

HURRICANE LILI

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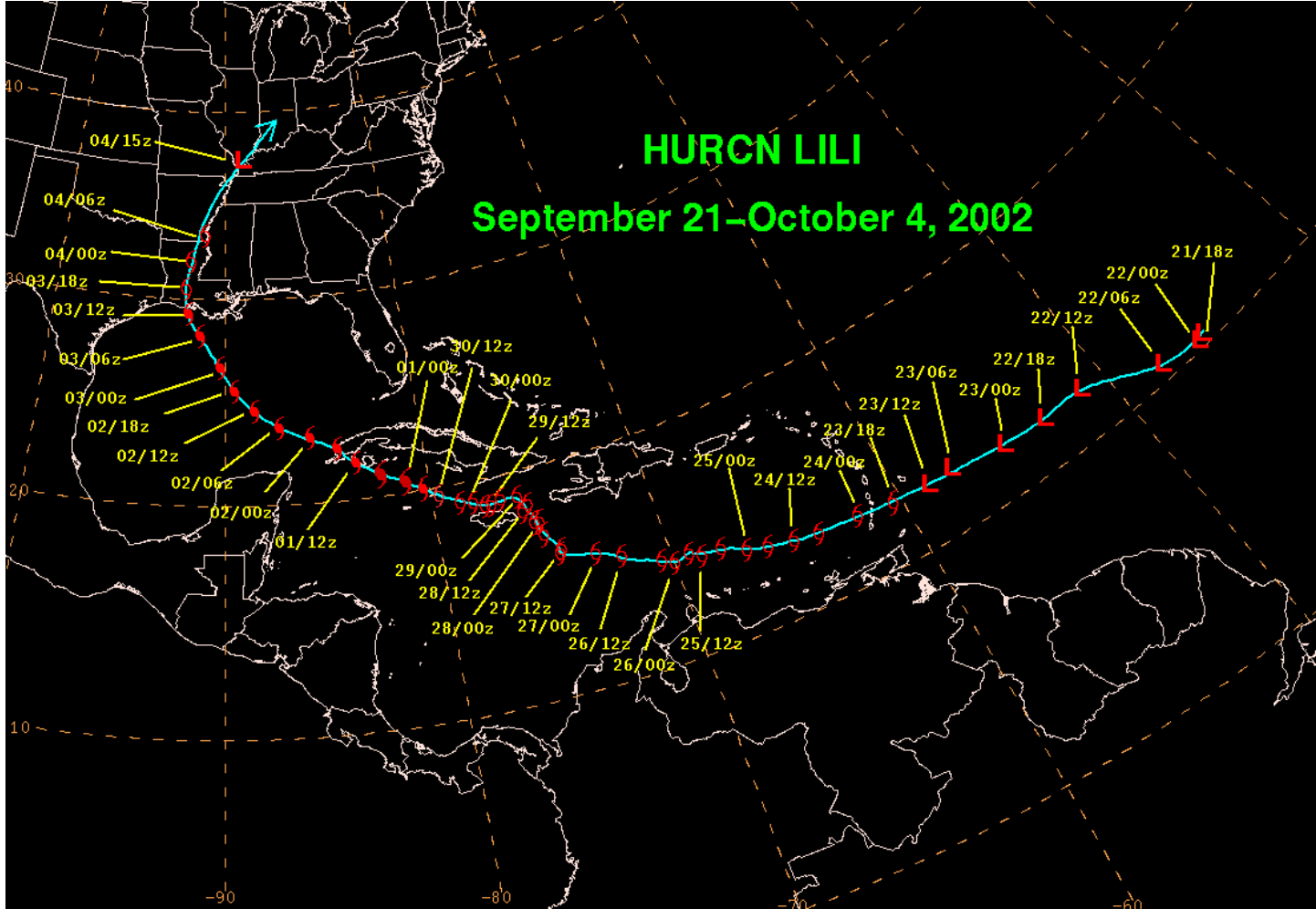
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HURCN LILI

September 21–October 4, 2002



HURRICANE LILI

PRELIMINARY STORM REPORT

PRELIMINARY STORM REPORT
HURRICANE LILI
NATIONAL WEATHER SERVICE LAKE CHARLES
OCTOBER 2002

HIGHEST WINDS

SOUTHEAST TEXAS REGIONAL AIRPORT...KBPT...ASOS
PEAK GUST...340 DEGREES 32 KT AT 1048 AM ON THE 3rd
2-MINUTE...330 DEGREES 27 KT AT 1048 AM ON THE 3rd

LAKE CHARLES REGIONAL AIRPORT...KLCH...ASOS
PEAK GUST...350 DEGREES 41 KT AT 1103 AM ON THE 3rd
2-MINUTE...340 DEGREES 31 KT AT 1104 AM ON THE 3rd

LAFAYETTE REGIONAL AIRPORT...KLFT...ASOS
PEAK GUST...150 DEGREES 63 KT AT 1159 AM ON THE 3rd
2-MINUTE...110 DEGREES 47 KT AT 1059 AM ON THE 3rd

ACADIANA REGIONAL AIRPORT...KARA...ASOS
PEAK GUST...110 DEGREES 79 KT AT 1012 AM ON THE 3rd
2-MINUTE...130 DEGREES 52 KT AT 1014 AM ON THE 3rd
NOTE: NO DATA AVAILABLE AFTER 1017 AM ON THE 3rd

SALT POINT...KP92...ASOS
PEAK GUST...090 DEGREES 23 KT AT 1253 AM ON THE 3rd
2-MINUTE...090 DEGREES 10 KT AT 1253 AM ON THE 3rd
NOTE: NO DATA AVAILABLE AFTER 1253 AM ON THE 3rd

ALEXANDRIA INTERNATIONAL...KAEX...ASOS
PEAK GUST...020 DEGREES 52 KT AT 353 PM ON THE 3rd
2-MINUTE...030 DEGREES 33 KT AT 354 PM ON THE 3rd

ESLER REGIONAL...KESF...ASOS
PEAK GUST...060 DEGREES 28 KT AT 1203 PM ON THE 3rd
2-MINUTE...050 DEGREES 14 KT AT 1119 AM ON THE 3rd
NOTE: NO DATA AVAILABLE AFTER 1213 PM ON THE 3rd

RECORDED WIND GUSTS

CAMERON PARISH.....CAMERON.....50 MPH AT TIME UNKNOWN
JEFF DAVIS PARISH..JENNINGS.....88 MPH AT TIME UNKNOWN
ST MARY PARISH....CYPREPOINT.....101 MPH AT TIME UNKNOWN
VERMILION PARISH...ABBEVILLE.....100 MPH AT TIME UNKNOWN
VERMILION PARISH...DELCAMBRE.....97 MPH AT 1008 AM ON THE 3rd
VERMILION PARISH...INTRACOASTAL CITY...120 MPH AT TIME UNKNOWN

WIND GUST ESTIMATES...BASED ON NWS SURVEY

ACADIA PARISH.....CHURCH POINT.....70 TO 80 MPH
ACADIA PARISH.....CROWLEY.....80 TO 90 MPH
ACADIA PARISH.....IOTA.....60 TO 70 MPH
ACADIA PARISH.....RAYNE.....100 TO 110 MPH

NWS COOPERATIVE RAINFALL REPORTS...

24 HOUR RAIN TOTALS ENDING AT 7 TO 8 AM ON THURSDAY OCTOBER 3 2002 AND FRIDAY OCTOBER 4 2002

SOUTHWEST...SOUTH CENTRAL...AND CENTRAL LOUISIANA

LOCATION	THU RAINFALL	FRI RAINFALL
ALEXANDRIA POWER PLANT	0.75	4.95
DRY CREEK	0.00	1.74
BUNKIE	0.96	3.81
DEQUINCY	0.12	1.53
DERIDDER	0.25	1.85
ESTHER 4SSW	1.85	2.49
EUNICE	0.78	2.99
JENNINGS	1.03	2.88
KINDER	0.00	2.34
SALT WATER BARRIER	0.00	1.75
SAM HOUSTON JONES S.P.	0.00	2.13
PORT OF LAKE CHARLES	0.50	1.69
OLD TOWN BAY	0.00	1.99
LEESVILLE	0.00	1.47
MOSS BLUFF	0.00	2.15
MITTIE	0.08	2.73
ROSEPINE RESEARCH STATION	0.00	1.22
LAKE MARTIN	1.76	2.91
PERRY	1.92	6.65

SOUTHEAST TEXAS

LOCATION	THU RAINFALL	FRI RAINFALL
BEAUMONT	0.08	0.02
TOLEDO BEND RESERVOIR	0.04	0.43
BURKEVILLE	0.00	0.94
BON WEIR	0.00	0.71
DEWEYVILLE	0.00	0.14
SAM RAYBURN RESERVOIR	0.05	0.05
KOUNTZE	0.00	0.03
LUMBERTON	0.07	0.02
ORANGE (CITY)	0.17	0.20
ORANGE 9N	0.22	0.15
ORANGE (NECHES RIV)	0.18	0.08

STORM SURGE

THE CAMERON TIDE GAUGE RECORDED A MAX TIDE LEVEL OF 3.4 MLLW AT 600 AM ON OCTOBER 3 2002.

BASED ON NWS SURVEY...MAX STORM SURGE AT BURNS POINT/SALT POINT WAS 10 TO 12 FEET. A HOME THAT WAS 6 FEET OFF THE GROUND HAD 4 FEET OF WATER IN IT. THE ASOS SITE KP92 HAD DEBRIS AT THE TOP OF A 6 FOOT CYCLONE FENCE...WHICH IS 2 FEET ABOVE SEA LEVEL...INDICATING AT LEAST AN 8 FT STORM SURGE.

BASED ON NWS SURVEY...MAX STORM SURGE AT CYPRE MORT POINT WAS 6 TO 8 FEET...BASED ON DISTINCT WATER MARKS ON ELEVATED HOMES. A LOCAL SHERIFF DEPUTY WHO WAS ON DUTY AT CYPRE MORT POINT SAW WATER RISE ABOVE A STOP SIGN. LOCAL RESIDENT REPORTED DEBRIS LINE 9 FEET HIGH ON HER HOME.

