

Sequential		Parallel	
Time	Iter.	Time	Iter.
6,440	920	6,160	933
6,080	942	6,510	957
6,280	975	6,070	957
6,180	964	6,410	975
6,310	949	6,240	949
6,080	913	6,210	943
6,030	929	6,240	948
6,230	912	6,340	931
6,360	940	6,540	906
6,120	926	6,540	983
6,160	942	5,810	940
6,220	959	5,950	943
6,300	970	6,100	974
6,280	990	6,110	927
6,190	959	6,060	938
6,480	943	6,080	976
6,050	949	6,140	957
6,380	925	5,840	1,002
6,100	932	6,210	974
6,240	973	6,200	985
6,150	973	6,080	948
6,060	973	6,100	943
6,320	930	5,900	935
6,050	945	6,330	946
6,040	940	6,150	962
6,120	959	6,180	929
6,280	937	6,130	963
6,340	972	5,650	942
6,080	913	6,140	957
6,300	942	6,160	948
6,208	947	6,153	952
127	21	203	20

**Table NQP 1:** Non-communicating results. 2000-Queens (40 cores)

Caption:

mean

Standard Deviation

100% - com. 1 to 1		100% - com. 1 to N	
Time	Iter.	Time	Iter.
5,710	894	6,220	959
5,790	825	6,160	925
6,150	914	6,180	950
5,520	847	6,150	926
5,790	945	5,760	902
6,290	897	5,850	865
5,880	857	6,330	823
5,820	898	6,010	906
6,030	955	6,280	894
5,970	904	6,040	865
6,060	935	5,690	937
5,960	864	5,810	832
6,050	946	5,890	833
5,870	849	6,240	886
6,090	867	6,140	950
6,150	910	6,120	894
5,900	835	6,000	750
5,710	771	5,740	719
6,010	800	5,750	858
6,010	896	6,020	923
5,990	968	6,020	885
5,960	844	6,140	941
5,790	843	6,280	946
5,990	933	5,920	822
5,570	860	5,590	918
5,880	854	6,040	865
5,960	963	5,920	884
6,150	908	5,880	912
5,740	857	6,150	945
6,000	896	6,240	889
5,926	885	6,019	887
174	49	197	57

Table NQP 2: Communicating results (100%). 2000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

50% - com. 1 to 1		50% - com. 1 to N	
Time	Iter.	Time	Iter.
5,960	945	5,410	910
6,000	935	6,220	941
6,160	918	5,910	949
5,790	923	5,860	967
6,240	967	5,970	948
5,660	796	5,980	858
6,150	933	5,960	915
6,020	919	6,080	957
5,720	918	6,080	920
6,070	907	6,090	951
5,980	937	5,810	965
5,820	970	5,640	929
5,890	919	5,860	886
5,750	958	5,990	991
6,000	864	5,900	875
6,190	887	6,040	904
6,120	952	5,840	906
6,280	958	6,160	866
5,990	897	6,020	898
5,940	946	5,880	862
6,040	935	5,820	864
5,940	938	5,940	950
5,750	805	6,360	930
5,960	955	6,050	962
6,310	906	6,120	904
6,270	899	6,150	894
6,300	948	6,210	941
5,900	885	6,390	896
5,860	919	5,870	911
6,380	955	5,820	808
6,015	920	5,981	915
194	41	199	41

Table NQP 3: Communicating results (50%). 2000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

25% - com. 1 to 1		25% - com. 1 to N	
Time	Iter.	Time	Iter.
6,000	931	6,080	891
6,190	937	5,670	938
6,000	992	6,090	931
6,150	940	5,960	930
5,960	894	6,370	949
6,170	960	6,240	913
6,350	890	6,240	927
6,230	949	6,010	945
6,240	995	6,110	903
5,820	964	6,020	890
6,080	946	6,130	936
6,130	929	5,970	931
6,210	938	5,860	869
5,600	932	6,260	878
5,550	907	6,290	972
6,040	920	6,060	877
6,040	914	6,200	931
6,170	956	6,100	948
5,890	977	6,080	936
6,550	856	6,010	929
6,050	950	6,080	962
5,820	915	6,160	769
5,370	905	5,690	927
6,210	1,010	6,160	936
6,120	859	6,090	920
6,000	937	6,170	949
5,970	900	6,140	975
6,440	927	5,890	972
6,070	956	6,030	933
6,300	930	6,080	972
6,057	934	6,075	925
250	36	156	41

