

instance	N	%	MINOBSx			CaMML		
			% feasible	% sat	t	% feasible	% sat	t
<b>cancer</b> 5 variables 10 parameters	250	10 / 5	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	4.0 / 3.9
		25 / 10	100 / 100	100 / 100	0.1 / 0.0	100 / 96.7	100 / 98.9	4.1 / 4.0
		50 / 15	100 / 100	100 / 100	0.1 / 0.1	96.7 / 100	99.2 / 100	4.2 / 4.3
		100 / 20	100 / 100	100 / 100	0.1 / 0.0	100 / 100	100 / 100	4.2 / 4.2
	1000	10 / 5	100 / 100	100 / 100	0.1 / 0.1	96.7 / 100	96.7 / 100	3.8 / 3.6
		25 / 10	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	3.8 / 3.8
		50 / 15	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	4.2 / 4.0
		100 / 20	100 / 100	100 / 100	0.0 / 0.0	100 / 100	100 / 100	4.1 / 3.8
<b>earthquake</b> 5 variables 10 parameters	250	10 / 5	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	4.2 / 4.3
		25 / 10	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	4.3 / 4.5
		50 / 15	100 / 100	100 / 100	0.1 / 0.0	100 / 100	100 / 100	4.4 / 4.1
		100 / 20	100 / 100	100 / 100	0.1 / 0.0	100 / 100	100 / 100	4.5 / 4.1
	1000	10 / 5	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	3.8 / 3.9
		25 / 10	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	3.8 / 3.9
		50 / 15	100 / 100	100 / 100	0.1 / 0.0	100 / 100	100 / 100	4.0 / 3.8
		100 / 20	100 / 100	100 / 100	0.0 / 0.0	100 / 100	100 / 100	4.3 / 4.0
<b>survey</b> 6 variables 21 parameters	250	10 / 5	100 / 100	100 / 100	0.2 / 0.1	100 / 100	100 / 100	4.7 / 4.6
		25 / 10	100 / 100	100 / 100	0.3 / 0.1	100 / 100	100 / 100	5.0 / 4.6
		50 / 15	100 / 100	100 / 100	0.2 / 0.1	93.3 / 96.7	99.0 / 99.4	4.9 / 4.4
		100 / 20	100 / 100	100 / 100	0.1 / 0.1	100 / 100	100 / 100	4.9 / 4.4
	1000	10 / 5	100 / 100	100 / 100	0.1 / 0.1	96.7 / 96.7	98.3 / 98.9	4.3 / 4.2
		25 / 10	100 / 100	100 / 100	0.2 / 0.1	96.7 / 96.7	99.17 / 99.3	4.6 / 4.4
		50 / 15	100 / 100	100 / 100	0.1 / 0.1	93.3 / 93.3	99.0 / 98.9	4.5 / 4.2
		100 / 20	100 / 100	100 / 100	0.1 / 0.1	100 / 96.7	100 / 99.6	4.7 / 4.1
<b>asia</b> 8 variables 18 parameters	250	10 / 5	100 / 100	100 / 100	1.1 / 0.5	100 / 100	100 / 100	5.8 / 5.4
		25 / 10	100 / 100	100 / 100	1.3 / 0.5	100 / 100	100 / 100	6.3 / 5.5
		50 / 15	100 / 100	100 / 100	0.9 / 0.3	100 / 100	100 / 100	6.8 / 5.9
		100 / 20	100 / 100	100 / 100	0.5 / 0.2	100 / 100	100 / 100	8.3 / 5.7
	1000	10 / 5	100 / 100	100 / 100	0.9 / 0.4	100 / 100	100 / 100	5.5 / 5.0
		25 / 10	100 / 100	100 / 100	1.1 / 0.4	100 / 100	100 / 100	6.0 / 5.3
