

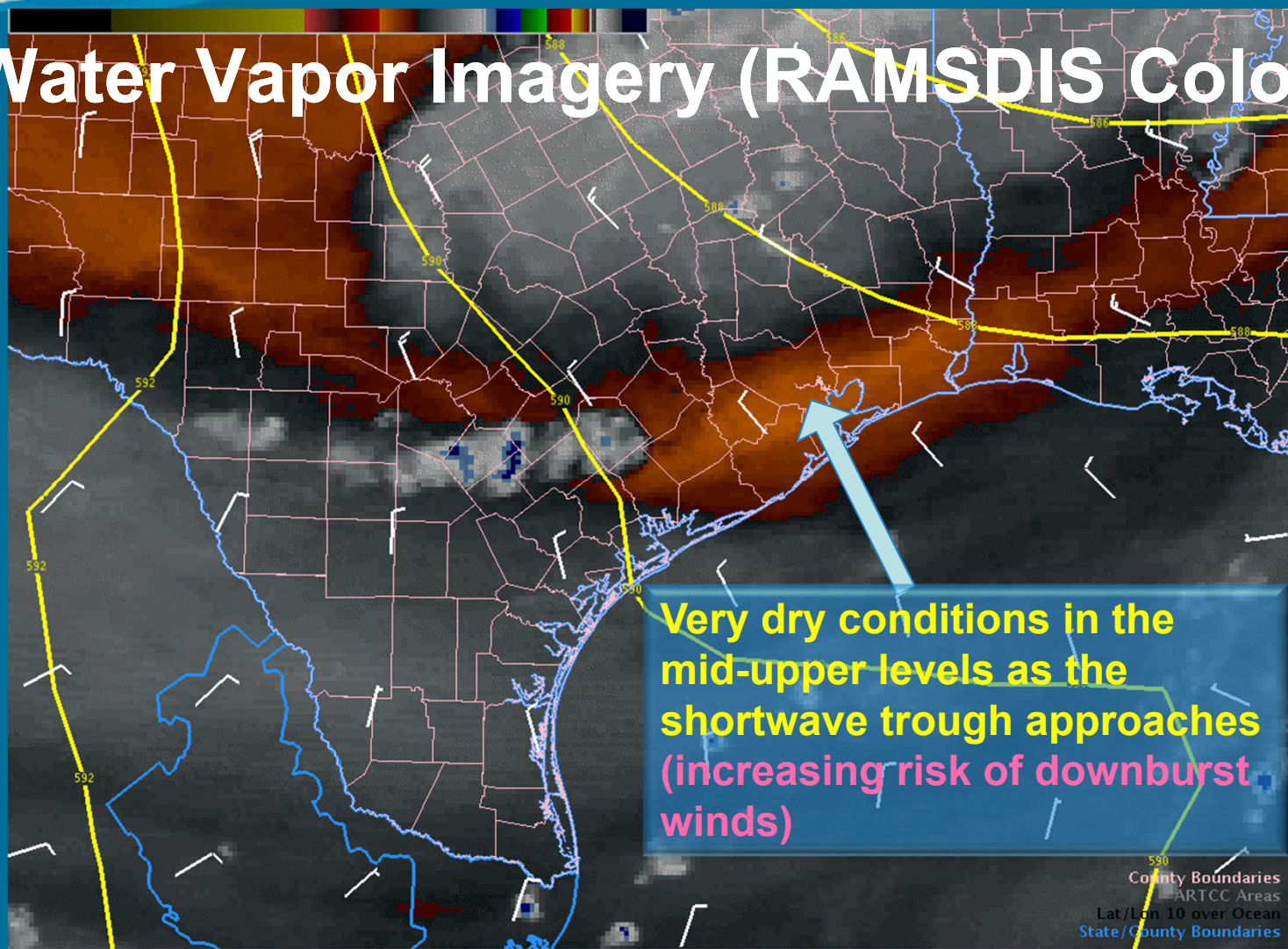
# Houston Severe Weather Event August 16, 2013



