

The NASA Eclipse Explorer

2023 & 2024 Annular Solar Eclipse Edition

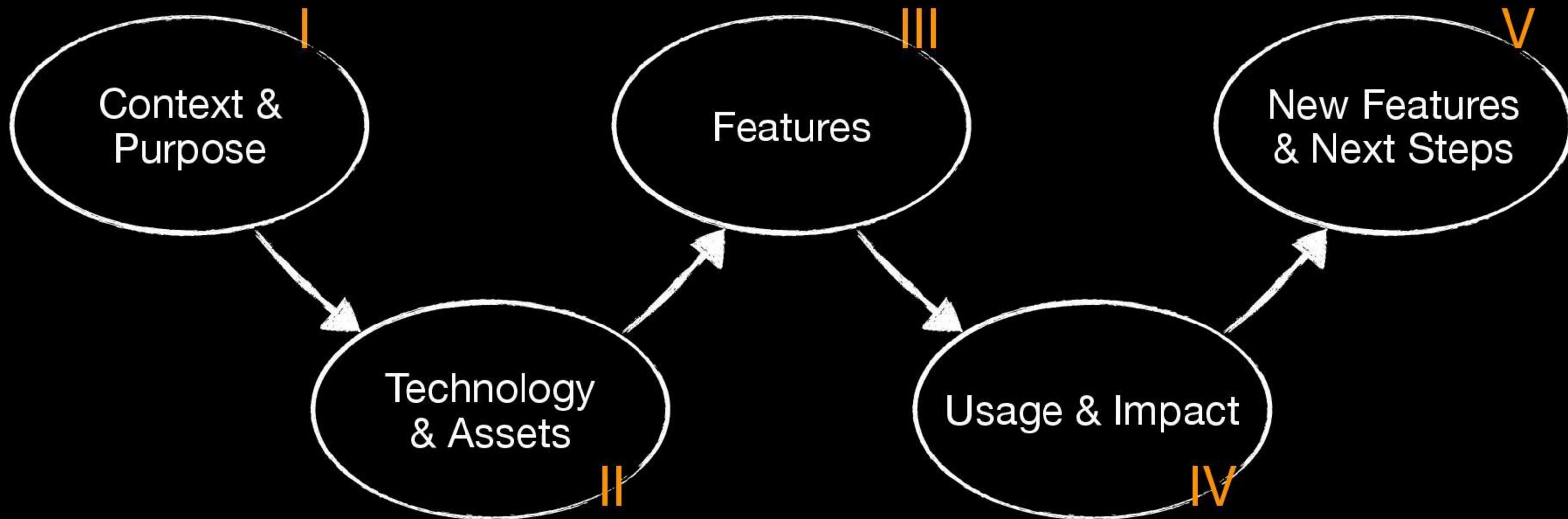
<https://go.nasa.gov/eclipseexplorer>

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Ernie Wright
Michala Garrison

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Roadmap



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The story begins in 2017, the **NASA Broadcast Team** needed an asset to cut to so they could show the **current location of the eclipse**.



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Then, in 2023, the SVS produced a **popular static map** and we received lots of requests for **minor variations**.



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As the 2023 annular eclipse approached, we asked ourselves: could we accomplish two goals at once?



