

Canterbury Earthquake (14 Feb 2016) Geodetic Marks

Title
| Canterbury Earthquake (14 Feb 2016) Geodetic Marks

Creator
| LINZ - Land Information New Zealand

Date
| 2015-02-26

Description
| Coordinates computed from surveys undertaken after the 14 February 2016 Canterbury earthquake. These should be consistent with any observations made after this earthquake (neglecting any localised deformation such as that due to liquefaction). **For further information about this dataset, see [the Canterbury earthquake information](<http://www.linz.govt.nz/land/surveying/canterbury-earthquakes/geodetic-survey-control-network>).** These coordinates are only provisional. Analysis is ongoing as further data is collected. Coordinates were calculated using SNAP v2.5.33. Stations were constrained using coordinates of distant PositionNZ continuous GNSS stations that were unaffected by the earthquake. The standard deviations of coordinates are 0.01m horizontally and 0.02m vertically, relative to the PositionNZ network. Coordinate changes due to the earthquake have been calculated by comparing pre and post-earthquake coordinates. Pre-earthquake coordinates were calculated relative to public and private continuous GNSS stations. These continuous GNSS stations had data processed for several days early in 2016 (before the earthquake). Other pre-earthquake geodetic data was then readjusted with the continuous GNSS data. Note that this means these coordinate changes may differ slightly from those that would be calculated by comparing the post-earthquake coordinates with those currently in the Geodetic Database. These coordinates are suitable for use in surveys and other geospatial activities in Canterbury and Christchurch.

Source
| The standard deviations are 0.01m horizontally and 0.02m vertically. Coordinates derived from geodetic surveys carried out to Order 4 and 5 standards, as well as 24-hour Continuously Operating GNSS Station (CORS) data obtained from LINZ, GeoNet, GeoSystems and Global Survey. This layer will be updated as further geodetic data becomes available, until such time as the Geodetic Database is updated.

Coverage
| -43.7027371215 172.481134684 -43.3893206049 172.77109421

Identifier
| <https://data.linz.govt.nz/layer/53322-canterbury-earthquake-14-feb-2016-geodetic-marks/>

Type
| textTable

Language
| eng

Subject
| New Zealand

Subject
| LAND-Geodesy

Subject
| HAZARDS-Earthquake

Subject
| LAND-Cadastre

Subject
| location