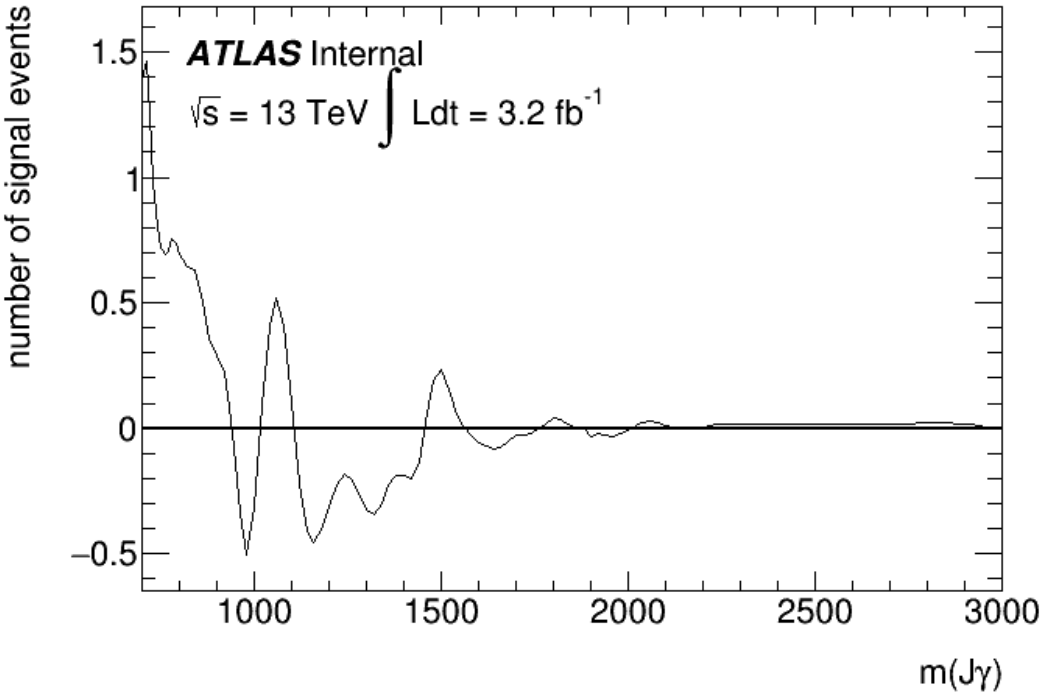
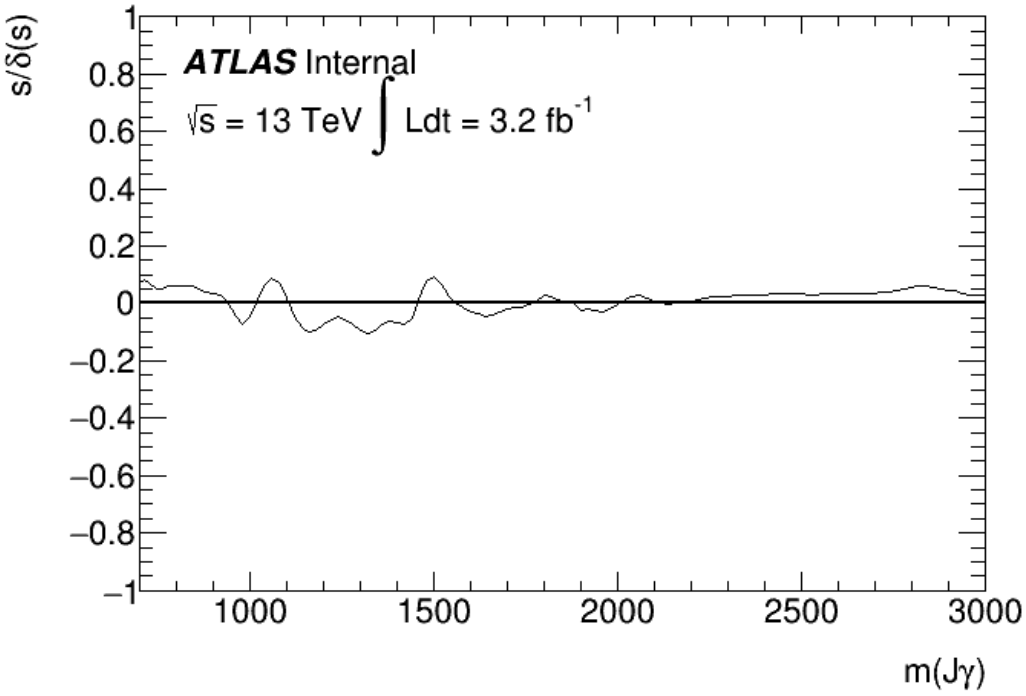
Spurious signal

