

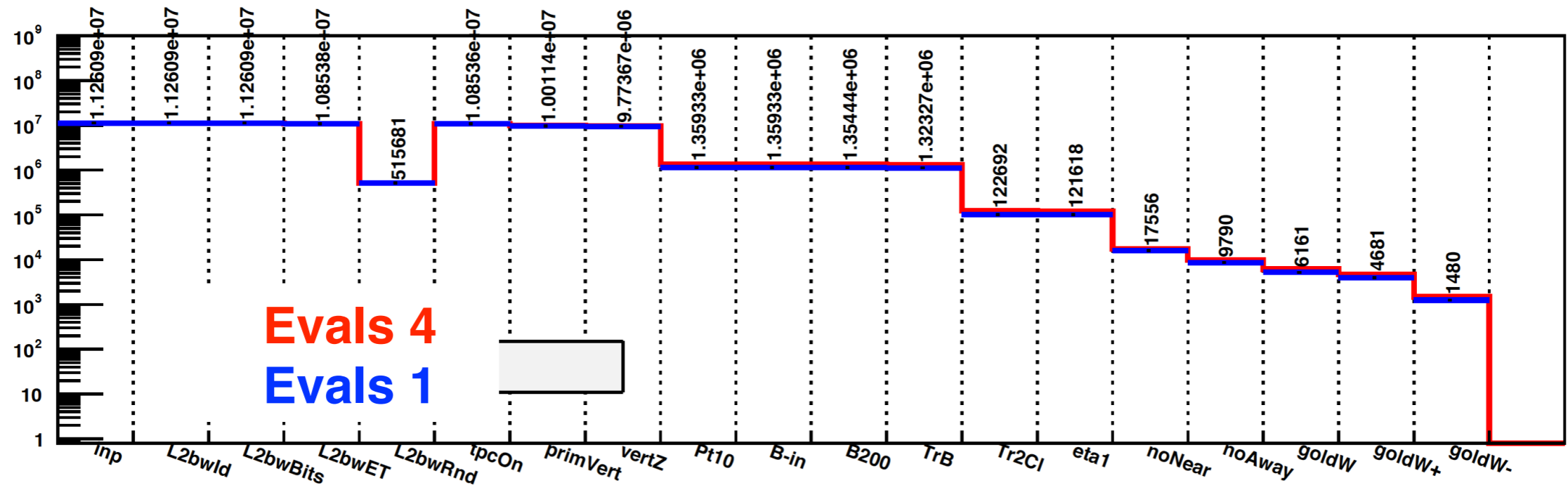
# Evals 1 vs Evals 4

Apple- to -Apple comparison

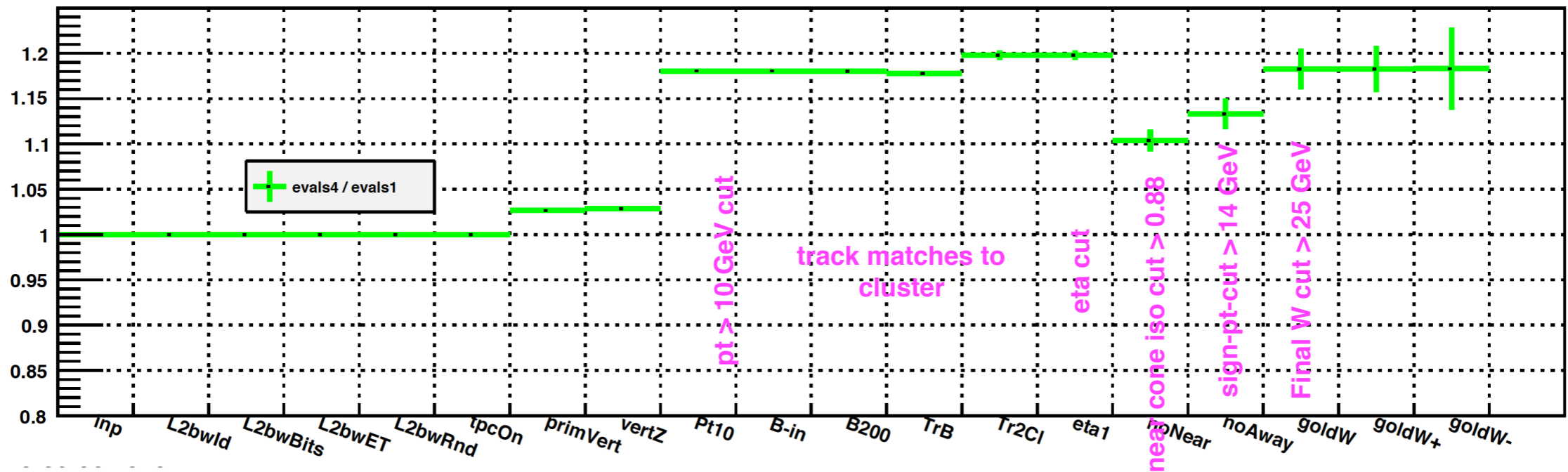
To investigate the difference between official STI vs STICA in EVAL

