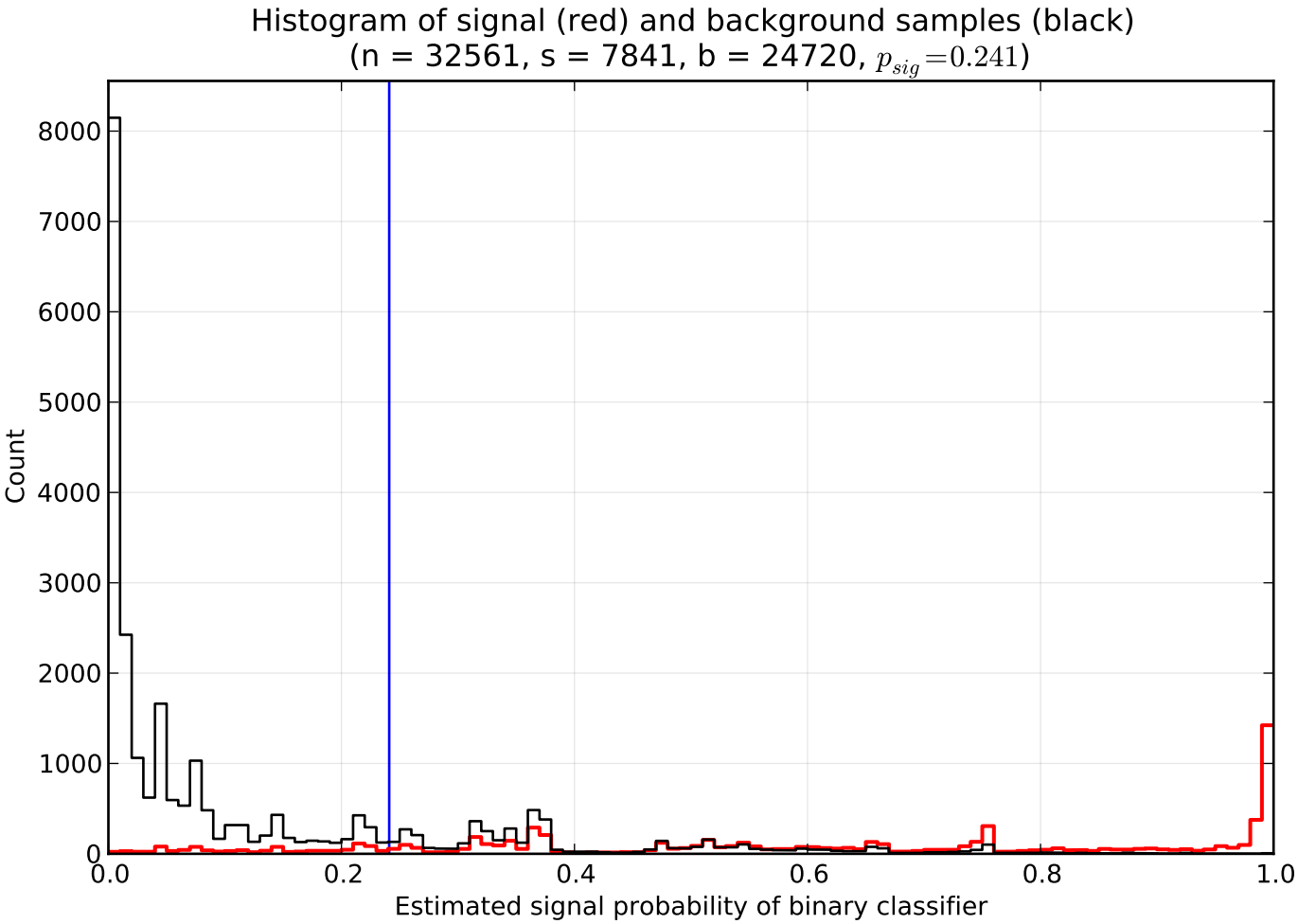
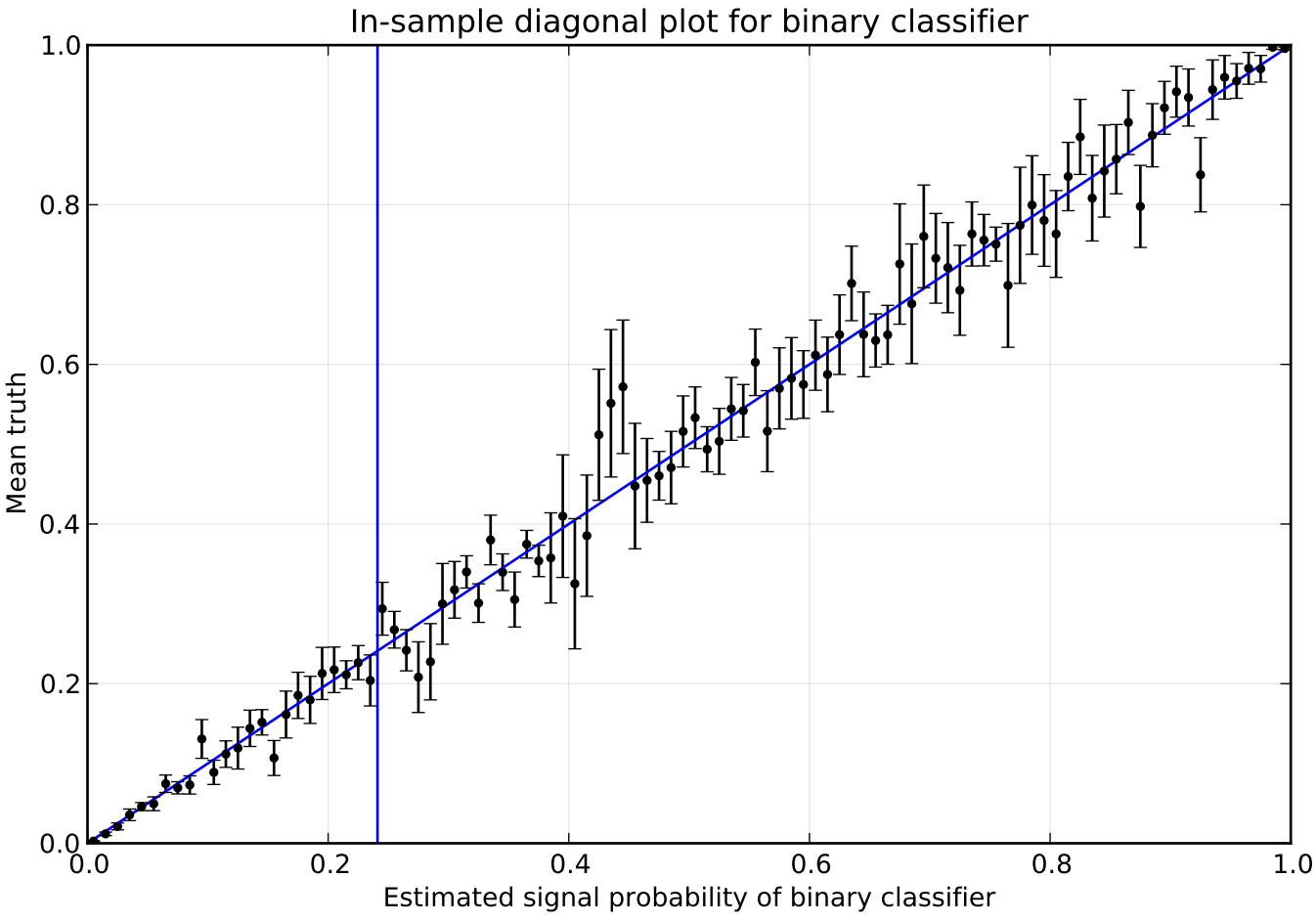
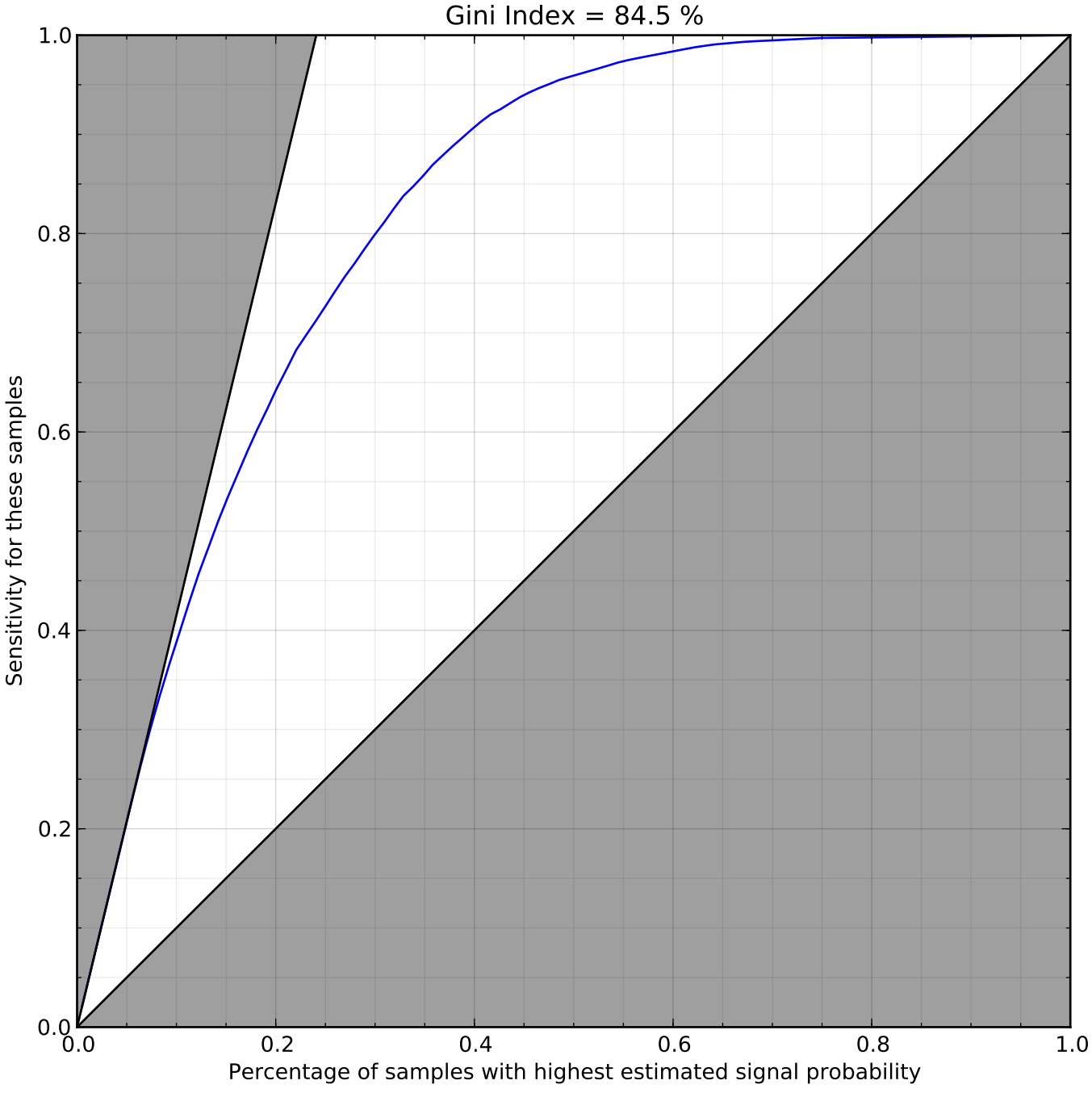
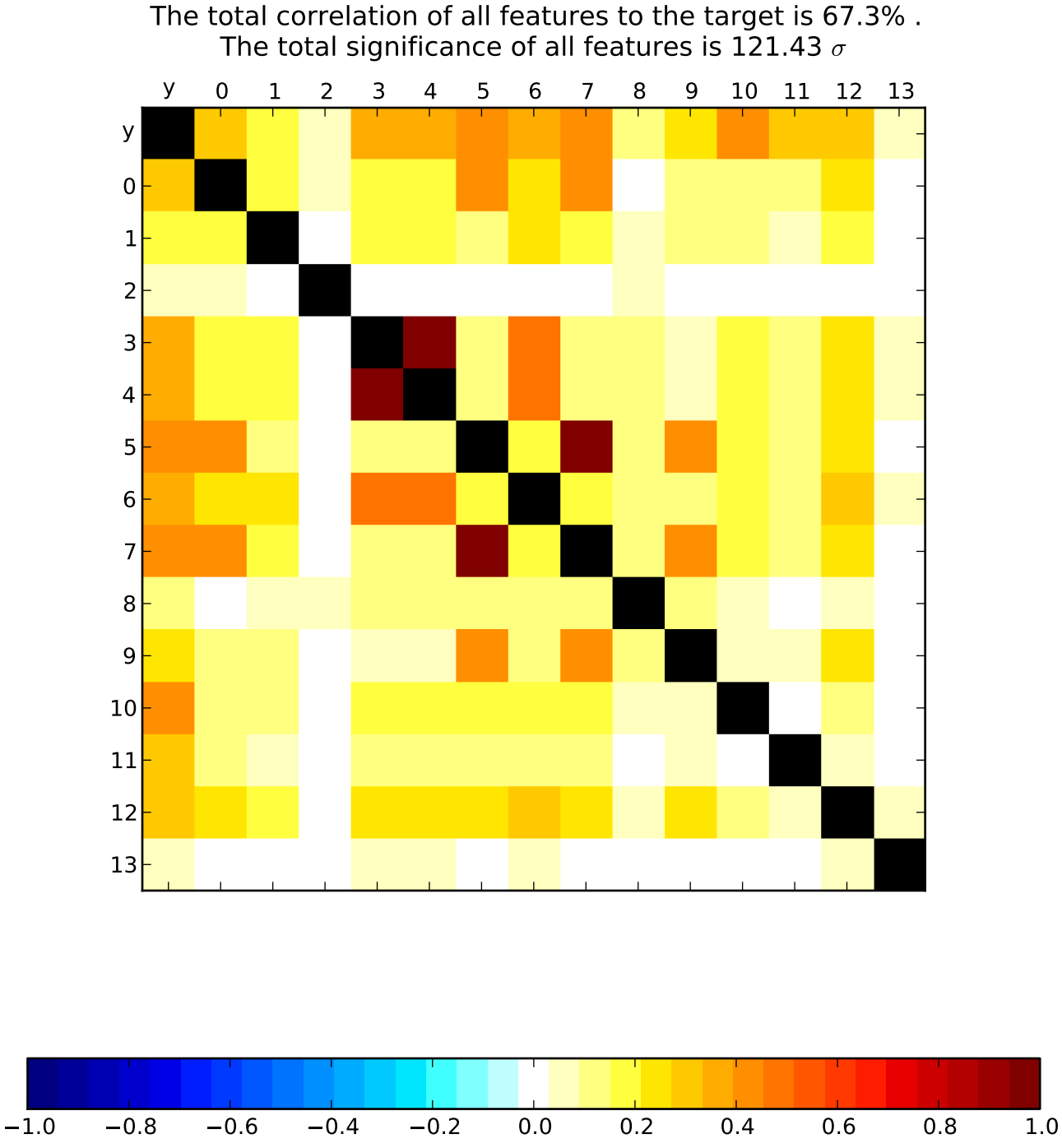

