

Weather Fronts & Pressure Systems

Ms. Larsh

What 3 Factors Influence Weather?

1. Wind (Atmospheric Instability)
2. Water / Humidity
3. Temperature

What is Wind?

Wind is the movement of air from an area of high pressure to an area of low pressure

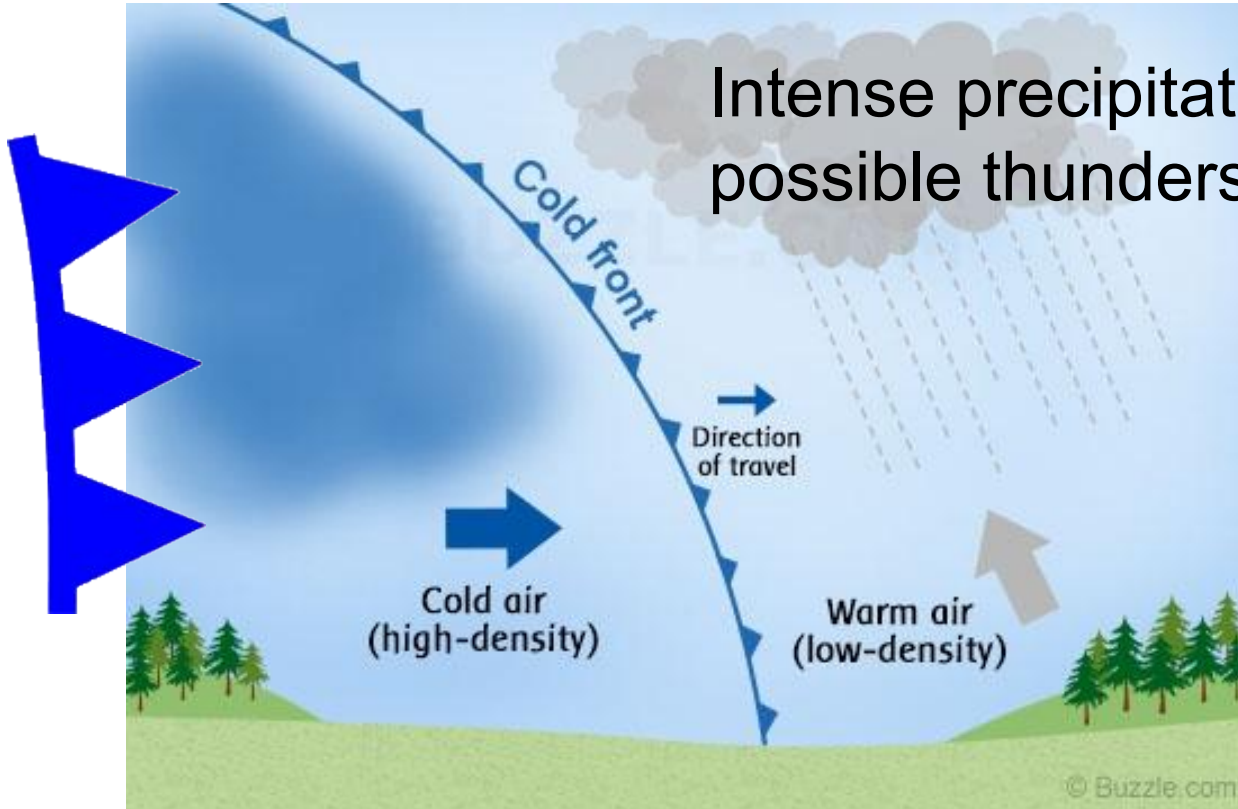
Recap

There are 4 different types of Fronts

Fronts are the boundaries between air masses of different temperatures

Cold Front

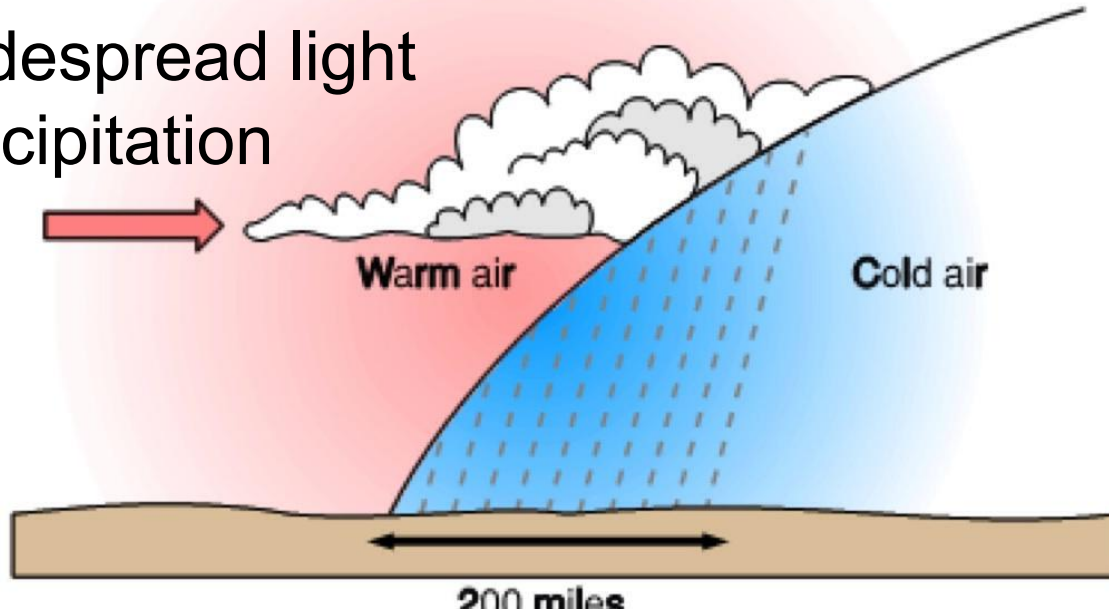
Intense precipitation & possible thunderstorms



