Analysis of Drought Phenomenon in the Northeast Climate Region

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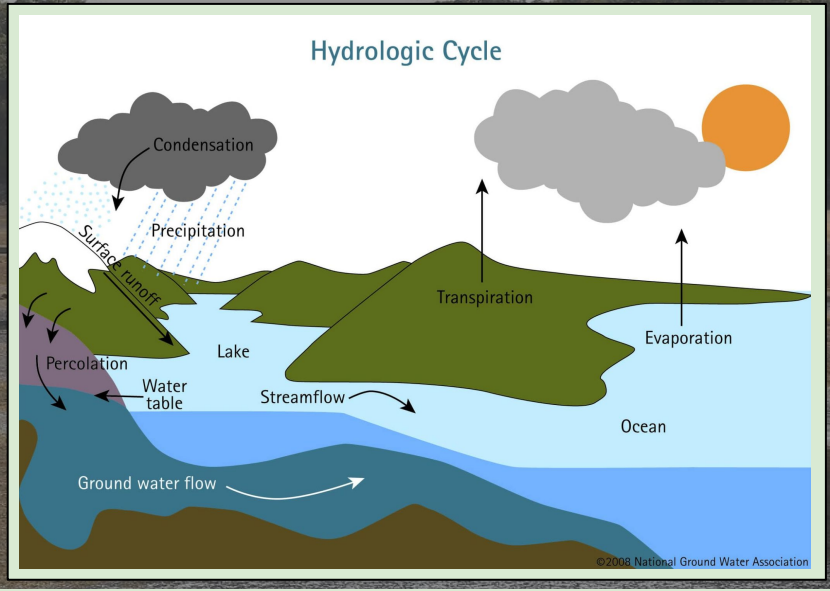
Mission

A temporal analysis of the frequency and sensitivity of drought reporting in the Northeast climate region. Analysis of pertinent data should highlight drought trends and variance in drought monitoring methodology.

Hydrological Drought

- a shortage of water compared to some 'normal' level
  - in streams or storages such as reservoirs, lakes, groundwater, and snowpacks
- slowly developing phenomenon that impacts many sectors of the society, the economy and the biosphere.



