

- HLT_Photon120_R9Id90_HE10_IsoM
- HLT_Photon50_R9Id90_HE10_IsoM
- HLT_Photon90_R9Id90_HE10_IsoM
- HLT_Photon75_R9Id90_HE10_IsoM
- HLT_Photon165_R9Id90_HE10_IsoM
- HLT_Photon120
- HLT_Photon175

2024 C

2024 D

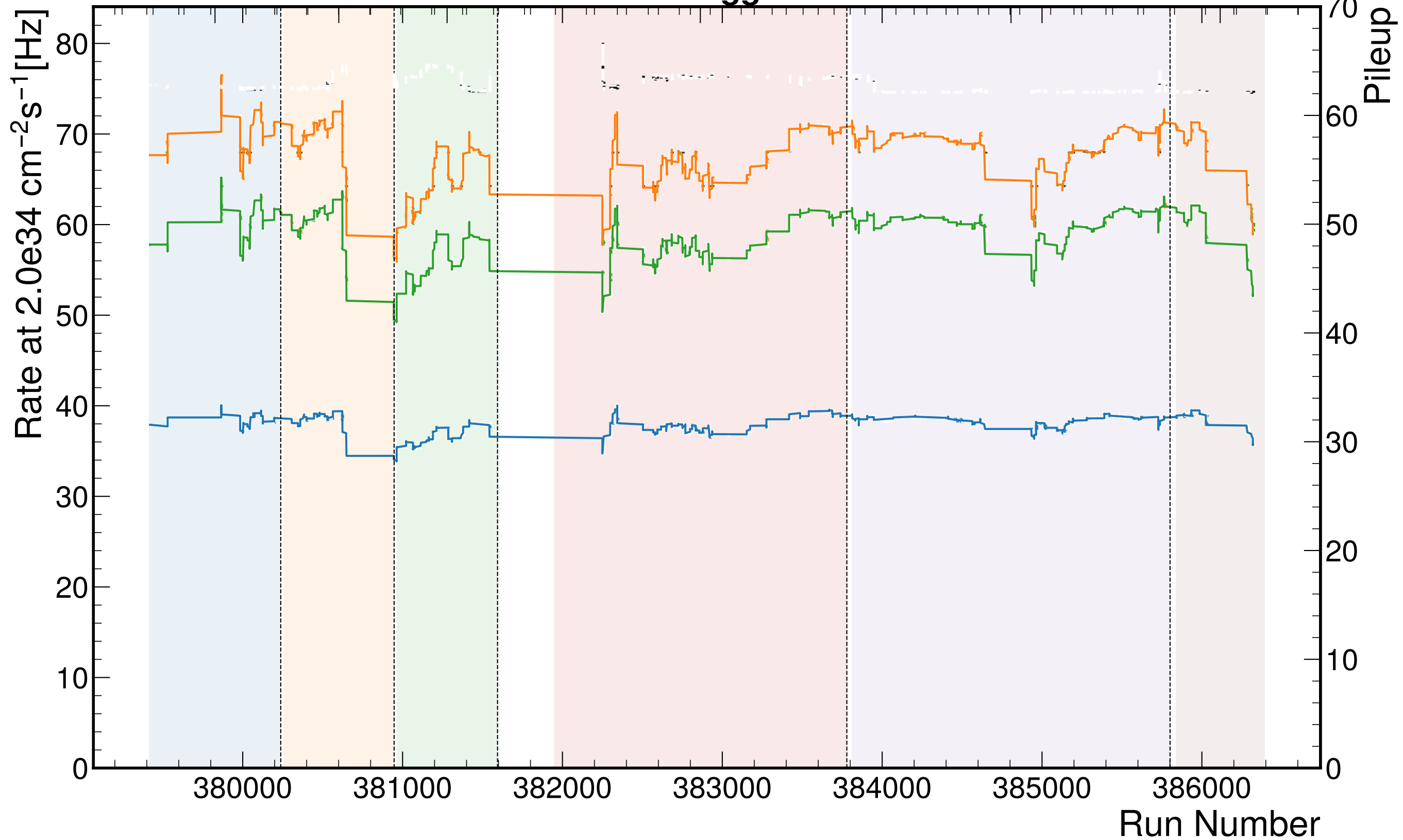
2024 E

2024 F

2024 G

