Datasets studied

/JetMETTau/: Run: 135821-141887

15U	0.011
30U	0.085
50U	0.172

/JetMET/: Run: 141961-144114

15U	0.01
30U	0.194
50U	2.888
70U	2.888
100U	2.888

/Jet/: Run: 146240-148864

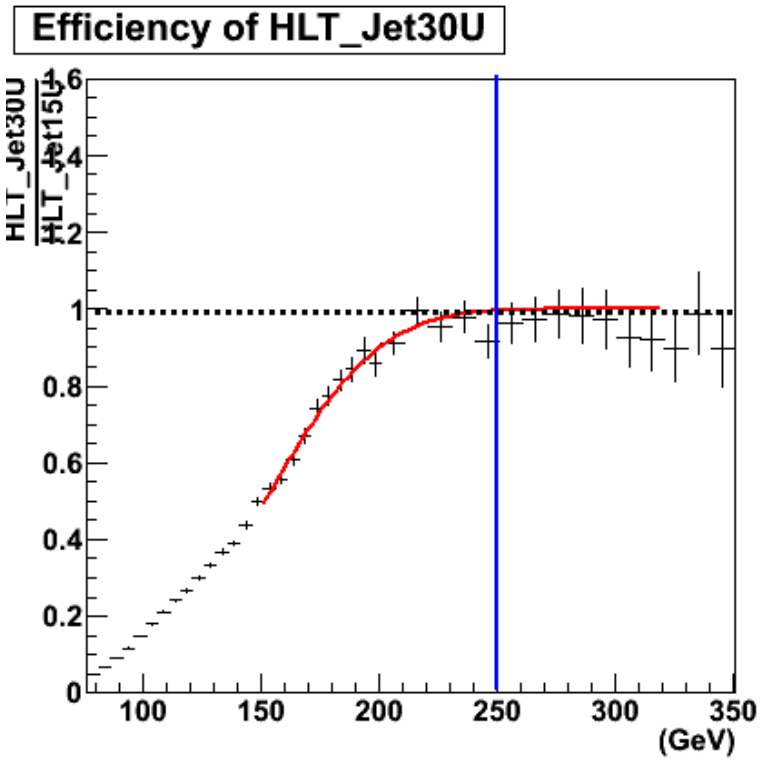
15U	0.002
30U	0.023
50U	0.206
70U	4.408
100U	4.408

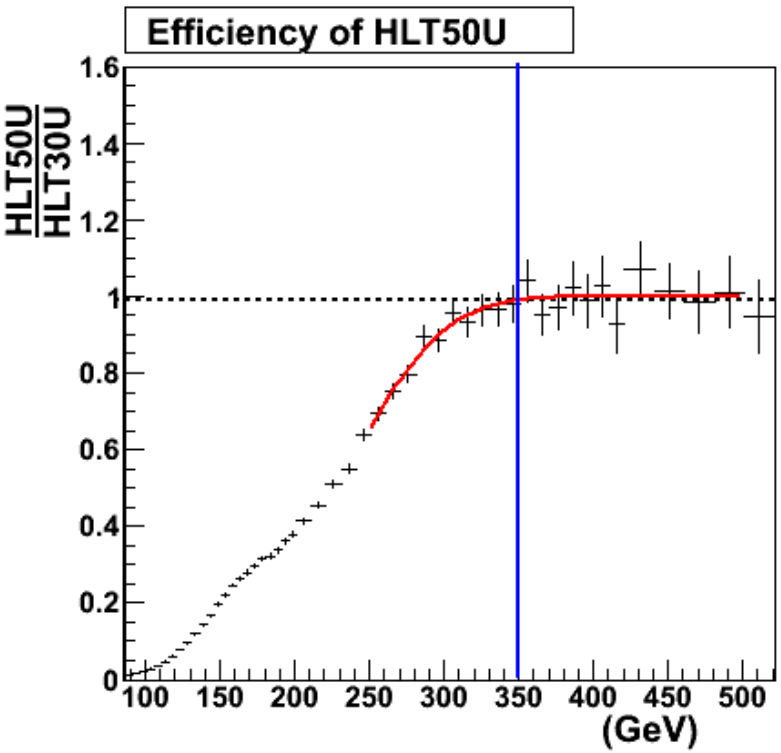
/Jet/: Run: 147196-148058

70U_v2	0.477
100U_v2	9.471
140U_v1	9.471

/Jet/:	148822-148864	148952-149294
15U_v3	0.001	0.001
30U_v3	0.003	0.008
50U_v3	0.022	0.060
70U_v3	0.115	0.319
100U_v3	0.523	1.424
140U_v3	4.955	12.832
180U_v3	4.955	12.832

