GEOPHYSICAL RESEARCH LETTERS, VOL. 33, L22603, doi:10.1029/2006GL027800, 2006

Figures

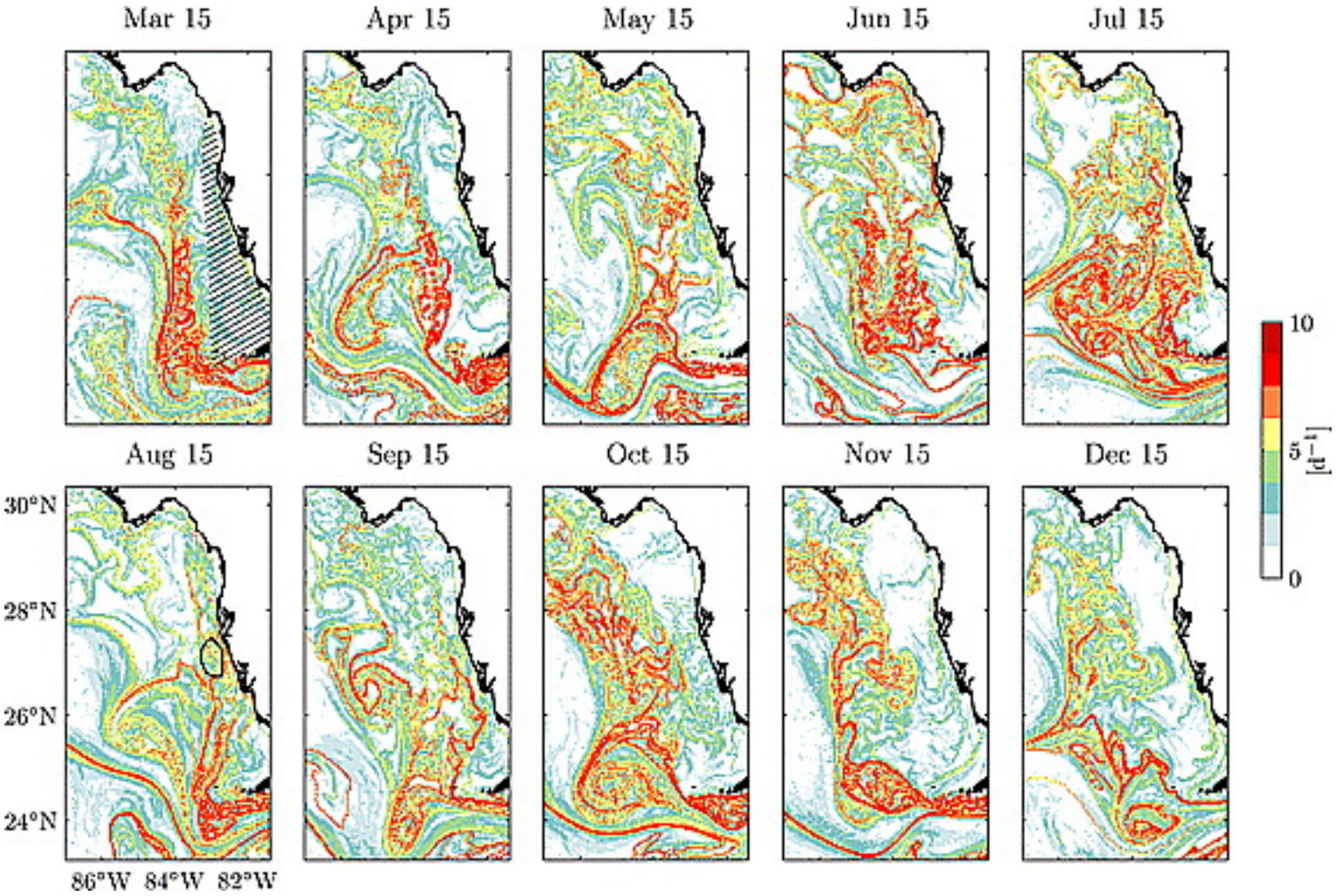

Figure 1. Sequence of snapshots of FTLE field (1) computed backward in time using surface currents generated by a HYCOM simulation of the WFS for year 2004. Ridges of FTLE field define attracting LCSs. Note the presence of a triangular-shaped area on the southern portion of the WFS with small FTLEs bounded by the western Florida coast on the east, the lower Florida keys on the south, and large ridges of FTLE field on the west. The latter constitute a barrier for cross-shelf transport, which is seen to undergo a seasonal oscillation near the western boundary of the FZ. The FZ, as identified by *Yang et al.* [1999], corresponds to the cross-hatched domain in the top left plot. The HF-radar measurement domain that was used to produce Figure 2 is identified in the bottom left plot. Enhanced EPS [4.0 MB]

