

# Jet trigger validation

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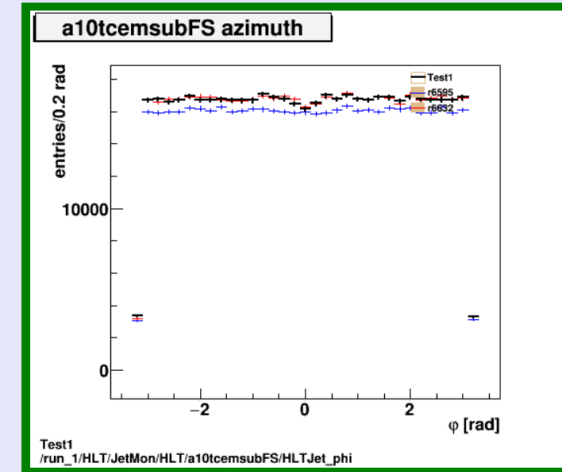
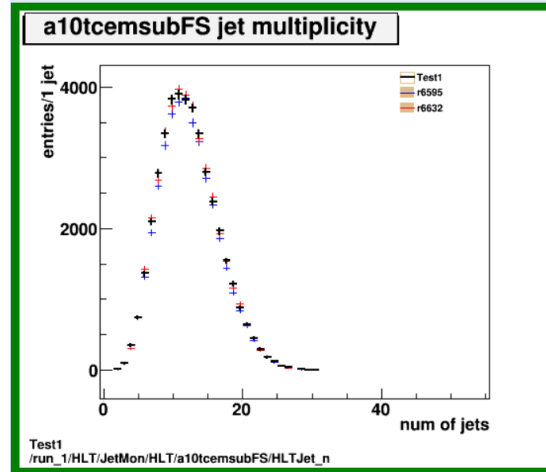
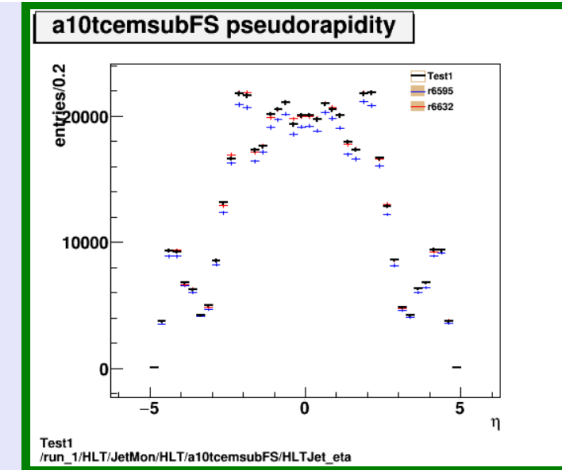
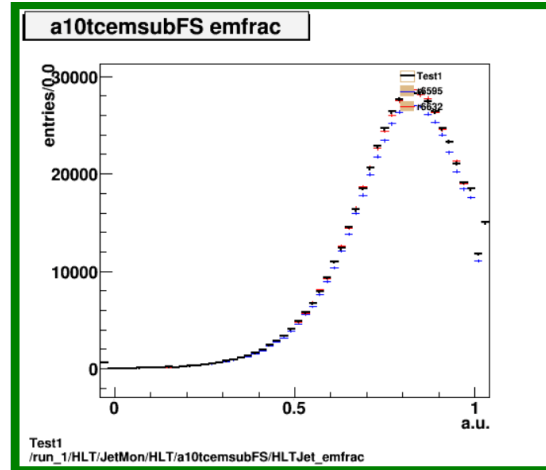
For the jet trigger signature group

# Sample A ttbar alidation for MC15a

Task	Test	Container	?
1	1	run_1/HLT/JetMon/HLT/a10tcemsubFS	OK
<b>Ref:</b> 1) AthenaMP (r6595) 2) As 1) but with updated digi-window (r6632) <b>Test:</b> Full MC15 setup (AthenaMP) in 20.1.4.7 incl. digi window update; <b>same pileup as test</b>		run_1/HLT/JetMon/HLT/a4tcemjesFS	OK
		run_1/HLT/JetMon/HLT/a4tcemjesPS	OK
		run_1/HLT/JetMon/HLT/a4tcemsubFS	OK
		run_1/HLT/JetMon/HLT/a4tcemsubjesFS	OK
		run_1/HLT/JetMon/HLT/a4tclcwjesFS	OK
1	2	run_1/HLT/JetMon/HLT/a10tcemsubFS	OK
<b>Ref:</b> 1) AthenaMP (r6595) 2) As 1) but with updated digi-window (r6632) <b>Test:</b> Full MC15 setup (AthenaMP) in 20.1.4.7 incl digi window update; slightly <b>updated pileup</b> distribution		run_1/HLT/JetMon/HLT/a4tcemjesFS	OK
		run_1/HLT/JetMon/HLT/a4tcemjesPS	OK
		run_1/HLT/JetMon/HLT/a4tcemsubFS	OK
		run_1/HLT/JetMon/HLT/a4tcemsubjesFS	OK
		run_1/HLT/JetMon/HLT/a4tclcwjesFS	OK