Photos courtesy of KTRK Channel 13 Houston



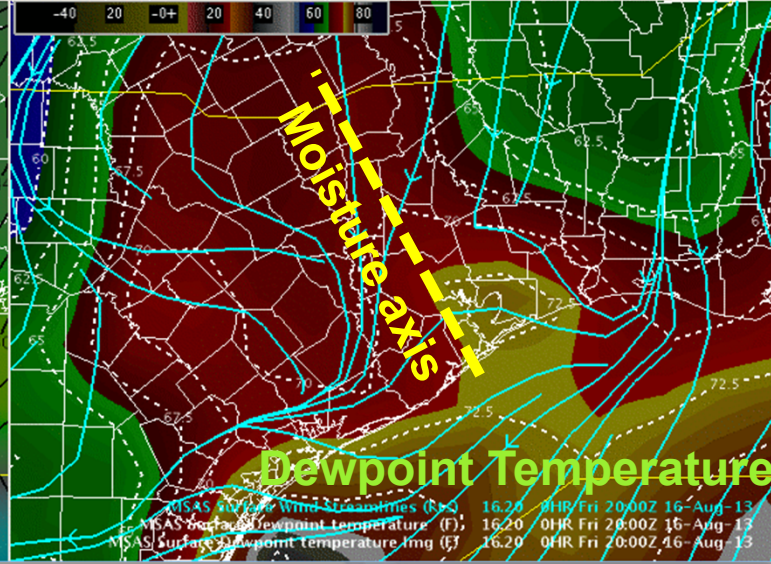
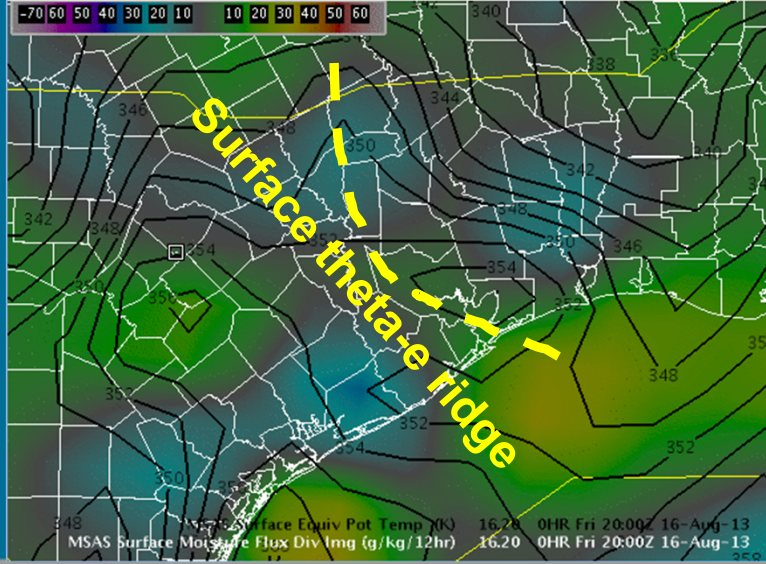
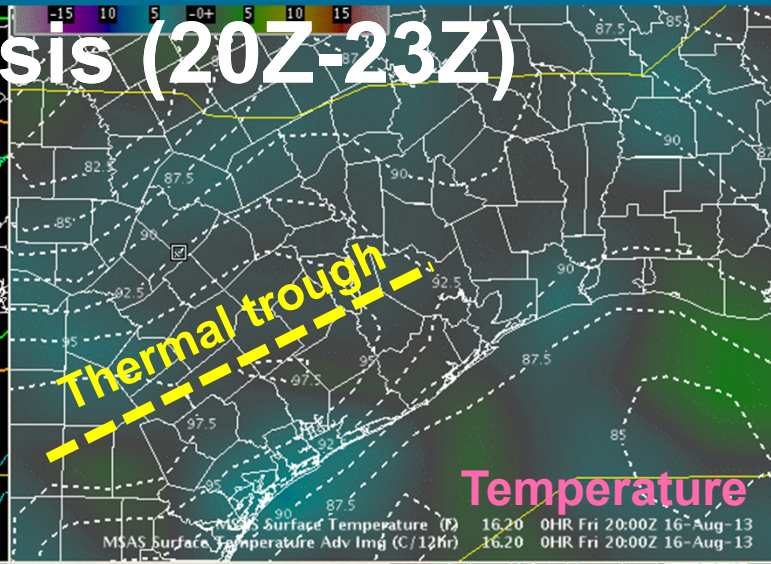
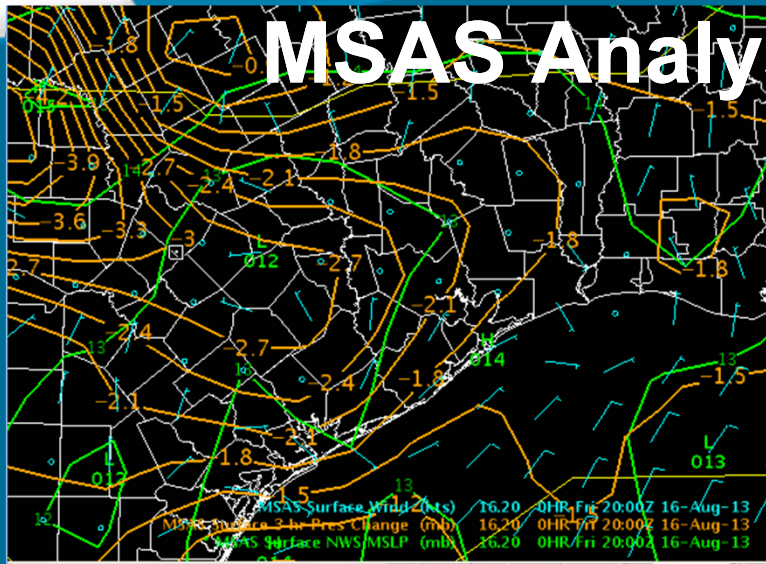
# Water Vapor Imagery (RAMSDIS Color)

