1. Click on the "Weather" Link

2. Click on the "Fire Weather Briefing Page" Link

https://gacc.nifc.gov/eacc/predictive_services/weather/briefing.htm
Thunderstorm activity usually ahead of cold front in warm, unstable air mass.

Counter clockwise winds around and into surface low pressure.

Clockwise winds around high pressure.

Blue shades = snow

Stationary Front

Warm Front
Valid time and date:
06Z or UTC=700 AM CDT/800 AM EDT
12Z or UTC=700 AM CDT/800 AM EDT
18Z or UTC=100 PM CDT/200 PM EDT
00Z or UTC=700 PM CDT/800 PM EDT
for the previous date (E.G. 00Z Monday is 700 PM CDT Sunday evening)

Legend
Snowfall/Wintry mix in winter storms on NW side of low where colder air is drawn in
Areas of historical 24 hour radar estimated 1–2 inch rainfall amounts indicated over parts of the Big Rivers/eastern Great Lakes.

24 hour radar estimated rainfall amounts indicated over parts of the Big Rivers/eastern Great Lakes.

24 Hour Valid Times and Dates.
12Z or UTC=700 AM CDT/800 AM EDT

Estimated Precipitation From: 12Z Jun 22 to 12Z Jun 23
Units in inches
Blue shades are current sustained wind speeds >10 MPH. Current gust speeds indicated in MPH. 26 MPH gust located in north central Minnesota.

Valid Date and Time:
- 0600 GMT = 700 AM CDT / 800 AM EDT
- 1200 GMT = 700 AM CDT / 800 AM EDT
- 1800 GMT = 700 PM CDT / 800 PM EDT
- 0000 GMT = 700 PM CDT / 800 PM EDT for the previous date (E.G. 0000 GMT Monday is 700 PM CDT Sunday evening)
**Stationary Front.** Acts as a focus for clouds/precipitation as winds converge towards the boundary.

**L** = Low pressure at the surface. Rising air from the surface creates clouds/precipitation.

**H** = High pressure at the surface. Sinking air at the surface suppresses cloud/precipitation formation and creates fair weather.

**Cold Front** = Barbs or triangles point towards direction of frontal movement. Milder, more humid and unstable air along with southerly component winds usually ahead of front. Colder, drier, more stable air behind from on N-NW winds.

**Valid Date and Time.**
- 06Z = 700 AM CDT/800 AM EDT
- 12Z = 700 AM CDT/800 AM EDT
- 18Z = 100 PM CDT/200 PM EDT
- 00Z = 700 PM CDT/800 PM EDT for the previous date (E.G. 0000 GMT Monday is 700 PM CDT Sunday evening)

**Forecast Surface Maps**

- **Forecast precipitation type.** E.G. Blue = Snow. Green = Rain. Orange = Ice.
- **NDFD Rain (Chance)**
- **NDFD Rain (Likely)**
- **NDFD Snow (Chance)**
- **NDFD Snow (Likely)**
- **NDFD Mix (Chance)**
- **NDFD Mix (Likely)**
- **NDFD Ice (Chance)**
- **NDFD Ice (Likely)**
- **NDFD T-Storm (Chance) (Hatched)**
- **NDFD T-Storm (Likely and/or Severe)**
**Stationary front.** Acts as a focus for clouds/precipitation as winds converge towards the boundary.

**L** = Low pressure at the surface. Rising air from the surface creates clouds/precipitation.

**H** = High pressure at the surface. Sinking air at the surface suppresses cloud/precipitation formation and creates fair weather.

**Cold front** = Barbs or triangles point towards direction of frontal movement. Milder, more humid and unstable air along with southerly component winds usually ahead of front. Colder, drier, more stable air behind from on N–NW winds.

**Forecast precipitation type.** E.G. **Green** = Rain. **Areas outlined by Red** = Thunderstorms. Solid Red Areas = Severe Storms.

**Forecast Surface Maps**

- **WPC Fronts/NDFD Weather Type**
- **Valid Date and Time.**
  - 06Z=0700 AM CDT/0800 AM EDT
  - 12Z=0700 AM CDT/0800 AM EDT
  - 18Z=1000 PM CDT/2000 PM EDT
  - 00Z=0700 PM CDT/0800 PM EDT for the previous date (E.G. 0000 GMT Monday is 0700 PM CDT Sunday evening)
Forecast 24 Hour Precipitation Amount Maps

Forecast 24 hour precipitation amounts of 1.50 to 2.50 inch.

