



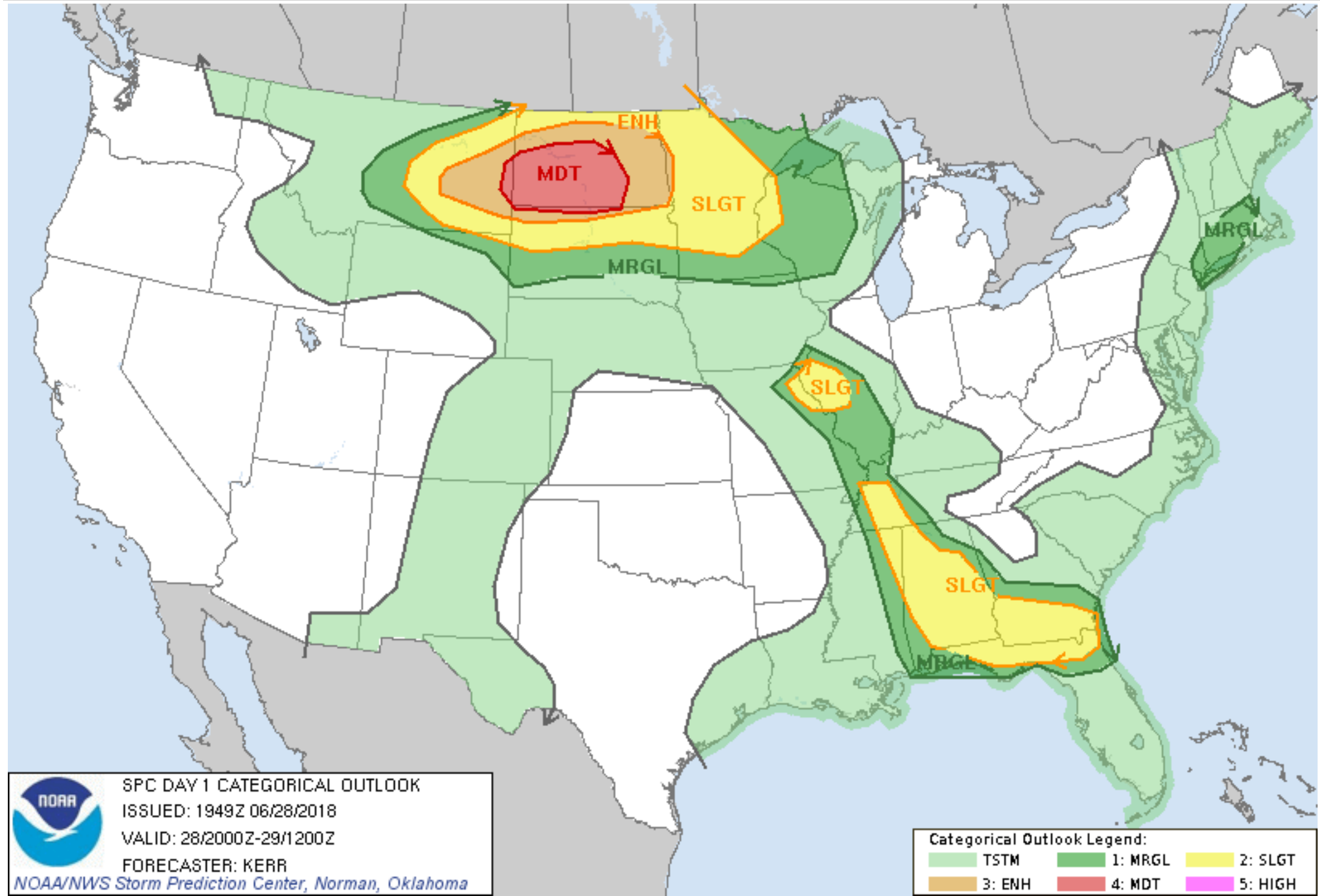
Jun 28, 2018 2000 UTC Day 1 Convective Outlook