Histogram of signal (red) and background samples (black)
(n = 32561, s = 7841, b = 24720, p_{sig}=0.241)
Count
0
1000
2000
3000
4000
5000
6000
7000
8000
0.0
0.2
0.4
0.6
0.8
1.0
Estimated signal probability of binary classifier


In-sample diagonal plot for binary classifier
Mean truth
0.0
0.2
0.4
0.6
0.8
1.0
0.0
0.2
0.4
0.6
0.8
1.0
Estimated signal probability of binary classifier


Gini Index = 84.5 %
1.0
0.8
0.6
0.4
0.2
0.0
Sensitivity for these samples
0.0
0.2
0.4
0.6
0.8
1.0
Percentage of samples with highest estimated signal probability


The total correlation of all features to the target is 67.3% .
The total significance of all features is 121.43 σ
y 0 1 2 3 4 5 6 7 8 9 10 11 12 13
y 0 1 2 3 4 5 6 7 8 9 10 11 12 13
−1.0 −0.8 −0.6 −0.4 −0.2 0.0 0.2 0.4 0.6 0.8 1.0

Feature 5: marital_status

1st most important feature

Neurobayes feature id: 7

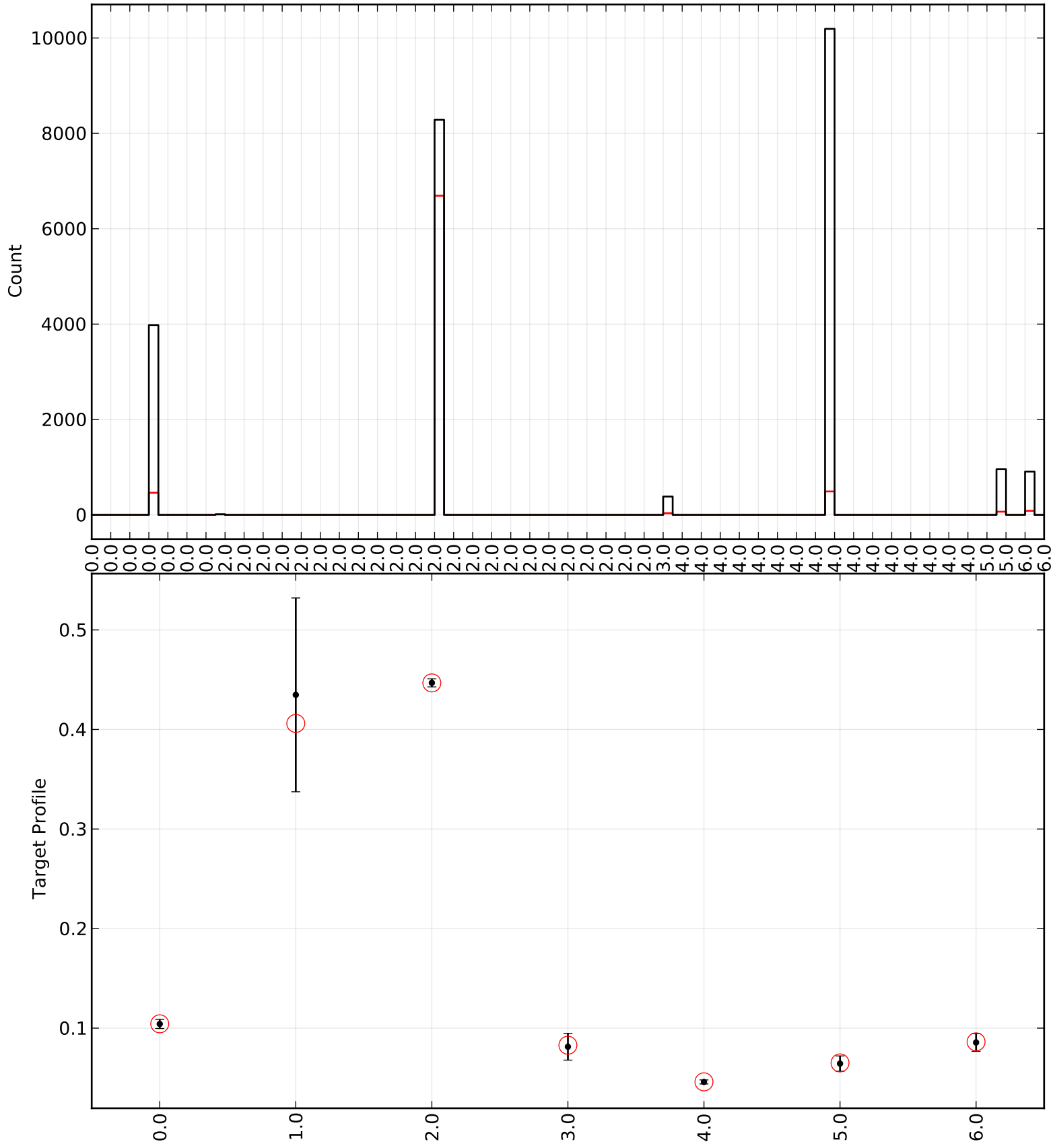
Added significance: 80.73 σ

Significance of this feature only: 80.73 σ

Significance loss when removed: 7.58 σ

Total correlation to others: 97.14 %

Feature properties: IS_UNORDERED



Feature 10: capital_gain

2nd most important feature

Neurobayes feature id: 12

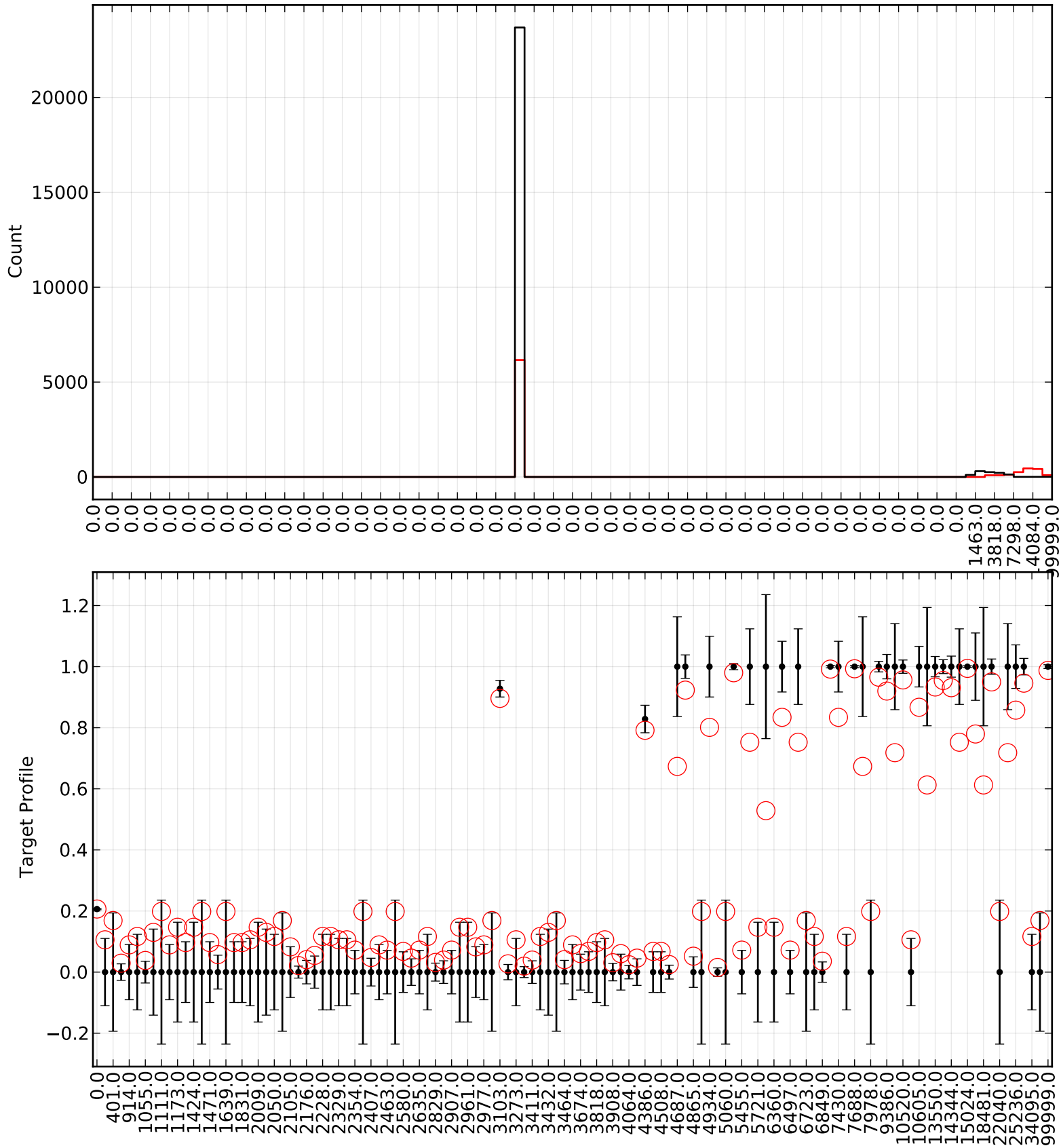
Added significance: 62.98 σ

Significance of this feature only: 75.3 σ

Significance loss when removed: 53.43 σ

Total correlation to others: 26.46 %

Feature properties: IS_UNORDERED



Feature 3: education

3rd most important feature

Neurobayes feature id: 5

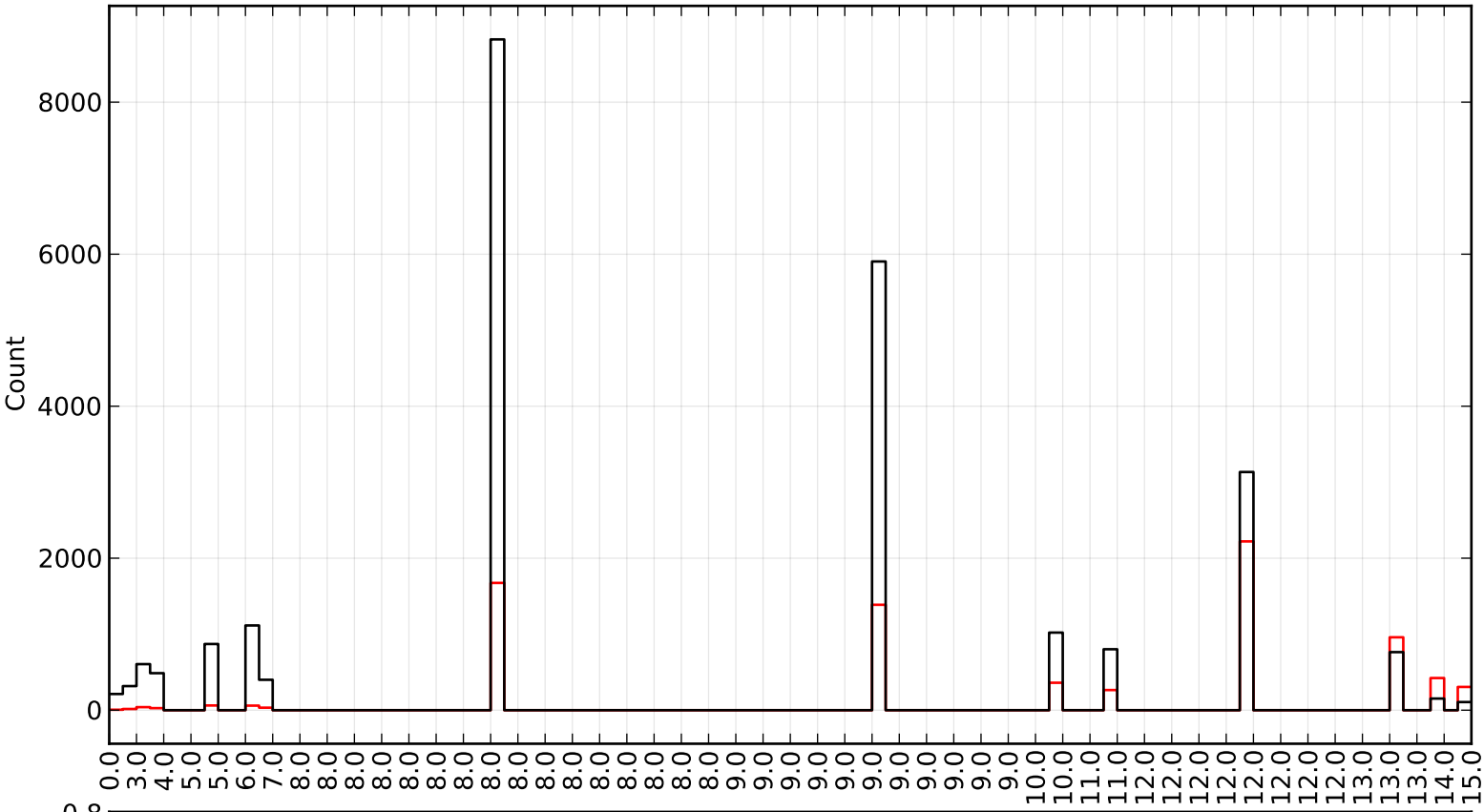
Added significance: 46.9 σ

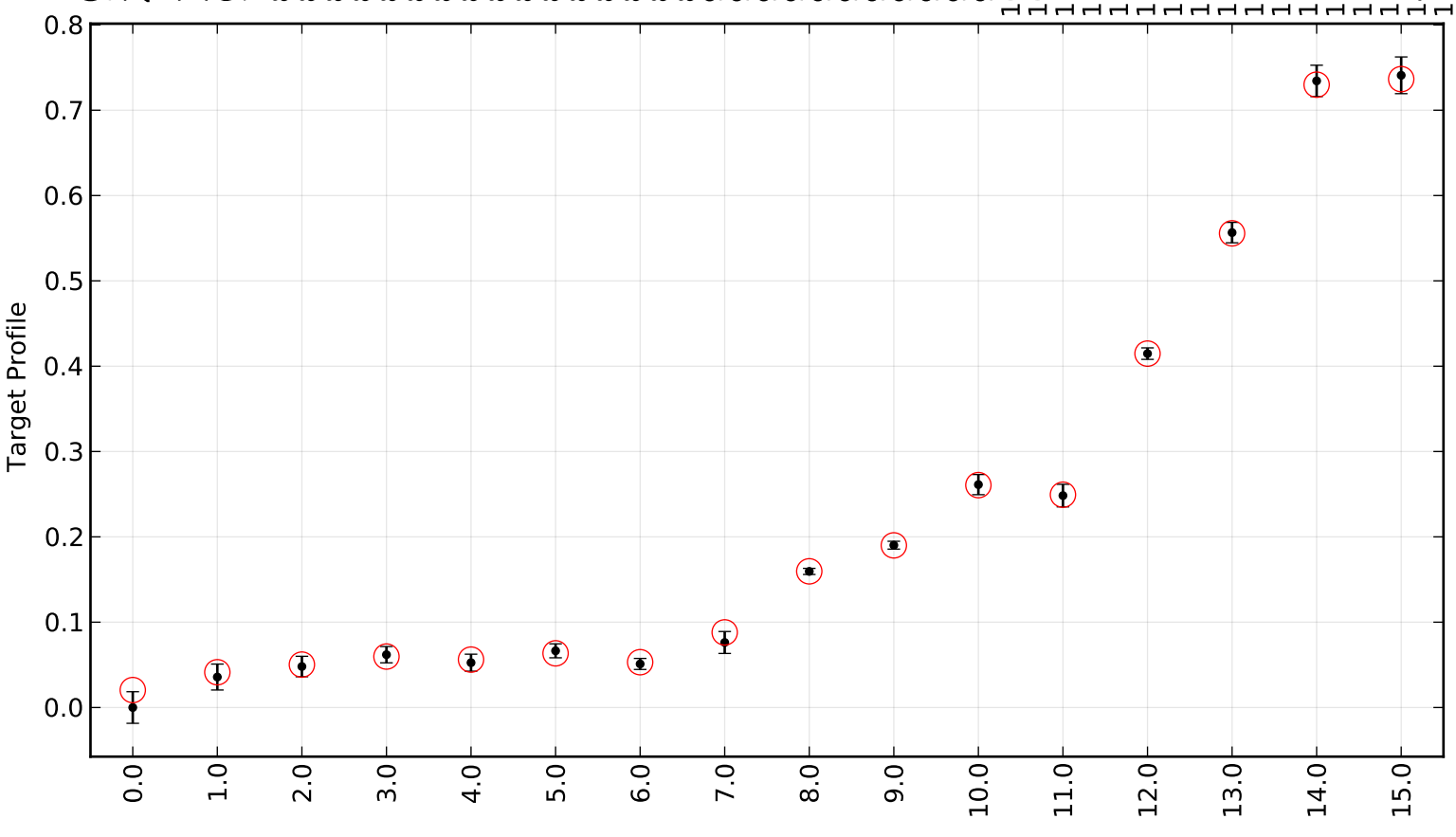
Significance of this feature only: 66.55 σ

