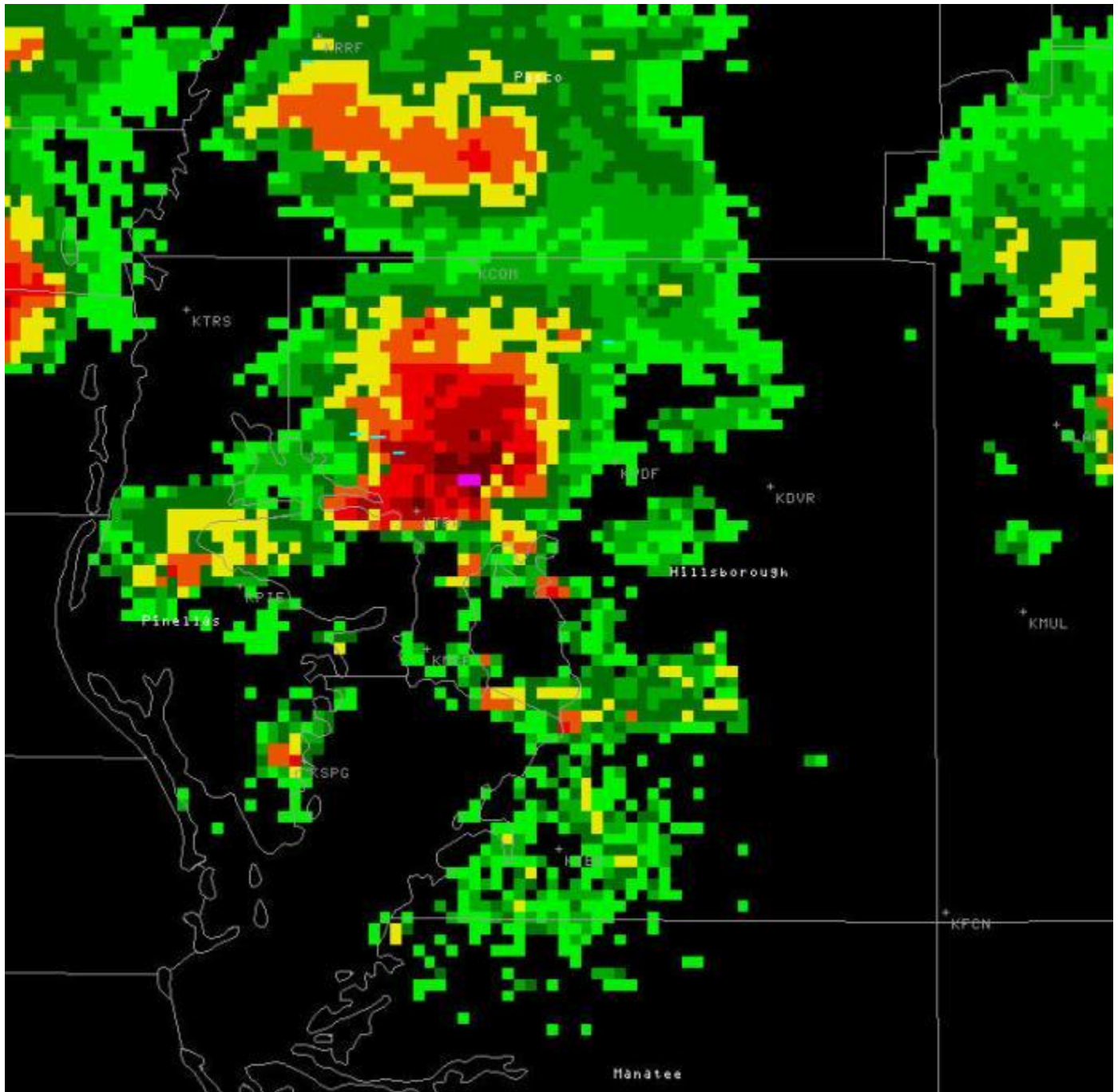
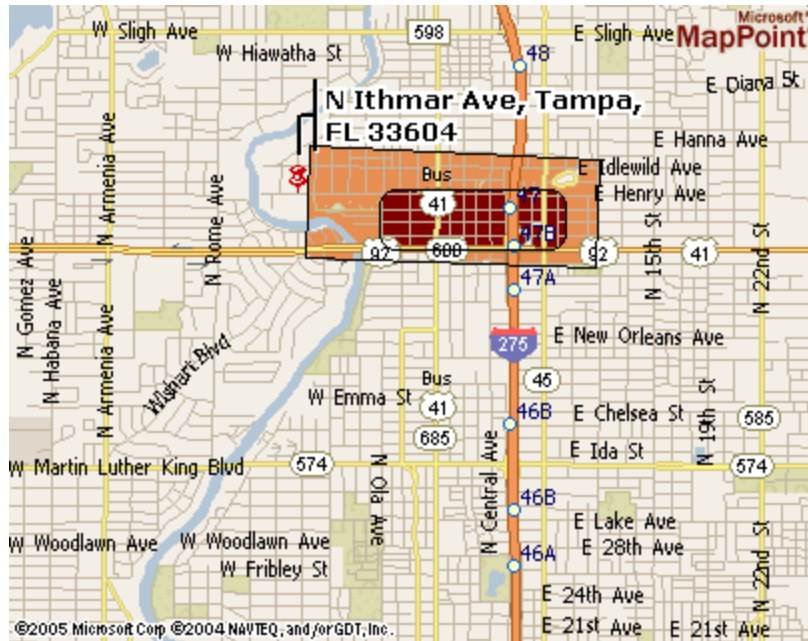


