This presentation shows you some of the highlights of a project in one of the few outcrop areas of the Brabant Massif: Halle-Lembeek. Although it is a small and relatively well-known area, you will notice that geological mapping is not a very straightforward process.

This presentation is largely based on:

The red square indicates the location of Halle-Lembeek within the Brabant Massif.
This area counts only few permanent outcrops.
But during the construction of a railway track, several temporary outcrops were created.
This area was extensively drilled, providing even more information.
Two different units (formations) can be recognised. Green points show the occurrence of the Tubize Formation.
Blue points the occurrence of the older Blanmont Formation.
Clearly their distribution is not random. But where exactly is the contact between the two?
In this particular situation, the properties of the rocks are helpful.
The Tubize Formation is often magnetic, the Blanmont Formation is non-magnetic.
This difference shows up on the aeromagnetic map. One square measures 100 by 100 meter.
As you can see, the green dots of the Tubize Formation correspond well to areas with higher aeromagnetic values, while the blue ones of the Blanmont Formation are located in or near aeromagnetic lows.
This allows to draw the boundary between the two formations more precisely. We now know the distribution of these two formations, but not yet the structure of the area.
Based on this information alone, you may postulate three different possibilities.
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Also a detailed structural analysis could not reveal the true architecture of this area.
Conclusion:

Three possibilities for this small area.

A mapping of the complete Brabant Massif is even more challenging. And we can not afford to end up with more than one map.