WARM FRONT

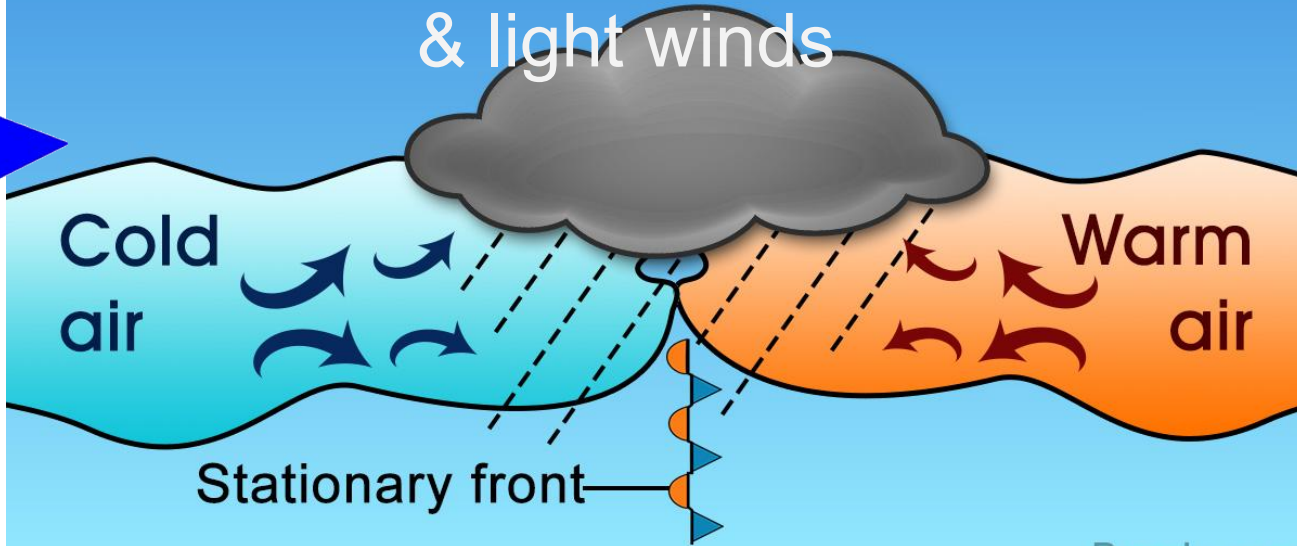


Widespread light precipitation



Stationary fronts are characterized by a cloudy weather accompanied by light or heavy precipitation.

& light winds



An **occluded front** is formed when a **cold front** meets a **warm front** that was moving ahead of it.

