

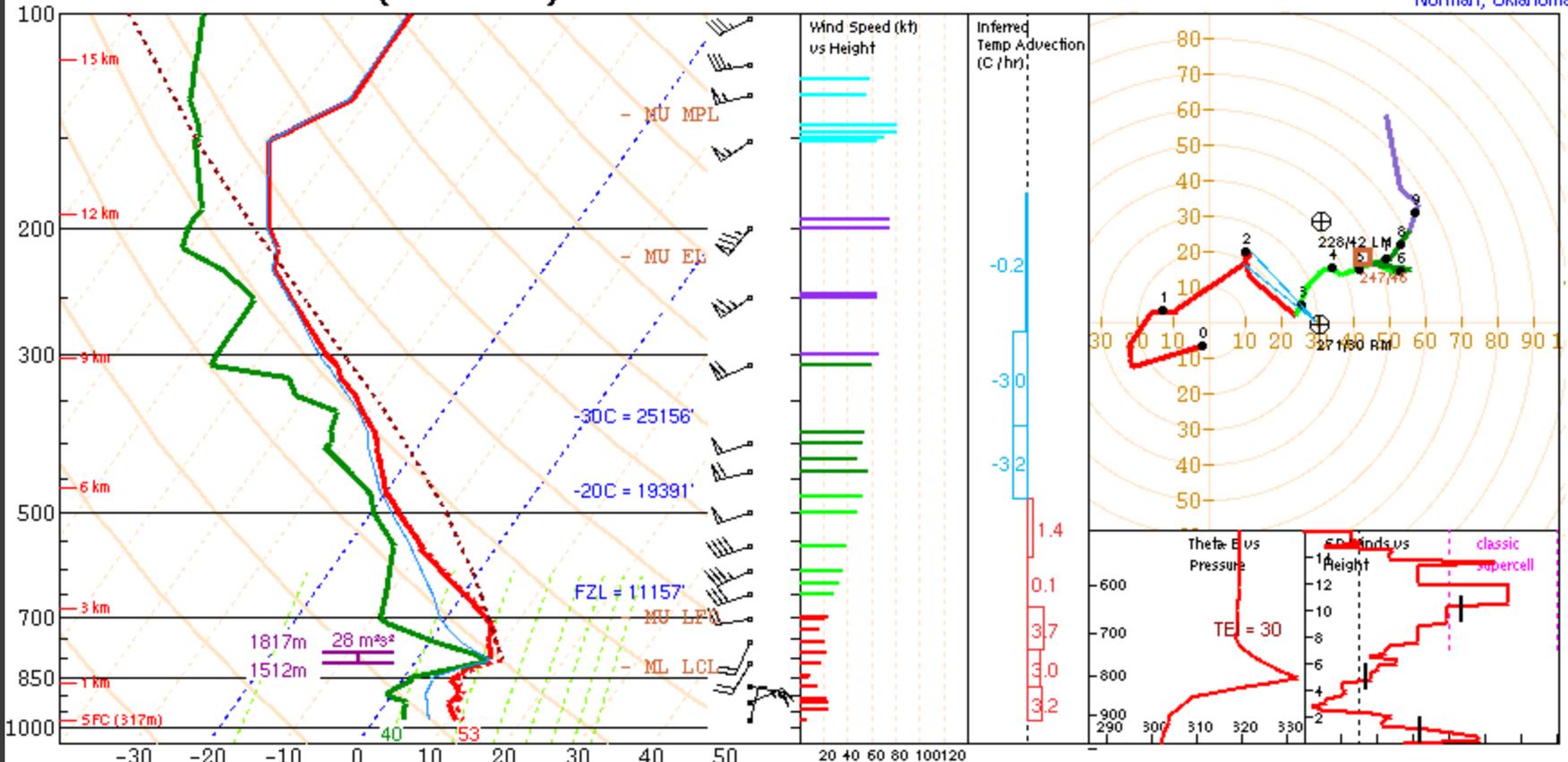
Saturday April 23, 2011

MC3E WEATHER BRIEFING

LMN Special 06UTC Sounding

LMN 110424/0600 (Observed)

NOAA/NWS Storm Prediction Center
Norman, Oklahoma



PARCEL	CAPE	CINH	LCL	LI	LFC	EL	SRH(m2/s2)	Shear(kt)	MnWind	SRW	*** BEST GUESS PRECIP TYPE ***					
SURFACE	0	0	884m	12	M	2898'	SFC - 1 km	197	12	73/19	84/48	None. Based on sfc temperature of 52.5 F.				
MIXED LAYER	0	0	1413m	11	M	4635'	SFC - 3 km	346	34	172/5	100/31					
FCST SURFACE	0	0	2002m	7	M	6567'	Eff Inflow Layer	28	4	210/23	137/27					
MU (804 mb)	1055	-3	1631m	-6		2776m	36542'					SARS - Sounding Analogs <table border="1"> <thead> <tr> <th>SUPERCCELL</th> <th>SGFNT HAIL</th> </tr> </thead> <tbody> <tr> <td>No Quality Matches</td> <td>No Quality Matches</td> </tr> </tbody> </table>	SUPERCCELL	SGFNT HAIL	No Quality Matches	No Quality Matches
SUPERCCELL	SGFNT HAIL															
No Quality Matches	No Quality Matches															
PW = 0.86 in	3CAPE = 0 J/kg		WBZ = 8684'		WNDG = 0.0		SFC - 6 km		62	237/14	113/20					
K = 10	DCAPE = -81 J/kg		FZL = 11157'		ESP = 0.0		Lower Half Storm Depth		47	244/32	173/14					
MidRH = 59%	DownT = 57 F		ConvT = 94F		MMP = 0.91		Cloud Bearing Layer		53	244/38	194/18					
LowRH = 64%	MeanW = 4.8 g/kg		MaxT = 66F		NCAPE = 0.00		BRN Shear = 183 m2/s2									
SigSevere = 0 m3/s3							4-6km SR Wind = 224/22 kt									

