



# Depletion and activation analysis of the JEEP-I reactor

By Tony Skovli

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# Motivation

- JEEP-1 reactor shut down in 1967
- Decommissioning needed
- Need to know isotopic composition
- Simulated neutron flux and activation

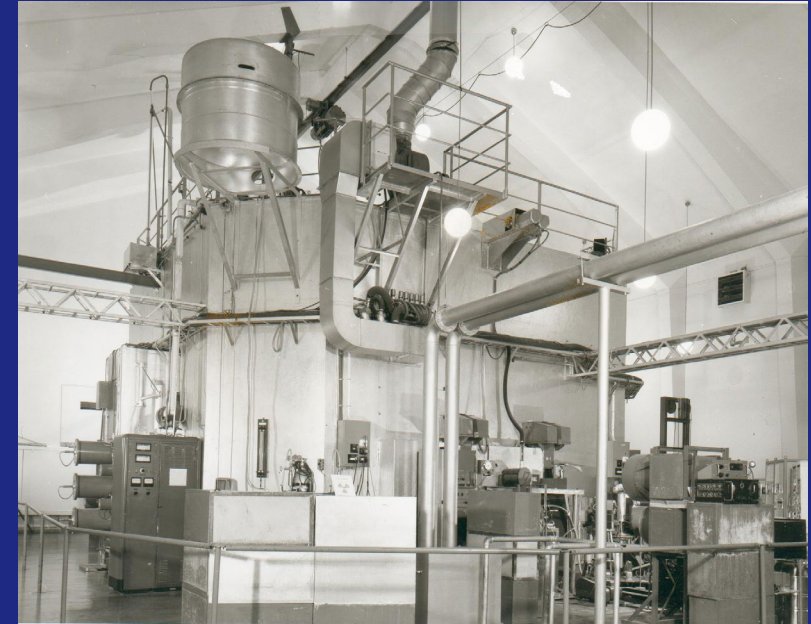
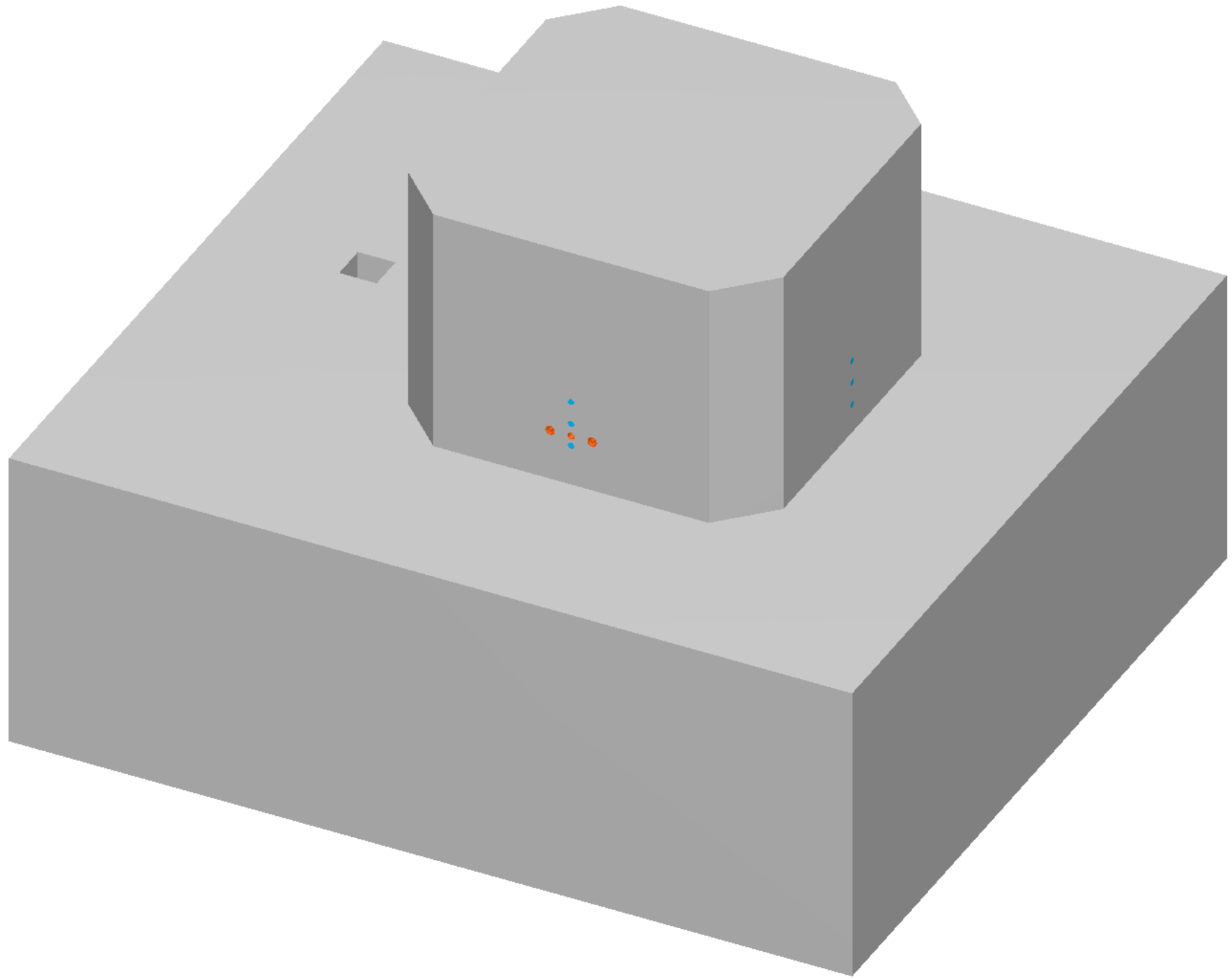
