

NUMERICAL EXPERIMENT

DIM	SP	PBSM				IRHCGP-II-2				AFISPBPM			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	12	89	0.003264	0	23	91	0.014765	6.63478E-13	-	-	-	-
	$x_0^{(2)}$	9	83	0.002372	0	21	83	0.005645	2.76701E-13	-	-	-	-
	$x_0^{(3)}$	16	89	0.002499	0	59	235	0.006675	1.45627E-13	25	107	0.0031843	3.453E-13
	$x_0^{(4)}$	18	99	0.00278	0	64	255	0.007749	1.07145E-13	-	-	-	-
	$x_0^{(5)}$	18	99	0.002905	0	64	255	0.010252	7.21231E-13	-	-	-	-
	$x_0^{(6)}$	17	95	0.002685	0	63	251	0.008373	5.64781E-13	28	120	0.0047461	9.148E-13
	$x_0^{(7)}$	17	94	0.003467	0	59	235	0.006364	5.05011E-13	28	120	0.0044509	9.51E-13
	$x_0^{(8)}$	18	99	0.002821	0	63	251	0.008385	5.93636E-13	-	-	-	-
	$x_0^{(9)}$	7	64	0.001923	0	18	71	0.002372	3.12544E-13	24	97	0.003228	9.489E-13
	$x_0^{(10)}$	18	100	0.002938	0	66	263	0.009152	3.54611E-13	-	-	-	-
20000	$x_0^{(1)}$	12	89	0.040188	0	25	99	0.049068	3.56874E-13	-	-	-	-
	$x_0^{(2)}$	9	83	0.03899	0	22	87	0.041781	4.85537E-13	-	-	-	-
	$x_0^{(3)}$	16	89	0.034855	0	59	235	0.119082	1.45627E-13	20	89	0.0449986	1.934E-13
	$x_0^{(4)}$	18	99	0.041353	0	72	287	0.131121	7.29286E-13	-	-	-	-
	$x_0^{(5)}$	18	99	0.038108	0	69	275	0.148535	5.23287E-13	-	-	-	-
	$x_0^{(6)}$	17	95	0.038336	0	58	231	0.120583	6.05025E-13	29	126	0.0692928	9.153E-13
	$x_0^{(7)}$	17	94	0.035358	0	59	235	0.122575	5.05011E-13	29	124	0.063359	8.767E-13
	$x_0^{(8)}$	18	99	0.042665	0	71	283	0.152945	2.2369E-13	-	-	-	-
	$x_0^{(9)}$	7	64	0.024269	0	16	63	0.032777	7.3299E-13	23	91	0.0523968	7.85E-13
	$x_0^{(10)}$	18	99	0.03937	0	75	299	0.169174	2.71949E-13	-	-	-	-
100000	$x_0^{(1)}$	12	89	0.148454	0	25	99	0.22533	9.05243E-13	-	-	-	-
	$x_0^{(2)}$	9	83	0.132302	0	23	91	0.234852	3.31977E-13	-	-	-	-
	$x_0^{(3)}$	16	89	0.169506	0	59	235	0.524125	1.45627E-13	17	79	0.1787502	4.992E-13
	$x_0^{(4)}$	18	99	0.16577	0	75	299	0.709725	5.43789E-13	-	-	-	-
	$x_0^{(5)}$	18	99	0.173825	0	81	323	0.639041	7.24627E-13	-	-	-	-
	$x_0^{(6)}$	17	95	0.282553	0	58	231	0.450648	2.81626E-13	27	117	0.2111643	6.449E-13
	$x_0^{(7)}$	17	94	0.169052	0	59	235	0.437273	5.05011E-13	29	123	0.2098297	9.56E-13
	$x_0^{(8)}$	18	99	0.159495	0	78	311	0.563626	9.24985E-13	-	-	-	-
	$x_0^{(9)}$	7	64	0.11478	0	1	3	0.003949	5.27048E-14	22	88	0.1576307	6.319E-13
	$x_0^{(10)}$	18	99	0.16547	0	69	275	0.501676	9.15094E-13	-	-	-	-
500000	$x_0^{(1)}$	12	89	1.57232	0	26	103	1.684798	5.98757E-13	-	-	-	-
	$x_0^{(2)}$	9	83	1.334999	0	23	91	1.53161	7.58568E-13	-	-	-	-
	$x_0^{(3)}$	16	89	1.38177	0	59	235	3.84678	1.45627E-13	18	80	1.2894652	4.918E-13
	$x_0^{(4)}$	18	99	1.518057	0	77	307	5.027772	5.48408E-13	-	-	-	-
	$x_0^{(5)}$	18	99	1.577904	0	82	327	5.340208	8.45064E-13	-	-	-	-
	$x_0^{(6)}$	17	95	1.479015	0	61	243	3.898658	3.67781E-13	32	139	2.4847376	6.096E-13
