M. Jodi Rell
Governor

WINTER STORM UPDATE

Friday December 9, 2005 – AT NOON

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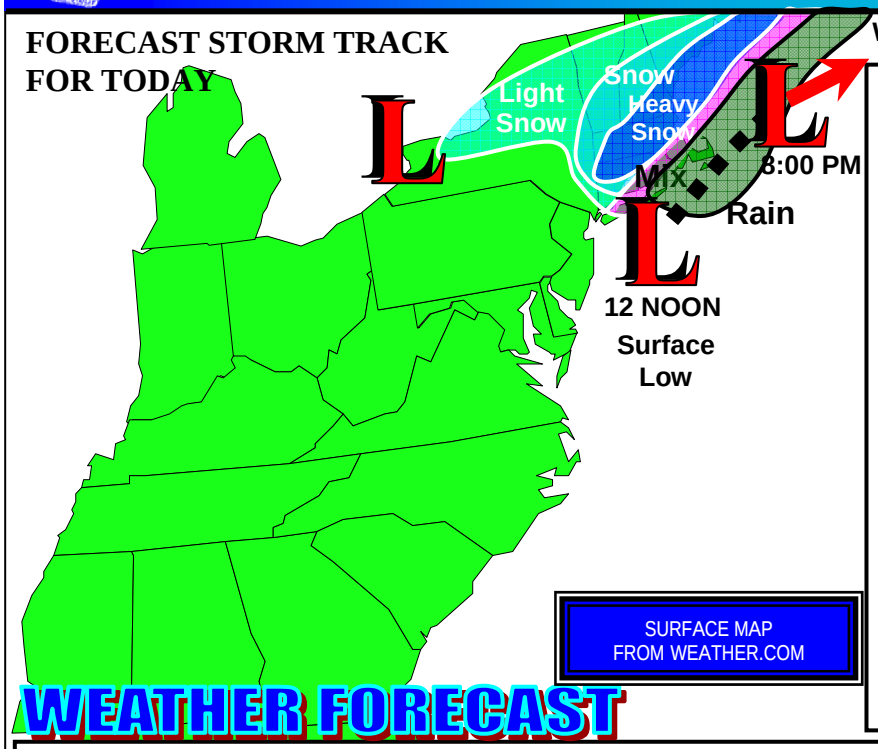
DEPARTMENT OF EMERGENCY MANAGEMENT AND HOMELAND SECURITY
James M. Thomas, Commissioner
Wayne Sandford, Deputy Commissioner

