HO Meeting

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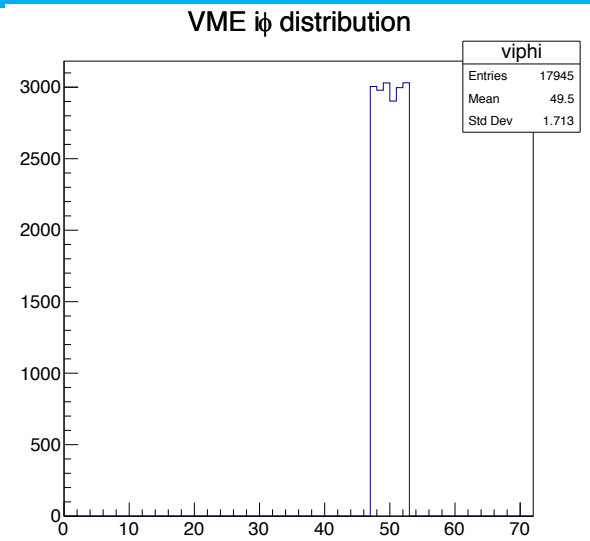
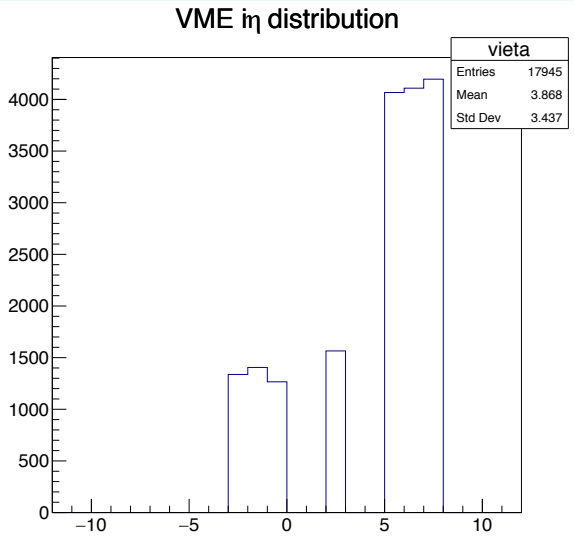
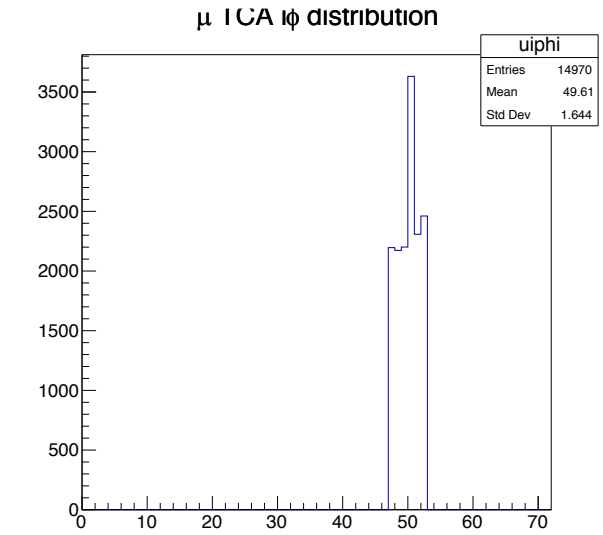
HO Fiber Split

