



Weather Basics

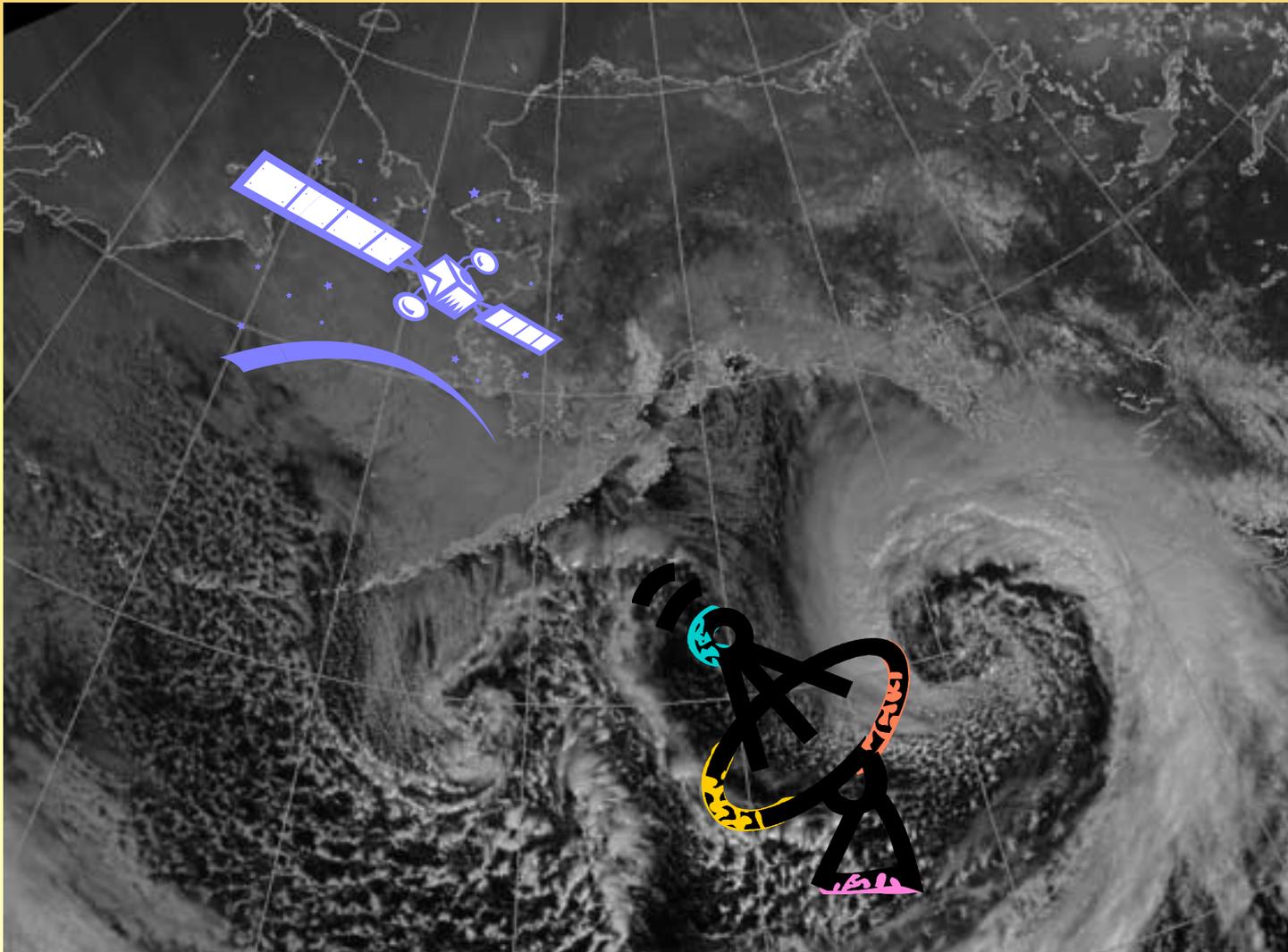
3/10/2010



Weather Basics

- **How to read satellite imagery**
- **Precipitation map clues**
- **Which way do winds go?**
- **Know the 500 mb flow**

