0.65	C	0.35	0	0.00		0.31	٥	38.101	Ú	101	0.00	C	TOT	0.00	15/18659	prob1_050_090_110_005_015_06
1.00	0	0.56	0	0.00	0	0.48	0	80.15	0			0	101	0.00	11565046	_050_090_110_005_015_
0.66 0	0	0.34	0	0.00	0	0.31	0	98.83	0	101 289		0	101	0.00	16609975	_090_110_005_015_
0.94 0	0	0.51	0	0.00	0	0.46	0	94.99	3			0	2	0.00	14840944	050 090 110 005 015
0.90 0	0	0.47	0		0	0.43	0	86.29	3	101 293	0.00	0	101	0.00	13504223	prob1_050_090_110_005_015_02
0.74 0	0	0.40			0	0.34		94.17	8	101 288	0.00	0	101	0.00	14789986	_090_110_005_015
0.37 0	0	0.20	0 0		0	0.18	0	19.90	32 0	103 232	0.00 1	0	101	0.00	2663638	prob1_050_040_060_035_045_10
0.47 0	0	0.25	0		0	0.20	7	26.77	35 0	147 265	0.01 1	0	233	0.00	3671723	prob1_050_040_060_035_045_09
0.49 0	0	0.28	0		0	0.25	8	20.98	0	157 259	0.00 1	0	211	0.00	2902174	prob1_050_040_060_035_045_08
0.37 0	0	0.20	0		0	0.19	0	19.69	0 8	101 24	0.00 1	0	159	0.00	2790482	prob1_050_040_060_035_045_07
0.36 0	0	0.19	0		0	0.18	0	19.72	35 0	163 285	0.01 1	0	335	0.00	2753196	prob1_050_040_060_035_045_06
0.31 0	0	0.17	0		0	0.17	0	21.96	51	101 251	0.00	0	101	0.00	2915232	prob1_050_040_060_035_045_05
0.50 0	0	0.28	0		0		0	19.43	წ 0	177 266	0.01	0	233	0.00	2695283	prob1_050_040_060_035_045_04
0.50 0	0	0.26	0 0	0.00	0	0.24	7 0	20.67	0	169 319	0.01 1	0	169	0.00	3211082	_050_040_060_035_045
0.41 0	0	0.22	0		0	0.20	0	23.69	0	103 256	0.00 1	0	155	0.00	3095667	prob1_050_040_060_035_045_02
0.44 0	0	0.24	0 0		0	0.21	0	19.94	35 0	165 285	0.01 1	0	221	0.00	2945473	prob1_050_040_060_035_045_01
0.53 0	0	0.30	0 0		0	0.28	0	26.80	0 8	139 298	,	0	175	0.00	4694577	prob1_050_040_060_025_035_10
0.45 0	0	0.25	0	0.00 (	0	0.24	3	27.00	76 0	101 276	0.00	0	175	0.00	4656286	prob1_050_040_060_025_035_09
0.45 0	0	0.39	0		0	0.32	7 0	23.97	0	103 266	0.00 1	0	101	0.00	3960253	prob1_050_040_060_025_035_08
0.44 0	0	0.26	0 0		0		9 0	27.59	74 0	101 274	0.00 1	0	101	0.00	4978034	prob1_050_040_060_025_035_07
0.56 0	0	0.37	0 0		0		0	19.04	35 0	149 285	0.01 1	0	195	0.00	3948088	prob1_050_040_060_025_035_06
0.44 0	0	0.32	0		0	0.23	8	19.98	8 0	107 268	0.01 1	0	203	0.00	3873796	prob1_050_040_060_025_035_05
0.53 0	0	0.29	0		0		7	25.27	<sup>7</sup> 6 0	107 276	0.00	0	105	0.00	4725627	prob1_050_040_060_025_035_04
0.50 0	0	0.28	0	0.00	0		0	24.61	0	101 299	0.00	0	101	0.00	4771628	prob1_050_040_060_025_035_03
0.49 0	0	0.25	0		0		0	19.75	4 0	105 284	0.00	0	105	0.00	4152935	prob1_050_040_060_025_035_02
0.45 0	0	0.23	0		0		3	24.43	6 0	105 266	0.01 1	0	219	0.00	4129750	prob1_050_040_060_025_035_01
0.49 0	0	0.26	0		0	0.24	0	22.66	9	101 269	0.00	0	117	0.00	5832383	prob1_050_040_060_015_025_10
0.43 0	0	0.27	0	0.00	0	0.23	0	23.20	)2 0	101 192	0.00 1	0	111	0.00	6482173	prob1_050_040_060_015_025_09
0.45 0	0	0.20	0 0		0		3 0	20.33	6 0	101 276	0.00 1	0	101	0.00	5322296	prob1_050_040_060_015_025_08
0.44 0	0	0.23	0		0			20.69	31			0	141	0.00	4623181	prob1_050_040_060_015_025_07
0.37 0	0	0.20			0			21.00	<u>ار</u> 0			0	101	0.00	5115975	prob1_050_040_060_015_025_06
0.47 0	0	0.33	0 0		0	0.31	7 0	26.77	?8 O	101 228	0.00 1	0	101	0.00	6972636	prob1_050_040_060_015_025_05
0.48 0	0	0.30	0		0	0.24	7	24.77	0	101 31	0.00	0	101	0.00	6034049	prob1_050_040_060_015_025_04
0.45 0	0	0.23	0	0.00 (	0			22.92	0			0	133	0.00	5026821	050_040_060_015_025
0.34 0	0	0.19			0	0.17		22.05	35			0	101	0.00	5370970	050 040 060 015 025
0.42 0	0	0.23		0.00	0			25.69	<sub>ั</sub> ง			0	125	0.00	5752178	050 040 060 015 025
0.51 0	0	0.28			0			19.58				0		0.00	6049640	050 040 060 005 015
0.49 0	0	0.26	0		0			18.82	31			0		0.00	6631876	050 040 060 005 015
0.54 0	0	0.28			0	0.25		19.50	31			0		0.00	6697850	050 040 060 005 015
0.50 0	0	0.26	0		0	0.24	ω 0	26.03	0	101 221		0	<u>1</u>	0.00	7723697	prob1 050 040 060 005 015 07
0.36 0	0	0.18	0		0	0.17	0	26.14	0			0	101	0.00	8416761	050 040 060 005 015
0.34 0	0	0.19	0	0.00	0		0	24.24	0			0	101	0.00	7349535	prob1_050_040_060_005_015_05
0.45 0	0	0.34	0	0.00	0		3	22.13	8 0			0	101	0.00	6861494	_050_040_060_005_015_
0.28 0	0		0		0	0.19	0	24.60	<u>ი</u>	101 232		0	101	0.00	8560415	prob1_050_040_060_005_015_03
0.30 0	0	0.24	0	0.00	0	0.16		26.13	0	101 257		0	101	0.00	8940572	040 060 005 015
0.58 0	0				0		0	21.58	39 0		0.00	0	101		7009296	prob1_050_040_060_005_015_01
time TL	7	time T	7	time best		time T	٠.	time	ls T	les #cols	time #nodes		#nodes TI	time #n	opt	Instance
DSS+DP		DSS-4TH		FMT		DSS-1TH		DP		¥ M3	Model M3		_	Model M1		

0.82 0	0.42 0	0	0.00	0	0.36	0	91.37	0	530	201	0.01	0	201	0.00	10395083	b1_100_040_060_015_025_02	prob1
1.07 0	61	0	0.00	0	0.58				526	215	0.01	0	215	0.00	11746062	_100_040_060_015_025_	prob1
0.88 0	0.46 0	0	0.00	0	0.49	0	113.44	23 0	423	201	0.01	0	201	0.00	17473888	b1_100_040_060_005_015_10	prob1
0.65 0	0.36 0	0 0	0.00	0	0.30	0	82.69	57 0	457	201	0.01	0	201	0.00	15088022	b1_100_040_060_005_015_09	prob1
0.99 0	0.55 0	0	0.00	0	0.47	0	100.78	38 0	438	201	0.01	0	201	0.00	15485417	b1_100_040_060_005_015_08	prob1
0.57 0	0.32 0	0 0	0.00	0	0.27	0	114.94	05	505	201	0.01	0	201	0.00	17179617	b1_100_040_060_005_015_07	prob1
0.67 0	0.35 0	0	0.00	0	0.32	0	104.46	0	440	201	0.01	0	201	0.00	17387042	b1_100_040_060_005_015_06	prob1
0.54 0	0.30 0	0 0	0.00	0	0.25	0	99.18	0 50	505	201	0.01	0	201	0.00	17989654	b1_100_040_060_005_015_05	prob1
0.77 0	0.42 0	0 0	0.00	0	0.36	0	88.69	14 0	444	201	0.01	0	201	0.00	14138637	_100_040_060	prob1
0.84 0	0.50 0	0	0.00	0	0.39	0	77.47	55 0	455	201	0.01	0	201	0.00	13022459	_100_040_060	prob1
1.03 0	0.58 0	0	0.00	0	0.49	0	109.81	0 65	459	201	0.01	0	201	0.00	16796574	_100_040_060	prob1
0.83 0	0.48 0	0	0.00	0	0.42	0	79.35	77 0	477	201	0.01	0	201	0.00	14918885	_100_040_060_005_015	prob1
0.94 0	0.52 0	0 0	0.00	0	0.46	0	90.43	16 0	316	107	0.00	0	107	0.00	6141230	b1_050_090_110_035_045_10	prob1
0.97 0	0.55 0	0 0	0.01	0	0.46	0	79.06	33 0	888	283	0.01	0	335	0.01	5227306	b1_050_090_110_035_045_09	prob1
0.97 0	0.55 0	0 0	0.00	0	0.46	0	111.44	)5 0	305	101	0.00	0	101	0.00	7481748	b1_050_090_110_035_045_08	prob1
1.40 0	0.81 0	0 0	0.00	0	0.72	0	112.94	37 0	387	215	0.01	0	215	0.00	7051395	_050_090_110_035	prob1
0.99 0	0.53 0	0	0.00	0	0.46	0	102.04	76 0	376	153	0.01	0	151	0.00	7113345	_050_090_110_	prob1
0.78 0	0.47 0	0	0.00	0	0.36	0	82.71	13 0	31	101	0.00	0	157	0.00	5659525	_050_090_110_035_	prob1
0.76 0	0.48 0	0 0	0.00	0	0.37	0	84.40	27 0	327	101	0.00	0	101	0.00	5544429	_050_090_110_035_	prob1
0.90 0	0.50 0	0 0	0.01	0	0.44	0	91.74	51 0	35	167	0.01	0	323	0.01	5823171	b1_050_090_110_035_045_03	prob1
1.06 0	0.61 0	0	0.00	0	0.55	0	110.85	0	888	101	0.01	0	143	0.00	7019208	b1_050_090_110_035_045_02	prob1
1.09 0	0.65 0	0 0	0.00	0	0.52	0	75.88	52 0	352	215	0.01	0	215	0.00	5862006	b1_050_090_110_035_045_01	prob1
1.28 0	0.72 0	0	0.00	0	0.62	0	93.10	16 0	346	101	0.01	0	169	0.00	9447002	_050_090_110_025_	prob1
1.12 0	0.59 0	0	0.00	0	0.54	0	87.68	71 0	371	171	0.01	0	169	0.00	7591896	_050_090_110_025	prob1
1.05 0	0.59 0	0	0.00	0	0.50	0	104.02	72 0	372	143	0.01	0	221	0.00	8670609	b1_050_090_110_025_035_08	prob1
1.30 0		0	0.00	0	0.62	0	115.84	0	354	101	0.00	0	101	0.00	10929791	_050_090_110_025_	prob1
1.62 0	0.81 0	0	0.00	0	0.80	0	104.31	35 0	385	157	0.01	0	149	0.00	9681248	_050_090_110_025_	prob1
1.08 0	0.61 0	0	0.00	0	0.58	0	92.01	30 0	330	101	0.00	0	179	0.00	8542538	_050_090_110_025_	prob1
1.32 0	0.65 0	0	0.00	0	0.64	0	110.82	0	334	101	0.00	0	101	0.00	10679582	_050_090_110_025_035	prob1
0.99 0	0.54 0	0	0.00	0	0.47	0	87.49	0	342	101	0.00	0	145	0.00	8145007	_050_090_110_025	prob1
1.45 0	0.75 0		0.00		0.69		88.71	0	390	211	0.01	0	209	0.00	7859707	050_090_110_025	prob1
1.08 0	0.64 0	0	0.00		0.52		88.17	93	293	151	0.00	0	151	0.00	7898663	050 090 110 025 035	prob1
1.47 0		0	0.00	0	0.71		111.02	0	359	101	0.00	0	135	0.00	12411979	050 090 110 015 025	prob1
			0.00	0	0.56		89.29		338	101	0.00	0	101	0.00	10753496	050 090 110 015	prob1
			0.00	0	0.45		83.43		321	101	0.00	0	101	0.00	10329151	050 090 110 015 025	prob1
1.43 0			0.00	0	0.70		92.68		370	101	0.00	0	101	0.00	11831069	050 090 110 015 025	prob1
1.43 0			0.00	0	0.67		111.24		376	101	0.00	0	101	0.00	13055044	050 090 110 015 025	prob1
1.11 0			0.00	0	0.53		90.22		345	101	0.00	0	117	0.00	11775499	050 090 110 015	prob1
1.15 0			0.00	0	0.54	0	92.27	0	350	101	0.00	0	101	0.00	10854934	050 090 110 015 025	prob1
1.41 0		0	0.00	0	0.68	0	114.68	73 0	373	101	0.00	0	111	0.00	12902825	050 090 110 015 025	prob1
0.86 0		0	0.00	0	0.41	0	84.97	0	314	101	0.00	0	131	0.00	9608532	_050_090_110_015	prob1
1.29 0	0.70 0	0	0.00	0	0.69	0	110.04	0	361	101	0.00	0	107	0.00	13440353	b1_050_090_110_015_025_01	prob1
0.70 0		0	0.00	0	0.34	0	105.04	21 0	321	101	0.00	0	101	0.00	16516160	050 090 110 005 015	prob1
1.07 0	0.62 0	0	0.00	0	0.51	0	91.08	0	250	101	0.00	0	101	0.00	13150951	b1 050 090 110 005 015 09	prob1
			0.00	0	0.33		99.95		325	101	0.00		101	0.00	17465693	050_090_110_005_015	prob1
0.72 0	- 1	- 1		0	0.35	0	110.32	0	331	101	0.00	0	101	0.00	18499760	b1_050_090_110_005_015_07	prob1
time TL	time TL	best TL	time b	≓	time		time	IS TL	#cols	#nodes	time	7	#nodes	time	opt	nstance	Inst
DSS+DP	DSS-4TH		FMT	_	DSS-1TH	$\dashv$	무		3	Model M3		$\dashv$	Model M1	Mod			

2.96	0	1.4		0.00	C	1.40	c	3/1.04	0	/03	201	0.01	С	201	0.00	22494029	prob1_100_090_110_015_025_08
	0	1.12	0	88	0	1.52				546	201	0.01	0	201	0.00	29127882	_100_090_110_015_025_
		1.25		0.01	0	1.19	0	355.46		568	201	0.01	0	327	0.01	21053118	_090_110_015_025_
		1.5		0.01	0	1.38	0	362.64	9 0	629	261	0.01	0	319	0.01	20756295	prob1_100_090_110_015_025_05
2.86 0	14 0	1.14	0	0.00	0	1.36	0	349.84	3 0	613	201	0.01	0	201	0.00	21742675	prob1_100_090_110_015_025_04
2.47 0	0	1.18			0	1.15	0	333.86	0	636	203	0.01	0	203	0.00	19631042	_100_090_110_015_025_
3.51 0		1.34	0		0	1.68	0	402.20	0	616	201	0.01	0	201	0.00	24901483	_100_090_110_015_
		1.49			0	1.75		416.29	4 0	734	205	0.01	0	205	0.00	25168881	_100_090_110_015
2.39 0		0.98			0	1.12	0	432.66	0	558	201	0.01	0	201	0.00	34003210	_100_090_110_005_015
1.39 0	0	0.76	0		0	0.65	0	383.10	7 0	557	201	0.01	0	201	0.00	33763313	prob1_100_090_110_005_015_09
1.30 0	75 0	0.75	0 0		0	0.61	0	391.18	9 0	589	201	0.01	0	201	0.00	34915619	prob1_100_090_110_005_015_08
2.12 0	0	0.83	0		0	1.02	0	335.64	3	553	201	0.01	0	201	0.00	27770754	prob1_100_090_110_005_015_07
2.02 0	39 0	0.89	0 0	0.00	0	0.96	0	433.39	4 0	544	201	0.01	0	201	0.00	32548931	prob1_100_090_110_005_015_06
2.44 0	0	1.16	0	0.01	0	1.20	0	314.65	0	590	201	0.01	0	201	0.00	28056280	prob1_100_090_110_005_015_05
2.23 0	36 0	0.86			0	1.08	0	429.41	2 0	642	201	0.01	0	201	0.00	36959876	prob1_100_090_110_005_015_04
2.46 0	0 0	1.00		0.00	0	1.19	0	409.56	8 0	618	201	0.01	0	201	0.00	29971986	prob1_100_090_110_005_015_03
1.45 0	77 0	0.77	0 0		0	0.68	0	382.98	0 0	570	201	0.01	0	201	0.00	32016960	prob1_100_090_110_005_015_02
1.99 0	0	0.86	0		0	0.96	0	335.26	0	576	201	0.01	0	201	0.00	29270210	prob1_100_090_110_005_015_01
0.80 0	19 0	0.49	0 0		0	0.38	0	82.32	5 0	455	201	0.01	0	309	0.00	6496080	prob1_100_040_060_035_045_10
0.88 0	0	0.51	0	0.00	0	0.42	0	112.56	3 0	493	201	0.01	0	201	0.00	7414701	prob1_100_040_060_035_045_09
0.88 0	18 0	0.48	0 0	0.01	0	0.47	0	80.29	8 0	448	439	0.02	0	669	0.01	5478890	prob1_100_040_060_035_045_08
0.85 0	0	0.48	0		0	0.40	0	88.46	3	433	201	0.01	0	201	0.00	6503856	prob1_100_040_060_035_045_07
0.89 0	0	0.5			0	0.42	0	84.47	0	451	201	0.01	0	313	0.00	6146637	prob1_100_040_060_035_045_06
1.12 0	37 0	0.67	0	0.00	0	0.53	0	113.07	5	485	213	0.01	0	209	0.00	7987908	prob1_100_040_060_035_045_05
0.76 0		0.44			0	0.38	0	95.96	5	445	203	0.01	0	203	0.00	6063077	prob1_100_040_060_035_045_04
0.84 0	19 0	0.49			0	0.44	0	79.51	5 0	455	233	0.01	0	229	0.00	5653035	prob1_100_040_060_035_045_03
0.85 0	<b>17</b> 0	0.47			0	0.40	0	114.02	8 0	488	201	0.01	0	201	0.00	7645609	prob1_100_040_060_035_045_02
0.76 0	<del>1</del> 5 0	0.45	0		0	0.36	0	82.44	5 0	465	337	0.01	0	691	0.01	5909773	prob1_100_040_060_035_045_01
0.82 0	16 0	0.46			0	0.40	0	102.73	0	519	201	0.01	0	269	0.00	9364346	_100_040_060_025_035_
0.68 0	0	0.38			0	0.32	0	83.03	7 0	467	201	0.01	0	499	0.01	7038100	_100_040_060_025_
1.12 0		0.63	0	0.00	0	0.55		91.79	8	488	285	0.01	0	285	0.00	9170654	_100_040_060_025_035_
0.81 0		0.4			0	0.41	0	90.45	0	511	291	0.01	0	291	0.00	8003828	100 040 060 025 035
		0.67	0		0	0.41	0	96.58	0	500	291	0.01	0	377	0.00	8602986	_100_040_060_025_035
1.12 0		0.83	П		0	0.65		91.83	9	509	291	0.01	0	465	0.01	7703518	100 040 060 025 035
		0.47			0	0.40		103.80		483	201	0.01	0	201	0.00	8704570	100 040 060 025 035
		0.49			0	0.41		113.49		519	201	0.01	0	253	0.00	11038983	100 040 060 025 035
		0.43			0	0.34		77.46		509	297	0.01	0	297	0.00	7761855	100 040 060 025 035
1.01 0		0.57			0	0.57		112.86		538	203	0.01	0	203	0.00	10874231	100 040 060 025 035
		0.50			0	0.41		89.31	3	523	201	0.01	0	201	0.00	10434348	100 040 060 015 025
0.70 0		0.41			0	0.33	0	78.10	7 0	507	269	0.01	0	269	0.00	9707636	_100_040_060_015_025_
1.07 0		0.57	0		0	0.56		112.57	7 0	507	201	0.01	0	201	0.00	12359613	100_040_060_015_025
0.87 0	0	0.49	0		0	0.41	0	104.66	<u>з</u>	543	201	0.01	0	201	0.00	12943973	prob1_100_040_060_015_025_07
1.09 0	0	0.59	0		0	0.52	0	105.24	3	393	201	0.01	0	213	0.00	14212888	_100_040_060_015_025_
		0.58			0	0.49		113.61	3	513	201	0.01	0	275	0.00	12277036	100 040 060 015 025
		1.20	0		0			111.37		546	201	0.01	0	201	0.00	12638109	_100_040_060_015_025_
0.87 0	- 1	0.61	0		0			86.44	5	375	201	0.01	0	201	0.00	11721692	prob1_100_040_060_015_025_03
time TL	-	time		ĕ	7		$\dashv$	time	T T	#cols	#nodes	time	7	#nodes	time	opt	Instance
DSS+DP	H	DSS-4TH		FMT		DSS-1TH		DP		ယ	Model M3			Model M1	Mod		

0.70 0	0.41 0	0	0	0.01	0	0.35	5.00 0	0 25	414	607	0.02	0	597	0.01	3332806	prob2_050_040_060_025_035_04
0.45 0	0.25 0	0	0	0.00	2 0		20.53 0	0 20	325 (	183	0.01	0	403	0.00	2911373	_050_040_060_025_035_
0.46 0		0	0	0.02	2 0	0.22	.03 0	21	529 (	1459	0.04	0	1411	0.02	3009079	prob2_050_040_060_025_035_02
0.36 0	0.19 0	0 0	0	0.00	1 0	0.2	3.20 0	<u>)</u> 23	266	163	0.00	0	163	0.00	3071622	prob2_050_040_060_025_035_01
0.57 0	0.29 0	0	0	0.03	0	0.28	3.64 0	0 28		1849	0.06	0	1773	0.03	4765302	_050_040_060_015_025_
0.47 0	0.25 0	0	0	0.00	0	0.31	7.84 0	0 27		101	0.01	0	229	0.00	4596061	_050_040_060_015_025
0.45 0	0.24 0		0	0.02	0	0.22	5.44 0	0 25		1463	0.05	0	1489	0.02	4304523	_050_040_060_015_025
0.54 0	0.28 0			0.00	0			0 20		321	0.01	0	317	0.00	3837284	_050_040_060_015_025
0.38 0	0.20 0		0	0.00	0		7.21 0	0 27		101	0.00	0	101	0.00	4928644	050_040_060_015
0.60 0	0.33 0	0	0	0.00	0		7.13 0	0 27		307	0.01	0	299	0.00	4885998	_050_040_060_015
0.82 0	0.49 0	0 0	0	0.01	9	0.39	3.01 0	0 23		1041	0.03	0	973	0.01	3738124	_050_040_060_015_025_
0.68 0	0.37 0	0 0	0	0.01	3 0	0.3	7.39 0	0 27		739	0.03	0	717	0.01	4946559	_025
0.51 0	).29 0	0 0	0	0.01	5 0	0.2	3.95 0	0 26		861	0.03	0	827	0.01	5000745	prob2_050_040_060_015_025_02
0.60 0	0.35 0	0 0	0	0.00	0 6	0.29	0.31	0 20	331 (	223	0.01	0	223	0.00	3455790	prob2_050_040_060_015_025_01
0.77 0	0.44 0	0	0	0.01	3 0	0.4	2.25 0	0 22		841	0.03	0	789	0.01	4356938	_050_040_060_005_015_
0.48 0	0.26 0	0	0	0.00	3 0	0.23	2.24 0	0 22		107	0.01	0	191	0.00	4951384	_050_040_060_005_
0.95 0	0.44 0	0	0	0.00	5		5.14 0	ე 26	302 (	153	0.01	0	151	0.00	6023731	prob2_050_040_060_005_015_08
0.89 0	0.53 0	0	0	0.01	0	0.43	3.13 0	0 23		973	0.04	0	897	0.01	4970388	_050_040_060_005
0.44 0	).25 0	0	0	0.00	0	0.2	2.64 0	22	260 (	155	0.00	0	155	0.00	4889092	_050_040_060_005
0.49 0	0.26 0	0 0	0	0.00	4 0	0.24	7.10 0	D 27	295 (	151	0.01	0	151	0.00	5705932	prob2_050_040_060_005_015_05
0.53 0	0.28 0	0	0	0.00	0	0.2	3.09 0	<u>)</u> 28	354 (	295	0.01	0	285	0.00	5703050	prob2_050_040_060_005_015_04
0.45 0	0.24 0	0 0	0	0.01	7 0	0.2	1.79 0	21	406 (	595	0.02	0	575	0.01	4495439	prob2_050_040_060_005_015_03
0.63 0	0.40 0	0	0	0.01	0	0.3	1.24 0	21	324 (	307	0.01	0	403	0.01	4454693	_050_040_060_005_
0.58 0	).34 0	0 0	0	0.00	0	0.28	5.29 0	<u>ງ</u> 26	301 (	191	0.01	0	341	0.00	5494371	prob2_050_040_060_005_015_01
3.18 0	1.69 0	0 1	0	0.02	0		3.20 0	0 346		571	0.02	0	571	0.02	11294615	prob1_100_090_110_035_045_10
1.99 0	0.95 0	0	0	0.01	3		3.84 0	0 413	538 (	201	0.01	0	297	0.01	12979244	0.001_100_090_110_035_045_09
2.40 0	1.17 0	0 1	0	0.02	3 0		0 60.0	) 43C	672	473	0.04	0	559	0.02	14781025	_100_090_110_035
2.21 0	1.08 0	0 1	0	0.01	0	1.01	1.45 0	<u>)</u> 421	588	201	0.01	0	201	0.00	13761634	prob1_100_090_110_035_045_07
2.04 0	1.01 0	0	0	0.01	0		6.29 0	J 436	580 (	207	0.01	0	299	0.01	14231038	_100_090_110_035
2.34 0	1.12 0	0	0	0.02	0	1.08	3.00 0	363	555 (	311	0.02	0	525	0.01	12207324	100_090_110_035_045
2.03 0				0.01		0.94	428.00 0	) 428	577 (	223	0.02	0	315	0.01	13073034	_100_090_110_035
1.92 0	0.87 0	0		0.01		0.8		317	552	201	0.01	0	441	0.01	10618915	100 090 110 035
2.00 0				0.01		0.93		336	567	315	0.01	0	315	0.01	10972971	100 090 110 035 045
2.21 0				0.02		1.03		0 398.15	572	255	0.02	0	553	0.02	12552502	100 090 110 035 045
2.00 0		0	П	0.01		0.93	72	Ī		201	0.01	0	300	0.01	14037512	100 090 110 025 035
2.52 0				0.01		1 19			625	201	0.01	0	263	0.01	21309974	100 090 110 025 035
2.96 0			0 (	0.00		1.40	419.32 0			201	0.01	0	201	0.00	21584669	100 090 110 025 035
				0.01		0.89				201	0.01	0	281	0.01	17934871	100 090 110 025
2.36 0	1.21 0	0	0	0.01	0	1.10	2.64 0	0 372		391	0.02	0	485	0.01	16375734	100 090 110 025 035
2.03 0	1.20 0	0	0	0.00	0	0.98	3.93 0	0 328.		201	0.01	0	201	0.00	16022979	_100_090_110_025_035
1.95 0	1.00 0	0	0	0.01	0		1.97 0	0 384.		281	0.02	0	359	0.01	17794230	_100_090_110_025_035
2.21 0	1.00 0	0 1	0	0.01	0		7.30 0	0 417.		201	0.01	0	263	0.01	19724288	prob1_100_090_110_025_035_03
2.13 0	1.09 0	0	0	0.01	0		1.03 0	0 314	638	327	0.02	0	325	0.01	13877675	prob1_100_090_110_025_035_02
3.15 0	1.35 0	0	0	0.00	0		2.69 0	0 452	640	201	0.01	0	201	0.00	21300396	prob1_100_090_110_025_035_01
2.51 0		0			0		49	0 326		207	0.01	0	207	0.00	19177398	_100_090_110_015_025_
3.72 0			0		0		1.61 0	0 444		201	0.01	0	223	0.00	26982698	prob1_100_090_110_015_025_09
time TL	time TL		best TL	time I	e TL		me		#cols TI	#nodes	time	7	#nodes	time	opt	nstance
DSS+DP	DSS-4TH	DSS	•	FMT	ヹ	DSS-1TH	Ď	D		Model M3			Model M1	Mod		