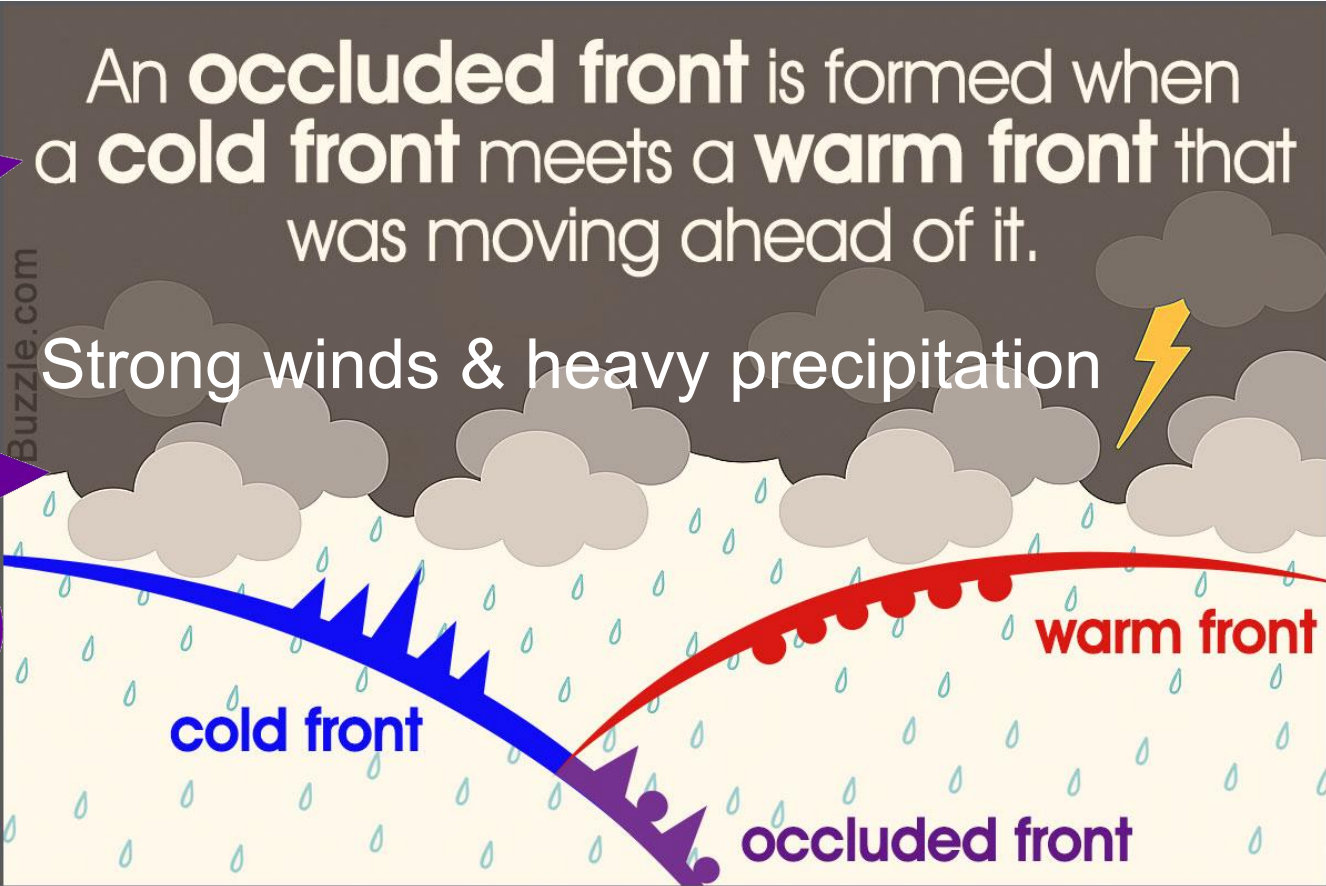
Strong winds & heavy precipitation

Buzzle.com

cold front

warm front

occluded front



Air Masses & Fronts

<https://www.youtube.com/watch?v=o4lg8UfY5DM>

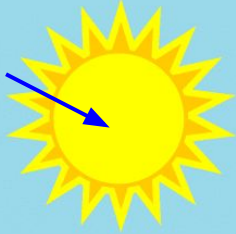
**What do these symbols
stand for?**

H

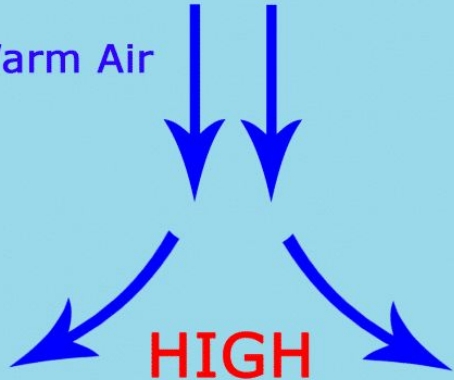
and

L

Clear
Skies

