

EACC Fire Weather Briefing Webpage

https://gacc.nifc.gov/eacc/predictive_services/weather/briefing.htm



EACC
Eastern Area Coordination Center
An Interagency Incident Support Website

National GACC Portal

EACC Home

About Us

Site Disclaimer

Contact Us

LOGISTICAL OPERATIONS

- Dispatch
- Aviation
- Crews
- Equipment / Supplies
- Overhead / Teams
- All Hazard Response

PREDICTIVE SERVICES

- Intelligence
- Weather**
- Fuels / Fire Danger
- Outlooks

FIRE MANAGEMENT & ADMINISTRATION

- EA Coordinating Group
- Policy, Programs, Guidelines
- Incident Business Management
- Safety Management
- Critical Incident Stress Management



CURRENT

- [MesoWest](#)
- [Eastern Area Surface Observations Maps](#)
- [NW N NE SE SW](#)
- [SSEC Real Time Satellite Imagery Data](#)

East Satellite Imagery

[Infrared](#) | [Water Vapor](#)

Animated:

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- [GOES-East Satellite Imagery Selection Page](#)
- [West Eastern Area Radar Loop](#)
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- [East Eastern Area Radar Loop](#)
- Forecast Surface Charts [12 Hour](#) | [24 Hour](#)
- [Hot, Dry and Windy Index Map](#)
- [Lightning Viewer Website](#)

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

EACC PRODUCTS

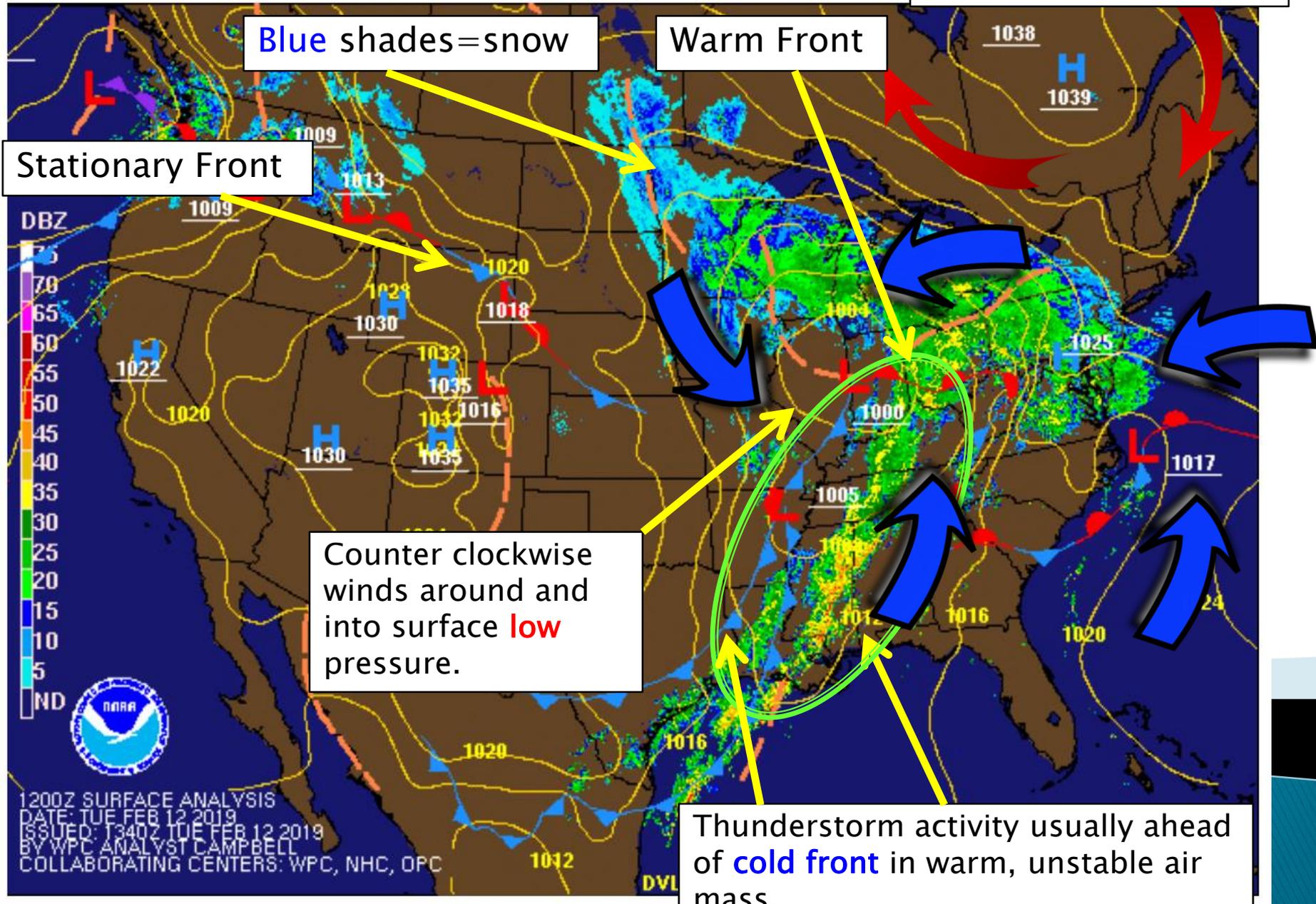
- [Fire Weather Briefing Page](#)
- [Eastern Area Prescribed Burn Form](#)
- [Eastern Area Late Spring/Summer Videocast](#)
- [Eastern Area Predictive Services Device Compatible](#)

1. Click on the "Weather" Link



1. Current Surface Analysis

Clockwise winds around **high** pressure.



Blue shades=snow

Warm Front

Stationary Front

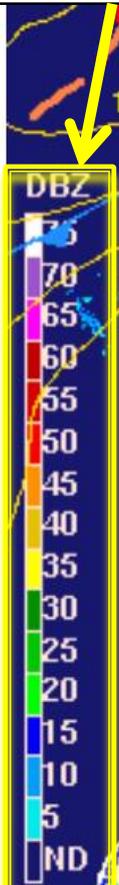
Counter clockwise winds around and into surface **low** pressure.

Thunderstorm activity usually ahead of **cold front** in warm, unstable air mass.

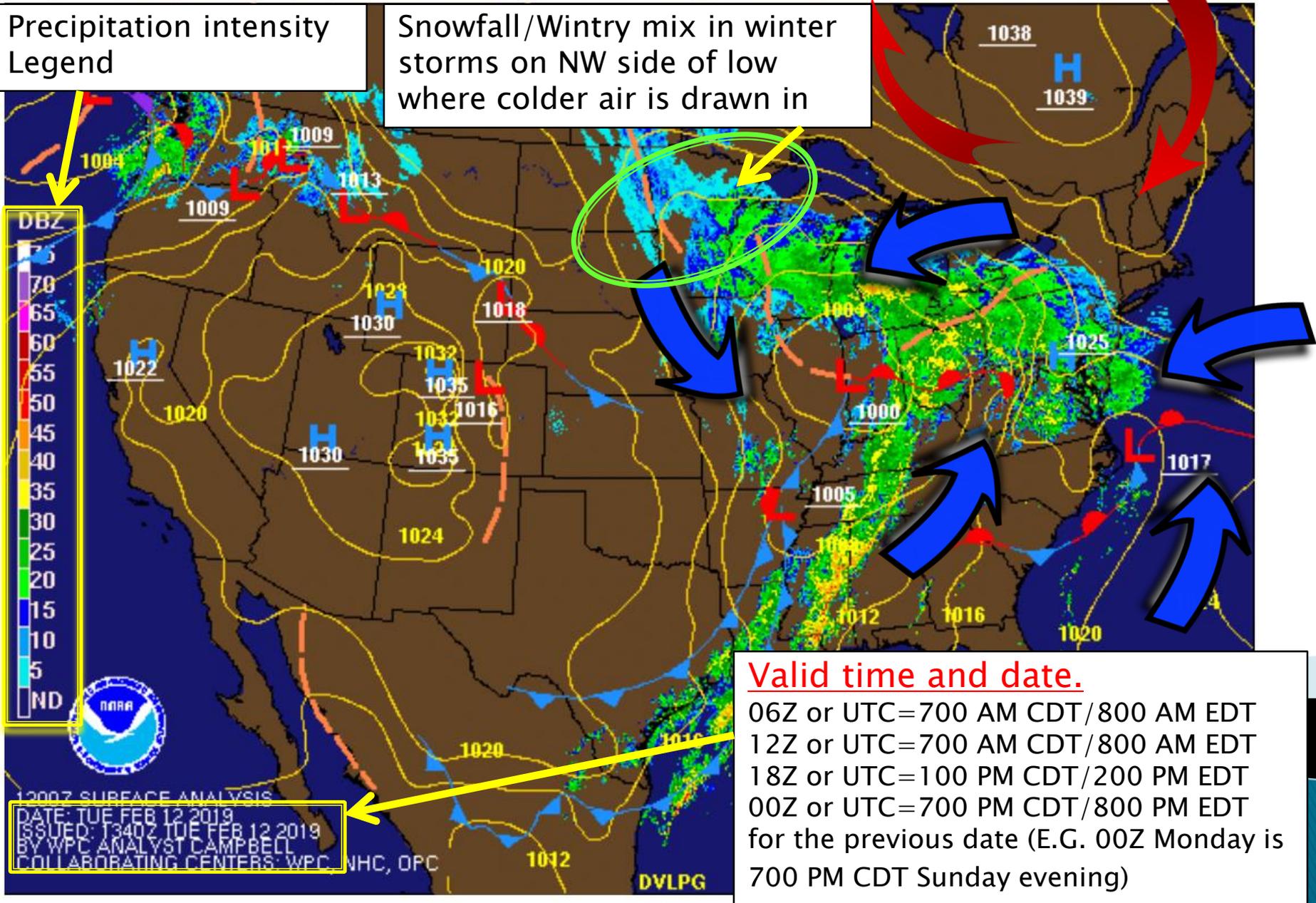
1200Z SURFACE ANALYSIS
DATE: TUE FEB 12 2019
ISSUED: 1340Z TUE FEB 12 2019
BY WPC ANALYST CAMPBELL
COLLABORATING CENTERS: WPC, NHC, OPC

