

Experiment name

| New BehaviorSpace Features

Vary variables as follows

| [{"wolf-gain-from-food" [30 5 50]]]

Repetitions

| 3

Execute combinations in sequential order

| yes

Measure runs using these reporters as metrics

| count sheep

| count wolves

| [xcor] of sheep

| [ycor] of sheep

| [xcor] of wolves

| [ycor] of wolves

Run metrics every step

| no

Run metrics when

| ticks mod 2 = 0

Pre experiment commands

| reset-timer

Setup commands

| setup

Go commands

| go

Stop condition**Post run commands****Post experiment commands**

| show timer

Time limit

| 200

Experiment name

```
| BehaviorSpace run 3 experiments
```

Vary variables as follows

```
| ["model-version" "sheep-wolves-grass"]  
| [{"sheep-reproduce" 1} {"sheep-gain-from-food" 1} {"wolf-reproduce" 2} {"wolf-gain-from-food" 10}]  
| [{"sheep-reproduce" 6} {"sheep-gain-from-food" 8} {"wolf-reproduce" 5} {"wolf-gain-from-food" 20}]  
| [{"sheep-reproduce" 20} {"sheep-gain-from-food" 15} {"wolf-reproduce" 15} {"wolf-gain-from-food" 30}]
```

Repetitions

```
| 1
```

Execute combinations in sequential order

```
| yes
```

Measure runs using these reporters as metrics

```
| count sheep
```

```
| count wolves
```

```
| count grass
```

Run metrics every step

```
| no
```

Run metrics when

```
| ticks mod 10 = 0
```

Pre experiment commands**Setup commands**

```
| setup
```

```
| print (word "sheep-reproduce: " sheep-reproduce ", wolf-reproduce: " wolf-reproduce)
```

```
| print (word "sheep-gain-from-food: " sheep-gain-from-food ", wolf-gain-from-food: " wolf-gain-from-food)
```

Go commands

```
| go
```

Stop condition**Post run commands**

```
| print (word "sheep: " count sheep ", wolves: " count wolves)
```

```
| print ""
```

```
| wait 1
```

Post experiment commands**Time limit**

```
| 1500
```

Experiment name

```
| BehaviorSpace run 3 variable values per experiments
```

Vary variables as follows

```
| ["model-version" "sheep-wolves-grass"]  
| ["sheep-reproduce" 4]  
| ["wolf-reproduce" 2]  
| ["sheep-gain-from-food" 4]  
| ["wolf-gain-from-food" 20]  
| [{"sheep-reproduce" 1 6 20}]  
| [{"wolf-reproduce" 2 7 15}]  
| [{"sheep-gain-from-food" 1 8 15}]  
| [{"wolf-gain-from-food" 10 20 30}]
```

Repetitions

```
| 1
```

Execute combinations in sequential order

```
| yes
```

Measure runs using these reporters as metrics

```
| count sheep  
| count wolves  
| count grass
```

Run metrics every step

```
| no
```

Run metrics when

```
| ticks mod 10 = 0
```

Pre experiment commands**Setup commands**

```
| setup  
| print (word "sheep-reproduce: " sheep-reproduce ", wolf-reproduce: " wolf-reproduce)  
| print (word "sheep-gain-from-food: " sheep-gain-from-food ", wolf-gain-from-food: " wolf-gain-from-food)
```

Go commands

```
| go
```

Stop condition**Post run commands**

```
| print (word "sheep: " count sheep ", wolves: " count wolves)  
| print ""  
| wait 1
```

Post experiment commands**Time limit**

```
| 1500
```

Experiment name

| BehaviorSpace subset

Vary variables as follows

| ["model-version" "sheep-wolves-grass"]

| [{"wolf-reproduce" 3 5} {"wolf-gain-from-food" 30 40}]

| [{"wolf-reproduce" 10 15} {"wolf-gain-from-food" 10 15}]

Repetitions

| 1

Execute combinations in sequential order

| yes

Measure runs using these reporters as metrics

| count sheep

| count wolves

| count grass

Run metrics every step

| no

Run metrics when

| ticks mod 10 = 0

Pre experiment commands**Setup commands**

| setup

Go commands

| go

Stop condition**Post run commands**

| wait 0.5

Post experiment commands**Time limit**

| 1500

Experiment name

| BehaviorSpace combinatorial

Vary variables as follows

| ["model-version" "sheep-wolves-grass"]

| ["wolf-reproduce" 3 5 10 15]

| ["wolf-gain-from-food" 10 15 30 40]

Repetitions

| 1

Execute combinations in sequential order

| yes

Measure runs using these reporters as metrics

| count sheep

| count wolves

| count grass

Run metrics every step

| no

Run metrics when

| ticks mod 10 = 0

Pre experiment commands**Setup commands**

| setup

Go commands

| go

Stop condition**Post run commands**

| wait 0.5

Post experiment commands**Time limit**

| 1500

Experiment name

| Wolf Sheep Crossing

Vary variables as follows

| ["wolf-gain-from-food" 20]
| ["show-energy?" false]
| ["wolf-reproduce" 5]
| ["initial-number-wolves" 50]
| ["initial-number-sheep" 100]
| ["model-version" "sheep-wolves-grass"]
| ["sheep-gain-from-food" 4]
| ["grass-regrowth-time" 30]
| ["sheep-reproduce" 4]

Repetitions

| 4

Execute combinations in sequential order

| yes

Measure runs using these reporters as metrics

| count sheep
| count wolves

Run metrics every step

| no

Run metrics when

| count sheep = count wolves

Pre experiment commands**Setup commands**

| setup

Go commands

| go

Stop condition**Post run commands****Post experiment commands****Time limit**

| 1500

Experiment name

| New BehaviorSpace Features reproducible

Vary variables as follows

| ["model-version" "sheep-wolves-grass"]
| ["wolf-gain-from-food" 20]
| ["show-energy?" false]
| ["wolf-reproduce" 5]
| ["initial-number-wolves" 50]
| ["initial-number-sheep" 100]
| [{"wolf-gain-from-food" 10 20 30}]

Repetitions

| 3

Execute combinations in sequential order

| yes

Measure runs using these reporters as metrics

| count sheep
| count wolves
| [xcor] of sheep
| [ycor] of sheep
| [xcor] of wolves
| [ycor] of wolves

Run metrics every step

| no

Run metrics when

| ticks mod 2 = 0

Pre experiment commands

| reset-timer

Setup commands

| random-seed (474 + behaviorspace-run-number)

|
| setup

Go commands

| go

Stop condition**Post run commands****Post experiment commands**

| show timer

Time limit

| 200