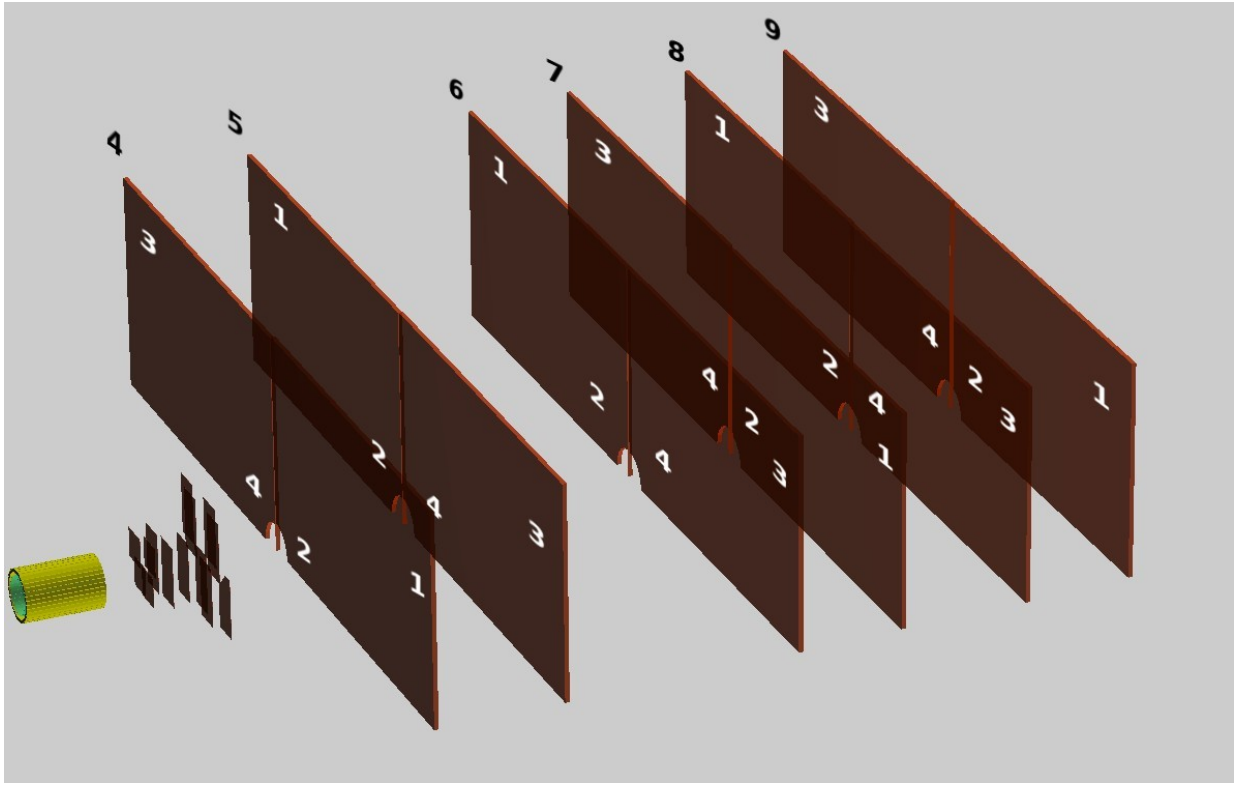
QA of embedding

- StsPoints to StsHits conversion efficiency
- CscPoints to StsHits conversion efficiency
- How to make a map between experimental and MC events?

