YCPA notes

2) Basic Simulation

b) A plane wave propagating through two mediums.

c) i) It did work. The plane wave propagated without hitting a second medium.

ii) The bc structure is used to set up boundaries of the movie plot.

iii) *bc{1}.s(1)* is setting up the source for the propagating wave.

iv) *bc{1}.xm/xp/ym/yp* are used to set up the kind of boundaries of the plot. 'a' allows the boundaries to absorb the propagating wave to imitate infinite propagation. 'e' allows the boundary to reflect the propagating wave.

3) Geometric Changes

b) The st parameter seems to be able to focus the plane wave. The original code had the wave fade along the top and bottom of the plot. Changing it to -0.05 focused the wave from its source.