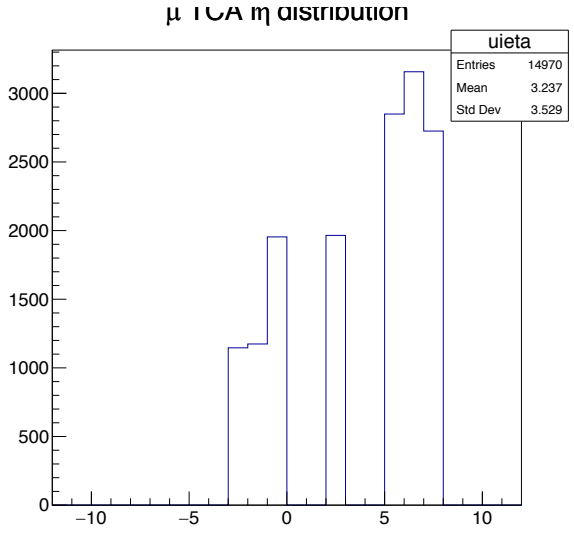
- Since Dick has connected the uHTR/HTR fiber split for one of the HO channel.
  http://cmsonline.cern.ch/cms-elog/1028885
- HO uHTR running with FW:
  Front Firmware revision: HB/HE-1600 (03) 01.07.00
  Back Firmware revision: HB/HE-1600 (03) 01.03.10
- I've looked at the data stream for and readout the data from :
  HTR at 16:6 VME and compared with uHTR at 38:1 uTCA.
- The dataset used : Run2018A/SingleMuon/RAW
- CMSSW : 10_1_1 , GT : 100X_dataRun2_HLT_v3
  modified emap provided by Dick.

HO Fiber Split





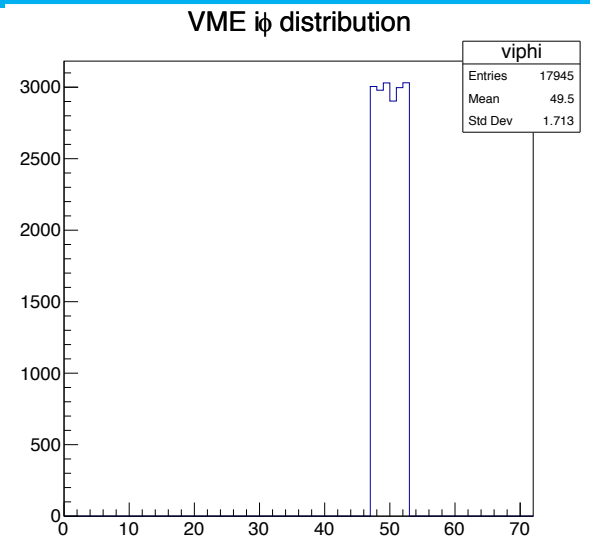


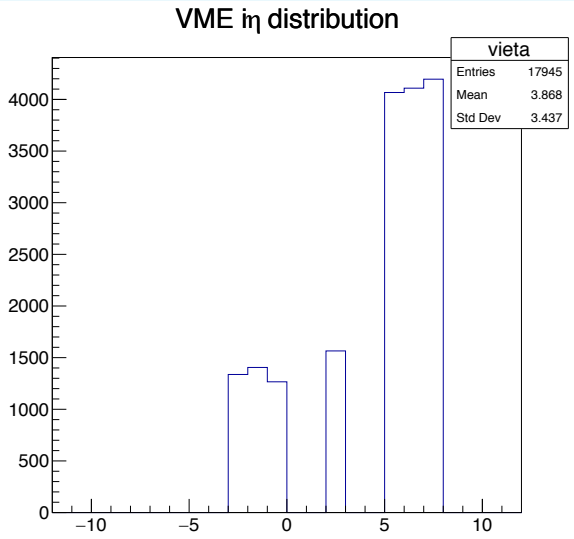


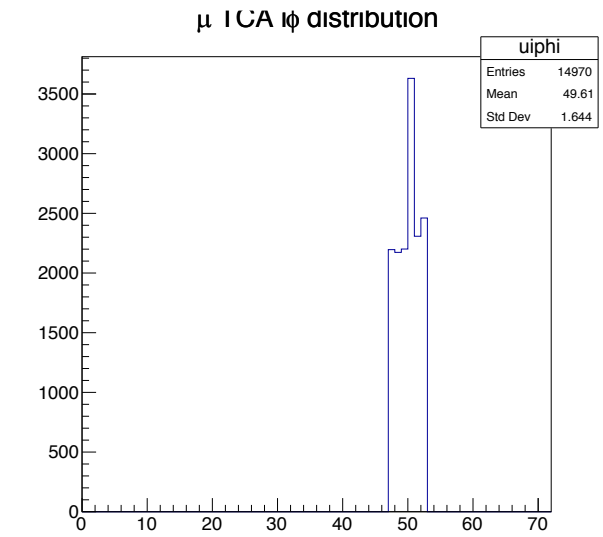
Uncorrelated eta,phi distributions I've dumped few events and they are completely uncorrelated.

