

The paper **Geothermal heat source estimations through ice flow modelling at Mýrdalsjökull, Iceland** by Jarosch et al. presents an indirect measurement method, which utilizes ice flow simulations and glacier surface data, such as surface mass balance and surface depression evolution to determine heat source locations to simulation grid scales. As such it is of interest for regional studies of the Mýrdalsjökull ice cap in Iceland but also more broadly as geothermal heat sources beneath glaciers and ice caps influence local ice-dynamics and mass balance and subglacial water reservoir dynamics.

The authors have done a good job in considering all the comments of previous reviewers and given the MS clarity and the important topic I would recommend acceptance basically as is.

My only small residual recommendation is to add a reference to a more recent paper on estimating geothermal heat flux indirectly beneath one of the most important sectors of the West Antarctic Ice Sheet, highlighting also that this topic is of great interest also outside Iceland.

Specifically, in lines 10-11 The role of subglacial geothermal heat in the mass balance and dynamics of glacier and ice sheets has in recent years caught increased attention (e.g. Winsborrow et al., 2010; Smith-Johnsen et al., 2020b, a). I would recommend adding Dziadek et al., (2021).

Dziadek, R., Ferraccioli, F. & Gohl, K. High geothermal heat flow beneath Thwaites Glacier in West Antarctica inferred from aeromagnetic data. *Commun Earth Environ* 2, 162 (2021). <https://doi.org/10.1038/s43247-021-00242-3>.