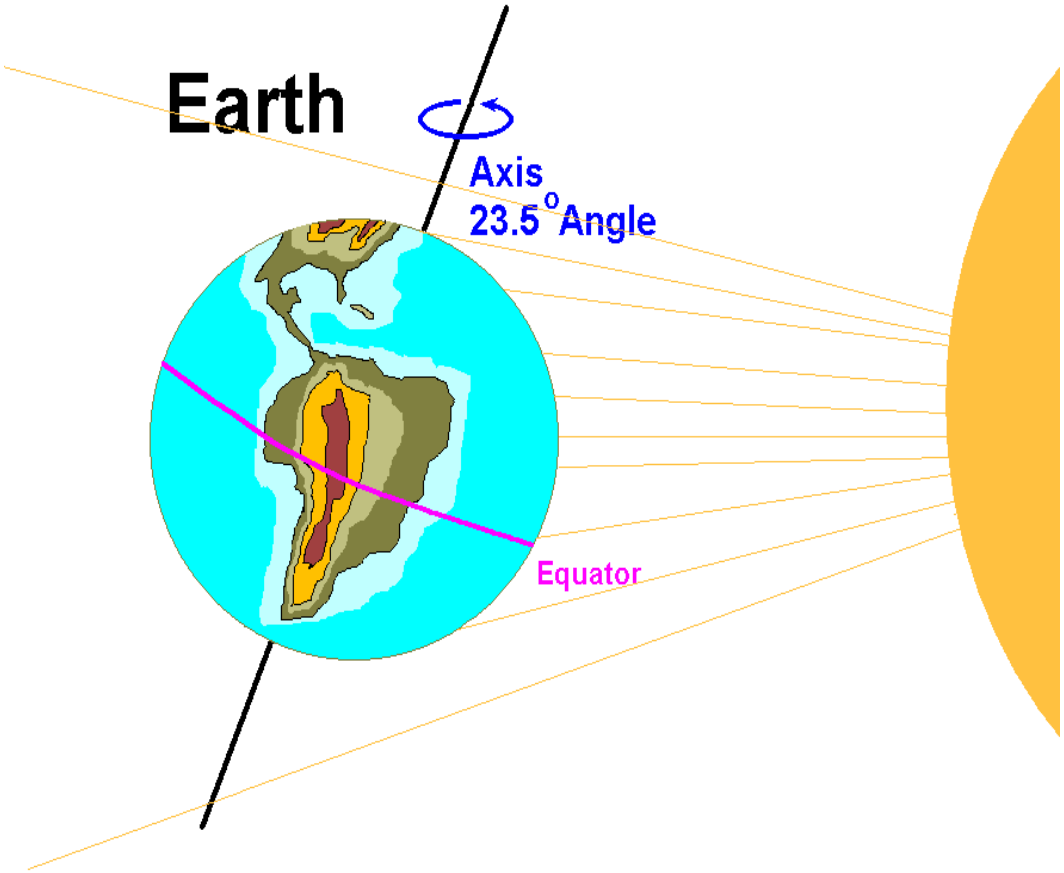
NOAA Weather Radio

Scoutnado Camporee at Ockanickon
April 25, 2015
Bob, KD2EIM
Delaware Valley Radio Association

