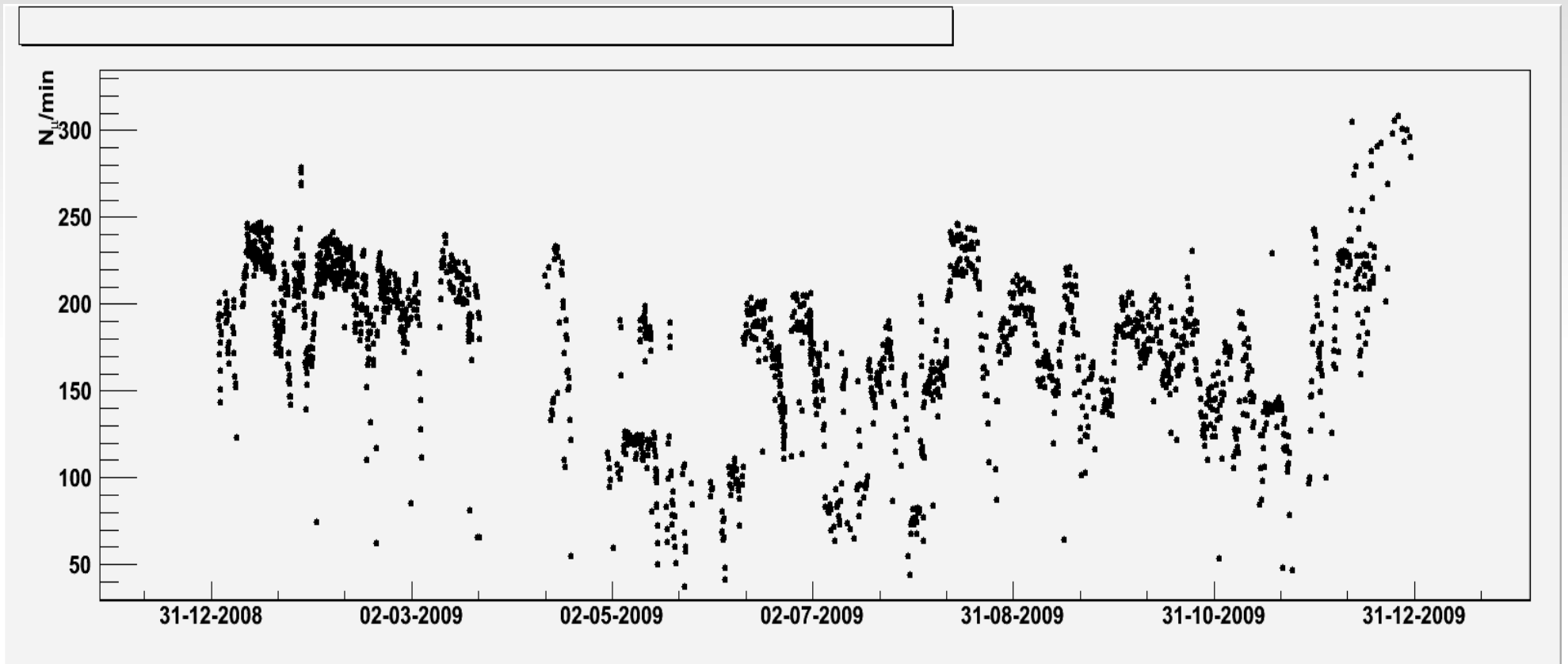


**New methods of a data quality
control for the neutrino telescope
ANTARES**

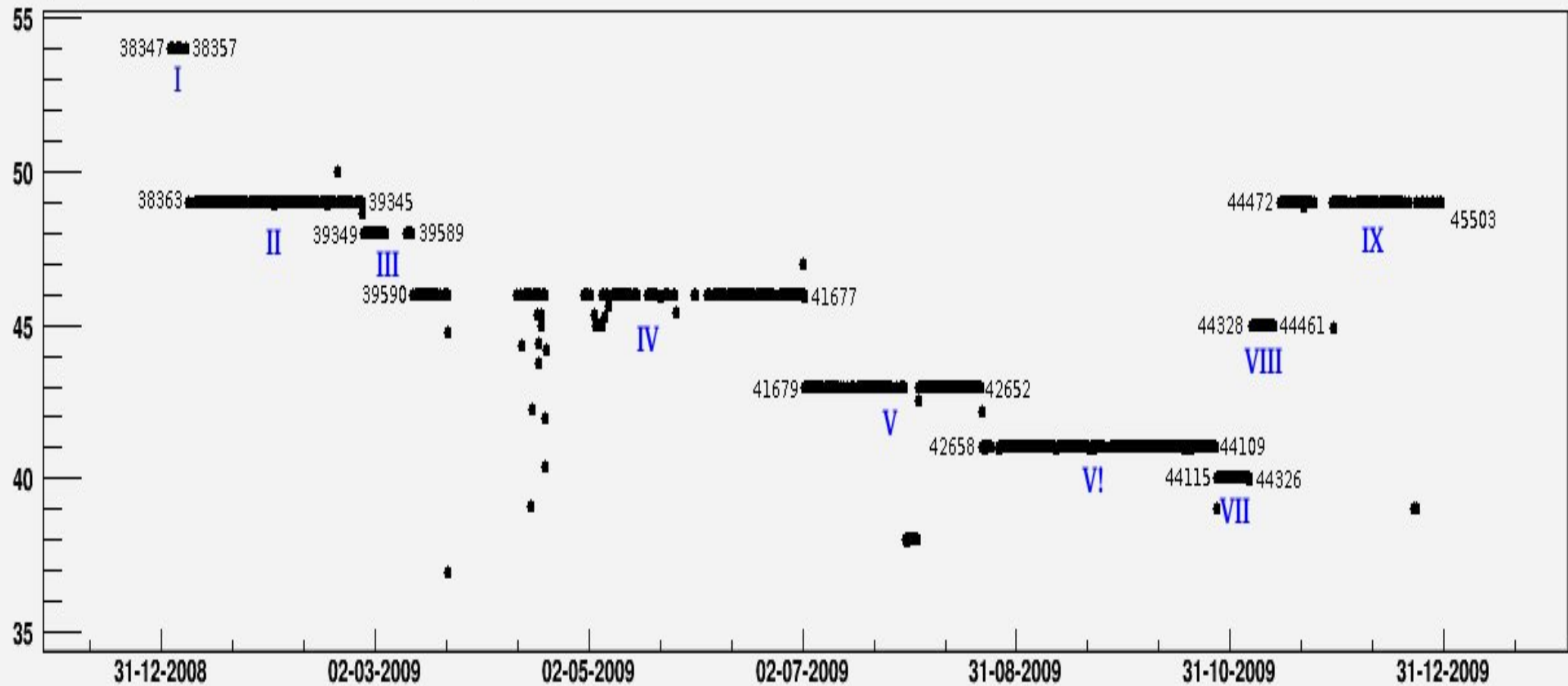
Number of registered muons per minute should be stable
but at the picture it isn't because of
some factors