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The basemap +

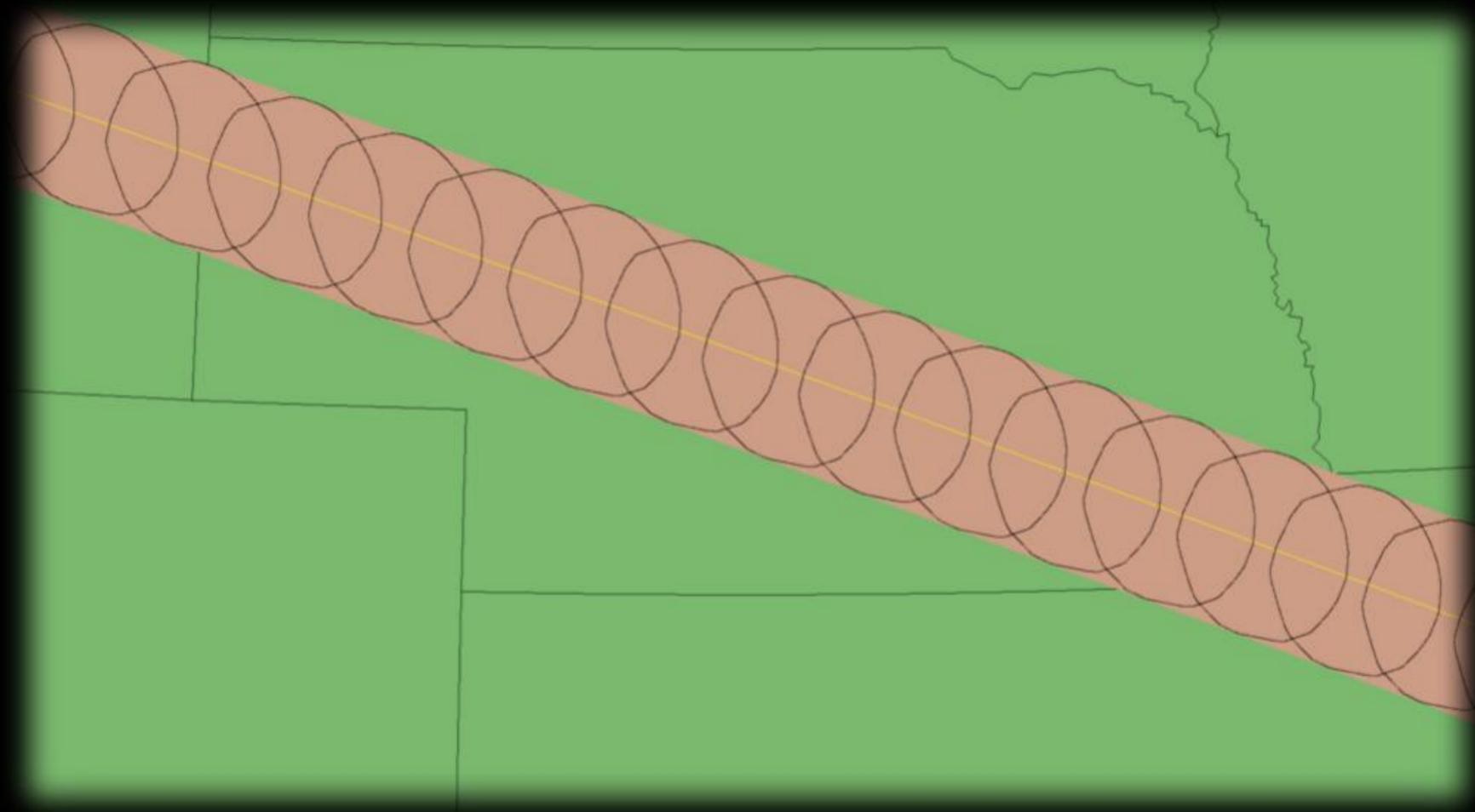
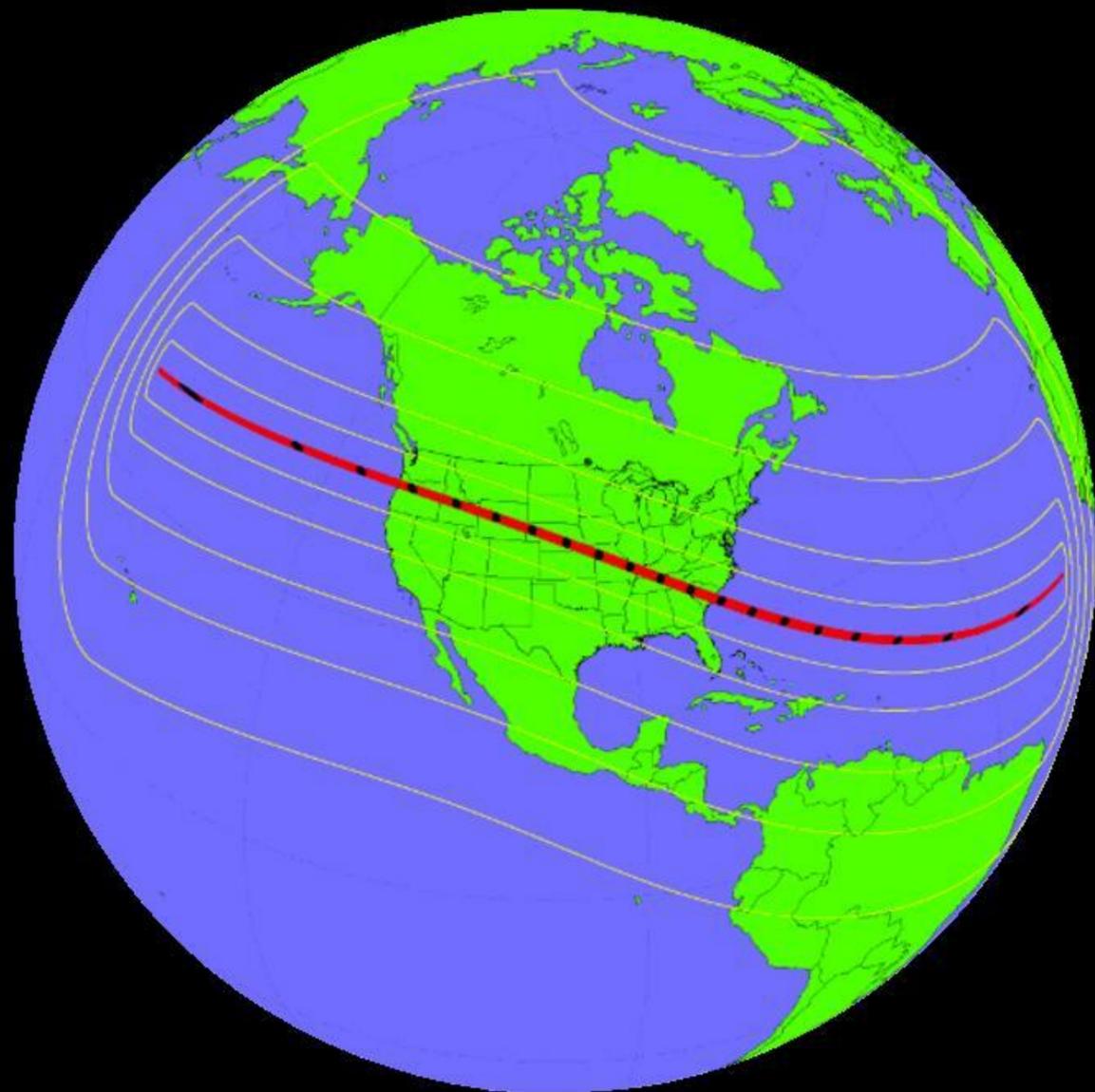


