There are four inversion methods: Conjugate Gradient Inversion, Evolution Inversion, Random Inversion and Evolution Inversion.
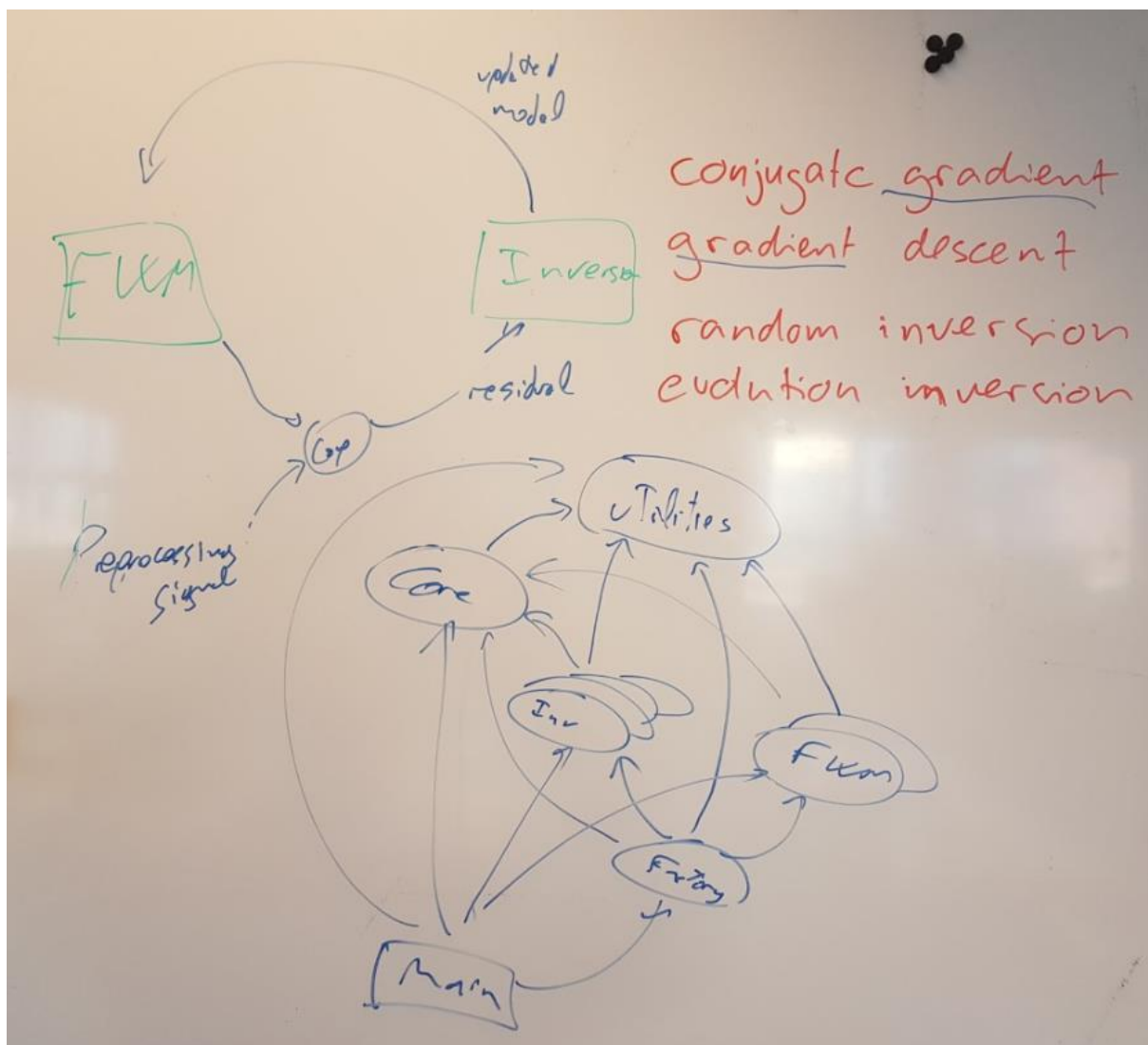
Conjugate Gradient Inversion is being applied mostly, which is also the most accurate and fastest model.

Evolution Inversion is slower and less accurate than Conjugate Gradient, but it is still useable.

Random Inversion and Evolution Inversion are not a good choice if a decent result is expected. They are very slow (both of them take hours and hours) and incorrect. They exist only to prove these two methods don't work well.

For testing, Random Inversion and Evolution Inversion can be ignored.

Models chart:

- Unit Test:

Path: Parellelized-fwi/libraries/inversion/core/test

There are fours modelsz, core, factory, forwardModel and inversion.

Currently there are only tests for core model.

To do:

Extend unit test for core model;

Create unit test for factory model, forwardModel and Inversion model.

- Regression test:

Parellelized-fwi/tests

To do: extend regression test with different models combination.

- System test

There is no system test yet.

To do: Find a quantitative figure and a qualitative figure to measure the output.

- Jenkins

https://ci-full-waveform-inversion.alten.nl
username/pw: admin/admin
Contact person is technical manager in Eindhoven Ben Van Mierloo (ben.van.mierloo@alten.nl). He takes charge of Jenkins for FWI system.

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