

gkgf37

P1: 25

Overall nicely done. Camera interaction UI cumbersome. Would have been better to have a click and drag (trackball) interface.

P2: 40

Nice. Colour map for isolines should have been present/explained in the visualisation window.

P3: 14

Great analysis in the report. Quality of text could have been a bit more polished.

Overall an excellent project.

TOTAL: 79/100

General remarks:

These are some missed opportunities for several improvements that cost a few marks in problems 1 and 2 for lacking creativity. (These do not apply to every project of course)

++Regarding UI:

- vtkInteractorStyleTrackballCamera would have been a much better camera choice for such a project as it allows click and drag interaction with the globe.
- Enabling functionality to tilt the earth not just rotate it, would have allowed for even more stunning views, that are impossible to get only with rotations.
- Smoothing filters could have been used to avoid spikes due to warping while maintaining exaggerated visuals in problem 1.
- Shortcuts for specific camera angles or interesting features could have been used.

++Regarding isolines:

- Auto-adjustment of iso-tube thickness based on zoom level: very simple to implement based on a visual angle calculation to maintain a constant tube thickness.
- Desaturating the earth texture or other such texture manipulations would make isolines much more apparent. But manipulating the colour scales also works.
- Selectively rendering isolines for different height ranges.

++Regarding rendering:

- Lighting effects for aesthetics.
- Animated earth rotation to exploit parallax.
- Animated lighting to allow for occlusion and structure from motion cues to help the visual system judge depth.

++Regarding reporting:

--It is helpful in reports when referenced figures are in close proximity to the point where they are first referenced, i.e., when you are discussing figure 7, figure 7 must be nearby and not, after 2 more pages. Also, in general it is good practice to use hyperlinks inside reports, for example to take you directly to a figure (especially when figures are far away...).

--Also, it is not enough to link or reference a figure. In the figure caption it is advisable that there is a short discussion of what is been shown. Simply saying "on the left we see this and on the right we see that" is not very helpful in many cases, unless you provide some further insight, even if this insight is also provided in the text.