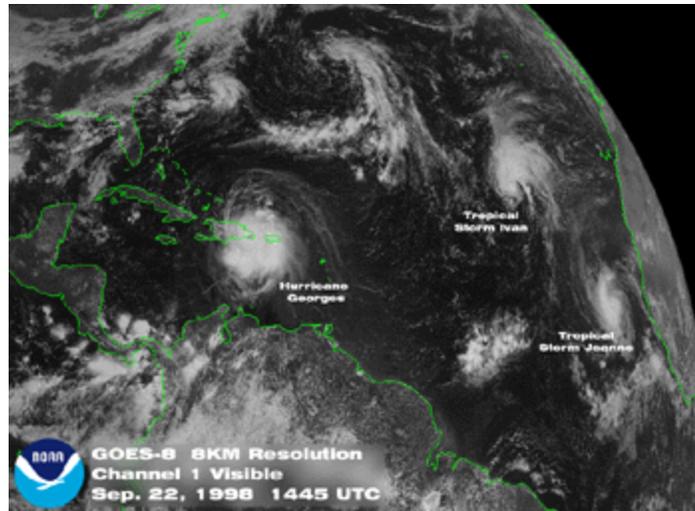


Georges Pummels Caribbean, Florida Keys, and U.S. Gulf Coast



Storm Review (Apr 12, 1999 Update)

From September 21-30, 1998, Hurricane Georges left a trail of destruction in the Caribbean region and across the southern U.S. Gulf coast. Estimates indicate more than 600 people were killed (or still missing) as the storm pushed its way across the islands of the Caribbean. The Caribbean islands where preliminary death totals are reported so far include Antigua, Barbuda, St. Kitts, U.S. Virgin Islands, Puerto Rico, Dominican Republic, Haiti, Cuba, and the Bahamas. In the U.S. mainland, there were four Georges-related fatalities. An elderly woman died from heat stress while being evacuated from New Orleans. Two more people died in Florida and Louisiana in fires started by candles during power outages, and another person died as a result of an auto accident on a slick highway near Crestview, Florida. Puerto Rico reported 12 fatalities.

Damage estimates for the U.S. including Puerto Rico are now \$5.9 billion. Extreme flooding was reported with rainfall amounts in excess of 20 to possibly 30 inches along portions of the southern U.S. Gulf coast. Mobile, Alabama received 13.0 inches of rain from the storm, which boosted the monthly total to 23.0 inches, breaking the September record of 16 inches set 100 years ago. The highest individual storm total reported thus far is Munson, Florida, which reported 25.0 inches of rain from Georges.

Following are reports from individual states and countries as provided by the Southeast Regional Climate Center and other sources:

Alabama: Gusts to 85 mph reported. 25-foot waves on immediate coast. 177,000 customers without power. No deaths or major injuries. Severe flooding in southern Alabama, with many homes and businesses flooded. Downtown Mobile flooded in many areas.

Florida: 18-30 inches of rain in portions of Panhandle, with NEXRAD estimates exceeding 35 inches for one small area near the AL state line. Mandatory evacuations total about 225,000. Severe flooding, high winds, and isolated tornadoes caused extensive damage. Nearly 700,000 without power at some point during storm. Approximately 200 residents in the Florida panhandle were rescued by the Coast Guard Sunday night. A portion of Interstate 10 near the Alabama border was destroyed or washed over. One death reported statewide.

On the Florida Keys, 90 mph winds were reported for >10 hours during storm passage; heavy structural damage from the storm, according to the Florida Division of Emergency Management. More than 900 homes suffered minor damage, 500 major damage, and more than 150 homes were completely destroyed, including 75 houseboats on so-called "Houseboat Row." All Key West residents were without power, and residents are under a "boil water" order. Utility restoration expected to take 7-10 days. Big Pine Key and Kudjoe Key were hardest hit, including severe storm surge damage. Since the highest elevation in the Keys is 14 feet, high water quickly swept into homes and businesses.

Puerto Rico: A major disaster. Damages estimated to exceed \$2 billion. Three direct deaths; nine others from medical complications (heart attacks, etc.). Power and water out to 80% of the 3.8 million people on island. The Federal Emergency Management Agency (FEMA) estimates 33,113

homes destroyed in Puerto Rico, with nearly 50,000 more suffering major or minor damage. The storm destroyed 75 percent of the coffee crop, 95 percent of Puerto Rico's plantains, and 65 percent of its chickens.

