GENERAL SESSION II
Extreme Weather for Crops: Too Dry, Too Wet, and Even Ideal

Dr. Elwynn Taylor
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Dr. Elwynn Taylor is a professor at Iowa State University in Ag Meteorology with a vision of mega-trends in technology, climate and society that opens the horizons of our enigmatic world. His extensive knowledge and understanding of the world around us enlightens and entertains. His insightful presentations are immediately useful in the management of business and life. Few can explain the complexities of our world in a manner as clear, concise, and pleasant, as does Dr. Taylor, who received his doctorate in Biology from Washington University in St. Louis. Scholars internationally recognize his expertise in interactions of the biological and physical environment.

Abstract/Summary

Corn yield per acre in Riley County, KS has been more erratic from 2001-2014 than was experienced from 1981-2000. The year-to-year volatility of soybean yield is similar to that of corn. The consistency of the pattern of favorable and adverse production years indicates that the management of "Weather Related Risk" to production and marketing during the coming decade will be of increasing importance to farm profits. The 2010-2011 drought conditions from Texas to Kansas and in the central corn-belt during 2012-2013 are similar to those experienced during the mid-1950's (both episodes being directly related to very strong La Niña events). Precipitation patterns appear to have a multi-year nature as do other major components of our climate. Risk management is, and should be, more than disaster insurance hedging the farm against the random nature of weather and markets. Use of government estimates and forecasts combined with careful analysis of observed crop conditions and weather impacts provide profitable alternative positions that can enhance the financial security of an individual's farming program.

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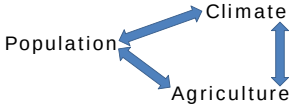
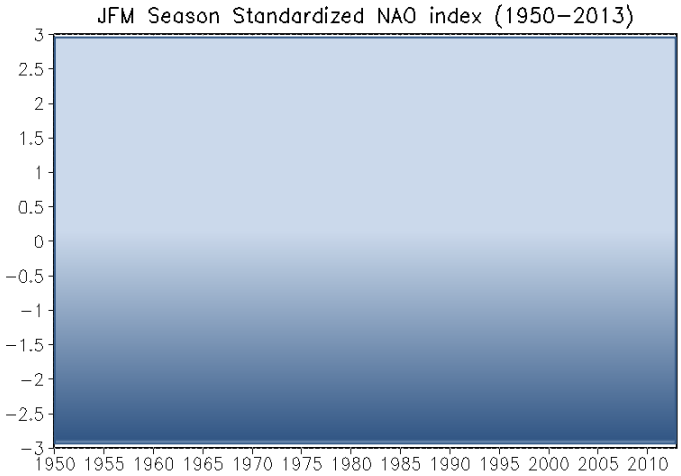
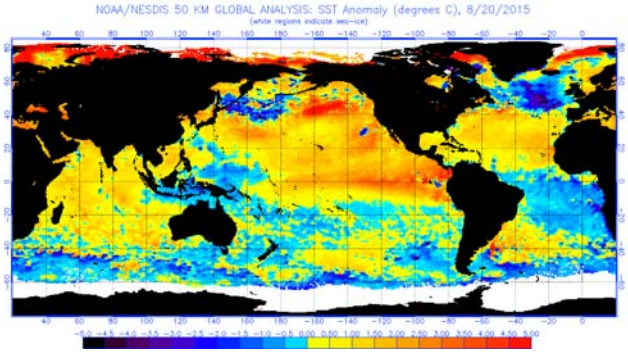
The VICIOUS CYCLE



Who will BREAK the CYCLE ?



http://www.cpc.ncep.noaa.gov/products/precip/CWlink/pna/season.JFM.nao.gif



El Niño

Friend of the Midwest farmer.

Better friend of the Argentine farmer (El Nino tends to be a Christmas event that may or may not persist through the Midwest growing season).

