The SPC is forecasting a tornado outbreak expected over parts of central and eastern NC and far eastern SC this afternoon into this evening. Please read the latest public statement about this event.
Probability of a tornado within 25 miles of a point.
Hatched Area: 10% or greater probability of EF2 - EF5 tornadoes within 25 miles of a point.

Probabilistic Damaging Wind Graphic

Probability of damaging thunderstorm winds or wind gusts of 50 knots or higher within 25 miles of a point.
Hatched Area: 10% or greater probability of wind gusts 65 knots or greater within 25 miles of a point.

Probabilistic Large Hail Graphic
SPC AC 161630

DAY 1 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
1130 AM CDT SAT APR 16 2011

VALID 161630Z - 171200Z

...THERE IS A HIGH RISK OF SVR TSTMS ACROSS PARTS OF ERN NC AND FAR
ERN SC...

...THERE IS A MDT RISK OF SVR TSTMS ACROSS PARTS OF SC...NC AND
VA...

...THERE IS A SLGT RISK OF SVR TSTMS ACROSS PARTS OF THE
MID-ATLANTIC...CAROLINAS AND ERN GA...

...TORNADO OUTBREAK EXPECTED THIS AFTERNOON AND EARLY THIS EVENING
ACROSS ERN NC AND FAR ERN SC WHERE A HIGH RISK HAS BEEN ADDED...

...CAROLINAS/VA/WV/MID-ATLANTIC/ERN GA...

A VIGOROUS UPPER-LEVEL TROUGH WILL MOVE INTO THE OH AND TN VALLEYS
TODAY AS A WELL-DEFINED 70 TO 85 KT MID-LEVEL JET ROUNDS THE BASE OF
THE TROUGH AND NOSES INTO THE CAROLINAS. THE JET WILL CREATE STRONG
DEEP LAYER SHEAR PROFILES WHICH WILL BE VERY FAVORABLE FOR SEVERE
STORMS AND TORNADOES THIS AFTERNOON. AT THE SFC A COLD FRONT WILL
MOVE QUICKLY EWD ACROSS THE SRN APPALACHIAN MOUNTAINS. AHEAD OF THE
FRONT...MODERATE DESTABILIZATION WILL LIKELY TAKE PLACE TODAY ALONG
A MOIST AXIS WHERE SFC DEWPOINTS WILL BE IN THE MID TO UPPER 60S F.
STRONG THUNDERSTORMS SHOULD INITIATE ON THE WRN EDGE OF THE MOIST
AXIS IN THE WRN CAROLINAS AND RAPIDLY INCREASE IN COVERAGE EARLY
THIS AFTERNOON. SEVERE STORMS ARE FORECAST TO MOVE INTO THE
CNTRL/ERN CAROLINAS AND ACROSS CNTRL/ERN VA LATE THIS AFTERNOON INTO
EARLY THIS EVENING.

FORECAST SOUNDINGS ALONG THE MOIST AXIS IN THE ERN CAROLINAS AT 21Z
SHOW 0-6 KM SHEAR VALUES AROUND 60 KT WITH MLCAPE OF 1500 TO 2000
J/KG. IN ADDITION...LOW-LEVEL SHEAR WILL BE STRONG SUGGESTING THE
THERMODYNAMIC AND SHEAR ENVIRONMENT WILL BE VERY FAVORABLE FOR
SUPERCELLS AND TORNADOES IN THE MODERATE AND HIGH RISK AREAS. 0 TO 3
KM STORM RELATIVE HELICITIES IN THE 450 TO 550 M2/S2 RANGE WILL ALSO
BE FAVORABLE FOR STRONG TORNADOES WITH THE MORE DOMINANT DISCRETE
SUPERCELLS. THE GREATEST THREAT FOR STRONG TORNADOES SHOULD EXIST
FROM RALEIGH NC SSWWD TO NEAR FLORENCE SC AND EAST OF THAT LINE
ABOUT 100 STATUTE MILES. THIS AREA WILL BE LOCATED WHERE THE
CROSSOVER OF THE LOW AND MID-LEVEL JET IS MAXIMIZED. A LONG-TRACK
TORNADO OR TWO IS EXPECTED TO OCCUR ACROSS THE HIGH RISK AREA IN ERN
NC AND FAR ERN SC. AS STORM COVERAGE INCREASES THIS AFTERNOON AND A
LINE OF STORMS ORGANIZES...A WIND DAMAGE THREAT WILL ALSO DEVELOP
FROM THE MID-ATLANTIC SWD ACROSS THE CAROLINAS INTO ERN GA. 50 KT OF
FLOW JUST ABOVE THE SFC AND A FAST EWD MOTION OF THE LINE SHOULD
RESULT IN A WIDESPREAD WIND DAMAGE THREAT WITH VERY STRONG WIND
GUSTS POSSIBLE WITH THE MORE INTENSE BOWING LINE-SEGMENTS ACROSS THE
MODERATE AND HIGH RISK AREAS. SUPERCELLS AND THE MORE INTENSE CELLS
WITHIN THE LINE SHOULD BE CAPABLE OF PRODUCING LARGE HAIL AS WELL.
THE LINE IS FORECAST TO MOVE ACROSS THE OUTER BANKS OF NC THIS
EVENING WITH THE SEVERE THREAT ENDING FROM WEST TO EAST ACROSS THE
REGION.
WHILE SHEAR CONDITIONS WILL BE FAVORABLE FOR TORNADOES AS FAR NORTH AS NRN VA AND MD...THE THREAT WILL BE MORE CONDITIONAL. ACROSS ERN GA...THIS AREA WILL BE SOUTH OF THE MID-LEVEL JET AND REMOVED FROM THE STRONG LARGE-SCALE ASCENT SUGGESTING THE SEVERE THREAT WILL REMAIN MORE ISOLATED ACROSS ERN GA.

..BROYLES/SMITH.. 04/16/2011

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NOTE: THE NEXT DAY 1 OUTLOOK IS SCHEDULED BY 2000Z