Factual Report – Attachment 12

Zone Forecast Products, Area Forecast Discussions, Hazardous Weather Outlooks and Watch County Notifications applicable to Stone County, Missouri, and Taney County, Missouri, issued by the NWS Springfield WFO on July 19, 2018, and prior to the accident time.

METEOROLOGY

DCA18MM028

Submitted by: Mike Richards NTSB, AS-30

Zone Forecast Products

FPUS53 KSGF 190555 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 1255 AM CDT Thu Jul 19 2018

MOZ104-190915-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 1255 AM CDT Thu Jul 19 2018

- .REST OF TONIGHT...Partly cloudy with a 20 percent chance of showers and thunderstorms. Near steady temperature in the lower 70s. Light wind.
- .THURSDAY...Warmer. Partly cloudy. A 20 percent chance of showers
- and thunderstorms in the afternoon. Highs in the mid 90s. Light wind. Highest heat index readings around 110 in the afternoon. .THURSDAY NIGHT...Partly cloudy. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening. .FRIDAY...Partly cloudy. Highs in the upper 90s. Light wind in
- the morning becoming west around 10 mph in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 20 percent chance of showers
- and thunderstorms. Lows around 70. Light wind. Highest heat index
- readings around 100 in the evening.
- .SATURDAY AND SATURDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .MONDAY THROUGH WEDNESDAY...Partly cloudy. Highs in the lower 90s. Lows around 70.

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MOZ103-190915-

Stone-

Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 1255 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...
- .REST OF TONIGHT...Partly cloudy with a 20 percent chance of showers and thunderstorms. Lows around 70. Light wind.
- .THURSDAY...Warmer. Mostly sunny. A 20 percent chance of showers and thunderstorms in the afternoon. Highs in the mid 90s. Light wind. Highest heat index readings around 110 in the afternoon.
- .THURSDAY NIGHT...Partly cloudy. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph. Heat index readings around 106.
- .FRIDAY NIGHT...Partly cloudy. A 20 percent chance of showers and

thunderstorms in the evening. Lows around 70. Light wind. Highest

heat index readings around 100 in the evening.

- .SATURDAY AND SATURDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs in the lower 90s. Lows around 70.
- .MONDAY THROUGH WEDNESDAY...Partly cloudy. Highs around 90. Lows around 70.

FPUS53 KSGF 190604 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 104 AM CDT Thu Jul 19 2018

MOZ104-190915-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 104 AM CDT Thu Jul 19 2018

- .REST OF TONIGHT...Partly cloudy with a 20 percent chance of showers and thunderstorms. Near steady temperature in the lower 70s. Light wind.
- .THURSDAY...Warmer. Partly cloudy. A 20 percent chance of showers
- and thunderstorms in the afternoon. Highs in the mid 90s. Light wind. Highest heat index readings around 110 in the afternoon. .THURSDAY NIGHT...Partly cloudy. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Light wind in the morning becoming west around 10 mph in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 20 percent chance of showers
- and thunderstorms. Lows around 70. Light wind. Highest heat index
- readings around 100 in the evening.
- .SATURDAY AND SATURDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .MONDAY THROUGH WEDNESDAY...Partly cloudy. Highs in the lower 90s. Lows around 70.

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MOZ103-190915-

Stone-

Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 104 AM CDT Thu Jul 19 2018

...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...

- .REST OF TONIGHT...Partly cloudy with a 20 percent chance of showers and thunderstorms. Lows around 70. Light wind.
- .THURSDAY...Warmer. Mostly sunny. A 20 percent chance of showers and thunderstorms in the afternoon. Highs in the mid 90s. Light wind. Highest heat index readings around 110 in the afternoon.
- .THURSDAY NIGHT...Partly cloudy. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph. Heat index readings around 106.
- .FRIDAY NIGHT...Partly cloudy. A 20 percent chance of showers and
- thunderstorms in the evening. Lows around 70. Light wind. Highest
- heat index readings around 100 in the evening.
- .SATURDAY AND SATURDAY NIGHT...Mostly clear. Highs in the mid 90s. Lows around 70.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs in the lower 90s. Lows around 70.
- .MONDAY THROUGH WEDNESDAY...Partly cloudy. Highs around 90. Lows around 70.

Attachment 12 5 DCA18MM028

FPUS53 KSGF 190821 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 321 AM CDT Thu Jul 19 2018

MOZ104-192115-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 321 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...
- .TODAY...Warmer. Partly sunny early in the morning then becoming mostly sunny late in the morning then becoming partly cloudy in the afternoon. Slight chance of showers and thunderstorms early in the morning. Slight chance of showers and thunderstorms in the
- afternoon. Highs in the mid 90s. Light wind. Chance of rain 20 percent. Highest heat index readings around 110 in the afternoon.
- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. A 20 percent chance of showers and thunderstorms in the morning. Highs in the upper 90s. Light wind.

Heat index readings around 105.

- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs in the lower 90s.
- .SUNDAY NIGHT THROUGH MONDAY NIGHT...Mostly clear. Lows around 70. Highs around 90.
- .TUESDAY AND TUESDAY NIGHT...Partly cloudy. Highs around 90. Lows

around 70

.WEDNESDAY...Mostly sunny. Highs around 90.

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MOZ103-192115-Stone-Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 321 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...
- .TODAY...Warmer. Partly cloudy early in the morning then becoming

mostly sunny in the late morning and early afternoon then becoming partly cloudy late in the afternoon. Slight chance of showers and thunderstorms early in the morning. Slight chance of showers and thunderstorms in the afternoon. Highs in the mid 90s.

Light wind. Chance of rain 20 percent. Highest heat index readings around 110 in the afternoon.

- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph in the morning shifting to the northwest in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT AND MONDAY...Mostly clear. Lows in the upper 60s. Highs around 90.
- .MONDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows around 70. Highs around 90.

FPUS53 KSGF 191236 AAA ZFPSGF

Zone Forecasts for Missouri...UPDATED National Weather Service Springfield MO 736 AM CDT Thu Jul 19 2018

MOZ104-192115-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 736 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Patchy fog in the morning. Mostly cloudy
- in the morning, then partly cloudy with a 20 percent chance of showers and thunderstorms in the afternoon. Highs in the mid 90s.
- Light wind. Highest heat index readings around 110 in the afternoon.
- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. A 20 percent chance of showers and thunderstorms in the morning. Highs in the upper 90s. Light wind.

Heat index readings around 105.

- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs in the lower 90s.
- .SUNDAY NIGHT THROUGH MONDAY NIGHT...Mostly clear. Lows around 70. Highs around 90.
- .TUESDAY AND TUESDAY NIGHT...Partly cloudy. Highs around 90. Lows

around 70.

.WEDNESDAY....Mostly sunny. Highs around 90.

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MOZ103-192115-

Stone-

Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 736 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT FROM NOON TODAY TO 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Patchy fog in the morning. Mostly cloudy
- in the morning, then partly cloudy with a 20 percent chance of showers and thunderstorms in the afternoon. Highs in the mid 90s.
- Light wind. Highest heat index readings around 110 in the afternoon.
- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph in the morning shifting to the northwest in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT AND MONDAY...Mostly clear. Lows in the upper 60s. Highs around 90.
- .MONDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows around 70. Highs around 90.

FPUS53 KSGF 191524 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 1024 AM CDT Thu Jul 19 2018

MOZ104-192115-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 1024 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Mostly cloudy late in the morning then clearing. Highs in the mid 90s. Light wind. Highest heat index readings around 111 in the afternoon.
- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. A 20 percent chance of showers and thunderstorms in the morning. Highs in the upper 90s. Light wind.

Heat index readings around 105.

.FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers

and thunderstorms. Lows around 70. Light wind.

- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs in the lower 90s.
- .SUNDAY NIGHT THROUGH MONDAY NIGHT...Mostly clear. Lows around 70. Highs around 90.
- .TUESDAY AND TUESDAY NIGHT...Partly cloudy. Highs around 90. Lows

around 70.

.WEDNESDAY....Mostly sunny. Highs around 90.

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MOZ103-192115-

Stone-

Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City
1024 AM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Mostly cloudy late in the morning then clearing. Highs in the mid 90s. Light wind. Highest heat index readings around 110 in the afternoon.
- .TONIGHT...Partly cloudy with a 30 percent chance of showers and thunderstorms. Lows in the lower 70s. Light wind. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph in the morning shifting to the northwest in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT AND MONDAY...Mostly clear. Lows in the upper 60s. Highs around 90.
- .MONDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows around 70. Highs around 90.

Attachment 12 DCA18MM028

FPUS53 KSGF 191630 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 1130 AM CDT Thu Jul 19 2018

MOZ104-192115-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 1130 AM CDT Thu Jul 19 2018

- ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Partly cloudy with scattered showers and

thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 30 percent. Highest heat index readings around 111 in the

afternoon.