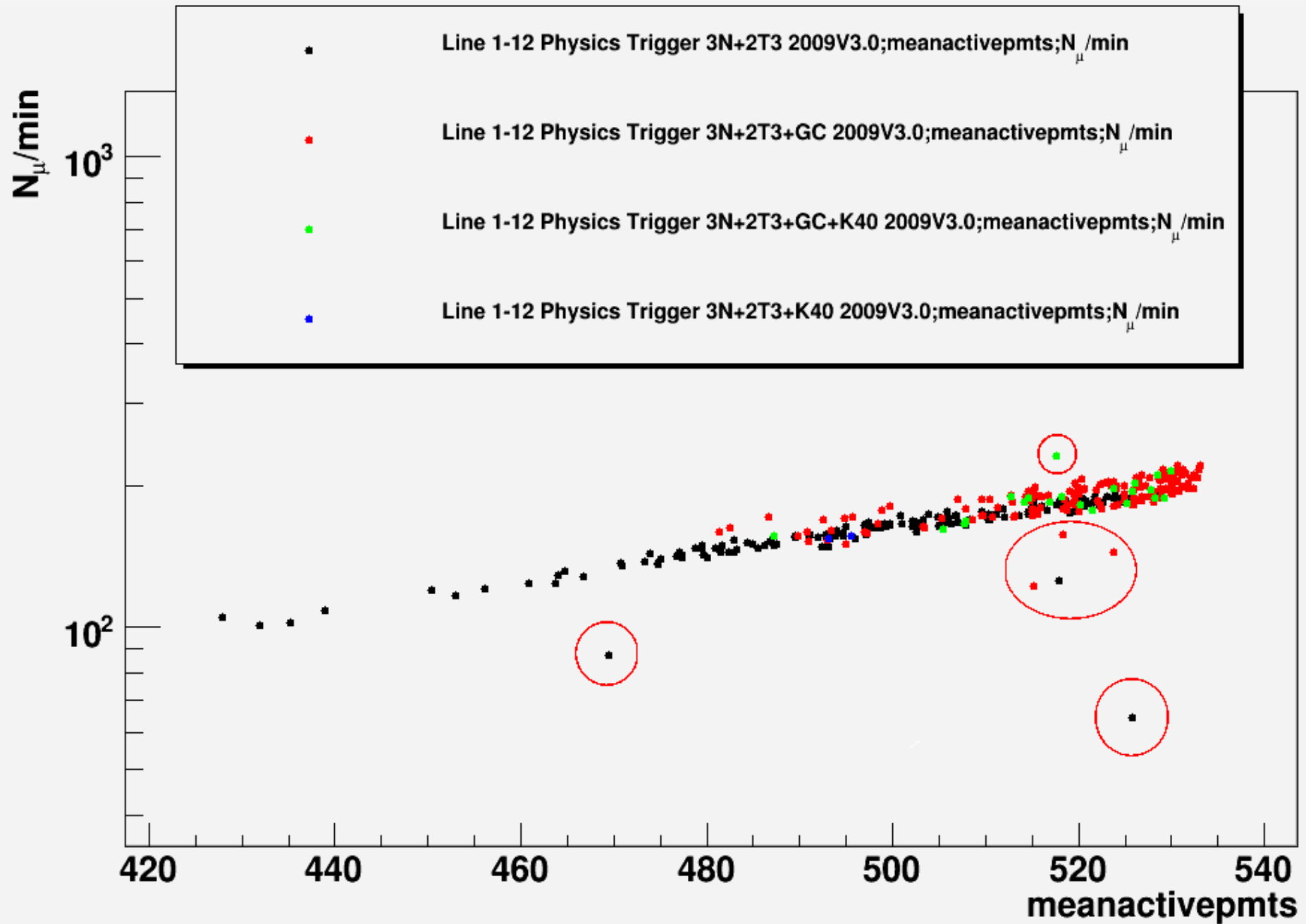
Main steps of the data processing.

Step 1. Separation of all runs on several groups by mean active sectors.