Updated: Thu Jun 28 19:49:00 UTC 2018 ( | )
[Probabilistic to Categorical Outlook Conversion Table](#)

Public Severe Weather Outlook

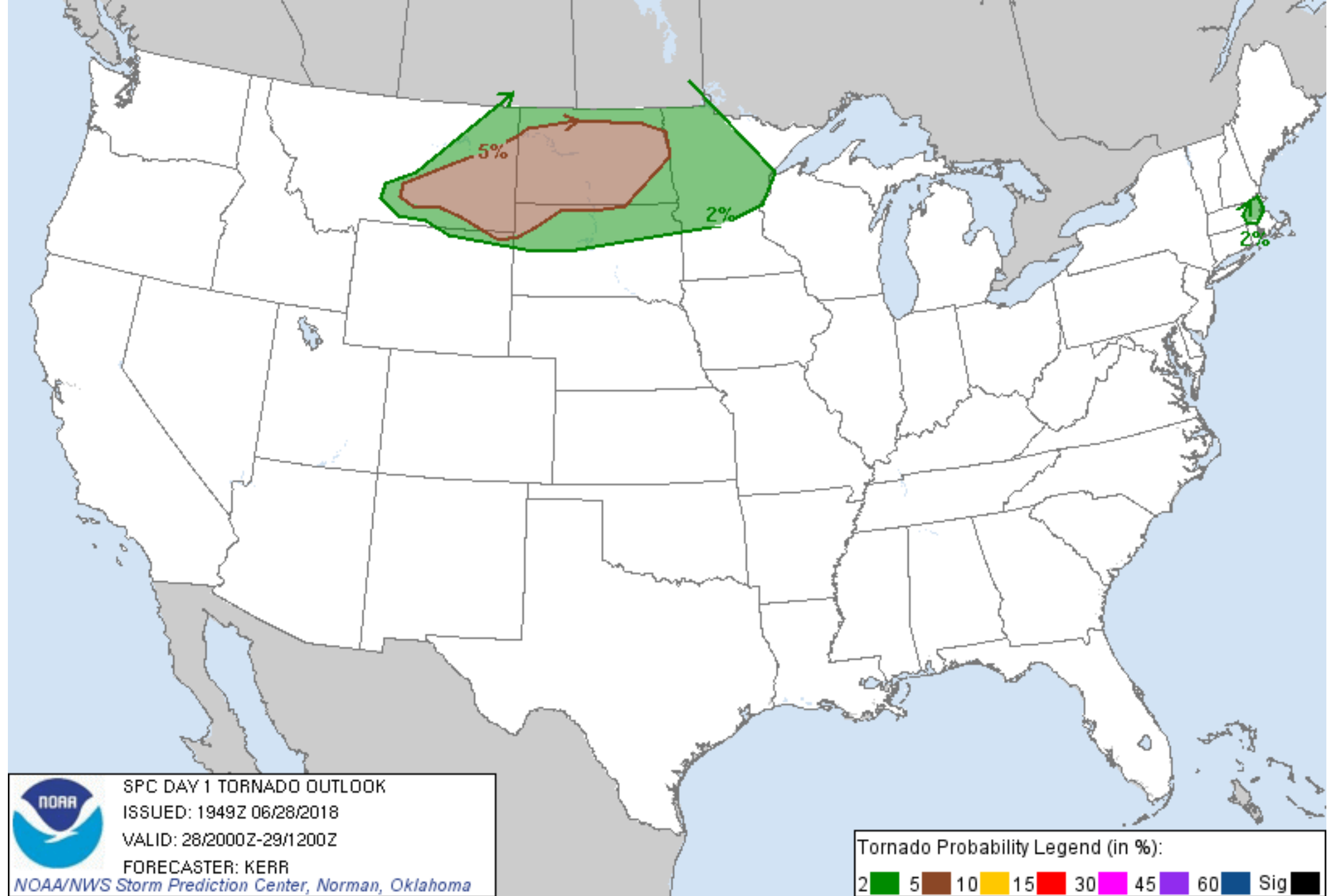
The SPC is forecasting ...Severe thunderstorms expected over parts of the northern Plains this afternoon and tonight.... Please [read](#) the latest public statement about this event. View [What is a Watch?](#) clip.

