

Lagrangian Geology module

Bad docs

August 23, 2022

Fully custom generation support.

Pos lower 0 and above 256 not supported (too hard to implement).

Just one step of generation is not enough.

Flexible generation API (Abstraction layer on top of Feature and Biome)

GenFeature - a zone of crust, with complex form, 3D pos and many IDs support

For example Oceans, Orogens etc.

Biome - biological purpose GenFeature. For example Deadlands (by default), Micro mats, Boreal forests etc.

pre GenFeature -> Biome -> post GenFeature

"MapChunk" structure 2x2x2 to 8x8x8 blocks (32 to 128 nodes) used only for generation.

MapGen interface with makeChunk(BlockMake) method for generation.

World divided by tectonic plates (getted post-factum (tricky) in predefined generations).

Rocks

Can generate rocks on predefined and custom generations.

Giant impact hypothesis (true - igneous rocks, false - metamorphic dominant).

Dominant elements is oxygen and silicon in vanilla generation.

Main types of rocks

- Igneous intrusive, extrusive
- Sedimentary Clastic, Chemical, Clay, Othersedimentary para or igneous meta
- Metamorphic meta if knowntexture: Schists, Gneisses, Granofels

//Dominant minerals ionic.
trace and antitrace element
Crust types

- Continental
- subcontinental
- suboceanic
- Oceanic

Volcano
World layers
sediments, evaporite

1. Regolith (soil)
2. Bedrock layers
3. "Bedrock" and Void (instead mantle - too small height)

Bedrock parts

1. Country rocks - oxides, silicates, carbonates, aluminates (?) etc - compounds of most abundant elements.
2. Igneous intrusives, rare/valuable rocks (pipes, veins, VMS, BIF, skarn etc) on country rocks.