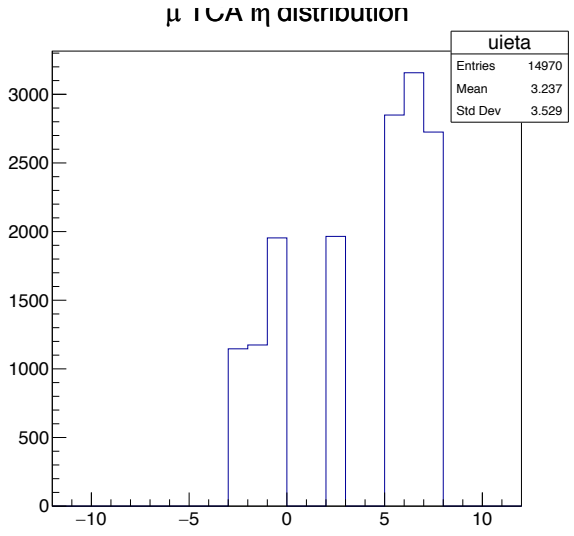
Dick investigated and realized that the VME crate number for split HTR is 7:16, not 6:16

HO Fiber Split







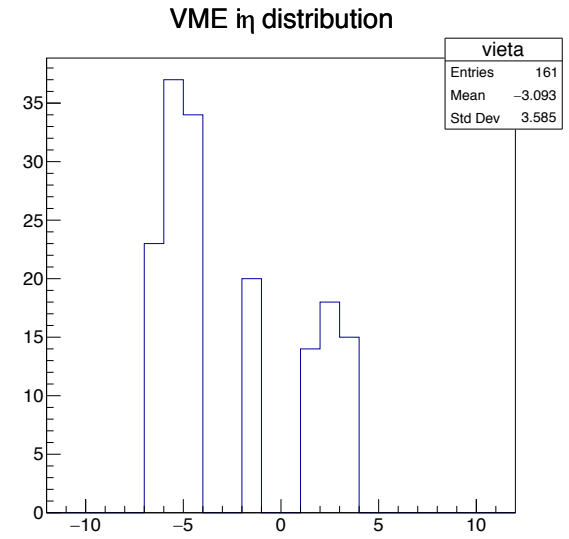


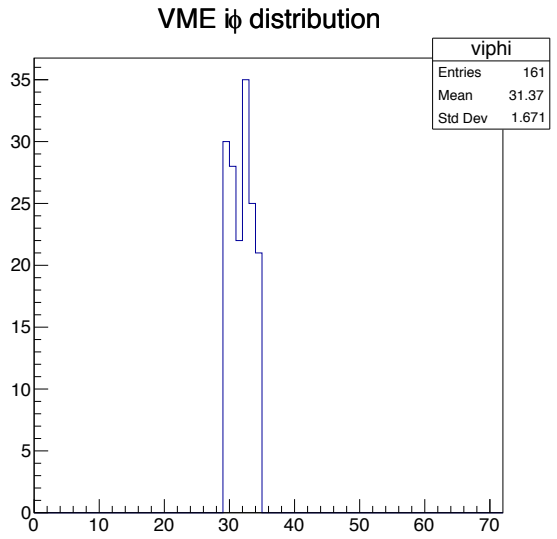
Uncorrelated eta,phi distributions I've dumped few events and they are completely uncorrelated.

