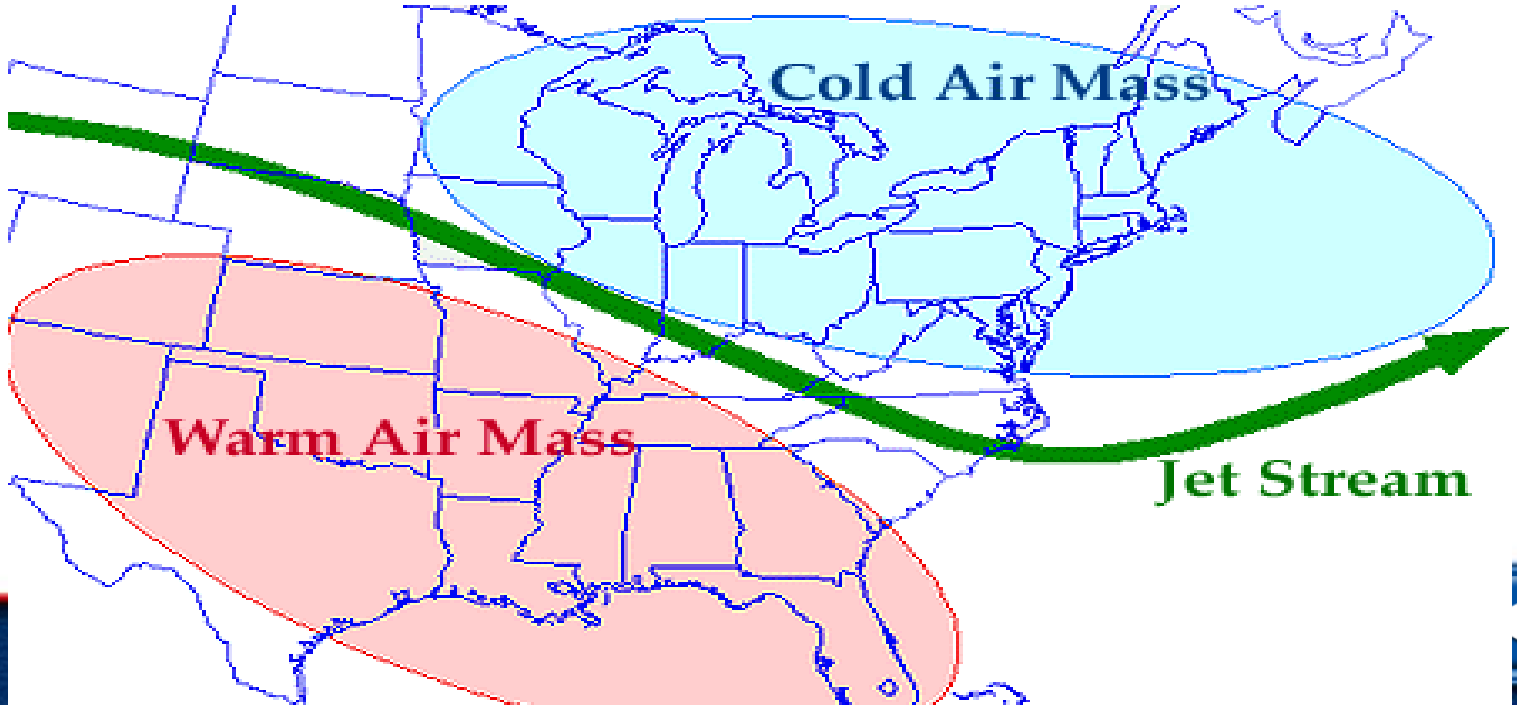
Air Masses

Unit 6 – Ch 20.1 - 20.2

Air Masses

- ***Air Mass*:** ***Large*** body of ***air*** with similar ***moisture*** and ***temperature*** at any altitude



Air masses are *classified* based on *amount* of:

moisture

temperature

Air masses develop their ***characteristics*** based on:

- ***Source Regions*** – **Area** where air masses ***originally FORM***

WHERE they form

Classifying Air Masses

- ***Continental (c)*** - **Forms** over ***LAND*** and generally ***dry***

- ***Maritime (m)*** - **Forms** over ***WATER*** and generally ***moist***

Classifying Air Masses

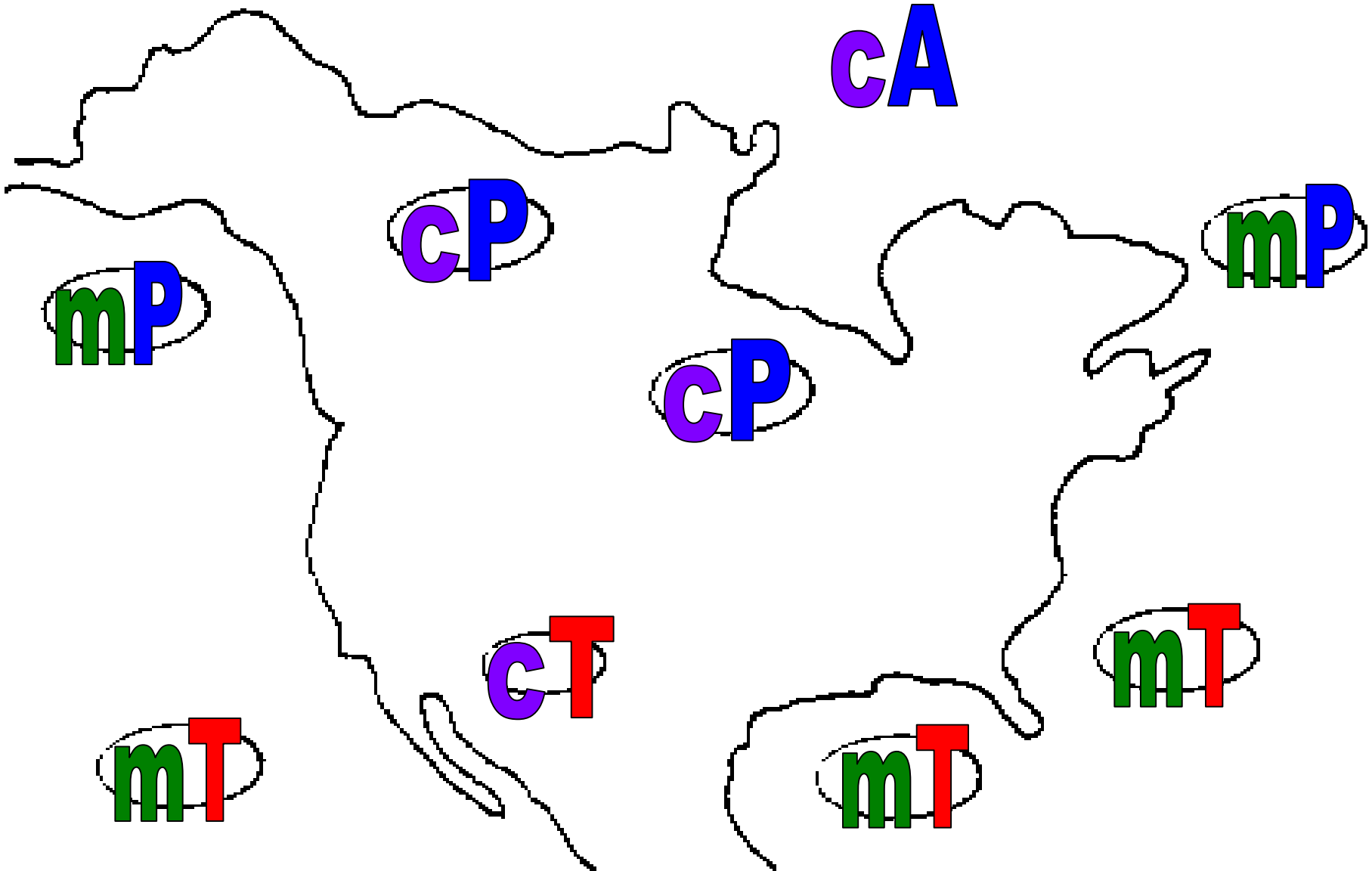
- ***Polar (P)*** - Generally ***colder*** temps
- ***Tropical (T)*** - Generally ***warmer*** temps
- ***Artic/Antarctic (A/AA)*** - Generally ***very cold*** temps