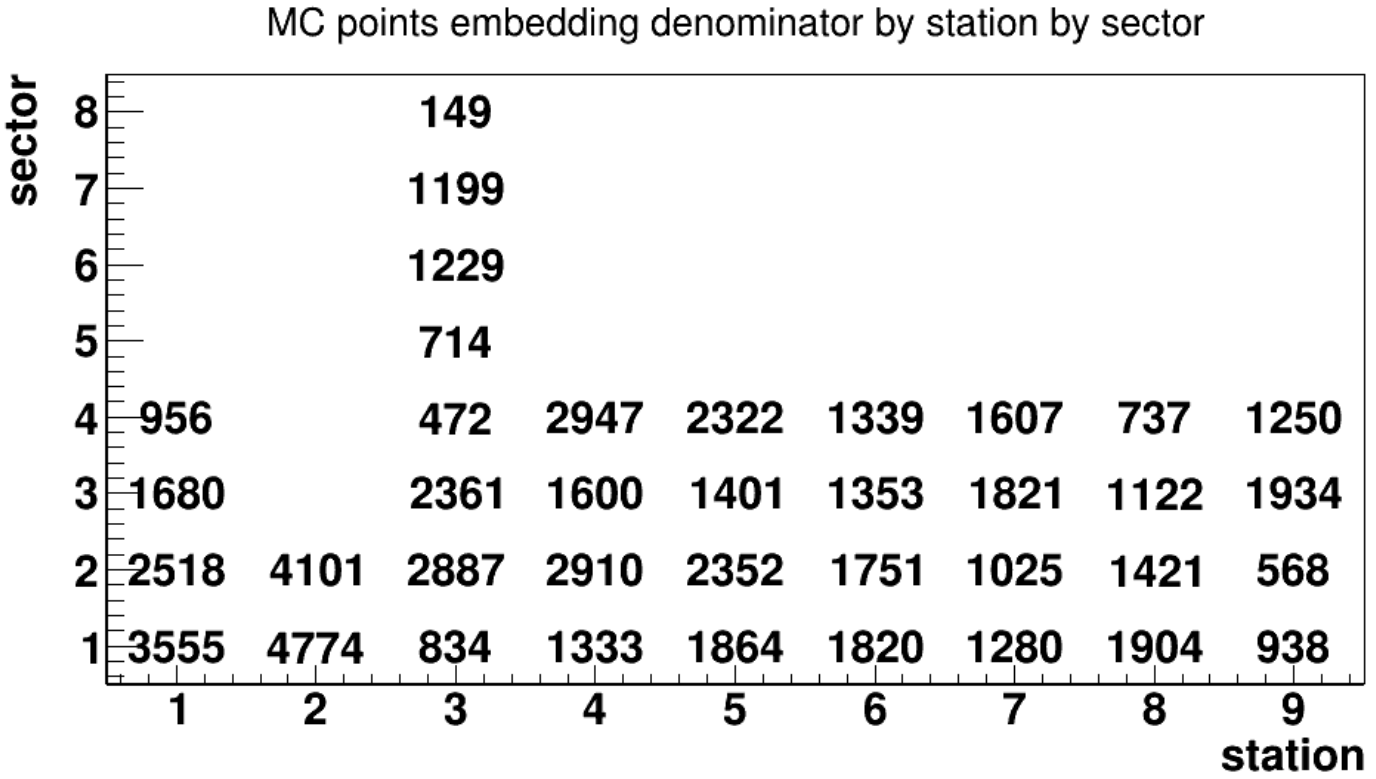
StsPoints to StsHits conversion efficiency



