

## A07 – Around the world

The application allows the user to look at the earth from any angle. It is contained in `index.html`, and the procedure for computing and update the world matrix for the earth is contained in file `World.js`. If you try the current version of the application, you will see the controls works as expected only at the beginning: if the world is already rotated in some direction, then rotation around some axis produces unexpected results. This is a direct consequence of the fact that the application uses Euler angles to store the rotation of the Earth.

Fix this application so that rotations are always around the axis as seen on screen. In order to do this fixing, you need to use quaternions. You can write quaternion operations yourself, or use a library available on the web. For your convenience, the page already includes library `quaternion.js`:

<https://www.npmjs.com/package/quaternion>