Brief Microburst Strikes Seminole Heights Neighborhood



Composite reflectivity image, showing hail core (pink pixel in center of image) just prior to the microburst



Map of neighborhood. Orange box depicts severe (58 mph) damage; maroon insert was area of most damage.

Sudden Storm Causes Damage in Seminole Heights

A microburst crashed down on unsuspecting Seminole Heights shortly after noon (12:45 PM) on Monday, March 14, 2005, causing widespread but relatively minor damage along the 1.5 mile path. Damage included a few roofs peeled back, windows blown out of at least one business, dozens of trees and large limbs blown down, and at least a dozen power wires and transformers blown down. About 2000 residents were without power shortly after the storm passed. All this was done in only a minute's time in any given location.

Track

Winds were estimated at 65 mph in the heaviest damage area. Severe (58 mph estimated wind) damage began around the intersection of Henry and Ithmar Avenue, along and just north of the Hillsborough River. The damage intensified in a Park just west of Ola Avenue, where at least 10 pine trees were blown down or uprooted. A large oak tree had many limbs downed onto a home on Henry Avenue just north of the park. Actual structural damage to residences was minor, including fascia and a few shingles.

As the burst crossed out of the neighborhood and into the commercial zone including north Florida and Hillsborough Avenue, damage increased a bit. One business on N. Florida Avenue had its windows blown out, followed by water damage inside. A bit farther east, on N. Central Ave, a fallen oak smashed three vehicles in a church parking lot. Damage continued sporadically after the storm crossed interstate 275, with a placard blown out at a tire store and took out a portion of the aluminum roof.

