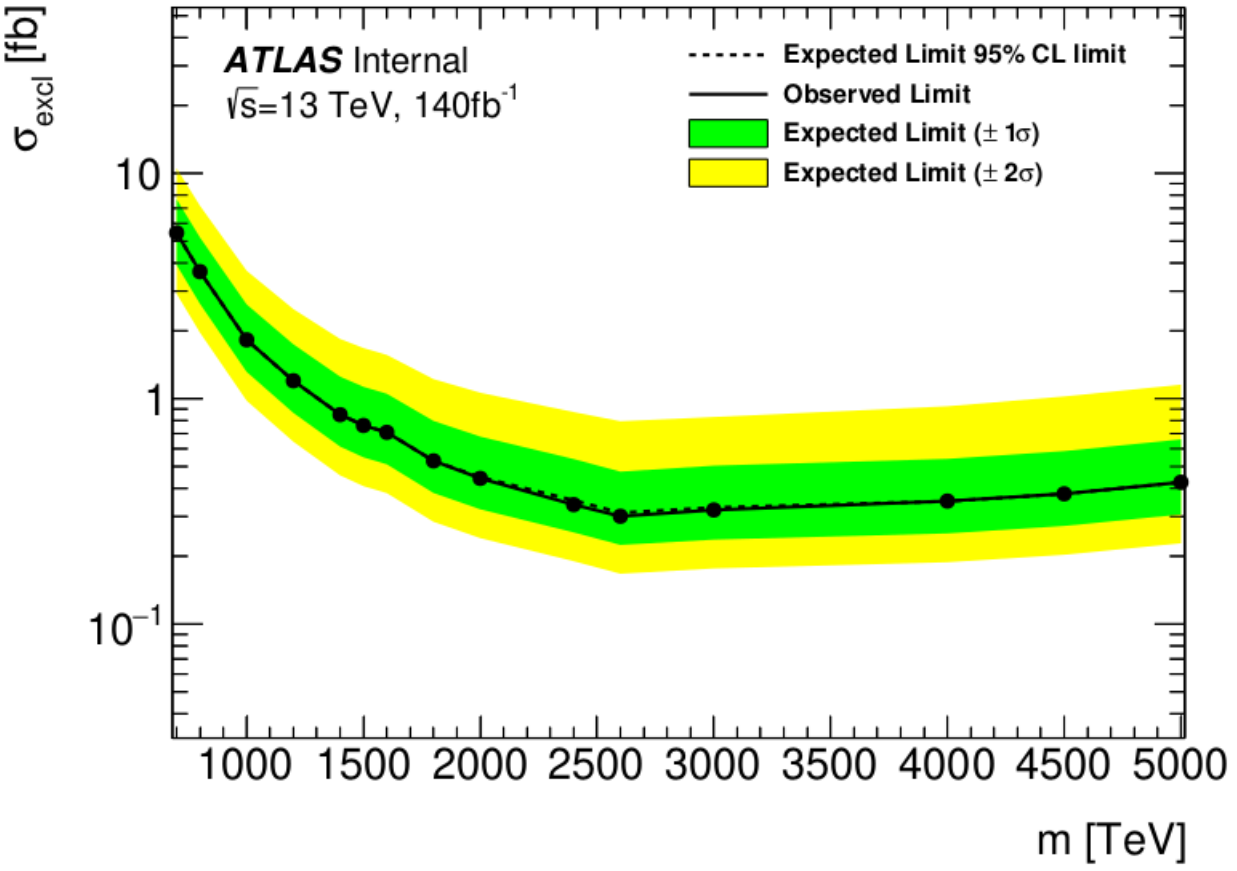
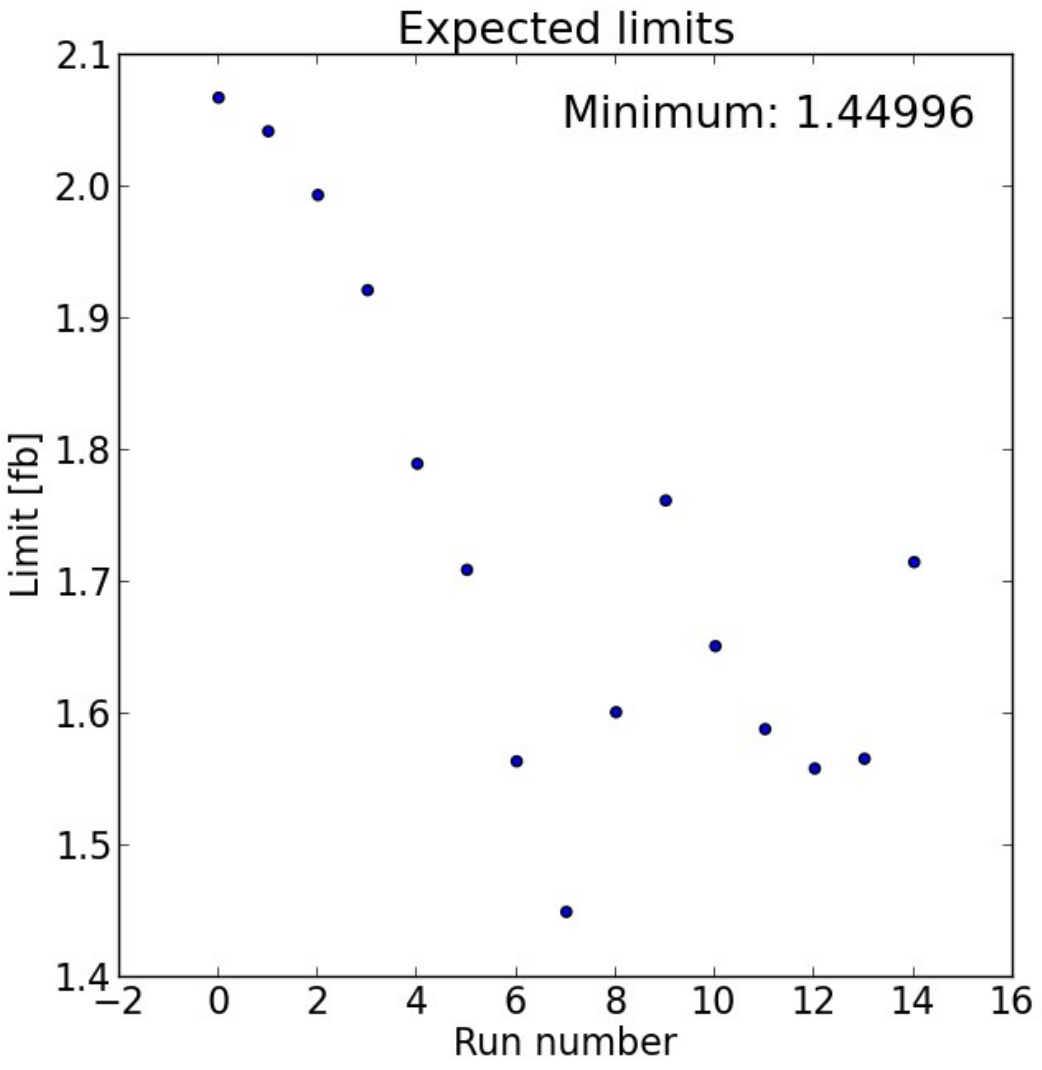
Invariant mass