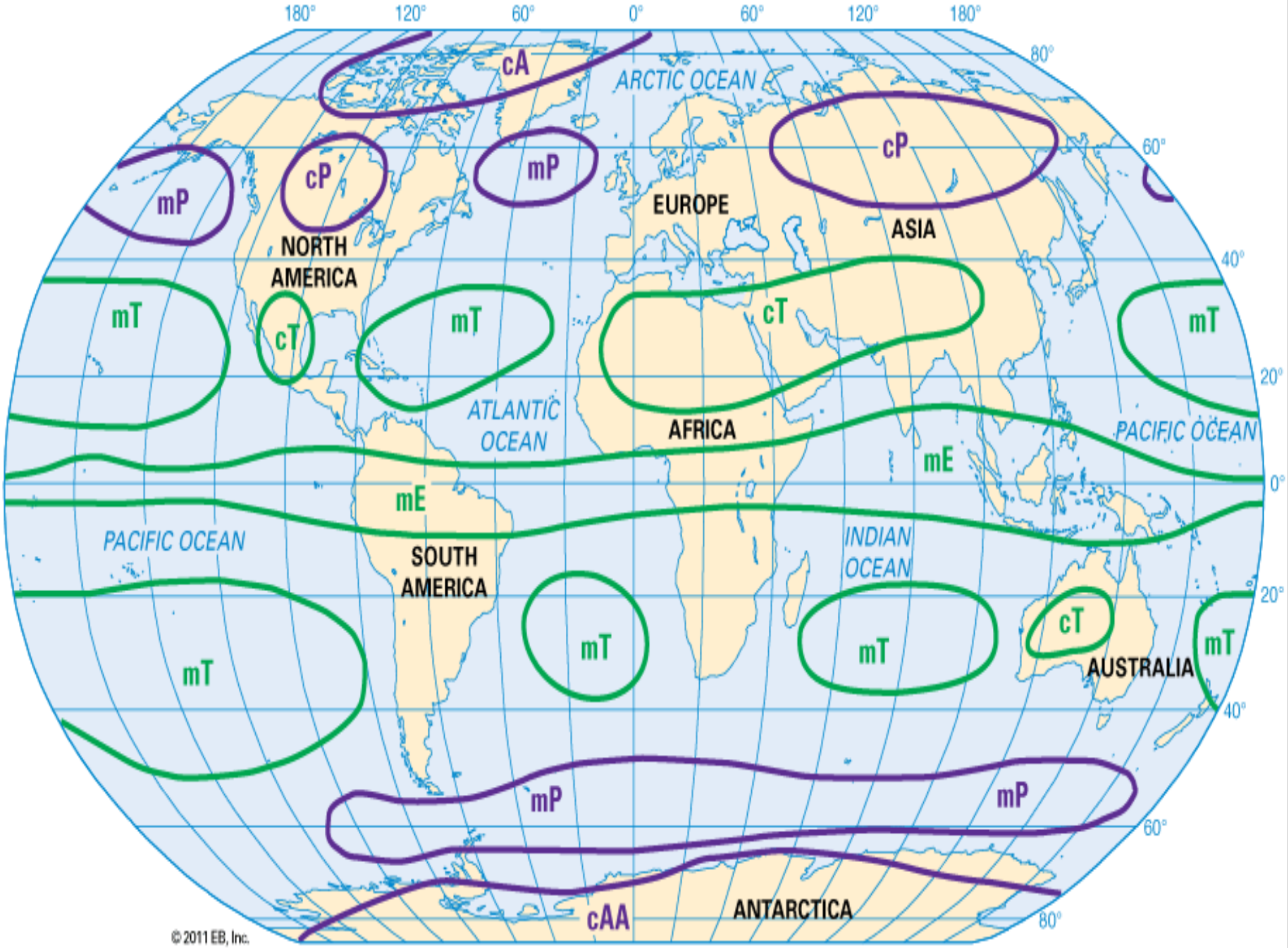
Classifying Air Masses

- **Continental Polar *(cP)* → dry ; cold**
- **Maritime Polar *(mP)* → moist ; cold**
- **Continental Tropical *(cT)* → dry; warm**
- **Maritime Tropical *(mT)* → moist; warm**

- **Continental Artic *(cA)* → dry; very cold**
- **Continental Antarctic *(cAA)* → dry; very cold**

Label Each Air Mass:




180°
120°
60°
0°
60°
120°
180°
80°
60°
40°
20°
0°
20°
40°
60°
80°
cA
ARCTIC OCEAN
cP
mP
cP
mP
EUROPE
ASIA
NORTH AMERICA
mT
cT
mT
cT
mT
ATLANTIC OCEAN
AFRICA
PACIFIC OCEAN
mE
mE
PACIFIC OCEAN
SOUTH AMERICA
INDIAN OCEAN
mT
mT
mT
cT
mT
AUSTRALIA
mT
mP
mP
cAA
ANTARCTICA
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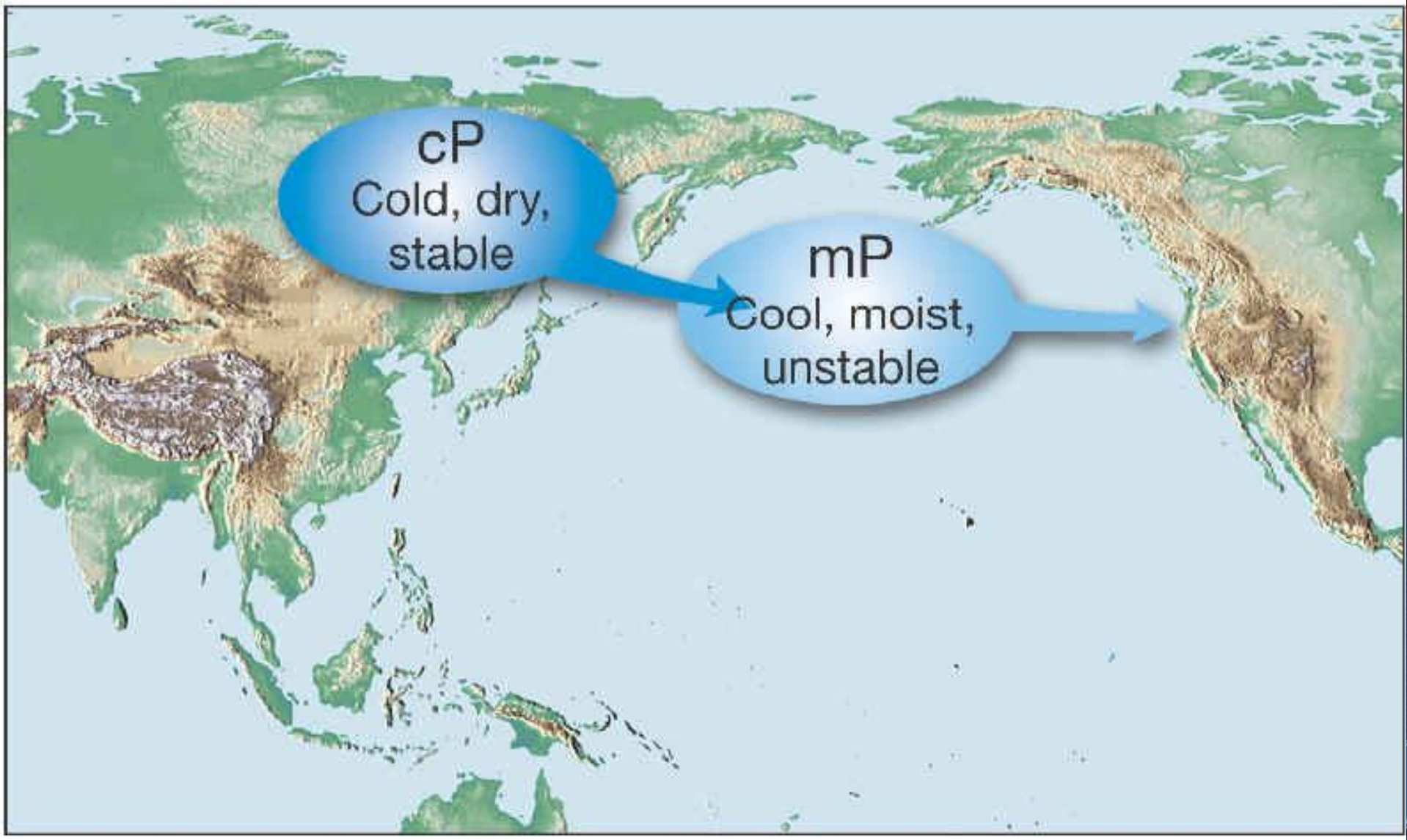
