

Post-ShakeAlert® Message Summary

Earthquake:

Advanced National Seismic System (ANSS):
M 4.4 - 43.6 km (27.1 mi) S of Arvin
ANSS location: 34.818, -118.929
ANSS depth: 13.1 km (8.2 mi)
ANSS origin (Local): 2026-07-12 03:38:04.7
ANSS origin (UTC): 2026-07-12 10:38:04.7
ShakeAlert first Message (UTC): 2026-07-12 10:38:09.3
ShakeAlert Event ID: ew1783852680

ShakeAlert Messages Issued (after origin time):

Initial: 4.6 sec
Peak: 7.9 sec
Final: 20.1 sec

ShakeAlert System Magnitude Estimates:

Initial: M 4.3
Peak: M 4.5
Final: M 4.4

ShakeAlert System Location Accuracy:

Initial: 0.2 km (0.1 mi) E
At peak: 4.3 km (2.7 mi) SW
Final: 4.0 km (2.5 mi) SW

Wireless Emergency Alert:

Magnitude below threshold for WEA system.
WEA alerts are distributed to the MMI 4+ area if ShakeAlert Peak M $\geq$ 5.0

Number of Stations Reporting:

2 within 10 km of epicenter
102 within 100 km of epicenter
140 used in final ShakeAlert Message

Nearby Cities:

City	Distance km / (mi)	Time* sec	Shaking (MMI**)
Arvin	44 / (27)	--	V. Weak (II)
Tehachapi	56 / (35)	--	Not felt
Simi Valley	62 / (39)	--	Not felt
Los Angeles	106 / (66)	--	Not felt

Radius shaken before message release: 10 km (6 mi)

Footnotes:

* Time -- Time from message release to predicted S-wave arrival at the location. "--" for weak or imperceptible shaking.
** MMI -- Modified Mercalli Intensity - a numeric shaking severity scale
*** For earthquakes deeper than ~15 km, the ShakeAlert Message may be available before peak shaking reaches the surface.

Disclaimer:

This information is provisional and subject to revision.
It is being provided to meet the need for timely best science.
The information has not received final approval by the U.S. Geological Survey (USGS) and is provided on the condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the information.

To learn more about ShakeAlert®, visit www.shakealert.org/FAQ

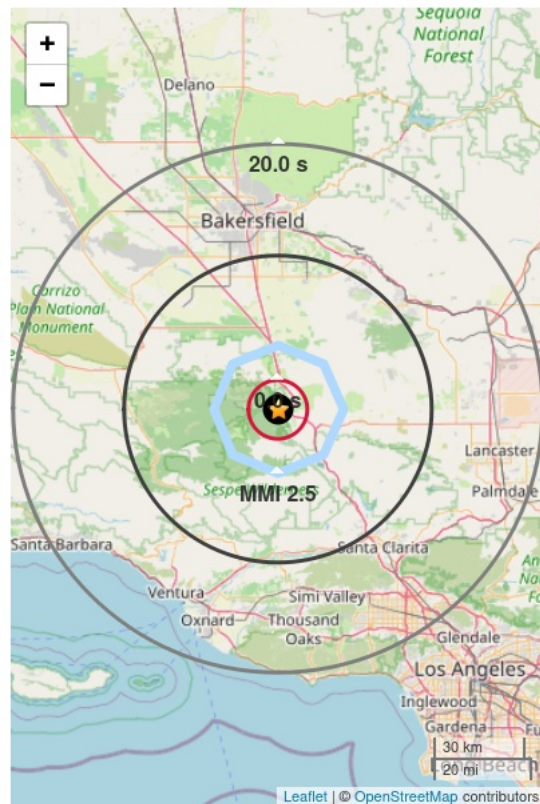


Figure 1. Initial earthquake locations from ShakeAlert (black dot) and ANSS (orange star). Polygon shows estimated area of felt ground shaking**. Red circle (if shown) marks the position of the peak shaking wave front at the time the Alert Message was issued***. Note, shaking takes 10 seconds to expand from circle to circle.

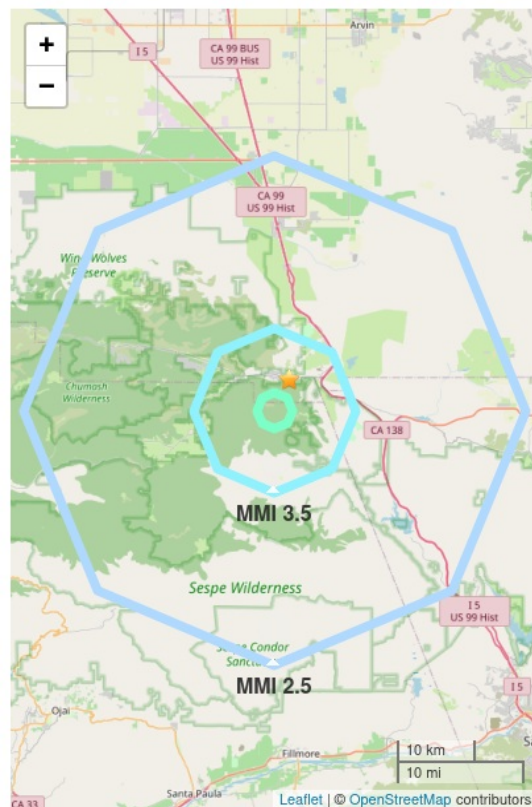


Figure 2. Polygons show the maximum estimated extent of ground shaking for different MMI** ranges (color-coded and labeled). Shaking of MMI 3 or less is often not felt. Orange star shows the ANSS earthquake location.

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