

Online Supplement to “A Horizon Decomposition approach for the Capacitated Lot Sizing Problem with Setup Times”

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This online supplement consists of two parts. Part A reports summary computational results, and part B reports detailed computational results, as described in section 6 of the main paper. All instances used in the paper can be found online at <https://www.dropbox.com/sh/qrlkspnlfmty4fb/AACJuf7uC4v-LAMNyXG9mqvia> and as a supplemental material at the publishers site.

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A. Summary Results of Section 6.

Table A.1 shows the Item-Period combinations that give the best average gap and CPU time.

Table A.1 Configurations ($|H|, |L|$) that give the best average gap and CPU time for each item-period combination.

$ I $	$ T =15$			$ T =30$			$ T =60$		
	Gap	CPU	Time	Gap	CPU	Time	Gap	CPU	Time
2	(9,3)		(11,0)	(11,1)		(3,0)	(11,3)		(7,0)
6	(9,3)		(3,0)	(11,3)		(3,0)	(11,3)		(3,0)
10	(11,3)		(3,0)	(11,1)		(3,0)	(7,2)		(3,0)

Table A.2 compares the lower bound obtained by horizon (HD), item (DJ) (Degraeve and Jans 2007) and period decompositions (PD) (Jans and Degraeve 2004, de Araujo et

al. 2015) and the approximate extended formulation (AEF) approach of Van Vyve and Wolsey (2006).

Table A.2 Lower bounds for horizon (HD), period (PD), item (DJ) decomposition and approximate extended formulations (AEF). Bold number indicate the best result for each instance.

Instance	(H , L)	Lower Bounds				Optimal Solution
		HD	DJ	PD	AEF	
G30 (6-15)	(8,1)	37,809	37,103	37,431	–	37,809
G30b (6-15)	(8,1)	37,579	37,201	37,382	37,469	37,721
G53 (12-15)	(8,1)	74,433	73,848	73,945	74,230	74,634
G57 (24-15)	(8,0)	134,184	136,366	136,418	136,417	136,509
G62 (6-30)	(15,1)	61,692	60,946	61,204	61,294	61,746
G69 (12-30)	(15,1)	130,398	130,177	130,338	130,335	130,596
G72 (24-30)	(15,0)	284,554	287,753	287,824	287,828	287,929

Time limit for horizon decomposition: 3,600 seconds.

Table A.3 shows the CPU time and integrality gap for the horizon decomposition (HD), the neighborhood search heuristic of Müller et al. (2012) (ALNS) and the Lagrange-relaxation based heuristic of Süral et al. (2009) (SDW). The integrality gap is measured using the best upper bound found by all approaches, and therefore constitutes a measure of the lower bound quality.

Table A.4 reports the average integrality gap calculated by taking into account the best upper bound found by both approaches when the time limit for horizon decomposition is 300 (HD300) and 600 (HD600) seconds respectively.

Table A.5 shows the integrality gaps obtained by ALNS and horizon decomposition after 300 (HD300) and 600 (HD600) seconds respectively. The integrality gap reported for each method is calculated using the best upper and lower bound which that method returned, and is used as a measure of overall performance. In order to indicate clearly the upper bound quality, table A.6 reports the integrality gap calculated when the best lower bound is used, thereby providing a measure that assesses the upper bound quality directly.

Table A.7 compares the results of product decomposition (Pimentel et al. 2010) with a horizon decomposition implementation that uses zero overlap and 10-period subproblems.

Table A.3 CPU times (s) and integrality gaps (%) for the Horizon Decomposition (HD), the neighborhood search of Müller et al. (2012) (ALNS) and the Lagrange relaxation of Süral et al. (2009) (SDW).

$ I \times T $	# Instances	(H , L)	CPU Time (s)			Gap-LB (%)		
			HD	ALNS	SDW	HD	ALNS	SDW
12 x 10 het	10	(5,0)	17.5	71.9	3.1	1.7	71.4	28.7
24 x 10 het	10	(5,0)	88.3	5.3	4.8	1.9	4.9	16.2
12 x 15 het	10	(10,0)	83.3	12.6	6.1	4.2	12.4	23.2
24 x 15 het	10	(10,0)	142.6	9.5	15.3	6.5	9.5	18.3
12 x 30 het	5	(15,0)	151.8	17.7	24.0	15.3	17.7	19.9
24 x 30 het	5	(15,0)	153.3	20.5	38.9	20.2	20.5	29.6
12 x 10 hom	10	(5,0)	72.3	6.8	2.7	2.5	20.2	41.7
24 x 10 hom	10	(5,0)	144.8	34.7	4.5	6.5	11.1	20.2
12 x 15 hom	10	(10,0)	141.0	28.7	5.6	6.6	19.1	27.0
24 x 15 hom	10	(10,0)	150.9	84.2	11.1	8.8	11.9	19.8
12 x 30 hom	5	(15,0)	151.8	153.6	19.1	18.6	20.3	22.8
24 x 30 hom	5	(15,0)	151.1	182.0	22.9	24.1	22.5	30.0
Average			114.5	37.6	10.6	7.8	15.00	24.6

Time limit for HD is 150s. Time and gap for ALNS are based on an average of 10 runs. HD uses 0 overlap and 5, 10 and 15 length for 10, 15 and 30 period problems respectively. Gap is calculated using the best found upper bound, and therefore constitutes a measure of lower bound quality. HD is run on a machine that is approximately 25% faster than SDW and 6% slower than ALNS.

Pimentel et al. (2010) run their algorithms with a 3,600 CPU time limit, and used a Pentium IV to perform their experiments. According to SPEC (www.spec.org) our machine is about 70% faster, and we therefore pose a time limit of 1,000 seconds, to ensure that our results are comparable.

Table A.8 reports the relative performance of CPLEX and Horizon Decomposition at the aforementioned problems.

Table A.4 Comparison of Lower Bounds obtained by Horizon Decomposition and ALNS (Müller et al. 2012).

			Average LB integrality gap (%)								
			Homogeneous			Heterogeneous			Total		
k	$ I $	$ T $	ALNS	HD300	HD600	ALNS	HD300	HD600	ALNS	HD300	HD600
5	12	30	21.22	9.59	6.22	8.61	1.87	0.58	14.92	5.73	3.40
4	24	30	6.19	6.72	5.53	4.69	6.66	5.21	5.44	6.69	5.37
5	12	45	22.74	9.95	9.07	8.96	4.36	3.64	15.85	7.16	6.35
5	24	45	6.93	6.12	5.95	5.29	5.29	4.26	6.11	5.70	5.10
5	12	60	22.33	17.32	16.21	15.84	12.65	11.88	19.08	14.99	14.04
5	24	60	25.30	22.50	20.14	16.79	20.50	20.07	21.04	21.50	20.11
5	12	90	23.96	19.72	18.94	16.51	15.24	12.75	20.23	17.48	15.84
5	24	90	27.32	25.86	24.70	18.18	22.72	20.30	22.75	24.29	22.50
Average (%)			20.18	15.16	13.75	12.22	11.44	10.11	16.20	13.30	11.93

k denotes the number of instances HD is run on a machine that is approximately 70% faster than SDW and 30% faster than ALNS.

Table A.5 Comparison of Horizon Decomposition and ALNS (Müller et al. 2012).

			Average integrality gap (%)								
			Homogeneous			Heterogeneous			Total		
k	$ I $	$ T $	ALNS	HD300	HD600	ALNS	HD300	HD600	ALNS	HD300	HD600
5	12	30	21.53	11.01	7.49	10.01	1.91	0.59	15.77	6.46	4.04
5	24	30	6.56	7.50	6.23	5.46	7.70	5.62	6.01	7.60	5.93
5	12	45	23.01	12.18	10.45	10.87	5.32	4.29	16.94	8.75	7.37
5	24	45	7.42	6.67	6.44	6.47	7.07	4.86	6.95	6.87	5.65
5	12	60	23.20	20.15	18.16	20.78	13.79	12.64	21.99	16.97	15.40
5	24	60	26.63	29.60	24.67	22.26	24.35	22.87	24.44	26.97	23.77
5	12	90	25.67	20.96	19.87	22.57	17.27	13.15	24.12	19.12	16.51
5	24	90	29.21	31.81	29.02	25.99	25.56	20.39	27.60	28.69	24.70
Average (%)			21.11	18.03	15.76	16.05	13.16	10.83	18.58	15.60	13.30

k denotes the number of instances. HD is run on a machine that is approximately 70% faster than SDW and 30% faster than ALNS.

Table A.6 Comparison of Upper Bounds obtained by Horizon Decomposition and ALNS (Müller et al. 2012).

			Average UB integrality gap (%)								
			Homogeneous			Heterogeneous			Total		
k	$ I $	$ T $	ALNS	HD300	HD600	ALNS	HD300	HD600	ALNS	HD300	HD600
5	12	30	6.51	7.62	6.22	0.75	0.61	0.59	3.63	4.12	3.41
5	24	30	5.88	6.29	5.53	4.58	5.10	4.49	5.23	5.70	5.01
5	12	45	9.31	11.28	9.07	4.24	4.58	4.29	6.78	7.93	6.68
5	24	45	6.44	6.50	5.95	5.09	6.02	4.86	5.76	6.26	5.40
5	12	60	17.03	19.01	16.21	13.37	13.01	12.64	15.20	16.01	14.43
5	24	60	21.42	26.94	20.14	20.54	23.90	22.85	20.98	25.42	21.50
5	12	90	20.60	20.17	18.94	15.02	14.72	13.15	17.81	17.45	16.04
5	24	90	26.54	30.56	24.70	22.07	23.05	20.39	24.31	26.80	22.54
Average (%)			14.64	16.55	13.75	11.01	11.68	10.71	12.83	14.12	12.23

k denotes the number of instances. HD is run on a machine that is approximately 70% faster than SDW and 30% faster than ALNS.

Table A.7 Comparison of Product Decomposition (PD) and Horizon Decomposition (HD).

Group	PD Gap (%)	HD Gap (%)	Group	PD Gap (%)	HD Gap (%)
x11117	0.00	0.00	x12117	0.05	0.00
x11118	0.03	0.00	x12118	0.20	0.00
x11119	1.54	0.71	x12119	1.73	1.14
x11127	0.00	0.00	x12127	0.02	0.00
x11128	0.1	0.00	x12128	0.29	0.02
x11129	2.53	0.57	x12129	1.14	0.04
x11217	0.08	0.05	x12217	0.17	0.24
x11218	0.41	0.10	x12218	0.63	0.26
x11219	2.38	1.46	x12219	2.75	1.02
x11227	0.09	0.14	x12227	0.15	0.09
x11228	0.33	0.15	x12228	0.46	0.20
x11229	3.05	2.16	x12229	3.24	1.57
x11417	0.47	2.80	x12417	1.09	2.35
x11418	2.25	3.09	x12418	1.82	1.88
x11419	10.37	6.24	x12419	5.97	3.73
x11427	0.98	2.89	x12427	0.59	2.79
x11428	4.78	2.85	x12428	3.91	3.13
x11429	9.6	6.49	x12429	8.00	4.40
Average	1.98	1.46			

Each group consists of five instances and each instance has 10 items and 20 periods. The horizon decomposition implementation uses zero overlap and 10-period subproblems. HD is run on a machine that is approximately 70% faster than PD, with a time limit of 1,000s instead of 3,600s used in PD.

Table A.8 Comparison of Horizon Decomposition and CPLEX.

$ I $	CPLEX			Horizon Decomposition			
	Final Gap (%)	Nodes	(H , L)	Final Gap (%)	Gap Closed (%)	Nodes	
2	3.66	3,667,604	(12,2)	0.43	59.01	53.9	
4	7.68	1,154,168	(12,2)	4.60	45.45	4.2	
6	11.34	277,598	(6,1)	11.03	4.93	3	
8	11.47	157,920	(6,1)	11.45	1.36	0.1	
10	9.44	615,530	(6,1)	7.27	17.33	0	

Time Limit: 3,600 seconds. Each value is an average of ten runs. The average final gap is calculated as $\frac{v_{UB} - v_{LB}}{v_{UB}}$. The gap closed is calculated as $\frac{gap^{HD} - gap^{CPX}}{gap^{CPX}}$, where each *gap* is calculated using the best upper bound found, and is a measure of improvement of the horizon decomposition lower bound over CPLEX.

B. Detailed Computational Results

Table B.1 shows the detailed computational results for the subproblem length and overlap experiment.

Table B.1: Detailed computational results for the subproblem length and overlap experiment.

Instance	Items	Periods	Length	Overlap	UB	LB	Gap
H02151	2	15	3 Periods	0 Overlap	10465.44	9603.713	0.0575
H02151	2	15	3 Periods	1 Overlap	10282.8	9623.068	0.0556
H02151	2	15	3 Periods	2 Overlap	10465.44	9673.809	0.0506
H02151	2	15	5 Periods	0 Overlap	10189.72	9582.582	0.0596
H02151	2	15	5 Periods	1 Overlap	10189.72	9747.647	0.0434
H02151	2	15	5 Periods	2 Overlap	10189.72	9782.977	0.0399
H02151	2	15	5 Periods	3 Overlap	10189.72	9771.27	0.0411
H02151	2	15	7 Periods	0 Overlap	10189.72	9852.638	0.0331
H02151	2	15	7 Periods	1 Overlap	10533.49	9794.337	0.0388
H02151	2	15	7 Periods	2 Overlap	10446.59	9776.342	0.0406
H02151	2	15	7 Periods	3 Overlap	10263.95	9911.412	0.0273
H02151	2	15	9 Periods	0 Overlap	10189.72	9826.302	0.0357
H02151	2	15	9 Periods	1 Overlap	10189.72	9929.02	0.0256
H02151	2	15	9 Periods	2 Overlap	10189.72	9983.47	0.0202
H02151	2	15	9 Periods	3 Overlap	10189.72	10021.53	0.0165
H02151	2	15	11 Periods	0 Overlap	10533.49	9817.831	0.0365
H02151	2	15	11 Periods	1 Overlap	10446.59	9834.52	0.0349
H02151	2	15	11 Periods	2 Overlap	10446.59	9834.52	0.0349
H02151	2	15	11 Periods	3 Overlap	10263.95	9945.942	0.0239
H02152	2	15	3 Periods	0 Overlap	2369.052	2337.392	0.0134
H02152	2	15	3 Periods	1 Overlap	2369.052	2342.934	0.011
H02152	2	15	3 Periods	2 Overlap	2369.052	2367.57	0.0006
H02152	2	15	5 Periods	0 Overlap	2369.052	2358.992	0.0042
H02152	2	15	5 Periods	1 Overlap	2369.052	2369.052	0

H02152	2	15	5 Periods	2 Overlap	2369.052	2368.984	0
H02152	2	15	5 Periods	3 Overlap	2369.052	2369.052	0
H02152	2	15	7 Periods	0 Overlap	2369.052	2369.052	0
H02152	2	15	7 Periods	1 Overlap	2369.052	2369.052	0
H02152	2	15	7 Periods	2 Overlap	2369.052	2368.452	0.0003
H02152	2	15	7 Periods	3 Overlap	2369.052	2369.052	0
H02152	2	15	9 Periods	0 Overlap	2369.052	2362.046	0.003
H02152	2	15	9 Periods	1 Overlap	2369.052	2369.052	0
H02152	2	15	9 Periods	2 Overlap	2369.052	2369.052	0
H02152	2	15	9 Periods	3 Overlap	2369.052	2369.052	0
H02152	2	15	11 Periods	0 Overlap	2369.052	2267.682	0.0428
H02152	2	15	11 Periods	1 Overlap	2369.052	2368.23	0.0003
H02152	2	15	11 Periods	2 Overlap	2369.052	2368.984	0
H02152	2	15	11 Periods	3 Overlap	2369.052	2369.052	0
H02301	2	30	3 Periods	0 Overlap	23910.29	22205.42	0.0713
H02301	2	30	3 Periods	1 Overlap	23910.29	21573.91	0.0977
H02301	2	30	3 Periods	2 Overlap	23910.29	22286.79	0.0679
H02301	2	30	5 Periods	0 Overlap	23910.29	22002.35	0.0798
H02301	2	30	5 Periods	1 Overlap	23910.29	22243.31	0.0697
H02301	2	30	5 Periods	2 Overlap	23910.29	22682.53	0.0513
H02301	2	30	5 Periods	3 Overlap	23910.29	22794.04	0.0467
H02301	2	30	7 Periods	0 Overlap	23910.29	22173.2	0.0727
H02301	2	30	7 Periods	1 Overlap	23910.29	22936.74	0.0407
H02301	2	30	7 Periods	2 Overlap	23910.29	22731.01	0.0493
H02301	2	30	7 Periods	3 Overlap	23910.29	23094.57	0.0341
H02301	2	30	9 Periods	0 Overlap	23910.29	22572.85	0.0559
H02301	2	30	9 Periods	1 Overlap	23910.29	23102.22	0.0338
H02301	2	30	9 Periods	2 Overlap	23910.29	23366.32	0.0228
H02301	2	30	9 Periods	3 Overlap	23910.29	23072.28	0.035
H02301	2	30	11 Periods	0 Overlap	23910.29	23440.58	0.0196
H02301	2	30	11 Periods	1 Overlap	23910.29	23608.23	0.0126

H02301	2	30	11 Periods	2 Overlap	23910.29	23115.99	0.0332
H02301	2	30	11 Periods	3 Overlap	23910.29	23313.28	0.025
H02302	2	30	3 Periods	0 Overlap	3691.034	2982.628	0.1919
H02302	2	30	3 Periods	1 Overlap	3691.034	3186.444	0.1367
H02302	2	30	3 Periods	2 Overlap	3691.034	3348.184	0.0929
H02302	2	30	5 Periods	0 Overlap	3691.034	3341.974	0.0946
H02302	2	30	5 Periods	1 Overlap	3691.034	3472.957	0.0591
H02302	2	30	5 Periods	2 Overlap	3691.034	3566.585	0.0337
H02302	2	30	5 Periods	3 Overlap	3691.034	3613.855	0.0209
H02302	2	30	7 Periods	0 Overlap	3691.034	3490.162	0.0544
H02302	2	30	7 Periods	1 Overlap	3691.034	3611.335	0.0216
H02302	2	30	7 Periods	2 Overlap	3691.034	3590.553	0.0272
H02302	2	30	7 Periods	3 Overlap	3691.034	3648.106	0.0116
H02302	2	30	9 Periods	0 Overlap	3691.034	3553.928	0.0371
H02302	2	30	9 Periods	1 Overlap	3691.034	3480.479	0.057
H02302	2	30	9 Periods	2 Overlap	3691.034	3594.718	0.0261
H02302	2	30	9 Periods	3 Overlap	3691.034	3637.713	0.0144
H02302	2	30	11 Periods	0 Overlap	3691.034	3610.8	0.0217
H02302	2	30	11 Periods	1 Overlap	3691.034	3691.034	0
H02302	2	30	11 Periods	2 Overlap	3691.034	3691.034	0
H02302	2	30	11 Periods	3 Overlap	3691.034	3691.034	0
H02303	2	30	3 Periods	0 Overlap	22632.87	21300.37	0.0589
H02303	2	30	3 Periods	1 Overlap	22632.87	21474.57	0.0512
H02303	2	30	3 Periods	2 Overlap	22632.87	21500.01	0.0501
H02303	2	30	5 Periods	0 Overlap	22632.87	21445.98	0.0524
H02303	2	30	5 Periods	1 Overlap	22632.87	21488.64	0.0506
H02303	2	30	5 Periods	2 Overlap	22632.87	21501.01	0.05
H02303	2	30	5 Periods	3 Overlap	22632.87	21505.39	0.0498
H02303	2	30	7 Periods	0 Overlap	22632.87	21501.52	0.05
H02303	2	30	7 Periods	1 Overlap	22632.87	21495.36	0.0503
H02303	2	30	7 Periods	2 Overlap	22632.87	21549.41	0.0479

H02303	2	30	7 Periods	3 Overlap	22632.87	21544.1	0.0481
H02303	2	30	9 Periods	0 Overlap	22632.87	21348.6	0.0567
H02303	2	30	9 Periods	1 Overlap	22632.87	21491.15	0.0504
H02303	2	30	9 Periods	2 Overlap	22632.87	21504.2	0.0499
H02303	2	30	9 Periods	3 Overlap	22632.87	21549.41	0.0479
H02303	2	30	11 Periods	0 Overlap	22632.87	21505.56	0.0498
H02303	2	30	11 Periods	1 Overlap	22632.87	21536.39	0.0484
H02303	2	30	11 Periods	2 Overlap	22632.87	21536.39	0.0484
H02303	2	30	11 Periods	3 Overlap	22632.87	21544.1	0.0481
H02304	2	30	3 Periods	0 Overlap	13845.26	12623.24	0.0883
H02304	2	30	3 Periods	1 Overlap	13845.26	12983.62	0.0622
H02304	2	30	3 Periods	2 Overlap	13845.26	13227.36	0.0446
H02304	2	30	5 Periods	0 Overlap	13845.26	13500.59	0.0249
H02304	2	30	5 Periods	1 Overlap	13845.26	13187.15	0.0475
H02304	2	30	5 Periods	2 Overlap	13845.26	13473.77	0.0268
H02304	2	30	5 Periods	3 Overlap	13845.26	13596.55	0.018
H02304	2	30	7 Periods	0 Overlap	13845.26	13163.05	0.0493
H02304	2	30	7 Periods	1 Overlap	13845.26	13634.14	0.0152
H02304	2	30	7 Periods	2 Overlap	13845.26	13568.1	0.02
H02304	2	30	7 Periods	3 Overlap	13845.26	13677.08	0.0121
H02304	2	30	9 Periods	0 Overlap	13845.26	13346.77	0.036
H02304	2	30	9 Periods	1 Overlap	13845.26	13747.33	0.0071
H02304	2	30	9 Periods	2 Overlap	13845.26	13803.46	0.003
H02304	2	30	9 Periods	3 Overlap	13845.26	13749.51	0.0069
H02304	2	30	11 Periods	0 Overlap	13845.26	13655.66	0.0137
H02304	2	30	11 Periods	1 Overlap	13845.26	13720	0.009
H02304	2	30	11 Periods	2 Overlap	13845.26	13673.3	0.0124
H02304	2	30	11 Periods	3 Overlap	13845.26	13782.72	0.0045
H02601	2	60	3 Periods	0 Overlap	187687.6	186326.4	0.0073
H02601	2	60	3 Periods	1 Overlap	187687.6	186524.5	0.0062
H02601	2	60	3 Periods	2 Overlap	187687.6	186683.9	0.0053

H02601	2	60	5 Periods	0 Overlap	187687.6	186679.7	0.0054
H02601	2	60	5 Periods	1 Overlap	187687.6	186763.1	0.0049
H02601	2	60	5 Periods	2 Overlap	187687.6	186868	0.0044
H02601	2	60	5 Periods	3 Overlap	187687.6	186968.5	0.0038
H02601	2	60	7 Periods	0 Overlap	187687.6	186765.9	0.0049
H02601	2	60	7 Periods	1 Overlap	187687.6	186855.9	0.0044
H02601	2	60	7 Periods	2 Overlap	187687.6	187046.8	0.0034
H02601	2	60	7 Periods	3 Overlap	187687.6	187162.8	0.0028
H02601	2	60	9 Periods	0 Overlap	187687.6	186977.5	0.0038
H02601	2	60	9 Periods	1 Overlap	187687.6	187088.7	0.0032
H02601	2	60	9 Periods	2 Overlap	187687.6	187135.1	0.0029
H02601	2	60	9 Periods	3 Overlap	187687.6	187179.9	0.0027
H02601	2	60	11 Periods	0 Overlap	187687.6	187172	0.0027
H02601	2	60	11 Periods	1 Overlap	187687.6	187273.7	0.0022
H02601	2	60	11 Periods	2 Overlap	187687.6	187044.9	0.0034
H02601	2	60	11 Periods	3 Overlap	187687.6	187299	0.0021
H02602	2	60	3 Periods	0 Overlap	207270.8	205649.2	0.0078
H02602	2	60	3 Periods	1 Overlap	207270.8	205741	0.0074
H02602	2	60	3 Periods	2 Overlap	207270.8	205787.4	0.0072
H02602	2	60	5 Periods	0 Overlap	207270.8	205851.6	0.0068
H02602	2	60	5 Periods	1 Overlap	207270.8	205846	0.0069
H02602	2	60	5 Periods	2 Overlap	207270.8	205880.7	0.0067
H02602	2	60	5 Periods	3 Overlap	207270.8	205949.9	0.0064
H02602	2	60	7 Periods	0 Overlap	207270.8	205923.7	0.0065
H02602	2	60	7 Periods	1 Overlap	207270.8	205940.2	0.0064
H02602	2	60	7 Periods	2 Overlap	207270.8	206006.1	0.0061
H02602	2	60	7 Periods	3 Overlap	207270.8	205992.1	0.0062
H02602	2	60	9 Periods	0 Overlap	207270.8	205982.8	0.0062
H02602	2	60	9 Periods	1 Overlap	207270.8	205945	0.0064
H02602	2	60	9 Periods	2 Overlap	207270.8	206023.1	0.006
H02602	2	60	9 Periods	3 Overlap	207270.8	206029	0.006

