The revised version of the manuscript has addressed Reviewer 2's comments satisfactorily. However, given Reviewer 1's negative assessment and the relatively brief nature of this review report, I undertook an additional reading of the manuscript. I have identified a few minor points that should be addressed before the manuscript can be finally published.

In line 107, you state that the average descent velocity was 1 m s^{-1}. However, the sampling frequency is not specified, although it determines the vertical resolution (in m) of the measurements.

We thank the editor for the comment. The sampling frequency information (4 Hz) was added line 107.

Table A3 reports a "stratification index", but this parameter does not appear to be defined anywhere in the manuscript.

We thank the editor for the comment. The stratification index was described in Section 2.2 (Material and Methods, lines 145-146: the stratification index as the density difference between the deepest and the surface (3m) sampled depth levels (Blais et al., 2019). We have added precision to this definition: "and the stratification index as the density difference (kg/m^3) between the maximum sampled depth and the surface (3m) sampled depth levels (Blais et al., 2019)."

Concerning stratification, the manuscript places considerable emphasis on thermal stratification. However, salinity is also highly variable in estuarine environments and may significantly contribute to density stratification. Moreover, Table A3 includes the depth of the pycnocline. This raises the question of why thermal stratification is given such prominence throughout the manuscript. For example, line 43 refers to barriers to organism movements associated with the thermocline, while Section 2.2 is largely devoted to estimating thermocline depth. In line 141, the authors state: "we chose to use temperature in the present study as an indicator of vertical stratification since some measurements of salinity were not recorded." However, most profiles appear to contain salinity information, as pycnocline depths are reported in Table A3 for all time series. You should clarify this point and discuss in more detail the relationship between the thermocline and the pycnocline in the dataset. In some series, the depths of these two features appear similar, whereas in others they differ substantially. From an ecological perspective, would organisms be expected to respond more strongly to density stratification or to temperature

stratification? Additional discussion on these issues would strengthen the manuscript and help justify the methodological choices made.

We thank the editor for this comment. We made several changes in the manuscript to add information and details about the relationship between the pycnocline and thermocline:

In Material and Methods, lines 142-145: “We chose to use temperature in the present study as a primary indicator of vertical stratification, consistent with recent studies that have focused on the thermocline in similar environments with dynamic coastal waters influenced by water masses and anthropogenic activities (Lim et al., 2025, and references therein).”

In section 3.2 Salinity, lines 202-218: we added information of the pycnocline and halocline, and comparisons with the thermocline.

In the discussion, lines 380-383: In June, thermocline and pycnocline depths were not always aligned and differed among zones. In Zone 2, the pycnocline occurred above the thermocline, whereas in Zone 3 the pycnocline was deeper, indicating that density stratification was mostly influenced by salinity in June.

We think the organisms would be expected to respond more strongly to temperature stratification, as the subsurface Chl a maxima observed coincided more closely with the thermocline than with the halocline and pycnocline the thermocline boundaries more than that of halocline and pycnocline. We have added this perspective to the discussion:

Lines 405- 411: Furthermore, halocline and pycnocline depths remained closely aligned throughout the study period, indicating that salinity was the main control on density stratification in this system. During summer months, however, the thermocline extended deeper than both the halocline and pycnocline. This coincided with the subsurface Chl *a* maxima observed in July, which occurred below the thermocline and at depths exceeding the pycnocline. These maxima therefore appear to align more closely with the lower boundary of the thermocline rather than the pycnocline, suggesting that thermal stratification may better explain the vertical distribution of Chl *a* in the studied region than density stratification alone.