

Figure S. 1: Scenario I (left) and scenario IV (right) for Typhoon Choi-Wan at 1200 UTC 19 September 2009. a,b) 850 hPa geopotential height (dashed contours, in gpm), 850 hPa temperature (shaded, in K) and vertically averaged baroclinic conversion (thick black contours, dashed when negative, every 50, 100, 150, 200 $W m^{-2}$). c,d) Vertically averaged K_e (shaded, in $10^5 J m^{-2}$), ageostrophic geopotential flux (arrows, in $10^6 W m^{-1}$), divergence of flux (shaded, in $W m^{-1}$) and 500 hPa geopotential height (dashed contours, in gpm).

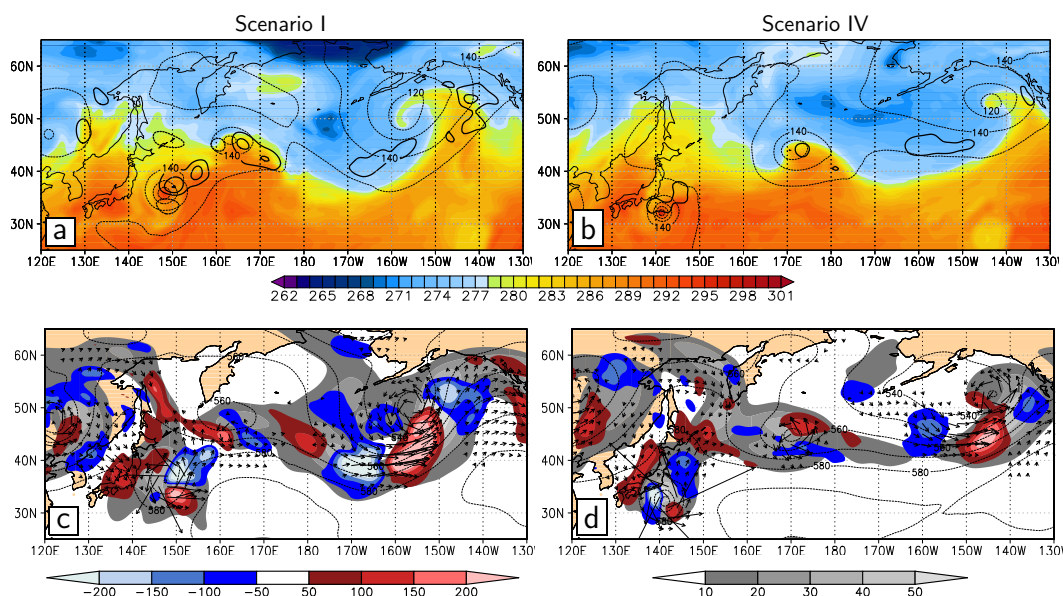


Figure S. 2: As Figure S.1 but for 1200 UTC 19 September 2009