

## EL NIÑO - BLIZZARD - TORNADO - HURRICANE

### Damages and Benefits

#### To Whom It May Concern:

During the "Ask Tom" program on 11 MAR 98, Tom Skilling introduced the prediction of the 1997-98 El Niño by Dr. Bob Livezey of the NOAA Climate Prediction Center. It was concluded in effect, that this El Niño will continue for sometime. The best guess is that the sea-surface temperature will stay strong enough to continue affecting the atmosphere substantially way into the Spring. By Summertime, the El Niño event should be weakening and the sea-surface temperature should be returning to the near normal level.

As a researcher of severe storms during the past 45 years, I investigated the influence of El Niño on storms. The prediction I made was "It is very likely that the 1997 El Niño will extend way into 1998, becoming weaker late in Spring to Summer, and disappear toward the end of 1998." (Taken from Addendum One dated 25 JAN 98 to Mystery of El Niño and Hurricanes, by Fujita.)

In spite of the two independent methods of prediction, Dr. Livezey's and my results are very close to each other, allowing me to think further on the possible prediction of severe windstorms, such as hurricanes, tornado outbreaks, etc. Presented herewith are the possible relationships between El Niño and windstorms.

### 1. COMPARISON of 82-83 and 97-98 EL NIÑOS

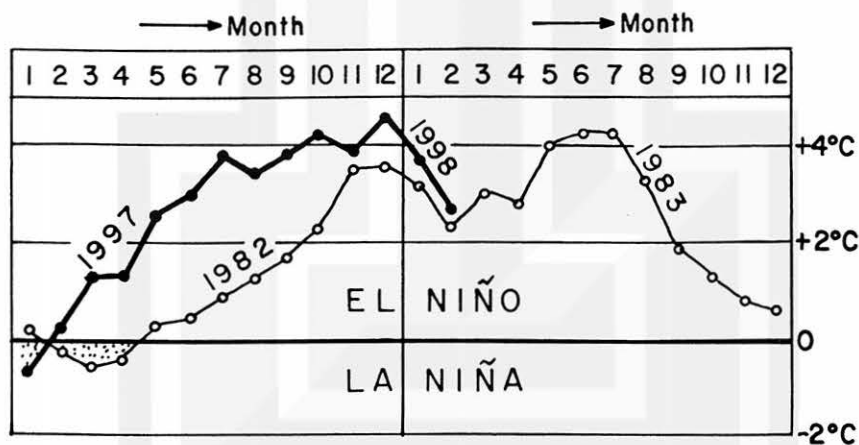


Fig. 1 Variation of Sea-surface temperature (SST) anomalies of the worst (97-98) and the second worst (82-83) El Niños. Anomalies are those of the EP 1 area of JMA.

This figure shows the updated comparison of two El Niños. Statistics show that every El Niño with large SST anomaly had twin peaks. It is very likely that the second-peak anomaly will occur later in 1998.

## 2. HURRICANES and EL NIÑO

● mark denotes the storm surveyed by the Fujita Group

( ) refers to the page of Mystery of El Niño and Hurricanes by Fujita

The percent change of hurricanes around the world (p37) reveals that Atlantic hurricanes are suppressed in El Niño years while more hurricanes form and develop in La Niña situations.

● **Hurricane Camille**, the worst storm of the Century, 15-22 AUG 69 caused incredible damage near the coast of Mississippi on 18 AUG. SST anomaly decreased from +2.4°C to +0.3°C prior to the hurricane. Refer to Fig. 2.

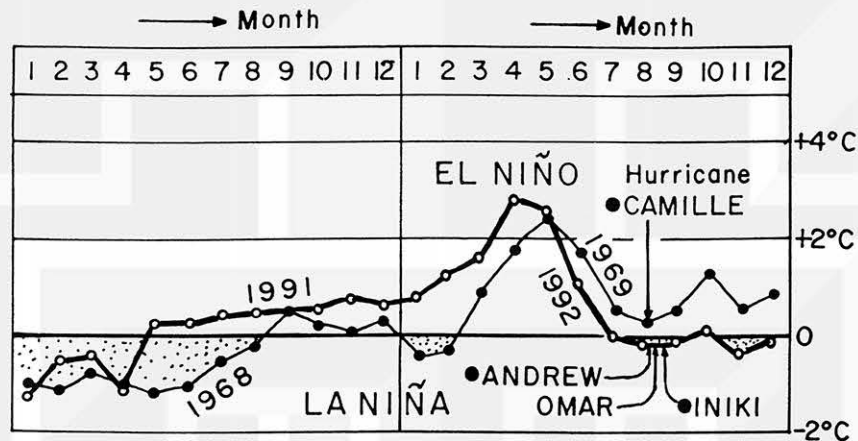


Fig. 2 Change of sea-surface temperature (SST) anomalies before and after the four memorable hurricanes.