<b>Production</b>	<b>Production Library [also W-code compiled library]</b>	<b>Tracking</b>	<b>vertex finding</b>	<b>BEMC-gains</b>	<b># of runs used in the comparison</b>	<b># of events</b>
“evals4”	EVAL	StiCA	PPV_W	run 12 - 200 GeV	896	11.26 M
“evals1”	SL16b	Sti	PPV_W	run 12 200 GeV	896	11.26 M

# Events Counts as a function of W cuts

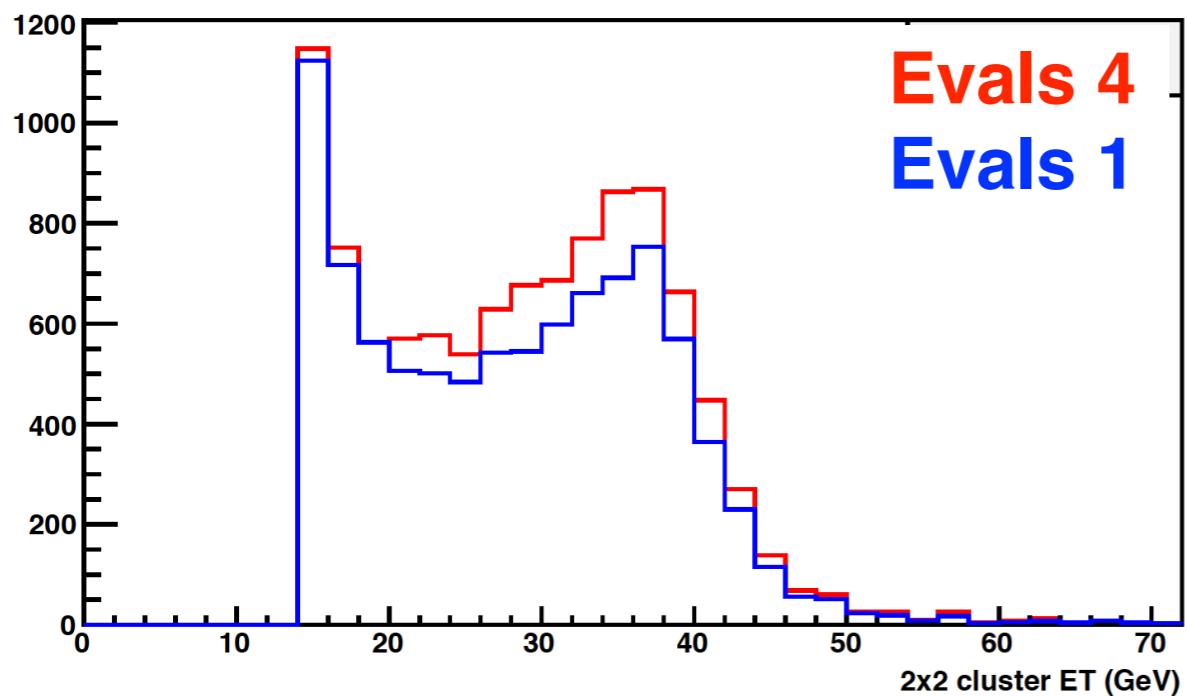


