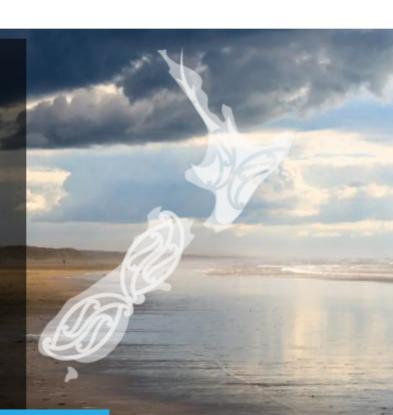
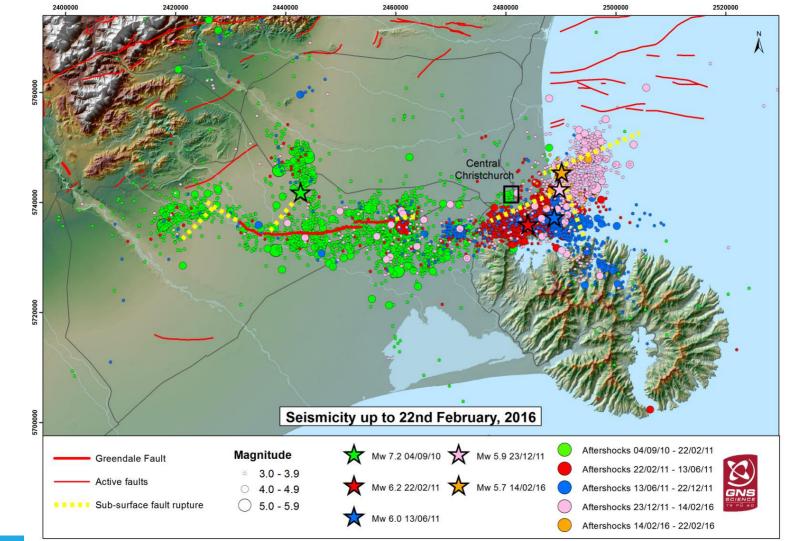




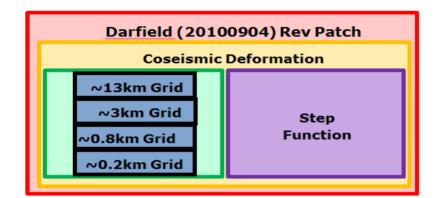
# Using a deformation model to calculate coordinates in a local reference frame

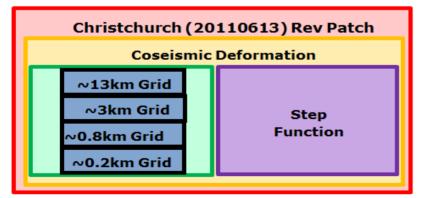
Nic Donnelly | Technical Manager Geodesy Chris Rizos and Craig Roberts (UNSW)

