

**Major Christchurch Events before February 22:**

These summary results are obtained by loading, processing and filtering the raw recording station outputs for the events below as most of these events are not available as processed records on the GeoNet ftp site. Those events that are available as processed records (2010-09-03-1635 (September 2010 main shock) and 2011-02-21-2351 (February 2011 main shock)) are compared to the processed results below and are within 1% relative error due to minor differences in the processing/filtering. Absent fields indicate that no recording occurred at that station for that event.

PGA values represent the peak horizontal acceleration from either orthogonal direction (%g)

GeoNet Reference	Event Time (Local Time)	Event Time (UTC)	Mag	Depth (km)	CBGS		CCCC		CHHC		REHS		CTV
					PGA (%g)	Distance (km)	PGA (%g)	Distance (km)	PGA (%g)	Distance (km)	PGA (%g)	Distance (km)	Distance (km)
3366146	Sat, Sep 4 2010 4:35 am	2010-09-03-1635	7.1	11	18.86	36	23.81	39	21.38	37	26.28	38	38
3366155	Sat, Sep 4 2010 4:56 am	2010-09-03-1656	5.3	8	0.29	32	-	34	-	32	1.01	33	33
3366230	Sat, Sep 4 2010 7:56 am	2010-09-03-1956	5.2	7	2.74	20	3.61	22	2.81	21	6.89	22	22
3366310	Sat, Sep 4 2010 11:12 am	2010-09-03-2312	5.3	12	0.81	28	1.21	31	-	29	-	30	30
3366313	Sat, Sep 4 2010 11:14 am	2010-09-03-2314	5.3	6	1.02	36	1.21	39	-	37	-	38	38
3366452	Sat, Sep 4 2010 4:55 pm	2010-09-04-0455	5.4	10	-	53	1.59	55	-	53	2.16	54	54
3367742	Mon, Sep 6 2010 11:24 pm	2010-09-06-1124	5.2	9	1.71	19	2.82	21	2.11	20	5.65	20	21
3367749	Mon, Sep 6 2010 11:40 pm	2010-09-06-1140	5.4	9	1.92	59	4.73	61	3.17	60	7.40	61	61
3367832	Tue, Sep 7 2010 3:24 am	2010-09-06-1524	5.4	15	1.85	33	3.73	35	2.81	34	6.28	35	35
3368445	Wed, Sep 8 2010 7:49 am	2010-09-07-1949	5.1	6	15.79	7.9	25.40	5.8	24.57	7.0	13.53	7.7	6.5
3382676	Mon, Oct 4 2010 10:21 pm	2010-10-04-0921	5.0	12	1.64	13	2.91	15	1.84	14	4.27	15	15
3388384	Wed, Oct 13 2010 4:42 pm	2010-10-13-0342	5.0	15	1.10	16	1.99	18	1.43	17	3.34	18	18
3391440	Tue, Oct 19 2010 11:32 am	2010-10-18-2232	5.0	9	7.30	12	17.51	12	10.43	12	9.04	13	13
	Sun, Dec 26 2010 10:30 am	2010-12-25-2130	4.9	5	35.54	2.1	22.36	1.7	25.49	1.4	24.40	2.7	1.9
3450113	Thu, Jan 20 2011 6:03 am	2011-01-19-1903	5.1	10	2.10	11	5.28	12	3.35	11	3.38	13	12
3468575	Tue, Feb 22 2011 12:51 pm	2011-02-21-2351	6.3	5	53.06	11	49.31	8.5	36.73	9.8	71.82	10.4	9.3

Epicentral distances are calculated for each of the four GeoNet CBD stations (CBGS, CCCC, CHHC and REHS) as well as for the CTV site. These distances are calculated based upon the following informations:

Site	GPS co-ordinates
CBGS	43.53101°S, 172.61975°E
CCCC	43.538085°S, 172.647427°E
CHHC	43.535929°S, 172.627523°E
REHS	43.52361°S, 172.63502°E
CTV	43.532611°S, 172.642347°E

The earthquake epicentre information is obtained from the GeoNet website for all events other than the Boxing Day 2010 earthquake, which was obtained from the Canterbury Quake Live website as it was the only publicly accessible epicentral location available at the time of compiling this list.

