

**Table 1** Crossover results ( $10^{-8}$  solutions) for the first half of the 100 NETLIB instances.

prob	nRows	nCols	# supp.			time (sec)				nOLS	
			PDLP	COPT	cross	cross	primal	dual	lin. ind.	primal	dual
25fv47	821	1571	600	583	584	0.20	0.03	0.07	0.03	17	50
80bau3b	2262	9799	1851	1758	1752	1.22d	0.15	0.34	0.73	86	205
adlittle	56	97	61	45	45	0.01	0.01	0.00	0.00	17	2
afiro	27	32	14	13	13	0.00	0.00	0.00	0.00	2	2
agg	488	163	62	57	57	0.01	0.00	0.00	0.00	6	2
agg2	516	302	141	120	121	0.02	0.01	0.00	0.00	26	4
agg3	516	302	144	124	124	0.01	0.01	0.00	0.00	26	2
bandm	305	472	306	294	294	0.01	0.00	0.00	0.00	2	2
beaconfd	173	262	89	89	89	0.00	0.00	0.00	0.00	2	2
blend	74	83	56	54	54	0.00	0.00	0.00	0.00	3	3
bnl1	643	1175	689	451	449	0.34	0.31	0.01	0.02	230	5
bnl2	2324	3489	1519	1171	1164	1.92	0.74	0.17	1.01	358	78
boeing1	351	384	207	196	195	0.02	0.01	0.01	0.00	15	26
boeing2	166	143	69	55	57	0.01	0.00	0.01	0.00	14	30
bore3d	233	315	126	126	126	0.00	0.00	0.00	0.00	2	2
brandy	220	249	135	134	134	0.01	0.00	0.00	0.00	2	2
capri	271	353	246	220	220	0.02	0.02	0.00	0.00	35	8
cre-a	3516	4067	579	492	491	11.30	0.16	10.27	0.86	112	1026
cre-c	3068	3678	590	508	504	9.00	0.15	8.08	0.77	99	766
cycle	1903	2857	994	224	445	1.04	0.34	0.45	0.25	401	384
czprob	929	3523	924	866	866	0.12	0.09	0.00	0.03	59	2
d2q06c	2171	5167	1612	1543	1543	1.54	0.32	0.56	0.66	31	121
d6cube	415	6184	136	115	110	0.58	0.02	0.54	0.01	21	284
degen2	444	534	207	207	207	0.28	0.00	0.25	0.03	2	206
degen3	1503	1818	640	637	638	8.14	0.01	7.33	0.79	3	776
e226	223	282	127	127	127	0.01	0.00	0.00	0.00	2	5
etamacro	400	688	292	271	272	0.03	0.01	0.02	0.01	22	50
ffff800	524	854	357	312	307	0.04	0.02	0.01	0.01	52	36
finnis	497	614	259	227	230	0.05	0.02	0.02	0.01	48	54
fit1d	24	1026	12	12	12	0.00	0.00	0.00	0.00	2	0
fit1p	627	1677	634	627	627	0.00	0.00	0.00	0.00	2	0
fit2d	25	10500	22	20	20	0.01	0.00	0.00	0.00	3	0
fit2p	3000	13525	3004	2997	2997	0.04	0.00	0.01	0.03	2	4
forplan	161	421	83	83	83	0.01	0.00	0.01	0.00	2	25
ganges	1309	1681	1278	1175	1174	0.18	0.08	0.00	0.09	103	6
gfrd-pnc	616	1092	349	336	336	0.09	0.00	0.06	0.02	2	125
greenbeb	2392	5405	1048	937	936	2.77	0.25	1.47	1.04	104	404
grow15	300	645	533	299	300	0.24	0.24	0.00	0.00	234	0
grow22	440	946	849	440	440	0.62	0.62	0.00	0.00	410	0
grow7	140	301	237	140	140	0.05	0.05	0.00	0.00	98	0
israel	174	142	80	70	69	0.01	0.01	0.00	0.00	20	0
kb2	43	41	27	27	27	0.00	0.00	0.00	0.00	2	0
ken-07	2426	3602	2236	2234	2234	1.27	0.00	0.05	1.22	2	65
lotfi	153	308	126	99	99	0.01	0.01	0.00	0.00	29	2
maros-r7	3136	9408	3136	3136	3136	0.09	0.06	0.00	0.01	2	0
maros	846	1443	345	340	339	0.32	0.01	0.27	0.05	7	162
modszk1	687	1620	666	666	666	0.09	0.02	0.03	0.03	2	20
nesm	662	2923	726	550	543	0.26	0.25	0.00	0.00	188	2
osa-07	1118	23949	357	355	355	0.05	0.01	0.01	0.02	8	6
osa-14	2337	52460	873	781	781	0.52	0.35	0.03	0.12	93	6