Table NQP 4: Communicating results (25%). 2000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

Time	Iter.
6,200	793
5,820	768
4,290	896
4,920	754
4,590	860
4,550	830
4,640	826
4,260	897
5,930	840
4,360	872
6,050	871
5,330	846
6,320	833
4,340	832
5,220	883
6,290	799
5,990	821
6,670	853
5,190	844
4,640	857
4,160	850
5,440	835
4,600	857
4,200	828
6,100	825
4,530	846
3,920	840
4,530	877
4,300	915
6,000	787
5,113	841
822	37

**Table NQP 5:** Communicating results (Partial-full solvers). 2000-Queens (40 cores)

Caption:

mean
Standard Deviation

receiver solver

receiver solver not tacking into account the received information

Sequential		Parallel	
Time	Iter.	Time	Iter.
14,350	1,439	14,600	1,393
14,380	1,424	14,540	1,414
14,210	1,406	13,250	1,387
13,760	1,399	14,370	1,433
14,010	1,419	14,300	1,400
14,150	1,416	13,710	1,423
14,490	1,406	14,190	1,420
14,160	1,412	14,140	1,420
14,030	1,420	13,810	1,467
14,420	1,436	13,830	1,420
13,950	1,383	13,790	1,375
13,990	1,384	14,050	1,383
14,520	1,450	14,160	1,413
14,080	1,411	13,880	1,465
14,280	1,431	13,320	1,411
14,270	1,394	14,010	1,464
14,080	1,474	14,630	1,403
14,180	1,384	13,810	1,394
14,100	1,409	13,990	1,391
14,340	1,387	14,030	1,411
14,200	1,391	14,520	1,394
14,180	1,403	14,480	1,429
14,260	1,419	14,050	1,370
14,350	1,446	13,910	1,400
14,180	1,404	13,830	1,405
14,060	1,418	14,380	1,423
13,890	1,382	14,080	1,409
13,870	1,425	14,110	1,398
14,460	1,432	14,220	1,443
14,690	1,437	13,940	1,434
14,196	1,415	14,064	1,413
211	22	335	25

**Table NQP 6:** Non-communicating results. 3000-Queens (40 cores)

Caption: 

mean
Standard Deviation

100% - com. 1 to 1		100% - com. 1 to N	
Time	Iter.	Time	Iter.
13,410	1,274	14,320	1,406
13,430	1,402	13,680	1,251
13,940	1,396	13,470	1,423
13,500	1,322	13,830	1,411
13,660	1,328	13,680	1,255
13,670	1,346	13,700	1,375
13,580	1,339	13,930	1,249
13,710	1,371	14,350	1,415
13,220	1,384	14,040	1,381
13,550	1,318	13,580	1,298
13,890	1,365	13,420	1,299
13,690	1,277	13,910	1,375
14,170	1,400	13,850	1,337
13,900	1,359	13,500	1,332
13,410	1,345	13,830	1,342
13,890	1,341	13,530	1,403
13,650	1,246	13,820	1,326
14,070	1,370	14,170	1,410
14,080	1,357	14,320	1,392
14,170	1,335	14,050	1,437
13,850	1,360	13,290	1,342
13,580	1,371	13,740	1,413
13,710	1,409	13,520	1,298
13,800	1,303	13,590	1,369
13,480	1,363	14,390	1,433
12,210	1,293	13,750	1,377
13,950	1,327	13,370	1,440
13,350	1,368	14,220	1,391
14,330	1,378	13,690	1,370
13,360	1,324	13,200	1,411
13,674	1,346	13,791	1,365
391	40	327	56

