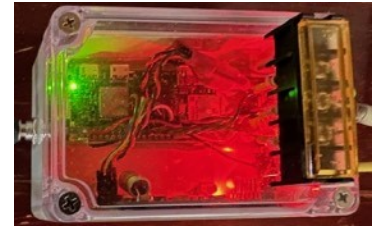




SAA Newsletter



The Peismo
#2/2025

From the Editor - Members are encouraged to submit articles with an earthquake connection of interest to members but accepting they may be edited or not published, at the discretion of the editors. Contributions to: mccue.kevin@gmail.com

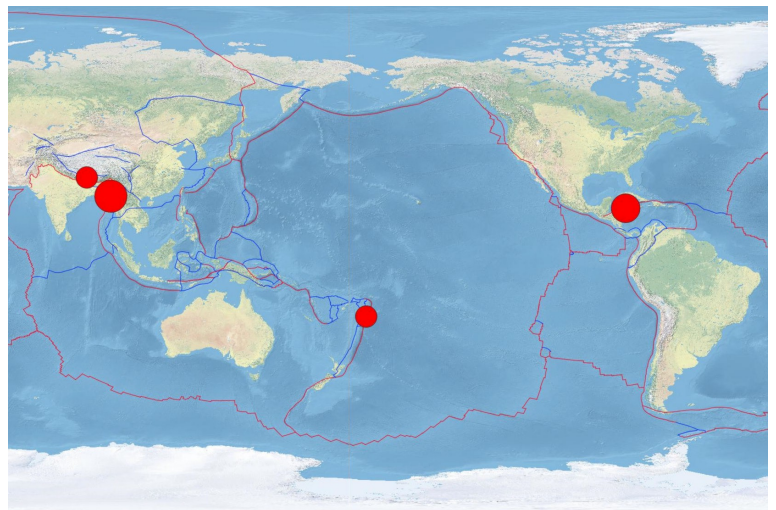
Contents

Earthquakes Worldwide	1	Tohoku Japan, Lessons	4	Col Lynam, seismologist	8
Peismo Network Rollout	2	Norway cf Australia	5	Lake George NSW earthquake	8
Maps of Earthquakes	3	BC Canada - How big?	6	Meckering WA in News	9
Large NZ earthquake	4	Mt Vesuvius - a must see	7	Vale Elaine Fraser WKA	10

Major Earthquakes Worldwide, January - March 2025

On average the world experiences one earthquake per month of magnitude 7 or more. In the first quarter of 2025 there were four major earthquakes, the first a magnitude M7.1 shallow, normal faulting earthquake in Tibet. The second, also shallow but strike-slip, its magnitude M7.6, was 200km SW of Georgetown in the Cayman Islands in Central America. The third was a shallow M7.7 earthquake in Myanmar, the fourth magnitude 7.0 in Tonga.

The earthquake in Tibet, some 80 km from the base of Mount Everest destroyed thousands of homes and killed at least 126 people in this remote area. More than 400 people were rescued in winter temperatures that dropped to -16C overnight. Tingri county is a popular base for climbers preparing to ascend the world's tallest peak.



Major earthquakes Worldwide, January to March 2025

Date UTC	Time UTC	Latitude	Longitude	Depth km	Mww	Place
2025-01-07	01:05:16	28.60	87.38	10	7.1	Southern Tibet
2025-02-08	23:23:14	17.69	82.42	10	7.6	Cayman Islands
2025-03-28	06:20:54	22.01	95.92	10	7.7	Myanmar
2025-03-30	12:18:47	-20.33	173.91	29	7.0	Tonga

BEIJING, Jan 16 (Reuters) - Chinese authorities in **Tibet** have detected problems, including cracks, at five out of 14 hydropower dams that they have inspected since a magnitude 6.8 earthquake rocked the southwest region last week, an emergency official said on Thursday

Of the five affected dams, three have since been emptied, the Tibet emergency management official told a press conference. In the county of Tingri, the quake's epicentre, the walls of one hydro dam have tilted, prompting the evacuation of about 1,500 people from six villages downstream to higher ground, he said. At another hydro dam, monitoring devices have been installed as it is being drained.



Figure A collapsed pagoda, just one of many structural failures in Myanmar.

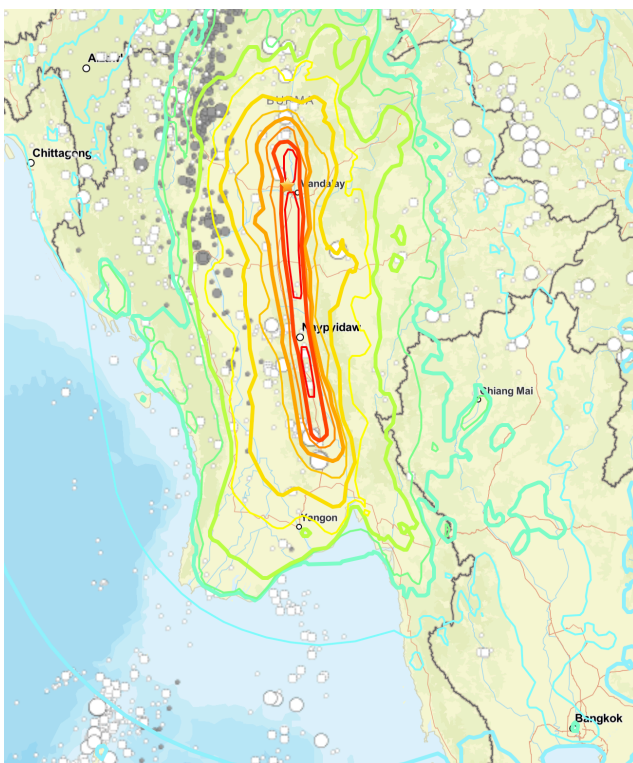


Figure Latest shake map of the Myanmar earthquake, from the USGS. Note the location of Bangkok where a multi-storey building collapsed.

