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Fig. 4.1 The conceptual models depicting the mechanisms responsible for the production of high surface winds for the (a) 17 February 2006 and (b) 15−16 April 2007 events. For both, MSLP is indicated by the solid black contours, potential instability is shaded in orange, 12-h centered mean sea level pressure change [hPa $(12\ h)^{-1}$, dashed; increasing indicated in red, decreasing indicated in blue], regions of warm advection (WAA) and cold advection (CAA) are indicated by the blue and red shaded regions, respectively, and the location of the dry-air intrusion is indicated by the (a) gray shading and (b) gray arrow. The stars denote the locations where high winds occurred. The red and blue arrows represent streamlines at the surface and at 900 hPa, respectively. Frontogenesis is indicated as frontal forcing along the cold front in (a) and is indicated by the purple shading in (b).