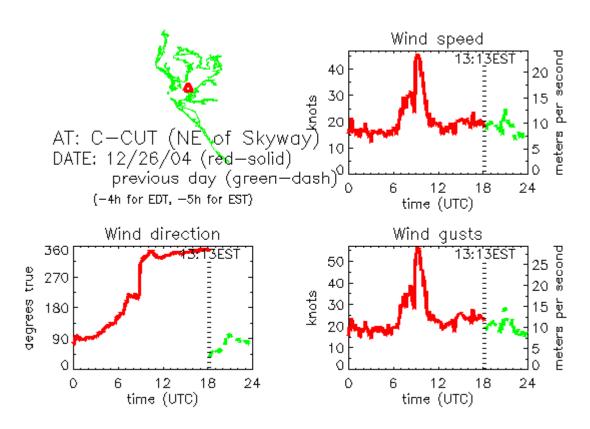
## Stormy Night Punctuates Wet, Chilly Christmas Weekend



*Figure 1, left:* Peak winds at the C-Cut of the Sunshine Skyway Bridge, at around 4 AM on December 26th.

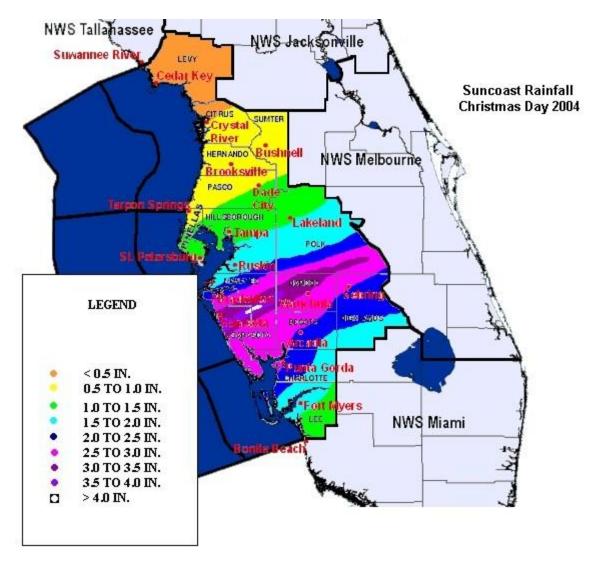


Figure 2, right: Rainfall from late on December 24th until early on December 26th.

Perhaps it was meant to be. Just 24 hours after an historic white Christmas in Deep South Texas, the same storm system punched across Tampa Bay, which for some rekindled not-too-distant memories of Hurricanes Frances and Jeanne. For others, the winter event recalled a smaller version of 1993's "No-Name Storm". No matter how it was remembered, the damaging winds, power outages, and storm tides were eerily familiar. Christmas weekend (December 24-26) as a whole was rather lousy by Florida standards.

That said, a wintry nip at least made it feel like the season, mainly north of Tampa Bay. Temperatures in Levy County failed to get out of the 40s on Christmas Eve and for much of the day on Christmas; in the Tampa Bay area, temperatures held in the 50s. Christmas Day featured a steady rain; locally heavier bands in the area of highest lift produced between 2 and 4 inches of rain (Figure 2, above).

By midnight, raw, chilly weather gave way to steadily rising temperatures as the warm front preceding the low pushed north. Between 2 and 3 AM, south winds cranked up, gusting over 30 knots near the coast and building tides to nearly 2 feet above normal. Soon after came the actual low center, which crossed the Tampa Bay area from St. Petersburg through south Tampa downtown, then toward northeastern Hillsborough County. Winds briefly calmed in a small area near the center before bursting from the west at sustained values between

