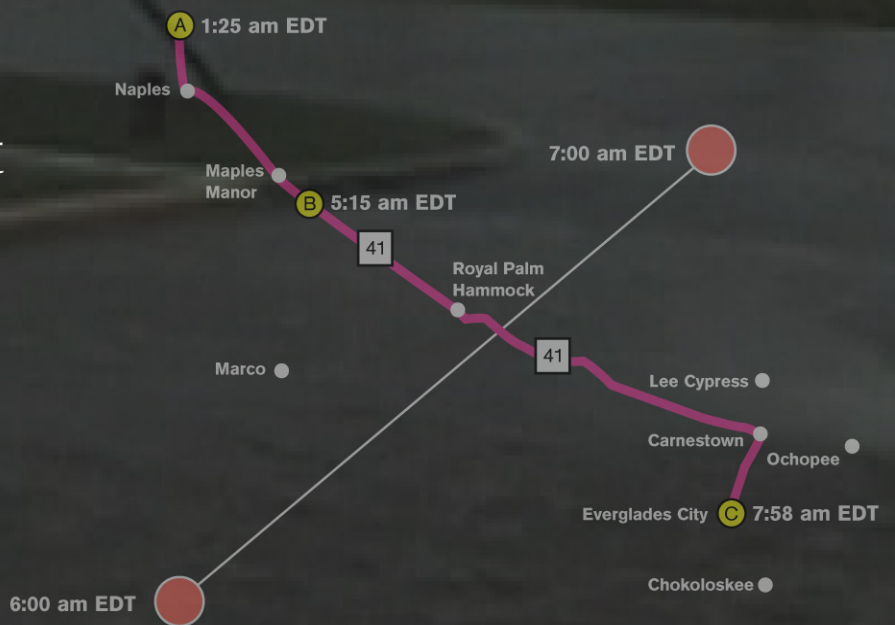


Chase Study

Hurricane Wilma

Florida Gulf Coast
24 October 2005

Josh Morgerman
March 2006



10/24/05
09:10:18



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1. Intro

1.1 Abstract

On 23 October 2005, Hurricane Wilma—an odd, late-season storm in the Gulf of Mexico—suddenly strengthened as it accelerated toward the S Florida Peninsula.

The system made landfall just W of Everglades City early on 24 October at Category 3 intensity. The center's track across the very southern tip of civilization on mainland Florida's Gulf coast created challenges for the hurricane chaser determined to intercept the storm's powerful right semicircle.

Wilma had several structural oddities—including a very large eye and an unusually severe back side—that made for a unique chase experience.

1.2 Purpose & Scope

This **Chase Study** documents iCyclone's **chase** of Hurricane Wilma during the storm's landfall on Florida's Gulf coast.

While this document contains meteorological data, it is not a meteorological report on Hurricane Wilma. Furthermore, this **Chase Study** focuses only on Wilma's landfall on **Florida's Gulf Coast**. It does not cover Wilma's very significant effects in the Florida Keys or the metropolitan areas of Florida's east coast.

For more information on iCyclone's Wilma chase—including video/multimedia products, photo galleries, the complete **Chase Diary**, and other materials—please visit www.icyclone.com.

1.3 Notational Conventions

Unless otherwise indicated:

- **Times** are specified in 24-hour clock notation—i.e., 8:00 = 8 am and 14:00 = 2 pm. However, National Hurricane Center (NHC) advisory times are expressed in their original, 12-hour clock (“am/pm”) notation. Additionally, in the chase diagrams (**Figures 3 and 8**), iCyclone locations are labeled in 12-hour clock notation to be consistent with NHC advisory times.
- **Locations** are in the State of Florida. In some instances, however, “FL” is included after location names for emphasis.



2. The Hurricane

Following is a brief overview of Hurricane Wilma's lifecycle.

2.1 Brief Synoptic History

The system that would eventually become Hurricane Wilma first became a tropical depression in the W Caribbean Sea about 215 SE of Grand Cayman Island on 15 October. After becoming a tropical storm and moving erratically S for a few days, the system gradually began a WNW motion as it strengthened into a hurricane on 18 October.

From this point, Wilma deepened very rapidly to Category 5, reaching a maximum intensity of 882 mb—the lowest ever observed in the Atlantic Basin—on 19 October while about 365 mi SE of Cozumel, Mexico. Winds were estimated to be 160 kt (~185 mph) at this time, and the sharply defined eye was only 2 n mi wide—one of the smallest hurricane eyes ever observed.

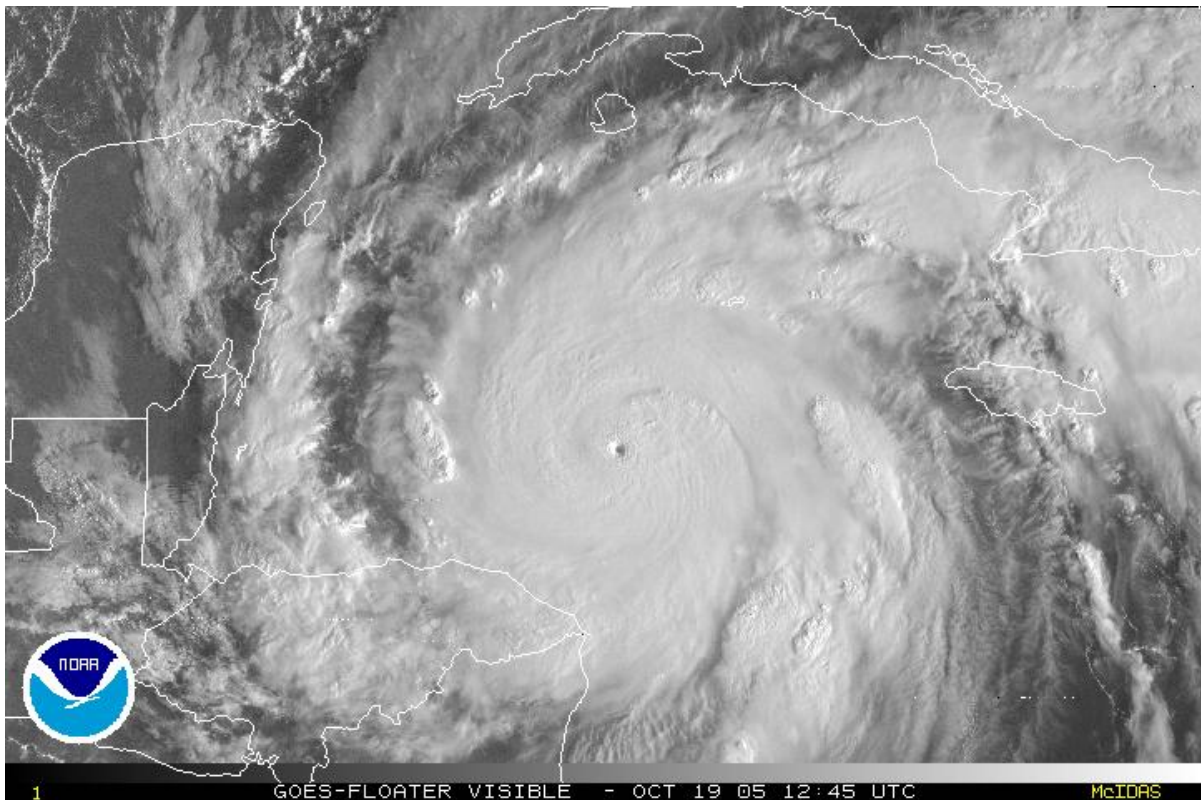


Figure 1: Wilma near maximum intensity at 12:45Z on 19 October 2005. (Satellite imagery courtesy of NOAA.)

The storm turned NW and weakened to 130 kt (~150 mph) (Category 4) before passing very slowly over Cozumel on 21 October and then the mainland Yucatan Peninsula early on 22 October. The storm meandered over the Yucatan for a day, weakening to 85 kt (~100 mph) (Category 2) before emerging into the Gulf of Mexico early on 23 October. Later that day, the storm accelerated on a straight NE path toward the SW Florida Peninsula while restrengthening into a major hurricane.

When the center made landfall at 6:30 EDT (10:30 UTC) 24 October near Cape Romano, FL (20 mi W of Everglades City), the central pressure was 950 mb and winds were estimated to be 105 kt (~120 mph)—a Category 3 hurricane. At this time Wilma was moving NE at a rapid 20 kt (23 mph). The very large eye—55-65 mi wide—sped NE across the Florida Peninsula, emerging into the Atlantic just SE of Jupiter only 4.5 hours after making landfall on the Gulf coast.

While the storm lost some strength over Florida—decreasing to Category 2—it quickly restrengthened to Category 3 that afternoon as it accelerated away from Florida, parallel to the U.S. coastline. The next day, 25 October, Wilma weakened and became extratropical while racing NE into the open Atlantic at a brisk 40-50 kt (~46-58 mph).

