

TABLE I: Low- and Mid-Level Wind Speeds Over Albany, NY, For Selected Times During Mohawk–Hudson Convergence Events

Date/Time (UTC)	850-hPa Wind Speed (m s⁻¹)	925-hPa Wind Speed (m s⁻¹)
021127/21	7.5	5.0
021217/00	12.5	10.0
030123/21	7.5	7.5
050117/12	10.0	5.0
060303/03	10.0	7.5
070129/06	7.5	5.0

TABLE II: Dates and Times of Six Original Mohawk–Hudson Convergence Case Studies, and Relative Observation Time Classification Scheme for Each

Storm	Date	Time	Relative Observation Time Classifications
Nov. 2002	27	1500 UTC–2300 UTC	Beginning: 1500 UTC–1600 UTC
			Middle: 1700 UTC–2000 UTC
			End: 2100 UTC–2300 UTC
Dec. 2002	16–17	2000 UTC–0600 UTC	Beginning: 2000 UTC–2200 UTC
			Middle: 2300 UTC–0300 UTC
			End: 0400 UTC–0600 UTC
Jan. 2003	23	1900 UTC–2300 UTC	Beginning: 1900 UTC–1900 UTC
			Middle: 2000 UTC–2200 UTC
			End: 2300 UTC–2300 UTC
Jan. 2005	17	1100 UTC–1500 UTC	Beginning: 1100 UTC–1100 UTC
			Middle: 1200 UTC–1400 UTC
			End: 1500 UTC–1500 UTC
Mar. 2006	3	0200 UTC–0700 UTC	Beginning: 0200 UTC–0200 UTC
			Middle: 0300 UTC–0500 UTC
			End: 0600 UTC–0700 UTC
Jan. 2007	29	0300 UTC–1200 UTC	Beginning: 0300 UTC–0400 UTC
			Middle: 0500 UTC–1100 UTC
			End: 1200 UTC–1200 UTC

TABLE III: Number of Surface Wind Direction Reports During Six Original Mohawk–Hudson Convergence Events

Wind Direction	Observation Site		
	KALB	KUCA/KSYR	KGFL
000°	4	1	1
010°	4	2	0
020°	7	0	2
030°	7	0	2
040°	2	0	6
050°	1	0	7
060°	0	0	4
070°	0	0	4
080°	0	0	4
090°	0	0	0
100°	0	0	1
110°	0	0	0
120°	0	0	0
130°	0	0	0
140°	0	0	0
150°	0	0	0
160°	0	0	0
170°	0	0	0
180°	0	0	0
190°	0	0	0
200°	0	0	0
210°	0	0	0
220°	0	0	0
230°	0	0	0
240°	0	0	0
250°	0	0	0
260°	0	1	0
270°	0	2	0
280°	0	4	0
290°	0	11	1
300°	4	8	1
310°	7	1	1
320°	3	6	1
330°	3	1	2

Wind Direction	Observation Site		
	KALB	KUCA/KSYR	KGFL
340°	3	4	3
350°	1	2	1
Calm	0	2	6
TOTALS	46	45	47

**TABLE IV: Number of Surface Wind Direction Reports at KALB
During Six Original Mohawk–Hudson Convergence Events,
Classified by Relative Observation Time (Event Maturity)**

Wind Direction	Relative Observation Time		
	Beginning	Middle	End
000°	3	1	0
010°	1	2	1
020°	1	4	2
030°	2	5	0
040°	0	2	0
050°	0	1	0
060°	0	0	0
070°	0	0	0
080°	0	0	0
090°	0	0	0
100°	0	0	0
110°	0	0	0
120°	0	0	0
130°	0	0	0
140°	0	0	0
150°	0	0	0
160°	0	0	0
170°	0	0	0
180°	0	0	0
190°	0	0	0
200°	0	0	0
210°	0	0	0
220°	0	0	0
230°	0	0	0
240°	0	0	0
250°	0	0	0
260°	0	0	0
270°	0	0	0
280°	0	0	0
290°	0	0	0
300°	0	1	3
310°	1	5	1
320°	1	2	0

