Underground Truthing? - Seeing is Believing. (805rooney085428-Oral)

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Abstract:

Many soil properties can be assessed through visual inspection. These include color, mineralogical, textural, structural, and chemical attributes. Additionally, the extent of horizon boundaries can be delineated with respect to their depth, thickness, and relative position in the landscape. Often, removing a sample from the in-situ environment irreparably alters the soil property either through sample manipulation or exposure to ex-situ conditions. The SIP obtains realtime digital soil imagery and can be combined with other sensor data to efficiently and effectively delineate subsurface attributes. SIP information can be combined with output from other sensors and data layers. The SIP will reduce the number of cores required and the number of samples sent to the laboratory from each core for soil mapping and site investigations. Subsurface imagery is immediately available for viewing, distribution, and analysis.

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