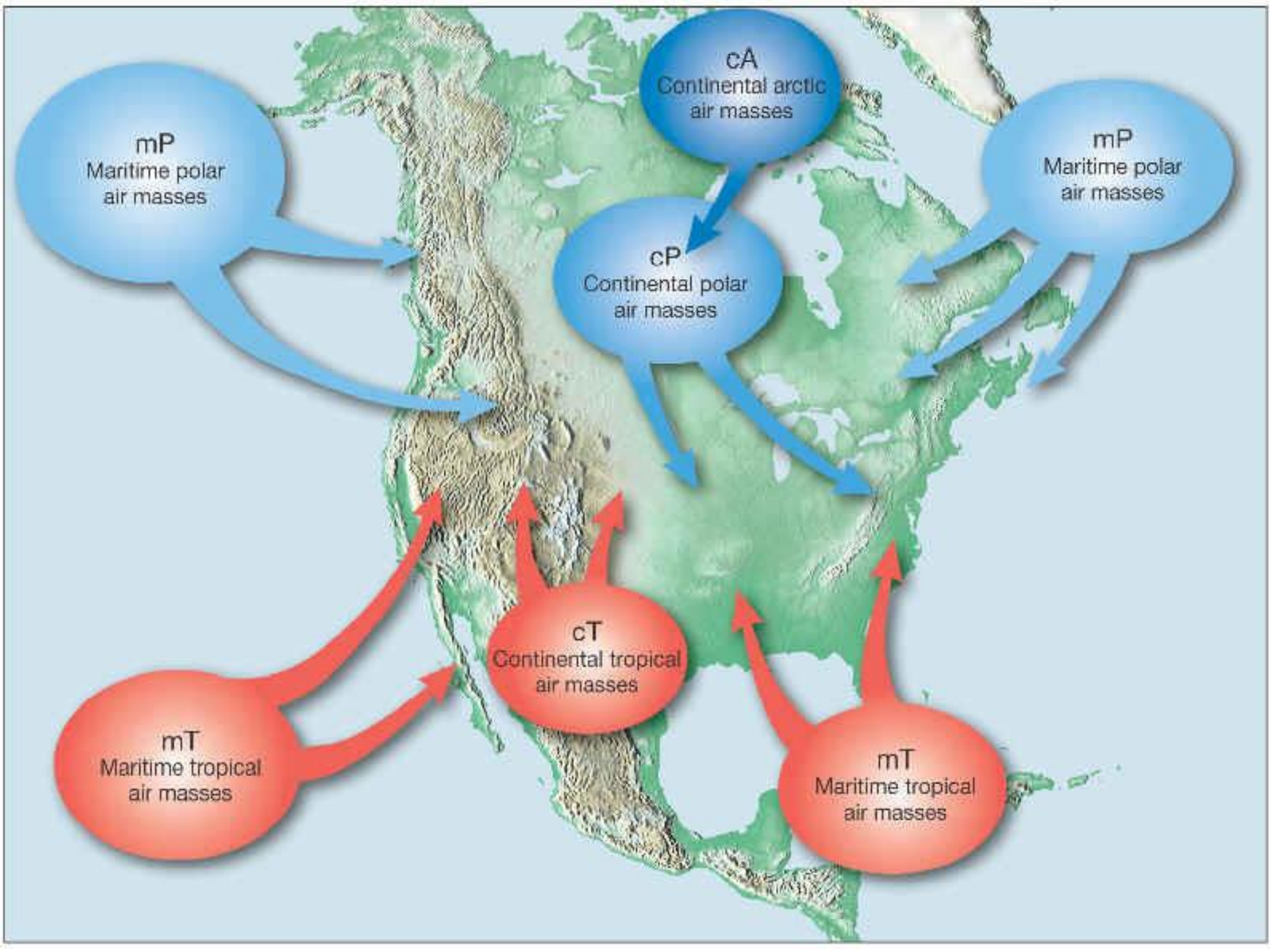
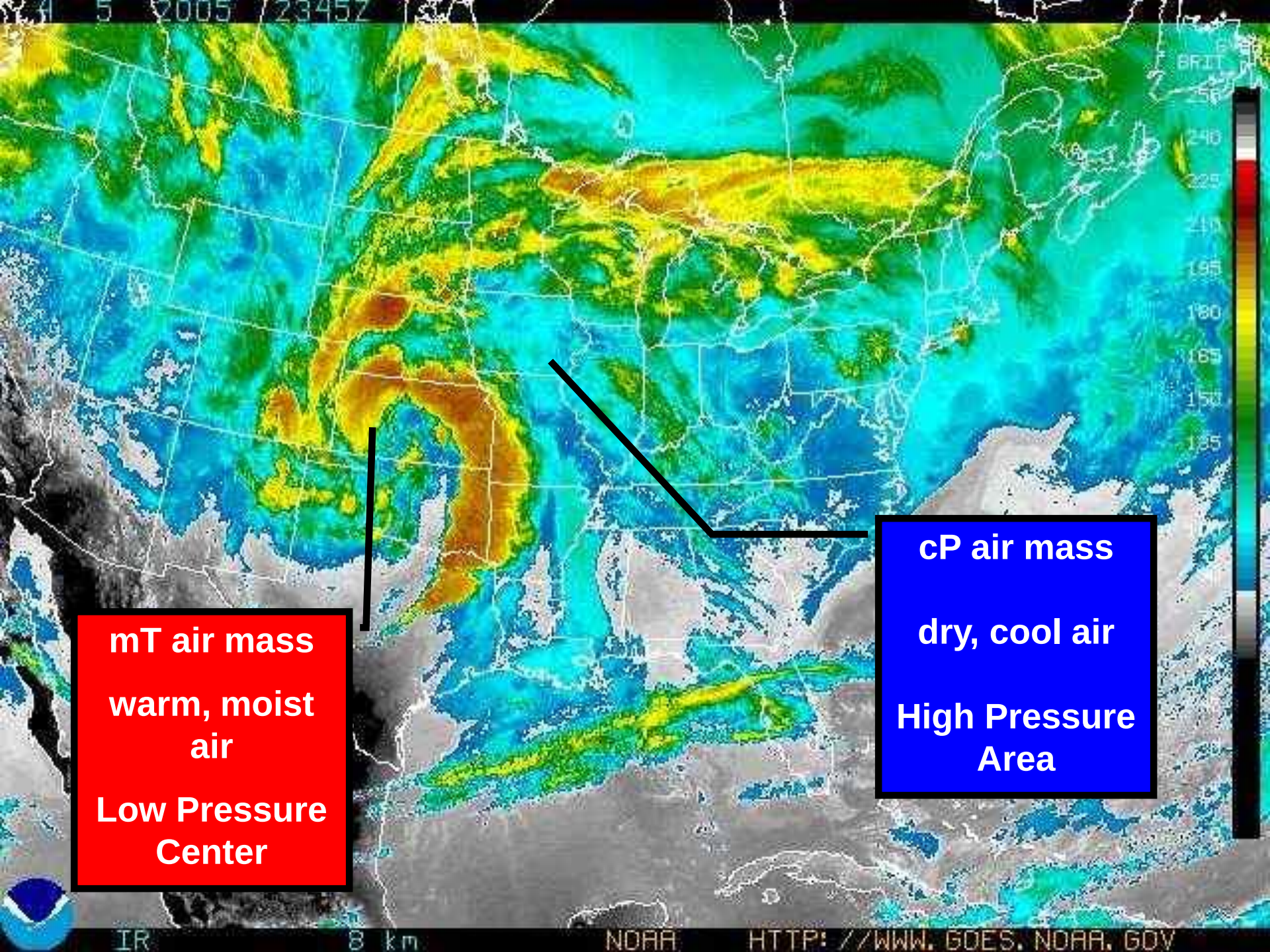
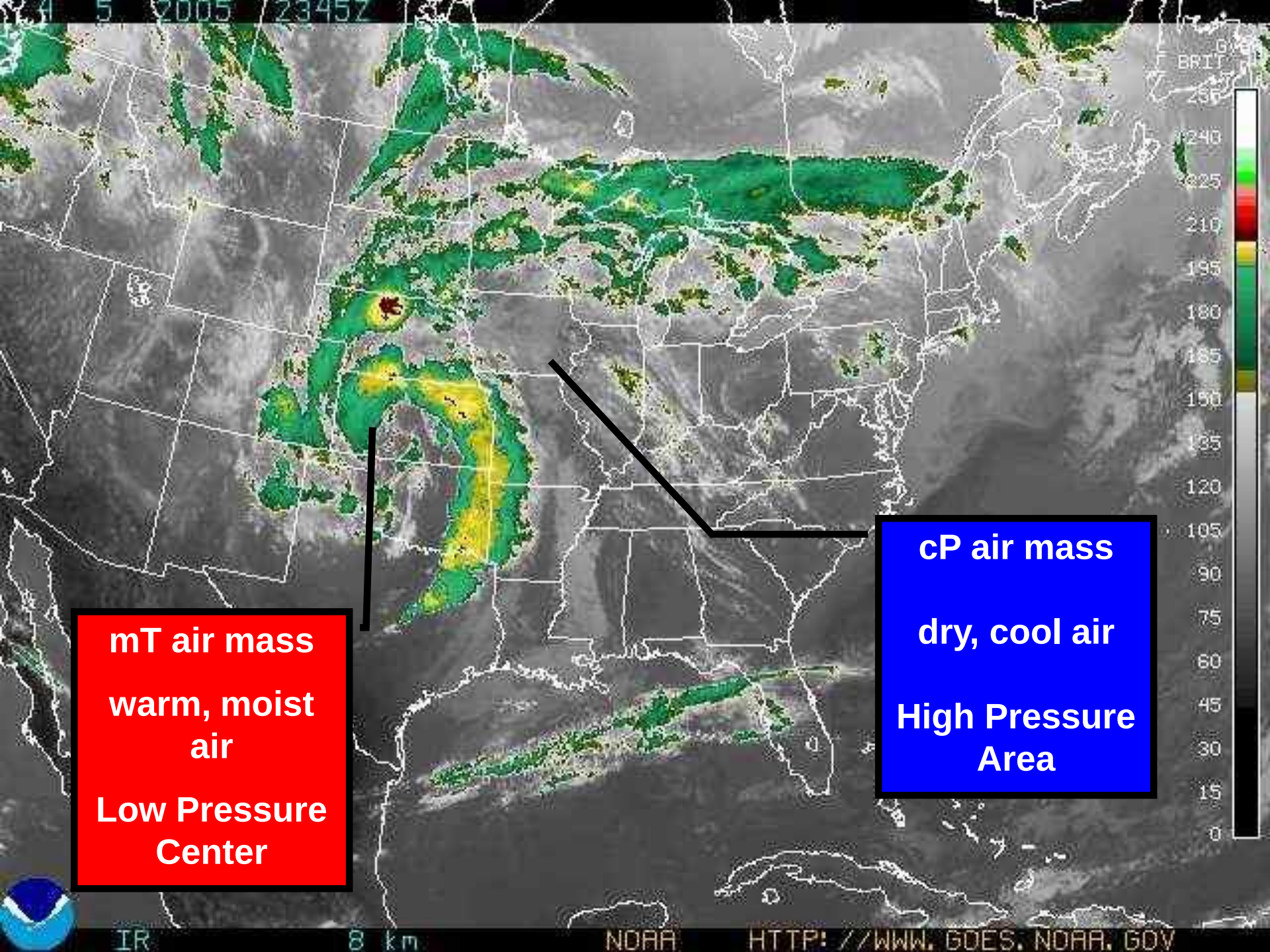
- Moving ***OUT*** of **source region…**




