

1. Detailed Results of Uniform-Weight Instances on S_A under WTRP Setting

We first report the results of ECS on the instance with $ws = 0.3$. Among these instances, only the instance "60-10-sif-0.3-3" is feasible.

Table 1 Detailed Results of ECS on 60-10-sif-0.3-3

ws-0.3			
Name	Cost	Gap% ₀₀	CPU
60-10-sif-3	1081.0	0.00	0.03

1.1. Results on the instances with i execution mode

Table 2 Detailed Results of ECS on Uniform-Weight Instances in S_A with i execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap%	CPU
60-10-i-1	-	-	-	60-10-i-1	-	-	-	60-10-i-1	-	-	-
60-10-i-2	-	-	-	60-10-i-2	-	-	-	60-10-i-2	1062.0	0.00	0.04
60-10-i-3	-	-	-	60-10-i-3	-	-	-	60-10-i-3	1079.0	0.00	0.09
60-10-i-4	-	-	-	60-10-i-4	-	-	-	60-10-i-4	-	-	-
60-10-i-5	-	-	-	60-10-i-5	-	-	-	60-10-i-5	-	-	-
60-20-i-1	-	-	-	60-20-i-1	-	-	-	60-20-i-1	-	-	-
60-20-i-2	-	-	-	60-20-i-2	-	-	-	60-20-i-2	-	-	-
60-20-i-3	-	-	-	60-20-i-3	-	-	-	60-20-i-3	-	-	-
60-20-i-4	-	-	-	60-20-i-4	-	-	-	60-20-i-4	-	-	-
60-20-i-5	-	-	-	60-20-i-5	-	-	-	60-20-i-5	-	-	-
60-30-i-1	-	-	-	60-30-i-1	-	-	-	60-30-i-1	-	-	-
60-30-i-2	-	-	-	60-30-i-2	-	-	-	60-30-i-2	-	-	-
60-30-i-3	-	-	-	60-30-i-3	-	-	-	60-30-i-3	-	-	-
60-30-i-4	-	-	-	60-30-i-4	-	-	-	60-30-i-4	-	-	-
60-30-i-5	-	-	-	60-30-i-5	-	-	-	60-30-i-5	-	-	-
90-10-i-1	-	-	-	90-10-i-1	-	-	-	90-10-i-1	-	-	-
90-10-i-2	-	-	-	90-10-i-2	-	-	-	90-10-i-2	-	-	-
90-10-i-3	-	-	-	90-10-i-3	-	-	-	90-10-i-3	-	-	-
90-10-i-4	-	-	-	90-10-i-4	-	-	-	90-10-i-4	-	-	-
90-10-i-5	-	-	-	90-10-i-5	-	-	-	90-10-i-5	-	-	-
90-20-i-1	-	-	-	90-20-i-1	-	-	-	90-20-i-1	-	-	-
90-20-i-2	-	-	-	90-20-i-2	-	-	-	90-20-i-2	-	-	-
90-20-i-3	-	-	-	90-20-i-3	-	-	-	90-20-i-3	-	-	-
90-20-i-4	-	-	-	90-20-i-4	-	-	-	90-20-i-4	-	-	-
90-20-i-5	-	-	-	90-20-i-5	-	-	-	90-20-i-5	-	-	-
90-30-i-1	-	-	-	90-30-i-1	-	-	-	90-30-i-1	-	-	-
90-30-i-2	-	-	-	90-30-i-2	-	-	-	90-30-i-2	-	-	-
90-30-i-3	-	-	-	90-30-i-3	-	-	-	90-30-i-3	-	-	-
90-30-i-4	-	-	-	90-30-i-4	-	-	-	90-30-i-4	-	-	-
90-30-i-5	-	-	-	90-30-i-5	-	-	-	90-30-i-5	-	-	-
120-10-i-1	-	-	-	120-10-i-1	-	-	-	120-10-i-1	-	-	-
120-10-i-2	-	-	-	120-10-i-2	-	-	-	120-10-i-2	-	-	-
120-10-i-3	-	-	-	120-10-i-3	-	-	-	120-10-i-3	-	-	-
120-10-i-4	-	-	-	120-10-i-4	-	-	-	120-10-i-4	-	-	-
120-10-i-5	-	-	-	120-10-i-5	-	-	-	120-10-i-5	-	-	-
120-20-i-1	-	-	-	120-20-i-1	-	-	-	120-20-i-1	-	-	-
120-20-i-2	-	-	-	120-20-i-2	-	-	-	120-20-i-2	-	-	-
120-20-i-3	-	-	-	120-20-i-3	-	-	-	120-20-i-3	-	-	-
120-20-i-4	-	-	-	120-20-i-4	-	-	-	120-20-i-4	-	-	-
120-20-i-5	-	-	-	120-20-i-5	-	-	-	120-20-i-5	-	-	-
120-30-i-1	-	-	-	120-30-i-1	-	-	-	120-30-i-1	-	-	-
120-30-i-2	-	-	-	120-30-i-2	-	-	-	120-30-i-2	6790.0	0.00	3.73
120-30-i-3	-	-	-	120-30-i-3	-	-	-	120-30-i-3	6688.0	0.00	1.06
120-30-i-4	-	-	-	120-30-i-4	-	-	-	120-30-i-4	-	-	-
120-30-i-5	-	-	-	120-30-i-5	-	-	-	120-30-i-5	-	-	-

Table 3 Detailed Results of ECS on Uniform-Weight Instances in S_A with i execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-i-1	-	-	-	60-10-i-1	1043.0	0.00	0.02	60-10-i-1	1042.0	0.00	0.03
60-10-i-2	1062.0	0.00	0.07	60-10-i-2	1057.0	0.00	0.03	60-10-i-2	1056.0	0.00	0.03
60-10-i-3	1077.0	0.00	0.03	60-10-i-3	1077.0	0.00	0.03	60-10-i-3	1077.0	0.00	0.03
60-10-i-4	-	-	-	60-10-i-4	1063.0	0.00	0.02	60-10-i-4	1063.0	0.00	0.03
60-10-i-5	1067.0	0.00	0.02	60-10-i-5	1067.0	0.00	0.04	60-10-i-5	1066.0	0.00	0.02
60-20-i-1	2151.0	0.00	0.03	60-20-i-1	2150.0	0.00	0.03	60-20-i-1	2150.0	0.00	0.02
60-20-i-2	2133.0	0.00	0.03	60-20-i-2	2130.0	0.00	0.05	60-20-i-2	2129.0	0.00	0.03
60-20-i-3	2028.0	0.00	0.08	60-20-i-3	2026.0	0.00	0.05	60-20-i-3	2025.0	0.00	0.04
60-20-i-4	-	-	-	60-20-i-4	2028.0	0.00	0.03	60-20-i-4	2026.0	0.00	0.03
60-20-i-5	-	-	-	60-20-i-5	2150.0	0.00	0.02	60-20-i-5	2150.0	0.00	0.04
60-30-i-1	3134.0	0.00	0.08	60-30-i-1	3129.0	0.00	0.03	60-30-i-1	3127.0	0.00	0.03
60-30-i-2	-	-	-	60-30-i-2	3210.0	0.00	0.12	60-30-i-2	3204.0	0.00	0.04
60-30-i-3	-	-	-	60-30-i-3	3184.0	0.00	0.04	60-30-i-3	3184.0	0.00	0.06
60-30-i-4	-	-	-	60-30-i-4	3182.0	0.00	0.13	60-30-i-4	3181.0	0.00	0.04
60-30-i-5	-	-	-	60-30-i-5	-	-	-	60-30-i-5	3191.0	0.00	0.04
90-10-i-1	-	-	-	90-10-i-1	1636.0	0.00	0.02	90-10-i-1	1636.0	0.00	0.02
90-10-i-2	-	-	-	90-10-i-2	1676.0	0.00	0.01	90-10-i-2	1676.0	0.00	0.01
90-10-i-3	1625.0	0.00	0.01	90-10-i-3	1625.0	0.00	0.03	90-10-i-3	1624.0	0.00	0.02
90-10-i-4	-	-	-	90-10-i-4	1650.0	0.00	0.02	90-10-i-4	1649.0	0.00	0.02
90-10-i-5	-	-	-	90-10-i-5	-	-	-	90-10-i-5	1644.0	0.00	0.02
90-20-i-1	-	-	-	90-20-i-1	3307.0	0.00	0.06	90-20-i-1	3307.0	0.00	0.05
90-20-i-2	-	-	-	90-20-i-2	3328.0	0.00	0.15	90-20-i-2	3327.0	0.00	0.05
90-20-i-3	3331.0	0.00	0.34	90-20-i-3	3328.0	0.00	0.24	90-20-i-3	3327.0	0.00	0.06
90-20-i-4	3321.0	0.00	0.03	90-20-i-4	3316.0	0.00	0.04	90-20-i-4	3315.0	0.00	0.04
90-20-i-5	-	-	-	90-20-i-5	3288.0	0.00	0.04	90-20-i-5	3286.0	0.00	0.09
90-30-i-1	4952.0	0.00	0.13	90-30-i-1	4948.0	0.00	0.14	90-30-i-1	4948.0	0.00	0.15
90-30-i-2	-	-	-	90-30-i-2	4837.0	0.00	0.47	90-30-i-2	4835.0	0.00	0.12
90-30-i-3	-	-	-	90-30-i-3	-	-	-	90-30-i-3	5012.0	0.00	0.11
90-30-i-4	4721.0	0.00	0.30	90-30-i-4	4720.0	0.00	0.16	90-30-i-4	4720.0	0.00	0.11
90-30-i-5	4930.0	0.00	0.12	90-30-i-5	4928.0	0.00	0.12	90-30-i-5	4928.0	0.00	0.09
120-10-i-1	2209.0	0.00	0.05	120-10-i-1	2209.0	0.00	0.05	120-10-i-1	2209.0	0.00	0.05
120-10-i-2	-	-	-	120-10-i-2	-	-	-	120-10-i-2	2216.0	0.00	0.03
120-10-i-3	-	-	-	120-10-i-3	-	-	-	120-10-i-3	2223.0	0.00	0.02
120-10-i-4	-	-	-	120-10-i-4	2176.0	0.00	0.03	120-10-i-4	2176.0	0.00	0.04
120-10-i-5	-	-	-	120-10-i-5	-	-	-	120-10-i-5	2252.0	0.00	0.04
120-20-i-1	4583.0	0.00	0.09	120-20-i-1	4583.0	0.00	0.09	120-20-i-1	4583.0	0.00	0.09
120-20-i-2	-	-	-	120-20-i-2	-	-	-	120-20-i-2	4541.0	0.00	0.10
120-20-i-3	4525.0	0.00	0.47	120-20-i-3	4520.0	0.00	0.13	120-20-i-3	4520.0	0.00	0.13
120-20-i-4	4432.0	0.00	0.31	120-20-i-4	4431.0	0.00	0.12	120-20-i-4	4431.0	0.00	0.10
120-20-i-5	4485.0	0.00	0.22	120-20-i-5	4485.0	0.00	0.12	120-20-i-5	4485.0	0.00	0.09
120-30-i-1	6721.0	0.00	28.41	120-30-i-1	6717.0	0.00	0.28	120-30-i-1	6717.0	0.00	0.26
120-30-i-2	6784.0	0.00	0.67	120-30-i-2	6784.0	0.00	0.51	120-30-i-2	6784.0	0.00	0.53
120-30-i-3	6685.0	0.00	0.78	120-30-i-3	6685.0	0.00	0.71	120-30-i-3	6685.0	0.00	0.81
120-30-i-4	6702.0	0.00	0.42	120-30-i-4	6702.0	0.00	0.31	120-30-i-4	6700.0	0.00	0.28
120-30-i-5	-	-	-	120-30-i-5	-	-	-	120-30-i-5	6635.0	0.00	0.51

