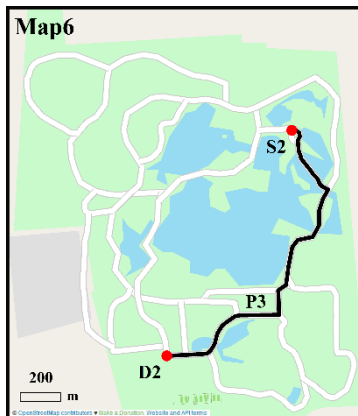
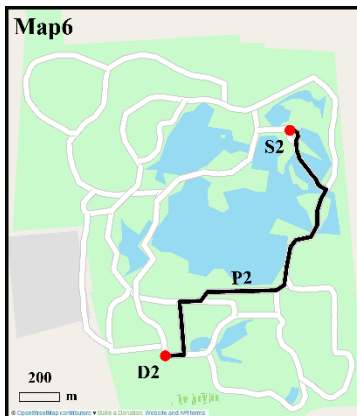
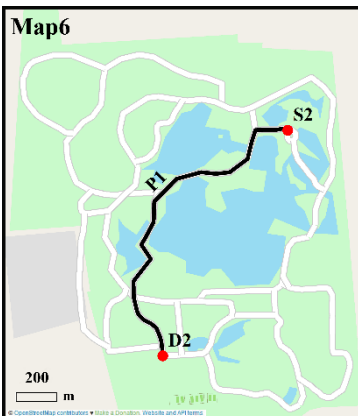
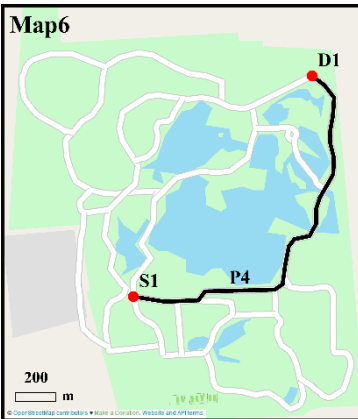
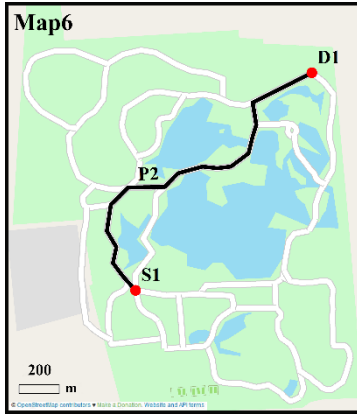
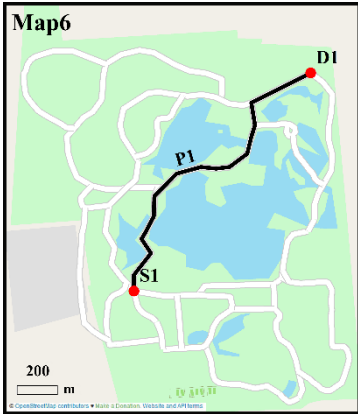




