



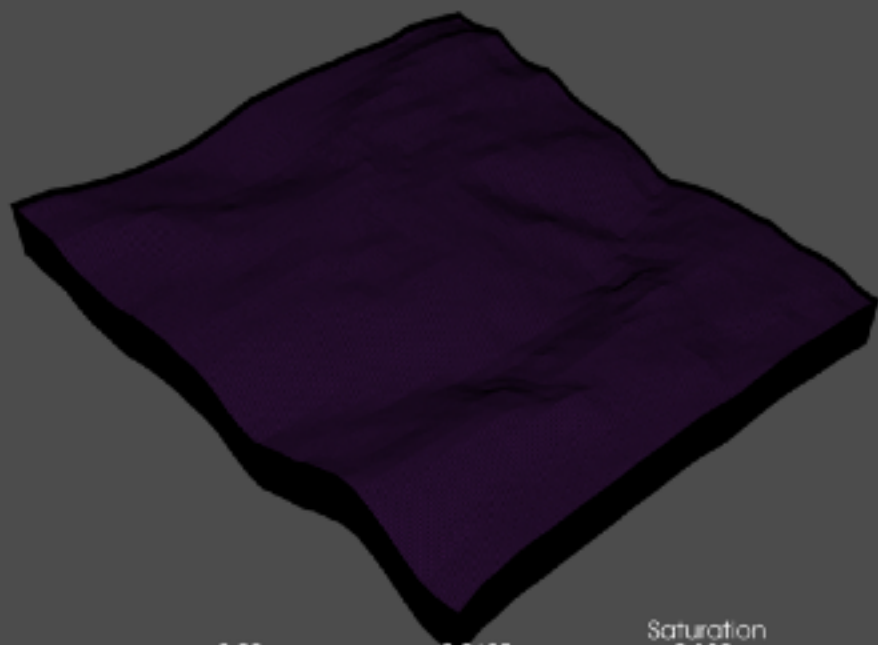




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1994

TU

