

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:

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

- [GOES-East Satellite Imagery Selection Page](#)
- [West Eastern Area Radar Loop](#)
- [Central Eastern Area Loop](#)
- [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

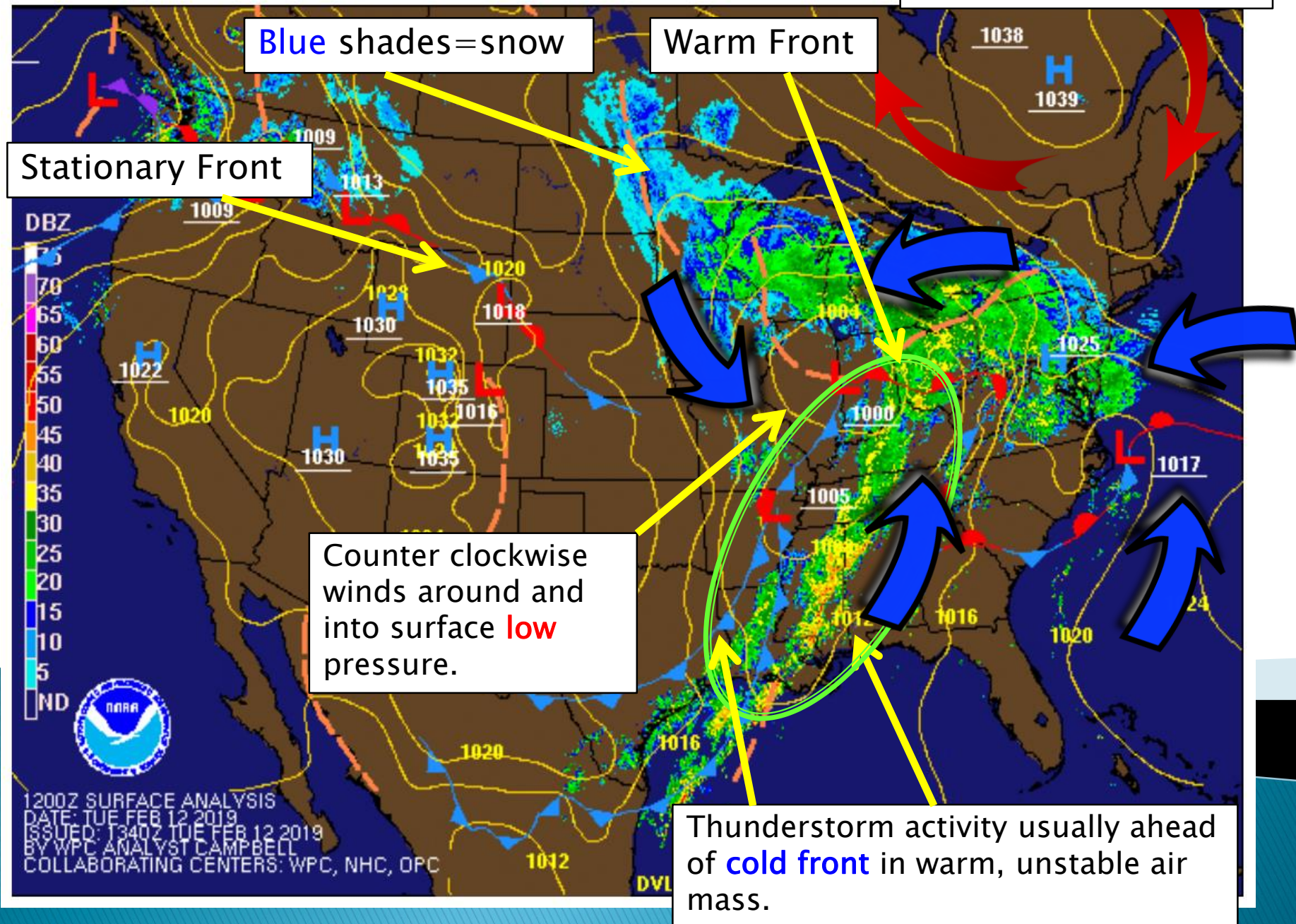
EACC PRODUCTS

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



1. Current Surface Analysis

Clockwise winds around **high** pressure.

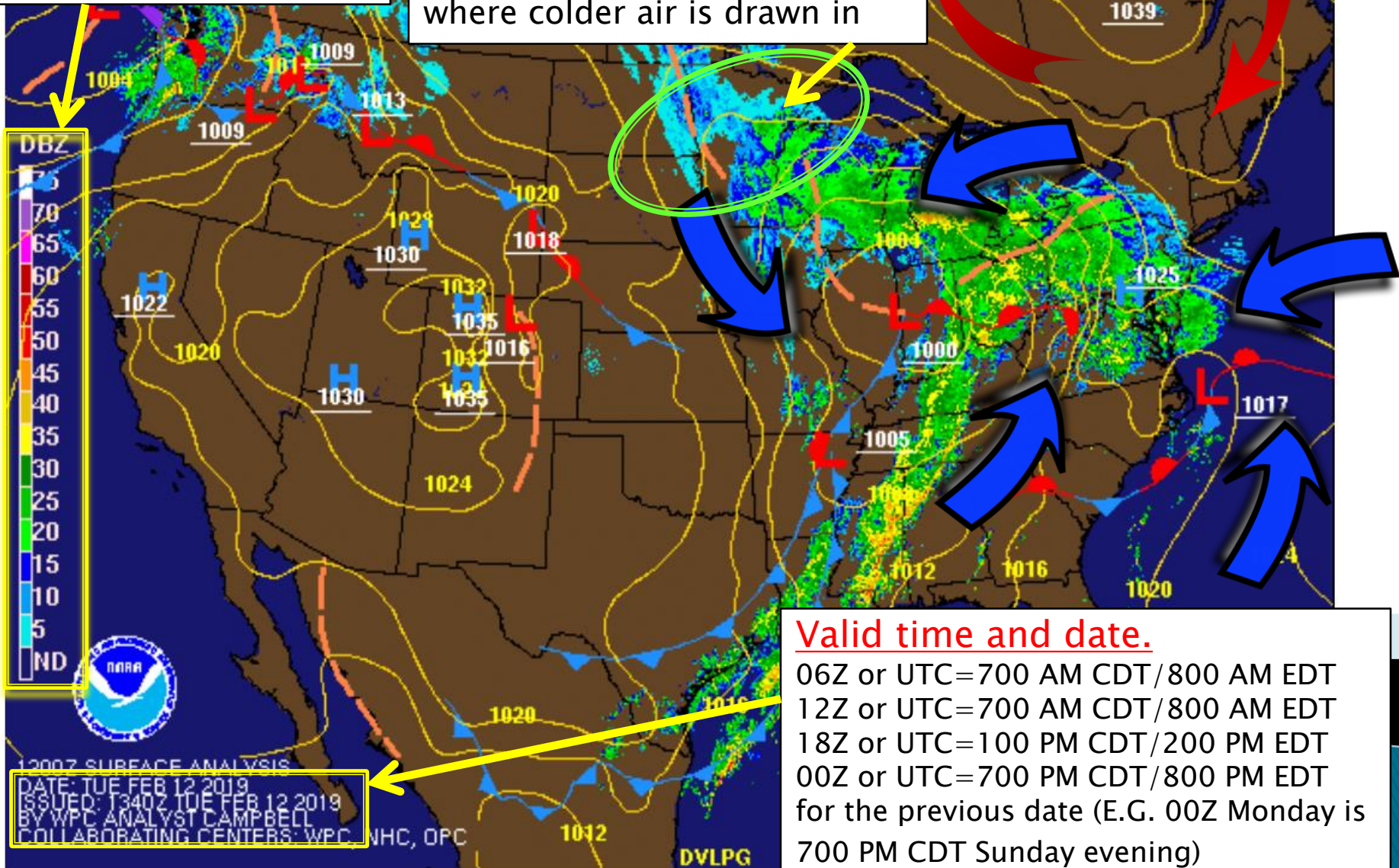


1. Current Surface Analysis

Precipitation intensity

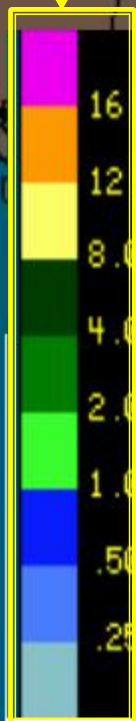
Legend

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



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

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.

