

Results for TSPLIB_2 (kTSP)

Keld Helsgaun, June 21, 2023

BKS from

Pandiri, V. and Singh, A.:

Two multi-start heuristics for the k-traveling salesman problem.

OPSEARCH, 57:1164-1204 (2020)

$k = \text{floor}(n/2)$

Instance	k	BKS	LKH-3
a280	140	1314	1231
ali535	267	46195	42563
att48	24	3603	3603
att532	266	9991	8978
bayg29	14	626	626
bays29	14	733	733
berlin52	26	1874	1874
bier127	63	26062	25761
brazil58	29	7978	7978
brg180	90	1080	980
burma14	7	1272	1273
ch130	65	2423	2408
ch150	75	2761	2760
d198	99	7073	6921
d493	246	14223	13574
d657	328	24424	20946
dantzig42	21	260	260
eil101	50	238	227
eil51	25	175	175
eil76	38	216	213
fl417	208	6404	5436
fri26	13	414	414
gil262	131	1034	993
gr120	60	2710	2669
gr137	68	29363	29231
gr17	8	517	517
gr202	101	14182	13790
gr21	10	918	918
gr229	114	41005	39618
gr24	12	918	504
gr431	215	39334	34985
gr48	24	1819	1819
gr666	333	89448	76925
gr96	48	20688	20688
hk48	24	4701	4701

kroA100	50	9184	9184
kroA150	75	11625	11496
kroA200	100	12753	12372
kroB100	50	9096	9096
kroB150	75	11642	11357
kroB200	100	13178	12338
kroC100	50	9457	9457
kroD100	50	8719	8719
kroE100	50	9102	9097
lin105	52	5848	5848
lin318	159	missing	15916
p654	327	19332	16174
pa561	280	1211	1035
pcb442	221	24451	22537
pr107	53	18028	18028
pr124	62	22998	22998
pr136	68	46890	46414
pr144	72	28402	27424
pr152	76	37336	36333
pr226	113	39830	36720
pr264	132	27711	22644
pr299	149	23475	22390
pr439	219	41581	35404
pr76	38	41976	41248
rat195	97	1140	1100
rat575	287	3349	3120
rat783	391	5007	4008
rat99	49	574	573
rd100	50	3168	3168
rd400	200	7013	6350
si175	87	10840	10087
si535	267	25599	22327
st70	35	260	260
swiss42	21	458	458
ts225	112	56828	56828
tsp225	112	1729	1708
u159	79	18399	18323
u574	287	17355	14858
u724	362	22802	16799
ulysses16	8	1985	1686
ulysses22	11	1902	1903

The deviation in the results for burma14, ulysses16 and ulysses22 is probably due to different implementations of the GEO norm.