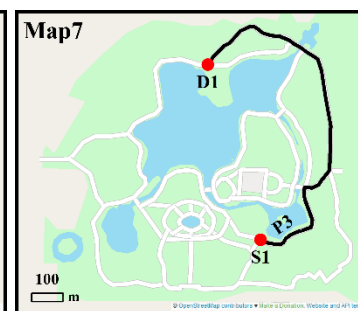
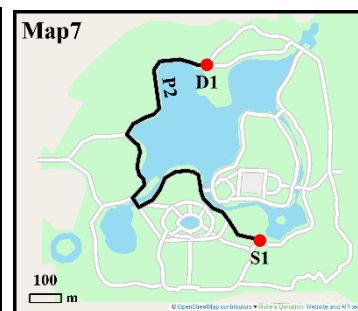
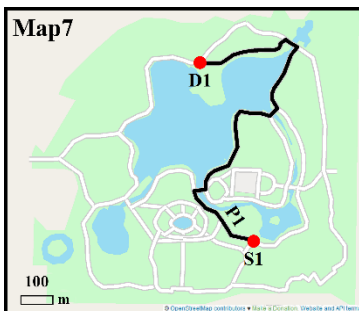
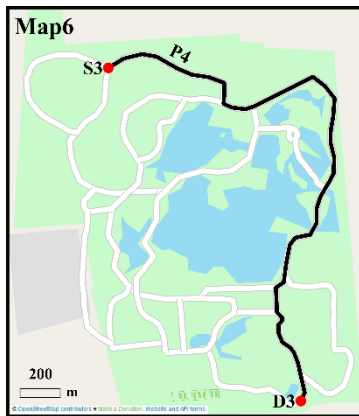
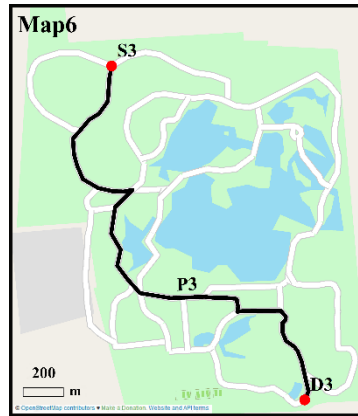
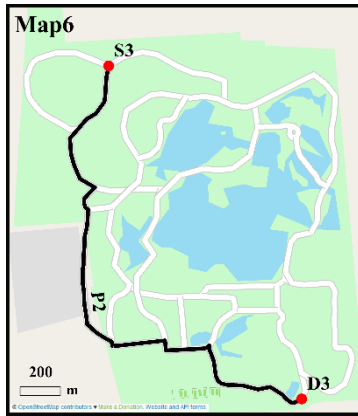
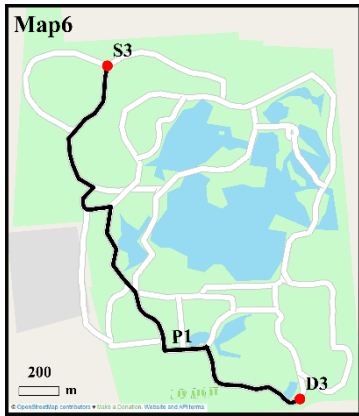












