

nanoAOD-like ntuple for Run 1: news

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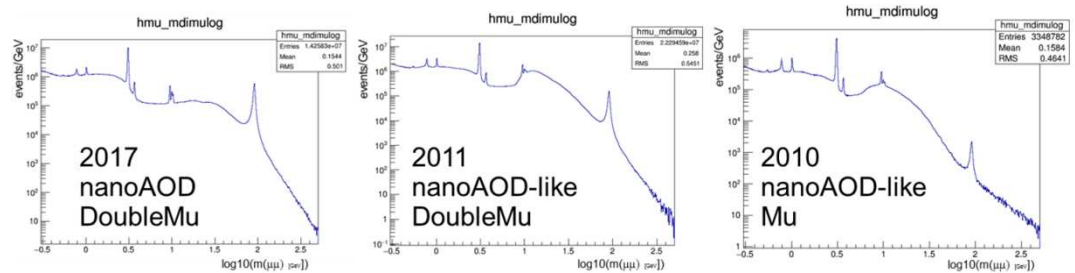
- for motivation/goals, see slides previous meeting
- legacy data format EPR now fully pledged (some room for negotiations)
- project well received at XPOG meeting at June collaboration week
- first validation results from Fabian and Paula (summer students)
- round table

Twiki Documentation (under development) :
<https://twiki.cern.ch/twiki/bin/viewauth/CMS/DPOANanoAODlike>

Validation tools and strategy

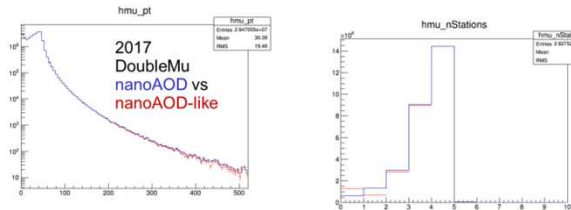
- Indirectly compare some **physics distributions** for different datasets
examples see presentation
at fall C&O meeting:

summer students
(+ DY studies??)



- Directly compare **technical distributions** (only possible for Run 2)
examples see presentation
at fall C&O meeting:

all developers



- New: Use BuildIndex and Friend functions of Root to **compare nanoAOD and nanoAOD-like variables event-by-event**, even if input event sets only **partially overlap** and events occur in **different order** (only possible for Run 2)
(thanks to A. Ricci and J. Metwally for support!)

-> can validate and debug **exactly** all developers

(currently ~30% of variables implemented, ~20% usefully filled, ~5% fully validated)

- Exactly reproduce some known/well-validated Run 1 distributions from nanoAOD-like ntuple

summer students
(+ DY studies??)

Backup

Tentative list of tasks/contents

- nanoAOD ntuple content (9_4 v2):

	variables	implemented	content implemented	content validated	remaining work
•	run/event/lumis.	3	100%	100%	100%
•	Generator /PSweight	11	-	-	done
•	PV /OtherPV /Pileup	14	70%	70%	~0.5 months, Hannes?
•	SV	13	100%	10%	~0.5 months, Achim
•	GenPart	9	100%	50%	~1 month, Achim
•	Muon	35	100%	80%	~0.25 months, Achim
•	Electron	48	20%	20%	~1 month, Achim/Fabian/Paula + Nuha
•	Photon	28	25%	25%	~3 months, Nuha/Paula/Fabian, Qun?
•	Tau	38	25%	25%	~2 months, !not yet covered!
•	IsoTrack	13	100%	-	~3 months, !not yet covered!
•	GenDressedLepton	14	-	-	~0.5 months, Achim
•	+ GenVisTau				~0.5 months, Hannes?
•	Jet+FatJet +SubJet	79	5%	5%	~5 months, 2 covered, Armando?
•	+SoftActivityJet+SoftActivityJetHTX				
•	GenJet +GenJetAk8	14	-	-	~0.5 months, Hannes?
•	MET+TkMET	23	30%	30%	~2 months, 0.5 covered, !1.5 not yet!
•	+CaloMET +RawMET+PuppiMET				Stefan??
•	TrigObj	11	-	-	~1 month, Qun
•	HLT	569 (!?)	-	-	~0.5 months? Afiq?
•	LHEPart	11	-	-	~0.5 months !not yet covered! Hannes??
•	+LHEPdfWeight + LHEScaleWeight+LHEWeight_originalXWGTUP				
•	Flag	26	-	-	~2 months, !not yet covered!
•	Various other	10	-	-	~1 month
•	coordination + set up & manage twiki + git repository				~1 month, Achim + Nuha?
•	various general technicalities of setup				~0.75 months, Nuha
total					~26 months 2019/20
					~13 this year
					~13 next year (tbc)