1. Current Surface Analysis

Precipitation intensity Legend



Snowfall/Wintery mix in winter storms on NW side of low where colder air is drawn in



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)

12007 SURFACE ANALYSIS
DATE: TUE FEB 12 2019
ISSUED: 1340Z TUE FEB 12 2019
BY WPC ANALYST CAMPBELL
COLLABORATING CENTERS: WPC, NHC, OPC
DVLPG

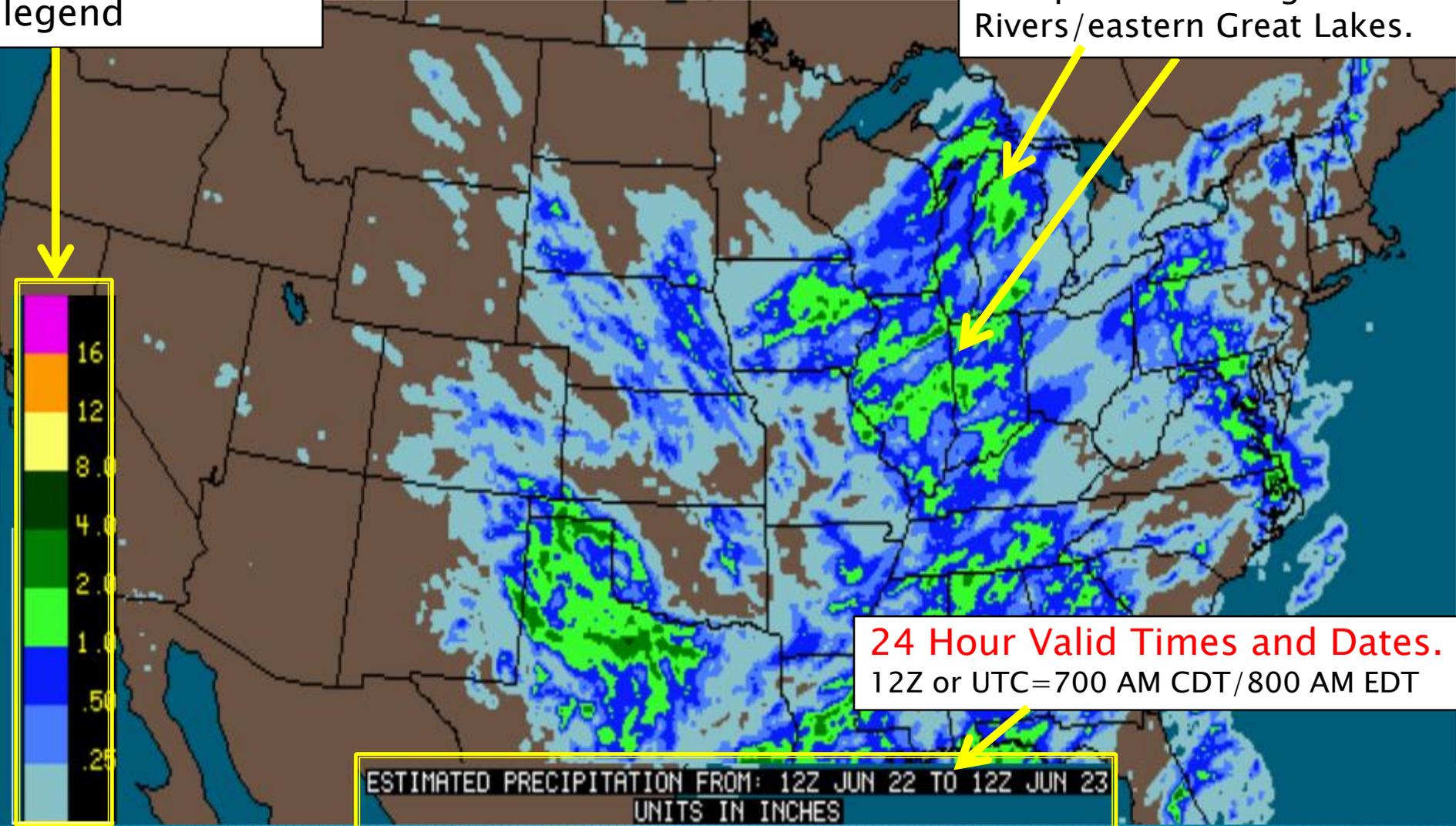
24 hour radar estimated rainfall amounts legend

Areas of historical 24 hour radar estimated 1-2 inch 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



10. Current Wind Speeds and Gusts

CURRENT WIND SPEEDS - GUSTS INDICATED

THURSDAY MAR 28, 2019

10 MPH

20 MPH

30+ MPH

Current gust speeds indicated in MPH. 26 MPH gust located in north central Minnesota

Blue shades are current sustained wind speeds >10 MPH.

28 MAR 2019 5:00 PM GMT / 28 MAR 2019 1:00 PM EDT

Valid Date and Time.

0600 GMT=700 AM CDT/800 AM EDT
1200 GMT=700 AM CDT/800 AM EDT
1800 GMT=100 PM CDT/200 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)

12. 24-Hour Surface Forecast

Forecast Surface Maps

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.

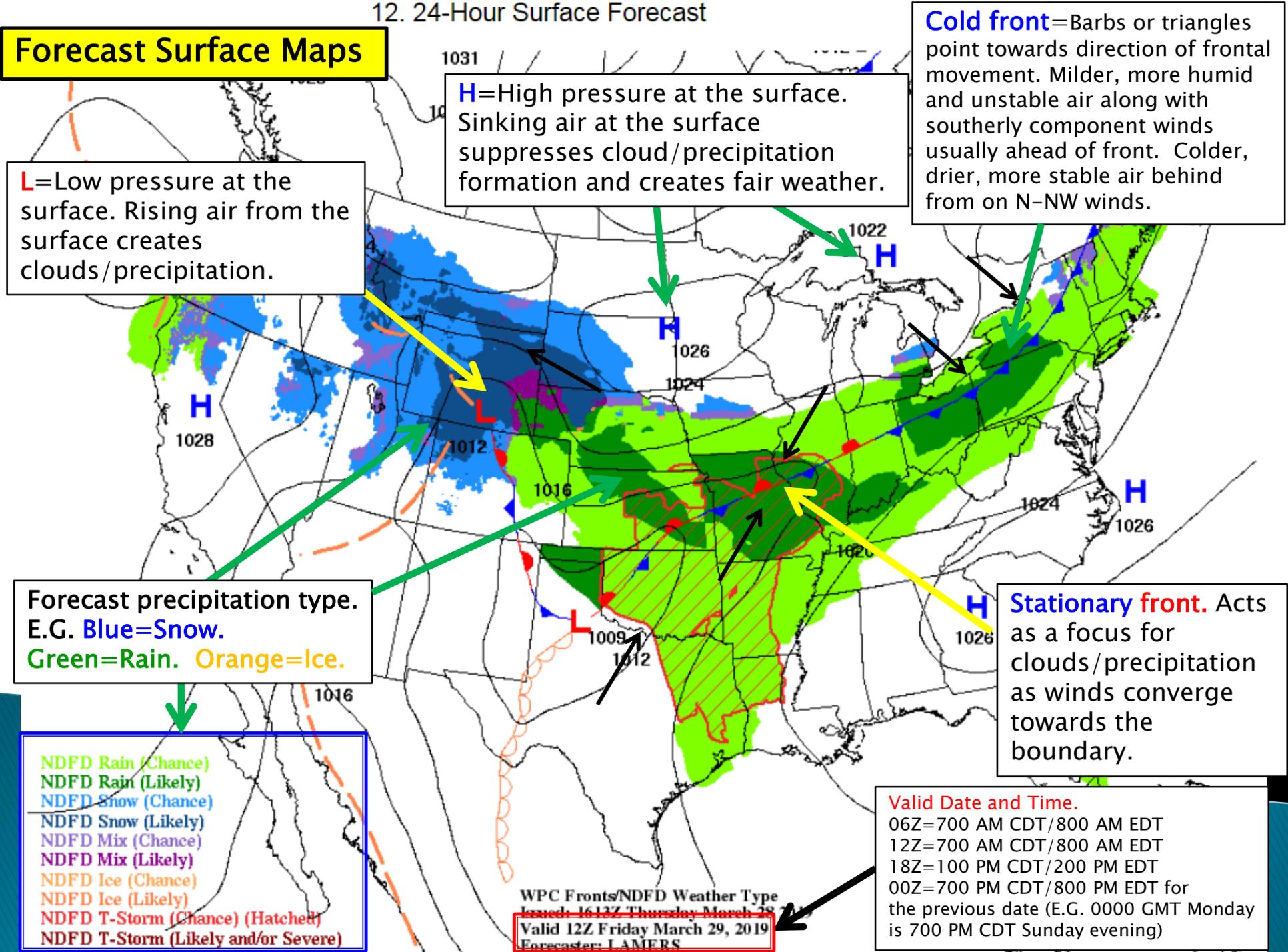
Forecast precipitation type. E.G. **Blue**=Snow. **Green**=Rain. **Orange**=Ice.