BASED ON NWS SURVEY...MAX STORM SURGE AT INTRACOASTAL CITY IN VERMILION PARISH WAS 6 FEET WHICH OCCURRED AT 400 PM ON THE 3rd. THIS WAS BASED ON THE WATER LEVEL AT THE CORP OF ENGINEERS OFFICE AT LELAND BOWMAN LOCKS.

MAX STORM SURGE AT DELCAMBRE IN VERMILION PARISH WAS 2 FEET IN THE EVENING OF THE 3rd. THIS WAS BASED ON INTERVIEWS WITH LOCAL RESIDENTS SHOWING HEIGHT OF THE WATER.

IN FRANKLIN...THE PECAN ACRES SUBDIVISION BARELY BEAT A 4 TO 6 FOOT STORM SURGE...ACCORDING TO THE MAYOR. SANDBAGS AND PUMPING WATER SAVED THE SUBDIVISION.

AT THE PORT OF NEW IBERIA...MEASURED STORM SURGE VALUES WERE 6.2 FT NGVD. THIS BROUGHT WATER INTO SEVERAL BUILDINGS AT THE PORT.

DATA FROM USGS/COE GAUGES...

LOCATION	DATUM	HEIGHT (FT)	DATE	TIME
SAINT MARY PARISH				
WAX LAKE OUTLET NR CALUMET	NGVD	8.0	OCT 3rd	1245 PM
CREWBOAT CHANNEL NR CALUMET 10 FT	NAVD88	12.3	OCT 3rd	1045 AM
ATCHAFALAYA R NR MORGAN CITY	NGVD	7.1	OCT 3rd	215 PM
ATCHAFALAYA BAY NR EUGENE IS	NGVD	9.0	OCT 3rd	200 PM
CASTILLE PASS NR MORGAN CITY		10.6	OCT 3rd	944 AM
GIWW AT BAYOU SALE RIDGE	NGVD	6.8	OCT 3rd	300 PM
CHARENTON DRAINAGE CANAL	NGVD	4.5	OCT 3rd	345 PM
VERMILION PARISH				
GIWW AT VERMILION LOCK	NGVD	8.3	OCT 3rd	400 PM
VERMILION BAY/B. FEARMAN	NGVD	11.7	OCT 3rd	900 AM

OF INTEREST...SEVERAL RIVER GAUGES IMPACTED BY TIDAL EFFECTS ON THE WEST SIDE OF LILI RECORDED SIGNIFICANT TIDAL FALLS...INCLUDING THE CALCASIEU LAKE AT HACKBERRY...AND THE MERMENTAU RIVER AT GRAND CHENIER AND THE MERMENTARU RIVER AT MERMENTAU.

BEACH EROSION

NWS STORM SURVEY INDICATES MINOR EROSION AT CAMERON...INTRACOASTAL CITY...AND CYPREPOINT POINT.

FLOODING

FLASH FLOOD WARNINGS WERE ISSUED FOR ACADIA... EVANGELINE...RAPIDES ...AND VERMILION PARISHES. DOPPLER RADAR AND NWS CO-OP REPORTED 5 TO 7 INCHES OF RAIN IN LESS THAN 2 HOURS IN THESE PARISHES. FLOODING WAS MAINLY CONFINED TO STREETS...EXCEPT IN PINEVILLE WHERE WATER ENTERED A FEW HOMES. A FEW RURAL AREAS OUTSIDE OF RAYNE...CROWLEY...AND EASTERN PORTIONS OF VERMILION PARISH HAD 1 TO 2 FEET OF WATER CROSSING THEM.

SEVERAL RIVERS WENT INTO FLOOD...INCLUDING THE CALCASIEU...VERMILION...AND BAYOU NEZPIQUE. THESE RIVERS HAD MINOR FLOODING.

THE CREST ON THE CALCASIEU RIVER AT GLENMORA WAS ESTIMATED AT 13.4 FEET AT 7 AM ON OCTOBER 4 2002. THE CREST ON BAYOU NEZPIQUE AT BASILE WAS ESTIMATED AT 24.0 FEET AT 7 PM ON OCTOBER 3 2002. THE CREST ON THE VERMILION RIVER AT SURREY STREET IN LAFAYETTE WAS

12.0 FEET AT 7 PM ON OCT 3 2002.

TORNADOES

TORNADOES WERE REPORTED IN ACADIA...EVANGELINE... LAFAYETTE...RAPIDES...AND ST LANDRY PARISHES. MOST OF THESE TORNADOES WERE SHORT-LIVED (LESS THAN 5 MINUTES) AND SHORT PATHS (LESS THAN 3 MILES). F-SCALE DAMAGE WAS IN THE F-0 TO F-1 RANGE.

THE FOLLOWING TABLE SHOWS LOCATIONS OF TORNADOES ON OCTOBER 3:

TIME PARISH CITY
-DESCRIPTION OF EVENT

1106 AM LAFAYETTE LAFAYETTE
- LAFAYETTE O.E.P. REPORTED A TORNADO AT PINHOOK AND VEROT SCHOOL ROAD.

1108 AM ACADIA 2 miles SE of CROWLEY
- NWS STORM SURVEY SHOWED TORNADO DAMAGE IN EBENEZER COMMUNITY.

1125 AM ACADIA 2 miles N of RAYNE
- NWS STORM SURVEY SHOWED TORNADO DAMAGE NEAR ROBERTS COVE COMMUNITY.

1128 AM LAFAYETTE LAFAYETTE
- LAFAYETTE O.E.P. REPORTED A TORNADO AT THE CORNER OF JOHNSTON AND SOUTH COLLEGE STREETS.

1143 AM ACADIA ESTHERWOOD
- NWS STORM SURVEY SHOWED TORNADO DAMAGE JUST EAST OF ESTHERWOOD.

1158 AM ACADIA 15 miles N of CROWLEY
- NWS STORM SURVEY SHOWED TORNADO DAMAGE NEAR MOWATA.

1201 PM LAFAYETTE 1 miles E of MIRE
- LAFAYETTE O.E.P. REPORTED A TORNADO AT THE ACADIA PARISH BORDER NEAR MIRE.

1219 PM EVANGELINE TURKEY CREEK
- NWS STORM SURVEY SHOWED TORNADO DAMAGE SOUTH OF TURKEY CREEK.

1228 PM ACADIA RICHARD
- NWS STORM SURVEY SHOWED TORNADO DAMAGE NEAR RICHARD.

115 PM EVANGELINE MAMOU
- POLICE OFFICER SAW A TORNADO TOUCH DOWN THAT CAUSED A ROOF TO CAVE IN ON A HOME. THE PEOPLE THAT WERE TRAPPED INSIDE ESCAPED SERIOUS INJURY.

152 PM ST. LANDRY CHIMNEYVILLE
- HOMEOWNER REPORTED A TORNADO RIPPED THE ROOF OFF HOME.

300 PM RAPIDES 5 miles S of ALEXANDRIA
- SKYWARN SPOTTER SAW A TORNADO DAMAGING HOMES ALONG HIGHWAY 1.

330 PM RAPIDES WOODWORTH
- STATE POLICE SAW A TORNADO TOUCH DOWN, CAUSING MINOR TREE DAMAGE.

STORM EFFECTS

...NO DIRECT DEATHS OR LIFE-THREATENING INJURIES...

...ACADIA PARISH...

...ONE INDIRECT FATALITY...

...TWO INJURIES DURING THE STORM...

ONE ELDERLY WOMAN DIED FROM CARBON MONOXIDE POISONING FROM HER GENERATOR IN CROWLEY ON SATURDAY OCTOBER 5 2002. SHE HAD BROUGHT HER GENERATOR INSIDE HER HOME...FEARING IT WOULD BE STOLEN.

DURING THE STORM ON OCTOBER 3RD IN RAYNE...TWO CITY EMPLOYEES WERE TREATED AND RELEASED FROM A LOCAL HOSPITAL AFTER THE BRICK FACADE COLLAPSED AT THE FOURTH STREET WATER PLANT. THE ROOF OF THE BUILDING BLEW OFF BEFORE THE FACADE FELL. TWO CITY VEHICLES WERE ALSO DAMAGED.

PRELIMINARY DAMAGE NUMBERS INDICATE 85 HOMES AND BUSINESSES WERE DESTROYED ACROSS ACADIA PARISH...AND ANOTHER 2540 HOMES AND BUSINESSES RECEIVED MAJOR DAMAGE.

MANY HOMES AND BUSINESSES WERE DAMAGED IN CROWLEY AND RAYNE FROM FLYING DEBRIS OR FALLING TREES. TREES AND POWER LINES WERE DOWN ALL ACROSS THE PARISH...BLOCKING SOME ROADS.

ACADIA PARISH SCHOOLS RECEIVED \$1.6 MILLION WORTH DAMAGES.

...ALLEN PARISH...

SEVERAL TREES AND POWER LINES WERE BLOWN DOWN ALONG THE HIGHWAY 165 CORRIDOR...BETWEEN KINDER...OBERLIN...AND OAKDALE.

FIVE HOMES WERE DAMAGED IN OBERLIN WHEN LARGE TREES FELL ON THEM.

...AVOYELLES PARISH...

THE HARDEST HIT AREA WAS AROUND BUNKIE. SEVERAL HOMES AND BUSINESSES HAD FLYING DEBRIS OR FALLING TREES DAMAGE THEM. A FEW TELEPHONE POLES FELL ON A HIGHWAY SOUTHWEST OF BUNKIE.

A FEW HOMES AND BUSINESSES WERE DAMAGED AS FAR EAST AS MARKSVILLE FROM TREES FALLING OR FLYING DEBRIS.

... BEAUREGARD PARISH...

ONE HOME IN THE SUGARTOWN-DRY CREEK AREA WAS DAMAGED WHEN A TREE FELL ON IT. A FEW TREES ALSO FELL ACROSS OTHER SECTIONS OF EASTERN BEAUREGARD PARISH.

