Review ISZ_17

reviewers

Imię i Nazwisko 1	Maria Mazur	Points:	23.5/27
Imię i Nazwisko 2	Filip Gąciarz	Percent:	87%

Problem formulation [4.5 | 5 pts]:

- is the problem clearly stated **[1 pt]**

Comments…

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

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

- DAG has been drawn **[1 pt]**

- confoundings (pipe, fork, collider) were described **[0.5 pt]**

    Given counfounding should be better explained

Data preprocessing [2 | 2 pts]:

- is preprocessing step clearly described **[1 pt]**

- reasoning and types of actions taken on the dataset have been described **[1 pt]**

Model [4 | 4 pts]

- are two different models specified **[1 pt]**

- are difference between two models explained **[1 pt]**

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

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

Priors [4| 4 pts]

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

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

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

- How prior parameters were selected **[1 pt]**

Posterior analysis (model 1) [3 | 4 pts]

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

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

- have parameter marginal disrtibutions been analyzed (histograms of individual parametes plus summaries, are they diffuse or concentrated, what can we say about values) **[0 pt]**

Posterior analysis (model 2) [3 | 4 pts]

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

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

- have parameter marginal disrtibutions been analyzed (histograms of individual parametes plus summaries, are they diffuse or concentrated, what can we say about values) **[0 pt]**

Model comparison [3 | 4 pts]

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

- Have result for WAIC been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[0.5pt]**

- Have result for PSIS-LOO been discussed (is there a clear winner, or is there an overlap, were there any warnings) **[0.5pt]**
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  Results for WAIC and LOO should be better described

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