Table NQP 7: Communicating results (100%). 3000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

50% - com. 1 to 1		50% - com. 1 to N	
Time	Iter.	Time	Iter.
14,310	1,317	13,920	1,260
13,680	1,389	14,300	1,384
13,420	1,408	14,430	1,357
13,910	1,417	14,060	1,441
13,740	1,320	14,140	1,368
13,880	1,345	13,880	1,348
14,010	1,405	13,960	1,405
13,790	1,345	14,470	1,463
13,860	1,289	13,760	1,428
14,310	1,265	13,960	1,381
14,070	1,417	13,740	1,439
14,300	1,360	13,880	1,417
13,960	1,444	14,180	1,399
13,430	1,299	14,150	1,353
14,080	1,423	13,340	1,306
13,820	1,456	13,740	1,421
14,430	1,402	13,860	1,365
14,360	1,403	13,840	1,403
13,350	1,356	13,660	1,272
14,190	1,357	13,160	1,404
13,890	1,442	13,810	1,410
13,980	1,372	14,220	1,352
14,300	1,389	14,060	1,435
13,720	1,418	14,100	1,414
13,430	1,319	14,120	1,437
13,840	1,305	13,790	1,410
14,050	1,400	14,340	1,407
13,710	1,348	13,480	1,270
14,140	1,337	14,430	1,403
13,610	1,301	14,120	1,420
13,919	1,368	13,963	1,386
300	51	311	52

**Table NQP 8:** Communicating results (50%). 3000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver



25% - com. 1 to 1		25% - com. 1 to N	
Time	Iter.	Time	Iter.
13,600	1,397	14,020	1,353
13,740	1,442	14,330	1,413
13,930	1,288	13,980	1,213
13,830	1,341	13,690	1,411
13,790	1,465	14,360	1,405
13,860	1,394	13,480	1,393
13,350	1,378	13,910	1,394
13,840	1,375	14,210	1,497
14,240	1,323	13,780	1,416
13,960	1,437	14,600	1,448
13,810	1,415	13,640	1,438
14,500	1,415	14,340	1,379
13,840	1,415	14,390	1,371
13,630	1,337	14,120	1,446
13,700	1,323	14,160	1,362
13,870	1,372	13,650	1,406
14,200	1,415	13,340	1,381
14,380	1,352	13,470	1,426
13,610	1,454	14,410	1,416
13,860	1,388	14,000	1,438
13,770	1,458	13,430	1,456
14,340	1,348	14,380	1,391
13,820	1,387	13,940	1,379
14,180	1,419	14,110	1,449
13,650	1,402	13,940	1,357
14,160	1,356	13,960	1,389
14,430	1,430	13,480	1,432
13,640	1,441	14,320	1,428
13,600	1,349	13,860	1,392
13,850	1,302	14,020	1,384
13,899	1,387	13,977	1,402
283	48	341	49

Table NQP 9: Communicating results (25%). 3000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

Time	Iter.
10,340	1,369
10,600	1,297
9,350	1,324
9,370	1,374
11,110	1,254
14,830	1,213
10,170	1,358
10,370	1,284
11,000	1,214
9,680	1,315
14,080	1,260
9,980	1,300
14,050	1,220
9,080	1,361
12,940	1,335
14,130	1,277
8,840	1,190
14,180	1,189
14,300	1,171
10,110	1,290
11,990	1,237
11,850	1,269
10,750	1,258
14,860	1,198
11,540	1,404
14,300	1,210
9,480	1,335
10,210	1,202
10,440	1,362
12,760	1,193
11,556	1,275
1,965	67

