ShakeAlert® Post-Alert Summary

Earthquake:

M 3.6 - 9.5 km (5.9 mi) E of Morgan Hill

ANSS origin (Local): 2020-12-15 06:59:41.3 ANSS origin (UTC): 2020-12-15 14:59:41.3 ShakeAlert alert (UTC): 2020-12-15 14:59:48.7 ANSS location: 37.159, -121.554 ANSS depth: 5.2 km (3.2 mi)

ShakeAlert Event ID: ew9970

Time To Alert After Earthquake Start:

Initial alert after origin time: 7.4 sec Final alert after origin time: 8.8 sec

Magnitude Accuracy:

Initial ShakeAlert: M 3.6 Peak ShakeAlert: M 3.7 Final ShakeAlert: M 3.7 ANSS report: M 3.6

Location Accuracy:

Final alert: 1.6 km (1.0 mi) E

Number of Stations Reporting:

1 within 10 km of epicenter

75 within 100 km of epicenter

24 used in final ShakeAlert update

Initial alert: 1.6 km (1.0 mi) E

Nearby Cities:

City	Distance	Warning*	MMI**
Morgan Hill	9 km (6 mi)	~0 sec	2
San Jose	36 km (23 mi)	~3 sec	<2
Santa Clara	42 km (26 mi)	~4 sec	<2
San Francisco	103 km (64 mi)	~21 sec	<2

Zone Shaken by S-wave Before Alert: 26 km (16 mi)

Footnotes:

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

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 peak magnitude ShakeAlert. Shaking of intensity 3 or less is often not felt. Star shows the regional network epicenter.