October 2009

El Niño

To

La Niña

October 2010 to 2012

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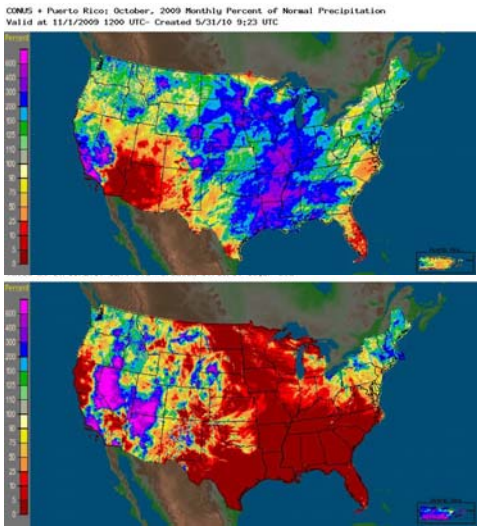
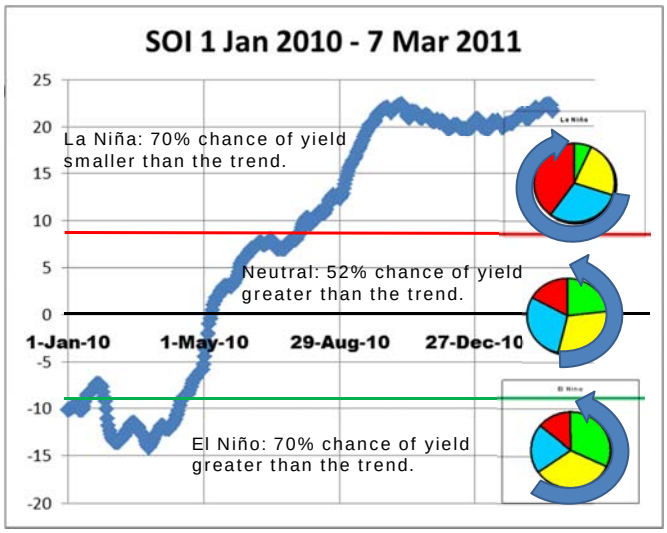
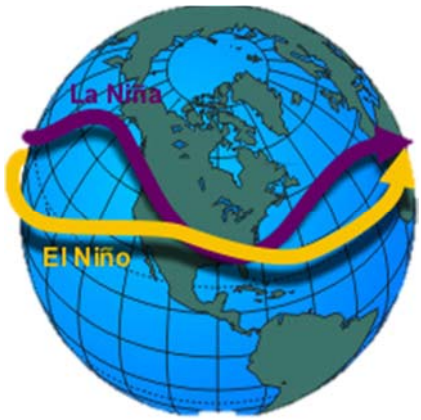




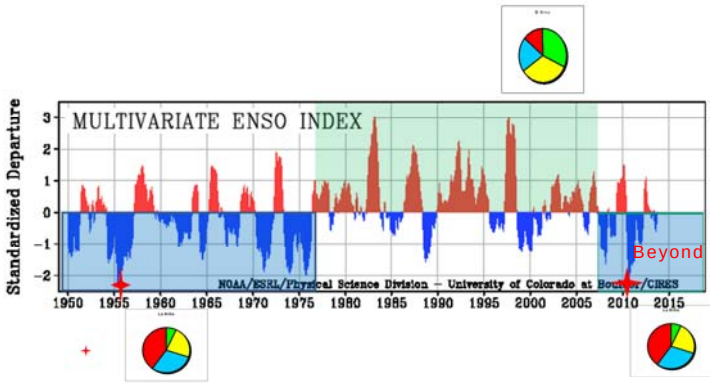
La Niña : Extremes



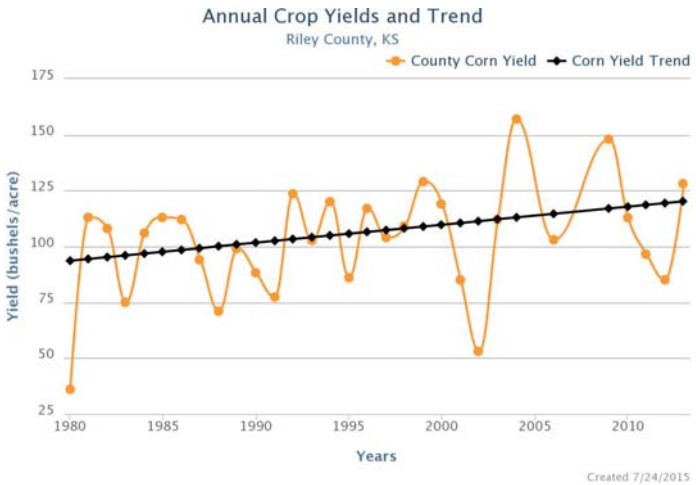
Weather Volatility

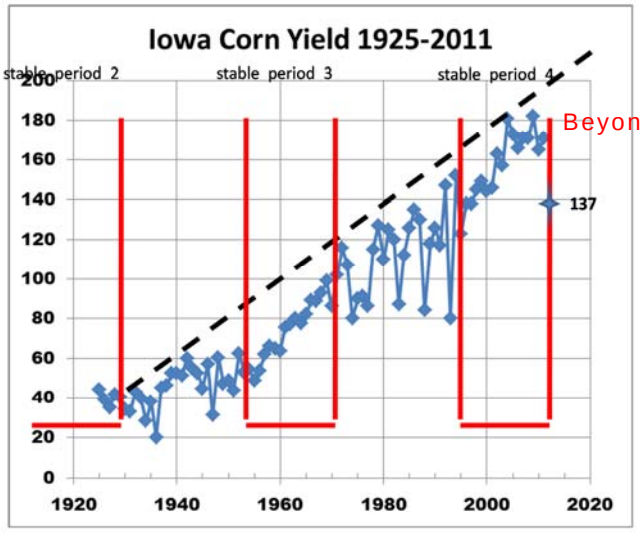
Climate RISK in Agriculture is likely to be greater during the next 20 years