- .TONIGHT...Partly cloudy. Chance of showers and thunderstorms. Some thunderstorms may produce damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. A 20 percent chance of showers and thunderstorms in the morning. Highs in the upper 90s. Light wind.

Heat index readings around 105.

- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs in the lower 90s.
- .SUNDAY NIGHT THROUGH MONDAY NIGHT...Mostly clear. Lows around 70. Highs around 90.
- .TUESDAY AND TUESDAY NIGHT...Partly cloudy. Highs around 90. Lows

around 70.

.WEDNESDAY....Mostly sunny. Highs around 90.

MOZ103-192115-Stone-Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 1130 AM CDT Thu Jul 19 2018

- ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Partly cloudy with isolated showers and thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 20 percent. Highest heat index readings around 110 in the
- afternoon.
- .TONIGHT...Partly cloudy. Chance of showers and thunderstorms. Some thunderstorms may produce damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph in the morning shifting to the northwest in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT AND MONDAY...Mostly clear. Lows in the upper 60s. Highs around 90.
- .MONDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows around 70. Highs around 90.

FPUS53 KSGF 191732 AAB ZFPSGF

Zone Forecasts for Missouri...UPDATED National Weather Service Springfield MO 1232 PM CDT Thu Jul 19 2018

MOZ104-192130-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 1232 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
 ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Partly cloudy with scattered showers and

thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 30 percent. Highest heat index readings around 111 in the

afternoon.

- .TONIGHT...Partly cloudy. Scattered showers and thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of
- rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Isolated showers and thunderstorms in the morning. Highs in the upper 90s. Light wind. Chance of rain 20 percent. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs in the lower 90s.
- .SUNDAY NIGHT THROUGH MONDAY NIGHT...Mostly clear. Lows around 70. Highs around 90.
- .TUESDAY AND TUESDAY NIGHT...Partly cloudy. Highs around 90. Lows

around 70.

.WEDNESDAY....Mostly sunny. Highs around 90.

MOZ103-192130-

Stone-

Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 1232 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Partly cloudy with scattered showers and

thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 30 percent. Highest heat index readings around 110 in the

afternoon.

- .TONIGHT...Partly cloudy. Scattered showers and thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of
- rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Partly cloudy. Highs in the upper 90s. Southwest winds around 10 mph in the morning shifting to the northwest in the afternoon. Heat index readings around 105.
- .FRIDAY NIGHT...Partly cloudy with a 30 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT AND MONDAY...Mostly clear. Lows in the upper 60s. Highs around 90.
- .MONDAY NIGHT THROUGH WEDNESDAY...Partly cloudy. Lows around 70. Highs around 90.

FPUS53 KSGF 191838 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 138 PM CDT Thu Jul 19 2018

MOZ104-192115-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 138 PM CDT Thu Jul 19 2018

...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...

- .REST OF TODAY...Warmer. Mostly sunny with isolated showers and thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 20 percent. Heat index readings around 107.
- .TONIGHT...Partly cloudy with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 105 in the evening.
- .FRIDAY...Mostly sunny. Highs around 100. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers

and thunderstorms. Lows around 70. Light wind. Highest heat index

readings around 100 in the evening.

- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT AND SUNDAY...Clear. Lows in the upper 60s. Highs around 90.
- .SUNDAY NIGHT THROUGH WEDNESDAY...Mostly clear. Lows in the upper

60s. Highs around 90.

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MOZ103-192115-

Stone-

Including the cities of Crane, Elsey, Indian Point,

Kimberling City, and Silver Dollar City 138 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .REST OF TODAY...Warmer. Mostly sunny with isolated showers and thunderstorms. Some thunderstorms may be severe with damaging winds, and large hail. Highs in the mid 90s. Light wind. Chance of rain 20 percent. Heat index readings around 107.
- .TONIGHT...Partly cloudy with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Mostly sunny. Highs in the upper 90s. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s.
- .SUNDAY...Mostly sunny. Highs around 90.
- .SUNDAY NIGHT THROUGH WEDNESDAY...Mostly clear. Lows in the upper
- 60s. Highs around 90.

FPUS53 KSGF 192105 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 405 PM CDT Thu Jul 19 2018

MOZ104-200915-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 405 PM CDT Thu Jul 19 2018

...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...

.TONIGHT...Mostly clear in the late afternoon and evening then becoming mostly cloudy early in the morning then becoming partly cloudy late in the night. Isolated showers and thunderstorms in the evening. Chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of

rain 30 percent. Highest heat index readings around 109 early in the evening.

- .FRIDAY...Mostly sunny. Highs around 100. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers

and thunderstorms. Lows around 70. Light wind. Highest heat index

readings around 100 in the evening.

- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s. Northwest winds around 10 mph in the evening becoming light after midnight.
- .SUNDAY...Sunny. Highs around 90.
- .SUNDAY NIGHT...Mostly clear. Lows in the upper 60s.
- .MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

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MOZ103-200915-

Stone-

Including the cities of Crane, Elsey, Indian Point,

Kimberling City, and Silver Dollar City 405 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
 ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .TONIGHT...Sunny early in the evening then becoming partly cloudy
- in the evening then becoming mostly cloudy early in the morning then becoming partly cloudy late in the night. Scattered showers and thunderstorms in the late afternoon and evening, then chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the late afternoon and evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 109 early in the evening.
- .FRIDAY...Mostly sunny. Highs in the upper 90s. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s. North winds around 10 mph in the evening becoming light after midnight.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs around 90. Lows in

the mid 60s.

.MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

FPUS53 KSGF 192118 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 418 PM CDT Thu Jul 19 2018

MOZ104-200915-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 418 PM CDT Thu Jul 19 2018

...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...

- .TONIGHT...Mostly clear with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Mostly sunny. Highs around 100. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers

and thunderstorms. Lows around 70. Light wind. Highest heat index

readings around 100 in the evening.

- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming northwest around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s. Northwest winds around 10 mph in the evening becoming light after midnight.
- .SUNDAY...Sunny. Highs around 90.
- .SUNDAY NIGHT...Mostly clear. Lows in the upper 60s.
- .MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

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MOZ103-200915-Stone-Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 418 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
 ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .TONIGHT...Partly cloudy with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Mostly sunny. Highs in the upper 90s. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s. North winds around 10 mph in the evening becoming light after midnight.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs around 90. Lows in

the mid 60s.

.MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

Attachment 12 21 DCA18MM028

FPUS53 KSGF 192310 ZFPSGF

Zone Forecasts for Missouri National Weather Service Springfield MO 610 PM CDT Thu Jul 19 2018

MOZ104-200915-

Taney-

Including the cities of Branson, Edgewater Beach, Forsyth, Hollister, Kirbyville, Ozark Beach, and Powersite 610 PM CDT Thu Jul 19 2018

...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...

- .TONIGHT...Mostly clear with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Mostly sunny. Highs around 100. Light wind. Heat index readings around 108.
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- .SUNDAY...Sunny. Highs around 90.
- .SUNDAY NIGHT...Mostly clear. Lows in the upper 60s.
- .MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

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MOZ103-200915-Stone-Including the cities of Crane, Elsey, Indian Point, Kimberling City, and Silver Dollar City 610 PM CDT Thu Jul 19 2018

- ...HEAT ADVISORY IN EFFECT UNTIL 9 PM CDT THIS EVENING...
 ...SEVERE THUNDERSTORM WATCH 283 IN EFFECT UNTIL 9 PM CDT THIS EVENING...
- .TONIGHT...Partly cloudy with isolated showers and thunderstorms in the evening, then mostly cloudy with chance of showers and thunderstorms after midnight. Some thunderstorms may be severe with damaging winds, and large hail in the evening. Lows in the lower 70s. Light wind. Chance of rain 30 percent. Highest heat index readings around 100 in the evening.
- .FRIDAY...Mostly sunny. Highs in the upper 90s. Light wind. Heat index readings around 108.
- .FRIDAY NIGHT...Partly cloudy with a 40 percent chance of showers
- and thunderstorms. Lows around 70. Light wind.
- .SATURDAY...Mostly sunny. Highs in the lower 90s. Light wind in the morning becoming north around 10 mph in the afternoon.
- .SATURDAY NIGHT...Clear. Lows in the upper 60s. North winds around 10 mph in the evening becoming light after midnight.
- .SUNDAY AND SUNDAY NIGHT...Mostly clear. Highs around 90. Lows in

the mid 60s.

.MONDAY THROUGH THURSDAY...Mostly clear. Highs around 90. Lows around 70.

Attachment 12 23 DCA18MM028

Area Forecast Discussions

FXUS63 KSGF 190741 AFDSGF

Area Forecast Discussion National Weather Service Springfield MO 241 AM CDT Thu Jul 19 2018

.SHORT TERM...(Today and tonight)
Issued at 130 AM CDT Thu Jul 19 2018

We hate to start forecast discussions with a disclaimer, but

goes. There is big bust potential today with both temperatures and PoPs!

