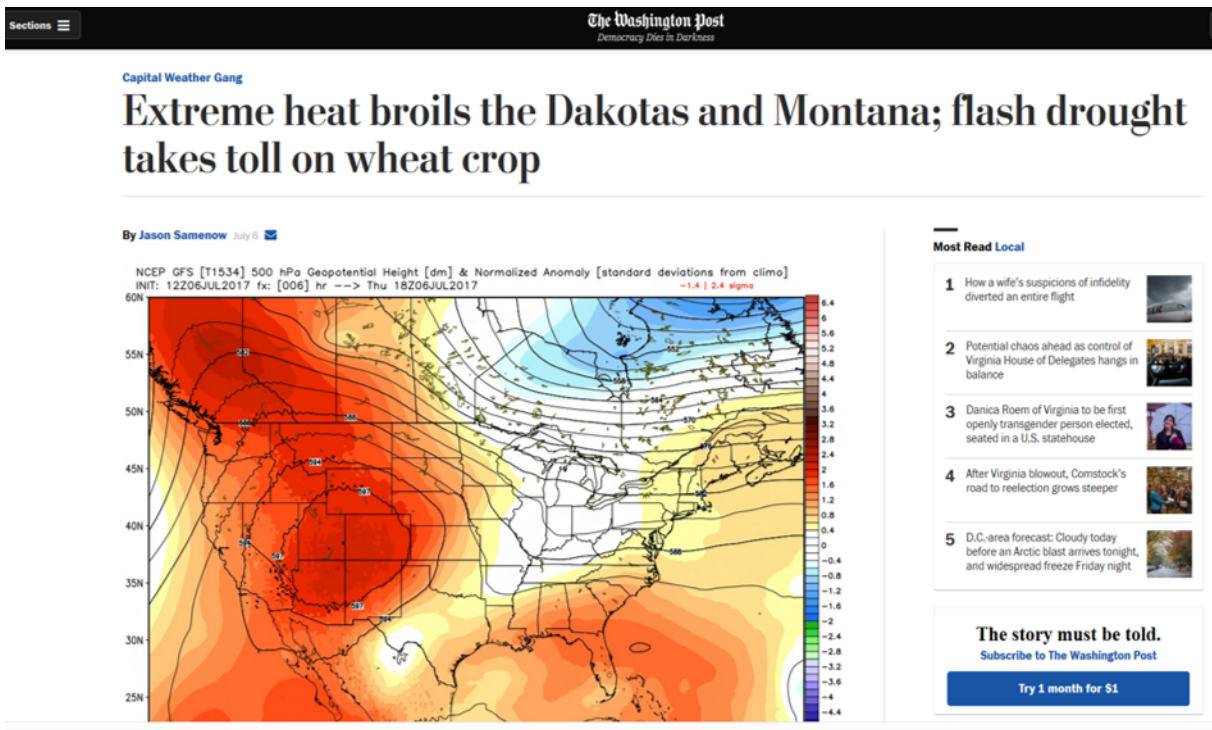


Research Experience: Understanding Flash Drought

The Project

[Flash droughts](#) are rapidly intensifying droughts that develop over the course of a few days to weeks. They can have devastating consequences for agriculture and water resources.

Ongoing and future climate change, [will likely increase the risk of flash drought](#).



The Washington Post, 2017-07-06

Figure 1: Flash Drought Coverate, Washington Post 2017-07-06

The reason for the rapid drought development during flash drought is poorly understood, but we think [that feedbacks between the land-surface and atmosphere](#) are at least partially to blame.

The National Science Foundation has recently funded a [research project](#) in collaboration with the University of Wisconsin-Madison to help uncovering the role of land-atmosphere feedbacks on drought development and intensification; **and you can be part of this research!**

What You Will Need

- JMU Student at Sophomore or Junior level
- Interest in Climate & Climate Impacts
- Interested in hands-on data work

