

UNITED STATES DEPARTMENT OF COMMERCE
WEATHER BUREAU

Miami, Florida

October 29, 1948

NOV 3 1948

Weather Bureau
Miami, Fla.

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(6607)

Report on Hurricane of Oct 1948

Chief U. S. Weather Bureau
Washington 25, D. C.

Subject: Report on Hurricane of October, 1948.

Sir:

The hurricane of October 4-8, 1948, caused 11 deaths and 300 injuries in Cuba, with 42 injuries in Florida. Damage has been estimated at about \$6,000,000 in Cuba and about \$5,500,000 in Florida, which includes flood damage resulting from the storm.

This hurricane formed in the northwestern Caribbean Sea and was first announced as an organized storm at 10:45 a.m. on October 4th, near latitude 19.6 N longitude 85 W. It increased rapidly to a small hurricane and moved northeastward across Cuba during the night and the center was very near Havana at 6:00 a.m. of the 5th. The highest wind at Havana was 132 mph, and considerable damage resulted in the city, while crop damage was heavy in Habana and Pinar Del Rio provinces. By noon of the 5th, the center crossed the Keys at Bahia Honda Bridge and Marathon, where a lull of about 45 minutes was experienced. Winds were well over 100 mph in this area of the Keys. By 7:25 p.m., the calm center was over Miami. The Miami Airport Station was apparently in the exact center, with pressure 28.92 inches and wind 3 mph. The lull lasted from 7:00 p.m. to 7:35 p.m. at the Airport, while at the City Office, seven miles to the east, the lull lasted from 7:00 p.m. to 7:45 p.m., but the velocity did not drop below 19 mph, and lowest pressure was 28.96 inches.

The strongest wind was at the City Office in the last half of the storm when it reached 86 mph from the northwest, with several gusts of 15 seconds above 90 mph. At the Airport the highest velocity was 68 mph from east-southeast in the first half of the storm. This was doubtless due to tall trees forming something of a wind-break to the northwest of the instrument at that place. There is attached a table showing strongest wind, lowest pressure, and other meteorological data for a number of places visited by the hurricane in Florida, and also a track chart with these data entered at the various places.

The hurricane moved fairly rapidly at the rate of around 18 to 20 mph until it passed into the Atlantic in the Fort Lauderdale-Pompano area about 9:30 p.m., after which forward movement accelerated over the

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Atlantic. Since it required about 35 to 45 minutes for the center to pass Miami, it was probably about 15 miles in diameter. The sky remained overcast with low stratus clouds during passage of the center.

Three tornadoes were reported on the advance edge of this hurricane; one at Opa Locka destroyed several houses, another at Fort Lauderdale, and a third at Pompano destroyed about 25 houses, many of which were occupied at the time. It seemed almost miraculous that no one was killed or critically injured. A characteristic tornado dip and recovery in pressure was noted on all barograph traces from the Keys to Hillsboro Lighthouse. This leads us to believe that this might have been the same tornado which dipped to earth at these several places as it progressed north-eastward in advance of the hurricane vortex.

After leaving Florida, the hurricane gave West End, Grand Bahama, Id., near hurricane winds, and continued rapid northeast movement with a gradual turn to more easterly. The center passed almost directly over Bermuda in the late afternoon of the 7th, and gave winds in excess of 100 mph at that place. Thereafter it moved eastward into mid-Atlantic.

DAMAGE AND CASUALTY SUMMARY FOR FLORIDA:

Deaths	None
Injured	42
Homes destroyed.	36
Homes damaged severely	638
Houses other than homes destroyed.	45
Houses other than homes damaged.	50
Persons sheltered in 143 Red Cross shelters.	21,663

DAMAGE ESTIMATES:

Property damage (includes flooding)	\$3,500,000
Crop damage	1,500,000
Power and communications.	400,000
Highways, streets, etc.	<u>100,000</u>
Total.	\$5,500,000

The Miami Office issued 26 advisory and warning bulletins in connection with this hurricane, and copies have been prepared for attachment to this report. It will be seen that the warning service was up to our usual standard of excellence. Complete and thorough preparations were made in advance of the hurricane in Florida and this doubtless resulted in saving of both life and property. This is the first hurricane in

Florida history, to my knowledge, in which there was no loss of life. While it was a small hurricane, it passed through the most populous area of the State, and loss of life was doubtless prevented by the warnings and widespread protective measures.