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

Forecast Surface Maps

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

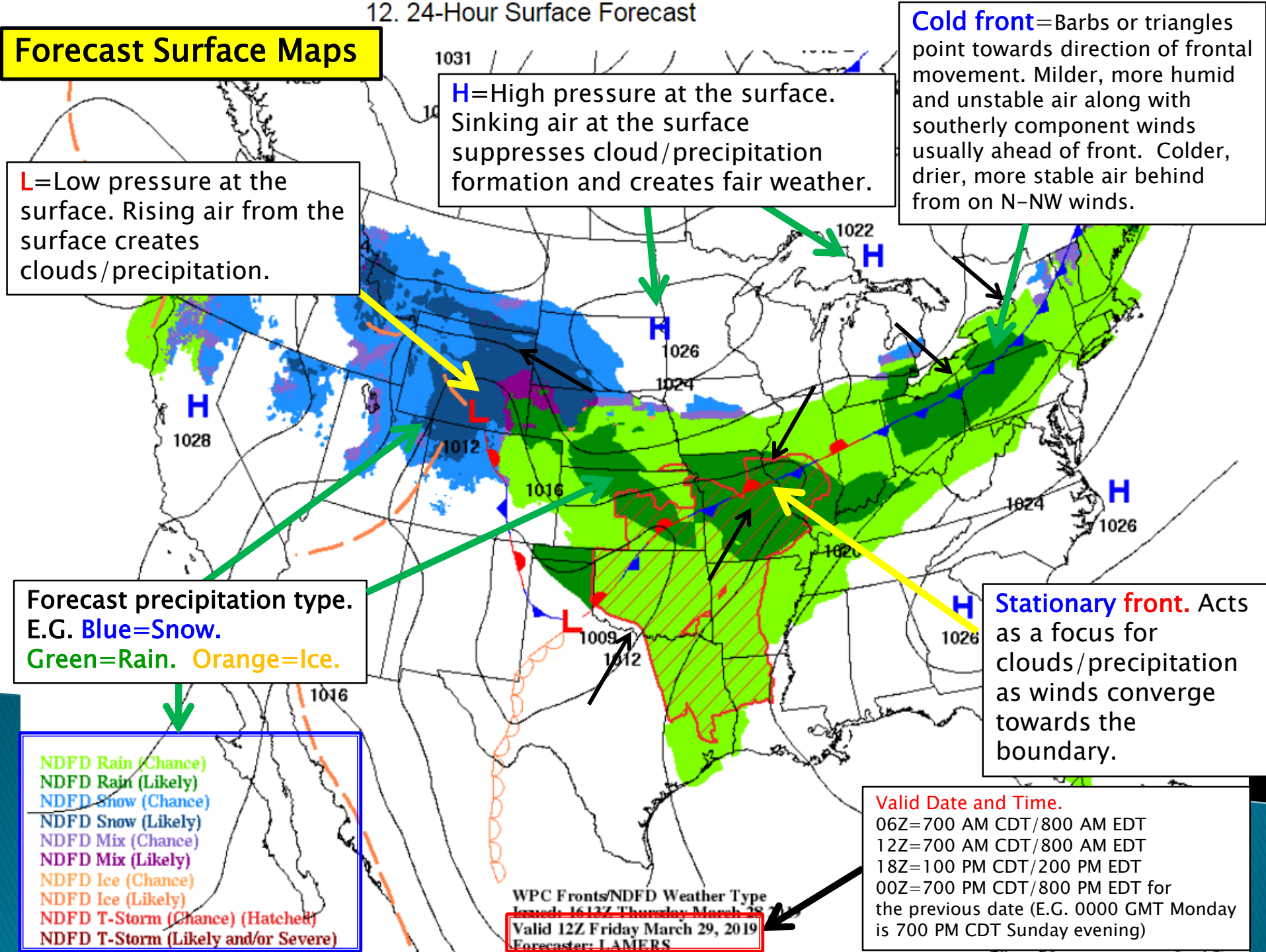
Forecast precipitation type.
E.G. **Blue**=Snow. **Green**=Rain. **Orange**=Ice.

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)

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: 1612Z 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.

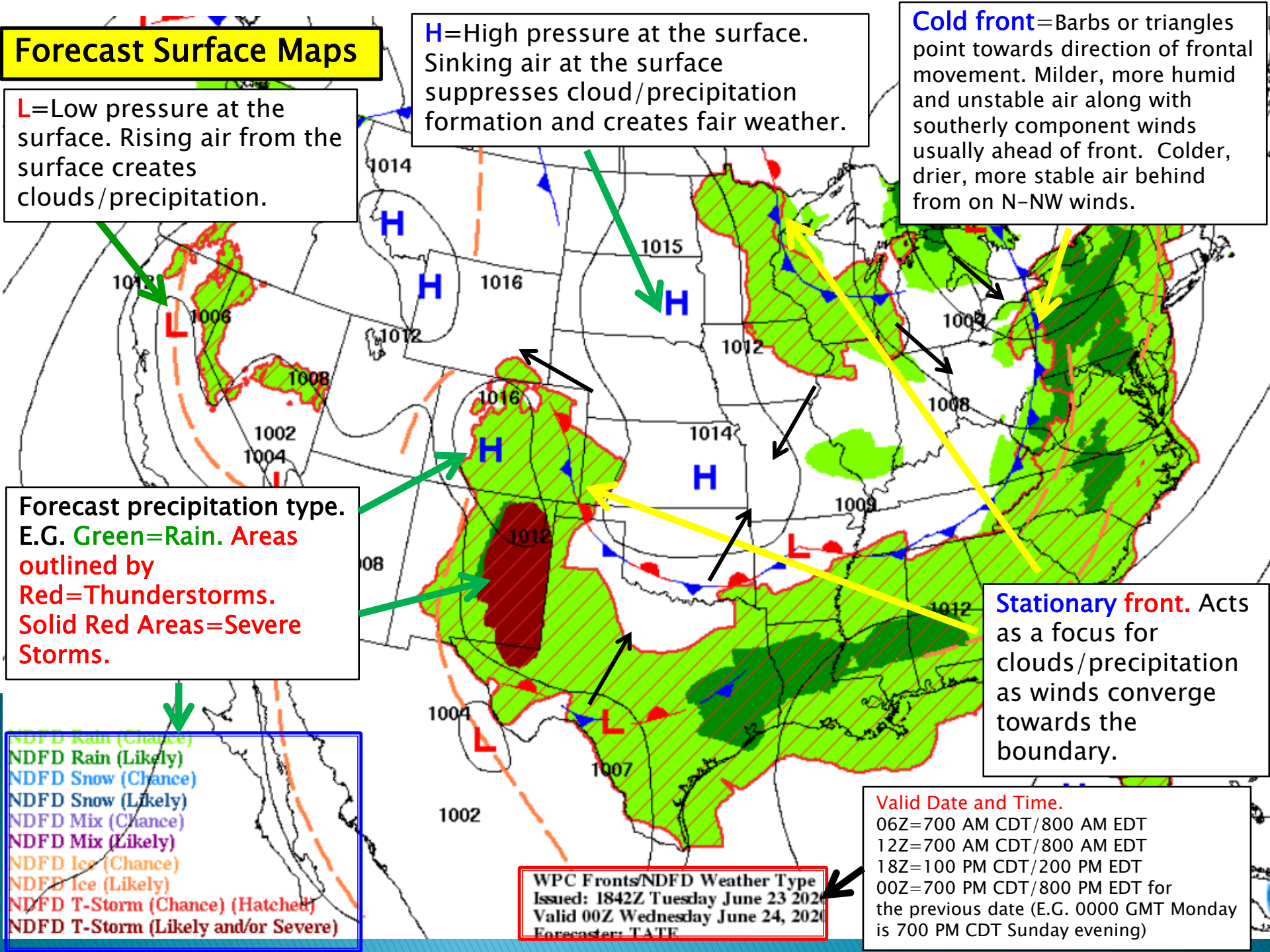
Forecast precipitation type. E.G. **Green**=Rain. **Areas outlined by Red**=Thunderstorms. **Solid Red Areas**=Severe Storms.

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)

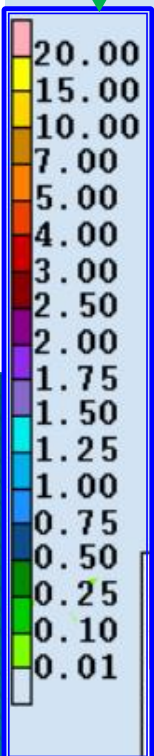
Valid Date and Time.
06Z=700 AM CDT/800 AM EDT
12Z=700 AM CDT/800 AM EDT
18Z=100 PM CDT/200 PM EDT
00Z=700 PM CDT/800 PM EDT for the previous date (E.G. 0000 GMT Monday is 700 PM CDT Sunday evening)

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



Forecast 24 Hour Precipitation Amount Maps

Forecast 24 hour
water equivalent
precipitation amounts
legend.