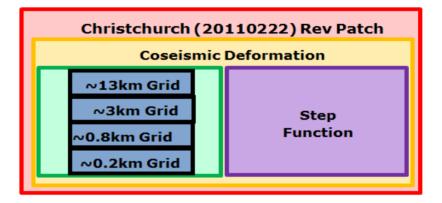


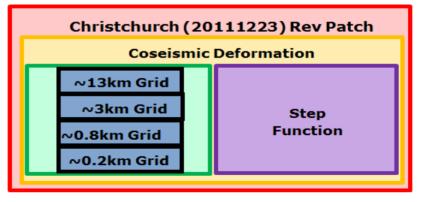


# **Canterbury Earthquakes Submodels**

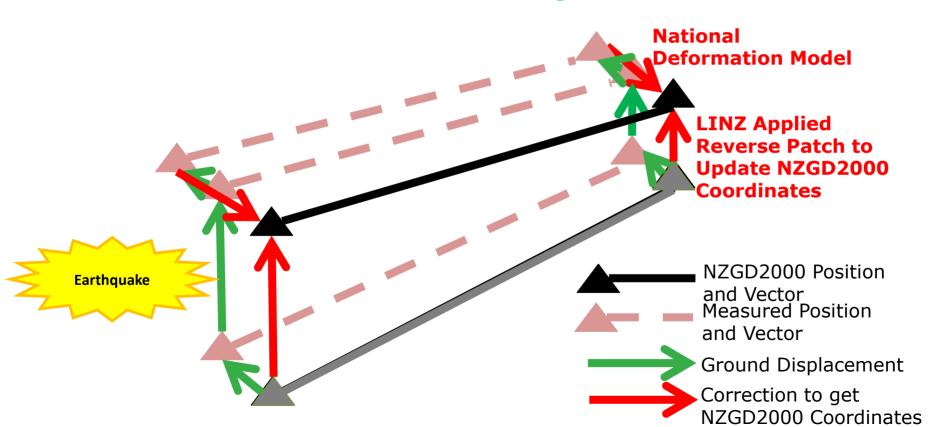




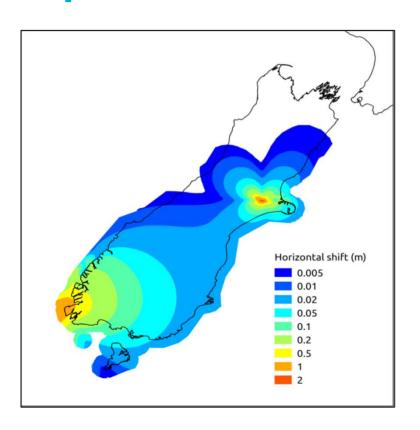




## **Reverse Patch for an Earthquake**



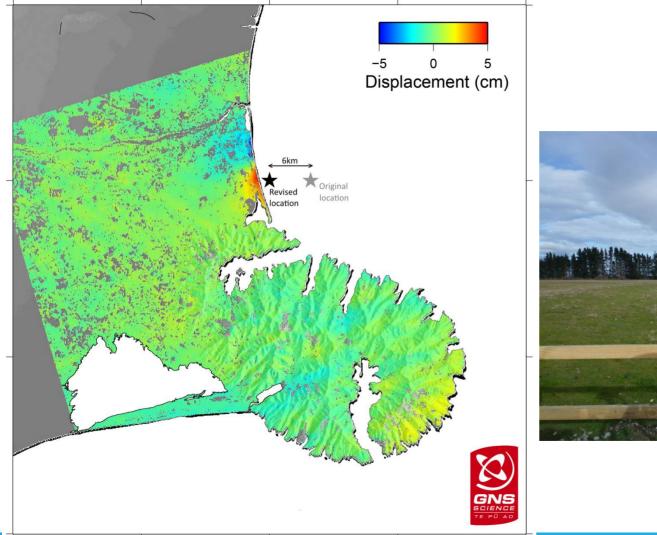
# Reverse patches: Applying the 20130801 reverse patch



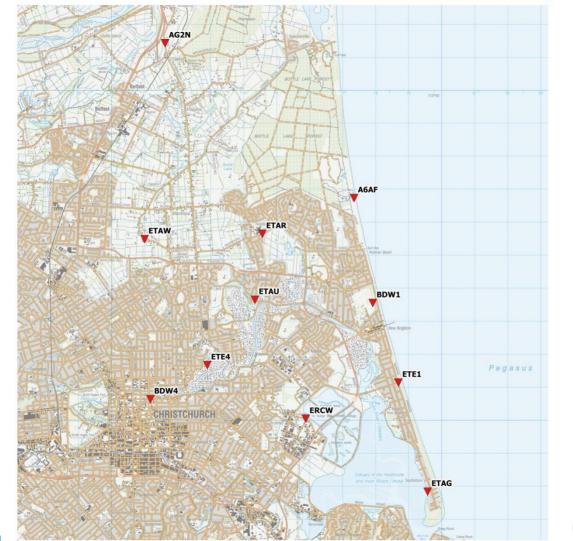
#### Landonline updates

7,876,563 coordinates 2,215,410 nodes 2,745,690 lines 543,787 parcels 48,629 roads

