

This documents includes the absolute objective values of the experimental studies of paper: “*Ant Colony Optimization Algorithms for Dynamic Problems: A Comprehensive Comparison*”.

TABLE I: Experimental results regarding $\bar{P}_{offline}$ of ACO variations for DTSPs with weight changes

ACO Algorithm	kroA100				kroA150				kroA200			
$f = 500, m \Rightarrow$	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75
Evaporation	20704	20798	21205	21411	25770	26495	27105	27553	28749	29355	30299	30867
Evaporation+PP	21131	21236	21637	21751	26351	26965	27398	27661	29265	29818	30381	30683
Shake-Strategy	20686	20767	21207	21407	25789	26498	27094	27495	28708	29350	30336	30908
Max-Strategy	21260	21623	22024	22257	26856	27645	28179	28457	30557	31233	31779	32046
\mathcal{MMAS}_{caste}	20666	20781	21211	21385	25737	26516	27068	27468	28770	29320	30197	30812
\mathcal{MMAS}_R	21309	21642	22006	22205	26836	27717	28137	28354	30537	31215	31701	31933
\mathcal{MMAS}_A	20631	20837	21294	21545	25848	26713	27494	27903	28818	29672	30903	31401
\mathcal{MMAS}_S	20640	20865	21288	21541	25900	26682	27489	27886	28821	29791	30847	31399
MC- \mathcal{MMAS}	20683	20834	21181	21361	25847	26524	27043	27407	28712	29273	30225	30598
Population	21027	21194	21550	21755	26191	26845	27343	27642	29100	29702	30584	30815
Population+RP	20910	21348	21730	21974	26375	27278	27871	28150	29786	30530	31217	31624
RIACO	21740	22111	22334	22527	27433	28095	28552	28733	30966	31487	31965	32296
EIACO	20705	20907	21351	21608	25970	26735	27424	27723	28902	29693	30675	31125
HIACO	20965	21373	21725	22012	26502	27293	27906	28141	29900	30507	31233	31647
HIACO-II	20761	20970	21367	21634	25966	26737	27417	27718	28916	29703	30665	31127
MIACO	20764	21021	21431	21677	25986	26821	27529	27834	29043	29849	30829	31218
EIIACO	21675	22051	22262	22459	27342	28019	28460	28655	30837	31405	31854	32196
M-PACO	21174	21420	21753	21954	26274	27067	27658	27945	29442	30160	30900	31139
$f = 5000, m \Rightarrow$	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75
Evaporation	20295	20174	20365	20436	25170	25542	25670	25812	27969	28014	28263	28514
Evaporation+PP	20594	20532	20782	20887	25607	25999	26238	26372	28401	28527	28948	29173
Shake-Strategy	20290	20179	20369	20445	25152	25530	25674	25822	27974	28016	28261	28526
Max-Strategy	20305	20334	20570	20666	25167	25688	25946	26081	28087	28362	28893	29100
\mathcal{MMAS}_{caste}	20288	20173	20366	20434	25159	25540	25676	25807	27956	28018	28243	28501
\mathcal{MMAS}_R	20337	20325	20535	20612	25190	25664	25899	26013	28089	28368	28815	28991
\mathcal{MMAS}_A	20261	20174	20356	20426	25117	25519	25697	25844	27930	27986	28314	28647
\mathcal{MMAS}_S	20276	20161	20352	20425	25113	25498	25689	25843	27939	27983	28349	28634
MC- \mathcal{MMAS}	20274	20179	20384	20439	25131	25547	25702	25828	27970	28011	28289	28552
Population	20484	20448	20676	20753	25395	25809	26034	26173	28234	28359	28738	28954
Population+RP	20320	20367	20528	20597	25237	25726	26008	26107	28173	28447	28922	29225
RIACO	21068	21215	21237	21259	26497	26938	27074	27080	29890	30051	30225	30371
EIACO	20285	20224	20398	20466	25148	25530	25746	25868	27987	28003	28407	28724
HIACO	20376	20412	20564	20628	25328	25842	26135	26157	28338	28543	29079	29319
HIACO-II	20289	20246	20418	20470	25157	25526	25747	25869	27990	28004	28409	28727
MIACO	20292	20240	20421	20497	25171	25561	25785	25940	28006	28052	28476	28812
EIIACO	21018	21167	21180	21206	26400	26846	26987	27002	29776	29957	30128	30269
M-PACO	20533	20573	20744	20818	25403	25791	26068	26255	28280	28502	28940	29236

Evaporation refers to the standard evaporation-based framework (i.e., \mathcal{MMAS})