1.2. Results on the instances with sf execution mode

Table 4 Detailed Results of ECS on Uniform-Weight Instances in S_A with sf execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap%	CPU
60-10-sf-1	1044.0	0.00	0.10	60-10-sf-1	1035.0	0.00	0.07	60-10-sf-1	1033.0	0.00	0.05
60-10-sf-2	-	-	-	60-10-sf-2	-	-	-	60-10-sf-2	1051.0	0.00	0.06
60-10-sf-3	1074.0	0.00	0.45	60-10-sf-3	1070.0	0.00	0.14	60-10-sf-3	1067.0	0.00	0.10
60-10-sf-4	1062.0	0.00	0.04	60-10-sf-4	1059.0	0.00	0.05	60-10-sf-4	1053.0	0.00	0.04
60-10-sf-5	1061.0	0.00	0.07	60-10-sf-5	1059.0	0.00	0.05	60-10-sf-5	1057.0	0.00	0.06
60-20-sf-1	-	-	-	60-20-sf-1	2142.0	0.00	0.11	60-20-sf-1	2136.0	0.00	0.12
60-20-sf-2	-	-	-	60-20-sf-2	2129.0	0.00	0.13	60-20-sf-2	2122.0	0.00	0.31
60-20-sf-3	-	-	-	60-20-sf-3	2026.0	0.00	0.07	60-20-sf-3	2022.0	0.00	0.16
60-20-sf-4	-	-	-	60-20-sf-4	2017.0	0.00	0.14	60-20-sf-4	2010.0	0.00	0.12
60-20-sf-5	-	-	-	60-20-sf-5	2146.0	0.00	0.23	60-20-sf-5	2136.0	0.00	0.05
60-30-sf-1	-	-	-	60-30-sf-1	3106.0	0.00	0.44	60-30-sf-1	3099.0	0.00	0.41
60-30-sf-2	-	-	-	60-30-sf-2	3201.0	0.00	4.39	60-30-sf-2	3182.0	0.00	0.99
60-30-sf-3	-	-	-	60-30-sf-3	-	-	-	60-30-sf-3	3168.0	0.00	0.27
60-30-sf-4	-	-	-	60-30-sf-4	3177.0	0.00	0.46	60-30-sf-4	3162.0	0.00	0.53
60-30-sf-5	-	-	-	60-30-sf-5	-	-	-	60-30-sf-5	3171.0	0.00	0.21
90-10-sf-1	-	-	-	90-10-sf-1	1625.0	0.00	0.13	90-10-sf-1	1621.0	0.00	0.09
90-10-sf-2	-	-	-	90-10-sf-2	-	-	-	90-10-sf-2	1663.0	0.00	0.03
90-10-sf-3	-	-	-	90-10-sf-3	1613.0	0.00	0.02	90-10-sf-3	1611.0	0.00	0.03
90-10-sf-4	-	-	-	90-10-sf-4	-	-	-	90-10-sf-4	-	-	-
90-10-sf-5	1639.0	0.00	0.08	90-10-sf-5	1634.0	0.00	0.07	90-10-sf-5	1631.0	0.00	0.06
90-20-sf-1	-	-	-	90-20-sf-1	3288.0	0.00	0.27	90-20-sf-1	3279.0	0.00	0.24
90-20-sf-2	-	-	-	90-20-sf-2	3302.0	0.00	1.10	90-20-sf-2	3293.0	0.00	1.32
90-20-sf-3	-	-	-	90-20-sf-3	3305.0	0.00	0.55	90-20-sf-3	3296.0	0.00	0.41
90-20-sf-4	-	-	-	90-20-sf-4	-	-	-	90-20-sf-4	3299.0	0.00	0.20
90-20-sf-5	-	-	-	90-20-sf-5	-	-	-	90-20-sf-5	3259.0	0.00	0.11
90-30-sf-1	-	-	-	90-30-sf-1	-	-	-	90-30-sf-1	4914.0	0.00	3.02
90-30-sf-2	-	-	-	90-30-sf-2	-	-	-	90-30-sf-2	4813.0	0.00	2.72
90-30-sf-3	-	-	-	90-30-sf-3	4988.0	0.00	26.60	90-30-sf-3	4976.0	0.00	1.38
90-30-sf-4	-	-	-	90-30-sf-4	4702.0	0.00	1.13	90-30-sf-4	4681.0	0.00	3.78
90-30-sf-5	-	-	-	90-30-sf-5	4899.0	0.00	1.64	90-30-sf-5	4887.0	0.00	1.18
120-10-sf-1	-	-	-	120-10-sf-1	-	-	-	120-10-sf-1	2195.0	0.00	0.25
120-10-sf-2	-	-	-	120-10-sf-2	-	-	-	120-10-sf-2	2205.0	0.00	0.04
120-10-sf-3	-	-	-	120-10-sf-3	-	-	-	120-10-sf-3	2207.0	0.00	0.15
120-10-sf-4	2166.0	0.00	0.41	120-10-sf-4	2155.0	0.00	0.39	120-10-sf-4	2155.0	0.00	0.48
120-10-sf-5	-	-	-	120-10-sf-5	2244.0	0.00	0.48	120-10-sf-5	2236.0	0.00	0.54
120-20-sf-1	4554.0	0.00	12.78	120-20-sf-1	4541.0	0.00	3.60	120-20-sf-1	4536.0	0.00	1.24
120-20-sf-2	-	-	-	120-20-sf-2	4514.0	0.00	1.22	120-20-sf-2	4503.0	0.00	0.32
120-20-sf-3	-	-	-	120-20-sf-3	4501.0	0.00	21.74	120-20-sf-3	4475.0	0.00	4.68
120-20-sf-4	-	-	-	120-20-sf-4	-	-	-	120-20-sf-4	-	-	-
120-20-sf-5	-	-	-	120-20-sf-5	-	-	-	120-20-sf-5	-	-	-
120-30-sf-1	-	-	-	120-30-sf-1	6683.0	0.00	324.41	120-30-sf-1	6659.0	0.00	18.49
120-30-sf-2	-	-	-	120-30-sf-2	6750.0	0.00	60.80	120-30-sf-2	6732.0	0.00	8.11
120-30-sf-3	-	-	-	120-30-sf-3	6643.0	0.00	70.71	120-30-sf-3	6635.0	0.00	30.61
120-30-sf-4	-	-	-	120-30-sf-4	6665.0	0.00	22.82	120-30-sf-4	6649.0	0.00	27.88
120-30-sf-5	-	-	-	120-30-sf-5	-	-	-	120-30-sf-5	-	-	-