...CALCASIEU PARISH...

SEVERAL HOMES RECEIVED MINOR DAMAGE FROM THE HIGH WINDS...MAINLY IN THE MOSS BLUFF...LEBLEAU SETTLEMENT...AND IOWA AREAS. SEVERAL TREES AND POWER LINES WERE BLOWN DOWN.

...CAMERON PARISH...

IN DOWNTOWN CAMERON...SEVERAL HOMES AND BUSINESSES WERE DAMAGED FROM FLYING DEBRIS OR FALLING TREES. A COUPLE OF HOMES NEAR GRAND LAKE WERE DAMAGED WHEN THE WIND BLEW THEIR COVERED PORCHES OFF. BETWEEN CAMERON AND GRAND CHENIER...SEVERAL TREES WERE BLOWN ACROSS THE ROAD. THE MOST TREE DAMAGE OCCURRED IN THE EASTERN SECTION OF CAMERON PARISH...ALONG HIGHWAY 82.

...EVANGELINE PARISH...

...TWO INJURIES DURING THE STORM...

...ONE INDIRECT INJURY DURING RECOVERY...

ONE PERSON WAS INJURED DURING THE STORM ON OCTOBER 3RD WHEN THEY BROKE THEIR LEG ACCORDING TO THE EVANGELINE PARISH 911 OFFICE.

A POLICE OFFICER IN VILLE PLATTE WAS INJURED DURING THE STORM ON OCTOBER 3RD WHEN A TREE FELL ON HIS PARKED CRUISER. HE WAS TREATED AND RELEASED FROM A LOCAL HOSPITAL.

ON FRIDAY OCTOBER 4th, A VILLE PLATTE HOUSE WAS COMPLETELY DESTROYED BY FIRE WHEN THE

OWNER WAS TRYING TO REFUEL HIS GENERATOR AND SPILLED GASOLINE. HE RECEIVED MINOR INJURIES.

IN CHURCH POINT...THE POLICE DEPARTMENT ROOF WAS BLOWN OFF.

IN VILLE PLATTE...AN ELEMENTARY SCHOOL HAD TWO BUILDINGS LOSE PART OF THEIR ROOFS. MANY HOMES AND BUSINESSES RECEIVED DAMAGE TO THEIR ROOFS AND WINDOWS.

IN VIDRINE...THE HIGH SCHOOL WAS DAMAGED.

IN RURAL AREAS ACROSS THE PARISH...TREES AND POWER LINES WERE BLOWN DOWN...BLOCKING SEVERAL ROADS. MANY BARNs WERE DESTROYED.

...IBERIA PARISH...

SEVERAL HOMES RECEIVED DAMAGE ACROSS THE PARISH DUE TO FALLING TREES OR FLYING DEBRIS. SOME BUSINESSES IN NEW IBERIA RECEIVED DAMAGE TO WINDOWS.

AT ACADIANA REGIONAL AIRPORT...\$100,000 DAMAGES OCCURRED TO THE HANGAR. A HELICOPTER COMPANY HAD \$50,000 DAMAGES TO ITS PROPERTY.

...JEFF DAVIS PARISH...

PRELIMINARY NUMBERS INDICATE 15 HOMES WERE DESTROYED AND 200 DAMAGED ACROSS JEFF DAVIS PARISH...MAINLY FROM FALLING TREES AND FLYING DEBRIS.

IN LAKE ARTHUR...THE LARGE TREE ALONG THE LAKE WAS DAMAGED. SEVERAL HOMES HAD TREES FALL ON THEM. SOME ROADS WERE BLOCKED FROM FALLING TREES.

IN JENNINGS...WIDESPREAD DAMAGE OCCURRED AS MANY TREES AND POWER LINES CAME DOWN...SOME FALLING ON HOMES AND BUSINESSES.

BARNs WERE DAMAGED AND SHINGLES WERE BLOWN OFF SOME HOMES IN RURAL AREAS OF EASTERN JEFF DAVIS PARISH...NORTH OF JENNINGS.

A LOW TO MODERATE FISH KILL WAS REPORTED ON TUESDAY OCTOBER 8 2002 ON THE MERMENTAU RIVER NEAR LAKE ARTHUR.

...LAFAYETTE PARISH...

...ONE MINOR INJURY DURING THE STORM...

IN LAFAYETTE...A CABLE TV TOWER BLEW DOWN BETWEEN 10 AND 11 AM...AND FELL ON A HOME...TRAPPING A WOMAN INSIDE. SHE RECEIVED AN ANKLE INJURY.

IN LAFAYETTE...A TV STATION TOWER FELL ON THE ROOF NEAR THE TV STUDIO...CAUSING WATER DAMAGE INSIDE.

PLANTATION ELEMENTARY SCHOOL HAD THE LIBRARY ROOF COLLAPSE. BROUSSARD ELEMENTARY SCHOOL HAD THE GYMNASIUM ROOF PEELED BACK.

SEVERAL WINDOWS WERE DAMAGED IN HIGH-RISE BUILDINGS IN DOWNTOWN LAFAYETTE.

NUMEROUS TREES AND POWER LINES WERE BLOWN DOWN ACROSS THE PARISH. SOME OF THIS DEBRIS LANDED ON HOMES...DAMAGING ROOFS AND WINDOWS.

...RAPIDES PARISH...

...NUMEROUS TRAFFIC ACCIDENTS DURING THE STORM...

AROUND ALEXANDRIA...SEVERAL PEOPLE WERE INJURED IN TRAFFIC ACCIDENTS DURING THE HEIGHT OF THE STORM.

ALEXANDRIA AND PINEVILLE HAD MINOR WIND DAMAGE...BUT RURAL AREAS AROUND CHENEYVILLE...FOREST HILL...GLENMORA...LECOMPTE...AND WOODWORTH RECEIVED MORE SIGNIFICANT

DAMAGE. SEVERAL HOMES AND BUSINESSES WERE DAMAGED FROM FLYING DEBRIS OR FALLING TREES. MANY HOMES LOST SHINGLES OR TIN WAS PEELED FROM THE ROOF IN RURAL LOCATIONS.

MAJOR COTTON CROP LOSSES OCCURRED IN THE CHENEYVILLE AREA.

...ST. LANDRY PARISH...

SEVERAL SCHOOLS SUFFERED ROOF DAMAGE...INCLUDING SOUTHWEST...LAWTELL...AND ARNAUDVILLE ELEMENTARY SCHOOLS.

IN EUNICE...A BUSINESS WAS COMPLETELY DESTROYED WHEN WIND PICKED UP THE ROOF AND BLEW DOWN A BRICK WALL OF THE BUILDING WAS THAT BUILT IN THE EARLY 1900S.

WESTERN SECTIONS OF ST. LANDRY PARISH RECEIVED THE MOST DAMAGE. MANY TREES AND POWER LINES CAME DOWN DURING THE STORM.

...ST. MARTIN PARISH...

IN BREAUX BRIDGE...A BRICK WALL ON THE BACK OF CITY HALL WAS BLOWN DOWN...CRUSHING A POLICE CAR AND THE GENERATORS THE CITY WAS GOING TO USE TO POWER THE POLICE STATION.

TREES AND POWER LINES WERE BLOWN DOWN ACROSS THE PARISH...BLOCKING SOME STREETS. BARNs WERE DAMAGED AND SOME TIN ROOFS WERE PEELED OFF HOMES.

...ST. MARY PARISH...

AT CYPRE MORT POINT...THE ST. MARY O.E.P. REPORTS 80 PERCENT OF THE BUILDINGS WERE DAMAGED. SEVERAL MOBILE HOMES WERE COMPLETELY DESTROYED...WHILE OTHER HOMES WERE LIFTED OFF THEIR PILINGS AND PUSHED BACK INTO THE WOODS. SOME HOMES THAT WERE ELEVATED 6 FEET ABOVE THE GROUND HAD STORM SURGE ENTER THEM.

FRANKLIN HAD TREES AND POWER LINES BLOWN DOWN...BESIDES THE SCARE OF STORM SURGE IN THE PECAN ACRES SUBDIVISION. OUTLYING AREAS AROUND CHARENTON AND BALDWIN ALSO HAD MINOR DAMAGE FROM FALLING TREES.

...VERMILION PARISH...

...ONE INDIRECT FATALITY...

...AT LEAST 20 CARBON MONOXIDE POISONINGS AFTER THE STORM...

A 79 YEAR OLD ERATH MAN DIED ON MONDAY OCTOBER 7 2002 WHEN HE FELL FROM A LADDER AT HIS HOME CLEANING UP STORM DEBRIS.

AT LEAST 20 PEOPLE WERE TREATED AND RELEASED FROM THE LOCAL HOSPITAL FOR CARBON MONOXIDE POISONING. EXHAUST FUMES FROM GENERATORS SENT PEOPLE FROM A LOCAL GROCERY STORE AND NEWSPAPER TO THE HOSPITAL.

PRELIMINARY DAMAGE ASSESSMENT NUMBERS INDICATE OVER 3700 HOMES AND BUSINESSES WERE DESTROYED OR RECEIVED MAJOR DAMAGE ACROSS VERMILION PARISH.

ABBEVILLE HIGH SCHOOL...THE LARGEST SCHOOL IN THE PARISH...COULD BE CLOSED UP TO 2 MONTHS DUE TO ROOF DAMAGE. A MOBILE HOME IN MAURICE CAUGHT ON FIRE AFTER ELECTRICITY CAME BACK ON MONDAY OCTOBER 7 2002.

THE HARDEST HIT AREAS INCLUDED ABBEVILLE AND INTRACOASTAL CITY. ABBEVILLE HAD MANY HOMES AND BUSINESSES DAMAGED FROM FLYING DEBRIS OR FALLING TREES. INTRACOASTAL CITY HAD WIDESPREAD FLOODING DUE TO STORM SURGE. WATER ENTERED SEVERAL BUSINESSES. STORM SURGE ALSO FLOODED STREETS IN DELCAMBRE...AND WIND DAMAGED SEVERAL HOMES AND BUSINESSES IN TOWN.

