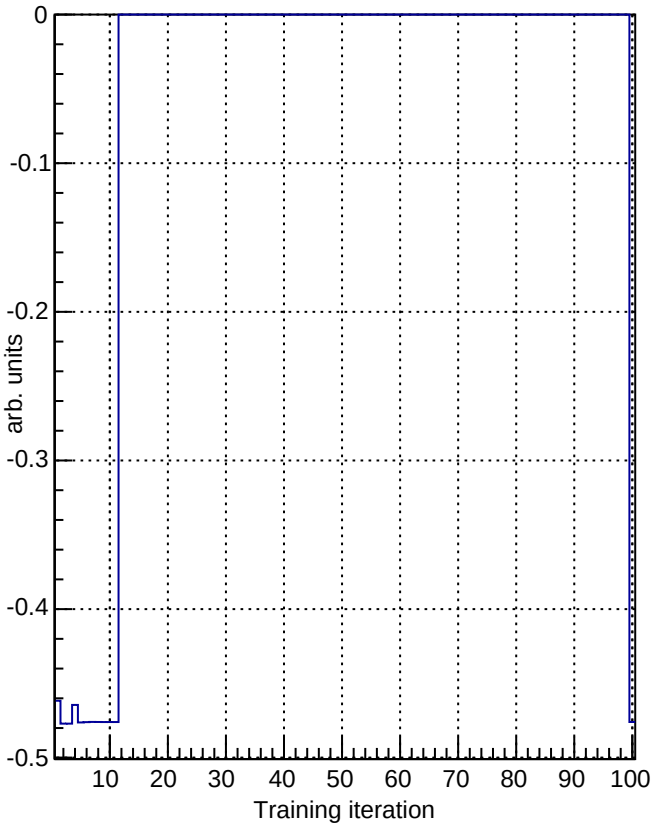
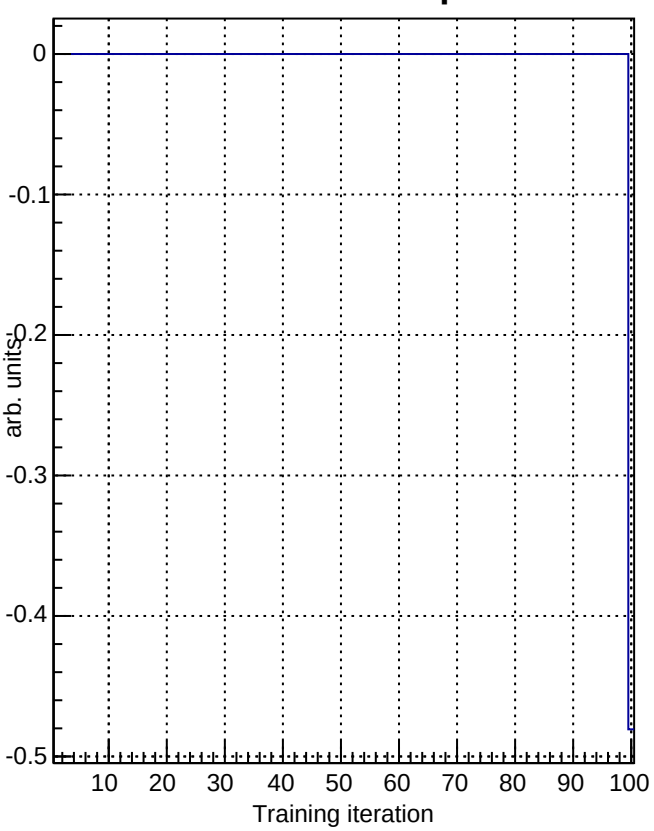
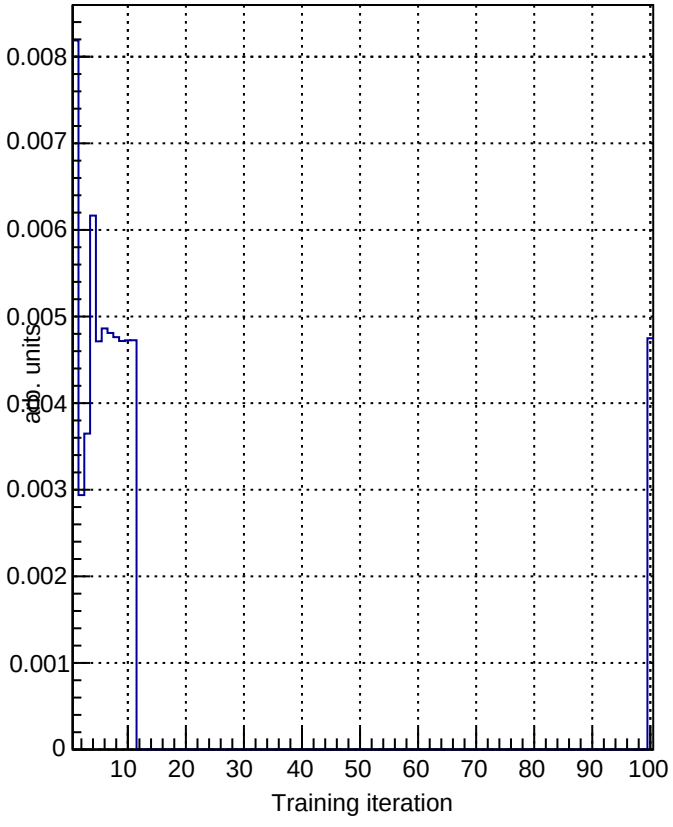
Error



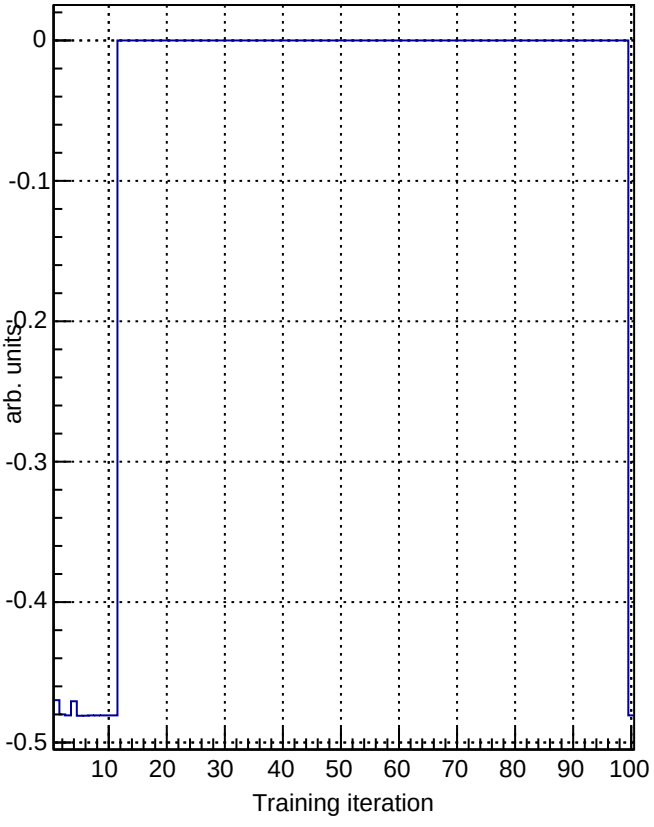
Error Testsample

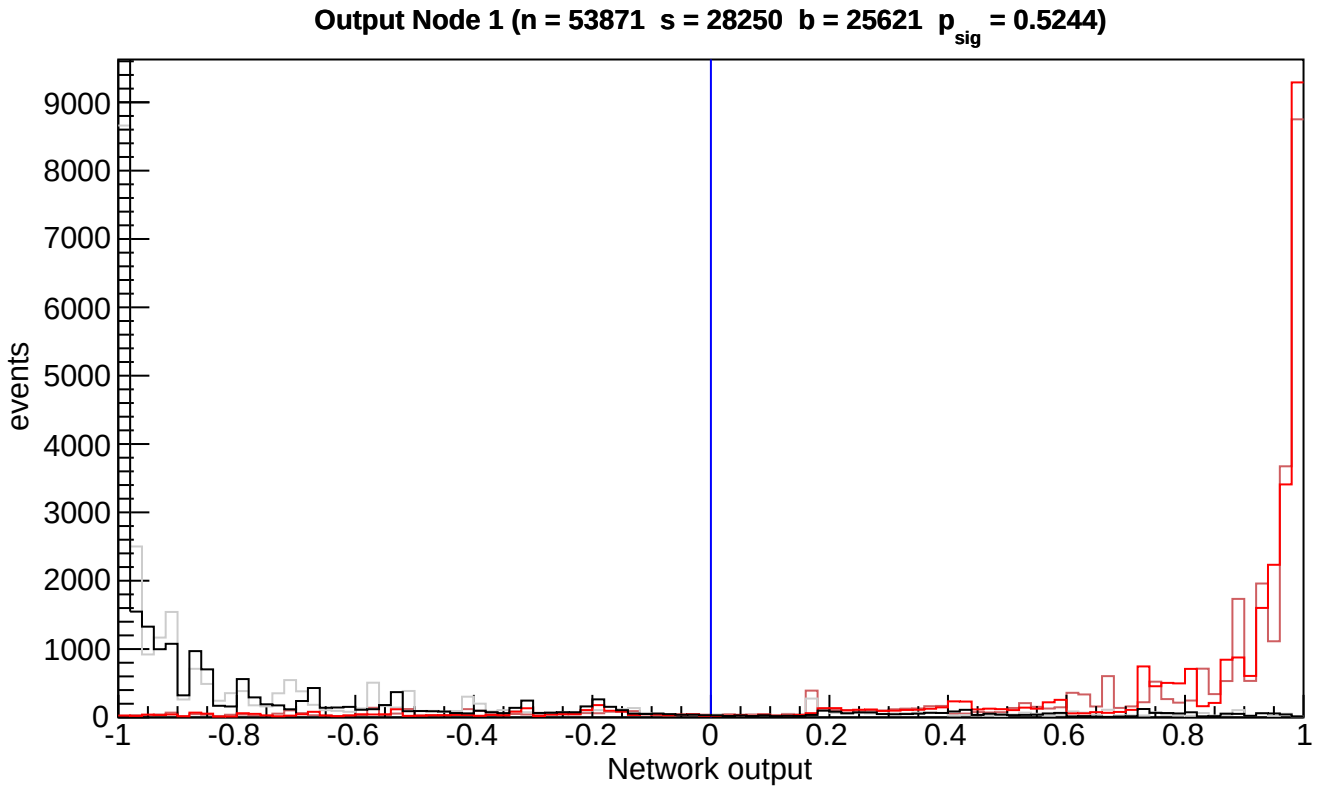


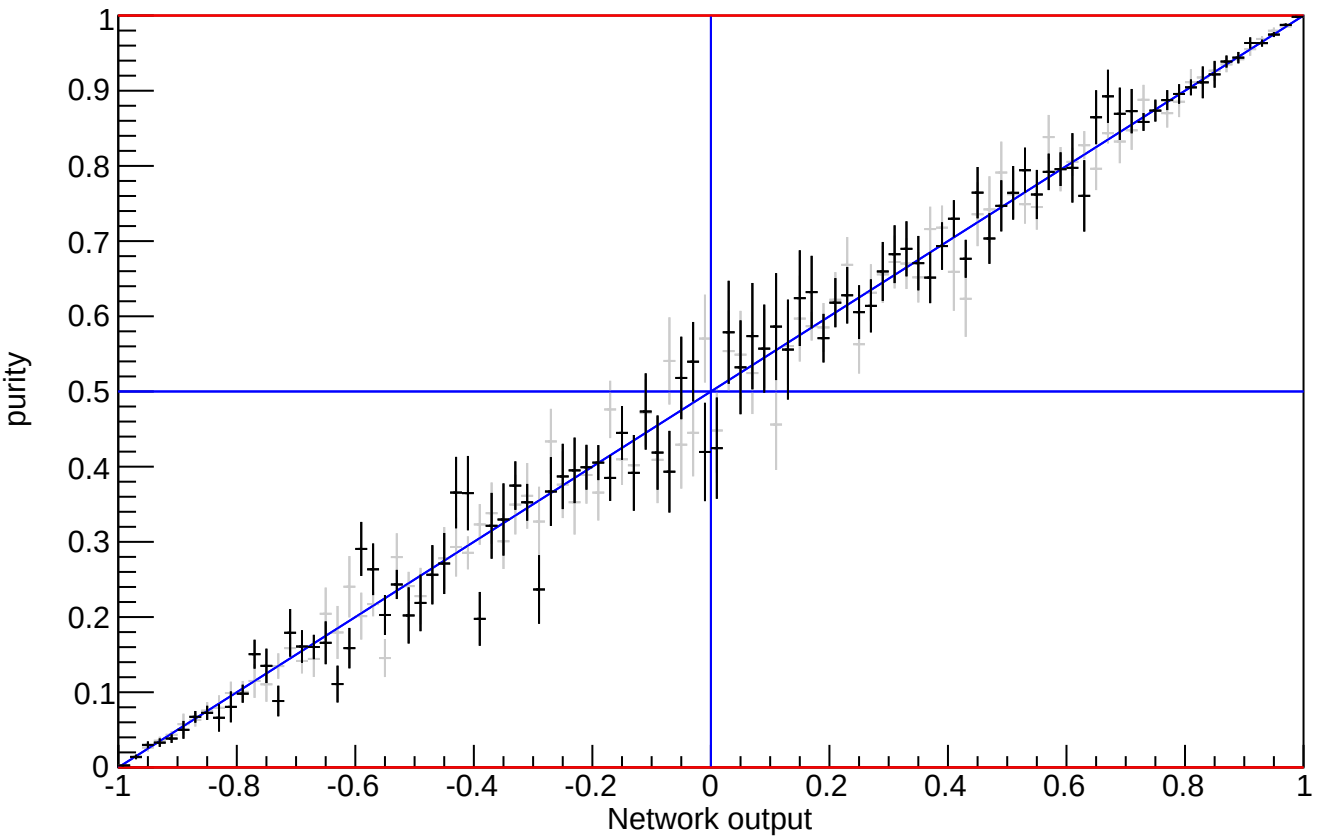
regularisation param. * weights

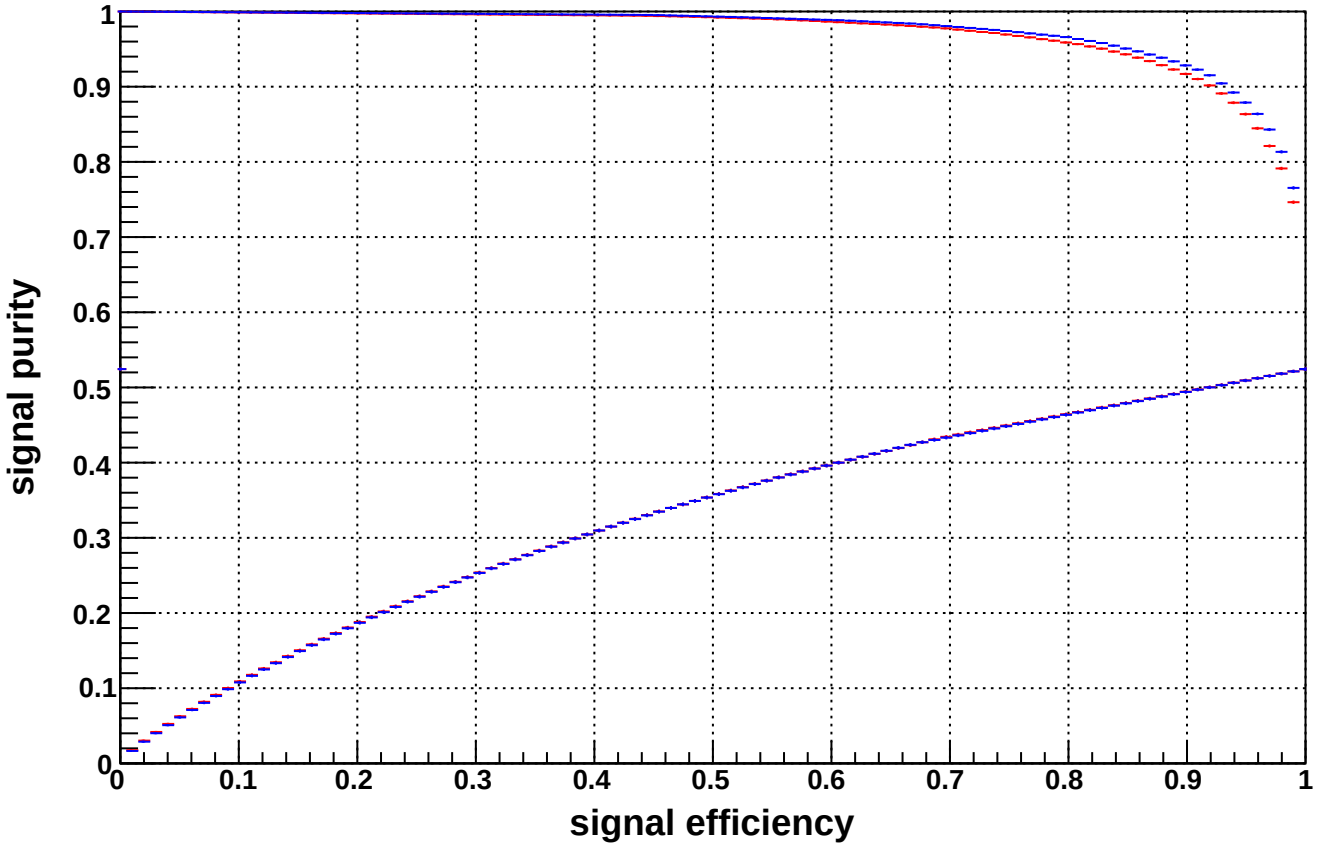


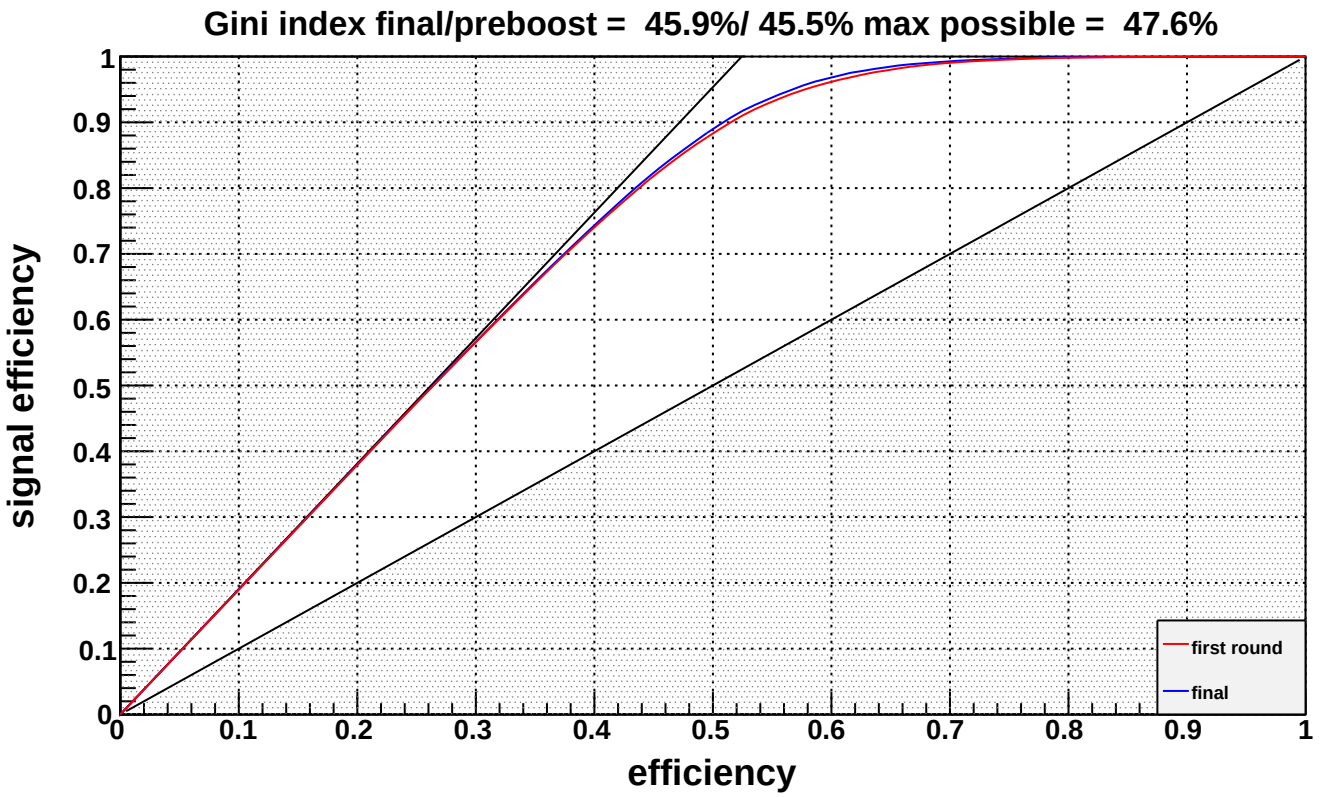
Err-Weight Learnsample

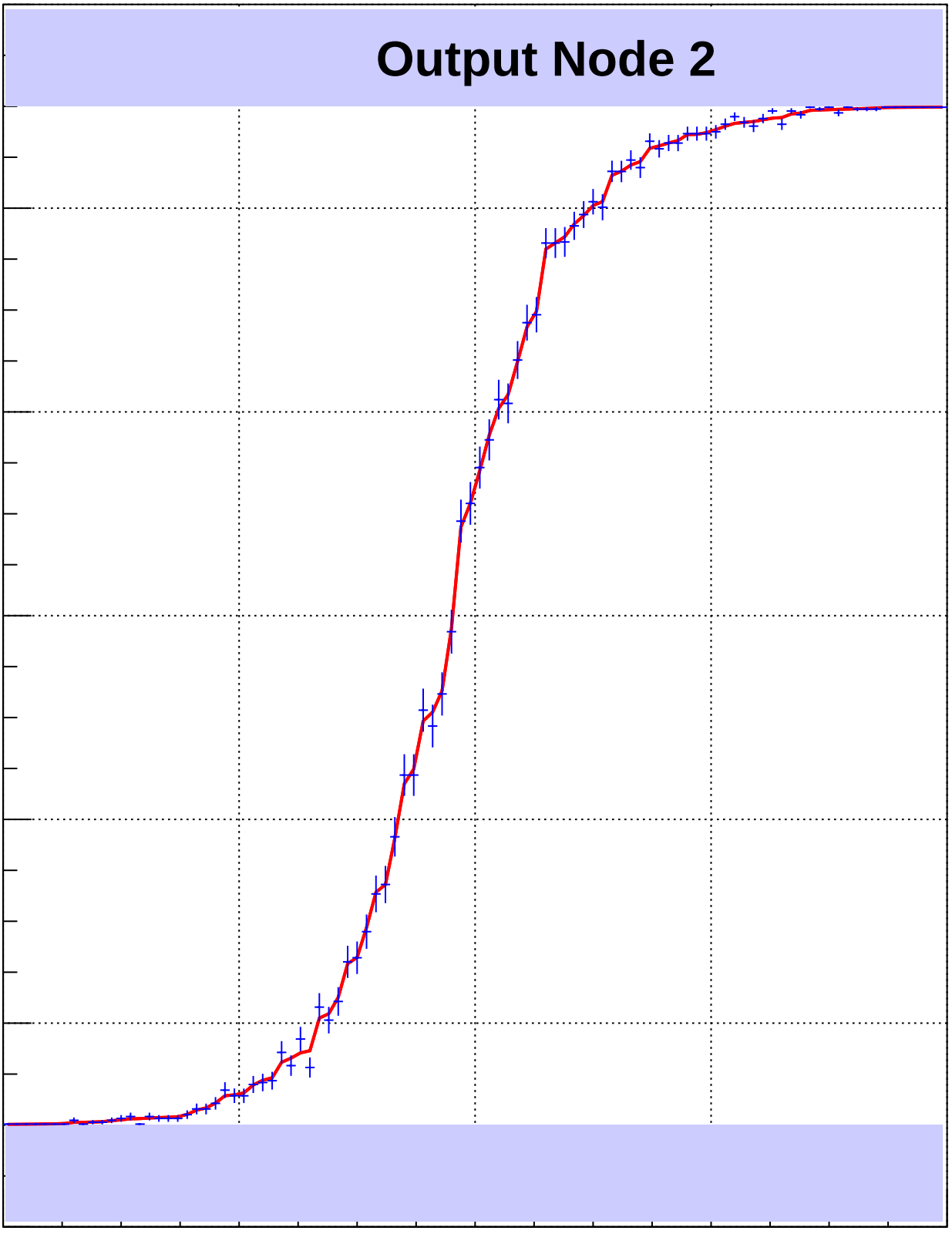



Output Node 1 (n = 53871 s = 28250 b = 25621 p_sig = 0.5244)
events
Network output
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1


purity
Network output
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-1
-0.8
-0.6
-0.4
-0.2
0
0.2
0.4
0.6
0.8
1


signal purity
signal efficiency
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


