

Mixed updates

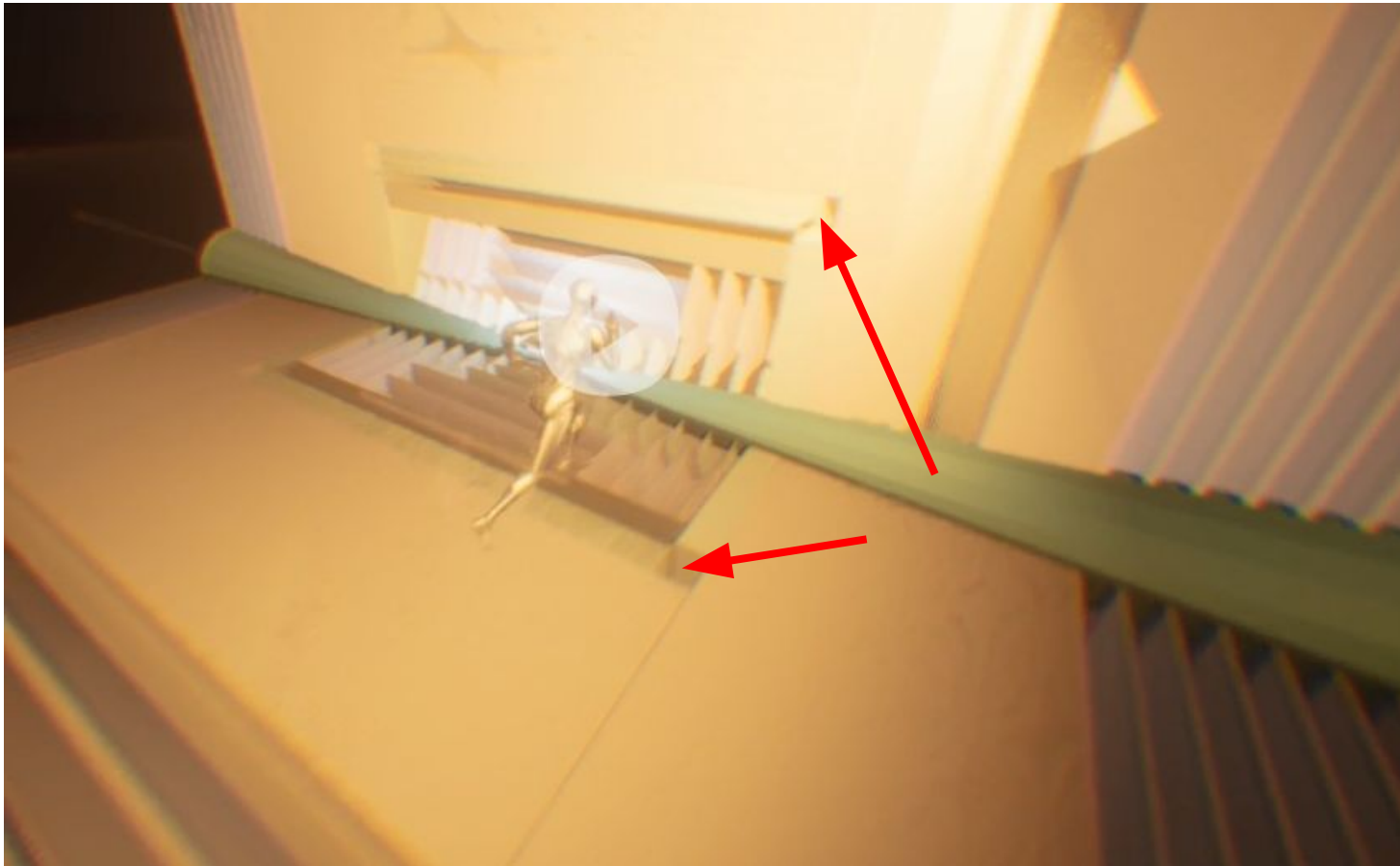
That went into an updated docker image

Federico Meloni (DESY)

