

Mitigating catastrophic risk from climate change through policy and technology

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Problem Statement

Will local disaster management planning and digital preservation be enough to address threats to collections from climate change? What advocacy has been done and has it been effective?

Research Methods

A general literature review was conducted to see if the issue has been addressed in scholarly articles. A further search was conducted to see if other archivists have addressed the problem by forming advocacy groups. Subsequent climate data was observed to make note of geographic areas within the U.S. with projected increases in extreme weather events and other climate risks that would adversely affect archives and data centers.

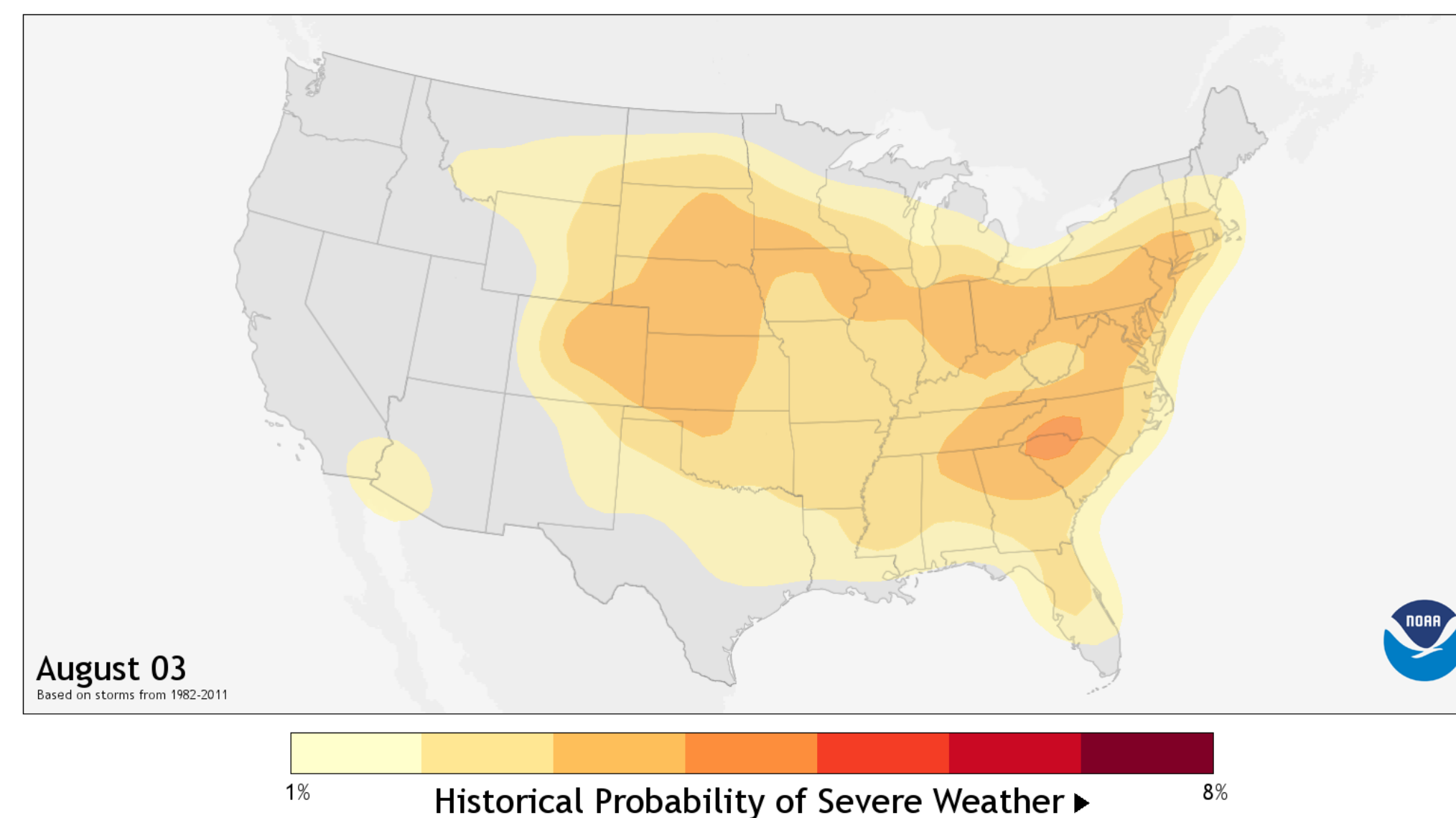
Further Research

- Comprehensive survey needed to document efforts of American archives to mitigate climate risk
- Continue to monitor existing groups (Project_ARCC) and conferences for updates on advocacy