2024 H

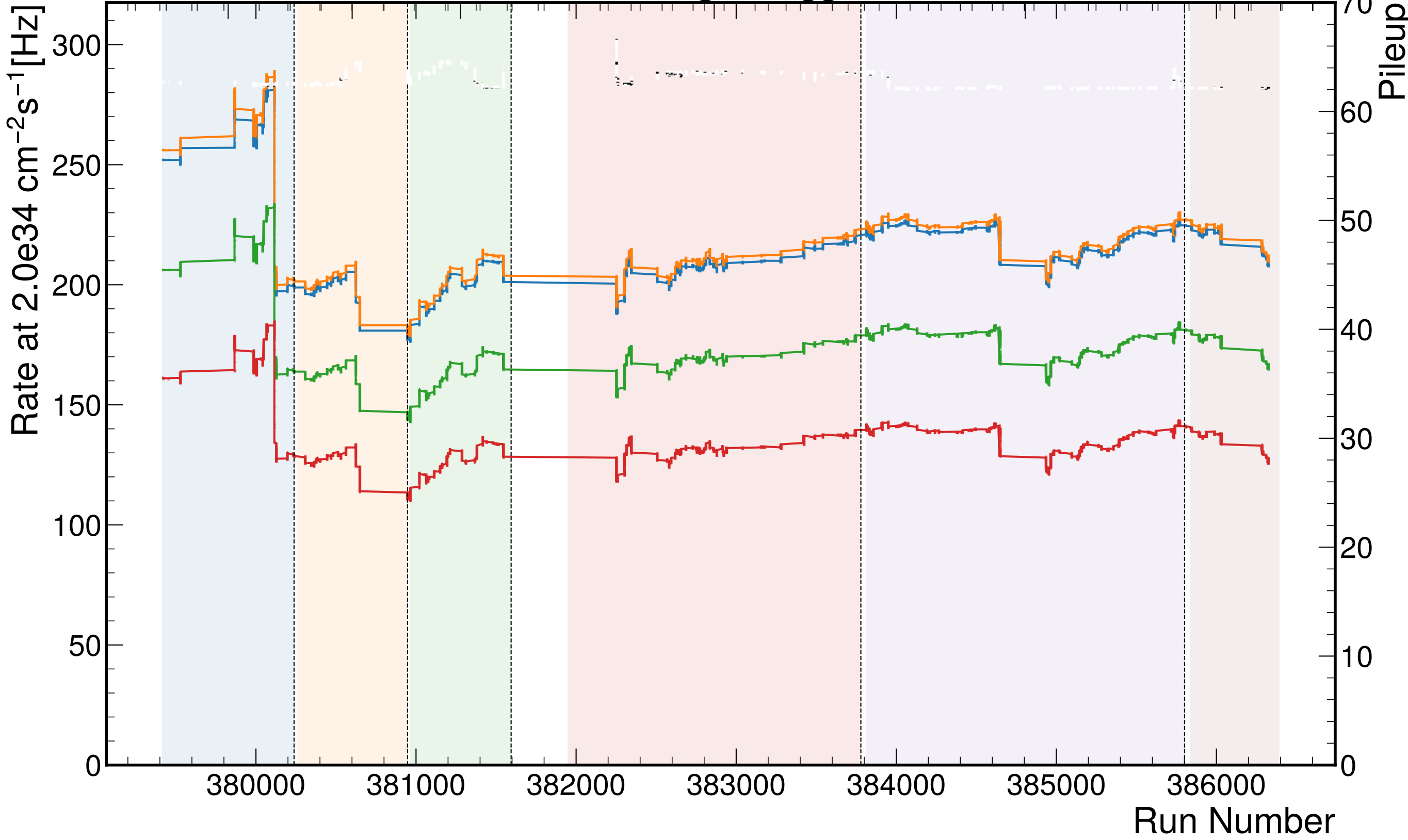
DiPhoton Trigger Paths



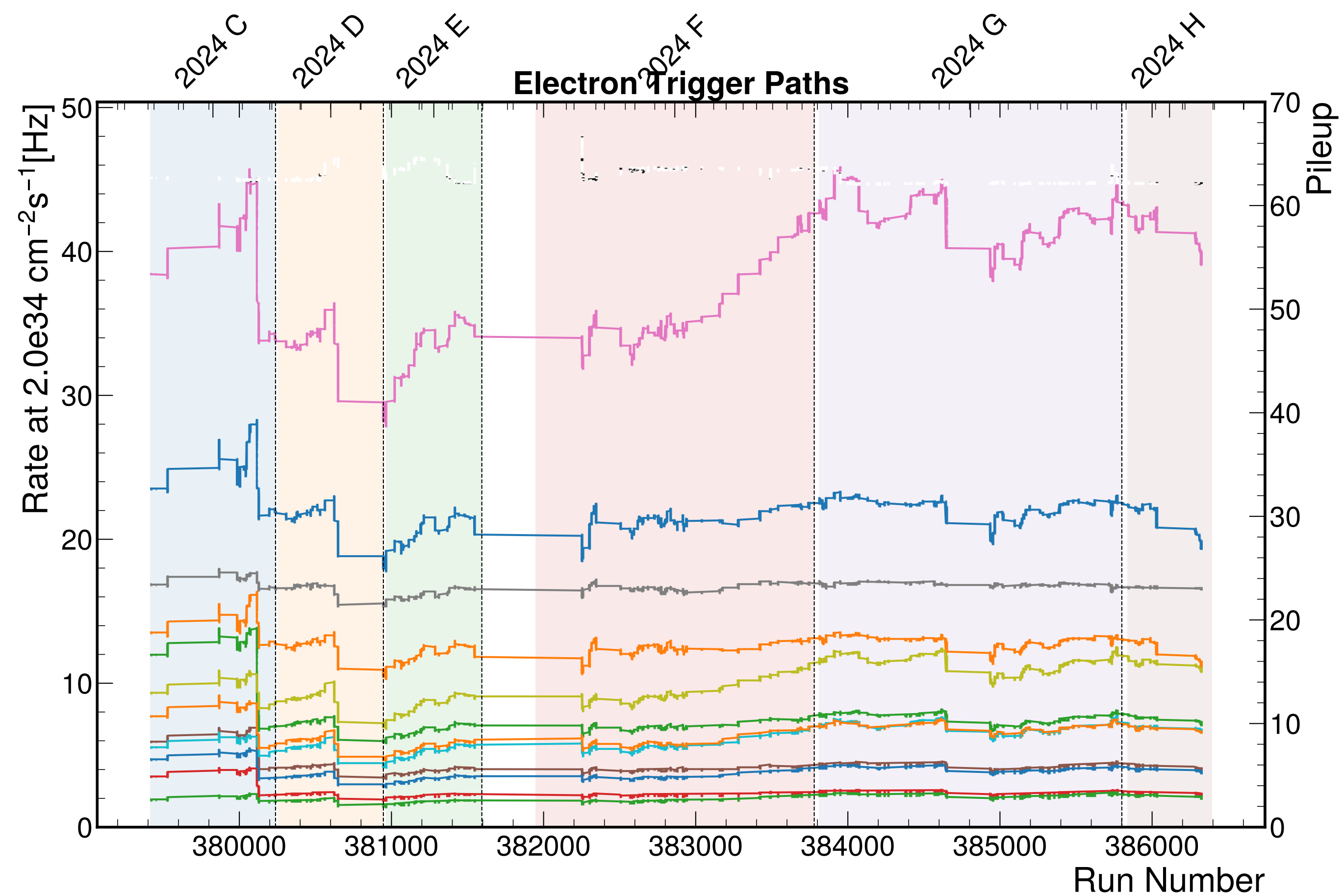
- HLT_Diphoton30_22_R9Id_OR_IsoCalId_AND_HE_R9Id_Mass90
- HLT_Diphoton30_22_R9Id_OR_IsoCalId_AND_HE_R9Id_Mass95
- HLT_Diphoton30_18_R9IdL_AND_HE_AND_IsoCalId