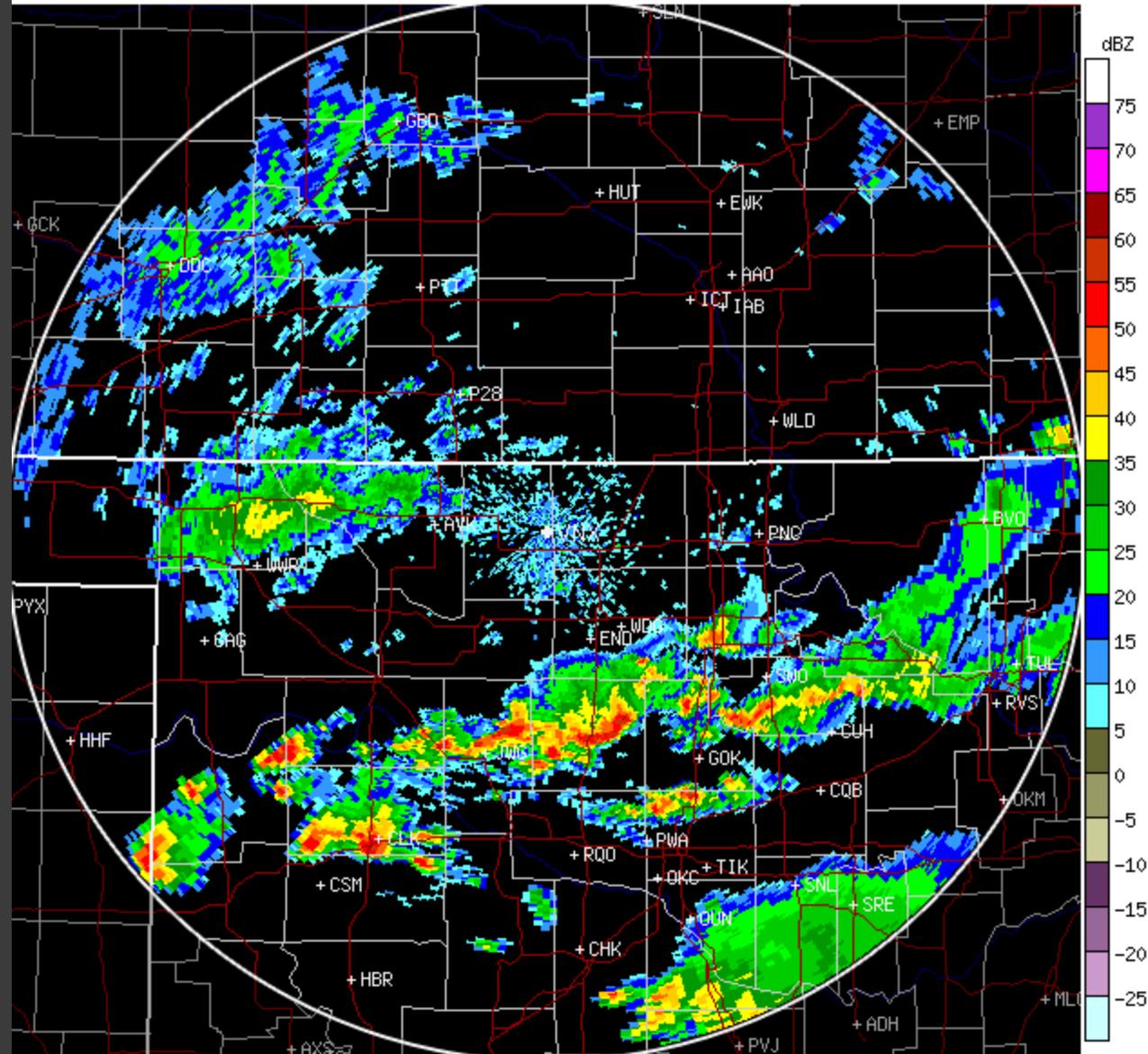
Overnight

KVNX -- Vance AFB, OK/Kegelman Field

Base Reflectivity: 0.5 degrees, Precip Mode

08:56:28 UTC Sun 24 April 2011

(c) UCAR <http://www.rap.ucar.edu/weather/radar/>



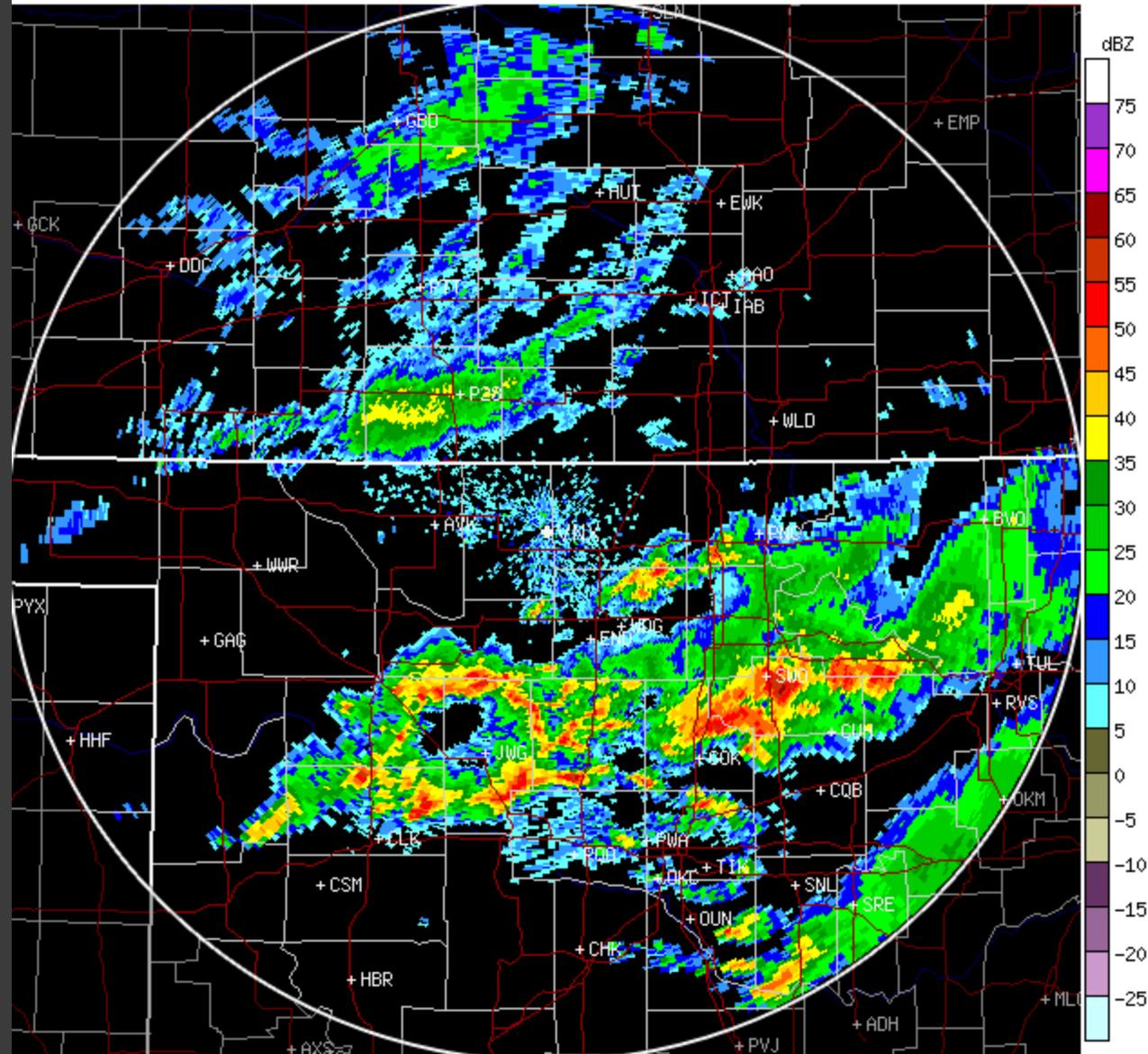
Overnight

KVNX -- Vance AFB, OK/Kegelman Field

09:56:17 UTC Sun 24 April 2011

Base Reflectivity: 0.5 degrees, Precip Mode

(c) UCAR <http://www.rap.ucar.edu/weather/radar/>



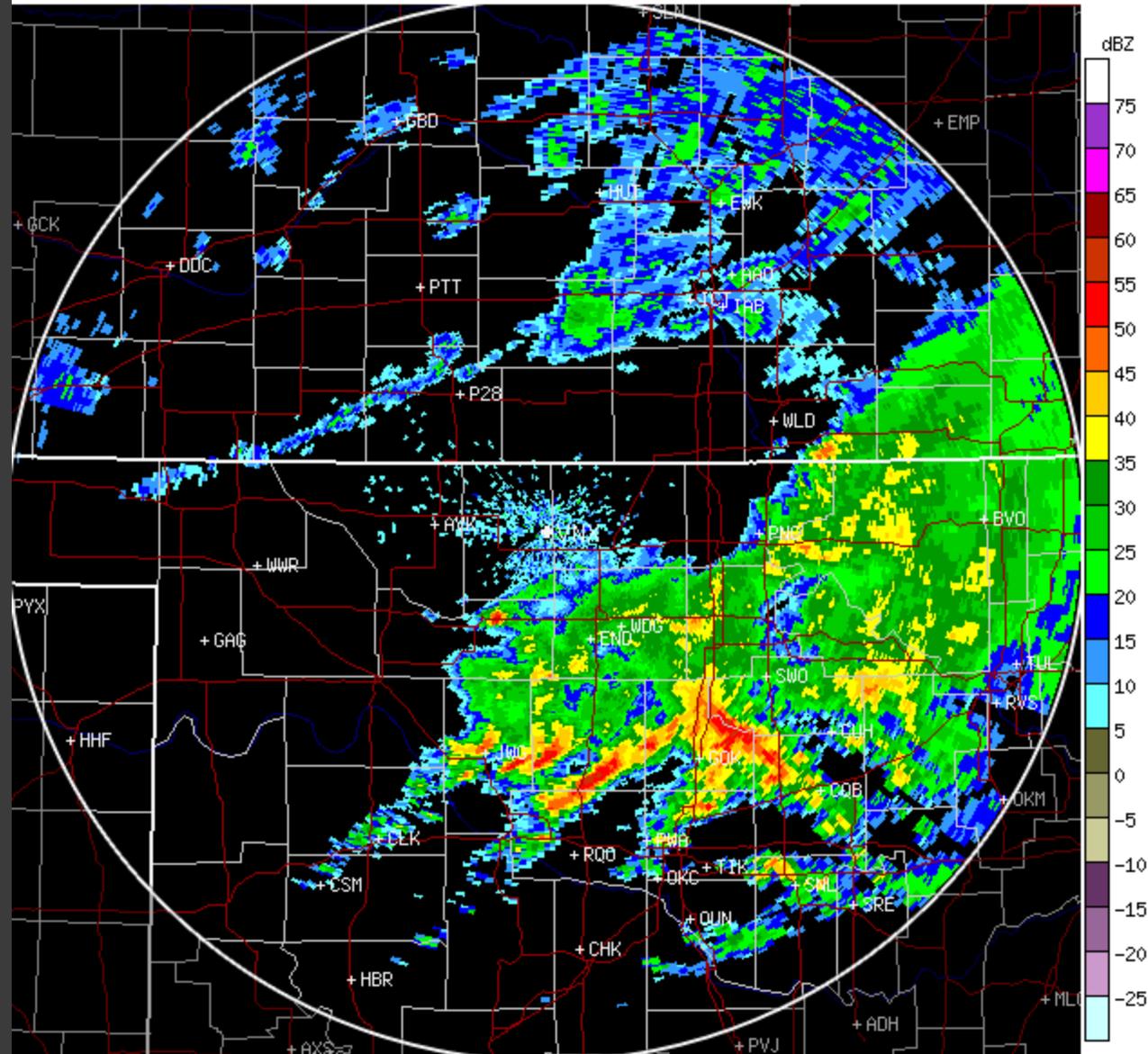
Overnight

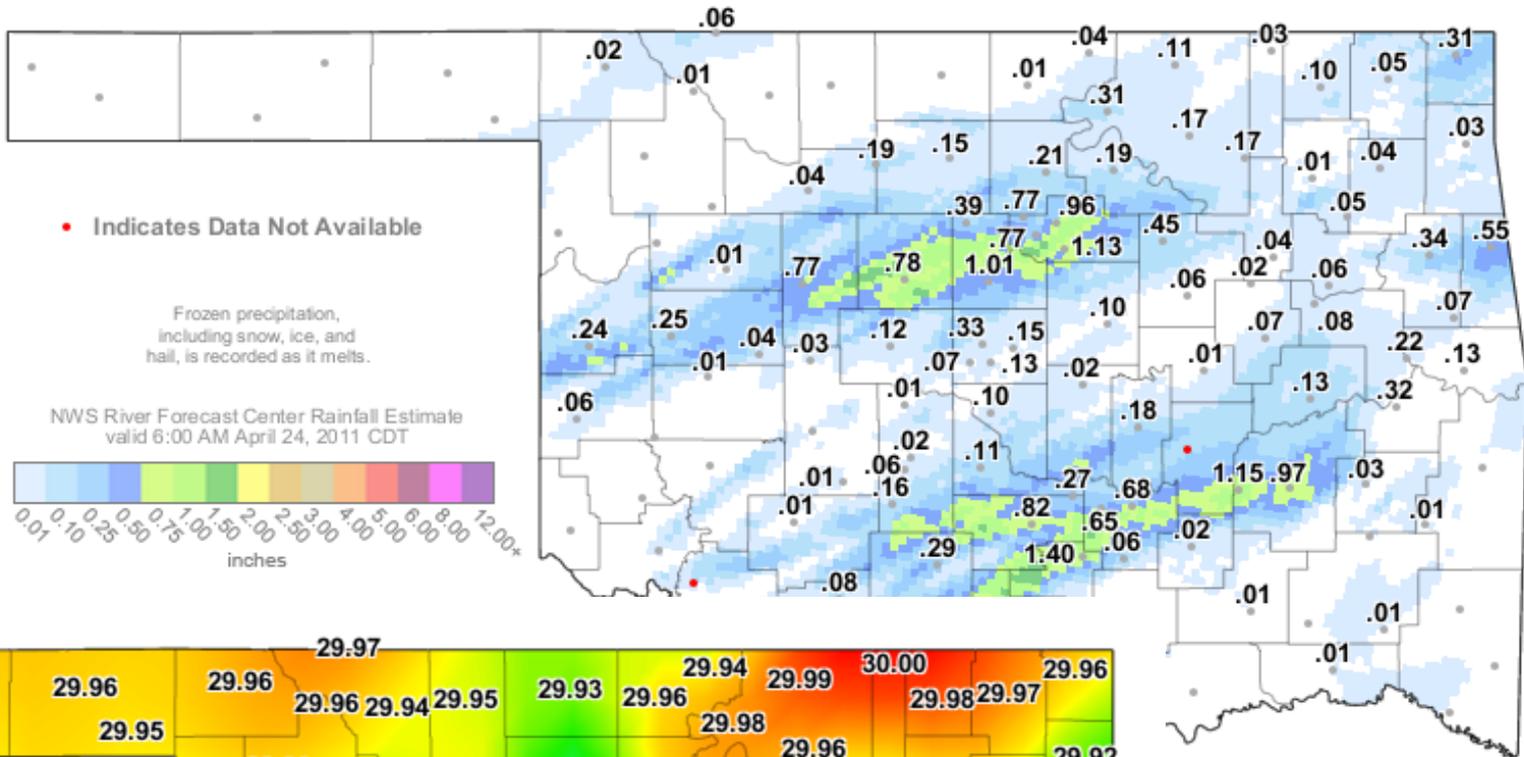
KVNX -- Vance AFB, OK/Kegelman Field

10:58:12 UTC Sun 24 April 2011

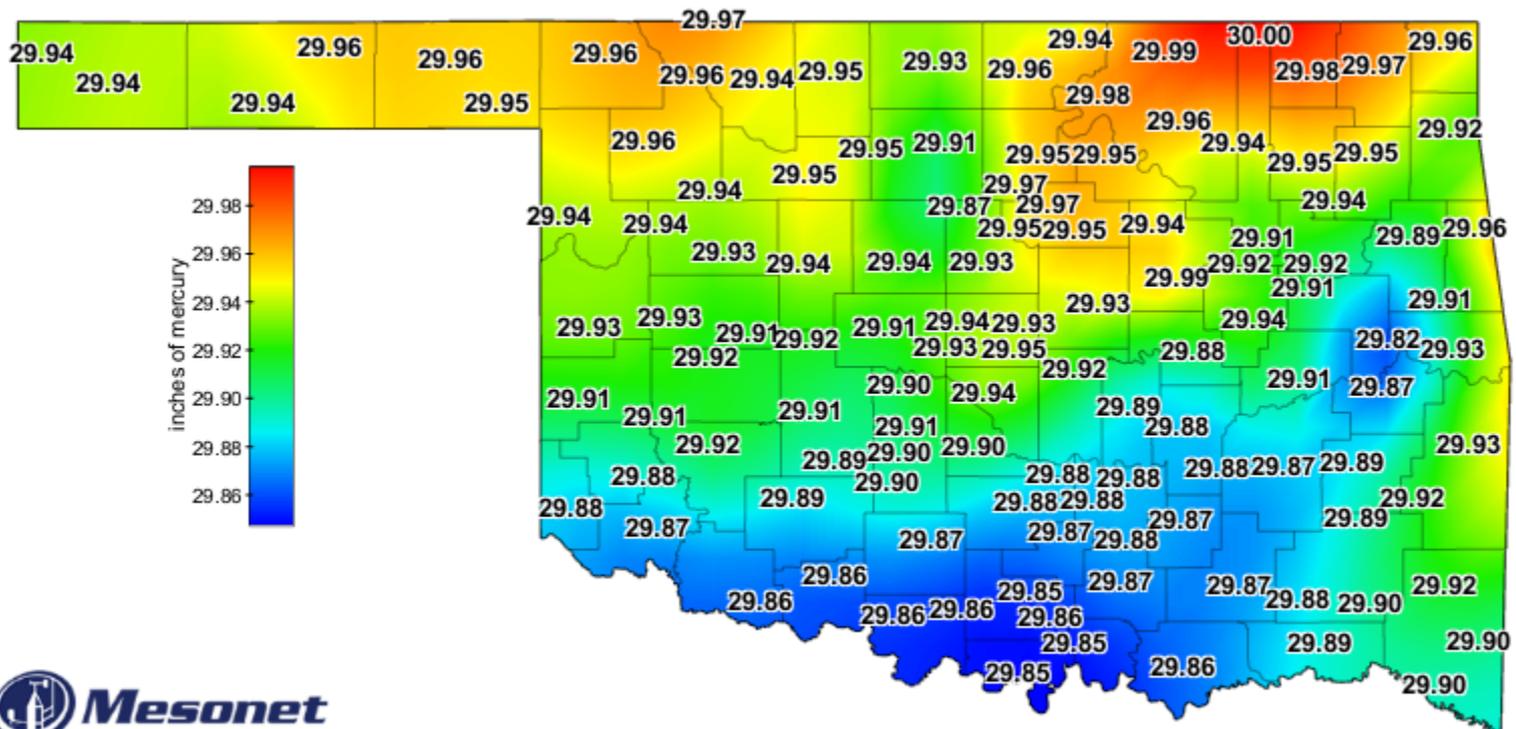
Base Reflectivity: 0.5 degrees, Precip Mode

(c) UCAR <http://www.rap.ucar.edu/weather/radar/>





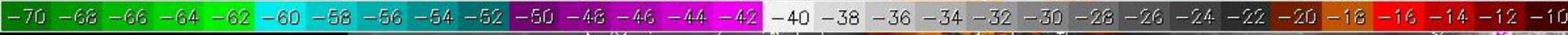
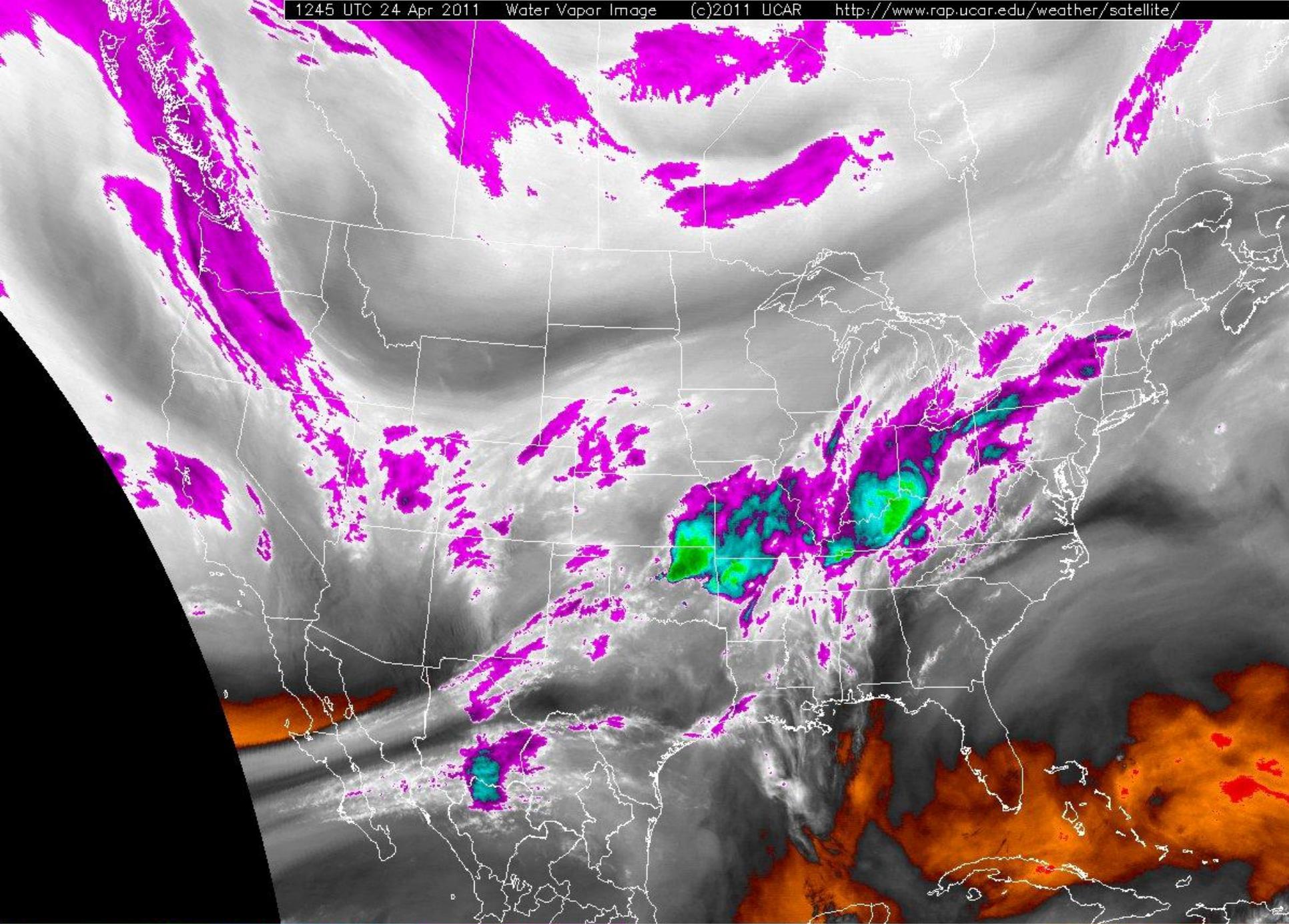
6:55 AM April 24, 2011 CDT
1:10 AM April 24, 2011 CDT. © Copyright 2011

