Visualization of Turbulence with OpenGL,[*] A. Avril, *Princeton U.*; M.A. Makowski, M Umansky, *LLNL*; R. Kalling, D.P. Schissel, *GA* — Turbulence is an all-pervasive phenomenon in plasmas. The edge turbulence is of particular interest for the containment of plasmas during fusion processes. It is simulated with BOUT, a 4D (3 spatial + time coordinates) edge turbulence simulation code that is typical of modern codes in many ways. While predictive, the 4D outputs of these codes are difficult to visualize. In an effort to better understand the macroscopic trends of edge turbulence in toroidal plasmas, we are developing routines to render the BOUT output, using the OpenGL framework in C++. These routines will allow us to follow the evolution of isosurfaces through time, and we anticipate gaining insight into the non-linear dynamics of turbulence as a result. Additionally, these routines could potentially be used to visualize the output of other modeling codes.