2024 C 2024 D 2024 E 2024 F 2024 G 2024 H

Electron WPTight Trigger Paths



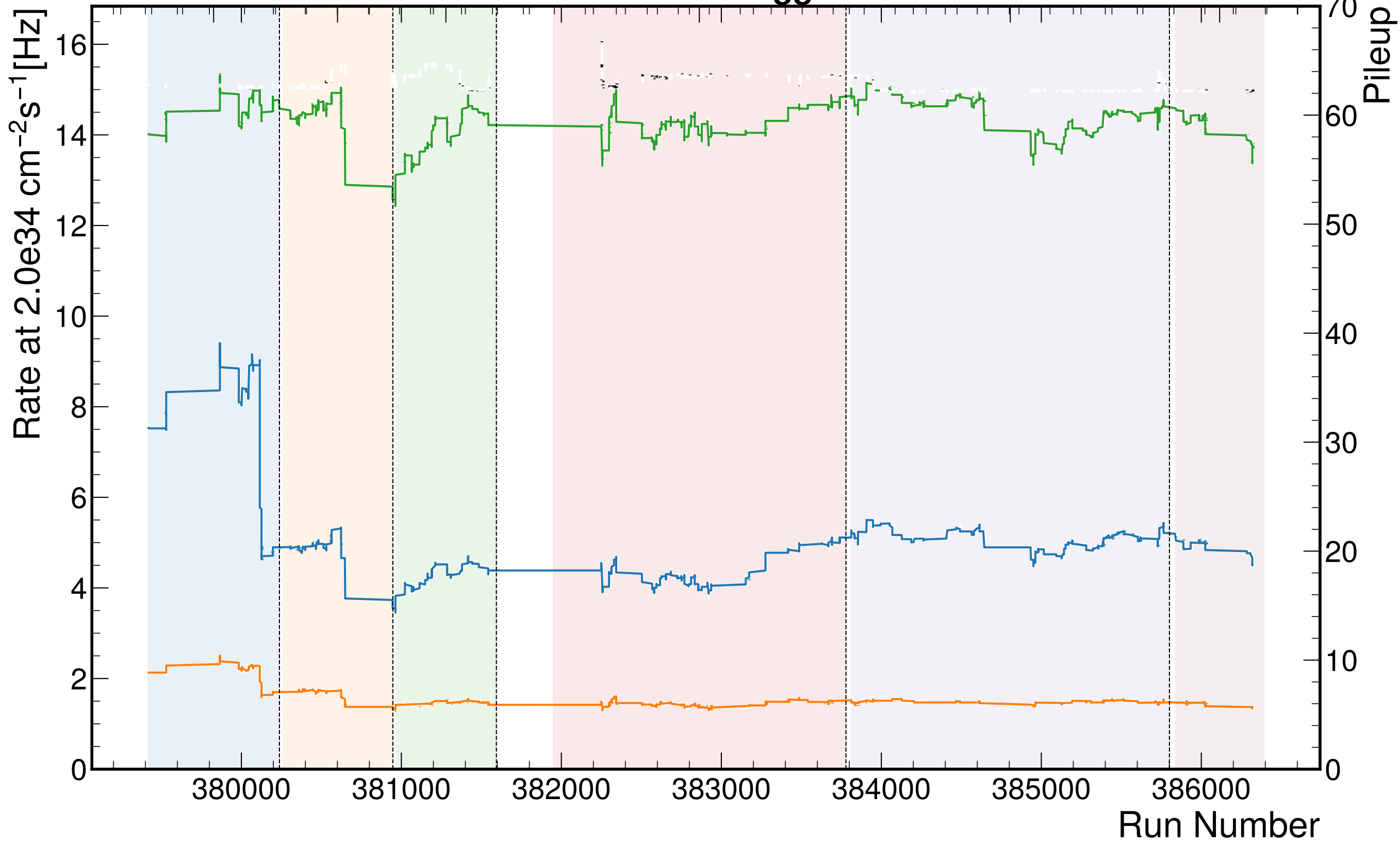
- HLT_Ele32_WPTight_Gsf_L1DoubleEG
- HLT_Ele32_WPTight_Gsf
- HLT_Ele35_WPTight_Gsf
- HLT_Ele38_WPTight_Gsf



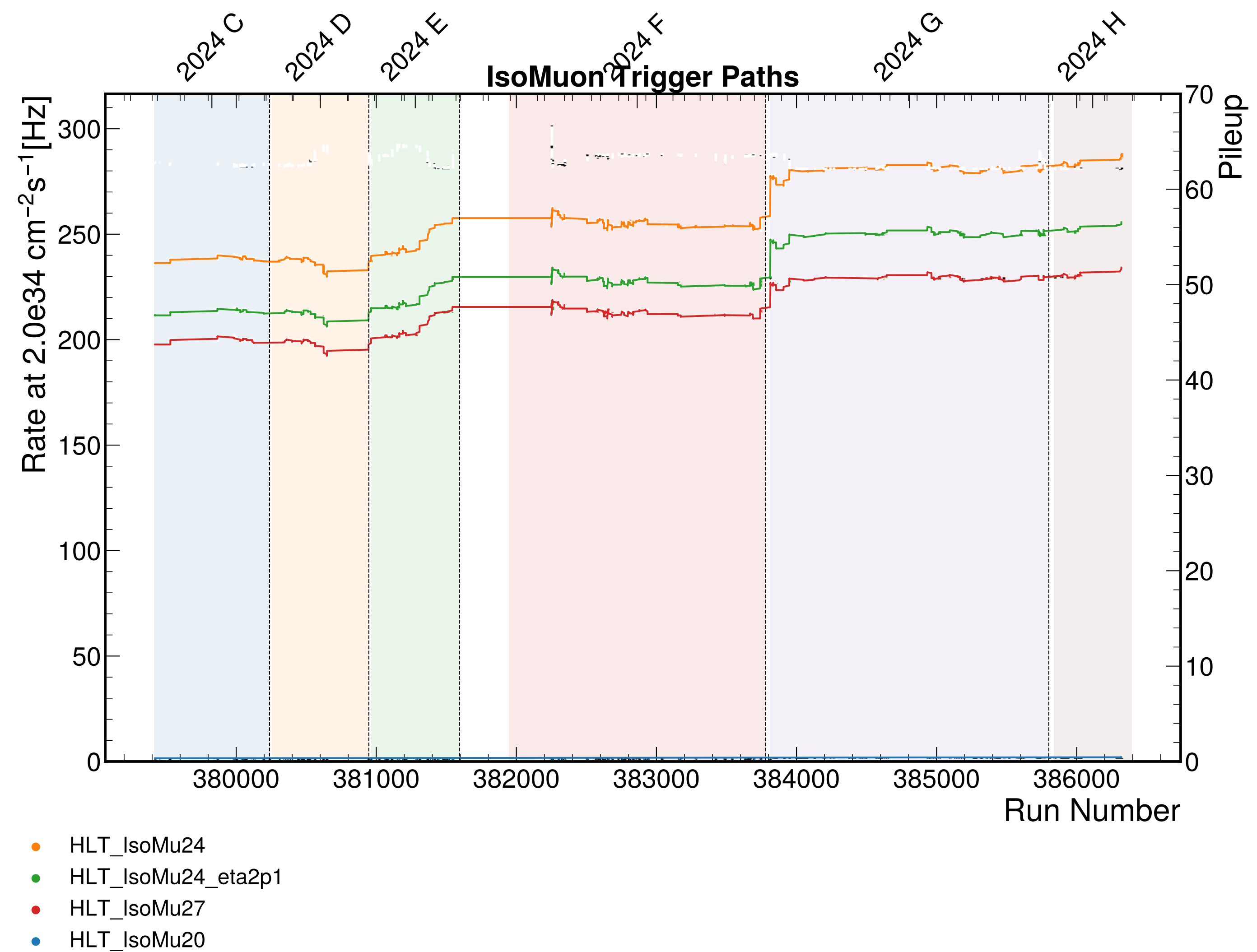
- HLT_Ele23_Ele12_CaloldL_TrackIdL_IsoVL
- HLT_Ele115_CaloldVT_GsfTrkIdT
- HLT_Ele23_Ele12_CaloldL_TrackIdL_IsoVL_DZ
- HLT_Ele135_CaloldVT_GsfTrkIdT
- HLT_Ele15_IsoVVVL_PFHT450
- HLT_Ele12_CaloldL_TrackIdL_IsoVL_PFJet30
- HLT_Ele8_CaloldM_TrackIdM_PFJet30
- HLT_Ele8_CaloldL_TrackIdL_IsoVL_PFJet30
- HLT_Ele50_IsoVVVL_PFHT450
- HLT_Ele17_CaloldM_TrackIdM_PFJet30
- HLT_Ele15_IsoVVVL_PFHT600
- HLT_Ele23_CaloldL_TrackIdL_IsoVL_PFJet30
- HLT_Ele28_eta2p1_WPTight_Gsf_HT150