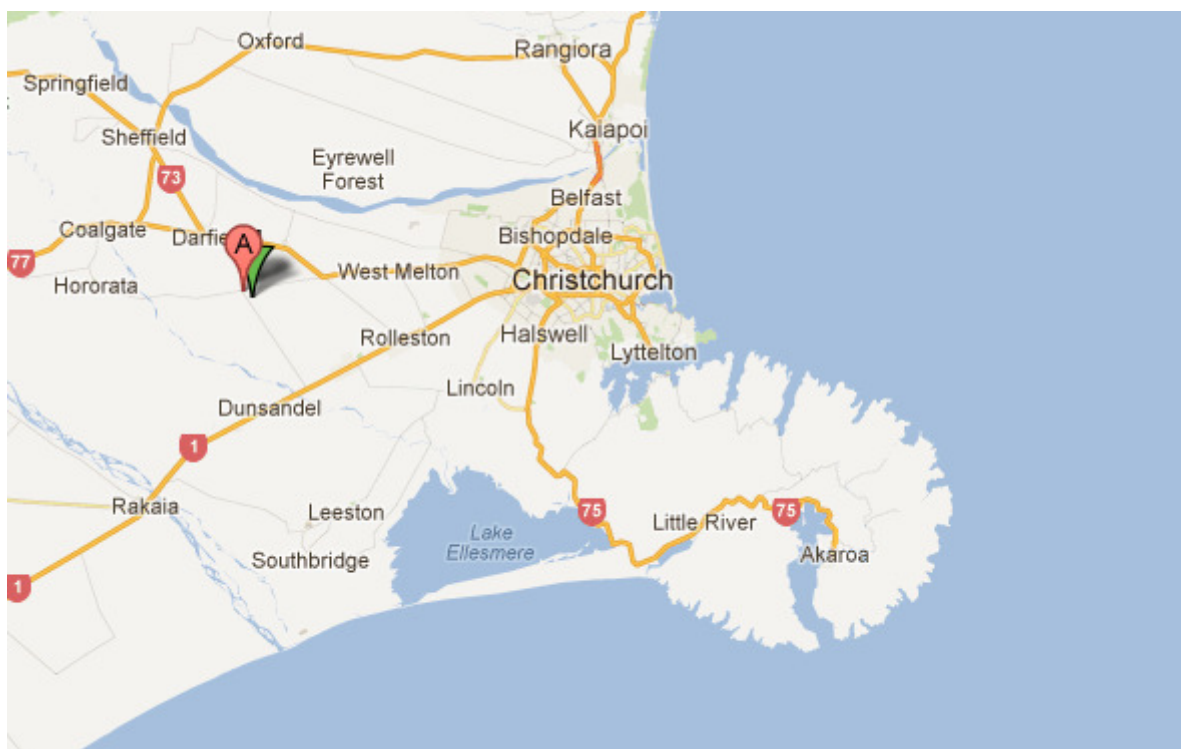
GeoNet Reference	Event Time (Local Time)	Event Time (UTC)	Mag	Depth (km)	Epicenter location
3366146	Sat, Sep 4 2010 4:35 am	2010-09-03-1635	7.1	11	43.55°S, 172.17°E
3366155	Sat, Sep 4 2010 4:56 am	2010-09-03-1656	5.3	8	43.56°S, 172.23°E
3366230	Sat, Sep 4 2010 7:56 am	2010-09-03-1956	5.2	7	43.55°S, 172.37°E
3366310	Sat, Sep 4 2010 11:12 am	2010-09-03-2312	5.3	12	43.53°S, 172.27°E
3366313	Sat, Sep 4 2010 11:14 am	2010-09-03-2314	5.3	6	43.54°S, 172.17°E
3366452	Sat, Sep 4 2010 4:55 pm	2010-09-04-0455	5.4	10	43.54°S, 171.97°E
3367742	Mon, Sep 6 2010 11:24 pm	2010-09-06-1124	5.2	9	43.57°S, 172.39°E
3367749	Mon, Sep 6 2010 11:40 pm	2010-09-06-1140	5.4	9	43.59°S, 171.89°E
3367832	Tue, Sep 7 2010 3:24 am	2010-09-06-1524	5.4	15	43.65°S, 172.24°E
3368445	Wed, Sep 8 2010 7:49 am	2010-09-07-1949	5.1	6	43.58°S, 172.69°E
3382676	Mon, Oct 4 2010 10:21 pm	2010-10-04-0921	5.0	12	43.56°S, 172.46°E
3388384	Wed, Oct 13 2010 4:42 pm	2010-10-13-0342	5.0	15	43.58°S, 172.43°E
3391440	Tue, Oct 19 2010 11:32 am	2010-10-18-2232	5.0	9	43.63°S, 172.56°E
	Sun, Dec 26 2010 10:30 am	2010-12-25-2130	4.9	5	43.547970°S, 172.631960°E
3450113	Thu, Jan 20 2011 6:03 am	2011-01-19-1903	5.1	10	43.62°S, 172.55°E
3468575	Tue, Feb 22 2011 12:51 pm	2011-02-21-2351	6.3	5	43.60°S, 172.71°E

