Fusion Moves for Correlation Clustering (Supplementary Material)

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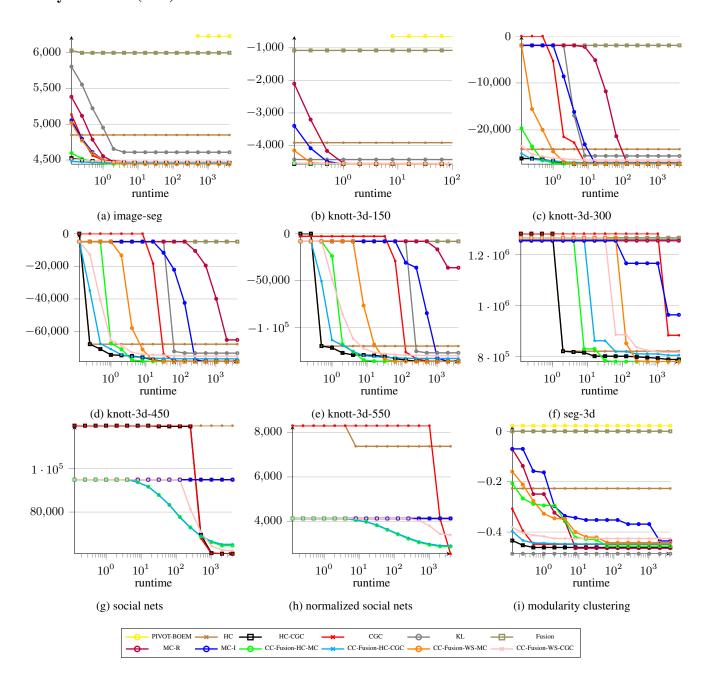
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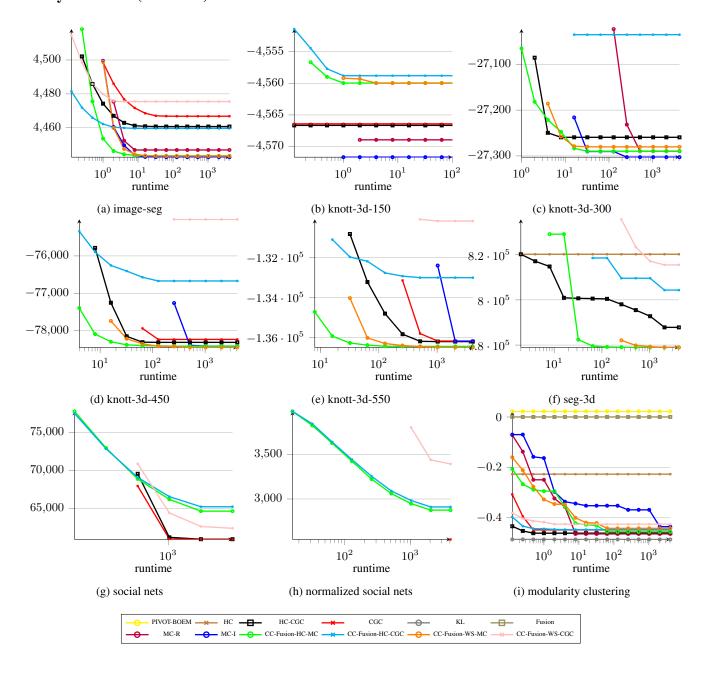
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1. Anytime Plots (Full)



2. Anytime Plots (Zommed)



3. Anytime Tables (per Dataset)

Table 1: image-seg (100 instances)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	4849.88 4485.83 5222.39 4465.90 4475.54 4485.79	$\begin{array}{c} \infty \\ 4498.51 \\ 4849.88 \\ 4474.20 \\ 4952.02 \\ 4462.20 \\ 4453.60 \\ 4479.85 \\ 4499.09 \end{array}$	4849.88 4461.14 4608.52 4459.63 4443.65 4475.47	4849.88 4460.71 4608.49 4459.63 4443.43 4475.47	4466.80 4849.88 4460.71 4608.49 4459.63 4443.43 4475.47	4466.80 4849.88 4460.71 4608.49 4459.63 4443.43 4475.47	4849.88 4460.71 4608.49 4459.63 4443.43 4475.47	4466.80 4849.88 4460.71 4608.49 4459.63 4443.43	46.22 sec 4.00 sec 0.00 sec 1.83 sec 1.36 sec 5.75 sec 1.06 sec 9.24 sec	2.5247 2.5967 2.5164 2.6432 2.4961 2.5319 2.5192	0.7590 0.7560 0.7724 0.6400 0.7780 0.7801 0.7750
MCR-CCFDB	4784.94	4553.88	4446.89	4446.89	4446.89	4446.89	4446.89	4446.89	0.50 sec	2.5471	0.7822
MCI-CCIFD	4610.08	4499.52	4442.88	4442.64	4442.64	4442.64	4442.64	4442.64	1.70 sec	2.5367	0.7821

Table 2: knott-3d-150 (8 instances)

algorithm				val	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} -3913.60 \\ -4566.66 \\ -4431.67 \\ -4557.70 \\ -4558.98 \\ -4548.38 \end{array}$	-4566.41 -3913.60 -4566.66 -4431.67 -4558.80 -4559.80 -4548.38 -4559.19	$\begin{array}{c} -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	$\begin{array}{c} -3913.60 \\ -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	$\begin{array}{c} -4566.41 \\ -3913.60 \\ -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	$\begin{array}{c} -4566.41 \\ -3913.60 \\ -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	$\begin{array}{c} -4566.41 \\ -3913.60 \\ -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	$\begin{array}{c} -3913.60 \\ -4566.66 \\ -4431.67 \\ -4558.80 \\ -4559.96 \\ -4548.38 \end{array}$	0.08 sec 0.01 sec 0.05 sec 0.12 sec 0.56 sec 1.72 sec 0.44 sec	$\begin{array}{c} 0.9267 \\ 1.5477 \\ 0.9052 \\ 2.0648 \\ 0.9679 \\ 0.9629 \\ 1.0585 \end{array}$	0.9206 0.8139 0.9226 0.8085 0.9031 0.9042 0.8951
MCR-CCFDB MCI-CCIFD		-4544.50 -4571.69							0.00.00	0.02.0	

Table 3: knott-3d-300 (8 instances)

algorithm				val	ue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	2819.99	1058.84 sec	4.4986	0.8792						
CGC	0.00	-5308.24	-26949.10	-26949.10	-26949.10	-26949.10	-26949.10	-26949.10	5.49 sec	1.8822	0.8666
HC	-24120.16	-24120.16	-24120.16	-24120.16	-24120.16	-24120.16	-24120.16	-24120.16	0.06 sec	2.3513	0.8084
HC-CGC	-26307.03	-26678.98	-27259.39	-27259.39	-27259.39	-27259.39	-27259.39	-27259.39	3.35 sec	1.7636	0.8713
ogm-KL	-1989.98	-1989.98	-25539.78	-25556.93	-25556.93	-25556.93	-25556.93	-25556.93	13.79 sec	4.1318	0.6858
CC-Fusion-HC-CGC	-26462.14	-26603.77	-27012.51	-27035.18	-27035.18	-27035.18	-27035.18	-27035.18	12.03 sec	1.7673	0.8763
CC-Fusion-HC-MC	-26495.92	-27065.29	-27271.94	-27289.85	-27289.85	-27289.85	-27289.85	-27289.85	27.21 sec	1.6516	0.8824
CC-Fusion-WS-CGC	-25667.92	-26039.03	-26424.67	-26441.83	-26441.83	-26441.83	-26441.83	-26441.83	16.16 sec	2.1344	0.8596
CC-Fusion-WS-MC	-19984.37	-24597.63	-27269.57	-27280.27	-27280.27	-27280.27	-27280.27	-27280.27	51.75 sec	1.6742	0.8802
MCR-CCFDB	-1989.98	-1989.98	-2547.19	-20267.93	-27231.64	-27289.63	-27289.63	-27289.63	149.78 sec	1.6369	0.8849
MCI-CCIFD	-1989.98	-1989.98	-25108.94	-27290.39	-27302.78	-27302.78	-27302.78	-27302.78	$42.49~\mathrm{sec}$	1.6352	0.8849

Table 4: knott-3d-450 (8 instances)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC	-70698.40 -4892.36 -67357.99 -4892.36	-4892.36 -70714.91 -67110.26 -65435.98	$-67700.01 \\ -76155.86$	$\begin{array}{c} -67700.01 \\ -78299.83 \\ -72145.23 \\ -76556.12 \\ -78398.58 \\ -74824.38 \end{array}$	$\begin{array}{c} -67700.01 \\ -78312.64 \\ -73188.82 \\ -76670.31 \\ -78413.63 \\ -75022.34 \end{array}$	$\begin{array}{c} -67700.01 \\ -78312.64 \\ -73188.82 \\ -76670.31 \\ -78413.63 \\ -75022.34 \end{array}$	$\begin{array}{c} -78312.64 \\ -73188.82 \\ -76670.31 \\ -78413.63 \\ -75022.34 \end{array}$	$\begin{array}{c} -67700.01 \\ -78312.64 \\ -73188.82 \\ -76670.31 \\ -78413.63 \\ -75022.34 \end{array}$	93.36 sec 0.32 sec 64.92 sec 191.32 sec 88.65 sec 132.78 sec 155.17 sec 500.38 sec	2.9155 2.2256 4.9270 2.3809 2.0801 2.7487	0.7610 0.8433 0.6409 0.8470 0.8573 0.8394
MCR-CCFDB	-4892.36	-4892.36	-4892.36					-65081.43			
MCI-CCIFD	-4892.36	-4892.36	-4892.36	-20812.44	-78090.32	-78390.56	-78412.27	-78412.27	679.35 sec	2.0037	0.867

Table 5: knott-3d-550 (8 instances)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} -2794.65 \\ -119817.00 \\ -119817.00 \\ -8187.14 \\ -50653.90 \\ -8187.14 \\ -8187.14 \\ -8187.14 \end{array}$	$\begin{array}{c} -121635.46 \\ -8187.14 \\ -113407.57 \\ -23928.53 \\ -48261.86 \end{array}$	$\begin{array}{c} -129458.56 \\ -8187.14 \\ -130789.76 \\ -135401.38 \\ -124659.83 \end{array}$	$\begin{array}{c} -119817.00 \\ -132967.67 \\ -8187.14 \\ -132194.34 \\ -136391.50 \\ -128978.18 \end{array}$	$\begin{array}{c} -134088.54 \\ -119817.00 \\ -136034.77 \\ -125886.60 \\ -133017.00 \\ -136457.29 \\ -130050.37 \\ -136421.13 \end{array}$	$\begin{array}{c} -119817.00 \\ -136208.48 \\ -127027.40 \\ -133017.00 \\ -136457.29 \\ -130181.61 \end{array}$	$\begin{array}{c} -119817.00 \\ -136216.88 \\ -127032.70 \\ -133017.00 \\ -136457.29 \\ -130181.61 \end{array}$	$\begin{array}{c} -119817.00 \\ -136216.88 \\ -127032.70 \\ -133017.00 \\ -136457.29 \\ -130181.61 \end{array}$	642.88 sec 0.76 sec 500.80 sec 654.69 sec 240.05 sec 327.30 sec 720.61 sec 1653.98 sec
MCR-CCFDB	-8187.14	-8187.14	-8187.14	-8187.14	-8187.14	-12604.86	-36297.50	-36297.50	2009.80 sec
MCI-CCIFD	-8187.14	-8187.14	-8187.14	-8187.14	-51626.33	-92513.86	-136198.25	-136198.25	$1530.04~{\rm sec}$

Table 6: seg-3d (1 instances)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	1281549.37 1281549.37 1258675.53 1265334.24 1265334.24 1265334.24	1281549.37 1281549.37 1281549.37 1258675.53 1265334.24 1265334.24 1265334.24	861280.16 829064.68 1265334.24	1281549.37 820184.98 800636.51 1258675.53 818529.13 779585.33 884727.49	809569.07 779014.36 824624.32	1281549.37 820184.98 795020.78 1258675.53 809569.07 778968.07 817956.21	949757.11 820184.98 787846.06 1258675.53 804313.81 778958.97 815461.43	804313.81 778958.97 815461.43	2.03 sec 1802.81 sec 4543.73 sec 1801.80 sec 1801.20 sec 1892.94 sec	2.8395 1.7603 7.1057 2.1347 1.3347 3.3514	0.9651 0.9861 0.5849 0.9775 0.9906 0.8895
CC-Fusion-WS-MC MCR-CCFDB MCI-CCIFD	1253637.12	1265334.24 1253637.12 1253637.12	1253637.12				779056.84 1253637.12 963034.43		1808.10 sec 8291.80 sec 2358.10 sec	6.5058	0.0432

Table 7: socialnets (2 instances)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC	119638.00	119638.00	119638.00	119638.00	119638.00	64244.50	60883.50	60882.50	3673.15 sec
HC	119638.00	119638.00	119638.00	119638.00	119638.00	119638.00	119638.00	119638.00	20.42 se
HC-CGC	119638.00	119638.00	119638.00	119309.50	119309.50	69550.00	60916.00	60915.00	4708.54 sec
ogm-KL	∞	NaN	NaN see						
CC-Fusion-HC-CGC	94861.00	94861.00	93700.50	83766.00	72063.00	68472.00	65204.50	65202.00	1803.23 se
CC-Fusion-HC-MC	94861.00	94861.00	93700.50	83768.00	71898.50	68023.00	64625.00	64622.00	1804.59 se
CC-Fusion-WS-CGC	94861.00	94861.00	94861.00	94861.00	72480.00	66223.00	62596.00	62353.50	1946.90 se
CC-Fusion-WS-MC	∞	NaN	NaN see						
MCR-CCFDB	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	3536.21 se
MCI-CCIFD	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	94861.00	2968.81 se

Table 8: normalized socialnets (2 instances)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} 8304.07 \\ 8304.07 \\ \infty \\ \infty \\ 4132.22 \\ 4132.22 \\ 4132.22 \\ \infty \end{array}$	8304.07 ∞ 4132.22 4132.22	$\begin{array}{c} 8304.07 \\ 7375.42 \\ \infty \\ \infty \\ 4058.67 \\ 4032.30 \\ 4132.22 \\ \infty \end{array}$	7375.42 ∞ 3655.71 3643.70	$ \begin{array}{c} $	7375.42 ∞ 3057.04 3033.03	7375.42 ∞ ∞ 2910.77 2875.74		$\begin{array}{c} 2771.35~\text{sec} \\ 10.17~\text{sec} \\ NaN~\text{sec} \\ NaN~\text{sec} \\ 1804.26~\text{sec} \\ 1804.24~\text{sec} \\ 2018.43~\text{sec} \\ NaN~\text{sec} \end{array}$
MCR-CCFDB	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	4320.10 sec
MCI-CCIFD	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	4132.22	3087.45 sec

Table 9: modularity-clustering (6 instances)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.0222	0.02 sec
CGC	-0.4482	-0.4482		-0.4482			-0.4482	-0.4482	0.19 sec
HC	-0.2270	-0.2270	-0.2270	-0.2270	-0.2270	-0.2270	-0.2270	-0.2270	0.00 sec
HC-CGC	-0.4611	-0.4611	-0.4611	-0.4611	-0.4611	-0.4611	-0.4611	-0.4611	0.14 sec
ogm-KL	-0.4860	-0.4860	-0.4860	-0.4860	-0.4860	-0.4860	-0.4860	-0.4860	0.01 sec
CC-Fusion-HC-CGC	-0.4431	-0.4438	-0.4470	-0.4470	-0.4470	-0.4470	-0.4470	-0.4470	0.93 sec
CC-Fusion-HC-MC	-0.2884	-0.2944	-0.4216	-0.4522	-0.4558	-0.4558	-0.4558	-0.4558	15.38 sec
CC-Fusion-WS-CGC	-0.4130	-0.4170	-0.4255	-0.4255	-0.4255	-0.4255	-0.4255	-0.4255	0.55 sec
CC-Fusion-WS-MC	-0.2767	-0.3273	-0.4140	-0.4415	-0.4419	-0.4419	-0.4419	-0.4419	14.93 sec
MCR-CCFDB	-0.2493	-0.2493	-0.4640	-0.4640	-0.4640	-0.4640	-0.4640	-0.4640	4.60 sec
MCI-CCIFD	-0.1581	-0.1633	-0.3519	-0.3521	-0.3685	-0.3685	-0.3685	-0.4353	$603.71~{\rm sec}$

4. Anytime Tables (per Instance)

4.1. image-seg

Table 10: image-seg (101085.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	5226.49	5226.49			$7469.86 \\ 5226.49$		7469.86 5226.49	7469.86 5226.49	43.12 sec 0.13 sec		
HC HC-CGC	5223.37	5223.37	5223.37	5223.37	5223.37	5223.37	$5746.53 \\ 5223.37$	5223.37	0.01 sec 0.09 sec	2.3197	0.9157
ogm-KL CC-Fusion-HC-CGC	5214.32	5503.35 5212.18	5212.03	5212.03	5212.03	5212.03	5212.03		0.83 sec 1.60 sec	2.2368	0.9188
CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	5232.73	5208.44 5232.73 5212.81	5232.73	5232.73	5232.73	5232.73	5207.50 5232.73 5209.17		3.51 sec 0.62 sec 3.60 sec	2.2764	0.9176
MCR-CCFDB	5207.50	5207.50	5207.50	5207.50	5207.50	5207.50	5207.50	5207.50	0.15 sec	2.3488	0.9146
MCI-CCIFD	5243.96	5207.50	5207.50	5207.50	5207.50	5207.50	5207.50	5207.50	0.90 sec	2.3488	0.9146

Table 11: image-seg (101087.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞				3902.82			3902.82			
CGC	2803.03	2803.03	2803.03	2803.03	2803.03	2803.03	2803.03	2803.03	0.06 sec	1.5848	0.9339
HC	2985.75	2985.75	2985.75	2985.75	2985.75	2985.75	2985.75	2985.75	0.00 sec	1.6375	0.9286
HC-CGC	2803.52	2803.52	2803.52	2803.52	2803.52	2803.52	2803.52	2803.52	0.08 sec	1.5771	0.9339
ogm-KL	2869.47	2869.47	2869.47	2869.47	2869.47	2869.47	2869.47	2869.47	0.12 sec	2.7070	0.7349
CC-Fusion-HC-CGC	2790.01	2790.01	2790.01	2790.01	2790.01	2790.01	2790.01	2790.01	0.32 sec	1.5245	0.9404
CC-Fusion-HC-MC	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	1.70 sec	1.5220	0.9404
CC-Fusion-WS-CGC	2793.22	2793.22	2793.22	2793.22	2793.22	2793.22	2793.22	2793.22	$0.45 \mathrm{sec}$	1.5463	0.9417
CC-Fusion-WS-MC	2793.54	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	$2.43~{ m sec}$	1.5220	0.9404
MCR-CCFDB	2790.78	2790.78	2790.78	2790.78	2790.78	2790.78	2790.78	2790.78	$0.06~{ m sec}$	1.5224	0.9404
MCI-CCIFD	2791.61	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	2789.90	$0.66~\mathrm{sec}$	1.5220	0.9404

Table 12: image-seg (102061.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	3168.30 2954.52 3077.77 2953.93 2945.33 2958.05	2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05	3739.06 2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05 2943.77	2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05	2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05	2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05	2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05	3739.06 2955.99 3168.30 2954.52 3077.77 2953.93 2944.79 2958.05 2943.77	0.15 sec 0.00 sec 0.12 sec 0.49 sec 0.51 sec 3.19 sec 0.45 sec	2.2416 2.1557 2.1844 2.4854 2.2270 2.2577 2.1394	0.8264 0.8332 0.8283 0.6706 0.8306 0.8274 0.8442
MCR-CCFDB	2947.74	2947.74	2947.74	2947.74	2947.74	2947.74	2947.74	2947.74	0.11 sec	2.2232	0.8320
MCI-CCIFD	2976.60	2976.05	2943.77	2943.77	2943.77	2943.77	2943.77	2943.77	1.11 sec	2.2150	0.8320

Table 13: image-seg (103070.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	$\frac{\infty}{4380.72}$	$\frac{\infty}{4290.48}$			5862.71 4239.74		5862.71 4239.74	5862.71 4239.74	19.10 sec 2.12 sec		
HC HC-CGC	4691.54	4691.54 4228.66	4691.54	4691.54	4691.54	4691.54	4691.54	4691.54 4228.66		3.4197	0.7221
ogm-KL	4446.22	4445.75	4445.75	4445.75	4445.75	4445.75	4445.75	4445.75	0.84 sec	3.5892	0.4534
CC-Fusion-HC-CGC CC-Fusion-HC-MC	4228.41	$\begin{array}{c} 4253.73 \\ 4212.32 \end{array}$	4199.58	4199.58	4199.58	4199.58		4199.58	0.78 sec 5.49 sec	2.8686	0.8123
CC-Fusion-WS-CGC CC-Fusion-WS-MC		$\begin{array}{c} 4275.56 \\ 4207.24 \end{array}$					$\begin{array}{c} 4245.11 \\ 4199.58 \end{array}$	$\begin{array}{c} 4245.11 \\ 4199.58 \end{array}$	1.84 sec 7.28 sec		
MCR-CCFDB	4361.98	4199.38	4199.38	4199.38	4199.38	4199.38	4199.38	4199.38	0.59 sec	2.8892	0.8118
MCI-CCIFD	4356.27	4212.04	4199.38	4199.38	4199.38	4199.38	4199.38	4199.38	1.00 sec	2.8892	0.8118

Table 14: image-seg (105025.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	8378.28	8378.28	8378.28	8378.28	8378.28	58.95 sec	5.8627	0.8016
CGC	6222.98	6135.88	6093.55	6093.55	6093.55	6093.55	6093.55	6093.55	3.23 sec	2.6426	0.8211
HC	6713.14	6713.14	6713.14	6713.14	6713.14	6713.14	6713.14	6713.14	0.01 sec	2.7860	0.8057
HC-CGC	6149.01	6110.87	6106.14	6106.14	6106.14	6106.14	6106.14	6106.14	1.20 sec	2.5595	0.7952
ogm-KL	6323.96	6306.79	6306.79	6306.79	6306.79	6306.79	6306.79	6306.79	1.17 sec	3.2042	0.4955
CC-Fusion-HC-CGC	6133.28	6131.30	6117.43	6117.43	6117.43	6117.43	6117.43	6117.43	1.76 sec	2.6041	0.7781
CC-Fusion-HC-MC	6136.91	6087.05	6070.91	6070.91	6070.91	6070.91	6070.91	6070.91	8.85 sec	2.8538	0.7765
CC-Fusion-WS-CGC	6156.14	6156.14	6156.14	6156.14	6156.14	6156.14	6156.14	6156.14	1.03 sec	2.9371	0.7482
CC-Fusion-WS-MC	6180.85	6114.11	6068.28	6068.28	6068.28	6068.28	6068.28	6068.28	16.06 sec	2.6990	0.8406
MCR-CCFDB	6211.10	6073.28	6073.28	6073.28	6073.28	6073.28	6073.28	6073.28	0.70 sec	2.8464	0.8170
MCI-CCIFD	6181.02	6148.73	6055.33	6055.33	6055.33	6055.33	6055.33	6055.33	2.83 sec	2.8160	0.8174

Table 15: image-seg (106024.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞				2509.12			2509.12			
CGC HC	1600.36 1769.75	1600.36 1769.75			1600.36 1769.75			1600.36 1769.75			
HC-CGC	1607.46 1626.41	1607.46 1626.41	1607.46 1626.41			1607.46 1626.41		1607.46 1626.41			
ogm-KL CC-Fusion-HC-CGC	1599.29	1599.29	1599.29	1599.29	1599.29	1599.29	1599.29	1599.29	0.31 sec	1.9706	0.5866
CC-Fusion-HC-MC CC-Fusion-WS-CGC	1599.29 1603.92	1599.29 1603.92		1599.29 1603.92		1599.29 1603.92	1599.29 1603.92	1599.29 1603.92			
CC-Fusion-WS-MC		1599.29				1599.29		1599.29			
MCR-CCFDB	1604.09	1604.09	1604.09	1604.09	1604.09	1604.09	1604.09	1604.09	$0.07~{ m sec}$	2.0129	0.5855
MCI-CCIFD	1600.57	1599.25	1599.25	1599.25	1599.25	1599.25	1599.25	1599.25	$0.69~\mathrm{sec}$	2.0092	0.5855

Table 16: image-seg (108005.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} \infty \\ 6804.65 \\ 7121.43 \\ 6655.68 \\ 10588.54 \\ 6647.86 \\ 6645.11 \\ 6654.39 \\ 6752.41 \end{array}$	7121.43 6614.60 10588.54 6631.03 6585.52 6650.95	$\begin{array}{c} \infty \\ 6617.36 \\ 7121.43 \\ 6599.14 \\ 6912.42 \\ 6605.37 \\ 6578.03 \\ 6643.86 \\ 6582.74 \end{array}$	7121.43 6599.14 6912.42 6605.37 6578.03 6643.86	6617.36 7121.43 6599.14 6912.42 6605.37 6578.03 6643.86	$\begin{array}{c} 6617.36 \\ 7121.43 \\ 6599.14 \\ 6912.42 \\ 6605.37 \\ 6578.03 \\ 6643.86 \end{array}$	6617.36 7121.43 6599.14 6912.42 6605.37 6578.03 6643.86	8625.85 6617.36 7121.43 6599.14 6912.42 6605.37 6578.03 6643.86 6582.74	88.73 sec 5.11 sec 0.01 sec 1.55 sec 4.31 sec 3.12 sec 6.09 sec 1.98 sec	4.0642 4.2541 4.3886 3.4629 4.3134 4.3639 4.2804	0.6163 0.6338 0.6775 0.4791 0.6937 0.7019 0.7050
MCR-CCFDB MCI-CCIFD	7906.62 7250.79	6581.96	6581.96 6578.03	6581.96	6581.96	6581.96		6581.96	0.70 sec 1.64 sec	4.3685	0.7019

Table 17: image-seg (108070.bmp)

algorithm				v	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	11947.12	11947.12	11947.12	11947.12	171.04 sec	7.7419	0.5215
CGC	8611.13	8600.20	8459.19	8441.67	8441.67	8441.67	8441.67	8441.67	21.65 sec	3.2492	0.5549
HC	9041.17	9041.17	9041.17	9041.17	9041.17	9041.17	9041.17	9041.17	0.01 sec	3.5225	0.6097
HC-CGC	8596.76	8565.77	8440.20	8436.35	8436.35	8436.35	8436.35	8436.35	17.41 sec		
ogm-KL	11215.59	11215.59	8636.17	8636.17	8636.17	8636.17	8636.17	8636.17	3.33 sec	2.5094	0.5387
CC-Fusion-HC-CGC	8493.42	8485.06	8456.98	8456.98	8456.98	8456.98	8456.98	8456.98	4.72 sec	3.2574	0.5553
CC-Fusion-HC-MC	8515.21	8443.22	8425.09	8425.09	8425.09	8425.09	8425.09	8425.09	15.44 sec	3.4284	0.6020
CC-Fusion-WS-CGC	8534.52	8515.59	8476.32	8476.32	8476.32	8476.32	8476.32	8476.32	2.76 sec	3.1948	0.5578
CC-Fusion-WS-MC	9216.25	8617.53	8425.44	8425.09	8425.09	8425.09	8425.09	8425.09	25.55 sec	3.4284	0.6020
MCR-CCFDB	10108.62	8760.98	8426.08	8426.08	8426.08	8426.08	8426.08	8426.08	$1.65~{ m sec}$	3.3905	0.6305
MCI-CCIFD	8822.24	8602.64	8422.24	8422.24	8422.24	8422.24	8422.24	8422.24	2.14 sec	3.3875	0.6304

