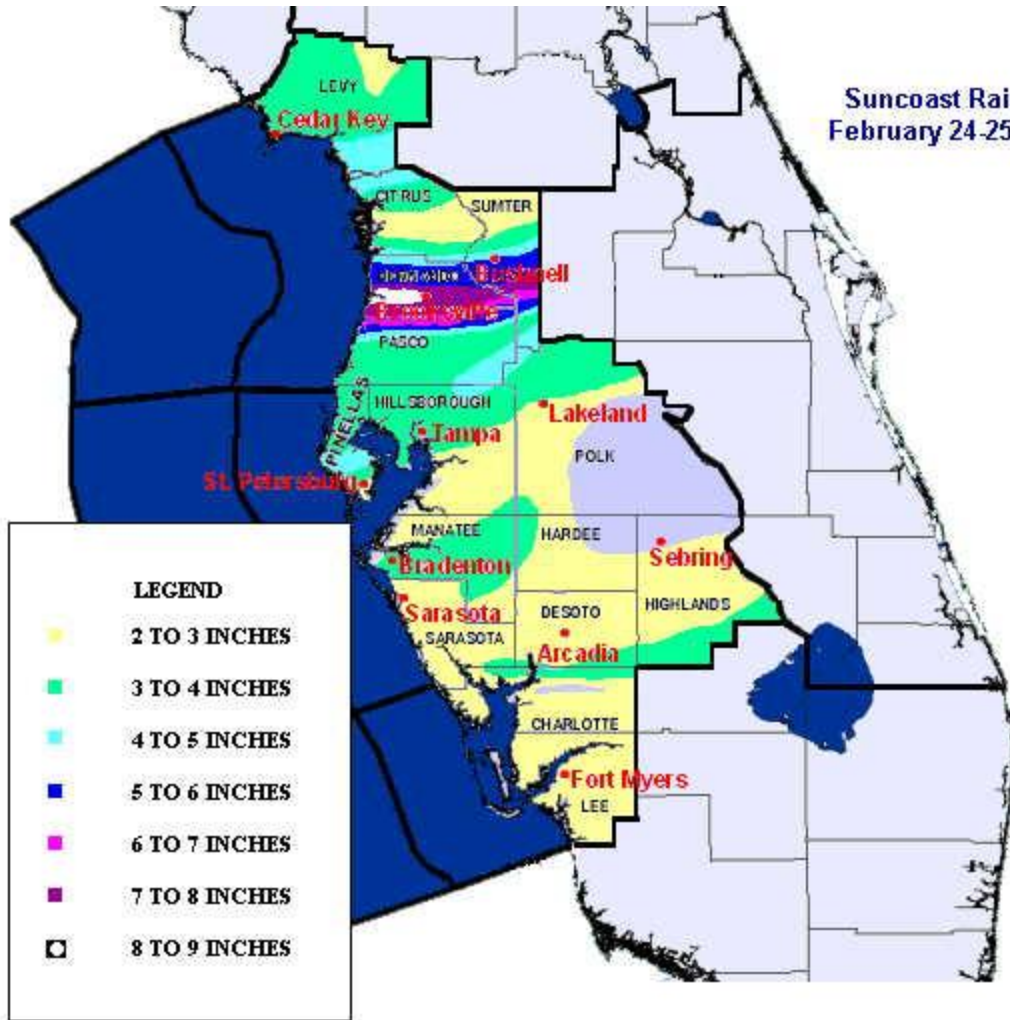


Heavy Rains and Scattered Severe Weather on the Suncoast

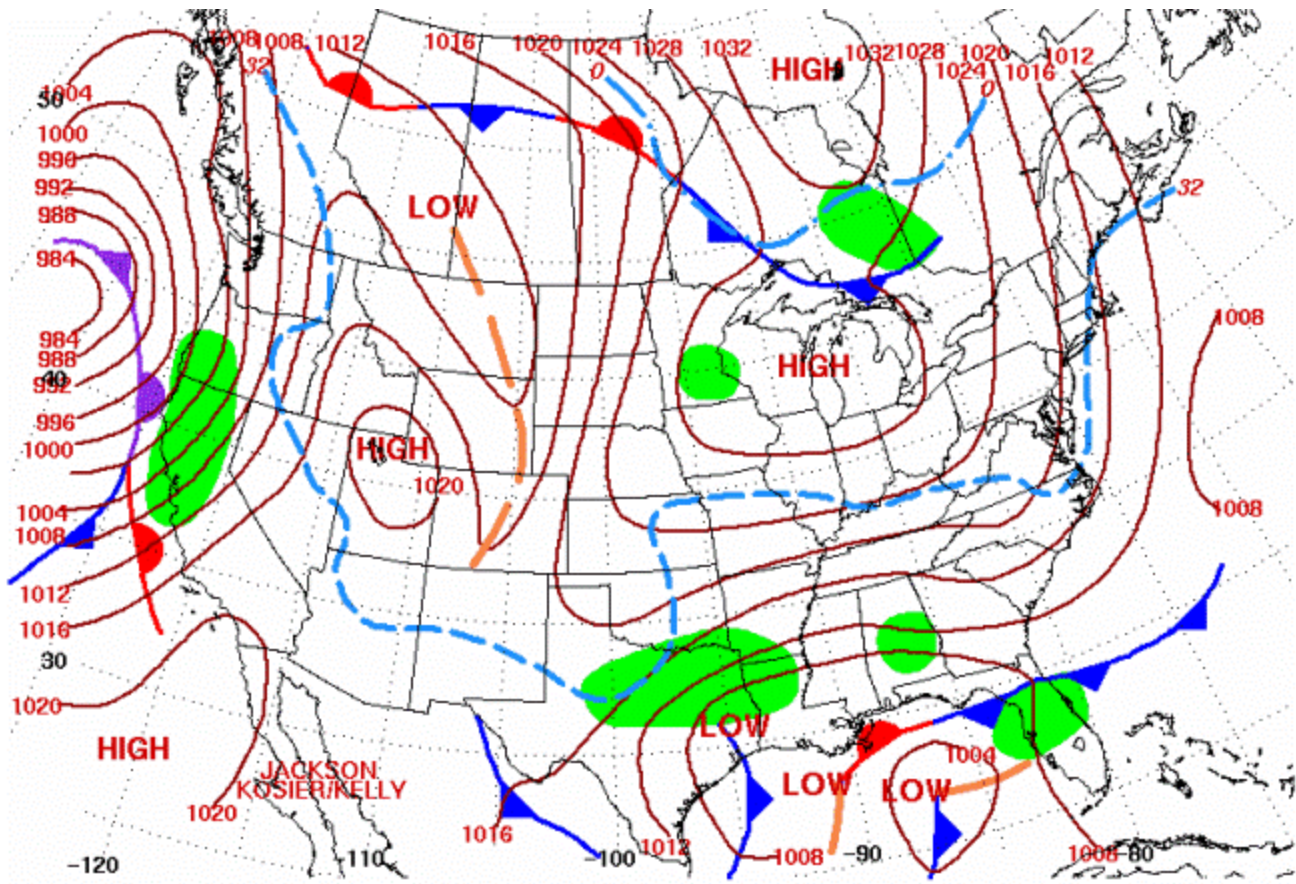


Damage to a home in the Derosa area, near