“p” means the basis is only primal optimal (dual infeasible). “d” means the basis is only dual optimal (primal infeasible). “a” means the basis is near-optimal but primal-dual infeasible. All OLS subproblems are solved by direct QR factorization.

**Table 2** Crossover results ( $10^{-8}$  solutions) for the second half of the 100 NETLIB instances.

prob	nRows	nCols	# supp.			time (sec)				nOLS	
			PDLP	COPT	cross	cross	primal	dual	lin. ind.	primal	dual
osa-30	4350	100024	1733	1536	1536	2.00	1.47	0.06	0.46	207	6
pds-02	2953	7535	1379	332	331	1.68	0.79	0.38	0.51	432	396
perold	625	1376	580	546	549	0.16d	0.08	0.05	0.02	38	27
pilot.ja	940	1988	789	681	678	0.58d	0.40	0.09	0.09	92	30
pilot	1441	3652	1299	1287	1282	0.58p	0.28	0.09	0.20	22	8
pilot4	410	1000	374	364	364	0.04	0.02	0.01	0.01	14	7
pilot87	2030	4883	1856	1840	1840	1.10	0.45	0.31	0.31	17	15
pilotnov	975	2172	1809	708	650	1.83d	1.71	0.00	0.12	1163	2
qap12	3192	8856	2940	2462	2466	66.60	32.42	8.85	25.33	435	216
qap8	912	1632	656	466	442	0.82	0.26	0.20	0.36	56	112
recipe	91	180	24	24	24	0.00	0.00	0.00	0.00	2	5
sc105	105	103	85	85	85	0.00	0.00	0.00	0.00	2	6
sc205	205	203	184	184	184	0.01	0.00	0.00	0.00	2	6
sc50a	50	48	42	42	42	0.00	0.00	0.00	0.00	2	2
sc50b	50	48	48	48	48	0.01	0.00	0.00	0.01	2	2
scagr25	471	500	317	307	307	0.01	0.00	0.00	0.00	2	2
scagr7	129	140	98	97	97	0.00	0.00	0.00	0.00	2	0
scfxm1	330	457	248	231	231	0.02	0.01	0.01	0.00	13	21
scfxm2	660	914	501	473	471	0.05	0.02	0.02	0.01	24	27
scfxm3	990	1371	754	711	711	0.11	0.04	0.03	0.04	35	33
scorpion	388	358	245	245	245	0.01	0.00	0.00	0.01	2	2
scrs8	490	1169	276	276	276	0.02	0.00	0.00	0.01	2	10
scsd1	77	760	31	7	12	0.02	0.00	0.01	0.00	13	60
scsd6	147	1350	182	63	66	0.06	0.04	0.01	0.00	85	52
scsd8	397	2750	551	147	354	0.14	0.12	0.01	0.00	175	23
sctap1	300	480	263	164	164	0.07	0.05	0.01	0.00	102	46
sctap2	1090	1880	811	562	561	0.26	0.11	0.06	0.09	231	143
sctap3	1480	2480	1038	731	730	0.51	0.16	0.13	0.21	279	270
seba	515	1028	438	438	438	0.00	0.00	0.00	0.00	2	2
share1b	117	225	95	94	94	0.00	0.00	0.00	0.00	2	0
share2b	96	79	52	48	48	0.01	0.00	0.00	0.00	7	11
shell	536	1775	391	383	383	0.03	0.00	0.01	0.02	2	48
ship04l	402	2118	261	260	260	0.01	0.00	0.01	0.01	2	24
ship04s	402	1458	281	280	280	0.02	0.00	0.01	0.01	2	16
ship08l	778	4283	422	422	422	0.08	0.00	0.03	0.05	2	34
ship08s	778	2387	447	447	447	0.06	0.00	0.01	0.05	2	22
ship12l	1151	5427	707	706	706	0.22	0.01	0.04	0.16	2	57
ship12s	1151	2763	728	728	728	0.19	0.00	0.03	0.16	2	47
sierra	1227	2036	373	361	361	0.18	0.00	0.04	0.14	5	92
stair	356	467	350	349	349	0.01	0.00	0.00	0.00	2	2
standata	359	1075	71	50	50	0.05	0.00	0.04	0.00	10	146
standgub	361	1184	71	50	50	0.04	0.00	0.03	0.00	10	146
standmps	467	1075	190	174	174	0.05	0.01	0.05	0.00	15	144
stocfor1	117	111	69	69	69	0.00	0.00	0.00	0.00	2	3
stocfor2	2157	2031	1267	1267	1267	0.85	0.00	0.13	0.72	2	123
truss	1000	8806	802	691	698	0.87	0.18	0.56	0.13	102	300
tuff	333	587	165	122	122	0.04	0.02	0.02	0.00	43	60
vtp.base	198	203	55	55	55	0.00	0.00	0.00	0.00	2	2
wood1p	244	2594	39	39	39	0.14	0.00	0.14	0.00	2	134
woodw	1098	8405	696	550	550	0.60	0.27	0.19	0.13	146	81

