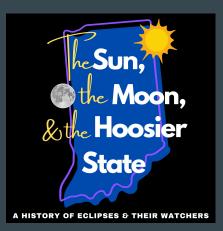
## **Connecting the Eclipse to Local & Community History**





Sarah J. Reynolds Dept. of Physics & Earth-Space Science University of Indianapolis

The Sun, The Moon, and the Hoosier State podcast - First Episode Launches June 13! at <u>www.hoosiereclipse.com</u> Contact: <u>reynoldssj@uindy.edu</u>

Connecting solar eclipses and other astronomical events to community history can create opportunities for engaging new audiences and for integrating science with other educational domains. Such history can also illustrate how the science of astronomy impacts and interacts with many people's lives beyond the scientific realm.

We are working on this in developing a podcast that explore the eclipse-related history of our state (Indiana) and an open, interdisciplinary campus+community course. This poster features practical ideas on how to find historical connections for your local community and use them well.

Key Elements to Keep in Mind:

- Science has a rich, human history intertwined with the development of scientific ideas. The influences in this can be bidirectional (ideas impact people, people impact ideas).
- History can be multiscalar and we can move between scales to highlight personal, individual stories as well as larger developments.
- Interdisciplinary, integrated learning allows people from multiple backgrounds and interests to form meaningful connections across learning domains.
- As a touchstone event, eclipses can empower anticipatory learning before and reflective learning after the event itself. Educational opportunities also extend beyond just how eclipses themselves work to include broader learning on topics related to the Sun, the Moon, and the history of astronomy and space studies.

## **Strategies for Finding Historical Connections**

In looking for historical connections to our state and region, I have tried to cast a broad net since the history here is intended to provide openings for learning. This can include:

- Eclipses visible in the region and their impact
- People from or connected with the region that traveled to study or witness eclipses elsewhere
- Regional impacts of remote eclipses (newspaper accounts, broadcast media, etc.)
- Astronomers or others in the region that contributed to the study/exploration of the Sun or Moon
- Ongoing current "history-making" as people in the region plan and prepare for the upcoming eclipse.

Source categories that can be helpful for finding these connections include:

- Institutions: Universities, Observatories, Organizations
  - What scholars and researchers at nearby institutions might have observed local eclipses or have traveled (and maybe led groups) to observe remote ones?
  - Contact local university astronomy department and/or university historian for list of likely people
  - Look up through college/university archives
  - Also a wealth of college/university publications have been digitized on Google Books, Archive.org, or HathiTrust - find catalogs, yearbooks, etc., and search for "eclipse."
- Media: Newspapers, Magazines, Broadcast
  - Eclipses become an interesting way to tell the history of our technological development as well, not just in research tech, but also in the ways that eclipses have been presented.
  - Search newspaper archives for local references and observation accounts (even sometimes commentary on eclipses not observed locally).
  - Newspapers.com often is accessible for free through local library or genealogical society. Library of Congress's Chronicling America is free online at <u>https://chroniclingamerica.loc.gov/</u>. Some other free sources through state or local history sites, others may require pay or library access.
- Archives: Journals and Diaries
  - With a timeline of known eclipses in the region, start looking at what local archives might have journals and diaries from that period to check for references.
  - Availability of this can depend quite a bit on time period.
- People & Organizations: Clubs, Local Historians & Historical Societies, Librarians, Museum Educators, Etc.
  - Don't be afraid to ask what connections people know or have heard about
  - An additional advantage is that looking for historical connections becomes a good way to connect with a broader range of local cultural institutions about their plans for the upcoming eclipse.

## **Practicing Good Science & Good History**

In working on this project, we are committed to practicing good science AND good history, respecting scholarly methods and best knowledge in both fields.

When working with history related to science, be history-wise! Just like we want to include science that is accurate, appropriate, and not misleading, we want to include history that is well-founded, thoughtful, and careful with its claims.

• Like science, historical claims require evidence and careful analysis of that evidence. We look for sources, particularly in their original/primary form, and consider them within their appropriate context.

Be cautious with claims in secondary sources that you can't find an original primary source confirming.

• Like science, in history we work towards objective evaluation of sources by making sure we understand and respect the context of historical sources and historical claims. We also recognize that we bring our own sociohistorical perspective into our interpretations and work to be sure that this does not distort a fair view of history.

In history of science, be especially cautious with assumptions that earlier science was poorly done, misinformed, or "unreasonable" due to its difference from what we know now. Earlier science has to be understood within the context of its time, as it may have represented a fair and well-supported interpretation of the best theory and evidence they had at the time. If you don't know why they thought something, you might be missing an understanding of what they knew.

• Watch for "hidden histories" that may have been excluded previously. Like science, history is transforming to greater awareness and recognition of peoples and perspectives that were historically excluded. Some older histories, even when well-intentioned, may also require updating in how they recount certain aspects of history. Rediscovering and retelling histories that reflect diverse groups' engagement in and with science is important in broadening the connections a public history audience makes in recognizing themselves in the community you are describing.

Reaching out to community members or history experts can be helpful for finding new resources in these areas and making sure that you are representing those communities' appropriately.