

	Correlated							
	PRr	PRpr	PRpo	PRoc	PRpc	PRac	PRic	MOPR/D
50.1	10.28	10.09	10.18	10.07	12.02	10.16	11.70	8.73
50.2	8.25	7.57	8.32	7.98	9.93	7.71	9.53	8.07
50.3	5.98	5.53	5.71	5.55	6.70	5.57	6.95	5.56
50.4	4.95	4.53	4.64	4.55	5.40	4.54	5.66	4.85
50.5	2.91	2.71	2.87	2.71	3.02	2.71	3.23	5.41
100.1	29.19	27.86	28.80	28.72	33.17	29.06	32.56	16.05
100.2	25.17	24.02	24.92	24.96	28.73	25.07	28.07	15.34
100.3	23.16	21.89	22.66	22.71	25.81	22.49	25.52	13.34
100.4	14.77	14.30	14.40	14.56	15.67	14.23	15.88	9.15
100.5	11.56	11.46	11.64	11.65	12.02	10.92	12.22	8.36
200.1	119.11	117.42	112.94	114.40	129.82	120.72	130.03	38.87
200.2	86.04	84.36	81.44	82.83	93.22	87.36	93.31	33.77
200.3	80.70	79.17	76.31	77.74	87.57	82.02	87.36	32.09
200.4	62.34	60.38	59.43	60.05	66.42	62.76	66.92	26.21
200.5	46.94	43.82	43.00	44.95	47.53	45.93	48.16	18.08
300.1	250.57	249.58	257.31	250.37	266.66	246.72	268.31	69.46
300.2	195.58	195.06	199.31	196.09	208.24	192.10	208.41	62.15
300.3	172.03	171.09	174.22	170.62	179.26	166.54	181.65	58.26
300.4	133.67	132.06	135.81	131.43	138.86	129.45	140.14	45.90
300.5	106.82	104.04	106.31	101.72	106.04	99.99	107.39	31.01
400.1	448.46	424.20	407.95	435.24	435.42	428.36	458.01	126.80
400.2	364.37	345.54	334.65	353.15	353.36	344.29	373.28	100.10
400.3	294.94	278.81	271.54	283.98	285.35	276.04	299.18	83.19
400.4	247.74	238.11	231.49	245.00	241.88	237.75	253.59	69.54
400.5	163.03	154.93	153.94	159.72	151.68	149.48	160.58	46.56
500.1	664.04	594.35	645.76	629.82	664.74	635.93	652.06	161.56
500.2	618.52	565.81	595.58	577.49	614.83	582.32	614.45	148.86
500.3	437.81	398.80	423.35	408.03	430.04	408.32	429.75	111.62
500.4	427.44	390.05	407.35	396.12	413.99	396.75	417.48	94.88
500.5	246.51	227.05	237.89	228.36	234.42	225.54	238.01	65.96
600.1	925.23	918.57	934.21	905.82	940.13	907.82	941.29	215.24
600.2	805.99	792.15	808.20	777.64	812.79	783.64	814.59	187.80
600.3	715.84	692.78	706.30	681.61	709.70	684.19	721.15	154.05
600.4	547.02	526.46	534.88	516.04	538.70	515.14	537.58	117.93
600.5	353.18	340.79	345.54	333.02	345.25	331.94	344.95	104.65
700.1	1153.18	1157.36	1177.87	1160.66	1198.02	1209.51	1212.92	280.24
700.2	949.70	957.98	973.23	952.31	976.96	993.14	988.99	226.39
700.3	821.50	814.74	820.85	811.95	827.39	832.36	842.75	185.00
700.4	670.89	661.10	672.28	655.94	673.36	676.13	680.80	147.16
700.5	390.65	384.50	390.01	381.74	389.66	387.98	391.71	146.59
800.1	1487.51	1394.03	1330.05	1433.89	1391.68	1402.11	1509.73	353.00
800.2	1377.96	1288.26	1242.84	1325.29	1295.13	1288.91	1400.79	302.62
800.3	1055.14	1003.34	970.77	1018.27	1005.79	991.68	1063.24	236.68
800.4	814.97	773.25	751.73	781.15	772.57	756.74	809.19	181.21