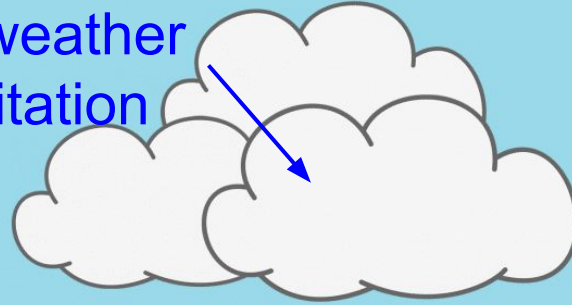


Warm Air

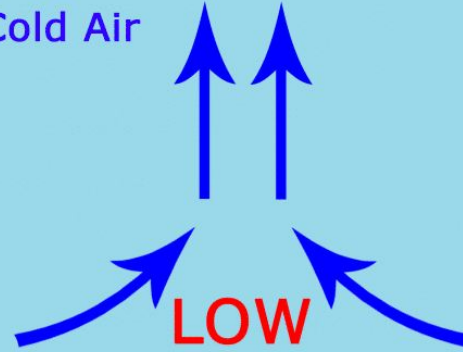


PRESSURE

Cloudy weather
& precipitation

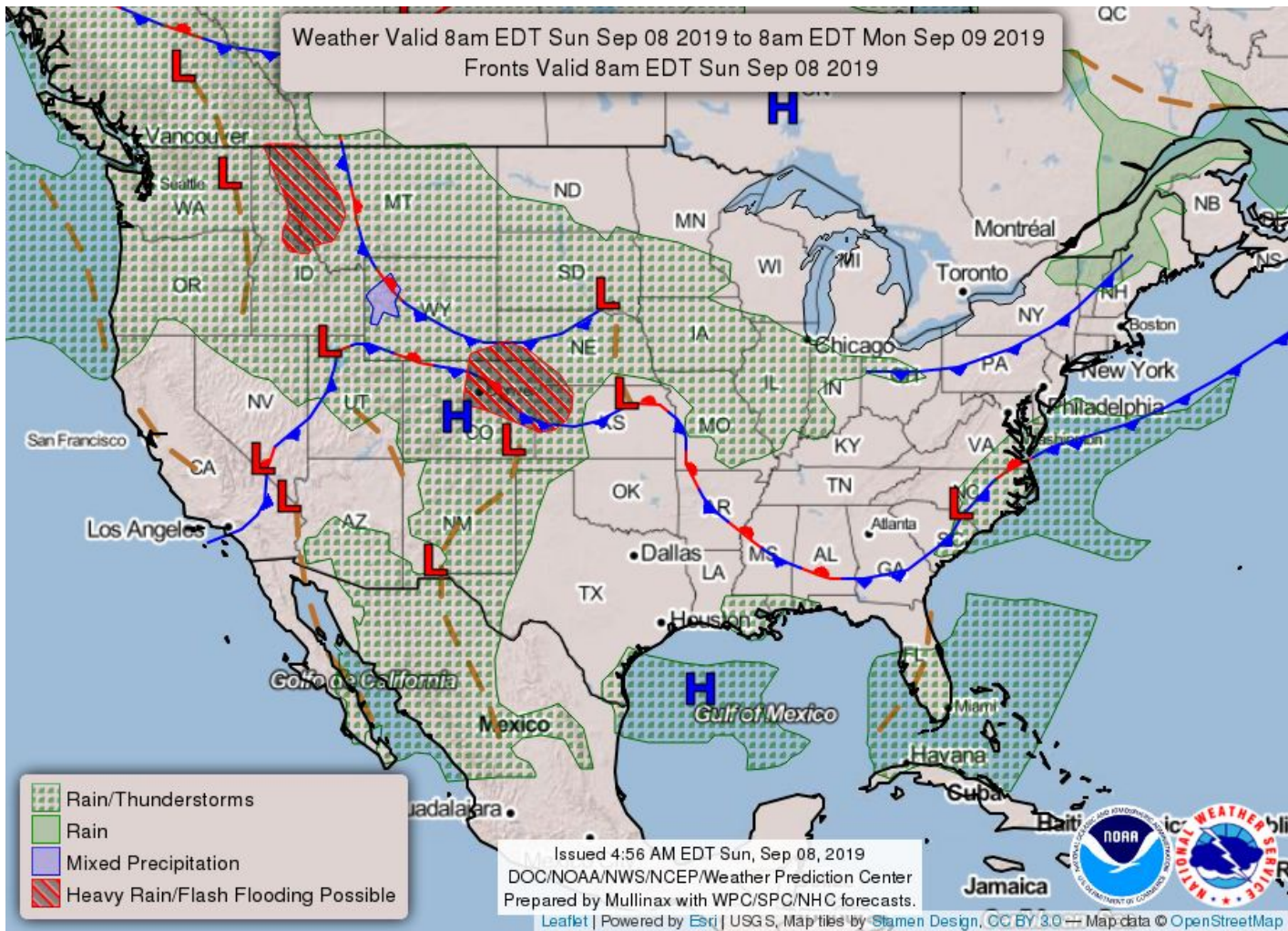


Cold Air



PRESSURE

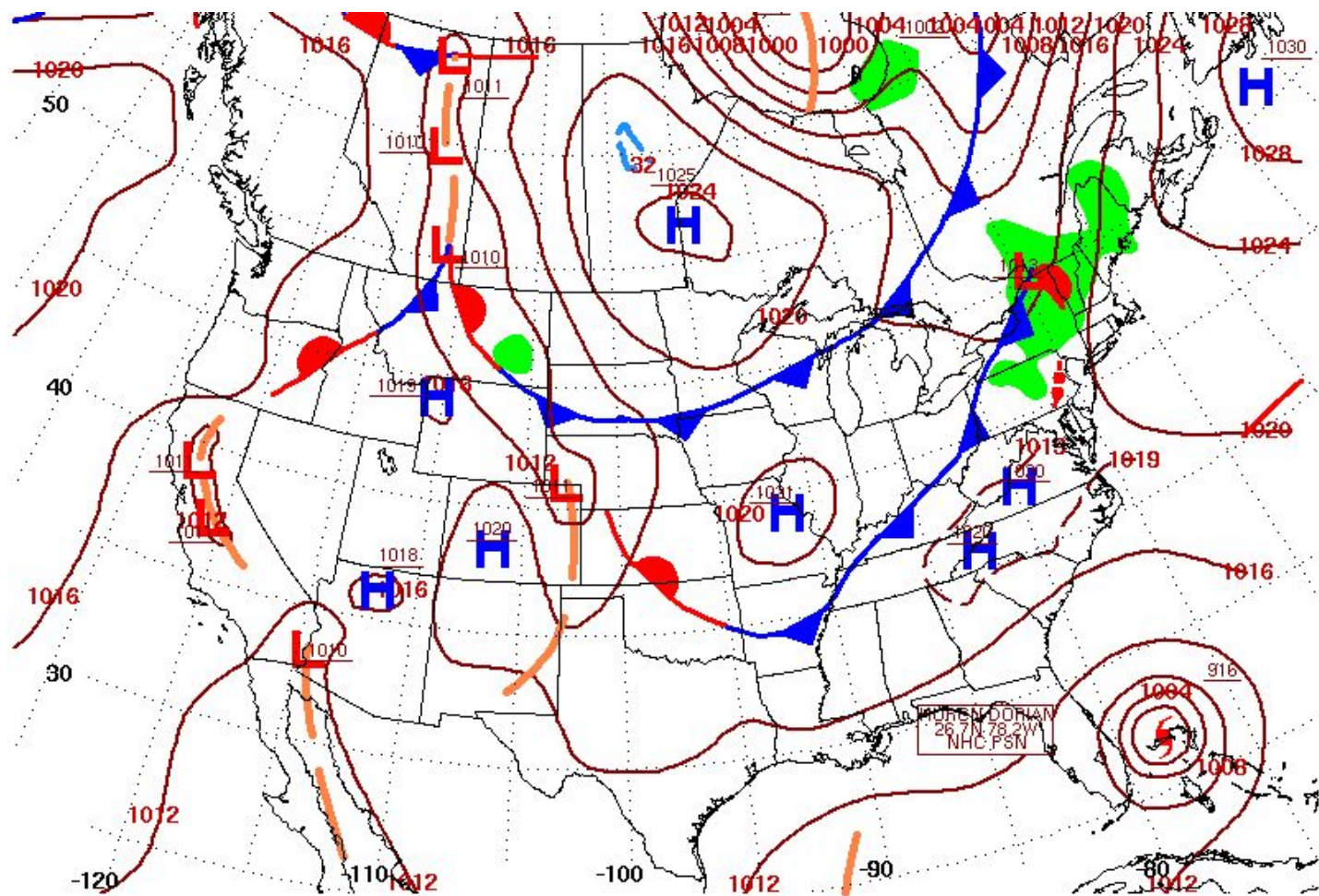
Weather Valid 8am EDT Sun Sep 08 2019 to 8am EDT Mon Sep 09 2019
Fronts Valid 8am EDT Sun Sep 08 2019



