Supplementary Material to
"A Schur Complement Based Semi-Proximal ADMM for Convex Quadratic Conic Programming and Extensions"

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Table 1: The performance of Scb-spADMM, ADMM, ADMMGB on QSDP-θ_+, QSDP-QAP, QSDP-BIQ and QSDP-RCP problems (accuracy = 10^{-6}). In the table, "scb" stands for Scb-spADMM and "gb" stands for ADMMGB, respectively. The computation time is in the format of "hours:minutes:seconds".

			iteration	η_{qsdp}	η_{gap}	time
problem	m_E ; n_s	rank(B)	scb|admm|gb	scb|admm|gb	scb|admm|gb	scb|admm|gb
theta6	4375 ; 300	10	311 | 407 | 549	7.9-7 | 9.7-7 | 9.9-7	2.1-6 | -1.6-6 | -6.2-7	08 | 09 | 14
theta62	13390 ; 300	10	153 | 196 | 229	9.6-7 | 9.9-7 | 9.6-7	-1.1-7 | 9.6-8 | -4.5-7	04 | 05 | 06
theta8	7905 ; 400	10	314 | 384 | 616	9.5-7 | 9.6-7 | 9.5-7	2.7-6 | -1.3-6 | -5.4-7	17 | 18 | 33
theta82	23872 ; 400	10	158 | 179 | 234	9.5-7 | 9.7-7 | 9.9-7	-3.7-8 | -2.8-7 | -8.2-7	10 | 09 | 13
theta83	39862 ; 400	10	200 | 177 | 219	9.3-7 | 9.6-7 | 9.4-7	6.2-9 | 1.4-7 | -1.2-7	11 | 09 | 14
theta10	12470 ; 500	10	329 | 439 | 614	9.0-7 | 8.5-7 | 9.7-7	-2.5-6 | 1.5-6 | 5.8-7	27 | 33 | 50
theta102	37467 ; 500	10	150 | 187 | 235	8.7-7 | 9.4-7 | 9.9-7	6.4-7 | 2.9-7 | -9.3-7	15 | 15 | 21
theta103	62516 ; 500	10	202 | 184 | 222	9.8-7 | 9.5-7 | 9.9-7	-4.2-8 | 6.9-8 | -1.6-7	20 | 15 | 21
theta104	87245 ; 500	10	181 | 181 | 242	9.4-7 | 9.5-7 | 9.9-7	6.9-8 | 2.0-7 | -2.8-7	20 | 15 | 23
theta12	17979 ; 600	10	343 | 441 | 703	9.9-7 | 8.3-7 | 9.9-7	3.0-6 | 1.4-6 | -8.8-7	42 | 48 | 1:27
theta123	90020 ; 600	10	204 | 205 | 213	9.7-7 | 9.8-7 | 9.9-7	-9.1-8 | 6.6-8 | -1.9-7	29 | 25 | 31
san200-0.7-1	5971 ; 200	10	2150 | 4758 | 5172	9.8-7 | 9.9-7 | 9.9-7	5.1-6 | 2.0-6 | -3.5-6	15 | 26 | 36
sanr200-0.7	6033 ; 200	10	177 | 223 | 280	9.6-7 | 9.7-7 | 9.7-7	1.9-7 | -6.0-8 | 1.7-8	02 | 02 | 03
c-fat200-1	18367 ; 200	10	2257 | 3027 | 3268	9.9-7 | 9.7-7 | 9.9-7	-2.6-6 | -2.0-6 | -2.2-6	24 | 26 | 35
hamming-8-4	11777 ; 256	10	2820 | 2945 | 3517	9.9-7 | 9.9-7 | 9.9-7	-6.0-7 | -6.4-7 | -1.1-6	53 | 49 | 1:09
hamming-9-8	2305 ; 512	10	3891 | 4980 | 5577	9.9-7 | 9.9-7 | 9.9-7	-3.4-6 | -5.8-7 | 9.9-7	3:54 | 4:12 | 5:50
hamming-8-3-4	16129 ; 256	10	202 | 220 | 294	4.8-7 | 8.9-7 | 9.8-7	4.5-6 | 5.9-7 | 2.2-7	04 | 04 | 06
