Micro-Swarm Dump Report

dump_dir: dumps\Stress-Test_Adaptionslauf
prefix: stress
steps: 10
normalization: local
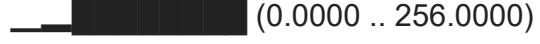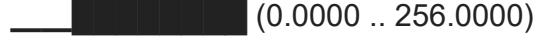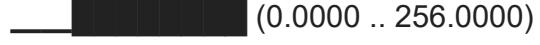
Scenario

stress_enable=true, at_step=120, block_rect=40,40,30,30, pheromone_noise=0.004

Summary over time

Field	mean	nonzero_ratio	norm_entropy
resources	(0.0148 .. 0.1827)	(0.0197 .. 1.0000)	(0.0395 .. 0.7896)
phero_food	(0.0000 .. 0.1406)	(0.0000 .. 1.0000)	(0.0000 .. 0.7897)
phero_danger	(0.0000 .. 0.1002)	(0.0000 .. 1.0000)	(0.0000 .. 0.5835)
molecules	(0.0000 .. 0.0011)	(0.0000 .. 0.3904)	(0.0000 .. 0.3109)
mycel	(0.0000 .. 0.2210)	(0.0000 .. 1.0000)	(0.0000 .. 0.8374)

System over time
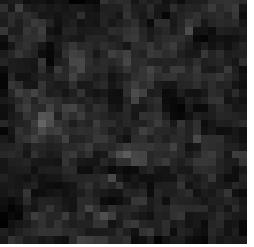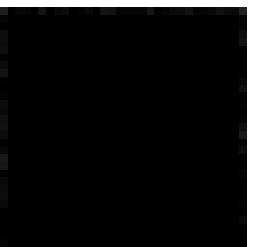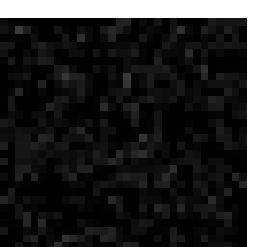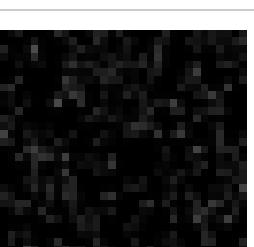
Metric	Sparkline
dna_global_size	(0.0000 .. 0.0000)
dna_s0	(0.0000 .. 256.0000)
dna_s1	(0.0000 .. 256.0000)
dna_s2	(0.0000 .. 256.0000)
dna_s3	(0.0000 .. 256.0000)
energy_s0	(0.3933 .. 0.9595)
energy_s1	(0.3830 .. 0.9618)
energy_s2	(0.4012 .. 0.9716)
energy_s3	(0.3923 .. 0.9639)

Step 0
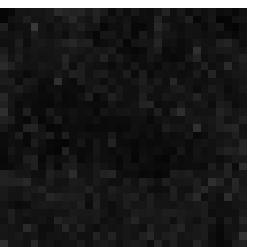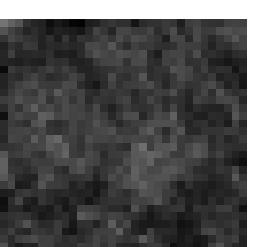
Field	CSV	Stats	Preview
resources	stress_step000000_resources.csv	min=0.0000 max=1.0000 mean=0.0148 stddev=0.1065 nonzero_ratio=0.0197 p95=0.0000 entropy=0.1641 norm_entropy=0.0395	
phero_food	stress_step000000_phero_food.csv	min=0.0000 max=0.0000 mean=0.0000 stddev=0.0000 nonzero_ratio=0.0000 p95=0.0000 entropy=0.0000 norm_entropy=0.0000	
phero_danger	stress_step000000_phero_danger.csv	min=0.0000 max=0.0000 mean=0.0000 stddev=0.0000 nonzero_ratio=0.0000 p95=0.0000 entropy=0.0000 norm_entropy=0.0000	
molecules	stress_step000000_molecules.csv	min=0.0000 max=0.0000 mean=0.0000 stddev=0.0000 nonzero_ratio=0.0000 p95=0.0000 entropy=0.0000 norm_entropy=0.0000	
mycel	stress_step000000_mycel.csv	min=0.0000 max=0.0000 mean=0.0000 stddev=0.0000 nonzero_ratio=0.0000 p95=0.0000 entropy=0.0000 norm_entropy=0.0000	
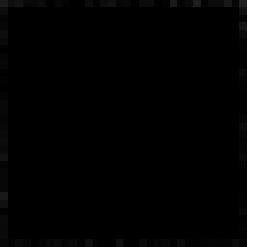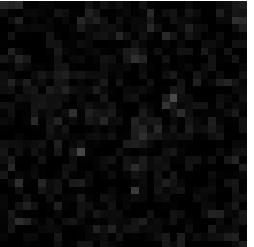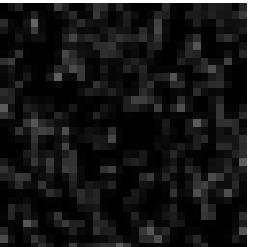
Step 50