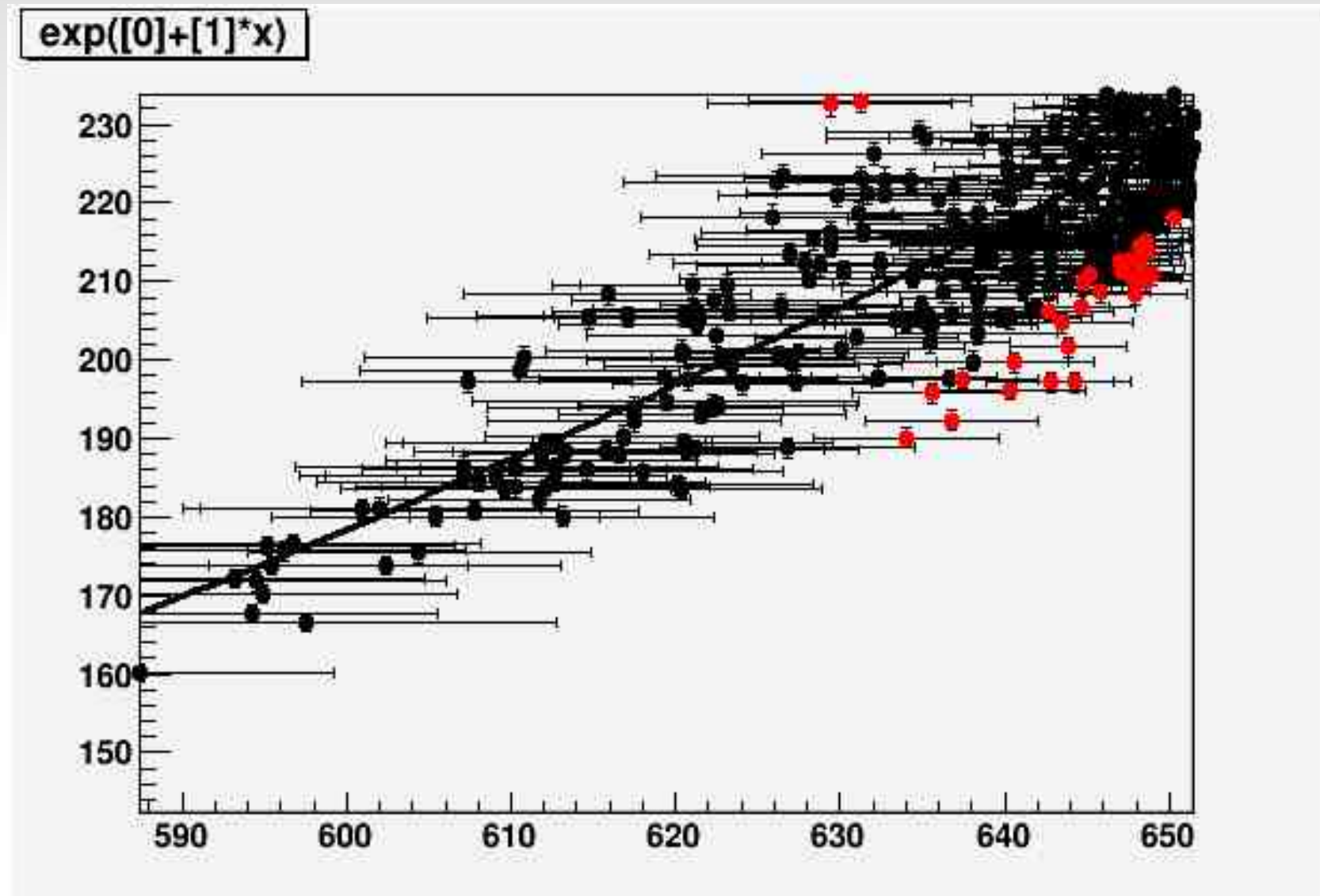
meanactivesectors



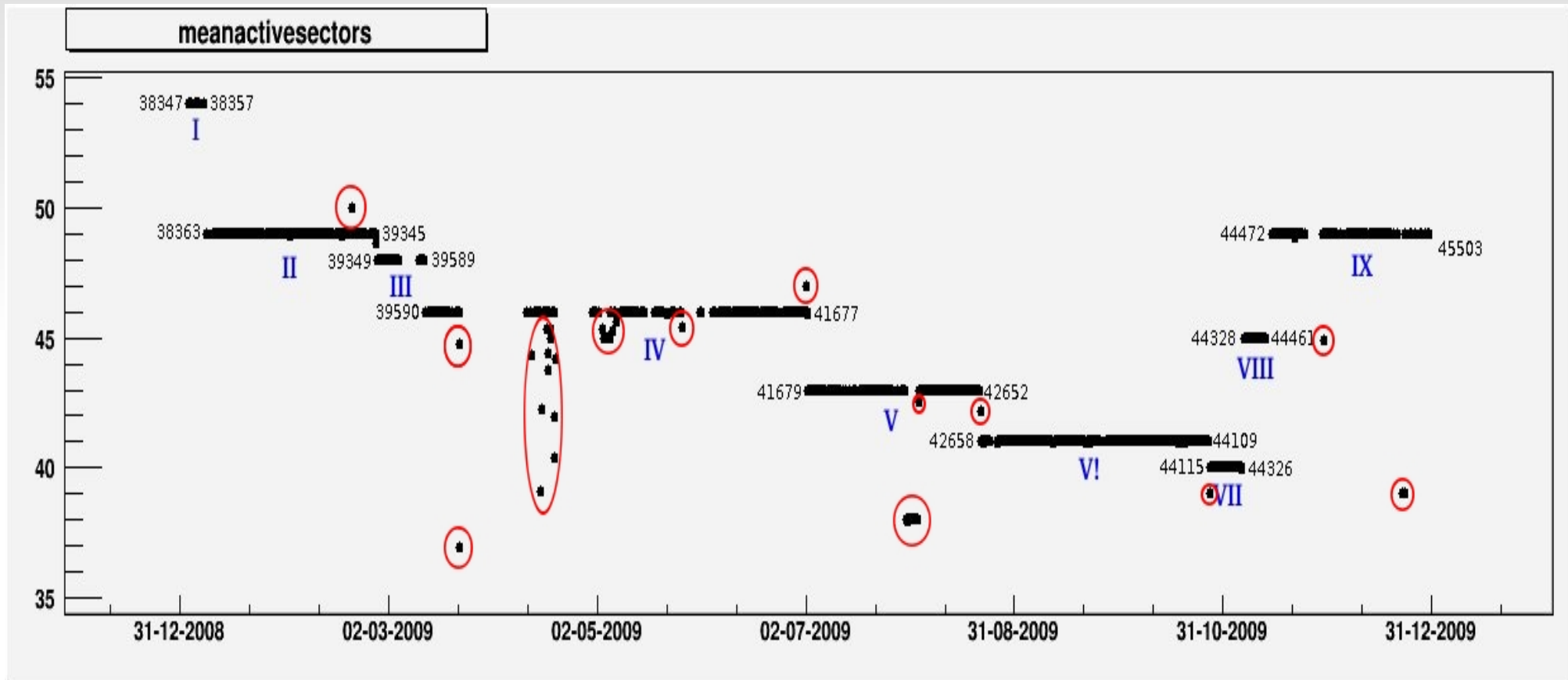
Step 2. Getting rid of "bad" runs.



