



- $\mu\mu \rightarrow t\bar{t}\mu\mu$ (emicut 5)
- - - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$)
- - - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5$)
- . - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS2
- $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS3
- . - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS5
- - - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS7
- . - $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS9
- $\mu\mu \rightarrow t\bar{t}\mu\mu$ ($\eta \mu_{\text{up}} < 0.5 \ \&\& \ \text{emicut} = 5$). HS10