**Table NQP 10:** Communicating results (Partial-full solvers). 3000-Queens  
(40 cores)

Caption:

mean
Standard Deviation

receiver solver

receiver solver not tacking into account the received information

Sequential		Parallel	
Time	Iter.	Time	Iter.
25,860	1,859	25,300	1,871
25,610	1,947	25,870	1,932
26,140	1,874	25,010	1,861
25,980	1,893	25,040	1,928
26,200	1,937	25,450	1,902
25,430	1,904	26,390	1,862
25,800	1,930	25,800	1,912
25,900	1,887	25,580	1,892
25,690	1,948	25,950	1,951
25,600	1,885	25,050	1,952
25,450	1,885	25,060	1,832
25,310	1,914	25,430	1,935
25,670	1,901	25,290	1,840
25,110	1,908	25,560	1,858
25,680	1,934	25,690	1,881
25,540	1,883	25,150	1,891
26,140	1,890	25,850	1,867
25,100	1,903	26,090	1,907
25,390	1,866	26,060	1,895
25,640	1,949	25,320	1,905
25,130	1,877	25,970	1,936
25,310	1,908	25,640	1,914
25,820	1,901	24,150	1,855
25,070	1,853	25,990	1,914
26,170	1,929	26,040	1,895
25,210	1,931	24,920	1,928
25,210	1,882	25,000	1,915
26,090	1,890	24,490	1,871
25,600	1,855	25,760	1,956
26,310	1,877	24,930	1,873
25,639	1,900	25,461	1,898
369	28	515	34

**Table NQP 11:** Non-communicating results. 4000-Queens (40 cores)

Caption:

mean

Standard Deviation

100% - com. 1 to 1		100% - com. 1 to N	
Time	Iter.	Time	Iter.
25,530	1,812	24,790	1,878
25,080	1,717	24,940	1,768
25,470	1,794	25,200	1,771
25,040	1,902	25,100	1,829
24,940	1,815	24,730	1,881
24,740	1,858	25,420	1,676
24,960	1,854	25,510	1,756
24,330	1,811	25,580	1,876
24,970	1,836	26,130	1,849
25,360	1,863	25,010	1,890
24,630	1,888	25,410	1,891
25,260	1,818	24,710	1,820
25,460	1,684	24,850	1,868
25,710	1,827	25,620	1,928
25,090	1,825	25,170	1,758
25,340	1,877	24,900	1,885
24,900	1,912	25,450	1,761
25,310	1,866	25,360	1,840
25,940	1,789	26,280	1,890
24,470	1,861	24,940	1,910
25,710	1,849	25,700	1,870
24,960	1,810	24,480	1,910
25,050	1,737	24,160	1,925
24,550	1,786	24,830	1,925
24,840	1,878	24,640	1,730
25,550	1,945	24,760	1,786
25,000	1,890	25,790	1,835
25,540	1,773	25,200	1,784
24,850	1,879	25,450	1,829
24,730	1,849	25,080	1,824
25,110	1,834	25,173	1,838
396	58	475	65

**Table NQP 12:** Communicating results (100%). 4000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

50% - com. 1 to 1		50% - com. 1 to N	
Time	Iter.	Time	Iter.
25,130	1,883	25,280	1,927
24,940	1,729	25,790	1,886
25,600	1,916	24,580	1,847
25,940	1,843	25,590	1,916
25,630	1,898	24,750	1,776
24,910	1,823	25,260	1,868
24,360	1,765	26,030	1,864
25,590	1,897	24,970	1,805
24,700	1,849	25,880	1,775
25,540	1,866	24,910	1,864
25,140	1,846	25,150	1,870
25,860	1,897	25,340	1,878
25,030	1,806	25,850	1,952
25,620	1,928	24,670	1,908
24,130	1,792	25,010	1,848
24,360	1,850	25,500	1,876
24,490	1,864	25,070	1,871
25,010	1,824	25,100	1,860
25,730	1,925	25,210	1,802
25,330	1,920	25,970	1,780
25,640	1,807	25,370	1,852
24,920	1,865	25,140	1,914
25,670	1,798	25,750	1,796
24,310	1,859	24,730	1,731
25,420	1,887	24,660	1,756
24,990	1,820	25,480	1,934
24,980	1,815	24,920	1,927
25,010	1,891	25,380	1,693
25,680	1,871	25,770	1,936
24,790	1,909	25,720	1,812
25,148	1,855	25,294	1,851
505	50	424	66