Field	CSV	Stats	Preview
resources	stress_step000050_resources.csv	min=0.0020 max=1.0000 mean=0.0568 stddev=0.1017 nonzero_ratio=1.0000 p95=0.0750 entropy=1.6849 norm_entropy=0.4051	
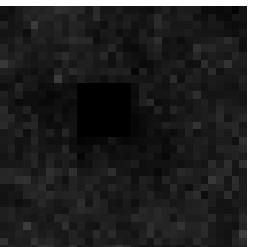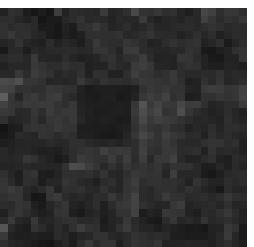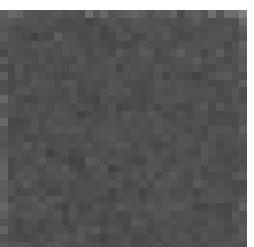
Field	CSV	Stats	Preview
phero_food	stress_step000050_phero_food.csv	min=0.0000 max=0.1190 mean=0.0162 stddev=0.0101 nonzero_ratio=0.9838 p95=0.0350 entropy=2.9432 norm_entropy=0.7077	
phero_danger	stress_step000050_phero_danger.csv	min=0.0000 max=0.0420 mean=0.0001 stddev=0.0012 nonzero_ratio=0.0368 p95=0.0000 entropy=0.2318 norm_entropy=0.0557	
molecules	stress_step000050_molecules.csv	min=0.0000 max=0.0200 mean=0.0008 stddev=0.0019 nonzero_ratio=0.3506 p95=0.0040 entropy=1.1504 norm_entropy=0.2766	
mycel	stress_step000050_mycel.csv	min=0.0000 max=0.1010 mean=0.0043 stddev=0.0094 nonzero_ratio=0.5417 p95=0.0210 entropy=1.6884 norm_entropy=0.4060	
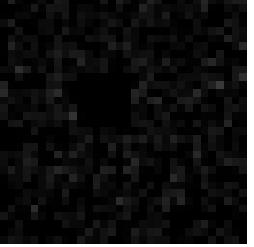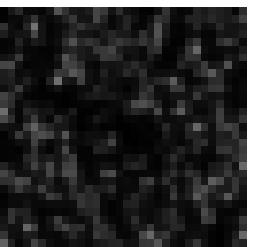
Step 100