Gini index final/preboost = 45.9%/ 45.5% max possible = 47.6%
signal efficiency
efficiency
first round
final
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


Output Node 2

First Round Diag Fit

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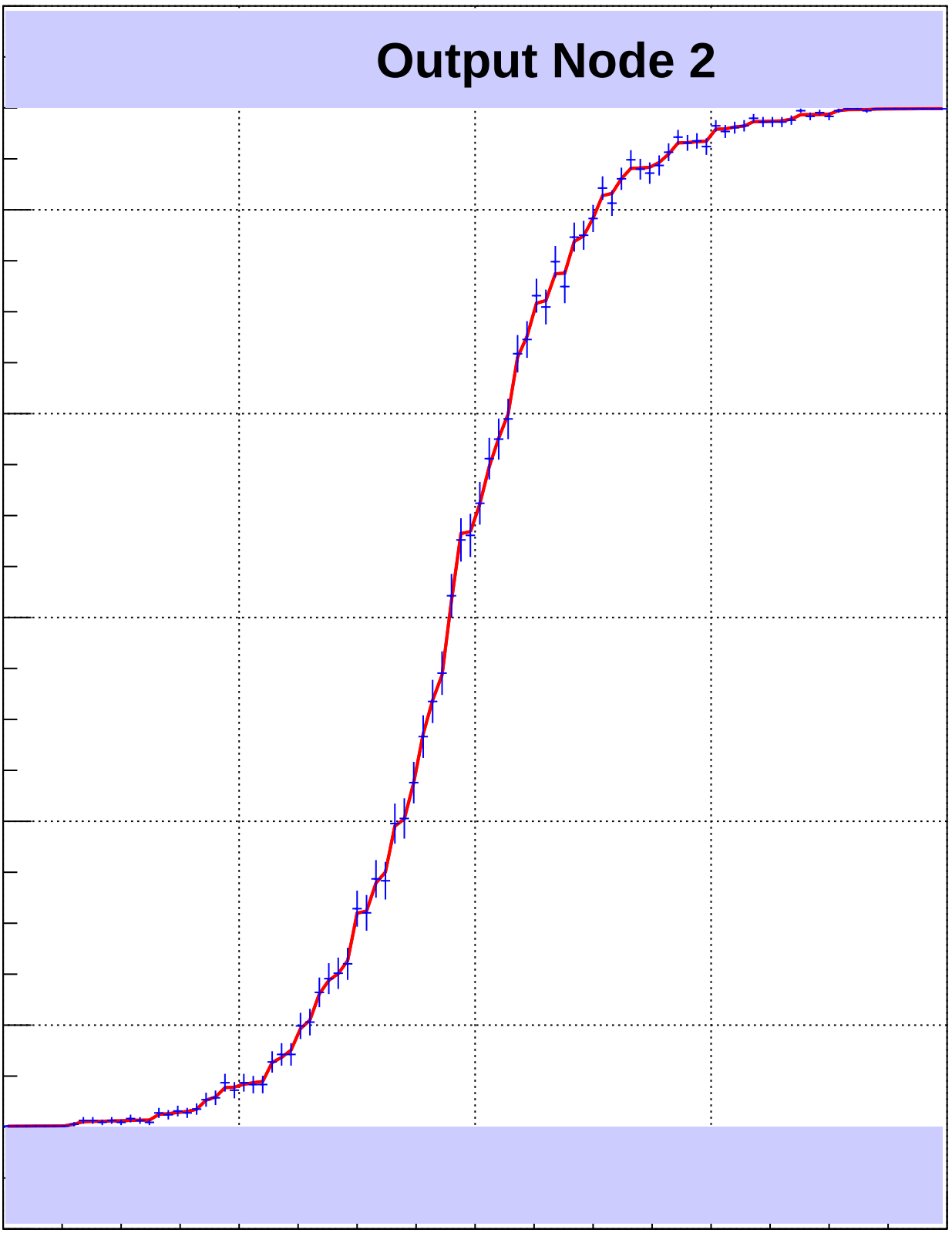
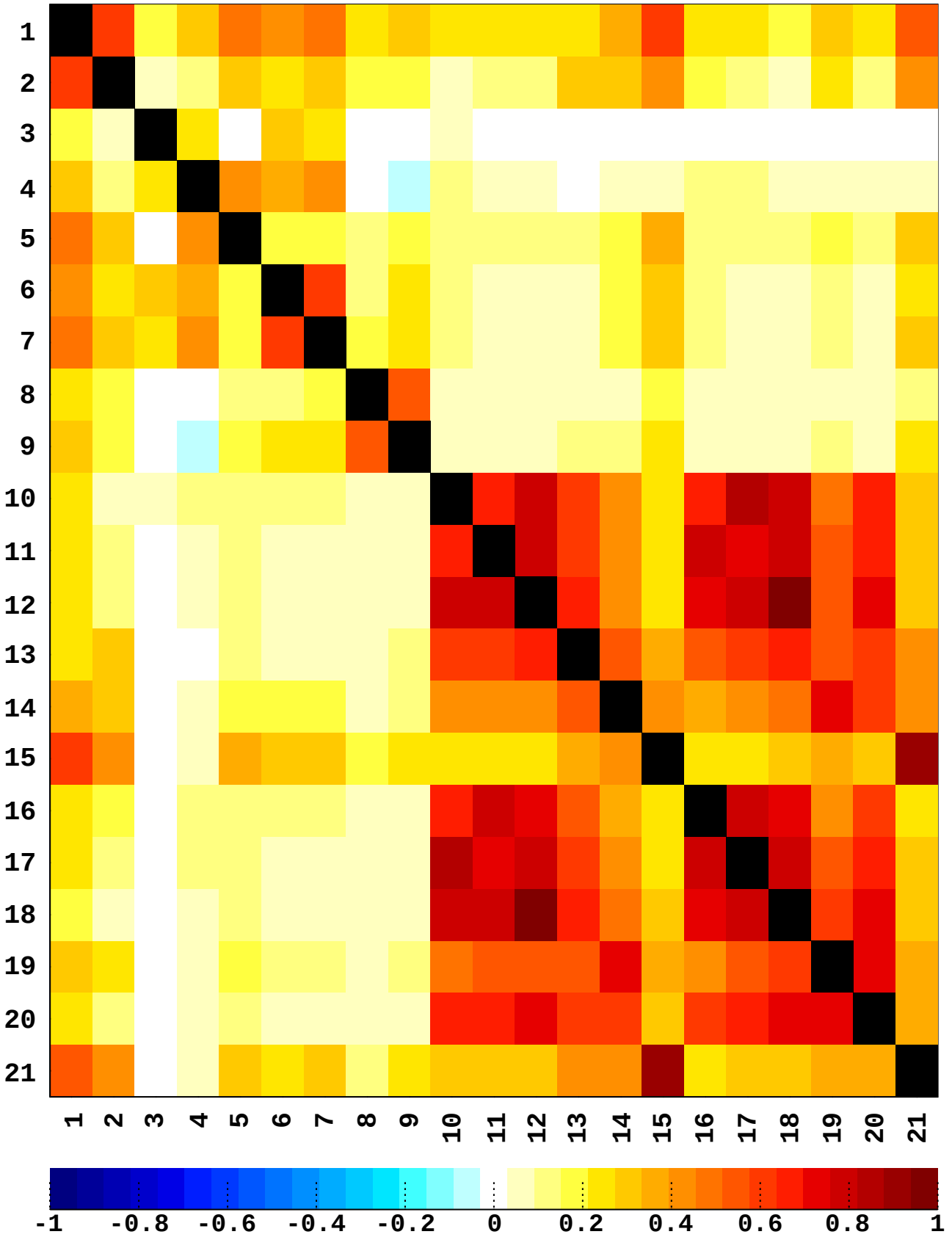
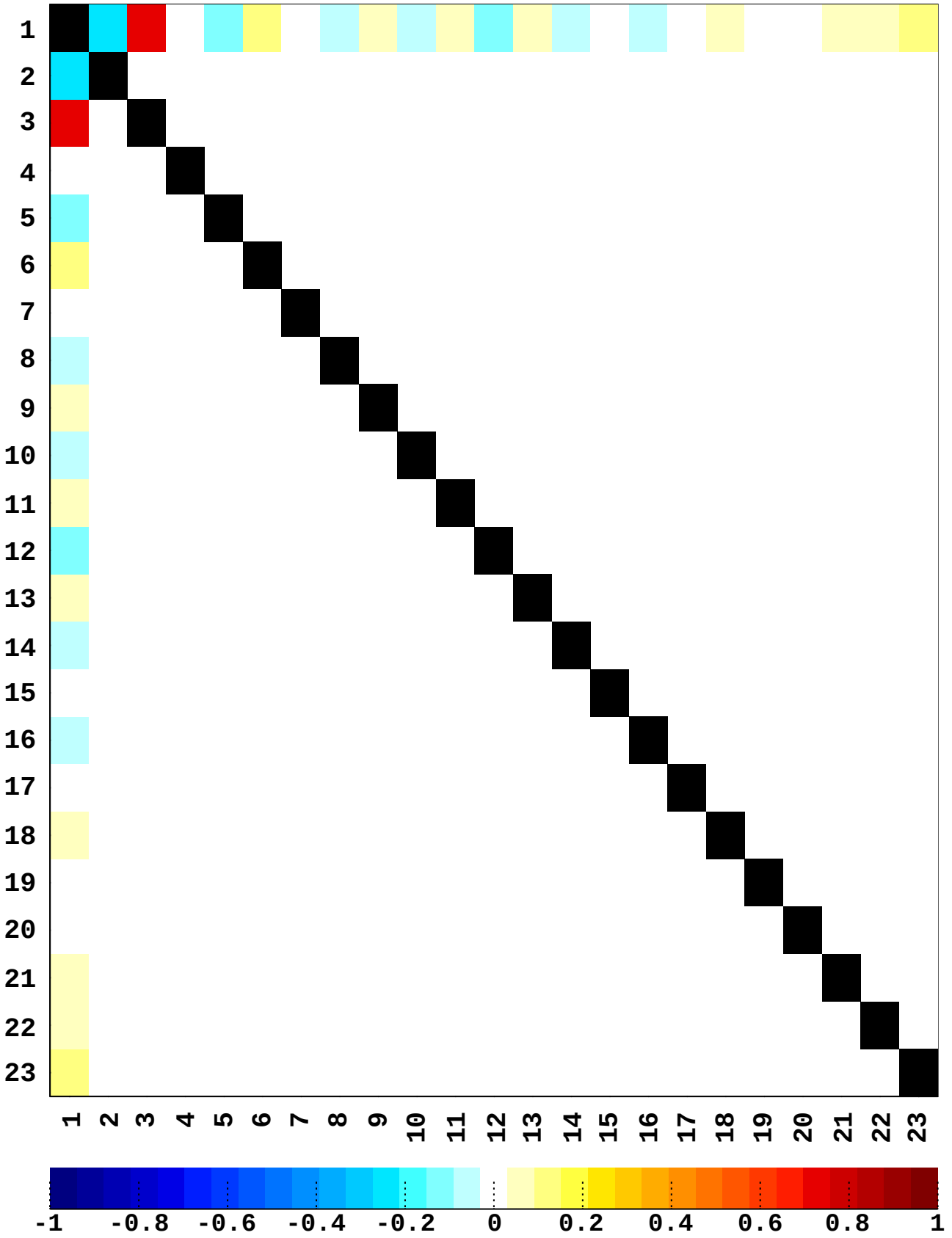


correlation matrix of input variables



correlation matrix of input variables



Input node 15 : 34

1st most important — PrePro: #15

added signi. 143.11 — only this 143.11

signi. loss 29.20 — corr. to others 90.70%

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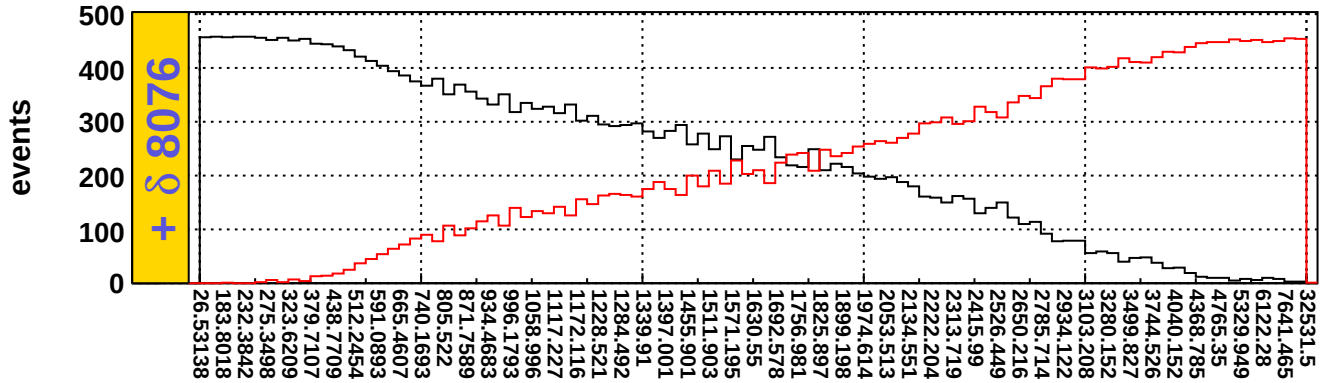
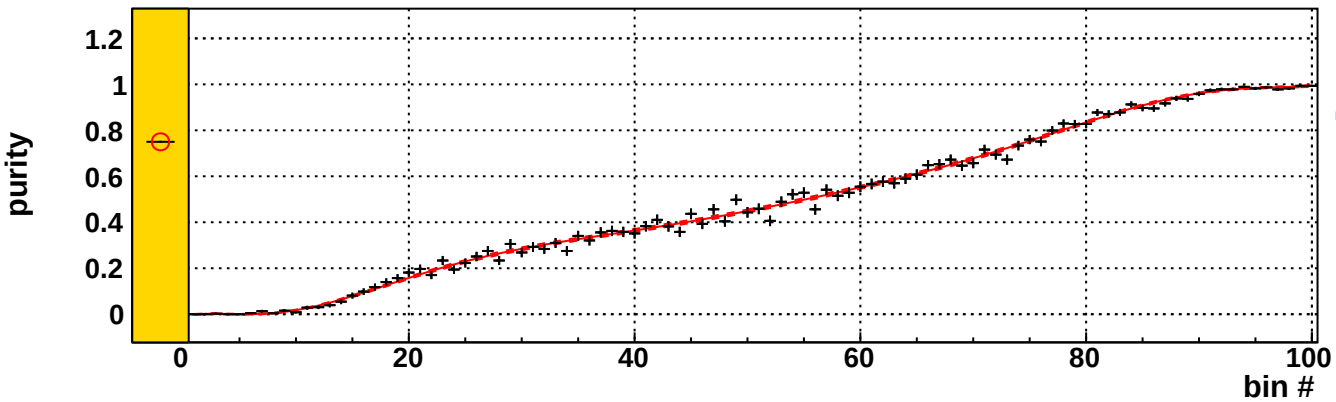
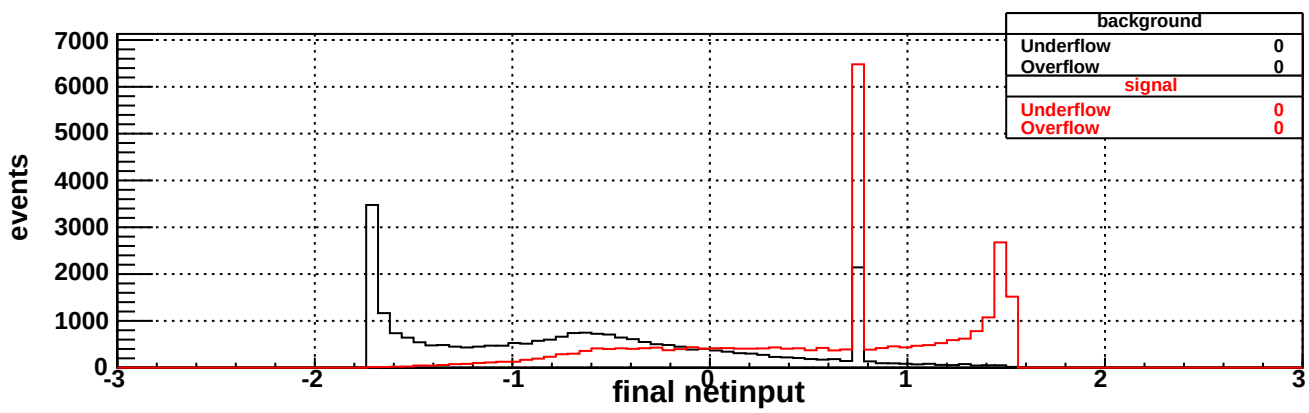


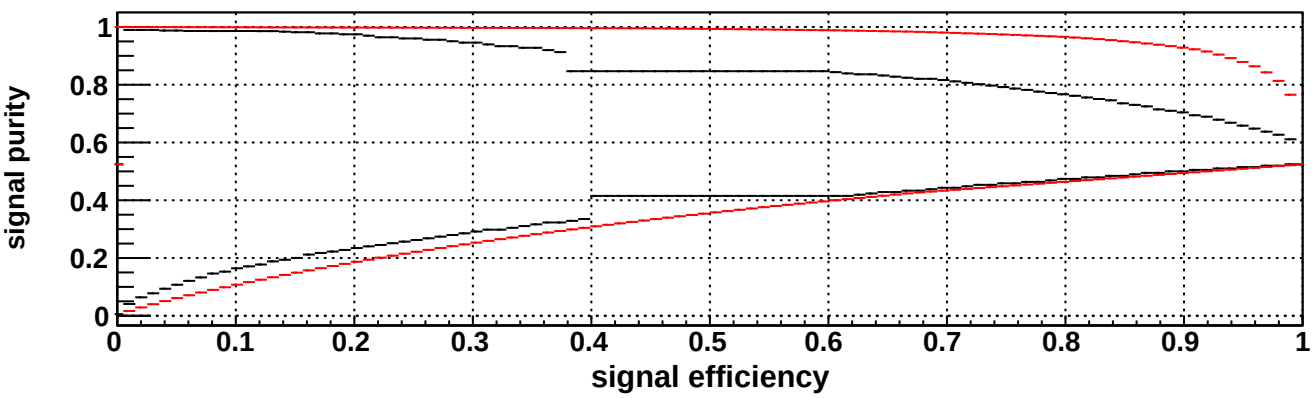
flat



spline fit



final



separation

Input node 2 : 14

2nd most important	PrePro: #2
added signi. 77.81	only this 134.00
signi. loss 51.10	corr. to others 56.00%