“p” means the basis is only primal optimal (dual infeasible). “d” means the basis is only dual optimal (primal infeasible). “a” means the basis is near-optimal but primal-dual infeasible. All OLS subproblems are solved by direct QR factorization.

**Table 3** Crossover results ( $10^{-6}$  solutions) for the first half of the 100 NETLIB instances.

prob	nRows	nCols	# supp.			time (sec)				nOLS	
			PDLP	COPT	cross	cross	primal	dual	lin. ind.	primal	dual
25fv47	821	1571	601	583	584	0.13	0.02	0.08	0.03	17	50
80bau3b	2262	9799	1852	1759	1742	1.28a	0.16	0.37	0.74	69	225
adlittle	56	97	64	45	45	0.01p	0.01	0.00	0.00	17	2
afiro	27	32	14	13	13	0.00	0.00	0.00	0.00	2	2
agg	488	163	62	57	57	0.01	0.00	0.00	0.00	6	2
agg2	516	302	141	120	121	0.01	0.01	0.00	0.00	26	4
agg3	516	302	144	124	124	0.02	0.02	0.00	0.00	26	2
bandm	305	472	326	294	294	0.01	0.00	0.00	0.00	2	2
beaconfd	173	262	89	89	89	0.00	0.00	0.00	0.00	2	2
blend	74	83	56	54	54	0.00	0.00	0.00	0.00	3	3
bnl1	643	1175	689	451	449	0.35	0.32	0.01	0.02	230	6
bnl2	2324	3489	1523	1170	1165	1.90p	0.68	0.22	0.99	359	79
boeing1	351	384	210	195	196	0.03a	0.01	0.02	0.00	18	26
boeing2	166	143	69	55	57	0.01	0.00	0.00	0.00	14	30
bore3d	233	315	127	126	126	0.00	0.00	0.00	0.00	2	2
brandy	220	249	136	134	134	0.01	0.00	0.00	0.00	2	2
capri	271	353	246	220	220	0.02	0.02	0.00	0.00	35	8
cre-a	3516	4067	578	493	490	10.96	0.16	9.91	0.89	110	1026
cre-c	3068	3678	591	508	503	8.69	0.14	7.76	0.80	99	766
cycle	1903	2857	1032	358	229	1.05	0.33	0.37	0.34	403	390
czprob	929	3523	925	866	866	0.21p	0.17	0.00	0.03	60	2
d2q06c	2171	5167	1645	1542	1542	1.40d	0.13	0.57	0.69	31	125
d6cube	415	6184	138	115	110	0.60	0.02	0.56	0.01	21	284
degen2	444	534	207	207	207	0.28	0.00	0.25	0.03	2	206
degen3	1503	1818	645	637	637	7.90	0.01	7.09	0.79	3	776
e226	223	282	129	127	127	0.01	0.00	0.00	0.00	2	5
etamacro	400	688	299	269	269	0.04d	0.02	0.01	0.01	25	48
ffff800	524	854	367	313	311	0.05p	0.02	0.01	0.01	53	36
finnis	497	614	246	228	230	0.05d	0.02	0.02	0.01	47	64
fit1d	24	1026	12	12	12	0.00	0.00	0.00	0.00	2	0
fit1p	627	1677	634	627	627	0.00	0.00	0.00	0.00	2	0
fit2d	25	10500	22	20	20	0.01	0.01	0.00	0.00	3	0
fit2p	3000	13525	3007	2997	2996	0.07d	0.00	0.01	0.05	2	5
forplan	161	421	85	83	83	0.01p	0.00	0.01	0.00	3	25
ganges	1309	1681	1278	1175	1173	0.18d	0.08	0.00	0.10	103	7
gfrd-pnc	616	1092	349	336	336	0.17	0.00	0.15	0.02	2	125
greenbeb	2392	5405	1074	939	935	3.48p	0.25	2.21	1.02	122	598
grow15	300	645	533	299	300	0.35	0.35	0.00	0.00	234	0
grow22	440	946	849	440	440	0.61	0.61	0.00	0.00	410	0
grow7	140	301	237	140	140	0.05	0.05	0.00	0.00	98	0
israel	174	142	79	69	68	0.04p	0.01	0.00	0.01	23	0
kb2	43	41	30	27	27	0.00	0.00	0.00	0.00	2	0
ken-07	2426	3602	2235	2234	2234	1.23	0.00	0.04	1.18	2	65
lotfi	153	308	129	99	99	0.01	0.01	0.00	0.00	29	2
maros-r7	3136	9408	3135	3136	3136	0.24	0.03	0.11	0.08	2	2
maros	846	1443	351	340	339	0.23p	0.01	0.17	0.05	8	161
modszk1	687	1620	666	666	666	0.05	0.00	0.02	0.03	2	20
nesm	662	2923	758	553	538	0.17a	0.17	0.00	0.00	218	2
osa-07	1118	23949	358	355	355	0.06	0.01	0.02	0.02	8	6
osa-14	2337	52460	882	781	781	0.50	0.34	0.03	0.13	92	6