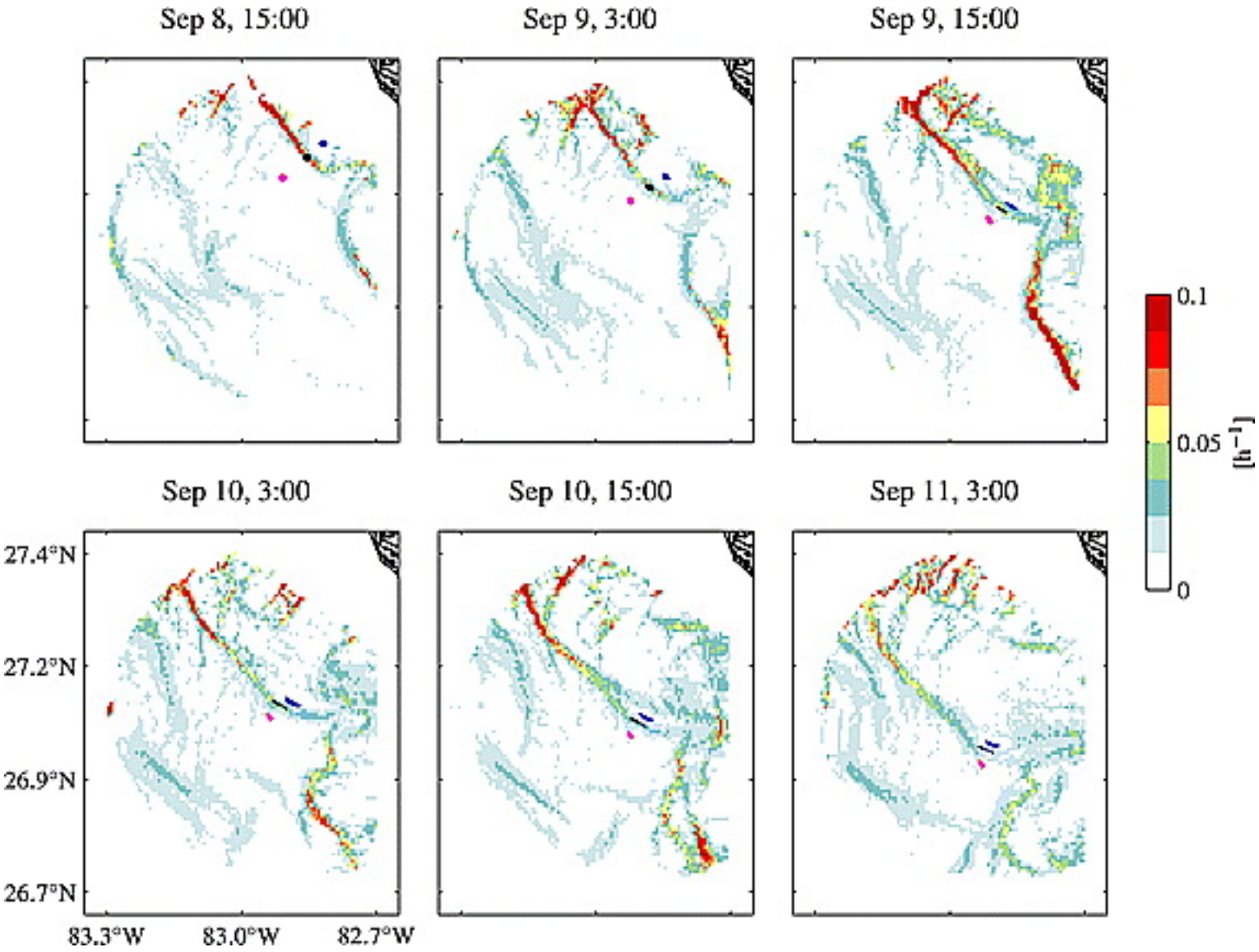

Figure 2. As in Figure 1 but using HF-radar-derived surface currents in a roughly 60 km ×80 km domain on the WFS off Tampa Bay (Figure 1, bottom left plot). The black, dark-blue, and magenta spots in each plot indicate clusters of passively advected fluid particles tracked from their initial location in the top left plot. Note how the black spot stretches along one of the identified LCSs and the dark-blue and magenta spots flanking this LCS are attracted to the LCS but do not cross it. Enhanced EPS [1.3 MB]

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