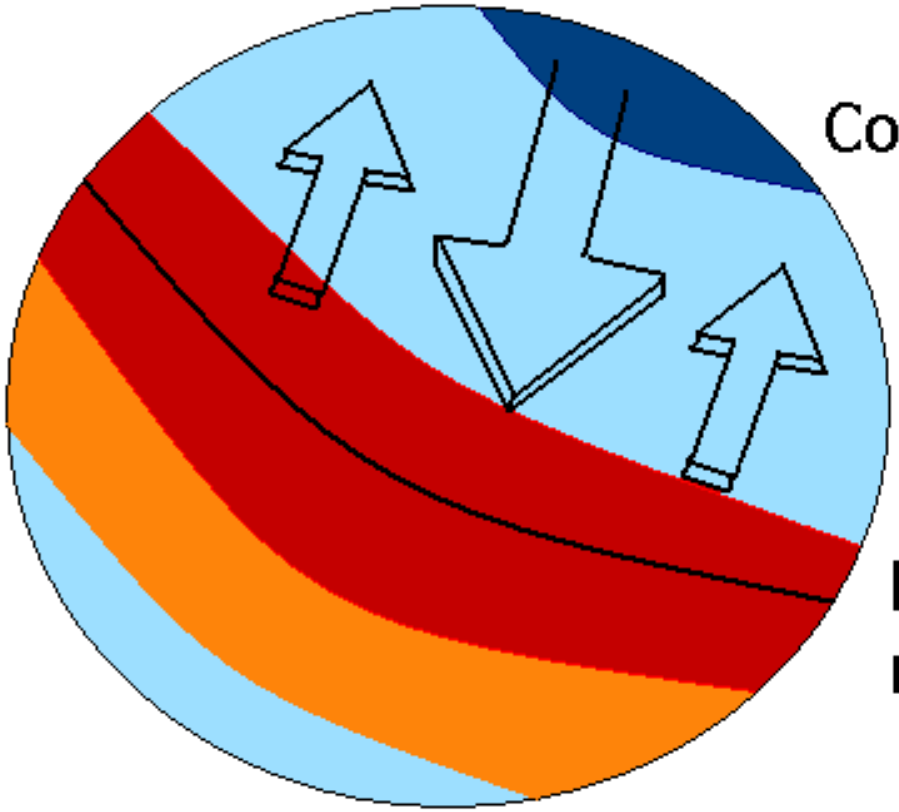
Let's start with a question. . . Why do we have weather?



The Earth rotates on a tilted axis.

Due to the tilt, the equator is always heated more than either pole.

Mixing of warm and cold air results. . .