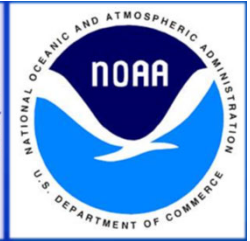


**Very dry conditions in the mid-upper levels as the shortwave trough approaches (increasing risk of downburst winds)**

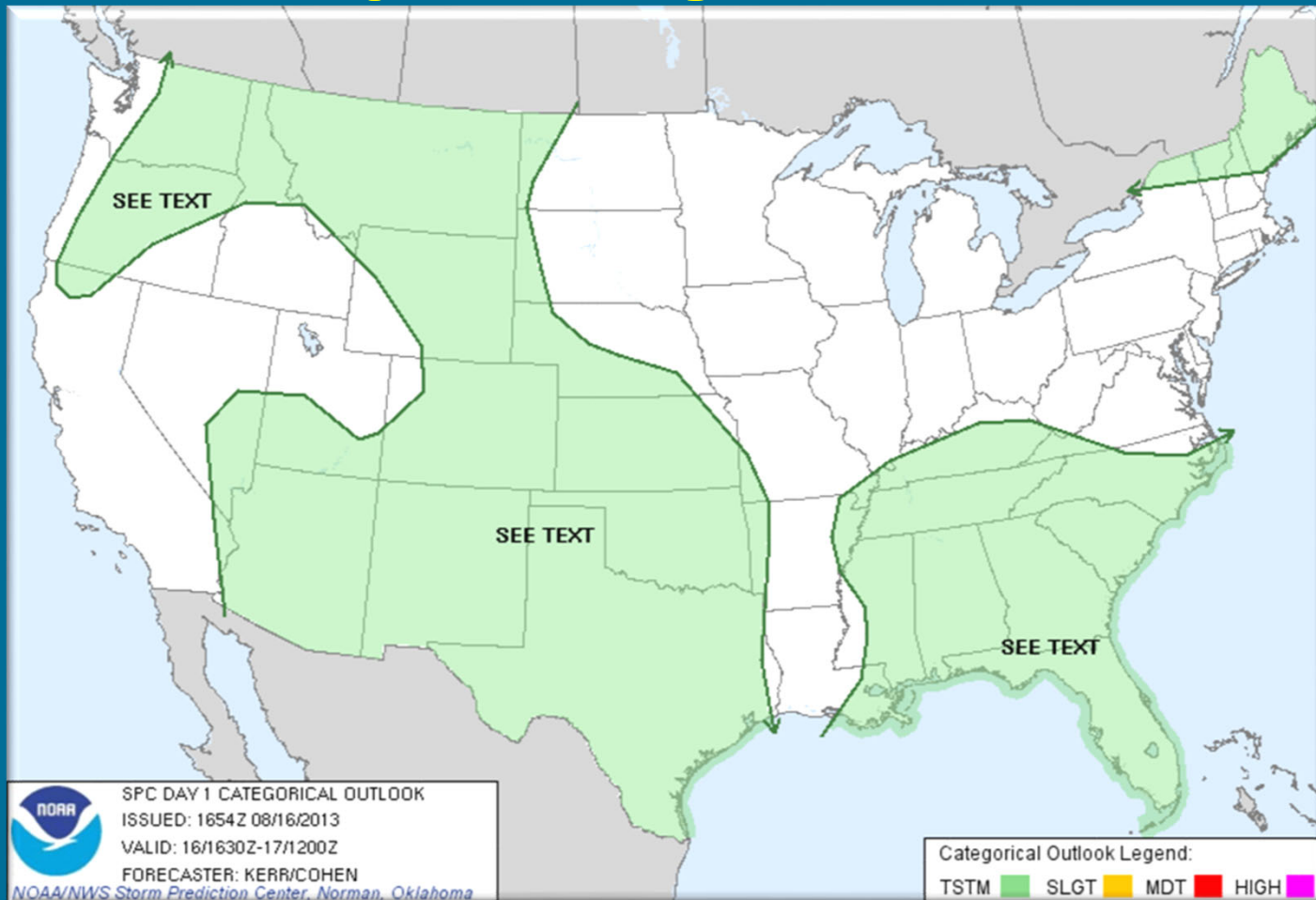


# MSAS Analysis (20Z-23Z)







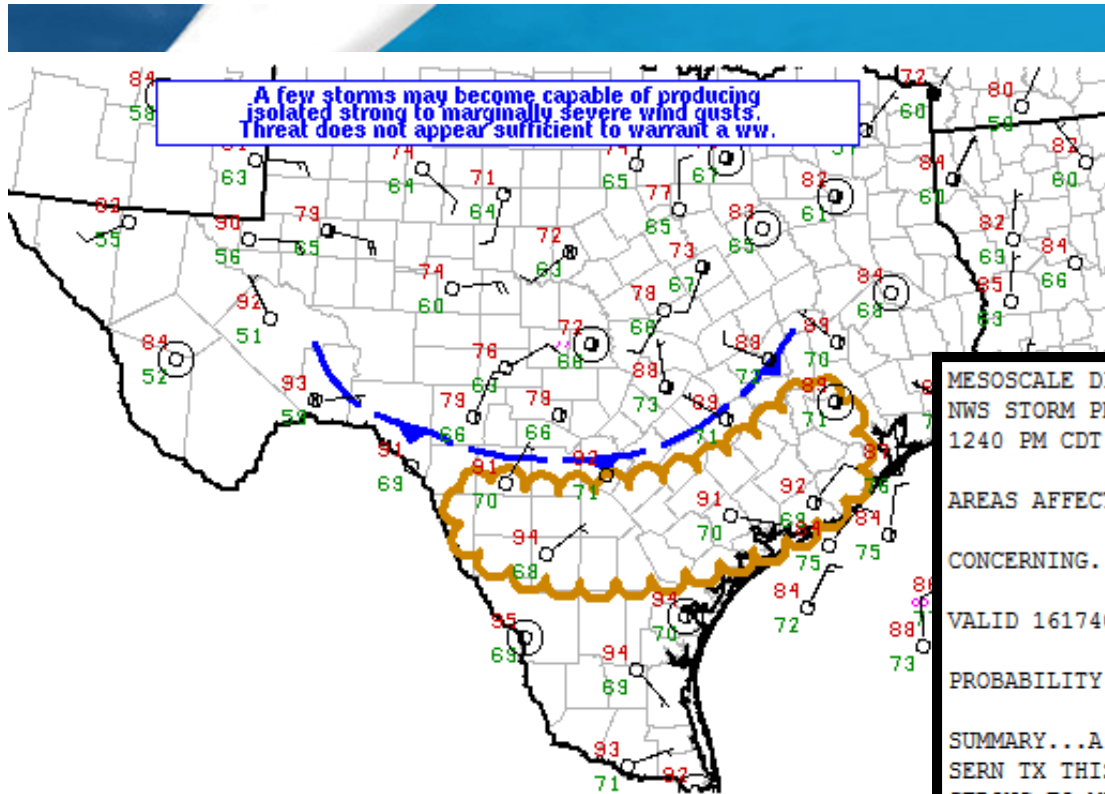


# SPC Day 1 Categorical Outlook



 SPC DAY 1 CATEGORICAL OUTLOOK  
ISSUED: 1654Z 08/16/2013  
VALID: 16/1630Z-17/1200Z  
FORECASTER: KERR/COHEN  
NOAA/NWS Storm Prediction Center, Norman, Oklahoma

Categorical Outlook Legend:  
TSTM  SLGT  MDT  HIGH 



SPC MCD #1729



MESOSCALE DISCUSSION 1729  
 NWS STORM PREDICTION CENTER NORMAN OK  
 1240 PM CDT FRI AUG 16 2013

AREAS AFFECTED...A PORTION OF SRN AND SERN TX  
 CONCERNING...SEVERE POTENTIAL...WATCH UNLIKELY

VALID 161740Z - 161945Z

PROBABILITY OF WATCH ISSUANCE...5 PERCENT

SUMMARY...A FEW STORMS DEVELOPING SWD THROUGH A PORTION OF SRN AND SERN TX THIS AFTERNOON MAY BECOME CAPABLE OF PRODUCING ISOLATED STRONG TO MARGINALLY SEVERE WIND GUSTS. OVERALL THREAT DOES NOT APPEAR SUFFICIENT TO WARRANT A WW.