	$x_0^{(7)}$	17	94	1.51843	0	59	235	3.696208	5.05011E-13	35	152	2.6839561	9.515E-13
	$x_0^{(8)}$	18	99	1.497236	0	71	283	4.668078	1.27002E-13	-	-	-	-
	$x_0^{(9)}$	7	64	0.97971	0	1	3	0.027224	9.42736E-16	21	84	1.5290869	8.635E-13
	$x_0^{(10)}$	18	99	1.594067	0	67	267	4.593857	9.24606E-13	-	-	-	-

DIM	SP	PBSM				IRHCGP-II-2				AFISPBm			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	9	69	0.004552	1.68473E-13	22	87	0.003404	7.48225E-13	-	-	-	-
	$x_0^{(2)}$	8	77	0.002629	5.00468E-13	20	79	0.002574	5.74798E-13	23	92	0.0025056	9.285E-13
	$x_0^{(3)}$	14	65	0.002116	2.16013E-14	52	207	0.006418	1.91747E-13	32	132	0.0032687	8.277E-13
	$x_0^{(4)}$	15	70	0.002481	1.64608E-13	72	287	0.009709	9.81512E-13	-	-	-	-
	$x_0^{(5)}$	15	70	0.00254	1.64624E-13	75	299	0.010284	7.6898E-13	-	-	-	-
	$x_0^{(6)}$	15	70	0.002431	8.65715E-13	59	235	0.007682	6.34571E-13	24	107	0.0027462	6.719E-13
	$x_0^{(7)}$	14	72	0.002497	5.91497E-15	50	199	0.006137	1.48629E-13	28	120	0.0031011	1.114E-14
	$x_0^{(8)}$	16	73	0.004342	6.63502E-14	67	267	0.009367	6.7929E-13	-	-	-	-
	$x_0^{(9)}$	8	80	0.003089	3.96392E-14	17	67	0.002277	9.43953E-13	21	84	0.0021075	8.49E-13
	$x_0^{(10)}$	17	76	0.00316	1.04102E-14	60	239	0.010973	1.55025E-13	-	-	-	-
20000	$x_0^{(1)}$	9	71	0.035389	3.76803E-13	22	88	0.044798	5.65205E-13	-	-	-	-
	$x_0^{(2)}$	8	74	0.035143	3.13996E-14	22	87	0.041957	3.14003E-13	-	-	-	-
	$x_0^{(3)}$	18	89	0.044347	3.06857E-15	59	235	0.110915	2.42464E-15	32	132	0.0465838	8.277E-13
	$x_0^{(4)}$	19	89	0.044854	4.74621E-13	69	275	0.137664	5.18896E-13	-	-	-	-
	$x_0^{(5)}$	19	89	0.043929	4.7462E-13	67	267	0.130342	1.37099E-13	-	-	-	-
	$x_0^{(6)}$	19	89	0.044544	1.18228E-14	54	215	0.108828	9.1191E-13	18	87	0.0299723	4.772E-13
	$x_0^{(7)}$	15	79	0.039564	8.06391E-14	54	215	0.10327	9.97338E-13	28	120	0.0443286	1.114E-14
	$x_0^{(8)}$	19	89	0.044183	5.35806E-13	66	263	0.127325	4.82064E-13	-	-	-	-
	$x_0^{(9)}$	9	103	0.044735	2.51202E-13	16	63	0.029755	7.22206E-13	19	77	0.0273907	7.222E-13
	$x_0^{(10)}$	19	89	0.04283	5.34078E-13	62	247	0.119027	7.37258E-13	-	-	-	-
100000	$x_0^{(1)}$	8	68	0.119751	2.80864E-13	23	92	0.180836	5.96836E-13	-	-	-	-
	$x_0^{(2)}$	9	83	0.154183	1.44919E-19	22	88	0.16105	3.86188E-13	-	-	-	-
	$x_0^{(3)}$	17	87	0.14678	4.15968E-14	62	247	0.455008	6.69641E-13	32	132	0.153529	8.277E-13
	$x_0^{(4)}$	19	90	0.17673	3.55752E-14	77	307	0.620433	9.23756E-13	-	-	-	-
	$x_0^{(5)}$	19	90	0.174166	3.56367E-14	78	311	0.616554	9.42165E-13	-	-	-	-
	$x_0^{(6)}$	20	94	0.183791	3.0815E-14	60	239	0.492268	6.61375E-13	18	87	0.1272574	4.284E-13
	$x_0^{(7)}$	17	88	0.165221	6.07074E-15	47	187	0.35473	3.54989E-13	28	120	0.1485704	1.114E-14
	$x_0^{(8)}$	19	90	0.158985	3.66246E-14	81	323	0.645884	3.76658E-13	-	-	-	-
	$x_0^{(9)}$	5	108	0.160709	7.02158E-14	16	63	0.126446	3.5108E-13	18	73	0.0883819	9.128E-13