		50 / 15	100 / 100	100 / 100	0.7 / 0.3	100 / 96.7	100 / 99.7	6.3 / 5.6
		100 / 20	100 / 100	100 / 100	0.4 / 0.2	100 / 100	100 / 100	7.3 / 5.6
<b>sachs</b> 11 variables 178 parameters	250	10 / 5	100 / 100	100 / 100	2.0 / 1.0	100 / 100	100 / 100	7.0 / 6.2
		25 / 10	100 / 100	100 / 100	3.5 / 0.8	100 / 93.3	100 / 99.4	7.4 / 6.1
		50 / 15	100 / 100	100 / 100	4.3 / 0.8	100 / 100	100 / 100	8.4 / 6.4
		100 / 20	100 / 100	100 / 100	2.3 / 0.7	16.7 / 100	96.2 / 100	10.3 / 6.1
	1000	10 / 5	100 / 100	100 / 100	1.6 / 1.0	80.0 / 83.3	93.3 / 97.2	6.2 / 5.9
		25 / 10	100 / 100	100 / 100	2.5 / 0.8	30.0 / 60.0	87.8 / 94.8	7.2 / 6.0
		50 / 15	100 / 100	100 / 100	2.9 / 0.6	23.3 / 50.0	90.0 / 96.9	8.1 / 6.2
		100 / 20	100 / 100	100 / 100	2.2 / 0.6	0 / 70.0	95.5 / 98.5	9.9 / 6.3

Table 1: Results for small networks, with ancestral constraints only (first number in each pair) and with various constraints (second number in each pair).  $N$  is number of observations, % is the fixed percentage used to sample constraints, % feasible is the percentage of cases where the solution satisfied *all* constraints imposed, % sat is the percentage of satisfied constraints out of those constraints imposed,  $t$  is the running time required by the program. Highlighted cells indicate that not all constraints were able to be satisfied.

instance	$N$	%	Missing	Extra	Reversed	SID	Score (BDeu)
<b>cancer</b> 5 variables 10 parameters	250	0*	1.8	0.2	0.8	9.2	0%
		10 / 5	1.4 / 1.0	0.3 / 0.2	0.5 / 0.5	6.1 / 4.8	0.1% / 0.1%
		25 / 10	0.8 / 1.1	0.3 / 0.2	0.3 / 0.5	3.6 / 5.2	0.2% / 0.2%
		50 / 15	0.7 / 0.6	0.5 / 0.3	0.3 / 0.3	3.3 / 3.3	0.3% / 0.3%
		100 / 20	0.2 / 0.8	0.3 / 0.2	0.0 / 0.3	0.5 / 4.0	0.4% / 0.2%
	1000	0*	0.8	0.0	0.5	4.3	0%
		10 / 5	0.7 / 0.6	0.1 / 0.0	0.5 / 0.4	4 / 3.1	0.0% / 0.0%
		25 / 10	0.5 / 0.5	0.2 / 0.1	0.3 / 0.5	2.6 / 3.4	0.1% / 0.0%
		50 / 15	0.3 / 0.3	0.1 / 0.1	0.1 / 0.1	1.0 / 1.4	0.1% / 0.1%
		100 / 20	0.0 / 0.4	0.0 / 0.0	0.0 / 0.3	0 / 2.3	0.1% / 0.1%
<b>earthquake</b> 5 variables 10 parameters	250	0*	0.8	1.0	1.5	8.7	0%
		10 / 5	0.6 / 0.4	1.0 / 1.0	0.6 / 0.3	4.2 / 2.7	0.2% / 0.3%
		25 / 10	0.4 / 0.6	0.9 / 1.0	0.2 / 0.5	1.7 / 3.9	0.3% / 0.3%
		50 / 15	0.4 / 0.3	1.2 / 1.1	0.3 / 0.2	1.9 / 2.3	0.5% / 0.7%
		100 / 20	0.2 / 0.4	1.2 / 1.2	0.0 / 0.2	0.2 / 2.1	0.7% / 0.6%
	1000	0*	0.0	0.5	0.3	1.5	0%
		10 / 5	0.0 / 0.0	0.4 / 0.3	0.1 / 0.0	0.6 / 0	0.0% / 0.0%
		25 / 10	0.0 / 0.0	0.3 / 0.3	0.0 / 0.0	0 / 0.3	0.0% / 0.0%