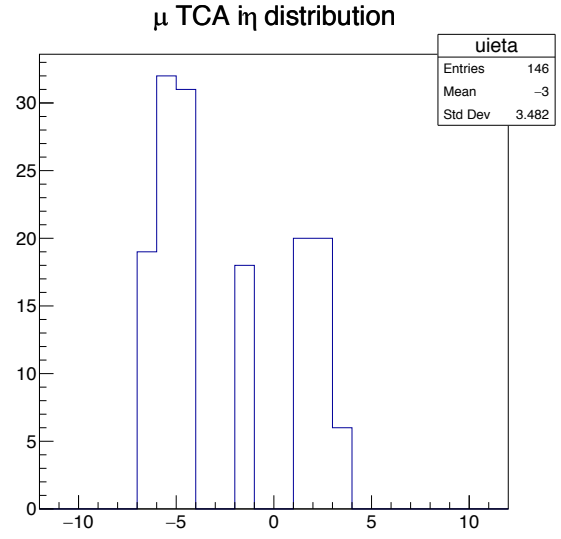
Dick investigated and realized that the VME crate number for split HTR is 7:16, not 6:16

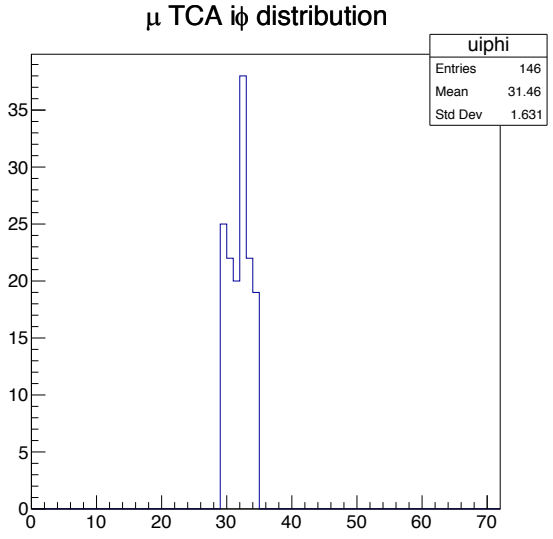
i've modifed the emap and wating for Dick's confirmation about the new emap

