

PEER REVIEW

Reviewers (ISZ 14):

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	Criterion	Points	Argumentation
1. Problem formulation		3/5	
	Is the problem clearly stated?	0.5	What goes into this characteristic? In my opinion you should generally list some of these factors
	What is the point of creating model, are potential use cases defined?	0.5	Very strange second use case
	Where do data comes from, what does it contain?	1	Done
	DAG has been drawn?	1	Very extensive
	Confoundings (pipe, fork, collider) were described?	0	No description of confoundings
2. Data preprocessing		2/2	
	Is preprocessing step clearly described?	1	Clearly described
	Reasoning and types of actions taken on the dataset have been described?	1	Clearly described
3. Model		4/4	
	are two different models specified?	1	Done
	are difference between two models explained?	1	Yes, second model takes more factors into account
	is the difference in the models justified (e.g. does adding additional parameter makes sense?)	1	Taking into consideration mileage factor makes sense
	are models sufficiently described (what are formulas, what are parameters, what data are required)	1	Formulas, parameters and data are clearly described

4. Priors		3/4	
	Is it explained why particular priors for parameters were selected?	1	Clearly explained
	Have prior predictive checks been done for parameters (are parameters simulated from priors make sense)?	1	Done
	Have prior predictive checks been done for measurements (are measurements simulated from priors make sense)?	0.5	Why car prices are in range (0,1.6)? I don't see any multiplication
5. Posterior analysis (model 1)	How prior parameters were selected?	0.5	I don't see complete description of selected values for parameters
		3.5/4	
	were there any issues with the sampling? if there were what kind of ideas for mitigation were used?	0.5	I don't see complete description of this point
	are the samples from posterior predictive distribution analyzed?	1	Done
	are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided)?	1	Done
	have parameter marginal distributions been analysed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values)?	1	Done
6. Posterior analysis (model 2)		3/4	
	were there any issues with the sampling? if there were what kind of ideas for mitigation were used?	0.5	I don't see complete description of this point

7. Model comparison	are the samples from posterior predictive distribution analyzed?	1	Done
	are the data consistent with posterior predictive samples and is it sufficiently commented (if they are not then is the justification provided)?	1	Done
	have parameter marginal distributions been analyzed (histograms of individual parameters plus summaries, are they diffuse or concentrated, what can we say about values)?	0.5	Very poor description
		3.5/4	
	Have models been compared using information criteria?	1	Done
	Have result for WAIC been discussed (is there a clear winner, or is there an overlap, were there any warnings)?	1	Comprehensive description with details of the individual variables
	Have result for PSIS-LOO been discussed (is there a clear winner, or is there an overlap, were there any warnings)?	1	Comprehensive description with details of the individual variables
	Whas the model comparison discussed? Do authors agree with information criteria? Why in your opinion one model better than another?	0.5	Very poor description. Too few details in addition to model comparison

Total points: 22/27 (81,5 %)