Just 3 days before the end of the quarter, **Myanmar** was struck by a shallow M7.7 earthquake that caused a high-rise building under construction in Bangkok Thailand to collapse (see USGS map). The damage in Myanmar was substantial. More than 5350 deaths have been attributed to the earthquake.

Eight people were killed and others trapped after a building in Mandalay, Myanmar's second largest city, collapsed at about 1 pm. "The whole of Mandalay city was affected by the earthquake. The rescue teams and hospitals were overrun. We are managing with the resources we have in the neighbourhood," an eye witness said.

Two people, a middle-aged man and an older woman, had died in the building collapse, he added.

Reporting by Esther J.

The scale of damage caused by the earthquake in Myanmar is clear, media footage from central regions has shown multiple buildings collapsed or damaged.

Passengers at Mandalay airport raced to safety through dusty hallways, the floor scattered with ceiling panels. Panicked people crouched on the floor outside the airport for safety. At least 20 people died in a damaged mosque in Mandalay.

Sections of the Ava Bridge, the Old Sagaing Bridge, which crosses the Irrawaddy River between Mandalay and Sagaing regions, built by the British during colonial times, also collapsed.

A state of emergency was declared in Bangkok.

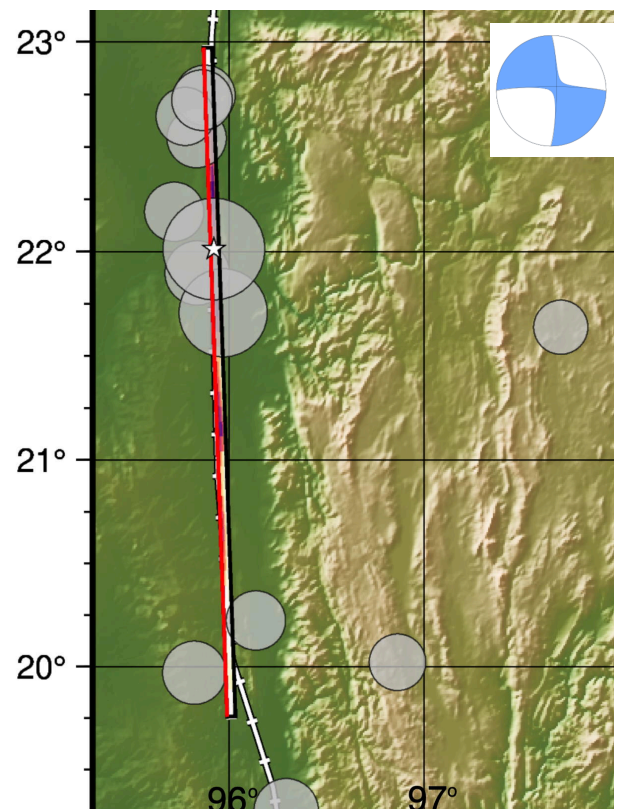


Figure Right lateral surface displacement modelled by the USGS, red indicating about 4m offset on the Sagaing Fault.

The white line is the plate boundary, between the Indian and Eurasian Plates, north of the December 2004 megathrust rupture, the two faulting events separated by a large step-over. Grey dots are aftershocks. **Inset** the USGS focal mechanism.

The Sagaing Fault ruptured in 1956 near Sagaing, twice in 1946 near the northern end of the fault, and twice near the southern end of the fault (close to Bago city) in 1930. Earthquake Ava on 23 March 1839 centred close to Mandalay was probably about M8 based on the fault length and offset, and the felt area.

PEISMO Network - another rollout

The network has expanded into the Sydney region where Sydney University PhD student Eric Wang (see his paper at the 2024 AEES Conference for which he was awarded an AEES student award) has installed the first of his Peismos at Pennant Hills. The site is registered with the ISC, code WEPH. Just a few days later it recorded its first earthquakes, near Orange NSW. Eric is keen to understand earthquakes in the vicinity of the large Warragamba Dam which is no longer monitored by its NSW government owners.

The Melbourne University server is at:
<https://meiproc.earthsci.unimelb.edu.au/eqserver/>