Lake Rousseau, in extreme northern Citrus County.

Suncoast Rainfall
February 24-25, 2004

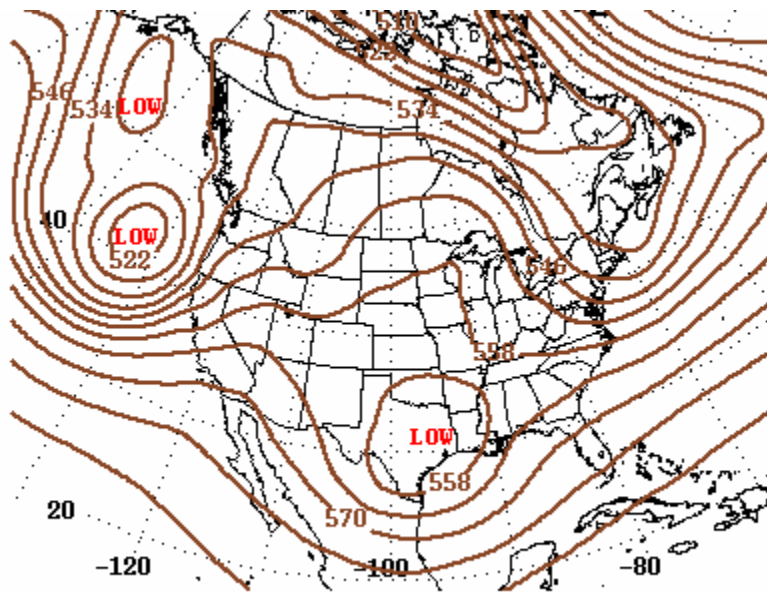


Event rainfall, from late evening on
February 23 to the afternoon of February 26.