Note: *This is a brief summary only. For a complete, official synoptic history, please refer to the NHC's **Tropical Cyclone Report: Hurricane Wilma, 15-25 October 2005**.*

*Data from advisory products and **Tropical Cyclone Report: Hurricane Wilma, 15-25 October 2005**, National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>); Hurricane Wilma report, NWS Forecast Office, Miami-South Florida (<http://www.srh.noaa.gov/mia/>).*



2.2 Advisory Positions

Following are Wilma center fixes as indicated in National Hurricane Center advisories and position estimates during the 24-hour Florida landfall period.

Note: The NHC's official post-analysis best-track data may deviate slightly from these positions.

Color key: blue = center over water; yellow = center over/near Florida.

DATE	TIME (EDT)	ADVISORY (A) or POSITION ESTIMATE (PE)	LOCATION			CAT
			° N LAT	° W LON	MILES FROM	
23 Oct	5:00 pm	A 34	23.5	84.9	295 SW FL coast	2
23 Oct	8:00 pm	A 34a	23.9	84.4	225 SW FL coast	2
23 Oct	9:00 pm	PE	24.0	84.2	210 SW Naples, FL	2
23 Oct	10:00 pm	PE	24.3	83.8	180 SW Naples, FL	2
23 Oct	11:00 pm	A 35	24.4	83.7	170 SW Naples, FL	3
24 Oct	12:00 am	PE	24.5	83.6	160 SW Naples, FL	3
24 Oct	1:00 am	A 35a	24.7	83.3	140 SW Naples, FL	3
24 Oct	2:00 am	PE	25.1	82.7	95 SW Naples, FL (<i>erroneous</i>)	3
24 Oct	3:00 am	A 35b	25.1	82.8	95 SW Naples, FL (<i>relocated</i>)	3
24 Oct	4:00 am	PE	25.3	82.6	80 SW Naples, FL	3
24 Oct	5:00 am	A 36	25.5	82.4	55 SW Naples, FL	3
24 Oct	6:00 am	PE	25.8	81.8	10 SSW Marco Island, FL 25 S Naples, FL	3
24 Oct	6:30 am	PE	-	-	Landfall: Near Cape Romano, FL 20 W Everglades City	3
24 Oct	7:00 am	A 36a	26.1	81.4	10 N Everglades City, FL	3
24 Oct	8:00 am	PE	26.1	81.0	35 ENE Everglades City, FL	3
24 Oct	9:00 am	A 36b	26.3	80.7	45 SW West Palm Beach, FL	2
24 Oct	10:00 am	PE	26.6	80.4	20 WSW West Palm Beach, FL	2
24 Oct	11:00 am	A 37	26.9	80.0	15 NNE West Palm Beach, FL	2
24 Oct	12:00 pm	PE	27.1	79.7	25 NE West Palm Beach, FL	2
24 Oct	1:00 pm	A 37a	27.3	79.2	65 NE West Palm Beach, FL	2
24 Oct	2:00 pm	PE	27.9	78.9	100 NE West Palm Beach, FL	2
24 Oct	2:30 pm	A 38	28.1	78.8	125 NE West Palm Beach, FL	3
24 Oct	4:00 pm	PE	28.7	77.8	200 NE West Palm Beach, FL	3
24 Oct	5:00 pm	A 39	29.0	77.4	180 N Great Abaco Island, Bahamas	3

Data from advisory & position-estimate products, National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>).

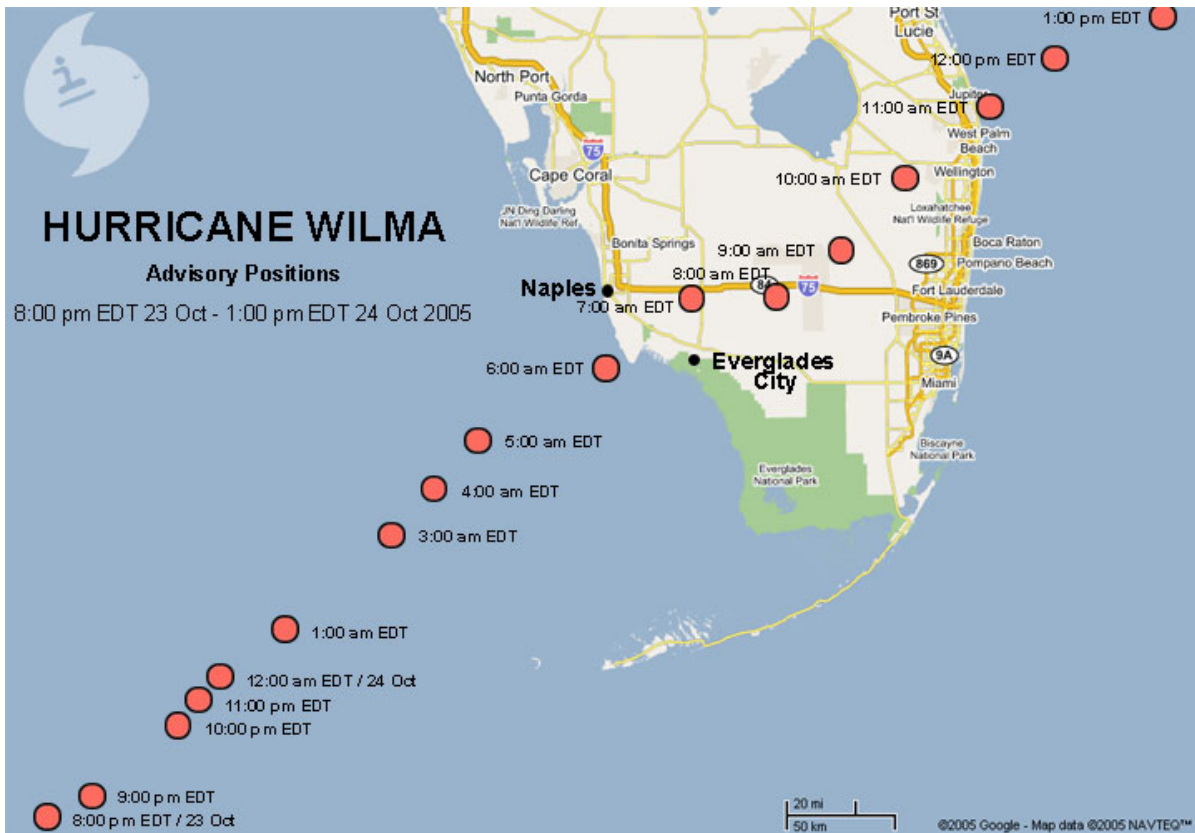


Figure 2: Wilma’s track across the Florida Peninsula, according to NHC advisory positions. **Note:** The erroneous 2:00 am EDT 24 October position is omitted. (Base map courtesy of Google Local & NAVTEQ.)

2.3 Florida Landfall—Fact Sheet

TIME/DATE	6:30 EDT (10:30 UTC) / 24 October 2005
LOCATION	Near Cape Romano, FL 20 mi W of Everglades City
MOTION	NE 20 kt (23 mph)
CATEGORY	3
WINDS	105 kt (~120 mph)
CENTRAL PRESSURE	950 mb
EYE DIAMETER	55-65 mi

Data from *Tropical Cyclone Report: Hurricane Wilma, 15-25 October 2005*, National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>); Hurricane Wilma report, NWS Forecast Office, Miami-South Florida (<http://www.srh.noaa.gov/mia/>).

2.4 Effects in Mainland Florida—Overview

2.4.1 Winds

Many stations across a wide swath of S Florida (on both coasts and inland) reported sustained hurricane-force winds—with the South Florida Water Management District meteorological station reporting a sustained wind of ~90 kt (103 mph) at the S end of Lake Okeechobee. Wind damage was extensive on both the Gulf and Atlantic coasts and inland around Lake Okeechobee.

It is interesting to note that, in most locations, winds in the back side of the eyewall—occurring **after** the eye had passed—were as strong as **or stronger** than winds in the front side.

It is believed that the maximum (Category 3) winds occurred far SE of the landfall point, over the unpopulated Everglades, near the S tip of the Florida Peninsula.

2.4.2 Storm Surge

The storm surge reached 4-8 ft in coastal Collier County, with 7 ft at Chokoloskee and Marco Island and 4 ft in Everglades City. Higher values probably occurred in mainland Monroe County, in the unpopulated Everglades.

2.4.3 Rainfall

Rainfall totals were 4-6 in in W Collier County (near the landfall point) and near Lake Okeechobee, with isolated amounts as high as 6-8 in. Storm totals throughout the Peninsula generally ranged from 3-7 in.

*Data from **Tropical Cyclone Report: Hurricane Wilma, 15-25 October 2005**, National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>); Hurricane Wilma report, NWS Forecast Office, Miami-South Florida (<http://www.srh.noaa.gov/mia/>).*



3. The Chase

3.1 Objective

When chasing any landfalling hurricane, my objectives are always the same:

- Get in the right (stronger) side of the eyewall, within the radius of maximum winds, close to the coastline, as the center comes ashore.
- Record the experience with observations and video footage.

3.2 Summary

Following is a brief chase summary. For precise times, locations, and observed conditions, see **Locations & Observations**. For a more detailed account of these events, see **Appendix: Chase Diary**.



Figure 3: Chase locations in relation to the path of Wilma's center. (Base map courtesy of Google Local & NAVTEQ.)