As of 2 AM, the weather is fairly quiet across the Missouri Ozarks. We are monitoring a cluster of strong to severe storms which is diving southeast across eastern Nebraska. This will be the first forecast concern as these storms should have no problem

making it into northeastern Kansas and northwestern Missouri by daybreak.

The question then becomes whether or not they make it into central

Missouri and portions of extreme southeastern Kansas a bit later this morning. Low level theta-e and MUCAPE gradients support a continued southeastward trek. Corfidi vectors will also support a southeastward motion as a low level jet veers and noses into the Kansas City metro. We have placed 30-40% PoPs up towards Highway 54 this morning to account for this. Even if these storms

do not make it this far southeast, we may see widely scattered development across central Missouri during the predawn and early morning hours as that veering low level jet induces isentropic upglide.

Thunderstorm chances this afternoon are then a tough call with multiple possible triggers. The two main mechanisms appear to be:

- 1) Any remaining outflow boundaries from morning storms.
- 2) Storms firing in the Kansas City metro/I-70 corridor with an

incoming short wave trough.

There seems to be loose agreement in both of these scenarios playing out from convection allowing models (CAMs).

While some areas may get worked over by morning convection, it does appear that most of the area will become highly unstable this

afternoon with MLCAPE values of 2500-3500 J/kg. There will also be

anomalously strong westerlies in place across northern and central

Missouri as an upper level speed max punches into the region.

Inspection of RAP forecast soundings indicates that supercell structures (possibly splitting) are in play this afternoon and this evening across central Missouri. Thus, large hail would be a

concern if this panned out. High 0-3 km theta-e differentials (30-35 Kelvin) will also support strong cold pool conglomeration and a damaging wind threat with storms that congeal into line segments and move southeast across the region.

At this point, we are going to advertise a limited severe weather

risk given the questions on triggering mechanisms and scenarios. It is quite possible that the severe risk may be increased later today.

The other big concern for today is temperatures and heat indices.

Any convection and associated cloud cover will certainly play a role. At this time, we believe that clouds and precipitation would tend to keep the eastern Ozarks the coolest.

In stark contrast, forecast 850 mb temperatures in the 19-22 Celsius range will support middle to upper 90s for highs across western Missouri and southeastern Kansas. With dew points in the lower to middle 70s, heat indices roughly along and west of

the U.S. 65 corridor will reach the 104 to 109 degree range.

We have decided to add a few counties near the Arkansas border to

the Heat Advisory. We will also have to watch for localized pooling of dew points as it is not out of the question that some

locations reach heat indices of 110. Thus, a short-fused Excessive

Heat Warning is not out of the realm of possibility.

As we get into tonight, a surface frontal boundary will drift south across northern Missouri. Models are all over the place regarding possible scenarios with overnight convection. There does

appear to be a signal for a low level jet stream strengthening and

nosing into the region. Thus, elevated convection will be possible

over parts of the area.

.LONG TERM...(Friday through Wednesday) Issued at 130 AM CDT Thu Jul 19 2018

That front will then continue to drift south and southwest across

the Missouri Ozarks on Friday. We could see a few left-over showers and thunderstorms in the morning across south-central Missouri. Thunderstorm chances in the afternoon are then in question as weak upper level height rises commence. We have therefore kept PoPs around 20%. PoPs will have to be increased if

breaking the cap appears more attainable, especially in the vicinity of that front. A slightly better chance for storms may come Friday night as a low level jet over-rides that frontal boundary

Hot and humid conditions will persist into Friday, especially near and south of that front. Highs in the upper 90s to around 100

degrees are expected, especially across far southwestern Missouri

and near the Arkansas border. It is possible that the Heat Advisory will need to be extended in this area, especially if dew

point/moisture pooling takes place near the front.

Near normal temperatures are then expected from this weekend into

the first half of next week as strong upper level high pressure over the Desert Southwest puts our region in a northerly flow aloft. Chances for precipitation look pretty low at this point.

&&

.AVIATION...(For the 06Z TAFS through 06Z Thursday night) Issued at 1125 PM CDT Wed Jul 18 2018

Convection was finally ending over the CWA with just a few light showers remaining. Nothing was close to the terminal locations and

will go with VFR conditions through the period. Will need to still

monitor what the MCS over Nebraska does, but for now, do not have

it impacting the 3 terminal sites.

&&

.SGF WATCHES/WARNINGS/ADVISORIES...

MO...Heat Advisory from noon today to 9 PM CDT this evening for MOZ055-066>068-077>080-088>091-093>096-101>105.

KS...Heat Advisory from noon today to 9 PM CDT this evening for KSZ073-097-101.

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SHORT TERM...Schaumann LONG TERM...Schaumann AVIATION...Lindenberg

Attachment 12 27 DCA18MM028

FXUS63 KSGF 191131 AFDSGF

Area Forecast Discussion National Weather Service Springfield MO 631 AM CDT Thu Jul 19 2018

... Updated for 12Z Aviation Discussion...

.SHORT TERM...(Today and tonight)
Issued at 130 AM CDT Thu Jul 19 2018

We hate to start forecast discussions with a disclaimer, but here

goes. There is big bust potential today with both temperatures and PoPs!

As of 2 AM, the weather is fairly quiet across the Missouri Ozarks. We are monitoring a cluster of strong to severe storms which is diving southeast across eastern Nebraska. This will be the first forecast concern as these storms should have no problem

making it into northeastern Kansas and northwestern Missouri by daybreak.

The question then becomes whether or not they make it into central

Missouri and portions of extreme southeastern Kansas a bit later this morning. Low level theta-e and MUCAPE gradients support a continued southeastward trek. Corfidi vectors will also support a southeastward motion as a low level jet veers and noses into the Kansas City metro. We have placed 30-40% PoPs up towards Highway 54 this morning to account for this. Even if these storms

do not make it this far southeast, we may see widely scattered development across central Missouri during the predawn and early morning hours as that veering low level jet induces isentropic upglide.

Thunderstorm chances this afternoon are then a tough call with multiple possible triggers. The two main mechanisms appear to be:

- 1) Any remaining outflow boundaries from morning storms.
- 2) Storms firing in the Kansas City metro/I-70 corridor with an incoming short wave trough.

There seems to be loose agreement in both of these scenarios playing out from convection allowing models (CAMs).

While some areas may get worked over by morning convection, it does appear that most of the area will become highly unstable this

afternoon with MLCAPE values of 2500-3500 J/kg. There will also be

anomalously strong westerlies in place across northern and central

Missouri as an upper level speed max punches into the region.

Inspection of RAP forecast soundings indicates that supercell structures (possibly splitting) are in play this afternoon and this evening across central Missouri. Thus, large hail would be a

concern if this panned out. High 0-3 km theta-e differentials (30-35 Kelvin) will also support strong cold pool conglomeration and a damaging wind threat with storms that congeal into line segments and move southeast across the region.

At this point, we are going to advertise a limited severe weather

risk given the questions on triggering mechanisms and scenarios. It is quite possible that the severe risk may be increased later today.

The other big concern for today is temperatures and heat indices.

Any convection and associated cloud cover will certainly play a role. At this time, we believe that clouds and precipitation would tend to keep the eastern Ozarks the coolest.

In stark contrast, forecast 850 mb temperatures in the 19-22 Celsius range will support middle to upper 90s for highs across western Missouri and southeastern Kansas. With dew points in the lower to middle 70s, heat indices roughly along and west of

the U.S. 65 corridor will reach the 104 to 109 degree range.

We have decided to add a few counties near the Arkansas border

the Heat Advisory. We will also have to watch for localized pooling of dew points as it is not out of the question that some locations reach heat indices of 110. Thus, a short-fused Excessive

Heat Warning is not out of the realm of possibility.

As we get into tonight, a surface frontal boundary will drift south across northern Missouri. Models are all over the place regarding possible scenarios with overnight convection. There does

appear to be a signal for a low level jet stream strengthening and

nosing into the region. Thus, elevated convection will be possible

over parts of the area.

.LONG TERM...(Friday through Wednesday)
Issued at 130 AM CDT Thu Jul 19 2018

That front will then continue to drift south and southwest across

the Missouri Ozarks on Friday. We could see a few left-over showers and thunderstorms in the morning across south-central Missouri. Thunderstorm chances in the afternoon are then in question as weak upper level height rises commence. We have therefore kept PoPs around 20%. PoPs will have to be increased if

breaking the cap appears more attainable, especially in the vicinity of that front. A slightly better chance for storms may come Friday night as a low level jet over-rides that frontal boundary

Hot and humid conditions will persist into Friday, especially near and south of that front. Highs in the upper 90s to around 100

degrees are expected, especially across far southwestern Missouri

and near the Arkansas border. It is possible that the Heat Advisory will need to be extended in this area, especially if dew

point/moisture pooling takes place near the front.