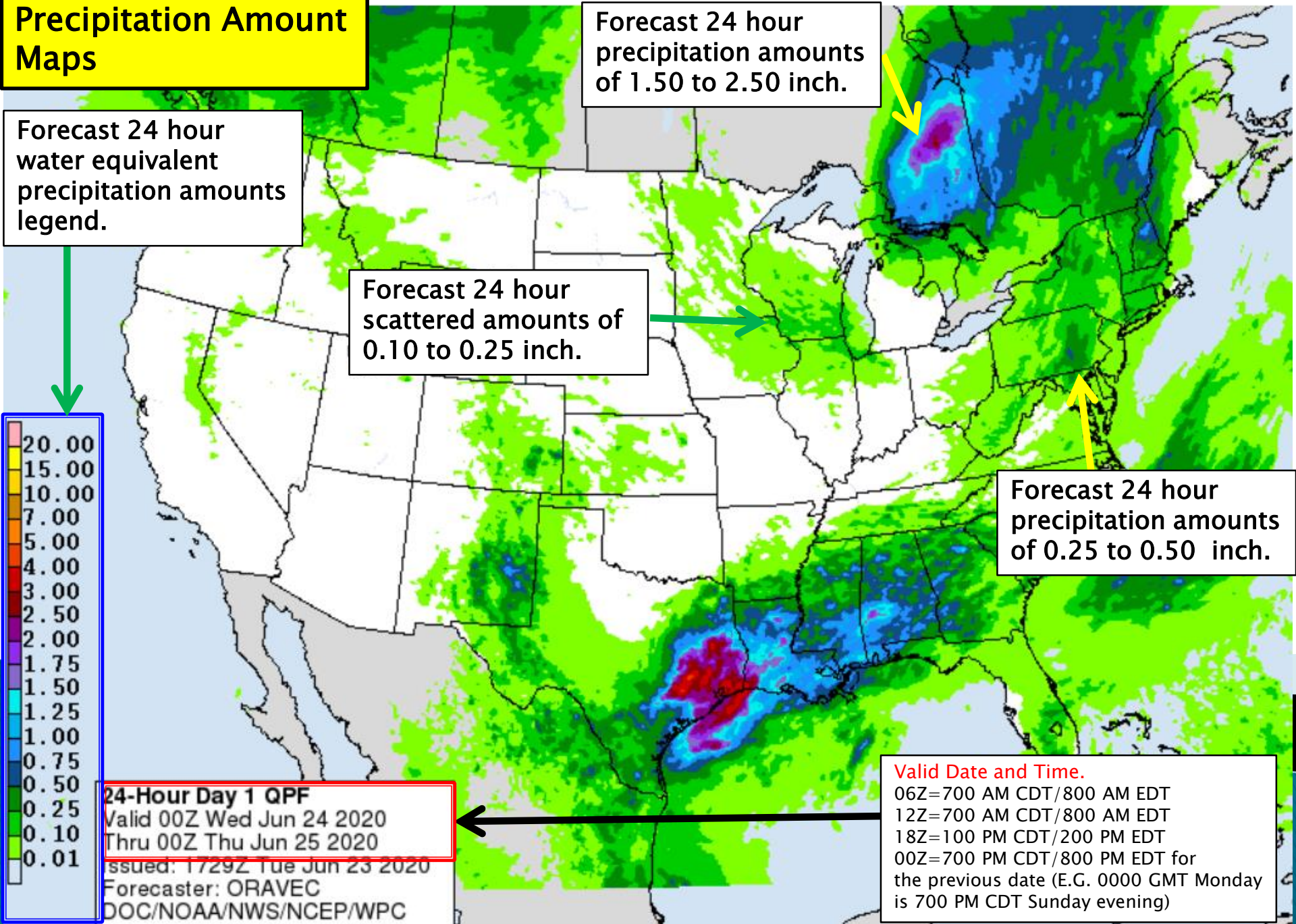
Forecast 24 hour
precipitation amounts
of 1.50 to 2.50 inch.

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. The navigation bar includes links for HOME, MODELS, FORECASTS, OBSERVATIONS, CONTACT, SUBSCRIPTIONS, and LOGIN. The 'MODELS' link is highlighted with a red box and an arrow pointing to it. Below the navigation bar, the 'Forecast Hour' section shows a dropdown menu for 'Tue 2020-06-23 00z' and a grid of buttons for various forecast hours (000, 006, 012, 018, 024, 030, 036, 042, 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). The 'Valid' section shows '< Tue 2020-06-23 06z >'. The 'Model' section shows 'ECMWF Hi-Res' selected. The 'Zoom' section shows 'Continental US' selected. The 'Soundings' section shows 'Single Image' selected. The 'Forecast Loop' section shows 'Forecast Loop' selected. The 'Forecast Slideshow' section shows 'Forecast Slideshow' selected. The 'Model Trend Loop' section shows 'Model Trend Loop' selected. The 'Model Trend Slideshow' section shows 'Model Trend Slideshow' selected. The 'Compare Models Loop (Latest Runs)' section shows 'Compare Models Loop (Latest Runs)' selected. The 'Compare Models Slideshow (Latest Runs)' section shows 'Compare Models Slideshow (Latest Runs)' selected. The 'Compare Models Loop (Selected Run Only)' section shows 'Compare Models Loop (Selected Run Only)' selected. The 'Compare Models Slideshow (Selected Run Only)' section shows 'Compare Models Slideshow (Selected Run Only)' selected. The main content area displays a map of the United States with precipitation type and rate (in hr⁻¹) for the model run. The map shows various weather features like clouds, rain, and snow. The text 'Precipitation Type, Rate (in hr⁻¹), M: F006 Valid: Tue 2020-06-23 06z' is visible. Below the map, there is a copyright notice: '(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

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

006 • 012 • 018 • 024 • 030 • 036 • 042 • 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.

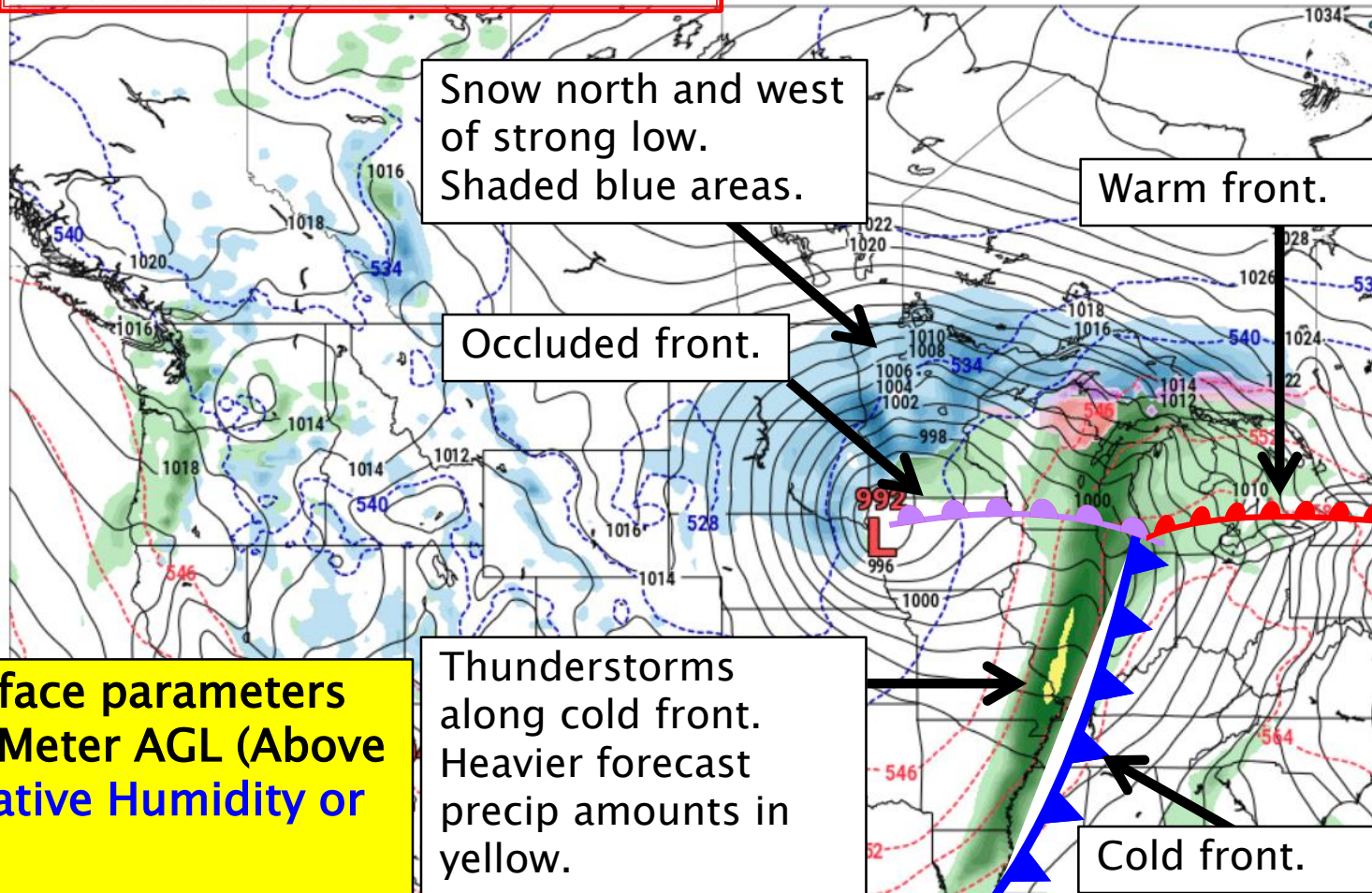
Warm front.