3.2.1 Before (18-23 October)

18-20 October

I first entertained the idea of chasing Wilma as early as 18 October, when long-range NHC forecast tracks began to consistently suggest recurvature and eventual landfall on Florida's SW coast.

Over the next couple of days, I selected Naples, FL, as my destination. As the major population center nearest the projected path, Naples seemed a good **starting point** for chase activities on Florida's Gulf coast. (I fully expected that I would need to fine-tune my location as the storm neared, and did not necessarily expect Naples to be ultimate location.)

21 October

I put the plan into action late on 21 October, when Wilma was nearing Mexico's Yucatan Peninsula—flying overnight from Los Angeles, CA, to Tampa, FL.

22 October

Landing in Tampa early in the morning, I drove down the coast to Naples, where I checked into my hotel, hooked up my computer, and spent the day closely monitoring the situation (**Point A** in **Figure 3**).

My hotel (**Hampton Inn**, 3210 Tamiami Trail N, Naples, FL 34103) was on the E side of Tamiami Trail (Highway 41), and therefore just outside the mandatory evacuation zone covering all of Naples between Tamiami Trail and the Gulf of Mexico.

23 October

On 23 October, forecast tracks were consistently bringing the center of Wilma near or just S of Naples, FL. This predicted landfall point created some difficult chase dilemmas. (See **Challenges**.)

Early in the afternoon, when Wilma was 300 mi offshore and still a Category 2 (85-kt) hurricane, I drove down Highway 41 to assess low-lying Everglades City as a station for riding out the storm. As it would likely be at or just right of the landfall point, I decided to go for it—despite evacuation orders—and drove back up to Naples to get my belongings from the hotel so I could officially relocate.

However... I started to get concerned later that afternoon as satellite imagery showed Wilma getting better organized. And I changed my mind—deciding Everglades City was not safe—when Wilma steadily strengthened that evening and advisories predicted storm surges that would completely inundate the small town.

I took another drive down Highway 41 very late in the evening—in intermittent heavy rain—to hunt for any other locations further down the coast that might be “closer to the action” (but safer than low-lying Everglades City). I checked out Lee Cypress, but the tiny town seemed completely deserted and I could find nowhere to stay.



3.2.2 During (24 October)

Leading Edge

I was unsuccessful in my search, and after midnight I returned to my hotel in Naples in rain and gusty winds.

In the hotel, I joined up with two other storm chasers, Tony Brite (www.hurricaneadventures.com) and Paul Bowen. Together, we ventured out a little after 3:00 EDT, searching for an optimal chase location—with Wilma's center less than 100 miles offshore. At this point, conditions were rapidly deteriorating and driving was becoming difficult.

Eyewall (Front Side)

When it became too dangerous to drive (a little after 5:00 EDT), we stationed in a shopping plaza near the intersection of Highway 41 and Collier Boulevard, near Naples Manor—and here we rode out the eyewall, staying very close to the downwind side of a large commercial building (**Kmart**, 12713 Tamiami Trail E, Naples, FL 34113) (**Point B** in **Figure 3**).

Eye

Conditions calmed considerably a little after 6:00 EDT as the leading edge of the eye reached us. The front side of the storm had not impressed us terribly, and—emboldened by the apparent mildness of Wilma—Tony and I decided to take advantage of the lull to relocate to Everglades City to see a little more action on the back side. We correctly assumed that Everglades City—located further to the SE and therefore closer to the storm's right-semicircle—would see more intense winds than Naples. Paul did not accompany us.

We drove down Highway 41 during the lull of the eye, passing through Royal Palm Hammock around 7:00 EDT—in near dead-calm conditions. Dawn broke and it was full daylight by the time we arrived in downtown Everglades City, just a couple of minutes before 8:00 EDT (**Point C** in **Figure 3**).

Eyewall (Back Side)

The backside of the eyewall struck suddenly at 7:58 EDT, just as we pulled into town—and we were surprised by the severity of it. The winds on the back side were much stronger—and more dangerous—than what we had seen in the front side of the storm near Naples (**Figure 4**). (See **Oddities**.)

The wind increased throughout the hour and seemed to peak between 8:50 and 9:10 EDT (**Figure 5**). At this point, the storm surge was rapidly inundating the entire town, and Tony and I had to make a quick escape—amid flying debris—to a hotel on slightly higher ground (**Captain's Table Lodge & Villas**, 102 E Broadway, Everglades City, FL 34139). The water was still rising at this point, the wind was still dangerously strong, and we were concerned for our safety.





Figure 4: The height of the storm in Everglades City. The eyewall's back side was surprisingly severe.



Figure 5: Some of the most extreme gusts—like this one—occurred well over an hour after the back-side eyewall winds started up in Everglades City.

Tail End

Fortunately, the surge stopped just shy of flooding the hotel. However, we were surrounded by deep water on all sides and trapped at this location until late afternoon, when conditions improved and the water receded enough to allow us drive away.

We drove back up Highway 41 as the sun set, arriving in Naples after dark. The city was almost completely blacked out, with police checkpoints on ever road in and out.

We continued N, finally arriving in Fort Myers and checking into a hotel late that evening.

3.2.3 After (25-27 October)

25 October

The next morning, Tony and I parted ways and I drove E on Highway 80, across the Peninsula, in order to check on my grandparents in Boca Raton. Wind damage was extensive in many communities just S of Lake Okeechobee, and surprisingly severe in Florida's east-coast cities.

26 October

I spent the day in Boca Raton, where everyday life was severely disrupted by widespread moderate wind damage, lack of electricity, and long lines for generators and gasoline.

27 October

Despite disruptions to life and transportation in S Florida, I was able to get to Tampa and fly back to L.A. early on 27 October.



3.3 Locations & Observations

The following table summarizes my locations and observations in the context of Hurricane Wilma's advisory and position-estimate data.

Color key: **yellow** = storm effects; **orange** = eyewall; **blue** = eye.

DATE	TIME (EDT— unless other- wise noted)	WILMA		iCYCLONE	
		LOCATION (NHC advisory positions—in miles)	MAX WIND (NHC advisory values—in kt (mph))	LOCATION (in Florida— unless otherwise noted)	OBSERVED CONDITIONS (observations apply to entire period up to next entry's time)
21 Oct	latenight (PDT)	15 S of Cancun, MX (10 pm CDT adv)	120 (140)	Los Angeles, CA	NA
22 Oct	morning	10 WSW of Cancun, MX (7 am CDT adv)	105 (120) <i>(100 (115) in post-analysis)</i>	Tampa	Warm & humid.
	12 noon	Just SW of Cancun, MX (10 am CDT adv)	100 (115)	Naples (Point A)	Warm & humid.
23 Oct	14:00	300 SW of SW FL coast (1 pm CDT adv)	85 (100) <i>(90(105) in post-analysis)</i>	Everglades City (Point C)	Warm & humid.
23 Oct	21:30	210 SW of Naples, FL (9 pm EDT position estimate)	95 (110)	Naples (Point A)	Showers. Warm & breezy.
23 Oct	23:25	170 SW of Naples, FL (11 pm EDT adv)	100 (115)	Hwy 41: Naples to Carnestown (Hwy 41 & St Rd 29 junction) & Lee Cypress (St Rd 29 & 837 junction) (driving)	Periods of heavy rain separated by drizzle; breezy (wind stronger/steadier near open water).
24 Oct	01:25	140 SW of Naples, FL (1 am EDT adv)	100 (115)	Naples (Point A)	Heavy rain; light wind.
24 Oct	01:40	NA	100 (115)	Naples (Point A)	Heavy rain; gusty winds.
24 Oct	01:50	NA	100 (115)	Naples (Point A)	Moderate rain; breezy.
24 Oct	02:35	95 SW of Naples, FL (2 am EDT position estimate)	100 (115) <i>(110 (125) in post-analysis)</i>	Naples (Point A)	Heavy rain; light wind.
24 Oct	03:45	95 SW of Naples, FL (3 am EDT adv)	105 (120) <i>(110 (125) in post-analysis)</i>	Hwy 41: Central Naples to Collier Blvd (driving)	Heavy rain; windy.