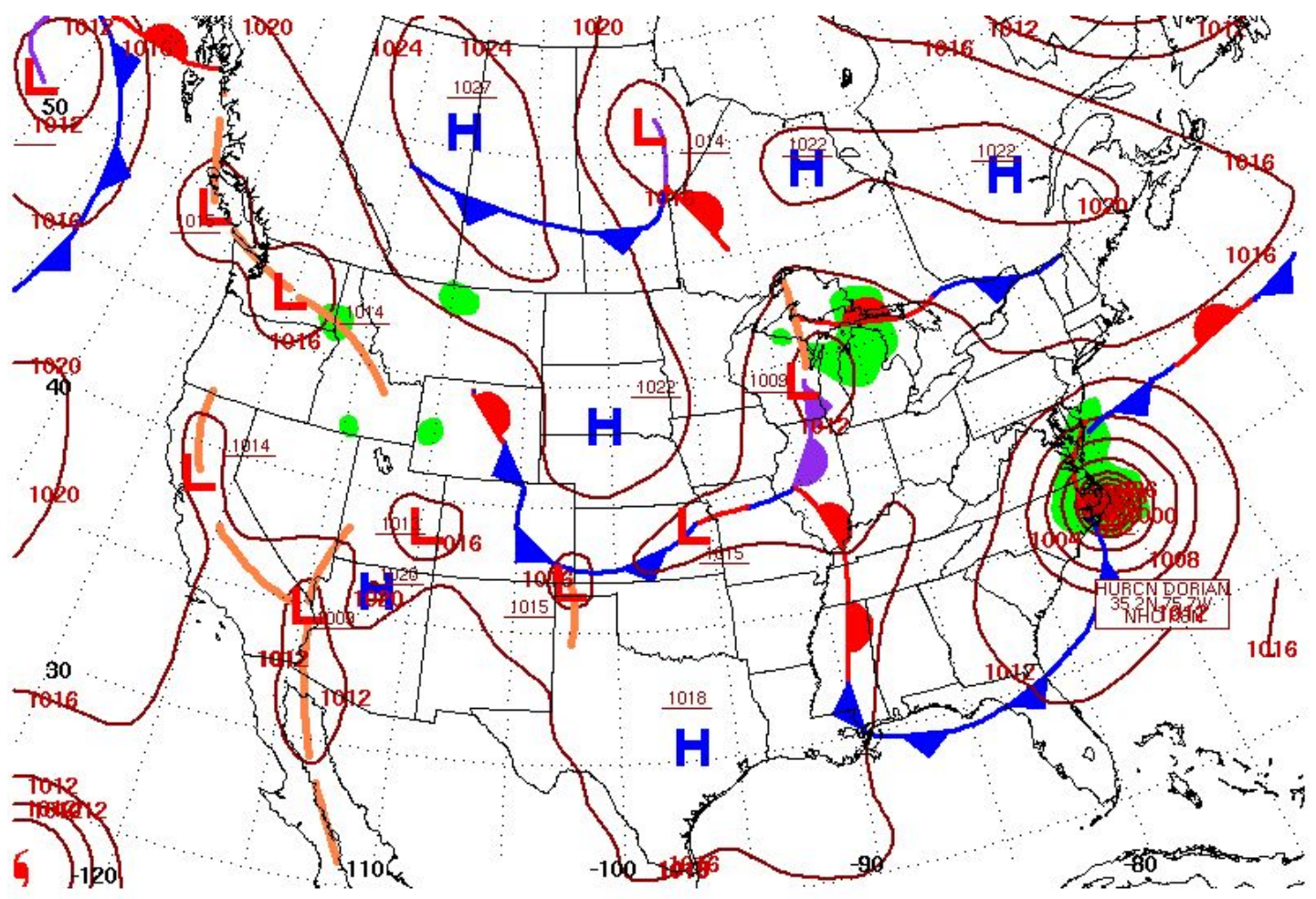
- Rain/Thunderstorms
- Rain
- Mixed Precipitation
- Heavy Rain/Flash Flooding Possible

Issued 4:56 AM EDT Sun, Sep 08, 2019
DOC/NOAA/NWS/NCEP/Weather Prediction Center
Prepared by Mullinax with WPC/SPC/NHC forecasts.

