

STATUS REPORT – to be presented to the Intelligence Team by 1200hrs daily.

Event: Christchurch Earthquake		Section/Function/agency:
Date: 16/03/2011	Time: 1200	Science Liaison Team
Operational Period:		Originator Record #: 018

Current situation (incidents, action taken, resource status, personnel numbers etc)

Earthquake Activity & Deformation:

- Appendix A illustrates the magnitude and frequency of aftershocks from 22 February to 16 March 2011.
- Appendix B illustrates the number of aftershocks with magnitude >3.0 since 22 February.
- Appendix C shows a comparison of vertical and horizontal ground shaking for the Sept 2010 and Feb 2011 earthquakes.

Landslides:

- Most of the geotechnical investigations underway are concentrating on assessment of rockfall hazard and remedial options. Some remedial work is already underway, and is being coordinated with EQC.
- Monitoring of tension cracks and potential landslides continues, including Glendever Rd, Kinsey Tce, Vernon Tce and Egnott Heights. Data from the landside sites has been “regionally filtered” to remove plate tectonic motions and “common mode noise” from their time series.
- The systematic mapping of landslide, rockfall and other slope-related ground damage using the high resolution aerial photography has been completed and a QA check of the data is now being carried out.
- GNS is compiling a report on rockfalls generated by the earthquake, to provide calibration data for subsequent rockfall analysis, using the actual mapped rockfall events.

Liquefaction:

- T&T teams are continuing to work through the eastern suburbs, mapping land damage property by property. They have also started the ‘EQC land damage assessments’ in some areas, and expect to run these two tasks concurrently until the mapping is complete.
- UC team continues to work in the Oxford terrace area west of Fitzgerald bridge, with special focus on evidence of lateral spreading, liquefaction and damage to residential properties.

Social Science:

- *International liaison:* Local and international (EERI) social science researchers met yesterday to discuss information sharing, and the potential for future collaboration.
- *Lifelines meeting:* Local researchers are meeting with Christchurch Lifeline providers today to discuss current and future research needs, and to coordinate a future visit (4th-10th April) by international Lifeline researchers.

- *TEC meeting*: The Natural Hazards Platform Social Science theme leader (Johnston) met today with TEC to discuss the impacts of migration of Canterbury tertiary students to other regions.

Outstanding Issues / Challenges / Problems:

Anticipated Priorities / Activities: (For future operational periods)

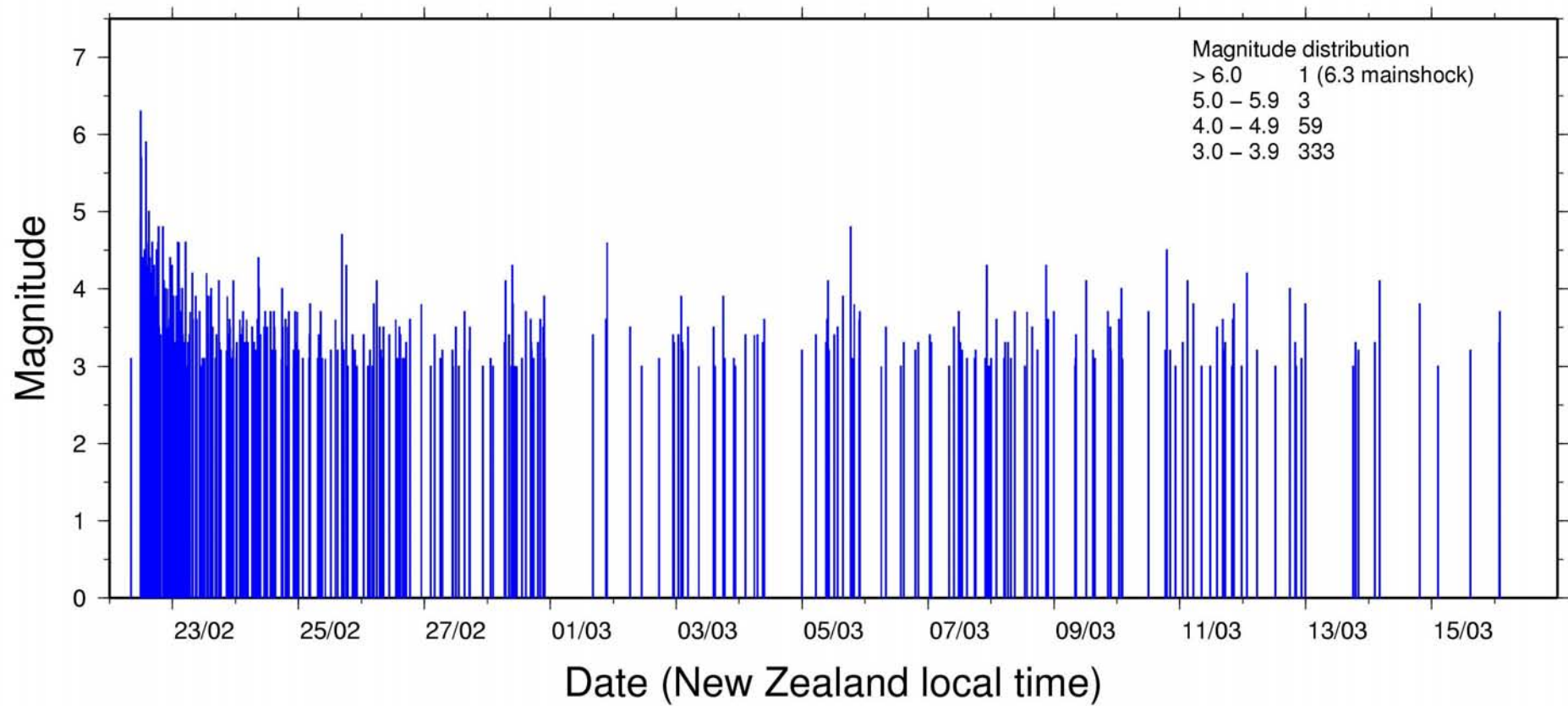
Social Science:

- *Research workshop on the business and economic impacts of earthquake*: The UC Resilient Organisations workshop, which will bring researchers together with local business and community leaders, is confirmed for the 6th April.

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APPENDIX A:

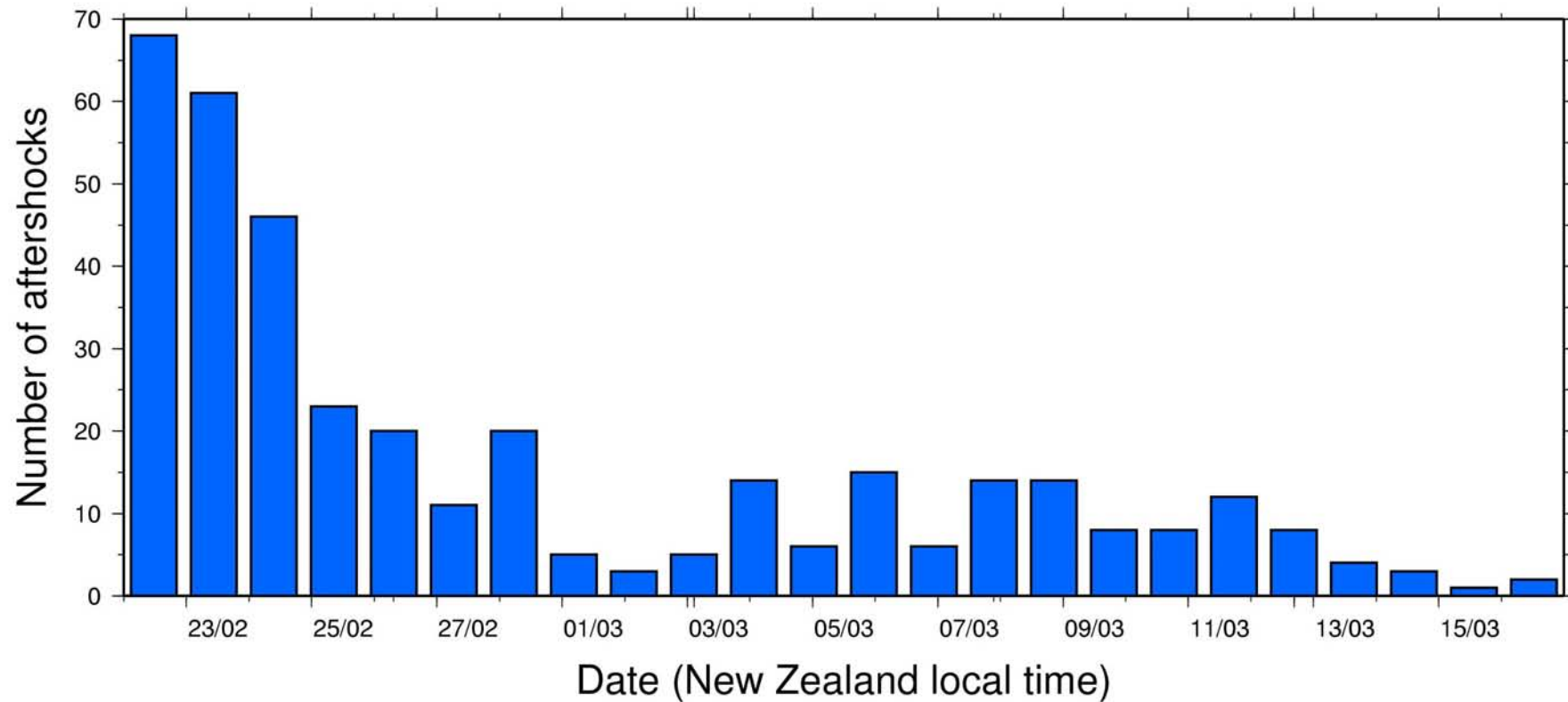
Magnitude and frequency of aftershocks from 22 February to 16 March 2011.



APPENDIX B:

Number of aftershocks per day with magnitude >3.0 since 22 February.

Number of aftershocks per day with $M \geq 3.0$



APPENDIX C:

Comparison of vertical and horizontal ground shaking for the Sept 2010 and Feb 2011 earthquakes.