“p” means the basis is only primal optimal (dual infeasible). “d” means the basis is only dual optimal (primal infeasible). “a” means the basis is near-optimal but primal-dual infeasible. All OLS subproblems are solved by direct QR factorization.

**Table 4** Crossover results ( $10^{-6}$  solutions) for the second half of the 100 NETLIB instances.

prob	nRows	nCols	# supp.			time (sec)				nOLS	
			PDLP	COPT	cross	cross	primal	dual	lin. ind.	primal	dual
osa-30	4350	100024	1741	1536	1536	2.01	1.48	0.06	0.46	207	6
pds-02	2953	7535	1389	332	319	1.77	0.78	0.37	0.62	432	402
perold	625	1376	608	546	549	0.15d	0.08	0.05	0.02	38	27
pilot.ja	940	1988	823	680	675	0.52d	0.32	0.09	0.10	97	33
pilot	1441	3652	1308	1284	1209	10.19a	0.33	9.62	0.22	27	1628
pilot4	410	1000	382	363	360	0.03d	0.01	0.01	0.01	13	9
pilot87	2030	4883	1976	1840	1800	27.52a	2.48	24.68	0.34	111	2325
pilotnov	975	2172	1809	704	647	1.80d	1.68	0.00	0.11	1154	2
qap12	3192	8856	2980	2441	2449	61.98d	27.69	8.81	25.45	377	222
qap8	912	1632	656	466	440	1.05	0.28	0.19	0.57	56	103
recipe	91	180	24	24	24	0.00	0.00	0.00	0.00	2	5
sc105	105	103	85	85	85	0.01	0.00	0.00	0.00	2	6
sc205	205	203	184	184	184	0.01	0.00	0.00	0.00	2	6
sc50a	50	48	42	42	42	0.01	0.00	0.00	0.00	2	2
sc50b	50	48	48	48	48	0.00	0.00	0.00	0.00	2	2
scagr25	471	500	317	307	307	0.01	0.00	0.00	0.00	2	2
scagr7	129	140	98	97	97	0.00	0.00	0.00	0.00	2	0
scfxm1	330	457	253	231	231	0.02	0.01	0.01	0.00	13	21
scfxm2	660	914	515	473	471	0.06	0.03	0.02	0.01	24	27
scfxm3	990	1371	754	711	711	0.11	0.03	0.04	0.04	35	33
scorpion	388	358	246	245	245	0.01	0.00	0.00	0.01	2	2
scrs8	490	1169	276	276	276	0.02	0.00	0.00	0.01	2	10
scsd1	77	760	31	7	11	0.03	0.01	0.02	0.00	13	61
scsd6	147	1350	182	60	60	0.05	0.03	0.01	0.00	84	55
scsd8	397	2750	551	147	208	0.14	0.12	0.01	0.00	175	21
sctap1	300	480	263	164	163	0.06	0.04	0.02	0.00	102	46
sctap2	1090	1880	817	562	561	0.26	0.11	0.06	0.09	231	143
sctap3	1480	2480	1040	731	729	0.53	0.19	0.13	0.21	279	273
seba	515	1028	438	438	438	0.00	0.00	0.00	0.00	2	2
share1b	117	225	98	94	93	0.00p	0.00	0.00	0.00	4	0
share2b	96	79	52	48	48	0.01	0.00	0.00	0.00	7	11
shell	536	1775	392	383	383	0.03	0.00	0.01	0.02	2	48
ship04l	402	2118	261	260	260	0.02	0.00	0.02	0.01	2	24
ship04s	402	1458	281	280	280	0.02	0.00	0.01	0.01	2	16
ship08l	778	4283	423	422	422	0.09	0.00	0.03	0.05	2	34
ship08s	778	2387	448	447	447	0.06	0.00	0.01	0.05	2	22
ship12l	1151	5427	707	706	706	0.21	0.00	0.04	0.16	2	57
ship12s	1151	2763	729	728	728	0.19	0.00	0.03	0.16	2	47
sierra	1227	2036	377	361	361	0.18	0.01	0.03	0.14	5	92
stair	356	467	350	349	349	0.01	0.00	0.00	0.00	2	2
standata	359	1075	71	50	50	0.05	0.00	0.04	0.00	10	146
standgub	361	1184	71	50	50	0.04	0.00	0.03	0.00	10	146
standmps	467	1075	190	174	174	0.04	0.00	0.03	0.00	15	143
stocfor1	117	111	69	69	69	0.00	0.00	0.00	0.00	2	3
stocfor2	2157	2031	1267	1267	1267	0.85	0.00	0.13	0.71	2	123
truss	1000	8806	802	691	691	0.90	0.22	0.56	0.12	102	300
tuff	333	587	167	122	122	0.04	0.02	0.02	0.00	43	60
vtp.base	198	203	55	55	55	0.00	0.00	0.00	0.00	2	2
wood1p	244	2594	39	39	39	0.18	0.00	0.18	0.00	2	134
woodw	1098	8405	696	550	550	0.61	0.24	0.23	0.13	146	81

“p” means the basis is only primal optimal (dual infeasible). “d” means the basis is only dual optimal (primal infeasible). “a” means the basis is near-optimal but primal-dual infeasible. All OLS subproblems are solved by direct QR factorization.