Table 18: image-seg (108082.bmp)

algorithm				va	lue		·		time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	6332.15	6332.15	6332.15	6332.15	6332.15	31.97 sec	6.1989	0.6320
CGC	4890.98	4842.39	4835.78	4835.78	4835.78	4835.78	4835.78	4835.78	1.99 sec	3.9599	0.5957
HC	5330.47	5330.47	5330.47	5330.47	5330.47	5330.47	5330.47	5330.47	0.00 sec	3.9840	0.5914
HC-CGC	4837.38	4812.66	4811.33	4811.33	4811.33	4811.33	4811.33	4811.33	1.19 sec		
ogm-KL	5113.17	5045.49	5037.94	5037.94	5037.94	5037.94	5037.94	5037.94	1.54 sec	2.8742	0.5656
CC-Fusion-HC-CGC	4833.99	4824.63	4823.33	4823.33	4823.33	4823.33	4823.33	4823.33	1.65 sec	3.9881	0.6161
CC-Fusion-HC-MC	4814.80	4804.23	4801.22	4801.22	4801.22	4801.22	4801.22	4801.22	7.07 sec	4.0023	0.6376
CC-Fusion-WS-CGC	4846.49	4846.49	4846.49	4846.49	4846.49	4846.49	4846.49	4846.49	0.72 sec	3.8971	0.6378
CC-Fusion-WS-MC	5242.84	4885.83	4802.49	4802.49	4802.49	4802.49	4802.49	4802.49	10.20 sec	3.9886	0.6299
MCR-CCFDB	4828.26	4800.15	4800.15	4800.15	4800.15	4800.15	4800.15	4800.15	$0.54~{ m sec}$	3.9890	0.6327
MCI-CCIFD	4952.90	4826.12	4800.15	4800.15	4800.15	4800.15	4800.15	4800.15	1.83 sec	3.9890	0.6327

Table 19: image-seg (109053.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5880.78	5880.78	5880.78	5880.78	5880.78	22.47 sec	5.4642	0.7216
CGC	4594.80	4565.57	4472.80	4472.80	4472.80	4472.80	4472.80	4472.80	4.59 sec	3.2634	0.4657
HC	5014.88	5014.88	5014.88	5014.88	5014.88	5014.88	5014.88	5014.88	0.00 sec	3.5099	0.5099
HC-CGC		4460.87					4442.56	4442.56	5.58 sec	3.3472	0.4716
ogm-KL	4628.24	4608.27	4606.41	4606.41	4606.41	4606.41	4606.41	4606.41	1.43 sec	2.8857	0.4083
CC-Fusion-HC-CGC	4448.45	4448.45	4448.45	4448.45	4448.45	4448.45	4448.45	4448.45	0.83 sec	3.2949	0.4942
CC-Fusion-HC-MC	4421.20	4421.13	4421.13	4421.13	4421.13	4421.13	4421.13	4421.13	3.03 sec	3.3533	0.5328
CC-Fusion-WS-CGC	4497.48	4484.98	4484.98	4484.98	4484.98	4484.98	4484.98	4484.98	1.19 sec	3.3959	0.4951
CC-Fusion-WS-MC	4455.97	4433.67	4421.83	4421.83	4421.83	4421.83	4421.83	4421.83	5.67 sec	3.2410	0.6103
MCR-CCFDB	4453.23	4425.56	4425.56	4425.56	4425.56	4425.56	4425.56	4425.56	$0.62~{ m sec}$	3.3633	0.5343
MCI-CCIFD	4519.74	4431.77	4421.13	4421.13	4421.13	4421.13	4421.13	4421.13	1.06 sec	3.3533	0.5328

Table 20: image-seg (119082.bmp)

algorithm				va	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	4837.30 4541.05 4722.36 4532.52 4531.76 4536.13	$\begin{array}{c} 4541.05 \\ 4705.51 \\ 4532.51 \\ 4530.71 \\ 4534.47 \end{array}$	4543.93 4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	4543.93 4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	4543.93 4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	4543.93 4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	4543.93 4837.30 4541.05 4705.51 4532.51 4530.71 4534.29	27.73 sec 0.17 sec 0.00 sec 0.13 sec 1.19 sec 0.99 sec 2.15 sec 1.26 sec	3.4900 3.4814 3.4636 4.0665 3.1669 3.2507 3.2112	0.8708 0.8545 0.8740 0.7653 0.9135 0.9100 0.9120
CC-Fusion-WS-MC MCR-CCFDB MCI-CCIFD	4530.71		4530.71	4530.71		4530.71 4530.71 4530.71	4530.71 4530.71 4530.71	4530.71 4530.71 4530.71	4.51 sec 0.07 sec 0.19 sec	3.2507	0.9100

Table 21: image-seg (12084.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞		8902.80			8902.80	118.42 sec		
CGC	7391.84	7376.93	7301.42	7301.42	7301.42	7301.42	7301.42	7301.42	8.54 sec	5.4724	0.4626
HC	7742.81	7742.81	7742.81	7742.81	7742.81	7742.81	7742.81	7742.81	0.01 sec	5.4058	0.4890
HC-CGC	7327.67	7301.35	7293.87	7293.87	7293.87	7293.87	7293.87	7293.87	3.73 sec	5.5457	0.4880
ogm-KL	9328.84	9328.84	7459.40	7456.34	7456.34	7456.34	7456.34	7456.34	12.95 sec	4.1543	0.4703
CC-Fusion-HC-CGC	7301.25	7295.29	7290.16	7290.16	7290.16	7290.16	7290.16	7290.16	2.71 sec	5.5907	0.4984
CC-Fusion-HC-MC	7312.97	7296.42	7287.68	7287.68	7287.68	7287.68	7287.68	7287.68	7.54 sec	5.6152	0.4940
CC-Fusion-WS-CGC	7324.13	7314.66	7306.02	7306.02	7306.02	7306.02	7306.02	7306.02	2.66 sec	5.5513	0.4964
CC-Fusion-WS-MC	7755.99	7373.70	7284.45	7284.45	7284.45	7284.45	7284.45	7284.45	13.38 sec	5.7016	0.5074
MCR-CCFDB	7288.30	7288.30	7288.30	7288.30	7288.30	7288.30	7288.30	7288.30	$0.44~{ m sec}$	5.7131	0.5074
MCI-CCIFD	7385.90	7313.23	7284.45	7284.45	7284.45	7284.45	7284.45	7284.45	1.07 sec	5.7016	0.5074

Table 22: image-seg (123074.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5974.05	5974.05	5974.05	5974.05	5974.05	13.51 sec	5.1189	0.8013
CGC	3979.04	3904.66	3880.29	3880.29	3880.29	3880.29	3880.29	3880.29	1.73 sec	2.6904	0.4909
HC	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	0.00 sec	3.0191	0.6645
HC-CGC	3856.11	3856.11	3856.11	3856.11	3856.11	3856.11	3856.11	3856.11	0.53 sec	2.6860	0.6508
ogm-KL	4059.26	4059.26	4059.26	4059.26	4059.26	4059.26	4059.26	4059.26	0.22 sec	2.9356	0.3470
CC-Fusion-HC-CGC	3869.89	3869.89	3869.89	3869.89	3869.89	3869.89	3869.89	3869.89	0.53 sec		
CC-Fusion-HC-MC	3847.83	3847.59	3842.74	3842.74	3842.74	3842.74	3842.74	3842.74	4.22 sec	2.6999	0.6741
CC-Fusion-WS-CGC	3901.18	3888.91	3878.90	3878.90	3878.90	3878.90	3878.90	3878.90	1.50 sec	2.7619	0.5513
CC-Fusion-WS-MC	3905.76	3848.05	3842.74	3842.74	3842.74	3842.74	3842.74	3842.74	5.55 sec	2.6999	0.6741
MCR-CCFDB	4200.09	3842.74	3842.74	3842.74	3842.74	3842.74	3842.74	3842.74	0.80 sec	2.6999	0.6741
MCI-CCIFD	3968.12	3877.22	3842.74	3842.74	3842.74	3842.74	3842.74	3842.74	2.87 sec	2.6999	0.6741

Table 23: image-seg (126007.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	2898.24 2688.59 2791.58 2685.26 2685.03 2688.73	$\begin{array}{c} 2692.98 \\ 2898.24 \\ 2688.59 \\ 2791.58 \\ 2685.26 \\ 2684.83 \\ 2688.73 \end{array}$	3461.57 2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73 2684.83	2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73	2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73	2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73	2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73	3461.57 2692.98 2898.24 2688.59 2791.58 2685.26 2684.83 2688.73 2684.83	0.05 sec 0.00 sec 0.04 sec 0.19 sec 0.53 sec 1.58 sec 0.65 sec	1.5914 1.9315 1.6463 2.0876 1.6525 1.5870 1.5721	0.9438 0.9027 0.9415 0.8715 0.9417 0.9443 0.9445
MCR-CCFDB MCI-CCIFD	2686.11	2686.11	2686.11	2686.11	2686.11	2686.11		2686.11	0.05 sec	1.5858	0.9443

Table 24: image-seg (130026.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL	6255.27 5508.38	5531.49 6255.27 5438.60 5597.67	5392.59 6255.27 5401.18	5392.59 6255.27 5401.18	$\begin{array}{c} 6255.27 \\ 5401.18 \end{array}$	5392.59 6255.27 5401.18	$5392.59 \\ 6255.27$	5401.18	47.80 sec 4.99 sec 0.01 sec 4.73 sec 1.55 sec	$2.2961 \\ 3.0404 \\ 2.3782$	$0.6529 \\ 0.5186 \\ 0.6118$
CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$5365.86 \\ 5479.09$	5377.79 5355.93 5479.09 5454.16	$5351.15 \\ 5479.09$	5351.15 5479.09	$5351.15 \\ 5479.09$	5351.15 5479.09	5351.15 5479.09	5367.14 5351.15 5479.09 5351.15	2.33 sec 6.99 sec 0.68 sec 10.55 sec	$\substack{2.4069 \\ 2.5547}$	$0.6601 \\ 0.6312$
MCR-CCFDB MCI-CCIFD	6383.91 5858.00	$5569.26 \\ 5722.56$			5366.20 5350.83			5366.20 5350.83			

Table 25: image-seg (134035.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	∞ cc79 11	$_{6674.28}^{\infty}$	∞ .ccoo 20						90.58 sec 29.29 sec		
HC	7355.83	7355.83	7355.83	7355.83	7355.83	7355.83	7355.83	7355.83	0.01 sec	3.7491	0.5253
HC-CGC ogm-KL		6707.17 9136.90			6598.31 6678.92			6598.31 6678.92	22.38 sec 8.47 sec		
CC-Fusion-HC-CGC CC-Fusion-HC-MC		6581.98 6583.05						6581.38 6579.13	2.00 sec 5.06 sec		
CC-Fusion-WS-CGC CC-Fusion-WS-MC	6609.94	6604.73 6619.96	6596.94	6596.94	6596.94	6596.94	6596.94	6596.94 6581.55	2.19 sec 9.05 sec	3.9030	0.5417
MCR-CCFDB	6699.59	6590.30	6590.30	6590.30	6590.30	6590.30	6590.30	6590.30	0.94 sec	3.9567	0.5420
MCI-CCIFD	6803.74	6638.86	6578.98	6578.98	6578.98	6578.98	6578.98	6578.98	4.24 sec	3.9131	0.5412

Table 26: image-seg (14037.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	2049.04	2049.04	2049.04	2049.04	2049.04	2049.04	2049.04	0.57 sec	3.0931	0.8347
CGC	1385.23	1385.23	1385.23	1385.23	1385.23	1385.23	1385.23	1385.23	$0.02 \mathrm{sec}$	1.2705	0.8898
HC	1527.15	1527.15	1527.15	1527.15	1527.15	1527.15	1527.15	1527.15	0.00 sec	1.2240	0.8952
HC-CGC	1389.67	1389.67	1389.67	1389.67	1389.67	1389.67	1389.67	1389.67	0.02 sec	1.2535	0.8917
ogm-KL	1444.67	1444.67	1444.67	1444.67	1444.67	1444.67	1444.67	1444.67	0.02 sec	2.2659	0.6622
CC-Fusion-HC-CGC	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	0.13 sec	1.2867	0.8895
CC-Fusion-HC-MC		1383.14						1383.14			
CC-Fusion-WS-CGC		1383.14						1383.14			
CC-Fusion-WS-MC	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1.11 sec	1.2867	0.8895
MCR-CCFDB	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	$0.06~{\rm sec}$	1.2867	0.8895
MCI-CCIFD	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	1383.14	$0.06~{\rm sec}$	1.2867	0.8895

Table 27: image-seg (143090.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	2357.83	2357.83	2357.83	2357.83	2357.83	2357.83	1.03 sec	2.9212	0.8294
CGC	1722.91	1722.91	1722.91	1722.91	1722.91	1722.91	1722.91	1722.91	$0.05 \mathrm{sec}$	1.2508	0.8906
HC	1945.72	1945.72	1945.72	1945.72	1945.72	1945.72	1945.72	1945.72	0.00 sec	1.1706	0.8943
HC-CGC	1723.71	1723.71	1723.71	1723.71	1723.71	1723.71	1723.71	1723.71	$0.05 \mathrm{sec}$	1.2774	0.8893
ogm-KL	1784.06	1784.06	1784.06	1784.06	1784.06	1784.06	1784.06	1784.06	$0.04 \mathrm{sec}$	2.0059	0.6847
CC-Fusion-HC-CGC	1720.50	1720.50	1720.50	1720.50	1720.50	1720.50	1720.50	1720.50	0.21 sec	1.2404	0.8901
CC-Fusion-HC-MC	1720.30	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1.62 sec	1.3168	0.8878
CC-Fusion-WS-CGC	1717.16	1714.54	1714.54	1714.54	1714.54	1714.54	1714.54	1714.54	$0.65 \mathrm{sec}$	1.2963	0.8879
CC-Fusion-WS-MC	1719.98	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1.49 sec	1.3168	0.8878
MCR-CCFDB	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	$0.04~\rm sec$	1.3168	0.8878
MCI-CCIFD	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	1714.38	$0.24~{\rm sec}$	1.3168	0.8878

Table 28: image-seg (145086.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	∞ 3337.96	∞ 3337.96			5192.72 3337.96			5192.72 3337.96	12.16 sec 0.04 sec		
HC HC-CGC		3446.29 3330.38					3446.29 3330.38	3446.29	0.00 sec 0.03 sec		0.00
ogm-KL	3393.28	3393.28	3393.28	3393.28	3393.28	3393.28	3393.28	3393.28	0.22 sec	1.8228	0.8599
CC-Fusion-HC-CGC CC-Fusion-HC-MC		$3323.53 \\ 3322.51$					$3323.53 \\ 3322.51$		0.67 sec 1.73 sec		
CC-Fusion-WS-CGC CC-Fusion-WS-MC							3325.68 3322.21		0.49 sec 2.51 sec		
MCR-CCFDB	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	0.04 sec	1.5486	0.8971
MCI-CCIFD	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	3322.21	0.22 sec	1.5486	0.8971

Table 29: image-seg (147091.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5311.98	5311.98	5311.98	5311.98	5311.98	15.46 sec	4.5198	0.6600
CGC	3995.30	3995.30	3995.30	3995.30	3995.30	3995.30	3995.30	3995.30	0.32 sec	1.4691	0.9028
HC	4267.63	4267.63	4267.63	4267.63	4267.63	4267.63	4267.63	4267.63	0.00 sec	1.5907	0.8931
HC-CGC	3992.55	3987.68	3987.68	3987.68	3987.68	3987.68	3987.68	3987.68	1.04 sec	1.6124	0.8824
ogm-KL	4085.05	4085.05	4085.05	4085.05	4085.05	4085.05	4085.05	4085.05	0.65 sec	1.8671	0.7421
CC-Fusion-HC-CGC	3988.71	3988.71	3988.71	3988.71	3988.71	3988.71	3988.71	3988.71	0.50 sec	1.5529	0.8834
CC-Fusion-HC-MC	3978.39	3978.39	3975.15	3975.15	3975.15	3975.15	3975.15	3975.15	3.92 sec	1.5645	0.8944
CC-Fusion-WS-CGC	3999.51	3993.72	3993.72	3993.72	3993.72	3993.72	3993.72	3993.72	0.86 sec	1.5447	0.8947
CC-Fusion-WS-MC	4009.08	3984.31	3973.71	3973.71	3973.71	3973.71	3973.71	3973.71	5.42 sec	1.6036	0.8933
MCR-CCFDB	3976.61	3976.61	3976.61	3976.61	3976.61	3976.61	3976.61	3976.61	0.22 sec	1.6149	0.8932
MCI-CCIFD	4007.45	3973.71	3973.71	3973.71	3973.71	3973.71	3973.71	3973.71	0.89 sec	1.6036	0.8933

Table 30: image-seg (148026.bmp)

algorithm				,	value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10358.57	10358.57	10358.57	10358.57	156.50 sec		
CGC	8233.45	8233.45	8233.45	8233.45	8233.45	8233.45	8233.45	8233.45	0.48 sec	3.7507	0.7976
HC	8708.30	8708.30	8708.30	8708.30	8708.30	8708.30	8708.30	8708.30	0.01 sec	3.7371	0.7926
HC-CGC	8225.98	8225.98	8225.98	8225.98	8225.98	8225.98	8225.98	8225.98	0.30 sec	3.7763	0.7967
ogm-KL	11005.86	8484.22	8463.81	8463.81	8463.81	8463.81	8463.81	8463.81	1.66 sec	3.3414	0.7640
CC-Fusion-HC-CGC	8219.45	8217.53	8217.53	8217.53	8217.53	8217.53	8217.53	8217.53	1.56 sec	3.7010	0.8063
CC-Fusion-HC-MC	8275.54	8226.19	8205.98	8205.98	8205.98	8205.98	8205.98	8205.98	7.12 sec	3.7380	0.8065
CC-Fusion-WS-CGC	8260.58	8249.21	8247.72	8247.72	8247.72	8247.72	8247.72	8247.72	1.84 sec	3.7103	0.8064
CC-Fusion-WS-MC	8391.06	8274.49	8206.03	8206.03	8206.03	8206.03	8206.03	8206.03	12.08 sec	3.7371	0.8065
MCR-CCFDB	8208.02	8208.02	8208.02	8208.02	8208.02	8208.02	8208.02	8208.02	0.24 sec	3.7392	0.8065
MCI-CCIFD	8212.83	8205.98	8205.98	8205.98	8205.98	8205.98	8205.98	8205.98	0.86 sec	3.7380	0.8065

Table 31: image-seg (148089.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	8630.87	8630.87	8630.87	8630.87	75.76 sec	6.4171	0.7751
CGC	6583.57	6466.63	6457.36	6457.36	6457.36	6457.36	6457.36	6457.36	2.14 sec	3.9737	0.7717
HC		7061.69					7061.69	7061.69	0.01 sec	4.1278	0.7845
HC-CGC	6458.50	6455.85	6455.85	6455.85	6455.85	6455.85	6455.85	6455.85	1.02 sec	3.9547	0.7769
ogm-KL	8715.56	8715.56	6691.00	6691.00	6691.00	6691.00	6691.00	6691.00	4.57 sec	3.9201	0.5529
CC-Fusion-HC-CGC	6448.72	6445.96	6444.72	6444.72	6444.72	6444.72	6444.72	6444.72	1.76 sec	3.7969	0.8016
CC-Fusion-HC-MC	6444.64	6439.58	6439.58	6439.58	6439.58	6439.58	6439.58	6439.58	3.57 sec	3.8431	0.8008
CC-Fusion-WS-CGC	6474.84	6467.71	6467.71	6467.71	6467.71	6467.71	6467.71	6467.71	1.27 sec	3.8231	0.7997
CC-Fusion-WS-MC	6670.96	6501.31	6440.12	6440.12	6440.12	6440.12	6440.12	6440.12	10.80 sec	3.8418	0.8008
MCR-CCFDB	6442.79	6442.57	6442.57	6442.57	6442.57	6442.57	6442.57	6442.57	$0.51~{ m sec}$	3.8412	0.8008
MCI-CCIFD	6645.42	6478.51	6439.58	6439.58	6439.58	6439.58	6439.58	6439.58	1.98 sec	3.8431	0.8008

Table 32: image-seg (156065.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM							7980.57		45.34 sec		
CGC HC	5706.16		5706.16	5706.16	$5294.51 \\ 5706.16$	5706.16		5706.16		3.1844	0.6115
HC-CGC ogm-KL	5303.51 6806.07				5285.52 5418.66			5285.52 5418.66	2.60 sec 2.49 sec		
CC-Fusion-HC-CGC CC-Fusion-HC-MC					5253.04 5234.15		5253.04 5234.15	5253.04 5234.15	1.11 sec 4.49 sec		
CC-Fusion-WS-CGC	5291.45	5291.45	5291.45	5291.45	5291.45	5291.45	5291.45	5291.45	0.83 sec	3.0040	0.6363
CC-Fusion-WS-MC					5234.15			5234.15	7.52 sec		
MCR-CCFDB					5236.79				0.69 sec		
MCI-CCIFD	5252.30	5239.36	5234.15	5234.15	5234.15	5234.15	5234.15	5234.15	3.17 sec	2.8637	0.6428

Table 33: image-seg (157055.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	6009.12	6009.12	6009.12	6009.12	6009.12	27.57 sec	4.6000	0.8641
CGC	4694.94	4694.94	4694.94	4694.94	4694.94	4694.94	4694.94	4694.94	0.13 sec	3.0130	0.8709
HC	4997.22	4997.22	4997.22	4997.22	4997.22	4997.22	4997.22	4997.22	0.00 sec	2.9006	0.8841
HC-CGC	4698.96	4698.96	4698.96	4698.96	4698.96	4698.96	4698.96	4698.96	0.08 sec	2.9241	0.8840
ogm-KL	4798.78	4798.78	4798.78	4798.78	4798.78	4798.78	4798.78	4798.78	0.66 sec	3.1407	0.8354
CC-Fusion-HC-CGC	4686.58	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	1.06 sec	2.8787	0.8882
CC-Fusion-HC-MC	4686.99	4686.43	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	2.47 sec	2.8834	0.8882
CC-Fusion-WS-CGC	4687.26	4685.71	4685.24	4685.24	4685.24	4685.24	4685.24	4685.24	1.33 sec	2.8844	0.8882
CC-Fusion-WS-MC	4689.03	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	2.46 sec	2.8834	0.8882
MCR-CCFDB	4686.20	4686.20	4686.20	4686.20	4686.20	4686.20	4686.20	4686.20	0.07 sec	2.8884	0.8882
MCI-CCIFD	4685.21	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	4685.17	0.62 sec	2.8834	0.8882

Table 34: image-seg (159008.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5873.46	5873.46	5873.46	5873.46	5873.46	29.68 sec	5.8549	0.7164
CGC	4556.59	4556.59	4556.59	4556.59	4556.59	4556.59	4556.59	4556.59	0.24 sec	3.6424	0.7338
HC	4973.51	4973.51	4973.51	4973.51	4973.51	4973.51	4973.51	4973.51	0.00 sec	3.6939	0.7297
HC-CGC	4554.56	4554.56	4554.56	4554.56	4554.56	4554.56	4554.56	4554.56	0.13 sec	3.6638	0.7311
ogm-KL	4841.43	4798.82	4793.11	4793.11	4793.11	4793.11	4793.11	4793.11	2.17 sec	3.6426	0.6126
CC-Fusion-HC-CGC	4547.83	4547.05	4547.05	4547.05	4547.05	4547.05	4547.05	4547.05	1.06 sec	3.7101	0.7310
CC-Fusion-HC-MC		4542.63					4540.87	4540.87	4.27 sec	3.7434	0.7342
CC-Fusion-WS-CGC	4588.69	4579.72	4579.72	4579.72	4579.72	4579.72	4579.72	4579.72	0.91 sec	3.5606	0.7350
CC-Fusion-WS-MC	4554.84	4543.74	4542.52	4542.52	4542.52	4542.52	4542.52	4542.52	4.64 sec	3.7406	0.7342
MCR-CCFDB	4545.66	4545.66	4545.66	4545.66	4545.66	4545.66	4545.66	4545.66	0.17 sec	3.7414	0.7342
MCI-CCIFD	4656.16	4544.28	4540.87	4540.87	4540.87	4540.87	4540.87	4540.87	$1.45~{ m sec}$	3.7434	0.7342

Table 35: image-seg (160068.bmp)

algorithm				Va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	4182.67	4182.67	4182.67	4182.67	4182.67	4182.67	6.63 sec	3.2572	0.8895
CGC	3100.79	3100.79	3100.79	3100.79	3100.79	3100.79	3100.79	3100.79	0.32 sec	1.8613	0.9005
HC	3444.01	3444.01	3444.01	3444.01	3444.01	3444.01	3444.01	3444.01	0.00 sec	1.8729	0.9088
HC-CGC	3092.72	3092.72	3092.72	3092.72	3092.72	3092.72	3092.72	3092.72	0.26 sec	1.8870	0.9009
ogm-KL	3216.91	3216.91	3216.91	3216.91	3216.91	3216.91	3216.91	3216.91	0.31 sec	2.5831	0.6388
CC-Fusion-HC-CGC	3097.42	3097.42	3097.42	3097.42	3097.42	3097.42	3097.42	3097.42	0.36 sec	1.9039	0.9047
CC-Fusion-HC-MC	3091.38	3091.38	3089.32	3089.32	3089.32	3089.32	3089.32	3089.32	2.47 sec	1.8716	0.9009
CC-Fusion-WS-CGC	3102.83	3102.83	3102.83	3102.83	3102.83	3102.83	3102.83	3102.83	0.49 sec	1.8899	0.9007
CC-Fusion-WS-MC	3097.07	3091.48	3091.48	3091.48	3091.48	3091.48	3091.48	3091.48	$2.43~{ m sec}$	1.9086	0.9046
MCR-CCFDB	3091.15	3091.15	3091.15	3091.15	3091.15	3091.15	3091.15	3091.15	$0.16~\rm sec$	1.8829	0.9008
MCI-CCIFD	3089.32	3089.32	3089.32	3089.32	3089.32	3089.32	3089.32	3089.32	$0.42~\rm sec$	1.8716	0.9009

Table 36: image-seg (16077.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	4646.12 4244.79 4383.98 4233.06 4231.67 4271.88	4244.79 4382.90 4232.10 4229.73	$\begin{array}{c} 4255.85 \\ 4646.12 \\ 4244.79 \\ 4382.90 \\ 4232.10 \\ 4227.88 \\ 4261.58 \end{array}$	4255.85 4646.12 4244.79 4382.90 4232.10 4227.88 4261.58	4646.12 4244.79 4382.90 4232.10 4227.88 4261.58	$\begin{array}{c} 4255.85\\ 4646.12\\ 4244.79\\ 4382.90\\ 4232.10\\ 4227.88\\ 4261.58\\ \end{array}$	4255.85 4646.12 4244.79 4382.90 4232.10 4227.88 4261.58	4255.85 4646.12 4244.79 4382.90 4232.10 4227.88	20.50 sec 0.25 sec 0.00 sec 0.21 sec 0.74 sec 1.10 sec 4.25 sec 1.68 sec 3.19 sec	3.5034 3.4908 3.6675 3.7870 3.6248 3.6559 3.6230	0.7610 0.7634 0.7547 0.5834 0.7521 0.7523 0.7886
MCR-CCFDB MCI-CCIFD		4230.49	4230.49	4230.49	4230.49	4230.49	4230.49 4227.88	4230.49	0.20 sec 0.62 sec	3.6581	0.7522

Table 37: image-seg (163085.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞		5707.74					18.31 sec		
CGC		4468.67						4415.74	4.37 sec		
HC	4862.02	4862.02	4862.02	4862.02	4862.02	4862.02	4862.02	4862.02	0.00 sec	3.2824	0.5849
HC-CGC	4441.73	4425.20	4425.20	4425.20	4425.20	4425.20	4425.20	4425.20	0.99 sec	3.4789	0.5813
ogm-KL	4562.73	4558.56	4558.56	4558.56	4558.56	4558.56	4558.56	4558.56	0.74 sec	3.0211	0.4362
CC-Fusion-HC-CGC	4417.90	4417.90	4417.90	4417.90	4417.90	4417.90	4417.90	4417.90	0.92 sec	2.9835	0.7280
CC-Fusion-HC-MC	4425.53	4390.79	4381.52	4381.52	4381.52	4381.52	4381.52	4381.52	12.96 sec	3.0889	0.7198
CC-Fusion-WS-CGC	4487.11	4460.90	4460.90	4460.90	4460.90	4460.90	4460.90	4460.90	1.26 sec	3.3805	0.6567
CC-Fusion-WS-MC	4579.44	4503.81	4381.21	4381.13	4381.13	4381.13	4381.13	4381.13	$22.85~\mathrm{sec}$	3.1678	0.7179
MCR-CCFDB	4569.48	4392.93	4392.93	4392.93	4392.93	4392.93	4392.93	4392.93	$0.65~{ m sec}$	3.1989	0.7178
MCI-CCIFD	4545.13	4465.31	4381.13	4381.13	4381.13	4381.13	4381.13	4381.13	1.08 sec	3.1678	0.7179

Table 38: image-seg (167062.bmp)

algorithm				Va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM					2249.67		2249.67				
CGC HC					1273.93 1316.63			1273.93 1316.63			
HC-CGC ogm-KL					1273.78 1274.78			1273.78 1274.78			
CC-Fusion-HC-CGC	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	0.13 sec	0.2546	0.9787
CC-Fusion-HC-MC CC-Fusion-WS-CGC					1273.72 1273.72			1273.72 1273.72			
CC-Fusion-WS-MC	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1.23 sec	0.2546	0.9787
MCR-CCFDB	1274.19	1274.19	1274.19	1274.19	1274.19	1274.19	1274.19	1274.19	$0.01~\rm sec$	0.2552	0.9787
MCI-CCIFD	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	1273.72	$0.17~{ m sec}$	0.2546	0.9787

