3.4.4: Electromagnetic Waves

This simulation shows an oscillating electron in a sending antenna on the left. Because electrons have an electric field, an accelerating electron will create a wave in the electric field around it. Magnetic fields are created by moving charges so a magnetic wave is also formed by an accelerating charge. Only the y-component of the change in the electric field is shown (so an oscillation frequency of zero will show nothing, because there is only a constant electric field).