DATE	TIME (EDT— unless other- wise noted)	WILMA		iCYCLONE	
		LOCATION (NHC advisory positions—in miles)	MAX WIND (NHC advisory values—in kt (mph))	LOCATION (in Florida— unless otherwise noted)	OBSERVED CONDITIONS (observations apply to entire period up to next entry's time)
24 Oct	05:15	55 SW of Naples, FL (5 am EDT adv)	110 (125)	Hwy 41 & Collier Blvd (near Naples Manor) (Point B)	Eyewall (front side). Heavy rain; very windy.
24 Oct	06:15	Very near SW FL coast; 10 SSW of Marco Island, FL; 25 S of Naples, FL (6 am EDT position estimate)	110 (125)	Hwy 41 & Collier Blvd (near Naples Manor) (Point B)	Eye (leading edge). Rain lessening; calmer.
24 Oct	06:30	Landfall. Near Cape Romano, FL; 20 W of Everglades City (6:30 am EDT update)	110 (125) <i>(105 (120) in post-analysis)</i>	Hwy 41 & Collier Blvd (near Naples Manor) (Point B)	Eye. Moderate rain; light winds.
24 Oct	07:05	10 N of Everglades City, FL (7 am EDT adv)	105 (120)	Royal Palm Hammock (driving)	Eye. No rain; almost total calm.
24 Oct	07:15	NA	105 (120)	Hwy 41: Royal Palm Hammock to Everglades City (driving)	Eye. Daylight: cloudy sky with bright patches; periods of light/moderate rain; some gusty winds.
24 Oct	07:58	35 ENE of Everglades City, FL (8 am EDT position estimate)	105 (120) <i>(95 (110) in post-analysis)</i>	Everglades City (Point C)	Eyewall (back side). Rain; very strong wind starting up again very quickly.
24 Oct	08:25	NA	105 (120) <i>(95 (110) in post-analysis)</i>	Everglades City (Point C)	Eyewall (back side). Rain; very windy; flying debris; tree uprooted.
24 Oct	09:00	45 SW of West Palm Beach, FL (9 am EDT adv)	95 (110)	Everglades City (Point C)	Eyewall (back side). Light (or no) rain; very windy with violent gusts; flying debris; storm-surge flooding of some streets.
24 Oct	09:30	NA	95 (110)	Everglades City (Point C)	Periods of rain; very windy—but not as violent as previously; major storm-surge flooding, with town completely flooded (all streets & most of ground underwater).
24 Oct	10:00	20 WSW of West Palm Beach, FL (10 am EDT position estimate)	95 (110)	Everglades City (Point C)	Rain ceasing; sky brightening; windy but much calmer; major storm-surge flooding of town—but no further increase.



DATE	TIME (EDT— unless other- wise noted)	WILMA		iCYCLONE	
		LOCATION (NHC advisory positions—in miles)	MAX WIND (NHC advisory values—in kt (mph))	LOCATION (in Florida— unless otherwise noted)	OBSERVED CONDITIONS (observations apply to entire period up to next entry's time)
24 Oct	11:30	15 NNE of West Palm Beach, FL (near E FL coast) (11 am EDT adv)	90 (105)	Everglades City (Point C)	Cloudy & breezy, with occasional strong gusts; town still completely flooded.
24 Oct	17:30	180 N of Great Abaco Island, NW Bahamas (over open Atlantic) (5 pm EDT adv)	105 (120)	Everglades City (Point C)	Sunny with some clouds; breezy; storm-surge flooding has mostly receded, exposing most streets.
24 Oct	latenight	260 SSE of Cape Hatteras, NC (11 pm EDT adv)	110 (125)	Fort Myers	Cool; calm.
25 Oct	after-noon	570 ENE of Cape Hatteras, NC (11 am EDT adv)	90 (105)	Hwy 80, S of Lake Okeechobee; E-coast cities, including Boca Raton (driving)	Sunny.
	evening	205 SSE Halifax, Nova Scotia, Canada (5 pm EDT adv)	75 (85)	Boca Raton	Clear.
26 Oct	all	NA	NA	Boca Raton	Sunny/clear.
27 Oct	morning	NA	NA	Tampa	NA
27 Oct	morning (PDT)	NA	NA	Los Angeles, CA	NA

*Wilma locations & max winds from advisory & position-estimate products, National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>). Observed conditions from time-stamped video footage & **Chase Diary**, iCyclone.*

3.4 Challenges

Hurricane Wilma was not the easiest chase subject—due to the storm’s structure, motion, and landfall point.

3.4.1 Objective: stay on the right!

As stated above, my primary objective when chasing a landfalling hurricane is to be **near the coast, just to the right of the center**—in the **right eyewall**—because this is usually the area of maximum winds.



Wilma's fast forward speed at landfall made this especially important. In fast-moving hurricanes, the difference between wind speeds on the right and left sides is even more pronounced than usual—with winds **much** stronger on the right side—because the forward motion augments winds on the right while decreasing them on the left.

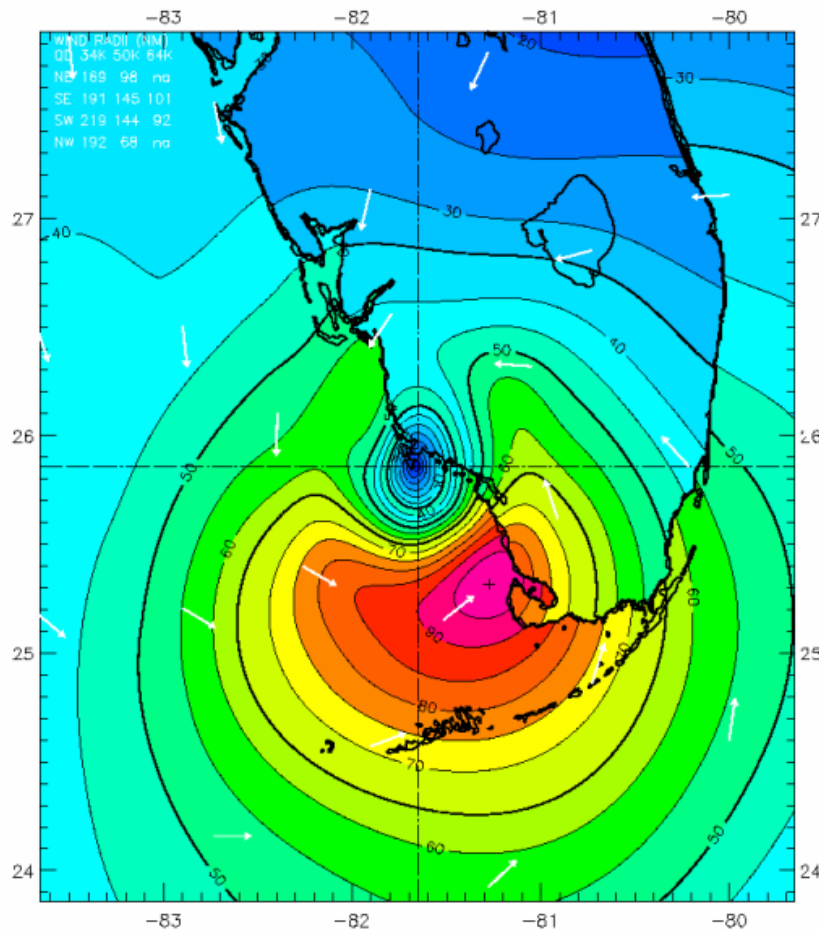
Wilma's surface-wind analysis at landfall (10:30 UTC) illustrates this dramatic asymmetry—with sustained hurricane-force winds not even occurring on the coast to the left of the center as this major (Category 3) hurricane made landfall (**Figure 6**).

Hurricane Wilma 1030 UTC 24 OCT 2005

Max 1-min sustained surface winds (kt) for marine exposure
Valid for marine exposure over water, open terrain exposure over land

Analysis based on CMAN from 0729 - 1029 z; MOORED_BUOY from 0729 - 1029 z;
GOES_SWIR from 1002 - 1002 z; FCMP_TOWER_LD_TO from 0731 - 1024 z;
ASOS_LD_TO from 0727 - 1029 z; GPSSONDE_SFC from 0750 - 1018 z;
AFRES adj. to surface from mean height 2820 m from 0725 - 1029 z; QSCAT from 1010 - 1012 z;
GPSSONDE_WL150 from 0750 - 1018 z; CMAN_LD_TO from 0729 - 1029 z;
GPSSONDE_MBL from 0750 - 1018 z;

1030 z position interpolated from 1014 Vortex; mslp = 951.0 mb



Observed Max. Surface Wind: 100 kts, 39 nm SE of center based on 1025 z AFRES sfc measurement
Analyzed Max. Wind: 100 kts, 40 nm SE of center
Experimental research product of: NOAA / AOML / Hurricane Research Division

Figure 6: The 10:30 UTC surface wind analysis shows a very asymmetric wind field. Note the maximum winds very far to the right (SE) of the center. (Surface wind analysis courtesy of NOAA Hurricane Research Division.)

3.4.2 Obstacle: no locations on the right

But Wilma’s track made getting into the storm’s right-semicircle on Florida’s Gulf coast difficult.

Wilma’s center moved NE through the Marco Island/Cape Romano area. There are very few (if any) feasible observation points for riding out a major hurricane along the coast to the right of this track—just two tiny communities: Everglades City and Chokoloskee. Going S from here, Everglades National Park extends—with no towns or roads—to the S tip of the Florida Peninsula (**Figure 2**).

Both Everglades City and Chokoloskee are low-lying islands—with Chokoloskee being more exposed and further from the mainland. The storm-surge map for the region shows that neither location is safe for riding out a major hurricane (**Figure 7**).

