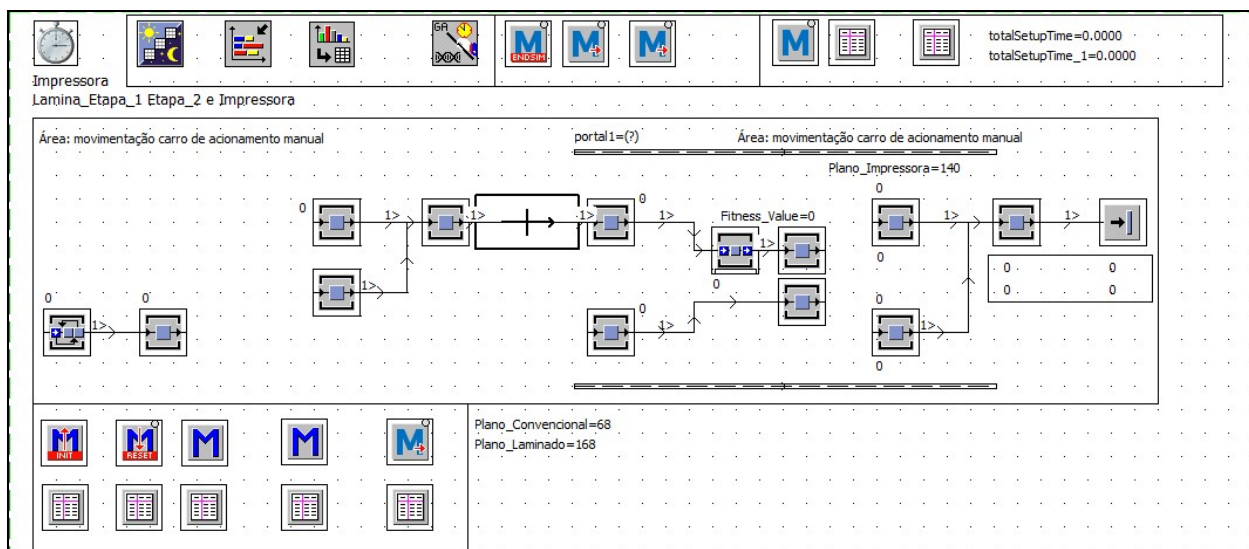


General Information

- Model file: C:\Users\walther\Documents\SEP5848_Pós_2023\09_10_2023_Ponte_1\4_5_Tecelagem_Godoy_Crane.spp
- GAWizard: .Models.Godoy.Godoy.GAWizard
- Generated on: 2023/10/12 20:50:12.7800
- Running time of the optimization: 21:01.2780

Model



.Models.Godoy.Godoy

Optimization results

Best Fitness: 18:13:00.0000

The parameters of the best solution are set in the model.

Fitness calculation

Fitness calculation by a weighted sum

Target value	Weighting
root.totalSetupTime	1.00000
root.totalSetupTime_1	1.00000
root.Fitness_Value	1.00000

Calculation of the fitness values of the best solution

Fitness	root.totalSetupTime	root.totalSetupTime_1	root.Fitness_Value
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000
18:13:00.0000	7:54:00.0000	36840	5:00.0000