1.56	0	0.2	0	0.14	C	0.76	0	102.79	840 0	5593	0.16	С	5225	0.14	/4/43/0	prob2_050_090_110_025_035_10
	0		0	0.01	0					271	0.01	0	261	0.01	6322561	050_090_110_025_035_
1.81 0		0.96	0	0.21	0	0.87	0	102.97	825 0	7447	0.27	0	7187	0.20	7474913	prob2_050_090_110_025_035_08
1.32 0	67 0	0.67	0 0	0.02	0	0.63	0	110.88	509 0	479	0.03	0	621	0.02	8000206	prob2_050_090_110_025_035_07
1.61 0	80 0	0.80	1 0	0.11	0	0.77	0	92.13	734 0	4479	0.11	0	4207	0.12	6446450	prob2_050_090_110_025_035_06
1.51 0	75 0	0.75	0	0.02	0	0.71	0	99.97	486 0	669	0.03	0	759	0.02	7126025	prob2_050_090_110_025_035_05
1.38 0	67 0	0.67	0	0.04	0	0.67	0	91.44	611 0	1219	0.05	0	1565	0.04	6711203	prob2_050_090_110_025_035_04
1.76 0	91 0	0.91		0.10	0	0.83	0	96.27	746 0	4231	0.11	0	3861	0.09	7253904	_050_090_110_025
1.20 0	0 69	0.69	0 0	0.01	0	0.59	0	82.47	429 0		0.01	0	257	0.00	5955928	prob2_050_090_110_025_035_02
1.87 0	95 0	0.95	0 0	4.16	0	0.90	7	90.97	004 0	154709 1	4.59	0	146783	4.02	6197305	prob2_050_090_110_025_035_01
1.43 0	73 0	0.73		0.01	0	0.69	0	78.79	543 0	725	0.02	0	657	0.01	6599716	_050_090_110_015_025_
1.91 0	99 0	0.99	0 0	0.08	0	0.92	0	76.94	644 0	3419	0.08	0	3111	0.07	7069229	prob2_050_090_110_015_025_09
1.43 0	74 0	0.74	0 0	0.01	0	0.68	0	115.87	654 0	567	0.04	0	541	0.01	10582239	prob2_050_090_110_015_025_08
1.73 0	94 0	0.94	0 0	0.17	0	0.84	0	106.71	0 688	6783	0.31	0	6333	0.17	9166972	prob2_050_090_110_015_025_07
1.97 0	1.09 0	1.1		0.11	0	0.96	0	104.67	884 0	4513	0.17	0	4187	0.11	9035608	prob2_050_090_110_015_025_06
1.43 0	78 0	0.78		0.01	0	0.69	0	94.25	528 0	655	0.02	0	639	0.01	8045646	_050_090_
1.12 0	64 0	0.0	0 0	0.01	0	0.53	0	88.79	354 0	137	0.01	0	311	0.01	7715590	prob2_050_090_110_015_025_04
2.08 0	1.09 0	1.1	0 0	0.24	0	1.02	0	102.72	950 0	9195	0.55	0	8717	0.23	9531849	prob2_050_090_110_015_025_03
0.91 0	58 0	0.58	0 0	0.00	0	0.43	0	92.47	286 0	101	0.00	0	101	0.00	8636601	prob2_050_090_110_015_025_02
1.84 0	1.07 0	1.1	0	0.03	0	0.90	0	109.1C	592 0	1657	0.04	0	1479	0.03	9476074	prob2_050_090_110_015_025_01
1.15 0	64 0	0.64	0 0	0.01	0	0.55	3 0	89.33	350 0	193	0.01	0	239	0.01	9674505	prob2_050_090_110_005_015_10
1.42 0	86 0	0.86	0	0.00	0	0.71	0	108.01	331 0	117	0.00	0	113	0.00	11190739	prob2_050_090_110_005_015_09
1.49 0	80 0	0.0	0	0.01	0	0.71	0	94.77	395 0	395	0.02	0	377	0.01	10765148	prob2_050_090_110_005_015_08
0.92 0	51 0	0.51	0	0.00	0	0.45	0	113.08	333 0	101	0.00	0	101	0.00	13315860	prob2_050_090_110_005_015_07
1.07 0		0.60		0.00	0	0.51	0	91.94	307 0	101	0.00	0	101	0.00	9827410	prob2_050_090_110_005_015_06
1.01 0		0.55	0	0.00	0	0.49	0	95.02	309 0	105	0.00	0	101	0.00	10966761	050_090_110
1.26 0	67 0	0.67	0 0	0.00	0	0.60	0	87.80	366 0	163	0.01	0	161	0.00	10103311	prob2_050_090_110_005_015_04
0.80 0	44 0	0.44	0	0.00	0	0.38	0	95.79	292 0	101	0.00	0	101	0.00	9952548	prob2_050_090_110_005_015_03
1.49 0	80 0	0.80		0.01	0	0.71	0	79.95	421 0	337	0.01	0	331	0.01	8921715	prob2_050_090_110_005_015_02
1.82 0	93 0	0.93		0.05	0	0.87	0	87.9C	583 0	2189	0.11	0	2025	0.05	9080083	050_090_110_005
0.67 0		0.31	0	0.01	0	0.31	0	25.86	364 0	265	0.01	0	431	0.01	3058279	050_040_060_035_045
0.50 0		0.		0.01	0	0.23	0	19.56	392 0	633	0.02	0	627	0.01	2055848	050 040 060 035 045
		0.25		0.00	0	0.19	0	25.56	374 0	337	0.01	0	333	0.00	2915020	050 040 060 035
		0.37	П	0.01	0	0.36		24.65	459 0	977	0.03	0	939	0.01	2499829	050 040 060 035 045
0.82		0.46		0.02	0	0.40		21.41		1315	0.04	0	1507	0.02	2407998	050 040 060 035 045
		0.46		0.07	0	0.43		27.02		5185	0.11	0	4795	0.07	2964223	050 040 060 035 045
		0.52		0.07	0	0.47		27.70		5083	0.11	0	4889	0.08	2976206	050 040 060 035 045
0.72 0		0.35		0.01	0	0.33		24.64		1051	0.03	0	1001	0.01	2785118	050 040 060 035
		0.36		0.02	0	0.35		19.91		1429	0.04	0	1585	0.02	2321179	050_040_060_035_045
		0.24		0.01	0	0.22	0	23.63	397 0	781	0.02	0	741	0.01	2424303	050 040 060 035 045
0.79 0		0.47	0	0.01	0	0.38		29.45	462 0	693	0.02	0	651	0.01	3789648	_050_040_060_025_035_
0.65 0	34 0	0.34	0	0.04	0	0.32	0	27.5C	563 0	3021	0.07	0	2885	0.04	3485082	prob2_050_040_060_025_035_09
0.47 0		0.24	0	0.01	0	0.24	0	25.11	346 0	481	0.01	0	467	0.01	3369342	050_040_060_025
0.51 0		0.29		0.02	0	0.25		18.24	425 0	1095	0.04	0	1191	0.02	2620699	050 040 060 025 035
		0.33	0	0.01	0	0.37		27.47			0.02	0	565	0.01	4195755	040_060_025_035_
0.73 0	- 1	0.41	0		0		0	24.57	336 0			0	603	0.01	3639814	prob2_050_040_060_025_035_05
time TL	-	time		time best	7			time	#cols TL		time #	7	#nodes	time	opt	Instance
DSS+DP	4TH	DSS-4TH		FMT		DSS-1TH		DP		Model M3	7		Model M1	Mod		

1.47 0	0.85 0	0	0.03	0	0.70	0	115.49	7 0	687	1405	0.07	0	1383	0.03	6342967	b2_100_040_060_035_045_06	prob2
0.99 0			0.01	0	0.48		83.97	0	501	447	0.02	0	443	0.01	4793753	b2_100_040_060_035_045_05	prob2
3.48 0	1.09 0	0	0.07	0	1.65	0	78.19	0	665	2855	0.11	0	3289	0.06	4305444	b2_100_040_060_035_045_04	prob2
1.66 0	0.87 0	0	0.11	0	0.79	0	112.53	5	715	3925	0.23	0	4263	0.11	6903780	b2_100_040_060_035_045_03	prob2
1.44 0	0.75 0	0	0.07	0	0.68	0	83.43	7 0	677	2327	0.12	0	2891	0.06	4892815	b2_100_040_060_035_045_02	prob2
1.97 0	0.96 0	0	0.19	0	1.01	0	91.33	၀ ၀	816	9325	0.37	0	8547	0.19	5239694	_100_040_060_035_045	prob2
1.16 0	0.64 0	0	0.05	0	0.55	0	99.45	၀ ၀	856	1943	0.09	0	2163	0.05	7249250	b2_100_040_060_025_035_10	prob2
1.48 0	0.82 0	0	0.02	0	0.70	0	103.20	0	601	713	0.04	0	705	0.01	6888870	_100_040_060_025	prob2
1.60 0	0.90 0	0 0	0.01	0	0.76	0	76.50	1 0	61.	807	0.03	0	785	0.01	5688486	_100_040_060_025	prob2
0.79 0	0.46 0	0 0	0.01	0	0.38	0	105.43	4 0	474	201	0.01	0	701	0.01	7827643	_100_040_060_025	prob2
1.38 0	0.83 0	0	0.03	0	0.67	0	116.26	0	701	1421	0.05	0	1405	0.03	7725160	b2_100_040_060_025_035_06	prob2
0.99 0	0.58 0	0	0.01	0	0.53	0	93.70	0	506	313	0.02	0	751	0.01	6947876	_100_040_	prob2
1.46 0	0.59 0	0 0	0.02	0	0.74	0	105.04	2 0	602	493	0.03	0	805	0.02	7378893	_100_040_060_025_	prob2
1.19 0	0.71 0	0 0	0.01	0	0.57	0	100.27	0	606	701	0.02	0	695	0.01	6926571	_100_040_060_025	prob2
1.42 0	0.74 0	0	0.02	0	0.67	0	83.89	0	646	1167	0.06	0	1121	0.02	6017995	_100_040_060_025	prob2
1.24 0	0.68 0	0 0	0.03	0	0.58	0	98.77	2 0	642	781	0.04	0	1199	0.03	6789535	_100_040_060_025	prob2
1.15 0	0.69 0	0	0.03	0	0.55	0	81.88	0 0	610	1539	0.06	0	1487	0.03	7267781	_100_040_060_015	prob2
1.09 0	0.64 0	0	0.16	0	0.53	0	93.65	0	.99	5671	0.36	0	5935	0.15	7913167	_100_040_060_015	prob2
0.91 0	0.52 0	0	0.01	0	0.43	0	86.10	0	51	481	0.02	0	475	0.01	7675678	_100_040_060_015	prob2
1.21 0	0.70 0	0	0.02	0	0.57	0	101.45	ω 0	573	909	0.04	0	891	0.02	9137088	100_040	prob2
1.18 0	0.62 0	0	0.15	0	0.57	0	97.94	ω 0	913	6055	0.34	0	5925	0.15	7963728	100_040_060_015	prob2
1.14 0	0.63 0	0	0.02	0	0.60	0	88.57	0	649	1259	0.04	0	1243	0.02	7796330	_100_040_060_015	prob2
1.46 0	0.84 0	0	0.05	0	0.71	0	82.21	7 0	727	2655	0.08	0	2569	0.04	6971511	_100_040_060_015	prob2
0.92 0	0.61 0	0 0	0.02	0	0.44	0	94.20	0	758	901	0.04	0	897	0.02	7639612	_100_040_060_015	prob2
1.11 0	0.63 0	0	0.01	0	0.55	0	77.39	7 0	467	205	0.01	0	571	0.01	7105775	_100_040_060_015	prob2
0.94 0	0.56 0	0 0	0.06	0	0.45	0	111.75	8 0	668	2295	0.18	0	2503	0.06	10225754	_100_040_060	prob2
1.21 0	0.71 0	0	0.01	0	0.57	0	116.84	0	494	375	0.01	0	373	0.01	12443206	_100_040_060	prob2
1.12 0	0.63 0	0 0	0.01	0	0.53	0	93.51	7 0	507	533	0.02	0	517	0.01	9572458	_100_040_060_005_	prob2
0.86 0	0.49 0	0	0.01	0	0.42	0	80.32	0	400	201	0.01	0	559	0.01	8183123	100_040_060_005	prob2
0.91 0	0.51 0	0	0.01	0	0.43	0	80.77	O Ο	475	577	0.02	0	575	0.01	8855858	_100_040_060_005_	prob2
1.01 0	0.55 0		0.01	0	0.47		98.20	9 0	509	307	0.02	0	593	0.01	10125878	100_040_060_005	prob2
1.09 0		0	0.00	0	0.50		96.36	0	485	315	0.01	0	313	0.00	10568922	100 040 060 005	prob2
0.79 0			0.00	0	0.37		87.49	0	408	201	0.01	0	201	0.00	8935165	100 040 060 005	prob2
			0.01	0	0.44		76.94		432	217	0.01	0	523	0.01	8323726	100 040 060 005	prob2
0.75 0		П	0.01	0	0.37		73.62		392	201	0.01	0	443	0.01	7606458	100 040 060 005 015	prob2
0.86 0			0.00	0	0.41		78.60		458	201	0.01	0	201	0.00	9002581	100 040 060 005 015	prob2
2.10 0		0 0	1.87	0 (	1.01		86.74		955	75221	1.81	0	67839	1.81	4512175	050 090 110 035 045	prob2
		0	0.01	0	0.59		102.74		442	251	0.01	Ò	247	0.00	5391675	050 090 110 035	prob2
2.42 0		<u></u>	11.71	0	1.16	0	82.80	0	1100	502899	11.12	0	484675	13.27	4532717	050 090 110 035 045	prob2
1.84 0		0	0.05	0	0.89	0	84.08	0	685	2447	0.06	0	2223	0.05	4515421	050 090 110 035	prob2
1.67 0		0	0.02	0	0.79	0	104.70	0	409	763	0.03	0	905	0.02	5657308	050_090_110_035	prob2
0.93 0	0.51 0	0	0.00	0	0.44	0	97.45	0	304	101	0.00	0	101	0.00	5757187	050_090_110	prob2
1.38 0	0.77 0	0	0.03	0	0.65	0	81.75	7 0	587	1315	0.04	0	1217	0.03	4405311	050_090_110_035_045	prob2
1.84 0	0.91 0	0	0.13	0	0.89	0	78.02	0	624	5049	0.13	0	5059	0.13	4661808	b2 050 090 110 035 045 03	prob2
2.32 0			9.23	0	1.12	- 1	101.89		1003	361643	8.82		343025	9.87	5673672	050_090_110_035_045_	prob2_
1.46 0	- 1	- 1	- 1	0	0.70	0	93.05	9	479	539	0.01	0	493	0.01	5446753	b2_050_090_110_035_045_01	prob2_
time TL	time TL	best TL	time b	ᄅ	time		time	s TL	#cols	#nodes	time	Ż	#nodes	time	opt	nstance	Inst
DSS+DP	DSS-4TH		FMT	_	DSS-1TH	$\dashv$	무	-	J	Model M3			Model M1	Moc			

0.59		0.82	c	0.24	1.04	c	0.20	c	233	21451	0.24	c	20443	0.28	664/8	prob3_U5U_U4U_U6U_UU5_U15_U2
0.52	0	0.45	0	0.01		c	0.24	0	236		0.01	0	753	0.01	53334	050_040_060_005_015
		1.17		0.03	1.39 0	c	332.65	0	670	861	0.03	0	853	0.03	9804896	_100_090_110_035_
3.23 0	0	1.22			1.52 0	0	406.78	0	899	901	0.06	0	899	0.04	12578011	100_090_110_035_045
4.43 0		1.93		8.43 0	2.08 0	0	377.46	0	1411	142691	12.05	0	139015	8.09	11183535	prob2_100_090_110_035_045_08
3.17 0		1.53			1.48 0	0	366.86	0	1059	5807	0.52	0	6083	0.33	9955370	prob2_100_090_110_035_045_07
2.63 0	0	1.26			1.23 0	0	345.88	0	1334	75531	5.69	0	75013	4.42	8977521	prob2_100_090_110_035_045_06
2.85 0	0	1.11			1.32 0	0	481.33	0	1358	37905	2.71	0	37155	2.33	12893140	prob2_100_090_110_035_045_05
4.10 0	0	1.69			1.93 0	0	320.00	0	1735	(1)	22.75	0	383569	22.99	9544555	prob2_100_090_110_035_045_04
7.08 0	0	2.49	0		3.34 0	0	323.82	0	1459	23005	1.49	0	22283	1.19	8178729	prob2_100_090_110_035_045_03
4.53 0	0	2.10		7.68 0	2.14 0	0	334.86	0	1456	139559	8.17	0	133561	7.41	8984540	prob2_100_090_110_035_045_02
2.30 0	0	1.07			1.08 0	0	429.83	0	527	201	0.01	0	201	0.01	11609596	prob2_100_090_110_035_045_01
2.23 0	0	1.05			1.04 0	0	357.67	0	981	4607	0.45	0	5309	0.28	11813607	prob2_100_090_110_025_035_10
4.83 0	0	1.58		0.09 0	2.25 0	0	454.71	0	890	1795	0.16	0	1761	0.09	14857980	prob2_100_090_110_025_035_09
3.47 0	0	1.80		0.18 0	1.65 0	0	323.75	0	1061	4101	0.23	0	3905	0.17	12163539	prob2_100_090_110_025_035_08
2.73 0	0	1.50		0.05 0	1.28 0	0	335.13	0	754		0.08	0	1173	0.05	11556641	prob2_100_090_110_025_035_07
3.01 0	0	1.40		0.59 0	1.40 0	0	335.81	0	1264	9585	0.94	0	9835	0.56	11657513	_100_090_110_025_
4.22 0	0	1.80			1.96 0	0	417.89	0	1047	3917	0.23	0	3561	0.17	13574049	prob2_100_090_110_025_035_05
2.90 0	0	1.35	0	2.93	1.37 0	0	343.64	0	1291	56631	2.81	0	54449	3.12	11595542	prob2_100_090_110_025_035_04
8.17 0	0	3.10		40.65 0	3.86 0	0	331.89	0	1185	820123	41.84	0	748167	39.42	11533841	prob2_100_090_110_025_035_03
3.73 0	0	1.59	0	0.04 0	1.74 0	0	380.99	0	854	757	0.06	0	941	0.04	13076912	prob2_100_090_110_025_035_02
3.19 0	0	1.51		0.02 0	1.50 0	0	426.57	0	695	583	0.03	0	569	0.02	16441961	prob2_100_090_110_025_035_01
4.75 0	0	1.77			2.25 0	0	428.54	0	1386	109011	13.41	0	102763	5.84	18741171	prob2_100_090_110_015_025_10
4.10 0	0	1.70		2.12 0	1.93 0	0	439.37	0	1548	36811	4.67	0	35439	2.04	18878187	prob2_100_090_110_015_025_09
2.72 0		1.30			1.27 0	0	336.20	0	797	1301	0.14	0	1841	0.09	15113753	prob2_100_090_110_015_025_08
2.72 0	0	1.30			1.27 0	0	376.80	0	698		0.13	0	1343	0.07	17755727	prob2_100_090_110_015_025_07
2.59 0	0	1.32			1.24 0	0	327.13	0	756	1163	0.05	0	1139	0.04	15012791	prob2_100_090_110_015_025_06
3.00 0	0	1.28	0	1.64 0	1.40 0	0	410.96	0	1014	27939	3.36	0	27611	1.57	19090896	prob2_100_090_110_015_025_05
4.04 0	0	1.79			1.89 0	0	384.75	0	1144		10.52	0	91857	5.30	18061115	prob2_100_090_110_015_025_04
3.01 0	0	1.49			1.42 0	0	362.54	0	984	15973	1.92	0	15513	0.88	16957540	prob2_100_090_110_015_025_03
3.80 0	0	1.85		1.27 0	1.77 0	0	431.79	0	1231	22677	2.91	0	21735	1.22	19332675	_100_090_110_015_
2.11 0	0	0.86	0		0.99 0	0	424.59	0	572	203	0.01	0	203	0.01	19042433	100_090_110_
		1.31			1.31 0		448.55	0	584	203	0.01	0	203	0.01	26505908	100_090_110_005_015
		1.93	П		2.10 0		377.08	0	958	29395	3.87	0	27825	1.51	19179158	100 090 110 005 015
1.97 0		0.97	0	0.01 0			318.22	0	498	201	0.01		201	0.01	16639295	100 090 110 005 015
		2.08		0.06			369.47	0	644		0.13		1295	0.06	19307546	100 090 110 005 015
		1.72					438.28	0	940	4	0.65		4417	0.23	22416964	100 090 110 005 015
		1.09					431.72		596		0.02		349	0.01	25126497	100 090 110 005 015
		1 83					327.59		640	641	0.05		993	0.03	17642587	100 090 110 005 015
		1.14	0				333.72		574	325	0.02	0	325	0.01	19183516	100 090 110 005 015
2.76 0		1.41	П	0.17 0			343.82		829	3687	0.50	0	3717	0.17	19021696	100 090 110 005 015
		1.27	0				426.71	0	542	201	0.01	0	201	0.01	21786202	100 090 110
1.74 0		0.81			0.84 0	0	109.87	0	1020	15557	0.70	0	15071	0.40	6006896	prob2_100_040_060_035_045_10
1.21 0		0.66		0.04 0	0.58 0	0	82.15	0	584	1355	0.07	0	1489	0.04	4718856	prob2 100 040 060 035 045 09
		0.81	0	0.09	0.66 0	0	86.97		711	3641	0.17	0	3415	0.08	5244278	_100_040_060_035_045_
0.72 0		0.43		- 1	0.35 0	0	88.08	0	528	343	0.01	0	1049	0.02	5108960	prob2_100_040_060_035_045_07
time TL	7	time	7	time best	time TL	ฮ	time	7	#cols	#nodes	time	7	#nodes	time	opt	Instance
DSS+DP		DSS-4TH		FMT	DSS-1TH		무		ω	Model M3			Model M1	Мо		