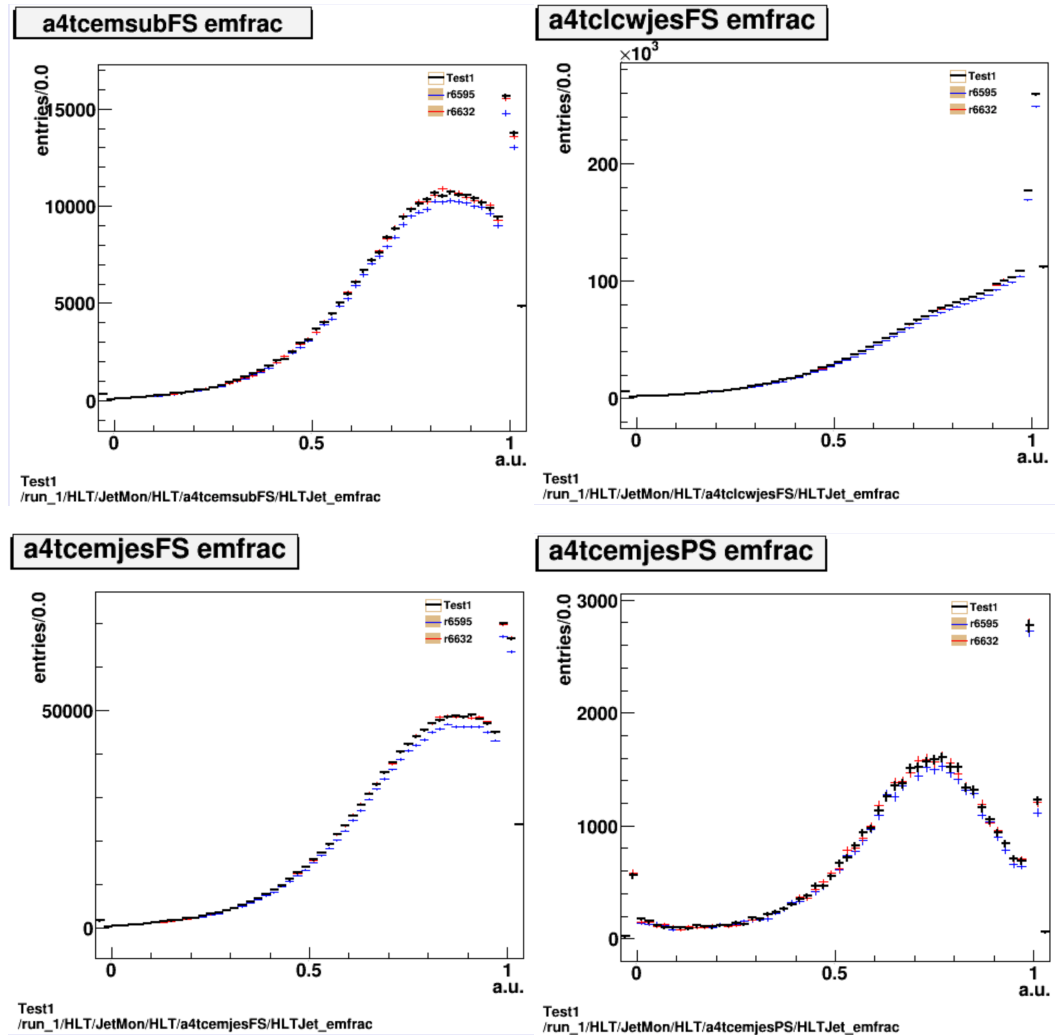
# Test 1

- **Ref:**
  - 1) R6595
  - 2) r6632: as 1) but with updated digi-window
- **Test:** incl. digi-window update; same pileup as ref
- Slightly less **events** with jets passing L1 in **ref.1**
- Consistent with same digi. window in ref.2 and test?



