Questions

1) What are the computational advantages of using logodds when generating our occupancy grid?

Logodds has the computational advantage of simplifying all multiplication operations involving the probabilities to logodds summations. Additionally, a small set of numbers can represent the entire probability range without crazy precision requirements.

2) Is the angle phi in our Spherical to Cartesian calculation the same as the polar angle in standard Spherical coordinates? Why?

No, the equipment defines phi as the angle of elevation, relative to the viewing axis plane. This definition differs from the angle defined by standard spherical coordinates.