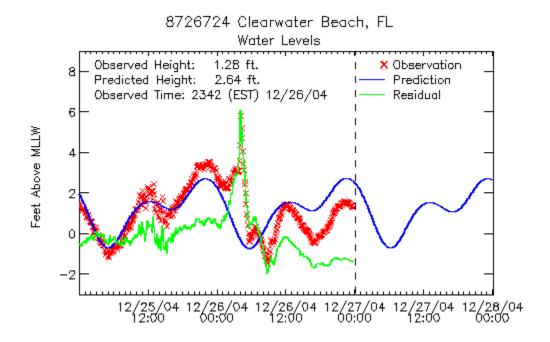
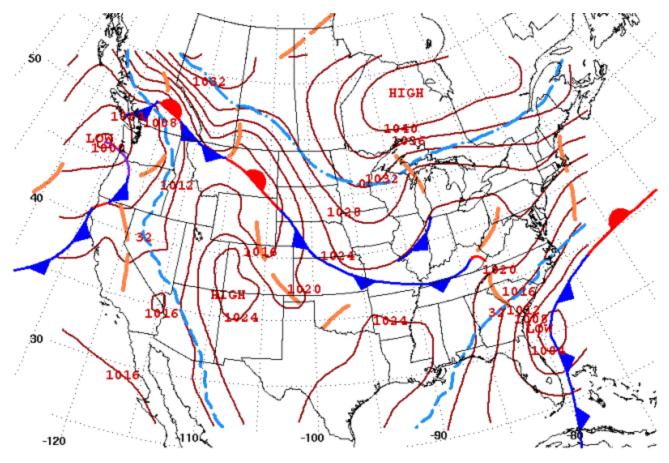


Figure 3.

The sharp, gusty west winds also slammed water into the coast, particularly between Manatee and Pasco Counties. Surges of 3 to 6 feet were reported, along with overwash and some minor coastal flooding. Figure 3 (below left) shows the "spike" at Clearwater Beach. Fortunately, the surge occurred as tides were decreasing between 4 and 630 AM. Had it occurred a few hours sooner, moderate or greater coastal flooding would have occurred, especially at shorelines perpendicular to the west winds (such as those in Pinellas, Pasco, and northern Manatee Counties). Data from Old Port Tampa, St. Petersburg, and Port Manatee were impressive.

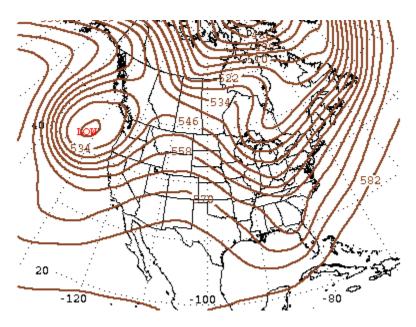
The event ended almost as quickly as it began; by 7 AM winds were blustery but nothing unusual for a winter cold front. Temperatures, which had briefly risen into the 60s, fell quickly back into the 40s and 50s (upper 30s across portions of the Nature Coast), and struggled to rise during the day. Below, figure 4(a) shows the surface pressure field shortly after the low jumped to Florida's central Atlantic coast. Figure 4(b) shows the sharp 500 mb trough nosing into north Florida soon after the surface feature passed.

Damage was widespread, but generally minor. Local utilities reported over 75,000 customers without power at 5 AM; roofs were blown off at several mobile home parks, boats were shoved off their moorings and marinas sustained some damage along the Manatee County shoreline, and dozens of trees were snapped and a few other uprooted. Most of the damage was near shorelines or in areas exposed to the higher wind gusts.



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

Figure 4a



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

Figure 4b

**Table 1.**Maximum sustained winds and peak gusts, in mph, early morning of December 26th. Airport sustained winds are averaged over 2 minutes; coastal sites are averaged over 6 minutes. Gusts are highest 10-second winds.

Location	Wind	Gust	Gust Time	
Selected Airports				
St. Pete Clwtr	42	56	446 AM	
Sarasota	38	56	413 AM	
Tampa Intl	42	52	436 AM	
Albert Whitted	35	51	418 AM	
Brooksville	29	45	433 AM	
Winter Haven	30	45	542 AM	
Punta Gorda	28	44	410 AM	
Fort Myers/Page	29	43	435 AM	
Coastal Observations				
Old Port Tampa	54	71	430 AM	
Clearwater Bch	43	61	406 AM	
Fred Howard Pk	50	59	406 AM	
Port Manatee	43	53	418 AM	
Port Richey	42	53	354 AM	
McKay Bay	37	53	430 AM	
St. Petersburg	32	51	430 AM	
Aripeka	23	45	400 AM	

Table 2. Maximum tide departures (surge), early morning of December 26th.

Location	Surge	Time
Clearwater Bch	6.1 ft	412 AM
McKay Bay Ent.	4.5 ft	636 AM
Port Manatee	4.08 ft	506 AM
St. Petersburg	3.8 ft	548 AM
Old Port Tampa	3.38 ft	618 AM