Field	CSV	Stats	Preview
resources	stress_step000100_resources.csv	min=0.0020 max=1.0000 mean=0.0815 stddev=0.1020 nonzero_ratio=1.0000 p95=0.1500 entropy=2.2846 norm_entropy=0.5493	
phero_food	stress_step000100_phero_food.csv	min=0.0000 max=0.1350 mean=0.0286 stddev=0.0129 nonzero_ratio=0.9933 p95=0.0510 entropy=3.1356 norm_entropy=0.7539	
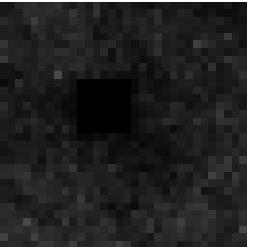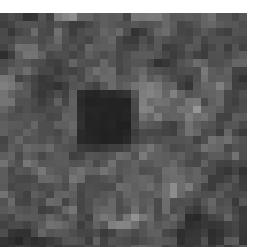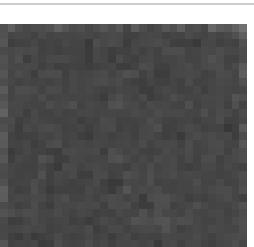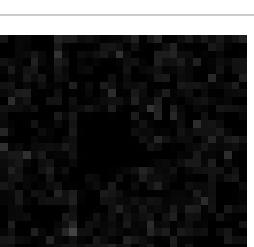
Field	CSV	Stats	Preview
phero_danger	stress_step000100_phero_danger.csv	min=0.0000 max=0.0550 mean=0.0002 stddev=0.0013 nonzero_ratio=0.0601 p95=0.0010 entropy=0.3351 norm_entropy=0.0806	
molecules	stress_step000100_molecules.csv	min=0.0000 max=0.0250 mean=0.0009 stddev=0.0021 nonzero_ratio=0.3627 p95=0.0050 entropy=1.2139 norm_entropy=0.2919	
mycel	stress_step000100_mycel.csv	min=0.0000 max=0.1170 mean=0.0079 stddev=0.0124 nonzero_ratio=0.7809 p95=0.0310 entropy=2.3596 norm_entropy=0.5674	
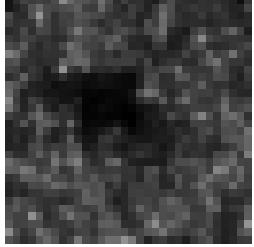
Step 150

| Field	CSV	Stats	Preview
resources	stress_step000150_resources.csv	min=0.0000 max=1.0000 mean=0.0980 stddev=0.1047 nonzero_ratio=0.9451 p95=0.1850 entropy=2.5936 norm_entropy=0.6236	
phero_food	stress_step000150_phero_food.csv	min=0.0360 max=0.2900 mean=0.0792 stddev=0.0143 nonzero_ratio=1.0000 p95=0.1050 entropy=2.6042 norm_entropy=0.6262	
phero_danger	stress_step000150_phero_danger.csv	min=0.0290 max=0.0820 mean=0.0457 stddev=0.0029 nonzero_ratio=1.0000 p95=0.0500 entropy=2.3879 norm_entropy=0.5742	
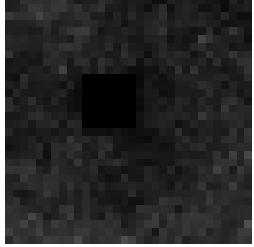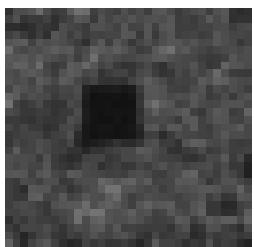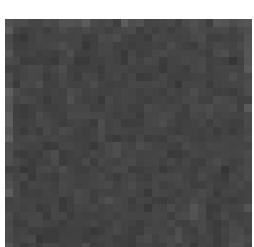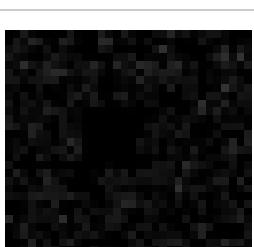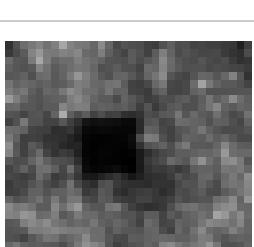
| molecules | stress_step000150_molecules.csv | min=0.0000
max=0.0260
mean=0.0009
stddev=0.0021
nonzero_ratio=0.3671
p95=0.0050
entropy=1.2179
norm_entropy=0.2928 | |
| mycel | stress_step000150_mycel.csv | min=0.0000
max=0.1320
mean=0.0134
stddev=0.0146
nonzero_ratio=0.9870
p95=0.0400
entropy=2.8472
norm_entropy=0.6846 | |