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**.



Model Surface Map Interpretation

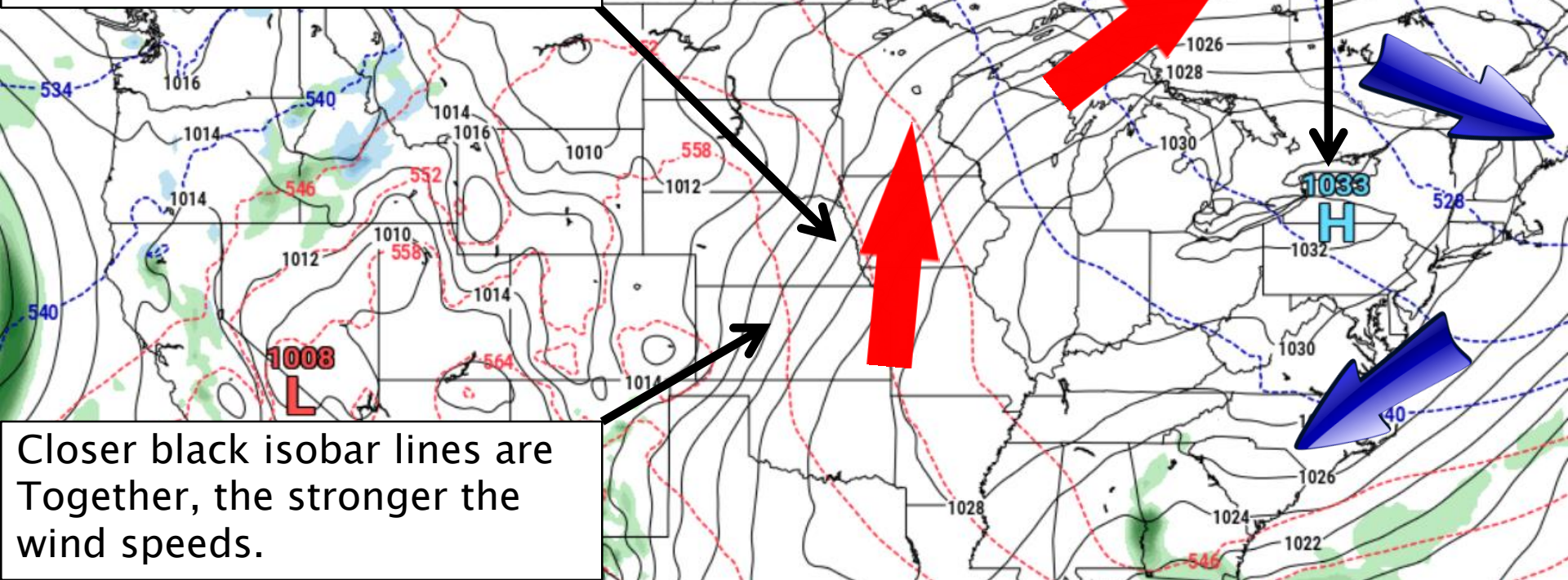
Precipitation Type, Rate (in hr^{-1}), 1000-500 mb Thickness (dam)

F039 Valid: Wed 2019-03-27 03z

Init: Mon 2019-03-2

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.

Clockwise winds occur around surface high pressure in the Northern Hemisphere. Fair weather associated with high pressure due to sinking air.



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

Model Surface Map Interpretation

Precipitation Type, Rate (in hr^{-1}), 1000-500 mb Thickness (dam)

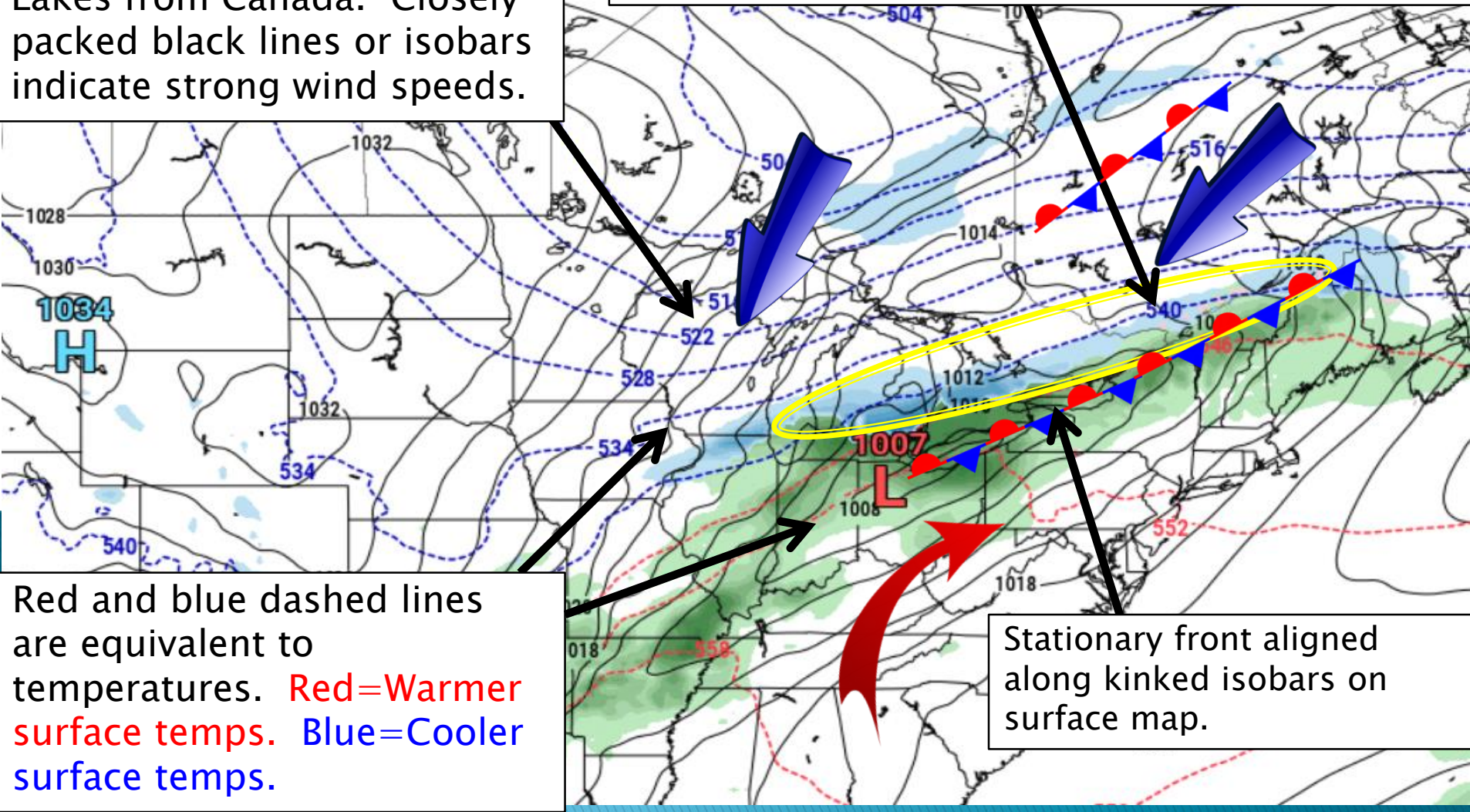
F096 Valid: Sat 2019-03-30 12z

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



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.