S+B pdf is fit to a large-stats Sherpa yjet MC sample
(inclusive cuts, i.e. no fat jet taggings)

Get absolute values of signal numbers as a function mass



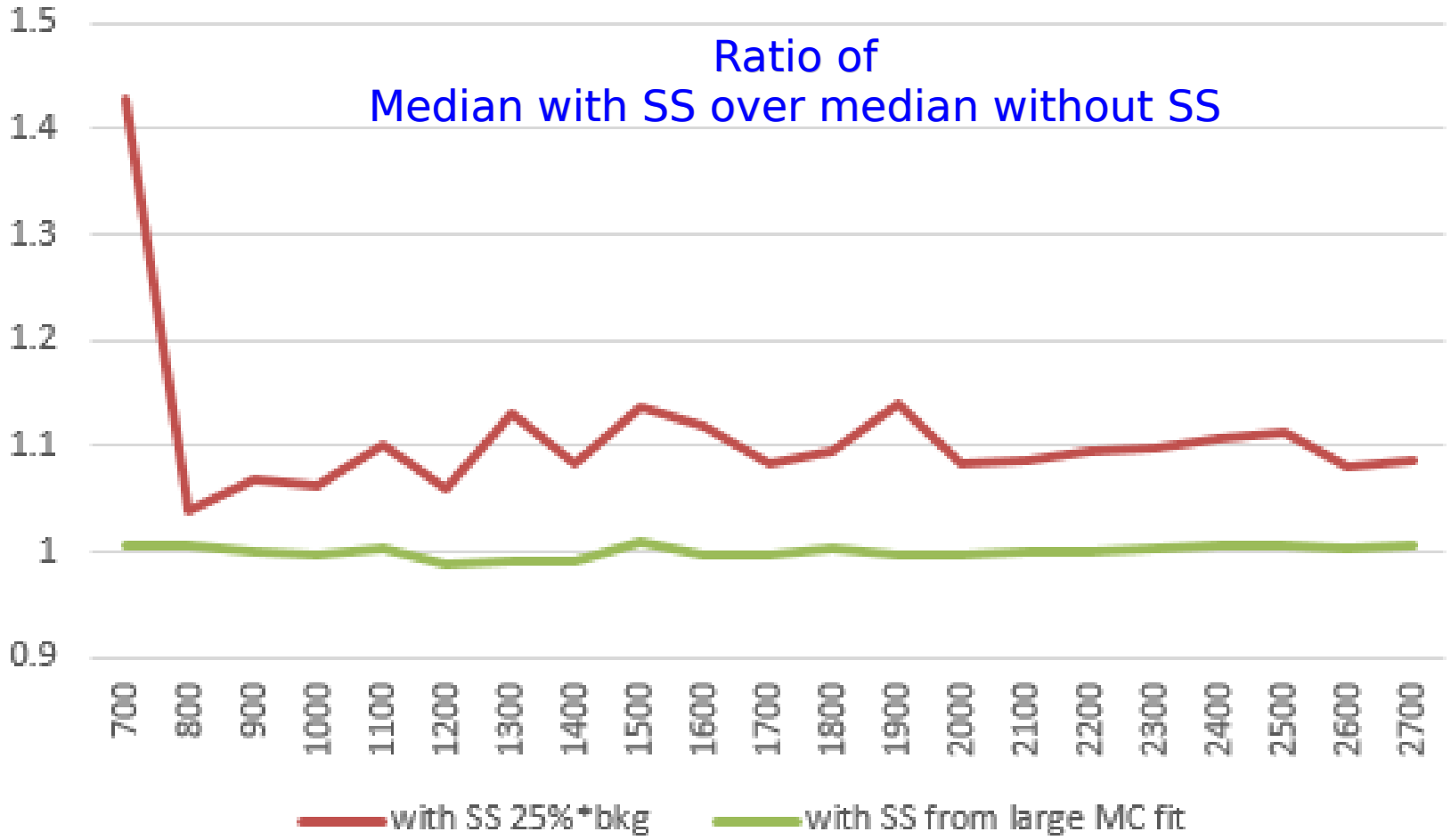


Last time, overestimated SS by setting it to 25%*delta(B)
That is 4 or 5 times more than now