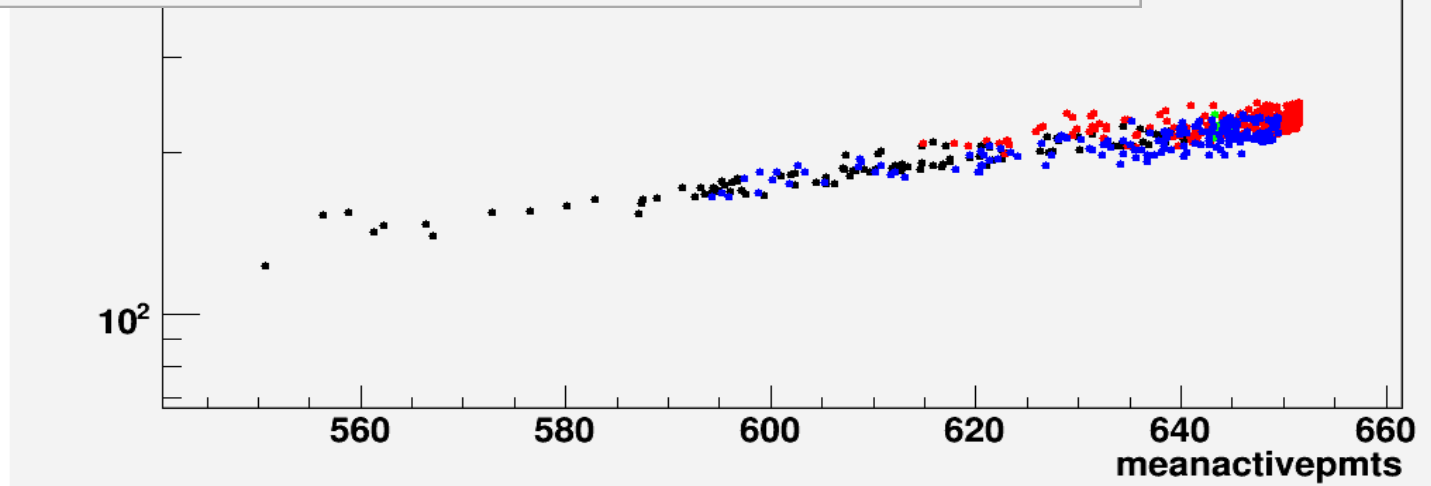
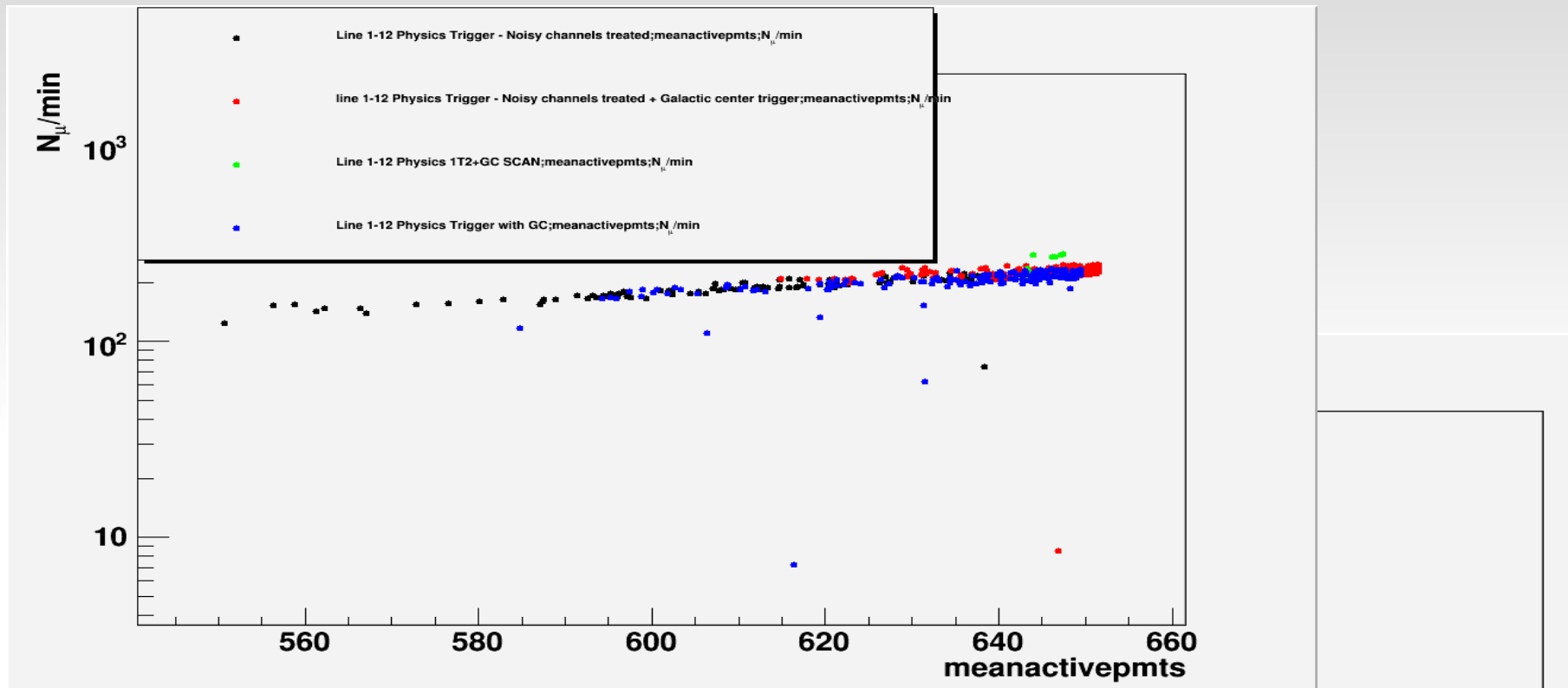
Ways to carry out step 2:
trying to cut off all points which don't reach the fit line
with errors.