2024 C 2024 D 2024 E 2024 F 2024 G 2024 H

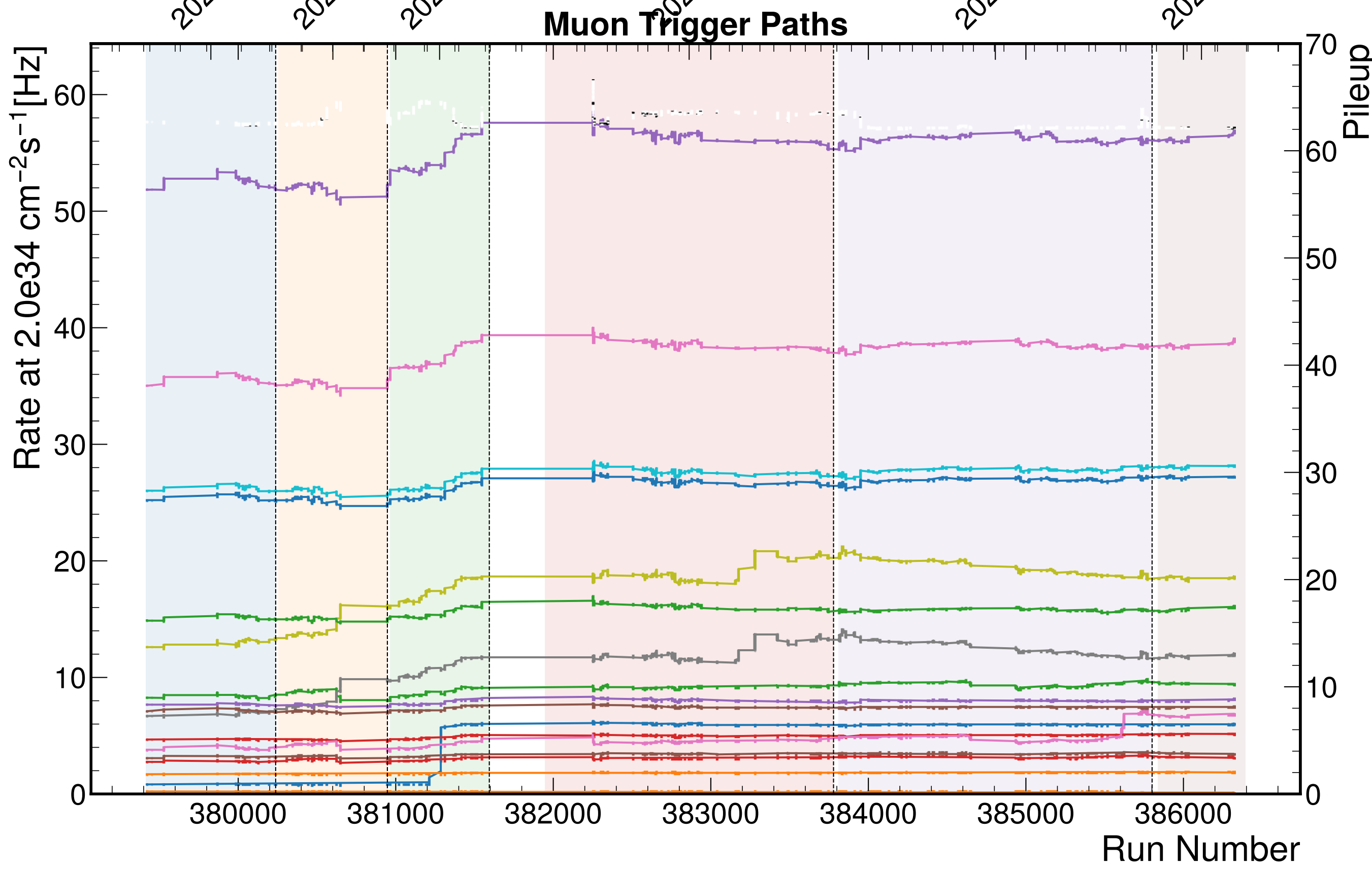
Double Electron Trigger Paths



- HLT_DoubleEle33_CaloldL_MW
- HLT_DoubleEle8_CaloldM_TrackIdM_Mass8_PFHT350
- HLT_DoubleEle8_CaloldM_TrackIdM_Mass8_DZ_PFHT350



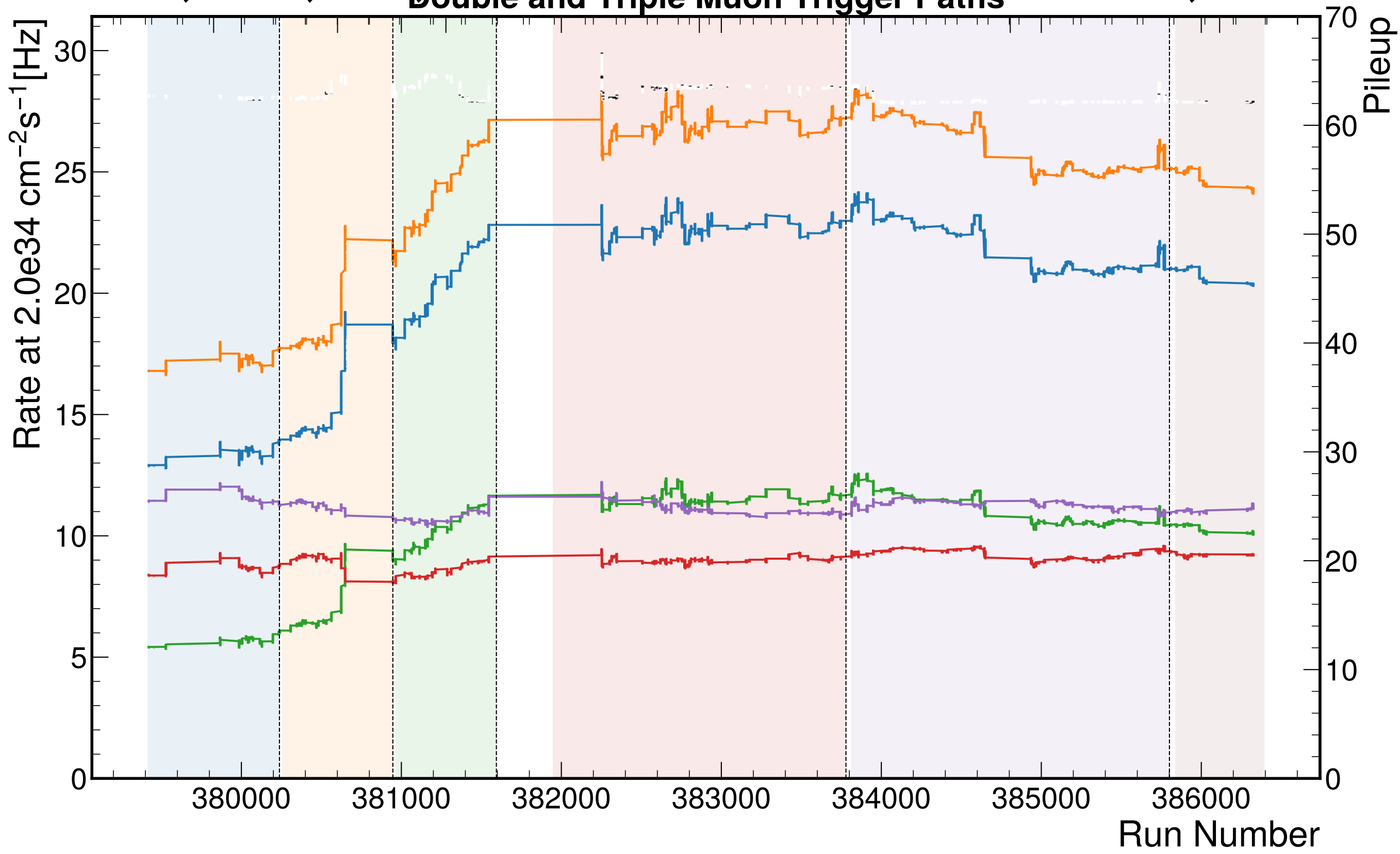
2024 C 2024 D 2024 E 2024 F 2024 G 2024 H



