

FIG. 6 Amarillo (KAMA), Texas, radar reflectivity (dBZ). 2008 UTC 8 June 1995. 0.5 degree elevation angle.

20:10Z Thu 8 Jun 1995 t=7800.0 s (2:10:00)

Grid level=18

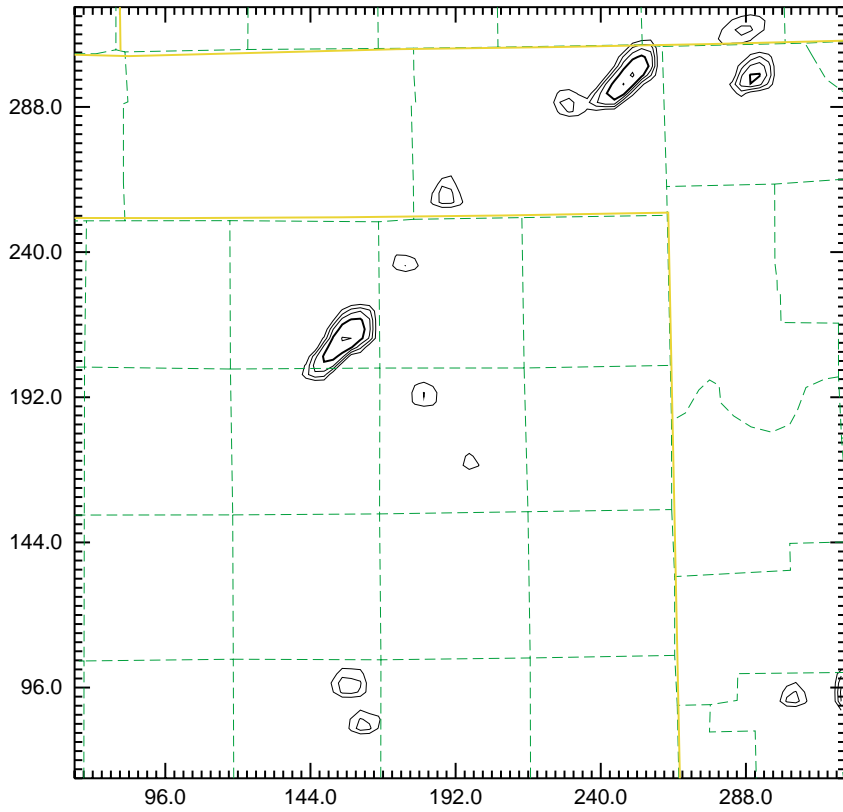


FIG. 7 Model reflectivity (dBZ) forecast for 2010 UTC 8 June 1995.

20:10Z Thu 8 Jun 1995 t=7800.0 s (2:10:00)