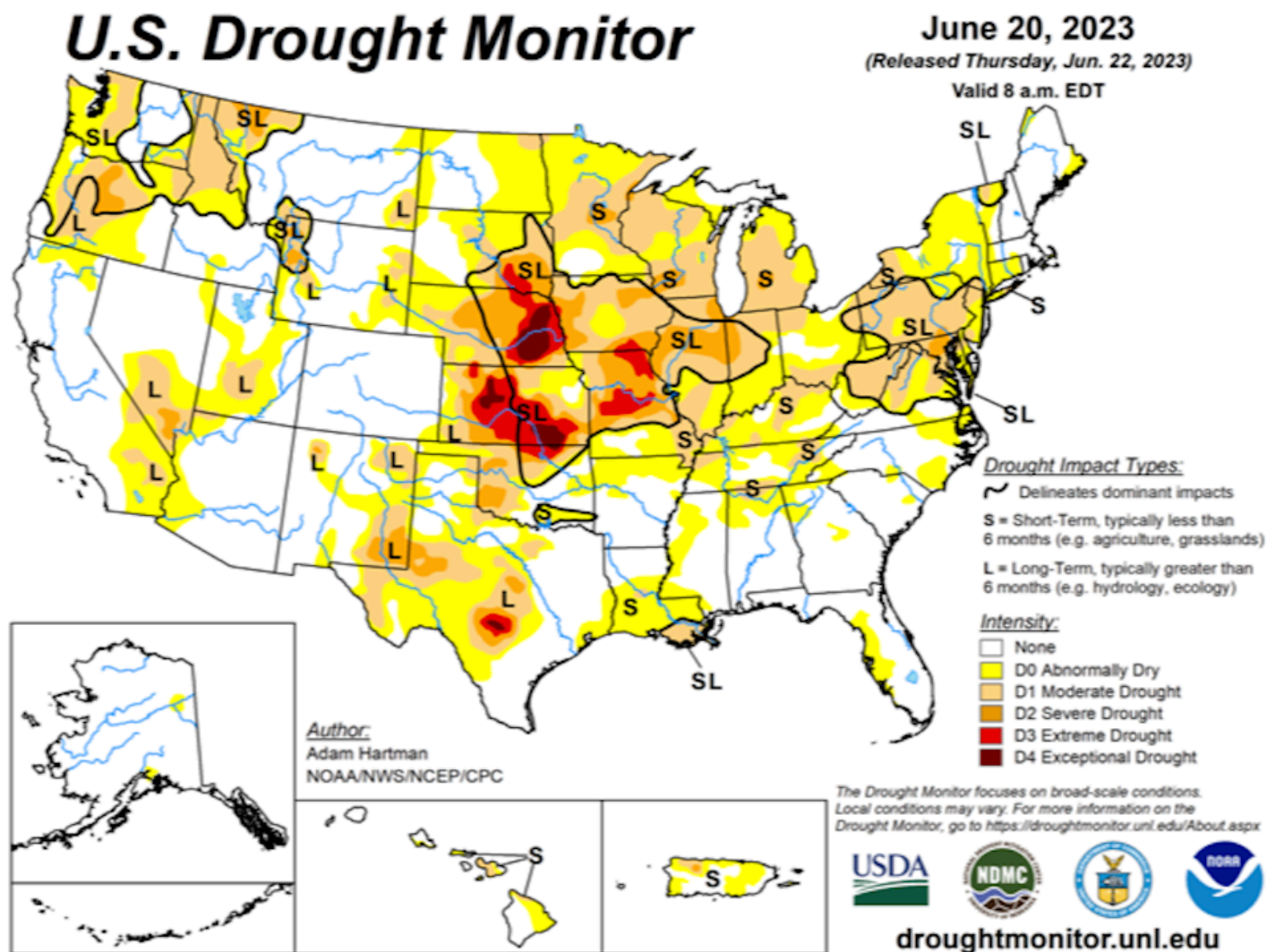


Figure 2: A developing flash drought during the summer of 2023 that affected the Mid-West agricultural belt

- Some experience in Python Programming and Statistics demonstrated through relevant course work (e.g. *ISAT 251 & 252*) or other means.
- Time to commit at least 5 hours per week during the Spring 2024 Semester with opportunity to continue at least next Fall.
 - The project is funded for 2 years.

What You Will Get Out of This

- Contribute to a National Science Foundation funded research project, that aims to better understand this important climate impact.
- Learn about working with climate data
- Opportunity to develop and showcase your research skills
- Pay: \$15/hour

Contact

Contact Dr. Tobias Gerken (gerkentx@jmu.edu) for additional details and how to apply.