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The basemap + data layers



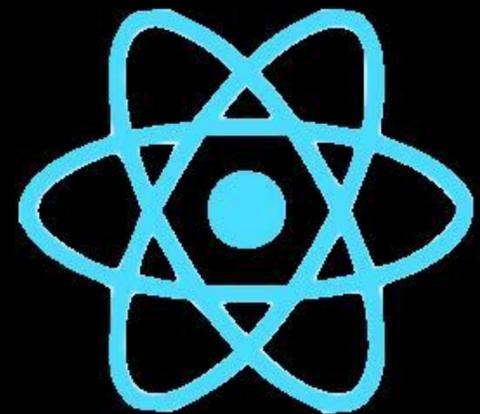
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The **basemap** + **data layers** + interactive **web technologies**

interaction with



React

mapping with

Leaflet



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The **basemap + data layers + interactive web technologies** =
a tool that **empowers users** and meets the needs of the **NASA broadcast team**



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The Eclipse Explorer can: **toggle different components** of the map.



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The Eclipse Explorer can: display the **position of the eclipse at different times.**

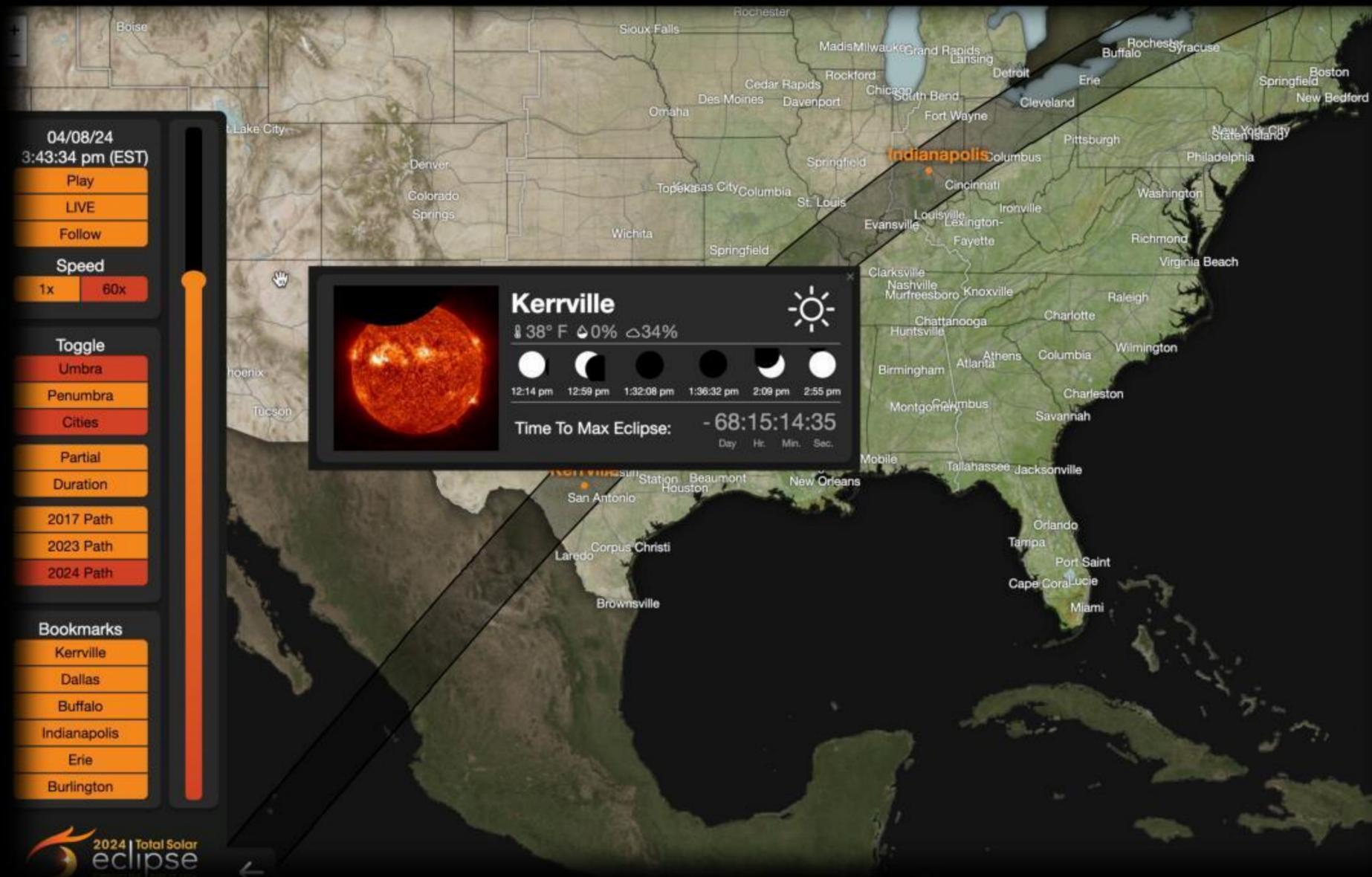


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The Eclipse Explorer can: **simulate the view of the eclipse** from major cities.