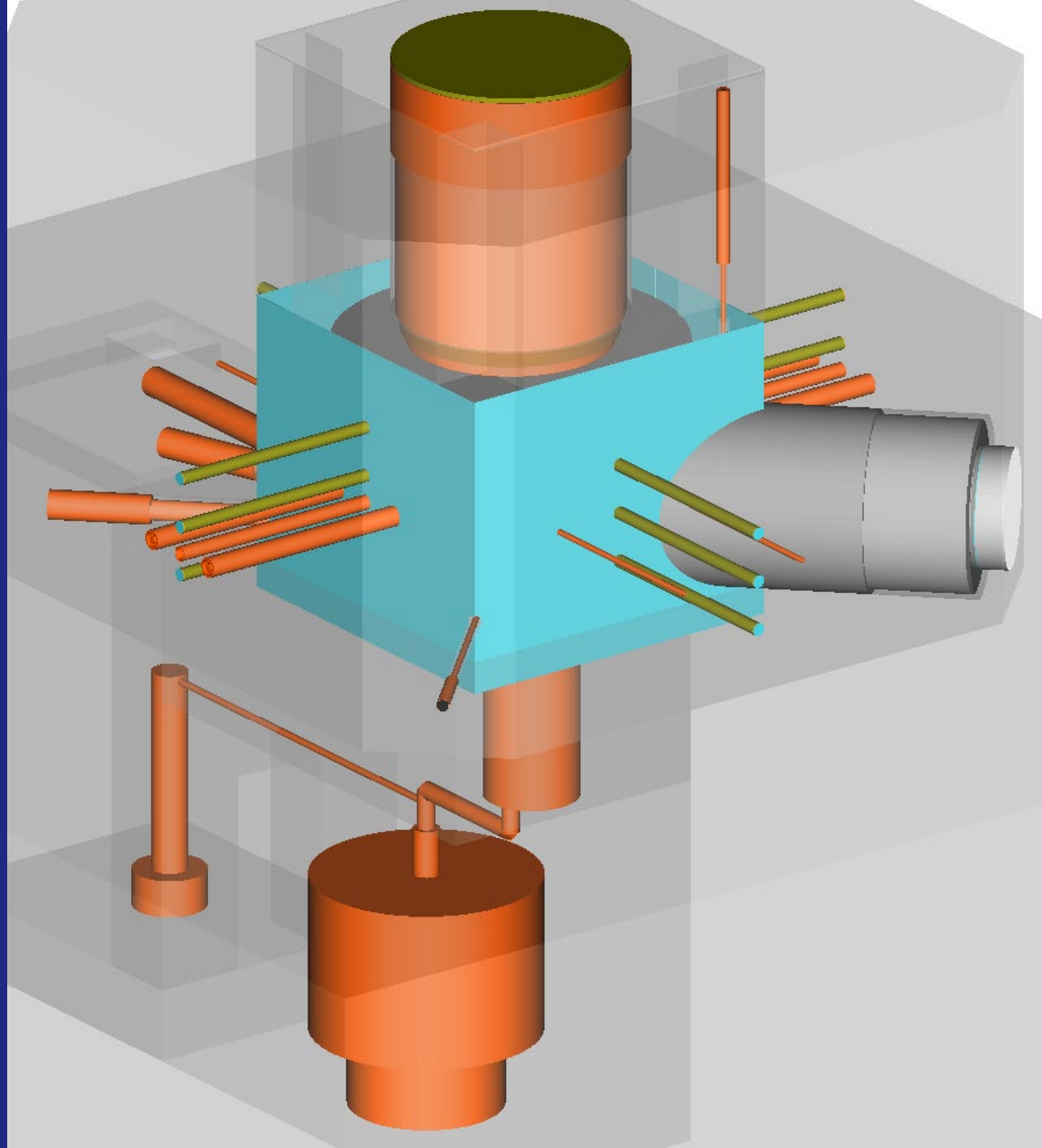
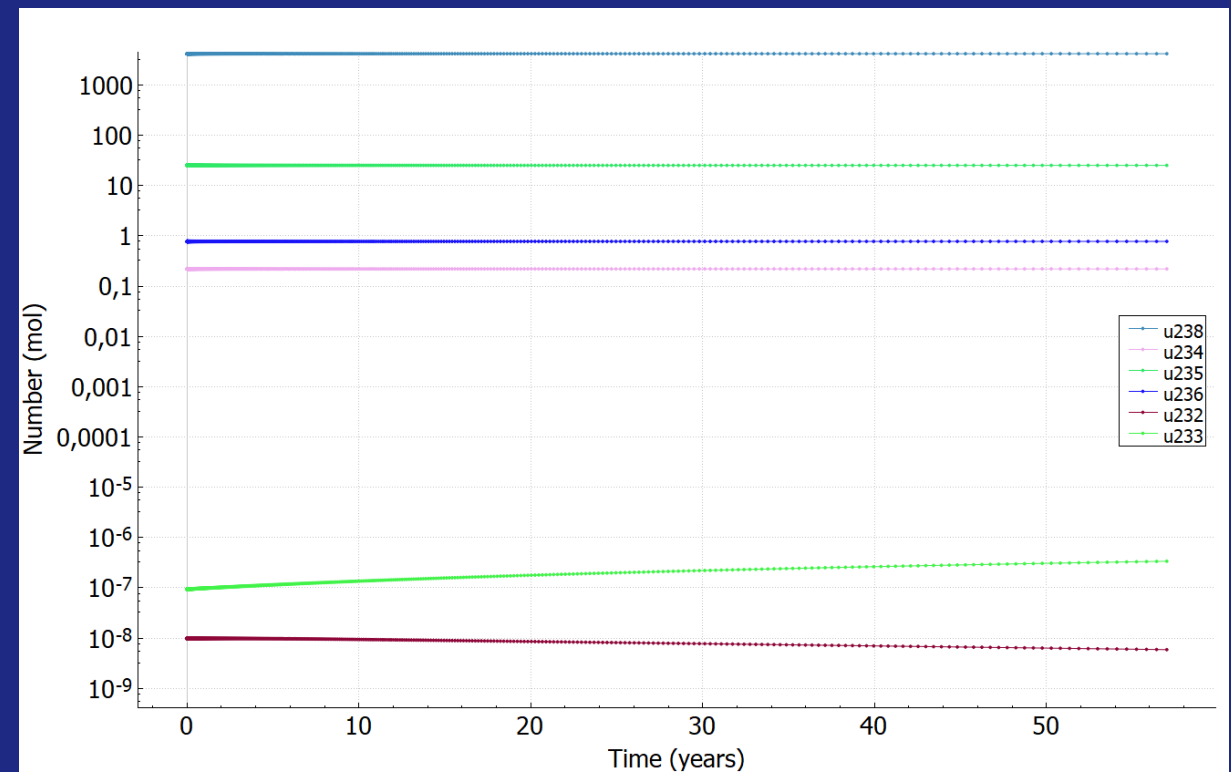
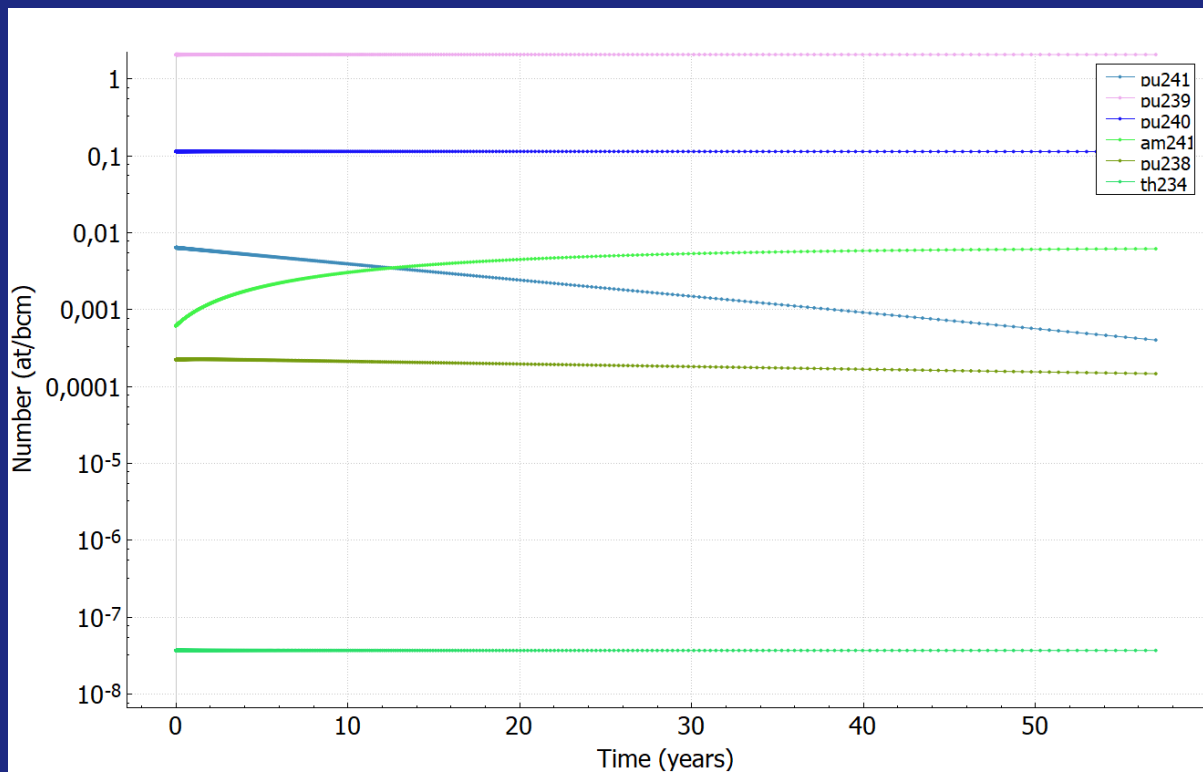


