Identification of Key Surface Wind Features Based on Nine Years (2000-2008) of Quick Scat Observations over the Mediterranean Basin

T. Chronis, V. Papadopoulos, and A. Papadopoulos
Hellenic Center for Marine Research, Inland Waters, Athens, Greece (themis@ath.hcmr.gr)

Nine years (2000-2008) worth of Quick Scat hi-resolution (12.5x12.5 km) surface wind observations (magnitude and direction) are compiled in order to identify key features with respect to the seasonality of mean and extreme states of the Mediterranean and Black Seas. A key finding pertains to the effect of topography and its interaction to the dominant surface flow and its mean and extreme states. The Gulf of Lion and the Aegean Sea are the regions with consistently higher wind speeds and extreme event frequency occurrence for any given season. The anomalies of the seasonal means over the Central and Eastern Mediterranean can play the role of the predictor for the seasonal extreme event frequency. This contribution aims at the identification of key features of the two basins as well as their multi-disciplinary usage. Furthermore, the Hellenic Center for Marine Research Poseidon buoys are employed to validate Quick Scat surface wind observations over the eastern Mediterranean and the Greek Seas on a high-frequency (e.g. daily) and low frequency (e.g. monthly) basis .