Surface Weather Map at 7:00 A.M. E.S.T.

Figure 1. Daily weather maps, 7 AM EST, February 25th. Surface analysis;



500-Millibar Height Contour at 7:00 A.M. E.S.T.

Figure 2. Daily weather maps, 7 AM EST, February 25th. 500 mb analysis.

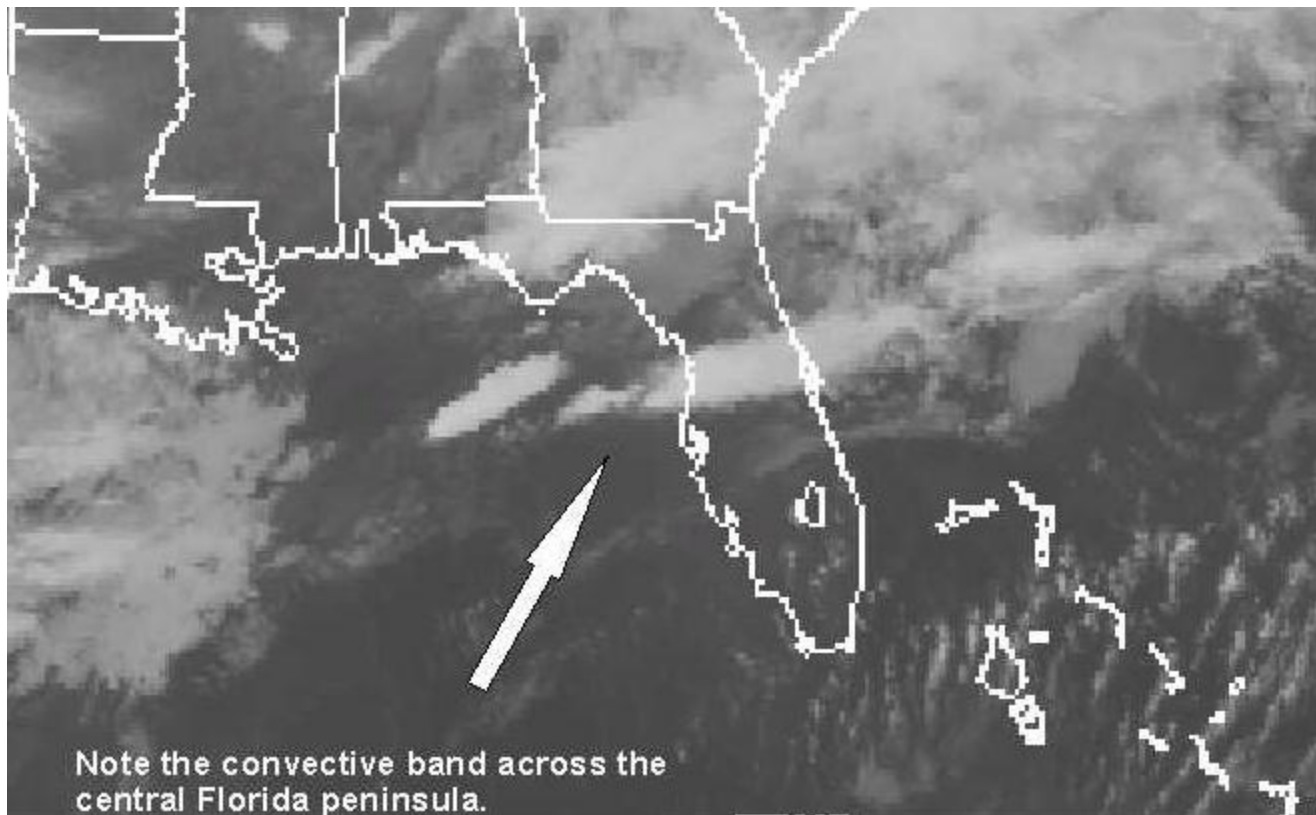


Figure 3. Infrared Satellite image at 715 AM EST, zoomed in on the eastern Gulf and Florida. The thin convective bands covered northern Pasco and southern Hernando Counties, and would produce over 5 inches in a few hours in some areas.

