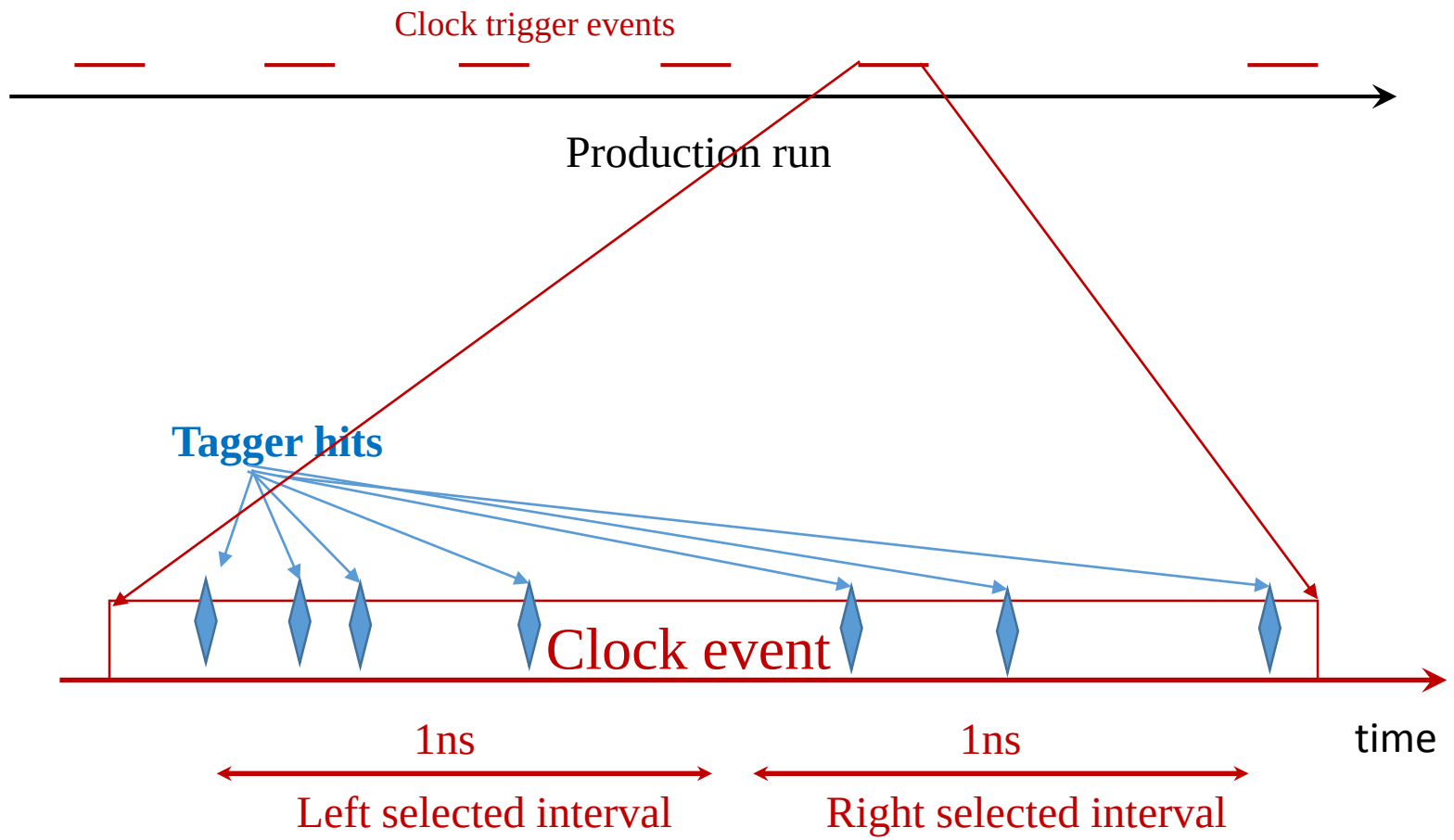
