A. Immediate clarifications

1. Horizon definition and overlap

- Clearly state whether “step=1” corresponds to overlapping 10-day P&L and “step=10” corresponds to non-overlapping.
- Define the 10-day P&L construction (sum of log-returns / compounded simple returns) and the forecast origin alignment.

I am doing backtesting on data from 2000 to 2025 so i am training the model on first 1000 data points and predicting 1001 th day return(VaR and Es from this return distribution will be calculated) and i am moving this window by 1(step size 1) so now i will train my model on data from 2 nd day to 1001 th day to predict 1002 th day return .this is what i an referring to for step size 1 .
For step size 10 after predicting 1001 th day return , i am training my model on 10 th day to 1010 th day to predict 1011 th day return here window is moving by size of 10 and every 10 th day return is being predicted this is what i mean by step size 10 .
I am not exactly understanding what you mean by overlapping ,non overlapping , 10 day p&l .
By 10 day p&l do you mean extracting historical 10 day returns and using these data to find return distribution for every 10th day to find var and es , basically replacing one day returns with 10 day returns in my step size equal to one model .

2. Refit cadence vs evaluation cadence

- For each experiment, specify: estimation window length, refit frequency, and evaluation frequency.
For training i am using window size of 1000 . i am training my model and predicting 11, 12 ,13 th day …. VaR , ES For step size 1 and 11 , 21,31 th day… VaR , ES for step size 10 .
These values which are predicted are being used to do backtesting(for step size 1 i am getting around 5000 points , and for step size 10 i am getting around 1000 points) .

3. Baseline fairness

- Ensure the baseline uses the same mean specification (e.g., AR(1) if used in the main model), so comparisons isolate tail/coupla effects.
No for baseline in the mean equation i am using a constant with no lags but in model i am using lags(1) Ar(1) so now i will modify the baseline like our model .

Meanwhile i will work on the issue of kde fit on tails,baseline mean equation . after getting clarity on overlapping and non overlapping 10 day p& l i will update these as well in my code and will run the code to get results and will be ready to have meet on week 1 deliverables on friday sir .