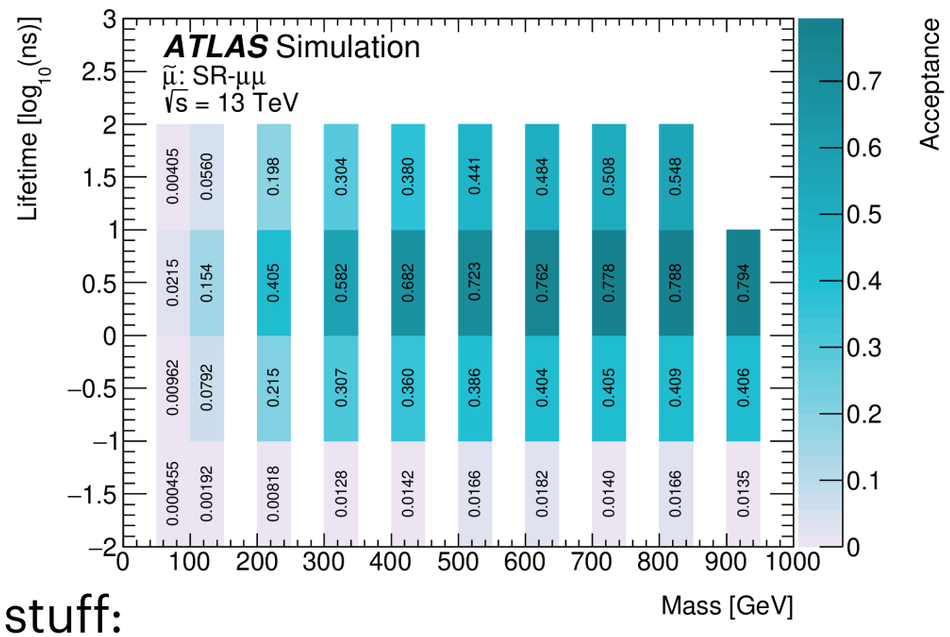
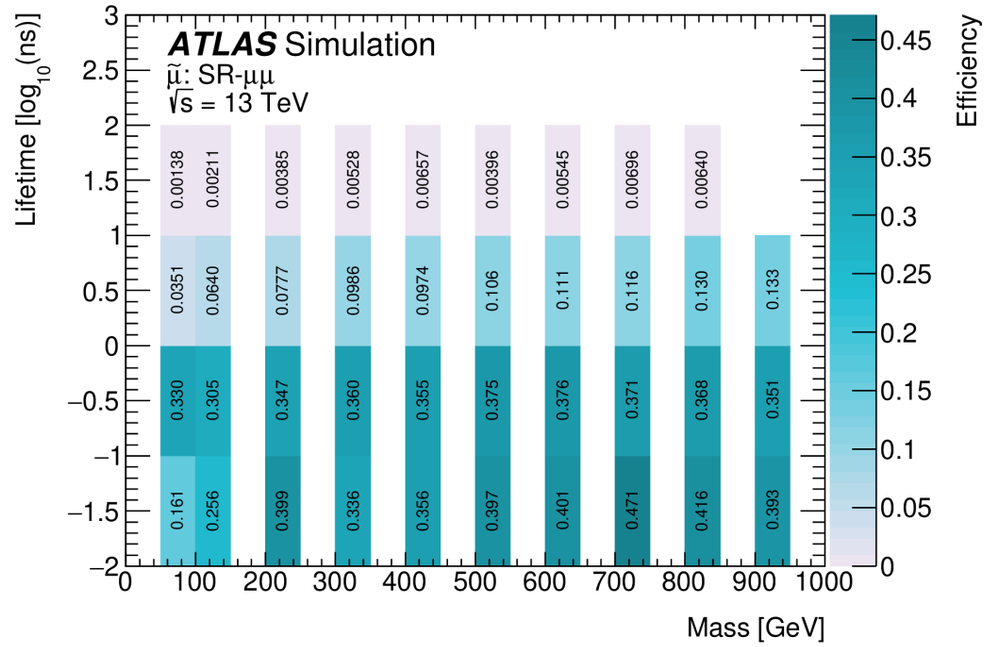
Alaa'd Weekly Update Sept. 14th

Last meeting minutes:

- Set up workflow on github with Jordan ***In progress***
- ~~Walk Jordan through the setup for generating events~~ **Done**
  -- her task is to generate 2 other grid points with the same model ***In progress***
  (one that varies lifetime and one that varies mass from the original point)
- ~~Calculate the fraction of muons with > 765 GeV pT to see how much of an issue this is~~ **Done**
- Clean up code a bit ***In progress***





New stuff:

- The number of events with the muons with pt of 760 GeV or more is 613 out of 20,000 events (~3%)

- After applying the cuts (before applying efficiency), the number of events became 209 out of 7856 events, i.e. 2.66%

- In the paper, the yield for the 0.1 ns 400-GeV smuons is: acceptance X efficiency = 0.36 * 0.355 = 0.1278 = 12.78%
- In our simulated events, the fraction of surviving events is 2275 out of 20,000 = 0.11375 = 11.375%