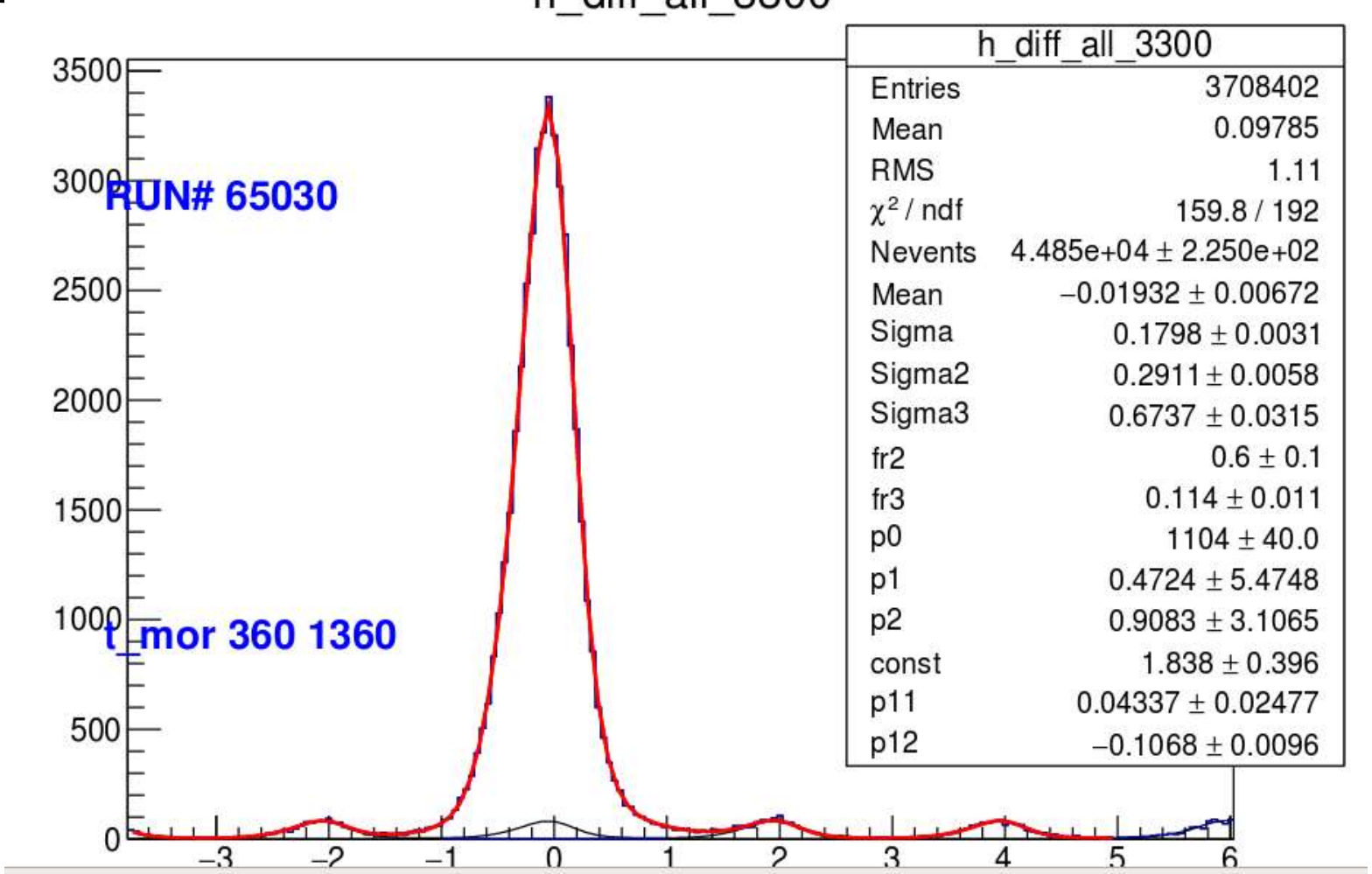
Relative tagging ratio analysis update