800.5	491.26	472.37	462.90	481.87	457.94	454.38	486.21	180.32
900.1	1974.74	1854.32	1932.10	1815.65	1909.90	1826.90	1990.39	437.95
900.2	1684.84	1556.88	1623.50	1534.51	1609.39	1542.65	1679.29	341.62
900.3	1456.19	1354.45	1411.66	1346.42	1398.54	1339.13	1445.47	276.11
900.4	1040.76	951.26	995.17	958.04	989.60	949.23	997.89	215.84
900.5	574.99	527.30	551.35	531.42	541.46	525.29	546.81	213.52
1000.1	2284.69	2456.06	2483.30	2212.39	2385.51	2240.50	2456.04	489.73
1000.2	2036.44	2121.18	2154.14	1932.07	2062.14	1945.27	2142.44	411.45
1000.3	1624.95	1635.97	1665.97	1527.68	1601.43	1532.27	1655.90	321.69
1000.4	1250.62	1256.20	1264.72	1169.29	1238.70	1185.69	1269.18	252.22
1000.5	709.71	702.57	713.84	672.72	706.33	679.38	703.09	285.51

Average processing times (in seconds) required by each path-relinking variant on 2-objective correlated, anti-correlated and concave MoSTP instances.

	Anti-Correlated							
	PRr	PRpr	PRpo	PRoc	PRpc	PRac	PRic	MOPR/D
50.1	14.98	14.68	14.62	14.71	19.13	14.81	18.25	10.50
50.2	17.26	16.75	16.76	16.75	23.46	17.19	22.71	11.98
50.3	18.27	17.81	17.80	17.59	27.31	17.83	26.89	12.61
50.4	18.55	17.91	17.89	17.83	29.08	17.97	29.09	12.91
50.5	20.46	19.58	19.64	19.35	34.35	19.51	35.72	13.56
100.1	54.05	50.66	52.69	52.73	63.01	52.37	63.53	21.81
100.2	53.86	50.47	53.06	52.96	72.83	52.59	71.59	24.35
100.3	54.76	51.36	53.73	53.90	81.19	53.54	82.29	25.91
100.4	53.99	50.23	52.45	52.44	84.13	51.89	87.80	27.41
100.5	56.17	51.33	54.25	53.97	93.18	53.34	101.48	27.36
200.1	197.19	198.49	187.91	190.43	226.70	203.05	226.96	62.34
200.2	192.70	193.22	183.30	183.67	259.39	197.98	247.86	69.33
200.3	190.76	192.66	183.32	183.85	280.20	198.05	276.98	72.22
200.4	186.16	187.15	177.69	177.64	286.54	190.99	297.67	74.50
200.5	190.98	191.85	182.07	183.20	308.61	198.84	328.37	81.24
300.1	431.03	441.97	447.85	444.90	500.12	435.13	493.58	130.20
300.2	415.33	424.97	434.98	427.40	561.88	414.84	540.61	143.82
300.3	412.76	421.30	434.10	426.81	596.59	412.70	596.84	148.97
300.4	420.17	434.28	445.31	435.59	651.11	420.47	669.31	153.25
300.5	428.85	440.24	449.91	441.79	670.43	428.11	730.72	161.30
400.1	756.12	711.61	667.64	732.90	777.96	734.49	795.93	233.32
400.2	741.80	707.35	662.17	726.18	900.84	719.78	878.14	252.42
400.3	749.89	713.16	672.37	731.43	989.14	728.32	968.38	260.15
400.4	746.41	711.78	662.94	723.82	1041.32	723.16	1044.96	265.82
400.5	758.63	719.64	679.65	732.38	1074.25	732.77	1129.16	262.52
500.1	1215.37	1084.13	1159.35	1151.27	1313.95	1166.48	1251.34	368.07
500.2	1201.60	1089.68	1155.65	1151.39	1538.09	1164.79	1388.96	388.08
500.3	1201.90	1088.73	1178.72	1163.62	1621.99	1173.99	1519.72	402.11
500.4	1192.53	1075.14	1150.43	1141.98	1671.78	1147.82	1616.48	397.03