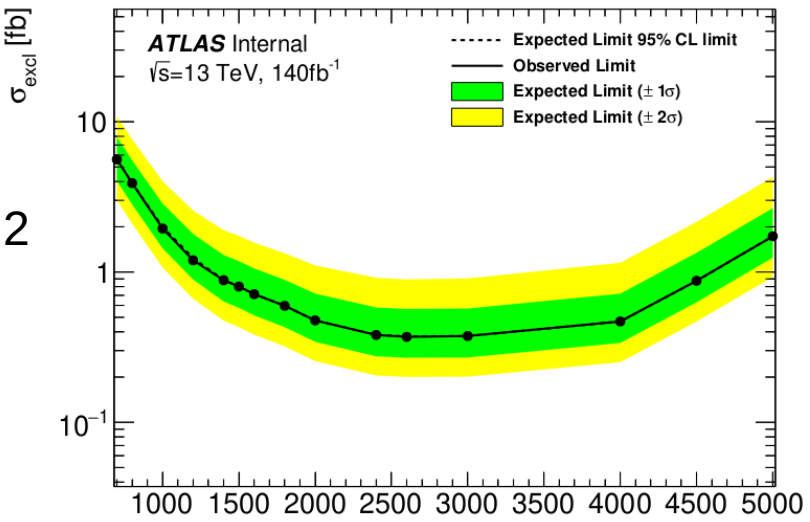
Scores

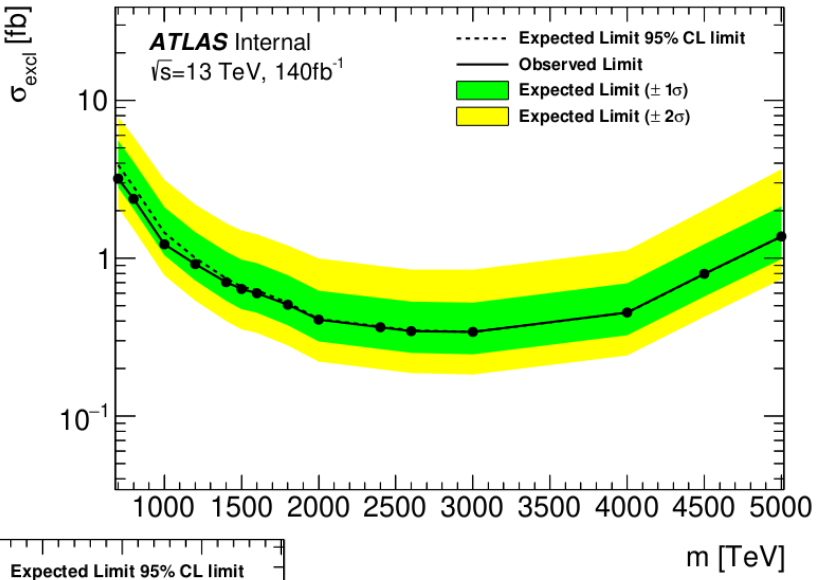



```
if usePNN:
  if runNumber == 00:
    bins = np.linspace(0, 1, 10)
  if runNumber == 01:
    bins = np.linspace(0, 1, 50)
  if runNumber == 02:
    bins = np.linspace(0, 1, 100)
  if runNumber == 03:
    bins = np.linspace(0, 1, 200)
  if runNumber == 04:
    bins = np.linspace(0, 1, 400)
  if runNumber == 05:
    bins = np.linspace(0, 1, 600)
  if runNumber == 06:
    bins = np.linspace(0, 1, 800)
  if runNumber == 07:
    bins = np.linspace(0, 1, 1000)
  if runNumber == 8:
    bins1 = np.linspace(0, 0.3, 300) ### binwidth = 0.001
    bins2 = np.linspace(0.3, 0.7, 40) ### binwidth = 0.01
    bins3 = np.linspace(0.7, 1, 300) ### binwidth = 0.001
    bins = np.concatenate((bins1, bins2, bins3))
  if runNumber == 9:
    bins1 = np.linspace(0, 0.3, 150) ### binwidth = 0.002
    bins2 = np.linspace(0.3, 0.7, 20) ### binwidth = 0.02
    bins3 = np.linspace(0.7, 1, 150) ### binwidth = 0.002
    bins = np.concatenate((bins1, bins2, bins3))