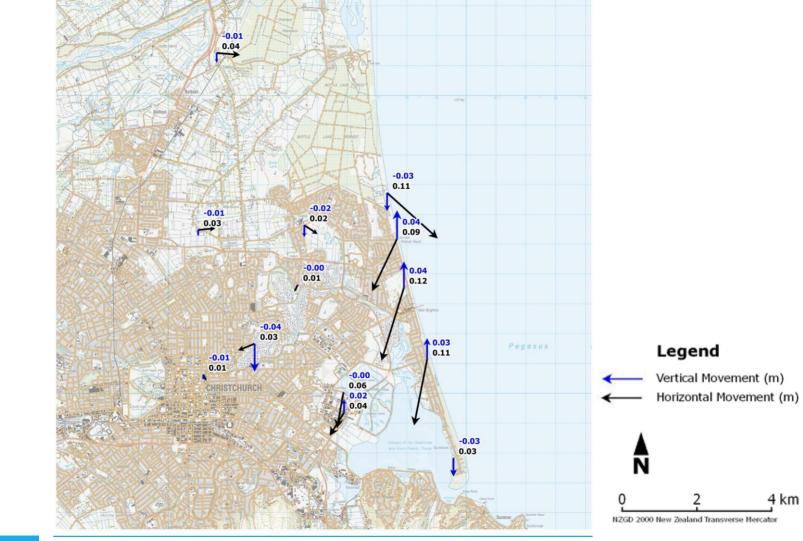
Cadastral layers only updated where the change is greater than 5cm