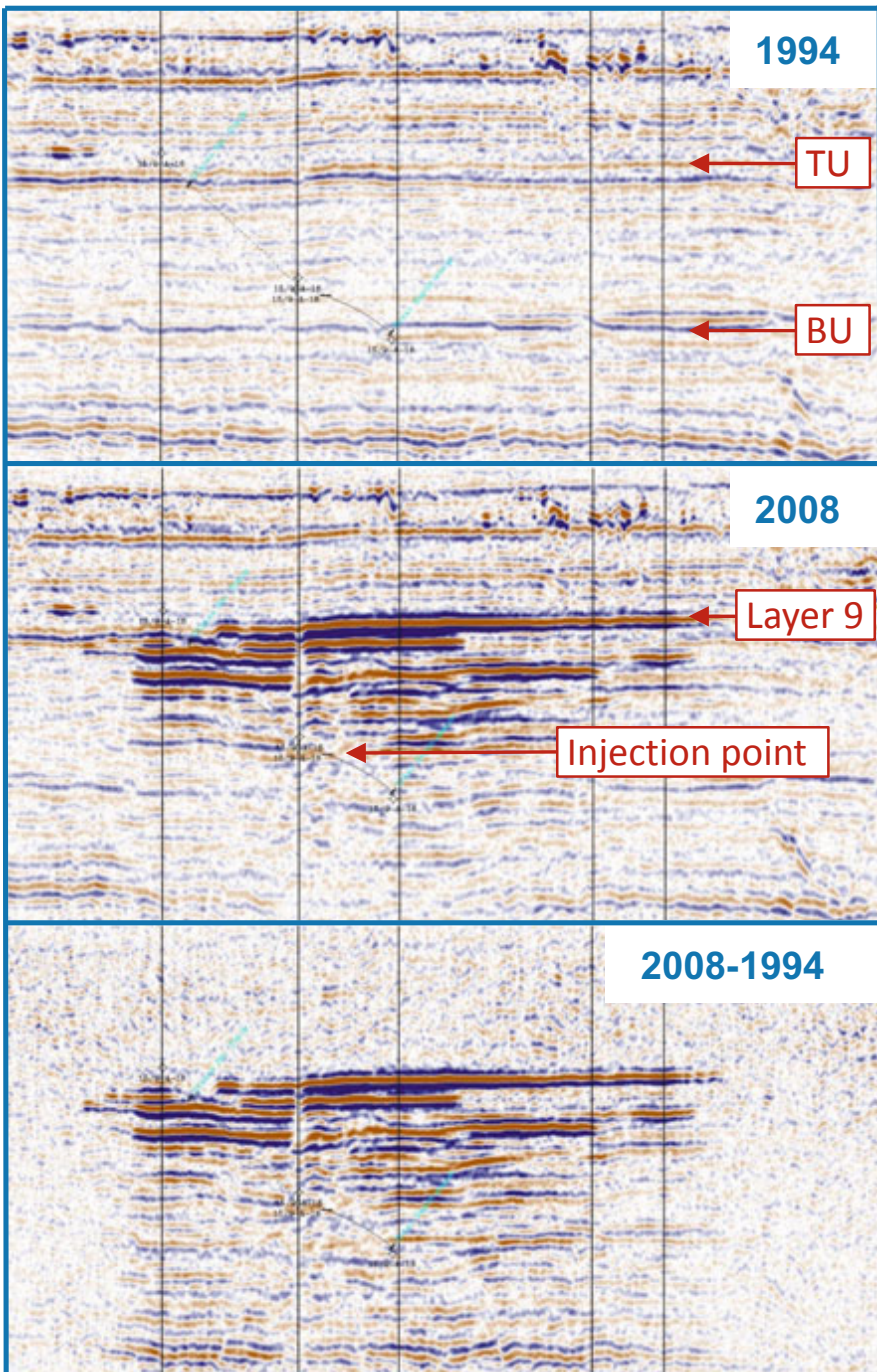
BU

2008

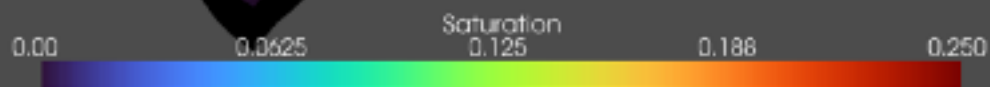
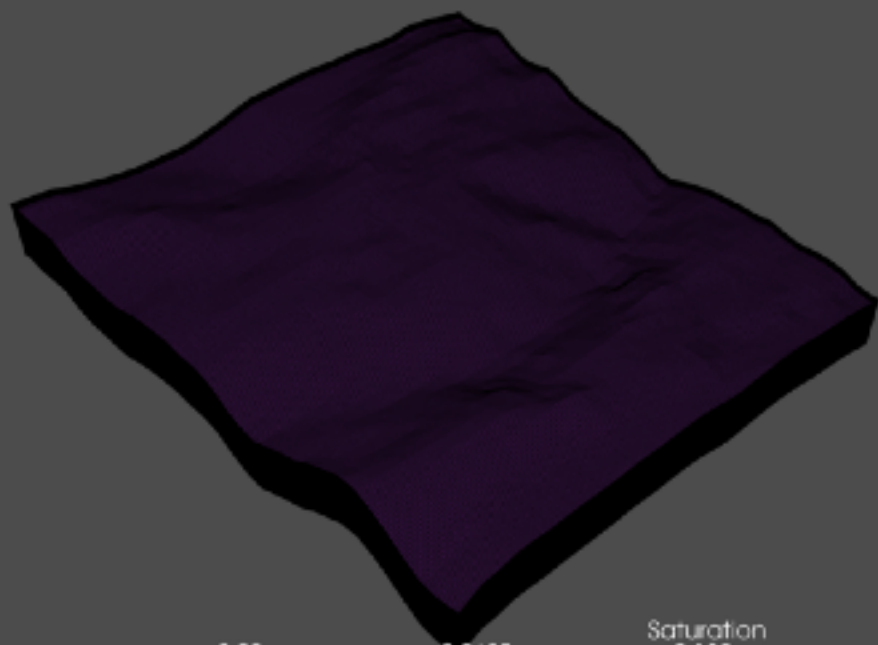
Layer 9

