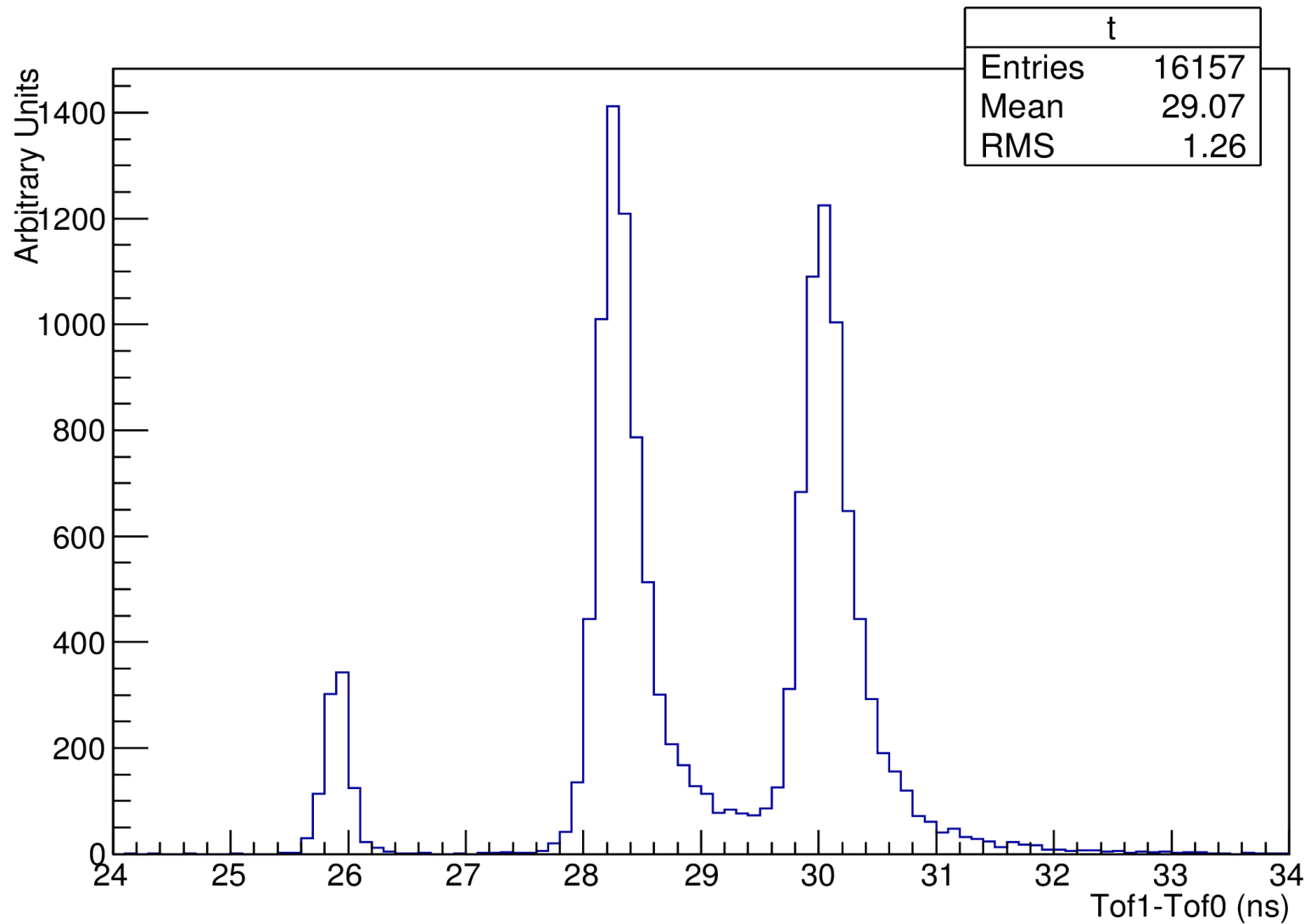


# Straight Track Data Analysis

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August 