Efficiency of Jet30U, Jet50U



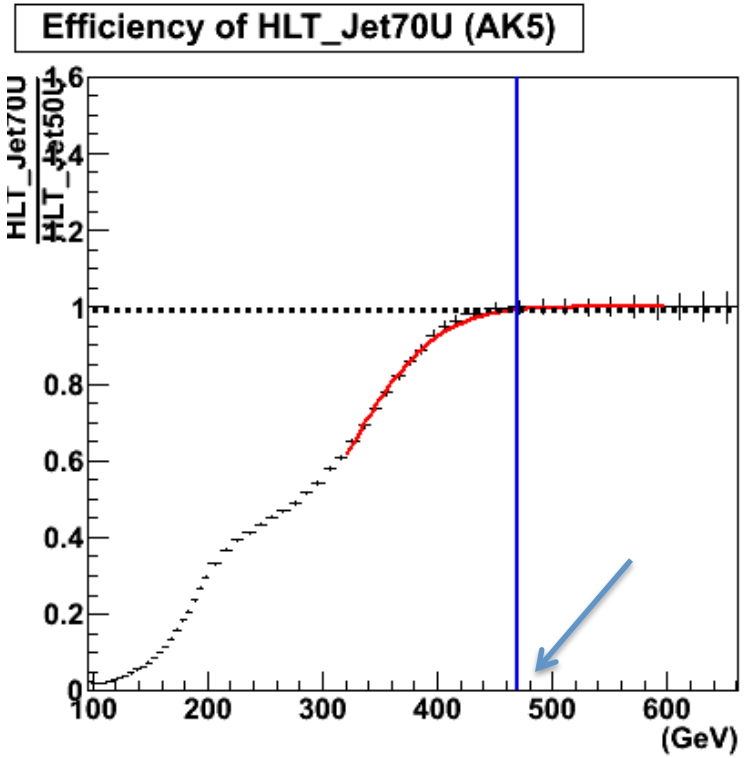


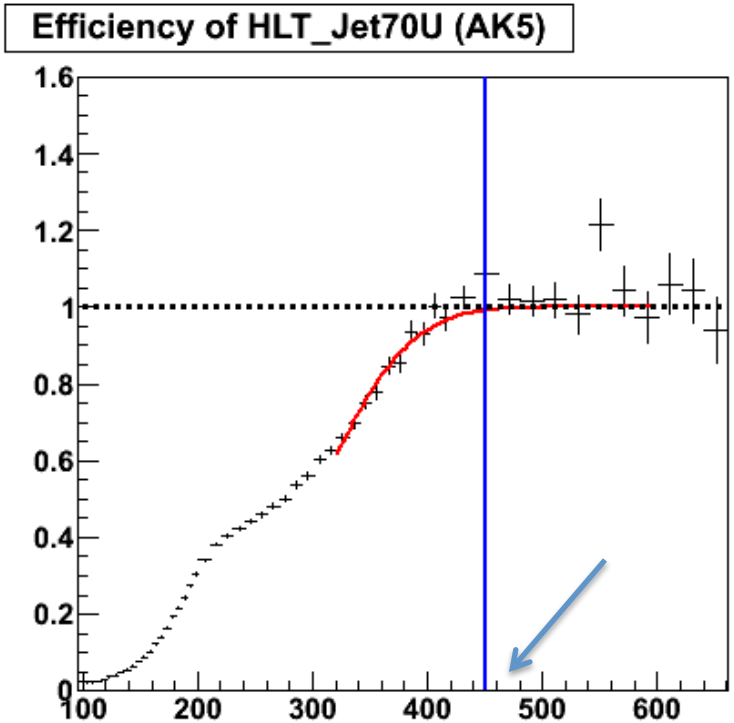
Turn on value: 250

Turn on value: 350

Fitted with : 0.5+0.5*Erf([0]*x+[1]) and calculated 99% efficiency from the fit.