**Major Christchurch Events before February 22:**

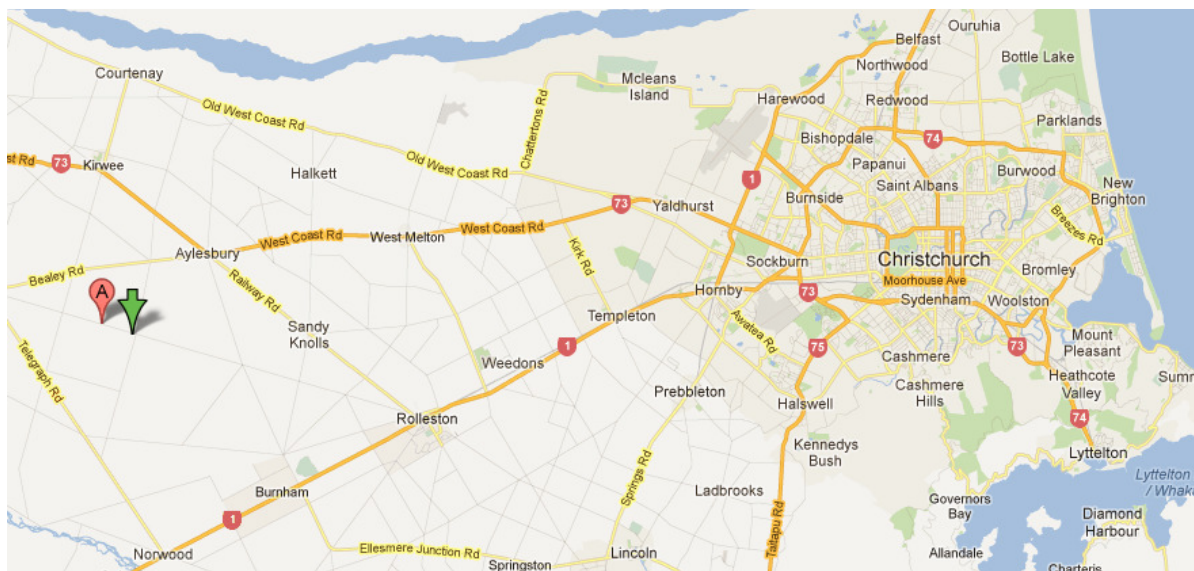
These epicentre locations are derived from the significant Canterbury events list on the GeoNet website at: <http://www.geonet.org.nz/canterbury-quakes/significant.html>