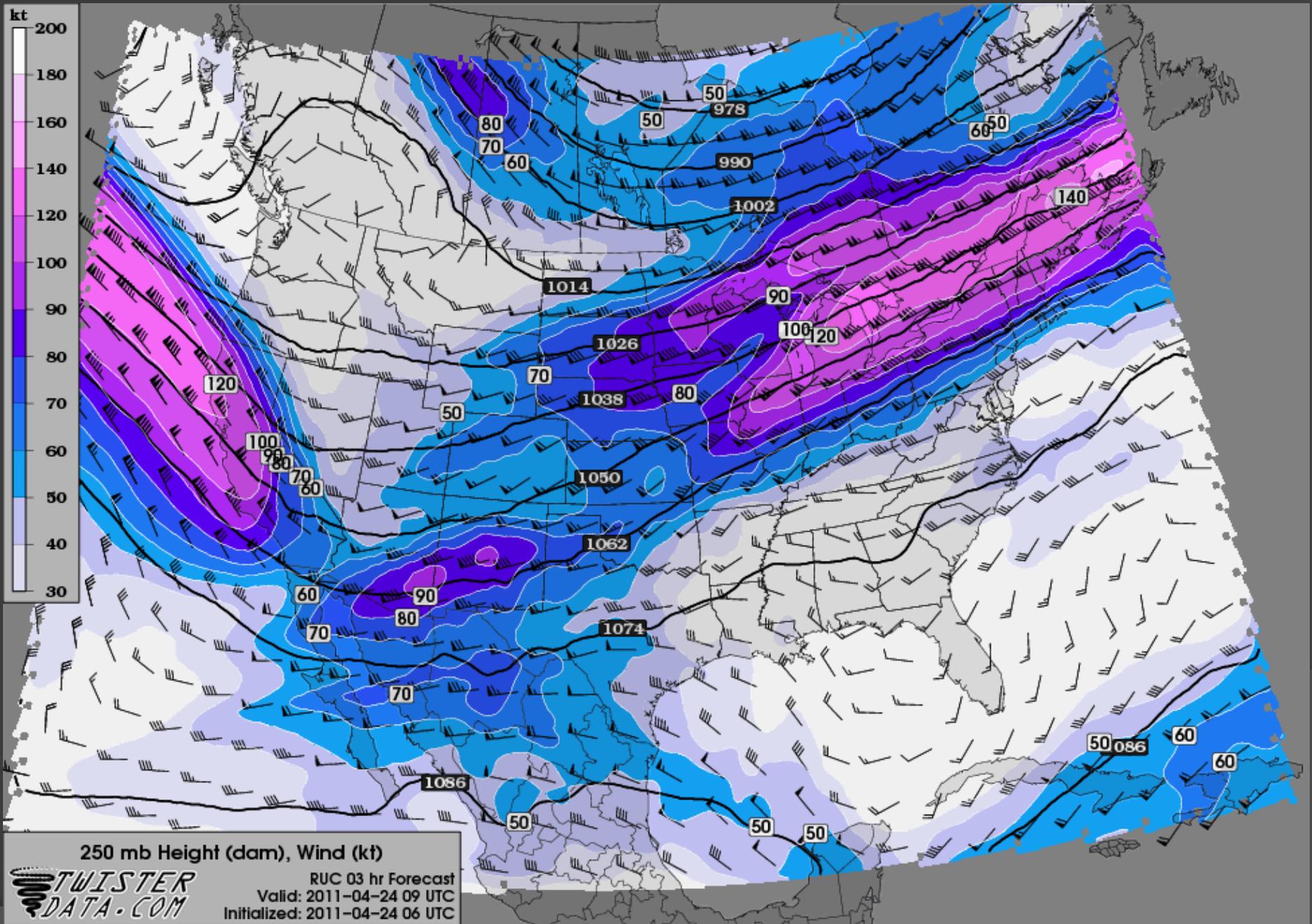


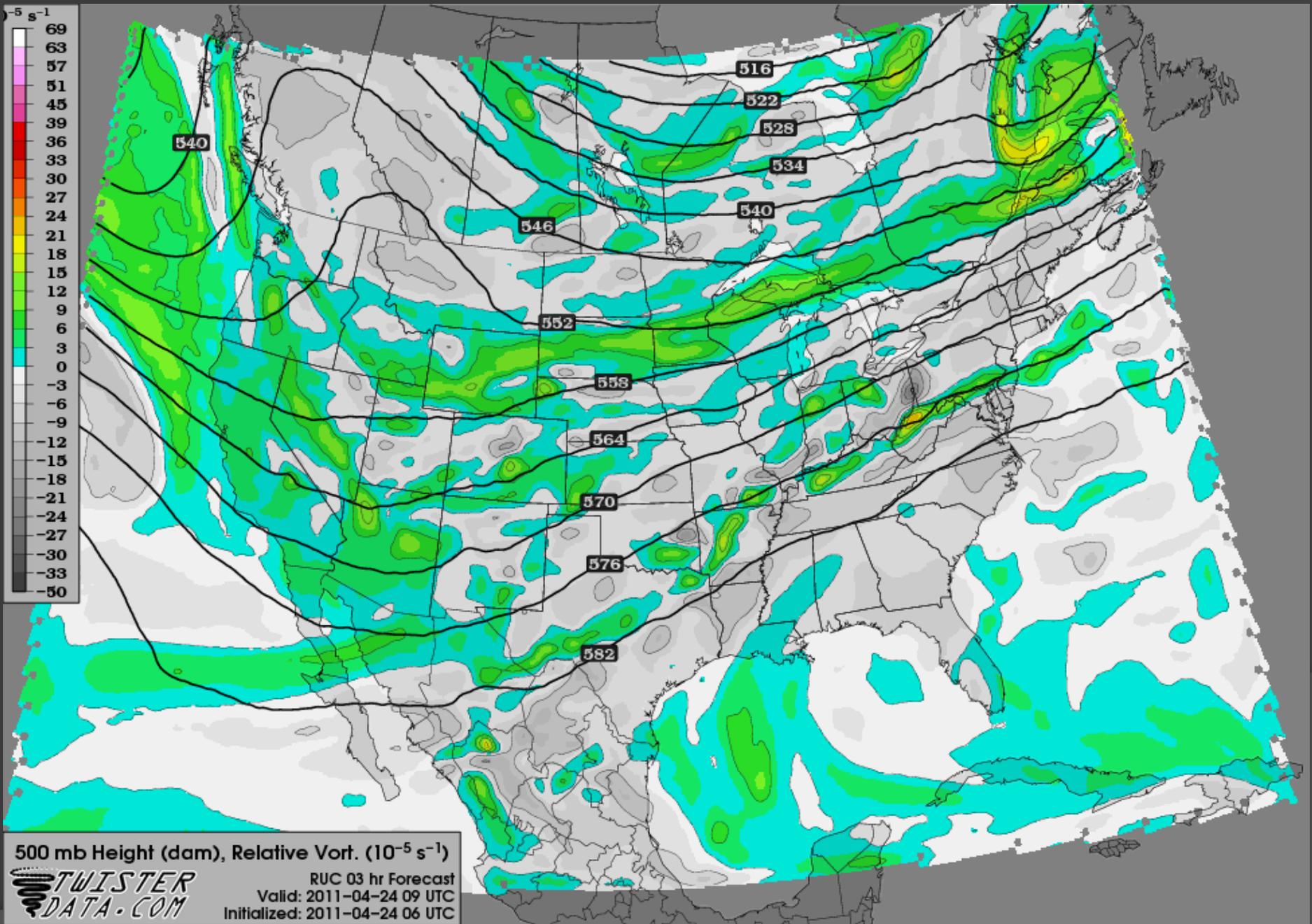
7:00 AM April 24, 2011 CDT



Sea-Level Pressure (inches of Mercury)

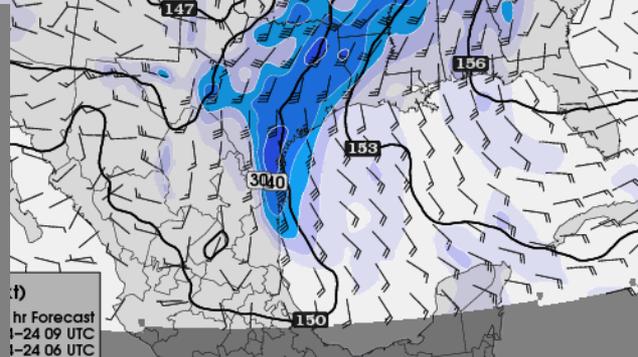
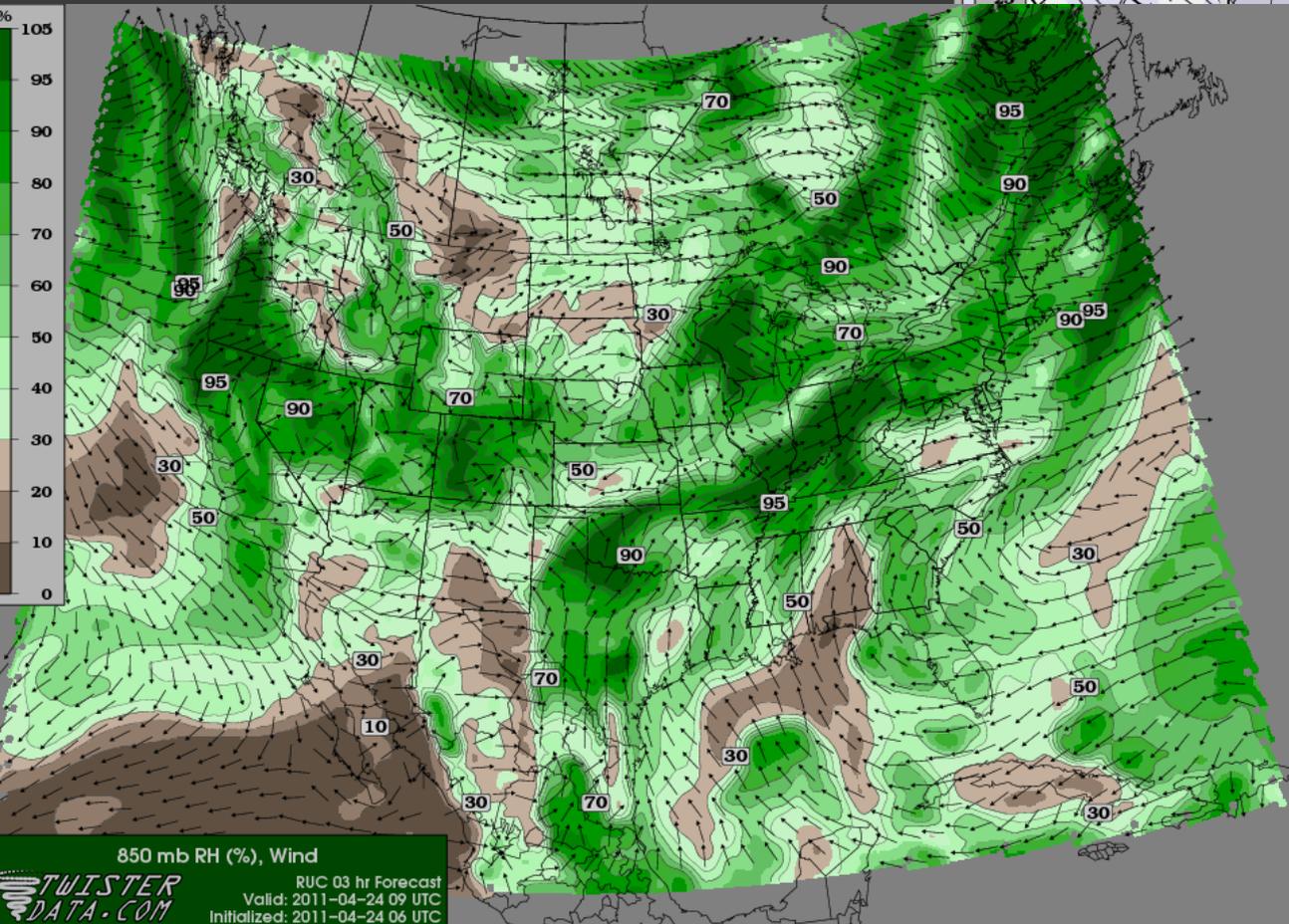
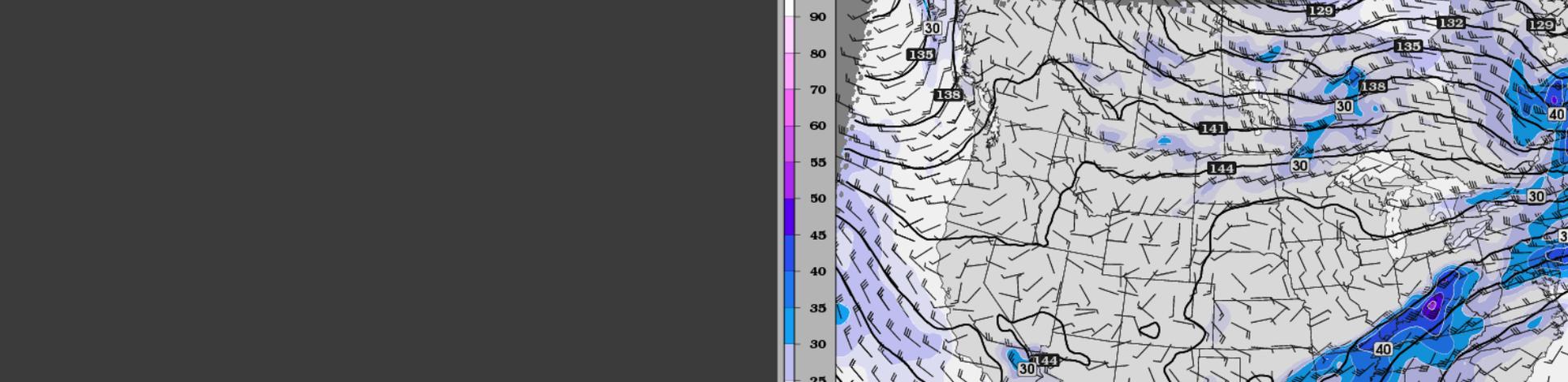