Satellite



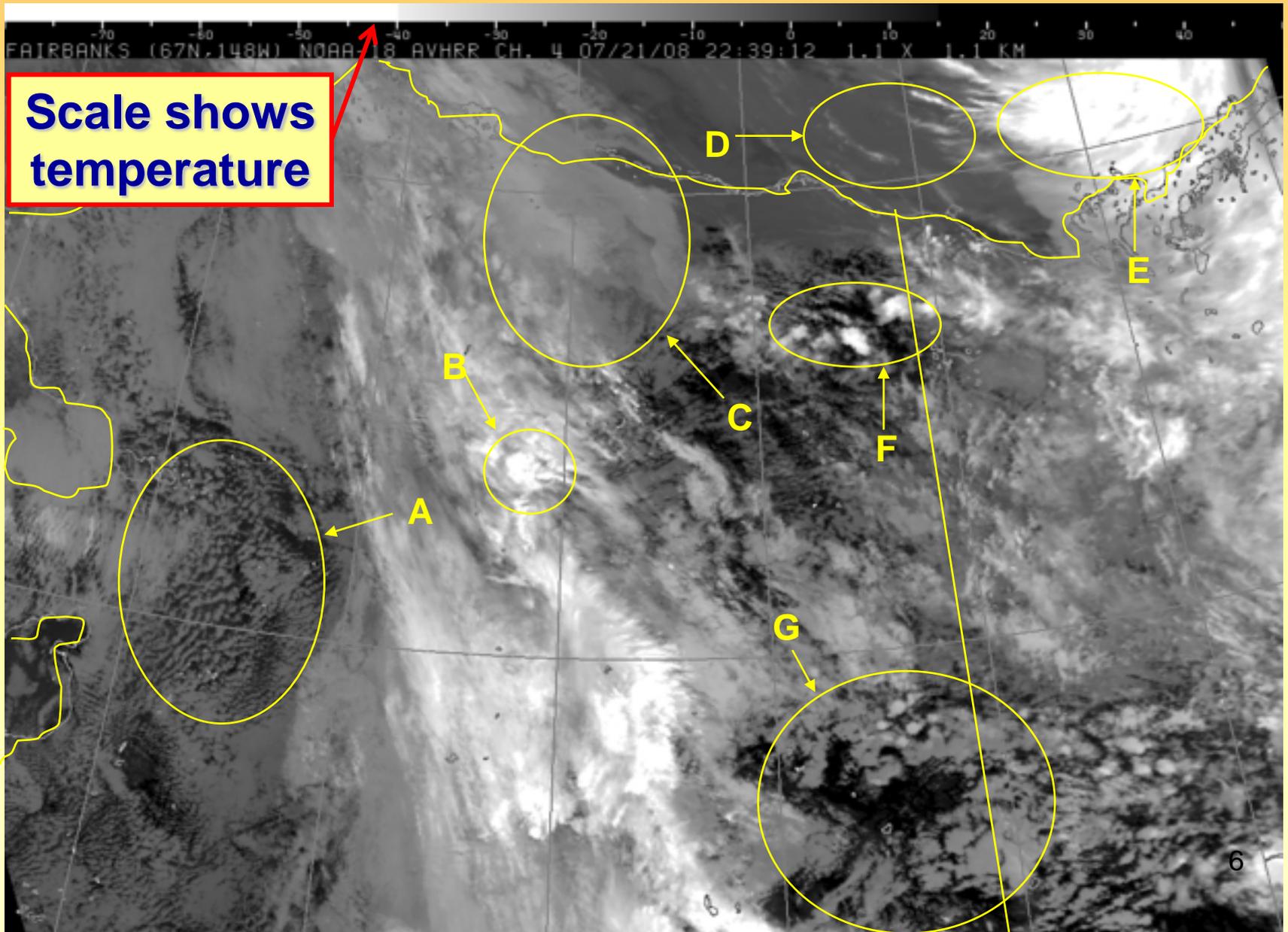
Satellite Basics

- **Infrared “sees” temperature:**
 - **White = Cold = High Cloud**
 - **Grey = Warm = Mid Cloud to Low Cloud**
 - **Black = Very Warm = Low Cloud or Ground**
- **Visible “sees” thickness:**
 - **White = Thick Cloud**
 - **Grey = Thin Cloud**
 - **Black = Ground**