Respectfully,

Grady Norton
Meteorologist in Charge

GN:cop

Attachments:
Track charts
Tables
Advices

METEOROLOGICAL DATA, HURRICANE OCTOBER 5, 1948

STATION	Date	PRESSURE		WIND DATA				HOURS OF GALES	RAIN FALL	MISCELLANEOUS	
		LOW	TIME	5-MIN MAX	TIME	1-MIN MAX	TIME				GUSTS
Key West WBO	5	29.25	12 noon	45-N	12:12P	56-NE	11:35a		4.55	Severe ltng and thdr 11:19a-11:24a	
Boca Chica WBAS	5	29.16	12:25p			85+ -N#		120-N	3.73		
Sombrero Key	5	28.80	1:15p	100-S#	1:00p	100-S#	1:00p				
Alligator Light	5	29.38	3:00p			96-SE#	1:00p	110#		No lull	
Tavernier	5	29.38	5:00p			60-70 SSW	5:00p		6.40	No lull	
Homestead Experiment Sta.	5	28.95	6:00p	90-NW#	7:30p				8.81	Lull 5:45p to 6:05p wind shifted southsoutheast to westnorthwest	
Fowey Rock Lgt.	5	29.16	8:00p								
Miami WBO	5	28.96	7:15p	79-NW	9:05p	36-NW	9:05p	15Secs. 90NW	6	6.02	Lull 7:00-7:45pm - wind down to 19 mph - no flat calm.
Miami WBAS	5	28.92	7:06p			68-ESE	6:25p	90NW	4	9.95	Lull 7:00-7:35pm - wind down to 5 mph.
Hillsboro Light	5	29.26						90-100 #			Wind register defective
West Palm Beach WBAS	5	29.45	10:30p			55-N	11:05p	62	2 1/2	7.48	No lull
Vero Beach WBAS	5	29.64	1:30a	39-NE	10:30p	39-NE	10:30p			0.60	
Jupiter Light	5	29.60	1:45p								
Ft. Myers	5	29.64	5:26p			19-N	7:07p				
Everglades City	5	29.56	4:00p	20-N	4:30p			35-N		2.50	
Belle Glade Experiment Sta.	5	29.69	11:15p	24-E	9:50p	30-E	9:50p			1.16	
Okeechobee	5	29.62	9:00p	30-NNW	10-11p						

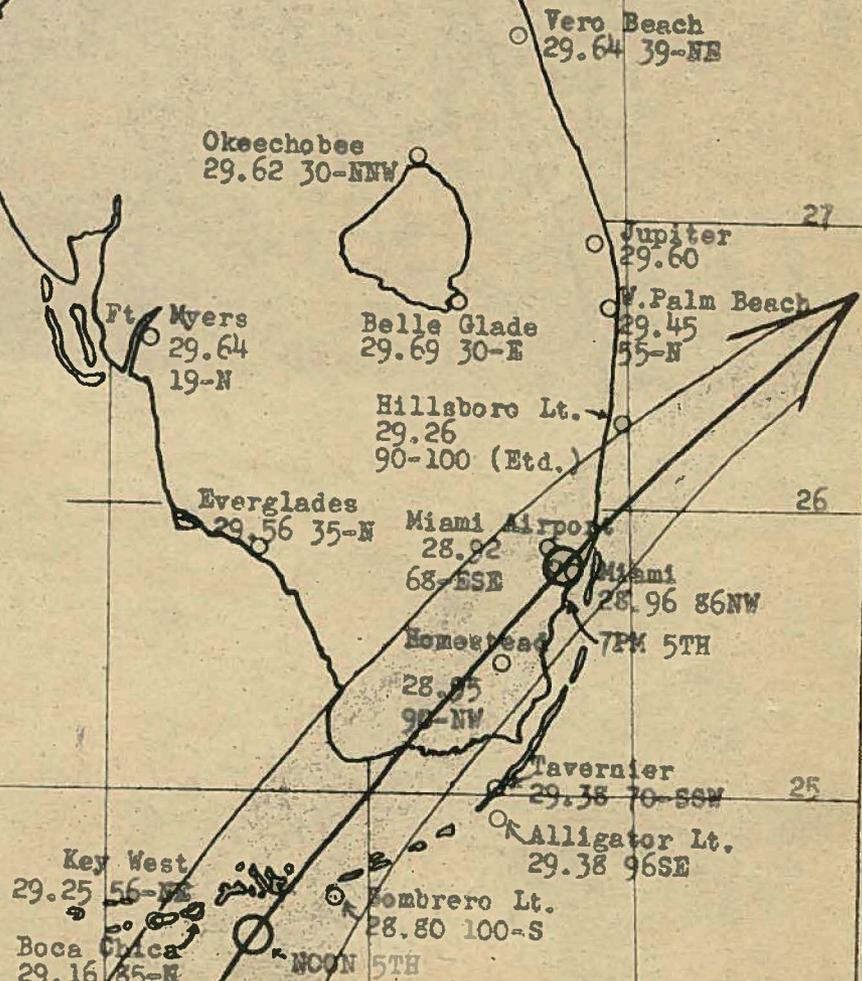
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PATH OF HURRICANE
ACROSS FLORIDA