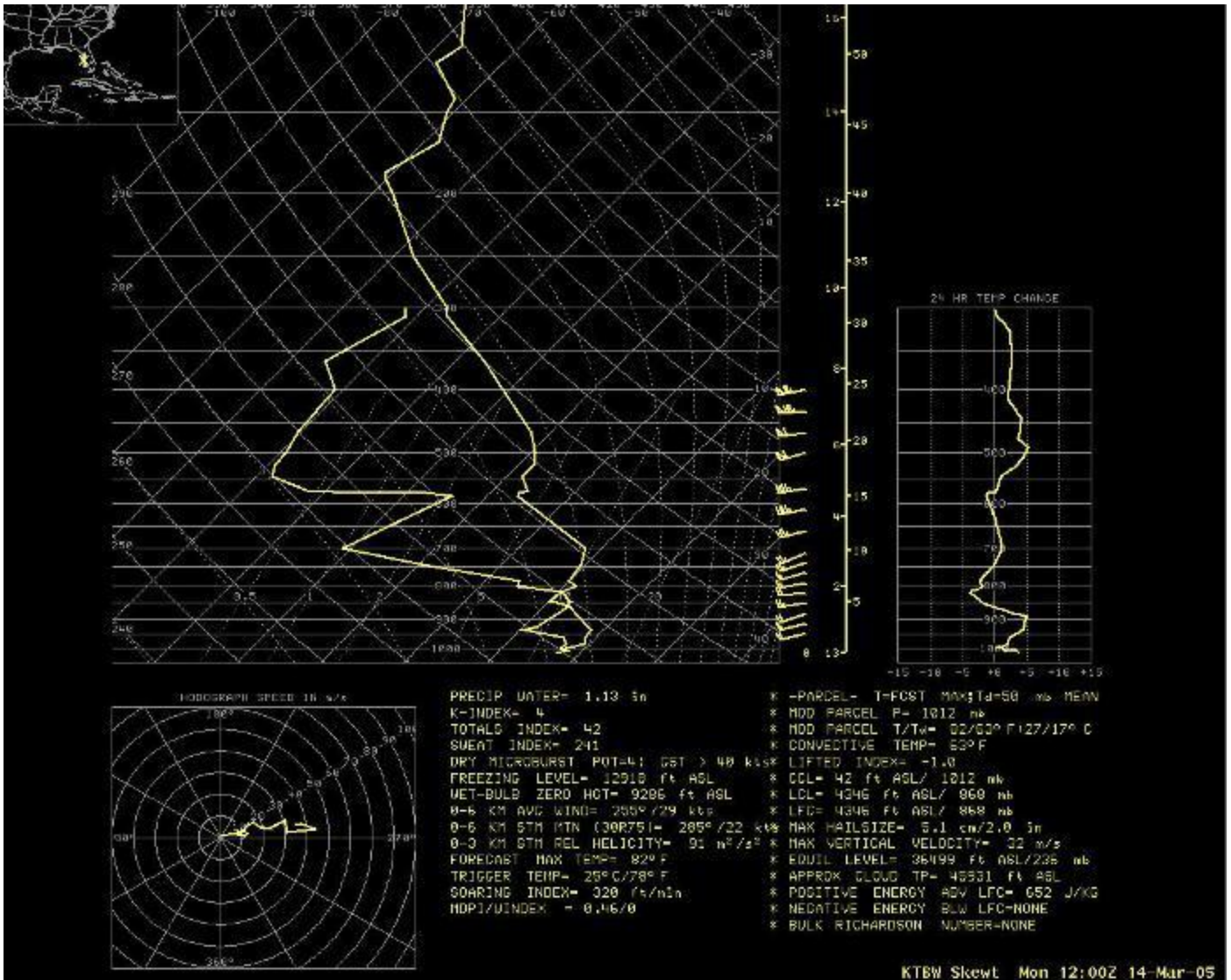


Figure 1. 7 AM EST Sounding from NWS Ruskin.

Meteorology

The storm, which formed in unstable air along the edge of a band of convection which had originally developed along the right rear quadrant of a 250 mb jet streak, intensified as it moved onshore in Pinellas County shortly after noon and headed across the northern shore of Old Tampa Bay.

At around 1230 PM, the storm further intensified, and by 1235 PM, a distinct reflectivity maximum was noted in the core of the storm. Given the cold temperatures aloft, the core appeared to contain small hail, which was indeed the case after interviews with several residents along the track indicated pea size hail briefly covered the ground. At the same time, a "V" shaped reflectivity void was evident west of the core; such a signature indicates increasing momentum transport into the cell, which in turn aids microburst development. Such momentum may have been generated by dry air and strong winds above 800 mb (Figure 1, above).