Best parameter of the allocation problems



root.Buffer.Capacity: 14

Best solutions of the sequence problems



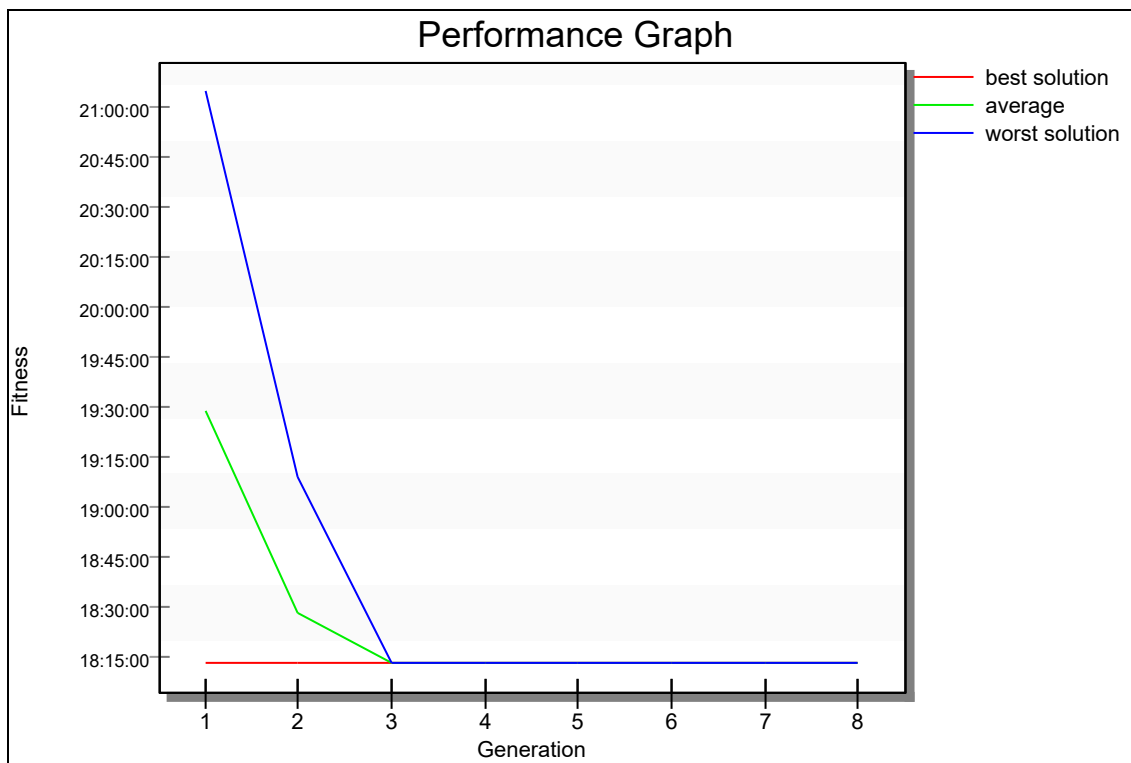
.Models.Godoy.Godoy.tf_datos

42, 14, 8, 52, 22, 11, 37, 9, 48, 40, 63, 13, 57, 60, 27, 20, 51, 67, 50, 26, 18, 66, 10, 43, 31, 45, 17, 64, 46, 41, 58, 28, 16, 2, 4, 49, 65, 12, 25, 29, 44, 59, 56, 68, 36, 30, 33, 55, 3, 32, 24, 54, 23, 61, 53, 1, 47, 21, 6, 38, 7, 5, 34, 35, 62, 39, 19, 15

.Models.Godoy.Godoy.tf_datos_1

20, 71, 29, 106, 40, 6, 161, 18, 52, 63, 25, 17, 35, 109, 138, 126, 166, 67, 93, 51, 160, 69, 36, 19, 85, 154, 103, 32, 91, 55, 73, 47, 41, 33, 125, 68, 140, 3, 141, 112, 12, 26, 72, 61, 119, 148, 94, 163, 88, 13, 5, 65, 117, 14, 131, 76, 150, 121, 123, 165, 111, 56, 58, 156, 137, 149, 164, 108, 48, 124, 102, 64, 132, 97, 100, 77, 87, 60, 157, 83, 79, 54, 116, 153, 101, 159, 133, 113, 4, 37, 31, 44, 16, 2, 27, 104, 28, 114, 84, 82, 128, 62, 11, 115, 81, 89, 59, 42, 110, 75, 57, 162, 34, 45, 122, 105, 30, 139, 24, 167, 142, 130, 127, 22, 43, 53, 107, 145, 38, 146, 86, 49, 95, 134, 15, 158, 7, 1, 39, 144, 10, 80, 50, 155, 152, 120, 21, 70, 8, 96, 99, 74, 78, 151, 143, 98, 118, 92, 23, 136, 168, 129, 66, 90, 46, 9, 147, 135

Evolution of the fitness values of the generations



Settings

Definition of optimization parameter

Parameter:	root.tf_dados
Sequence of	root.tf_dados
68 Elements	

Parameter:	root.tf_dados_1
Sequence of	root.tf_dados_1
168 Elements	

Parameter:	root.Buffer.Capacity
Lower bound	10
Upper bound	20
Increment	4

Settings of the Genetic Algorithm

Direction of the Optimization: Minimum
 Number of Generations: 8
 Size of Generation: 15
 Observations per individual: 10

