Post-ShakeAlert® Message Summary

Earthquake:

Advanced National Seismic System (ANSS):

M 4.4 - 93.4 km (58.0 mi) NE of Mammoth Lakes

ANSS location:

ANSS depth:

ANSS origin (Local):

ANSS origin (UTC):

Not available at report time

ShakeAlert origin (UTC): 2022-01-22 22:40:26.5

ShakeAlert Event ID: ew1642891220

ShakeAlert Messages Issued (after origin time):

Initial: Not available Peak magnitude: Not available Final: Not available

ShakeAlert System Magnitude Estimates:

Initial: M 5.1
Peak: M 5.1
Final: M 4.4

ShakeAlert System Location Accuracy:

Initial: Not available at report time Peak M: Not available at report time Final: Not available at report time

Wireless Emergency Alert:

WEA delivery not confirmed.

WEA alerts are distributed to the MMI 4+ area if ShakeAlert Peak M>=5.0

Number of Stations Reporting:

0 within 10 km of epicenter

14 within 100 km of epicenter

21 used in final ShakeAlert Message

Nearby Cities:

City	Distance	Time*	MMI**
Mammoth Lakes	93 km (58 mi)	~26 sec	<2
Carson City	166 km (103 mi)	~47 sec	<2
South Lake Tahoe	168 km (105 mi)	~47 sec	<2
Sacramento	285 km (177 mi)	~80 sec	<2

Radius shaken before message release: Not available

Footnotes:

- * Time -- Time between message release and arrival of the S-wave at the location.
- ** MMI -- Modified Mercalli Intensity: a scale to measure ground shaking severity.
- *** For earthquakes deeper than ~15 km, the ShakeAlert Message may be sent 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.

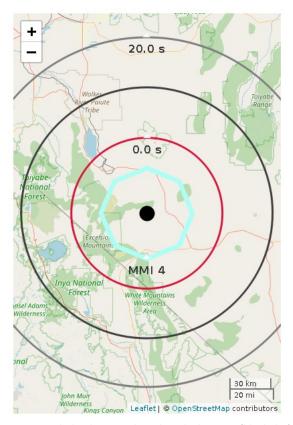


Figure 1. ShakeAlert initial earthquake location (black dot).

ANSS earthquake epicenter not available. Polygon shows estimated MMI 4 shaking intensity area. If shown, red circle is front of peak shaking when the message was released***.

Shaking takes 10 s to expand from circle to circle.



Figure 2. Polygons show shaking intensity contours for the peak magnitude estimate. Shaking of MMI 3 or less is often not felt. ANSS earthquake epicenter not available.