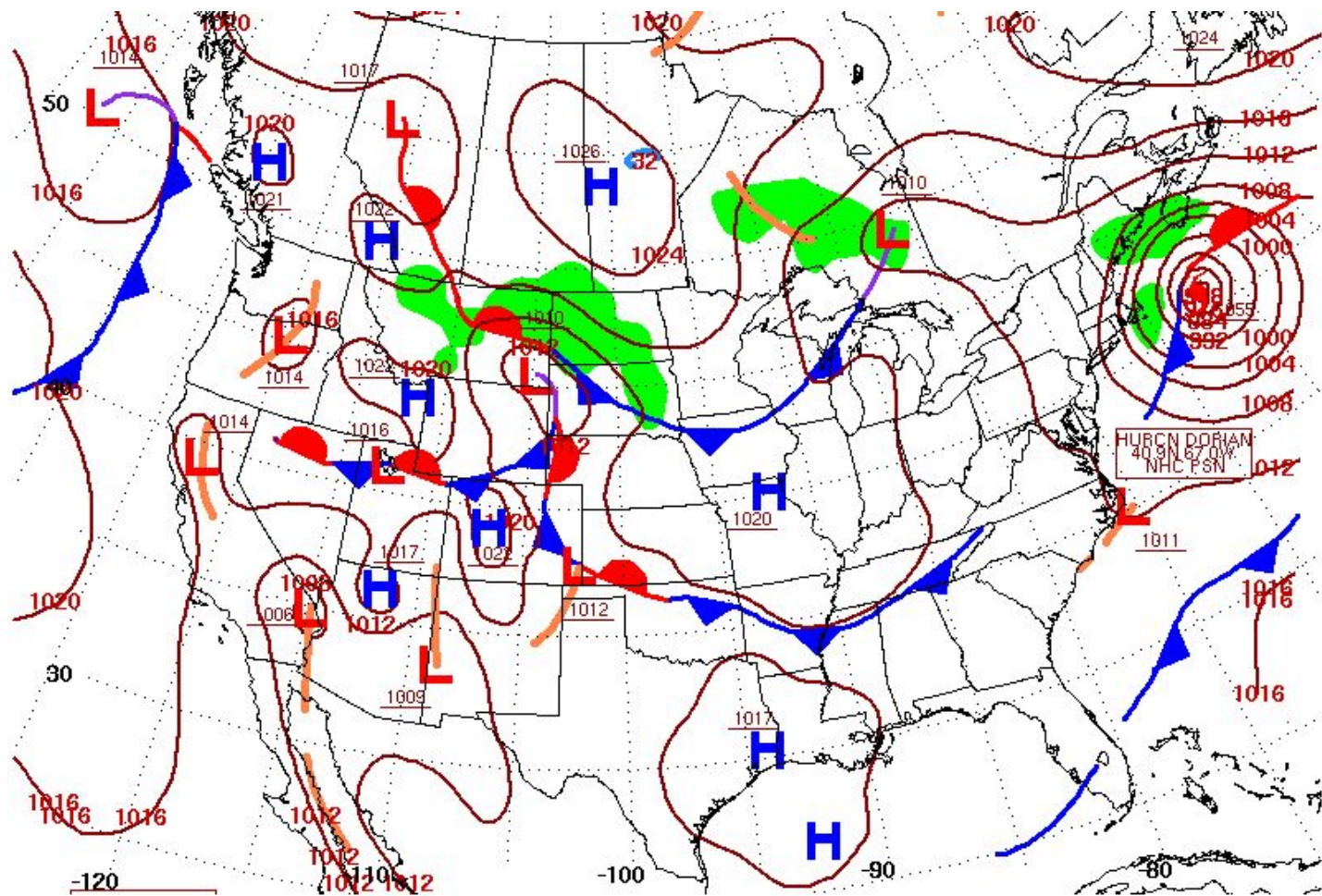




Surface Weather Map at 7:00 A.M. E.S.T.

