iv) Most of the sunlight entering raindrops leaves the other side without internal reflection. Only a small fraction is reflected to form the primary, secondary and higher order rainbows. These rainbow forming rays are usually very faint. [1]

Now, let’s analyze the diagram of the zero order rainbows.

From the picture, we know that ∠OAC=∠OBC=α-β. Then D(α)= ∠OAC+∠OBC=2(α-β). D’(α)=2>0, α∈(0,π/2). That means D(α) does not have a minimum and the outgoing ray deviation increases **continuously** . There is **no turning point** or angle of minimum deviation at each side of which the deflection changes in the same direction. This is why the zero order rays do not produce a rainbow. [1]

Although refraction disperses the colors, they overlap again outside the drop. The glow is the same color as the incident sunlight and we can’t see color bands in the glory. [1]

The brightness of the zero order glow is one of the causes of the difficulty in ever seeing 3rd and 4th order rainbows outdoors. [1]