Hi Simone,

your code looks ok for me.

Since you are considering Lambdas, which have a quite large lifetime a fly quite long, I wouldn't expect a vertex resolution as good as for short living particles like D's decaying within the MVD.

It would be helpful to take a look to the vertex distance from the IP and study the resolution depending on that. You could also fit the mean lifetime of your Lambda candidates and compare it to the PDG value.

Best regards,
Klaus