Table NQP 13: Communicating results (50%). 4000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

25% - com. 1 to 1		25% - com. 1 to N	
Time	Iter.	Time	Iter.
23,940	1,912	25,340	1,872
25,740	1,900	24,900	1,863
25,770	1,909	25,700	1,931
25,620	1,933	25,100	1,834
25,670	1,835	25,670	1,858
25,790	1,851	24,120	1,740
24,130	1,852	24,550	1,930
25,900	1,884	25,260	1,881
25,670	1,835	25,920	1,935
25,190	1,833	25,720	1,893
24,940	1,922	26,050	1,904
25,620	1,845	26,060	1,849
25,410	1,901	25,610	1,848
24,850	1,889	24,470	1,882
24,270	1,888	25,710	1,909
24,550	1,794	25,570	1,962
25,700	1,853	25,270	1,896
25,570	1,909	24,440	1,844
24,680	1,877	24,210	1,885
25,340	1,911	25,550	1,872
26,530	1,808	25,350	1,730
25,690	1,899	25,520	1,891
25,340	1,758	25,800	1,876
26,020	1,904	25,700	1,845
25,090	1,838	25,520	1,903
24,330	1,799	25,250	1,853
25,640	1,882	24,070	1,844
25,260	1,840	25,440	1,829
25,530	1,889	25,540	1,773
24,270	1,894	25,690	1,883
25,268	1,868	25,303	1,867
635	43	570	52

Table NQP 14: Communicating results (25%). 4000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

Time	Iter.
18,490	1,635
23,080	1,761
25,490	1,555
17,000	1,708
25,290	1,349
25,660	1,496
19,870	1,710
24,870	1,630
16,660	1,714
21,990	1,708
16,680	1,605
16,360	1,803
25,250	1,690
15,840	1,764
18,330	1,681
15,980	1,734
25,920	1,550
24,890	1,671
25,520	1,618
24,500	1,475
17,230	1,712
25,300	1,656
24,520	1,723
22,670	1,730
20,920	1,574
17,810	1,789
16,100	1,758
23,600	1,773
23,700	1,468
18,660	1,644
21,273	1,656
3,767	108

**Table NQP 15:** Communicating results (Partial-full solvers). 4000-Queens  
(40 cores)

Caption:

mean
Standard Deviation

receiver solver

receiver solver not tacking into account the received information

Sequential		Parallel	
Time	Iter.	Time	Iter.
41,270	2,350	40,360	2,386
41,370	2,384	40,370	2,365
42,150	2,362	41,280	2,346
41,190	2,426	40,400	2,348
41,260	2,356	40,850	2,401
40,980	2,351	41,140	2,381
41,300	2,362	40,550	2,355
41,400	2,304	38,160	2,387
41,890	2,330	40,820	2,436
40,220	2,381	41,930	2,335
41,540	2,403	41,030	2,372
41,170	2,381	41,660	2,414
41,250	2,345	41,430	2,404
41,130	2,363	40,800	2,398
41,710	2,379	41,250	2,367
41,480	2,321	40,440	2,357
40,990	2,375	40,350	2,420
41,770	2,350	40,680	2,389
41,210	2,406	40,930	2,317
40,940	2,347	39,670	2,391
41,910	2,359	39,190	2,339
41,520	2,399	39,950	2,411
40,590	2,391	38,470	2,398
41,260	2,366	41,180	2,404
41,720	2,353	41,260	2,347
41,790	2,350	39,950	2,310
40,700	2,404	39,710	2,406
41,780	2,377	42,130	2,418
41,720	2,375	41,300	2,370
42,150	2,367	40,130	2,340
41,379	2,367	40,579	2,377
446	26	914	32