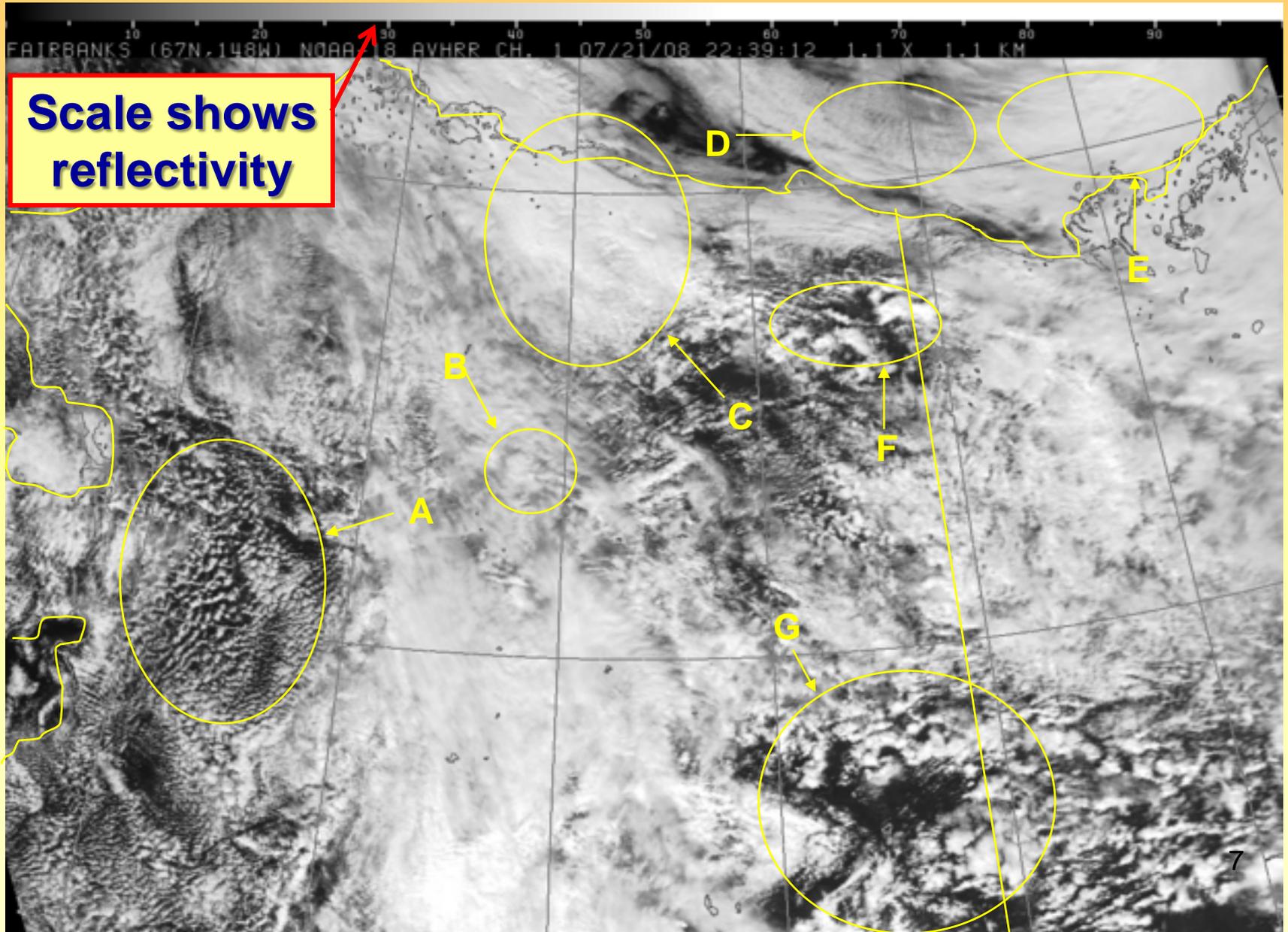
Satellite Quiz

**Use the next two slides to
determine some basic cloud
features:**

Satellite- Infrared



Satellite-Visible



Satellite “Answers”

A = lines of cumulus clouds, in the mid levels

B = thunderstorm

C = Low level stratus or fog

D = Fog over water- lower tops than area C

E = Thick cloud, with high level cirrus on top

F = More thunderstorms and showers

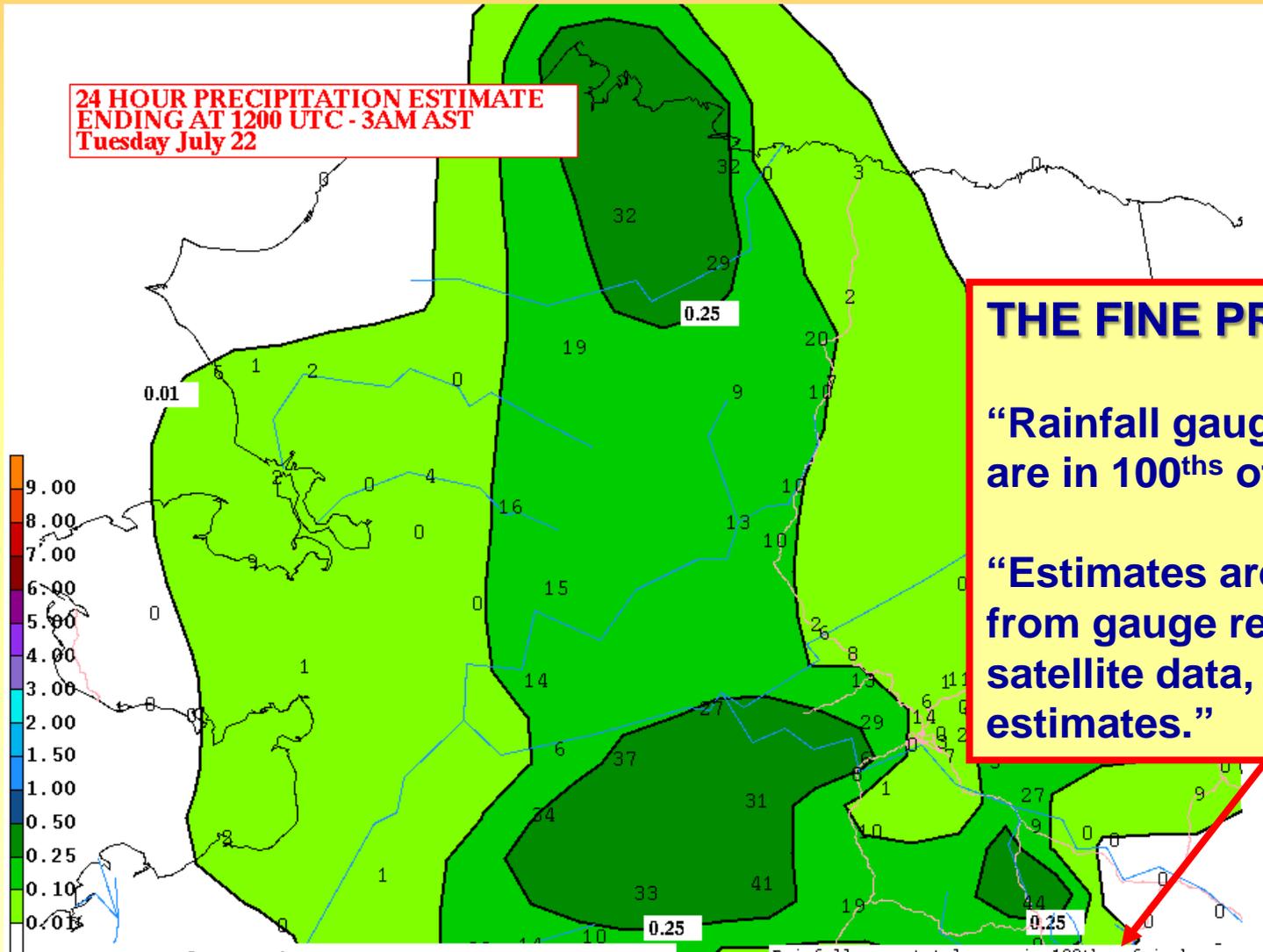
G = Altocumulus, thickest at edges of circle