		50 / 15	0.0 / 0.0	0.3 / 0.5	0.0 / 0.1	0 / 0.9	0.0% / 0.1%
		100 / 20	0.0 / 0.0	0.3 / 0.3	0.0 / 0.0	0 / 0	0.0% / 0.1%
<b>survey</b> 6 variables 21 parameters	250	0*	4.5	0.0	0.5	15.5	0%
		10 / 5	3.6 / 3.1	0.8 / 0.4	0.6 / 0.6	13.1 / 12.2	0.4% / 0.4%
		25 / 10	2.8 / 2.8	1.4 / 0.2	0.5 / 0.1	11.7 / 8.9	0.7% / 0.5%
		50 / 15	2.4 / 2.8	1.5 / 0.6	0.5 / 0.1	9.1 / 9.7	1.0% / 0.7%
		100 / 20	2.5 / 2.1	2.0 / 0.7	0.0 / 0.3	6.2 / 8.0	1.2% / 1.0%
	1000	0*	3.5	0.0	1.3	16.3	0%
		10 / 5	2.8 / 2.3	1.0 / 0.4	1.3 / 1.1	15.9 / 13.5	0.1% / 0.1%
		25 / 10	2.7 / 2.5	1.1 / 0.3	0.3 / 0.3	10.1 / 8.3	0.1% / 0.1%
		50 / 15	2.6 / 2.5	1.4 / 0.6	0.2 / 0.2	8.2 / 8.7	0.2% / 0.2%
		100 / 20	2.7 / 1.7	1.8 / 0.5	0.0 / 0.4	6.8 / 8.5	0.2% / 0.3%
<b>asia</b> 8 variables 18 parameters	250	0*	1.5	1.7	1.0	12.2	0%
		10 / 5	1.4 / 1.4	1.6 / 1.6	0.7 / 0.9	10.3 / 11.1	0.0% / 0.0%
		25 / 10	1.2 / 1.4	1.8 / 1.6	0.5 / 0.6	7.2 / 8.9	0.1% / 0.1%
		50 / 15	1.0 / 0.8	2.0 / 1.4	0.3 / 0.4	4.3 / 4.4	0.2% / 0.3%
		100 / 20	0.5 / 0.7	1.7 / 1.1	0.0 / 0.2	1.8 / 3.9	0.3% / 0.3%
	1000	0*	0.8	0.3	1	9.0	0%
		10 / 5	0.7 / 0.8	0.4 / 0.4	0.9 / 1.1	7.3 / 9.0	0.0% / 0.0%
		25 / 10	0.4 / 0.5	0.5 / 0.3	0.4 / 0.8	4.2 / 6.4	0.0% / 0.0%
		50 / 15	0.2 / 0.3	0.4 / 0.4	0.0 / 0.5	0.4 / 3.6	0.0% / 0.0%
		100 / 20	0.0 / 0.2	0.3 / 0.3	0.0 / 0.4	0 / 3.1	0.0% / 0.0%
<b>sachs</b> 11 variables 178 parameters	250	0*	6.5	1.0	5.3	48.0	0%
		10 / 5	6.0 / 5.0	0.8 / 0.5	3.5 / 3.4	36.2 / 34.7	0.2% / 0.4%
		25 / 10	5.5 / 4.5	0.6 / 0.3	2.6 / 1.7	33.4 / 24.8	0.3% / 0.6%
		50 / 15	4.9 / 3.9	0.3 / 0.2	1.4 / 1.5	24.5 / 22.0	0.5% / 0.9%
		100 / 20	3.2 / 3.5	0.0 / 0.0	0.0 / 0.8	15 / 16.2	0.9% / 0.8%
	1000	0*	1.5	0.0	6.0	30.5	0%
		10 / 5	1.3 / 1.1	0.0 / 0.0	4.1 / 3.7	22.2 / 20.7	0.0% / 0.0%
		25 / 10	1.1 / 0.5	0.0 / 0.0	3.4 / 1.8	20.7 / 13.8	0.0% / 0.1%
		50 / 15	0.9 / 0.8	0.0 / 0.0	2.6 / 2.2	15.9 / 13.6	0.1% / 0.1%
		100 / 20	0.5 / 0.5	0.0 / 0.0	0.0 / 1.4	1.5 / 10.4	0.1% / 0.1%

Table 2: Results for small networks, with ancestral constraints only (first number in each pair) and with various constraints (second number in each pair). We report the number of missing arcs, extra arcs, reversed arcs, and the *structural intervention distance* (?) between the learned network and ground truth network. We also report the percentage difference between the BDeu score of the learned network and the baseline (0\*% row) BDeu score of the optimal network when no side constraints are imposed.