<b>GeoNet Reference</b>	<b>Event Time (Local Time)</b>	<b>Event Time (UTC)</b>	<b>Mag</b>	<b>Depth (km)</b>	<b>Location</b>
3366146	Sat, Sep 4 2010 4:35 am	2010-09-03-1635	7.1	11	Greendale Fault
3366155	Sat, Sep 4 2010 4:56 am	2010-09-03-1656	5.3	8	Greendale Fault
3366230	Sat, Sep 4 2010 7:56 am	2010-09-03-1956	5.2	7	Greendale Fault
3366310	Sat, Sep 4 2010 11:12 am	2010-09-03-2312	5.3	12	Greendale Fault
3366313	Sat, Sep 4 2010 11:14 am	2010-09-03-2314	5.3	6	Greendale Fault
3366452	Sat, Sep 4 2010 4:55 pm	2010-09-04-0455	5.4	10	Greendale Fault
3367742	Mon, Sep 6 2010 11:24 pm	2010-09-06-1124	5.2	9	Greendale Fault
3367749	Mon, Sep 6 2010 11:40 pm	2010-09-06-1140	5.4	9	Greendale Fault
3367832	Tue, Sep 7 2010 3:24 am	2010-09-06-1524	5.4	15	Greendale Fault
3368445	Wed, Sep 8 2010 7:49 am	2010-09-07-1949	5.1	6	Port Hills – Castle Rock/Heathcote Valley
3382676	Mon, Oct 4 2010 10:21 pm	2010-10-04-0921	5.0	12	Templeton
3388384	Wed, Oct 13 2010 4:42 pm	2010-10-13-0342	5.0	15	Weedons
3391440	Tue, Oct 19 2010 11:32 am	2010-10-18-2232	5.0	9	Halswell-Tai Tapu
	Sun, Dec 26 2010 10:30 am	2010-12-25-2130	4.9	5	Brougham Street
3450113	Thu, Jan 20 2011 6:03 am	2011-01-19-1903	5.1	10	Halswell-Tai Tapu
3468575	Tue, Feb 22 2011 12:51 pm	2011-02-21-2351	6.3	5	Lyttelton

3366146 Sat, Sep 4 2010 4:35 am local time (2010-09-03-1635 UTC):



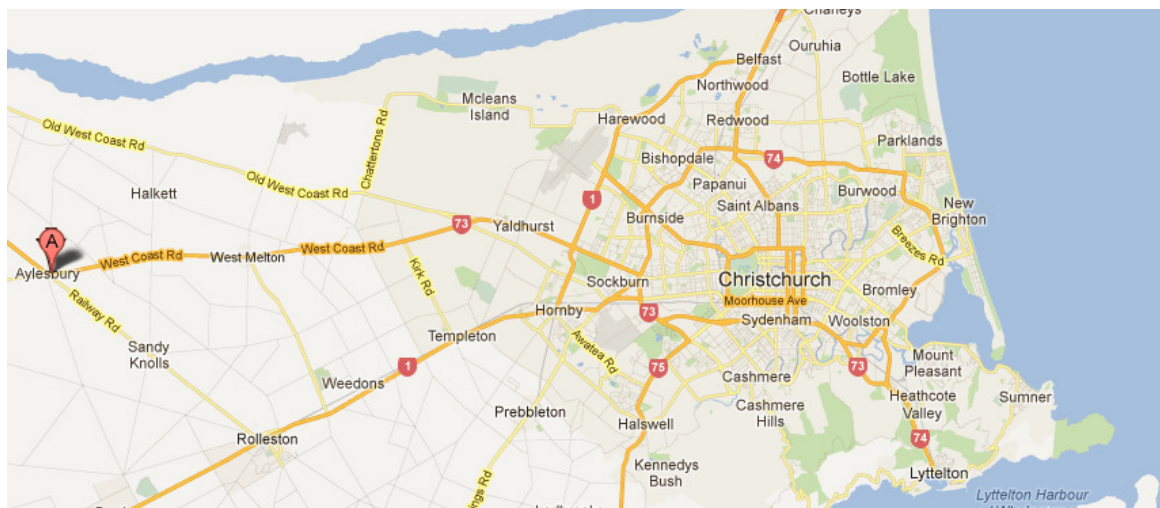
3366155 Sat, Sep 4 2010 4:56 am local time (2010-09-03-1656 UTC):