Detector meeting, 05/10/2023



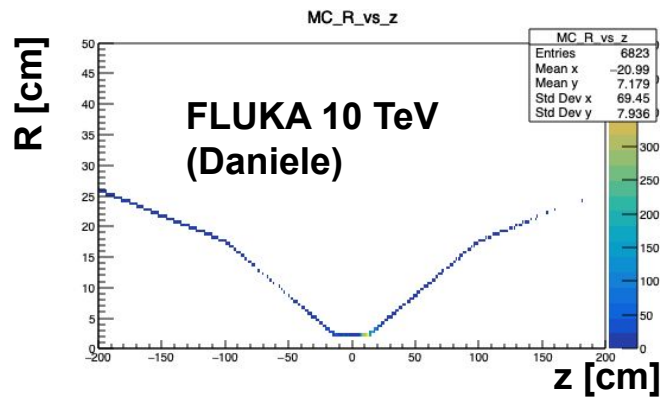
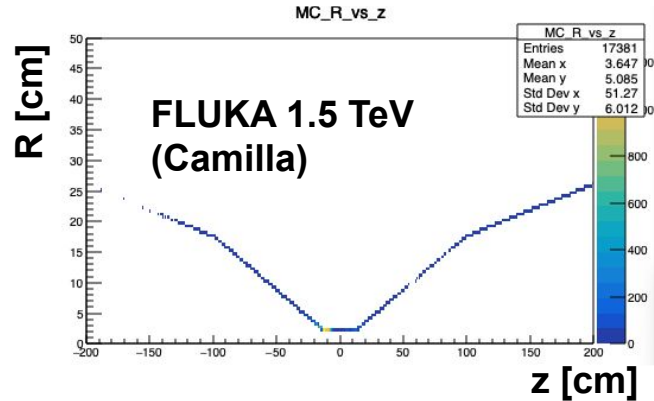
More fixes to geometry



Noticed from (awesome) video from Larry that in the revised geometry to accommodate the Pandora hardcoded order of endcap and barrel I left a gap