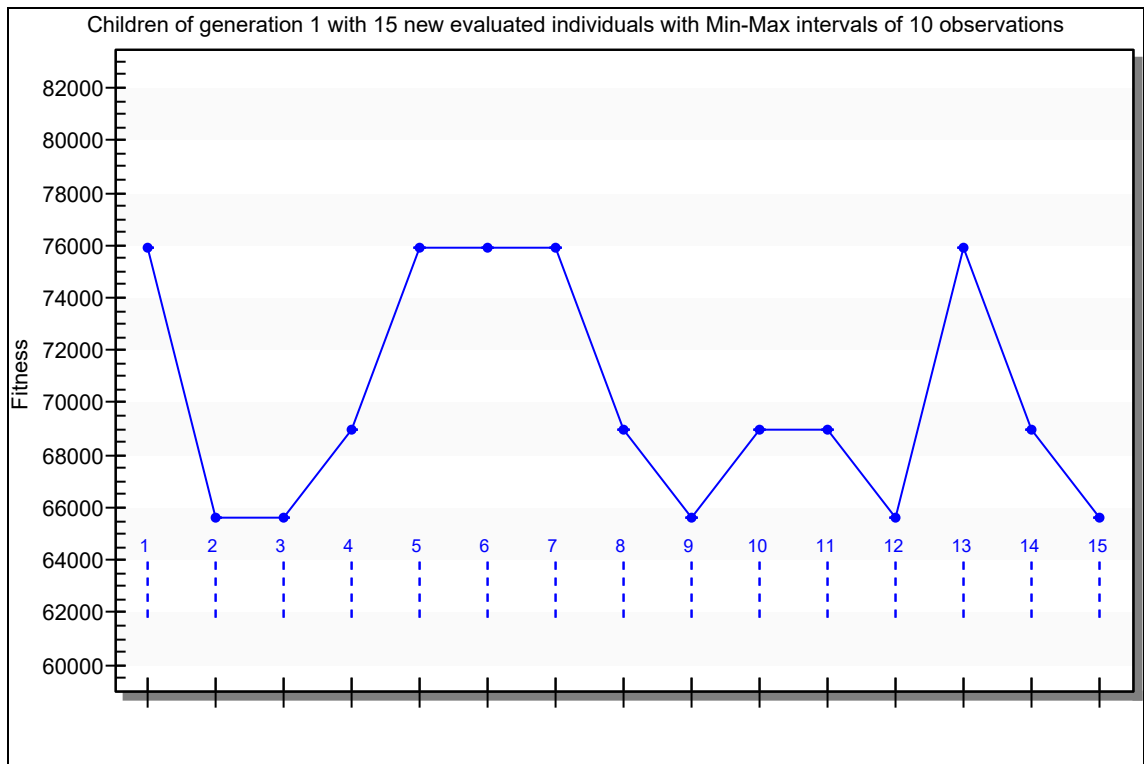
Generated individuals

The Genetic Algorithm generated 225 individuals.
The search for equal individuals is performed.
Number of multiple generated individuals: 2
The penalty method was not applied.
Number of evaluated individuals: 223
Observations per individual: 10
2230 simulation runs are performed.