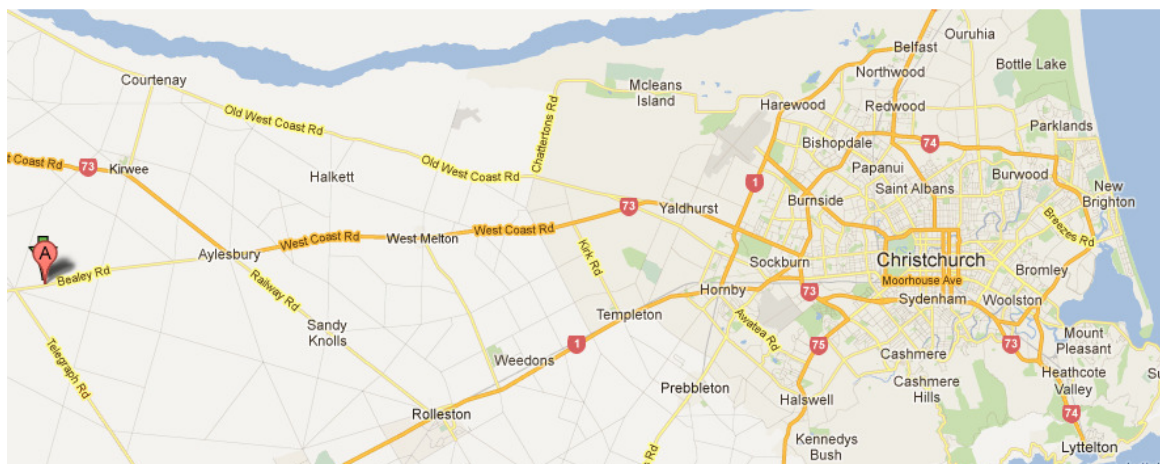
3366230 Sat, Sep 4 2010 7:56 am local time (2010-09-03-1956 UTC)



3366310 Sat, Sep 4 2010 11:12 am local time (2010-09-03-2312 UTC)



3366313 Sat, Sep 4 2010 11:14 am (2010-09-03-2314 UTC):



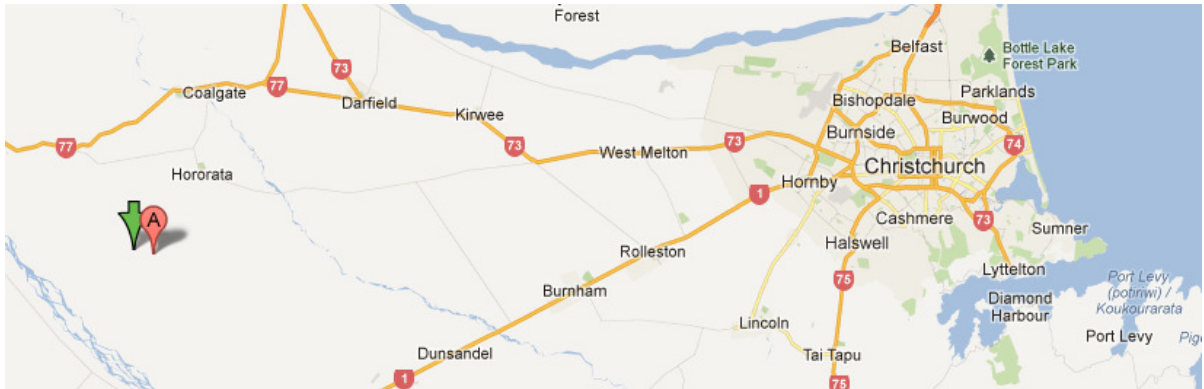
3366452 Sat, Sep 4 2010 4:55 pm local time (2010-09-04-0455 UTC):