Table 39: image-seg (167083.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	12262.87	12262.87	12262.87	12262.87	167.32 sec	6.3080	0.7532
CGC	8503.85	8472.52	8360.25	8360.25	8360.25	8360.25	8360.25	8360.25	3.50 sec	2.7648	0.7724
HC	8977.05	8977.05	8977.05	8977.05	8977.05	8977.05	8977.05	8977.05	0.01 sec	2.5980	0.8199
HC-CGC	8354.70	8346.31	8344.30	8344.30	8344.30	8344.30	8344.30	8344.30	1.38 sec	2.9703	0.7714
ogm-KL	10993.43	10993.43	8572.76	8572.76	8572.76	8572.76	8572.76	8572.76	3.48 sec	2.6473	0.6127
CC-Fusion-HC-CGC	8367.21	8365.94	8361.93	8361.93	8361.93	8361.93	8361.93	8361.93	2.35 sec	2.8402	0.7788
CC-Fusion-HC-MC	8390.17	8353.66	8331.63	8331.63	8331.63	8331.63	8331.63	8331.63	11.07 sec	2.7377	0.8137
CC-Fusion-WS-CGC	8419.79	8419.79	8419.79	8419.79	8419.79	8419.79	8419.79	8419.79	1.28 sec	3.0286	0.7642
CC-Fusion-WS-MC	8497.80	8437.79	8332.10	8331.63	8331.63	8331.63	8331.63	8331.63	26.46 sec	2.7377	0.8137
MCR-CCFDB	9520.92	8333.88	8333.88	8333.88	8333.88	8333.88	8333.88	8333.88	0.85 sec	2.7379	0.8137
MCI-CCIFD	8555.05	8423.16	8331.63	8331.63	8331.63	8331.63	8331.63	8331.63	1.38 sec	2.7365	0.8137

Table 40: image-seg (170057.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	3635.86 3321.50 3345.02 3279.23 3269.41 3283.59	$\begin{array}{c} 3305.67 \\ 3635.86 \\ 3288.11 \\ 3345.02 \\ 3271.82 \\ 3268.63 \\ 3283.59 \end{array}$	5025.86 3296.05 3635.86 3272.34 3345.02 3271.82 3266.73 3283.59 3267.14	3296.05 3635.86 3272.34 3345.02 3271.82 3266.73 3283.59	3296.05 3635.86 3272.34 3345.02 3271.82 3266.73 3283.59	3296.05 3635.86 3272.34 3345.02 3271.82 3266.73 3283.59	3296.05 3635.86 3272.34 3345.02 3271.82 3266.73 3283.59	3345.02 3271.82 3266.73 3283.59	8.59 sec 2.57 sec 0.00 sec 1.65 sec 0.55 sec 1.19 sec 4.11 sec 0.70 sec 20.52 sec	3.1630 2.9926 2.8835 3.2455 2.8443 2.8527 2.9616	0.3510 0.3907 0.4367 0.3154 0.4440 0.4495 0.4283
MCR-CCFDB MCI-CCIFD			3287.66 3266.17		0_0		0_00	3287.66	0.59 sec 2.95 sec		

Table 41: image-seg (175032.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM								15402.59			
CGC HC		11926.15 12687.80			11609.38 12687.80				86.73 sec 0.01 sec		
HC-CGC			11640.31						38.93 sec		
ogm-KL	15464.52	15464.52	11888.55	11888.55	11888.55	11888.55	11888.55	11888.55	3.85 sec	3.1694	0.4315
CC-Fusion-HC-CGC			11673.16						8.16 sec		
CC-Fusion-HC-MC			11553.73						54.86 sec		
CC-Fusion-WS-CGC			11750.88						3.81 sec		
CC-Fusion-WS-MC	13761.10	12389.89	11561.60	11543.61	11543.61	11543.61	11543.61	11543.61	83.59 sec	4.0962	0.6993
MCR-CCFDB	15464.52	14588.17	11574.52	11574.52	11574.52	11574.52	11574.52	11574.52	$5.55~\mathrm{sec}$	4.1655	0.6992
MCI-CCIFD	13510.38	12232.23	11566.32	11542.63	11542.63	11542.63	11542.63	11542.63	36.18 sec	4.1087	0.6992

Table 42: image-seg (175043.bmp)

algorithm				valı	ue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	9837.76	9837.76	9837.76	9837.76	128.42 sec	8.3795	0.2924
CGC	8098.10	7888.65	7882.39	7882.39	7882.39	7882.39	7882.39	7882.39	1.12 sec	5.5365	0.3235
HC	8536.56	8536.56	8536.56	8536.56	8536.56	8536.56	8536.56	8536.56	0.01 sec	5.6158	0.3120
HC-CGC	7853.79	7853.79	7853.79	7853.79	7853.79	7853.79	7853.79	7853.79	0.24 sec		
ogm-KL	12318.40	12318.40	8260.16	8260.16	8260.16	8260.16	8260.16	8260.16	4.43 sec	2.9531	0.4981
CC-Fusion-HC-CGC	7859.65	7842.03	7840.83	7840.83	7840.83	7840.83	7840.83	7840.83	1.87 sec	5.7208	0.3141
CC-Fusion-HC-MC	7870.73	7822.96	7820.21	7820.21	7820.21	7820.21	7820.21	7820.21	4.37 sec	5.8466	0.3094
CC-Fusion-WS-CGC	7936.18	7904.21	7904.21	7904.21	7904.21	7904.21	7904.21	7904.21	1.34 sec		
CC-Fusion-WS-MC	8324.29	7971.72	7817.30	7817.30	7817.30	7817.30	7817.30	7817.30	11.85 sec	5.8333	0.3096
MCR-CCFDB	8667.37	7816.92	7816.92	7816.92	7816.92	7816.92	7816.92	7816.92	0.61 sec	5.8411	0.3091
MCI-CCIFD	8422.56	7900.02	7816.92	7816.92	7816.92	7816.92	7816.92	7816.92	1.82 sec	5.8411	0.3091

Table 43: image-seg (182053.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	4908.61	4908.61	4908.61	4908.61	4908.61	11.27 sec	3.4775	0.9228
CGC	3596.52	3596.52	3596.52	3596.52	3596.52	3596.52	3596.52	3596.52	0.27 sec	2.3543	0.8689
HC	3957.81	3957.81	3957.81	3957.81	3957.81	3957.81	3957.81	3957.81	0.00 sec	2.3121	0.8988
HC-CGC	3588.44	3588.44	3588.44	3588.44	3588.44	3588.44	3588.44	3588.44	0.36 sec	2.4027	0.8851
ogm-KL	3751.47	3751.47	3751.47	3751.47	3751.47	3751.47	3751.47	3751.47	0.44 sec	2.6442	0.7688
CC-Fusion-HC-CGC	3595.59	3589.97	3584.57	3584.57	3584.57	3584.57	3584.57	3584.57	1.87 sec	2.2317	0.9147
CC-Fusion-HC-MC	3586.15	3580.57	3579.24	3579.24	3579.24	3579.24	3579.24	3579.24	7.95 sec	2.3030	0.9056
CC-Fusion-WS-CGC	3603.53	3603.53	3603.53	3603.53	3603.53	3603.53	3603.53	3603.53	0.58 sec	2.3667	0.8730
CC-Fusion-WS-MC	3605.77	3593.19	3579.49	3579.49	3579.49	3579.49	3579.49	3579.49	11.81 sec	2.2895	0.9059
MCR-CCFDB	3581.74	3581.74	3581.74	3581.74	3581.74	3581.74	3581.74	3581.74	0.30 sec	2.3058	0.9055
MCI-CCIFD	3649.67	3590.79	3579.24	3579.24	3579.24	3579.24	3579.24	3579.24	$2.42~{ m sec}$	2.3030	0.9056

Table 44: image-seg (189080.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1558.24 1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41 1077.47	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41	1558.24 1092.58 1147.86 1090.77 1103.64 1077.47 1077.47 1078.41 1077.47	0.01 sec 0.00 sec 0.01 sec 0.01 sec 0.10 sec 0.94 sec 0.11 sec	1.3029 1.0224 1.2274 1.2925 1.2663 1.2663 1.2788	0.8789 0.9251 0.9055 0.8703 0.9053 0.9053 0.8988
MCR-CCFDB	1080.02	1080.02	1080.02	1080.02	1080.02	1080.02	1080.02	1080.02	0.01 sec	1.2690	0.9053
MCI-CCIFD	1077.47	1077.47	1077.47	1077.47	1077.47	1077.47	1077.47	1077.47	$0.13~{ m sec}$	1.2663	0.9053

Table 45: image-seg (19021.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	∞ 4601.22	$ \begin{array}{c} \infty \\ 4542.47 \end{array} $		6101.70			0-0-10	6101.70 4531.82	25.37 sec 1.25 sec		
HC	4979.08	4979.08	4979.08	4979.08	4979.08	4979.08	4979.08	4979.08	0.00 sec	3.1780	0.6736
HC-CGC ogm-KL	4625.23	$\begin{array}{c} 4533.42 \\ 4616.42 \end{array}$	4608.54	4608.54	4608.54	4608.54	4608.54	$\begin{array}{c} 4526.64 \\ 4608.54 \end{array}$	2.25 sec 2.08 sec	3.1923	0.6468
CC-Fusion-HC-CGC CC-Fusion-HC-MC		4522.07 4516.34				4522.07 4515.08	$\begin{array}{c} 4522.07 \\ 4515.08 \end{array}$	4522.07 4515.08	1.01 sec 5.19 sec		
CC-Fusion-WS-CGC CC-Fusion-WS-MC		$\begin{array}{c} 4534.21 \\ 4530.19 \end{array}$			$\begin{array}{c} 4534.21 \\ 4515.08 \end{array}$			$\begin{array}{c} 4534.21 \\ 4515.08 \end{array}$	1.10 sec 8.40 sec		
MCR-CCFDB	4520.06	4520.06	4520.06	4520.06	4520.06	4520.06	4520.06	4520.06	0.34 sec	2.4515	0.8822
MCI-CCIFD	4581.98	4515.08	4515.08	4515.08	4515.08	4515.08	4515.08	4515.08	1.09 sec	2.4479	0.8822

Table 46: image-seg (196073.bmp)

algorithm					value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	802.45	802.45	802.45	802.45	802.45	802.45	802.45	802.45	0.08 sec	0.6855	0.9074
CGC	545.53	545.53	545.53	545.53	545.53	545.53	545.53	545.53	0.00 sec	0.2684	0.9700
HC	596.13	596.13	596.13	596.13	596.13	596.13	596.13	596.13	0.00 sec	0.3810	0.9222
HC-CGC	547.55	547.55	547.55	547.55	547.55	547.55	547.55	547.55	0.01 sec	0.2507	0.9696
ogm-KL	554.88	554.88	554.88	554.88	554.88	554.88	554.88	554.88	0.00 sec	0.3511	0.9230
CC-Fusion-HC-CGC	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	0.06 sec	0.2459	0.9702
CC-Fusion-HC-MC	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	$0.65 \mathrm{sec}$	0.2459	0.9702
CC-Fusion-WS-CGC	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	0.04 sec	0.2459	0.9702
CC-Fusion-WS-MC	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	$0.86~\mathrm{sec}$	0.2459	0.9702
MCR-CCFDB	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	$0.01~{\rm sec}$	0.2459	0.9702
MCI-CCIFD	545.47	545.47	545.47	545.47	545.47	545.47	545.47	545.47	0.06 sec	0.2459	0.9702

Table 47: image-seg (197017.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	2947.36 2802.47 2917.21 2798.95 2798.77	2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40	$\begin{array}{c} 2798.77 \\ 2799.40 \end{array}$	2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40	2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40	2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40	2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40	4505.51 2800.33 2947.36 2802.47 2917.21 2798.95 2798.77 2799.40 2798.77	0.06 sec 0.00 sec 0.07 sec 0.34 sec 0.30 sec 1.09 sec 0.23 sec	1.3674 1.4555 1.3638 2.0348 1.3770 1.3787 1.3751	0.9147 0.9088 0.9148 0.7939 0.9135 0.9135
MCR-CCFDB MCI-CCIFD	2798.77	2798.77	2798.77 2798.77	2798.77	2798.77	2798.77	2798.77	2798.77	0.04 sec	1.3787	0.9135

Table 48: image-seg (208001.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	6869.30 6317.52 6617.39 6306.93 6312.71 6348.84	6869.30 6316.75 6609.41 6305.32 6285.11 6327.73	$\begin{array}{c} \infty \\ 6317.09 \\ 6869.30 \\ 6316.75 \\ 6609.41 \\ 6305.32 \\ 6275.39 \\ 6327.73 \\ 6275.10 \\ \end{array}$	6317.09 6869.30 6316.75 6609.41 6305.32 6275.39 6327.73	6869.30 6316.75 6609.41 6305.32 6275.39 6327.73	6317.09 6869.30 6316.75 6609.41 6305.32 6275.39 6327.73	6317.09 6869.30 6316.75 6609.41 6305.32 6275.39 6327.73	6305.32 6275.39 6327.73		2.7689 2.8688 2.7870 3.9545 2.6688 2.6910 2.6530	0.8306 0.8246 0.8322 0.4900 0.8468 0.8500 0.8496
MCR-CCFDB MCI-CCIFD			6276.25 6272.68				6276.25 6272.68		0.77 sec 8.39 sec		0.0.0.

Table 49: image-seg (210088.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	2314.80	2314.80	2314.80	2314.80		2314.80			
CGC	1907.78	1907.78	1907.78	1907.78	1907.78	1907.78	1907.78	1907.78	$0.04 \mathrm{sec}$	4.2902	0.3490
HC	2109.40	2109.40	2109.40	2109.40	2109.40	2109.40	2109.40	2109.40	0.00 sec	3.8516	0.3803
HC-CGC	1904.32	1904.32	1904.32	1904.32	1904.32	1904.32	1904.32	1904.32	0.02 sec	4.4182	0.3390
ogm-KL	2016.88	2016.88	2016.88	2016.88	2016.88	2016.88		2016.88			
CC-Fusion-HC-CGC	1899.80	1898.13	1898.13	1898.13	1898.13	1898.13	1898.13	1898.13	0.93 sec	4.5710	0.3299
CC-Fusion-HC-MC	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1.19 sec	4.3517	0.3426
CC-Fusion-WS-CGC	1908.90	1908.90	1908.90	1908.90	1908.90	1908.90	1908.90	1908.90	0.29 sec	4.7390	0.3244
CC-Fusion-WS-MC	1897.37	1896.22	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	2.13 sec	4.3517	0.3426
MCR-CCFDB	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	$0.03~\mathrm{sec}$	4.3517	0.3426
MCI-CCIFD	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	1895.44	$0.28~{ m sec}$	4.3517	0.3426

Table 50: image-seg (21077.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	3913.82	3913.82	3913.82	3913.82	3913.82	3913.82	6.42 sec	4.2707	0.7088
CGC	2949.63	2949.63	2949.63	2949.63	2949.63	2949.63	2949.63	2949.63	$0.03 \mathrm{sec}$	2.6694	0.7481
HC	3130.37	3130.37	3130.37	3130.37	3130.37	3130.37	3130.37	3130.37	0.00 sec	2.7688	0.7411
HC-CGC	2950.76	2950.76	2950.76	2950.76	2950.76	2950.76	2950.76	2950.76	0.03 sec	2.6620	0.7481
ogm-KL	2993.34	2993.34	2993.34	2993.34	2993.34	2993.34	2993.34	2993.34	0.08 sec	2.6913	0.7484
CC-Fusion-HC-CGC	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	$0.45 \mathrm{sec}$	2.7148	0.7473
CC-Fusion-HC-MC	2948.03	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	1.96 sec	2.7148	0.7473
CC-Fusion-WS-CGC	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71		2946.71			
CC-Fusion-WS-MC	2952.40	2947.35	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2.41 sec	2.7148	0.7473
MCR-CCFDB	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	$0.04~\rm sec$	2.7148	0.7473
MCI-CCIFD	2954.77	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	2946.71	0.88 sec	2.7148	0.7473

Table 51: image-seg (216081.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5709.21	5709.21	5709.21	5709.21	5709.21	21.32 sec	4.0093	0.9016
CGC	4166.86	4166.86	4166.86	4166.86	4166.86	4166.86	4166.86	4166.86	0.06 sec	2.2544	0.9224
HC	4447.97	4447.97	4447.97	4447.97	4447.97	4447.97	4447.97	4447.97	0.00 sec	2.2734	0.9212
HC-CGC	4163.11	4163.11	4163.11	4163.11	4163.11	4163.11	4163.11	4163.11	0.04 sec	2.2990	0.9222
ogm-KL	4263.48	4263.48	4263.48	4263.48	4263.48	4263.48	4263.48	4263.48	0.53 sec	2.9393	0.8620
CC-Fusion-HC-CGC	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	0.67 sec	2.2304	0.9244
CC-Fusion-HC-MC	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	2.18 sec	2.2304	0.9244
CC-Fusion-WS-CGC	4170.28	4170.28	4170.28	4170.28	4170.28	4170.28	4170.28	4170.28	0.66 sec	2.2623	0.9233
CC-Fusion-WS-MC	4175.99	4165.39	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	3.95 sec	2.2304	0.9244
MCR-CCFDB	4159.53	4159.53	4159.53	4159.53	4159.53	4159.53	4159.53	4159.53	$0.05~{ m sec}$	2.2304	0.9244
MCI-CCIFD	4159.27	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	4158.73	0.61 sec	2.2304	0.9244

Table 52: image-seg (219090.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CC-Fusion-HC-MC CC-Fusion-WS-CGC	$\begin{array}{c} 2661.40 \\ 2502.46 \\ 2576.46 \\ 2501.27 \\ 2501.27 \\ 2501.52 \end{array}$	$\begin{array}{c} 2502.92 \\ 2661.40 \\ 2502.46 \\ 2576.46 \\ 2501.27 \\ 2501.27 \\ 2501.52 \end{array}$	$\begin{array}{c} 2502.92 \\ 2661.40 \\ 2502.46 \\ 2576.46 \\ 2501.27 \\ 2501.27 \\ 2501.52 \end{array}$	$\begin{array}{c} 2502.92 \\ 2661.40 \\ 2502.46 \\ 2576.46 \\ 2501.27 \\ 2501.27 \\ 2501.52 \end{array}$	3485.32 2502.92 2661.40 2502.46 2576.46 2501.27 2501.27 2501.52 2501.27	$\begin{array}{c} 2502.92 \\ 2661.40 \\ 2502.46 \\ 2576.46 \\ 2501.27 \\ 2501.27 \\ 2501.52 \end{array}$	2502.92 2661.40 2502.46 2576.46 2501.27 2501.27 2501.52	3485.32 2502.92 2661.40 2502.46 2576.46 2501.27 2501.27 2501.52 2501.27	0.06 sec 0.00 sec 0.03 sec 0.28 sec 0.32 sec 1.15 sec 0.42 sec	1.3574 1.3574 1.3586 2.0018 1.3548 1.3548 1.3514	0.9492 0.9477 0.9494 0.7534 0.9494 0.9494
MCR-CCFDB MCI-CCIFD	2501.27	2501.27	2501.27	2501.27	2501.27 2501.27	2501.27	2501.27	2501.27	0.03 sec	1.3548	0.9494

Table 53: image-seg (220075.bmp)

algorithm				Va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	3901.26	3901.26	3901.26	3901.26		3901.26			
CGC	3127.17	3127.17	3127.17	3127.17	3127.17	3127.17	3127.17	3127.17	$0.04 \mathrm{sec}$	3.3135	0.7940
HC	3313.61	3313.61	3313.61	3313.61	3313.61	3313.61	3313.61	3313.61	0.00 sec	3.3330	0.7991
HC-CGC	3124.32	3124.32	3124.32	3124.32	3124.32	3124.32	3124.32	3124.32	$0.04 \mathrm{sec}$	3.2815	0.7989
ogm-KL	3154.56	3154.56	3154.56	3154.56	3154.56	3154.56	3154.56	3154.56	0.12 sec	2.9903	0.7897
CC-Fusion-HC-CGC	3117.29	3117.29	3117.29	3117.29	3117.29	3117.29	3117.29	3117.29	$0.43 \mathrm{sec}$	3.3184	0.7962
CC-Fusion-HC-MC	3119.68	3117.29	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	3.21 sec	3.2603	0.7969
CC-Fusion-WS-CGC							3116.11	3116.11	1.03 sec	3.2549	0.7970
CC-Fusion-WS-MC	3117.11	3116.30	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	2.89 sec	3.2603	0.7969
MCR-CCFDB	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	$0.02~{\rm sec}$	3.2603	0.7969
MCI-CCIFD	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	3115.95	$0.12~{\rm sec}$	3.2603	0.7969

Table 54: image-seg (223061.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	9155.86	9155.86	9155.86	9155.86	66.84 sec	5.2630	0.7366
CGC	6717.33	6714.01	6645.67	6614.35	6614.35	6614.35	6614.35	6614.35	27.32 sec	2.4830	0.7330
HC	7157.96	7157.96	7157.96	7157.96	7157.96	7157.96	7157.96	7157.96	0.01 sec	2.8465	0.7424
HC-CGC	6759.27	6650.76	6605.00	6605.00	6605.00	6605.00	6605.00	6605.00	5.46 sec	2.3223	0.8007
ogm-KL	6823.53	6789.08	6789.08	6789.08	6789.08	6789.08	6789.08	6789.08	1.08 sec	2.8707	0.4413
CC-Fusion-HC-CGC	6675.35	6654.09	6640.56	6640.56	6640.56	6640.56	6640.56	6640.56	2.14 sec	2.3010	0.7823
CC-Fusion-HC-MC					6580.38		6580.38	6580.38	28.95 sec		
CC-Fusion-WS-CGC	6681.38	6680.10	6652.80	6652.80	6652.80	6652.80	6652.80	6652.80	2.55 sec	2.2396	0.7917
CC-Fusion-WS-MC	7130.21	6779.34	6588.76	6584.14	6584.14	6584.14	6584.14	6584.14	27.68 sec	2.3161	0.7914
MCR-CCFDB	7564.80	6989.93	6585.28	6585.28	6585.28	6585.28	6585.28	6585.28	$2.54~{ m sec}$	2.3196	0.8070
MCI-CCIFD	7027.70	6883.68	6576.83	6576.83	6576.83	6576.83	6576.83	6576.83	4.81 sec	2.2995	0.8072

Table 55: image-seg (227092.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	2761.68	2761.68	2761.68	2761.68	2761.68	2761.68	1.28 sec	2.5505	0.8820
CGC	2014.62	2014.62	2014.62	2014.62	2014.62	2014.62	2014.62	2014.62	0.26 sec	1.3719	0.8888
HC	2134.47	2134.47	2134.47	2134.47	2134.47	2134.47	2134.47	2134.47	0.00 sec	1.5525	0.8856
HC-CGC	2015.89	2015.89	2015.89	2015.89	2015.89	2015.89	2015.89	2015.89	0.31 sec	1.4132	0.8872
ogm-KL	2071.11	2071.11	2071.11	2071.11	2071.11	2071.11	2071.11	2071.11	0.03 sec	1.9407	0.7325
CC-Fusion-HC-CGC	2001.14	2001.14	2001.14	2001.14	2001.14	2001.14	2001.14	2001.14	0.52 sec	1.5152	0.8824
CC-Fusion-HC-MC	2000.89	1999.16	1998.46	1998.46	1998.46	1998.46	1998.46	1998.46	4.13 sec	1.5330	0.8824
CC-Fusion-WS-CGC	2003.52	2003.52	2003.52	2003.52	2003.52	2003.52	2003.52	2003.52	0.48 sec	1.4798	0.8830
CC-Fusion-WS-MC	2002.93	2000.81	1998.46	1998.46	1998.46	1998.46	1998.46	1998.46	10.49 sec	1.5330	0.8824
MCR-CCFDB	2004.79	2004.79	2004.79	2004.79	2004.79	2004.79	2004.79	2004.79	0.16 sec	1.5412	0.8846
MCI-CCIFD	2002.79	1998.46	1998.46	1998.46	1998.46	1998.46	1998.46	1998.46	$0.52~{ m sec}$	1.5330	0.8824

Table 56: image-seg (229036.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	6581.68 6148.26 7306.79 6146.87 6140.25 6150.94	6581.68 6144.46 6284.85 6145.64 6134.87 6134.59	6581.68 6144.46 6267.68 6135.52 6132.91 6132.47	6141.14 6581.68 6144.46 6267.68 6135.52 6132.91 6132.47	8411.18 6141.14 6581.68 6144.46 6267.68 6135.52 6132.91 6132.47 6130.44	6141.14 6581.68 6144.46 6267.68 6135.52 6132.91 6132.47	8411.18 6141.14 6581.68 6144.46 6267.68 6135.52 6132.91 6132.47 6130.44	6141.14 6581.68 6144.46 6267.68 6135.52 6132.91 6132.47	71.16 sec 2.58 sec 0.01 sec 0.66 sec 1.53 sec 2.09 sec 3.72 sec 1.82 sec 8.10 sec	1.9292 2.6773 2.3084 1.7054 2.5261 2.5320 1.9610	0.8413 0.6886 0.7383 0.8602 0.7068 0.7056 0.8349
MCR-CCFDB	6125.73	6125.73	6125.73	6125.73	6125.73	6125.73	6125.73	6125.73	0.42 sec	2.3811	0.7322
MCI-CCIFD	6144.84	6125.73	6125.73	6125.73	6125.73	6125.73	6125.73	6125.73	0.60 sec	2.3811	0.7322

Table 57: image-seg (236037.bmp)

algorithm				v	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	11411.55	11411.55			182.21 sec	7.5487	0.6430
CGC	9577.14	9478.78	9154.99	9140.68	9140.68	9140.68	9140.68	9140.68	20.12 sec	4.4172	0.5410
HC	9863.37	9863.37	9863.37	9863.37	9863.37	9863.37	9863.37	9863.37	0.01 sec	4.2743	0.6661
HC-CGC	9151.42	9115.52	9113.71	9113.71	9113.71	9113.71	9113.71	9113.71	1.24 sec	4.3505	0.6669
ogm-KL	12496.16	12496.16	9479.67	9479.67	9479.67	9479.67	9479.67	9479.67	4.92 sec	3.1258	0.4677
CC-Fusion-HC-CGC	9185.41	9179.06	9176.54	9176.54	9176.54	9176.54	9176.54	9176.54	2.89 sec	4.6518	0.6546
CC-Fusion-HC-MC	9259.59	9132.00	9062.61	9061.18	9061.18	9061.18	9061.18	9061.18	23.94 sec	4.7557	0.6534
CC-Fusion-WS-CGC	9272.47	9249.77	9249.77	9249.77	9249.77	9249.77	9249.77	9249.77	2.29 sec	4.8479	0.6395
CC-Fusion-WS-MC	9823.29	9346.86	9066.91	9060.84	9060.84	9060.84	9060.84	9060.84	50.69 sec	4.7584	0.6533
MCR-CCFDB	12499.39	10650.43	9072.01	9072.01	9072.01	9072.01	9072.01	9072.01	1.71 sec	4.8120	0.6529
MCI-CCIFD	10293.90	9232.77	9060.84	9060.84	9060.84	9060.84	9060.84	9060.84	3.61 sec	4.7584	0.6533

Table 58: image-seg (24077.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞			5787.16				31.09 sec		
CGC	4773.14	4773.14	4773.14	4773.14	4773.14	4773.14	4773.14	4773.14	0.12 sec	3.0879	0.9175
HC	5151.15	5151.15	5151.15	5151.15	5151.15	5151.15	5151.15	5151.15	0.00 sec	2.8252	0.9219
HC-CGC	4778.48	4778.48	4778.48	4778.48	4778.48	4778.48	4778.48	4778.48	0.16 sec	3.0422	0.9185
ogm-KL	4872.82	4867.75	4867.75	4867.75	4867.75	4867.75	4867.75	4867.75	0.76 sec	3.3160	0.8637
CC-Fusion-HC-CGC	4764.91	4764.12	4762.09	4762.09	4762.09	4762.09	4762.09	4762.09	1.79 sec	3.0741	0.9188
CC-Fusion-HC-MC	4773.03	4763.78	4763.78	4763.78	4763.78	4763.78	4763.78	4763.78	2.84 sec	3.0819	0.9189
CC-Fusion-WS-CGC	4771.27	4768.44	4768.44	4768.44	4768.44	4768.44	4768.44	4768.44	1.29 sec	3.0367	0.9196
CC-Fusion-WS-MC	4814.81	4784.92	4763.78	4763.78	4763.78	4763.78	4763.78	4763.78	8.92 sec	3.0819	0.9189
MCR-CCFDB	4766.37	4766.37	4766.37	4766.37	4766.37	4766.37	4766.37	4766.37	0.13 sec	3.0835	0.9188
MCI-CCIFD	5145.78	4761.98	4761.98	4761.98	4761.98	4761.98	4761.98	4761.98	0.73 sec	3.0783	0.9188