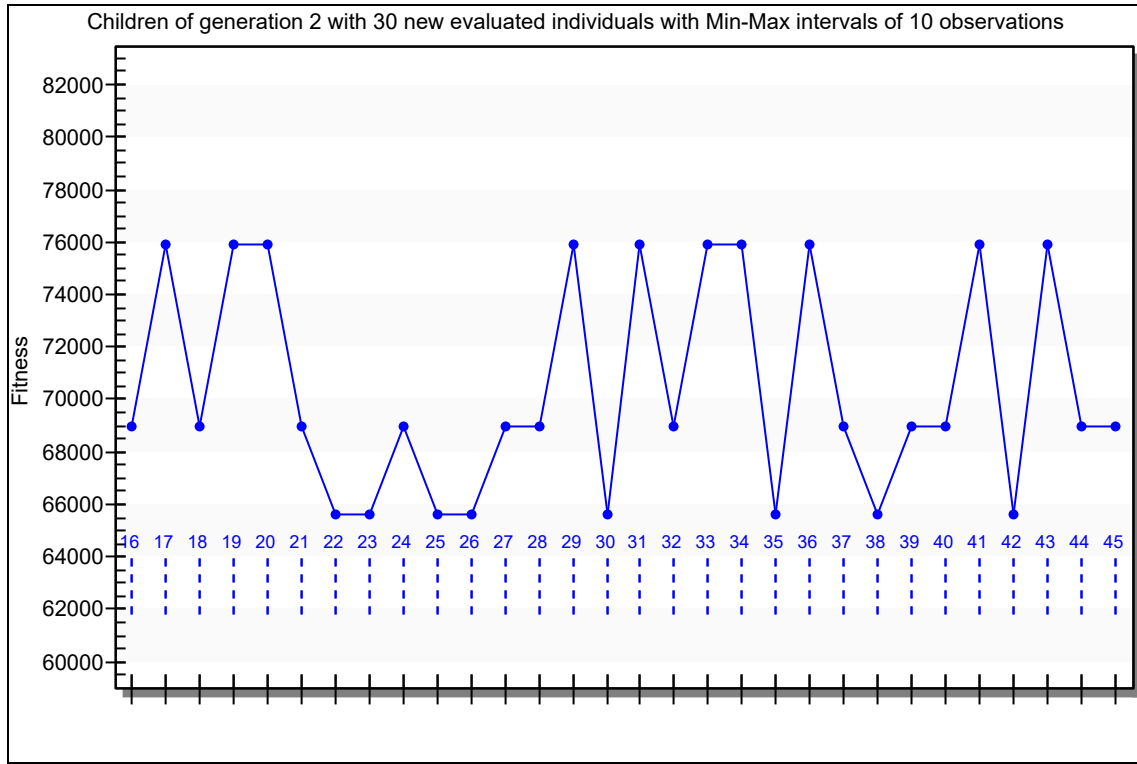
Children of all generations

Children of all generations with Min-Max intervals