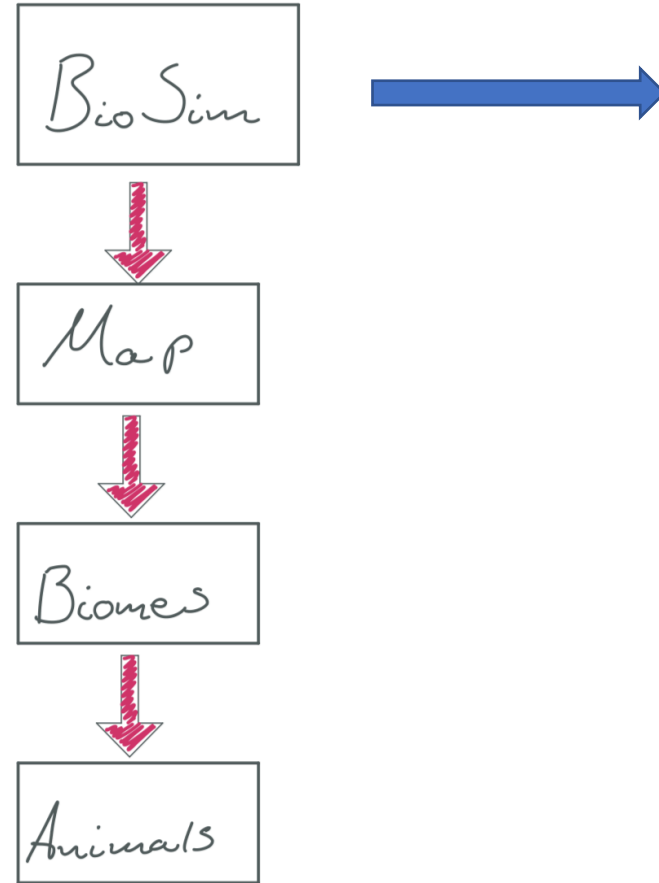




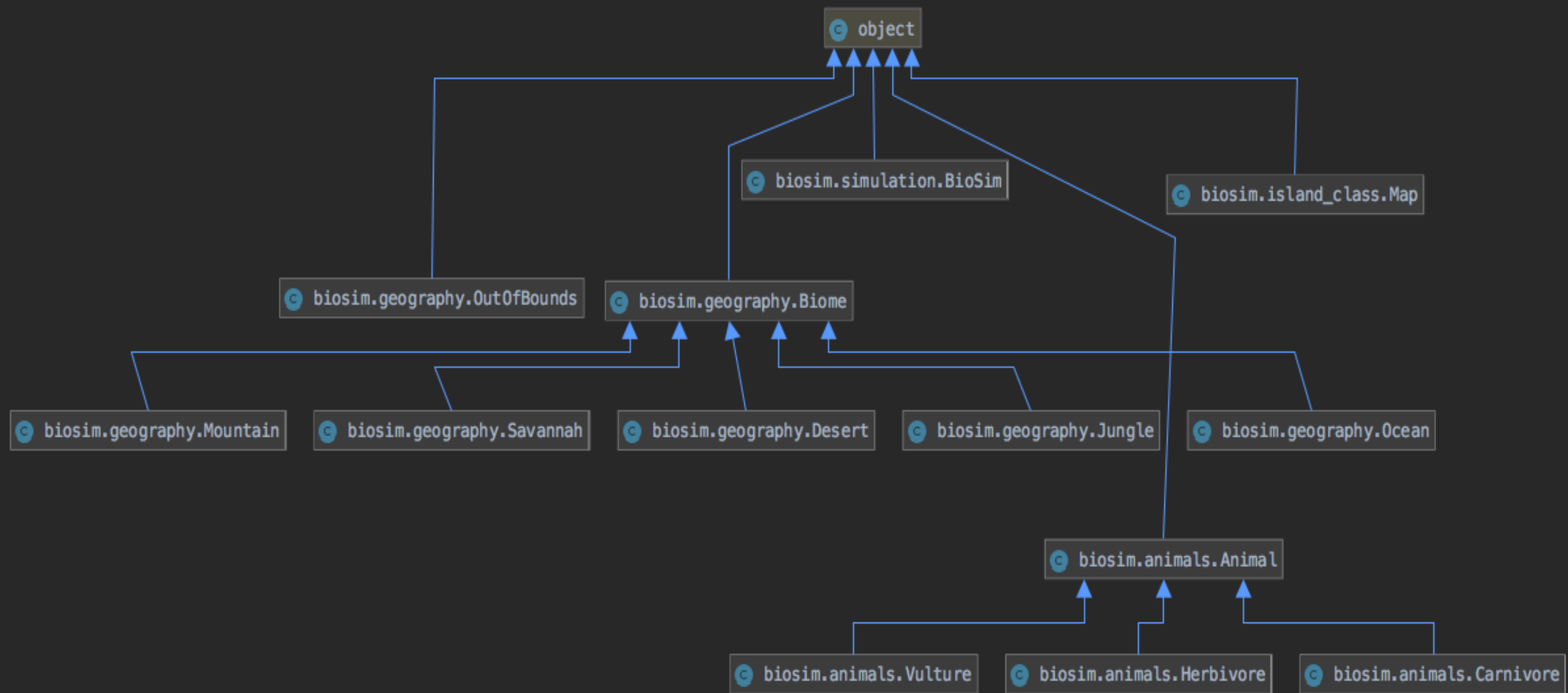
BioSim project

By: Sebastian Kihle & Andreas Sandvik Høimyr

BioSim



- Simulation
- Visualization








Test coverage

✘ Tests failed: 1, passed: 62 of 63 tests – 1 s 391 ms

Coverage: pytest in tests ✕

↑ 100% files, 90% lines covered in 'biosim'