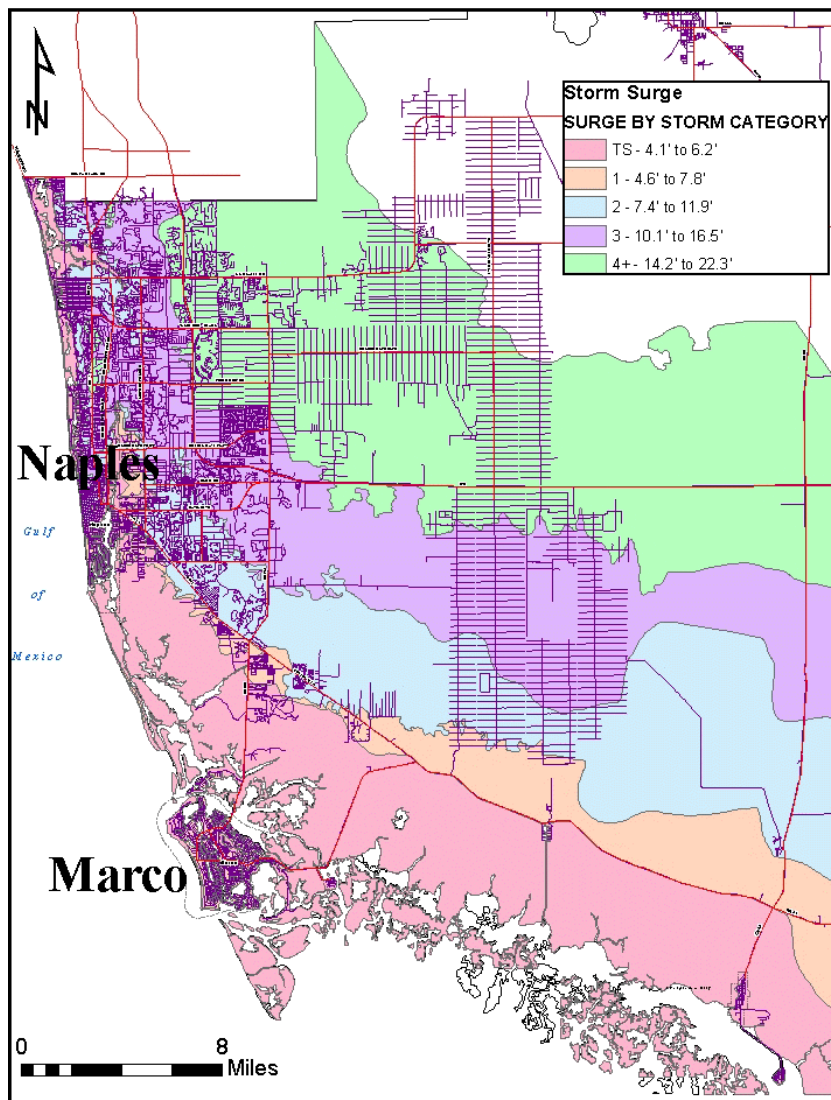


Figure 7: SLOSH-generated storm surge map for the SW Florida coast illustrates the threat of tremendous flooding in Everglades City and Chokoloskee (extreme lower-right corner)—even in a moderate hurricane. (Map generated with ArcMap, courtesy of Collier County Emergency Management.)

3.4.3 Location Changes

My conflicting intentions to experience the storm’s brunt while also being reasonably safe led to serious indecision—and several location changes during the chase.

1. On the afternoon of 23 October, when Wilma was a Category 2 hurricane in the Gulf, I decided to station in Everglades City to ride out the storm (**Point C in Figure 8**). (I ruled out Chokoloskee as being too exposed and dangerous.)
2. That evening, as Wilma neared Florida and strengthened to Category 3, I reconsidered and decided **not** to station in Everglades City, as the predicted storm surge would inundate the town many times over. I instead opted to ride out the storm in my hotel in Naples (**Point A in Figure 8**).
3. However, late that evening I met Tony and Paul, and—as Wilma rapidly approached the coastline—together we drove further down Highway 41 to get closer to the projected landfall point. We rode out the front side of the eyewall near Naples Manor—**just left of the center’s track (Point B in Figure 8)**. Conditions were not especially severe for the front-side eyewall of a major hurricane.
4. Feeling emboldened by the apparent mildness of the storm, Tony and I relocated during the eye’s lull to Everglades City—**just right of the center’s track (Point C in Figure 8)**. Winds in the back side of the eyewall in Everglades City were much more severe than what we had experienced in the front side near Naples (**to the left of the center**), and storm-surge flooding confined us to this location for the remainder of the storm.

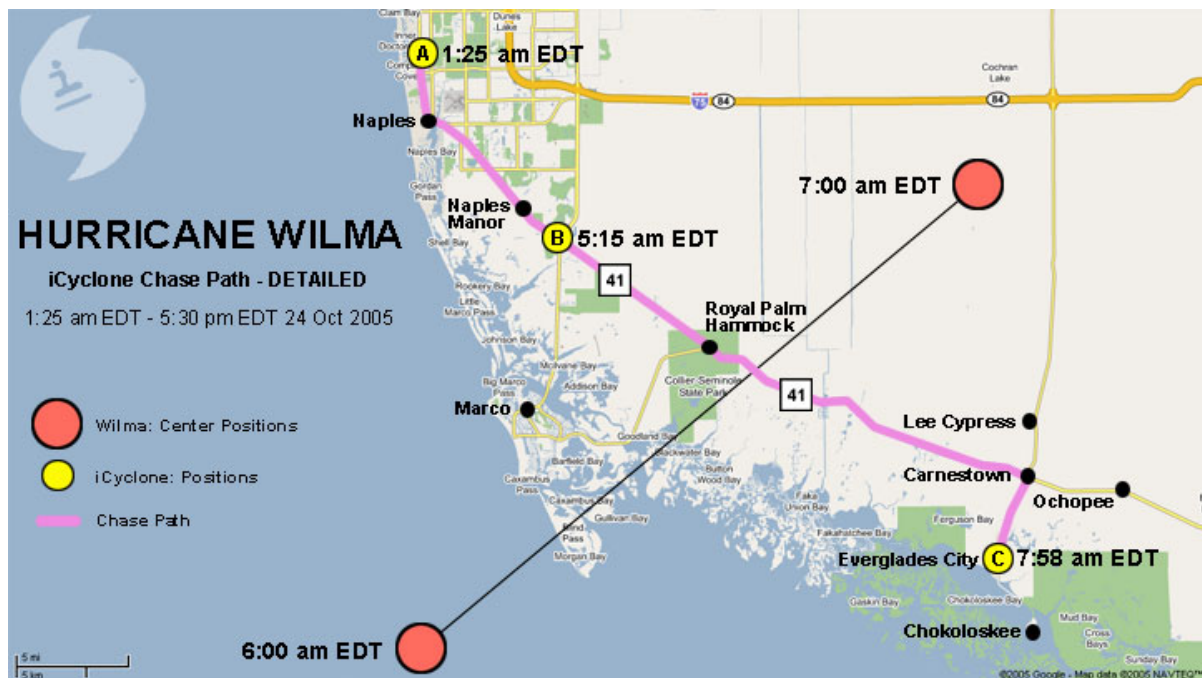
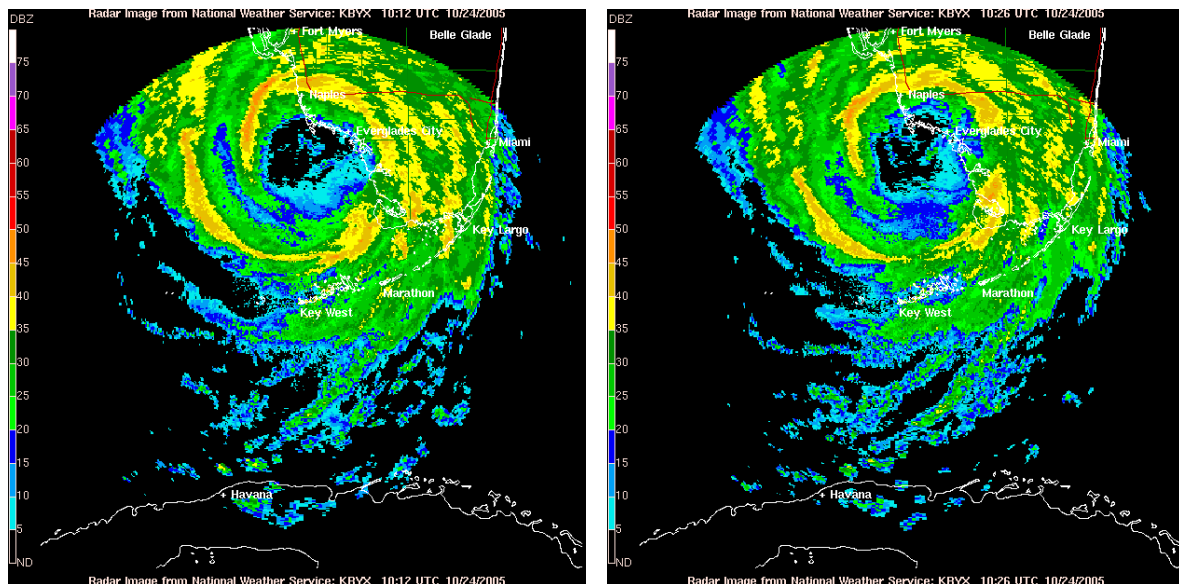


Figure 8: Chase locations in relation to the path of Wilma’s center—**detailed view**. (Base map courtesy of Google Local & NAVTEQ.)