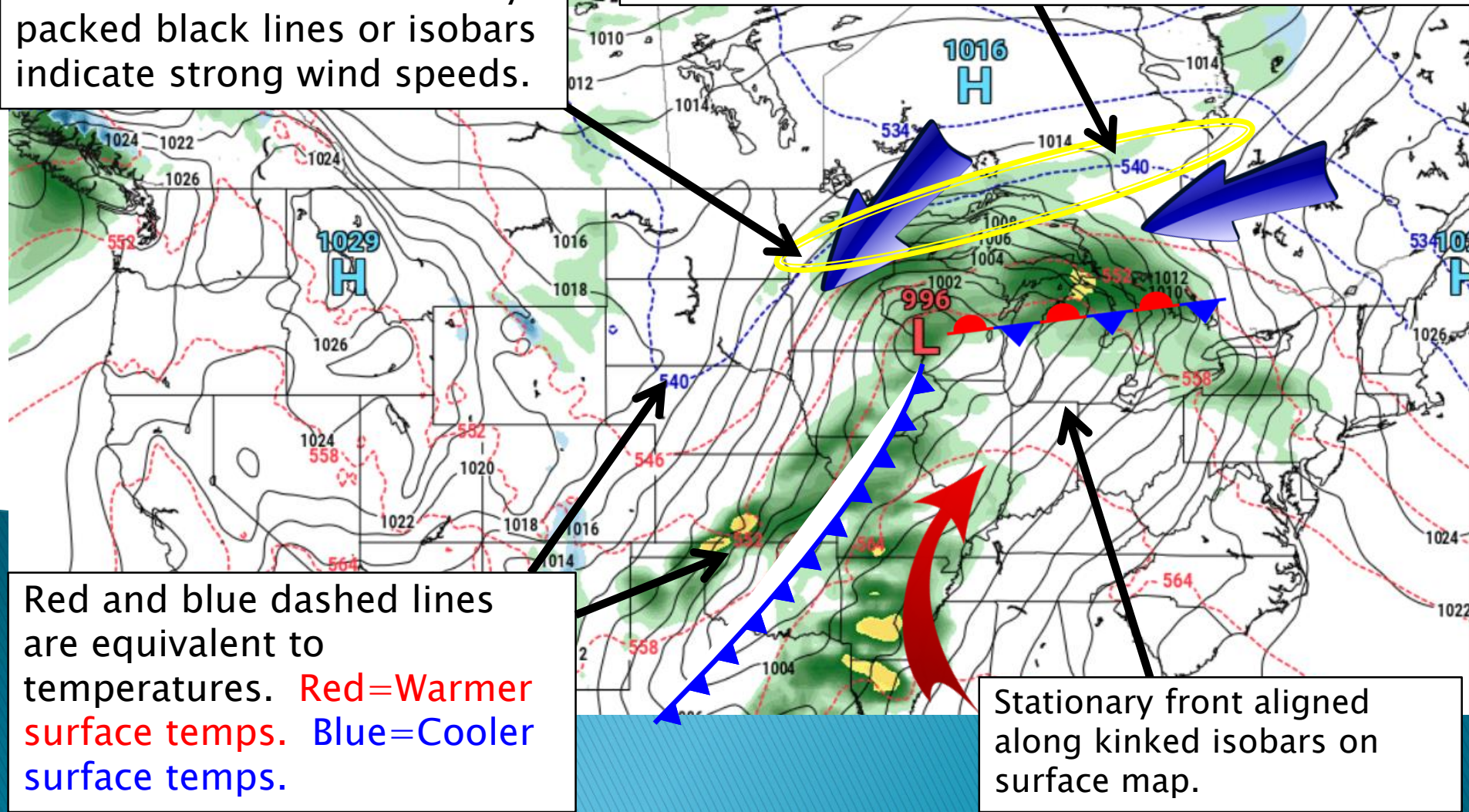
Model Surface Map Interpretation

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

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

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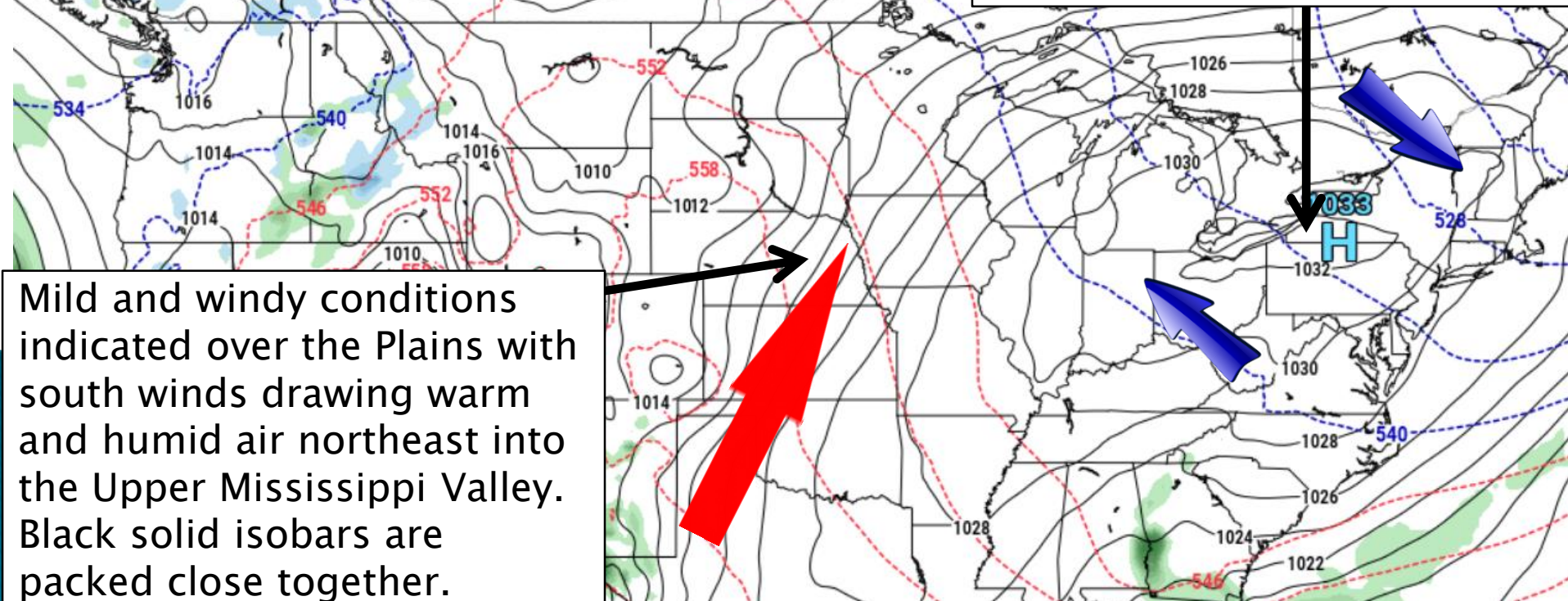


Model Surface Map Interpretation

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.

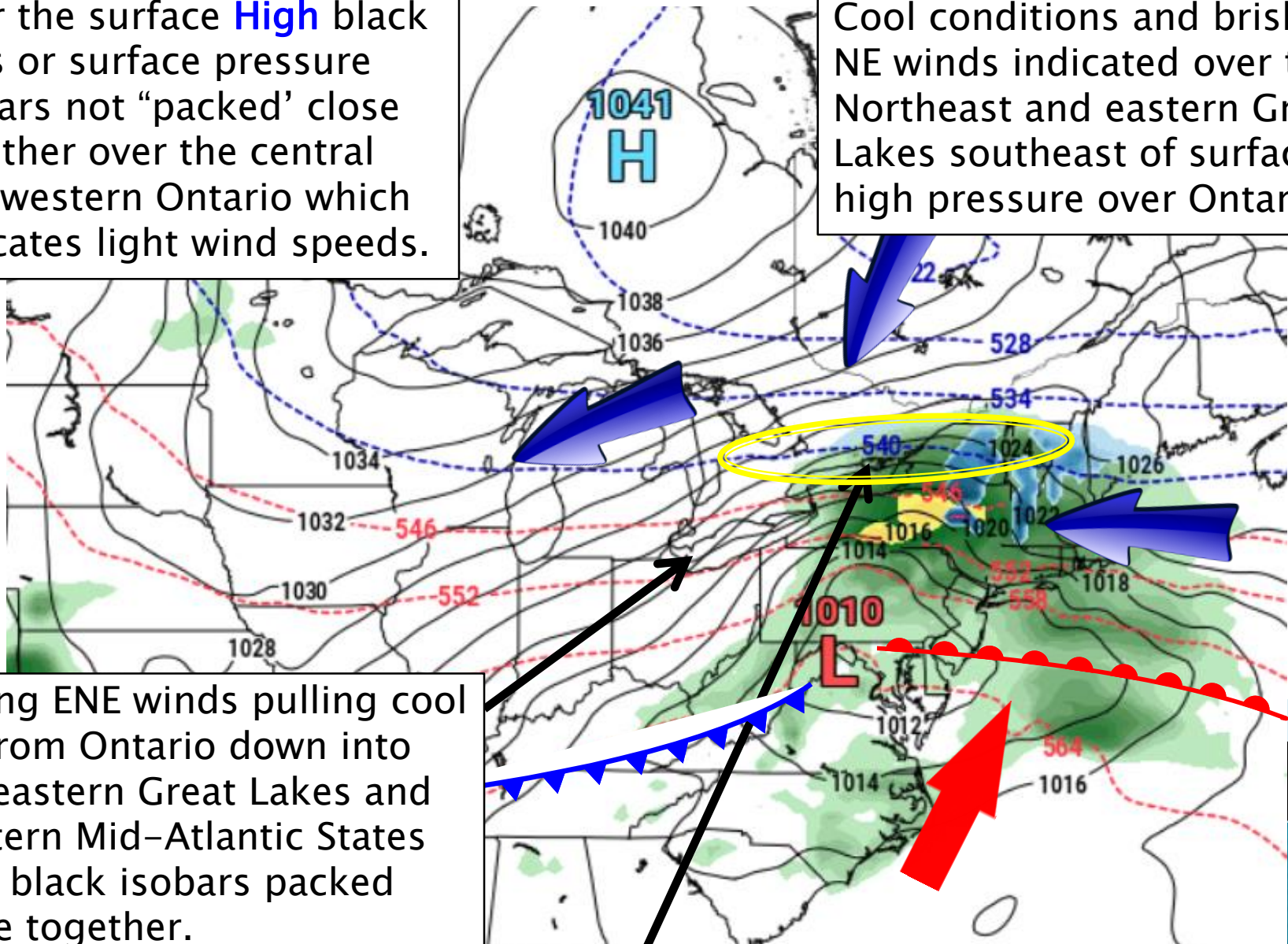
Cooler conditions and lighter winds forecast over the eastern states as high pressure at the surface prevails. Wind direction is clockwise around High pressure in the Northern Hemisphere.