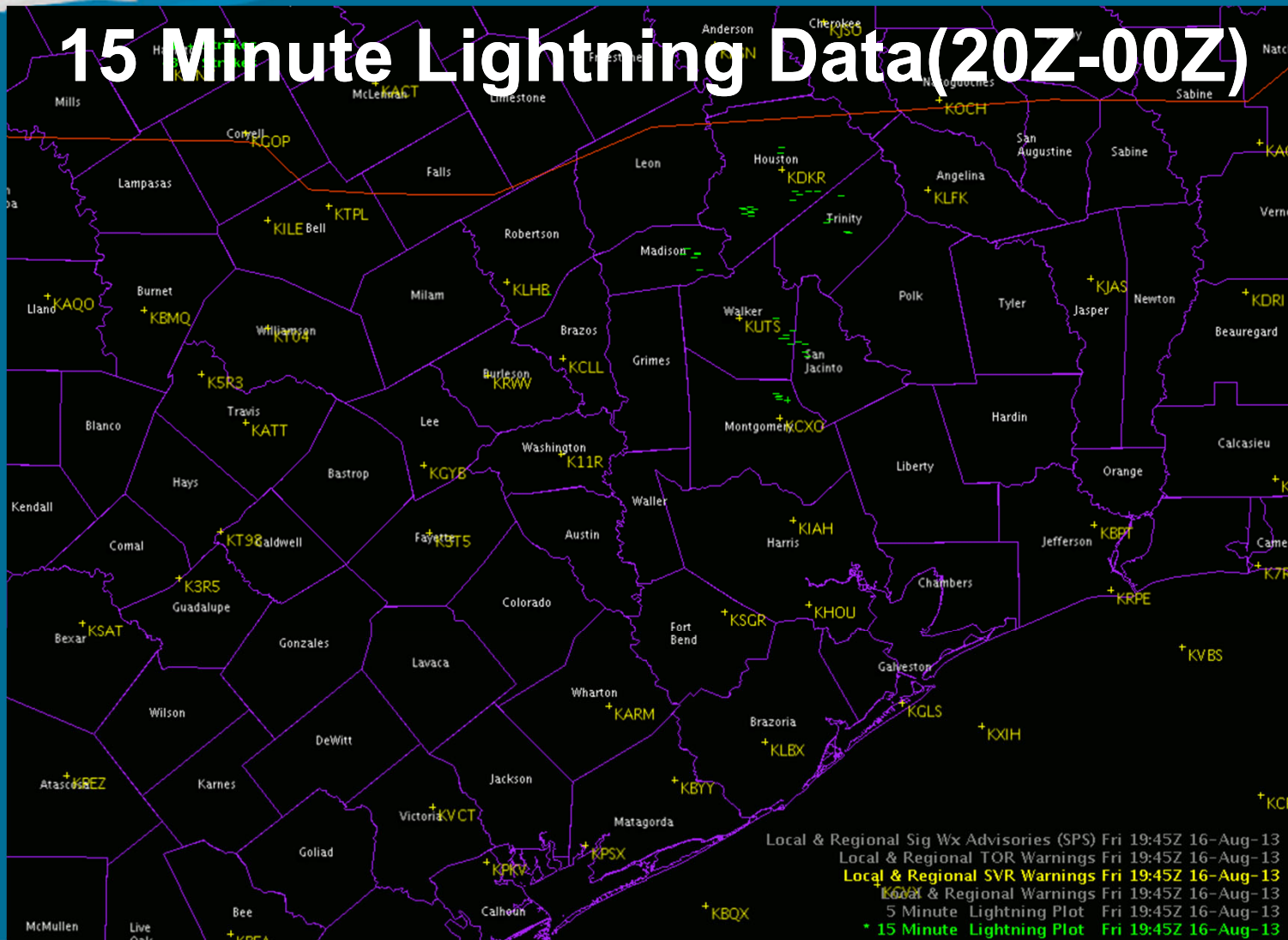
DISCUSSION...EARLY THIS AFTERNOON AN EXPANSIVE OUTFLOW BOUNDARY STRETCHES FROM HUNTSVILLE IN SERN TX WSWD TO JUST NORTH OF SAN ANTONIO THEN FARTHER WEST NEAR SANDERSON...AND IS MOVING SOUTH AT AROUND 20 KT. MOSTLY CLEAR SKIES HAVE PROMOTED STRONG INSOLATION SOUTH OF THIS FEATURE...WITH SFC TEMPERATURES CLIMBING INTO THE 90S ALONG WITH LOW 70S DEWPOINTS. DESPITE THE HIGH THETA-E BOUNDARY LAYER AIR...THERMODYNAMIC PROFILES ARE UNIMPRESSIVE WITH MLCAPE LIMITED TO 1500-2000 J/KG DUE TO WARM AIR ALOFT AND WEAK MIDDLE-LEVEL LAPSE RATES. DESTABILIZATION AND CONVERGENCE ALONG THE OUTFLOW BOUNDARY HAVE FOSTERED INITIATION OF SCATTERED STORMS OVER SCNTRL TX. THE STEEPENING LOW-LEVEL LAPSE RATES MAY CONTRIBUTE TO A THREAT OF ISOLATED STRONG WIND GUSTS WITH SOME OF THE STORMS. HOWEVER...WEAK VERTICAL SHEAR AND MID-LEVEL LAPSE RATES SUGGEST AN ORGANIZED SEVERE EVENT IS UNLIKELY.

