## Winter 2017-2018 SWOP Conference Call

**Matt Barnes** 

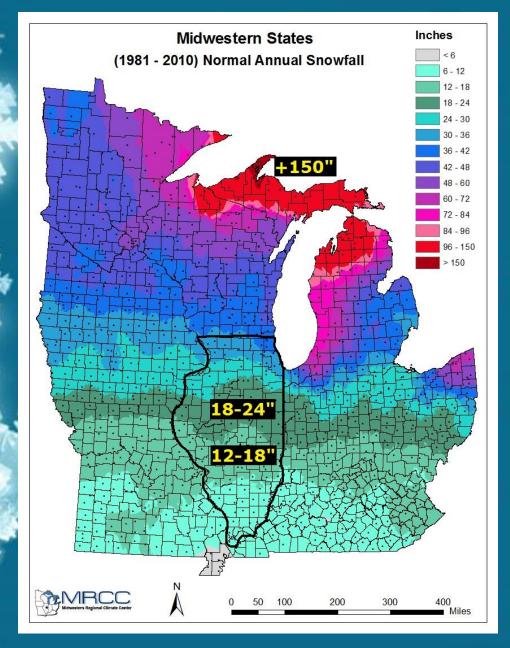
### So What Exactly is a "Normal" Winter in Central Illinois?

#### Let's find out...

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Markes Rodgers Rosamond Christian County March 21, 2006

## **Average Annual Snowfall**



#### **Peoria: 24.6**

Champaign-Urbana: 23.2

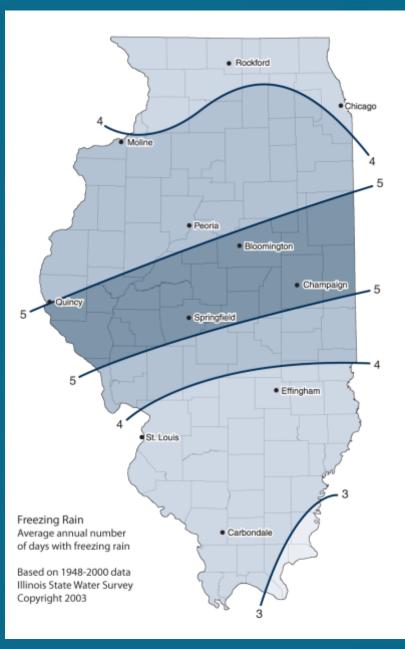
**Springfield: 20.9** 

**Bloomington-Normal: 19.9** 

Charleston: 17.2

**Olney: 11.6** 

## **Average Freezing Rain Days**



#### **UNIQUE GEOGRAPHY**

#### Cold source region to the north (CANADA)

Warm/Moist source region to the south (GULF OF MEXICO)

## **Average Days Below Zero**



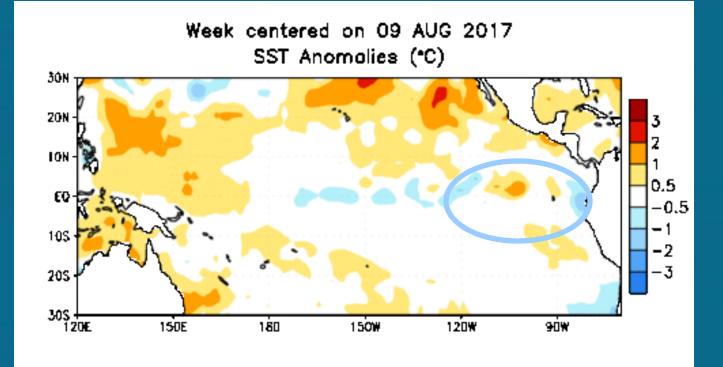
# What Pattern is Evident For This Coming Winter?

• A weak "La Nina" event is currently ongoing in the Equatorial Pacific

• La Nina is a cooling of the waters off the coast of Ecuador/Peru

This event is expected to persist through February

### La Nina



**Blue colors show cooler than normal sea-surface temperatures** 

Weak La Nina (1-2 degrees below)

# **Typical La Nina Weather Pattern**

#### Typical Wintertime Pattern oler ver Ulteen High Cool Pressure Wet & Cool Wet Wet Pacific Jet Stream Dry & Warm NWS/NCEP **Climate Prediction Center**

## La Nina

 Important to note that El Nino/La Nina has only a minor direct influence on Illinois winters

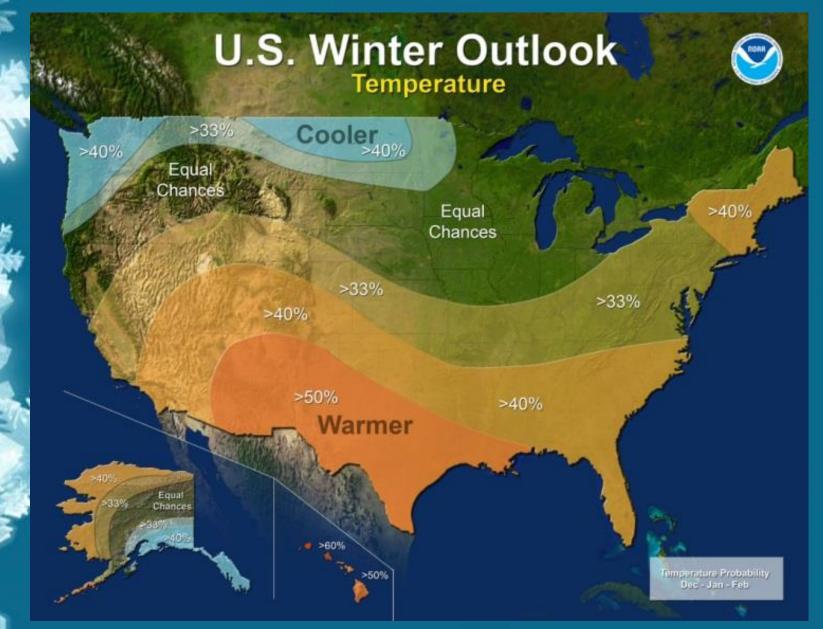
 Varies depending on strength/location of El Nino/La Nina event as well as timing of onset

