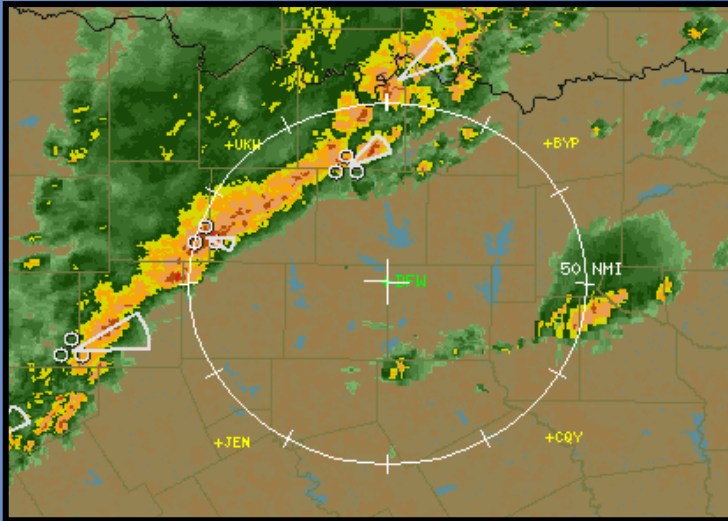


# *Convective Weather Initiatives*



*November 11, 2005*



# WSI Corporate Summary



- **Company Overview**

- Established 1978
- U.S. Headquarters in Andover, MA
- European Office in Birmingham, U.K.



- **Weather-driven business solutions**

- Aviation
  - Preflight briefing
  - In-flight cockpit weather
  - Complete airline EWINS capable forecasting solutions
- Media – On-air shows & storm center services for broadcast & cable television
- Energy – Services for traders and T&D decision makers



- **A subsidiary of Landmark Communications**

- Sister company to The Weather Channel & weather.com



Landmark Communications

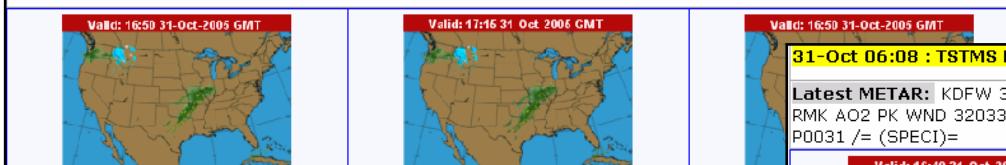
(trust·ed)

# Convective Initiatives 2005- HUBCAST



- Implemented HUBCAST
  - High temporal granularity forecasts presented as graphical decision aid
  - Concept used and evaluated during FAA proof of concept trial with favorable verification results
  - Currently in use at American Airlines, BAA, and TNT

Latest METAR: KBOS 311554Z 23009KT 10SM SCT250 17/02 A3012 RMK AO2 SLP198 T01720022=



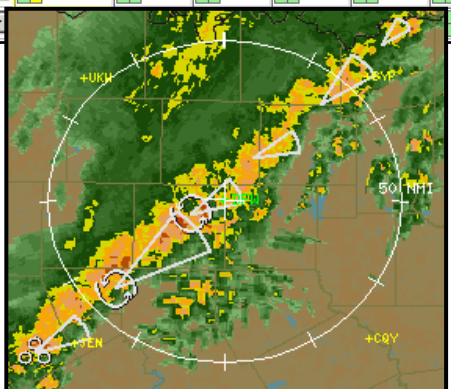
**31-Oct 06:08 : TSTMS EXPECTED IN THE DFW METROPLEX FROM MID MORNG INTO THE EARLY AFTN.**

Latest METAR: KDFW 311621Z 34016G26KT 2SM R17C/4500VP6000FT TSRA BR SCT010 BKN019 OVC043 16/14 A3008 RMK AO2 PK WND 32033/1607 WSHFT 1601 TWR VIS 2 1/2 RAB01 OCNL LTGCG W-N TS OHD MOV NE CB OHD MOV NE P0031 /= (SPECI)=



