

MEMS Acoustic Detectors for Natural Hazard Warning Systems

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Natural Hazard Events



Randa Rockfall

1999 - 30 Million m³ requiring new infrastructure (road/railway) and extensive mitigation measures

2014 - small breakoff observed

April 22, 2015 - large rockfall event

Felsabbruch hüllt Dorf in Riesen-Staubwolke

Das Bergdorf Randa im Mattertal ist am Mittwochsorgen in eine mächtige Staubwolke gehüllt worden. Mehrere Felsstürze hatten den Staub verursacht.

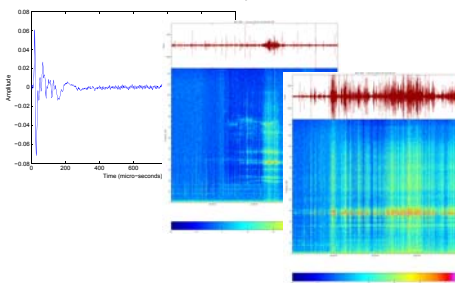
Objective

New scientific knowledge about geophysical processes

Development of early warning system for rock fall detection

Sensing movement events and/or micro seismic and acoustic activities

big, noisy data



high energy



high cost