Table 59: image-seg (241004.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	1567.60	1567.60	1567.60	1567.60	1567.60	1567.60	1567.60	1567.60	0.31 sec	1.7650	0.9361
CGC	1060.32	1060.32	1060.32	1060.32	1060.32	1060.32	1060.32	1060.32	0.01 sec	1.3261	0.9077
HC	1107.76	1107.76	1107.76	1107.76	1107.76	1107.76	1107.76	1107.76	0.00 sec	1.1400	0.9381
HC-CGC	1060.82	1060.82	1060.82	1060.82	1060.82	1060.82	1060.82	1060.82	0.01 sec	1.3406	0.9076
ogm-KL	1113.75	1113.75	1113.75	1113.75	1113.75	1113.75	1113.75	1113.75	0.01 sec	2.1385	0.7698
CC-Fusion-HC-CGC	1057.42	1057.42	1057.42	1057.42	1057.42	1057.42		1057.42			
CC-Fusion-HC-MC	1057.42	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1.33 sec	1.3521	0.9086
CC-Fusion-WS-CGC		1057.42					1057.42	1057.42	0.07 sec	1.3036	0.9090
CC-Fusion-WS-MC	1057.42	1057.42	1057.42	1057.42	1057.42	1057.42	1057.42	1057.42	0.80 sec	1.3036	0.9090
MCR-CCFDB	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	$0.01~\rm sec$	1.3521	0.9086
MCI-CCIFD	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	1057.14	$0.02~\mathrm{sec}$	1.3521	0.9086

Table 60: image-seg (241048.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	5266.78 4754.34 4902.61 4756.74 4768.44 4778.74	5266.78 4753.32 4896.67 4753.36 4746.60 4773.50	4764.50 5266.78 4753.32 4896.67 4753.36 4731.58 4773.50	4764.50 5266.78 4753.32 4896.67 4753.36 4730.95 4773.50	6765.74 4764.50 5266.78 4753.32 4896.67 4753.36 4730.95 4773.50 4735.80	4764.50 5266.78 4753.32 4896.67 4753.36 4730.95 4773.50	4764.50 5266.78 4753.32 4896.67 4753.36 4730.95 4773.50	4764.50 5266.78 4753.32 4896.67 4753.36 4730.95 4773.50	16.83 sec	2.6705 2.5360 2.6361 3.3921 2.6228 2.4583 2.6370	0.8300 0.8592 0.8353 0.6255 0.8451 0.8849 0.8355
MCR-CCFDB MCI-CCIFD					4740.05 4730.95						0.00-0

Table 61: image-seg (253027.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	8496.07	8496.07	8496.07	8496.07	92.25 sec	5.8696	0.5088
CGC	6767.89	6670.66	6646.71	6646.71	6646.71	6646.71	6646.71	6646.71	1.57 sec	2.1409	0.8347
HC	7091.05	7091.05	7091.05	7091.05	7091.05	7091.05	7091.05	7091.05	0.01 sec	1.9390	0.8679
HC-CGC	6627.71	6627.71	6627.71	6627.71	6627.71	6627.71	6627.71	6627.71	0.27 sec	1.7577	0.9160
ogm-KL	12302.90	6954.63	6899.47	6899.47	6899.47	6899.47	6899.47	6899.47	2.11 sec	2.1247	0.7032
CC-Fusion-HC-CGC	6652.41	6642.74	6642.74	6642.74	6642.74	6642.74	6642.74	6642.74	1.53 sec	1.7541	0.9007
CC-Fusion-HC-MC	6774.52	6625.84	6606.62	6606.62	6606.62	6606.62	6606.62	6606.62	18.55 sec	1.7626	0.9155
CC-Fusion-WS-CGC	6709.48	6674.79	6671.77	6671.77	6671.77	6671.77	6671.77	6671.77	2.00 sec	1.7581	0.9190
CC-Fusion-WS-MC	6889.53	6683.12	6607.07	6606.62	6606.62	6606.62	6606.62	6606.62	20.40 sec	1.7626	0.9155
MCR-CCFDB	10535.57	7039.94	6609.76	6609.76	6609.76	6609.76	6609.76	6609.76	1.14 sec	1.7652	0.9156
MCI-CCIFD	7692.95	6699.15	6606.62	6606.62	6606.62	6606.62	6606.62	6606.62	1.14 sec	1.7626	0.9155

Table 62: image-seg (253055.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	2130.97	2130.97	2130.97	2130.97	2130.97	2130.97	2130.97	0.79 sec	3.7111	0.6217
CGC	1527.79	1527.79	1527.79	1527.79	1527.79	1527.79	1527.79	1527.79	0.03 sec	1.2598	0.8672
HC	1696.76	1696.76	1696.76	1696.76	1696.76	1696.76	1696.76	1696.76	0.00 sec	1.0510	0.8921
HC-CGC	1512.99	1512.99	1512.99	1512.99	1512.99	1512.99	1512.99	1512.99	$0.05 \mathrm{sec}$	1.1069	0.8844
ogm-KL	1553.88	1553.88	1553.88	1553.88	1553.88	1553.88	1553.88	1553.88	$0.04 \mathrm{sec}$	1.1437	0.8766
CC-Fusion-HC-CGC	1502.22	1502.22	1502.22	1502.22	1502.22	1502.22	1502.22	1502.22	0.12 sec	1.0373	0.8941
CC-Fusion-HC-MC		1502.16					1502.16	1502.16	0.88 sec	1.0360	0.8945
CC-Fusion-WS-CGC	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16		1502.16			
CC-Fusion-WS-MC	1503.06	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16	1.70 sec	1.0360	0.8945
MCR-CCFDB	1503.91	1503.91	1503.91	1503.91	1503.91	1503.91	1503.91	1503.91	$0.03~{\rm sec}$	1.0364	0.8945
MCI-CCIFD	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16	1502.16	$0.22~{\rm sec}$	1.0360	0.8945

Table 63: image-seg (260058.bmp)

algorithm				Va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26 1084.26	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26	1937.28 1087.76 1194.32 1084.68 1110.94 1084.26 1084.26 1084.26	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26	1087.76 1194.32 1084.68 1110.94 1084.26 1084.26	1937.28 1087.76 1194.32 1084.68 1110.94 1084.26 1084.26 1084.26	0.02 sec 0.00 sec 0.02 sec 0.01 sec 0.07 sec 0.63 sec 0.06 sec	$\begin{array}{c} 0.7246 \\ 0.8468 \\ 0.7255 \\ 0.8036 \\ 0.7233 \\ 0.7233 \\ 0.7233 \end{array}$	0.9240 0.9008 0.9244 0.9044 0.9244 0.9244 0.9244
MCR-CCFDB	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	0.01 sec	0.7233	0.9244
MCI-CCIFD	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	1084.26	$0.05~{\rm sec}$	0.7233	0.9244

Table 64: image-seg (271035.bmp)

algorithm				va	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	4002.40 3631.79 3834.56 3630.63 3625.92 3637.81	4002.40 3631.79 3812.22 3630.63 3621.48 3635.08	$\begin{array}{c} 3640.12\\ 4002.40\\ 3631.79\\ 3812.22\\ 3630.63\\ 3621.48\\ 3635.08 \end{array}$	$\begin{array}{c} 3640.12\\ 4002.40\\ 3631.79\\ 3812.22\\ 3630.63\\ 3621.48\\ 3635.08 \end{array}$	4674.85 3640.12 4002.40 3631.79 3812.22 3630.63 3621.48 3635.08 3621.00	$\begin{array}{c} 3640.12\\ 4002.40\\ 3631.79\\ 3812.22\\ 3630.63\\ 3621.48\\ 3635.08 \end{array}$	3640.12 4002.40 3631.79 3812.22 3630.63 3621.48 3635.08	4002.40 3631.79 3812.22 3630.63 3621.48 3635.08	11.71 sec 0.13 sec 0.00 sec 0.06 sec 0.68 sec 0.48 sec 2.54 sec 0.83 sec 7.90 sec	2.7983 2.8257 2.9024 4.0265 2.7748 2.8771 2.8803	0.8598 0.8578 0.8555 0.6491 0.8609 0.8571 0.8556
MCR-CCFDB MCI-CCIFD	3625.90	3625.90	3625.90	3625.90	3625.90 3621.00	3625.90	3625.90	3625.90 3621.00	0.15 sec 0.97 sec	2.8115	0.8592

Table 65: image-seg (285079.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	7855.54	7855.54	7855.54	7855.54	7855.54	52.10 sec	5.7799	0.7437
CGC	5648.81	5625.98	5625.08	5625.08	5625.08	5625.08	5625.08	5625.08	1.50 sec	2.9455	0.7653
HC	6099.78	6099.78	6099.78	6099.78	6099.78	6099.78	6099.78	6099.78	0.01 sec	2.9178	0.7673
HC-CGC	5659.28	5635.10	5631.01	5631.01	5631.01	5631.01	5631.01	5631.01	2.24 sec	2.8327	0.7822
ogm-KL	7465.28	5749.35	5742.46	5742.46	5742.46	5742.46	5742.46	5742.46	2.31 sec	3.4650	0.5453
CC-Fusion-HC-CGC	5619.11	5617.00	5617.00	5617.00	5617.00	5617.00	5617.00	5617.00	1.18 sec	2.8579	0.7976
CC-Fusion-HC-MC	5625.88	5618.23	5610.71	5610.71	5610.71	5610.71	5610.71	5610.71	4.95 sec	2.8881	0.7961
CC-Fusion-WS-CGC		5627.83						5627.83	1.04 sec		
CC-Fusion-WS-MC	5797.42	5681.36	5610.12	5610.12	5610.12	5610.12	5610.12	5610.12	10.82 sec	2.8816	0.7963
MCR-CCFDB	5614.90	5614.90	5614.90	5614.90	5614.90	5614.90	5614.90	5614.90	0.31 sec	2.8904	0.7961
MCI-CCIFD	5648.18	5648.18	5610.12	5610.12	5610.12	5610.12	5610.12	5610.12	2.80 sec	2.8816	0.7963

Table 66: image-seg (291000.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	15013.35	15013.35	15013.35	15013.35	287.04 sec	8.0721	0.6083
CGC	10401.10	10384.56	10276.04	10230.14	10230.14	10230.14	10230.14	10230.14	25.28 sec	2.4443	0.7835
HC	10833.66	10833.66	10833.66	10833.66	10833.66	10833.66	10833.66	10833.66	0.01 sec	2.7142	0.7603
HC-CGC	10478.68	10383.13	10225.51	10225.12	10225.12	10225.12	10225.12	10225.12	14.56 sec	2.3635	0.7926
ogm-KL	12318.39	12318.39	10442.94	10442.94	10442.94	10442.94	10442.94	10442.94	4.06 sec	2.3676	0.5473
CC-Fusion-HC-CGC	10242.90	10236.64	10233.77	10233.77	10233.77	10233.77	10233.77	10233.77	2.11 sec	2.3766	0.7933
CC-Fusion-HC-MC	10226.70	10219.34	10208.87	10208.87	10208.87	10208.87	10208.87	10208.87	5.14 sec	2.3534	0.7966
CC-Fusion-WS-CGC	10272.06	10251.93	10249.53	10249.53	10249.53	10249.53	10249.53	10249.53	2.12 sec	2.4124	0.7863
CC-Fusion-WS-MC	10252.46	10237.71	10208.87	10208.87	10208.87	10208.87	10208.87	10208.87	13.90 sec	2.3534	0.7966
MCR-CCFDB	11287.95	10388.61	10209.16	10209.16	10209.16	10209.16	10209.16	10209.16	1.69 sec	2.3579	0.7964
MCI-CCIFD	10460.61	10298.44	10208.87	10208.87	10208.87	10208.87	10208.87	10208.87	$3.45~{ m sec}$	2.3534	0.7966

Table 67: image-seg (295087.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5960.92	5960.92	5960.92	5960.92	5960.92	22.43 sec	4.0987	0.8790
CGC	4319.34	4315.46	4315.46	4315.46	4315.46	4315.46	4315.46	4315.46	0.66 sec	2.2703	0.8837
HC	4671.04	4671.04	4671.04	4671.04	4671.04	4671.04	4671.04	4671.04	0.00 sec	2.2425	0.8856
HC-CGC	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	4310.37	0.23 sec	2.2692	0.8876
ogm-KL	4437.74	4434.65	4434.65	4434.65	4434.65	4434.65	4434.65	4434.65	1.19 sec	2.3252	0.7697
CC-Fusion-HC-CGC	4293.28	4293.21	4293.21	4293.21	4293.21	4293.21	4293.21	4293.21	0.92 sec	2.2811	0.8855
CC-Fusion-HC-MC	4294.03	4292.52	4291.40	4291.40	4291.40	4291.40	4291.40	4291.40	2.50 sec	2.3224	0.8862
CC-Fusion-WS-CGC	4305.88	4305.88	4305.88	4305.88	4305.88	4305.88	4305.88	4305.88	0.58 sec	2.2452	0.8860
CC-Fusion-WS-MC	4328.58	4304.41	4290.54	4290.54	4290.54	4290.54	4290.54	4290.54	3.98 sec	2.1874	0.9035
MCR-CCFDB	4290.54	4290.54	4290.54	4290.54	4290.54	4290.54	4290.54	4290.54	0.19 sec	2.1874	0.9035
MCI-CCIFD	4295.87	4295.87	4290.54	4290.54	4290.54	4290.54	4290.54	4290.54	1.45 sec	2.1874	0.9035

Table 68: image-seg (296007.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	2308.94 2584.21 2308.90 2401.42 2301.79 2293.13	2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	2308.94 2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	2308.94 2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	2308.94 2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	2308.94 2584.21 2308.90 2401.42 2301.79 2293.13 2294.30	3437.10 2308.94 2584.21 2308.90 2401.42 2301.79 2293.13 2294.30 2293.13	0.25 sec 0.00 sec 0.10 sec 0.09 sec 0.38 sec 1.25 sec 0.45 sec	1.7274 1.5971 1.5527 1.7012 1.6933 1.5506 1.5479	0.8217 0.8454 0.8505 0.8463 0.8231 0.8518 0.8516
MCR-CCFDB MCI-CCIFD	2293.13	2293.13	2293.13	2293.13	2293.13	2293.13		2293.13	0.07 sec	1.5506	0.8518

Table 69: image-seg (296059.bmp)

algorithm				Va	llue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	3092.48	3092.48	3092.48	3092.48	3092.48	3092.48	1.94 sec	3.0536	0.8713
CGC	2050.88	2050.88	2050.88	2050.88	2050.88	2050.88	2050.88	2050.88	0.18 sec	1.9190	0.7849
HC	2317.19	2317.19	2317.19	2317.19	2317.19	2317.19	2317.19	2317.19	0.00 sec	1.9539	0.7603
HC-CGC	2051.09	2051.09	2051.09	2051.09	2051.09	2051.09	2051.09	2051.09	0.09 sec	1.9365	0.7932
ogm-KL		2162.03	2162.03	2162.03	2162.03	2162.03	2162.03	2162.03	$0.05 \mathrm{sec}$	2.4812	0.6696
CC-Fusion-HC-CGC	2044.73	2044.73	2044.73	2044.73	2044.73	2044.73	2044.73	2044.73	0.38 sec	1.9279	0.7938
CC-Fusion-HC-MC	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	1.02 sec	1.9199	0.7991
CC-Fusion-WS-CGC	2045.37	2045.37	2045.37	2045.37	2045.37	2045.37	2045.37	2045.37	0.26 sec	1.9287	0.7947
CC-Fusion-WS-MC	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	1.45 sec	1.9199	0.7991
MCR-CCFDB	2045.16	2045.16	2045.16	2045.16	2045.16	2045.16	2045.16	2045.16	$0.09~{ m sec}$	1.9205	0.7992
MCI-CCIFD	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	2044.71	$0.45~{ m sec}$	1.9199	0.7991

Table 70: image-seg (299086.bmp)

algorithm				Va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	2049.19	2049.19	2049.19	2049.19	2049.19	2049.19	2049.19	0.85 sec	2.1254	0.8727
CGC	1559.66	1559.66	1559.66	1559.66	1559.66	1559.66	1559.66	1559.66	0.03 sec	1.5639	0.8551
HC	1683.59	1683.59	1683.59	1683.59	1683.59	1683.59	1683.59	1683.59	0.00 sec	1.3613	0.8969
HC-CGC	1566.34	1566.34	1566.34	1566.34	1566.34	1566.34		1566.34			
ogm-KL	1622.71	1622.71	1622.71	1622.71	1622.71	1622.71	1622.71	1622.71	$0.05 \mathrm{sec}$	1.9319	0.7621
CC-Fusion-HC-CGC	1559.13	1559.13	1559.13	1559.13	1559.13	1559.13	1559.13	1559.13	0.21 sec	1.4884	0.8599
CC-Fusion-HC-MC	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	0.89 sec	1.5484	0.8557
CC-Fusion-WS-CGC	1559.28	1559.28	1559.28	1559.28	1559.28	1559.28		1559.28			
CC-Fusion-WS-MC	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1.21 sec	1.5484	0.8557
MCR-CCFDB	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	$0.03~{\rm sec}$	1.5484	0.8557
MCI-CCIFD	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	1557.24	$0.03~{\rm sec}$	1.5484	0.8557

Table 71: image-seg (300091.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	∞ 1495.59				2285.23 1495.59			2285.23 1495.59			
HC	1595.38	1595.38	1595.38	1595.38	1595.38	1595.38	1595.38	1595.38	0.00 sec	1.1432	0.6750
HC-CGC ogm-KL		$1495.10 \\ 1524.61$						$1495.10 \\ 1524.61$			
CC-Fusion-HC-CGC CC-Fusion-HC-MC		1496.74 1495.10			1496.74 1495.10			1496.74 1495.10			
CC-Fusion-WS-CGC CC-Fusion-WS-MC	1495.59	1495.59 1495.10	1495.59	1495.59	1495.59	1495.59	1495.59	1495.59 1495.10	0.14 sec	0.7039	0.8965
MCR-CCFDB			1501.09		1501.09			1501.09		000-	
MCI-CCIFD	1495.10	1495.10	1495.10	1495.10	1495.10	1495.10	1495.10	1495.10	0.45 sec	0.7081	0.8964

Table 72: image-seg (302008.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2544.50 2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2544.50 2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2544.50 2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2544.50 2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	2544.50 2739.19 2544.52 2582.25 2543.23 2543.23 2543.25	3300.15 2544.50 2739.19 2544.52 2582.25 2543.23 2543.23	0.07 sec 0.00 sec 0.04 sec 0.12 sec 0.40 sec 1.16 sec 0.27 sec	2.3072 2.8436 2.2610 2.9797 2.3054 2.3054 2.3051	0.7304 0.5283 0.7755 0.5291 0.7320 0.7320 0.7320
MCR-CCFDB MCI-CCIFD	2543.23	2543.23 2543.23 2543.23	2543.23	2543.23	2543.23	2543.23			0.03 sec	2.3054	0.7320

Table 73: image-seg (304034.bmp)

algorithm				v	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10695.62	10695.62	10695.62	10695.62	129.09 sec	8.2526	0.3734
CGC	8126.66	8100.40	7867.15	7867.15	7867.15	7867.15	7867.15	7867.15	5.62 sec	3.9446	0.4840
HC	8581.17	8581.17	8581.17	8581.17	8581.17	8581.17	8581.17	8581.17	0.01 sec	4.1439	0.4515
HC-CGC	7957.98	7878.87	7850.47	7850.47	7850.47	7850.47	7850.47	7850.47	2.44 sec		
ogm-KL	10653.69	10653.69	8191.05	8191.05	8191.05	8191.05	8191.05	8191.05	4.18 sec	2.2853	0.5362
CC-Fusion-HC-CGC	7914.44	7914.44	7914.44	7914.44	7914.44	7914.44	7914.44	7914.44	1.17 sec	4.0884	0.4523
CC-Fusion-HC-MC	7896.66	7843.87	7835.47	7835.47	7835.47	7835.47	7835.47	7835.47	7.08 sec	4.2012	0.4451
CC-Fusion-WS-CGC	7976.09	7937.90		7924.40	7924.40	7924.40	7924.40	7924.40	2.19 sec		
CC-Fusion-WS-MC	8075.21	7936.09	7836.00	7836.00	7836.00	7836.00	7836.00	7836.00	14.62 sec	4.2100	0.4447
MCR-CCFDB	9888.74	7860.77	7849.10	7849.10	7849.10	7849.10	7849.10	7849.10	1.06 sec	4.2626	0.4439
MCI-CCIFD	8155.93	7914.90	7835.47	7835.47	7835.47	7835.47	7835.47	7835.47	3.10 sec	4.2017	0.4451

Table 74: image-seg (304074.bmp)

algorithm	_	_	_	va	ılue	_	-		time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC			3898.47	3898.47	$\begin{array}{c} 6235.71 \\ 3898.47 \end{array}$	3898.47	$\begin{array}{c} 6235.71 \\ 3898.47 \end{array}$	3898.47	17.96 sec 0.25 sec	1.7082	0.9206
HC HC-CGC	3901.26	3901.26	3901.26	3901.26	4331.65 3901.26 4128.25	3901.26	3901.26	4331.65 3901.26 4128.25	0.00 sec 0.19 sec 0.69 sec	1.7033	0.9210
ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC	3893.13	3893.13	3893.13	3893.13	3893.13 3891.88	3893.13	3893.13 3891.88	3893.13	0.69 sec 0.74 sec 1.33 sec	1.6286	0.9304
CC-Fusion-WS-CGC CC-Fusion-WS-MC	3915.84	3904.80	3903.82	3903.82	3903.82 3892.06	3903.82	3903.82	3903.82 3892.06	1.24 sec 1.88 sec	1.6451	0.9281
MCR-CCFDB	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	0.18 sec	1.6939	0.9259
MCI-CCIFD	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	3891.88	0.16 sec	1.6939	0.9259

Table 75: image-seg (306005.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	6098.68	6098.68	6098.68	6098.68	6098.68	21.27 sec	5.7029	0.7076
CGC	4364.23	4340.79	4340.79	4340.79	4340.79	4340.79	4340.79	4340.79	1.20 sec	2.7518	0.5707
HC	4687.29	4687.29	4687.29	4687.29	4687.29	4687.29	4687.29	4687.29	0.00 sec	2.3970	0.7926
HC-CGC	4309.50	4309.50	4309.50	4309.50	4309.50	4309.50	4309.50	4309.50	0.33 sec	2.3532	0.7978
ogm-KL	4517.30	4516.90	4516.90	4516.90	4516.90	4516.90	4516.90	4516.90	0.92 sec	2.7038	0.5053
CC-Fusion-HC-CGC	4307.25	4307.25	4307.25	4307.25	4307.25	4307.25	4307.25	4307.25	0.83 sec	2.3414	0.8017
CC-Fusion-HC-MC			4290.66				4290.66	4290.66	5.51 sec	2.3725	0.8041
CC-Fusion-WS-CGC	4323.27	4323.27	4323.27	4323.27	4323.27	4323.27	4323.27	4323.27	0.48 sec	2.3361	0.7977
CC-Fusion-WS-MC	4354.16	4316.02	4290.66	4290.66	4290.66	4290.66	4290.66	4290.66	9.40 sec	2.3699	0.8042
MCR-CCFDB	4292.90	4292.90	4292.90	4292.90	4292.90	4292.90	4292.90	4292.90	$0.34~{ m sec}$	2.3764	0.8087
MCI-CCIFD	4301.93	4301.93	4290.25	4290.25	4290.25	4290.25	4290.25	4290.25	1.34 sec	2.3752	0.8087

Table 76: image-seg (3096.bmp)

algorithm					value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	396.90 411.27 396.90 400.75 396.90 396.90 396.90	396.90 411.27 396.90 400.75 396.90 396.90 396.90	396.90	396.90 411.27 396.90 400.75 396.90 396.90 396.90	493.39 396.90 411.27 396.90 400.75 396.90 396.90 396.90	493.39 396.90 411.27 396.90 400.75 396.90 396.90 396.90	396.90 411.27 396.90 400.75 396.90 396.90 396.90	396.90 411.27 396.90 400.75 396.90 396.90 396.90	0.05 sec 0.00 sec 0.00 sec 0.00 sec 0.00 sec 0.04 sec 0.52 sec 0.03 sec 0.53 sec	$\begin{array}{c} 0.5448 \\ 0.5381 \\ 0.5448 \\ 0.5148 \\ 0.5448 \\ 0.5448 \\ 0.5448 \end{array}$	0.8728 0.8730 0.8728 0.8723 0.8728 0.8728 0.8728
MCR-CCFDB	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	0.00 sec	0.5448	0.8728
MCI-CCIFD	396.90	396.90	396.90	396.90	396.90	396.90	396.90	396.90	$0.01~{\rm sec}$	0.5448	0.8728

Table 77: image-seg (33039.bmp)

algorithm				,	value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10265.62	10265.62	10265.62	10265.62	137.48 sec	6.8874	0.7556
CGC	8517.48	8162.64	8112.64	8112.64	8112.64	8112.64	8112.64	8112.64	1.81 sec	4.3825	0.7517
HC	9246.92	9246.92	9246.92	9246.92	9246.92	9246.92	9246.92	9246.92	0.01 sec	4.1089	0.7638
HC-CGC	8096.34	8095.85	8095.85	8095.85	8095.85	8095.85	8095.85	8095.85	0.62 sec	4.4446	0.7561
ogm-KL	12899.70	8631.80	8582.09	8582.09	8582.09	8582.09	8582.09	8582.09	3.15 sec	3.9329	0.5515
CC-Fusion-HC-CGC	8166.00	8163.93	8145.97	8145.97	8145.97	8145.97	8145.97	8145.97	2.78 sec	4.2699	0.7715
CC-Fusion-HC-MC	8158.60	8109.44	8069.67	8069.67	8069.67	8069.67	8069.67	8069.67	12.27 sec	4.4347	0.7637
CC-Fusion-WS-CGC	8264.14	8243.85	8221.18	8221.18	8221.18	8221.18	8221.18	8221.18	2.80 sec	4.4419	0.7470
CC-Fusion-WS-MC	8853.16	8272.73	8078.66	8069.67	8069.67	8069.67	8069.67	8069.67	32.00 sec	4.4347	0.7637
MCR-CCFDB	11568.47	8827.80	8102.26	8102.26	8102.26	8102.26	8102.26	8102.26	1.21 sec	4.4959	0.7621
MCI-CCIFD	8788.75	8439.03	8069.67	8069.67	8069.67	8069.67	8069.67	8069.67	2.90 sec	4.4347	0.7637

Table 78: image-seg (351093.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	8298.39	8298.39	8298.39	8298.39	60.33 sec	4.8819	0.8406
CGC	6289.91	6157.80	6156.33	6156.33	6156.33	6156.33	6156.33	6156.33	1.29 sec	2.5166	0.8755
HC	6602.99	6602.99	6602.99	6602.99	6602.99	6602.99	6602.99	6602.99	0.01 sec	2.4726	0.8769
HC-CGC	6133.67	6129.15	6129.15	6129.15	6129.15	6129.15	6129.15	6129.15	0.99 sec	2.3687	0.8850
ogm-KL	8371.23	6361.43	6337.40	6337.40	6337.40	6337.40	6337.40	6337.40	1.87 sec	2.7285	0.7185
	6142.75	6129.27	6124.74	6124.74	6124.74	6124.74	6124.74	6124.74	2.56 sec	2.6381	0.8455
CC-Fusion-HC-MC	6131.78	6111.90	6108.57	6108.57	6108.57	6108.57	6108.57	6108.57	6.81 sec	2.5059	0.8791
CC-Fusion-WS-CGC	6207.70	6188.15	6162.41	6162.41	6162.41	6162.41	6162.41	6162.41	1.85 sec	2.6726	0.8488
CC-Fusion-WS-MC	6535.99	6293.85	6106.71	6105.28	6105.28	6105.28	6105.28	6105.28	14.75 sec	2.5626	0.8776
MCR-CCFDB	6205.45	6111.09	6111.09	6111.09	6111.09	6111.09	6111.09	6111.09	0.61 sec	2.5818	0.8773
MCI-CCIFD	6176.71	6162.71	6105.28	6105.28	6105.28	6105.28	6105.28	6105.28	2.26 sec	2.5626	0.8776

