**Abstract**
Selecting a map projection for a visualization is a challenging problem. We implement as an extension to D3 a recent paper on the topic, which produces a composite projection at different zoom levels and latitudes. The implementation ensures that a reasonable projection is chosen for any given reference frame, and that the transition between these projections is seamless, as demonstrated below:

**Methods**
The figure below illustrates the various projections used. Note that while some of the projections (e.g., Hammer to Lambert Azimuthal) are smooth, others (e.g., Lambert Azimuthal to Lambert Cylindrical) are an abrupt jump, which is nonetheless minimally noticeable in the viewport. Finally, note that all the projections transition to Mercator at the finest scale, allowing interfacing with tile-based services like Google Maps.

**Extensions**
The primary challenge beyond implementing the paper was integrating into D3 and ensuring the level of quality of other D3 components. In particular:
- Ensuring that wrapping and polar views work as expected.
- Handling extreme distortion.

**References**

Demo: http://jitouch.com/map/