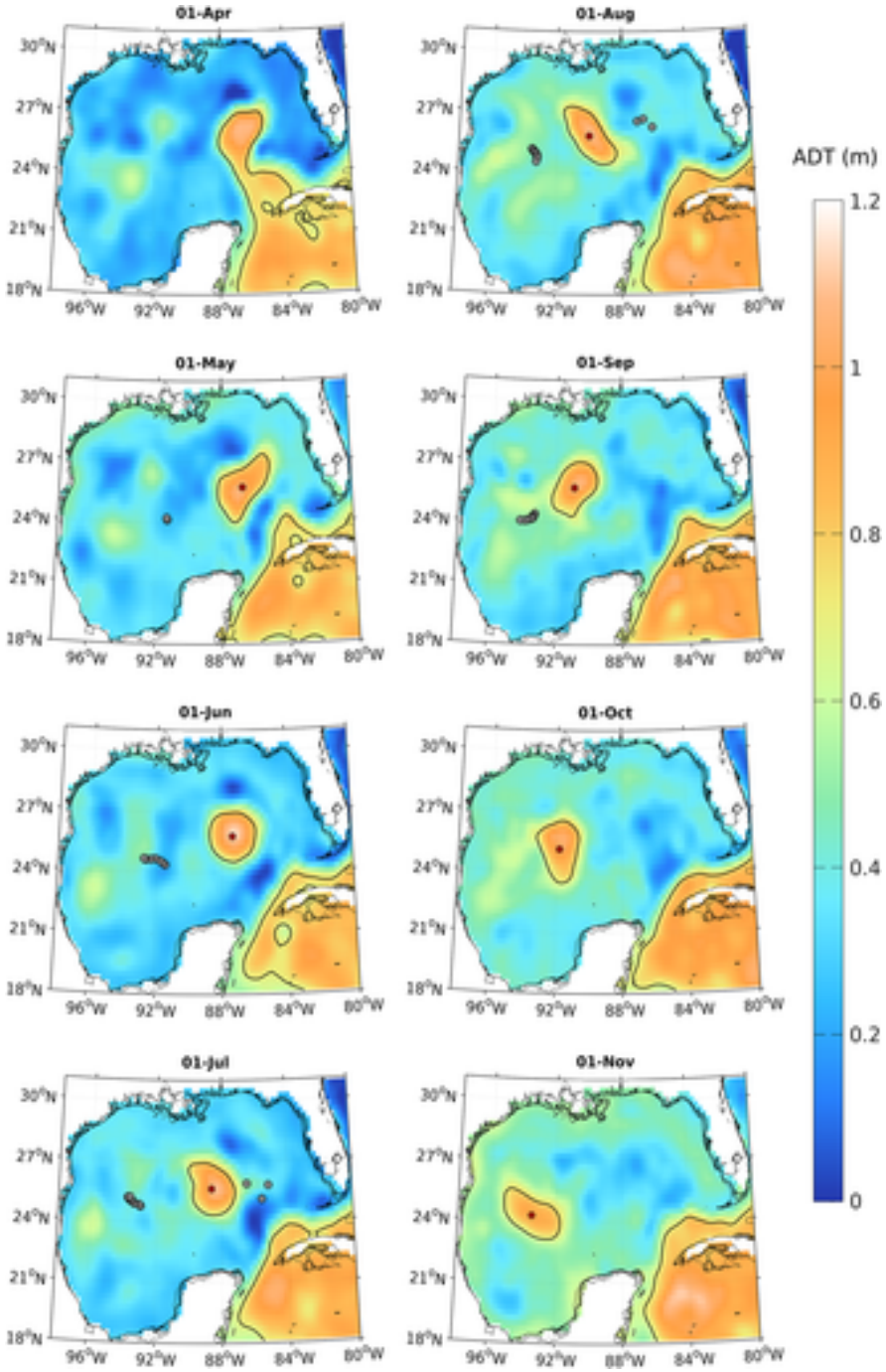
Poseidon

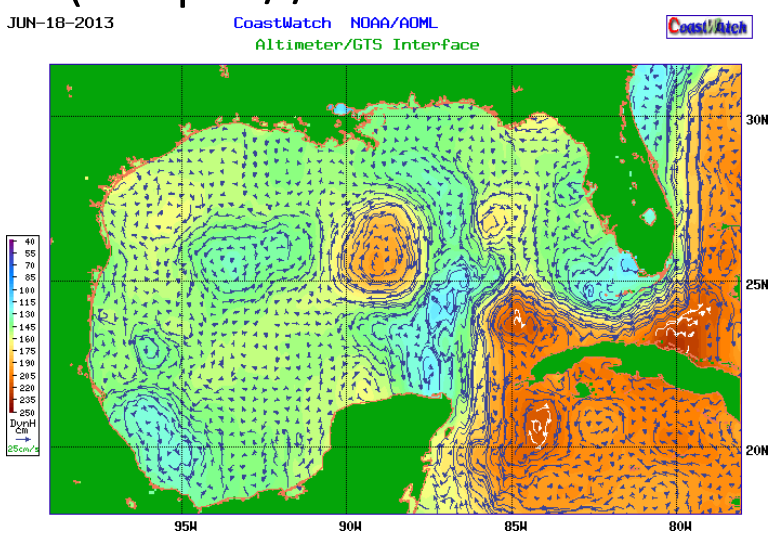
Meunier et al 2018.

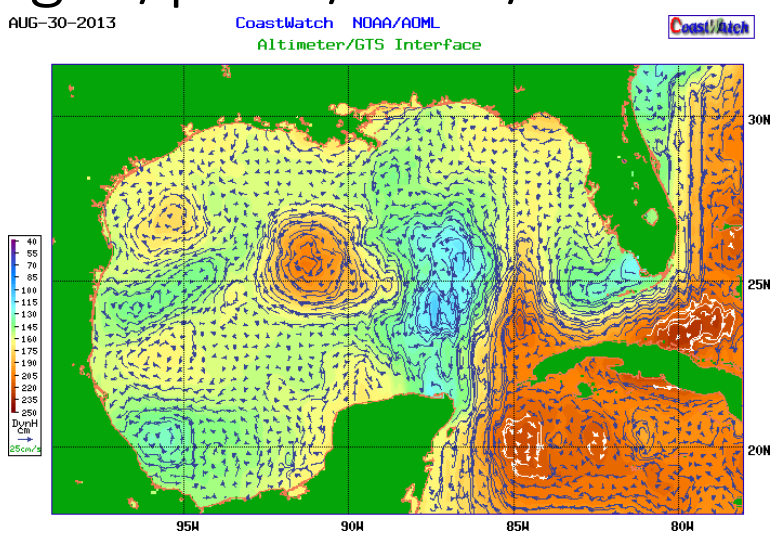
Figure 2

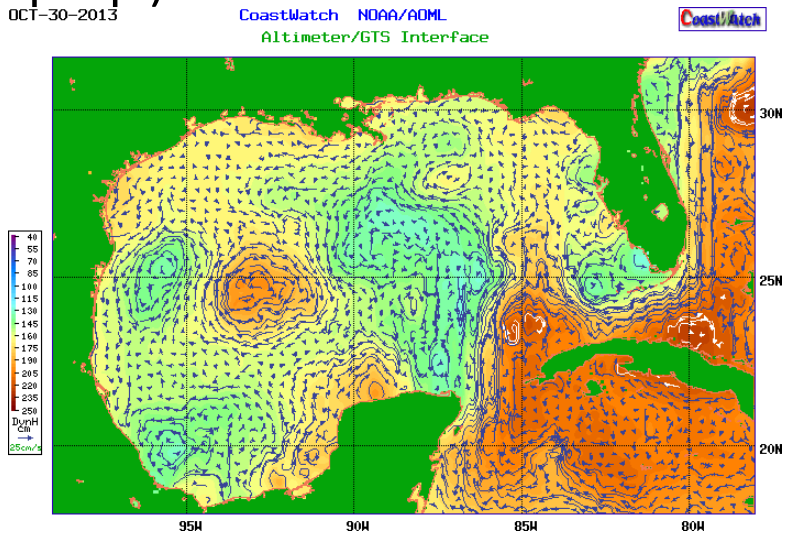
Snapshots of ADT (m) from 01 April to 01 November 2016. The 0.7-m ADT isopleth is materialized by a black contour line. The red dots stand for the centroid of the 0.7-m ADT isopleth. The grey dots represent the location of the Argo profiles available during this time lapse. A list of the latter is available in Table A1. ADT = Absolute Dynamic Topography.