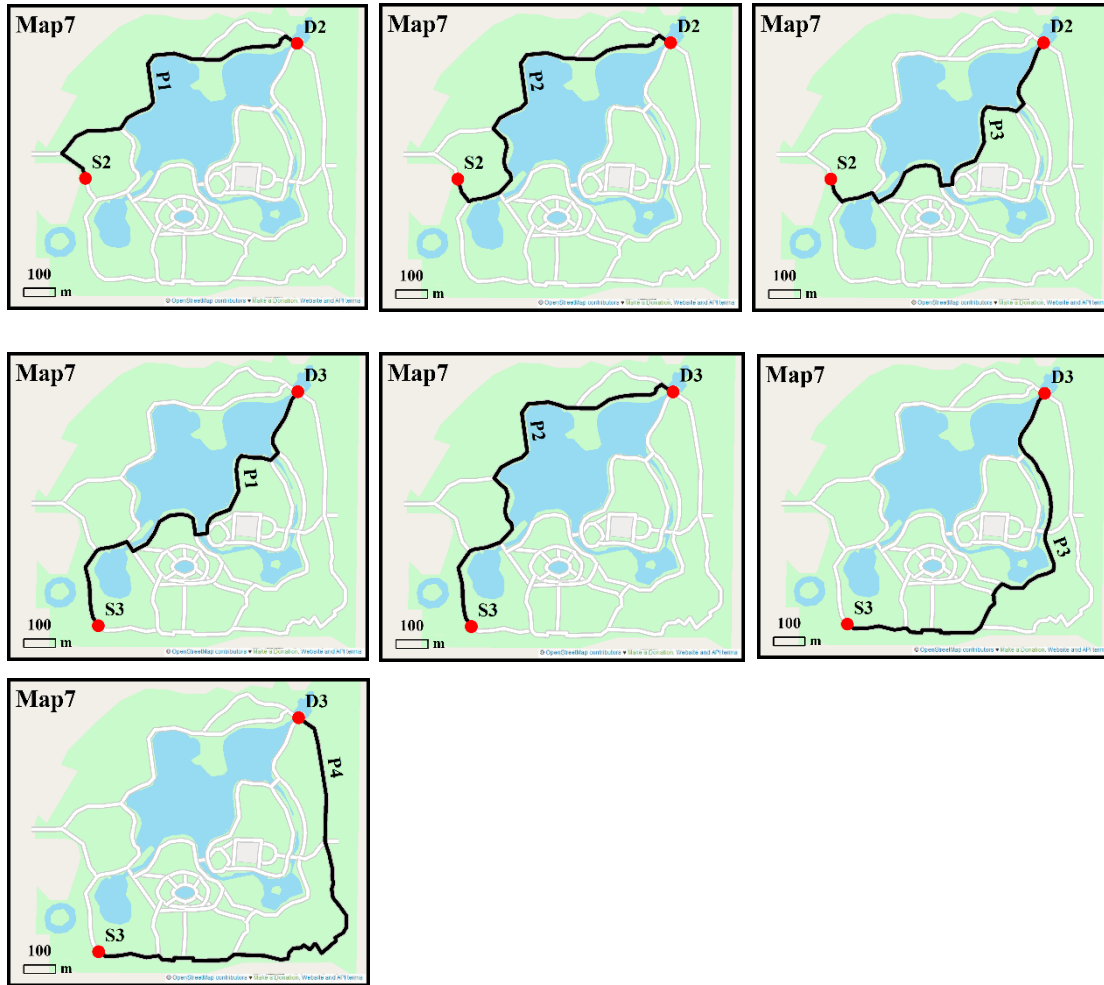


Figure S3. Route choice results on baseline maps.

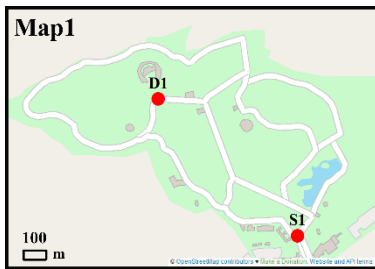
Table S1. Route choice results on baseline maps.

Map Nr.	Start - destination	Numbers of valid questionnaires	Route Nr.	Choice percentage	Number of intersections	Difference in initial orientation (°)	Distance (m)
Map1	SD <sub>1</sub>	57	P1	61.4%	2	1	1120
			P2	22.8%	4	83	1194
			P3	15.8%	3	1	1179
	SD <sub>2</sub>	58	P1	63.8%	0	14	1261
			P2	36.2%	3	32	1341
	SD <sub>3</sub>	57	P1	52.6%	5	82	1547
			P2	14.0%	5	82	1604
			P3	10.5%	4	82	1586
			P4	7.0%	6	82	1699
P5			8.8%	4	82	1912	
Map2	SD <sub>1</sub>	59	P1	83.1%	3	27	2536
			P2	16.9%	3	47	2659
	SD <sub>2</sub>	60	P1	71.7%	1	53	3406
			P2	21.7%	4	67	3891
			P3	6.7%	5	67	3860