	$x_0^{(10)}$	19	89	0.164818	3.12334E-14	79	315	0.617997	5.17539E-13	-	-	-	-
500000	$x_0^{(1)}$	8	69	1.12789	1.57009E-13	24	96	1.781277	4.71027E-13	-	-	-	-
	$x_0^{(2)}$	8	77	1.279184	2.211E-20	22	88	1.668924	8.63549E-13	-	-	-	-
	$x_0^{(3)}$	16	84	1.390153	9.31863E-13	49	195	3.594047	7.90723E-13	32	132	1.3536086	8.277E-13
	$x_0^{(4)}$	20	95	1.612672	7.61925E-14	65	259	4.66253	1.23322E-13	-	-	-	-
	$x_0^{(5)}$	20	95	1.678682	7.63803E-14	69	275	4.999731	6.06432E-13	-	-	-	-
	$x_0^{(6)}$	21	99	1.689386	1.04496E-13	65	259	4.726756	9.80504E-13	18	87	0.9201357	4.218E-13
	$x_0^{(7)}$	16	86	1.370398	3.70924E-13	54	215	3.729723	3.54235E-14	28	120	1.2756811	1.114E-14
	$x_0^{(8)}$	20	95	1.609611	7.73078E-14	69	275	5.024523	3.65448E-13	-	-	-	-
	$x_0^{(9)}$	6	98	1.574743	1.57009E-13	15	59	1.032288	5.49531E-13	17	70	0.7354718	9.421E-13
	$x_0^{(10)}$	19	91	1.456476	8.25625E-14	72	287	5.087681	8.11329E-13	-	-	-	-

DIM	SP	PBSM				IRHCGP-II-2				AFISPBM			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	10	94	0.004291	0	21	84	0.003015	7.39795E-13	-	-	-	-
	$x_0^{(2)}$	11	85	0.002262	0	21	83	0.002108	3.4259E-13	23	92	0.0038212	9.285E-13
	$x_0^{(3)}$	19	104	0.002656	0	58	232	0.005567	4.75882E-13	32	132	0.0032414	8.277E-13
	$x_0^{(4)}$	26	141	0.004118	7.18988E-13	58	233	0.005825	1.86305E-13	-	-	-	-
	$x_0^{(5)}$	26	141	0.003888	7.18924E-13	56	225	0.00582	4.99021E-13	-	-	-	-
	$x_0^{(6)}$	20	108	0.00311	0	50	201	0.005202	3.85277E-13	24	107	0.0026937	6.719E-13
	$x_0^{(7)}$	23	130	0.003442	2.68348E-13	63	251	0.005959	6.19501E-13	28	120	0.0037379	1.114E-14
	$x_0^{(8)}$	27	147	0.004132	2.88638E-13	66	265	0.006458	6.79117E-13	-	-	-	-
	$x_0^{(9)}$	7	79	0.00259	0	18	71	0.001848	3.12799E-13	21	84	0.0022407	8.49E-13
	$x_0^{(10)}$	26	138	0.003572	7.13025E-13	81	324	0.010786	7.68851E-13	-	-	-	-
20000	$x_0^{(1)}$	11	99	0.033782	0	23	92	0.034187	3.76822E-13	-	-	-	-
	$x_0^{(2)}$	11	85	0.027236	0	22	87	0.032289	6.28037E-13	-	-	-	-
	$x_0^{(3)}$	19	104	0.034731	0	58	232	0.081553	4.75882E-13	32	132	0.0431408	8.277E-13
	$x_0^{(4)}$	27	146	0.047143	6.34831E-13	74	297	0.103141	1.78004E-13	-	-	-	-
	$x_0^{(5)}$	27	146	0.049149	6.34735E-13	66	265	0.089177	2.15775E-13	-	-	-	-
	$x_0^{(6)}$	25	135	0.044683	9.41439E-13	48	193	0.065985	5.7634E-13	18	87	0.0279505	4.772E-13
	$x_0^{(7)}$	23	130	0.043097	2.68348E-13	63	251	0.087185	6.19501E-13	28	120	0.0418155	1.114E-14
	$x_0^{(8)}$	27	146	0.046827	6.1904E-13	69	277	0.09611	9.36374E-13	-	-	-	-
	$x_0^{(9)}$	8	70	0.021383	0	16	63	0.020796	7.22243E-13	19	77	0.02583	7.222E-13
	$x_0^{(10)}$	27	146	0.049001	5.52059E-13	109	436	0.147627	1.80228E-13	-	-	-	-
100000	$x_0^{(1)}$	10	94	0.129172	0	24	96	0.125803	3.51083E-13	-	-	-	-
	$x_0^{(2)}$	11	85	0.100103	0	23	91	0.114907	4.91517E-13	-	-	-	-
