

Appendix B Redcliffs, Laser Scanning – Memorandum (GNS)

Redcliffs, Terrestrial Laser Scanning



Terrestrial laser scans of Redcliffs were captured on the following dates:

- 02 March 2011 (following Mw6.3 on 22 February 2011)
- 03 March 2011
- 06 March 2011
- 03 May 2011 (following Mw5.3 on 16 April 2011)
- 14 June 2011 (following Mw6.3 on 13 June 2011)

The following images (Figures 3, 4, and 5) are change maps showing the loss or gain of material on the cliff face between the scans. The differences are calculated as normal distances between the pointclouds, represented on a colour gradient with dark blue being no change and red being 3m or more difference. The change maps were created using CloudCompare v2.0 and raw pointcloud data. Figures 1 and 2 are included to aid interpretation.

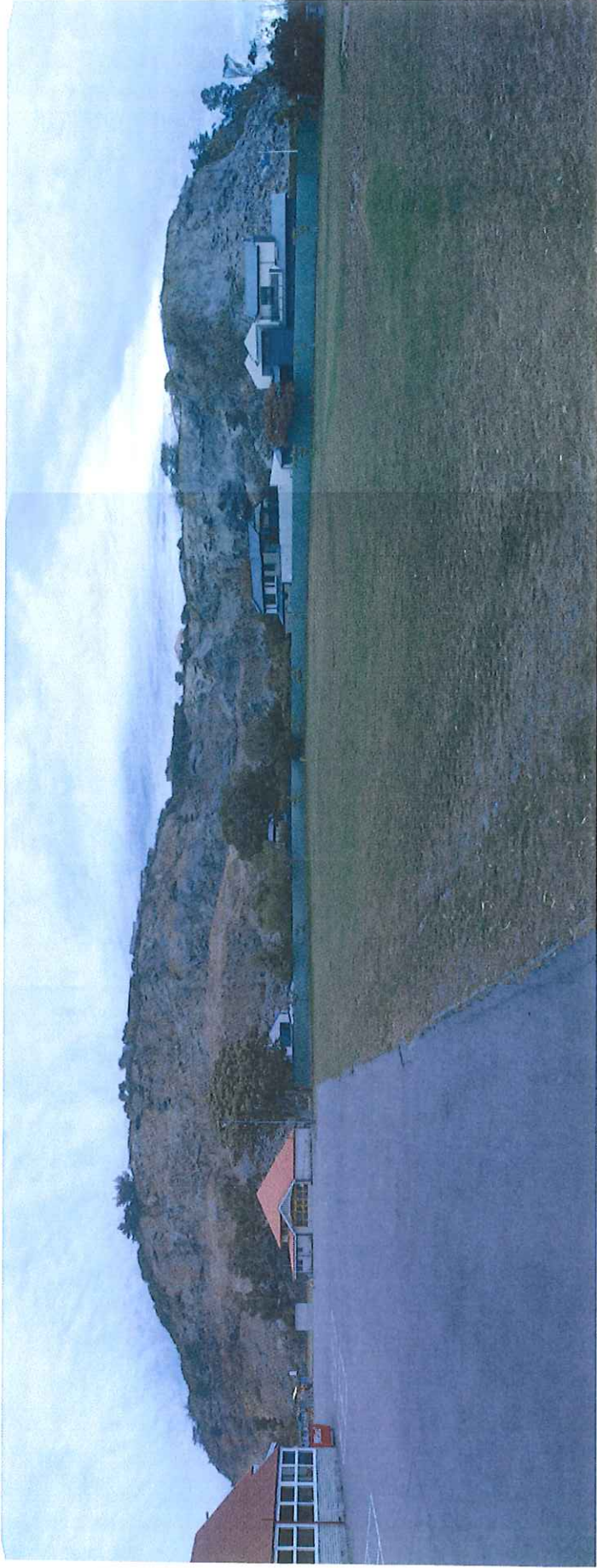


Figure 1. Panorama photograph of Redcliffs from the scanner set-up position

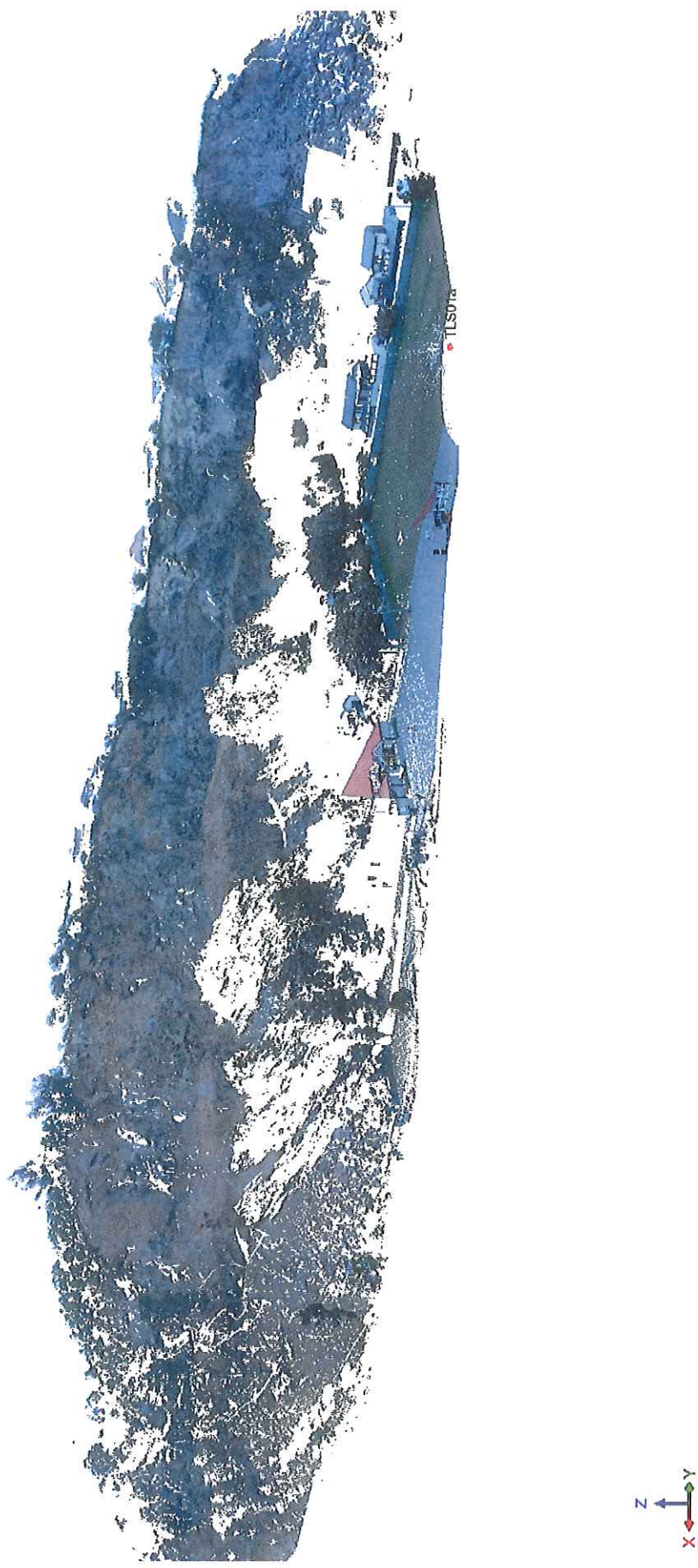


Figure 2. Coloured pointcloud approximating the view in the comparison images