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.



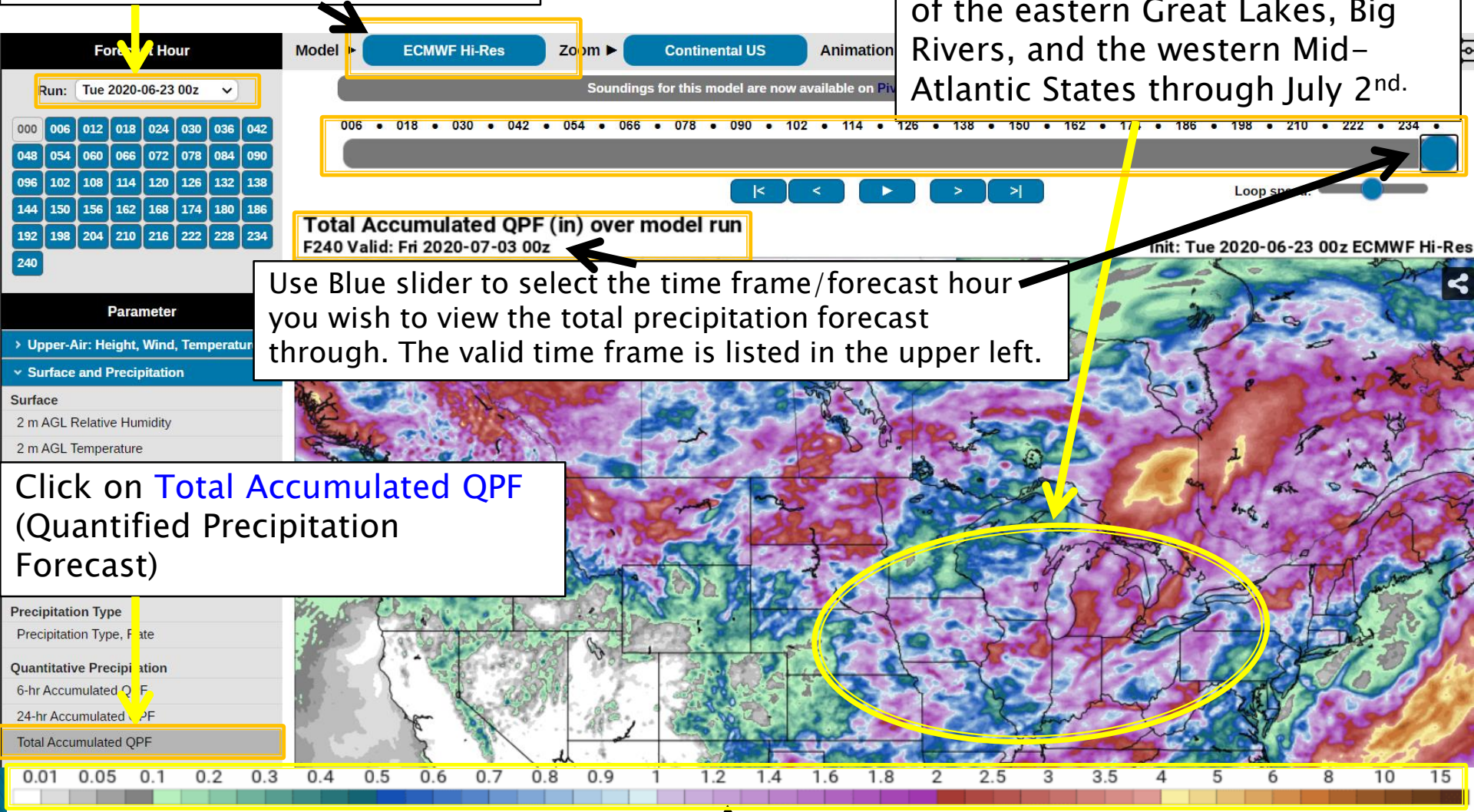
Strong ENE winds pulling cool air from Ontario down into the eastern Great Lakes and western Mid-Atlantic States with black isobars packed close together.

540 Thickness = Rain/Snow estimate in winter

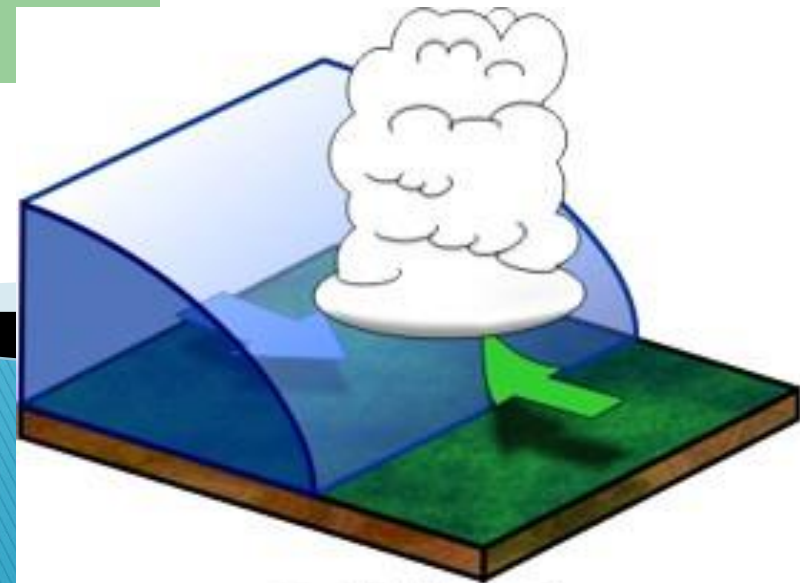
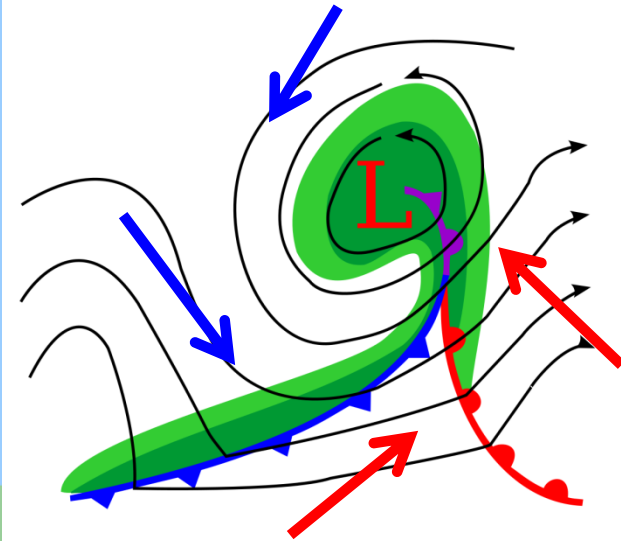
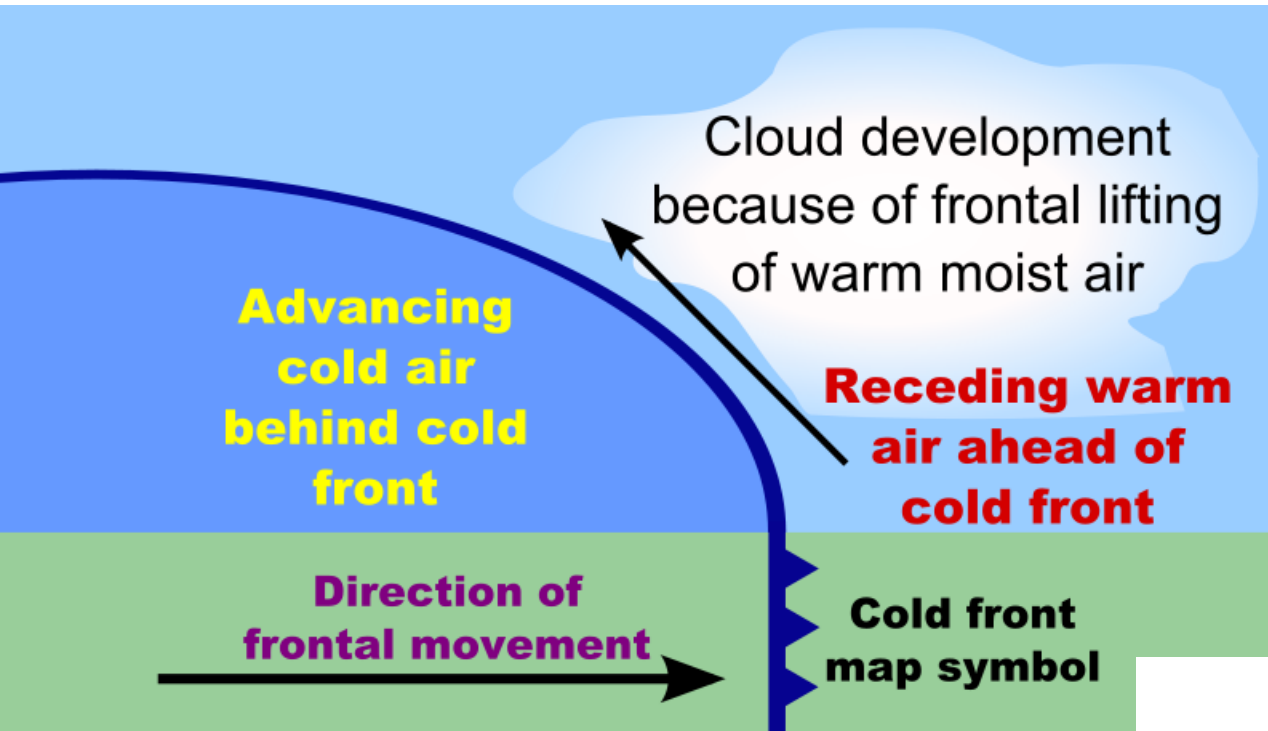
Model Total Forecast Precipitation Amounts