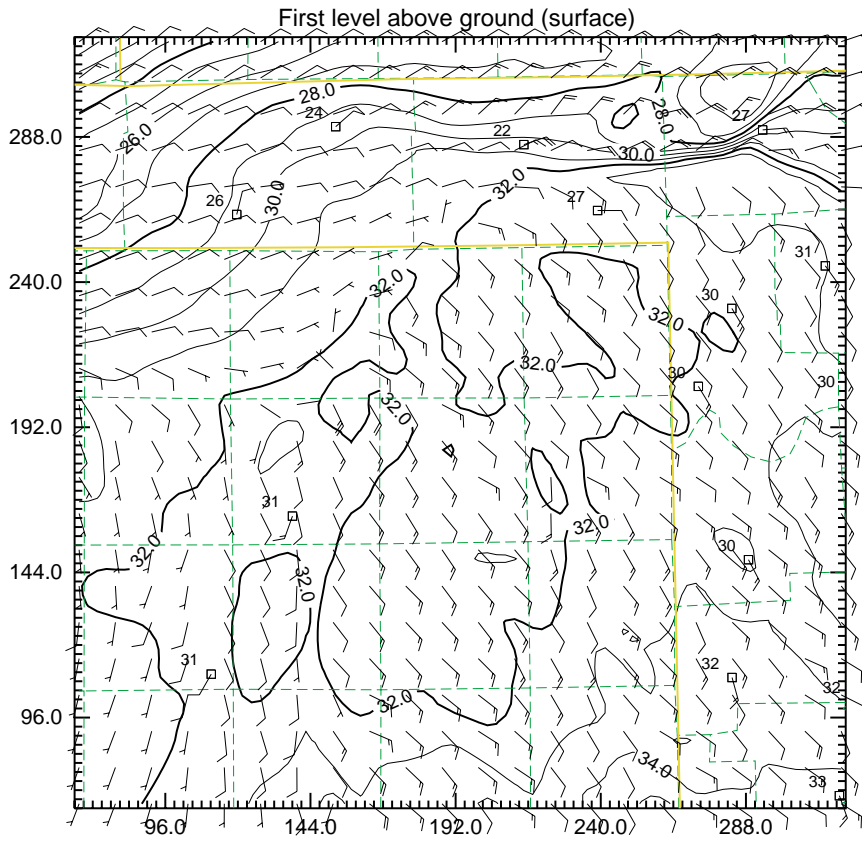


FIG. 8 Surface temperature ( $^{\circ}\text{C}$ ) and wind (barbs). Observations and model forecast at 2010 UTC 8 June 1995. Full barb is  $5 \text{ ms}^{-1}$ .

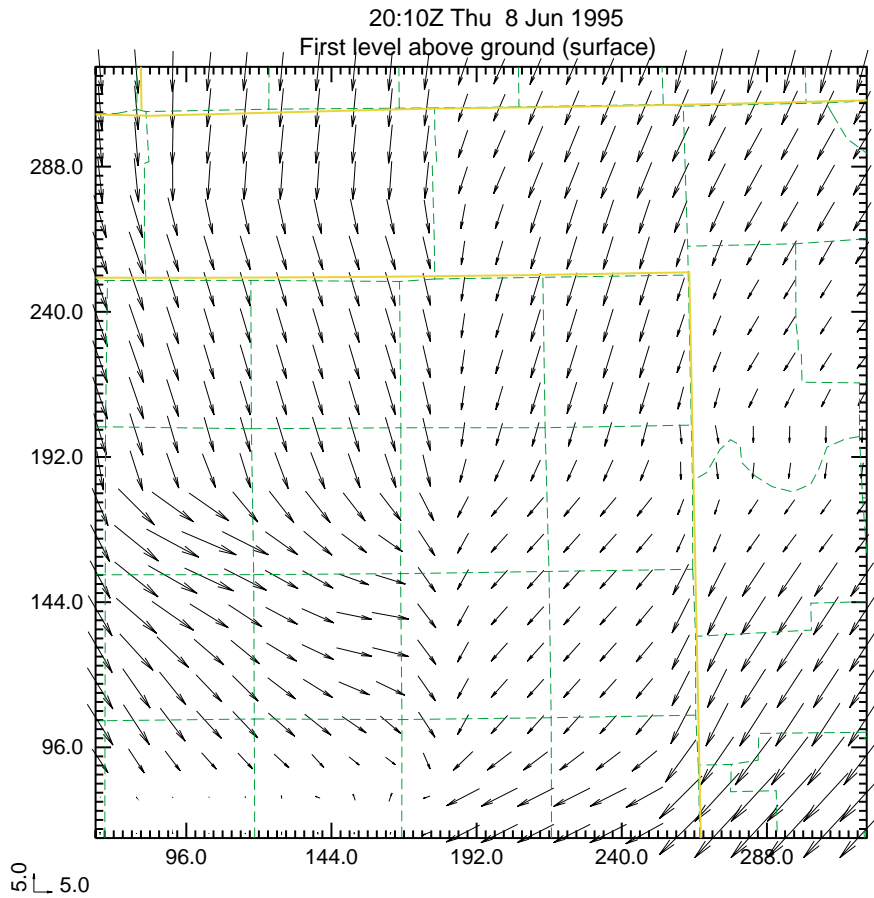


FIG. 9 Phase shift vectors for the 10-m AGL model level at 2010 UTC. Vector scale in the lower-left corner is in unit grid lengths (1 grid length=3 km).

