

# NZ Kaikoura Earthquake (14 Nov 2016) Geodetic Marks

Title	NZ Kaikoura Earthquake (14 Nov 2016) Geodetic Marks
Creator	Toitū Te Whenua Land Information New Zealand
Date	2016-12-04
Description	<p><b>**For further information about this dataset, see [the Kaikoura earthquake information] (<a href="http://www.linz.govt.nz/land/surveying/canterbury-earthquakes/geodetic-survey-control-network/kaikoura-earthquake-%E2%80%9314-november-2016">http://www.linz.govt.nz/land/surveying/canterbury-earthquakes/geodetic-survey-control-network/kaikoura-earthquake-%E2%80%9314-november-2016</a>).</b> It is likely that many of these coordinates will be updated multiple times as marks move due to aftershocks and ongoing post-seismic deformation. It is therefore critical that the <b>**datum version**</b> and <b>**coordinate epoch**</b> date are recorded with any coordinates sourced from this dataset, along with the date the coordinates were accessed or downloaded. These coordinates are computed from Continuously Operating Reference Station (CORS) data and geodetic surveys undertaken after the 14 November 2016 Kaikoura earthquake. They reflect earthquake movements up until the epoch date that is associated with each coordinate. Where possible, coordinates sourced from this dataset for use as control or calibration points in a project should be at the same or similar epochs. If not, post-seismic deformation may mean that new observations or coordinates do not fit well with these coordinates. Coordinates used as control or calibration points should also be well-distributed over the project area, so that any discrepancies resulting from the survey date being significantly different from the coordinate epoch date can be identified. If such discrepancies are identified, it may be necessary to use the [LINZ PositionNZ-PP online processing service] (<a href="http://www.linz.govt.nz/positionzpp">http://www.linz.govt.nz/positionzpp</a>) to generate control coordinates at the same (or nearly the same) epoch as the survey date. Coordinates were calculated using SNAP v2.5.48. The origin of non-CORS coordinates is PositionNZ CORS that have been updated to include earthquake movements. The 95% confidence interval uncertainties of coordinates are 0.02m horizontally and 0.03m vertically, relative to the PositionNZ network, at the epoch specified. In areas experiencing significant ongoing seismic activity, coordinates at the same mark at other epochs may differ by more than these uncertainties. These coordinates are suitable for use in surveys and other geospatial positioning activities in the area impacted by the Kaikoura earthquake.</p>
Source	The uncertainties are 0.02m horizontally and 0.03m vertically at a 95% confidence level. Coordinates derived from geodetic surveys carried out to Order 4 and 5 standards, as well as 24-hour Continuously Operating GNSS Station (CORS) data. This layer will be updated as further geodetic data becomes available, until such time as the Geodetic Database is updated.
Coverage	-46.585064421 166.472671295 -35.068932937 -175.631221
Identifier	<a href="https://data.linz.govt.nz/layer/53527-nz-kaikoura-earthquake-14-nov-2016-geodetic-marks/">https://data.linz.govt.nz/layer/53527-nz-kaikoura-earthquake-14-nov-2016-geodetic-marks/</a>
Type	textTable
Language	eng
Subject	New Zealand
Subject	LAND-Geodesy
Subject	

HAZARDS-Earthquake

Subject

LAND-Cadastre

Subject

location