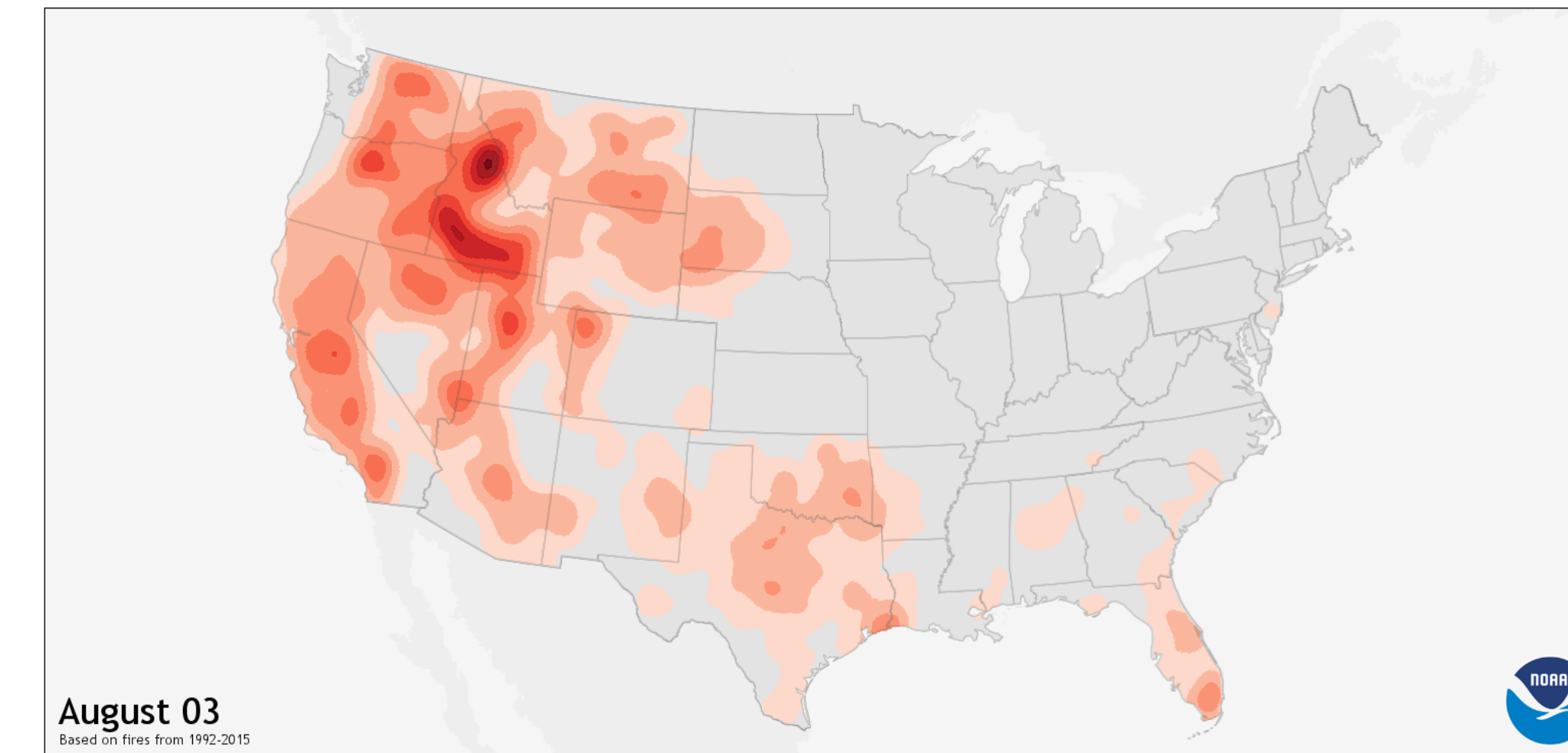
Introduction

Most institutions rely on their disaster management plans to address threats to collections by climate change. This localized focus ignores the larger national and global problem. Many institutions have been moving ahead with digital preservation programs to safeguard their assets, but increasingly little has been mentioned regarding traditional microform preservation.

Although SAA provides climate change resources for archivists and a handful of briefs, actions, and resolutions, there is no one group within the organization solely dedicated to climate change. Archivists have not banded as one united profession to advocate to stop climate change at a sustained, national level.



August 03
Based on Data from 1982-2011
1% Historical Probability of Severe Weather ▶ 8%



August 03
Based on Data from 1982-2015
2% Historical Probability of a Wildfire ≥ 100 acres 40%

Models showing the likelihood of extreme weather events on the day of the SAA Research Forum. Climate change increasingly poses greater risks to collections and data centers. (NOAA, Data Snapshots, <https://www.climate.gov/maps-data/data-snapshots>.)

Results & Findings

- Overreliance on storing AIPs with commercial data centers located in areas with extreme weather, better transparency needed
- Novel technological approaches for preservation receive little attention. Some solutions include:

Embedding human readable metadata onto microfilm to recreate digital objects in case of disaster

Using smart paint to shield electronics from potential nuclear disasters or EMP

- Need for centrally focused advocacy group specifically on stopping climate change (not disaster management)

Select References

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- Stenzer, A., and Burkhard F. "Using Microfilm for Long-Term Preservation of Digitally Annotated Archival Content." *PV 2011 Ensuring Long-Term Preservation and Adding Value to Scientific and Technical Data*, 2011, Toulouse, France.