

DXR Data Visualization: Milestone 1

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Project: Visualize air currents on the Earth.

Platforms

- [Figma, design inspo & mapping the user experience](#)
- Github for Unity
- Unity

Project Breakdown

- Data interpolation, cleaning the data
 - Isaac
- Rendering effects of air flow
 - Roger
- VR integration, interaction
 - Alex

Schedule

2/18 - 2/20 – Research on modeling particle systems and modeling air flow
2/18 - 2/20 – gathering VR UI mockups and reading up on new UX studies
2/21 – Figma mockup of UI interactions and button assets
2/23 – Dataset sourced and cleaned
2/24 – first full functioning prototype
2/23 – UI screens created in the VR space, functionality no responsiveness
2/25 – Full responsiveness + partial integration of UI with the rest of the code
2/26 – full functioning app/sim
2/26 – 3/2 Integration and smoothing out bugs and features

Ideal Functionality

- Users can interact with the aircurrents
- Toggle different layers of data, add and subtract the visuals
- Air currents visualized on the Earth

Links/Articles for VR Interactions

<https://uxdesign.cc/how-to-design-virtual-reality-menus-that-do-not-suck-9c06eb1df865>

<https://studio.knightlab.com/results/exploring-data-visualization-in-vr/uncharted-territory-datavis-vr/>

Inspiration

<https://earth.nullschool.net/>

Feedback from meeting:

- Nick: What can you do to exploit the spatial component? The depth?
- Prof. Mahoney: show some volume! Use the layers of data
- Get some concept images together ASAP