500.5	1245.48	1107.53	1203.31	1192.05	1793.61	1201.68	1770.58	394.71
600.1	1599.33	1695.59	1701.70	1646.70	1880.12	1664.32	1757.93	485.32
600.2	1603.62	1683.27	1679.46	1633.33	2244.71	1635.60	2066.69	526.46
600.3	1593.08	1682.32	1690.88	1640.60	2368.97	1642.26	2349.23	542.25
600.4	1615.83	1700.49	1697.78	1661.46	2449.59	1656.39	2607.11	545.14
600.5	1629.61	1693.73	1663.97	1628.50	2372.51	1617.66	2642.72	499.86
700.1	2159.91	2271.39	2316.68	2265.86	2507.34	2386.51	2434.97	692.87
700.2	2103.57	2322.51	2364.10	2325.22	3124.59	2412.75	2964.41	753.14
700.3	2117.85	2318.18	2325.13	2295.45	3163.26	2368.63	3272.17	748.00
700.4	2138.37	2276.41	2305.53	2250.38	3294.01	2333.85	3559.56	749.66
700.5	2155.80	2369.07	2392.86	2328.86	3391.16	2441.60	4007.24	701.37
800.1	2848.05	2679.98	2490.17	2840.63	2892.85	2783.48	3062.33	942.57
800.2	2772.99	2635.61	2473.93	2736.80	3392.21	2676.76	3278.58	1013.47
800.3	2879.31	2722.15	2503.01	2906.22	3939.94	2815.36	3701.43	1073.62
800.4	3002.46	2812.52	2562.48	2982.44	4250.01	2901.96	4023.97	1059.39
800.5	2850.35	2691.77	2522.61	2783.04	3791.31	2717.98	4036.98	879.67
900.1	3913.25	3805.53	4049.90	3675.79	4248.50	3703.60	4259.01	1194.23
900.2	3845.48	3784.24	4052.15	3701.09	5291.97	3701.93	4731.62	1320.06
900.3	3773.55	3767.10	3912.83	3575.47	5085.76	3574.76	5091.67	1295.34
900.4	3928.32	3825.49	4088.52	3728.62	5577.86	3763.81	5603.41	1331.01
900.5	3962.45	3852.14	4139.54	3769.04	5639.36	3799.36	5879.62	1145.10
1000.1	4307.58	5158.64	5208.03	4357.34	5156.04	4346.38	5272.17	1366.49
1000.2	4402.53	5430.13	5468.69	4564.99	6799.17	4565.45	6444.85	1492.26
1000.3	4453.36	5382.14	5336.60	4509.58	6758.34	4534.10	6939.04	1510.84
1000.4	4551.80	5397.26	5365.56	4495.01	6865.19	4533.21	7583.71	1530.68
1000.5	4575.86	5481.72	5536.19	4626.11	7211.93	4698.76	8544.95	1391.62

	Concave							
	PRr	PRpr	PRpo	PRoc	PRpc	PRac	PRic	MOPR/D
50.1	10.68	10.35	10.38	10.39	11.94	10.36	11.97	11.64
50.2	7.93	7.80	8.02	7.82	9.26	7.87	9.31	8.63
50.3	8.46	8.40	8.53	8.37	9.89	8.46	9.92	9.01
50.4	7.82	7.71	7.87	7.87	9.35	7.83	9.11	8.53
50.5	7.94	7.86	8.02	7.96	9.52	7.98	9.31	8.35
100.1	28.44	26.40	27.31	27.68	30.41	27.70	30.79	26.87
100.2	23.33	21.86	22.68	22.70	25.77	22.81	26.10	19.84
100.3	26.64	25.00	25.46	25.62	28.77	25.81	29.10	22.20
100.4	23.36	21.92	22.38	22.70	25.21	22.68	25.92	19.86
100.5	21.22	19.95	20.30	20.70	23.81	20.81	23.74	15.48
200.1	49.94	47.05	47.03	46.86	48.84	45.34	49.52	69.75
200.2	62.73	58.37	58.23	58.17	60.13	56.49	60.75	73.40
200.3	87.44	83.57	82.98	82.49	89.05	79.20	88.85	60.76
200.4	87.67	83.94	83.45	83.58	90.64	80.47	90.12	69.46
200.5	78.98	76.13	75.64	75.72	82.38	72.58	81.66	45.35