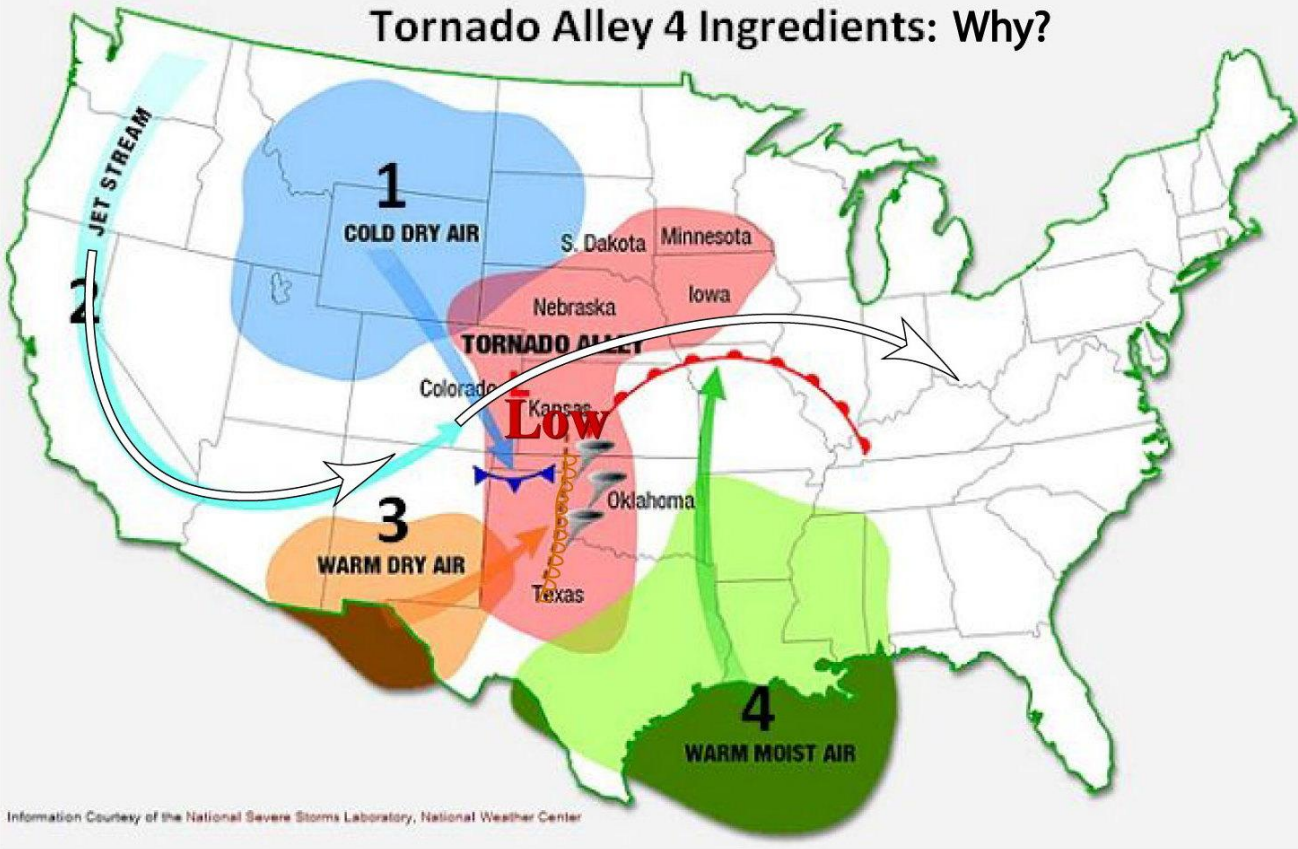


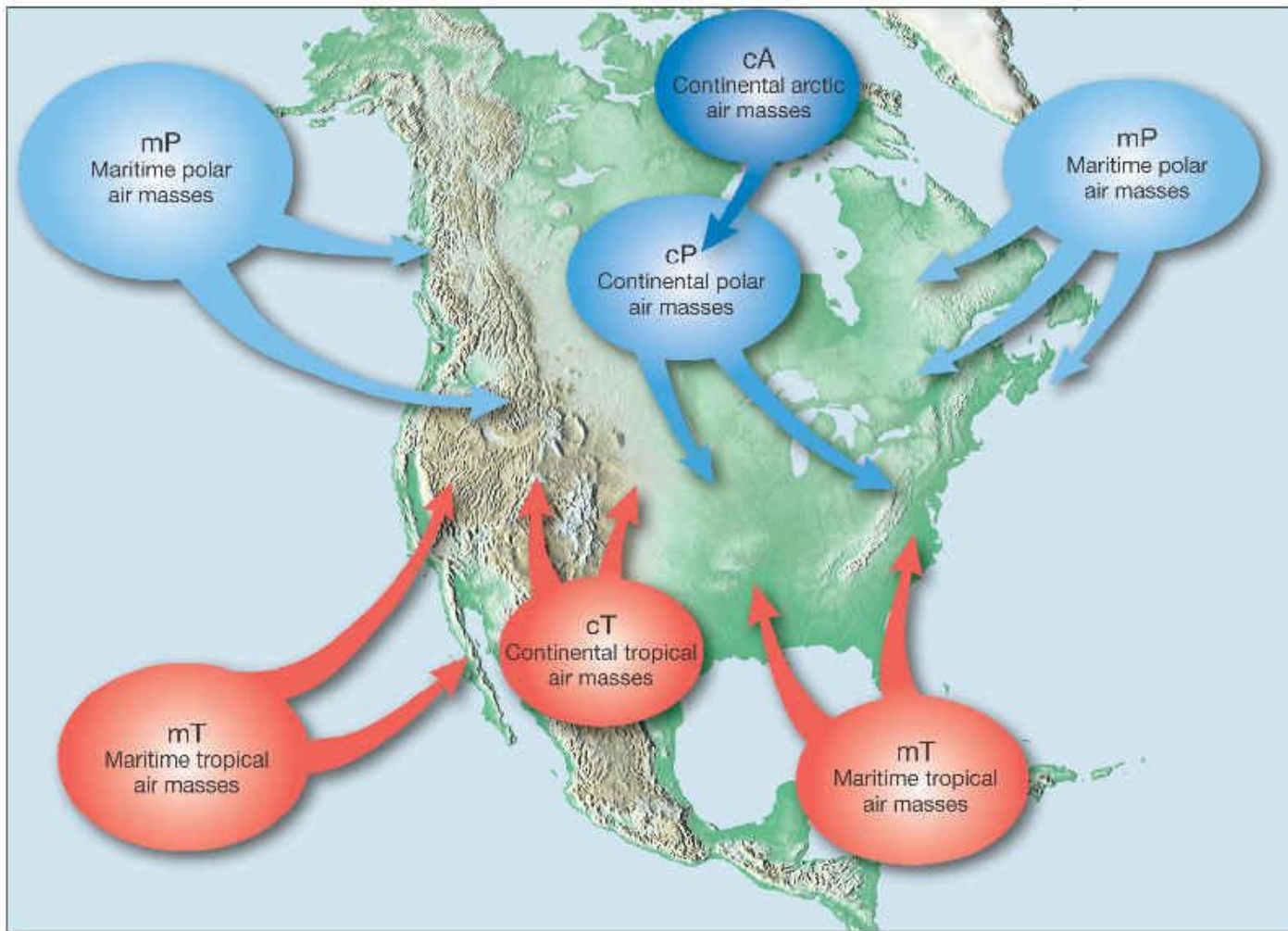
Surface Weather Map at 7:00 A.M. E.S.T.