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.

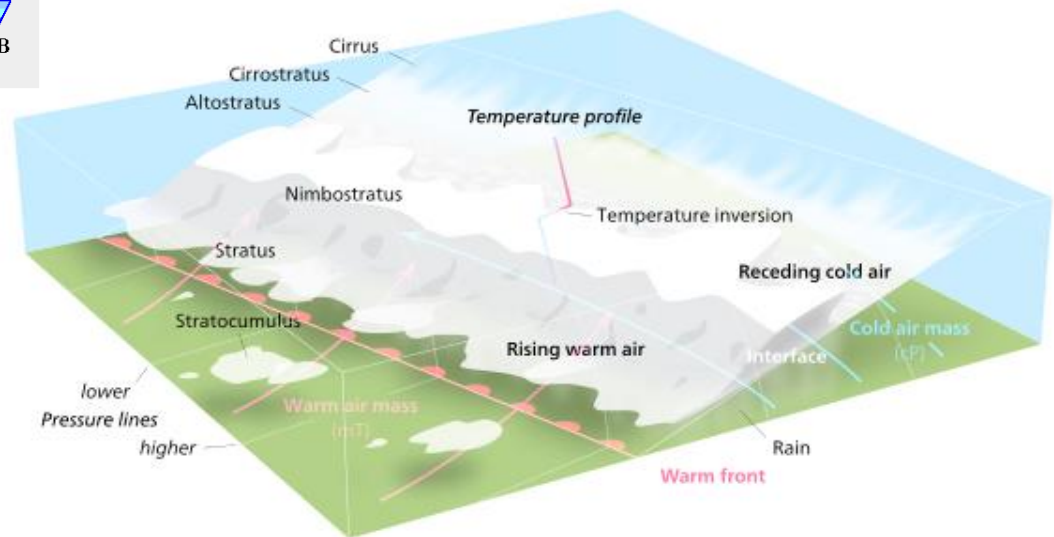
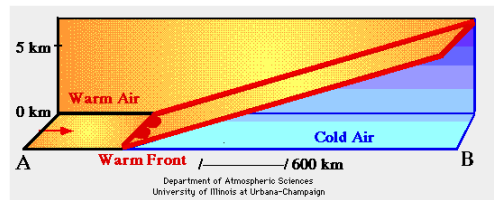
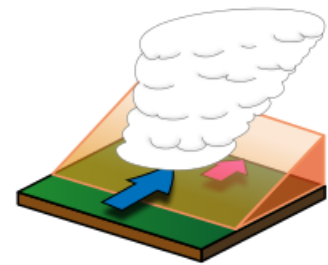
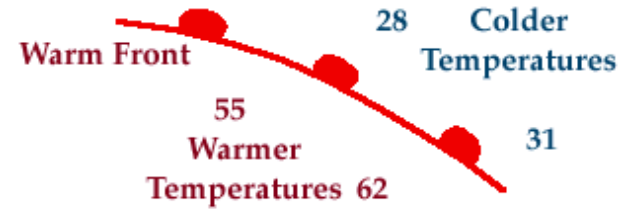
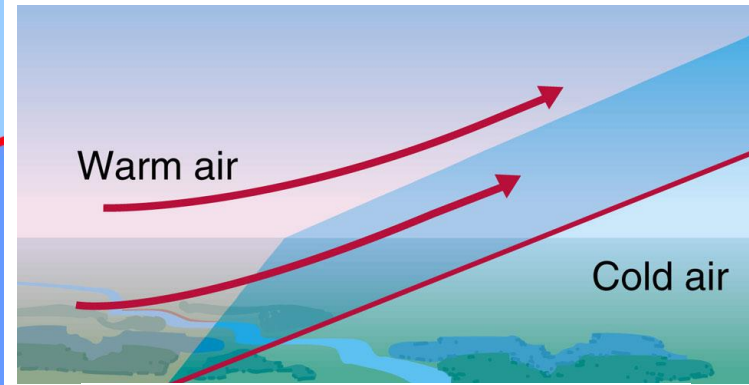
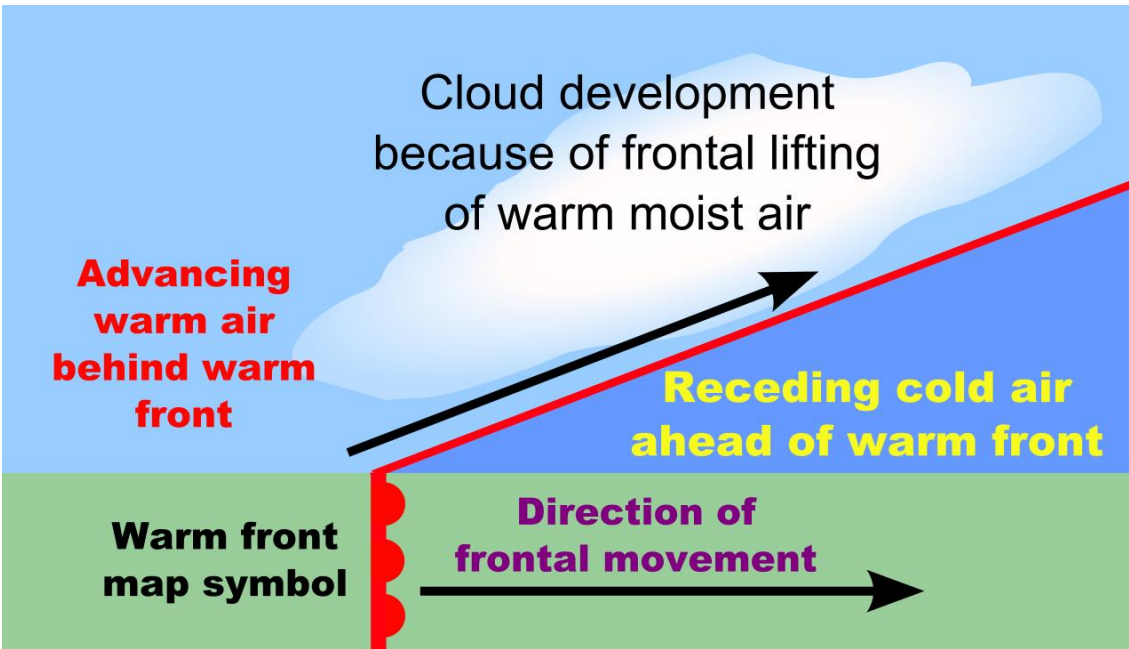