hamming-9-5-6	53761 ; 512	10	436 | 535 | 684	8.5-7 | 8.7-7 | 9.6-7	1.1-5 | -1.7-6 | -1.6-7	36 | 37 | 57
brock200-1	5067 ; 200	10	198 | 210 | 291	9.7-7 | 9.4-7 | 9.8-7	9.9-8 | -2.9-7 | -6.9-10	02 | 02 | 03
brock200-4	6812 ; 200	10	209 | 186 | 263	9.8-7 | 9.9-7 | 9.8-7	1.2-7 | -2.6-9 | -1.1-7	03 | 02 | 03
brock400-1	20078 ; 400	10	168 | 217 | 275	9.0-7 | 9.6-7 | 9.7-7	8.6-7 | -4.9-8 | 6.2-9	11 | 10 | 15
keller4	5101 ; 171	10	669 | 909 | 963	9.9-7 | 9.9-7 | 9.9-7	-1.3-8 | 4.6-9 | -8.4-8	06 | 07 | 09
p-hat300-1	33918 ; 300	10	468 | 829 | 2501	9.9-7 | 9.9-7 | 8.3-7	-8.7-7 | 2.1-7 | -1.0-6	14 | 20 | 1:09
be250.1	251 ; 251	10	4126 | 7439 | 25000	9.6-7 | 9.9-7 | 1.3-6	-5.8-7 | -8.6-7 | -1.3-8	59 | 1:27 | 5:41
be250.2	251 ; 251	10	3604 | 6504 | 16322	9.8-7 | 9.9-7 | 9.9-7	-4.9-7 | -6.8-7 | -7.4-9	52 | 1:18 | 3:40
be250.3	251 ; 251	10	3562 | 5712 | 8501	9.9-7 | 9.9-7 | 9.7-7	-9.2-7 | -9.4-7 | 9.3-7	52 | 1:08 | 1:57

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problem	$m_E; n_s$	rank(B)	iteration scb|admm|gb	η_{qsdp} scb|admm|gb	ηgap scb|admm|gb	time scb|admm|gb
be250.4	251 ; 251	10	4072 | 7668 | 25000	9.9-7 | 9.9-7 | 1.4-6	-2.1-6 | 2.8-6 | -9.4-9	57 | 1:32 | 5:41
be250.5	251 ; 251	10	3210 | 4635 | 7406	9.9-7 | 9.9-7 | 9.9-7	-8.6-7 | -8.8-7 | 1.4-6	46 | 55 | 1:41
be250.6	251 ; 251	10	3250 | 5580 | 9812	9.9-7 | 9.9-7 | 9.9-7	-2.8-7 | -3.1-7 | -3.6-7	46 | 1:05 | 2:10
be250.7	251 ; 251	10	3699 | 6562 | 13501	9.9-7 | 9.9-7 | 9.9-7	-6.5-7 | -3.8-7 | 5.4-9	52 | 1:17 | 3:03
be250.8	251 ; 251	10	3507 | 4712 | 7701	9.9-7 | 9.9-7 | 9.6-7	-9.7-7 | -1.0-6 | 5.1-7	50 | 56 | 1:43
be250.9	251 ; 251	10	3678 | 7292 | 21001	9.9-7 | 9.9-7 | 9.9-7	-4.1-7 | -7.2-7 | -1.2-8	53 | 1:28 | 4:57
be250.10	251 ; 251	10	3305 | 5752 | 10500	9.9-7 | 9.9-7 | 9.9-7	-1.1-6 | -8.2-7 | -3.7-8	49 | 1:06 | 2:19
bqp100-1	101 ; 101	10	1376 | 2134 | 3067	9.9-7 | 9.9-7 | 9.9-7	2.6-7 | -1.9-7 | -5.1-7	05 | 06 | 10
bqp100-2	101 ; 101	10	3109 | 4319 | 7107	9.9-7 | 9.9-7 | 9.9-7	-1.8-7 | -7.2-7 | -5.3-7	10 | 13 | 22
bqp100-3	101 ; 101	10	1751 | 2371 | 6276	9.9-7 | 9.9-7 | 9.9-7	-2.7-6 | -3.1-6 | 4.7-7	06 | 06 | 20
bqp100-4	101 ; 101	10	2646 | 3986 | 13901	9.9-7 | 9.9-7 | 9.1-7	-4.0-7 | -6.6-7 | -3.3-8	09 | 11 | 45
