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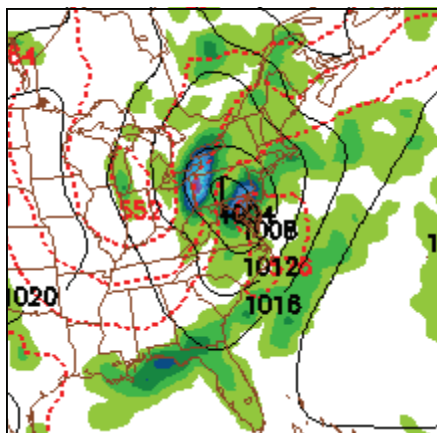


July 29, 2:50 PM: An E-F2 tornado in Wantage, NJ with approximate winds of 120 MPH.

July 2009 Temp. Departures

New York, NY	- 3.8
Islip, NY	- 3.8
Hartford, CT	- 3.5
Boston, MA	- 3.4
Worcester, MA	- 3.3
Allentown, PA	- 3.2
Newark, NJ	- 2.9
Trenton, NJ	- 2.6
Washington, DC	- 2.3
Baltimore, MD	- 1.9
Philadelphia, PA	- 1.7

July: Summer Arrives Late...But The Rain Threats Continue



A Coastal Storm in July? The region saw not one, but two such storms in July. This was a model run from 7-14

July began where June left off...cool and wet. However, cool is not a bad thing in what is normally the hottest month of the year. We continued to see a mean trough across the Eastern US and occasional upper-level lows in the Great Lakes. July was not as wet as June, monthly rainfall totals were highly variable. This was because most of our rain came from convective showers and thunderstorms, thus

resulting in more "hit or miss" events. An example is Philadelphia where the total rainfall was 3.35", which is below normal. Only 35 miles NE, Trenton picked up just under six inches of rain. Similar trends were noticed elsewhere like in New England, as Boston saw 6.90 inches, while Worcester had 10.81 inches. The type of pattern we saw just about the entire month also meant that there was the threat of a thunderstorm almost everyday (see article below).

Generally, temperatures were well below normal, however the last 7-10 days of the month saw the heat and especially humidity, rising. In New York City, this July was the second coolest July on record (first was in 1888) until July 27, when very warm temps (especially nighttime lows), bumped average temps up. In

mid-July, temperatures across the interior higher elevations fell into the 40s, which is extremely unusual. Up in the east coast of Canada, Prince Edward Island, had frost on July 8, the first known occurrence of frost observed in July.

In terms of severe weather, there were a couple of notable events and they mainly affected the NJ-NY area. On July 7th, an extremely rare overnight supercell formed and moved thru NE NJ, SE NY and LI. Hardest hit was Yonkers to New Rochelle, where straight-line winds estimated at 100 MPH caused a significant amount of damage, especially to trees. July 29 featured scattered t-storms in PA-NJ-NY which produced torrential 2-3" per hour rain rates. Also, two E-F2 (est. winds of 120mph) tornadoes were reported in Stroudsburg, PA and Wantage, NJ. July 31 brought another round of heavy rain and strong storms.

Answering the Question: "What time will it rain?"

One of the most difficult questions that we get in the Spring and Summertime is "Will it rain today?" and "When will the rain arrive?". Unfortunately, precipitation patterns in the warm season are much different than in the winter or even fall and early spring. It is very rare to find "synoptic" scale systems that bring widespread rain into areas. Instead, rain or showers are more scattered and when they do evolve into a broader area, it is much more difficult to pinpoint exactly when and where that is.

Many times when clients call

for consultation, we try to explain as best as possible what the situation is. Many times, the best we can do is give a time range when showers/storms are going to develop and a coverage area on how widespread they will be. We also try to illustrate this in our daily forecasts. Hopefully, this is a much better way of handling the forecast than just saying "Mostly cloudy with a 30% chance of t-storms".

When you are out in the field, the main concern usually is will it rain and when. We have the

same exact thought when we're out on the golf course! But when it comes to summer-time rain and thunder, please keep in mind that the dynamics are completely different due to the subtleties of the atmosphere in the summer



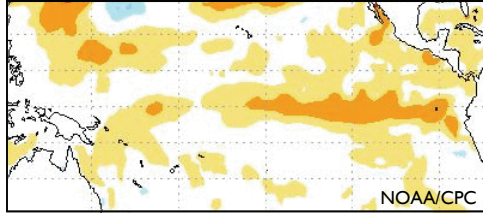
EL Nino...It's Back!