13, 2015

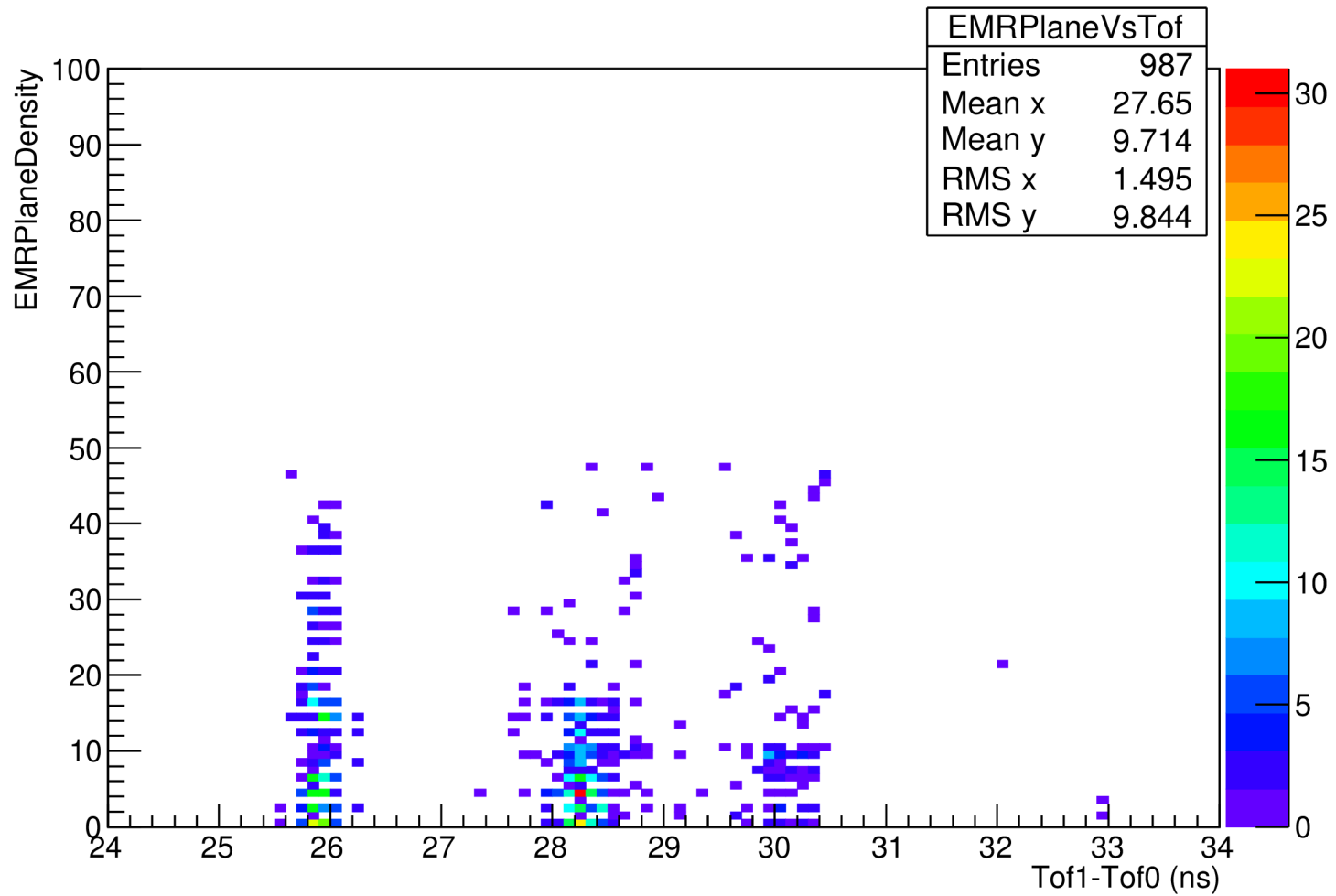


# Preliminary Time of Flight Histogram