Table 79: image-seg (361010.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	4475.74	4475.74	4475.74	4475.74	4475.74	10.96 sec	4.8133	0.7521
CGC	3365.90	3365.90	3365.90	3365.90	3365.90	3365.90	3365.90	3365.90	0.22 sec	2.1146	0.8095
HC	3676.00	3676.00	3676.00	3676.00	3676.00	3676.00	3676.00	3676.00	0.00 sec	2.1945	0.8549
HC-CGC	3363.51	3363.51	3363.51	3363.51	3363.51	3363.51	3363.51	3363.51	0.13 sec	1.8938	0.8918
ogm-KL	3440.32	3440.32	3440.32	3440.32	3440.32	3440.32	3440.32	3440.32	0.52 sec	2.4798	0.7033
CC-Fusion-HC-CGC	3362.08	3362.08	3362.08	3362.08	3362.08	3362.08	3362.08	3362.08	0.73 sec	1.6718	0.9425
CC-Fusion-HC-MC	3361.39	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	1.62 sec	1.6743	0.9426
CC-Fusion-WS-CGC	3364.87	3364.87	3364.87	3364.87	3364.87	3364.87	3364.87	3364.87	0.59 sec	2.1212	0.8095
CC-Fusion-WS-MC	3367.25	3361.32	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	2.42 sec	1.6743	0.9426
MCR-CCFDB	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	$0.05~{ m sec}$	1.6743	0.9426
MCI-CCIFD	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	3361.02	0.12 sec	1.6743	0.9426

Table 80: image-seg (37073.bmp)

algorithm				Va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	2077.92 1976.38 2050.47 1975.00 1975.68	$\begin{array}{c} \infty \\ 1976.05 \\ 2077.92 \\ 1976.38 \\ 2050.47 \\ 1975.00 \\ 1975.00 \\ 1975.68 \\ 1975.00 \end{array}$	1976.05 2077.92 1976.38 2050.47 1975.00 1975.68	1976.05 2077.92 1976.38 2050.47 1975.00 1975.68	2077.92 1976.38 2050.47 1975.00 1975.00 1975.68	1976.05 2077.92 1976.38 2050.47 1975.00 1975.68	1976.05 2077.92 1976.38 2050.47 1975.00 1975.68	2618.31 1976.05 2077.92 1976.38 2050.47 1975.00 1975.00 1975.68 1975.00	0.03 sec 0.00 sec 0.02 sec 0.10 sec 0.38 sec 0.93 sec 0.23 sec	2.6728 2.6292 2.6558 3.1116 2.6679 2.6679 2.6543	0.6803 0.6904 0.6803 0.5823 0.6803 0.6803 0.6816
MCR-CCFDB	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	0.02 sec	2.6679	0.6803
MCI-CCIFD	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	1975.00	$0.05~{\rm sec}$	2.6679	0.6803

Table 81: image-seg (376043.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	9278.95	9278.95	9278.95	9278.95	9278.95	59.55 sec	6.3516	0.7298
CGC	6035.99	5923.43	5897.16	5897.16	5897.16	5897.16	5897.16	5897.16	1.42 sec	2.0213	0.8573
HC	6460.85	6460.85	6460.85	6460.85	6460.85	6460.85	6460.85	6460.85	0.01 sec	2.2194	0.8380
HC-CGC	5915.44	5901.44	5901.44	5901.44	5901.44	5901.44	5901.44	5901.44	1.26 sec	1.7335	0.9014
ogm-KL	6108.39	6099.05	6099.05	6099.05	6099.05	6099.05	6099.05	6099.05	1.03 sec	2.7470	0.4549
CC-Fusion-HC-CGC	5905.66	5905.66	5905.66	5905.66	5905.66	5905.66	5905.66	5905.66	0.83 sec	1.8574	0.8528
CC-Fusion-HC-MC	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	2.44 sec	2.0117	0.8575
CC-Fusion-WS-CGC	5932.06	5926.86	5926.86	5926.86	5926.86	5926.86	5926.86	5926.86	1.43 sec	1.8695	0.8933
CC-Fusion-WS-MC	5901.92	5873.73	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	5.40 sec	2.0117	0.8575
MCR-CCFDB	5908.00	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	$0.54~{\rm sec}$	2.0117	0.8575
MCI-CCIFD	6022.11	5960.30	5863.83	5863.83	5863.83	5863.83	5863.83	5863.83	1.18 sec	2.0117	0.8575

Table 82: image-seg (38082.bmp)

algorithm				,	value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10920.80	10920.80	10920.80	10920.80	137.63 sec		
CGC	8466.26	8369.76	8130.41	8130.41	8130.41	8130.41	8130.41	8130.41	5.78 sec	3.7813	0.6816
HC	8882.31	8882.31	8882.31	8882.31	8882.31	8882.31	8882.31	8882.31	0.01 sec	3.7426	0.7027
HC-CGC	8125.70	8104.12	8104.12	8104.12	8104.12	8104.12	8104.12	8104.12	0.90 sec	3.6727	0.7011
ogm-KL	10547.29	8507.28	8480.50	8480.50	8480.50	8480.50	8480.50	8480.50	2.40 sec	3.2592	0.4623
CC-Fusion-HC-CGC	8213.42	8210.70	8206.21	8206.21	8206.21	8206.21	8206.21	8206.21	3.36 sec	3.7325	0.7067
CC-Fusion-HC-MC	8180.42	8105.80	8061.66	8060.44	8060.44	8060.44	8060.44	8060.44	26.56 sec	3.8167	0.7112
CC-Fusion-WS-CGC	8305.69	8272.16	8243.25	8243.25	8243.25	8243.25	8243.25	8243.25	4.12 sec	3.9664	0.6931
CC-Fusion-WS-MC	8939.73	8602.95	8062.32	8060.34	8060.34	8060.34	8060.34	8060.34	$25.67 \mathrm{sec}$	3.8232	0.7083
MCR-CCFDB	9969.00	9669.92	8080.61	8080.61	8080.61	8080.61	8080.61	8080.61	1.78 sec	3.9109	0.7037
MCI-CCIFD	8746.25	8334.10	8060.34	8060.34	8060.34	8060.34	8060.34	8060.34	3.84 sec	3.8232	0.7083

Table 83: image-seg (38092.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	6142.02	6142.02	6142.02	6142.02	6142.02	19.63 sec	4.5036	0.8366
CGC	4080.77	4080.77	4080.77	4080.77	4080.77	4080.77	4080.77	4080.77	0.45 sec	1.6383	0.9200
HC	4315.97	4315.97	4315.97	4315.97	4315.97	4315.97	4315.97	4315.97	0.00 sec	1.6717	0.9156
HC-CGC	4081.02	4081.02	4081.02	4081.02	4081.02	4081.02	4081.02	4081.02	0.45 sec	1.6712	0.9201
ogm-KL	4325.15	4310.52	4310.52	4310.52	4310.52	4310.52	4310.52	4310.52	0.81 sec	2.6418	0.7319
CC-Fusion-HC-CGC	4075.17	4074.42	4074.42	4074.42	4074.42	4074.42	4074.42	4074.42	1.10 sec	1.6178	0.9207
CC-Fusion-HC-MC	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	1.50 sec	1.6181	0.9228
CC-Fusion-WS-CGC	4093.97	4093.97	4093.97	4093.97	4093.97	4093.97	4093.97	4093.97	0.35 sec	1.6584	0.9098
CC-Fusion-WS-MC	4073.35	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	2.29 sec	1.6181	0.9228
MCR-CCFDB	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	0.16 sec	1.6181	0.9228
MCI-CCIFD	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	4071.86	0.13 sec	1.6181	0.9228

Table 84: image-seg (385039.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	3964.74 3758.48 3871.27 3746.35 3745.97 3754.99	3964.74 3758.48 3870.70 3746.35 3745.97 3754.99	3761.13 3964.74 3758.48 3870.70 3746.35 3745.53 3754.99	3761.13 3964.74 3758.48 3870.70 3746.35 3745.53 3754.99	3745.53	3761.13 3964.74 3758.48 3870.70 3746.35 3745.53 3754.99	3761.13 3964.74 3758.48 3870.70 3746.35 3745.53	3964.74 3758.48 3870.70 3746.35 3745.53 3754.99	16.35 sec 0.14 sec 0.00 sec 0.05 sec 0.64 sec 2.57 sec 0.54 sec 2.93 sec	2.5323 2.3986 2.5622 3.3107 2.4966 2.4426 2.4438	0.8615 0.8731 0.8650 0.6584 0.8704 0.8730 0.8727
MCR-CCFDB MCI-CCIFD	3747.90	3747.90	3747.90	3747.90	3747.90	3747.90	00.00	3747.90		2.4300	0.8733

Table 85: image-seg (41033.bmp)

algorithm				Va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	2001 65	$\frac{\infty}{2001.65}$	3348.87					3348.87 2001.65			
HC	2162.63	2162.63	2162.63	2162.63	2162.63	2162.63	2162.63	2162.63	0.00 sec	1.9961	0.8102
HC-CGC ogm-KL	2086.82	2003.88 2086.82	2086.82	2086.82	2086.82	2086.82	2086.82	2003.88 2086.82	0.05 sec	2.3014	0.6176
CC-Fusion-HC-CGC CC-Fusion-HC-MC		1994.82 1994.24						1994.82 1994.24			
CC-Fusion-WS-CGC CC-Fusion-WS-MC		$\begin{array}{c} 1999.38 \\ 1994.82 \end{array}$						1999.38 1994.82			
MCR-CCFDB	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	$0.06~{ m sec}$	1.9850	0.8289
MCI-CCIFD	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	1994.24	$0.14~{ m sec}$	1.9850	0.8289

Table 86: image-seg (41069.bmp)

algorithm	_			,	value		•		time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	10802.67	10802.67	10802.67	10802.67	10802.67	54.00 sec	6.1801	0.6626
CGC	5141.05	5126.73	5126.73	5126.73	5126.73	5126.73	5126.73	5126.73	0.93 sec	2.1375	0.5709
HC	5603.76	5603.76	5603.76	5603.76	5603.76	5603.76	5603.76	5603.76	0.01 sec	2.1274	0.4272
HC-CGC	5130.38	5128.55	5128.55	5128.55	5128.55	5128.55	5128.55	5128.55	0.67 sec	2.1342	0.5720
ogm-KL	5269.73	5269.73	5269.73	5269.73	5269.73	5269.73	5269.73	5269.73	0.27 sec	2.2871	0.4861
CC-Fusion-HC-CGC	5124.32	5124.32	5124.32	5124.32	5124.32	5124.32	5124.32	5124.32	0.69 sec	1.9637	0.6332
CC-Fusion-HC-MC		5120.95		5120.95	5120.95	5120.95	5120.95	5120.95	2.90 sec	2.0463	0.5931
CC-Fusion-WS-CGC	5119.45	5119.45	5119.45	5119.45	5119.45	5119.45	5119.45	5119.45	$0.47 \mathrm{sec}$	2.0218	0.6240
CC-Fusion-WS-MC	5112.91	5110.96	5110.96	5110.96	5110.96	5110.96	5110.96	5110.96	3.84 sec	2.1405	0.5953
MCR-CCFDB	5429.51	5200.11	5114.98	5114.98	5114.98	5114.98	5114.98	5114.98	1.59 sec	2.1409	0.5953
MCI-CCIFD	5411.57	5410.52	5110.96	5110.96	5110.96	5110.96	5110.96	5110.96	5.78 sec	2.1405	0.5953

Table 87: image-seg (42012.bmp)

algorithm				Va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞		4760.93					4760.93			
CGC			3306.02					3306.02			
HC	3654.22	3654.22	3654.22	3654.22	3654.22	3654.22	3654.22	3654.22	$0.00 \mathrm{sec}$	3.2283	0.7040
HC-CGC	3294.22	3294.22	3294.22	3294.22	3294.22	3294.22	3294.22	3294.22	0.19 sec	3.1899	0.7246
ogm-KL	3485.03	3485.03	3485.03	3485.03	3485.03	3485.03	3485.03	3485.03	0.16 sec	4.0526	0.4037
CC-Fusion-HC-CGC	3251.87	3249.10	3249.10	3249.10	3249.10	3249.10	3249.10	3249.10	1.22 sec	2.9865	0.7935
CC-Fusion-HC-MC	3250.41	3249.05	3249.05	3249.05	3249.05	3249.05	3249.05	3249.05	2.22 sec	3.0847	0.7506
CC-Fusion-WS-CGC	3267.25	3267.25	3267.25	3267.25	3267.25	3267.25	3267.25	3267.25	$0.64 \mathrm{sec}$	3.1774	0.7278
CC-Fusion-WS-MC	3250.28	3250.28	3248.70	3248.70	3248.70	3248.70	3248.70	3248.70	$6.74~{ m sec}$	3.0055	0.7922
MCR-CCFDB	3258.45	3258.45	3258.45	3258.45	3258.45	3258.45	3258.45	3258.45	$0.30~{ m sec}$	3.0155	0.7978
MCI-CCIFD	3550.49	3272.63	3248.70	3248.70	3248.70	3248.70	3248.70	3248.70	1.62 sec	3.0055	0.7922

Table 88: image-seg (42049.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-GC CC-Fusion-WS-MC	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1090.54	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15	1278.22 1072.33 1123.37 1072.99 1090.54 1069.67 1069.67 1070.15 1069.22	0.01 sec 0.00 sec 0.01 sec 0.02 sec 0.13 sec 0.93 sec 0.10 sec	$\begin{array}{c} 0.8764 \\ 0.8728 \\ 0.8788 \\ 0.8826 \\ 0.8922 \\ 0.8922 \\ 0.8894 \end{array}$	0.9772 0.9773 0.9772 0.9686 0.9769 0.9769 0.9769
MCR-CCFDB	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	0.01 sec	0.8971	0.9768
MCI-CCIFD	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	1069.22	$0.05~{\rm sec}$	0.8971	0.9768

Table 89: image-seg (43074.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	4180.23	4180.23	4180.23	4180.23	4180.23	4180.23	3.51 sec	4.7877	0.6292
CGC	2343.40	2343.40	2343.40	2343.40	2343.40	2343.40	2343.40	2343.40	$0.42 \mathrm{sec}$	1.5187	0.4951
HC	2466.99	2466.99	2466.99	2466.99	2466.99	2466.99	2466.99	2466.99	0.00 sec	1.4852	0.5269
HC-CGC	2355.67	2355.67	2355.67	2355.67	2355.67	2355.67	2355.67	2355.67	$0.24 \mathrm{sec}$	1.4402	0.5303
ogm-KL	2390.74	2390.74	2390.74	2390.74	2390.74	2390.74	2390.74	2390.74	$0.09 \mathrm{sec}$	1.6198	0.4540
CC-Fusion-HC-CGC	2334.97	2334.97	2334.97	2334.97	2334.97	2334.97	2334.97	2334.97	0.24 sec	1.4456	0.5159
CC-Fusion-HC-MC	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	1.09 sec	1.4105	0.5312
CC-Fusion-WS-CGC	2336.13	2336.13	2336.13	2336.13	2336.13	2336.13	2336.13	2336.13	0.17 sec	1.4060	0.5293
CC-Fusion-WS-MC	2333.36	2333.36	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	2.56 sec	1.4105	0.5312
MCR-CCFDB	2343.74	2343.74	2343.74	2343.74	2343.74	2343.74	2343.74	2343.74	$0.25 \sec$	1.4250	0.5319
MCI-CCIFD	2334.33	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	2332.83	$0.78 \sec$	1.4105	0.5312

Table 90: image-seg (45096.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	1274.33	1274.33	1274.33	1274.33	1274.33	1274.33	1274.33	1274.33	0.29 sec	1.9038	0.8445
CGC	986.93	986.93	986.93	986.93	986.93	986.93	986.93	986.93	0.02 sec	1.2652	0.8338
HC	1039.42	1039.42	1039.42	1039.42	1039.42	1039.42	1039.42	1039.42	0.00 sec	1.2131	0.8563
HC-CGC	981.04	981.04	981.04	981.04	981.04	981.04	981.04	981.04	0.01 sec	1.1225	0.8694
ogm-KL	1008.08	1008.08	1008.08	1008.08	1008.08	1008.08	1008.08	1008.08	0.02 sec	1.4049	0.8509
CC-Fusion-HC-CGC	977.78	977.78	977.78	977.78	977.78	977.78	977.78	977.78	0.11 sec	1.1241	0.8681
CC-Fusion-HC-MC	977.78	977.78	977.78	977.78	977.78	977.78	977.78	977.78	0.93 sec	1.1241	0.8681
CC-Fusion-WS-CGC	977.78	977.78	977.78	977.78	977.78	977.78	977.78	977.78	0.10 sec	1.1241	0.8681
CC-Fusion-WS-MC	978.60	977.78	977.78	977.78	977.78	977.78	977.78	977.78	1.37 sec	1.1241	0.8681
MCR-CCFDB	977.78	977.78	977.78	977.78	977.78	977.78	977.78	977.78	$0.01~{\rm sec}$	1.1241	0.8681
MCI-CCIFD	977.78	977.78	977.78	977.78	977.78	977.78	977.78	977.78	$0.02~\mathrm{sec}$	1.1241	0.8681

Table 91: image-seg (54082.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5411.16	5411.16	5411.16	5411.16	5411.16	12.14 sec	4.0959	0.8399
CGC	3895.76	3859.80	3830.13	3830.13	3830.13	3830.13	3830.13	3830.13	2.13 sec	2.5040	0.7027
HC	4423.13	4423.13	4423.13	4423.13	4423.13	4423.13	4423.13	4423.13	0.00 sec	2.4943	0.7394
HC-CGC	3818.81	3818.81	3818.81	3818.81	3818.81	3818.81	3818.81	3818.81	0.54 sec	2.5136	0.7242
ogm-KL	3923.38	3923.38	3923.38	3923.38	3923.38	3923.38	3923.38	3923.38	0.54 sec	3.1468	0.4740
CC-Fusion-HC-CGC	3809.30	3809.30	3809.30	3809.30	3809.30	3809.30	3809.30	3809.30	0.52 sec	2.1327	0.7767
CC-Fusion-HC-MC	3800.97	3799.90	3796.36	3796.36	3796.36	3796.36	3796.36	3796.36	4.80 sec	2.2149	0.7878
CC-Fusion-WS-CGC	3817.98	3817.98	3817.98	3817.98	3817.98	3817.98	3817.98	3817.98	0.52 sec	2.1577	0.7741
CC-Fusion-WS-MC	3804.23	3801.70	3796.36	3796.36	3796.36	3796.36	3796.36	3796.36	7.33 sec	2.2149	0.7878
MCR-CCFDB	3966.75	3798.55	3798.55	3798.55	3798.55	3798.55	3798.55	3798.55	$0.55~{ m sec}$	2.2159	0.7879
MCI-CCIFD	4111.43	3796.36	3796.36	3796.36	3796.36	3796.36	3796.36	3796.36	0.91 sec	2.2149	0.7878

Table 92: image-seg (55073.bmp)

algorithm				,	value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	11227.29	11227.29	11227.29	11227.29	129.95 sec	6.2945	0.8065
CGC	8175.28	8151.00	7877.64	7877.64	7877.64	7877.64	7877.64	7877.64	7.80 sec	3.2643	0.7393
HC	8788.90	8788.90	8788.90	8788.90	8788.90	8788.90	8788.90	8788.90	0.01 sec	3.7634	0.5934
HC-CGC	8226.93	8042.20	7869.61	7869.61	7869.61	7869.61	7869.61	7869.61	3.87 sec	3.2468	0.7303
ogm-KL	10194.77	8208.48	8200.84	8200.84	8200.84	8200.84	8200.84	8200.84	2.13 sec	3.7028	0.3849
CC-Fusion-HC-CGC	7911.74	7908.80	7888.85	7888.85	7888.85	7888.85	7888.85	7888.85	3.02 sec	3.1893	0.7651
CC-Fusion-HC-MC	7876.99	7867.43	7840.43	7838.19	7838.19	7838.19	7838.19	7838.19	21.37 sec	3.2175	0.7715
CC-Fusion-WS-CGC	7924.96	7916.52	7916.52	7916.52	7916.52	7916.52	7916.52	7916.52	1.49 sec	3.1858	0.7784
CC-Fusion-WS-MC	8258.20	7856.63	7835.96	7835.96	7835.96	7835.96	7835.96	7835.96	11.98 sec	3.1751	0.7955
MCR-CCFDB	9646.06	8785.58	7840.92	7840.92	7840.92	7840.92	7840.92	7840.92	1.66 sec	3.1883	0.7951
MCI-CCIFD	8325.52	8038.53	7835.96	7835.96	7835.96	7835.96	7835.96	7835.96	2.39 sec	3.1751	0.7955

Table 93: image-seg (58060.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	12405.93	12405.93	12405.93		238.48 sec	6.5231	0.7081
CGC	10100.41	10049.51	9937.79	9937.79	9937.79	9937.79	9937.79	9937.79	4.94 sec	3.9160	0.6869
HC	10654.86	10654.86	10654.86	10654.86	10654.86	10654.86	10654.86	10654.86	0.01 sec	3.6932	0.7093
HC-CGC	9996.53	9957.49	9928.04	9928.04	9928.04	9928.04	9928.04	9928.04	5.34 sec	3.8462	0.6983
ogm-KL	12237.48	12237.48	10121.99	10121.99	10121.99	10121.99	10121.99	10121.99	8.48 sec	3.1929	0.5829
CC-Fusion-HC-CGC	9960.95	9949.19	9940.45	9940.45	9940.45	9940.45	9940.45	9940.45	2.37 sec	3.7718	0.7120
CC-Fusion-HC-MC	10319.83	10057.59	9887.79	9884.16	9884.16	9884.16	9884.16	9884.16	26.05 sec	3.9821	0.6991
CC-Fusion-WS-CGC	10015.84	10009.19	9975.16	9975.16	9975.16	9975.16	9975.16	9975.16	2.81 sec	4.0326	0.7126
CC-Fusion-WS-MC	10841.41	10319.52	9883.83	9882.52	9882.52	9882.52	9882.52	9882.52	20.72 sec	4.0159	0.6983
MCR-CCFDB	10976.84	10033.19	9890.34	9890.34	9890.34	9890.34	9890.34	9890.34	1.07 sec	4.0480	0.7000
MCI-CCIFD	10759.51	10256.02	9881.86	9881.86	9881.86	9881.86	9881.86	9881.86	5.31 sec	4.0160	0.6983

Table 94: image-seg (62096.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5405.43	5405.43	5405.43	5405.43	5405.43	11.32 sec	4.7248	0.6928
CGC	3430.05	3430.05	3430.05	3430.05	3430.05	3430.05	3430.05	3430.05	0.54 sec	0.9297	0.9309
HC	3724.76	3724.76	3724.76	3724.76	3724.76	3724.76	3724.76	3724.76	0.00 sec	1.5801	0.8092
HC-CGC	3424.07	3424.07	3424.07	3424.07	3424.07	3424.07	3424.07	3424.07	0.69 sec	0.9593	0.9279
ogm-KL	3505.74	3473.37	3473.37	3473.37	3473.37	3473.37	3473.37	3473.37	0.77 sec	1.3491	0.8301
CC-Fusion-HC-CGC	3420.23	3420.23	3420.23	3420.23	3420.23	3420.23	3420.23	3420.23	0.28 sec	0.9189	0.9320
CC-Fusion-HC-MC	3420.19	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	1.92 sec	0.9513	0.9286
CC-Fusion-WS-CGC	3420.43	3420.43	3420.43	3420.43	3420.43	3420.43	3420.43	3420.43	0.59 sec	1.3364	0.8389
CC-Fusion-WS-MC	3420.34	3420.30	3420.30	3420.30	3420.30	3420.30	3420.30	3420.30	1.65 sec	1.3403	0.8387
MCR-CCFDB	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	0.29 sec	0.9513	0.9286
MCI-CCIFD	3451.59	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	3419.40	$0.64~{ m sec}$	0.9513	0.9286

Table 95: image-seg (65033.bmp)

algorithm	•		•	,	value			•	time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10141.12	10141.12	10141.12	10141.12	109.00 sec	6.2258	0.7925
CGC	7407.36	7405.17	7405.17	7405.17	7405.17	7405.17	7405.17	7405.17	0.51 sec	2.6930	0.8659
HC	7954.15	7954.15	7954.15	7954.15	7954.15	7954.15	7954.15	7954.15	0.01 sec	3.0427	0.8429
HC-CGC	7389.37	7389.09	7389.09	7389.09	7389.09	7389.09	7389.09	7389.09	0.60 sec	2.6742	0.8713
ogm-KL	10114.93	7617.46	7580.90	7580.90	7580.90	7580.90	7580.90	7580.90	2.76 sec	2.8783	0.7639
CC-Fusion-HC-CGC	7391.59	7385.65	7381.94	7381.94	7381.94	7381.94	7381.94	7381.94	1.71 sec	2.8700	0.8584
CC-Fusion-HC-MC	7374.58	7368.35	7366.03	7366.03	7366.03	7366.03	7366.03	7366.03	7.46 sec	2.9032	0.8580
CC-Fusion-WS-CGC	7429.52	7421.64	7409.61	7409.61	7409.61	7409.61	7409.61	7409.61	2.29 sec	2.6585	0.8717
CC-Fusion-WS-MC	7800.51	7414.54	7365.22	7365.22	7365.22	7365.22	7365.22	7365.22	8.89 sec	2.9382	0.8569
MCR-CCFDB	7365.34	7365.34	7365.34	7365.34	7365.34	7365.34	7365.34	7365.34	$0.42~{ m sec}$	2.9437	0.8568
MCI-CCIFD	7541.46	7404.64	7364.57	7364.57	7364.57	7364.57	7364.57	7364.57	1.63 sec	2.9440	0.8568

Table 96: image-seg (66053.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	5048.16 4445.52 4524.61 4433.21 4431.06 4451.69	5048.16 4439.17 4524.61 4433.18 4427.25 4451.69	$\begin{array}{c} 4441.72 \\ 5048.16 \\ 4439.17 \\ 4524.61 \\ 4433.18 \\ 4427.25 \\ 4451.69 \end{array}$	4441.72 5048.16 4439.17 4524.61 4433.18 4427.25 4451.69	7108.55 4441.72 5048.16 4439.17 4524.61 4433.18 4427.25 4451.69 4427.93	4441.72 5048.16 4439.17 4524.61 4433.18 4427.25 4451.69	$4441.72 \\ 5048.16$	5048.16 4439.17 4524.61 4433.18 4427.25 4451.69	28.04 sec 0.80 sec 0.00 sec 1.02 sec 0.54 sec 1.00 sec 2.65 sec 0.73 sec 3.52 sec	2.5962 2.7227 2.6002 2.7513 2.2642 2.2623 2.2551	0.7745 0.7642 0.7752 0.7182 0.8553 0.8561 0.8568
MCR-CCFDB MCI-CCIFD					4429.11 4427.25	4429.11	4429.11 4427.25	4429.11	0.27 sec 0.73 sec		

Table 97: image-seg (69015.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5878.27	5878.27	5878.27	5878.27	5878.27	17.77 sec	5.2817	0.8164
CGC	4090.96	4088.12	4088.12	4088.12	4088.12	4088.12	4088.12	4088.12	0.78 sec	2.8705	0.7595
HC	4308.17	4308.17	4308.17	4308.17	4308.17	4308.17	4308.17	4308.17	0.00 sec	2.9258	0.8392
HC-CGC	4081.07	4081.07	4081.07	4081.07	4081.07	4081.07	4081.07	4081.07	0.13 sec	2.9965	0.8001
ogm-KL	4161.61	4161.61	4161.61	4161.61	4161.61	4161.61	4161.61	4161.61	0.61 sec	3.3795	0.5935
CC-Fusion-HC-CGC	4026.15	4025.79	4025.79	4025.79	4025.79	4025.79	4025.79	4025.79	0.91 sec	2.5500	0.8615
CC-Fusion-HC-MC	4028.50	4025.34	4024.45	4024.45	4024.45	4024.45	4024.45	4024.45	5.37 sec		
CC-Fusion-WS-CGC	4028.23	4028.23	4028.23	4028.23	4028.23	4028.23		4028.23	0.62 sec	2.5781	0.8604
CC-Fusion-WS-MC	4049.88	4032.07	4024.45	4024.45	4024.45	4024.45	4024.45	4024.45	9.87 sec	2.5936	0.8600
MCR-CCFDB	4026.56	4026.56	4026.56	4026.56	4026.56	4026.56	4026.56	4026.56	0.24 sec	2.5948	0.8600
MCI-CCIFD	4252.47	4028.52	4024.45	4024.45	4024.45	4024.45	4024.45	4024.45	1.14 sec	2.5936	0.8600