Population refers to the standard evaporation-based framework (i.e., P-ACO)

TABLE II: Experimental results regarding $\bar{P}_{offline}$ of ACO variations for DTSPs with node changes

ACO Algorithm	kroA100				kroA150				kroA200			
$f = 500, m \Rightarrow$	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75
Evaporation	23325	23878	23839	23842	29131	29438	29750	29881	33923	34620	34751	34787
Evaporation+PP	23755	24221	24165	24093	29495	29758	29794	29837	34096	34800	34681	34477
Shake-Strategy	23340	23877	23828	23839	29131	29425	29724	29863	33913	34640	34741	34777
Max-Strategy	23576	23803	23635	23618	29327	29221	29370	29504	34078	34300	34242	34290
\mathcal{MMAS}_{caste}	23305	23850	23810	23818	29086	29406	29695	29807	33855	34603	34682	34710
\mathcal{MMAS}_R	23526	23727	23553	23547	29266	29124	29266	29374	34007	34182	34116	34194
\mathcal{MMAS}_A	24105	24679	24588	24600	30148	30449	30766	30909	35036	35792	35933	35956
\mathcal{MMAS}_S	23375	23853	23767	23767	29211	29362	29636	29760	33962	34553	34614	34657
MC- \mathcal{MMAS}	23260	23819	23770	23750	29017	29323	29645	29747	33743	34478	34592	34623
Population	23427	23902	23829	23798	29179	29385	29468	29579	33787	34430	34373	34189
Population+RP	23502	23970	23831	23863	29205	29376	29630	29759	33910	34460	34503	34485
RIACO	24327	24679	24494	24526	30256	30194	30387	30524	35047	35400	35381	35349
EIACO	23202	23688	23609	23605	28863	29104	29303	29422	33575	34177	34195	34133
HIACO	23541	23998	23876	23900	29293	29427	29642	29799	34085	34581	34620	34570
HIACO-II	23203	23714	23584	23616	28850	29097	29305	29431	33578	34174	34188	34137
MIACO	23247	23820	23716	23718	28990	29252	29451	29593	33725	34344	34389	34312
EIIACO	24252	24594	24411	24454	30138	30099	30276	30425	34910	35253	35252	35216
M-PACO	23420	23886	23813	23783	29185	29377	29481	29602	33755	34425	34362	34222
$f = 5000, m \Rightarrow$	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75	0.1	0.25	0.5	0.75
Evaporation	22131	22352	22278	22250	27146	27163	27319	27450	31245	31638	31631	31655
Evaporation+PP	22576	22814	22741	22726	27696	27740	27849	27973	31709	32157	32072	32038
Shake-Strategy	22115	22347	22275	22244	27101	27150	27328	27429	31202	31638	31606	31656
Max-Strategy	22200	22354	22245	22220	27226	27131	27270	27375	31372	31596	31529	31581
\mathcal{MMAS}_{caste}	22116	22351	22281	22251	27102	27155	27312	27431	31165	31602	31576	31617
\mathcal{MMAS}_R	22189	22340	22234	22211	27215	27119	27270	27376	31355	31603	31518	31564
\mathcal{MMAS}_A	23283	23544	23335	23264	29043	28982	29152	29288	33756	34149	34058	34115
\mathcal{MMAS}_S	22134	22346	22245	22216	27211	27225	27364	27475	31544	31916	31854	31924
MC- \mathcal{MMAS}	22114	22388	22321	22284	27119	27206	27427	27499	31208	31703	31715	31737
Population	22331	22575	22487	22476	27364	27429	27543	27679	31416	31887	31855	31782
Population+RP	22470	22731	22553	22559	27706	27697	27828	27961	32191	32482	32406	32410
RIACO	23378	23636	23445	23475	28995	28889	29026	29170	33680	33900	33817	33830
EIACO	22113	22375	22267	22239	27123	27200	27340	27471	31341	31767	31740	31713
HIACO	22315	22590	22439	22440	27496	27561	27701	27831	32014	32391	32302	32316
HIACO-II	22113	22383	22261	22233	27134	27206	27344	27466	31333	31795	31730	31727
MIACO	22117	22395	22290	22256	27125	27241	27373	27516	31347	31831	31784	31778
EIIACO	23307	23567	23372	23410	28906	28788	28921	29070	33545	33779	33679	33689
M-PACO	22281	22526	22430	22407	27350	27388	27511	27632	31464	31926	31868	31817

Evaporation refers to the standard evaporation-based framework (i.e., \mathcal{MMAS})

Population refers to the standard evaporation-based framework (i.e., P-ACO)