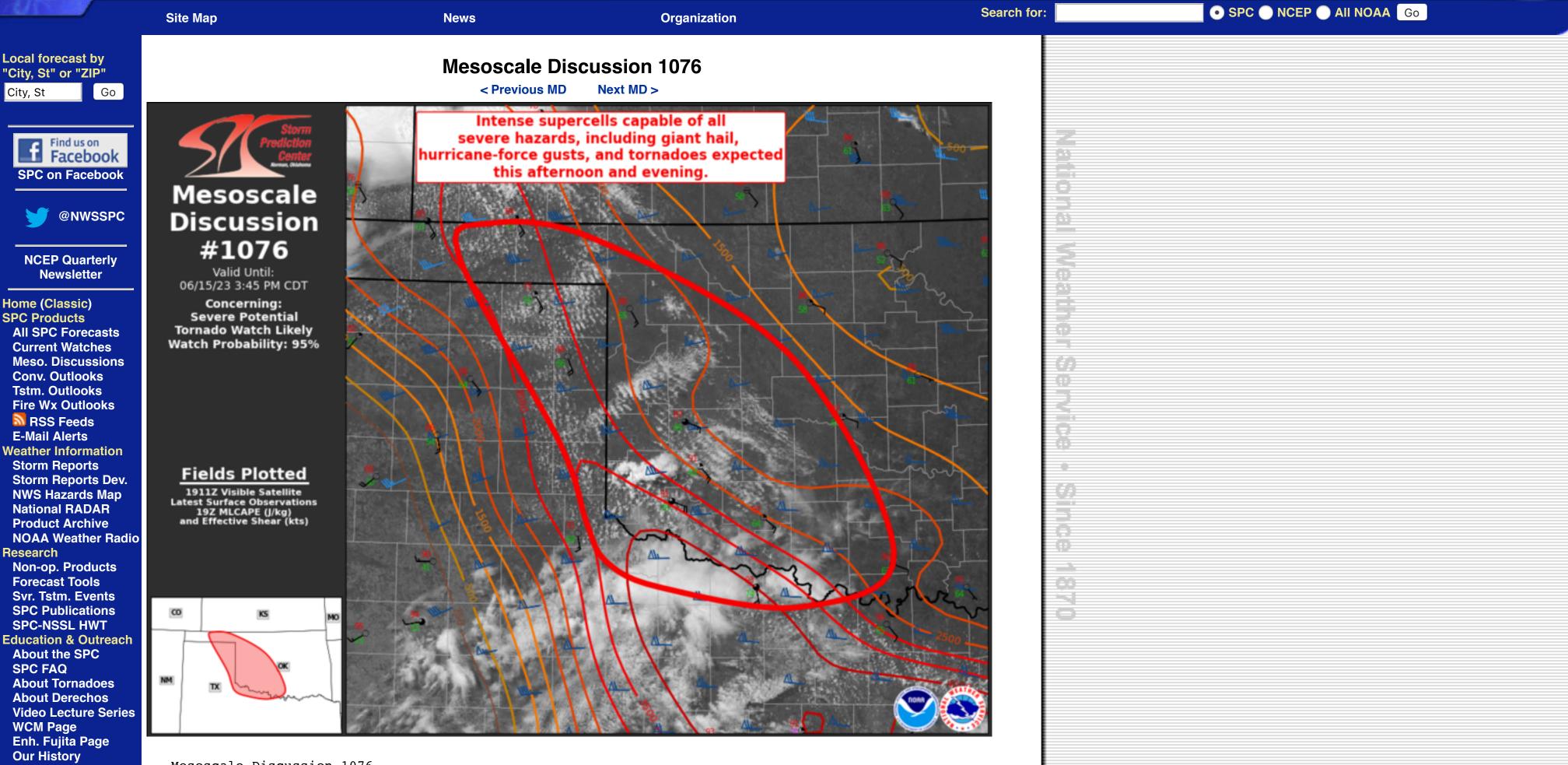
NOAA's National Weather Service

Storm Prediction Center





Mesoscale Discussion 1076 NWS Storm Prediction Center Norman OK 0215 PM CDT Thu Jun 15 2023

Areas affected...Central/Eastern OK Panhandle...Western/Central

OK...Eastern TX Panhandle...Far Northwest TX

Concerning...Severe potential...Tornado Watch likely

Valid 151915Z - 152045Z

Public Tours

SPC Feedback

usa

Misc.

Staff Contact Us

CORRECTED FOR TYPO IN DISCUSSION

Probability of Watch Issuance...95 percent

SUMMARY...Intense supercell thunderstorms capable of all severe hazards, including giant hail, hurricane-force wind gusts, and tornadoes, are expected across the region this afternoon and evening.

DISCUSSION...Visible satellite imagery currently shows an expanding cumulus field from the central/eastern OK Panhandle down through the eastern TX Panhandle and into far northwest TX. Thus far, most of the cumulus within this field have a relatively flat appearance, with only a few pockets with more vertical development (i.e. over far southwest OK/far northwest TX and central OK Panhandle). Recent mesoanalysis suggests some convective inhibition remains, which is verified with the appearance of the cumulus field.

Continued air mass destabilization is anticipated, with the limited convective inhibition likely eroding over the next hour. This erosion of the inhibition coupled with forcing for ascent attendant to the approaching shortwave trough, and additional mesoscale ascent related to the low-level confluence over the region, will likely result in convective initiation by 20Z (perhaps even sooner).

The air mass over the region represents a rare combination of buoyancy and shear during any time of the year, but particularly mid June. Forecast sounding suggest MLCAPE from 3000 to 4000 J/kg and effective bulk shear from 60 to 70 kt when storms initiate. These type of environment will result in intense supercells, capable of all severe hazards, including giant hail (3"+ in diameter), hurricane-force wind gusts, and tornadoes. The tornado potential may be mitigated somewhat by the higher LCLs and relatively modest low-level shear. However, given the overall character of the environment, tornadic supercells cannot be ruled out.

..Mosier/Thompson.. 06/15/2023

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

ATTN...WFO...FWD...OUN...LUB...AMA...

LAT...LON 35180048 36710153 36990125 36870012 35899812 34249711 33809804 33989945 34189999 34500019 35180048

Top/All Mesoscale Discussions/Forecast Products/Home

Weather Topics: Watches, Mesoscale Discussions, Outlooks, Fire Weather, All Products, Contact Us

NOAA / National Weather Service National Centers for Environmental Prediction Storm Prediction Center 120 David L. Boren Blvd. Disclaimer Information Quality Help Glossary Privacy Policy Freedom of Information Act (FOIA) About Us Career Opportunities

