

EERI VERT Chiapas Earthquake

Early Warning System

By Xin Ma & Yolanda Alberto

Overview of topic and how it affected various regions

- The seismic warning in Mexico started with the system for Mexico City in 1991 and continue with the State of Oaxaca in 2003. It is planned that the system will cover Chiapas soon. http://www.cires.mx/cires_es.php
- A multi-alert 360° system was planned for Chiapas last January. <http://www.cuartopoder.mx/sirenaalertarasobretembloresentuxtla-145311.html>



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Seismic alert in Mexico City

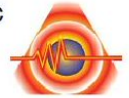
- On September 6, 19:06, the seismic warning was activated accidentally and the official safety procedure was also activated, however there was no earthquake record.
<https://www.sdpnoticias.com/local/ciudad-de-mexico/2017/09/06/se-activa-alerta-sismica-en-cdmx>
- On September 7, 23:50, the seismic warning alerted people in Mexico City before the earthquake
- The anticipation time was 86 seconds for Mexico City, 13 seconds for Oaxaca and 66 seconds for Guerrero, CIRES



centro de instrumentación y registro sísmico, ac

Sistema de Alerta Sísmica Mexicano

Emisor Alterno Ciudad de México



Informe Reciente

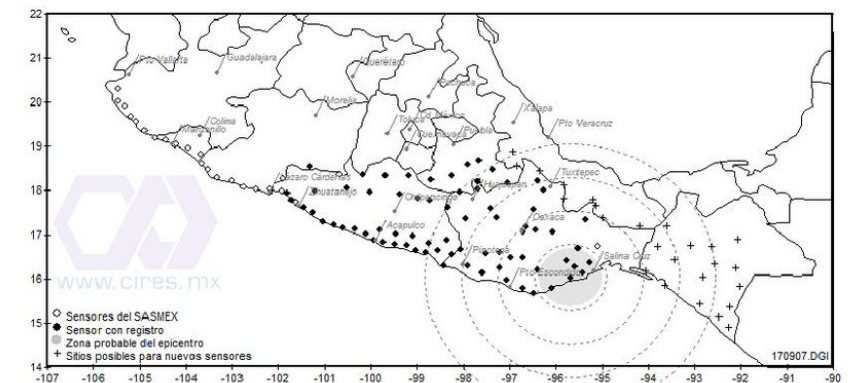
septiembre 7, 2017

El 7 DE SEPTIEMBRE DE 2017 a las 23:49:54 el SASMEX registró un sismo que fue evaluado y confirmado con sensores próximos a su epicentro. Las ciudades donde se alertó automáticamente la amenaza de sus efectos y el tiempo aproximado de anticipación se indican en la tabla.

El mapa muestra la zona probable del epicentro y circunferencias de tiempo, cada 20 segundos, que permiten estimar el retardo del efecto sísmico advertido.

CIUDAD	Alerta	Hora Alerta	Distancia	Anticipación
Oaxaca	Pública	23:50:18	160 Km	13 seg
Puebla	Pública	23:50:32	429 Km	63 seg
Chilpancingo	Pública	23:50:32	440 Km	66 seg
Acapulco	Pública	23:50:32	458 Km	70 seg
Ciudad de México	Pública	23:50:32	525 Km	86 seg
Morelia	--	--	714 Km	--
Colima	Pública	23:50:32	925 Km	181 seg
Guadalajara	Pública	23:50:32	960 Km	190 seg

Auto SASMEX, 07/sep/17 23:53:18



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Seismic warning on September 7, 2017

City	Warning	Warning time	Distance (km)	Anticipation (seconds)
Oaxaca	Public	23:50:18	160	13
Puebla	Public	23:50:32	429	63
Chilpancingo	Public	23:50:32	440	66
Acapulco	Public	23:50:32	458	70
Mexico City	Public	23:50:32	525	86
Morelia	-	-	714	-
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Questions that a reconnaissance team could look into

- Progress of the system installation in Chiapas
- Protocol in case of false alarms
- Safety protocol activation
- Efficacy of the seismic warning system

Links to media articles discussing the topic

- http://www.cires.mx/cires_es.php
- <http://sasmex.net>
- <http://www.cuartopoder.mx/sirenaalertarasobretembloresentuxtla-145311.html>
- <https://www.sdpnoticias.com/local/ciudad-de-mexico/2017/09/06/se-activa-alerta-sismica-en-cdmx>