						-				•				•					7.
	s	01	10	<u> </u>	1.16	0	1.35	0	1.1.	0	257	77851	1.12		74189	1.97	158249	050 090 110 005 015	g .
1.73 0			0.79	0	1.26	0	0.86		1.2	0	262	149705	2.13	0	135197	3.56	160632	050 090 110 005 015	pro
.52	2.5	0	1.10	0	0.64	0	1.71	0	1.22	0	268	38195	0.61	0	36493	1.02	146470	prob3_050_090_110_005_015_06	pro
1.06 0	1.0	.61 0	0.6	0 0	0.01	0	0.52	0	1.12	3 0	213	466	0.01	0	464	0.01	142054	prob3_050_090_110_005_015_05	prc
07 0	2.0	38 0	0.88		0.23	0	1.03	0	1.2	0	270	13813	0.22	0	13467	0.36	160436	prob3_050_090_110_005_015_04	prc
93 0	1.0	92 0	0.92		0.96	0	1.01	3 0	0.9	0	273	8476021	102.45	0	7601911	210.19	119307	prob3_050_090_110_005_015_03	prc
48 0	2.48	0	1.81	0	1.23	0	1.95	0	1.20	0	259	720615	9.79	0	657369	17.04	159325	prob3_050_090_110_005_015_02	pro
41 0	2.4	0	1.2		1.19	0	1.29	0	1.1	0	314	5117025	67.68	0	4969797	124.56	149542	prob3_050_090_110_005_015_01	prc
62 0	0.6	37 0	0.37	0	0.03	0	0.42	0	0.20	0	208	2017	0.03	0	1977	0.03	34895	prob3_050_040_060_035_045_10	prc
66 0	0.6	0	0.38	0	0.25	0	0.49	0	0.3	0	282	22065	0.24	0	21739	0.32	40806	prob3_050_040_060_035_045_09	prc
43 0	۰,0	22 0	0.22	0	0.01	0	0.21	0	0.2	0	255	491	0.01	0	491	0.01	25399	prob3_050_040_060_035_045_08	prc
58 0	0.5	0	0.39	0	0.24	0	0.51	7	0.27	0	247	22745	0.23	0	22057	0.31	36799	prob3_050_040_060_035_045_07	prc
63 0	0.6	0 61	0.49	2 0	0.30	0	0.52	0	0.30	0	227	31263	0.29	0	29975	0.41	36187	prob3_050_040_060_035_045_06	prc
48 0	۰,0	0	0.4	1 0	0.09	0	0.46	0	0.2:	0	263	7745	0.08	0	7563	0.11	26532	prob3_050_040_060_035_045_05	prc
52 0	0.	54 0	0.54	1 0	0.12	0	0.50	4 0	0.2	0	275	11753	0.12	0	11201	0.17	27316	prob3_050_040_060_035_045_04	prc
64 0	0.6	99 0	0.99	2 0	0.30	0	1.47	0	0.30	0	247	41637	0.43	0	38805	0.51	43655	prob3_050_040_060_035_045_03	prc
59 0	0.5	71	0.71		0.28	0	0.99	0	0.28	0	292	88199	0.87	0	83313	1.11	34480	prob3_050_040_060_035_045_02	prc
52 0	0.	0	0.45	1 0	0.04	0	0.39	3 0	0.23	0	265	2733	0.04	0	2543	0.04	27297	prob3_050_040_060_035_045_01	prc
63 0	0.6	58 0	0.5	2	0.29	0	0.80	0	0.20	0	266	73087	0.75	0	68031	0.93	44286	prob3_050_040_060_025_035_10	prc
67 0	0.6	78 0	0.78		0.32	0	1.08	2 0	0.32	0	212	50204	0.46	0	46016	0.64	50766	prob3_050_040_060_025_035_09	prc
46 0	۰.0		0.47	1 0	0.15	0	0.59	1 0	0.2	<del>ا</del> 0	266	14471	0.15	0	13885	0.19	32230	prob3_050_040_060_025_035_08	prc
58 0	0.5		0.53	<u> </u>	0.05	0	0.59	7	0.2	0	186	4317	0.05	0	4021	0.06	46156	prob3_050_040_060_025_035_07	prc
	0.0		1.30	0	0.26	0	2.26		0.30	0	238	23076	0.25	0	21706	0.30	46049	prob3_050_040_060_025_035_06	pro
47 0	0,		0.72	0	0.21	0	0.78		0.2:	0	269	54783	0.48	0	52991	0.67	33331	prob3_050_040_060_025_035_05	prc
44 0	0,		0.51	0	0.08	0	0.70	0	0.2	0	255	7399	0.08	0	6799	0.11	34669	prob3_050_040_060_025_035_04	pro
64	0.64		0.6	0	0.10	0	0.98		0.30	0	242	7297	0.10	0	6981	0.11	54380	050_040_060_025	prc
59 0	0.5		0.47	0	0.05	0	0.67		0.27	0	180	4663	0.05	0	4299	0.07	43520	035	prc
50 0	0.5		0.98	0	0.17	0	1.85	0	0.2:	0	251	16919	0.17	0	16075	0.22	34658	050_040_060_025	prc
62 0	0.6	78 0	0.78	<u> </u>	0.29	0	0.87	0	0.30	0	256	25206	0.28	0	23850	0.34	55225	prob3_050_040_060_015_025_10	prc
68 0	0.6	39 0	0.39	2 0	0.32	0	0.48	0	0.3	0	230	53463	0.53	0	51973	0.76	62348	prob3_050_040_060_015_025_09	prc
46 0	۰٬.0	0	1.30	0	0.20	0	1.94	0	0.2	0	236	18809	0.20	0	17179	0.22	40196	prob3_050_040_060_015_025_08	pro
60 0	0.6	96 0	1.96	2 0	0.27	0	4.05	0	0.27	0	205	43041	0.43	0	40419	0.54	57100	prob3_050_040_060_015_025_07	prc
63	0.6	0	0.65	<u> </u>	0.05	0	0.88	0	0.3(	۰. 0	182	4145	0.05	0	3845	0.06	57570	_050_040_060_015	prc
46 0			0.92	0	0.21	0	1.01		0.2	0	243	28527	0.26	0	26575	0.34	41222	050_040_060_015	prc
0.52 0	0.5		0.48	<u> </u>	0.02	0	0.51	0	0.2	0	200	1850	0.02	0	1784	0.03	43252	050_040_060_015	pro
65 0	0.6	37 0	0.37	0	0.02	0	0.40	0	0.30	0	223	1359	0.03	0	1299	0.02	66922	050_040_060_015_	prc
	0.6		0.57	2	0.28	0	0.72		0.28	0	235	30108	0.31	0	28520	0.39	54045	050 040 060 015	pro
50 0	0.5		0.47		0.09	0	0.52	0	0.2	0	246	8173	0.10	0	7729	0.12	43232	050 040 060	pro
63 0	0.6	0	2.76	0	0.30	0	4.71	0	0.20	0	232	43109	0.46	0	39487	0.53	68110	prob3_050_040_060_005_015_10	pro
68 0	0.6	72 0	0.7		0.03	0	0.93	0	0.32	0	217	1803	0.03	0	1729	0.03	75933	prob3_050_040_060_005_015_09	prc
0.46 0	۰,0	0 6	1.49	2 0	0.20	0	3.43	0	0.2	0	244	39487	0.38	0	37177	0.49	49607	prob3_050_040_060_005_015_08	prc
0.58 0	0.0	0 11	0.41	1 0	0.05	0	0.44	0 7	0.27	1 0	194	3239	0.04	0	3029	0.05	70106	prob3_050_040_060_005_015_07	prc
0.63 0	0.6		0.94	1 0	0.06	0	1.41	0	0.3(	3 0	173	5469	0.07	0	5119	0.08	71183	050_040_060_005_015	pro
47 0	0.47		0.79	<u> </u>	0.07	0	1.10	0	0.22	0	221	5439	0.07	0	5249	0.08	50498	050_040_060_005_015	pro
	0.52		0.54		0.08	0	0.51		0.24		195	6869	0.08		6481	0.10	53373	040_060_005_015_	bl.
64	0.64		0.47		- 1	0	0.47		0.30		211	4649	0.07		4133	0.06	81773	prob3_050_040_060_005_015_03	pro
ne TL	time	TL e	time	st TL	time best	7	time	Ħ	time	7	#cols	#nodes	time	≓	#nodes	time	opt	nstance	Ins
ģ	DSS+DP	로	DSS-4TH		FMT	_	DSS-1TH		무		ω	Model M3		-	Model M1	Mo			

2.44 1.96 2.08 1.68 2.44	7.65	c		Ι										10/11/	prob3 100 040 060 015 025 04
2.44 1.96 2.08 1.68	1	<u>-</u>	0.90	>	14.18	200		349 C	37430	0.86	0	34634	0.99	133474	100_040_060_015_025
2.44 1.96 2.08	0.61	0	0.11	0			0.0	292 C		0.11	0	5776	0.17	98557	<u> 100_040_060_015_025</u>
2.44	1.37	0	0.39		2.75		1.0	368 C	17557	0.37	0	16793	0.48	101318	prob3_100_040_060_015_025_01
2.44	3.97	0	0.69 1	0		)5 0	0.95	367 0	30223	0.65	0	29229	0.86	120182	prob3_100_040_060_005_015_10
:	26.66	0	1.22	0	6	0		375 0		3.18	0	130107	3.72	147092	_100_040_060_005_015_
	1.49	0	0.67	0		35		324 0	31901	0.62	0	30937	0.92	114299	0
0 2.52 0	1.89	0	0.41	0		22 0	1.2	371 C	16101	0.40	0	15505	0.46	150224	_100_040_060
1.70	1.03	0	0.35	0			0.81	332 C		0.33	0	16783	0.46	110440	100_040_060_005_015
0 1.92 0	1.09	0	0.29	0		94 0	0.0	327 C	13750	0.28	0	13202	0.37	119047	prob3_100_040_060_005_015_05
0 1.87 0	2.65	0	0.76 1	0		39 0	3.0	345 C	34927	0.72	0	33277	0.92	112463	prob3_100_040_060_005_015_04
0	0.57	0		0			0.0	303 C		0.01	0	416	0.01	121527	prob3_100_040_060_005_015_03
0 1.76 0	2.98	0	0.59	0	4.83	0	3.0	335 C	28600	0.56	0	27770	0.80	105576	prob3_100_040_060_005_015_02
0 2.23 0	1.60	0	1.11	0		0 70		321 0	135003	3.00	0	127035	3.59	141557	prob3_100_040_060_005_015_01
0 1.70 0	0.81	0	0.06	0		0	3.0	273 C	4295	0.06	0	4053	0.09	58091	_050_090_110_035
0 1.71 0	0.69	0	0.79	0		18 0	1,	320 C	54441	0.76	0	51463	1.34	84435	prob3_050_090_110_035_045_09
0 1.96 0	0.85	0	1.14	0		1 0	-,	326 C	4157601	47.84	0	3982765	104.27	71922	prob3_050_090_110_035_045_08
0 2.22 0	1.05	0	0.11	0		07	1.0	258 C		0.10	0	7743	0.20	75034	_050_090_110_035
	0.62	0	0.05	0	0.62		0.0	253 C		0.04	0	3307	0.08	64131	_050_090_110_035
0 1.94 0	0.81	2 0	0.96	0		93 0	3.0	346 C	373187	4.29	0	359867	9.17	61654	prob3_050_090_110_035_045_05
0 2.18 0	0.81	0	0.15	0	1.15	0 70	1.0	260 C	10829	0.14	0	9963	0.25	67448	prob3_050_090_110_035_045_04
0 1.93 0	1.00	2 0		0		93 0	0.8	350 C	1135719	12.59	0	1102949	27.81	64338	prob3_050_090_110_035_045_03
0 2.10 0	0.80	0	0.09 1	0		)2 0	1.0	311 C	5473	0.08	0	5303	0.14	64952	prob3_050_090_110_035_045_02
0 0.87 0	0.48	0 0		0	0.43	0 80	1.0	292 C	835	0.03	0	815	0.02	75878	prob3_050_090_110_035_045_01
0 1.10 0	0.60	0 0		0		)2 0	1.0	283 C	441	0.01	0	429	0.01	79575	prob3_050_090_110_025_035_10
0 1.84 0	0.73	1 0	0.07 1	0		0   80	1.0	234 C	4955	0.07	0	4857	0.13	96062	prob3_050_090_110_025_035_09
0 2.13 0	0.80	2 0		0	1.06	0 7(	1.07	318 C	1355986	16.05	0	1300328	32.96	84310	prob3_050_090_110_025_035_08
0 1.44 0	0.62	0	0.02	0		0 7(	1.0	223 C		0.02	0	941	0.02	87521	_050_090_
0 1.95 0	0.80	0	0.22	0		0	1.0	290 C	15289	0.21	0	13239	0.31	84243	prob3_050_090_110_025_035_06
0 1.36 0	0.68	0	0.08	0		37 0	3.0	258 C	5477	0.07	0	5221	0.13	68826	_050_090_110_025
0 1.75 0	2.20	0		0		34 0	3.0	299 C			0	15921971	401.60	73284	_050_090_110_025_035
0 2.11 0	1.70	0	1.05	0		0	1.0	287 C	26734517	283.36 2	0	25465783	646.50	82813	prob3_050_090_110_025_035_03
0 2.47 0	2.56	0	1.23	0		0	<u>-</u>	282 C	64296835	738.76	_	47733915	1200.00	105092	prob3_050_090_110_025_035_02
1.99	0.77	0	0.51				0.96	334 C		0.49	0	36039	0.94	78542	050_090_110_025_035
2.07	0.91	0	0.05					287 0		0.05	0	2899	0.08	104194	050 090 110 015 025
	0.66	0	0.23	0		34 0		214 0		0.22	0	18348	0.49	80819	050 090 110 015
2.55	1.46							293 0		1.50	0	94559	2.55	124830	050_090_110_015
0 2.03 0	1.17	0		0		0 86		277 0		4.95	0	360257	9.54	110309	050_090_110_015
	0.75	0	0.03	0		0		276 0	1853	0.03	0	1799	0.05	101871	_050_090_110_015_
0 2.44 0	1.47	0		0		.19 0		277 0		79.26	0	5260661	140.18	124249	_050_090_110_015_
0 2.26 0	0.98	0	1.12	0		0	1.09	309 0	1368449	18.03	0	1295605	34.47	106776	prob3_050_090_110_015_025_04
0 2.08 0	3.29	0	0.14	0	6.76	01 0		299 0	8901	0.13	0	8675	0.23	98874	prob3_050_090_110_015_025_03
0 1.94 0	1.01	0	0.06			94 0	0	279 0		0.06	0	4103	0.10	98542	050_090_110
0 0.95 0	0.56	0	0.08	0		0		287 0	5137	0.07	0	5045	0.13	86269	prob3_050_090_110_015_025_01
2.41	0.95	0	1.20 2				1.16	279 0		6.59	0	410097	10.92	159881	prob3 050 090 110 005 015 10
	- 1							293 0		15.55	0	1072857	27.68	159034	prob3 050 090 110 005 015 09
TL time TL	time :	7	time best	ᅻ	time	핕	time	#cols TL		time	ฮ	#nodes	time	opt	Instance
DSS+DP	DSS-4TH		FMT	<b>T</b>	DSS-1TH		무		Model M3		4	Model M1	Mo		

Г	0.87	20		_	2.50	_	2.07	c	1.00	c	<b>†</b>	70001	14.7	c	00800	J. / 1	700057	piob3_100_090_110_013_023_10
0 0	E 0.02	3 6	ع إد			0 0				٥	117	70504	2 0	0	66065	3 2	0407040	100 000 110 015 025
	0.5		3 0		4.09				1.4	0	20.4 20.4	2020133	20.12	0	300029	100.00	004000	100_090_110_015_025
	6.10		ے ا	0 0	7 00	) C			7 7 7	o c	433	626153	30.20		70000	30.07	334006	100 000 110 015
	3		7   i		1.00	) (			2 T	٥	2 1	8097	00.00	Т	7530	0.07	192124	100 090 110 015 025
0 0	2.00		3 1.70	0 0	7.00				4.90	0	370	60217	100.00	o c	799761	110 35	200724	100 000 110 015
	70.		2 7.0		0.00	0 0			2 00	٥	201	34300	0.0		2005	1 - 0	260496	100 000 110 015
	7 15		3 - 90						2 T. C	0	204	10550	0.4.0 0.4.0		18533	100	173730	100 090 110 015
			١.	) (	4 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	) (			4	5	403	272224	0.46	0	25050	13.00	202200	100 000 110
	7.09		1 72	0 0		0 0	3 47		4 50	5	430	195810	6.90	5	182174	10 06	239246	100 090 110 015 025
			4 42						3 74	5	355	33284	0 08	5	31700	1 75	186899	100 090 110 015 025
			3.35	0		0			3.41	0	398	918717	25.25	0	892503	51.40	233362	100 090 110 005 015
0	9.16	84 0	4.84	0	2.81	0		0	4.51	0	426	84721	2.67	0	82899	4.56	308677	prob3_100_090_110_005_015_09
0		47 0	1.47	0	0.62	0		0	4.77	0	361	16789	0.59	0	15909	0.87	306957	prob3_100_090_110_005_015_08
0		72 0	1.72			0	1.82	0	3.99	0	428	9277586	247.82	0	9023862	497.15	243938	prob3_100_090_110_005_015_07
0		99 0	1.99			0		0	3.38	0	400	1350351	39.63	0		69.89	227858	prob3_100_090_110_005_015_06
			1.58	0		0			4.14	0	427	2562911	77.35	0	2415681	135.97	269487	015
	8.02		5.66			0			3.98	0	401	11932149	354.18	0	11268353	649.02	247507	100_090_110_005_015
	3.72		1.24			0			4.96	0	351	4981	0.17	0	4753	0.26	330931	_100_090_110_
	4.92		<u> </u>	0	0.33	С			3.91	c	402	9723	0.31	c	9509	0.50	250228	_100_090_110_005_015_
	9.21		3.27	0	4.07				4.52	o	451	125357	3.90		123803	7.13	283965	_100_090_110_005_015
			0.~	0	0.00				0.83	ح	3/8	11/200	2.05	0	113940	3.15	20012	_100_040_060_035_045
			- 00	0 0	0.00	0 0			- 100	٥	270	110011	2 0		110000	0 140	50202	100 040 060 035 045
			واح	)	0.00	-			1 3 i	ه (	338	16614	0.34		16038	0.48	86262	100 040 060 035 045
			3 50	<u> </u>	96.0	) 			1 24	ا ح	335	43281	0.91	5	41497	1 20	82189	100 040 060 035 045
			0.61	0	1.21	0			1.17	0	384	56945	1.14	0	55117	1.70	79962	100 040 060 035 045
0		01	1.0	0	1.06	0		0	1.03	0	324	56012	1.03	0	54676	1.62	73480	100 040 060 035 045
0		52 0	1.52	0	0.50	0		0	1.20	0	430	21091	0.48	0	20257	0.57	86391	prob3_100_040_060_035_045_05
0		72 0	1.72	0		0		0	0.92	0	402	147104	2.94	0	136304	3.68	63904	prob3_100_040_060_035_045_04
0	2.16	69 0	1.69	1 0	0.87	0	2.20	0	1.04	0	368	43017	0.84	0	41979	1.26	66201	prob3_100_040_060_035_045_03
0		17 0	1.17	0	0.66	0		0	1.03	0	301	33969	0.64	0	33153	0.96	74150	prob3_100_040_060_035_045_02
0		14 0	1.14	0	0.89	0		0	0.86	0	383	100831	1.86	0	97173	2.68	59944	prob3_100_040_060_035_045_01
0	1.41	67 0	0.67	0	0.05	0	0.70	0	1.01	0	364	2077	0.05	0	2007	0.05	83587	prob3_100_040_060_025_035_10
			0.80	0	0.23	0			1.21	0	338	9545	0.21	0	9174	0.26	108300	025
0	1.02	57 0	0.57	0	0.84	0		0	0.92	0	365	42513	0.80	0	41607	1.19	76077	prob3_100_040_060_025_035_08
0	1.81		0.90	0	0.05	0	1.27		0.87	0	302	2383	0.05	0	2315	0.06	72297	prob3_100_040_060_025_035_07
0	2.48	43 0	1.43	0	0.94	0		0	1.21	0	391	40707	0.90	0	39485	1.19	102964	prob3_100_040_060_025_035_06
0	2.08	16 0	3.16	0	1.04	0		0	1.01	0	309	87296	1.52	0	85286	2.49	84166	prob3_100_040_060_025_035_05
0	2.20	01 0	1.01	1 0	0.24	0	1.98	0	1.06	0	386	10555	0.22	0	10275	0.29	83829	prob3_100_040_060_025_035_04
0		87 0	0.87	0	0.59	0	1.39	0	1.18	0	334	28375	0.56	0	27947	0.86	108400	prob3_100_040_060_025_035_03
0		70 0	0.70	2		0		0	0.90	0	384	179175	3.07	0	177041	5.24	79586	prob3_100_040_060_025_035_02
			2.2			0		0	1.01	0	386	459325	9.43	0	437237	12.45	81569	prob3_100_040_060_025_035_01
0	2.11	27 0	2.27	0	0.55	0	5.41	0	1.01	0	363	25013	0.53	0	24461	0.73	103946	prob3_100_040_060_015_025_10
0	2.50	19 0	1.19	0	0.42	0		0	1.21	0	369	17067	0.40	0	15979	0.44	133449	prob3_100_040_060_015_025_09
0	1.92		1.79	1 0	0.25	0	2.81	0	0.92	0	361	11281	0.24	0	10943	0.30	94065	prob3_100_040_060_015_025_08
0	1.83	32 0	3.32	2 0		0			0.87	0	361	546599	10.42	0	524675	15.68	89239	prob3_100_040_060_015_025_07
0	1.92		1.0	0		0		0	1.21	0	306	124936	2.53	0	120094	3.62	126907	prob3_100_040_060_015_025_06
	1.18		0.5	0		0			1.00	0	294	2913	0.06	0	2841	0.08	103822	prob3_100_040_060_015_025_05
į	time	l⊣	time	l⊣	time best	Ė	time TL	l⊣	time	7	#cols	#nodes	time	7	#	time	opt	Instance
Ū	DSS+DP	Ħ	DSS-4TH		FMT	_	DSS-1TH	L	무	L		Model M3		L	de	Mo		
]	1	!	1		!	-	1))		]	_		:						