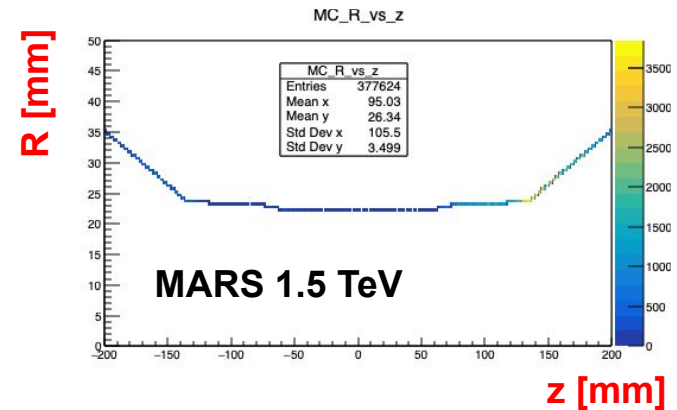
- Fixed

Understood mismatch in timing at Vertex

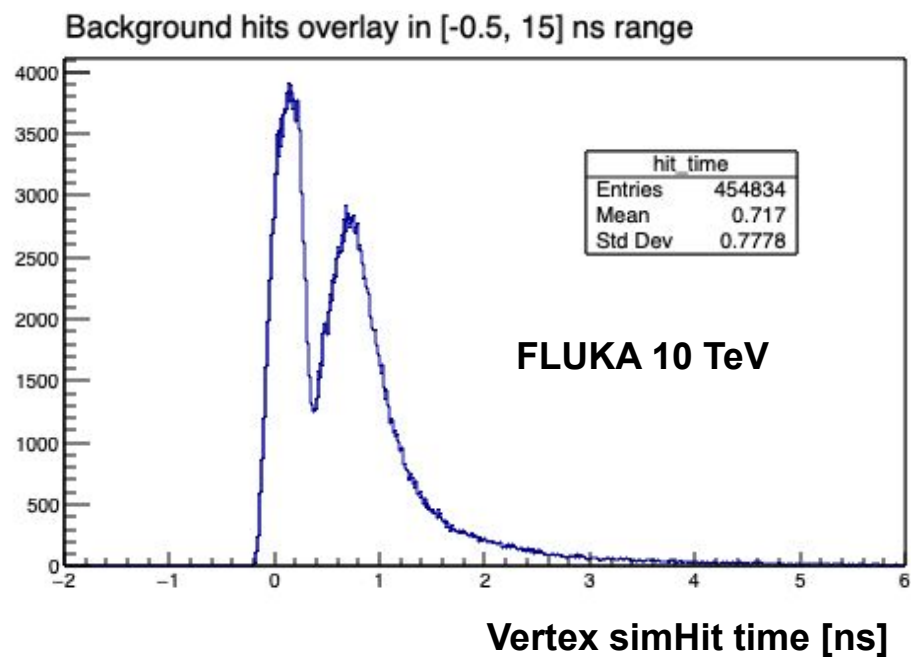
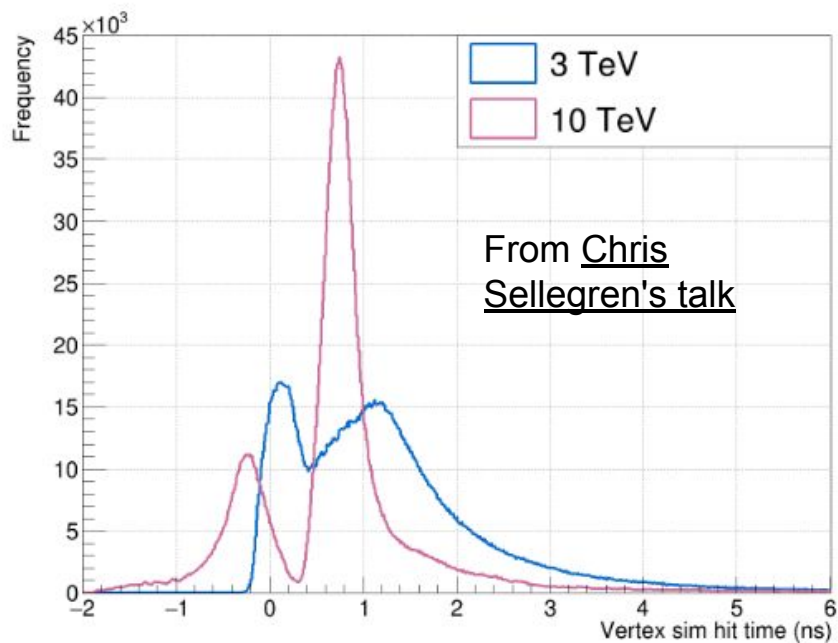