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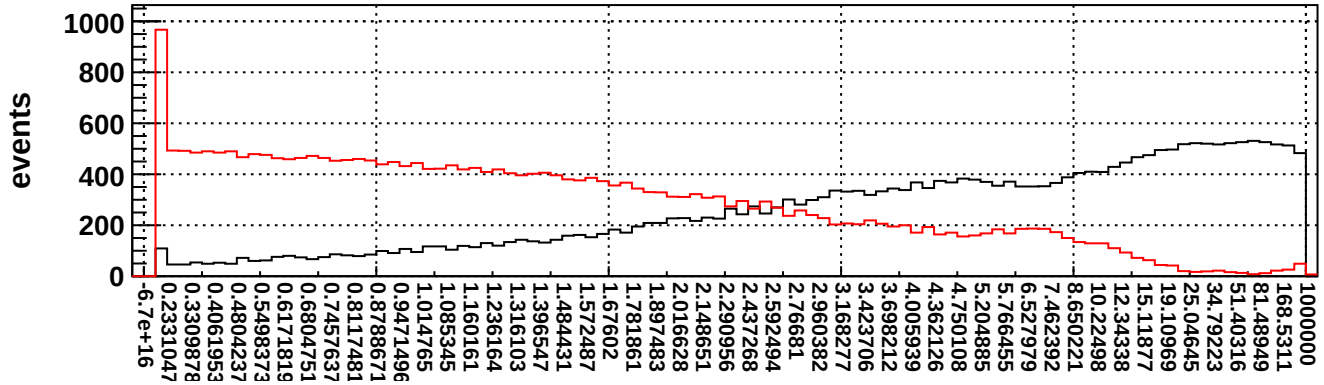
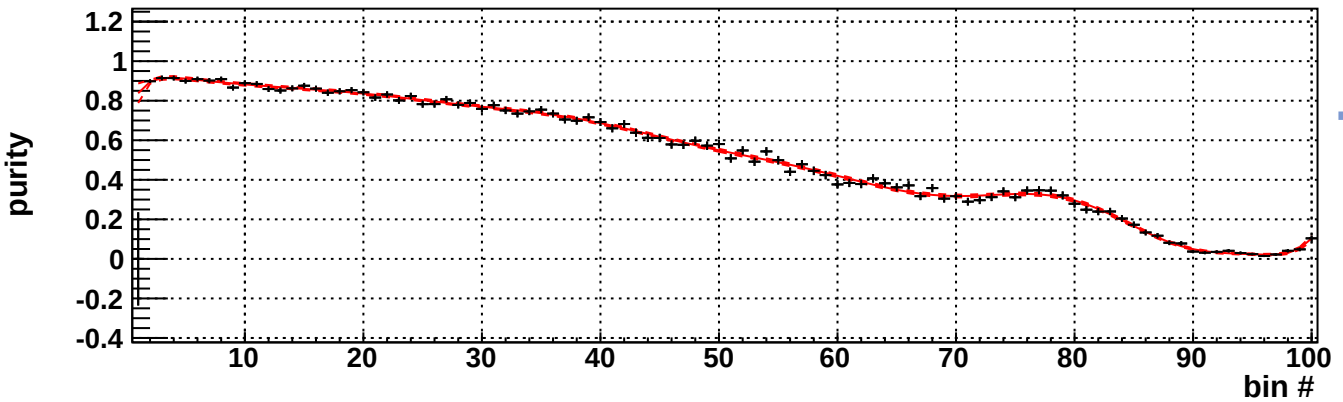
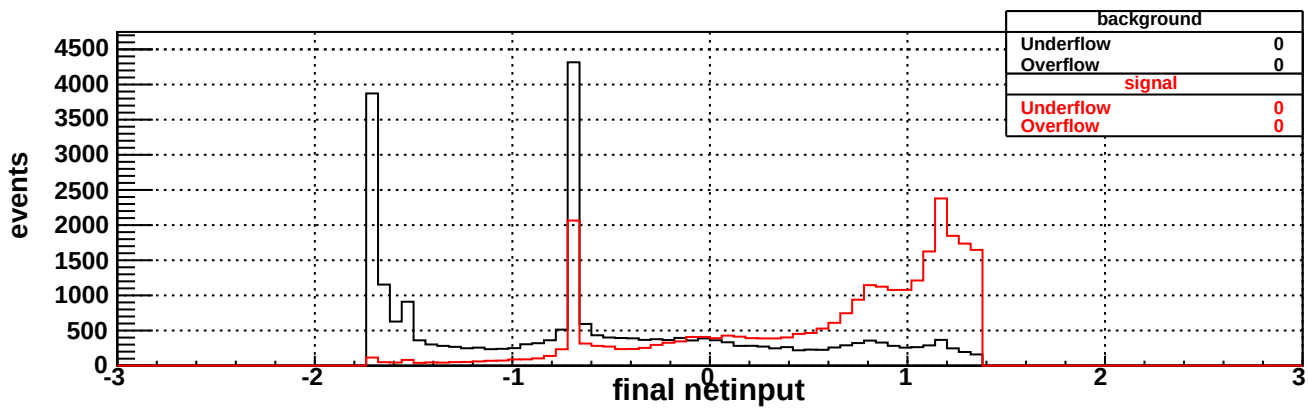


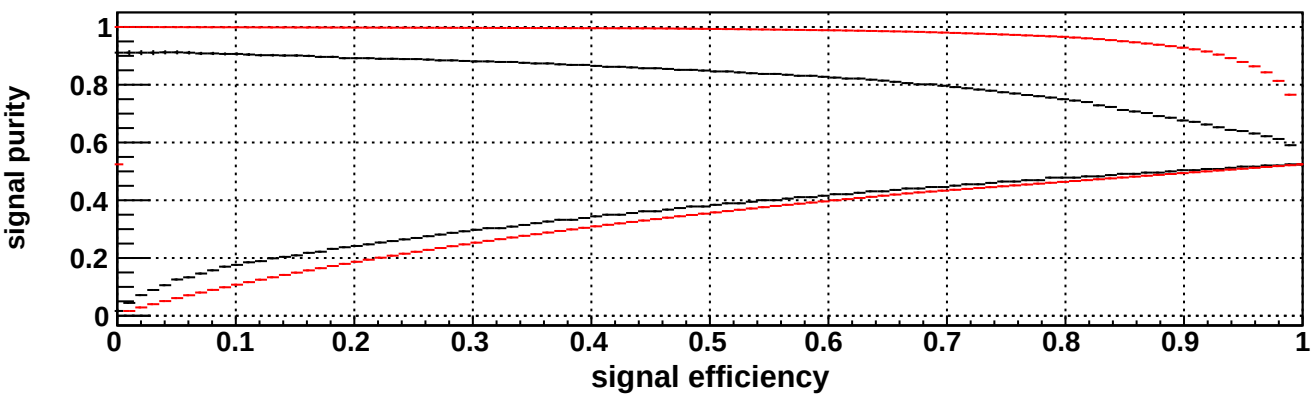
flat



spline fit



final



separation

Input node 7 : 14

3rd most important	PrePro: #7
added signi. 61.31	only this 113.62
signi. loss 29.76	corr. to others 67.60%

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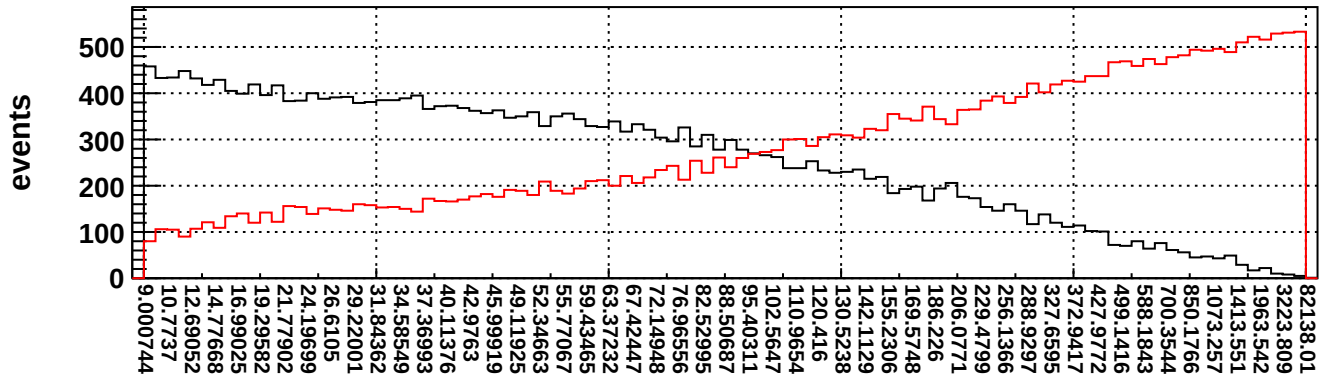
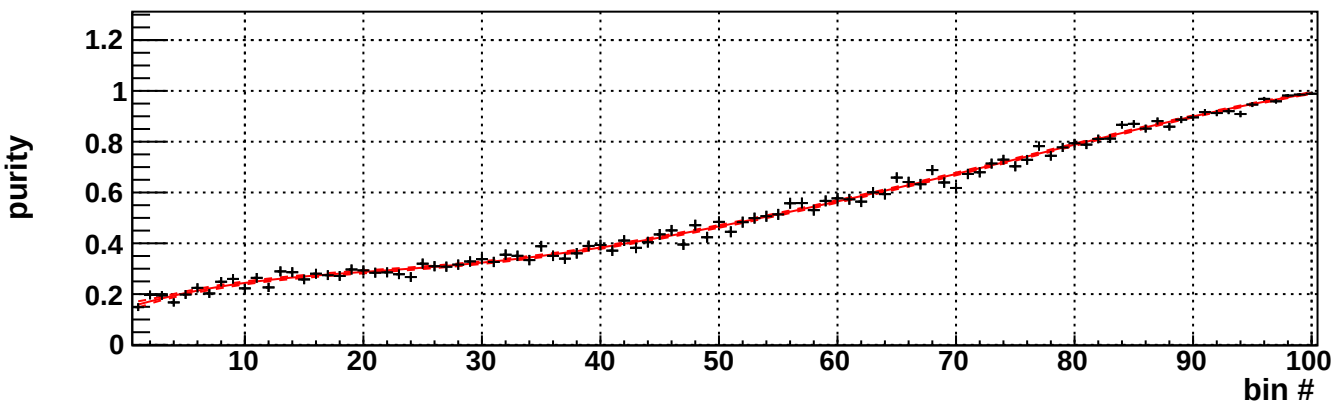
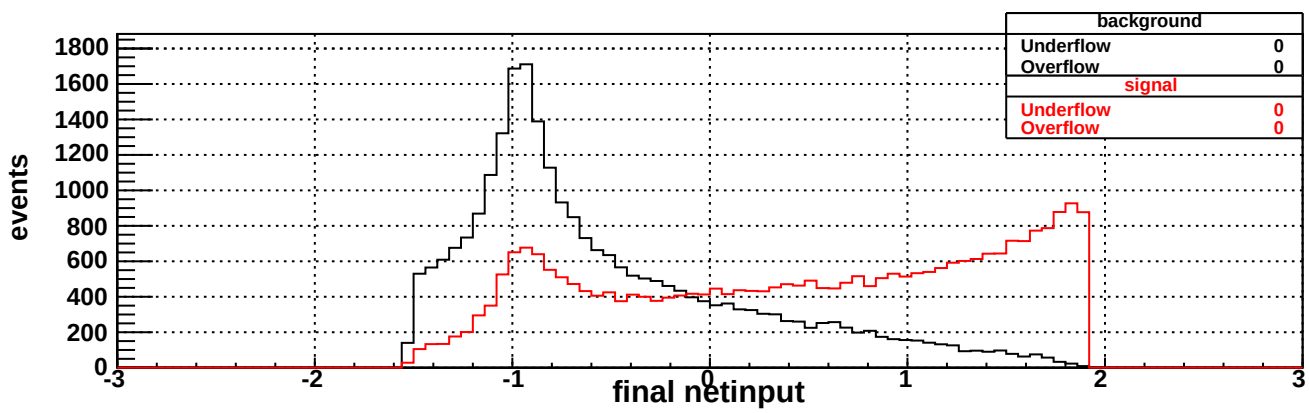


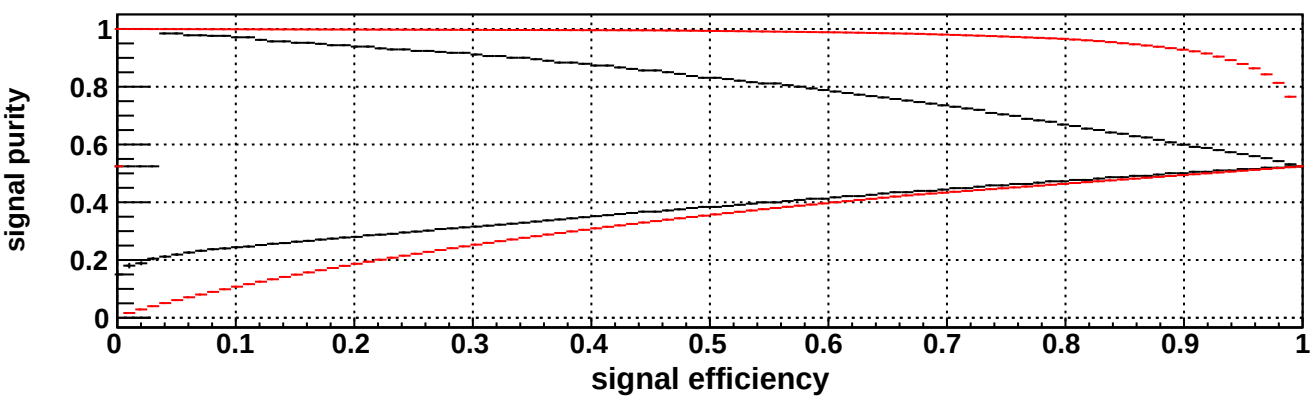
flat



spline fit



final



separation

Input node 5 : 14

4th most important	PrePro: #5
added signi. 52.94	only this 113.23
signi. loss 40.98	corr. to others 56.20%

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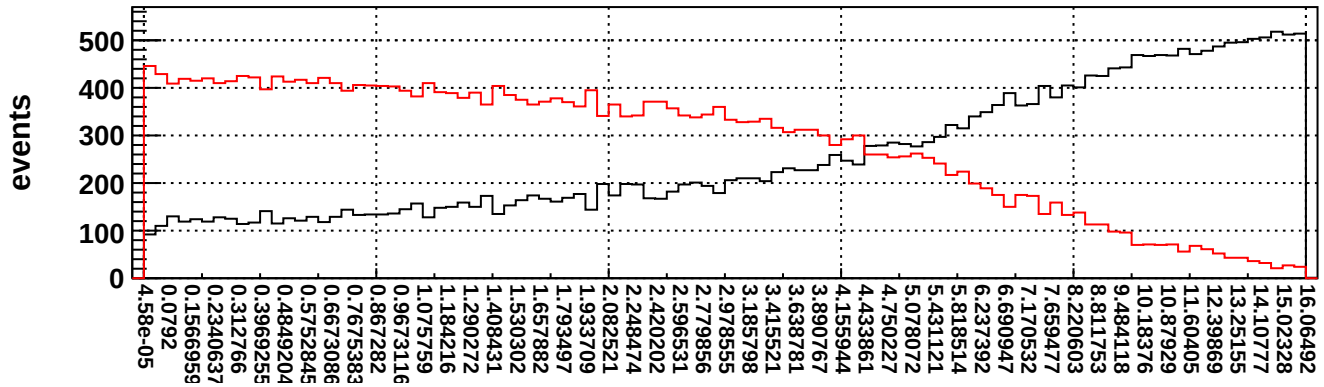
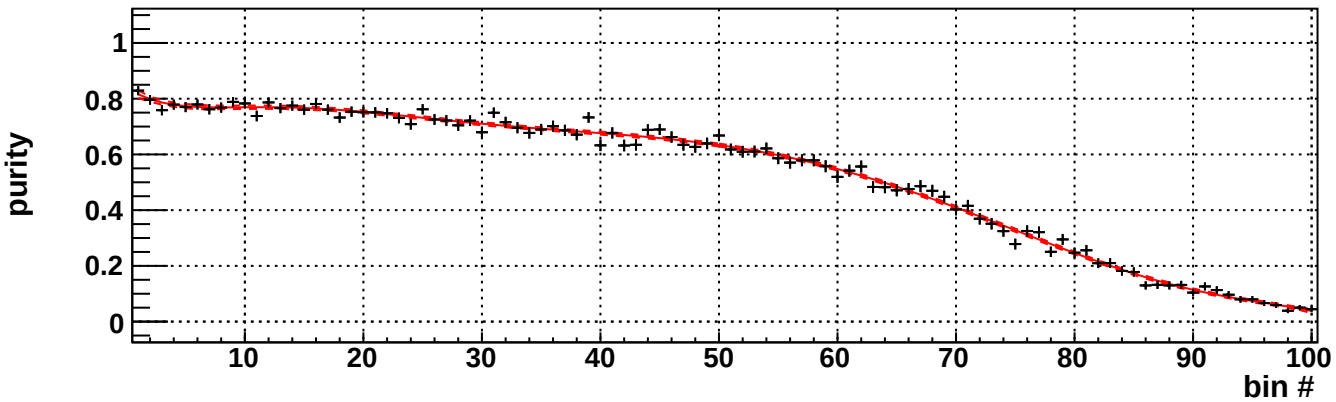
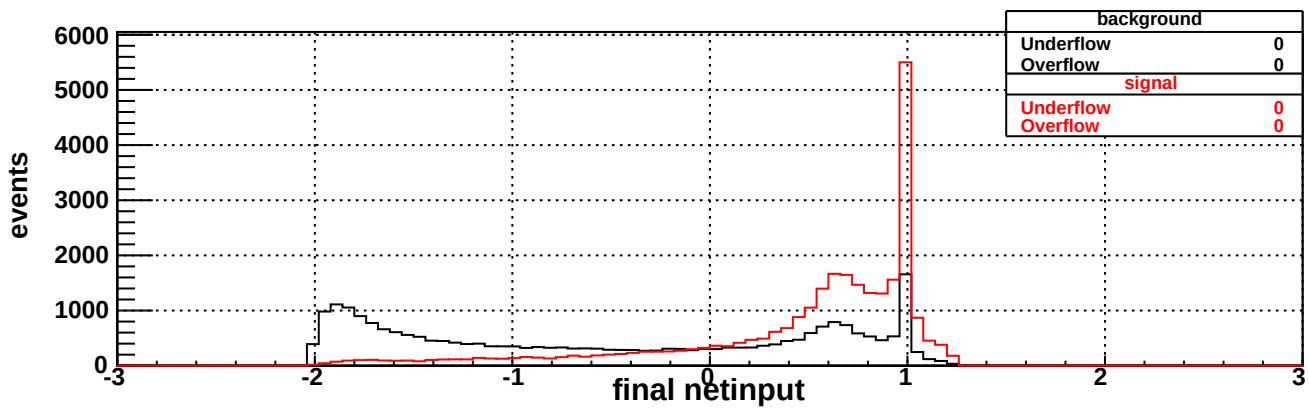


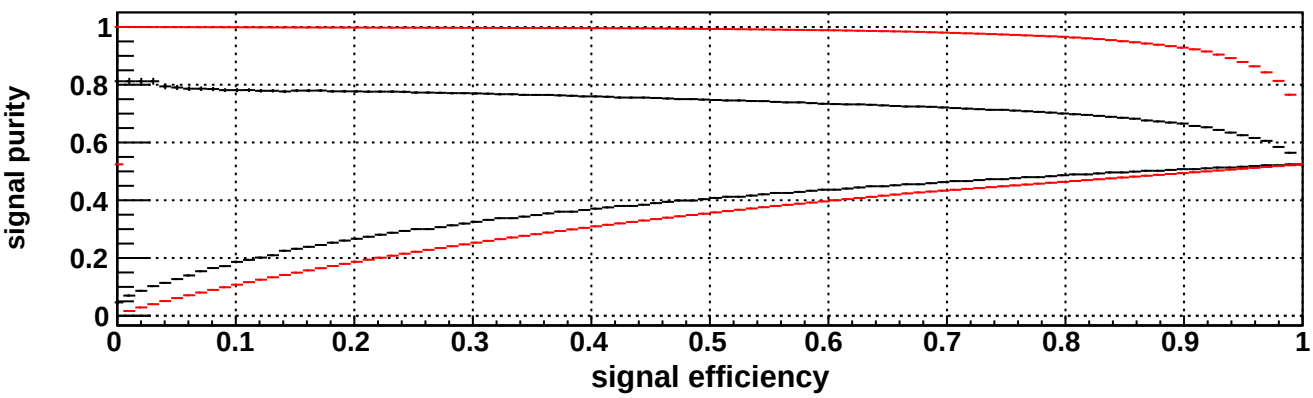
flat



spline fit



final



separation

Input node 16 : 34

5th most important — **PrePro: #16**

added signi. 20.29 — **only this 60.72**

signi. loss 12.82 — **corr. to others 83.00%**

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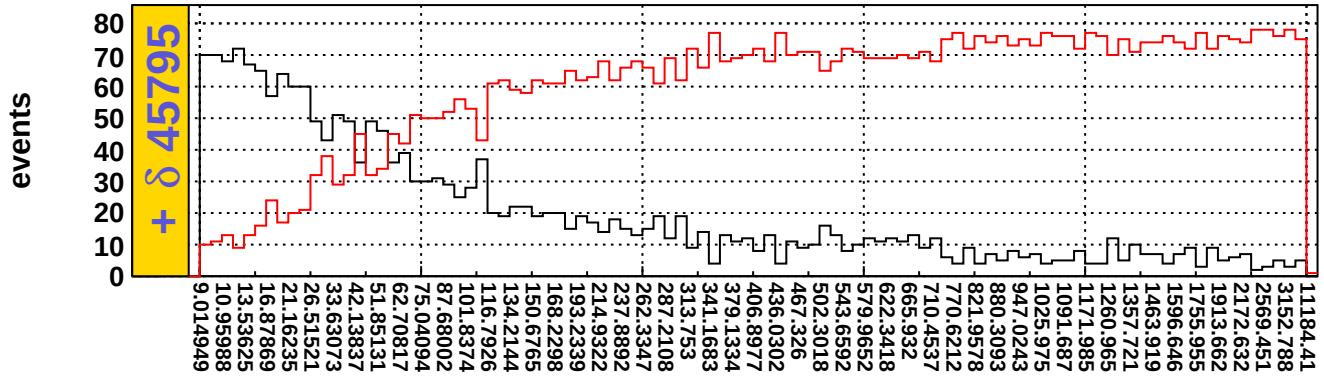