		Mod	Model M1			Model M3		_	DP	_	DSS-1TH	I	F	F⊠T		DSS-4TH	DSS+DP
Instance	opt	time	des T	r'	time	#nodes	#cols T		time	7	time	₽	time		<b> </b>	ш.	time TL
prob3_100_090_110_025_035_01	151351	229.34	4304951	0	111.52	4401153	405	0	3.67	0	2.99	- 1	3.78	20		- 1	6.11 0
_100_090_110_025_	190270	1.01	18923	0	0.58	20073	373	0	4.27	0	3.47	0	0.61		0		7.04 0
prob3_100_090_110_025_035_03	152838	1200.00 2	21934779		1200.28	53061984	455	_	3.94	0	5.60	0	4.05	·	2 0	3.10 0	7.93 0
prob3_100_090_110_025_035_04	193571	0.19	3517	0	0.13	3633	386	0	4.67	0	2.22	0	0.14	<u>,                                     </u>	0	1.50 0	4.56 0
prob3_100_090_110_025_035_05	134240	3.56	67580	0	1.74	68692	454	0	3.25	0	1.57	0	1.82		0	1.46 0	3.17 0
prob3_100_090_110_025_035_06	155664	23.87	425049	0	12.28	434573	470	0	3.87	0	12.34	0	3.99		2 0	7.24 0	7.85 0
_100_090_110_025_035	179889	22.17	401146	0	12.72	419150	468	0	4.20	0	3.17	0	4.32		0	1.97 0	6.44 0
_100_090_110_025_035	177276	2.73	48469	0	1.53	49307	515	0	4.09	0	1.53	0	1.59		0	1.19 0	3.11 0
prob3_100_090_110_025_035_09	184082	1200.00 2	21641539	_	803.52	35076144	424	0	4.15	0	6.03	0	4.27	,	2 0	4.32 0	8.41 0
_100_090_110_025_035	211718	45.80	787199	0	24.04	829361	418	0	4.48	0	1.54	0	4.61	_	2 0	1.28 0	3.11 0
prob3_100_090_110_035_045_01	136458	12.75	225416	0	6.19	228844	434	0	4.26	0	3.58	0	4.38		2 0	2.13 0	7.23 0
prob3_100_090_110_035_045_02	148690	0.39	7031	0	0.21	7333	375	0	4.64	0	1.79	0	0.23		0	1.45 0	3.50 0
prob3_100_090_110_035_045_03	127193	1.13	20823	0	0.57	21209	365	0	3.68	0	4.49	0	0.60		0	2.74 0	7.44 0
prob3_100_090_110_035_045_04	151766	64.88	1151625	0	32.30	1191475	450	0	4.31	0	3.06	0	4.43		2 0	2.36 0	6.19 0
045	152051	2.15	39082	0	1.15	40086	404	0	4.34	0	2.55		1.21		0	1.94 0	5.24 0
prob3_100_090_110_035_045_06	143578	1.33	24809	0	0.73	25423	390	0	4.15	0	4.95		0.76		0	2.64 0	8.38 0
prob3_100_090_110_035_045_07	123346	0.98	17927	0	0.48	18285	369	0	3.53	0	3.11		0.50		0	1.81 0	6.33 0
_100_090_110_035_045	134029	$\Box$	15676685	0	1	16244027	443	0	4.01	0	7.68		4.13		0		8.10 0
_100_090_110_035_045_	143578	63.11	1157787	0	32.20	1182673	505	0	3.97	0	2.89		4.08		0		5.86 0
1	133582	1.99	36325	0	1.00	36725	495	0	3.64	0	2.03		1.04		П	1.41 0	4.14 0
	10965	0.00	43	0	0.00	43	83	0	0.01	0	0.09		0.00				0.04 0
	10964	0.00	39	0	0.00	39	53	0	0.02	0	0.07		0.00				0.03
	11155	0.00	49	0	0.00	49	2 3	0	0.02	0	0.08		0.00				0.04
prob4_005_000500_05	11478	0 00	3 0	0 0	0 0	35	5) O	<b>&gt;</b>   C	0.02	ع د	0.10	5 0	0.00		00	0.12	0.04
8	11244	0.00	45	0	0.01	45	71	0	0.02	0	0.07		0.00				
005	10881	0.00	43	0	0.00	43	85	0	0.02	0	0.07		0.00			0.08 0	0.04 0
prob4_005_000500_08	11049	0.00	29	0	0.00	29	62	0	0.02	0	0.07	0	0.00			0.08 0	0.04 0
prob4_005_000500_09	10971	0.00	33	0	0.00	33	50	0	0.01	0	0.07	0	0.00			0.09 0	0.04 0
prob4_005_000500_10	10970	0.00	41	0	0.00	41	69	0	0.01	0	0.09		0.00			0.10 0	0.04 0
prob4_005_001000_01	19351	0.00	47	0	0.00	47	94	0	0.05	0	0.14		0.00				0.11 0
005_001000	19815	0.00	45	0	0.00	45	71	0	0.06	0	0.12		0.00			0.13 0	0.12 0
prob4_005_001000_03	20091	0.00	39	0	0.00	39	78	0	0.06	0	0.13		0.00				0.12 0
005_	20239	0.00	39	0	0.00	39	92	0	0.05	0	0.12		0.00		0		0.12 0
05	20181	0.00	49	0	0.01	49	86	0	0.05	0	0.17		0.00		0	0.16 0	0.12 0
05	19753	0.00	35	0	0.00	35	70	0	0.05	0	0.14	0	0.00			0.15 0	0.12 0
05	19951	0.00	39	0	0.00	39	100	0	0.05	0	0.14		0.00				0.12 0
prob4_005_001000_08	19793	0.00	43	0	0.00	43	90	0	0.05	0	0.12		0.00				0.11 0
prob4_005_001000_09	19715	0.00	49	0	0.00	49	94	0	0.05	0	0.14	0	0.00			0.14 0	0.12 0
prob4_005_001000_10	20889	0.00	45	0	0.01	45	89	0	0.06	0	0.12		0.00				0.12 0
prob4_005_002500_01	55207	0.00	47	0	0.01	47	88	0	0.25	0	0.35		0.00				0.53 0
prob4_005_002500_02	55719	0.00	43	0	0.00	43	79	0	0.25	0	0.35		0.00				0.54 0
prob4_005_002500_03	55811	0.01	39	0	0.01	39	94	0	0.25	0	0.35		0.01		0		0.53 0
05	55593	0.00	43	0	0.00	43	60	0	0.25	0	0.35	0	0.00				0.53 0
prob4_005_002500_05	56653	0.00	43	0	0.01	43	94	0	0.25	0	0.32	0	0.00		0		0.54 0
prob4_005_002500_06	54612	0.01	47	0	0.01	47	89	0	0.24	0	0.35	0	0.01		0	0.36 0	0.52 0

		Model M1	Z		Model M3		무		DSS-1TH	FMT	7	DSS-4TH	DSS+DP
Instance	opt	time	#nodes TL	time	#nodes	#cols TL	₽	me TL	time TL	time	best TL	time TL	
prob4_005_002500_07	54739	0.00		0.00	45	$\neg$			- 1	0.00	0	- 1	
002500	55407	0.00		0.00	47				0.32 0	0.00	0		
005	55746	0.00	<b>4</b> 5 0	0.01	45			0	0.34 0	0.00	0	0.36 0	
005	55703	0.00		0.01	47					0.00	0		0.54
prob4_005_005000_01	99661	0.00	45 0	0.01	45		3.0		0.92 0	0.00	0		
prob4_005_005000_02	100371	0.00	21 0	0.00	21		3.0	0	1.07 0	0.00	0		
prob4_005_005000_03	99253	0.01		0.01	43		0.89		0.97 0	0.01	0 0		
prob4_005_005000_04	100709	0.00	29 0	0.00	29		0 0.9	0	0.93 0	0.00	0	0.48 0	0 1.85 0
prob4_005_005000_05	101143	0.00	53 0	0.01	53		0.0		0.91 0	0.01			
prob4_005_005000_06	100015	0.00	53 0	0.00	53	100 (	0.0	0	0.91 0	0.00	0	0.48 0	0 1.82 0
prob4_005_005000_07	100315	0.00	45 0	0.01	45	105 (	3.0	0	0.89 0	0.00		0.49 0	
_005_	100189	0.01	43 0	0.01	43		3.0	0 06	1.02 0	0.01	0	0.50 0	
005	100499	0.00	35 0	0.00	35		0.0	0	0.90 0	0.00			
prob4_005_005000_10	100867	0.01	47 0	0.01	47	103 (	0.0	0	0.81 0	0.01	0	0.50 0	
prob4_005_010000_01	222561	0.01	39 0	0.01	39		0 3.6	36 0	3.49 0	0.01	0 0	0.76 0	
prob4_005_010000_02	223710	0.00	45 0	0.00	45		0 3.6	37 0	3.32 0	0.00		0.90 0	
prob4_005_010000_03	223263	0.01	43 0	0.01	43		0 3.6	6	3.03 0	0.01	0	0.90 0	
prob4_005_010000_04	223212	0.00	43 0	0.01	43		0 3.6		3.57 0	0.01			
prob4_005_010000_05	224012	0.01	47 0	0.02	47		0 3.6		4.17 0	0.01	0		
ll .	222838	0.01	45 0	0.02	45		0 3.6		3.42 0	0.01			
II.	222511	0.00	43 0	0.00	43	87 (	3.6		3.75 0	0.00	0	0.88 0	
	221362	0.00		0.01	47					0.00	0		6.56
005 010000	223404	0.0		0.01	3 4					0.00		0.79	5.76
prob4 010 000500 01	11202	000	665 0	0.00	679	95	0 0	ა მ ი	0.07	0.00	5 0	0.76	
010	10929	0.00		0.00	275					0.00	0		0.04
010	11214	0.00	555 0	0.00	563		0.0	0	0.18 0	0.00	0	0.19 0	
prob4_010_000500_04	10742	0.00	599 0	0.00	609		0.0		0.12 0	0.00	0		
prob4_010_000500_05	11041	0.00	513 0	0.00	539		0.0		0.19 0	0.00			0.04
	11851	0.00	99 0	0.00	113				0.13 0	0.00	0		0.04
prob4_010_000500_07	11385	0.01	955 0	0.01	955		0.0		0.24 0	0.01			0.04
000500	11027	0.00	257 0	0.00	257	96 (	0.0		0.16 0	0.00	0	0.16 0	0.04
010_000500	10873	0.00	549 0	0.00	579	104	0.0			0.00			0.04
010_000500	11182	0.01	911 0	0.00	911	87 (	0.0			0.01	0		0.04
010_001000	21568	0.01		0.00	933					0.01		0.17 0	0.12
010	22107	0.01		0.01	933				0.21 0	0.01			0.12
010	22078	0.01	933 0	0.00	933				0.13 0	0.01			0.12
prob4_010_001000_04	22106	0.01	923 0	0.01	923		0.0	0	0.17 0	0.01	_		
010_001000	21481	0.01	933 0	0.01	933		0.0		0.16 0	0.01	_		0.11
prob4_010_001000_06	22388	0.01	933 0	0.00	933	119 (	0.0	0	0.18 0	0.01	_	0.15 0	
prob4_010_001000_07	22305	0.01	873 0	0.00	873	108 (	0.0	0	0.13 0	0.01	1 0	0.14 0	
prob4_010_001000_08	21373	0.01	935 0	0.01	935	108 (	0.0	0	0.15 0	0.01	<u>_1</u>		
prob4_010_001000_09	22290	0.01	629 0	0.00	637	124 (	0.0	0	0.13 0	0.01	_	0.13 0	
prob4_010_001000_10	21737	0.01	933 0	0.00	933	108 (	0.0		0.14 0	0.01	1	0.14 (	
prob4_010_002500_01	55021	0.02	941 0	0.02	941	141 (		0	0.36 0	0.02	_		0.
prob4_010_002500_02	54143	0.01	947 0	0.01	947	150 (	0.2		0.34 0	0.01	_	0.34 (	0.53

		Mod	Model M1	_		Model M3		-	묵	DS	DSS-1TH	7	FMT		DS	DSS-4TH	DSS+DP	U
Instance	opt	time	#nodes T	Γ΄	time	#nodes	#cols 1	7			time TL	_	time b	best TI		time TL	time	7
prob4_010_002500_03	54359	0.01	937	0	0.01	937	133	0	0.26			0			0		0.54	0
010_002500	55262	0.01	949	0	0.01	949	139	0			0.32	0	0.01	_	0	0.32 0	0.54	
prob4_010_002500_05	55044	0.01	933	0	0.01	933	136	0		0		0	0.01				0.53	0
prob4_010_002500_06	54566	0.01	933	0	0.01	933	154	0		0		0	0.01		0	0.38 0	0.53	0
010	55212	0.02	953	0	0.01	953	131	0		0		0	0.01		0	0.33 0	0.54	0
010_	55033	0.02	949	0	0.01	949	161	0		0		0	0.01	_	0		0.54	0
010	54712	0.01	937	0	0.01	937	151	0		0	0.37	0	0.01	_	0		0.54	0
010	55148	0.01	911	0	0.01	911	170	0		0		0	0.01		0		0.53	0
prob4_010_005000_01	100447	0.02	913	0	0.02	913	183	0		0		0	0.02	1	0	0.55 0	1.86	0
prob4_010_005000_02	101343	0.01	503	0	0.01	515	187	0		0		0	0.01	1	0	0.54 0	1.74	0
prob4_010_005000_03	99553	0.02	909	0	0.02	909	188	0		0	0.87	0	0.02	0	С	0.54 0	1.74	0
prob4_010_005000_04	100389	0.01	643	0	0.02	657	202	0		0		0	0.02		0	0.53 0	1.68	0
prob4_010_005000_05	99615	0.01	543	0	0.01	547	185	0		0		0	0.01		O	0.52 0	1.61	0
prob4_010_005000_06	100905	0.01	511	0	0.01	513	179	0		0		0	0.01	_	0	0.54 0	1.78	0
prob4_010_005000_07	101507	0.01	373	0	0.01	385	200	0		0		0	0.01	0	O	0.50 0	1.62	0
prob4_010_005000_08	100989	0.01	297	0	0.01	301	164	0		0		0	0.01	0	0		1.82	0
prob4_010_005000_09	101421	0.01	563	0	0.01	571	179	0				0	0.01	_			1.69	
prob4_010_005000_10	100325	0.01	775	0	0.01	775	141	0				0	0.01	_	0		1.78	
010	203813	0.02	747	0	0.02	749	176	0	3.76		2.69	0	0.02		0	0.92	5.50	
	201393	0.03	28.2	0 0	0.03	793	101	0 0				0 0	0.03	Т	ی د		5.04	
prob4_010_010000_03	108005	0.00	850 -	0 0	0.00	250	187	0 0		O C		0 0	0.02	ے د	0 0	0.09	7 QO	0 0
010000	201261	0.03	681	0	0.02	689	177	0				)	0.02	o -	ی ر		5.56	
	200848	0.02	915	0	0.02	915	176	0				0	0.02		0		5.55	
010	201297	0.02	679	0	0.01	679	176	0				0	0.02	_	٥		4.85	
prob4_010_010000_08	201046	0.02	657	0	0.02	657	192	0		0		0	0.02	_	0	0.83 0	5.64	0
prob4_010_010000_09	202163	0.03	613	0	0.03	617	203	0				0	0.03	0	0		5.97	
prob4_010_010000_10	201324	0.02	643	0	0.01	643	190	0				0	0.01	_	0		5.22	
prob4_020_000500_01	14004	0.00	283	0	0.00	301	98	0		0		0	0.00		0		0.04	0
prob4_020_000500_02	14018	0.00	179	0	0.00	183	94	0				0	0.00		0		0.04	
prob4_020_000500_03	13872	0.00	71	0	0.00	77	74	0				0	0.00	0	0	0.09 0	0.04	0
	13809	0.00	309	0	0.00	339	93	0				0	0.00		0		0.04	
	14211	0.00	231	0	0.00	243	93	0				0	0.00	0	0		0.04	
prob4_020_000500_06	13952	0.00	163	0	0.00	169	85	0				0	0.00		0		0.04	0
	13372	0.00	145	0	0.00	157	81	0			0.09	0	0.00		0		0.04	
prob4_020_000500_08	13589	0.00	141	0	0.00	157	82	0		0		0	0.00		0	0.11 0	0.04	
prob4_020_000500_09	14824	0.00	125	0	0.00	153	88	0		0		0	0.00		0		0.04	0
020_000500	13527	0.00	143	0	0.00	151	73	0				0	0.00		0		0.04	
prob4_020_001000_01	22590	0.19	31417	0	0.16	32661	138	0				0	0.06	N	0		0.12	
prob4_020_001000_02	22488	0.06	7847	0	0.05	8499	133	0		0	0.21	0	0.05	_	0	0.21 0	0.13	0
prob4_020_001000_03	22760	0.06	7043	0	0.05	8141	120	0		0		0	0.05	_	C	0.19 0	0.12	0
prob4_020_001000_04	22464	0.19	29633	0	0.14	31321	136	0		0		0	0.06		O	0.20 0	0.12	0
prob4_020_001000_05	22787	0.09	11793	0	0.07	12247	130	0		0		0	0.06		0	0.30 0	0.13	0
prob4_020_001000_06	23157	0.52	92570	0	0.37	93927	145	0		0		0	0.06		C	.38	0.12	0
prob4_020_001000_07	22138	0.36	61277	0	0.27	63525	146	0	0.06	0	26	0	0.05	N	0	0.25 0	0.12	
prob4_020_001000_08	22527	0.17	26805	0	0.13	28267	126	0		0	0.19		0.06			0.19 0	0.12	0

0.12	0 0	0.25	0	0.06	0	0.26	.05	0.0			1.02		222313	1.16	22723	030_001000
3		0.33		0 06	0	0 4	9	0	166		1 95	5	389135	2 07	22641	3
0.12 0		0.26		0.06	0	0.4	.05	<u>ی</u> 0	142 (	241984	1.08	0	231580	1.23	22116	prob4 030 001000 02
0.12 0		1.37		0.05	7 0	2.7	.05 0	0.	138 (	564661	2.42	0	547317	2.84	22141	prob4_030_001000_01
0.04	0	0.24		0.00	0	0.2:	.01	0.0	120	523	0.01	0	475	0.00	13819	prob4_030_000500_10
0.04 0	0	0.29		0.00	0	0.2	.02 0	0.	101	309	0.01	0	295	0.00	13683	prob4_030_000500_09
0.04 0		0.61		0.01	0	0.5	.02	0.	121	973	0.01	0	901	0.00	13746	prob4_030_000500_08
		1.29		0.02	0	1.20		0.		5839	0.03	0	5263	0.02	14384	prob4_030_000500_07
0.04 0		0.22		0.00	0	0.21	.02	0.	110	743	0.01	0	691	0.00	14019	prob4_030_000500_06
0.04 0		0.38	0	0.00	0	0.3	0.02 0	0	117 (	889	0.01	0	763	0.00	14034	prob4_030_000500_05
		0.15		0.00	0	0.1		0.		431	0.01	0	407	0.00	13781	prob4_030_000500_04
		0.26		0.00	0	0.20		0.	107 (	343	0.01	0	311	0.00	13673	prob4_030_000500_03
0.04 0		0.14		0.00	0	0.1	.02	0.	86 (	167	0.00	0	157	0.00	14101	prob4_030_000500_02
		0.43		0.00	0	0.3		0.	108 (		0.01	0	1033	0.00	14284	prob4_030_000500_01
5.56 0		0.95		3.86	5	2.7:	.75 0	3.		486035	4.91	0	485215	13.81	201285	prob4_020_010000_10
5.38 0	0	0.96	0	3.88	0	2.6	.77 0	3.		513807	5.18	0	512177	14.63	201818	prob4_020_010000_09
5.44 0	0	1.02	0	2.36	0	2.6	.77 0	3.		181541	2.26	0	179689	5.58	202291	prob4_020_010000_08
4.93 0	0	1.06	0	0.94	0	2.4.	.77 0	3.	257 (	72353	0.90	0	71497	2.27	202286	prob4_020_010000_07
5.61 0	0	0.98	0	3.86	0	2.7	.74 0	3.		397651	4.11	0	396715	11.62	200715	prob4_020_010000_06
5.80 0	0	1.12	0	0.66	0	2.8	.77 0	3.	274 (	50447	0.63	0	49479	1.51	202400	prob4_020_010000_05
5.41 0		1.04	<u> </u>	0.70	0	2.6	.73 0	3.		53267	0.67	0	51683	1.62	200500	prob4_020_010000_04
5.30	0	0.97	0	2.37	0	2.5	.74 0	ب	231	204779	2.26	0	202797	6.07	200920	prob4_020_010000_03
		0.97	0	1.92	0	2.3		ی	238 (		1.82	0	158003	4.75	201679	prob4_020_010000_02
		1.00	0	3.57	0	2.5		3.		300987	3.41	0	296643	8.88	203934	prob4_020_010000_01
		0.68	0	0.98		0.90		0.0	234 (		1.82	0	244713	4.54	101773	prob4_020_005000_10
		0.67		0.97	5 0	0.85	0.94 0	0.	253 (		1.46	0	183683	3.47	101283	020_
1.76 0		0.64	0	0.96	0	0.8		0.0	236 (	473797	3.24	0	472721	8.46	100133	prob4_020_005000_08
1.58 0		0.60		0.02	0	0.7		0.	227 (		0.01	0	805	0.02	100811	prob4_020_005000_07
1.47 0	0	0.54	<u> </u>	0.31	0	0.7	.94 0	0.	253 (	30645	0.29	0	28331	0.59	101023	prob4_020_005000_06
1.84 0	0	0.72	1 0	0.35	2 0	.0.9	.93 0	0.	256 (		0.33	0	41419	0.79	100661	prob4_020_005000_05
1.96 0	0	0.74	0	0.97	7 0	1.17	.94 0		266 0	366865	2.57	0	365833	6.56	100847	prob4_020_005000_04
1.70 0	3 0	0.63	1 0	0.81	4 0	0.84	.93 0	0 0.		92875	0.77	0	90783	1.78	99889	prob4_020_005000_03
1.64 0	0	0.65	<u> </u>	0.41	0	0.8	.93 0	<u>0</u>	219 (	50627	0.39	0	48921	0.95	99785	prob4_020_005000_02
1.59 0		0.64	2 0	0.98	9 0	0.79	.95 0	ر 0.	253 (	177611	1.41	0	175507	3.38	101585	020
0.56 0		0.31	<u> </u>	0.03	0	0.36	.26 0	0.	185 (		0.03	0	3421	0.06	52063	prob4_020_002500_10
0.55 0	0	0.39	0	0.25	0	0.38	.26 0	<u>0</u>	201 (	323805	1.59	0	318761	3.56	51067	020
0.54 0		0.48		0.25	0	0.46	.25 0	0.	189 (	204491	1.06	0	201045	2.38	50167	prob4_020_002500_08
0.53 0	0	0.37	0	0.25	0	0.3	.25 0	0.		563505	2.74	0	563429	5.98	49446	prob4_020_002500_07
0.53 0	0	0.41	0	0.25	0	0.4	.25 0	0.	201 (		1.50	0	291167	3.32	49695	prob4_020_002500_06
0.53 0		0.27		0.25	7 0	0.2	.25 0	0 0.	190 (	180369	0.91	0	176155	2.07	49735	prob4_020_002500_05
0.53 0		0.45	2 0	0.25	0	0.46	.25 0	0 0.	196 (	472379	2.20	0	471375	5.05	49830	prob4_020_002500_04
0.53 0	0	0.43	0	0.25	0	0.4:	.25 0	0 0.	205 (	334163	1.62	0	332171	3.71	49913	prob4_020_002500_03
0.54 0	0	0.54	2 0	0.25	3 0	0.63	.25 0		195 0	368259	1.75	0	367349	4.05	50051	prob4_020_002500_02
0.55 0	0	0.74	0	0.25	0	0.78	.25 0	0.	196 (	145389	0.77	0	142037	1.68	50567	prob4_020_002500_01
0.13 0	0	0.22	2 0	0.06	1 0	0.2	.05 0		150 0	34677	0.16	0	33719	0.20	22681	prob4_020_001000_10
0.13 0		0.19				0.19					0.08	0	14389	0.11	22888	prob4_020_001000_09
time TL	7	time	st TL	time best	e TL	time	me TL		#cols TL		time	7	#nodes	time	opt	Instance
DSS+DP		DSS-4TH		FMT	로	DSS-1TH	Ū	D		Model M3		-	Model M1	Mo		

		Model M1	Model M3		무	DSS-1TH	FMT	DSS-4TH	DSS+DP
Instance	opt	time #nodes TL	time #nodes	#cols TL	Ō	time TL	est	time	time TL
prob4_030_001000_05	22635	134299			0.06 0	- 1	N	0 0.18 0	- 1
prob4_030_001000_06	23167	5.78 1112499 0	5.60 1204641	170 0		0.33 0	N	0.25	0.12 0
030_001000	22489	515841		153 0			0.05 2	0.37	0.12 0
prob4_030_001000_08	22588	313925	1.38 340775	132 0				0.44	
prob4_030_001000_09	22770	1107563						1.32	
prob4_030_001000_10	23278	6.45 1263443 0	5.58 1312995	147 0	0.06 0	0.74 0		0 0.56 0	0.13 0
prob4_030_002500_01	49891	6.69 506155 0	3.98 560747	222 0	0.26 0	0.63 0		0 0.59 0	0.54 0
	56128	1994697	12.50 2076741	194 0		0.60 0		0 0.55 0	0.54 0
prob4_030_002500_03	55701	21.50 1606963 0	11.05 1702157	194 0	0.25 0	0.57 0			0.55 0
030_002500	56200	373595					0.25 2	0.58	
prob4_030_002500_05	56211	13.85 1041553 0	7.02 1088473	184 0	0.25 0	0.31 0		0 0.30 0	0.55 0
prob4_030_002500_06	56894	10.44 786877 0	5.53 859287	182 0	0.26 0	0.46 0	0.26 2	0 0.44 0	0.54 0
prob4_030_002500_07	55702	20.47 1556349 0	10.53 1677291	178 0	0.25 0	0.41 0		0 0.36 0	0.54 0
prob4_030_002500_08	55670		0.04 3875	163 0	0.25 0	0.49 0	0.04 1	0 0.46 0	0.54 0
prob4_030_002500_09	56933	70.47 5437763 0	37.77 5919961	199 0	0.25 0	0.47 0	0.26 2		0.55 0
prob4_030_002500_10	55913	16.30 1218357 0	8.99 1366529	191 0			0.25 2		0.54 0
030_005000	101929	1513				0.93 0	0.03 1		
005000	101839	1807					0.04 1	0.70	
030_005000	100244	35079	(.)				0.40	0.74	
005000	100247	/451		232 0			0.09	0.84	
030_005000	100613	1749				0.84	0.03	0.69	
030_005000	101429	330221					0.97	0.78	
030_005000	101963	52367						0.71	
030_005000	220101	118035	_				0.98	1.U5	
030 005000	100871	32475					0.02	0.78	
prob4_030_010000_10	201438	0.10 2819 0	0.06 3263	235 0	3 75 0	3 -: -: -: -: -: -: -: -: -: -: -: -: -:	0.03	1 53 0	6 - 5 - 0 5 - 7 - 0
030 010000	201466	103569	ا ب				1.80	1.22	
030 010000	202037	457793				2.84 0	3.88 2	1.84	5.79 0
030_010000	200886	8015		298 0	3.74 0	2.30 0	0.20 1		4.66 0
prob4_030_010000_05	202139	78.98 2136953 0	30.83 2209423	326 0	3.77 0	2.72 0	3.89 2	0 1.29 0	5.58 0
prob4_030_010000_06	201864	15257	0.32 15845	350 0		4.44 0	0.33 1		
prob4_030_010000_07	202001	57429	1.08 63339	315 0	3.77 0		1.12 1		5.55 0
prob4_030_010000_08	202196	332355	w				3.88 2	1.21	
prob4_030_010000_09	201980	75447	1.06 76561				1.11		7.35 0
prob4_030_010000_10	199853	0.46 11409 0	0.24 12943	269 0	3.72 0	2.51 0	0.25		
prob5_005_020000_01	422024	0.01 43 0	0.01 43	73 0	15.82 0	11.50 0	0.01 0	0 1.87 0	24.04 0
prob5_005_020000_02	435581	0.00 43 0	0.01 43	68 0	15.97 0		0.00 0	0 1.58 0	
prob5_005_020000_03	463233		0.01 45	79 0	15.97 0	12.45 0	0.01 0	0 1.40 0	26.26 0
	394850	0.00 47 0	0.01 47	97 0	15.64 0	10.68 0		0 1.94 0	22.35 0
05	389661	0.01 45 0				11.66 0		0 1.83 0	24.50 0
_005_020000	458575			70 0	16.00 0	13.40 0	0.00 0	1.40	28.04 0
prob5_005_020000_07	427640	0.00 45 0	0.01 45	85 0	15.72 0	11.27 0	0.00 0	0 1.37 0	23.72 0
prob5_005_020000_08	400375		0.01 55	92 0	15.69 0	12.37 0	0.01 0	0 1.95 0	26.06 0
prob5_005_020000_09	394464	0.00 21 0	0.01 21	72 0	15.60 0	14.50 0	0.01	1.81	
prob5_005_020000_10	442123	0.00 11 0	0.00 11	45 0	15.86 0	8.82 0	0.00 0	0 0.85 0	18.27 0