Step 200
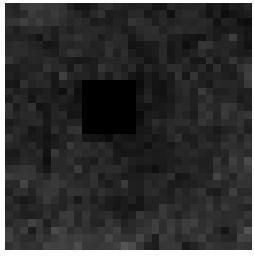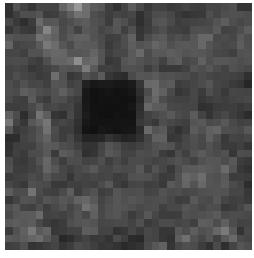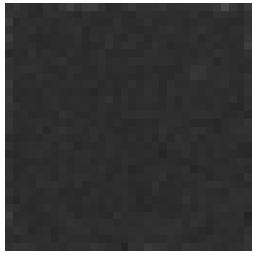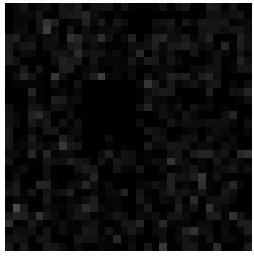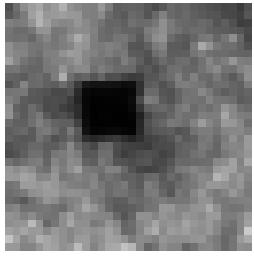
| Field	CSV	Stats	Preview
resources	stress_step000200_resources.csv	min=0.0000 max=1.0000 mean=0.1147 stddev=0.1087 nonzero_ratio=0.9451 p95=0.2270 entropy=2.7978 norm_entropy=0.6727	
phero_food	stress_step000200_phero_food.csv	min=0.0660 max=0.2250 mean=0.1169 stddev=0.0161 nonzero_ratio=1.0000 p95=0.1450 entropy=3.2173 norm_entropy=0.7736	
phero_danger	stress_step000200_phero_danger.csv	min=0.0640 max=0.1230 mean=0.0803 stddev=0.0030 nonzero_ratio=1.0000 p95=0.0850 entropy=2.4268 norm_entropy=0.5835	
molecules	stress_step000200_molecules.csv	min=0.0000 max=0.0270 mean=0.0010 stddev=0.0022 nonzero_ratio=0.3716 p95=0.0060 entropy=1.2366 norm_entropy=0.2973	

| mycel | stress_step000200_mycel.csv | min=0.0000
max=0.1600
mean=0.0371
stddev=0.0193
nonzero_ratio=0.9988
p95=0.0700
entropy=3.3523
norm_entropy=0.8061 | |