MANY HOMES ACROSS VERMILION PARISH RECEIVED ROOF DAMAGE...EITHER LOSING SHINGLES OR PEELING TIN OFF. MANY BARNES WERE DESTROYED. ONE MOBILE HOME PARK COMMUNITY WEST OF ABBEVILLE SUFFERED SEVERE LOSSES...FROM FLOODING AND WIND DAMAGE.

IN KAPLAN...HIGHWAY 14 WAS BLOCKED DUE TO FALLEN TREES. SEVERAL HOMES AND BUSINESSES WERE DAMAGED FROM FALLING TREES OR FLYING DEBRIS.

IN PECAN ISLAND...MANY HOMES RECEIVED MINOR DAMAGES SUCH AS PEELED TIN ROOFS OR PORCHES RIPPED OFF. SEVERAL BARNES WERE DESTROYED.

AT INTRACOASTAL CITY...A HELICOPTER COMPANY LOST BETWEEN 15 AND 20 BUILDINGS USED TO HOUSE CREW MEMBERS.

...CROP LOSSES...

STATEWIDE ACROSS LOUISIANA...EARLY CROP LOSS ESTIMATES INCLUDE BETWEEN \$12 AND \$25 MILLION FOR COTTON...\$100 TO \$200 MILLION FOR SUGARCANE...AND \$3 TO \$6 MILLION FOR SOYBEAN.

...EVACUATIONS...

EVACUATIONS OCCURRED IN JEFFERSON...ORANGE...LOWER JASPER...AND LOWER NEWTON COUNTIES IN SOUTHEAST TEXAS. PRELIMINARY ESTIMATES SHOW AROUND 200,000 PEOPLE EVACUATED THIS AREA. THIS INCLUDED MOST NURSING HOMES AND HOSPITALS IN JEFFERSON COUNTY...AND SEVERAL FEDERAL...STATE...AND LOCAL PRISONS. MOST OF THE PETROCHEMICAL INDUSTRIES WERE SHUT DOWN IN THE PORT ARTHUR AREA...WHICH TOOK UP TO A WEEK TO RESTART IN SOME INSTANCES.

AT LEAST 6,500 PEOPLE SOUGHT SHELTER IN OFFICIAL SHELTERS IN LUFKIN AND NACOGDOCHES TEXAS. FOR EVACUATION TIMING...THE NORMAL 2 HOUR DRIVE FROM BEAUMONT TO LUFKIN TOOK BETWEEN 4 AND 5 HOURS DURING THE EVACUATION.

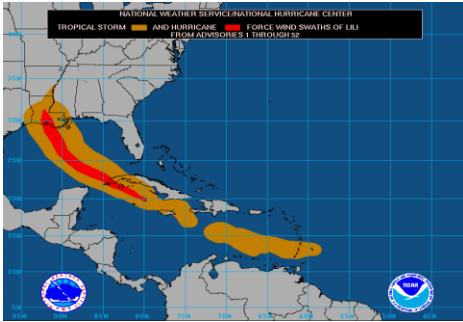
EVACUATIONS OCCURRED IN ACADIA...CALCASIEU...CAMERON... JEFF DAVIS...LAFAYETTE...ST MARTIN...ST MARY...AND VERMILION PARISHES. MOST OF THE PETROCHEMICAL PLANTS IN THE LAKE CHARLES AREA WERE SHUT DOWN...AND TOOK UP TO A WEEK TO RESTART IN SOME INSTANCES.

ACCORDING TO PRELIMINARY REPORTS...AROUND 7,000 PEOPLE SOUGHT SHELTER IN OFFICIAL SHELTERS IN CENTRAL LOUISIANA.

...POWER OUTAGES...

ELECTRICITY WAS OUT AT ONE TIME TO AROUND 237,000 CUSTOMERS ACROSS SOUTH CENTRAL AND CENTRAL LOUISIANA. WHILE MOST PLACES HAD POWER RESTORED WITHIN TWO TO THREE DAYS...SOME RURAL LOCATIONS WERE STILL WITHOUT POWER NEARLY TWO WEEKS LATER.

Hurricane Lili's journey began as a tropical wave moving west across the central Atlantic Ocean. On September 21st 2002 at 4 PM CDT the tropical wave was upgraded to Tropical Depression Thirteen and was located about 955 miles west of the Lesser Antilles moving to the west at 17 mph. The complete track can be found [here](#).



On Sunday, the 22nd of September, Tropical Depression Thirteen increased in forward speed to 23 mph and was located 90 miles east-southeast of the Windward Islands with maximum sustained winds of 35 mph. As the morning progressed, Tropical Depression Thirteen continued to intensify and was upgraded to Tropical Storm Lili with maximum sustained winds of 50 mph. During the overnight hours, a still weak and clumsy Lili stumbled across the Windward Islands leaving the islands unscathed. By sunrise, on the morning of the 24th, Lili had moved into the Caribbean Sea.

Lili continued a westward movement across the Caribbean Sea on a crash course toward Jamaica. However, on the 27th of September, Lili made a last minute jog to the right, sparing the island of Jamaica from the brunt of its fury.

On Sunday, the 29th of September, the [Coastal Waters Forecast](#) from the National Weather Service Forecast Office in Lake Charles (WFO LCH) began to alert mariners to the possibility of hurricane conditions by Thursday. This gave the marine interests four days to prepare. The word had been released that this storm was not going to yield and it would move toward the Southeast Texas and Southwest Louisiana coasts. Its exact location of landfall was still sketchy at this time, but local forecasters could not deny that it was definitely becoming a threat.

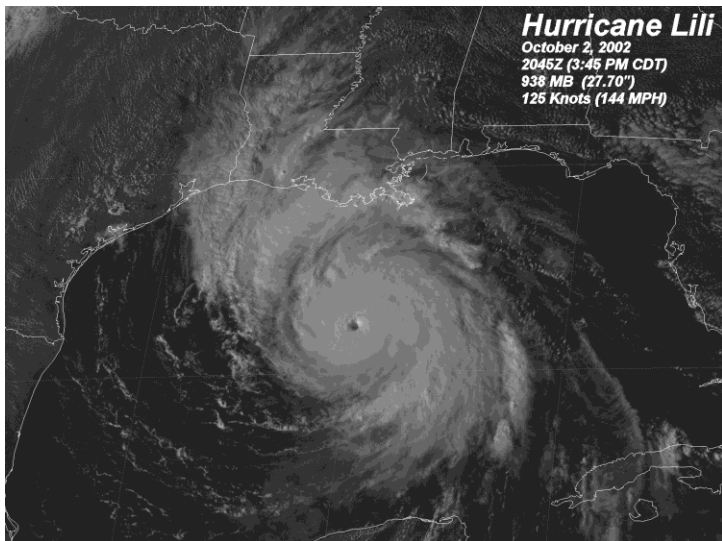
At 10:00 AM CDT on the 30th of September, Lili was upgraded to a hurricane and was moving towards the Cayman Islands, approaching the southwest tip of Cuba.

On the first day of October, interests along the northwest Gulf Coast awoke to find that Lili had emerged off the western tip of Cuba and was now in the Gulf of Mexico. The morning [Area Forecast Discussion](#) and [Hazardous Weather Outlook](#) issued from WFO LCH mentioned the first alert to residents along the southwest coast of Louisiana to the potential for a major hurricane making landfall later in the week. By the late afternoon hours, Lili had intensified to a Category II storm with winds of 100 mph, moving west-northwest across the Gulf of Mexico.

A Hurricane Watch was posted for the northern Gulf Coast late in the afternoon on Tuesday, October 1st. This watch extended from San Luis Pass, Texas to the mouth of the Mississippi River.

WFO LCH continued to issue products concerning this impending storm. The first [Hurricane Local Statement](#) was issued at 5 PM CDT on the 1st, addressing residents along the coast with precaution and preparedness information in the event that the storm was to make landfall in Southeast Texas or Southern Louisiana.

Some of the precautions taken by local emergency officials included a mandatory evacuation of Cameron Parish, effective at 8 AM October 2nd. Calcasieu Parish asked for an evacuation of low lying areas. In addition, all schools were closed across these parishes for the remainder of the week.

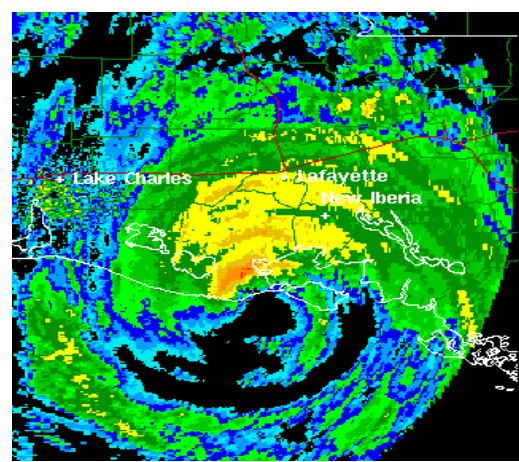
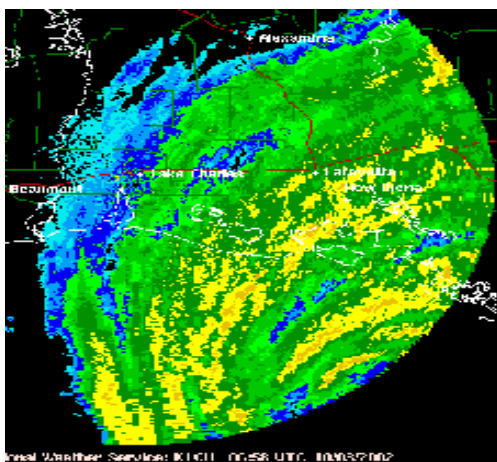


On Wednesday morning, the 2nd of October, Lili was upgraded to a **Category III** hurricane, which made it the second major hurricane of the 2002 hurricane season, after Isidore with winds of 120 mph. Emergency management quickly responded with mandatory evacuation orders along the entire coast from Jefferson County in Southeast Texas to Iberia Parish in South-Central Louisiana. At the same time, a [River Flood Warning](#) was issued for the lower Calcasieu and Vermilion rivers. This was to alert the interests along these rivers to expect flooding as tidal surge pushed waters upstream.

