Response to Reviewer

Line 181. I believe it is important to provide some explanations of the alternating very high and very low growth rates along the CS2 orbits seen in Figure 4 in the manuscript text. It may provide a more comprehensive understanding of the uncertainties associated with the ice growth model.

Yes, we agree that an explanation is helpful in this regard. We added the following paragraph: "In some regions, very high and very low growth rates appear side by side, and overall, the gridded growth estimates exhibit considerable noise. This is partly because the linear fit is highly sensitive to abrupt changes in SIT, which may occur naturally or result from measurement uncertainties. Such variability can introduce significant noise or bias into the estimated growth rates. Additionally, the SIT estimates used for the fit are obtained over differing time intervals, leading to inconsistencies in temporal resolution. These inconsistencies can degrade the stability of the fitted growth estimates."