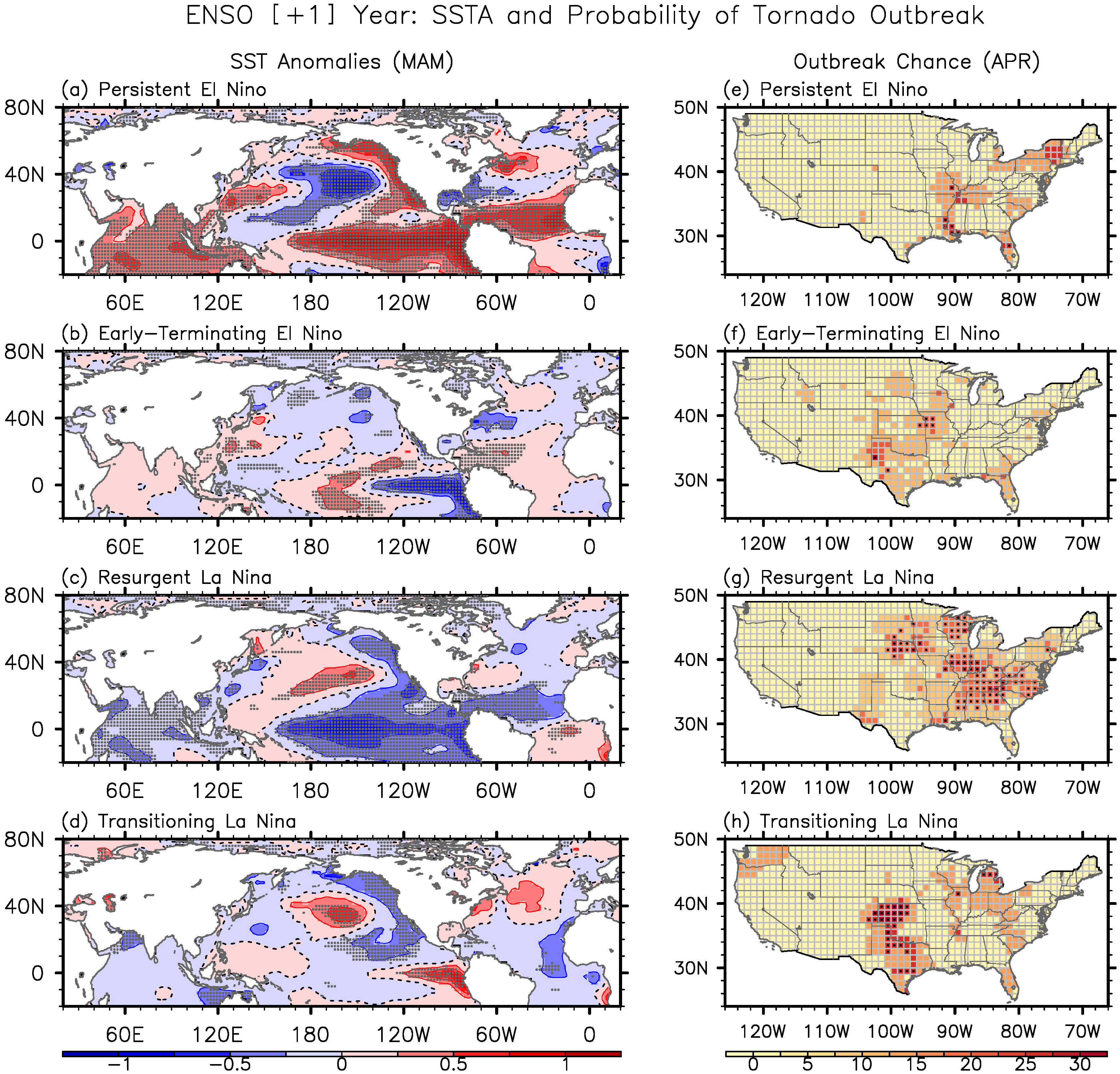
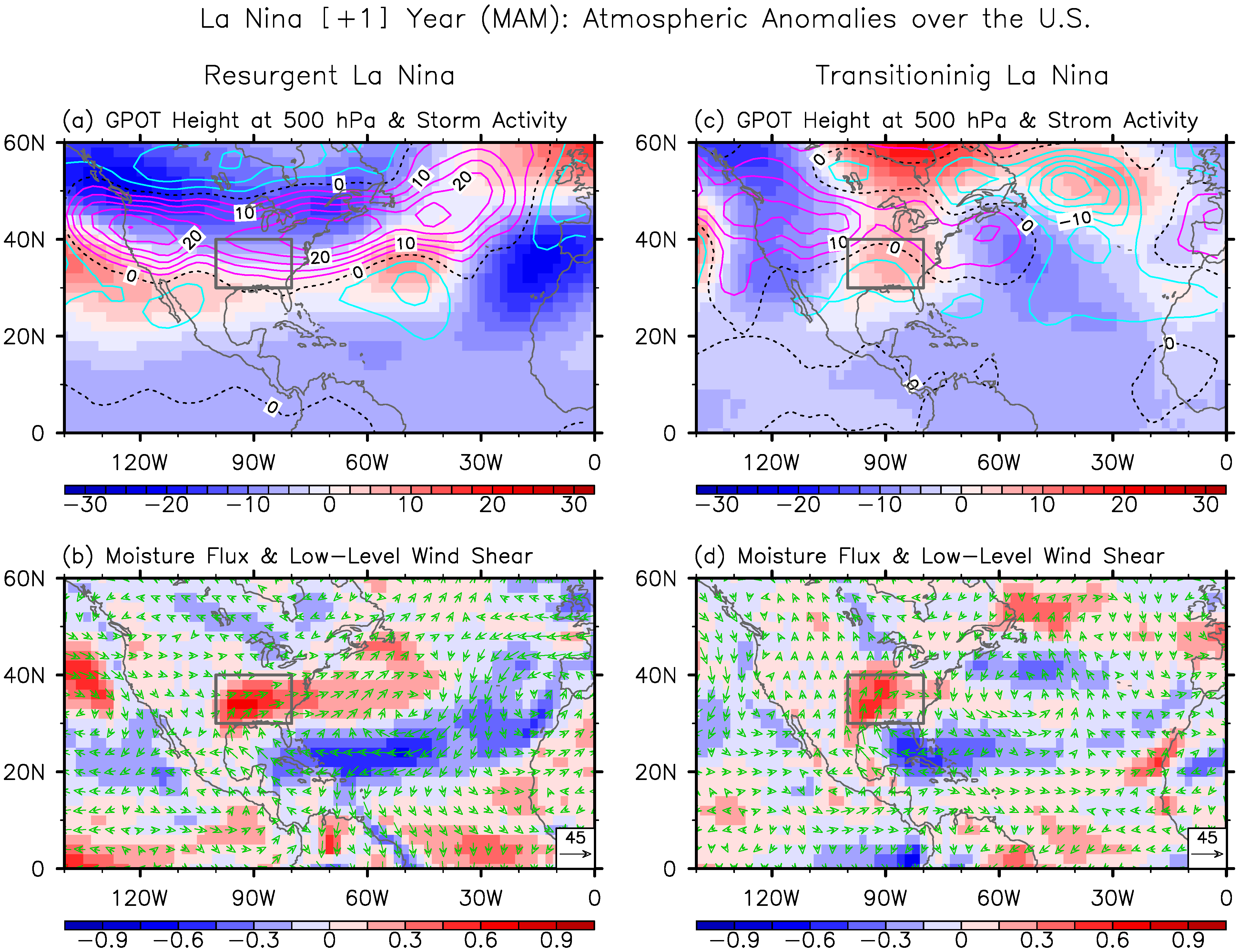


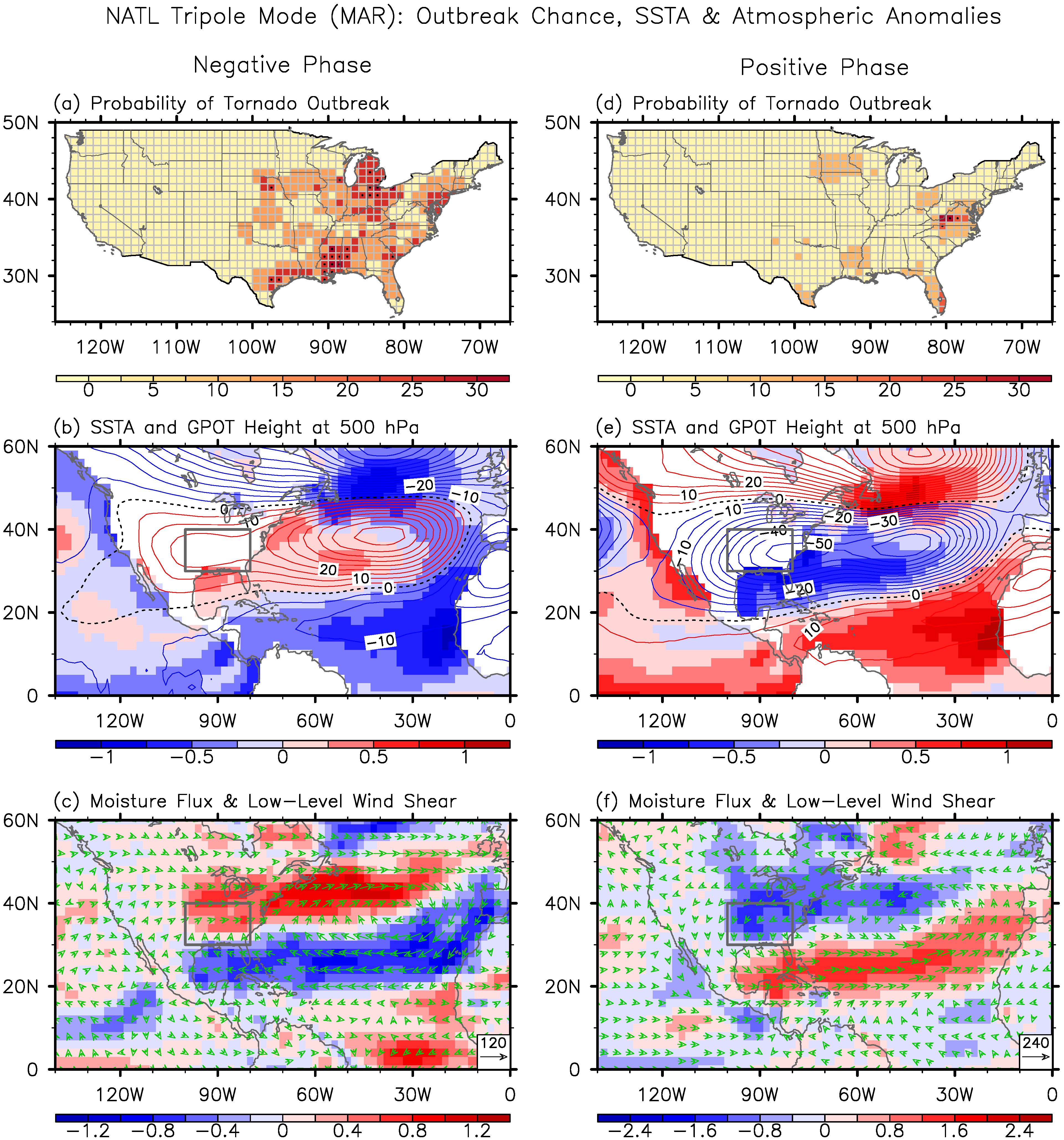
**Figure 1**. Time-longitude plots of the leading orthogonal modes of the tropical Pacific SSTAs averaged between 5°S and 5°N for 21 El Niño and 22 La Niña events during 1949-2013, reproduced from *Lee et al*. [2014b], namely (a) the persistent El Niño, (b) early-terminating El Niño, (c) resurgent La Niña and (d) transitioning La Niña. The unit is in °C.



**Figure 2**. Composite (a-d) SSTAs for the four dominant phases of springtime ENSO evolution in MAM (+1) and (e-h) the corresponding probability of U.S. regional tornado outbreaks in April (+1). The gray dots in panels