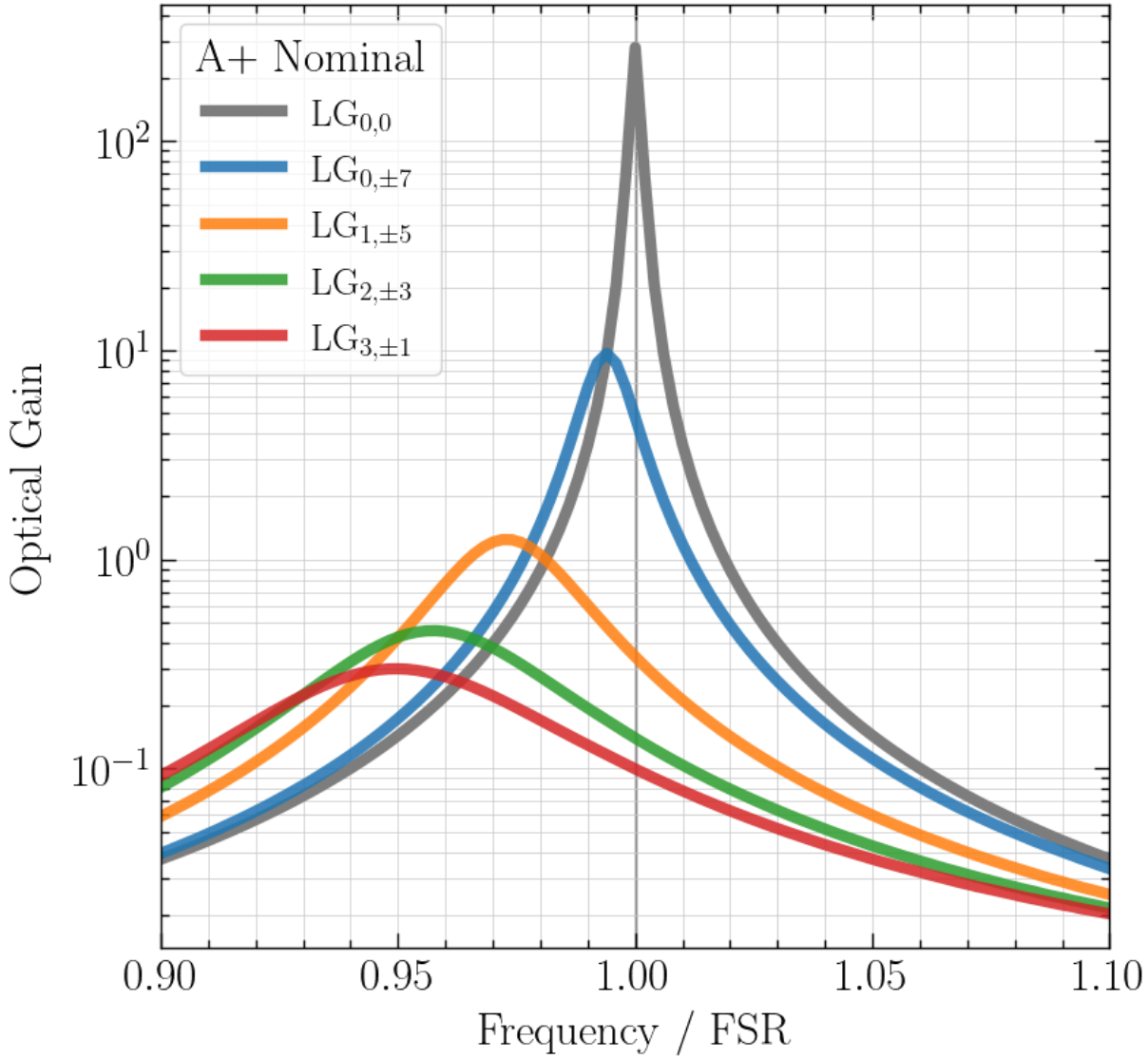
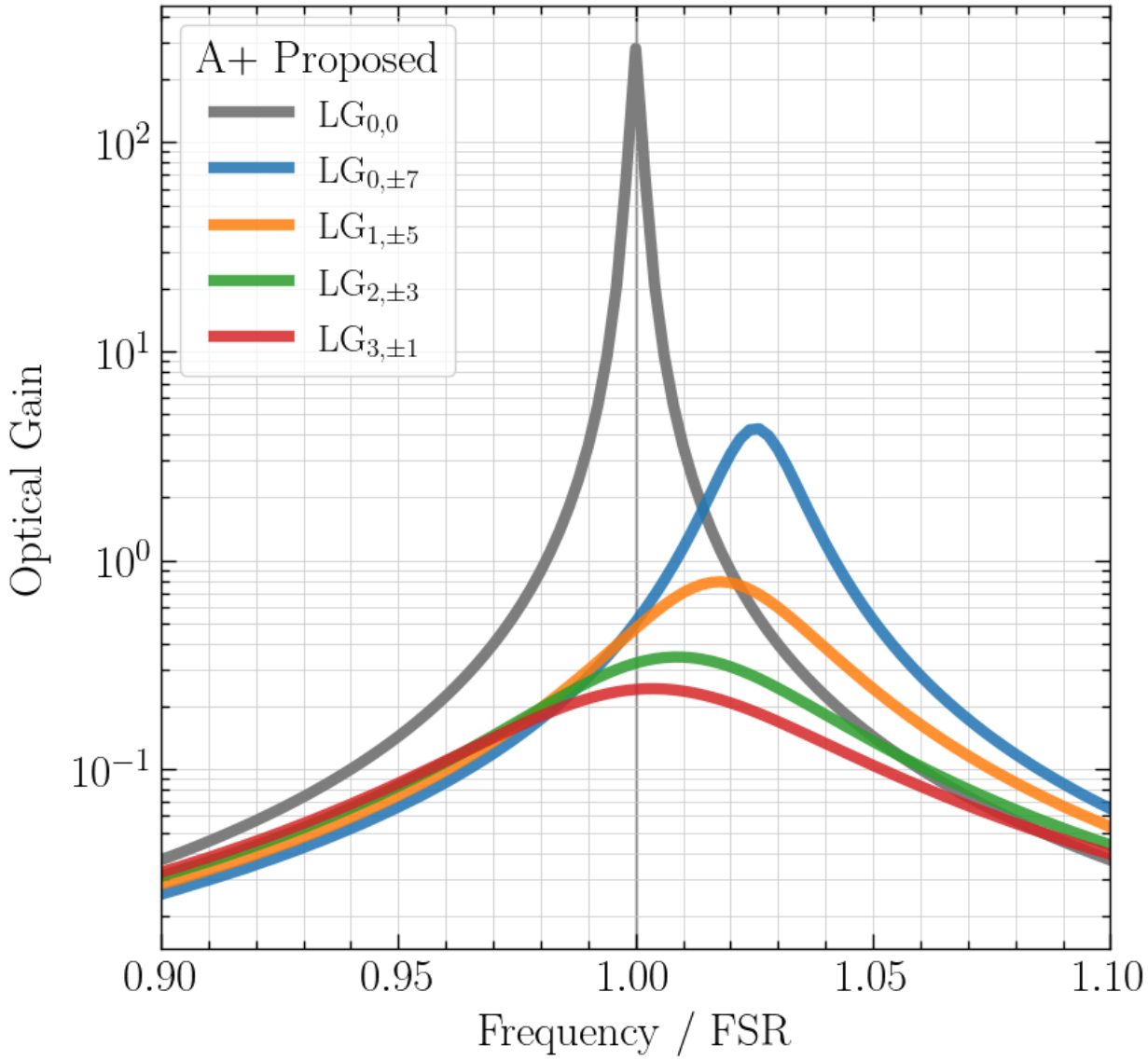
Resulting graphs are different from the one in the previous study even with the same codes, investigation might be needed before moving on to future cavity scans as it could make all cavity scans done inaccurate.

