

2011 data filter for $H \rightarrow WW \rightarrow l\nu qq$

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- Tight staco combined muon with $p_T > 15, 20 \text{ GeV}$, $|\eta| < 2.4$ or tight electron (medium electron) with $E_T = E_{\text{cluster}} \sin(\theta^{\text{track}}) > 15, 20 \text{ GeV}$ and $|\eta^{\text{cluster}}| < 2.47$
- $\text{MET}^{\text{RefFinal}} > 25, 30 \text{ GeV}$
- At least two jets (AntiKt4EM) with $p_T > 15, 20 \text{ GeV}$, $|\eta| < 4.5$

Tested on 1000 events on run 182747 (G2, 26.4 pb^{-1}).

Number of events passing filter

cuts	muon stream	egamma stream (medium electron)
$p_T^l > 15 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 25 \text{ GeV}$	105	32 (91)
$p_T^l > 20 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 25 \text{ GeV}$	61	30 (86)
$p_T^l > 15 \text{ GeV}, p_T^{jet} > 20 \text{ GeV}, \text{MET} > 25 \text{ GeV}$	86	
$p_T^l > 15 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 30 \text{ GeV}$	62	
$p_T^l > 20 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 30 \text{ GeV}$	42	

On 10000 events

Number of events passing filter

cuts	muon stream	egamma stream
$p_T^l > 15 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 25 \text{ GeV}$	1007	383
$p_T^l > 20 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 25 \text{ GeV}$	582	339
$p_T^l > 20 \text{ GeV}, p_T^{jet} > 15 \text{ GeV}, \text{MET} > 30 \text{ GeV}$	406	249

Expected size of unfiltered ntuples: $\approx 2TB$ per stream