

Feedback on summative gravity practical question, 2011

- Problem:
 - Can modelling of the main gravity anomaly associated with Long Valley caldera help to determine if a partially molten magma chamber lies beneath? If so, can gravity modelling determine the depth and size of this hypothesised chamber?
- Conclusion:
 - Gravity modelling cannot help to determine if a partially molten magma chamber lies beneath LVC because its signal would be very small and swamped by the large signal from shallow structure.

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- Separate Method, Results, Interpretation
 - A gravity profile across the north caldera fault was drawn.
 - Examination of the second derivatives showed that the caldera rim fault is inward dipping.
 - This is consistent with the caldera fill being responsible for the main gravity anomaly.

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- Referencing
 - ... was measured by Smith et al. (1989).
 - ... was measured by Smith (1989).
 - ... was measured by Smith and Jones (1989).
 - ... was measured (Smith et al., 1989; Jones, 1990).
 - Smith et al. (1989) measured...
 - The gravity was measured¹.

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