

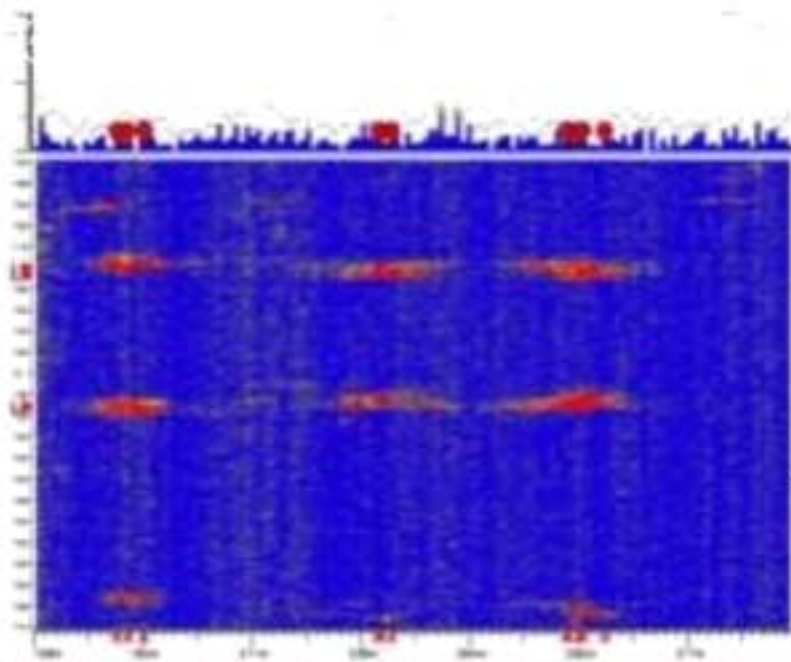


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UA tests underground border system

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A screen shot of the Helios system output captured while two horses ran across the buried fiber-optic cables. The red traces are clearly visible, unlike those made by a small dog, and also quite distinct from the traces created by humans, cattle or trucks.

The University of Arizona, nearer to the border than some, is currently testing a unique underground surveillance system. Researchers believe it could be used to watch the entire US-Mexico border continuously.

According to [UA News](#) the system, known as Helios, consists of laser pulses transmitted through fiber-optic cables buried in the ground that respond to movements on the surface above.

Helios is sensitive enough to detect a dog and can discriminate between people, horses and trucks. The system can be set to avoid being triggered by small animals and can also tell if people are running or walking, or digging, and in which direction.

desert near Tucson.

A geophysical engineering company based in Tucson called Zonge recently installed a Helios test system in the

This is not new technology. Such systems are known as smart sensors and are already used to monitor large engineering works such as dams, pipelines, bridges and highways for cracks or seismic damage and other unseen strain forces at work deep within structures.