Near normal temperatures are then expected from this weekend into

the first half of next week as strong upper level high pressure over the Desert Southwest puts our region in a northerly flow aloft. Chances for precipitation look pretty low at this point.

&&

.AVIATION...(For the 12Z TAFS through 12Z Friday morning)

Issued at 631 AM CDT Thu Jul 19 2018

A large area of low stratus and fog has developed across southern

Missouri overnight, mainly affecting the KBBG and KSGF TAF sites with IFR/LIFR flight conditions. Satellite shows this area expanding northward into central Missouri, and slightly westward towards KJLN. Expect conditions to improve by mid morning back into VFR conditions.

Somewhat complicated forecast in terms of convection potential later

today. Do expect scattered storms once again this afternoon, but confidence not high in spatial coverage nor impact to the terminal

sites. Better chances look to reside from central Missouri through

the eastern Ozarks this afternoon and evening. For now will include

Prob30 for KSGF only and will have to monitor for possible inclusion at the other sites.

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.SGF WATCHES/WARNINGS/ADVISORIES...

MO...Heat Advisory from noon today to 9 PM CDT this evening for MOZ055-066>068-077>080-088>091-093>096-101>105.

KS...Heat Advisory from noon today to 9 PM CDT this evening for KSZ073-097-101.

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SHORT TERM...Schaumann LONG TERM...Schaumann AVIATION...Raberding

FXUS63 KSGF 191731 AFDSGF

Area Forecast Discussion National Weather Service Springfield MO 1231 PM CDT Thu Jul 19 2018

... Update to Aviation Discussion for 18Z Tafs...

.SHORT TERM...(Today and tonight)
Issued at 130 AM CDT Thu Jul 19 2018

We hate to start forecast discussions with a disclaimer, but here

goes. There is big bust potential today with both temperatures and PoPs!

As of 2 AM, the weather is fairly quiet across the Missouri Ozarks. We are monitoring a cluster of strong to severe storms which is diving southeast across eastern Nebraska. This will be the first forecast concern as these storms should have no problem

making it into northeastern Kansas and northwestern Missouri by daybreak.

The question then becomes whether or not they make it into central

Missouri and portions of extreme southeastern Kansas a bit later this morning. Low level theta-e and MUCAPE gradients support a continued southeastward trek. Corfidi vectors will also support a southeastward motion as a low level jet veers and noses into the Kansas City metro. We have placed 30-40% PoPs up towards Highway 54 this morning to account for this. Even if these storms

do not make it this far southeast, we may see widely scattered development across central Missouri during the predawn and early morning hours as that veering low level jet induces isentropic upglide.

Thunderstorm chances this afternoon are then a tough call with multiple possible triggers. The two main mechanisms appear to be:

- 1) Any remaining outflow boundaries from morning storms.
- 2) Storms firing in the Kansas City metro/I-70 corridor with an incoming short wave trough.

There seems to be loose agreement in both of these scenarios playing out from convection allowing models (CAMs).

While some areas may get worked over by morning convection, it does appear that most of the area will become highly unstable this

afternoon with MLCAPE values of 2500-3500 J/kg. There will also be

anomalously strong westerlies in place across northern and central

Missouri as an upper level speed max punches into the region.

Inspection of RAP forecast soundings indicates that supercell structures (possibly splitting) are in play this afternoon and this evening across central Missouri. Thus, large hail would be a

concern if this panned out. High $0-3~\rm km$ theta-e differentials $(30-35~\rm Kelvin)$ will also support strong cold pool conglomeration and a damaging wind threat with storms that congeal into line segments and move southeast across the region.

At this point, we are going to advertise a limited severe weather

risk given the questions on triggering mechanisms and scenarios. It is quite possible that the severe risk may be increased later today.

The other big concern for today is temperatures and heat indices.

Any convection and associated cloud cover will certainly play a role. At this time, we believe that clouds and precipitation would tend to keep the eastern Ozarks the coolest.

In stark contrast, forecast 850 mb temperatures in the 19-22 Celsius range will support middle to upper 90s for highs across western Missouri and southeastern Kansas. With dew points in the lower to middle 70s, heat indices roughly along and west of

the U.S. 65 corridor will reach the 104 to 109 degree range.

We have decided to add a few counties near the Arkansas border

the Heat Advisory. We will also have to watch for localized pooling of dew points as it is not out of the question that some locations reach heat indices of 110. Thus, a short-fused Excessive

Heat Warning is not out of the realm of possibility.

As we get into tonight, a surface frontal boundary will drift south across northern Missouri. Models are all over the place regarding possible scenarios with overnight convection. There does

appear to be a signal for a low level jet stream strengthening and

nosing into the region. Thus, elevated convection will be possible

over parts of the area.

.LONG TERM...(Friday through Wednesday)
Issued at 130 AM CDT Thu Jul 19 2018

That front will then continue to drift south and southwest across

the Missouri Ozarks on Friday. We could see a few left-over showers and thunderstorms in the morning across south-central Missouri. Thunderstorm chances in the afternoon are then in question as weak upper level height rises commence. We have therefore kept PoPs around 20%. PoPs will have to be increased if

breaking the cap appears more attainable, especially in the vicinity of that front. A slightly better chance for storms may come Friday night as a low level jet over-rides that frontal boundary

Hot and humid conditions will persist into Friday, especially near and south of that front. Highs in the upper 90s to around 100

degrees are expected, especially across far southwestern Missouri

and near the Arkansas border. It is possible that the Heat Advisory will need to be extended in this area, especially if dew

point/moisture pooling takes place near the front.

Near normal temperatures are then expected from this weekend into

the first half of next week as strong upper level high pressure over the Desert Southwest puts our region in a northerly flow aloft. Chances for precipitation look pretty low at this point.

&&

.AVIATION...(For the 18Z TAFS through 18Z Friday afternoon)

Issued at 1230 AM CDT Thu Jul 19 2018

Thunderstorms are pushing southeast across central Missouri early

this afternoon. Additional storms are developing across northwestern Missouri and also across north central Kansas. This activity will slide to the south and east this afternoon into this evening and could clip the Taf sites. This activity will likely be more scattered in nature. Brief lowering in flight category and erratic and gusty winds will occur with any storm.

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.SGF WATCHES/WARNINGS/ADVISORIES...

MO...Heat Advisory until 9 PM CDT this evening for MOZ055-066>068-

077>080-088>091-093>096-101>105.

KS...Heat Advisory until 9 PM CDT this evening for KSZ073-097-101.

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SHORT TERM...Schaumann LONG TERM...Schaumann AVIATION...Wise

FXUS63 KSGF 192044 AFDSGF

Area Forecast Discussion National Weather Service Springfield MO 344 PM CDT Thu Jul 19 2018

.SHORT TERM...(This evening through Friday) Issued at 340 PM CDT Thu Jul 19 2018

A hot and humid air mass is in place across southeastern Kansas and western Missouri this afternoon. Temperatures across these locations are currently in the middle to upper 90s with heat index

values in the 100 to around 105 range. Temperatures across the eastern Ozarks are cooler as cloud cover from convection is in place. Heat index values along and west of Highway 65 will continue to top out from around 103 to 108 degrees this afternoon

into early this evening. Will continue the Heat Advisory as is through 9 PM this evening.

An upper level shortwave trough is currently pushing southeast out

of the Northern Plains this afternoon. Deep layer shear has increased some across the area ahead of the trough. Given the warm

and humid conditions, instability has also increased across the area. As result there will be the potential for strong to severe storms this afternoon and evening with any storm. Storms have developed across northeastern Kansas into west central Missouri this afternoon. This activity will spread to the south and east into this evening. Large hail to the size of golf balls and damaging straight line winds up to around 70 mph will be the primary hazards with this activity. These storms will track across

portions of the northern forecast area, but there are questions on just how far south and west these storms will be able to track.

Frequent lightning and heavy rainfall will also occur with the storms. A localized flooding risk will also occur with this activity.

A few storms will likely linger overnight into Friday. Friday evening and night shortwave energy will track through the area and

could trigger a few storms. There will be the risk for a few

strong to severe storms Friday evening and night.

Highs on Friday will again warm into the lower to upper 90s with the hottest conditions occurring across southeastern Kansas and far southern Missouri. Heat index values of 100 to 105 are expected during the afternoon and early evening hours Friday.

.LONG TERM...(Friday Night through Thursday) Issued at 340 PM CDT Thu Jul 19 2018

An upper level low trough will deepen into a low and slowly spread southeast across the eastern U.S. this weekend into early next week. A drier air mass will spread into the area this weekend

with no rain expected this weekend into early next week. Highs will warm into the upper 80s to the lower 90s this weekend into next week as the upper level ridge remains west of the region.

An upper level shortwave will move through the region during the middle of next week and bring additional rain chances to the area.