3.5 Results

I was unable to achieve my objective of penetrating Hurricane Wilma's zone of maximum winds at landfall in Florida. Even Everglades City—20 mi to the right of the landfall point—**was not far enough right** (SE) to experience these maximum winds.

The reason: the storm's **very large eye**. While Wilma was a strong hurricane at landfall, it did not have a tight inner core. The eye was 55-65 mi wide as it crossed Florida's coast—so the right eyewall (with maximum winds) swept the coast **far SE of the landfall point** (Figures 9a & 9b).



Figures 9a & 9b: Radar images illustrate Wilma's large eye just before and during landfall in Florida. Note the right eyewall (with presumed maximum winds) is very far to the right of the storm's center—down near the S tip of the Florida Peninsula. (Radar imagery courtesy of the National Weather Service.)

As a result:

- **Wilma's maximum winds on Florida's Gulf coast occurred over the uninhabited Everglades National Park.** Note the surface-wind analysis at landfall (10:30 UTC), which shows the highest winds 40 n mi SE of the center (Figure 6).
- **Sustained winds in Everglades City did not reach Category 3 intensity.** The back side of the eyewall brought the strongest winds to this location between 8:00 and 9:15 EDT, when they are estimated to have reached 75-80 kt (~85-90 mph) with gusts to 85-105 kt (~100-120 mph). This estimate is based partially on a reading of 63 kt (72 mph) with a maximum 3-second gust of 82 kt (94 mph) reported from FCMP's Tower T0, located in nearby Ochopee, between 8:00 and 9:00 EDT. Since Ochopee is 5 mi further inland from Everglades City, it is believed Everglades City experienced slightly higher winds. (Ochopee wind reading courtesy of Florida Coastal Monitoring Program (FCMP). Everglades City wind estimate courtesy of Robert Molleda, Meteorologist, NWS Forecast Office, Miami-South Florida.)

3.6 Lessons Learned

While Wilma taught me no new lessons, it strongly reinforced my previous understanding of hurricane anatomy:

- A **hurricane's** strongest winds are usually to the **right** of the center.
- In **fast-moving hurricanes**, the wind field will be even more asymmetric, with winds on the right side **much stronger** than on the left. The relative mildness of the front-side eyewall near Naples Manor—**just left of the center**—illustrates this point. (See **Point B** in **Figures 3 and 8**.)
- In **fast-moving hurricanes with large eyes**, maximum winds will occur **very far** to the right of the landfall point—because the right eyewall will be far-removed from the center.

Given Wilma's path, I believe Everglades City—while not optimal—was the **best compromise** for observing the storm on Florida's Gulf coast. There simply weren't any options along the coast further to the right—no towns, no access roads, and therefore no feasible way to penetrate the zone of maximum winds.

3.7 Oddities

Wilma was an unusual hurricane in many respects.

It produced the lowest pressure (882 mb) ever observed in the Atlantic Basin. Its spectacular 97-mb central-pressure drop from 12:00 UTC 18 October to 12:00 UTC 19 October is a 24-hour record. And it is very rare for a major (Category 3+) hurricane to make landfall in the U.S. after September. The last example was Hurricane Opal of October 1995. Before Opal, one would have to go back another 31 years—to Hilda of October 1964—for the next example.

These records aside, several characteristics made the storm unusual as it crossed Florida:

3.7.1 Fast Motion

The storm was moving NE at 20 kt (23 mph) as it made landfall on Florida's Gulf coast and 22 kt (25 mph) as it exited the east coast. The center crossed the Florida Peninsula in just 4.5 hours, and this fast motion created a highly asymmetric wind field. (See **Challenges**, above.)

3.7.2 Large Eye

Wilma's eye was 55-65 mi wide as it crossed Florida—so that many locations experienced lulls lasting well over an hour despite the storm's fast forward motion. We experienced a very long lull—**approx. one hour and 45 minutes** (6:15 to 7:58 EDT). (Our changing location while in the eye—from near Naples to Everglades City—might have slightly affected the duration of the lull we experienced.)

The eye was not sharply defined and had turbulent patches—i.e., occasional short periods of gusty winds and moderate rain.



3.7.3 Stronger Back Side

We experienced much stronger winds in the back side of the eyewall, after the eye had passed. This might have been caused by our location change in the eye, as we moved SE, further to the right of the center. However, several people I interviewed—on both the Gulf coast and on the east coast (Boca Raton)—indicated that the storm was more severe (and most of the wind damage occurred) **after the eye passed**.

While unusual, this is not unheard of. In Hurricane Celia (1970), Corpus Christi, TX, experienced the most extreme gusts after the center passed.

3.7.4 High Winds in a Dry Slot

Radar imagery shows a distinct dry slot in the SW eyewall starting a little before 8:00 EDT. Interestingly, Everglades City experienced some of the most severe winds while **inside** this dry slot (8:30 to 9:15 EDT) (**Figure 10**).

iCyclone video footage illustrates this: bursts of very heavy wind during this period are accompanied by little or no rain. This is surprising, given that the highest winds in a hurricane generally coincide with the deepest convection—and it makes one wonder how much stronger winds would have been in Everglades City during this period had there been greater convection.

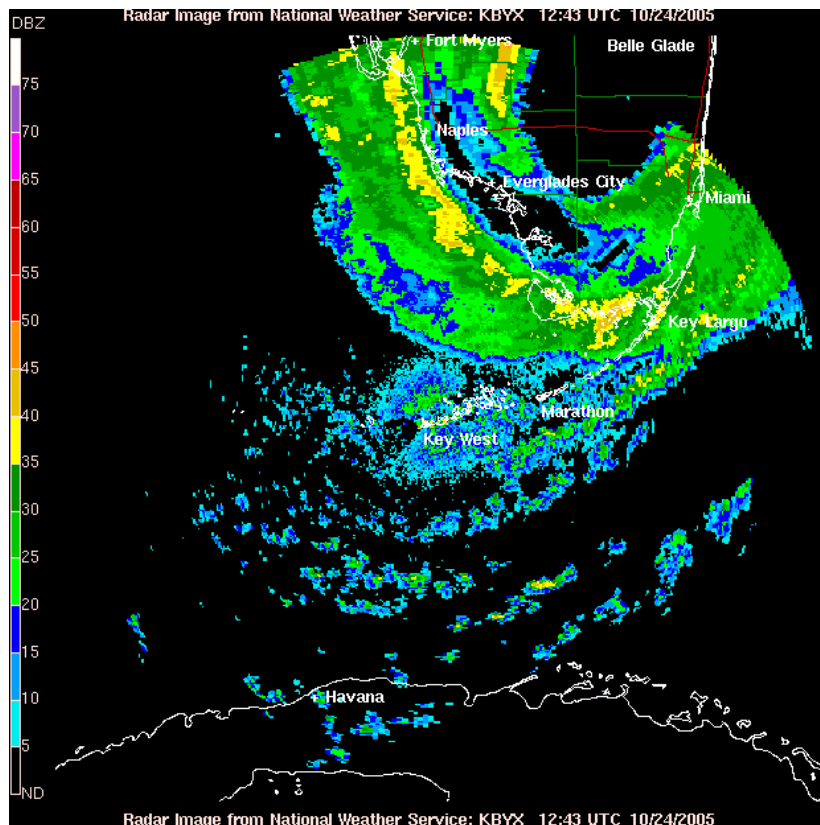


Figure 10: Radar image shows the dry slot in the SW eyewall, over Everglades City. At this time, Everglades City was experiencing its highest winds. (Radar imagery courtesy of the National Weather Service.)

4. Sources

In addition to my time-stamped video footage and **Chase Diary** (see **Appendix**), the following sources were consulted for this report:

- National Hurricane Center (<http://www.nhc.noaa.gov/index.shtml>)
 - Advisory & position-estimate products.
 - Pasch, Richard J.; Blake, Eric S.; Cobb III, Hugh D.; Roberts, David P., 12 January 2006. *Tropical Cyclone Report: Hurricane Wilma, 15-25 October 2005*.
- National Weather Service Forecast Office, Miami-South Florida (<http://www.srh.noaa.gov/mia/>)
 - Hurricane Wilma report (<http://www.srh.noaa.gov/mfl/events/?id=wilma>).
 - eMail correspondence with Robert Molleda, Meteorologist.
- Satellite imagery courtesy of NOAA.
- Florida base maps courtesy of Google Local & NAVTEQ.
- Surface wind analysis courtesy of NOAA Hurricane Research Division.
- Storm surge map generated with ArcMap, courtesy of Collier County Emergency Management.
- Radar imagery courtesy of the National Weather Service.
- Ochopee (Tower T0) wind reading courtesy of Florida Coastal Monitoring Program (FCMP) (<http://users.ce.ufl.edu/~fcmp/index.htm>).



5. Appendix: Chase Diary

This diary is my detailed, real-time account of my Hurricane Wilma chase. For the sake of space, entries before 17:45 EDT 23 October have been excluded. For these earlier entries, see the complete **Chase Diary** at www.icyclone.com.

All times are specified in **24-hour clock notation** and are **EDT** unless otherwise noted. All locations are in **Florida** unless otherwise noted.