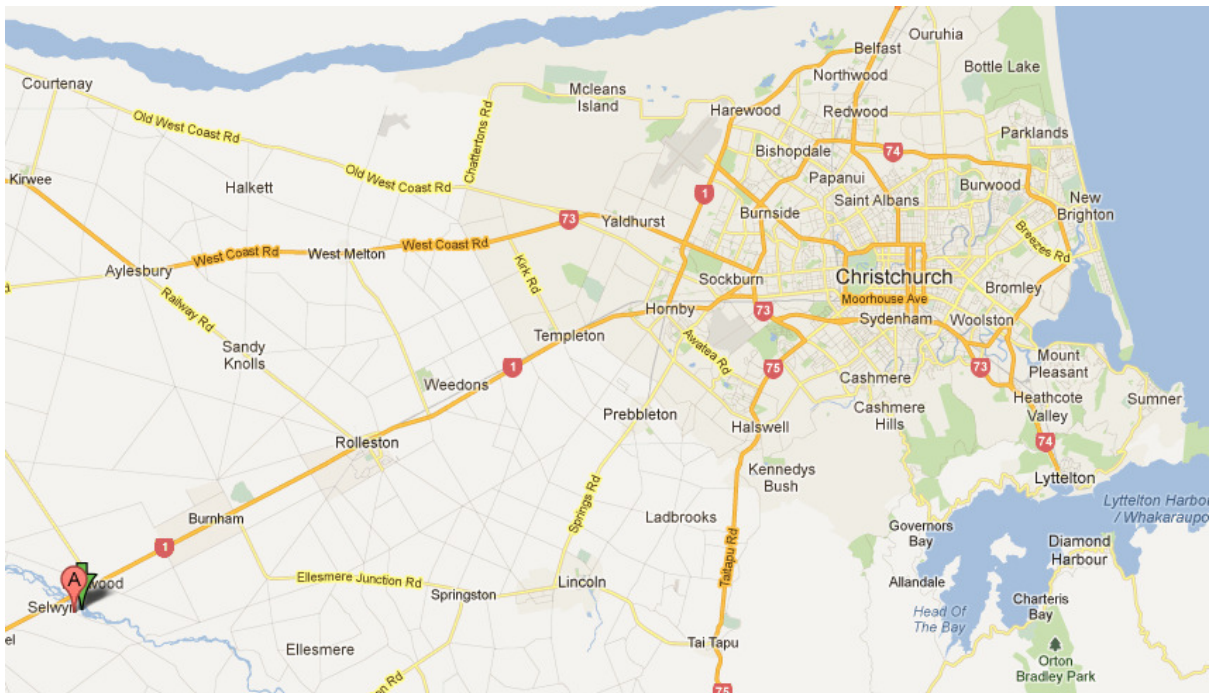
3367742 Mon, Sep 6 2010 11:24 pm local time (2010-09-06-1124 UTC):



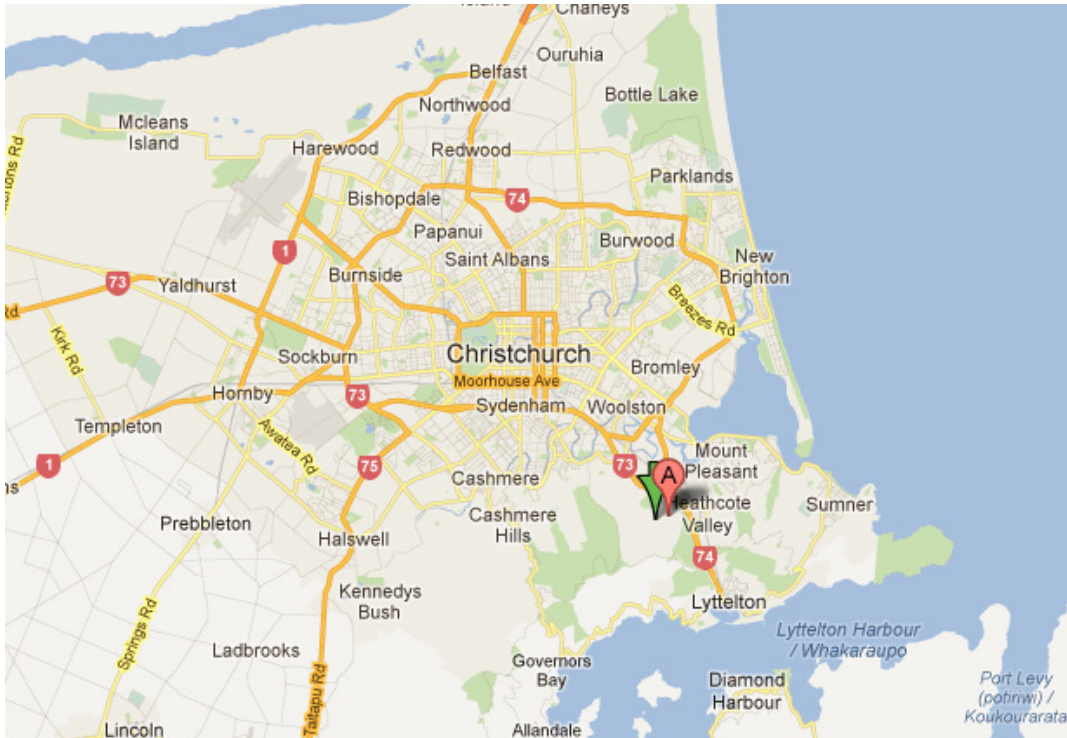
3367749 Mon, Sep 6 2010 11:40 pm local time (2010-09-06-1140 UTC):