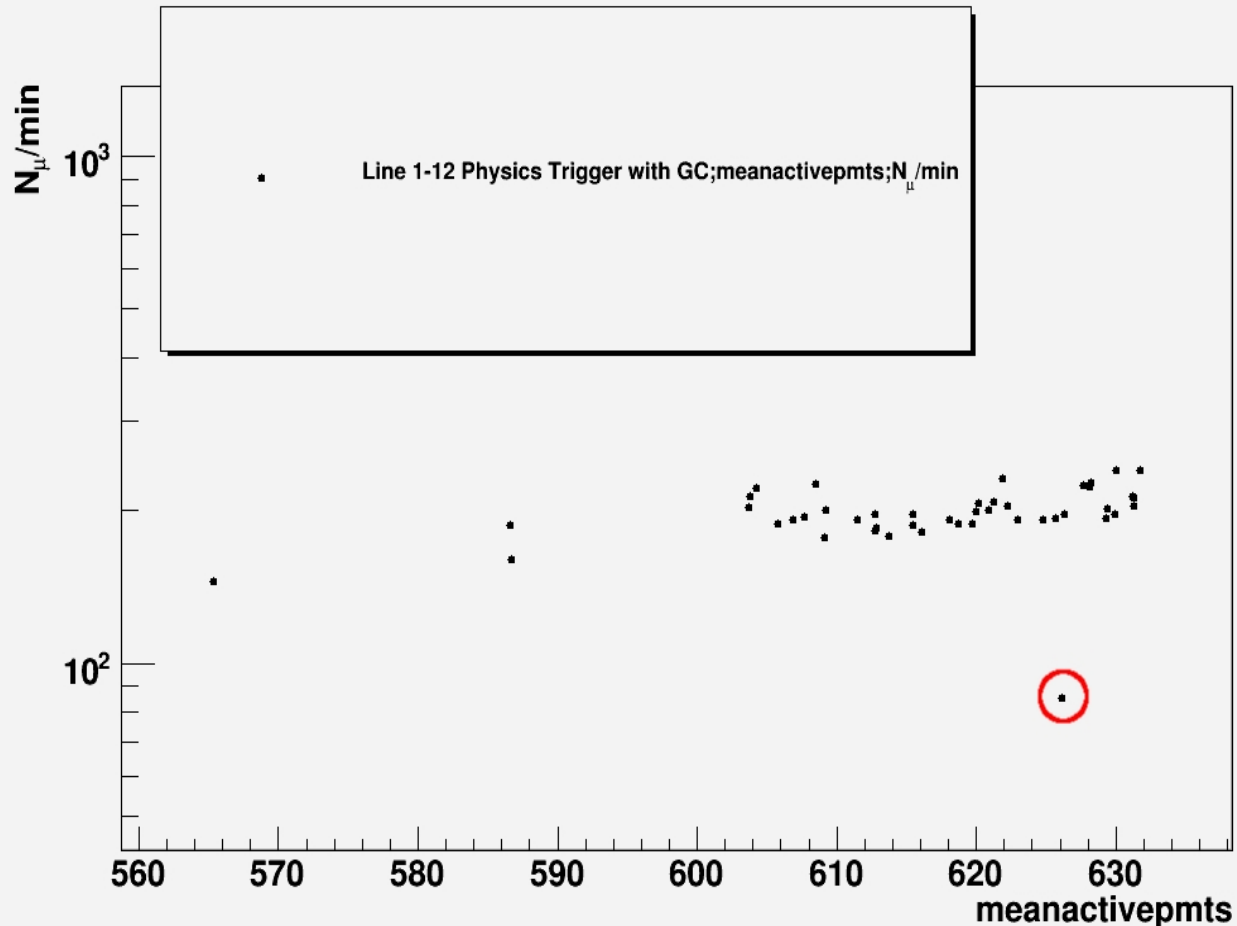
Ways to carry out step 2: mean active sectors selection



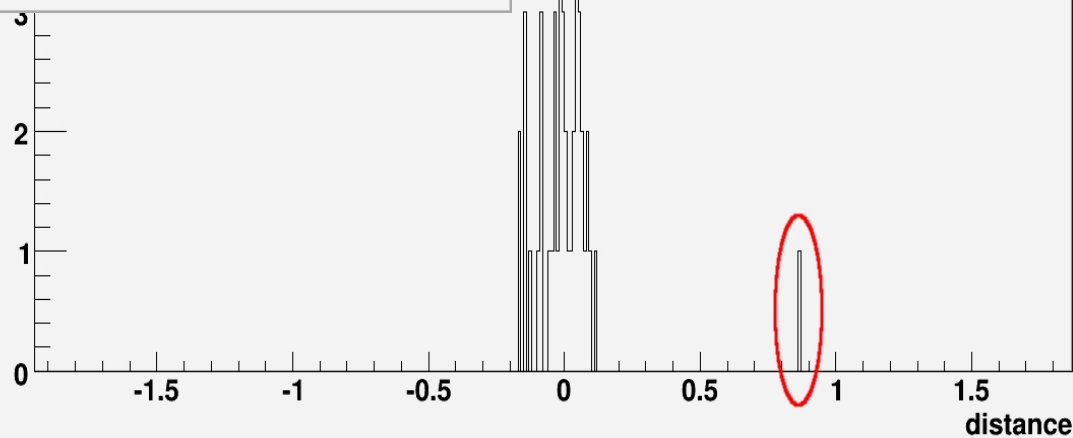
Ways to carry out step 2: results of mean active sectors selection by example of set 2



Failing of mean active sector selection method on example of set 3: one point is still on the graph