**Table 5** Crossover results with auxiliary LPs ( $10^{-8}$  solutions) for the first half of the 100 NETLIB instances.

prob	nRows	nCols	# supp.			time (sec)					nOLS	
			PDLP	COPT	cross	cross	aux. LP	primal	dual	lin. ind.	primal	dual
25fv47	821	1571	600	583	584	1.01	0.96	0.01	0.00	0.03	1	2
80bau3b	2262	9799	1851	1758	1755	0.77	0.05	0.00	0.00	0.71	1	1
adlittle	56	97	61	45	44	0.01	0.01	0.00	0.00	0.00	1	1
afiro	27	32	14	13	14	0.00	0.00	0.00	0.00	0.00	1	1
agg	488	163	62	57	57	0.01	0.01	0.00	0.00	0.00	1	1
agg2	516	302	141	120	121	0.01	0.01	0.00	0.00	0.00	2	1
agg3	516	302	144	124	125	0.01	0.01	0.00	0.00	0.00	2	1
bandm	305	472	306	294	294	0.07	0.06	0.00	0.00	0.00	1	1
beaconfd	173	262	89	89	89	0.01	0.00	0.00	0.00	0.00	1	1
blend	74	83	56	54	54	0.01	0.00	0.00	0.00	0.00	1	1
bnl1	643	1175	689	451	448	6.29	6.27	0.00	0.00	0.02	1	1
bnl2	2324	3489	1519	1171	1168	2.22	1.19	0.00	0.01	1.01	2	3
boeing1	351	384	207	196	195	0.04	0.03	0.00	0.00	0.00	1	3
boeing2	166	143	69	55	55	0.01	0.01	0.00	0.00	0.00	1	3
bore3d	233	315	126	126	126	0.01	0.01	0.00	0.00	0.00	1	1
brandy	220	249	135	134	134	0.05	0.04	0.00	0.00	0.00	1	1
capri	271	353	246	220	225	0.02	0.02	0.00	0.00	0.00	1	1
cre-a	3516	4067	579	492	484	1.27	0.08	0.00	0.35	0.81	1	41
cre-c	3068	3678	590	508	503	2.22	0.22	0.00	1.23	0.75	2	46
cycle	1903	2857	994	224	105	2.04p	2.00	0.00	0.01	0.03	1	9
czprob	929	3523	924	866	866	0.06	0.03	0.00	0.00	0.03	1	1
d2q06c	2171	5167	1612	1543	1541	93.46	92.75	0.00	0.05	0.65	1	11
d6cube	415	6184	136	115	101	13.38	13.30	0.00	0.06	0.01	1	7
degen2	444	534	207	207	207	0.33	0.13	0.00	0.16	0.03	1	111