bqp100-5	101 ; 101	10	1979 | 3001 | 6901	9.9-7 | 9.9-7 | 9.7-7	-3.7-7 | -1.5-7 | 1.7-8	07 | 08 | 22
bqp100-6	101 ; 101	10	1316 | 2083 | 2937	9.4-7 | 9.9-7 | 9.9-7	1.1-7 | 3.3-7 | -9.5-7	05 | 06 | 11
bqp100-7	101 ; 101	10	1787 | 2341 | 3664	9.9-7 | 9.9-7 | 9.9-7	-5.5-7 | -5.1-7 | -1.3-6	06 | 06 | 12
bqp100-8	101 ; 101	10	1820 | 3337 | 9612	9.9-7 | 9.9-7 | 9.9-7	7.3-7 | 8.9-8 | 1.1-8	06 | 09 | 32
bqp100-9	101 ; 101	10	1948 | 4146 | 15901	9.9-7 | 9.9-7 | 9.9-7	-2.2-6 | -6.7-7 | 2.6-9	07 | 11 | 52
bqp100-10	101 ; 101	10	3207 | 5077 | 12101	9.9-7 | 9.9-7 | 9.9-7	8.0-8 | 4.3-7 | 2.7-8	10 | 15 | 38
bqp250-1	251 ; 251	10	3931 | 5941 | 11758	9.6-7 | 9.9-7 | 9.9-7	-1.2-6 | -1.5-6 | 1.2-7	57 | 1:10 | 2:39
bqp250-2	251 ; 251	10	4007 | 5774 | 9704	9.5-7 | 9.9-7 | 9.9-7	-6.6-7 | -2.3-7 | -1.2-6	57 | 1:07 | 2:11
bqp250-3	251 ; 251	10	4112 | 5708 | 12202	9.9-7 | 9.9-7 | 9.9-7	-3.9-6 | 3.8-8 | 3.0-6	57 | 1:05 | 2:40
bqp250-4	251 ; 251	10	3158 | 4290 | 9671	9.9-7 | 9.9-7 | 9.9-7	-5.5-7 | -2.4-6 | 4.5-6	45 | 52 | 2:13
bqp250-5	251 ; 251	10	4430 | 7349 | 22802	9.9-7 | 9.9-7 | 9.9-7	-2.0-6 | 3.6-6 | -1.3-8	1:02 | 1:29 | 5:13
bqp250-6	251 ; 251	10	2871 | 5122 | 7801	9.9-7 | 9.9-7 | 9.9-7	-1.2-6 | -1.3-6 | -2.5-7	42 | 1:01 | 1:47
bqp250-7	251 ; 251	10	3991 | 5570 | 11508	9.9-7 | 9.9-7 | 9.9-7	-2.2-6 | -2.0-6 | -2.7-6	57 | 1:04 | 2:31
bqp250-8	251 ; 251	10	2882 | 4008 | 5501	9.9-7 | 9.8-7 | 9.8-7	-2.0-7 | -7.1-7 | -1.0-6	40 | 45 | 1:14
bqp250-9	251 ; 251	10	4127 | 6279 | 11998	9.7-7 | 9.9-7 | 9.9-7	-5.1-7 | -3.9-7 | 3.8-6	58 | 1:11 | 2:38
bqp250-10	251 ; 251	10	3044 | 4185 | 7986	9.9-7 | 9.9-7 | 9.9-7	-9.3-7 | -7.5-7 | -2.5-6	43 | 48 | 1:43
bqp500-1	501 ; 501	10	6003 | 8391 | 13416	9.9-7 | 9.9-7 | 9.9-7	-3.9-7 | -7.3-7 | -5.4-7	6:01 | 7:05 | 13:34
bqp500-2	501 ; 501	10	6601 | 10203 | 25000	9.7-7 | 9.9-7 | 3.4-6	-4.2-7 | -1.2-7 | 1.8-5	6:52 | 8:43 | 25:23
bqp500-3	501 ; 501	10	7450 | 10517 | 21140	9.9-7 | 9.9-7 | 9.9-7	7.6-7 | -4.3-6 | 1.1-6	7:31 | 8:46 | 21:10
bqp500-4	501 ; 501	10	7035 | 9903 | 23551	9.6-7 | 9.9-7 | 9.9-7	-3.3-7 | -1.3-6 | 2.6-6	7:08 | 8:12 | 23:36
bqp500-5	501 ; 501	10	6164 | 8406 | 20533	9.9-7 | 9.9-7 | 9.9-7	-8.8-7 | -4.8-7 | 2.8-6	6:30 | 7:04 | 20:37
bqp500-6	501 ; 501	10	6905 | 8659 | 25000	9.8-7 | 9.9-7 | **1.4-4**	-3.8-7 | -1.5-6 | **-1.8-4**	7:13 | 7:30 | 25:44