- HLT_Mu50
- HLT_Mu55
- HLT_Mu17_TrkIsoVVL_Mu8_TrkIsoVVL_DZ_Mass3p8
- HLT_Mu17_TrkIsoVVL_Mu8_TrkIsoVVL_DZ_Mass8
- HLT_Mu3er1p5_PFJet100er2p5_PFMETNoMu100_PFMHTNoMu100_IDTight
- HLT_Mu37_TkMu27
- HLT_Mu3er1p5_PFJet100er2p5_PFMET100_PFMHT100_IDTight
- HLT_Mu15_IsoVVVL_PFHT450
- HLT_Mu17
- HLT_Mu8
- HLT_Mu3_PFJet40
- HLT_Mu12eta2p3
- HLT_Mu8_TrkIsoVVL
- HLT_Mu50_IsoVVVL_PFHT450
- HLT_Mu15_IsoVVVL_PFHT600
- HLT_Mu17_TrkIsoVVL_Mu8_TrkIsoVVL_DZ
- HLT_Mu12eta2p3_PFJet40

2024 C 2024 D 2024 E 2024 F 2024 G 2024 H

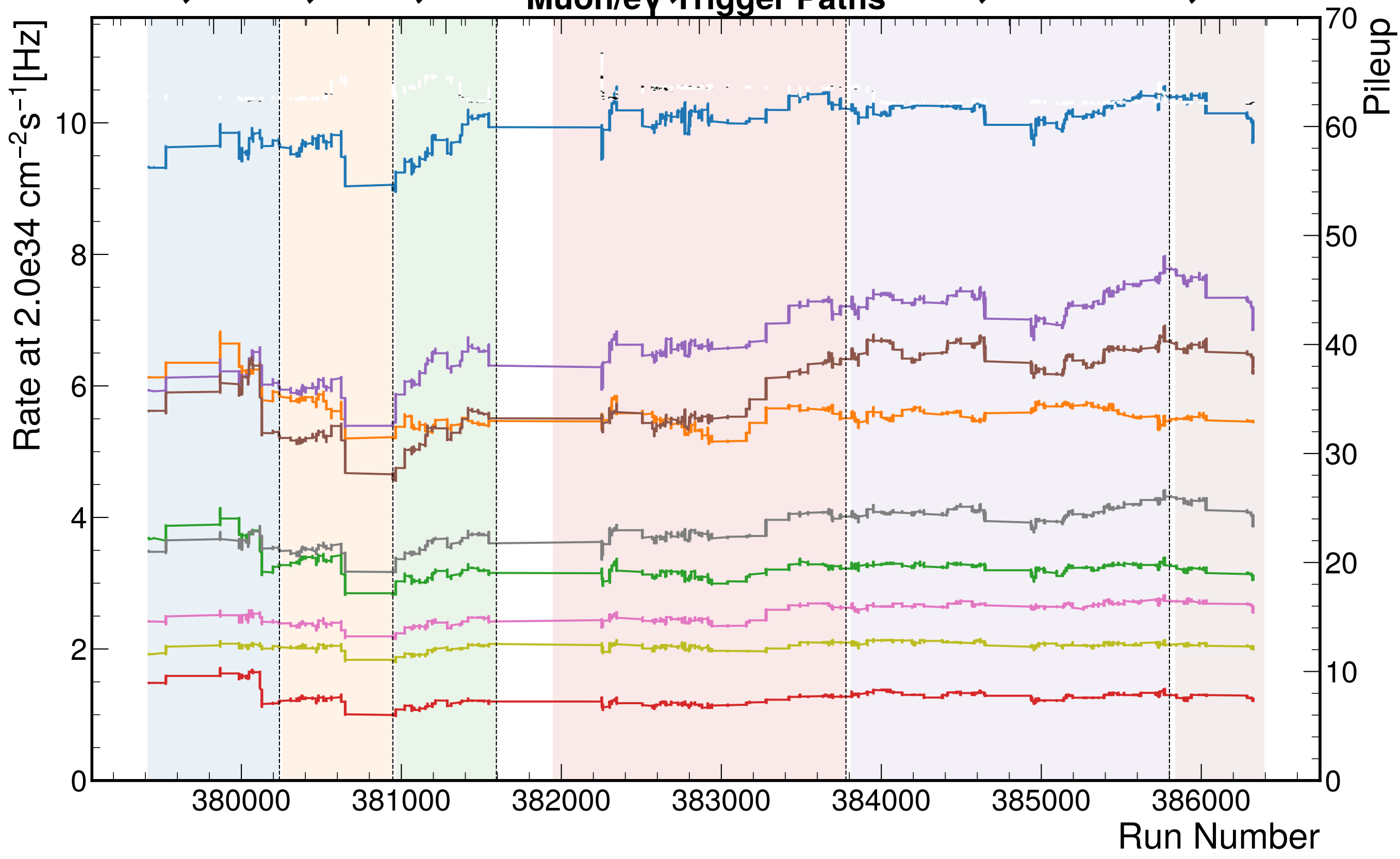
Double and Triple Muon Trigger Paths



- HLT_DoubleMu3_DCA_PFMET50_PFMHT60
- HLT_DoubleMu3_DZ_PFMET50_PFMHT60
- HLT_DoubleMu3_DZ_PFMET70_PFMHT70
- HLT_TripleMu_5_3_3_Mass3p8_DCA
- HLT_DoubleMu4_Mass3p8_DZ_PFHT350