&&

.AVIATION...(For the 18Z TAFS through 18Z Friday afternoon) Issued at 1230 AM CDT Thu Jul 19 2018

Thunderstorms are pushing southeast across central Missouri early

this afternoon. Additional storms are developing across northwestern Missouri and also across north central Kansas. This activity will slide to the south and east this afternoon into this evening and could clip the Taf sites. This activity will likely be more scattered in nature. Brief lowering in flight category and erratic and gusty winds will occur with any storm.

&&

.SGF WATCHES/WARNINGS/ADVISORIES...

MO...Heat Advisory until 9 PM CDT this evening for MOZ055-066>068-

077>080-088>091-093>096-101>105.

KS...Heat Advisory until 9 PM CDT this evening for KSZ073-097-101.

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SHORT TERM...Wise LONG TERM...Wise AVIATION...Wise

FXUS63 KSGF 192251 AFDSGF

Area Forecast Discussion National Weather Service Springfield MO 551 PM CDT Thu Jul 19 2018

.SHORT TERM...(This evening through Friday) Issued at 340 PM CDT Thu Jul 19 2018

A hot and humid air mass is in place across southeastern Kansas and western Missouri this afternoon. Temperatures across these locations are currently in the middle to upper 90s with heat index

values in the 100 to around 105 range. Temperatures across the eastern Ozarks are cooler as cloud cover from convection is in place. Heat index values along and west of Highway 65 will continue to top out from around 103 to 108 degrees this afternoon

into early this evening. Will continue the Heat Advisory as is through 9 PM this evening.

An upper level shortwave trough is currently pushing southeast out

of the Northern Plains this afternoon. Deep layer shear has increased some across the area ahead of the trough. Given the warm

and humid conditions, instability has also increased across the area. As result there will be the potential for strong to severe storms this afternoon and evening with any storm. Storms have developed across northeastern Kansas into west central Missouri this afternoon. This activity will spread to the south and east into this evening. Large hail to the size of golf balls and damaging straight line winds up to around 70 mph will be the primary hazards with this activity. These storms will track across

portions of the northern forecast area, but there are questions on just how far south and west these storms will be able to track.

Frequent lightning and heavy rainfall will also occur with the storms. A localized flooding risk will also occur with this activity.

A few storms will likely linger overnight into Friday. Friday evening and night shortwave energy will track through the area and

could trigger a few storms. There will be the risk for a few

strong to severe storms Friday evening and night.

Highs on Friday will again warm into the lower to upper 90s with the hottest conditions occurring across southeastern Kansas and far southern Missouri. Heat index values of 100 to 105 are expected during the afternoon and early evening hours Friday.

.LONG TERM...(Friday Night through Thursday) Issued at 340 PM CDT Thu Jul 19 2018

An upper level low trough will deepen into a low and slowly spread southeast across the eastern U.S. this weekend into early next week. A drier air mass will spread into the area this weekend

with no rain expected this weekend into early next week. Highs will warm into the upper 80s to the lower 90s this weekend into next week as the upper level ridge remains west of the region.

An upper level shortwave will move through the region during the middle of next week and bring additional rain chances to the area.

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.AVIATION...(For the 00Z TAFS through 00Z Friday evening) Issued at 545 PM CDT Thu Jul 19 2018

Line segment was from Caplinger Mills to near Jasper MO as of 22:50Z pushing southeast and will potentially impact SGF by 2330-0000z. It should remain northeast of JLN and not expecting it

to affect BBG at this time. While additional isolated/widely scattered convection possible later in the evening, this should be

the main thunderstorm risk over the next couple hours. Will see some MVFR possible IFR briefly as this segment moves through SGF,

with VFR through the remainder of the period.

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.SGF WATCHES/WARNINGS/ADVISORIES...
MO...Heat Advisory until 9 PM CDT this evening for MOZ055-066>068-

077>080-088>091-093>096-101>105.

KS...Heat Advisory until 9 PM CDT this evening for KSZ073-097-101.

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SHORT TERM...Wise LONG TERM...Wise AVIATION...Lindenberg

Attachment 12 41 DCA18MM028

Hazardous Weather Outlooks

FLUS43 KSGF 190904 HWOSGF

Hazardous Weather Outlook National Weather Service Springfield MO 404 AM CDT Thu Jul 19 2018

KSZ073-097-101-MOZ055>058-066>071-077>083-088>098-101>106-200915-

Bourbon-Crawford-Cherokee-Benton-Morgan-Miller-Maries-Vernon-St. Clair-Hickory-Camden-Pulaski-Phelps-Barton-Cedar-Polk-Dallas-

Laclede-Texas-Dent-Jasper-Dade-Greene-Webster-Wright-Newton-Lawrence-Christian-Douglas-Howell-Shannon-McDonald-Barry-Stone-Taney-Ozark-Oregon-

404 AM CDT Thu Jul 19 2018

This Hazardous Weather Outlook is for portions of the Missouri Ozarks and extreme southeast Kansas.

.DAY ONE...Today and Tonight.

Weather hazards expected...

Limited hail risk.

Limited thunderstorm wind damage risk.

Limited flooding risk.

Limited lightning risk.

Elevated to locally Significant excessive heat risk.

Limited to Elevated fog risk.

DISCUSSION...

Areas of fog will reduce visibilities to less than a half mile at

times early this morning across southern Missouri.

Heat index values of 100 to 110 degrees can be expected this afternoon and early this evening with the hottest readings occurring along and west of the Highway 65 corridor.

Scattered thunderstorms are expected at times through tonight. A few strong to severe storms will be possible from this afternoon into this evening. Hail up to the size of half dollars and

Attachment 12 42 DCA18MM028

damaging wind gusts will be the primary potential severe weather hazards. Frequent lightning and locally heavy rainfall can also be

expected from these storms. There will be a limited threat for localized flash flooding across central Missouri and the eastern Ozarks.

.DAYS TWO THROUGH SEVEN...Friday through Wednesday.

Afternoon and early evening heat indices of 95 to 105 degrees will

occur again on Friday with the hottest readings across far southern Missouri and extreme southeastern Kansas. Afternoon heat

indices from this weekend into the first half of next week will range from 90 to 100 degrees.

Isolated to scattered thunderstorms will remain possible on Friday

and Friday night. Frequent lightning, small hail, and brief heavy

downpours will be the main potential hazards from these storms. There is then a slight chance for thunderstorms next Tuesday across the eastern Ozarks.

.SPOTTER INFORMATION STATEMENT...

Spotter activation will not be needed through tonight.

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More detailed information can be accessed at: http://www.weather.gov/sgf/sitrep

This product in graphical format...along with other weather... hydrological and climate information...at http://www.weather.gov/sqf

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Schaumann

FLUS43 KSGF 191551 HWOSGF

Hazardous Weather Outlook National Weather Service Springfield MO 1051 AM CDT Thu Jul 19 2018

KSZ073-097-101-MOZ055>058-066>071-077>083-088>098-101>106-201600-

Bourbon-Crawford-Cherokee-Benton-Morgan-Miller-Maries-Vernon-St. Clair-Hickory-Camden-Pulaski-Phelps-Barton-Cedar-Polk-Dallas-

Laclede-Texas-Dent-Jasper-Dade-Greene-Webster-Wright-Newton-Lawrence-Christian-Douglas-Howell-Shannon-McDonald-Barry-Stone-Taney-Ozark-Oregon-

1051 AM CDT Thu Jul 19 2018

This Hazardous Weather Outlook is for portions of the Missouri Ozarks and extreme southeast Kansas.

.DAY ONE...Today and Tonight.

Weather hazards expected...

Elevated hail risk.

Elevated thunderstorm wind damage risk.

Limited flooding risk.

Elevated lightning risk.

Significant excessive heat risk.

DISCUSSION...

A complex of storms is making its way south into portions of central

Missouri late this morning. This activity will continue to spread

south into early this afternoon and then should generally weaken the farther south it tracks this afternoon. A few strong to severe storms will be possible with this activity especially north

of I-44 and east of Highway 65. The focus then turns to later this afternoon into this evening, when additional storm development will be possible. Hail up to the size of golf balls and damaging wind gusts will be the primary potential severe weather hazards. Frequent lightning and locally heavy rainfall can

also be expected from the storms today. There will be a limited

threat for localized flash flooding across central Missouri and the eastern Ozarks.

Heat index values of 100 to 110 degrees can be expected this afternoon and early this evening with the hottest readings occurring along and west of the Highway 65 corridor.

.DAYS TWO THROUGH SEVEN...Friday through Wednesday.

Afternoon and early evening heat indices of 95 to 105 degrees will occur again on Friday with the hottest readings across far southern Missouri and extreme southeastern Kansas. Afternoon heat

indices from this weekend into the first half of next week will range from 90 to 100 degrees.

Isolated to scattered thunderstorms will remain possible on Friday and Friday night. Frequent lightning, small hail, and brief heavy downpours will be the main potential hazards from these storms. There is then a slight chance for thunderstorms next.