bqp500-7	501 ; 501	10	6587 | 9038 | 18072	9.9-7 | 9.9-7 | 9.9-7	-6.8-7 | 2.5-7 | 2.8-6	6:41 | 7:39 | 18:13
bqp500-8	501 ; 501	10	6300 | 8832 | 16496	9.9-7 | 9.9-7 | 9.9-7	1.3-6 | -1.6-6 | 5.8-6	6:24 | 7:17 | 16:20
bqp500-9	501 ; 501	10	6532 | 9015 | 18065	9.9-7 | 9.9-7 | 9.9-7	9.9-7 | -6.5-7 | -3.5-6	6:39 | 7:37 | 18:10
bqp500-10	501 ; 501	10	7199 | 9787 | 24119	9.9-7 | 9.9-7 | 9.9-7	-1.9-6 | 2.1-6 | -2.3-6	7:09 | 8:12 | 24:15
gka1d	101 ; 101	10	1600 | 2266 | 4068	9.8-7 | 9.9-7 | 9.7-7	-4.2-7 | -8.8-7 | 7.4-7	06 | 06 | 13
gka2d	101 ; 101	10	1903 | 3097 | 5601	9.9-7 | 9.9-7 | 9.3-7	-5.9-7 | -2.4-7 | -3.8-8	07 | 09 | 21
gka3d	101 ; 101	10	2431 | 3101 | 5618	9.9-7 | 9.9-7 | 9.9-7	-2.6-7 | -3.8-7 | 1.7-8	08 | 09 | 19
gka4d	101 ; 101	10	2266 | 2787 | 6632	9.9-7 | 9.9-7 | 9.9-7	2.3-7 | -4.4-7 | -1.9-8	08 | 09 | 22
soybean-large-2	308 ; 307	10	1267 | 1717 | 11208	9.9-7 | 9.9-7 | 9.9-7	-5.8-8 | -6.5-8 | -7.9-8	20 | 23 | 2:55
soybean-large-3	308 ; 307	10	936 | 1362 | 9261	8.3-7 | 9.1-7 | 9.8-7	-5.1-8 | -5.7-8 | -1.7-8	17 | 17 | 2:29
soybean-large-4	308 ; 307	10	1681 | 2132 | 13401	9.9-7 | 9.9-7 | 9.9-7	-1.0-7 | -1.0-7 | -4.3-8	29 | 28 | 3:49
soybean-large-5	308 ; 307	10	834 | 1229 | 3937	9.9-7 | 9.9-7 | 9.9-7	-3.2-8 | -1.9-8 | -2.3-8	14 | 18 | 1:08

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problem	$m_E; n_s$	rank(B)	iteration scb|admm|gb	η_{qsdp} scb|admm|gb	ηgap scb|admm|gb	time scb|admm|gb
soybean-large-6	308 ; 307	10	310 | 475 | 707	9.4-7 | 8.9-7 | 8.3-7	-8.1-8 | -5.8-8 | -1.5-7	05 | 06 | 12
soybean-large-7	308 ; 307	10	1028 | 1327 | 3970	9.9-7 | 9.9-7 | 9.9-7	-3.6-8 | -6.3-8 | -1.8-8	19 | 20 | 1:12
soybean-large-8	308 ; 307	10	782 | 1091 | 2901	9.8-7 | 9.9-7 | 8.9-7	-3.7-8 | -4.5-8 | -1.0-8	14 | 15 | 51
soybean-large-9	308 ; 307	10	928 | 1187 | 4901	9.8-7 | 9.8-7 | 9.9-7	1.1-7 | -6.0-8 | -1.7-8	17 | 19 | 1:26
soybean-large-10	308 ; 307	10	309 | 489 | 518	9.9-7 | 9.9-7 | 9.7-7	2.0-7 | 3.1-7 | 1.4-7	06 | 07 | 09
soybean-large-11	308 ; 307	10	877 | 1605 | 1755	9.9-7 | 8.6-7 | 9.5-7	-2.2-7 | 3.5-7 | -2.6-7	17 | 23 | 32
spambase-small-2	301 ; 300	10	409 | 610 | 2792	8.8-7 | 9.5-7 | 9.0-7	-3.1-7 | -3.9-7 | -1.1-6	06 | 07 | 40
