

COMP SCI 5401 FS2017 Assignment 1b

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Average vs Best Fitness

As can be seen from Figure

Table 1: Figure 1 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1001
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 1: Input 1

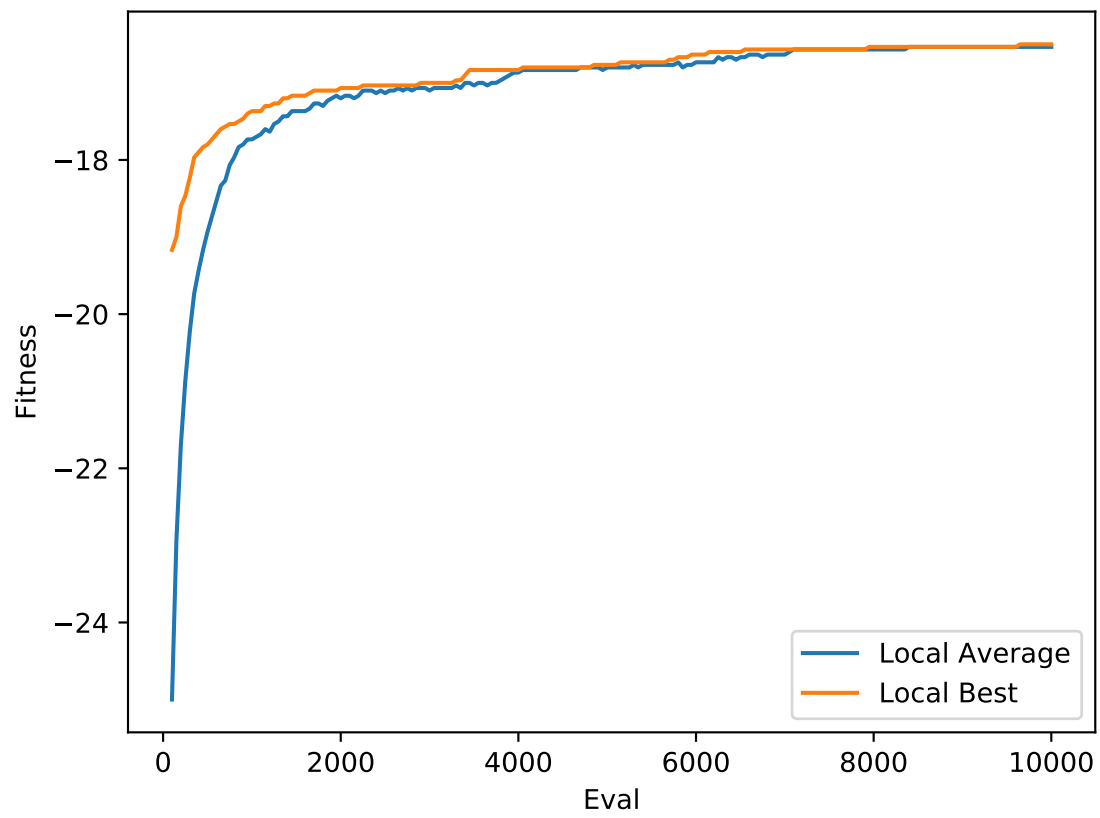


Table 2: Figure 2 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1002
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 3: Figure 3 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1003
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 2: Input 1

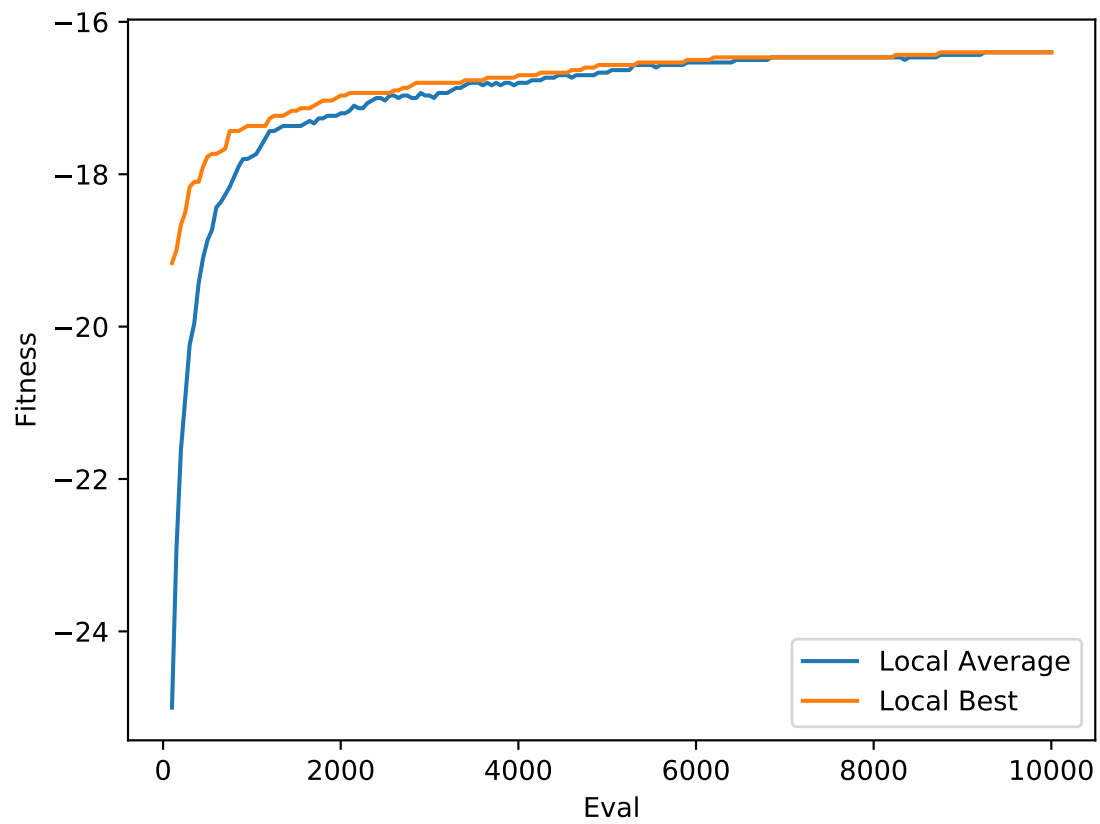


Figure 3: Input 1

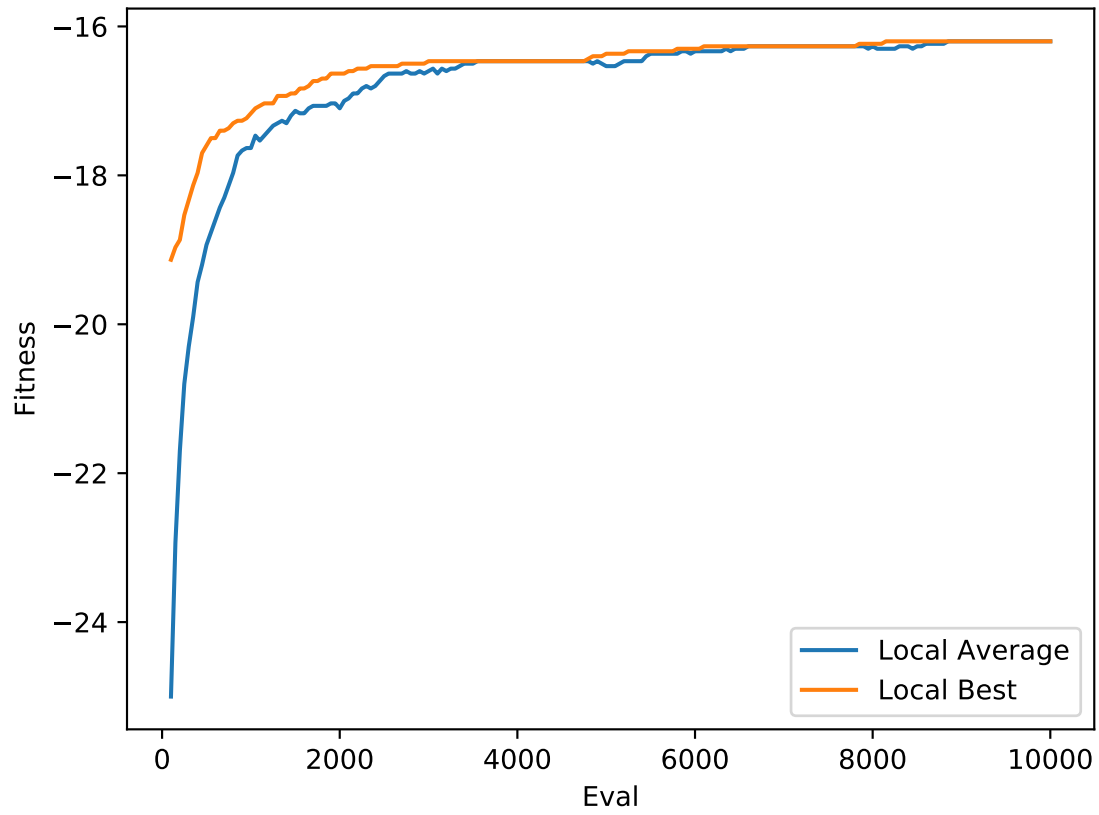


Table 4: Figure 4 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1004
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 5: Figure 5 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1005
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 4: Input 1

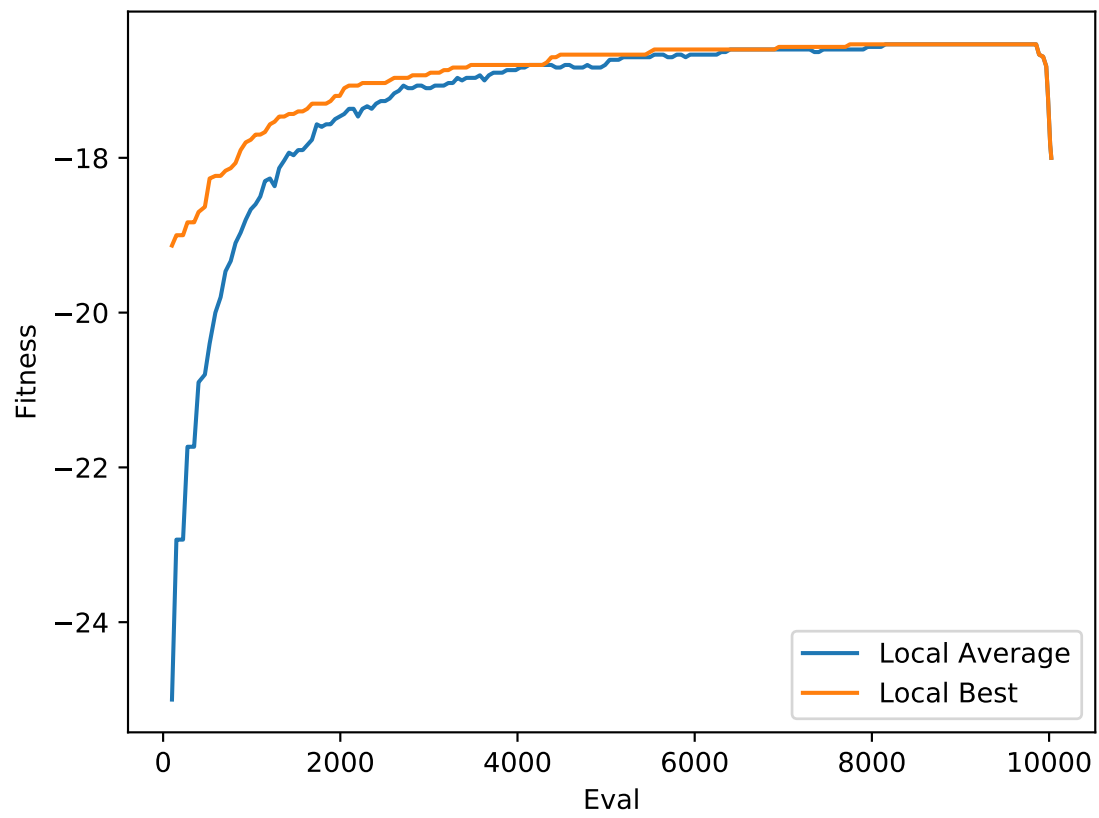


Figure 5: Input 1

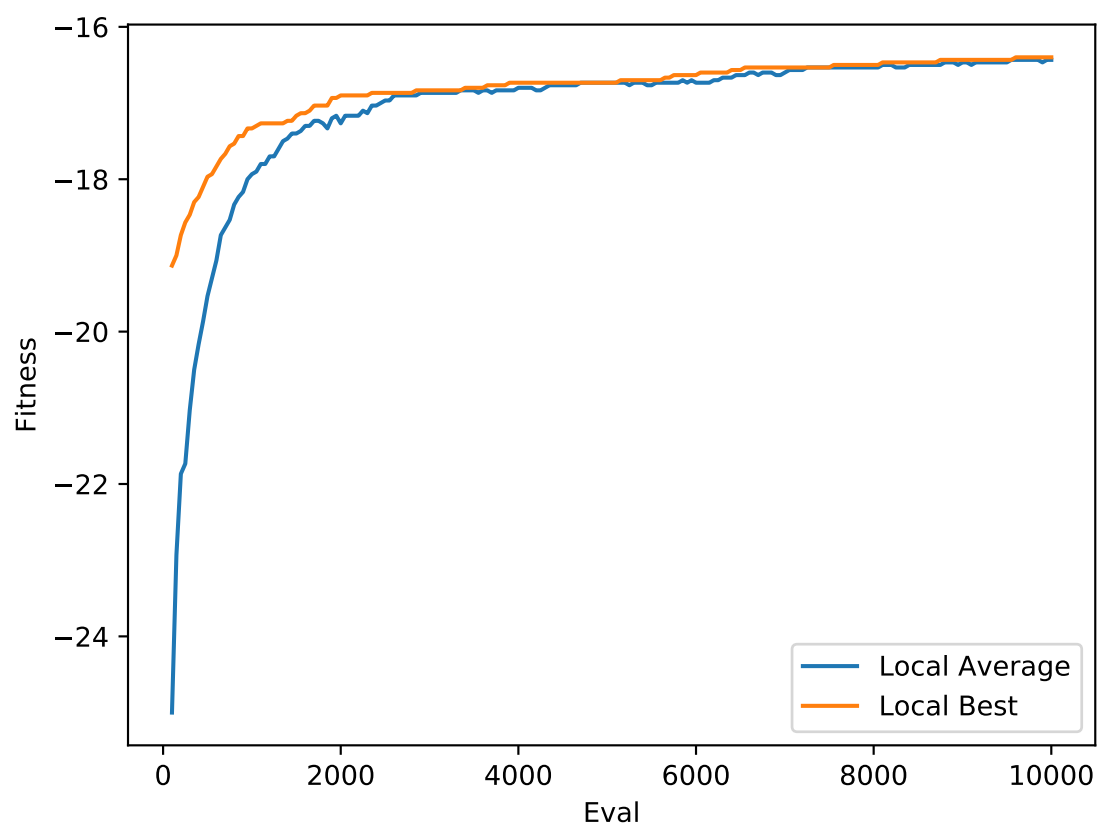


Table 6: Figure 6 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1006
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 7: Figure 7 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1007
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 6: Input 1

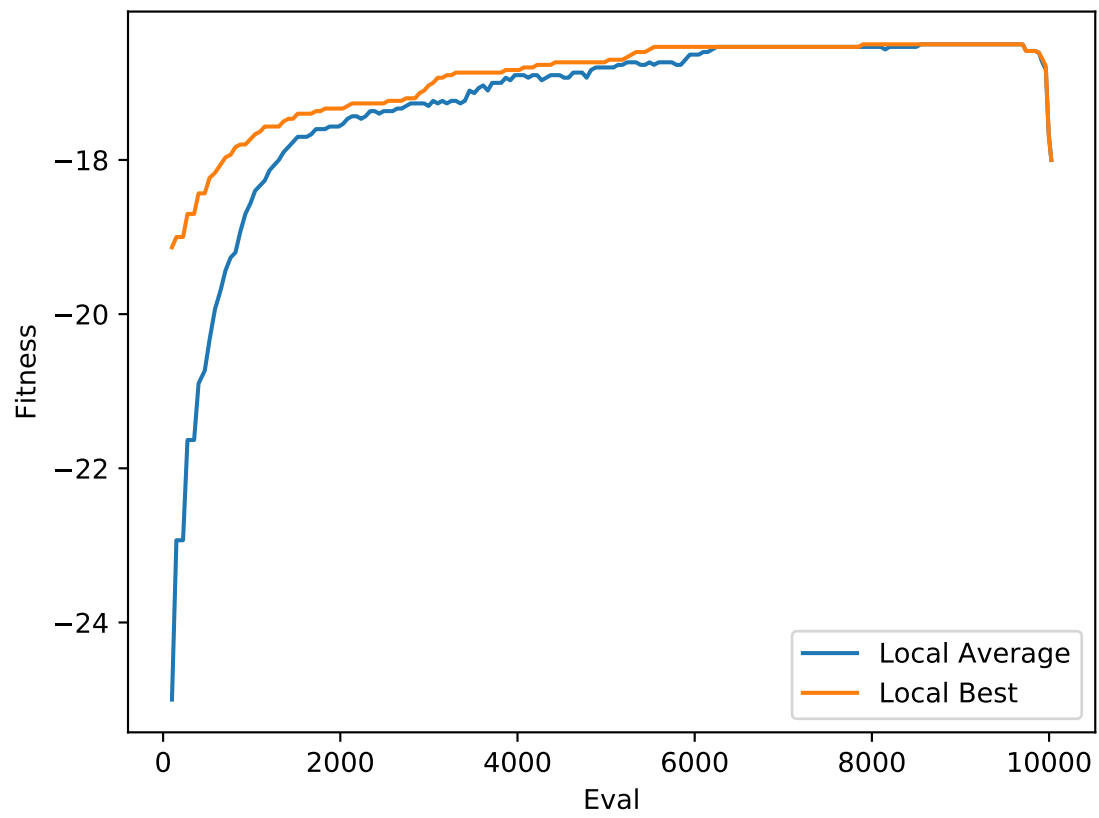


Figure 7: Input 1

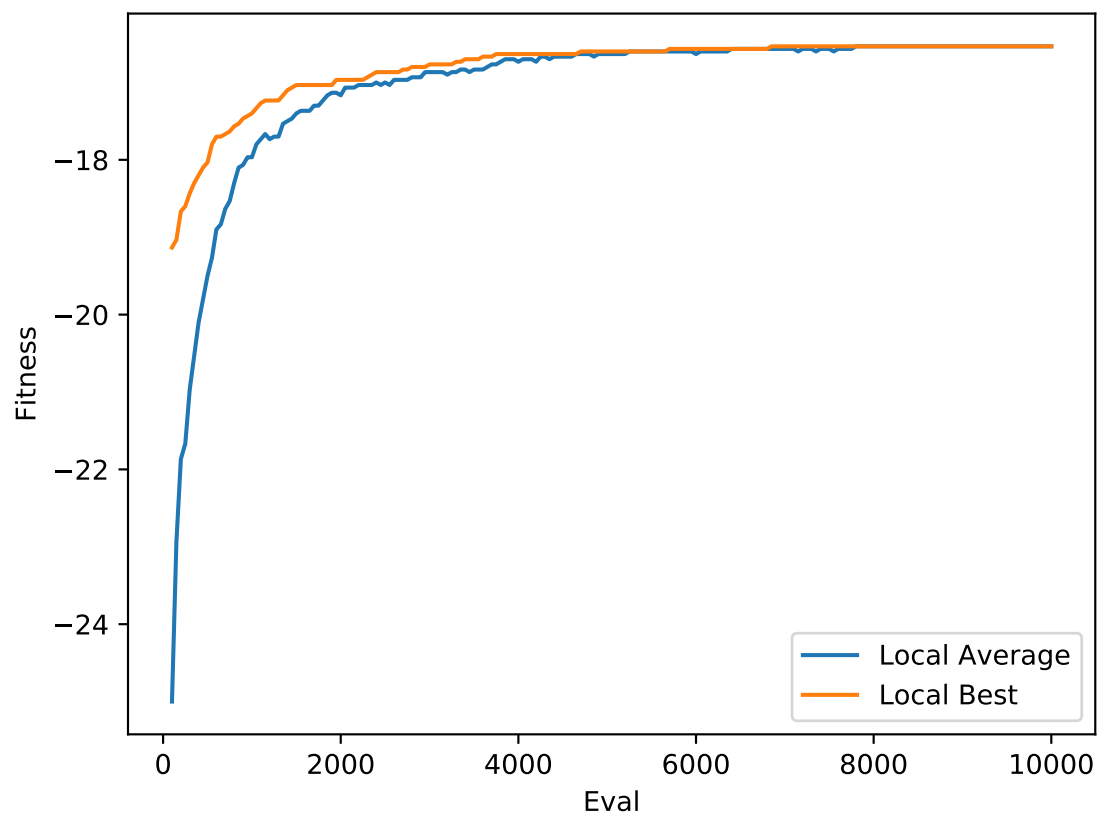


Table 8: Figure 8 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1008
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 9: Figure 9 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1009
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 8: Input 1

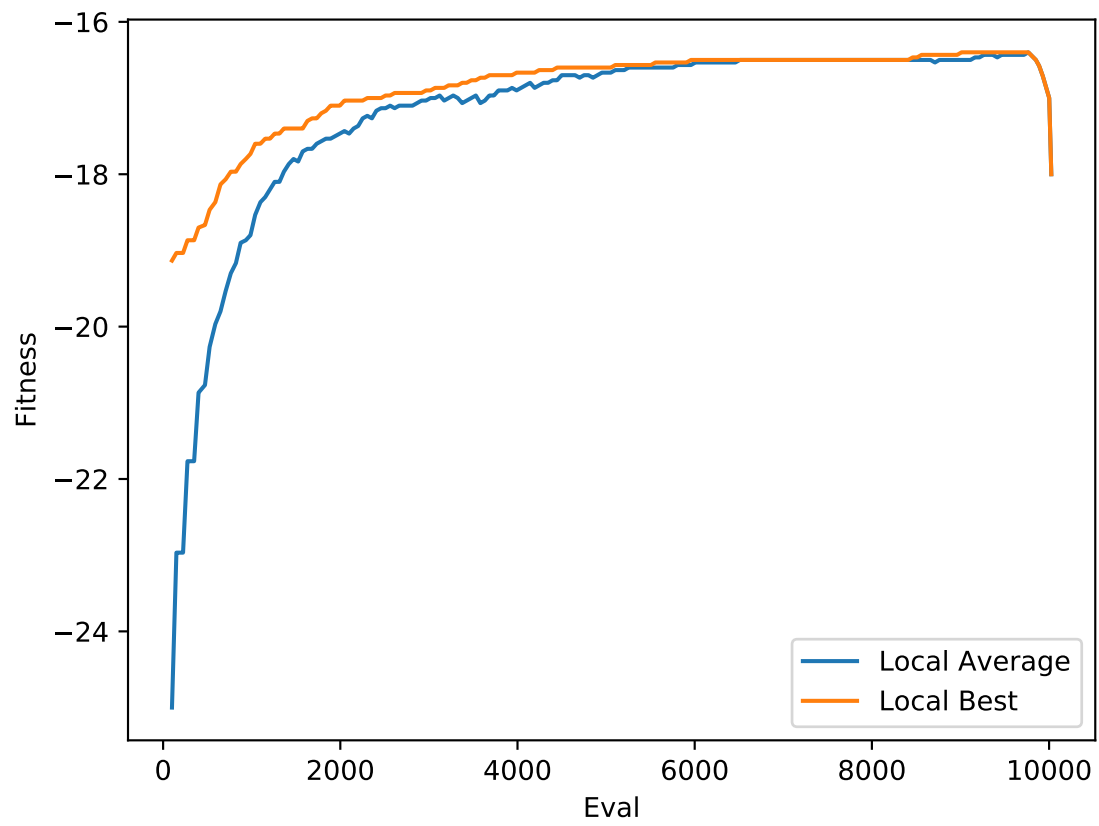


Figure 9: Input 1

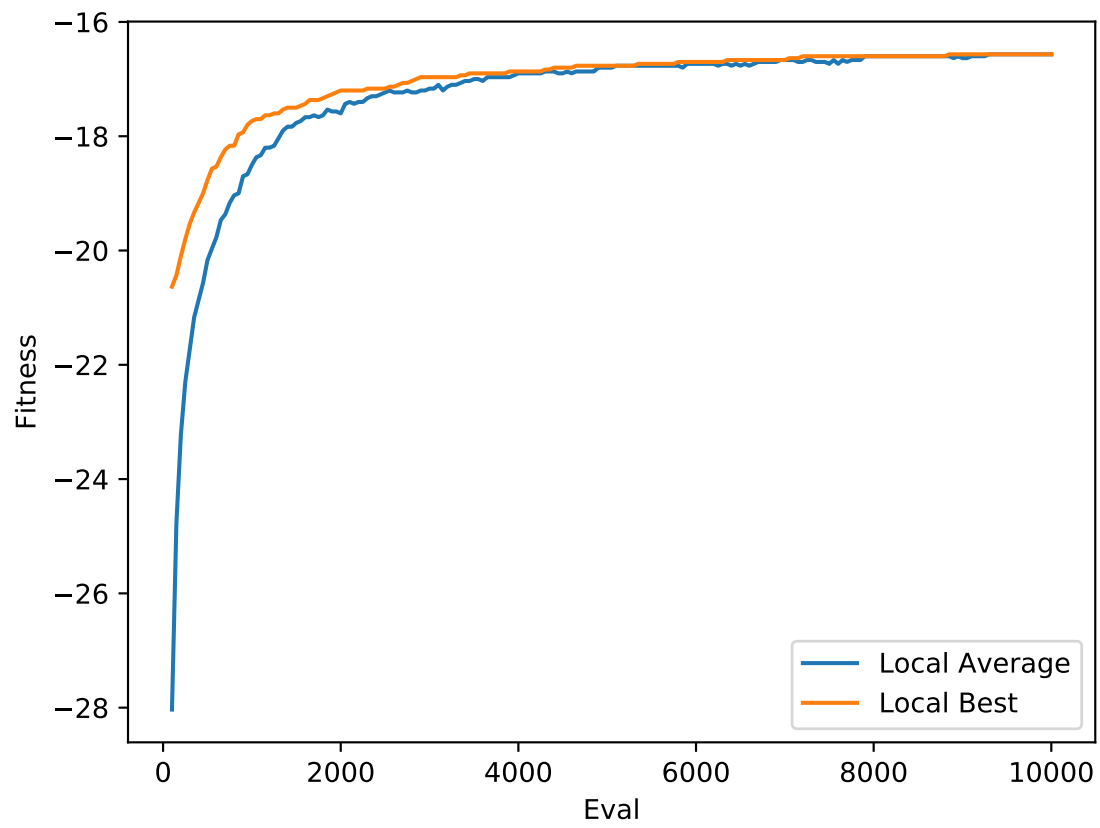


Table 10: Figure 10 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1010
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 10: Input 1

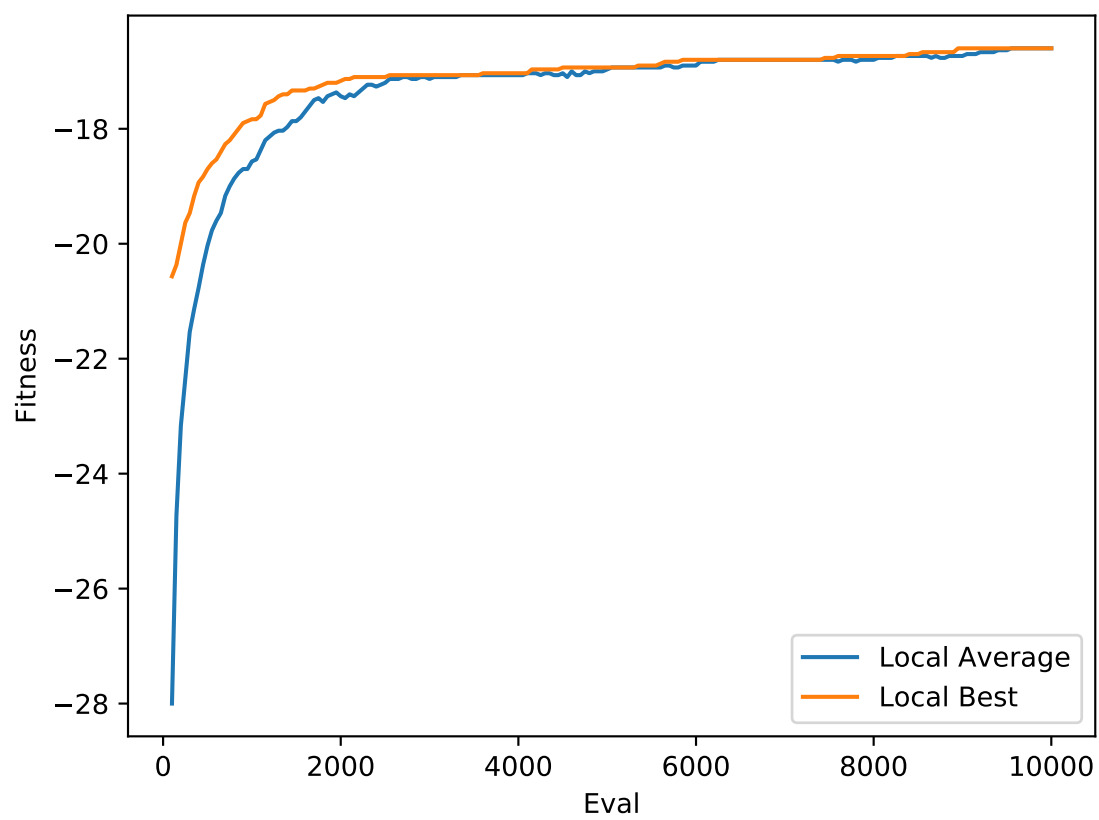


Table 11: Figure 11 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1011
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 12: Figure 12 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1012
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 11: Input 1