cA
Continental arctic air masses
mP
Maritime polar air masses
mP
Maritime polar air masses
cP
Continental polar air masses
cT
Continental tropical air masses
mT
Maritime tropical air masses
mT
Maritime tropical air masses


mT air mass
warm, moist air
Low Pressure Center
cP air mass
dry, cool air
High Pressure Area
IR
8 km
NOAA
HTTP://WWW.GOES.NOAA.GOV


mT air mass
warm, moist air
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dry, cool air
High Pressure Area
IR
8 km
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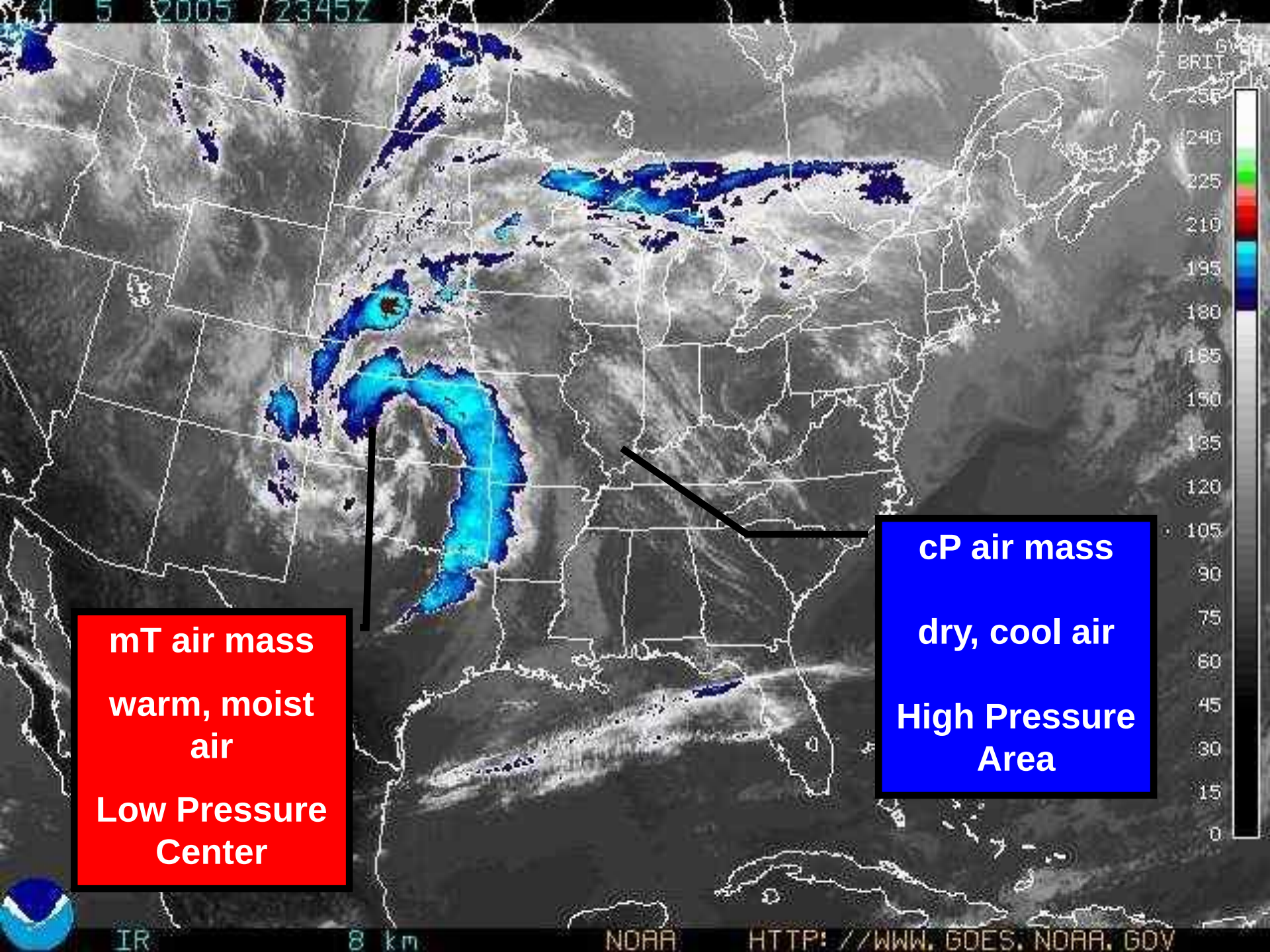