**Table NQP 16:** Non-communicating results. 5000-Queens (40 cores)

Caption:

mean

Standard Deviation



100% - com. 1 to 1		100% - com. 1 to N	
Time	Iter.	Time	Iter.
37,950	2,296	39,240	2,228
39,710	2,299	39,400	2,295
38,270	2,181	38,410	2,301
37,320	2,237	40,120	2,313
41,220	2,289	40,500	2,296
39,310	2,228	40,960	2,353
40,760	2,364	39,660	2,360
39,150	2,292	39,200	2,326
39,620	2,275	39,280	2,265
40,860	2,273	41,440	2,355
38,360	2,332	40,360	2,305
38,760	2,344	39,410	2,315
40,470	2,281	39,940	2,211
39,500	2,313	40,700	2,255
39,840	2,313	40,670	2,246
40,630	2,324	40,220	2,208
38,270	2,371	39,830	2,277
39,570	2,223	39,150	2,276
38,740	2,297	40,660	2,191
37,690	2,232	39,930	2,304
39,280	2,272	40,100	2,306
40,160	2,270	38,920	2,238
39,570	2,320	39,250	2,260
41,330	2,258	38,960	2,266
40,550	2,255	40,920	2,361
40,990	2,322	40,190	2,341
40,080	2,239	39,220	2,241
40,240	2,299	39,570	2,304
40,120	2,274	40,400	2,395
40,270	2,337	39,830	2,328
39,620	2,287	39,881	2,291
1,074	44	717	51

Table NQP 17: Communicating results (100%). 5000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

50% - com. 1 to 1		50% - com. 1 to N	
Time	Iter.	Time	Iter.
41,200	2,379	40,390	2,300
40,910	2,207	40,320	2,380
40,020	2,287	40,800	2,307
40,330	2,365	40,230	2,297
40,510	2,402	40,710	2,304
40,670	2,396	40,090	2,332
38,420	2,145	40,930	2,388
40,170	2,367	40,880	2,283
40,430	2,304	40,510	2,176
40,490	2,184	40,810	2,275
39,570	2,316	40,820	2,335
40,590	2,306	40,010	2,276
40,410	2,300	39,810	2,211
41,390	2,348	39,890	2,260
40,320	2,326	40,410	2,302
40,890	2,359	41,030	2,385
40,580	2,250	39,660	2,333
40,420	2,254	39,940	2,319
40,880	2,291	40,990	2,381
39,680	2,364	41,330	2,321
40,680	2,290	40,120	2,294
39,940	2,192	41,150	2,286
39,020	2,401	38,910	2,333
40,750	2,374	40,060	2,390
39,710	2,347	41,030	2,297
40,130	2,319	39,620	2,246
39,920	2,304	40,280	2,358
39,810	2,331	40,820	2,221
40,730	2,237	39,690	2,391
41,570	2,409	39,940	2,388
40,338	2,312	40,373	2,312
661	69	565	56

Table NQP 18: Communicating results (50%). 5000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

25% - com. 1 to 1		25% - com. 1 to N	
Time	Iter.	Time	Iter.
41,120	2,333	41,450	2,321
41,560	2,270	38,980	2,346
40,060	2,195	39,330	2,167
41,700	2,419	40,920	2,319
41,590	2,220	40,550	2,425
40,300	2,422	41,140	2,400
40,260	2,268	40,530	2,364
40,990	2,320	38,890	2,336
39,770	2,405	41,030	2,454
40,040	2,213	41,320	2,251
39,030	2,364	40,580	2,123
40,450	2,235	40,540	2,405
38,210	2,259	40,950	2,281
38,900	2,408	41,460	2,364
41,230	2,338	41,290	2,245
41,000	2,368	39,340	2,368
39,680	2,377	40,430	2,313
41,570	2,347	39,970	2,188
39,580	2,417	41,390	2,367
40,420	2,244	40,520	2,289
40,710	2,306	39,100	2,356
39,180	2,304	40,380	2,382
39,280	2,357	39,870	2,420
40,290	2,430	40,220	2,423
39,870	2,356	40,640	2,359
41,010	2,336	40,250	2,380
41,590	2,402	41,700	2,454
40,090	2,415	40,340	2,367
41,650	2,405	39,260	2,342
40,420	2,400	41,210	2,344
40,385	2,338	40,453	2,338
930	71	807	80