Element ▲	Statistics, %
 <code>__init__.py</code>	100% lines covered
 <code>animals.py</code>	94% lines covered
 <code>geography.py</code>	93% lines covered
 <code>island_class.py</code>	95% lines covered
 <code>simulation.py</code>	86% lines covered

Optimization

Statistics

Call Graph

Name	Call Count	Time (ms)		Own Time (ms) ▼	
calculate_fitness	7201026	14410	23,9 %	7785	12,9 %
_propensity_carn	1474292	5994	9,9 %	5739	9,5 %
hunt	414795	6095	10,1 %	4979	8,3 %
_sigmodial_plus	7201026	3361	5,6 %	2641	4,4 %
_sigmodial_minus	7201026	3263	5,4 %	2583	4,3 %
_migrate_one_species	163800	13298	22,1 %	2304	3,8 %
breeding	1872253	7418	12,3 %	2255	3,7 %
map_iterator	438400	2386	4,0 %	2217	3,7 %
<method 'sort' of 'list' objects>	382230	3537	5,9 %	2040	3,4 %
<built-in method math.exp>	16693213	1650	2,7 %	1650	2,7 %
<method 'random' of '_random.R	19577668	1561	2,6 %	1561	2,6 %
lose_weight	2333387	6046	10,0 %	1518	2,5 %
potential_death	2333387	1665	2,8 %	1485	2,5 %
__init__	391404	2693	4,5 %	1383	2,3 %
_breed_one_species	163800	8943	14,8 %	1296	2,1 %
eat	1534626	4257	7,1 %	1275	2,1 %
feeding_cycle	200	14785	24,5 %	1182	2,0 %
ageing	2333387	5805	9,6 %	1147	1,9 %
death_cycle	200	3399	5,6 %	1144	1,9 %

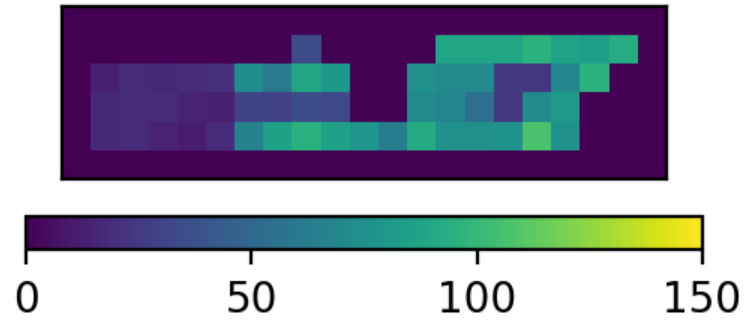
Additional features

- Vulture
- OutOfBounds biome

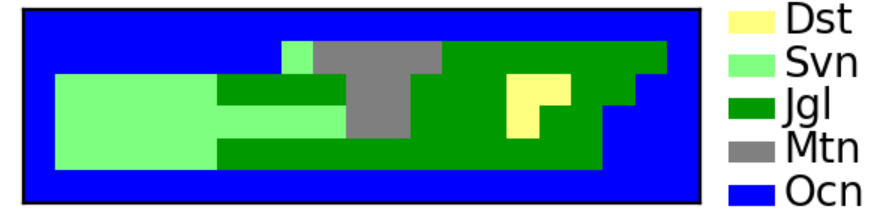


Model of the Ecosystem of Rossoya

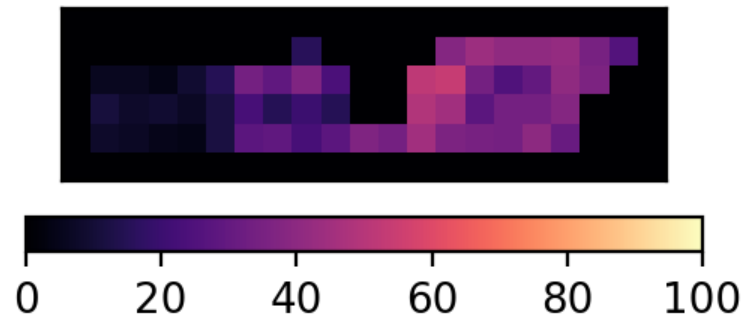
Herbivore heatmap



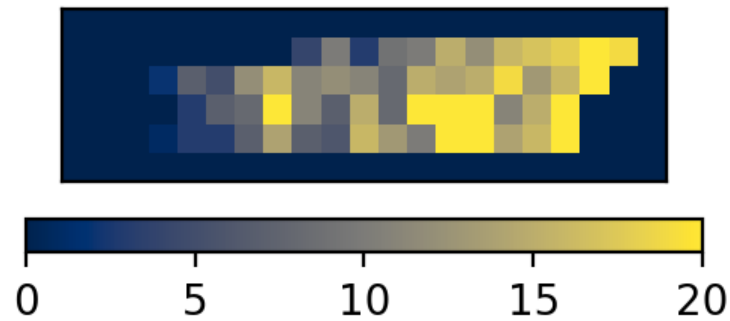
Island map



Carnivore heatmap



Vulture heatmap



Population of species over time