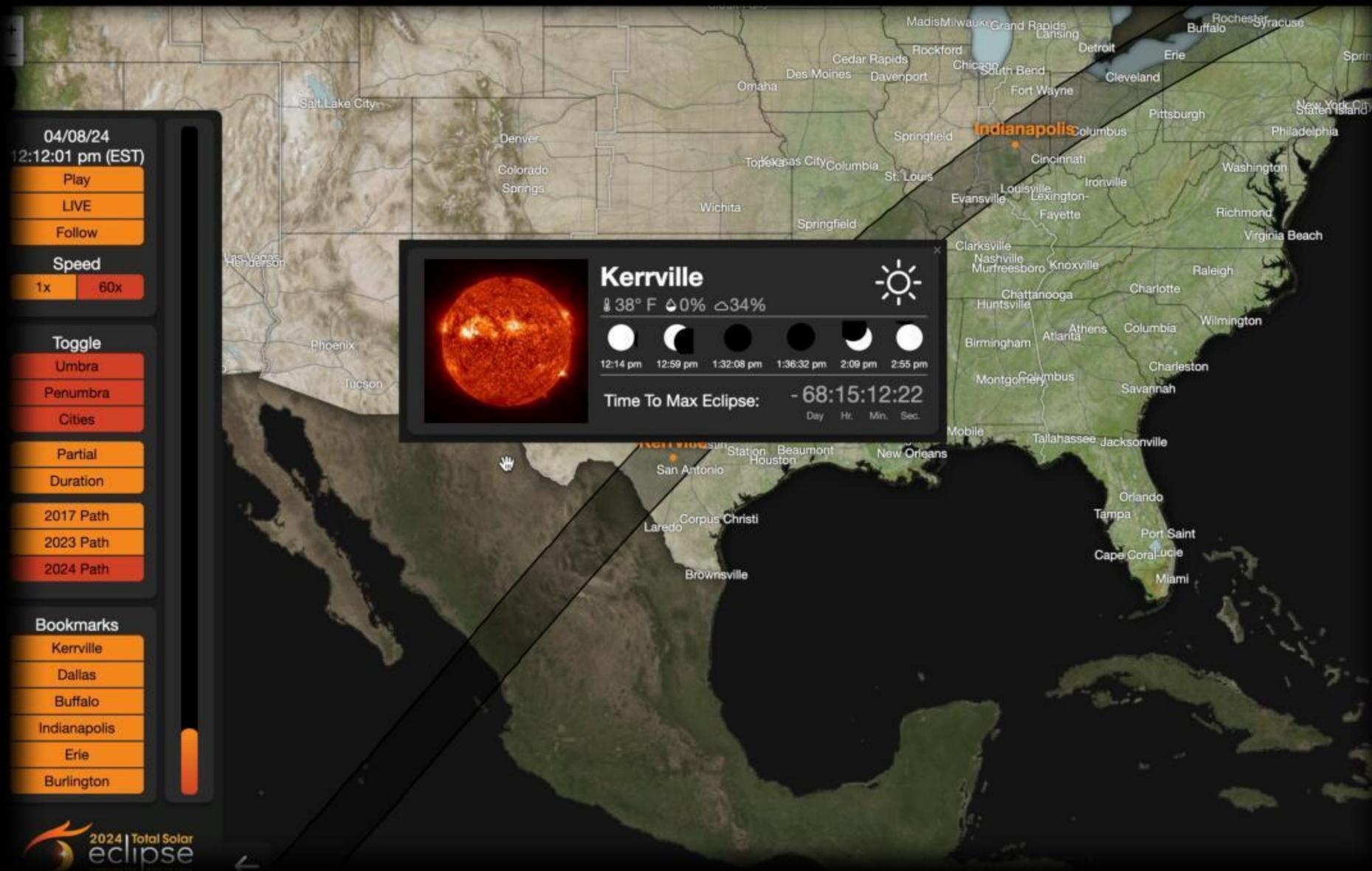


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The Eclipse Explorer can: **jump to specific phases** of the eclipse.