	$x_0^{(3)}$	19	104	0.131572	0	58	232	0.290403	4.75882E-13	32	132	0.1537672	8.277E-13
	$x_0^{(4)}$	28	151	0.202729	3.51768E-13	-	-	-	-	-	-	-	-
	$x_0^{(5)}$	28	151	0.189107	3.5173E-13	247	1206	1.680362	5.60007E-13	-	-	-	-
	$x_0^{(6)}$	25	135	0.167582	9.39516E-13	50	201	0.277247	3.50502E-13	18	87	0.1173189	4.284E-13
	$x_0^{(7)}$	23	130	0.148799	2.68348E-13	63	251	0.327115	6.19501E-13	28	120	0.1556887	1.114E-14
	$x_0^{(8)}$	28	151	0.192158	3.50121E-13	90	360	0.501727	4.2254E-13	-	-	-	-
	$x_0^{(9)}$	7	65	0.079842	0	16	63	0.088057	3.51083E-13	18	73	0.0843812	9.128E-13
	$x_0^{(10)}$	28	151	0.197433	3.54519E-13	70	286	0.397014	7.09159E-14	-	-	-	-
500000	$x_0^{(1)}$	10	94	1.080387	0	24	98	1.295428	5.49532E-13	-	-	-	-
	$x_0^{(2)}$	12	90	1.035714	0	23	91	1.162488	9.42055E-13	-	-	-	-
	$x_0^{(3)}$	19	104	1.176974	0	58	232	2.953135	4.75882E-13	32	132	1.3990359	8.277E-13
	$x_0^{(4)}$	28	151	1.761455	7.84963E-13	82	328	4.17773	7.20612E-13	-	-	-	-
	$x_0^{(5)}$	28	151	1.724262	7.84857E-13	81	324	4.108133	9.88168E-13	-	-	-	-
	$x_0^{(6)}$	25	135	1.55125	9.39072E-13	56	225	3.035863	6.59187E-13	18	87	0.9209082	4.218E-13
	$x_0^{(7)}$	23	130	1.620643	2.68348E-13	63	251	3.186794	6.19501E-13	28	120	1.3608919	1.114E-14
	$x_0^{(8)}$	28	151	1.777063	7.84316E-13	85	340	4.490966	4.18727E-13	-	-	-	-
	$x_0^{(9)}$	7	64	0.754562	0	15	59	0.702012	6.28037E-13	17	70	0.7326302	9.421E-13
	$x_0^{(10)}$	28	151	1.826433	8.0571E-13	99	396	5.023904	3.12696E-13	-	-	-	-

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		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	19	131	0.005003	0	23	91	0.002325	4.17066E-13	-	-	-	-
	$x_0^{(2)}$	20	133	0.004508	0	23	91	0.00235	6.55389E-13	-	-	-	-
	$x_0^{(3)}$	23	138	0.004549	0	56	223	0.005655	8.03065E-13	-	-	-	-
	$x_0^{(4)}$	24	140	0.004749	0	67	267	0.006749	5.68779E-13	-	-	-	-
	$x_0^{(5)}$	24	140	0.004694	0	70	279	0.007082	7.7413E-13	-	-	-	-
	$x_0^{(6)}$	23	137	0.004528	0	71	283	0.007202	7.40572E-13	-	-	-	-
	$x_0^{(7)}$	23	138	0.004618	0	67	267	0.006752	9.70359E-13	-	-	-	-
	$x_0^{(8)}$	24	140	0.004936	0	59	235	0.005983	3.8528E-13	-	-	-	-
	$x_0^{(9)}$	20	133	0.00349	0	23	91	0.002368	6.75249E-13	-	-	-	-
	$x_0^{(10)}$	24	139	0.003659	0	71	283	0.007185	2.60004E-13	-	-	-	-
20000	$x_0^{(1)}$	13	94	0.065944	0	24	95	0.066655	6.28037E-13	-	-	-	-
	$x_0^{(2)}$	13	94	0.064327	0	25	99	0.068384	2.51215E-13	-	-	-	-
	$x_0^{(3)}$	18	119	0.08215	0	68	271	0.190477	4.77111E-13	-	-	-	-
	$x_0^{(4)}$	15	104	0.072965	0	89	355	0.247394	3.24251E-13	-	-	-	-
	$x_0^{(5)}$	15	104	0.072444	0	83	331	0.231491	1.61255E-13	-	-	-	-
	$x_0^{(6)}$	19	124	0.084787	0	62	247	0.171571	1.98051E-13	-	-	-	-
	$x_0^{(7)}$	18	119	0.082321	0	62	247	0.17235	3.81564E-13	-	-	-	-
	$x_0^{(8)}$	15	104	0.073433	0	75	299	0.211195	3.73772E-13	-	-	-	-