  if runNumber == 10:
    bins1 = np.linspace(0, 0.2, 200) ### binwidth = 0.001
    bins2 = np.linspace(0.2, 0.8, 60) ### binwidth = 0.01
    bins3 = np.linspace(0.8, 1, 200) ### binwidth = 0.001
    bins = np.concatenate((bins1, bins2, bins3))
  if runNumber == 11:
    bins1 = np.linspace(0, 0.3, 300) ### binwidth = 0.001
    bins2 = np.linspace(0.3, 0.7, 80) ### binwidth = 0.005
    bins3 = np.linspace(0.7, 1, 300) ### binwidth = 0.001
    bins = np.concatenate((bins1, bins2, bins3))
  if runNumber == 12:
    bins1 = np.linspace(0, 0.3, 300) ### binwidth = 0.001
    bins2 = np.linspace(0.3, 0.7, 200) ### binwidth = 0.002
    bins3 = np.linspace(0.7, 1, 300) ### binwidth = 0.001
    bins = np.concatenate((bins1, bins2, bins3))
  if runNumber == 13:
    bins1 = np.linspace(0, 0.2, 200) ### binwidth = 0.001
    bins2 = np.linspace(0.2, 0.8, 300) ### binwidth = 0.002
    bins3 = np.linspace(0.8, 1, 200) ### binwidth = 0.001
```

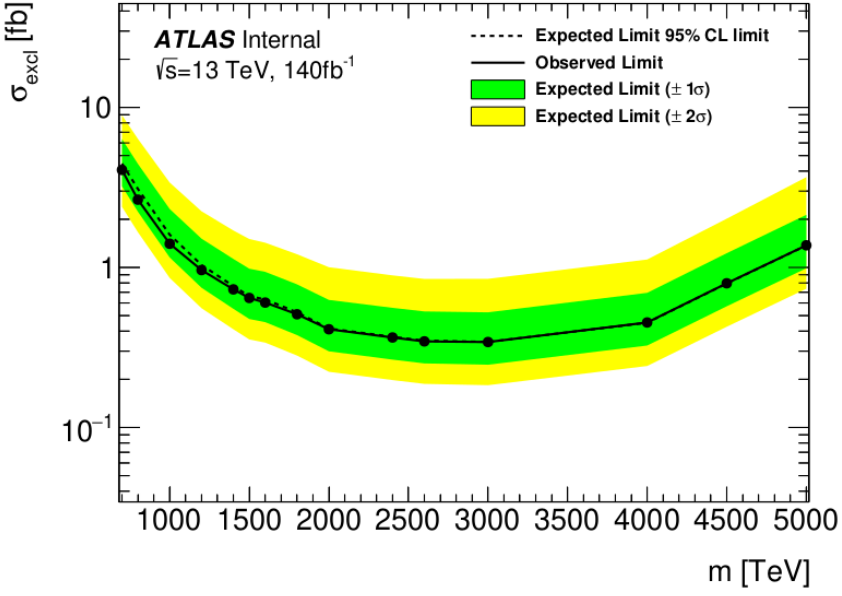
Scores

Run 2





Run 7



Run 8

Invariant mass vs scores