Table NQP 19: Communicating results (25%). 5000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

Time	Iter.
40,090	2,135
38,090	2,058
25,270	2,155
39,390	1,895
39,880	2,149
26,480	2,192
38,030	2,090
35,710	2,002
39,180	1,910
33,100	2,052
37,230	2,192
38,000	2,133
26,350	2,232
30,290	2,099
39,440	1,800
36,560	2,216
39,660	2,059
38,050	1,918
30,500	2,098
38,450	2,004
39,620	2,203
33,930	2,191
37,370	2,103
39,980	1,910
30,640	2,093
30,090	2,059
27,900	2,189
31,410	2,084
25,620	2,134
37,070	2,105
34,779	2,082
4,993	108

**Table NQP 20:** Communicating results (Partial-full solvers). 5000-Queens  
(40 cores)

Caption:

mean
Standard Deviation

receiver solver

receiver solver not tacking into account the received information

Sequential		Parallel	
Time	Iter.	Time	Iter.
60,450	2,865	59,280	2,816
60,590	2,860	59,410	2,941
60,880	2,845	59,380	2,883
60,660	2,827	60,960	2,803
59,560	2,820	60,950	2,893
60,340	2,910	60,110	2,840
59,910	2,864	61,710	2,893
61,480	2,850	59,530	2,792
60,670	2,839	60,270	2,841
60,360	2,811	59,700	2,848
61,030	2,818	59,940	2,844
60,670	2,842	60,390	2,904
60,440	2,904	59,590	2,843
59,830	2,889	60,640	2,774
60,190	2,852	59,660	2,817
60,900	2,826	59,770	2,843
59,950	2,834	60,680	2,807
59,830	2,810	59,250	2,817
61,340	2,861	59,280	2,931
60,070	2,810	60,850	2,865
59,870	2,819	60,040	2,843
60,390	2,857	59,880	2,863
60,650	2,794	60,760	2,847
60,480	2,824	59,220	2,875
60,590	2,807	60,480	2,833
60,590	2,806	60,220	2,854
61,220	2,865	59,680	2,794
59,290	2,810	60,380	2,782
59,800	2,787	61,790	2,912
60,690	2,802	59,360	2,871
60,424	2,837	60,105	2,849
522	31	709	43

**Table NQP 21:** Non-communicating results. 6000-Queens (40 cores)

Caption:

mean

Standard Deviation

100% - com. 1 to 1		100% - com. 1 to N	
Time	Iter.	Time	Iter.
59,830	2,725	57,960	2,868
58,510	2,707	59,790	2,810
60,590	2,660	58,260	2,748
59,080	2,813	58,910	2,729
58,390	2,772	58,270	2,690
59,650	2,769	56,310	2,656
57,350	2,550	59,980	2,811
56,450	2,602	57,280	2,739
57,050	2,792	62,020	2,703
58,520	2,824	57,810	2,833
61,190	2,650	59,850	2,759
61,550	2,820	60,320	2,780
59,050	2,773	59,110	2,801
60,310	2,664	60,290	2,855
60,130	2,764	57,650	2,794
58,640	2,758	59,350	2,811
59,690	2,777	58,120	2,821
56,860	2,604	56,530	2,752
59,270	2,668	58,790	2,680
57,200	2,583	59,840	2,772
60,680	2,757	60,760	2,740
58,340	2,670	58,520	2,853
59,600	2,712	60,060	2,744
57,850	2,814	60,760	2,837
58,080	2,761	61,500	2,853
59,020	2,762	59,140	2,773
59,970	2,703	58,840	2,688
59,870	2,812	59,390	2,796
56,510	2,824	58,540	2,741
60,120	2,793	60,860	2,749
58,978	2,729	59,160	2,773
1,380	78	1,378	57

