

Figure S1. Area-weighted mean EKE over (a) the Ionian Sea, (b) the northern Ionian Sea, (c) the Levantine Sea and (d) the eastern Algerian basin for the different L4 products. Thinner lines are the raw daily data while thicker lines represent the yearly-rolling mean. Straight lines correspond to the trends of the raw data. The time series are calculated by averaging the EKE over the regions indicated in the insets, where the black lines are the reference altimeter tracks. (e) EKE trends and their associated error for the different L4 products in the four studied regions. Statistically non-significant trends are indicated in italics and bars are gray-hatched.

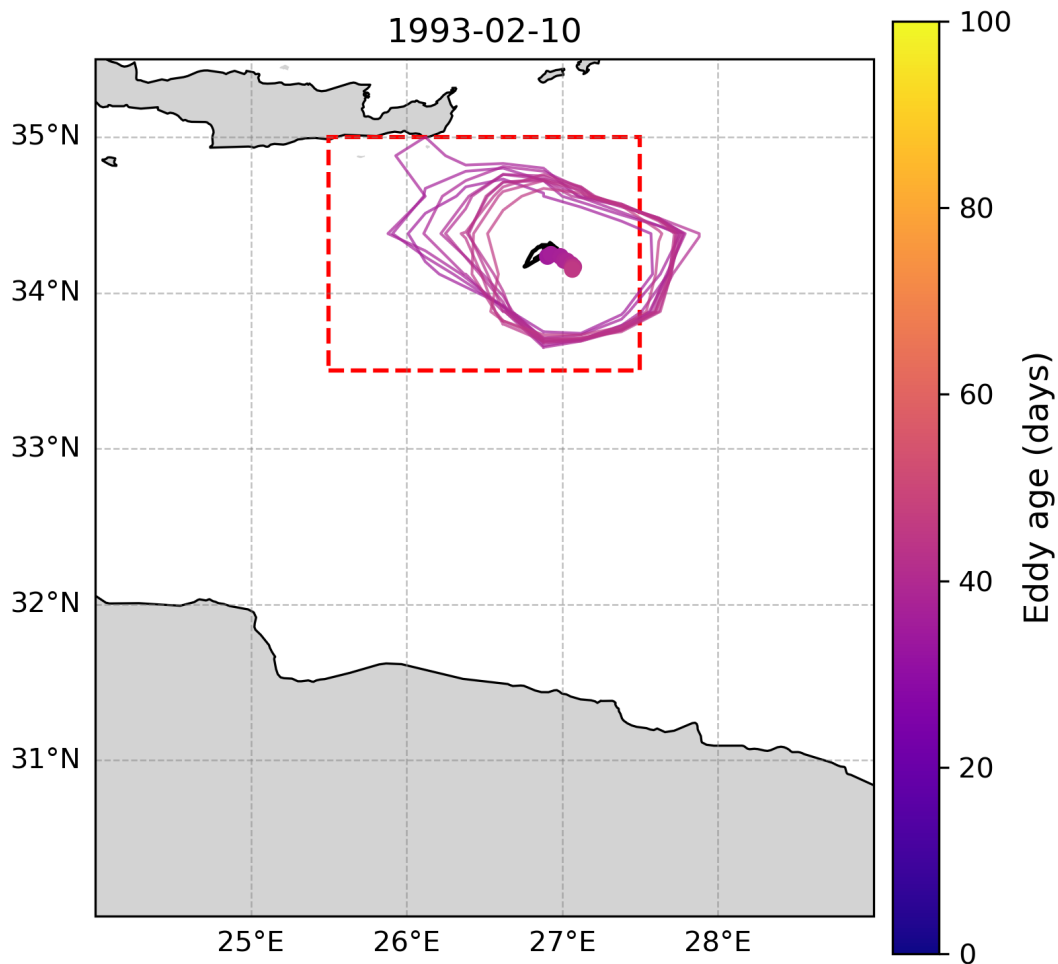


Figure S2. See Video S1 in the Supplementary Materials (or at <https://doi.org/10.5446/72396>). Long-lived anticyclonic eddies detected in the Ierapetra area from META 3.2 DT atlas built with all-sat-glo. The red dashed box delineates the region where Ierapetra eddies are known to form and is therefore used as the selection area to identify anticyclones with a lifetime longer than 10 days whose first detection occurs within this region. The black line shows the anticyclone trajectory, while the color-coded circles represent individual anticyclone detections over the last 10 days, with colors indicating the anticyclone age in days.