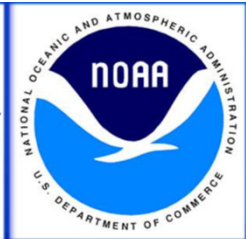
..DIAL/KERR.. 08/16/2013

# SPC Mesoscale Discussion 1729

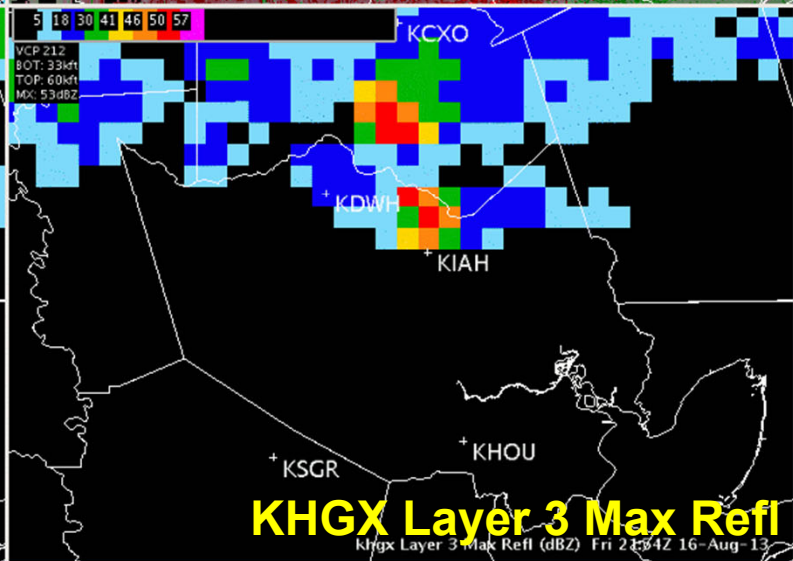
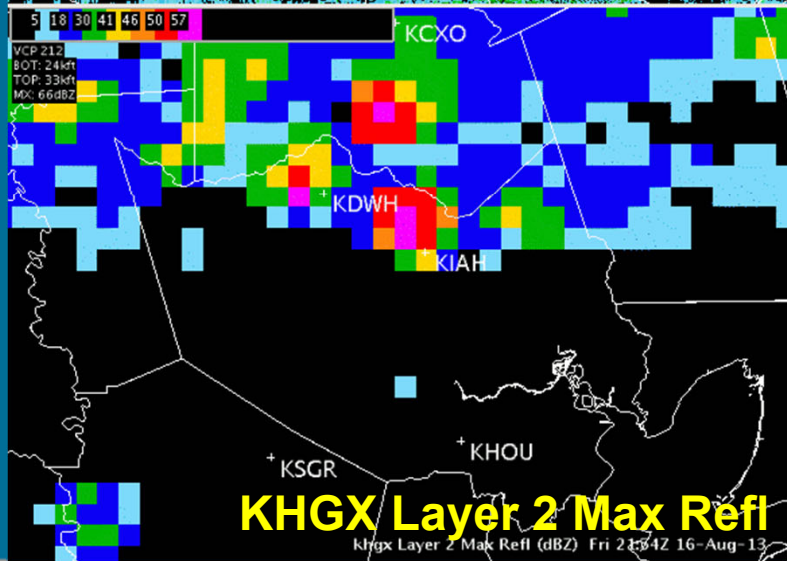
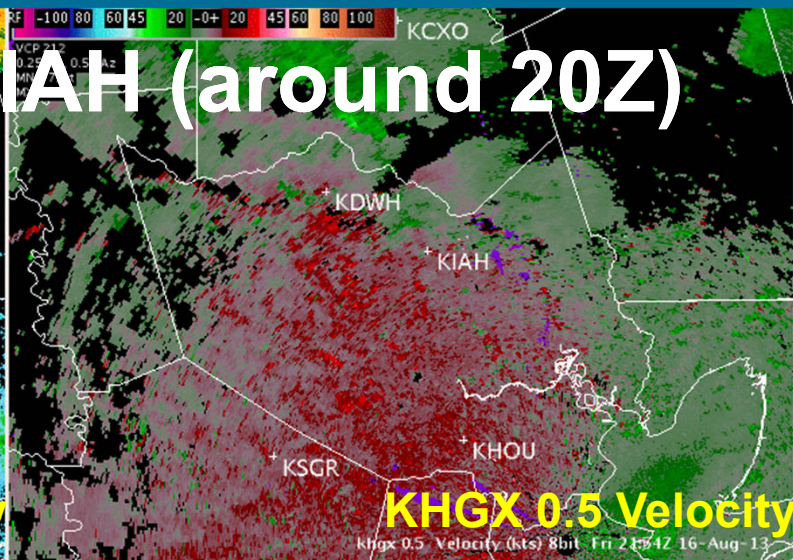
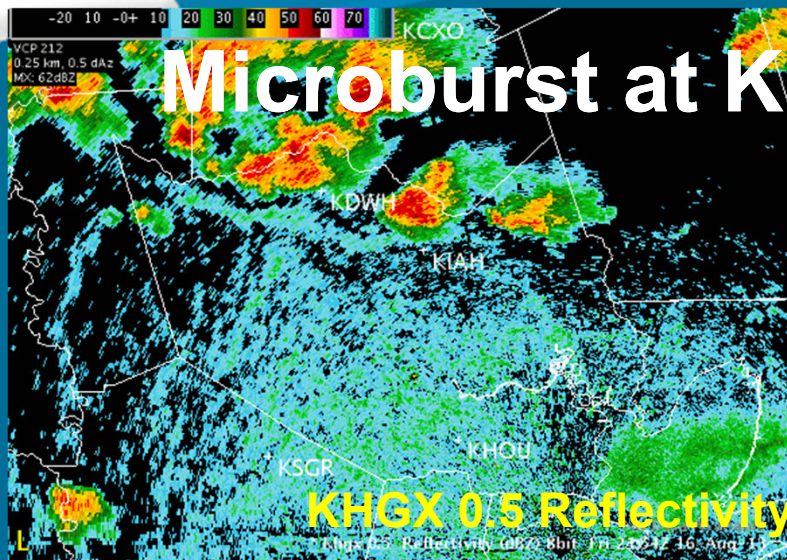