18:00Z Thu 8 Jun 1995 t=0.0 s (0:00:00)

First level above ground (surface)

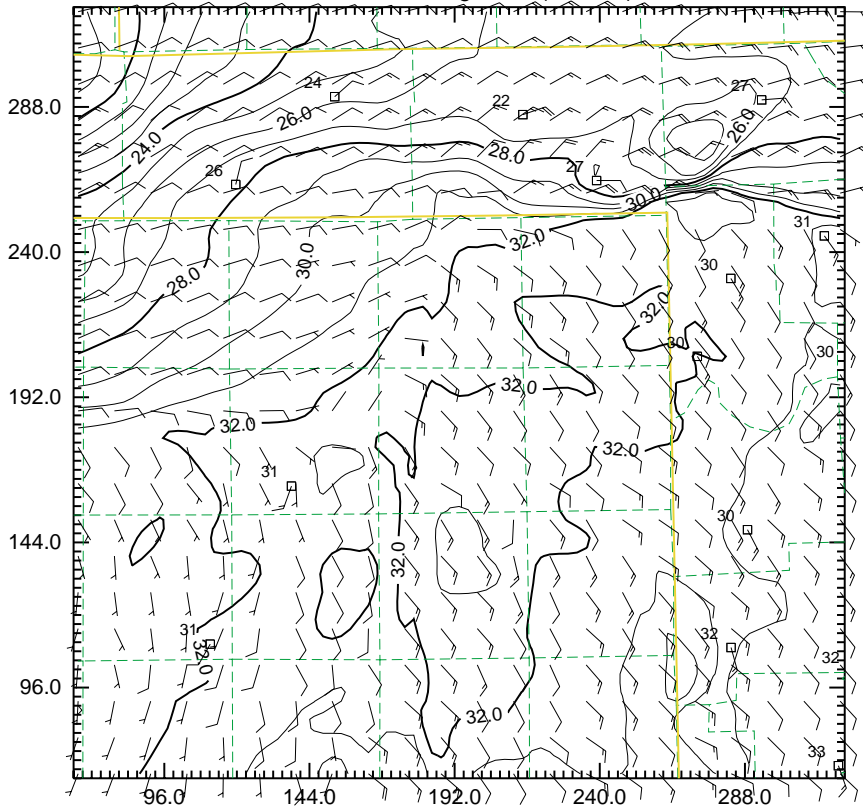


FIG. 10 Surface temperature ( $^{\circ}\text{C}$ ) and wind (barbs). Observations and ARPS fields after phase correction.

