Dear Prof. Neuweiler,

Thank you for the comments for our last submission. The minor technical correction was made accordingly (line 302). Beside the minor technical correction, we would like to further clarify the issue of "prior distribution" and "posterior distribution" here (not in the MS as I noticed that I am not allowed to make any more changes to the accepted manuscript except the changes requested by the Editor).

The software PEST actually uses the Gauss-Marquardt-Levenberg (GML) method [*Marquardt*, 1963; *Draper and Smith*, 1998] to minimize a target function by varying the values of a given set of parameters until the optimization criterion is reached. GML method, as a frequentist approach, considers the unknown parameters as fixed and attempts to estimate them through the calibration process using the data sets. The outcome of such calibration approach is the most likely estimate of the parameters (best-fit parameters) associated with different levels of confidence. We also noticed that this approach differs from the Bayesian approach (e.g., Markov Chain Monte Carlo method), which considers the parameters as random with the prior distributions and attempts to update the prior ones into the posterior distributions by the conditioning effect of the data sets. The Bayesian approach usually has higher computational cost and its performance can be hampered for complex models. Therefore, it was not suitable for our model with relatively long CPU time (4 hours per run) and involved with various flow and transport process.

Please let us know if you have any further questions regarding the updates to the manuscript. Thank you!

Best regards
Jie