Step 250
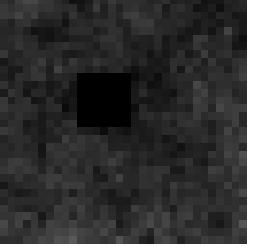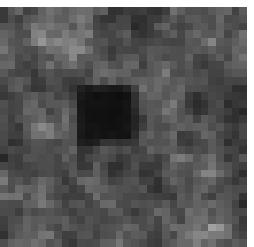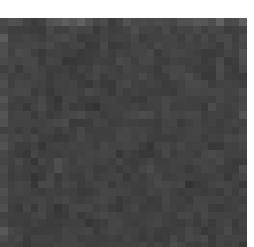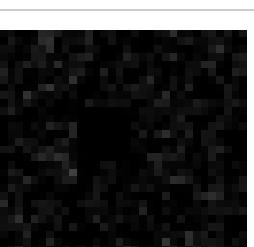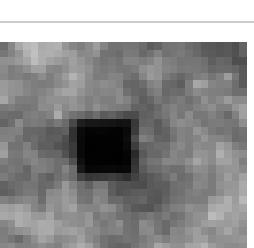
| Field	CSV	Stats	Preview
resources	stress_step000250_resources.csv	min=0.0000 max=1.0000 mean=0.1297 stddev=0.1128 nonzero_ratio=0.9451 p95=0.2650 entropy=2.9287 norm_entropy=0.7042	
phero_food	stress_step000250_phero_food.csv	min=0.0820 max=0.2670 mean=0.1313 stddev=0.0165 nonzero_ratio=1.0000 p95=0.1590 entropy=3.1069 norm_entropy=0.7470	
phero_danger	stress_step000250_phero_danger.csv	min=0.0770 max=0.1370 mean=0.0930 stddev=0.0029 nonzero_ratio=1.0000 p95=0.0970 entropy=2.4231 norm_entropy=0.5826	
molecules	stress_step000250_molecules.csv	min=0.0000 max=0.0260 mean=0.0010 stddev=0.0022 nonzero_ratio=0.3860 p95=0.0060 entropy=1.2635 norm_entropy=0.3038	
mycel	stress_step000250_mycel.csv	min=0.0010 max=0.2070 mean=0.0743 stddev=0.0279 nonzero_ratio=1.0000 p95=0.1160 entropy=3.4824 norm_entropy=0.8373	

Step 300
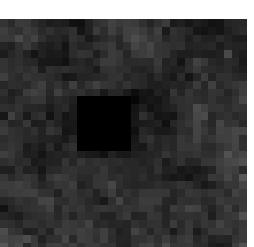
| Field	CSV	Stats	Preview
resources	stress_step000300_resources.csv	min=0.0000 max=1.0000 mean=0.1433 stddev=0.1173 nonzero_ratio=0.9451 p95=0.2940 entropy=3.0462 norm_entropy=0.7325	
phero_food	stress_step000300_phero_food.csv	min=0.0850 max=0.2700 mean=0.1371 stddev=0.0172 nonzero_ratio=1.0000 p95=0.1670 entropy=3.1152 norm_entropy=0.7490	
phero_danger	stress_step000300_phero_danger.csv	min=0.0780 max=0.1880 mean=0.0976 stddev=0.0031 nonzero_ratio=1.0000 p95=0.1020 entropy=1.8537 norm_entropy=0.4457	
molecules	stress_step000300_molecules.csv	min=0.0000 max=0.0240 mean=0.0010 stddev=0.0023 nonzero_ratio=0.3893 p95=0.0060 entropy=1.2779 norm_entropy=0.3073	
mycel	stress_step000300_mycel.csv	min=0.0010 max=0.2610 mean=0.1143 stddev=0.0376 nonzero_ratio=1.0000 p95=0.1660 entropy=3.4825 norm_entropy=0.8374	
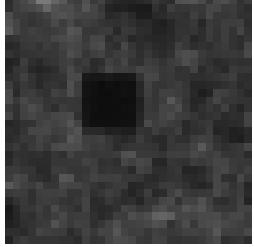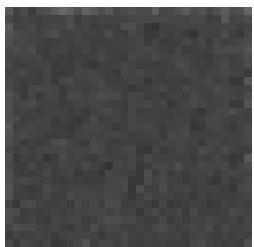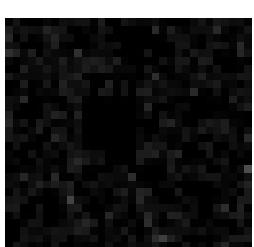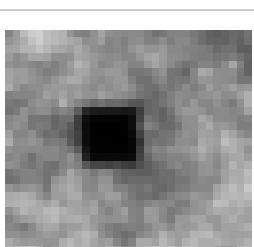
Step 350