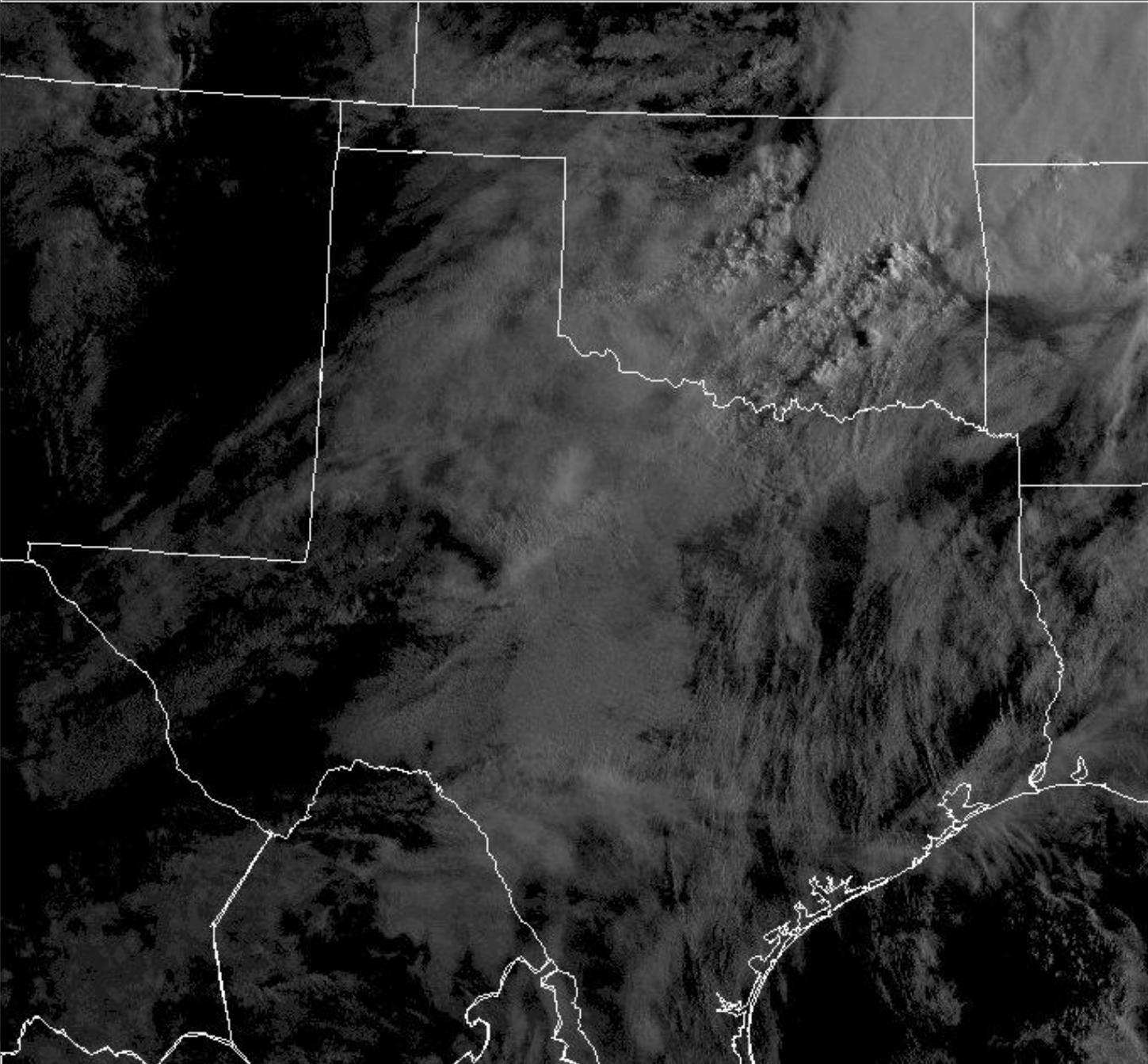


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DATA.COM

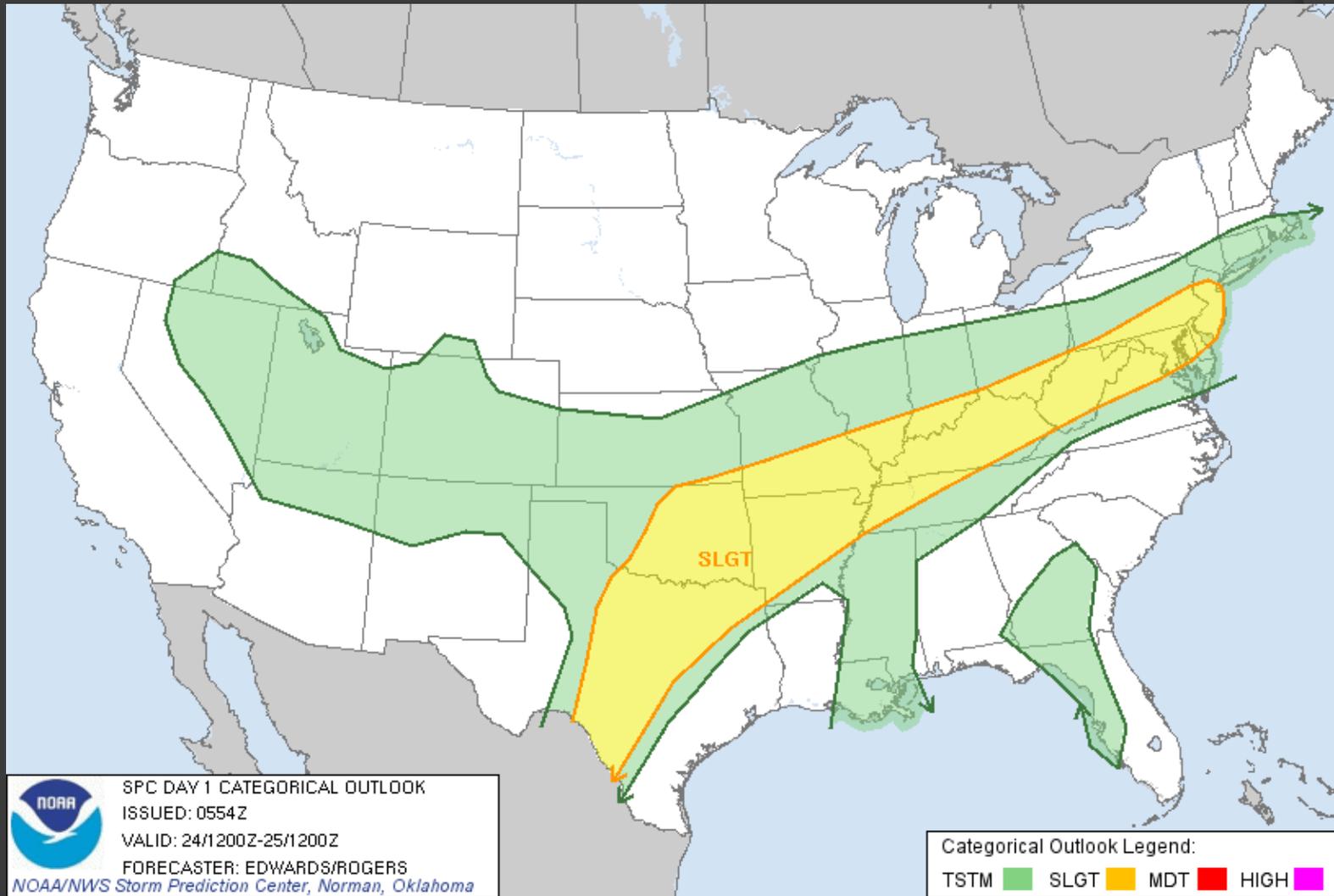
RUC 03 hr Forecast
Valid: 2011-04-24 09 UTC
Initialized: 2011-04-24 06 UTC



f) 3 hr Forecast
1-24 09 UTC
1-24 06 UTC



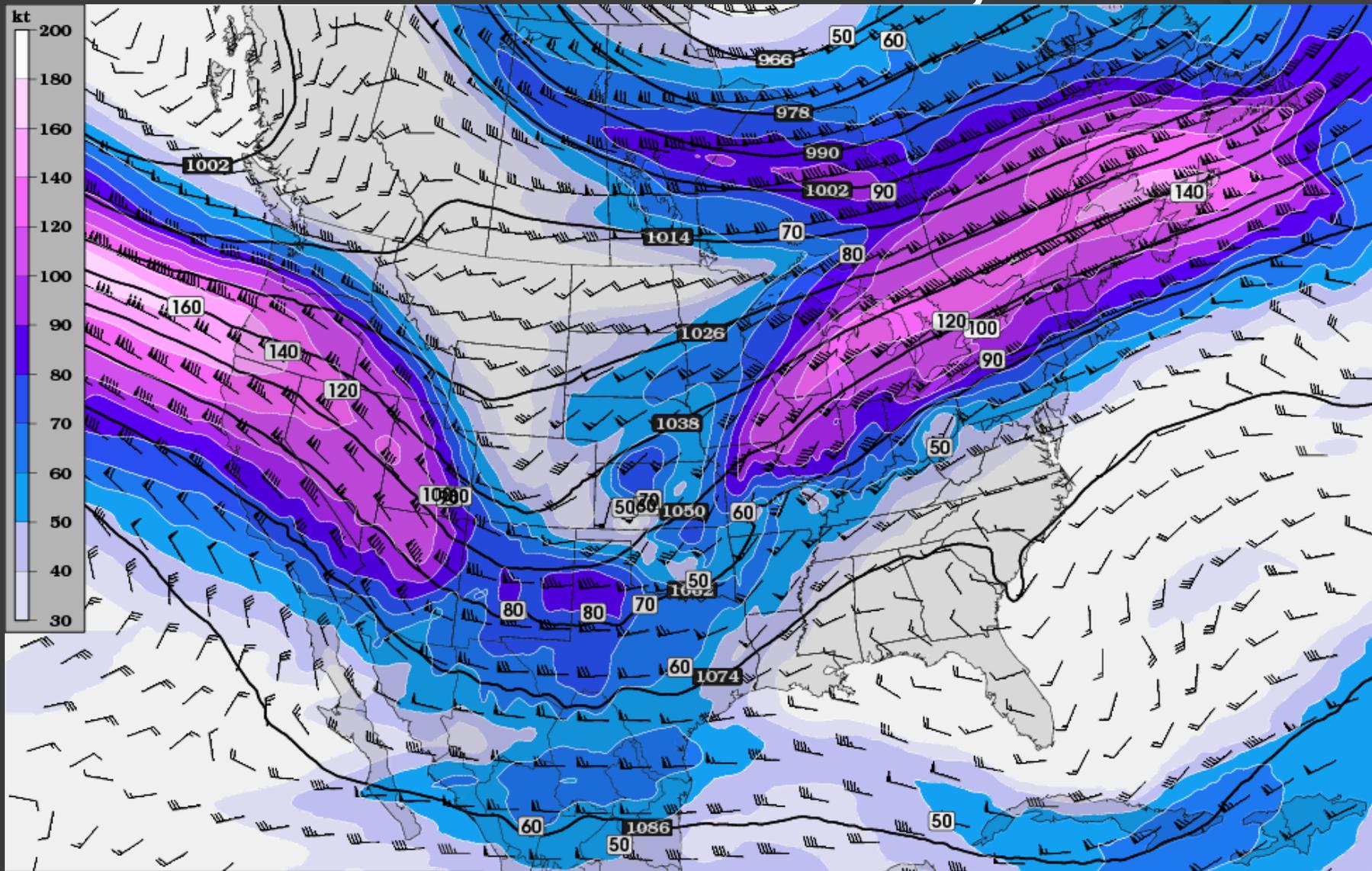
Convective Outlook (12Z Sun – 12Z Mon)