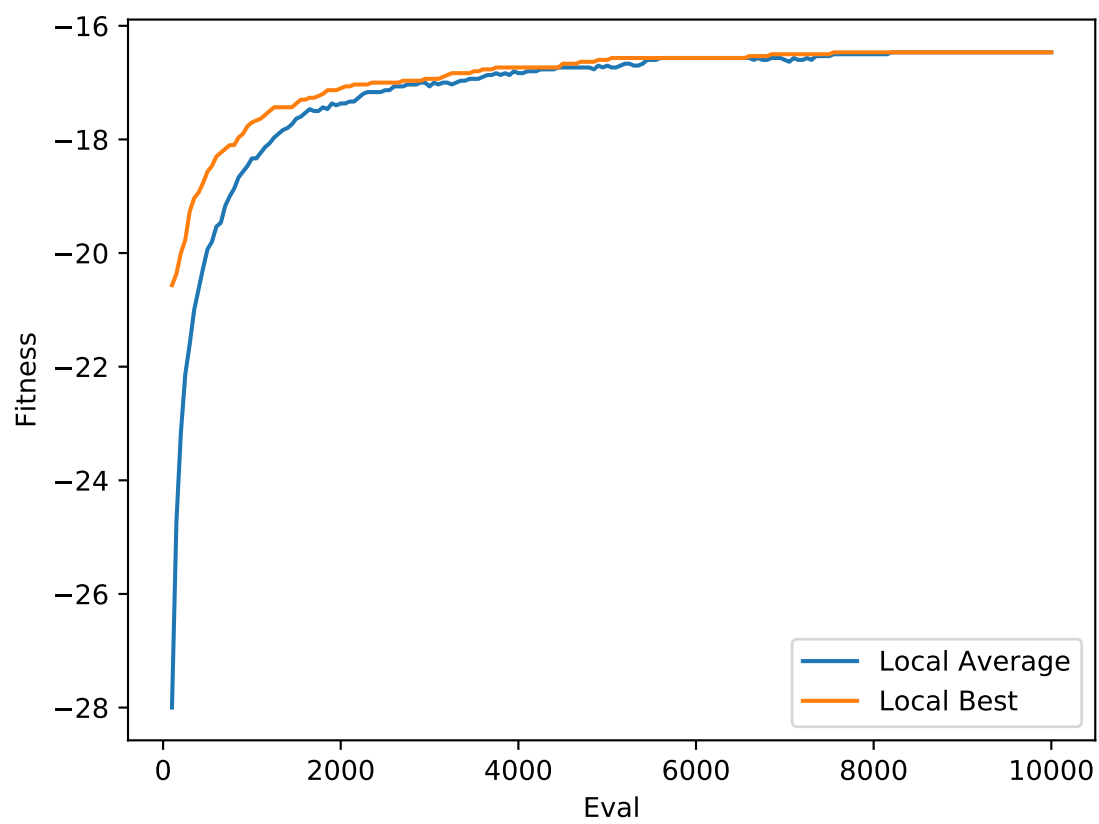


Figure 12: Input 1

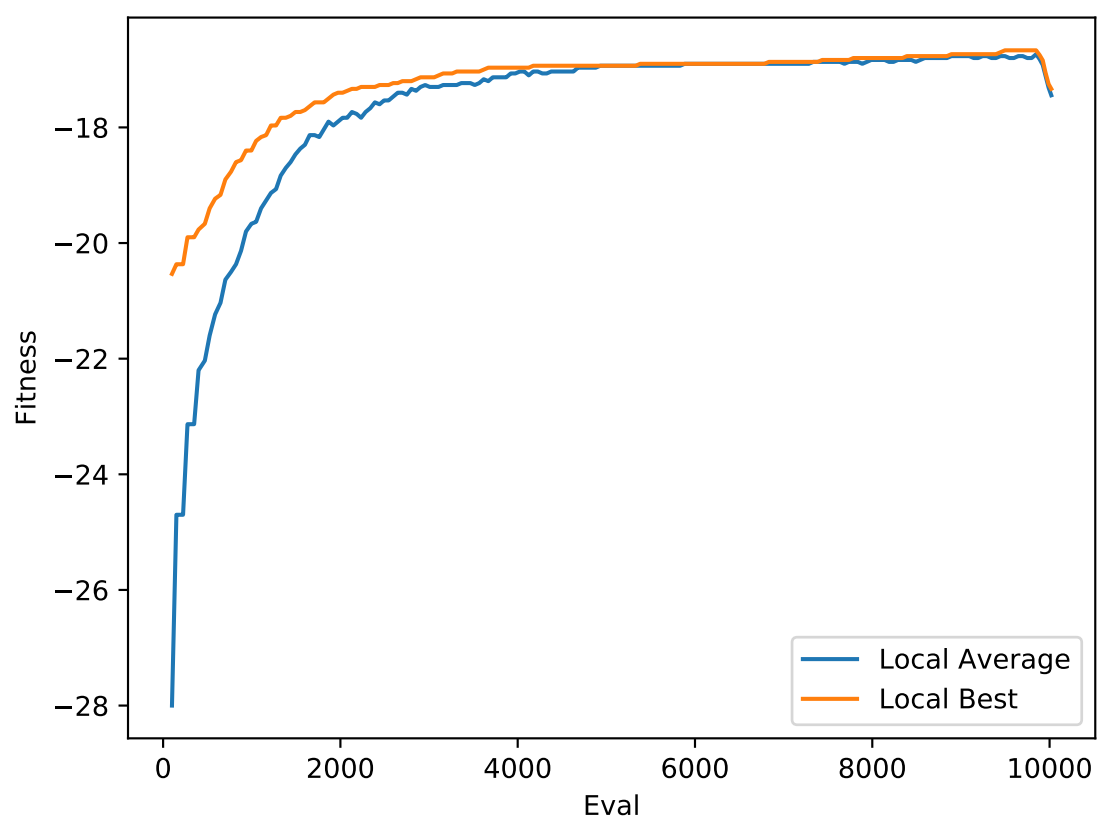


Table 13: Figure 13 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1013
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 14: Figure 14 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1014
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 13: Input 1

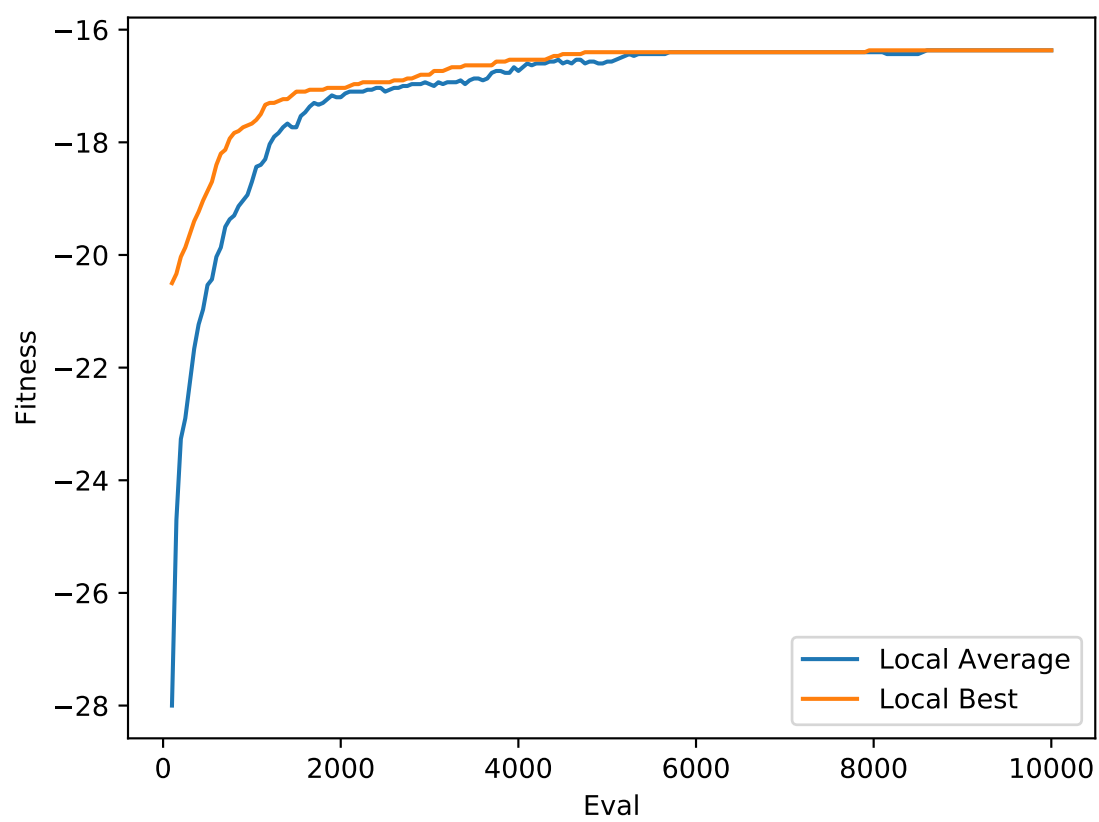


Figure 14: Input 1

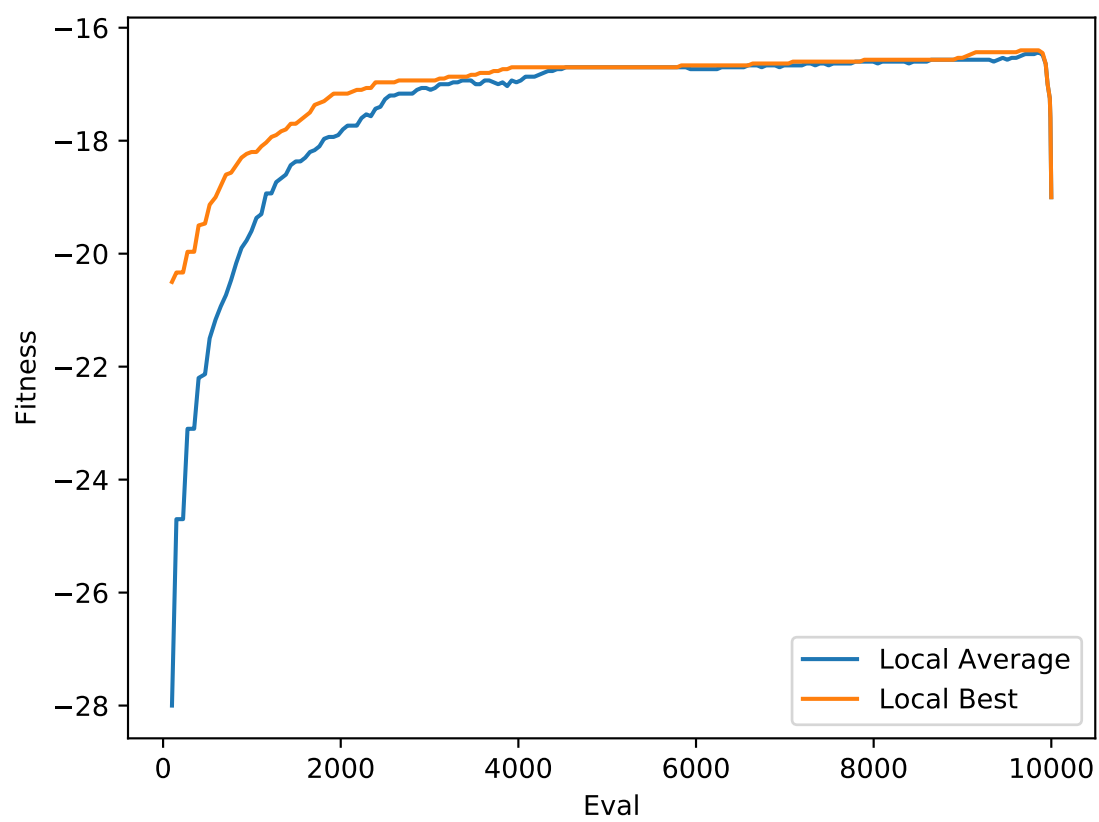


Table 15: Figure 15 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1015
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 16: Figure 16 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1016
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 15: Input 1

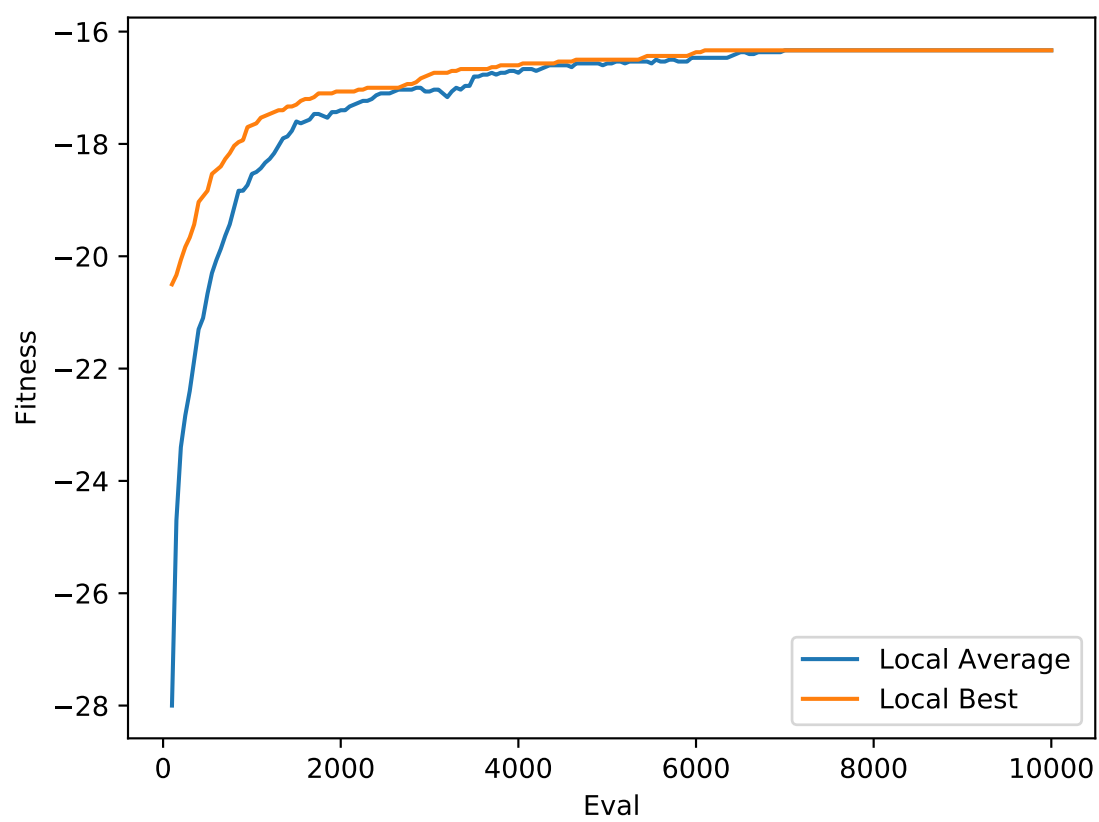


Figure 16: Input 1

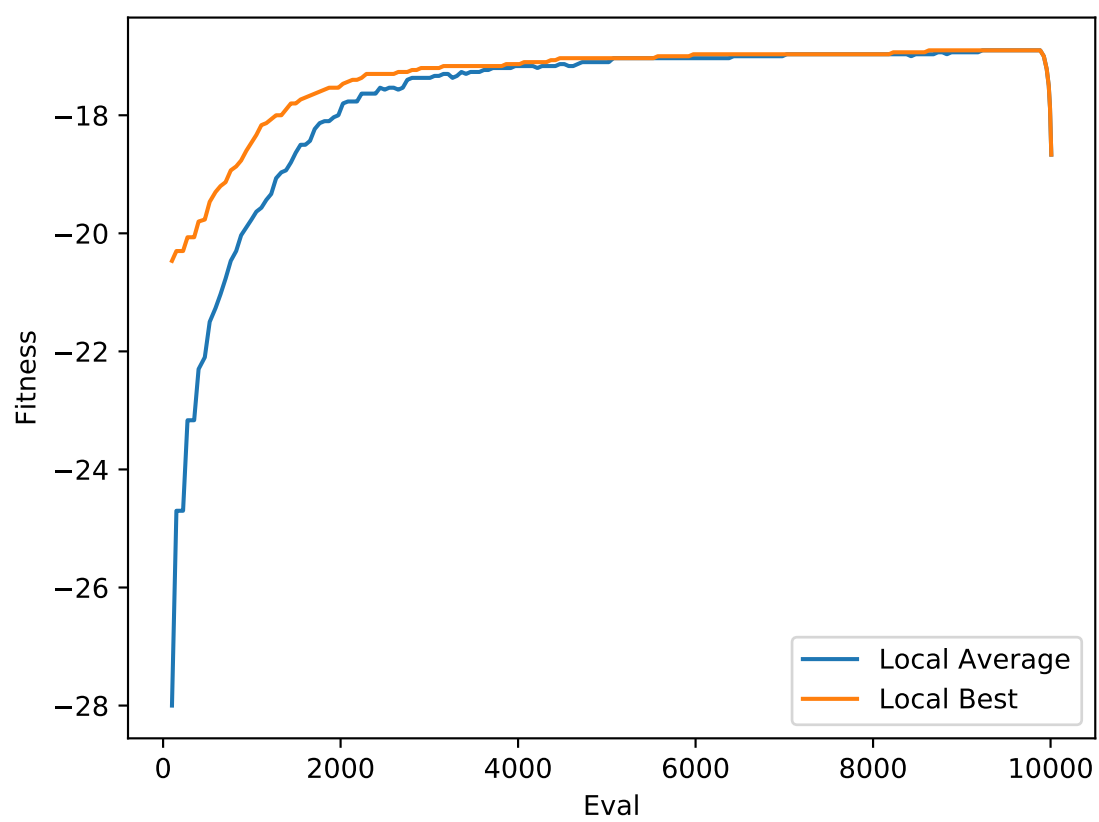


Table 17: Figure 17 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1017
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 18: Figure 18 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1018
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 17: Input 1

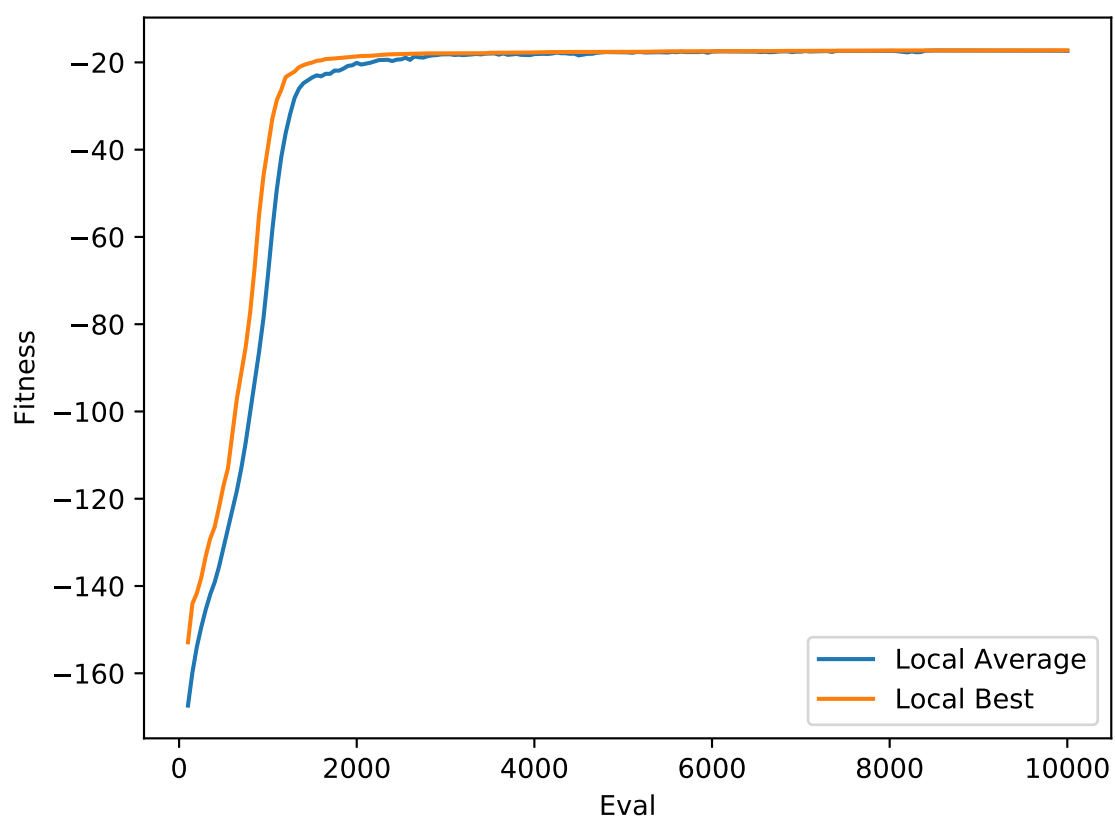


Figure 18: Input 1

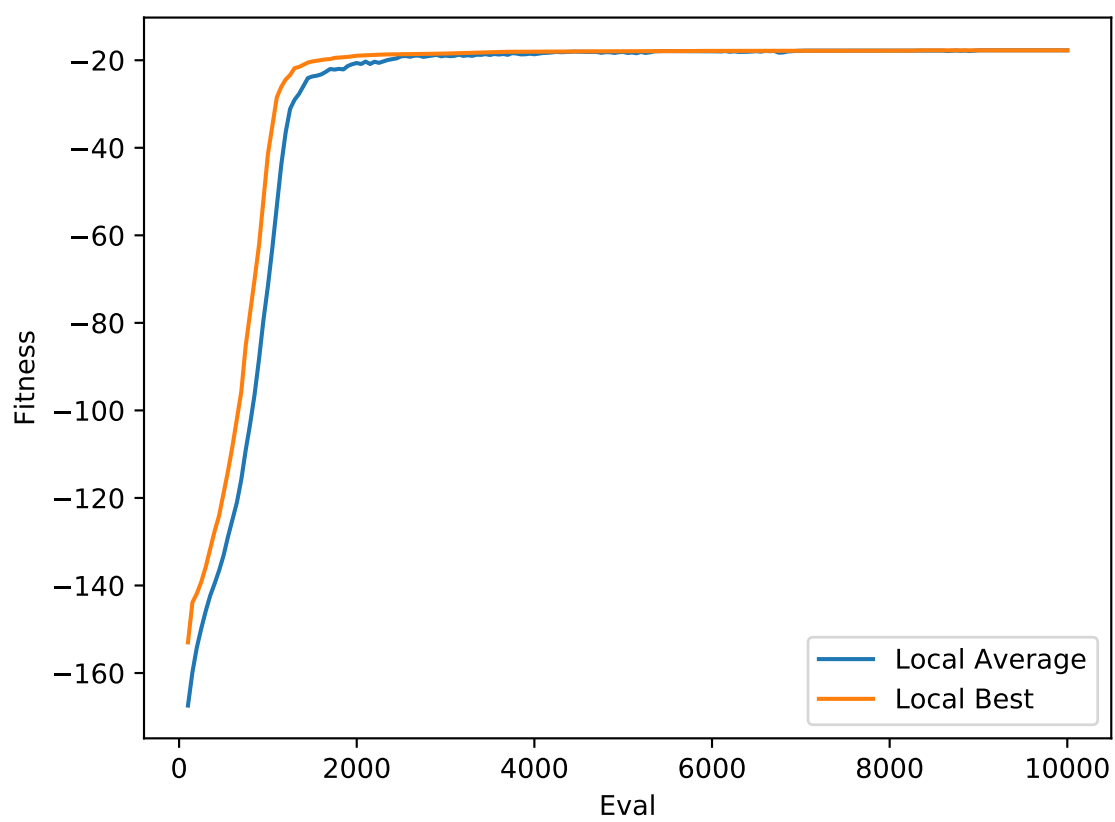


Table 19: Figure 19 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1019
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 20: Figure 20 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1020
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 19: Input 1

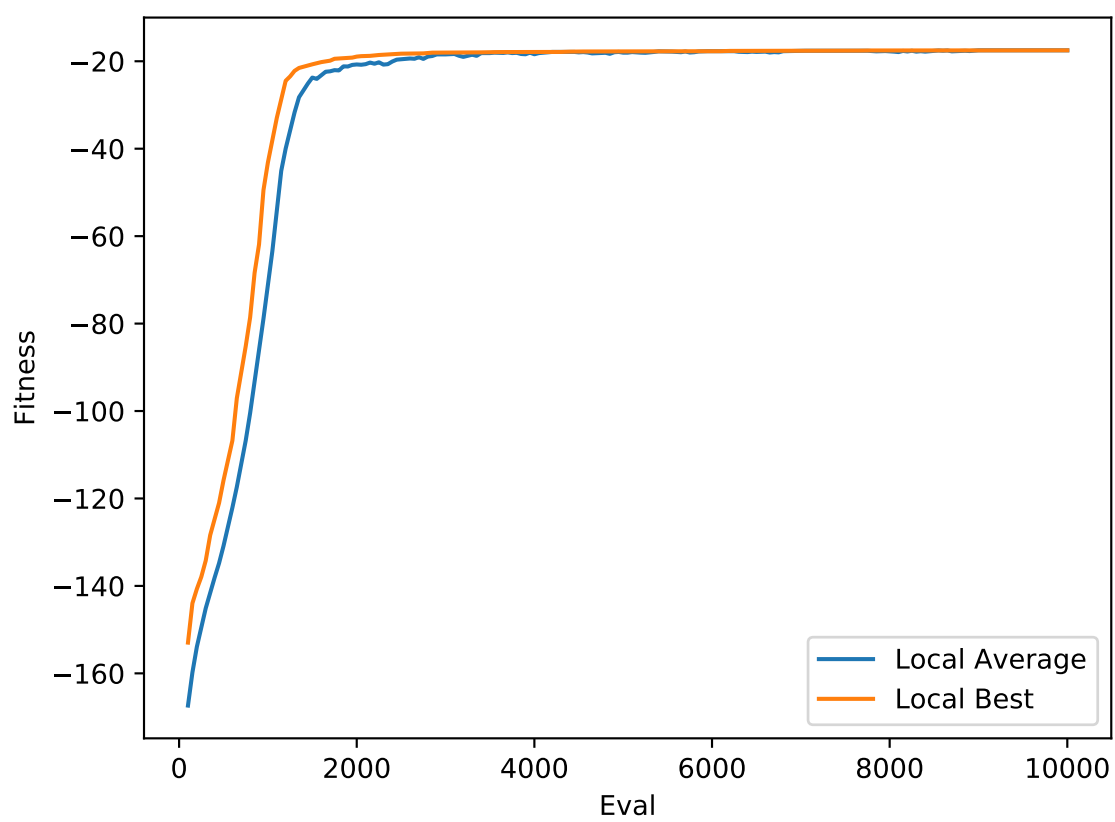


Figure 20: Input 1

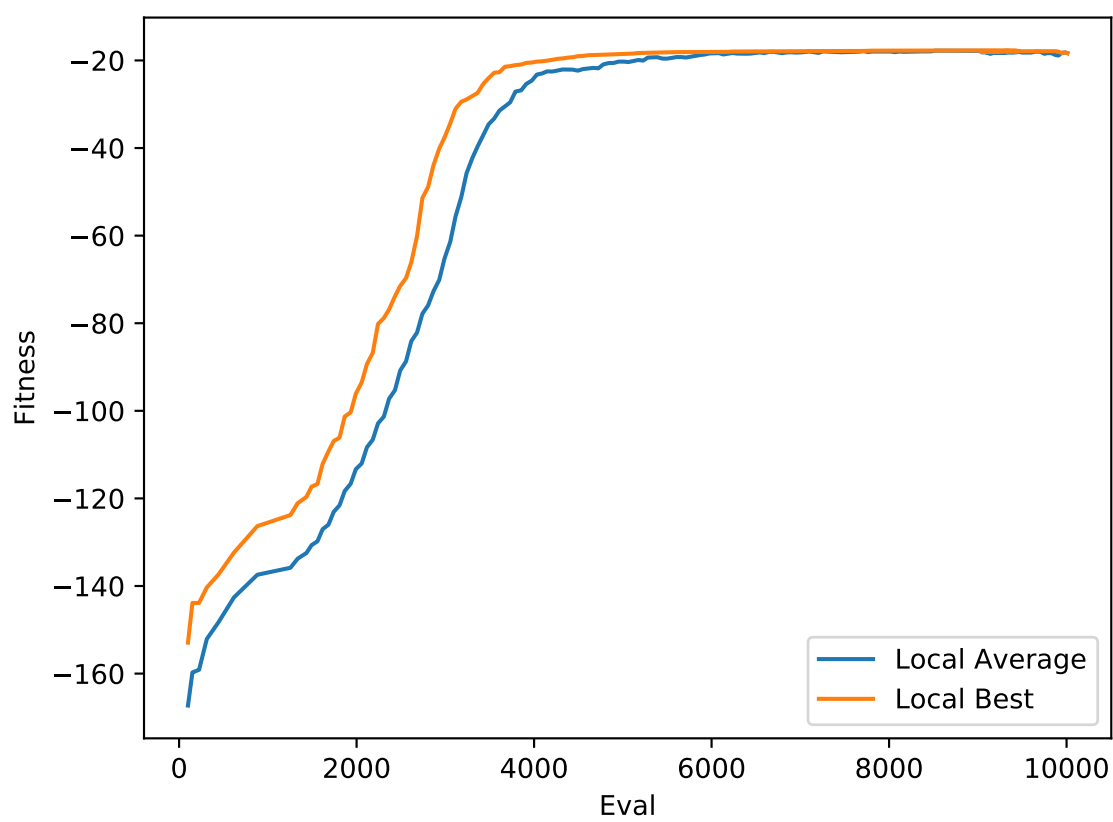


Table 21: Figure 21 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1021
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 22: Figure 22 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1022
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 21: Input 1