3367832 Tue, Sep 7 2010 3:24 am local time (2010-09-06-1524 UTC):



3368445 Wed, Sep 8 2010 7:49 am local time (2010-09-07-1949 UTC):



3382676 Mon, Oct 4 2010 10:21 pm local time (2010-10-04-0921 UTC):

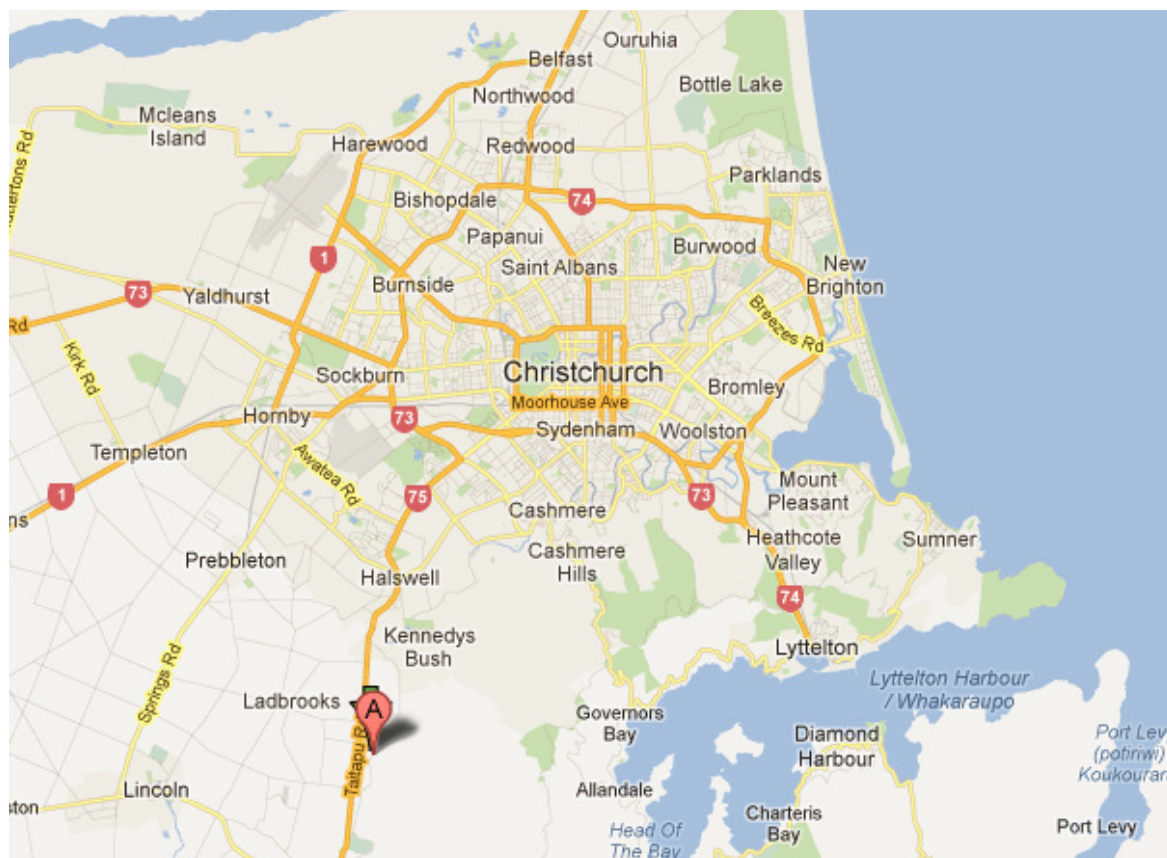




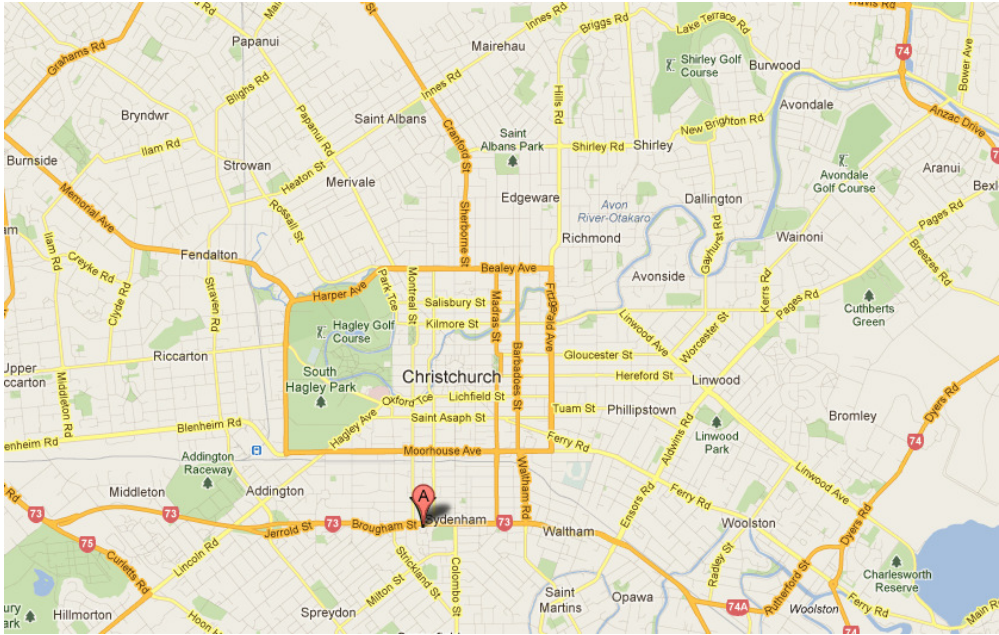
3388384 Wed, Oct 13 2010 4:42 pm local time (2010-10-13-0342 UTC):