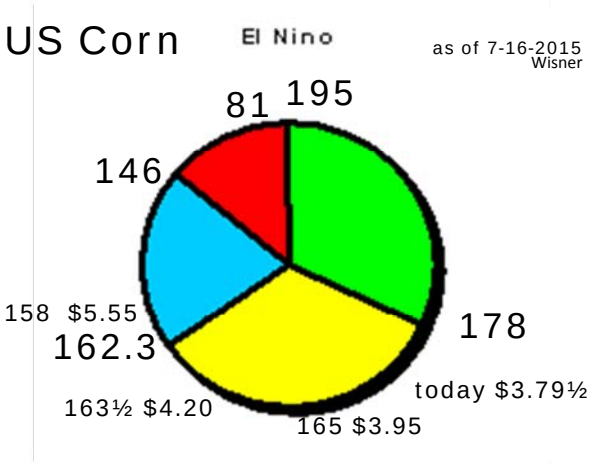
Management of RISK is of increasing importance



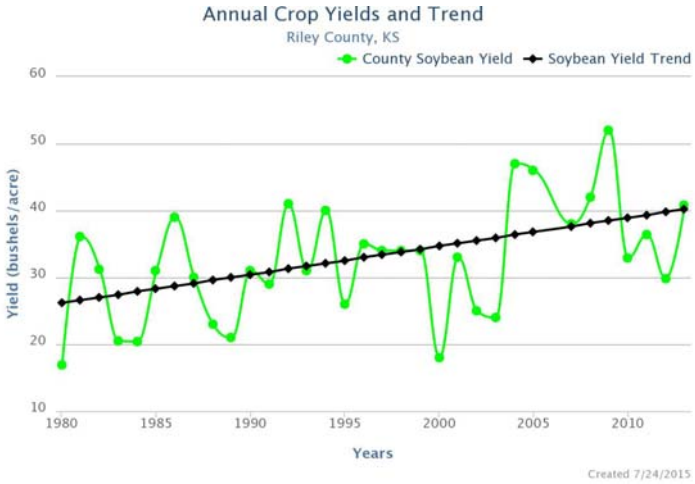
High risk Moderate High

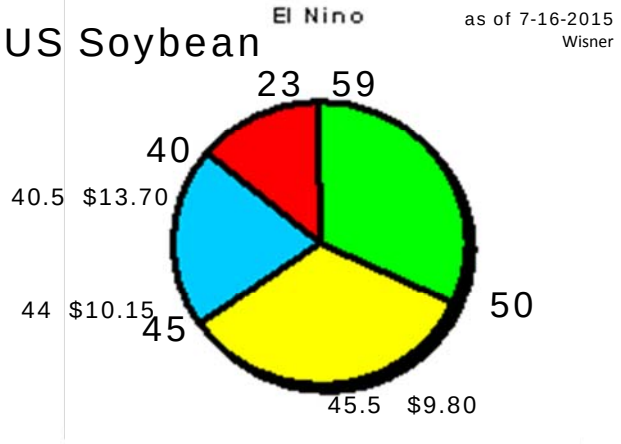






Example Yield-Price "Risk Wheel"





Example Yield-Price "Risk Wheel"

END

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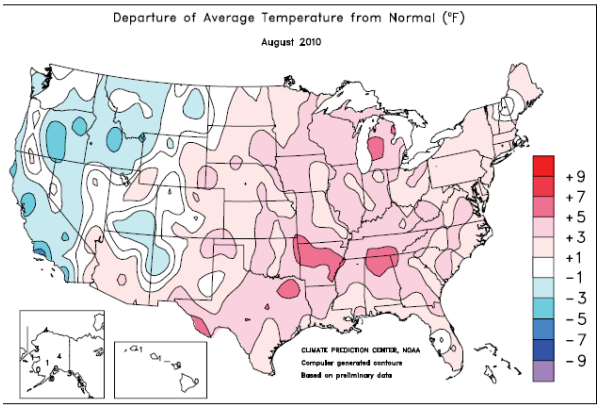
Summer Temperature 2010



- This is OPPOSITE of past 3 years