Table 5 Detailed Results of ECS on Uniform-Weight Instances in S_A with sf execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-sf-1	1031.0	0.00	0.02	60-10-sf-1	1031.0	0.00	0.02	60-10-sf-1	1031.0	0.00	0.03
60-10-sf-2	1049.0	0.00	0.06	60-10-sf-2	1049.0	0.00	0.05	60-10-sf-2	1048.0	0.00	0.03
60-10-sf-3	1066.0	0.00	0.05	60-10-sf-3	1063.0	0.00	0.03	60-10-sf-3	1063.0	0.00	0.03
60-10-sf-4	1052.0	0.00	0.06	60-10-sf-4	1052.0	0.00	0.08	60-10-sf-4	1051.0	0.00	0.03
60-10-sf-5	1055.0	0.00	0.05	60-10-sf-5	1054.0	0.00	0.06	60-10-sf-5	1053.0	0.00	0.04
60-20-sf-1	2132.0	0.00	0.05	60-20-sf-1	2132.0	0.00	0.04	60-20-sf-1	2132.0	0.00	0.05
60-20-sf-2	2115.0	0.00	0.07	60-20-sf-2	2109.0	0.00	0.04	60-20-sf-2	2108.0	0.00	0.04
60-20-sf-3	2016.0	0.00	0.05	60-20-sf-3	2016.0	0.00	0.13	60-20-sf-3	2014.0	0.00	0.04
60-20-sf-4	2007.0	0.00	0.10	60-20-sf-4	2006.0	0.00	0.10	60-20-sf-4	2005.0	0.00	0.05
60-20-sf-5	2134.0	0.00	0.09	60-20-sf-5	2133.0	0.00	0.08	60-20-sf-5	2132.0	0.00	0.05
60-30-sf-1	3095.0	0.00	0.38	60-30-sf-1	3092.0	0.00	0.30	60-30-sf-1	3092.0	0.00	0.29
60-30-sf-2	3169.0	0.00	0.40	60-30-sf-2	3166.0	0.00	0.25	60-30-sf-2	3165.0	0.00	0.08
60-30-sf-3	3159.0	0.00	0.11	60-30-sf-3	3155.0	0.00	0.08	60-30-sf-3	3155.0	0.00	0.06
60-30-sf-4	3155.0	0.00	0.37	60-30-sf-4	3151.0	0.00	0.16	60-30-sf-4	3150.0	0.00	0.07
60-30-sf-5	3163.0	0.00	0.21	60-30-sf-5	3161.0	0.00	0.19	60-30-sf-5	3160.0	0.00	0.04
90-10-sf-1	1621.0	0.00	0.08	90-10-sf-1	1617.0	0.00	0.06	90-10-sf-1	1617.0	0.00	0.08
90-10-sf-2	1659.0	0.00	0.04	90-10-sf-2	1658.0	0.00	0.03	90-10-sf-2	1658.0	0.00	0.03
90-10-sf-3	1610.0	0.00	0.03	90-10-sf-3	1610.0	0.00	0.03	90-10-sf-3	1610.0	0.00	0.03
90-10-sf-4	1638.0	0.00	0.06	90-10-sf-4	1635.0	0.00	0.03	90-10-sf-4	1635.0	0.00	0.05
90-10-sf-5	1629.0	0.00	0.05	90-10-sf-5	1629.0	0.00	0.07	90-10-sf-5	1629.0	0.00	0.08
90-20-sf-1	3275.0	0.00	0.33	90-20-sf-1	3273.0	0.00	0.13	90-20-sf-1	3273.0	0.00	0.07
90-20-sf-2	3290.0	0.00	0.45	90-20-sf-2	3290.0	0.00	0.34	90-20-sf-2	3289.0	0.00	0.12
90-20-sf-3	3295.0	0.00	0.78	90-20-sf-3	3295.0	0.00	0.65	90-20-sf-3	3295.0	0.00	0.79
90-20-sf-4	3291.0	0.00	0.36	90-20-sf-4	3286.0	0.00	0.06	90-20-sf-4	3285.0	0.00	0.05
90-20-sf-5	3254.0	0.00	0.23	90-20-sf-5	3250.0	0.00	0.08	90-20-sf-5	3249.0	0.00	0.08
90-30-sf-1	4902.0	0.00	3.74	90-30-sf-1	4890.0	0.00	1.28	90-30-sf-1	4888.0	0.00	0.21
90-30-sf-2	4798.0	0.00	2.25	90-30-sf-2	4794.0	0.00	1.44	90-30-sf-2	4790.0	0.00	0.22
90-30-sf-3	4970.0	0.00	1.48	90-30-sf-3	4968.0	0.00	1.58	90-30-sf-3	4966.0	0.00	0.23
90-30-sf-4	4674.0	0.00	0.41	90-30-sf-4	4673.0	0.00	1.48	90-30-sf-4	4672.0	0.00	0.36
90-30-sf-5	4885.0	0.00	0.17	90-30-sf-5	4884.0	0.00	0.10	90-30-sf-5	4884.0	0.00	0.11
120-10-sf-1	2193.0	0.00	0.13	120-10-sf-1	2192.0	0.00	0.10	120-10-sf-1	2192.0	0.00	0.09
120-10-sf-2	2205.0	0.00	0.03	120-10-sf-2	2204.0	0.00	0.13	120-10-sf-2	2204.0	0.00	0.13
120-10-sf-3	2204.0	0.00	0.08	120-10-sf-3	2204.0	0.00	0.15	120-10-sf-3	2204.0	0.00	0.12
120-10-sf-4	2154.0	0.00	0.46	120-10-sf-4	2154.0	0.00	0.43	120-10-sf-4	2150.0	0.00	0.04
120-10-sf-5	2235.0	0.00	0.22	120-10-sf-5	2234.0	0.00	0.20	120-10-sf-5	2234.0	0.00	0.22
120-20-sf-1	4535.0	0.00	1.40	120-20-sf-1	4533.0	0.00	0.23	120-20-sf-1	4533.0	0.00	0.19
120-20-sf-2	4497.0	0.00	0.63	120-20-sf-2	4494.0	0.00	0.79	120-20-sf-2	4492.0	0.00	0.90
120-20-sf-3	4464.0	0.00	1.56	120-20-sf-3	4462.0	0.00	2.25	120-20-sf-3	4460.0	0.00	0.23
120-20-sf-4	-	-	-	120-20-sf-4	4385.0	0.00	0.23	120-20-sf-4	4385.0	0.00	0.16
120-20-sf-5	4447.0	0.00	1.06	120-20-sf-5	4446.0	0.00	0.22	120-20-sf-5	4446.0	0.00	0.19
120-30-sf-1	6656.0	0.00	39.44	120-30-sf-1	6655.0	0.00	1.77	120-30-sf-1	6655.0	0.00	1.57
120-30-sf-2	6727.0	0.00	68.32	120-30-sf-2	6723.0	0.00	10.92	120-30-sf-2	6722.0	0.00	0.80
120-30-sf-3	6633.0	0.00	1.23	120-30-sf-3	6633.0	0.00	0.65	120-30-sf-3	6633.0	0.00	0.52
120-30-sf-4	6639.0	0.00	98.93	120-30-sf-4	6639.0	0.00	91.83	120-30-sf-4	6636.0	0.00	1.96
120-30-sf-5	6567.0	0.00	8.82	120-30-sf-5	6565.0	0.00	15.74	120-30-sf-5	6558.0	0.00	1.06

1.3. Results on the instances with *sif* execution mode

Table 6 Detailed Results of ECS on Uniform-Weight Instances in S_A with *sif* execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-sif-1	1042.0	0.00	0.03	60-10-sif-1	1038.0	0.00	0.07	60-10-sif-1	1035.0	0.00	0.06
60-10-sif-2	-	-	-	60-10-sif-2	1062.0	0.00	0.06	60-10-sif-2	1053.0	0.00	0.04
60-10-sif-3	1076.0	0.00	0.10	60-10-sif-3	1071.0	0.00	0.08	60-10-sif-3	1068.0	0.00	0.06
60-10-sif-4	-	-	-	60-10-sif-4	1058.0	0.00	0.03	60-10-sif-4	1053.0	0.00	0.04
60-10-sif-5	1062.0	0.00	0.03	60-10-sif-5	1058.0	0.00	0.07	60-10-sif-5	1056.0	0.00	0.06
60-20-sif-1	-	-	-	60-20-sif-1	2141.0	0.00	0.05	60-20-sif-1	2136.0	0.00	0.15
60-20-sif-2	-	-	-	60-20-sif-2	2124.0	0.00	0.16	60-20-sif-2	2118.0	0.00	0.31
60-20-sif-3	-	-	-	60-20-sif-3	2027.0	0.00	0.14	60-20-sif-3	2023.0	0.00	0.13
60-20-sif-4	-	-	-	60-20-sif-4	2016.0	0.00	0.13	60-20-sif-4	2010.0	0.00	0.16
60-20-sif-5	-	-	-	60-20-sif-5	2146.0	0.00	0.12	60-20-sif-5	2138.0	0.00	0.10
60-30-sif-1	-	-	-	60-30-sif-1	3104.0	0.00	0.49	60-30-sif-1	3100.0	0.00	0.34
60-30-sif-2	-	-	-	60-30-sif-2	-	-	-	60-30-sif-2	3183.0	0.00	0.53
60-30-sif-3	-	-	-	60-30-sif-3	3180.0	0.00	0.23	60-30-sif-3	3165.0	0.00	0.31
60-30-sif-4	-	-	-	60-30-sif-4	-	-	-	60-30-sif-4	3161.0	0.00	0.46
60-30-sif-5	-	-	-	60-30-sif-5	-	-	-	60-30-sif-5	3174.0	0.00	0.24
90-10-sif-1	-	-	-	90-10-sif-1	1624.0	0.00	0.33	90-10-sif-1	1622.0	0.00	0.16
90-10-sif-2	-	-	-	90-10-sif-2	1673.0	0.00	0.07	90-10-sif-2	1662.0	0.00	0.05
90-10-sif-3	-	-	-	90-10-sif-3	1617.0	0.00	0.03	90-10-sif-3	1612.0	0.00	0.04
90-10-sif-4	-	-	-	90-10-sif-4	-	-	-	90-10-sif-4	1638.0	0.00	0.04
90-10-sif-5	1646.0	0.00	0.04	90-10-sif-5	1634.0	0.00	0.06	90-10-sif-5	1631.0	0.00	0.06
90-20-sif-1	-	-	-	90-20-sif-1	3293.0	0.00	0.31	90-20-sif-1	3279.0	0.00	0.37
90-20-sif-2	-	-	-	90-20-sif-2	3309.0	0.00	0.63	90-20-sif-2	3297.0	0.00	0.53
90-20-sif-3	-	-	-	90-20-sif-3	3306.0	0.00	0.71	90-20-sif-3	3297.0	0.00	0.42
90-20-sif-4	-	-	-	90-20-sif-4	3312.0	0.00	0.24	90-20-sif-4	3299.0	0.00	0.12
90-20-sif-5	-	-	-	90-20-sif-5	-	-	-	90-20-sif-5	3261.0	0.00	0.53
90-30-sif-1	-	-	-	90-30-sif-1	4931.0	0.00	46.87	90-30-sif-1	4909.0	0.00	6.51
90-30-sif-2	-	-	-	90-30-sif-2	4840.0	0.00	3.17	90-30-sif-2	4806.0	0.00	1.43
90-30-sif-3	-	-	-	90-30-sif-3	4991.0	0.00	20.14	90-30-sif-3	4978.0	0.00	12.25
90-30-sif-4	-	-	-	90-30-sif-4	4694.0	0.00	1.66	90-30-sif-4	4679.0	0.00	3.52
90-30-sif-5	4932.0	0.00	0.96	90-30-sif-5	4900.0	0.00	2.71	90-30-sif-5	4887.0	0.00	1.95
120-10-sif-1	-	-	-	120-10-sif-1	2209.0	0.00	6.13	120-10-sif-1	2199.0	0.00	0.63
120-10-sif-2	2212.0	0.00	0.14	120-10-sif-2	2207.0	0.00	0.18	120-10-sif-2	2206.0	0.00	0.17
120-10-sif-3	-	-	-	120-10-sif-3	-	-	-	120-10-sif-3	2208.0	0.00	0.27
120-10-sif-4	2167.0	0.00	0.18	120-10-sif-4	2158.0	0.00	1.24	120-10-sif-4	2155.0	0.00	0.46
120-10-sif-5	-	-	-	120-10-sif-5	2243.0	0.00	0.38	120-10-sif-5	2238.0	0.00	0.52
120-20-sif-1	-	-	-	120-20-sif-1	4543.0	0.00	4.29	120-20-sif-1	4536.0	0.00	1.33
120-20-sif-2	-	-	-	120-20-sif-2	4516.0	0.00	1.24	120-20-sif-2	4503.0	0.00	1.22
120-20-sif-3	-	-	-	120-20-sif-3	4515.0	0.00	20.49	120-20-sif-3	4479.0	0.00	1.96
120-20-sif-4	-	-	-	120-20-sif-4	4406.0	0.00	30.47	120-20-sif-4	4394.0	0.00	4.32
120-20-sif-5	-	-	-	120-20-sif-5	-	-	-	120-20-sif-5	4455.0	0.00	2.14
120-30-sif-1	-	-	-	120-30-sif-1	6695.0	0.00	110.75	120-30-sif-1	6662.0	0.00	45.08
120-30-sif-2	-	-	-	120-30-sif-2	6747.0	0.00	33.56	120-30-sif-2	6732.0	0.00	7.71
120-30-sif-3	-	-	-	120-30-sif-3	6652.0	0.00	43.65	120-30-sif-3	6635.0	0.00	35.06
120-30-sif-4	-	-	-	120-30-sif-4	6679.0	0.00	20.25	120-30-sif-4	6648.0	0.00	23.15
120-30-sif-5	-	-	-	120-30-sif-5	-	-	-	120-30-sif-5	6578.0	0.00	24.63