	$x_0^{(9)}$	13	94	0.065139	0	25	99	0.069931	2.51215E-13	-	-	-	-
	$x_0^{(10)}$	15	104	0.072103	0	72	287	0.200022	6.44428E-13	-	-	-	-
100000	$x_0^{(1)}$	11	84	0.271233	0	25	99	0.323985	4.213E-13	-	-	-	-
	$x_0^{(2)}$	11	84	0.283858	0	25	99	0.32133	7.02167E-13	-	-	-	-
	$x_0^{(3)}$	11	84	0.27582	0	52	207	0.693534	4.44089E-16	-	-	-	-
	$x_0^{(4)}$	12	89	0.292444	0	84	335	1.102054	6.39784E-13	-	-	-	-
	$x_0^{(5)}$	12	89	0.293905	0	73	291	0.957506	1.10955E-13	-	-	-	-
	$x_0^{(6)}$	11	84	0.271734	0	56	223	0.805103	8.85539E-13	-	-	-	-
	$x_0^{(7)}$	11	84	0.279037	0	52	207	0.674196	4.09573E-13	-	-	-	-
	$x_0^{(8)}$	12	89	0.29706	0	74	295	0.96	7.68261E-14	-	-	-	-
	$x_0^{(9)}$	11	84	0.272494	0	25	99	0.314004	7.02167E-13	-	-	-	-
	$x_0^{(10)}$	12	89	0.293052	0	87	347	1.126058	4.42775E-13	-	-	-	-
500000	$x_0^{(1)}$	8	69	1.275005	0	25	99	1.925849	9.42055E-13	-	-	-	-
	$x_0^{(2)}$	8	69	1.314844	0	26	103	1.978673	3.14018E-13	-	-	-	-
	$x_0^{(3)}$	8	69	1.306101	0	57	227	4.498063	4.02387E-13	-	-	-	-
	$x_0^{(4)}$	8	69	1.255401	0	78	311	6.076695	2.09347E-13	-	-	-	-
	$x_0^{(5)}$	8	69	1.295833	0	84	335	6.623028	6.76955E-13	-	-	-	-
	$x_0^{(6)}$	8	69	1.268464	0	57	227	4.405255	5.54914E-13	-	-	-	-
	$x_0^{(7)}$	8	69	1.266733	0	62	247	4.83944	7.60415E-13	-	-	-	-
	$x_0^{(8)}$	8	69	1.291898	0	84	335	6.66882	8.04904E-13	-	-	-	-
	$x_0^{(9)}$	8	69	1.272416	0	26	103	2.010478	3.14018E-13	-	-	-	-
	$x_0^{(10)}$	8	69	1.270734	0	74	295	5.780596	4.6765E-13	-	-	-	-

DIM	SP	PBSM				IRHCGP-II-2				AFISPB			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	31	172	0.006017	2.49985E-15	-	-	-	-	-	-	-	-
	$x_0^{(2)}$	28	139	0.003129	6.10254E-13	72	297	0.006504	3.8778E-13	-	-	-	-
	$x_0^{(3)}$	27	135	0.00261	3.73399E-13	62	250	0.004463	2.0703E-13	-	-	-	-
	$x_0^{(4)}$	22	106	0.00228	2.91209E-15	80	321	0.005322	8.2951E-13	-	-	-	-
	$x_0^{(5)}$	34	195	0.005977	9.65089E-13	-	-	-	-	-	-	-	-
	$x_0^{(6)}$	22	105	0.001999	2.73079E-15	69	278	0.005507	3.096E-13	-	-	-	-
	$x_0^{(7)}$	27	135	0.002708	7.29157E-13	69	279	0.004952	4.6414E-14	-	-	-	-
	$x_0^{(8)}$	30	174	0.005271	2.84356E-15	-	-	-	-	-	-	-	-
	$x_0^{(9)}$	29	147	0.002636	5.32038E-13	82	329	0.006449	6.2947E-13	-	-	-	-
	$x_0^{(10)}$	37	257	0.004702	2.72627E-15	104	415	0.006821	9.5376E-14	-	-	-	-
20000	$x_0^{(1)}$	39	257	0.037354	1.58836E-14	-	-	-	-	-	-	-	-
	$x_0^{(2)}$	34	177	0.025455	5.14594E-13	-	-	-	-	-	-	-	-
	$x_0^{(3)}$	30	147	0.020255	4.58947E-13	-	-	-	-	-	-	-	-
	$x_0^{(4)}$	41	255	0.036525	3.19722E-13	-	-	-	-	-	-	-	-
	$x_0^{(5)}$	41	297	0.042982	1.71561E-14	-	-	-	-	-	-	-	-
	$x_0^{(6)}$	22	103	0.015221	1.68812E-14	-	-	-	-	-	-	-	-
	$x_0^{(7)}$	32	165	0.023429	2.53776E-13	-	-	-	-	-	-	-	-
	$x_0^{(8)}$	45	319	0.04448	1.60476E-14	-	-	-	-	-	-	-	-
	$x_0^{(9)}$	34	204	0.030206	4.37105E-13	-	-	-	-	-	-	-	-
