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MEDIA RELEASE

Why Darwin residents feel earthquakes in the Banda Sea

For release: 23 January 2009

Another large earthquake in the Banda Sea region this morning has prompted questions as to why Darwin residents feel these events so strongly.

Residents were woken by rattling windows and ground shaking caused by a 6.2 magnitude earthquake which occurred at 5:46am local time, 590km to the north-west of Darwin, at an approximate depth of 110km.

"Darwin experiences more than its fair share of earthquakes that originate from the Banda Sea, north of Australia, as the area is regularly shaken by earthquakes above about magnitude 5", said Clive Collins, Senior Seismologist with Geoscience Australia. "The Banda Sea lies near the plate boundary between the Australian and Eurasian tectonic plates. This makes it part of the 'ring of fire' that encircles the Pacific, where the majority of the world's earthquakes and volcanic eruptions occur".

The Australian continent is part of the Indian-Australian plate which is moving slowly north-east at around 65mm each year, and diving under (or subducting) the Banda Sea micro-plate. As these plates are moving against each other, stress is building up in the surrounding rocks. At some point in time, this stress is released suddenly as movement along fault-lines, creating an earthquake.

"Residents in our northern capital feel earthquakes from this plate movement that are not normally felt at such distances from the epicentre of an earthquake. We believe this is due to the orientation of the fault-lines under the Banda Sea, and the geology between there and Australia which allow seismic waves to travel very efficiently in our direction", said Mr Collins.

The biggest earthquake recorded in this region was in 2005 when Darwin residents felt the effects of a 7.1 magnitude event some 660km away. Events have been recorded lasting up to two minutes, but none have caused significant damage or injury in Australia.

Information from the public provides valuable information about the impact of any earthquake. To fill out an earthquake report, and see a map showing the location of this earthquake, visit www.ga.gov.au and click on the *Recent Earthquakes* link.

For more information or to arrange interviews, please contact:
Geoscience Australia 24 hour Media Hotline 1800 882 035