Model thoughts

- Both models are looking a bit more consistent, but still have some distinct differences for convective line formation tomorrow midday in eastern OK
- A bit more confidence in NAM given performance last night and better initialization at 00Z, though GFS had a slightly better grasp of lingering precipitation this morning
- Both are consistent in showing likely precipitation overnight akin to last night

250 hPA - 09Z Monday

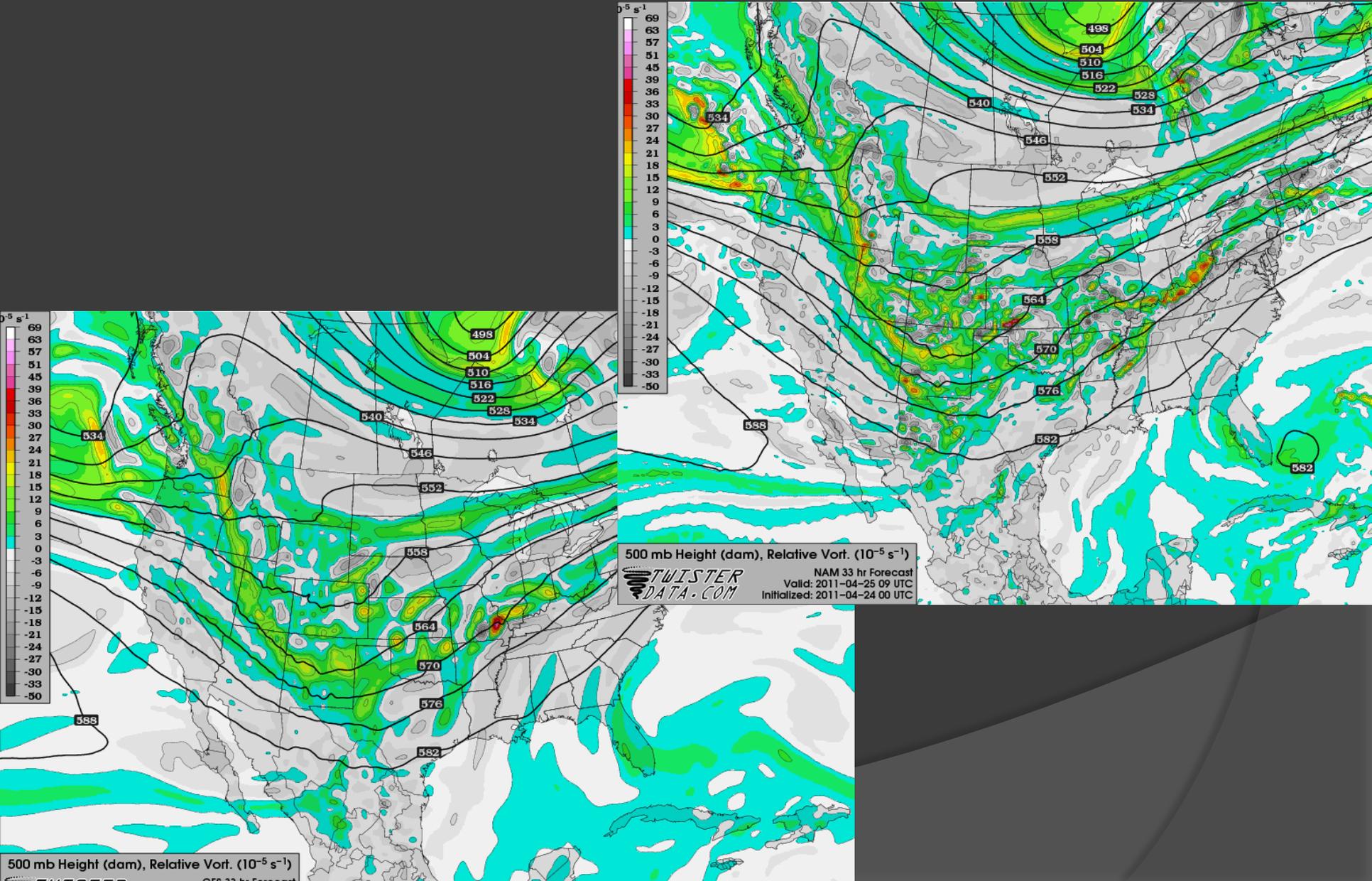


250 mb Height (dam), Wind (kt)

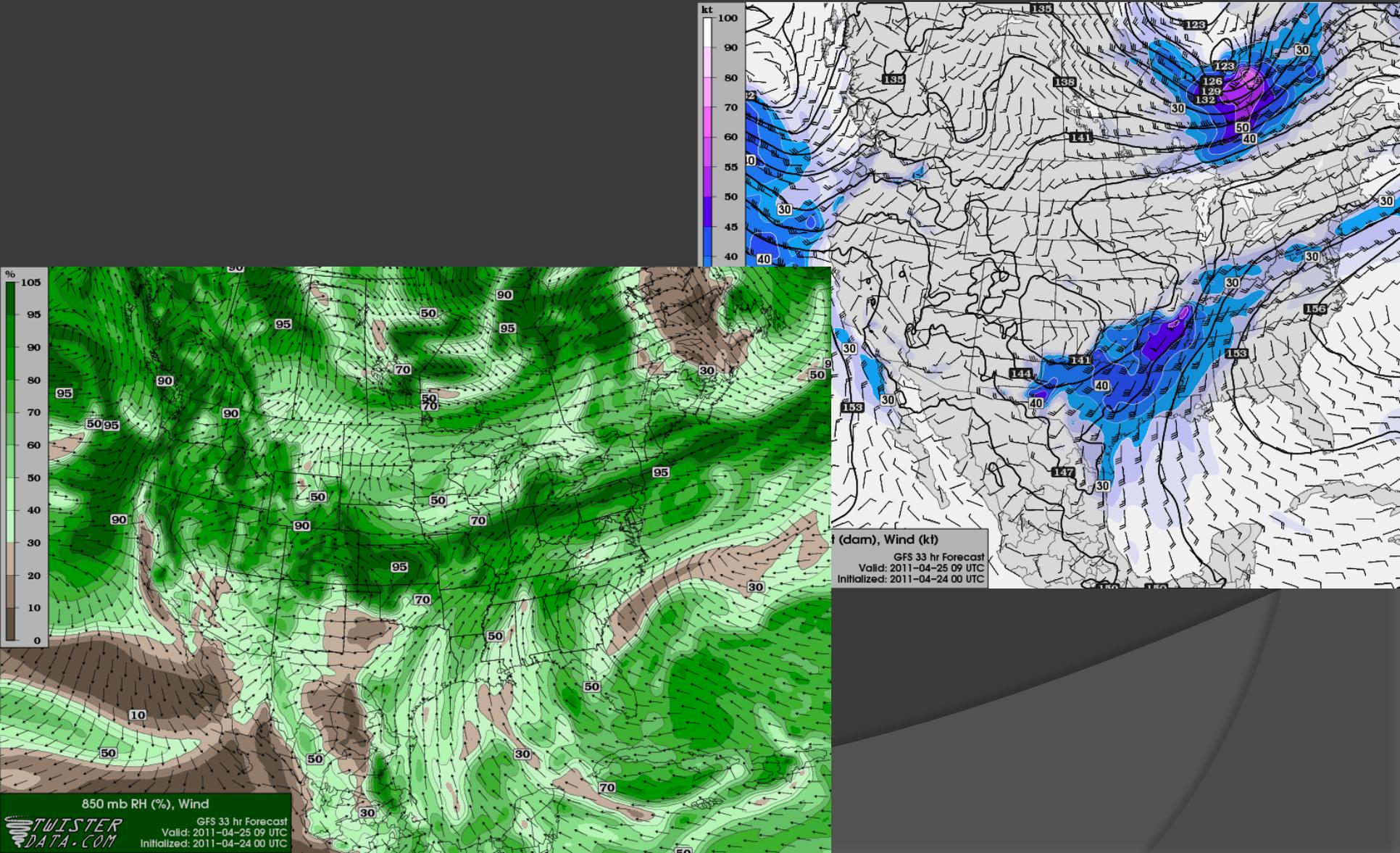
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NAM 33 hr Forecast
Valid: 2011-04-25 09 UTC
Initialized: 2011-04-24 00 UTC