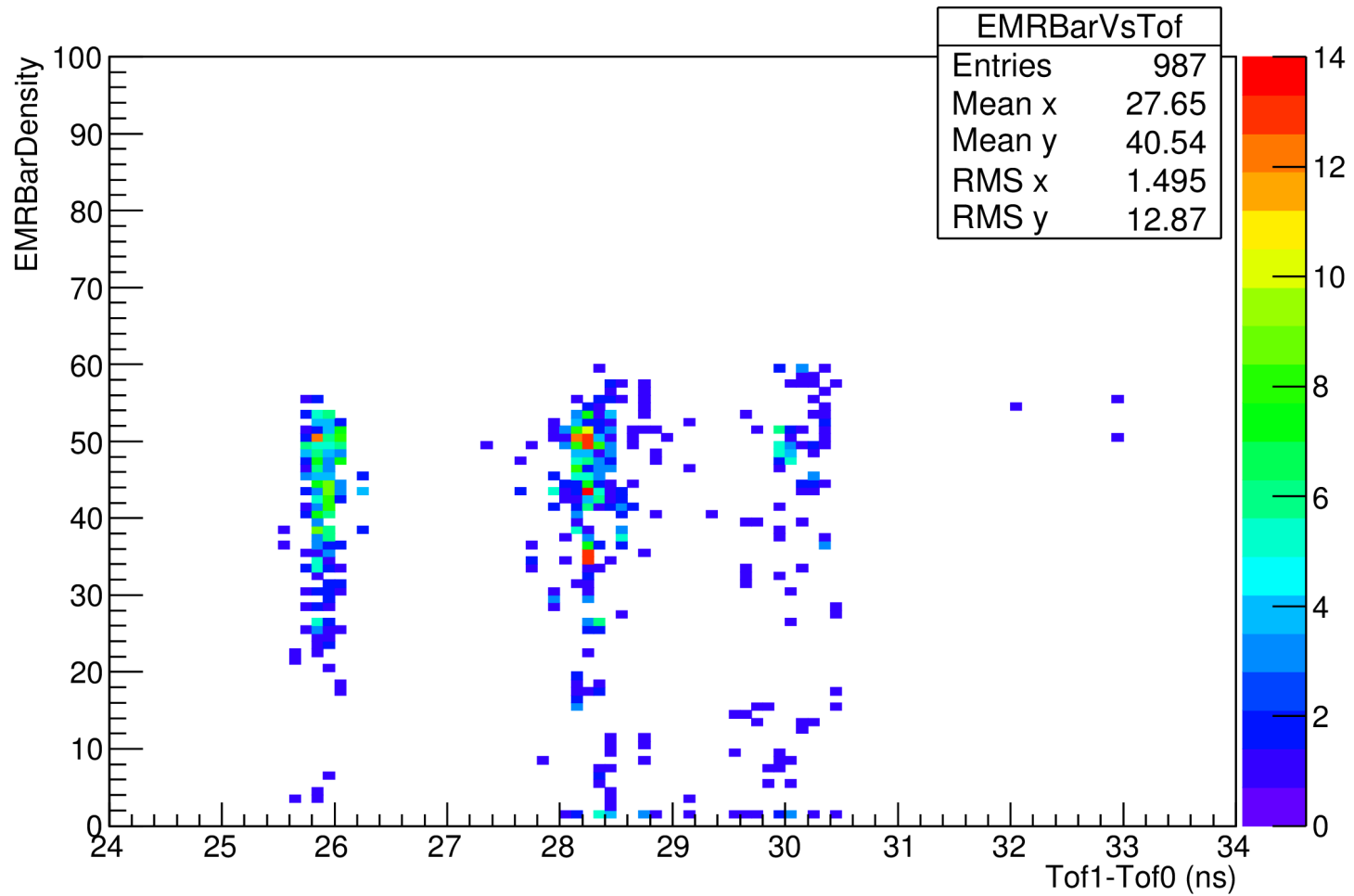
➤ Analysis on run numbers 7066, 7067, 7068 located at <http://mice.iit.edu/reco/MAUS-v1.0.0/>.