Drought on East Coast Raises Worries of Water Rationing

By Iver Peterson With Barbara Stewart

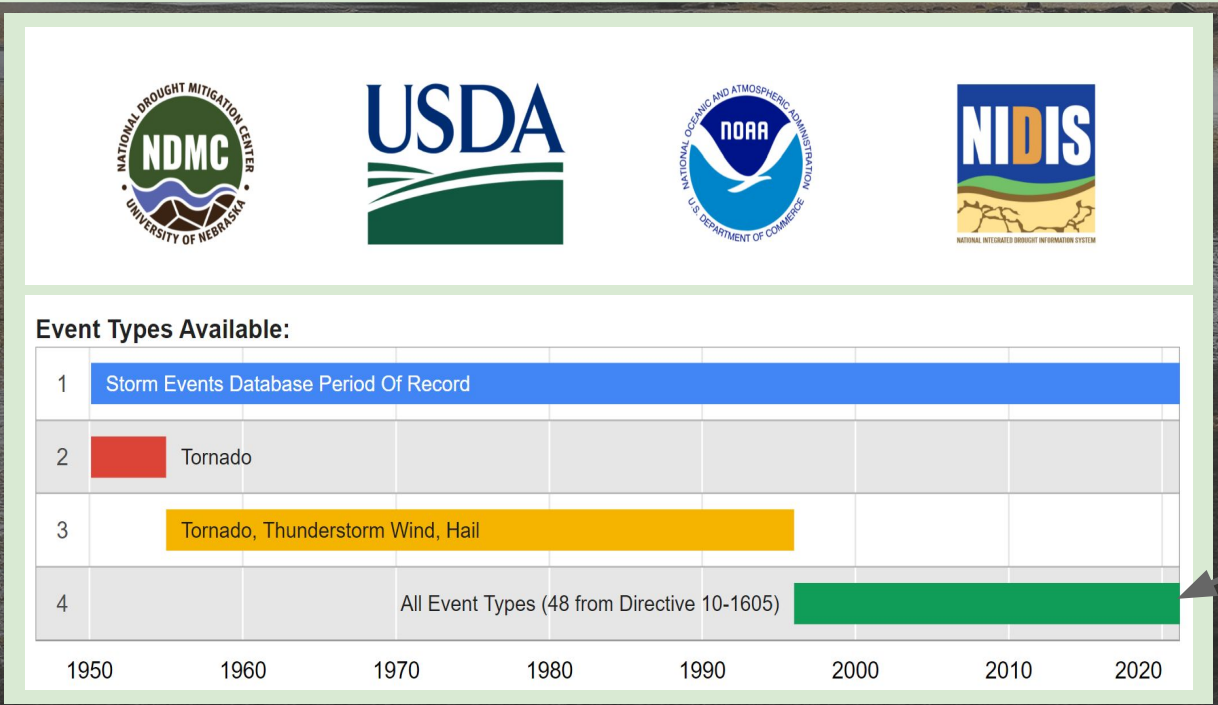
Feb. 20, 2002

Drought Reporting

- Temporal Data Source: United States Drought Monitor and NOAA Storm Events Database

USDM:

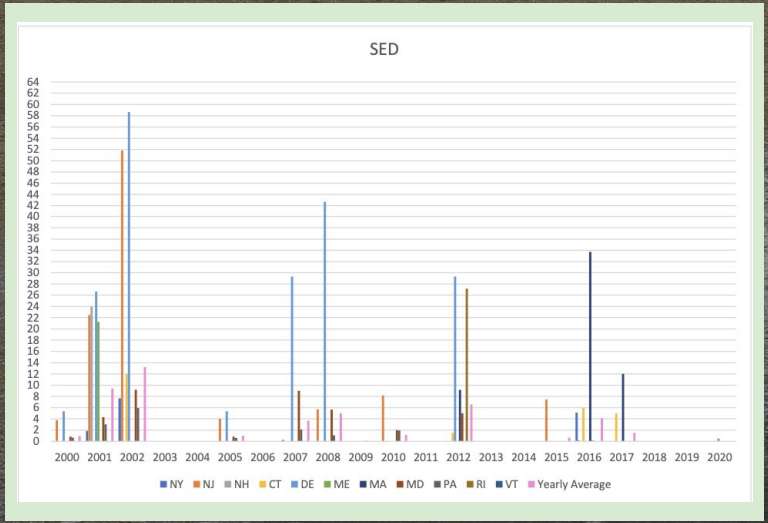
NOAA SED:

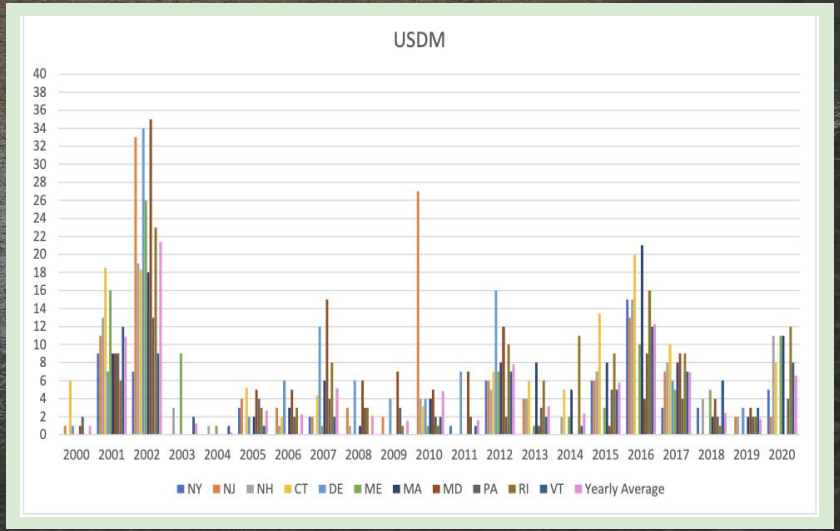


Drought event type added

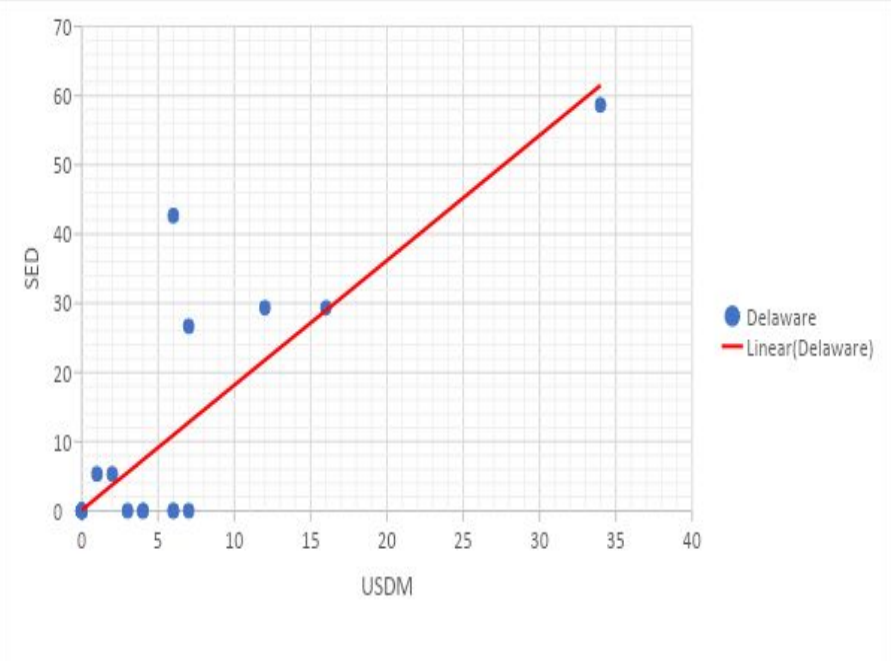
Current Research

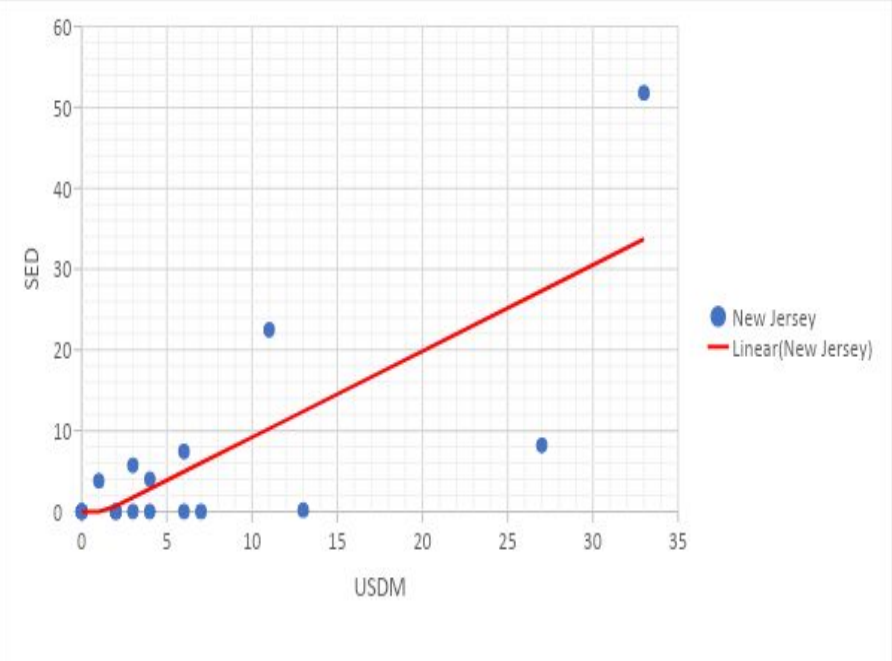
- Indexed and illustrated drought reporting data for Northeastern Climate Region on a yearly and monthly basis
- Compare reporting rates to media and news drought response
- Form hypothesis of drought reporting sensitivity and methodology