of 10 observations

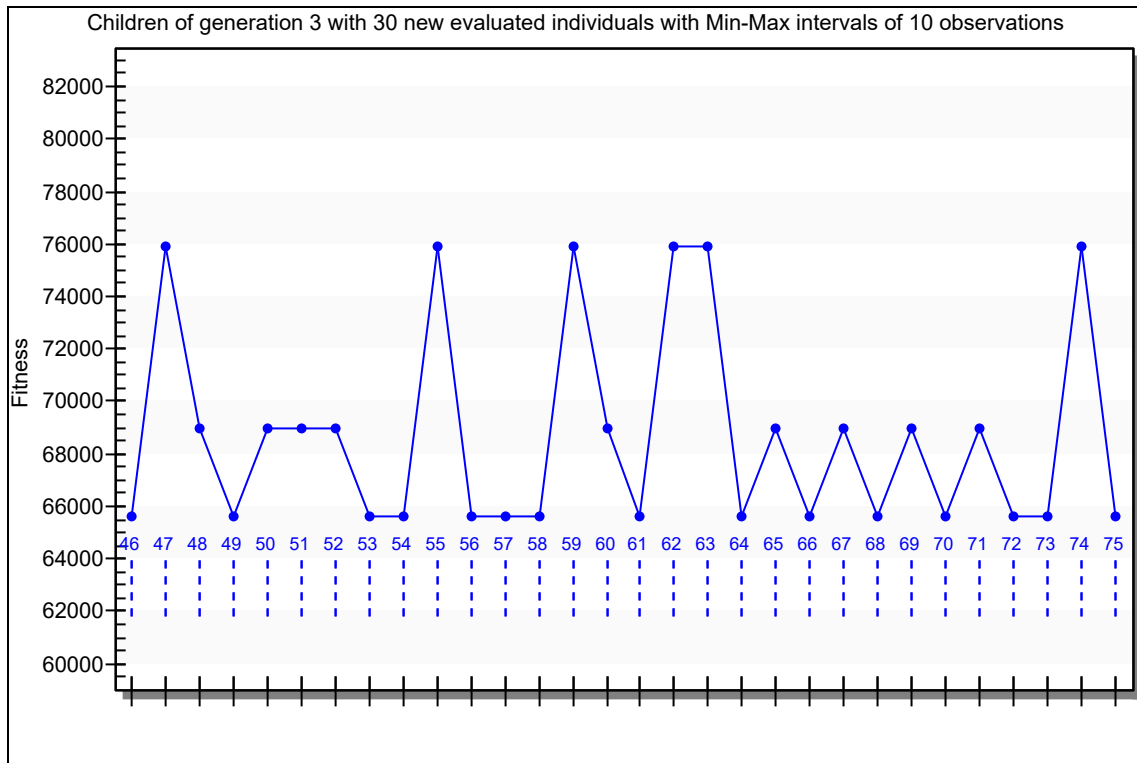
Generation 1



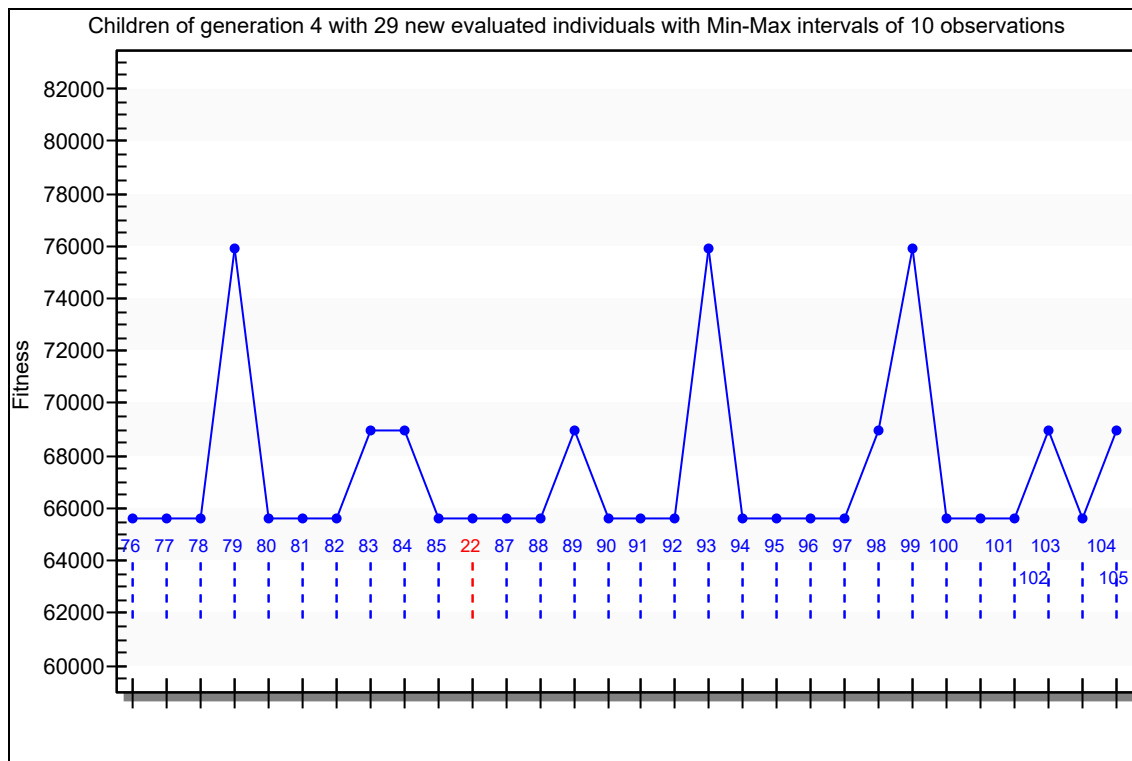
