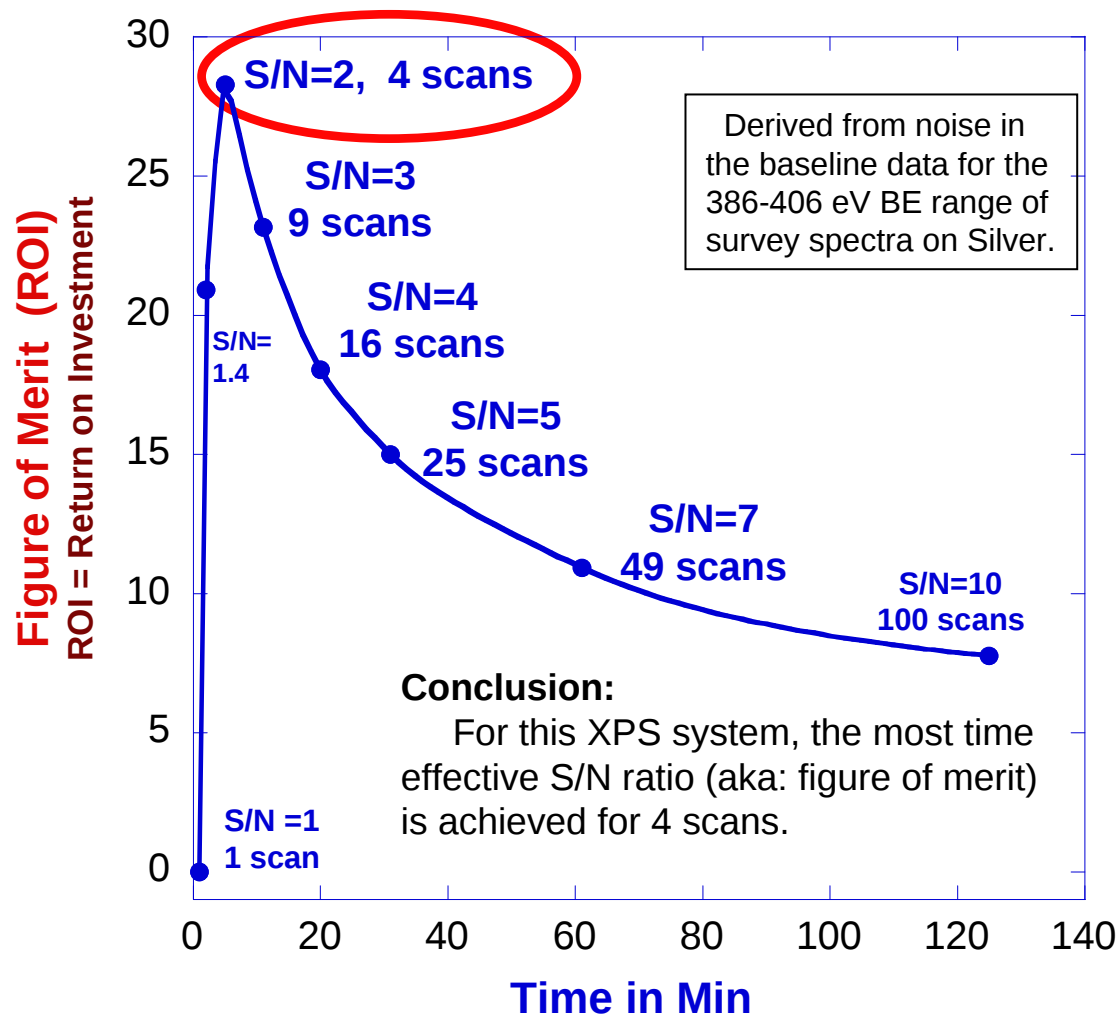


Merit of Collecting More Scans

Figure of Merit (Y axis) = (Rel Increase in S/N Ratio) / (Expt S/N Ratio X Time Spent)



# Scans	Time (min)
1 scan	1.25 min.
2 scans	2.50 min.
4 scans	5.00 min.
9 scans	11.25 min.
16 scans	20.00 min.
25 scans	31.25 min.
49 scans	61.25 min.
100 scans	125.00 min.

400 μ M Spot
PE = 200 eV
1 eV/point
50 ms/point