Post-ShakeAlert® Message Summary

Earthquake:

Advanced National Seismic System (ANSS):
M 3.6 - 11.1 km (6.9 mi) NW of Calipatria

ANSS location:	33.205, -115.586
ANSS depth:	7.9 km (4.9 mi)
ANSS origin (Local):	2023-04-30 00:58:19.7
ANSS origin (UTC):	2023-04-30 07:58:19.7
ShakeAlert first Message (UTC):	2023-04-30 07:58:25.6
ShakeAlert Event ID:	ew1682841500

ShakeAlert Messages Issued (after origin time):

Initial:	5.9 sec
Peak magnitude:	5.9 sec
Final:	16.1 sec

ShakeAlert System Magnitude Estimates:

Initial:	M 4.9
Peak:	M 4.9
Final:	M 4.4

ShakeAlert System Location Accuracy:

Initial:	0.8 km (0.5 mi) NE
At peak mag.:	0.8 km (0.5 mi) NE
Final:	2.9 km (1.8 mi) SE

Wireless Emergency Alert:

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

Number of Stations Reporting:

3 within 10 km of epicenter
60 within 100 km of epicenter
36 used in final ShakeAlert Message

Nearby Cities:

City	Distance	Time*	MMI**
Calipatria	11 km (7 mi)	~0 sec	3
El Centro	46 km (29 mi)	~7 sec	2
Mexicali B.C.	62 km (39 mi)	~12 sec	<2
San Diego	156 km (97 mi)	~38 sec	<2

Radius shaken before message release: 21 km (13 mi)

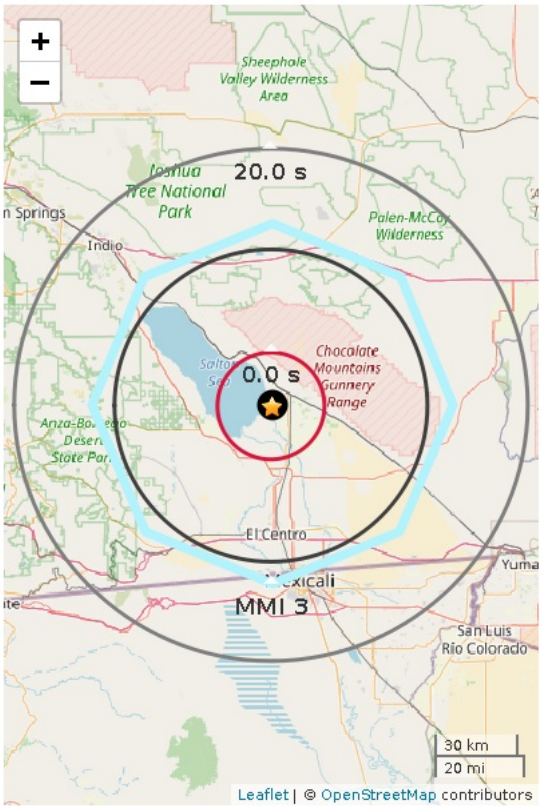

*Figure 1. ShakeAlert initial earthquake location (black dot). Star is ANSS earthquake epicenter. Polygon approximates the outer range for felt ground motion. If shown, red circle is front of peak shaking when the message was released***. Shaking takes 10 s to expand from circle to circle.*

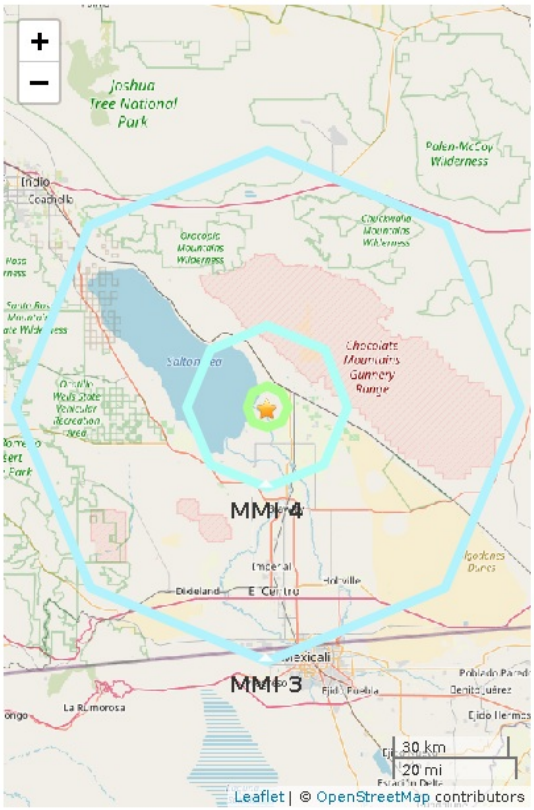

Figure 2. Polygons show shaking intensity contours for the peak magnitude estimate. Shaking of MMI 3 or less is often not felt. Star shows the ANSS earthquake epicenter.

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.*

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

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