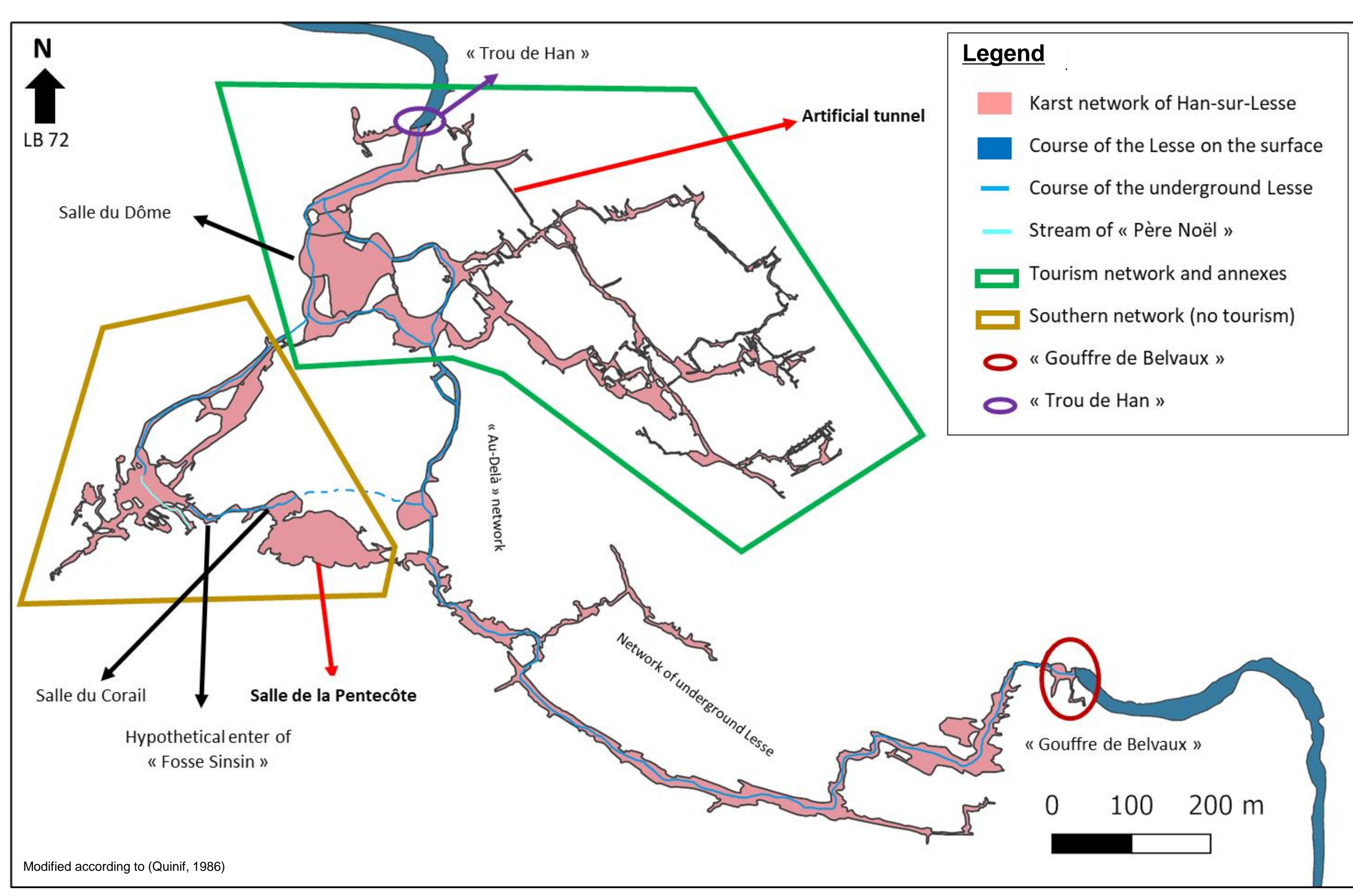


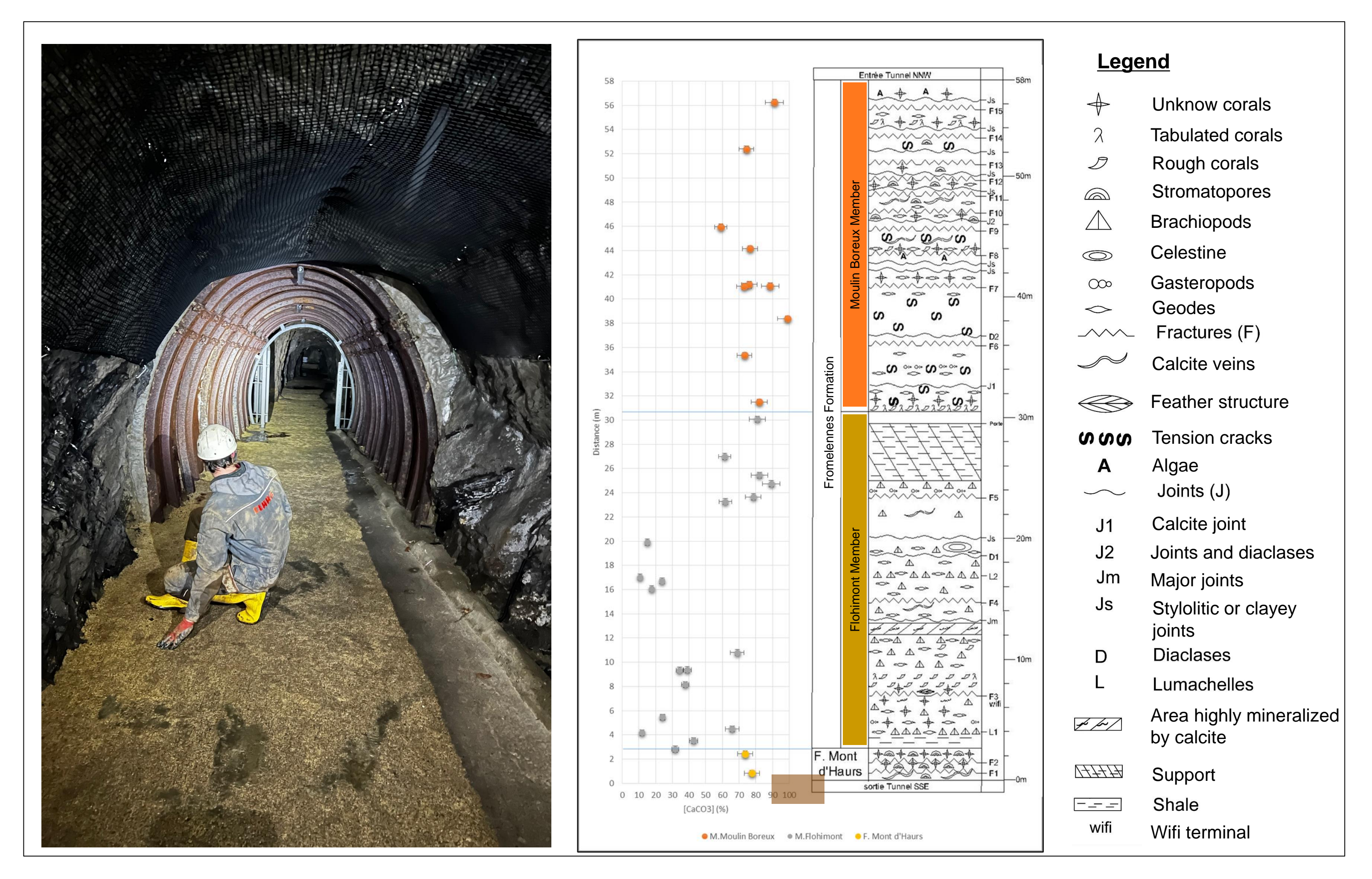
# Correlation test between lithostratigraphy and karstic speleothems at the caves of Han-sur-Lesse (Rochefort, Belgium)

Bastien Paternostre de la Mairieu, Sara Vanduycke, Serge Delaby & Sophie Verheyden