By the early afternoon hours on the 2nd, the minimum central pressure dropped to 941 millibars or 27.79 inches as winds increased to 135 mph. **Flood Watches** were posted across Southern and Central Louisiana. In addition, at 3:45 PM, an [Inland Hurricane Wind Warning](#) was issued for Southern Louisiana and a [Tropical Storm Wind Warning](#) was posted for Southeast Texas.

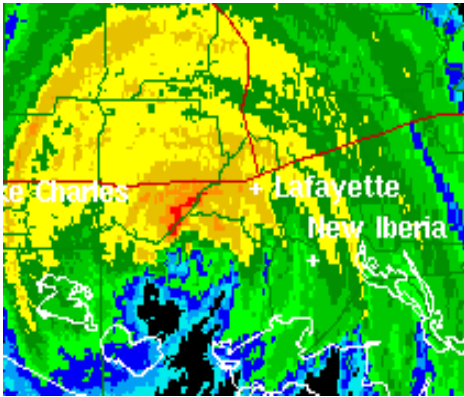
Lili countered preparedness moves with an unexpected and threatening intensification to winds of 145 mph, making it a **Category IV** hurricane. With Lili located only 200 miles south of Intracoastal City, Louisiana, officials had to act fast and brace for the worst. By the early evening hours on the 2nd, the National Hurricane Center adjusted the track of the storm with landfall 50 miles east of the previous forecast track. This put Lili on a direct course into Vermilion Parish, potentially ushering in a deadly storm surge of 18 to 20 feet across Vermilion Bay.

During the pre-dawn hours of the 3rd, tensions ran high as Lili moved northwest as forecast. However, an unexpected twist made all the difference between life and death as Lili began to weaken. Satellite imagery began to reveal that the eyewall was filling. At daybreak on the 3rd, Lili was downgraded to a Category II storm with winds of only **100 mph**. However, the worst was still yet to come for residents across Southern and Central Louisiana.



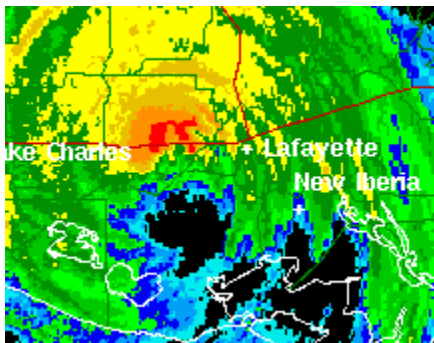
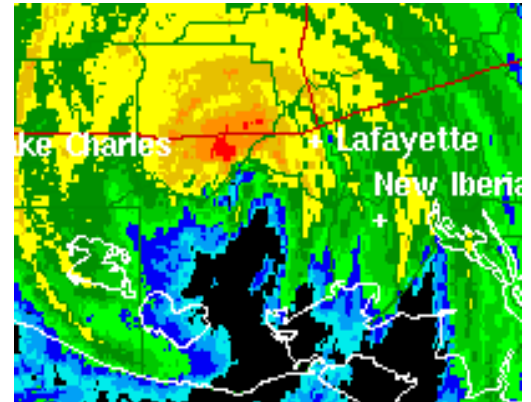
Hourly Short Term Forecasts issued by WFO LCH detailed Lili's approach to the coast of Southern Louisiana. WSR-88D Doppler radar images, such as the one on the left above, are the basis for these forecasts. As can be seen in this image, outer bands were sweeping across Southern Louisiana. By 9 AM, short term forecasts heralded the arrival of Lili in southern Vermilion parish. This can be seen in the image above at right. Notice the eyewall moving near Marsh Island.

For a complete radar loop of Hurricane Lili making landfall, click [here](#).



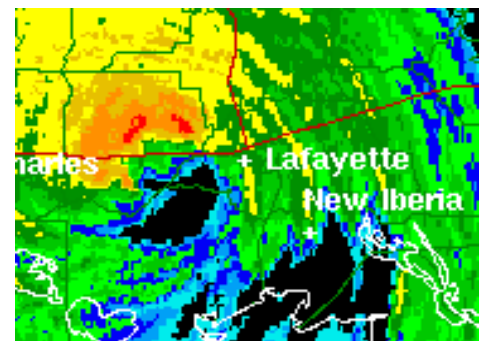
The first [Tornado Warning](#) was issued at 10:57 AM for Lafayette Parish. Reports from Lafayette Emergency Management indicated a touchdown near Pinhook and Verot School Roads. No damage was reported with the first touchdown.

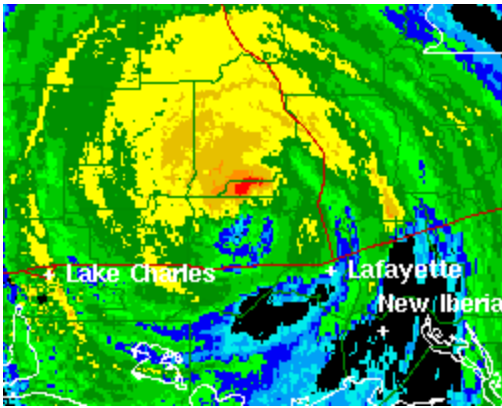
The second [Tornado Warning](#) was issued at 11:16 AM, this time for Acadia Parish. This was based on the signatures in the northern section of the eyewall. The Lake Charles WSR-88S's Storm-Relative Motion products showed indications of a strong circulation in this area at the 0.5° elevation scan (around 3,000 ft elevation) in western Lafayette Parish.



The third [Tornado Warning](#) was issued at 11:31 AM for Lafayette Parish. It is the policy of this office to limit warning times to 30 minutes, thereby enhancing the tornado issuance. After radar analysis indicated a tornadic signature, a new tornado warning was issued for Lafayette Parish.

A new [Tornado Warning](#) for Acadia Parish was issued at 11:43 AM based on radar signatures. The post-storm site survey team found damage from this tornado about 15 miles north of Crowley near Mowata. In the image at right, Acadia Parish is to the west-northwest of Lafayette.

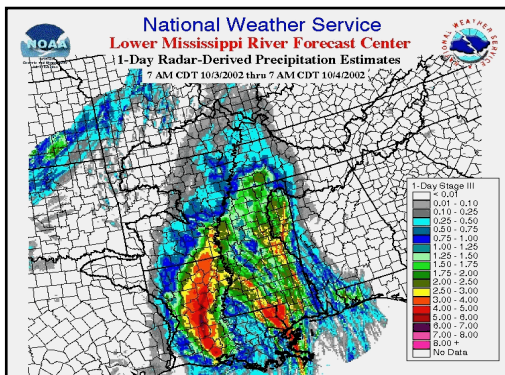




In all, a total of eleven tornado warnings were issued for storms produced by Hurricane Lili across South-Central and Central Louisiana. After [landfall](#), Lili continued on a northward course at 16 mph. In Evangeline Parish, a tornado touched down, causing a roof on a home to collapse. Residents were trapped inside the home but escaped serious injury from the damage. Below at left is an image from the WSR-88D in Lake Charles at the time the tornado struck.

Flash flood warnings were issued for Vermilion, Acadia, Evangeline and Rapides parishes. Doppler radar indicated 5 to 7 inches of rain had fallen in less than 2 hours across these parishes. Although flooding was mainly confined to streets, a few rural areas outside of Rayne, Crowley and eastern portions of Vermilion Parish had 1 to 2 feet of water. Rainfall totals reported by co-operative observers for the two-day period from 7 AM Wednesday to 7 AM Friday include:

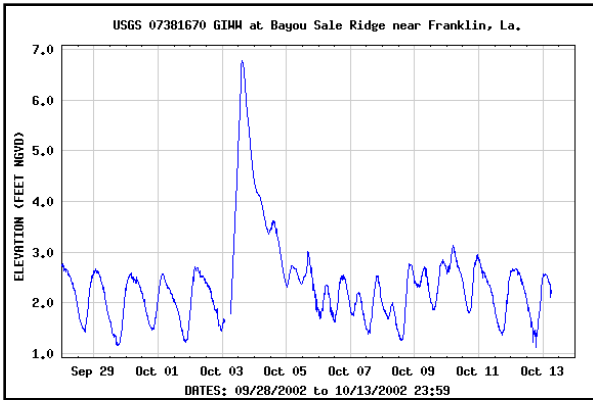
Location	Total
Perry	8.57 in
Alexandria (Power Plant)	5.70 in
Bunkie	4.77 in
Lake Martin	4.67 in
Esther	4.34 in
Jennings	3.91 in
Eunice	3.77 in
DeRidder	2.10 in



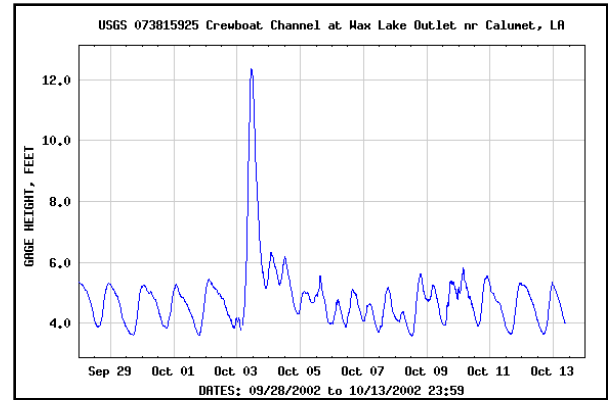
Click to see a larger version

This image shows the total rainfall with Hurricane Lili. Most of the rainfall was locked near the path of the center of the storm.

Four different tide gage sites heralded the arrival of Lili's tidal surge. Bayou Sale Ridge near Franklin, Louisiana recorded a max height of 6.78 feet around 10 AM. This was close to the location where Lili made landfall.



