

points: 21/24

1. Problem formulation [0-4 pts]:

- is the problem clearly stated [1 pt]

Problem described in the introduction- 1 pt

- what is the point of creating model, are potential use cases defined [1 pt]

In the introduction- information about the main reason to create the project and possible use cases 1 pt

- where do data comes from, what does it contain [1 pt]

Database source linked, explanation of what it contains- 1 pt

- is preprocessing step clearly described [1 pt]

Yes in the Data section - 1pt

2. Model [0-4 pts]

- are two different models specified [1 pt]

Yes- linear and quadratic - 1pt

- are difference between two models explained [1 pt]

Both models and their parameters are described- 1 pt

- is the difference in the models justified (e.g. does adding additional parameter makes sense?) [1 pt]

There is no specific description why this two models were used- 0.5 pt

- are models sufficiently described (what are formulas, what are parameters, what data are required) [1 pt]

Yes, there are formulas in place, the parameters are sufficiently described. In both cases, price data is used - 1 pt

3. Priors [0-4 pts]

- Is it explained why particular priors for parameters were selected [1 pt]

Yes rough estimations were used - 1 pt

- Have prior predictive checks been done for parameters (are parameters simulated from priors make sense) [1 pt]

Yes, there are specific sections for that purpose - 1 pt

- Have prior predictive checks been done for measurements (are measurements simulated from priors make sense) [1 pt]

Yes, there are specific sections for that purpose - 1 pt

- How prior parameters were selected [1 pt]

Yes, based on observation of the data - 1 pt

4. Posterior analysis (model 1) [0-4 pts]

- were there any issues with the sampling? if there were what kind of ideas for mitigation were used [1 pt]

No sampling issues - 1 pt

- are the samples from posterior predictive distribution analyzed [1 pt]

Yes, there is plotted data but it is not thoroughly described 0.5pt

- are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided)

The samples are inline, it is plotted and there is also a comment- 1 pt

- have parameter marginal distributions been analyzed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values) [1 pt]

There are histograms of individual parameters but they are not analyzed - 0.5 pt

5. Posterior analysis (model 2) [0-4 pts]

- were there any issues with the sampling? if there were what kind of ideas for mitigation were used [1 pt]

There were some issues, there is the explanation of the fix- 1 pt

- are the samples from posterior predictive distribution analyzed [1 pt]

0.5 pt

- are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided)[1 pt]

The samples are inline with the data, there is a plot in place and a comment- 1 pt

- have parameter marginal distributions been analyzed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values) [1 pt]

0.5 pt

6. Model comparison [0-4 pts]

- Have models been compared using information criteria [1 pt]

Yes, the loo and waic criteria were used 1 pt

- Have result for WAIC been discussed (is there a clear winner, or is there an overlap, were there any warnings) [1 pt]

Yes, the linear model is the winner- 1 pt

- Have result for PSIS-LOO been discussed (is there a clear winner, or is there an overlap, were there any warnings) [1 pt]

Yes, the linear model once again is the winner- 1 pt

- Was the model comparison discussed? Do authors agree with information criteria? Why in your opinion one model better than another [1 pt]

Models comparison is discussed, but there is no information whether the authors agree or not with the results of information criteria- 0.5 pt