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The velocity of the expanding by-products and soil layer on top of a buried landmine

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ABSTRACT

This paper uses high-speed video images of the PHOTRON APX-RS high-speed camera to determine the velocity of the expanding volume of by-products of a buried landmine. The study analyses three experiments done with the Scientifically Instrumented Impulse Measurement Apparatus (SIIMA) to determine the imparted impulse of a landmine. Two phenomena emerge from the analyses. The expansion of the flush buried mine is very fast while the expansion of the sand layer and volume of by-products when the charge is buried with an overburden is slower.