Table NQP 22: Communicating results (100%). 6000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

50% - com. 1 to 1		50% - com. 1 to N	
Time	Iter.	Time	Iter.
57,800	2,822	57,350	2,862
59,720	2,728	58,890	2,820
59,100	2,851	61,070	2,864
59,870	2,850	59,120	2,928
58,160	2,738	59,720	2,808
60,200	2,881	60,720	2,742
59,050	2,817	59,020	2,765
59,280	2,659	60,250	2,802
58,240	2,722	60,500	2,811
60,980	2,754	60,010	2,804
57,200	2,664	58,010	2,802
57,550	2,726	60,950	2,673
61,860	2,890	60,720	2,658
59,500	2,757	58,270	2,841
59,380	2,732	59,490	2,650
58,550	2,758	59,890	2,696
57,240	2,863	60,060	2,778
57,580	2,829	59,940	2,680
59,120	2,787	59,740	2,672
60,660	2,630	59,980	2,759
59,700	2,812	60,350	2,784
58,060	2,780	58,100	2,832
57,330	2,851	57,760	2,692
57,580	2,676	58,500	2,784
58,090	2,769	60,320	2,805
58,540	2,740	59,570	2,713
59,480	2,763	60,070	2,776
60,020	2,805	58,550	2,803
59,870	2,755	59,570	2,838
59,640	2,826	59,560	2,750
58,978	2,775	59,535	2,773
1,190	67	984	69

Table NQP 23: Communicating results (50%). 6000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver

25% - com. 1 to 1		25% - com. 1 to N	
Time	Iter.	Time	Iter.
58,670	2,657	60,790	2,752
59,340	2,825	58,690	2,877
57,600	2,814	60,940	2,839
59,410	2,680	60,750	2,863
60,050	2,755	59,480	2,790
59,290	2,826	62,360	2,882
60,380	2,772	60,040	2,871
56,360	2,640	59,820	2,805
60,220	2,684	58,820	2,739
60,790	2,789	60,350	2,792
61,930	2,828	58,060	2,890
57,780	2,819	58,460	2,766
59,530	2,874	59,800	2,847
60,380	2,902	60,890	2,719
58,050	2,814	56,810	2,873
59,410	2,790	59,200	2,878
62,810	2,884	59,890	2,800
59,600	2,863	58,280	2,815
59,540	2,694	59,920	2,830
59,300	2,860	59,720	2,835
58,920	2,895	59,370	2,778
58,940	2,871	62,070	2,888
59,830	2,861	56,560	2,761
58,140	2,657	57,810	2,771
56,860	2,756	60,610	2,847
59,160	2,781	58,190	2,878
60,060	2,838	62,320	2,864
59,520	2,713	61,630	2,824
57,800	2,788	61,340	2,801
58,960	2,892	60,140	2,851
59,288	2,794	59,770	2,824
1,340	78	1,500	49

Table NQP 24: Communicating results (25%). 6000-Queens (40 cores)

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the received information

non-communicating solver



Time	Iter.
59,000	2,406
54,190	2,511
46,540	2,417
52,710	2,588
48,020	2,546
54,890	2,648
47,130	2,724
55,980	2,529
56,040	2,574
50,920	2,734
41,560	2,515
56,900	2,186
52,780	2,451
51,170	2,479
50,760	2,367
51,710	2,276
56,300	2,691
48,700	2,737
59,710	2,555
45,980	2,807
41,860	2,497
54,060	2,440
43,060	2,509
59,310	2,200
57,750	2,405
57,650	2,127
47,270	2,525
57,200	2,285
38,870	2,810
53,800	2,503
51,727	2,501
5,737	176

**Table NQP 25:** Communicating results (Partial-full solvers). 6000-Queens  
(40 cores)

Caption:

mean
Standard Deviation

receiver solver

receiver solver not tacking into account the received information