For the first time since early 2007, an El Nino pattern in the Pacific Ocean is beginning to take shape. In recent months, the temperature of the water in the equatorial Pacific Ocean has warmed to above normal levels, marking El Nino's arrival. Nearly all forecasts suggest that El Nino will continue to strengthen before peaking late this fall or early in the winter. El Nino's eventual strength does remain in question, but the potential exists for moderate to strong development.

For the U.S., outside of limiting hurricane development, El Nino's influence on weather during the warm season is not particularly strong. Heading into winter, El

Nino's effects become much more noticeable, especially in the far northern and southern tiers of the country. In the north, especially west of the Great Lakes, temperatures tend to be warmer than normal, along with less than average snowfall. While areas along the Mexican border tend to be cool and wet, which often means more snow for the interior SW U.S.

In the mid-Atlantic and northeast, however, snowfall tends to be about normal. Tempera-

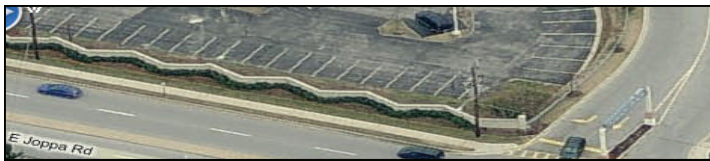


Sea Surface Temperature Anomaly Map - 7/22/09 (Yellows: Above Normal, Blues: Below Normal)

tures usually run close to or just above average levels. How exactly El Nino interacts with other atmosphere conditions this winter remains to be seen, but it definitely bears watching.

Editor's Note: October's issue of The Weather Tracker will feature this year's winter forecast and a more in-depth look at El Nino.

Using Bing Maps To Your Advantage



Mapping technology has grown exponentially over the last five years and one of the products that continues to marvel is [Bing Maps](#). This is formerly Windows Local Live maps and it is something that we have utilized for a couple years. One great feature

is "Bird's eye", which enables the user to see an actual picture from a satellite (see above) of a location at a 30° angle. Opposed to an overhead view, this enables you to see a much clearer image of a new location or facility. Birds Eye is

available in a large portion of the country and there are now only a few spots missing data.

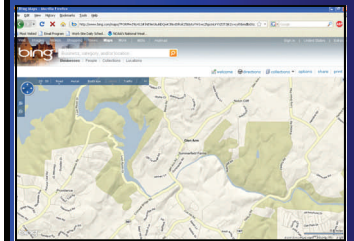
Another great feature are the road maps. Elevation is designed on them, so you are able to visually see which streets or highly localized spots are on smaller scale hills. Even a very minor elevation change in the winter can lead to a phase change in precipitation or temps staying just a bit colder for ice.

Upcoming Contract Renewals

For clients that have not yet renewed service with WeatherWorks this year, please watch your mail in the upcoming weeks for updated contract materials.

A timely return of all necessary forms will ensure a smooth continuation of service, in addition to helping us prepare for the upcoming winter. Your help in this matter is appreciated.

WEBSITE OF THE MONTH



<http://www.bing.com/maps/>

The above link brings you to a map program from "Bing", formerly Windows Local Live. See the article to the left for more details about the site.

UPCOMING EVENTS

Aug 6 SIMA Build a Bid
Albany, NY

Aug 20 SIMA Build a Bid
Novi, MI

Sep 7 Labor Day

Sep 13-16 APWA '09 Congress
Columbus, OH

AUGUST AVERAGES (30 year averages: 1971-2000)

	Boston, MA (BOS)		Newark, NJ (EWR)		Baltimore, MD (BWI)	
	Aug 1	Aug 31	Aug 1	Aug 31	Aug 1	Aug 31
High Temp	82	77	85	80	87	82
Low Temp	66	61	69	65	66	61
Precip (Mo. Total)	3.37"		4.02"		3.74"	
Snowfall (Mo. Total)	0.0"		0.0"		0.0"	
Sunrise	5:37AM	6:09 AM	5:53 AM	6:22 AM	6:07 AM	6:34 AM
Sunset	8:04 PM	7:20 PM	8:12 PM	7:31 PM	8:18 PM	7:38 PM

August 2009 Temperature Outlook

August will likely be warmer than July as we return to more typical Summer heat and humidity. There may be one or two heat waves during the month with mid-late August the most likely time period.

August 2009 Precipitation Outlook

Constant, almost daily rain threats should wane and there will be some 5-7 day dry stretches. However, the pattern may break down a couple of times, thus leading to a few stormy periods.