Tuesday across the eastern Ozarks.

.SPOTTER INFORMATION STATEMENT...

Spotter activation may be needed for portions of central Missouri late this morning into this afternoon.

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More detailed information can be accessed at: http://www.weather.gov/sgf/sitrep

This product in graphical format...along with other weather... hydrological and climate information...at http://www.weather.gov/sqf

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Albano/Wise

FLUS43 KSGF 191628 HWOSGF

Hazardous Weather Outlook National Weather Service Springfield MO 1128 AM CDT Thu Jul 19 2018

KSZ073-097-101-MOZ055>058-066>071-077>083-088>098-101>106-201630-

Bourbon-Crawford-Cherokee-Benton-Morgan-Miller-Maries-Vernon-St. Clair-Hickory-Camden-Pulaski-Phelps-Barton-Cedar-Polk-Dallas-

Laclede-Texas-Dent-Jasper-Dade-Greene-Webster-Wright-Newton-Lawrence-Christian-Douglas-Howell-Shannon-McDonald-Barry-Stone-Taney-Ozark-Oregon-

1128 AM CDT Thu Jul 19 2018

This Hazardous Weather Outlook is for portions of the Missouri Ozarks and extreme southeast Kansas.

.DAY ONE...This Afternoon and Tonight.

Weather hazards expected...

Elevated hail risk.
Elevated thunderstorm wind damage risk.
Limited flooding risk.
Elevated lightning risk.
Significant excessive heat risk.

DISCUSSION...

A complex of strong to severe thunderstorms will impact portions of central and southern Missouri today. Hail up to the size of golf balls and damaging wind gusts up to 70 MPH will be the primary hazards with the most intense storms. Frequent lightning and locally heavy rainfall can also be expected from the storms today. There will be a limited threat for localized flash flooding

across central Missouri and the eastern Ozarks.

Heat index values of 100 to 110 degrees can be expected this afternoon and early this evening with the hottest readings occurring along and west of the Highway 65 corridor.

.DAYS TWO THROUGH SEVEN...Friday through Wednesday.

Afternoon and early evening heat indices of 95 to 105 degrees will occur again on Friday with the hottest readings across far southern Missouri and extreme southeastern Kansas. Afternoon heat

indices from this weekend into the first half of next week will range from 90 to 100 degrees.

Isolated to scattered thunderstorms will remain possible on Friday and Friday night. Frequent lightning, small hail, and brief heavy downpours will be the main potential hazards from these storms. There is then a slight chance for thunderstorms next

Tuesday across the eastern Ozarks.

.SPOTTER INFORMATION STATEMENT...

Spotter activation may be needed in the next three hours.

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More detailed information can be accessed at: http://www.weather.gov/sgf/sitrep

This product in graphical format...along with other weather... hydrological and climate information...at http://www.weather.gov/sqf

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WFO SGF

Attachment 12 47 DCA18MM028

FLUS43 KSGF 191910 HWOSGF

Hazardous Weather Outlook National Weather Service Springfield MO 210 PM CDT Thu Jul 19 2018

KSZ073-097-101-MOZ055>058-066>071-077>083-088>098-101>106-201915-

Bourbon-Crawford-Cherokee-Benton-Morgan-Miller-Maries-Vernon-St. Clair-Hickory-Camden-Pulaski-Phelps-Barton-Cedar-Polk-Dallas-

Laclede-Texas-Dent-Jasper-Dade-Greene-Webster-Wright-Newton-Lawrence-Christian-Douglas-Howell-Shannon-McDonald-Barry-Stone-Taney-Ozark-Oregon-

210 PM CDT Thu Jul 19 2018

This Hazardous Weather Outlook is for portions of the Missouri Ozarks and extreme southeast Kansas.

.DAY ONE...This Afternoon and Tonight.

Weather hazards expected...

Elevated hail risk.
Elevated thunderstorm wind damage risk.
Limited flooding risk.
Significant lightning risk.
Elevated excessive heat risk.

DISCUSSION...

Scattered storms are occurring from central Missouri to the northwest into northeastern Kansas this afternoon. This activity will continue to the slide south and east into this evening. There are outflows also moving south across the area that a few storms could develop along too. Hail up to the size of golf balls

and damaging wind gusts up to 70 MPH will be the primary hazards with the most intense storms. Frequent lightning and locally heavy

rainfall can also be expected from the storms today. There will be a limited threat for localized flash flooding across central Missouri and the eastern Ozarks. A few storms may linger into the

overnight hours.

Heat index values of 100 to 110 degrees will continue to occur into early this evening along and west of the Highway 65 corridor.

.DAYS TWO THROUGH SEVEN...Friday through Wednesday.

Afternoon and early evening heat indices of 95 to 105 degrees will occur again on Friday with the hottest readings across far southern Missouri and extreme southeastern Kansas. Afternoon heat

indices from this weekend into the first half of next week will range from 90 to 100 degrees.

Isolated to scattered thunderstorms will remain possible on Friday and Friday night. Frequent lightning, small hail, and brief heavy downpours will be the main potential hazards from these storms. There is then a slight chance for thunderstorms next Tuesday across the eastern Ozarks.

.SPOTTER INFORMATION STATEMENT...

Spotter activation may be needed this afternoon and evening across portions of the Missouri Ozarks.

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More detailed information can be accessed at: http://www.weather.gov/sgf/sitrep

This product in graphical format...along with other weather... hydrological and climate information...at http://www.weather.gov/sgf

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Wise

Attachment 12 49 DCA18MM028

Watch County Notifications

WWUS63 KSGF 191628 WCNSGF

WATCH COUNTY NOTIFICATION FOR WATCH 283 NATIONAL WEATHER SERVICE SPRINGFIELD MO 1128 AM CDT THU JUL 19 2018

 $\begin{array}{l} \texttt{MOC}009-011-015-029-039-043-057-059-065-067-077-085-091-097-105-109-119-125-131-141-145-149-153-161-167-169-185-203-209-213-215-217-225-229-200200- \end{array}$

/O.NEW.KSGF.SV.A.0283.180719T1628Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS ISSUED SEVERE THUNDERSTORM WATCH

283 IN EFFECT UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 34 COUNTIES

IN CENTRAL MISSOURI

BENTON CAMDEN HICKORY MARIES MILLER MORGAN

PULASKI

IN EAST CENTRAL MISSOURI

PHELPS

IN SOUTH CENTRAL MISSOURI

DENT HOWELL OREGON

SHANNON TEXAS

IN SOUTHWEST MISSOURI

BARRY BARTON CEDAR CHRISTIAN DADE DALLAS DOUGLAS **JASPER** GREENE LACLEDE LAWRENCE MCDONALD NEWTON OZARK POLK STONE TANEY WEBSTER

WRIGHT

IN WEST CENTRAL MISSOURI

ST. CLAIR VERNON

THIS INCLUDES THE CITIES OF ALTON, ANDERSON, APPLETON CITY, ARNICA, AURORA, AURORA SPRINGS, AVA, BANGERT, BENDAVIS, BIRCH TREE, BOLIVAR, BRANSON, BUFFALO, CAMDENTON, CAPLINGER MILLS, CARTHAGE, CASSVILLE, CEDAR SPRINGS, CHARITY, CHRISTIAN CENTER, COLE CAMP, COUCH, CRANE, CROCKERVILLE, CROSS TIMBERS, DARIEN, DAWSON, DECATURVILLE, DOGWOOD, DUNCAN, EDGEWATER BEACH, EDMONSON, EL DORADO SPRINGS, ELDON, ELSEY, FILLEY, FOOSE, FORSYTH, FORT LEONARD WOOD, GLADDEN, GOODHOPE, GOODMAN, GRAFF, GREENFIELD, GREER, HERMITAGE, HOLLISTER, HOWES, HUGGINS, INDIAN POINT, JADWIN, JOHNSON CITY, JOPLIN, KENOMA, KIMBERLING CITY, KIRBYVILLE, LAKE OZARK, LAKE SPRING, LAMAR, LAQUEY, LAURIE, LEBANON, LINCOLN, LOCKWOOD, LYNCHBURG, MADRY, MANSFIELD, MARCH, MARIONVILLE, MARSHFIELD, MEINERT, MONETT, MONTIER, MORA, MOUNT VERNON, MOUNTAIN GROVE, NEOSHO, NEVADA, NIXA, NOEL, NORTHVIEW, NORTHWYE, OLIVE, OSAGE BEACH, OZARK, OZARK BEACH, PINEVILLE, PITTSBURG, PLAD, PLATO, POMONA, POTTERSVILLE, POWERSITE, QUINCY, ROACH, ROBY, ROCKY COMFORT, ROCKY MOUNT, ROGERSVILLE, ROLLA, ROME, SALEM, SELMORE, SEYMOUR, SILOAM SPRINGS, SILVER DOLLAR CITY, SOUTH FORK, SOUTH WEST CITY, SPRINGFIELD, SQUIRES, STOCKTON, STOVER, TERESITA, THAYER, THOMASVILLE, TIFFIN, VANZANT, VERSAILLES, VICHY, VILLAGE OF FOUR SEASONS, WARSAW, WASOLA, WAYNESVILLE, WEAUBLEAU, WEST PLAINS, WHEATLAND, WHITAKERVILLE, WHITE CHURCK, WILDERNESS, WINDYVILLE, AND WINONA.