0.01	700.61	.α 4	01	_	0.12	797.67	C	408.13	c	1/9	839	-	c	839	0.17	2049191	probb_u1u_1uuuuu_ub
2 2	707.04	20.70		-	2 - 4			41.22	c	144	947	0.10	0	947	0 0	2277309	010_10000
	607.70			\ _	0.16			409.48	0	1 0	935	0.14	0	025	0.20	2277200	010_100000
	606.80			-	0.12	261.53		408.90	C	152	937	0.11	0	93/	0.18	22143/6	010_100000
	595.59			0	0.11			409.55	0	117	939	0.10	0	939	0.17	2045612	010_100000
	591.04			0	0.09			411.59	0	103	933	0.09	0	933	0.17	2236117	010_100000
1.26 0	124.26			<u></u>	0.09	56.00 0	0	102.75	0	118	975	0.08	0	975	0.11	1145731	prob5_010_050000_10
34.94 0	134	3.02 0		<u> </u>	0.07	59.47 0	0	102.69	0	147	947	0.06	0	947	0.10	1140648	prob5_010_050000_09
123.59 0	123	3.49 0		1 0	0.09	55.72 0	0	102.70	0	141	941	0.08	0	941	0.11	1106401	010_
115.88 0	115	5.28 0		1 0	0.06	51.98 0	0	101.71	0	149	779	0.06	0	775	0.09	984636	prob5_010_050000_07
118.01 0	118	5.94 0		0 0	0.09	52.75 0	0	102.04	0	153	513	0.11	0	511	0.09	1031614	prob5_010_050000_06
125.62 0	125	3.27 0		1 0	0.04	55.85 0	0	102.96	0	112	923	0.04	0	923	0.09	1140612	prob5_010_050000_05
119.93 0	119			<u> </u>	0.08	53.74 0	0	103.11	0	143	933	0.08	0	933	0.10	1138628	prob5_010_050000_04
131.46 0	131	5.51 0		0 0	0.09	58.28 0	0	101.76	0	171	595	0.10	0	595	0.09	1007222	prob5_010_050000_03
124.09 0	124	4.11 0		<u> </u>	0.06	55.52 0	0	102.28	0	159	943	0.06	0	943	0.10	1089537	prob5_010_050000_02
131.48 0	131	3.66 0		<u> </u>	0.05	58.80 0	0	102.11	0	153	933	0.05	0	933	0.09	1103870	prob5_010_050000_01
23.54 0	23	1.31 0		<u> </u>	0.03	11.30 0	0	16.33	0	145	953	0.03	0	953	0.04	453172	prob5_010_020000_10
.53 0	21	1.65 0		0	0.05	10.26 0	0	16.12	0	160	625	0.05	0	609	0.04	399665	prob5_010_020000_09
22.07 0	22	1.42 0		<u> </u>	0.03	10.52 0	0	16.30	0	146	951	0.03	0	951	0.04	456159	prob5_010_020000_08
.90 0	21	1.29 0		1 0	0.03	10.47 0	0	16.29	0	129	833	0.03	0	823	0.04	424769	prob5_010_020000_07
19.80 0	19	1.36 0		1 0	0.04	9.44 0	0	16.19	0	148	959	0.04	0	959	0.05	437758	010
22.60 0	22	1.22 0		<u> </u>	0.02	10.77 0	0	16.12	0	135	931	0.02	0	931	0.04	406762	010
20.42 0	20	1.50 0		1 0	0.03	9.70 0	0	16.20	0	124	687	0.02	0	685	0.03	403191	prob5_010_020000_04
0.63	20	1.47 0		<u> </u>	0.03	9.84 0	0	16.38	0	130	941	0.03	0	941	0.04	458976	prob5_010_020000_03
0.44	20	1.35 0		1 0	0.02	9.85 0	0	16.28	0	107	939	0.02	0	939	0.04	419065	_010_020000
21.84 0	21	1.40 0		1 0	0.02	10.28 0	0	16.38	0	149	941	0.02	0	941	0.04	470617	prob5_010_020000_01
0.85	835.85	38.01 0		0	0.01	410.20 0	0	404.34	0	75	43	0.02	0	43	0.01	2178242	prob5_005_100000_10
9.19 0	819.19	43.92 0		0 0	0.03	406.31 0	0	399.00	0	82	45	0.04	0	45	0.02	2148811	prob5_005_100000_09
).54 0	820.54	45.11 0		0	0.05	488.45 0	0	394.27	0	84	53	0.07	0	53	0.04	1997019	prob5_005_100000_08
3.36	833.36	38.61 0		0	0.01	414.60 0	0	398.15	0	90	47	0.02	0	47	0.01	2085649	prob5_005_100000_07
3.50	838.50	44.11 0		0	0.02	414.48 0	0	399.84	0	68	43	0.04	0	43	0.02	2119415	005_
9.84	819.84	48.08 0			0.03	452.93 0	0	395.02	0	81	45	0.04	0	45	0.02	1989604	_005_100000
.91	821.91				0.01	407.48 0	0	393.72	0	65	43	0.02	0	43	0.01	1977496	005
.80	831.80				0.11	421.89 0	0	403.87	0	77	45	0.17	0	45	0.11	2264107	005
	832.96				0.06			400.07	0	92	45	0.10	0	45	0.05	2210555	005 100000
3.23 0	826.23	47.02 0	7	0	0.04	425.84 0	0 2	395.73	0	94	43	0.07	0	43	0.04	2022274	005
184.18 0	184	7.75 0			0.01	81.88 0		100.85	0	78	43	0.02	0	43	0.01	1129598	05
189.60 0	189	5.22 0			0.01	85.28 0	0	100.28	0	82	43	0.01	0	43	0.01	1145564	005
174.97 0	174	5.52 0		0	0.01	78.14 0	0	100.03	0	61	45	0.02	0	45	0.01	1071769	prob5_005_050000_08
193.61 0	193	5.58 0		0 0	0.02	86.03 0	0	99.75	0	76	45	0.04	0	45	0.02	1090982	prob5_005_050000_07
183.69 0	183	9.33 0		0 0	0.03	82.64 0	0	98.48	0	80	45	0.04	0	45	0.03	978658	prob5_005_050000_06
159.73 0	159	5.30 0		0	0.02	72.21 0	0	98.50	0	78	45	0.03	0	45	0.02	1001602	prob5_005_050000_05
192.11 0	192	6.08 0		0 0	0.01	84.09 0	0	99.57	0	81	47	0.02	0	47	0.01	1087340	prob5_005_050000_04
202.84 0	202	5.66 0		0	0.01	91.95 0	0	99.11	0	57	33	0.02	0	33	0.01	1061123	prob5_005_050000_03
178.01 0	178			0	0.01	79.39 0	0	99.09	0	68	41	0.02	0	41	0.01	1010656	
73.52 0	173	- 1		- 1		- 1	0		0	$\neg$	53	0.04	0	53	0.03	977514	prob5_005_050000_01
time TL	±.	time TL		best TL	time be	time TL	7	ne .	ᄅ	#cols ·	#nodes	time	굳	#nodes	time	opt	Instance
DSS+DP	DSS	DSS-4TH	DSS		FMT	DSS-1TH	Ō	무	$\dashv$		Model M3		-	Model M1	Mod		

c	109.61		26.0	c	30.13	٥	.24	40.	00	103.0		337	116100	20.77	c	044079	00.93	00/086	propa_030_050000_02
0 0	12.66			0	0.00	<b>.</b>	44.00			103.2	0 0		13875	0.77	0	13441	1.73	993944	
	19.23		2.30	0	2.88					16.4	0 0	294	499797	12.34	0	4/8323	29.32	399316	
	19.34		2.70	0	8.70					16.4			347103	8.36	0	332353	20.43	395340	030
0	19.01		1.62	0	0.16					16.5	0		4861	0.15	0	4609	0.28	481787	030
0	20.67		1.71	0	0.04		9.65 0	9		16.	0	197	851	0.04	0	777	0.05	438897	prob5_030_020000_07
0	19.77	0	2.18	0	0.21 1		9.32 0	0		16	0	256	6539	0.21	0	6195	0.42	454698	prob5_030_020000_06
0	19.32	0	2.33	0	0.07 1		9.05 0	9	.46 (	16.4	5 0	215	1727	0.06	0	1609	0.11	446907	prob5_030_020000_05
0	18.61	0	1.74	0	0.02 1		.69 0	0 8		16	0	190	521	0.02	0	467	0.03	431900	prob5_030_020000_04
0	18.34	0	2.35	0	1.00 1		.66 0	0 8	.51 (	16.	7 0		32583	0.96	0	30469	1.95	460347	prob5_030_020000_03
0	19.82	0	2.09	0	0.99 1		.32 0	0 9		16.	3 0	303	36215	0.95	0	35189	2.17	397982	prob5_030_020000_02
0	17.10	0	2.33	0	16.91 2	_	.01	0		16.4	0	328	9459341	204.59	0	8739283	499.72	405739	prob5_030_020000_01
0	626.84	0	21.76	0	2.46 1		.84 0	0 271.84		413	0	235	23647	2.33	0	22253	4.91	2068359	prob5_020_100000_10
0	597.59	0	20.37	0	8.05 1		.99 0	0 255.99		415.7	<u>3</u>	246	86285	7.66	0	85461	17.92	2099854	prob5_020_100000_09
0	529.17	0	12.19	0	0.34 1		.49 0	0 230.49		413.9	<u> </u>	216	2225	0.32	0	2195	0.53	1994490	prob5_020_100000_08
0	584.69	0	13.36	0	30.02 1	3	.97 0	0 251.97		415.4	3 0	253	373083	28.61	0	366822	71.52	2160642	prob5_020_100000_07
0	523.90	0	9.89	0	44.03 1	4	.66 0	0 229.66		413.98	0		587965	41.94	0	587965	109.79	2125925	prob5_020_100000_06
0	513.26	0	7.96	0	43.81 1	4	.51 0	0 225.51		415.2	0	214	588025	41.70	0	588025	110.35	2380257	prob5_020_100000_05
0	565.76	0	21.76	0	0.37 1		.38 0	0 246.38		416.4	0	185	2727	0.35	0	2291	0.51	2353252	prob5_020_100000_04
0	522.71	0	7.67	0	43.58 1	4	.48 0	0 231.48		416.3	0	231	587953	41.68	0	587953	109.91	2302913	prob5_020_100000_03
0	673.18	0	17.99	0	1.30		.87 0	0 291.87		413.4	0		13801	1.23	0	13777	2.88	2053969	prob5_020_100000_02
0	563.66	0	23.22	0	1.85		.68	0 240.68		414.6	0		17003	1.75	0	16477	3.66	2005936	prob5_020_100000_01
0	121.11		4.94	0	7.65					103.6	0		163091	7.33	0	158537	17.54	1063866	020
0	111.93		5.39	0	14.82	_	.06	0 50.06		103.5	0		351101	14.20	0	348763	36.34	1025292	prob5_020_050000_09
0	114.91		4.36	0	22.85	2	51.44 0			103.8	0	242	587927	21.90	0	587927	58.22	1125739	prob5_020_050000_08
0	119.85		5.40	0	18.49 1	_	53.12 0	0 53	.55 (	103.	0	271	439121	17.72	0	438417	45.08	1064190	020
0	120.56		4.38	0	22.76 1	N	53.66 0	0 53		103.6	0		587967	21.79	0	587967	58.53	1140141	prob5_020_050000_06
0	122.85	0	5.48	0	1.48 1		54.20 0	0 54		103.05	0		26505	1.42	0	25537	3.01	1022690	prob5_020_050000_05
0	143.40	0	5.62	0	1.72 1		62.74 0	0 62		103.3	0	260	32805	1.65	0	31099	3.56	1054328	prob5_020_050000_04
0	134.06	0	5.87	0	1.43		58.63 0	0 58		103.	7	267	26303	1.37	0	25391	2.97	1062835	prob5_020_050000_03
0	131.60	0	5.91	0	0.38 1		57.90 0	0 57		103.	0		6195	0.36	0	5767	0.71	1017536	prob5_020_050000_02
0	133.25	0	4.79	0	2.76 1		58.68 0	0 58		104.19	9 0	229	51915	2.64	0	49389	5.62	1165699	prob5_020_050000_01
0	23.32	0	2.04	0	1.35		11.05 0	0 11		16.37	0	237	59855	1.30	0	58301	3.13	406329	prob5_020_020000_10
0	22.15	0	1.81	0	5.67 1		10.49 0	0 10		16.48	0	275	292677	5.43	0	290747	14.04	439527	prob5_020_020000_09
0	24.93	0	1.74	0	0.25		11.87 0	0 11		16.3	0		8841	0.24	0	8255	0.47	467465	prob5_020_020000_08
0	22.99	0	2.05	0	2.98 1		10.81 0	0 10		16.3	0	285	148471	2.85	0	147959	7.31	425377	020
0	22.76	0	1.85	0	3.25		10.75 0		13 0		0		157181	3.11	0	151205	7.66	424216	020
0	19.75	0	1.87	0	2.56 1		9.32 0		13 0	16.43	0	252	116373	2.45	0	109431	5.64	427108	prob5_020_020000_05
0	24.05	0	1.54	0	5.83		11.27 0	0 11		16.5	0	218	308039	5.59	0	304551	15.14	464807	020
0	22.49	0	2.04	0	0.48		10.67 0	0 10	.38 (	16.3	0		20035	0.46	0	19593	1.04	417449	prob5_020_020000_03
0	21.75	0	1.53	0	10.33 1	_	10.37 0		.48 0	16.4	0	252	587929	9.88	0	587929	27.04	438511	   
0	21.64	0	1.44	0	10.18 1	_	10.31 0		.48 0	16.4	0	228	587925	9.72	0	587925	26.64	428066	prob5_020_020000_01
0	587.68	0	8.17	0	0.14		.31		25 0	411.25	0	121	933	0.13	0	933	0.20	2250741	prob5_010_100000_10
0	639.39	0	8.98		0.09 0		.66 0	0 276.66	.79 (	408.7	0	111	261	0.10	0	257	0.08	1990233	prob5_010_100000_09
0	607.26	0	7.05	0	0.16		.98 0		.70 0	412.7	ω 0	143	955	0.15	0	955	0.20	2281380	prob5_010_100000_08
0	685.28	0	23.84	0	0.06 0		.23 0	2		406.6	0	148	213	0.06	0	203	0.06	1952291	prob5_010_100000_07
7	time	Ħ	time	걷	time best	_	time TL		า T	time	Į	#cols	#nodes	time	ฮ	#nodes	time	opt	Instance
ס	DSS+DP	ヹ	DSS-4TH		FMT		1TH	DSS-1TH		무		13	Model M3			Model M1	Мо		

020.00	320	0		_	70.08	41.91		00	4	0	3/9	20000	11.18	c	2000	122.20	7077161	proba_rao_roovo_ro
	3 6	5 2	17.7.	<b>)</b>	75.50				1 1				71 70	0	10000		020000	050 10000
	365		15.0	)	1 88	161 83 0			418				1 77	0	12000	2 1 I	2306726	050
358.11 0	355	8	9.88	0	1.57	51.69 0		43 0	419.	0			1.48	0	12091	3.23	2309974	050
376.44 0	376	0	13.90	0	2.06	162.51 0		01 0	419.	3	343	12738	1.94	0	13109	3.73	2170260	prob5_050_100000_05
367.71 0	367	0	19.65	0	197.91	160.62 0		11 0	419.	0	338	1720959	187.80	0	1649947	435.38	2408412	prob5_050_100000_04
381.99 0	38.	53	16.53	0	432.17 2	169.44 0		71 0	418.	<u>ω</u>	343	12907836	1200.29	_	4700525	1200.00	2283609	prob5_050_100000_03
387.12 0	387	0	19.02	0	85.09	169.86 0		17 0	418.	0	373	696745	80.80	0	677619	183.71	2172414	prob5_050_100000_02
359.82 0	359	26 0	16.26	0	28.72	156.55 0		15 0	417.	2	352	244347	27.37	0	238007	62.94	2051814	prob5_050_100000_01
111.33 0	11	91 0	7.91	1 0	2.32	49.07 0		.62 0	104.	4 0	374	30371	2.22	0	29217	4.61	1046749	prob5_050_050000_10
88.39 0	38	35 0	5.85	0	6.24	39.04 0		.14 0	104.	7 0	347	85137	5.99	0	81429	12.76	991878	prob5_050_050000_09
92.35 0	92	72 0	6.72	0	8.22	40.55 0		39 0	104.	7 0	327	128351	7.86	0	124499	17.77	1017578	prob5_050_050000_08
86.59 0	86	70 0	6.70	0	14.27	37.94 0		65 0	104.65	<u>з</u>	343	222843	13.70	0	209665	30.62	1013441	prob5_050_050000_07
92.83 0	36	0 00	7.00	2 0	107.58	40.61 0		.39 0	104.	7 1	347	18658518	1200.28	1	7907929	1200.00	1132833	prob5_050_050000_06
89.27 0	38	34 0	4.8	0	0.66	39.30 0		42 0	104.	5 0	275	8167	0.62	0	7755	1.17	1051531	prob5_050_050000_05
85.76 0	38	19 0	5.19	2 0		37.61 0		93 0	103.93	5 1	325	25402416	1200.28	1	8816619	1200.00	995415	prob5_050_050000_04
97.35 0	97	0	5.8	0		42.69 0		53 0	104.	3 0	353	18329039	1150.68	_	8330931	1200.00	1127941	prob5_050_050000_03
92.30 0	92	12 0	6.4	2 0	107.31	40.58 0		22 0	104.:	2 0	362	4868405	328.67	0	4468119	688.68	997119	prob5_050_050000_02
100.50 0	100	53	7.53	0	70.87	44.35 0		52 0	104.	0	328	996969	67.90	0	912475	135.98	1064788	prob5_050_050000_01
15.83 0	16	24 0	2.24	0	5.40	7.42 0		62 0	16.	0	386	147415	5.16	0	132911	10.02	405236	prob5_050_020000_10
13.85 0	13	97 0	1.97	0	0.28	6.54 0		67 0	16.	0	360	7183	0.26	0	6963	0.56	482365	prob5_050_020000_09
15.27 0	15	0	2.30	0	16.91	7.10 0		42 0	16.	0	361	4053129	116.15	0	3835031	288.80	445098	prob5_050_020000_08
5.57 0		0	1.51	0	0.06	2.66 0		.53 0	16.	0	291	1283	0.06	0	1225	0.09	399643	prob5_050_020000_07
9.68 0	<u></u>	19 0	1.49	0	0.20	4.63 0		57 0	16.	0	346	4951	0.20	0	4815	0.36	431259	prob5_050_020000_06
19.93 0	19	0	3.09	0	17.05	9.27 0		56 0	16.	7 0	357	31665909	945.89	_	15953971	1200.00	448914	prob5_050_020000_05
14.51 0	12	0	2.40	0	17.10	6.72 0		59 0	16.	5	365	43076571	1200.27	_	16590423	1200.00	452173	3rob5_050_020000_04
9.60 0	·		1.82	0	0.35	4.61 0		.53 0	16.	2 0			0.34	0	8701	0.65	460819	050
17.01 0	17	37 0	2.37	2 0	17.16	7.89 0		.66 0	16.	1 0	361	593171	17.35	0	563743	41.08	408220	prob5_050_020000_02
6.06 0	6	27 0	1.27	0	0.09	2.93 0		.46 0	16.	9 0	339	2093	0.09	0	2027	0.15	417544	prob5_050_020000_01
428.70 0	428	76 0	14.76	0	295.49	185.83 0	18	.79 0	416.	2 0	322	2833677	280.90	0	2618855	615.05	2119588	prob5_030_100000_10
459.10 0	459	39	17.89	0	428.78	200.62 0		10 0	416.	7	317	15784947	1200.27	_	5705887	1200.00	2122188	prob5_030_100000_09
367.16 0	367	16 0	16.16	0	36.00	159.91 0		.01 0	416.	0	301	329449	34.28	0	316091	75.97	2018858	prob5_030_100000_08
515.32 0	516	27 0	10.27	0	0.79	220.66 0		09 0	417.09	9		4889	0.74	0	4705	1.23	2020308	  30  -
482.14 0	482		23.38	0	4.20	206.52 0		17 0	417.	0			4.00	0	31125	7.59	2281791	030
376.42 0	376		11.20	0	1.44	160.30 0		.61 0	416.	0			1.36	0	9857	2.58	2382536	030
451.30 0	45,		13.27	0	1.18	196.44 0			417.	0			1.11	0	8523	2.21	2362815	030
499.88 0	499	33	15.83	0	429.79	217.47 0		.49 0	416.	0		8	718.09	_	5668511	1200.00	2186271	030
	427		17.84	0	4.28				416.	8		(.)	4.07	0	27973	6.87	2285364	8
426.36 0	426		12.98	0	0.57	182.69 0		.09 0	417.	7 0			0.54	0	3317	0.83	2307625	030
130.04 0	130		4.43	0	0.40	57.79 0		.04	104.	ω 0			0.38	0	3947	0.53	1115636	30
126.87 0	126	39 0	5.6	0	57.54	55.75 0		.94 0	103.	1 0	301	1038003	55.23	0	956423	120.77	1053940	prob5_030_050000_09
116.61 0	116	15 0	6.15	0	106.62	51.08 0		.67 0	103.	3 0	323	5751645	259.04	0	5557469	654.76	1059798	prob5_030_050000_08
106.23 0	106	1 <u>7</u> 0	5.5	0	22.56	47.07 0		.15 0	104.	2 0	272	413621	21.52	0	397177	50.53	991129	prob5_030_050000_07
18.76 0	118	13 0	3.43	1 0	0.07	52.10 0		.99 0	103.	0 0	190	879	0.06	0	841	0.11	1130076	prob5_030_050000_06
115.65 0	116	0	3.86	0	0.23	50.93 0		.28 0	104.:	0	232	1429	0.21	0	1389	0.23	1118597	prob5_030_050000_05
17.64 0	117	† 0	5.40	0	12.08	52.51 0		.41 0	103.	7 0	297	195467	11.56	0	181977	24.51	1009213	prob5_030_050000_04
124.34 0	124	- 1	4.28			54.32 0			104.	ი 0			0.55	0	8677	1.18	1199349	prob5_030_050000_03
time TL	<b>-</b>	าย TL	time	ī	time best	time TL		ne TL	time	S TL	#cols		time	₽	#nodes	time	opt	Instance
DSS+DP	DSS	Ŧ	DSS-4TH		FMT	DSS-1TH	DSS	J	무		3	Model M3			Model M1	Мо		