Mismatch in units

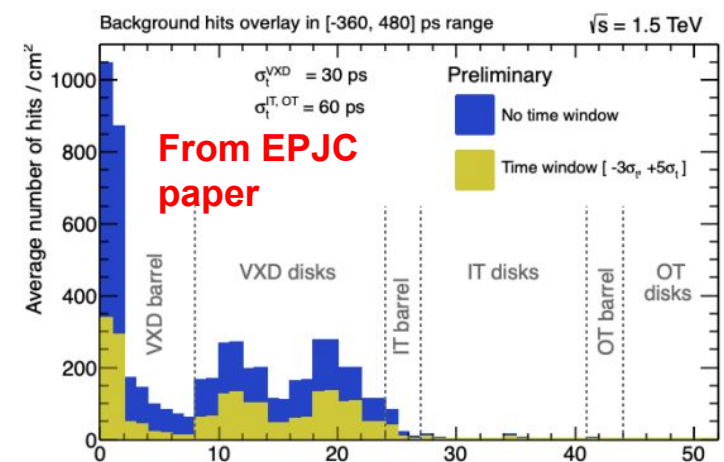
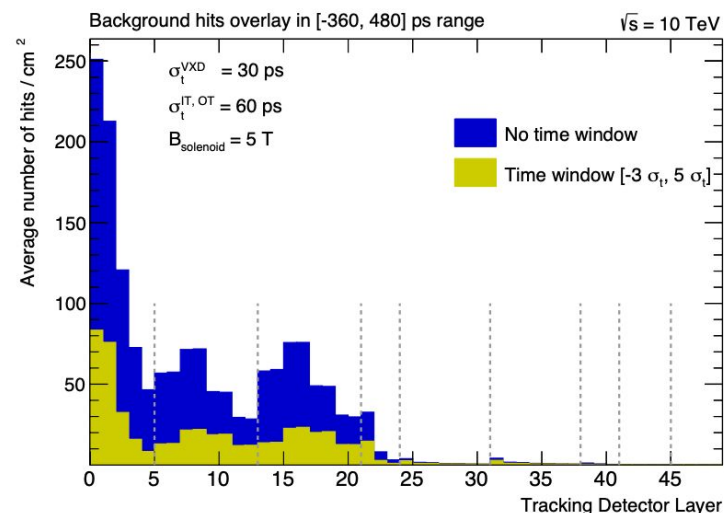
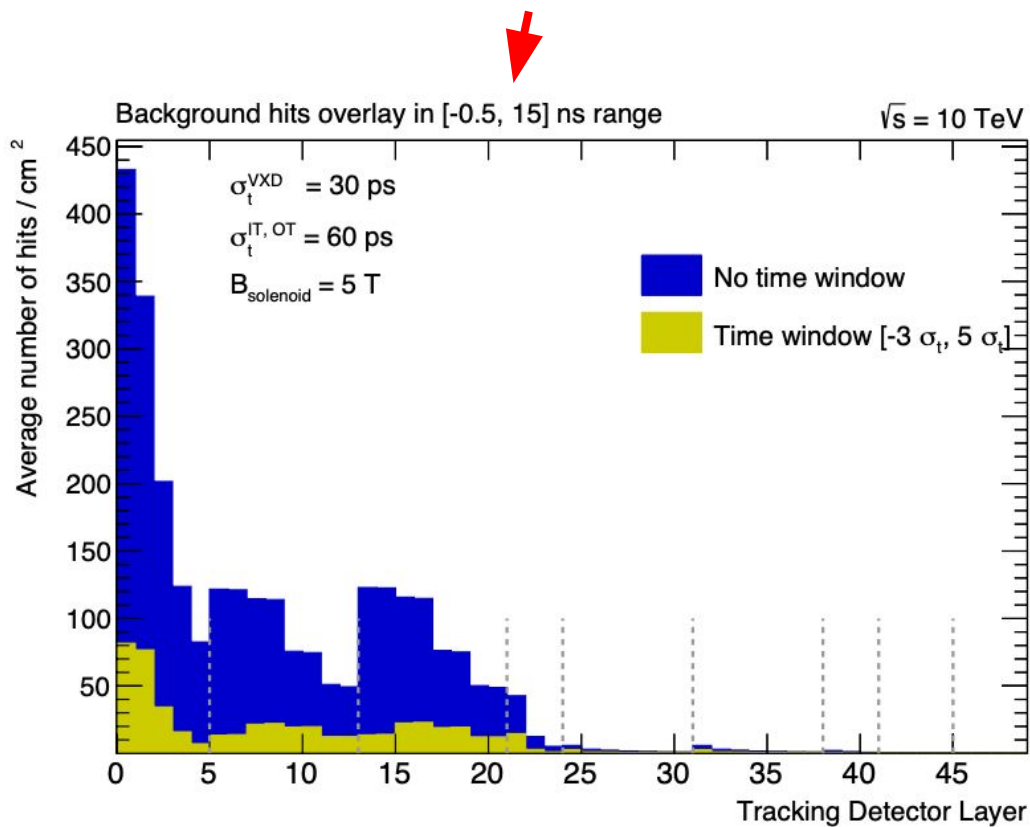
- The fluka to LCIO script didn't take this into account
- Fixed in [git](#) (and propagated to IMCC github in [PR](#))



