

Sequential		No Communication	
Time	Iter.	Time	Iter.
3,410	70,278	1,810	19,861
3,140	67,274	250	4,672
2,070	43,561	120	1,234
340	7,381	440	5,205
3,010	61,855	1,570	16,639
3,150	64,966	340	4,840
2,030	43,528	450	4,831
1,280	26,578	120	2,306
2,280	47,955	1,020	10,638
1,340	27,925	200	2,539
2,240	46,846	1,160	14,293
2,610	53,341	910	16,289
740	15,529	550	6,652
2,050	43,846	700	12,914
1,600	33,460	280	2,884
2,640	55,891	1,160	11,834
1,980	41,479	850	14,665
1,440	29,980	390	4,630
3,080	63,730	890	9,382
3,090	65,338	560	9,262
1,100	22,774	1,580	16,999
		1,620	29,008
		310	5,462
		280	2,974
		180	3,367
		380	3,631
		270	3,064
		1,000	10,571
		1,280	14,581
		230	4,099
		100	1,752
		560	6,574
		1,150	12,022
		720	10,345
		1,210	13,006
		280	3,023
		110	1,195
		990	10,448
		910	9,787
		1,020	18,244
		920	10,564
		730	10,939
		780	12,232
		1,430	24,616
		900	15,970
2,125	44,453	727	9,557
871	18,113	469	6,439

Table CAP 1: No communication (1 and 40 cores) Costas Array 17

St_a / 100% com . 1-1		St_a / 100% com. 1-n		St_a / 50% com. 1-1		St_a / 50% com. 1-n	
Time	Iter.	Time	Iter.	Time	Iter.	Time	Iter.
860	9,481	1,000	13,702	330	3,964	760	12,946
810	7,954	170	1,648	550	10,750	140	1,963
830	7,870	350	4,172	840	15,835	120	1,384
240	2,947	350	3,617	280	3,019	780	9,553
180	2,252	210	2,593	960	11,142	720	12,013
300	3,106	200	1,976	1,030	15,841	20	172
280	3,978	160	1,617	340	5,251	570	7,855
190	2,392	370	4,336	330	4,153	110	1,259
200	1,868	1,040	16,596	260	3,313	290	3,496
740	6,670	150	1,891	290	4,834	1,270	22,888
380	6,395	230	2,566	10	119	1,020	20,027
200	2,320	800	9,874	170	3,730	1,430	16,756
700	9,247	920	9,599	370	8,019	460	6,115
170	1,700	130	1,486	1,640	23,068	290	5,632
1,030	10,403	780	8,361	1,060	20,573	40	571
760	13,045	800	10,440	360	5,329	1,700	23,350
760	7,660	340	4,647	410	5,146	430	8,873
500	6,751	1,040	13,030	580	7,987	420	5,695
160	1,360	380	4,243	810	9,737	990	11,596
140	1,528	360	3,763	90	1,112	250	3,478
120	1,198	500	6,985	220	2,644	210	2,500
380	4,804	110	1,312	530	10,198	300	3,691
220	1,981	100	1,066	1,310	13,846	490	7,138
180	2,833	150	2,560	70	1,348	760	7,840
190	1,928	560	5,119	570	6,703	440	7,016
980	8,974	590	9,214	550	6,703	1,540	30,901
1,130	10,750	650	7,919	20	427	1,640	19,264
260	2,572	160	1,922	300	3,779	1,380	27,048
380	3,324	260	2,638	180	2,364	180	3,737
120	1,465	80	1,035	750	8,929	720	8,287
40	689	540	11,224	630	9,292	1,430	24,226
790	13,384	760	13,072	50	681	660	6,959
80	844	370	5,209	600	7,396	160	2,191
610	5,650	110	2,298	1,330	15,478	470	9,328
470	4,748	120	1,182	780	14,206	40	402
100	1,036	420	4,527	790	12,373	350	4,260
50	562	100	1,069	100	1,171	490	10,333
480	7,780	80	1,054	340	4,189	960	11,074
510	4,883	690	7,756	260	3,493	60	616
630	11,797	80	871	620	8,236	30	328
610	6,125	1,100	18,772	510	5,246	380	5,173
260	2,734	80	872	660	6,893	220	2,638
270	3,322	690	7,912	20	241	480	6,091
240	2,500	910	14,065	1,330	21,556	960	12,664
210	2,041	420	7,740	1,920	39,955	320	5,176
416	4,819	431	5,723	559	8,228	588	8,767
296	3,589	317	4,744	443	7,556	477	7,774