Precipitation



Precipitation Sources

**24 HOUR PRECIPITATION ESTIMATE
ENDING AT 1200 UTC - 3AM AST
Tuesday July 22**



THE FINE PRINT:

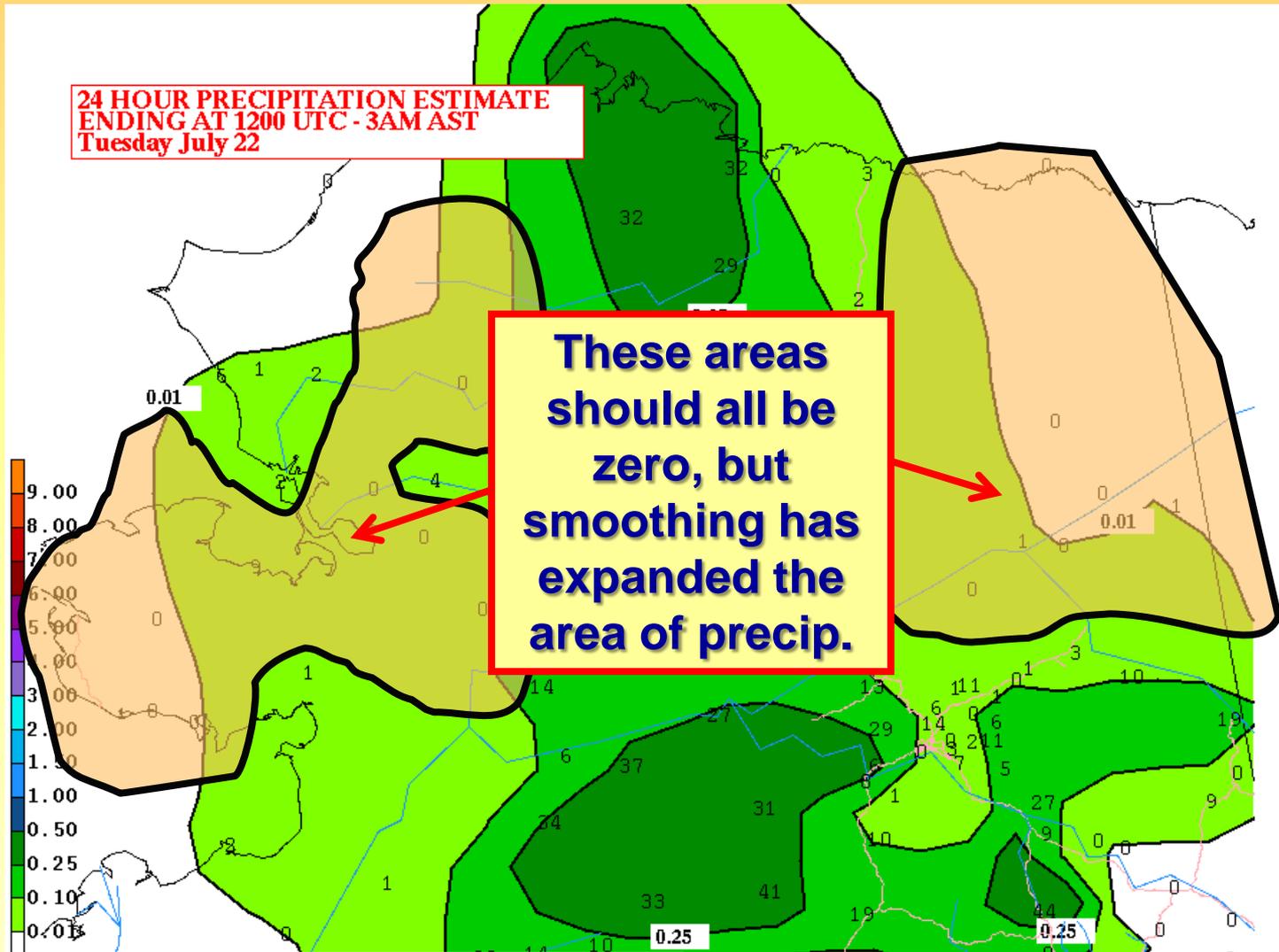
“Rainfall gauge totals are in 100^{ths} of inches.”

“Estimates are derived from gauge reports, satellite data, and radar estimates.”