evals4 / evals1

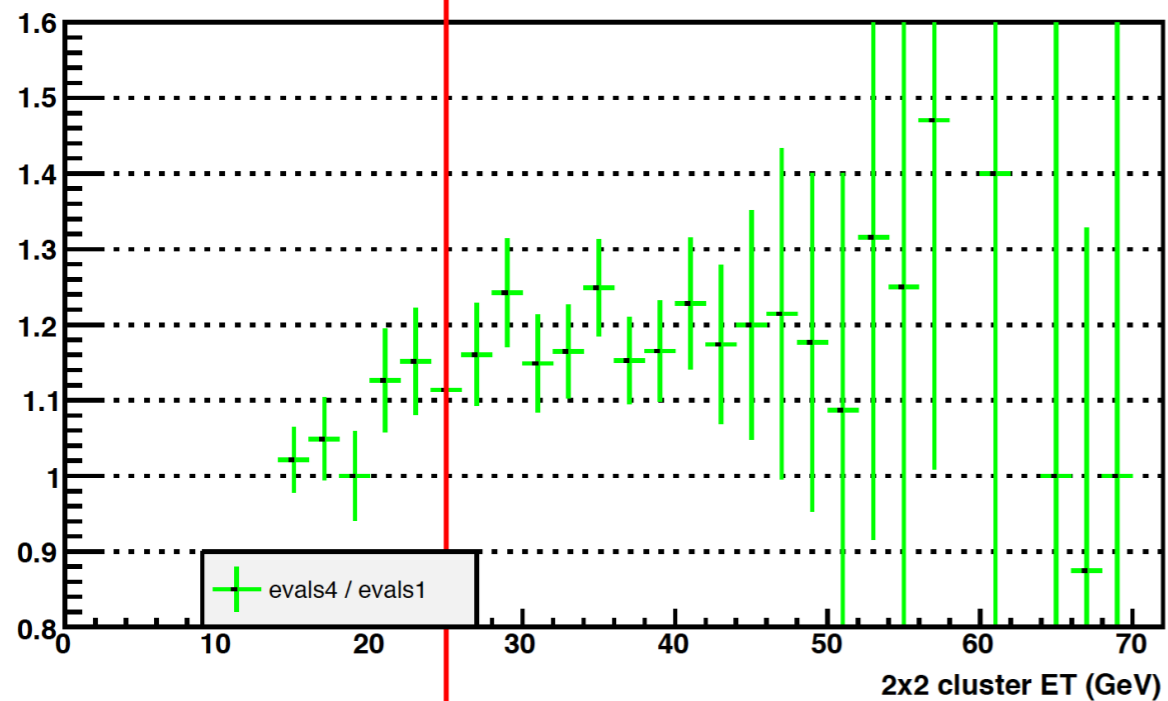


# Final W : Et , ZDC

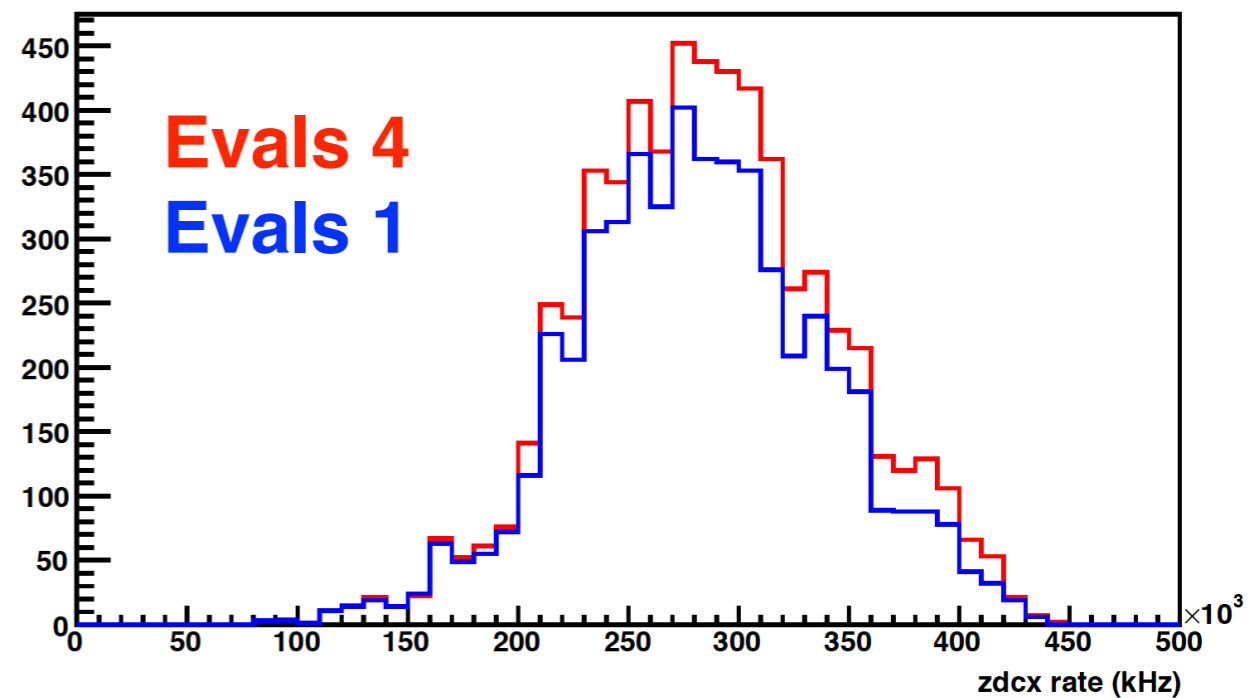
## Final W - Et



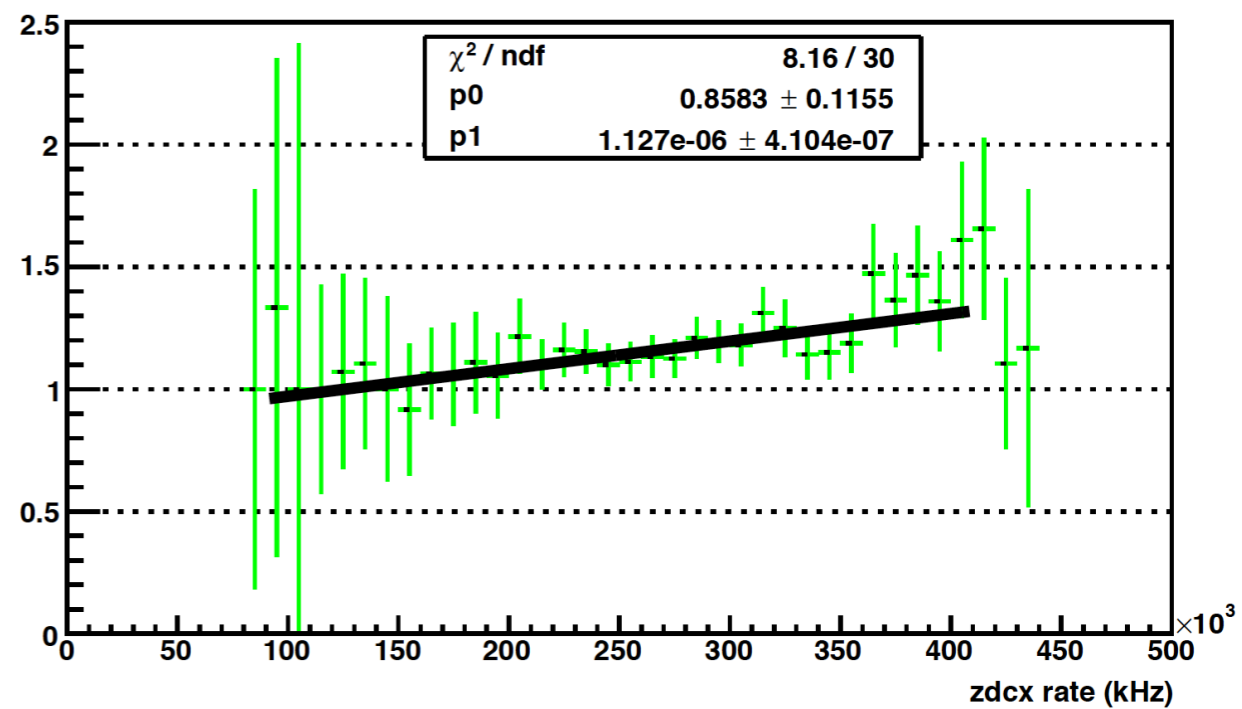
