Doppler shift grids, using the [cm={cosh(β),sinh(β),sinh(β),cosh(β),(coord)}] transfomation matrix in Tikz, where β is the boost of the frame.
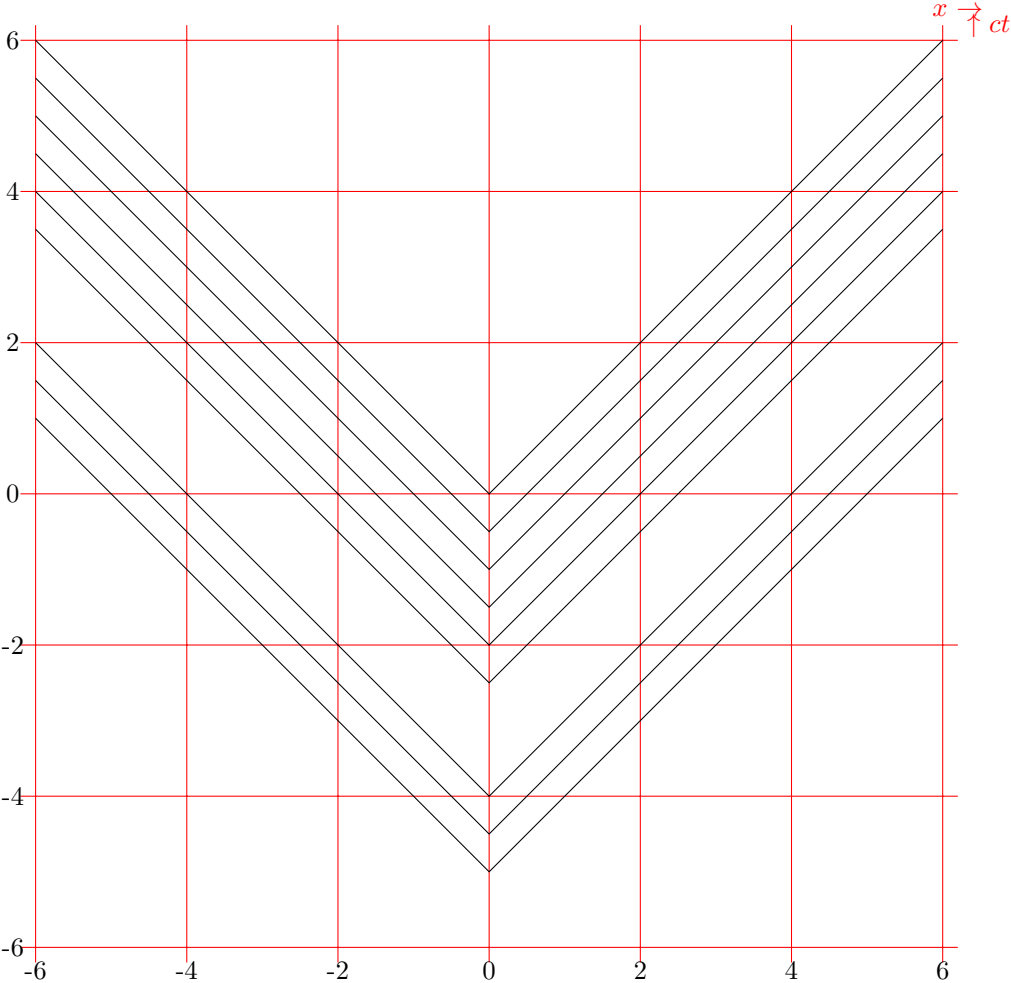

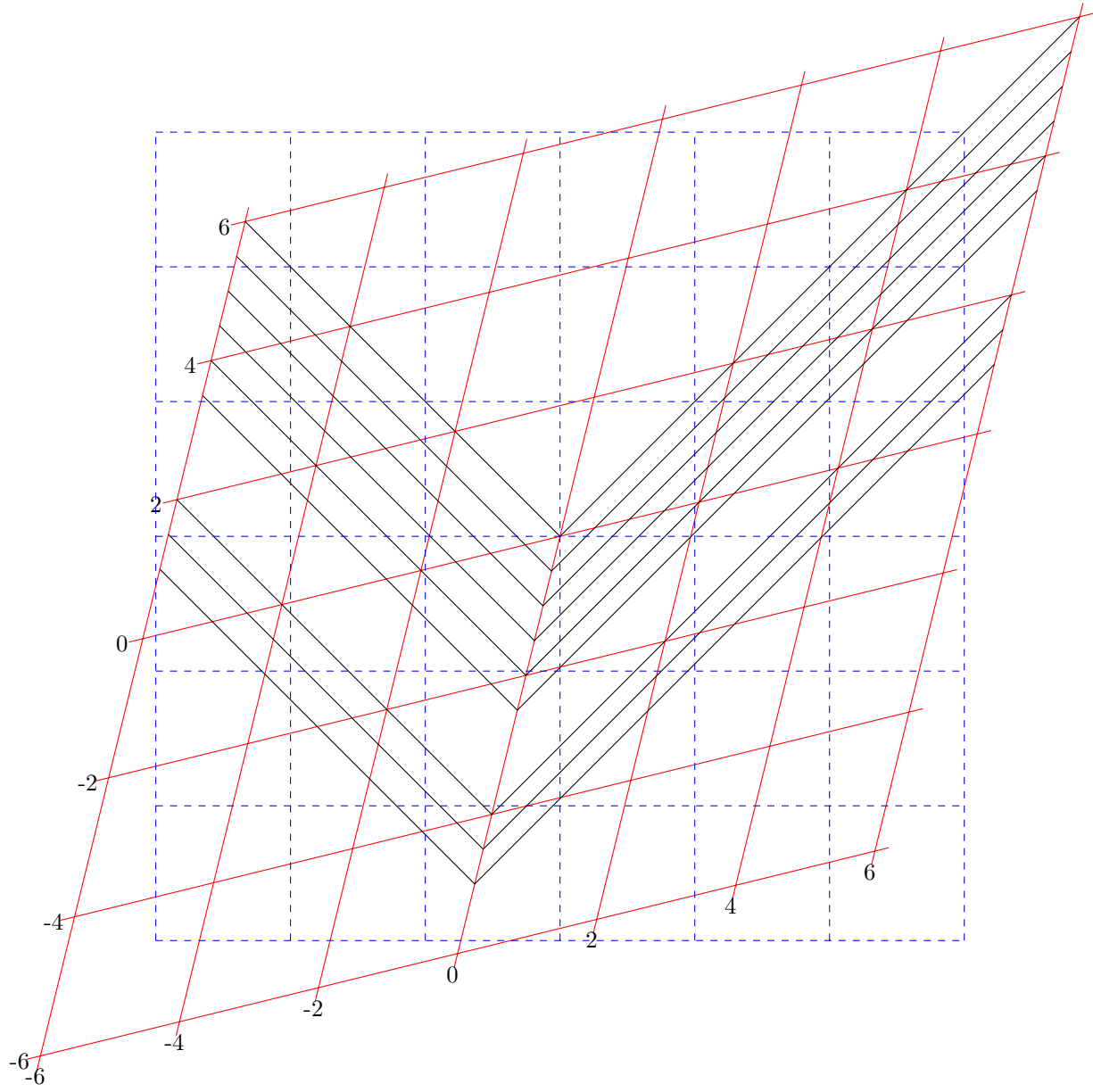Figure 1: Light pulse world lines from a source at rest in the reference frame.

