

Review of SP-2025-17

I am overall satisfied with the revised manuscript. I also believe that the comments raised by the other referee have been addressed satisfactorily. I therefore have only one minor remark authors should address before the manuscript is ready for publication, given below.

Since the first submission, several studies have demonstrated that mesoscale eddies can be reliably detected directly from raw SWOT SSH measurements, without additional interpolation. These applications include high-latitude regions such as the Arctic Pacific, the Labrador Sea, and the Antarctic coastal zone, where the relatively small Rossby deformation radius results in eddies that are fully contained within the SWOT swath. In the Mediterranean Sea, many mesoscale eddies are also small enough to be entirely captured within a single swath. However, this approach would fail to detect the largest, quasi-permanent eddies, whose spatial extent exceeds the swath width, namely the one that are of interest for the present study. In this context, the use of MIOST-K is advantageous because it enables the detection of both small and large eddies. This distinction, and the complementary strengths of the two approaches, should be discussed in the Introduction, the Discussion, or both.

Refs:

<https://doi.org/10.1038/s43247-026-03498-9>

<https://doi.org/10.1093/nsr/nwag181>

<https://doi.org/10.5194/os-22-1515-2026>