Generation 2



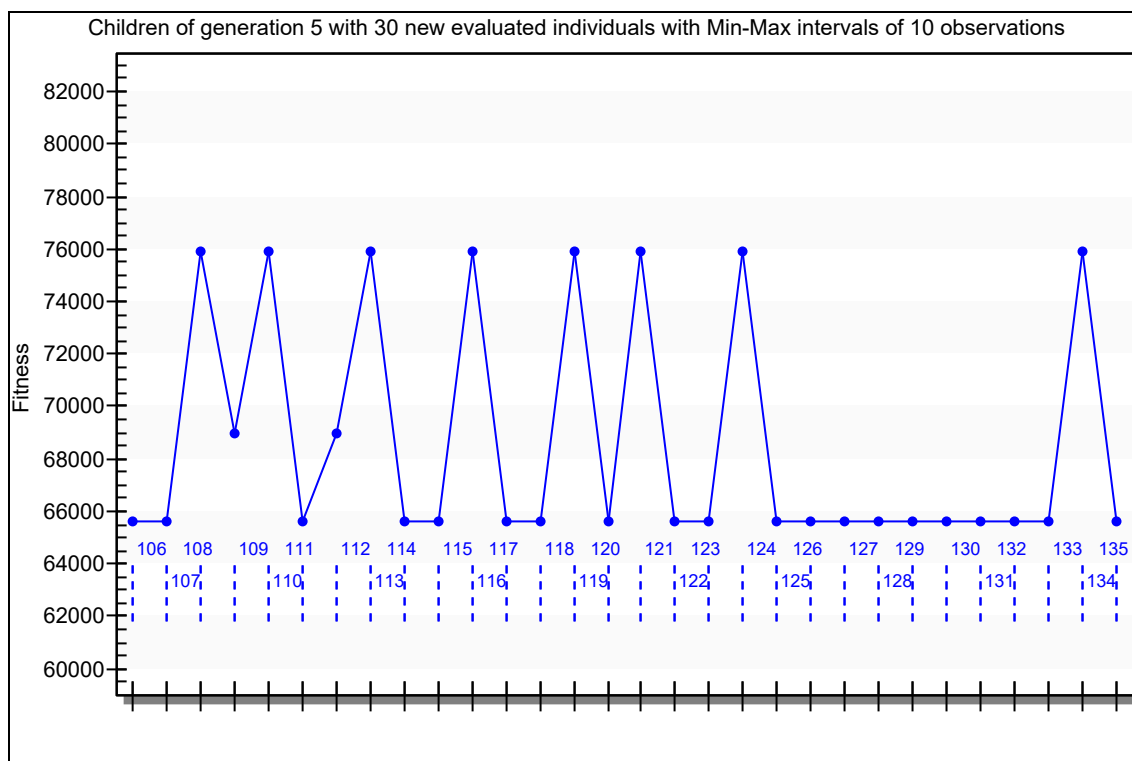
Generation 3



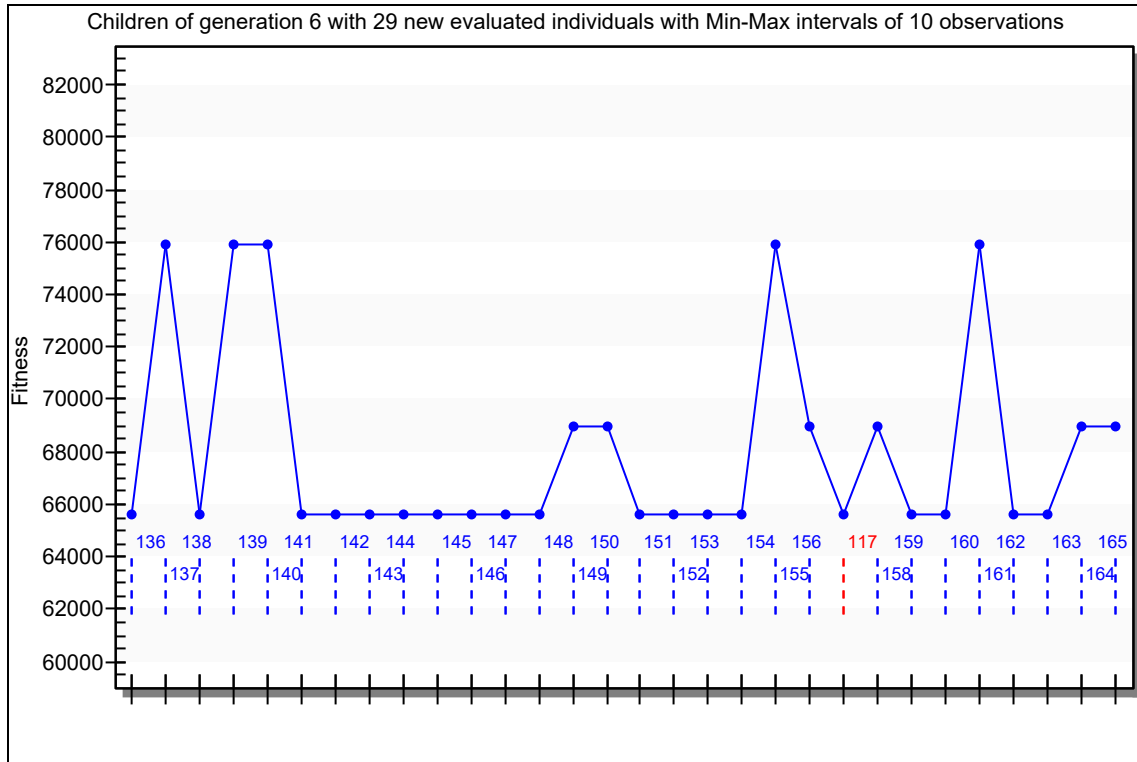