				-					101.1		010		0.00	c	010	10.10	107,7000	
	44	2 0	α .	ا <u>د</u> 0 (	10 15	٠ ص	10 73	5 (	104 70	5.	202	87617	080	٥.	84010	20 40	1074850	200 050000
	26		4.95	0	108.12	0	11 84		104.95	_	796	11540459	1200.29	_	4756997	1200.00	1011027	200
51.58 0	51	0 80	17.08	2	108.36	0	23.14	0	105.32	_	906	12727540	1200.28	1	5008329	1200.00	1173582	prob5 200 050000 02
95.55 0	95	0 85	33.58	0	10.57	0	42.76	0	105.12	0	618	89185	9.91	0	86789	20.21	1043434	prob5_200_050000_01
13.87 0	13	72 0	4.72	2 0	17.13	0	6.44	0	16.64	0	754	394146	26.65	0	388908	46.97	403516	prob5_200_020000_10
24.79 0	24	30 0	8.30	0	8.40	0	11.65	0	16.6	0	683	119889	8.06	0	115301	13.25	402623	prob5_200_020000_09
10.73 0	10	06	3.06	0	17.11	0	5.03	0	16.60	_	693	20605316	1200.27	_	10185445	1200.00	416889	prob5_200_020000_08
23.15 0	23	86 0	7.86	0	11.64	0	10.81	0	16.75	0	629	162400	11.08	0	158894	19.11	445700	prob5_200_020000_07
10.25 0	10	72 0	3.72	1 0	4.12	2 0	4.72	0	16.78	0	515	61045	3.93	0	60079	7.12	453689	prob5_200_020000_06
8.21 0	œ	08	3.08	0	0.65	0	3.83	0	16.64	0	510	9497	0.62	0	9157	1.01	413443	prob5_200_020000_05
33.76 0	33	42 0	16.42	0	17.28	0	18.03	0	16.76	_	679	21360986	1200.28	_	10255021	1200.00	455774	prob5_200_020000_04
24.43 0	24		7.02	0	14.18	0	11.52	0	16.81	0	726	181331	13.56	0	176389	21.03	452035	prob5_200_020000_03
14.53 0	14	74 0	4.7	0	17.16	0	6.79	0	16.62	0	721	988471	63.87	0	975543	115.55	429341	prob5_200_020000_02
18.91 0	18		4.28	0	17.33	0	8.83	0	16.8	_	693	22328067	1200.28	_	10466019	1200.00	421353	prob5_200_020000_01
84.33 0	84		7.42	1 0	1.84	0	38.24	0	419.11	0	420	10081	1.73	0	9485	3.11	2315957	prob5_100_100000_10
.19 0	275.19		15.88	0	432.11	0	114.84	0	418.49	_	569	10591725	1200.28	_	3813543	1200.00	2157177	prob5_100_100000_09
.73 0	225.73	52 0	6.52	1 0	0.32	0	96.87	0	418.69	0	415	1703	0.29	0	1621	0.49	2249881	prob5_100_100000_08
.59 0	237.59	91 0	12.9	1 0	195.06	1 0	103.51	0	418.3	0	562	1501311	185.98	0	1471053	458.48	2118517	prob5_100_100000_07
.27 0	187.27	08 0	10.08	0	111.26	0	81.25	0	419.57	0	569	656367	105.95	0	624645	211.59	2303104	prob5_100_100000_06
.12 0	239.12	67 0	9.67	2 0		0	104.20	0	419.32	1	534	10559151	1200.28	_	3704003	1200.00	2195801	prob5_100_100000_05
.31	193.31	27 0	13.27	2 0	432.80	7 0	83.77	0	419.52	1	573	10104377	1200.29	_	3645877	1200.00	2293465	prob5_100_100000_04
.66	222.66	48 0	9.48	0	2.76	0	94.26	0	418.5	0	416	17639	2.62	0	17321	6.03	2000431	prob5_100_100000_03
.17 0	110.17	74 0	11.74	0	3.52	0	48.09	0	419.3	0	429	20987	3.32	0	20527	7.05	2295478	prob5_100_100000_02
.11	219.11		13.79	0	2.86	0	95.99	0	417.74	0	405	16979	2.68	0	16529	5.49	2030175	prob5_100_100000_01
34.77 0	34		4.70	0	107.95	0	15.84	0	104.88	_	564	17539934	1200.29	_	6555083	1200.00	1094646	prob5_100_050000_10
61.79 0	61		5.8	0	35.06	0	27.22	0	104.7	0	536	388317	33.42	0	363763	67.22	1060660	prob5_100_050000_09
42.54 0	42	83 0	3.8	0	2.12	0	19.35	0	104.86	0	612	22476	2.01	0	21990	4.18	1032213	prob5_100_050000_08
58.64 0	58	06	5.06	0	9.29	0	25.52	0	104.51	0	478	94273	8.92	0	87931	16.94	1051719	<u> </u>
169.42 0	169	89 0	26.8	0	108.02	0	75.7	0	104.8	_	578	16661558	1200.28	_	6529735	1200.00	1195937	prob5_100_050000_06
51.55 0	51	38 0	6.3	1 0	39.94	0	22.64	0	104.90	0	566	426855	38.07	0	410149	76.10	1185978	prob5_100_050000_05
44.75 0	44	11 0	7.11	1 0	4.82	0 0	20.40	0	104.50	0	482	51609	4.60	0	49261	9.00	988464	prob5_100_050000_04
63.75 0	63	49 0	6.49	1 0	23.91	0	28.42	0	104.8	0	569	280621	22.93	0	275051	52.73	1182257	prob5_100_050000_03
59.07 0	59	92 0	6.92	0	107.71	0	25.99	0	104.73	_	560	19070083	1200.28	_	6756363	1200.00	996581	2
60.54 0	60		5.90	0	39.38	0	26.49	0	104.04	0	492	450781	37.54	0	430263	80.65	1084506	100
5.89 0	51		1.69	0	0.44	0	2.81	0	16.59	0	383	9223	0.42	0	9027	0.81	394575	100 020000
20.06 0	20	17 0	5.17	2 0	17.05	7 0	9.3	0	16.5	0	522	5417325	247.28	0	5191665	499.95	442708	100
33.70 0	33		10.30	2	17.16	0	16.51		16.64	_	563	31602106	1200.28	_	12516704	1200.00	481558	10
12.49 0	12	64 0	3.64	0	0.91	0	5.93	0	16.60	0	415	19140	0.87	0	18226	1.66	401159	prob5_100_020000_07
17.15 0	17	22 0	4.22	0	17.14	0	8.0	0	16.6	0	540	1406417	61.19	0	1373823	134.86	420174	9
.86 0	9	44 0	2.44	1 0	2.76	8 0	4.68	0	16.59	0	502	59815	2.68	0	56441	5.43	396612	prob5_100_020000_05
25.16 0	25	51 0	7.51	2 0	17.14	0	11.72	0	16.64	_	518	33147365	1200.29	_	13192991	1200.00	426035	prob5_100_020000_04
13.20 0	13	33 0	3.33	0	17.13	0	6.22	0	16.62	0	502	16255891	621.54	_	12483023	1200.00	395910	prob5_100_020000_03
8.84 0	8	85 0	2.85	1 0	2.93	0	4.15	0	16.58	0	526	62700	2.82	0	61198	5.98	418489	prob5_100_020000_02
8.83 0	8	47 0	3.47	0	0.49	0	4.19	0	16.50	0	510	9781	0.47	0	9589	0.93	428945	prob5_100_020000_01
12.70 0	312	67 0	17.67	1 0	20.23	0	137.70	0	418.35	0	374	146145	19.13	0	137887	39.17	2252938	050_
30 0	404.30		13.44		4.95	- 1	175.79		418.01	0	364	35173	4.68	0	33845	9.26	2083227	prob5_050_100000_09
time TL	±.	ne TL	time	#    -	time best	e T	time	Z	time	7	#cols	#nodes	time	ฮ	#nodes	time	opt	nstance
₽	DSS+DP	Ŧ	DSS-4TH		FMT	<b>로</b>	DSS-1TH		무			Model M3			Model M1	Мо		

		Moc	Model M1	4		Model M3		-	무		DSS-1TH	I		FMT		DSS-4TH	DSS+DP
Instance	opt	time	#nodes 7	7	time	#nodes	#cols T	_	time	ฮ	time	귿	<b>±</b> .	me best	귿		time TL
prob5 200 050000 05	1044234	22.02	89973	0	10.57	91763	810	9	104.44	0	27.93		<u> </u>	11.12		8.46	61.61 0
	1048194	52.00	212621	0	24.03	215219	809	0	105.34	0	13.72	0	25	32	0		30.57 0
200	1024966	2.96	13251	0	1.55	13729	665	0	104.85	0	13.04	0	_	.62	0	9.14	29.31 0
prob5_200_050000_08	1072564	1200.00	5142713	_	1200.36	12148615	810	_	105.58	0	11.15	0	108	08.75	0		24.71 0
prob5_200_050000_09	1156161	192.65	811017	0	87.82	834243	839	0	104.91	0	26.35	0	92	92.11	0	_	58.18 0
prob5_200_050000_10	1132731	1200.00	5034071	_	1200.35	12783949	816	_	105.17	0	41.94	0	108		0	33.14 0	93.16 0
_200_	1993435	41.99	106108	0	20.43	109912	813	0	418.82	0	70.10	0	21	21.54	0		164.95 0
_200_	2204128	1200.00	2991173	_	1200.28	8224138	876	_	419.09	0	46.40	0	433		2		107.08 0
_200_	2161366	1200.00	3043217	_	1200.29	8329564	915	_	420.41	0	76.21	0	433		2 0		176.66 0
_200_	2036629	1200.00	3061285	_	870.48	5326069	818	0	419.22	0	30.11	0	433		2 0		66.06 0
prob5_200_100000_05	2178235	1200.00	3053291	_	1200.28	8271750	913	_	420.94	0	91.44	0	435.15	5.15	0	,	214.92 0
prob5_200_100000_06	2245002	18.89	47535	0	8.76	48009	834	0	421.12	0	19.66	0	0	9.36	0		43.39 0
prob5_200_100000_07	2095422	24.62	60509	0	10.93	61333	620	0	419.96	0	21.30	0	11	11.64	0		46.72 0
prob5_200_100000_08	2064083	23.18	58379	0	11.44	59943	698	0	419.60	0	50.50	0	12	12.11	1 0		114.26 0
200_	2275872	1200.00	2991575	_	1200.28	8191070	726	_	419.21		96.66		433.00	3.00	0	27.29	223.20 0
prob5_200_100000_10	2396790	37.61	90355	0	17.62	92403	644	0	421.36	0	36.27		18	18.51	0	N	81.14 0
05_005000_c45	1698027	0.00	_	0	0.00		44	0	8.48		0.46					0.49	0.80 0
_05_005000_c45_	1039413	0.00	13	0	0.00	13	95	0	8.45	1	2.10					0.99	4.31 0
_05_005000_c45_	1204653	0.00	43	0	0.00	43	120	0	8.34		1.49			0.00		0.77	2.99 0
05_005000_c45_	102/6/5	0.00	43	c	0.01	43	148	0	10.06		1.32					0.94	2.75
05_005000_c45_	1210656	0.00	43	0	0.00	43	125	0	8.47		2.02		0			0.90	4.11 0
ြင	965553	0.00	39	0	0.00	39	י ט	0	8.35		0.68			0.00	Π	0.52	
05_005000_c45_	966531	0.00	39	0	0.00	39	5 0	0	0.41		0.53					0.44	
2       	1805073	0.00	1 5		0.00	113	111		0.43	0	0.30	0		0.00			0.74
005000 c50	1154761	0.00	15		0.00	15	113	0	9.40		1.81				0 0	0.91	
05 005000 c50	1342463	0.00	43	0	0.00	43	132	0	9.29		1.81		0			0.80	
_05_005000_c50_	1149985	0.00	25	0	0.00	25	118	0	11.20		1.36		0	0.00	0	0.83	2.81 0
၂၄	1349524	0.00	37	0	0.00	37	112	0	9.41	0	1200.00	_	0		0	12(	18.76 0
prob6_05_005000_c50_T6	1089063	0.00	39	0	0.00	39	51	0	9.30	0	0.70	0	0		0	0.55 0	1.26 0
prob6_05_005000_c50_T7	1090165	0.00	43	0	0.00	43	σı	0	9.38	0	0.63	0	0		0		1.32 0
prob6_05_005000_c50_T8	1343565	0.00	43	0	0.00	43	113	0	9.37	0	1.52		0				3.12 0
prob6_05_005000_c55_T1	1904847	0.00	1	0	0.00	1	94	0	10.42	0	0.36		0				0.75 0
Ι.	1266985	0.00	17	0	0.00	15	131	0	10.38	0	2.60		0		0	1.07	5.25 0
05_005000_c55_	1479472	0.00	15	0	0.00	23	92	0	10.25	0	1.90		0		0	0.78	3.83 0
prob6_05_005000_c55_T4	1266034	0.00	17	0	0.01	15	114	0	12.33	0	1.47	0	0				2.95 0
prob6_05_005000_c55_T5	1487682	0.00	21	0	0.00	21	106	0	10.40	0	1200.00	_	0			120	20.67 0
prob6_05_005000_c55_T6	1212572	0.00	39	0	0.00	39	ഗ	0	10.24	0	0.80	0	0				1.51 0
prob6_05_005000_c55_T7	1213799	0.00	43	0	0.00	43	ഗ	0	10.34	0	0.65	0	0		0		1.30 0
prob6_05_005000_c55_T8	1480699	0.00	15	0	0.00	23	87	0	10.33	0	1.61	0	0				3.25 0
prob6_05_010000_c45_T1	3399221	0.00		0	0.00		53	0	34.10	0	1.04	0	0	0.00	0		2.14 0
prob6_05_010000_c45_T2	2096915	0.00	7	0	0.00	7	50	0	34.11	0	5.22	0	0			1.86 0	10.69 0
prob6_05_010000_c45_T3	2425380	0.00	43	0	0.00	43	149	0	33.81	0	3.67	0	0	0.00	0	1.08	7.53 0
prob6_05_010000_c45_T4	2072180	0.01	47	0	0.01	47	206	0	40.69	0	3.53	0	0			1.64 0	7.20 0
prob6_05_010000_c45_T5	2437752	0.00	43	0	0.00	43	134	0	34.12	0	6.26	0	0	0.00		1.60 0	12.84 0
prob6_05_010000_c45_T6	1949280	0.00	39	0	0.00	39	5	0	33.81	0	1.64	0		0.00	0	0.93 0	3.38 0

644.38	0	18./5	0	0.05	C	2/6.38		1200.00	0	131	4/	0.08	С	4/	0.05	20/48512	prob6_05_100000_c45_14
		13.48		02	0	48		1200.00		135	43	0.03	0	43	0.02	24227812	05_100000
1159.21 0	0	45.01	0	0.01	0		_	1200.00	0	88	9	0.01	0	9	0.00	20849642	prob6_05_100000_c45_T2
95.50 0	0 0	17.00	0 0	0.00	0		_	1200.00	67 0	67	1	0.01	0	1	0.00	34035545	prob6_05_100000_c45_T1
26.51 0	0 0	2.20	0 0	0.00	0		0	169.12	0	106	43	0.01	0	43	0.00	5990366	prob6_05_020000_c55_T8
11.28 0	3 0	1.73	0		0		0	169.29	5 0		45	0.00	0	45	0.00	4930066	_05_020000_c55_
14.38 0	3 0	1.53	0		0		0	166.77	5		39	0.00	0	39	0.00	4925175	prob6_05_020000_c55_T6
331.72 0	0	1200.00				1200.00	0	167.26	0	161	43	0.01	0	43	0.01	5972391	ပြ
26.33 0	5 0	2.35	0 0		0		0	200.28	5 0	115	15	0.01	0	17	0.01	5138901	05
28.81 0	3 0	2.33	0 0		0		0	166.75	0 0	120	43	0.01	0	43	0.00	5985575	_05_
55.72 0	7 0	4.57	0 0		0		0	166.74	)3 0	193	29	0.01	0	29	0.00	5093438	prob6_05_020000_c55_T2
5.15 0	0	1.78	0	0.00	0		0	166.64	0	59		0.00	0		0.00	7631351	prob6_05_020000_c55_T1
24.99 0	0 0	2.00	0 0	0.00	0		0	153.73	1 0	111	43	0.01	0	43	0.00	5432530	05_
13.21 0	0 6	1.69	0 0	0.00	0		0	153.58	5 0		45	0.00	0	45	0.00	4427330	_05_
16.77 0	0	1.64	0		0		0	151.44	5 0		39	0.00	0	39	0.00	4422938	
301.86 0	0 1	1200.00	0 0		1	1200.00	0	151.35	5 0	145	43	0.01	0	43	0.01	5416658	_05_020000_c50_
24.97 0	3 0	2.43	0		0		0	181.83	67 0	167	43	0.01	0	43	0.00	4663064	_05_020000_c50_
27.14 0	0	2.2	0		0		0	151.44	õ 0	130	43	0.01	0	43	0.00	5428238	_05_020000_c50_
28.14 0	5 0	4.25	0 0		0		0	151.29	0	142	15	0.01	0	15	0.00	4641866	_05_
5.48 0	0 8	1.78	0 0	0.00	0		0	151.35	0	122	11	0.00	0	11	0.00	7237551	prob6_05_020000_c50_T1
24.06 0	0	2.00	0	0.00	0		0	138.21	0	106	43	0.01	0	43	0.00	4871794	prob6_05_020000_c45_T8
10.63 0	1 0	1.61	0 0		0		0	138.34	5 0		39	0.00	0	39	0.00	3924594	prob6_05_020000_c45_T7
10.98 0	0	2.2	0		0		0	136.14	5		39	0.00	0	39	0.00	3920701	prob6_05_020000_c45_T6
37.25 0	9	3.79	0	0.01	0	18.06	0	136.08	0	165	43	0.01	0	43	0.01	4858113	prob6_05_020000_c45_T5
22.01 0	0	2.93	0		0		0	163.63	0	149	45	0.02	0	45	0.01	4167747	prob6_05_020000_c45_T4
25.30 0	0	2.24	0		0		0	136.00	0	126	43	0.01	0	43	0.00	4868001	05_
32.76 0	9 0	4.79	0 0		0		0	136.05	32 0	8.	13	0.00	0	13	0.00	4177909	_05_
5.26 0	0	1.70	0		0	2.55	0	136.37	0	57		0.00	0	_	0.00	6806681	05
7.61 0	3 0	1.23	0		0		0	41.80	0	و	31	0.00	0	25	0.00	2982969	<u> </u> 25
3.17 0	0	0.72	0		0		0	41.89	<u>ი</u>		43	0.00	0	43	0.00	2450669	prob6_05_010000_c55_T7
3.70 0	0	0.79	0		0			41.44	5 0		39	0.00	0	39	0.00	2448239	_05_010000_c55_
83.57 0	0	3.5	0		_	1200.00	0	41.82	0	126	33	0.00	0	33	0.00	2996888	05 010000 c55
7.62 0	0	1.10	0		0		0	49.87	0	91	11	0.00	0	13	0.00	2556337	05_010000_c55
		1.22			0			41.42		110	31	0.00	0	25	0.00	2980539	05 010000 c55
		2.38			0			41.80		205	29	0.00	0	29	0.00	2555532	05 010000 c55 T
		0.63			0			41.80		54	_	0.00	0	_	0.00	3813666	05 010000 c55
		1.05			0			37.97		112	43	0.00	0	43	0.00	2705841	05 010000 c50
3.03 0		0.74			0			37.98			43	0.00	0	43	0.00	2200941	05 010000 c50
3.28 0		0.78			0		0	37.62			39	0.00	0	39	0.00	2198760	05_010000_c50_
13.39 0		1.69	0		0		0	37.99	0	121	43	0.00	0	43	0.00	2718008	05_010000
7.45 0		1.49	0		0		0	45.32		166	37	0.00	0	37	0.00	2319058	_05_010000_c50_
8.37 0	0	1.16	0		0		0	37.63	31 0	131	43	0.00	0	43	0.00	2703660	05_010000_c50_
12.77 0	0	2.10	0		0		0	37.95	) 0	103	11	0.00	0	11	0.00	2329193	05
2.25 0		0.75			0			38.05		55	_	0.00	0	_	0.00	3615433	05 010000 c50
		0.89		0.00 0	0			34.17		125	43	0.00	0	43	0.00	2427311	<u> </u> ဒြ
3.28 0	- 1	0.78	0		0			34.19	- 1		43	0.00	0	43	0.00	1951211	prob6_05_010000_c45_T7
time TL	e TL	time		time bes	7		7	time	s T	#cols	#nodes	time	7	#nodes	time	opt	Instance
DSS+DP	ヹ	DSS-4TH		FMT		DSS-1TH	$\square$	P		ω	Model M3			Model M1	Mod		

2.87 0	0	1.06	0	0.00	1.41 0	0	8.48	176 0	23	0.00	0	23	0.00	1041067	_10_005000_c45_T2	prob6
0.68 0			0	0.00		0	8.48		21	0.00		21	0.00	1698029	005000_c45	prob6_
200.00 1	0 120	36.03	0	0.03	200.00 1	1 120	1200.00	93 0	43	0.05	0	43	0.03	59677791	_05_200000_c55_T8	prob6_
1200.00 1	0 120	48.23	0	0.03	021.32 0	1 102	1200.00	5 0	45	0.03		45	0.02	49102391	_05_200000_c55_T7	prob6_
1200.00 1	0 120	34.76	0	0.02	1013.13 0	1 10	1200.00	50	39	0.01	0	39	0.02	49053379	655	prob6_
1200.00 1	0 120		0	0.03	200.00 1	1 12	1200.00	84 0	39	0.03		39	0.02	59614163	200000_c55_	prob6_
1200.00	0 120	48.16	0	0.07	200.00 1	1 12	1200.00	112 0	29	0.11		31	0.06	51200879		prob6
1200.00 1	0 120	37.56	0	0.02	200.00 1	1 12	1200.00	109 0	43	0.04	0	43	0.02	59629279	I .I	prob6_
1200.00 1	0 120	270.23	0 0	0.03	200.00 1	1 120	1200.00	291 0	29	0.07	0	29	0.03	50840679	_05_200000_c55_T2	prob6_
404.41 0	0 40	44.83	0	0.01	160.72 0	1 16	1200.00	74 0	_1	0.02	0	_	0.01	76340453	_05_200000_c55_T1	prob6_
1200.00 1	0 120	35.46	0	0.03	200.00 1	1 12	1200.00	92 0	43	0.05		43	0.03	54116337	_05_200000_c50_T8	prob6_
1200.00 1	0 120	44.26	0	0.02	1076.39 0	1 10	1200.00	50	39	0.01	0	39	0.02	44092437	_05_200000_c50_T7	prob6
1200.00 1	0 120	33.39	0	0.02	067.41 0	1 100	1200.00	<u>თ</u>	39	0.01		39	0.02	44048425	_05_200000_c50_T6	prob6_
200.00 1	0 120		0	0.03	200.00 1	1 12	1200.00	90 0	39	0.03		39	0.02	54059192	Ι.	prob6_
1200.00 1	0 120	61.56	0	0.03	200.00 1	1 12	1200.00	118 0	43	0.06		43	0.03	46479725		prob6
1200.00 1	0 120	35.75	0 0	0.03	200.00 1	1 12	1200.00	103 0	43	0.05	0	43	0.03	54073025	_05_200000_c50_T3	prob6_
200.00 1	0 120	180.23	0	0.03	200.00 1	1 12	1200.00	236 0	21	0.06	0	21	0.02	46326647	_05_200000_c50_T2	prob6
393.85 0	0 39	43.88	0	0.01	157.26 0	1 1:	1200.00	74 0		0.02	0	1	0.01	72387771	_05_200000_c50_T1	prob6_
1200.00 1	0 120	34.11	0	0.03	200.00 1	1 120	1200.00	102 0	43	0.06	0	43	0.03	48524881	_05_200000_c45_T8	prob6_
1200.00 1	0 120	39.63	1 0	0.02	1139.89 0	1 11:	1200.00	5 0	39	0.01		39	0.02	39082481	_05_200000_c45_T7	prob6_
1200.00 1	0 120	287.79	1 0	0.02	030.64 0	1 103	1200.00	5 0	39	0.01	0	39	0.02	39043470	_05_200000_c45_T6	prob6_
1200.00 1	0 120	39.82	0	0.03	200.00 1	1 12	1200.00	153 0	43	0.05	0	43	0.02	48473792	_05_200000_c45_T5	prob6_
1200.00 1	0 120	52.58	0	0.06	200.00 1	1 120	1200.00	61	43	0.07	0	43	0.05	41538770	_05_200000_c45_T4	prob6
1200.00 1	0 120		0	0.03	200.00 1	1 120	1200.00	118 0	43	0.06		43	0.03	48486870	05_200000_c45_T3	prob6_
200.00	0 120	197.00	0	0.03	200.00 1	1 120	1200.00	177 0	33	0.04		33	0.03	41685687	_05_200000_c45_T2	prob6_
393.62 0	0 39	51.40	0	0.01	158.50 0	1 1:	1200.00	72 0		0.02	0	_	0.01	68061246	05_200000_c45_T1	prob6
910.05 0	0 91	14.59	0	0.02	395.00 0	33	1200.00	104 0	43	0.03	0	43	0.02	29816051	_05_100000_c55_T8	prob6
423.56 0	0 42	15.30	0 0	0.01	188.29 0	1 18	1200.00	5 0	43	0.01	0	43	0.01	24524651	_05_100000_c55_T7	prob6_
414.92 0	0 41	11.71	1 0	0.01	184.65 0	1 18	1200.00	5 0	39	0.01		39	0.01	24500167	_05_100000_c55_T6	prob6_
914.18 0	0 91		0	0.05	395.66 0	<u>م</u> 3	1200.00	147 0	43	0.08	0	43	0.05	29804919	_05_100000_c55_T5	prob6
820.04 0	0 82	22.16	0 0	0.04	348.66 0	1 3.	1200.00	116 0	29	0.06	0	31	0.03	25575605	_05_100000_c55_T4	prob6_
894.44 0	0 89	14.82	0 0	0.02	383.86 0	1 38	1200.00	117 0	43	0.03	0	43	0.02	29791767	_05_100000_c55_T3	prob6_
200.00	0 120	60.18	0	0.02	673.68 0	1	1200.00	290 0	29	0.04	0	29	0.02	25427449	_05_100000_c55_T2	prob6_
69.09 0	0	14.71	0	0.00	29.22 0		1200.00	71 0	1	0.01	0	_	0.00	38169768	_05_100000_c55_T1	prob6_
839.34 0	0 83	13.90	0	0.02	359.63 0	1 3:	1200.00	88 0	43	0.03	0	43	0.02	27038875	_05_100000_c50_T8	prob6_
461.23 0	0 46	11.33	0 0	0.01	204.03 0	1 20	1200.00	5 0	41	0.01		41	0.01	22022675	_05_100000_c50_T7	prob6
486.67 0	0 48	11.22	<u>1</u> 0	0.01	214.77 0	1 2	1200.00	5 0	39	0.01		39	0.01	22000690		prob6_
850.80 0	0 85	15.14	0	0.01	356.44 0	1 3:	1200.00	94 0	39	0.01	0	39	0.01	27027970	_05_100000_c50_T5	prob6_
805.01 0	0 80	18.98	0	0.02	341.35 0	<sub>-</sub> 2	1200.00	142 0	43	0.03		43	0.01	23217770	_05_100000_c50_T4	prob6_
852.31 0	0 85	13.97	0	0.02	366.03 0	1 3	1200.00	116 0	43	0.03	0	43	0.02	27017190		prob6
200.00	0 120	44.00	0 0	0.01	532.75 0	1 5;	1200.00	136 0	11	0.02	0	11	0.01	23170257	_05_100000_c50_T2	prob6_
68.47 0	0		0	0.00	28.77 0		1200.00	66 0		0.01	0	1	0.00	36195681	_05_100000_c50_T1	prob6
801.90 0	0 80	13.24	0 0	0.02	345.69 0	1 3.	1200.00	107 0	43	0.03	0	43	0.02	24246801	_05_100000_c45_T8	prob6
382.97 0	0 38	9.90	0	0.01	169.23 0	1	1200.00	50	43	0.01	0	43	0.01	19520701	_05_100000_c45_T7	prob6_
427.93 0	0 42	10.45	1 0	0.01	188.68 0	1 18	1200.00	5 0	39	0.01	0	39	0.01	19501212	_05_100000_c45_T6	prob6_
823.30 0	0 82	16.12	0	0.01	349.47 0	ئ 7	1200.00	92 0	39	0.01		39	0.01	24235561	_05_100000_c45_	prob6_
time TL	7	l .I	st TL	time best	time TL	7	time .	#cols TL	#nodes #	time	7	#nodes	time	opt	ice	Instance
DSS+DP	DS	DSS-4TH		FMT	DSS-1TH	DS	DР		Model M3			Model M1	Mo			
						1										