- Stations 1-3 are Si
- Stations 4-9 are GEM

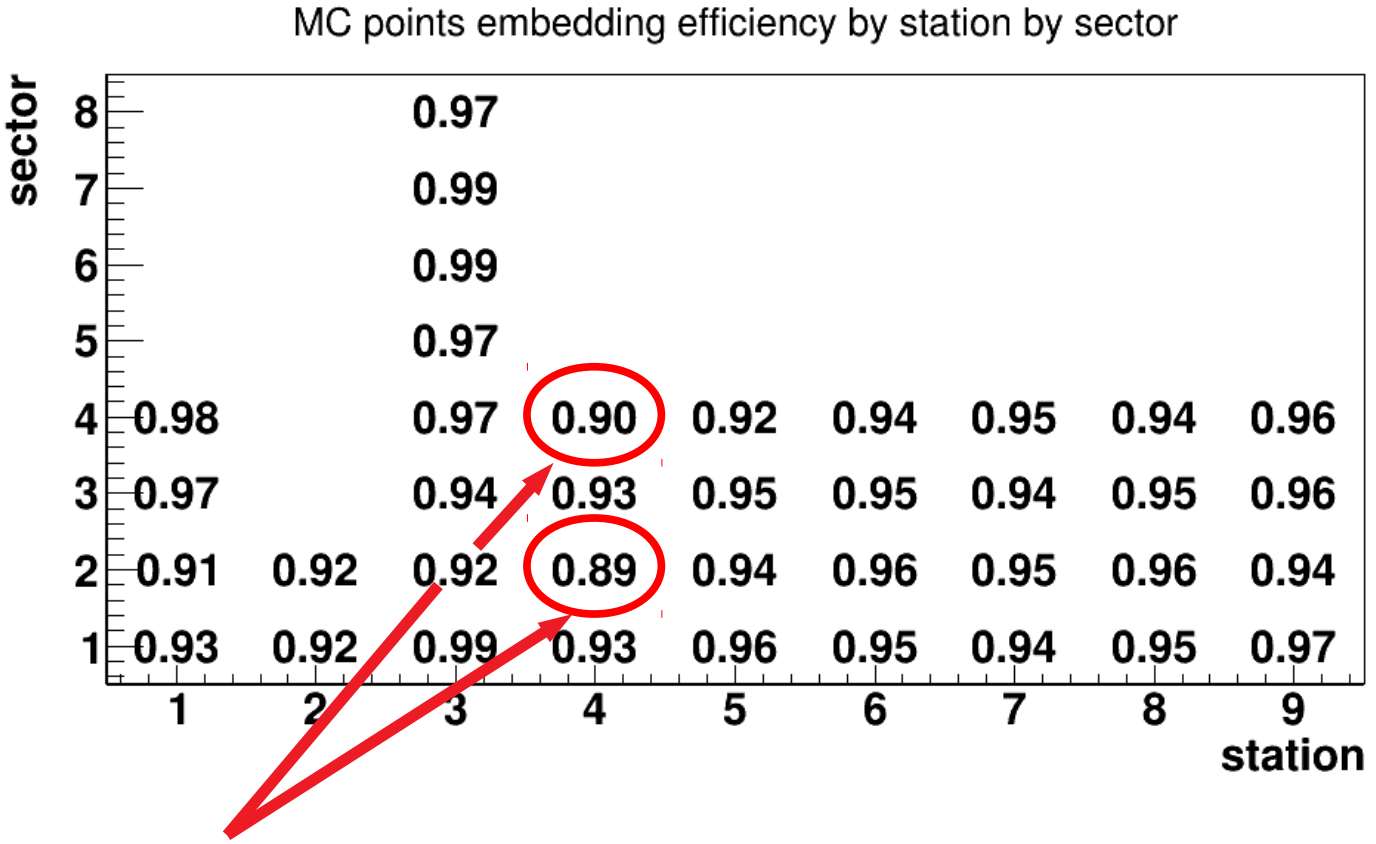
- Even sectors of GEM are hot zones
- Odd sectors of GEM are main zones