- 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.

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)

WPC Fronts/NDFD Weather Type
 Issued: 1613Z Thursday March 28, 2019
 Valid 12Z Friday March 29, 2019
 Forecaster: LAMERS



Forecast Surface Maps

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.

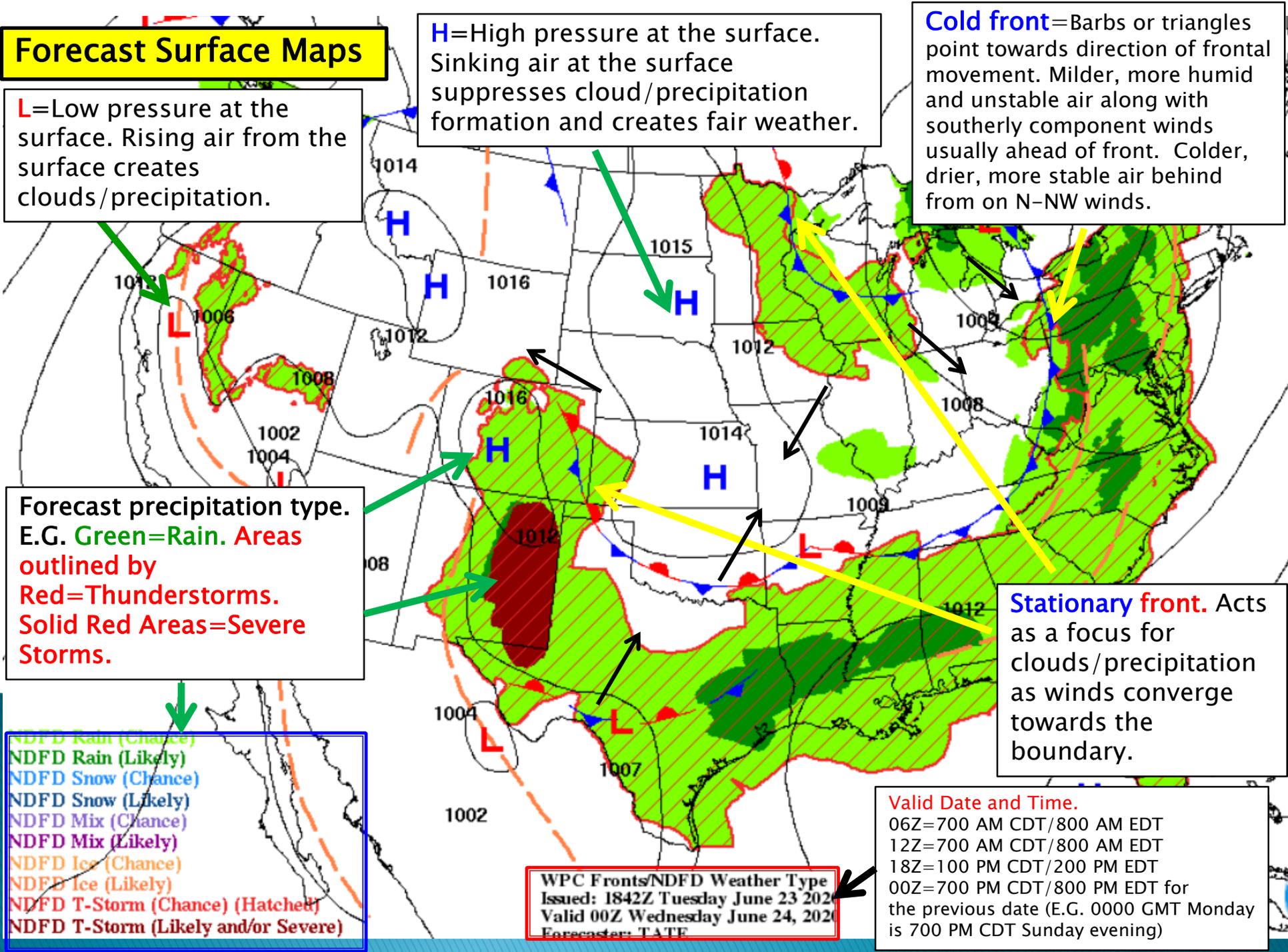
Forecast precipitation type. E.G. **Green**=Rain. **Areas outlined by Red**=Thunderstorms. **Solid Red Areas**=Severe Storms.

Stationary front. Acts as a focus for clouds/precipitation as winds converge towards the boundary.

- 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)

WPC Fronts/NDFD Weather Type
 Issued: 1842Z Tuesday June 23 2020
 Valid 00Z Wednesday June 24, 2020
 Forecaster: TATE

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 24 Hour Precipitation Amount Maps

Forecast 24 hour water equivalent precipitation amounts legend.



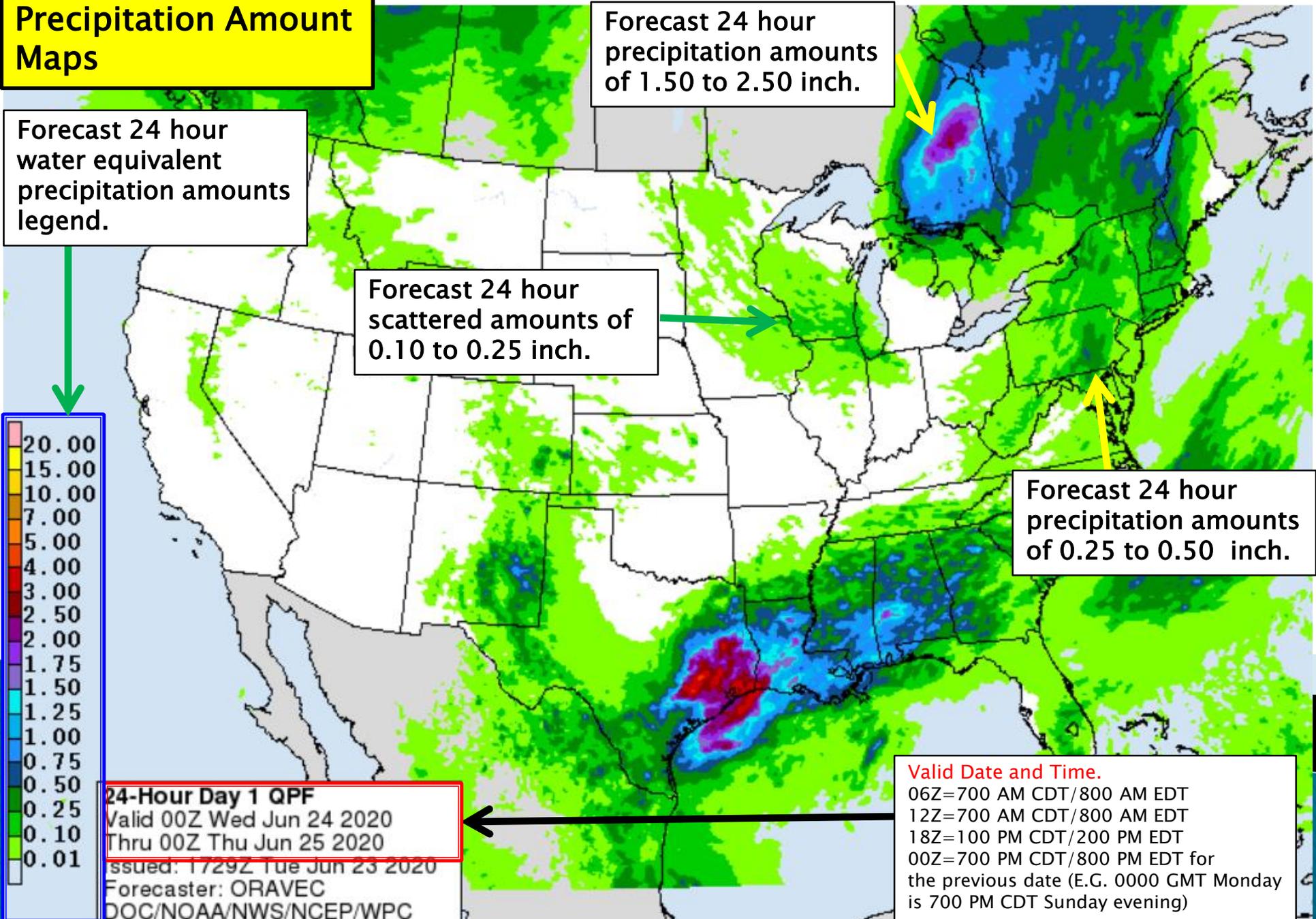
Forecast 24 hour precipitation amounts of 1.50 to 2.50 inch.

Forecast 24 hour scattered amounts of 0.10 to 0.25 inch.

