

1998 Tropical Atlantic Activity Report

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Hello all, as is my tradition, I have prepared a summary of the storm activity for the Atlantic Hurricane season. I've included the basic Saffir-Simpson Scale for those of you who don't live, eat, and breathe hurricanes. The report is organized in 3 main categories: 1) lifetimes & intensities, 2) climatology & statistics, and 3) landfall. The results and statistics here are from my own collection of data, so if you find an error or have an addition, let me know. On with the report...

Saffir-Simpson Scale of Tropical Cyclone Intensity

CATEGORY	WINDS (mph)	PRESSURE (millibars)
depression	23-39	N/A
tropical storm	40-73	N/A
1	74-95	> 980
2	96-110	965-979
3	111-130	945-964
4	131-155	920-944
5	>156	< 919

1. LIFETIMES AND INTENSITIES

NAME	DATES OF ACTIVITY	MAX WIND (mph)	MIN PRES (mb)
ALEX	27 JUL - 02 AUG	50 (TS)	1000
BONNIE	19 AUG - 30 AUG	115 (CAT3)	954
CHARLEY	21 AUG - 22 AUG	60 (TS)	1003
DANIELLE	24 AUG - 03 SEP	105 (CAT2)	955
EARL	31 AUG - 03 SEP	100 (CAT2)	986
FRANCES	08 SEP - 13 SEP	65 (TS)	990
GEORGES	15 SEP - 29 SEP	150 (CAT4)	938
HERMINE	17 SEP - 20 SEP	45 (TS)	999
IVAN	20 SEP - 27 SEP	90 (CAT1)	975
JEANNE	21 SEP - 30 SEP	105 (CAT2)	970
KARL	23 SEP - 28 SEP	105 (CAT2)	970
LISA	05 OCT - 09 OCT	75 (CAT1)	987
MITCH	21 OCT - 05 NOV	180 (CAT5)	905
NICOLE	24 NOV - 01 DEC	85 (CAT1)	979

2. CLIMATOLOGY AND STATISTICS

The average annual number of tropical disturbances over the past 52 years is:

- 9.8 named storms
- 5.8 hurricanes
- 2.5 intense hurricanes (CAT3 or higher)

This year, the numbers were all above-average:

- 14 named storms
- 10 hurricanes
- 3 intense hurricanes

This season was filled with record-breaking statistics. First, from Sept 23 to Sept 27, there were four active hurricanes at one time (Georges, Ivan, Jeanne, and Karl). The last time this occurred was in 1893. There have been years with three hurricanes and a tropical storm, but very rarely four hurricanes... and not for five days!

All tropical depressions eventually made it to Tropical Storm status (which is when they get named). This is actually not too uncommon, but just thought it should be mentioned.

The weakest storm of the season was TS Alex, who only reached 50mph winds. The strongest (by a substantial margin) was Hurricane Mitch, who reached 180mph.

Nicole formed abnormally late in the season in the eastern Atlantic... November 24th. As far as I could tell, this is one of the latest dates a tropical storm developed. She finally deteriorated below tropical depression status on December 1. Note: the hurricane season officially ends on November 30th; who's the official?

Bonnie maintained hurricane strength for 140 hours, while Georges maintained hurricane status for 259 hours! That is an incredibly long time, especially considering the terrain he encountered on his journey. Mitch, the strongest storm, maintained hurricane strength for 130 hours and maintained maximum winds of 180mph for 15 hours.

Mitch was a storm for the books. He was the deadliest hurricane in 218 years. He caused well over 12,000 deaths and over \$4 billion in damage. Mitch had the lowest pressure ever recorded in October in the Atlantic basin. He had the 4th lowest pressure ever recorded overall in the Atlantic (tied with Camille '69). FYI, the lowest pressure ever recorded was in Hurricane Gilbert '88 which was 888mb. To compare Mitch to the most powerful storms in the Atlantic since 1960:

- Allen '80 : 190mph
- Camille '69 : 190mph
- Gilbert '88 : 185mph
- Mitch '98 : 180mph
- Anita '77 : 170mph
- Carla '61 : 170mph
- David '79 : 170mph

3. LANDFALL

Of the 14 named storms, 7 of them were US landfalling. Incidentally, every storm that made landfall was a US landfalling one. Mitch was a special case: he first made landfall in Honduras, then on the US, but it still counts. First column is name of storm, second is date of primary landfall, third is local time of landfall, fourth is maximum sustained winds at landfall, and fifth is closest city to location of primary landfall.

Bonnie	8/26	1500	115	Cape Fear, NC
Charley	8/22	0400	60	Corpus Christi, TX
Earl	9/3	0100	80	Panama City, FL
Frances	9/11	0100	65	Corpus Christi, TX
Georges	9/28	0400	105	Gulfport, MS (also Martinique, Puerto Rico, Dominican Republic, Haiti, Cuba, Key West FL)
Hermine	9/19	1900	45	Houma, LA
Mitch	10/29	1300	75	La Ceiba, Honduras (also Fort Myers FL)

That's all I have for this year's report. If anyone has any questions, corrections, additions, etc., just let me know! Next year's season begins June 1 (of course) and the first few names on deck are Arlene, Bret, and Cindy.

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