
Issue #14 (open): [DECISION] Recommendations for visual predictive checks in Bayesian workflow - Minor revisions

[@Fumeng-Yang](#) on
Jul 13, 2025 18:46: [opened]

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Conflicts of interest

- ☒ I declare that I have no known conflicts of interest with the authors.

Reviewed version

944e939

Reviews summarized

This paper contributes to the evaluation of visual model checks. I invited two reviewers who have expertise in visual model checks to review. They gave similar recommendations, so I will proceed with two reviews ([#11](#), [#13](#)). Based on their reviews, I recommend minor revisions to address these points.

Strengths:

- The paper is well-written and easy to follow.
- The visualizations are clear and easy to understand.
- It provides sound and well-supported recommendations.

Weaknesses and requested revisions:

- Explicitly state that the paper focuses on visualizations of predictive quantities for scalar, independent data, and acknowledge limitations for temporal or hierarchical data. ([helske](#))
- Discuss the effect of sample size “both of posterior draws and observed data” on visualization quality. ([helske](#))
- Expand the description and interpretation of quantile dot plots and PAV-adjusted calibration plots, including practical considerations and potential limitations. ([helske](#))
- Ensure that all plots have axis labels and legends, especially where omission could hinder understanding. ([helske](#))
- Add discussion in Section 4 on how the different visualizations support different model diagnosis tasks, potentially with a summary table. ([Guoziyang27](#))
- Offer a more systematic taxonomy of visual model checks, based on prior visualization research. ([Guoziyang27](#))
- Justify more clearly the use of PIT ECDF for evaluating visual predictive checks, particularly in relation to the goal of checking model prediction fitness. ([Guoziyang27](#))

- Clarify mathematical notation (Guoziyang27)
- Ensure that all example scripts produce outputs consistent with what is shown in the paper. (heske)
- Address some typos and formatting issues (heske)

Meta-Review

This paper offers valuable recommendations for visual model checking in a Bayesian workflow, serving both as a practical tutorial for practitioners and a theoretical reference for researchers. It is well-organized, with clearly constructed figures and accompanying R code. While there are some minor presentation issues, both reviewers and I believe it is close to being ready for publication.

Decision

Minor revisions: this paper requires some smaller changes, after which I am confident I would be able to endorse it.

@mjskay on
Mar 16, 2026 16:02:

Hi @TeemuSailynoja: have you had a chance to address the issues raised in this round of reviews? As there are only minor revisions, once they are addressed the paper will move to the published/endorsed state.

@TeemuSailynoja on
Mar 19, 2026 10:43:

@mjskay Hi Matthew, we are back to working on the revision. Thank you for your patience, we very much appreciate that this has taken quite long.

@alocavodia on
Jun 03, 2026 12:24:

Hi @Fumeng-Yang and @mjskay, just a quick ping to let you know that the PR with the review changes is ready for a look: <https://github.com/journalovi/2025-sailynoja-visual-predictive-checks/pull/15>

@alocavodia on
Aug 05, 2026 08:32:

Hi @Fumeng-Yang, now that [#15](#) has been merged, are there any additional steps or updates needed on our end to help move the review process forward? Thanks for your time!

@Fumeng-Yang on
Aug 05, 2026 13:03:

Hi @alocavodia, I've informed the organizers to accept this paper on July 22... Hope it's moving forward.

@alocavodia on
Aug 05, 2026 13:29:

Great! Thank you again for your time!

@alocavodia on
Sep 12, 2026 08:50:

Any update about this?