October 5, 1948

(With Extremes of Pressure and Wind)

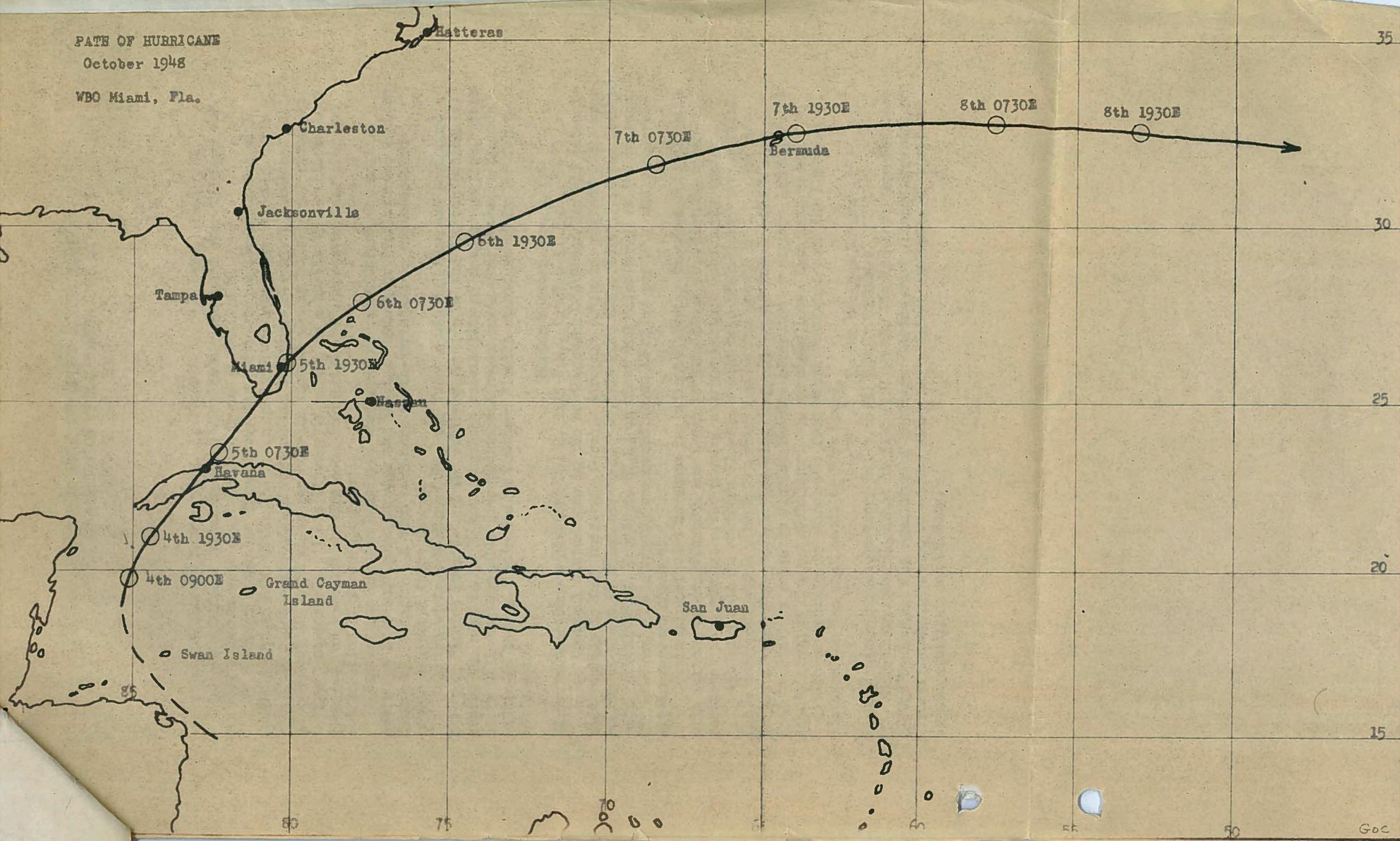
WBO Miami, Fla.



PATH OF HURRICANE

October 1948

WBO Miami, Fla.



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