[Click for a larger view of Bayou Sale's tidal plot](#)

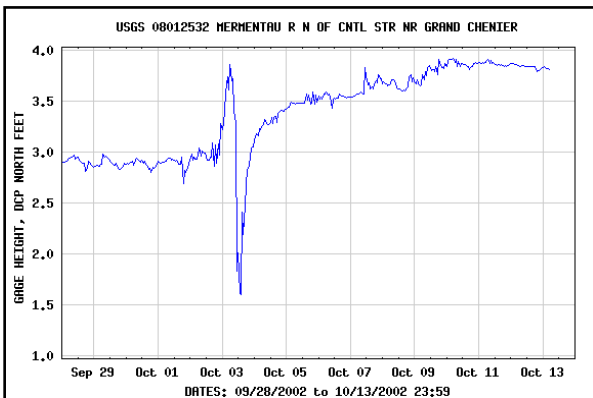


[Click for a larger view of Wax Lake's tidal plot](#)

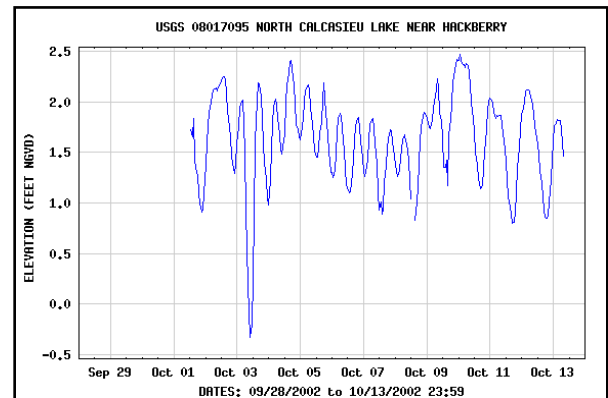
The highest storm surge occurred to the right of center near Wax Lake Outlet or Calumet, Louisiana with a height of 12.45 feet around 8 AM. This site is located in eastern St. Mary Parish near the coast. This was confirmed by a local damage survey team from WFO LCH.

One of the interesting features noted in the tidal graphs occurred on the west side of the storm.

Grand Chenier Lake was west of the eye passage. Note the tidal surge during the morning hours; however, what catches the eye is the sudden falling tide of over two feet. This signature resulted after Lili moved onshore as the strong north winds pushed the storm surge waters back out into the gulf.



[Click for a larger view of Grand Chenier's tidal plot](#)



[Click for a larger view of Hackberry's tidal plot](#)

The Hackberry gage site is located on the north end of Calcasieu Lake, southwest of Lake Charles. This area has normal tidal influences, although located about 20 miles inland. A tidal surge cannot be noted with this site just looking at the graph. A small tidal surge appears to have held tides to near normal. As the storm moved onshore, the effects of the surge no longer supported water across the lake and with a very strong north wind, water was allowed to rush out of the lake.

By the evening hours of October 3rd, all watches and warnings for Lili were lifted.

Prior to Hurricane Lili making landfall, the electronics staff at WFO LCH completed advance field work. They ensured equipment was online and working within established parameters. This equipment included river gages, tidal gages and NOAA Weather Radio. They also installed a barograph and wind gust recorder at the Cameron Parish courthouse, as Lili was anticipated to make landfall near this location. This was one of the few locations in Cameron Parish that remained above Audrey's tidal surge many years ago.

The office electronics staff conducted an extensive check of station equipment and resources needed to maintain operations. This included evaluating the WSR-88D, Automated Surface Observation System (ASOS) sites, the Upper Air Tracking Unit, and on-station computer systems.

Through hard work and early preparations, no direct deaths or serious injuries were associated with Hurricane Lili as she passed through Southern Louisiana on her northward journey. Based on survey damage, the highest storm surge was between 10 and 12 feet at Burns Point/Salt Point, where a home 6 feet above the ground had 4 feet of water inundation. Debris was found on the top of an 8 foot cyclone fence at the the National Weather Service's ASOS at Salt Point. As a result of Lili, portions of Louisiana were declared a federal disaster area. The amount of monetary damage is still unknown at this time, but the cleanup and restoration efforts will continue for many years.

The highest wind gust of 120 mph was reported in Vermilion Parish at Intracoastal City. The highest wind gust recorded at an ASOS site was 91 mph at the Acadiana Regional Airport outside New Iberia. The Louisiana State University Agricultural Center reported a maximum wind gust of 68 mph in New Iberia and 67 mph just south of Alexandria in Rapides Parish.

This was the first time since 1992 that a hurricane struck the southwest coast of Louisiana. It was on that occasion that Andrew made landfall in St. Mary Parish.

Hurricane Lili was a unique storm in many ways. Unlike Isidore a week earlier, Lili's strongest winds remained close to the center of the storm. Lili also unexpectedly weakened as it approached the coastal waters of South-Central Louisiana. These two factors along with preparedness inevitably saved lives.

This storm moved through Louisiana without a single life lost. A year earlier, Tropical Storm Allison claimed around thirty lives, mainly from flooding. Through accurate forecasts by the National Weather Service, in conjunction with emergency planners and the local media, residents were well equipped to make life-saving decisions.

Hydrologic Effects of Hurricane Lili

Hurricane Lili made landfall along the south-central coast of Louisiana near Intracoastal City. The hurricane was moving fairly rapidly north at around 15 mph. Due to the speed of the storm, flooding caused by heavy rains was minimized.

Twenty-four hour radar-derived precipitation estimates from 7 AM Thursday October 3rd to 7 AM Friday October 4th indicated a band of heavy rainfall from Central to South-Central Louisiana, where the center of the storm crossed the state. Rainfall totals within this area ranged from about 4 to 8 inches, with locally higher amounts in some areas. Rainfall totals reported by co-operative observers for the two-day period from 7 AM Wednesday to 7 AM Friday include:

Location	Total
Alexandria (Power Plant)	5.70 in
Bunkie	4.77 in
DeRidder	2.10 in
Esther	4.34 in
Eunice	3.77 in
Jennings	3.91 in
Lake Martin	4.67 in
Perry	8.57 in

Flash flood warnings were issued for Vermilion, Acadia, Evangeline and Rapides parishes. Doppler radar indicated 5 to 7 inches of rainfall had fallen in less than 2 hours across these parishes. Although flooding was mainly confined to streets, a few rural areas outside of Rayne, Crowley and over eastern portions of Vermilion parish had 1 to 2 feet of water.

Several river sites located within the heavy rain area also went into flood. The Calcasieu River at Glenmora, Bayou Nezpique near Basile, and the Vermilion River at Surrey Street in Lafayette did experience flooding. Storm and flood surveys during the days following landfall revealed only minor flooding which was confined to areas near the river. The following are crests for these river sites:

River/Location	Flood Stage	Crest Height	Time/Date
Calcasieu River at Glenmora	12.0 ft	13.40 ft (Estimated)	7 AM 10/4
Bayou Nezpique near Basile	22.0 ft	24.00 ft (Estimated)	7 PM 10/3
Vermilion River at Lafayette (Surrey Street)	10.0 ft	12.03 ft	7 PM 10/3

