Author's response to the reviews and relevant changes to the manuscript egusphere-2024-1093

This document provides a detailed point-by-point response to all referee comments and the relevant changes that have been made in the manuscript. Referee comments are shown in *italics*. Author's responses are shown in **bold**.

Public justification by the topic editor:

I am placing your paper as ready to publish pending technical corrections for two reasons:

(1) the two points given above by the GMD staff,

The full affiliations of authors have been added and the sections have been rearranged according to the manuscript composition as suggested by the GMD staff (now using the Copernicus Publications LaTeX Package, version 7.11, 9 April 2025).

(2) a note that you might consider the reviewer's clarifying question about thin elastic shells and whether further explanation, as suggested by the reviewer, might be helpful to potential readers.

We have re-evaluated the issue and assure that our exposition in the manuscript is sufficiently clear. Both the shell and plate models have been considered in our work. In contrast to the reviewer's standpoint, we start from the general formulation for thin elastic shells and consider its reduction to a plate model. This has been clarified in the previous response by pointing out the relevant sections. We believe that no further explanation is required in the manuscript.