Follow the project <https://github.com/colinlove/peismo>

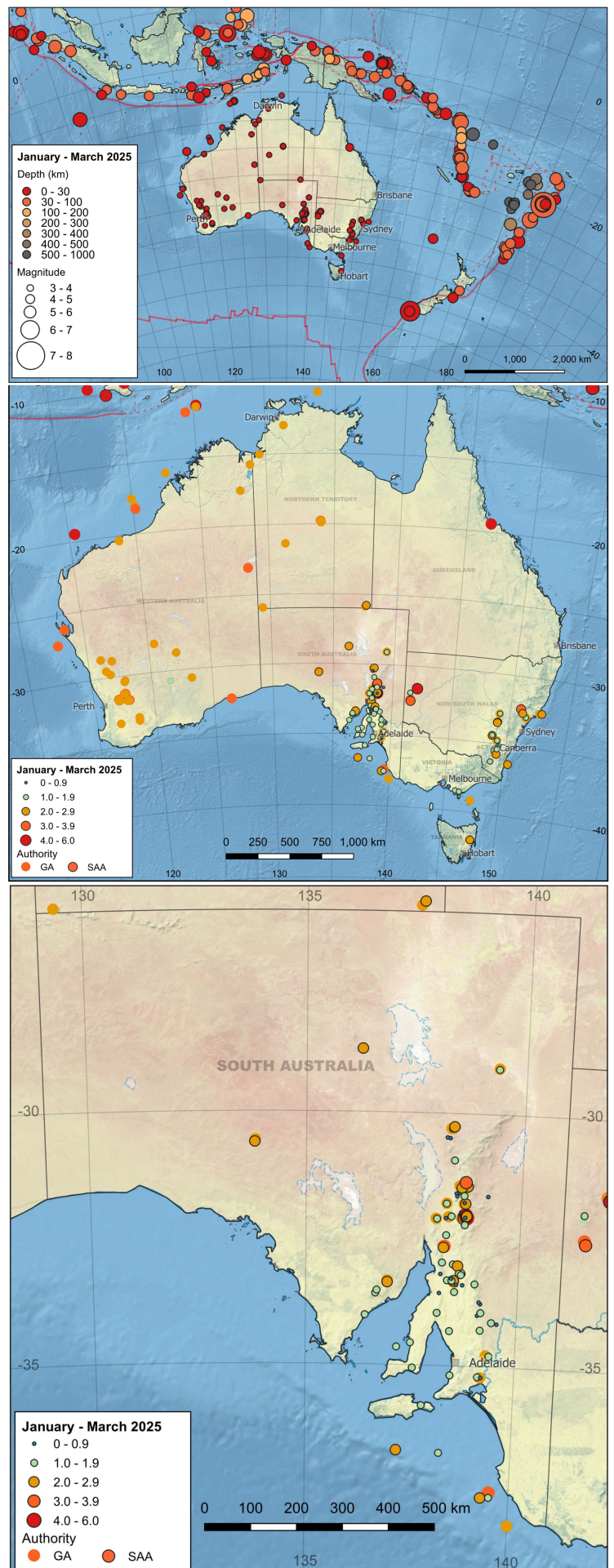
Maps of Earthquakes January to March 2025 (by Clive Collins)

The plate boundaries around continental Australia are the thin red solid lines (USGS version). We have plotted everything above ~M4.5 on the plate boundary but above M3 intraplate. These limits are about what is practicable with the existing network.

The section from the South Island of NZ to Macquarie Island extending west to south of Australia is quiet but has experienced several major earthquakes in recent decades.

There were no surprises in the Australian epicentral locations. Tasmania was quiet, a single small earthquake on the east coast. In Queensland too just a single coastal earthquake. The largest earthquake on shore in the quarter was the M4.8 earthquake near Hawker SA. Seven earthquakes were M4 or greater so there was potential for minor non-structural damage but no damage was reported from any Australian earthquake.

In South Australia small earthquakes occurred in all the usual zones; in the Southeast offshore Robe and Beachport, most of the epicentres



were as usual through the Mt Lofty and Flinders Ranges, others occurred on the Eyre Peninsula coincident with the southeastern margin of the Gawler Block.

Two other earthquakes struck the east and west ends of the NT/SA border areas, perhaps late aftershocks of large earthquakes there. Occasional earthquakes continue near Tennant Creek, NT, site of an incredible mainshock/aftershock sequence in 1988. The seismograph network is less dense in WA but the southwest and northwest of the State were active.

Large NZ earthquake

On Tuesday afternoon, 25 March, at 2:43PM a magnitude M6.8 earthquake occurred some 167 km west of Rakiura Stewart Island. It generated a small tsunami.

NEMA issued a national advisory warning people on the West Coast of the South Island from Milford Sound to Puysegur Point that they might experience strong and unusual currents and unpredictable surges at the shore. See: civildefence.govt.nz

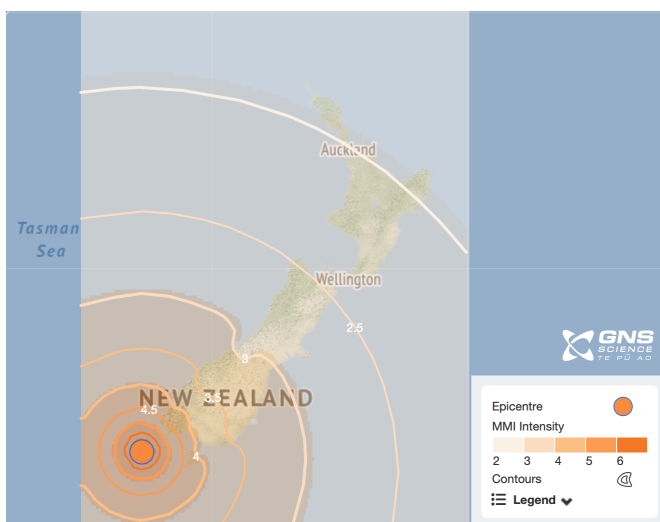
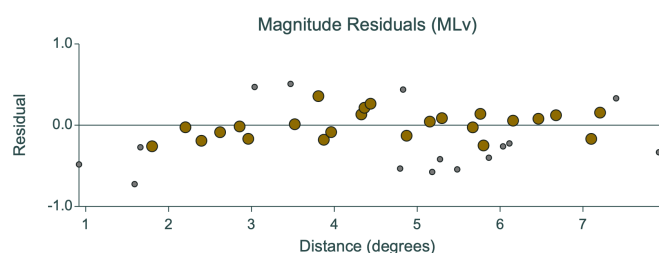


Figure Felt area of the M6.8 earthquake northwest of the Snares Islands NZ by GNS.

GNS's coastal sea level gauge in southwest Fiordland recorded a 10 cm tsunami, waves



continuing for 90 minutes after the earthquake.