Soaking Rains

A series of upper level disturbances, riding along an strong subtropical jet stream, aided in producing a combination of heavy rainfall and severe weather from late on February 23rd to the afternoon of February 25th. Much of the rain was beneficial, falling on relatively dry ground. However, some areas received more than others.

The combination of an upper level jet core, subtropical moisture, and lift provided by a stationary front separating the warm, unstable air across the Florida peninsula with much cooler air in north Florida, set the stage for bands of moderate to heavy rains which gradually drifted southward across the Suncoast between the morning of the 24th and the late afternoon of the 25th.

The first, and most potent, band (**Figure 3**, above) dumped between 3 and 6 inches of rain in southern Hernando and extreme northern Pasco Counties from daybreak to before noon. Minor flooding was reported in Spring Hill. This rain area then accelerated into the Tampa Bay and Lakeland areas by early afternoon, producing scattered severe weather. By evening of the 24th, a large area of moderate rain redeveloped between the Nature Coast and Sarasota/Bradenton, which dropped 1 to 2 inches (locally 3 inches) of rain overnight. This batch of rain was induced by a stronger upper level system, which developed an area of low pressure in the eastern Gulf (**Figure 1 and 2**, above).

Soon after daybreak on the 25th, the heaviest rains shifted into Southwest and South Central Florida, dropping generally 1 to 3 inches from Fort Myers to Port Charlotte eastward to southern Highlands County.

As the upper level system moved across the Southeast U.S., the surface low redeveloped along the northeast Florida coast and moved slowly northward. Much colder air was eventually dragged down the peninsula, with

temperatures in the 40s and 50s during the daylight hours on the 27th.

Wind Damage

Severe weather occurred twice: During the late evening of the 23rd in Citrus County, and in the afternoon of the 24th. The strongest storm formed along the stationary front in the eastern Gulf west of Yankeetown and Inglis (Levy County) shortly before 11 PM, then raced east at 40 mph and intensified as it crossed through the nearshore waters and into southern Levy County and northern Citrus County between 1115 PM and midnight. The storm was fed by increasing southerly winds, which also provided low level wind shear.

Soon after crossing the coast, wind gusts of 70 mph caused at least \$250 thousand in damage in the Derosa area near Lake Rousseau, in extreme northern Citrus County (**Figure 6**, below). Surveys conducted by Citrus County Emergency Management indicated straight-line wind damage; however, a tornado may have been embedded within, as suggested by doppler radar data (**Figure 5**, below).

Differential heating between torrential morning rain bands in Hernando and Pasco Counties and warm and humid air farther south set the stage for more thunderstorms. Inflow of gusty southerly winds aided the updrafts as a portion of the line broke off and accelerated southeast, moving from southern Pasco County through Tampa and the eastern suburbs and continuing into northern Polk County. Wind damage, and even a small tornado, was reported from Tampa to Auburndale.