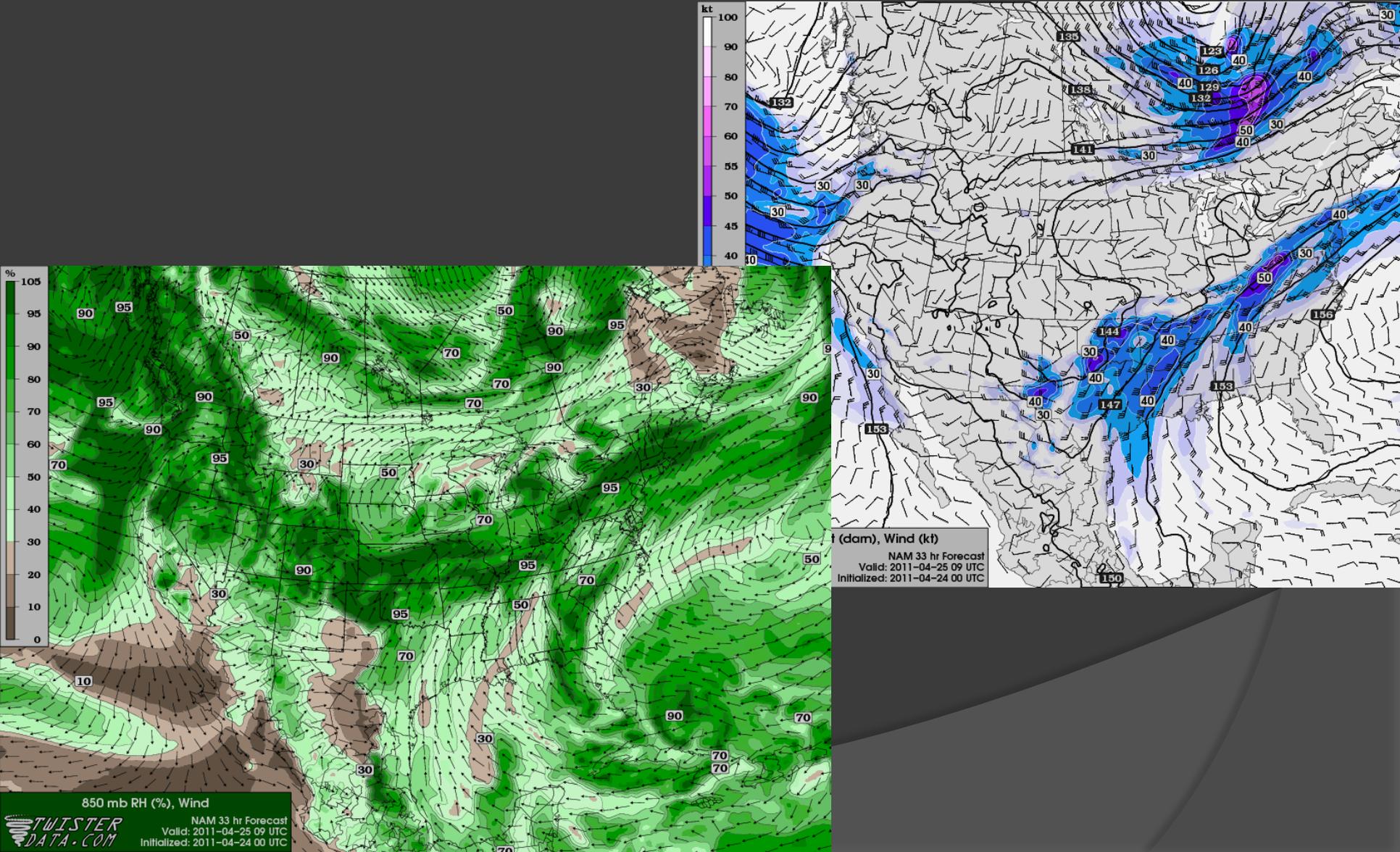
500 hPa – 09Z Monday



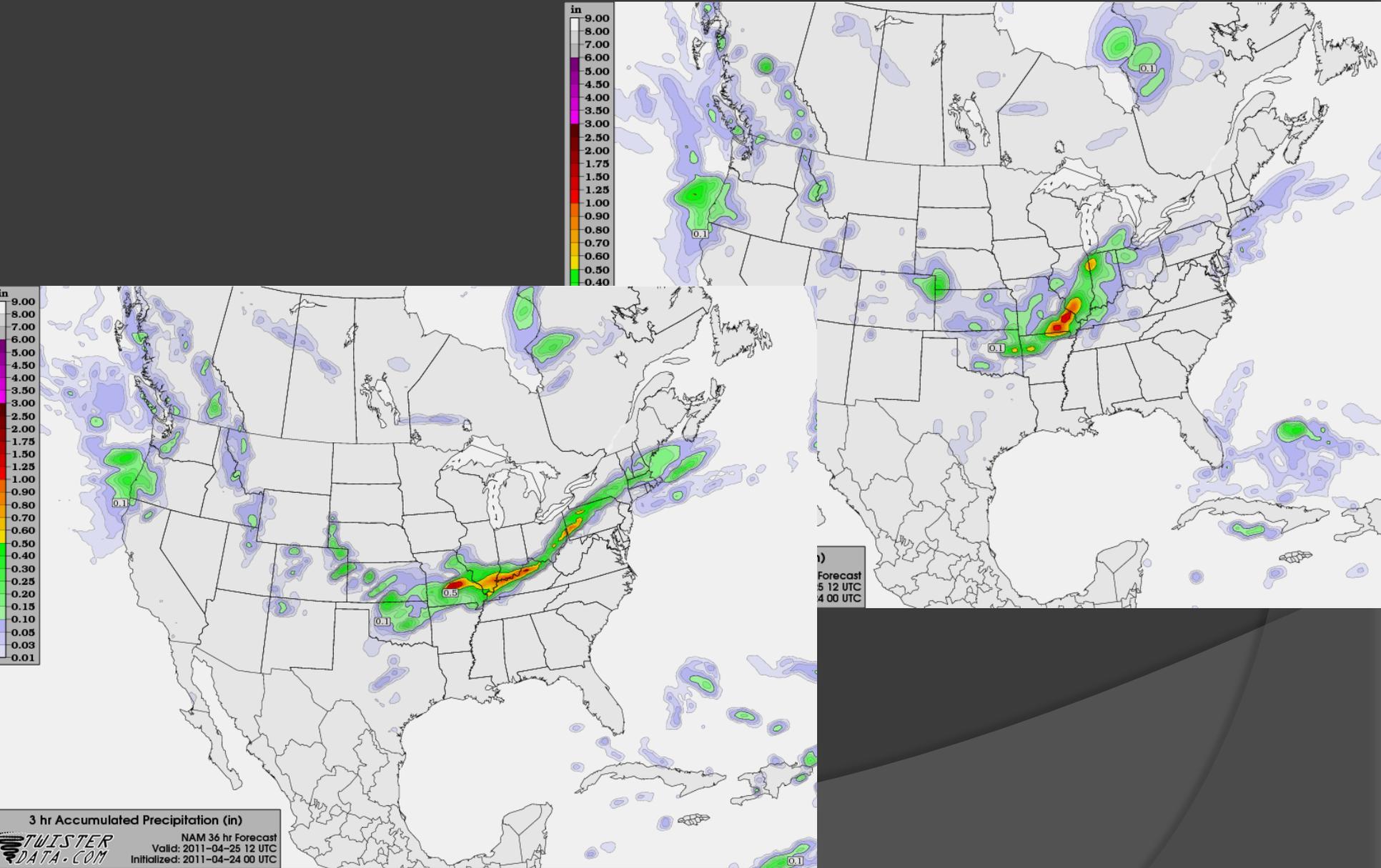
850 hPa – 09Z Monday GFS



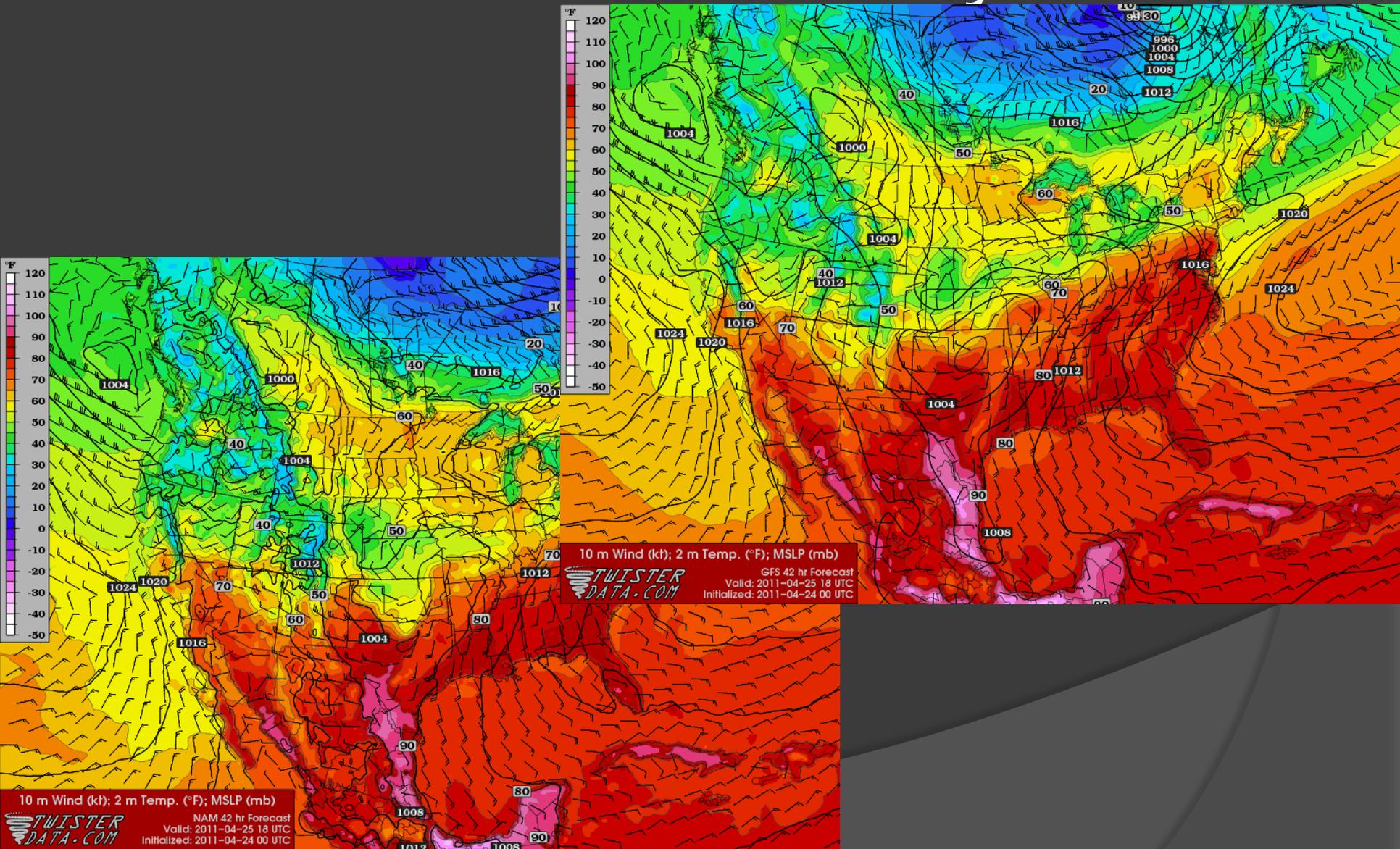
850 hPa – 09Z Monday NAM



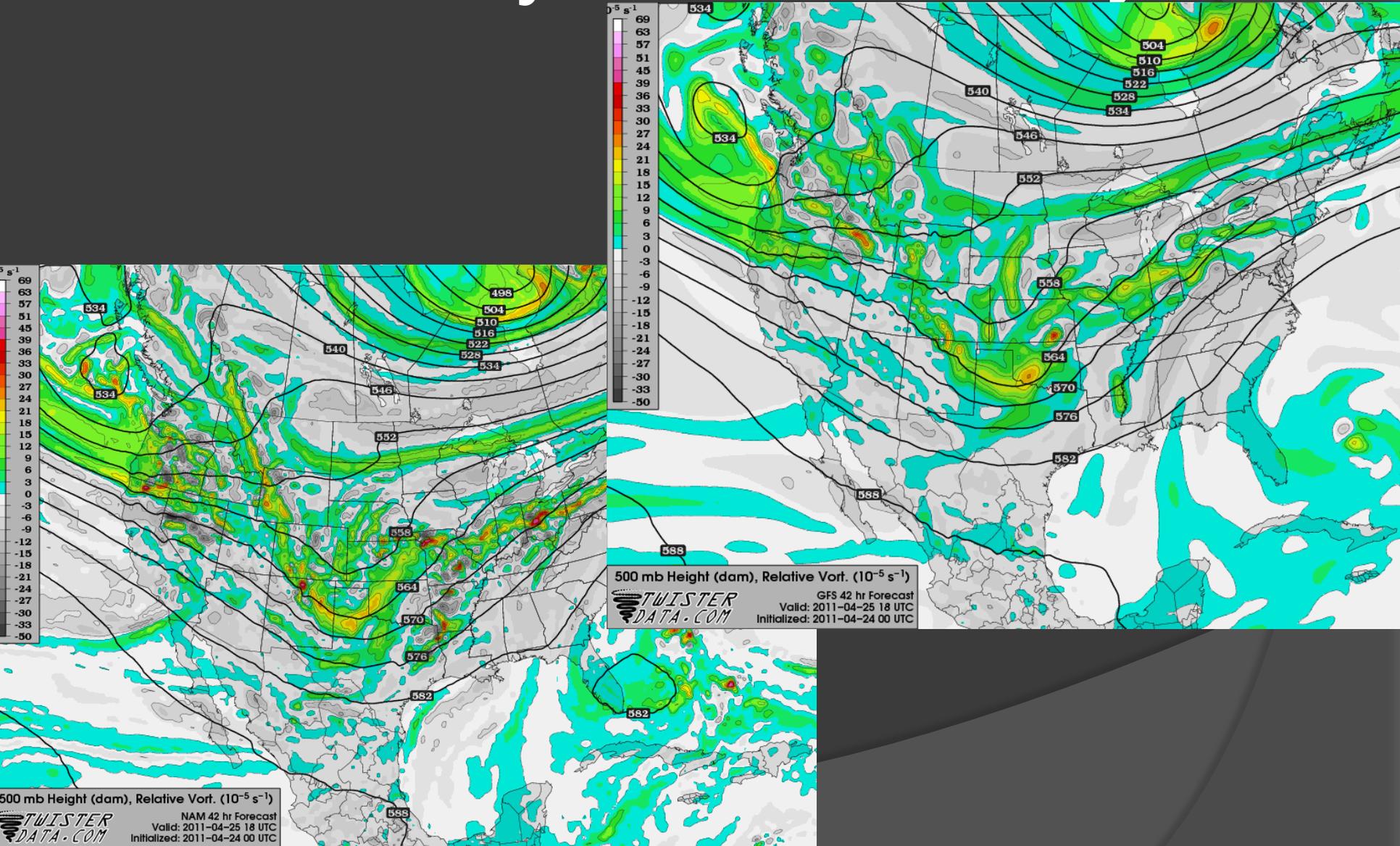
Model Precip - 12Z Monday



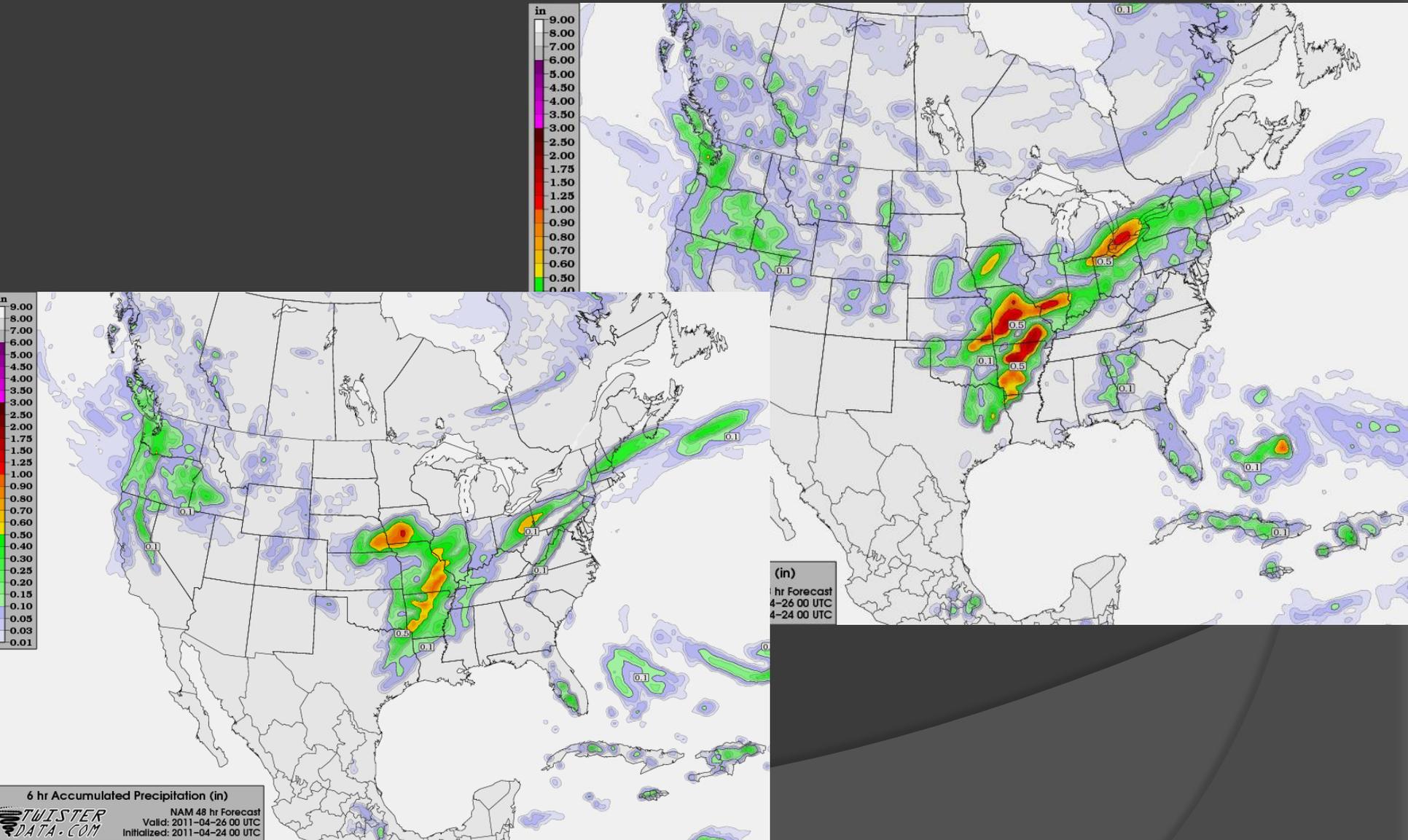
Sfc Front – 18 Z Monday



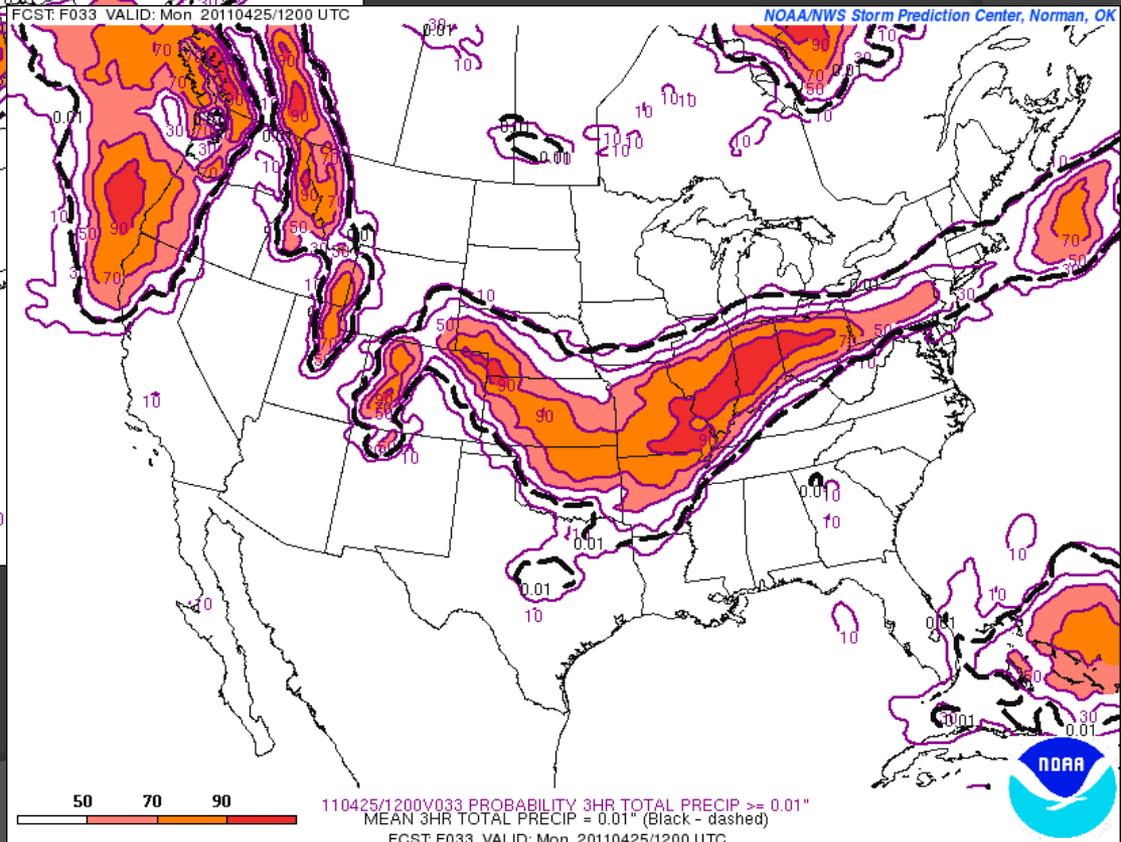
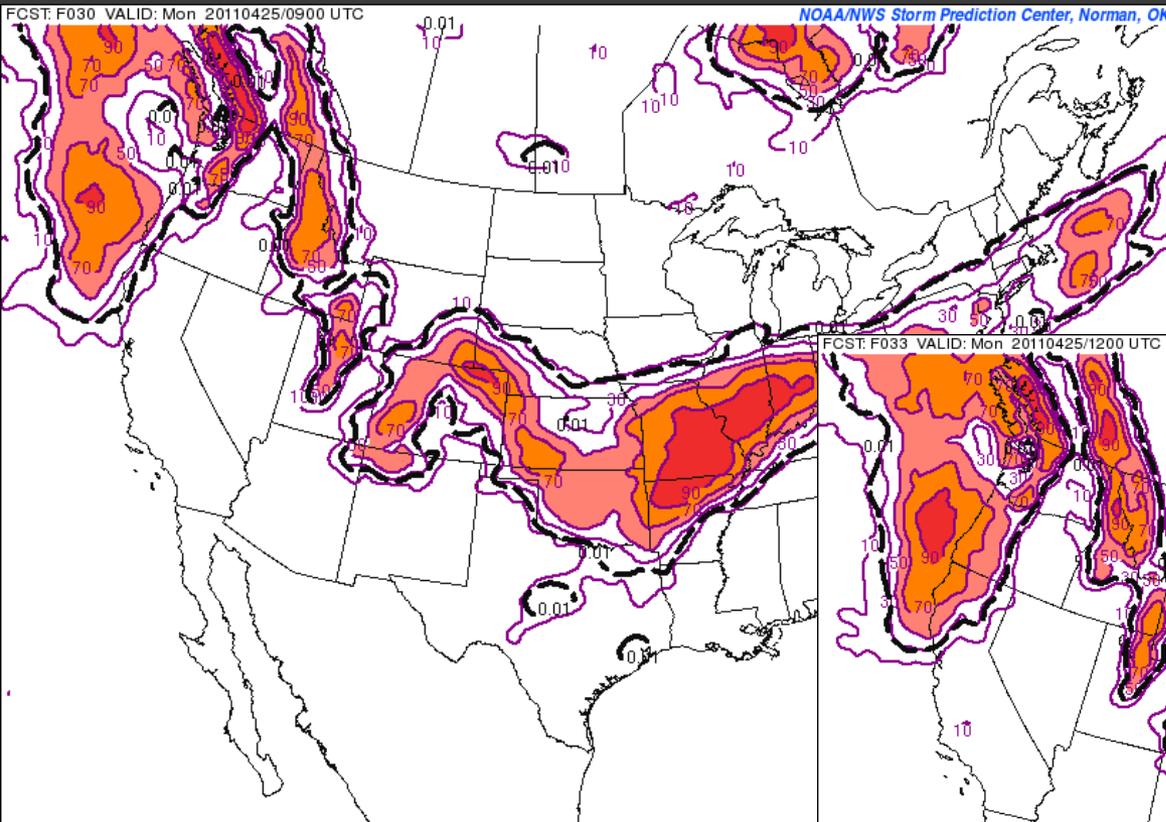
500 Vorticity - 18 Z Monday



Model Precip - 00Z Tuesday



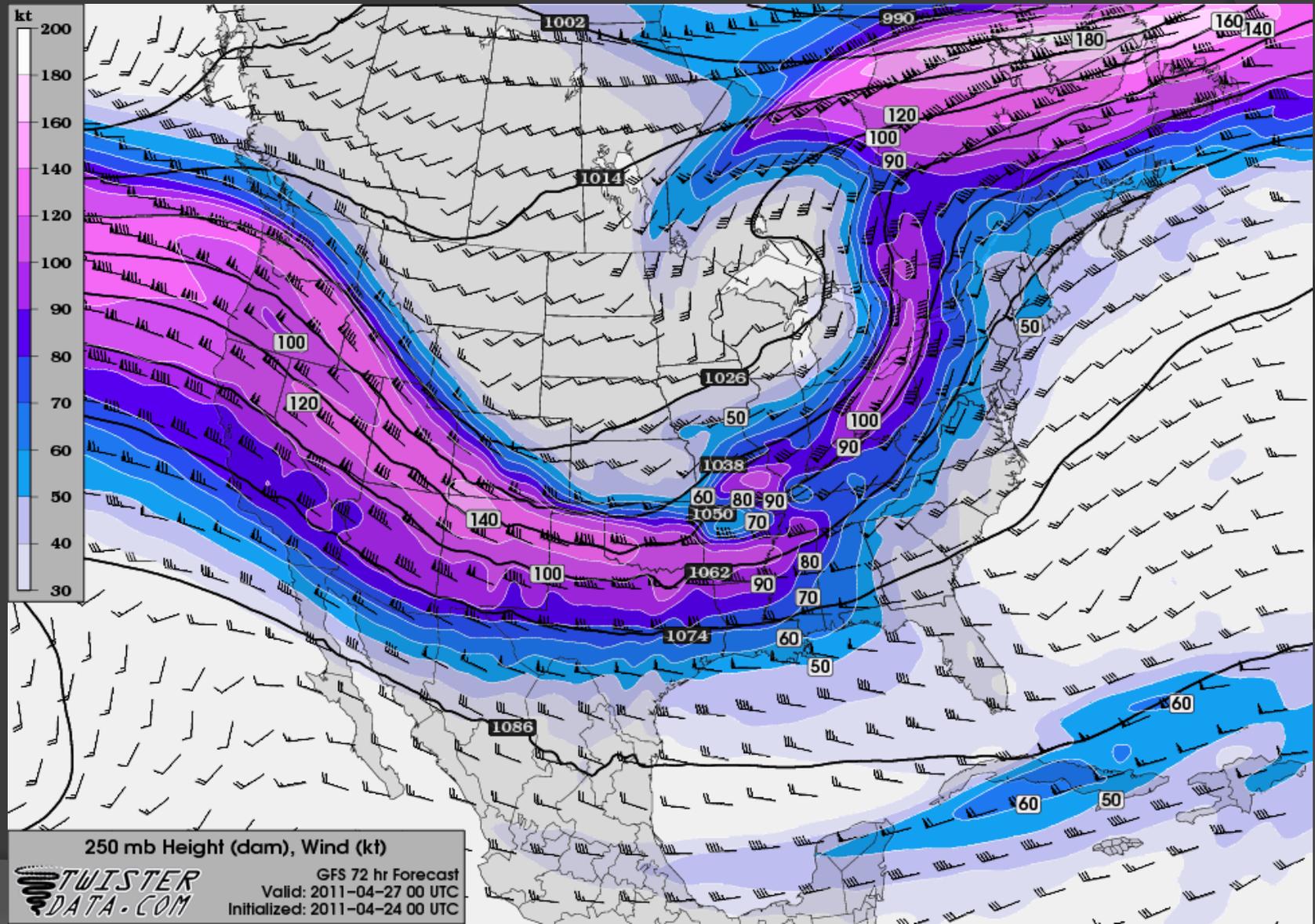
SREF >0.01 probabilities



