

- 1). The subject of study and the applicant are considered suitable by the Management Committee of the NZNSEE. All applications must be completed by the person who will undertake the research;
- 2). Only one Scholarship will be awarded to any applicant in any given financial year;
- 3). The Scholarship is awarded for twelve months. Multi-year applications will not be considered, but all applicants can reapply each year;
- 4). On completion of the research project, a research paper is presented that is suitable for publication in the *Bulletin of the New Zealand National Society for Earthquake Engineering*. It is normal practice to withhold part of the Scholarship until this condition is fulfilled.

31st January is the annual closing date for applications which should be sent to:

The Administrative Secretary,
New Zealand National Society for Earthquake Engineering,
P O Box 48-046,
Silverstream,
Upper Hutt.

PUBLICATIONS

New Zealand Strong-Motion Data on CD-ROM.

Strong-motion data recorded in New Zealand is now available on CD-ROM from the Institute of Geological & Nuclear Sciences. The Institute, and predecessor groups in the DSIR, have operated a NZ wide network of accelerographs and acceleroscopes since the mid-1960's. Currently there are 266 recording sites in a blend of ground and structural recording locations. Thirty percent of the accelerographs in the network are digital and the remainder are film-recording mechanical-optical units designed and manufactured in NZ.

More than 4000 recordings have been obtained during the 30+ years of recording. The 600 largest have been fully processed to give instrument-corrected and filtered time histories (accelerations, velocities, displacements) and response spectra.

For each of the 600 processed records, three 3-component data files containing:

- raw acceleration time-histories
- fully processed time-histories (accelerations, velocities and displacements)
- response spectra

Support files giving information on the formats of the processed data files, locations of recorded events, locations, site information and ground class classifications for the recording sites, a listing of peak accelerations for all recordings and a list of related publications.

The cost of the CD-ROM is NZ\$300 (includes GST, p & p). The CD is available from Jim Cousins, IGNS, PO Box 30 368, Lower Hutt, New Zealand.

Fax: +64 4 570-1440

email: j.cousins@gns.cri.nz

WORLD EARTHQUAKES OF MAGNITUDE 6.0 AND GREATER January to March 1999.

Data from the U.S. National Earthquake Information Service.

Date	Lat.	Long.	Depth (km)	Mag.	
Jan 12	26.75N	140.17E	441	6.1	Bonin Islands region.
Jan 12	5.441S	151.68E	47	6.0	New Britain region.
Jan 16	56.26N	147.32W	10	6.0	Gulf of Alaska.
Jan 24	30.63N	131.08E	33	6.4	Kyushu, Japan. Felt on Tanegashima and at Kagoshima.
Jan 24	21.14S	174.65W	33	6.1	Tonga Islands.
Jan 24	26.50S	74.462E	10	6.3	Mid Indian Ridge.
Jan 25	4.427N	75.749W	17	6.2	Colombia. At least 883 people confirmed killed, some missing, over 3626 injured, 250,000 homeless, extensive damage in the Armenia-Calarca-Pereira area. Landslides blocked a number of highways in the epicentral area.
Jan 28	52.91N	169.15W	67	6.6	Fox Islands, Aleutian Islands. Felt strongly at Nikolski. Also felt at Unalaska, Dutch Harbor and Akutan.
Jan 28	4.541S	153.57E	97	6.4	New Ireland region, P.N.G.