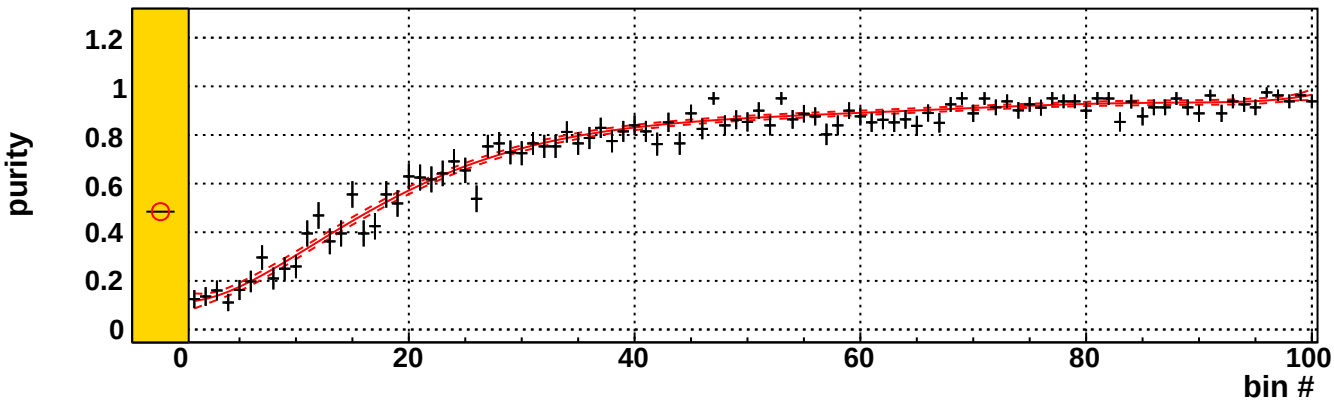

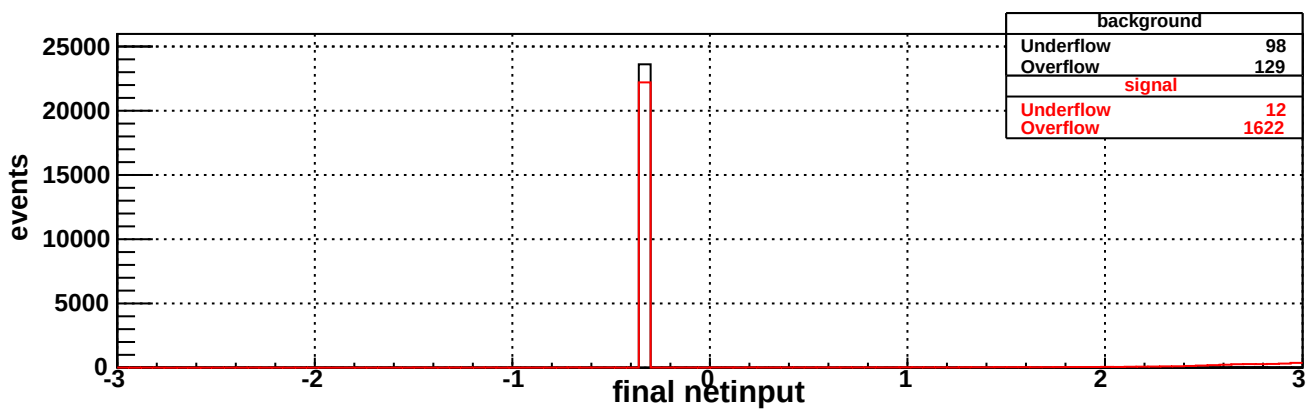

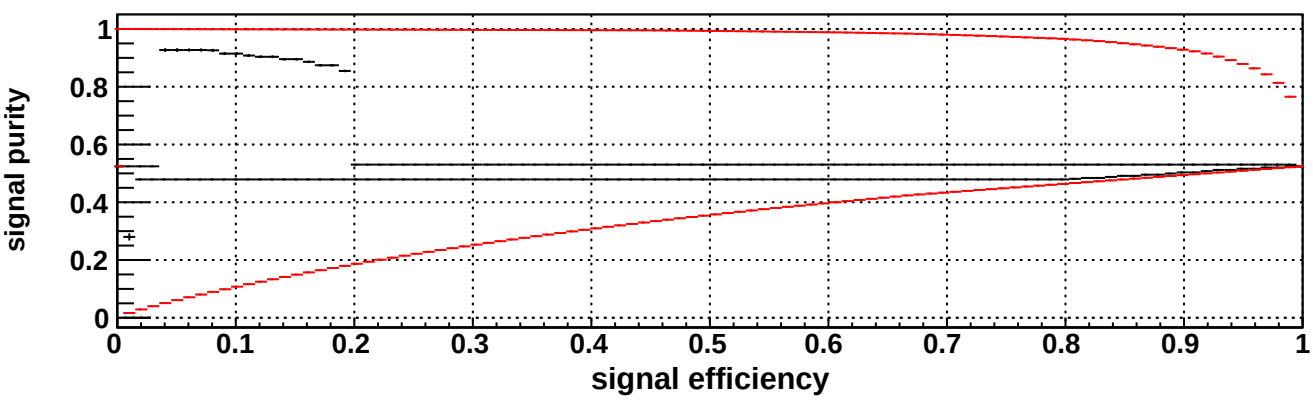

Input node 8 : 14

6th most important — **PrePro: #8**

added signi. 17.91 — **only this 59.11**

signi. loss 13.44 — **corr. to others 53.30%**

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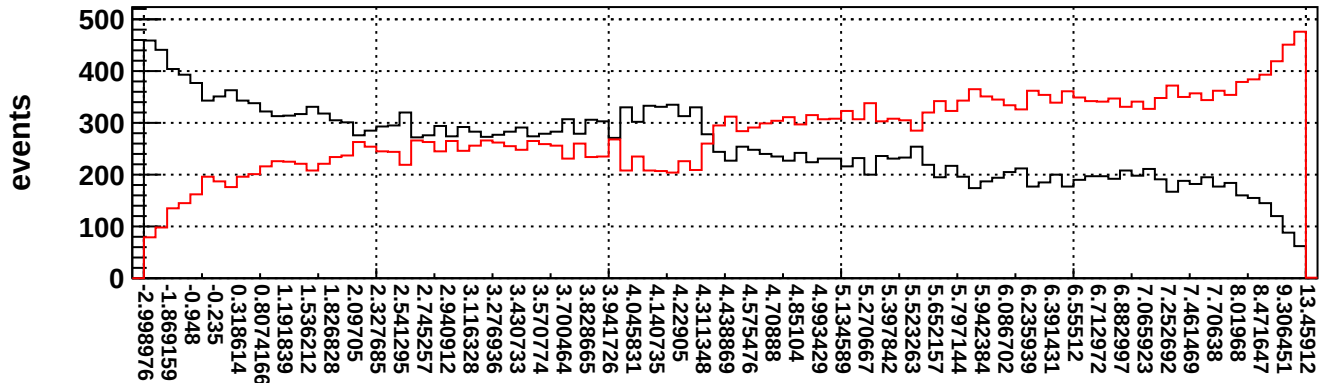
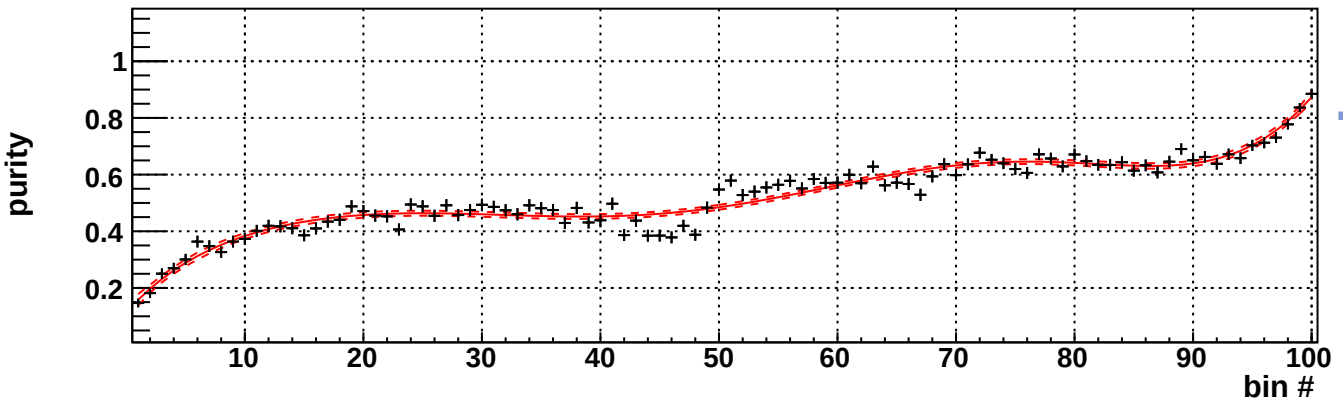
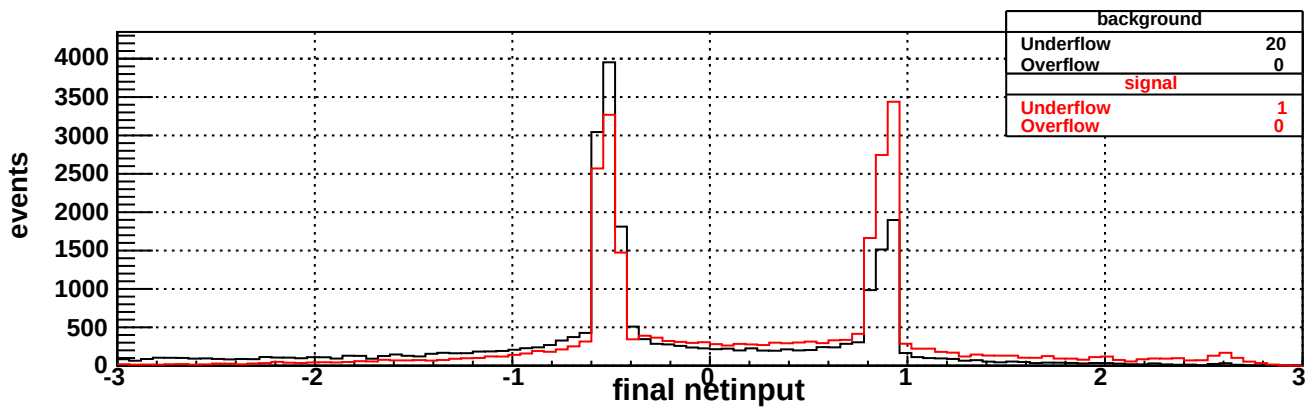
flat



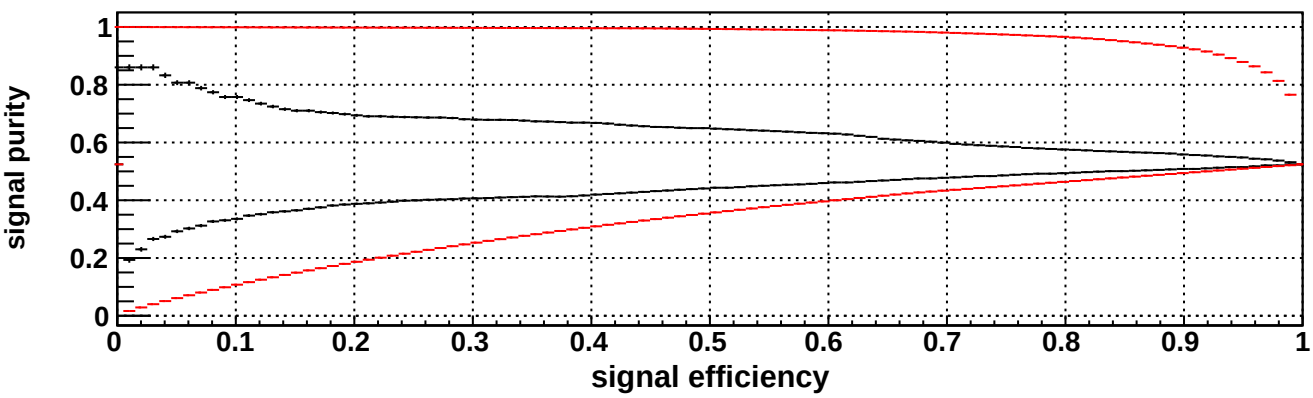
spline fit



final



separation



Input node 3 : 14

7th most important	PrePro: #3
added signi. 16.24	only this 35.36
signi. loss 11.24	corr. to others 39.50%

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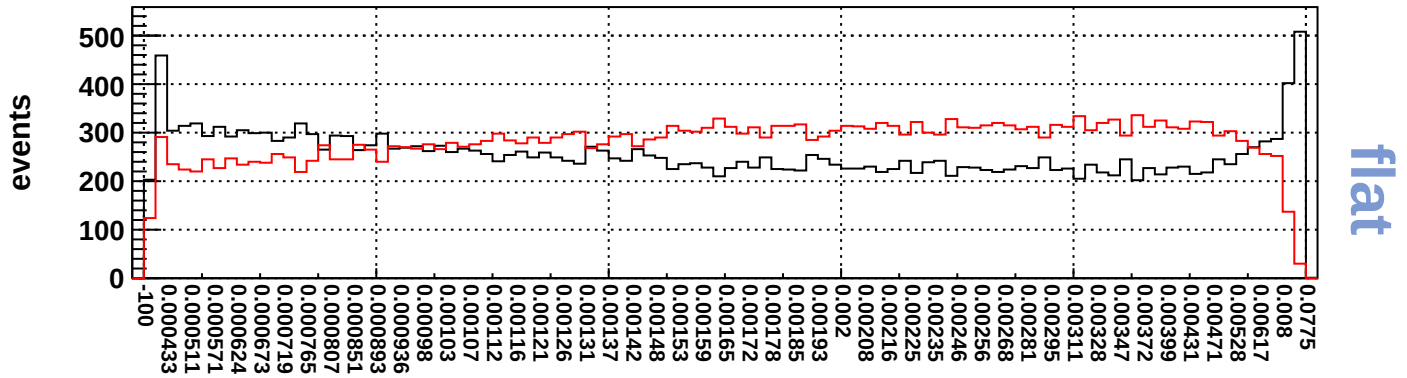

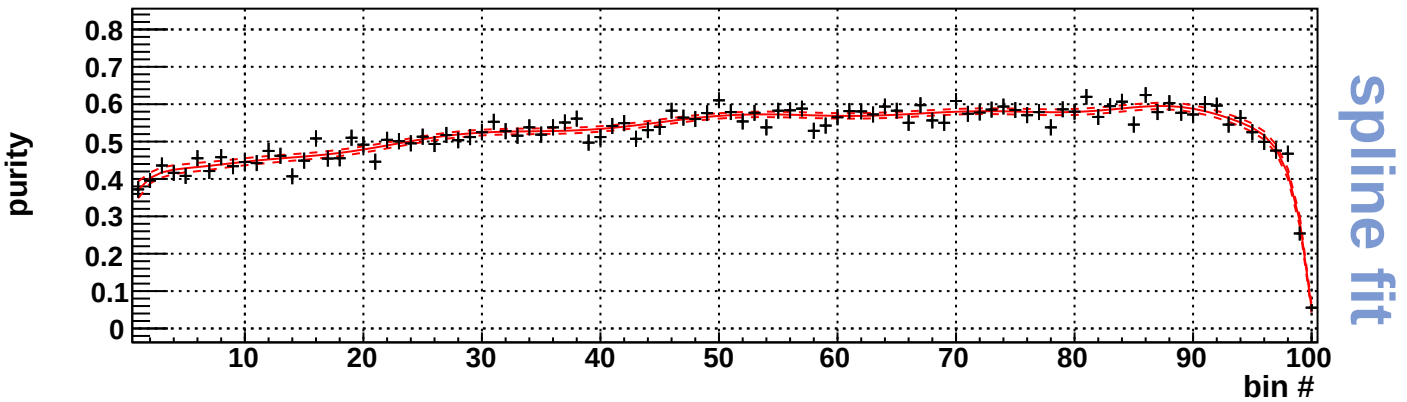

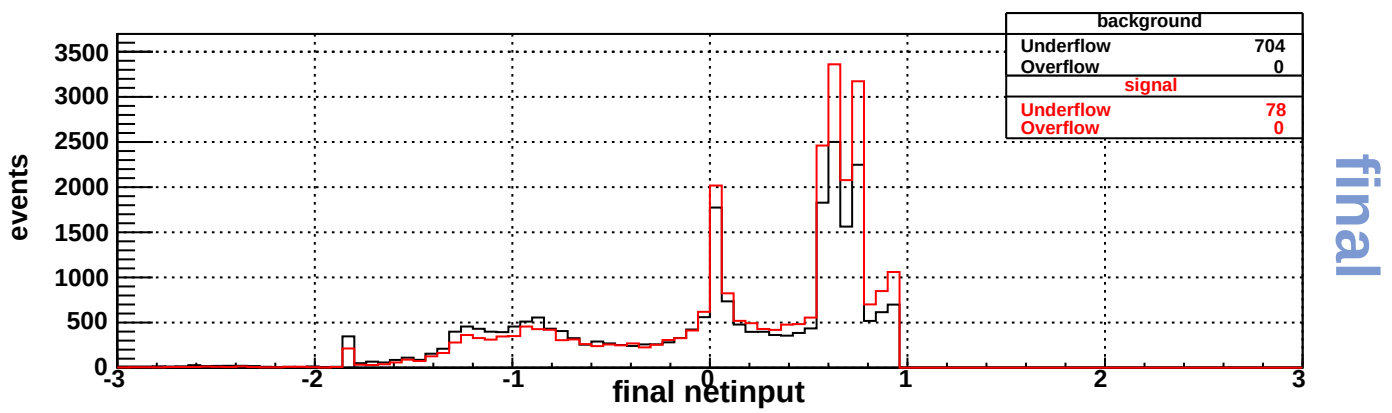

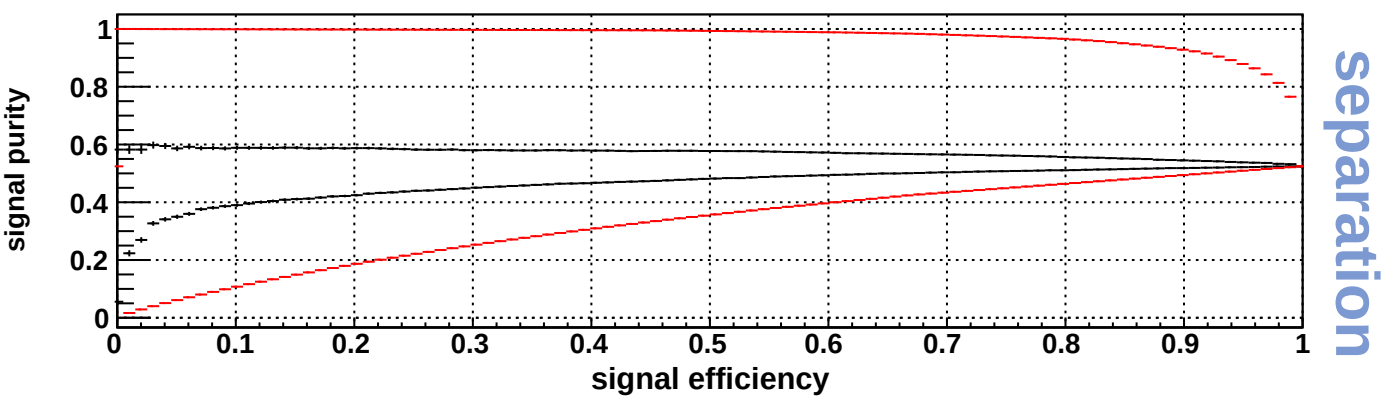

Input node 4 : 14

8th most important — **PrePro: #4**

added signi. 12.28 — **only this 73.96**

signi. loss 9.98 — **corr. to others 62.50%**

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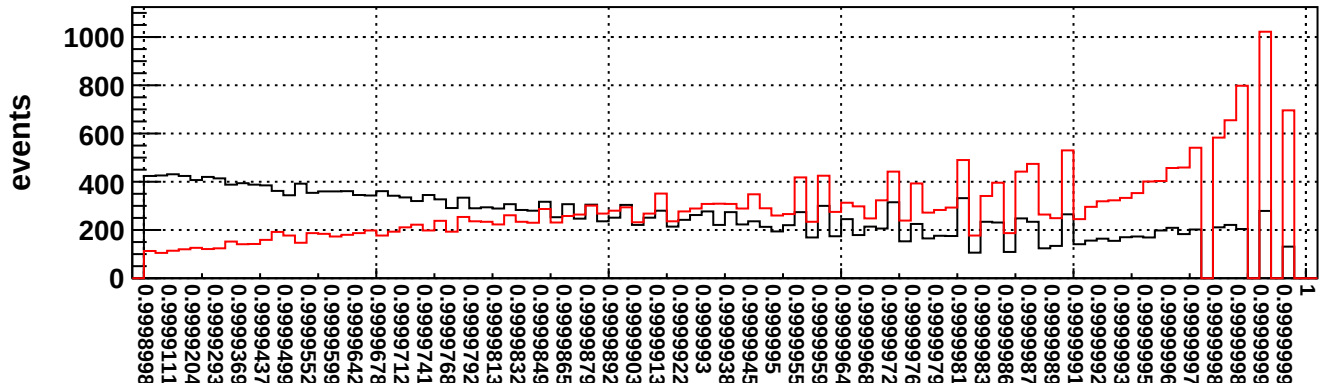
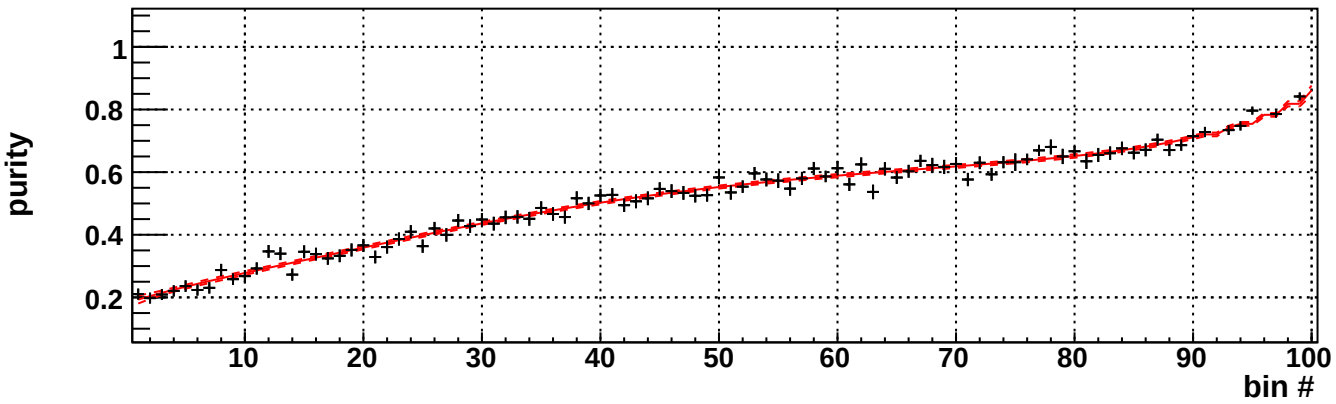
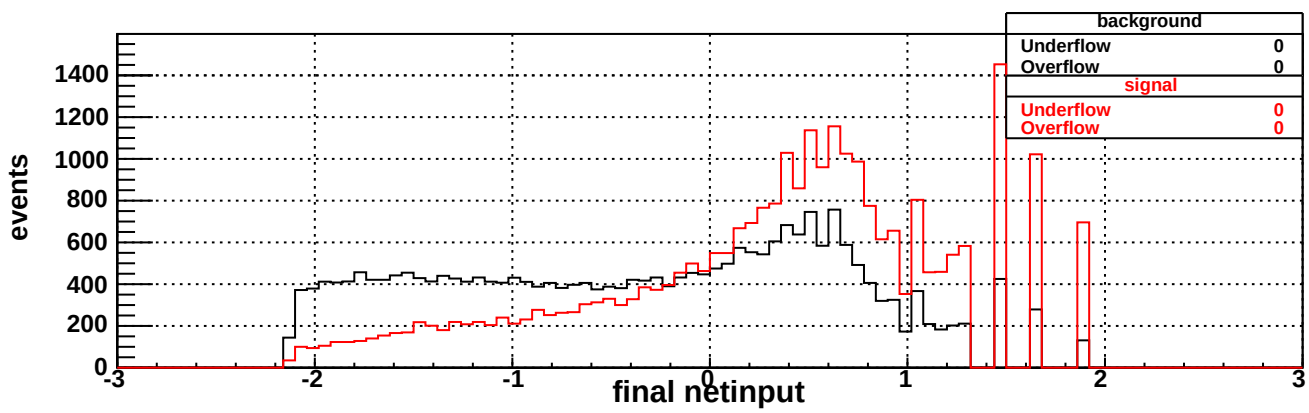