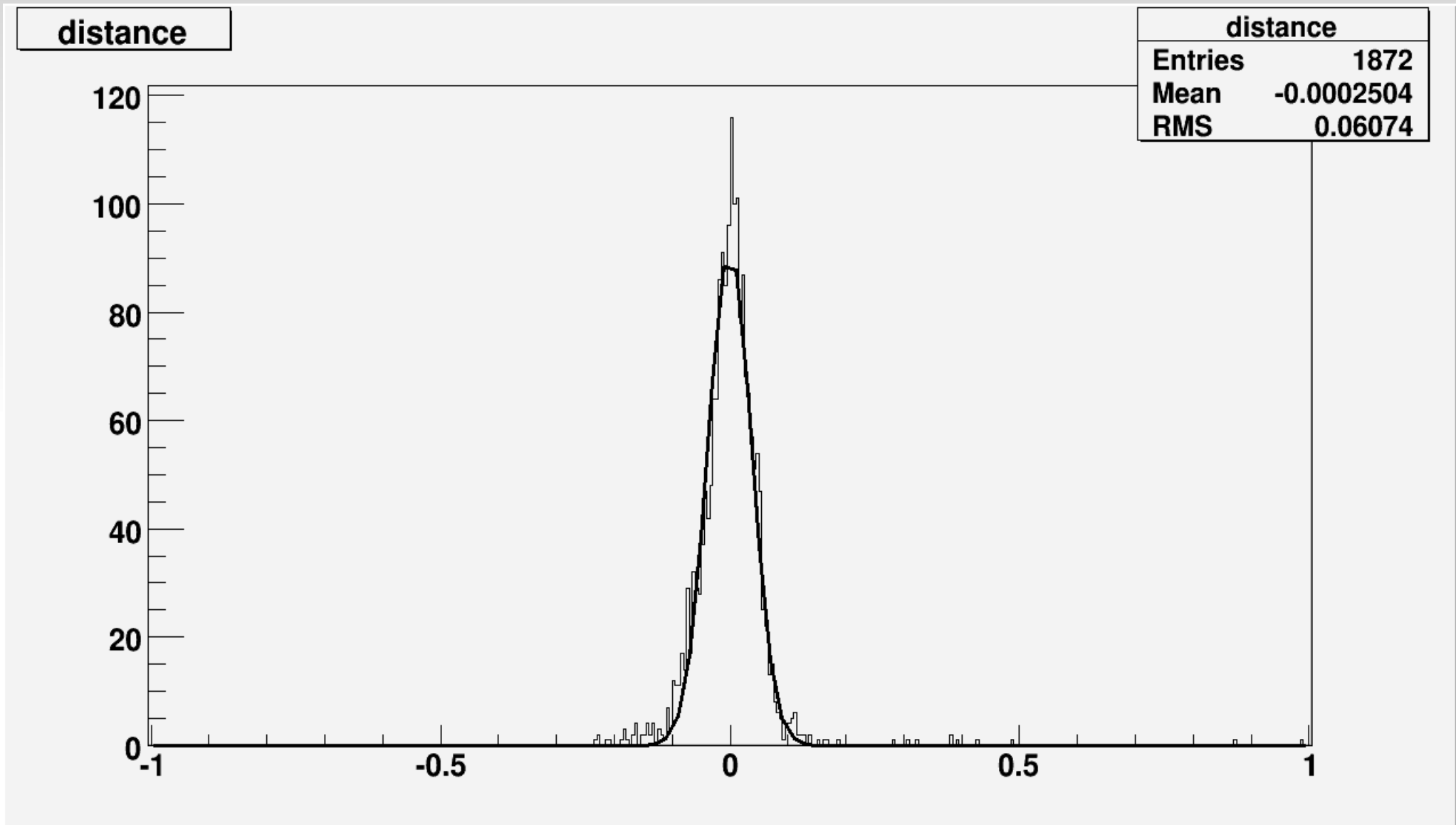


Introduction of new
distance parameter

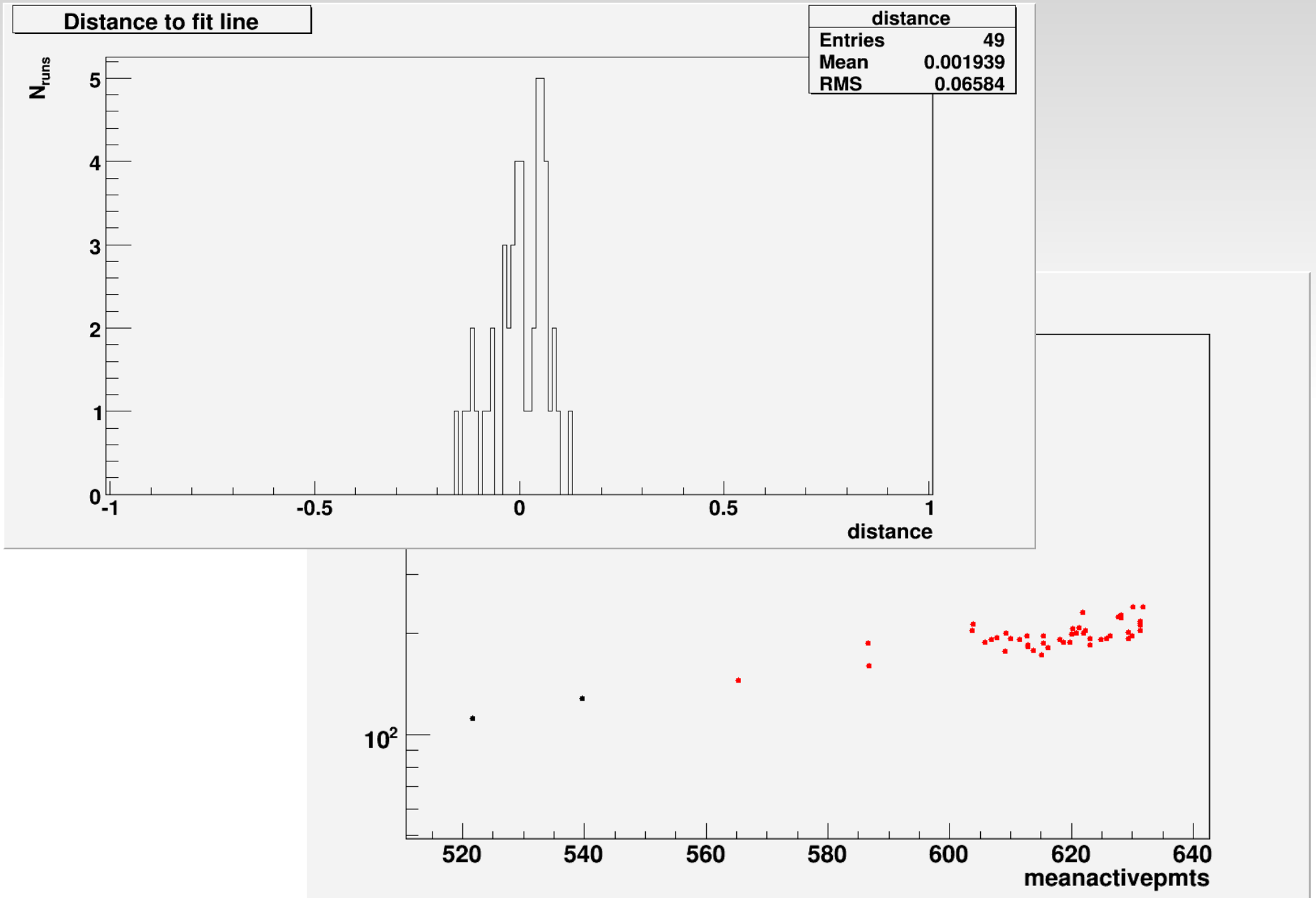


distance	
Entries	45
Mean	0.009222
RMS	0.1485