StsPoints to StsHits conversion efficiency



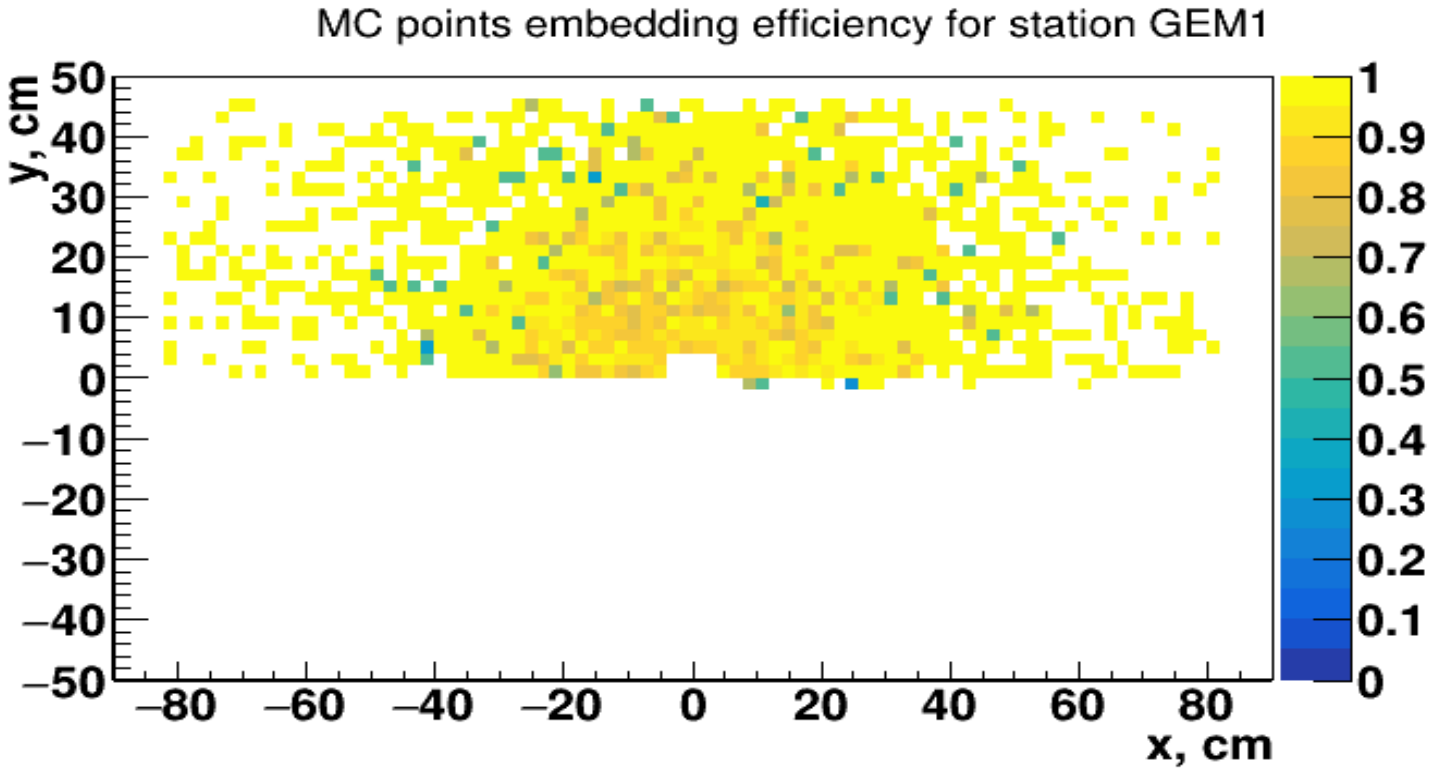
- The number of MC Points to be converted
- Using only points which give digits in the strips
- Enough statistics in the each sector