spambase-small-3	301 ; 300	10	476 | 665 | 1201	9.6-7 | 9.9-7 | 9.6-7	7.8-9 | -3.7-8 | -3.3-8	09 | 08 | 17
spambase-small-4	301 ; 300	10	1305 | 1983 | 6073	9.9-7 | 9.9-7 | 9.9-7	-4.5-9 | 6.6-9 | -1.7-8	20 | 28 | 1:36
spambase-small-5	301 ; 300	10	608 | 819 | 868	8.5-7 | 9.8-7 | 9.9-7	-7.3-7 | -2.7-7 | -1.4-7	11 | 11 | 14
spambase-small-6	301 ; 300	10	811 | 1198 | 1334	9.9-7 | 9.9-7 | 9.9-7	-1.5-7 | -2.0-7 | -1.3-7	14 | 17 | 23
spambase-small-7	301 ; 300	10	849 | 1240 | 1359	9.9-7 | 9.9-7 | 9.9-7	4.0-7 | 2.8-7 | 1.8-7	15 | 18 | 25
spambase-small-8	301 ; 300	10	1109 | 1244 | 1501	9.9-7 | 9.9-7 | 8.8-7	7.1-8 | 9.3-8 | 7.6-8	20 | 18 | 27
spambase-small-9	301 ; 300	10	1090 | 1415 | 1440	9.9-7 | 9.7-7 | 9.9-7	-1.7-7 | 2.9-8 | -1.3-8	20 | 21 | 27
spambase-small-10	301 ; 300	10	1081 | 1341 | 1500	9.9-7 | 9.9-7 | 9.9-7	1.7-7 | 1.5-7 | -1.5-7	20 | 22 | 27
spambase-small-11	301 ; 300	10	1319 | 1482 | 1653	9.9-7 | 9.9-7 | 9.9-7	-3.6-7 | -8.3-7 | -5.8-7	25 | 25 | 31
spambase-medium-2	901 ; 900	10	471 | 596 | 1201	9.9-7 | 9.9-7 | 8.9-7	-1.6-6 | -1.3-6 | -1.9-6	1:42 | 1:37 | 4:01
spambase-medium-3	901 ; 900	10	1205 | 1582 | 11000	9.9-7 | 9.9-7 | 9.9-7	-2.0-7 | -1.8-7 | -2.2-7	4:18 | 4:16 | 36:54
spambase-medium-4	901 ; 900	10	2560 | 2990 | 4045	9.7-7 | 9.8-7 | 9.9-7	-2.3-6 | 2.5-6 | 1.1-6	9:06 | 8:04 | 13:37
spambase-medium-5	901 ; 900	10	1414 | 1900 | 2901	9.9-7 | 9.9-7 | 9.0-7	7.4-8 | 3.8-8 | -1.1-6	5:06 | 5:17 | 9:58
spambase-medium-6	901 ; 900	10	1607 | 2107 | 2698	9.9-7 | 9.9-7 | 9.9-7	-1.0-8 | 3.7-8 | -1.3-6	6:01 | 6:16 | 9:25
spambase-medium-7	901 ; 900	10	1805 | 2508 | 2846	9.9-7 | 9.9-7 | 9.9-7	-8.7-8 | -4.5-8 | -1.4-6	6:55 | 7:36 | 10:00
spambase-medium-8	901 ; 900	10	1655 | 2309 | 2489	9.9-7 | 9.9-7 | 9.9-7	-2.6-8 | -6.7-8 | 4.6-7	6:19 | 6:54 | 8:47
spambase-medium-9	901 ; 900	10	1683 | 2330 | 2687	9.9-7 | 9.9-7 | 9.9-7	2.6-8 | -5.9-8 | 2.2-8	6:23 | 6:56 | 9:38
spambase-medium-10	901 ; 900	10	1641 | 2030 | 2617	9.9-7 | 9.9-7 | 9.8-7	-6.5-7 | -4.7-7 | 1.9-6	6:11 | 5:59 | 9:22
spambase-medium-11	901 ; 900	10	1608 | 1838 | 3210	9.9-7 | 9.9-7 | 9.9-7	-5.0-7 | 5.4-7 | 9.0-7	6:06 | 5:20 | 11:21
abalone-medium-2	401 ; 400	10	500 | 682 | 1301	9.9-7 | 9.9-7 | 8.5-7	-7.4-8 | 5.8-8 | 3.4-8	16 | 17 | 40
