

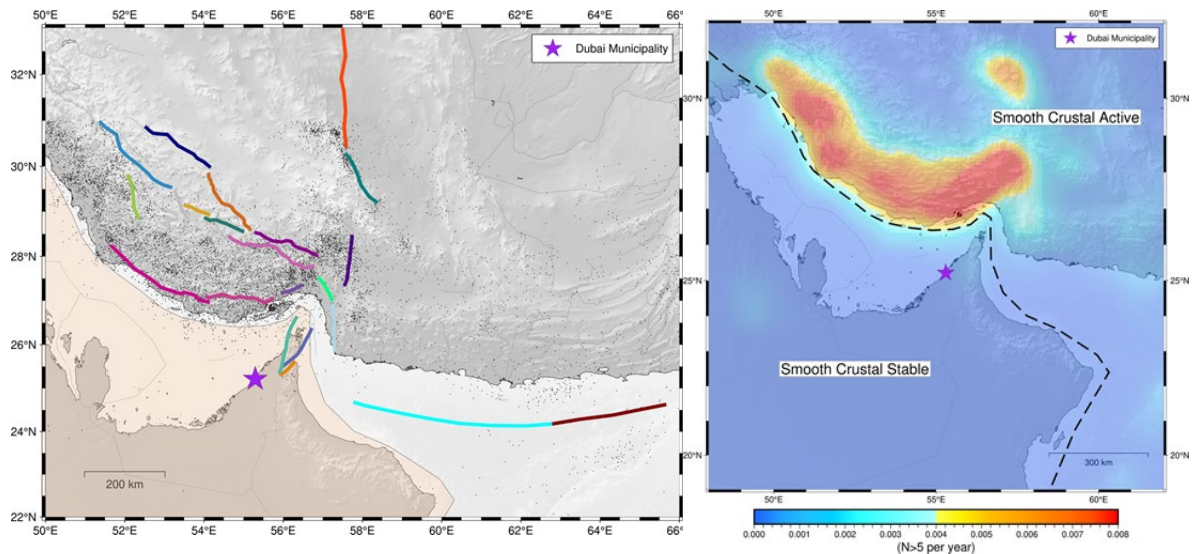


UC Berkeley Geosystems Engineering Wednesday Lecture Series

Wednesday, January 29, 2025
1:10-2:00 PM
Lecture Room: 406 Davis Hall

Overcoming Seismic Hazard Analysis Challenges

Andreas Skarlatoudis, PhD
AECOM



This presentation delves into the multifaceted challenges faced during seismic hazard assessment. We explore the complexities of developing design ground motions for a hydroelectric project in the Solomon Islands, where the challenge lies in accounting for the region's high seismicity and limited historical data. Additionally, we examine the unique difficulties encountered in large-scale, high-visibility infrastructure projects, such as The Line (NEOM) in Saudi Arabia, which involves navigating the technical complexities and coordination challenges inherent in creating design ground motions for a futuristic urban development. Finally, we discuss the challenge of advising stakeholders who may underestimate the importance of seismic hazard evaluations, drawing from our experience of updating the Dubai Road and Transport Authority manual. Through these case studies this presentation aims to showcase best practices in seismic hazard assessments which result in safer and more resilient structures as well as real-life challenges in delivering a successful project.