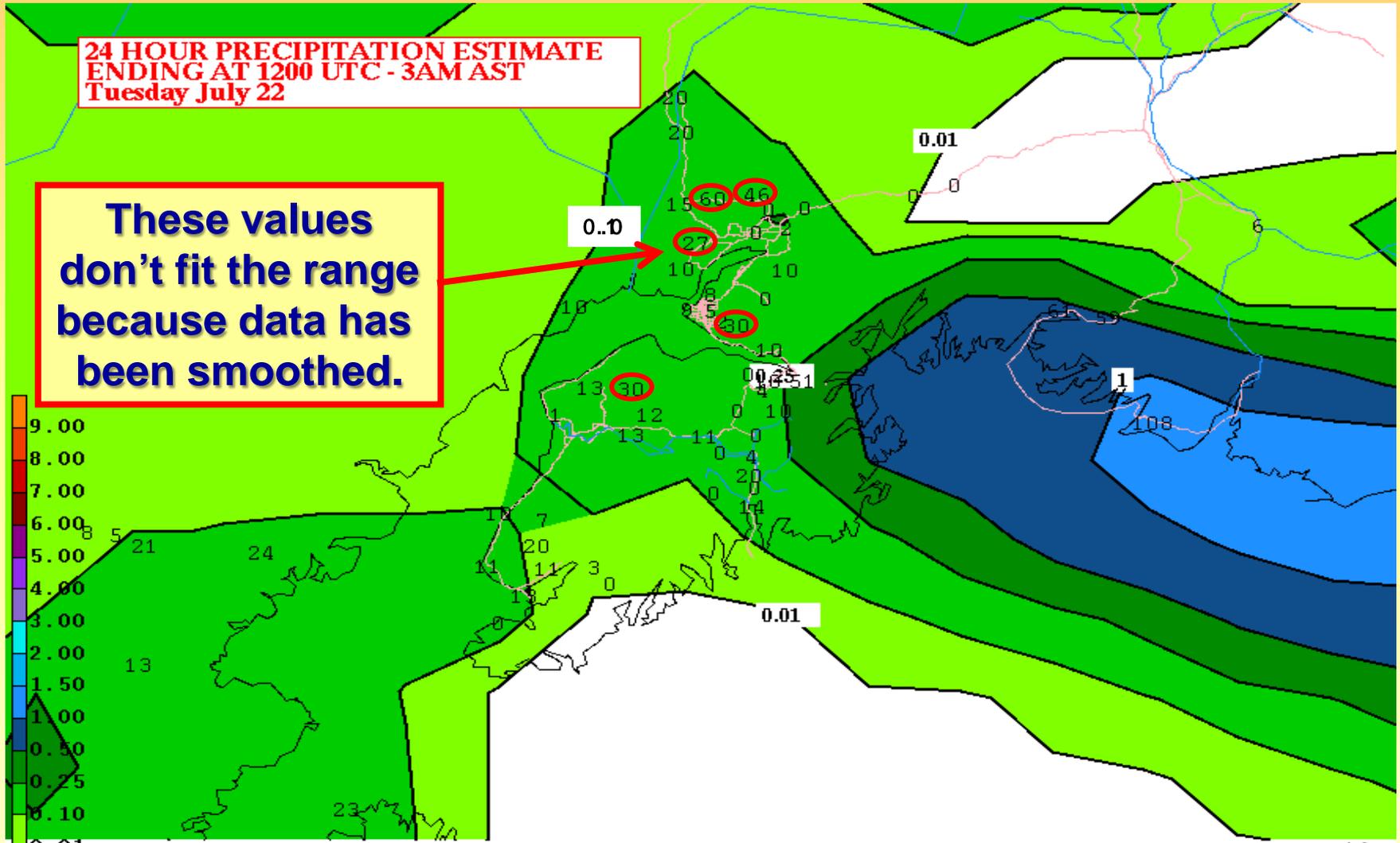
National Weather Service
Alaska-Pacific River Forecast Center

Rainfall gauge totals are in 100ths of inches.
The precipitation estimates are derived from
gauge reports, satellite data and radar estimates

Precipitation Smoothing



Precipitation Smoothing

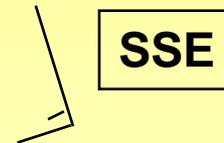
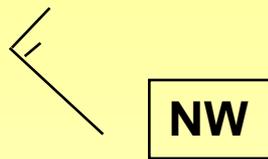
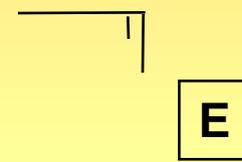