evals4 / evals1



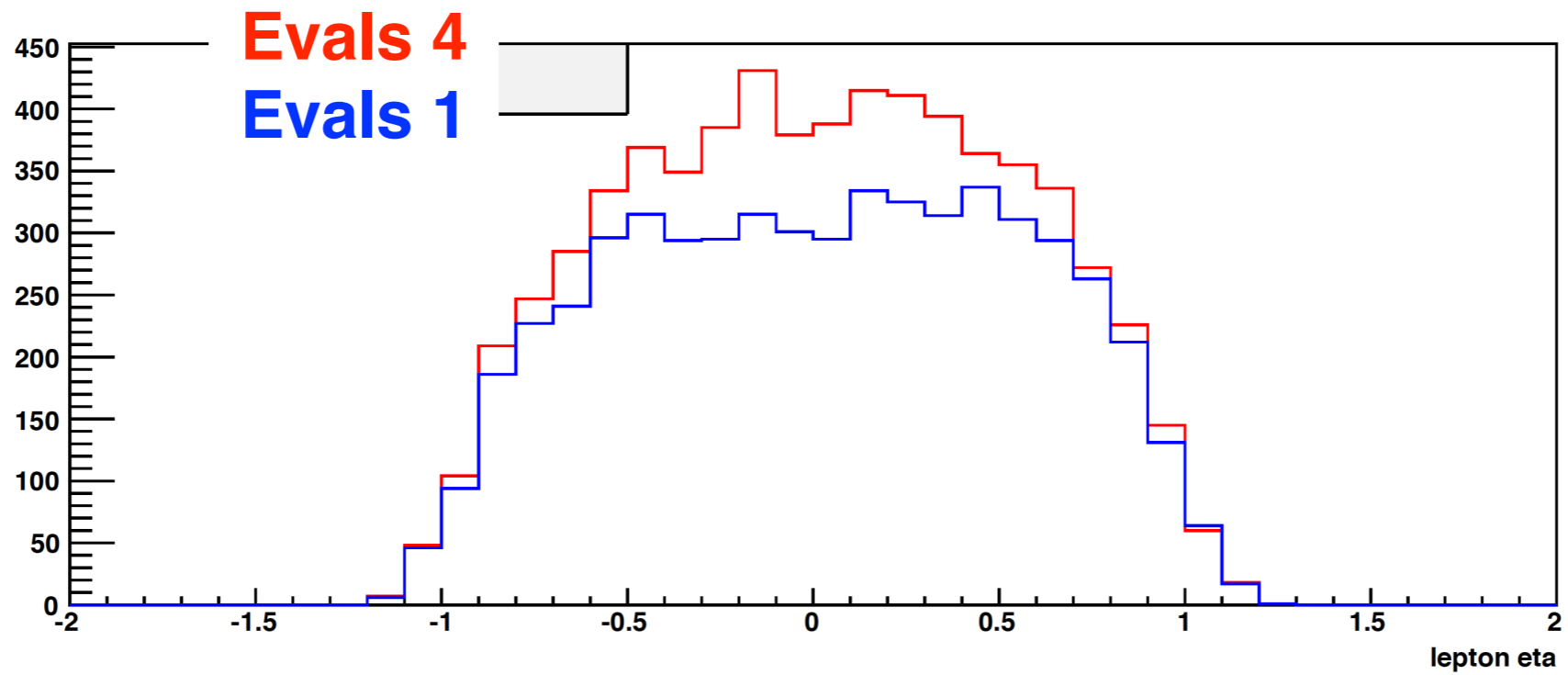
## Final W - ZDC



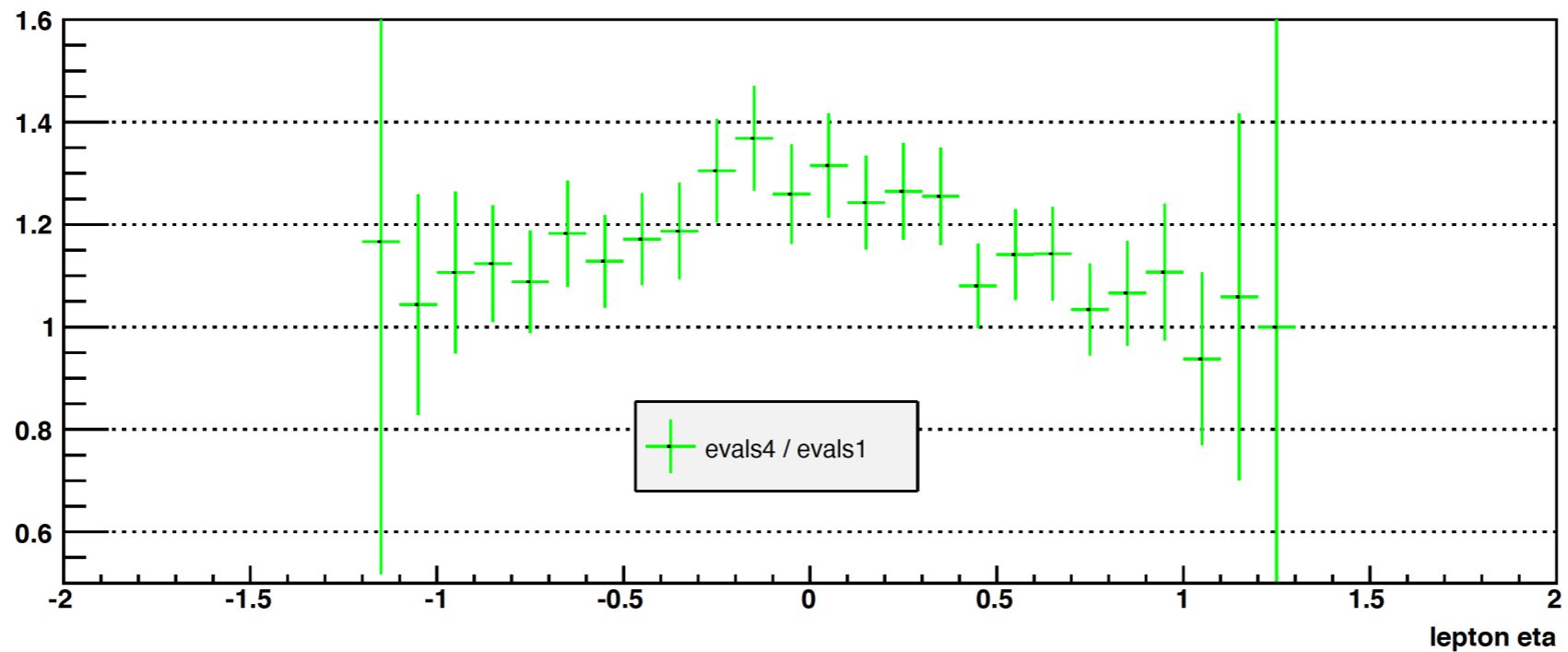
evals4 / evals 1



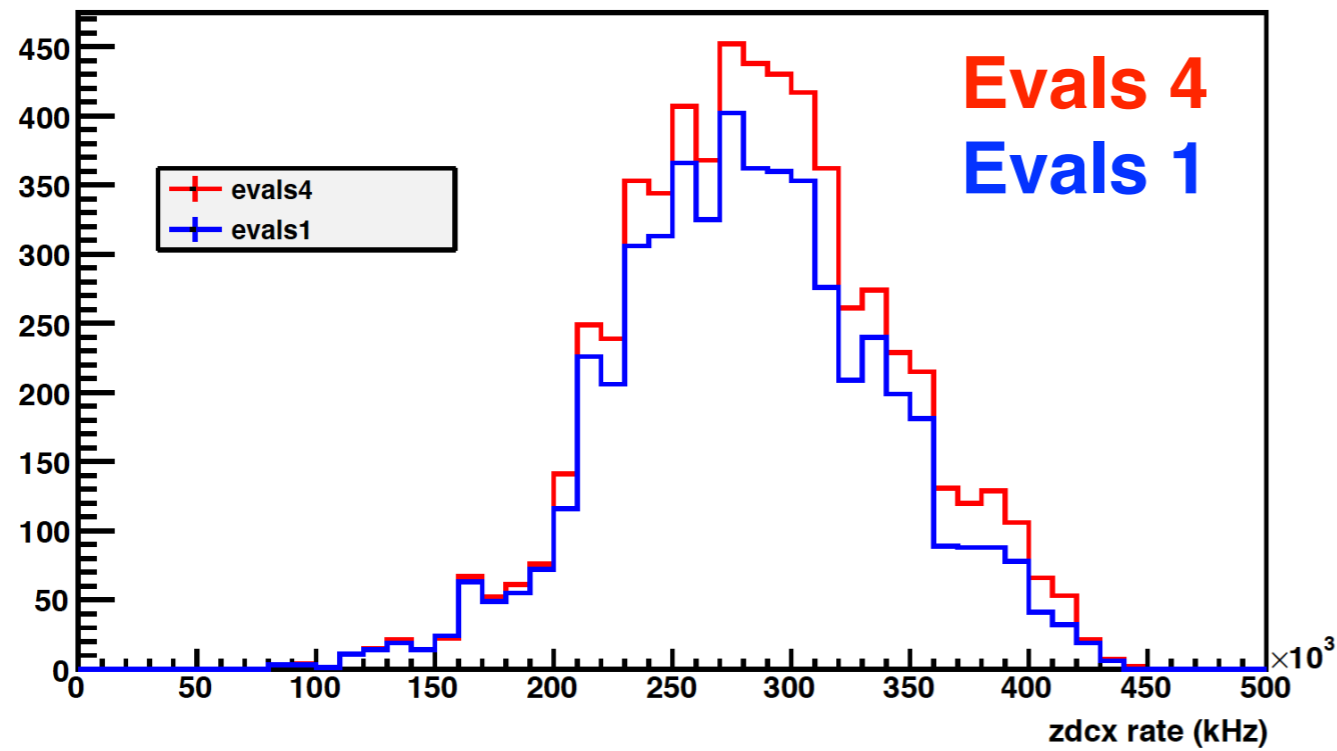