Image of the JEEP-1 reactor block

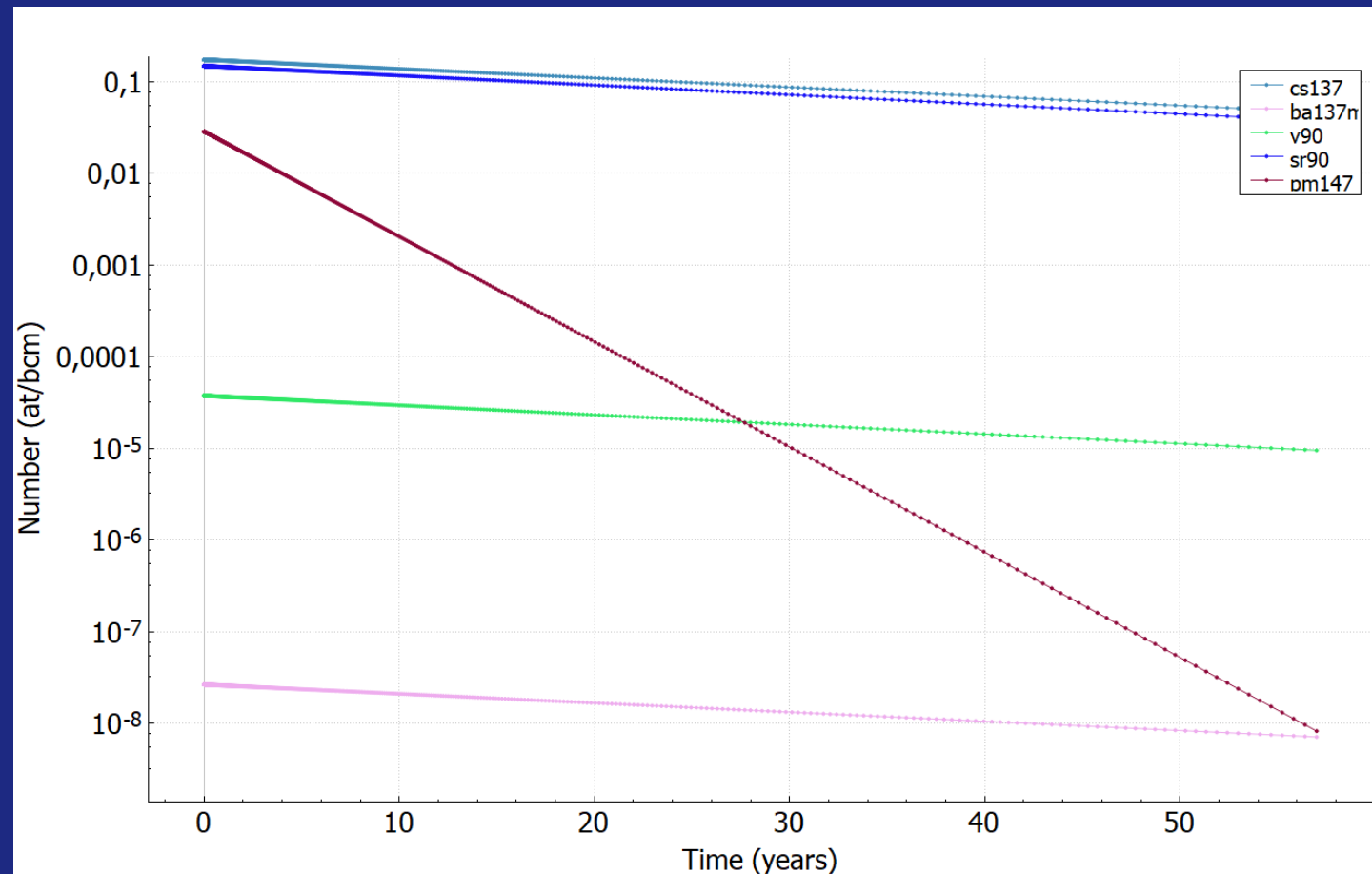




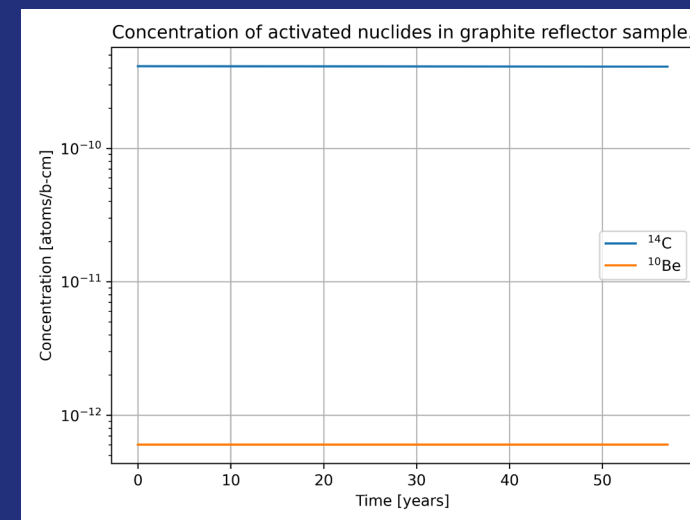
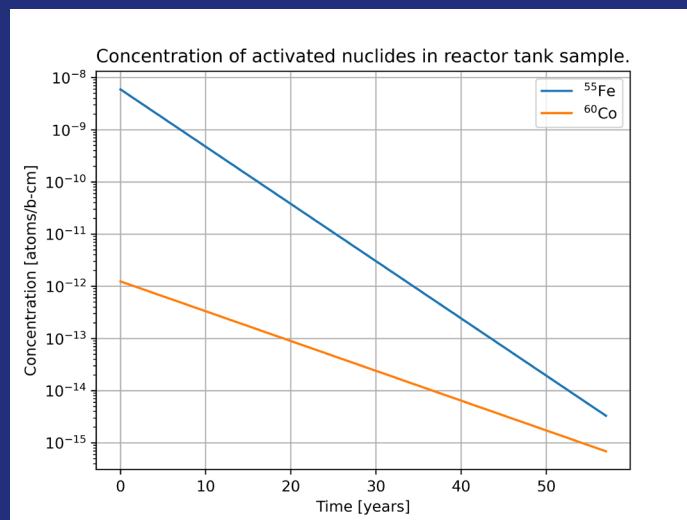