Air Motion and Weather near a Cold Front

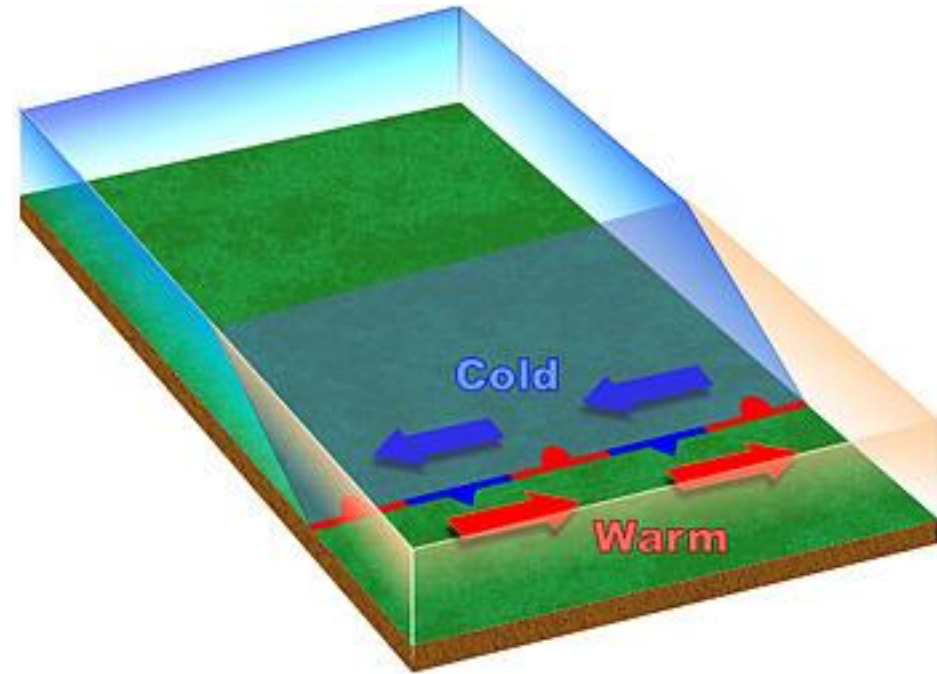
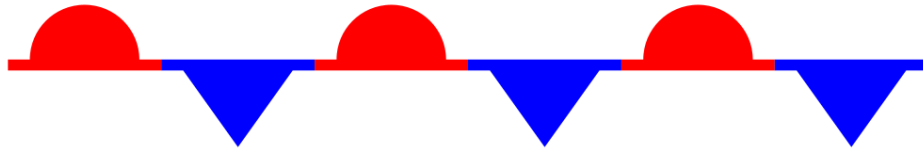


Cold Front

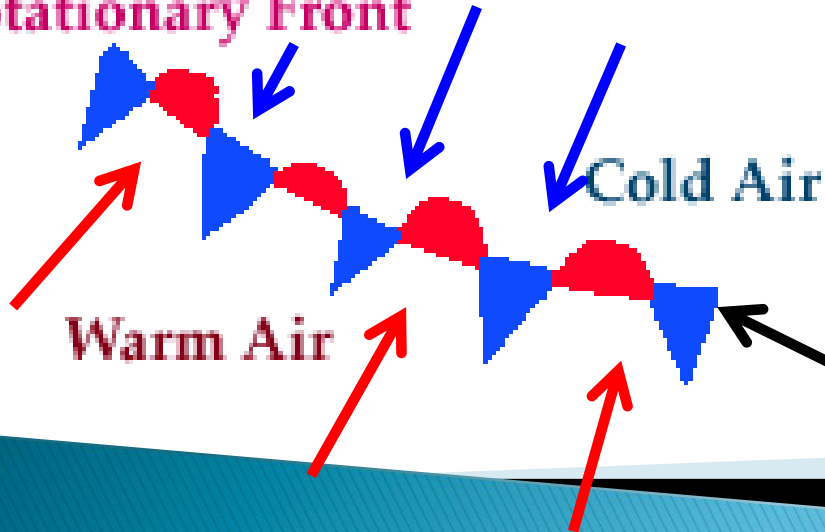
Air Motion and Weather near a Warm Front



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



Stationary Front

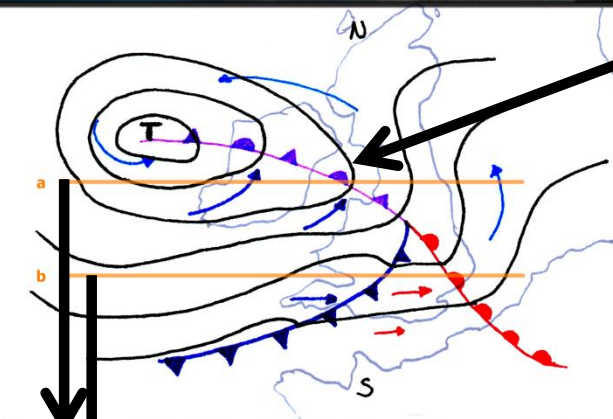


Air motion towards a **stationary front** converges at boundary and is forced upward creating clouds and possible precipitation near the front.

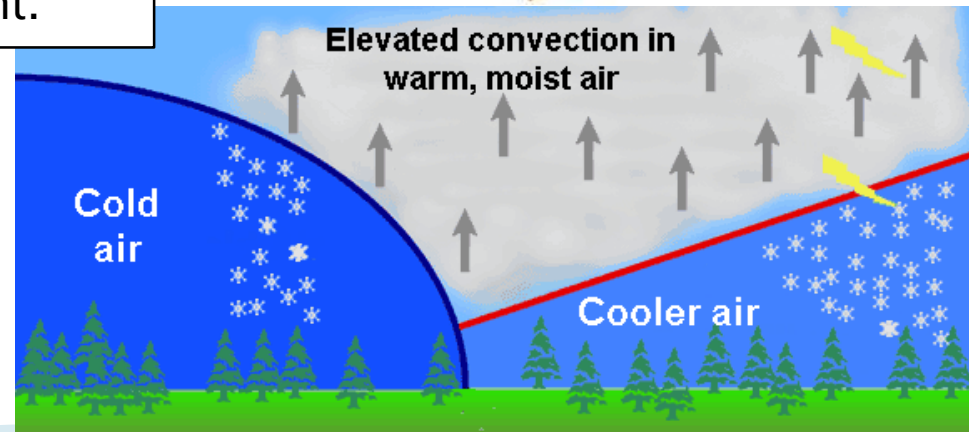
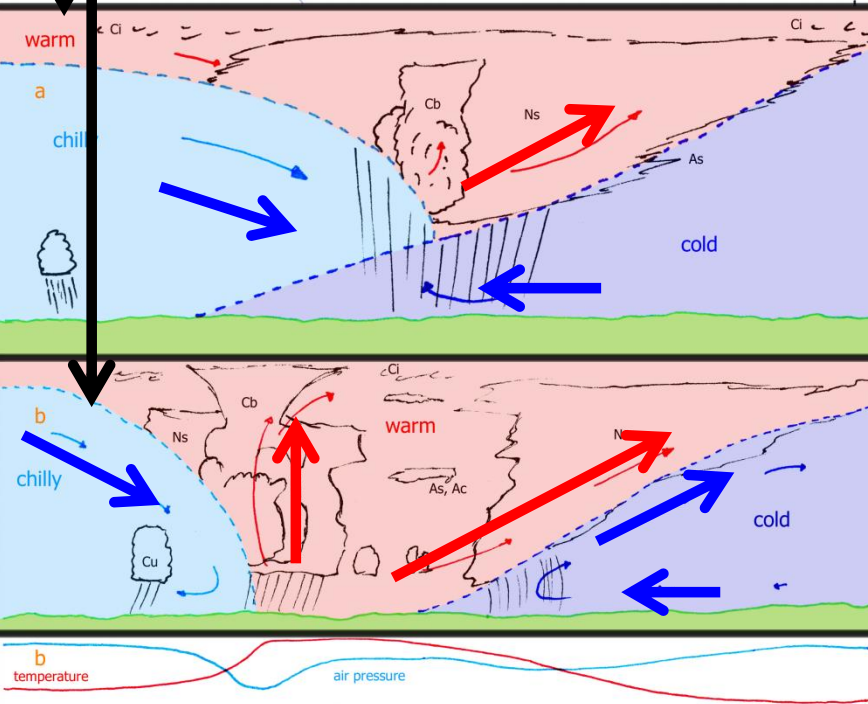
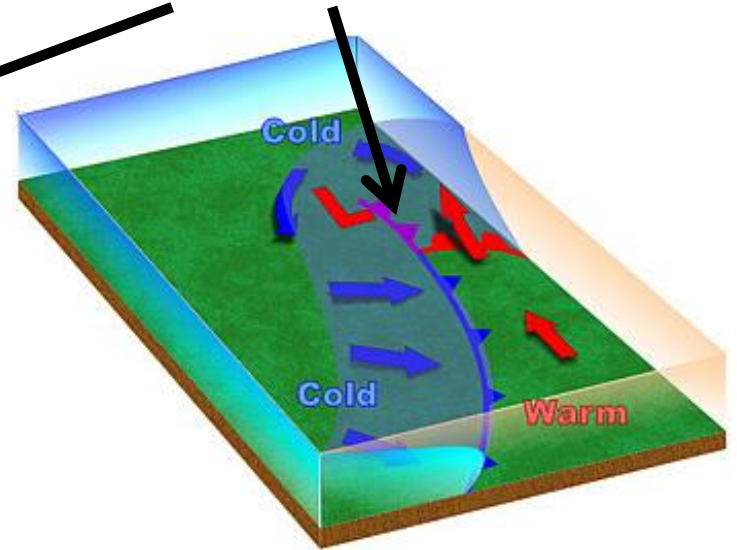
Air Motion and Weather near an Occluded Front

Warm front occlusion

Occlusion with warm front character
North hemisphere



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.