2024 C 2024 D 2024 E 2024 F 2024 G 2024 H

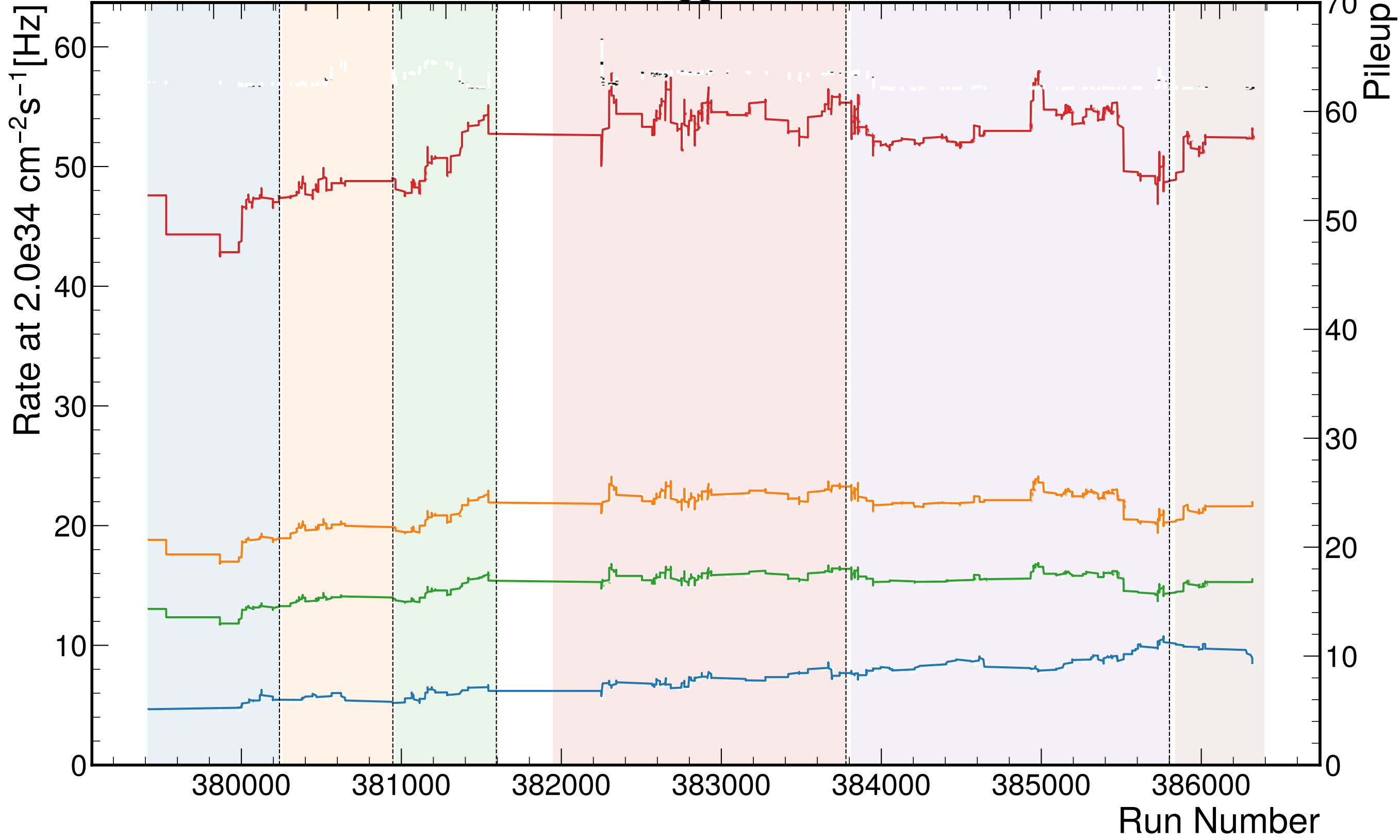
Muon/ey Trigger Paths



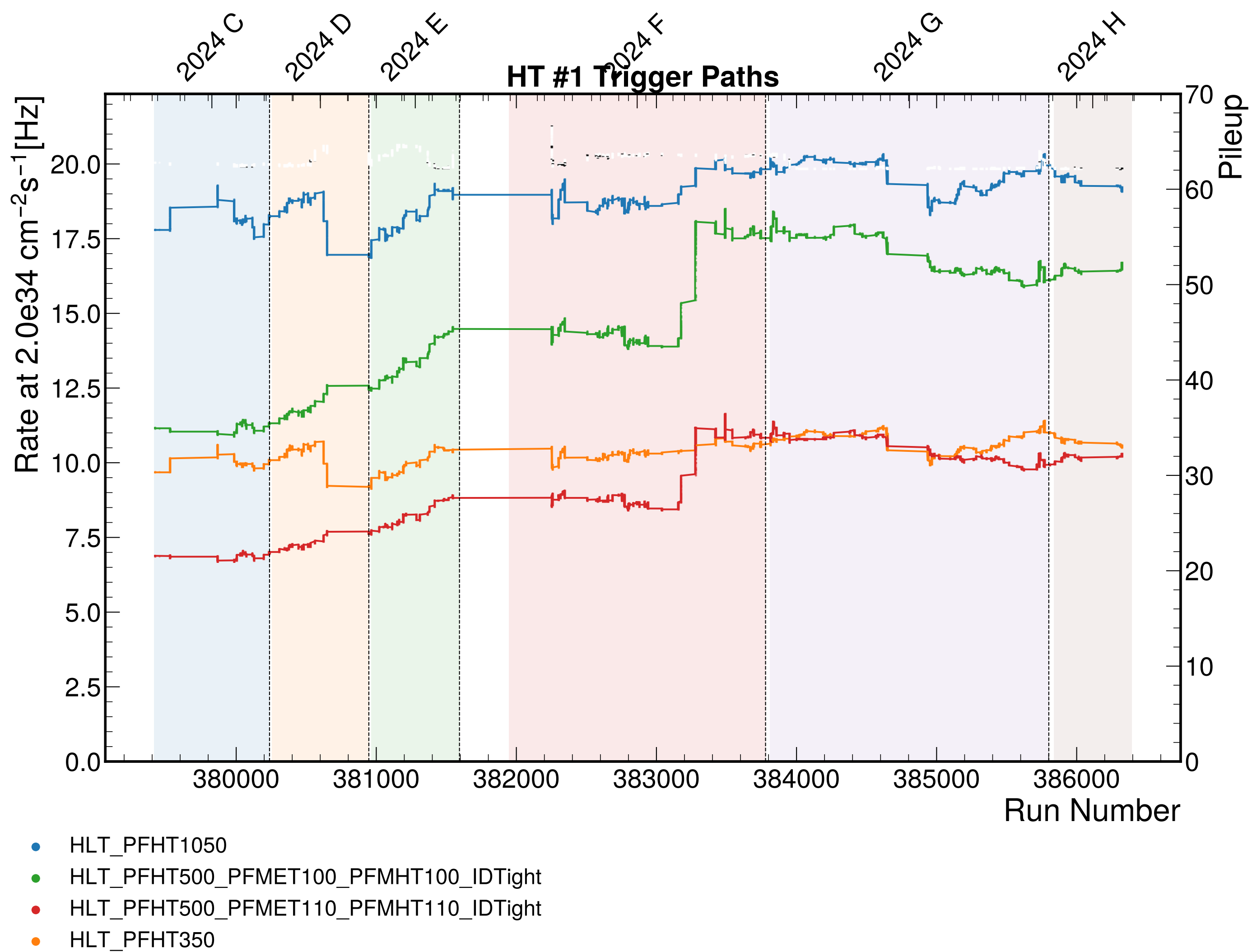
- HLT_Mu17_Photon30_IsoCalold
- HLT_Mu8_TrkIsoVVL_Ele23_CaloldL_TrackIdL_IsoVL_DZ
- HLT_Mu23_TrkIsoVVL_Ele12_CaloldL_TrackIdL_IsoVL
- HLT_DiMu4_Ele9_CaloldL_TrackIdL_DZ_Mass3p8
- HLT_Mu12_TrkIsoVVL_Ele23_CaloldL_TrackIdL_IsoVL_DZ
- HLT_Mu8_Ele8_CaloldM_TrackIdM_Mass8_PFHT350_DZ
- HLT_Mu23_TrkIsoVVL_Ele12_CaloldL_TrackIdL_IsoVL_DZ
- HLT_Mu37_Ele27_CaloldL_MW
- HLT_Mu8_Ele8_CaloldM_TrackIdM_Mass8_PFHT350

