



# WeatherWorks



## THE WEATHER TRACKER

<http://www.weatherworksinc.com>

PO BOX 7100  
HACKETTSTOWN, NJ 07840  
(908) 850-8600

Edited by:  
Sean Rowland and  
Ken Elliott

Volume 3, Issue 1 |

November 2009

### Inside this issue...

October Snow	1
Long-Range Monthly Forecasts	1
RadarLab HD and WeatherTap	2
New Forecasters	2
November Averages	2



October 29: Denver, Colorado  
Major snow storms have hit the Rockies and Upper Midwest early this season.

### Oct. Snow Notes

Boston, MA: Only the third time in 118 yrs, measurable snow ( $\geq 0.1"$ ) fell in Oct.

State College, PA: Earliest measurable snow on record (10-15) and most October snow (4.3 inches) ever

Denver, CO: A total of 17.2" fell in Oct. 2009 with four days seeing over an inch

## Winter Starts Early....Again!

Last year on October 28th, many locations across the interior Mid-Atlantic and Northeast saw their first snowfall (specifically Western NJ and Eastern PA). This was a very rare event that got many people realizing accumulating snow can happen in October. One year later, it happened even earlier. A highly unusual pattern set up from October 15-18 with a strong upper-level low over the Mid-Atlantic. At the same time, a high over Quebec funneled in cold air from the Northeast. The upper low spawned off two separate coastal storms one on the 15th and the other on the 17th-18th and both systems produced some snowfall.

The snow was almost completely dependant on intensity and elevation. Falling Precipitation is a cooling mechanism and in marginal temperatures, heavy precip can cool the atmosphere that one or two needed degrees to change the precip type to snow. On October 15th, this happened across NW NJ and NE PA. Elevation also played a key role in the

event. Tobyhanna, PA, which has an elevation ranging from 1600 to 2000 feet saw precip fall as all snow and 4.3 inches resulted. In NW NJ, hilltops were covered (even pavements) while many valleys just stayed wet.



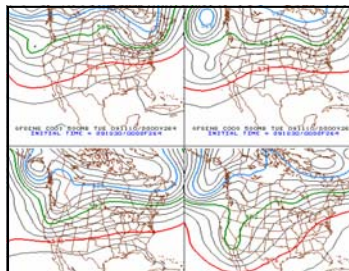
Foxboro, MA: A snowy Gillette Stadium in the late afternoon of October 18, 2009

The second storm on October 17-18 was more difficult to forecast in terms of the strength and intensity of the precipitation. Where there was heavy precip or banding, changes to snow were observed, even as far south as Maryland. A few towns in Baltimore County picked up a couple tenths of an inch. The coastal low tracked Northeast and really started strengthening in New England. During the strengthening phase, the storm resembled a classic Nor'easter and heavy precip fell west of

the low. Just enough cold air was in place for the heavy rain to change to heavy snow. This left several towns in Massachusetts covered in snow mainly on the grasses, including the town of Foxboro during the New England-Tennessee game.

The rest of October was quite wet as several systems produced steady rain, leading to above normal precip across the entire region. In addition, because of the mid-month cold snap, temperatures averaged below normal in the area.

## Introducing a New WeatherWorks Experimental Product



### Long Range Model Forecasts (from Penn State University)

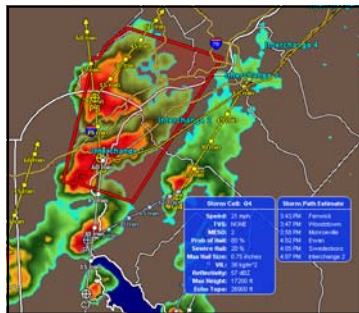
To better serve the emerging needs and desires of clients, WeatherWorks is in the process of developing a different type of Long Range Forecast from the one that is currently offered. A lot of the forecast itself will be

the same. However, the goal is to make it more useful to clients in planning their operations, no matter the season.

Using the latest forecast tools and techniques to understand upcoming patterns and trends will of course be the foundation of this new forecast product. However, combining the forecast with a wealth of in-house past weather data is where this product will be different. When there are distinctive patterns in place that have been observed before, every attempt will be made to provide a meaningful correla-

tion to clients. Instead of just saying a pattern will be active, the forecast may indicate that the tendency is to see 1-3" type snow systems as opposed to 6-9" storms. While in the summer, that same forecast may suggest that as opposed to all day washouts, rain is more likely to be showery in nature. The hope is that in the end, clients can use these forecasts to make better scheduling, purchasing and maintenance decisions, ultimately saving money. Forecast and alert clients can expect the first forecast on their webpage early in December.