Categorical Graphic



Day 1 Risk	Area (sq. mi.)	Area Pop.	Some Larger Population Centers in Risk Area
MODERATE	36,949	226,704	Bismarck, ND...Mandan, ND...Dickinson, ND...Jamestown, ND...
ENHANCED	50,730	510,057	Fargo, ND...Grand Forks, ND...Minot, ND...Moorhead, MN...West Fargo, ND...
SLIGHT	220,862	12,448,763	Jacksonville, FL...Minneapolis, MN...St. Paul, MN...Birmingham, AL...Montgomery, AL...
MARGINAL	223,277	33,086,755	New York, NY...Boston, MA...St. Louis, MO...Jersey City, NJ...Yonkers, NY...

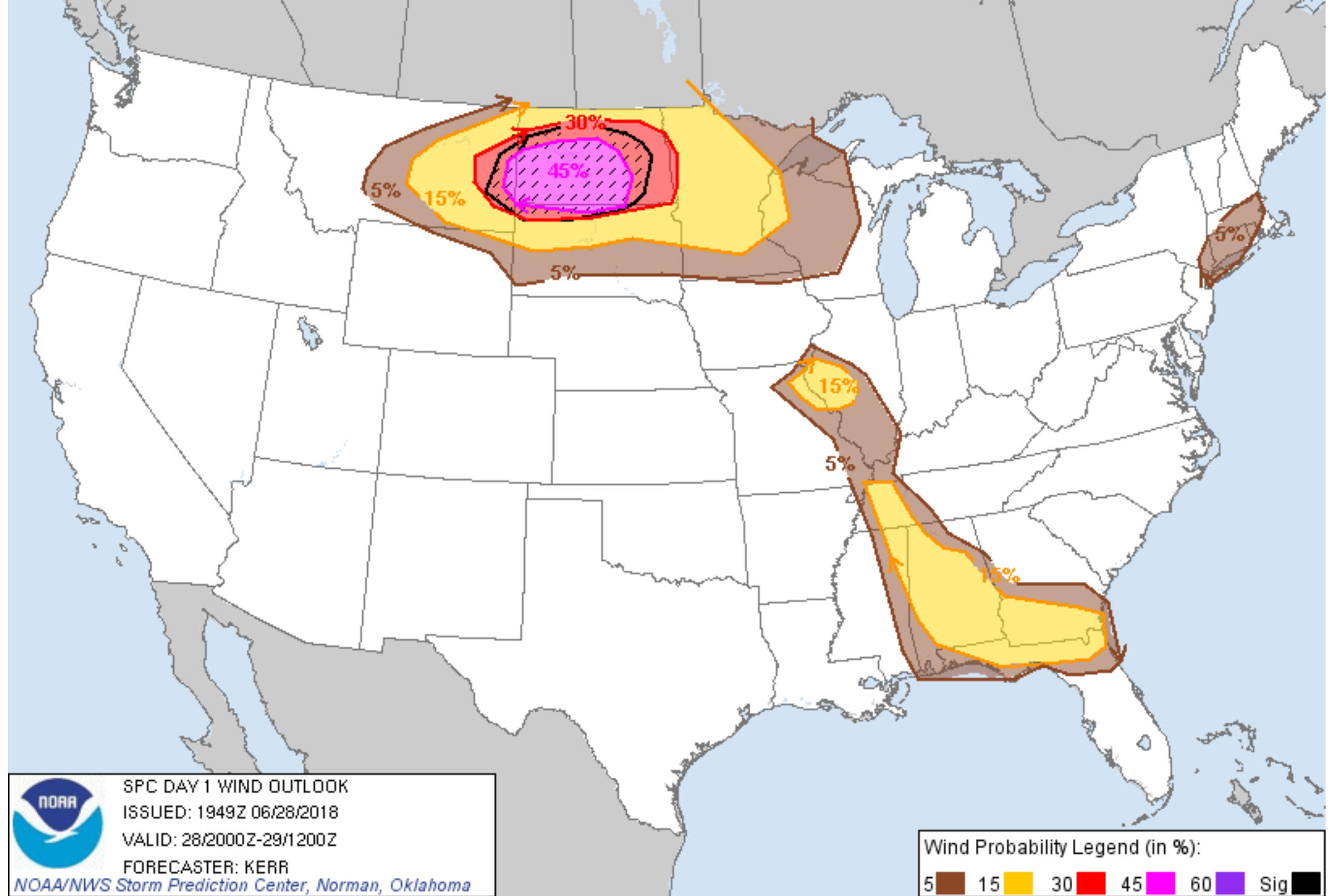
Probabilistic Tornado Graphic



Probability of a tornado within 25 miles of a point.
Hatched Area: 10% or greater probability of EF2 - EF5 tornadoes within 25 miles of a point.

Day 1 Tornado Risk	Area (sq. mi.)	Area Pop.	Some Larger Population Centers in Risk Area
5 %	92,516	662,106	Billings, MT...Bismarck, ND...Grand Forks, ND...Minot, ND...Mandan, ND...
2 %	114,680	4,995,951	Boston, MA...Lowell, MA...Cambridge, MA...Fargo, ND...Lynn, MA...