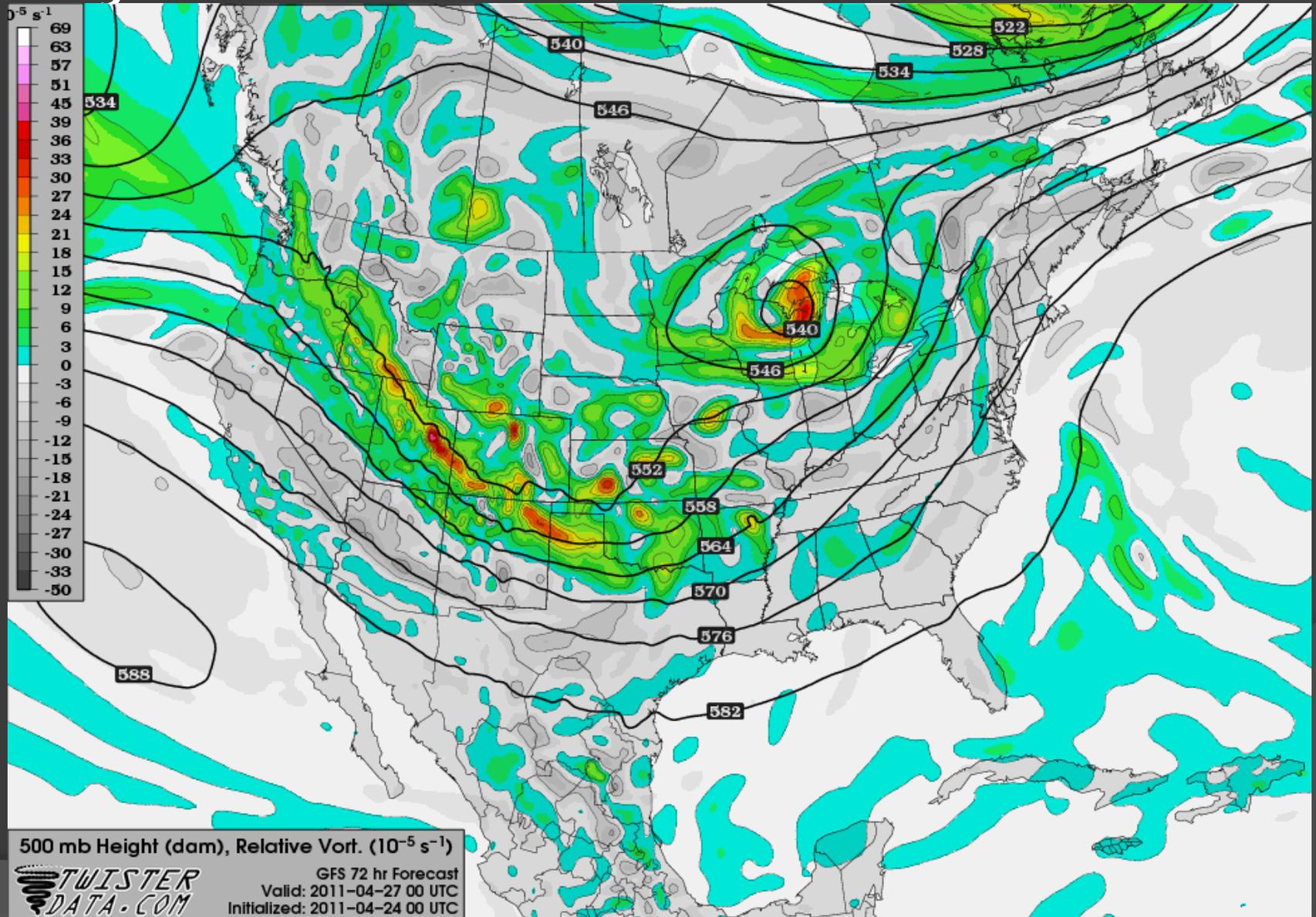
Day 0/1 Recap

- ⦿ LL Jet looks likely to re-form behind convective front akin to last night
- ⦿ Expecting precipitation formation in SGP array beginning around 09 UTC
- ⦿ Keep eyes open for storms near Purcell, Morris sounding sites late afternoon into overnight
- ⦿ Expected Precip: elevated convection, potentially slightly weaker than last night (good for 12 UTC run update given yesterday)
- ⦿ Precipitation likely pushing NE and out of instrument array around 17 UTC (going with NAM on this one)

