

The Problem

- Astronomers often need to collect data or use collected data from surveys.
- It's difficult to visualise how surveys relate to each other and to astrophysical phenomena, and where in the sky they collect data from.
- Time and effort wasted on logistical work.

Our Solution

- Web-based app-tool for astronomers using HTML, CSS and JavaScript.
- Visualises the sky, astrophysical phenomena, survey footprints, how they all relate to each other and additional information about each.
- Uses Leaflet maps for easy user interaction

Take a Look!

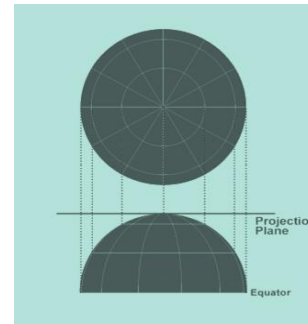
Visit the link:

https://nadafalou.github.io/surp2021_prez/

Orthographic Projection – The Chosen One

How it works

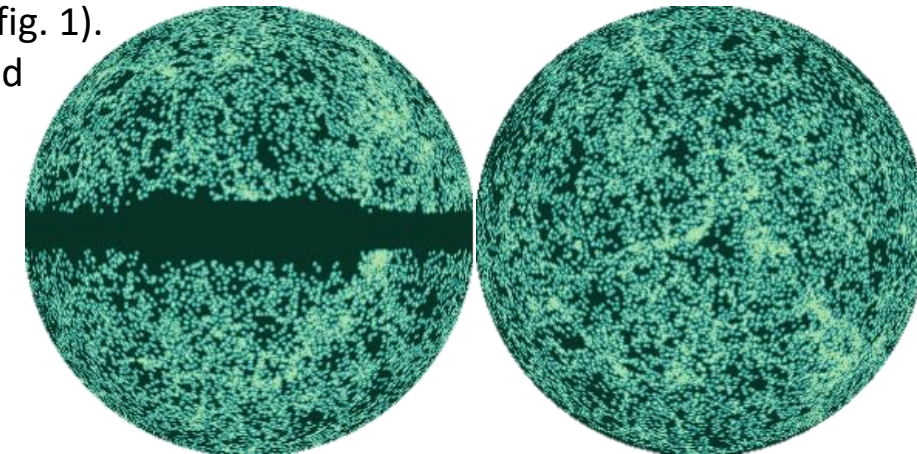
- Projects hemisphere by 'flattening' it (fig. 1).
- User chooses out of 3 pairs of projected hemisphere to best suit needs.



*Figure 1

Why we chose it

- No distortion around poles, unlike cartesian
- More intuitive than Mollweide.

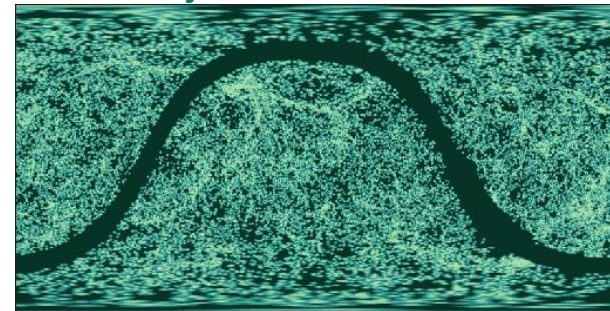


Prime meridian

Galactic North pole

Visualisation – Projection Options

Cartesian Projection

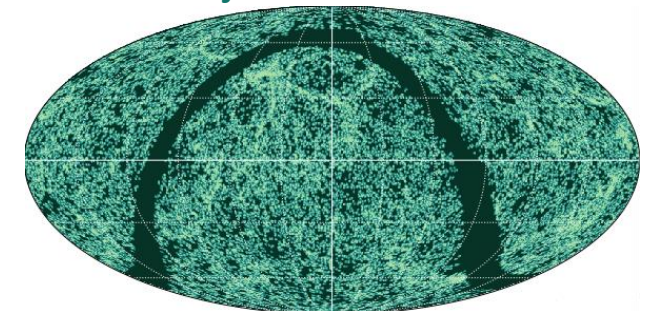


Pros: intuitive

Cons: distorts poles, which we care about.

Visualisation – Projection Options

Mollweide Projection



Pros: areas not distorted

Cons: not intuitive and discontinuous