

indicates the presence of marked low-level convergence with a resultant lifting of the air column. Experience has shown that moderate to strong positive vorticity advection is probably present in all significant severe-weather outbreaks. Since the height and temperature changes

at 500 mb are closely associated with the fields of vorticity advection, both are of value in determining type of advection, orientation, and rate of movement of the vorticity pattern. These height and temperature changes at 500 mb supplement the NMC charts and are especially

Table 1 - Summary of Key Parameters

RANK	PARAMETER	WEAK	MODERATE	STRONG
1	500 mb Vorticity	Neutral or Negative Vort Advection	Contours Cross Vort Pattern 30°	Contours Cross at more than 30°
2	Stability	Lifted Index	-2	-3 to -5
		Totals	50	55
3	Middle Level	Jet	35K	35K-50K
		Shear	15K/90 nm	15K-30K/90 nm
4	Upper Level	Jet	55K	55 to 85K
		Shear	15K/90 nm	15K - 30K/90 nm
5	Low-Level Jet	20K	25K - 34K	35K
6	Low-Level Moisture	8	8 to 12	12
7	850-mb Max-Temp Field	E of Moist Ridge	Over Moist Ridge	W of Moist Ridge
8	700-mb No-Change Line	Winds Cross Line 20°	Winds Cross Line 20° to 40°	Winds Cross Line 40°
9	700-mb Dry-Air Intrusion	Not Available - or Available but weak Wind Field	Winds from Dry to Moist Intrude at an Angle of 10 to 40° are at least 15K	Winds Intrude at an Angle of 40° and are at least 25K
10	12-hr Sfc Pressure Falls		1 to 5 MB	5MB
11	500-mb Height Change	30 m	30 to 60 m	60 m
12	Height of Wet-Bulb-Zero above Sfc	Above 11000 ft Below 5000 ft	9000 to 11000 ft 5000 to 7000 ft	7000 to 9000 ft
13	Surface Pressure over Threat Area	1010 mb	1010 to 1005 mb	1005 mb
14	Sfc Dew Point	55°F	55° to 64°F	65°F