# 15 Minute Lightning Data(20Z-00Z)





# Microburst at KIAH (around 20Z)

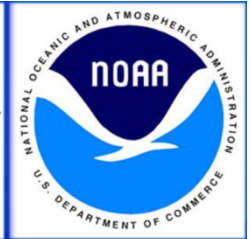




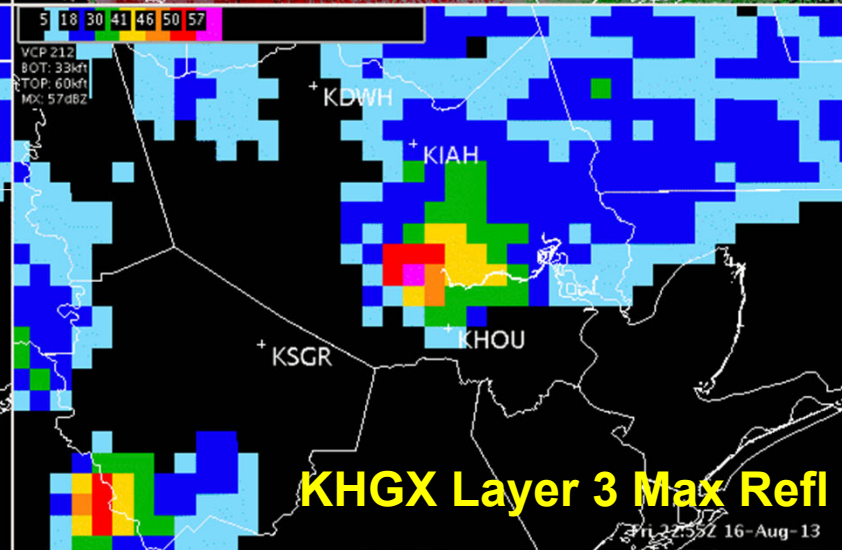
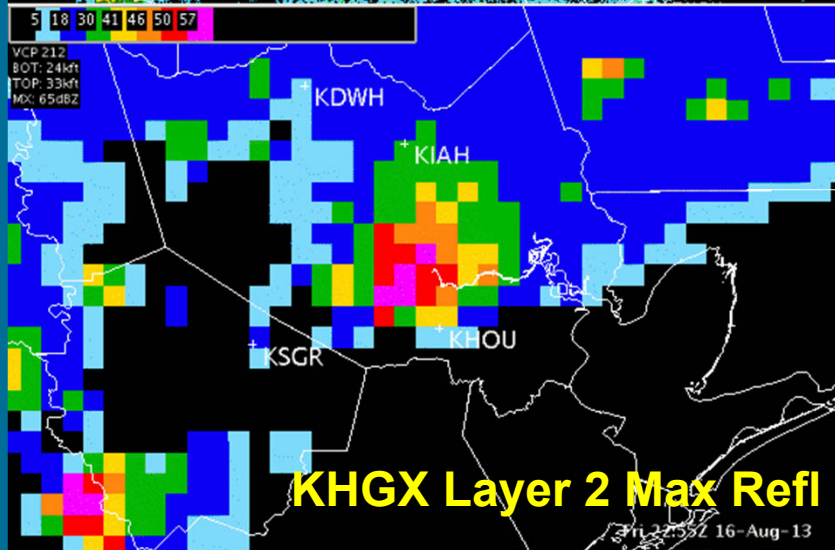
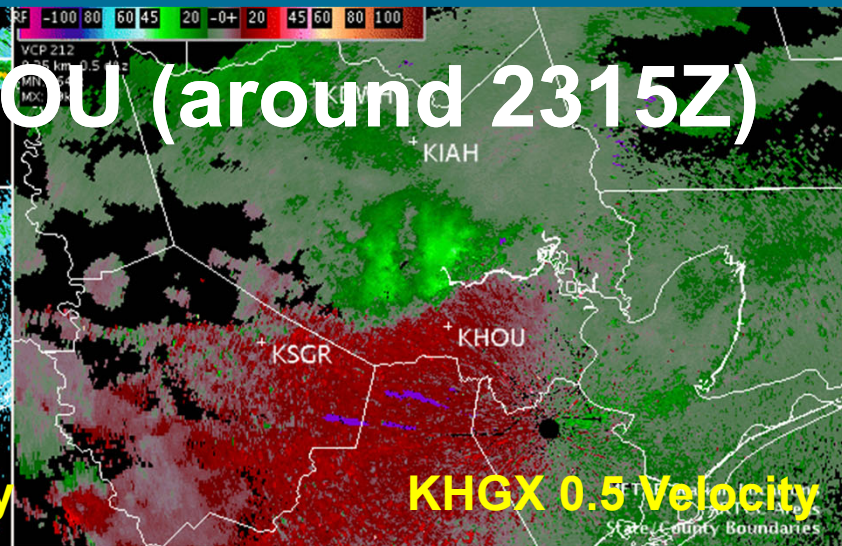
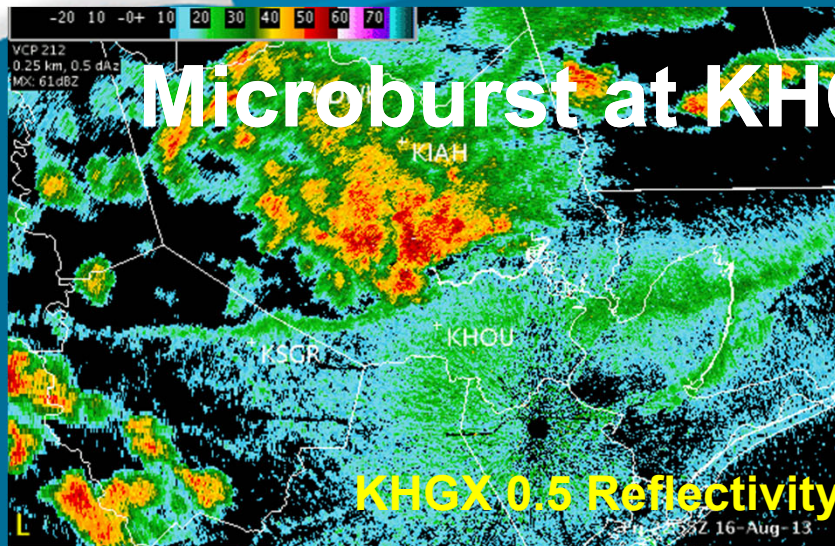
# Weather Observations for: Houston, Houston Intercontinental Airport

