

Table of Contents

ATLAS Final Run2 FTAG Recommendation SFs Plots.....	1
Introduction.....	1
Nominal ("410470", Powheg+Pythia8+EvtGen on t \bar{t}).....	1
PFlow Jets.....	1
Fixed Cut.....	1
60 WP.....	1
70 WP.....	1
77 WP.....	2
85 WP.....	2
VR Jets.....	3
Fixed Cut.....	3
60 WP.....	3
70 WP.....	3
77 WP.....	4
85 WP.....	4
Alternative Samples.....	5

ATLAS Final Run2 FTAG Recommendation SFs Plots

Introduction

This corresponds to the CDI released in April 2021 (Twiki) and the public plots released here: FTAG-2021-001 [↗](#). This page offers tables containing the cut-values and corresponding efficiencies or mis-tag rate.

Nominal ("410470", Powheg+Pythia8+EvtGen on ttbar)

This sample is used to define the WPs and the following numbers shown can be quoted when describing the b-tagger performance. If your analysis considers jets at high pT and you need to quote the performance in those high pT jets, you may have to do some extra work and please feel free to contact us.

PFlow Jets

Fixed Cut

60 WP

Table 1: PFlow, DL1r, 60WP, 410470

Cut-value	4.565
Flavor	Efficiency
B	20 GeV: 0.5104 300 GeV: 0.6023 20-300 GeV: 0.6158
C	20 GeV: 0.0287 300 GeV: 0.0289 20-300 GeV: 0.0268
L	20 GeV: 0.0004 300 GeV: 0.0008 20-300 GeV: 0.0004

70 WP

Table 1: PFlow, DL1r, 70WP, 410470

Cut-value	3.245
Flavor	Efficiency
B	20 GeV: 0.6312 300 GeV: 0.7104 20-300 GeV: 0.7127
C	20 GeV: 0.0993 300 GeV: 0.0839 20-300 GeV: 0.0855
L	20 GeV: 0.0017 300 GeV: 0.0027 20-300 GeV: 0.0017

77 WP

Table 1: PFlow, DL1r, 77WP, 410470

Cut-value	2.195
Flavor	Efficiency
B	20 GeV: 0.7191 300 GeV: 0.7829 20-300 GeV: 0.7819
C	20 GeV: 0.2098 300 GeV: 0.1714 20-300 GeV: 0.1835
L	20 GeV: 0.0062 300 GeV: 0.0072 20-300 GeV: 0.0056

85 WP

Table 1: PFlow, DL1r, 85WP, 410470

Cut-value	0.665
Flavor	Efficiency
B	20 GeV: 0.8126 300 GeV: 0.8614 20-300 GeV: 0.8580
C	20 GeV: 0.3637 300 GeV: 0.3434 20-300 GeV: 0.3574
L	20 GeV: 0.0302 300 GeV: 0.0308 20-300 GeV: 0.0273

VR Jets

Fixed Cut

60 WP

Table 1: VR, DL1r, 60WP, 410470

Cut-value	4.805
Flavor	Efficiency
B	20 GeV: 0.502 300 GeV: 0.5377
C	20 GeV: 0.0237 300 GeV: 0.0441
L	20 GeV: 0.0004 300 GeV: 0.0005

70 WP

85 WP

Table 1: VR, DL1r, 70WP, 410470

Cut-value	3.515
Flavor	Efficiency
B	20 GeV: 0.6235 300 GeV: 0.6663
C	20 GeV: 0.0849 300 GeV: 0.1169
L	20 GeV: 0.0016 300 GeV: 0.0026

77 WP

Table 1: VR, DL1r, 77WP, 410470

Cut-value	2.585
Flavor	Efficiency
B	20 GeV: 0.706 300 GeV: 0.7483
C	20 GeV: 0.1724 300 GeV: 0.2072
L	20 GeV: 0.0048 300 GeV: 0.0084

85 WP

Table 1: VR, DL1r, 85WP, 410470

Cut-value	1.085
Flavor	Efficiency
B	20 GeV: 0.8046
	300 GeV: 0.8528
C	20 GeV: 0.3185
	300 GeV: 0.3833
L	20 GeV: 0.0235
	300 GeV: 0.0344

Alternative Samples

Tables are also available for other alternative samples. They are not displayed here but attached.

This topic: Sandbox > BTaggingEfficienciesFinalRun2Rel21

Topic revision: r2 - 2022-01-28 - BingxuanLiu



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