H02602	2	60	11 Periods	0 Overlap	207270.8	206116.6	0.0056
H02602	2	60	11 Periods	1 Overlap	207270.8	206107.5	0.0056
H02602	2	60	11 Periods	2 Overlap	207270.8	206012.3	0.0061
H02602	2	60	11 Periods	3 Overlap	207270.8	206106.7	0.0056
H02603	2	60	3 Periods	0 Overlap	129766.5	124440	0.041
H02603	2	60	3 Periods	1 Overlap	129766.5	125660.2	0.0316
H02603	2	60	3 Periods	2 Overlap	129766.5	126013.6	0.0289
H02603	2	60	5 Periods	0 Overlap	129766.5	126016.9	0.0289
H02603	2	60	5 Periods	1 Overlap	129766.5	125955.7	0.0294
H02603	2	60	5 Periods	2 Overlap	129766.5	126337	0.0264
H02603	2	60	5 Periods	3 Overlap	129766.5	126523.3	0.025
H02603	2	60	7 Periods	0 Overlap	129766.5	126315.8	0.0266
H02603	2	60	7 Periods	1 Overlap	129766.5	126475.7	0.0254
H02603	2	60	7 Periods	2 Overlap	129766.5	126893.2	0.0221
H02603	2	60	7 Periods	3 Overlap	129766.5	127106.2	0.0205
H02603	2	60	9 Periods	0 Overlap	129766.5	126855	0.0224
H02603	2	60	9 Periods	1 Overlap	129766.5	126632.8	0.0241
H02603	2	60	9 Periods	2 Overlap	129766.5	127357.5	0.0186
H02603	2	60	9 Periods	3 Overlap	129766.5	126947.8	0.0217
H02603	2	60	11 Periods	0 Overlap	129766.5	126861.5	0.0224
H02603	2	60	11 Periods	1 Overlap	129766.5	127573.9	0.0169
H02603	2	60	11 Periods	2 Overlap	129766.5	127353.7	0.0186
H02603	2	60	11 Periods	3 Overlap	129766.5	127768.4	0.0154
H02604	2	60	3 Periods	0 Overlap	81293.93	78671.42	0.0323
H02604	2	60	3 Periods	1 Overlap	81293.93	79006	0.0281
H02604	2	60	3 Periods	2 Overlap	81293.93	79109.98	0.0269
H02604	2	60	5 Periods	0 Overlap	81293.93	79360.69	0.0238
H02604	2	60	5 Periods	1 Overlap	81293.93	79495.87	0.0221
H02604	2	60	5 Periods	2 Overlap	81293.93	79920.85	0.0169
H02604	2	60	5 Periods	3 Overlap	81293.93	79898.77	0.0172
H02604	2	60	7 Periods	0 Overlap	81293.93	79568.92	0.0212

H02604	2	60	7 Periods	1 Overlap	81293.93	80103.07	0.0146
H02604	2	60	7 Periods	2 Overlap	81293.93	79548.18	0.0215
H02604	2	60	7 Periods	3 Overlap	81293.93	79958.35	0.0164
H02604	2	60	9 Periods	0 Overlap	81293.93	80091.32	0.0148
H02604	2	60	9 Periods	1 Overlap	81293.93	79727.38	0.0193
H02604	2	60	9 Periods	2 Overlap	81293.93	79650.61	0.0202
H02604	2	60	9 Periods	3 Overlap	81293.93	80298.26	0.0122
H02604	2	60	11 Periods	0 Overlap	81293.93	79514.78	0.0219
H02604	2	60	11 Periods	1 Overlap	81293.93	80159.77	0.014
H02604	2	60	11 Periods	2 Overlap	81293.93	80253.08	0.0128
H02604	2	60	11 Periods	3 Overlap	81293.93	80266.98	0.0126
H06151	6	15	3 Periods	0 Overlap	38350.29	36406.38	0.0371
H06151	6	15	3 Periods	1 Overlap	38120.08	37410.45	0.0105
H06151	6	15	3 Periods	2 Overlap	38089.08	37609.18	0.0053
H06151	6	15	5 Periods	0 Overlap	38103.65	37005.74	0.0212
H06151	6	15	5 Periods	1 Overlap	37999.2	37701.06	0.0029
H06151	6	15	5 Periods	2 Overlap	37809	37809	0
H06151	6	15	5 Periods	3 Overlap	37809	37809	0
H06151	6	15	7 Periods	0 Overlap	38061.67	37497.83	0.0082
H06151	6	15	7 Periods	1 Overlap	37809	37725.71	0.0022
H06151	6	15	7 Periods	2 Overlap	37809	37809	0
H06151	6	15	7 Periods	3 Overlap	37809	37809	0
H06151	6	15	9 Periods	0 Overlap	38138.31	37601.15	0.0055
H06151	6	15	9 Periods	1 Overlap	37809	37798.5	0.0003
H06151	6	15	9 Periods	2 Overlap	37809	37809	0
H06151	6	15	9 Periods	3 Overlap	37809	37809	0
H06151	6	15	11 Periods	0 Overlap	38087.13	37608.61	0.0053
H06151	6	15	11 Periods	1 Overlap	37809	37729.6	0.0021
H06151	6	15	11 Periods	2 Overlap	37809	37809	0
H06151	6	15	11 Periods	3 Overlap	37809	37809	0
H06152	6	15	3 Periods	0 Overlap	38159	36156.48	0.0415

H06152	6	15	3 Periods	1 Overlap	38054	37190.13	0.0141
H06152	6	15	3 Periods	2 Overlap	37798	37466	0.0068
H06152	6	15	5 Periods	0 Overlap	38059	37015.51	0.0187
H06152	6	15	5 Periods	1 Overlap	37773	37543.21	0.0047
H06152	6	15	5 Periods	2 Overlap	37798	37689.38	0.0008
H06152	6	15	5 Periods	3 Overlap	37798	37676.43	0.0012
H06152	6	15	7 Periods	0 Overlap	37798	37198.69	0.0138
H06152	6	15	7 Periods	1 Overlap	37798	37544.55	0.0047
H06152	6	15	7 Periods	2 Overlap	37721	37663.44	0.0015
H06152	6	15	7 Periods	3 Overlap	37721	37713.71	0.0002
H06152	6	15	9 Periods	0 Overlap	37889	37451.01	0.0072
H06152	6	15	9 Periods	1 Overlap	37767	37654.16	0.0018
H06152	6	15	9 Periods	2 Overlap	37721	37687.15	0.0009
H06152	6	15	9 Periods	3 Overlap	37721	37721	0
H06152	6	15	11 Periods	0 Overlap	37773	37554.7	0.0044
H06152	6	15	11 Periods	1 Overlap	37721	37666.58	0.0014
H06152	6	15	11 Periods	2 Overlap	37721	37712.92	0.0002
H06152	6	15	11 Periods	3 Overlap	37721	37714.9	0.0002
H06301	6	30	3 Periods	0 Overlap	73082	68224.39	0.0456
H06301	6	30	3 Periods	1 Overlap	71776	70083.9	0.0196
H06301	6	30	3 Periods	2 Overlap	71526	70553.29	0.013
H06301	6	30	5 Periods	0 Overlap	72876	69445.3	0.0285
H06301	6	30	5 Periods	1 Overlap	71864	70703.72	0.0109
H06301	6	30	5 Periods	2 Overlap	71861	71105.51	0.0053
H06301	6	30	5 Periods	3 Overlap	71512	71261.28	0.0031
H06301	6	30	7 Periods	0 Overlap	72573	70144.44	0.0187
H06301	6	30	7 Periods	1 Overlap	71749	71116.58	0.0051
H06301	6	30	7 Periods	2 Overlap	72206	71211.28	0.0038
H06301	6	30	7 Periods	3 Overlap	71489	71346.62	0.0019
H06301	6	30	9 Periods	0 Overlap	72295	70342.06	0.016
H06301	6	30	9 Periods	1 Overlap	72245	71236.74	0.0035

H06301	6	30	9 Periods	2 Overlap	71546	71392.94	0.0013
H06301	6	30	9 Periods	3 Overlap	71488	71454.31	0.0004
H06301	6	30	11 Periods	0 Overlap	71599	70576.52	0.0127
H06301	6	30	11 Periods	1 Overlap	71489	71320.97	0.0023
H06301	6	30	11 Periods	2 Overlap	71484	71453.23	0.0004
H06301	6	30	11 Periods	3 Overlap	71484	71484	0
H06302	6	30	3 Periods	0 Overlap	66078	60606.03	0.0553
H06302	6	30	3 Periods	1 Overlap	64490	62785.79	0.0214
H06302	6	30	3 Periods	2 Overlap	64544	63265.91	0.0139
H06302	6	30	5 Periods	0 Overlap	65266	61835.32	0.0362
H06302	6	30	5 Periods	1 Overlap	64352	63584.08	0.0089
H06302	6	30	5 Periods	2 Overlap	64194	63774.47	0.0059
H06302	6	30	5 Periods	3 Overlap	64430	63887.1	0.0042
H06302	6	30	7 Periods	0 Overlap	64803	62760.09	0.0218
H06302	6	30	7 Periods	1 Overlap	64420	63674.96	0.0075
H06302	6	30	7 Periods	2 Overlap	64181	63881.61	0.0043
H06302	6	30	7 Periods	3 Overlap	64181	64019.32	0.0021
H06302	6	30	9 Periods	0 Overlap	65584	63008.38	0.0179
H06302	6	30	9 Periods	1 Overlap	64181	63923.63	0.0036
H06302	6	30	9 Periods	2 Overlap	64192	64039.09	0.0018
H06302	6	30	9 Periods	3 Overlap	64181	64115.9	0.0006
H06302	6	30	11 Periods	0 Overlap	64531	62922.44	0.0192
H06302	6	30	11 Periods	1 Overlap	64181	63857.85	0.0046
H06302	6	30	11 Periods	2 Overlap	64181	64046.52	0.0017
H06302	6	30	11 Periods	3 Overlap	64156	64114.41	0.0006
H06303	6	30	3 Periods	0 Overlap	66300	61776.56	0.0512
H06303	6	30	3 Periods	1 Overlap	65605	63217.87	0.029
H06303	6	30	3 Periods	2 Overlap	65111	63709.07	0.0215
H06303	6	30	5 Periods	0 Overlap	67832	62674.43	0.0374
H06303	6	30	5 Periods	1 Overlap	65195	64154.17	0.0146
H06303	6	30	5 Periods	2 Overlap	65195	64232.05	0.0135

H06303	6	30	5 Periods	3 Overlap	65195	64465.2	0.0099
H06303	6	30	7 Periods	0 Overlap	65991	63486.98	0.0249
H06303	6	30	7 Periods	1 Overlap	65108	64400.7	0.0109
H06303	6	30	7 Periods	2 Overlap	65111	64548.23	0.0086
H06303	6	30	7 Periods	3 Overlap	65195	64633.23	0.0073
H06303	6	30	9 Periods	0 Overlap	65741	63948.64	0.0178
H06303	6	30	9 Periods	1 Overlap	65330	64640.71	0.0072
H06303	6	30	9 Periods	2 Overlap	65178	64743.9	0.0056
H06303	6	30	9 Periods	3 Overlap	65277	64819.63	0.0044
H06303	6	30	11 Periods	0 Overlap	66318	64444.63	0.0102
H06303	6	30	11 Periods	1 Overlap	65150	64828.02	0.0043
H06303	6	30	11 Periods	2 Overlap	65108	64740.82	0.0056
H06303	6	30	11 Periods	3 Overlap	65195	64910.43	0.003
H06304	6	30	3 Periods	0 Overlap	86461	76919.76	0.0789
H06304	6	30	3 Periods	1 Overlap	83935	81758.83	0.0209
H06304	6	30	3 Periods	2 Overlap	83700	82560.66	0.0113
H06304	6	30	5 Periods	0 Overlap	104595	79620.29	0.0465
H06304	6	30	5 Periods	1 Overlap	83640	82783.79	0.0087
H06304	6	30	5 Periods	2 Overlap	83696	83076.81	0.0052
H06304	6	30	5 Periods	3 Overlap	83735	83194.19	0.0037
H06304	6	30	7 Periods	0 Overlap	84242	80792.48	0.0325
H06304	6	30	7 Periods	1 Overlap	83729	82990.62	0.0062
H06304	6	30	7 Periods	2 Overlap	83647	83252.85	0.003
H06304	6	30	7 Periods	3 Overlap	83507	83335.01	0.0021
H06304	6	30	9 Periods	0 Overlap	84512	81617.84	0.0226
H06304	6	30	9 Periods	1 Overlap	83857	83188.13	0.0038
H06304	6	30	9 Periods	2 Overlap	83581	83382.34	0.0015
H06304	6	30	9 Periods	3 Overlap	83645	83425.82	0.001
H06304	6	30	11 Periods	0 Overlap	84123	81870.39	0.0196
H06304	6	30	11 Periods	1 Overlap	83594	83241.93	0.0032
H06304	6	30	11 Periods	2 Overlap	83581	83399.08	0.0013

H06304	6	30	11 Periods	3 Overlap	83507	83415.87	0.0011
H06601	6	30	3 Periods	0 Overlap	146222	135930.7	0.0453
H06601	6	30	3 Periods	1 Overlap	144422	139694.3	0.0189
H06601	6	30	3 Periods	2 Overlap	146135	140641.6	0.0122
H06601	6	60	5 Periods	0 Overlap	145407	138229.7	0.0292
H06601	6	60	5 Periods	1 Overlap	143149	141128.6	0.0088
H06601	6	60	5 Periods	2 Overlap	142912	141669.7	0.005
H06601	6	60	5 Periods	3 Overlap	142562	139221.9	0.0222
H06601	6	60	7 Periods	0 Overlap	144935	139326.5	0.0215
H06601	6	60	7 Periods	1 Overlap	142666	141741.4	0.0045
H06601	6	60	7 Periods	2 Overlap	143279	141923.9	0.0032
H06601	6	60	7 Periods	3 Overlap	142389	142207.4	0.0012
H06601	6	60	9 Periods	0 Overlap	144062	140229.7	0.0151
H06601	6	60	9 Periods	1 Overlap	142695	141962.8	0.003
H06601	6	60	9 Periods	2 Overlap	142473	142185.4	0.0014
H06601	6	60	9 Periods	3 Overlap	142388	140669.1	0.012
H06601	6	60	11 Periods	0 Overlap	143471	140538.5	0.013
H06601	6	60	11 Periods	1 Overlap	142389	142061.4	0.0023
H06601	6	60	11 Periods	2 Overlap	142575	142336.3	0.0003
H06601	6	60	11 Periods	3 Overlap	142384	142355.6	0.0002
H06602	6	60	3 Periods	0 Overlap	131934	119992.5	0.0566
H06602	6	60	3 Periods	1 Overlap	128999	124461.8	0.0215
H06602	6	60	3 Periods	2 Overlap	129673	125477.1	0.0135
H06602	6	60	5 Periods	0 Overlap	129522	122407.1	0.0376
H06602	6	60	5 Periods	1 Overlap	127849	125849.1	0.0106
H06602	6	60	5 Periods	2 Overlap	127209	126524	0.0053
H06602	6	60	5 Periods	3 Overlap	127563	124820.8	0.0187
H06602	6	60	7 Periods	0 Overlap	128888	123976.6	0.0253
H06602	6	60	7 Periods	1 Overlap	127743	126308.3	0.007
H06602	6	60	7 Periods	2 Overlap	127241	126719.1	0.0037
H06602	6	60	7 Periods	3 Overlap	127743	126974.2	0.0017

H06602	6	60	9 Periods	0 Overlap	129316	124613	0.0203
H06602	6	60	9 Periods	1 Overlap	127523	126487.1	0.0056
H06602	6	60	9 Periods	2 Overlap	127196	126990.1	0.0016
H06602	6	60	9 Periods	3 Overlap	127196	125613.7	0.0124
H06602	6	60	11 Periods	0 Overlap	128116	125091.1	0.0165
H06602	6	60	11 Periods	1 Overlap	127241	126655.8	0.0042
H06602	6	60	11 Periods	2 Overlap	127196	127041.9	0.0012
H06602	6	60	11 Periods	3 Overlap	127196	127112	0.0007
H06603	6	60	3 Periods	0 Overlap	133181	122113.3	0.0536
H06603	6	60	3 Periods	1 Overlap	129632	125361.3	0.0284
H06603	6	60	3 Periods	2 Overlap	130019	126336.5	0.0208
H06603	6	60	5 Periods	0 Overlap	134460	124210.3	0.0373
H06603	6	60	5 Periods	1 Overlap	129878	126893.2	0.0165
H06603	6	60	5 Periods	2 Overlap	129263	127235.3	0.0139
H06603	6	60	5 Periods	3 Overlap	129197	127777	0.0097
H06603	6	60	7 Periods	0 Overlap	131559	125462.9	0.0276
H06603	6	60	7 Periods	1 Overlap	129545	127508.1	0.0118
H06603	6	60	7 Periods	2 Overlap	129029	127952.8	0.0083
H06603	6	60	7 Periods	3 Overlap	129442	128222.8	0.0062
H06603	6	60	9 Periods	0 Overlap	129967	126505.7	0.0195
H06603	6	60	9 Periods	1 Overlap	129397	127965.2	0.0082
H06603	6	60	9 Periods	2 Overlap	129497	128254.2	0.006
H06603	6	60	9 Periods	3 Overlap	129192	126498.4	0.0196
H06603	6	60	11 Periods	0 Overlap	130486	127295	0.0134
H06603	6	60	11 Periods	1 Overlap	129630	128388.8	0.0049
H06603	6	60	11 Periods	2 Overlap	129026	128323.3	0.0054
H06603	6	60	11 Periods	3 Overlap	129200	128654.7	0.0029
H06604	6	60	3 Periods	0 Overlap	174308	152425.7	0.0849
H06604	6	60	3 Periods	1 Overlap	170339	162451.9	0.0247
H06604	6	60	3 Periods	2 Overlap	168119	164433.9	0.0128
H06604	6	60	5 Periods	0 Overlap	193194	157869.8	0.0522

H06604	6	60	5 Periods	1 Overlap	167005	164622.4	0.0117
H06604	6	60	5 Periods	2 Overlap	166801	165484.5	0.0065
H06604	6	60	5 Periods	3 Overlap	166653	163921.8	0.0159
H06604	6	60	7 Periods	0 Overlap	169463	159952.8	0.0397
H06604	6	60	7 Periods	1 Overlap	168110	165129.6	0.0086
H06604	6	60	7 Periods	2 Overlap	167869	165797	0.0046
H06604	6	60	7 Periods	3 Overlap	167325	166065.4	0.003
H06604	6	60	9 Periods	0 Overlap	193655	161888.7	0.0281
H06604	6	60	9 Periods	1 Overlap	167056	165609.3	0.0058
H06604	6	60	9 Periods	2 Overlap	167116	165981.5	0.0035
H06604	6	60	9 Periods	3 Overlap	166570	164077	0.015
H06604	6	60	11 Periods	0 Overlap	168363	162767.3	0.0228
H06604	6	60	11 Periods	1 Overlap	166962	165616.2	0.0057
H06604	6	60	11 Periods	2 Overlap	166815	166203.2	0.0022
H06604	6	60	11 Periods	3 Overlap	166619	166288.3	0.0017
H10151	10	15	3 Periods	0 Overlap	478623.2	423250.3	0.088
H10151	10	15	3 Periods	1 Overlap	467073.2	444647.8	0.0419
H10151	10	15	3 Periods	2 Overlap	464811.7	448141.1	0.0344
H10151	10	15	5 Periods	0 Overlap	483711.4	444992.4	0.0412
H10151	10	15	5 Periods	1 Overlap	465033.4	453937	0.0219
H10151	10	15	5 Periods	2 Overlap	467936.3	455172.1	0.0192
H10151	10	15	5 Periods	3 Overlap	464493.2	455995.4	0.0175
H10151	10	15	7 Periods	0 Overlap	468674	450339.8	0.0297
H10151	10	15	7 Periods	1 Overlap	465429.9	456137.6	0.0172
H10151	10	15	7 Periods	2 Overlap	464707.5	457989.7	0.0132
H10151	10	15	7 Periods	3 Overlap	468027.2	458814.7	0.0114
H10151	10	15	9 Periods	0 Overlap	465243.8	458039.4	0.0131
H10151	10	15	9 Periods	1 Overlap	464586.4	459931	0.009
H10151	10	15	9 Periods	2 Overlap	464355	460219.4	0.0084
H10151	10	15	9 Periods	3 Overlap	464355	460471.5	0.0078
H10151	10	15	11 Periods	0 Overlap	464535.3	460078.4	0.0087

H10151	10	15	11 Periods	1 Overlap	464102.4	460911.5	0.0069
H10151	10	15	11 Periods	2 Overlap	464586.4	461140.8	0.0064
H10151	10	15	11 Periods	3 Overlap	464586.4	461149.3	0.0064
H10152	10	15	3 Periods	0 Overlap	197728.7	153752.6	0.1524
H10152	10	15	3 Periods	1 Overlap	183335.7	167483.1	0.0767
H10152	10	15	3 Periods	2 Overlap	186524.7	170025.1	0.0626
H10152	10	15	5 Periods	0 Overlap	197761.8	162990.7	0.1014
H10152	10	15	5 Periods	1 Overlap	190477	171053.1	0.057
H10152	10	15	5 Periods	2 Overlap	183921.9	173894.8	0.0413
H10152	10	15	5 Periods	3 Overlap	185354.4	174519	0.0379
H10152	10	15	7 Periods	0 Overlap	184533.6	171775.6	0.053
H10152	10	15	7 Periods	1 Overlap	183918.8	176736.6	0.0256
H10152	10	15	7 Periods	2 Overlap	183091.2	177535.5	0.0212
H10152	10	15	7 Periods	3 Overlap	189299.3	177883.5	0.0193
H10152	10	15	9 Periods	0 Overlap	191389.8	175719.5	0.0312
H10152	10	15	9 Periods	1 Overlap	192808.9	178658.2	0.015
H10152	10	15	9 Periods	2 Overlap	192277.4	179000	0.0132
H10152	10	15	9 Periods	3 Overlap	191664.6	179183.9	0.0121
H10152	10	15	11 Periods	0 Overlap	182153.9	180391	0.0055
H10152	10	15	11 Periods	1 Overlap	181387.1	181219.9	0.0009
H10152	10	15	11 Periods	2 Overlap	181387.1	181227.6	0.0009
H10152	10	15	11 Periods	3 Overlap	181387.1	181372.6	0.0001
H10301	10	30	3 Periods	0 Overlap	503199.6	413686.7	0.1546
H10301	10	30	3 Periods	1 Overlap	504245.6	450965.9	0.0785
H10301	10	30	3 Periods	2 Overlap	503663.7	449516.1	0.0814
H10301	10	30	5 Periods	0 Overlap	509255.7	438780.9	0.1034
H10301	10	30	5 Periods	1 Overlap	489356.5	466702.5	0.0463
H10301	10	30	5 Periods	2 Overlap	495222.3	468726.1	0.0422
H10301	10	30	5 Periods	3 Overlap	499595.2	448847.3	0.0828
H10301	10	30	7 Periods	0 Overlap	497443.8	458961.2	0.0621
H10301	10	30	7 Periods	1 Overlap	501216.3	470558.2	0.0384

H10301	10	30	7 Periods	2 Overlap	497700.8	472096.8	0.0353
H10301	10	30	7 Periods	3 Overlap	495074.1	460269	0.0594
H10301	10	30	9 Periods	0 Overlap	517965.7	463653.3	0.0525
H10301	10	30	9 Periods	1 Overlap	492799.9	473570.7	0.0323
H10301	10	30	9 Periods	2 Overlap	491048.8	471737	0.036
H10301	10	30	9 Periods	3 Overlap	494634.5	469651.4	0.0403
H10301	10	30	11 Periods	0 Overlap	494606.4	470100.2	0.0394
H10301	10	30	11 Periods	1 Overlap	492699.1	476590	0.0261
H10301	10	30	11 Periods	2 Overlap	496047.8	473551.8	0.0323
H10301	10	30	11 Periods	3 Overlap	495816.7	466587.5	0.0465
H10302	10	30	3 Periods	0 Overlap	339672.4	270297.3	0.1694
H10302	10	30	3 Periods	1 Overlap	327050.3	296236.5	0.0897
H10302	10	30	3 Periods	2 Overlap	325441.2	287593.4	0.1163
H10302	10	30	5 Periods	0 Overlap	349486.3	292418.6	0.1015
H10302	10	30	5 Periods	1 Overlap	343699.1	303314.1	0.068
H10302	10	30	5 Periods	2 Overlap	330303.6	304860.7	0.0632
H10302	10	30	5 Periods	3 Overlap	337190	289517.2	0.1104
H10302	10	30	7 Periods	0 Overlap	342781	299464.4	0.0798
H10302	10	30	7 Periods	1 Overlap	326618.6	307947.4	0.0538
H10302	10	30	7 Periods	2 Overlap	328650.3	308974.1	0.0506
H10302	10	30	7 Periods	3 Overlap	326631.4	303246.7	0.0682
H10302	10	30	9 Periods	0 Overlap	375602.3	304603.2	0.064
H10302	10	30	9 Periods	1 Overlap	327475.2	310332.2	0.0464
H10302	10	30	9 Periods	2 Overlap	327054.6	310930	0.0446
H10302	10	30	9 Periods	3 Overlap	327538.2	306184.9	0.0592
H10302	10	30	11 Periods	0 Overlap	328823.2	307754.3	0.0543
H10302	10	30	11 Periods	1 Overlap	326766.6	310122.8	0.0471
H10302	10	30	11 Periods	2 Overlap	326435.1	308910.7	0.0508
H10302	10	30	11 Periods	3 Overlap	327423.4	301946.7	0.0722
H10303	10	30	3 Periods	0 Overlap	143566.2	112425.2	0.0656
H10303	10	30	3 Periods	1 Overlap	122066.9	118523.3	0.0149