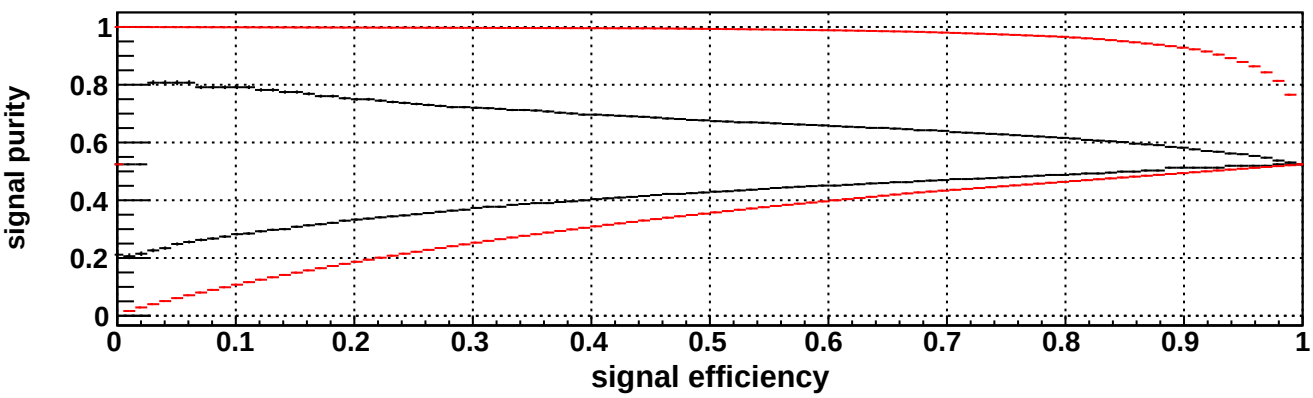
flat



spline fit



final



separation

Input node 14 : 34

9th most important	PrePro: #14
added signi. 9.47	only this 86.75
signi. loss 11.24	corr. to others 75.00%

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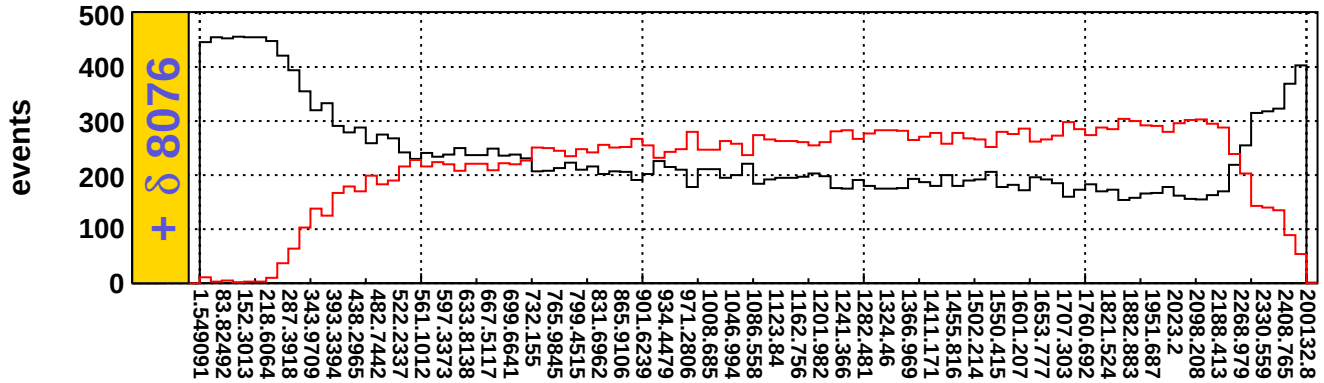
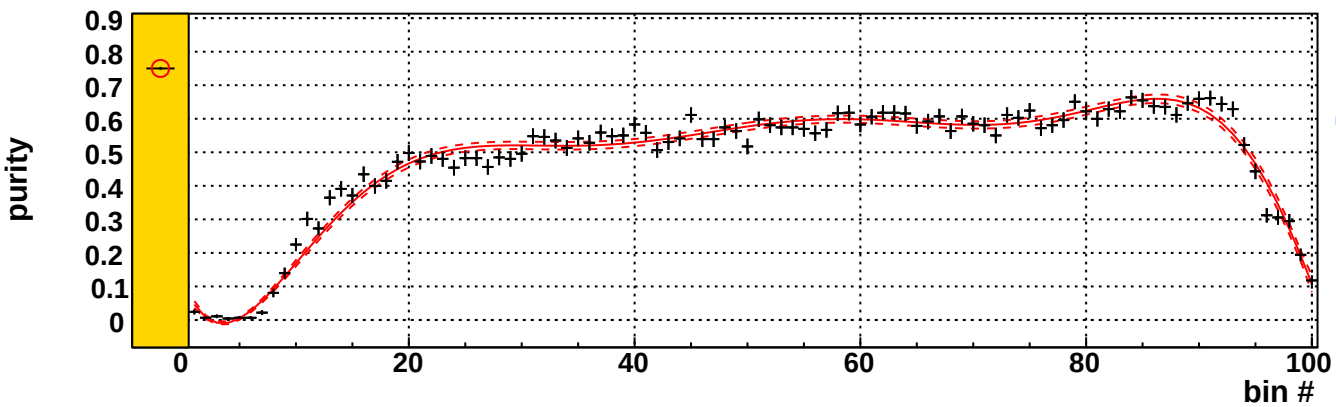
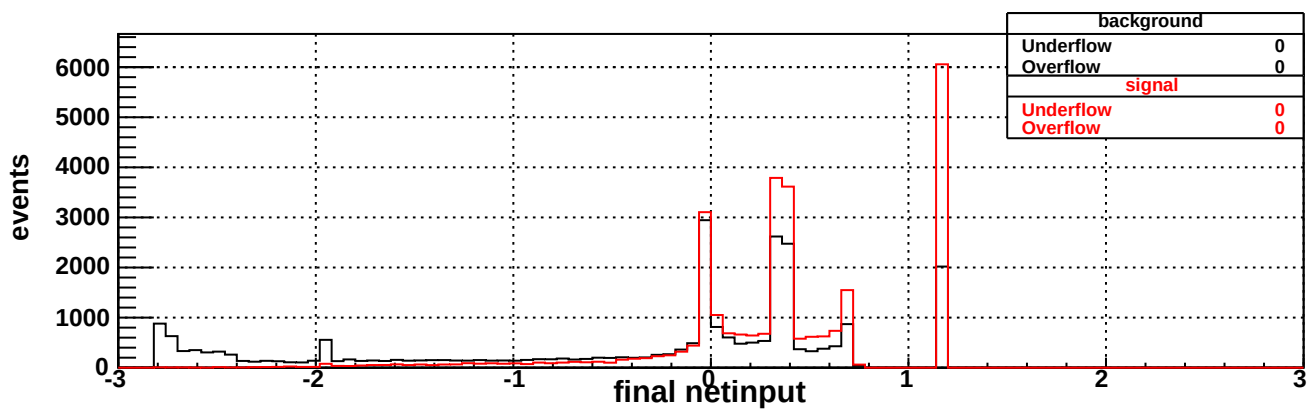


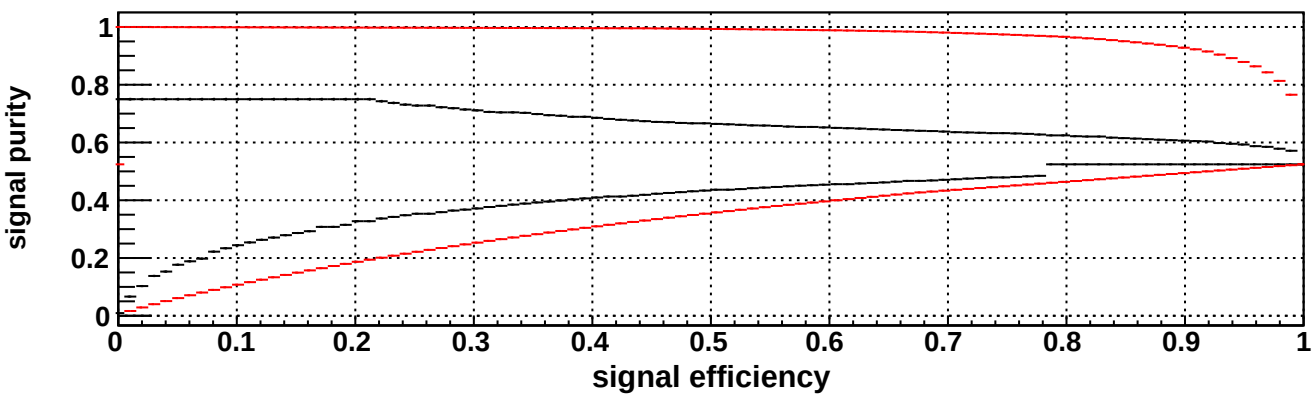
flat



spline fit



final



separation

Input node 13 : 34

10th most important | **PrePro: #13**

added signi. 10.58 | **only this 59.84**

signi. loss 8.88 | **corr. to others 76.20%**

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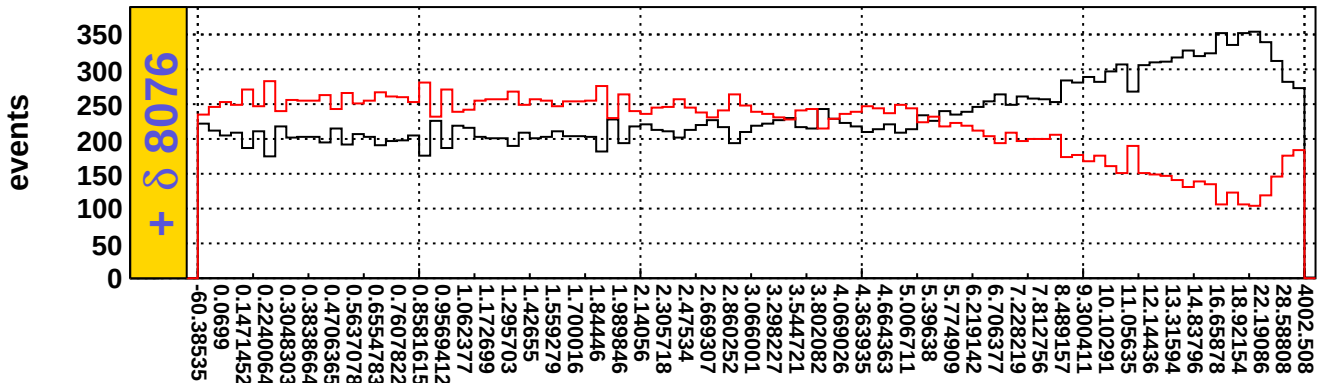
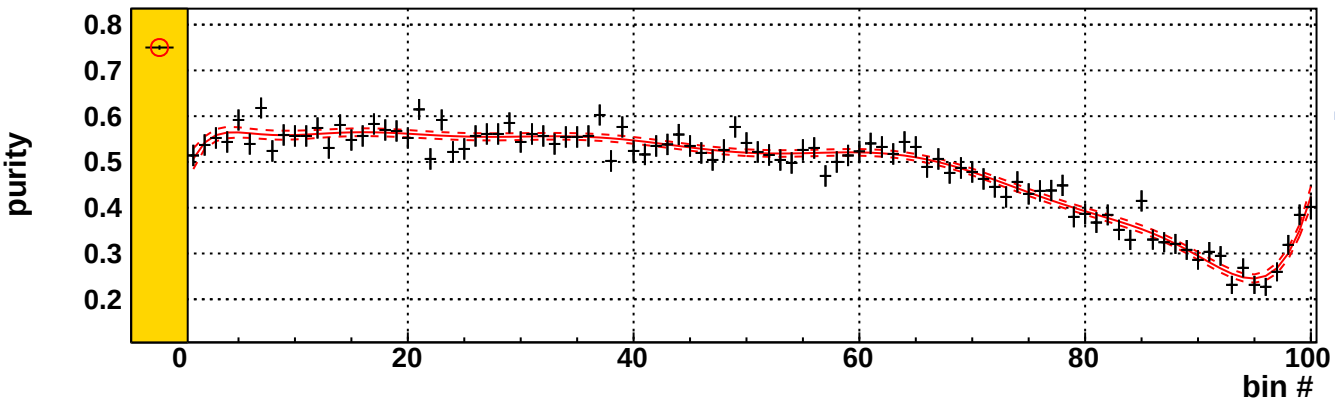
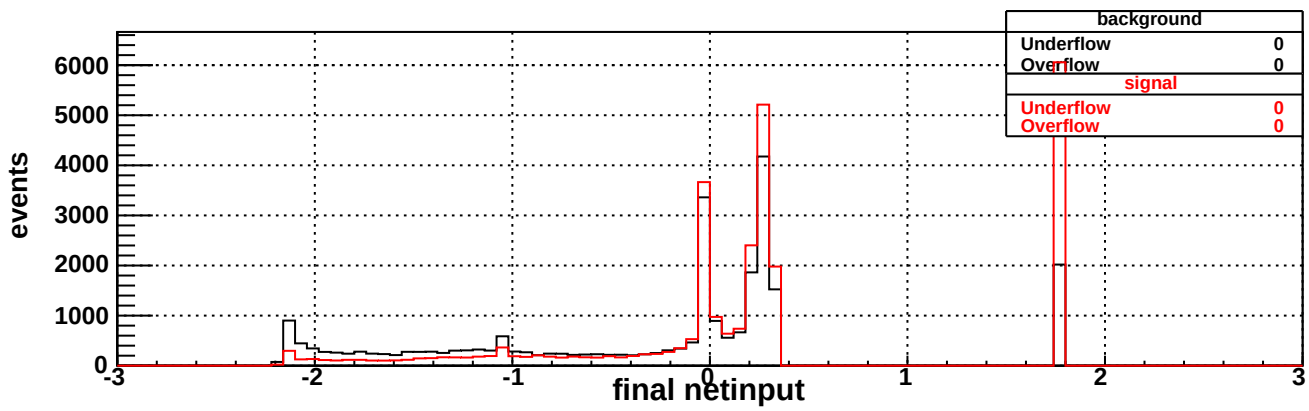


flat



spline fit



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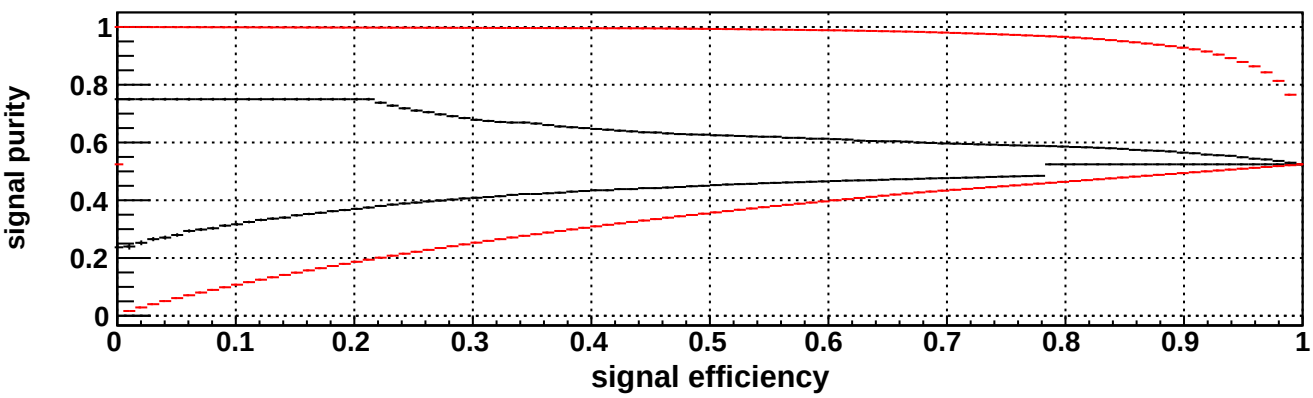

separation

Input node 6 : 14

11th most important — **PrePro: #6**

added signi. 9.51 — **only this 97.24**

signi. loss 8.15 — **corr. to others 66.40%**

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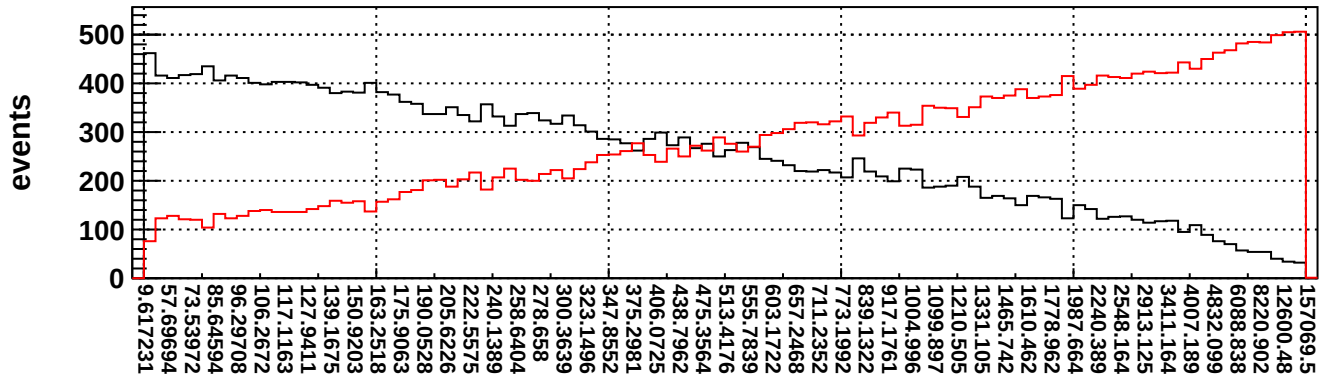

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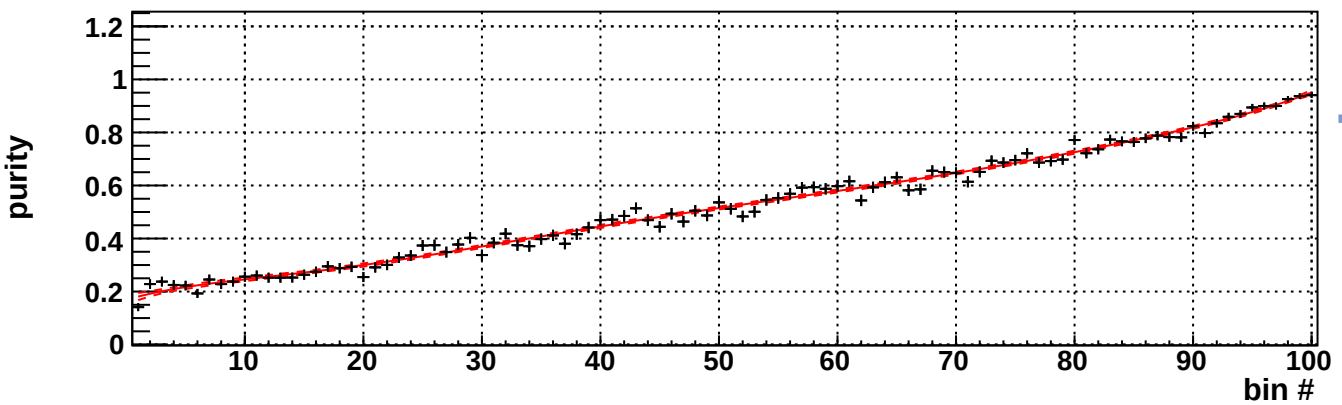
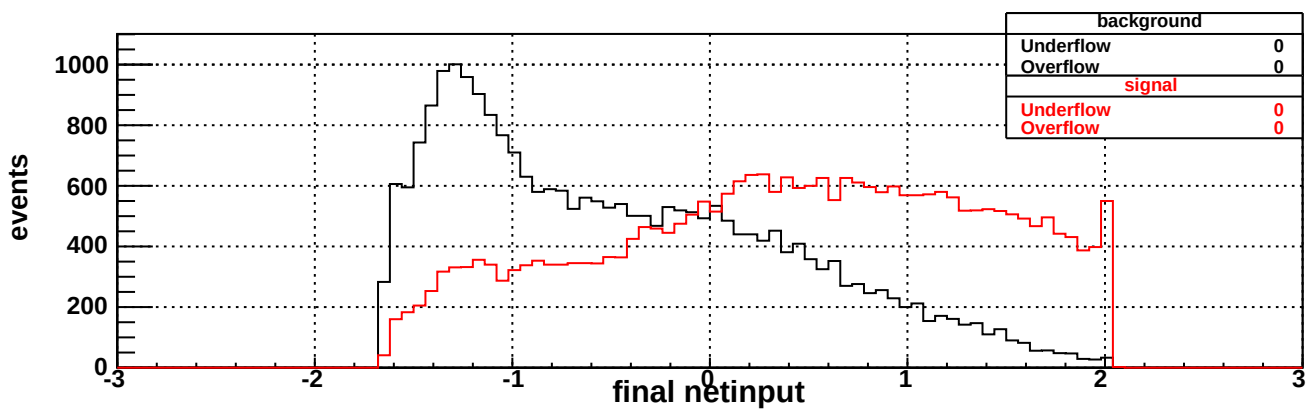


spline fit



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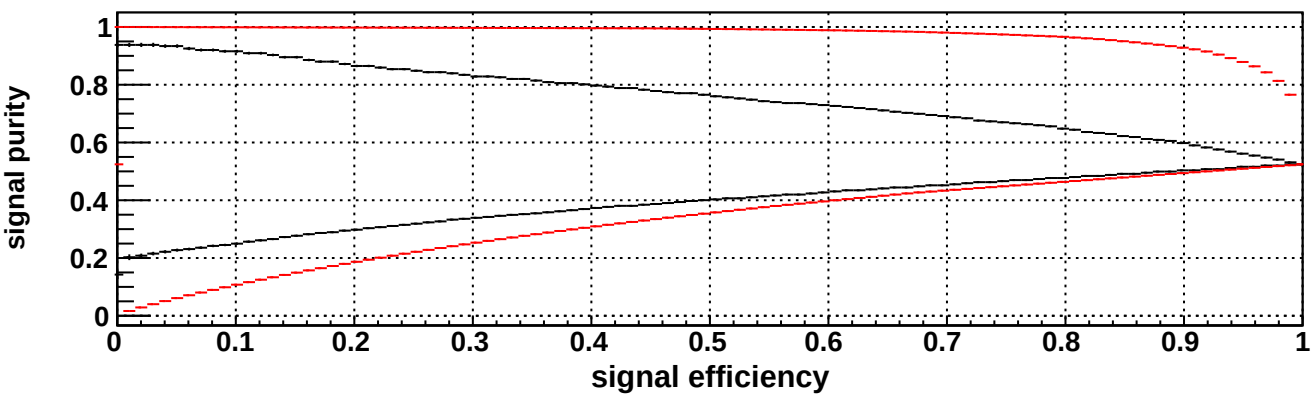

separation

Input node 10 : 34

12th most important | **PrePro: #10**

added signi. 7.31 | **only this 54.27**

signi. loss 10.32 | **corr. to others 86.00%**

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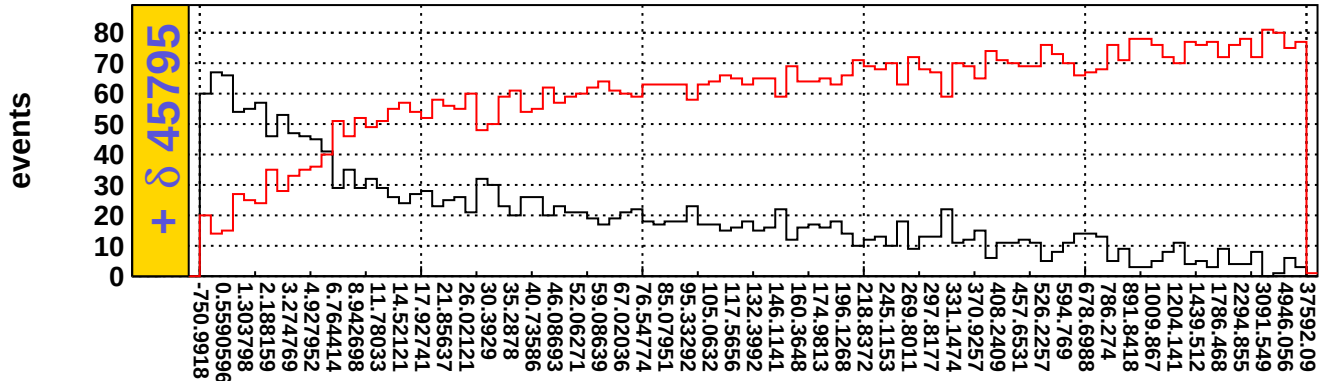