Ilya & Victor

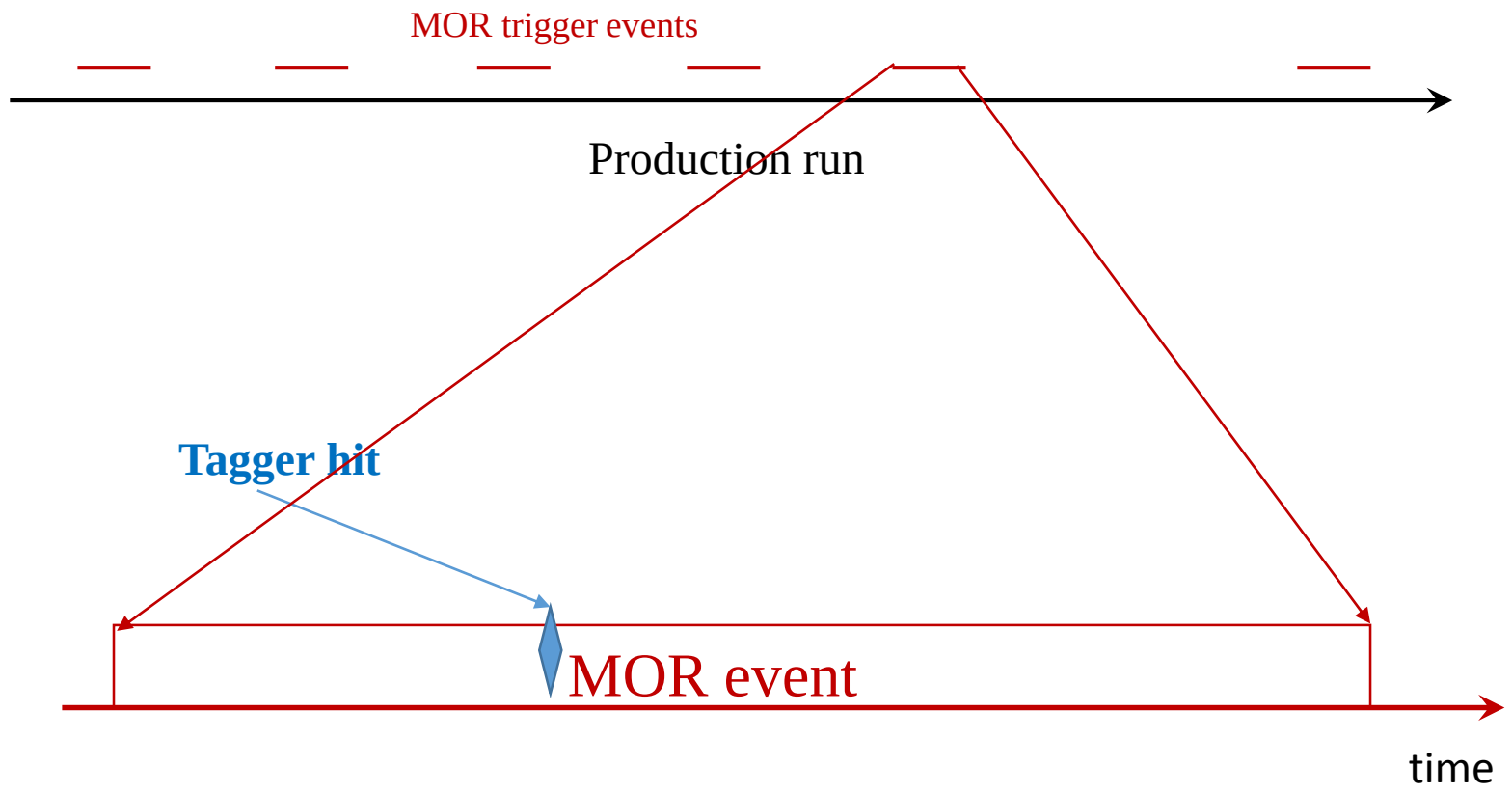
Counting coincidences between Tagger and PS: Production run