abalone-medium-3	401 ; 400	10	715 | 1011 | 1679	9.9-7 | 9.9-7 | 9.9-7	-2.5-9 | 1.3-8 | -1.1-8	24 | 28 | 56
abalone-medium-4	401 ; 400	10	372 | 626 | 684	9.9-7 | 9.9-7 | 9.9-7	-5.3-8 | 3.6-9 | 6.3-9	12 | 16 | 24
abalone-medium-5	401 ; 400	10	524 | 779 | 942	9.9-7 | 9.9-7 | 9.9-7	-3.8-8 | -1.4-7 | -9.6-8	18 | 21 | 32
abalone-medium-6	401 ; 400	10	536 | 946 | 1162	9.7-7 | 9.9-7 | 9.9-7	-1.3-7 | -2.3-7 | -1.8-7	22 | 27 | 38
abalone-medium-7	401 ; 400	10	1046 | 1676 | 2013	9.9-7 | 9.9-7 | 9.9-7	-8.9-8 | -4.2-8 | -3.3-8	37 | 47 | 1:09
abalone-medium-8	401 ; 400	10	745 | 1123 | 1641	9.6-7 | 9.7-7 | 9.9-7	-3.9-8 | -2.2-7 | -9.1-8	27 | 32 | 55
abalone-medium-9	401 ; 400	10	1035 | 1504 | 1709	9.9-7 | 9.5-7 | 9.9-7	-8.3-8 | 7.1-8 | -1.2-8	38 | 43 | 1:02
abalone-medium-10	401 ; 400	10	1349 | 1803 | 1904	9.9-7 | 9.4-7 | 9.8-7	-1.7-7 | -2.0-7 | -2.2-7	49 | 51 | 1:07
abalone-medium-11	401 ; 400	10	1066 | 1504 | 1704	9.9-7 | 9.7-7 | 9.5-7	-1.1-7 | -1.6-7 | -1.6-7	40 | 45 | 1:02
abalone-large-2	1001 ; 1000	10	594 | 734 | 909	9.9-7 | 9.8-7 | 9.9-7	4.6-7 | 4.5-7 | 1.3-7	3:16 | 2:35 | 3:54
abalone-large-3	1001 ; 1000	10	656 | 1014 | 1901	9.9-7 | 9.9-7 | 9.9-7	-1.4-8 | -7.2-8 | -4.4-8	3:03 | 3:37 | 8:20
abalone-large-4	1001 ; 1000	10	505 | 749 | 995	9.9-7 | 9.9-7 | 9.8-7	-1.3-9 | -1.6-8 | -6.6-8	2:42 | 2:39 | 4:24
abalone-large-5	1001 ; 1000	10	752 | 1187 | 1550	9.8-7 | 9.9-7 | 9.9-7	-6.8-8 | -1.8-7 | -1.2-7	4:11 | 4:16 | 6:53
abalone-large-6	1001 ; 1000	10	886 | 1364 | 1670	9.9-7 | 9.9-7 | 9.9-7	-9.5-8 | -1.1-7 | -1.2-7	4:09 | 4:56 | 7:27
abalone-large-7	1001 ; 1000	10	1206 | 1614 | 2251	9.9-7 | 9.9-7 | 9.9-7	-1.1-7 | 1.8-8 | -7.5-8	5:40 | 5:47 | 9:59
abalone-large-8	1001 ; 1000	10	1092 | 1721 | 2046	9.9-7 | 9.9-7 | 9.9-7	-3.1-7 | -1.8-7 | -2.9-7	5:08 | 6:14 | 9:07
abalone-large-9	1001 ; 1000	10	1557 | 2407 | 2746	9.8-7 | 9.9-7 | 9.9-7	-3.8-7 | -3.5-7 | -2.8-7	8:30 | 8:47 | 12:15
abalone-large-10	1001 ; 1000	10	1682 | 2488 | 2821	9.9-7 | 9.9-7 | 9.9-7	-1.6-7 | -2.6-7 | -2.5-7	8:00 | 9:06 | 12:39

Table 1: The performance of Scb-spadmm, Admm, Admmgb on QSDP-θ_+, QSDP-QAP, QSDP-BIQ and QSDP-RCP problems (accuracy = 10^{-6}). In the table, "scb" stands for Scb-spadmm and "gb" stands for Admmgb, respectively. The computation time is in the format of "hours:minutes:seconds".