H10303	10	30	3 Periods	2 Overlap	121445.5	117819.3	0.0208
H10303	10	30	5 Periods	0 Overlap	180832.7	115580	0.0394
H10303	10	30	5 Periods	1 Overlap	122207.8	119676.4	0.0054
H10303	10	30	5 Periods	2 Overlap	120480.5	118540.8	0.0148
H10303	10	30	5 Periods	3 Overlap	120478.4	118004.8	0.0193
H10303	10	30	7 Periods	0 Overlap	122263.2	117332.8	0.0248
H10303	10	30	7 Periods	1 Overlap	120592.2	120042.4	0.0023
H10303	10	30	7 Periods	2 Overlap	120321.2	120258.9	0.0005
H10303	10	30	7 Periods	3 Overlap	120321.3	118516.2	0.015
H10303	10	30	9 Periods	0 Overlap	143712.2	117712.4	0.0217
H10303	10	30	9 Periods	1 Overlap	120610.7	120094.7	0.0019
H10303	10	30	9 Periods	2 Overlap	120321.2	120289.2	0.0003
H10303	10	30	9 Periods	3 Overlap	120321.2	117909.4	0.02
H10303	10	30	11 Periods	0 Overlap	120885.5	118543.1	0.0148
H10303	10	30	11 Periods	1 Overlap	120406.1	120201	0.001
H10303	10	30	11 Periods	2 Overlap	120327.4	120327.4	-0.0001
H10303	10	30	11 Periods	3 Overlap	120321.3	118862.6	0.0121
H10304	10	30	3 Periods	0 Overlap	988012.9	768226.7	0.169
H10304	10	30	3 Periods	1 Overlap	966484.1	815451.7	0.1179
H10304	10	30	5 Periods	0 Overlap	1047604	837376.4	0.0942
H10304	10	30	5 Periods	1 Overlap	977564.8	874006.6	0.0545
H10304	10	30	5 Periods	2 Overlap	950982.4	888352	0.039
H10304	10	30	5 Periods	3 Overlap	947696.3	864531.4	0.0648
H10304	10	30	7 Periods	0 Overlap	952118.9	857365	0.0725
H10304	10	30	7 Periods	1 Overlap	955635.7	887362.3	0.0401
H10304	10	30	7 Periods	2 Overlap	924431.1	899099.9	0.0274
H10304	10	30	7 Periods	3 Overlap	951923	891297.8	0.0358
H10304	10	30	9 Periods	0 Overlap	974968.8	883637.2	0.0441
H10304	10	30	9 Periods	1 Overlap	1003128	899139.4	0.0274
H10304	10	30	9 Periods	2 Overlap	936916.7	892164.3	0.0349
H10304	10	30	9 Periods	3 Overlap	930781.3	894520.7	0.0324

H10304	10	30	11 Periods	0 Overlap	937025.5	888570.1	0.0388
H10304	10	30	11 Periods	1 Overlap	932624.3	895924.8	0.0308
H10304	10	30	11 Periods	2 Overlap	931727.5	879886.1	0.0482
H10304	10	30	11 Periods	3 Overlap	937921.3	888088.7	0.0393
H10601	10	60	3 Periods	0 Overlap	746597.5	516695.6	0.2374
H10601	10	60	3 Periods	1 Overlap	713409.4	577454.8	0.1477
H10601	10	60	5 Periods	0 Overlap	1084102	569624	0.1593
H10601	10	60	5 Periods	1 Overlap	705431.5	617637.1	0.0884
H10601	10	60	5 Periods	2 Overlap	691983.4	607664.6	0.1032
H10601	10	60	5 Periods	3 Overlap	701569.4	544283.7	0.1967
H10601	10	60	7 Periods	0 Overlap	725456.5	600647.6	0.1135
H10601	10	60	7 Periods	1 Overlap	706461	630137.5	0.07
H10601	10	60	7 Periods	2 Overlap	689183	641583.7	0.0531
H10601	10	60	7 Periods	3 Overlap	698722.6	591861.8	0.1265
H10601	10	60	9 Periods	0 Overlap	1146837	613729.5	0.0942
H10601	10	60	9 Periods	1 Overlap	695118.4	627199.5	0.0743
H10601	10	60	9 Periods	2 Overlap	677563.1	620419.7	0.0843
H10601	10	60	9 Periods	3 Overlap	693212.7	604455.8	0.1079
H10601	10	60	11 Periods	0 Overlap	693862.6	618525	0.0871
H10601	10	60	11 Periods	1 Overlap	686385.5	622840.5	0.0808
H10601	10	60	11 Periods	2 Overlap	690241.3	631533.7	0.0679
H10601	10	60	11 Periods	3 Overlap	701588.1	604155.1	0.1083
H10602	10	60	3 Periods	0 Overlap	875969.8	627736.9	0.2218
H10602	10	60	3 Periods	1 Overlap	853015.3	679219.7	0.158
H10602	10	60	5 Periods	0 Overlap	1591907	684555.9	0.1514
H10602	10	60	5 Periods	1 Overlap	816407.9	723236.3	0.1035
H10602	10	60	5 Periods	2 Overlap	829610.2	713825.2	0.1151
H10602	10	60	5 Periods	3 Overlap	826729.5	654391.9	0.1888
H10602	10	60	7 Periods	0 Overlap	829834.3	699480.8	0.1329
H10602	10	60	7 Periods	1 Overlap	838487.8	738248.8	0.0848
H10602	10	60	7 Periods	2 Overlap	835460.3	741377.4	0.081

H10602	10	60	7 Periods	3 Overlap	816889.5	698782.6	0.1338
H10602	10	60	9 Periods	0 Overlap	989271.4	717706.7	0.1103
H10602	10	60	9 Periods	1 Overlap	806713.3	726483.3	0.0994
H10602	10	60	9 Periods	2 Overlap	810062.3	725805.5	0.1003
H10602	10	60	9 Periods	3 Overlap	816408.1	706571.5	0.1241
H10602	10	60	11 Periods	0 Overlap	824230.7	714035.7	0.1149
H10602	10	60	11 Periods	1 Overlap	827478.4	718119.1	0.1098
H10602	10	60	11 Periods	2 Overlap	809031.3	723083.9	0.1036
H10602	10	60	11 Periods	3 Overlap	806693.9	716496.3	0.1118
H10603	10	60	3 Periods	0 Overlap	579869.5	491198.3	0.1179
H10603	10	60	3 Periods	1 Overlap	571093	526817.8	0.0539
H10603	10	60	5 Periods	0 Overlap	627133.8	517194.1	0.0712
H10603	10	60	5 Periods	1 Overlap	570681.8	536748	0.0361
H10603	10	60	5 Periods	2 Overlap	558258.1	525412.9	0.0564
H10603	10	60	5 Periods	3 Overlap	558258.1	493736.5	0.1133
H10603	10	60	7 Periods	0 Overlap	575180.6	529906.8	0.0483
H10603	10	60	7 Periods	1 Overlap	564512	543856.9	0.0233
H10603	10	60	7 Periods	2 Overlap	576928.3	544827	0.0215
H10603	10	60	7 Periods	3 Overlap	557470.5	521899.1	0.0627
H10603	10	60	9 Periods	0 Overlap	582059.2	534722.4	0.0397
H10603	10	60	9 Periods	1 Overlap	563895.6	541164	0.0281
H10603	10	60	9 Periods	2 Overlap	556945.7	530496.8	0.0473
H10603	10	60	9 Periods	3 Overlap	556824.7	526119.9	0.0551
H10603	10	60	11 Periods	0 Overlap	561467.5	537444.9	0.0348
H10603	10	60	11 Periods	1 Overlap	566981.4	536221.3	0.037
H10603	10	60	11 Periods	2 Overlap	561919.9	530641.6	0.047
H10603	10	60	11 Periods	3 Overlap	558102.5	527091	0.0534
H10604	10	60	3 Periods	0 Overlap	671796	559532.3	0.1025
H10604	10	60	3 Periods	1 Overlap	641977	591661.5	0.051
H10604	10	60	5 Periods	0 Overlap	703309.8	589582.2	0.0543
H10604	10	60	5 Periods	1 Overlap	644500.3	605126.3	0.0294

H10604	10	60	5 Periods	2 Overlap	623461.1	588661.3	0.0558
H10604	10	60	5 Periods	3 Overlap	632322.1	560263.3	0.1014
H10604	10	60	7 Periods	0 Overlap	632556.4	598361.2	0.0403
H10604	10	60	7 Periods	1 Overlap	627294.7	612207.9	0.018
H10604	10	60	7 Periods	2 Overlap	649163.6	613004.9	0.0168
H10604	10	60	7 Periods	3 Overlap	632677.5	586408.4	0.0594
H10604	10	60	9 Periods	0 Overlap	718790.1	604190.7	0.0309
H10604	10	60	9 Periods	1 Overlap	637658.1	612144	0.0182
H10604	10	60	9 Periods	2 Overlap	637527.2	601887.3	0.0346
H10604	10	60	9 Periods	3 Overlap	633586.2	589072.4	0.0552
H10604	10	60	11 Periods	0 Overlap	635487.5	610797.6	0.0203
H10604	10	60	11 Periods	1 Overlap	636870.3	599565.3	0.0383
H10604	10	60	11 Periods	2 Overlap	636870.3	599565.3	0.0383
H10604	10	60	11 Periods	3 Overlap	633969.7	592622.5	0.0495
H021503	2	15	3 Periods	0 Overlap	12599.74	12580.69	0.0015
H021504	2	15	3 Periods	0 Overlap	1971.178	1618.366	0.179
H021505	2	15	3 Periods	0 Overlap	12575.63	10764.5	0.1009
H021506	2	15	3 Periods	0 Overlap	6809	6511.88	0.0436
H021507	2	15	3 Periods	0 Overlap	2958.24	2850.977	0.0363
H021508	2	15	3 Periods	0 Overlap	5513.9	4674.482	0.0793
H021509	2	15	3 Periods	0 Overlap	3489.6	3449.605	0.0115
H021510	2	15	3 Periods	0 Overlap	8098.613	6468.479	0.0893
H061503	6	15	3 Periods	0 Overlap	161449	149395.7	0.067
H061504	6	15	3 Periods	0 Overlap	366859	306975.9	0.1114
H061505	6	15	3 Periods	0 Overlap	85898.77	79558.28	0.0563
H061506	6	15	3 Periods	0 Overlap	365359.2	328718.4	0.0931
H061507	6	15	3 Periods	0 Overlap	140311.8	114558.2	0.1062
H061508	6	15	3 Periods	0 Overlap	96820.08	72596.31	0.1298
H061509	6	15	3 Periods	0 Overlap	314727.1	291158.1	0.0651
H061510	6	15	3 Periods	0 Overlap	410420	370715.2	0.0447
H101503	10	15	3 Periods	0 Overlap	414359.6	350487.4	0.0857

H101504	10	15	3 Periods	0 Overlap	367611.3	305145.8	0.0386
H101505	10	15	3 Periods	0 Overlap	519300.7	471973.7	0.0517
H101506	10	15	3 Periods	0 Overlap	122787.6	111830.6	0.075
H101507	10	15	3 Periods	0 Overlap	460243	418307	0.0665
H101508	10	15	3 Periods	0 Overlap	241664	225144.4	0.0586
H101509	10	15	3 Periods	0 Overlap	430815	372743.5	0.0453
H101510	10	15	3 Periods	0 Overlap	326520.8	283558.6	0.073
H023005	2	30	3 Periods	0 Overlap	12130.17	9908.291	0.1122
H023006	2	30	3 Periods	0 Overlap	18111.03	16517.23	0.0681
H023007	2	30	3 Periods	0 Overlap	2822.639	2130.656	0.1769
H023008	2	30	3 Periods	0 Overlap	17895.25	15492.26	0.0957
H023009	2	30	3 Periods	0 Overlap	4672.604	4432.924	0.0425
H023010	2	30	3 Periods	0 Overlap	22534.21	22137.6	0.0126
H063005	6	30	3 Periods	0 Overlap	220820.9	180495.2	0.0759
H063006	6	30	3 Periods	0 Overlap	198098.3	110209.5	0.0653
H063007	6	30	3 Periods	0 Overlap	176262.1	114361.1	0.0967
H063008	6	30	3 Periods	0 Overlap	328078.9	259495.7	0.1583
H063009	6	30	3 Periods	0 Overlap	139659.4	87999.42	0.0614
H063010	6	30	3 Periods	0 Overlap	287116.8	230179.9	0.1444
H103005	10	30	3 Periods	0 Overlap	721599	527987.9	0.1396
H103006	10	30	3 Periods	0 Overlap	467517.2	410817.4	0.0497
H103007	10	30	3 Periods	0 Overlap	644263	440350.4	0.122
H103008	10	30	3 Periods	0 Overlap	388073.8	335864.8	0.0607
H103009	10	30	3 Periods	0 Overlap	772716.5	655968.1	0.1078
H103010	10	30	3 Periods	0 Overlap	573716.6	341228.5	0.1604
H026005	2	60	3 Periods	0 Overlap	136692.5	132618	0.0298
H026006	2	60	3 Periods	0 Overlap	113428.4	107443.8	0.0308
H026007	2	60	3 Periods	0 Overlap	77015.14	69124.22	0.0838
H026008	2	60	3 Periods	0 Overlap	193743.6	189516	0.014
H026009	2	60	3 Periods	0 Overlap	44820.18	41637.85	0.0404
H026010	2	60	3 Periods	0 Overlap	116989.4	108229.7	0.0691

H066005	6	60	3 Periods	0 Overlap	512550.3	379668.6	0.1387
H066006	6	60	3 Periods	0 Overlap	406343.8	235151.8	0.3163
H066007	6	60	3 Periods	0 Overlap	477863.8	322317.2	0.2272
H066008	6	60	3 Periods	0 Overlap	228028.6	191271.6	0.0853
H066009	6	60	3 Periods	0 Overlap	433941.6	339635.9	0.1037
H066010	6	60	3 Periods	0 Overlap	397118.3	319390.4	0.1223
H106005	10	60	3 Periods	0 Overlap	1704150	618794.6	0.1233
H106006	10	60	3 Periods	0 Overlap	652354.1	422375.8	0.0659
H106007	10	60	3 Periods	0 Overlap	952913.5	485059.3	0.0943
H106008	10	60	3 Periods	0 Overlap	1231989	586486.1	0.2302
H106009	10	60	3 Periods	0 Overlap	845598.6	544411.9	0.1843
H106010	10	60	3 Periods	0 Overlap	843894.4	532489.9	0.1087
H021503	2	15	3 Periods	1 Overlap	12599.74	12578.9	0.0017
H021504	2	15	3 Periods	1 Overlap	2442.471	1699.819	0.1377
H021505	2	15	3 Periods	1 Overlap	12432.83	11140.52	0.0695
H021506	2	15	3 Periods	1 Overlap	6809	6452.78	0.0523
H021507	2	15	3 Periods	1 Overlap	2958.24	2958.24	0
H021508	2	15	3 Periods	1 Overlap	5435.833	4802.472	0.0541
H021509	2	15	3 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	3 Periods	1 Overlap	7785.697	6565.656	0.0757
H061503	6	15	3 Periods	1 Overlap	160126.3	152259.1	0.0491
H061504	6	15	3 Periods	1 Overlap	359917.4	322006	0.0679
H061505	6	15	3 Periods	1 Overlap	90681.75	81391.68	0.0346
H061506	6	15	3 Periods	1 Overlap	374383	339159	0.0643
H061507	6	15	3 Periods	1 Overlap	139469.3	119007.7	0.0715
H061508	6	15	3 Periods	1 Overlap	85469.63	74076.03	0.112
H061509	6	15	3 Periods	1 Overlap	315148.2	296173	0.049
H061510	6	15	3 Periods	1 Overlap	391611.7	376561.8	0.0297
H101503	10	15	3 Periods	1 Overlap	383707.9	367919.2	0.0402
H101504	10	15	3 Periods	1 Overlap	324680.1	309730.4	0.0241
H101505	10	15	3 Periods	1 Overlap	499416.4	476703.9	0.0422

H101506	10	15	3 Periods	1 Overlap	122299.7	112806.9	0.0669
H101507	10	15	3 Periods	1 Overlap	448114.3	425421.7	0.0506
H101508	10	15	3 Periods	1 Overlap	240022.2	228229	0.0457
H101509	10	15	3 Periods	1 Overlap	398846.1	382885.8	0.0194
H101510	10	15	3 Periods	1 Overlap	308240.9	290047.1	0.0518
H023005	2	30	3 Periods	1 Overlap	11170.11	10381.46	0.0698
H023006	2	30	3 Periods	1 Overlap	18478.72	16277.35	0.0817
H023007	2	30	3 Periods	1 Overlap	2588.446	2172.623	0.1606
H023008	2	30	3 Periods	1 Overlap	17569.36	15614.37	0.0886
H023009	2	30	3 Periods	1 Overlap	4672.604	4475.132	0.0334
H023010	2	30	3 Periods	1 Overlap	22420.28	22140.86	0.0125
H063005	6	30	3 Periods	1 Overlap	196633.9	185029	0.0527
H063006	6	30	3 Periods	1 Overlap	118960.3	113773.3	0.0351
H063007	6	30	3 Periods	1 Overlap	129646.8	118047.8	0.0675
H063008	6	30	3 Periods	1 Overlap	313785.4	277271.1	0.1006
H063009	6	30	3 Periods	1 Overlap	96784.17	91901.86	0.0198
H063010	6	30	3 Periods	1 Overlap	278268.2	244287.1	0.092
H103005	10	30	3 Periods	1 Overlap	896291.8	545695.7	0.1107
H103006	10	30	3 Periods	1 Overlap	435371.1	413791.3	0.0428
H103007	10	30	3 Periods	1 Overlap	523144.3	457013.6	0.0888
H103008	10	30	3 Periods	1 Overlap	357562.6	341550.8	0.0448
H103009	10	30	3 Periods	1 Overlap	743536.3	672848.3	0.0848
H103010	10	30	3 Periods	1 Overlap	437789.3	362305.7	0.1085
H026005	2	60	3 Periods	1 Overlap	137281.1	132827	0.0283
H026006	2	60	3 Periods	1 Overlap	112338.1	107687.1	0.0286
H026007	2	60	3 Periods	1 Overlap	76287.08	71317.68	0.0547
H026008	2	60	3 Periods	1 Overlap	193119.9	189655.2	0.0133
H026009	2	60	3 Periods	1 Overlap	44750.35	41862.39	0.0352
H026010	2	60	3 Periods	1 Overlap	117710.9	112197.9	0.035
H066005	6	60	3 Periods	1 Overlap	453463.1	396283.1	0.101
H066006	6	60	3 Periods	1 Overlap	369527.7	248499.9	0.2775

H066007	6	60	3 Periods	1 Overlap	467078.7	344419.9	0.1742
H066008	6	60	3 Periods	1 Overlap	474410.3	199577.5	0.0455
H066009	6	60	3 Periods	1 Overlap	398624.8	347765.3	0.0823
H066010	6	60	3 Periods	1 Overlap	382448.1	327178.1	0.1009
H106005	10	60	3 Periods	1 Overlap	732243.3	613953.2	0.1302
H106006	10	60	3 Periods	1 Overlap	452180.5	407751.7	0.0983
H106007	10	60	3 Periods	1 Overlap	544198.9	480163.6	0.1034
H106008	10	60	3 Periods	1 Overlap	812382.1	582641	0.2353
H106009	10	60	3 Periods	1 Overlap	675274.4	545754.6	0.1823
H106010	10	60	3 Periods	1 Overlap	605429.9	518580.3	0.1319
H021503	2	15	3 Periods	2 Overlap	12599.74	12587.01	0.001
H021504	2	15	3 Periods	2 Overlap	1971.178	1820.054	0.0767
H021505	2	15	3 Periods	2 Overlap	13849.66	11380.25	0.0495
H021506	2	15	3 Periods	2 Overlap	6809	6549.118	0.0382
H021507	2	15	3 Periods	2 Overlap	2958.24	2958.24	0
H021508	2	15	3 Periods	2 Overlap	5588.967	4931.606	0.0287
H021509	2	15	3 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	3 Periods	2 Overlap	7103.005	6710.533	0.0553
H061503	6	15	3 Periods	2 Overlap	161160.9	150638.7	0.0593
H061504	6	15	3 Periods	2 Overlap	353377.4	318117.8	0.0792
H061505	6	15	3 Periods	2 Overlap	90916.45	81561.65	0.0325
H061506	6	15	3 Periods	2 Overlap	362588.7	331966.7	0.0841
H061507	6	15	3 Periods	2 Overlap	140732.9	119557.6	0.0672
H061508	6	15	3 Periods	2 Overlap	83420.32	73755.11	0.1159
H061509	6	15	3 Periods	2 Overlap	311824.5	290490.5	0.0672
H061510	6	15	3 Periods	2 Overlap	403625.5	368001	0.0517
H101503	10	15	3 Periods	2 Overlap	387495.1	325590.9	0.1506
H101504	10	15	3 Periods	2 Overlap	317761.7	272396.8	0.1417
H101505	10	15	3 Periods	2 Overlap	498674.1	429057.4	0.1379
H101506	10	15	3 Periods	2 Overlap	120895.1	89926.11	0.2562
H101507	10	15	3 Periods	2 Overlap	457164.8	358799.6	0.1993

H101508	10	15	3 Periods	2 Overlap	239161.3	186807.7	0.2189
H101509	10	15	3 Periods	2 Overlap	394168.3	341332.9	0.1258
H101510	10	15	3 Periods	2 Overlap	315693.1	235624.2	0.2297
H023005	2	30	3 Periods	2 Overlap	11170.11	10573.07	0.0526
H023006	2	30	3 Periods	2 Overlap	18474.9	16578.91	0.0647
H023007	2	30	3 Periods	2 Overlap	2841.463	2260.653	0.1266
H023008	2	30	3 Periods	2 Overlap	17564.59	15791.62	0.0783
H023009	2	30	3 Periods	2 Overlap	4672.604	4476.577	0.0331
H023010	2	30	3 Periods	2 Overlap	22420.28	22142.38	0.0124
H063005	6	30	3 Periods	2 Overlap	195745.6	175207.6	0.103
H063006	6	30	3 Periods	2 Overlap	118436.8	109567.4	0.0708
H063007	6	30	3 Periods	2 Overlap	127295.6	115502.8	0.0877
H063008	6	30	3 Periods	2 Overlap	316692.4	258693	0.1609
H063009	6	30	3 Periods	2 Overlap	93757.58	81119.62	0.1348
H063010	6	30	3 Periods	2 Overlap	271757.6	226440.5	0.1583
H103005	10	30	3 Periods	2 Overlap	1527751	310903.2	0.4933
H103006	10	30	3 Periods	2 Overlap	780020.2	268314.5	0.3794
H103007	10	30	3 Periods	2 Overlap	519366.5	195988.2	0.6092
H103008	10	30	3 Periods	2 Overlap	1268710	181512.7	0.4924
H103009	10	30	3 Periods	2 Overlap	736673.4	328051.4	0.5538
H103010	10	30	3 Periods	2 Overlap	420119.5	189417.1	0.5339
H026005	2	60	3 Periods	2 Overlap	136692.5	132968.7	0.0272
H026006	2	60	3 Periods	2 Overlap	113564.8	107817.6	0.0274
H026007	2	60	3 Periods	2 Overlap	75781.79	72394.75	0.0404
H026008	2	60	3 Periods	2 Overlap	193135.6	189760.2	0.0127
H026009	2	60	3 Periods	2 Overlap	44337.77	42112.71	0.0295
H026010	2	60	3 Periods	2 Overlap	116269.4	112448	0.0329
H066005	6	60	3 Periods	2 Overlap	460838.7	250176.7	0.4324
H066006	6	60	3 Periods	2 Overlap	378808	125882.2	0.634
H066007	6	60	3 Periods	2 Overlap	471896.9	201516.4	0.5168
H066008	6	60	3 Periods	2 Overlap	1090095	122712.6	0.4131