Significance loss when removed: 24.96 σ

Total correlation to others: 54.07 %

Feature properties: IS_ORDERED





Feature 11: capital_loss

4th most important feature

Neurobayes feature id: 13

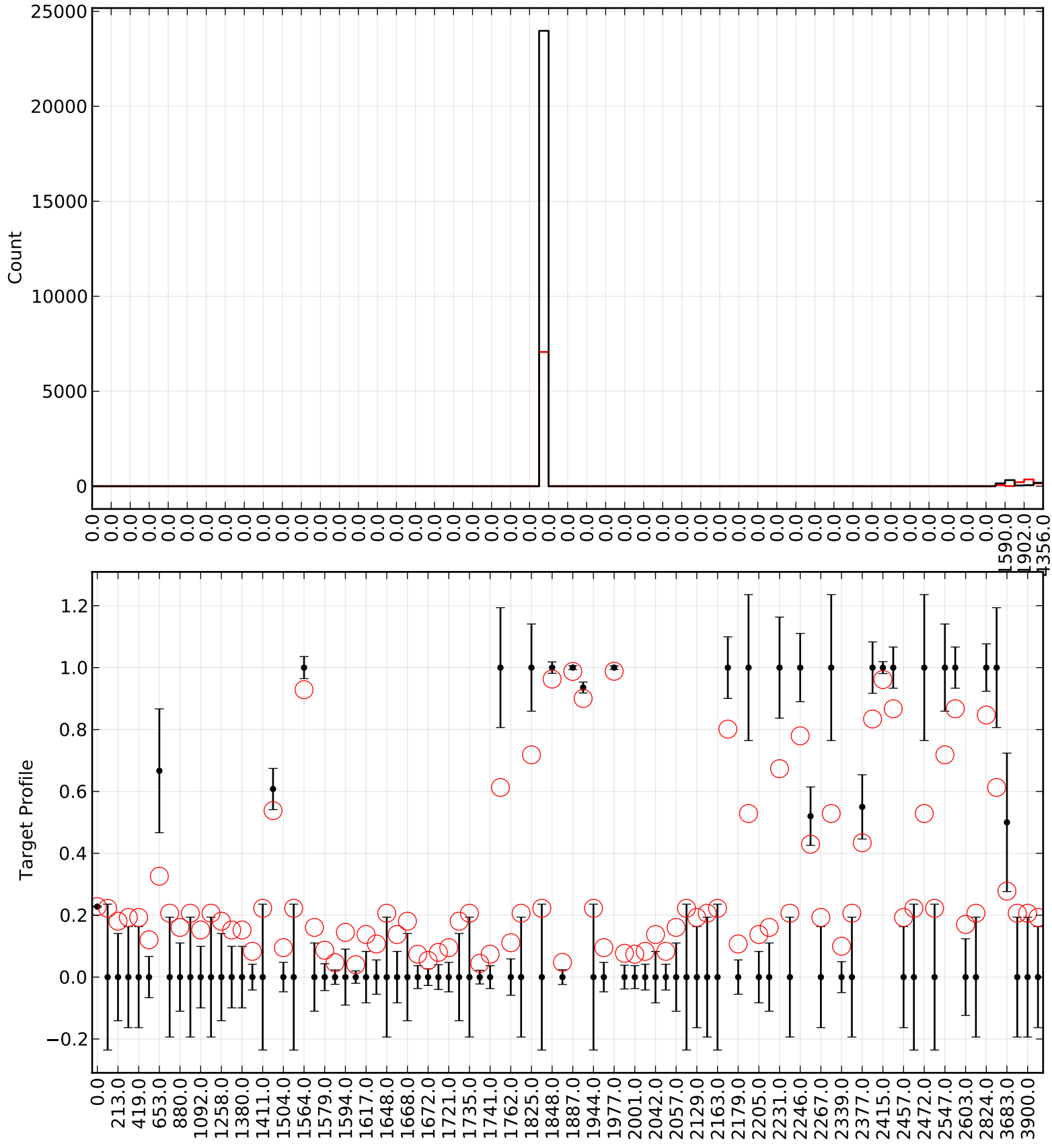
Added significance: 35.62 σ

Significance of this feature only: 49.42 σ

Significance loss when removed: 33.94 σ

Total correlation to others: 20.78 %

Feature properties: IS_UNORDERED



Feature 6: occupation

5th most important feature

Neurobayes feature id: 8

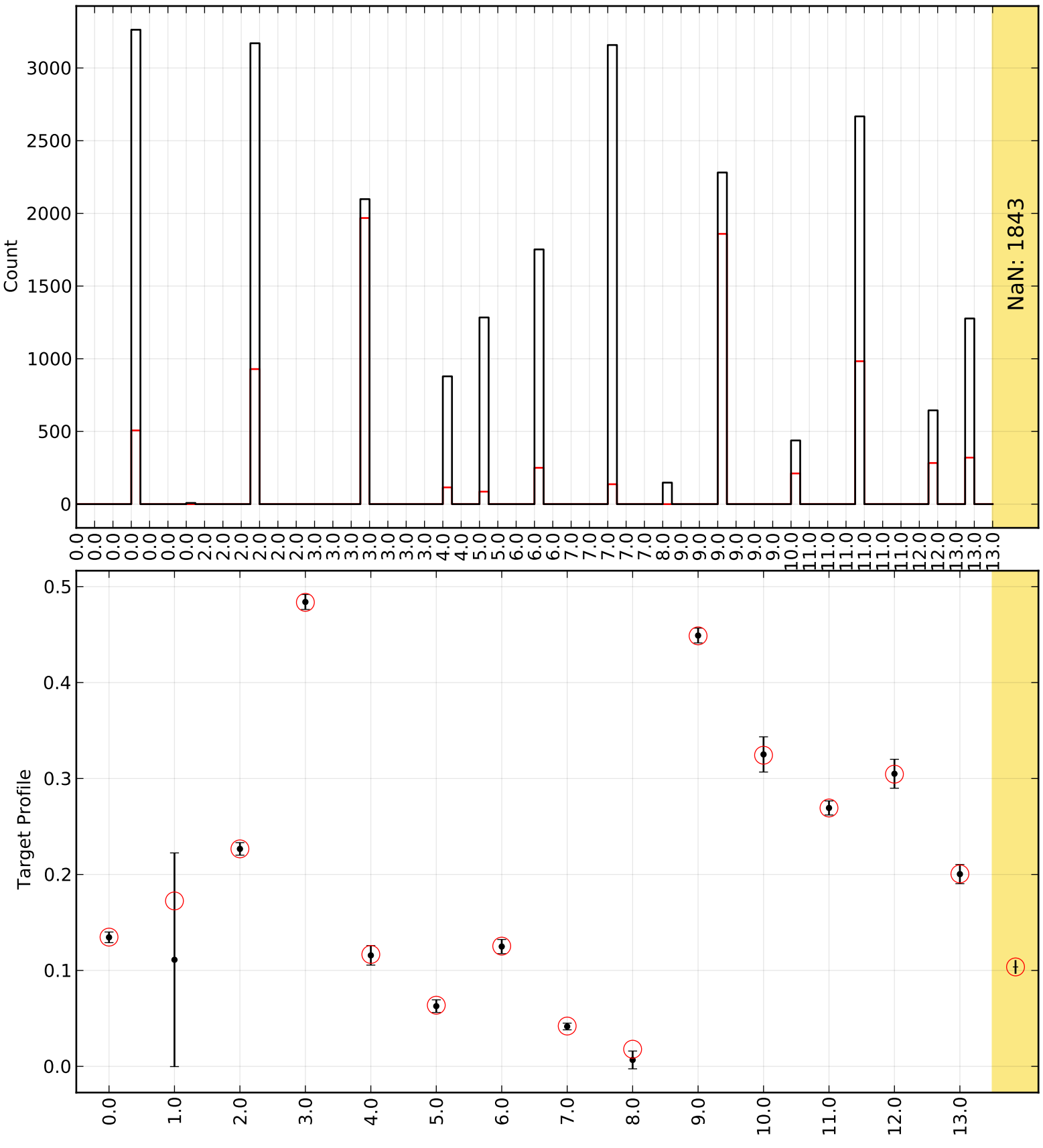
Added significance: 19.27 σ

Significance of this feature only: 63.5 σ

Significance loss when removed: 14.67 σ

Total correlation to others: 57.12 %

Feature properties: IS_UNORDERED | HAS_MISSING



Feature 0: age

6th most important feature

Neurobayes feature id: 2

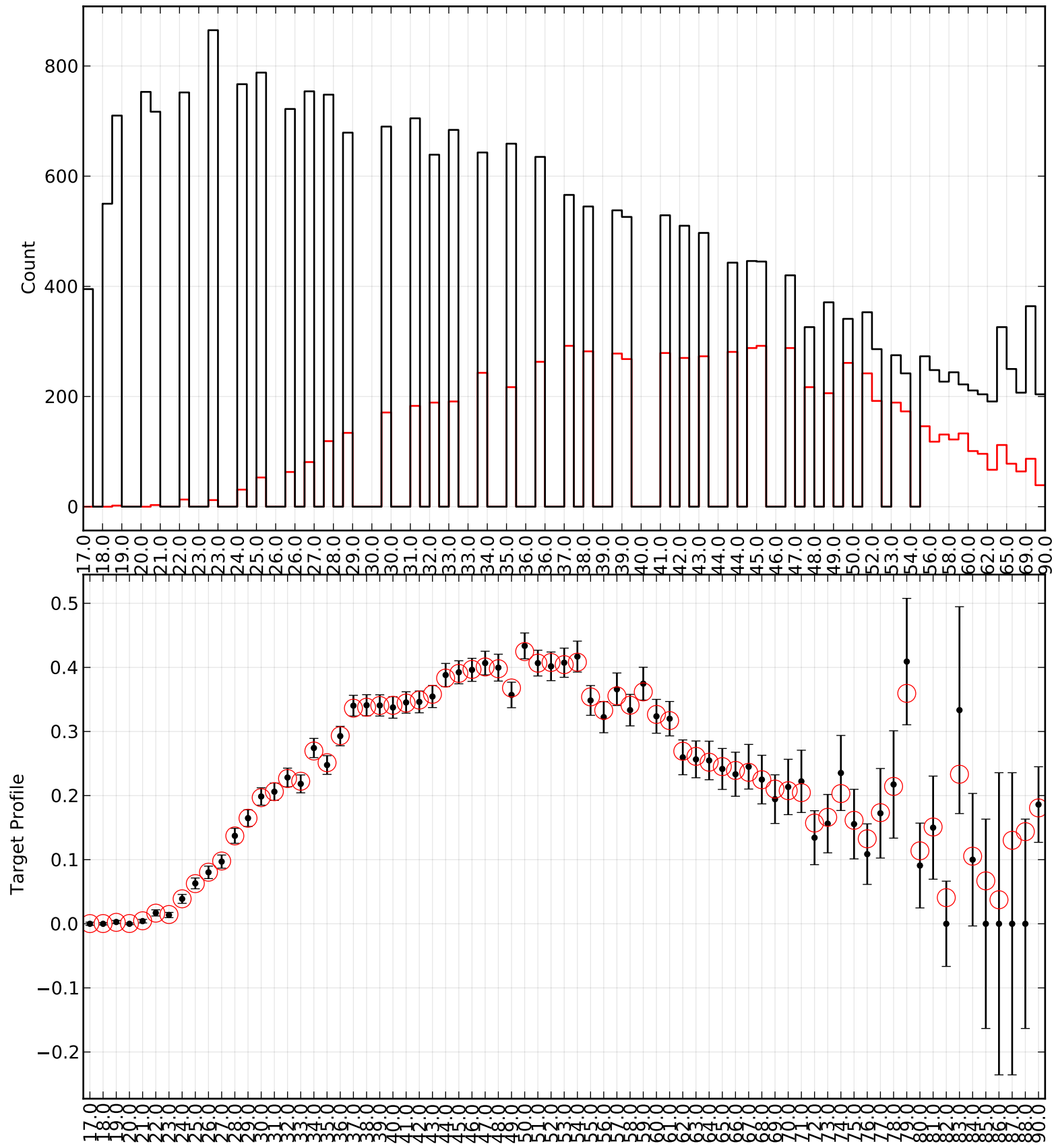
Added significance: 15.0 σ

Significance of this feature only: 59.13 σ

Significance loss when removed: 12.74 σ

Total correlation to others: 48.96 %

Feature properties: IS_ORDERED



Feature 12: hours_per_week

7th most important feature

Neurobayes feature id: 14

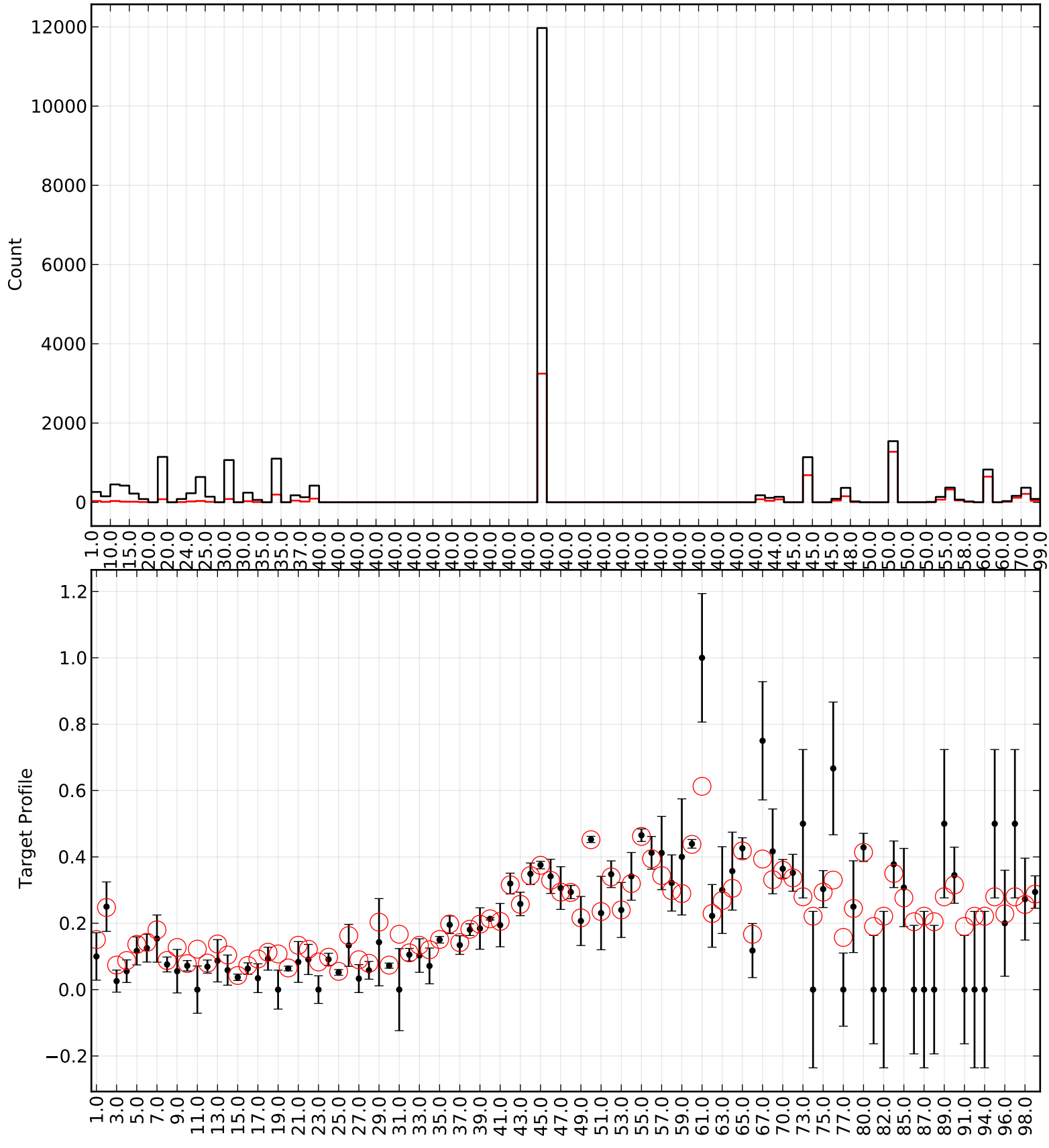
Added significance: 11.95 σ

Significance of this feature only: 51.23 σ

Significance loss when removed: 10.58 σ

Total correlation to others: 42.25 %

Feature properties: IS_UNORDERED


Count
12000
10000
8000
6000
4000
2000
0
1.0
10.0
15.0
20.0
20.0
24.0
25.0
30.0
30.0
35.0
35.0
37.0
40.0
40.0
40

