Predicting Seismic Data Quality from Multispectral Satellite Imagery in Alberta Oil Sands

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Abstract

For several years, field quality control metrics have been derived by partial processing of the 3D seismic data concurrent to acquisition in the KOSP (Kai Kos Dehseh Oil Sands Partnership) lands in northern Alberta. Upon examination of the data quality maps, it is clear that there exists some correlation with satellite imagery. Here we present a systematic method for predicting the seismic data quality in areas not yet acquired, based on correlations between the quality metric on existing data and multispectral satellite imagery.

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