

PYTHIA8 Parameter	CP2 [? ]	CP2-CR1	CP2-CR2
PDF set	NNPDF3.1 LO	NNPDF3.1 LO	NNPDF3.1 LO
$\alpha_S(m_Z)$	0.130	0.130	0.130
SpaceShower:rapidityOrder	off	off	off
MultipartonInteractions:EcmRef [GeV]	7000	7000	7000
$\alpha_S^{\text{ISR}}(m_Z)$ value/order	0.130/LO	0.130/LO	0.130/LO
$\alpha_S^{\text{FSR}}(m_Z)$ value/order	0.130/LO	0.130/LO	0.130/LO
$\alpha_S^{\text{MPI}}(m_Z)$ value/order	0.130/LO	0.130/LO	0.130/LO
$\alpha_S^{\text{ME}}(m_Z)$ value/order	0.130/LO	0.130/LO	0.130/LO
StringZ:aLund	–	0.38	–
StringZ:bLund	–	0.64	–
StringFlav:probQQtoQ	–	0.078	–
StringFlav:probStoUD	–	0.2	–
SigmaTotal:zeroAXB	off	off	off
BeamRemnants:remnantMode	–	1	–
MultipartonInteractions:bProfile	2	2	2
ColourReconnection:mode	–	1	2
MultipartonInteractions:pT0Ref [GeV]	2.306	2.154	2.287
MultipartonInteractions:ecmPow	0.139	0.119	0.146
MultipartonInteractions:coreRadius	0.376	0.538	0.514
MultipartonInteractions:coreFraction	0.327	0.599	0.525
ColourReconnection:range	2.323	–	–
ColourReconnection:junctionCorrection	–	0.761	–
ColourReconnection:timeDilationPar	–	13.080	–
ColourReconnection:m0	–	1.546	–
ColourReconnection:m2lambda	–	–	6.186
ColourReconnection:fracGluon	–	–	0.978
$N_{\text{dof}}$	183	117	118
$\chi^{*2}/N_{\text{dof}}$	0.54	0.21	0.22