

SURFACE WEATHER OBSERVATIONS

TYPE	TIME (LST)	SKY AND CEILING (Hundreds of Feet)	VISIBILITY (Miles)		WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (Mbs.)	TEMP. (°F)	DEW PT. (°F)	WIND		ALTIMETER SETTING (In.)	REMARKS AND SUPPLEMENTAL CODED DATA	SEA LEVEL PRESS. (Mbs.)		
			SURFACE	TOWER					DIRECTION (100-360)	SPEED (Kts.)					
(1)	(2)	(3)	(4)	(4a)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
R	0055	E120(1)250(1)	10			061.54	42	13	03		971				
R	0155	E120(1)250(1)	10			050.55	42	15	08		968				
R	0255	E120(1)250(1)	10			043.54	43	14	08		966	720	1078		
R	0355	250(1)200(1)E250(1)	10			046.53	44	14	07		967				
RS	0455	M22(1)	10			040.54	46	00	00		965				
R	0555	M22(1)35(1)	10			040.57	50	15	09		965				
		72423 R1509	66032		04014	85511	16803				6986.5	46853			
S	0615	250(1)400(1)E100(1)	10					13	08		963	40(1)V(1)			
R	0655	400(1)E100(1)250(1)	10			030.60	54	15	10		962				
R	0755	200(1)E45(1)100(1)	10			026.62	56	16	12		961				
S	0820	200(1)138(1)100(1)	7		TRW			21	08		962	TB20 TSW MOVG NE LTGIC SW			
RS	0855	200(1)M34(1)100(1)	7			030.64	58	18	08		962	TE40 MOVG NE RE35 PKWIND 15/1145 SWR01 157/			
R	0955	300(1)E20(1)250(1)	7			016.70	62	18	16		958				
R	1055	M32(1)250(1)	7			998.75	63	18	18	G29	953				
R	1155	M32(1)	7			998.77	64	18	19	G27	950				
		72423 C1819	C1029		98825	C1500	18647	69814			70140	20001	47753(1)		
R	1255	M34(1)250(1)	7			960.78	63	18	21	G30	942	PRESRR			
R	1355	M36(1)250(1)	7			950.77	62	18	19	G30	939				
RS	1439	E45(1)	10		T			19	25		957	TB38 TSW MOVG NE OCNL LTGIC SW	RDC		
R	1455	E45(1)	10		T	947.78	62	19	22	G31	956	TB38 SW MOVG NE OCNL LTGIC SW	RDC		
												SW SDF RADAR INDICATES HOOK ECHO 30 MINSW 236/30			
S	1540	M32(1)	4		TRW+			24	28	G73	957	PK WMO 26/35 29 742 1911			
RS	1555	E45(1)250(1)	7									TORNADO B31 JUST NORTH OF FIELD MOVG E	RDC		
RS	1555	E45(1)250(1)	7		TRW-	926.73	64	27	32	G54	932	TORNADO B31 E42 200 YDS NORTH OF ARPT MOVG E RB00 OCNL LTGICCG E PKWIND 24/73 37 AB30 E41	RDC		
												HAIL 1/2 IN LONEST PRES 887 2152			
RS	1614	E45(1)250(1)	7					21	18	G26	956	TE14 MOVG E RE14 PRESRR	RDC		
R	1655	45(1)E250(1)	10			940.73	62	21	17		956	TE14 RE14 MOVG E PKWIND 2126 13	RDC		
R	1755	E45(1)250(1)	7			940.73	62	20	15		986	TCU ALQDS	RDC		
		72423 62015	61029		940	23	52	602	17503		69770	70720	92273	20006	47953
R	1855	45(1)	7			944.72	61	18	09		957	TORNADO HAIL	RDC		
R	1855	45(1)	7			944.70	61	18	09		957	OCNL LTGIC E	RDC		
R	1955	O	7			947.72	62	20	14		956		RDC		
		1805										EARTHQUAKE FELT AB 50F			
R	2055	45(1)	7			950.71	63	20	11		959	210 1100	RDC		
R	2155	E50(1)	7			956.72	63	18	18	G26	941		RDC		
RS	2255	E50(1)250(1)	7		T	948.70	62	18	20	G32	959	TB50 W-NW MOVG E OCNL LTGICCG	RDC		
												PK WIND 18/32 56			
S	2332	E20(1)30(1)	4		TRW+			27	18	G41	948	TALQDS FOT LTGICCG ALQDS MOVG ENE PKWIND 26/41 31	RDC		

A synoptic observation, in WMO code format FMI1D, is entered on the following related aviation observation.

FMI1D: IIIII Hddff VVwwW PPTT N1C1 hCUC4 T.J.1000 6P.P.P.P. TRRR15 8N.Ch.h.e. 95p5p5p 2R2R2R2R2R2 3P_w.H_w d_wd_wP_wH_wH_w 4T_xT_xT_x

Translations of highlighted sections on next page...

PRESFR: The barometric pressure was falling very rapidly

SDF RADAR INDICATES HOOK ECHO 30 MI SW: A “hook echo” on radar is an indicator of a possible tornado. The radar was probably seeing the Brandenburg F5.

TORNADO B31 JUST NORTH OF FIELD MOVG E: At 31 minutes after the hour, National Weather Service officials witnessed the birth of the Louisville tornado as it touched down just west of the State Fairgrounds.

TORNADO B31 E42 200 YDS NORTH OF ARPT MOVD E RB00 OCNL LTGICCG E PK WND 24/73 AB30E41: The tornado began at 31 minutes after the hour 200 yards north of Standiford Field, moved east, and disappeared from the view of the weather observer at 42 minutes after the hour. Rain began at the top of the hour and was continuing. There was occasional lightning to the east of the airport. The strongest wind at the weather office was 84 miles per hour at 24 minutes after the hour. Hail fell from 30 minutes to 41 minutes after the hour.

EARTHQUAKE FELT AT SDF: As if an F4 tornado wasn't enough, we also had an earthquake! It was a 4.7 on the Richter Scale and was centered in southeast Illinois about 30 miles southwest of Vincennes, Indiana.