FORECAST STORM TRACK FOR TODAY



SURFACE MAP FROM WEATHER.COM

WEATHER FORECAST

WATCHES AND WARNINGS

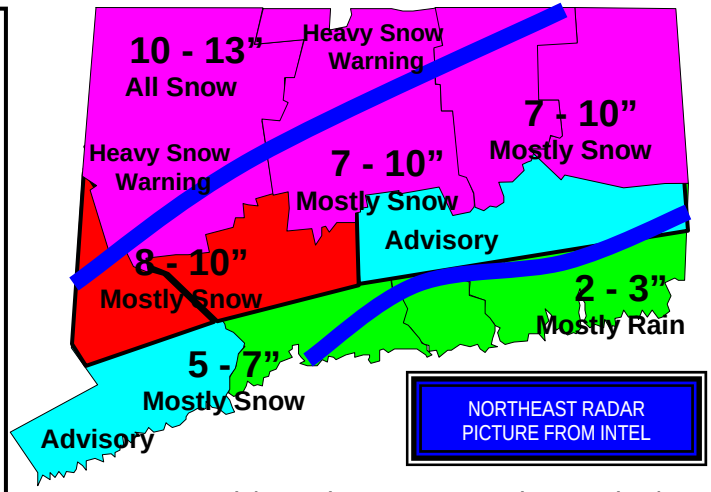
Heavy Snow Warning
All of Northern CT

Winter Storm Warning
Northern New Haven and Fairfield Counties

Advisory
Southern Half of Fairfield, Northern Middlesex and New London Counties

Coastal Flooding
No Coastal Warnings In Effect

SNOWFALL FORECAST FOR TODAY



NORTHEAST RADAR PICTURE FROM INTEL

COASTAL TIDES (NGVD)	High Tide	Time	Low Tide	Time	Flood Stage
Bridgeport	3.90 Ft	5:29am	-2.70	11:55am	7.0 Feet
	3.50 Ft	5:58pm	-2.90	12:15am (Sat)	
New London	1.70 Ft	3:42am	-0.90	10:15am	5.0 Feet
	1.40 Ft	4:03pm	-1.00	10:29pm (Fri)	

STORM TRACK FORECAST… At noon, the surface low is rapidly intensifying as it moves south of Long Island. A large area of moderate to heavy snow currently covers most of New England with rainfall at the southeast coast. This area of snowfall/rainfall is forecast to move to the northeast and exit Connecticut during the next 3 hours.

CONNECTICUT FORECAST…NWS Continues Warnings and Advisories for all of Connecticut…Slightly colder scenario has resulted in slightly higher snowfall… This Afternoon…Moderate to heavy snow currently over most of the State at Noon will taper off to light snow and flurries from West to East during the next 3 hours. The moderate to heavy snow is expected to end by 1:00 PM in the Danbury/New Milford Area, by 2:00 PM on the Hartford/New Haven Area and by 3:00 PM in Norwich and Mansfield. Rain in Southeastern CT may change briefly back to snow before ending by 3:30 PM. A period of gusty northwest winds of 20 – 30 mph can be expected later this afternoon especially along the Southeast Coast. Total snowfall amounts are expected to range from 2 – 3 inches at the southeast coast up to 7 – 10 inches in the Hartford Area and 10 – 13 inches in the Northwest Hills. No significant coastal flooding or icing is expected with this storm. This will be the last update issued on this storm unless the ending times change.

Introduction

SKIP INTRO

IN AN EFFORT TO BETTER COORDINATE THE RESPONSE TO WINTER STORMS, SEVERE WEATHER AND OTHER WEATHER EVENTS THAT MIGHT AFFECT LARGE AREAS OF CONNECTICUT, HOMELAND SECURITY IS GOING TO ISSUE TECHNICAL DISCUSSIONS WITHIN IT'S WEATHER UPDATES IN ADVANCE OF APPROACHING STORMS ON A TRIAL BASIS. THESE TECHNICAL DISCUSSIONS ARE INTENDED TO PROVIDE THE USER WITH MORE DETAIL AND ANALYSIS OF APPROACHING STORMS. THE FOLLOWING IS AN EXPLANATION OF THE THREE MOST COMMONLY USED COMPUTER MODELS FOR PREDICTING WEATHER.

THE ETA (NUMERICAL) MODEL:

THE ETA IS A SHORT RANGE 72 HOUR FORECAST MODEL. THE ETA SHOWS THE TRACKS OF LOWS AND HIGHS AND THEIR ASSOCIATED WARM AND COLD FRONTS. THE ETA IS SOMETIMES KNOWN AS THE "WET MODEL" BECAUSE THE ETA TENDS TO OVER-ESTIMATE THE AMOUNT OF RAIN OR SNOW FROM AN APPROACHING STORM.

THE GFS (GLOBAL FORECAST SYSTEMS)

THE GFS IS ALSO A SHORT RANGE 72 HOUR FORECAST MODEL. THE GFS ALSO SHOWS THE TRACKS OF LOWS AND HIGHS AND THEIR ASSOCIATED WARM AND COLD FRONTS. THE GFS IS SOMETIMES CALLED THE "DRY MODEL" BECAUSE THE GFS TENDS TO UNDER-ESTIMATE THE AMOUNT OF RAIN OR SNOW FROM AN APPROACHING STORM.