20:10Z Thu 8 Jun 1995  
Grid level=18

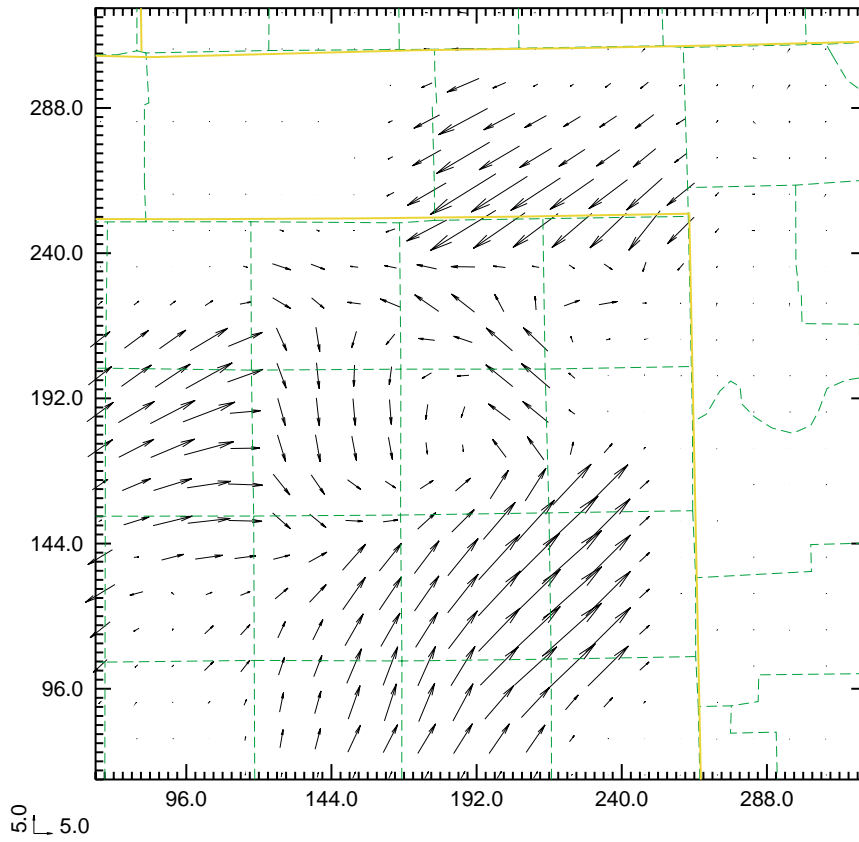


FIG. 11 Phase shift vectors for grid level 18. Vector scale in lower-left corner is in unit grid lengths (1 grid length=3 km).

20:10Z Thu 8 Jun 1995  
Grid level=18

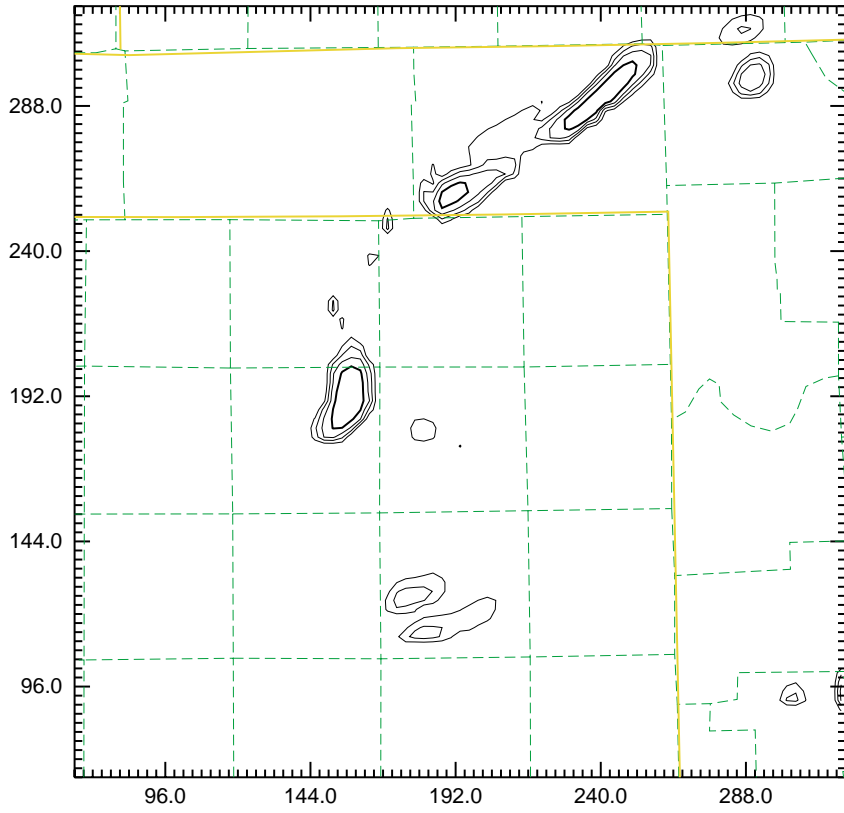
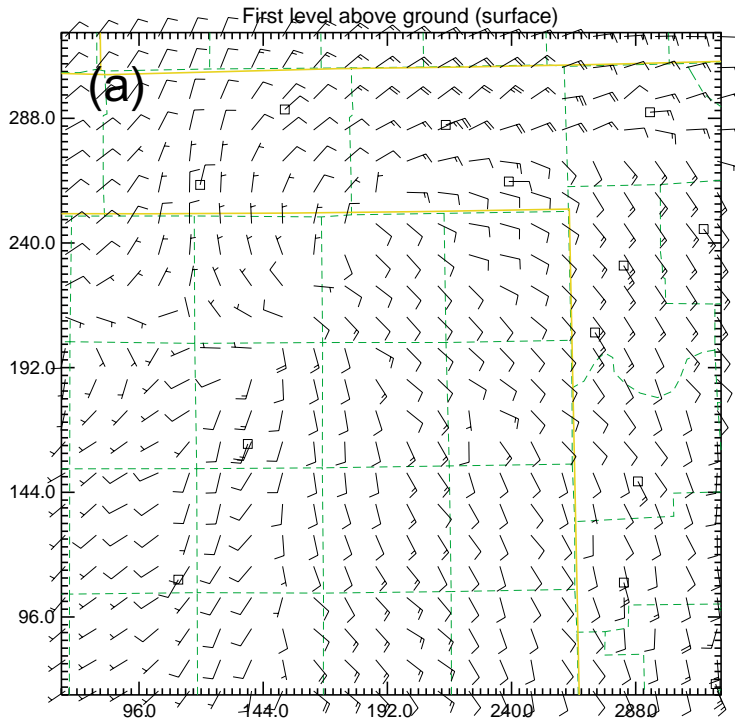