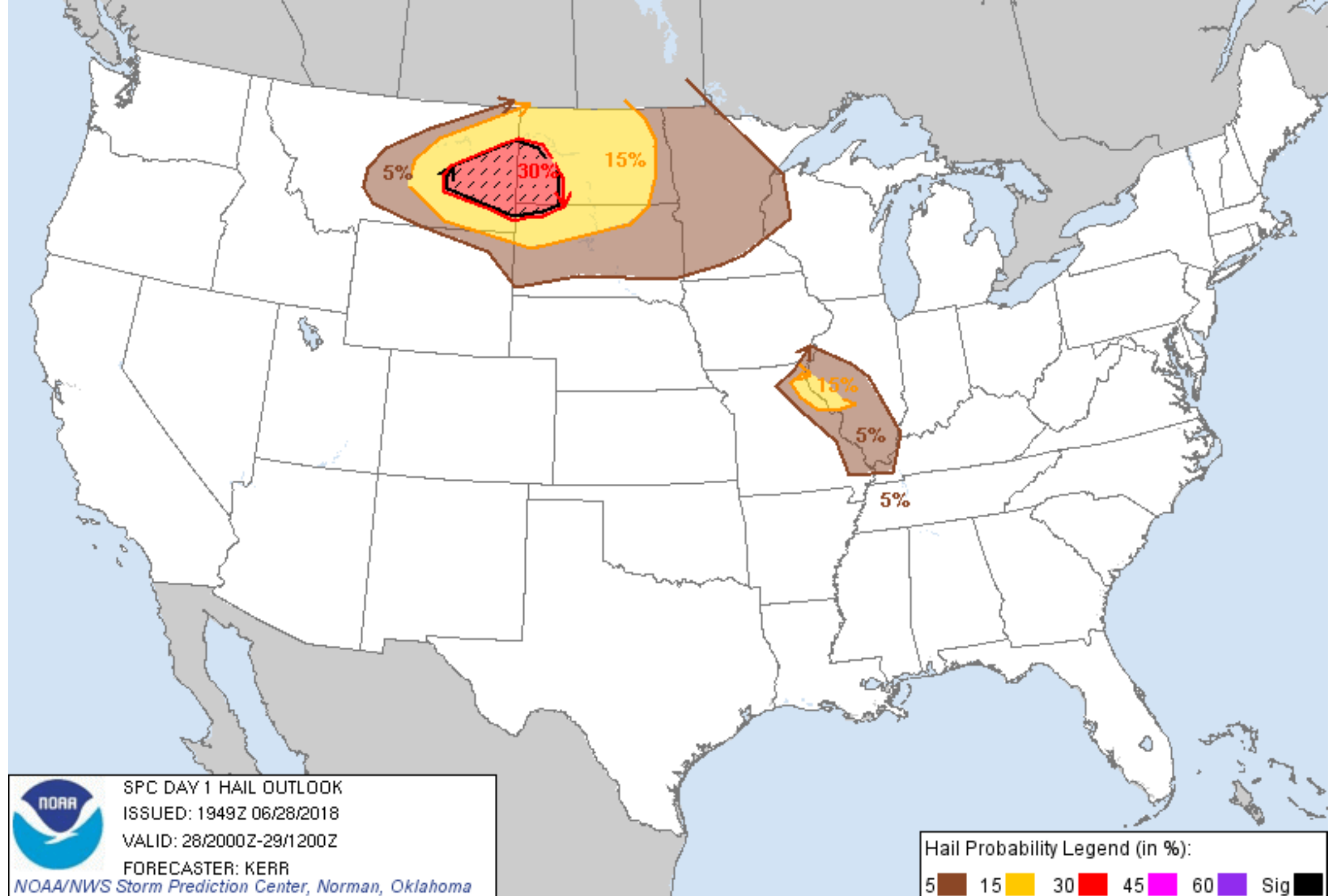
Probabilistic Damaging Wind Graphic



Probability of damaging thunderstorm winds or wind gusts of 50 knots or higher within 25 miles of a point.
Hatched Area: 10% of greater probability of wind gusts 65 knots or greater within 25 miles of a point.

Day 1 Wind Risk	Area (sq. mi.)	Area Pop.	Some Larger Population Centers in Risk Area
SIG SEVERE	59,204	367,662	Bismarck, ND...Minot, ND...Mandan, ND...Dickinson, ND...Jamestown, ND...
45 %	37,139	227,188	Bismarck, ND...Mandan, ND...Dickinson, ND...Jamestown, ND...
30 %	43,243	494,700	Fargo, ND...Grand Forks, ND...Minot, ND...Moorhead, MN...West Fargo, ND...
15 %	229,801	12,503,470	Jacksonville, FL...Minneapolis, MN...St. Paul, MN...Birmingham, AL...Montgomery, AL...
5 %	222,291	33,122,948	New York, NY...Boston, MA...St. Louis, MO...Jersey City, NJ...Yonkers, NY...

Probabilistic Large Hail Graphic



Probability of hail 1" or larger within 25 miles of a point.
Hatched Area: 10% or greater probability of hail 2" or larger within 25 miles of a point.

Day 1 Hail Risk	Area (sq. mi.)	Area Pop.	Some Larger Population Centers in Risk Area
SIG SEVERE	28,395	81,258	Dickinson, ND...Miles City, MT...Glendive, MT...Sidney, MT...
30 %	33,253	88,580	Dickinson, ND...Miles City, MT...Glendive, MT...Sidney, MT...
15 %	101,565	691,594	Bismarck, ND...Quincy, IL...Minot, ND...Hannibal, MO...Mandan, ND...
5 %	184,302	10,079,678	Minneapolis, MN...St. Louis, MO...St. Paul, MN...Springfield, IL...Billings, MT...

SPC AC 281949

Day 1 Convective Outlook
NWS Storm Prediction Center Norman OK
0249 PM CDT Thu Jun 28 2018

Valid 282000Z - 291200Z

...THERE IS A MODERATE RISK OF SEVERE THUNDERSTORMS THIS EVENING ACROSS MUCH OF WESTERN AND CENTRAL NORTH DAKOTA AND ADJACENT AREAS OF EASTERN MONTANA AND NORTHERN SOUTH DAKOTA...