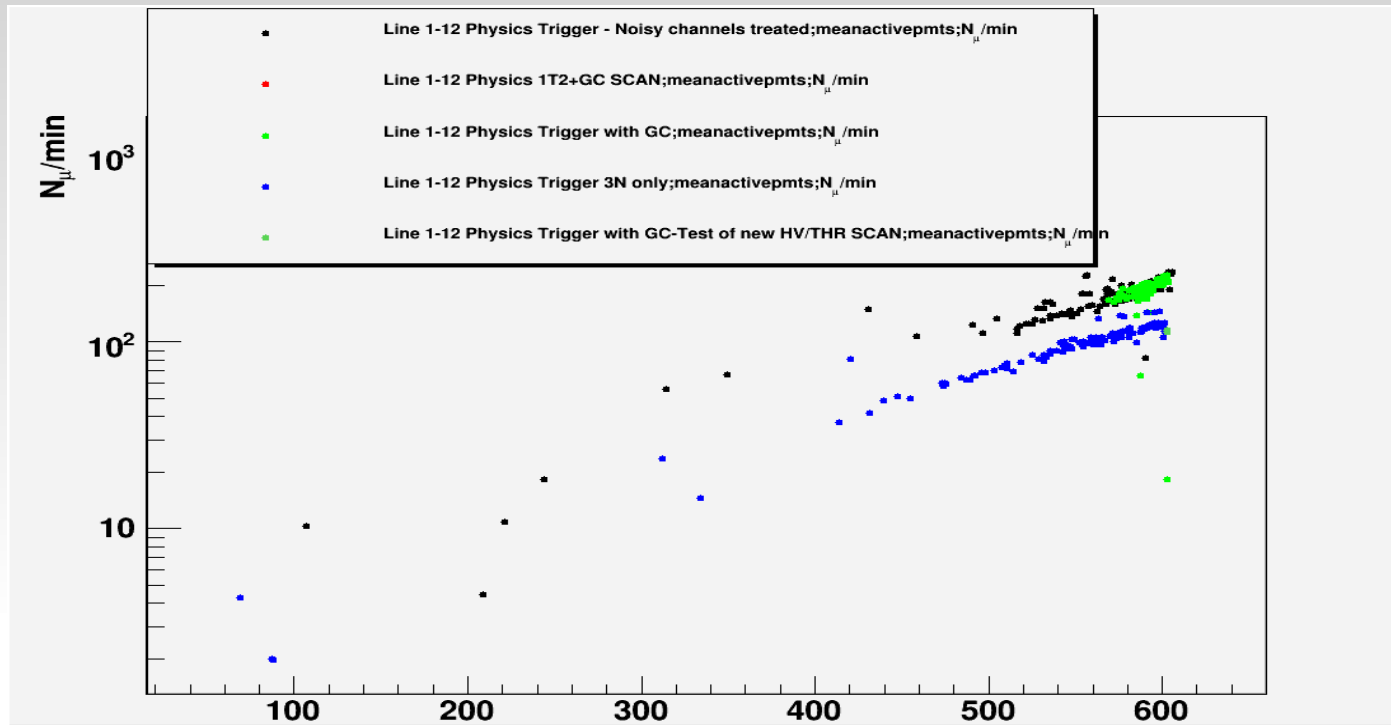
How to find an optimal distance parameter?



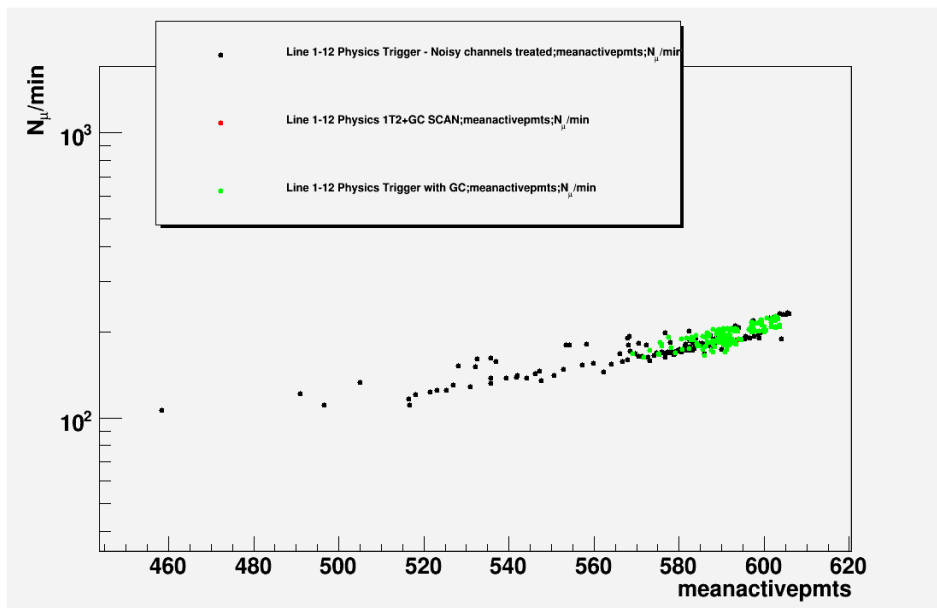
Result of using distance selection on example of set 3