FIG. 12 Model reflectivity (dBZ) at grid level 18 after phase shift applied.



20:10Z Thu 8 Jun 1995 t=7800.0 s (2:10:00)

Grid level=20

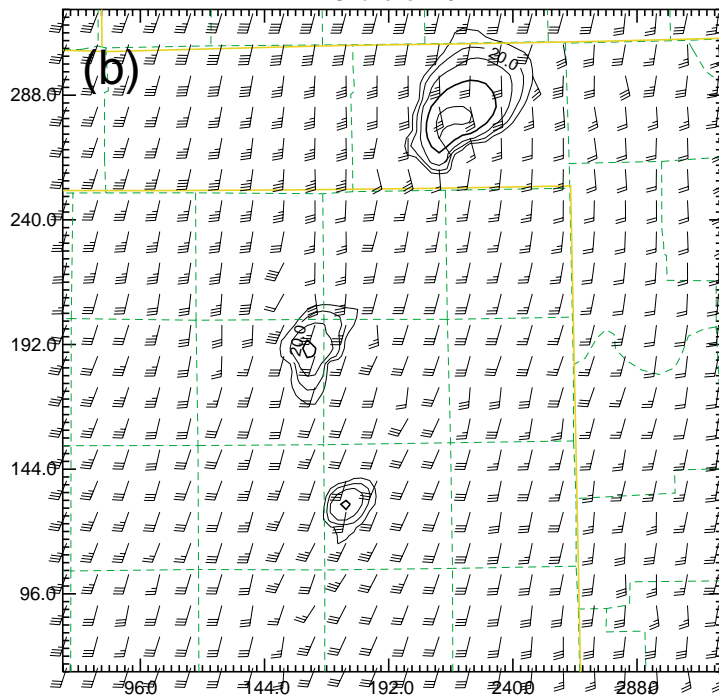


FIG. 13 Reflectivity (dBZ) and wind ( $\text{ms}^{-1}$ ), from the ADAS\_Only analysis at 2010 UTC. Level 2 (10-m AGL) and Level 20.