Feature 7: relationship

8th most important feature

Neurobayes feature id: 9

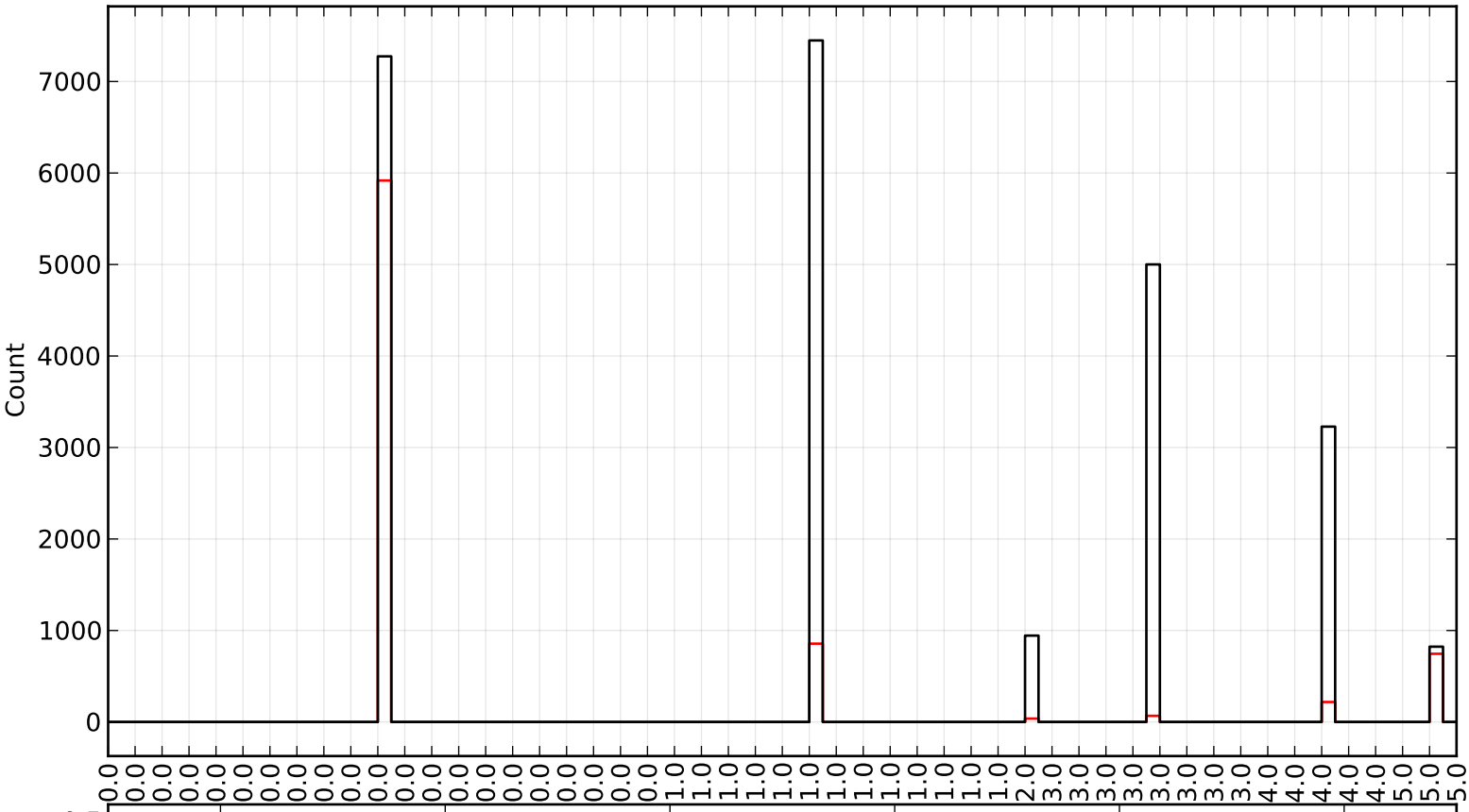
Added significance: 4.24 σ

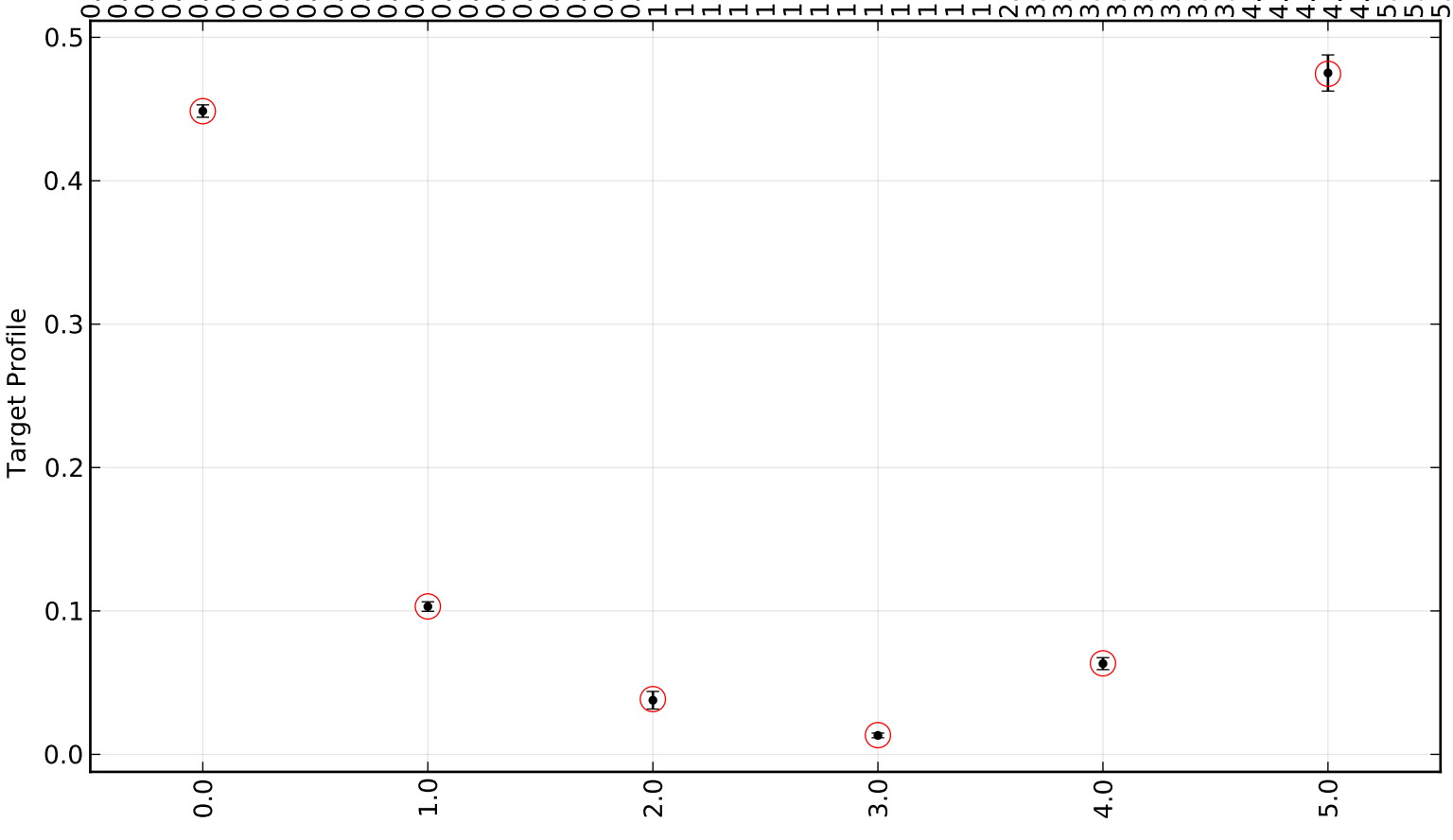
Significance of this feature only: 81.85 σ