Generation 4



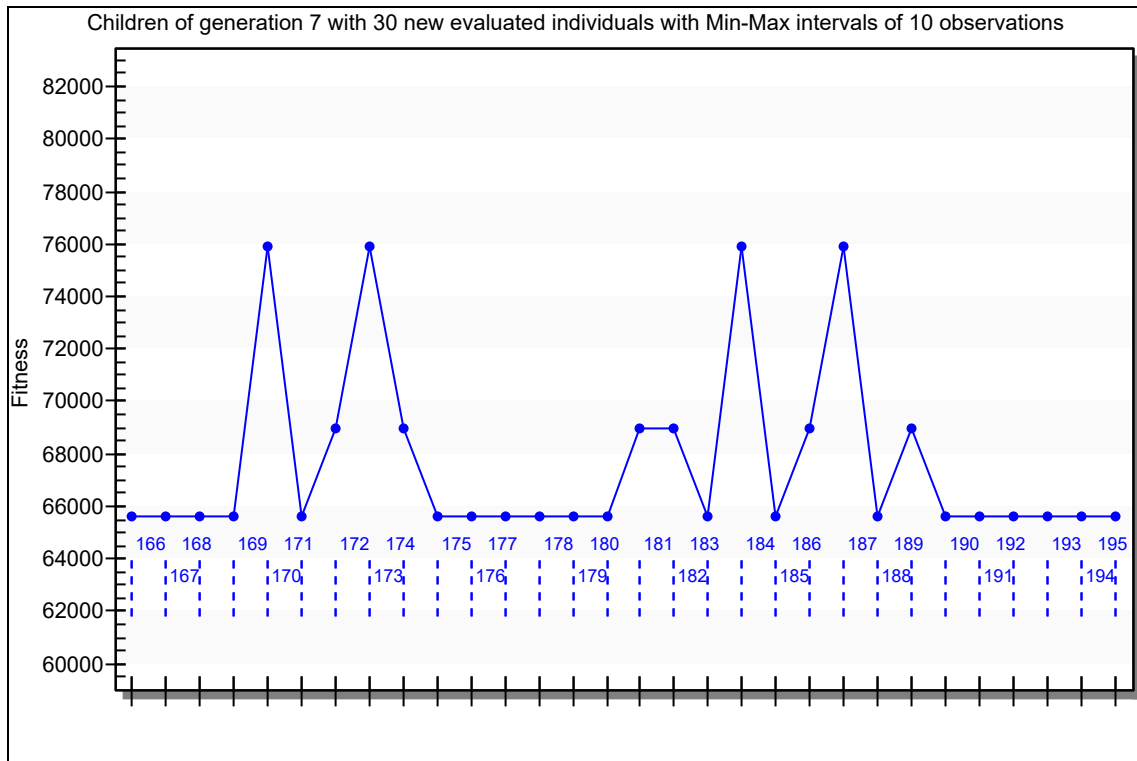
Generation 5



Generation 6



Generation 7



Generation 8