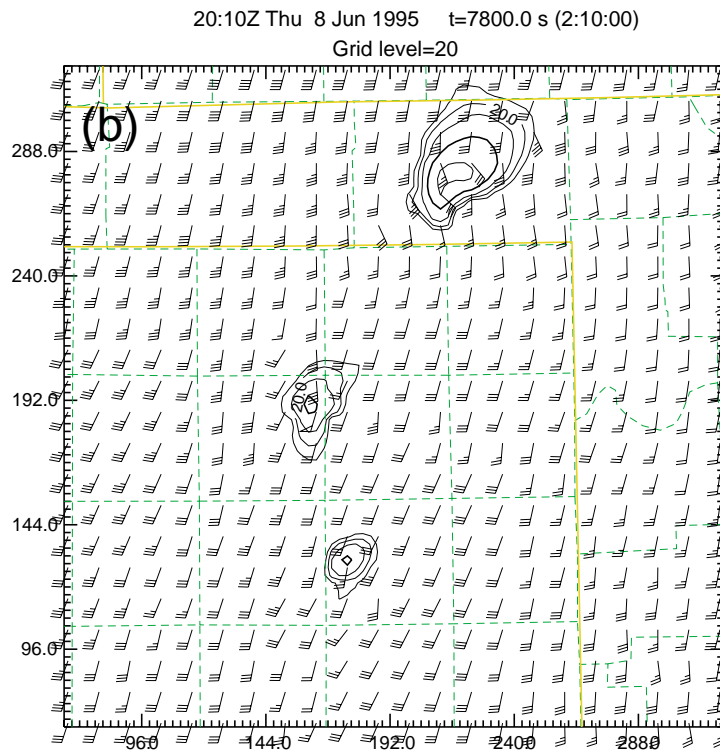
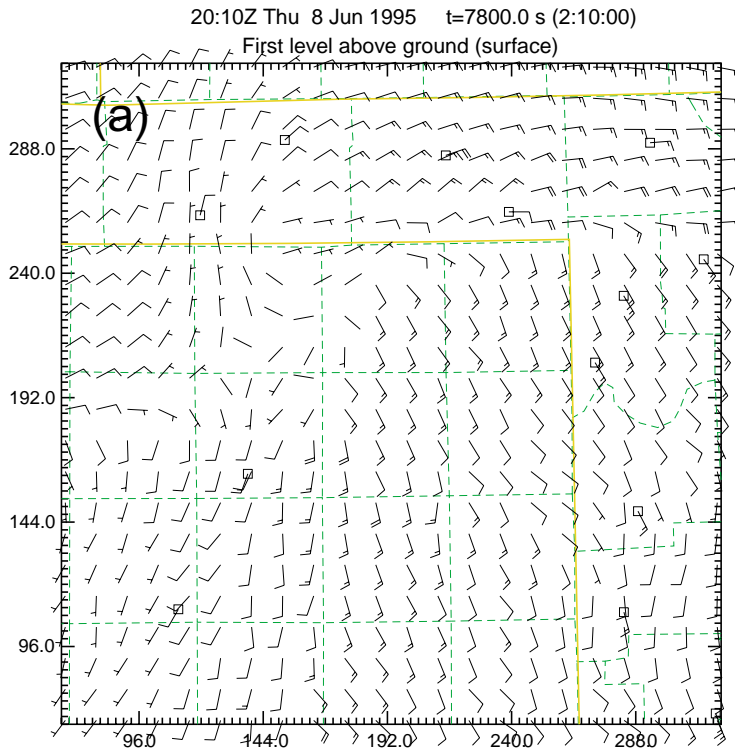


FIG. 14 Reflectivity (dBZ) and wind ( $\text{ms}^{-1}$ ) for ADAS analysis on phase-corrected forecast (Shift+ADAS) at 2010 UTC. Level 2 (10-m AGL) and Level 20.

