



Fig. 7. Dominant eigenvectors of the normalized 3D mesoscale tracer variability covariance (limited to the sampled domain). Only the surface values are shown; they are discussed in the text. The isotropic horizontal zero-crossing is 50 km and decay scale 25 km. The size of the covariance is [147,680 × 147,680]. The Panel number indicates the mode number.

Ionian Shelf Break Vortex (IBV) and mode 3 to the Maltese Channel Crest (MCC), coupling the other two vortices. These features are in accord with the squeezing and stretching of the AIS over the local topography (Fig. 2), as was also addressed by Onken and Sellschopp (1998). The mode 4 identifies another feature at the entrance of the Strait of Messina. We name this vortex the Strait of Messian Vortex (SMV). As for the three other features (Robinson et al., 1998b), satellite SST images and associated wind data