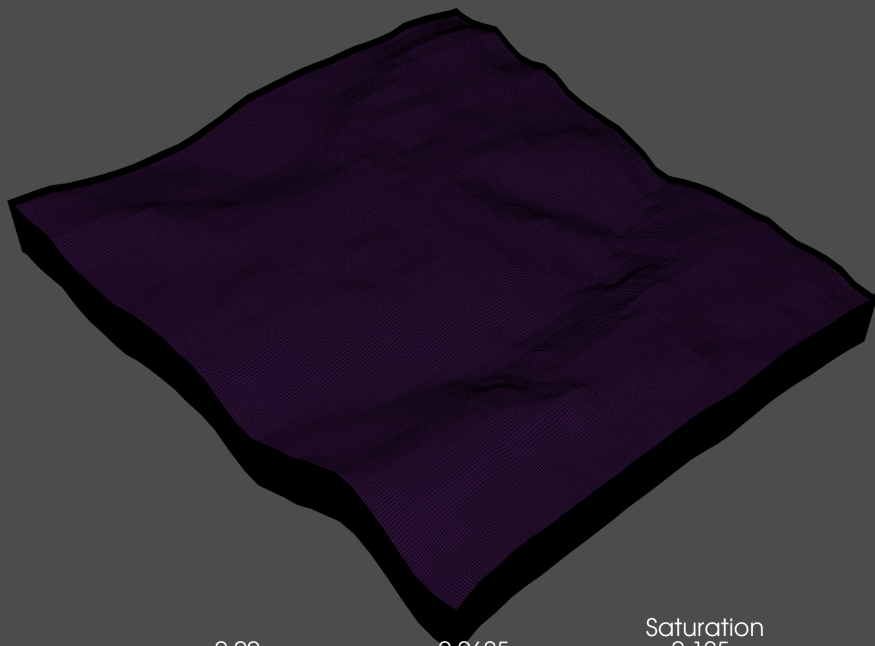
Injection point

2008-1994



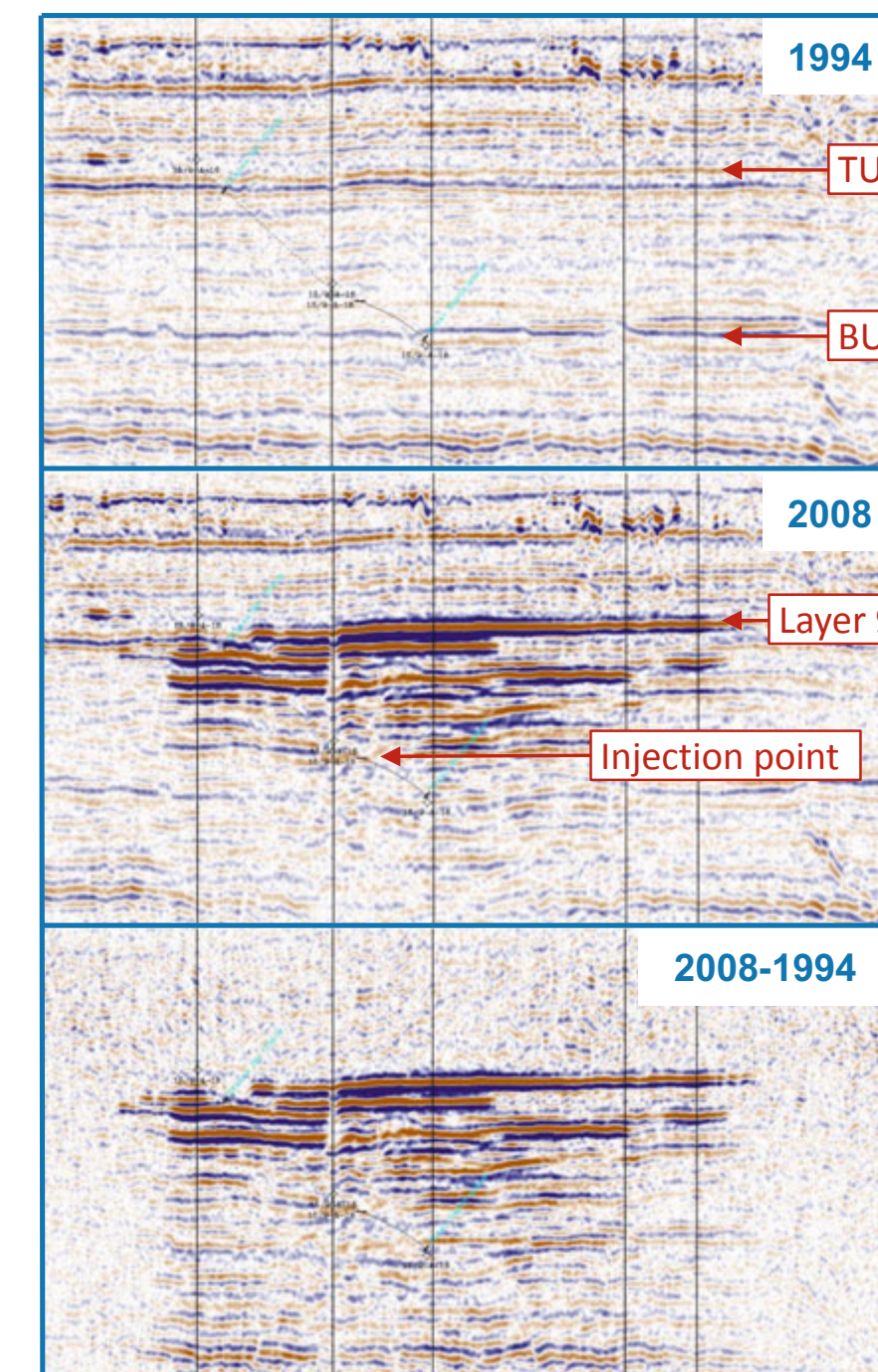
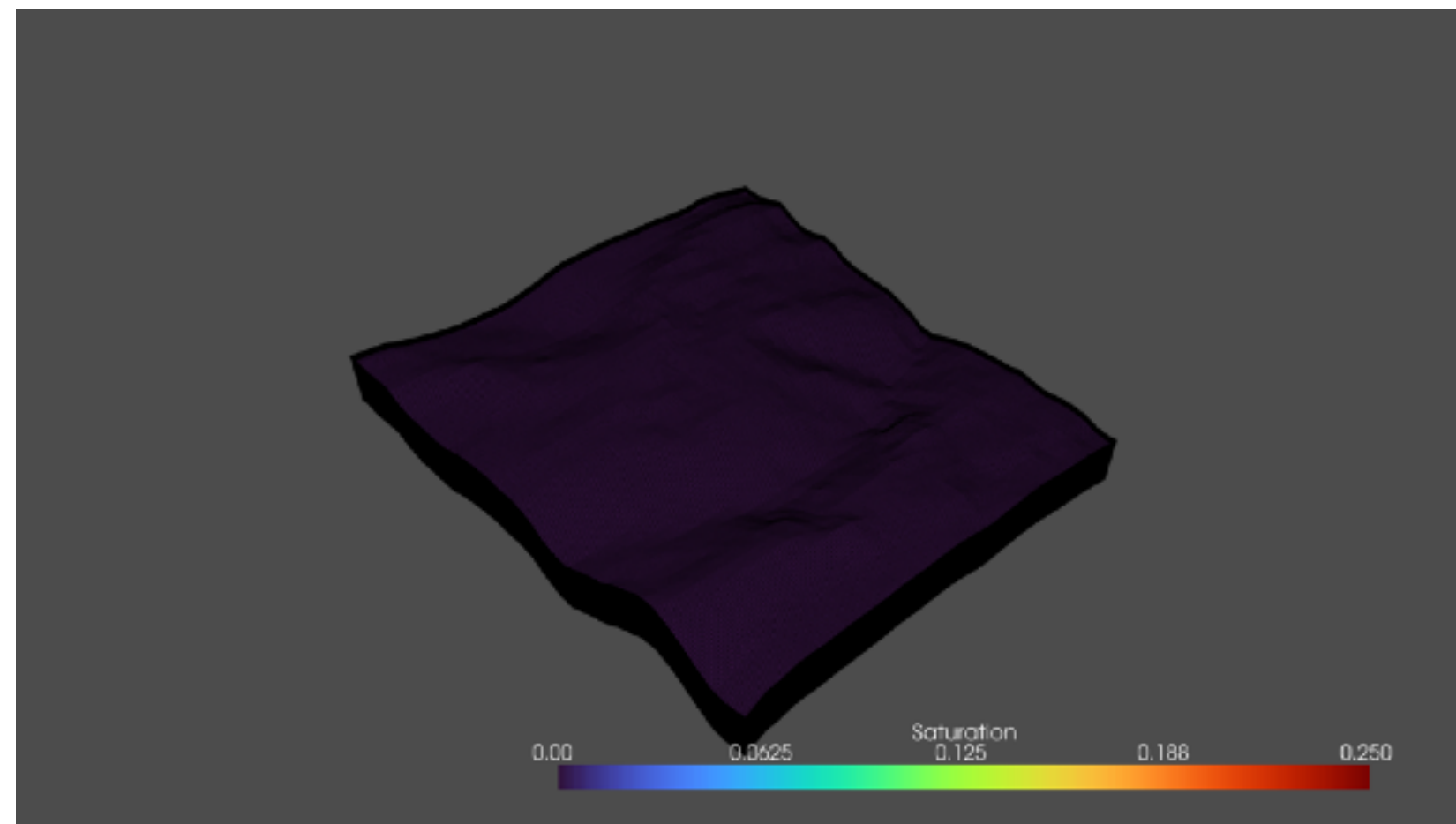






# EAS 4803/8803 Seismic Monitoring CCS Lec#1

Dr. Felix J. Herrmann Spring 2025







# Course Description

Carbon Capture and Storage (CCS) is widely considered as a key technology to combat climate change. This course presents a comprehensive review how seismic imaging can be used to monitor underground (geologic) storage of carbon dioxide. Topics covered include basics of seismic data acquisition, wave propagation, and imaging, empirical relations between seismic and fluid-flow properties, two-phase flow equations describing CO<sub>2</sub> plumes, and the challenges of designing a seismic monitoring system for geologic CO<sub>2</sub> storage.