Forecast 24 hour precipitation amounts of 0.25 to 0.50 inch.

24-Hour Day 1 QPF
 Valid 00Z Wed Jun 24 2020
 Thru 00Z Thu Jun 25 2020
 Issued: 1729Z Tue Jun 23 2020
 Forecaster: ORAVEC
 DOC/NOAA/NWS/NCEP/WPC

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)



Viewing Weather Computer Model Images

Navigate to and bookmark: <https://www.pivotalweather.com/>

1. Click on “Models”

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

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

The screenshot shows the Pivotal Weather website interface. At the top left is the logo with a gear icon and the text "pivotalweather". Below the logo is a navigation bar with the following items: "HOME", "1. MODELS", "FORECASTS", "3. OBSERVATIONS", "CONTACT", "SUBSCRIPTIONS", and "LOGIN". Below the navigation bar is a "Forecast Hour" section with a time selection dropdown menu set to "Tue 2020-06-23 00z". Below the dropdown is a grid of buttons for selecting specific forecast hours, with "000" highlighted. To the right of the dropdown is a "Soundings" section. Below the "Soundings" section is a "Model" dropdown menu set to "ECMWF Hi-Res". To the right of the "Model" dropdown is a "Zoom" dropdown menu set to "Continental US". Below the "Zoom" dropdown is a "Single Image" button. Below the "Single Image" button is a table of options:

Forecast Loop	Forecast Slideshow
Model Trend Loop	Model Trend Slideshow
Compare Models Loop (Latest Runs)	Compare Models Slideshow (Latest Runs)
Compare Models Loop (Selected Run Only)	Compare Models Slideshow (Selected Run Only)

Below the table is a weather map showing precipitation type, rate, and pressure contours. The map is titled "Precipitation Type, Rate (in hr⁻¹), MSL" and "F006 Valid: Tue 2020-06-23 06z". The map shows a large area of green and yellow precipitation over the eastern United States and the Atlantic Ocean. The map is credited to "(c) 2020 European Centre for Medium-range Weather Forecasts (ECMWF)".

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

Model Surface Map Interpretation

Valid model run

Image parameters & valid date/time

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

Run: Thu 2019-04-11 12z

006 • 012 • 018 • 024 • 030 • 036 • 42 • 048 • 060

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.

Click on other surface parameters to view such as 2 Meter AGL (Above Ground Level) **Relative Humidity** or **Temp/Wind**.

000	003	006	009	012	015	018	021
024	027	030	033	036	039	042	045
048	054	060	066	072	078	084	090
096	102	108	114	120	126	132	138
144	150	156	162	168	174	180	186
192	198	204	210	216	222	228	234
240	252	264	276	288	300	312	324
336	348	360	372	384			

Parameter

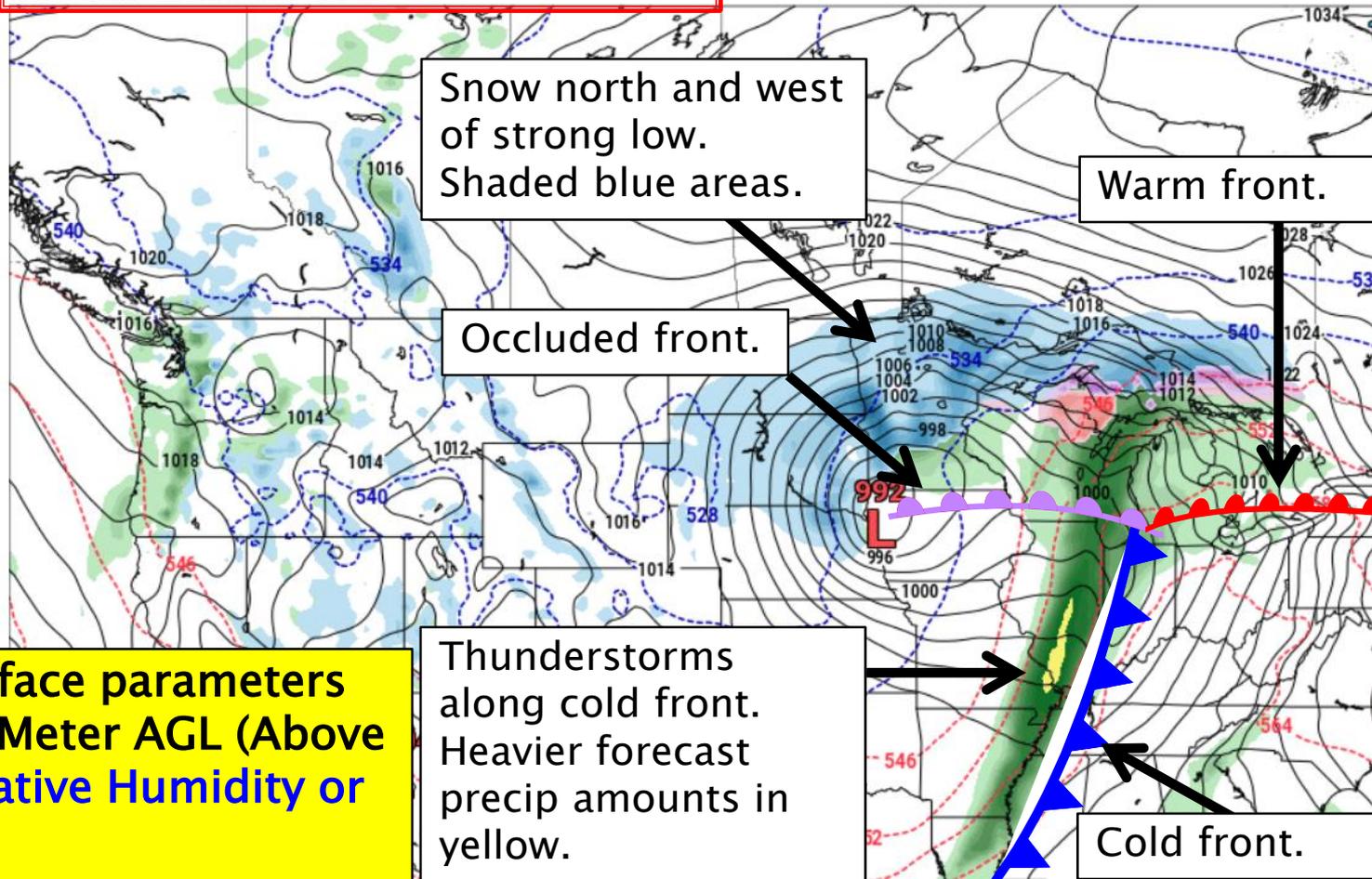
- > Upper-Air: Height, Wind, Temperature
- < Surface and Precipitation

Surface

- 2 m AGL Relative Humidity
- 2 m AGL Temperature
- 2 m AGL Temperature, Wind Barbs
- 2 m AGL Wind Chill/Heat Index
- 2 m AGL Dew Point
- 2 m AGL Dew Point, Wind Barbs
- 2 m AGL Theta_e, Wind Barbs
- MSLP, 10 m AGL Wind