problem	$m_E; n_s$	rank(B)	iteration scb|admm|gb	η_{qsdp} scb|admm|gb	ηgap scb|admm|gb	time scb|admm|gb
abalone-large-11	1001 ; 1000	10	1923 | 3005 | 3723	9.8-7 | 9.9-7 | 9.9-7	1.3-7 | 3.6-8 | -3.5-8	9:17 | 11:00 | 16:39
segment-medium-2	701 ; 700	10	1016 | 1541 | 1880	9.7-7 | 9.8-7 | 9.9-7	1.3-6 | -1.1-6 | 2.5-7	2:07 | 2:13 | 3:26
segment-medium-3	701 ; 700	10	713 | 714 | 1801	9.4-7 | 9.5-7 | 9.2-7	-4.0-7 | -9.7-7 | -8.7-7	1:24 | 1:03 | 3:20
segment-medium-4	701 ; 700	10	2282 | 2710 | 17881	9.9-7 | 9.9-7 | 9.9-7	-7.1-8 | -6.5-8 | -6.5-8	4:30 | 4:25 | 34:11
segment-medium-5	701 ; 700	10	2322 | 3100 | 18701	9.9-7 | 9.9-7 | 9.9-7	-1.2-7 | -9.5-8 | -7.3-8	4:40 | 5:02 | 35:56
segment-medium-6	701 ; 700	10	2966 | 3916 | 25000	9.9-7 | 9.9-7 | 1.4-6	-1.7-7 | -1.4-7 | -1.3-7	6:12 | 6:29 | 51:26
segment-medium-7	701 ; 700	10	3185 | 4268 | 25000	9.9-7 | 9.9-7 | 1.6-6	-1.7-7 | -1.7-7 | -1.6-7	7:03 | 7:34 | 53:28
segment-medium-8	701 ; 700	10	2998 | 4140 | 25000	9.9-7 | 9.9-7 | 1.1-6	-1.6-7 | -1.7-7 | -6.7-8	6:28 | 7:09 | 52:54
segment-medium-9	701 ; 700	10	2123 | 2635 | 8801	9.9-7 | 9.9-7 | 9.9-7	-1.9-7 | -3.0-8 | -4.3-8	4:32 | 4:25 | 18:04
segment-medium-10	701 ; 700	10	1695 | 2414 | 6101	9.9-7 | 9.9-7 | 9.8-7	-2.4-7 | -1.2-7 | -2.2-8	3:35 | 4:07 | 12:27
segment-medium-11	701 ; 700	10	1454 | 2437 | 2101	9.4-7 | 9.7-7 | 8.6-7	6.4-8 | -6.3-7 | -1.5-7	3:01 | 4:00 | 4:13
segment-large-2	1001 ; 1000	10	1348 | 1823 | 2038	9.6-7 | 9.9-7 | 9.9-7	-1.3-6 | -1.3-6 | -1.4-6	6:30 | 6:15 | 8:40
segment-large-3	1001 ; 1000	10	479 | 533 | 1601	9.9-7 | 9.9-7 | 8.7-7	-4.0-7 | -1.0-6 | -4.4-7	2:10 | 1:53 | 6:49
segment-large-4	1001 ; 1000	10	2157 | 2802 | 20226	9.9-7 | 9.9-7 | 9.9-7	-9.1-8 | -9.5-8 | -7.1-8	9:57 | 9:57 | 1:27:58
segment-large-5	1001 ; 1000	10	2618 | 3404 | 25000	9.9-7 | 9.9-7 | 1.0-6	-1.1-7 | -9.3-8 | -8.3-8	12:13 | 12:12 | 1:50:29