Table CAP 2: Strategy A (40 cores) Costas Array 17

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the
received information

non-communicating solver

St_b / 100% com. 1-1		St_b / 100% com. 1-n		St_b / 50% com. 1-1		St_b / 50% com. 1-n	
Time	Iter.	Time	Iter.	Time	Iter.	Time	Iter.
10	322	2,420	32,411	990	13,492	220	4,852
320	5,560	1,690	17,034	130	1,654	2,190	27,028
790	9,226	650	6,397	960	19,321	810	13,510
40	541	1,200	22,472	570	12,136	80	814
1,280	20,420	640	6,389	230	4,858	680	12,859
1,240	12,358	610	5,670	740	8,590	630	6,412
850	10,123	920	9,427	410	5,498	120	1,390
280	4,840	250	3,058	320	4,429	440	4,309
880	10,507	960	16,715	300	4,039	490	5,614
430	5,125	940	9,898	320	4,123	450	9,082
60	625	100	1,243	1,180	15,841	110	1,252
340	6,875	870	17,608	420	7,598	2,330	42,391
60	583	180	1,885	50	616	140	1,780
980	11,539	790	7,738	1,620	18,894	120	1,557
90	949	470	5,982	1,890	26,893	500	5,965
230	2,281	130	1,366	130	1,924	1,310	27,804
830	12,990	120	1,780	1,280	13,420	500	7,017
550	6,721	170	1,932	160	1,861	430	5,332
330	6,537	40	432	10	211	290	3,736
320	3,317	320	3,547	110	1,369	80	859
760	11,194	200	3,073	120	1,573	160	3,142
420	4,405	80	1,360	100	872	40	507
160	1,955	20	130	60	691	100	1,219
90	1,105	430	7,915	1,050	14,983	580	6,859
200	3,649	30	373	1,670	34,654	100	1,486
300	3,982	210	2,869	490	6,250	170	2,440
160	1,748	50	544	1,560	26,260	200	2,719
790	8,998	470	5,890	10	187	40	382
280	3,715	370	3,932	130	1,246	430	6,370
120	1,318	170	2,164	300	4,066	630	7,480
1,370	14,143	90	1,546	290	3,562	360	4,621
390	4,216	1,160	14,086	1,030	13,999	1,500	17,857
630	7,579	120	1,447	500	10,426	1,240	16,702
170	1,990	120	1,186	300	3,451	660	9,184
90	1,012	300	5,012	110	1,441	160	1,642
1,590	16,567	300	3,133	970	20,263	200	2,668
320	3,976	20	280	40	988	170	2,218
1,310	17,230	470	6,574	320	6,691	260	2,918
120	1,567	260	2,423	480	10,150	620	13,171
190	3,301	90	1,048	640	6,592	1,030	19,681
210	2,143	360	3,436	20	451	90	1,036
470	9,954	600	7,060	90	1,609	1,100	13,264
360	5,307	290	3,217	480	8,611	440	4,471
160	1,691	380	5,341	270	3,601	280	3,415
1,020	17,737	280	2,581	940	15,943	210	2,746
480	6,265	452	5,769	529	8,118	504	7,372
417	5,321	477	6,578	506	8,192	524	8,544

Table CAP 3: Strategy B (40 cores) Costas Array 17

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the
received information

non-communicating solver

St_c / 100% com. 1-1		St_c / 100% com. 1-n		St_c / 50% com. 1-1		St_c / 50% com. 1-n	
Time	Iter.	Time	Iter.	Time	Iter.	Time	Iter.
40	340	960	18,532	1,990	24,955	70	793
200	1,936	980	10,132	40	551	360	5,321
180	1,966	290	3,196	720	15,226	220	2,374
1,170	11,605	540	5,428	730	7,378	210	2,416
520	10,654	1,300	26,122	1,200	14,257	540	7,306
390	5,275	180	2,005	720	9,265	40	583
380	4,012	140	2,065	870	10,972	410	4,288
660	6,797	170	1,849	270	5,617	870	12,076
340	4,321	180	2,233	190	2,620	580	11,218
240	2,527	400	4,198	1,010	19,234	720	8,242
320	3,799	680	7,546	1,280	15,586	1,600	30,455
310	3,484	780	7,377	330	4,636	1,600	15,751
400	4,138	890	11,849	870	11,847	180	2,164
1,100	21,040	870	9,637	300	4,129	2,080	25,051
1,110	19,507	110	1,406	80	1,066	1,350	18,460
240	3,493	120	1,315	410	5,167	1,380	13,921
1,250	25,261	250	2,574	1,570	29,595	440	4,351
320	6,529	660	9,044	860	9,987	380	4,663
360	4,054	200	2,683	80	1,765	370	5,008
340	3,547	630	12,604	390	3,992	230	4,882
1,070	10,996	630	6,409	310	3,754	320	3,643
320	3,574	570	5,563	960	10,719	130	2,618
340	7,062	800	7,642	970	11,053	400	4,690
360	4,459	500	10,312	910	17,042	230	2,917
1,100	19,301	500	8,659	1,150	15,991	400	4,807
160	1,672	590	6,070	320	3,959	110	1,393
1,410	16,363	130	1,423	120	2,460	260	3,580
150	1,615	1,820	30,643	520	8,194	1,280	25,900
300	3,160	830	16,030	520	5,842	400	5,084
1,310	15,066	720	8,838	590	12,658	300	4,077
1,360	25,852	740	8,437	220	3,193	290	2,944
590	12,271	100	1,027	100	1,184	200	2,211
230	2,788	600	7,387	10	241	210	2,983
10	313	580	6,493	700	8,263	220	2,239
390	8,149	170	1,957	390	5,312	310	3,288
390	6,727	150	1,771	720	11,386	770	7,825
370	7,654	340	4,627	160	2,080	1,790	22,204
20	250	570	6,751	640	12,271	180	1,978
120	1,518	500	5,932	870	10,204	1,710	36,013
100	1,201	20	265	530	5,959	470	4,819
170	2,237	280	3,910	390	8,155	660	12,346
230	2,767	250	2,785	160	1,985	910	10,369
490	6,028	190	2,368	810	10,024	920	11,116
480	8,626	180	3,091	180	3,850	440	4,474
920	9,349	450	5,035	280	3,375	420	5,179
495	7,184	501	6,783	588	8,378	599	8,178
400	6,632	359	6,218	432	6,437	525	8,289

Table CAP 4: Strategy C (40 cores) Costas Array 17

Caption:

mean

Standard Deviation

sender solver

receiver solver

receiver solver not tacking into account the
received information

non-communicating solver