٥	7.03	0	1.10	C	0.01	c.	c	3.40	0	42.19	_	108	203	0.01	C	263	0.01	2980305	probe_10_010000_c55_18
0	2.50		0.91	0	0.01	0.0		1.21				10	933	0.01	0	933	0.02	2452365	_10_010000_c55_
0	2.8		1.04	0	01	0	0	1.36		41.72		10	923	0.01		923	0.02	2449927	_10_010000
0	83.89	0	3.82	0	01 1	0.01	_	1200.00	0	42.18	0	225	711	0.01	0	709	0.04	2996891	prob6_10_010000_c55_T5
0	4.69	0	1.25	0	0.00 0	0.	0	2.28	0	50.29	0	194	27	0.01	0	33	0.00	2557163	prob6_10_010000_c55_T4
0	9.34	0	1.4.	0	0.01 1	0.	0	4.55	0	41.80	0	190	259	0.01	0	251	0.01	2984127	_10_010000_c55_
0	14.76	0 8	3.18	0	0.00 0	0.	0	7.17	0	42.17	0	125	21	0.00	0	21	0.00	2563342	prob6_10_010000_c55_T2
3 0	1.83	0 8	0.78	0	0.00 0	0.	0	0.88	3 0	42.18	0	185	21	0.00	0	21	0.00	3813668	_10_
3 0	4.13	1 0	1.11	0	0.00 0	0.	0	2.00	ŝ 0	38.26	0	136	23	0.00	0	21	0.00	2719929	prob6_10_010000_c50_T8
0	2.54	3	0.83	0	0.01 1	0.	0	1.20	0	38.39	0	10	929	0.01	0	929	0.02	2252429	prob6_10_010000_c50_T7
0	3.09	0	0.96	0	0.01 1	0.	0	1.49	0	37.89	0	10	923	0.01	0	923	0.02	2250192	prob6_10_010000_c50_T6
0	22.49	0	7.31	0	00	0.	0	10.97	0	38.32	0	201	65	0.01	0	55	0.00	2730152	prob6_10_010000_c50_T5
0	7.84	3 0	1.93		0.02 0	0.	0	3.79	0	45.71	0	725	679	0.20	0	671	0.02	2320378	prob6_10_010000_c50_T4
0	4.92	3 0	1.33	0	0.00 0	0.	0	2.38	0	37.89	0	145	23	0.00	0	21	0.00	2717692	prob6_10_010000_c50_T3
9 0	4.79	3 0	1.43	0	0.00 0	0.	0	2.32	0	38.36	0	185	25	0.00	0	25	0.00	2331531	prob6_10_010000_c50_T2
0	2.1	0	0.68	0	00 C	.0	0	1.05	0	38.32	0	92		0.00	0	_	0.00	3615436	prob6_10_010000_c50_T1
3 0	6.83	0 0	1.10	0	0.01 1	0.	0	3.31	0	34.39	0	188	231	0.01	0	219	0.01	2444199	prob6_10_010000_c45_T8
0	2.6	7 0	0.97	0	01 1	0.	0	1.25	0	34.50	0	10	949	0.01	0	949	0.02	2002699	prob6_10_010000_c45_T7
0	2.7.	0	1.04	0	0.01 1	.0	0	1.32	0	34.07	0	10	923	0.01	0	923	0.02	2000712	prob6_10_010000_c45_T6
3 0	68.48	0 1	1200.00	0	01 1	0.	_	1200.00	0	34.50	0	243	637	0.01	0	621	0.04	2452397	prob6_10_010000_c45_T5
0	2.1:	0	1.34	0	0.00 0	0.	0	1.02	0	41.10	0	166	21	0.00	0	21	0.00	2093617	prob6_10_010000_c45_T4
0	8.9	0	1.32	0	0.01 1	.0	0	4.33	0	34.15	0	221	229	0.01	0	211	0.01	2442212	prob6_10_010000_c45_T3
0	8.84	0	1.81	0	0.00	0.	0	4.32	0	34.44	0	213	37	0.00	0	37	0.00	2098233	prob6_10_010000_c45_T2
0	1.9	0	0.6	0	0.00 0	0.	0	0.92	0	34.46	0	92		0.00	0	_	0.00	3399224	prob6_10_010000_c45_T1
0	2.9	0	0.74	0	01 1	0.		1.42	0	10.43	0	178	267	0.00	0	251	0.01	1481446	prob6_10_005000_c55_T8
0	1.03	0	0.53	0	01 1	0.	0	0.49	0	10.43	0	10	923	0.00	0	923	0.01	1214146	prob6_10_005000_c55_T7
0	1.21	7 0	0.57	0	01 1	0.	0	0.59	0	10.30	0	10	923	0.00	0	923	0.01	1212920	prob6_10_005000_c55_T6
0	4.29	5 0	1.05	0	0.01 1	0.	0	2.10	0	10.40	0	186	223	0.00	0	223	0.01	1489754	
7 0	2.7	0	0.9	0	00 C	0.	0	1.35	0	12.40	0	160	21	0.00	0	31	0.00	1267218	prob6_10_005000_c55_T4
0	3.2	0	0.8	0	0.00 1	0.	0	1.61	0	10.3	0	186	263	0.00	0	251	0.01	1480220	prob6_10_005000_c55_T3
9	2.0	0	0.82	0	0.00 0	0.	0	1.03	0	10.38	0	87	15	0.00	0	15	0.00	1271494	prob6_10_005000_c55_T2
3 0	0.4	8 0	0.28	0	0.00 0	0.	0	0.23	0	10.38	0	156	21	0.00	0	21	0.00	1904850	prob6_10_005000_c55_T1
0	2.7:	0	0.69	0	0.00	0.	0	1.31	0	9.47	0	140	29	0.00	0	27	0.00	1349160	prob6_10_005000_c50_T8
7 0	1.2	5 0	0.55	0	0.01 1	0.	0	0.60	7	9.47	0	10	925	0.00	0	925	0.01	1115260	_10_005000_c50_
0	1.11	9	0.49	0	0.01 1	.0	0	0.54	0	9.35	0	10	923	0.00	0	923	0.01	1114133	
7 0	2.57	0	1.00	0	01	0.	0	1.31	0	9.43	0	133	21	0.01	0	21	0.01	1357039	_10_005000_c50_
3	2.7:	<u>0</u>	0.95		0.01 0	0.		1.33		11.26		520	471	0.13		465	0.01	1150019	10_005000_c50
0	2.35	0	0.71	0	0.00 0	.0	0	1.17	0	9.37	0	146	29	0.00	0	27	0.00	1348033	10 005000 c50
0	3.6	<u>0</u>	1.09		0.00 0	.0	0	1.78	0	9.44	0	155	21	0.00	0	21	0.00	1156210	5
0	0.81	<u>ი</u>	0.46	0	0.00 0	.0	0	0.39	0	9.44	0	150	21	0.00	0	21	0.00	1805976	prob6_10_005000_c50_T1
0	2.19	0	0.70	0	0.00 1	.0	0	1.06	<u>-</u>	8.51	0	184	231	0.00	0	217	0.01	1212624	prob6_10_005000_c45_T8
0	1.16	0	0.55	0	0.01 1	0.	0	0.56	0	8.50	0	10	941	0.01	0	941	0.01	991624	prob6_10_005000_c45_T7
7 0	1.17	0	0.51	0	0.01 1	.0	0	0.59	0	8.40	0	10	923	0.00	0	923	0.01	990623	_10_005000_c45_
0	16.98	0	1.02	0	0.00 1	.0	_	1200.00	0	8.48	0	215	207	0.00	0	189	0.01	1219499	prob6_10_005000_c45_T5
0	1.32	6 0	0.66	0	00	.0	0	0.65		10.13	0	153	21	0.00	0	21	0.00	1037463	prob6_10_005000_c45_T4
0	2.82	- 1	0.75	- 1		.0	- 1	1.37	0	8.40	0	208	219	0.00	0	193	0.01	1211723	prob6_10_005000_c45_T3
JL	time	e TL	time	7	time best	tir	7	time	_	time	7	#cols	#nodes	time	7	#nodes	time	opt	Instance
Ť	DSS+DP	로	DSS-4TH	_	FMT		I	DSS-1TH		무		<b></b>	Model M3		4	Model M1	Moc	_	

322.04 0	.17 0	19.	0	0.08	0	145.86	1	1200.00	0	10	923	0.07	0	923	0.17	24504095	prob6_10_100000_c55_T6
730.11 0		21.07	1 0	0.17	0	318.55	1	1200.00	0	325	931	0.16	0	931	0.32	29817497	prob6_10_100000_c55_T5
645.87 0	.98 0	12.98	0	0.07	0	273.51	_	1200.00	0	238	295	0.53	0	301	0.06	25579583	_10_100000_c55_
633.05 0	.54 0	17.54	<u> </u>	0.11	0	272.29	_	1200.00	0	206	931	0.10	0	931	0.23	29800095	prob6_10_100000_c55_T3
907.24 0	.82 0	38.82	0	0.01	0	385.65	_	1200.00	0	125	15	0.01	0	15	0.01	25489074	0
122.56 0	. 19 0	14.19	0	0.01	0	51.68	_	1200.00	0	125	_	0.01	0	_	0.01	38169772	prob6_10_100000_c55_T1
679.24 0		22.53	<u> </u>	0.08	0	293.21	_	1200.00	0	194	597	0.07	0	583	0.13	27158991	_10_100000
538.33 0		10.28	<u> </u>	0.09	0	237.79	_	1200.00	0	10	933	0.08	0	933	0.17	22526391	_10_100000_c50_
532.57 0	.52 0	43.52	<u> </u>	0.07	0	233.05	_	1200.00	0	10	923	0.07	0	923	0.16	22503904	_10_100000_c50_
721.68 0	.48 0	44.48	1 0	0.05	0	311.44	1	1200.0C	0	186	327	0.04	0	317	0.11	27156129	_10_1
594.66 0	.40 0	14.40	0 0	0.17	0	252.36	1	1200.0C	0	507	931	1.18	0	931	0.16	23218906	_10_100000
712.21 0	.07 0	21.07	1 0	0.08	0	307.49	1	1200.0C	0	225	589	0.08	0	563	0.15	27136604	prob6_10_100000_c50_T3
1106.12 0	.34 0	32.34	0 0	0.03	0	466.70	1	1200.00	0	440	61	0.07	0	61	0.02	23170259	prob6_10_100000_c50_T2
124.96 0	.56 0	16.56	0	0.01	0	52.59	_	1200.0C	0	129	_	0.01	0		0.01	36195684	prob6_10_100000_c50_T1
597.34 0	.44 0	13.44	<u> </u>	0.10	0	259.00	_	1200.0C	0	170	933	0.09	0	933	0.20	24393717	prob6_10_100000_c45_T8
368.66 0	.39	20.39	<u> </u>	0.09	0	163.57	_	1200.0C	0	10	943	0.08	0	943	0.17	20024417	_10_100000_c45_
351.24 0	65 0	22.65	<u> </u>	0.08	0	155.49	_	1200.0C	0	10	923	0.07	0	923	0.16	20004426	١.,١
682.17 0	19.79 0	19.	0	0.13	0	297.58	_	1200.00	0	382	933	0.12	0	933	0.30	24391475	prob6_10_100000_c45_T5
242.13 0	7.61 0	7.	0	0.03	0	107.54	_	1200.00	0	188	21	0.03	0	35	0.02	20935386	prob6_10_100000_c45_T4
642.64 0	15.32 0	15.	1 0	0.10	0	277.99	1	1200.00	0	221	933	0.10	0	933	0.22	24373926	prob6_10_100000_c45_T3
1009.52 0	.24 0	37.24	0 0	0.08	0	421.27	1	1200.00	3 0	673	189	0.13	0	189	0.07	20849644	prob6_10_100000_c45_T2
122.81 0	.92 0	13.	0	0.01	0	51.76	_	1200.00	0	120	_	0.01	0	_	0.01	34035549	prob6_10_100000_c45_T1
23.29 0	2.16 0	2	<u> </u>	0.02	0	10.94	0	169.19	0	189	813	0.02	0	813	0.05	5994070	prob6_10_020000_c55_T8
7.85 0	1.65 0		0	0.02	0	3.75	0	169.21	0	10	929	0.02	0	929	0.04	4931770	prob6_10_020000_c55_T7
7.86 0	1.88 0	  -	0	0.02	0	3.80	0	167.85	0	10	923	0.01	0	923	0.03	4926879	prob6_10_020000_c55_T6
333.85 0	.00	1200.00	1 0	0.03	_	1200.00	0	167.61	0	303	875	0.03	0	875	0.09	5976217	_ _0_
24.29 0	.10 0	2.	0 0	0.01	0	11.70	5 0	202.35	0	264	83	0.05	0	87	0.01	5140843	prob6_10_020000_c55_T4
26.81 0	2.48 0	2.	1 0	0.02	0	12.85	0	167.91	0	224	813	0.02	0	813	0.06	5989179	_10_020000_c55_
20.48 0	.41 0	51	0	0.00	0	9.80	0	167.68	0	116	15	0.00	0	15	0.00	5112447	
6.43 0	1.74 0	_	0	0.00	0	3.06	0	167.67	0	215	21	0.01	0	21	0.00	7631357	prob6_10_020000_c55_T1
	2.15 0	2	0	0.01	0	10.95		153.72	0	171	75	0.01	0	73	0.01	5460318	
7.16 0	1.82 0	_	0	0.02	0	3.46	0	153.87	0	10	931	0.02	0	931	0.04	4530018	10 020000 c50
8.20 0	1.75 0	_	<u> </u>	0.02	0	3.97	0	152.37	0	10	923	0.01	0	923	0.03	4525528	10 020000 c50
30.66 0	3.86 0	ω	0	0.01	0	14.87	0	152.91	0	229	57	0.01	0	49	0.01	5443200	10 020000 c50
		2	0	0.06	0	11.21		183.50	0	854	931	0.37	0	931	0.05	4665206	10 020000 c50
		2	0	0.01	0	13.85		152.49		203	75	0.01	0	73	0.01	5455828	10 020000 c50
		ω	0	0.00	0	8.54		152.25		237	25	0.01	0	25	0.00	4648404	10 020000 c50
		_	0	0.00	0	2.83		152.39		101	_	0.00	0	_	0.00	7237558	10 020000 c50
		_	<u> </u>	0.02	0	10.26	0	138.35	0	199	737	0.02	0	729	0.05	4904882	10_020000
8.23 0		_	<u> </u>	0.02	0	3.96	0	138.26	0	10	945	0.02	0	945	0.03	4027282	10_020000_c45_
8.88 0		_	<u> </u>	0.02	0	4.22	0	137.27	0	10	923	0.01	0	923	0.03	4023291	_10_020000_c45_
38.94 0	3.43 0	<u>ω</u>	<u> </u>	0.03	0	18.46	0	137.03	0	351	835	0.03	0	835	0.09	4889733	10_020000
14.12 0	4.67 0	4.	0	0.01	0	6.83	0	165.29	0	228	43	0.01	0	43	0.01	4207153	
26.79 0	2.32 0	2	<u> </u>	0.02	0	12.67	0	137.07	0	236	725	0.02	0	725	0.06	4900991	10 020000 c45
		4			0	10.74		136.93		186	23	0.00	0	23	0.00	4184438	6
6.22 0	- 1	_			0	- 1	- 1	137.02	0	101	_	0.00	0	_	0.00	6806688	prob6_10_020000_c45_T1
time TL	time TL	ŧ	st TL	time best	ᅻ	time 7	귿	time	7	#cols	#nodes	time	ᅻ	#nodes	time	opt	Instance
DSS+DP	4TH	DSS-4TH		FMT		DSS-1TH		DP		ω	Model M3			e M1	Model M1		

		Model M1	<b>Z</b>		Model M3		PP	DSS-1TH	_	FMT	1	DSS-4TH	DSS+DP
Instance	opt	time	#nodes TL	time	#nodes	#cols TL	Ð	TL time	7	time best	st TL	time TL	time TL
prob6 10 100000 c55 T7	24528580				937	- 1			0				270.79 0
[5]	29824380	0.20		0.10	931		1200.00	1 263.93	0	0.11	1 0		
_10_200000_c45_	68061252	0.02	1 0	0.03	_	133 0	1200.00	1 165.78	0	0.02	0		400.37 0
_10_	41699198	0.26	349 0	0.39	349		1200.00	1 1200.00		0.28	0 0		1200.00 1
prob6_10_200000_c45_T3	48794232	0.39	933 0	0.19	933	216 0	1200.00	1 1023.48	0	0.21	0	45.48 0	1200.00 1
prob6_10_200000_c45_T4	41910744	0.08	47 0	0.14	31	201 0	1200.00	1 282.09	0	0.09	0	54.79 0	637.57 0
_10_200000_c45_	48762308	0.49	931 0	0.19	931	282 0	1200.00	1 1200.00		0.21	0	51.82 0	1200.00 1
_10_200000_c45_	40056632	0.33	923 0	0.15	923	10 0	1200.00	1 503.57	0	0.17	0	68.87 0	1108.80 0
prob6_10_200000_c45_T7	40096654	0.33	939 0	0.16	939	10 0	1200.00	1 550.81	0	0.17	1 0	37.41 0	1200.00 1
prob6_10_200000_c45_T8	48833854	0.37	933 0	0.18	933	184 0	1200.00	1 1061.70	0	0.20	0	44.84 0	1200.00 1
prob6_10_200000_c50_T1	72387776	0.02	1 0	0.03	1	142 0	1200.00	1 159.07	0	0.02	0 0	50.00 0	387.99 0
prob6_10_200000_c50_T2	46340582	0.07	91 0	0.20	91	563 0	1200.00	1 1200.00	_	0.08	0	108.97 0	1200.00 1
prob6_10_200000_c50_T3	54326387	0.27	571 0	0.15	581	225 0	1200.00	1 1200.00	_	0.16	0	80.15 0	1200.00 1
prob6_10_200000_c50_T4	46484184	0.30	937 0	2.40	937	509 0	1200.00	1 1012.56	0	0.32	0	57.53 0	1200.00 1
prob6_10_200000_c50_T5	54293461	0.49	923 0	0.16	923	171 0	1200.00	1 1200.00	_	0.18	0	78.71 0	1200.00 1
prob6_10_200000_c50_T6	45061587	0.34	923 0	0.15	923	10 0	1200.00	1 663.88	0	0.17	0	80.21 0	1200.00 1
prob6_10_200000_c50_T7	45106610	0.34	939 0	0.16	939	10 0	1200.00	1 705.69	0	0.17	0	125.85 0	1200.00 1
prob6_10_200000_c50_T8	54371310	0.25	575 0	0.14	585	173 0	1200.00	1 1196.91	0	0.16	0	80.59 0	1200.00 1
_10_200000_c55_	76340458	0.01	1 0	0.02	ا		1200.00	1 175.19	. 0	0.01			427.43 0
prob6_10_200000_c55_12	50982456	0.01	15 0	0.03	15	136 0	1200.00	1 1200.00	_	0.01	0	115.45 0	1200.00 1
_10_200000_c55_	59656147	0.40		0.18	931		1200.00	1 1200.00		0.20	0 0		1200.00 1
_10_200000_c55_	71601719	0.75	395 0	1.38	40/		1200.00	1 1200.00	<u></u>	0.15	C		1200.00
_10_200000_c55_	59621035	0.53		0.29	931		1200.00	1 1200.00	<u> </u>	0.32	0		1200.00 1
2	49066147	0.35	923 0	0.16	923		1200.00	1 694.87	c	0.18	0		1200.00 1
_10_200000_c55_1	49115167	0.35		0.18	941		1200.00	1 786.63	0	0.20	0	36.21 0	1200.00 1
000000	39/0466/	0.38	931	0.20	93		1200.00	-	0 0	0.22	) <u>-</u>		20.00
000000	4 19700	0.0		0.0	ی د		14.00	20.01	0 0	0.0		04:0	20.00
	432869	0.0		0.0	ა დ	7 0	14.94		0 0	0.00			29.90
, 008 020000	301050	0.00	7 (	0.00	ى د		1 20 4		0	0.00	Τ		20 00 00 00 00 00 00 00 00 00 00 00 00 0
prob7 005 020000_04	385505	0.00	7 .	0.00		0 N	13.99	0 33.57	0 0	0 00	) c	2.47	28.41
005	431174	0.00	<u>ნ</u>	0.01	ω		14.90		0	0.00			30.19 0
_005_020000	423984	0.01	7 0	0.02	_	2 0	14.43	0 24.76	0	0.01	0	2.36 0	29.12 0
prob7_005_020000_08	397527	0.00	7 0	0.02		2 0	14.20	0 26.89	0	0.00	0	2.40 0	28.52 0
prob7_005_020000_09	386706	0.00	7 0	0.01	_1	2 0	13.96	0 33.90	0	0.00	0	2.49 0	28.19 0
prob7_005_020000_10	421926	0.00	7 0	0.01	5	13 0	14.58	0 25.46	0	0.00	0 0	6.46 0	29.51 0
prob7_005_050000_01	971246	0.01	7 0	0.01	5	11 0	87.79	0 211.86	0	0.01	0 0	14.62 0	179.36 0
prob7_005_050000_02	1005145	0.00	7 0	0.05	1	2 0	89.23	0 240.87	0	0.00	0 0	12.81 0	181.43 0
_0005_050000_	998014	0.03	5 0	0.04	3	7 0	90.27	0 201.06	0	0.03	0 0	10.45 0	183.48 0
_005_050000_	1087340	0.01	7 0	0.02		2 0	91.60	0 267.08	0	0.01	0	10.76 0	187.57 0
_005_	1001602	0.01	7 0	0.04		2 0	88.91	0 240.02	0	0.01		11.16 0	184.12 0
_005_050000_	973009	0.00	7 0	0.01	1	2 0	88.59	0 252.29	0	0.00	0	17.51 0	178.51 0
prob7_005_050000_07	1090982	0.01	7 0	0.04	5	13 0	91.66	0 225.25	0	0.01	0 0	45.40 0	186.74 0
prob7_005_050000_08	1057582	0.01	5 0	0.01	3	6 0	91.97	0 176.68	0	0.01	0	10.96 0	188.68 0
prob7_005_050000_09	1055007	0.02	7 0	0.10	5	13 0	92.94	0 171.22	0	0.02	0 0	41.99 0	190.66 0
prob7_005_050000_10	1121358	0.01	7 0	0.03	5	13 0	93.91	0 209.53	0	0.01	0	37.77 0	195.16 0
	-						-			•		-	-