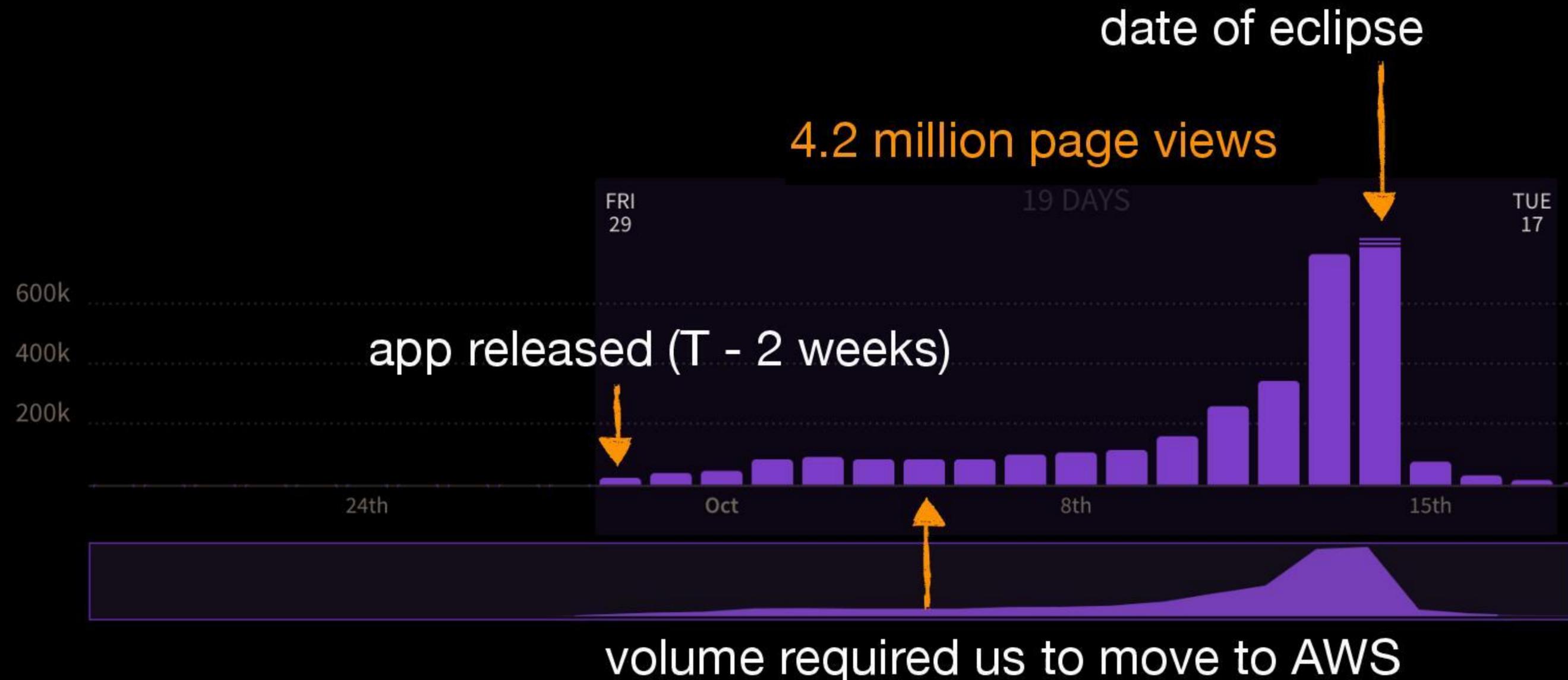


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Interest built up **exponentially** as we approached the **date of the eclipse**.



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On the day of the eclipse, the app **enabled talking points** for the broadcast that **otherwise wouldn't have been possible.**



e.g. penumbral coverage at specific times

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Preparing for the **upcoming total solar eclipse on 04/08/24** and next steps for the **long term future** of the Eclipse Explorer.

- Allow users to **generate detail cards** based on:
 - zip code lookup
 - dropping a pin
- Add data for the **2017 eclipse** (and other historical North American solar eclipses)
- Lunar eclipses (?)

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