

ZedX Inc.
Student Collaborative Climate Research
Projects
A Private Sector Point of View



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About ZedX

- Founded in 1987
- Development of information technology (IT) products and services for the agricultural and environmental industries
- Leader as an IT solution provider for the precision agriculture industry
- Meteorological data are used for;
 - Precision Agriculture
 - Sustainability programs
 - Commodities

www.zedxinc.com



About ZedX

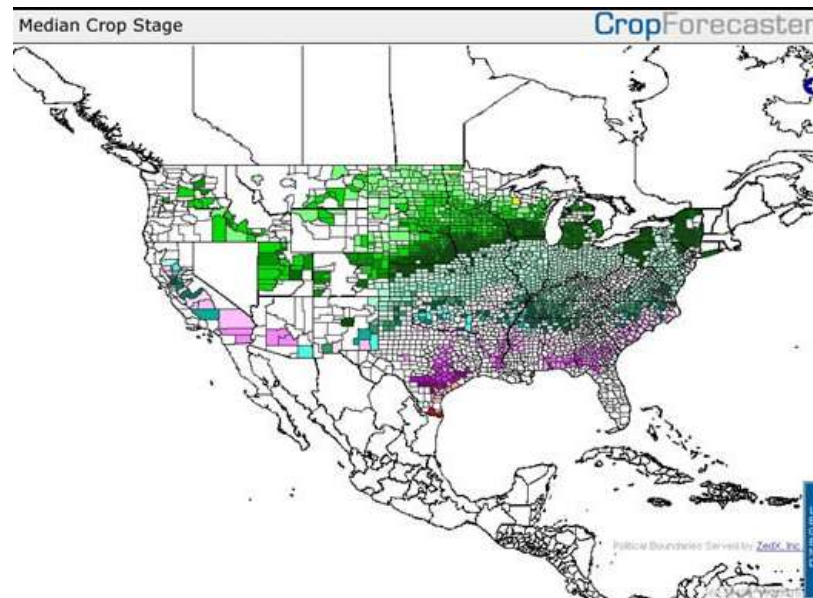
- **Academic collaborators**
 - Cornell University
 - North Carolina State University
 - The Pennsylvania State University
 - University of Wageningen (Netherlands)
 - University of Guelph (Canada)
- **Government Sector**
 - NAPPFast NCSU APHIS
 - US EPA
 - USDA
- **Non-Government Sector**
 - The Keystone Center
 - The Technology Collaborative
 - TECHQuest PA
- **Corporate Sector**
 - Infoterra –EADS
 - Marcus Weather



Products Using Climate Data

- CropForecaster

- Objective and quantitative interpretation of the national weather scene - each day's new weather and forecasts in terms of its whole impact on the crop status and outlook for the remainder of the season.



Climate Data

- More than quantitative information about climate change is required
- The impact of climate change is what drives decisions
 - Crop Varieties
 - Length of growing season
 - Drought resistance
 - Disease resistance
 - Management practices
 - When to plant
 - How to prepare for the season
 - Future changes
 - Associated Industries
 - Seed companies
 - Chemical companies
 - Commodities
 - Ag-business



What Can Students Do?

- Research how changing climate changed local practices and provide insights for future practices (Climate Literacy)
- Agriculture
 - Change in planting dates
 - Change in crop varieties
 - Change in growing season
 - How have management practices change?
- Non-Agriculture
 - How have urban water resources changed?
 - How have snow removal needs changed?
 - Budget
 - Environmental Impact (Road chemicals, Placing snow into rivers)
 - Energy usage
 - Changes due to climate change

Research Setting

- How long will the research take?
 - Within a school year?
 - Multiple years?
- Traditional
 - Science classes
 - AP classes
 - Science Clubs
- Non-traditional
 - Boy/Girl Scouts
 - FFA
 - 4H
 - Science Centers
 - Others groups/organizations



Research Partners

- Government scientist
- University scientists
- Private sector scientists
- Educational professionals
 - Schools
 - Community organizations
- Information outlets
 - Scientific organizations
 - Science Centers
 - Media



Research Results

- Scientific Journals
 - AMS BAMS
 - NWA
- Incorporated as part of a projects final report
- Science Fairs
- Science Center Displays
- Stories for local television and cable outlets

