## <u>Pre-AP World History Source Exploration G.1-C: Synthesizing Data to See Patterns in Maps</u>

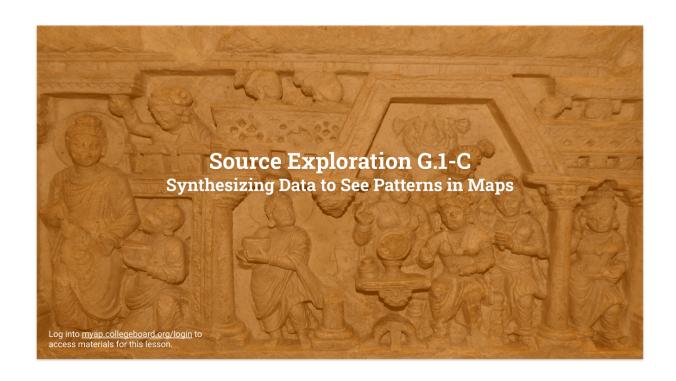
**Background:** Students can best understand geography's potential to solve problems when they experience powerful, relevant examples. These maps all illustrate imaginative uses of GIS and design to illuminate current challenges. The maps also demonstrate choices about how to convey information, and noticing those choices can spur discussion about the effectiveness of various representation methods, such as choropleth, dot density, and proportional symbol maps.

**Source Exploration G.1-C Recording Observations-Instructions:** As you progress through the sources below, you will see three images, titled Source 12, 13, and 14. Each source should be examined one at a time so that you can make observations or impressions.

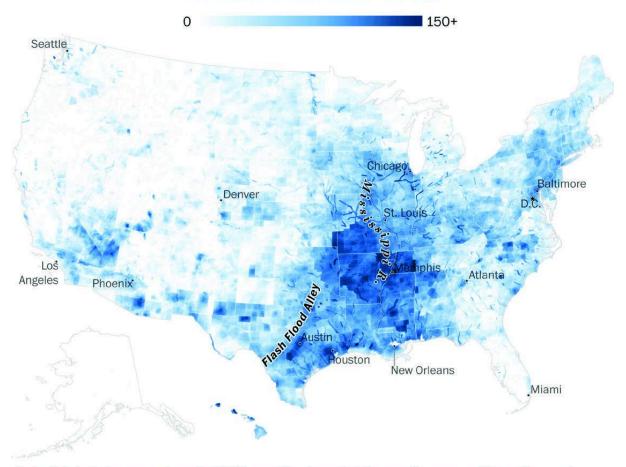
To help structure your observation, consider:

- What do you see, think, and wonder?
- What details stand out to you in this map?

You DO NOT have to write your observations for each source, as you have in the past, just observe them. After you complete your observations for each source, you will have to complete the four "Observe and Analyze" questions on your own paper. Please put G1.C Source Observation in your heading.



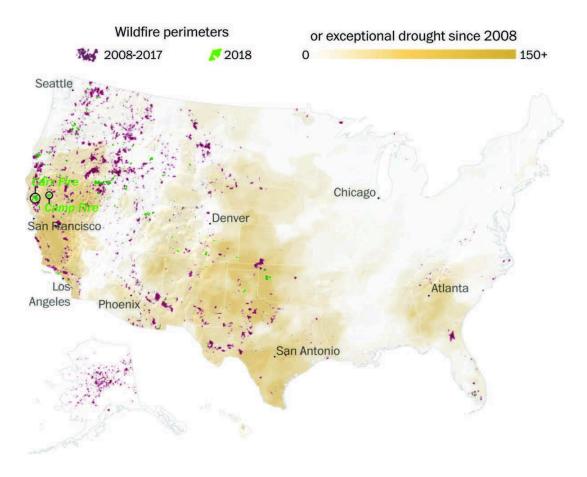
# National Weather Service warnings for floods and flash floods since 2008



Note: Only includes areas where the NWS issued flood warnings for specific areas, not the entire county.

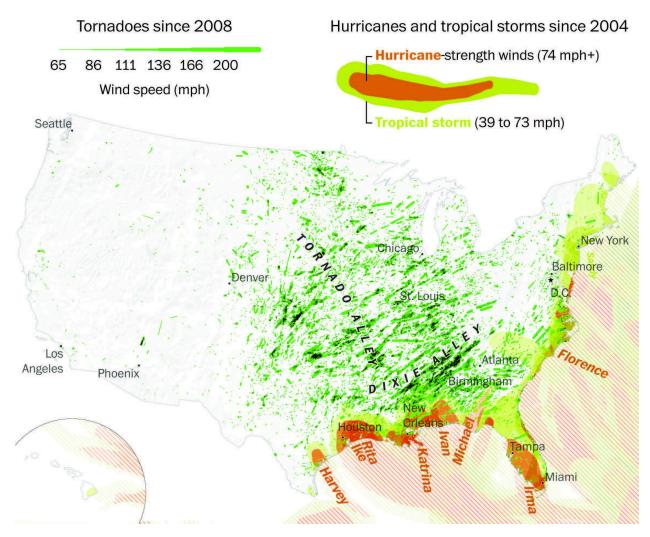
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### **Source 12**



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#### Source 13



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#### Source 14

#### **Observe and Analyze Questions**

1.	Examine sources 12 and	13.	How	does	each	map	use c	olor t	0
	convey information?								

2. How does the way in which source 14 illustrates tornado intensity differ from the ways in which sources 12 and 13 illustrate floods and droughts? Why might the creator of source 14 have made this choice?

3. How can these maps help to inform future decisions?

4. This source exploration demonstrates how geographic information systems (GIS) are used to confront real world issues. Click this link to view other real world applications of GIS: <u>1000 GIS Applications and</u> <u>Uses</u>. Then provide **TWO** examples of how GIS could be used to help specific issues within the Memphis region.