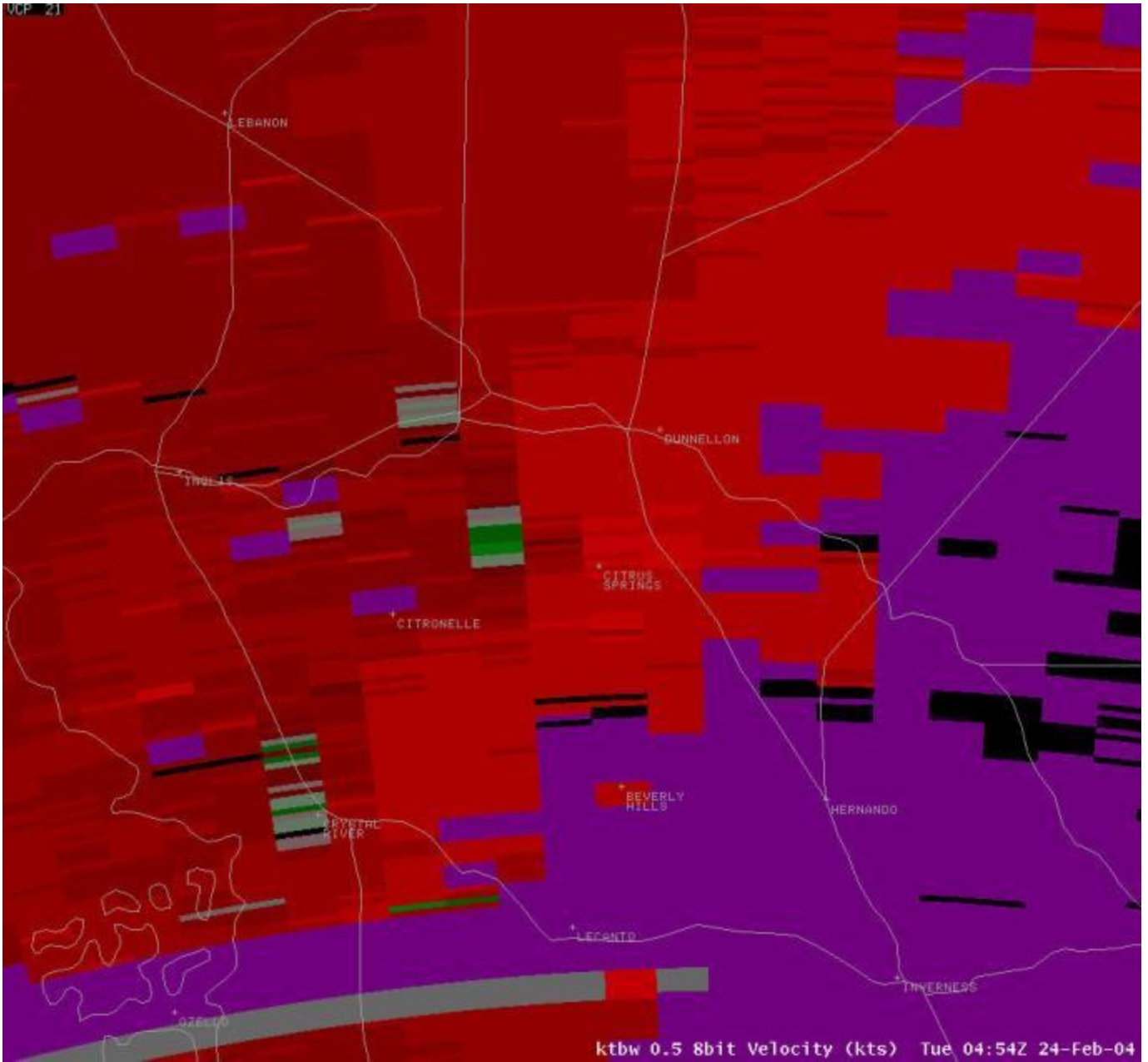


Figure 4. NWS Ruskin Doppler Radar image of base velocity at 0.5 degree elevation around time of damaging wind. Note adjacent inbound (green) and outbound (red) in center of image, suggesting a possible tornado.