degen3	1503	1818	640	637	637	8.20	2.87	0.01	4.41	0.79	1	475
e226	223	282	127	127	127	0.05	0.04	0.00	0.00	0.00	1	1
etamacro	400	688	292	271	272	0.03	0.01	0.00	0.00	0.01	1	12
ffff800	524	854	357	312	315	0.03	0.01	0.00	0.00	0.01	7	1
finnis	497	614	259	227	229	0.02	0.01	0.00	0.00	0.01	2	4
fit1d	24	1026	12	12	12	0.01	0.00	0.00	0.00	0.00	1	0
fit1p	627	1677	634	627	627	0.60	0.59	0.00	0.00	0.00	1	0
fit2d	25	10500	22	20	20	0.01	0.01	0.00	0.00	0.00	1	0
fit2p	3000	13525	3004	2997	2997	5.08	5.05	0.00	0.00	0.03	1	1
forplan	161	421	83	83	83	1.65	1.64	0.00	0.00	0.00	1	1
ganges	1309	1681	1278	1175	1171	t						
gfrd-pnc	616	1092	349	336	336	0.05	0.02	0.00	0.01	0.02	1	23
greenbeb	2392	5405	1048	937	942	114.78	113.76	0.00	0.00	1.01	1	1
grow15	300	645	533	299	300	0.20	0.19	0.00	0.00	0.00	1	0
grow22	440	946	849	440	440	0.38	0.37	0.00	0.00	0.00	1	0
grow7	140	301	237	140	140	0.02	0.02	0.00	0.00	0.00	1	0
israel	174	142	80	70	68	0.01	0.01	0.00	0.00	0.00	7	0
kb2	43	41	27	27	27	0.01	0.01	0.00	0.00	0.00	1	0
ken-07	2426	3602	2236	2234	2234	1.22	0.03	0.00	0.00	1.18	1	4
lotfi	153	308	126	99	98	0.01	0.01	0.00	0.00	0.00	1	1
maros-r7	3136	9408	3136	3136	3136	0.33	0.28	0.01	0.00	0.01	1	0
maros	846	1443	345	340	339	1.84	1.77	0.00	0.01	0.05	3	11
modszk1	687	1620	666	666	666	0.05	0.01	0.00	0.00	0.03	1	1
nesm	662	2923	726	550	545	t						
osa-07	1118	23949	357	355	355	0.16	0.13	0.00	0.00	0.02	1	1
osa-14	2337	52460	873	781	781	f						

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**Table 6 Crossover results with auxiliary LPs ( $10^{-8}$  solutions) for the second half of the 100 NETLIB instances.**