Table 7 Detailed Results of ECS on Uniform-Weight Instances in S_A with *sif* execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap‰	CPU	Name	Cost	Gap‰	CPU	Name	Cost	Gap%	CPU
60-10-sif-1	1033.0	0.00	0.04	60-10-sif-1	1031.0	0.00	0.02	60-10-sif-1	1031.0	0.00	0.02
60-10-sif-2	1052.0	0.00	0.06	60-10-sif-2	1049.0	0.00	0.05	60-10-sif-2	1048.0	0.00	0.02
60-10-sif-3	1067.0	0.00	0.10	60-10-sif-3	1066.0	0.00	0.04	60-10-sif-3	1063.0	0.00	0.03
60-10-sif-4	1052.0	0.00	0.06	60-10-sif-4	1052.0	0.00	0.05	60-10-sif-4	1051.0	0.00	0.03
60-10-sif-5	1055.0	0.00	0.04	60-10-sif-5	1054.0	0.00	0.06	60-10-sif-5	1053.0	0.00	0.02
60-20-sif-1	2133.0	0.00	0.05	60-20-sif-1	2132.0	0.00	0.03	60-20-sif-1	2132.0	0.00	0.04
60-20-sif-2	2114.0	0.00	0.08	60-20-sif-2	2112.0	0.00	0.08	60-20-sif-2	2108.0	0.00	0.04
60-20-sif-3	2016.0	0.00	0.05	60-20-sif-3	2016.0	0.00	0.10	60-20-sif-3	2014.0	0.00	0.05
60-20-sif-4	2007.0	0.00	0.05	60-20-sif-4	2006.0	0.00	0.10	60-20-sif-4	2005.0	0.00	0.06
60-20-sif-5	2134.0	0.00	0.08	60-20-sif-5	2133.0	0.00	0.08	60-20-sif-5	2132.0	0.00	0.04
60-30-sif-1	3095.0	0.00	0.37	60-30-sif-1	3090.0	0.00	0.09	60-30-sif-1	3090.0	0.00	0.09
60-30-sif-2	3170.0	0.00	0.37	60-30-sif-2	3166.0	0.00	0.29	60-30-sif-2	3165.0	0.00	0.13
60-30-sif-3	3159.0	0.00	0.10	60-30-sif-3	3155.0	0.00	0.08	60-30-sif-3	3155.0	0.00	0.06
60-30-sif-4	3154.0	0.00	0.36	60-30-sif-4	3151.0	0.00	0.30	60-30-sif-4	3150.0	0.00	0.11
60-30-sif-5	3163.0	0.00	0.18	60-30-sif-5	3161.0	0.00	0.16	60-30-sif-5	3160.0	0.00	0.04
90-10-sif-1	1620.0	0.00	0.09	90-10-sif-1	1619.0	0.00	0.08	90-10-sif-1	1617.0	0.00	0.07
90-10-sif-2	1659.0	0.00	0.05	90-10-sif-2	1658.0	0.00	0.02	90-10-sif-2	1658.0	0.00	0.02
90-10-sif-3	1610.0	0.00	0.04	90-10-sif-3	1610.0	0.00	0.03	90-10-sif-3	1610.0	0.00	0.03
90-10-sif-4	1637.0	0.00	0.06	90-10-sif-4	1637.0	0.00	0.09	90-10-sif-4	1635.0	0.00	0.05
90-10-sif-5	1630.0	0.00	0.05	90-10-sif-5	1629.0	0.00	0.06	90-10-sif-5	1629.0	0.00	0.05
90-20-sif-1	3275.0	0.00	0.36	90-20-sif-1	3273.0	0.00	0.13	90-20-sif-1	3273.0	0.00	0.10
90-20-sif-2	3290.0	0.00	1.83	90-20-sif-2	3290.0	0.00	0.14	90-20-sif-2	3289.0	0.00	0.12
90-20-sif-3	3295.0	0.00	0.12	90-20-sif-3	3293.0	0.00	0.42	90-20-sif-3	3293.0	0.00	0.41
90-20-sif-4	3291.0	0.00	0.29	90-20-sif-4	3286.0	0.00	0.06	90-20-sif-4	3285.0	0.00	0.06
90-20-sif-5	3253.0	0.00	0.18	90-20-sif-5	3250.0	0.00	0.11	90-20-sif-5	3249.0	0.00	0.13
90-30-sif-1	4899.0	0.00	2.73	90-30-sif-1	4897.0	0.00	1.95	90-30-sif-1	4888.0	0.00	0.47
90-30-sif-2	4796.0	0.00	1.61	90-30-sif-2	4794.0	0.00	2.66	90-30-sif-2	4793.0	0.00	1.71
90-30-sif-3	4971.0	0.00	1.26	90-30-sif-3	4968.0	0.00	1.70	90-30-sif-3	4966.0	0.00	0.24
90-30-sif-4	4675.0	0.00	0.38	90-30-sif-4	4673.0	0.00	0.26	90-30-sif-4	4672.0	0.00	0.30
90-30-sif-5	4885.0	0.00	0.63	90-30-sif-5	4884.0	0.00	0.36	90-30-sif-5	4884.0	0.00	0.36
120-10-sif-1	2198.0	0.00	0.51	120-10-sif-1	2192.0	0.00	0.07	120-10-sif-1	2192.0	0.00	0.07
120-10-sif-2	2204.0	0.00	0.03	120-10-sif-2	2203.0	0.00	0.03	120-10-sif-2	2203.0	0.00	0.03
120-10-sif-3	2204.0	0.00	0.12	120-10-sif-3	2204.0	0.00	0.18	120-10-sif-3	2204.0	0.00	0.21
120-10-sif-4	2154.0	0.00	0.48	120-10-sif-4	2154.0	0.00	0.48	120-10-sif-4	2150.0	0.00	0.06
120-10-sif-5	2235.0	0.00	0.41	120-10-sif-5	2233.0	0.00	0.05	120-10-sif-5	2233.0	0.00	0.22
120-20-sif-1	4535.0	0.00	1.69	120-20-sif-1	4535.0	0.00	3.17	120-20-sif-1	4533.0	0.00	0.44
120-20-sif-2	4497.0	0.00	0.61	120-20-sif-2	4495.0	0.00	0.75	120-20-sif-2	4492.0	0.00	0.67
120-20-sif-3	4469.0	0.00	5.12	120-20-sif-3	4462.0	0.00	2.15	120-20-sif-3	4460.0	0.00	0.31
120-20-sif-4	4392.0	0.00	3.42	120-20-sif-4	4392.0	0.00	4.55	120-20-sif-4	4385.0	0.00	0.20
120-20-sif-5	4449.0	0.00	3.75	120-20-sif-5	4446.0	0.00	0.27	120-20-sif-5	4446.0	0.00	0.22
120-30-sif-1	6656.0	0.00	38.98	120-30-sif-1	6655.0	0.00	2.28	120-30-sif-1	6655.0	0.00	2.28
120-30-sif-2	6726.0	0.00	22.15	120-30-sif-2	6723.0	0.00	13.58	120-30-sif-2	6722.0	0.00	0.68
120-30-sif-3	6633.0	0.00	2.52	120-30-sif-3	6633.0	0.00	1.97	120-30-sif-3	6633.0	0.00	1.60
120-30-sif-4	6639.0	0.00	110.96	120-30-sif-4	6639.0	0.00	110.69	120-30-sif-4	6639.0	0.00	113.21
120-30-sif-5	6565.0	0.00	11.94	120-30-sif-5	6563.0	0.00	17.77	120-30-sif-5	6563.0	0.00	19.59

2. Detailed Results of Standard-Weight Instances on S_A under WTRP Setting

We first report the results of ECS on the instance with $ws = 0.3$. Among these instances, only the instance "60-10-sif-0.3-3" is feasible.