H066009	6	60	3 Periods	2 Overlap	2074623	215306.5	0.4318
H066010	6	60	3 Periods	2 Overlap	1641979	173638.9	0.5228
H106005	10	60	3 Periods	2 Overlap	3688099	297097.5	0.5791
H106006	10	60	3 Periods	2 Overlap	1764741	252243.5	0.4422
H106007	10	60	3 Periods	2 Overlap	1413544	281963.1	0.4735
H106008	10	60	3 Periods	2 Overlap	2542830	249791.6	0.6721
H106009	10	60	3 Periods	2 Overlap	2708732	285792.5	0.5718
H106010	10	60	3 Periods	2 Overlap	2313667	282776.6	0.5267
H021503	2	15	5 Periods	0 Overlap	12599.74	12592.19	0.0006
H021504	2	15	5 Periods	0 Overlap	1971.178	1854.057	0.0594
H021505	2	15	5 Periods	0 Overlap	12010.89	11574.53	0.0333
H021506	2	15	5 Periods	0 Overlap	7379.9	6539.417	0.0396
H021507	2	15	5 Periods	0 Overlap	2958.24	2784.749	0.0586
H021508	2	15	5 Periods	0 Overlap	5435.833	4979.191	0.0193
H021509	2	15	5 Periods	0 Overlap	3489.6	3446.266	0.0124
H021510	2	15	5 Periods	0 Overlap	7103.005	7049.595	0.0075
H061503	6	15	5 Periods	0 Overlap	160539.4	155357.3	0.0298
H061504	6	15	5 Periods	0 Overlap	360129.3	326440.8	0.0551
H061505	6	15	5 Periods	0 Overlap	91306.09	81601.35	0.0321
H061506	6	15	5 Periods	0 Overlap	371847.7	341273	0.0584
H061507	6	15	5 Periods	0 Overlap	129217.8	124274.6	0.0304
H061508	6	15	5 Periods	0 Overlap	102853.9	74534.63	0.1065
H061509	6	15	5 Periods	0 Overlap	312943.5	292549.6	0.0606
H061510	6	15	5 Periods	0 Overlap	398993.7	380334.9	0.0199
H101503	10	15	5 Periods	0 Overlap	389018	364457.9	0.0492
H101504	10	15	5 Periods	0 Overlap	334139.3	310402.7	0.022
H101505	10	15	5 Periods	0 Overlap	510698.6	480507.9	0.0345
H101506	10	15	5 Periods	0 Overlap	122481.7	114810.3	0.0503
H101507	10	15	5 Periods	0 Overlap	496306.1	426659.8	0.0479
H101508	10	15	5 Periods	0 Overlap	256774.7	229396.5	0.0408
H101509	10	15	5 Periods	0 Overlap	426518.4	377654.1	0.0328

H101510	10	15	5 Periods	0 Overlap	319693.1	291732.5	0.0463
H023005	2	30	5 Periods	0 Overlap	11745.94	10404.22	0.0677
H023006	2	30	5 Periods	0 Overlap	17933.19	16757.23	0.0546
H023007	2	30	5 Periods	0 Overlap	2633.183	2279.79	0.1192
H023008	2	30	5 Periods	0 Overlap	17836.69	15903.16	0.0717
H023009	2	30	5 Periods	0 Overlap	4672.604	4507.238	0.0265
H023010	2	30	5 Periods	0 Overlap	22715.55	22145.71	0.0122
H063005	6	30	5 Periods	0 Overlap	205238.3	189056.6	0.0321
H063006	6	30	5 Periods	0 Overlap	141244	113942.3	0.0337
H063007	6	30	5 Periods	0 Overlap	128377.6	123673.5	0.0231
H063008	6	30	5 Periods	0 Overlap	336399.9	279626.7	0.093
H063009	6	30	5 Periods	0 Overlap	110310.2	91411.69	0.025
H063010	6	30	5 Periods	0 Overlap	290598.8	246728.1	0.0829
H103005	10	30	5 Periods	0 Overlap	654238.5	540118	0.1198
H103006	10	30	5 Periods	0 Overlap	444407.2	417600.1	0.034
H103007	10	30	5 Periods	0 Overlap	540776.3	456064.6	0.0907
H103008	10	30	5 Periods	0 Overlap	362141.2	345684.6	0.0332
H103009	10	30	5 Periods	0 Overlap	769223.5	684841.5	0.0685
H103010	10	30	5 Periods	0 Overlap	427555.6	356665.2	0.1224
H026005	2	60	5 Periods	0 Overlap	137840.4	133179.8	0.0257
H026006	2	60	5 Periods	0 Overlap	114311.9	107700.9	0.0285
H026007	2	60	5 Periods	0 Overlap	75781.79	71402.59	0.0536
H026008	2	60	5 Periods	0 Overlap	192208.3	189834.8	0.0123
H026009	2	60	5 Periods	0 Overlap	44942.65	42295.09	0.0253
H026010	2	60	5 Periods	0 Overlap	117138.1	114091.1	0.0187
H066005	6	60	5 Periods	0 Overlap	446094.8	396459.6	0.1006
H066006	6	60	5 Periods	0 Overlap	360957.1	260218.4	0.2434
H066007	6	60	5 Periods	0 Overlap	448128.8	342787	0.1781
H066008	6	60	5 Periods	0 Overlap	229421.1	198406.4	0.0511
H066009	6	60	5 Periods	0 Overlap	390583.3	356018.8	0.0605
H066010	6	60	5 Periods	0 Overlap	383876	336355.8	0.0757

H106005	10	60	5 Periods	0 Overlap	803548.4	642122.3	0.0903
H106006	10	60	5 Periods	0 Overlap	626241.2	422822.4	0.0649
H106007	10	60	5 Periods	0 Overlap	663561.5	493857.1	0.0779
H106008	10	60	5 Periods	0 Overlap	1068370	613198.7	0.1951
H106009	10	60	5 Periods	0 Overlap	858903.4	561314	0.1589
H106010	10	60	5 Periods	0 Overlap	636980.2	537259.2	0.1007
H021503	2	15	7 Periods	0 Overlap	12599.74	12597.86	0.0001
H021504	2	15	7 Periods	0 Overlap	2015.159	1849.228	0.0619
H021505	2	15	7 Periods	0 Overlap	12471.54	11475.77	0.0415
H021506	2	15	7 Periods	0 Overlap	7339.5	6750.003	0.0087
H021507	2	15	7 Periods	0 Overlap	2964.6	2916.207	0.0142
H021508	2	15	7 Periods	0 Overlap	5513.9	4996.141	0.016
H021509	2	15	7 Periods	0 Overlap	3504.2	3455.143	0.0099
H021510	2	15	7 Periods	0 Overlap	7103.005	6981.917	0.017
H061503	6	15	7 Periods	0 Overlap	162544.8	155905.2	0.0264
H061504	6	15	7 Periods	0 Overlap	349970	335622.9	0.0285
H061505	6	15	7 Periods	0 Overlap	107659.5	83978.71	0.0039
H061506	6	15	7 Periods	0 Overlap	363106.4	347229.6	0.042
H061507	6	15	7 Periods	0 Overlap	128173.1	125449	0.0213
H061508	6	15	7 Periods	0 Overlap	90428.12	77117.58	0.0756
H061509	6	15	7 Periods	0 Overlap	316730.2	300149.8	0.0362
H061510	6	15	7 Periods	0 Overlap	406413	385243.1	0.0073
H101503	10	15	7 Periods	0 Overlap	392060.9	364398.5	0.0494
H101504	10	15	7 Periods	0 Overlap	320402.9	312932.4	0.014
H101505	10	15	7 Periods	0 Overlap	510440.8	492152.4	0.0111
H101506	10	15	7 Periods	0 Overlap	121105.3	117687.1	0.0265
H101507	10	15	7 Periods	0 Overlap	459718.6	431462.4	0.0372
H101508	10	15	7 Periods	0 Overlap	239622.8	234406.4	0.0199
H101509	10	15	7 Periods	0 Overlap	391314.9	386481.5	0.0101
H101510	10	15	7 Periods	0 Overlap	320670.4	294715	0.0366
H023005	2	30	7 Periods	0 Overlap	11159.96	10366.55	0.0711

H023006	2	30	7 Periods	0 Overlap	18305.39	16684.83	0.0587
H023007	2	30	7 Periods	0 Overlap	2673.108	2346.466	0.0935
H023008	2	30	7 Periods	0 Overlap	17517.74	16057.06	0.0628
H023009	2	30	7 Periods	0 Overlap	4629.885	4497.856	0.0285
H023010	2	30	7 Periods	0 Overlap	22568.52	22146.83	0.0122
H063005	6	30	7 Periods	0 Overlap	195750.3	193558.3	0.009
H063006	6	30	7 Periods	0 Overlap	125023.8	115673.4	0.019
H063007	6	30	7 Periods	0 Overlap	127997.8	124023.1	0.0204
H063008	6	30	7 Periods	0 Overlap	316386.2	288254	0.065
H063009	6	30	7 Periods	0 Overlap	96214.97	92597.02	0.0124
H063010	6	30	7 Periods	0 Overlap	283959.8	249581.9	0.0723
H103005	10	30	7 Periods	0 Overlap	699673.8	551001.6	0.102
H103006	10	30	7 Periods	0 Overlap	432642.7	418757.6	0.0314
H103007	10	30	7 Periods	0 Overlap	543539.6	457276.5	0.0883
H103008	10	30	7 Periods	0 Overlap	388381.9	345370.6	0.0341
H103009	10	30	7 Periods	0 Overlap	742563.9	684222	0.0694
H103010	10	30	7 Periods	0 Overlap	501723.1	361450.6	0.1106
H026005	2	60	7 Periods	0 Overlap	137212.9	133266.4	0.0251
H026006	2	60	7 Periods	0 Overlap	112983.4	108293.6	0.0231
H026007	2	60	7 Periods	0 Overlap	76753.86	73315.06	0.0282
H026008	2	60	7 Periods	0 Overlap	193287.6	189881.5	0.0121
H026009	2	60	7 Periods	0 Overlap	43545.93	41630.74	0.0406
H026010	2	60	7 Periods	0 Overlap	117587.7	114334.3	0.0166
H066005	6	60	7 Periods	0 Overlap	444153.9	400205.9	0.0921
H066006	6	60	7 Periods	0 Overlap	360875.4	265090.7	0.2292
H066007	6	60	7 Periods	0 Overlap	448224.3	347911.5	0.1658
H066008	6	60	7 Periods	0 Overlap	215809	201786.4	0.035
H066009	6	60	7 Periods	0 Overlap	382389.4	345852.4	0.0873
H066010	6	60	7 Periods	0 Overlap	376274.7	336751	0.0746
H106005	10	60	7 Periods	0 Overlap	751639.2	638394.5	0.0956
H106006	10	60	7 Periods	0 Overlap	516048.4	422841.7	0.0649

H106007	10	60	7 Periods	0 Overlap	602446.1	507361.1	0.0527
H106008	10	60	7 Periods	0 Overlap	828453.4	622132.5	0.1834
H106009	10	60	7 Periods	0 Overlap	742012.8	575812.1	0.1372
H106010	10	60	7 Periods	0 Overlap	626645.3	539687.8	0.0966
H021503	2	15	9 Periods	0 Overlap	12599.74	12589.91	0.0008
H021504	2	15	9 Periods	0 Overlap	1971.178	1947.643	0.0119
H021505	2	15	9 Periods	0 Overlap	11972.81	11972.81	0
H021506	2	15	9 Periods	0 Overlap	7517.5	6777.08	0.0047
H021507	2	15	9 Periods	0 Overlap	2964.6	2906.819	0.0174
H021508	2	15	9 Periods	0 Overlap	5360.767	5038.431	0.0077
H021509	2	15	9 Periods	0 Overlap	3489.6	3486.892	0.0008
H021510	2	15	9 Periods	0 Overlap	7103.005	6998.546	0.0147
H061503	6	15	9 Periods	0 Overlap	161553.6	156715.7	0.0213
H061504	6	15	9 Periods	0 Overlap	360470	338903.5	0.019
H061505	6	15	9 Periods	0 Overlap	84393.46	83952.92	0.0042
H061506	6	15	9 Periods	0 Overlap	367015.5	354631.1	0.0216
H061507	6	15	9 Periods	0 Overlap	129089.8	126167.9	0.0156
H061508	6	15	9 Periods	0 Overlap	85792	77852.59	0.0667
H061509	6	15	9 Periods	0 Overlap	313757.4	303713.4	0.0248
H061510	6	15	9 Periods	0 Overlap	388139.3	387440	0.0016
H101503	10	15	9 Periods	0 Overlap	387525.1	368136.6	0.0396
H101504	10	15	9 Periods	0 Overlap	317826.2	312972.5	0.0139
H101505	10	15	9 Periods	0 Overlap	580757.6	490738.2	0.014
H101506	10	15	9 Periods	0 Overlap	121876.5	119070.1	0.0151
H101507	10	15	9 Periods	0 Overlap	460178.6	438532.9	0.0214
H101508	10	15	9 Periods	0 Overlap	240279.6	235146.1	0.0168
H101509	10	15	9 Periods	0 Overlap	391184.5	388127.9	0.0059
H101510	10	15	9 Periods	0 Overlap	310953.8	295533.1	0.0339
H023005	2	30	9 Periods	0 Overlap	11159.96	10977.03	0.0164
H023006	2	30	9 Periods	0 Overlap	18506.67	16696.02	0.0581
H023007	2	30	9 Periods	0 Overlap	2878.564	2343.892	0.0945

H023008	2	30	9 Periods	0 Overlap	17554.76	15994.25	0.0664
H023009	2	30	9 Periods	0 Overlap	4672.604	4564.884	0.014
H023010	2	30	9 Periods	0 Overlap	22715.55	22146.17	0.0122
H063005	6	30	9 Periods	0 Overlap	196021.9	193208.5	0.0108
H063006	6	30	9 Periods	0 Overlap	141094	115513.1	0.0204
H063007	6	30	9 Periods	0 Overlap	231725.3	124360.9	0.0177
H063008	6	30	9 Periods	0 Overlap	324738.4	287396.6	0.0678
H063009	6	30	9 Periods	0 Overlap	94798.62	92664.75	0.0117
H063010	6	30	9 Periods	0 Overlap	275416.2	247048.3	0.0817
H103005	10	30	9 Periods	0 Overlap	693118.5	556696.9	0.0928
H103006	10	30	9 Periods	0 Overlap	437547	417868.5	0.0334
H103007	10	30	9 Periods	0 Overlap	506539.6	462640.3	0.0776
H103008	10	30	9 Periods	0 Overlap	357895.3	345864.4	0.0327
H103009	10	30	9 Periods	0 Overlap	737166.3	689160	0.0627
H103010	10	30	9 Periods	0 Overlap	440609.2	365650.6	0.1003
H026005	2	60	9 Periods	0 Overlap	138725.4	133659.1	0.0222
H026006	2	60	9 Periods	0 Overlap	114355.4	108294	0.0231
H026007	2	60	9 Periods	0 Overlap	77689.92	73245.9	0.0291
H026008	2	60	9 Periods	0 Overlap	193304	190127.3	0.0108
H026009	2	60	9 Periods	0 Overlap	44305.5	42393.11	0.023
H026010	2	60	9 Periods	0 Overlap	117310.3	114362.7	0.0164
H066005	6	60	9 Periods	0 Overlap	444376.2	398679.3	0.0955
H066006	6	60	9 Periods	0 Overlap	350696.4	263965.1	0.2325
H066007	6	60	9 Periods	0 Overlap	459505.7	344337.8	0.1744
H066008	6	60	9 Periods	0 Overlap	212523.1	202385.6	0.0321
H066009	6	60	9 Periods	0 Overlap	384589.3	352299.4	0.0703
H066010	6	60	9 Periods	0 Overlap	374019.7	337624.4	0.0722
H106005	10	60	9 Periods	0 Overlap	740895.4	640941.7	0.0919
H106006	10	60	9 Periods	0 Overlap	492466	424157.9	0.062
H106007	10	60	9 Periods	0 Overlap	551473	507890.3	0.0517
H106009	10	60	9 Periods	0 Overlap	700289.8	572502.3	0.1422

H106010	10	60	9 Periods	0 Overlap	622100.7	543074.7	0.0909
H021503	2	15	11 Periods	0 Overlap	12599.74	12593.42	0.0005
H021504	2	15	11 Periods	0 Overlap	1971.178	1910.872	0.0306
H021505	2	15	11 Periods	0 Overlap	11972.81	11912.64	0.005
H021506	2	15	11 Periods	0 Overlap	6809	6608.781	0.0294
H021507	2	15	11 Periods	0 Overlap	2964.6	2920.642	0.0127
H021509	2	15	11 Periods	0 Overlap	3489.6	3454.884	0.0099
H021510	2	15	11 Periods	0 Overlap	7103.005	6744.134	0.0505
H061503	6	15	11 Periods	0 Overlap	161433.9	158527.3	0.01
H061504	6	15	11 Periods	0 Overlap	350496.8	341705.5	0.0109
H061505	6	15	11 Periods	0 Overlap	84427.81	83893.71	0.0049
H061506	6	15	11 Periods	0 Overlap	363923.5	355190.2	0.02
H061507	6	15	11 Periods	0 Overlap	128390.6	127176.9	0.0078
H061508	6	15	11 Periods	0 Overlap	88811.76	79724.45	0.0443
H061509	6	15	11 Periods	0 Overlap	315832.7	306558.7	0.0156
H061510	6	15	11 Periods	0 Overlap	408607.6	387568.3	0.0013
H101503	10	15	11 Periods	0 Overlap	386823	368365.5	0.039
H101504	10	15	11 Periods	0 Overlap	318214.6	312941	0.014
H101505	10	15	11 Periods	0 Overlap	499102.2	484494.9	0.0265
H101506	10	15	11 Periods	0 Overlap	121144.1	119883.1	0.0084
H101507	10	15	11 Periods	0 Overlap	456234.4	436662.5	0.0256
H101508	10	15	11 Periods	0 Overlap	240096	235605.8	0.0149
H101509	10	15	11 Periods	0 Overlap	391040.9	387159.7	0.0084
H101510	10	15	11 Periods	0 Overlap	306653.2	296899.8	0.0294
H023005	2	30	11 Periods	0 Overlap	11159.96	11127.94	0.0029
H023006	2	30	11 Periods	0 Overlap	17826.16	16580.29	0.0646
H023007	2	30	11 Periods	0 Overlap	2588.446	2492.732	0.037
H023008	2	30	11 Periods	0 Overlap	17621.58	16393.16	0.0431
H023009	2	30	11 Periods	0 Overlap	4629.885	4586.584	0.0094
H023010	2	30	11 Periods	0 Overlap	22715.55	22149.03	0.0121
H063005	6	30	11 Periods	0 Overlap	196097	193089.3	0.0114

H063006	6	30	11 Periods	0 Overlap	132999.7	115051.1	0.0243
H063007	6	30	11 Periods	0 Overlap	140973.1	125118.2	0.0117
H063008	6	30	11 Periods	0 Overlap	311796.6	284364.9	0.0776
H063009	6	30	11 Periods	0 Overlap	97789.12	92832.93	0.0099
H063010	6	30	11 Periods	0 Overlap	287921.1	247995.9	0.0782
H103005	10	30	11 Periods	0 Overlap	629723.7	562211.8	0.0838
H103006	10	30	11 Periods	0 Overlap	437224.1	417626	0.034
H103007	10	30	11 Periods	0 Overlap	528002	469613.7	0.0637
H103008	10	30	11 Periods	0 Overlap	361586.8	347648.3	0.0277
H103009	10	30	11 Periods	0 Overlap	735876.1	689313	0.0624
H103010	10	30	11 Periods	0 Overlap	430691	362181.2	0.1088
H026005	2	60	11 Periods	0 Overlap	137974.3	133680.4	0.022
H026006	2	60	11 Periods	0 Overlap	112200.9	108210.8	0.0239
H026007	2	60	11 Periods	0 Overlap	78408.36	73696.67	0.0232
H026008	2	60	11 Periods	0 Overlap	192983.6	190127.6	0.0108
H026009	2	60	11 Periods	0 Overlap	45174.75	42532.47	0.0198
H026010	2	60	11 Periods	0 Overlap	117310.3	114457.2	0.0156
H066005	6	60	11 Periods	0 Overlap	442241	402245	0.0874
H066006	6	60	11 Periods	0 Overlap	356827.9	256409.7	0.2545
H066007	6	60	11 Periods	0 Overlap	423134.2	342608.9	0.1785
H066008	6	60	11 Periods	0 Overlap	210832.1	202225.6	0.0329
H066009	6	60	11 Periods	0 Overlap	381716.8	352152.6	0.0707
H066010	6	60	11 Periods	0 Overlap	366867.6	337955.3	0.0713
H106005	10	60	11 Periods	0 Overlap	759950.6	641631.2	0.091
H106006	10	60	11 Periods	0 Overlap	476727.3	426936.3	0.0558
H106007	10	60	11 Periods	0 Overlap	591006.6	508016.6	0.0514
H106008	10	60	11 Periods	0 Overlap	809189	632588.4	0.1697
H106009	10	60	11 Periods	0 Overlap	732877	578752	0.1328
H106010	10	60	11 Periods	0 Overlap	621413.5	541255.6	0.094
H021503	2	15	3 Periods	1 Overlap	12599.74	12578.9	0.0017
H021504	2	15	3 Periods	1 Overlap	2442.471	1699.819	0.1377

H021505	2	15	3 Periods	1 Overlap	12432.83	11140.52	0.0695
H021506	2	15	3 Periods	1 Overlap	6809	6452.78	0.0523
H021507	2	15	3 Periods	1 Overlap	2958.24	2958.24	0
H021508	2	15	3 Periods	1 Overlap	5435.833	4802.472	0.0541
H021509	2	15	3 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	3 Periods	1 Overlap	7785.697	6565.656	0.0757
H061503	6	15	3 Periods	1 Overlap	160126.3	152259.1	0.0491
H061504	6	15	3 Periods	1 Overlap	359917.4	322006	0.0679
H061505	6	15	3 Periods	1 Overlap	90681.75	81391.68	0.0346
H061506	6	15	3 Periods	1 Overlap	374383	339159	0.0643
H061507	6	15	3 Periods	1 Overlap	139469.3	119007.7	0.0715
H061508	6	15	3 Periods	1 Overlap	85469.63	74076.03	0.112
H061509	6	15	3 Periods	1 Overlap	315148.2	296173	0.049
H061510	6	15	3 Periods	1 Overlap	391611.7	376561.8	0.0297
H101503	10	15	3 Periods	1 Overlap	383707.9	367919.2	0.0402
H101504	10	15	3 Periods	1 Overlap	324680.1	309730.4	0.0241
H101505	10	15	3 Periods	1 Overlap	499416.4	476703.9	0.0422
H101506	10	15	3 Periods	1 Overlap	122299.7	112806.9	0.0669
H101507	10	15	3 Periods	1 Overlap	448114.3	425421.7	0.0506
H101508	10	15	3 Periods	1 Overlap	240022.2	228229	0.0457
H101509	10	15	3 Periods	1 Overlap	398846.1	382885.8	0.0194
H101510	10	15	3 Periods	1 Overlap	308240.9	290047.1	0.0518
H023005	2	30	3 Periods	1 Overlap	11170.11	10381.46	0.0698
H023006	2	30	3 Periods	1 Overlap	18478.72	16277.35	0.0817
H023007	2	30	3 Periods	1 Overlap	2588.446	2172.623	0.1606
H023008	2	30	3 Periods	1 Overlap	17569.36	15614.37	0.0886
H023009	2	30	3 Periods	1 Overlap	4672.604	4475.132	0.0334
H023010	2	30	3 Periods	1 Overlap	22420.28	22140.86	0.0125
H063005	6	30	3 Periods	1 Overlap	196633.9	185029	0.0527
H063006	6	30	3 Periods	1 Overlap	118960.3	113773.3	0.0351
H063007	6	30	3 Periods	1 Overlap	129646.8	118047.8	0.0675

H063008	6	30	3 Periods	1 Overlap	313785.4	277271.1	0.1006
H063009	6	30	3 Periods	1 Overlap	96784.17	91901.86	0.0198
H063010	6	30	3 Periods	1 Overlap	278268.2	244287.1	0.092
H103005	10	30	3 Periods	1 Overlap	896291.8	545695.7	0.1107
H103006	10	30	3 Periods	1 Overlap	435371.1	413791.3	0.0428
H103007	10	30	3 Periods	1 Overlap	523144.3	457013.6	0.0888
H103008	10	30	3 Periods	1 Overlap	357562.6	341550.8	0.0448
H103009	10	30	3 Periods	1 Overlap	743536.3	672848.3	0.0848
H103010	10	30	3 Periods	1 Overlap	437789.3	362305.7	0.1085
H026005	2	60	3 Periods	1 Overlap	137281.1	132827	0.0283
H026006	2	60	3 Periods	1 Overlap	112338.1	107687.1	0.0286
H026007	2	60	3 Periods	1 Overlap	76287.08	71317.68	0.0547
H026008	2	60	3 Periods	1 Overlap	193119.9	189655.2	0.0133
H026009	2	60	3 Periods	1 Overlap	44750.35	41862.39	0.0352
H026010	2	60	3 Periods	1 Overlap	117710.9	112197.9	0.035
H066005	6	60	3 Periods	1 Overlap	453463.1	396283.1	0.101
H066006	6	60	3 Periods	1 Overlap	369527.7	248499.9	0.2775
H066007	6	60	3 Periods	1 Overlap	467078.7	344419.9	0.1742
H066008	6	60	3 Periods	1 Overlap	474410.3	199577.5	0.0455
H066009	6	60	3 Periods	1 Overlap	398624.8	347765.3	0.0823
H066010	6	60	3 Periods	1 Overlap	382448.1	327178.1	0.1009
H106005	10	60	3 Periods	1 Overlap	732243.3	613953.2	0.1302
H106006	10	60	3 Periods	1 Overlap	452180.5	407751.7	0.0983
H106007	10	60	3 Periods	1 Overlap	544198.9	480163.6	0.1034
H106008	10	60	3 Periods	1 Overlap	812382.1	582641	0.2353
H106009	10	60	3 Periods	1 Overlap	675274.4	545754.6	0.1823
H106010	10	60	3 Periods	1 Overlap	605429.9	518580.3	0.1319
H021503	2	15	5 Periods	1 Overlap	12599.74	12580.69	0.0015
H021504	2	15	5 Periods	1 Overlap	1984.283	1895.519	0.0384
H021505	2	15	5 Periods	1 Overlap	12887.35	11915.5	0.0048
H021506	2	15	5 Periods	1 Overlap	6809	6740.267	0.0101