● **Andrew** in South Florida (24 AUG 92), **Omar** in Guam (28 AUG 92) and ● **Iniki** in Kauai (11 SEP 92) are three significant hurricanes/typhoon in the United States in 1992. Figure 2 reveals that all three storms occurred after the +2.9°C El Niño in APR 92 weakened into the -0.1°C La Niña. Against the common belief, hurricane Andrew did not occur in El Niño month. It is desirable to predict SST anomalies during hurricane/typhoon seasons in assessing storm activities in different oceanic locations.

## 3. TORNADO OUTBREAKS

● **The worst outbreak occurred on 3-4 April 1974.** 148 tornadoes killed 315 persons, injuring 5,484 others. The SST anomalies in 1974 were between -0.8°C and +0.3°C. The April anomaly was -0.1°C, near normal.

The second worst outbreak of ● **Palm Sunday Tornadoes of 11 April 1965** in five states was centered at 40°N and 88°W. 36 tornadoes killed 253 persons, injuring 2,966 others. The SST anomaly increased from 0°C in JAN to +2.2°C in APR, the month of the outbreak. Evidently, these historical tornado outbreaks are not influenced by El Niño.

**The Florida outbreak of 23 FEB 98.** Unknown number of tornadoes killed 39, injuring 250 others. The SST anomaly was +2.6°C. The tornadoes occurred between 11 p.m. (22 FEB) and 1 a.m. (23 FEB) when a line of echoes originated in the Gulf of Mexico where El Niño-driven cyclone developed.

#### 4. BLIZZARD and TWIN EL NIÑO

The large area around the south end of Lake Michigan suffered from 350,000 power outages due to the blizzard of 9 MAR 98. Due to the warm winter caused by the 97-98 El Niño, the Great Lakes had little or no lake ice. After the SST anomaly dropped 1.9°C, from +4.5°C to +2.6°C, cold winds from Canada blew over Lake Michigan resulting in added lake-effect snow, freezing, and high winds. Northwest Indiana was paralyzed for days.


As shown in Figure 1, it is very likely that the SST anomaly will increase again causing the second peak, because most or all strong El Niños are TWIN (peak) EL NIÑOS. The SST drop between two peaks could cause one of the most damaging effects of super El Niños, such as 82-83 and 97-98. The warm winter during the first peak causes floods, fast growth of flowers and crops, and warm lake surfaces.

Between the twin peaks, El Niño weakens temporarily, resulting in frozen flowers and crops, lake-enhanced blizzard, etc. My statistics (p30) shows that 8 twin and 1 triplet peaks occurred between 1950 and 1995. The 1997-98 El Niño is most likely to be a twin El Niño.

#### CONCLUSIONS

I have been thinking about the overall effects of strong El Niños. Now I believe that the variation (significant decrease in SST anomaly) is extremely important. Such a decrease occurs between the TWIN PEAKS (Fig. 1) and before the ENDING, after which Atlantic hurricanes could be very active. Hurricanes Camille and Andrew (Fig. 2), True or False?

P.S. It turned out that I was one of the victims of the Power Outage on March 9, 1998. My severe RSD pain on both feet increased significantly. Miraculously I survived, so far.

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Professor Emeritus

cc: Dr. Bob Livezey, NOAA Climate Prediction Center  
Mr. Tom Skilling, Meteorologist, WGN-TV  
Dr. Robert Abbey, Jr., Office of Naval Research  
Japan Meteorological Agency



Sunday 15 March 1998

Personal Note to President Sonnenschein

Thank you very much for your letter before departing to Japan. I sincerely hope that you enjoyed my native country. Welcome back to this snow-covered Chicago.

I am taking the liberty of presenting to you a 3-page report on EL NIÑO-BLIZZARD-TORNADO-HURRICANE Relationships (Yellow Cover). Apparently, my prediction of 98 El Niño turned out to be very close to that of the NOAA Climate Prediction Center reported on March 11, 1998 by Tom Skilling of WGN TV.

Unfortunately, the weakening of El Niño in JAN-MAR 98 caused the Blizzard of 98 and POWER OUTAGE in our area. Although I knew that all major EL NIÑO had TWIN PEAKS, I paid no attention to the cooling of temperature between the peaks, which induced the rush of cold air from Canada.

The power outage caused by sticky snow and high winds damaged my RSD's - severe pain on my feet. Now I can barely walk while feeling cold feet. Apparently, the disorder of my sympathetic nerve has reached the terminal stage. No doctors ever found the cause of my RSD. However, I personally think that the side effects of diabetic medication DIABETA is suspicious. Sorry, I should have consulted with PDR and INTERNET before the situation became irreversible. Now it appears to be too late.

Nevertheless, I am happy to have accomplished my research for both Government Sponsors and The University of Chicago.

With sincere appreciation,

Sincerely yours

[Redacted Signature]