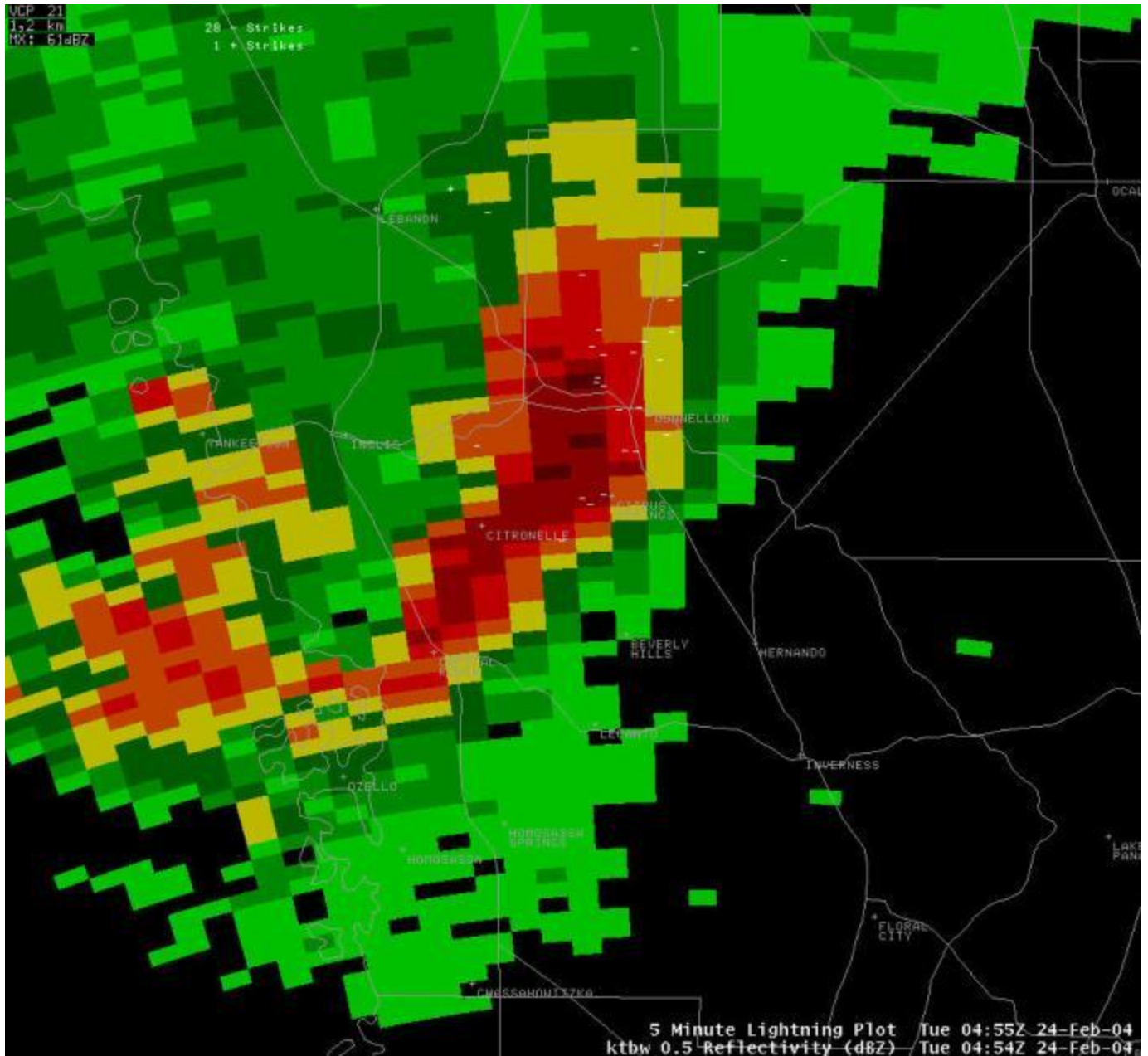


Figure 5. Doppler Radar image of base reflectivity at 0.5 degree elevation at the same time. Areal map of damage in northern Citrus County (shaded area), and reported damage locations (dots).