H021507	2	15	5 Periods	1 Overlap	2958.24	2958.24	0
H021508	2	15	5 Periods	1 Overlap	5360.767	4881.706	0.0385
H021509	2	15	5 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	5 Periods	1 Overlap	7738.749	6673.448	0.0605
H061503	6	15	5 Periods	1 Overlap	166626.7	155725.7	0.0275
H061504	6	15	5 Periods	1 Overlap	353954.6	335022	0.0303
H061505	6	15	5 Periods	1 Overlap	85257.44	82267.47	0.0242
H061506	6	15	5 Periods	1 Overlap	363706.1	348356.9	0.0389
H061507	6	15	5 Periods	1 Overlap	129441.8	124716.6	0.027
H061508	6	15	5 Periods	1 Overlap	85436.01	76467.6	0.0833
H061509	6	15	5 Periods	1 Overlap	318570.3	300909.7	0.0338
H061510	6	15	5 Periods	1 Overlap	395035.1	385354.7	0.007
H101503	10	15	5 Periods	1 Overlap	383430.5	366375.4	0.0442
H101504	10	15	5 Periods	1 Overlap	317992.1	312308.5	0.016
H101505	10	15	5 Periods	1 Overlap	500143.4	483694.4	0.0281
H101506	10	15	5 Periods	1 Overlap	121430.8	115387.6	0.0456
H101507	10	15	5 Periods	1 Overlap	448114.3	430698.4	0.0389
H101508	10	15	5 Periods	1 Overlap	239987.2	230492	0.0362
H101509	10	15	5 Periods	1 Overlap	390968.6	383840.8	0.0169
H101510	10	15	5 Periods	1 Overlap	306910	291189.1	0.0481
H023005	2	30	5 Periods	1 Overlap	11170.11	10472.78	0.0616
H023006	2	30	5 Periods	1 Overlap	18352.59	16712.01	0.0572
H023007	2	30	5 Periods	1 Overlap	2588.446	2385.358	0.0785
H023008	2	30	5 Periods	1 Overlap	17332.79	16115	0.0594
H023009	2	30	5 Periods	1 Overlap	4629.885	4542.491	0.0189
H023010	2	30	5 Periods	1 Overlap	22559.91	22144.87	0.0123
H063005	6	30	5 Periods	1 Overlap	196807.3	191633.8	0.0189
H063006	6	30	5 Periods	1 Overlap	117914.2	116464.1	0.0123
H063007	6	30	5 Periods	1 Overlap	126893.1	125759.4	0.0066
H063008	6	30	5 Periods	1 Overlap	311541.5	283857.6	0.0792
H063009	6	30	5 Periods	1 Overlap	93918.37	93056.64	0.0075

H063010	6	30	5 Periods	1 Overlap	273984.8	248101.1	0.0778
H103005	10	30	5 Periods	1 Overlap	624982.7	553361.6	0.0982
H103006	10	30	5 Periods	1 Overlap	433012.6	415122.8	0.0398
H103007	10	30	5 Periods	1 Overlap	506193.7	459602.3	0.0836
H103008	10	30	5 Periods	1 Overlap	360356.4	342340.8	0.0426
H103009	10	30	5 Periods	1 Overlap	735901	681410.5	0.0732
H103010	10	30	5 Periods	1 Overlap	407109	366809.3	0.0974
H026005	2	60	5 Periods	1 Overlap	137281.1	132977.2	0.0272
H026006	2	60	5 Periods	1 Overlap	112062.7	107951.4	0.0262
H026007	2	60	5 Periods	1 Overlap	76287.08	73014.74	0.0322
H026008	2	60	5 Periods	1 Overlap	193135.6	189822.1	0.0124
H026009	2	60	5 Periods	1 Overlap	44612.77	41979.37	0.0325
H026010	2	60	5 Periods	1 Overlap	119203.9	114157.6	0.0182
H066005	6	60	5 Periods	1 Overlap	442253.6	384323.6	0.1281
H066006	6	60	5 Periods	1 Overlap	360778.6	257873.9	0.2502
H066007	6	60	5 Periods	1 Overlap	448043.3	344258.2	0.1745
H066008	6	60	5 Periods	1 Overlap	225365.1	197823.8	0.0539
H066009	6	60	5 Periods	1 Overlap	391006	340869.2	0.1005
H066010	6	60	5 Periods	1 Overlap	375987.5	329274.7	0.0951
H106005	10	60	5 Periods	1 Overlap	714499.4	606799.2	0.1403
H106006	10	60	5 Periods	1 Overlap	456647.8	416875.1	0.0781
H106007	10	60	5 Periods	1 Overlap	536061.9	491210.2	0.0828
H106008	10	60	5 Periods	1 Overlap	761872.9	595975.3	0.2177
H106009	10	60	5 Periods	1 Overlap	685615.7	523536.5	0.2155
H106010	10	60	5 Periods	1 Overlap	603201.9	516886.9	0.1348
H021503	2	15	7 Periods	1 Overlap	12599.74	12592.52	0.0006
H021504	2	15	7 Periods	1 Overlap	1984.283	1873.34	0.0496
H021505	2	15	7 Periods	1 Overlap	12260.67	11618.95	0.0296
H021506	2	15	7 Periods	1 Overlap	6809	6808.203	0.0001
H021507	2	15	7 Periods	1 Overlap	2958.24	2958.24	0
H021508	2	15	7 Periods	1 Overlap	5513.9	4889.191	0.0371

H021509	2	15	7 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	7 Periods	1 Overlap	7103.005	6777.882	0.0458
H061503	6	15	7 Periods	1 Overlap	161859.4	156230.3	0.0243
H061504	6	15	7 Periods	1 Overlap	345807.3	338386.1	0.0205
H061505	6	15	7 Periods	1 Overlap	84566.51	84282.75	0.0003
H061506	6	15	7 Periods	1 Overlap	363322.1	352345.3	0.0279
H061507	6	15	7 Periods	1 Overlap	128390.6	125618.1	0.0199
H061508	6	15	7 Periods	1 Overlap	86151.7	77515.87	0.0708
H061509	6	15	7 Periods	1 Overlap	311423	303198.4	0.0264
H061510	6	15	7 Periods	1 Overlap	388299.8	386505.2	0.004
H101503	10	15	7 Periods	1 Overlap	383707.9	369012.5	0.0374
H101504	10	15	7 Periods	1 Overlap	318291.5	310173.7	0.0227
H101505	10	15	7 Periods	1 Overlap	497682.6	484646	0.0262
H101506	10	15	7 Periods	1 Overlap	120895.1	115435.5	0.0452
H101507	10	15	7 Periods	1 Overlap	448161.1	430065.4	0.0403
H101508	10	15	7 Periods	1 Overlap	239566.3	232114.9	0.0295
H101509	10	15	7 Periods	1 Overlap	390936	381429.1	0.0231
H101510	10	15	7 Periods	1 Overlap	317033.6	293637.2	0.0401
H023005	2	30	7 Periods	1 Overlap	11170.11	10759.4	0.0359
H023006	2	30	7 Periods	1 Overlap	17815.96	16889.35	0.0472
H023007	2	30	7 Periods	1 Overlap	2588.446	2494.6	0.0363
H023008	2	30	7 Periods	1 Overlap	17226.34	16473.75	0.0384
H023009	2	30	7 Periods	1 Overlap	4629.885	4570.341	0.0129
H023010	2	30	7 Periods	1 Overlap	22573.27	22148.7	0.0121
H063005	6	30	7 Periods	1 Overlap	195380.4	191447.5	0.0199
H063006	6	30	7 Periods	1 Overlap	118186.3	115091.5	0.0239
H063007	6	30	7 Periods	1 Overlap	126668.5	126024.6	0.0045
H063008	6	30	7 Periods	1 Overlap	313782.1	286247.5	0.0715
H063009	6	30	7 Periods	1 Overlap	95202.35	92825.36	0.0099
H063010	6	30	7 Periods	1 Overlap	272280.8	245965.9	0.0857
H103005	10	30	7 Periods	1 Overlap	620304.6	558193.2	0.0903

H103006	10	30	7 Periods	1 Overlap	432714.9	417458.9	0.0344
H103007	10	30	7 Periods	1 Overlap	506701.5	459800.6	0.0832
H103008	10	30	7 Periods	1 Overlap	360278.9	342470.1	0.0422
H103009	10	30	7 Periods	1 Overlap	735426	682389.9	0.0719
H103010	10	30	7 Periods	1 Overlap	415595.7	364903.6	0.1021
H026005	2	60	7 Periods	1 Overlap	138746.9	133416.4	0.024
H026006	2	60	7 Periods	1 Overlap	113543.2	108102.4	0.0249
H026007	2	60	7 Periods	1 Overlap	78123.06	73516.1	0.0256
H026008	2	60	7 Periods	1 Overlap	193136.2	189938.4	0.0118
H026009	2	60	7 Periods	1 Overlap	45223.13	42350.75	0.024
H026010	2	60	7 Periods	1 Overlap	117161.6	114391.2	0.0162
H066005	6	60	7 Periods	1 Overlap	445883.5	382101.4	0.1331
H066006	6	60	7 Periods	1 Overlap	343927.5	255696.9	0.2565
H066007	6	60	7 Periods	1 Overlap	430945.1	341485.9	0.1812
H066008	6	60	7 Periods	1 Overlap	209100.8	198252	0.0519
H066009	6	60	7 Periods	1 Overlap	388904.1	340813	0.1006
H066010	6	60	7 Periods	1 Overlap	378413.6	329257.5	0.0952
H106005	10	60	7 Periods	1 Overlap	715024.8	572866.4	0.1884
H106006	10	60	7 Periods	1 Overlap	464866.8	412538.1	0.0877
H106007	10	60	7 Periods	1 Overlap	535562.2	492623.6	0.0802
H106008	10	60	7 Periods	1 Overlap	767575.8	577426.2	0.2421
H106009	10	60	7 Periods	1 Overlap	667392	530457.6	0.2052
H106010	10	60	7 Periods	1 Overlap	597400.8	519210.5	0.1309
H021503	2	15	9 Periods	1 Overlap	12599.74	12589.91	0.0008
H021504	2	15	9 Periods	1 Overlap	1971.178	1971.178	0
H021505	2	15	9 Periods	1 Overlap	11972.81	11972.81	0
H021506	2	15	9 Periods	1 Overlap	6809	6809	0
H021507	2	15	9 Periods	1 Overlap	2958.24	2958.24	0
H021508	2	15	9 Periods	1 Overlap	5077.368	5077.368	0
H021509	2	15	9 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	9 Periods	1 Overlap	7103.005	6998.546	0.0147

H061503	6	15	9 Periods	1 Overlap	160977.2	156810.9	0.0207
H061504	6	15	9 Periods	1 Overlap	345700.9	341188.6	0.0124
H061505	6	15	9 Periods	1 Overlap	84354.29	84290.9	0.0002
H061506	6	15	9 Periods	1 Overlap	363785.6	356858.4	0.0154
H061507	6	15	9 Periods	1 Overlap	128306.6	126347.8	0.0142
H061508	6	15	9 Periods	1 Overlap	85423.69	78624.98	0.0575
H061509	6	15	9 Periods	1 Overlap	313757.4	304465.6	0.0223
H061510	6	15	9 Periods	1 Overlap	388139.3	387538.9	0.0014
H101503	10	15	9 Periods	1 Overlap	383334.6	368317.5	0.0392
H101504	10	15	9 Periods	1 Overlap	317457.4	311667.9	0.018
H101505	10	15	9 Periods	1 Overlap	497682.6	488430	0.0186
H101506	10	15	9 Periods	1 Overlap	121199.3	118437.3	0.0203
H101507	10	15	9 Periods	1 Overlap	453448.4	436103.1	0.0268
H101508	10	15	9 Periods	1 Overlap	239419.7	233400.7	0.0241
H101509	10	15	9 Periods	1 Overlap	390673.2	385542.5	0.0126
H101510	10	15	9 Periods	1 Overlap	307128.9	294476.8	0.0373
H023005	2	30	9 Periods	1 Overlap	11159.96	10779.79	0.0341
H023006	2	30	9 Periods	1 Overlap	17815.96	16949.87	0.0437
H023007	2	30	9 Periods	1 Overlap	2878.564	2424.158	0.0635
H023008	2	30	9 Periods	1 Overlap	17563.89	16470.51	0.0386
H023009	2	30	9 Periods	1 Overlap	4629.885	4605.328	0.0053
H023010	2	30	9 Periods	1 Overlap	22705.89	22146.28	0.0122
H063005	6	30	9 Periods	1 Overlap	195747.2	191838	0.0179
H063006	6	30	9 Periods	1 Overlap	118331	114891.4	0.0256
H063007	6	30	9 Periods	1 Overlap	126730.6	126099.5	0.0039
H063008	6	30	9 Periods	1 Overlap	312500.4	282620.3	0.0833
H063009	6	30	9 Periods	1 Overlap	93839.78	92919.43	0.0089
H063010	6	30	9 Periods	1 Overlap	276546.1	241086.6	0.1039
H103005	10	30	9 Periods	1 Overlap	620199.7	551687.7	0.1009
H103006	10	30	9 Periods	1 Overlap	433072	416837.8	0.0358
H103007	10	30	9 Periods	1 Overlap	506359.5	455166.6	0.0925

H103008	10	30	9 Periods	1 Overlap	360188.9	345212	0.0345
H103009	10	30	9 Periods	1 Overlap	739605.8	684941.4	0.0684
H103010	10	30	9 Periods	1 Overlap	414901.6	364643.9	0.1028
H026005	2	60	9 Periods	1 Overlap	138746.9	133432.2	0.0239
H026006	2	60	9 Periods	1 Overlap	111376.1	108302.1	0.0231
H026007	2	60	9 Periods	1 Overlap	76248.57	73617.37	0.0242
H026008	2	60	9 Periods	1 Overlap	193413.6	190061.1	0.0112
H026009	2	60	9 Periods	1 Overlap	43623.35	42171.74	0.0281
H026010	2	60	9 Periods	1 Overlap	117905.2	114485.1	0.0153
H066005	6	60	9 Periods	1 Overlap	440906.5	383773	0.1294
H066006	6	60	9 Periods	1 Overlap	353032.7	249619.1	0.2742
H066007	6	60	9 Periods	1 Overlap	421400.6	345430.6	0.1717
H066008	6	60	9 Periods	1 Overlap	210581.6	198272.3	0.0518
H066009	6	60	9 Periods	1 Overlap	382284.4	345707.6	0.0877
H066010	6	60	9 Periods	1 Overlap	363889.6	330973.3	0.0905
H106005	10	60	9 Periods	1 Overlap	714158.2	616943.6	0.1259
H106006	10	60	9 Periods	1 Overlap	468283	412526.9	0.0877
H106007	10	60	9 Periods	1 Overlap	535935.3	494024.3	0.0776
H106008	10	60	9 Periods	1 Overlap	775951.4	562204.3	0.2621
H106009	10	60	9 Periods	1 Overlap	674873.2	511589.3	0.2335
H106010	10	60	9 Periods	1 Overlap	610436.3	526698.7	0.1183
H021503	2	15	11 Periods	1 Overlap	12599.74	12593.42	0.0005
H021504	2	15	11 Periods	1 Overlap	1971.178	1971.178	0
H021505	2	15	11 Periods	1 Overlap	11972.81	11912.64	0.005
H021506	2	15	11 Periods	1 Overlap	6809	6612.781	0.0288
H021507	2	15	11 Periods	1 Overlap	2958.24	2958.24	0
H021509	2	15	11 Periods	1 Overlap	3489.6	3489.6	0
H021510	2	15	11 Periods	1 Overlap	7103.005	7103.005	0
H061503	6	15	11 Periods	1 Overlap	160667.8	158595	0.0096
H061504	6	15	11 Periods	1 Overlap	345472.7	337115.6	0.0242
H061505	6	15	11 Periods	1 Overlap	84399.84	84293.65	0.0001

H061506	6	15	11 Periods	1 Overlap	363903.5	347656.2	0.0408
H061507	6	15	11 Periods	1 Overlap	128502.8	127327.6	0.0066
H061508	6	15	11 Periods	1 Overlap	85803.11	79975.29	0.0413
H061509	6	15	11 Periods	1 Overlap	316418.4	307439.1	0.0128
H061510	6	15	11 Periods	1 Overlap	388139.3	387911.6	0.0004
H101503	10	15	11 Periods	1 Overlap	391698.8	368386.6	0.039
H101504	10	15	11 Periods	1 Overlap	317385.3	310807.2	0.0207
H101505	10	15	11 Periods	1 Overlap	499102.2	483839.7	0.0278
H101506	10	15	11 Periods	1 Overlap	121405	118416.9	0.0205
H101507	10	15	11 Periods	1 Overlap	451063.1	431716.7	0.0366
H101508	10	15	11 Periods	1 Overlap	239889.8	233265.2	0.0247
H101509	10	15	11 Periods	1 Overlap	390999.6	381418.9	0.0231
H101510	10	15	11 Periods	1 Overlap	306882.2	294897	0.036
H023005	2	30	11 Periods	1 Overlap	11159.96	11135.27	0.0022
H023006	2	30	11 Periods	1 Overlap	17943.56	17087.27	0.036
H023007	2	30	11 Periods	1 Overlap	2588.446	2566.882	0.0083
H023008	2	30	11 Periods	1 Overlap	17132.39	16511.39	0.0362
H023009	2	30	11 Periods	1 Overlap	4629.885	4586.584	0.0094
H023010	2	30	11 Periods	1 Overlap	22715.55	22148.82	0.0121
H063005	6	30	11 Periods	1 Overlap	195325.2	192194.3	0.016
H063006	6	30	11 Periods	1 Overlap	118349.2	113883.3	0.0342
H063007	6	30	11 Periods	1 Overlap	126753.6	125607.1	0.0078
H063008	6	30	11 Periods	1 Overlap	314731.7	282233.9	0.0845
H063009	6	30	11 Periods	1 Overlap	93918.37	92394.92	0.0145
H063010	6	30	11 Periods	1 Overlap	273445.7	243334.6	0.0955
H103005	10	30	11 Periods	1 Overlap	621509.7	556526.8	0.093
H103006	10	30	11 Periods	1 Overlap	436268.5	416511.4	0.0366
H103007	10	30	11 Periods	1 Overlap	501547	460468.4	0.0819
H103008	10	30	11 Periods	1 Overlap	360746	341656.5	0.0445
H103009	10	30	11 Periods	1 Overlap	735292.7	680732	0.0741
H103010	10	30	11 Periods	1 Overlap	409823.5	364719	0.1026

H026005	2	60	11 Periods	1 Overlap	138038.4	133966.8	0.0199
H026006	2	60	11 Periods	1 Overlap	112514.2	108365.7	0.0225
H026007	2	60	11 Periods	1 Overlap	76377.77	72154.22	0.0436
H026008	2	60	11 Periods	1 Overlap	193287.6	190204.8	0.0104
H026009	2	60	11 Periods	1 Overlap	44008.02	42542.79	0.0196
H026010	2	60	11 Periods	1 Overlap	117756.5	114612.8	0.0142
H066005	6	60	11 Periods	1 Overlap	449235.6	386382.2	0.1234
H066006	6	60	11 Periods	1 Overlap	359068.4	240106.5	0.3019
H066007	6	60	11 Periods	1 Overlap	417051	336710.2	0.1926
H066008	6	60	11 Periods	1 Overlap	209674.7	196663.7	0.0595
H066009	6	60	11 Periods	1 Overlap	378949.3	346187	0.0865
H066010	6	60	11 Periods	1 Overlap	364281.3	330825.5	0.0909
H106005	10	60	11 Periods	1 Overlap	710703	604425.1	0.1437
H106006	10	60	11 Periods	1 Overlap	456611.7	418043.9	0.0755
H106007	10	60	11 Periods	1 Overlap	544910	498388.2	0.0694
H106008	10	60	11 Periods	1 Overlap	779047.8	609324.1	0.2002
H106009	10	60	11 Periods	1 Overlap	671934.8	555792.8	0.1672
H106010	10	60	11 Periods	1 Overlap	605830.7	526414.5	0.1188
H021503	2	15	3 Periods	2 Overlap	12599.74	12587.01	0.001
H021504	2	15	3 Periods	2 Overlap	1971.178	1820.054	0.0767
H021505	2	15	3 Periods	2 Overlap	13849.66	11380.25	0.0495
H021506	2	15	3 Periods	2 Overlap	6809	6549.118	0.0382
H021507	2	15	3 Periods	2 Overlap	2958.24	2958.24	0
H021508	2	15	3 Periods	2 Overlap	5588.967	4931.606	0.0287
H021509	2	15	3 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	3 Periods	2 Overlap	7103.005	6710.533	0.0553
H061503	6	15	3 Periods	2 Overlap	161160.9	150638.7	0.0593
H061504	6	15	3 Periods	2 Overlap	353377.4	318117.8	0.0792
H061505	6	15	3 Periods	2 Overlap	90916.45	81561.65	0.0325
H061506	6	15	3 Periods	2 Overlap	362588.7	331966.7	0.0841
H061507	6	15	3 Periods	2 Overlap	140732.9	119557.6	0.0672

H061508	6	15	3 Periods	2 Overlap	83420.32	73755.11	0.1159
H061509	6	15	3 Periods	2 Overlap	311824.5	290490.5	0.0672
H061510	6	15	3 Periods	2 Overlap	403625.5	368001	0.0517
H101503	10	15	3 Periods	2 Overlap	387495.1	325590.9	0.1506
H101504	10	15	3 Periods	2 Overlap	317761.7	272396.8	0.1417
H101505	10	15	3 Periods	2 Overlap	498674.1	429057.4	0.1379
H101506	10	15	3 Periods	2 Overlap	120895.1	89926.11	0.2562
H101507	10	15	3 Periods	2 Overlap	457164.8	358799.6	0.1993
H101508	10	15	3 Periods	2 Overlap	239161.3	186807.7	0.2189
H101509	10	15	3 Periods	2 Overlap	394168.3	341332.9	0.1258
H101510	10	15	3 Periods	2 Overlap	315693.1	235624.2	0.2297
H023005	2	30	3 Periods	2 Overlap	11170.11	10573.07	0.0526
H023006	2	30	3 Periods	2 Overlap	18474.9	16578.91	0.0647
H023007	2	30	3 Periods	2 Overlap	2841.463	2260.653	0.1266
H023008	2	30	3 Periods	2 Overlap	17564.59	15791.62	0.0783
H023009	2	30	3 Periods	2 Overlap	4672.604	4476.577	0.0331
H023010	2	30	3 Periods	2 Overlap	22420.28	22142.38	0.0124
H063005	6	30	3 Periods	2 Overlap	195745.6	175207.6	0.103
H063006	6	30	3 Periods	2 Overlap	118436.8	109567.4	0.0708
H063007	6	30	3 Periods	2 Overlap	127295.6	115502.8	0.0877
H063008	6	30	3 Periods	2 Overlap	316692.4	258693	0.1609
H063009	6	30	3 Periods	2 Overlap	93757.58	81119.62	0.1348
H063010	6	30	3 Periods	2 Overlap	271757.6	226440.5	0.1583
H103005	10	30	3 Periods	2 Overlap	1527751	310903.2	0.4933
H103006	10	30	3 Periods	2 Overlap	780020.2	268314.5	0.3794
H103007	10	30	3 Periods	2 Overlap	519366.5	195988.2	0.6092
H103008	10	30	3 Periods	2 Overlap	1268710	181512.7	0.4924
H103009	10	30	3 Periods	2 Overlap	736673.4	328051.4	0.5538
H103010	10	30	3 Periods	2 Overlap	420119.5	189417.1	0.5339
H026005	2	60	3 Periods	2 Overlap	136692.5	132968.7	0.0272
H026006	2	60	3 Periods	2 Overlap	113564.8	107817.6	0.0274