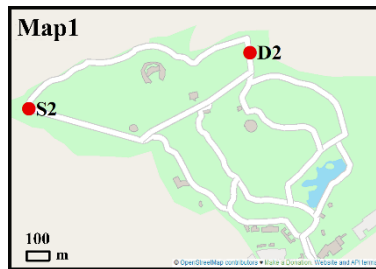
	SD <sub>3</sub>	60	P1	41.7%	4	52	3245
			P2	35.0%	3	52	3104
			P3	10.0%	3	36	4733
			P4	6.7%	3	36	4744
			P5	6.7%	4	36	5971
Map3	SD <sub>1</sub>	57	P1	57.9%	3	11	2229
			P2	24.6%	5	58	2102
			P3	17.5%	4	99	2452
	SD <sub>2</sub>	60	P1	58.3%	0	46	2290
			P2	23.3%	5	55	2229
			P3	18.3%	6	55	2258
	SD <sub>3</sub>	60	P1	48.3%	4	96	2877
			P2	16.7%	7	96	3339
			P3	13.3%	7	89	3690
			P4	8.3%	5	89	3789
			P5	6.7%	6	89	3769
	Map4	SD <sub>1</sub>	60	P1	51.7%	3	28
P2				33.3%	5	28	1311
P3				15.0%	2	60	1315
SD <sub>2</sub>		60	P1	40.0%	2	66	866
			P2	26.7%	4	66	1048
			P3	26.7%	6	65	967
			P4	6.7%	5	65	856
SD <sub>3</sub>		60	P1	40.0%	4	63	1206
			P2	31.7%	5	59	1248
			P3	20.0%	4	59	1277
	P4		8.3%	5	63	1653	
Map5	SD <sub>1</sub>	59	P1	72.9%	2	61	855
			P2	27.1%	2	76	826
	SD <sub>2</sub>	58	P1	39.7%	4	79	1367
			P2	29.3%	5	79	1565
			P3	20.7%	8	72	1269
			P4	10.3%	7	61	1565
	SD <sub>3</sub>	58	P1	36.2%	9	30	1701
			P2	20.7%	11	30	1621
			P3	19.0%	13	37	2159
			P4	8.6%	10	30	2545
P5			8.6%	11	37	2732	
P6			6.9%	11	37	2306	
Map6	SD <sub>1</sub>	60	P1	70.0%	3	15	1698
			P2	11.7%	5	79	1892
			P3	11.7%	6	79	1944
			P4	6.7%	5	54	1941
	SD <sub>2</sub>	60	P1	80.0%	3	61	1720
			P2	10.0%	7	61	1848
			P3	10.0%	8	61	1767
	SD <sub>3</sub>	60	P1	43.3%	8	58	2677
			P2	33.3%	7	58	2788
			P3	16.7%	11	58	2776
P4			6.7%	7	53	3097	

Map7	SD <sub>1</sub>	57	P1	36.8%	7	58	1284
			P2	31.6%	6	58	1287
			P3	22.8%	4	118	1139
			P4	8.8%	7	124	1187
	SD <sub>2</sub>	60	P1	65.0%	4	101	1110
			P2	26.7%	5	96	1198
			P3	8.3%	8	96	1184
	SD <sub>3</sub>	60	P1	38.3%	8	53	1360
			P2	30.0%	5	53	1374
			P3	20.0%	7	53	1422
			P4	11.7%	4	53	1610

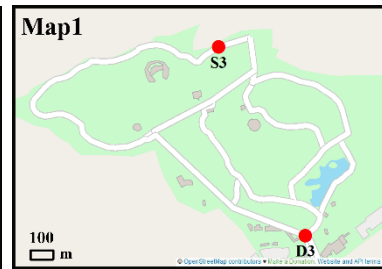
As referenced in Section 4.2., the modified maps illustrating shape simplification of the recommended routes are presented below.