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Instance	opt	time	#nodes TL	time #	#nodes	#COIS IL		IL IIMe	Z	time b	best TL	time TL	time TL
prob7_005_100000_01	1951694		7 0		5			10					7:
005_100000	2069231	0.02	7 0	0.14	<u>0</u> 1		367.62			0.02	0		761.75
005_100000	2209462	0.00	7 0	0.03	5	13 0	376.01		3 0	0.00			
_005_	1977496	0.01	7 0	0.14	5	13 0	354.10	0 1063.49	9 0	0.01	0 0	202.99 0	
prob7_005_100000_05	1974066	0.01	7 0	0.10		2 0	356.00	0 1200.00	_1	0.01	0	40.97 0	
_005_	2113075	0.01	7 0	0.15	5	13 0	369.26	0 890.54	0	0.02	0	229.97 0	
_005_	2055338	0.01	5 0	0.10	З	7 0	361.69	0 982.60	0	0.01	0	39.62 0	
_005_	1985161	0.01	7 0	0.06	1	2 0	355.77	0 1200.00	1	0.01	0	55.51 0	
prob7_005_100000_09	2148811	0.01	7 0	0.04	1	2 0	366.08	0 1029.97	7 0	0.01	0 0	44.25 0	758.70 0
prob7_005_100000_10	2178242	0.01	5 0	0.23	3	6 0	375.32	0 1153.65	5 0	0.01	0 0	33.23 0	) 769.13 0
prob7_010_020000_01	468189	0.00	7 0	0.01		2 0	15.17	0 33.15	0	0.00	0	2.27 0	30.49 0
prob7_010_020000_02	390019	0.00	7 0	0.01		2 0	14.58	0 32.32	0	0.00	0	2.05 0	
prob7_010_020000_03	455422	0.00	7 0	0.00		2 0	15.10	0 31.99	0	0.00	0	2.27 0	30.38 0
prob7_010_020000_04	360121	0.00	7 0	0.01	_	2 0	14.22	0 36.97	7 0	0.00	0	2.12 0	
010	363318	0.01	7 0	0.02			14.24			0.01		2.73 0	28.72
010_020000	420366	0.01	7 0	0.01			14.69			0.01			29.66
prob7 010 020000 08	442530	0.00	7 0	0.03		0 0	14.91	0 31.97	0 0	0.00	00	2.10	
010	352096	0.00	5 O	0.01	_	2 0	14.14			0.00			28.56
1 1	436820	0.00	7 0	0.02	_	2	14.91	0 33.30	0	0.00	0	2.05 0	
prob7_010_050000_01	1034239	0.01	7 0	0.08	_	2 0	92.45	0 237.74	0	0.01	0	8.60 0	188.71 0
prob7_010_050000_02	1012061	0.01	7 0	0.03	_		93.46	0 255.22	0	0.01	0		
_010_050000	891878	0.00	7 0	0.05			89.25			0.00	0	8.67 0	184.94
010	1108640	0.01	0 0	0.03	_		94.10			0.01	Г		193.49
_010_050000	1102360	0.00		0.12	1 -	200	93.91			0.00			191.59
010_050000	1024116	0.02	15	0.06	1 ~		92.67			0.02			188.57
_010_050000	983184	0.01	11	0.02	, O		91.25			0.01			186.61
010_050000	1055100	0.00	1 ~	0.04			93.03			0.00			189.62
	1090171	0.00	1 >	0.00			40.46			0.0			191.10
010_050000	7736400	0.00	7 >	0.01	<u>_</u>	) N	94.30		2 د	0.00	Т		779.01
	1955976	0.01	7 ~	0.75	<u> </u>		3/7.49		\	0.01	Т		7/5.09
prob/_010_100000_02	2110183	0.0	7 >	0.27	<u> </u>	) N	37063	0 1200.00	ے د	0.0		29.47	781 63 0
l l	2253336	0.01	7 0	0.11			378.64			0.01		42.83 0	774.91
010	2193806	0.01	7 0	0.06			375.41	_		0.01	0		791.54
_010_100000	2033242	0.02	15 O	0.12	7	23 0	370.56	0 850.97	7 0	0.02	0	81.15 0	
prob7_010_100000_07	1936794	0.03	15 0	0.10	7	21 0	365.01	0 905.89	0	0.04	0	84.52 0	753.34 0
	2242901	0.03		0.09	_		379.07	_		0.03			783.34
_010_	1970978	0.00	<u>ი</u>	0.15	ω		368.38		0	0.00			755.86
_010_100000	2246774	0.01		0.09		2 0	377.82	12		0.01			779.76
020000	421250	0.00		0.01	ω		14.94			0.00			30.16
prob7_020_020000_02	432142	0.00	19 0	0.02	9	17 0	15.07	0 17.42	0	0.00		2.70 0	
	407299	0.00		0.04	9		14.86			0.00			29.84
prob7_020_020000_04	457713	0.00	19 0	0.05	15		15.33			0.00	0		
020	412749	0.00	19 0	0.08	13	41 0	14.82				0		29.95
prob7_020_020000_06	412370	0.00	5 0	0.01	c	9	14.88	0 22.55	0	0.00	0	2.40 0	30.00 0

794.97	С	46.46	0	0.03	0	756.51	С	385.66	0	23	9	0.18	С	27	0.03	2278947	prob7_030_100000_02
		59.59	0	0.11						86	91	0.65	0	103	0.10	2297805	030_100000
194.40 0		13.66	0	0.01	0	135.82	0	95.31	0	64	57	0.07	0	89	0.01	1102331	prob7_030_050000_10
192.77 0	0	9.78	0 0	0.00	0	152.74	0	94.12	9 0	29	19	0.07	0	19	0.00	1033244	prob7_030_050000_09
192.40 0	0	13.81	0	0.01	0	163.95	0	93.75	0	69	39	0.07	0	57	0.01	1039124	prob7_030_050000_08
189.00 0	0	17.01	0		0		0	92.51	3 0	33	23	0.11	0	47	0.03	948697	prob7_030_050000_07
193.35 0	0	14.72	0	0.01 (	0		0	95.05	0	25	11	0.15	0	27	0.01	1113060	prob7_030_050000_06
196.08 0	0	13.19	0		0		0	95.54	0	30	13	0.09	0	35	0.01	1108646	prob7_030_050000_05
189.19 0	0	12.44	0 0	0.01 (	0		0	92.61	0	42	27	0.52	0	43	0.01	978670	prob7_030_050000_04
197.99 0	0	14.00	0 0	0.01 (	0		0	96.62	8 0	18	9	0.05	0	21	0.01	1192247	prob7_030_050000_03
189.85 0	0	15.93	0 0		0		0	92.51	0	54	45	0.54	0	67	0.02	962910	_030_050000
189.65 0	0	16.89	0		0	164.81	0	94.10	0	35	23	0.14	0	47	0.01	959820	prob7_030_050000_01
29.84 0	0	3.34	0 0	0.01 (	0	21.04	0	14.70	0	65	57	0.07	0	89	0.01	384471	prob7_030_020000_10
29.66 0	0	3.56	0 0	0.02 (	0	22.42	0	14.70	0 0	50	27	0.13	0	53	0.01	380039	prob7_030_020000_09
31.23 0	0	2.68	0 0	0.00 (	0	20.48	0	15.37	0 0	20	9	0.01	0	13	0.00	478644	prob7_030_020000_08
30.43 0	0	2.94	0 0		0		0	15.09	3 0	33	13	0.04	0	35	0.00	433753	prob7_030_020000_07
30.73 0	0	2.81	0 0	0.01 (	0	22.14	0	15.17	0	32	19	0.04	0	29	0.01	448030	prob7_030_020000_06
30.57 0	0	3.09	0	0.01 (	0		0	15.15	7 0	57	27	0.04	0	53	0.01	442951	prob7_030_020000_05
30.64 0	0	2.69	0 0	0.00	0		0	15.07	0	10	3	0.02	0	19	0.00	430130	prob7_030_020000_04
30.72 0	0	2.73	0 0	0.00	0		0	15.19	0	24	9	0.03	0	23	0.00	456030	prob7_030_020000_03
30.08 0	0	3.53	0	0.01	0		0	14.94	0	36	23	0.11	0	57	0.01	392381	prob7_030_020000_02
29.83 0	0	3.31	0 0	0.02 (	0	21.28	0	14.75	0	41	27	0.04	0	57	0.02	392246	prob7_030_020000_01
773.85 0	0	53.20	0	0.04 (	0	607.53	0	375.95	0	21	9	0.15	0	21	0.03	2058046	prob7_020_100000_10
776.70 0	0	30.42	0	0.00	_	782.96	0	374.11	0	19	9	0.13	0	9	0.00	2012186	prob7_020_100000_09
769.91 0	0	51.70	0	0.01	0		0	373.06	0	33	13	0.16	0	3	0.01	1984264	prob7_020_100000_08
778.02 0	0	56.30	0	0.01	0		0	377.56	0	18	11	0.10	0	15	0.01	2089108	prob7_020_100000_07
777.92 0	0	29.27	0		0		0	374.20	7 0	17	7	0.09	0	15	0.01	2058756	prob7_020_100000_06
793.03 0	0	24.83	0 0	0.03 (	0		0	391.17	0	30	17	0.13	0	27	0.03	2362366	prob7_020_100000_05
790.94 0	0	41.97	0		0		0	385.13	0	26	13	0.15	0	27	0.04	2329562	prob7_020_100000_04
795.94 0	0	48.39			0		0	383.80	0	21	1	0.22	0	21	0.02	2270088	020_
762.54 0	0	26.57	0		0		0	371.84	0	9	ω	0.58	0	11	0.01	1965657	_020_
756.59 0	0	47.91	0		0		0	371.18	0	21	11	0.18	0	19	0.04	1895297	020
191.23 0	0	16.48	0		0		0	93.68	0	54	23	0.21	0	29	0.03	1023709	020
		16.50	П					92.72	0	21	11	0.08		23	0.01	975801	020
		12.38	$\neg$					95.23		46	21	0.09		27	0.01	1103569	020 050000
		15.46						93.33		40	19	0.27		27	0.01	1033028	020
		8.44						95.22		14	51	0.02		9 5	0.00	1122735	020
		15 83						92 16		40	19	0 22		29	0 00	975985	020 050000
		8.26						93.84		12	5	0.03		15	0.01	1013162	020
190.82 0		15.01	0		0		0	93.58		39	19	0.15		29	0.01	1024371	020 050000
188.70 0		13.10	0		0		0	92.10		24	1	0.04		21	0.01	96086	020
196.07 0	0	12.87	0	0.01	0		0	96.17	0	25	9	0.08	0	19	0.01	1158869	prob7_020_050000_01
29.55 0	0	3.01	0		0		0	14.70	3	23	9	0.03	0	19	0.00	388688	020
30.27 0	0	2.17	0	0.00	0		0	14.99	0	9	ω	0.02	0	⇉	0.00	429419	prob7_020_020000_09
		2.27	0					15.18	9		ω	0.02		15	0.00	462858	020 020000
30.08 0	- 1	3.05			0			14.80	- 1	5	23	0.05	0	29	0.01	410650	prob7 020 020000 07
time TL	7	time	$\dashv$	time best		time TL	7	time	s T	#cols	#nodes	time	7	#nodes	time	opt	Instance
DSS+DP		DSS-4TH		FMT		DSS-1TH	$\dashv$	무			Model M3		$\dashv$	Model M1	Mod		

01.20	c	4.97	Г	4		24.24		14.0	10	201	0.02			700	0.04	412011	hion, _ 100_050000_00
	0	4 07			ا د			15.00				9 !	7 6	60	100	770747	100 02000
	0	8 08	Т		0			15.00			50	42 92		67993	2 30	398324	100 020000
30.46 0	0	7.29	0	0.10	0		0	15.09	181 0	1615 18		0.66	<u>က်</u> ဝ	1835	0.09	415559	prob7 100 020000 06
30.16 0	0	7.92	0		0	26.08	0	14.92	261 0	7445 26	_	10.52	0 7	17647	0.63	390812	prob7_100_020000_05
30.50 0	0	7.23	0		0	21.90 (	0	15.13	238 0	8745 2:		11.63	37 0	8987	0.34	423663	prob7_100_020000_04
30.16 0	0	7.31				24.10 (	0	14.95	143 0	659 1,		0.72	0	951	0.06	392367	prob7_100_020000_03
30.40 0	0	7.30	0	0.19 (	0	22.36 (	0	15.07	257 0	3189 2		5.44	0	3619	0.19	415213	prob7_100_020000_02
30.39 0	0	6.46	0				0	15.14	129 0	1105 12		0.97	0	1225	0.05	426560	prob7_100_020000_01
799.62 0	0	50.72	0		0	863.54 (	0	382.52	59 0	57	0.32	0	0	101	0.04	2224005	prob7_050_100000_10
784.67 0	0	57.92	0		0	704.88 (	0	379.08	131 0	577 1:		13.68	0	629	0.17	2058780	prob7_050_100000_09
769.95 0	0	51.40			0	758.61 (	0	375.24	69 0			0.49	67 0	167	0.08	1949055	prob7_050_100000_08
805.25 0		29.98	0			896.09	0	391.23	68 0			0.41	<u>ين</u>	155	0.10	2385433	prob7_050_100000_07
791.99 0		53.86		0.07	0		0	385.88	64 0		2.33	2	۶۲ 0	137	0.06	2284372	prob7_050_100000_06
799.07 0		53.28	0		0		0	382.66	72 0			0	0	159	0.07	2163980	Ι.
810.56 0		35.84			0		0	387.91	69 0				0	119	0.05	2391988	prob7_050_100000_04
791.91 0		53.71	0		0		0	386.03	58 0			0.51	25	125	0.08	2276826	prob7_050_100000_03
789.14 0	0	56.89	0	0.09 (	0	724.40 (	0	382.12	118 0	195 1	6.39	6.	71 0	271	0.09	2165291	prob7_050_100000_02
775.85 0	0	48.28	0		0		0	377.60	59 0				07	107	0.04	2030765	prob7_050_100000_01
193.90 0	0	18.47	0		0	166.44 (	0	94.67	108 0	179 10	0.85	0	0	255	0.05	1034630	prob7_050_050000_10
190.77 0	0	16.11	0	0.04 (	0		0	93.47	111 0		0.16	0.	33	183	0.03	969059	prob7_050_050000_09
191.81 0	0	16.34	0	0.06	0	152.05 (	0	94.04	91 0	113		0.	0	201	0.05	1002859	prob7_050_050000_08
192.60 0	0	16.14	0		0		0	94.03	124 0	313 1;		0.1	75 0	375	0.07	998553	prob7_050_050000_07
195.50 0		13.26	0		0		0	95.60	47 0			0.08	75 0	7	0.02	1118083	prob7_050_050000_06
193.31 0		14.38		0.02	0		0	95.07	36 0			0.	75 0	7	0.01	1041654	prob7_050_050000_05
190.98 0		15.79	0		0	152.63	0	93.13	106 0	261 10		<u>.</u>	77 0	307	0.03	975593	prob7_050_050000_04
195.09 0		13.22			0		0	95.49	55 0			0.25	7 0	101	0.01	1109911	1
192.41 0		14.40	0	0.02	0	148.27 (	0	93.54	64 0	57		0.77	7 0	127	0.02	982857	prob7_050_050000_02
194.89 0	0	17.55	0		0	148.02 (	0	95.26	200 0		0.93 7	0.5	23 0	823	0.11	1057478	prob7_050_050000_01
30.24 0	0	4.38	0		0	21.49 (	0	14.98	102 0	111 10	0.19 1	0.	0	159	0.02	397759	prob7_050_020000_10
31.28 0	0	3.72	0	0.02	0	16.62	0	15.49	71 0	153	0.10	0.	0	189	0.02	479183	prob7_050_020000_09
30.30 0	0	3.67	0 0	0.03	0	16.39	0	15.0C	136 0	207 1:		0.	0 7	237	0.03	437764	prob7_050_020000_08
29.99 0	0	4.24	0		0		0	14.86	115 0			0.64	0	209	0.01	391658	prob7_050_020000_07
30.57 0	0	4.05	0		0		0	15.19	0 69			0.09	0	101	0.02	428801	_050_
30.51 0	0	3.47			0		0	15.13	33 0			.0	59 0	(J)	0.01	441932	050
	0	3.39			0		0	15.18	32 0			.0	43 0	4	0.00	446281	050
30.83 0	0	3.29	0		0		0	15.21	64 0			0	0	125	0.01	455095	050
		4.41		0.02	0			15.03	112 0			0	33	183	0.02	401036	050
30.42 0	0	4.18	0		0		0	15.00	116 0	205 1		0.58	0	247	0.02	411813	prob7 050 020000 01
782.04 0	0	47.12	0		0		0	377.81	21 0			0.42	27 0	N	0.01	2078266	prob7_030_100000_10
779.62 0	0 7	55.85	0		0	744.91 (	0	377.92	64 0	51		0.47	73 0	7	0.06	2084666	prob7_030_100000_09
773.69 0	0 7	56.10	0 0	0.01	0	978.41 (	0	377.38	37 0	19	30	0.30	21 0	2	0.01	2016873	prob7_030_100000_08
776.73 0	0 7	58.13	0	0.08	0	734.11 (	0	376.90	102 0	141 10	1.29 1		55 0	15	0.07	2010141	prob7_030_100000_07
796.20 0	0 7	45.83	0 0	0.03 (	0	930.62	0	385.32	22 0	11 :	0.37	0.	39 0	G	0.03	2270263	prob7_030_100000_06
793.85 0	0 7	29.23	0	0.02	0	989.29 (	0	386.34	24 0	11	0.15	0.	31 0	ω	0.02	2375740	prob7_030_100000_05
800.34 0	3	40.03	0		0		0	386.60	62 0	43	0.20	0.	49 0	4	0.03	2353310	_030100000
785.94 0		- 1			0	- 1		380.34	46 0			0		6	0.03	2166161	prob7 030 100000 03
time TL	ฮ	time T	7	time best	1-	time TL	ᄅ	time	ปร TL	des #cols		time	)TL	#nodes	time	opt	Instance
DSS+DP	0	DSS-4TH		FMT		DSS-1TH	$\perp$	무		Model M3	Mode			Model M1	Мо	_	

796.71 0	1000		2	307 00	<u>&gt;</u>	726.82	<u>م</u> 0	380.98	533	412124	1200.29	_	7574835	1200.00	2028666	prob7_200_100000_04
	0 796	89.64	0	312.87 C	0	822.03	4 0	382.94	405 0	2113731	1166.79	0	2114781	300.74	2149788	prob7_200_100000_03
788.09 0	0 788	86.94		28.35 C	0	736.93	9 0	385.49	304 0	164003	330.56	0	165199	27.40	2192351	prob7_200_100000_02
781.38 0	0 781			388.27 2	0		8 0	376.28	451 1	71670	1200.32	0	4457917	673.14	1976104	prob7_200_100000_01
196.76 0	0 196	35.32		100.31 2	0	165.33	5 0	96.95	451 1	818622	1200.28	_	14545199	1200.00	1126485	prob7_200_050000_10
197.98 0	0 197				0		1 0	96.41	321 1	123355	1200.30	0	557601	43.36	1151445	_200_
194.72 0	0 194	38.74			0		7 0	96.07	425 1	267769	1200.29	0	2360757	190.66	1065220	prob7_200_050000_08
194.85 0	0 194			97.92 2	0		1 0	94.61	631 1	1075760	1200.33	0	10488147	945.96	1019807	prob7_200_050000_07
93.81 0	0 193	39.61		25.28 0	0	172.49	0 0	95.20	404 0	295151	248.78	0	296401	24.23	1041622	prob7_200_050000_06
192.41 0	0 192	39.11	0		0	171.27	0	94.40	325 0	393479	886.00	0	394545	37.63	1035424	prob7_200_050000_05
194.66 0	0 194	40.46		98.31 2	0	163.84	9 0	95.19	360 1	193068	1200.30	0	1574155	149.14	1068536	prob7_200_050000_04
194.43 0		44.85	0	39.79 0	0	175.62	1 0	94.51	399 1	193078	1200.31	0	395009	38.47	1005399	prob7_200_050000_03
199.03 0	0 199	29.70			0	192.99	6 0	97.06	378 1	130201	1200.33	0	328401	27.88	1168262	prob7_200_050000_02
193.99 0	0 193	41.69	0	98.08 2	0	180.45	5 0	94.85	500 1	586969	1200.28	0	1312415	117.03	1035865	prob7_200_050000_01
30.34 0	0 30	18.41	0	15.54 2	0	37.83	1 0	15.01	426 0	1573186	939.56	0	1575135	67.84	400661	prob7_200_020000_10
30.34 0	0 30		0		0		<u> </u>	15.01	368 0	1179893	338.01	0	1181371	43.99	398560	prob7_200_020000_09
30.37 0	0 30		0	15.61 2	0	33.51	9 0	15.09	443 1	1240957	1200.28	0	2622687	104.66	413897	prob7_200_020000_08
30.77 0	0 30	12.48		2.41 C	0		7 0	15.2	229 0	67695	139.48	0	68767	2.34	441650	prob7_200_020000_07
31.00 0	0 31	12.39		15.79 2	0		3 0	15.3	266 1	287776	1200.29	0	394385	16.16	450464	prob7_200_020000_06
30.39 0	0 30		0		0		0	15.0	433 1	741956	1200.29	0	6292799	260.03	409258	prob7_200_020000_05
30.88 0	0 30	11.54	0	6.41 0	0		6 0	15.3	298 0	164025	171.97	0	164735	6.22	451402	prob7_200_020000_04
30.97 0	0 30	12.36		10.15 0	0		0	15.3	312 0	278617	113.93	0	279659	9.81	449032	prob7_200_020000_03
30.56 0	0 30				0		2 0	15.12	423 1	462253	1200.29	0	9438141	343.75	425898	prob7_200_020000_02
30.80 0					0		3 0	15.2	321 1	498984	1200.29	0	4260847	149.18	417950	prob7_200_020000_01
794.70 0	7		0		0	(0	2 0	386.2	85 0	189	3.19	0	335	0.10	2306890	prob7_100_100000_10
793.68 0				1.51 0	0		8 0	382.48	244 0	9219	19.01	0	9449	1.45	2148693	prob7_100_100000_09
796.87 0	0 796	57.91			0	710.37	8	383.98	70 0	189	4.03	0	331	0.08	2237177	prob7_100_100000_08
784.57 0	0 784		0		0		8	380.18	225 0	3129	110.02	0	3483	0.74	2106103	_100_
.44 0	0 811.44	62.99		0.83 0	0		4 0	386.2	164 0	4593	51.40	0	4831	0.79	2291957	prob7_100_100000_06
796.19 0	0 796	64.12	0	0.32 0	0	704.96	ω 0	383.13	175 0	803	8.60	0	1085	0.30	2187775	prob7_100_100000_05
797.46 0	0 797	60.18	0	0.35 0	0	874.29	7 0	385.8	125 0	1279	13.95	0	1535	0.33	2283814	prob7_100_100000_04
776.15 0	0 776	66.85	0	2.79 0	0	713.14	6 0	378.06	235 0	17377	34.37	0	17807	2.69	1983074	prob7_100_100000_03
793.91 0	0 793	60.54	0	0.26 0	0	869.15	5 0	388.75	147 0	781	5.16	0	975	0.24	2288990	prob7_100_100000_02
777.01 0	0 777			2.61 0	0		4 0	378.04	260 0	16687	14.36	0	17143	2.57	2015845	prob7_100_100000_01
195.13 0	0 195		0	0.36 0	0	160.16	0	95.64	182 0	2591	7.65	0	2991	0.34	1084050	prob7_100_050000_10
194.25 0	0 194			0.09 0	0		1 0	95.11	99 0	513	3.27	0	725	0.09	1051017	_100_
					0	_	0 0	94.60	305 0	12349	38.11	0	12683	1.24	1023375	100
194.07 0	0 194		0	0.96 0	0		8	94.78	276 0	10295	53.13	0	10585	0.92	1048472	100
197.11 0					0		ω 0	97.03	145 0	777	4.09	0	875	0.12	1187270	100
197.56 0	0 197	19.40			0	137.68	ω 0	97.03	152 0	791	1.94	0	877	0.12	1182603	100_
192.10 0	0 192		0	0.03 0	0	147.45	o 0	93.8	84 0	153	1.27	0	309	0.03	982534	prob7_100_050000_04
99.26 0	0 199	20.12		0.64 0	0	147.89	5 0	97.05	221 0	6149	106.63	0	6263	0.62	1176729	prob7_100_050000_03
191.98 0				1.00 0	0	,	5	94.15	269 0	10273	46.38	0	10579	0.97	992839	prob7_100_050000_02
193.94 0	0 193	20.26			0	1	4 0	94.84	153 0	785	5.69	0	967	0.14	1080007	prob7_100_050000_01
30.22 0	0 30		0	0.43 0	0	25.77	7 0	14.97	277 0	10343	45.34	0	10525	0.42	392096	prob7_100_020000_10
30.66 0					0			15.16	241 0	10307	38.51	0	10567	0.45	440242	prob7_100_020000_09
time TL	۲ ti	time T	7	time best	7	time 1	e TL	time	#cols TL	#nodes #	time	ฮ	#nodes	time	opt	Instance
DSS+DP	DSS	DSS-4TH		FMT	4	DSS-1TH		무		Model M3		_	Model M1	Мо		

		Mod	Model M1			Model M3			무		DSS-1TH		FMT		DSS-4TH	DSS+DP
Instance	opt	time	#nodes TI	_	time	#nodes	#cols TI	_	time 1	٦.	time 1	٦.	time best	٦T	time TL	time TL
prob7_200_100000_05	2167402	27.42	165451	0	1200.29	144633	338		383.57	0	745.69	0	28.39 0	0	86.32 0	793.17 0
prob7_200_100000_06	2237772	26.83	165259	0	957.26	163933	278 (		385.80	0	680.53	0	27.73 0	0	90.69 0	805.23 0
prob7_200_100000_07	2088163	9.04	50393	0	908.92	49377	309 (		380.91	0	724.03	0	9.37 0 (	0	92.95 0	787.12 0
prob7_200_100000_08	2053461	1200.00	8063513	_	1200.29	1154985	486	_	380.99	0	747.81	0	394.65 2	0	96.52 0	785.58 0
prob7_200_100000_09	2268727	360.73	2360485	0	1200.28	82479	394	_	386.87	0	741.57	0	372.19 0	0	83.62 0	794.42 0
proh7 200 100000 10	2388148	<u>م</u> 4 م	25205	ر	105 00	24571	155	_	38088	2	800 43	$\supset$	4 76 O	0	63 03 0	81206 0