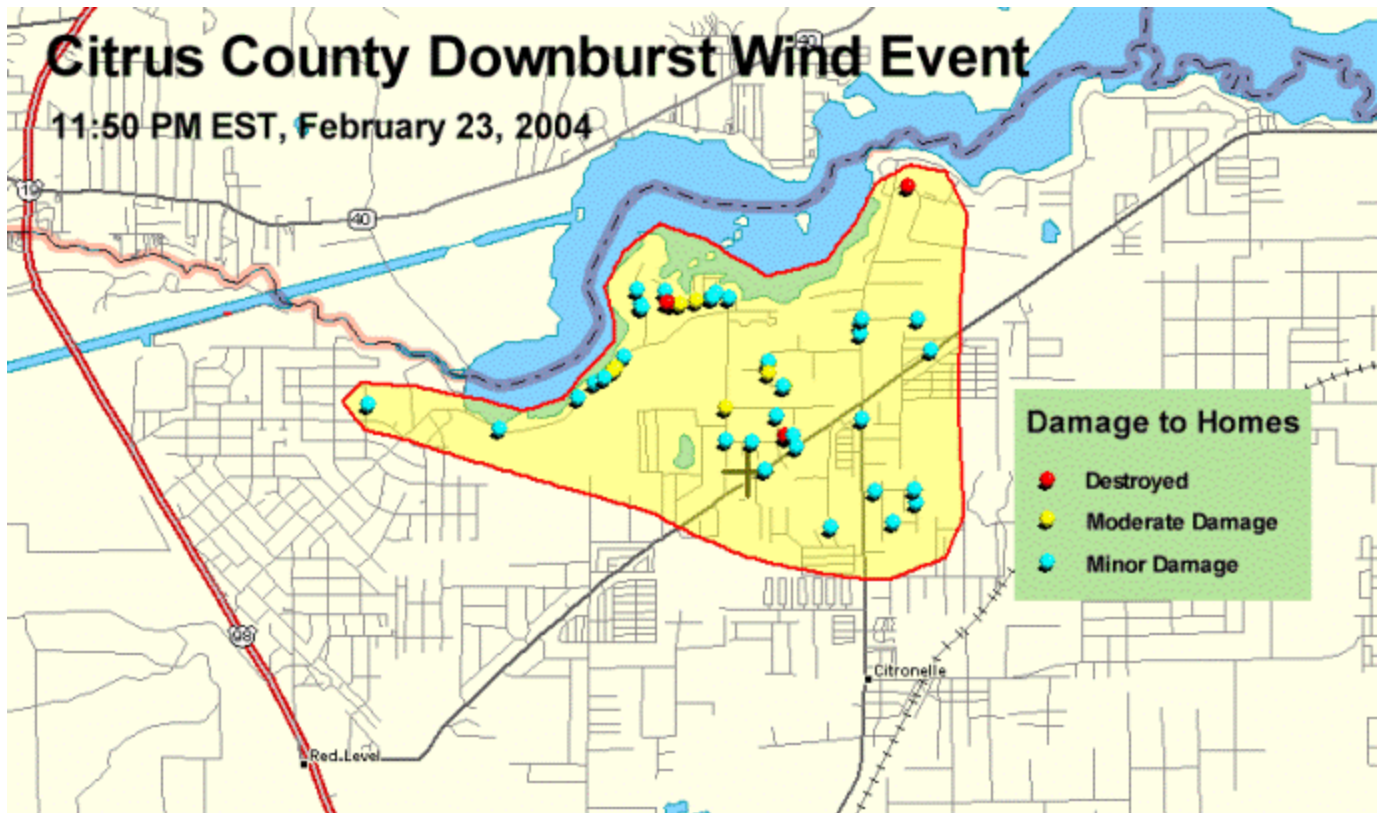


Figure 6. Areal map of damage in northern Citrus County (shaded area), and reported damage locations (dots).

PUBLIC INFORMATION STATEMENT
 NATIONAL WEATHER SERVICE TAMPA BAY AREA - RUSKIN FL
 820 PM EST THU FEB 26 2004

...HEAVY RAINS ACROSS MOST OF WEST CENTRAL AND SOUTHWEST FLORIDA...

FOR THE FIRST TIME SINCE TROPICAL STORM HENRI IN EARLY SEPTEMBER 2003...HEAVY RAINFALL OCCURRED OVER A LARGE PORTION OF WEST CENTRAL AND SOUTHWEST FLORIDA. A STRONG UPPER LEVEL TROUGH MOVING ACROSS THE SOUTHERN UNITED STATES COMBINED WITH A QUASI-STATIONARY FRONT AND ATMOSPHERIC DISTURBANCES MOVING ALONG THE FRONT LED TO HEAVY RAINFALL ACROSS A LARGE PORTION OF WEST CENTRAL AND SOUTHWEST FLORIDA.

MANY LOCATIONS IN WEST CENTRAL AND SOUTHWEST FLORIDA RECEIVED OVER THREE INCHES OF RAIN SINCE ABOUT 8 PM MONDAY FEBRUARY 23RD WHEN THE RAIN FIRST ARRIVED IN PORTIONS OF THE NATURE COAST. THE HEAVIEST RAINS OCCURRED ACROSS HERNANDO AND NORTHERN PASCO COUNTIES EASTWARD INTO SUMTER WHERE MANY LOCATIONS REPORTED OVER 5 INCHES.

SOME MINOR FLOODING WAS REPORTED ACROSS THE REGION...BUT SINCE ONLY LIMITED AMOUNTS OF RAINFALL HAVE OCCURRED OVER THE LAST FEW MONTHS THE GROUND WAS ABLE TO ABSORB MOST OF THE RAIN AND THE MAJORITY OF THE FLOODING OCCURRING IN LOW LYING AND POOR DRAINAGE AREAS. ALSO... SOME OF THE RIVERS ROSE...BUT ONCE AGAIN SINCE IT HAS BEEN RATHER DRY...VERY LITTLE RIVER FLOODING HAS BEEN REPORTED.