Other short-term circulations are much better (but can't be accurately predicted more than a couple weeks in advance)

# Now for the Official Winter 2017-2018 Outlook...

Kelly Lockhart Effingham January 6, 2014

# 2017-2018 Winter Outlook



# 2017-2018 Winter Outlook

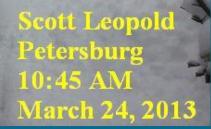


## **Winter Outlook Summary**

- Temperature: No clear trend
- Precipitation: Trending above normal (not necessarily snow)
- Good chance this winter will be colder than last

Expect large temperature swings (no long periods of cold/warm)

## **Shifting Gears to Reporting...**



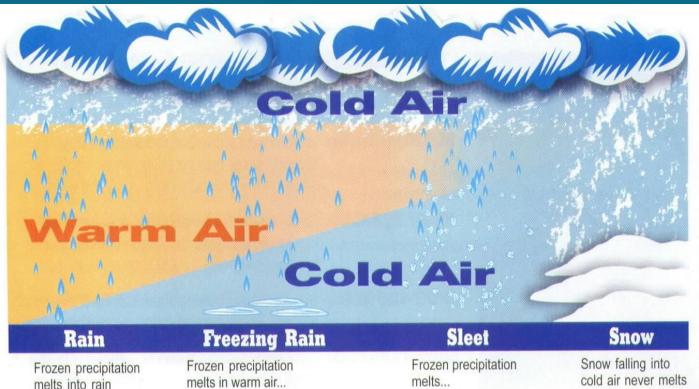
## **Winter Weather Reporting**

 Time of Precipitation Onset: this can help us assess our current accumulation forecasts

• Type (are you getting rain, snow, sleet, freezing rain, or a mixture?)

**Snowfall measurements** (both during and after the event)

## **Precipitation Types**



...rain falls and freezes on cold surfaces as a sheet of ice ...refreezes into sleet before hitting ground

## Winter Weather Reporting

 Snowfall is the amount of NEW snow that has occurred since your last measurement

 Snow Depth is the total amount of snow on the ground (both old and new)

Both can be measured with an official NWS snowstick...or a basic yardstick

## **How to Measure Snow**

• Select a flat, grassy location well away from obstructions (drifting effect)

• Do NOT take measurements on concrete or asphalt surfaces (melting effect)

Do NOT measure snow drifts

Take an average of at least <mark>5</mark> readings and use this as your official total

## How to Measure Ice

- Find a tree or shrub branch
- Use tape measure or ruler to measure the ice thickness on the top side and bottom side of branch

Divide by 2 to get the average ice accumulation

 Example: <sup>3</sup>/<sub>4</sub>" + <sup>1</sup>/<sub>4</sub>" divided by 2 yields <sup>1</sup>/<sub>2</sub>"



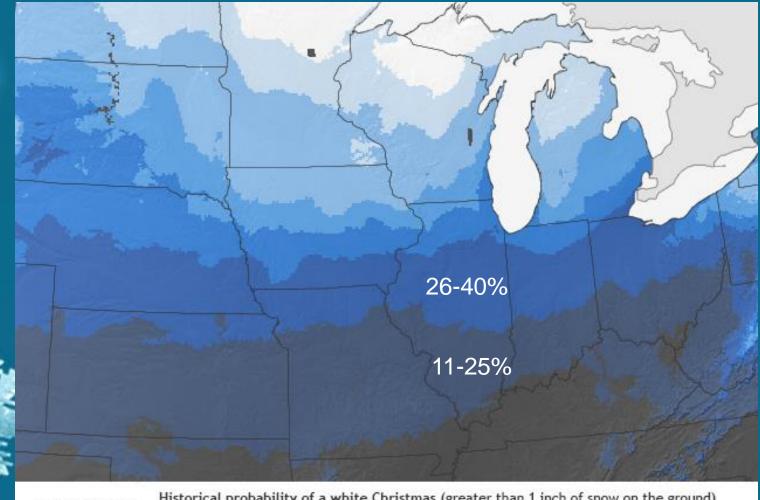
### **Winter Resources**

SWOP Training Page weather.gov/ilx/swop-training

YouTube Training Videos 4 short clips (5-8 minute)

Part 1: Overview of SWOP ProgramPart 2: Measuring SnowPart 3: Selecting a Spot to Measure SnowPart 4: Snow Measurement Demonstration

## **Chances of a White Christmas**



Data: 1981-2010 Climate.gov

0-10%

11-25%

26-40%

Historical probability of a white Christmas (greater than 1 inch of snow on the ground)

51-60%

61-75%

76-90%

91-100%

41-50%

## **Questions?**

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