instance	N	%	MINOBSx			CaMML		
			% feasible	% sat	t	% feasible	% sat	t
<b>child</b> 20 variables 230 parameters	500	10 / 5	100 / 100	100 / 100	11.2 / 7.2	100 / 100	100 / 100	66.8 / 58.4
		25 / 10	100 / 100	100 / 100	29.9 / 7.3	100 / 100	100 / 100	86.0 / 62.4
		50 / 15	100 / 100	100 / 100	37.8 / 4.1	100 / 100	100 / 100	120.6 / 64.6
		100 / 20	100 / 100	100 / 100	26.1 / 5.1	66.7 / 100	99.5 / 100	197.6 / 64.6
	2000	10 / 5	100 / 100	100 / 100	9.4 / 6.7	100 / 100	100 / 100	61.0 / 55.1
		25 / 10	100 / 100	100 / 100	19.1 / 6.0	100 / 100	100 / 100	83.7 / 59.7
		50 / 15	100 / 100	100 / 100	25.7 / 3.0	100 / 100	100 / 100	115.6 / 60.6
		100 / 20	100 / 100	100 / 100	20.4 / 3.2	100 / 100	100 / 100	180.2 / 60.1
<b>insurance</b> 27 variables 984 parameters	500	10 / 5	100 / 100	100 / 100	180.5 / 104.9	50.0 / 70.0	95.9 / 99.0	439.5 / 325.3
		25 / 10	100 / 100	100 / 100	318.9 / 56.5	56.7 / 50.0	98.0 / 98.9	723.9 / 385.0
		50 / 15	100 / 100	100 / 100	328.7 / 52.8	30.0 / 33.3	98.5 / 98.1	1165.6 / 485.2
		100 / 20	100 / 100	100 / 100	292.5 / 37.4	0 / 53.3	98.1 / 99.6	2052.3 / 571.7
	2000	10 / 5	100 / 100	100 / 100	124.0 / 88.3	0 / 53.3	78.8 / 98.1	438.5 / 309.8
		25 / 10	100 / 100	100 / 100	236.3 / 49.6	16.7 / 23.3	92.4 / 96.8	748.6 / 393.2
		50 / 15	100 / 100	100 / 100	251.5 / 48.2	3.3 / 10.0	94.4 / 96.6	1175.2 / 487.9
		100 / 20	100 / 100	100 / 100	233.1 / 33.4	0 / 10.0	95.6 / 98.8	1956.8 / 571.1
<b>water</b> 32 variables 10083 parameters	1000	10 / 5	100 / 100	100 / 100	436.5 / 236.0	86.7 / 100	99.3 / 100	2740.5 / 2138.4
		25 / 10	100 / 100	100 / 100	987.1 / 265.2	80.0 / 43.3	99.5 / 99.0	4934.6 / 2782.8
		50 / 15	100 / 100	100 / 100	1083.2 / 166.0	46.7 / 30.0	99.2 / 98.9	8499.3 / 3239.0
		100 / 20	100 / 100	100 / 100	1015.1 / 87.9	16.7 / 30.0	99.3 / 99.1	15299.3 / 3967.5
	4000	10 / 5	100 / 100	100 / 100	358.9 / 232.5	30 / 63.3	92.2 / 98.9	2912.2 / 2153.3
		25 / 10	100 / 100	100 / 100	788.7 / 169.2	10.0 / 10.0	94.5 / 98.4	5081.3 / 2725.6
		50 / 15	100 / 100	100 / 100	901.6 / 139.2	6.7 / 3.3	95.3 / 97.7	8325.3 / 3377.0
		100 / 20	100 / 100	100 / 100	934.6 / 62.0	0 / 0	98.5 / 97.6	15341.1 / 4210.0
<b>mildew</b> 35 variables 540150 parameters	8000	10 / 5	100 / 100	100 / 100	193.8 / 754.7	0 / 0	26.9 / 75.6	2134.2 / 1442.0