Topographic network of the Han-sur-Lesse cave

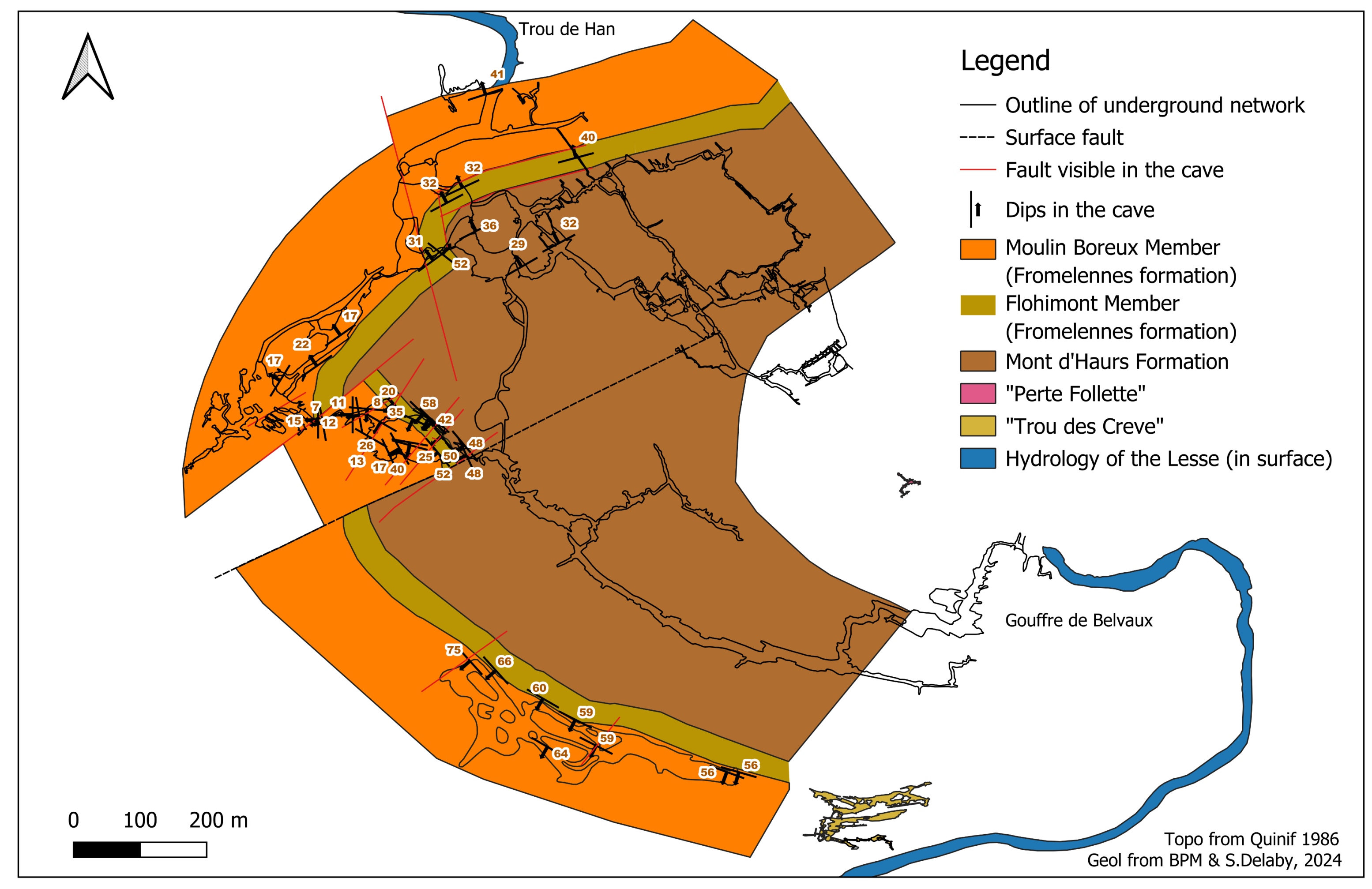


Lithostratigraphic Study and highlighting of the Flohimont member of the Fromelennes formation