Efficiency of Jet70U

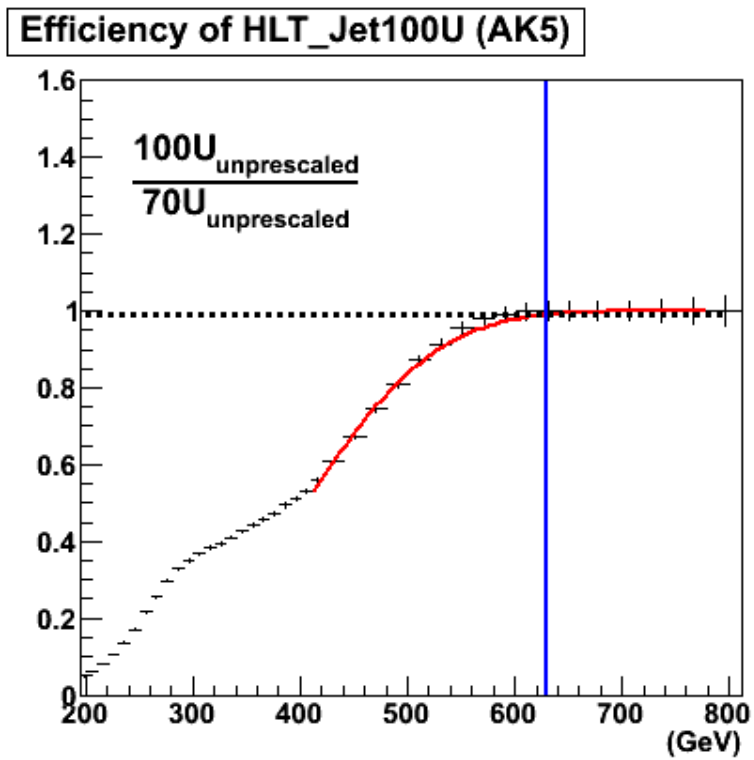




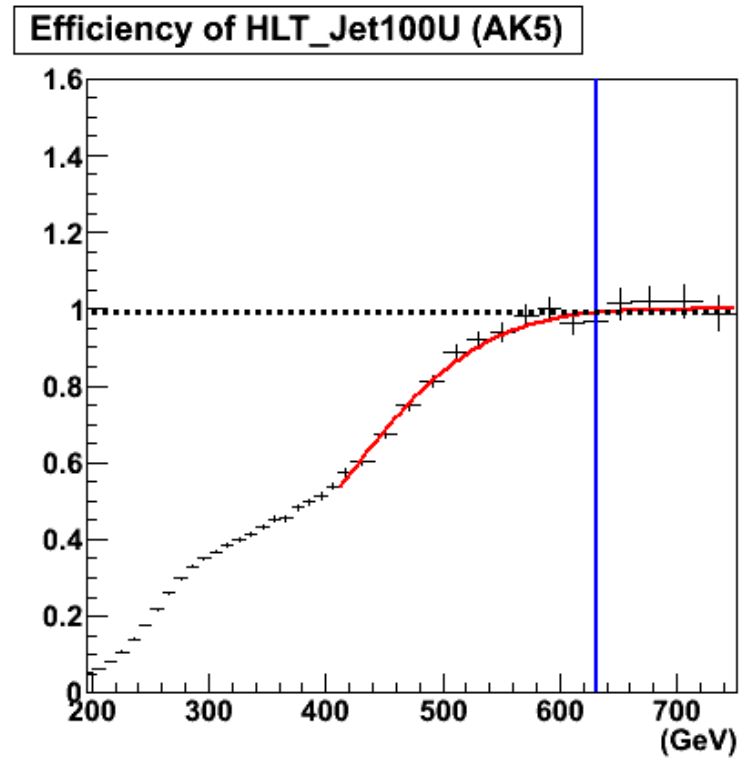
Unprescaled
Turn on value: 470

Prescaled
Turn on value 450

Efficiency of Jet100U

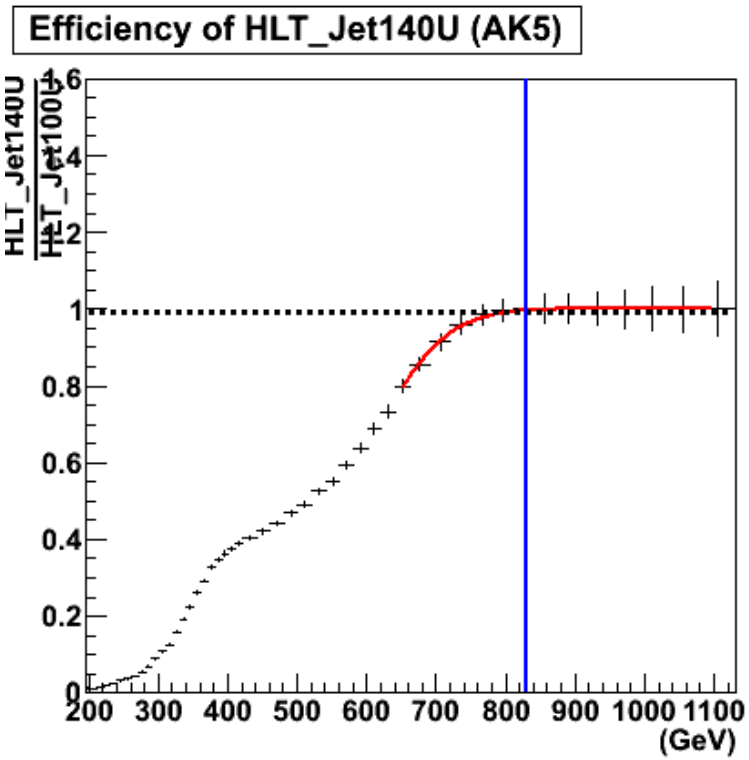


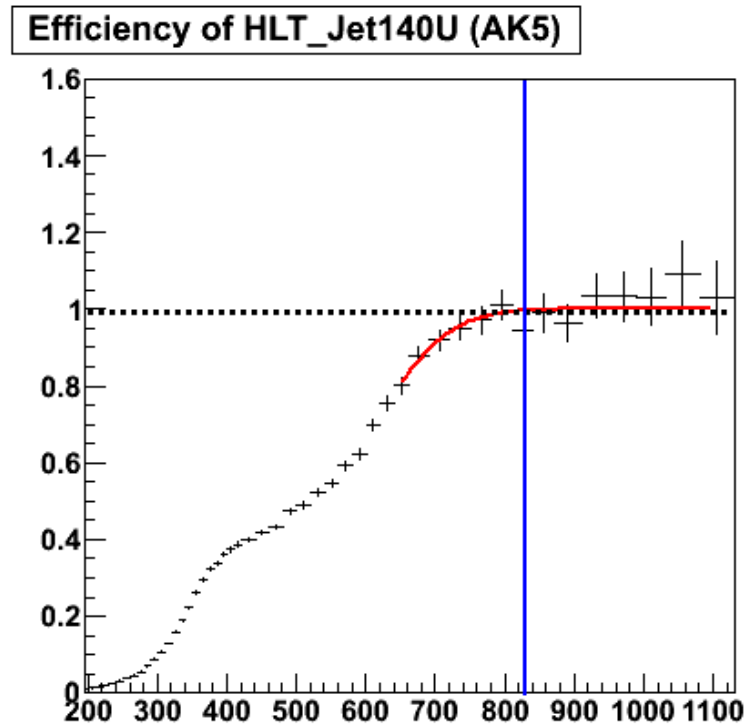
Unprescaled
Turn on value: 630



prescaled
Turn on value: 630

Efficiency of Jet140U





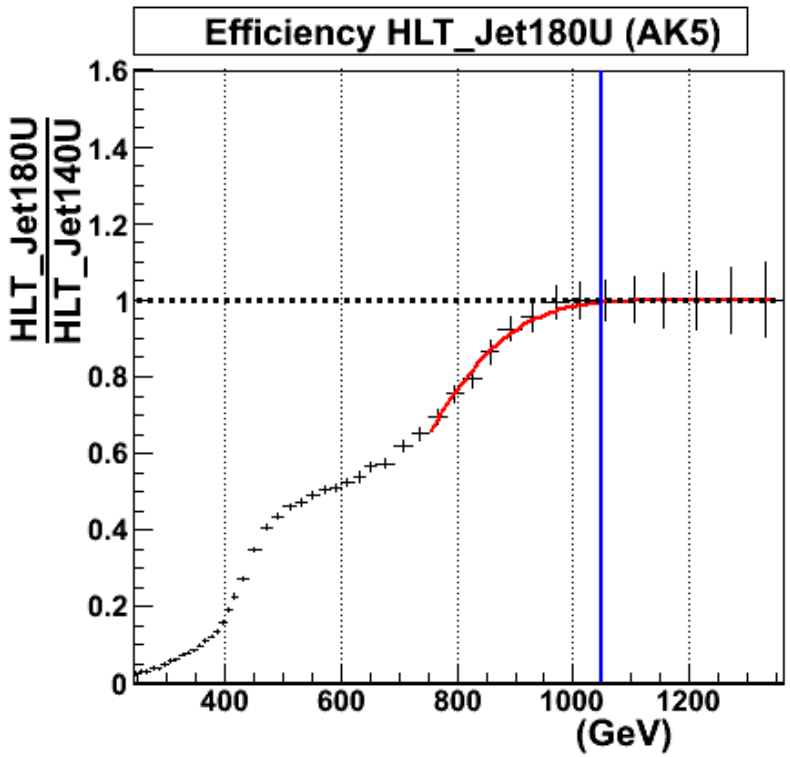
Unprescaled:
Turn on value: 850
This is Jet140U_v1

Jet100_v2

Unprescaled:
Turn on value: 850
This is Jet140U_v3 + Jet140U_v1

Jet100_v3 + Jet100_v2

Efficiency of Jet180U



Turn on value:1050

Proposal for Mass bins

Triggers	AK5	AK5	AK5
HLT_Jet15U	(OLD)	*NEW*	(Andreas)
HLT_Jet30U	250	250	240
HLT_Jet50U	380	350	340
HLT_Jet70U	450	450	440
HLT_Jet70U_v2	450		
HLT_Jet100U	620	630	580
HLT_Jet100U_v2	~620		
HLT_Jet100U_v3	~620		
HLT_Jet140U_v1	820	830 *	780
HLT_Jet140U_v3	820		
HLT_Jet180U_v3	980	1050 *	1000

★ For 140U and 180U the suggested values from the Erf() Fit function is higher than what can be seen by the eyes to be >99% efficient point.