HO Fiber Split – new emap





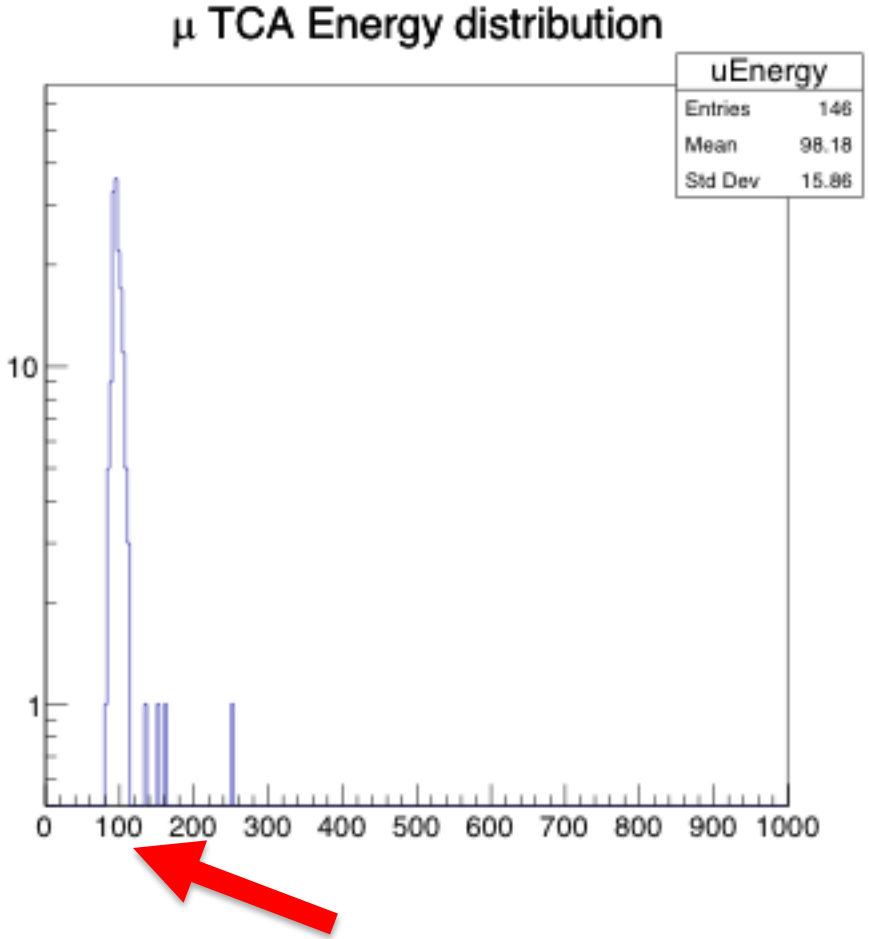


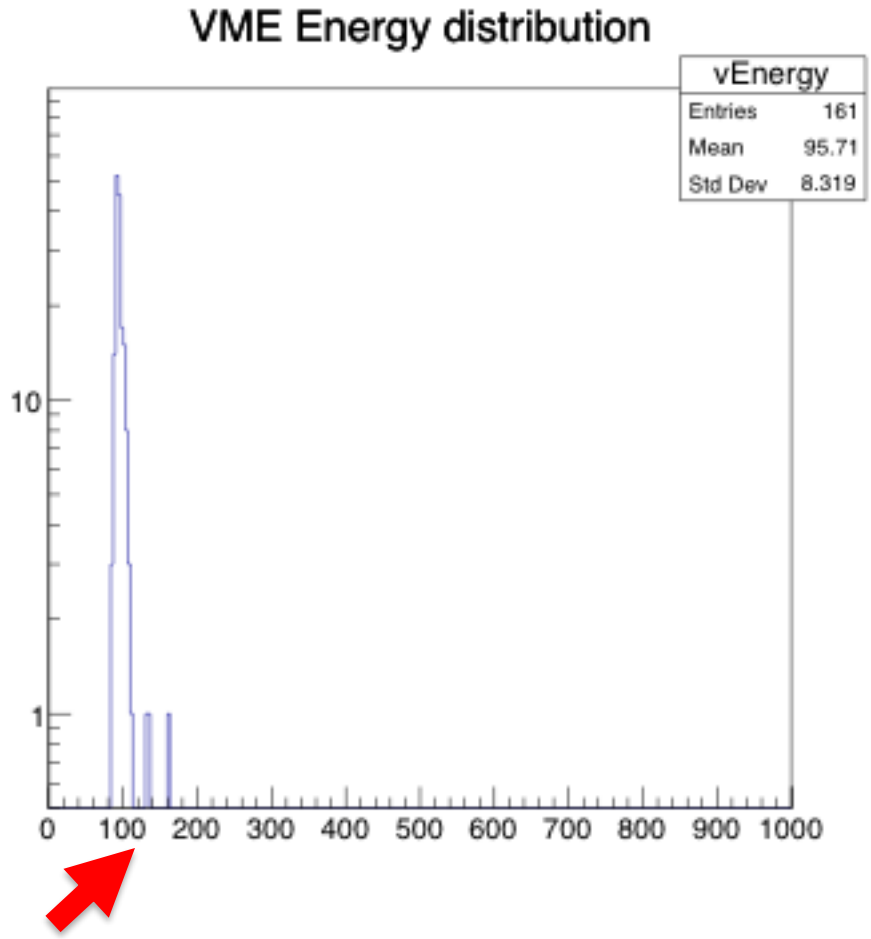


Better correlation when I've dumped few events, still waiting to Dick's confirmation about the emap

Still need to understand the why HTR have more entries than uHTR while the supposed to process the same input ?!

HO Fiber Split – new emap





Sum(ADC counts) looks in agreement

Discussions

- Few thing needed to be checked and the payload needed to be understood well.
- We need to understand how exactly uHTR treat the HO data.
- The FW for uHTR can be compiled only with Xilinix ISE , not VIVADO, still I can't compile the FW at DESY server while it's working at CERN servers, but CERN servers are not accessible from outside CERN network.
- I suggest to have a separate Windows machine with full control as I can't debug any thing in the current server.
- Summer student program will start soon.
- HO trigger DN is now ready for second iterations, I will send it back to Dirk and then we can circulate to the whole list

Danke

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Thanks