Time (CDT)	Temp. (f)	Dew (f)	Relative Humidity (%)	Wind Direction	Wind Speed (mph)	Visibility (miles)	WX	Clouds
16 Aug 6:53 pm CDT	73	72	96	SSE	3	10.00	-RA	FEW039 BKN110 BKN250
16 Aug 6:32 pm CDT	73	72	94	S	5	6.00	-RA	FEW040 BKN110 BKN250
16 Aug 5:53 pm CDT	73	70	90	NW	7	5.00	+TSRA	SCT012 SCT045CB BKN080 OVC250
16 Aug 5:48 pm CDT	73	70	89	NNW	6	5.00	-TSRA	SCT012 SCT045CB BKN080 OVC250
16 Aug 5:31 pm CDT	72	70	94	ESE	9G47	0.75	+TSRA	FEW010 BKN045CB OVC075
16 Aug 5:25 pm CDT	73	70	89	ENE	21G47	0.75	+TSRA	FEW010 BKN045CB OVC075
16 Aug 5:16 pm CDT	73	70	89	WSW	13G51	0.50	+TSGRRA	FEW010 BKN045CB OVC080
16 Aug 5:09 pm CDT	82	73	74	NNW	43G51	2.00	+TSRA	FEW040CB BKN075 OVC250
16 Aug 5:08 pm CDT	84	73	70	NNW	37G46	1.75	+TSRA	SCT050CB BKN080 BKN250
16 Aug 4:57 pm CDT	91	70	49	SE	12	10.00	TS	SCT050CB BKN080 BKN250
16 Aug 4:53 pm CDT	93	70	47	E	8	10.00		SCT050 BKN080 BKN250
16 Aug 3:53 pm CDT	93	71	49	VRBL	3	10.00		SCT060 SCT100 SCT250
16 Aug 2:53 pm CDT	92	70	49	VRBL	5	10.00		SCT050 SCT250
16 Aug 1:53 pm CDT	91	70	50	CALM		10.00		SCT050
16 Aug 12:53 pm CDT	90	71	54	NE	6	10.00		SCT041
16 Aug 11:53 am CDT	90	72	56	VRBL	5	10.00		SCT038 BKN050
16 Aug 10:53 am CDT	86	72	62	ENE	5	10.00		FEW027 SCT250
16 Aug 9:53 am CDT	83	74	74	N	6	9.00		FEW020 SCT250
16 Aug 8:53 am CDT	80	74	82	NNE	5	9.00		CLR
16 Aug 7:53 am CDT	77	75	94	NNE	5	5.00	BR	CLR
16 Aug 6:53 am CDT	75	74	96	N	3	7.00		FEW070 SCT250





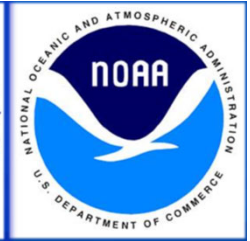
# Microburst at KHOU (around 2315Z)