Significance loss when removed: 4.06 σ

Total correlation to others: 97.18 %

Feature properties: IS_UNORDERED





Feature 9: sex

9th most important feature

Neurobayes feature id: 11

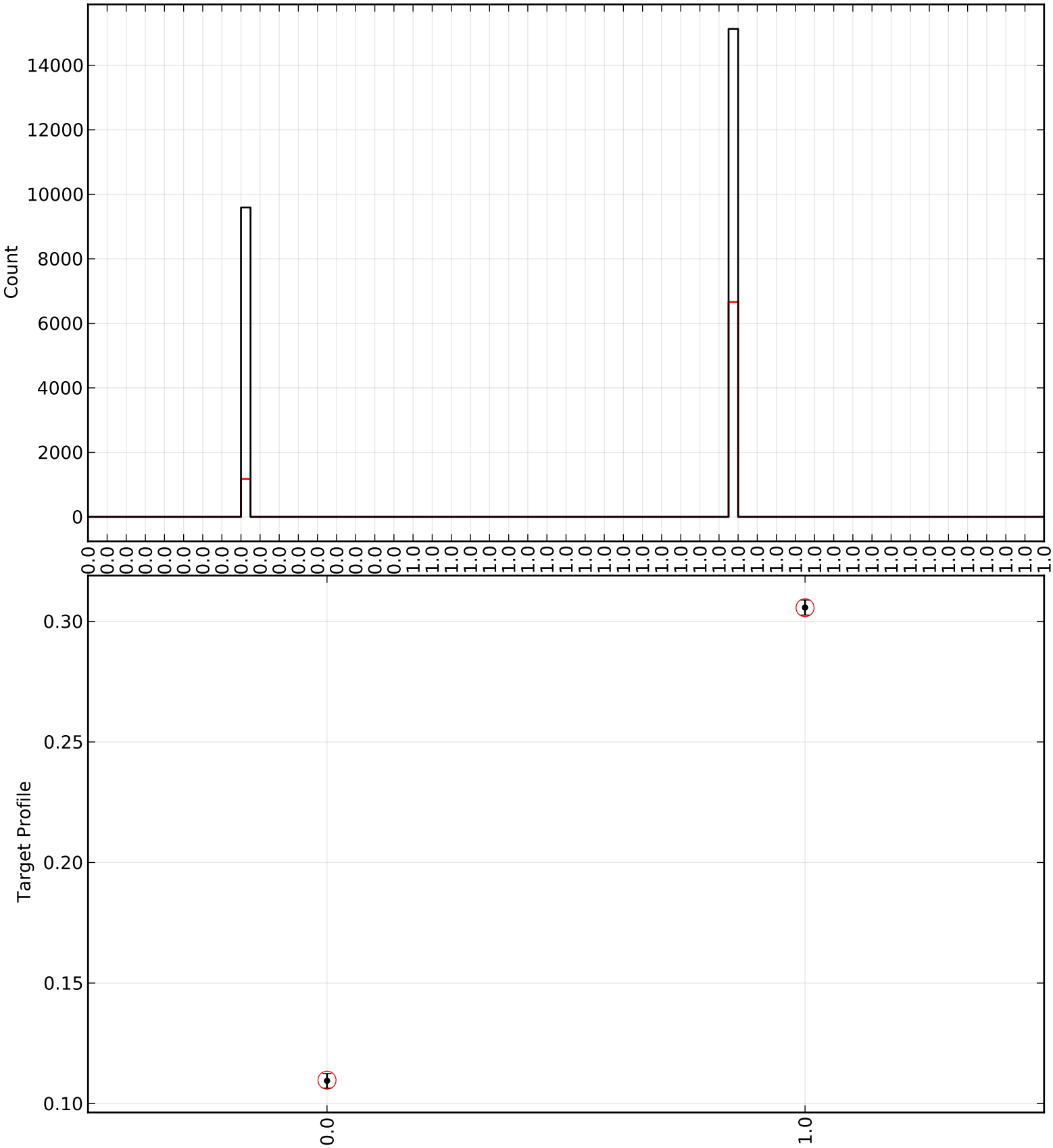
Added significance: 3.22 σ

Significance of this feature only: 38.97 σ

Significance loss when removed: 3.07 σ

Total correlation to others: 46.08 %

Feature properties: IS_UNORDERED



Feature 13: native_country

10th most important feature

Neurobayes feature id: 15

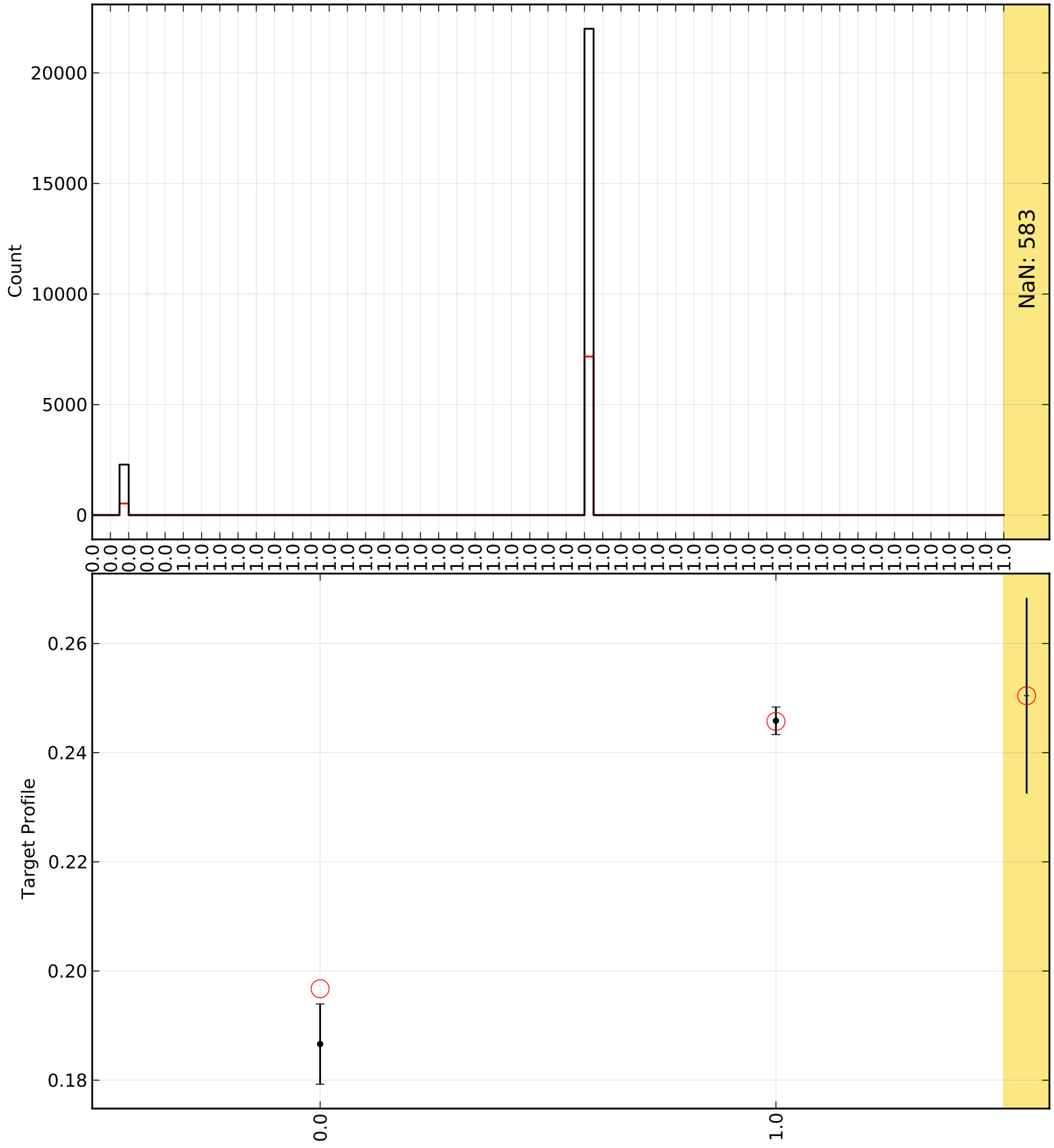
Added significance: 2.82 σ

Significance of this feature only: 7.03 σ

Significance loss when removed: 2.75 σ

Total correlation to others: 7.89 %