## Effectively using RadarLab HD in WeatherTap



Many clients have chosen to take advantage of WeatherWorks' partnership with WeatherTap bringing powerful and professional grade satellite/radar products directly to you.

These products have always been ahead of others made available to the general public from the NWS and other organizations. The advent of RadarLab HD greatly increases the functionality and

usefulness of radar. There are too many features and tools to list and discuss in this article. However, without a doubt, RadarLab HD's greatest feature is its very high resolution. The resolutions get as high as 30 meters, compared to 600m from other sources. With such fine resolution, more data can be added onto radar images like state highways, and even NWS watches and warnings.

In the case of severe thunderstorms, RadarLab HD will even create storm tracks based on storm motion and estimate the time the storm will hit certain locations. A user can set up to 10 personalized locations using GPS coordinates, taking the guess work out of determining if that storm will affect a site.

While some of the most impressive features for RadarLab HD are for thunderstorms, it provides plenty of functionality for winter weather as well. There is a customary "Winter Mask", which is similar to those on TV and elsewhere estimates precipitation type. However, the true power of the high definition radar comes when snow showers strike. The high resolution will help you determine which areas to worry about and which ones were spared by the snow showers.

If your organization does not currently subscribe to online weather data, including WeatherTap and RadarLab HD, call Kevin Hopley at 800-427-3456 to add it your current weather service package.

## Welcome New WeatherWorks Forecasters

With the start of the winter season, we would like to introduce two new forecasters who will be joining the WeatherWorks team this winter: Sam DeAlba and Anthony Masiello.

Sam is graduate from Millersville University and has interned and worked with us in prior years. Growing up and living in Pennsyl-

vania most of his life, Sam brings a high level of expertise to forecasting all across PA. In addition, his knowledge of mesoscale models used in Millersville will be beneficial in highly localized events.

Anthony Masiello will be helping us with our new long range product discussed on page 1.

He is from Rutgers and along with skilled short-term forecasting, he provides a great deal of experience in the long range.

These forecasters will join Frank, Tommy, Kevin, Sean and Ken during the season, along with Jon Schwartz and Mike Mihalik who did a great job with WeatherWorks last season.

NOVEMBER AVERAGES (30 year averages: 1971-2000)						
	Boston, MA (BOS)		Newark, NJ (EWR)		Baltimore, MD (BWI)	
	Nov 1	Nov 30	Nov 1	Nov 30	Nov 1	Nov 30
High Temp	57	47	59	48	61	51
Low Temp	42	33	44	35	38	31
Precip (Mo. Total)	3.98"		3.88"		3.12"	
Snowfall (Mo. Total)	1.5"		0.6"		0.6"	
Sunrise	6:18 AM	6:53 AM	6:27 AM	7:01 AM	6:35 AM	7:06 AM
Sunset	4:37 PM	4:13 PM	4:53 PM	4:30 PM	5:05 PM	4:44 PM

### November 2009 Temperature Outlook

Expect cycles of warming and cooling during the month of November. Look for a zonal weather pattern which will keep temp swings to a minimum. Overall, temps come in below normal.

### November 2009 Precipitation Outlook

The anticipated zonal pattern will reduce the threat of big storms this month. There will be weaker east-west moving systems. Temps will allow for some snow threats, especially inland.

Before the heart of winter nears, all Alert Clients are strongly encouraged to become familiar with WeatherWorks' new client Web Pages. In fact it is this month's featured website below.

For those that have already visited the site to update your contact information, it is appreciated. To ensure a smooth first event this winter, please visit the site and make sure your information is current.

## WEBSITE OF THE MONTH



[www.weatherworksinc.com/account/index.php](http://www.weatherworksinc.com/account/index.php)

WeatherWorks' Client Login page for ALL Clients to access WeatherWorks' online offering of services, including Certified Snowfall Totals™. This page can also be reached by visiting the WeatherWorks homepage and clicking "Client Login."

## UPCOMING EVENTS

- Nov 11 Veterans Day
- Nov 17-20 NJLOM Conference Atlantic City, NJ
- Nov 26 Thanksgiving Day