Taufinder weekly update

At this point:

- M_{inv} 2 → 10 [GeV/c^2]
- E_{iso} 5 → 600 [GeV]

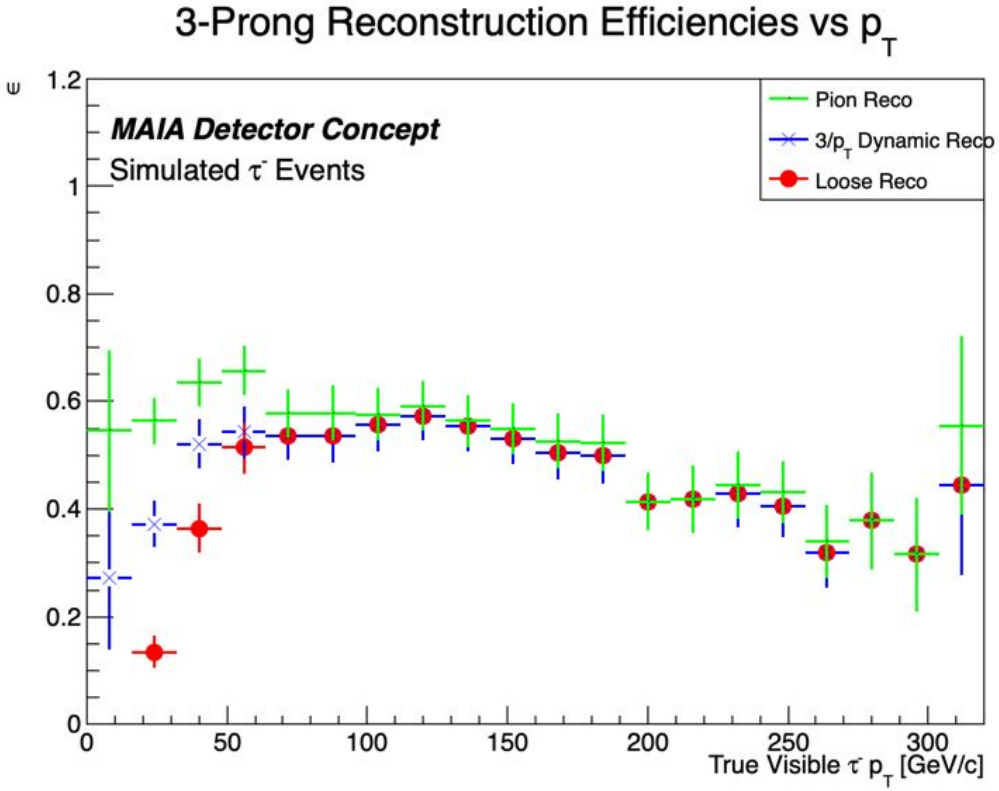
Now:

- Dynamic cone
- + loose cuts

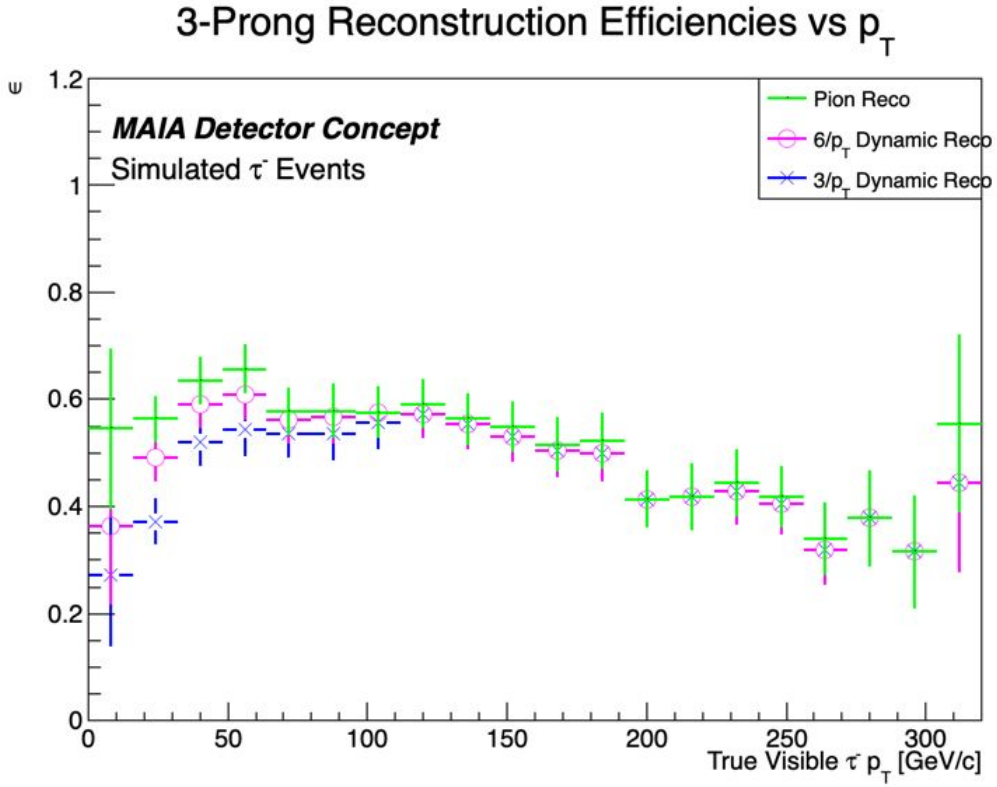
Idea for the cone:

- Continuous
- Aimed at improving low pt tau candidates
- General form of n/pt where n is a positive integer
    - The hope is that this form is generalizable to other decays and signals

- 3 / pt in the range [10,60]
- When pt > 60: angle = 0.05 rad
- When pt < 10: angle = 0.3 rad



- 6 / pt in the range [10,120]
- When pt > 120: angle = 0.05 rad
- When pt < 10: angle = 0.6 rad



Notes:

- One prongs unchanged
- Drops in fake rate

Concerns:

- Large cone at the beginning
- Function is steep

Next steps:

- Would be good to test the dynamic cone with a jet background

Other progress:

- Looking into the neutral pion decays
  - Hoping to see a pattern in the photons from MC neutral pion decays