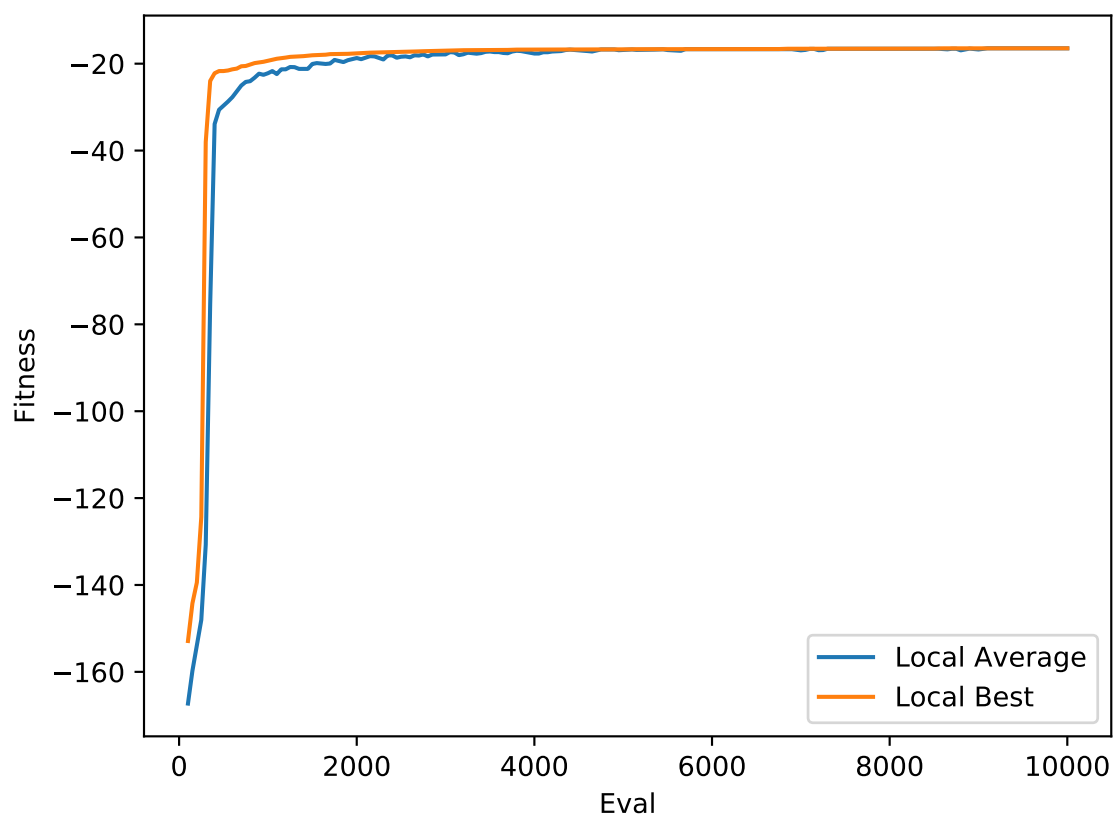


Figure 22: Input 1

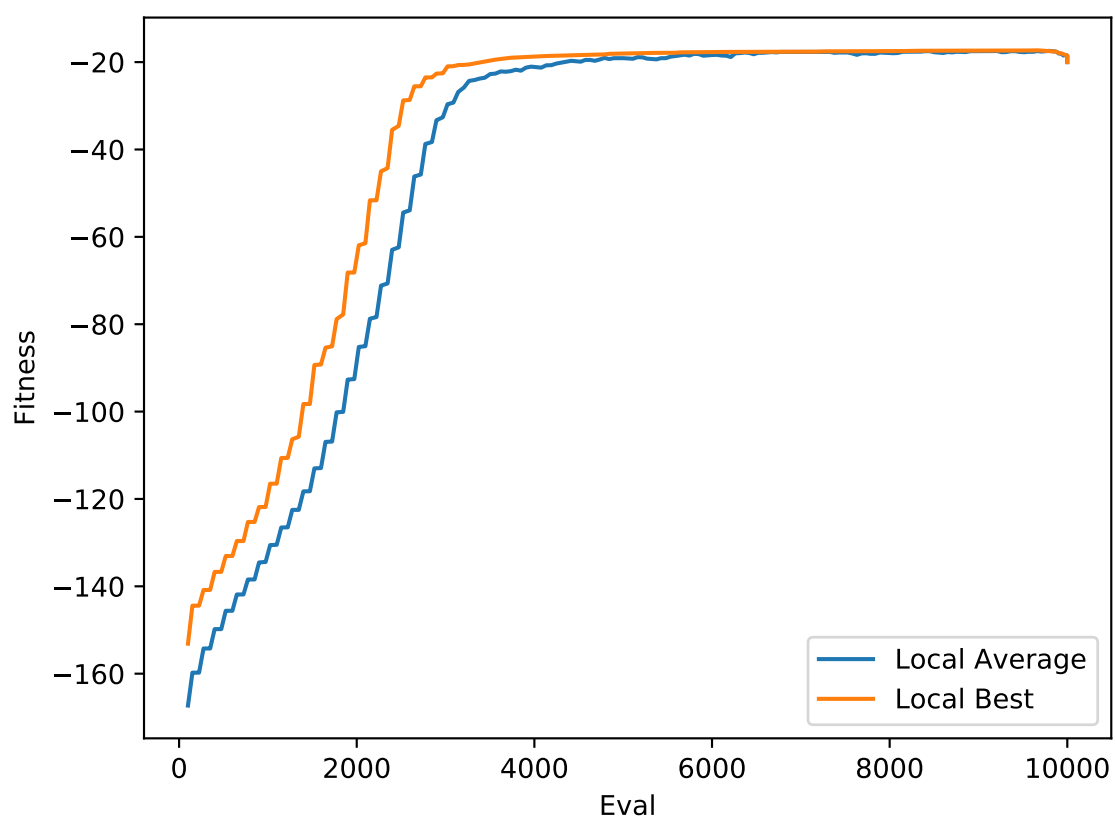


Table 23: Figure 23 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1023
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 24: Figure 24 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1024
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 23: Input 1

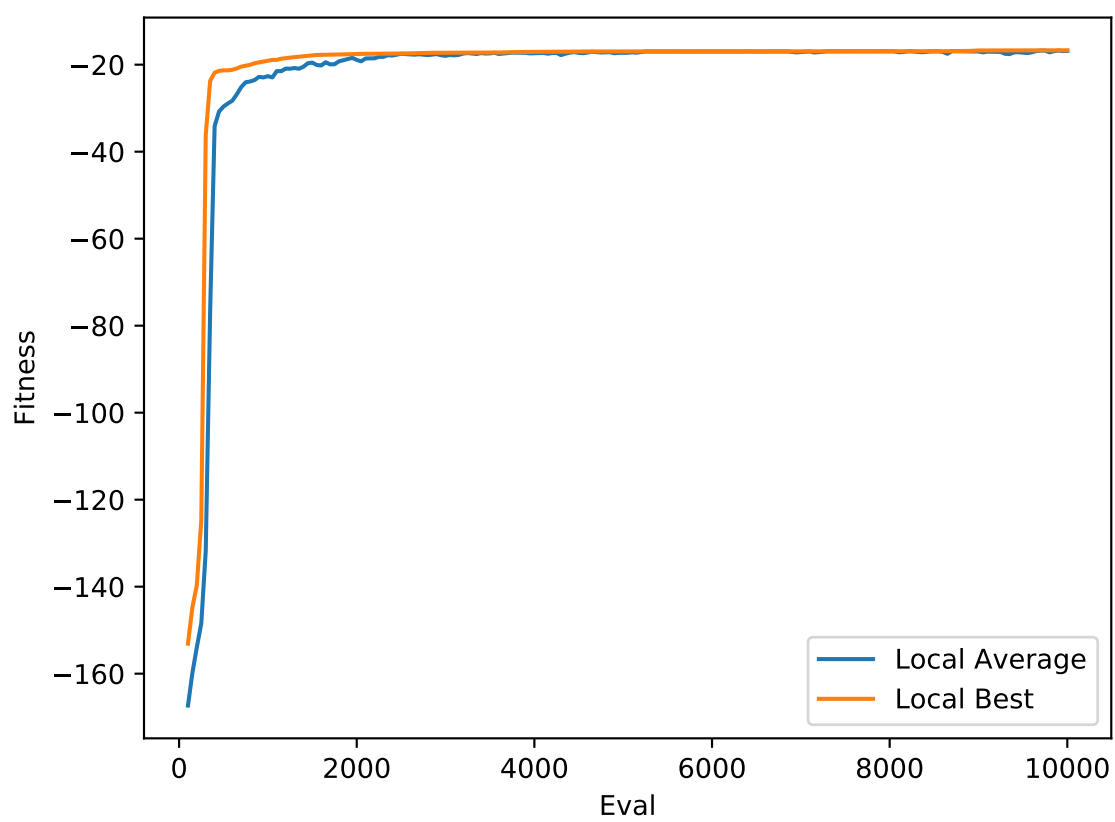


Figure 24: Input 1

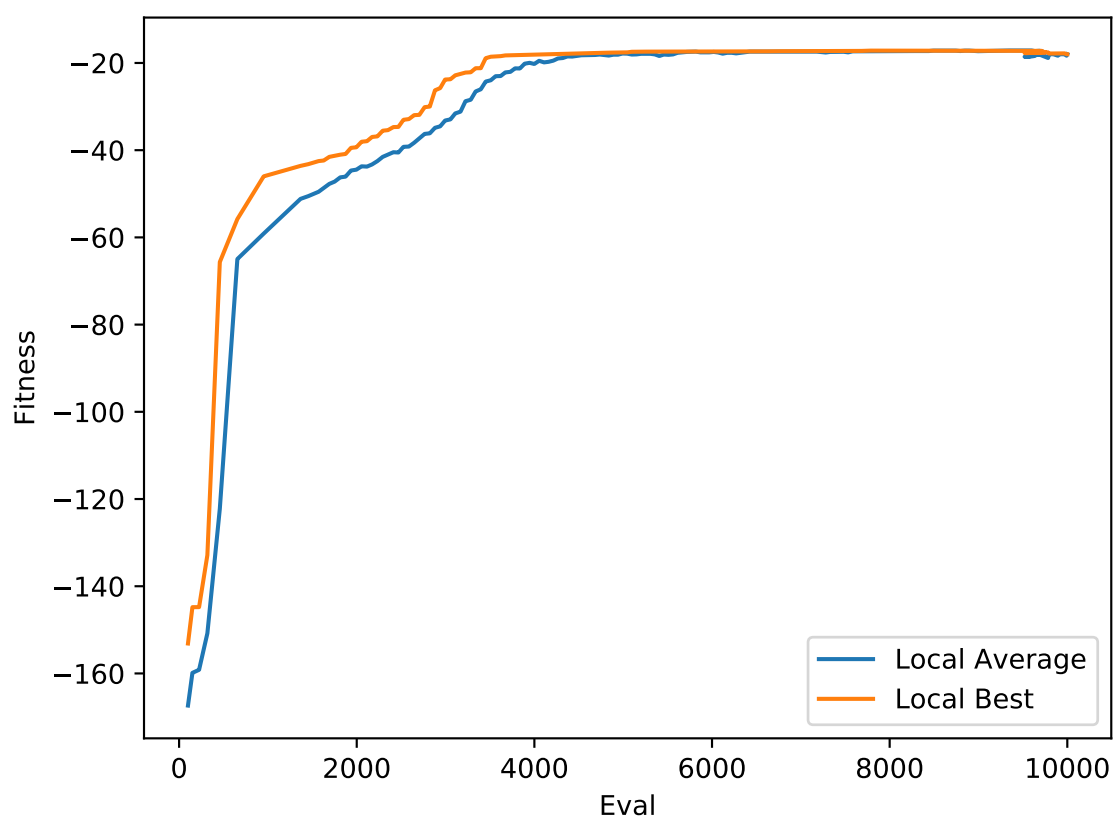


Table 25: Figure 25 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1025
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 26: Figure 26 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1026
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 25: Input 1

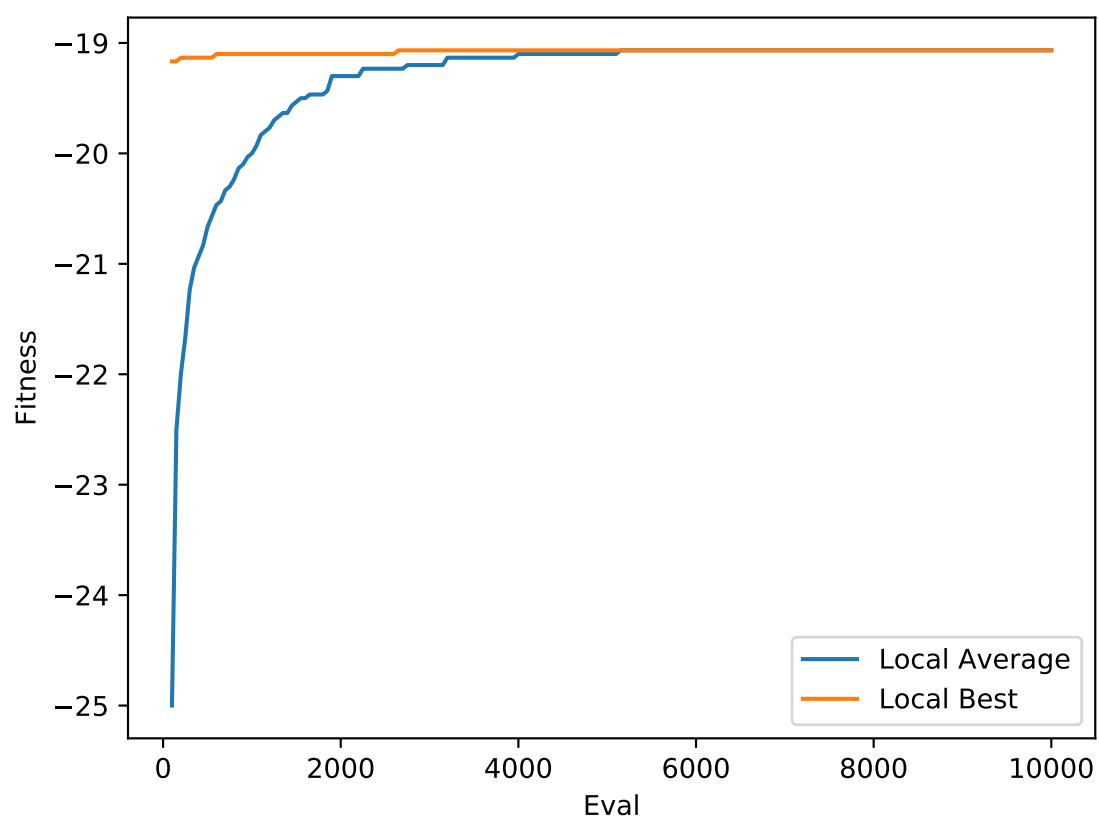


Figure 26: Input 1

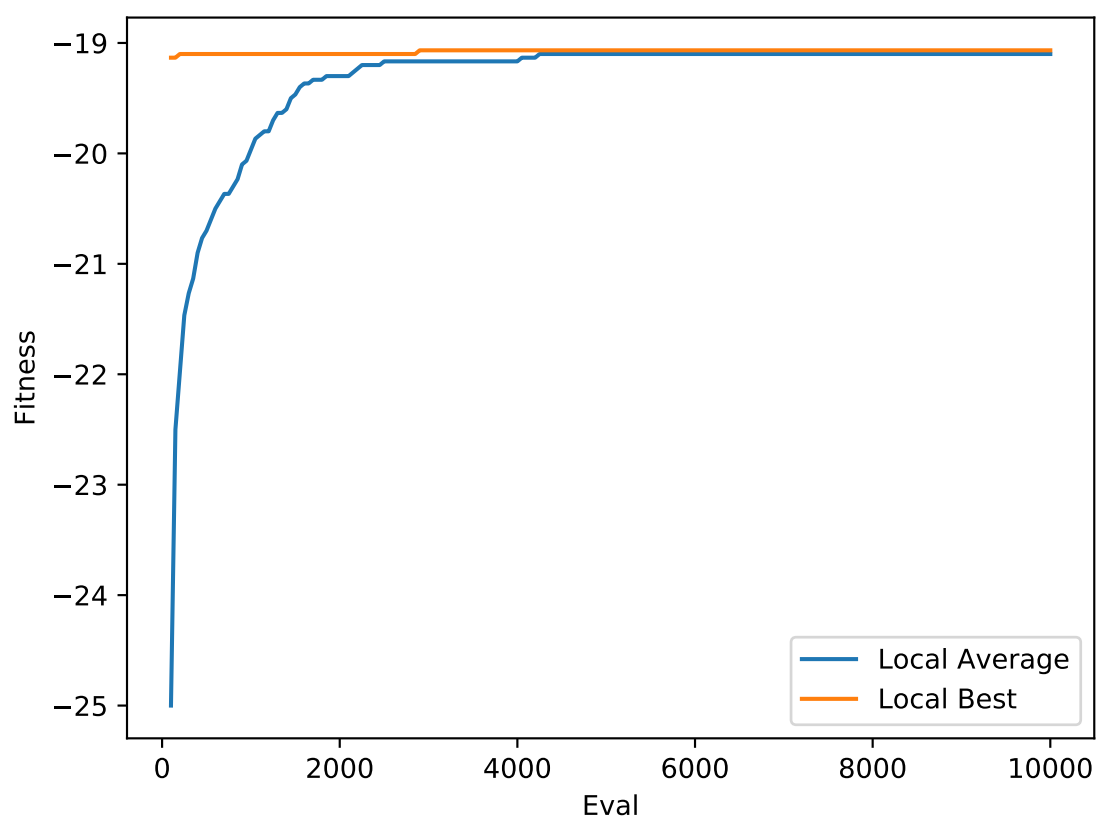


Table 27: Figure 27 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1027
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 28: Figure 28 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1028
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 27: Input 1

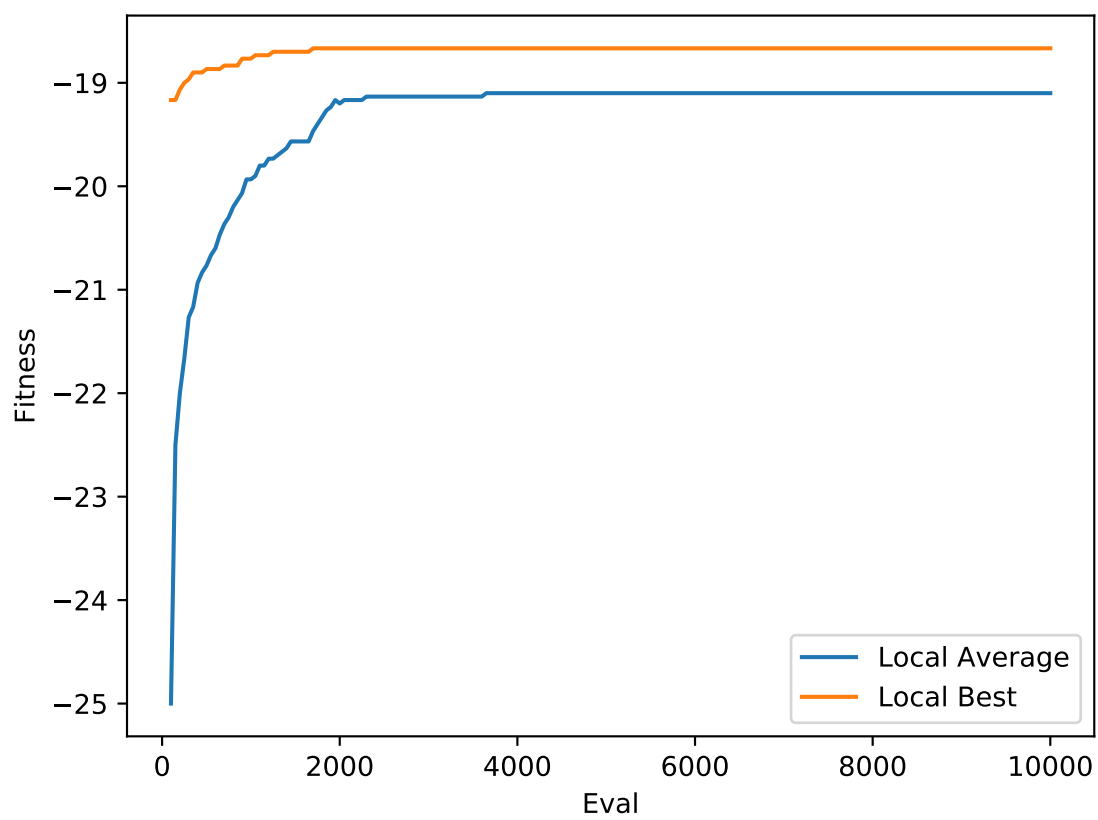


Figure 28: Input 1

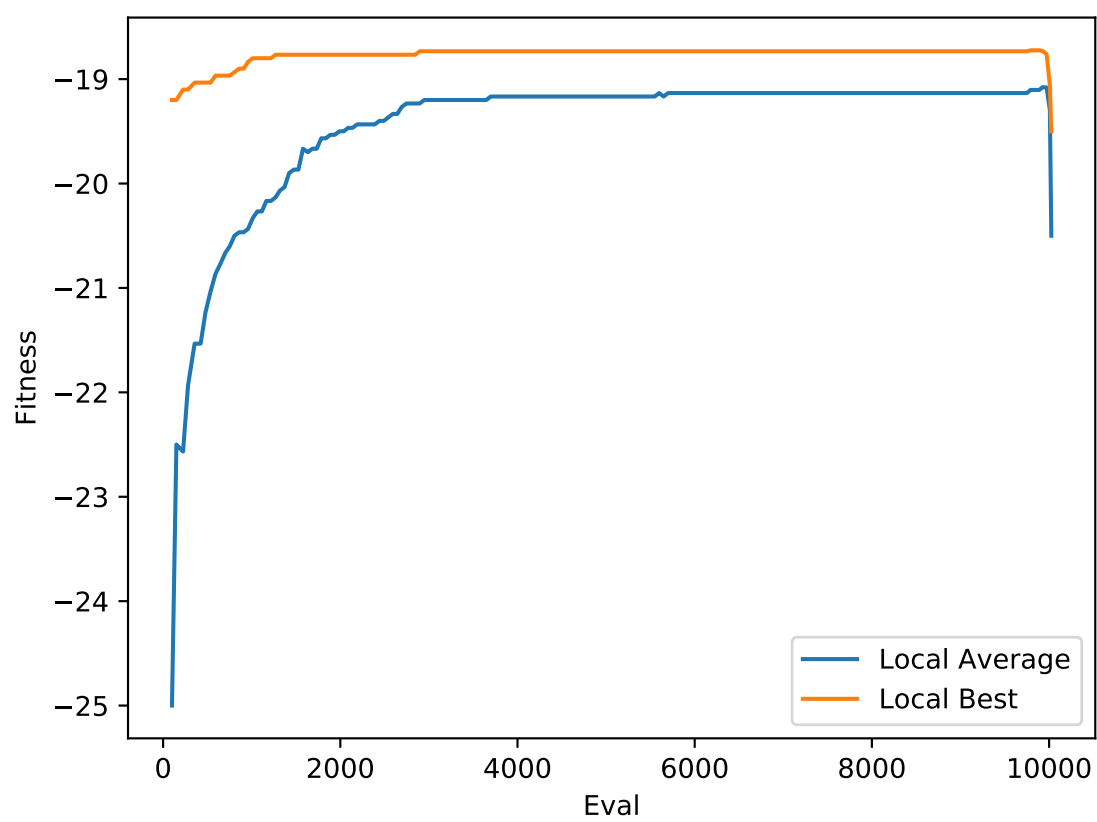


Table 29: Figure 29 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1029
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 30: Figure 30 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1030
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 29: Input 1

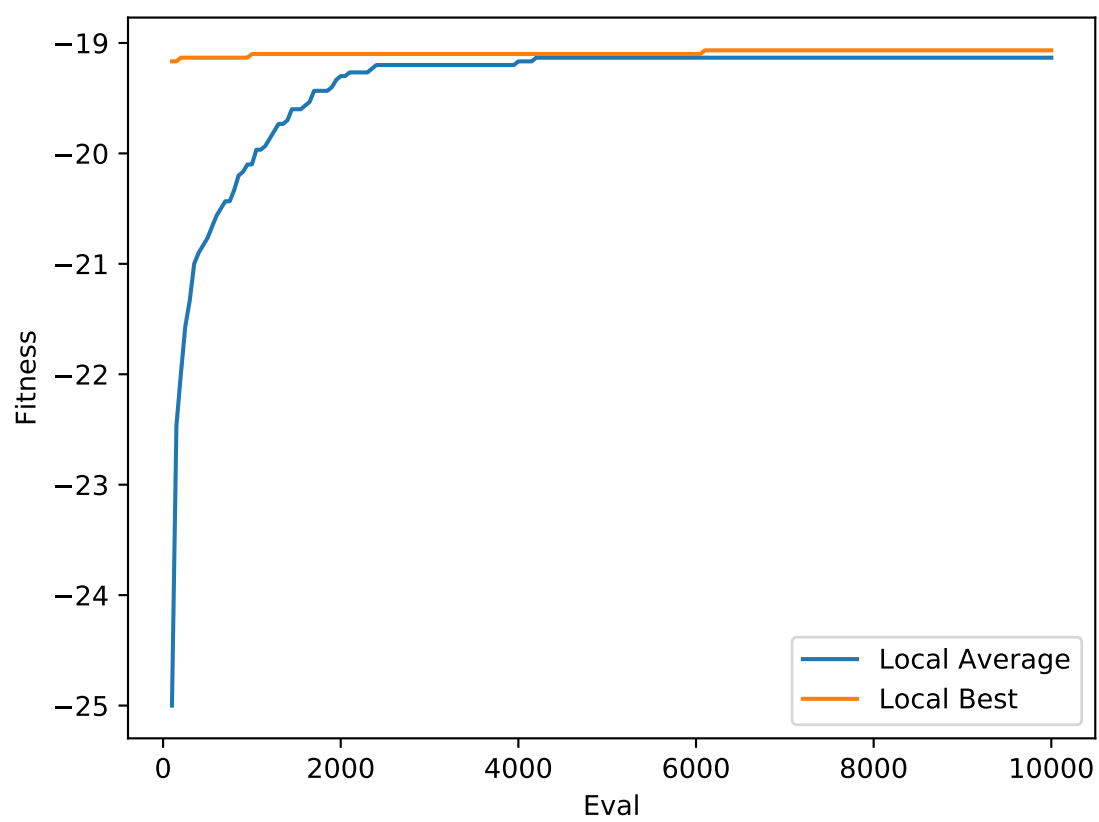


Figure 30: Input 1

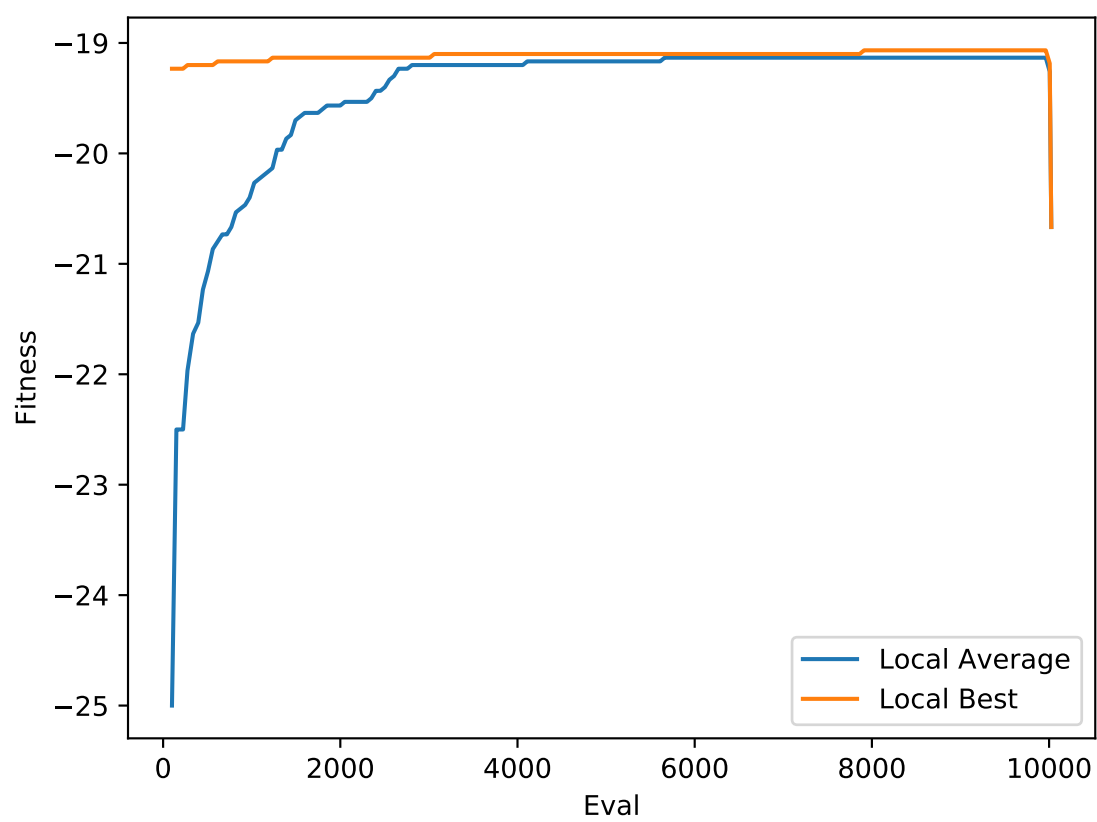


Table 31: Figure 31 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1031
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 32: Figure 32 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1032
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 31: Input 1