StsPoints to StsHits conversion efficiency



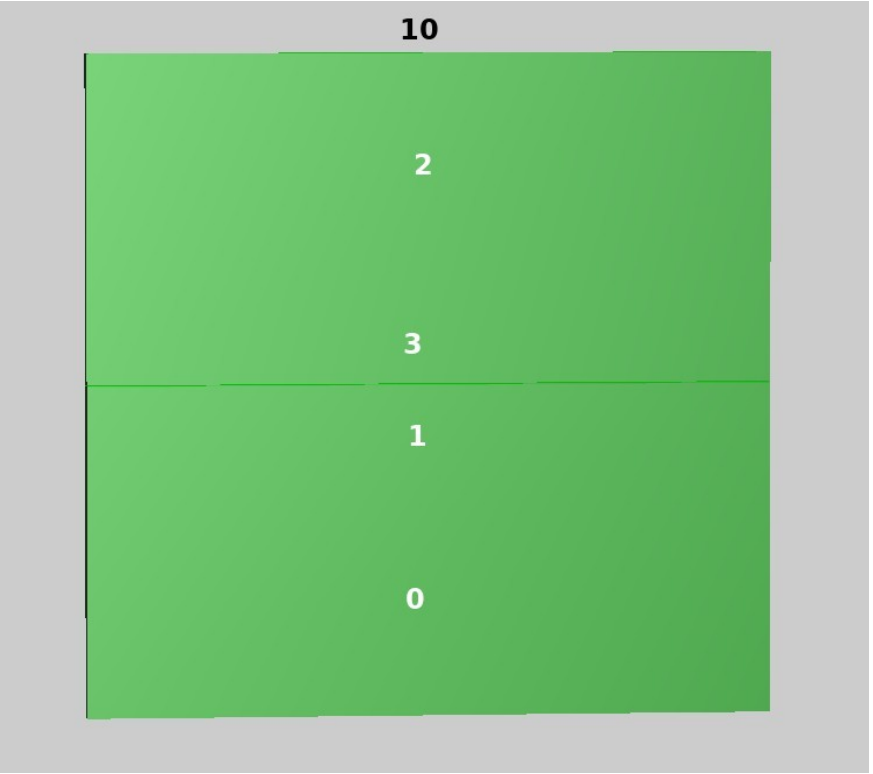
- The lowest efficiency for hot zones of GEM1
- Possibly due to the largest MC Points density according to the pitch size

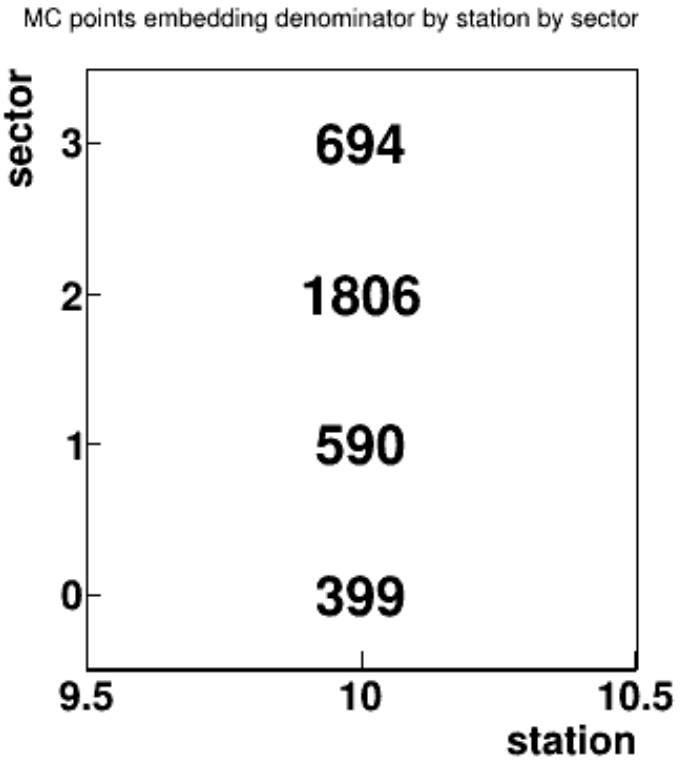
StsPoints to StsHits conversion efficiency



- The same efficiency for GEM1 using net of squares with the side length 2cm
- No special regions are visible
- Efficiency rises with the distance from the station center

