

## ***Interactive comment on “First conclusions about results of GPR investigations in the Church of the Assumption of the Blessed Virgin Mary in Kłodzko, Poland” by Anatolii Chernov et al.***

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The manuscript represents an interesting Ground-Penetrating Radar case study. Results collected in the Church of the Assumption of the Blessed Virgin Mary in Kłodzko, Poland, are presented. The Authors inspected the floor of the church by using antennas working at two different frequencies; they looked for unknown underground structures, such as crypts and tombs (during the first and second world wars, most documents related to the church were lost). It is worth noticing that, so far, GPR has been rarely used in Poland; moreover, this study was carried out by an international team of early-career investigators. Based on the collected results, the Authors discovered the presence of

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two new crypts, and they estimated their position and size. Clear drawings and interesting radargrams are included in the paper; the text is concise but informative. In the attached file, I propose several small corrections to the English and a few changes to the Figures, which aim at improving the manuscript readability.

Does the paper address relevant scientific questions within the scope of GI? Yes.

Does the paper present novel concepts, ideas, tools, or data? The paper presents new data, collected in a church in Poland. It is a very nice example of application of the GPR technique for the non-destructive investigation of a historical building.

Are substantial conclusions reached? Yes, two unknown crypts are discovered, based on the performed measurements. Their position and size is estimated.

Are the scientific methods and assumptions valid and clearly outlined? Yes.

Are the results sufficient to support the interpretations and conclusions? Yes, several profiles were collected in the church.

Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes.

Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Yes.

Does the title clearly reflect the contents of the paper? Yes.

Does the abstract provide a concise and complete summary? Yes.

Is the overall presentation well structured and clear? The presentation of the results will be more clear, once the suggestions provided in the attached file are followed.

Is the language fluent and precise? The language is reasonably good, some corrections are proposed in the attached file.

Are mathematical formulae, symbols, abbreviations, and units correctly defined and

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used? Yes (no formulas are present in the paper).

Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? See comments in the attached file.

Are the number and quality of references appropriate? Yes.

Is the amount and quality of supplementary material appropriate? There is no supplementary material. It would be very nice if the Authors might provide the presented radargrams as supplementary material.

Please also note the supplement to this comment:

<https://www.geosci-instrum-method-data-syst-discuss.net/gi-2017-40/gi-2017-40-RC1-supplement.pdf>

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Interactive comment on Geosci. Instrum. Method. Data Syst. Discuss.,  
<https://doi.org/10.5194/gi-2017-40>, 2017.