Winds

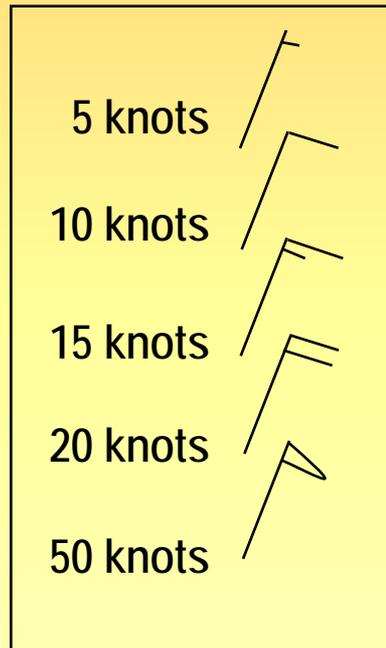


Wind Direction

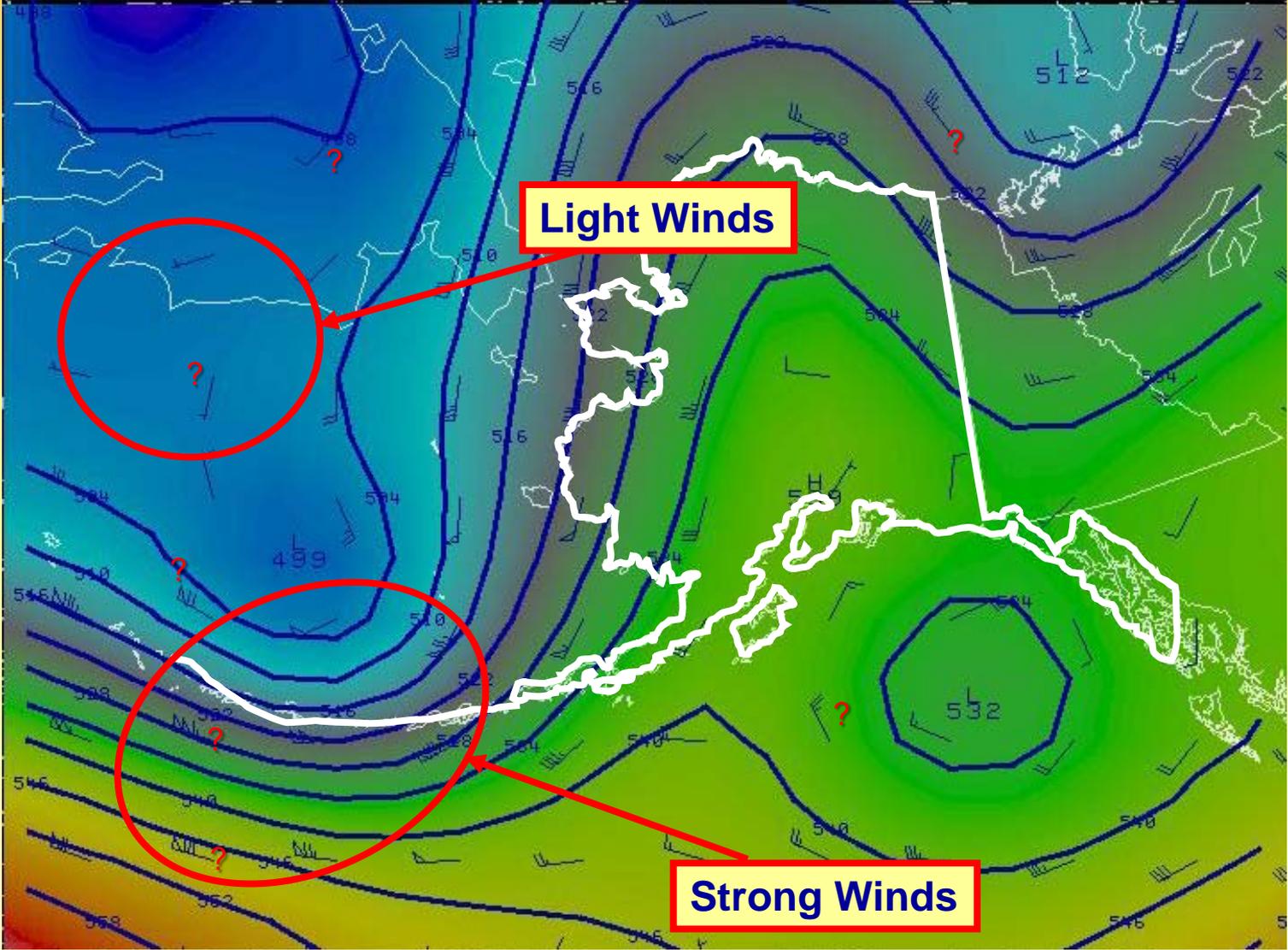
Named for the direction winds come FROM