Table 98: image-seg (69020.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	8497.68	8497.68	8497.68	8497.68	8497.68	42.88 sec	6.2243	0.7413
CGC	5497.95	5326.69	5292.43	5292.43	5292.43	5292.43	5292.43	5292.43	1.69 sec	2.2497	0.8074
HC	5606.70	5606.70	5606.70	5606.70	5606.70	5606.70	5606.70	5606.70	0.01 sec	2.2130	0.8152
HC-CGC					5203.21		5203.21	5203.21	0.43 sec	2.0853	0.8255
ogm-KL	5469.84	5453.10	5453.10	5453.10	5453.10	5453.10	5453.10	5453.10	0.91 sec	2.7002	0.4325
CC-Fusion-HC-CGC	5206.42	5190.29	5190.29	5190.29	5190.29	5190.29	5190.29	5190.29	1.32 sec	1.8584	0.8554
CC-Fusion-HC-MC					5179.95		5179.95		3.71 sec	1.8721	0.8550
CC-Fusion-WS-CGC					5228.45		5228.45		1.68 sec		
CC-Fusion-WS-MC	5247.15	5193.00	5179.29	5179.29	5179.29	5179.29	5179.29	5179.29	7.09 sec	1.8730	0.8549
MCR-CCFDB	5389.80	5192.68	5192.68	5192.68	5192.68	5192.68	5192.68	5192.68	$0.59~{ m sec}$	1.9320	0.8523
MCI-CCIFD	5399.74	5399.74	5179.29	5179.29	5179.29	5179.29	5179.29	5179.29	1.66 sec	1.8730	0.8549

Table 99: image-seg (69040.bmp)

algorithm				v	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	10448.05	10448.05	10448.05	10448.05	124.42 sec	7.9061	0.3795
CGC	8253.22	8241.50	8135.56	8046.26	8046.20	8046.20	8046.20	8046.20	70.03 sec	3.3199	0.4891
HC	8814.27	8814.27	8814.27	8814.27	8814.27	8814.27	8814.27	8814.27	0.01 sec	3.9397	0.4196
HC-CGC	8273.73	8221.44	8044.29	8044.29	8044.29	8044.29	8044.29	8044.29	7.65 sec	3.7586	0.4347
ogm-KL	10138.02	10138.02	8254.71	8254.71	8254.71	8254.71	8254.71	8254.71	4.06 sec	2.1321	0.5229
CC-Fusion-HC-CGC	8107.08	8060.11	8060.11	8060.11	8060.11	8060.11	8060.11	8060.11	1.78 sec	3.6844	0.4505
CC-Fusion-HC-MC	8254.25	8072.69	7978.40	7978.40	7978.40	7978.40	7978.40	7978.40	16.74 sec	3.8310	0.4534
CC-Fusion-WS-CGC	8168.56	8142.20	8098.14	8098.14	8098.14	8098.14	8098.14	8098.14	4.23 sec	3.4037	0.4752
CC-Fusion-WS-MC	9389.64	8870.25	7997.25	7974.93	7974.93	7974.93	7974.93	7974.93	63.21 sec	4.1772	0.4165
MCR-CCFDB	9540.51	9043.51	7987.78	7987.78	7987.78	7987.78	7987.78	7987.78	3.15 sec	4.2102	0.4231
MCI-CCIFD	8924.10	8515.08	7974.58	7974.58	7974.58	7974.58	7974.58	7974.58	3.65 sec	4.0533	0.4314

Table 100: image-seg (76053.bmp)

algorithm				va	alue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	5023.76 4544.14 4805.56 4548.82 4527.71		$\begin{array}{c} 4540.58 \\ 5023.76 \\ 4544.14 \\ 4805.56 \\ 4535.11 \\ 4514.99 \end{array}$	4540.58 5023.76 4544.14 4805.56 4535.11 4514.99	5023.76 4544.14 4805.56	4540.58 5023.76 4544.14 4805.56 4535.11 4514.99	4540.58 5023.76 4544.14 4805.56 4535.11 4514.99	$\begin{array}{c} 4540.58 \\ 5023.76 \\ 4544.14 \\ 4805.56 \\ 4535.11 \\ 4514.99 \end{array}$	25.21 sec 0.34 sec 0.00 sec 0.22 sec 0.55 sec 1.00 sec 8.98 sec 1.32 sec	3.6375 3.5673 3.6411 2.9633 3.7710 3.7727	0.5942 0.5585 0.6016 0.5462 0.5998 0.6016
CC-Fusion-WS-MC MCR-CCFDB		4556.53 4534.40					4514.99 4534.40	4514.99 4534.40			0.00-0
MCI-CCIFD	4756.49	4551.42	4514.99	4514.99	4514.99	4514.99	4514.99	4514.99	1.50 sec	3.7727	0.6016

Table 101: image-seg (78004.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	4537.40	4537.40	4537.40	4537.40	4537.40	4537.40	8.82 sec	4.1380	0.8733
CGC	3270.53	3270.53	3270.53	3270.53	3270.53	3270.53	3270.53	3270.53	$0.04 \mathrm{sec}$	1.8387	0.9292
HC	3470.35	3470.35	3470.35	3470.35	3470.35	3470.35	3470.35	3470.35	0.00 sec	2.1758	0.9015
HC-CGC			3256.58				3256.58	3256.58	$0.04 \mathrm{sec}$	1.8106	0.9296
ogm-KL	3312.31	3312.31	3312.31	3312.31	3312.31	3312.31	3312.31	3312.31	0.14 sec	2.9369	0.7800
CC-Fusion-HC-CGC	3254.61	3254.61	3254.61	3254.61	3254.61	3254.61		3254.61			
CC-Fusion-HC-MC			3254.61				3254.61	3254.61	3.13 sec	1.8211	0.9280
CC-Fusion-WS-CGC	3256.22	3256.22	3256.22	3256.22	3256.22	3256.22	3256.22	3256.22	0.35 sec	1.8123	0.9277
CC-Fusion-WS-MC	3269.53	3254.83	3254.61	3254.61	3254.61	3254.61	3254.61	3254.61	4.00 sec	1.8211	0.9280
MCR-CCFDB	3256.19	3256.19	3256.19	3256.19	3256.19	3256.19	3256.19	3256.19	$0.05~{\rm sec}$	1.8217	0.9280
MCI-CCIFD	3254.61	3254.61	3254.61	3254.61	3254.61	3254.61	3254.61	3254.61	$0.45~\rm sec$	1.8211	0.9280

Table 102: image-seg (8023.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	5716.99	5716.99	5716.99	5716.99	5716.99	17.25 sec	6.0632	0.4745
CGC	4090.32	4076.82	4047.52	4047.52	4047.52	4047.52	4047.52	4047.52	5.40 sec	1.8680	0.5566
HC	4405.95	4405.95	4405.95	4405.95	4405.95	4405.95	4405.95	4405.95	0.00 sec	1.9550	0.5633
HC-CGC	4109.08	4067.44	4038.55	4038.55	4038.55	4038.55	4038.55	4038.55	3.90 sec	1.9284	0.5497
ogm-KL	4123.48	4123.48	4123.48	4123.48	4123.48	4123.48	4123.48	4123.48	0.60 sec	1.5005	0.5548
CC-Fusion-HC-CGC	4038.90	4038.63	4038.63	4038.63	4038.63	4038.63	4038.63	4038.63	0.86 sec	1.9275	0.5550
CC-Fusion-HC-MC	4044.89	4031.31	4026.67	4026.67	4026.67	4026.67	4026.67	4026.67	3.99 sec	2.0603	0.5433
CC-Fusion-WS-CGC	4050.31	4050.31	4050.31	4050.31	4050.31	4050.31	4050.31	4050.31	0.74 sec	2.0113	0.5554
CC-Fusion-WS-MC	4130.27	4089.65	4023.62	4023.62	4023.62	4023.62	4023.62	4023.62	9.29 sec	2.1718	0.5410
MCR-CCFDB	4094.33	4032.75	4032.75	4032.75	4032.75	4032.75	4032.75	4032.75	0.99 sec	2.2017	0.5403
MCI-CCIFD	4110.19	4096.95	4023.38	4023.38	4023.38	4023.38	4023.38	4023.38	3.96 sec	2.2067	0.5388

Table 103: image-seg (85048.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	7720.13	7720.13	7720.13	7720.13	7720.13	57.98 sec	5.4287	0.8908
CGC	5881.18	5881.18	5881.18	5881.18	5881.18	5881.18	5881.18	5881.18	0.25 sec	3.0630	0.9128
HC	6394.69	6394.69	6394.69	6394.69	6394.69	6394.69	6394.69	6394.69	0.01 sec	3.0312	0.9113
HC-CGC	5879.75	5879.75	5879.75	5879.75	5879.75	5879.75	5879.75	5879.75	0.15 sec	2.9341	0.9151
ogm-KL	8093.99	6225.49	6182.61	6182.61	6182.61	6182.61	6182.61	6182.61	2.02 sec	3.8576	0.7150
CC-Fusion-HC-CGC	5865.83	5861.73	5861.73	5861.73	5861.73	5861.73	5861.73	5861.73	1.30 sec	3.1026	0.9119
CC-Fusion-HC-MC	5862.44	5855.44	5852.33	5852.33	5852.33	5852.33	5852.33	5852.33	5.44 sec	3.1339	0.9115
CC-Fusion-WS-CGC	5890.54	5886.23	5873.79	5873.79	5873.79	5873.79	5873.79	5873.79	2.04 sec	3.0009	0.9134
CC-Fusion-WS-MC	5947.52	5868.52	5852.33	5852.33	5852.33	5852.33	5852.33	5852.33	9.09 sec	3.1339	0.9115
MCR-CCFDB	5857.10	5857.10	5857.10	5857.10	5857.10	5857.10	5857.10	5857.10	0.20 sec	3.2150	0.9100
MCI-CCIFD	5912.25	5855.81	5851.38	5851.38	5851.38	5851.38	5851.38	5851.38	$1.05~{ m sec}$	3.1682	0.9109

Table 104: image-seg (86000.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	∞ 4646.88	∞ 4646.88			5488.04 4646.88			5488.04 4646.88	25.86 sec 0.11 sec		0.0-00
HC	4985.07	4985.07	4985.07	4985.07	4985.07	4985.07	4985.07	4985.07	0.00 sec	3.5114	0.8307
HC-CGC ogm-KL	4718.61	4718.61	4718.61	4718.61		4718.61	4718.61		0.11 sec 0.58 sec	3.3422	0.8198
CC-Fusion-HC-CGC CC-Fusion-HC-MC	4649.62	4640.90	4633.86	4633.86	$\begin{array}{c} 4637.35 \\ 4633.86 \end{array}$	4633.86		4637.35 4633.86	1.21 sec 4.48 sec		
CC-Fusion-WS-CGC CC-Fusion-WS-MC					$\begin{array}{c} 4649.03 \\ 4635.75 \end{array}$			$\begin{array}{c} 4649.03 \\ 4635.75 \end{array}$	0.99 sec 4.30 sec		
MCR-CCFDB	4634.68	4634.68	4634.68	4634.68	4634.68	4634.68	4634.68	4634.68	0.11 sec	3.5891	0.8308
MCI-CCIFD	4634.99	4633.86	4633.86	4633.86	4633.86	4633.86	4633.86	4633.86	0.79 sec	3.5839	0.8309

Table 105: image-seg (86016.bmp)

algorithm					value				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	13541.94	13541.94	13541.94	13541.94	113.78 sec	6.1072	0.7791
CGC	6624.58	6624.58	6624.58	6624.58	6624.58	6624.58	6624.58	6624.58	0.11 sec	2.5511	0.4868
HC	6792.12	6792.12	6792.12	6792.12	6792.12	6792.12	6792.12	6792.12	0.01 sec	2.6682	0.5046
HC-CGC	6621.36	6621.36	6621.36	6621.36	6621.36	6621.36	6621.36	6621.36	0.18 sec	2.6136	0.4839
ogm-KL	6661.14	6661.14	6661.14	6661.14	6661.14	6661.14	6661.14	6661.14	0.29 sec	2.6200	0.4322
CC-Fusion-HC-CGC	6619.37	6619.37	6619.37	6619.37	6619.37	6619.37	6619.37	6619.37	0.85 sec	2.6104	0.4840
CC-Fusion-HC-MC	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	2.82 sec	2.6165	0.4839
CC-Fusion-WS-CGC	6624.74	6624.74	6624.74	6624.74	6624.74	6624.74	6624.74	6624.74	0.43 sec	2.5833	0.4845
CC-Fusion-WS-MC	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	3.44 sec	2.6165	0.4839
MCR-CCFDB	6620.72	6620.72	6620.72	6620.72	6620.72	6620.72	6620.72	6620.72	0.14 sec	2.6183	0.4839
MCI-CCIFD	6631.73	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	6618.85	0.64 sec	2.6165	0.4839

Table 106: image-seg (86068.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	7942.28	7942.28	7942.28	7942.28	7942.28	39.39 sec	7.3219	0.2156
CGC	5282.55	5271.44	5235.77	5235.77	5235.77	5235.77	5235.77	5235.77	10.83 sec	1.7011	0.6988
HC	5833.13	5833.13	5833.13	5833.13	5833.13	5833.13	5833.13	5833.13	0.01 sec	2.9679	0.3717
HC-CGC	5314.36	5286.88	5234.18	5234.18	5234.18	5234.18	5234.18	5234.18	9.88 sec	1.7441	0.6930
ogm-KL	5330.73	5324.67	5324.67	5324.67	5324.67	5324.67	5324.67	5324.67	1.19 sec	1.3032	0.7017
CC-Fusion-HC-CGC	5236.94	5231.95	5229.37	5229.37	5229.37	5229.37	5229.37	5229.37	2.44 sec	2.0844	0.6054
CC-Fusion-HC-MC			5198.87				5198.87	5198.87	3.40 sec	2.8195	0.3971
CC-Fusion-WS-CGC	5256.88	5250.53	5250.53	5250.53	5250.53	5250.53	5250.53	5250.53	1.32 sec	1.6953	0.6973
CC-Fusion-WS-MC	5222.00	5204.13	5198.87	5198.87	5198.87	5198.87	5198.87	5198.87	7.56 sec	2.8195	0.3971
MCR-CCFDB	5481.98	5198.87	5198.87	5198.87	5198.87	5198.87	5198.87	5198.87	0.99 sec	2.8195	0.3971
MCI-CCIFD	5385.58	5244.09	5198.87	5198.87	5198.87	5198.87	5198.87	5198.87	1.41 sec	2.8195	0.3971

Table 107: image-seg (87046.bmp)

algorithm				va	ılue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	6290.96	6290.96	6290.96	6290.96	6290.96	23.54 sec	6.2501	0.6364
CGC	4340.11	4334.08	4334.08	4334.08	4334.08	4334.08	4334.08	4334.08	0.73 sec	3.5072	0.6026
HC	4798.20	4798.20	4798.20	4798.20	4798.20	4798.20	4798.20	4798.20	0.00 sec	3.0094	0.7185
HC-CGC	4334.44	4333.16	4333.16	4333.16	4333.16	4333.16	4333.16	4333.16	0.71 sec	3.1717	0.6938
ogm-KL	4563.99	4557.04	4557.04	4557.04	4557.04	4557.04	4557.04	4557.04	1.01 sec	2.8398	0.5227
CC-Fusion-HC-CGC	4333.35	4327.38	4320.32	4320.32	4320.32	4320.32	4320.32	4320.32	2.12 sec	3.4626	0.6152
CC-Fusion-HC-MC	4320.27	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	2.16 sec	3.5416	0.6120
CC-Fusion-WS-CGC	4357.79	4344.04	4344.04	4344.04	4344.04	4344.04	4344.04	4344.04	1.01 sec	3.4823	0.6196
CC-Fusion-WS-MC	4337.08	4319.35	4316.62	4316.62	4316.62	4316.62	4316.62	4316.62	3.24 sec	3.5261	0.6172
MCR-CCFDB	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	0.40 sec	3.5416	0.6120
MCI-CCIFD	4376.91	4363.81	4315.53	4315.53	4315.53	4315.53	4315.53	4315.53	1.40 sec	3.5416	0.6120

Table 108: image-seg (89072.bmp)

algorithm					time	VI	RI				
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM					5364.41		5364.41		17.17 sec		
CGC HC		3950.43 4200.63						3950.43 4200.63	0.38 sec 0.00 sec		
HC-CGC		3947.25 4171.57						3947.25 4171.06	0.07 sec 1.46 sec		
ogm-KL CC-Fusion-HC-CGC	3934.71	3934.17	3933.75	3933.75	3933.75	3933.75	3933.75	3933.75	1.30 sec	3.1168	0.8454
CC-Fusion-HC-MC CC-Fusion-WS-CGC		3935.13 3937.82					3933.75 3937.82	3933.75 3937.82	2.99 sec 0.54 sec		
CC-Fusion-WS-MC		3934.52						3933.75	3.14 sec		
MCR-CCFDB	3935.25	3935.25	3935.25	3935.25	3935.25	3935.25	3935.25	3935.25	0.10 sec	3.1188	0.8454
MCI-CCIFD	3946.76	3933.75	3933.75	3933.75	3933.75	3933.75	3933.75	3933.75	0.57 sec	3.1181	0.8454

Table 109: image-seg (97033.bmp)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞		5862.67				5862.67	21.90 sec		
CGC	4337.35	4337.35	4337.35	4337.35	4337.35	4337.35	4337.35	4337.35	0.22 sec	2.4771	0.7825
HC	4816.56	4816.56	4816.56	4816.56	4816.56	4816.56	4816.56	4816.56	0.00 sec	2.7490	0.7650
HC-CGC	4334.12	4334.12	4334.12	4334.12	4334.12	4334.12	4334.12	4334.12	0.09 sec	2.4903	0.7869
ogm-KL	4553.50	4553.50	4553.50	4553.50	4553.50	4553.50	4553.50	4553.50	0.37 sec	2.6802	0.7029
CC-Fusion-HC-CGC	4328.51	4328.51	4328.51	4328.51	4328.51	4328.51	4328.51	4328.51	0.68 sec	2.3882	0.7912
CC-Fusion-HC-MC	4321.87	4320.94	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	2.85 sec	2.5451	0.7837
CC-Fusion-WS-CGC	4338.32	4336.74	4335.37	4335.37	4335.37	4335.37	4335.37	4335.37	1.56 sec	2.3734	0.7902
CC-Fusion-WS-MC	4336.87	4321.21	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	3.49 sec	2.5451	0.7837
MCR-CCFDB	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	0.18 sec	2.5451	0.7837
MCI-CCIFD	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	4320.69	$0.37~{ m sec}$	2.5451	0.7837

4.2. knott-3d-150

Table 110: knott-3d-150 (gm_knott_3d_032)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{r} -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{r} -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	$\begin{array}{c} -5810.10 \\ -4917.85 \\ -5811.47 \\ -5529.15 \\ -5811.47 \\ -5811.47 \\ -5798.93 \end{array}$	0.05 sec 0.00 sec 0.03 sec 0.11 sec 0.37 sec 1.51 sec 0.26 sec	1.0520 1.6821 1.0508 2.6680 1.0508 1.0508 1.1435	0.9055 0.8352 0.9055 0.7622 0.9055 0.9055 0.9022
MCR-CCFDB	-5809.41	-5809.41	-5809.41	-5809.41	-5809.41	-5809.41	-5809.41	-5809.41	0.44 sec	1.1335	0.9019
MCI-CCIFD	-5811.47	-5811.47	-5811.47	-5811.47	-5811.47	-5811.47	-5811.47	-5811.47	$0.67~{ m sec}$	1.0508	0.9055

Table 111: knott-3d-150 (gm_knott_3d_033)

algorithm				val	ue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	5260.11	5260.11	5260.11	5260.11	5260.11	5260.11	5.45 sec	4.9486	0.2371
CGC	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	$0.05 \mathrm{sec}$	0.4964	0.8790
HC	-1943.62	-1943.62	-1943.62	-1943.62	-1943.62	-1943.62	-1943.62	-1943.62	0.01 sec	0.5591	0.8613
HC-CGC	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	0.09 sec	0.4964	0.8790
ogm-KL	-2487.31	-2487.31	-2487.31	-2487.31	-2487.31	-2487.31	-2487.31	-2487.31	0.15 sec	0.7502	0.8622
CC-Fusion-HC-CGC	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	0.40 sec	0.4964	0.8790
CC-Fusion-HC-MC	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	1.11 sec	0.4964	0.8790
CC-Fusion-WS-CGC				-2545.84							
CC-Fusion-WS-MC	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	1.86 sec	0.4964	0.8790
MCR-CCFDB	-1917.78	-2350.25	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	1.58 sec	0.4964	0.8790
MCI-CCIFD	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	-2545.84	0.33 sec	0.4964	0.8790

Table 112: knott-3d-150 (gm_knott_3d_034)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	2834.57	2834.57	2834.57	2834.57	2834.57	2834.57	6.89 sec	2.8922	0.8586
CGC	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	0.08 sec	0.9066	0.9106
HC	-2830.20	-2830.20	-2830.20	-2830.20	-2830.20	-2830.20	-2830.20	-2830.20	0.01 sec	2.0380	0.6586
HC-CGC	-4062.65	-4062.65	-4062.65	-4062.65	-4062.65	-4062.65	-4062.65	-4062.65	$0.05 \mathrm{sec}$	0.9071	0.9106
ogm-KL	-3889.86	-3889.86	-3889.86	-3889.86	-3889.86	-3889.86	-3889.86	-3889.86	0.23 sec	2.1895	0.6956
CC-Fusion-HC-CGC	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	0.67 sec	1.5758	0.7397
CC-Fusion-HC-MC	-3972.66	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	2.26 sec	1.5758	0.7397
CC-Fusion-WS-CGC	-3974.19	-3974.19	-3974.19	-3974.19	-3974.19	-3974.19	-3974.19	-3974.19	0.68 sec	1.6881	0.7231
CC-Fusion-WS-MC	-3964.28	-3975.28	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	-3975.79	6.83 sec	1.5758	0.7397
MCR-CCFDB	-4061.36	-4061.36	-4061.36	-4061.36	-4061.36	-4061.36	-4061.36	-4061.36	$0.49~{\rm sec}$	0.9069	0.9106
MCI-CCIFD	-3957.84	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	-4064.87	$0.70~{ m sec}$	0.9066	0.9106

Table 113: knott-3d-150 (gm_knott_3d_035)

algorithm				val	ue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	880.94	880.94	880.94	880.94	880.94	880.94	4.12 sec	3.6774	0.7177
CGC	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	0.09 sec	0.7473	0.9125
HC	-3756.70	-3756.70	-3756.70	-3756.70	-3756.70	-3756.70	-3756.70	-3756.70	0.01 sec	1.7381	0.6938
HC-CGC			-4595.84								
ogm-KL	-4561.64	-4561.64	-4561.64	-4561.64	-4561.64	-4561.64	-4561.64	-4561.64	$0.13 \mathrm{sec}$	1.6108	0.8007
CC-Fusion-HC-CGC	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	$0.43 \mathrm{sec}$	0.7473	0.9125
CC-Fusion-HC-MC	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	1.18 sec	0.7473	0.9125
CC-Fusion-WS-CGC	-4595.04	-4595.04	-4595.04	-4595.04	-4595.04	-4595.04	-4595.04	-4595.04	0.29 sec	0.7473	0.9125
CC-Fusion-WS-MC	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	1.79 sec	0.7473	0.9125
MCR-CCFDB	-2450.55	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	$0.97 \sec$	0.7473	0.9125
MCI-CCIFD	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	-4595.84	$0.22\mathrm{sec}$	0.7473	0.9125

Table 114: knott-3d-150 (gm_knott_3d_036)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC	$\begin{array}{c} -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -4015.99 \\ -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5198.37 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	$\begin{array}{c} -5164.28 \\ -4775.56 \\ -5164.28 \\ -5031.51 \\ -5198.37 \\ -5198.37 \\ -5175.25 \end{array}$	0.13 sec 0.00 sec 0.06 sec 0.06 sec 0.42 sec 1.37 sec 0.54 sec	$\begin{array}{c} 0.8748 \\ 1.5805 \\ 0.8748 \\ 2.3828 \\ 0.8916 \\ 0.8916 \\ 1.0123 \end{array}$	0.9685 0.8975 0.9685 0.8699 0.9765 0.9765 0.9674
MCR-CCFDB	-5195.89	-5195.89	-5195.89	-5195.89	-5195.89	-5195.89	-5195.89	-5195.89	0.28 sec	0.8913	0.9765
MCI-CCIFD	-5198.37	-5198.37	-5198.37	-5198.37	-5198.37	-5198.37	-5198.37	-5198.37	$0.31~{ m sec}$	0.8916	0.9765

Table 115: knott-3d-150 (gm_knott_3d_037)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	-2757.98	-2757.98	-2757.98	-2757.98	-2757.98	-2757.98	1.24 sec	2.6433	0.8731
CGC	-4632.24	-4632.24	-4632.24	-4632.24	-4632.24	-4632.24	-4632.24	-4632.24	0.08 sec	1.0475	0.9561
HC	-4075.88	-4075.88	-4075.88	-4075.88	-4075.88	-4075.88	-4075.88	-4075.88	0.00 sec	1.5888	0.8219
HC-CGC	-4638.20	-4638.20	-4638.20	-4638.20	-4638.20	-4638.20	-4638.20	-4638.20	0.06 sec	0.8670	0.9720
ogm-KL	-4501.88	-4501.88	-4501.88	-4501.88	-4501.88	-4501.88	-4501.88	-4501.88	$0.05 \mathrm{sec}$	2.1186	0.8513
CC-Fusion-HC-CGC			-4634.74								
CC-Fusion-HC-MC	-4635.18	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	3.28 sec	0.8686	0.9720
CC-Fusion-WS-CGC	-4617.07	-4617.07	-4617.07	-4617.07	-4617.07	-4617.07	-4617.07	-4617.07	0.44 sec	1.0508	0.9466
CC-Fusion-WS-MC	-4614.62	-4633.75	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	7.24 sec	0.8686	0.9720
MCR-CCFDB	-4176.13	-4630.01	-4630.01	-4630.01	-4630.01	-4630.01	-4630.01	-4630.01	$0.60~\mathrm{sec}$	0.8744	0.9719
MCI-CCIFD	-4491.38	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	-4638.99	$0.78~{ m sec}$	0.8686	0.9720

Table 116: knott-3d-150 (gm_knott_3d_038)

algorithm				val	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	208.62	208.62	208.62	208.62	208.62		2.83 sec		
CGC		-4625.80									
HC		-4248.19									
HC-CGC	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	0.06 sec	1.0301	0.8802
ogm-KL	-4459.46	-4459.46	-4459.46	-4459.46	-4459.46	-4459.46	-4459.46	-4459.46	0.18 sec	2.0392	0.7915
CC-Fusion-HC-CGC	-4624.74	-4624.74	-4624.74	-4624.74	-4624.74	-4624.74	-4624.74	-4624.74	0.61 sec	1.0099	0.8770
CC-Fusion-HC-MC	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	1.12 sec	1.0301	0.8802
CC-Fusion-WS-CGC	-4611.47	-4611.47	-4611.47	-4611.47	-4611.47	-4611.47	-4611.47	-4611.47	0.51 sec	1.0298	0.8802
CC-Fusion-WS-MC	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	$1.57~{ m sec}$	1.0301	0.8802
MCR-CCFDB	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	$0.38~{ m sec}$	1.0301	0.8802
MCI-CCIFD	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	-4625.80	0.20 sec	1.0301	0.8802

Table 117: knott-3d-150 (gm_knott_3d_039)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	-3709.96	-3709.96	-3709.96	-3709.96	-3709.96	-3709.96	1.02 sec	2.3966	0.9100
CGC	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	0.06 sec	1.2590	0.9527
HC	-4760.80	-4760.80	-4760.80	-4760.80	-4760.80	-4760.80	-4760.80	-4760.80	0.00 sec	1.6742	0.9167
HC-CGC	-5089.17	-5089.17	-5089.17	-5089.17	-5089.17	-5089.17	-5089.17	-5089.17	0.03 sec	1.2679	0.9523
ogm-KL	-4992.50	-4992.50	-4992.50	-4992.50	-4992.50	-4992.50	-4992.50	-4992.50	0.07 sec	2.7593	0.8343
CC-Fusion-HC-CGC	-5083.60	-5083.60	-5083.60	-5083.60	-5083.60	-5083.60	-5083.60	-5083.60	0.68 sec	1.1245	0.9623
CC-Fusion-HC-MC	-5086.64	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	1.93 sec	1.0425	0.9683
CC-Fusion-WS-CGC	-5069.29	-5069.29	-5069.29	-5069.29	-5069.29	-5069.29	-5069.29	-5069.29	0.36 sec	1.2998	0.9501
CC-Fusion-WS-MC	-5084.84	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	-5087.58	2.65 sec	1.0425	0.9683
MCR-CCFDB	-5087.40	-5087.40	-5087.40	-5087.40	-5087.40	-5087.40	-5087.40	-5087.40	$0.28~{ m sec}$	1.2619	0.9527
MCI-CCIFD	-4676.13	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	-5092.32	$0.63~\mathrm{sec}$	1.2590	0.9527