# Preliminary EMR Plane Hits Vs. Time of Flight in TOF0 and TOF1



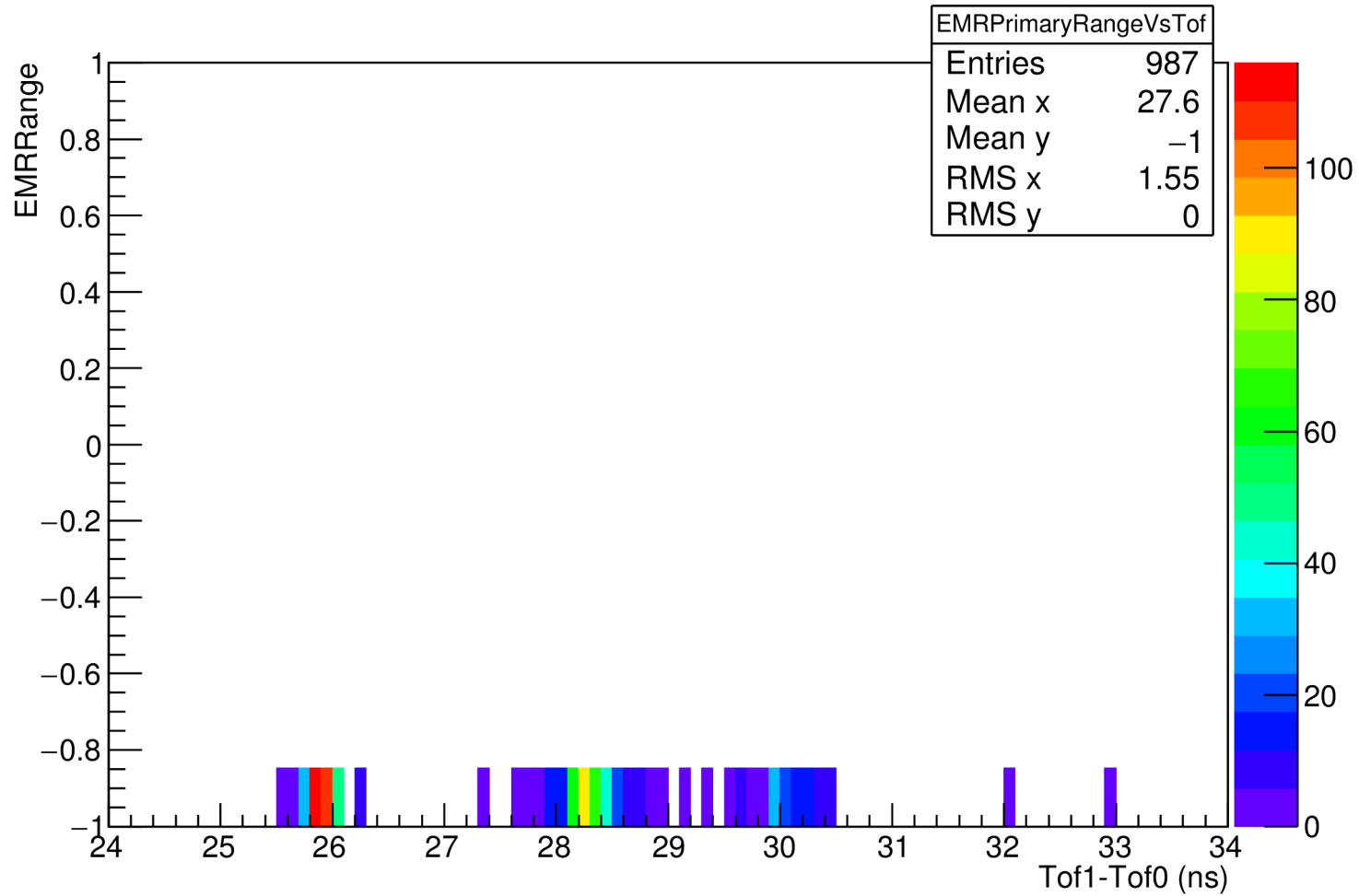
➤ Same run numbers.