GNS also recorded 23 aftershocks by 8:00am the next morning, the largest was a M5.1 event at 10:01pm on Tuesday 25 March.

A GNS isoseismal map is shown above, shaking was felt throughout the islands of New Zealand.

New Zealand seismologists seem to have largely sorted out previous problems with magnitude assessment, judging by the plot of magnitude residuals below. Even so the scatter is ± 0.5 units, as it was in Richter's time.

Lessons from Tohoku: 14 years since the giant earthquake

<https://www3.nhk.or.jp/nhkworld/en/news/backstories/3869/>

#~:text=Disaster%2Dresponse%20system%20must%20be,or%20relief%20centers%20were%20destroyed. Monday March 10, 2025

The Great East Japan Earthquake of 2011 was the strongest jolt ever recorded in Japan and the fourth-largest globally since the start of the 20th century. It triggered a deadly tsunami and nuclear meltdowns.



Figure Rupture of the Great East Japan earthquake, 2011.

Fourteen years on, Japan is stepping up its efforts to tackle the risks, coming up with new measures based on lessons learned from the disaster.

M 9.0 mega quake "unpredictable"

The magnitude 9.0 tremor on March 11th at 2:46 PM, shook the whole of Japan. It left more than 22,000 people missing or killed — including those whose deaths were indirectly caused by the disaster. Hundreds of thousands more were forced to abandon their homes.

The jolt generated tsunami waves more than ten meters high, which devastated Japan's Pacific coast and slammed into the Fukushima Daiichi nuclear power plant, causing meltdowns in three reactors. The disaster was triggered by a massive fault rupture that stretched 450 km long and 200 km wide off Japan's Pacific coast. The fault was rupturing for around three minutes.

Fukushima earthquake, 23 January 2025

According to JMA, a magnitude 5.2 earthquake shook Fukushima prefecture and surrounding areas. The epicentre of the quake, which occurred at 2:49 a.m. (18:49 p.m. UTC), was located 4 km inland below Aizu in Fukushima Prefecture.

The quake was felt in Fukushima, Tochigi, Gunma and Niigata prefectures. No problems were detected

at the Fukushima Daiichi or Daini nuclear power plants following the quake, according to the the plant operator Tokyo Electric Power Company Holdings Inc. (Tepco).

Relative seismicity of Norway and South Australia with similar tectonic settings

It is interesting to sometimes show a comparison between earthquakes in other countries with similar tectonics to Australia - this time we chose Norway.

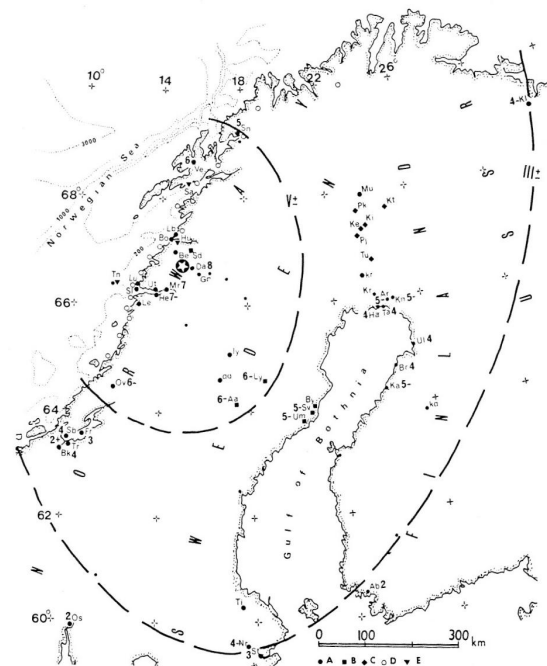
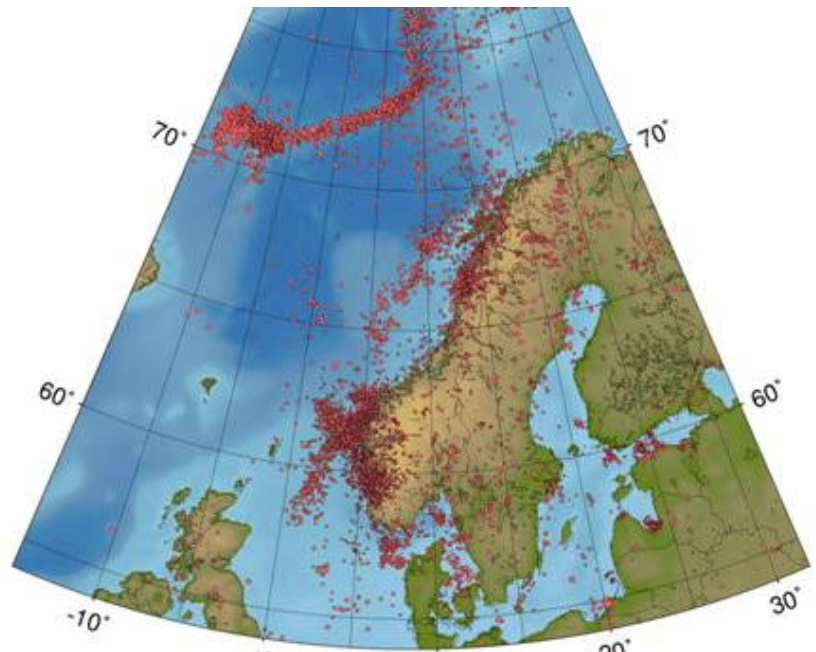
Norway is located on the Eurasian Plate about 900 km from the nearest plate boundary along the mid-Atlantic Ridge where sea-floor spreading causes "ridge-push" stress. This stress is thought to be the primary cause of earthquake activity affecting Norway.