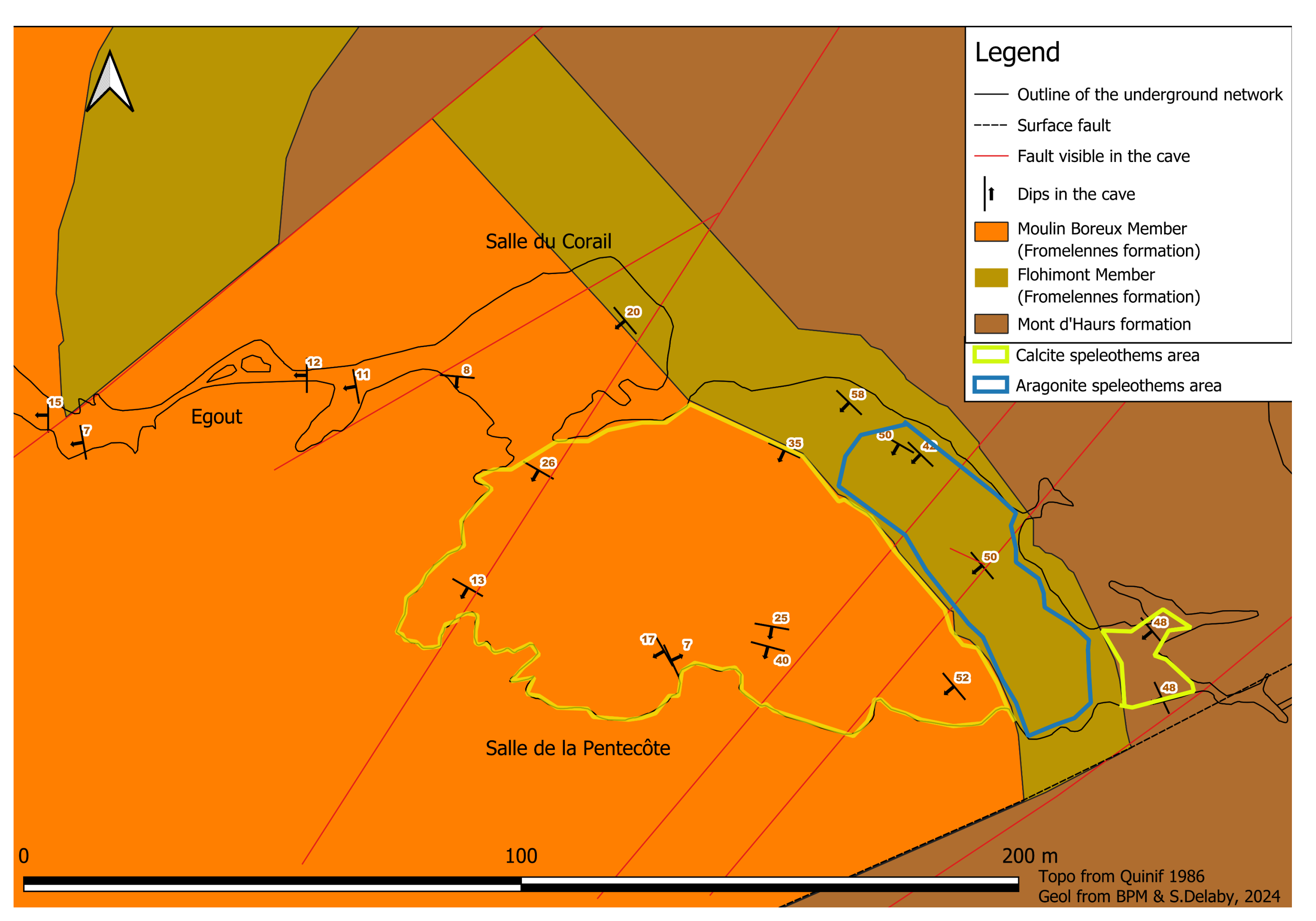


The lithostratigraphic study of the caves of Han sur lesse has made it possible to highlight the Flohimont member and to propose a geological map at the altimetric level of the Lesse.