# Preliminary EMR Bar Hits Vs. Time of Flight in TOF0 and TOF1



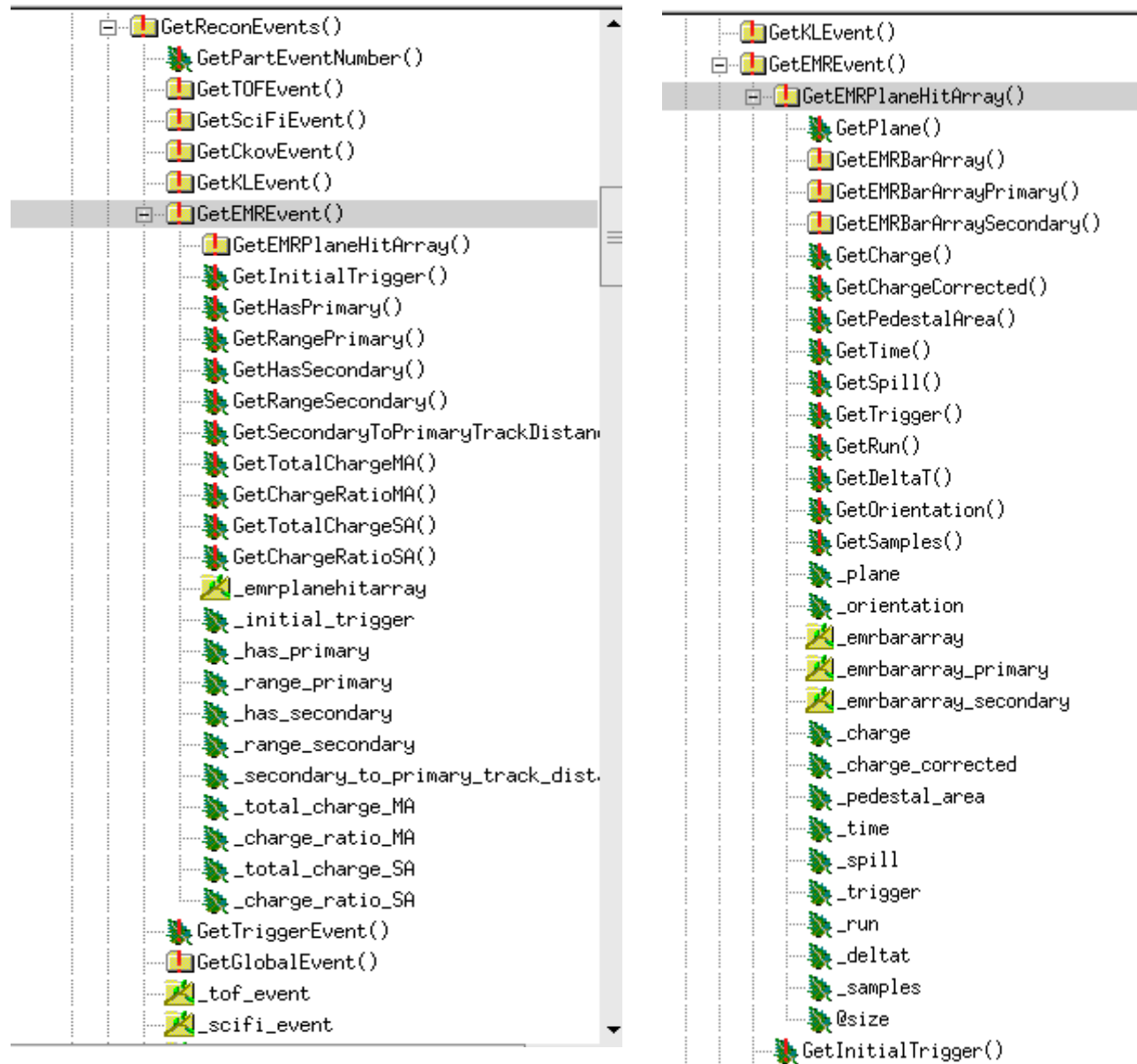
- Same number of runs.

# Preliminary EMR Range Vs. Time of Flight in TOF0 and TOF1



Same number of runs.

# Obtaining EMR information



```
for j in range(spill.GetReconEvents().size()):
    for n in range(spill.GetReconEvents()[j].GetEMREvent().GetEMRPlaneHitArray().size()):
        for m in range(spill.GetReconEvents()[j].GetEMREvent().GetEMRPlaneHitArray()[n].GetEMRBarArray().size()):
            h1.Fill(tdiff, spill.GetReconEvents()[j].GetEMREvent().GetRangePrimary())

            h3.Fill(tdiff, spill.GetReconEvents()[j].GetEMREvent().GetEMRPlaneHitArray()[n].GetPlane())

            h2.Fill(tdiff, spill.GetReconEvents()[j].GetEMREvent().GetEMRPlaneHitArray()[n].GetEMRBarArray()[m].GetBar())
```