...THERE IS A SLIGHT RISK OF SEVERE THUNDERSTORMS THROUGH THE REMAINDER OF THE AFTERNOON AND EVENING ACROSS PARTS OF THE

SOUTHEAST...AND ACROSS PARTS OF THE MIDDLE MISSISSIPPI VALLEY THIS AFTERNOON...

...SUMMARY...

Severe thunderstorms will develop off the northern Rockies late this afternoon before spreading across eastern Montana, North Dakota and parts of adjacent South Dakota by late tonight. This activity will be accompanied by the risk for very large hail, potentially widespread damaging wind gusts, and perhaps a couple of tornadoes.

...20Z Outlook Update...

A number of adjustments have been made to the categorical and probabilistic outlook lines to account for ongoing convective trends and progression of supporting synoptic and mesoscale features.

Observational data suggest that the small but long-lived convective system now propagating southeastward into northeastern Missouri and west central Illinois may finally be in the process of weakening, in the presence of increasing inhibition and weakening supporting forcing for ascent. Strongest convection now appears to be an evolving cell on the southwestern-most flank of the system. It is not certain that this will be maintained, but the latest High Resolution Rapid Refresh suggests renewed development and upscale growth might not be out of the question south southeastward in the vicinity of the Mississippi River later this afternoon and evening.

Otherwise, primary convective development this afternoon into this evening is expected to continue to evolve in the presence of high boundary layer moisture content and weaker inhibition across the eastern Gulf Coast states, to the southeast of a broad plume of very warm elevated mixed layer air overspreading much of the Plains and Mississippi Valley region. Near the northern periphery of this plume, aided by forcing associated with a short wave impulse emerging from the Great Basin mid/upper troughing, a significant increase in thunderstorm development off the mountains of Montana and northern Wyoming into western/central North Dakota, and perhaps adjacent northern South Dakota, is expected by mid to late evening. Given an environment characterized by strong deep layer shear, steep lapse rates and moderate to large CAPE, early storm development will include supercells with the risk for severe hail and locally strong surface gusts, perhaps a couple of tornadoes, before transitioning to primarily a severe wind threat with the upscale growth this evening.

..Kerr.. 06/28/2018

.PREV DISCUSSION... /ISSUED 1116 AM CDT Thu Jun 28 2018/

...Northern Plains...

Isolated severe thunderstorms have been ongoing this morning in area of low-level warm advection over ND and MN. Locally intense storms will remain possible through the afternoon in this regime, with large hail and damaging winds possible.

By mid/late afternoon, the influence of a strong upper trough in the western states will begin to affect western/central MT. Favorable heating, dewpoints in the 50s, and strong winds aloft will promote a few severe storms capable of hail and wind. As this activity spreads eastward, more robust convection should develop in the eastern plains of MT, with supercells and very large hail possible. A few tornadoes may also occur in this region before storms merge/congeal into multiple bowing line segments. Damaging wind threat will likely become rather widespread across parts of ND after dark.

Several 12z model runs suggest a risk of a linear MCS tracking into parts of MN/WI overnight. Have expanded the MRGL risk to account for this potential.

...TN Valley into Southeast states...

A band of strong thunderstorms extends from western KY, across

middle TN, into northern GA. These storms are expected to build southward through the day, into a very moist and unstable air mass. Winds aloft are just strong enough for a few multicell clusters posing a risk of organized damaging wind potential. Southward extent of storms will be modulated by mesoscale organization, but may reach into north FL before weakening.

...Northeast...

A moist boundary layer is present today over parts of NY/NJ and southern New England, with dewpoints in the 70s. Scattered thunderstorms are expected to form this afternoon and spread across the MRGL risk area. Thermodynamic parameters are weak, but low/mid level winds are sufficiently strong for a few wind gusts in the most intense cells.

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NOTE: THE NEXT DAY 1 OUTLOOK IS SCHEDULED BY 0100Z