

Understanding the Richter scale

Magnitude on Richter scale in contrast with force of dynamite explosion

INTENSITY	RICHTER SCALE	DYNAMITE (KG)
Cannot feel	0-1	= 0.6 - 20
Can be felt	2	= 600
Can be felt at the epicentre	3	= 20,000
Can cause damage to buildings near the epicentre, the same as a fission bomb	4	= 60,000
Damage to buildings near the epicentre	5	= 20 Million
Great damage to buildings at the epicentre	6	= 60 Million
Serious damage and can be detected across the globe	7	= 20 Billion
Causes death and major destruction	8	= 20 Billion
Leads to near or total destruction	9	= 20 Trillion

Tremors yesterday

11.52am - 2.7 magnitude | 1.45pm - 4.5 magnitude | 4.43pm - 2.7 magnitude

Expect aftershocks, says expert

KUALA LUMPUR: “Expect a bigger one after this or it might go unnoticed,” said Universiti Putra Malaysia Chemical and Environment Engineering Professor Dr Fakhrul Razi Ahmadun when commenting on the 5.9-magnitude earthquake that struck Ranau in Sabah on Friday.

“Sabah folk can expect aftershocks in Ranau and nearby areas in the next few hours or days.

“They could be bigger than the 5.9-magnitude quake that hit the district yesterday (Friday) or smaller ones that might go unnoticed.

“We do not know how they are going to be.

“There are aftershocks after an earthquake; some big, some small.

“No one, not even the agencies involved, can predict how big or small an earthquake is going to be.

“However, trends show that earthquake epicentres are getting closer to Malaysia,” he told the *New Sunday Times* yesterday.

Sabah sees its fair share of earthquakes, as the state is near the Sulu Sea, the Philippines and Indonesia, which are active earthquake areas along the Ring of Fire.

The first earthquake that hit Sabah on Friday morning was the largest in the state so far.

Fakhrul said in 1976, a 5.8-magnitude earthquake hit Lahad Datu.

“Till today, the effects of that



Professor Dr Fakhrul Razi Ahmadun says trends show that quake epicentres are getting closer to the country

earthquake can be seen in some parts of Lahad Datu.

“The Lahad Datu earthquake, at the time, was considered the biggest to have hit Malaysia.”

The Ring of Fire is an area in the basin of the Pacific Ocean, where a large number of earthquakes and volcanic eruptions occur.

Stretching 40,000km in the shape of a horseshoe, it has a nearly continuous series of oceanic trenches, volcanic arcs and volcanic belts, and sees plate movements.

The Ring of Fire has 452 volcanoes and is home to more than 75 per cent of the world’s volcanoes. It is some-

times called the circum-Pacific belt.

Some 90 per cent of earthquakes and 81 per cent of the world’s largest earthquakes occur along the Ring of Fire.

The second most seismically active region — where between five and six per cent of earthquakes and 17 per cent of the world’s largest earthquakes occur — is the Alpide belt, which extends from Java to Sumatra through the Himalayas, the Mediterranean and out the Atlantic.

The Mid-Atlantic Ridge is the third most prominent earthquake belt.

Fakhrul said a big earthquake in Sumatra could trigger an aftershock of a similar scale in Malaysia.

“Therefore, it is important that the authorities monitor active fault lines.

“Another important thing is the nation’s preparedness in handling earthquakes.

“Malaysians must know that we cannot rely on agencies when a disaster happens, as the personnel need to be in other places to render aid.”

He said community-based programmes must be outlined to help the public prepare for natural disasters.

“Look at what happened in Kelantan during the floods last year.

“That is a lesson we should learn in preparation for any eventuality.”