Surface Weather Map at 7:00 A.M. E.S.T.

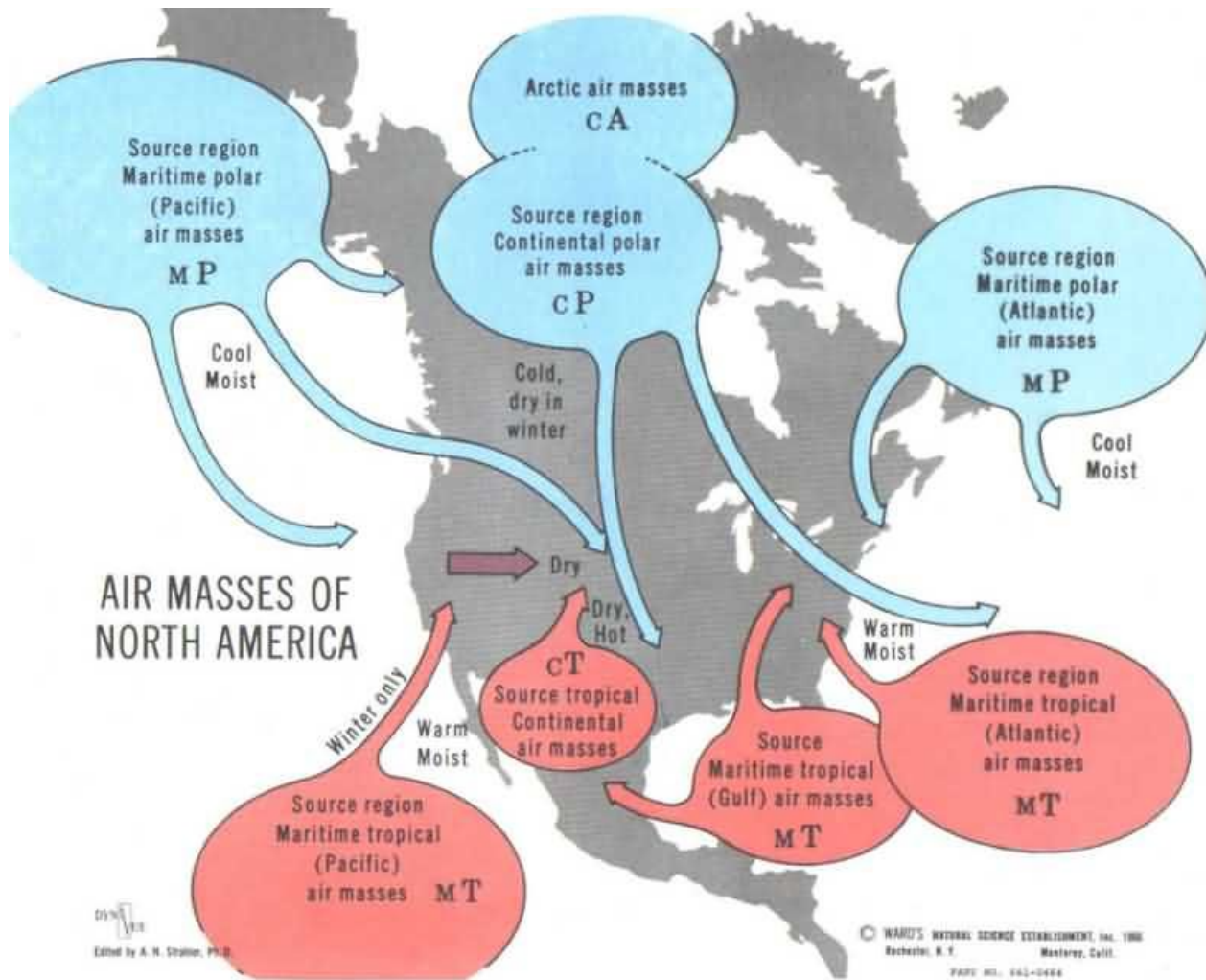
Tornado Alley 4 Ingredients: Why?





Types of Air Masses

Name of Air Mass	Abbreviation	Temperature	Moisture
Continental Polar	cP	Cold	Dry
Maritime Polar	mP	Cold	Humid
Continental Tropical	cT	Warm	Dry- Low Humidity
Maritime Tropical	mT	Warm	Humid
Continental Arctic	cA	Very Cold	Very Dry



Tornado Alley 4 Ingredients: Why?