Most—but not all—entries starting 13:35 EDT 22 October were originally posted in an online blog entitled, **Live From Naples, FL – Hurricane Wilma: Diary from Ground Zero**, on Eastern US Weather Forums (<http://www.easternuswx.com/>). Slight edits have been made to this version.

The diary was kept in “real-time” up to and including the entry at 2:45 EDT 24 October. At that point I was in chase mode and unable to make entries. Therefore, entries starting 3:45 EDT 24 October thru to the end were written **after the fact**, on October 27. I was able to accurately reconstruct events by referring to my video footage, and the times are based on the video timestamps.

23 Oct 17:45 – Naples

Conditions: Mostly overcast with a light breeze. Still warm & muggy.

Around the region: Today I drove down Highway 41 to Everglades City, a small hamlet of 600 people right on the Gulf. State Road 29—the main artery through the place—is lined with houses, condos, a couple of gas stations, and a U.S. Post Office. I had a creepy feeling while being there that this is going to be Wilma’s Ground Zero. It is mostly evacuated, except for a few diehard residents. I talked to two different sheriffs who explained to me their plan of action: stay in the area until the conditions get too rough, then retreat inland for the storm’s peak, then come back to Everglades City when conditions improve enough to check on those who stayed behind. Despite the “mandatory” evacuation, they are not forcing people to leave—although they highly recommend it.

My plan: Extrapolating Wilma’s motion over the last 6 hours suggests Naples as the landfall point. Additionally, the NHC’s projected path has the center passing near Naples. Given the large eye and anticipated fast forward motion at landfall, I believe the most severe conditions will occur well to the right (S) of Wilma’s geometric center—and I believe this will be around Everglades City. Therefore, I will be relocating there within a couple of hours to ride out the storm.

Bottom line: My next post will be out of Everglades City later this evening, and I will be posting from there throughout the night, for as long as I am able. I get no mobile/GPRS signal from Everglades City—it is a dead zone for my mobile operator, apparently—so once the power goes down, there will be no more posts until after the storm. ☹️ Hopefully I’ll get some good video footage.

More later!

23 Oct 19:45 – Naples

Change of plans: I am still in my Naples hotel room and starting to seriously doubt the wisdom of riding out Wilma in Everglades City—the main reason being that the storm looks to be intensifying on the latest satellite imagery and I think it would be pure insanity to try and ride out a direct hit from a solid Cat 3 in a town that is right on the Gulf and 4 feet above sea level. Sure, all severe weather chasers are a **little** imbalanced—but I am not completely f***ing crazy.

However, I am faced with a dilemma because I still don’t want to ride this out in Naples—I really want to be to the **right** of the center as it comes ashore.

One Internet poster this evening suggested Fort Myers might be Wilma’s target—in which case, Naples is perfect.



But if Wilma is heading more toward Marco Island, Naples isn't an optimal location, as it would be on the left (weaker) side. The fundamental problem with a Marco Island landfall is that there aren't a whole lot of options to the right of Marco Island—civilization really dies off after Marco.

Next step: Given that conditions are still OK here—it's not even raining—I am going to hop in the car, go back down the 41, and check some other potential locations. One possibility is Lee Cypress, which is on Road 29 just a few miles due N of Everglades City—still prone to flooding but not as insanely exposed.

More later...

23 Oct 19:50 – Naples

OK, so I think I am making a good decision (to not ride this out in Everglades City). I love experiencing harsh 'canes, but I have to be logical about it—and those last few satellite frames started to give me a crawling feeling on the back of my neck.

23 Oct 20:10 – Naples

I am leaving my hotel room now to find a location for riding out the storm. As I have no idea whether I will have Internet access where I am, my friend in NY is going to post on my behalf—I am going to call him from my mobile and dictate any updates. But since he is not me, he will of course not be able to respond to any questions. ☺

Ciao!

P.S. Wilma's center is only 225 miles offshore, but it is totally calm here and not even raining. Weird.

P.P.S. Given that the 8 pm advisory indicates 110 mph and still strengthening, I think not riding this out in Everglades City was a wise choice! Call me a chicken... ☺

23 Oct 21:30 – Naples

Intermittent moderate rain showers in the last half hour or so; very warm & breezy.

23 Oct 22:15 – Naples

No rain; light breeze; very warm. I would never guess what was just offshore...

I hate to inject emotions into this, but I am literally burning with curiosity about what is going to happen in the next few hours.

23 Oct 23:25 – Hwy 41, betw Naples & Marco Island

(Dictated via mobile phone to Keith Nugent, posting on my behalf.)

Driving S on Hwy 41 between Naples & Marco, looking for an optimal location from which to ride out the storm. Heavy downpours—but very little wind. Streets almost completely deserted.

24 Oct 00:00 Midnight – Hwy 41, S of Marco Island

(Dictated via mobile phone to Keith Nugent, posting on my behalf.)

On Hwy 41 S of Marco Island, heading towards the 29 junction; outside Islands Hotel. Rain has lessened to slight drizzle. Very—almost strangely—warm; stiff breeze along the immediate shore.

24 Oct 00:55– Hwy 41, betw Carnestown (St Rd 29 junction) & Marco Island

(Dictated via mobile phone to Keith Nugent, posting on my behalf.)

OK—it looks like I am going to have to ride out the storm in Naples.

Despite my best efforts to find a place to batten down further S along the coast, there don't seem to be any reasonable options. The Islands Hotel (S of Marco) looked sturdy, but seemed to be less than 5 ft above sea level. I went all the way down to State Road 29, and instead of making a right towards Everglades City I turned left and went N. Another left onto the 837 brought me to what I expected to be a little town called Lee Cypress. What I found were a few intertwined dirt roads with some boarded up old houses. I didn't see anyone around, and the wind was making that creepy hurricane sound.

At this point I decided that the only option is to ride this out in Naples. I am now high-tailing it back up the 41 towards Naples.

Conditions: Moderate rain, warm, & breezy.



P.S. I'll be typing my next post with my own hands in my hotel room! ☺ Thanks to my friend Keith for so meticulously typing out my dictation.

P.P.S. Rain has started to come down hard again as I am finishing this post.

24 Oct 01:25 – Naples

I'm back in my cozy hotel room in Naples and kind of glad about it! (It is now me typing again!) ☺

Posts will continue thru the night until 1) we lose power or 2) the storm gets too violent and I need to retreat into the hallway.

Conditions: Steady, heavy rain; warm.

24 Oct 01:40 – Naples

An intense squall just passed thru with heavy rain and some gusts... and I am starting to believe we are going to get a direct hit from a major 'cane.

24 Oct 02:45 – Naples

Intense squalls are becoming more common—during which the palm trees in front of the hotel do that "hurricane dance" and all bend in the same direction at the same time, like synchronized swimmers. In between the squalls the wind drops almost to a calm—it is not picking up in a steady way. It is still oppressively sticky outside—just disgusting.

Shooting video at this time of day presents problems, as you have to point the camera at trees that are near street lamps—but without actually shooting the street lamps.

During the lulls I can hear ducks quacking from across the highway. Weird.

P.S. I hooked up with two other hurricane chasers, and we may make another expedition down Highway 41 within the next hour—not down to Everglades City, but maybe to the Marco area—to get closer to the center. I feel a little more comfortable doing this with two other people—as opposed to my lonely expedition two hours ago. ☺

Note: *From here a chase partner, Tony, and I pursued Wilma to "ground zero" (Everglades City)—a wild ride. After the storm I made it back up to Fort Myers, then across the smashed up Florida Peninsula to Boca Raton, where I remained for two days with no electricity, no Internet, and very limited mobile service.*

*I was not able to keep this diary during this period—therefore, the remaining entries were written **after the fact**, on October 27. I was able to accurately reconstruct events by referring to my video footage, and the times are based on the video timestamps.*

The Leading Edge

24 Oct 03:45 – Hwy 41, Naples & S

I hooked up with two other chasers—Tony Brite and Paul ???—that I met in my hotel lobby. They were in a daring mood, and being with two others gave me the confidence to once more make an expedition down Highway 41 as conditions rapidly deteriorated.

The wind was really picking up. The highway was deserted and transformer boxes were exploding frequently, like fireworks—lighting up the sky bright blue and creating eerie silhouettes of traffic lights dancing crazily on their wires. The car occasionally listed off course and I started to get a creeping feeling that we needed to find shelter fast—especially as updates indicated the storm continued to intensify up to landfall.

The Eyewall, Front Side

24 Oct 05:15 – Hwy 41 & Collier Blvd, near Naples Manor

Conditions were getting dangerous and we couldn't find an ideal place to ride out the eyewall—which we knew from radio reports was minutes away—so we pulled into a big shopping plaza. We could hear occasional banging sounds—but it was dark and we couldn't tell what caused them. A shop door flew open, and I suggested to my chase partners we take shelter in there. They were reluctant, saying we would be arrested for looting.

The wind increased in intensity and was soon ripping really hard and steady. I road out the eyewall pressed up against the wall of a Kmart on the downwind side of the building, filming the trees in the parking swaying furiously. The howling wind seemed unnatural—almost machine-generated—in its harsh steadiness.