Table 8 Detailed Results of ECS on 60-10-sif-0.3-3

ws-0.3			
Name	Cost	Gap% ₀₀₀	CPU
60-10-sif-3	2301.0	0.00	0.02

2.1. Results on the instances with i execution mode

Table 9 Detailed Results of ECS on Standard-Weight Instances in S_A with i execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-i-1	-	-	-	60-10-i-1	-	-	-	60-10-i-1	-	-	-
60-10-i-2	-	-	-	60-10-i-2	-	-	-	60-10-i-2	2018.0	0.00	0.01
60-10-i-3	-	-	-	60-10-i-3	-	-	-	60-10-i-3	2295.0	0.00	0.02
60-10-i-4	-	-	-	60-10-i-4	-	-	-	60-10-i-4	-	-	-
60-10-i-5	-	-	-	60-10-i-5	-	-	-	60-10-i-5	-	-	-
60-20-i-1	-	-	-	60-20-i-1	-	-	-	60-20-i-1	-	-	-
60-20-i-2	-	-	-	60-20-i-2	-	-	-	60-20-i-2	-	-	-
60-20-i-3	-	-	-	60-20-i-3	-	-	-	60-20-i-3	-	-	-
60-20-i-4	-	-	-	60-20-i-4	-	-	-	60-20-i-4	-	-	-
60-20-i-5	-	-	-	60-20-i-5	-	-	-	60-20-i-5	-	-	-
60-30-i-1	-	-	-	60-30-i-1	-	-	-	60-30-i-1	-	-	-
60-30-i-2	-	-	-	60-30-i-2	-	-	-	60-30-i-2	-	-	-
60-30-i-3	-	-	-	60-30-i-3	-	-	-	60-30-i-3	-	-	-
60-30-i-4	-	-	-	60-30-i-4	-	-	-	60-30-i-4	-	-	-
60-30-i-5	-	-	-	60-30-i-5	-	-	-	60-30-i-5	-	-	-
90-10-i-1	-	-	-	90-10-i-1	-	-	-	90-10-i-1	-	-	-
90-10-i-2	-	-	-	90-10-i-2	-	-	-	90-10-i-2	-	-	-
90-10-i-3	-	-	-	90-10-i-3	-	-	-	90-10-i-3	-	-	-
90-10-i-4	-	-	-	90-10-i-4	-	-	-	90-10-i-4	-	-	-
90-10-i-5	-	-	-	90-10-i-5	-	-	-	90-10-i-5	-	-	-
90-20-i-1	-	-	-	90-20-i-1	-	-	-	90-20-i-1	-	-	-
90-20-i-2	-	-	-	90-20-i-2	-	-	-	90-20-i-2	-	-	-
90-20-i-3	-	-	-	90-20-i-3	-	-	-	90-20-i-3	-	-	-
90-20-i-4	-	-	-	90-20-i-4	-	-	-	90-20-i-4	-	-	-
90-20-i-5	-	-	-	90-20-i-5	-	-	-	90-20-i-5	-	-	-
90-30-i-1	-	-	-	90-30-i-1	-	-	-	90-30-i-1	-	-	-
90-30-i-2	-	-	-	90-30-i-2	-	-	-	90-30-i-2	-	-	-
90-30-i-3	-	-	-	90-30-i-3	-	-	-	90-30-i-3	-	-	-
90-30-i-4	-	-	-	90-30-i-4	-	-	-	90-30-i-4	-	-	-
90-30-i-5	-	-	-	90-30-i-5	-	-	-	90-30-i-5	-	-	-
120-10-i-1	-	-	-	120-10-i-1	-	-	-	120-10-i-1	-	-	-
120-10-i-2	-	-	-	120-10-i-2	-	-	-	120-10-i-2	-	-	-
120-10-i-3	-	-	-	120-10-i-3	-	-	-	120-10-i-3	-	-	-
120-10-i-4	-	-	-	120-10-i-4	-	-	-	120-10-i-4	-	-	-
120-10-i-5	-	-	-	120-10-i-5	-	-	-	120-10-i-5	-	-	-
120-20-i-1	-	-	-	120-20-i-1	-	-	-	120-20-i-1	-	-	-
120-20-i-2	-	-	-	120-20-i-2	-	-	-	120-20-i-2	-	-	-
120-20-i-3	-	-	-	120-20-i-3	-	-	-	120-20-i-3	-	-	-
120-20-i-4	-	-	-	120-20-i-4	-	-	-	120-20-i-4	-	-	-
120-20-i-5	-	-	-	120-20-i-5	-	-	-	120-20-i-5	-	-	-
120-30-i-1	-	-	-	120-30-i-1	-	-	-	120-30-i-1	-	-	-
120-30-i-2	-	-	-	120-30-i-2	-	-	-	120-30-i-2	12013.0	0.00	39.25
120-30-i-3	-	-	-	120-30-i-3	-	-	-	120-30-i-3	11252.0	0.00	3.16
120-30-i-4	-	-	-	120-30-i-4	-	-	-	120-30-i-4	-	-	-
120-30-i-5	-	-	-	120-30-i-5	-	-	-	120-30-i-5	-	-	-

Table 10 Detailed Results of ECS on Standard-Weight Instances in S_A with i execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-i-1	-	-	-	60-10-i-1	1881.0	0.00	0.01	60-10-i-1	1879.0	0.00	0.01
60-10-i-2	2018.0	0.00	0.02	60-10-i-2	2012.0	0.00	0.01	60-10-i-2	2011.0	0.00	0.01
60-10-i-3	2289.0	0.00	0.01	60-10-i-3	2289.0	0.00	0.01	60-10-i-3	2289.0	0.00	0.01
60-10-i-4	-	-	-	60-10-i-4	2034.0	0.00	0.01	60-10-i-4	2034.0	0.00	0.01
60-10-i-5	1927.0	0.00	0.01	60-10-i-5	1927.0	0.00	0.02	60-10-i-5	1925.0	0.00	0.01
60-20-i-1	3772.0	0.00	0.02	60-20-i-1	3770.0	0.00	0.02	60-20-i-1	3770.0	0.00	0.02
60-20-i-2	3953.0	0.00	0.02	60-20-i-2	3948.0	0.00	0.04	60-20-i-2	3946.0	0.00	0.02
60-20-i-3	3200.0	0.00	0.05	60-20-i-3	3197.0	0.00	0.04	60-20-i-3	3196.0	0.00	0.02
60-20-i-4	-	-	-	60-20-i-4	3848.0	0.00	0.02	60-20-i-4	3844.0	0.00	0.02
60-20-i-5	-	-	-	60-20-i-5	3658.0	0.00	0.02	60-20-i-5	3658.0	0.00	0.02
60-30-i-1	6739.0	0.00	0.07	60-30-i-1	6730.0	0.00	0.03	60-30-i-1	6724.0	0.00	0.05
60-30-i-2	-	-	-	60-30-i-2	5798.0	0.00	0.16	60-30-i-2	5786.0	0.00	0.05
60-30-i-3	-	-	-	60-30-i-3	5338.0	0.00	0.06	60-30-i-3	5338.0	0.00	0.06
60-30-i-4	-	-	-	60-30-i-4	5536.0	0.00	0.17	60-30-i-4	5533.0	0.00	0.04
60-30-i-5	-	-	-	60-30-i-5	-	-	-	60-30-i-5	5328.0	0.00	0.04
90-10-i-1	-	-	-	90-10-i-1	2950.0	0.00	0.01	90-10-i-1	2950.0	0.00	0.02
90-10-i-2	-	-	-	90-10-i-2	3022.0	0.00	0.01	90-10-i-2	3022.0	0.00	0.01
90-10-i-3	2946.0	0.00	0.01	90-10-i-3	2946.0	0.00	0.03	90-10-i-3	2944.0	0.00	0.02
90-10-i-4	-	-	-	90-10-i-4	3188.0	0.00	0.02	90-10-i-4	3186.0	0.00	0.02
90-10-i-5	-	-	-	90-10-i-5	-	-	-	90-10-i-5	2641.0	0.00	0.02
90-20-i-1	-	-	-	90-20-i-1	6565.0	0.00	0.07	90-20-i-1	6565.0	0.00	0.03
90-20-i-2	-	-	-	90-20-i-2	6874.0	0.00	0.14	90-20-i-2	6873.0	0.00	0.06
90-20-i-3	6187.0	0.00	0.53	90-20-i-3	6178.0	0.00	0.26	90-20-i-3	6175.0	0.00	0.06
90-20-i-4	5309.0	0.00	0.03	90-20-i-4	5302.0	0.00	0.04	90-20-i-4	5301.0	0.00	0.04
90-20-i-5	-	-	-	90-20-i-5	6029.0	0.00	0.10	90-20-i-5	6025.0	0.00	0.14
90-30-i-1	9636.0	0.00	0.14	90-30-i-1	9625.0	0.00	0.12	90-30-i-1	9625.0	0.00	0.13
90-30-i-2	-	-	-	90-30-i-2	8587.0	0.00	0.49	90-30-i-2	8581.0	0.00	0.12
90-30-i-3	-	-	-	90-30-i-3	-	-	-	90-30-i-3	8719.0	0.00	0.11
90-30-i-4	9028.0	0.00	22.44	90-30-i-4	9026.0	0.00	0.08	90-30-i-4	9026.0	0.00	0.16
90-30-i-5	8044.0	0.00	0.12	90-30-i-5	8040.0	0.00	0.14	90-30-i-5	8040.0	0.00	0.10
120-10-i-1	3886.0	0.00	0.06	120-10-i-1	3886.0	0.00	0.12	120-10-i-1	3886.0	0.00	0.04
120-10-i-2	-	-	-	120-10-i-2	-	-	-	120-10-i-2	3571.0	0.00	0.02
120-10-i-3	-	-	-	120-10-i-3	-	-	-	120-10-i-3	3440.0	0.00	0.03
120-10-i-4	-	-	-	120-10-i-4	4352.0	0.00	0.03	120-10-i-4	4352.0	0.00	0.04
120-10-i-5	-	-	-	120-10-i-5	-	-	-	120-10-i-5	3857.0	0.00	0.05
120-20-i-1	8143.0	0.00	0.06	120-20-i-1	8143.0	0.00	0.07	120-20-i-1	8143.0	0.00	0.08
120-20-i-2	-	-	-	120-20-i-2	-	-	-	120-20-i-2	9375.0	0.00	0.10
120-20-i-3	9751.0	0.00	0.48	120-20-i-3	9742.0	0.00	0.11	120-20-i-3	9742.0	0.00	0.13
120-20-i-4	7794.0	0.00	0.42	120-20-i-4	7792.0	0.00	0.12	120-20-i-4	7792.0	0.00	0.12
120-20-i-5	7532.0	0.00	0.25	120-20-i-5	7532.0	0.00	0.10	120-20-i-5	7532.0	0.00	0.08
120-30-i-1	13088.0	0.00	51.78	120-30-i-1	13080.0	0.00	0.19	120-30-i-1	13080.0	0.00	0.27
120-30-i-2	12002.0	0.00	0.69	120-30-i-2	12002.0	0.00	0.65	120-30-i-2	12002.0	0.00	0.54
120-30-i-3	11246.0	0.00	0.88	120-30-i-3	11246.0	0.00	0.80	120-30-i-3	11246.0	0.00	0.59
120-30-i-4	11496.0	0.00	0.36	120-30-i-4	11496.0	0.00	0.31	120-30-i-4	11490.0	0.00	0.24
120-30-i-5	-	-	-	120-30-i-5	-	-	-	120-30-i-5	13444.0	0.00	0.34