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BURCHFIELD

WWUS63 KSGF 191726 WCNSGF

WATCH COUNTY NOTIFICATION FOR WATCHES 283/284 NATIONAL WEATHER SERVICE SPRINGFIELD MO 1226 PM CDT THU JUL 19 2018

KSC011-200200-

/O.NEW.KSGF.SV.A.0284.180719T1726Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS ISSUED SEVERE THUNDERSTORM WATCH

284 IN EFFECT UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN KANSAS THIS WATCH INCLUDES 1 COUNTY

IN SOUTHEAST KANSAS

BOURBON

THIS INCLUDES THE CITIES OF FORT SCOTT AND PAWNEE STATION.

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 $\begin{tabular}{l} MOC009-011-015-029-039-043-057-059-065-067-077-085-091-097-105-109-119-125-131-141-145-149-153-161-167-169-185-203-209-213-215-217-225-229-200200- \end{tabular}$

/O.CON.KSGF.SV.A.0283.000000T0000Z-180720T0200Z/

SEVERE THUNDERSTORM WATCH 283 REMAINS VALID UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 34 COUNTIES

IN CENTRAL MISSOURI

BENTON CAMDEN HICKORY MARIES MILLER MORGAN

PULASKI

IN EAST CENTRAL MISSOURI

PHELPS

IN SOUTH CENTRAL MISSOURI

DENT HOWELL OREGON

SHANNON TEXAS

IN SOUTHWEST MISSOURI

BARRY BARTON CEDAR CHRISTIAN DADE DALLAS DOUGLAS GREENE JASPER LACLEDE LAWRENCE MCDONALD NEWTON OZARK POLK STONE TANEY WEBSTER

WRIGHT

IN WEST CENTRAL MISSOURI

ST. CLAIR VERNON

THIS INCLUDES THE CITIES OF ALTON, ANDERSON, APPLETON CITY, ARNICA, AURORA, AURORA SPRINGS, AVA, BANGERT, BENDAVIS, BIRCH TREE, BOLIVAR, BRANSON, BUFFALO, CAMDENTON, CAPLINGER MILLS, CARTHAGE, CASSVILLE, CEDAR SPRINGS, CHARITY, CHRISTIAN CENTER, COLE CAMP, COUCH, CRANE, CROCKERVILLE, CROSS TIMBERS, DARIEN, DAWSON, DECATURVILLE, DOGWOOD, DUNCAN, EDGEWATER BEACH, EDMONSON, EL DORADO SPRINGS, ELDON, ELSEY, FILLEY, FOOSE, FORSYTH, FORT LEONARD WOOD, GLADDEN, GOODHOPE, GOODMAN, GRAFF, GREENFIELD, GREER, HERMITAGE, HOLLISTER, HOWES, HUGGINS, INDIAN POINT, JADWIN, JOHNSON CITY, JOPLIN, KENOMA, KIMBERLING CITY, KIRBYVILLE, LAKE OZARK, LAKE SPRING, LAMAR, LAQUEY, LAURIE, LEBANON, LINCOLN, LOCKWOOD, LYNCHBURG, MADRY, MANSFIELD, MARCH, MARIONVILLE, MARSHFIELD, MEINERT, MONETT, MONTIER, MORA, MOUNT VERNON, MOUNTAIN GROVE, NEOSHO, NEVADA, NIXA, NOEL, NORTHVIEW, NORTHWYE, OLIVE, OSAGE BEACH, OZARK, OZARK BEACH, PINEVILLE, PITTSBURG, PLAD, PLATO, POMONA, POTTERSVILLE, POWERSITE, QUINCY, ROACH, ROBY, ROCKY COMFORT, ROCKY MOUNT, ROGERSVILLE, ROLLA, ROME, SALEM, SELMORE, SEYMOUR, SILOAM SPRINGS, SILVER DOLLAR CITY, SOUTH FORK, SOUTH WEST CITY, SPRINGFIELD, SQUIRES, STOCKTON, STOVER, TERESITA, THAYER, THOMASVILLE, TIFFIN, VANZANT, VERSAILLES, VICHY, VILLAGE OF FOUR SEASONS, WARSAW, WASOLA, WAYNESVILLE, WEAUBLEAU, WEST PLAINS, WHEATLAND, WHITAKERVILLE, WHITE CHURCK, WILDERNESS, WINDYVILLE, AND WINONA.

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WISE

Attachment 12 53 DCA18MM028

WWUS63 KSGF 192116 WCNSGF

WATCH COUNTY NOTIFICATION FOR WATCHES 283/284 NATIONAL WEATHER SERVICE SPRINGFIELD MO 416 PM CDT THU JUL 19 2018

KSC021-037-200200-/O.EXA.KSGF.SV.A.0284.000000T0000Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS EXTENDED SEVERE THUNDERSTORM WATCH 284 TO INCLUDE THE FOLLOWING AREAS UNTIL 9 PM CDT THIS EVENING

IN KANSAS THIS WATCH INCLUDES 2 COUNTIES

IN SOUTHEAST KANSAS

CHEROKEE CRAWFORD

THIS INCLUDES THE CITIES OF BAXTER SPRINGS, CHICOPEE, COLUMBUS, LONE OAK, LOWELL, NEUTRAL, PITTSBURG, RIVERTON, SHERWIN, AND STIPPVILLE.

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MOC009-011-015-029-039-043-057-059-065-067-077-085-091-097-105-109-119-125-131-141-145-149-153-161-167-169-185-203-209-213-215-217-225-229-200200-/O.CON.KSGF.SV.A.0283.00000T0000Z-180720T0200Z/

SEVERE THUNDERSTORM WATCH 283 REMAINS VALID UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 34 COUNTIES

IN CENTRAL MISSOURI

BENTON CAMDEN HICKORY
MARIES MILLER MORGAN
PULASKI

IN EAST CENTRAL MISSOURI

PHELPS

IN SOUTH CENTRAL MISSOURI

DENT HOWELL OREGON

SHANNON TEXAS

IN SOUTHWEST MISSOURI

BARRY BARTON CEDAR DALLAS CHRISTIAN DADE DOUGLAS GREENE JASPER LAWRENCE LACLEDE MCDONALD NEWTON OZARK POLK STONE TANEY WEBSTER

WRIGHT

IN WEST CENTRAL MISSOURI

ST. CLAIR VERNON

THIS INCLUDES THE CITIES OF ALTON, ANDERSON, APPLETON CITY, ARNICA, AURORA, AURORA SPRINGS, AVA, BANGERT, BENDAVIS, BIRCH TREE, BOLIVAR, BRANSON, BUFFALO, CAMDENTON, CAPLINGER MILLS, CARTHAGE, CASSVILLE, CEDAR SPRINGS, CHARITY, CHRISTIAN CENTER, COLE CAMP, COUCH, CRANE, CROCKERVILLE, CROSS TIMBERS, DARIEN, DAWSON, DECATURVILLE, DOGWOOD, DUNCAN, EDGEWATER BEACH, EDMONSON, EL DORADO SPRINGS, ELDON, ELSEY, FILLEY, FOOSE, FORSYTH, FORT LEONARD WOOD, GLADDEN, GOODHOPE, GOODMAN, GRAFF, GREENFIELD, GREER, HERMITAGE, HOLLISTER, HOWES, HUGGINS, INDIAN POINT, JADWIN, JOHNSON CITY, JOPLIN, KENOMA, KIMBERLING CITY, KIRBYVILLE, LAKE OZARK, LAKE SPRING, LAMAR, LAQUEY, LAURIE, LEBANON, LINCOLN, LOCKWOOD, LYNCHBURG, MADRY, MANSFIELD, MARCH, MARIONVILLE, MARSHFIELD, MEINERT, MONETT, MONTIER, MORA, MOUNT VERNON, MOUNTAIN GROVE, NEOSHO, NEVADA, NIXA, NOEL, NORTHVIEW, NORTHWYE, OLIVE, OSAGE BEACH, OZARK, OZARK BEACH, PINEVILLE, PITTSBURG, PLAD, PLATO, POMONA, POTTERSVILLE, POWERSITE, OUINCY, ROACH, ROBY, ROCKY COMFORT, ROCKY MOUNT, ROGERSVILLE, ROLLA, ROME, SALEM, SELMORE, SEYMOUR, SILOAM SPRINGS, SILVER DOLLAR CITY, SOUTH FORK, SOUTH WEST CITY, SPRINGFIELD, SQUIRES, STOCKTON, STOVER, TERESITA, THAYER, THOMASVILLE, TIFFIN, VANZANT, VERSAILLES, VICHY, VILLAGE OF FOUR SEASONS, WARSAW, WASOLA, WAYNESVILLE, WEAUBLEAU, WEST PLAINS, WHEATLAND, WHITAKERVILLE, WHITE CHURCK, WILDERNESS, WINDYVILLE, AND WINONA.