Feature properties: IS_UNORDERED | HAS_MISSING



Feature 1: workclass

11th most important feature

Neurobayes feature id: 3

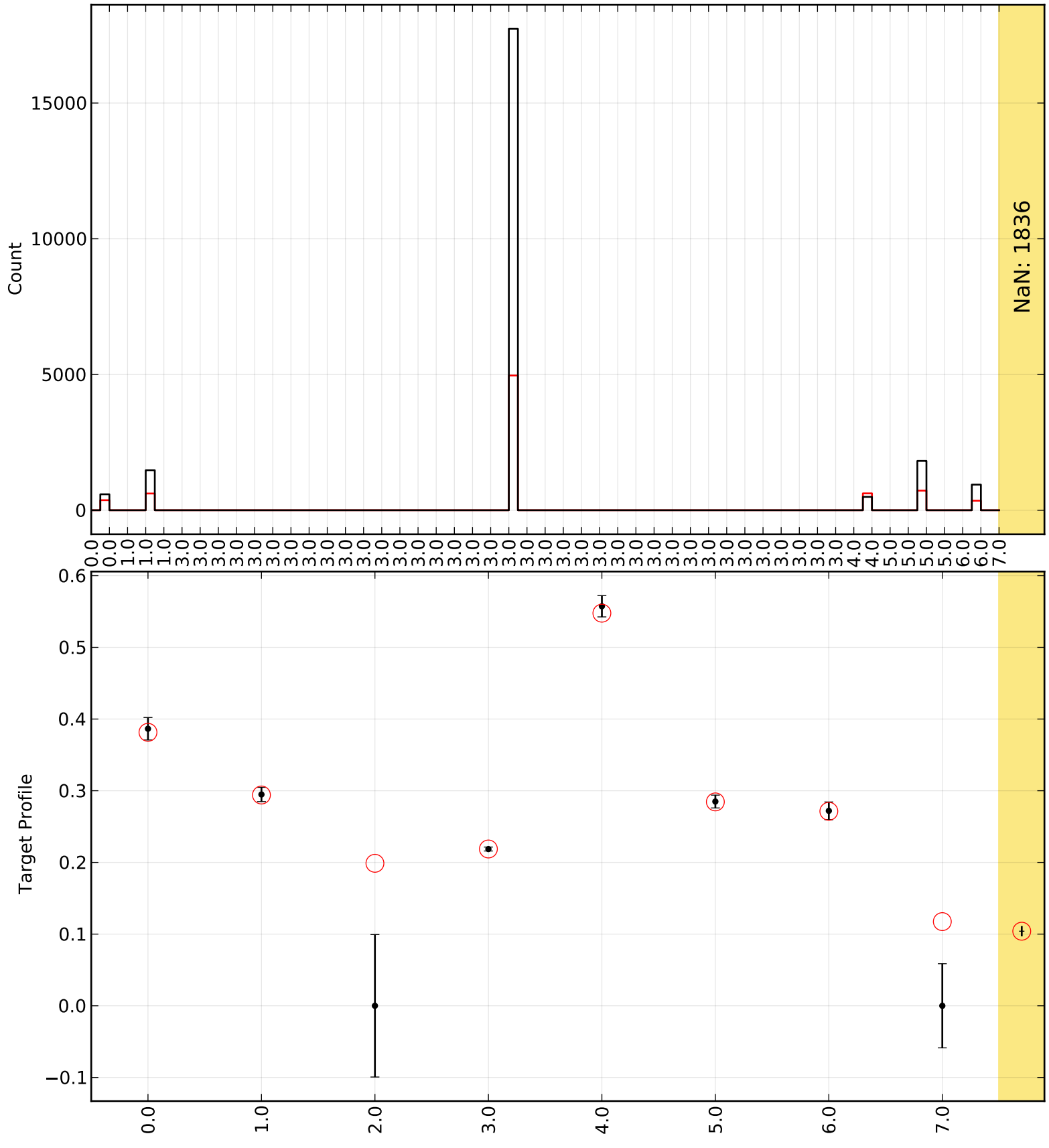
Added significance: 2.58 σ

Significance of this feature only: 32.3 σ

Significance loss when removed: 2.62 σ

Total correlation to others: 31.37 %

Feature properties: IS_UNORDERED | HAS_MISSING


Count
15000
10000
5000
0
NaN: 1836
0.0
0.0
1.0
1.0
1.0
3.0
3.0
3

Feature 2: fnlwgt

12th most important feature

Neurobayes feature id: 4

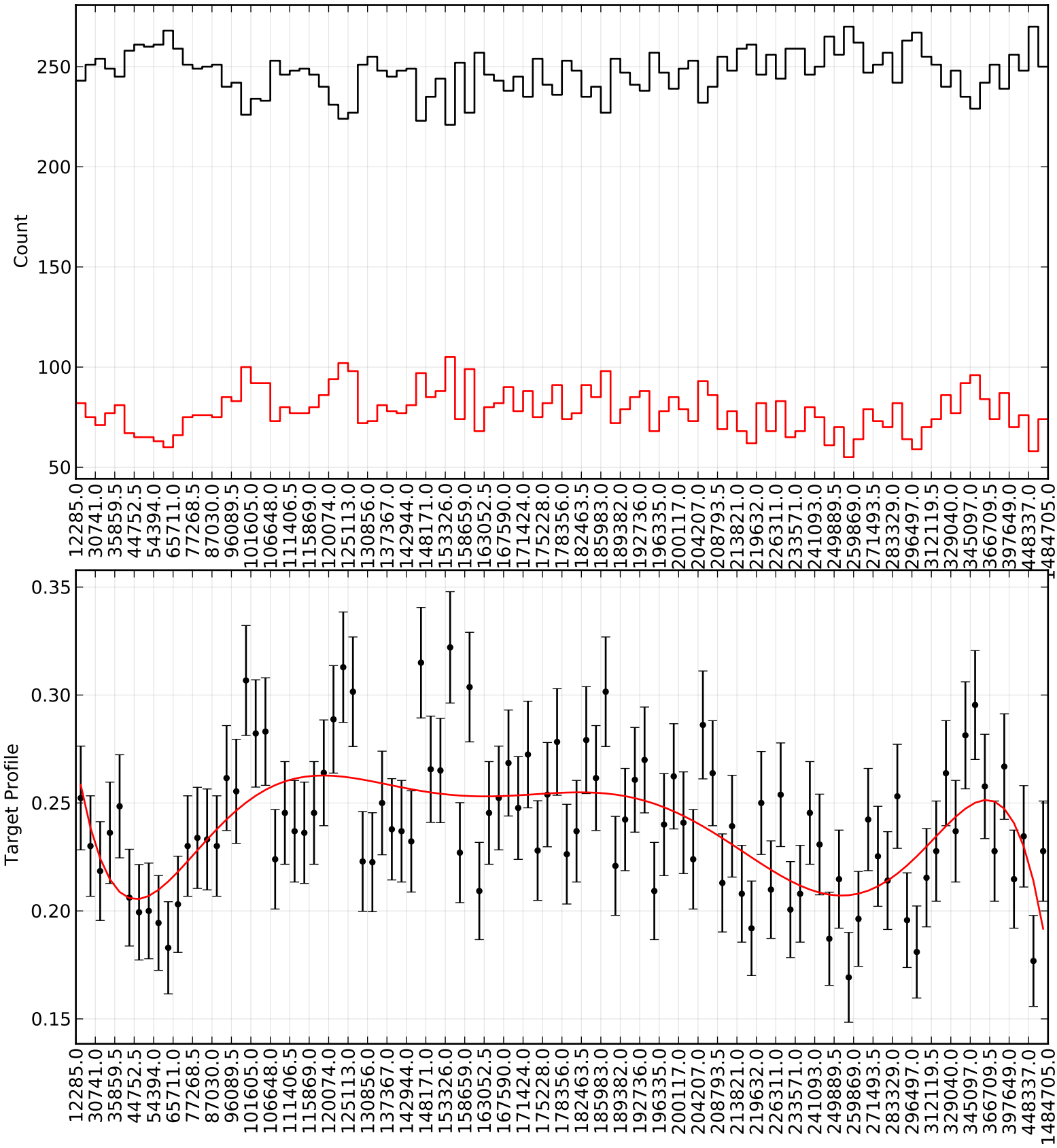
Added significance: 2.54 σ

Significance of this feature only: 8.32 σ

Significance loss when removed: 2.42 σ

Total correlation to others: 9.9 %

Feature properties: IS_CONTINUOUS