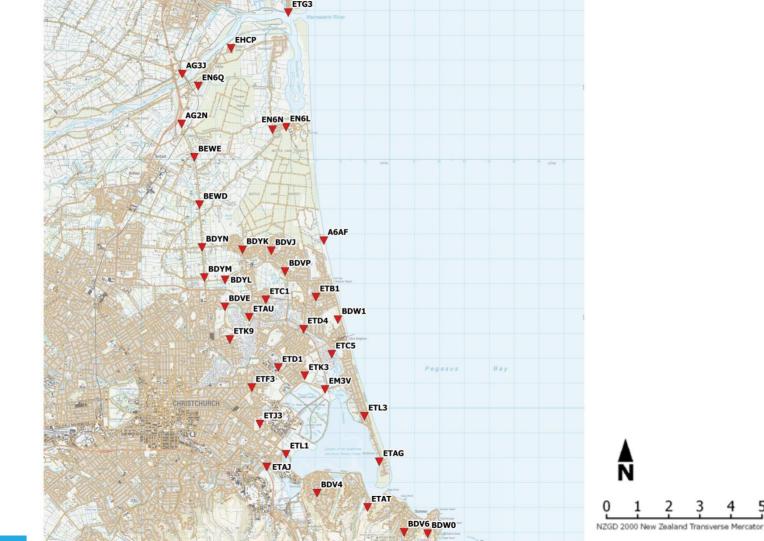




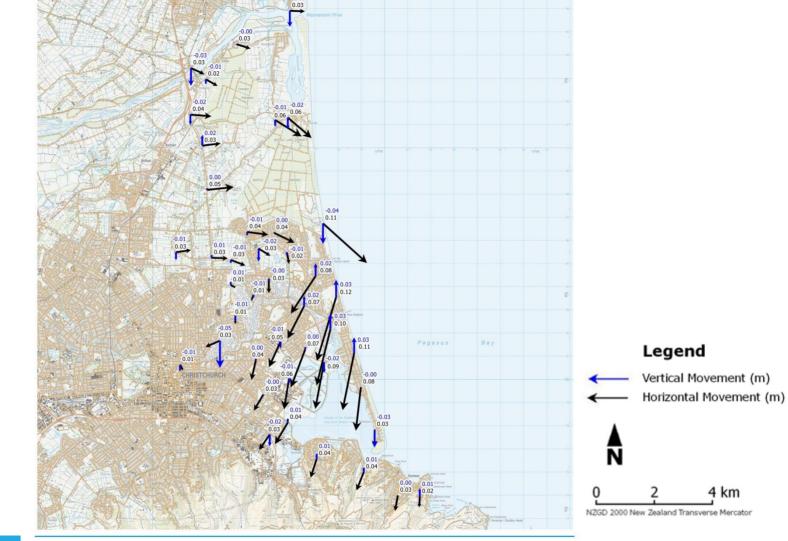








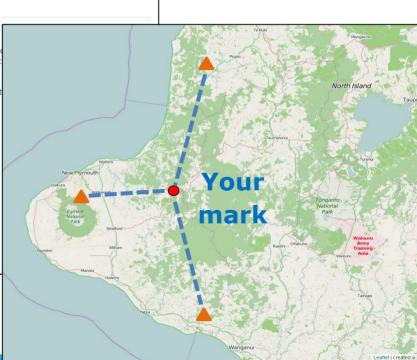
5 km

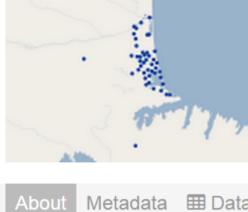


4 km



<< Back Next >> Cancel





eq 14feb2016 height change

### Canterbury Earthquake (14 Feb 2016) Geodetic Marks LINZ / National Geodetic Office



| nod_id     |         | 36753029 |  |
|------------|---------|----------|--|
| geodetic_c | ode     | A6AF     |  |
| ourrent me | rk nome | 7604     |  |

-0.037

| current_mark_name                 | 7001               |            |                 |          |     |      |      |
|-----------------------------------|--------------------|------------|-----------------|----------|-----|------|------|
| geodetic_database_link            | http://apps.linz.g | govt.nz/go | db/index.aspx?  |          |     |      |      |
| post_14feb2016_nztm_north         | 5186734.369        |            |                 |          | Add | Mod. |      |
| post_14feb2016_nztm_east          | 1577346.142        | Rev.       | Published (UTC) | Features |     |      | Del. |
| nost 1/feh2016 ellinsoidal height | 20 502             |            |                 |          |     |      |      |

| current_mark_name                 | 7681                            |            |                     |          |     |      |      |
|-----------------------------------|---------------------------------|------------|---------------------|----------|-----|------|------|
| geodetic_database_link            | http://apps.linz.g<br>code=A6AF | govt.nz/go | db/index.aspx?      |          |     |      |      |
| post_14feb2016_nztm_north         | 5186734.369                     |            | Published (UTC)     | Features | Add | Mod. | Del. |
| post_14feb2016_nztm_east          | 1577346.142                     | Rev.       |                     |          |     |      |      |
| post_14feb2016_ellipsoidal_height | 20.502                          |            | 12 April 2016 20:10 | 44       | 31  | 12   |      |
|                                   |                                 | _ <b>3</b> |                     |          |     |      | 10   |

| geodetic_database_iiiik           | code=A6AF   |      |                     |          |     |      |      |  |
|-----------------------------------|-------------|------|---------------------|----------|-----|------|------|--|
| post_14feb2016_nztm_north         | 5186734.369 |      | Published (UTC)     | Features | Add | Mod. | Del. |  |
| oost_14feb2016_nztm_east          | 1577346.142 | Rev. |                     |          |     |      |      |  |
| oost_14feb2016_ellipsoidal_height | 20.502      |      | 12 April 2016 20:10 | 44       | 31  |      | 0    |  |
| eq_14feb2016_north_change         | -0.072      | 3    |                     |          |     | 12   |      |  |

|                                   | E400704 000 |      |                     |          |     |      |      |  |
|-----------------------------------|-------------|------|---------------------|----------|-----|------|------|--|
| oost_14feb2016_nztm_north         | 5186734.369 |      | Published (UTC)     | Features | Add | Mod. | Del. |  |
| oost_14feb2016_nztm_east          | 1577346.142 | Rev. |                     |          |     |      |      |  |
| oost_14feb2016_ellipsoidal_height | 20.502      |      | 12 April 2016 20:10 | 44       | 31  | 12   | 0    |  |
| eq_14feb2016_north_change         | -0.072      | 3    |                     |          |     |      |      |  |
|                                   |             |      |                     |          |     |      |      |  |

| ost_14feb2016_nztm_east          | 1577346.142 | Rev. | Published (OTC)     | reatures | Add | wou. | Dei. |
|----------------------------------|-------------|------|---------------------|----------|-----|------|------|
| ost_14feb2016_ellipsoidal_height | 20.502      |      | 12 April 2016 20:10 | 44       | 31  | 12   |      |
| q_14feb2016_north_change         | -0.072      | 3    |                     |          |     |      | 0    |
| q_14feb2016_east_change          | 0.08        |      |                     |          |     |      |      |

eq 25 February 2016 21:42 eq\_14feb2016\_horizontal\_change 0.108







