### Winter 2018-2019 SWOP Conference Call

Matt Barnes Scott Baker



#### **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?

- Neutral conditions are currently observed in the Equatorial Pacific
- A weak El Nino event is expected to develop soon and persist through the winter

El Nino is a warming of the waters off the coast of Ecuador/Peru

#### **El Nino**



**Red colors** show warmer than normal sea-surface temperatures

Weak El Nino (1-2 degrees above)

# **Typical El Nino Weather Pattern**

Typical Wintertime Pattern

Warm

Low Pressure

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Wet

Wet & Cool

Polar

Jet Stream

Persistent, Extended Pacific Jet Stream & Amplified Storm Track

NWS/NCEP Climate Prediction Center

#### **El Nino**

 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 2018-2019 Outlook...

Patrick Lines East of Lake Decatur April 9, 2018

# 2018-2019 Winter Outlook



# 2018-2019 Winter Outlook



## **Winter Outlook Summary**

- Temperature: Slight trend for above normal...especially N/NW
- Precipitation: no clear trend
- While temperatures may trend above normal overall, several periods of cold will
  still be likely

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



## What to Report?

 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 (use snowstick or ruler)

## What to Report?

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

• Provide measurements DURING the storm (not more frequently than once every 3 hours...6 hours is ideal)

Send your final storm total after the event concludes

#### **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

## **Measuring Snow at NWS Lincoln**



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## How to Measure Ice

- Find a flat object such as a table top or fence post
- Use a ruler to measure the ice thickness



#### Winter Resources

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

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

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%

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

51-60%

61-75%

76-90%

91-100%

11-25% 26-40% 41-50%

# **Questions**?

Patrick Lines East of Lake Decatur April 9, 2018