

## and Nevada Short Term Seismic Risk Detection

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Old fashion earthquake early warnings are changing in a new era in the shadow of Earthquake Preparedness Alert (EPA), which instead of noticing only a few seconds, issues a few days in advance. Still, EPAs need more efforts for being used in the public sector, but already they are used in oil and gas, mining in California and Nevada. Since September 2020, the generated models in project Earling analyze risk level changes in these two regions. Since then, all the larger than M5 earthquakes were detected a couple of days in advance. For example, Petrolia residents felt shaking of a M 6.2 earthquake on 20 Dec 2021. The earthquake rattled the region three days after the models detected a high risk time window for the region. Based on Federal Emergency Management Agency (FEMA) reports, these two regions experiencing about 85% of the 75,000 annual earthquakes in the US. So low false alert ratio in the regions is mandatory to make decisions based on seismic risk level changes. Whilst Earling marked five high risk time windows in 2021 it didn't mark any time windows as high risk until the end of November 2022, which means precise risk detection both in avoiding false positive and false negative alerts.

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### Promotional text

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