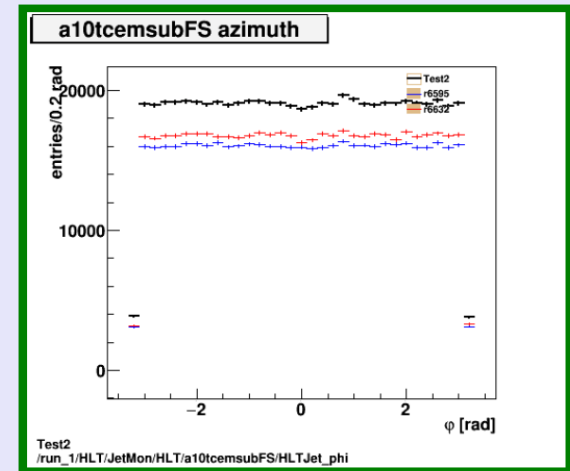
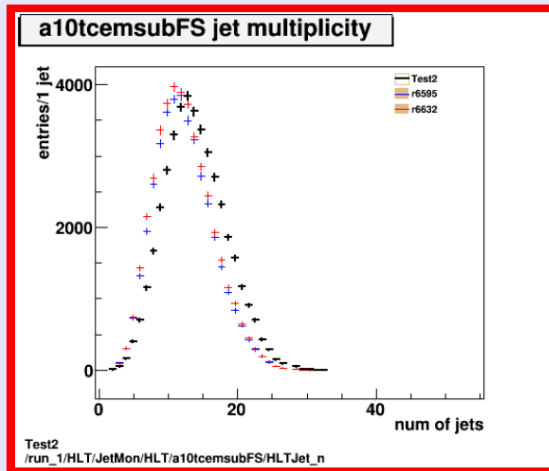
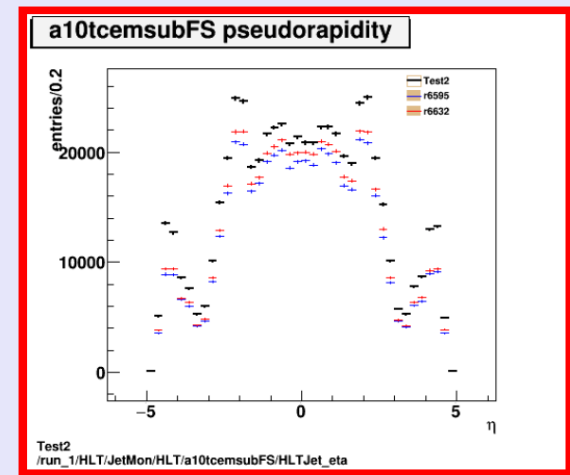
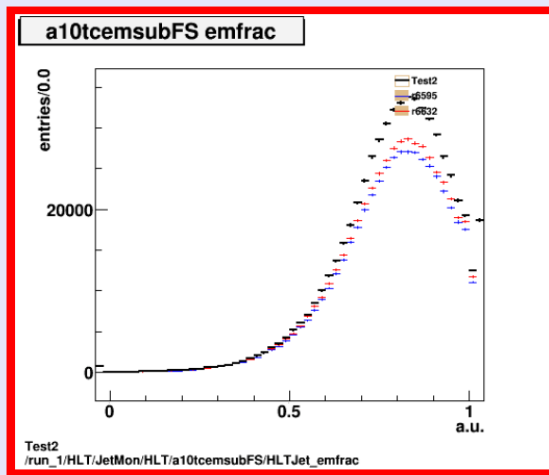
# Test 1

- **Ref:**
  - 1) R6595
  - 2) r6632: as 1) but with updated digi-window
- **Test:** incl. digi-window update; same pileup as ref.
- Differences in EMfrac between EM and LCW calibrations as expected



# Test 2

- **Ref:**
  - 1) R6595
  - 2) r6632: as 1) but with updated digi-window
- **Test:** Full MC15 setup (AthenaMP) in 20.1.4.7 incl digi window update; slightly **updated pileup**
- More jets in test, consistent with **more pileup** on average



# Summary

- **Ref:**
  - 1) R6595
  - 2) r6632: as 1) but with updated digi-window
- **Test 1:** includes updated digi-window
- **Test 2:** updated pileup
- **Conclusions:**
  - Looks essentially fine
  - Small doubt about what to expect from difference digitization window in test 1