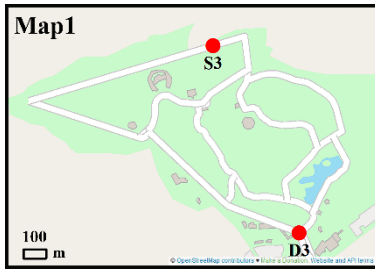
Map1-SD1-P2



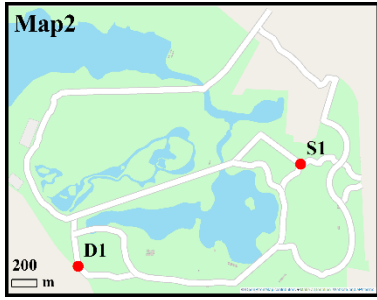
Map1-SD2-P2



Map1-SD3-P5



Map1-SD3-P6



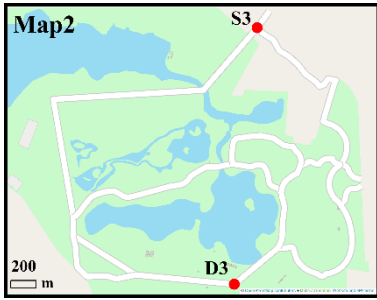
Map2-SD1-P2



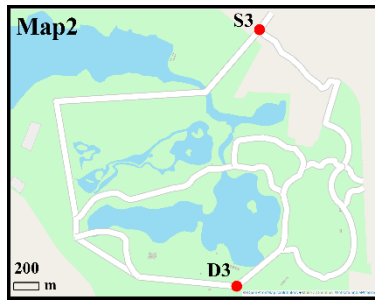
Map2-SD2-P2



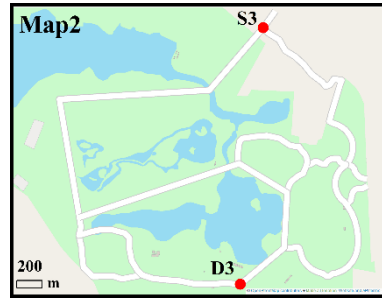
Map2-SD2-P3



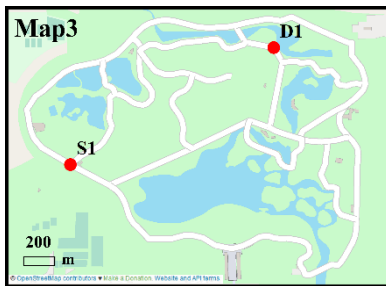
Map2-SD3-P3



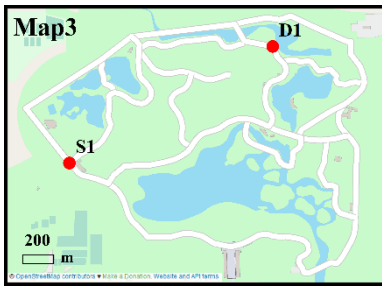
Map2-SD3-P4



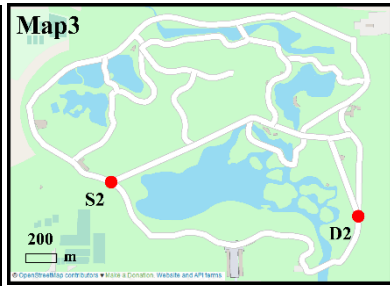
Map2-SD3-P5