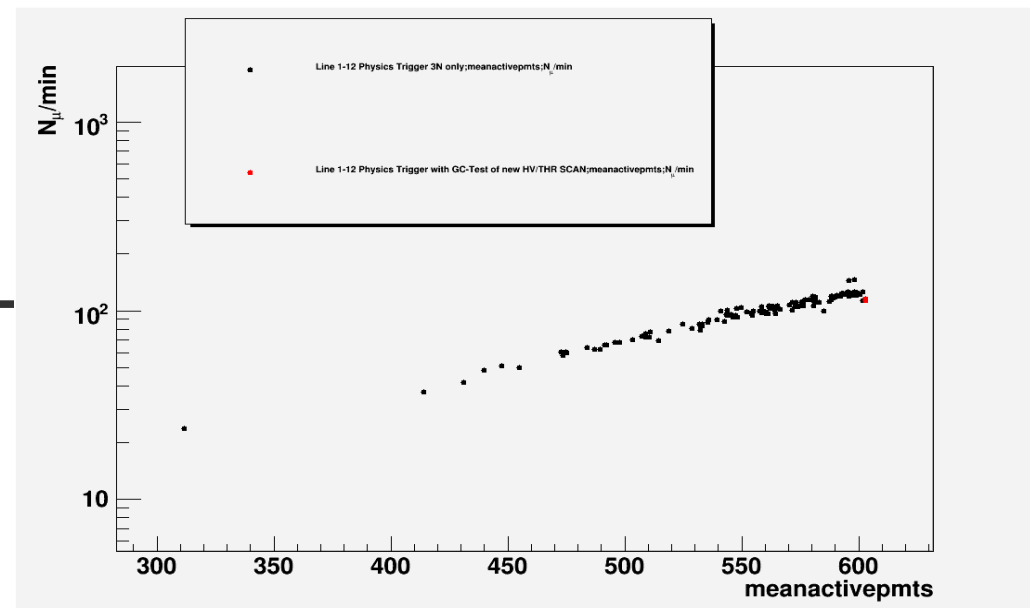
Set 4: multilines and splitting on subgroups by triggers



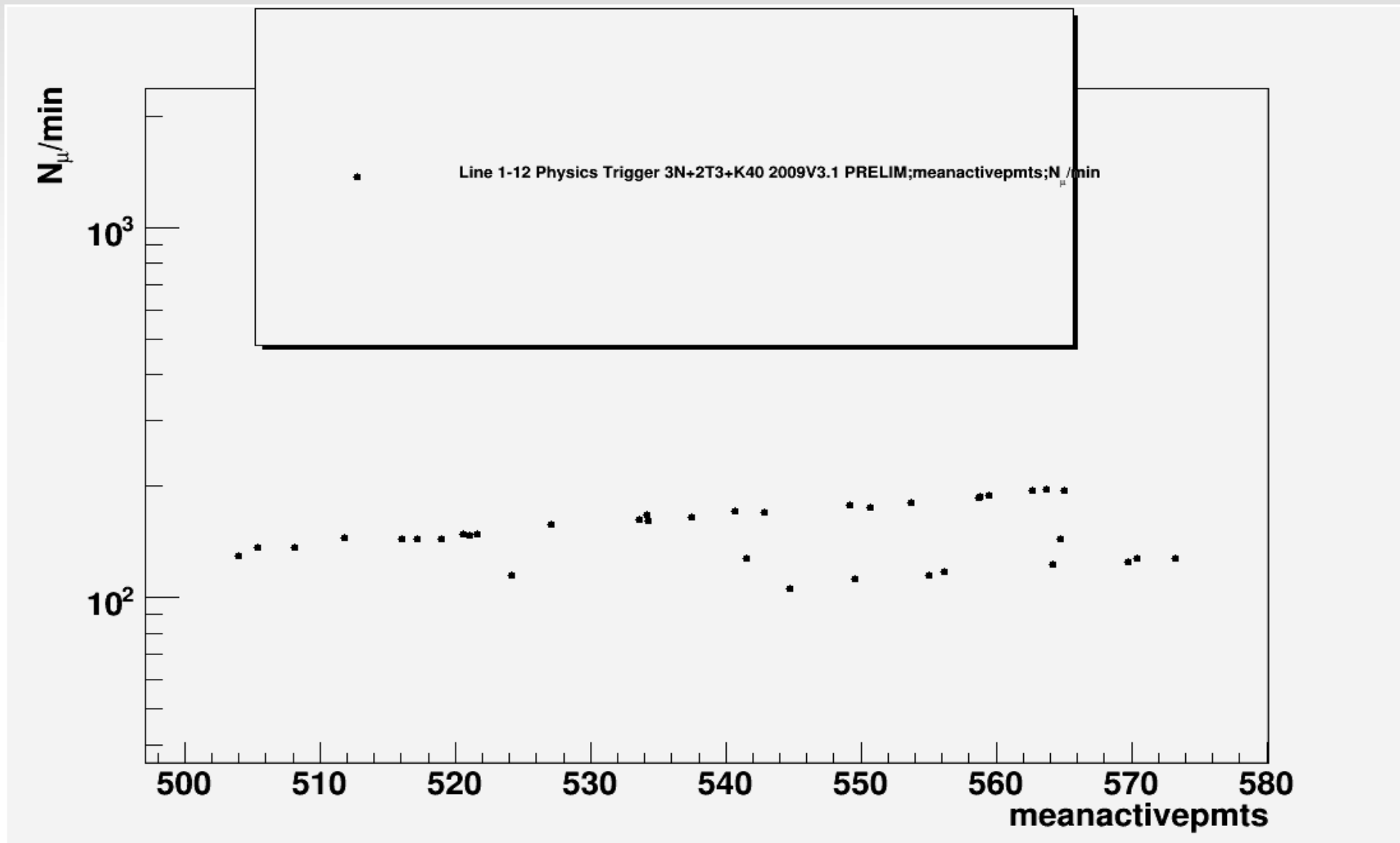
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Set 8: multiline formed by only one trigger and time separation



Statistics and conclusions

Set	Run	Date	Trigger	Number of runs	Runs deleted		Number of sectors	Number of lines	Extra information
					Number	%%			
1	38347-38357	02.01.2009-07.01.2009	1	30	0	0	54	12	
2	38363-39345	08.01.2009-26.02.2009	1,2,3,4	479	14	2,3	49	11	
3	39349-39589	27.02.2009-12.03.2009	1,4	52	3	5,7	48	11	
4	39590-41677	12.03.2009-02.07.2009	1,3,4,5,6	443	21	4,7	46	10	High bioluminescence level
5	41679-42652	02.07.2009-21.08.2009	1,4,5,7,8,9,10,11	274	8	2,9	43	9	Calibration of PMT's
6	42658-44109	22.08.2009-27.10.2009	10,11,12,13	329	6	1,8	41	9	
7	44115-44326	28.10.2009-06.11.2009	13	49	1	2	40	8	
8	44328-44461	07.11.2009-12.11.2009	14	37	0	0	45	9	10 line installation
9	44472-45503	14.11.2009-31.12.2009	14,15,16,17,18	182	6	3,3	49	10	12 line installation
All		2009 year		1875	59	3,1			Time inefficiency 1.9%