Figure 2: Light pulse world lines from a source resting in a moving frame (solid), viewed from a different frame (dashed)
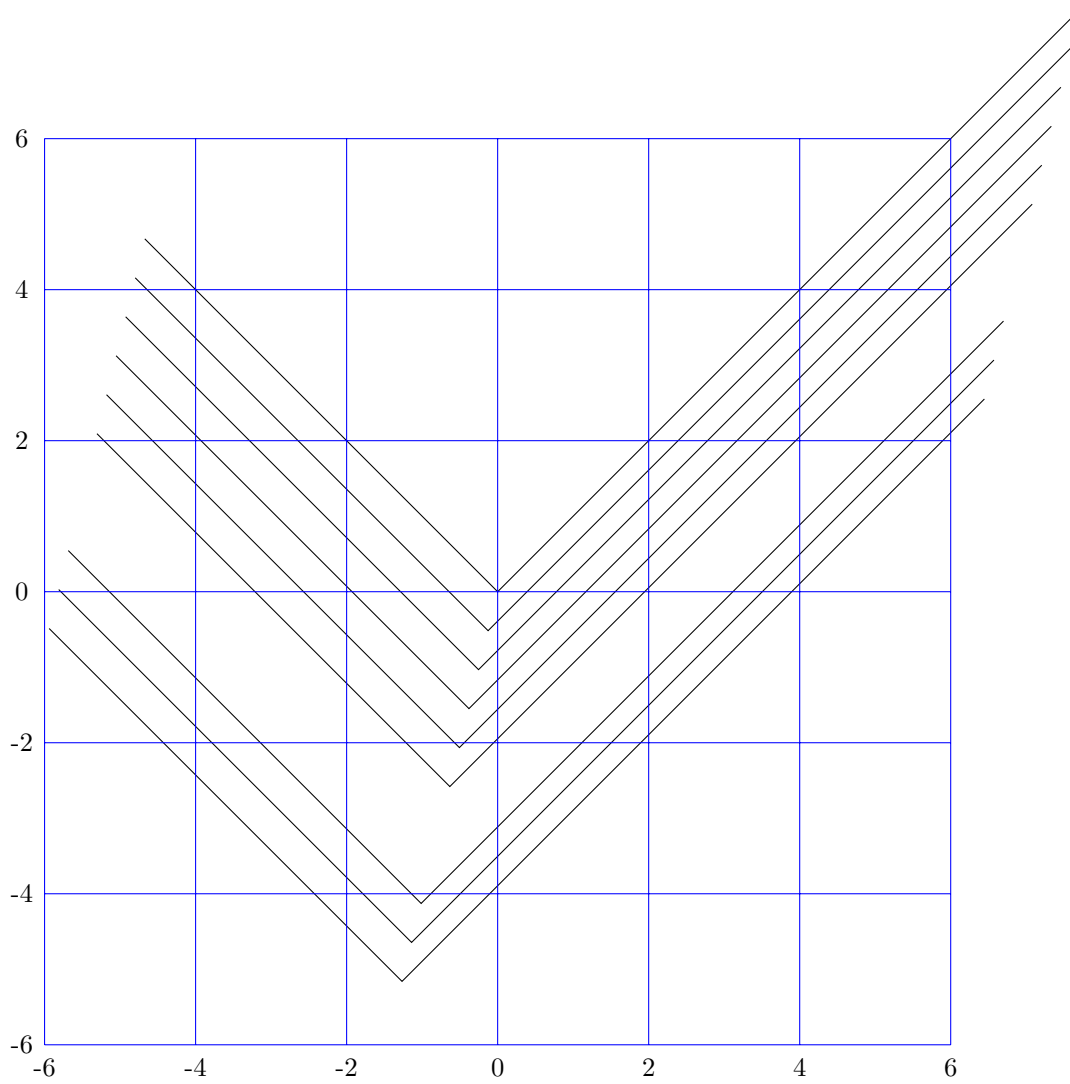
Figure 3: Light pulse world lines from a source moving with respect to an observer at at rest in the visible reference frame.