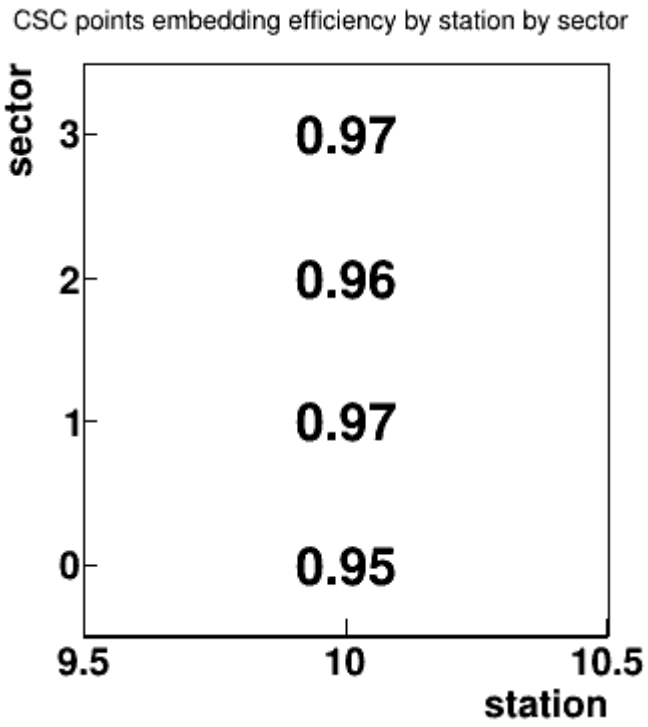
CscPoints to StsHits conversion efficiency

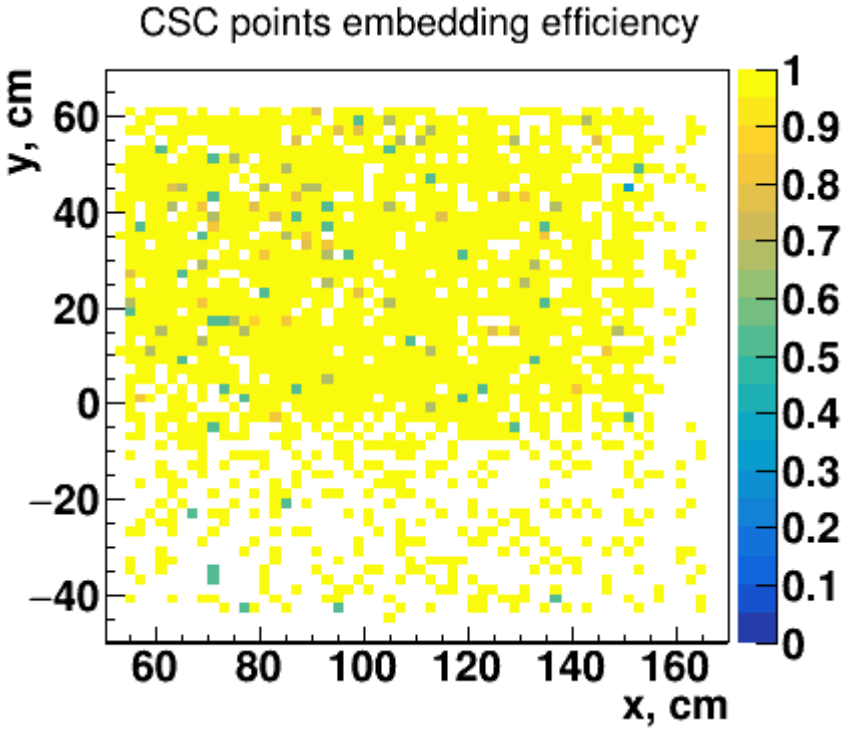




- The number of CSC Points to be converted
- Using only points which give digits in the strips
- Enough statistics in the each sector

CscPoints to StsHits conversion efficiency





- Large and uniform conversion efficiency in all CSC sectors

How to make a map between experimental and MC events?

- For run 4649 we have ~6.5K PV
- For MC run we have 50K generated events
- Now we make a loop over exp PV for all MC events
- Does event have reconstructable π^+ depends on PV (physical issue)
- About 20% reconstructed π^+ now have use the same PV (technical issue)