Limit changes due to SS

Limit changes a lot with SS using 25%*bkg
Limit changes slightly with SS from a largr-stats bkg MC

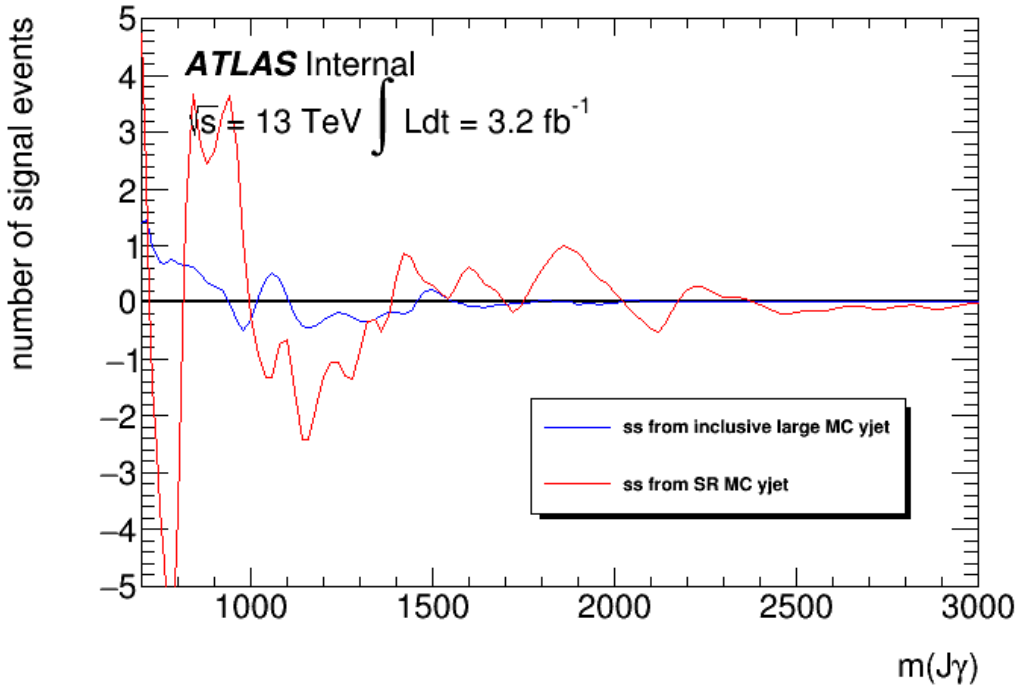
The following curves are ration of the limits with SS over the limits without SS

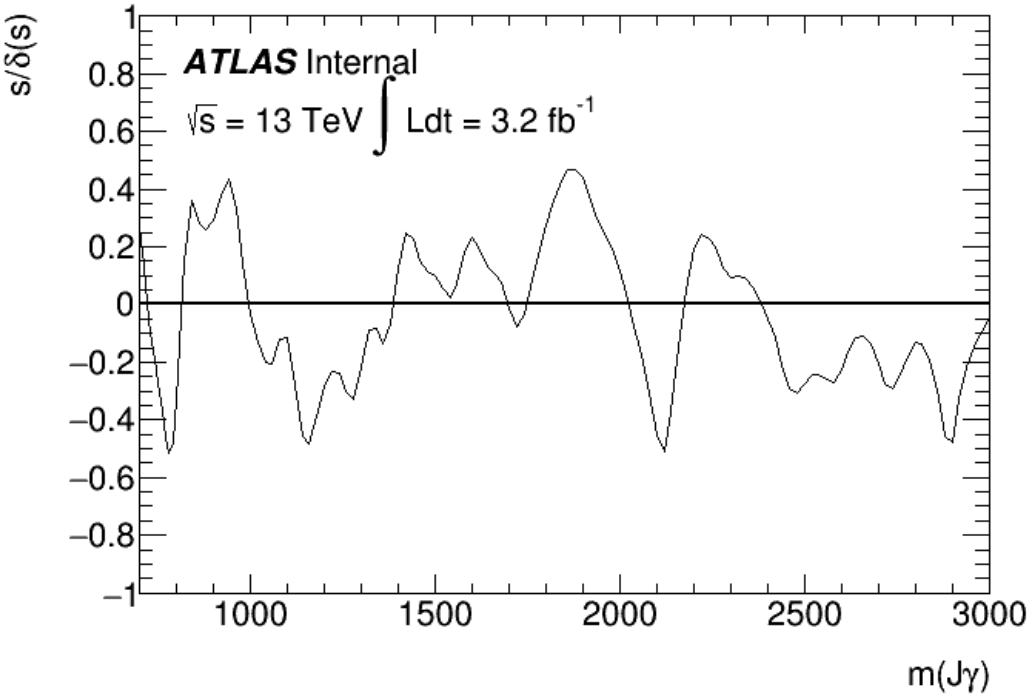


Spurious signal (SR ...)