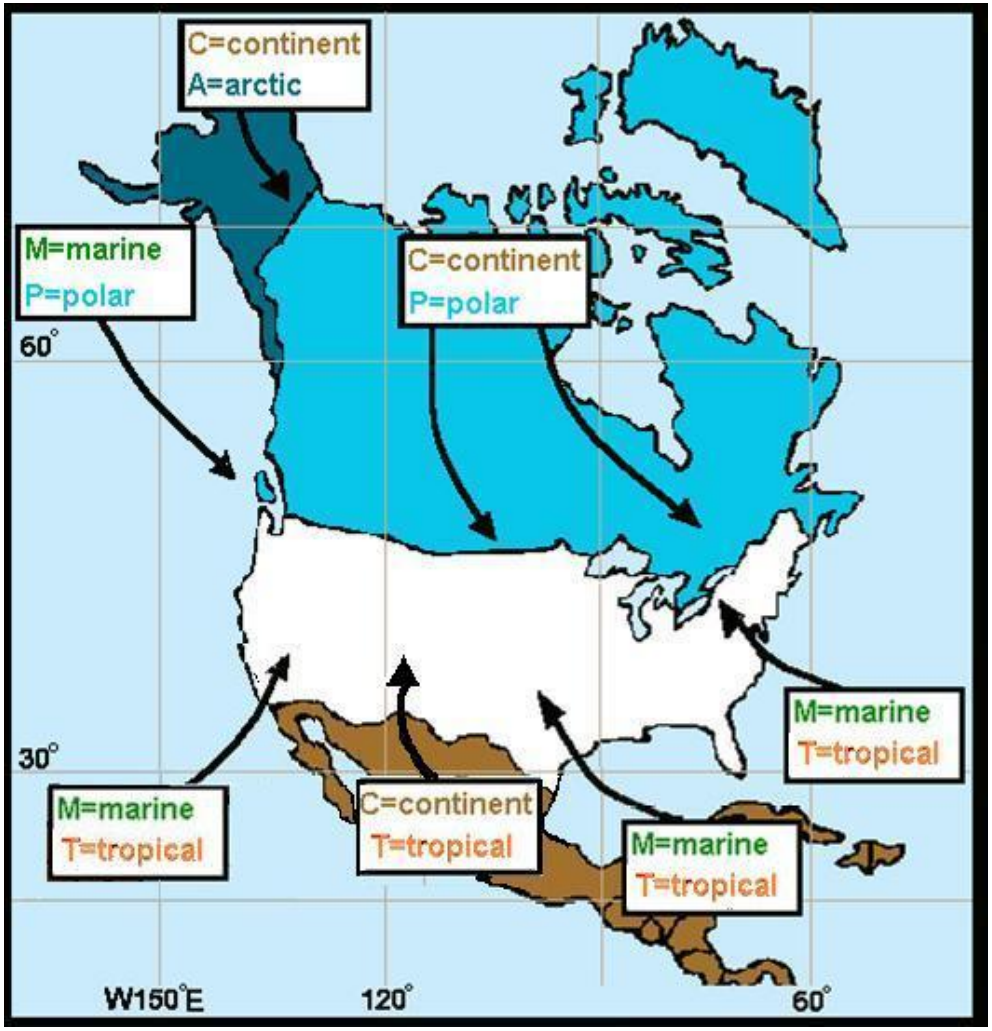
Cold air at the poles sinks

Hot air at the equator rises

Not just temperature differences…

Air which stays over water for long periods of time absorbs some of the moisture through evaporation.

Mixing of warm and cold air results in weather



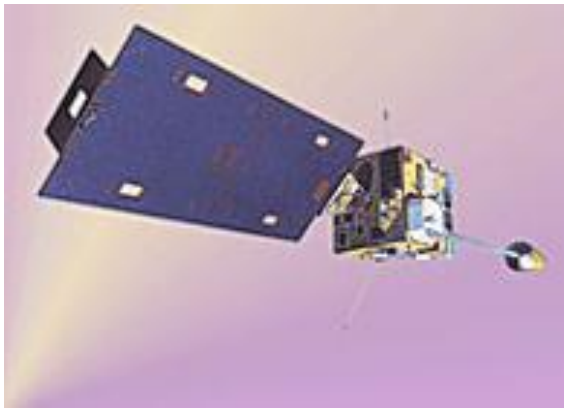
Weather Forecasting

- This problem has two parts . . .
  - Analyze: What's going on right now
  - Forecast: What's going to happen?
- There are 3 basic methods of forecasting:
  - Persistence – tomorrow will be like today – works great in summer
  - Experience - forecast that was seen before to repeat – good for 1 or 2 days
  - Computer Modeling – works great most of the time – except when you have bad data

Weather Data Sources

Radar

Surface Observations



Satellite

Cooperative Observers: SkyWarn

Sources of Weather Forecasts

- All weather forecasts in the US, no mater what the source, are based on **National Weather Service (NWS)** data and computer models.
- Commercial weather enterprises such as radio, TV and Weather.com, just put a pretty pictures on it and dumb it down
- The commercial spin is designed to make it more exciting, not more accurate!

You can avoid weather bias

- Know where to get unbiased locality specific forecasts
- Know where to get time specific forecasts
- Understand the uncertainty of the forecast

National Weather Service (NWR)

- NWR's Primary Mission: *The protection of lives and property*
- Issues forecasts and advisories, watches, and warnings, for:

-Severe Thunderstorms -Tornados

-Floods -Flash Floods

-Winter Storms

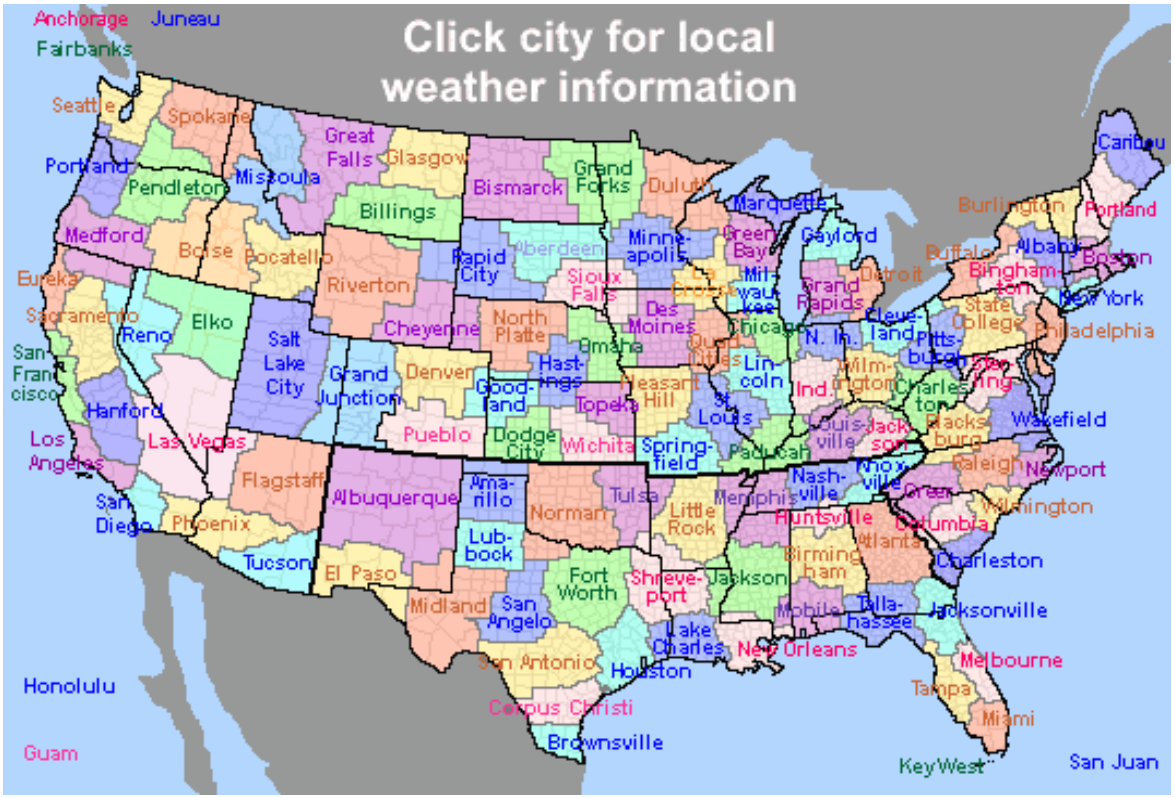
For Current Weather Information

NOAA Weather Radio

- Provides Scouts with weather forecasts in remote wilderness places without cellphone coverage
- NOAA Weather Radio receivers with Specific Area Message Encoding (SAME) can automatically turn themselves on to warn you about dangers such as tornados in your county while you're asleep
- 1025 transmitters, covering all 50 states, adjacent costal waters, Puerto Rico, the US Virgin islands and U.S. Pacific territories
- Broadcasts are found in the VHF service band at 7 frequencies:

  162.400, 162.425, 162.450, 162.500, 162.525, 162.550 Mhz

Locality Specific Forecasts



- 122 Weather Forecast Offices (CONUS, AK, HI, Guam and Puerto Rico)

Site Name	Call Sign	Frequency
Atlantic City	KHB38	162.400
Lakewood	KZZ31	162.450
Philadelphia	K1H28	162.475

Forecast Realities

- NWS naturally errs on the side of caution; weather is more often better than forecast and rarely worse
- Advisory: Just so you know…
- Watch: Stay Alert!
- Warning: Take Cover Now!
- Follow the old Norwegian folk saying:
  - *“There’s no such thing as bad weather, only bad clothing”*

Amateur Radio Training and Licensing

- For information about upcoming training classes and exam sessions, please contact the Delaware Valley Radio Association Director of Training & Exams – Don Wright, AA2F – AA2F@arrl.net or visit the Delaware valley radio Associations website www.w2zq.com

QUESTIONS?

You can view or download the slides at www.W2ZQ.com/dvra-online-library