Updated timing distribution



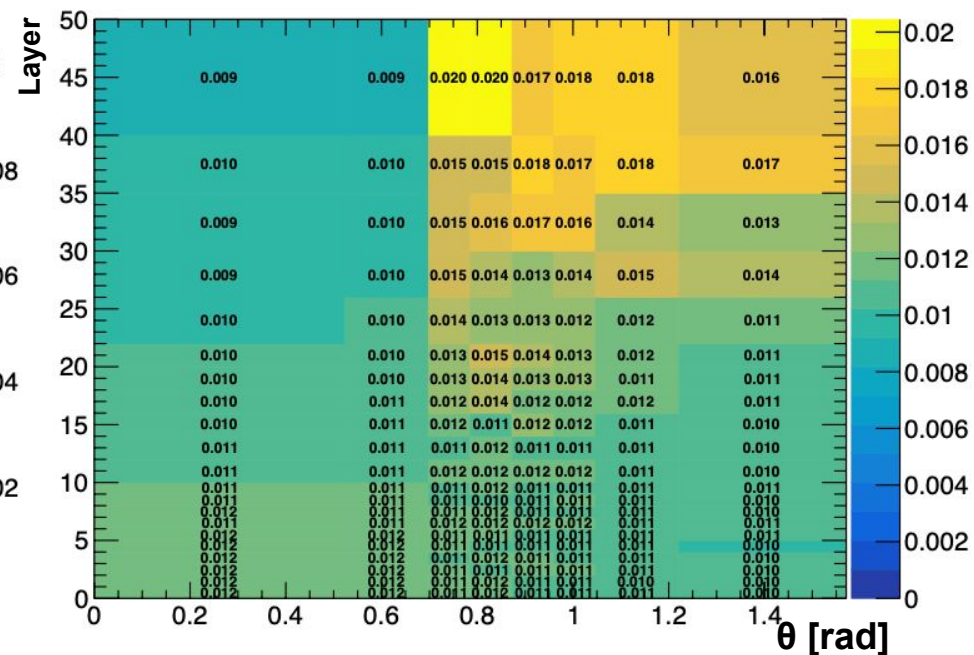
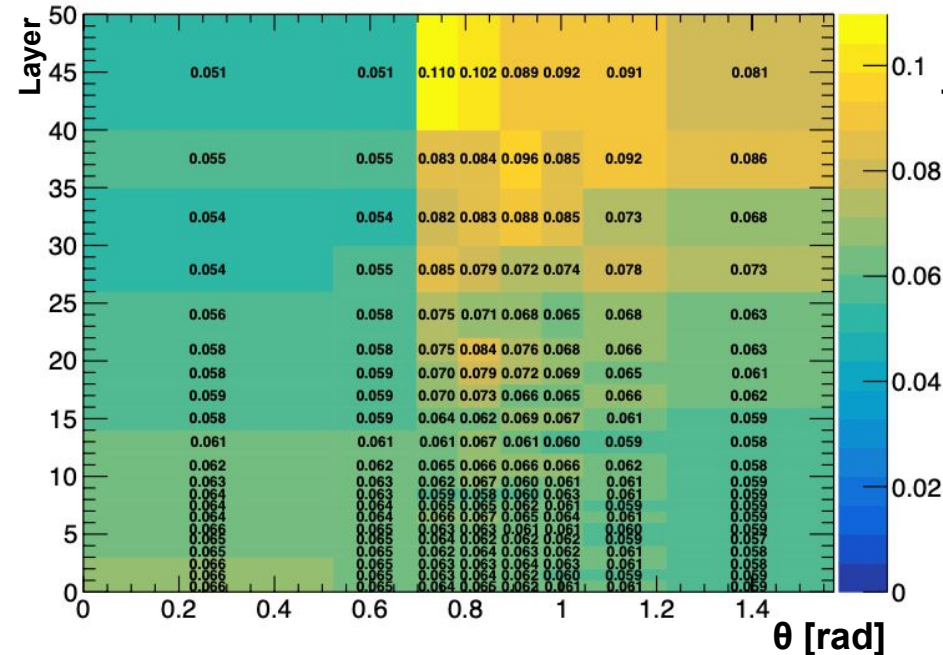
Updated tracker occupancy plot