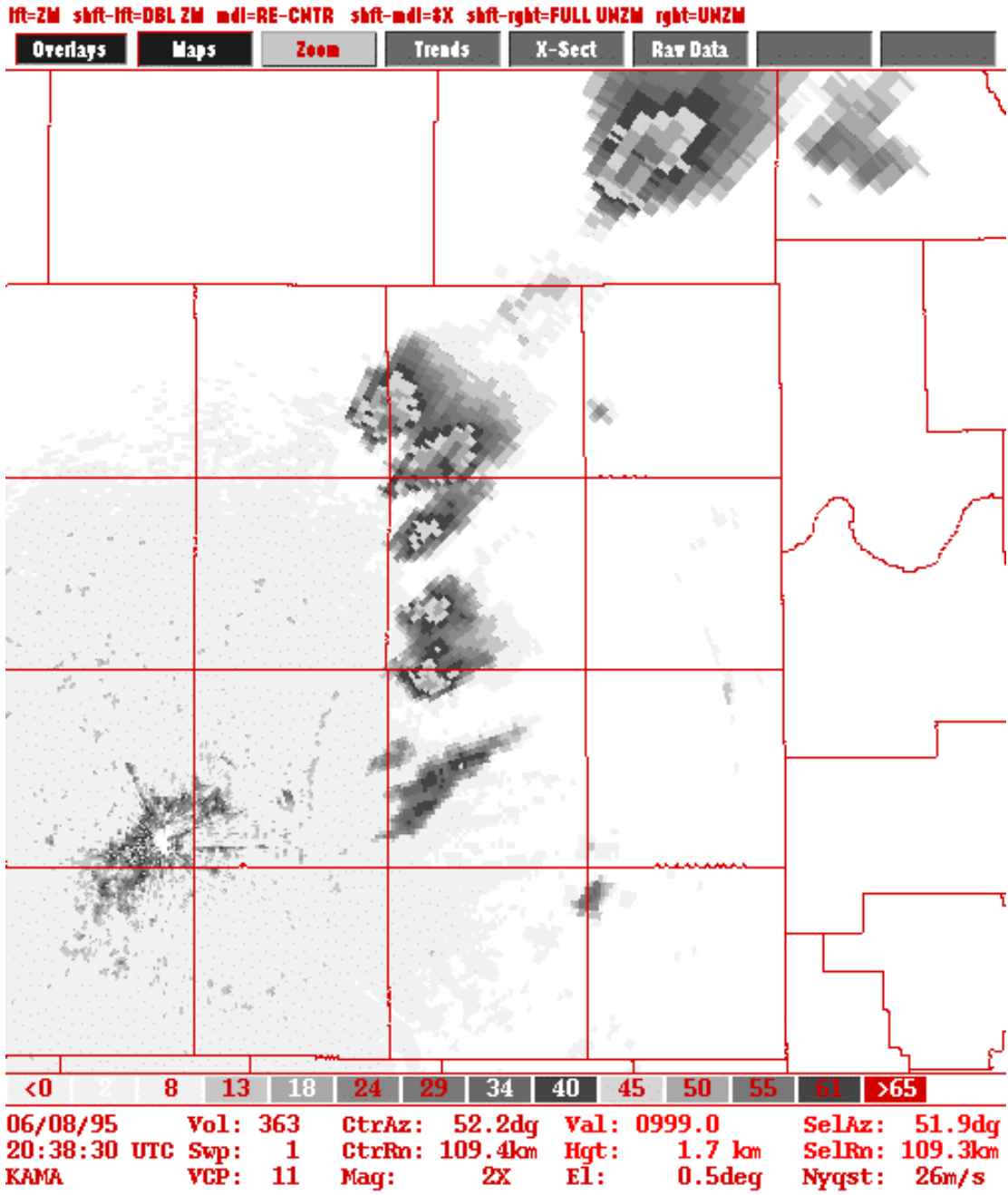


FIG. 15 Amarillo (KAMA), Texas, radar reflectivity (dBZ), 0.5 degree elevation angle, 2038 UTC 8 June 1995.