O5 nominal low absorption 400kW:

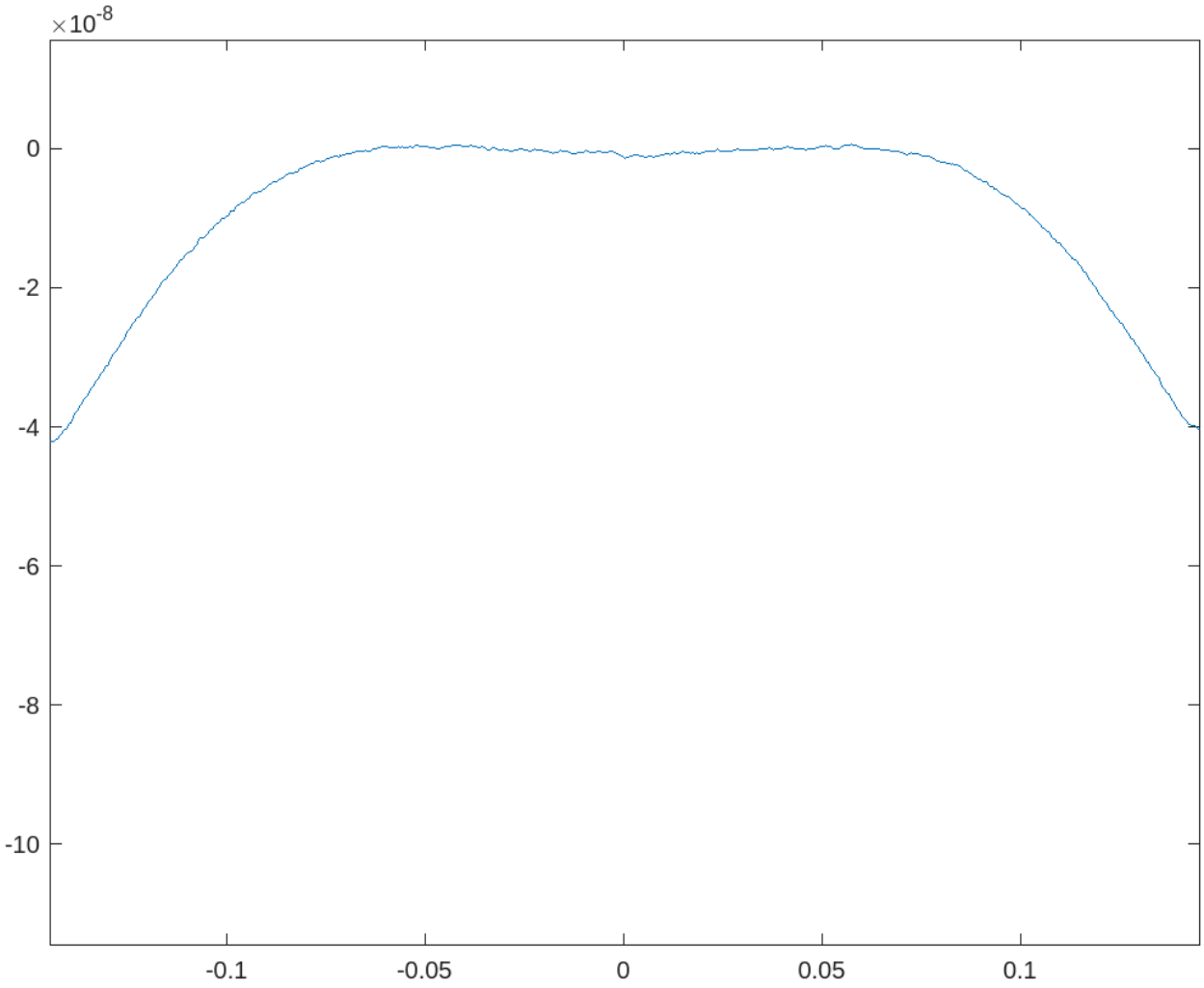


O5 proposed low absorption 400kW:

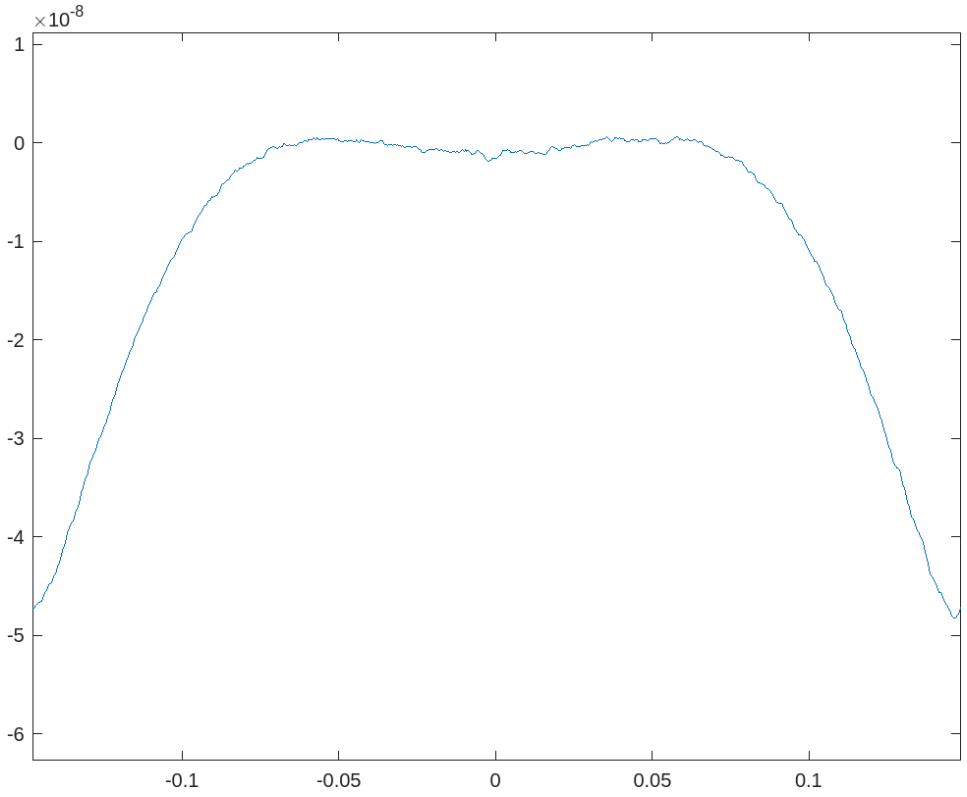


To further investigate the issue of an unexpected large roll-off for plots of ETM mirror cross sections, I tried to do the same for multiple other possible O5 ETM mirrors and the nominal O5 mirror. It seems like most ETM mirrors, except ETM O5 nominal, have a similar large roll-off. However, it is suggested that I should plot with mirror heights integrated over angle theta instead of just a cross section of a mirror for those 1D maps. I am still currently working on making such an integration function.

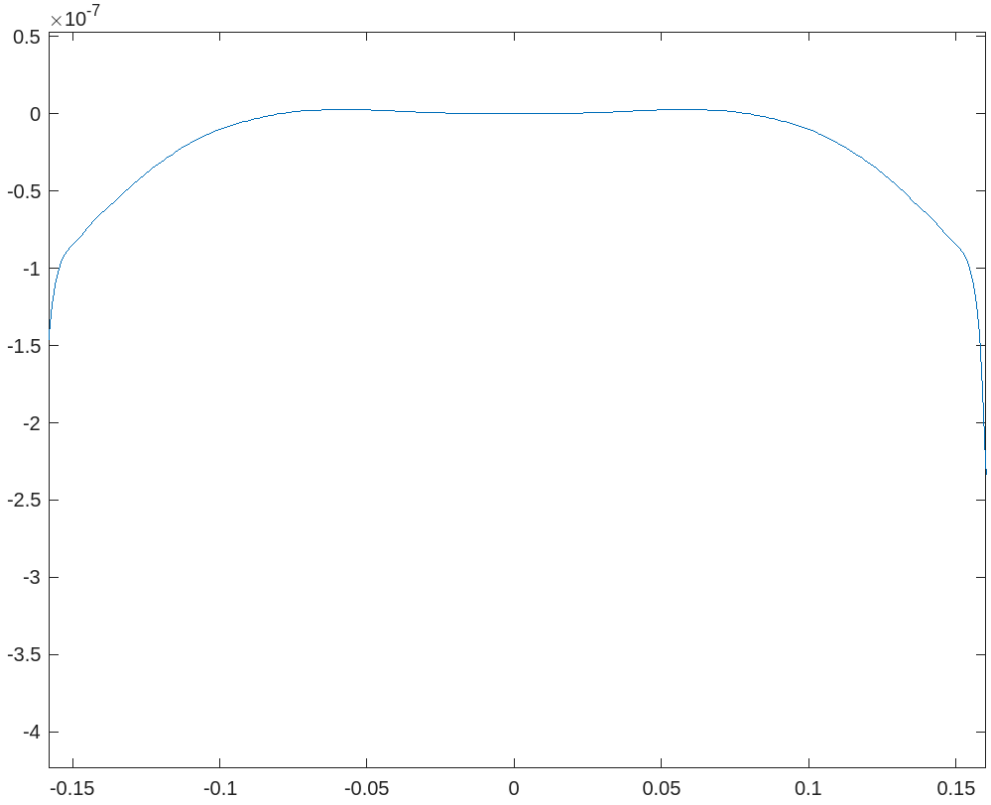
ETM07:



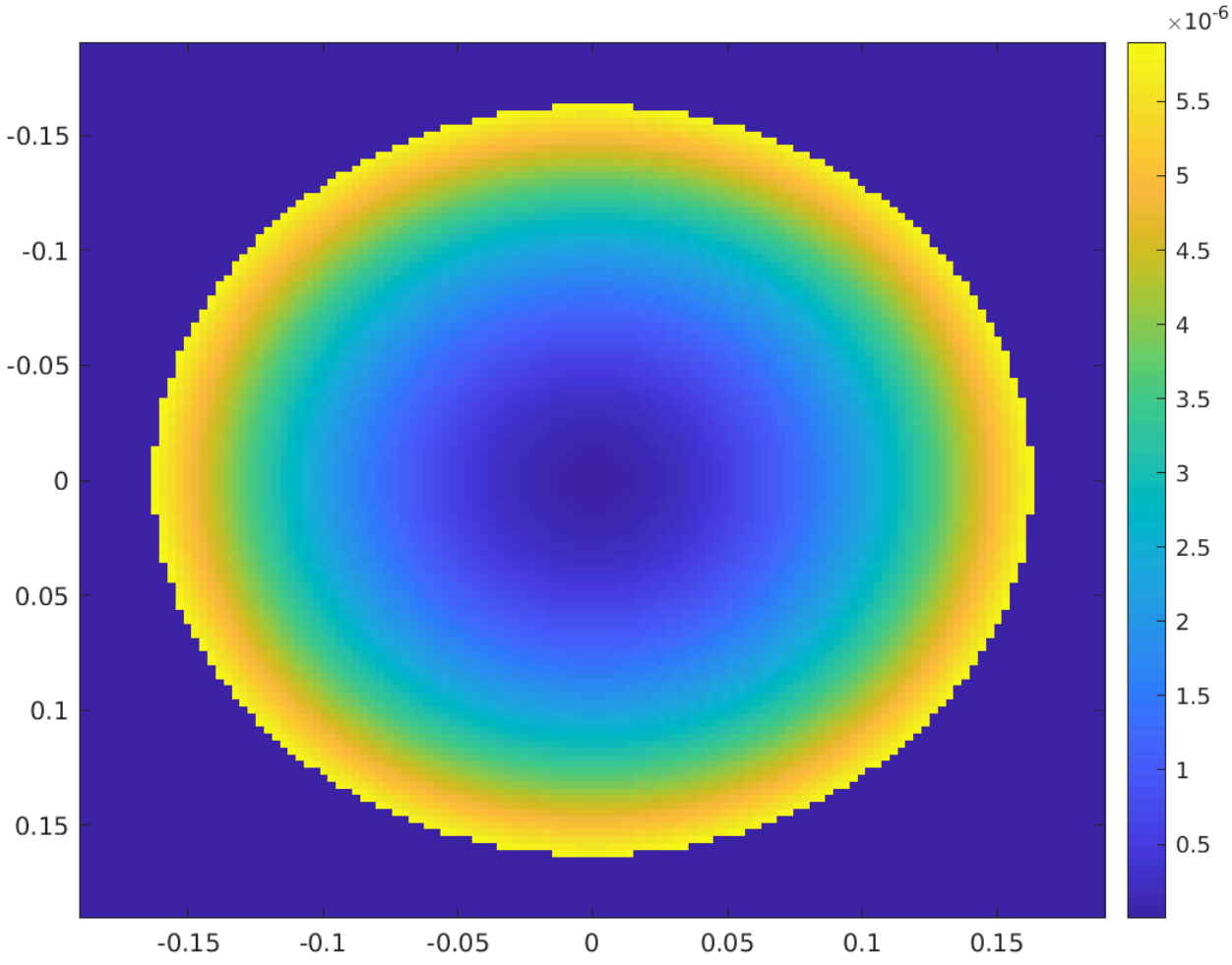
ETM08:

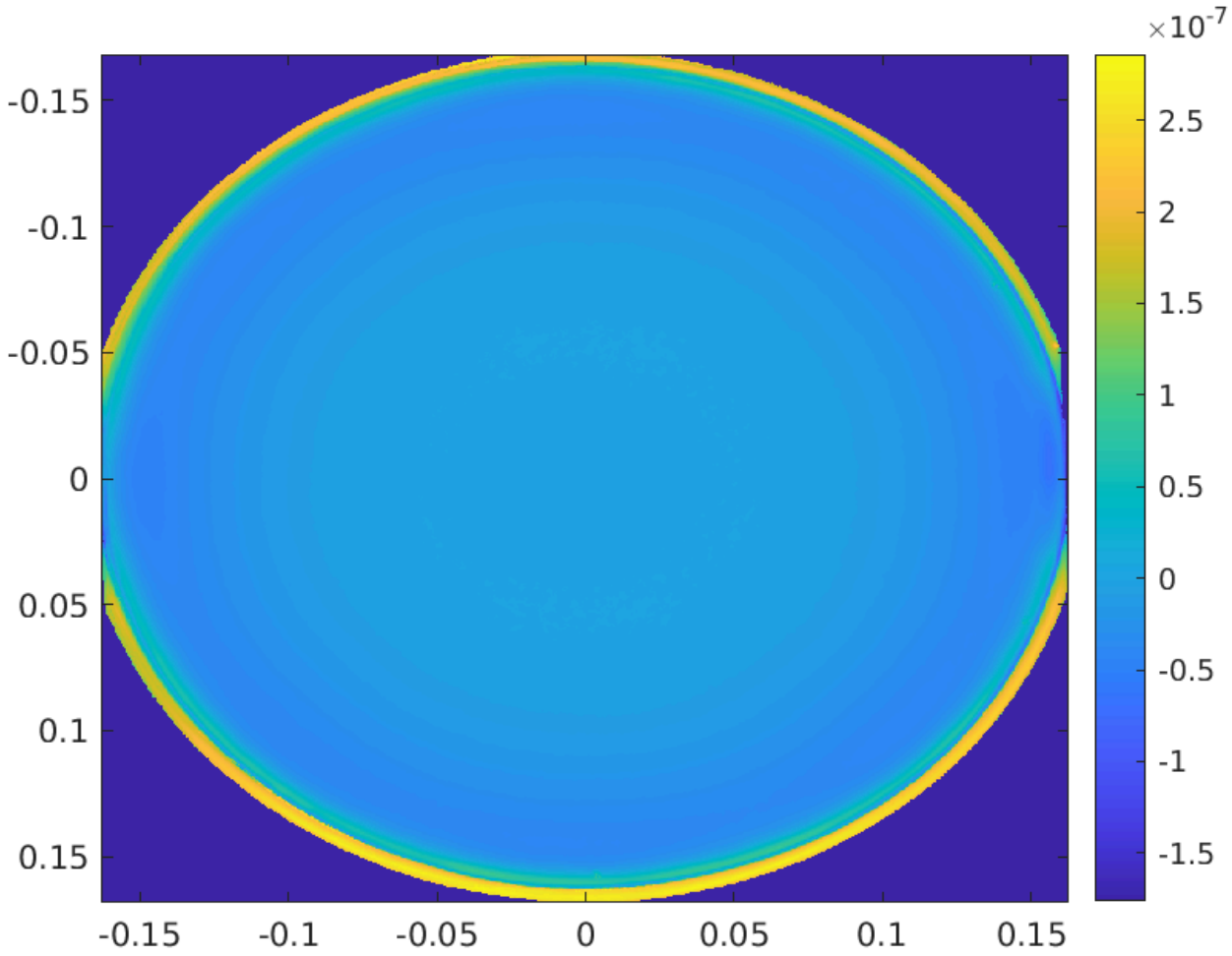


ETM O5 nominal



I have attempted to plot effects of RH and self heating with the command of getRHmap, but its plot of the cold state mirror is very different from when I use the command I used to use, loadOneData. I was still unsure what the issue was.




×10^-7
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-0.15
-0.1
-0.05
0
0.05
0.1
0.15