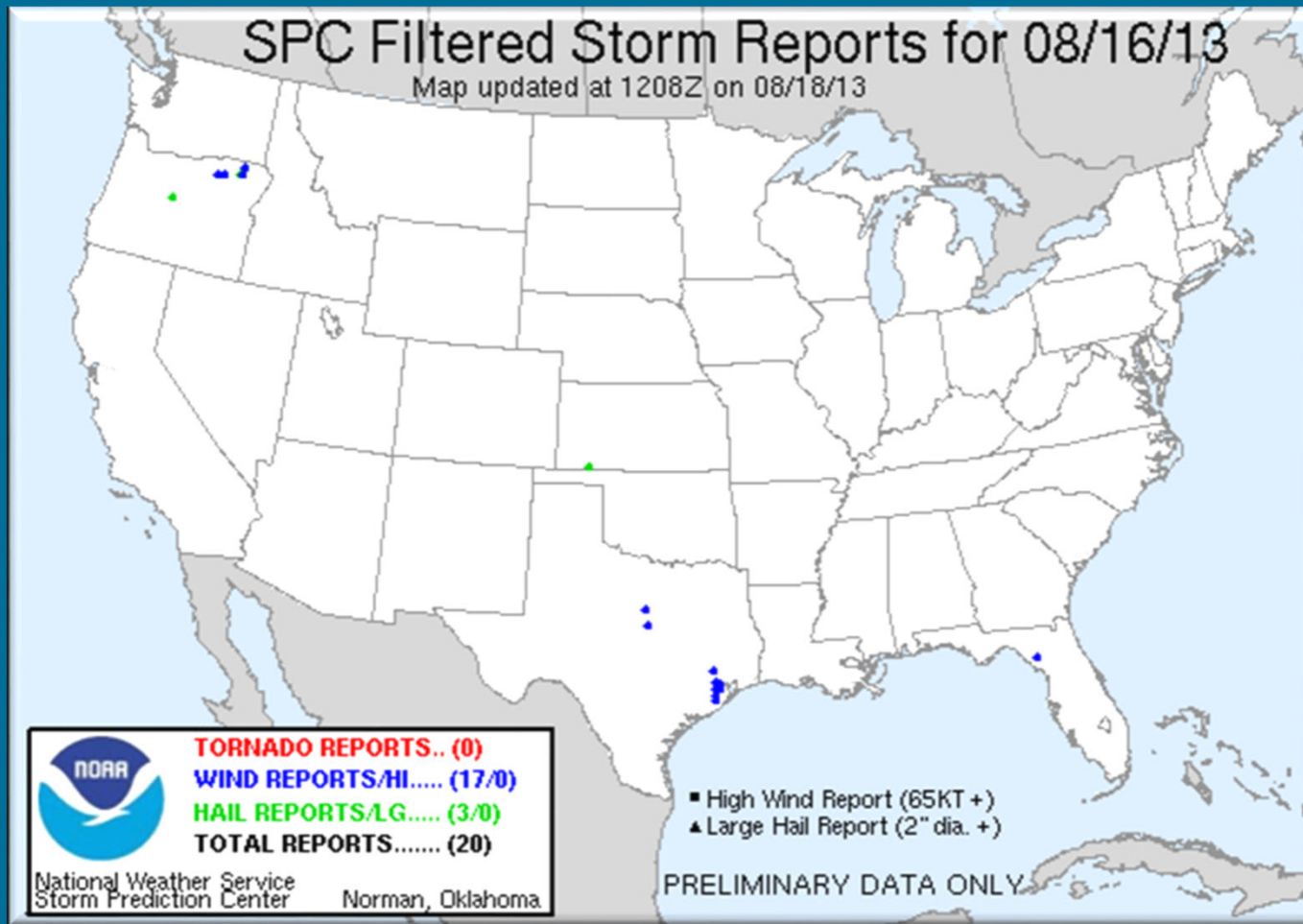


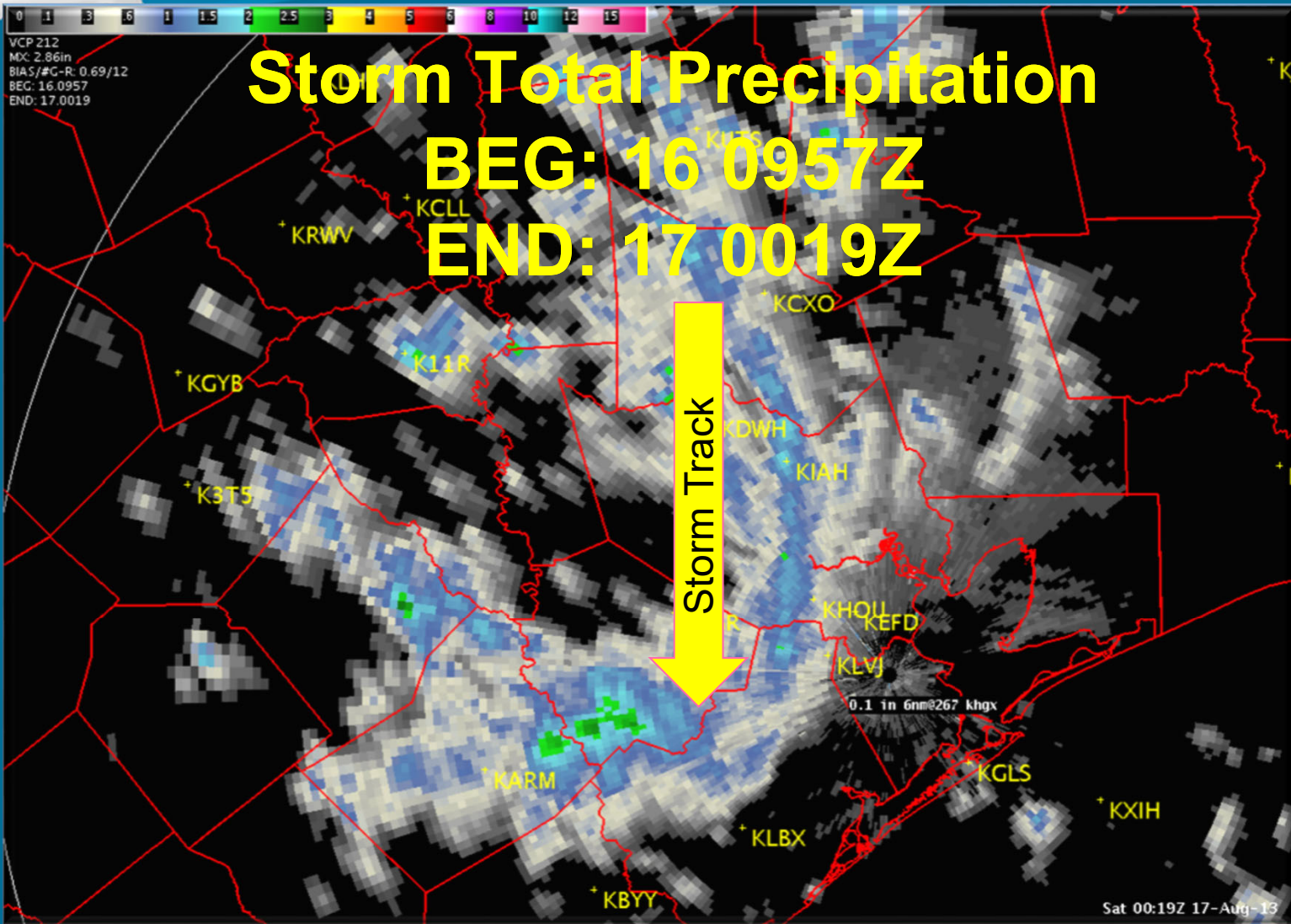
# Weather Observations for: Houston, Houston Hobby Airport

Time (CDT)	Temp. (f)	Dew (f)	Relative Humidity (%)	Wind Direction	Wind Speed (mph)	Visibility (miles)	WX	Clouds
16 Aug 7:19 pm CDT	75	72	89	CALM		10.00	-RA	FEW065 BKN110
16 Aug 6:53 pm CDT	73	70	90	NNE	5	8.00	-TSRA	FEW009 BKN041CB OVC070
16 Aug 6:45 pm CDT	73	70	89	CALM		8.00	-TSRA	FEW009 BKN041CB OVC070
16 Aug 6:34 pm CDT	73	70	89	WNW	12G24	2.00	+TSRA BR	FEW009 BKN041CB OVC049
16 Aug 6:21 pm CDT	73	70	89	N	20G53	0.75	+TSRA BR SQ	FEW011 SCT024 BKN049CB BKN250
16 Aug 6:13 pm CDT	75	70	83	N	14G39	1.00	+TSRA SQ	FEW026 SCT047CB BKN100 BKN250
16 Aug 5:53 pm CDT	90	70	52	E	15G20	10.00	TS	SCT050CB BKN250
16 Aug 4:53 pm CDT	90	71	54	E	10	10.00		SCT050 SCT250
16 Aug 3:53 pm CDT	92	69	47	E	5	10.00		FEW050 SCT250
16 Aug 2:53 pm CDT	91	69	49	VRBL	5	10.00		SCT050
16 Aug 1:53 pm CDT	92	70	49	VRBL	6	10.00		SCT045
16 Aug 12:53 pm CDT	90	69	51	CALM		10.00		SCT040
16 Aug 11:53 am CDT	88	70	55	CALM		10.00		SCT035
16 Aug 10:53 am CDT	86	72	62	VRBL	5	10.00		SCT025
16 Aug 9:53 am CDT	83	73	72	N	6	10.00		FEW020
16 Aug 8:53 am CDT	82	74	77	N	8	8.00		FEW020
16 Aug 7:53 am CDT	80	74	82	VRBL	6	10.00		FEW020 SCT120 SCT250
16 Aug 6:53 am CDT	77	73	89	CALM		10.00		FEW020 SCT110 BKN250
16 Aug 5:53 am CDT	78	74	87	CALM		10.00		OVC110
16 Aug 4:53 am CDT	79	73	82	CALM		10.00		BKN080 BKN250



# Storm (Wind) Reports





# Storm Total Precipitation

**BEG: 16 0957Z**  
**END: 17 0019Z**

Storm Track