The two largest earthquakes in Norway's recent seismic history were along the coast. One in 1904 along the Oslo fjord measured 5.4 on the Richter scale. The largest since 1800 measuring 6.2 (Ambraseys, 1985) occurred in 1819 on the coast near Bodø (lower figure opposite). A large exposed portion of the Sturoagurra fault located in Northern Norway in Finnmark demonstrates a fault scarp about 9m high which most likely resulted from an earthquake with a magnitude $M \geq 7$ about 6-9000 ya. As recently as January 1996 a magnitude 4.0 earthquake occurred near this same fault.

The map opposite, modified from the University of Washington, shows the seismicity of Norway and the nearest tectonic plate boundary through the mid-Atlantic Ocean.

The relative areas of Norway and South Australia are 375,207 km² and 983,482 km², a factor of 2.6, and South Australia is about 1500km from the mid-ocean rift plate boundary in the Southern Ocean.

The tectonic, historical and paleo-seismological records of South Australia and Norway are similar warranting a closer comparison of seismicity and computed hazard.



Figures Seismicity of Norway (University of Washington and felt area of the largest earthquake in Norway since 1800 (from Ambraseys, 1985)

It is time for Australian governments, universities and organisations such as AEES and SAA to enter discussions about the possible impact on our research of the major changes in the World order happening now. Will the USGS continue to be able to provide the current level of support they provide with seismograph networks information, data centres and data exchange that we have enjoyed since WWII, the strategic arms limitation agreements and 1956/57 International Geophysical Year? Will the US continue to support the ISC and joint monitoring facilities such as the Alice Springs array, NWA0 etc? How can/should we adapt?

How big was the B.C. Canada earthquake? Why the magnitude number changed.

By Denise Ryan
Feb 24, 2025

So just how big was last Friday's earthquake? Depending on what source you read — and when you read it — the magnitude of the Sunshine Coast earthquake that rattled southwest B.C. shortly before 1:30 p.m. on Friday ranged from 4.7 to 5.4.

According to Natural Resources Canada, the official magnitude of the quake ended up at 4.7.

Differing numbers are common in the first hours after an earthquake is felt, said Brent Ward, a professor in the earth sciences department at SFU and co-director at the centre for natural hazards research.

In the case of Friday's quake, the initial differing numbers may have had something to do with its remote location, an unpopulated mountainous area in the Tetrahedron Provincial Park on the Sunshine Coast.

"The first numbers are calculated through an automated program," said Ward. "The computer gets information from different seismic stations and does a very basic calculation to determine the magnitude."

Seismologists then look at the data and do their own calculations.

"There would be several people doing the calculations to make sure it's correct," said Ward.

"It's complicated," said John Cassidy, a seismologist with Natural Resources Canada, who was in a Zoom meeting at his home in Cordova Bay on Vancouver Island when he felt the quake.

Larger earthquakes — 4.5 and upwards — are more complicated to measure, because they cover a larger area and generate different types of waves, said Cassidy.

"Large earthquakes generate rapid, high-frequency shaking, the really rapid up and down shaking people feel, and more long period energy, which is felt as slow, rolling shaking."

Initial magnitudes may be based on data from a relatively small number of stations, said Cassidy. 10-second wake-up call: Earthquake sparks urgent inspections of B.C. infrastructure.

"For this recent earthquake on the Sunshine Coast, the very initial magnitude estimate based on those P-waves was a 5.1. Over the initial few hours, as you add in more data from different distances, folding in more information, and the magnitude may change.

There are different magnitude scales used to measure earthquakes, ML (local magnitude, up to 600 kilometres away), MB (body wave magnitude) and MS (surface wave magnitude), and a more uniformly applicable measure called MW (moment magnitude).

"For this earthquake, the local magnitude was 5.1, but the magnitude we typically use as seismologists is moment magnitude, or MW, based on longer period energy in addition to high frequency shaking, using the entire wave form to get a better estimate on how much energy is released during an earthquake," said Cassidy.

MW can differ from ML and is considered the most reliable measure. The MW, or moment magnitude, of Friday's earthquake was 4.7, said Cassidy.

First measurements of magnitude are an estimate calculated by the online system within minutes. Then analysts look at the wave forms, the data from seismic stations further away, and consider "felt reports" to calculate and refine the magnitude.

"Felt reports," provided by people in the region are not as precise but are very important, said Cassidy. Anyone who felt the earthquake is encouraged to provide details through the Canada's Natural Resources website's [Did You Feel It](#) link.

"Reports on how you felt it and where you live are really, really useful to scientists," said Cassidy. Shaking across the region is varied, depending on whether you live on solid ground, or areas built on deep layers of sediment and silt.

"We have many more people feeling the shaking than we have seismometers measuring it, and it can help give us a more detailed pattern of how waves travel to different areas, to Vancouver or Richmond or Surrey," said Cassidy.

Friday's earthquake was a "relatively shallow crustal earthquake within the North American Plate," said Cassidy, with a fault approximately one kilometre long, and movement of only a few centimetres.

Ed. Note there is no mention of how Mw was computed or measured by BC seismologists. Magnitude as originally defined was a measure of the maximum amplitude of the ground shaking relative to a magnitude 3 at 100km. Mw is not that.