	$x_0^{(10)}$	135	1835	0.254485	1.7048E-14	-	-	-	-	-	-	-	-
100000	$x_0^{(1)}$	51	404	0.190466	3.4682E-14	-	-	-	-	-	-	-	-
	$x_0^{(2)}$	86	1018	0.453817	3.70598E-14	-	-	-	-	-	-	-	-
	$x_0^{(3)}$	89	905	0.397483	3.20632E-13	-	-	-	-	-	-	-	-
	$x_0^{(4)}$	107	1137	0.507708	8.99049E-13	-	-	-	-	-	-	-	-
	$x_0^{(5)}$	64	606	0.265777	3.70672E-14	-	-	-	-	-	-	-	-
	$x_0^{(6)}$	154	1850	0.808402	3.0234E-13	-	-	-	-	-	-	-	-
	$x_0^{(7)}$	68	655	0.287999	4.29711E-13	-	-	-	-	-	-	-	-
	$x_0^{(8)}$	70	644	0.286334	3.97937E-13	-	-	-	-	-	-	-	-
	$x_0^{(9)}$	97	1147	0.486965	3.69784E-14	-	-	-	-	-	-	-	-
	$x_0^{(10)}$	-	-	-	-	-	-	-	-	-	-	-	-
500000	$x_0^{(1)}$	78	824	3.712803	7.64368E-14	-	-	-	-	-	-	-	-
	$x_0^{(2)}$	141	1902	8.384015	8.71943E-14	-	-	-	-	-	-	-	-
	$x_0^{(3)}$	125	1584	6.941697	6.9902E-13	-	-	-	-	-	-	-	-
	$x_0^{(4)}$	144	1771	7.749472	7.47882E-13	-	-	-	-	-	-	-	-
	$x_0^{(5)}$	97	1089	4.692874	4.81438E-13	-	-	-	-	-	-	-	-
	$x_0^{(6)}$	136	1760	7.683723	3.90882E-13	-	-	-	-	-	-	-	-
	$x_0^{(7)}$	120	1468	6.745033	4.29182E-13	-	-	-	-	-	-	-	-
	$x_0^{(8)}$	94	1079	4.951837	9.30769E-13	-	-	-	-	-	-	-	-
	$x_0^{(9)}$	116	1462	6.747069	8.14639E-13	-	-	-	-	-	-	-	-
	$x_0^{(10)}$	-	-	-	-	-	-	-	-	-	-	-	-

DIM	SP	PBSM				IRHCGP-II-2				AFISPB			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	19	166	0.00402	3.51279E-13	15	75	0.001316	2.80526E-13	-	-	-	-
	$x_0^{(2)}$	18	164	0.003242	4.04653E-13	14	70	0.001336	2.66872E-13	-	-	-	-
	$x_0^{(3)}$	23	179	0.002774	2.18748E-13	35	175	0.002385	8.68345E-13	-	-	-	-
	$x_0^{(4)}$	24	181	0.002676	2.37084E-13	42	210	0.003105	6.16583E-13	-	-	-	-
	$x_0^{(5)}$	24	181	0.00285	2.37057E-13	42	210	0.003101	6.16497E-13	-	-	-	-
	$x_0^{(6)}$	26	189	0.003314	2.25541E-13	39	195	0.002645	4.00031E-13	-	-	-	-
	$x_0^{(7)}$	23	178	0.002556	2.90797E-13	37	185	0.002719	6.78857E-13	-	-	-	-
	$x_0^{(8)}$	24	181	0.002713	2.28001E-13	35	175	0.002413	8.57624E-13	-	-	-	-
	$x_0^{(9)}$	17	163	0.002298	2.80526E-13	-	-	-	-	-	-	-	-
	$x_0^{(10)}$	24	181	0.002876	2.90256E-13	38	190	0.003112	5.93916E-13	-	-	-	-
20000	$x_0^{(1)}$	20	173	0.019769	4.78878E-13	16	79	0.011964	6.59439E-13	-	-	-	-
	$x_0^{(2)}$	19	171	0.017869	5.18131E-13	16	79	0.009335	9.73457E-13	-	-	-	-
	$x_0^{(3)}$	24	185	0.018751	7.682E-13	37	184	0.023425	4.75471E-14	-	-	-	-
	$x_0^{(4)}$	25	188	0.017834	3.1108E-13	50	250	0.038065	4.18659E-13	-	-	-	-
	$x_0^{(5)}$	25	188	0.020857	3.11092E-13	50	250	0.03123	4.18588E-13	-	-	-	-
	$x_0^{(6)}$	24	186	0.018006	3.00899E-13	37	185	0.017736	8.74307E-13	-	-	-	-
	$x_0^{(7)}$	24	183	0.016786	9.31554E-13	36	179	0.017374	6.43901E-13	-	-	-	-
	$x_0^{(8)}$	25	188	0.01652	3.10872E-13	40	200	0.019299	2.6211E-14	-	-	-	-
	$x_0^{(9)}$	15	156	0.012259	5.1028E-13	16	79	0.010459	6.20187E-13	-	-	-	-
	$x_0^{(10)}$	25	188	0.016464	3.02314E-13	45	225	0.023189	5.21097E-13	-	-	-	-