THE MRF (MEDIUM RANGE FORECAST) MODEL

THE MRF IS A MEDIUM RANGE 10 DAY FORECAST MODEL. THE MRF IS THE MODEL MOST COMMONLY USED TO PREDICT STORMS THAT ARE BETWEEN 4 – 10 DAYS AWAY FROM CONNECTICUT. THE MRF IS ALSO SOMETIMES A "WET MODEL". IT WILL SHOW A STORM SYSTEM BUT WILL NOT SHOW ITS REAL INTENSITY MORE THAN 4 DAYS IN ADVANCE. THIS IS BECAUSE A NUMERICAL BUFFER SYSTEM IS BUILT INTO THE MRF MODEL. THIS NUMERICAL BUFFER IS DESIGNED TO SMOOTH OUT ERRORS IN THE MODEL AND THIS HAS THE EFFECT OF WATERING DOWN THE INTENSITY OF STORMS THAT ARE MORE THAN 4 DAYS AWAY.

ALL THREE MODELS ALSO SUFFER FROM THE FOLLOWING FORECAST DEFICIENCIES:

1) THEY (ETA, GFS, MRF) TEND TO UNDER-ESTIMATE THE FOREWARD SPEED OF STORMS. THUS, MOST STORMS MOVE FASTER THAN THE FORECAST AND NORMALLY END SOONER THAN EXPECTED.

2) THEY TEND TO OVER-ESTIMATE THE DAMMING OF COLD AIR IN NEW ENGLAND. THUS, STORMS TEND TO CHANGE TO RAIN SOONER THAN EXPECTED.

3) THEY ALL USE SIMILAR DATA AT THE START OF THEIR FORECAST RUNS. ANY ERRORS IN THE STARTING DATA CAN BE MAGNIFIED BY THE COMPUTERS WHEN THEY MAKE THEIR FORECASTS.

4) THEY CANNOT TELL YOU EXACTLY WHERE A SEVERE THUNDERSTORM WILL OCCUR. THEY CAN ONLY TELL YOU WHAT AREA'S ARE PRONE TO SEVERE THUNDERSTORMS. THIS ALSO APPLIES TO TORNADOES, HAIL, HIGH WINDS AND FLOODING.

WHEN THE MODELS CANNOT DETERMINE THE PRECISE FORECAST, IT IS UP TO THE FORECASTER TO USE HIS OR HER JUDGEMENT. EVERY FORECASTER HAS HIS OR HER OWN FAVORITE MODEL. THIS EXPLAINS WHY YOU SEE DIFFERENT FORECASTS FROM EACH NWS OFFICE AND FROM THE BROADCAST MEDIA FOR THE SAME STORM. I TRY TO INCORPORATE ALL THREE MODELS INTO MY FORECASTS TO REDUCE THE BIAS OF ANY ONE MODEL. HOWEVER I DO TEND TO SLIGHTLY FAVOR THE ETA AND MRF MODELS IN MY FORECASTS. THESE MODELS PROVIDE A MORE CONSERVATIVE (WORST CASE) FORECAST THAN THE GFS MODEL. THE MORE CONSERVATIVE FORECASTS ARE GOOD FOR PLANNING FOR THE WORST CASE SCENARIO. MY FORECASTING TECHNIQUE IS KNOWN AS CONSENSUS FORECASTING (USING SEVERAL MODELS AND CONSULTING THE NWS TO GET A CONSENSUS). THIS IS TYPICALLY MORE ACCURATE THAN FORECASTS BASED ON A SINGLE MODEL. HOWEVER I AM NOT GOING TO BE PERFECT.

THE TECHNICAL DISCUSSION IS PROVIDED SO YOU CAN SEE WHAT I SEE WHEN I PREPARE A FORECAST. THIS ADDITIONAL INSITE MAY HELP THE DECISION MAKING PROCESS DURING THE STORM.

Technical Discussion

Not available at this time.