2.2. Results on the instances with sf execution mode

Table 11 Detailed Results of ECS on Standard-Weight Instances in S_A with sf execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap% ₀₀	CPU	Name	Cost	Gap%	CPU
60-10-sf-1	1884.0	0.00	0.08	60-10-sf-1	1867.0	0.00	0.03	60-10-sf-1	1863.0	0.00	0.03
60-10-sf-2	-	-	-	60-10-sf-2	-	-	-	60-10-sf-2	1997.0	0.00	0.04
60-10-sf-3	2281.0	0.00	0.08	60-10-sf-3	2267.0	0.00	0.04	60-10-sf-3	2263.0	0.00	0.05
60-10-sf-4	2034.0	0.00	0.02	60-10-sf-4	2029.0	0.00	0.02	60-10-sf-4	2011.0	0.00	0.02
60-10-sf-5	1915.0	0.00	0.03	60-10-sf-5	1912.0	0.00	0.03	60-10-sf-5	1908.0	0.00	0.04
60-20-sf-1	-	-	-	60-20-sf-1	3756.0	0.00	0.16	60-20-sf-1	3744.0	0.00	0.07
60-20-sf-2	-	-	-	60-20-sf-2	3944.0	0.00	0.11	60-20-sf-2	3931.0	0.00	0.09
60-20-sf-3	-	-	-	60-20-sf-3	3200.0	0.00	0.15	60-20-sf-3	3187.0	0.00	0.09
60-20-sf-4	-	-	-	60-20-sf-4	3829.0	0.00	0.12	60-20-sf-4	3812.0	0.00	0.10
60-20-sf-5	-	-	-	60-20-sf-5	3648.0	0.00	0.10	60-20-sf-5	3634.0	0.00	0.09
60-30-sf-1	-	-	-	60-30-sf-1	6677.0	0.00	0.42	60-30-sf-1	6656.0	0.00	0.32
60-30-sf-2	-	-	-	60-30-sf-2	5775.0	0.00	1.01	60-30-sf-2	5734.0	0.00	0.56
60-30-sf-3	-	-	-	60-30-sf-3	-	-	-	60-30-sf-3	5298.0	0.00	0.22
60-30-sf-4	-	-	-	60-30-sf-4	5524.0	0.00	1.45	60-30-sf-4	5495.0	0.00	0.82
60-30-sf-5	-	-	-	60-30-sf-5	-	-	-	60-30-sf-5	5291.0	0.00	0.21
90-10-sf-1	-	-	-	90-10-sf-1	2926.0	0.00	0.12	90-10-sf-1	2919.0	0.00	0.10
90-10-sf-2	-	-	-	90-10-sf-2	-	-	-	90-10-sf-2	2996.0	0.00	0.04
90-10-sf-3	-	-	-	90-10-sf-3	2919.0	0.00	0.02	90-10-sf-3	2916.0	0.00	0.02
90-10-sf-4	-	-	-	90-10-sf-4	-	-	-	90-10-sf-4	-	-	-
90-10-sf-5	2633.0	0.00	0.25	90-10-sf-5	2621.0	0.00	0.07	90-10-sf-5	2615.0	0.00	0.06
90-20-sf-1	-	-	-	90-20-sf-1	6522.0	0.00	0.44	90-20-sf-1	6496.0	0.00	0.15
90-20-sf-2	-	-	-	90-20-sf-2	6804.0	0.00	1.31	90-20-sf-2	6783.0	0.00	3.20
90-20-sf-3	-	-	-	90-20-sf-3	6133.0	0.00	0.58	90-20-sf-3	6109.0	0.00	0.47
90-20-sf-4	-	-	-	90-20-sf-4	-	-	-	90-20-sf-4	5269.0	0.00	0.10
90-20-sf-5	-	-	-	90-20-sf-5	-	-	-	90-20-sf-5	5970.0	0.00	0.29
90-30-sf-1	-	-	-	90-30-sf-1	-	-	-	90-30-sf-1	9560.0	0.00	16.62
90-30-sf-2	-	-	-	90-30-sf-2	-	-	-	90-30-sf-2	8537.0	0.00	3.30
90-30-sf-3	-	-	-	90-30-sf-3	8668.0	0.00	4.24	90-30-sf-3	8645.0	0.00	1.59
90-30-sf-4	-	-	-	90-30-sf-4	8999.0	0.00	2.29	90-30-sf-4	8946.0	0.00	3.24
90-30-sf-5	-	-	-	90-30-sf-5	7986.0	0.00	1.53	90-30-sf-5	7964.0	0.00	0.28
120-10-sf-1	-	-	-	120-10-sf-1	-	-	-	120-10-sf-1	3853.0	0.00	0.10
120-10-sf-2	-	-	-	120-10-sf-2	-	-	-	120-10-sf-2	3553.0	0.00	0.03
120-10-sf-3	-	-	-	120-10-sf-3	-	-	-	120-10-sf-3	3411.0	0.00	0.15
120-10-sf-4	4345.0	0.00	0.49	120-10-sf-4	4307.0	0.00	0.81	120-10-sf-4	4307.0	0.00	0.88
120-10-sf-5	-	-	-	120-10-sf-5	3846.0	0.00	9.11	120-10-sf-5	3823.0	0.00	0.31
120-20-sf-1	8085.0	0.00	16.41	120-20-sf-1	8058.0	0.00	1.52	120-20-sf-1	8051.0	0.00	1.45
120-20-sf-2	-	-	-	120-20-sf-2	9302.0	0.00	1.20	120-20-sf-2	9277.0	0.00	0.94
120-20-sf-3	-	-	-	120-20-sf-3	9692.0	0.00	24.61	120-20-sf-3	9625.0	0.00	6.97
120-20-sf-4	-	-	-	120-20-sf-4	-	-	-	120-20-sf-4	-	-	-
120-20-sf-5	-	-	-	120-20-sf-5	-	-	-	120-20-sf-5	-	-	-
120-30-sf-1	-	-	-	120-30-sf-1	13009.0	0.00	1089.68	120-30-sf-1	12963.0	0.00	43.95
120-30-sf-2	-	-	-	120-30-sf-2	11934.0	0.00	538.62	120-30-sf-2	11896.0	0.00	10.78
120-30-sf-3	-	-	-	120-30-sf-3	11169.0	0.00	68.20	120-30-sf-3	11156.0	0.00	31.40
120-30-sf-4	-	-	-	120-30-sf-4	11412.0	0.00	20.38	120-30-sf-4	11384.0	0.00	46.16
120-30-sf-5	-	-	-	120-30-sf-5	-	-	-	120-30-sf-5	-	-	-