FOLLOWING ARE PRELIMINARY AND UNOFFICIAL TOTALS FOR THE EVENT FROM 8 PM FEBRUARY 23RD THROUGH 8 PM FEBRUARY 26TH AT SELECTED LOCATIONS ACROSS WEST CENTRAL AND SOUTHWEST FLORIDA:

OBSERVING SITE	COUNTY	EVENT TOTAL (INCHES)
...AIRPORTS...		
BROOKSVILLE/HERNANDO CO	HERNANDO	6.76
ST PETE/CLEARWATER INTL	PINELLAS	4.44
TAMPA INTL	HILLSBOROUGH	3.61
MACDILL AIR FORCE BASE	HILLSBOROUGH	3.43
ST PETE/ALBERT WHITTED	PINELLAS	2.96
LAKELAND LINDER	POLK	2.91
PUNTA GORDA/CHARLOTTE CO	CHARLOTTE	2.74
WINTER HAVEN/GILBERT FIELD	POLK	2.66
FORT MYERS/PAGE FIELD	LEE	2.56
SARASOTA-BRADENTON INTL	MANATEE	2.55
FORT MYERS/SW FLORIDA INTL	LEE	2.39
...OTHERS...		
BUSHNELL	SUMTER	6.51
TRILBY (WITHLACOOCHEE RVR)	HERNANDO	6.25
MASARYKTOWN 5 W	HERNANDO	5.46
BROOKSVILLE CHIN HILL	HERNANDO	5.33
ROYAL HIGHLANDS 5 E	HERNANDO	5.10
BROOKSVILLE (FAWN)	HERNANDO	4.88
DADE CITY 10 E (GREEN SWAMP)	SUMTER	4.82
INGLIS	LEVY	4.50
GOWERS CORNER 2 NW	PASCO	4.40
CHASSAHOWITZKA	CITRUS	4.33
PINELLAS PARK	PINELLAS	4.32
THONOTOSASSA	HILLSBOROUGH	4.02
RYE BRIDGE	MANATEE	3.97
ARCHBOLD BIO STN	HIGHLANDS	3.87
LAND O' LAKES	PASCO	3.80
CLEARWATER	PINELLAS	3.73
CHIEFLAND 5 SE	LEVY	3.63
SAFETY HARBOR	PINELLAS	3.60
DOVER (FAWN)	HILLSBOROUGH	3.57
BRONSON (FAWN)	LEVY	3.44
TARPON SPRINGS 5 ENE	PINELLAS	3.33
FORT OGDEN 14 E	DESOTO	3.31
ODESSA 3 S	HILLSBOROUGH	3.31
FOUR CORNERS	POLK	3.30
DUETTE	MANATEE	3.29
HOLDER (WITHLACOOCHEE RVR)	CITRUS	3.28
MYAKKA HEAD	MANATEE	3.09
PLANT CITY	HILLSBOROUGH	3.08
FORT OGDEN	DESOTO	3.04
SAN ANTONIO	PASCO	3.02
ST. LEO	PASCO	2.99
WILLISTON	LEVY	2.99
CRYSTAL RIVER 3 S	CITRUS	2.98
MYAKKA CITY	MANATEE	2.98
POINT LONESOME	CHARLOTTE	2.98
MULBERRY	POLK	2.97
LAKE GIBSON	POLK	2.94
VENICE 3 NE	SARASOTA	2.77
FLORAL CITY	CITRUS	2.71
BRADENTON (FAWN)	MANATEE	2.67
RUSKIN/NWS	HILLSBOROUGH	2.67
GARDNER	HARDEE	2.65

ARCADIA 8 WNW	DESOTO	2.63
WAUCHULA 9 SW	HARDEE	2.53
SEBRING (FAWN)	HIGHLANDS	2.47
FORT MEADE	POLK	2.45
ENGLEWOOD 4 NNW	SARASOTA	2.42
WARES CREEK	MANATEE	2.40
NORTH PORT	SARASOTA	2.38
ONA	HARDEE	2.33
LITHIA (ALAFIA RVR)	HILLSBOROUGH	2.31
BARTOW	POLK	2.27
WEST BRADENTON	MANATEE	2.20
ONA (FAWN)	HARDEE	2.16
LAKE ALFRED (FAWN)	POLK	2.15
LAKE PANASOFFKEE	SUMTER	2.14
BOWLING GREEN	HARDEE	2.12
INVERNESS 3 SE	CITRUS	2.01
BALM (FAWN)	HILLSBOROUGH	1.99
PALMA SOLA	MANATEE	1.95
WIMAUMA	HILLSBOROUGH	1.85
AVON PARK 2 W	HIGHLANDS	1.38

FOR MORE CLIMATE INFORMATION VISIT OUR WEB SITE AT THE FOLLOWING
LINK: [HTTP://WWW.SRH.NOAA.GOV/TBW/](http://www.srh.noaa.gov/tbw/) AND THEN CLICK ON THE PAST
LOCAL WEATHER LINK.

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PRC

Lake Rousseau (Citrus County) Damage Photos Event of February 23, 2004