prob	nRows	nCols	# supp.			time (sec)					nOLS	
			PDLP	COPT	cross	cross	aux. LP	primal	dual	lin. ind.	primal	dual
osa-30	4350	100024	1733	1536	1536	f						
pds-02	2953	7535	1379	332	320	0.40	0.06	0.00	0.02	0.31	3	30
perold	625	1376	580	546	547	54.13d	54.10	0.00	0.00	0.02	1	1
pilot.ja	940	1988	789	681	661	t						
pilot	1441	3652	1299	1287	1298	t						
pilot4	410	1000	374	364	364	99.07	99.06	0.00	0.00	0.01	2	1
pilot87	2030	4883	1856	1840	1840	t						
pilotnov	975	2172	1809	708	642	54.40d	54.26	0.03	0.00	0.10	11	1
qap12	3192	8856	2940	2462	2446	63.12	32.86	0.06	4.88	25.29	1	112
qap8	912	1632	656	466	418	0.53	0.09	0.00	0.16	0.26	1	96
recipe	91	180	24	24	24	0.01	0.00	0.00	0.00	0.00	1	1
sc105	105	103	85	85	85	0.01	0.00	0.00	0.00	0.00	1	1
sc205	205	203	184	184	184	0.01	0.01	0.00	0.00	0.00	1	1
sc50a	50	48	42	42	42	0.01	0.00	0.00	0.00	0.00	1	1
sc50b	50	48	48	48	48	0.01	0.00	0.00	0.00	0.00	1	1
scagr25	471	500	317	307	307	0.01	0.01	0.00	0.00	0.00	1	1
scagr7	129	140	98	97	97	0.00	0.00	0.00	0.00	0.00	1	0
scfxm1	330	457	248	231	232	0.03	0.02	0.00	0.00	0.00	2	2
scfxm2	660	914	501	473	471	0.06	0.04	0.00	0.00	0.01	1	3
scfxm3	990	1371	754	711	711	0.15	0.10	0.00	0.00	0.04	1	1
scorpion	388	358	245	245	245	0.02	0.01	0.00	0.00	0.01	1	1
scrs8	490	1169	276	276	276	0.05	0.03	0.00	0.00	0.01	1	1
scsd1	77	760	31	7	11	0.02	0.01	0.00	0.01	0.00	1	59
scsd6	147	1350	182	63	56	0.02	0.01	0.00	0.01	0.00	1	34
scsd8	397	2750	551	147	143	0.16	0.14	0.00	0.01	0.00	1	21
sectap1	300	480	263	164	168	0.04	0.03	0.00	0.00	0.01	4	5
sectap2	1090	1880	811	562	564	0.13	0.03	0.00	0.00	0.09	3	5
sectap3	1480	2480	1038	731	732	0.26	0.03	0.00	0.01	0.21	3	21
seba	515	1028	438	438	438	0.01	0.01	0.00	0.00	0.00	1	1
share1b	117	225	95	94	94	0.03	0.03	0.00	0.00	0.00	1	0
share2b	96	79	52	48	48	0.04	0.03	0.00	0.00	0.00	1	2
shell	536	1775	391	383	383	0.03	0.01	0.00	0.00	0.02	1	2
ship04l	402	2118	261	260	260	0.03	0.02	0.00	0.00	0.01	1	1
ship04s	402	1458	281	280	280	0.03	0.02	0.00	0.00	0.01	1	4
ship08l	778	4283	422	422	422	0.07	0.02	0.00	0.00	0.05	1	1
ship08s	778	2387	447	447	447	0.07	0.02	0.00	0.00	0.05	1	1
ship12l	1151	5427	707	706	706	0.20	0.03	0.00	0.00	0.16	1	1
ship12s	1151	2763	728	728	728	0.18	0.02	0.00	0.00	0.16	1	1
sierra	1227	2036	373	361	361	0.16	0.02	0.00	0.00	0.14	1	7
stair	356	467	350	349	349	0.20	0.20	0.00	0.00	0.00	1	1
standata	359	1075	71	50	50	0.01	0.01	0.00	0.00	0.00	1	1
standgub	361	1184	71	50	50	0.01	0.01	0.00	0.00	0.00	1	6
standmps	467	1075	190	174	174	0.02	0.01	0.00	0.00	0.00	1	6
stocfor1	117	111	69	69	69	0.01	0.01	0.00	0.00	0.00	1	1
stocfor2	2157	2031	1267	1267	1267	0.76	0.02	0.00	0.02	0.72	1	17
truss	1000	8806	802	691	689	0.73	0.08	0.00	0.47	0.12	1	262
tuff	333	587	165	122	113	0.64	0.64	0.00	0.00	0.00	1	1
vtp.base	198	203	55	55	55	0.01	0.00	0.00	0.00	0.00	1	1
wood1p	244	2594	39	39	39	1.40	1.40	0.00	0.00	0.00	1	1
woodw	1098	8405	696	550	550	0.19	0.05	0.00	0.00	0.13	1	1

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