Precipitation Type

Precipitation Type, Rate



Model Surface Map Interpretation

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

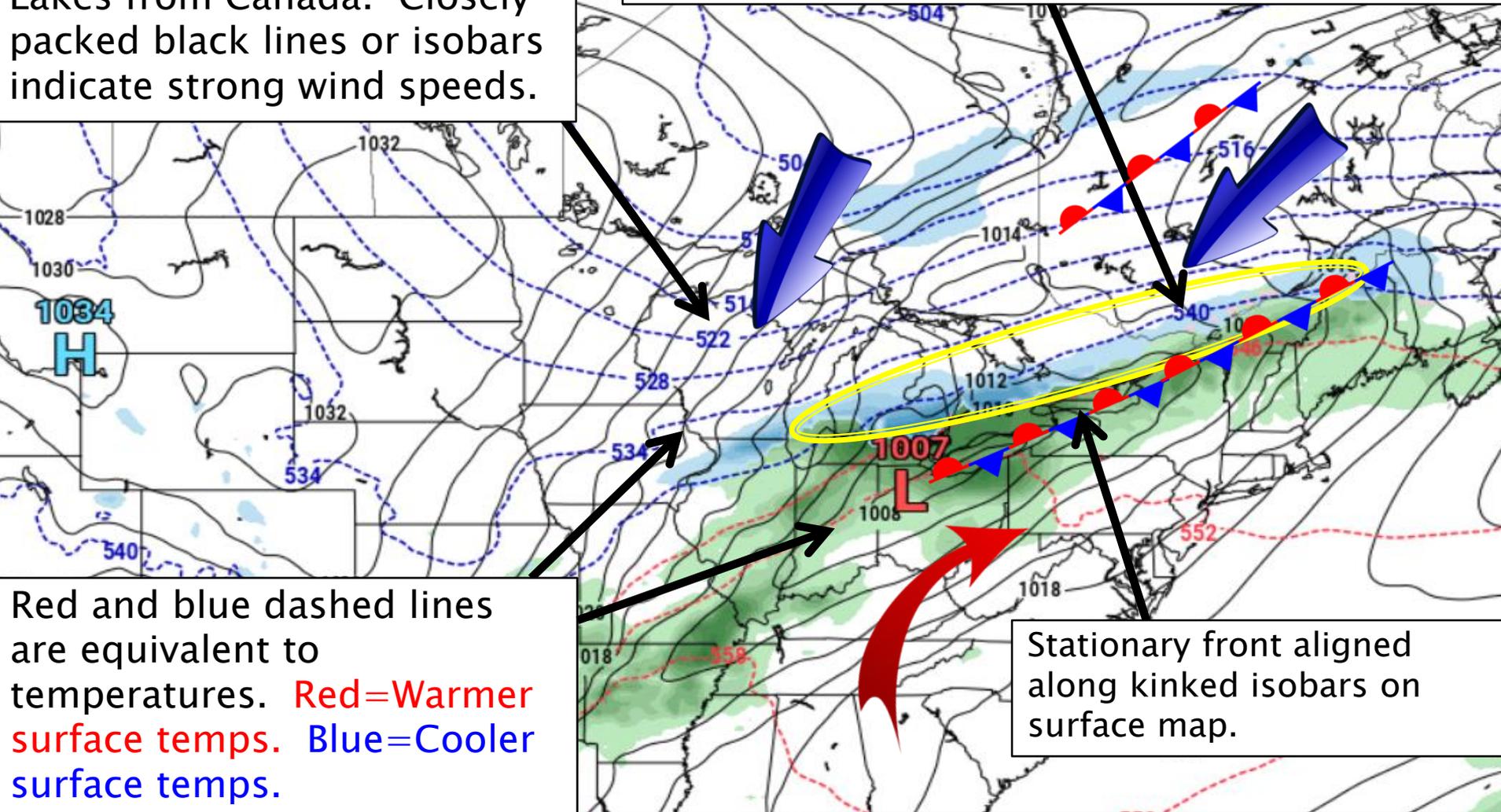
F096 Valid: Sat 2019-03-30 12z

Init: Tue 2019-03-26 12z GFS

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



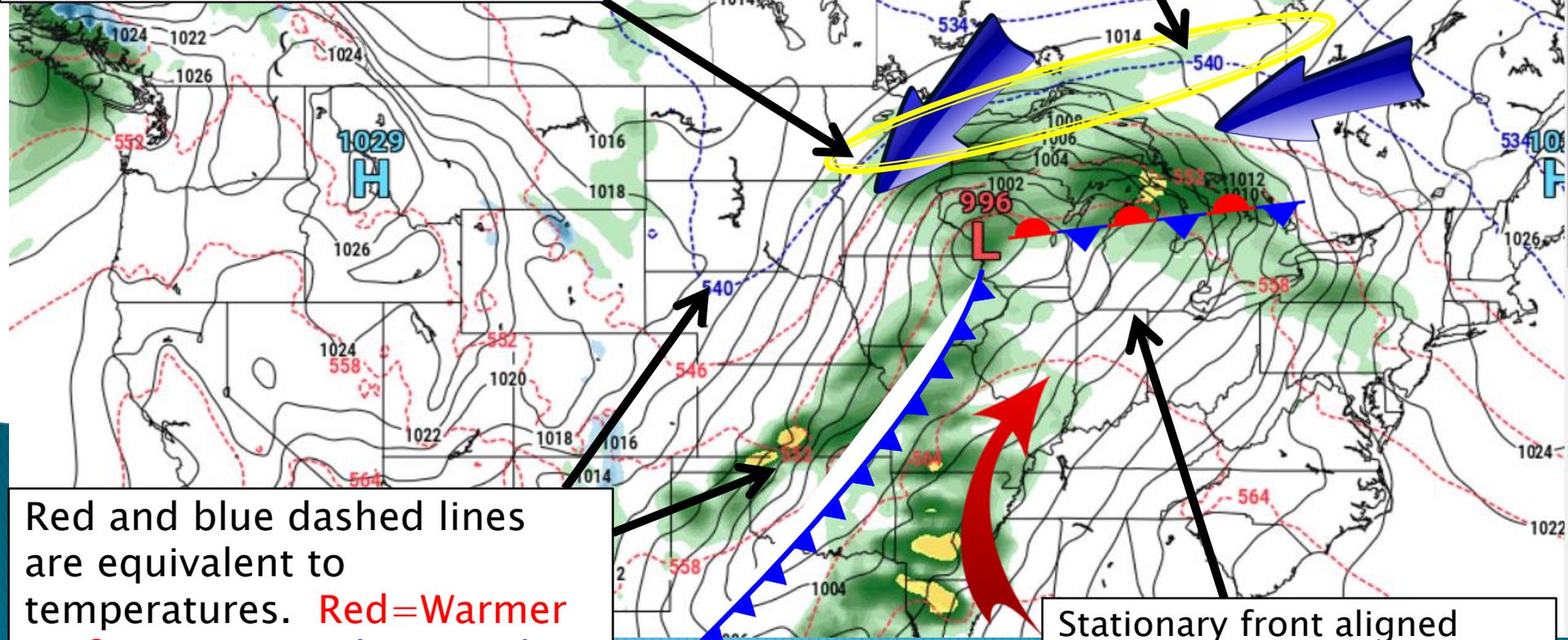
Model Surface Map Interpretation

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

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.

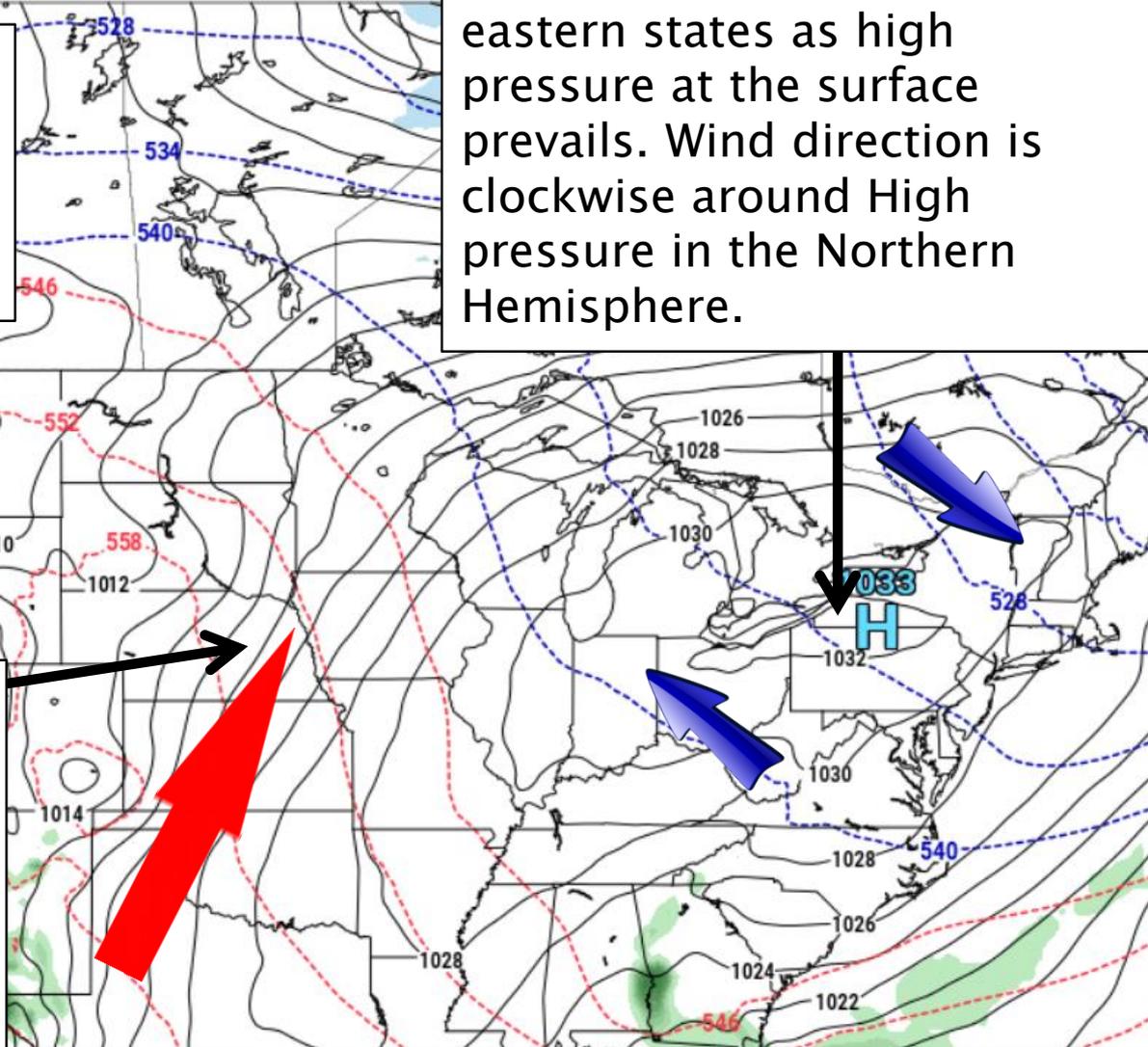
Model Surface Map Interpretation

Precipitation Type, Rate (in hr⁻¹), 1000-500 mb Thickness (dam)
F039 Valid: Wed 2019-03-27 03z

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

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.

