

Monte Carlo VAR HINTS

The document "Return to Risk Metrics: The Evolution of a standard" describes in detail the methodology you should follow.

Notice that on p14 they describe precisely ~~what you should~~ the volatility you should use for your Monte Carlo simulations. You will need to use historic data from Bloomberg to compute this.

I recommend starting simply ~~and~~ by trying to compute VAR for a single stock. You can then compare

you answer with a computation using parametric VaR.

When you have a single stock working add in options on that stock.

~~The~~ The next step would be ~~of the~~ portfolios involving more than one stock. In this case you'll need to come up with appropriate correlations for your Monte Carlo simulation, and generate correlated random variables.

I recommend using Matlab for this project. You will discover that a lot of the code has already been done during the FMO6 course.