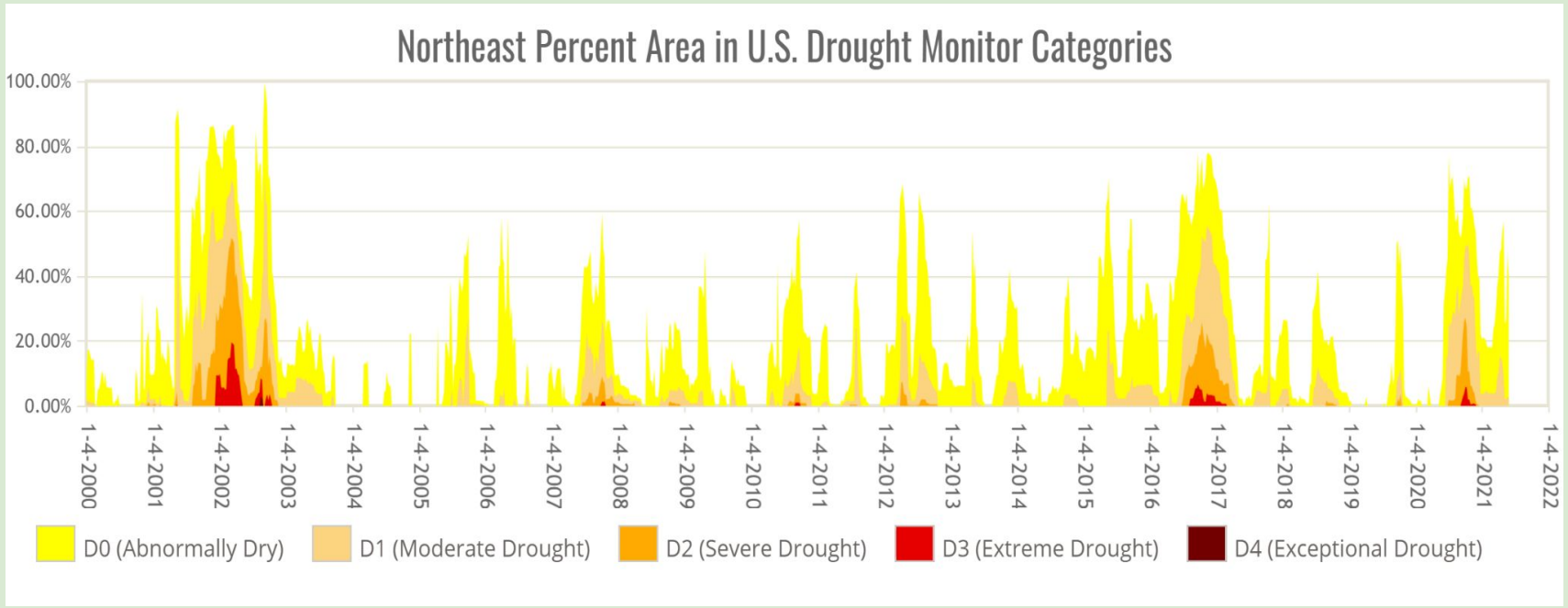


Linear Regression: SED vs. USDM
New Jersey & Delaware





Drought in Northeast USA



Research Objectives

- Monthly Analysis: 2000 to 2020
  - Examine effect of seasonality on drought reporting
  - Ilustrate/model indexed data
- Drought Impact Assessment
  - Economic indicators & health/social impact
- Build and fine tune Research oriented skills
  - Presentation/public speaking
  - Software/Coding implementation
  - Teamwork and collaboration

Conclusion

The knowledge and understanding we build will provide support for considering economic and social drought impacts. A combination of data analysis and anecdotal evidence from news and agency reports; provides a holistic approach.


THANK YOU