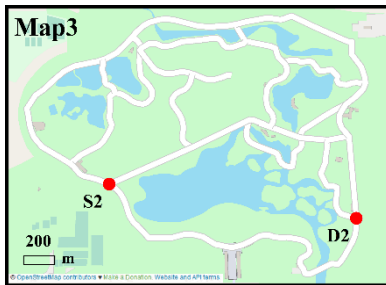
Map3-SD1-P2



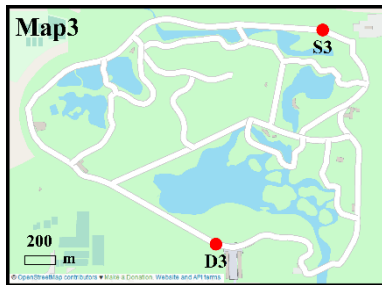
Map3-SD1-P3



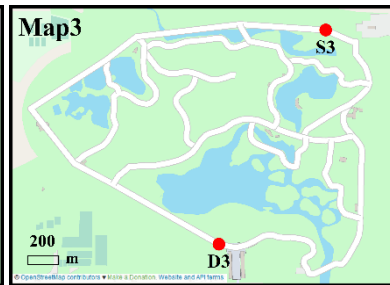
Map3-SD2-P2



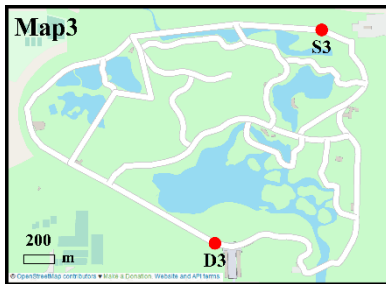
Map3-SD2-P3



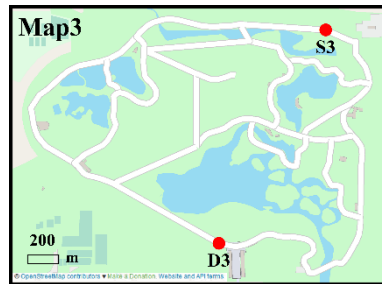
Map3-SD3-P3



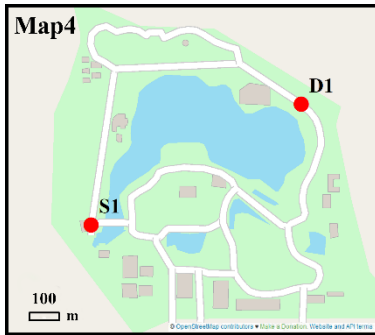
Map3-SD3-P4



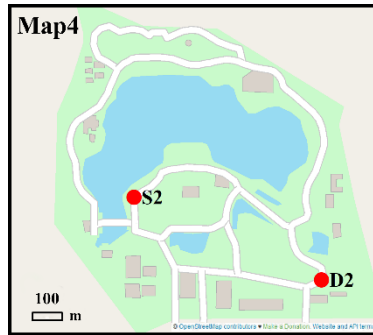
Map3-SD3-P5



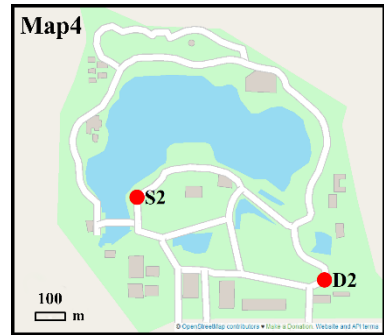
Map3-SD3-P6