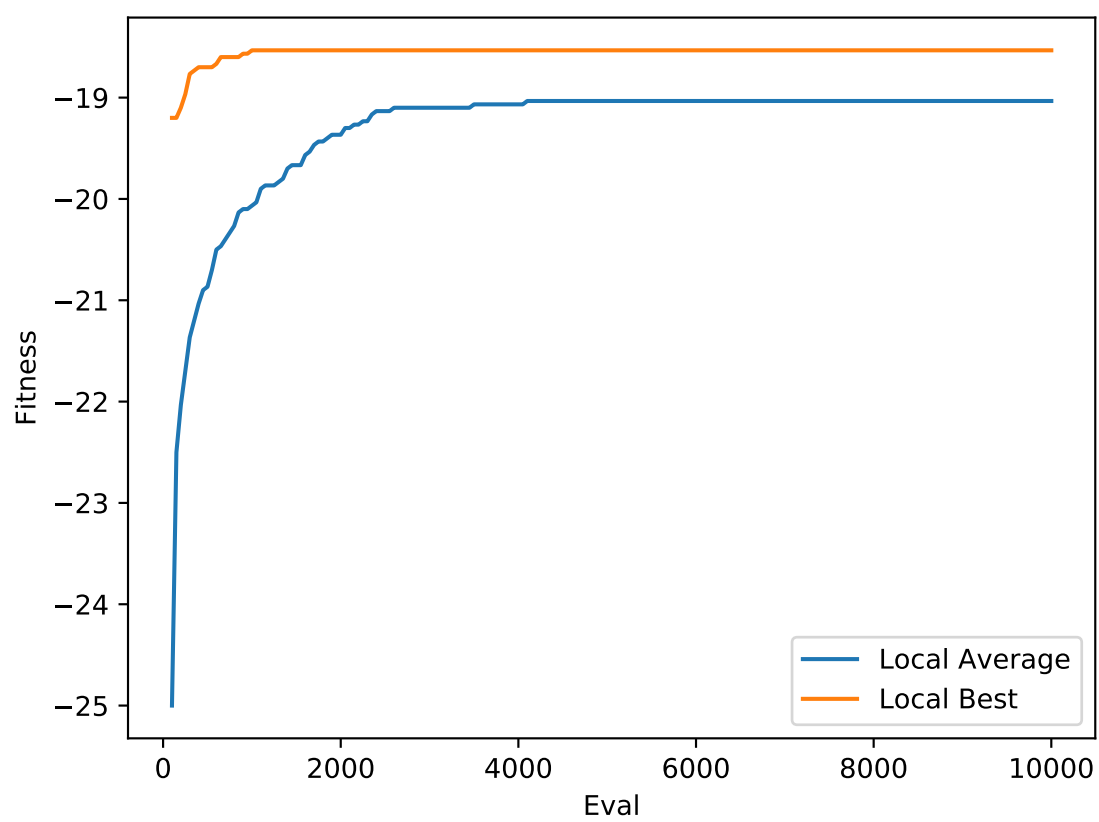


Figure 32: Input 1

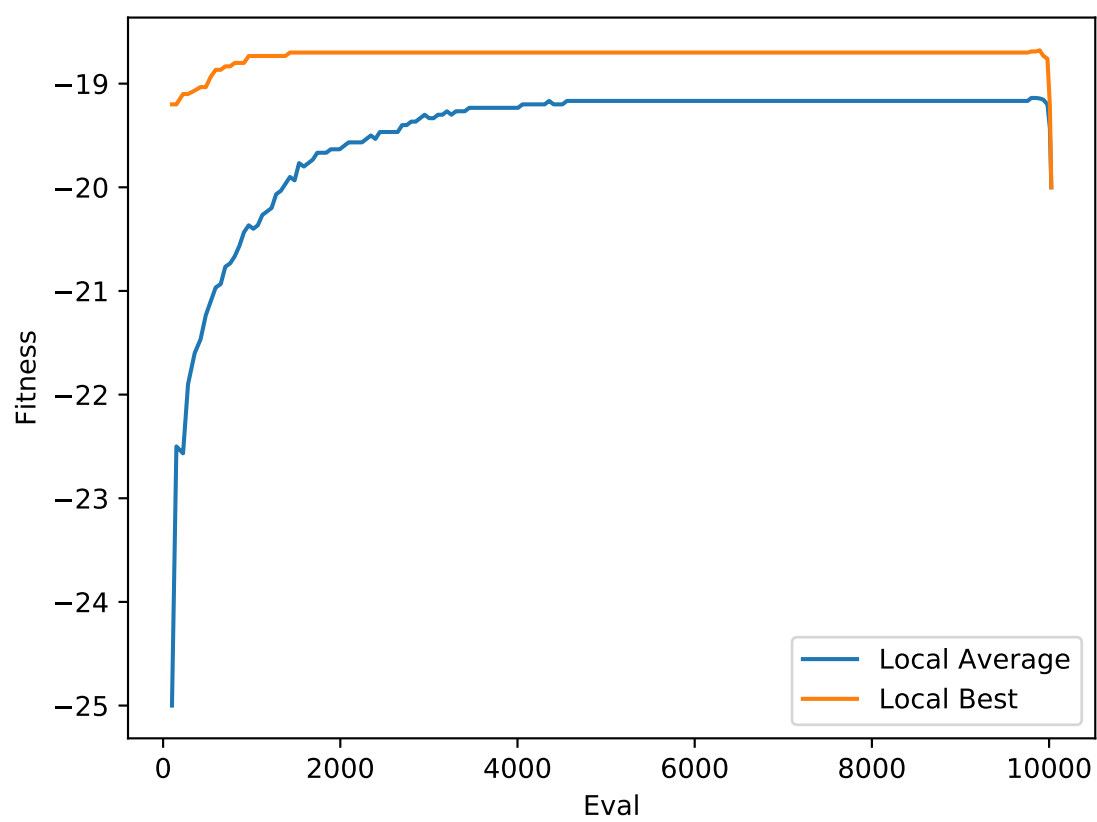


Table 33: Figure 33 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1033
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 34: Figure 34 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1034
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 33: Input 1

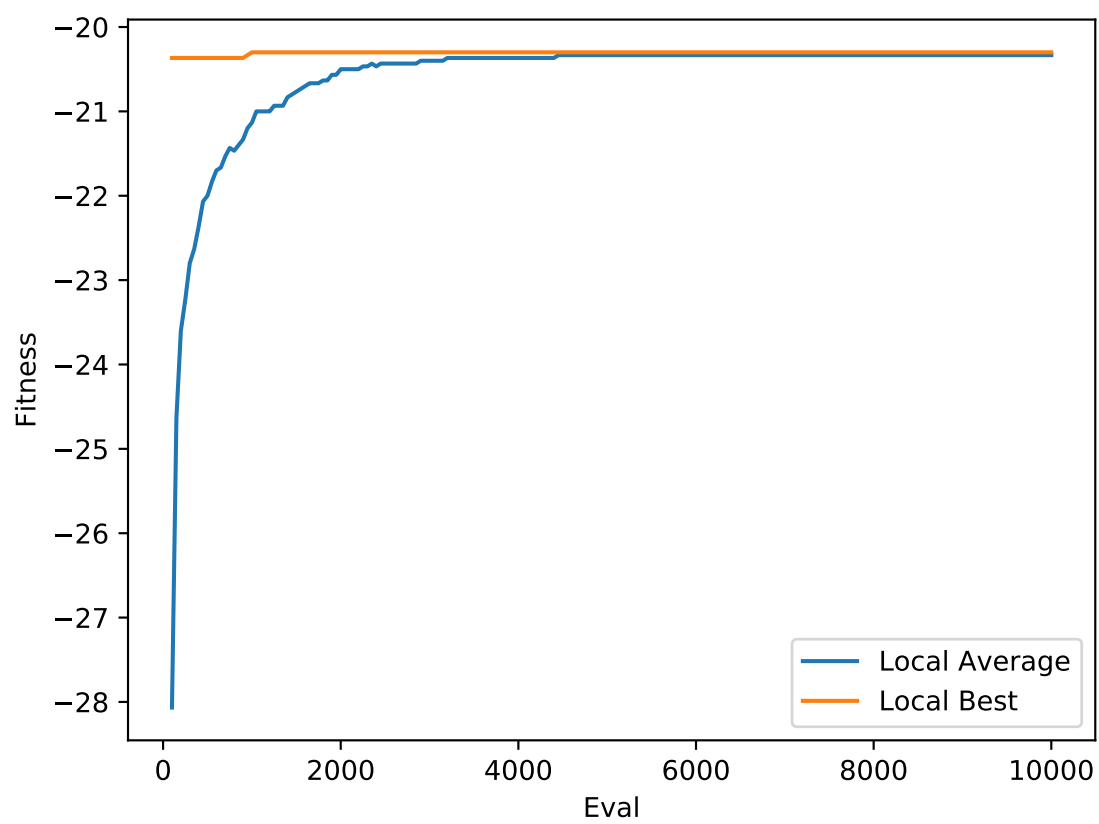


Figure 34: Input 1

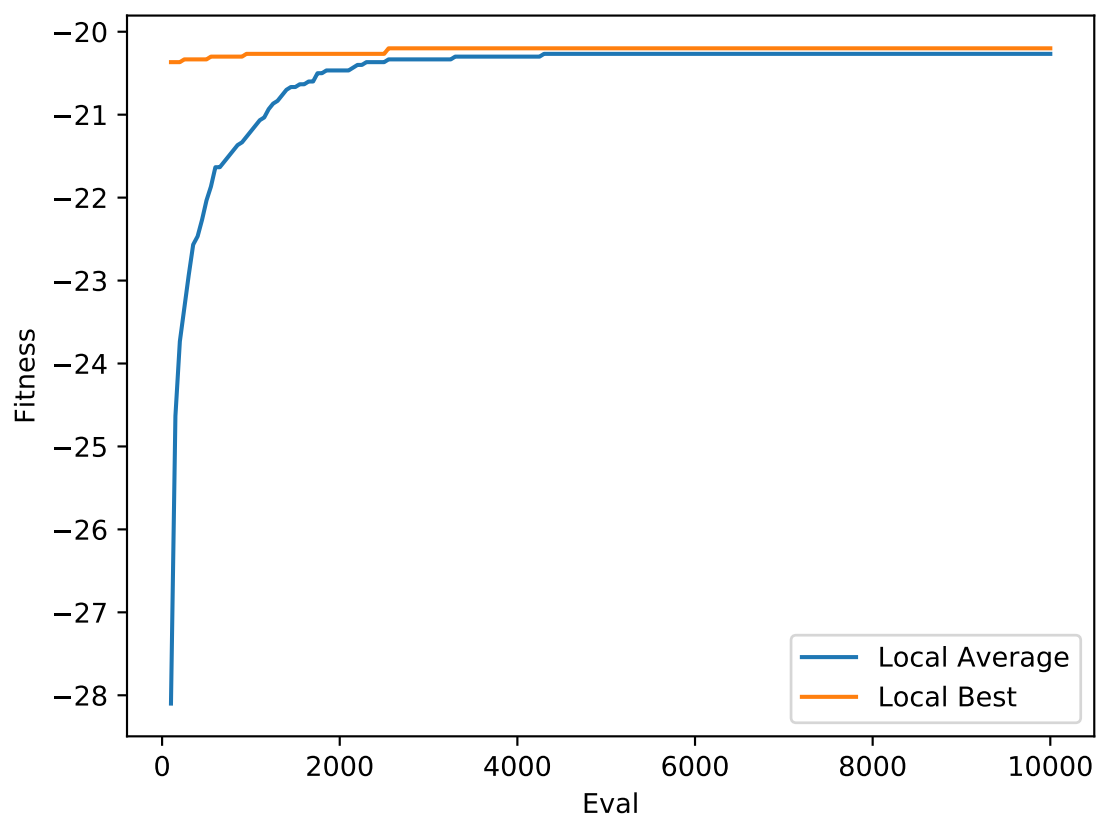


Table 35: Figure 35 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1035
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 36: Figure 36 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1036
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 35: Input 1

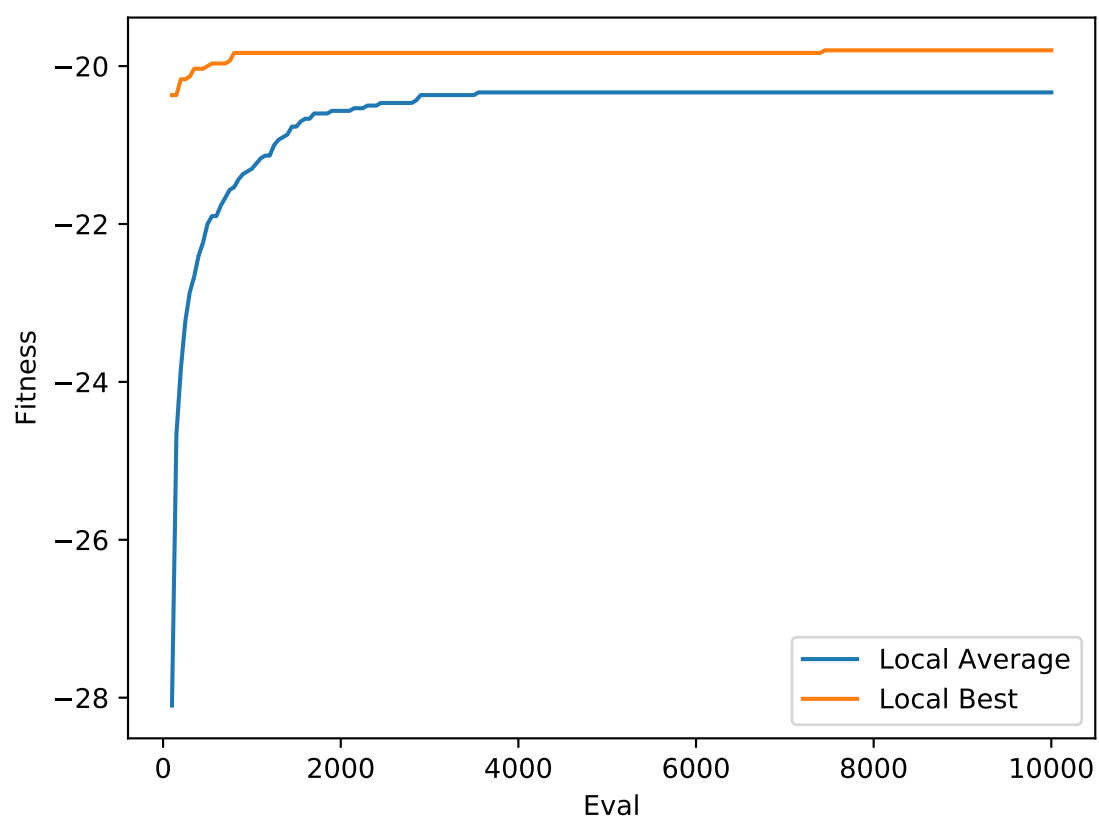


Figure 36: Input 1

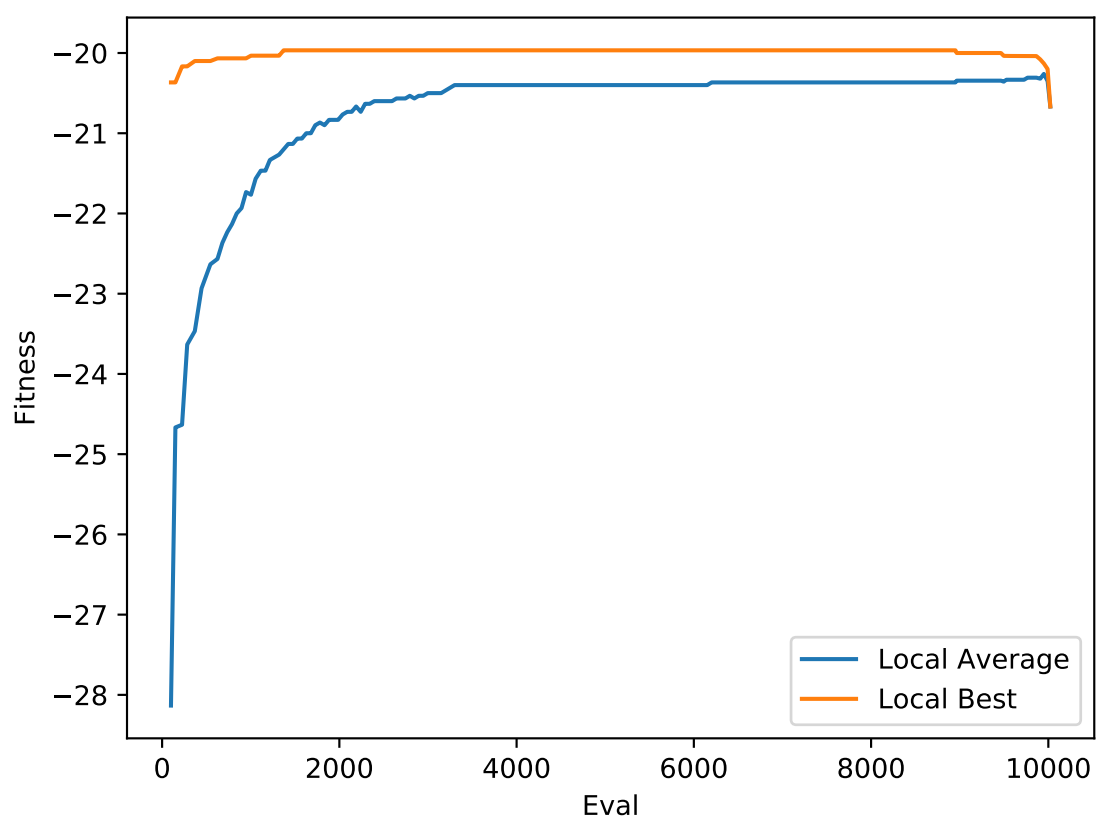


Table 37: Figure 37 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1037
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 38: Figure 38 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1038
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 37: Input 1

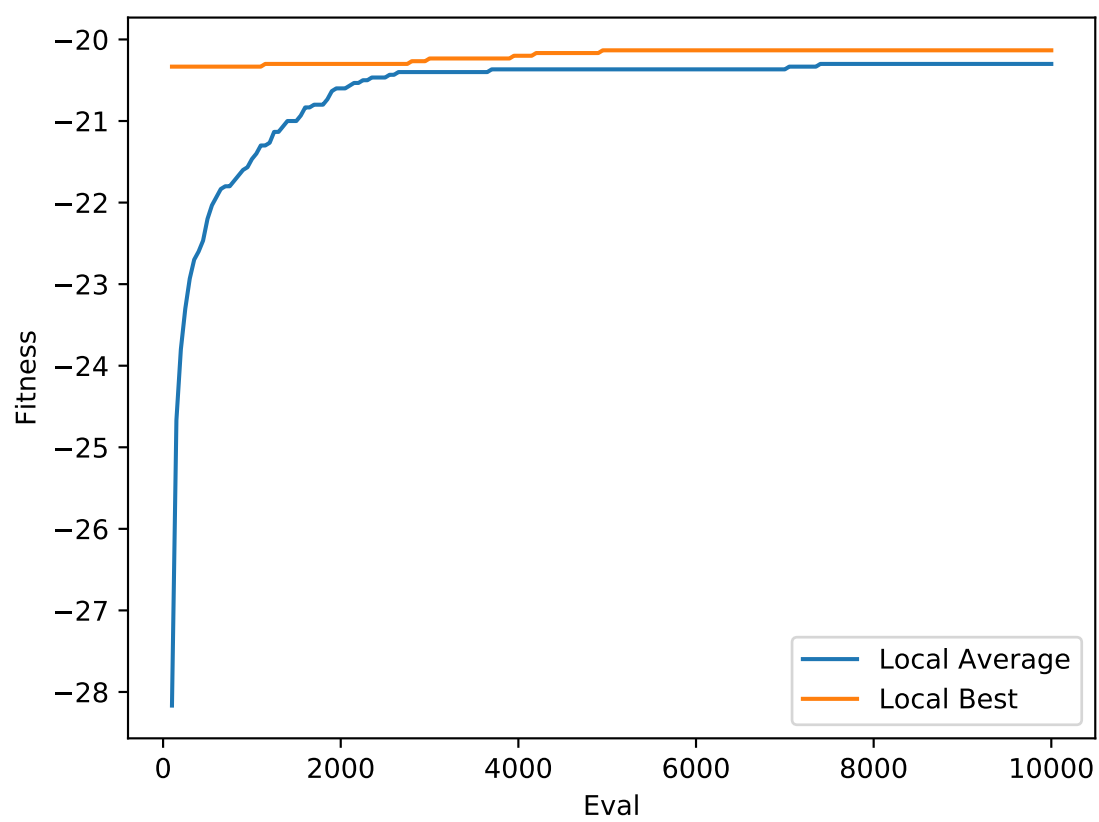


Figure 38: Input 1

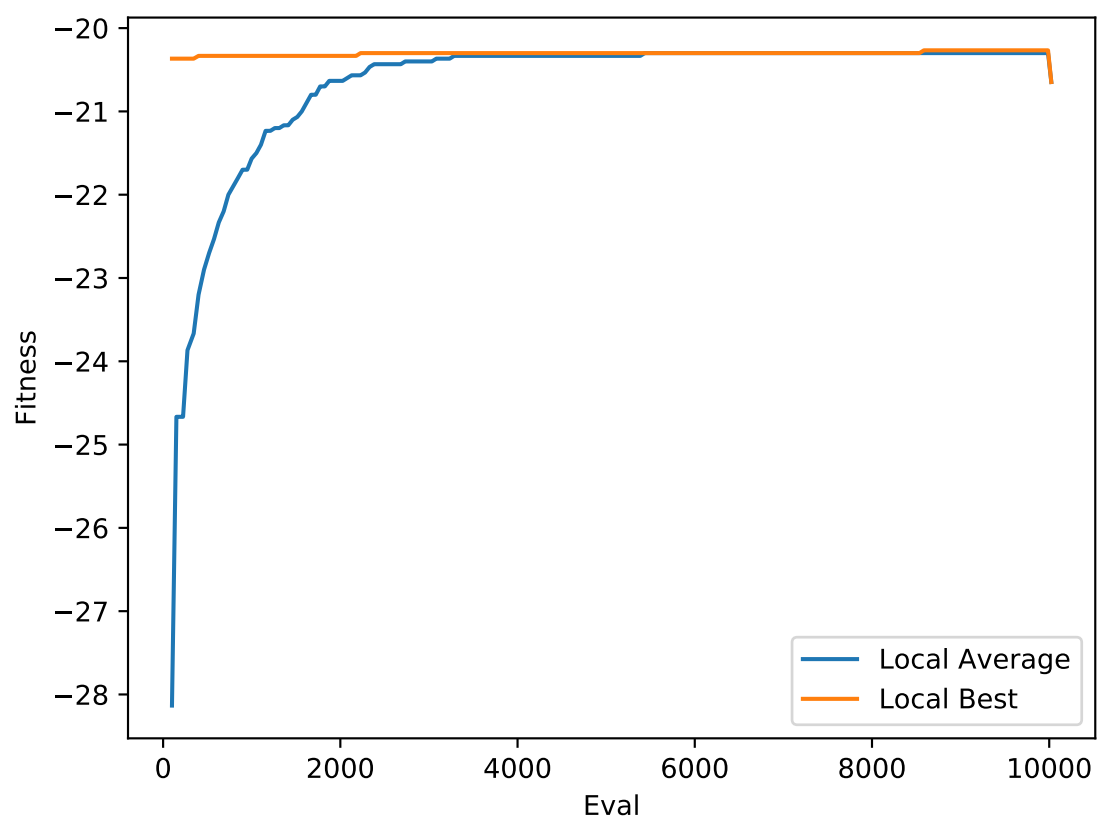


Table 39: Figure 39 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1039
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 40: Figure 40 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1040
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 39: Input 1

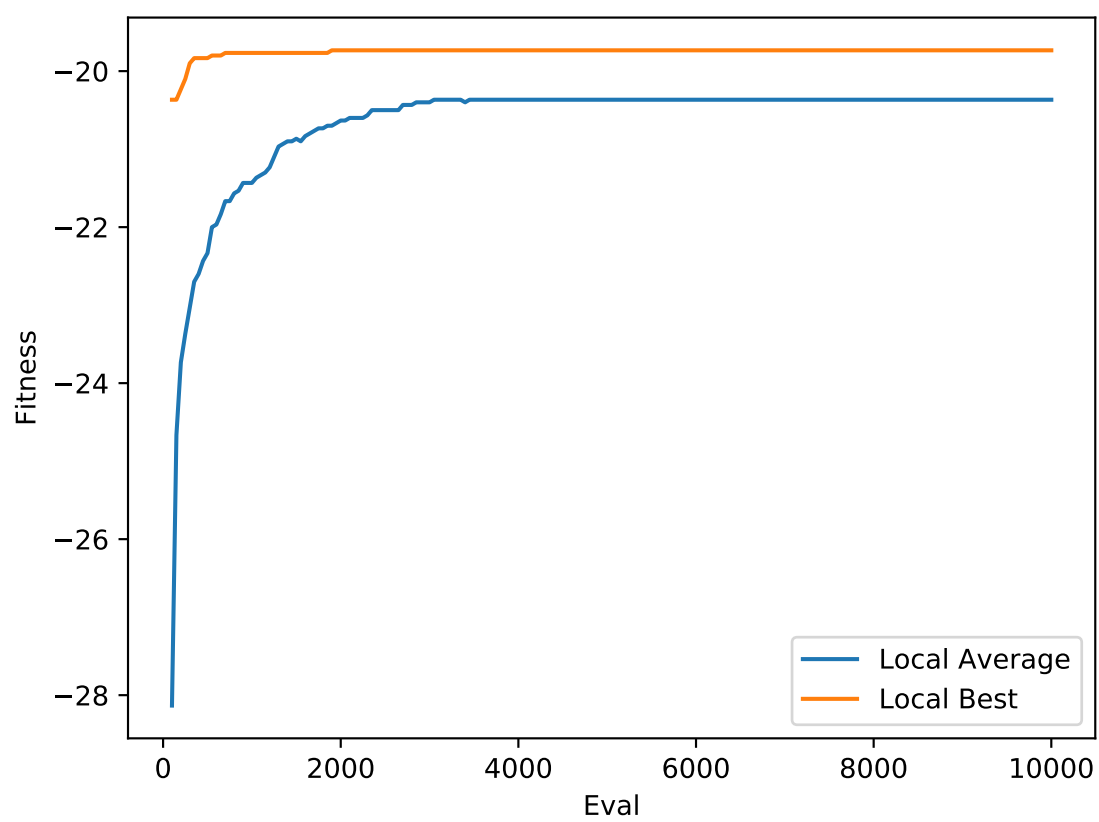


Figure 40: Input 1

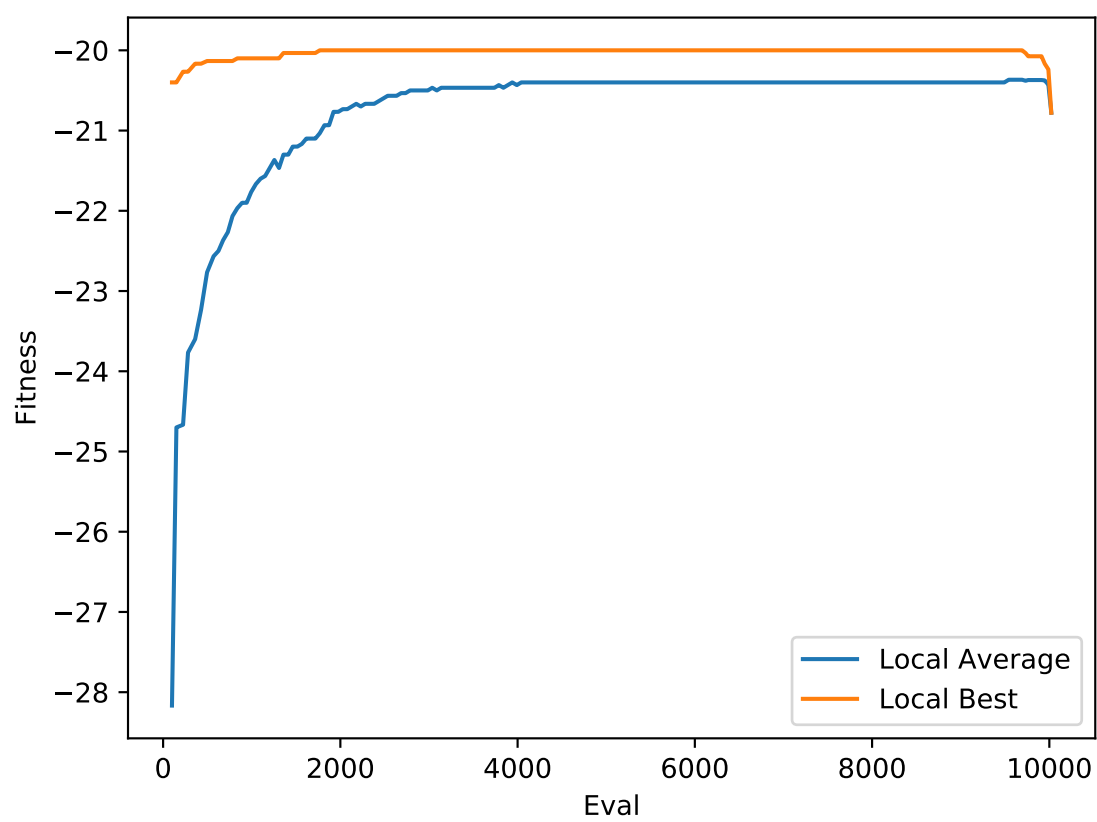


Table 41: Figure 41 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1041
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 42: Figure 42 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1042
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 41: Input 1

