



FIG. 11. (a) Vertical profiles of reflectivity factor  $[Z - (Z_w + Z_i)/2]$ , differential reflectivity ( $Z_{DR}$ ), differential propagation constant ( $K_{DP}$ ) and the correlation coefficient  $\rho_{HV}(0)$  measured on 2 June 1985, at 1859:28 CST. The range is 82.5 km; azimuth is 242°. Data are averaged over 2.1 km. The 0°C isotherm is at 4.8 km. (b) Vertical profiles of  $Z$ ,  $Z_{DR}$ ,  $\rho_{HV}(0)$ , and  $K_{DP}$  measured at 1559:32 CST 14 May 1986, 40 km in range and 130° in azimuth. The 0°C isotherm is at 3.5 km and, the profiles are from averages over 2.1 km in range. (c) Vertical profiles as in Fig. (b) but for 1611:06 CST.

Hail cases

a) Large, vertically aligned stones

b) Smaller, tumbling or spherical hail

Stratiform

Balacrishnan and Zrnica, JAS, June 1990