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Booming Sand Dunes MELANY HUNT, N.M. VRIEND, K.S. BRANT-LEY, C.E. BRENNEN, R.W. CLAYTON, Caltech — In the southwestern United States and other locations around the world, large sand dunes can generate a loud booming sound during a natural or induced slumping event. The sound builds over time to a single frequency varying from 75 to 105 Hz. By measuring the tone at several locations and on different days, the frequency data shows independence of average particle diameter. This talk will outline recent work at Caltech involving field measurements (including seismic refraction, ground penetrating radar and sand sampling), and will offer an alternative explanation of the desert sounds.

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