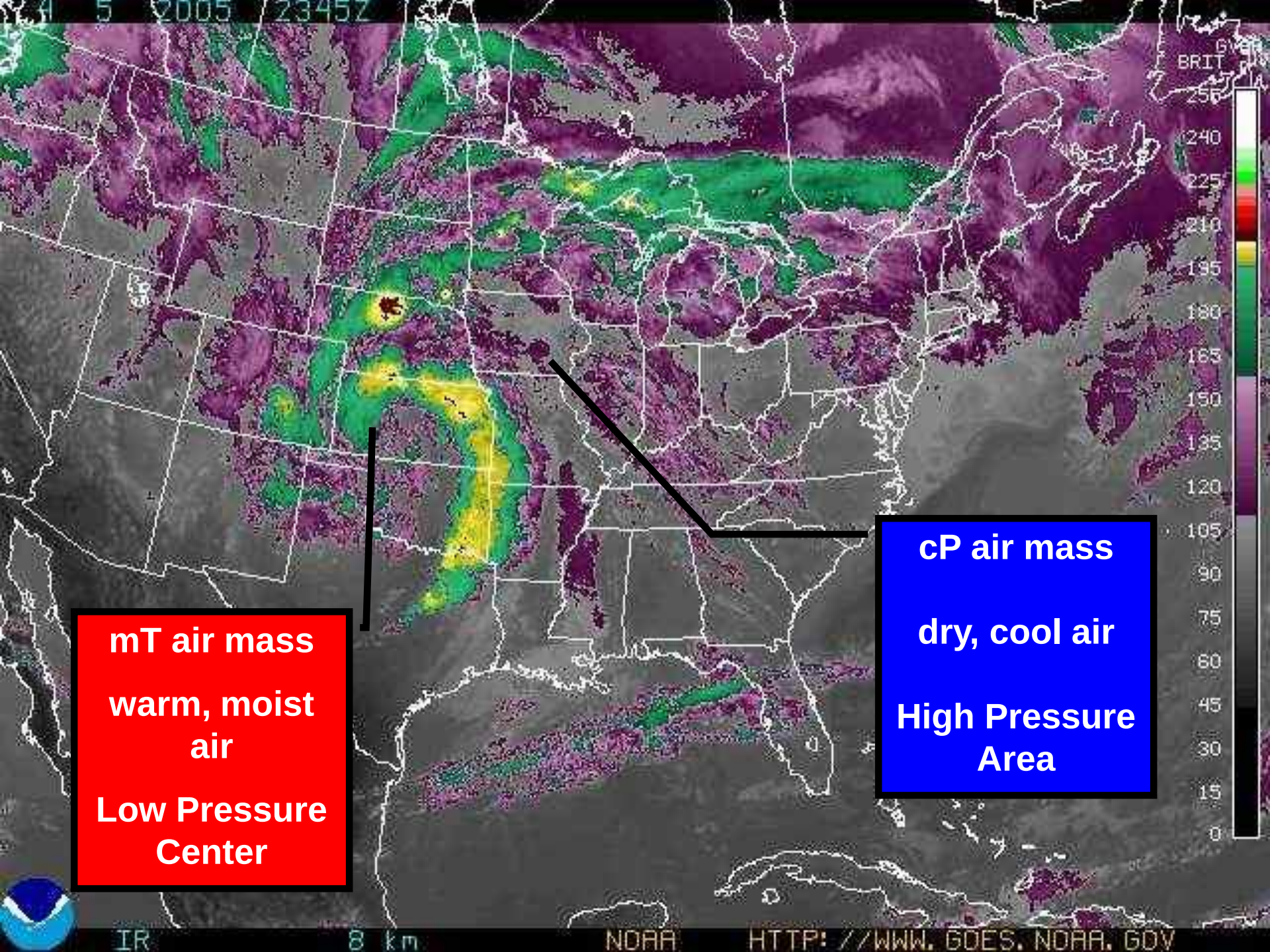
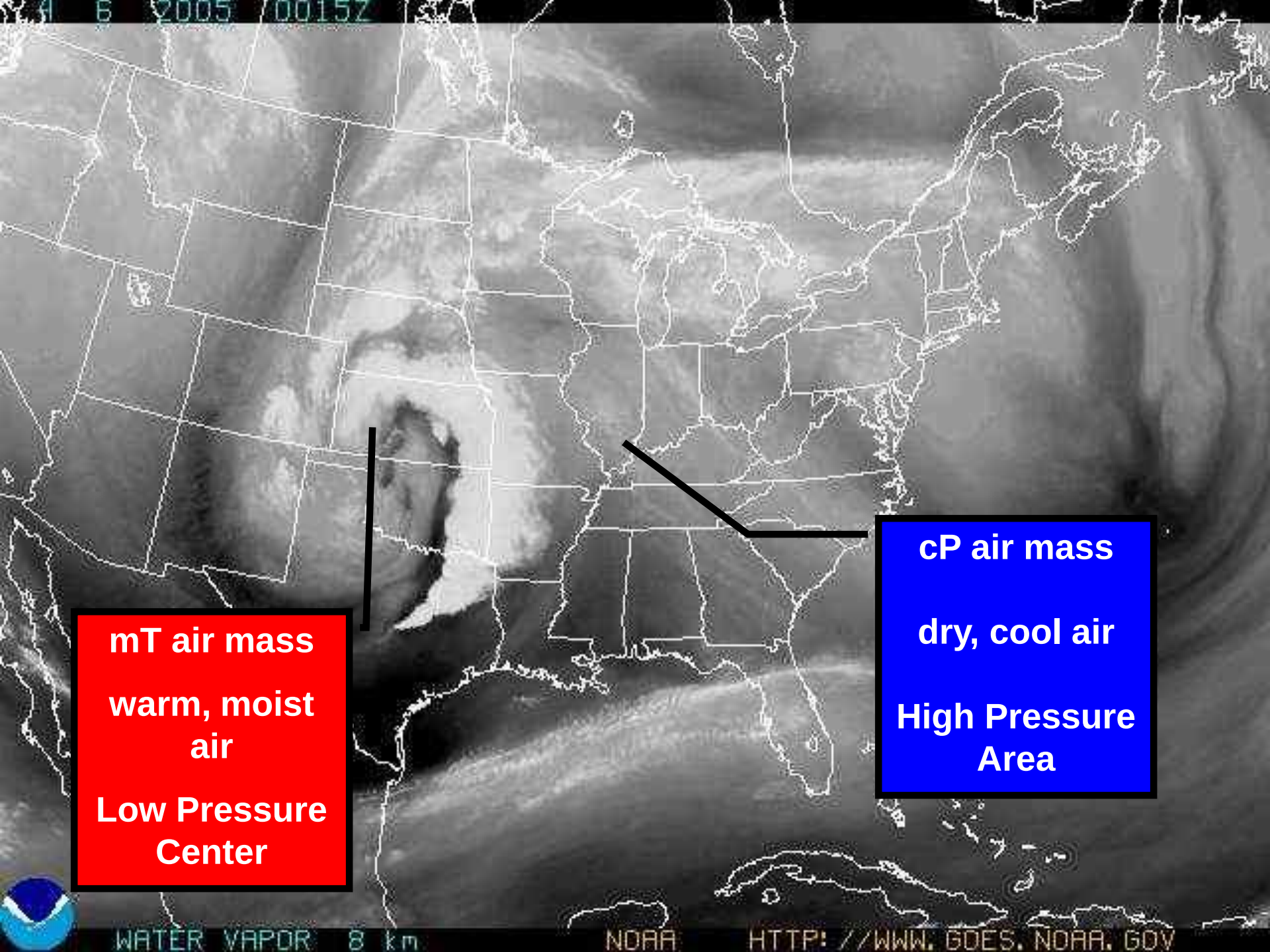

mT air mass
warm, moist air
Low Pressure Center
cP air mass
dry, cool air
High Pressure Area
IR
8 km
NOAA
HTTP://WWW.GOES.NOAA.GOV


A 5 2005 23452
BRIT
255
240
225
210
195
180
165
150
135
120
105
90
75
60
45
30
15
0
mT air mass
warm, moist air
Low Pressure Center
cP air mass
dry, cool air
High Pressure Area
IR
8 km
NOAA
HTTP://WWW.GOES.NOAA.GOV


A 6 2005 /0015Z
mT air mass
warm, moist air
Low Pressure Center
cP air mass
dry, cool air
High Pressure Area
WATER VAPOR 8 km
NOAA
HTTP://WWW.GOES.NOAA.GOV