

# OR/18/030 Model QA

From Earthwise

[Jump to navigation](#) [Jump to search](#)

Burke, H, Martin, C, and Terrington, R. 2018. Metadata report for the City of London 3D geological model. *British Geological Survey Internal Report*, OR/18/030.

In order for a geological model to be approved for publication or delivery to a client a number of QA checks are carried out. This includes visual examination of the modelled cross-sections to ensure that they match each other at cross-section intersections and fit the borehole and geological map data used. The model calculation is checked to ensure that all units calculate to their full extent within the area of interest and the modelled geological surfaces are checked for artefacts such as spikes and thickness anomalies. The naming convention of the modelled geological units is checked to ensure that recognised entries in the BGS Lexicon of Named Rock Units ([www.bgs.ac.uk/lexicon/home.html](http://www.bgs.ac.uk/lexicon/home.html)) and the BGS Rock Classification Scheme ([www.bgs.ac.uk/bgsrcls/](http://www.bgs.ac.uk/bgsrcls/)) are used as far as possible.

Any issues found in the QA checking process are recorded and addressed before delivery/publication of the model.

During the QA process each borehole was re-coded to enable more detailed lithological information and text descriptions in the borehole logs to be viewed in the model. This enabled the bases of geological units to be modelled more accurately. Surfaces generated in the London Basin geological model (base London Clay Formation and base Thanet Sand Formation) were loaded into the City of London model workspace and used to adjust the bedrock units in the cross-sections where deep borehole data is sparse. Two 'helper sections' were added during the QA process to improve the calculation of alluvium.

The City of London model overlaps the Farringdon geological model area (Aldiss et al., 2012<sup>[1]</sup>). No surfaces or cross-sections from the Farringdon model were used during construction of the City of London model. However, the base Thanet Sand Formation surface from the Farringdon model was used in the QA of the City of London model. Despite some differences in the depths of these units and the structural interpretation, no changes were made to the City of London model.

## References

1. <sup>↑</sup> Aldiss, D T, Black, M G, Entwisle, D C, Page, D P, and Terrington, R L. 2012. Benefits of a 3D geological model for major tunnelling works: an example from Farringdon, east-central London, UK. *Quarterly Journal of Geology and Hydrogeology* Vol. 45, Issue 4.

Retrieved from '[http://earthwise.bgs.ac.uk/index.php?title=OR/18/030\\_Model\\_QA&oldid=38394](http://earthwise.bgs.ac.uk/index.php?title=OR/18/030_Model_QA&oldid=38394)'  
[Category:](#)

- [OR/18/030 Metadata report for the City of London 3D geological model](#)

## Navigation menu

## Personal tools

- Not logged in
- [Talk](#)
- [Contributions](#)
- [Log in](#)
- [Request account](#)

## Namespaces

- [Page](#)
- [Discussion](#)

## Variants

## Views

- [Read](#)
- [Edit](#)
- [View history](#)
- [PDF Export](#)

## More

## Search

## Navigation

- [Main page](#)
- [Recent changes](#)
- [Random page](#)
- [Help about MediaWiki](#)

## Tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Permanent link](#)
- [Page information](#)
- [Cite this page](#)
- [Browse properties](#)

- This page was last modified on 19 October 2018, at 09:50.

- [Privacy policy](#)
- [About Earthwise](#)
- [Disclaimers](#)