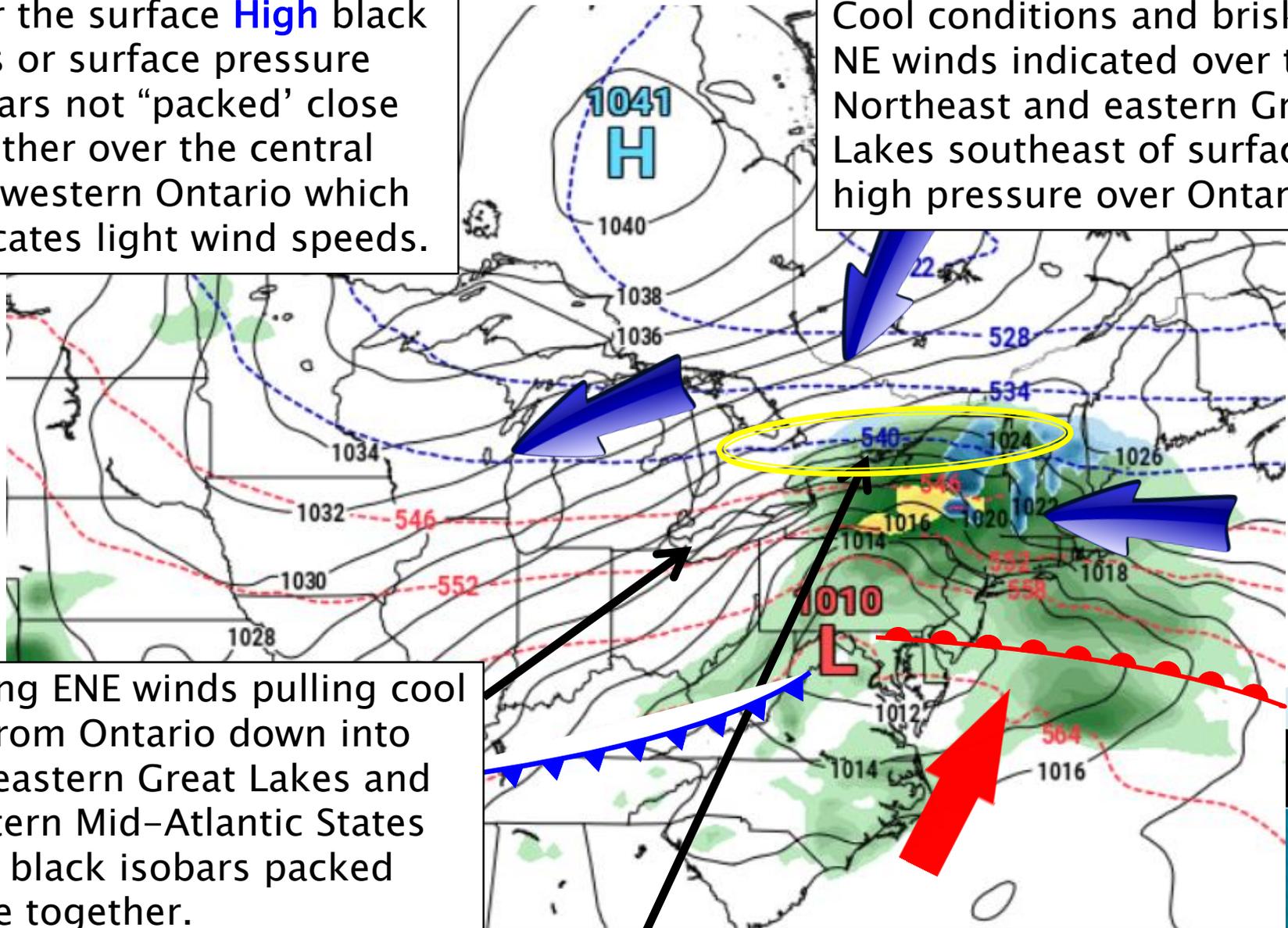
Mild and windy conditions indicated over the Plains with south winds drawing warm and humid air northeast into the Upper Mississippi Valley. Black solid isobars are packed close together.



Model Surface Map Interpretation

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.



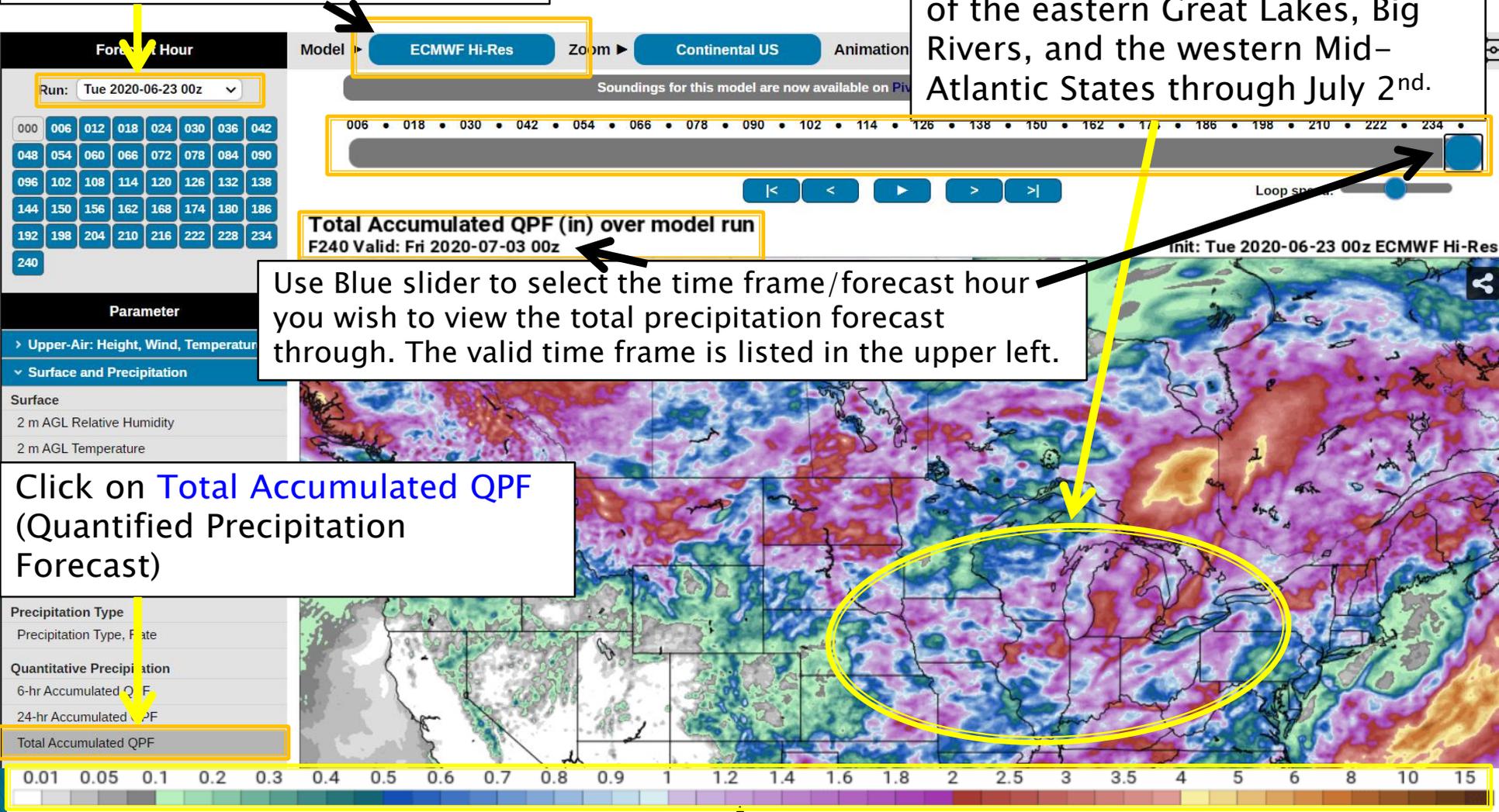
Strong ENE winds pulling cool air from Ontario down into the eastern Great Lakes and western Mid-Atlantic States with black isobars packed close together.

540 Thickness = Rain/Snow estimate in winter

Model Total Forecast Precipitation Amounts

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.

