Abstract-

The Rocky Mountain region is the most prominent orographic feature in the western US with a maximum elevation of 2.2 km within a 500 by 300 km area. The imaging of depths and support mechanisms of the current topography are contentious, but from the sedimentary record, it is clear that this region was near sea-level in the late-Cretaceous. We present preliminary findings for the CREST array which consisted of 59 stations and was deployed within the US network.

Future Work-

- Include ballistic surface wave dispersion measurements for better depth resolution in the tomography model.
- Construct a crustal Vp/Vs model by applying the HK stacking methodology to the RF data.
- Integrate the RF wave tomography and gravity data to investigate the possible effects of mantle upwelling.

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