We greatly appreciate the editor and referee for the valuable comments. Now, the responses to each of the comments are listed below.

Response to Reviewer 2

Point: I have read with great interest the manuscript entitled "Numerical Simulation of Geothermal Field in Combined Operating of a Solar-ground Source Heat Pump---A case study in Nan Cha Village, Ping Gu District, Beijing". I think it is a very interesting and well-structured work. The modelling taks has been correctly carried out and I have not appreciated technical errors. So I recommend its publication in the Water Journal after minor revisions.

- A more extensive bibliographic analysis should be done in the introduction section. In many cases, important citations regarding the numerical modeling of shallow geothermal systems are missing. A very similar case of study is Zaragoza city where many numerical models of the geothermal systems installed in the Quaternary alluvial aquifer have been performed. For example:

García-Gil et al., 2020: Defining the exploitation patterns of groundwater heat pump systems. Science of the total environment, 710
García-Gil et al., 2019: Sustainability indicator for the prevention of potential thermal interferences between groundwater heat pump systems in urban aquifers. Renewable energy 134
-What is the origin of the thermal parameters showed in Fig. 2? Please, provide the citation.

-Figs. 2 and 3: I think that the quality and the information provided by these two figures should be improved.

Good look!

Response: We are very pleased with the referee is interested in the paper. We have conducted more extensive bibliographic analysis in the introduction section. We have made a clear statement in Lines 190 to 195 for the thermal parameters in Table 2.

We have improved the quality and the information of Figs. 2 and 3 in Lines 244 to 245.

We have read the two references carefully and cited it.