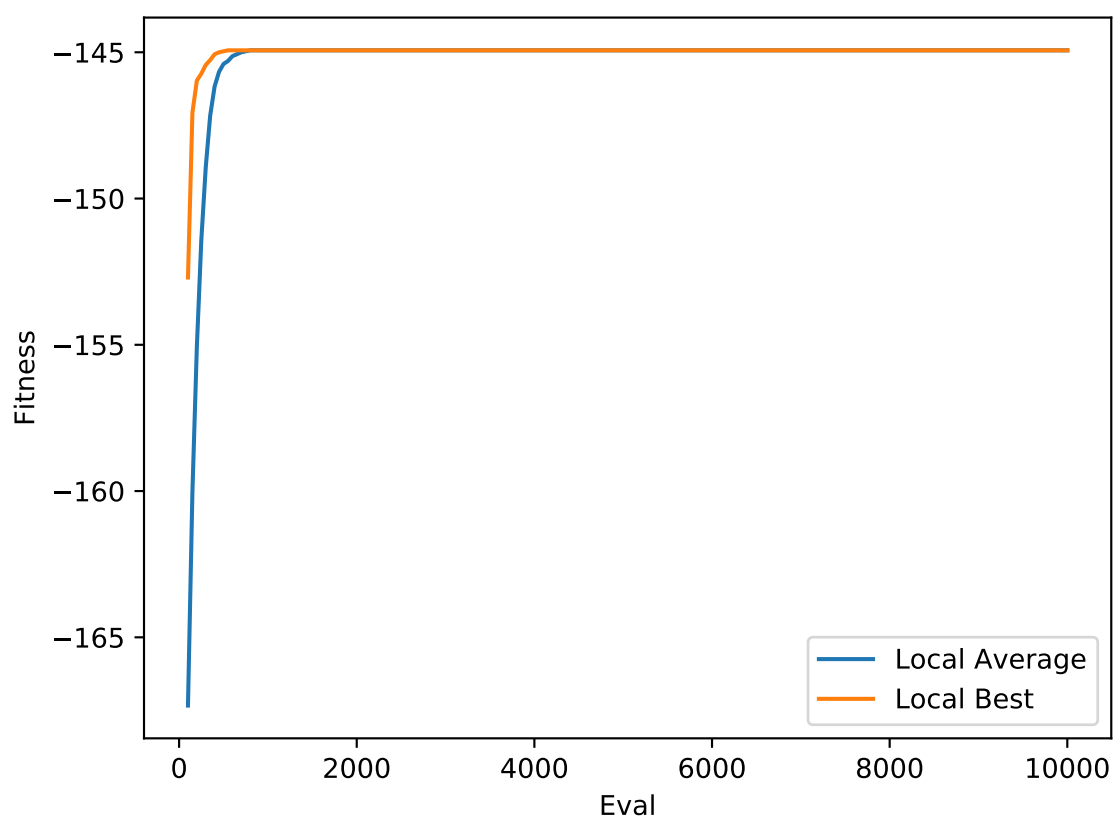


Figure 42: Input 1

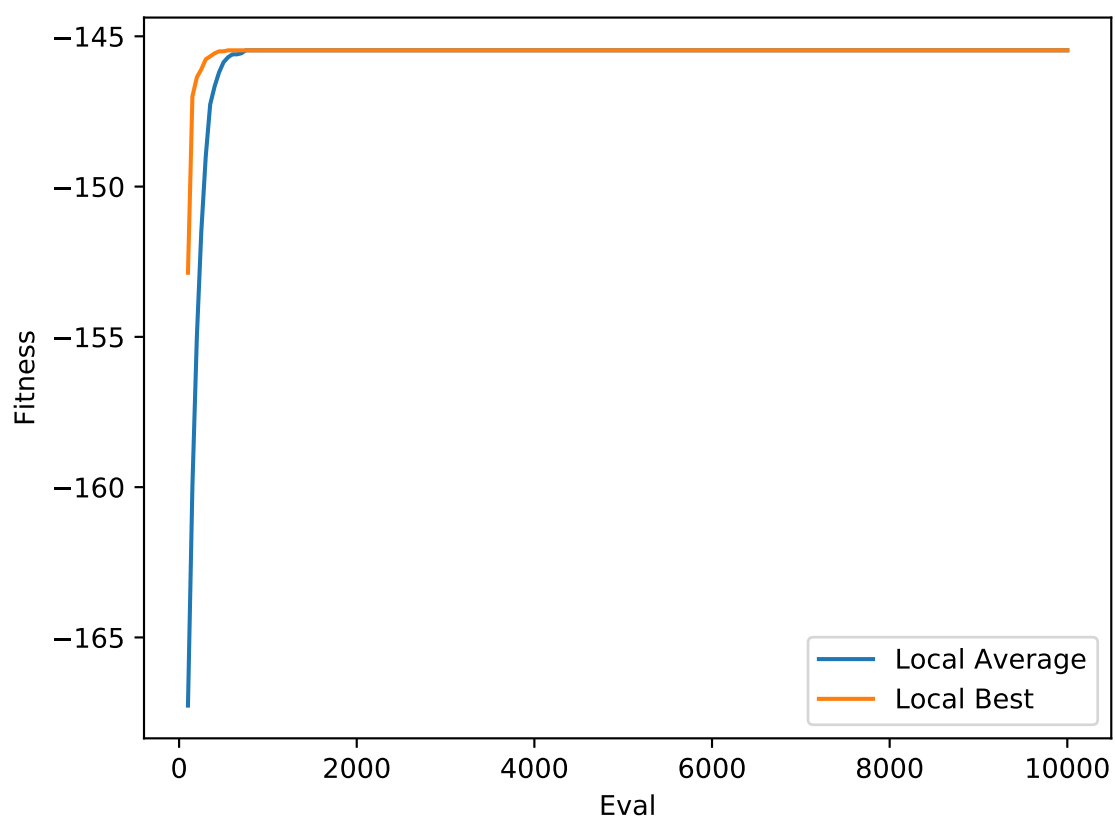


Table 43: Figure 43 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1043
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 44: Figure 44 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1044
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 43: Input 1

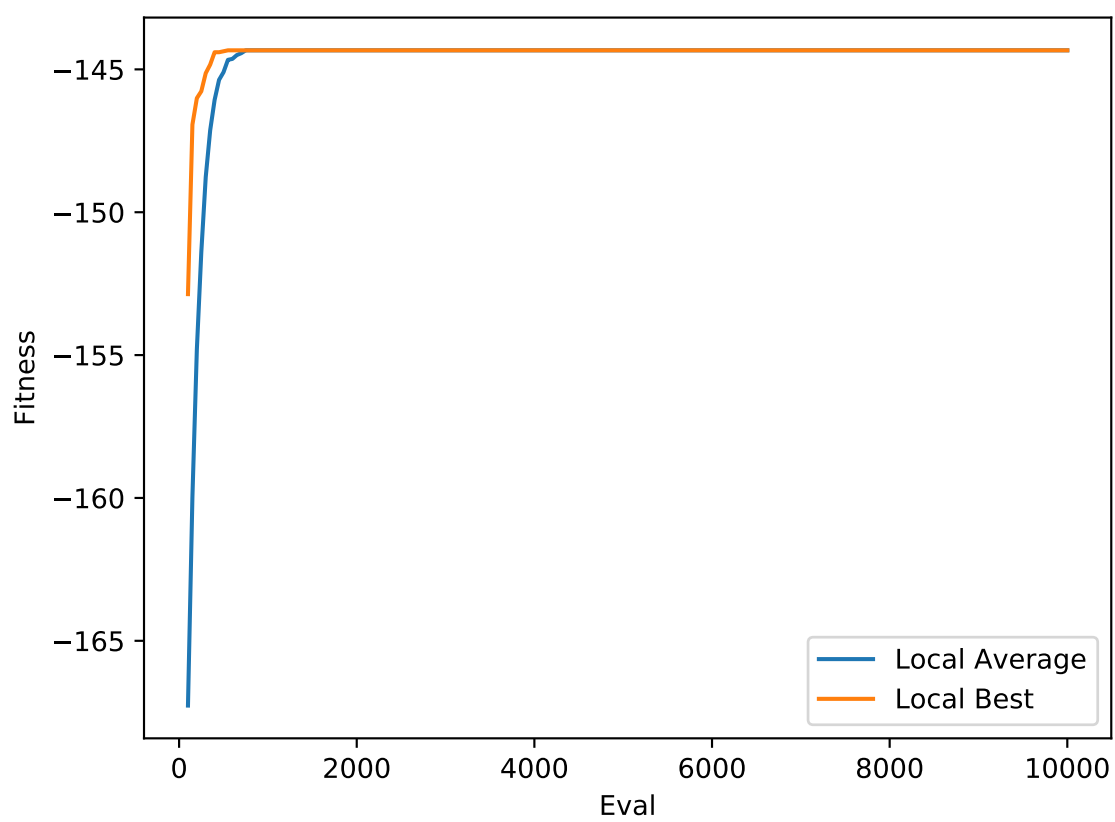


Figure 44: Input 1

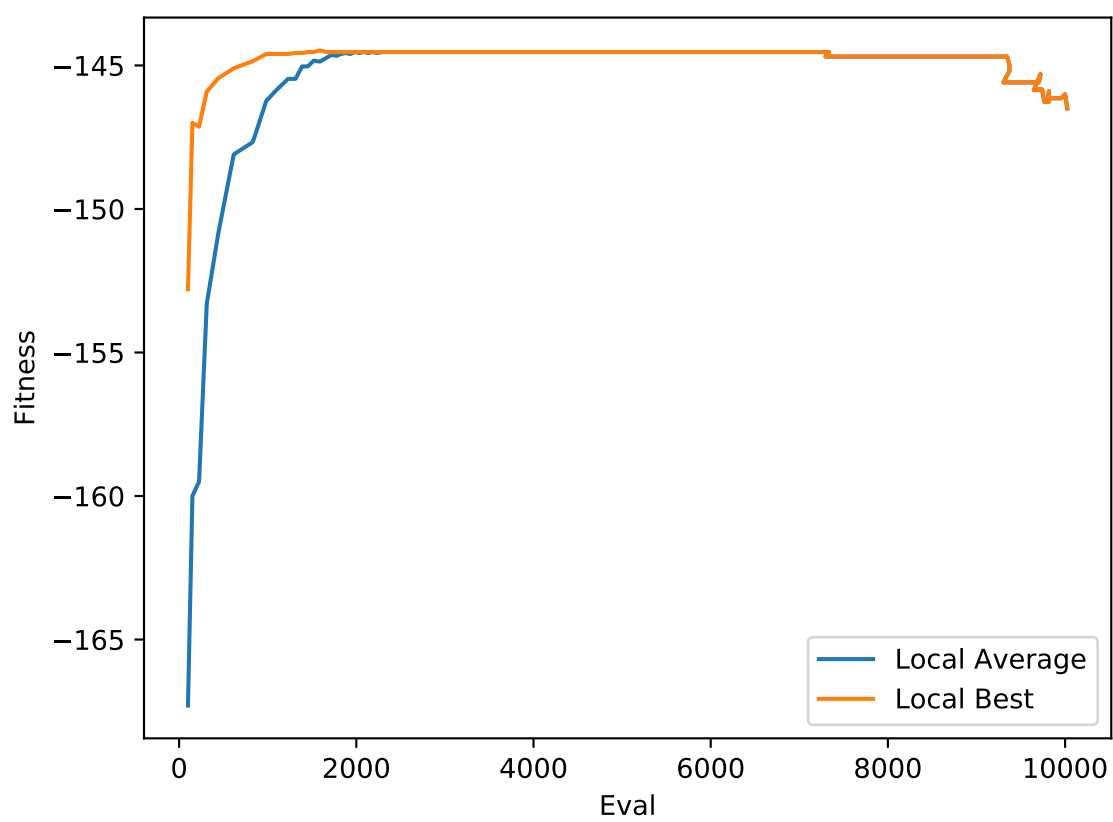


Table 45: Figure 45 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1045
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 46: Figure 46 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1046
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 45: Input 1

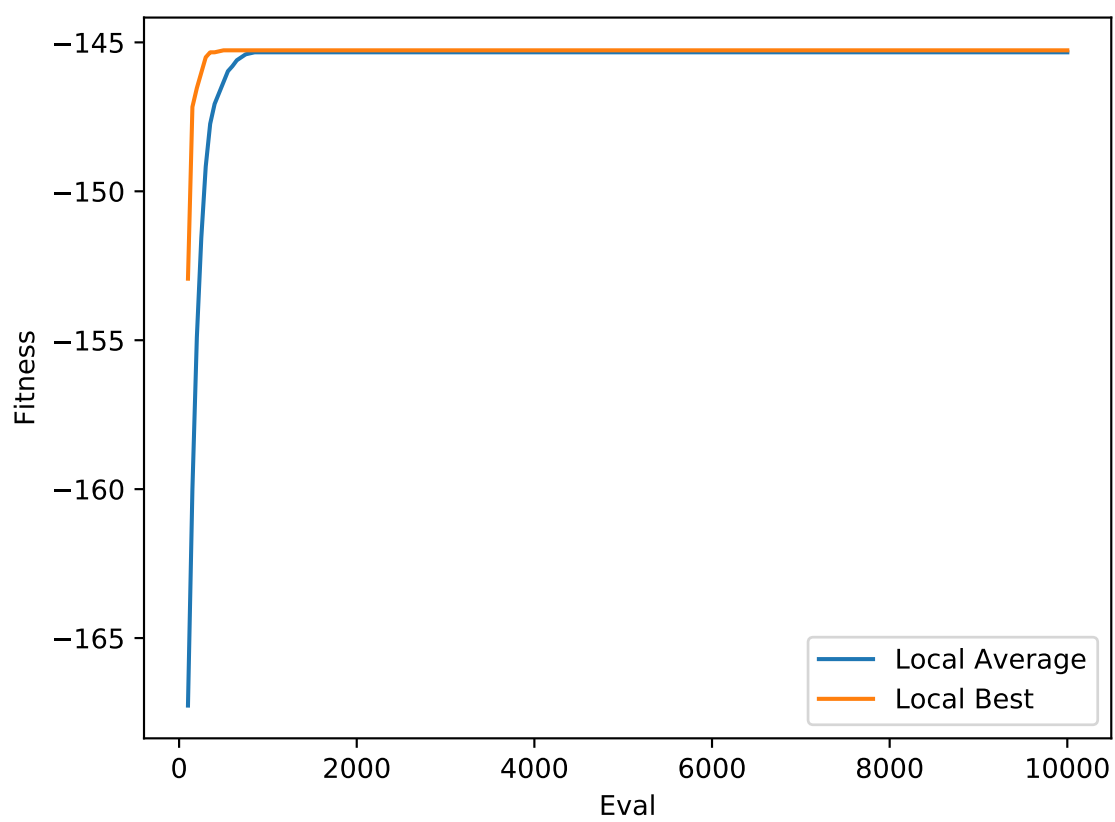


Figure 46: Input 1

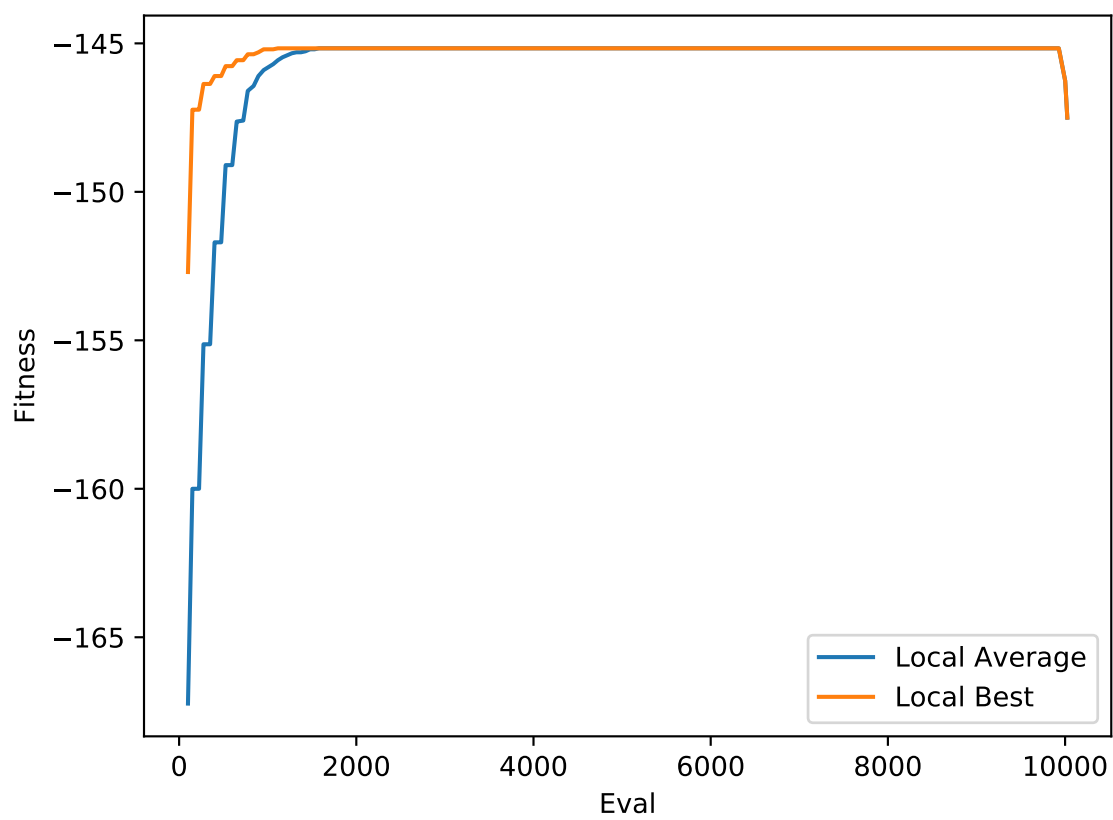


Table 47: Figure 47 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1047
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 48: Figure 48 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Partially Mapped Crossover
Random Seed	1048
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 47: Input 1

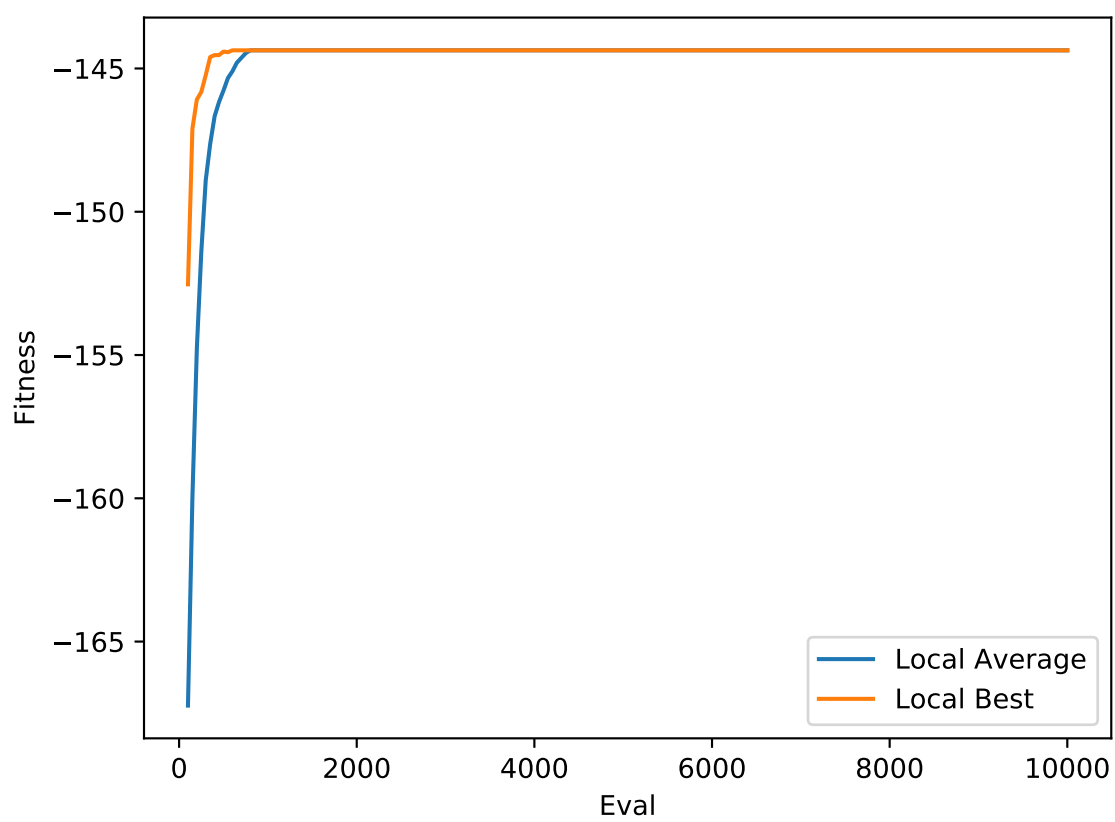


Figure 48: Input 1

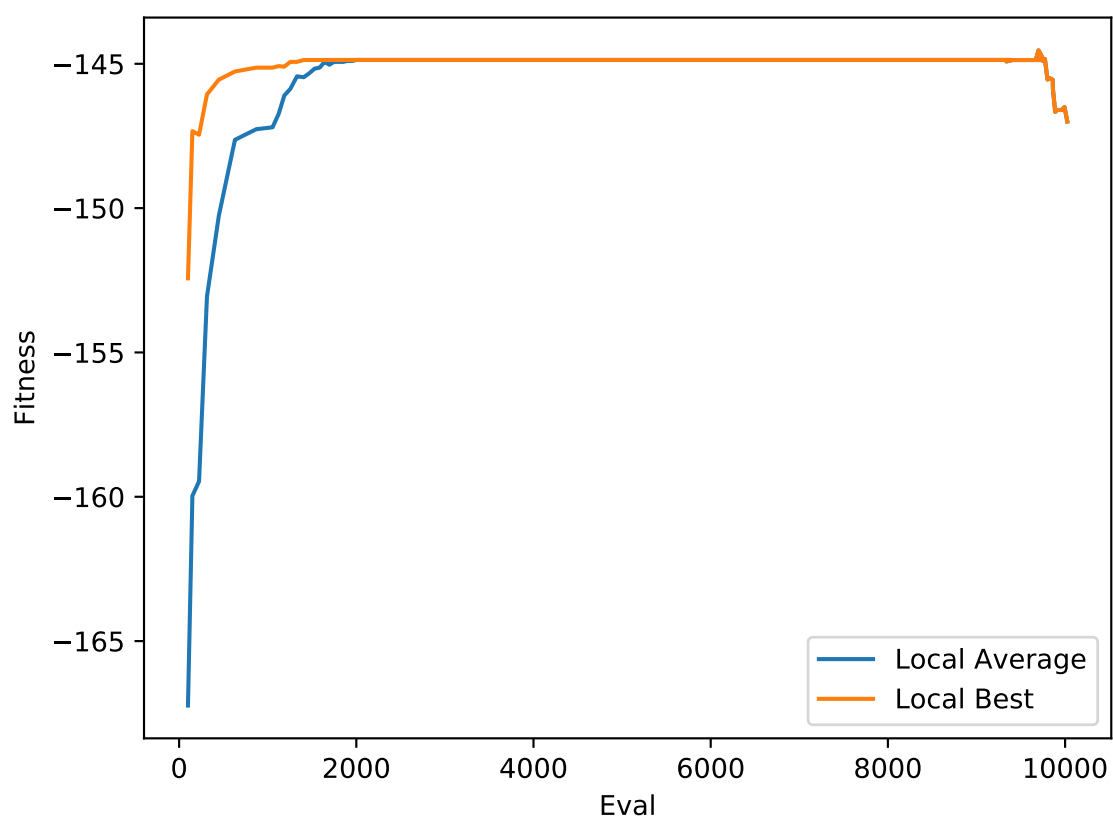


Table 49: Figure 49 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1049
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 50: Figure 50 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1050
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 49: Input 1

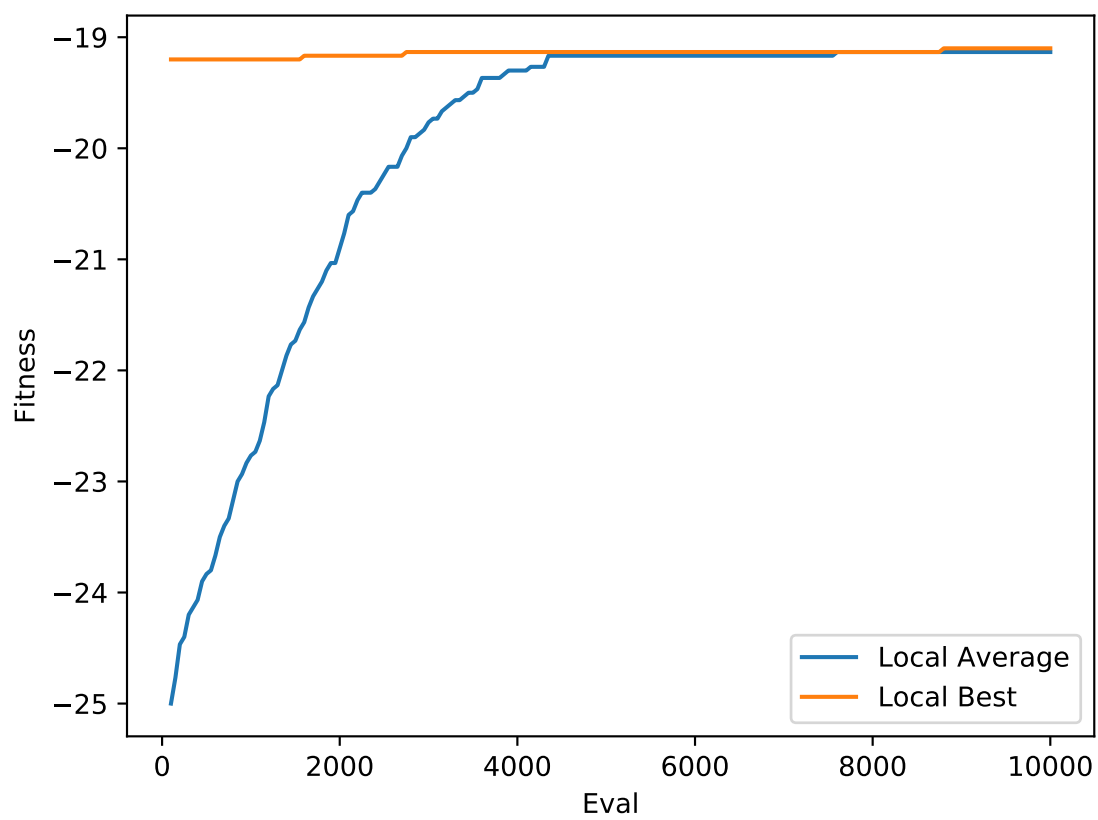


Figure 50: Input 1

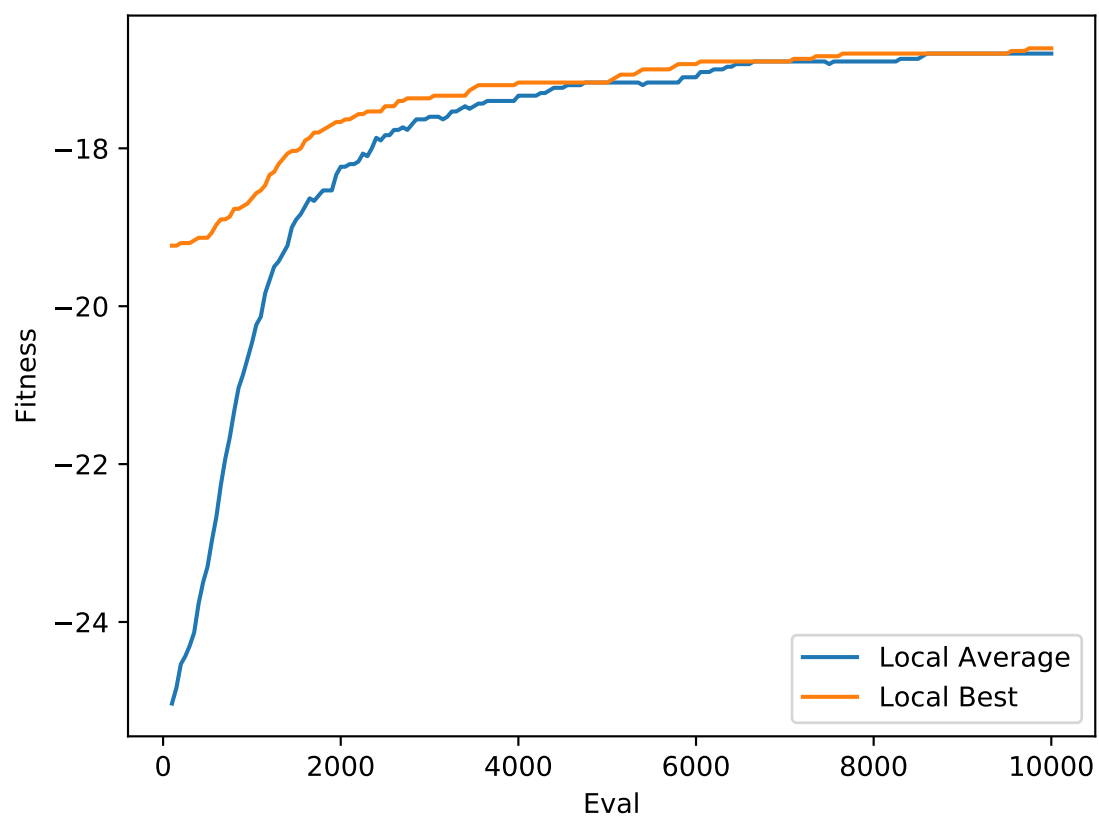


Table 51: Figure 51 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1051
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 52: Figure 52 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1052
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 51: Input 1

