We thank the reviewer for their careful reading and kind words about the paper and the code/data package. We address each comment below; reviewer comments are in italics and our responses follow. All referenced line numbers correspond to the revised manuscript.

General comments

1.) The new text on lines 481–486 discusses future work for developing a temperature-only version of ISEFlow... I suggest also adding some wording on what a temperature-only ISEFlow would enable beyond the GP emulator...

We agree, and have expanded the paragraph to make explicit what a temperature-only ISEFlow would retain relative to the GP emulator: lower emulation error than the temperature-only GP for both ice sheets (Table 3), the hybrid uncertainty quantification demonstrated by Regional ISEFlow with better-calibrated intervals (Table 4, most notably for the GrIS), and the ability to retain sector-level output and accept ISM characteristics as inputs. We also directly acknowledge the reviewer's observation that the temperature-only GP attains comparable or slightly higher scenario separation (KS D) in this regime. Following the reviewer's note, we adjusted the corresponding sentence in the Conclusions (now lines 545–548) to remain consistent with this addition.

2.) The new text on lines 536–537 discusses extending ISEFlow to a larger selection of CMIP forcings. I suggest expanding on this... using the existing trained model (if that is indeed the case).

That is indeed the case, and we have revised the sentence (now lines 542–545) to state explicitly that this refers to applying the existing trained ISEFlow emulators, without retraining, to additional CMIP forcings to produce a broader suite of predictions, provided those forcings share the input variables and sector resolution used in training.

Line edits

We have made all three requested edits: added "the" before "importance" (line 12), removed "the" before "deep" (line 20), and expanded the acronym to "Ice Sheet Model Intercomparison Project for CMIP6 (ISMIP6)" (line 22).