Feb 03	20.38S	174.23W	33	6.3	Tonga Islands.	Feb 25	51.59N	104.88E	10	6.1	Lake Baykal region, Russia. Felt (V) at Irkutsk, (IV) at Talay and (III) at Zakamensk.
Feb 05	12.56S	166.94E	213	6.0	Santa Cruz Islands.						
Feb 05	47.52N	147.14E	408	6.0	Northwest of Kuril Islands. Felt (II JMA) in the Hiroo area, Hokkaido; felt (I JMA) along the southeast coast of Hokkaido. Also felt (I JMA) in eastern Aomori and northern Iwate Prefectures, Honshu. Felt at Misawa Air Base.	Mar 02	35.59N	141.76E	35	6.1	Near East coast of Honshu, Japan. Felt (I JMA) in northern Chiba and parts of of Fukushima and Ibaraki Prefectures.
Feb 06	19.20N	121.30E	33	6.0	Philippine Islands region.	Mar 04	28.38N	57.19E	33	6.6	Southern Iran. One person killed at Kerman and at least 517 houses damaged or destroyed in the Kerman area. Felt strongly in the Bam, Baft, Kerman, Rafsanjan and Zehmakan areas. Also felt at Dubai, United Arab Emirates.
Feb 06	12.802S	166.65E	90	7.4	Santa Cruz Islands.						
Feb 11	34.75N	69.64E	33	6.0	Afghanistan. Sixty people killed, at least 500 people injured and at least 7000 homes destroyed in Maidan Shahr area. Also felt at Islamabad and Peshwar Pakistan.	Mar 04	5.359N	11.79E	33	7.1	Celebes Sea. Minor damage (V RF) at Zamboanga. Felt (IV RF) at Cagayan de Oro; (III RF) at Cotabato and General Santos; (II RF) at Dipolog; (I RF) at Itoilo, Kidapawan and Surigao, Mindanao, Philippines. Also felt on Basilan and Negros, Philippines.
Feb 13	3.626S	144.85E	33	6.3	Near N coast of New Guinea, PNG.						
Feb 14	15.52S	167.95E	33	6.0	Vanuatu Islands.						
Feb 22	21.42S	169.67E	33	6.5	Loyalty Islands region.						
Feb 22	24.13N	122.67E	33	6.1	Taiwan region. Felt (III JMA) at I-lan; (II JMA) at Hua-lien and Taipei; (I JMA) at Chia-i, kao-hsiung, Tai-chung, Tai-nan and Tai-tung. Also felt (I JMA) on Iriomote-shima and Yonaguni.	Mar 07	15.83S	179.49W	33	6.2	Fiji Islands region.
						Mar 08	52.07N	159.57E	33	6.9	Off East coast of Kamchatka. Felt (VI) at Petropavlovsk.
Feb 23	0.150N	119.66E	33	6.2	Minahassa Peininsula, Sulawesi.	Mar 18	41.13N	143.00E	42	6.1	Hokkaido, Japan. Felt (III JMA) in eastern Aomori and Iwate Prefectures; (II JMA) in northern Miyagi and other parts of Aomori and Iwate Prefectures, Honshu. Felt (II

					JMA) in parts of southern Hokkaido.				Felt in Wellington.		
Mar 20	51.57N	177.64W	50	6.9	Andreanof Islands, Aleutian Is. Felt strongly on Adak and Amchitka.	Mar 18	38.59S	177.57E	45	5.0	39 km WNW of Gisborne. Felt from East Cape to Napier, maximum intensity MM5 near Wairoa.
Mar 28	30.55N	79.424E	10	6.6	Xizang-India border region. At least 96 people killed, 300 injured, extensive damage and landslides in the Chamboli-Rudraprayag area, India. Felt in much of far south as Kanpur. Also felt western Nepal and southern China.	Mar 23	37.65S	177.22E	143	5.7	40 km NNE of Whakatane. Felt along the East coast of the North Island as far as south as Wellington.
Mar 29	41.27S	171.94E	12	4.2						4.2	15 km W of Karamea. Felt in Westport.
Mar 31	6.141N	82.69W	10	6.4	South of Panama.						

SIGNIFICANT NEW ZEALAND EARTHQUAKES January to March 1999.

The locations of these earthquakes are preliminary as final analyses have not been completed.

Date	Lat.	Long.	Depth (km)	Mag.	
Jan 03	41.04S	174.53E	54	5.2	33 km NW of Wellington. Felt from Wanganui to Seddon, maximum intensity MM5.
Jan 18	40.08S	177.35E	33	4.4	64 km SE of Wellington. Felt Hawkes Bay region.
Jan 19	40.06S	177.29E	12	4.2	58 km SE of Hastings. Felt Hawkes Bay region.
Jan 20	41.76S	174.58E	33	4.0	54 km SSW of Wellington.
Jan 22	41.75S	174.40E	21	4.6	45 km SE of Blenheim. Felt in Blenheim.
Jan 25	41.48S	174.46E	17	4.1	33 km SW of Wellington.