

Abstract Submitted
for the TSF17 Meeting of
The American Physical Society

Shallow Soil Temperature Tracing Probe Calibration and Comparison to Thermal Models¹ LAURA RAINES, EDDIE HOLIK, JAMES WARD, EMMETT SPOONER, DAVID KENNEDY, Angelo State Univ — Local soils in Tom Green county have no data relating to thermal gradients until now. A Hobo U23, which is to be calibrated, is currently being used to extract temperature data. The U23 sensors are wrapped around a 0.47 cm dowel rod inside a PVC pipe. The PVC pipe is then placed inside a galvanized steel pipe, which is driven 15.24 cm into the ground. Sensors are placed 2.5 cm and 10.16 cm in the ground. Over the course of 50 minutes, the sensors track the temperature as water infiltrates into the ground. These tests are being conducted on clay soils which were destroyed by brine water. Collected temperature data will be turned into thermal models. In all, the hopes of this research project are to be able to correlate temperature flux in various soils types to infiltration rates.

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Date submitted: 22 Sep 2017

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