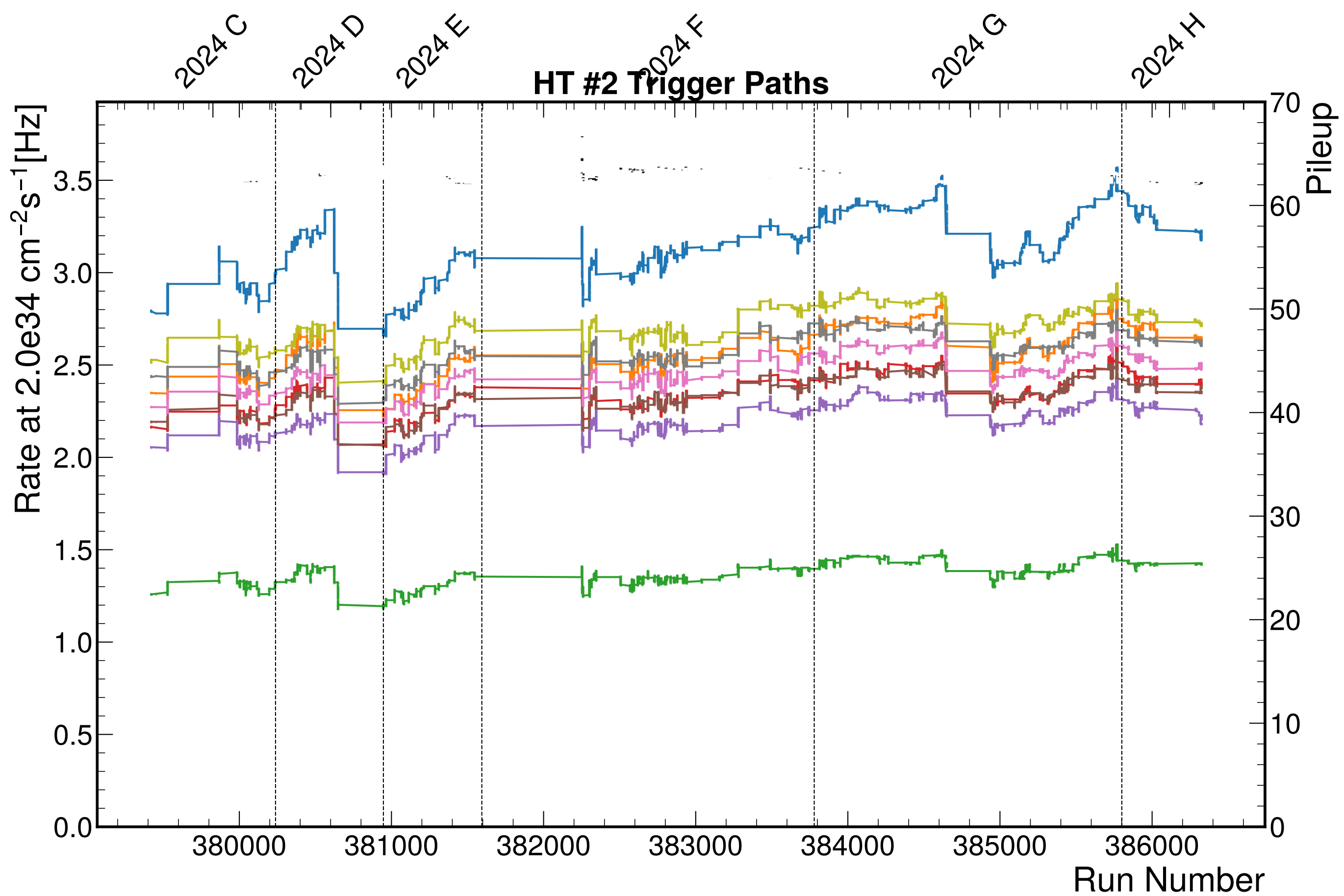
2024 C 2024 D 2024 E 2024 F 2024 G 2024 H

Tau Trigger Paths



- HLT_DoubleMediumDeepTauPFTauHPS35_L2NN_eta2p1
- HLT_DoubleMediumDeepTauPFTauHPS30_L2NN_eta2p1_PFJet60
- HLT_DoubleMediumDeepTauPFTauHPS30_L2NN_eta2p1_PFJet75
- HLT_DoubleMediumChargedIsoDisplacedPFTauHPS32_Trk1_eta2p1





- HLT_PFHT180
- HLT_PFHT890
- HLT_PFHT250
- HLT_PFHT780
- HLT_PFHT680
- HLT_PFHT430
- HLT_PFHT590
- HLT_PFHT510
- HLT_PFHT370