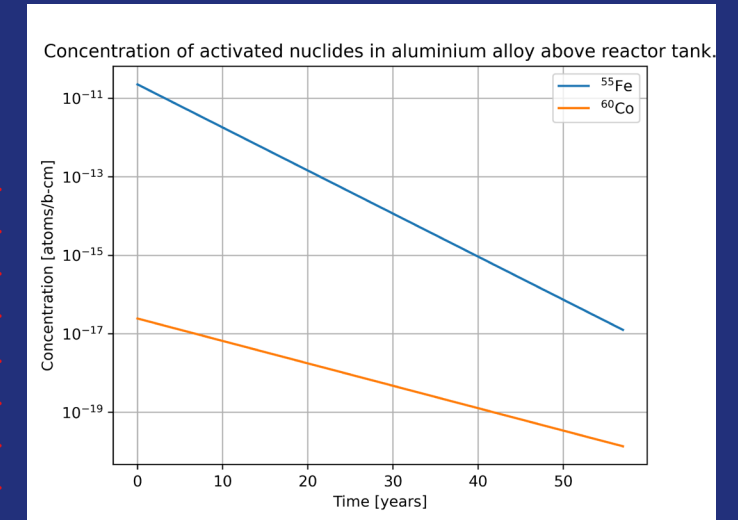
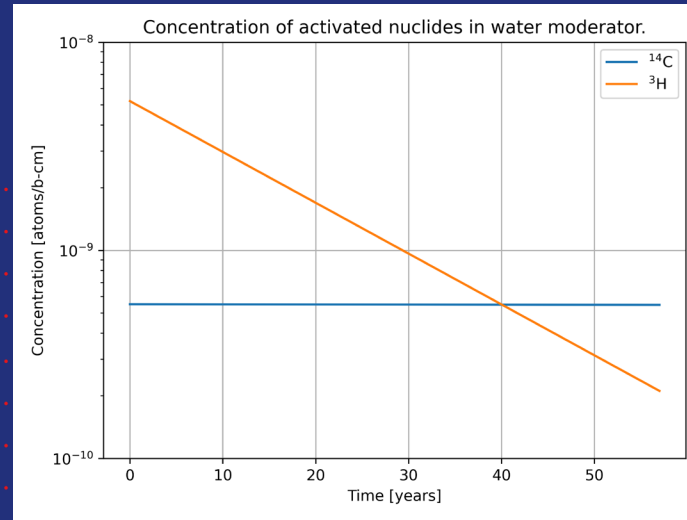
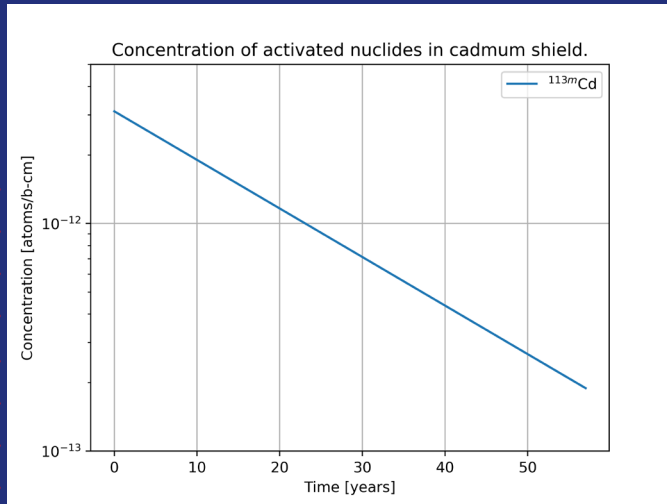
# Actinide build-up