Updated ECAL cell thresholds

ECAL mode

ECAL std deviation



*calBarrel*Sel collections contain calo hits passing

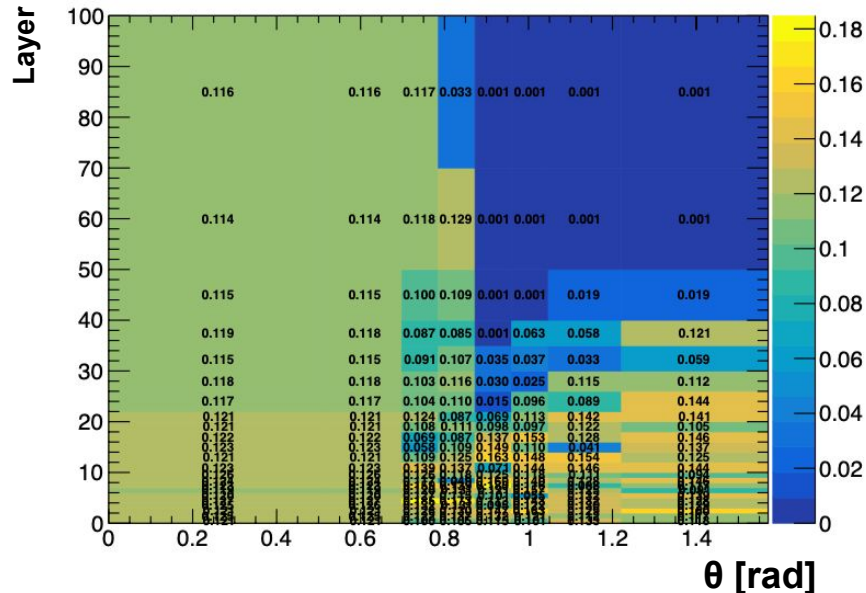
$$E_{\text{hit}} > \text{cell_mode} + 5 * \text{cell_stddev} \quad (\text{BIB efficiency: } 0.006)$$

PFOs are reconstructed with filtered cells, but “*calBarrel*Rec” are available

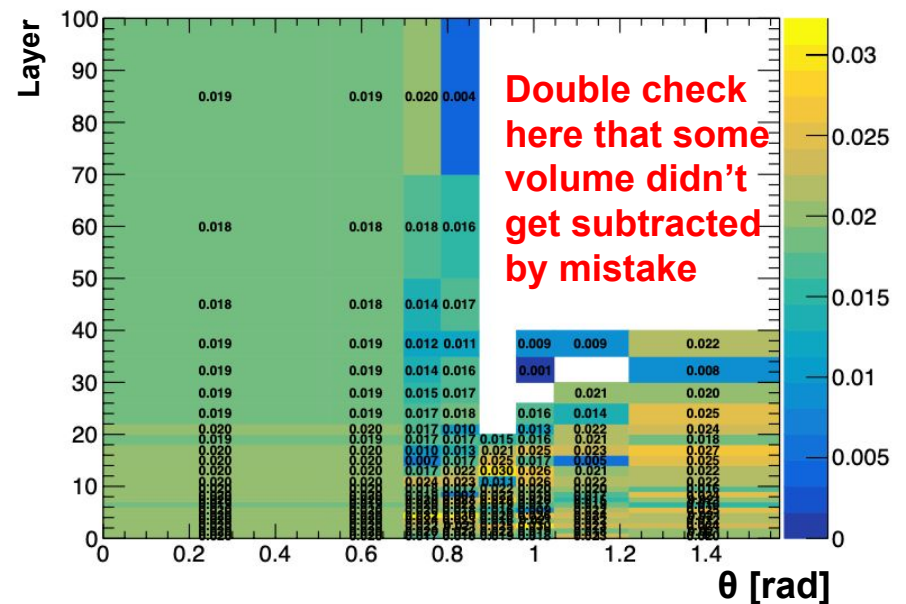
Filtered cell energy corrected by subtracting the cell_mode

Updated HCAL cell thresholds

HCAL mode



HCAL std deviation



***calBarrel*Sel** collections contain calo hits passing

$$E_{\text{hit}} > \text{cell_mode} + 5 * \text{cell_stddev} \quad (\text{BIB efficiency: } 0.034)$$

PFOs are reconstructed with filtered cells, but “***calBarrel*Rec**” are available

Filtered cell energy corrected by subtracting the cell_mode

Thank you!