ShakeAlert® Post-Alert Summary

Earthquake:

M 3.9 - 136.7 km (84.9 mi) SW of Imperial Beach
ANSS origin (Local): Not available at report time
ANSS origin (UTC): Not available at report time
ShakeAlert alert (UTC): 2021-03-23 00:49:55.8
ANSS location: Not available at report time
ANSS depth: Not available at report time

ShakeAlert Event ID: ew10802 Time To Alert After Earthquake Start:

Initial alert after origin time: Not available Final alert after origin time: Not available

Magnitude Accuracy:

Initial ShakeAlert: M 3.9
Peak ShakeAlert: M 3.9
Final ShakeAlert: M 3.9
ANSS report: Not available at report time

Location Accuracy:

Initial alert: Not available at report time Final alert: Not available at report time

Number of Stations Reporting:

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

Nearby Cities:

City	Distance	Warning*	MMI**
Imperial Beach	137 km (85 mi)	~39 sec	<2
Tijuana B.C.	141 km (87 mi)	~40 sec	<2
San Diego	142 km (88 mi)	~40 sec	<2
Oceanside	170 km (106 mi)	~48 sec	<2

Zone Shaken by S-wave Before Alert: Not available

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.
- *** For earthquakes deeper than 15 km, the alert may be sent before peak shaking reaches the surface.

Disclaimer:

This information is preliminary or provisional and is 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). Regional network epicenter not available. Polygon is the approximate outer range for felt ground motion. If shown***, 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. Regional network epicenter not available.