Forecast 24 hour scattered amounts of 0.10 to 0.25 inch.

Forecast 24 hour precipitation amounts of 0.25 to 0.50 inch.
1. Click on “Models”

2. Click on “Single Image” button and then select “Forecast Loop”

3. Choose the Model. GFS is the U.S. medium range model and the ECMWF Hi-Red is the European Model.

4. Choose the latest 00z or 12z model run from drop down. They are typically more accurate as they contain NWS upper air radiosonde balloon data.
Click on other surface parameters to view such as 2 Meter AGL (Above Ground Level) Relative Humidity or Temp/Wind.

Valid model run

Image parameters & valid date/time

Click on “Play” button to play model or > or < to step forwards or backwards through images

Precipitation Type, Rate (in hr⁻¹), 1000-500 mb Thickness (dam)

F018 Valid: Fri 2019-04-12 06z

Snow north and west of strong low. Shaded blue areas.

Warm front.

Occluded front.

Thunderstorms along cold front. Heavier forecast precip amounts in yellow.

Cold front.
Strong south winds forecast over the Plains and Upper Mississippi Valley ahead of developing trough of low pressure in the West. Dashed red lines indicate warm air being drawn north and east from the Plains.

Closer black isobar lines are Together, the stronger the wind speeds.

Clockwise winds occur around surface high pressure in the Northern Hemisphere. Fair weather associated with high pressure due to sinking are.
Strong N–NE winds pulling cold air down into the Great Lakes from Canada. Closely packed black lines or isobars indicate strong wind speeds.

Blue shades=Estimated Snow. Green=Rain

540 Thickness=Rain/Snow estimate in winter

Stationary front aligned along kinked isobars on surface map.

Red and blue dashed lines are equivalent to temperatures. Red=Warmer surface temps. Blue=Cooler surface temps.
Model Surface Map Interpretation

Strong N–NE winds pulling cold air down into the Great Lakes from Canada. Closely packed black lines or isobars indicate strong wind speeds.

Blue shades = Estimated Snow. Green = Rain

540 Thickness = Rain/Snow estimate in winter

Red and blue dashed lines are equivalent to temperatures. Red = Warmer surface temps. Blue = Cooler surface temps.

Stationary front aligned along kinked isobars on surface map.
Cooler conditions and lighter winds forecast over the eastern states as high pressure at the surface prevails. Wind direction is clockwise around High pressure in the Northern Hemisphere.

Black lines or surface pressure isobars not "packed" close together over the eastern states which indicates light wind speeds.

Mild and windy conditions indicated over the Plains with south winds drawing warm and humid air northeast into the Upper Mississippi Valley. Black solid isobars are packed close together.
Near the surface **High** black lines or surface pressure isobars not “packed’ close together over the central and western Ontario which indicates light wind speeds.

Cool conditions and brisk E–NE winds indicated over the Northeast and eastern Great Lakes southeast of surface high pressure over Ontario.

Strong ENE winds pulling cool air from Ontario down into the eastern Great Lakes and western Mid–Atlantic States with black isobars packed close together.

540 Thickness = Rain/Snow estimate in winter
Select Model Type and 00Z or 12Z Run.

Total forecast precipitation totals over 2 inches forecast over parts of the eastern Great Lakes, Big Rivers, and the western Mid-Atlantic States through July 2nd.

Use Blue slider to select the time frame/forecast hour you wish to view the total precipitation forecast through. The valid time frame is listed in the upper left.

Click on Total Accumulated QPF (Quantified Precipitation Forecast)
Air Motion and Weather near a Cold Front

- Advancing cold air behind cold front
- Receding warm air ahead of cold front
- Direction of frontal movement
- Cloud development because of frontal lifting of warm moist air

Cold Front map symbol
Air Motion and Weather near a Warm Front

Advancing warm air behind warm front

Receding cold air ahead of warm front

Warm Front map symbol

Direction of frontal movement

Cloud development because of frontal lifting of warm moist air

Warm air

Cold air

Warm Front

Colder Temperatures

55
55

Warmer Temperatures

62

31
Air motion towards a stationary front converges at boundary and is forced upward creating clouds and possible precipitation near the front.
An occluded front occurs when a cold front undercuts a warm front. Wind patterns near and above the surface are complicated near and occluded front and clouds and precipitation are usually associated with them.