H026007	2	60	3 Periods	2 Overlap	75781.79	72394.75	0.0404
H026008	2	60	3 Periods	2 Overlap	193135.6	189760.2	0.0127
H026009	2	60	3 Periods	2 Overlap	44337.77	42112.71	0.0295
H026010	2	60	3 Periods	2 Overlap	116269.4	112448	0.0329
H066005	6	60	3 Periods	2 Overlap	460838.7	250176.7	0.4324
H066006	6	60	3 Periods	2 Overlap	378808	125882.2	0.634
H066007	6	60	3 Periods	2 Overlap	471896.9	201516.4	0.5168
H066008	6	60	3 Periods	2 Overlap	1090095	122712.6	0.4131
H066009	6	60	3 Periods	2 Overlap	2074623	215306.5	0.4318
H066010	6	60	3 Periods	2 Overlap	1641979	173638.9	0.5228
H106005	10	60	3 Periods	2 Overlap	3688099	297097.5	0.5791
H106006	10	60	3 Periods	2 Overlap	1764741	252243.5	0.4422
H106007	10	60	3 Periods	2 Overlap	1413544	281963.1	0.4735
H106009	10	60	3 Periods	2 Overlap	2708732	285792.5	0.5718
H106010	10	60	3 Periods	2 Overlap	2313667	282776.6	0.5267
H021503	2	15	5 Periods	2 Overlap	12599.74	12593.42	0.0005
H021504	2	15	5 Periods	2 Overlap	1971.178	1971.178	0
H021505	2	15	5 Periods	2 Overlap	12260.67	11813.28	0.0133
H021506	2	15	5 Periods	2 Overlap	7517.5	6718.578	0.0133
H021507	2	15	5 Periods	2 Overlap	2958.24	2958.24	0
H021508	2	15	5 Periods	2 Overlap	5435.833	5024.619	0.0104
H021509	2	15	5 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	5 Periods	2 Overlap	7103.005	6989.793	0.0159
H061503	6	15	5 Periods	2 Overlap	166816	154188.3	0.0371
H061505	6	15	5 Periods	2 Overlap	85013.83	79904.84	0.0522
H061506	6	15	5 Periods	2 Overlap	363187.6	336210.3	0.0724
H061507	6	15	5 Periods	2 Overlap	128784	125072.7	0.0242
H061508	6	15	5 Periods	2 Overlap	85436.01	75721.92	0.0923
H061509	6	15	5 Periods	2 Overlap	313757.4	301419.3	0.0321
H061510	6	15	5 Periods	2 Overlap	388076.8	377325.2	0.0277
H101503	10	15	5 Periods	2 Overlap	386691.6	359498.6	0.0622

H101504	10	15	5 Periods	2 Overlap	318231.7	301517.5	0.05
H101505	10	15	5 Periods	2 Overlap	497682.6	475568.9	0.0444
H101506	10	15	5 Periods	2 Overlap	121243	111516.4	0.0776
H101507	10	15	5 Periods	2 Overlap	448114.3	422263.4	0.0577
H101508	10	15	5 Periods	2 Overlap	240325.2	224346	0.0619
H101509	10	15	5 Periods	2 Overlap	391442.3	372780	0.0452
H101510	10	15	5 Periods	2 Overlap	306607.3	286385	0.0638
H023005	2	30	5 Periods	2 Overlap	11170.11	10759.6	0.0359
H023006	2	30	5 Periods	2 Overlap	18489.59	16773.54	0.0537
H023007	2	30	5 Periods	2 Overlap	2588.446	2395.422	0.0746
H023008	2	30	5 Periods	2 Overlap	17144.39	16137.3	0.0581
H023009	2	30	5 Periods	2 Overlap	4672.604	4523.448	0.023
H023010	2	30	5 Periods	2 Overlap	22516.4	22146.6	0.0122
H063005	6	30	5 Periods	2 Overlap	196442.8	183324.4	0.0614
H063006	6	30	5 Periods	2 Overlap	118272.3	113802.2	0.0349
H063007	6	30	5 Periods	2 Overlap	126600.7	125058.4	0.0122
H063008	6	30	5 Periods	2 Overlap	313625.8	273015.6	0.1144
H063009	6	30	5 Periods	2 Overlap	93757.58	89563.07	0.0447
H063010	6	30	5 Periods	2 Overlap	277587.2	233963.8	0.1303
H103006	10	30	5 Periods	2 Overlap	436095.8	389128.7	0.0999
H103007	10	30	5 Periods	2 Overlap	519477.8	407950.9	0.1866
H103008	10	30	5 Periods	2 Overlap	359640.1	315839.1	0.1167
H103009	10	30	5 Periods	2 Overlap	735321.6	620065.5	0.1566
H026005	2	60	5 Periods	2 Overlap	137673.4	133278.8	0.025
H026006	2	60	5 Periods	2 Overlap	111040.4	108113.3	0.0248
H026007	2	60	5 Periods	2 Overlap	76927.81	73121.63	0.0308
H026008	2	60	5 Periods	2 Overlap	193135.6	189896.2	0.012
H026009	2	60	5 Periods	2 Overlap	43545.93	42392.63	0.023
H026010	2	60	5 Periods	2 Overlap	116566.8	113341.8	0.0252
H066005	6	60	5 Periods	2 Overlap	456860.4	359290.8	0.1849
H066006	6	60	5 Periods	2 Overlap	389084.3	220675.1	0.3584

H066007	6	60	5 Periods	2 Overlap	466332.8	305507.1	0.2675
H066008	6	60	5 Periods	2 Overlap	221159.7	184077.9	0.1197
H066009	6	60	5 Periods	2 Overlap	386417.4	325879.3	0.14
H066010	6	60	5 Periods	2 Overlap	376961.5	308361.1	0.1526
H106005	10	60	5 Periods	2 Overlap	735695.2	437652.7	0.38
H106006	10	60	5 Periods	2 Overlap	457345.4	347093.1	0.2324
H106007	10	60	5 Periods	2 Overlap	541126.4	400456.3	0.2523
H106008	10	60	5 Periods	2 Overlap	809803.2	260153.8	0.6585
H106009	10	60	5 Periods	2 Overlap	689774.1	316068.2	0.5264
H106010	10	60	5 Periods	2 Overlap	617015.1	400128.7	0.3302
H021503	2	15	7 Periods	2 Overlap	12599.74	12594.09	0.0004
H021504	2	15	7 Periods	2 Overlap	1971.178	1969.071	0.0011
H021505	2	15	7 Periods	2 Overlap	12010.89	11779.54	0.0161
H021506	2	15	7 Periods	2 Overlap	6809	6673.677	0.0199
H021507	2	15	7 Periods	2 Overlap	2958.24	2958.24	0
H021508	2	15	7 Periods	2 Overlap	5360.767	5013.699	0.0125
H021509	2	15	7 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	7 Periods	2 Overlap	7103.005	7049.595	0.0075
H061503	6	15	7 Periods	2 Overlap	160490.5	156632.3	0.0218
H061504	6	15	7 Periods	2 Overlap	347313.2	332166.5	0.0385
H061505	6	15	7 Periods	2 Overlap	84304.74	84286.81	0.0002
H061506	6	15	7 Periods	2 Overlap	362451.1	346346	0.0444
H061507	6	15	7 Periods	2 Overlap	128173.1	125642.6	0.0197
H061508	6	15	7 Periods	2 Overlap	85423.69	77442.94	0.0717
H061509	6	15	7 Periods	2 Overlap	313757.4	303831.9	0.0244
H061510	6	15	7 Periods	2 Overlap	388299.8	383086.9	0.0129
H101503	10	15	7 Periods	2 Overlap	383334.6	360204	0.0603
H101504	10	15	7 Periods	2 Overlap	317818.2	308700.2	0.0274
H101505	10	15	7 Periods	2 Overlap	497682.6	481111.3	0.0333
H101506	10	15	7 Periods	2 Overlap	121291.9	112654.1	0.0682
H101507	10	15	7 Periods	2 Overlap	452139.4	427617.1	0.0457

H101508	10	15	7 Periods	2 Overlap	240031	230231.3	0.0373
H101509	10	15	7 Periods	2 Overlap	1102589	378658.5	0.0302
H101510	10	15	7 Periods	2 Overlap	318024.6	291145	0.0482
H023005	2	30	7 Periods	2 Overlap	11170.11	10897.22	0.0235
H023006	2	30	7 Periods	2 Overlap	18123.34	16852.09	0.0493
H023007	2	30	7 Periods	2 Overlap	2588.446	2447.563	0.0544
H023008	2	30	7 Periods	2 Overlap	17132.39	16045.78	0.0634
H023009	2	30	7 Periods	2 Overlap	4629.885	4570.341	0.0129
H023010	2	30	7 Periods	2 Overlap	22573.27	22147.48	0.0122
H063005	6	30	7 Periods	2 Overlap	195561.8	185864.4	0.0484
H063006	6	30	7 Periods	2 Overlap	118449.3	114280.9	0.0308
H063007	6	30	7 Periods	2 Overlap	126688.9	124697.3	0.015
H063008	6	30	7 Periods	2 Overlap	311471.4	275845.1	0.1052
H063009	6	30	7 Periods	2 Overlap	93860.74	90604.06	0.0336
H063010	6	30	7 Periods	2 Overlap	271698.6	232926.4	0.1342
H103005	10	30	7 Periods	2 Overlap	621886.7	514847.5	0.161
H103006	10	30	7 Periods	2 Overlap	434733.5	395405.3	0.0854
H103007	10	30	7 Periods	2 Overlap	528759.7	416238.2	0.1701
H103010	10	30	7 Periods	2 Overlap	413455.6	340551.6	0.162
H026005	2	60	7 Periods	2 Overlap	138591.7	133498.7	0.0234
H026006	2	60	7 Periods	2 Overlap	110922.7	108229.1	0.0237
H026007	2	60	7 Periods	2 Overlap	75444.92	73180.68	0.03
H026008	2	60	7 Periods	2 Overlap	192832.1	190062.1	0.0112
H026009	2	60	7 Periods	2 Overlap	44537.63	42562.46	0.0191
H026010	2	60	7 Periods	2 Overlap	116695.5	114422.5	0.0159
H066005	6	60	7 Periods	2 Overlap	445227.7	368326.1	0.1644
H066006	6	60	7 Periods	2 Overlap	377056.5	242661.4	0.2944
H066007	6	60	7 Periods	2 Overlap	468155.3	320724.3	0.231
H066008	6	60	7 Periods	2 Overlap	210835.8	188756.6	0.0973
H066009	6	60	7 Periods	2 Overlap	396255	332826	0.1217
H066010	6	60	7 Periods	2 Overlap	378502.4	309540.9	0.1494

H106006	10	60	7 Periods	2 Overlap	468184.7	365115.5	0.1925
H106007	10	60	7 Periods	2 Overlap	547248	460830.1	0.1395
H106008	10	60	7 Periods	2 Overlap	767941.7	452679.1	0.4058
H106009	10	60	7 Periods	2 Overlap	686429.5	490840.4	0.2645
H106010	10	60	7 Periods	2 Overlap	626912.8	460024.8	0.23
H021503	2	15	9 Periods	2 Overlap	12599.74	12599.74	0
H021504	2	15	9 Periods	2 Overlap	1971.178	1971.178	0
H021505	2	15	9 Periods	2 Overlap	11972.81	11972.81	0
H021506	2	15	9 Periods	2 Overlap	6809	6809	0
H021507	2	15	9 Periods	2 Overlap	2958.24	2958.24	0
H021508	2	15	9 Periods	2 Overlap	5360.767	5077.368	0
H021509	2	15	9 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	9 Periods	2 Overlap	7103.005	7022.889	0.0113
H061503	6	15	9 Periods	2 Overlap	160275.8	156848	0.0205
H061504	6	15	9 Periods	2 Overlap	345700.9	331297.7	0.041
H061505	6	15	9 Periods	2 Overlap	84484.49	84030.77	0.0032
H061506	6	15	9 Periods	2 Overlap	363322.1	352984.2	0.0261
H061507	6	15	9 Periods	2 Overlap	128306.6	126388	0.0139
H061508	6	15	9 Periods	2 Overlap	85423.69	78670.65	0.0569
H061509	6	15	9 Periods	2 Overlap	313566.3	305691	0.0184
H061510	6	15	9 Periods	2 Overlap	393959	374580.7	0.0348
H101503	10	15	9 Periods	2 Overlap	383919	363284.6	0.0523
H101504	10	15	9 Periods	2 Overlap	318514.7	309301.1	0.0255
H101505	10	15	9 Periods	2 Overlap	499306.9	480087.4	0.0354
H101506	10	15	9 Periods	2 Overlap	121391.7	117152	0.031
H101507	10	15	9 Periods	2 Overlap	452791.3	431521.8	0.037
H101508	10	15	9 Periods	2 Overlap	240077.8	231812.4	0.0307
H101509	10	15	9 Periods	2 Overlap	391009	382000	0.0227
H101510	10	15	9 Periods	2 Overlap	314060.2	290946.4	0.0489
H023005	2	30	9 Periods	2 Overlap	11159.96	11029.43	0.0117
H023006	2	30	9 Periods	2 Overlap	17907.5	16976.47	0.0422

H023007	2	30	9 Periods	2 Overlap	2588.446	2439.665	0.0575
H023008	2	30	9 Periods	2 Overlap	17680.49	16362.91	0.0449
H023009	2	30	9 Periods	2 Overlap	4629.885	4606.195	0.0051
H023010	2	30	9 Periods	2 Overlap	22577.72	22149.86	0.0121
H063005	6	30	9 Periods	2 Overlap	195778.8	187741	0.0388
H063006	6	30	9 Periods	2 Overlap	117925.4	112506.2	0.0459
H063007	6	30	9 Periods	2 Overlap	126741.3	125007.8	0.0126
H063008	6	30	9 Periods	2 Overlap	312996.6	280856.2	0.089
H063009	6	30	9 Periods	2 Overlap	93987.86	90673.38	0.0329
H063010	6	30	9 Periods	2 Overlap	275829.4	236095	0.1224
H103005	10	30	9 Periods	2 Overlap	613619.6	536544.3	0.1256
H103006	10	30	9 Periods	2 Overlap	435306	413009.5	0.0447
H103007	10	30	9 Periods	2 Overlap	509588.3	440945.1	0.1208
H103008	10	30	9 Periods	2 Overlap	359398.1	335075.8	0.0629
H103009	10	30	9 Periods	2 Overlap	736545.3	671371.8	0.0868
H103010	10	30	9 Periods	2 Overlap	406404.4	360416	0.1132
H026005	2	60	9 Periods	2 Overlap	138262	133453.8	0.0237
H026006	2	60	9 Periods	2 Overlap	111671.3	108405.7	0.0221
H026007	2	60	9 Periods	2 Overlap	75574.84	73689.64	0.0233
H026008	2	60	9 Periods	2 Overlap	192360.3	190050.5	0.0112
H026009	2	60	9 Periods	2 Overlap	43956.85	42400.52	0.0228
H026010	2	60	9 Periods	2 Overlap	116715.5	114519.3	0.0151
H066005	6	60	9 Periods	2 Overlap	444006.8	368299.8	0.1645
H066006	6	60	9 Periods	2 Overlap	367292.4	229002.4	0.3342
H066007	6	60	9 Periods	2 Overlap	433090.7	314361.9	0.2462
H066008	6	60	9 Periods	2 Overlap	210798.5	185818.6	0.1113
H066009	6	60	9 Periods	2 Overlap	385867.1	332207.5	0.1233
H066010	6	60	9 Periods	2 Overlap	368239.9	318870.3	0.1237
H106005	10	60	9 Periods	2 Overlap	722735.4	586095.4	0.1696
H106006	10	60	9 Periods	2 Overlap	459445	402653.9	0.1095
H106007	10	60	9 Periods	2 Overlap	538264.3	437764.5	0.1826

H106008	10	60	9 Periods	2 Overlap	784873.5	549239.7	0.2791
H106009	10	60	9 Periods	2 Overlap	8154979	525516.3	0.2126
H106010	10	60	9 Periods	2 Overlap	618299.4	293012	0.5095
H021503	2	15	11 Periods	2 Overlap	12599.74	12593.42	0.0005
H021504	2	15	11 Periods	2 Overlap	1971.178	1971.178	0
H021505	2	15	11 Periods	2 Overlap	11972.81	11972.81	0
H021506	2	15	11 Periods	2 Overlap	6941.4	6800.426	0.0013
H021507	2	15	11 Periods	2 Overlap	2958.24	2958.24	0
H021509	2	15	11 Periods	2 Overlap	3489.6	3489.6	0
H021510	2	15	11 Periods	2 Overlap	7103.005	7103.005	0
H061503	6	15	11 Periods	2 Overlap	160292.7	154324.9	0.0362
H061504	6	15	11 Periods	2 Overlap	345807.3	331108.4	0.0416
H061505	6	15	11 Periods	2 Overlap	84304.74	84304.74	0
H061506	6	15	11 Periods	2 Overlap	363886.2	345411.2	0.047
H061507	6	15	11 Periods	2 Overlap	128469.4	127261.7	0.0071
H061508	6	15	11 Periods	2 Overlap	85916.35	78451.4	0.0596
H061509	6	15	11 Periods	2 Overlap	315374.4	301000	0.0322
H061510	6	15	11 Periods	2 Overlap	388299.8	377517	0.0272
H101503	10	15	11 Periods	2 Overlap	389611.2	366612.8	0.0436
H101504	10	15	11 Periods	2 Overlap	318622.7	309090.7	0.0261
H101505	10	15	11 Periods	2 Overlap	499198.9	484183.2	0.0271
H101506	10	15	11 Periods	2 Overlap	121861.3	117706.9	0.0264
H101507	10	15	11 Periods	2 Overlap	452139.4	429744.7	0.041
H101508	10	15	11 Periods	2 Overlap	242122.2	230952.4	0.0343
H101509	10	15	11 Periods	2 Overlap	390898.1	380736.2	0.0249
H101510	10	15	11 Periods	2 Overlap	308657.1	290412	0.0506
H023005	2	30	11 Periods	2 Overlap	11159.96	11135.27	0.0022
H023006	2	30	11 Periods	2 Overlap	17849.08	17010.76	0.0403
H023007	2	30	11 Periods	2 Overlap	2588.446	2588.446	0
H023008	2	30	11 Periods	2 Overlap	17132.39	16427.72	0.0411
H023009	2	30	11 Periods	2 Overlap	4629.885	4586.584	0.0094

H023010	2	30	11 Periods	2 Overlap	22715.55	22148.76	0.0121
H063005	6	30	11 Periods	2 Overlap	195759.8	185435.5	0.0506
H063006	6	30	11 Periods	2 Overlap	119310.4	111947.3	0.0506
H063007	6	30	11 Periods	2 Overlap	126653.9	124921.2	0.0133
H063008	6	30	11 Periods	2 Overlap	308285.9	279862.3	0.0922
H063009	6	30	11 Periods	2 Overlap	93757.58	89732.74	0.0429
H063010	6	30	11 Periods	2 Overlap	274226.1	237657.2	0.1166
H103005	10	30	11 Periods	2 Overlap	613788.8	554230.6	0.0968
H103006	10	30	11 Periods	2 Overlap	432315.5	411785.9	0.0475
H103007	10	30	11 Periods	2 Overlap	508728.2	449150.9	0.1045
H103008	10	30	11 Periods	2 Overlap	360571.4	338628.8	0.053
H103009	10	30	11 Periods	2 Overlap	735642.5	670032.1	0.0887
H103010	10	30	11 Periods	2 Overlap	413790.6	356318.7	0.1232
H026005	2	60	11 Periods	2 Overlap	138065.8	133763.8	0.0214
H026006	2	60	11 Periods	2 Overlap	112114.2	108667.2	0.0198
H026007	2	60	11 Periods	2 Overlap	75743.27	73911.36	0.0203
H026008	2	60	11 Periods	2 Overlap	192832.1	190226.2	0.0103
H026009	2	60	11 Periods	2 Overlap	43391.1	42526.43	0.0199
H026010	2	60	11 Periods	2 Overlap	117161.6	114535.5	0.0149
H066005	6	60	11 Periods	2 Overlap	447606.8	376837.2	0.1451
H066006	6	60	11 Periods	2 Overlap	350801.2	228465.1	0.3357
H066007	6	60	11 Periods	2 Overlap	427922	337251.1	0.1913
H066008	6	60	11 Periods	2 Overlap	210264.8	192313.8	0.0803
H066009	6	60	11 Periods	2 Overlap	381113.1	336693.6	0.1115
H066010	6	60	11 Periods	2 Overlap	367774.5	312422.9	0.1414
H106005	10	60	11 Periods	2 Overlap	705840.4	627670.8	0.1107
H106006	10	60	11 Periods	2 Overlap	458258.3	402133.4	0.1107
H106007	10	60	11 Periods	2 Overlap	545556.7	437998.3	0.1822
H106008	10	60	11 Periods	2 Overlap	779388.9	613912.3	0.1942
H106009	10	60	11 Periods	2 Overlap	693494.7	550706.6	0.1748
H106010	10	60	11 Periods	2 Overlap	603698.3	531555.9	0.1102

H021503	2	15	5 Periods	3 Overlap	12599.74	12593.42	0.0005
H021504	2	15	5 Periods	3 Overlap	1971.178	1971.178	0
H021505	2	15	5 Periods	3 Overlap	11972.81	11960.01	0.0011
H021506	2	15	5 Periods	3 Overlap	6809	6797.569	0.0017
H021507	2	15	5 Periods	3 Overlap	2958.24	2958.24	0
H021508	2	15	5 Periods	3 Overlap	5360.767	5022.091	0.0109
H021509	2	15	5 Periods	3 Overlap	3489.6	3489.6	0
H021510	2	15	5 Periods	3 Overlap	7103.005	7005.407	0.0137
H061503	6	15	5 Periods	3 Overlap	160539.4	149849	0.0642
H061504	6	15	5 Periods	3 Overlap	353377.4	317217.3	0.0818
H061505	6	15	5 Periods	3 Overlap	84800.85	80950.01	0.0398
H061506	6	15	5 Periods	3 Overlap	362626.5	335718	0.0738
H061508	6	15	5 Periods	3 Overlap	85423.69	73569.12	0.1181
H061509	6	15	5 Periods	3 Overlap	313360.5	289957	0.0689
H061510	6	15	5 Periods	3 Overlap	388089.9	368741.6	0.0498
H101503	10	15	5 Periods	3 Overlap	383330.5	334011.7	0.1287
H101504	10	15	5 Periods	3 Overlap	324335.7	279843.5	0.1183
H101505	10	15	5 Periods	3 Overlap	499282.2	444893.2	0.1061
H101506	10	15	5 Periods	3 Overlap	121376.1	102226.1	0.1544
H101508	10	15	5 Periods	3 Overlap	239955.3	192690	0.1943
H101509	10	15	5 Periods	3 Overlap	390443.5	345696.4	0.1146
H101510	10	15	5 Periods	3 Overlap	316084.6	266578.1	0.1285
H023005	2	30	5 Periods	3 Overlap	11170.11	10885.24	0.0246
H023006	2	30	5 Periods	3 Overlap	18305.39	16767.36	0.054
H023007	2	30	5 Periods	3 Overlap	2588.446	2417.154	0.0662
H023008	2	30	5 Periods	3 Overlap	17332.79	16185.13	0.0553
H023009	2	30	5 Periods	3 Overlap	4672.604	4550.357	0.0172
H023010	2	30	5 Periods	3 Overlap	22568.52	22146.7	0.0122
H063005	6	30	5 Periods	3 Overlap	195378.3	173285.3	0.1128
H063007	6	30	5 Periods	3 Overlap	126599.5	123540.3	0.0242
H063008	6	30	5 Periods	3 Overlap	313348	249374.1	0.1911

H063009	6	30	5 Periods	3 Overlap	300460.6	72924.83	0.2222
H063010	6	30	5 Periods	3 Overlap	277560.9	215400.8	0.1993
H103005	10	30	5 Periods	3 Overlap	619268.6	392157	0.3609
H103006	10	30	5 Periods	3 Overlap	481810.8	240641.8	0.4434
H103007	10	30	5 Periods	3 Overlap	510270.1	235271.6	0.5309
H103008	10	30	5 Periods	3 Overlap	374270.9	296327.5	0.1713
H103010	10	30	5 Periods	3 Overlap	421695.3	172324.4	0.576
H026005	2	60	5 Periods	3 Overlap	138220.6	133509.4	0.0233
H026006	2	60	5 Periods	3 Overlap	111407.9	108225.3	0.0238
H026007	2	60	5 Periods	3 Overlap	75444.92	73291.85	0.0285
H026008	2	60	5 Periods	3 Overlap	193135.6	189967.9	0.0117
H026009	2	60	5 Periods	3 Overlap	44654.13	42394.92	0.023
H026010	2	60	5 Periods	3 Overlap	116864.2	114321.9	0.0168
H066005	6	60	5 Periods	3 Overlap	468590	286780.2	0.3494
H066006	6	60	5 Periods	3 Overlap	396161.3	181637.5	0.4719
H066007	6	60	5 Periods	3 Overlap	490535	201115	0.5178
H066008	6	60	5 Periods	3 Overlap	222814.2	99159.11	0.5258
H066010	6	60	5 Periods	3 Overlap	385066.8	200385.6	0.4493
H106005	10	60	5 Periods	3 Overlap	3688099	454754	0.3557
H106006	10	60	5 Periods	3 Overlap	1764741	327465.4	0.2758
H106007	10	60	5 Periods	3 Overlap	1413544	358329.2	0.3309
H106009	10	60	5 Periods	3 Overlap	2708831	398131.6	0.4035
H106010	10	60	5 Periods	3 Overlap	2313667	371584.8	0.378
H021503	2	15	7 Periods	3 Overlap	12599.74	12593.42	0.0005
H021504	2	15	7 Periods	3 Overlap	1970	1971.178	0
H021505	2	15	7 Periods	3 Overlap	11972.81	11963.27	0.0008
H021506	2	15	7 Periods	3 Overlap	6809	6808.203	0.0001
H021507	2	15	7 Periods	3 Overlap	2960	2958.24	0
H021509	2	15	7 Periods	3 Overlap	3490	3489.6	0
H021510	2	15	7 Periods	3 Overlap	7103.005	7049.595	0.0075
H061503	6	15	7 Periods	3 Overlap	160943.6	153386.3	0.0421