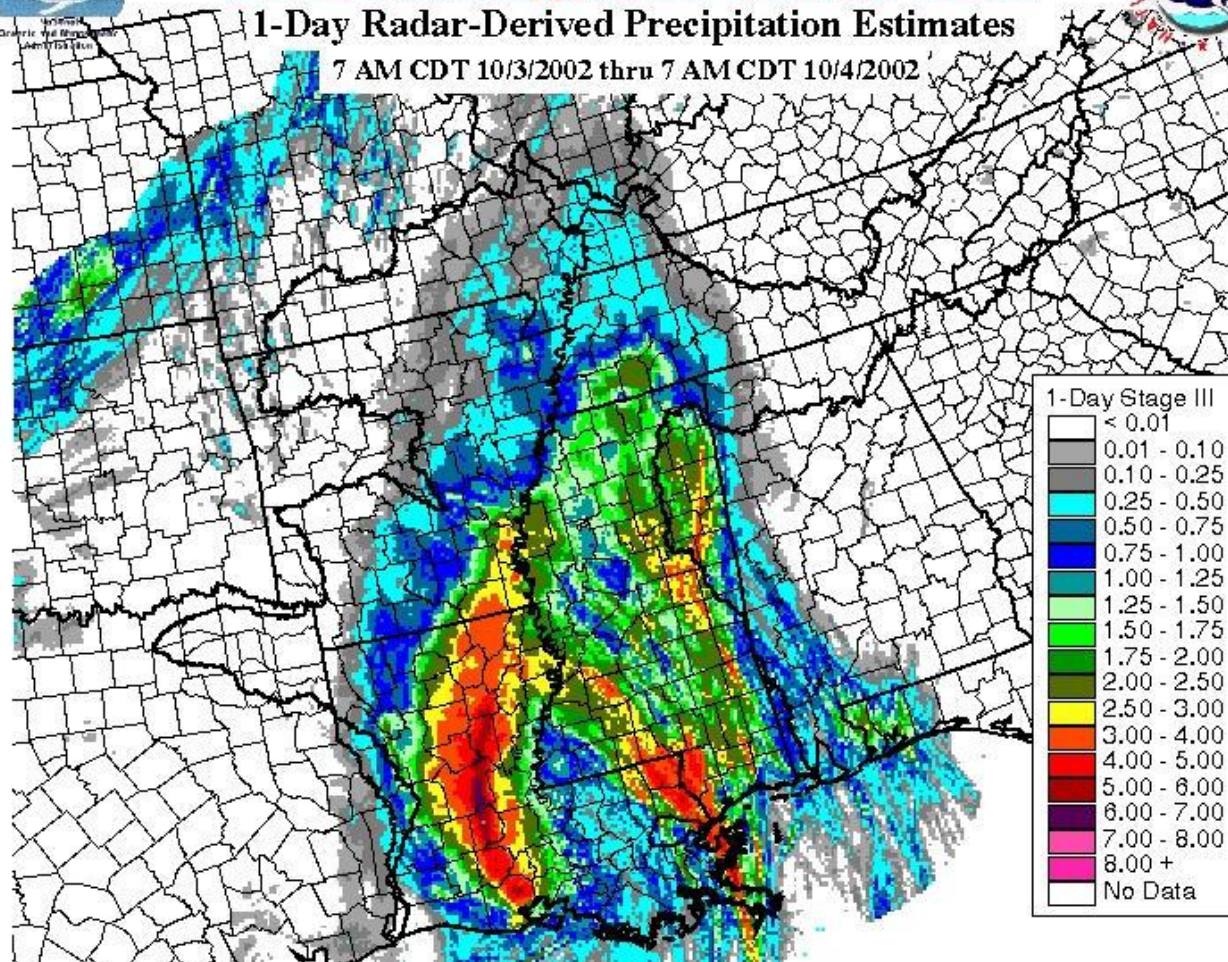


National Weather Service Lower Mississippi River Forecast Center



1-Day Radar-Derived Precipitation Estimates

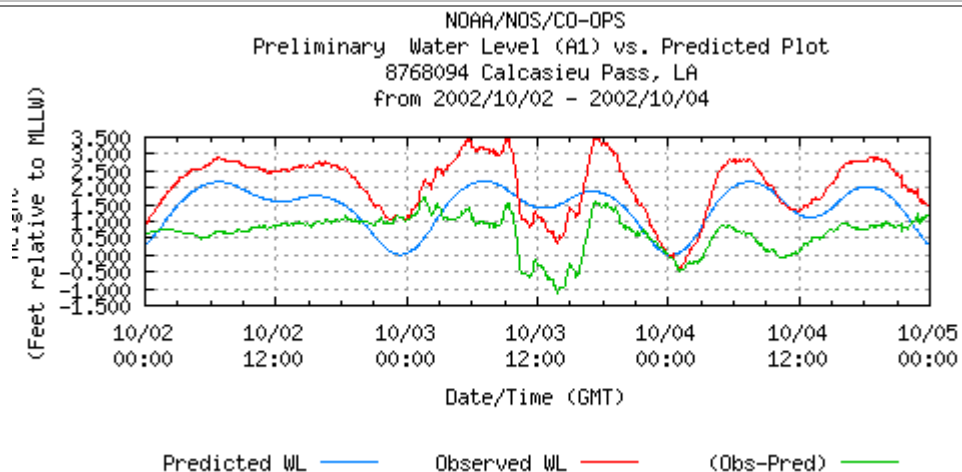
7 AM CDT 10/3/2002 thru 7 AM CDT 10/4/2002



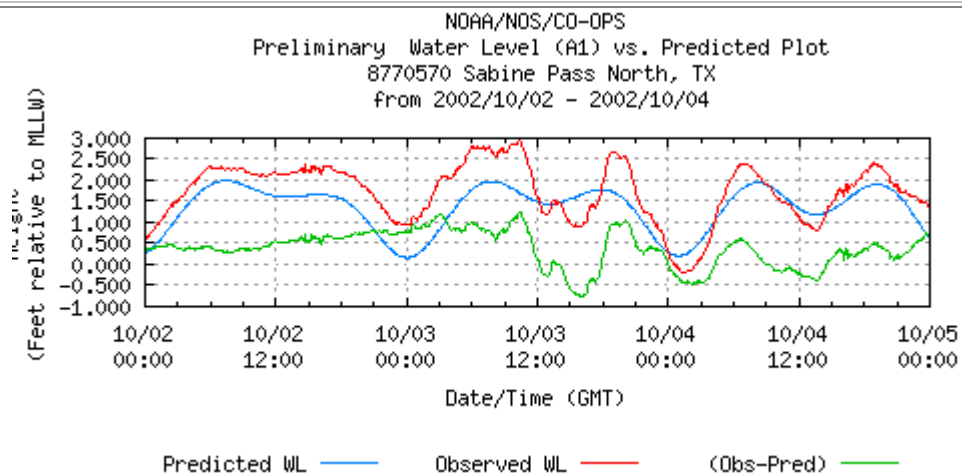
WATCHES AND WARNINGS ISSUED DURING HURRICANE LILI BY WFO LAKE CHARLES			
DATE	TIME	PRODUCT ISSUED	PARISHES AND COUNTIES ISSUED FOR
October 1st	4:00 PM	<u>Hurricane Watch*</u>	Jefferson, Orange, Cameron, Iberia, St. Mary and Vermilion
October 2nd	4:00 AM	<u>Hurricane Warning*</u>	Jefferson, Orange, Cameron, Iberia, St. Mary, and Vermilion
October 2nd	4:00 PM	Inland Hurricane Wind Warning	Acadia, Allen, Avoyelles, Beauregard, Calcasieu, Evangeline, Jeff Davis, Lafayette, Rapides, St. Landry, St. Martin, and Vernon
October 2nd	4:00 PM	Inland Tropical Storm Warning	Hardin, Jasper, Newton, and Tyler
October 2nd	4:00 PM	Flood Watch	Acadia, Allen, Avoyelles, Beauregard, Calcasieu, Cameron, Evangeline, Iberia, Jeff Davis, Lafayette, Rapides, St. Landry, St. Martin, St. Mary, Vermilion, and Vernon
October 3rd	9:49 AM	Flash Flood Warning	Vermilion
October 3rd	10:57 AM	Tornado Warning	Lafayette
October 3rd	11:16 AM	Tornado Warning	Acadia
October 3rd	11:31 AM	Tornado Warning	Lafayette
October 3rd	11:43 AM	Tornado Warning	Acadia
October 3rd	11:50 AM	Flash Flood Warning	Acadia
October 3rd	12:12 PM	Tornado Warning	Acadia
October 3rd	12:22 PM	Tornado Warning	Evangeline
October 3rd	12:43 PM	Tornado Warning	Acadia
October 3rd	12:55 PM	Tornado Warning	Evangeline and St. Landry
October 3rd	12:58 PM	Tornado Warning	Evangeline
October 3rd	1:56 PM	Tornado Warning	Evangeline
October 3rd	2:31 PM	Tornado Warning	Rapides
October 3rd	3:10 PM	Flash Flood Warning	Rapides
October 3rd	3:25 PM	Tornado Warning	Rapides
October 3rd	4:10 PM	Tornado Warning	Rapides