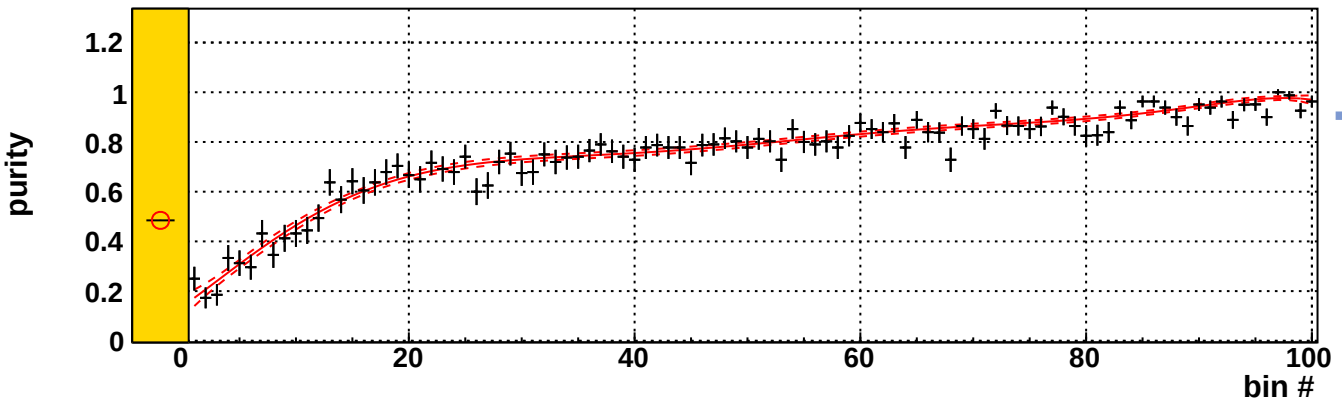

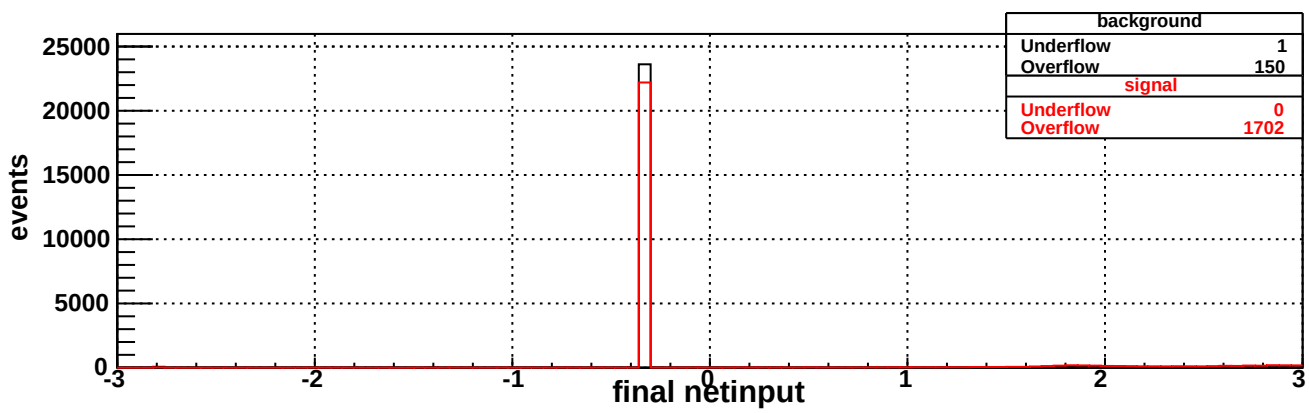

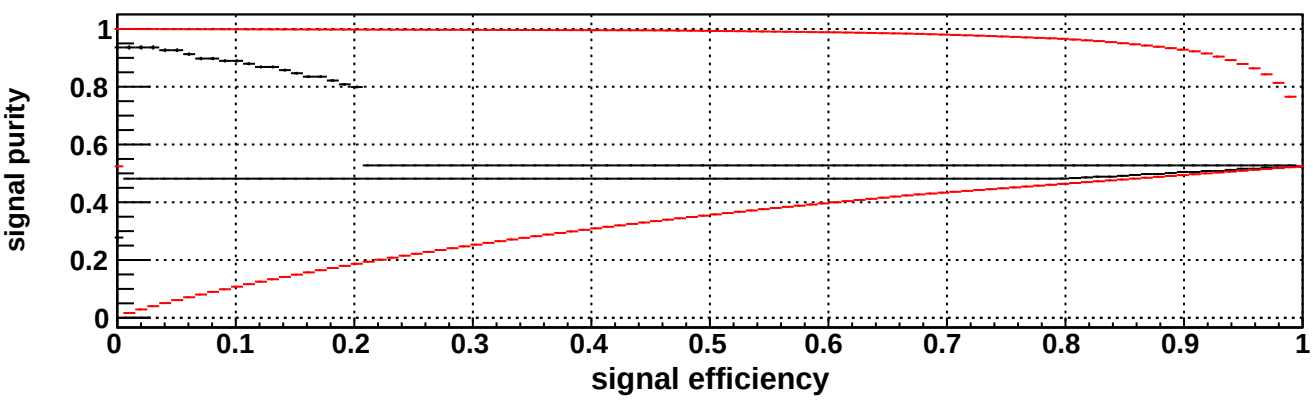

Input node 9 : 14

13th most important | **PrePro: #9**

added signi. 6.99 | **only this 69.33**

signi. loss 6.87 | **corr. to others 60.00%**

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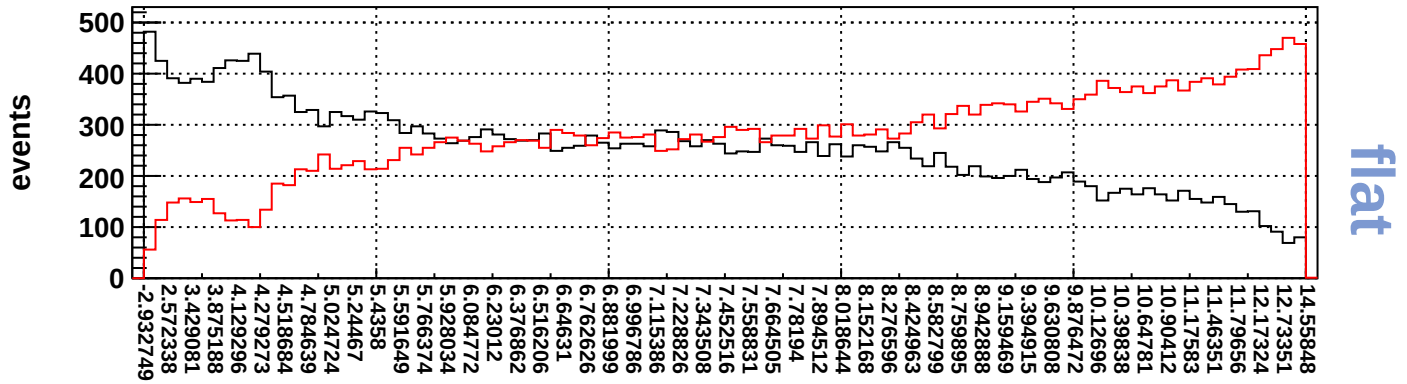

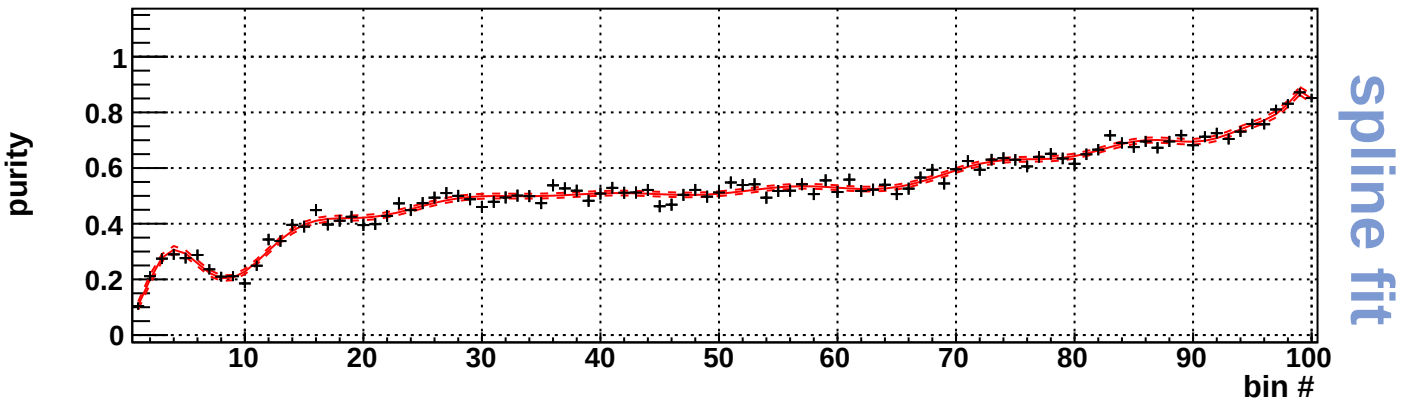

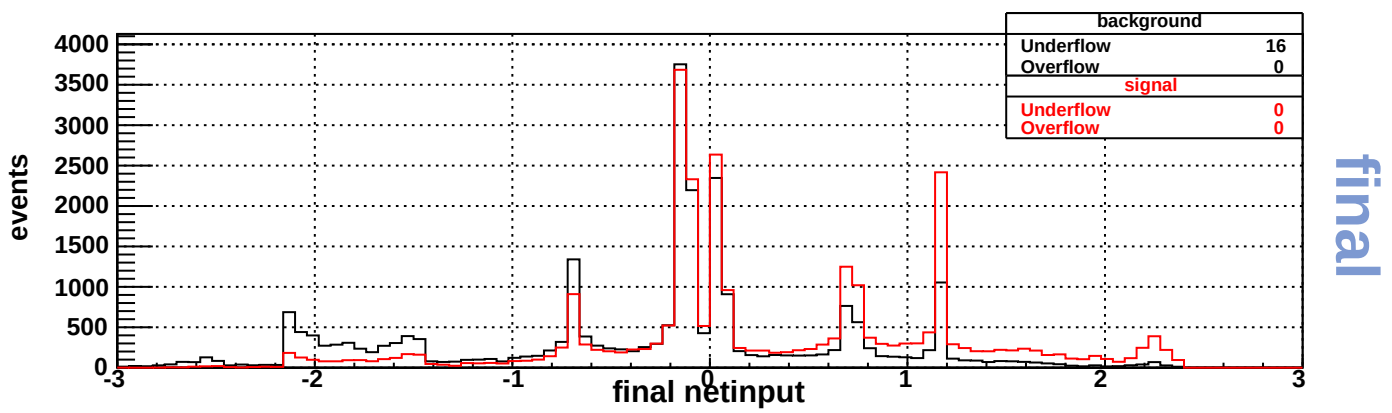

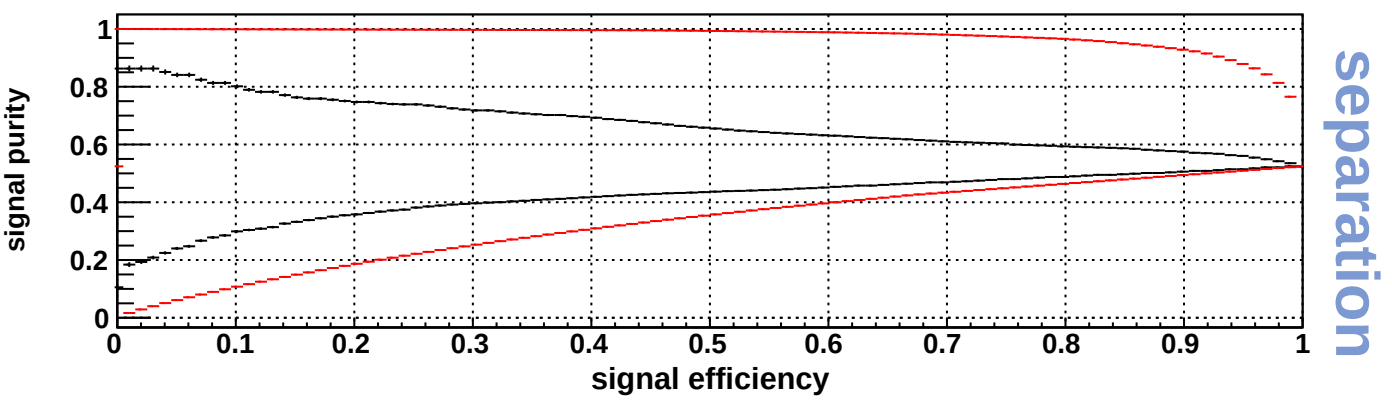

Input node 18 : 34

14th most important	PrePro: #18
added signi. 6.13	only this 47.03
signi. loss 7.12	corr. to others 96.20%

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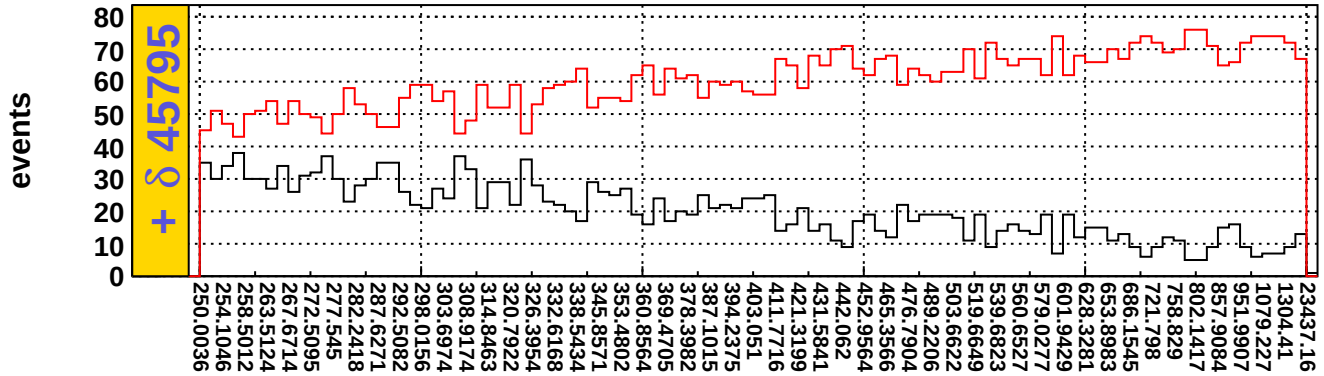

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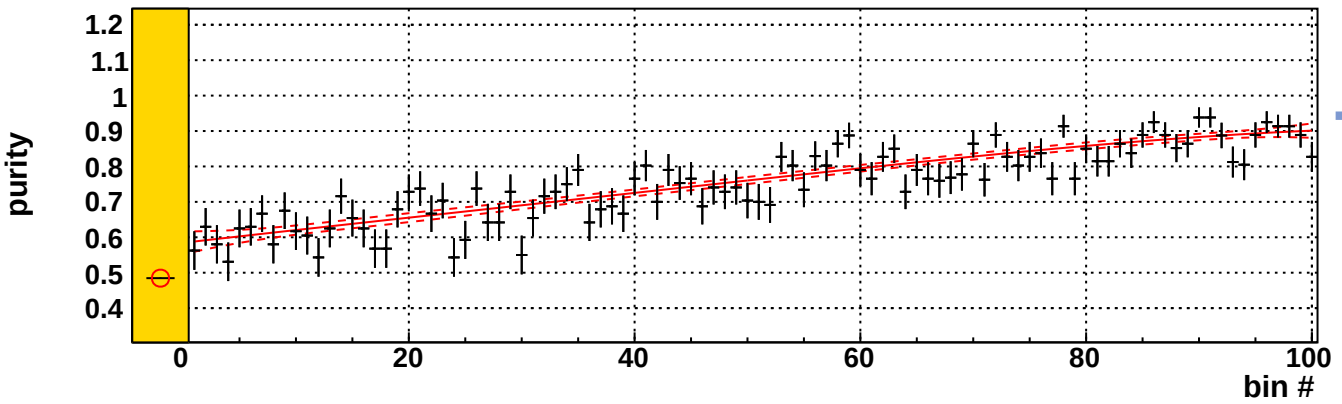
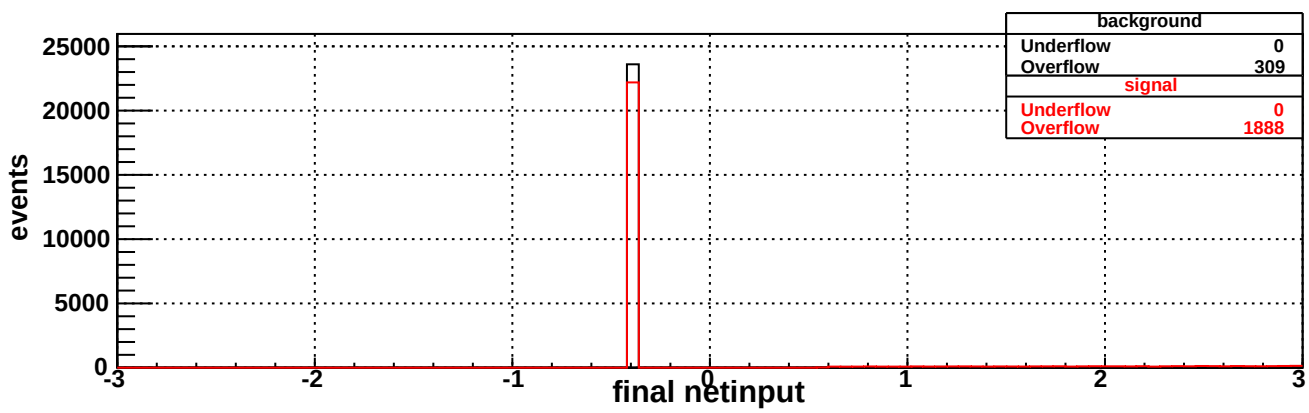


spline fit



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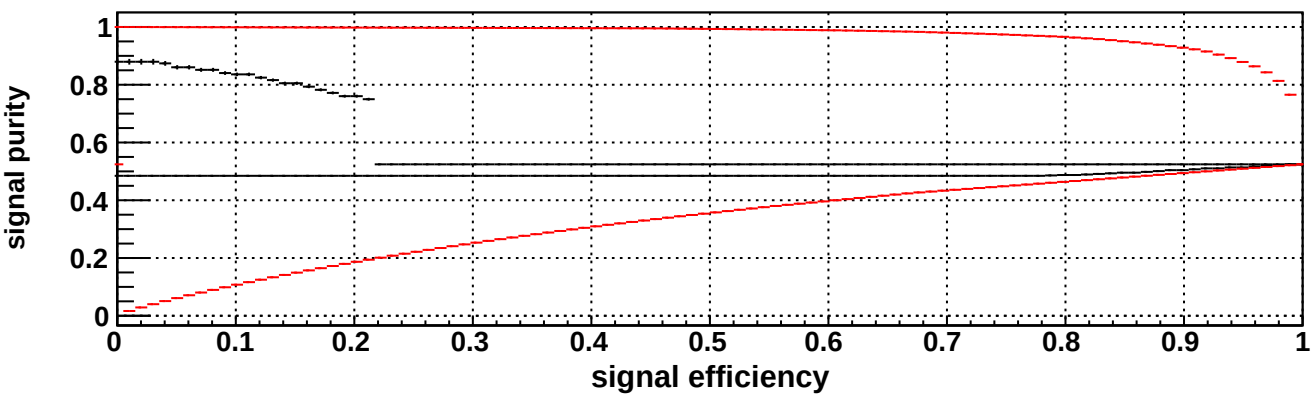

separation

Input node 12 : 34

15th most important	PrePro: #12
added signi. 5.58	only this 49.64
signi. loss 5.86	corr. to others 95.00%

