Dear Editor Aurelien Podglajen,

Thank you for your message and for considering our manuscript "Lagrangian Coherent Structures to Examine Mixing in the Stratosphere". We truly appreciate the referees' thoughtful review and constructive feedback. In response to Referee 1's comment, we have expanded the discussion on the limitations of using PV to compute effective diffusivity in the conclusion and have also added a clarifying sentence in the equivalent latitude section. The changes are highlighted in blue in the track-changes file.

We are grateful for your time and consideration and look forward to your opinion.

Best regards,

Marianna and Jezabel