# Final W Eta



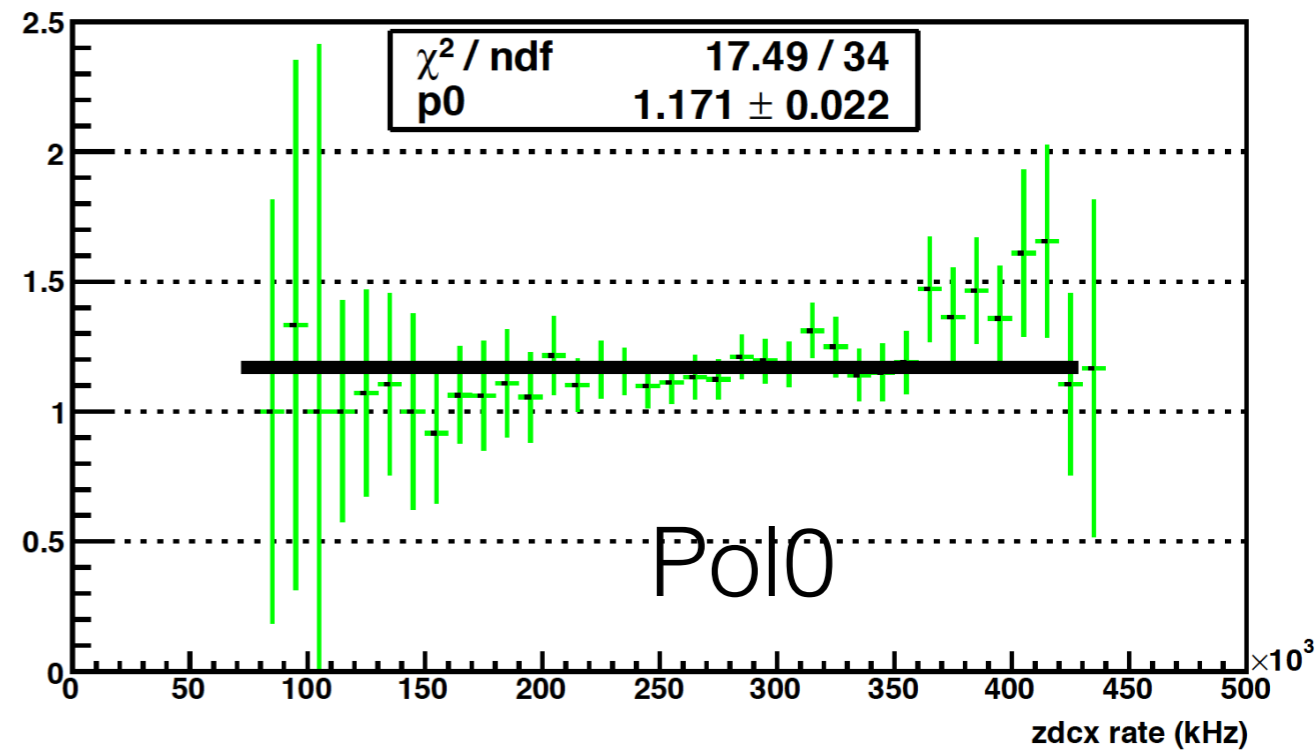
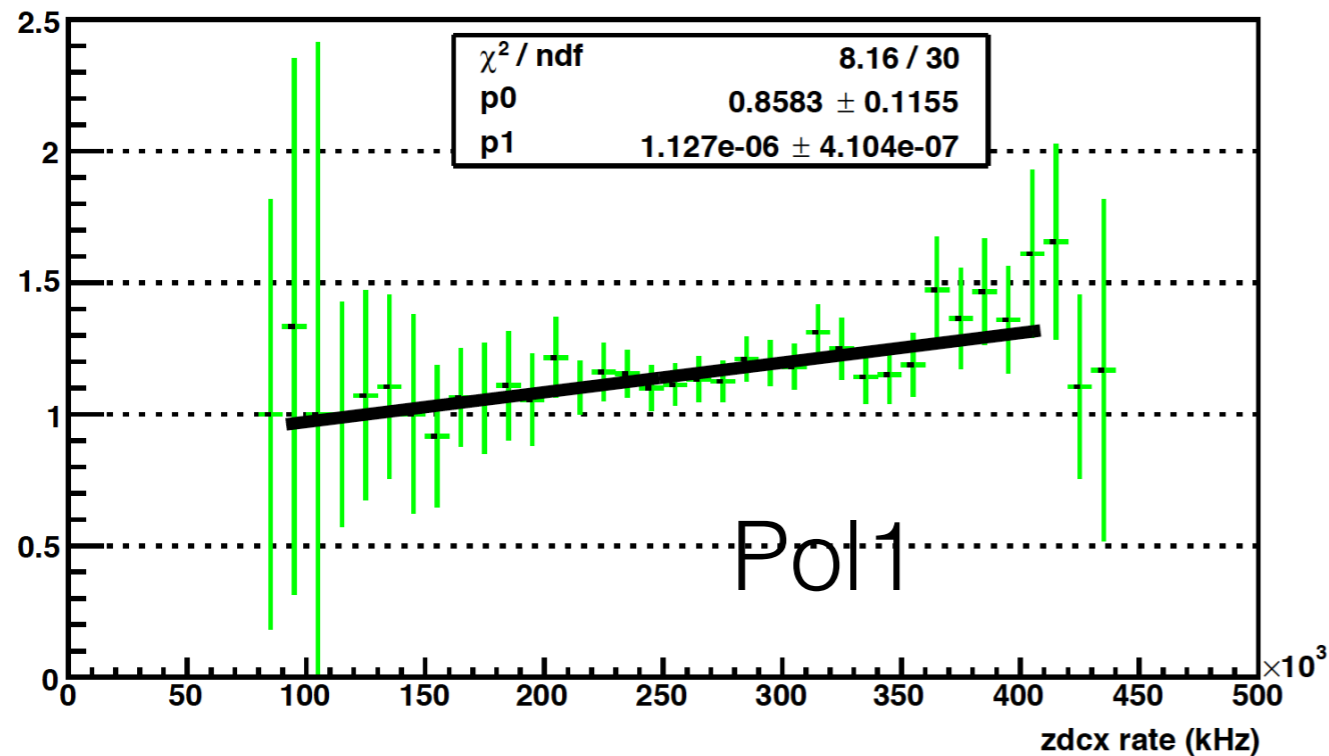
evals4 / evals1



# Final W ZDC



evals4 / evals 1



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# Summary

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- We see ~18 % enhancement in tracks above  $P_t = 10$  GeV and similar enhancement in final W [ $> 25$  GeV] tracks using STICA tracking.
- Significant enhancement of **final W Eta in mid rapidity** region where a “dip” [data-MC discrepancy] was observed previously.