Wind Direction	Relative Observation Time		
	Beginning	Middle	End
330°	1	0	2
340°	0	1	2
350°	0	1	0
Calm	0	0	0
TOTALS	10	25	11

**TABLE V: Summary of Important Parameters For
Mohawk–Hudson Convergence Case Studies**

<i>PARAMETERS</i>		2100 UTC 27 Nov. 02	0000 UTC 17 Dec. 02	2100 UTC 23 Jan. 03
Temperature Advection ($10^{-5} \text{ }^\circ\text{C s}^{-1}$)	925 hPa	-10.0	-17.9	-7.0
	850 hPa	-14.5	-7.1	52.2
	700 hPa	-10.0	0.1	13.8
Ascent ($\mu\text{b s}^{-1}$)	925 hPa	-1.5	0.0	-0.3
	850 hPa	-0.8	0.5	-2.8
	700 hPa	0.8	2.6	-4.0
500-hPa Abs. Vort. Advection		AVA	AVA	AVA
(Classification)		(Weak)	(Weak)	(Weak)
700-hPa Rel. Vort. Advection By Thermal Wind		0	0	AVA
(Classification)		---	---	(Weak)
Cloud Top Temperature (Inferred Pressure Level)		-14 $^\circ\text{C}$ 840 hPa	-18 $^\circ\text{C}$ 650 hPa	-22 $^\circ\text{C}$ 675 hPa
Top of Moist Layer		825 hPa	700 hPa	650 hPa
Precipitable Water		3.8 mm	7.1 mm	3.8 mm
(% of Normal)		60%	90%	60%
MLCAPE (J kg^{-1}) (* denotes MUCAPE)		0	0*	0
Lifted Index (* denotes MULI)		+10 $^\circ\text{C}$	+4 $^\circ\text{C}$ *	+26 $^\circ\text{C}$
Surface–2km Shear		3 m s^{-1}	3 m s^{-1}	10 m s^{-1}

PARAMETERS	1200 UTC 17 Jan. 05	0300 UTC 3 Mar. 06	0600 UTC 29 Jan. 07
Temperature Advection ($1 \times 10^{-5} \text{ }^\circ\text{C s}^{-1}$)	-8.7	-13.5	-12.5
	-14.1	-20.7	-10.2
	-20.5	-7.6	-11.0
Ascent ($\mu\text{b s}^{-1}$)	-0.7	-1.4	-2.2
	-0.2	-0.6	-1.6
	-0.3	0.4	-1.0
500-hPa Abs. Vort. Advection	CVA	AVA	CVA
(Classification)	(Weak)	(Weak)	(Weak)
700-hPa Rel. Vort. Advection			
By Thermal Wind	0	AVA	0
(Classification)	---	(Weak)	---
Cloud Top Temperature	-28°C	-20°C	-20°C
(Inferred Pressure Level)	600 hPa	525 hPa	775 hPa
Top of Moist Layer	500 hPa	500 hPa	750 hPa
Precipitable Water	4.6 mm	6.4 mm	3.8 mm
(% of Normal)	72%	65%	60%
MLCAPE (J kg^{-1})	0	0	0
(* denotes MUCAPE)			
Lifted Index	+14°C	+20°C	+16°C
(* denotes MULI)			
Surface–2km Shear	6 m s^{-1}	6 m s^{-1}	5 m s^{-1}

Abs. = Absolute Rel. = Relative Vort. = Vorticity

AVA = Anticyclonic Vorticity Advection CVA = Cyclonic Vorticity Advection

MLCAPE = Mixed-Layer Convective Available Potential Energy

MUCAPE = Most-Unstable Convective Available Potential Energy

MULI = Most-Unstable Lifted Index

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