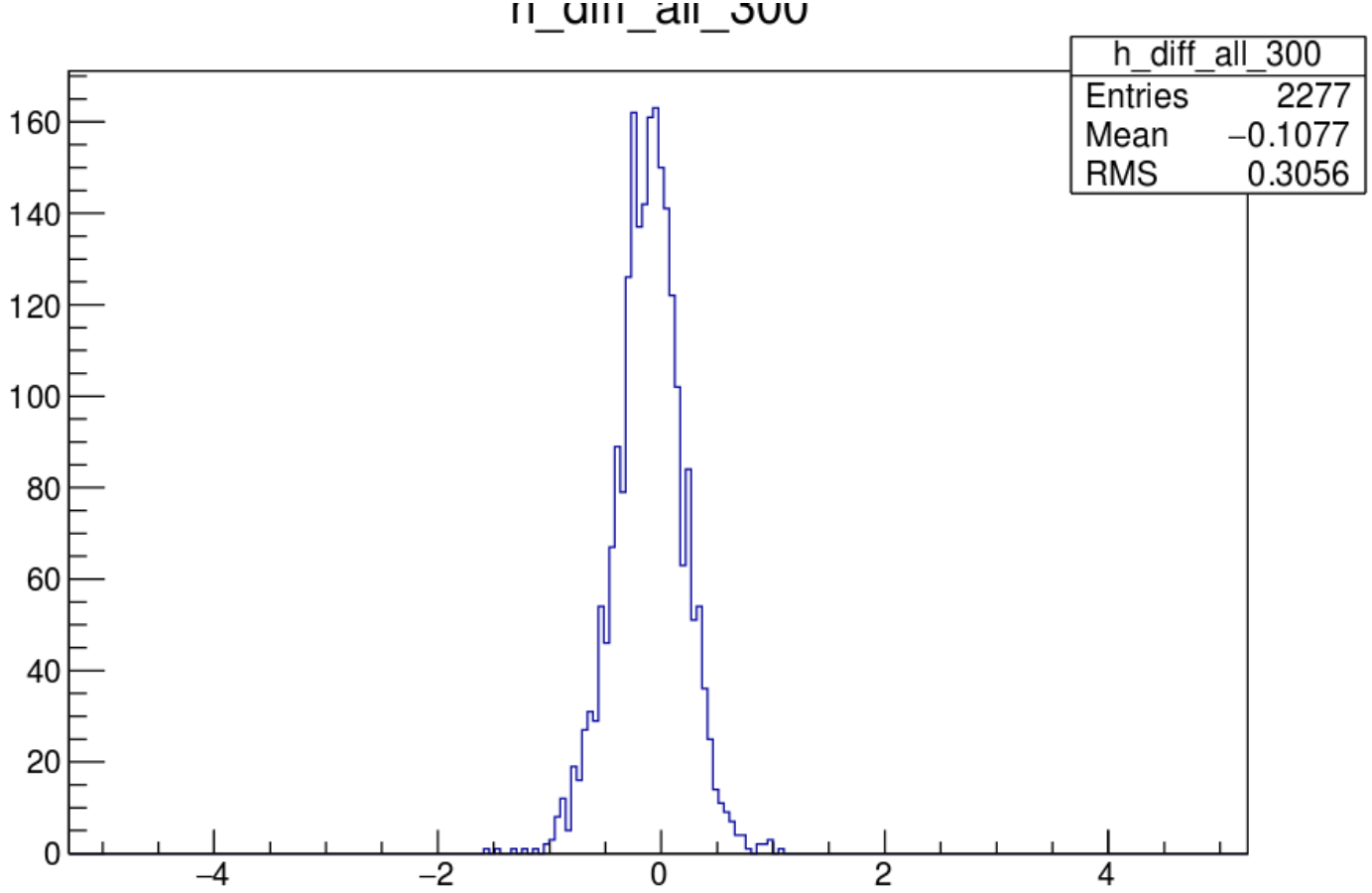
Tagger hit time minus PS reconstruction time: production run