segment-large-6	1001 ; 1000	10	3236 | 4143 | 25000	9.9-7 | 9.9-7 | 1.4-6	-1.8-7 | -1.8-7 | -1.2-7	15:28 | 15:20 | 1:52:58
segment-large-7	1001 ; 1000	10	3505 | 4318 | 25000	9.9-7 | 9.9-7 | 1.8-6	-1.8-7 | -1.7-7 | -1.9-7	17:07 | 16:39 | 1:56:00
segment-large-8	1001 ; 1000	10	3063 | 3749 | 25000	9.9-7 | 9.9-7 | 1.2-6	-9.3-8 | -7.8-8 | -1.0-7	14:55 | 14:18 | 1:56:05
segment-large-9	1001 ; 1000	10	2497 | 3248 | 15649	9.9-7 | 9.9-7 | 9.9-7	-1.4-7 | -1.2-7 | -5.1-8	12:05 | 13:16 | 1:11:25
segment-large-10	1001 ; 1000	10	1723 | 2226 | 4901	9.9-7 | 9.9-7 | 9.9-7	7.4-9 | 1.4-8 | -2.1-8	8:00 | 8:12 | 21:45
segment-large-11	1001 ; 1000	10	1571 | 2331 | 3417	9.9-7 | 9.7-7 | 9.9-7	1.9-7 | -5.1-7 | -1.7-8	7:20 | 8:30 | 15:23
housing-2	507 ; 506	10	3183 | 5358 | 4689	9.4-7 | 9.7-7 | 9.7-7	-1.9-7 | 1.8-7 | 2.0-7	2:54 | 3:22 | 3:48
housing-3	507 ; 506	10	845 | 1970 | 1714	9.9-7 | 9.9-7 | 9.9-7	-1.5-7 | 1.2-7 | -2.2-8	48 | 1:16 | 1:24
housing-4	507 ; 506	10	805 | 1742 | 2057	9.4-7 | 9.9-7 | 9.9-7	-2.5-8 | -4.8-8 | -3.4-8	45 | 1:09 | 1:45
housing-5	507 ; 506	10	874 | 1262 | 1774	9.9-7 | 9.9-7 | 9.9-7	2.4-7 | -2.3-7 | -2.6-7	1:10 | 1:14 | 3:08
housing-6	507 ; 506	10	586 | 826 | 1005	9.9-7 | 9.9-7 | 9.9-7	-1.9-8 | 2.9-9 | -8.6-8	1:41 | 1:26 | 1:39
housing-7	507 ; 506	10	583 | 906 | 1069	9.9-7 | 9.9-7 | 9.9-7	-1.3-7 | -2.7-7 | -1.7-7	32 | 37 | 56
housing-8	507 ; 506	10	682 | 904 | 1074	9.9-7 | 9.3-7 | 9.9-7	-1.1-7 | -6.9-9 | -6.6-8	39 | 38 | 59
housing-9	507 ; 506	10	765 | 1208 | 1590	8.5-7 | 9.9-7 | 9.8-7	-1.5-7 | -1.3-8 | 8.5-8	44 | 53 | 1:26
housing-10	507 ; 506	10	1027 | 1381 | 1541	9.9-7 | 9.9-7 | 9.9-7	-6.4-8 | -1.6-7 | -1.0-7	58 | 1:02 | 1:27
housing-11	507 ; 506	10	867 | 1327 | 1359	9.9-7 | 9.9-7 | 9.9-7	-1.0-7 | -9.0-8 | -9.2-8	49 | 1:01 | 1:19