

DAY 1 CONVECTIVE OUTLOOK
NWS STORM PREDICTION CENTER NORMAN OK
1249 AM CDT FRI JUL 18 2008

VALID 181200Z - 191200Z

...THERE IS A SLGT RISK OF SVR TSTMS TODAY ACROSS PARTS OF THE
NORTHERN PLAINS....

...THERE IS A SLGT RISK OF SVR TSTMS TODAY ACROSS PARTS OF THE
NORTHEAST STATES....

...SYNOPSIS...

A COUPLE OF SIGNIFICANT SHORT WAVE IMPULSES ARE EMBEDDED WITHIN A
BROADLY CYCLONIC BRANCH OF SPLIT POLAR WESTERLIES NEAR THE
CANADIAN/U.S. BORDER. ONE OF THESE WAVES HAS BEEN GRADUALLY
PROGRESSING TOWARD THE UPPER GREAT LAKES REGION. BUT...AN EASTWARD
ACCELERATION INTO THE ST. LAWRENCE VALLEY APPEARS LIKELY DURING THIS
PERIOD...WITHIN CONFLUENT FLOW TO THE SOUTH OF A BROAD TROUGH OVER
HUDSON BAY AND NORTHERN QUEBEC. THIS FEATURE WILL CONTINUE TO BE
PRECEDED BY A WEAKER IMPULSE...WITHIN A BELT OF WESTERLIES EMANATING
FROM NORTHEAST PACIFIC...WHICH IS PROGGED TO SHIFT TO THE EAST OF
LAKE ONTARIO...THROUGH NORTHERN NEW ENGLAND...THIS AFTERNOON AND
EVENING.

THE PROGRESSION OF A MORE PROMINENT UPSTREAM WAVE AND EMBEDDED
MID-LEVEL CLOSED LOW LIKELY WILL BE SLOWER...TO THE SOUTH OF
NORTHERN BRANCH RIDGING. BUT...THE SYSTEM IS EXPECTED TO GRADUALLY
MIGRATE TO THE EAST SOUTHEAST OF THE CANADIAN ROCKIES TODAY...AS A
LARGER SCALE TROUGH/CLOSED LOW SYSTEM BEGINS TO DIG TOWARD THE
BRITISH COLUMBIA COAST. THE FORMER SYSTEM WILL ALSO BE PRECEDED TO
THE SOUTH/EAST BY AN IMPULSE WITHIN THE STREAM EMANATING FROM THE
NORTHEAST PACIFIC...WHICH APPEARS LIKELY TO OVERSPREAD PARTS OF THE
NORTHERN ROCKIES/HIGH PLAINS DURING AND SHORTLY AFTER THE PEAK
AFTERNOON HEATING.

...NORTHEASTERN STATES...

MODELS SUGGEST DESTABILIZATION SUPPORTIVE OF SCATTERED STRONG/
LOCALLY SEVERE STORMS WILL OCCUR ACROSS A LARGE PORTION OF THE
NORTHEAST TODAY...PARTICULARLY NEW ENGLAND...WHERE DEEP LAYER SHEAR
BENEATH 30-50+ KT WESTERLY 500 MB FLOW WILL BE MODERATE TO STRONG.
A TIGHTER LOW-LEVEL THERMAL GRADIENT EXTENDING ACROSS NORTHERN NEW
YORK STATE/VERMONT AND NEW HAMPSHIRE INTO SOUTHERN MAINE APPEARS
LIKELY TO BE THE FOCUS FOR HIGHEST SEVERE PROBABILITIES. THIS IS
WHERE AN ORGANIZED STORM CLUSTER MAY EVOLVE IN RESPONSE TO FORCING
ASSOCIATED WITH THE UPPER IMPULSE PROGRESSING ACROSS REGION.
COUPLED WITH A STRENGTHENING BELT OF WESTERLY 850 MB FLOW...UP TO
40-50 KT...THIS WILL SUPPORT POTENTIAL FOR A SWATH OR SWATHS OF
DAMAGING WIND GUSTS...IN ADDITION TO THE RISK FOR HAIL AND LOCALIZED
DOWNBURSTS.