

## **Storm Prediction Center**

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Mesoscale Discussion 406

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Convective initiation is expected during the 230-400 pm period with storms subsequently maturing and becoming severe.
A small tornado watch AND severe thunderstorm watch will likely be needed over much of this area later this afternoon into this evening.
Set of the severe thunderstorm watch will likely be needed over much of this area later this afternoon into this evening.
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News

Organization

Mesoscale Discussion 0406 NWS Storm Prediction Center Norman OK 1243 PM CDT Fri Apr 23 2021

Areas affected...southeast TX Panhandle...western north-central TX...far southwest OK

Concerning...Severe potential...Watch likely

Valid 231743Z - 232015Z

Probability of Watch Issuance...80 percent

SUMMARY...Convective initiation is expected during the 230-400 pm period with storms subsequently maturing and becoming severe. A large to giant hail risk (1 to 3+ inches in diameter) may accompany the stronger storms, especially late this afternoon; coincident in general timing with the peaking of a tornado threat. Additional storm development and upscale growth will facilitate the transition to severe gusts becoming more common during the evening across south-central and central OK.

DISCUSSION...Visible satellite imagery shows a cumulus field over the TX Low Rolling Plains east of the Caprock escarpment, where a dryline is becoming better defined from north to south. Surface temperatures as of 1230 pm have warmed into the low 70s in Dickens County to the east of Lubbock and the northwestern rim of low 60s dewpoints arcs from 50 mi west of Abilene northeastward to near the Fredrick, OK WSR-88D location in southwest OK.

Forecast soundings from 200 pm to 400 pm show the warming of the boundary layer to the east of the dryline at C11 (Seymour, TX) from the upper 60s to the mid 70s during the timeframe. As a result of the warming, convective inhibition is essentially eroded. The strengthening large-scale ascent associated with the approaching mid-level trough, will likely yield storms developing by mid afternoon across western north-central TX into far southwest OK. Strong effective shear and 2500-3000 J/kg MLCAPE will favor supercells with the stronger/persistent updrafts. Large to giant hail may occur and possibly a tornado despite low-level shear relatively limited. The transition to upscale growth in the form of a cluster and eventual band is expected this evening as the storms move east across south-central and central OK.

..Smith/Hart.. 04/23/2021

...Please see www.spc.noaa.gov for graphic product...

ATTN...WFO...OUN...SJT...LUB...AMA...

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Page last modified: April 23, 2021

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