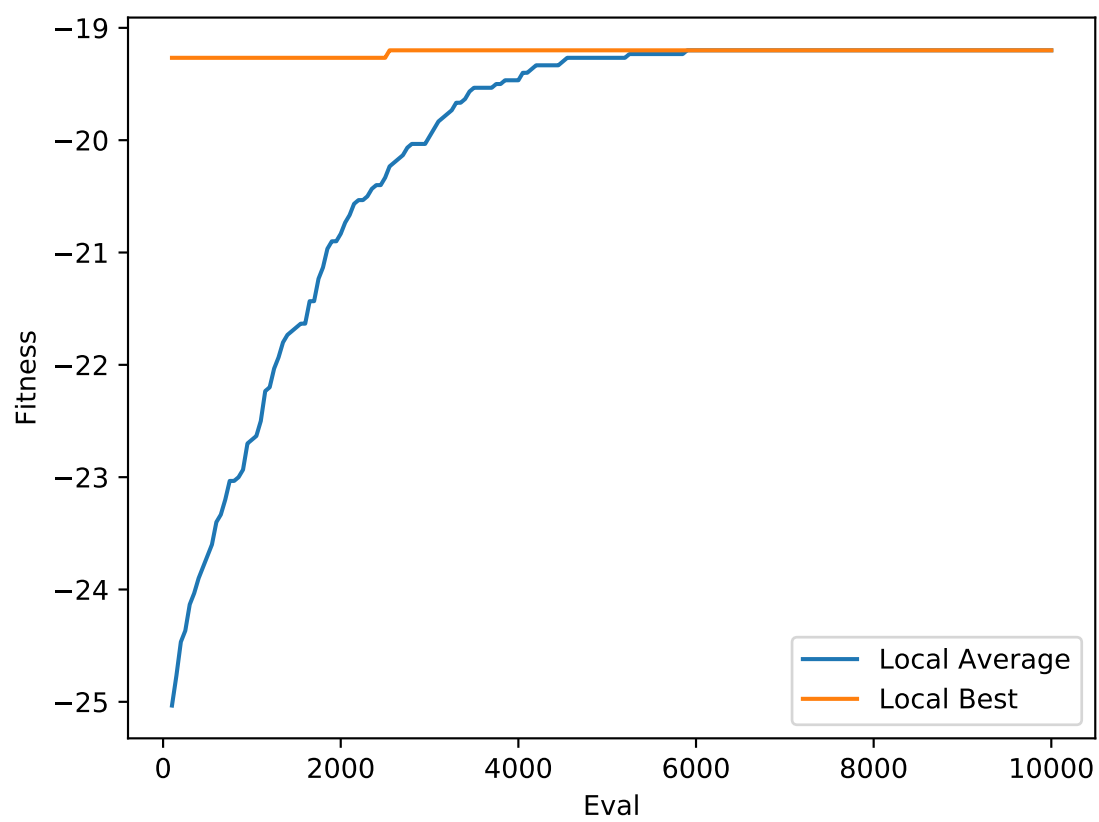


Figure 52: Input 1

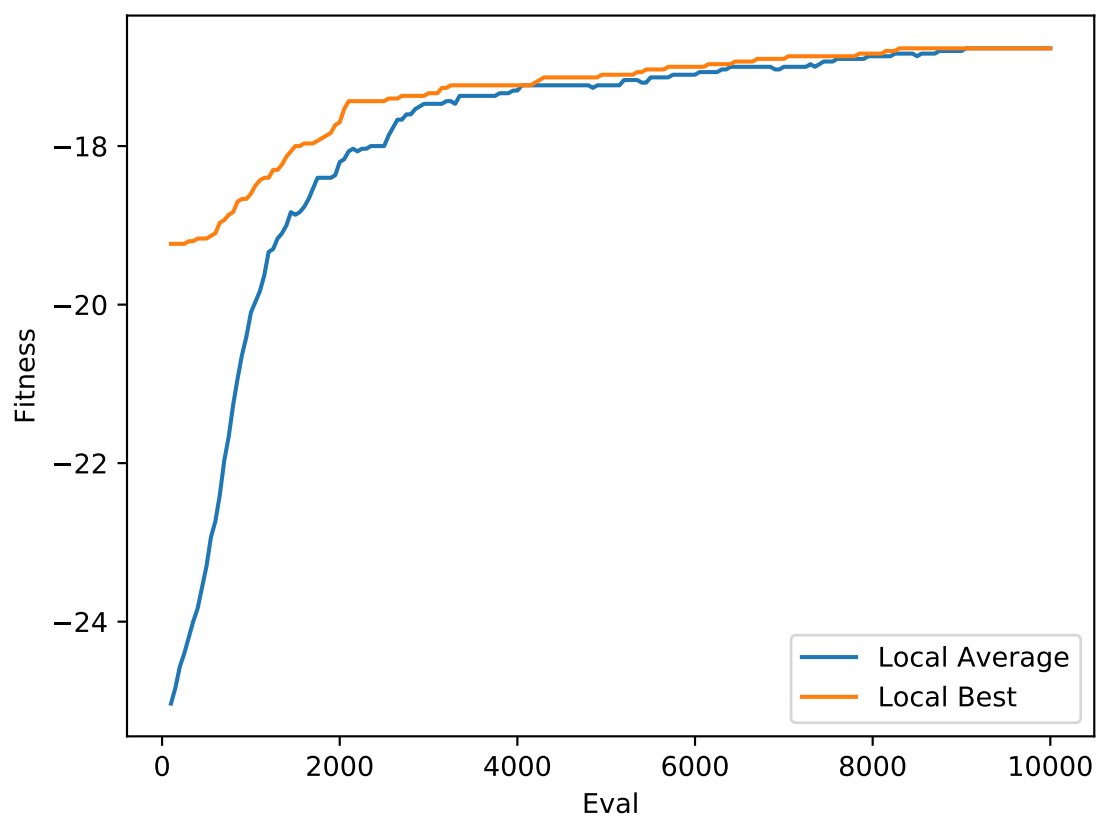


Table 53: Figure 53 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1053
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 54: Figure 54 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1054
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 53: Input 1

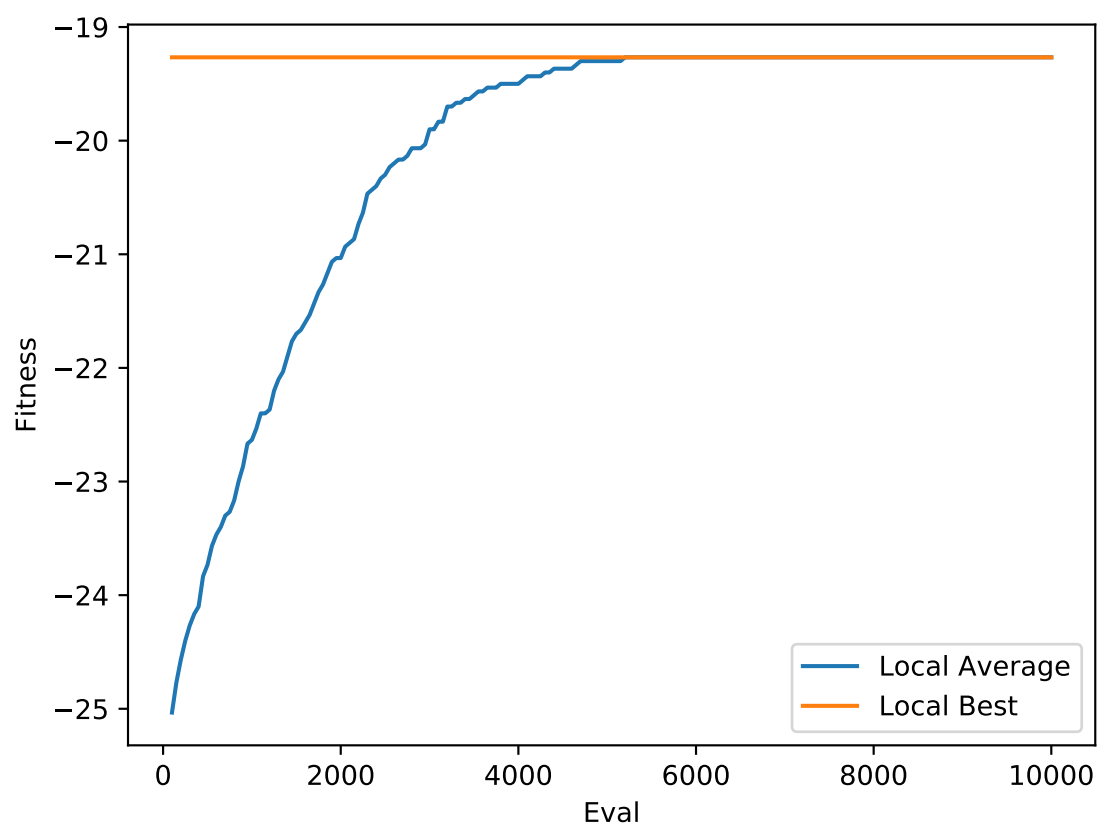


Figure 54: Input 1

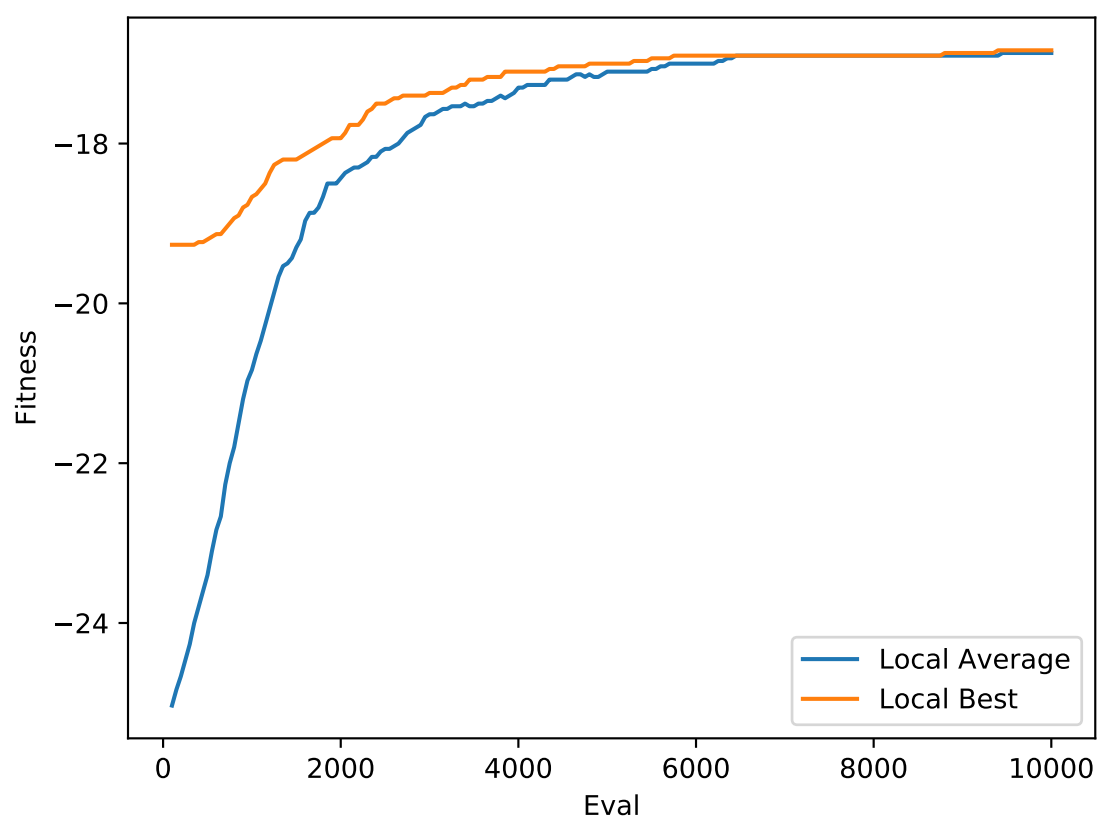


Table 55: Figure 55 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1055
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 56: Figure 56 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1056
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 55: Input 1

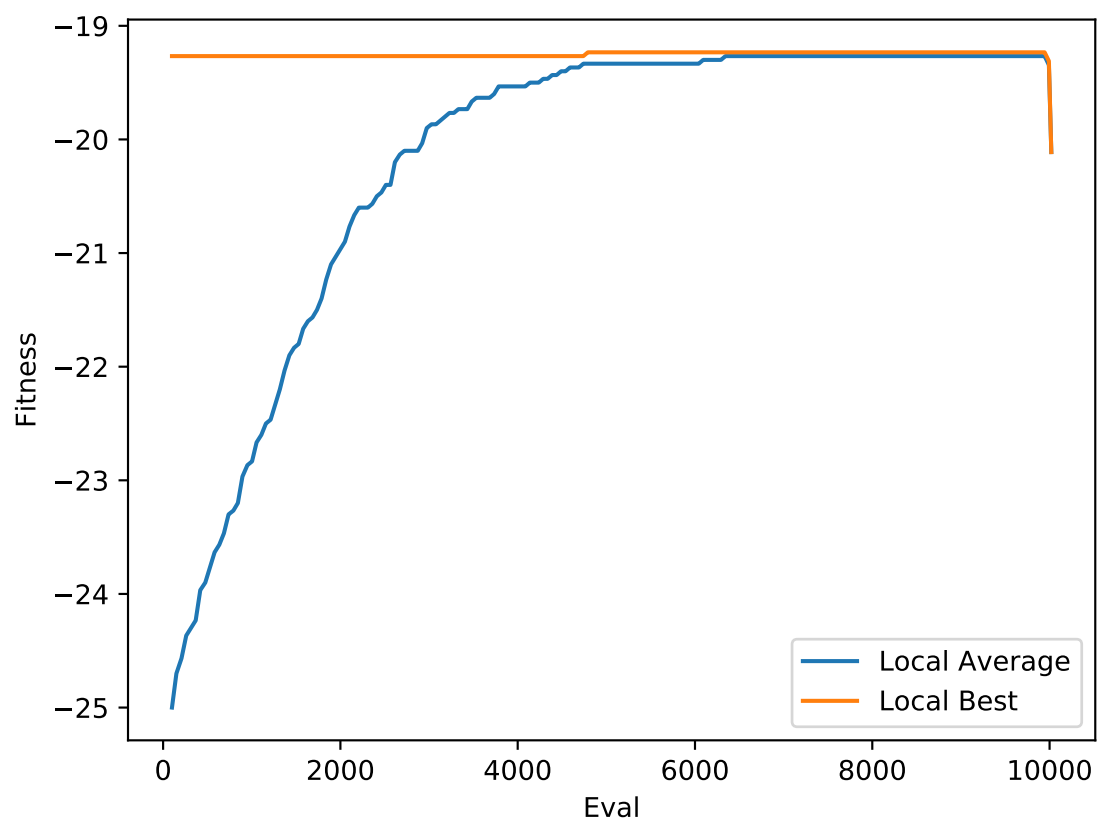


Figure 56: Input 1

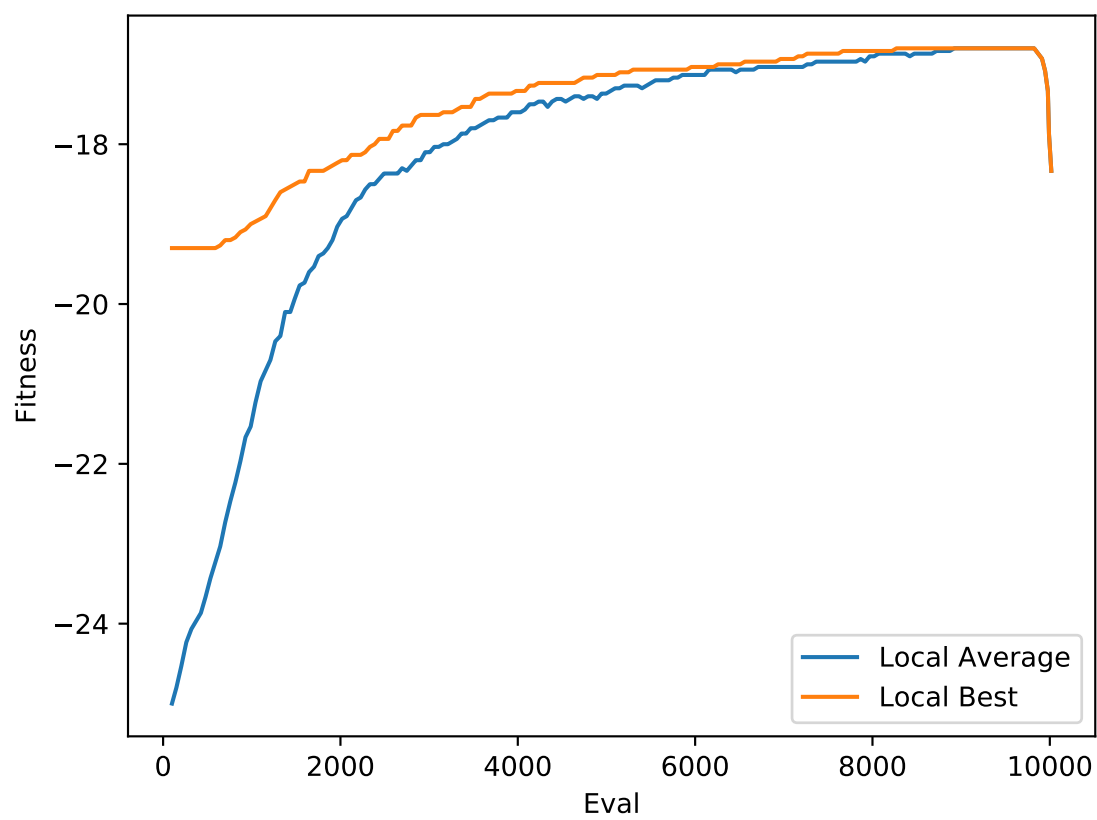


Table 57: Figure 57 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1057
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 58: Figure 58 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1058
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 57: Input 1

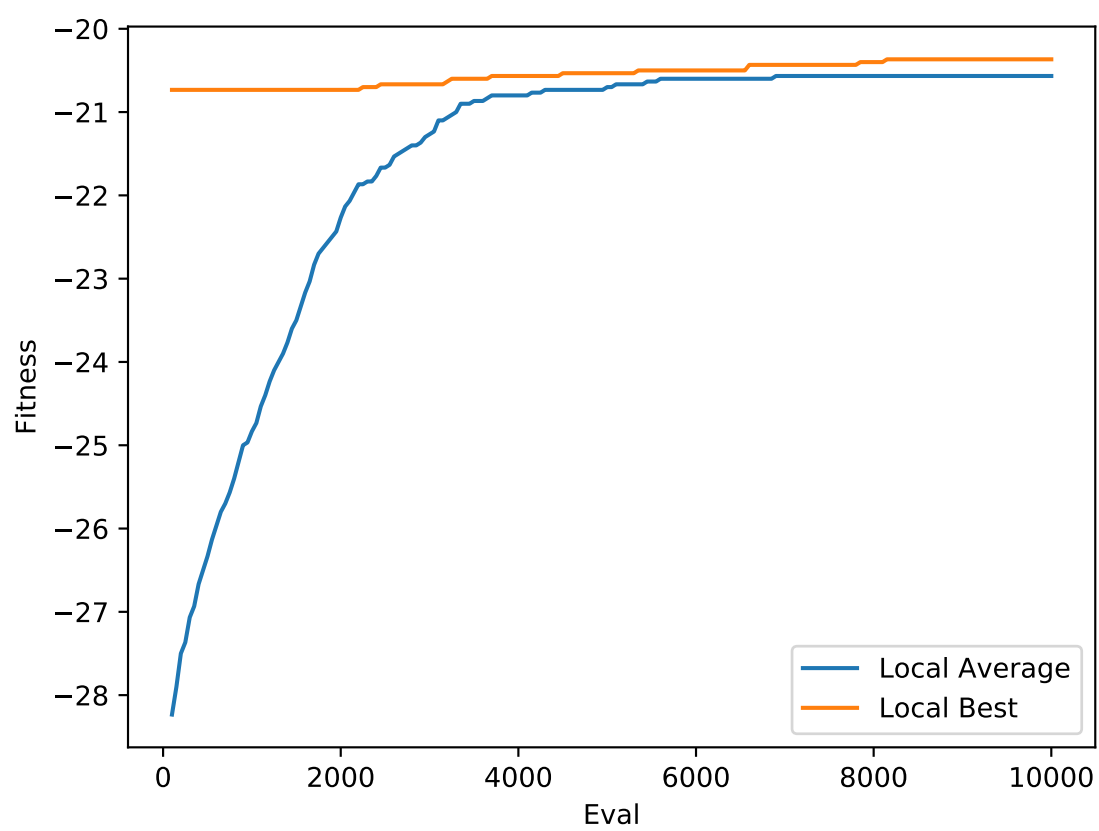


Figure 58: Input 1

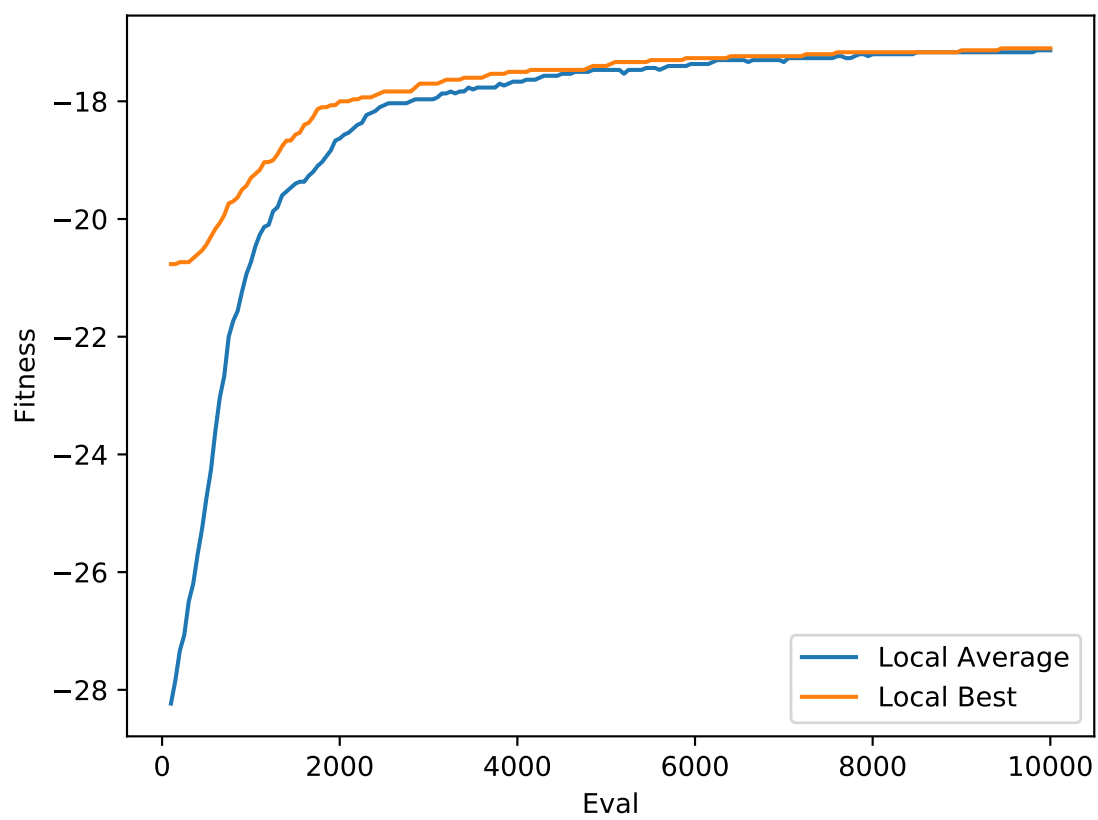


Table 59: Figure 59 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1059
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 60: Figure 60 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1060
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 59: Input 1

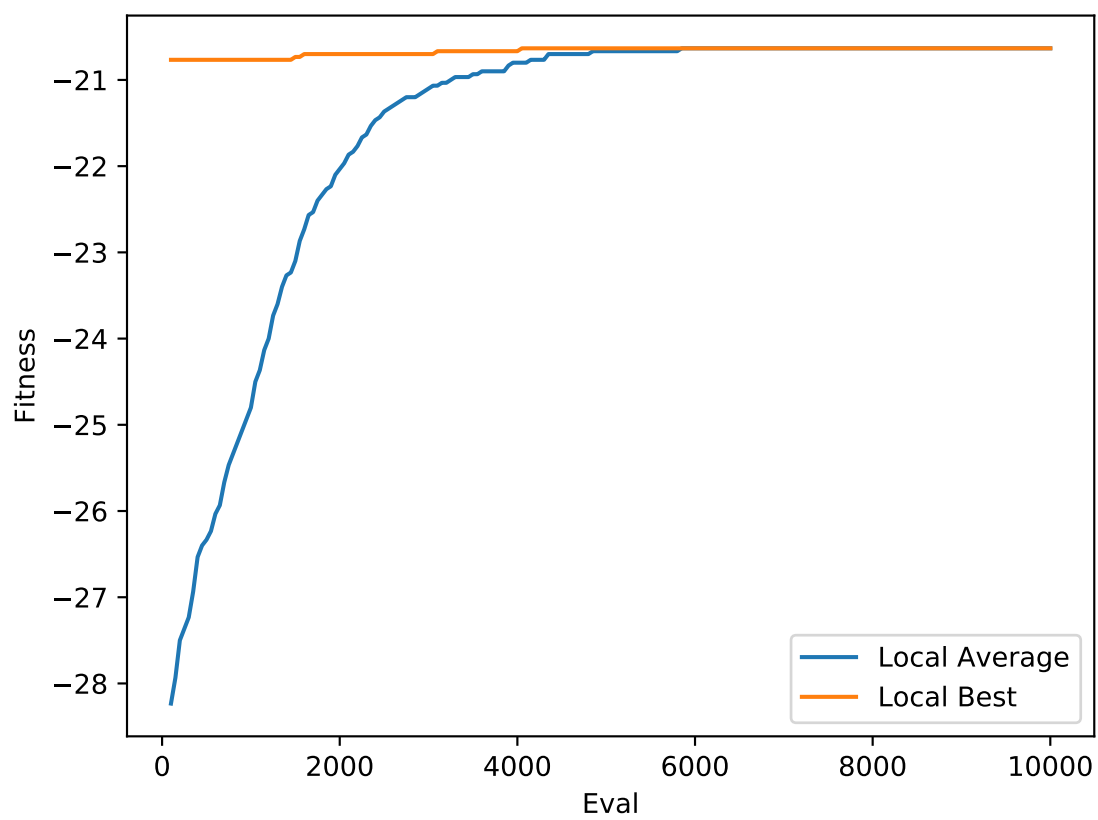


Figure 60: Input 1

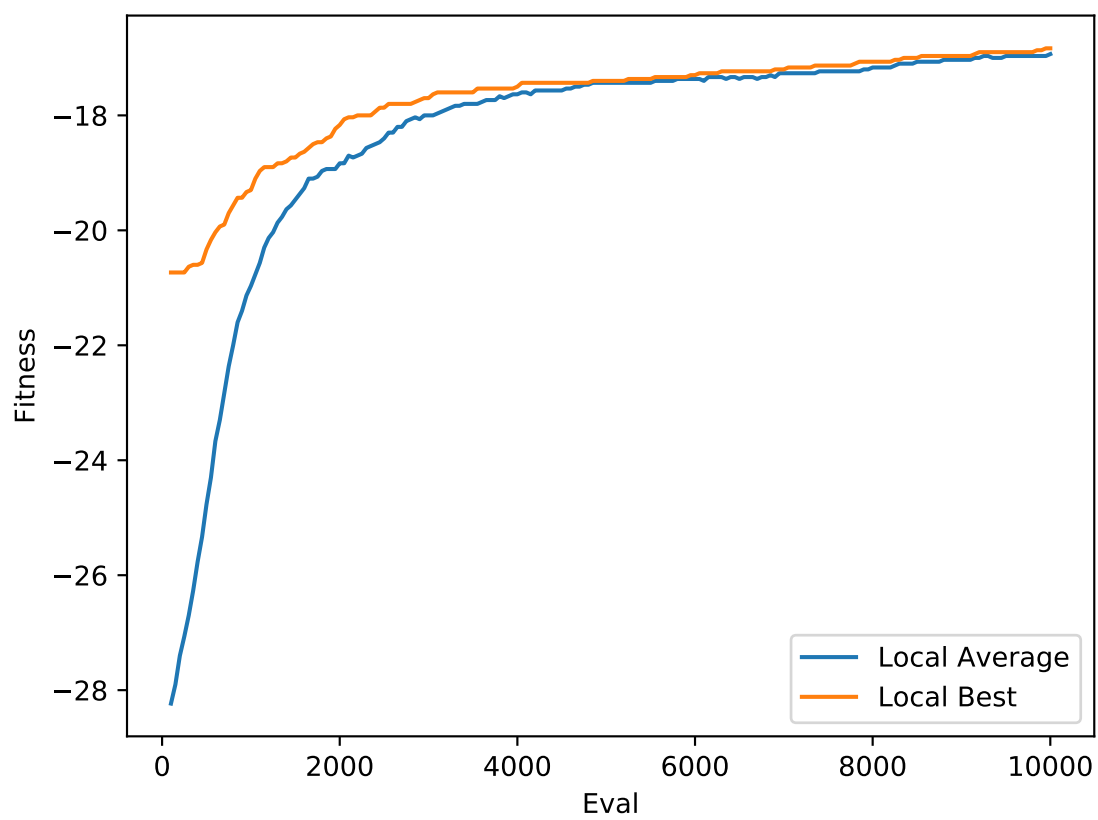


Table 61: Figure 61 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1061
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 62: Figure 62 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1062
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 61: Input 1