4.3. knott-3d-300

Table 118: knott-3d-300 (gm_knott_3d_072)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{r} -32209.61 \\ -3796.59 \\ -31890.58 \\ -32176.66 \\ -29574.18 \end{array}$	$\begin{array}{c} -29619.84 \\ -32507.35 \\ -3796.59 \\ -32029.55 \\ -32881.78 \\ -31429.37 \end{array}$	$\begin{array}{c} -29619.84 \\ -32863.16 \\ -30283.52 \\ -32633.04 \\ -32916.63 \\ -31638.36 \end{array}$	$\begin{array}{c} -29619.84 \\ -32863.16 \\ -30354.28 \\ -32750.13 \\ -32916.63 \\ -31638.36 \end{array}$	$\begin{array}{c} \infty \\ -32907.64 \\ -29619.84 \\ -32863.16 \\ -30354.28 \\ -32750.13 \\ -32916.63 \\ -31638.36 \\ -32924.46 \end{array}$	$\begin{array}{c} -32907.64 \\ -29619.84 \\ -32863.16 \\ -30354.28 \\ -32750.13 \\ -32916.63 \\ -31638.36 \end{array}$	$\begin{array}{c} -29619.84 \\ -32863.16 \\ -30354.28 \\ -32750.13 \\ -32916.63 \\ -31638.36 \end{array}$	$\begin{array}{r} -32907.64 \\ -29619.84 \\ -32863.16 \\ -30354.28 \\ -32750.13 \\ -32916.63 \\ -31638.36 \end{array}$	643.37 sec 8.39 sec 0.05 sec 3.19 sec 17.11 sec 14.95 sec 9.94 sec 18.60 sec 29.62 sec	1.6360 2.4918 1.7597 4.8809 1.7279 1.6595 2.2600	0.9387 0.8962 0.9372 0.7323 0.9344 0.9389 0.9069
MCR-CCFDB MCI-CCIFD	-3796.59 -3796.59	-3796.59			-32987.47 -32999.85				79.64 sec		

Table 119: knott-3d-300 (gm_knott_3d_073)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	∞	∞	3494.53	3494.53	958.48 sec	4.7741	0.8634
CGC	0.00	0.00	-23433.69	-23433.69	-23433.69	-23433.69	-23433.69	-23433.69	1.41 sec	2.4793	0.8337
HC	-21636.83	-21636.83	-21636.83	-21636.83	-21636.83	-21636.83	-21636.83	-21636.83	0.06 sec	1.9538	0.8070
HC-CGC	-24496.88	-24828.93	-25861.17	-25861.17	-25861.17	-25861.17	-25861.17	-25861.17	2.87 sec	1.4560	0.8758
ogm-KL	-1556.16	-1556.16	-24366.05	-24368.30	-24368.30	-24368.30	-24368.30	-24368.30	13.87 sec	3.7796	0.6611
CC-Fusion-HC-CGC	-24660.17	-25054.07	-25555.66	-25555.66	-25555.66	-25555.66	-25555.66	-25555.66	12.35 sec	1.5401	0.8750
CC-Fusion-HC-MC	-24403.93	-25111.58	-25745.16	-25863.38	-25863.38	-25863.38	-25863.38	-25863.38	35.72 sec	1.4370	0.8777
CC-Fusion-WS-CGC			-24858.58						10.84 sec		
CC-Fusion-WS-MC	-21012.24	-24202.37	-25800.80	-25848.08	-25848.08	-25848.08	-25848.08	-25848.08	39.36 sec	1.4371	0.8777
MCR-CCFDB	-1556.16	-1556.16	-1556.16	-16078.57	-25849.06	-25849.06	-25849.06	-25849.06	$107.97~{\rm sec}$	1.4309	0.8781
MCI-CCIFD	-1556.16	-1556.16	-25287.81	-25863.38	-25863.38	-25863.38	-25863.38	-25863.38	11.44 sec	1.4370	0.8777

Table 120: knott-3d-300 (gm_knott_3d_074)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} -21831.32 \\ -24285.59 \\ -1550.70 \\ -25256.68 \\ -24739.46 \\ -24604.49 \end{array}$	$ \begin{array}{r} -21831.32 \\ -25015.57 \end{array} $	$\begin{array}{c} -21831.32 \\ -25691.16 \\ -24026.44 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	$\begin{array}{c} -21831.32 \\ -25691.16 \\ -24035.85 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	$\begin{array}{c} -21831.32 \\ -25691.16 \\ -24035.85 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	$\begin{array}{c} -21831.32 \\ -25691.16 \\ -24035.85 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	$\begin{array}{c} -21831.32 \\ -25691.16 \\ -24035.85 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	$\begin{array}{c} -25689.42 \\ -21831.32 \\ -25691.16 \\ -24035.85 \\ -25430.22 \\ -25705.79 \\ -25092.31 \end{array}$	1518.59 sec 4.69 sec 0.07 sec 2.34 sec 13.30 sec 8.98 sec 16.07 sec 7.13 sec 65.09 sec	1.3949 2.1471 1.3761 3.7416 1.6724 1.3558 1.9541	0.9111 0.7991 0.9119 0.6808 0.8892 0.9122 0.8817
MCR-CCFDB MCI-CCIFD	-1550.70 -1550.70	-1550.70		-14964.28	-25716.21	-25716.21	-25716.21	-25716.21	167.49 sec 14.92 sec	1.3924	0.9099

Table 121: knott-3d-300 (gm_knott_3d_075)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	∞	∞	3514.30	3514.30	1155.90 sec	4.2488	0.9171
CGC	0.00	0.00	-30388.15	-30388.15	-30388.15	-30388.15	-30388.15	-30388.15	5.73 sec	1.9506	0.8727
HC	-28478.32	-28478.32	-28478.32	-28478.32	-28478.32	-28478.32	-28478.32	-28478.32	0.07 sec	2.2776	0.8459
HC-CGC	-30091.80	-30355.71	-30466.35	-30466.35	-30466.35	-30466.35	-30466.35	-30466.35	2.02 sec	1.7201	0.8887
ogm-KL	-2669.63	-2669.63	-28814.26	-28815.15	-28815.15	-28815.15	-28815.15	-28815.15	14.57 sec	4.0892	0.6859
CC-Fusion-HC-CGC	-29972.99	-30025.17	-30283.32	-30283.32	-30283.32	-30283.32	-30283.32	-30283.32	5.25 sec	1.7392	0.8919
CC-Fusion-HC-MC	-30394.93	-30470.29	-30474.44	-30474.44	-30474.44	-30474.44	-30474.44	-30474.44	12.51 sec	1.6330	0.8899
CC-Fusion-WS-CGC		-28488.09					-29623.75		12.24 sec		
CC-Fusion-WS-MC	-25931.41	-29612.53	-30478.37	-30478.37	-30478.37	-30478.37	-30478.37	-30478.37	18.53 sec	1.6331	0.8901
MCR-CCFDB	-2669.63	-2669.63	-2669.63	-24694.95	-30478.37	-30478.37	-30478.37	-30478.37	$102.04~\mathrm{sec}$	1.6331	0.8901
MCI-CCIFD	-2669.63	-2669.63	-30478.37	-30478.37	-30478.37	-30478.37	-30478.37	-30478.37	7.47 sec	1.6331	0.8901

Table 122: knott-3d-300 (gm_knott_3d_076)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	∞	∞	-1991.22				0.00-0
CGC HC	0.00	0.00 -24454.42	-27018.86						3.94 sec 0.06 sec		
HC-CGC		-24454.42 -26895.76							2.24 sec		
ogm-KL	-1597.05		-25246.64						9.99 sec		
CC-Fusion-HC-CGC			-26645.74						9.91 sec		
CC-Fusion-HC-MC		-26610.28							70.50 sec		
CC-Fusion-WS-CGC		-26025.28						-26195.11	24.82 sec		
CC-Fusion-WS-MC	-23127.04	-25844.82	-27050.13	-27056.71	-27056.71	-27056.71	-27056.71	-27056.71	57.05 sec	1.9016	0.8930
MCR-CCFDB	-1597.05	-1597.05	-3592.11	-26879.72	-27024.74	-27024.74	-27024.74	-27024.74	$70.94 \mathrm{sec}$	1.9201	0.8929
MCI-CCIFD	-1597.05	-1597.05	-26995.91	-27056.99	-27056.99	-27056.99	-27056.99	-27056.99	12.64 sec	1.9016	0.8930

Table 123: knott-3d-300 (gm_knott_3d_077)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM	∞	∞	∞	∞	∞	∞	-2184.98	-2184.98	961.44 sec	4.1355	0.9233
CGC	0.00	0.00	-29377.43	-29377.43	-29377.43	-29377.43	-29377.43	-29377.43	4.72 sec	1.7882	0.8959
HC	-27385.48	-27385.48	-27385.48	-27385.48	-27385.48	-27385.48	-27385.48	-27385.48	0.06 sec	2.4407	0.8374
HC-CGC	-28787.89	-29167.29	-29418.86	-29418.86	-29418.86	-29418.86	-29418.86	-29418.86	2.34 sec	1.9373	0.8764
ogm-KL	-1550.87	-1550.87	-27768.65	-27819.39	-27819.39	-27819.39	-27819.39	-27819.39	17.38 sec	4.5358	0.6849
CC-Fusion-HC-CGC	-28593.45	-28739.32	-29206.10	-29206.10	-29206.10	-29206.10	-29206.10	-29206.10	12.14 sec	1.7146	0.9046
CC-Fusion-HC-MC	-28309.14	-29389.26	-29482.24	-29482.24	-29482.24	-29482.24	-29482.24	-29482.24	21.47 sec	1.6059	0.9154
CC-Fusion-WS-CGC	-28078.96	-28232.85	-28315.02	-28315.02	-28315.02	-28315.02	-28315.02	-28315.02	13.33 sec	2.3320	0.8843
CC-Fusion-WS-MC	-23802.33	-27618.73	-29478.91	-29482.24	-29482.24	-29482.24	-29482.24	-29482.24	$76.25 {\rm sec}$	1.6059	0.9154
MCR-CCFDB	-1550.87	-1550.87	-1550.87	-17822.19	-29481.84	-29481.84	-29481.84	-29481.84	94.45 sec	1.6057	0.9154
MCI-CCIFD	-1550.87	-1550.87	-28226.71	-29482.24	-29482.24	-29482.24	-29482.24	-29482.24	$15.04~{ m sec}$	1.6059	0.9154

Table 124: knott-3d-300 (gm_knott_3d_078)

algorithm	value									VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC HC		$ \begin{array}{c} \infty \\ -19330.48 \\ -17629.18 \end{array} $							1954.57 sec 4.84 sec 0.09 sec	1.9511	0.7098
HC-CGC ogm-KL CC-Fusion-HC-CGC	$-18987.65 \\ -1371.43$	-19090.50	$^{-20174.59}_{-19129.67}$	$^{-20174.59}_{-19132.84}$	$\begin{array}{c} -20174.59 \\ -19132.84 \end{array}$	$\begin{array}{c} -20174.59 \\ -19132.84 \end{array}$	$-20174.59 \\ -19132.84$	$-20174.59 \\ -19132.84$	4.29 sec 13.48 sec 21.11 sec	1.9433 3.1283	$0.7096 \\ 0.6367$
CC-Fusion-HC-MC CC-Fusion-WS-CGC CC-Fusion-WS-MC	-19740.30	$\begin{array}{c} -20123.90 \\ -19766.95 \\ -16853.64 \end{array}$	-19969.14	-19969.14	-19969.14	-19969.14	-19969.14	-19969.14	16.91 sec 10.56 sec 66.00 sec	2.0234	0.7087
MCR-CCFDB	-1371.43	-1371.43	-1371.43	-7662.94	-19737.03	-20200.94	-20200.94	-20200.94	491.72 sec	1.8238	0.7383
MCI-CCIFD	-1371.43	-1371.43	-13717.83	-20112.37	-20211.55	-20211.55	-20211.55	-20211.55	239.34 sec	1.8055	0.7386

Table 125: knott-3d-300 (gm_knott_3d_079)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
PIVIT-BOEM CGC	$_{0.00}^{\infty}$	0.00	-26604.18	-26604.18	-26604.18		-10443.86 -26604.18		520.72 sec 10.18 sec		0.00.0
HC HC-CGC	-21925.87	0.00	-21925.87	-21925.87	-21925.87 -26586.84	-21925.87	-21925.87	-21925.87	0.04 sec	2.4849	0.8351
ogm-KL	-1827.45	-1827.45	-24683.01	-24683.01	-24683.01	-24683.01	-24683.01	-24683.01	10.62 sec	4.3570	0.7143
CC-Fusion-HC-CGC CC-Fusion-HC-MC		-26389.43	-26606.48	-26607.98	-26607.98	-26607.98	-26607.98	-26607.98	11.56 sec 34.54 sec		0.00-0
CC-Fusion-WS-CGC CC-Fusion-WS-MC	$-25177.61 \\ -1827.45$		$-25817.56 \\ -26594.09$		-25842.37 -26607.98				31.74 sec 62.05 sec		
MCR-CCFDB	-1827.45	-1827.45	-4290.04	-25770.98	-26578.44	-26578.44	-26578.44	-26578.44	83.99 sec	1.7683	0.8981
MCI-CCIFD	-1827.45	-1827.45	-25902.05	-26607.98	-26607.98	-26607.98	-26607.98	-26607.98	24.85 sec	1.7859	0.8976

4.4. knott-3d-450

Table 126: knott-3d-450 (gm_knott_3d_096)

algorithm		value								VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC	0.00	0.00					-89681.90		84.60 sec		
HC	-77366.26	-77366.26			-77366.26			-77366.26	0.28 sec		
HC-CGC	-85381.84	-85407.71	-87435.50	-89605.35	-89605.35	-89605.35	-89605.35	-89605.35	53.60 sec	2.3528	0.8846
ogm-KL	-6504.54	-6504.54	-6504.54	-81992.02	-83436.56	-83436.56	-83436.56	-83436.56	187.89 sec	5.2742	0.6892
CC-Fusion-HC-CGC	-76149.17	-80772.94	-86369.93	-87442.99	-87442.99	-87442.99	-87442.99	-87442.99	84.22 sec	2.4266	0.8975
CC-Fusion-HC-MC	-6504.54	-77741.99	-89396.66	-89764.33	-89810.42	-89810.42	-89810.42	-89810.42	206.13 sec	2.0311	0.9066
CC-Fusion-WS-CGC	-6504.54	-70751.86	-83217.04	-84538.86	-84538.86	-84538.86	-84538.86	-84538.86	161.80 sec	2.6986	0.9024
CC-Fusion-WS-MC	-6504.54	-6504.54	-87957.41	-89687.58	-89793.08	-89828.99	-89828.99	-89828.99	594.71 sec	2.0285	0.9068
MCR-CCFDB	-6504.54	-6504.54	-6504.54	-6504.54	-13109.24	-26156.24	-69829.42	-69829.42	1822.72 sec	3.0765	0.6926
MCI-CCIFD	-6504.54	-6504.54	-6504.54	-21343.11	-89640.23	-89959.41	-89959.41	-89959.41	337.50 sec	1.9035	0.9308

Table 127: knott-3d-450 (gm_knott_3d_097)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC	0.00	0.00			-73196.32				73.09 sec		
HC	-65135.76	-65135.76	-65135.76	-65135.76	-65135.76	-65135.76	-65135.76	-65135.76	0.35 sec	2.7417	0.7889
HC-CGC	-68421.60	-68432.64	-71927.20	-73393.59	-73393.59	-73393.59	-73393.59	-73393.59	46.53 sec	2.0645	0.8233
ogm-KL	-4626.25	-4626.25	-4626.25	-68048.10	-69320.32	-69320.32	-69320.32	-69320.32	190.71 sec	4.6581	0.6482
CC-Fusion-HC-CGC	-60813.40	-67207.78	-70886.83	-70914.74	-71433.42	-71433.42	-71433.42	-71433.42	145.69 sec	2.5275	0.7840
CC-Fusion-HC-MC	-4626.25	-62666.23	-73264.79	-73445.66	-73445.66	-73445.66	-73445.66	-73445.66	111.21 sec	1.9981	0.8274
CC-Fusion-WS-CGC	-58852.06	-66211.06	-69659.84	-69815.82	-70797.99	-70797.99	-70797.99	-70797.99	225.65 sec	2.6017	0.8122
CC-Fusion-WS-MC	-4626.25	-4626.25	-71860.56	-73400.97	-73476.61	-73476.61	-73476.61	-73476.61	342.34 sec	1.9975	0.8270
MCR-CCFDB	-4626.25	-4626.25	-4626.25	-4626.25	-10985.99	-23330.11	-65180.85	-65180.85	1834.93 sec	2.4361	0.7286
MCI-CCIFD	-4626.25	-4626.25	-4626.25	-16559.90	-73477.55	-73477.55	-73477.55	-73477.55	268.74 sec	1.9976	0.8275

Table 128: knott-3d-450 (gm_knott_3d_098)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	-83366.13 -5807.00 -78628.78 -5807.00	$\begin{array}{r} -83378.62 \\ -5807.00 \\ -78637.88 \\ -76495.45 \\ -76884.66 \end{array}$	$\begin{array}{c} -85830.24 \\ -5807.00 \\ -84728.38 \\ -86291.60 \\ -81590.47 \end{array}$	$\begin{array}{c} -86500.26 \\ -80778.55 \\ -84964.79 \\ -86495.58 \\ -82698.93 \end{array}$	$\begin{array}{c} -86332.22 \\ -76603.26 \\ -86500.26 \\ -81676.37 \\ -84964.79 \\ -86495.58 \\ -82698.93 \\ -86593.72 \end{array}$	$\begin{array}{c} -86500.26 \\ -81676.37 \\ -84964.79 \\ -86495.58 \\ -82698.93 \end{array}$	$\begin{array}{c} -76603.26 \\ -86500.26 \\ -81676.37 \\ -84964.79 \\ -86495.58 \\ -82698.93 \end{array}$	$\begin{array}{c} -86332.22 \\ -76603.26 \\ -86500.26 \\ -81676.37 \\ -84964.79 \\ -86495.58 \\ -82698.93 \\ -86593.72 \end{array}$	71.97 sec 0.28 sec 44.77 sec 172.27 sec 50.67 sec 103.63 sec 87.13 sec 528.88 sec	2.9603 2.0466 5.1483 2.1306 1.9138 2.8300	0.7963 0.8848 0.6718 0.8989 0.9003 0.8653
MCR-CCFDB	-5807.00	-5807.00	-5807.00	-5807.00	-10847.89	-23603.58	-74529.25	-74529.25	1822.77 sec	2.6551	0.7548
MCI-CCIFD	-5807.00	-5807.00	-5807.00	-23550.62	-86439.15	-86593.97	-86593.97	-86593.97	328.90 sec	1.8016	0.9124

Table 129: knott-3d-450 (gm_knott_3d_099)

algorithm		value									RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC	0.00	0.00					-86124.21	-86124.21	85.78 sec		
HC	00110111		00110111						0.33 sec		
HC-CGC	00020.20		01012.10						46.39 sec		
ogm-KL	-5800.63	-5800.63	-5800.63	-79899.07	-81173.62	-81173.62	-81173.62	-81173.62	185.76 sec	5.0145	0.6556
CC-Fusion-HC-CGC	-75188.25	-75216.40	-83872.72	-84504.60	-84504.60	-84504.60	-84504.60	-84504.60	54.76 sec	2.4162	0.8524
CC-Fusion-HC-MC	-5800.63	-76667.19	-86119.72	-86180.59	-86180.59	-86180.59	-86180.59	-86180.59	107.23 sec	2.0205	0.8570
CC-Fusion-WS-CGC	-69659.38	-69659.38	-82085.79	-82949.21	-82949.21	-82949.21	-82949.21	-82949.21	135.95 sec	2.7623	0.8384
CC-Fusion-WS-MC	-5800.63	-5800.63	-85511.72	-86135.24	-86208.81	-86238.56	-86238.56	-86238.56	$641.25 \; { m sec}$	2.0254	0.8578
MCR-CCFDB	-5800.63	-5800.63	-5800.63	-5800.63	-11899.23	-29624.25	-79620.92	-79620.92	$1832.70~{\rm sec}$	2.3841	0.7664
MCI-CCIFD	-5800.63	-5800.63	-5800.63	-24095.62	-85933.44	-85956.93	-85956.93	-85956.93	1799.70 sec	1.9844	0.8588

Table 130: knott-3d-450 (gm_knott_3d_100)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{r} -52959.08 \\ -4148.97 \\ -60622.39 \\ -4148.97 \end{array}$	$\begin{array}{r} -69487.57 \\ -4148.97 \\ -69097.43 \\ -64909.33 \\ -58318.15 \end{array}$	$\begin{array}{c} -52886.54 \\ -73755.02 \\ -4148.97 \\ -73051.76 \\ -76078.15 \\ -71475.18 \end{array}$	$\begin{array}{c} -52886.54 \\ -76462.46 \\ -68997.05 \\ -74131.11 \\ -76584.80 \\ -72523.04 \end{array}$	-69788.31 -74525.94 -76659.12	$\begin{array}{c} -52886.54 \\ -76462.46 \\ -69788.31 \\ -74525.94 \\ -76659.12 \\ -72523.04 \end{array}$	$\begin{array}{c} -52886.54 \\ -76462.46 \\ -69788.31 \\ -74525.94 \\ -76659.12 \\ -72523.04 \end{array}$	$\begin{array}{c} -52886.54 \\ -76462.46 \\ -69788.31 \\ -74525.94 \\ -76659.12 \\ -72523.04 \end{array}$	62.24 sec 0.29 sec 46.05 sec 191.74 sec 151.95 sec 215.06 sec 131.61 sec 490.99 sec	3.2217 2.3725 5.0973 2.3949 2.1224 2.8618	0.7121 0.8725 0.6205 0.8941 0.9014 0.8860
MCR-CCFDB	-4148.97	-4148.97	-4148.97	-4148.97	-12042.61	-23872.55	-56042.54	-56042.54	1837.01 sec	3.6626	0.5753
MCI-CCIFD	-4148.97	-4148.97	-4148.97	-27595.65	-76699.37	-76699.37	-76699.37	-76699.37	278.73 sec	2.0840	0.9055

Table 131: knott-3d-450 (gm_knott_3d_101)

algorithm				time	VI	RI					
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC	$ \begin{array}{r} -66495.54 \\ -4104.14 \\ -63081.79 \\ -4104.14 \end{array} $	$\begin{array}{c} -70374.37 \\ -4104.14 \\ -64916.67 \\ -65756.83 \end{array}$	$\begin{array}{c} -66066.00 \\ -71277.01 \\ -4104.14 \end{array}$	$\begin{array}{c} -66066.00 \\ -74384.75 \\ -68453.16 \\ -72681.24 \\ -74509.06 \end{array}$	$\begin{array}{r} -74399.79 \\ -69409.01 \\ -72681.24 \\ -74509.06 \end{array}$	$\begin{array}{c} -66066.00 \\ -74399.79 \\ -69409.01 \\ -72681.24 \\ -74509.06 \end{array}$	$\begin{array}{c} -66066.00 \\ -74399.79 \\ -69409.01 \\ -72681.24 \\ -74509.06 \end{array}$	$\begin{array}{c} -66066.00 \\ -74399.79 \\ -69409.01 \\ -72681.24 \\ -74509.06 \end{array}$	114.08 sec 0.35 sec 86.30 sec 178.30 sec 94.15 sec 90.10 sec 129.65 sec	2.8546 2.3125 4.9624 2.3526 2.1083	0.7705 0.8235 0.6187 0.8420 0.8476
CC-Fusion-WS-MC MCR-CCFDB MCI-CCIFD	-4104.14 -4104.14 -4104.14		-70875.67 -4104.14	-74506.77 -4104.14	-74529.24	-74529.24 -16040.30	-74529.24 -59065.52	-74529.24 -59065.52	325.13 sec	2.1110 3.1232	0.8476 0.5943

Table 132: knott-3d-450 (gm_knott_3d_102)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	$\begin{array}{c} -62469.87 \\ -3926.11 \\ -60904.68 \\ -3926.11 \\ -53782.35 \end{array}$	$\begin{array}{c} -62912.76 \\ -3926.11 \\ -60904.68 \\ -47599.28 \\ -59976.55 \end{array}$	$\begin{array}{c} -58463.32 \\ -63207.57 \\ -3926.11 \\ -65091.16 \\ -66408.18 \\ -63033.98 \end{array}$	$\begin{array}{c} -66183.62 \\ -60756.42 \\ -65325.61 \\ -66477.52 \\ -64007.43 \end{array}$	$\begin{array}{c} -58463.32 \\ -66241.33 \\ -61743.77 \\ -65325.61 \\ -66477.52 \\ -64271.44 \end{array}$	$\begin{array}{c} -66241.33 \\ -61743.77 \\ -65325.61 \\ -66477.52 \\ -64271.44 \end{array}$	$\begin{array}{c} -66241.33 \\ -61743.77 \\ -65325.61 \\ -66477.52 \\ -64271.44 \end{array}$	$\begin{array}{c} -58463.32 \\ -66241.33 \\ -61743.77 \\ -65325.61 \\ -66477.52 \\ -64271.44 \end{array}$	137.87 sec 0.32 sec 95.50 sec 192.87 sec 79.07 sec 106.36 sec 143.78 sec	2.7101 1.9150 4.3688 2.0283 1.8600 2.4149	0.7152 0.8354 0.6020 0.8417 0.8500 0.8315
CC-Fusion-WS-MC MCR-CCFDB MCI-CCIFD	-3926.11 -3926.11 -3926.11	-3926.11 -3926.11 -3926.11	-63997.53 -3926.11 -3926.11	-66477.72 -3926.11 -13143.57	-7781.92	-66482.52 -12748.76 -66482.68	-46110.61		493.50 sec 1817.59 sec 286.48 sec	2.7730	0.5554

Table 133: knott-3d-450 (gm_knott_3d_103)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC	$\begin{array}{c} -65666.85 \\ -4221.22 \\ -63475.47 \\ -4221.22 \end{array}$	$\begin{array}{c} -70581.15 \\ -4221.22 \\ -68965.51 \\ -65045.76 \\ -61634.71 \end{array}$	$-64935.25 \\ -71001.99$	$\begin{array}{c} -64935.25 \\ -73688.70 \\ -68237.46 \\ -72483.88 \\ -73731.09 \\ -70697.57 \end{array}$	$\begin{array}{c} -64935.25 \\ -73718.40 \\ -68962.60 \\ -72483.88 \\ -73731.09 \\ -71035.03 \end{array}$	$\begin{array}{c} -73718.40 \\ -68962.60 \\ -72483.88 \\ -73731.09 \\ -71035.03 \end{array}$	$\begin{array}{c} -64935.25 \\ -73718.40 \\ -68962.60 \\ -72483.88 \\ -73731.09 \\ -71035.03 \end{array}$	$\begin{array}{c} -64935.25 \\ -73718.40 \\ -68962.60 \\ -72483.88 \\ -73731.09 \\ -71035.03 \end{array}$	117.21 sec 0.34 sec 100.18 sec 231.02 sec 48.73 sec 122.54 sec 225.82 sec 586.26 sec	3.1065 2.6522 4.8927 2.7707 2.5862 3.0472	0.6886 0.7652 0.6210 0.7657 0.7682 0.7617
MCR-CCFDB	-4221.22	-4221.22	-4221.22	-4221.22	-10383.72	-28085.13	-70272.34	-70272.34	1832.67 sec	2.8571	0.7033
MCI-CCIFD	-4221.22	-4221.22	-4221.22	-24924.00	-71844.21	-73425.08	-73598.74	-73598.74	1800.16 sec	2.2969	0.8025