300.1	486.96	488.18	486.68	486.84	492.75	481.35	488.96	494.79
300.2	117.39	112.46	112.55	109.24	113.49	106.94	114.82	134.66
300.3	322.74	302.78	302.71	297.20	299.85	292.48	302.93	307.07
300.4	249.27	241.08	240.78	234.36	244.47	227.89	242.51	230.71
300.5	228.85	221.11	220.75	213.88	223.99	208.93	223.48	218.82
400.1	347.42	340.71	334.47	335.16	348.32	343.62	343.54	356.10
400.2	288.32	289.78	283.29	282.75	298.61	290.99	294.30	272.95
400.3	393.93	402.16	390.05	392.65	420.51	405.90	403.20	353.20
400.4	339.20	354.23	345.33	345.88	368.99	356.70	354.70	211.23
400.5	388.71	403.82	389.80	394.19	422.01	405.56	406.50	180.28
500.1	791.90	770.88	778.79	759.97	777.29	741.33	767.92	264.12
500.2	580.38	560.78	566.63	555.70	565.89	541.52	561.88	281.18
500.3	704.31	683.15	690.34	678.39	694.47	659.01	681.41	257.33
500.4	565.46	546.86	553.38	541.15	553.97	524.22	545.92	273.91
500.5	726.97	710.44	699.30	696.86	710.95	685.08	692.98	261.62
600.1	1156.73	1143.80	1123.45	1121.17	1125.46	1135.83	1160.84	447.55
600.2	1182.93	1168.80	1169.70	1149.80	1179.90	1178.17	1206.45	390.41
600.3	726.89	696.31	691.83	671.01	693.69	697.63	700.23	584.73
600.4	1302.09	1278.26	1270.20	1252.17	1278.69	1273.25	1255.10	413.97
600.5	1242.68	1215.56	1216.64	1187.66	1208.46	1224.03	1204.08	408.73
700.1	1635.52	1603.41	1605.21	1534.06	1596.95	1488.37	1561.68	696.73
700.2	2592.08	2400.97	2378.65	2293.62	2313.73	2282.56	2350.80	2334.94
700.3	1357.31	1324.03	1327.71	1269.84	1320.28	1218.64	1288.67	638.04
700.4	1816.25	1795.20	1783.05	1707.63	1749.55	1605.22	1703.10	551.94
700.5	1367.05	1278.56	1278.63	1231.21	1244.67	1222.08	1269.38	1277.83
800.1	2062.31	2107.95	2060.39	2076.36	2212.27	2169.06	2101.25	1004.07
800.2	1480.94	1530.00	1488.05	1514.70	1597.00	1555.46	1512.62	710.69
800.3	1580.83	1623.86	1591.30	1601.83	1687.87	1643.71	1612.99	719.78
800.4	1477.70	1531.68	1499.97	1519.89	1602.86	1568.11	1514.68	626.08
800.5	1797.14	1854.60	1819.03	1833.38	1935.17	1876.53	1835.18	561.78
900.1	2702.79	2764.42	2809.63	2521.77	2575.36	2574.43	2733.05	2643.17
900.2	3933.45	3781.18	3851.77	3414.42	3469.12	3496.45	3680.95	3464.64
900.3	4110.84	4094.04	4216.76	3656.78	3749.52	3774.71	4011.15	3786.32
900.4	1986.55	1974.62	2009.28	1863.29	1946.84	1949.04	1966.37	811.69
900.5	3077.81	3117.12	3129.23	2846.33	2907.91	2988.56	2966.15	1267.59
1000.1	5303.95	5775.40	5772.56	5172.24	5197.08	5464.25	5645.50	1448.85
1000.2	5823.76	6416.31	6138.89	5681.82	5504.41	6007.65	5771.25	1668.43
1000.3	6281.15	7068.29	7037.89	6157.94	6268.98	6522.41	6876.78	1794.42
1000.4	6037.07	6739.14	6723.37	5966.24	6054.20	6263.51	6591.23	1779.11
1000.5	4331.46	4839.39	4769.41	4291.18	4309.51	4480.96	4682.76	1318.86