Noble gas banks in two-phase flow

Toti Larson (Theme 2), Marc Hesse, Kiran Sathaye, and Esben Pedersen

Objectives of Research

- 1) Understand compositional insoluble gas banks in twophase flow.
- 2) Couple theoretical two-phase gas displacement models with experimental results
- 3) Expand research to include stable isotope 'banks'.

Conclusions

- 1) Noble gas 'banks' developed in column experiments are predicted with displacement models.
- 2) Results explain noble gas distributions at Bravo Dome CO₂ analogue.

Impact on Specific Challenges

Challenge 2: using pore space with unprecedented efficiency

Challenge 3: Controlling undesired or unexpected behavior