Table 12 Detailed Results of ECS on Standard-Weight Instances in S_A with sf execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap% _{oo}	CPU	Name	Cost	Gap% _{oo}	CPU	Name	Cost	Gap%	CPU
60-10-sf-1	1859.0	0.00	0.02	60-10-sf-1	1859.0	0.00	0.01	60-10-sf-1	1859.0	0.00	0.01
60-10-sf-2	1991.0	0.00	0.03	60-10-sf-2	1991.0	0.00	0.03	60-10-sf-2	1989.0	0.00	0.02
60-10-sf-3	2260.0	0.00	0.02	60-10-sf-3	2251.0	0.00	0.02	60-10-sf-3	2251.0	0.00	0.02
60-10-sf-4	2009.0	0.00	0.03	60-10-sf-4	2009.0	0.00	0.03	60-10-sf-4	2007.0	0.00	0.02
60-10-sf-5	1903.0	0.00	0.02	60-10-sf-5	1902.0	0.00	0.03	60-10-sf-5	1900.0	0.00	0.01
60-20-sf-1	3738.0	0.00	0.04	60-20-sf-1	3738.0	0.00	0.03	60-20-sf-1	3738.0	0.00	0.03
60-20-sf-2	3918.0	0.00	0.06	60-20-sf-2	3902.0	0.00	0.03	60-20-sf-2	3900.0	0.00	0.03
60-20-sf-3	3178.0	0.00	0.04	60-20-sf-3	3178.0	0.00	0.07	60-20-sf-3	3175.0	0.00	0.04
60-20-sf-4	3807.0	0.00	0.08	60-20-sf-4	3805.0	0.00	0.08	60-20-sf-4	3803.0	0.00	0.04
60-20-sf-5	3629.0	0.00	0.04	60-20-sf-5	3628.0	0.00	0.05	60-20-sf-5	3626.0	0.00	0.03
60-30-sf-1	6647.0	0.00	0.20	60-30-sf-1	6642.0	0.00	0.28	60-30-sf-1	6642.0	0.00	0.30
60-30-sf-2	5710.0	0.00	0.47	60-30-sf-2	5705.0	0.00	0.25	60-30-sf-2	5704.0	0.00	0.08
60-30-sf-3	5283.0	0.00	0.24	60-30-sf-3	5277.0	0.00	0.07	60-30-sf-3	5277.0	0.00	0.08
60-30-sf-4	5480.0	0.00	0.20	60-30-sf-4	5473.0	0.00	0.19	60-30-sf-4	5472.0	0.00	0.07
60-30-sf-5	5278.0	0.00	2.48	60-30-sf-5	5274.0	0.00	0.17	60-30-sf-5	5273.0	0.00	0.04
90-10-sf-1	2919.0	0.00	0.09	90-10-sf-1	2908.0	0.00	0.05	90-10-sf-1	2908.0	0.00	0.05
90-10-sf-2	2990.0	0.00	0.05	90-10-sf-2	2988.0	0.00	0.03	90-10-sf-2	2988.0	0.00	0.02
90-10-sf-3	2915.0	0.00	0.03	90-10-sf-3	2915.0	0.00	0.03	90-10-sf-3	2915.0	0.00	0.02
90-10-sf-4	3162.0	0.00	0.07	90-10-sf-4	3153.0	0.00	0.02	90-10-sf-4	3153.0	0.00	0.06
90-10-sf-5	2612.0	0.00	0.06	90-10-sf-5	2612.0	0.00	0.06	90-10-sf-5	2612.0	0.00	0.06
90-20-sf-1	6490.0	0.00	0.31	90-20-sf-1	6487.0	0.00	0.18	90-20-sf-1	6487.0	0.00	0.09
90-20-sf-2	6778.0	0.00	1.66	90-20-sf-2	6778.0	0.00	0.49	90-20-sf-2	6775.0	0.00	0.12
90-20-sf-3	6107.0	0.00	0.77	90-20-sf-3	6107.0	0.00	0.72	90-20-sf-3	6107.0	0.00	0.83
90-20-sf-4	5260.0	0.00	0.36	90-20-sf-4	5252.0	0.00	0.07	90-20-sf-4	5250.0	0.00	0.06
90-20-sf-5	5961.0	0.00	0.22	90-20-sf-5	5954.0	0.00	0.08	90-20-sf-5	5952.0	0.00	0.07
90-30-sf-1	9533.0	0.00	4.68	90-30-sf-1	9500.0	0.00	0.29	90-30-sf-1	9496.0	0.00	0.23
90-30-sf-2	8501.0	0.00	3.72	90-30-sf-2	8493.0	0.00	2.11	90-30-sf-2	8482.0	0.00	0.29
90-30-sf-3	8636.0	0.00	1.61	90-30-sf-3	8633.0	0.00	2.87	90-30-sf-3	8628.0	0.00	0.23
90-30-sf-4	8933.0	0.00	0.44	90-30-sf-4	8931.0	0.00	1.56	90-30-sf-4	8929.0	0.00	0.42
90-30-sf-5	7961.0	0.00	0.16	90-30-sf-5	7959.0	0.00	0.12	90-30-sf-5	7959.0	0.00	0.10
120-10-sf-1	3851.0	0.00	0.15	120-10-sf-1	3850.0	0.00	0.09	120-10-sf-1	3850.0	0.00	0.08
120-10-sf-2	3553.0	0.00	0.03	120-10-sf-2	3551.0	0.00	0.15	120-10-sf-2	3551.0	0.00	0.13
120-10-sf-3	3407.0	0.00	0.08	120-10-sf-3	3407.0	0.00	0.06	120-10-sf-3	3407.0	0.00	0.05
120-10-sf-4	4305.0	0.00	0.71	120-10-sf-4	4305.0	0.00	0.64	120-10-sf-4	4289.0	0.00	0.05
120-10-sf-5	3822.0	0.00	0.23	120-10-sf-5	3820.0	0.00	0.20	120-10-sf-5	3820.0	0.00	0.20
120-20-sf-1	8049.0	0.00	2.46	120-20-sf-1	8043.0	0.00	0.22	120-20-sf-1	8043.0	0.00	0.19
120-20-sf-2	9260.0	0.00	0.75	120-20-sf-2	9251.0	0.00	0.62	120-20-sf-2	9246.0	0.00	0.71
120-20-sf-3	9598.0	0.00	2.25	120-20-sf-3	9591.0	0.00	2.82	120-20-sf-3	9587.0	0.00	0.25
120-20-sf-4	-	-	-	120-20-sf-4	7695.0	0.00	0.16	120-20-sf-4	7695.0	0.00	0.14
120-20-sf-5	7457.0	0.00	1.36	120-20-sf-5	7455.0	0.00	0.25	120-20-sf-5	7455.0	0.00	0.22
120-30-sf-1	12955.0	0.00	22.72	120-30-sf-1	12954.0	0.00	1.53	120-30-sf-1	12954.0	0.00	1.49
120-30-sf-2	11889.0	0.00	66.24	120-30-sf-2	11881.0	0.00	12.07	120-30-sf-2	11879.0	0.00	0.77
120-30-sf-3	11152.0	0.00	1.90	120-30-sf-3	11152.0	0.00	0.59	120-30-sf-3	11152.0	0.00	0.66
120-30-sf-4	11366.0	0.00	186.94	120-30-sf-4	11366.0	0.00	180.43	120-30-sf-4	11357.0	0.00	2.29
120-30-sf-5	13291.0	0.00	21.28	120-30-sf-5	13287.0	0.00	31.20	120-30-sf-5	13266.0	0.00	0.91

2.3. Results on the instances with *sif* execution mode

Table 13 Detailed Results of ECS on Standard-Weight Instances in S_A with *sif* execution mode ($ws = 0.4 - 0.6$)

ws-0.4				ws-0.5				ws-0.6			
Name	Cost	Gap‰	CPU	Name	Cost	Gap‰	CPU	Name	Cost	Gap%	CPU
60-10-sif-1	1880.0	0.00	0.02	60-10-sif-1	1872.0	0.00	0.03	60-10-sif-1	1866.0	0.00	0.03
60-10-sif-2	-	-	-	60-10-sif-2	2018.0	0.00	0.03	60-10-sif-2	2003.0	0.00	0.05
60-10-sif-3	2287.0	0.00	0.06	60-10-sif-3	2271.0	0.00	0.05	60-10-sif-3	2265.0	0.00	0.06
60-10-sif-4	-	-	-	60-10-sif-4	2025.0	0.00	0.02	60-10-sif-4	2011.0	0.00	0.02
60-10-sif-5	1917.0	0.00	0.02	60-10-sif-5	1910.0	0.00	0.04	60-10-sif-5	1906.0	0.00	0.05
60-20-sif-1	-	-	-	60-20-sif-1	3753.0	0.00	0.05	60-20-sif-1	3745.0	0.00	0.05
60-20-sif-2	-	-	-	60-20-sif-2	3932.0	0.00	0.06	60-20-sif-2	3922.0	0.00	0.15
60-20-sif-3	-	-	-	60-20-sif-3	3202.0	0.00	0.14	60-20-sif-3	3189.0	0.00	0.09
60-20-sif-4	-	-	-	60-20-sif-4	3824.0	0.00	0.06	60-20-sif-4	3811.0	0.00	0.05
60-20-sif-5	-	-	-	60-20-sif-5	3652.0	0.00	0.15	60-20-sif-5	3637.0	0.00	0.10
60-30-sif-1	-	-	-	60-30-sif-1	6670.0	0.00	0.55	60-30-sif-1	6659.0	0.00	0.27
60-30-sif-2	-	-	-	60-30-sif-2	-	-	-	60-30-sif-2	5741.0	0.00	1.18
60-30-sif-3	-	-	-	60-30-sif-3	5324.0	0.00	0.25	60-30-sif-3	5293.0	0.00	0.27
60-30-sif-4	-	-	-	60-30-sif-4	-	-	-	60-30-sif-4	5492.0	0.00	0.50
60-30-sif-5	-	-	-	60-30-sif-5	-	-	-	60-30-sif-5	5296.0	0.00	0.17
90-10-sif-1	-	-	-	90-10-sif-1	2925.0	0.00	0.31	90-10-sif-1	2919.0	0.00	0.11
90-10-sif-2	-	-	-	90-10-sif-2	3017.0	0.00	0.09	90-10-sif-2	2996.0	0.00	0.06
90-10-sif-3	-	-	-	90-10-sif-3	2930.0	0.00	0.04	90-10-sif-3	2917.0	0.00	0.04
90-10-sif-4	-	-	-	90-10-sif-4	-	-	-	90-10-sif-4	3162.0	0.00	0.04
90-10-sif-5	2647.0	0.00	0.05	90-10-sif-5	2621.0	0.00	0.08	90-10-sif-5	2615.0	0.00	0.06
90-20-sif-1	-	-	-	90-20-sif-1	6536.0	0.00	0.56	90-20-sif-1	6496.0	0.00	0.16
90-20-sif-2	-	-	-	90-20-sif-2	6816.0	0.00	0.54	90-20-sif-2	6797.0	0.00	0.81
90-20-sif-3	-	-	-	90-20-sif-3	6132.0	0.00	0.55	90-20-sif-3	6111.0	0.00	0.48
90-20-sif-4	-	-	-	90-20-sif-4	5292.0	0.00	0.35	90-20-sif-4	5269.0	0.00	0.11
90-20-sif-5	-	-	-	90-20-sif-5	-	-	-	90-20-sif-5	5974.0	0.00	9.60
90-30-sif-1	-	-	-	90-30-sif-1	9588.0	0.00	17.73	90-30-sif-1	9544.0	0.00	17.41
90-30-sif-2	-	-	-	90-30-sif-2	8591.0	0.00	2.21	90-30-sif-2	8515.0	0.00	2.70
90-30-sif-3	-	-	-	90-30-sif-3	8673.0	0.00	2.18	90-30-sif-3	8648.0	0.00	1.70
90-30-sif-4	-	-	-	90-30-sif-4	8981.0	0.00	1.63	90-30-sif-4	8942.0	0.00	2.94
90-30-sif-5	8049.0	0.00	1.10	90-30-sif-5	7989.0	0.00	2.47	90-30-sif-5	7964.0	0.00	1.89
120-10-sif-1	-	-	-	120-10-sif-1	3881.0	0.00	3.59	120-10-sif-1	3867.0	0.00	0.76
120-10-sif-2	3563.0	0.00	0.04	120-10-sif-2	3555.0	0.00	0.04	120-10-sif-2	3554.0	0.00	0.11
120-10-sif-3	-	-	-	120-10-sif-3	-	-	-	120-10-sif-3	3413.0	0.00	0.28
120-10-sif-4	4345.0	0.00	0.44	120-10-sif-4	4313.0	0.00	1.45	120-10-sif-4	4307.0	0.00	0.91
120-10-sif-5	-	-	-	120-10-sif-5	3839.0	0.00	0.59	120-10-sif-5	3827.0	0.00	0.39
120-20-sif-1	-	-	-	120-20-sif-1	8062.0	0.00	2.05	120-20-sif-1	8051.0	0.00	2.04
120-20-sif-2	-	-	-	120-20-sif-2	9309.0	0.00	1.24	120-20-sif-2	9273.0	0.00	1.04
120-20-sif-3	-	-	-	120-20-sif-3	9723.0	0.00	23.48	120-20-sif-3	9638.0	0.00	2.18
120-20-sif-4	-	-	-	120-20-sif-4	7739.0	0.00	18.95	120-20-sif-4	7719.0	0.00	4.28
120-20-sif-5	-	-	-	120-20-sif-5	-	-	-	120-20-sif-5	7470.0	0.00	2.22
120-30-sif-1	-	-	-	120-30-sif-1	13038.0	0.00	99.65	120-30-sif-1	12967.0	0.00	52.28
120-30-sif-2	-	-	-	120-30-sif-2	11922.0	0.00	514.15	120-30-sif-2	11896.0	0.00	7.76
120-30-sif-3	-	-	-	120-30-sif-3	11191.0	0.00	40.45	120-30-sif-3	11156.0	0.00	38.46
120-30-sif-4	-	-	-	120-30-sif-4	11440.0	0.00	559.46	120-30-sif-4	11382.0	0.00	38.18
120-30-sif-5	-	-	-	120-30-sif-5	-	-	-	120-30-sif-5	13314.0	0.00	34.84