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KSC011-200200-/O.CON.KSGF.SV.A.0284.000000T0000Z-180720T0200Z/ SEVERE THUNDERSTORM WATCH 284 REMAINS VALID UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN KANSAS THIS WATCH INCLUDES 1 COUNTY

IN SOUTHEAST KANSAS

BOURBON

THIS INCLUDES THE CITIES OF FORT SCOTT AND PAWNEE STATION.

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LINDENBERG

WWUS63 KSGF 192309 WCNSGF

WATCH COUNTY NOTIFICATION FOR WATCHES 283/284 NATIONAL WEATHER SERVICE SPRINGFIELD MO 609 PM CDT THU JUL 19 2018

MOC011-015-029-039-065-085-105-125-131-141-161-169-185-217-200015-

/O.CAN.KSGF.SV.A.0283.00000T0000Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS CANCELLED SEVERE THUNDERSTORM WATCH 283 FOR THE FOLLOWING AREAS

IN MISSOURI THIS CANCELS 14 COUNTIES

IN CENTRAL MISSOURI

BENTON CAMDEN HICKORY MARIES MILLER MORGAN

PULASKI

IN EAST CENTRAL MISSOURI

PHELPS

IN SOUTH CENTRAL MISSOURI

DENT

IN SOUTHWEST MISSOURI

BARTON CEDAR LACLEDE

IN WEST CENTRAL MISSOURI

ST. CLAIR VERNON

THIS INCLUDES THE CITIES OF APPLETON CITY, ARNICA,
AURORA SPRINGS, BANGERT, CAMDENTON, CAPLINGER MILLS,
CEDAR SPRINGS, COLE CAMP, CROCKERVILLE, CROSS TIMBERS, DARIEN,
DECATURVILLE, EDMONSON, EL DORADO SPRINGS, ELDON, FILLEY,
FORT LEONARD WOOD, GLADDEN, HERMITAGE, HOWES, JADWIN,
JOHNSON CITY, KENOMA, LAKE OZARK, LAKE SPRING, LAMAR, LAQUEY,
LAURIE, LEBANON, LINCOLN, LYNCHBURG, MORA, NEVADA, NORTHWYE,
OSAGE BEACH, PITTSBURG, QUINCY, ROACH, ROCKY MOUNT, ROLLA,
SALEM,

STOCKTON, STOVER, TIFFIN, VERSAILLES, VICHY, VILLAGE OF FOUR SEASONS, WARSAW, WAYNESVILLE, WEAUBLEAU, WHEATLAND, AND WHITAKERVILLE.

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KSC011-021-037-200015-/O.CAN.KSGF.SV.A.0284.000000T0000Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS CANCELLED SEVERE THUNDERSTORM WATCH 284 FOR THE FOLLOWING AREAS

IN KANSAS THIS CANCELS 3 COUNTIES

IN SOUTHEAST KANSAS

BOURBON CHEROKEE CRAWFORD

THIS INCLUDES THE CITIES OF BAXTER SPRINGS, CHICOPEE, COLUMBUS, FORT SCOTT, LONE OAK, LOWELL, NEUTRAL, PAWNEE STATION, PITTSBURG,

RIVERTON, SHERWIN, AND STIPPVILLE.

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MOC009-043-057-059-067-077-091-097-109-119-145-149-153-167-203-209-213-215-225-229-200200-/O.CON.KSGF.SV.A.0283.000000T0000Z-180720T0200Z/

SEVERE THUNDERSTORM WATCH 283 REMAINS VALID UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 20 COUNTIES

IN SOUTH CENTRAL MISSOURI

HOWELL OREGON SHANNON

TEXAS

IN SOUTHWEST MISSOURI

BARRY CHRISTIAN DADE

DALLAS DOUGLAS GREENE

JASPER LAWRENCE MCDONALD

NEWTON OZARK POLK

STONE TANEY WEBSTER

WRIGHT

THIS INCLUDES THE CITIES OF ALTON, ANDERSON, AURORA, AVA, BENDAVIS, BIRCH TREE, BOLIVAR, BRANSON, BUFFALO, CARTHAGE, CASSVILLE, CHARITY, CHRISTIAN CENTER, COUCH, CRANE, DAWSON, DOGWOOD, DUNCAN, EDGEWATER BEACH, ELSEY, FOOSE, FORSYTH, GOODHOPE, GOODMAN, GRAFF, GREENFIELD, GREER, HOLLISTER, HUGGINS, INDIAN POINT, JOPLIN, KIMBERLING CITY, KIRBYVILLE, LOCKWOOD, MADRY, MANSFIELD, MARCH, MARIONVILLE, MARSHFIELD, MEINERT, MONETT, MONTIER, MOUNT VERNON, MOUNTAIN GROVE, NEOSHO, NIXA, NOEL, NORTHVIEW, OLIVE, OZARK, OZARK BEACH, PINEVILLE, PLAD, PLATO, POMONA, POTTERSVILLE, POWERSITE, ROBY, ROCKY COMFORT, ROGERSVILLE, ROME, SELMORE, SEYMOUR, SILOAM SPRINGS, SILVER DOLLAR CITY, SOUTH FORK, SOUTH WEST CITY, SPRINGFIELD, SQUIRES, TERESITA, THAYER, THOMASVILLE, VANZANT, WASOLA, WEST PLAINS, WHITE CHURCK, WILDERNESS, WINDYVILLE, AND WINONA.

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LINDENBERG

WWUS63 KSGF 200003 WCNSGF

WATCH COUNTY NOTIFICATION FOR WATCH 283 NATIONAL WEATHER SERVICE SPRINGFIELD MO 703 PM CDT THU JUL 19 2018

MOC057-059-077-097-109-145-167-200115-/O.CAN.KSGF.SV.A.0283.000000T0000Z-180720T0200Z/

THE NATIONAL WEATHER SERVICE HAS CANCELLED SEVERE THUNDERSTORM WATCH 283 FOR THE FOLLOWING AREAS

IN MISSOURI THIS CANCELS 7 COUNTIES

IN SOUTHWEST MISSOURI

DADE DALLAS GREENE JASPER LAWRENCE NEWTON

POLK

THIS INCLUDES THE CITIES OF AURORA, BOLIVAR, BUFFALO, CARTHAGE, CHARITY, FOOSE, GREENFIELD, JOPLIN, LOCKWOOD, MARCH, MARIONVILLE,

MEINERT, MOUNT VERNON, NEOSHO, OLIVE, PLAD, SPRINGFIELD, AND WINDYVILLE.

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MOC009-043-067-091-119-149-153-203-209-213-215-225-229-200200-/O.CON.KSGF.SV.A.0283.000000T0000Z-180720T0200Z/

SEVERE THUNDERSTORM WATCH 283 REMAINS VALID UNTIL 9 PM CDT THIS EVENING FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 13 COUNTIES

IN SOUTH CENTRAL MISSOURI

HOWELL OREGON SHANNON

TEXAS

IN SOUTHWEST MISSOURI

BARRY CHRISTIAN DOUGLAS MCDONALD OZARK STONE TANEY WEBSTER WRIGHT

THIS INCLUDES THE CITIES OF ALTON, ANDERSON, AVA, BENDAVIS, BIRCH TREE, BRANSON, CASSVILLE, CHRISTIAN CENTER, COUCH, CRANE, DAWSON, DOGWOOD, DUNCAN, EDGEWATER BEACH, ELSEY, FORSYTH, GOODHOPE, GOODMAN, GRAFF, GREER, HOLLISTER, HUGGINS, INDIAN POINT, KIMBERLING CITY, KIRBYVILLE, MADRY, MANSFIELD, MARSHFIELD, MONETT, MONTIER, MOUNTAIN GROVE, NIXA, NOEL, NORTHVIEW, OZARK, OZARK BEACH, PINEVILLE, PLATO, POMONA, POTTERSVILLE, POWERSITE, ROBY, ROCKY COMFORT, ROGERSVILLE, ROME, SELMORE, SEYMOUR, SILOAM SPRINGS, SILVER DOLLAR CITY, SOUTH FORK,

SOUTH WEST CITY, SQUIRES, TERESITA, THAYER, THOMASVILLE, VANZANT,

WASOLA, WEST PLAINS, WHITE CHURCK, WILDERNESS, AND WINONA.

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LINDENBERG

Attachment 12 61 DCA18MM028