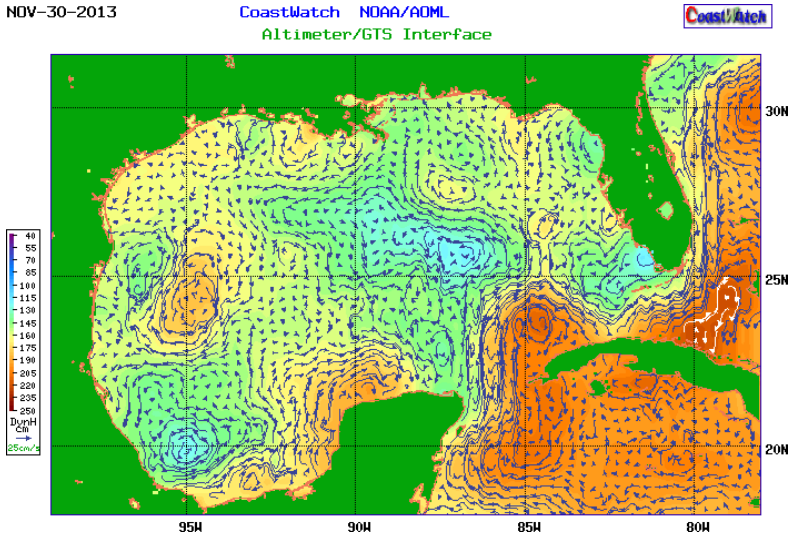


Kraken from low res altimetry (https://www.aoml.noaa.gov/phod/dhos/altimetry.php)





