

OS MasterMap data and Building Heights – ArcGIS

Digimap webinar

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1pm

Questions and Answers transcript

Data and software related questions

Q: How did you add the first map? Maybe show the group starting a new project from the absolute start.

A: Apologies for that, I started with a map already added as it can take a minute or two to add the map first time around. The steps I carried out that weren't shown were:

1. Create a new project
2. Press the 'New Map' button – at this point ArcGIS Pro adds in the default basemap automatically so you never start a new project without a map.

Q: Can you confirm if the building height data from mastermap is the footprint of the building. When you extruded it looked like it included structures on the roof?

A: Building height values are provided for building features in MasterMap Topography Layer. Buildings in MasterMap Topography Layer may be made up of multiple separate polygons that have different height values. Roof structures would only be present if they were present in the underlying MasterMap data as separate polygons. The extra bits on the roof come from the building being made up from multiple polygons, with multiple height values.

Q: Where does the height data come from?

A: The OS user guide explains how the data was created. Essentially it is derived from their aerial photography, but they have done a lot of processing to it.

Q: Hi there, what's the current situation with displaying Ordnance Survey data on Google Earth? I ask because you mentioned KML and Google Earth and previously I have heard there were issues?

A: This has been the case in the past as google took a copy of everything that was uploaded. I'm not sure that this is still the case so we will look into it and get back to you.

A2: There are no issues using KML file in Google Earth as these are stored on your computer and viewed by the software. Issues would only arise if you upload Ordnance Survey data or Data derived from Ordnance Survey material to a google server. This isn't the case when you are using Google Earth normally.

Q: Could you create a 3D feature yourself to overlay on the height data?

A: Yes you could. You could extrude any feature using an attribute value, so different feature classes can be extruded using different attributes.

Q: What formats can the data from ArcGIS PRO be exported as for use in other 3d programmes?

A: ArcGIS Pro currently only supports export to the Shapefile and Geodatabase formats. You would need to use something like FME if you wanted to convert the data in to a different format

Q: I'm interested in extracting/exporting too.

A: Please see answers above and below, but please get back to us if you have any further questions.

Q: Can you add Vectorworks

A: We are currently working on creating a DWG version of the 3D buildings. From looking at the Vectorworks Knowledgebase (<http://kbase.vectorworks.net/questions/567/Importing+Files>), you should be able to import these DWG files in to Vectorworks.

Q: How can we extract the 3d representation from ArcGis pro to 3ds max or google sketchup

A: I don't think this is possible as ArcGIS Pro only supports exporting the data in to Shapefile or Geodatabase formats, but the DWG version may help when this is released.

Q: I also need help with 3d extraction to sketchup

A: The DWG version of Building Height data should make this much easier, once released.

Q: Any chance you could release OS maps in skp format? Importing a DWG into sketchup does not add surfaces

A: We're looking at a couple of different ways of constructing the DWG file of 3D buildings and will take this on board.

Q: For lidar data which application of ArcGIS would be more suitable to use ArcMap or ArcPro, as you mentioned 3D visualisation is improved in ArcPro?

A: 3D visualisation functionality is fully built in to ArcGIS Pro, rather than being a separate standalone program as ArcScene or ArcGlobe. However ESRI have stated that not all functionality has been added ArcGIS Pro yet, so I expect more functionality would be available in the existing applications of ArcMap, ArcGlobe and ArcScene (the latter two for 3D visualisation). Further information on using LIDAR data in ArcGIS Pro can be found here: <http://pro.arcgis.com/en/pro-app/help/data/las-dataset/use-lidar-in-arcgis-pro.htm>

Q: So a building when you download it can actually be a set of overlapping polygons?

A: The building outlines are from OS MasterMap Topography Layer, which don't overlap.