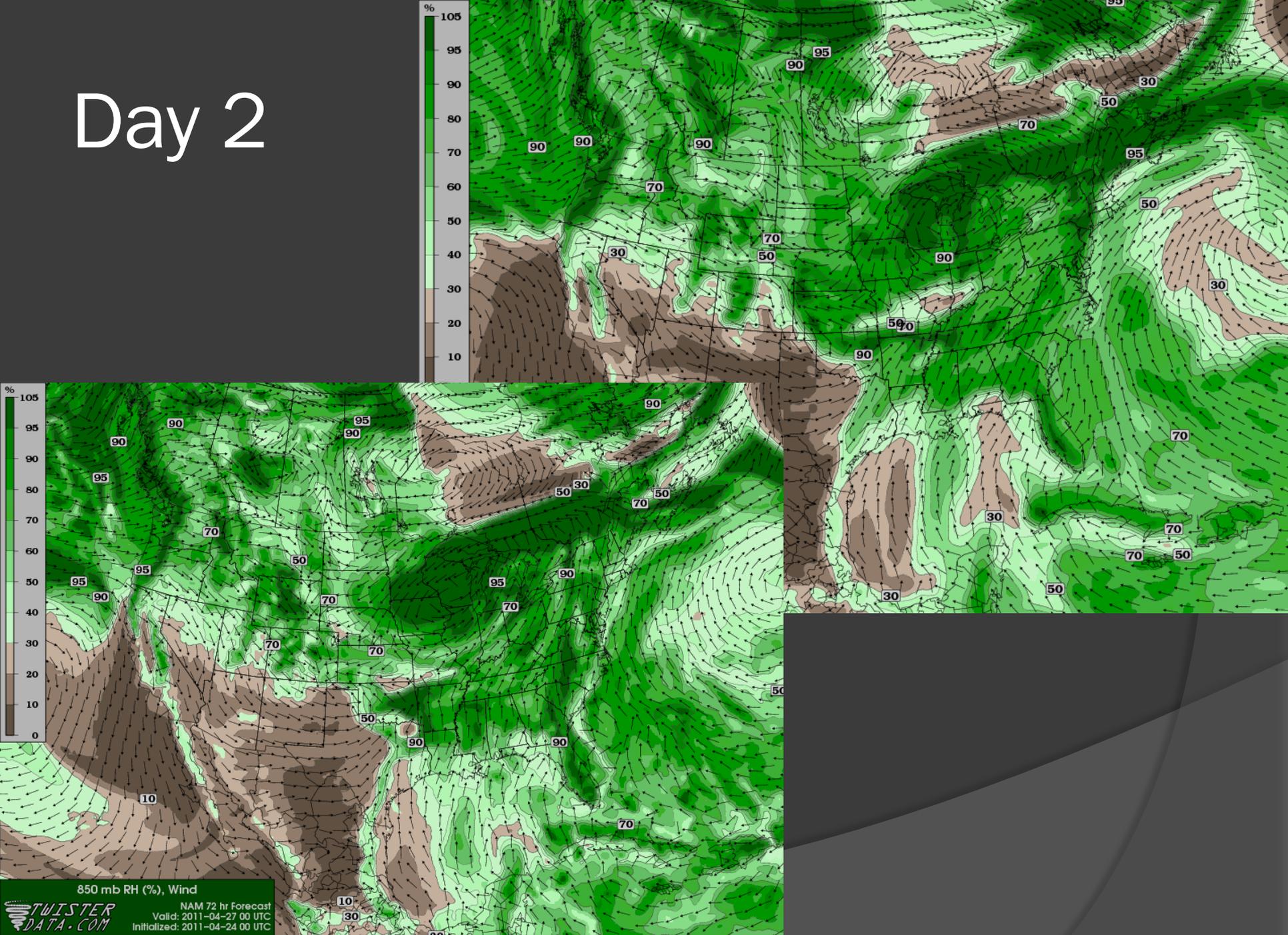
Day 2



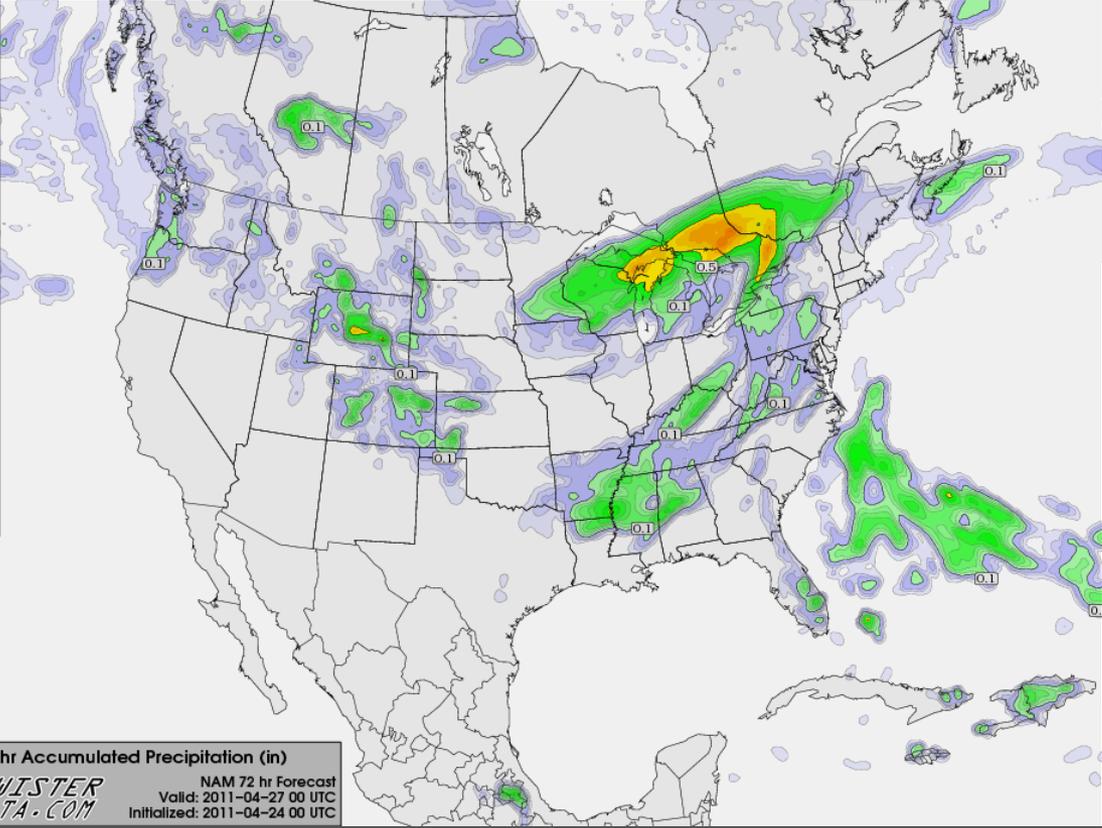
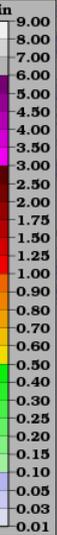
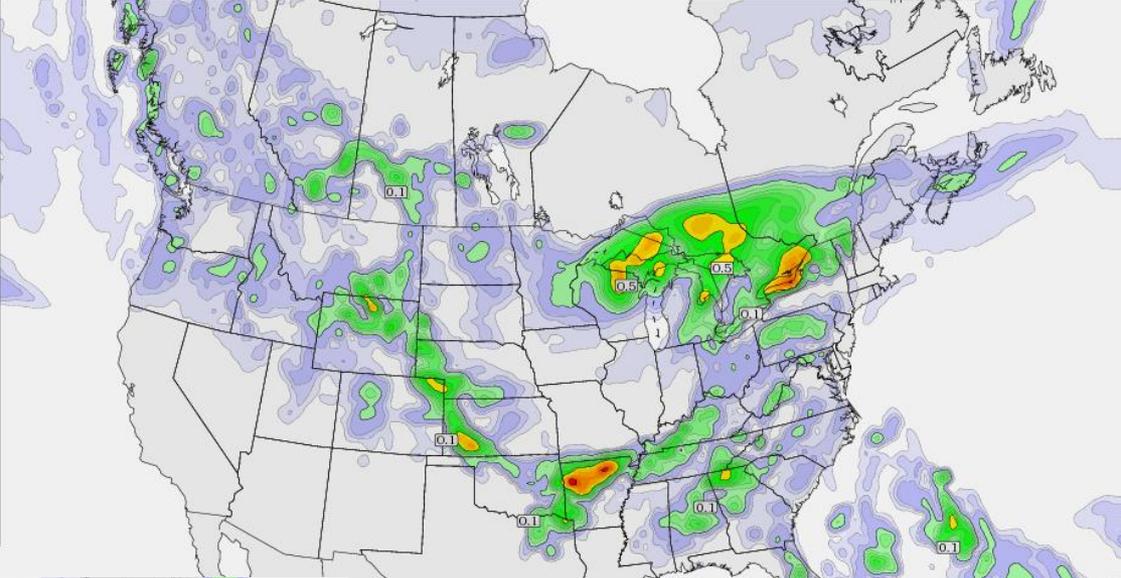
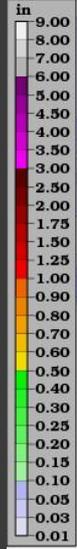
Day 2



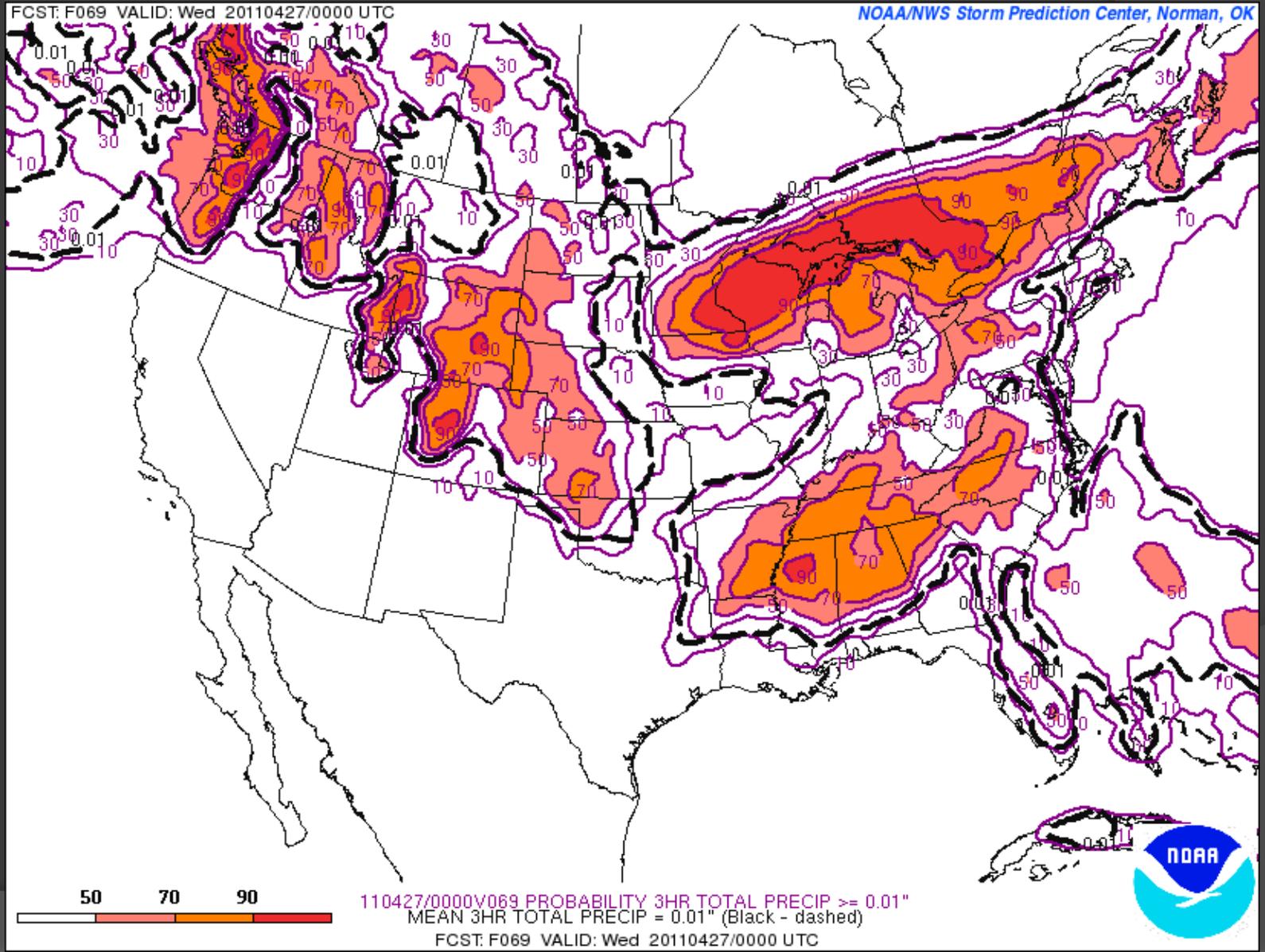
Day 2



Day 2



Day 2



Day 3+

- Looking like a dry stretch through at least Friday

Recap

- ⦿ Day 0/1:
 - LL jet building again overnight
 - Expecting precipitation to form N of front, pushing into SGP around 9UTC +/- 2 hrs (will finalize with afternoon updates), continuing through until ~16-18UTC before pulling NE
 - Going with a NAM-favoured forecast
- ⦿ Day 2:
 - Further chance of post-frontal precipitation
 - Good forcing aloft, though questions of available moisture
- ⦿ Day 3+:
 - Looking dry through Friday