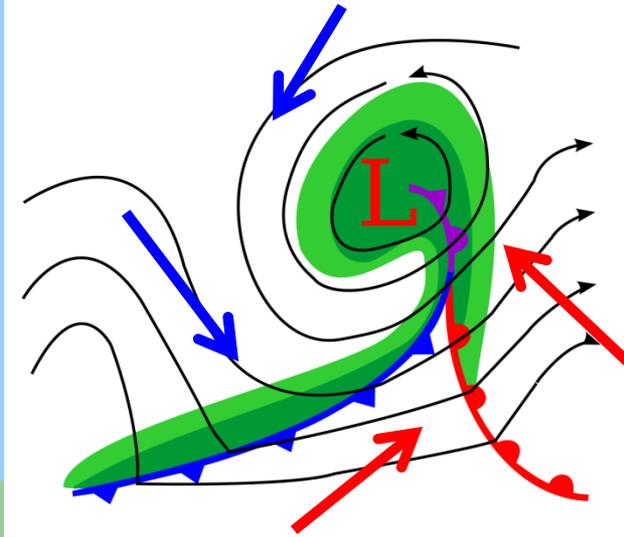
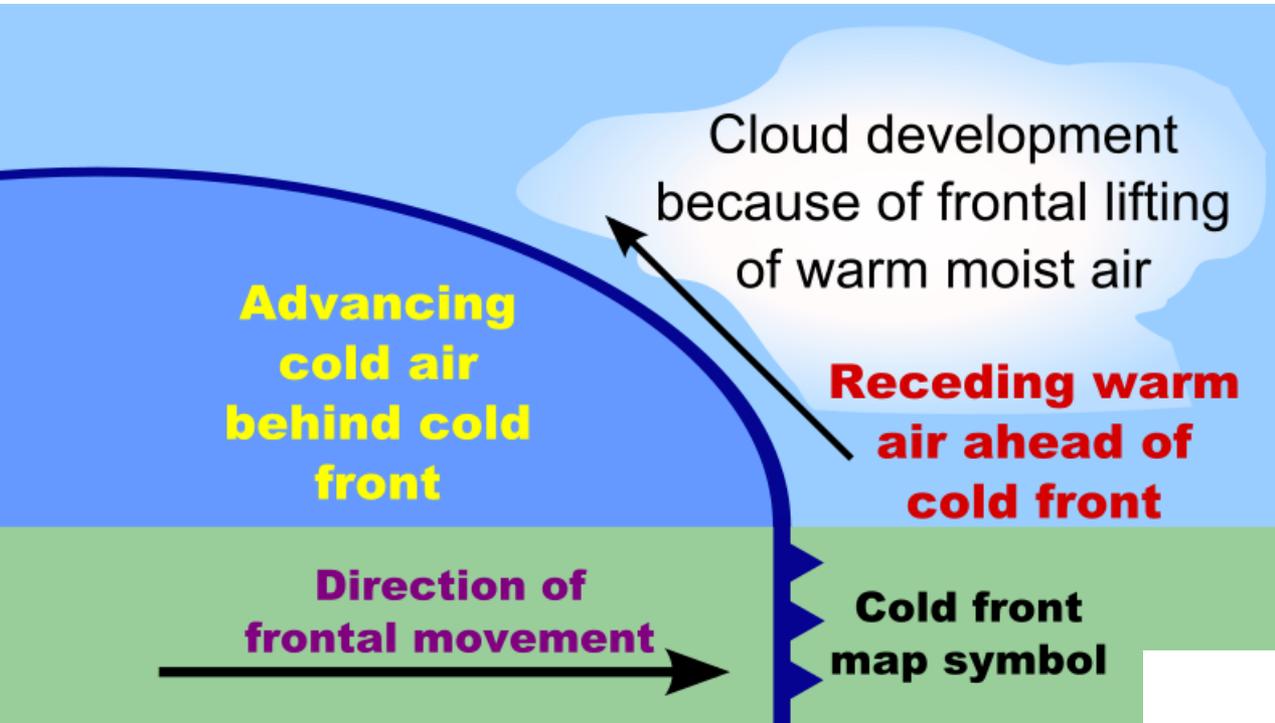


Total Accumulated QPF (in) over model run
F240 Valid: Fri 2020-07-03 00z

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.

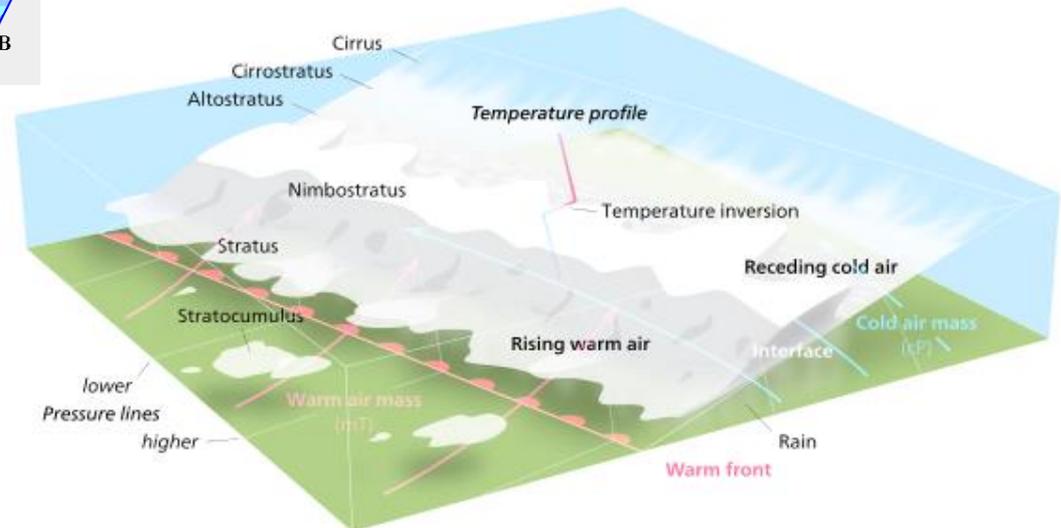
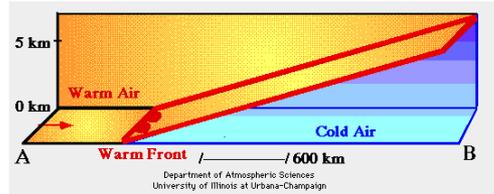
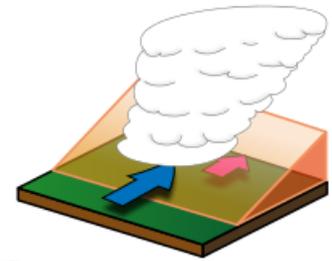
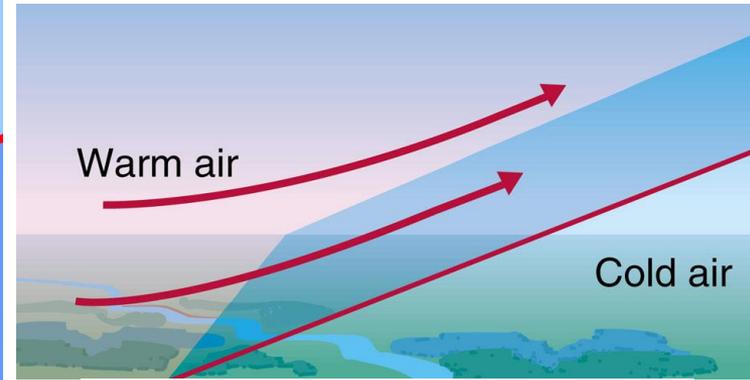
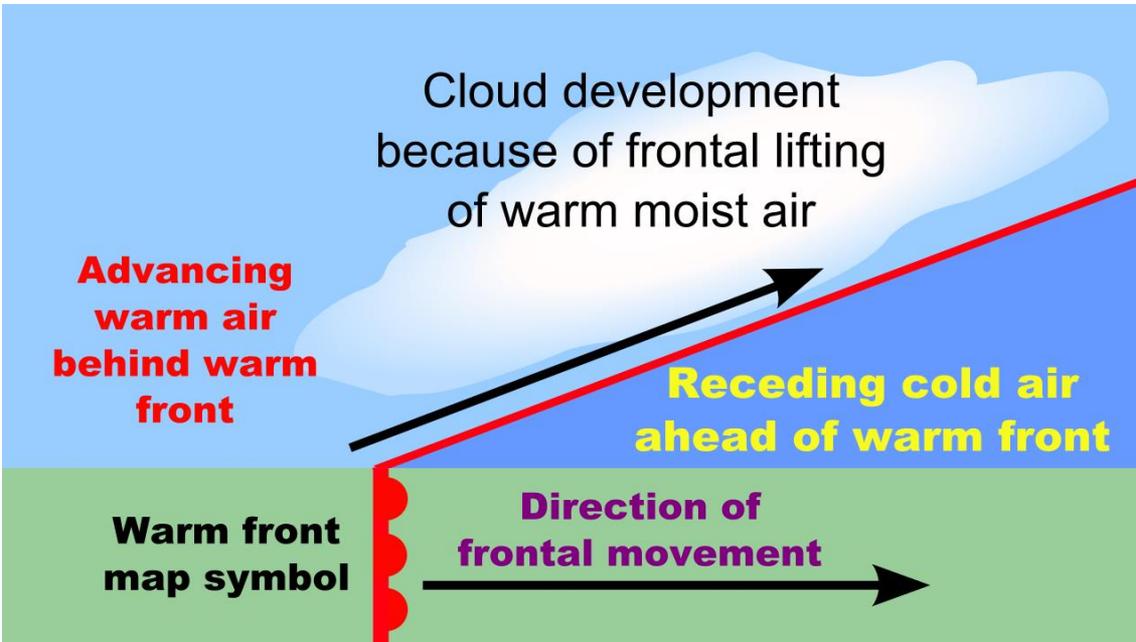
Total Forecast Precipitation Amount Legend