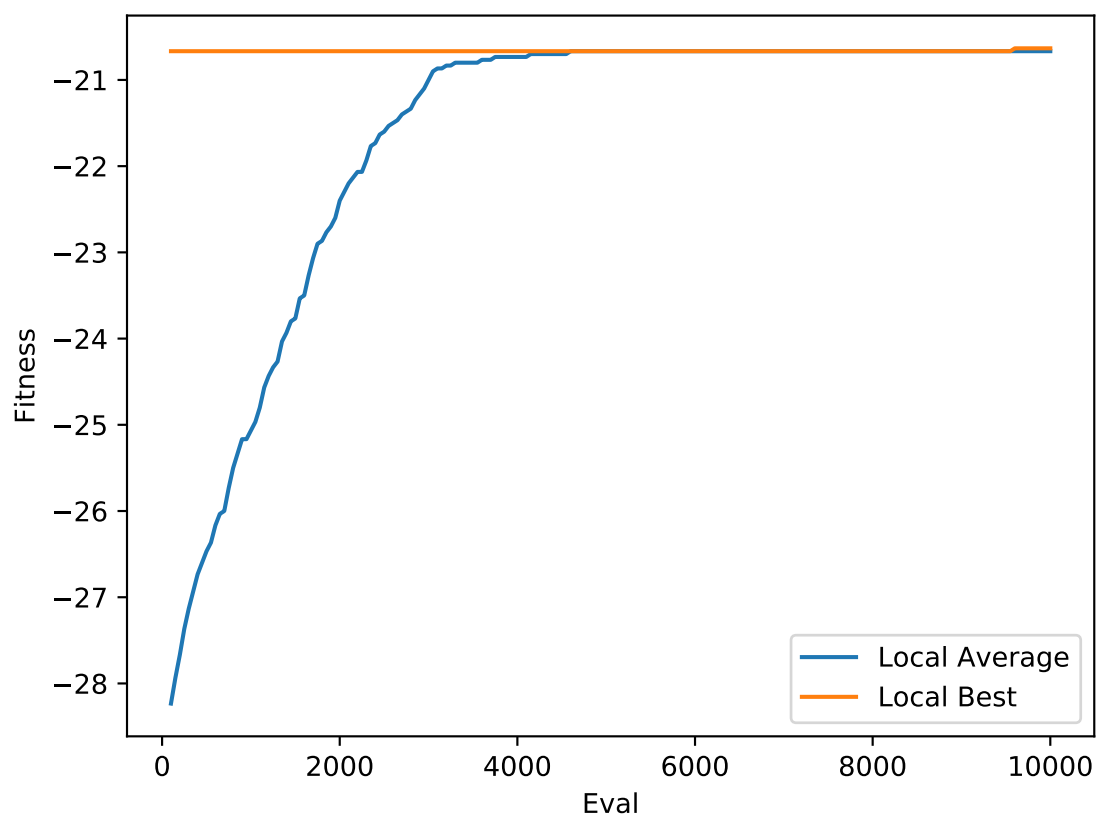


Figure 62: Input 1

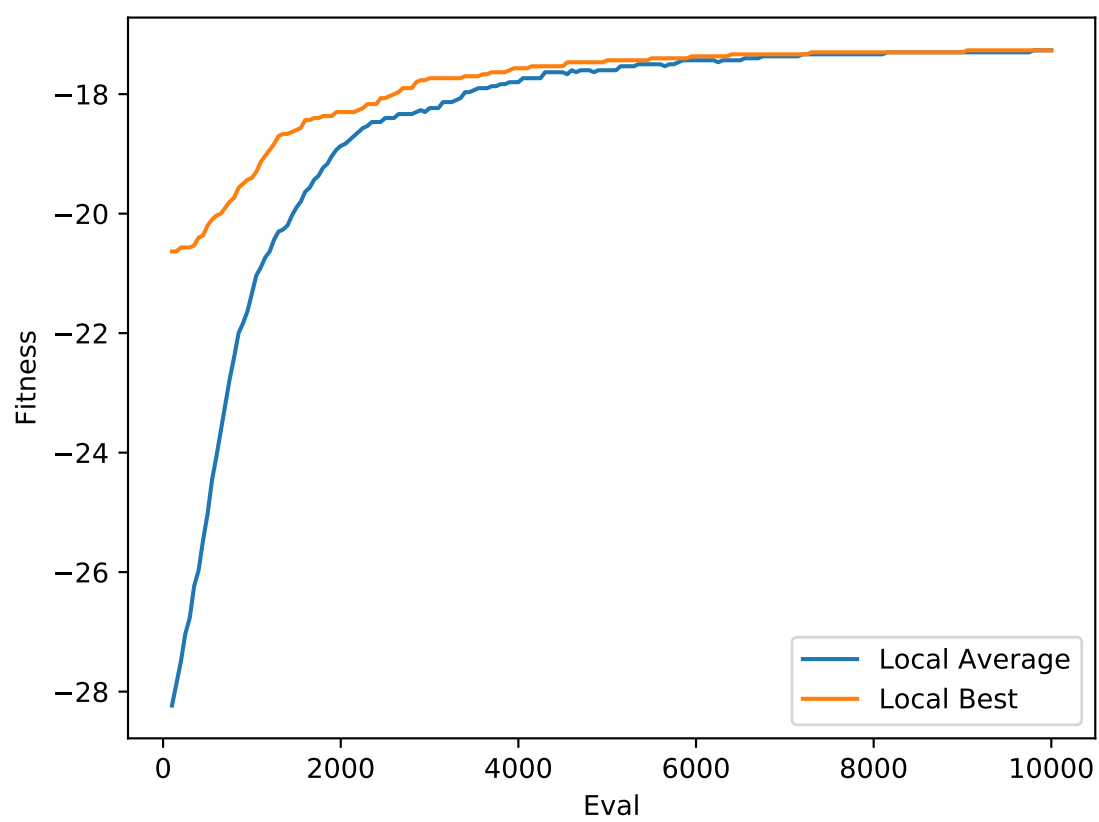


Table 63: Figure 63 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1063
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 64: Figure 64 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1064
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Repair
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 63: Input 1

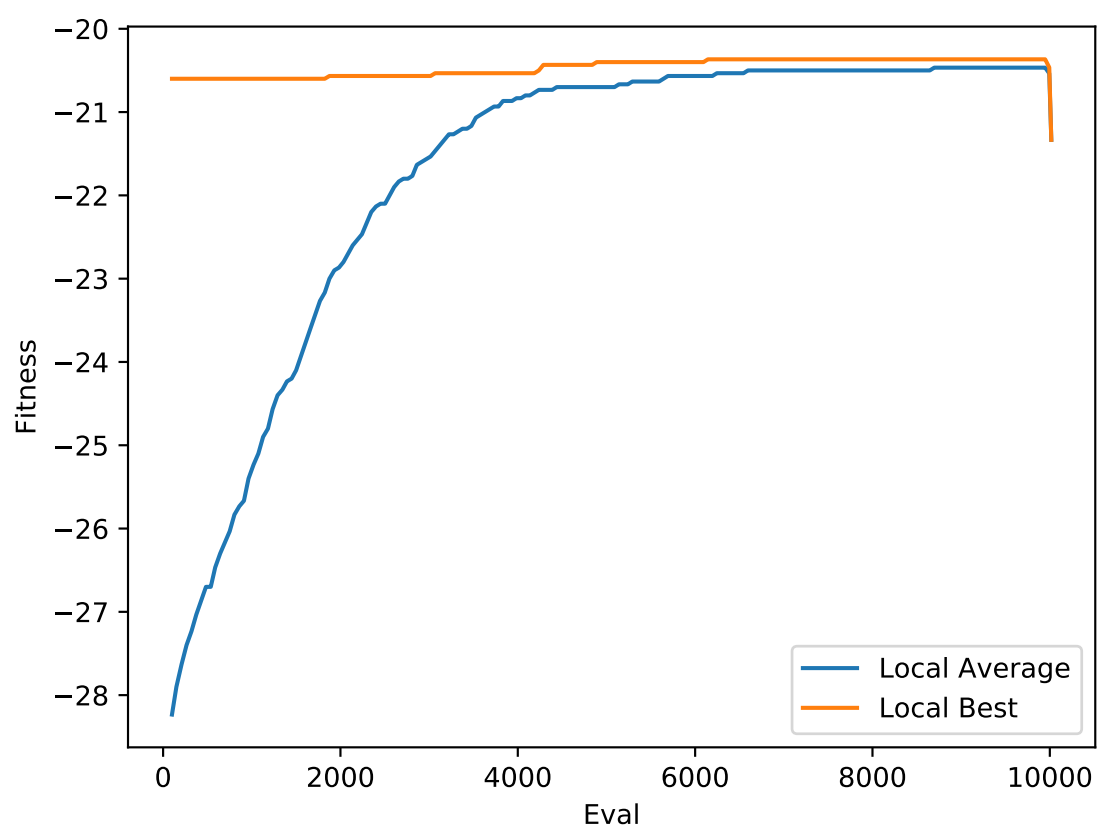


Figure 64: Input 1

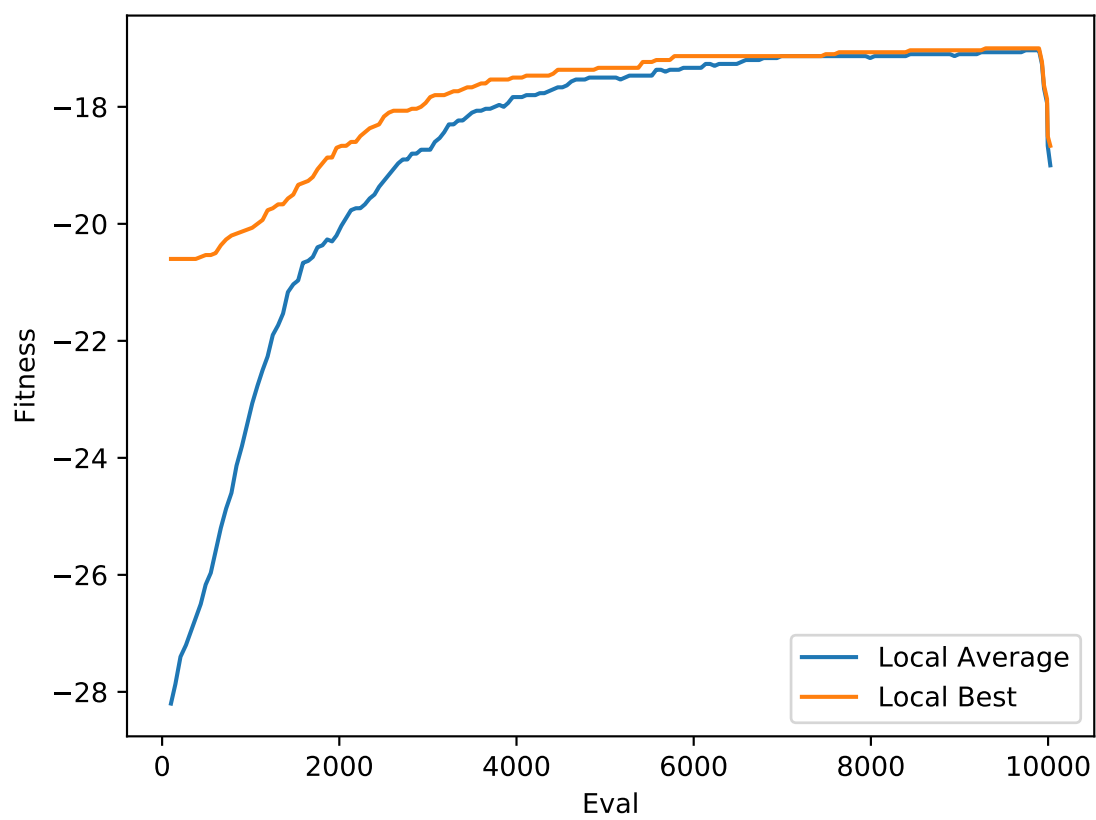


Table 65: Figure 65 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1065
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 66: Figure 66 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1066
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 65: Input 1

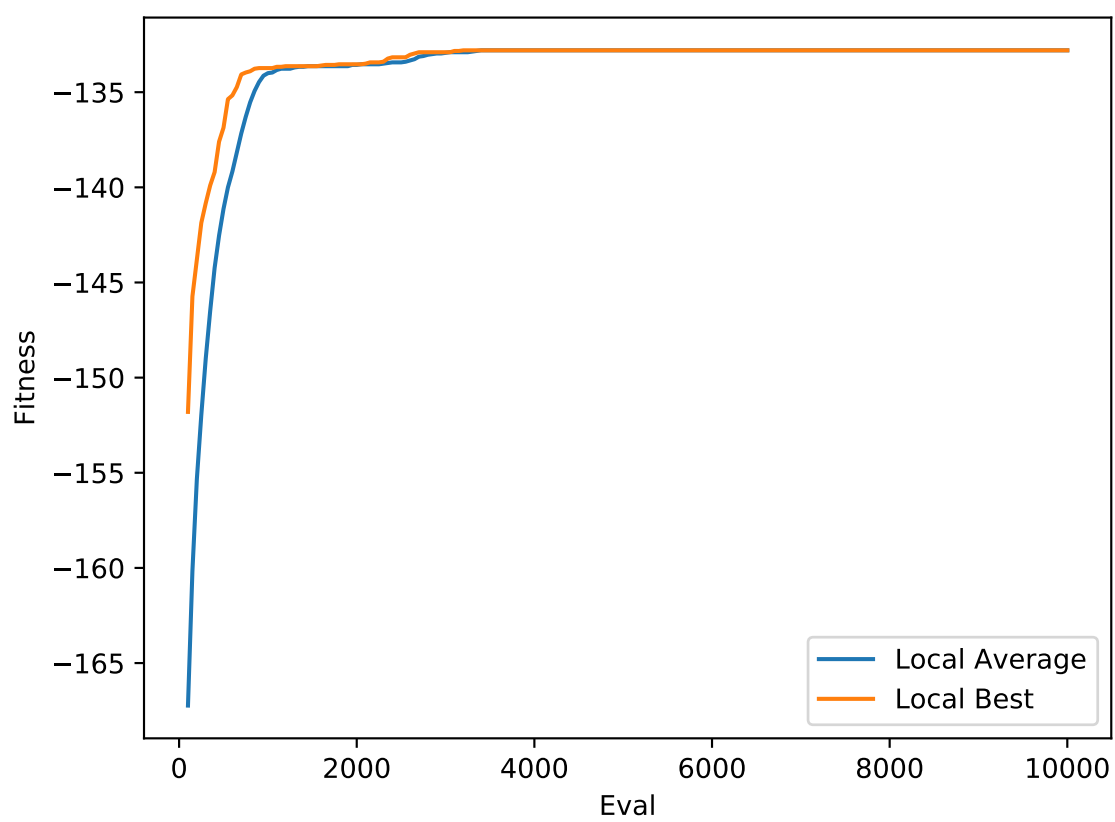


Figure 66: Input 1

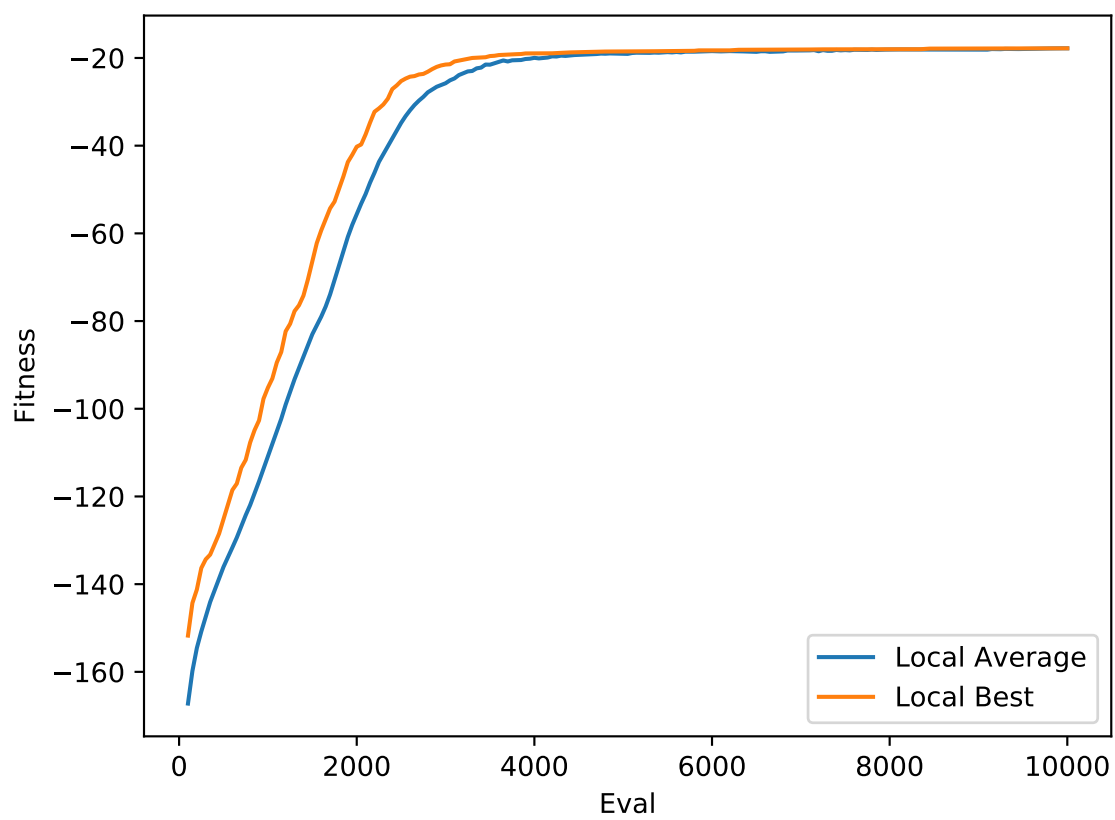


Table 67: Figure 67 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1067
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 68: Figure 68 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1068
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 67: Input 1

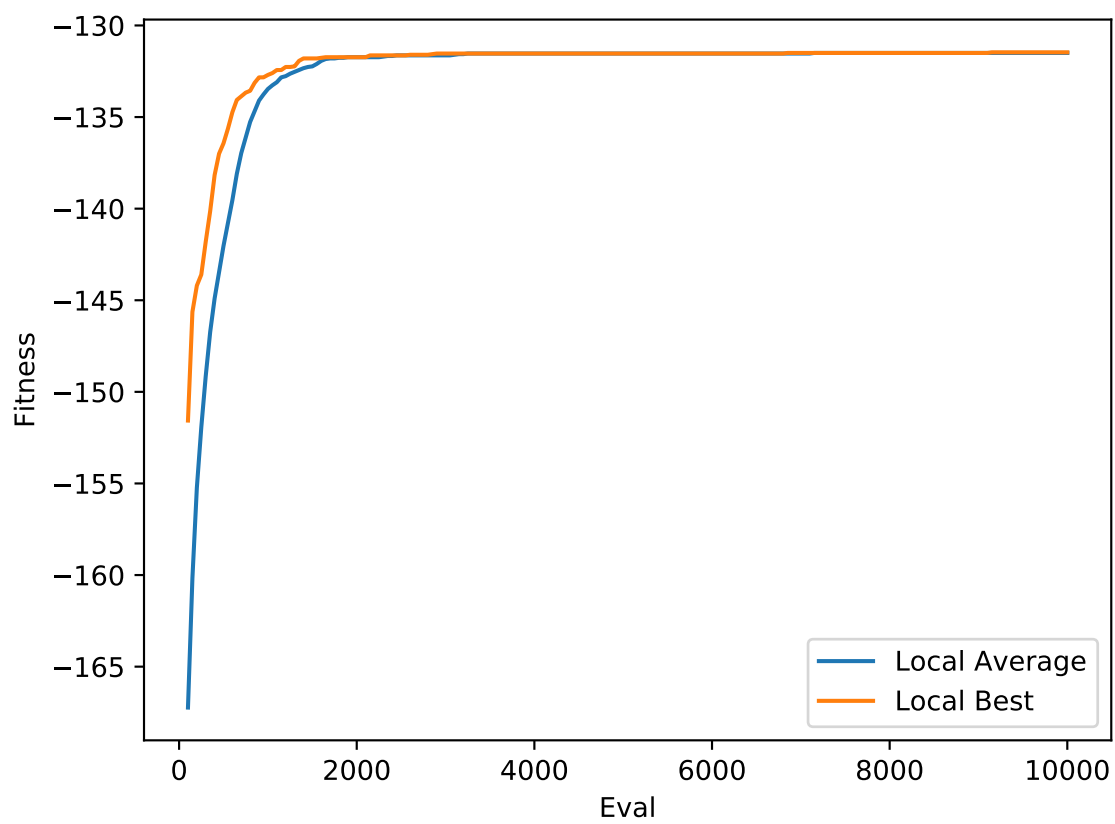


Figure 68: Input 1

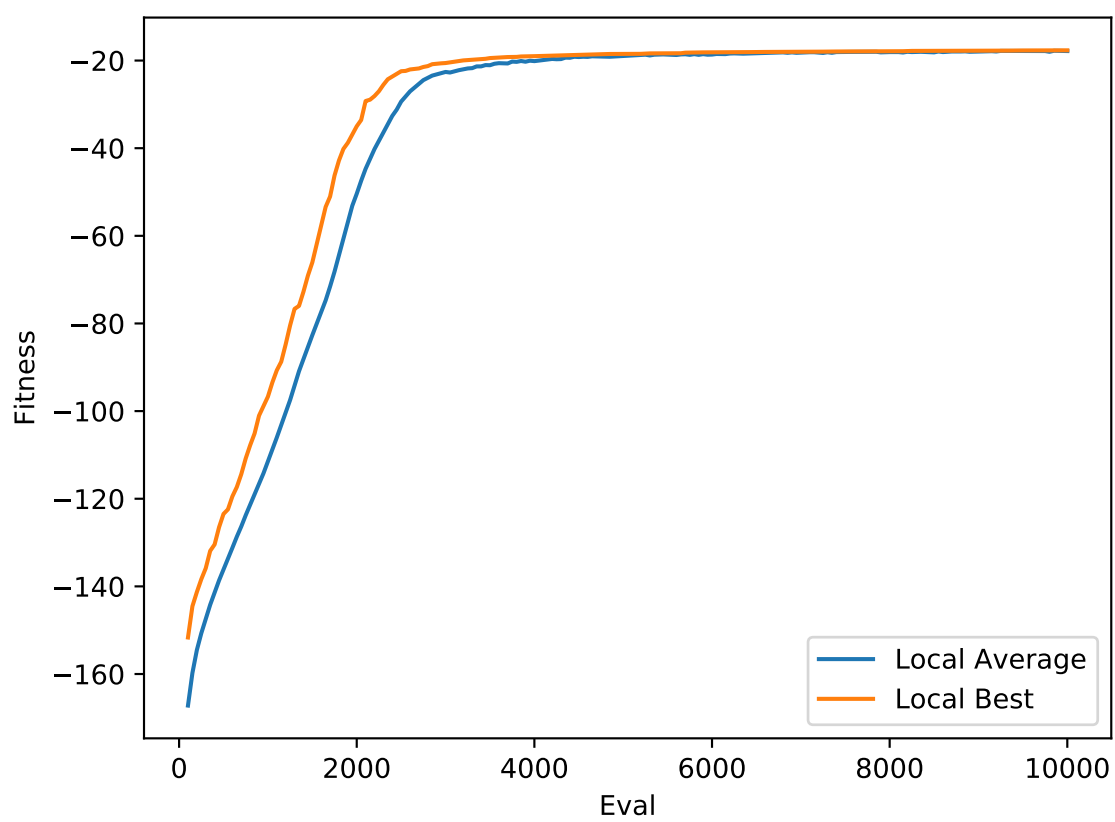


Table 69: Figure 69 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1069
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 70: Figure 70 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1070
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 69: Input 1

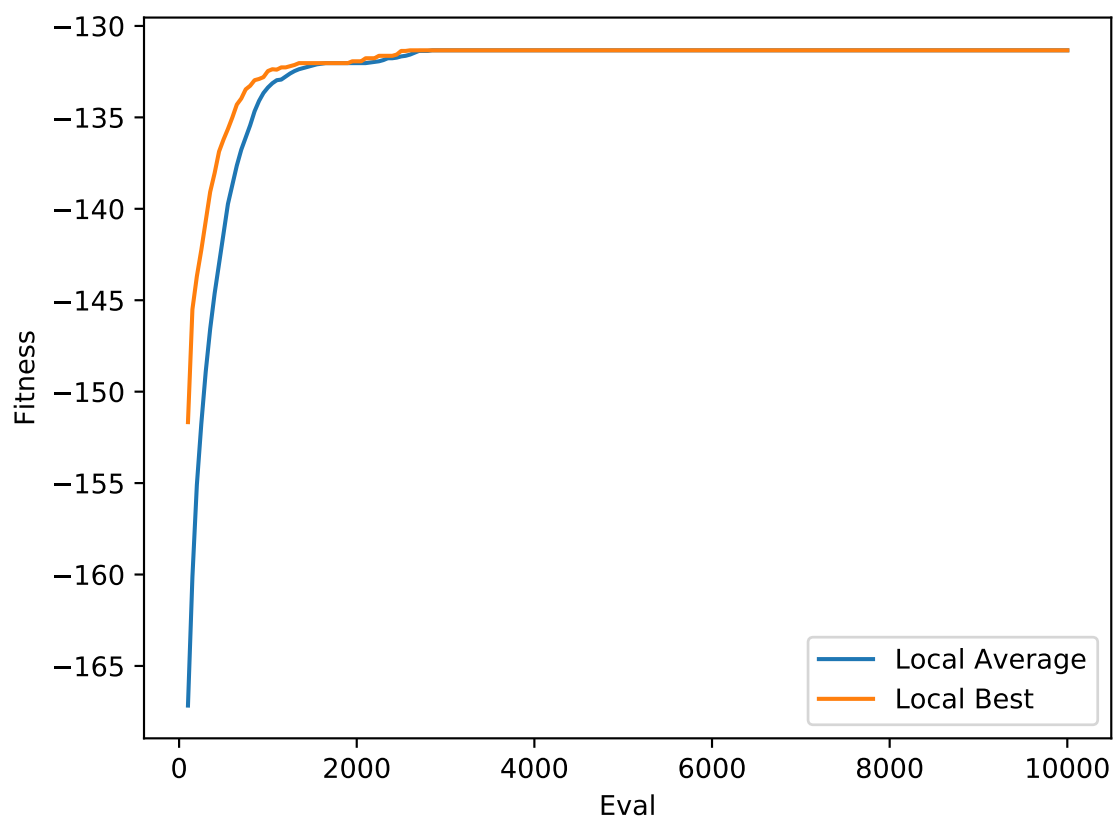


Figure 70: Input 1

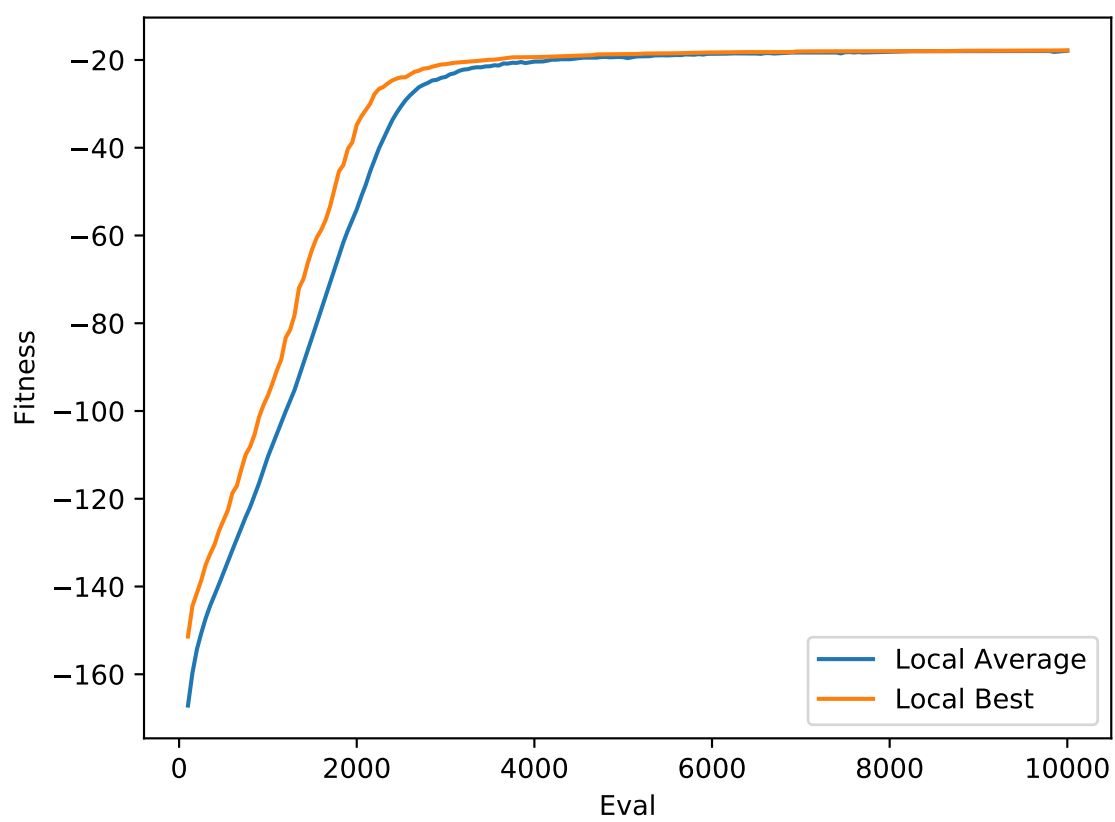


Table 71: Figure 71 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1071
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 72: Figure 72 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	False
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1072
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 71: Input 1