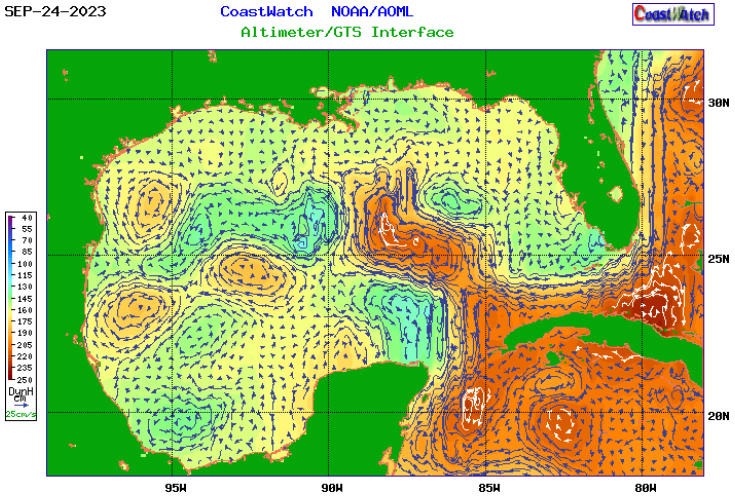


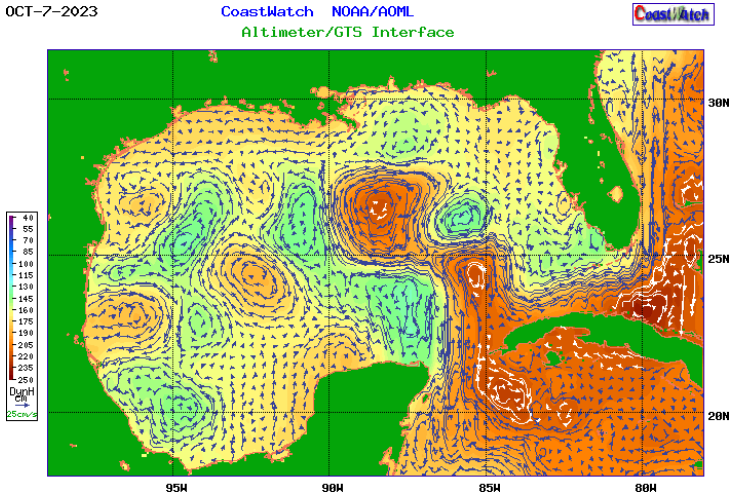


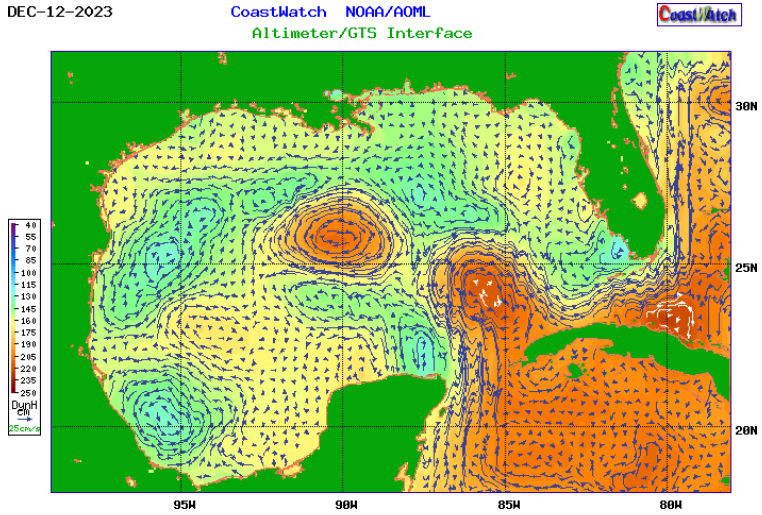
Farily ciruclar with no clear appearance of cyclones near its rim. Cyclones were present surrounding it as part of the detachment from the Loop Current, and also the large cyclone present in the western basin which alter interacted with Kraken as it approached the western boundary.

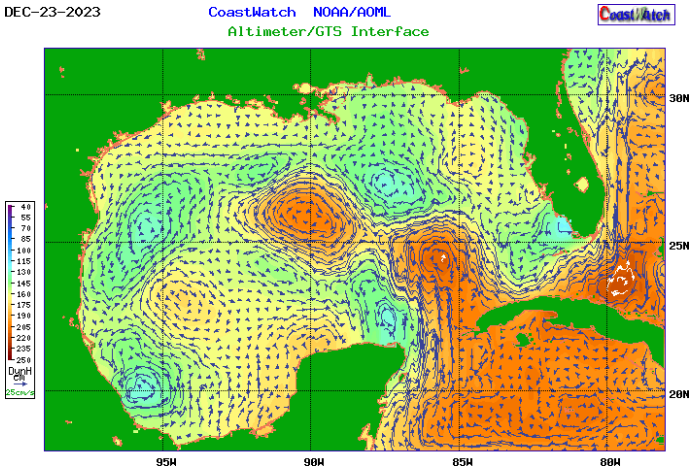
See more on the coherence of this eddy in Beron-Vera et al 2018.

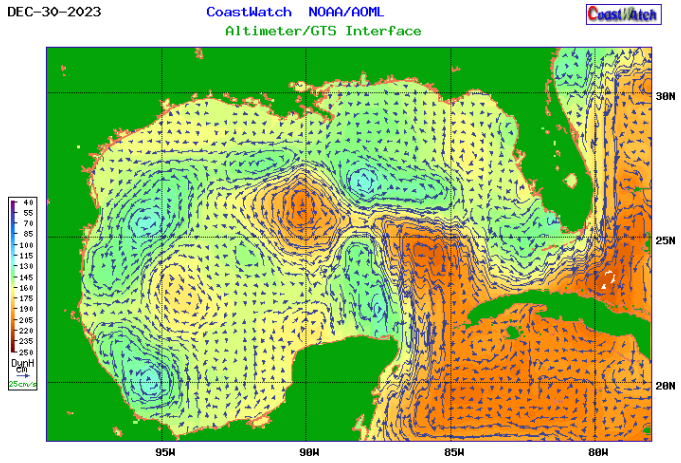
LCE in this study with low res altimetry