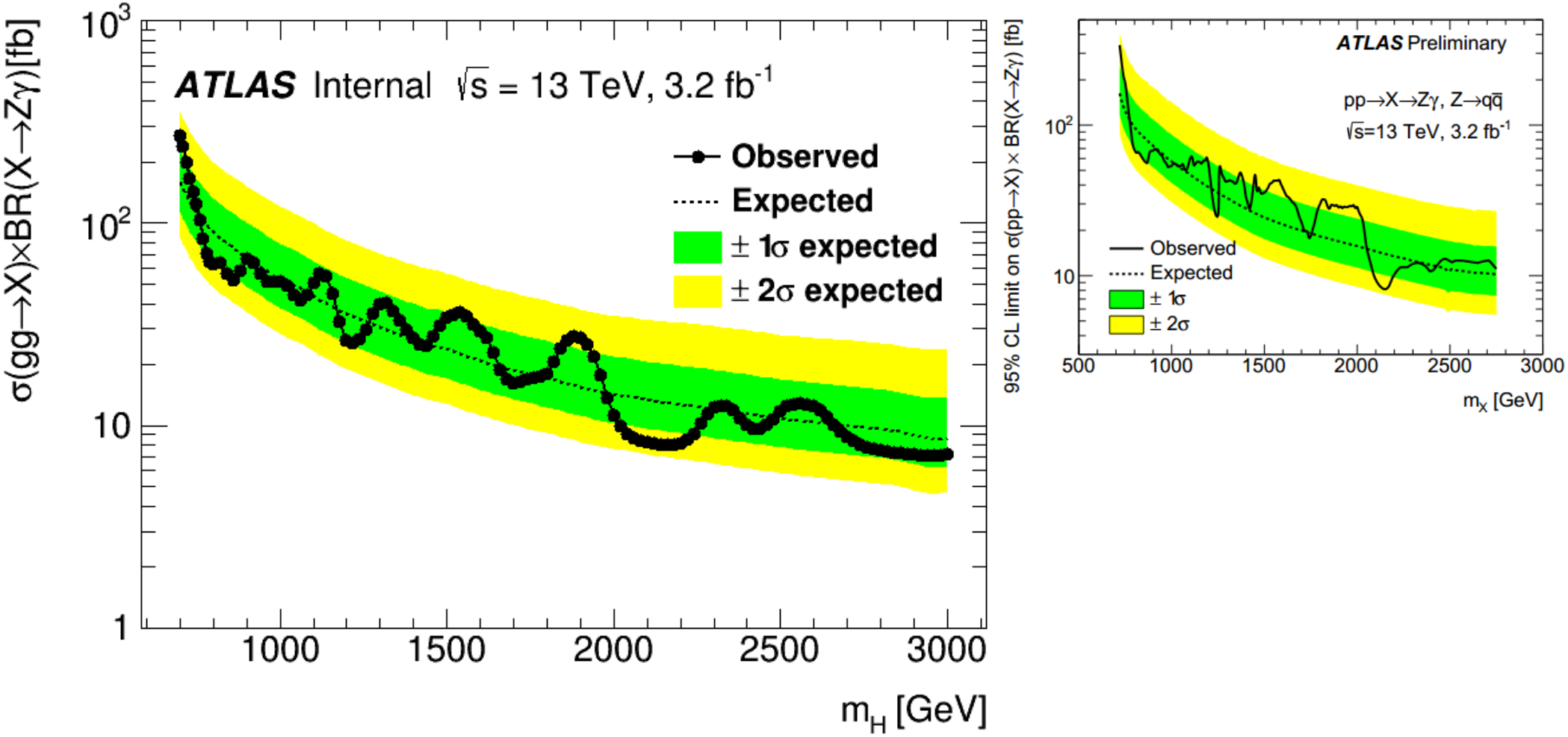
An estimate from SR with yjet MC is tested, although it has very low stats
SR MC is only 2% of the inclusive MC used in blue curve
Sure, we can expected very large SS from the red curve

In principal, SS should be estimated from a very large MC sample
The blue curve should be eventually used





Limits



With the SS got from a large-stats yjet MC sample, the median and bands do not have visible fluctuates any more.