



SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
DAMAGE	None	None	None	Very light	Light	Moderate	Moderate/heavy	Heavy	Very heavy
PGA(%g)	<0.05	0.3	2.76	6.2	11.5	21.5	40.1	74.7	>139
PGV(cm/s)	<0.02	0.13	1.41	4.65	9.64	20	41.4	85.8	>178
INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X

Scale based on Worden et al. (2012) Version 4: Processed 2019-11-21T23:51:20Z  
 △ Seismic Instrument ○ Reported Intensity ★ Epicenter

The ShakeMap from [USGS](https://www.usgs.gov)

EFFECTS



\*Estimations are based on data reported/confirmed by National Disaster Management Organisations of each respective ASEAN Member State and other verified sources



Photo credit: Lao PDR NDMO

## Lao PDR and Thailand

- According to the Earthquake Observation Division of the Thailand Meteorological Department ([TMD](https://www.tmd.go.th)), an earthquake with a magnitude of 6.4 at a depth of 3 km occurred about 20 km Southeast of Ban Nam Chang, Nan Province in Lao PDR on 21 November 2019 at 06:50 (UTC+7).
- The United States Geological Survey ([USGS](https://www.usgs.gov)) reported shake intensity of IV in northeastern Thailand and intensities of V-VI near the epicentre in Lao PDR, as shown in the map above.
- The Thailand Department of Disaster Prevention and Mitigation ([DDPM](https://www.ddpm.go.th)) reported that the quake was felt in 11 provinces in Thailand (Chiang Rai, Lampang, Nan, Phrae, Uttaradit, Loei, Udon Thani, Khonkaen, Nakornratchasima, Phitsanulok, Nonthaburi and Bangkok), but the damages only occurred in the provinces of Phrae, Nan and Loei.
- Lao PDR National Disaster Management Office (NDMO) reported that the affected areas comprise eleven (11) districts in Xayaboury province and the mostly damaged are in Hongsa and Xaysathan districts (34 villages). Estimated amount of damages is US\$278,874.
- The AHA Centre is continuously monitoring the event, and will issue updates should there be any significant development.