4.5. knott-3d-550

Table 134: knott-3d-550 (gm_knott_3d_112)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC CC-Fusion-WS-CGC	$\begin{array}{c} -134297.62 \\ -11034.52 \\ -126136.98 \\ -11034.52 \\ -11034.52 \end{array}$	$\begin{array}{c} -11034.52 \\ -126136.98 \\ -11034.52 \\ -123526.43 \end{array}$	$\begin{array}{c} -144504.77 \\ -11034.52 \\ -146470.38 \\ -150995.62 \\ -135888.16 \end{array}$	$\begin{array}{c} -134297.62 \\ -151570.33 \\ -11034.52 \\ -147293.44 \\ -152708.49 \\ -142503.31 \end{array}$	$\begin{array}{c} -134297.62 \\ -152515.41 \\ -139206.91 \\ -147364.26 \\ -152767.04 \\ -144340.09 \end{array}$	$\begin{array}{c} -134297.62 \\ -152515.41 \\ -141245.77 \\ -147364.26 \\ -152767.04 \\ -144340.09 \end{array}$	$\begin{array}{c} -134297.62 \\ -152515.41 \\ -141245.77 \\ -147364.26 \\ -152767.04 \\ -144340.09 \end{array}$	$\begin{array}{c} -134297.62 \\ -152515.41 \\ -141245.77 \\ -147364.26 \\ -152767.04 \\ -144340.09 \end{array}$	339.69 sec 0.63 sec 208.65 sec 670.59 sec 197.83 sec 306.88 sec 839.23 sec
CC-Fusion-WS-MC MCR-CCFDB MCI-CCIFD	$ \begin{array}{r} -11034.52 \\ -11034.52 \\ -11034.52 \end{array} $	-11034.52 -11034.52 -11034.52	-130162.40 -11034.52 -11034.52	-152145.47 -11034.52 -11034.52	-11034.52	-11034.52	-152964.92 -40619.36 -153023.26	-40619.36	2031.23 sec

Table 135: knott-3d-550 (gm_knott_3d_113)

algorithm				val	ue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC	-8041.54	-8041.54	-8041.54				-135350.74		
HC	-114456.46	-114456.46	-114456.46				-114456.46		0.70 sec
HC-CGC	-114456.46	-116141.97	-127078.51	-127625.81	-134243.22	-135398.71	-135465.92	-135465.92	1300.64 sec
ogm-KL	-8040.83	-8040.83	-8040.83	-8040.83	-124427.06	-126464.27	-126478.02	-126478.02	785.83 sec
CC-Fusion-HC-CGC	-112867.34	-112867.34	-129428.40	-131850.04	-132746.52	-132746.52	-132746.52	-132746.52	290.91 sec
CC-Fusion-HC-MC	-8040.83	-8040.83	-134183.10	-135307.46	-135571.24	-135571.24	-135571.24	-135571.24	249.26 sec
CC-Fusion-WS-CGC	-8040.83	-8040.83	-122584.50	-127581.66	-129396.51	-129429.92	-129429.92	-129429.92	602.67 sec
CC-Fusion-WS-MC	-8040.83	-8040.83	-116439.48	-135279.73	-135555.34	-135556.46	-135575.43	-135575.43	$1801.24~\mathrm{sec}$
MCR-CCFDB	-8040.83	-8040.83	-8040.83	-8040.83	-8040.83	-19941.08	-37472.56	-37472.56	$1908.85~\mathrm{sec}$
MCI-CCIFD	-8040.83	-8040.83	-8040.83	-8040.83	-49055.59	-112335.39	-135084.12	-135084.12	$1800.84~\mathrm{sec}$

Table 136: knott-3d-550 (gm_knott_3d_114)

algorithm				val	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC	$\begin{array}{c} 0.00 \\ -133294.75 \\ -133294.75 \\ -8472.49 \\ -128277.63 \\ -8472.49 \\ -8472.49 \\ -8472.49 \end{array}$	$\begin{array}{r} -141562.33 \\ -8472.49 \\ -128277.63 \\ -8472.49 \end{array}$	-8472.49 -144071.66 -148616.13 -137283.09	$\begin{array}{c} -133294.75 \\ -148671.12 \\ -8472.49 \\ -145274.73 \\ -149512.44 \\ -139325.86 \end{array}$	$\begin{array}{c} -133294.75 \\ -149296.47 \\ -139398.79 \\ -145570.04 \\ -149601.99 \\ -140712.02 \end{array}$	$-133294.75 \\ -149296.47$	$\begin{array}{c} -133294.75 \\ -149296.47 \\ -139743.64 \\ -145570.04 \\ -149601.99 \\ -140712.02 \end{array}$	-145570.04 -149601.99 -140712.02	341.85 sec 0.63 sec 252.77 sec 723.58 sec 194.31 sec 341.52 sec 792.27 sec 1656.56 sec
MCR-CCFDB	-8472.49	-8472.49	-8472.49	-8472.49	-8472.49	-17831.44	-37210.59	-37210.59	1925.72 sec
MCI-CCIFD	-8472.49	-8472.49	-8472.49	-8472.49	-59611.73	-107097.82	-149721.26	-149721.26	$1094.67~{\rm sec}$

Table 137: knott-3d-550 (gm_knott_3d_115)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} 0.00 \\ -135677.63 \\ -135677.63 \\ -8594.13 \\ -8594.13 \\ -8594.13 \\ -8594.13 \\ -8594.13 \end{array}$	$-134525.25 \\ -8594.13$	-8594.13	$\begin{array}{c} -135677.63 \\ -146276.56 \\ -8594.13 \\ -145386.25 \\ -149793.41 \\ -141015.28 \end{array}$	$\begin{array}{c} -135677.63 \\ -149600.65 \\ -139924.58 \\ -146750.01 \\ -149816.78 \\ -142516.30 \end{array}$	-142866.00	$\begin{array}{c} -135677.63 \\ -149696.58 \\ -140379.54 \\ -146750.01 \\ -149816.78 \\ -142866.00 \end{array}$	$\begin{array}{c} -135677.63 \\ -149696.58 \\ -140379.54 \\ -146750.01 \\ -149816.78 \\ -142866.00 \end{array}$	915.52 sec 0.72 sec 615.10 sec 596.21 sec 203.39 sec 287.65 sec 933.21 sec 1800.17 sec
MCR-CCFDB	-8594.13	-8594.13	-8594.13	-8594.13	-8594.13	-16900.93	-41127.11	-41127.11	1957.96 sec
MCI-CCIFD	-8594.13	-8594.13	-8594.13	-8594.13	-71592.84	-113487.59	-149560.96	-149560.96	$1800.95~\mathrm{sec}$

Table 138: knott-3d-550 (gm_knott_3d_116)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-CGC	$\begin{array}{c} 0.00 \\ -112010.05 \\ -112010.05 \\ -7670.49 \\ -7670.49 \\ -7670.49 \\ -7670.49 \\ -7670.49 \\ -7670.49 \end{array}$	-7670.49 -105502.05 -7670.49 -103691.19	-7670.49 -125727.82 -129446.26	$\begin{array}{c} -112010.05 \\ -127693.08 \\ -7670.49 \\ -126227.29 \\ -130600.08 \\ -123647.53 \end{array}$	$\begin{array}{c} -112010.05 \\ -130260.47 \\ -118772.02 \\ -126677.91 \\ -130654.11 \\ -124152.94 \end{array}$	$\begin{array}{c} -112010.05 \\ -130260.47 \\ -120328.50 \\ -126677.91 \\ -130654.11 \\ -124819.77 \end{array}$	$\begin{array}{c} -112010.05 \\ -130260.47 \\ -120328.50 \\ -126677.91 \\ -130654.11 \\ -124819.77 \end{array}$	$\begin{array}{c} -112010.05 \\ -130260.47 \\ -120328.50 \\ -126677.91 \\ -130654.11 \\ -124819.77 \end{array}$	466.50 sec 0.77 sec 217.61 sec 590.31 sec 241.63 sec 349.68 sec 997.70 sec 1293.18 sec
MCR-CCFDB	-7670.49	-7670.49	-7670.49	-7670.49	-7670.49	-7670.49	-36055.47	-36055.47	2140.98 sec
MCI-CCIFD	-7670.49	-7670.49	-7670.49	-7670.49	-49782.32	-80334.84	-130757.67	-130757.67	1227.31 sec

Table 139: knott-3d-550 (gm_knott_3d_117)

algorithm		value										
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)			
CGC	-7255.99	-7255.99	-7255.99	-7255.99	-122098.76	-123160.13	-123160.50	-123160.50	689.15 sec			
HC	-108232.79	-108232.79	-108232.79	-108232.79	-108232.79	-108232.79	-108232.79	-108232.79	0.90 sec			
HC-CGC	-108232.79	-108612.16	-116381.91	-118156.53	-123312.66	-123357.05	-123357.05	-123357.05	596.90 sec			
ogm-KL	-7254.87	-7254.87	-7254.87	-7254.87	-113281.68	-114609.75	-114609.75	-114609.75	694.62 sec			
CC-Fusion-HC-CGC	-7254.87	-104001.77	-117466.97	-119304.80	-121195.26	-121195.26	-121195.26	-121195.26	410.41 sec			
CC-Fusion-HC-MC	-7254.87	-7254.87	-122820.20	-123432.28	-123450.53	-123450.53	-123450.53	-123450.53	247.34 sec			
CC-Fusion-WS-CGC	-7254.87	-7254.87	-114505.29	-117994.32	-118854.72	-118854.72	-118854.72	-118854.72	535.55 sec			
CC-Fusion-WS-MC	-7254.87	-7254.87	-106018.18	-122926.74	-123444.91	-123450.47	-123450.53	-123450.53	1606.19 sec			
MCR-CCFDB	-7254.87	-7254.87	-7254.87	-7254.87	-7254.87	-13030.60	-32539.50	-32539.50	$1990.26~{\rm sec}$			
MCI-CCIFD	-7254.87	-7254.87	-7254.87	-7254.87	-24077.18	-66606.80	-122667.36	-122667.36	1802.73 sec			

Table 140: knott-3d-550 (gm_knott_3d_118)

algorithm				val	ue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} 0.00 \\ -111864.41 \\ -111864.41 \\ -7370.54 \\ -7370.54 \\ -7370.54 \\ -7370.54 \\ -7370.54 \\ -7370.54 \end{array}$	$\begin{array}{r} -112960.32 \\ -7370.54 \\ -105484.64 \\ -7370.54 \\ -7370.54 \end{array}$	-7370.54 -117921.79 -122657.25 -112777.05	$\begin{array}{c} -111864.41 \\ -121538.50 \\ -7370.54 \\ -118783.50 \\ -123473.60 \\ -117891.30 \end{array}$	$\begin{array}{c} -111864.41 \\ -122946.00 \\ -113473.15 \\ -120181.48 \\ -123487.06 \\ -118440.30 \end{array}$		$\begin{array}{c} -111864.41 \\ -122946.00 \\ -114827.73 \\ -120181.48 \\ -123487.06 \\ -118440.30 \end{array}$	$\begin{array}{c} -122946.00 \\ -114827.73 \\ -120181.48 \\ -123487.06 \\ -118440.30 \end{array}$	448.44 sec 0.81 sec 262.59 sec 648.81 sec 190.55 sec 441.68 sec 573.10 sec 1681.71 sec
MCR-CCFDB	-7370.54	-7370.54	-7370.54	-7370.54	-7370.54	-7370.54	-28415.43	-28415.43	2087.31 sec
MCI-CCIFD	-7370.54	-7370.54	-7370.54	-7370.54	-46336.74	-74333.47	-123528.33	-123528.33	1563.32 sec

Table 141: knott-3d-550 (gm_knott_3d_119)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	$\begin{array}{c} -7059.66 \\ -108702.30 \\ -108702.30 \\ -7059.24 \\ -7059.24 \\ -7059.24 \\ -7059.24 \\ -7059.24 \\ -7059.24 \end{array}$	-7059.24 -7059.24	-126042.98 -119761.15	$\begin{array}{c} -108702.30 \\ -122209.45 \\ -7059.24 \\ -123434.65 \\ -126304.27 \\ -121866.16 \end{array}$	$\begin{array}{c} -108702.30 \\ -126103.25 \\ -118608.63 \\ -123650.49 \\ -126309.59 \\ -121990.05 \end{array}$	$\begin{array}{c} -108702.30 \\ -126197.12 \\ -118648.65 \\ -123650.49 \\ -126309.59 \\ -121990.05 \end{array}$	$\begin{array}{c} -108702.30 \\ -126197.12 \\ -118648.65 \\ -123650.49 \\ -126309.59 \\ -121990.05 \end{array}$	$\begin{array}{c} -108702.30 \\ -126197.12 \\ -118648.65 \\ -123650.49 \\ -126309.59 \end{array}$	661.72 sec 0.88 sec 552.15 sec 527.58 sec 191.40 sec 394.39 sec 491.12 sec 1647.01 sec
MCR-CCFDB	-7059.24	-7059.24	-7059.24	-7059.24	-7059.24	-7059.24	-36939.97	-36939.97	2036.10 sec
MCI-CCIFD	-7059.24	-7059.24	-7059.24	-7059.24	-56268.77	-80219.43	-125243.06	-125243.06	$1834.95~{\rm sec}$

4.6. seg-3d

Table 142: seg-3d (mc3d2-model)

algorithm				va	lue				time	VI	RI
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-HC-MC	1281549.37 1258675.53 1265334.24	1281549.37 1281549.37 1281549.37 1258675.53 1265334.24 1265334.24	1281549.37 820184.98 802315.77 1258675.53 861280.16 829064.68	1281549.37 820184.98 800636.51 1258675.53 818529.13 779585.33	1281549.37 820184.98 796844.12 1258675.53 809569.07 779014.36	1281549.37 820184.98 795020.78 1258675.53 809569.07 778968.07	949757.11 820184.98 787846.06 1258675.53 804313.81 778958.97	882747.02 820184.98 787836.19 839974.05 804313.81 778958.97	2.03 sec 1802.81 sec 4543.73 sec 1801.80 sec	2.8395 1.7603 7.1057 2.1347	0.9651 0.9861 0.5849 0.9775
CC-Fusion-WS-CGC CC-Fusion-WS-MC	1265334.24		1265334.24		824624.32 781378.89	817956.21 779662.36	815461.43 779056.84	779026.51	1808.10 sec	1.3334	0.9906
MCR-CCFDB MCI-CCIFD		1200001112	1253637.12 1253637.12	1200001112			1253637.12 963034.43		2358.10 sec		0.0.00

4.7. socialnets

Table 143: socialnets (soc-sign-Slashdot081106)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC		118309.00				72015.00	70292.00		2623.87 sec
HC		118309.00				118309.00	118309.00	118309.00	14.38 sec
HC-CGC	118309.00	118309.00	118309.00	118309.00	118309.00	79858.00	70380.00	70379.00	1844.41 sec
ogm-KL	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	70218.00	7657.22 sec
CC-Fusion-HC-CGC	105705.00	105705.00	103384.00	93115.00	81730.00	78782.00	75963.00	75963.00	1801.25 sec
CC-Fusion-HC-MC	105705.00	105705.00	103384.00	93113.00	81383.00	78426.00	74990.00	74984.00	1803.21 sec
CC-Fusion-WS-CGC	105705.00	105705.00	105705.00	105705.00	88087.00	79398.00	73357.00	72872.00	2058.64 sec
CC-Fusion-WS-MC	∞	NaN	NaN sec						
MCR-CCFDB	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	3543.81 sec
MCI-CCIFD	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	105705.00	2565.32 sec

Table 144: socialnets (soc-sign-epinions)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	120967.00	120967.00 120967.00 ∞ 84017.00 84017.00	$\begin{array}{c} 120967.00\\ 120967.00\\ 120967.00\\ \infty\\ 84017.00\\ 84017.00\\ 84017.00\\ \infty\\ \end{array}$	$\begin{array}{c} 120967.00\\ 120967.00\\ 120310.00\\ \infty\\ 74417.00\\ 74423.00\\ 84017.00\\ \infty\\ \end{array}$	$\begin{array}{c} 120967.00\\ 120967.00\\ 120310.00\\ \infty\\ 62396.00\\ 62414.00\\ 56873.00\\ \infty \end{array}$	$\begin{array}{c} 56474.00\\ 120967.00\\ 59242.00\\ \infty\\ 58162.00\\ 57620.00\\ 53048.00\\ \infty\\ \end{array}$	$\begin{array}{c} 51475.00\\ 120967.00\\ 51452.00\\ \infty\\ 54446.00\\ 54260.00\\ 51835.00\\ \infty\\ \end{array}$	$\begin{array}{c} 51474.00\\ 120967.00\\ 51451.00\\ NaN\\ 54441.00\\ 54260.00\\ 51835.00\\ NaN\\ \end{array}$	$\begin{array}{c} 4722.44 \sec \\ 26.46 \sec \\ 7572.66 \sec \\ NaN \sec \\ 1805.22 \sec \\ 1805.96 \sec \\ 1835.15 \sec \\ NaN \sec \end{array}$
MCR-CCFDB	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	$3528.62~\mathrm{sec}$
MCI-CCIFD	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	84017.00	$3372.31~{\rm sec}$

4.8. normalized socialnets

Table 145: normalized socialnets (soc-sign-Slashdot 081106-n)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC HC HC-CGC ogm-KL CC-Fusion-HC-CGC CC-Fusion-WS-CGC CC-Fusion-WS-MC	6119.38 6119.38 5097.55 5097.55 5097.55	$\begin{array}{c} 6119.38 \\ 6119.38 \\ 6119.38 \\ 5097.55 \\ 5097.55 \\ 5097.55 \\ \infty \end{array}$	4806.04 4806.04 5097.55 4950.44 4950.44	4806.04 4806.04 5097.55 4339.65 4339.57	4806.04 4806.04 5097.55 3755.24 3735.93	4806.04 4806.04 5097.55 3566.15 3535.43	4806.04 4806.04 5097.55 3382.51 3334.11	4806.04 2951.84	2532.15 sec 8.04 sec 3164.60 sec 5525.36 sec 1804.91 sec 1805.10 sec 1863.73 sec NaN sec
MCR-CCFDB	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	$3705.84~{\rm sec}$
MCI-CCIFD	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	5097.55	$2623.51~{\rm sec}$

Table 146: normalized socialnets (soc-sign-epinions-n)

algorithm				valı	ie				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
CGC	10488.76	10488.76	10488.76	10488.76	10488.76	10488.76	2138.66	2078.23	3010.56 sec
HC	10488.76	10488.76	9944.79	9944.79	9944.79	9944.79	9944.79	9944.79	12.31 sec
HC-CGC	∞	∞	∞	∞	∞	∞	∞	NaN	NaN sec
ogm-KL	∞	∞	∞	∞	∞	∞	∞	NaN	NaN sec
CC-Fusion-HC-CGC	3166.89	3166.89	3166.89	2971.76	2659.45	2547.93	2439.03	2439.03	1803.60 sec
CC-Fusion-HC-MC	3166.89	3166.89	3114.15	2947.83	2638.25	2530.63	2417.37	2417.37	1803.39 sec
CC-Fusion-WS-CGC	3166.89	3166.89	3166.89	3166.89	3166.89	2993.10	2736.09	2644.70	2173.13 sec
CC-Fusion-WS-MC	∞	∞	∞	∞	∞	∞	∞	NaN	NaN sec
MCR-CCFDB	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	$4934.37~{\rm sec}$
MCI-CCIFD	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	3166.89	$3551.38~{\rm sec}$

4.9. modularity-clustering

Table 147: modularity-clustering (adjnoun)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.0162	0.04 sec
CGC	-0.2582	-0.2582	-0.2582	-0.2582	-0.2582	-0.2582	-0.2582	-0.2582	0.37 sec
HC	-0.1457	-0.1457	-0.1457	-0.1457	-0.1457	-0.1457	-0.1457	-0.1457	0.00 sec
HC-CGC	-0.2742	-0.2742	-0.2742	-0.2742	-0.2742	-0.2742	-0.2742	-0.2742	0.24 sec
ogm-KL	-0.2980	-0.2980	-0.2980	-0.2980	-0.2980	-0.2980	-0.2980	-0.2980	0.01 sec
CC-Fusion-HC-CGC	-0.2559	-0.2595	-0.2792	-0.2792	-0.2792	-0.2792	-0.2792	-0.2792	3.47 sec
CC-Fusion-HC-MC	-0.0896			-0.2732		-0.2948		-0.2948	77.32 sec
CC-Fusion-WS-CGC	-0.1774	-0.2015	-0.2527	-0.2527	-0.2527	-0.2527	-0.2527	-0.2527	2.15 sec
CC-Fusion-WS-MC	-0.1220	-0.1220	-0.1220	-0.2870	-0.2891	-0.2891	-0.2891	-0.2891	68.53 sec
MCR-CCFDB	0.0000	0.0000	-0.1707	-0.1707	-0.1707	-0.1707	-0.1707	-0.1707	12.84 sec
MCI-CCIFD	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1800.60 sec

Table 148: modularity-clustering (dolphins)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.0214	0.02 sec
CGC	-0.4974	-0.4974	-0.4974	-0.4974	-0.4974	-0.4974	-0.4974	-0.4974	0.05 sec
HC	-0.2775	-0.2775	-0.2775	-0.2775	-0.2775	-0.2775	-0.2775	-0.2775	0.00 sec
HC-CGC	-0.4928	-0.4928	-0.4928	-0.4928	-0.4928	-0.4928	-0.4928	-0.4928	0.03 sec
ogm-KL	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	0.00 sec
CC-Fusion-HC-CGC	-0.5148	-0.5148	-0.5148	-0.5148	-0.5148	-0.5148	-0.5148	-0.5148	0.24 sec
CC-Fusion-HC-MC	-0.5067	-0.5265	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	-0.5268	1.77 sec
CC-Fusion-WS-CGC	-0.4646	-0.4646	-0.4646	-0.4646	-0.4646	-0.4646	-0.4646	-0.4646	0.12 sec
CC-Fusion-WS-MC	-0.4734	-0.4997	-0.5246	-0.5246	-0.5246	-0.5246	-0.5246	-0.5246	$2.03 \mathrm{sec}$
MCR-CCFDB	-0.5192	-0.5192	-0.5192	-0.5192	-0.5192	-0.5192	-0.5192	-0.5192	$0.32~{ m sec}$
MCI-CCIFD	0.0000	0.0000	-0.5285	-0.5285	-0.5285	-0.5285	-0.5285	-0.5285	8.06 sec

Table 149: modularity-clustering (football)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.0088	0.02 sec
CGC	-0.5324	-0.5324	-0.5324	-0.5324	-0.5324	-0.5324	-0.5324	-0.5324	0.37 sec
HC	-0.3062	-0.3062	-0.3062	-0.3062	-0.3062	-0.3062	-0.3062	-0.3062	0.01 sec
HC-CGC	-0.5687	-0.5687	-0.5687	-0.5687	-0.5687	-0.5687	-0.5687	-0.5687	0.12 sec
ogm-KL	-0.6046	-0.6046	-0.6046	-0.6046	-0.6046	-0.6046	-0.6046	-0.6046	0.01 sec
CC-Fusion-HC-CGC	-0.5010	-0.5010	-0.5010	-0.5010	-0.5010	-0.5010	-0.5010	-0.5010	0.97 sec
CC-Fusion-HC-MC	-0.0969	-0.0969	-0.4938	-0.4938	-0.4938	-0.4938	-0.4938	-0.4938	6.71 sec
CC-Fusion-WS-CGC	-0.4580	-0.4580	-0.4580	-0.4580	-0.4580	-0.4580	-0.4580	-0.4580	0.64 sec
CC-Fusion-WS-MC	-0.1040	-0.1040	-0.5008	-0.5008	-0.5008	-0.5008	-0.5008	-0.5008	10.61 sec
MCR-CCFDB	0.0000	0.0000	-0.5924	-0.5924	-0.5924	-0.5924	-0.5924	-0.5924	$6.17~{ m sec}$
MCI-CCIFD	0.0000	0.0000	-0.6033	-0.6046	-0.6046	-0.6046	-0.6046	-0.6046	$12.47~{ m sec}$

Table 150: modularity-clustering (karate)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0498	0.0498	0.0498	0.0498	0.0498	0.0498	0.0498	0.0498	0.01 sec
CGC	-0.3715	-0.3715	-0.3715	-0.3715	-0.3715	-0.3715	-0.3715	-0.3715	0.01 sec
HC	-0.1362	-0.1362	-0.1362	-0.1362	-0.1362	-0.1362	-0.1362	-0.1362	0.00 sec
HC-CGC	-0.3991	-0.3991	-0.3991	-0.3991	-0.3991	-0.3991	-0.3991	-0.3991	0.00 sec
ogm-KL	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	0.00 sec
CC-Fusion-HC-CGC							-0.4020		
CC-Fusion-HC-MC							-0.4020		
CC-Fusion-WS-CGC	-0.4020	-0.4020	-0.4020	-0.4020	-0.4020	-0.4020	-0.4020	-0.4020	0.05 sec
CC-Fusion-WS-MC	-0.3153	-0.3153	-0.3153	-0.3153	-0.3153	-0.3153	-0.3153	-0.3153	0.49 sec
MCR-CCFDB	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	$0.02~{\rm sec}$
MCI-CCIFD	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	-0.4198	$0.05~{\rm sec}$

Table 151: modularity-clustering (lesmis)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0237	0.0237	0.0237	0.0237	0.0237	0.0237	0.0237	0.0237	0.01 sec
CGC	-0.5336	-0.5336	-0.5336	-0.5336	-0.5336	-0.5336	-0.5336	-0.5336	$0.05 \mathrm{sec}$
HC	-0.3014	-0.3014	-0.3014	-0.3014	-0.3014	-0.3014	-0.3014	-0.3014	0.00 sec
HC-CGC	-0.5346	-0.5346	-0.5346	-0.5346	-0.5346	-0.5346	-0.5346	-0.5346	$0.05 \mathrm{sec}$
ogm-KL	-0.5443	-0.5443	-0.5443	-0.5443	-0.5443	-0.5443	-0.5443	-0.5443	0.00 sec
CC-Fusion-HC-CGC	-0.5428	-0.5428	-0.5428	-0.5428	-0.5428	-0.5428	-0.5428	-0.5428	0.38 sec
CC-Fusion-HC-MC	-0.4951	-0.4954	-0.4954	-0.4954	-0.4954	-0.4954	-0.4954	-0.4954	1.52 sec
CC-Fusion-WS-CGC	-0.5189	-0.5189	-0.5189	-0.5189	-0.5189	-0.5189	-0.5189	-0.5189	0.19 sec
CC-Fusion-WS-MC	-0.4859	-0.5455	-0.5600	-0.5600	-0.5600	-0.5600	-0.5600	-0.5600	5.74 sec
MCR-CCFDB	-0.5568	-0.5568	-0.5568	-0.5568	-0.5568	-0.5568	-0.5568	-0.5568	$0.46~\rm sec$
MCI-CCIFD	-0.5286	-0.5600	-0.5600	-0.5600	-0.5600	-0.5600	-0.5600	-0.5600	$0.53~\rm sec$

Table 152: modularity-clustering (polbooks)

algorithm				va	lue				time
	(0.5 sec)	(1 sec)	(10 sec)	(60 sec)	(300 sec)	(600 sec)	(1800 sec)	(end)	(end)
PIVIT-BOEM	0.0135	0.0135	0.0135	0.0135	0.0135	0.0135	0.0135	0.0135	0.02 sec
CGC	-0.4963	-0.4963	-0.4963	-0.4963	-0.4963	-0.4963	-0.4963	-0.4963	0.31 sec
HC	-0.1952	-0.1952	-0.1952	-0.1952	-0.1952	-0.1952	-0.1952	-0.1952	0.00 sec
HC-CGC	-0.4972	-0.4972	-0.4972	-0.4972	-0.4972	-0.4972	-0.4972	-0.4972	0.39 sec
ogm-KL	-0.5226	-0.5226	-0.5226	-0.5226	-0.5226	-0.5226	-0.5226	-0.5226	0.00 sec
CC-Fusion-HC-CGC	-0.4424	-0.4424	-0.4424	-0.4424	-0.4424	-0.4424	-0.4424	-0.4424	0.44 sec
CC-Fusion-HC-MC	-0.1401	-0.1560	-0.5221	-0.5221	-0.5221	-0.5221	-0.5221	-0.5221	4.32 sec
CC-Fusion-WS-CGC	-0.4569	-0.4569	-0.4569	-0.4569	-0.4569	-0.4569	-0.4569	-0.4569	0.16 sec
CC-Fusion-WS-MC	-0.1596	-0.3772	-0.4614	-0.4614	-0.4614	-0.4614	-0.4614	-0.4614	2.21 sec
MCR-CCFDB	0.0000	0.0000	-0.5252	-0.5252	-0.5252	-0.5252	-0.5252	-0.5252	7.80 sec
MCI-CCIFD	0.0000	0.0000	0.0000	0.0000	-0.0980	-0.0980	-0.0980	-0.4986	$1800.57 \sec$