		25 / 10	100 / 100	100 / 100	632.1 / 334.2	0 / 0	29.4 / 86.5	3906.5 / 1835.7
		50 / 15	100 / 100	100 / 100	943.3 / 321.0	0 / 0	40.3 / 88.2	7336.1 / 2215.0
		100 / 20	100 / 100	100 / 100	1085.4 / 309.7	0 / 0	54.4 / 89.8	12649.3 / 2572.5
	32000	10 / 5	100 / 100	100 / 100	181.6 / 353.0	0 / 0	19.4 / 77.8	2553.9 / 1664.6
		25 / 10	100 / 100	100 / 100	471.6 / 266.2	0 / 0	19.4 / 87.7	4763.4 / 1983.3
		50 / 15	100 / 100	100 / 100	702.2 / 210.2	0 / 0	24.0 / 88.0	8546.6 / 2462.6
		100 / 20	100 / 100	100 / 100	761.0 / 264.8	0 / 0	28.2 / 92.3	17148.3 / 2400.38
<b>alarm</b> 37 variables 509 parameters	1000	10 / 5	100 / 100	100 / 100	954.0 / 160.9	86.7 / 96.7	99.4 / 99.9	2423.0 / 1736.6
		25 / 10	100 / 100	100 / 100	1893.2 / 316.9	76.7 / 90.0	99.5 / 99.9	4070.2 / 2019.4
		50 / 15	100 / 100	100 / 100	1627.7 / 185.1	73.3 / 100	99.5 / 100	6753.0 / 2263.7
		100 / 20	100 / 100	100 / 100	1207.2 / 147.3	83.3 / 100	99.9 / 100	12377.2 / 2692.7
	4000	10 / 5	100 / 100	100 / 100	602.3 / 115.3	70.0 / 83.3	97.2 / 99.7	2314.6 / 1705.3
		25 / 10	100 / 100	100 / 100	1336.8 / 224.7	86.7 / 86.7	99.3 / 99.9	3807.8 / 1988.3
		50 / 15	100 / 100	100 / 100	1438.2 / 133.3	90.0 / 100	99.8 / 100	6268.1 / 2163.7
		100 / 20	100 / 100	100 / 100	1195.6 / 116.5	50.0 / 80.0	99.0 / 99.8	11169.0 / 2581.8
<b>barley</b> 48 variables 114005 parameters	2000	10 / 5	100 / 100	100 / 100	2321.4 / 5866.8	0 / 0	70.3 / 89.3	19824.8 / 11666.1
		25 / 10	100 / 100	100 / 100	4228.9 / 2941.3	0 / 0	74.4 / 93.6	37034.3 / 14864.9
		50 / 15	100 / 100	100 / 100	7163.0 / 3518.9	0 / 0	73.9 / 95.0	70433.0 / 20339.2
		100 / 20	100 / 100	100 / 100	7246.6 / 1806.3	0 / 0	80.9 / 96.3	114036.7 / 22366.9
	8000	10 / 5	100 / 100	100 / 100	4761.1 / 6032.7	0 / 0	44.0 / 82.8	18092.6 / 10759.6
		25 / 10	100 / 100	100 / 100	4063.8 / 3620.0	0 / 0	52.5 / 91.8	35308.3 / 14477.5
		50 / 15	100 / 100	100 / 100	5137.8 / 3022.8	0 / 0	54.0 / 95.1	64893.5 / 18142.0
		100 / 20	100 / 100	100 / 100	5675.6 / 1638.8	0 / 0	53.4 / 95.1	111338.4 / 21184.4

Table 3: Results for medium networks, with ancestral constraints only (first number in each pair) and with various constraints (second number in each pair).