100000	$x_0^{(1)}$	21	180	0.040855	1.93096E-13	13	65	0.017438	4.73963E-13	-	-	-	-
	$x_0^{(2)}$	20	178	0.035943	2.45758E-13	17	84	0.018906	6.3195E-13	-	-	-	-
	$x_0^{(3)}$	24	183	0.038999	6.94234E-13	39	191	0.047488	9.76858E-13	-	-	-	-
	$x_0^{(4)}$	25	188	0.037707	6.9527E-13	45	225	0.049541	1.47673E-13	-	-	-	-
	$x_0^{(5)}$	25	188	0.037493	6.95262E-13	45	225	0.047272	1.56715E-13	-	-	-	-
	$x_0^{(6)}$	25	192	0.037634	3.45453E-13	48	239	0.056188	4.9199E-13	-	-	-	-
	$x_0^{(7)}$	25	191	0.039012	2.52414E-13	46	227	0.052276	5.85747E-14	-	-	-	-
	$x_0^{(8)}$	25	188	0.038716	6.95221E-13	41	205	0.043796	8.5734E-14	-	-	-	-
	$x_0^{(9)}$	16	164	0.034199	8.77708E-13	17	84	0.019581	4.38854E-13	-	-	-	-
	$x_0^{(10)}$	25	188	0.0444	6.84352E-13	43	215	0.04428	2.13033E-13	-	-	-	-
500000	$x_0^{(1)}$	21	180	0.510006	4.31775E-13	16	81	0.271737	4.71028E-13	-	-	-	-
	$x_0^{(2)}$	20	178	0.540822	5.49532E-13	18	89	0.324148	4.71028E-13	-	-	-	-
	$x_0^{(3)}$	26	193	0.568606	5.7227E-13	52	259	0.944818	3.94443E-14	-	-	-	-
	$x_0^{(4)}$	26	195	0.573024	3.29338E-13	47	235	0.873961	8.3395E-13	-	-	-	-
	$x_0^{(5)}$	26	195	0.650286	3.2939E-13	47	235	0.889033	8.44887E-13	-	-	-	-
	$x_0^{(6)}$	26	194	0.64806	3.14283E-13	50	249	0.890862	9.47756E-13	-	-	-	-
	$x_0^{(7)}$	25	192	0.591328	4.22079E-13	54	269	0.979678	1.68618E-13	-	-	-	-
	$x_0^{(8)}$	26	195	0.613051	3.2948E-13	48	240	0.901395	5.35844E-13	-	-	-	-
	$x_0^{(9)}$	17	170	0.496597	5.1028E-13	18	89	0.31133	1.96262E-13	-	-	-	-
	$x_0^{(10)}$	26	195	0.616952	3.29201E-13	40	200	0.714514	3.46422E-13	-	-	-	-

DIM	SP	PBSM				IRHCGP-II-2				AFISPB			
		NI	NF	CPUT	Norm	NI	NF	CPUT	Norm	NI	NF	CPUT	Norm
500	$x_0^{(1)}$	15	166	0.004133	2.97904E-13	-	-	-	-	-	-	-	-
	$x_0^{(2)}$	15	163	0.002522	1.78742E-13	15	91	0.001889	3.67415E-13	-	-	-	-
	$x_0^{(3)}$	19	170	0.002602	3.14709E-13	15	91	0.001267	6.44906E-13	-	-	-	-
	$x_0^{(4)}$	19	175	0.002834	4.77564E-13	15	92	0.001416	6.90332E-13	-	-	-	-
	$x_0^{(5)}$	19	175	0.002838	4.77625E-13	15	92	0.001687	6.90378E-13	-	-	-	-
	$x_0^{(6)}$	20	170	0.002873	3.75106E-13	15	91	0.001394	8.93387E-13	-	-	-	-
	$x_0^{(7)}$	18	169	0.00422	4.67684E-13	15	91	0.001272	6.03289E-13	-	-	-	-
	$x_0^{(8)}$	19	176	0.002973	2.98337E-13	15	92	0.001477	6.90328E-13	-	-	-	-
	$x_0^{(9)}$	15	159	0.002498	6.52906E-13	15	91	0.00127	5.83396E-13	-	-	-	-
	$x_0^{(10)}$	19	172	0.002719	7.07787E-13	15	92	0.00151	6.99191E-13	-	-	-	-
20000	$x_0^{(1)}$	16	174	0.016622	2.19813E-13	16	97	0.012345	5.49532E-13	-	-	-	-
	$x_0^{(2)}$	16	171	0.013961	1.25607E-13	15	91	0.010623	1.88411E-13	-	-	-	-
	$x_0^{(3)}$	20	182	0.016382	1.44955E-13	16	98	0.011104	2.10799E-13	-	-	-	-
	$x_0^{(4)}$	20	183	0.017153	3.12348E-13	16	98	0.009214	5.28037E-13	-	-	-	-
	$x_0^{(5)}$	20	183	0.018376	3.12375E-13	16	98	0.008535	5.28055E-13	-	-	-	-