2024 C

2024 D

2024 E

Jet Trigger Paths

2024 G

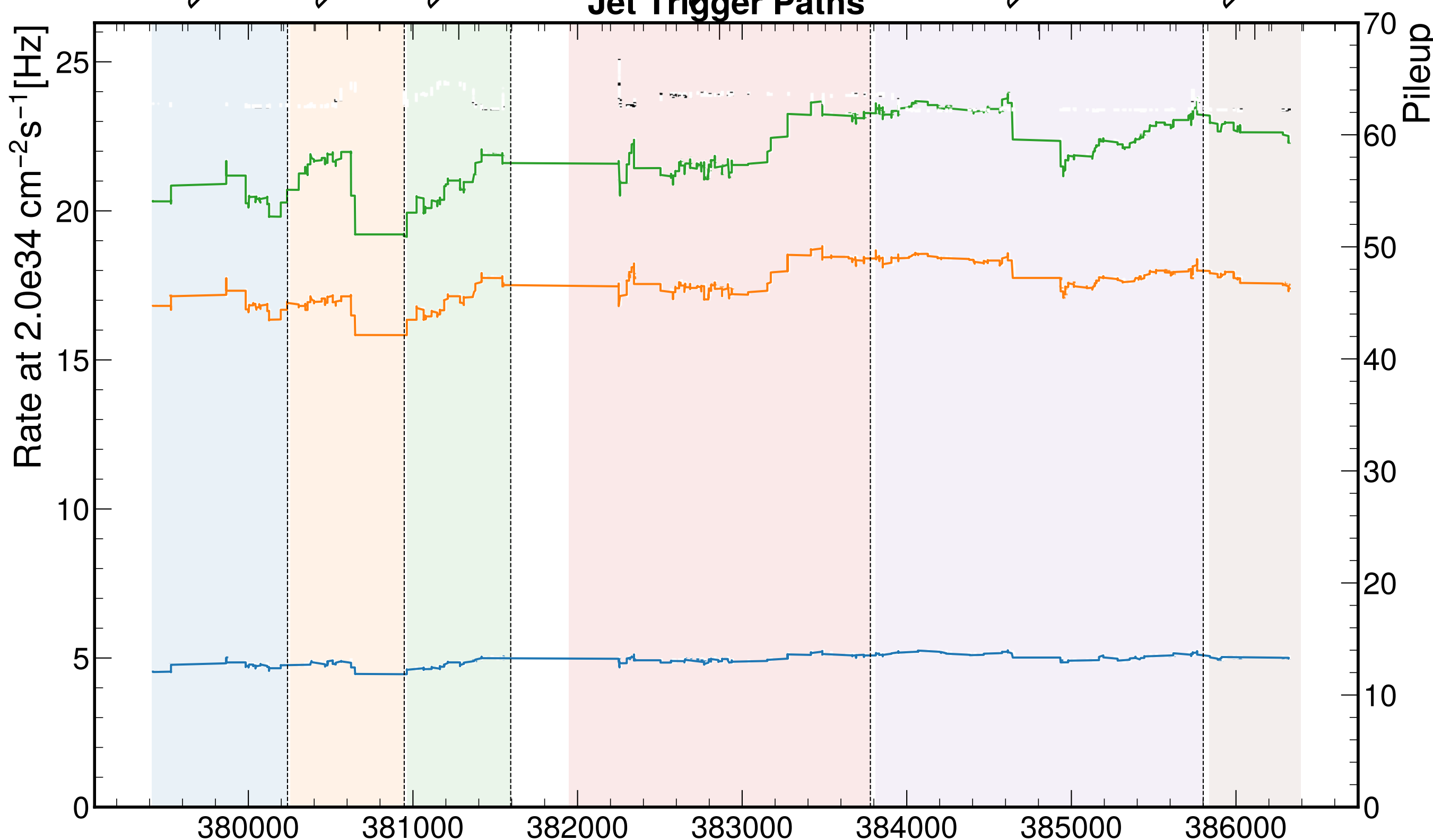
2024 H

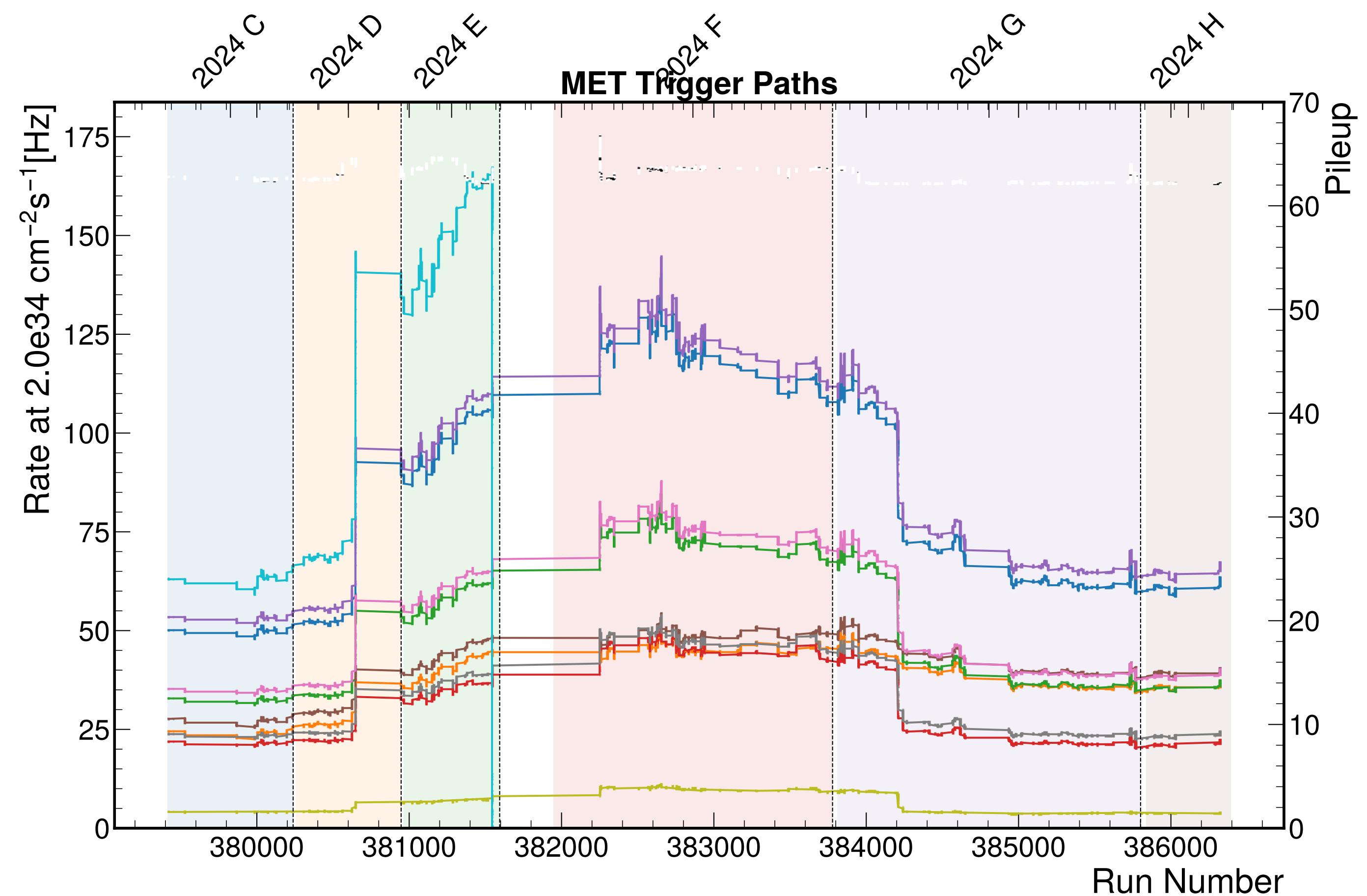
Rate at $2.0 \times 10^4 \text{ cm}^{-2} \text{ s}^{-1}$ [Hz]

Pileup

- HLT_AK8PFJet500
- HLT_PFJet500
- HLT_PFJet140

Run Number





- HLT_PFMETNoMu110_PFMHTNoMu110_IDTight_FilterHF
- HLT_PFMETNoMu120_PFMHTNoMu120_IDTight
- HLT_PFMET120_PFMHT120_IDTight
- HLT_PFMETNoMu130_PFMHTNoMu130_IDTight
- HLT_PFMET130_PFMHT130_IDTight
- HLT_PFMETNoMu120_PFMHTNoMu120_IDTight_PFH60
- HLT_PFMETNoMu140_PFMHTNoMu140_IDTight
- HLT_PFMET140_PFMHT140_IDTight
- HLT_PFMET120_PFMHT120_IDTight_PFH60
- HLT_PFMET200_BeamHaloCleaned