A new Mass bin for AK5

Mass bins
250 -350
350-450
450-650
650-850
830-1050 ?
1050-1250 ?
1250-1500
1500-1800
1800-2200
2200-

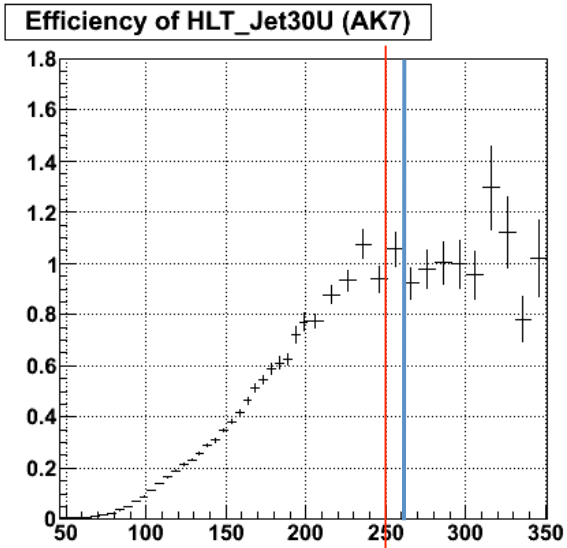
What do you feel Andreas?

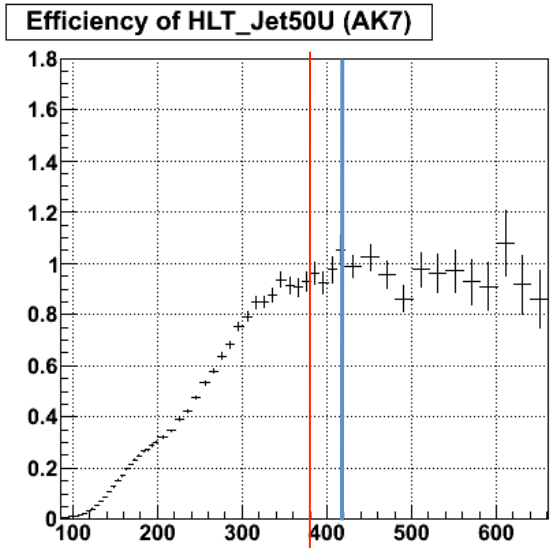
Else we can keep

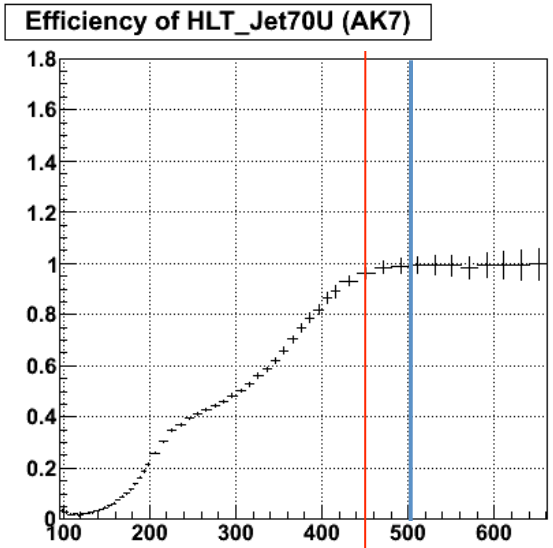
650-800
830-1000 ?
1000-1200 ?
1200-1400
1400-1800
1800-2200
2200-

