



Mobility of weather systems and meteorological hazards in the Mediterranean area

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The energy of weather systems is often an essential ingredient for disasters. But many weather systems causing natural hazards are relatively weak whether compared with others, overall in the Mediterranean area. Conditions that make those systems potentially hazardous concern the persistence of the systems over a specific area. The persistence of weather systems is strictly connected with the mobility of these systems. Orography, latent heat and position of anticyclones may be able to slow fronts and cyclones down. In this work, we study some Mediterranean weather systems and the influences of orography and latent heat on their mobility. Latent heat associated with condensation and evaporation as well as fluxes of latent and sensible heat at surface may play an important role in the evolution of fronts. Moreover the mobility may affect the moistening of weather systems, overall on a warm sea like the Mediterranean Sea.