Table 14 Detailed Results of ECS on Standard-Weight Instances in S_A with *sif* execution mode ($ws = 0.7 - 0.9$)

ws-0.7				ws-0.8				ws-0.9			
Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap% ₀₀₀	CPU	Name	Cost	Gap%	CPU
60-10-sif-1	1862.0	0.00	0.04	60-10-sif-1	1859.0	0.00	0.02	60-10-sif-1	1859.0	0.00	0.02
60-10-sif-2	1999.0	0.00	0.06	60-10-sif-2	1991.0	0.00	0.05	60-10-sif-2	1989.0	0.00	0.02
60-10-sif-3	2261.0	0.00	0.06	60-10-sif-3	2260.0	0.00	0.02	60-10-sif-3	2251.0	0.00	0.03
60-10-sif-4	2009.0	0.00	0.04	60-10-sif-4	2009.0	0.00	0.06	60-10-sif-4	2007.0	0.00	0.02
60-10-sif-5	1903.0	0.00	0.03	60-10-sif-5	1902.0	0.00	0.04	60-10-sif-5	1900.0	0.00	0.02
60-20-sif-1	3740.0	0.00	0.04	60-20-sif-1	3738.0	0.00	0.03	60-20-sif-1	3738.0	0.00	0.04
60-20-sif-2	3916.0	0.00	0.08	60-20-sif-2	3911.0	0.00	0.06	60-20-sif-2	3900.0	0.00	0.04
60-20-sif-3	3178.0	0.00	0.04	60-20-sif-3	3178.0	0.00	0.08	60-20-sif-3	3175.0	0.00	0.05
60-20-sif-4	3807.0	0.00	0.05	60-20-sif-4	3805.0	0.00	0.09	60-20-sif-4	3803.0	0.00	0.08
60-20-sif-5	3629.0	0.00	0.03	60-20-sif-5	3628.0	0.00	0.06	60-20-sif-5	3626.0	0.00	0.04
60-30-sif-1	6647.0	0.00	0.31	60-30-sif-1	6636.0	0.00	0.13	60-30-sif-1	6636.0	0.00	0.10
60-30-sif-2	5712.0	0.00	0.46	60-30-sif-2	5705.0	0.00	0.38	60-30-sif-2	5704.0	0.00	0.09
60-30-sif-3	5283.0	0.00	0.12	60-30-sif-3	5277.0	0.00	0.09	60-30-sif-3	5277.0	0.00	0.06
60-30-sif-4	5479.0	0.00	0.55	60-30-sif-4	5473.0	0.00	0.30	60-30-sif-4	5472.0	0.00	0.09
60-30-sif-5	5278.0	0.00	0.17	60-30-sif-5	5274.0	0.00	0.23	60-30-sif-5	5273.0	0.00	0.04
90-10-sif-1	2916.0	0.00	0.10	90-10-sif-1	2914.0	0.00	0.08	90-10-sif-1	2907.0	0.00	0.06
90-10-sif-2	2990.0	0.00	0.07	90-10-sif-2	2988.0	0.00	0.02	90-10-sif-2	2988.0	0.00	0.02
90-10-sif-3	2915.0	0.00	0.04	90-10-sif-3	2915.0	0.00	0.03	90-10-sif-3	2915.0	0.00	0.04
90-10-sif-4	3160.0	0.00	0.07	90-10-sif-4	3159.0	0.00	0.09	90-10-sif-4	3153.0	0.00	0.07
90-10-sif-5	2614.0	0.00	0.06	90-10-sif-5	2612.0	0.00	0.06	90-10-sif-5	2612.0	0.00	0.06
90-20-sif-1	6490.0	0.00	0.35	90-20-sif-1	6487.0	0.00	0.13	90-20-sif-1	6487.0	0.00	0.11
90-20-sif-2	6778.0	0.00	0.67	90-20-sif-2	6778.0	0.00	0.20	90-20-sif-2	6775.0	0.00	0.15
90-20-sif-3	6107.0	0.00	0.14	90-20-sif-3	6101.0	0.00	0.59	90-20-sif-3	6101.0	0.00	0.46
90-20-sif-4	5259.0	0.00	0.25	90-20-sif-4	5252.0	0.00	0.08	90-20-sif-4	5250.0	0.00	0.06
90-20-sif-5	5959.0	0.00	0.16	90-20-sif-5	5954.0	0.00	0.12	90-20-sif-5	5952.0	0.00	0.11
90-30-sif-1	9527.0	0.00	6.39	90-30-sif-1	9521.0	0.00	2.17	90-30-sif-1	9496.0	0.00	0.42
90-30-sif-2	8497.0	0.00	2.74	90-30-sif-2	8493.0	0.00	2.59	90-30-sif-2	8491.0	0.00	2.45
90-30-sif-3	8638.0	0.00	2.04	90-30-sif-3	8633.0	0.00	2.73	90-30-sif-3	8628.0	0.00	0.25
90-30-sif-4	8935.0	0.00	0.38	90-30-sif-4	8931.0	0.00	0.33	90-30-sif-4	8929.0	0.00	0.34
90-30-sif-5	7961.0	0.00	0.75	90-30-sif-5	7959.0	0.00	0.46	90-30-sif-5	7959.0	0.00	0.46
120-10-sif-1	3866.0	0.00	0.87	120-10-sif-1	3850.0	0.00	0.07	120-10-sif-1	3850.0	0.00	0.07
120-10-sif-2	3551.0	0.00	0.03	120-10-sif-2	3549.0	0.00	0.03	120-10-sif-2	3549.0	0.00	0.03
120-10-sif-3	3407.0	0.00	0.14	120-10-sif-3	3407.0	0.00	0.07	120-10-sif-3	3407.0	0.00	0.07
120-10-sif-4	4305.0	0.00	0.68	120-10-sif-4	4305.0	0.00	0.77	120-10-sif-4	4289.0	0.00	0.07
120-10-sif-5	3821.0	0.00	0.34	120-10-sif-5	3818.0	0.00	0.27	120-10-sif-5	3818.0	0.00	0.07
120-20-sif-1	8049.0	0.00	3.36	120-20-sif-1	8049.0	0.00	8.25	120-20-sif-1	8043.0	0.00	0.42
120-20-sif-2	9260.0	0.00	0.57	120-20-sif-2	9255.0	0.00	0.67	120-20-sif-2	9246.0	0.00	0.77
120-20-sif-3	9611.0	0.00	13.62	120-20-sif-3	9591.0	0.00	0.69	120-20-sif-3	9587.0	0.00	0.33
120-20-sif-4	7716.0	0.00	8.03	120-20-sif-4	7716.0	0.00	7.10	120-20-sif-4	7695.0	0.00	0.17
120-20-sif-5	7460.0	0.00	4.04	120-20-sif-5	7455.0	0.00	0.25	120-20-sif-5	7455.0	0.00	0.26
120-30-sif-1	12955.0	0.00	23.48	120-30-sif-1	12954.0	0.00	2.32	120-30-sif-1	12954.0	0.00	2.45
120-30-sif-2	11886.0	0.00	643.27	120-30-sif-2	11881.0	0.00	13.18	120-30-sif-2	11879.0	0.00	0.91
120-30-sif-3	11152.0	0.00	2.31	120-30-sif-3	11152.0	0.00	1.97	120-30-sif-3	11152.0	0.00	1.78
120-30-sif-4	11366.0	0.00	235.78	120-30-sif-4	11366.0	0.00	230.80	120-30-sif-4	11366.0	0.00	229.83
120-30-sif-5	13285.0	0.00	23.65	120-30-sif-5	13281.0	0.00	37.96	120-30-sif-5	13281.0	0.00	38.79