Feature 8: race

13th most important feature

Neurobayes feature id: 10

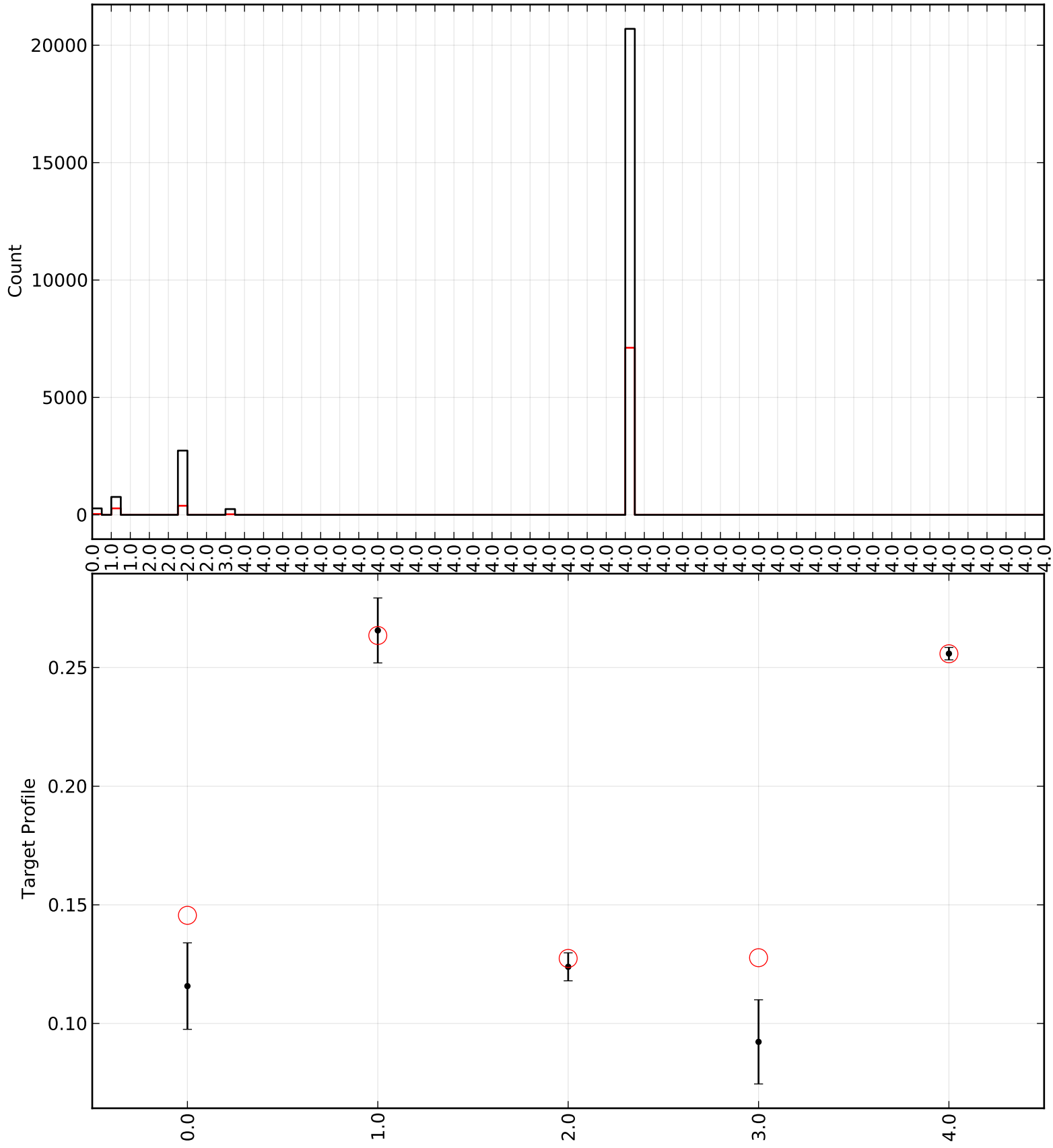
Added significance: 2.17 σ

Significance of this feature only: 18.13 σ

Significance loss when removed: 2.17 σ

Total correlation to others: 19.7 %

Feature properties: IS_UNORDERED


Count
20000
15000
10000
5000
0
0.0 1.0 1.0 2.0 2.0 2.0 2.0 3.0 4.0 4.0 4

Feature 4: education_num

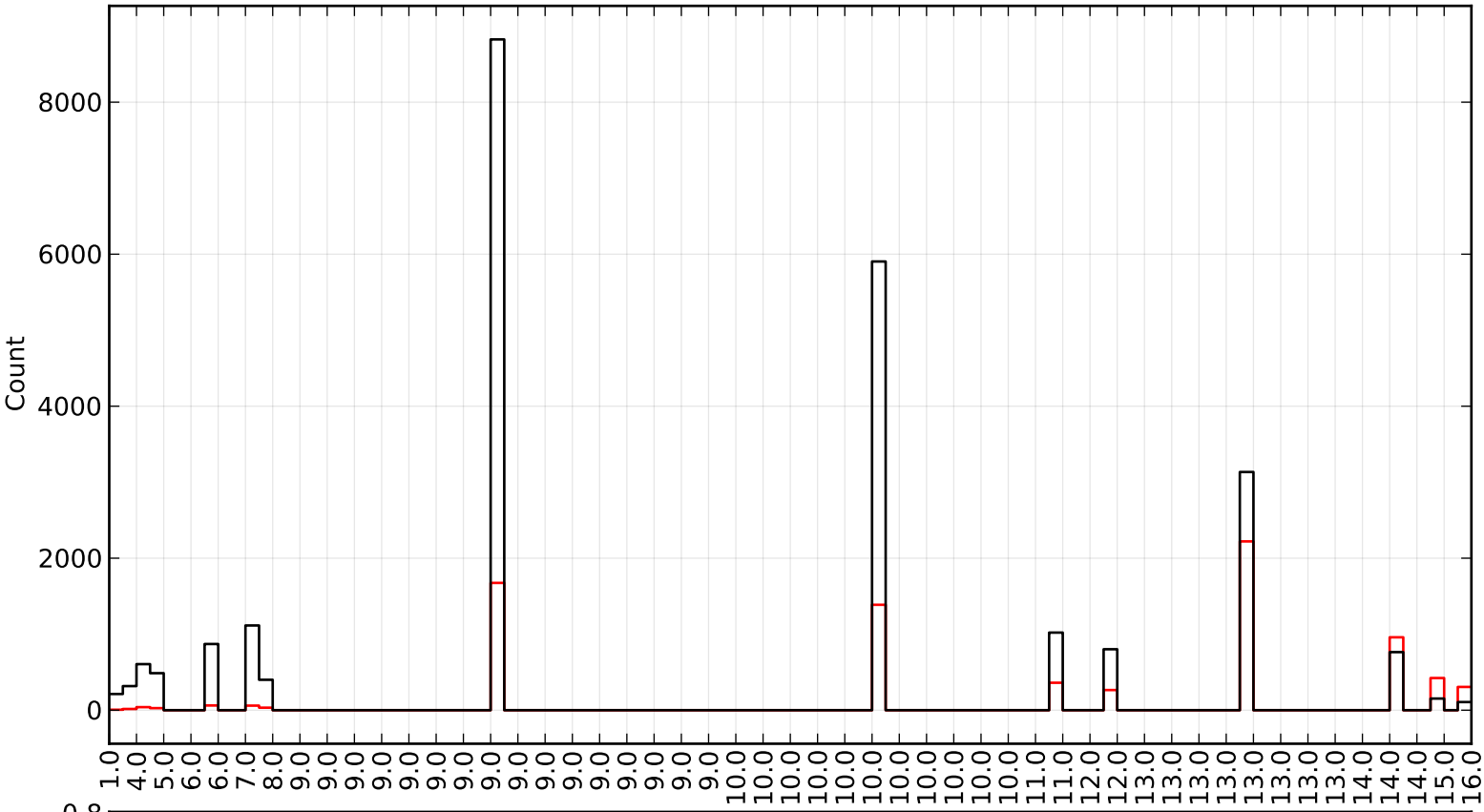
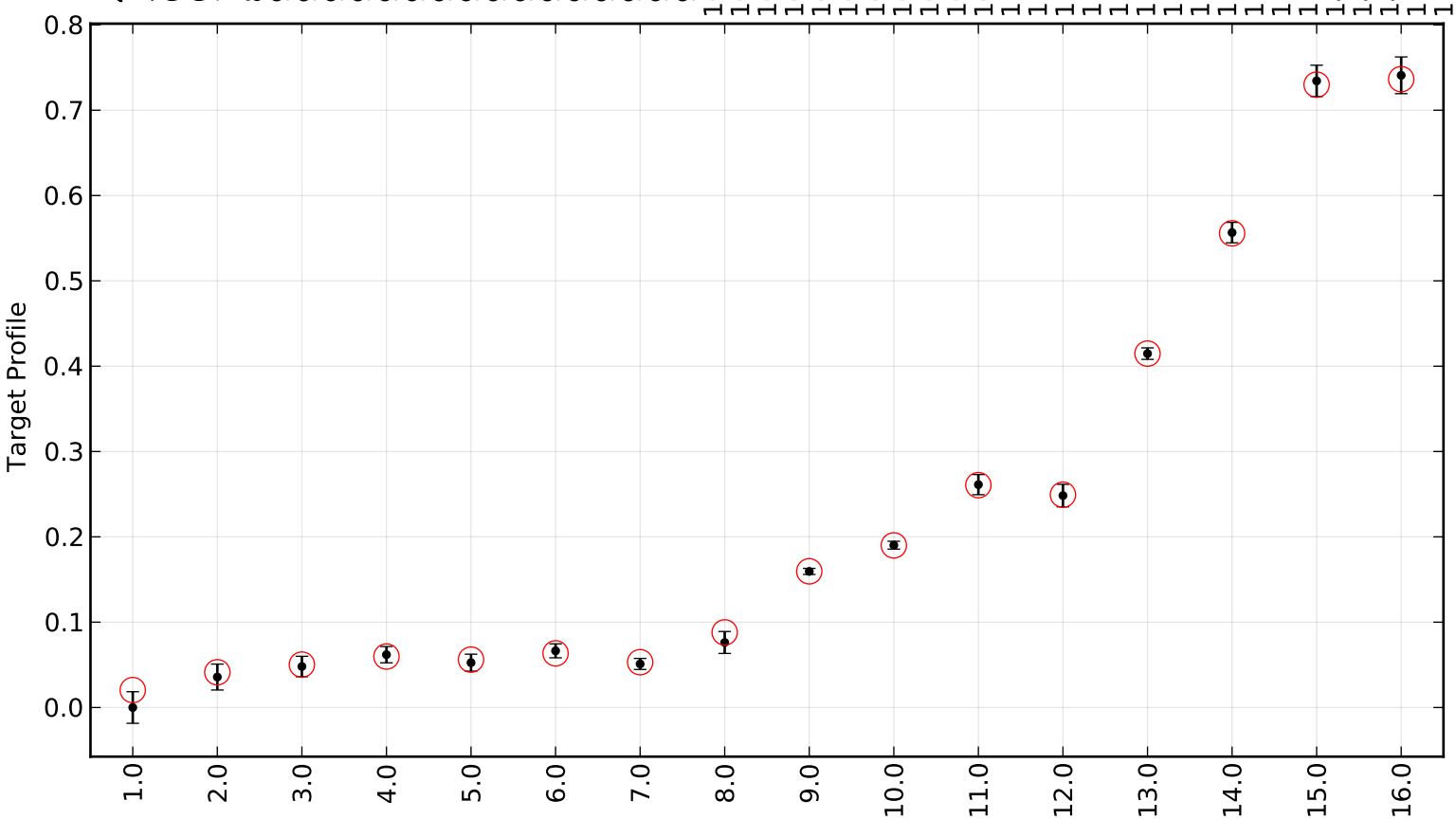
14th most important feature

Neurobayes feature id: 6

Added significance: 0.0 σ

Significance of this feature only: 66.55 σ

Significance loss when removed: 0.0 σ

Total correlation to others: 100.0 %

Feature properties: IS_ORDERED