instance	$N$	%	Missing	Extra	Reversed	SID	Score (BDeu)
<b>child</b> 20 variables 230 parameters	500	0*	5.3	1.0	3.0	115.7	0%
		10 / 5	4.8 / 4.8	1.1 / 0.8	1.9 / 1.3	91.4 / 82.6	0.1% / 0.2%
		25 / 10	4.7 / 4.3	1.9 / 1.6	1.6 / 1.8	93.9 / 79.4	0.2% / 0.3%
		50 / 15	3.9 / 4.2	1.4 / 1.2	1.7 / 0.7	76.1 / 69.9	0.3% / 0.4%
		100 / 20	2.2 / 3.6	2.2 / 0.8	0.0 / 0.3	35.8 / 57.6	0.9% / 0.4%
	2000	0*	1.7	0.2	3.5	79.2	0%
		10 / 5	1.5 / 1.3	0.2 / 0.2	0.5 / 0.1	26.0 / 20.8	0.0% / 0.0%
		25 / 10	0.7 / 1.0	0.3 / 0.3	0.3 / 0.5	12.1 / 18.0	0.0% / 0.0%
		50 / 15	0.7 / 1.0	0.3 / 0.3	0.5 / 0.0	12.2 / 16.2	0.0% / 0.0%
		100 / 20	0.2 / 1.0	0.3 / 0.1	0.0 / 0.0	2.5 / 16.6	0.1% / 0.0%
<b>insurance</b> 27 variables 984 parameters	500	0*	18.8	4.0	2.8	348.2	0%
		10 / 5	18.4 / 17.3	5.5 / 5.2	2.5 / 2.6	345.1 / 341.4	0.2% / 0.4%
		25 / 10	17.6 / 17.0	6.5 / 4.9	2.5 / 1.8	326.8 / 315.8	0.5% / 1.3%
		50 / 15	17.2 / 14.4	6.9 / 5.7	2.0 / 1.2	321.6 / 276.4	0.6% / 1.4%
		100 / 20	17.3 / 12.9	10.8 / 5.8	0.0 / 1.4	282.0 / 261.8	1.6% / 2.3%
	2000	0*	9.8	1.7	3.7	264.7	0%
		10 / 5	9.9 / 10.0	3.1 / 2.6	2.7 / 2.5	235.7 / 235.0	0.1% / 0.1%
		25 / 10	9.8 / 9.8	4.2 / 2.2	2.4 / 1.8	230.6 / 223.2	0.2% / 0.9%
		50 / 15	9.9 / 8.9	4.2 / 3.3	2.1 / 1.2	223.8 / 191.4	0.2% / 0.4%
		100 / 20	8.3 / 8.1	5.8 / 3.2	0.0 / 0.5	144.2 / 155.4	0.5% / 0.8%
<b>water</b> 32 variables 10083 parameters	1000	0*	38.3	21.5	5.7	439.5	0%
		10 / 5	38.1 / 35.6	19.3 / 16.6	5.6 / 4.8	434.4 / 426.1	0.1% / 0.2%
		25 / 10	37.3 / 33.1	19.8 / 16.5	4.3 / 3.7	446.5 / 415.1	0.2% / 0.9%
		50 / 15	35.9 / 30.8	18.5 / 15.4	2.9 / 2.3	420.3 / 381.0	0.4% / 0.8%
		100 / 20	36.3 / 28.9	20.3 / 14.6	0.0 / 1.7	359.8 / 365.1	0.6% / 0.9%
	4000	0*	33.2	18.0	5.2	434.3	0%
		10 / 5	31.8 / 30.8	14.8 / 14.2	5.0 / 4.7	428.6 / 421.4	0.0% / 0.1%
		25 / 10	30.8 / 27.9	15.5 / 14.4	3.4 / 3.9	417.9 / 396.4	0.1% / 0.5%
		50 / 15	30.0 / 26.1	15.6 / 13.1	2.5 / 1.7	390.2 / 348.1	0.2% / 0.3%
		100 / 20	30.5 / 25.1	19.3 / 12.7	0.0 / 1.6	343.7 / 347.9	0.3% / 0.3%
<b>mildew</b> 35 variables 540150 parameters	8000	0*	14.2	2.0	7.5	448.7	0%