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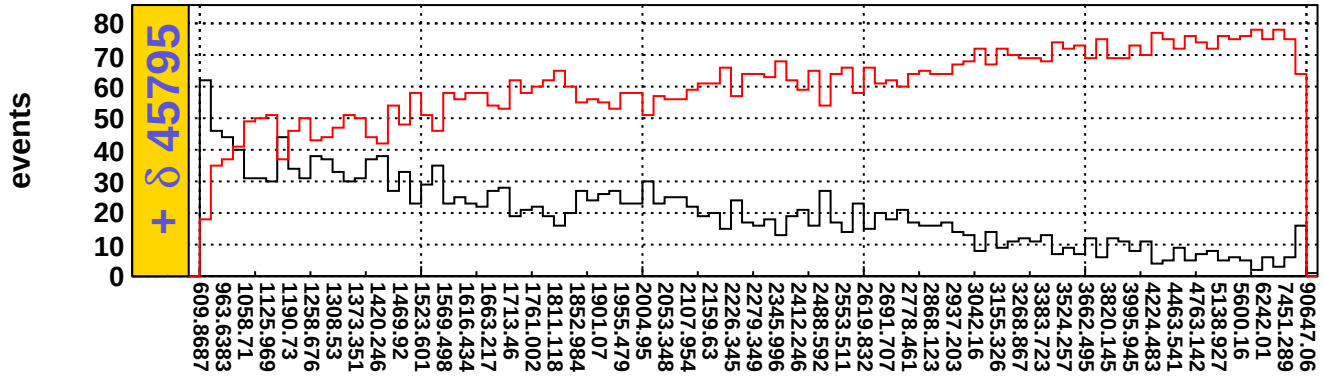

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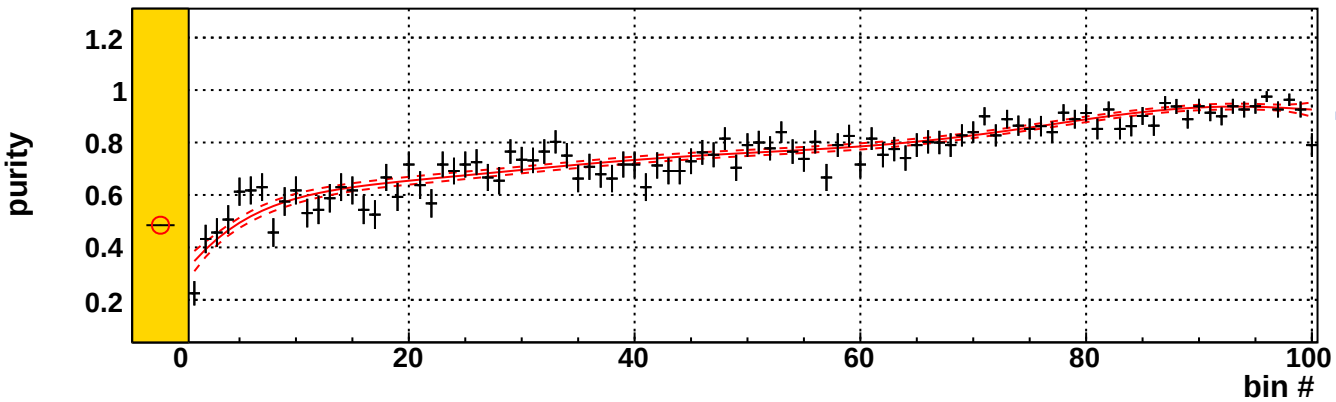
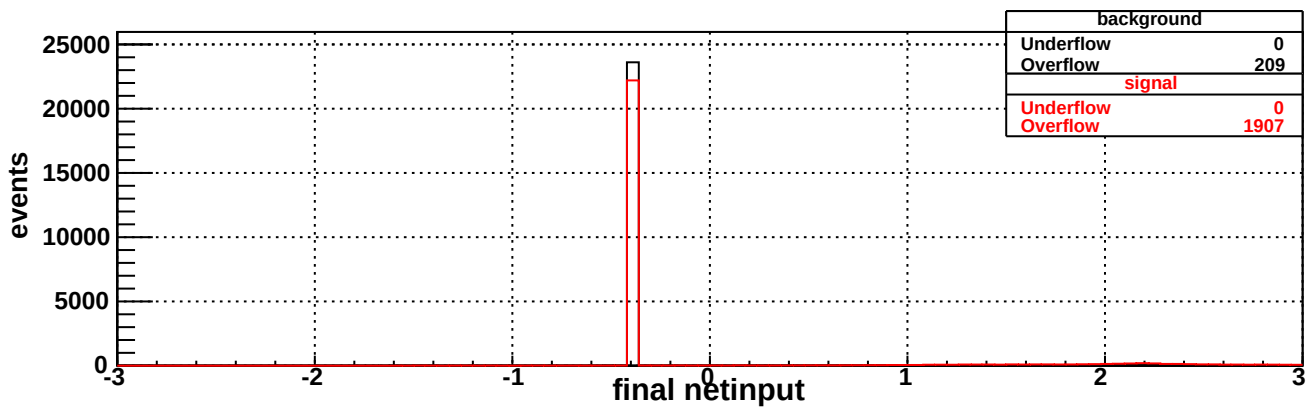


spline fit



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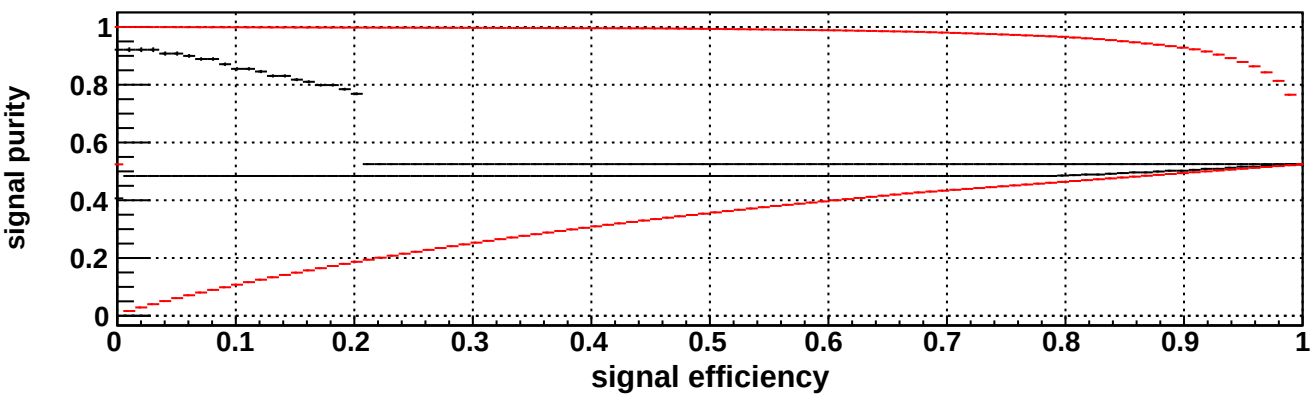

separation

Input node 17 : 34

16th most important — **PrePro: #17**

added signi. 4.48 — **only this 53.01**

signi. loss 4.18 — **corr. to others 89.00%**

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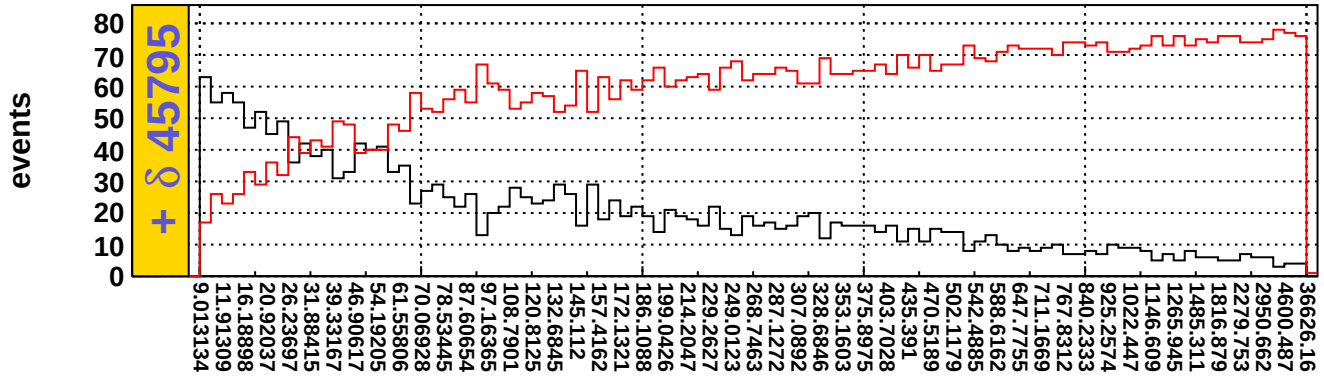

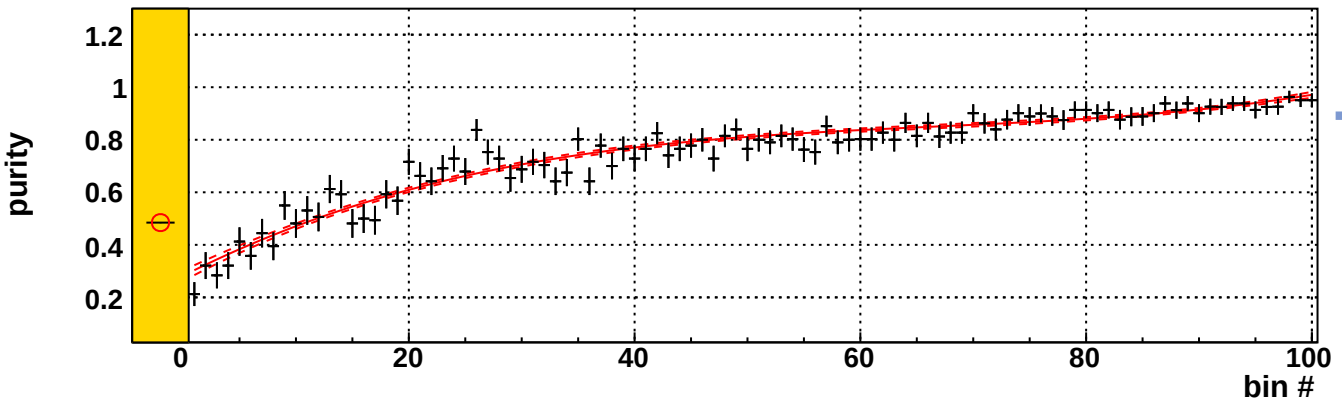

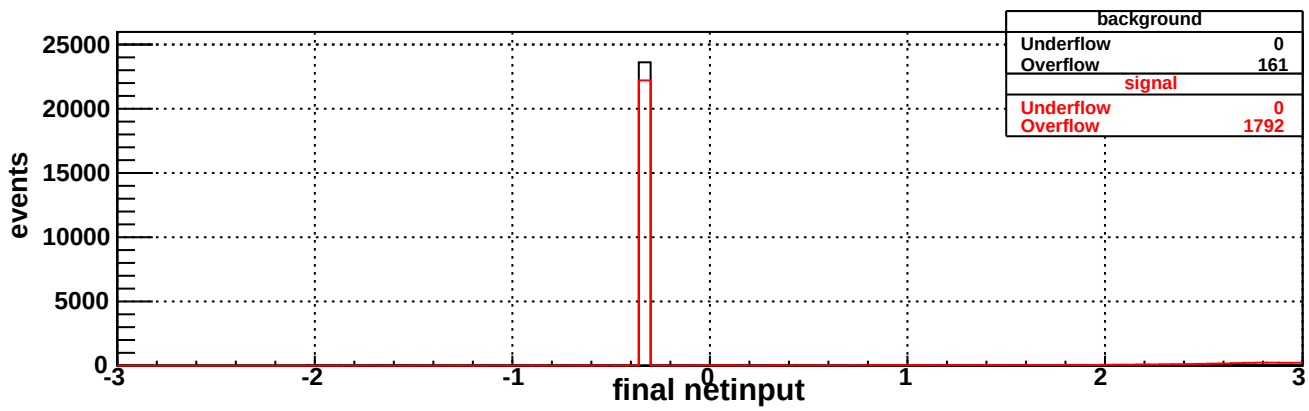

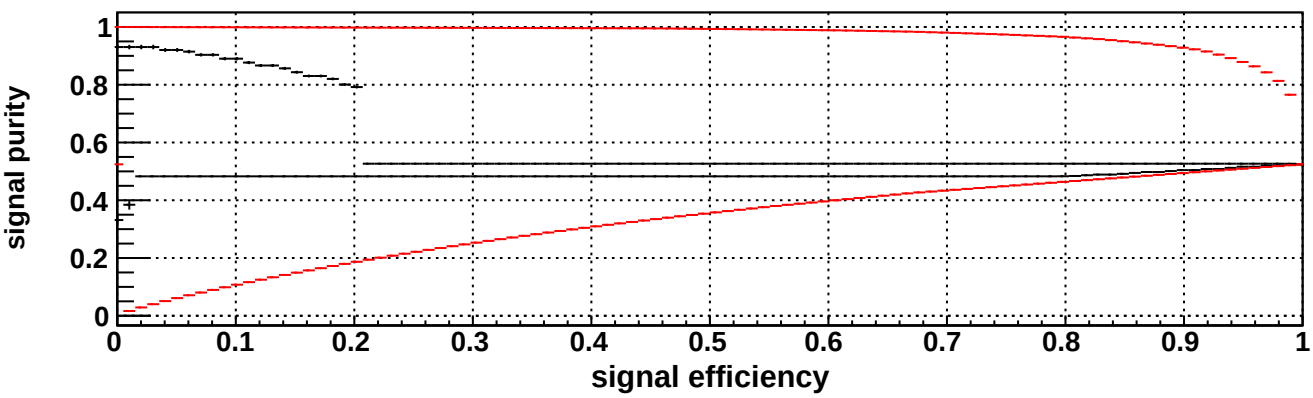

Input node 20 : 34

17th most important | **PrePro: #20**

added signi. 3.43 | **only this 55.09**

signi. loss 3.31 | **corr. to others 84.60%**

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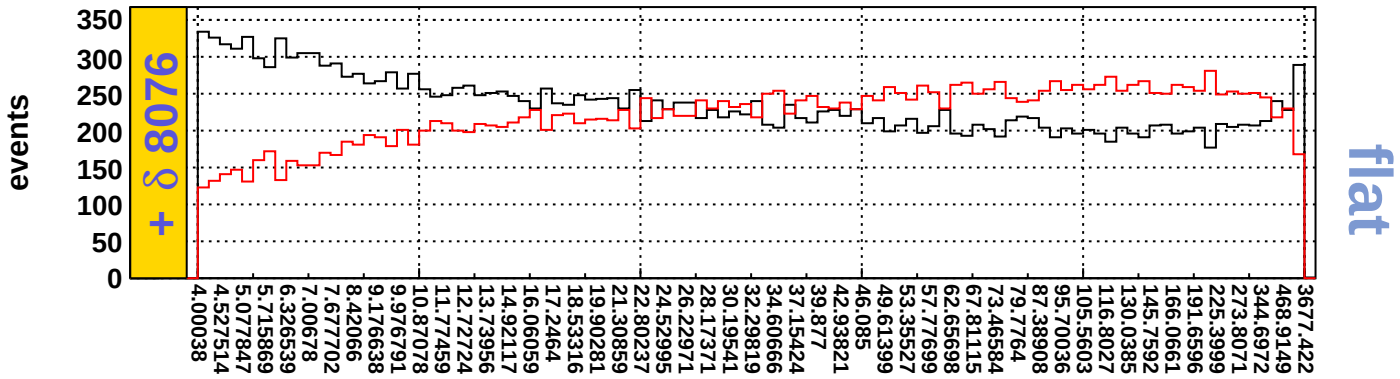

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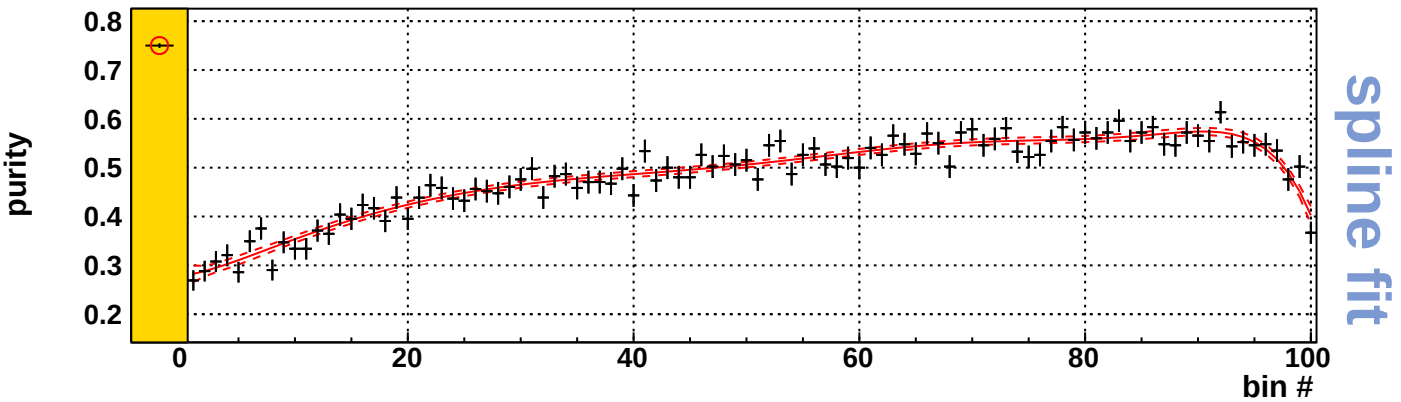
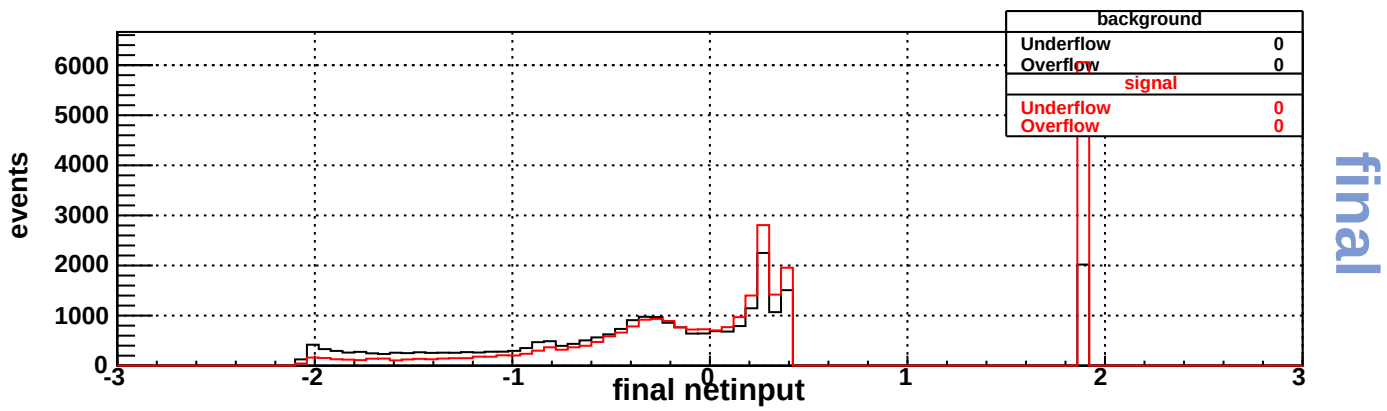
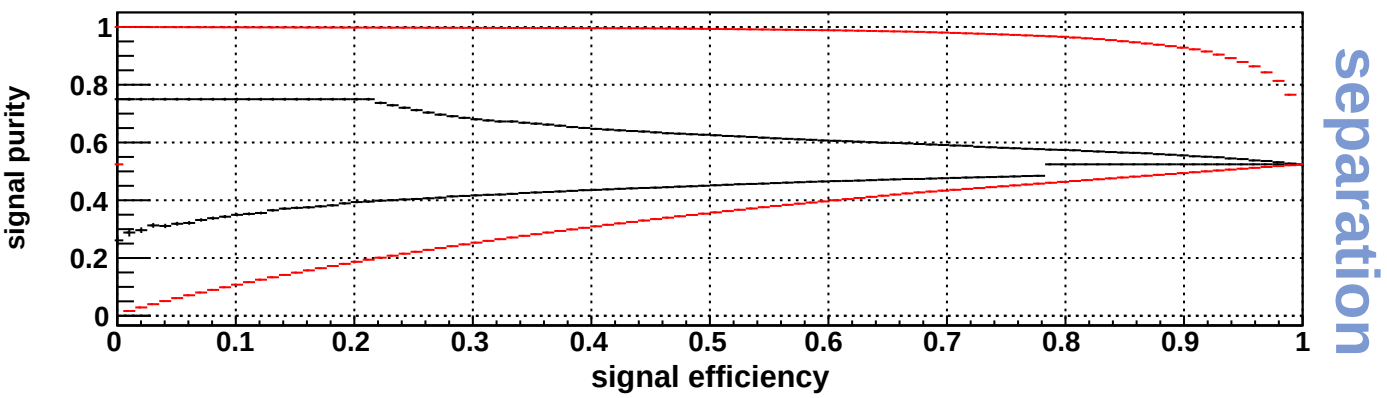


spline fit



final



separation

Input node 11 : 34

18th most important | **PrePro: #11**

added signi. 0.87 | **only this 52.52**

signi. loss 0.86 | **corr. to others 85.70%**

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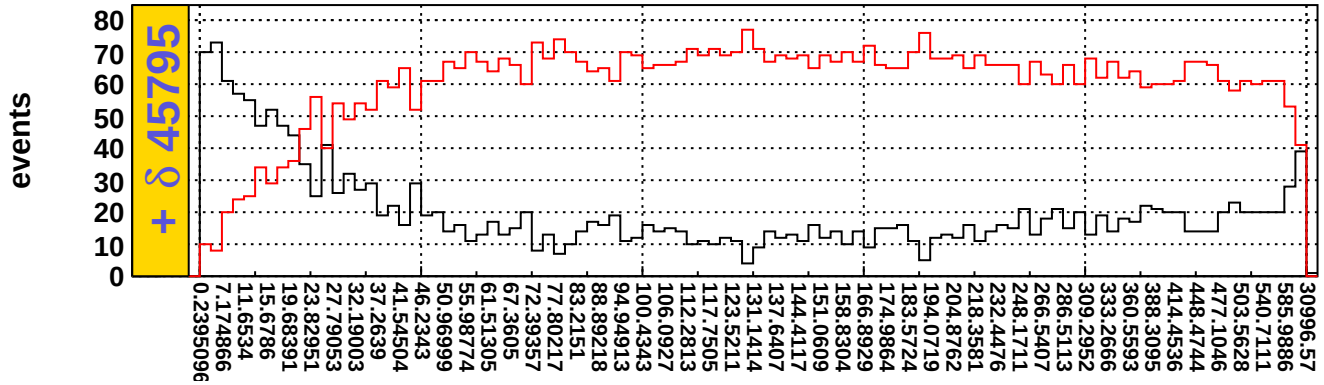