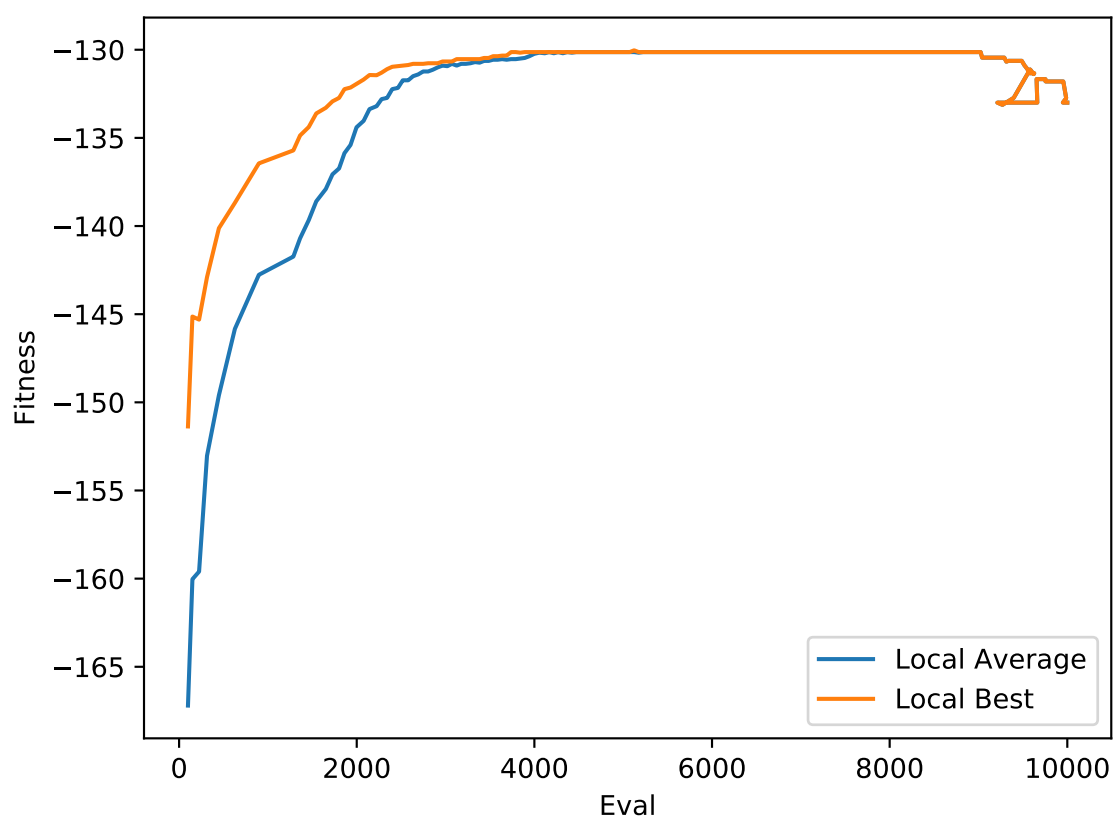


Figure 72: Input 1

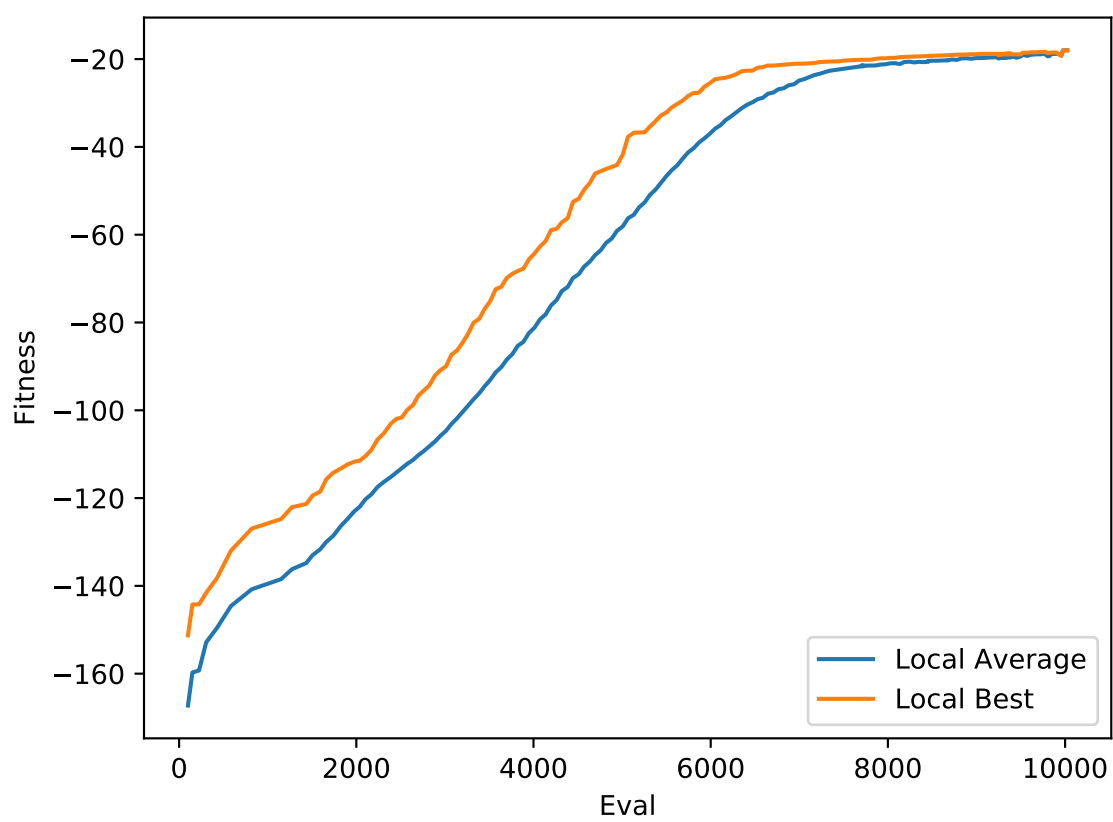


Table 73: Figure 73 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1073
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 74: Figure 74 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1074
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 73: Input 1

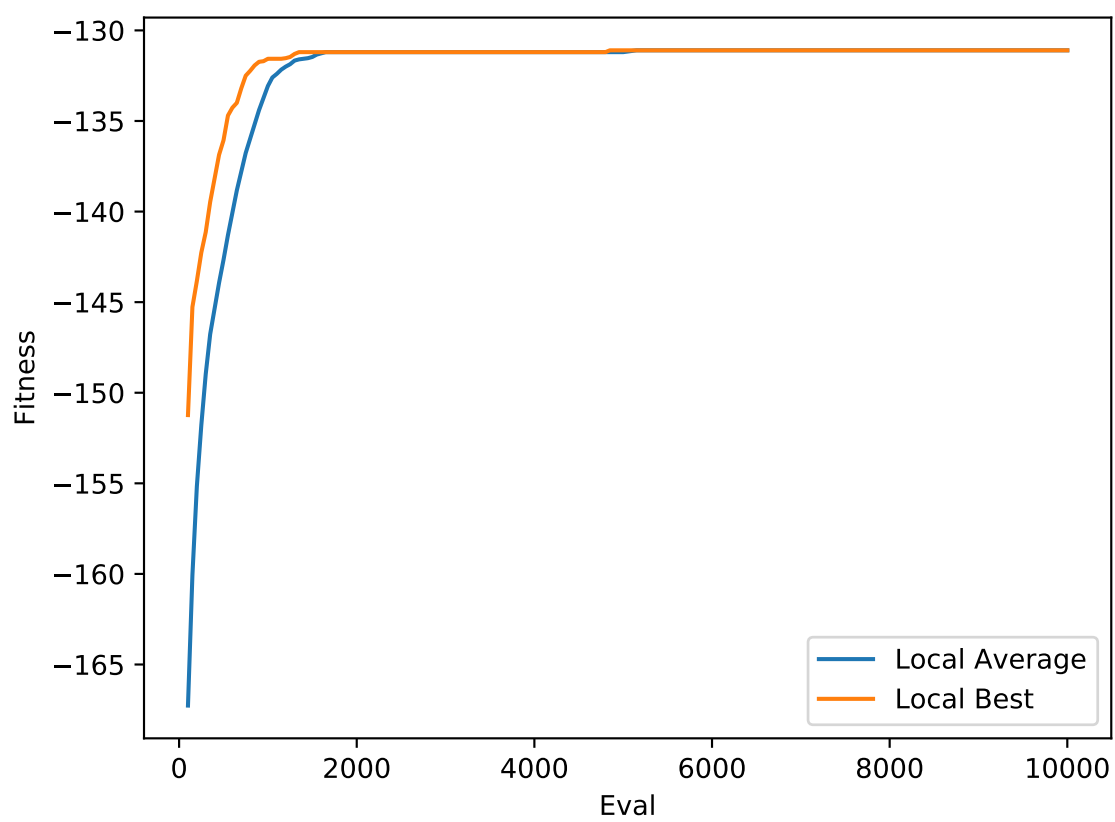


Figure 74: Input 1

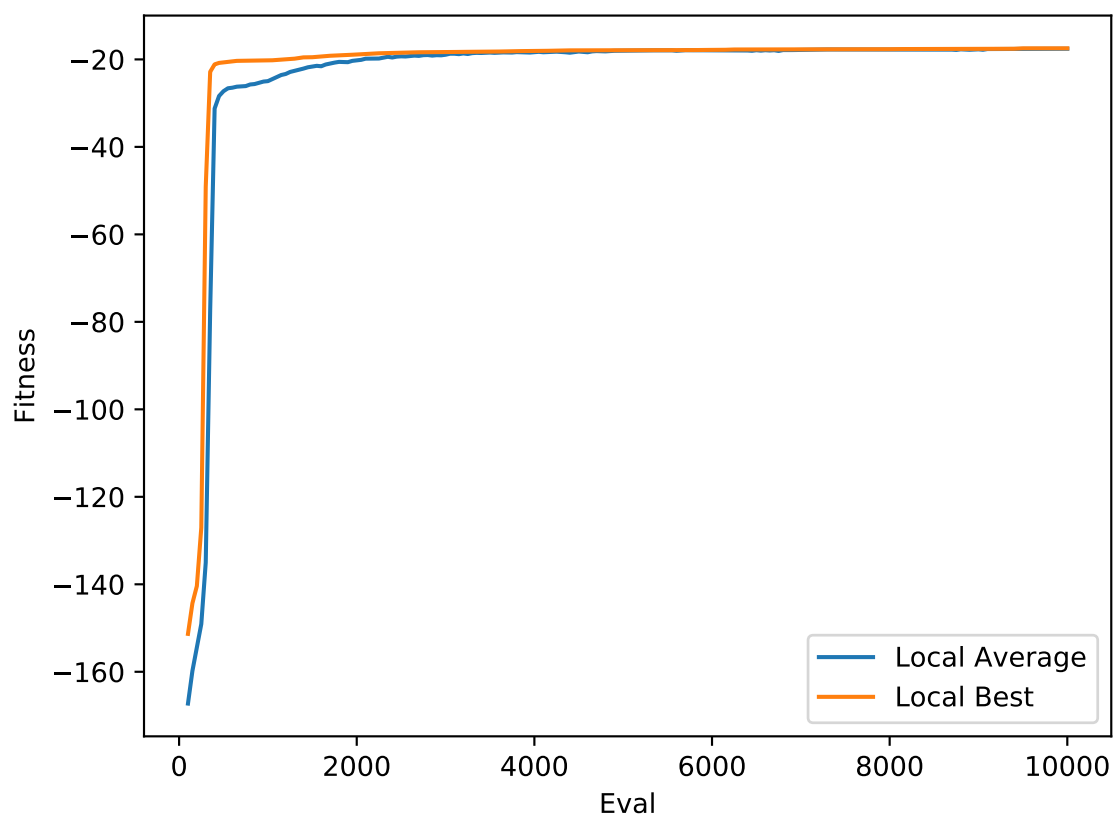


Table 75: Figure 75 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1075
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Table 76: Figure 76 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1076
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	False

Figure 75: Input 1

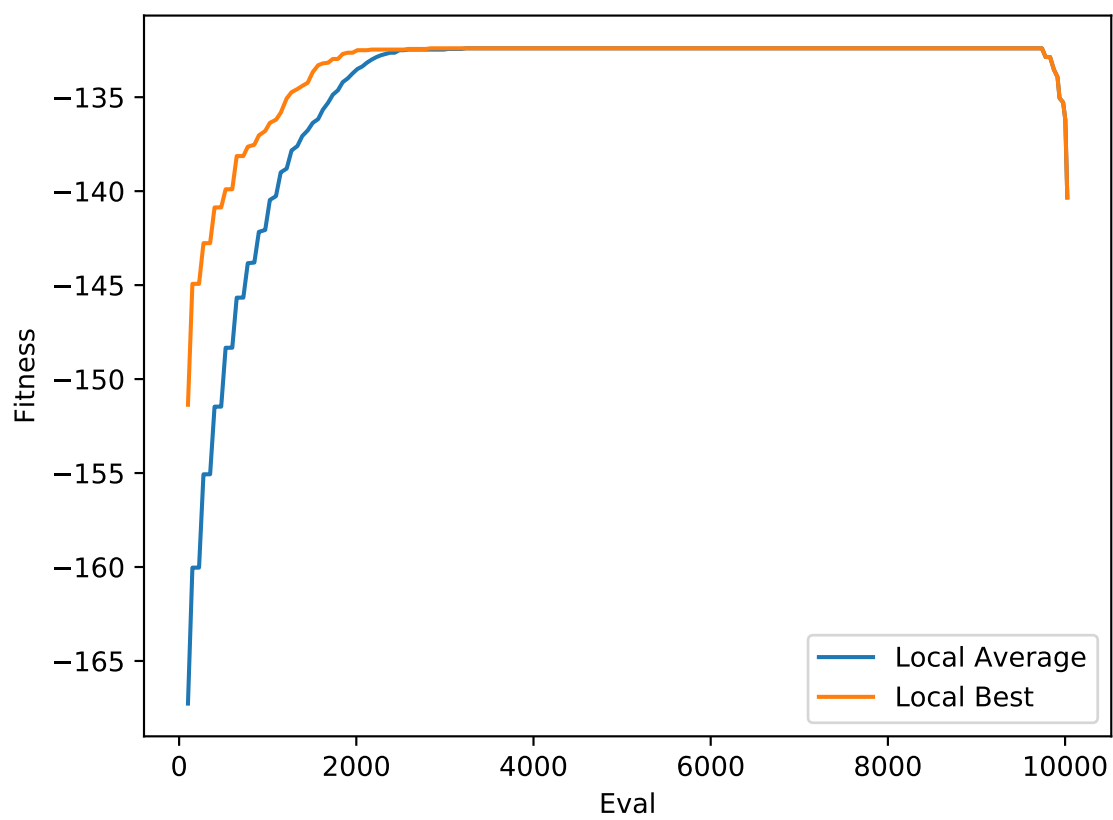


Figure 76: Input 1

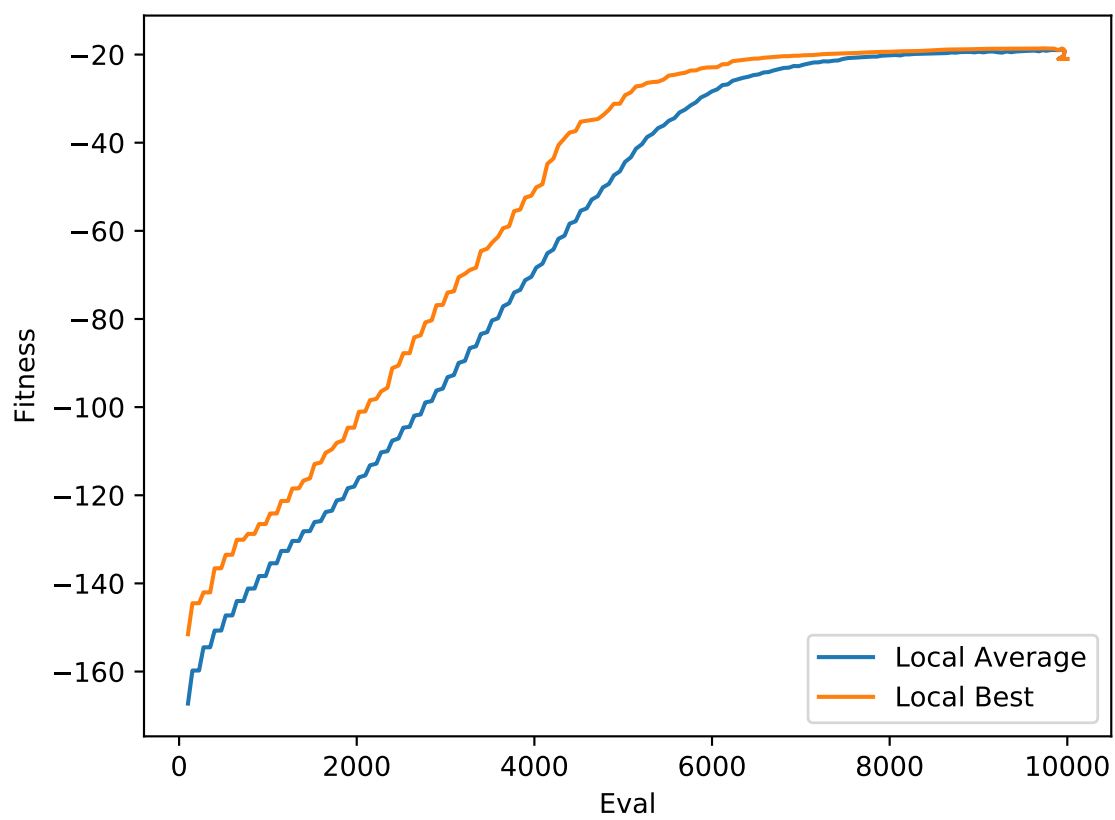


Table 77: Figure 77 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1077
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 78: Figure 78 Configuration File

Self Adaptive Offspring Count	False
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1078
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 77: Input 1

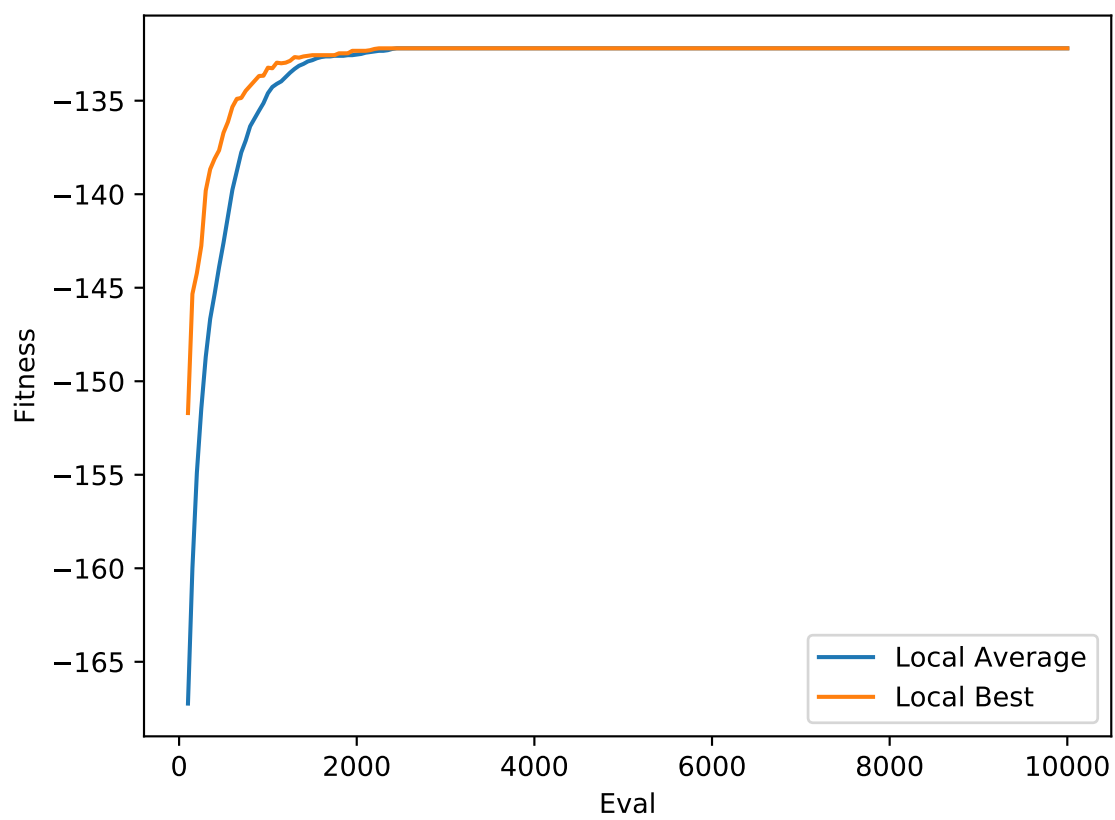


Figure 78: Input 1

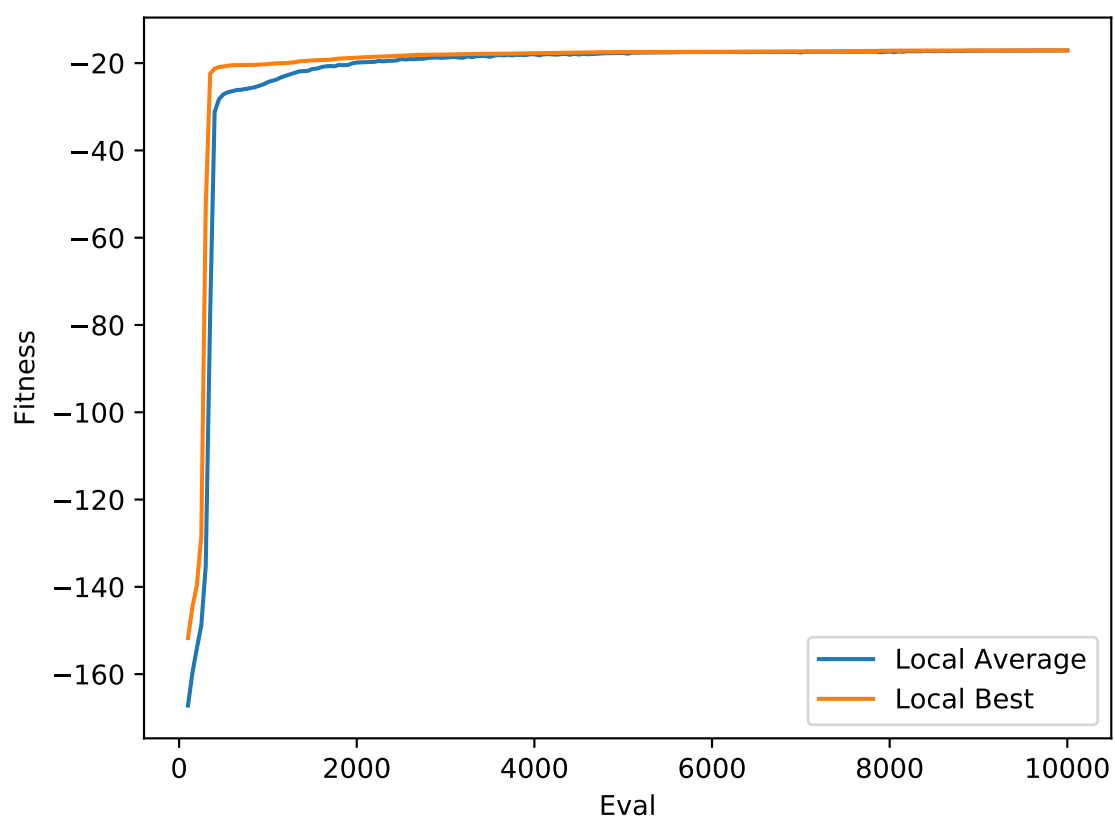


Table 79: Figure 79 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1079
Mutation Algorithm	Flip
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Table 80: Figure 80 Configuration File

Self Adaptive Offspring Count	True
Tournament Size For Parent Selection	5
Penalty Coefficient	1
Runs	30
Parent Selection Algorithm	k-Tournament Selection with replacement
Self Adaptive Mutation Rate	True
Offspring Count	50
Termination Convergence Criterion	10000
Solution File Path	None
Mutation Rate	0.1
Recombination Algorithm	Order Crossover
Random Seed	1080
Mutation Algorithm	Move
Tournament Size For Survival Selection	5
Placement Algorithm	Random with Penalty
Population Size	100
Survival Strategy	Plus
Search Algorithm	EA
Log File Path	None
Fitness Evaluations	10000
Survivor Algorithm	Truncation
Self Adaptive Penalty Coefficient	True

Figure 79: Input 1

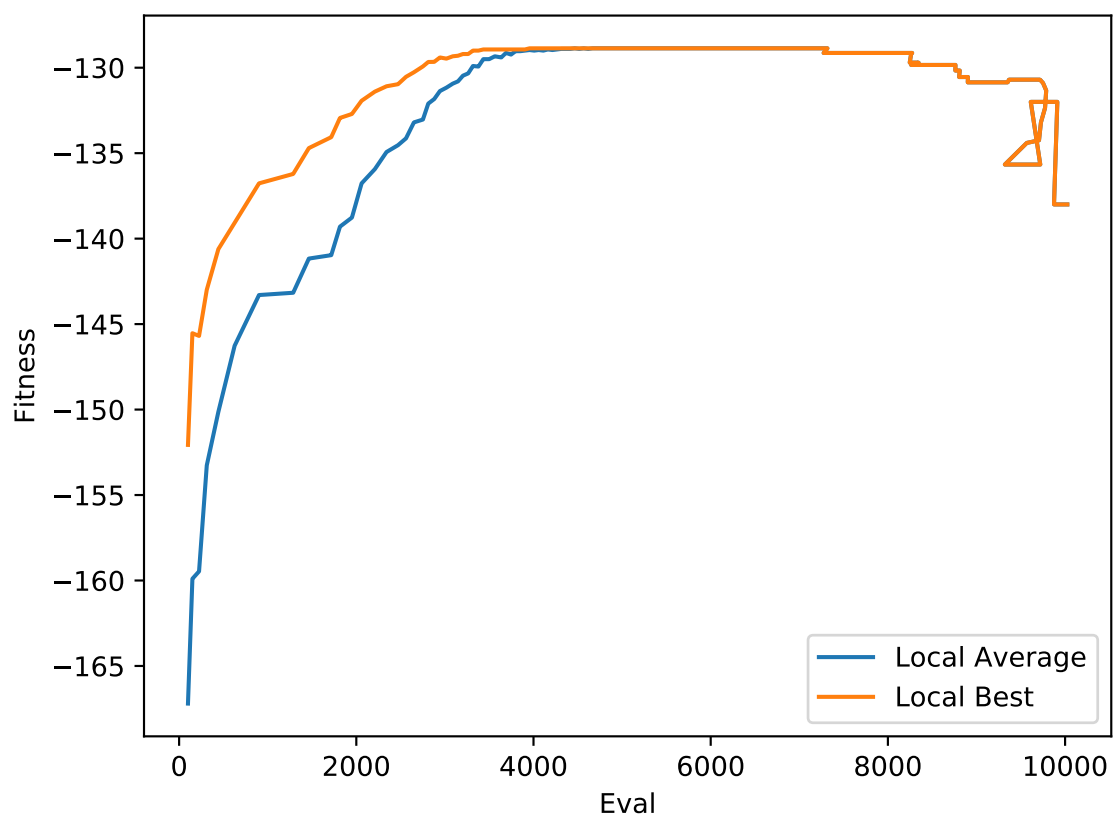


Figure 80: Input 1

