Tornadoogenesis with a QLCS on 28 February 2011. The lee panel shows the dual Doppler analysis (ARMOR/KHTX) of storm-detected by the microwave profiling radiometer was present within the lowest 2 km. (and secondarily at 5 km) and a CG lightning strike near a range of 22 km (tower induced).

Liquid water verification plane of the RHI images. Layering of sources indicates long horizontal channels near 2 km AGL images show VHF sources (black dots) detected by the lightning mapping array superimposed on the vertical plane of the RHI images. The top two panels present high-resolution details of Z and W (right). Variation in W is shown in the lower region of the cloud. Simultaneous measurements (XPR, lower left) from the 915 MHz wind profiler do not resolve the smaller scale features, but Bragg scatter at low levels is apparent. The XPR Z values at low levels are less pronounced, but the return does show W values within the boundary layer over the lowest one kilometer (top right). This example illustrates the ability to identify Bragg vs. Rayleigh scatter.