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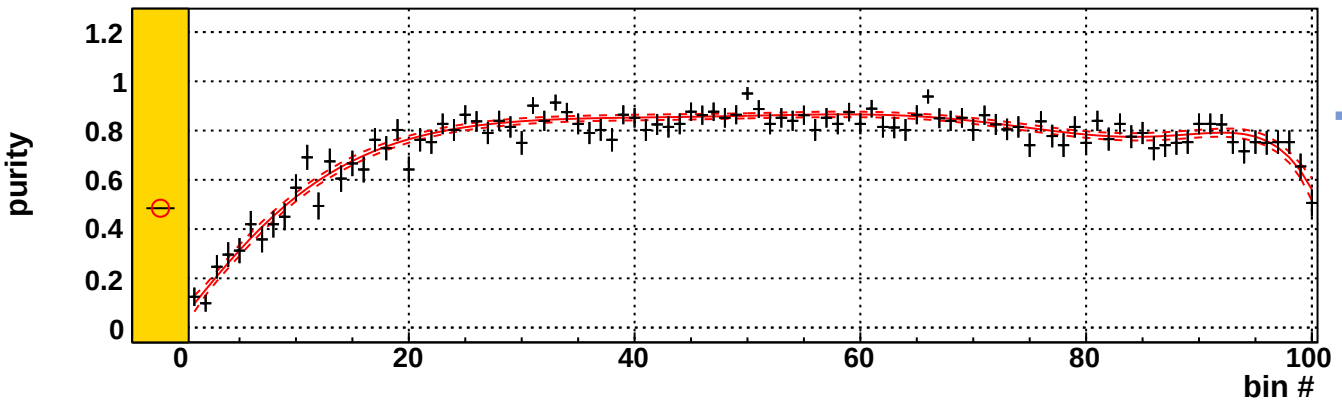
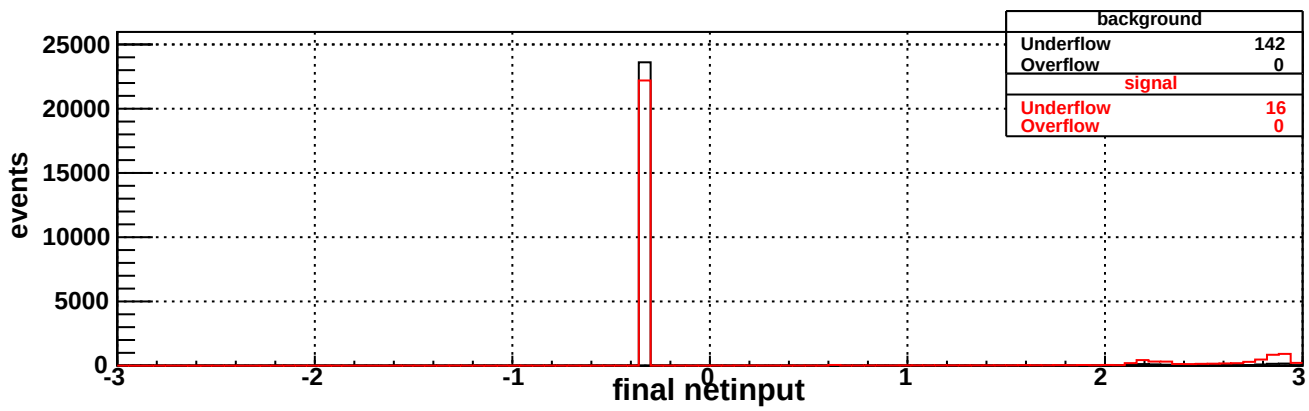


spline fit



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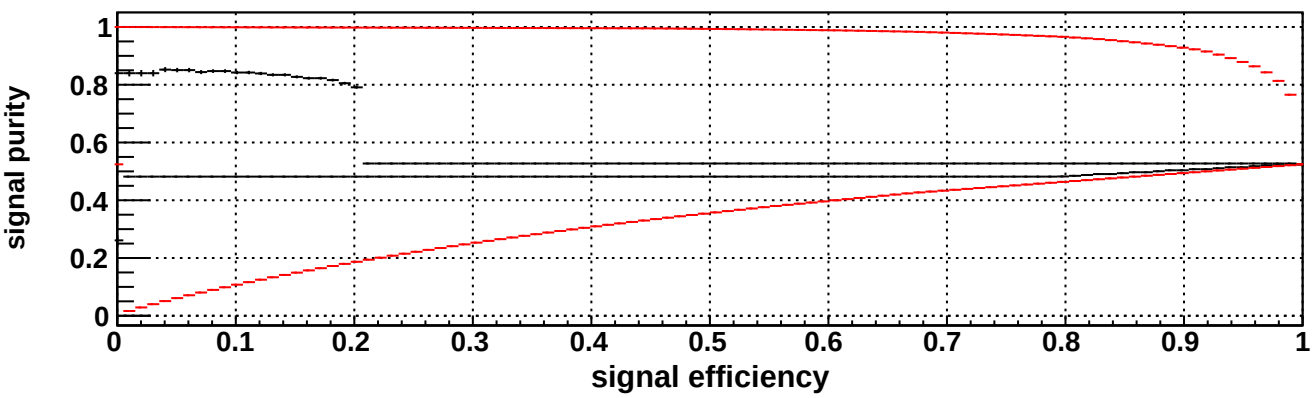

separation

Input node 21 : 34

19th most important | **PrePro: #21**

added signi. 0.74 | **only this 129.58**

signi. loss 0.75 | **corr. to others 90.00%**

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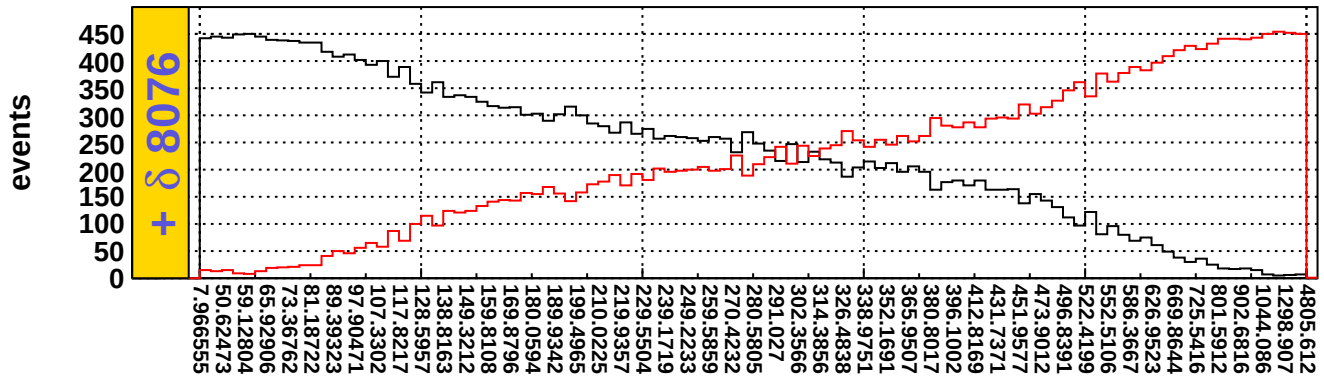

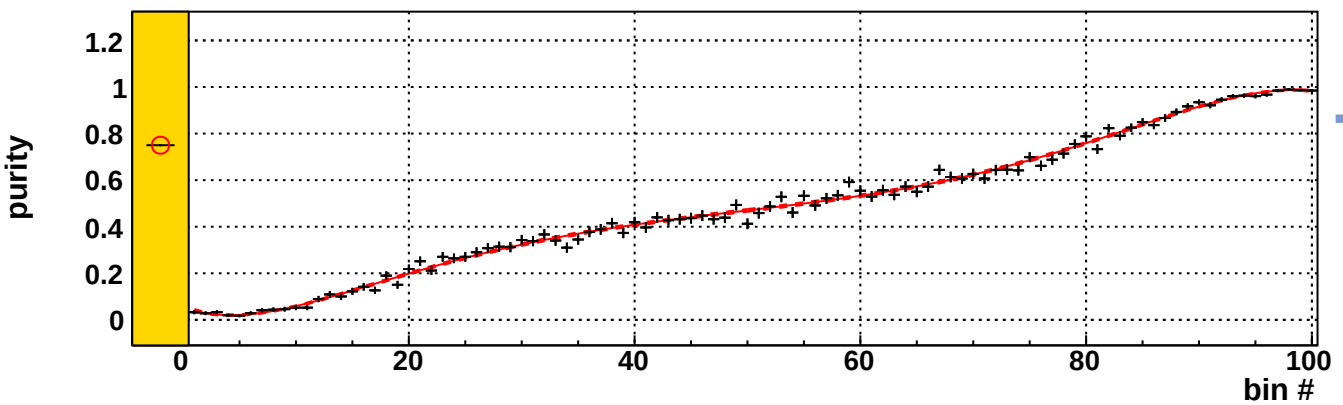

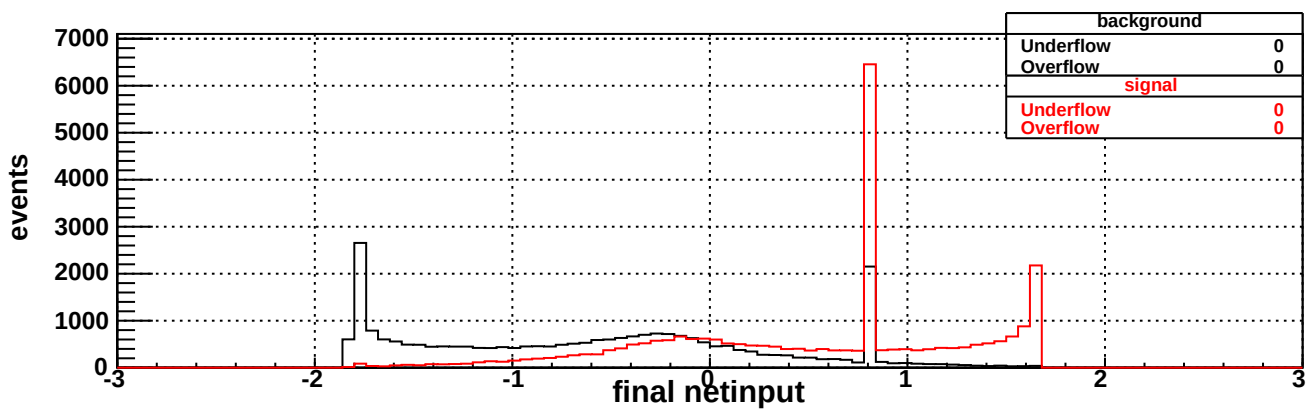

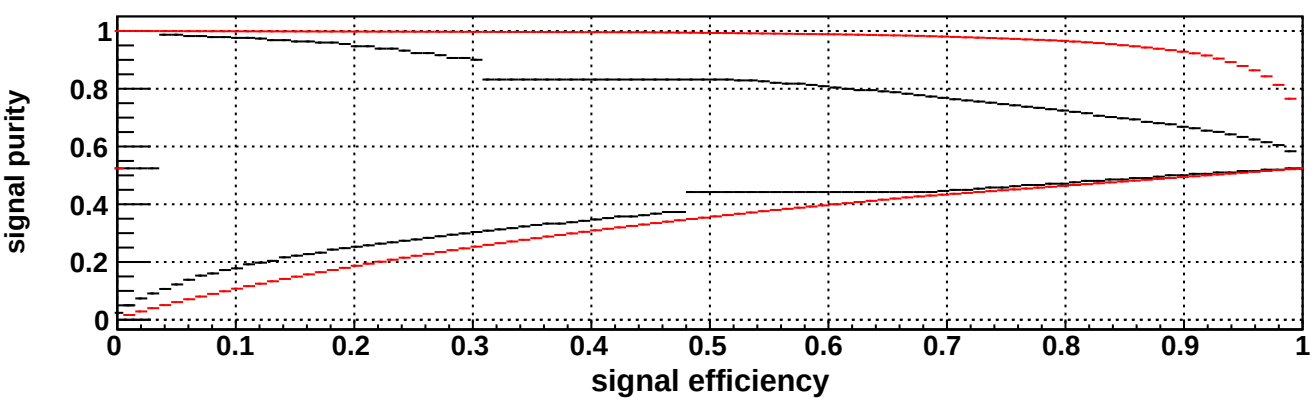

Input node 19 : 34

20th most important — **PrePro: #19**

added signi. 0.24 — **only this 70.43**

signi. loss 0.24 — **corr. to others 81.00%**

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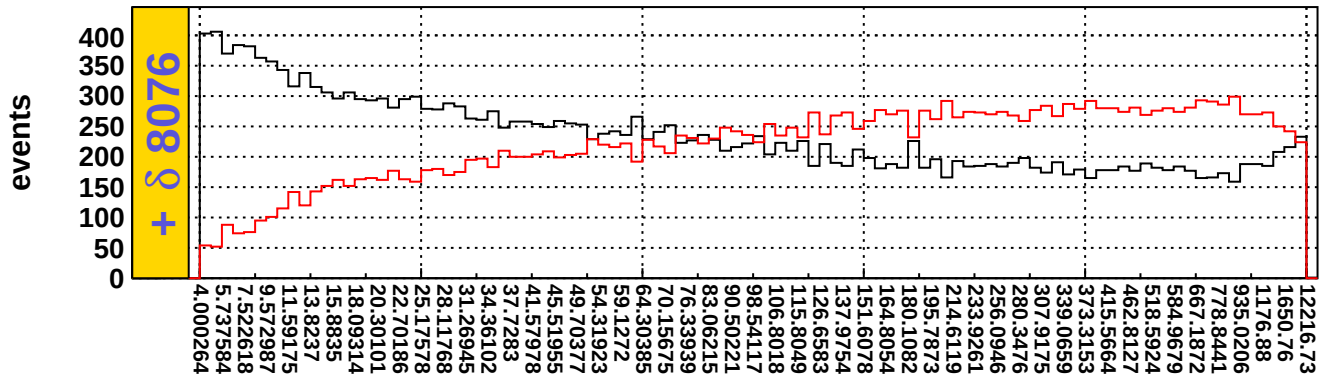

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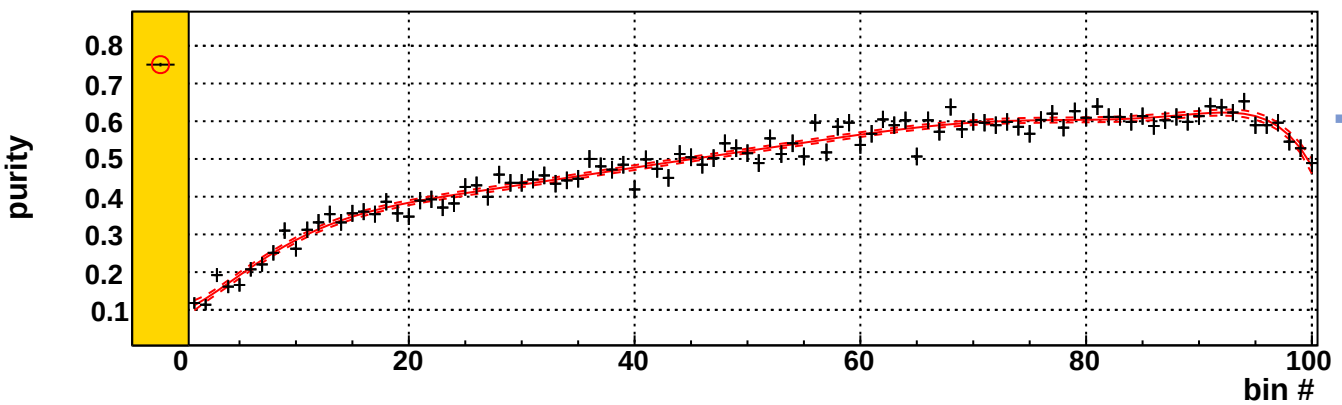
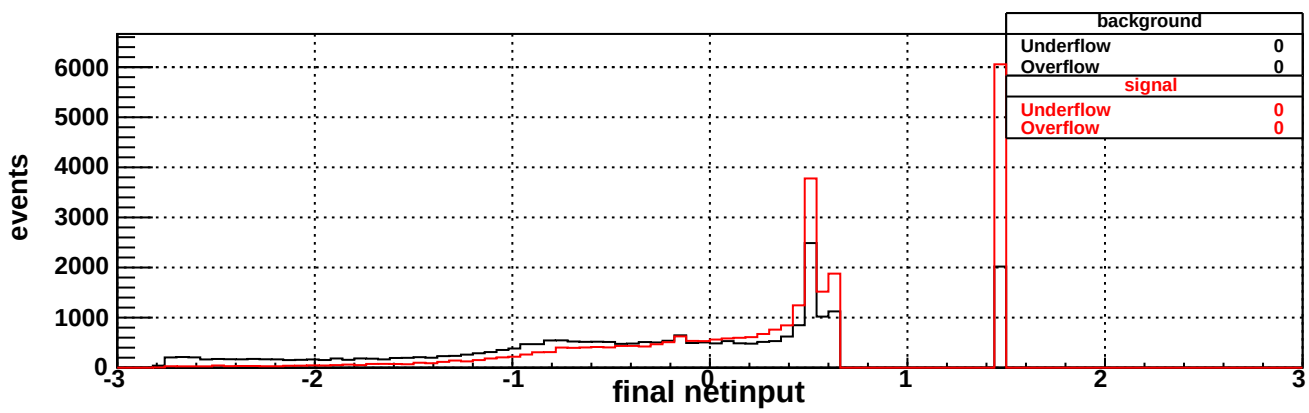


spline fit



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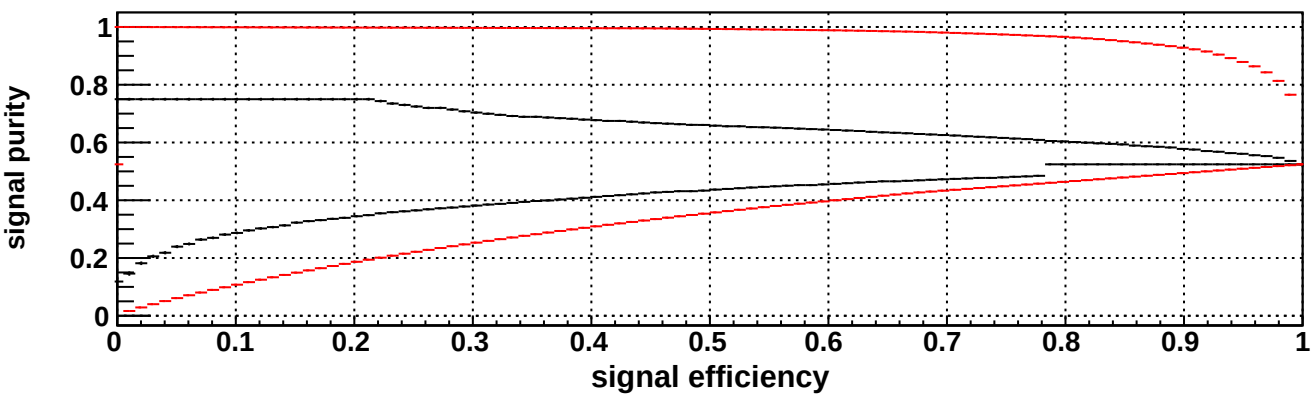
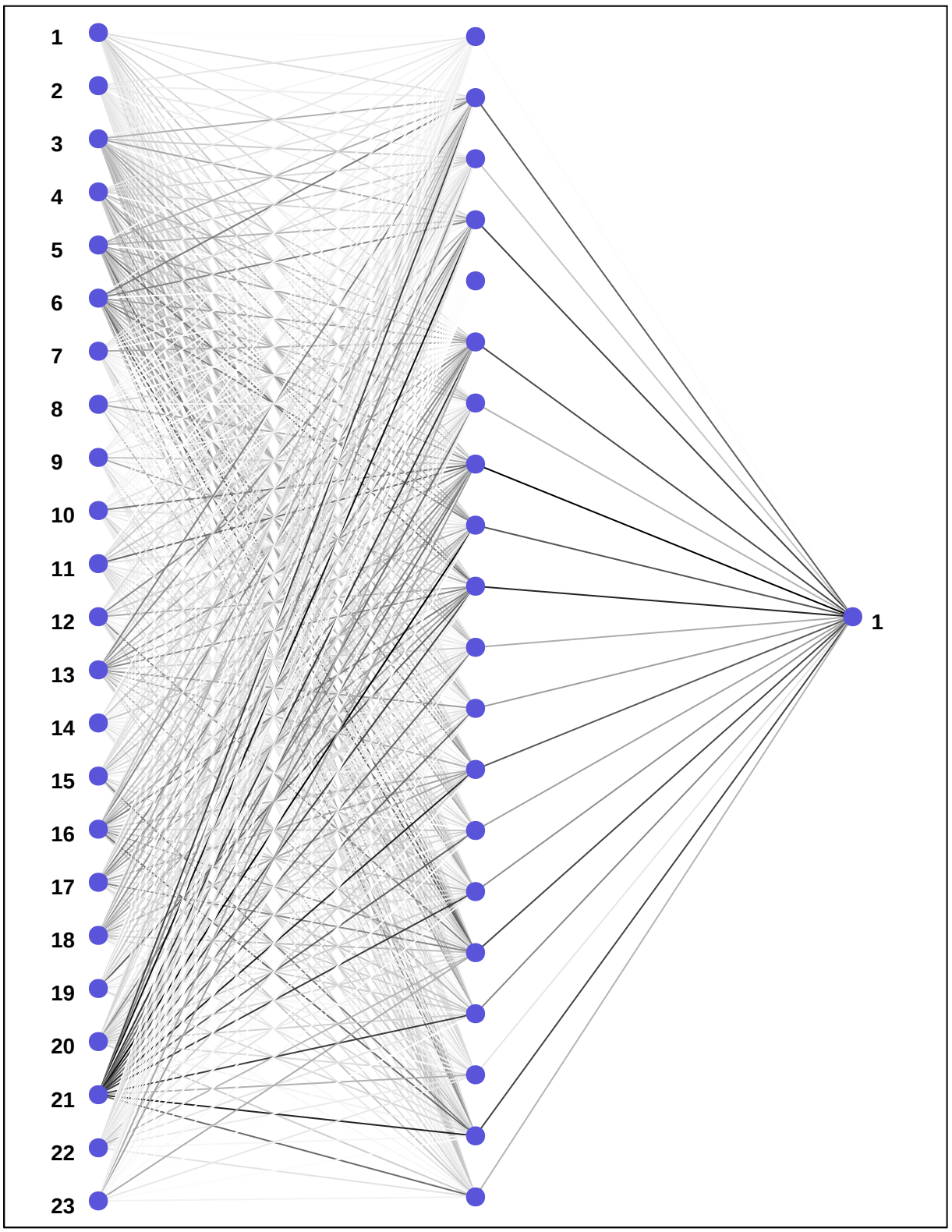


separation

Network at iteration 100