US Virgin Islands: No deaths and little major damage was reported. Only about 20 homes were destroyed and another 50 damaged. Adherence to building codes likely prevented further damage. Most structures on the three islands had been rebuilt to FEMA standards after hits by Hugo (1989) and Marilyn (1995). Damage reported is almost solely restricted to agriculture (coconuts & mangoes) and livestock losses.

Antigua: Two dead; major structural damage island-wide; major coastal flooding; major marina, boat, and port damages.

St. Kitts & Nevis: Three dead, 3000 homeless; 85% of all homes damaged. Early damage estimate is \$402 million. Infrastructure damaged (most hospitals, police stations, schools damaged); severe damage to airport terminal and control tower.

Cuba: Five dead; 2100 homes destroyed; 40,000 homes damaged. 20,000 homes flooded in Holguin Province. Major crop damage; 200,000 evacuated during and after the storm.

Haiti: 94 deaths at last tally. 60 missing. Flooding in Port-au-Prince, in Artibonite Valley, Cap-Haitien.

Dominican Republic: At least 210 dead, more than 500 missing. About 100,000 homeless. 70% of all bridges damaged or out; 90% of all plantation crops destroyed; damages estimated at more than \$1 billion.

Satellite/Radar Images of Hurricane Georges

[**September 26-28 - Mobile \(KMOB\) NEXRAD - Derived 48-hour Storm Totals**](#)

[**September 28 - Radar Image - at 1:07 pm \(CDT\)**](#)

[**September 28 - Radar Image - at 4:57 am \(CDT\)**](#)

[**September 28 - MPEG movie - 4.7mb**](#)

[**September 28 - MPEG movie - 2.6mb**](#)

[**September 28 - Colorized IR - Center Moving Inland Over Mississippi**](#)

[**September 27 - Visible - Approaching Mississippi Coast**](#)

[**September 25 - Colorized IR - Over the Florida Keys**](#)

[**September 25 - Visible - Over the Florida Keys**](#)

[**September 22 - Visible - With Tropical Storms Ivan and Jeanne**](#)

[**September 22 - Visible - Striking Dominican Republic**](#)

[**September 22 - Colorized IR - With Well Defined Eye**](#)

[**September 21 - Visible - Near Virgin Islands**](#)

[**September 18 - Visible**](#)

[**NESDIS Operational Significant Event Imagery**](#)

Precipitation Table

Preliminary Precipitation Reports (Based on daily rainfall data from the Climate Prediction Center)

Rainfall in affected states for 6-day period ending at 12Z on Sep 30, 1998 - amounts listed for totals exceeding 10.00:

DAYS = Number of days of data for Sep 25-30, 1998 period --

Note that some stations did not report for all 6 days

ID = National Weather Service Station ID

STATION = Station name

COUNTY = County for the station

ST = State

ELEV = Elevation in feet

LAT/LON = Latitude and Longitude in degrees and hundredths

RAINFALL = Total reported rainfall (inches) for Sep 25-30 period, ending at 12Z on the 30th

DAYS	ID	STATION	COUNTY	ST	ELEV	LAT	LON	RAINFALL
6	CEW	CRESTVIEW	OKALOOSA	FL	190	30.78N	86.52W	20.11
5	ALUA1	ANDALUSIA	COVINGTON	AL	250	31.30N	86.53W	19.57
4	NCVF1	NICEVILLE	OKALOOSA	FL	60	30.52N	86.50W	19.53
6	GVLA1	GREENVILLE	BUTLER	AL	470	31.85N	86.65W	19.30
5	VPS	VALKARAISSO	OKALOOSA	FL		30.50N	86.50W	19.19
3	GRGA1	GEORGIANNA	BUTLER	AL	300	31.67N	86.73W	19.15
4	HRT	MARY ESTHER	OKALOOSA	FL		30.42N	86.68W	18.01
4	BWTA1	BREWTON	ESCAMBIA	AL	85	31.07N	87.05W	17.60
6	DEFF1	DE FUNIAK SPRINGS	WALTON	FL	230	30.73N	86.07W	17.55
3	OCSM6	OCEAN SPRINGS	JACKSON	MS		30.23N	88.67W	15.67
3	WHTA1	WHATLEY	CLARKE	AL	170	31.65N	87.72W	15.15
2	KGNA1	KINSTON	COFFEE	AL	270	31.23N	86.18W	14.27
5	GVAA1	GENEVA	GENEVA	AL	145	31.05N	85.88W	14.25