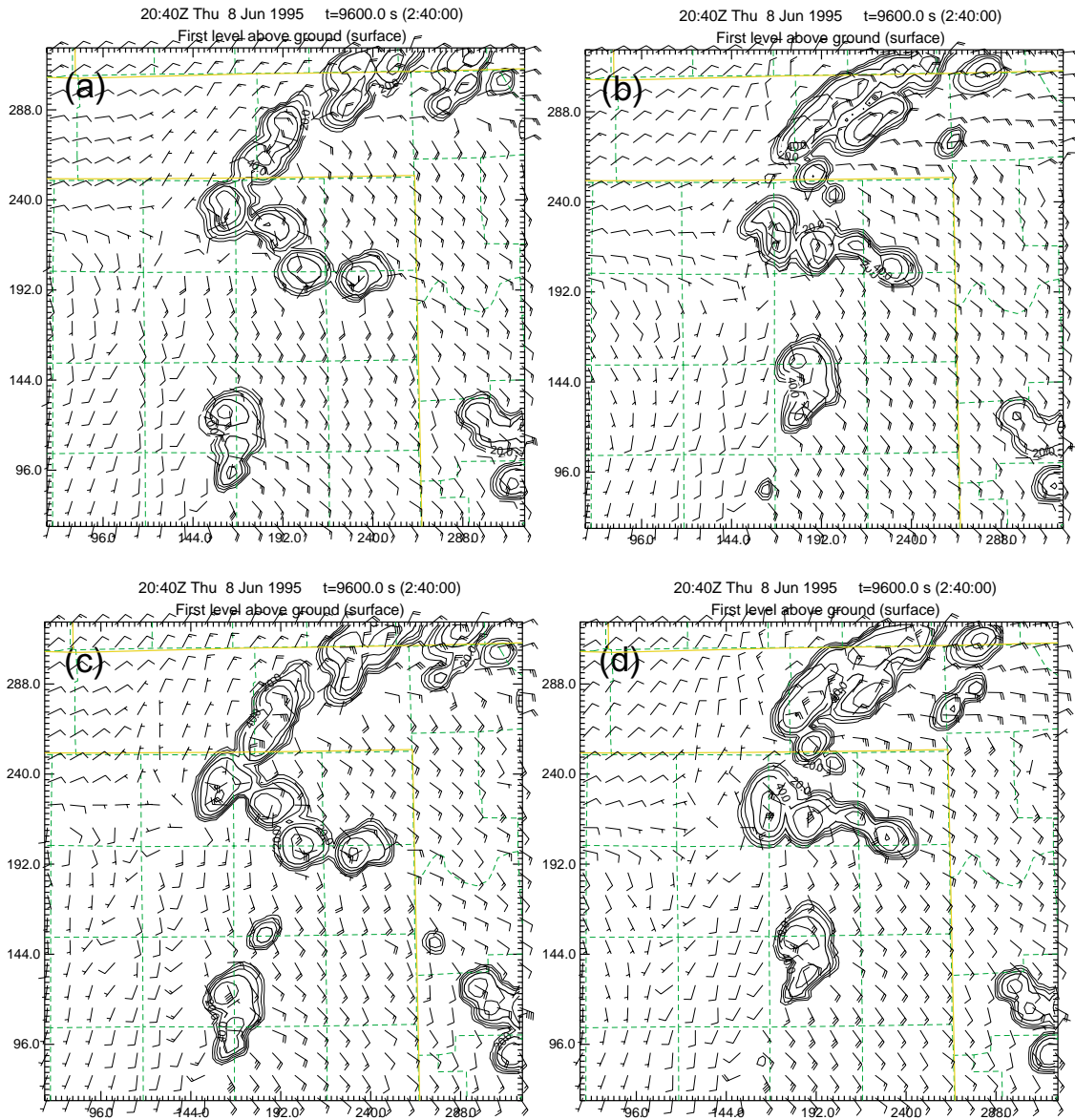


FIG 16 ARPS forecast fields of 10 m AGL winds (barbs) and reflectivity (dBZ) at 8 June 2040 UTC. a) Control, b) Shift, c) ADAS\_Only, d) Shift+ADAS.