Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	45.52	45.61
SNS	Yes	No	-	49.12	42.25
SNS	No	Yes	-	9.87	9.90
SNS	Yes	Yes	-	11.70	7.61
CL	No	No	No	43.47	43.55
CL	No	No	Yes	46.76	46.68
CL	Yes	No	No	46.77	41.38
CL	Yes	No	Yes	50.75	43.48
CL	No	Yes	No	8.90	8.98
CL	No	Yes	Yes	16.05	16.08
CL	Yes	Yes	No	11.56	7.72
CL	Yes	Yes	Yes	18.89	14.83
NS	No	No	No	44.78	44.56
NS	No	No	Yes	46.85	46.66
NS	Yes	No	No	48.64	42.25
NS	Yes	No	Yes	46.72	45.35
NS	No	Yes	No	9.86	9.83
NS	No	Yes	Yes	42.21	41.88
NS	Yes	Yes	No	11.74	7.92
NS	Yes	Yes	Yes	41.79	41.77

Table C.8: Checkpointing Data for `LARGE-SYNC`

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	46.76	46.77
SNS	Yes	No	-	51.22	44.22
SNS	No	Yes	-	54.02	54.19
SNS	Yes	Yes	-	58.08	48.12
CL	No	No	No	46.85	46.71
CL	No	No	Yes	50.68	46.59
CL	Yes	No	No	50.48	43.18
CL	Yes	No	Yes	52.43	41.85
CL	No	Yes	No	52.50	52.38
CL	No	Yes	Yes	63.46	52.97
CL	Yes	Yes	No	57.20	47.87
CL	Yes	Yes	Yes	68.03	46.69
NS	No	No	No	48.10	47.67
NS	No	No	Yes	53.79	22.42
NS	Yes	No	No	50.37	43.21
NS	Yes	No	Yes	54.40	21.54
NS	No	Yes	No	52.82	52.49
NS	No	Yes	Yes	101.17	28.16
NS	Yes	Yes	No	58.42	48.39
NS	Yes	Yes	Yes	100.58	25.87

Table C.9: Checkpointing Data for `LARGE-IND-RAND`

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	2.28	2.42
SNS	Yes	No	-	4.18	0.66
SNS	No	Yes	-	1.53	1.58
SNS	Yes	Yes	-	3.57	0.81
CL	No	No	No	2.52	2.37
CL	No	No	Yes	2.47	1.75
CL	Yes	No	No	4.25	0.71
CL	Yes	No	Yes	4.27	0.78
CL	No	Yes	No	1.55	1.45
CL	No	Yes	Yes	2.18	1.33
CL	Yes	Yes	No	3.58	0.75
CL	Yes	Yes	Yes	3.64	0.74
NS	No	No	No	2.79	2.06
NS	No	No	Yes	3.46	1.12
NS	Yes	No	No	4.50	0.71
NS	Yes	No	Yes	4.03	0.32
NS	No	Yes	No	1.90	1.47
NS	No	Yes	Yes	4.16	0.73
NS	Yes	Yes	No	3.48	0.76
NS	Yes	Yes	Yes	4.48	0.61

Table C.10: Checkpointing Data for the Genetic Algorithm Tool

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	7.27	7.40
SNS	Yes	No	-	11.08	1.47
SNS	No	Yes	-	4.20	4.33
SNS	Yes	Yes	-	7.00	1.59
CL	No	No	No	6.35	6.31
CL	No	No	Yes	7.03	5.82
CL	Yes	No	No	11.04	1.39
CL	Yes	No	Yes	11.03	1.09
CL	No	Yes	No	3.58	3.63
CL	No	Yes	Yes	4.48	3.35
CL	Yes	Yes	No	6.65	1.38
CL	Yes	Yes	Yes	7.24	1.25
NS	No	No	No	7.50	6.26
NS	No	No	Yes	7.76	5.81
NS	Yes	No	No	11.60	1.47
NS	Yes	No	Yes	10.77	1.29
NS	No	Yes	No	4.63	3.34
NS	No	Yes	Yes	6.91	5.50
NS	Yes	Yes	No	6.68	1.49
NS	Yes	Yes	Yes	7.72	3.83

