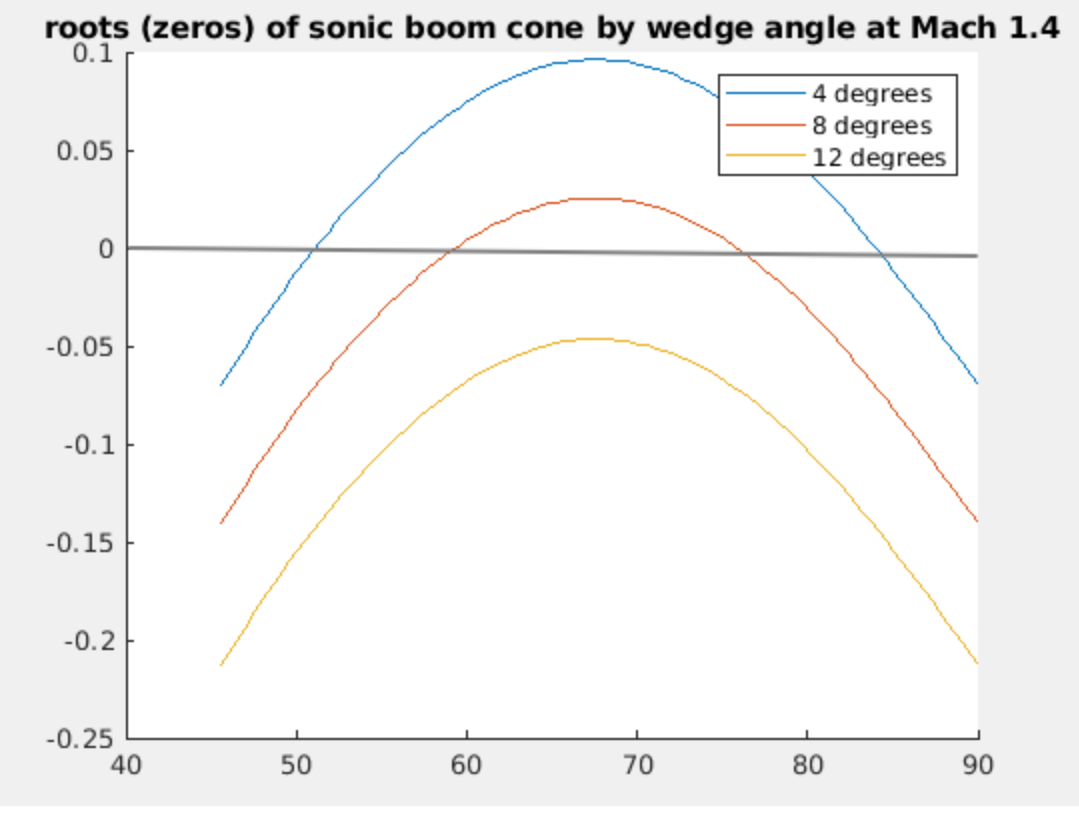

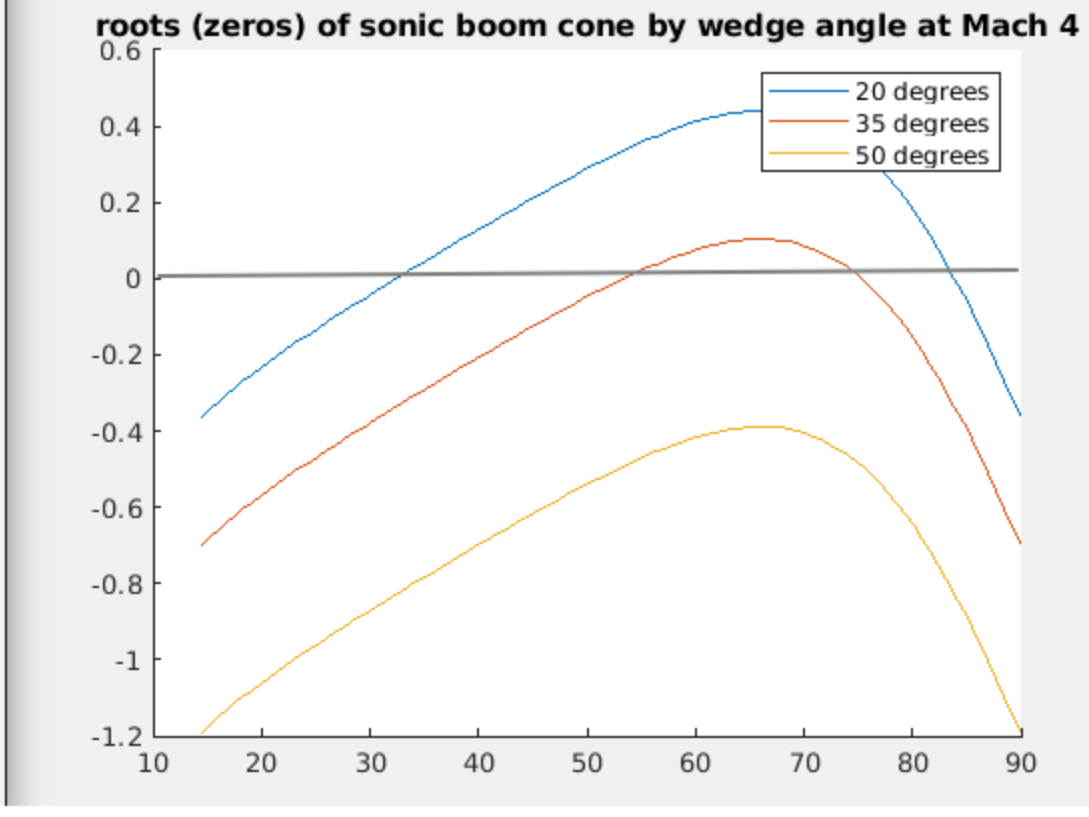

At θ_{max}, there is a difference in behavior of the sonic boom's cone. Namely if goes from being ahead of the "nose" of the wedge to behind it. It's attached to the nose precisely at θ_{max} and that's where we observe this bifurcation. Graphically we can this occurs around:

At Mach 1.4: $8° < \theta < 12°$. Around $\theta = 8.5°$
At Mach 4: $35° < \theta < 50°$. Around $\theta = 37°$