a-d indicate that the SSTAs are statistically significant at 90% based on a student-*t* test. The black dots in panels e-h indicate that the probability of tornado outbreaks is statistically significant at 90% based on a binomial test. The unit is in °C for the SSTAs and in % for the probability of tornado outbreaks.



**Figure 3**. (upper row) Anomalous geopotential height at 500 hPa (color shades) and variance of 5day high-pass filtered meridional winds at 300 hPa (contours), and (lower row) anomalous moisture transport (vectors) and low-level vertical wind shear (850 - 1000 hPa; color shades) in MAM (+1) for (a,b) the resurgent La Niña and (c,d) transitioning La Niña cases. The units are in gpm for geopotential height, in m2 s-2 for variance of meridional winds, in kg m-1 s-1 for moisture transport, and in m s-1 for vertical wind shear.



**Figure 4**. (top row) Probability of U.S. regional tornado, (middle row) composite SSTAs (color shades) and geopotential height anomalies at 500 hPa (contours), and (bottom row) low-level vertical wind shear anomalies (color shades) and moisture transport anomalies (vectors) in March for (a-c) the negative and (d-f) positive North Atlantic SST tripole. The unit is in % for the probability of tornado outbreaks, in °C for the SSTAs, in gpm for geopotential height, in kg m-1 s-1 for moisture transport, and in m s-1 for vertical wind shear.