H061504	6	15	7 Periods	3 Overlap	345700.9	328222.4	0.0499
H061505	6	15	7 Periods	3 Overlap	84409.66	82564.52	0.0206
H061506	6	15	7 Periods	3 Overlap	362451.1	349531.1	0.0356
H061507	6	15	7 Periods	3 Overlap	128173.1	126000	0.0197
H061508	6	15	7 Periods	3 Overlap	85800.05	76319.14	0.0851
H061509	6	15	7 Periods	3 Overlap	312439.9	301490.8	0.0319
H061510	6	15	7 Periods	3 Overlap	388139.3	378293.6	0.0252
H101503	10	15	7 Periods	3 Overlap	1109634	358158.6	0.0657
H101504	10	15	7 Periods	3 Overlap	318061.9	301330.5	0.0506
H101505	10	15	7 Periods	3 Overlap	497682.6	476854.9	0.0418
H101506	10	15	7 Periods	3 Overlap	121105.3	111000	0.0831
H101507	10	15	7 Periods	3 Overlap	448161.1	422031.5	0.0582
H101508	10	15	7 Periods	3 Overlap	240391.3	228773.4	0.0434
H101509	10	15	7 Periods	3 Overlap	390936	372867.1	0.045
H101510	10	15	7 Periods	3 Overlap	306332.4	283307.9	0.0739
H023005	2	30	7 Periods	3 Overlap	11170.11	10900	0.0235
H023006	2	30	7 Periods	3 Overlap	17725.19	16952.16	0.0436
H023007	2	30	7 Periods	3 Overlap	2588.446	2465.141	0.0476
H023008	2	30	7 Periods	3 Overlap	17563.89	16379.39	0.044
H023009	2	30	7 Periods	3 Overlap	4629.885	4606.195	0.0051
H023010	2	30	7 Periods	3 Overlap	22714.8	22147.67	0.0122
H063005	6	30	7 Periods	3 Overlap	195571	184121	0.0574
H063006	6	30	7 Periods	3 Overlap	119317.8	111419.6	0.0551
H063007	6	30	7 Periods	3 Overlap	126645.7	124377.6	0.0176
H063008	6	30	7 Periods	3 Overlap	311223.5	264480.8	0.1421
H063009	6	30	7 Periods	3 Overlap	93907.66	87305.93	0.0688
H063010	6	30	7 Periods	3 Overlap	269029.1	229418.3	0.1472
H103005	10	30	7 Periods	3 Overlap	620736.4	475869.8	0.2245
H103007	10	30	7 Periods	3 Overlap	508803.8	402229.6	0.198
H103008	10	30	7 Periods	3 Overlap	359454.2	294995.3	0.175
H103009	10	30	7 Periods	3 Overlap	736271.8	551313.8	0.2501

H103010	10	30	7 Periods	3 Overlap	419781.7	325027.7	0.2002
H026005	2	60	7 Periods	3 Overlap	137492.8	133794.3	0.0212
H026006	2	60	7 Periods	3 Overlap	110922.7	108485.5	0.0214
H026007	2	60	7 Periods	3 Overlap	75613.36	73570.72	0.0248
H026008	2	60	7 Periods	3 Overlap	192815.9	190097.6	0.011
H026009	2	60	7 Periods	3 Overlap	44117.13	42480.55	0.021
H026010	2	60	7 Periods	3 Overlap	117012.9	114473.2	0.0154
H066005	6	60	7 Periods	3 Overlap	440790	336530.1	0.2365
H066006	6	60	7 Periods	3 Overlap	408736.1	179127.9	0.4792
H066007	6	60	7 Periods	3 Overlap	458690.6	284408.7	0.318
H066008	6	60	7 Periods	3 Overlap	209485.7	169018.2	0.1917
H066009	6	60	7 Periods	3 Overlap	390507	312925.6	0.1742
H066010	6	60	7 Periods	3 Overlap	383290.5	276809.7	0.2393
H106005	10	60	7 Periods	3 Overlap	719013.7	487365.7	0.3095
H106006	10	60	7 Periods	3 Overlap	489845	375866	0.1688
H106007	10	60	7 Periods	3 Overlap	541756.3	445618.9	0.1679
H106008	10	60	7 Periods	3 Overlap	798973	469993.6	0.3831
H106009	10	60	7 Periods	3 Overlap	687330.1	459237.3	0.3119
H106010	10	60	7 Periods	3 Overlap	625900.6	451969.5	0.2434
H021503	2	15	9 Periods	3 Overlap	12600	12599.74	0
H021504	2	15	9 Periods	3 Overlap	1970	1971.178	0
H021505	2	15	9 Periods	3 Overlap	12000	11972.81	0
H021506	2	15	9 Periods	3 Overlap	6810	6809	0
H021507	2	15	9 Periods	3 Overlap	2960	2958.24	0
H021508	2	15	9 Periods	3 Overlap	5360.767	5077.368	0
H021509	2	15	9 Periods	3 Overlap	3490	3489.6	0
H021510	2	15	9 Periods	3 Overlap	7103.005	7022.889	0.0113
H061503	6	15	9 Periods	3 Overlap	161044.5	156979.4	0.0197
H061504	6	15	9 Periods	3 Overlap	345700.9	336366.5	0.0264
H061505	6	15	9 Periods	3 Overlap	84300	84304.74	0
H061506	6	15	9 Periods	3 Overlap	363692.5	353798.9	0.0239

H061507	6	15	9 Periods	3 Overlap	128306.6	126421.2	0.0137
H061508	6	15	9 Periods	3 Overlap	85423.69	77950.69	0.0656
H061509	6	15	9 Periods	3 Overlap	313371.6	306000	0.0179
H061510	6	15	9 Periods	3 Overlap	388237.4	377954.9	0.0261
H101503	10	15	9 Periods	3 Overlap	387347.4	358532.3	0.0647
H101504	10	15	9 Periods	3 Overlap	318294.6	307210.7	0.0321
H101505	10	15	9 Periods	3 Overlap	499436.5	477886.3	0.0398
H101506	10	15	9 Periods	3 Overlap	121565.4	115890.1	0.0414
H101507	10	15	9 Periods	3 Overlap	448692.5	426991.7	0.0471
H101508	10	15	9 Periods	3 Overlap	242122.4	227903.2	0.0471
H101509	10	15	9 Periods	3 Overlap	391115	379192.6	0.0288
H101510	10	15	9 Periods	3 Overlap	305900.7	289701.4	0.053
H023005	2	30	9 Periods	3 Overlap	11159.96	11052.14	0.0097
H023006	2	30	9 Periods	3 Overlap	17815.96	17020.18	0.0398
H023007	2	30	9 Periods	3 Overlap	2588.446	2494.6	0.0363
H023008	2	30	9 Periods	3 Overlap	17132.39	16594.86	0.0314
H023009	2	30	9 Periods	3 Overlap	4629.885	4606.195	0.0051
H023010	2	30	9 Periods	3 Overlap	22516.4	22149.82	0.0121
H063005	6	30	9 Periods	3 Overlap	195574.1	184299	0.0565
H063006	6	30	9 Periods	3 Overlap	117914.4	111125.3	0.0576
H063007	6	30	9 Periods	3 Overlap	126603.9	123827.1	0.0219
H063008	6	30	9 Periods	3 Overlap	313990.8	270912.6	0.1212
H063009	6	30	9 Periods	3 Overlap	93799.28	88214.58	0.0591
H063010	6	30	9 Periods	3 Overlap	274493.5	231244.8	0.1404
H103005	10	30	9 Periods	3 Overlap	628214.8	529566.6	0.137
H103006	10	30	9 Periods	3 Overlap	436841	370542.5	0.1429
H103007	10	30	9 Periods	3 Overlap	518184.3	439242	0.1242
H103008	10	30	9 Periods	3 Overlap	360152.6	327471.4	0.0842
H103009	10	30	9 Periods	3 Overlap	739415.3	645356.8	0.1222
H103010	10	30	9 Periods	3 Overlap	426836.8	323017.6	0.2052
H026005	2	60	9 Periods	3 Overlap	138262	133661.4	0.0222

H026006	2	60	9 Periods	3 Overlap	110859.1	108593.4	0.0204
H026007	2	60	9 Periods	3 Overlap	76159.97	73736.68	0.0226
H026008	2	60	9 Periods	3 Overlap	192983.6	190166.6	0.0106
H026009	2	60	9 Periods	3 Overlap	43545.93	42548.91	0.0194
H026010	2	60	9 Periods	3 Overlap	116844.2	114559.8	0.0147
H066005	6	60	9 Periods	3 Overlap	446927.2	374981.6	0.1493
H066006	6	60	9 Periods	3 Overlap	392733.8	204392	0.4057
H066007	6	60	9 Periods	3 Overlap	453012.8	306101.7	0.266
H066008	6	60	9 Periods	3 Overlap	211903.1	175853.1	0.159
H066009	6	60	9 Periods	3 Overlap	394320.8	329452.5	0.1306
H066010	6	60	9 Periods	3 Overlap	368386	288835.2	0.2063
H106005	10	60	9 Periods	3 Overlap	711875.6	583250.8	0.1737
H106007	10	60	9 Periods	3 Overlap	560630	194508.5	0.6368
H106008	10	60	9 Periods	3 Overlap	797070.1	507141.4	0.3343
H106010	10	60	9 Periods	3 Overlap	615628.2	497911.5	0.1665
H021503	2	15	11 Periods	3 Overlap	12599.74	12593.42	0.0005
H021504	2	15	11 Periods	3 Overlap	1971.178	1971.178	0
H021505	2	15	11 Periods	3 Overlap	11972.81	11972.81	0
H021506	2	15	11 Periods	3 Overlap	6809	6809	0
H021507	2	15	11 Periods	3 Overlap	2958.24	2958.24	0
H021509	2	15	11 Periods	3 Overlap	3489.6	3489.6	0
H021510	2	15	11 Periods	3 Overlap	7103.005	7103.005	0
H061503	6	15	11 Periods	3 Overlap	160882.2	153917.8	0.0388
H061504	6	15	11 Periods	3 Overlap	345472.7	329347.7	0.0467
H061505	6	15	11 Periods	3 Overlap	84304.74	83747.27	0.0066
H061506	6	15	11 Periods	3 Overlap	363322.1	346447.1	0.0442
H061507	6	15	11 Periods	3 Overlap	128360.5	123893.7	0.0334
H061508	6	15	11 Periods	3 Overlap	85785.91	77502.14	0.0709
H061509	6	15	11 Periods	3 Overlap	316418.4	300873.1	0.0339
H061510	6	15	11 Periods	3 Overlap	388250.5	376061.2	0.031
H101503	10	15	11 Periods	3 Overlap	383355.8	365624.3	0.0462

H101504	10	15	11 Periods	3 Overlap	318108.6	308200.9	0.0289
H101505	10	15	11 Periods	3 Overlap	499385.9	478270.8	0.039
H101506	10	15	11 Periods	3 Overlap	121632.1	117653.8	0.0268
H101507	10	15	11 Periods	3 Overlap	459153.8	426780.3	0.0476
H101508	10	15	11 Periods	3 Overlap	240505.3	230933.7	0.0344
H101509	10	15	11 Periods	3 Overlap	393140.4	376694.9	0.0352
H101510	10	15	11 Periods	3 Overlap	309975.1	290817.4	0.0493
H023005	2	30	11 Periods	3 Overlap	11159.96	11135.27	0.0022
H023006	2	30	11 Periods	3 Overlap	17815.96	17036.57	0.0389
H023007	2	30	11 Periods	3 Overlap	2588.446	2588.446	0
H023008	2	30	11 Periods	3 Overlap	17132.39	16518.83	0.0358
H023009	2	30	11 Periods	3 Overlap	4629.885	4610	0.0051
H023010	2	30	11 Periods	3 Overlap	22714.8	22148.09	0.0121
H063005	6	30	11 Periods	3 Overlap	195432.3	188000	0.0361
H063006	6	30	11 Periods	3 Overlap	118544	112166.1	0.0487
H063007	6	30	11 Periods	3 Overlap	127009.1	123746.6	0.0225
H063008	6	30	11 Periods	3 Overlap	311100.2	269658.2	0.1253
H063009	6	30	11 Periods	3 Overlap	94276.16	88165.16	0.0596
H063010	6	30	11 Periods	3 Overlap	274426.4	227105.2	0.1558
H103005	10	30	11 Periods	3 Overlap	625471	525742.9	0.1432
H103006	10	30	11 Periods	3 Overlap	440197	413740.4	0.043
H103007	10	30	11 Periods	3 Overlap	506719.6	458572.6	0.0857
H103008	10	30	11 Periods	3 Overlap	360455.9	333037.6	0.0686
H103009	10	30	11 Periods	3 Overlap	735225.4	672938.3	0.0847
H103010	10	30	11 Periods	3 Overlap	414265.4	344550	0.1522
H026005	2	60	11 Periods	3 Overlap	137869.6	134035.3	0.0194
H026006	2	60	11 Periods	3 Overlap	111364.9	108724.3	0.0193
H026007	2	60	11 Periods	3 Overlap	75743.27	73815.34	0.0216
H026008	2	60	11 Periods	3 Overlap	192368	190283.4	0.01
H026009	2	60	11 Periods	3 Overlap	43391.1	42664.47	0.0167
H026010	2	60	11 Periods	3 Overlap	116715.5	114628.8	0.0141

H066005	6	60	11 Periods	3 Overlap	444536.8	366556.5	0.1684
H066006	6	60	11 Periods	3 Overlap	385714.9	196675.1	0.4281
H066007	6	60	11 Periods	3 Overlap	461979.6	318232.9	0.2369
H066008	6	60	11 Periods	3 Overlap	210886.7	188741	0.0974
H066009	6	60	11 Periods	3 Overlap	384637.6	332257.7	0.1232
H106006	10	60	11 Periods	3 Overlap	452310.5	270743.9	0.4012
H106007	10	60	11 Periods	3 Overlap	541135.6	475879.4	0.1114
H106010	10	60	11 Periods	3 Overlap	608121.4	511284	0.1442

Table B.2 shows the detailed computational results for the Süral heterogeneous and table B.3 for the homogeneous instances respectively.

Table B.2: Heterogeneous instances. Time limit is 150 seconds. A dash (-) denotes zero gap. Gap is expressed (%).

Instance	$ L $	$ H $	LB Hor	UB Hor	Gap Hor	LB Süral	UB Süral	Gap Süral	Gap LB Hor	Gap LB Süral
G51	0	10	3606.53	3766	4.42	3449.05	4082	18.35	2.15	6.81
G52	0	10	1715.69	1849	7.77	1401.93	1773	26.47	3.34	26.47
G53	0	10	2068.26	2228	7.72	1831.31	2251	22.92	4.87	18.44
G54	0	10	2153.35	2163	0.45	1784.36	2209	23.8	0.45	21.22
G55	0	10	5129.41	5269	2.72	4830.13	5419	12.19	2.72	9.09
G56	0	10	5352.5	5734	7.13	5242.59	5846	11.51	4.38	6.56
G57	0	10	4140.73	4782	15.49	4180.63	4603	10.1	10.74	9.68
G58	0	10	6879.69	7404	7.62	7046.94	7528	6.83	6.41	3.88
G59	0	10	9391.35	10173	8.32	9688.37	10583	9.23	6.11	2.86
G60	0	10	8180.85	8785	7.38	8264.44	9149	10.7	3.81	2.76
G66	0	15	5488.11	6506	18.55	5439.44	6553	20.47	13.21	14.22
G67	0	15	7591.82	8887	17.06	6902.64	10207	47.87	13.42	24.75
G68	0	15	15974.7	17996	12.65	16082.92	18639	15.89	11.65	10.89
G69	0	15	3383.81	4260	25.89	3124.61	4325	38.42	21.89	32
G70	0	15	12375.46	14769	19.34	12243.5	14784	20.75	16.51	17.77
G71	0	15	2819.11	4006	42.1	2811.27	3895	38.55	35.48	35.86

G72	0	15	1409.14	1740	23.48	941.62	1726	83.3	22.34	83.09
G73	0	15	19018.83	21052	10.69	19477.68	21713	11.48	7.64	5.1
G74	0	15	4781.48	6126	28.12	4954.18	5867	18.43	22.7	18.43
G75	0	15	19244.61	23002	19.52	20572.57	22629	10	12.77	5.49
MG51_T	0	5	1417.11	1458	2.89	1329.09	1441	8.42	1.69	8.42
MG52_T	0	5	737.52	761	3.18	601.39	761	26.54	3.18	26.54
MG53_T	0	5	813.65	828	1.76	709.21	872	22.95	1.76	16.75
MG54_T	0	5	424	424	-	302.42	424	40.2	-	40.2
MG55_T	0	5	1914.91	1926	0.58	1798.22	1960	9	0.58	7.11
MG56_T	0	5	1179.15	1183	0.33	1045.6	1183	13.14	0.33	13.14
MG57_T	0	5	2052.24	2120	3.3	2017.78	2124	5.26	3.3	5.07
MG58_T	0	5	2849.53	2894	1.56	2773.5	2926	5.5	1.56	4.34
MG59_T	0	5	3199.45	3231	0.99	3140.19	3323	5.82	0.99	2.89
MG60_T	0	5	2630.94	2725	3.58	2569.31	2867	11.59	3.58	6.06
MG66_T	0	5	1049.08	1063	1.33	957.34	1063	11.04	1.33	11.04
MG67_T	0	5	483.77	486	0.46	372.32	486	30.53	0.46	30.53
MG68_T	0	5	1485.78	1508	1.5	1252.51	1734	38.44	1.5	20.4
MG69_T	0	5	178.61	189	5.82	91.13	189	107.4	5.82	107.4
MG70_T	0	5	1987.86	2009	1.06	1694.85	2081	22.78	1.06	18.54
MG71_T	0	5	815	815	-	677.68	847	24.99	-	20.26
MG72_T	0	5	360.12	383	6.35	205.49	376	82.98	4.41	82.98
MG73_T	0	5	2617.5	2651	1.28	2615.37	2727	4.27	1.28	1.36
MG74_T	0	5	977.28	1000	2.33	849.12	988	16.36	1.1	16.36
MG75_T	0	5	2180.38	2239	2.69	2036.82	2257	10.81	2.14	9.34
MG66_TT	0	10	1672.1	1744	4.3	1481.89	1733	16.95	3.64	16.95
MG67_TT	0	10	2833.27	2947	4.01	2116.42	3120	47.42	3.38	38.39
MG68_TT	0	10	4951.74	5437	9.8	4874.78	5608	15.04	9.27	-
MG69_TT	0	10	891	973	9.2	621.84	971	56.15	8.98	56.15
MG70_TT	0	10	5237.82	5385	2.81	4676.88	5623	20.23	2.81	15.14
MG71_TT	0	10	1000.74	1056	5.52	802.96	1064	32.51	5.52	31.51
MG72_TT	0	10	694.24	748	7.74	369.65	743	101	7.02	101

MG73_TT	0	10	6493.62	7004	7.86	6637.33	7032	5.95	6.8	4.48
MG74_TT	0	10	2385.02	2652	11.19	2272.61	2632	15.81	9.59	15.01
MG75_TT	0	10	5932.89	6287	5.97	5887.75	6415	8.96	4.58	5.38

Table B.3: Heterogeneous instances. Time limit is 150 seconds. A dash (-) denotes zero gap. Gap is expressed (%).

Instance	$ L $	$ H $	LB Hor	UB Hor	Gap Hor	LB Süral	UB Süral	Gap Süral	Gap LB Hor	Gap LB Süral
G51	0	10	1964.22	2251	14.6	154.22	1774	2151	21.25	2151
G52	0	10	1446.24	1618	11.88	155.21	1215	1599	31.59	1599
G53	0	10	1326.06	1490	12.36	150.56	1133	1486	31.14	1473
G54	0	10	1035.74	1050	1.38	43.36	736	1050	42.69	1050
G55	0	10	2943.21	3425	16.37	151.42	2840	3126	10.06	3097
G56	0	10	2466.9	2604	5.56	151.84	2426	2605	7.4	2600
G57	0	10	3246.12	3740	15.21	151.62	3232	3514	8.71	3502
G58	0	10	4123.52	4517	9.54	150.75	4134	4344	5.07	4293
G59	0	10	4538.71	4869	7.28	151.07	4622	4867	5.3	4852
G60	0	10	3681.79	3994	8.48	150.07	3687	4018	8.97	3992
G66	0	15	3506.04	4517	28.83	152.3	3415	4304	26.02	4306
G67	0	15	3740.1	4492	20.1	150.33	3698	4404	19.11	4378
G68	0	15	7322.19	8358	14.15	151.57	7285	8368	14.86	8097
G69	0	15	2395.38	3075	28.37	154.85	2166	2978	37.46	2919
G70	0	15	3942.35	4877	23.71	150.19	3847	4778	24.19	4754
G71	0	15	1898.11	3924	106.73	151.02	1919	2620	36.51	2620
G72	0	15	1143.92	1637	43.1	152.44	888	1619	82.34	1619
G73	0	15	9047.39	11734	29.69	150.14	9448	10088	6.78	10100
G74	0	15	3863.69	6657	72.3	150.84	3930	4728	20.31	4663
G75	0	15	9675.9	10974	13.42	150.87	9971	10608	6.39	10545
MG51_T	0	5	1028.1	1053	2.42	70.83	877	1049	19.56	1049
MG52_T	0	5	649.76	676	4.04	47.75	554	676	22.09	676
MG53_T	0	5	656.37	670	2.08	72.16	518	663	28.08	663

MG54_T	0	5	356.03	384	7.86	20.58	179	363	102.47	363
MG55_T	0	5	1344.9	1409	4.77	150.01	1255	1396	11.25	1380
MG56_T	0	5	692.52	788	13.79	150.1	600	770	28.36	770
MG57_T	0	5	1720.53	1807	5.03	151.9	1686	1758	4.28	1758
MG58_T	0	5	1913.55	2160	12.88	150.38	1935	2035	5.14	2035
MG59_T	0	5	1912.9	2014	5.29	150.8	1858	1990	7.09	1990
MG60_T	0	5	1441.96	1502	4.16	150.45	1386	1512	9.1	1490
MG66_T	0	5	834.37	845	1.27	80.1	741	845	14.1	845
MG67_T	0	5	464.25	480	3.39	11.83	350	480	37.08	480
MG68_T	0	5	905.8	918	1.35	150.39	749	929	24.1	922
MG69_T	0	5	173.6	186	7.14	5.5	77	186	140.06	186
MG70_T	0	5	781.17	791	1.26	113.69	652	795	22	795
MG71_T	0	5	660.59	701	6.12	150.93	572	701	22.45	701
MG72_T	0	5	345.56	374	8.23	90.94	200	367	83.23	367
MG73_T	0	5	1652.1	1799	8.89	150.94	1604	1846	15.1	1772
MG74_T	0	5	790	866	9.62	150.54	738	860	16.46	860
MG75_T	0	5	1477.27	1638	10.88	151.02	1385	1628	17.59	1628
MG66_TT	0	10	1301.9	1403	7.77	161.19	1066	1342	25.84	1342
MG67_TT	0	10	1653.42	1835	10.98	151.47	1488	1831	23.08	1805
MG68_TT	0	10	2498.96	2644	5.8	150.92	2394	2744	14.64	2650
MG69_TT	0	10	778.8	833	6.96	140.43	504	833	65.4	827
MG70_TT	0	10	1685.36	1798	6.68	151.39	1544	1764	14.28	1752
MG71_TT	0	10	773.72	891	15.16	150.49	669	891	33.2	891
MG72_TT	0	10	630.06	732	16.18	150.34	353	711	101.16	711
MG73_TT	0	10	3578.42	3850	7.59	151.42	3592	3886	8.19	3841
MG74_TT	0	10	1887.98	2318	22.78	150.74	1844	2192	18.9	2142
MG75_TT	0	10	3438.51	3990	16.04	150.27	3386	3680	8.7	3,656.00

Table B.4 shows the detailed computational results for the heterogeneous Müller et al. (2012) instances, and table B.5 for the homogeneous instances respectively.

Table B.4: Heterogeneous instances.