Mt Vesuvius - an artistic exhibition

The National Museum of Australia (Canberra) exhibition *Pompeii: Inside a Lost City* was a great spectacle that deserved wider distribution than just our capital city. The creators had done their homework even down to the recent revision of the date of the eruption in AD79 and the pre-eruption earthquakes that should have been a warning for citizens of Pompeii and Herculaneum to depart (easy in hindsight). The footage, explanatory notes and spectacular reenactment of the eruption were very professionally done, as was the publication produced by the NMA for the occasion, printed in Melbourne, the cover by Andy Warhol.



There is even mention of some Queensland volcanoes in the magazine which was what convinced me to buy a copy. The crater at Vesuvius was the first I ever climbed into, back in July 1970, and it started a great adventure.

The eruption reminded me of the recent Tongan volcanic eruption in its size, sending an eruption column to 30+km altitude, and causing nuée ardente and even a small tsunami. The difference of course was the number of casualties, though next time it erupts there are likely to be many more. In AD79 there were just 20,000 people living in Pompeii whereas now Napoli boasts about 3 million inhabitants in the vicinity of the volcano. Despite scientific knowledge that Vesuvius is an active volcano humans have extended the built environment right up the flanks of the volcano, the last eruption as late as 1944. Before that it erupted in 1906 when the famous Italian soprano Caruso fled nearby Napoli by boat to San Francisco, arriving there just in time to witness the great earthquake and consequent destruction. He didn't stay.

Question is, will the Italian occupants leave Napoli when the earthquakes start, will South Australians in Mt Gambier be so wise. The South Australian government abandoned earthquake monitoring there, they will not be forgiven when volcanic earthquakes once again rock the Southeast.

Figures Artist impression of the AD79 eruption of Italy's Mt Vesuvius (left) and a photo of the March 1944 eruption of Vesuvius, by Jack Reinhardt.



Santorini Huff and Puff

The site of one of the largest volcanic eruptions and tsunamis in the Mediterranean, Santorini is also Greece's most popular Aegean Isle, attracting an estimated 3.5 million tourists each year. So, when a swarm of thousands of felt earthquakes began, many people evacuated the island but seismologists had no idea what the seismicity portrayed. We aren't good at crystal ball gazing. All you can do is go on the historical record.

The island is just part of the rim of a mostly submerged volcanic caldera created in the last eruptive phase, the Minoan eruption, about 3600 years ago. The most recent eruption was in 1950, just 6 years after the last eruption of Mt Vesuvius.

So strong advice from civil authorities to evacuate the island was probably the best advice, even though now, in retrospect, nothing eventuated, not yet.

Kevin McCue

Col Lynam, SAA Committee member

How I became involved in Seismology



In 1965, I started in the University of Queensland Seismograph Station as a Cadet Technician (trainee Observer) to replace Roslyn Bragg who was about to leave and marry the UQSS technician (Ted Laundon). (Public Service rules of the day.) I received in-house practical training from Senior Observer Paul Gaffy and The Honorary Director, Dr Jack Webb. As a consequence, I received free access in my quest for a degree in Arts (Geomorphology, philosophy and all sorts of fun subjects.).

The records from Charters Towers (CTA) were analysed up there by Jack Millican who mailed his weekly “bulletin” of pic observations, and they were collated with the (BRS) pics, and a weekly bulletin was typed up and distributed globally. Daily event results were sent to USGS on a teletype. That was the daily routine, looking at 6 photographic charts (3 Sprengnether short periods, 3 Benioff long periods) from Mt Nebo, while we still ran photographic records on 2 Milne Shaw and a 7 sec seismograph from the old Tripartite Cyclone tracking station of the 1950’s. The photo developing and fixing in the dark room was my initial duty and didn’t it take your breath away?

The seismograph activity was funded by BMR and served as a “teaching” service. The UQSS was expanded into a supercomputer enterprise, housed in the Centre for QUAKES (Director Prof Peter Mora) and serviced the State Government Contracts for (Wivenhoe Dam and water infrastructure), mainly. Re-organisation and budget cuts saw us morph back into ESSCC. Then, around 1999, the Charters Towers Station was ceded back to BMR as the cost of maintaining the instrument tunnel was deemed too expensive. BRS was running under me as the (Honorary) Director for a while until UQ cut earth

science budgets and the UQSS became unfunded. I maintained it as a volunteer and created an advisory Board of experts that I communicated my promotional activities in order to influence the UQ to re-establish the UQSS. It failed.

In 2002, I was given a redundancy on my 55th birthday. I kept turning up weekly to keep data flowing and then a dilemma occurred with the threatened landfilling of all the UQSS records!! Literally!

I worked on in a volunteer capacity to reorganise the 70 years of seismograms dumped in a room after I threatened to raise the matter as a criminal action under the Archives Act of Queensland that could pursue me as a “curator of records”. I was working as a part-time record keeping clerk and had access to this archival expertise. My parting act was to have catalogued and trans-shipped the seismograms across to the Queensland State Archive, where they live for another day.

As time goes on, I have written and published papers about seismology, thanks to encouraging friends in the Royal Society of Queensland.

