ShakeAlert® Post-Alert Summary

Overview of ShakeAlert Performance

Earthquake

M 3.7 - 26.8 mi SW of Rio Dell

ANSS origin (Local): 2020-02-26 01:21:15.3 ANSS origin (UTC): 2020-02-26 09:21:15.3 ANSS depth: 17.8 km (11.1 mi) ShakeAlert alert (UTC): 2020-02-26 09:21:25.8

ShakeAlert Event ID: ew7319

Summary Report

Speed of Alert:

Initial alert after origin time: 10.5 s Final alert update after origin time: 11.7 s

Magnitude Accuracy:

Initial ShakeAlert: M 3.9 Final ShakeAlert: M 3.7 ANSS report: M 2.8

Distance From Alert to Reviewed Location

Initial alert: 104.9 km (65.2 mi) W Final alert: 35.9 km (22.3 mi) W

Number of stations reporting

0 within 10 km of epicenter 6 within 100 km of epicenter 9 used in final ShakeAlert update

Performance for Nearby Cities

City	Distance \	Warning Time*	k MMI
Rio Dell	43 km (26 mi)	~2 sec	<2
Eureka	64 km (39 mi)	~8 sec	<2
Fort Bragg	114 km (70 mi)	~21 sec	<2
Sacramento	324 km (201 mi)	~80 sec	<2

Zone Shaken by S-wave Before Alert: 37 km 23 mi

Footnotes

- 1) *MMI -- Modified Mercalli Intensity: a scale to measure ground shaking.
- 2) *Warning Time -- Time between alert production and arrival of the S-wave at a chosen site.

Disclaimer

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Figure 1. ShakeAlert initial earthquake location (black dot). Star is regional network epicenter. Polygon is the predicted outer range for felt ground motion (MMI 2). Red circle is front of peak shaking when the alert was released. Shaking takes 10 s to expand from circle to circle.



Figure 2. Polygons show shaking intensity contours for the final ShakeAlert. Shaking of intensity 3 or less is often not felt. Star shows the regional network epicenter.