

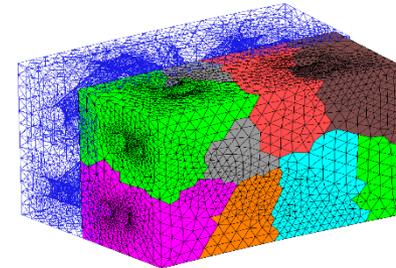
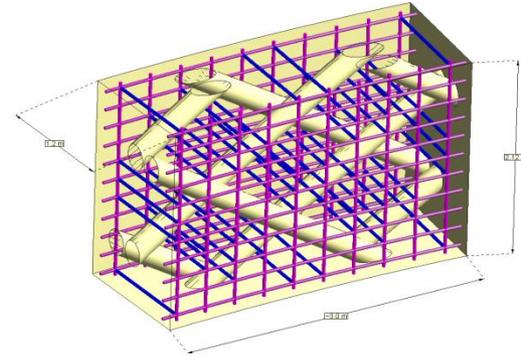
## Challenge

Prediction of security of concrete containments which contain nuclear reactors. Possible prolongation of service life.

Three-dimensional non-linear time dependent coupled thermo-mechanical analysis on parallel computer was used.

## Goals

- Estimate durability and integrity of containment.
- Estimate damaged zones and cracks in concrete.
- Compare results with in situ measurements.



## Benefits

Numerical analysis is in good accordance with in situ measurements. No significant damaged zones and cracks were detected. Containment is able to serve safely for next several years.