'Bang and a rattle': Small earthquake shakes Lake George (NSW)

By Lucy Arundell February 23 2025

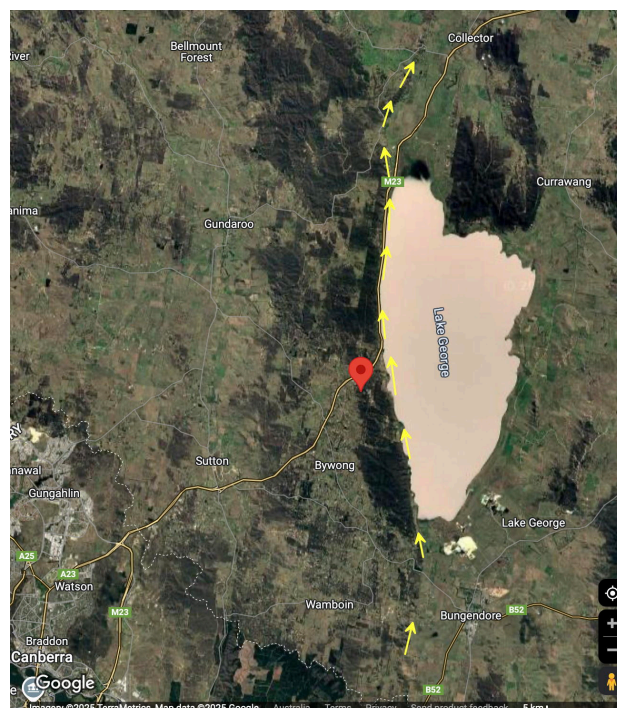


Figure Epicentre relative to the Lake George Fault (approximate location marked by yellow arrows).

Residents living north of Canberra might have felt a tremor on Saturday night when a small earthquake hit Lake George, 30km north of Parliament House.

The earthquake shook at around 8.45 pm on Saturday, February 22, hitting 2.0 magnitude on the Richter Scale with a depth of 3km.

Seismological Association of Australia member Kevin McCue said he and his colleagues recorded the quake on seismographs in and around the ACT, and as far away as Bega. He said locals living in towns around the lake may have felt the tremor.

"It's a small earthquake, so it's only magnitude two," Mr McCue said. "Bywong ... is the closest population so if they'd felt it, they would have felt just a short bang and a rattle and then they would have said, 'Oh, what was that?'"

Geoscience Australia had received 20 reports from people who felt the quake by midday on Sunday, February 23.

Mr McCue said it was unlikely people in northern Canberra would have felt anything. The quake hit along the Lake George fault line, *one of the most active faults in Australia* (KMc - I did not say that).

Meckering WA in the News

Meckering Earthquake: Magnitude 3.8 quake shakes houses in WA town

Lisa Thomas, Perth Now January 19

WA News

A 3.8 magnitude earthquake has rattled houses in WA's Wheatbelt. The earthquake was recorded in Meckering, about 150km from Perth, at 11.12am, with people from Mundaring to Meckering reporting hearing a loud bang and feeling the ground move.

Shire of Cunderdin president Alison Harris said the earthquake had caused some excitement, but there had been no reports of damage. "It seems like the tremors were felt quite widely from Tammin to Kellerberrin and near Bolgart, but we have not heard about any damage," she said.

Cunderdin Museum volunteer Graham Cooper said he heard a loud bang and thought there had been a crash outside. "I didn't feel the ground shake, but there was a loud bang that went on for a few seconds," he said.

Tremors from the earthquake rattled homes in Clackline and Northam more than 50km away. Clackline resident Danielle Cara said she was in her kitchen when her house started to rattle. "I was wiping the kitchen benches, when I heard glass clinking together and the floor started to shake," she said. "I heard a loud rumbling. My first thought was that it was the washing machine... then I realised I

hadn't started the washing machine. So my next thought was oh wow it's an earthquake."

A Department of Fire and Emergency Services spokesperson said there had been no calls related to the earthquake.

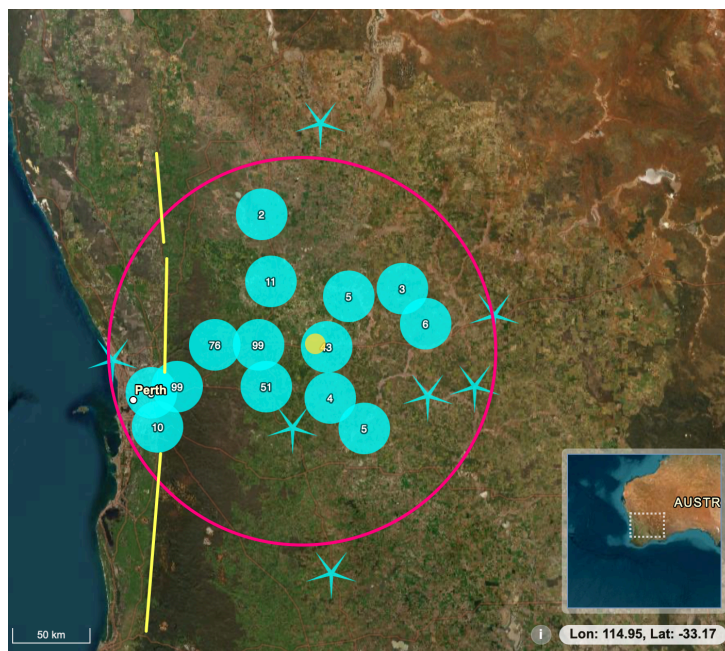


Figure Reports (blue dots and stars) messaged to GA with the epicentre (yellow dot) and Darling Fault scarp added. I have also added the notional felt area (red circle)

ABC Midwest and wheatbelt 19 January

Residents in nearby towns of Northam, Beverley and York also reported hearing rumblings before feeling the earthquake.

Debbie and Steve Barratt

Felt this in York.

Emma Williams

We had a rattling vibration in Kalannie from this.

Brett Taylor

North Kellerberrin as well.

Caitlin Scully

I'm actually pretty sure I may have heard something around then in SwanView, however could of been the airport.

Suzette Kidd

Felt this in Baker's Hill.

Rosemary Madácsi

Heard it in West Toodyay - a very low loud rumbling. I thought it was a train at first.

