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Temperature sensitivity of young and old soil carbon : same soil, slight differences in ^{13}C natural abundance method, inconsistent results

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Predictions of future climate change critically depend on the temperature sensitivity of soil organic carbon decomposition. One question of debate is whether temperature sensitivity differs between young or labile and old or more stable carbon pools. We re-analysed soil that has previously led to the conclusion that old soil carbon is more temperature sensitive. The re-analysis gave different results compared to the earlier study, most likely due to small differences in an otherwise very similar experimental approach. This study illustrates how conclusions may depend upon details of the experimental setting. (c) 2008 Elsevier Ltd. All rights reserved.

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