

CASE STUDY

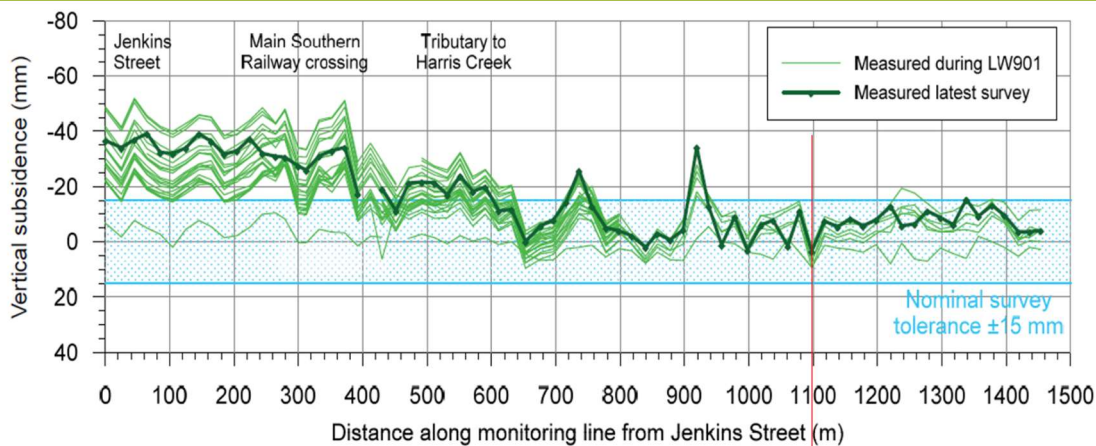


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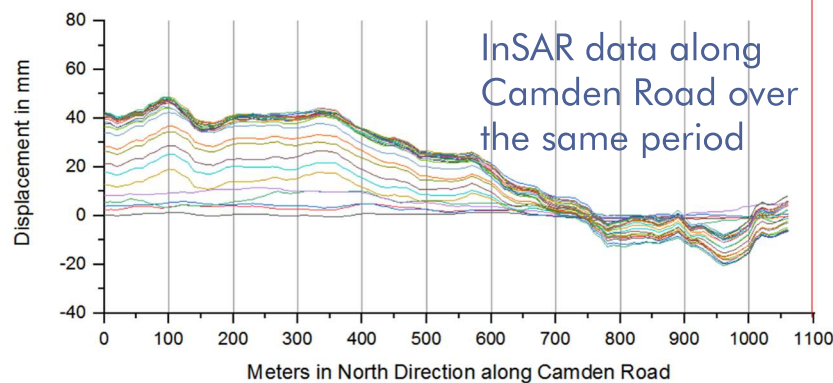
Douglas Park, NSW



Longwall mining can cause ground subsidence over large areas, both during mining operations and long after they have ceased. If the subsidence becomes too large it can affect both the natural environment and man-made structures so it needs careful monitoring and this is well suited to InSAR analysis. This example in New South Wales, Australia provided an opportunity to validate our InSAR output by comparison with in-situ surveying over a twelve month period.



Weekly in-situ survey data along Camden Road



These two graphs present displacement data along the same road over the same time period. The data in the upper graph was obtained by conventional manual level surveys on a fortnightly basis. The data in the lower graph was obtained from satellite data every 12 days and agreed remarkably well with the in situ data and certainly within the ± 15 mm tolerance of the conventional method.



Satellite analysis with engineering insight