	$x_0^{(6)}$	21	181	0.020325	2.04097E-13	16	98	0.010686	7.15247E-13	-	-	-	-
	$x_0^{(7)}$	19	178	0.015811	2.62673E-13	16	96	0.008587	9.95807E-13	-	-	-	-
	$x_0^{(8)}$	20	184	0.015673	2.87399E-13	16	98	0.008388	5.28314E-13	-	-	-	-
	$x_0^{(9)}$	15	164	0.013562	8.16448E-13	15	92	0.009438	4.86729E-13	-	-	-	-
	$x_0^{(10)}$	20	184	0.015638	2.38303E-13	16	98	0.009813	5.06472E-13	-	-	-	-
100000	$x_0^{(1)}$	16	174	0.059856	4.91517E-13	16	96	0.018353	8.426E-13	-	-	-	-
	$x_0^{(2)}$	16	171	0.038218	2.80867E-13	16	96	0.018658	5.26625E-13	-	-	-	-
	$x_0^{(3)}$	19	175	0.039576	8.08354E-13	17	102	0.02344	4.5674E-13	-	-	-	-
	$x_0^{(4)}$	20	183	0.053792	6.96358E-13	17	103	0.021854	5.8984E-13	-	-	-	-
	$x_0^{(5)}$	20	183	0.064269	6.96377E-13	17	103	0.024377	5.89729E-13	-	-	-	-
	$x_0^{(6)}$	22	188	0.043856	5.54074E-13	17	102	0.020218	7.68659E-13	-	-	-	-
	$x_0^{(7)}$	20	184	0.100249	1.07999E-13	16	97	0.024011	8.81386E-13	-	-	-	-
	$x_0^{(8)}$	20	183	0.038901	6.94948E-13	17	103	0.020787	5.89811E-13	-	-	-	-
	$x_0^{(9)}$	16	174	0.054118	1.05325E-13	16	97	0.020499	7.02167E-13	-	-	-	-
	$x_0^{(10)}$	20	184	0.063557	6.42736E-13	17	103	0.02146	5.9136E-13	-	-	-	-
500000	$x_0^{(1)}$	17	182	0.630573	1.57009E-13	17	100	0.319842	4.71028E-13	-	-	-	-
	$x_0^{(2)}$	16	171	0.525043	6.28037E-13	17	101	0.324062	3.92523E-13	-	-	-	-
	$x_0^{(3)}$	20	184	0.714159	4.7392E-13	18	108	0.376939	4.14271E-13	-	-	-	-
	$x_0^{(4)}$	21	191	0.601507	1.77537E-13	18	107	0.354328	2.79682E-13	-	-	-	-
	$x_0^{(5)}$	21	191	0.571259	1.7749E-13	18	107	0.393725	2.7962E-13	-	-	-	-
	$x_0^{(6)}$	22	196	0.689542	4.16019E-13	18	108	0.348436	8.02665E-13	-	-	-	-
	$x_0^{(7)}$	19	181	0.682906	4.61243E-13	18	108	0.373437	2.37698E-13	-	-	-	-
	$x_0^{(8)}$	21	191	0.554685	1.77194E-13	18	107	0.346464	2.79685E-13	-	-	-	-
	$x_0^{(9)}$	16	173	0.497069	1.57009E-13	17	103	0.35847	7.06542E-13	-	-	-	-
	$x_0^{(10)}$	21	192	0.58188	1.56954E-13	18	107	0.350391	2.76288E-13	-	-	-	-

Table 1: Result for test problem 8

DIM	SP	PBSM				IRHCGP-II-2				AFISPBM			
		NI	FV	CPUT	Norm	NI	FV	CPUT	Norm	NI	FV	CPUT	Norm
2	$x_0^{(1)}$	-	-	-	-	20	100	0.005854	8.7E-13	-	-	-	-
	$x_0^{(2)}$	34	146	0.006237	2.98E-13	27	109	0.003581	8.96E-13	-	-	-	-
	$x_0^{(3)}$	27	118	0.003914	4.72E-13	28	113	0.005033	9.85E-13	-	-	-	-
	$x_0^{(4)}$	28	123	0.003874	2.89E-13	28	113	0.003312	3.79E-13	-	-	-	-
	$x_0^{(5)}$	27	112	0.002065	6.23E-13	31	125	0.004275	4.37E-13	-	-	-	-
	$x_0^{(6)}$	29	133	0.002056	6.12E-13	33	133	0.002943	4.12E-13	-	-	-	-
	$x_0^{(7)}$	29	121	0.001555	4.5E-13	28	113	0.001557	5E-13	-	-	-	-
	$x_0^{(8)}$	25	101	0.025358	8.21E-13	20	100	0.000341	4.68E-13	-	-	-	-
	$x_0^{(9)}$	28	124	0.000817	6.48E-13	31	125	0.000301	4.72E-13	-	-	-	-
	$x_0^{(10)}$	29	131	0.000754	5.24E-13	-	-	-	-	-	-	-	-