Table C.11: Checkpointing Data for the Sparse Matrix Solver

Algorithm	Main Memory	Com-pressed	Stag-gered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	15.12	16.36
SNS	Yes	No	-	25.50	9.39
SNS	No	Yes	-	6.94	7.98
SNS	Yes	Yes	-	18.73	4.87
CL	No	No	No	16.18	15.75
CL	No	No	Yes	18.57	15.18
CL	Yes	No	No	25.67	10.23
CL	Yes	No	Yes	26.76	9.34
CL	No	Yes	No	7.61	7.64
CL	No	Yes	Yes	13.75	9.66
CL	Yes	Yes	No	16.64	4.10
CL	Yes	Yes	Yes	19.26	5.56
NS	No	No	No	17.66	15.74
NS	No	No	Yes	21.43	14.78
NS	Yes	No	No	25.11	8.54
NS	Yes	No	Yes	26.10	9.41
NS	No	Yes	No	8.90	7.16
NS	No	Yes	Yes	20.19	12.85
NS	Yes	Yes	No	17.21	4.00
NS	Yes	Yes	Yes	22.14	8.44

Table C.12: Checkpointing Data for Gaussian Elimintaion

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	14.96	14.81
SNS	Yes	No	-	22.64	1.54
SNS	No	Yes	-	16.82	16.80
SNS	Yes	Yes	-	25.02	3.91
CL	No	No	No	14.72	14.35
CL	No	No	Yes	15.62	13.86
CL	Yes	No	No	22.74	1.42
CL	Yes	No	Yes	22.71	1.83
CL	No	Yes	No	16.52	16.51
CL	No	Yes	Yes	20.04	16.13
CL	Yes	Yes	No	24.57	3.73
CL	Yes	Yes	Yes	27.18	3.95
NS	No	No	No	15.12	14.39
NS	No	No	Yes	18.15	7.01
NS	Yes	No	No	23.15	1.38
NS	Yes	No	Yes	22.49	1.17
NS	No	Yes	No	16.84	16.03
NS	No	Yes	Yes	32.78	8.81
NS	Yes	Yes	No	24.81	3.80
NS	Yes	Yes	Yes	32.48	3.53

Table C.13: Checkpointing Data for Fast Fourier Transform

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	49.63	49.77
SNS	Yes	No	-	57.31	47.31
SNS	No	Yes	-	10.70	10.77
SNS	Yes	Yes	-	18.60	10.18
CL	No	No	No	48.97	49.01
CL	No	No	Yes	52.07	51.91
CL	Yes	No	No	58.48	48.68
CL	Yes	No	Yes	62.11	49.47
CL	No	Yes	No	10.34	10.45
CL	No	Yes	Yes	18.12	17.91
CL	Yes	Yes	No	17.86	10.57
CL	Yes	Yes	Yes	26.66	18.18
NS	No	No	No	48.87	48.98
NS	No	No	Yes	51.46	51.12
NS	Yes	No	No	56.77	46.30
NS	Yes	No	Yes	52.19	49.27
NS	No	Yes	No	10.33	10.42
NS	No	Yes	Yes	45.16	44.87
NS	Yes	Yes	No	18.62	10.21
NS	Yes	Yes	Yes	44.72	44.48

Table C.14: Checkpointing Data for the Molecular Dynamics Program

Algorithm	Main Memory	Compressed	Staggered	Checkpoint Time (sec)	Checkpoint Overhead (sec)
SNS	No	No	-	70.83	69.32
SNS	Yes	No	-	77.57	57.97
SNS	No	Yes	-	19.18	17.61
SNS	Yes	Yes	-	23.82	12.74
CL	No	No	No	71.79	72.19
CL	No	No	Yes	74.16	74.32
CL	Yes	No	No	76.58	60.20
CL	Yes	No	Yes	78.88	63.73
CL	No	Yes	No	18.36	18.90
CL	No	Yes	Yes	29.54	29.84
CL	Yes	Yes	No	22.52	15.11
CL	Yes	Yes	Yes	33.41	26.05
NS	No	No	No	70.68	71.12
NS	No	No	Yes	72.70	72.85
NS	Yes	No	No	76.24	60.69
NS	Yes	No	Yes	72.88	67.89
NS	No	Yes	No	18.16	18.63
NS	No	Yes	Yes	69.94	70.30
NS	Yes	Yes	No	22.40	15.59
NS	Yes	Yes	Yes	68.28	68.99

Table C.15: Checkpointing Data for the Iterative Equation Solver