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Project 15347

**Summary Comments**

Overall, the proposal is easy to read and well-organized. As a non-weather modeling expert, I find only a few places that may raise questions from reviewers, but as a friendly reviewer, I try to point them out. Nice job.

**1. Format and font sizing.** The document was received as a PDF and converted to a Word file for easier editing, so some of the original formatting may have been altered. The minimum font size for ISF is 11pt. The text as written was 10pt. I changed the size to 11pt, which lengthens the proposal past the 15-page limit.

I compensated with the following strategies:

a. I altered all margins to a minimum of 1.5cm (0.8 in) A4 size sheet.

b. I removed automatic spaces between paragraphs.

c. I removed headers and footers. The header used a significant amount of space.

With edits, the research plan is now less than 15 pages.

**2. Streamlining the writing.** For clarity and space, I tried to streamline the writing throughout. You will note edits and comments reflecting this. Please carefully read the edited doc to be sure I have not altered any intent.

**3. Figures and tables**.

a. This may have been due to the conversion, but I suggest that all figures and tables be in text boxes so they can be moved easily and text wrapped around them to save space. Except for Figure 1, the legends were within the main text, making the figure placement tedious. I placed all legends in text boxes. However, I suggest that the figures or tables be grouped with the legends. This tact will save you time and effort.

b. Figure legends can be difficult to distinguish from the main text as written. I suggest several strategies.

c. You can make the text of the legends a slightly smaller font size. The Figure 1 legend was already reduced, so I converted the rest to 10pt. The ISF directions do state a minimum of 11 pt, but I suspect no one will be rejected outright for a 10 pt font size legend, especially because the legends are more easily distinguished from the text. However, it is ultimately up to the PIs to decide. If this is a worry, another option is to make the figure legends a different font style. For example, the legends could be 12pt Arial.

d. Figures and Tables may be awkwardly placed in the text due to editing. You will need to replace them for the most impact.

**4. Hierarchy of headings.** I removed the spacing below each subheading. See, for example, line 127 and throughout. I also distinguished the headings and subheadings, as shown in these examples.

**C. Detailed Description of the Proposed Work (line 126)**

**C.1. Working hypothesis: (line 127)**

**C.2 Research design and methods: (line 137)**

***C.2.1 Causal detection method: (line 142)***

**5. Ambiguous words.** Words like usually, sometimes, often, few, maybe, and occasionally, among others, add ambiguity. I suggest eliminating them or being quantitative. For example, “there are three goals” rather than “there are several goals.” As another example, at line 32, “usually” indicates there are other jet classifications. If there are not, then “usually” can be omitted. If there are other classifications, I suggest citations to identify them for reviewers. One of our goals is to answer questions for reviewers proactively. Also, we do not raise unnecessary questions. I have edited or identified instances in the text. I hope this makes sense!

**6. Highlighting critical statements.** I suggest highlighting essential propositions, goals, hypotheses, and objectives. Reviewers are busy and will skim the proposal, looking for the main features, signaling that it is worth a more detailed read. Highlighting essential elements will assist them. Overusing this tactic is monotonous and counterproductive. Your proposal is sparely highlighted, so you are safe.

**7. Summarizing paragraphs.** I want to compliment you on finishing most paragraphs with a conclusion that reviewers should absorb. This greatly aids reviewers in understanding the flow of the proposal.

**8. Numbered reference citations.** I suggest sequentially numbered references in the text. Numbering will save a significant amount of space for additional text.

**9. Objectives.** You do a nice job presenting your major questions (starting at line 95) and hypotheses (starting at line 119). However, as a friendly reviewer, what seems missing are the Objectives that will address the questions. A logical order would be:

a.Scientific background

b.Questions

c. Objectives. Each Objective in the list has a sentence or two stating how it will address the questions or goals. In this case, the Objectives would align with the tasks described in C.2 Research design and methods. It should be clear how each task in C.2 relates to each Objective.

d. Hypotheses that underpin the Questions and Objectives

The order of these can change. For example, hypotheses could come after Objectives, but these are the typical elements of an ISF proposal. If you agree, I suggest Objectives can be inserted about line 106 after the Questions.

**10. Preliminary data.** This section is well written. But, at line 206, I suggest a subheading for the preliminary data to distinguish it from other text in the Work Plan and Preliminary Results. Similarly, at lines 299 and 349, I suggest the same subheading.

**11. A strong final statement.** At line 380, I suggest a statement indicating the overall results of the research plan and its significance. What are the tangible outputs? For example, will you have a database or other products to highlight beyond publications? Will the improved models you develop be available to other researchers in your field? What are the broader impacts of the research on your field, science, and society? As part of the research plan, this is your opportunity to remind reviewers of the deliverables and significance of your work and, thus, why you should be funded.