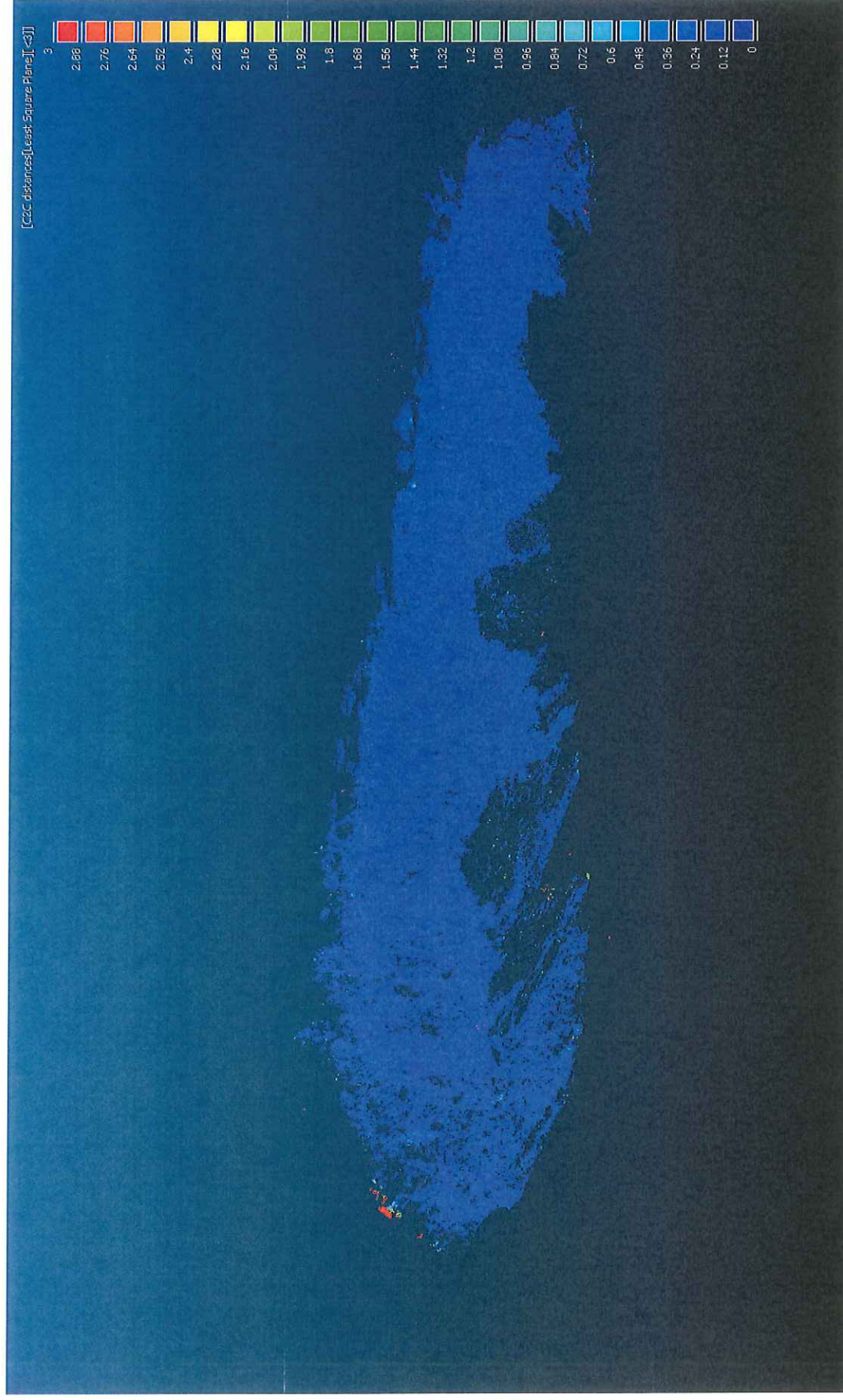


Figure 3. Scan 02/03/2011 vs Scan 06/03/2011

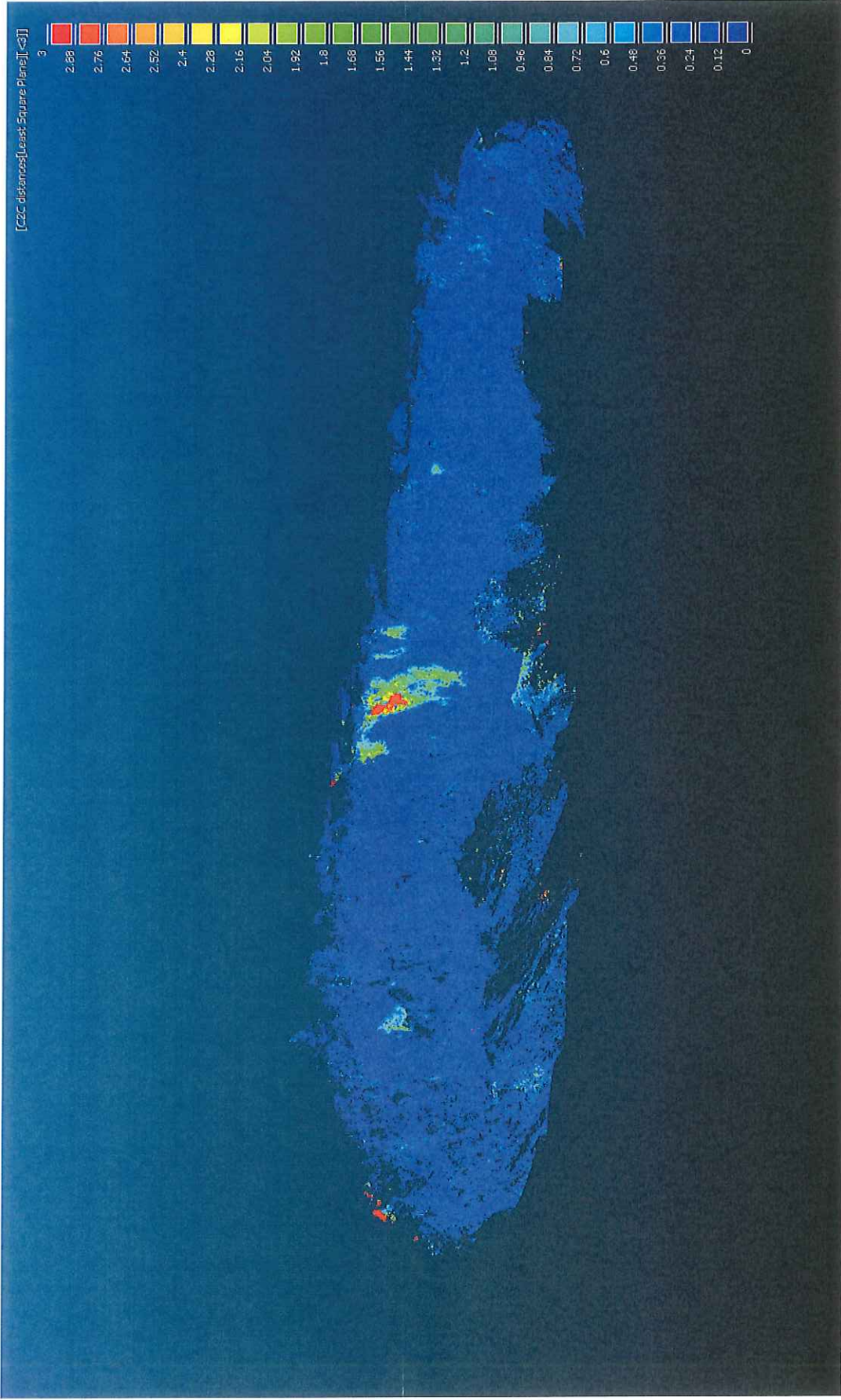


Figure 4. Scan 02/03/2011 vs Scan 03/05/2011

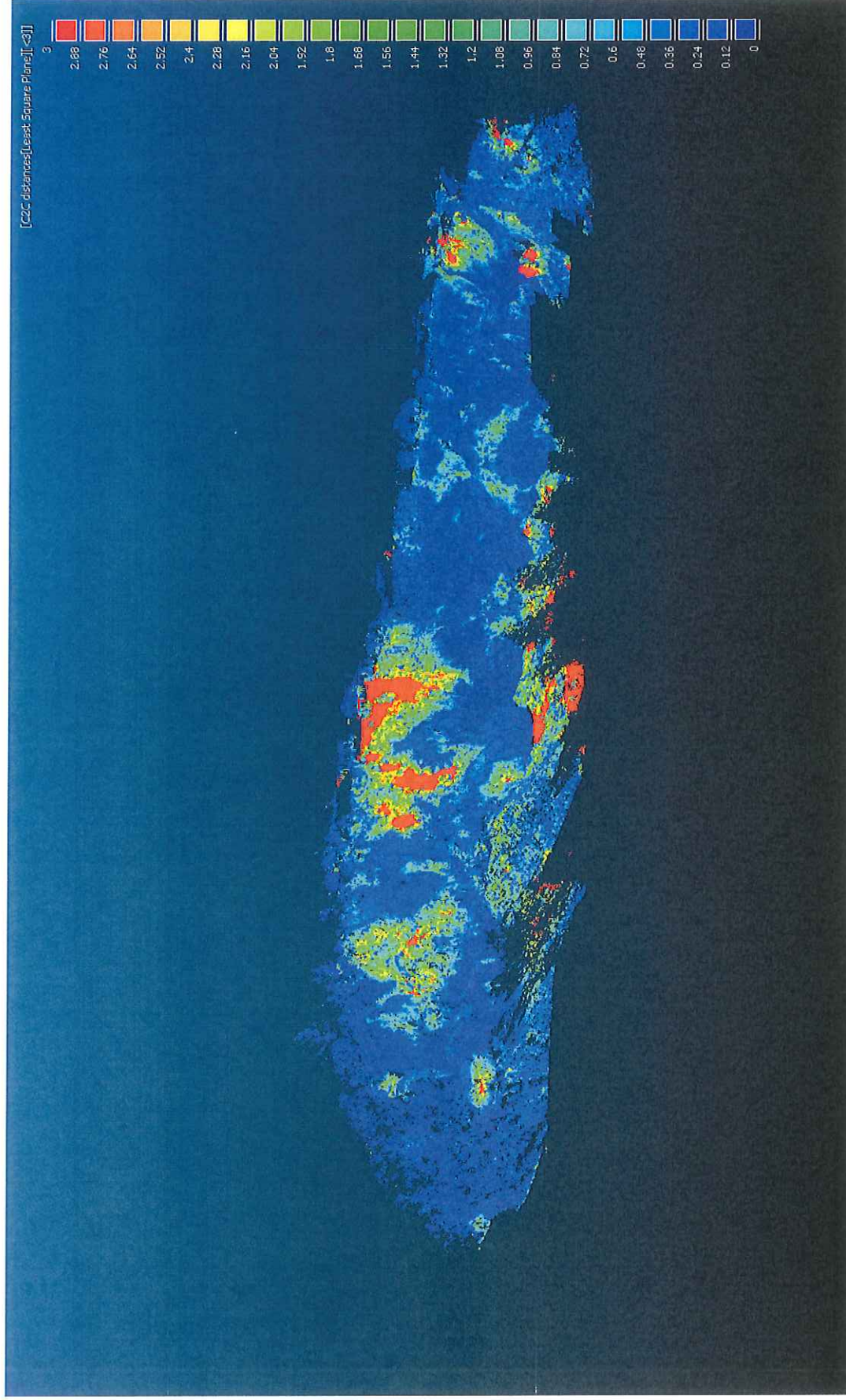


Figure 5. Scan 02/03/2011 vs Scan 15/06/2011