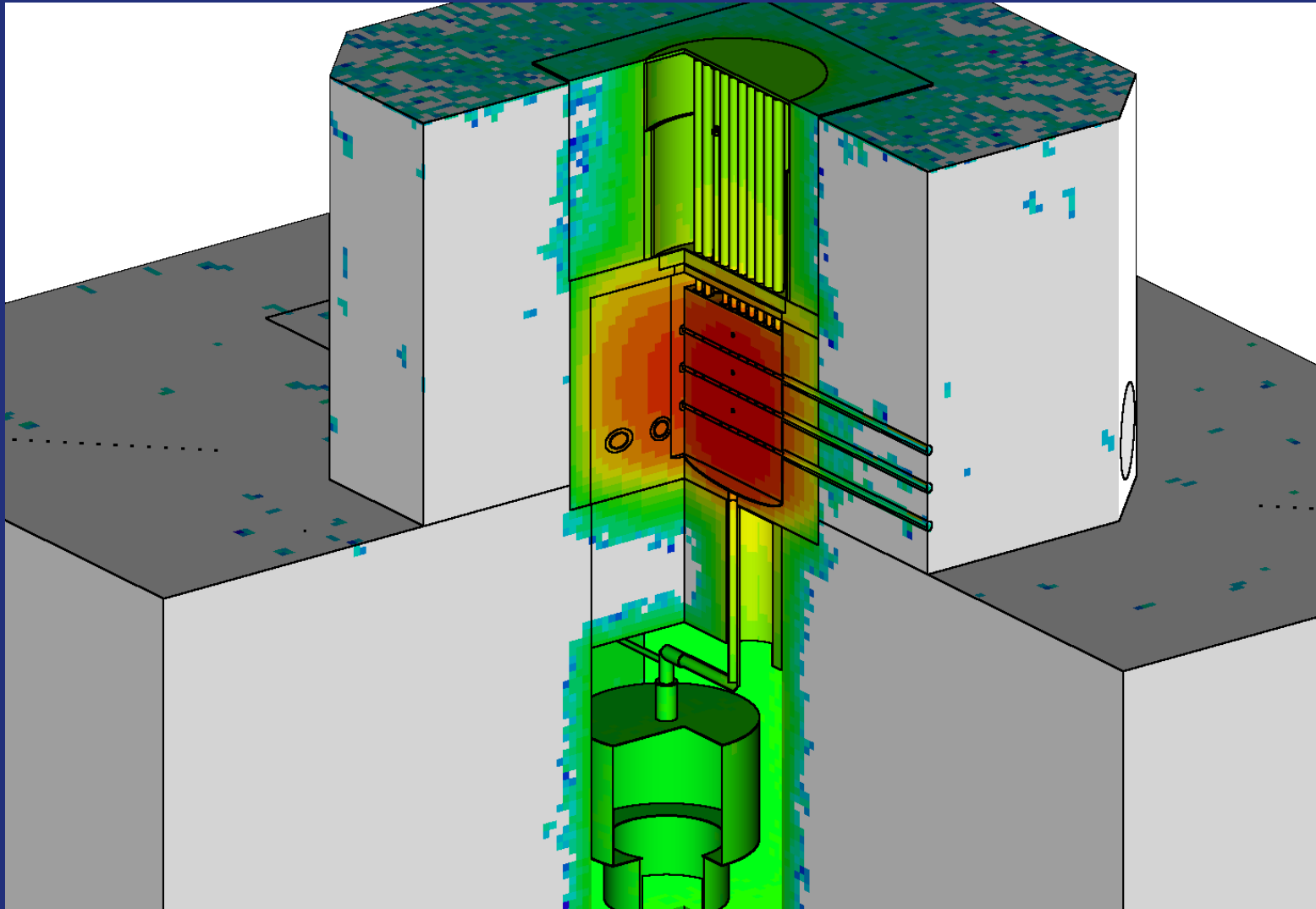
# Fission product build-up



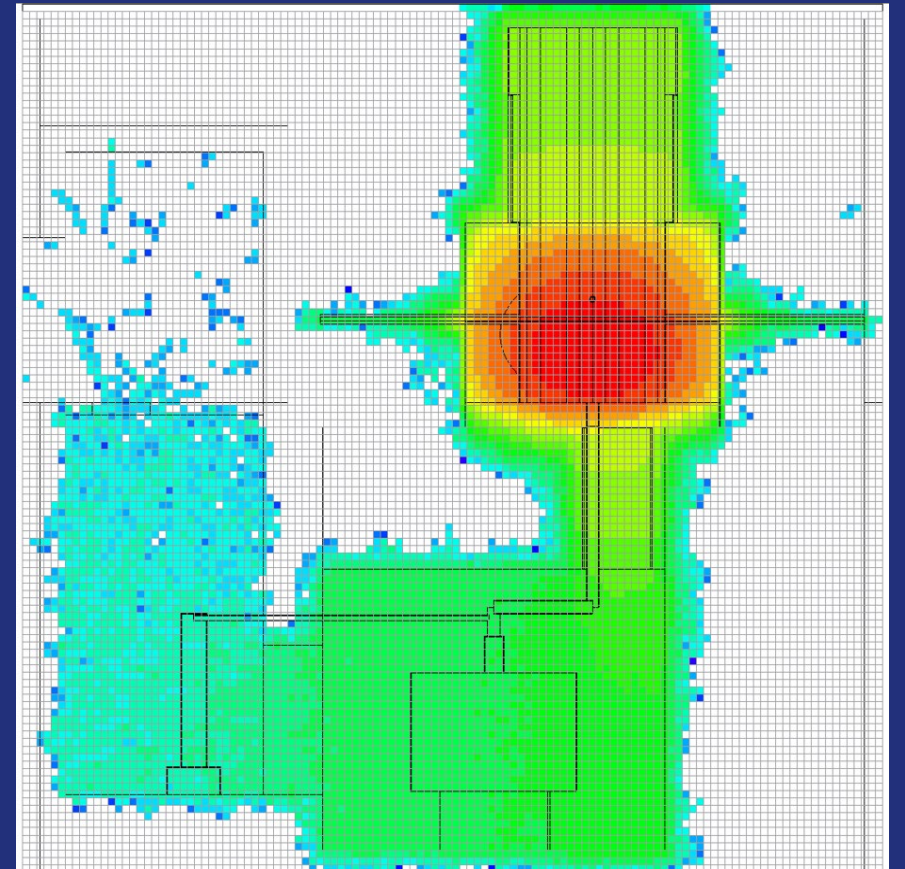
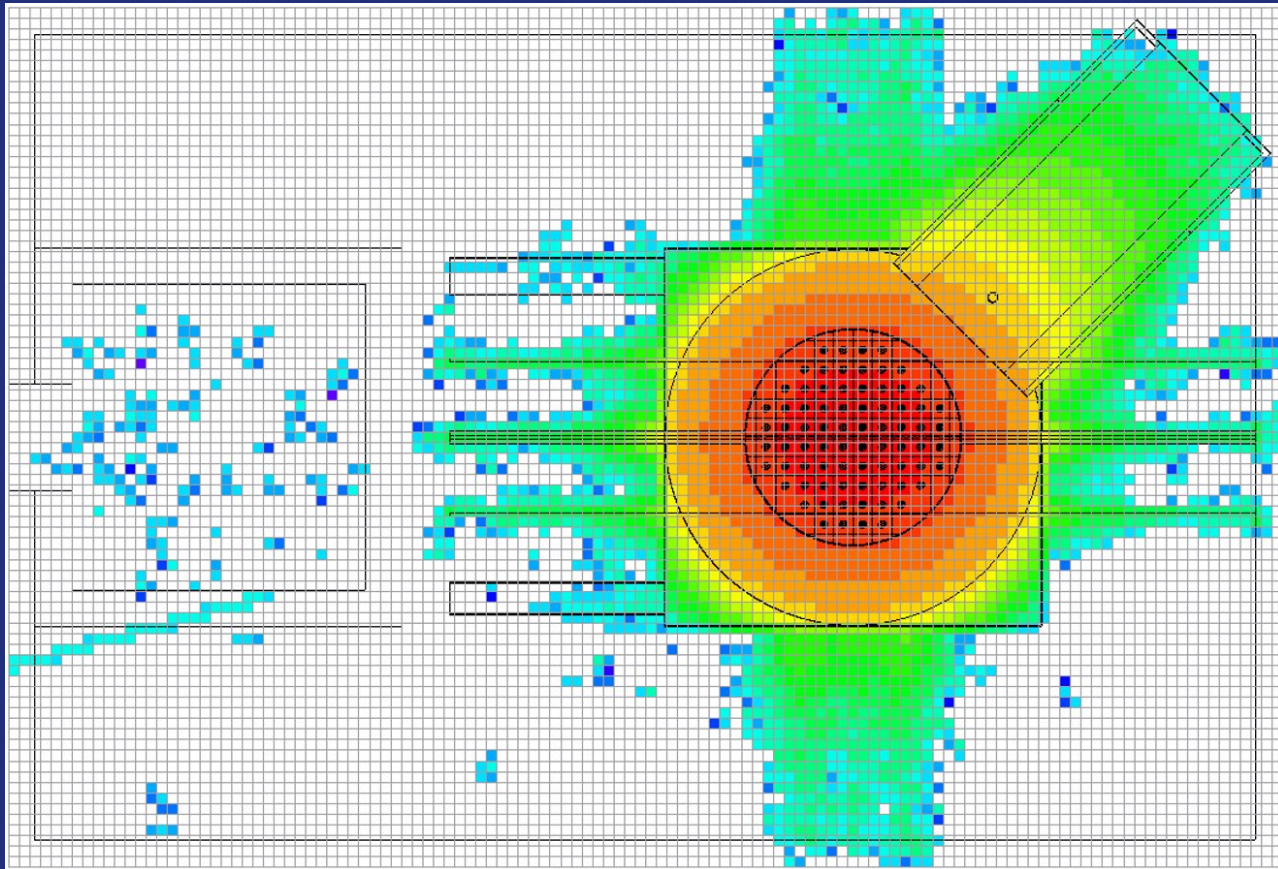
# Activation products



# Neutron flux



# Neutron flux



# Future outlook

- Optimise code
  - Importance maps
  - Update geometry
- Physical samples



Model of the JEEP-1 Reactor

Thank you for your attention!

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