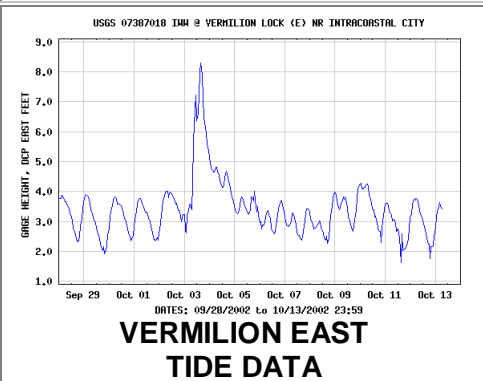
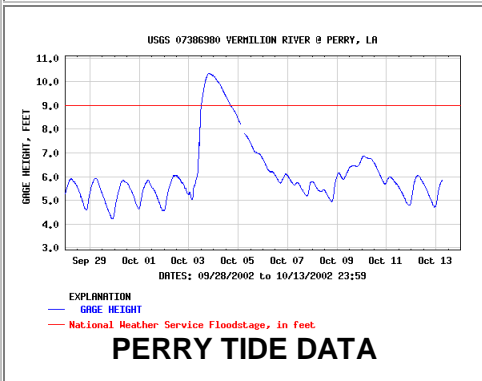
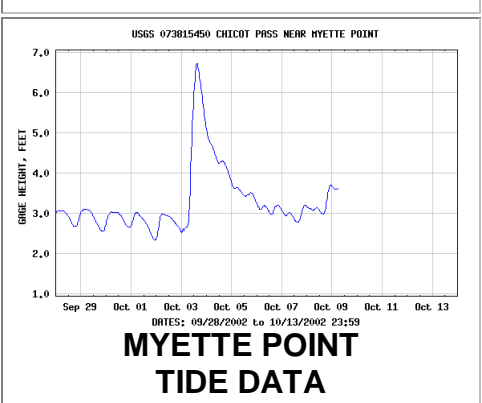
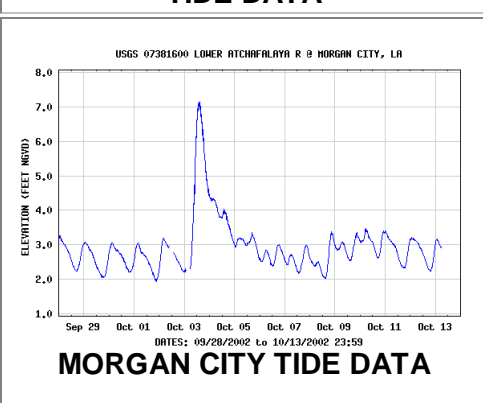
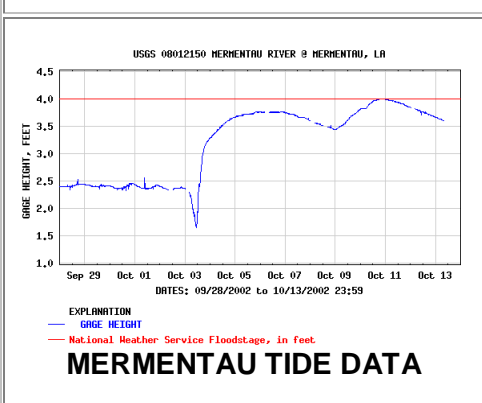
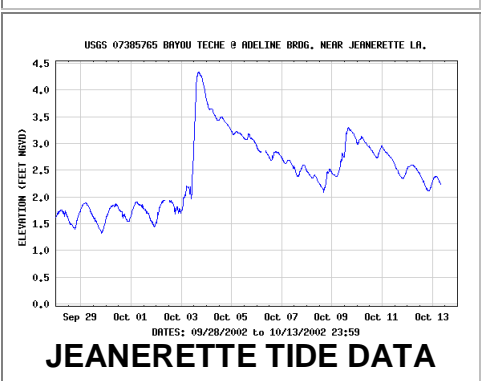
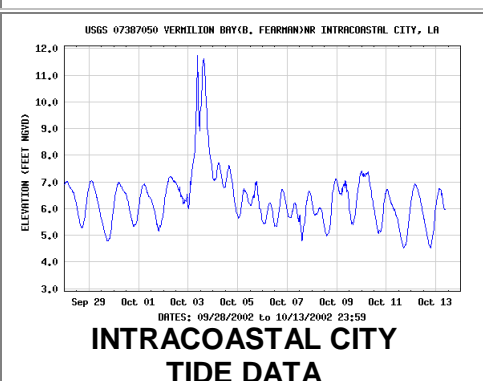
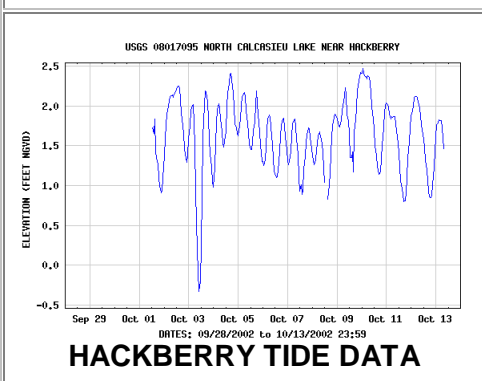
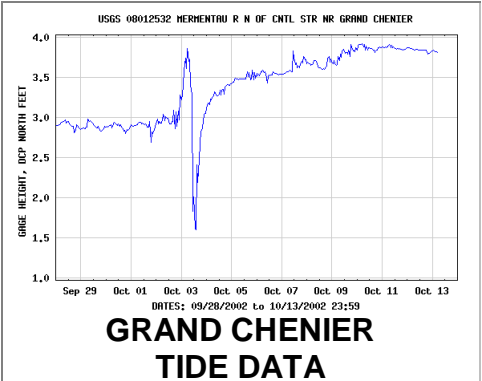
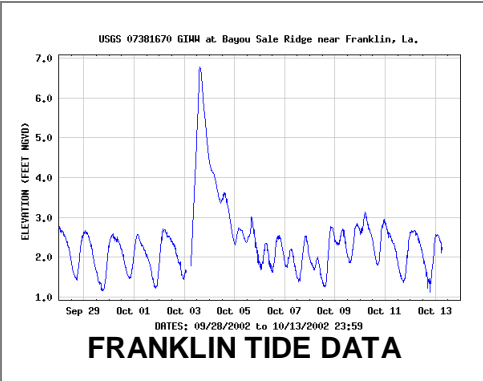
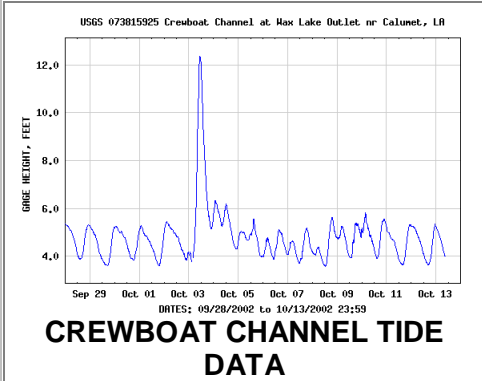
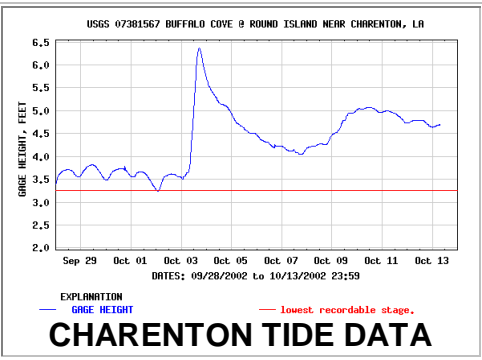
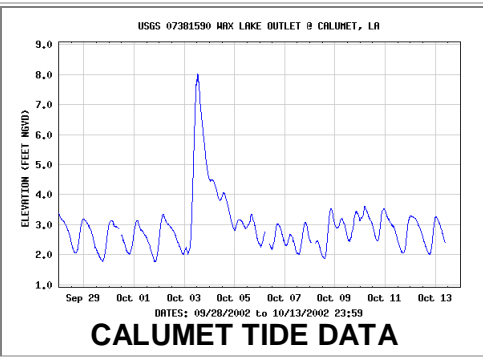
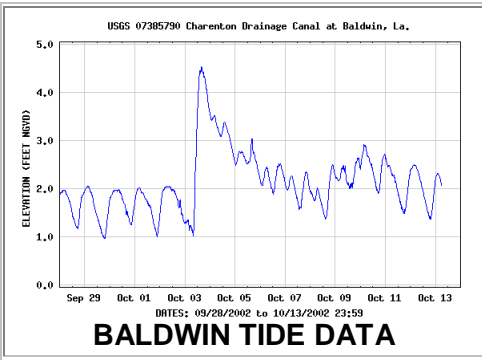
* issued by the Tropical Prediction Center/National Hurricane Center in Miami, Florida

CALCASIEU PASS TIDE DATA



SABINE PASS TIDE DATA





HURRICANE LILI PHOTOS

(click on image for larger version)



(1) ABBEVILLE



(2) BURNS POINT



(3) CHENEYVILLE

(4) CROWLEY



(5) CYPREPOINT



(6) DELCAMBRE



(7) ERATH



(8) EUNICE



(9) HENRY



(10) INTRACOASTAL CITY



(11) JENNINGS



(12) KAPLAN



(13) LAFAYETTE



(14) LAKE ARTHUR



(15) LONEPINE



(16) MAMOU



MIDLAND



(17) NEW IBERIA



(18) PECAN ISLAND



(19) PERRY

(20) RAYNE



(21) ST. MARTINVILLE



(22) VILLE PLATTE

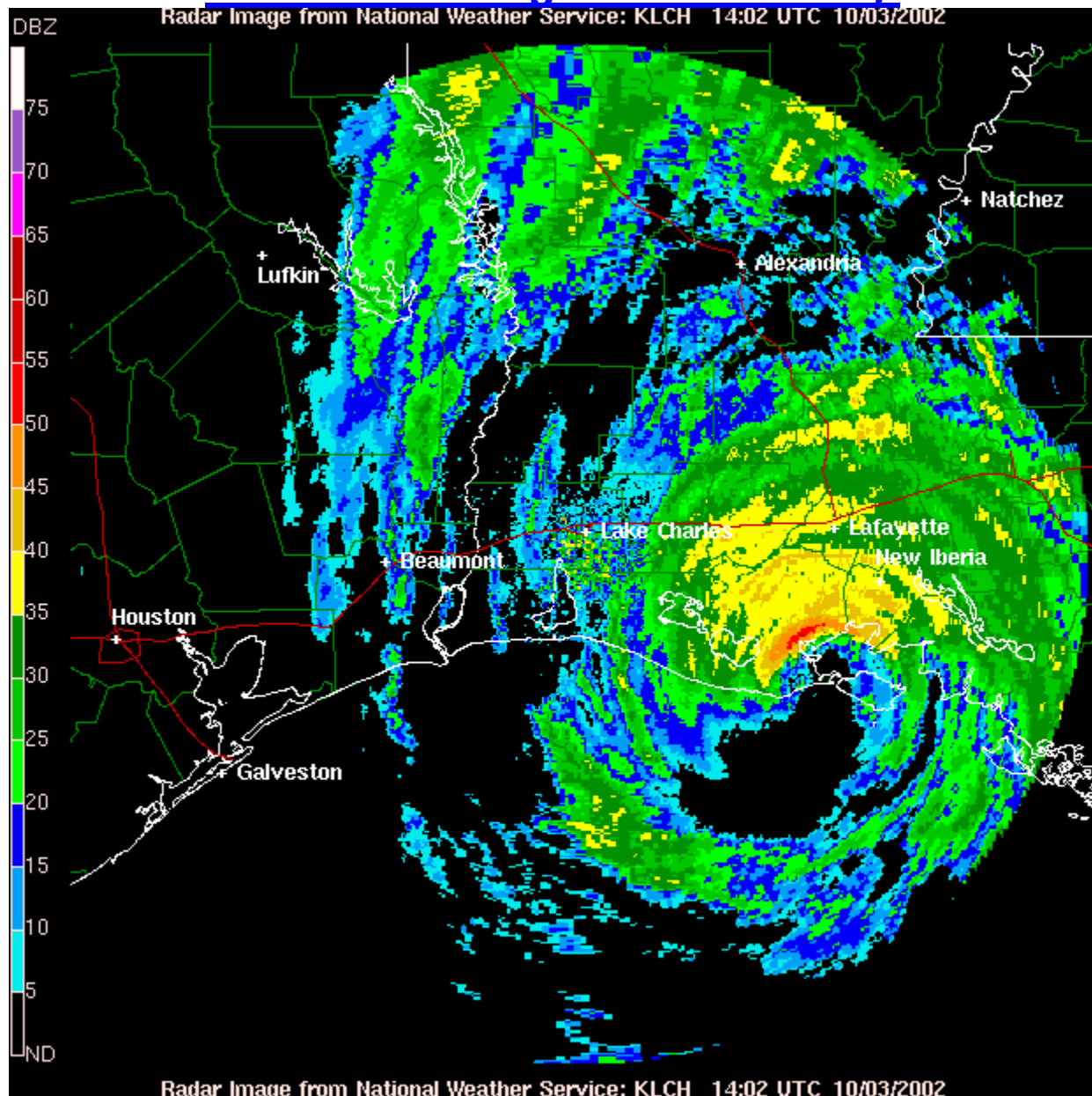


(23) YOUNGSVILLE



HURRICANE LILI RADAR & SATELLITE IMAGERY

[Click on the image for a radar loop](#)



[**Click on the image for a satellite loop**](#)