Air Motion and Weather near a Cold Front

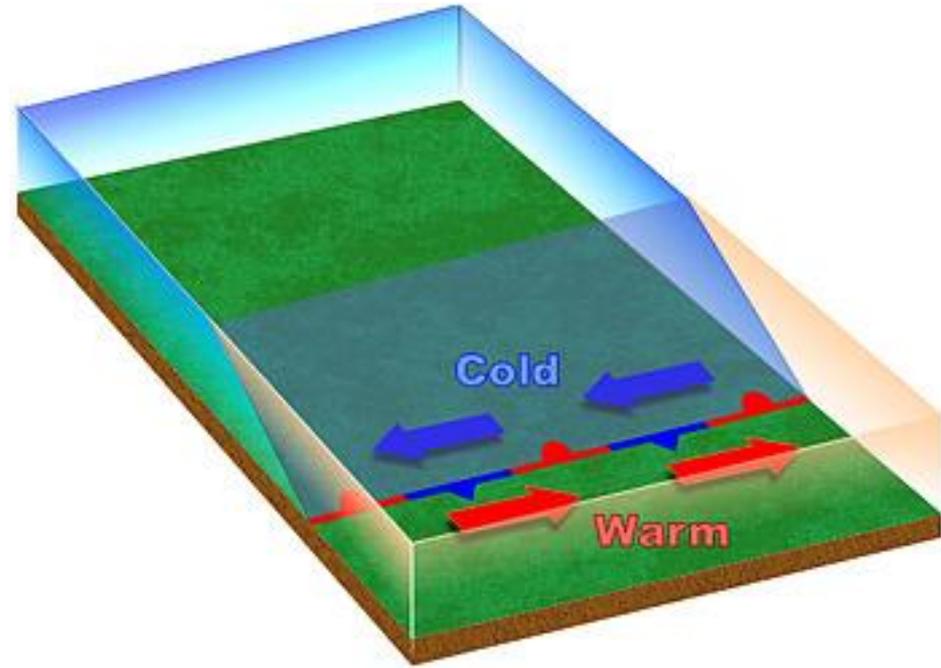
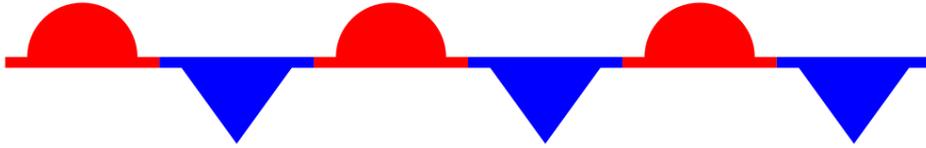


Cold Front

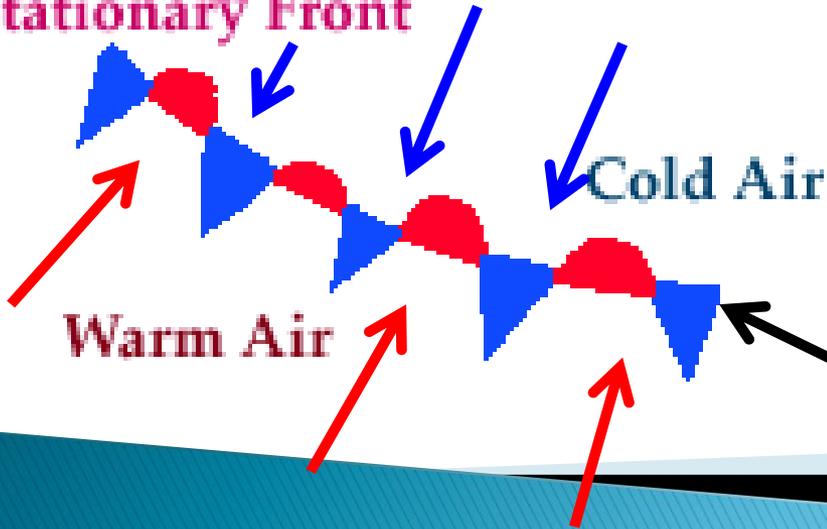
Air Motion and Weather near a **Warm Front**



Air Motion and Weather near a **Stationary Front**

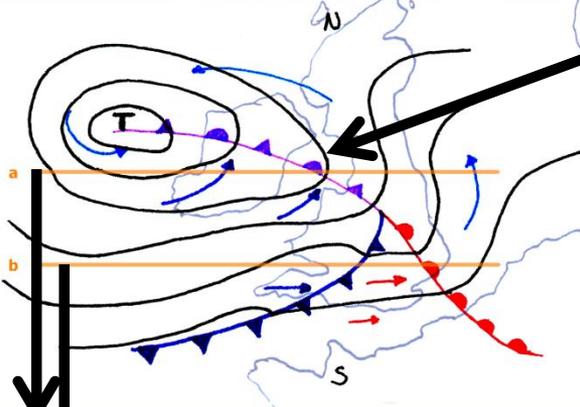


Stationary Front

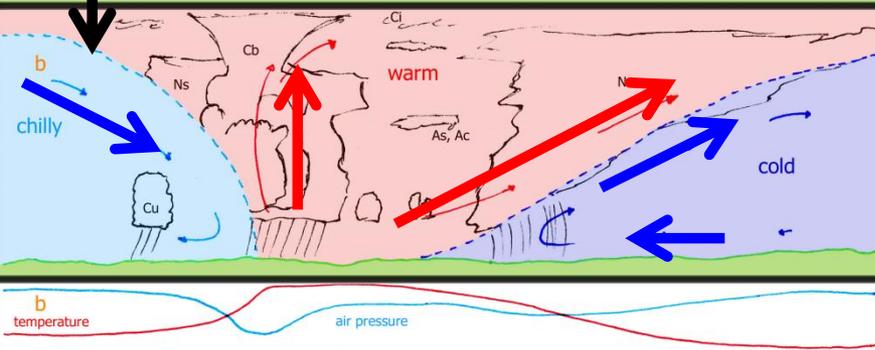
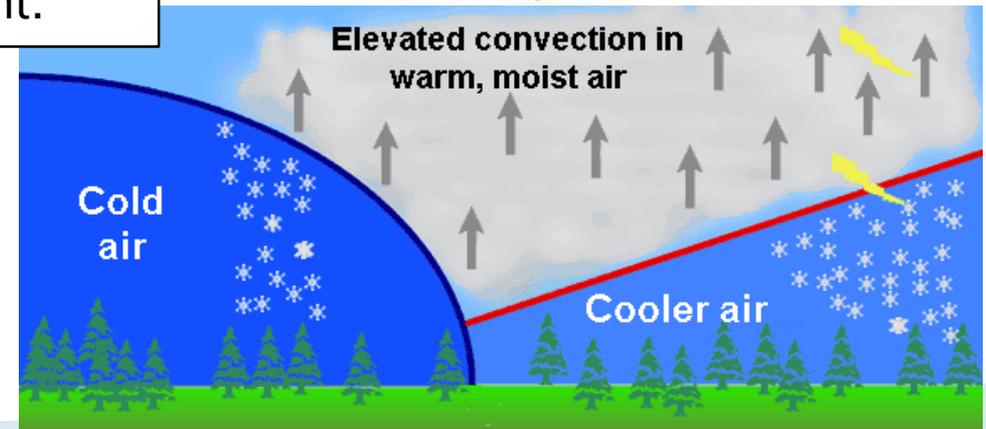
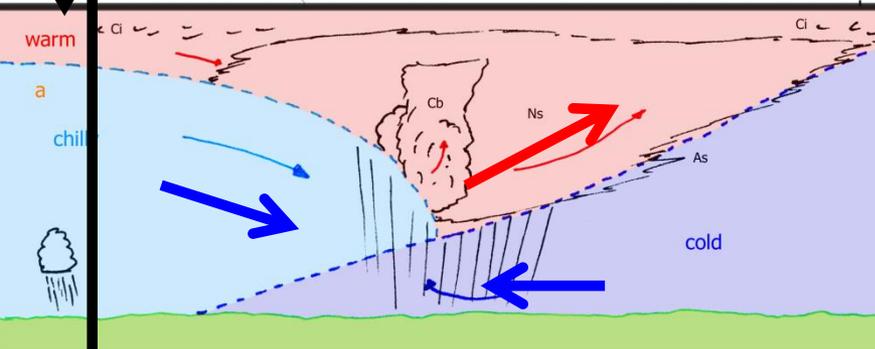
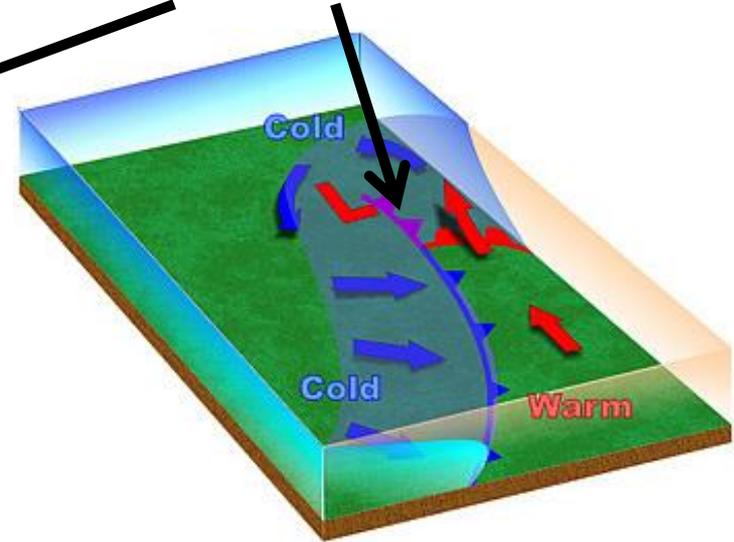


Air motion towards a **stationary front** converges at boundary and is forced upward creating clouds and possible precipitation near the front.

Air Motion and Weather near an Occluded Front



A and B north looking cross section view diagrams of weather and wind patterns near an occluded 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.