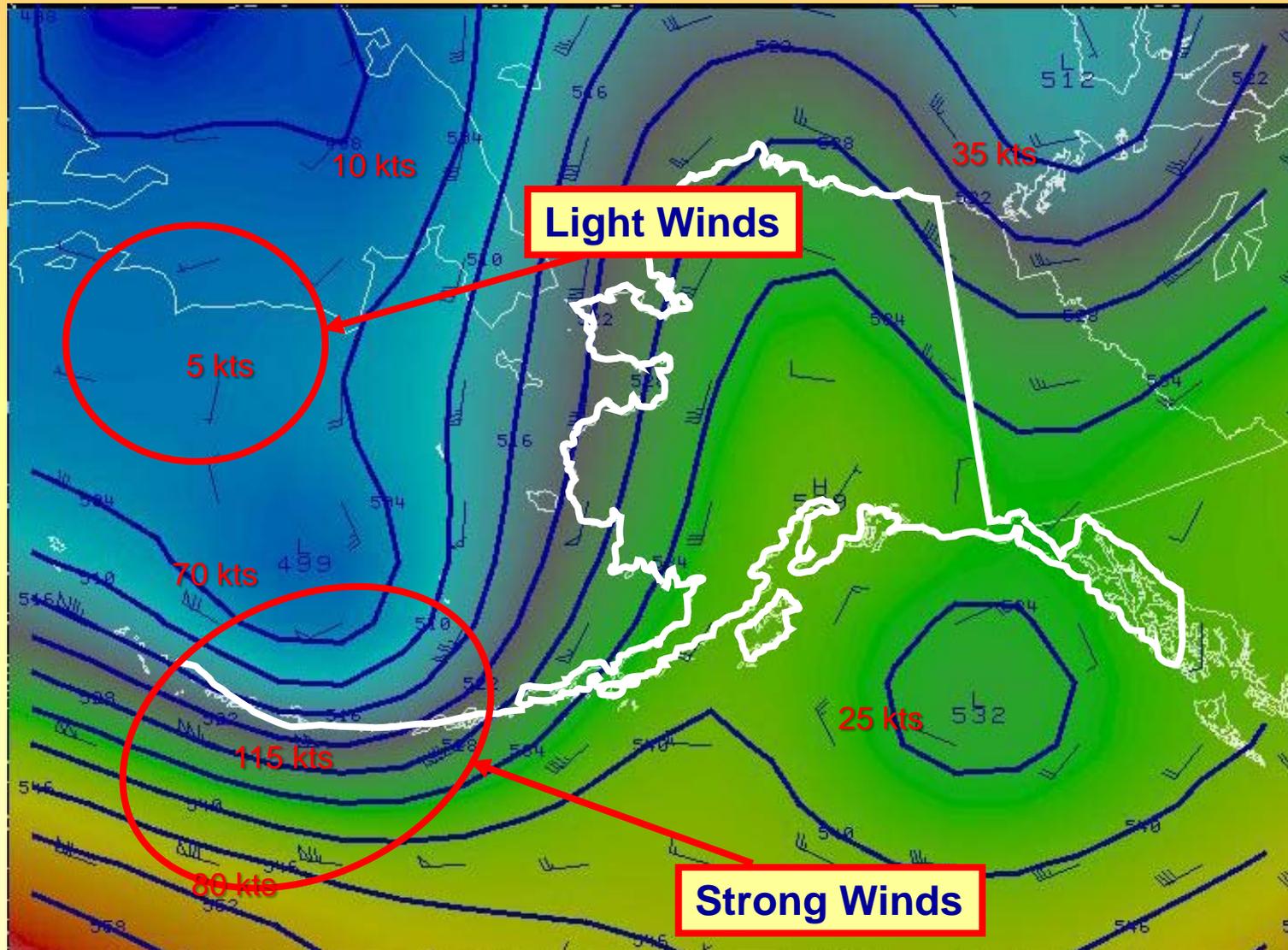
Wind Speeds



Wind Quiz



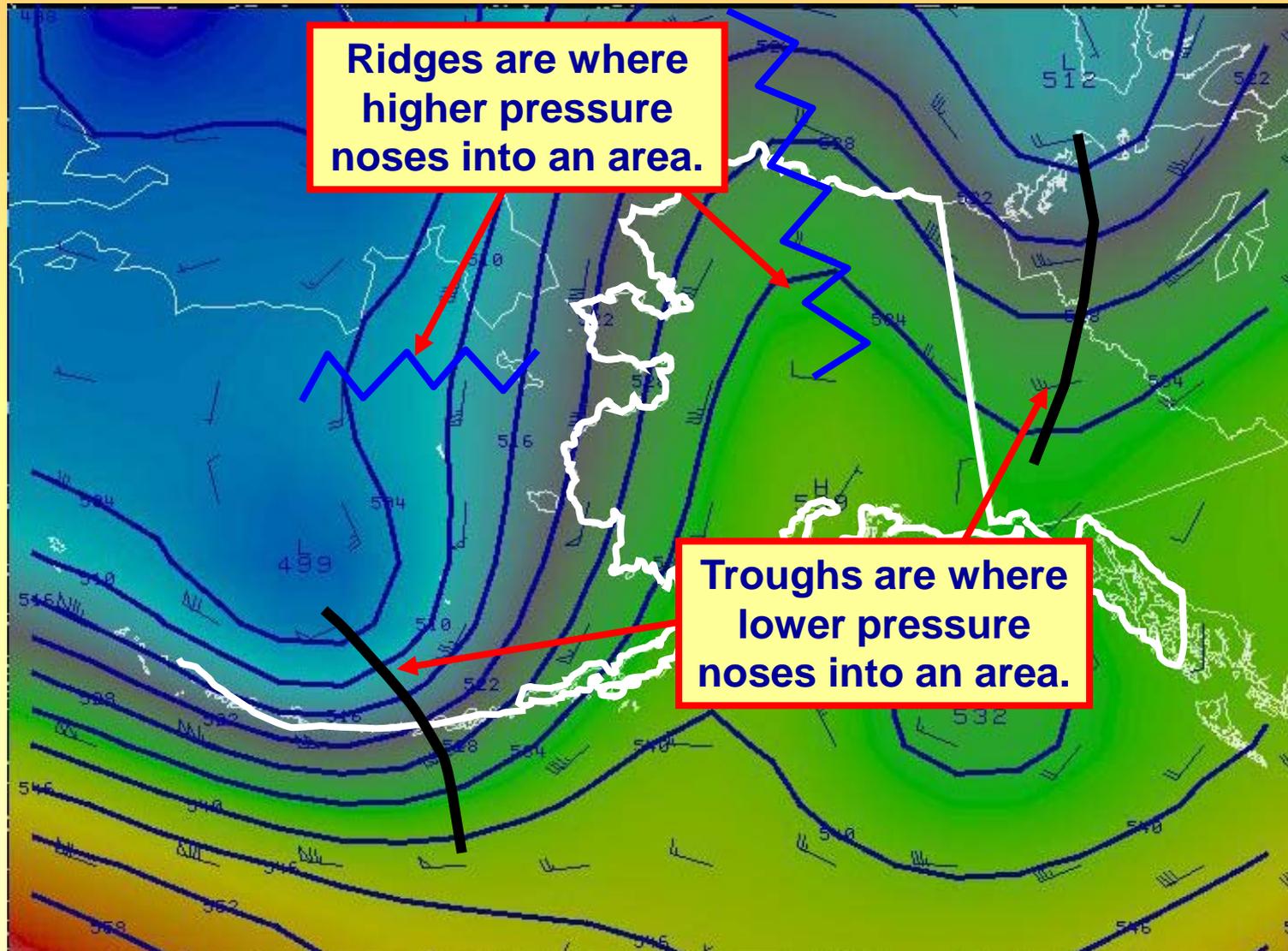
Wind "Answers"