Instance	ALNS			HorDec			HorDec600		
	LB	UB	Gap	LB	UB	Gap	LB600	UB600	Gap600
G51-30	7103.5	7368	3.72	7363.05	7368	0.07	7363.38	7368	0.06
G51-45	10635	11052	3.92	10938.62	11088	1.37	10985.47	11052	0.61
G52-30	2943.7	3546	20.46	3443.85	3546	2.97	3541.09	3546	0.14
G52-45	4393.5	5344	21.64	4847.24	5411	11.63	4900.68	5411	10.41
G53-30	3787.4	4351	14.88	4138.14	4342	4.93	4236.62	4338	2.39
G53-45	5678.9	6558	15.48	6047.86	6657	10.07	6151.24	6593	7.18
G54-30	4222	4366	3.41	4366	4366	0	4366	4366	0
G54-45	6302.4	6549	3.91	6549	6549	0	6549	6549	0
G55-30	9893	10640	7.55	10423.97	10588	1.57	10550.16	10588	0.36
G55-45	14783	16171	9.39	15383.92	15927	3.53	15411.56	15916	3.27
G56-30	10568.8	11278	6.71	10684.61	11412	6.81	10940.35	11274	3.05
G56-45	15797.3	16939	7.22	15552.96	17243	10.87	16240.48	17191	5.85
G57-30	8447.5	9217	9.11	8255.37	9196	11.39	8510.59	9214	8.27
G57-45	12628	13854	9.71	12765.47	14126	10.66	12787.19	13916	8.83
G58-30	14149.3	14681	3.76	13900.86	14712	5.84	14094.66	14699	4.29
G58-45	21211.7	22162	4.48	21396.23	22068	3.14	21403.22	22053	3.04
G59-30	19337.8	20282	4.88	18738.7	20309	8.38	18738.7	20125	7.4
G59-45	28997.8	30910	6.59	29274.85	31267	6.8	29348.4	30286	3.19
G60-30	16571.2	17045	2.86	16267.9	17260	6.1	16267.9	17099	5.11
G60-45	24849.9	25931	4.35	24929.99	25897	3.88	24950.14	25794	3.38
G66-60	10913.7	12672	16.11	11139.24	12586	12.99	11216.53	12586	12.21
G66-90	16355.9	19261	17.76	16562.66	19823	19.68	16949.33	18977	11.96
G67-60	13951.8	18039	29.29	15470.5	17249	11.5	15577.17	17249	10.73
G67-90	20797	27224	30.9	22921.32	26026	13.54	23182.35	25996	12.14
G68-60	32375.6	36316	12.17	32634.35	36152	10.78	32774.96	35792	9.21
G68-90	48475.4	54951	13.36	46870.22	54936	17.21	48961.37	53942	10.17
G69-60	6423.7	8302	29.24	7138.02	8540	19.64	7191.12	8540	18.76

G69-90	9654.3	12577	30.28	10675.79	12793	19.83	10891.77	12793	17.46
G70-60	24925.5	29187	17.1	25877.44	29507	14.03	26103.45	29319	12.32
G70-90	37389.5	45072	20.55	38309.81	44468	16.07	38753.6	44182	14.01
G71-60	5808.3	7769	33.76	6010.3	8281	37.78	6020.79	8243	36.91
G71-90	8740.7	12076	38.16	9021	12255	35.85	9039.67	12114	34.01
G72-60	2484.1	3501	40.95	2482.97	3631	46.24	2482.97	3631	46.24
G72-90	3667.3	5565	51.75	3691.85	5504	49.09	4006.5	5294	32.14
G73-60	38992.7	41591	6.66	39085.77	42065	7.62	39190.32	41671	6.33
G73-90	58468.4	63193	8.08	58614.2	63041	7.55	58693.28	62280	6.11
G74-60	9985	12115	21.33	10084.54	12330	22.27	10210.01	12182	19.31
G74-90	14995.2	18474	23.2	15123.6	18766	24.08	15127.6	18473	22.11
G75-60	41221.6	44762	8.59	41417.71	44671	7.85	41482.03	43780	5.54
G75-90	61823.9	67229	8.74	61970.82	68936	11.24	62202.37	66902	7.56

Table B.5: Homogeneous instances.

Instance	ALNS			HorDec			HorDec600		
	LB	UB	Gap	LB	UB	Gap	LB600	UB600	Gap600
G51-30	3633.4	4304	0.18	112.75	4209	4524	0.07	4271	4524
G51-45	5422	6484	0.2	271.69	6141	6862	0.12	6237	6842
G52-30	2514.7	3198	0.27	21.81	2738	3207	0.17	2794	3198
G52-45	3734.3	4797	0.28	101.89	4013	4853	0.21	4049	4807
G53-30	2382.1	2968	0.25	72.85	2570	2946	0.15	2661	2946
G53-45	3549.5	4457	0.26	99.35	3896	4563	0.17	3924	4458
G54-30	1632.6	2100	0.29	11.86	1908	2100	0.1	2064	2100
G54-45	2388.5	3150	0.32	9.1	3026	3150	0.04	3035	3150
G55-30	5723.2	6228	0.09	180.04	5942	6283	0.06	5987	6262
G55-45	8553.1	9369	0.1	232.26	8727	9342	0.07	8775	9342
G56-30	4894.5	5218	0.07	174.58	4839	5203	0.08	4892	5203
G56-45	7324.8	7870	0.07	264.74	7400	7872	0.06	7423	7861
G57-30	6508.3	7055	0.08	238.69	6490	7075	0.09	6605	7062

G57-45	9756.4	10655	0.09	291.79	9870	10686	0.08	9888	10671
G58-30	8306	8609	0.04	195.35	8151	8622	0.06	8313	8604
G58-45	12452.2	12984	0.04	277.81	12503	12963	0.04	12512	12963
G59-30	9271.4	9808	0.06	279.66	9318	9876	0.06	9318	9828
G59-45	13908.4	14902	0.07	288.31	13967	14872	0.06	13986	14872
G60-30	7399.9	8017	0.08	221.78	7421	8104	0.09	7481	8147
G60-45	11094.1	12097	0.09	291.33	11182	12137	0.09	11191	12137
G66-60	6870.8	8805	0.28	255.16	7132	8748	0.23	7243	8709
G66-90	10314.6	13347	0.29	266.6	10542	13144	0.25	10543	13120
G67-60	7497.2	8862	0.18	285.74	7711	9038	0.17	7778	9038
G67-90	11242.4	13571	0.21	285.79	11600	13540	0.17	11723	13514
G68-60	14633.3	16701	0.14	269.84	14757	16696	0.13	14784	16696
G68-90	21923.2	25390	0.16	254.2	22033	24970	0.13	22105	24970
G69-60	4453	5863	0.32	265.06	4951	6102	0.23	5005	5948
G69-90	6682.9	8907	0.33	286.74	7332	9165	0.25	7386	9165
G70-60	7811.7	9674	0.24	278.81	8008	9970	0.25	8091	9922
G70-90	11738.9	15158	0.29	285.56	11968	14970	0.25	12109	14841
G71-60	3941.9	5325	0.35	283.49	4084	5750	0.41	4105	5750
G71-90	5923.2	8268	0.4	284.12	6055	8863	0.46	6191	8627
G72-60	2107.7	3325	0.58	272.93	2208	3737	0.69	2376	3500
G72-90	3183.4	5161	0.62	283.59	3248	5580	0.72	3296	5516
G73-60	18900.5	20715	0.1	286.5	18998	20636	0.09	19035	20636
G73-90	28351.1	31207	0.1	271.96	28393	31082	0.09	28468	30829
G74-60	7906.6	9685	0.22	284.24	8010	9735	0.22	8021	9648
G74-90	11875.9	14843	0.25	285.09	11961	14722	0.23	11973	14672
G75-60	19974.5	21616	0.08	281.03	20000	21557	0.08	20032	21496
G75-90	29959.9	32737	0.09	275.89	29995	32490	0.08	30026	32304

Table B.6 shows the detailed computational experiments on the instances of Pimentel et al. (2010).

Table B.6: Detailed results for the instances of Pimentel et al. (2010).

Instance	Lower Bound	Upper Bound	Gap (%)	CPU Time
X11117A	8375.8	8375.8	0	0.13
X11117B	8169.4	8169.4	0	0.43
X11117C	9664.6	9664.6	0	0.17
X11117D	8313.4	8313.4	0	0.15
X11117E	8483	8483	0	0.14
X11118A	8387	8387	0	0.14
X11118B	8546.7	8546.7	0	0.15
X11118C	6157	6157	0	0.15
X11118D	9673	9673	0	0.19
X11118E	10343.1	10343.1	0	218.55
X11119A	9223.6	9245.2	0.23	1003.98
X11119B	12452.8	12559.7	0.85	1018.98
X11119C	12060.5	12121.7	0.5	1025.68
X11119D	8831.7	8923.9	1.03	1016.27
X11119E	9088	9171.8	0.91	1005.5
X11127A	8215	8215	0	0.14
X11127B	8910.2	8910.2	0	0.17
X11127C	9197	9197	0	0.15
X11127D	8997.6	8997.6	0	0.47
X11127E	9983.8	9983.8	0	45.78
X11128A	8198.8	8198.8	0	0.31
X11128B	9600.2	9600.2	0	206.97
X11128C	9802.8	9802.8	0	324.62
X11128D	8963.8	8963.8	0	0.16
X11128E	10869.9	10869.9	0	175.75
X11129A	11540	11541.4	0.01	1002.13
X11129B	7680.8	7712.2	0.41	1000.39
X11129C	9454.2	9463.6	0.1	1002.92

X11129D	9622.3	9695	0.75	1005.58
X11129E	9929.4	10091.5	1.61	1013.56
X11217A	28425.1	28425.1	0	835.32
X11217B	26367	26376.9	0.04	1000.1
X11217C	27207.8	27207.8	0	73.71
X11217D	25637.8	25637.8	0	87.19
X11217E	28756.2	28822.4	0.23	1000.42
X11218A	25452.8	25455.4	0.01	1002.73
X11218B	25039.5	25099.9	0.24	1000.05
X11218C	23618	23618	0	489.91
X11218D	24299.5	24299.5	0	101.06
X11218E	23622.9	23686.3	0.27	1000.69
X11219A	24325.6	24567.5	0.98	1059.23
X11219B	28079.1	28429.4	1.23	1070.33
X11219C	27995.7	28446.5	1.58	1064.04
X11219D	24756.1	25265.8	2.02	1062.18
X11219E	28066.4	28490.8	1.49	1045.23
X11227A	28878.7	29085.8	0.71	1000.41
X11227B	28493.2	28493.2	0	736.48
X11227C	28814.3	28814.3	0	421.04
X11227D	25949.1	25949.1	0	73.17
X11227E	29752.8	29752.8	0	282.7
X11228A	25720.6	25721.1	0	1000.04
X11228B	32014.6	32093.8	0.25	1000.4
X11228C	23442.6	23491.9	0.21	1000.52
X11228D	27115.8	27140.1	0.09	1000.15
X11228E	29494.3	29554.2	0.2	1000.66
X11229A	25350	25659.2	1.2	1060.38
X11229B	29560.4	30449.7	2.92	1055.7
X11229C	25639.8	26085.4	1.71	1051.08
X11229D	27042.9	27852.5	2.91	1059.88

X11229E	26078.1	26620.5	2.04	1076.68
X11417A	64922.4	66563.1	2.46	1000.32
X11417B	55987.9	57770.1	3.08	1003.36
X11417C	61192.8	62783.3	2.53	1001.17
X11417D	62652.8	64422.8	2.75	1001.13
X11417E	62431.4	64460.2	3.15	1000.23
X11418A	70259.5	72916.8	3.64	1054.37
X11418B	60455	62130	2.7	1006.58
X11418C	61067.1	63041.6	3.13	1032.09
X11418D	63829.9	65033.9	1.85	1010.43
X11418E	69622.8	72626.8	4.14	1027.13
X11419A	58954.2	61558.4	4.23	1064.2
X11419B	52350.9	55310.3	5.35	1090.65
X11419C	64112.9	67496.3	5.01	1073.46
X11419D	65629.6	71691	8.45	1072.33
X11419E	73218.4	79729.4	8.17	1064.59
X11427A	68871.3	70773.6	2.69	1001.45
X11427B	59205.7	60784.8	2.6	1001.13
X11427C	67222	69321.3	3.03	1000.54
X11427D	63566.5	65296.6	2.65	1000.71
X11427E	59828.4	62003.6	3.51	1002.31
X11428A	58157.9	59804.2	2.75	1009.58
X11428B	64953	66633.3	2.52	1022.89
X11428C	54010	55600	2.86	1041.32
X11428D	67196.1	69720.2	3.62	1062.69
X11428E	62038.9	63616.1	2.48	1031.49
X11429A	56564.1	60269.2	6.15	1068.77
X11429B	60360.3	64618.3	6.59	1066.57
X11429C	56590.7	60652.8	6.7	1067.54
X11429D	61483.2	66313.5	7.28	1076.74
X11429E	58469.4	62031.5	5.74	1056.99

X12117A	7447.8	7447.8	0	3.7
X12117B	8432.7	8432.7	0	82.4
X12117C	7801.6	7801.6	0	18.51
X12117D	7457.8	7457.8	0	3.52
X12117E	7395.3	7395.3	0	9.38
X12118A	9293.4	9293.4	0	214.15
X12118B	8778.2	8778.2	0	100.21
X12118C	6377.7	6377.7	0	252.45
X12118D	8482.6	8482.6	0	119.9
X12118E	8330.5	8330.5	0	473.31
X12119A	12788.1	12874.9	0.67	1004.74
X12119B	15954.6	16195.2	1.49	1002.13
X12119C	11748.7	11870	1.02	1003.73
X12119D	10535.9	10629.6	0.88	1000.18
X12119E	9531.6	9691.9	1.65	1000.66
X12127A	7093.9	7093.9	0	6.2
X12127B	8605.7	8605.7	0	2.25
X12127C	8411.5	8411.5	0	1.46
X12127D	7149.5	7149.5	0	5.97
X12127E	8888.4	8888.4	0	49.16
X12128A	8385	8385	0	334.97
X12128B	7175	7175	0	360
X12128C	8482.5	8482.5	0	24.95
X12128D	8086	8095.5	0.12	1000.12
X12128E	6911.8	6911.8	0	236.28
X12129A	8766.3	8766.3	0	391.25
X12129B	8641.4	8641.4	0	392.82
X12129C	8839.1	8857.2	0.2	1002.21
X12129D	7912.4	7912.4	0	434.78
X12129E	7979	7979	0	392.63
X12217A	24582.4	24875.4	1.18	1000.72

X12217B	23114	23114	0	432.48
X12217C	26824.3	26824.3	0	611.63
X12217D	26650.4	26650.4	0	798.14
X12217E	21098.8	21098.8	0	139.76
X12218A	25839.4	25840.4	0	1000.34
X12218B	22494.6	22550.6	0.25	1000.14
X12218C	23090.8	23128.4	0.16	1001.88
X12218D	24956.7	25008.3	0.21	1001.36
X12218E	23294.8	23449.6	0.66	1004.09
X12219A	30102.8	30527.6	1.39	1006.75
X12219B	25029.9	25179.7	0.59	1000.75
X12219C	27043.7	27583.6	1.96	1002.1
X12219D	24594.8	24694	0.4	1002.63
X12219E	23433.4	23608.9	0.74	1000.27
X12227A	22489.6	22489.6	0	205.86
X12227B	27549.8	27673.6	0.45	1000.46
X12227C	24946.9	24946.9	0	196.15
X12227D	25998	26001.2	0.01	1000.04
X12227E	23084.1	23084.1	0	246.19
X12228A	24945.1	24986	0.16	1001.01
X12228B	23045.9	23128.5	0.36	1000.18
X12228C	25570.4	25689.5	0.46	1000.01
X12228D	22796.3	22796.5	0	1000.06
X12228E	27384.5	27384.5	0	187.68
X12229A	20563.3	20648.3	0.41	1000.19
X12229B	26735.8	27330.3	2.18	1001.79
X12229C	27099.4	27746.2	2.33	1001.95
X12229D	24084.8	24609.4	2.13	1017.8
X12229E	24015.7	24208.7	0.8	1002.95
X12417A	64836.8	66490.6	2.49	1012.01
X12417B	61569.9	63206.8	2.59	1002.73

X12417C	55971.6	57168.6	2.09	1005.14
X12417D	56569	58020	2.5	1001.71
X12417E	62964.2	64291.8	2.06	1000.59
X12418A	51402.1	52759.8	2.57	1000.45
X12418B	58445.2	59638	2	1004.88
X12418C	56970	58682.3	2.92	1000.9
X12418D	51025	51893.4	1.67	1010.26
X12418E	48540.1	48652.7	0.23	1002.86
X12419A	57959.5	59809	3.09	1037.72
X12419B	71467.6	74618.2	4.22	1027.22
X12419C	63076.2	66050.3	4.5	1013.74
X12419D	59229.4	61293.9	3.37	1023.94
X12419E	62933.8	65192.2	3.46	1019.64
X12427A	57350.4	59274.1	3.25	1000.38
X12427B	66423.8	68581	3.15	1000.78
X12427C	55777.6	57368.7	2.77	1001.15
X12427D	54029.2	55405.1	2.48	1000.86
X12427E	56343.9	57686.2	2.33	1000.59
X12428A	59031	60432	2.32	1004.8
X12428B	64998.2	68898.1	5.66	1002.77
X12428C	63894	65449.4	2.38	1023.58
X12428D	65649.6	67555.8	2.82	1000.41
X12428E	57306.8	58772.2	2.49	1002.44
X12429A	56712.8	58509.7	3.07	1006.91
X12429B	56130.2	58056.1	3.32	1005.1
X12429C	60838.2	63945.6	4.86	1000.53
X12429D	58108.6	61007.2	4.75	1016.32
X12429E	55051.2	58556	5.99	1038.64

Finally, tables B.7 and B.8 show the detailed computational examples for the CPLEX solver (v. 12.6) and the branch-and-price algorithm respectively.

Table B.7: CPLEX 12.6 results. Time limit is 3,600 seconds.

Instance	Root LB	Root UB	Root Gap	Root Time	Final LB	Final UB	Final Gap	Nodes
two1	18633.33	24564	24%	0.4	21624.3	22207	2.6%	5680355
two2	22113.55	35799	38%	0.38	29394.9	30498	3.6%	5556579
two3	10735.91	17917	40%	0.25	14542.8	15812	8%	3968000
two4	12925.09	17714	27%	0.36	15915.8	15916	0%	2658228
two5	11696.71	18987	38%	0.31	15428.8	16748	7.9%	2799000
two6	13231.29	18541	29%	0.46	16008.3	16284	1.7%	5608178
two7	16399.05	22020	26%	0.38	20139.3	20732	2.9%	6460838
two8	12375.12	19411	36%	0.42	15614.4	17328	9.9%	2400000
two9	12724.21	17264	26%	0.32	15537.8	15538	0%	412202
two10	15451.31	19909	22%	0.43	18238	18238	0%	1232660
four1	226337.59	359563	37%	1.87	255724	271933	6%	1254512
four2	52152.34	106911	51%	1.78	57658.4	63242	8.8%	710952
four3	147637	192941	23%	1.62	151717	161088	5.8%	1739950
four4	305535.06	603906	49%	1.95	352436	372658	5.4%	358984
four5	28054.87	46143	39%	1.27	34497.3	36791	6.2%	1329919
four6	26915.78	41197	35%	0.86	31583	32939	4.1%	2167716
four7	29623.81	54497	46%	1.14	33166.5	34819	4.7%	2528026
four8	658374.06	903088	27%	1.94	705027	773142	8.8%	305351
four9	236989.19	475603	50%	1.85	266619	323667	17.6%	266766
four10	1076229.25	1667283	35%	1.31	1109650	1222330	9.2%	879502
six1	2816410.53	3626814	22%	2.38	2835770	3064800	7.5%	586773
six2	372790.22	494187	25%	2.72	393148	425691	7.6%	202984
six3	2437346.33	3256795	25%	2.56	2462160	2672120	7.9%	312844
six4	2506337.74	3416842	27%	2.62	2525860	2771130	8.9%	380556
six5	1236985.78	2085302	41%	4.77	1259680	1525190	17.4%	263743
six6	498695.22	1018194	51%	5.05	513588	686779	25.2%	139165
six7	607607.56	831457	27%	3.22	633047	684931	7.6%	174541
six8	2450355.51	3246451	25%	2.71	2468450	2653440	7%	305564

six9	362751.97	637885	43%	3.35	383083	414820	7.7%	147986
six10	1290722.5	2081707	38%	4.28	1318060	1582930	16.7%	261820
eight1	703513.9	1660128	58%	6.82	712655	853548	16.5%	88091
eight2	461527.71	602037	23%	3	479288	511634	6.3%	285003
eight3	2064834.29	3828783	46%	10.23	2112650	2678720	21.1%	56133
eight4	1601580.18	2411096	34%	9.02	1620270	1925580	15.9%	86660
eight5	4863764.71	6042921	20%	4.51	4891690	5191490	5.8%	270246
eight6	1943548.76	3113762	38%	9.14	1967400	2368320	16.9%	127228
eight7	558241.16	668598	17%	3.77	574597	623029	7.8%	262609
eight8	466534.18	733807	36%	3.44	482007	519776	7.3%	203344
eight9	1306898.21	1824472	28%	7.04	1327170	1471790	9.8%	64604
eight10	479997.38	595254	19%	4.3	491490	530515	7.4%	135280
ten1	78249.37	99006	21%	2.88	78558.3	86213	8.9%	707002
ten2	60523.25	75998	20%	2.25	60908.5	66659	8.6%	1123409
ten3	95026.45	134235	29%	3.74	95502.4	106254	10.1%	530108
ten4	75516.57	99424	24%	2.65	76061	81790	7%	902207
ten5	87489.11	114092	23%	3.88	87849	97593	10%	578299
ten6	710059.56	934138	24%	4.68	720815	785949	8.3%	178673
ten7	107317.91	157870	32%	3.61	107726	120889	10.9%	545776
ten8	96755.9	137071	29%	3.44	97196.7	107905	9.9%	586079
ten9	118492.47	158508	25%	4.43	118775	132503	10.4%	477277
ten10	104335.56	138726	25%	3.61	104785	116795	10.3%	526474

Table B.8: Horizon Decomposition results. Time limit is 3,600 seconds.

Instance	Root LB	Root UB	Root Gap	Root Time	Final LB	Final UB	Final Gap	Nodes
two1	21764.79	22344	3%	81.43	21881.6	22283	2%	161
two2	29702.7	31305	5%	76.25	29909.24	30656	2%	143
two3	15812.12	15812	0%	93.83	15812.12	15812	0%	0
two4	15914.69	15916	0%	72.1	15914.69	15916	0%	0
two5	16489.43	16622	1%	104.9	16621.98	16622	0%	72

two6	16272.71	16284	0%	93.15	16283.66	16284	0%	10
two7	20724.63	20732	0%	79.91	20730.39	20732	0%	12
two8	17197.16	17436	1%	81.5	17321.79	17335	0%	123
two9	15451.65	15595	1%	79.94	15536.87	15538	0%	18
two10	18236.81	18238	0%	99.45	18236.81	18238	0%	0
four1	266020.63	270842	2%	3127.87	266020.63	270842	2%	0
four2	60580.93	63171	4%	1591.01	60611.05	63171	4%	4
four3	156705.47	161558	3%	2439.92	156705.47	161558	3%	0
four4	357206.98	370732	4%	3618.84	357206.98	370732	4%	0
four5	35761.64	37065	4%	811.34	35781.79	37065	3%	18
four6	32149.83	33569	4%	475.47	32153.91	33520	4%	10
four7	34488.28	34701	1%	1298.8	34502.22	34693	1%	10
four8	741254.15	774861	4%	3658	741254.15	774861	4%	0
four9	264326.64	299098	12%	3602.52	264326.64	299098	12%	0
four10	1134210.4	1252197	9%	3613.49	1134210.4	1252197	9%	0
six1	2831460.4	3045120	7%	3605.23	2831460.4	3045120	7%	0
six2	397588.67	441550	10%	988.17	397787.18	441550	10%	6
six3	2461738.2	2718412	9%	3600	2461738.2	2718412	9%	0
six4	2524337.5	2753073	8%	554.019	2524337.5	2753073	8%	2
six5	1256730.9	1490512	16%	1571.84	1256730.9	1490512	16%	0
six6	529813.33	680110	22%	2337.255	529813.33	680110	22%	0
six7	643056.48	686690	6%	791.45	645635.09	686690	6%	8
six8	2464999.1	2681183	8%	1011.202	2465000.2	2681183	8%	1
six9	384777.88	410867	6%	906.42	388321.84	410867	5%	6
six10	1286695	1577048	18%	1566.86	1287565.3	1577048	18%	4
eight1	729662.59	870461	16%	3693.55	729662.59	870461	16%	0
eight2	483109.04	495876	3%	2992.17	483109.42	495876	3%	1
eight3	1994974.9	2630604	24%	3570.92	1994974.9	2630604	24%	0
eight4	1600918	1933251	17%	3642.26	1600918	1933251	17%	0
eight5	4798227.3	5275954	9%	3605.01	4798227.3	5275954	9%	0
eight6	1934328.2	2349290	18%	3626.95	1934328.2	2349290	18%	0

eight7	578650.29	598790	3%	3630.72	578650.29	598790	3%	0
eight8	484271.58	517199	6%	3605.5	484271.58	517199	6%	0
eight9	1337414.6	1518420	12%	3619.35	1337414.6	1518420	12%	0
eight10	498039.22	529853	6%	3659.3	498039.22	529853	6%	0
ten1	79629.32	86577	8%	3600	79629.32	86577	8%	0
ten2	62234.72	65783	5%	3600	62234.72	65783	5%	0
ten3	97766.63	105606	7%	3600	97766.63	105606	7%	0
ten4	77616.11	82622	6%	3600	77616.11	82622	6%	0
ten5	89598.68	97232	8%	3600	89598.68	97232	8%	0
ten6	725104.07	772328	6%	3600	725104.07	772328	6%	0
ten7	109038.79	118859	8%	3600	109038.79	118859	8%	0
ten8	99286.56	108461	8%	3600	99286.56	108461	8%	0
ten9	119992.25	130168	8%	3600	119992.25	130168	8%	0
ten10	106574.53	114957	7%	3600	106574.53	114957	7%	0

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