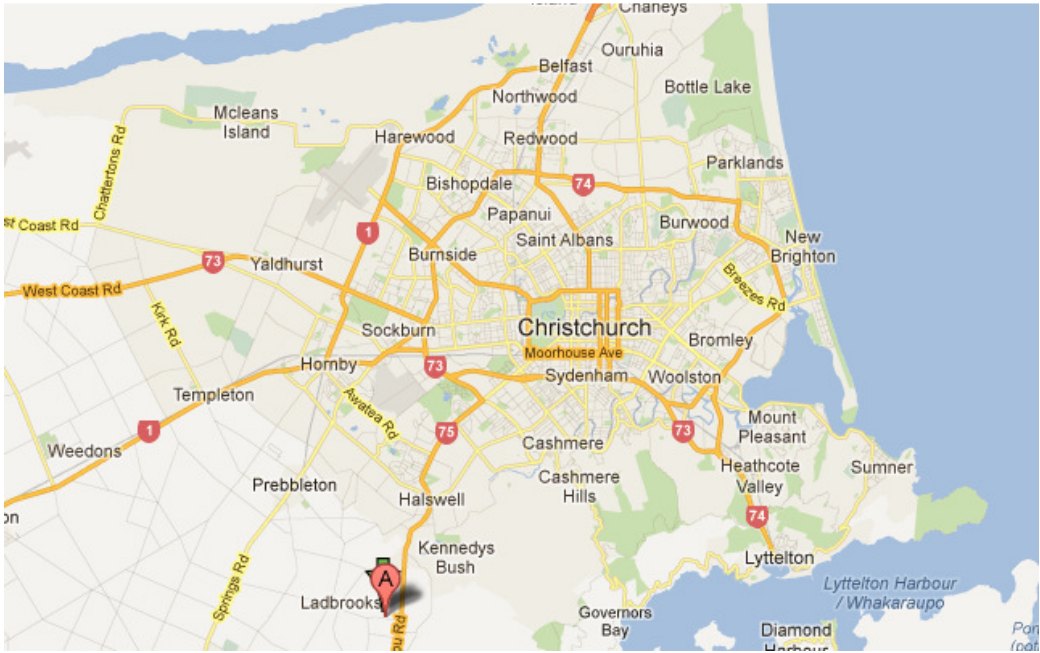
3391440 Tue, Oct 19 2010 11:32 am local time (2010-10-18-2232 UTC):



Sun, Dec 26 2010 10:30 am local time (2010-12-25-2130 UTC):



3450113 Thu, Jan 20 2011 6:03 am local time (2011-01-19-1903 UTC):



3468575

Tue, Feb 22 2011 12:51 pm

2011-02-21-2351