6	MOB	MOBILE	MOBILE	AL	204	30.68N	88.24W	13.71
6	NPA	PENSACOLA	ESCAMBIA	FL	30	30.33N	87.30W	13.51
5	DIBM6	D'IBERVILLE	HARRISON	MS		30.48N	88.90W	12.23
6	BIX	BILOXI	HARRISON	MS	26	30.40N	88.92W	12.11
5	EVRA1	EVERGREEN	CONECUH	AL	290	31.45N	86.93W	12.02
6	CODA1	CODEN	MOBILE	AL	12	30.38N	88.23W	11.82
6	CLDA1	COFFEEVILLE	CHOCTAW	AL	46	31.77N	88.13W	11.78
6	BEAA1	BEATRICE	MONROE	AL	178	31.73N	87.20W	11.77
2	GNVA1	GENEVA	GENEVA	AL	106	31.03N	85.83W	11.57
6	CLBA1	CLAIBORNE	MONROE	AL	50	31.62N	87.55W	11.48
6	LEKM6	LEAKESVILLE	GREENE	MS	51	31.15N	88.56W	10.65
1	PINA1	PINE APPLE	WILCOX	AL	250	31.87N	86.98W	10.40
6	TOMA1	THOMASVILLE	CLARKE	AL	405	31.92N	87.73W	10.20

[All rainfall reports for LA, MS, AL, GA, SC, and FL](#)

Rainfall in Puerto Rico for 2-day period ending at 12Z on Sep 23, 1998 - amounts listed for totals exceeding 10.00:

DAYS = Number of days of data for Sep 22-23, 1998 period --
 Note that some stations reported only for 1 of the 2 days
 ID = National Weather Service Station ID
 STATION = Station name
 ST = State or Territory
 ELEV = Elevation in feet
 LAT/LON = Latitude and Longitude in degrees and hundredths
 RAINFALL = Total reported rainfall (inches) for Sep 22-23 period, ending at 12Z on the 23rd

DAYS	ID	STATION	ST	ELEV	LAT	LON	RAINFALL
2	COMP4	COMERIO	PR	604	18.22N	66.22W	25.68
1	JAYP4	JAYUYA	PR	1560	18.22N	66.57W	18.13
2	CIEP4	CIDRA	PR	1279	18.35N	66.13W	17.19
2	RORP4	OROCOVIS	PR	500	18.22N	66.40W	16.76
1	CAIP4	CAGUAA	PR	1475	18.13N	66.05W	15.74
2	BAUP4	OROCOVIS	PR	773	18.23N	66.45W	14.38
1	SLJP4	SAN LORENZO	PR	330	18.17N	65.98W	14.27
2	PCYP4	PONCE	PR	253	18.07N	66.58W	14.25
1	NGIP4	NAGUABO	PR	2020	18.28N	65.78W	13.78
2	SLKP4	SAN LORENZO	PR	490	18.15N	65.95W	13.54
2	GUSP4	JUNCOS	PR	1115	18.25N	65.83W	13.18

2	AIBP4	AIBONITO	PR	850	18.15N	66.22W	12.32
2	GURP4	GURABO	PR	137	18.25N	65.97W	12.01
2	VEDP4	RIO GRANDE	PR	40	18.36N	65.81W	11.83
2	CAJP4	CAGUAS	PR	426	18.25N	66.10W	11.04
2	BZAP4	CAGUAS	PR	623	18.28N	66.08W	11.03
2	TRUP4	TRUJILLO ALTO	PR	49	18.35N	66.00W	10.92
2	TOVP4	VILLALBA	PR	525	18.13N	66.47W	10.92
2	ZLBP4	COAMO	PR		18.12N	66.24W	10.90
2	NGHP4	NAGUABO	PR	640	18.28N	65.79W	10.53
2	LARP4	LARES	PR	951	18.30N	66.87W	10.27

[All rainfall reports for Puerto Rico](#)

Noteworthy Hispaniola and Puerto Rico Hurricanes

List of modern day (post 1950) hurricanes that have struck Hispaniola and/or Puerto Rico. Click on name to see track. For more information on these hurricanes visit the [Satellite's Eye Gallery](#) discussion area.

- 1996 - [Hortense](#)
 - 1989 - [Hugo](#)
 - 1987 - [Emily](#)
 - 1980 - [Allen](#)
 - 1979 - [David](#)
 - 1967 - [Beulah](#)
 - 1966 - [Inez](#)
 - 1964 - [Cleo](#)
 - 1963 - [Flora](#)
 - 1963 - [Edith](#)
 - 1958 - [Ella](#)
 - 1956 - [Betsy](#)
 - 1955 - [Katie](#)
 - 1954 - [Hazel](#)
-

Additional information and Links

- [National Hurricane Center](#)
- [Climatic Extremes and Weather Events](#)
- [Hurricanes--Climatology and Reports](#)

Citing the Article

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