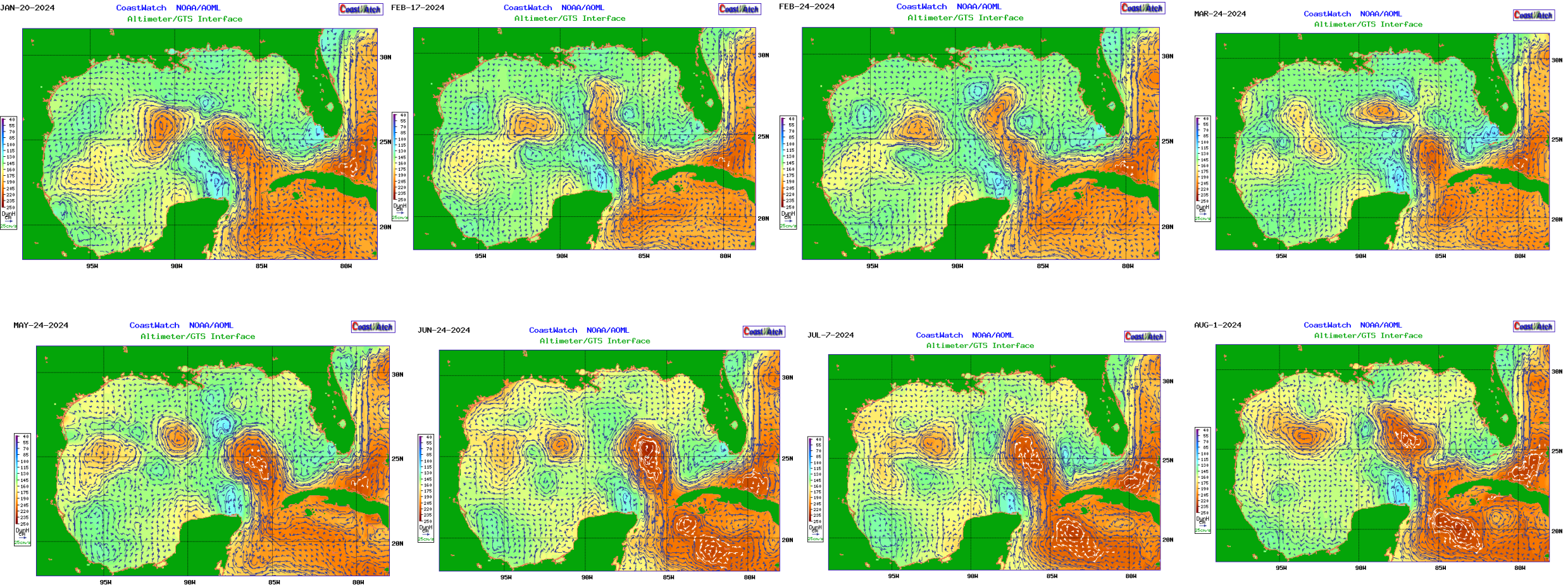


Very active mesoscale field present when this eddy was formed

Cyclonic circulations surrounded it even before it was “born” (4cyclones were surrounding it before it detached from the LC, september/october 2023)

4 cyclones in squared vortex configuration visible in 23 and 30 December 2023 (fig 1j,k in paper)

LCE in this study with low res altimetry, lifecycle



Notice dipole for February 17 and 24, 2024 (fig 1p,q)

Lifecycle includes nearly splitting in two (March), and apparently merging in August with the LCE that was formed in March (last panel is an animation). Hence its lifetime lasted at least from December 2023 to August 2024.