		10 / 5	15.0 / 15.1	8.6 / 8.1	5.6 / 5.6	410.7 / 408.4	0.5% / 1.1%
		25 / 10	15.1 / 14.0	13.2 / 9.2	5.5 / 2.8	405.7 / 304.0	1.4% / 1.7%
		50 / 15	11.6 / 13.8	11.2 / 9.5	2.1 / 2.3	256.3 / 303.8	1.7% / 2.8%
		100 / 20	9.0 / 10.6	9.2 / 8.7	0.0 / 2.0	145 / 212.6	2.3% / 3.9%
	32000	0*	6.3	5.0	7.3	317.1	0%
		10 / 5	7.1 / 8.4	5.9 / 5.1	6.0 / 4.5	277.5 / 233.6	0.0% / 0.1%
		25 / 10	6.6 / 7.5	5.7 / 4.1	4.9 / 1.5	244.1 / 140.2	0.0% / 0.3%
		50 / 15	7.7 / 8.6	7.4 / 5.5	2.6 / 1.1	202.8 / 153.7	0.1% / 0.7%
		100 / 20	7.5 / 7.3	7.8 / 6.1	0.0 / 1.2	122.3 / 141.9	0.2% / 0.7%
<b>alarm</b> 37 variables 509 parameters	1000	0*	2.2	5.8	1.3	45.7	0%
		10 / 5	2.0 / 1.6	6.2 / 5.5	1.1 / 1.6	34.7 / 46.4	0.0% / 0.1%
		25 / 10	2.0 / 1.8	6.3 / 5.4	0.7 / 0.8	27.7 / 32.2	0.1% / 0.1%
		50 / 15	2.0 / 1.5	6.1 / 5.0	0.3 / 0.6	22.4 / 27.7	0.1% / 0.2%
		100 / 20	2.0 / 1.5	6.2 / 4.4	0.0 / 0.1	18.0 / 18.3	0.1% / 0.2%
	4000	0*	2.0	3.2	1.8	39.5	0%
		10 / 5	2.0 / 1.6	4.6 / 4.5	0.6 / 1.2	24.9 / 38.8	0.0% / 0.0%
		25 / 10	2.0 / 1.8	4.5 / 4.3	0.3 / 0.6	20.1 / 28.0	0.0% / 0.0%
		50 / 15	2.0 / 1.5	4.1 / 4.2	0.0 / 0.4	18.0 / 22.3	0.0% / 0.1%
		100 / 20	1.7 / 1.4	4.2 / 3.7	0.0 / 0.3	12.3 / 20.4	0.0% / 0.1%
<b>barley</b> 48 variables 114005 parameters	2000	0*	32.3	8.2	9.7	949.5	0%
		10 / 5	33.3 / 31.7	14.4 / 12.2	5.1 / 4.4	792.9 / 756.7	0.6% / 1.4%
		25 / 10	31.9 / 31.0	15.6 / 13.8	5.3 / 4.8	802.6 / 741.5	0.9% / 1.7%
		50 / 15	31.0 / 27.5	17.4 / 11.3	3.0 / 3.2	699.4 / 666.9	1.4% / 2.9%
		100 / 20	30.2 / 26.4	19.5 / 11.8	0.0 / 1.5	619.3 / 628.1	2.4% / 3.9%
	8000	0*	25.5	3.7	9.7	794.7	0%
		10 / 5	25.6 / 24.6	8.9 / 8.0	5.3 / 5.2	636.6 / 625.4	0.3% / 0.8%
		25 / 10	25.0 / 24.0	10.4 / 8.8	5.5 / 4.3	644.4 / 584.7	0.4% / 0.9%
		50 / 15	22.1 / 20.5	9.2 / 7.6	3.3 / 1.9	541.7 / 487.4	0.6% / 1.4%
		100 / 20	20.8 / 19.3	12.0 / 7.0	0.0 / 1.6	457.2 / 507.2	0.9% / 1.8%

Table 4: Results for medium networks, with ancestral constraints only (first number in each pair) and with various constraints (second number in each pair).