Geological map of the Han caves at the altimetric level of the Lesse



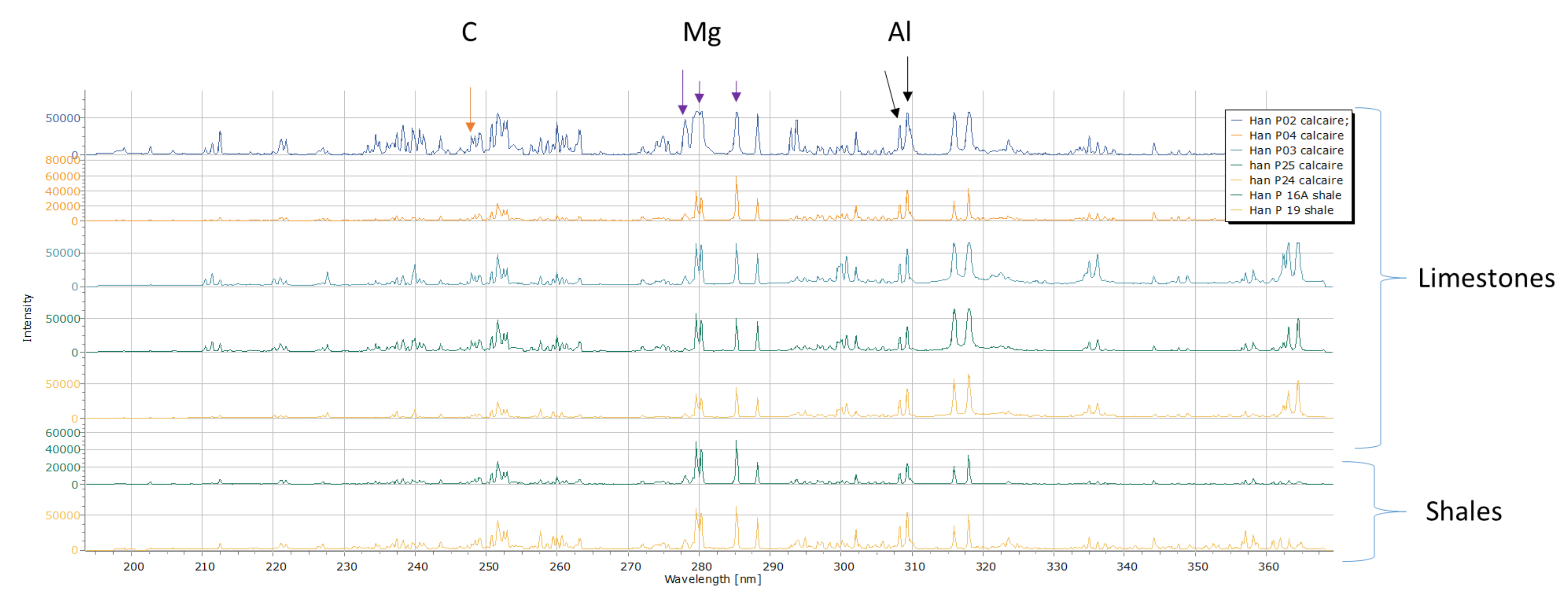
Geological map of the corail and Pentecôte rooms and highlighting of the Flohimont member as well as the different types of speleothems



The results of the geochemical study show the presence of aragonite and calcite speleothems. When these results are combined with the geological map, it can be clearly observed that aragonite speleothems are exclusively in the Flohimont Member. In addition, the study by laser-induced breakdown spectroscopy (LIBS) shows very well that the elements present in the rock are reflected in the speleothems. This is also well marked for Al, Mg and C.  
**In conclusion, this study shows that there is a link between the speleothems and their associated rocks in the Caves of Han-sur-Lesse.**

laser-induced breakdown spectroscopy (LIBS) study of the samples of the Salle de la Pentecôte

Chemical comparison of rocks of the "Salle de la Pentecôte"



Comparison between different speleothems of "Salle de la Pentecôte"

