
New Geohazard Tools, Coupled with Lessons Learned in System Safety, Will Improve Infrastructure Safety which Engineering cannot do Alone

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ABSTRACT

At present, the engineering discipline lacks affordable tools to identify, locate, and assess many geohazards, such as faults, affecting critical structures—levees, pipelines, and bridges. However, lessons learned in flight and system safety when combined with new geophysical technologies and remote sensing tools can greatly improve the safety of levee and other civil works at low cost. First one must convince the engineers there really are threats to the structures they have built that their present way of doing business can neither find nor quantify. Once the geologists get their attention, they must demonstrate to the engineers that there are in fact faster, cheaper, and more accurate ways of finding and classifying geohazards.

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