Counting coincidences between Tagger and PS: TAC run

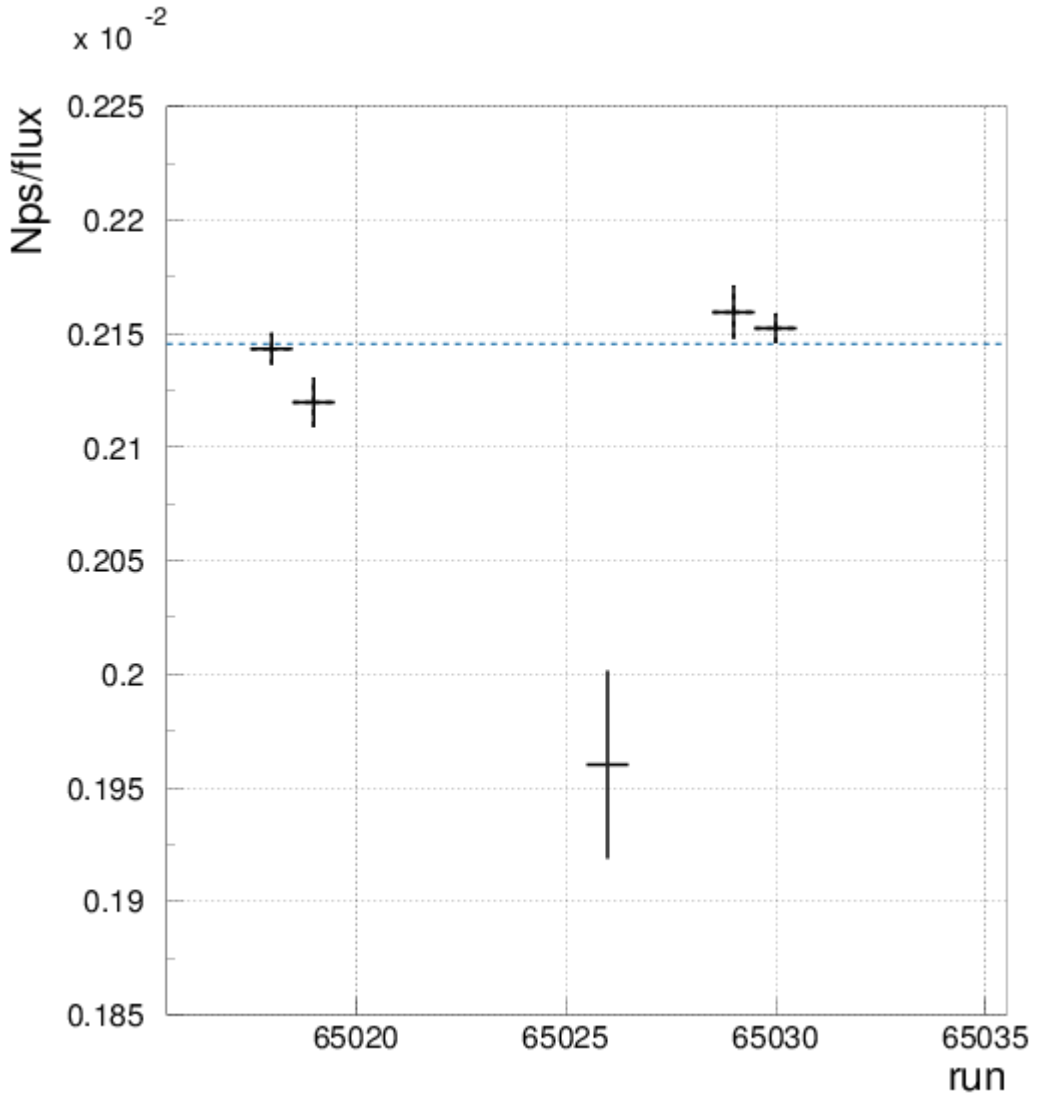


Tagger hit time minus PS reconstruction time: TAC run



N(PS) / N(tagger): 4 production carbon run and one TAC carbon run

- TAC run 4.4 sigma down vs adjacent production runs
- Rel. tag. Ratio defined this way could be (more) stable or possibly usable



Considering other runs to analyze:

64995	—	50?	11.3	old	61	hall-A off, beam current increased in the middle	87.80(15)	96.03(5)	97.34(3)
64996	—	110?	3.8	old	61	hall-A off, TAC 5 cm lower	87.08(13)	95.91(4)	97.46(3)
64997	—	60?	10	old	61	HV 1900V	86.95(10)	95.92(3)	97.35(2)
65022	—	100	4.2	new	61	HV 1700V, ADC overflow	86.61(18)	95.12(5)	96.65(4)
65023	—	100	2.4	new	61	HV 1610V	87.31(19)	95.67(6)	96.81(4)
65025	—	100	10.5	new	61	〰	86.83(10)	95.89(3)	96.81(3)
65026	C	100	25	new	61	—	82.29(8)	90.74(4)	92.02(3)
65060	—	100	1.3	new	19	hall-A 3μA, hall-C 50μA	86.36(7)	95.35(4)	96.80(3)
65061	C	100	1.4	new	19	—	80.79(15)	89.60(8)	90.78(8)
65063	Si	100	1.7	new	19	hall-A 3μA, 〰	80.16(10)	89.44(5)	90.52(4)
65064	—	100	0.9	new	19	hall-A off, hall-C 50μA	85.79(10)	94.87(4)	96.41(3)
65098	—	100	5.7	new	38	hall-A 3μA, hall-C off	86.49(8)	95.83(3)	96.87(3)
65099	—	100	4.5	new	38	hall-A off, hall-C off	86.53(8)	95.52(3)	97.03(2)
65100	C	100	2.1	new	19	e+e run with TAC	82.42(24)	91.27(13)	91.70(12)
65101	C	250	4.1	new	19	e+e run with TAC	82.29(8)	90.89(6)	92.03(5)
65102	Si	250	4	new	19	e+e run with TAC	81.48(8)	90.02(5)	90.95(5)
65103	—	250	1.1	new	19	e+e run with TAC	86.23(11)	95.54(5)	96.65(4)
65104	Si	250	10.5	new	19	—	81.13(5)	89.68(4)	90.81(3)
65106	—	250	1.8	new	19	—	86.38(8)	95.53(4)	96.66(3)

❶ Errors on last digit(s) are given in brackets: 90.00(12) means 90.00±0.12.
Values for runs with target were highlighted
〰 stands for unstable DAQ livetime