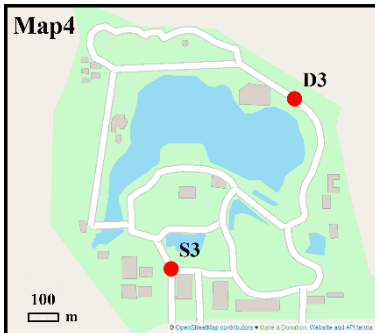
Map4-SD1-P3



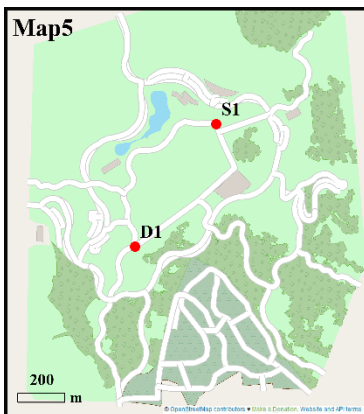
Map4-SD2-P3



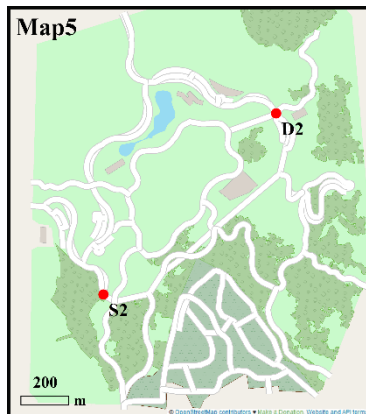
Map4-SD2-P4



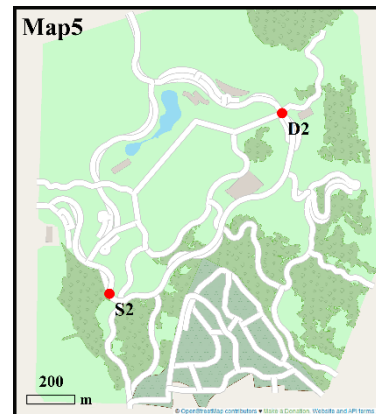
Map4-SD3-P4



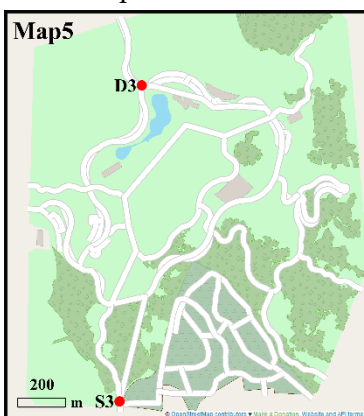
Map5-SD1-P2



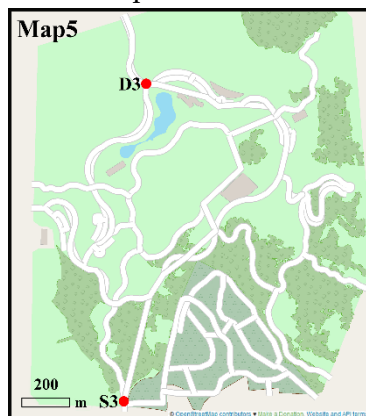
Map5-SD2-P3



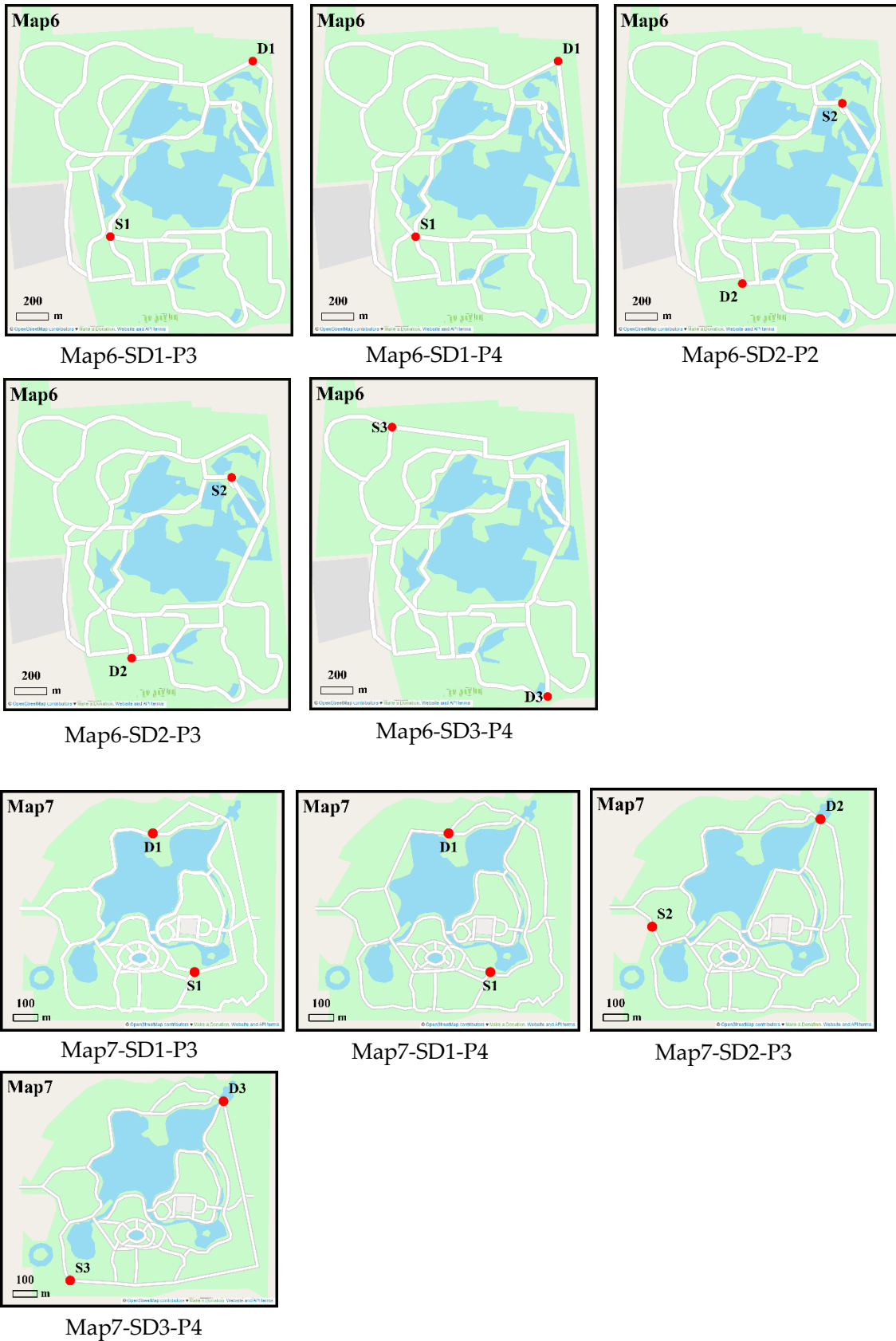
Map5-SD2-P4



Map5-SD3-P5



Map5-SD3-P6



**Figure S4.** The modified maps with simplified recommended routes.