It was a good blow, but perhaps not as strong as we were expecting, given that we were in the eyewall of a strong Cat 3. In fact, I estimate that the winds in this leading portion of the eyewall in this location reached Cat 1 strength only. I base this on the fact that most trees in the shopping plaza took a beating but stayed up.



I attribute these relatively low winds to the fact that we were on the left side of a very rapidly moving storm.

The wind slackened off quite a bit around 6:15 or 6:20 am, and my chase partners and I agreed the leading edge of the storm had peaked. We were perhaps a tad disappointed it hadn't been more intense.

The Eye 24 Oct 07:05 – Hwy 41, betw Marco Island & Everglades City

By around 7 am or so it was quite calm and the eye was certainly passing over. Emboldened by the apparent mildness of the storm, Tony and I decided to drive down the coast during the eye to see what was up in Everglades City. Paul said, "Knock yourselves out," and headed back up the highway to the hotel in Naples—he wanted no part in this.

As Tony and I drove down the swampy Highway 41, the sun rose. The sky was bluish grey, with bits of dull, smoky sunlight breaking through. At some points it was almost completely calm. Flocks of birds floated about; some of them seemed confused and we had to keep slamming the brakes to avoid running them over. Twice we barreled into downed powerlines hanging over the road.

We passed along a very desolate stretch of Highway 41 and Tony kept asking, "How much longer?" I said we'd be there soon, but I was not sure how soon. We reached a small marina community with downed trees and torn shingles, and we ask a fellow standing outside of his house, "Are we in the eye?" We asked because it was taking so long to pass, we were wondering if maybe the whole storm had passed. He confirmed we were in the eye.

Finally we got to the 29 junction, where all of the aluminum roofing of the tourist information center was scattered on the grass and stuck in trees. We met a shirtless fellow holding a beer who rode out the first part of the storm with his wife in a mobile home. He smiled and said the second half of the storm would be worse. I smiled but felt skeptical and wondered how he would know this.

The wind picked up a tad as Tony and I drove a mile down the 29 to Everglades City. The town had taken a beating, with downed trees and signs and debris scattered everywhere.

The Eyewall, Back Side 24 Oct 08:00 – Everglades City

We pulled into the heart of Everglades City, and it seemed the second we got out of the car, the wind exploded like a rocket—it was like someone turned the wind machine back on and all the palm trees immediately and obediently bowed toward the east. I have never before seen the winds after the eye of a hurricane pick up so suddenly. (**Note:** *In my video footage, these winds start up at 7:58 am.*)

And I was caught off guard by the ferocity. The wind screamed—literally **screamed**—making that terrible hurricane sound that we did not hear during the first half of the storm. Tony and I looked at each other. "This is it—**now** we're really getting it," I thought. I jumped out of the car and stood close against the downwind side of an old warehouse maybe 50 yards from the back side of the City Hall. The palm trees twisted furiously and crap was flying through the air. Every minute or so I heard a sound like an airplane taking off, and each time I heard this sound a terrific gust exploded within a couple of seconds, spraying debris and shredding the trees. A block away, I saw lawn furniture flying down the street—really fast. Big pieces of building material sailed through the air—just every kind of crap you can imagine.

I got in a pattern where I knew to brace myself and take cover every time I heard the "airplane sound". I filmed as best I could, but the camera shook a lot.

I repositioned to a stairwell about 75 yards away, and the winds seemed to get even worse, the extreme "airplane gusts" seeming to happen more frequently. Tony was in his car and I was trying to come out from the stairwell when we had what we both agreed afterward was the "peak gust" of the storm; it made a higher pitched scream than all the others. I glimpsed a couple of big pieces of debris flying at us, and I dove back into the stairwell. Something hit Tony's car—and him, in the neck—as he sat in his car with the window open.

The Surge 24 Oct 09:10 – Everglades City

The eyewall winds were still ripping—maybe even worse than an hour ago.

We were only about 20 yards from Lake Placid, which connects with the Gulf, and the wind was whipping the water into a ghostly white spray that hovered above the surface. At this point, I noticed that the center of town was flooded and the storm surge was coming up the stairs that I was standing on. The wheels of Tony's car were submerged, and we realized we had only moments to take action.

We jumped in the car—dodging the flying debris—and drove 100 yards in deep water to a small inn, The Captain's Table. We pulled into the driveway, which was just a few feet above the water.



We jumped out of the car and ran inside and I was damn happy to see other people. The hotel had taken a beating—the wind had completely ripped away all the second-floor porches and the signage blocked the front steps. The inn was surrounded by water on all sides—the streets around it were simply wind-whipped water with trees and signposts sticking out. The innkeeper, David, his wife, Maggie, and others were busy bringing stuff up to the second floor as the water rapidly rose. The wind was still shrieking—it showed no signs of letting up—and I couldn't believe the eyewall was lasting so long. I asked the innkeeper what we would do if the water came higher—he said nonchalantly that we'd need to get to the second floor.

We were trapped. I thought of that famous story about the Richelieu Apartments in Pass Christian during Hurricane Camille. I was a little freaked at this point and starting to feel like this experience had crossed a line, I had made a big mistake, I am never doing this again, etc.

Saved **24 Oct 10:00 – Everglades City**

The Gulf flooded the driveway and the foundation of the inn, but it stopped there and never came higher. And very, very slowly, the winds seemed to mellow out.

An AP reporter made his way to the inn and interviewed me. Once we were out of imminent danger, the adrenalin wore off and I was damn tired—just totally strung out.

But we were still trapped—we were still surrounded by water and the Gulf showed no sign of draining. We would be trapped there for the rest of the day at least. I resigned myself to this and asked the innkeeper for a room. I passed out in bed for a few hours, the wind still whistling and banging outside.

Assessment **24 Oct 17:25 – Everglades City**

I awoke to a knock on the door—it was my chase partner, Tony, cheerily telling me the surge had drained and we could leave. I came downstairs and looked around. The Gulf had receded enough to reveal the streets, the sun was shining, a fresh breeze was blowing. We said goodbye to the innkeeper and his wife and a few others whom we rode out the storm with, then assessed damage in the parts of the town that were not underwater.

Overall, given the ferocity of the storm, we felt Everglades City got through pretty well. We saw no complete structural failures, and the streets and infrastructure seemed to be intact, though smashed up a bit.

Tony and I do not believe that Cat 3 winds occurred in Everglades City. We base this assessment on the fact that we saw no homes with complete roof or wall failures. Our call is Cat 2 winds in Everglades City. We assume Cat 3 winds occurred further to the SE, over the Everglades. (**Note:** We are not professionals—these are our **amateur** opinions using the Saffir-Simpson damage descriptions as a guide.)

After taking some pictures, we took off up Highway 41, heading back to Naples.

Northward Trek **24 Oct: Evening – Naples & Fort Myers**

It got dark as we headed up the 41. Naples was completely blacked out and under curfew, with numerous police checkpoints. It was hard to assess damage due to darkness, but numerous trees and signs seemed to be blown down along Highway 41.

The damage lessened significantly as we went north, and Fort Myers seemed to have gotten off very easy—with just some trees and signs damaged. They had electricity, and we checked into a Days Inn. With a hot shower, a warm bed, and a microwaved TV dinner from the nearby 7-Eleven, I was as happy as a clam. ☺

25 Oct: Early Afternoon – Lake Okeechobee Region

In the morning I said goodbye to Tony and headed E on the 80 toward the east coast, to check on my grandparents in Boca Raton.

Communities to the S of Lake Okeechobee—including Clewiston, South Bay, and Belle Glade—had significant wind damage. Shopping plazas along the highway had widespread tree blowdown, many signs completely blown out, and (in some instances) heavy damage to roofs and facades.



25 Oct: Late Afternoon & Evening – Boca Raton

I arrived in Boca Raton and was surprised to find widespread, very significant wind damage. Some shopping plazas had lost well over half their trees, with all of the signs blown out and numerous street lamps smashed.

My grandparents' gated community was no better—with extensive tree blowdown, every street lamp down, many screened-in porches completely destroyed (some smashing through windows), and spotty roof damage. People in the Boca Raton/West Palm Beach region—who have had so many near misses over the last couple of years—were shocked to finally get a direct hit from a pretty-harsh 'cane.

Electricity was out all over the region. At night, my grandparents and I sat in the dark eating gefilte fish and peanut-butter sandwiches for dinner.

26 & 27 Oct – Boca Raton

Life in South Florida is completely disrupted. There is almost no power and very little phone service. The few functioning gas stations have lines that extend for over a mile. The Home Depot has lines. The grocery stores are selling only dry goods from half-empty shelves. Trees, smashed street lamps, blown out signs, and odd pieces of debris litter streets and driveways.

I did not have enough gasoline to get back to Tampa, where my flight to L.A. was leaving from. My grandparents' handyman, Cody, tried to siphon gas from my grandfather's car into mine, but it didn't work. I couldn't find gas anywhere else.

As a last resort, I paid Cody a good chunk of change to drive me to Tampa in the middle of the night. We couldn't even find gasoline for his car until we got well N, into Highlands County.