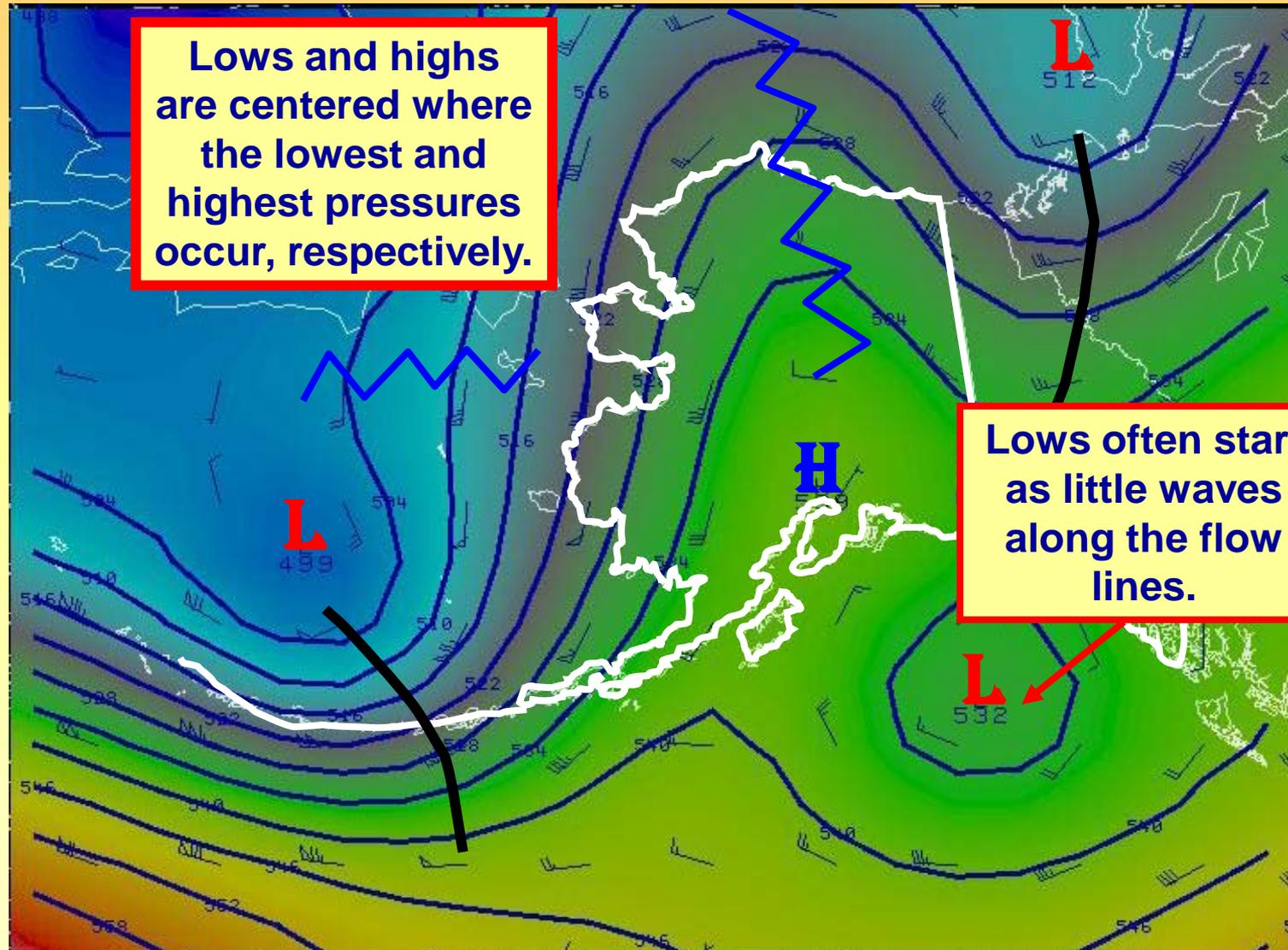
500 mb Flow



500 mb Features



500 mb Features



That's all, Folks!