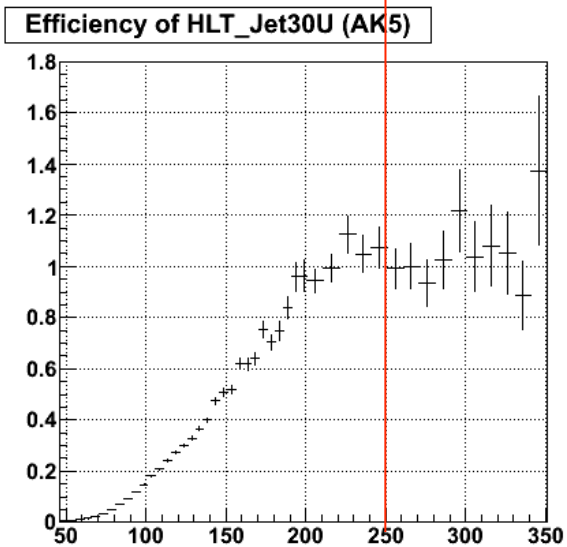
Back up

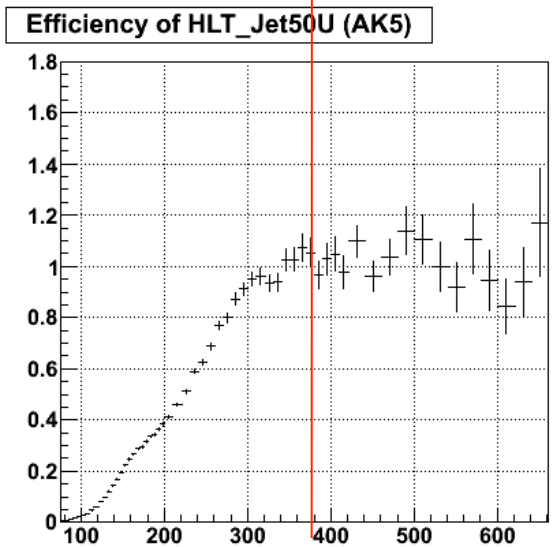
Turn On's for Jet30U, Jet50U, Jet70U

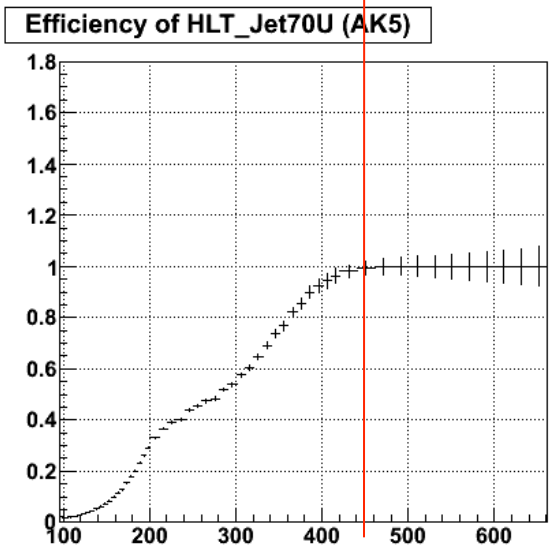




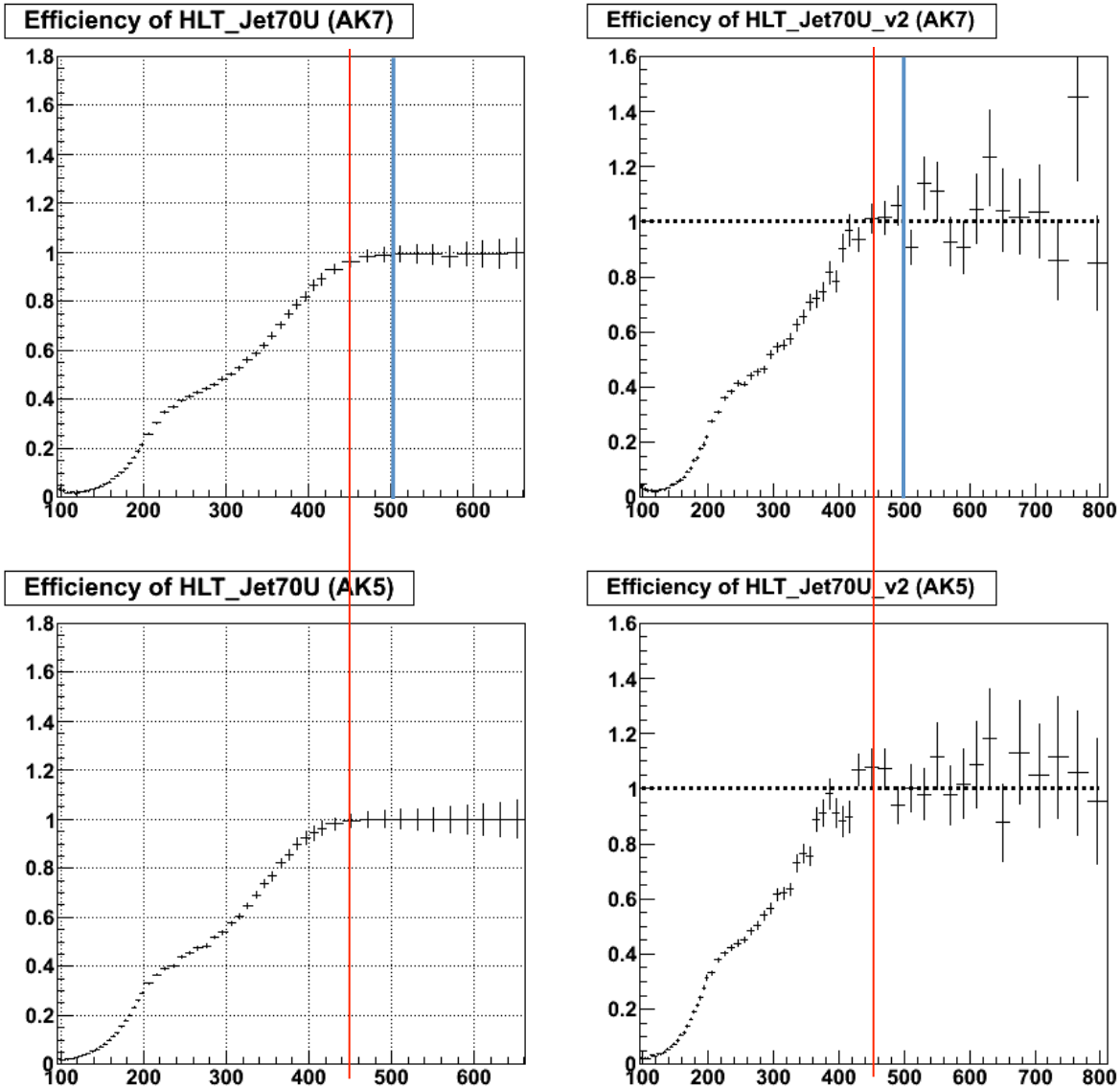




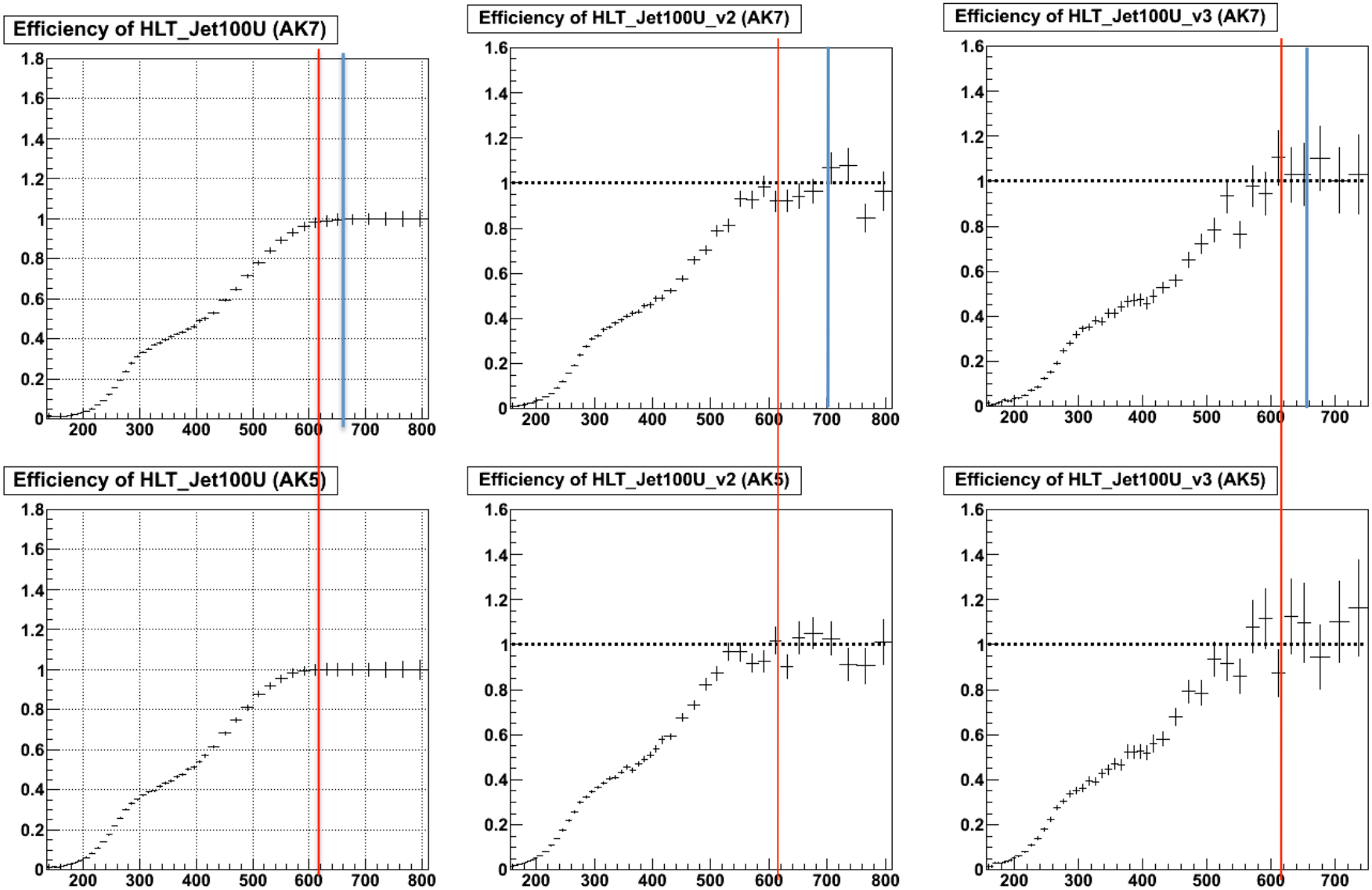




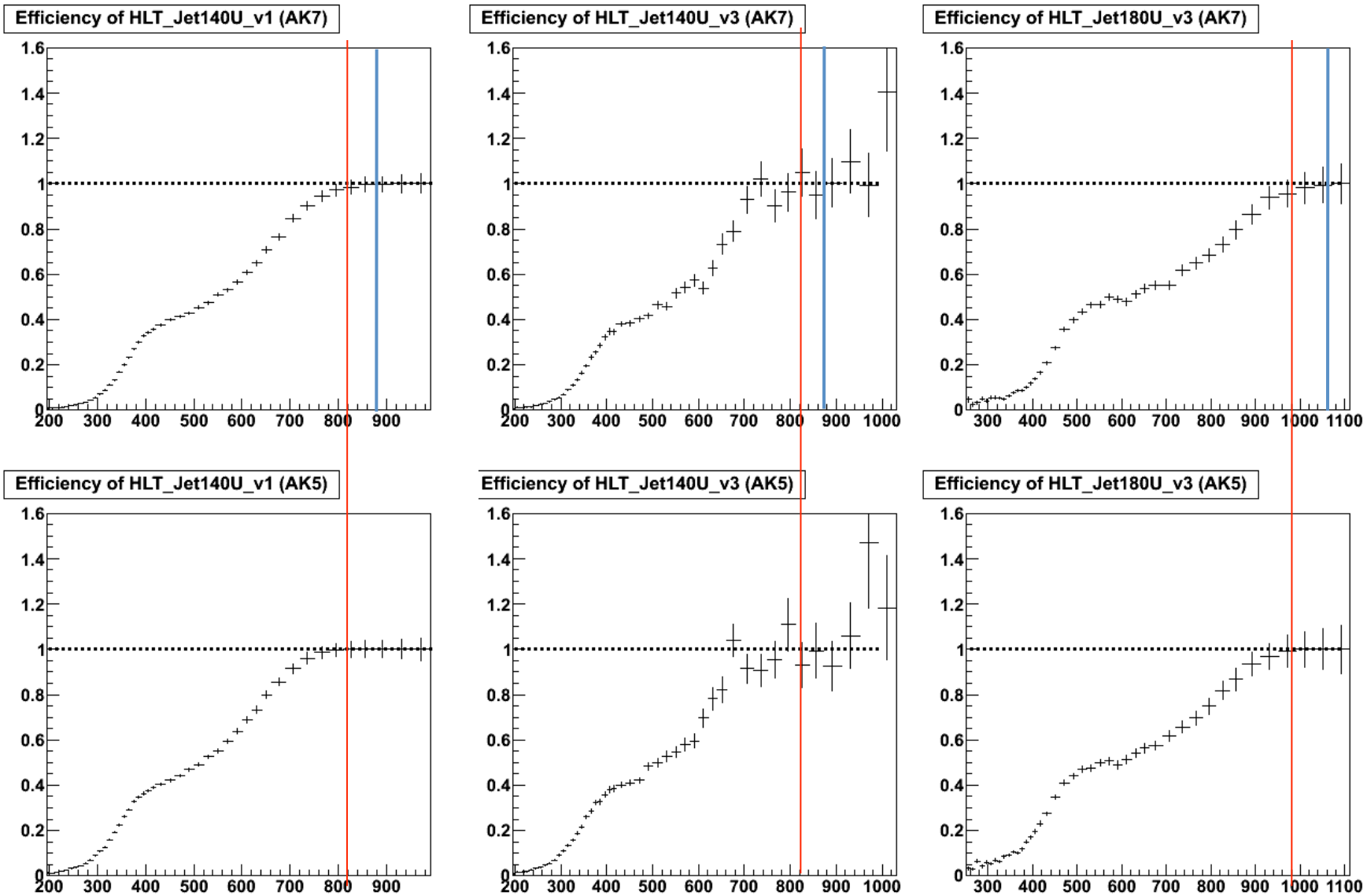
Turn on for HLT_Jet70U_v2, HLT_Jet70U



For Jet100U, Jet100U_v2, 100U_v3



For Jet140U_v1, Jet140U_v3, 180U_v3



Proposal for Mass bins

- As we can see – the turn on points for AK5 and AK7 are not the same.
- For AK7 the turn-ons are a bit higher.
- Proposed mass bins:

Triggers	AK5	AK7	AK5	AK7
HLT_Jet15U	Remove	Remove	(*From Andreas*)	
HLT_Jet30U	**250**	**260**	**240**	**260**
HLT_Jet50U	**380**	**420**	**340**	**360**
HLT_Jet70U	**450**	**500**	**440**	**480**
HLT_Jet70U_v2	**450**	**500**		
HLT_Jet100U	**620**	**660**	**580**	**640**
HLT_Jet100U_v2	**~620**	**700***		
HLT_Jet100U_v3	**~620**	**660**		
HLT_Jet140U_v1	**820**	**660**	**780**	**820**
HLT_Jet140U_v3	**820**	**880**		
HLT_Jet180U_v3	**980**	**1060**	**1000**	**1040**