Updated: 16:25Z

STN	RWY	NOW	17Z	18Z	19Z	20Z	21Z
<a href="#">BOS</a>	4R, 15R Circle to 4L/9						
<a href="#">DCA</a>	1, 33, 4						
<a href="#">DFW</a>	36L, 35C, 31R TRIP						
<a href="#">ORD</a>	Plan B Trip - 14R, 22R, 22L						
<a href="#">LGA</a>	22 / 13						



HOME

VALIDATION			DFW	NOW	FORECAST Updated: 16:25Z							
13Z	14Z	15Z	UTC	16Z	17Z	18Z	19Z	20Z	21Z	22Z	23Z	00Z
NSC	NSC	NSC	Ceiling	4100	1500	2000	2000	2500	2500	2500	3000	3500
UNL	UNL	UNL	Visibility	UNL	3	5	5	UNL	UNL	UNL	UNL	UNL
180	180	190	Wind Dir	200	320	320	320	330	330	330	330	340
14	17	19	Wind Speed	19	17	17	17	16	16	15	16	16
14	17	19	Gust Speed	23	28	25	25	25	25	25	25	25
NONE	NONE	NONE	Wx	TS	TSRA	-SHRA	-SHRA	NONE	NONE	NONE	NONE	NONE
NONE	NONE	NONE	TS	HIGH	MED	NONE	NONE	NONE	NONE	NONE	NONE	NONE

96-114 96-114 96-114 **AAR** 96-114 96-114 96-114 96-114 96-114 96-114 96-114 96-114 96-114

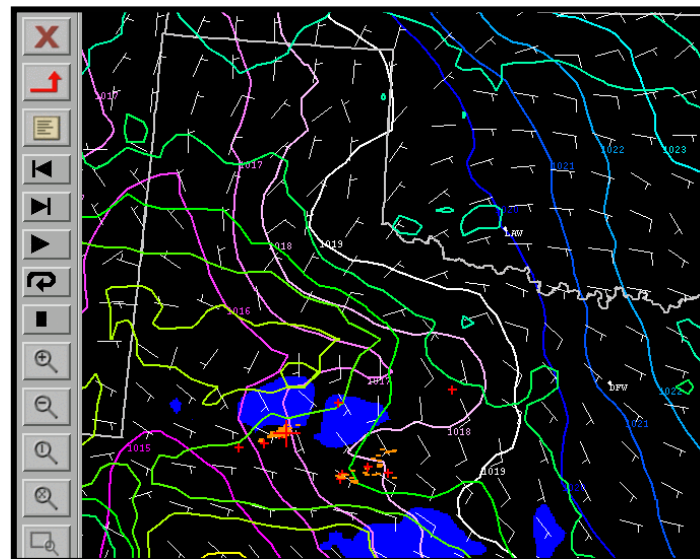
RUNWAYS:



# Convective Initiatives 2006



- Refinement of RPM numerical model and “advective” forecast guidance
  - Lightning density
  - Convective wind events
  - Weather type
  - Visibility
  - Ceiling
  - Turbulence
  - Icing
- Enhancements to our existing real-time monitoring and forecast verification system



detection_time	valid_time	site_id	bust_type	lead_time	fr_err	wx_miss	wx_f_a	wmdir_err	fcst_vis	obs_vis	vis_err	fcst_d
10/26 20:04	10/26 19:55	TJMZ	{WND_MS}	12:05:00	+0			-11	6.25	6.25		UNL
10/26 19:43	10/26 19:37	TJMZ	{WND_MS}	11:47:00	+0			-11	6.25	6.25		UNL
10/26 19:20	10/26 19:00	MBPV	{WND_FA}	02:57:00	+0			+14	6.25	5.0		080
10/26 18:30	10/26 18:00	TKPN	{CV_MS,WX_MS}	02:43:00	+1	{RA}			6.25	6.25	+0.00	250
10/26 18:17	10/26 18:00	MBPV	{WND_FA}	01:57:00	+0			+14	6.25	5.0		080
10/26 18:12	10/26 18:00	MTPP	{WX_FA}	06:50:00	+0		{VCTS}		6.25	6.25		060
10/26 17:00	10/26 17:00	MTPP	{WX_FA}	05:50:00	+0		{VCTS}		6.25	6.25		060