Field	CSV	Stats	Preview
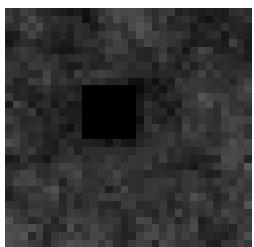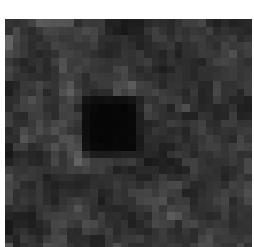
| resources	stress_step000350_resources.csv	min=0.0000 max=1.0000 mean=0.1570 stddev=0.1221 nonzero_ratio=0.9451 p95=0.3250 entropy=3.1346 norm_entropy=0.7537	
phero_food	stress_step000350_phero_food.csv	min=0.0880 max=0.2530 mean=0.1392 stddev=0.0181 nonzero_ratio=1.0000 p95=0.1710 entropy=3.2843 norm_entropy=0.7897	
phero_danger	stress_step000350_phero_danger.csv	min=0.0840 max=0.1430 mean=0.0993 stddev=0.0029 nonzero_ratio=1.0000 p95=0.1040 entropy=2.4115 norm_entropy=0.5799	
molecules	stress_step000350_molecules.csv	min=0.0000 max=0.0270 mean=0.0010 stddev=0.0023 nonzero_ratio=0.3755 p95=0.0060 entropy=1.2688 norm_entropy=0.3051	
mycel	stress_step000350_mycel.csv	min=0.0010 max=0.3090 mean=0.1528 stddev=0.0466 nonzero_ratio=1.0000 p95=0.2150 entropy=3.4725 norm_entropy=0.8350	
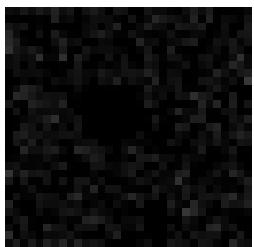
Step 400

Field	CSV	Stats	Preview
resources	stress_step000400_resources.csv	min=0.0000 max=1.0000 mean=0.1703 stddev=0.1276 nonzero_ratio=0.9451 p95=0.3600 entropy=3.2119 norm_entropy=0.7723	

| phero_food	stress_step000400_phero_food.csv	min=0.0850 max=0.3420 mean=0.1400 stddev=0.0184 nonzero_ratio=1.0000 p95=0.1710 entropy=2.8753 norm_entropy=0.6914	
phero_danger	stress_step000400_phero_danger.csv	min=0.0850 max=0.1420 mean=0.1000 stddev=0.0030 nonzero_ratio=1.0000 p95=0.1040 entropy=2.4265 norm_entropy=0.5835	
molecules	stress_step000400_molecules.csv	min=0.0000 max=0.0260 mean=0.0010 stddev=0.0023 nonzero_ratio=0.3849 p95=0.0060 entropy=1.2783 norm_entropy=0.3074	
mycel	stress_step000400_mycel.csv	min=0.0020 max=0.3450 mean=0.1885 stddev=0.0545 nonzero_ratio=1.0000 p95=0.2580 entropy=3.4690 norm_entropy=0.8341	

Step 450

| Field	CSV	Stats	Preview
resources	stress_step000450_resources.csv	min=0.0000 max=1.0000 mean=0.1827 stddev=0.1321 nonzero_ratio=0.9451 p95=0.3850 entropy=3.2837 norm_entropy=0.7896	
phero_food	stress_step000450_phero_food.csv	min=0.0940 max=0.3280 mean=0.1406 stddev=0.0180 nonzero_ratio=1.0000 p95=0.1710 entropy=2.9248 norm_entropy=0.7033	

phero_danger	stress_step000450_phero_danger.csv	min=0.0810 max=0.1940 mean=0.1002 stddev=0.0030 nonzero_ratio=1.0000 p95=0.1040 entropy=1.8213 norm_entropy=0.4379	
molecules	stress_step000450_molecules.csv	min=0.0000 max=0.0260 mean=0.0011 stddev=0.0023 nonzero_ratio=0.3904 p95=0.0060 entropy=1.2930 norm_entropy=0.3109	
mycel	stress_step000450_mycel.csv	min=0.0020 max=0.3740 mean=0.2210 stddev=0.0612 nonzero_ratio=1.0000 p95=0.2950 entropy=3.4678 norm_entropy=0.8338	