Ed. Note: Modern reports like this cannot be compared with earthquake reports for historical earthquakes, here and now vs weekly newspapers. Also note: there is no abrupt increase in intensity across the Darling Scarp.

Vale Elaine Fraser

Elaine passed away on her property “Petherick” on 8 August 2024, just a day short of her 89th birthday. While she was known as the local herb lady,



interested in food, health and gardening, she was also one of our most reliable seismograph operators.

It is unclear how Dr David Sutton first came in contact with her and husband Bruce, deciding to



install an instrument on a large granite outcrop on another farm a few kilometers to the north-east, and have Telecom trench a private line to the farm house. A small shed was built outside, starting on 2 August 1978, with the first records received on Friday 10th Feb 1979.

While the whole family helped in operating the station, Elaine's name is the one listed as describing all glitches and malfunctions, so that repairs and adjustments could be made. The messy ink, fine pen adjustments and daily logging she handled in her stride.

Her son Mark writes:

“I remember being allowed to take a couple of days off school (year 11) when the Willalooka Seismograph Station was being built and installed. I am still building things.

Figures Willalooka (WKA) Seismograph 2004.

Seismograph drum in wood panelled green shed and seismometer housing on the side of a large granite outcrop. Map (below) of events located using WKA between 2018 and 2024.

We were excited to know “our” seismometer was one of the most accurate in the group due to its foundation being the granite outcrop. When first switched on, it was quickly discovered that the waves crashing on the Coorong shore in heavy weather showed a reading and had to be tuned out

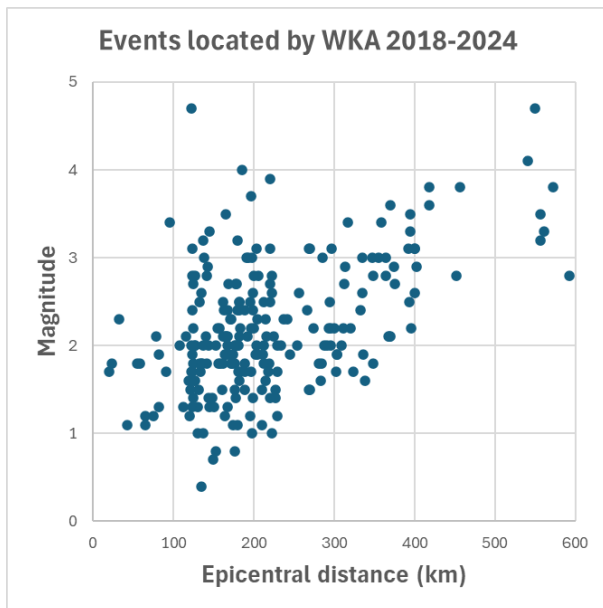
Changing the paper every day became a family tradition and part of planning for holidays. Someone always had to be arranged to change the paper along with feed the chooks and other animals on the farm. I was particularly interested over the years with the time check systems. Initially by tuning into the short wave Australian Time Pip station then watching the line of leds light up and adjust the thumb wheels accordingly. This system was replaced by a simpler system but still required adjustment from time to time.

Most visitors to Petherick received a full tour of the garden. The tour was never complete without a visit to the Seismograph room. I am sure Mum enjoyed the huge surprise most people had as she opened the door and showed them in. Definitely an unexpected contrast to everything around it. Dinner guests were



quite often greeted by “I’m just going to change the Seismograph Paper, would you like to come with me”. Saying Yes to the Willalooka Seismograph Station was a tribute to my Mum’s adventurous spirit.

Those from the team who remember the difficulties reaching the seismometer site through the deep sand tracks on Marapana will be very pleased to know that the new owners have built gravel roadways around the house yard and through the dreaded sand trap gateway that caused almost every regular visitor



to get bogged at least once.

We thank the SA Seismology Team in its various forms over the years for including the Fraser family as part of your family.”

After the Willalooka seismograph was converted to digital in 2011, Elaine changed the little green shed into an art display area. We continued to visit for a cup of tea when repairs were needed. The station is still the most sensitive in the south-east of the state, showing up the activity that happens offshore along the edge of the continental shelf. Gary Gibson once estimated that it could register a magnitude zero event at 100km.

Thank you Elaine
by David Love and Mark Fraser

New Chief Executive for Geoscience Australia 24 January 2025

Media release issued by acting Minister for Resources, the Hon Amanda Rishworth MP.

Experienced public servant and chief executive Ms Melissa Harris PSM* will take up the role of Chief Executive Officer of Australia’s key government geoscience organisation, Geoscience Australia, in February.

Previously a senior executive with Land Use Victoria for more than six years, Ms Harris was appointed Chief Executive and Registrar of Titles in 2020. She received a Public Service Medal in 2023 for outstanding public service and transformation of geospatial, planning and land administration in

Victoria. Acting Minister for Resources the Hon Amanda Rishworth MP noted Ms Harris had more than 30 years of experience leading change and innovation in land administration and planning.

“In her new role, Ms Harris will oversee the Government’s record \$3.4 billion investment through Resourcing Australia’s Prosperity, which will help find those economy-making discoveries that will support future generations of Australians,” Minister Rishworth said. “Importantly, she will also drive Australia’s engagement with the United States-led Landsat Next satellite program, building on more than 50 years of collaboration with the United States on Earth observation and data.”

Minister Rishworth thanked outgoing CEO Dr James Johnson, who joined Geoscience Australia in 2006 after 20 years in the mineral and exploration industries to serve eight years as its CEO.

*Public Service Medal

The Seismological Association of Australia Inc.

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Membership of the SAA is open to anyone interested in earthquakes and applies for the calendar year (January through to December)

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