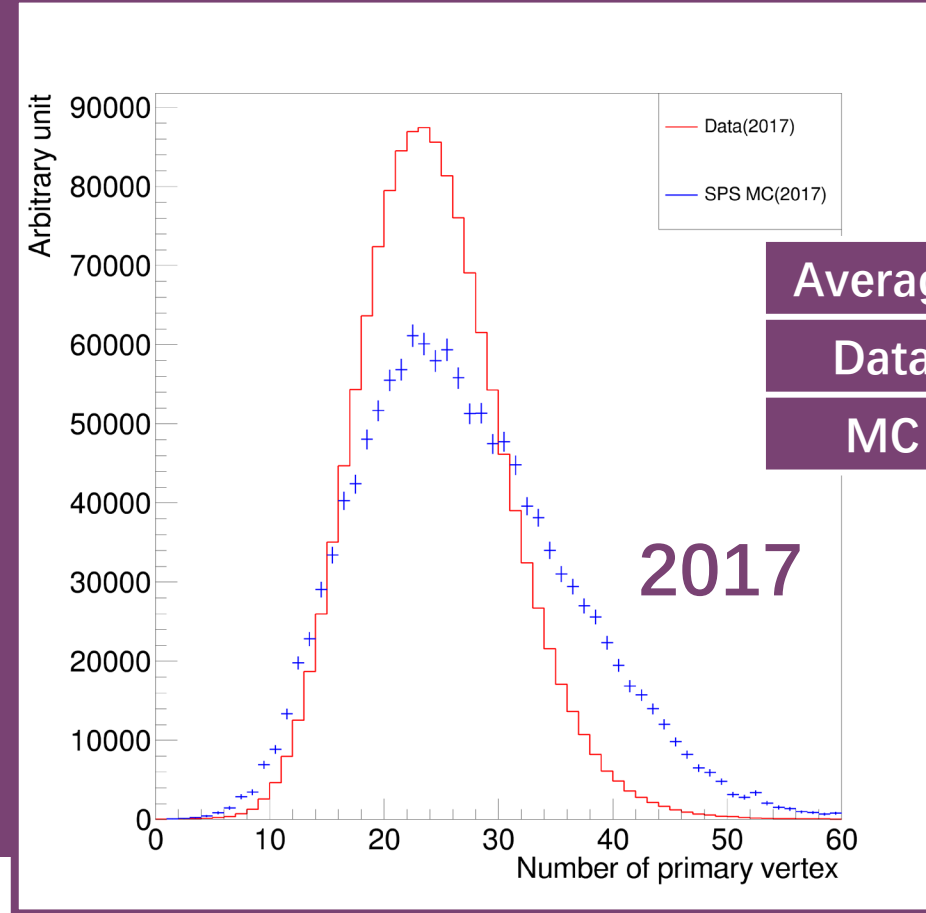
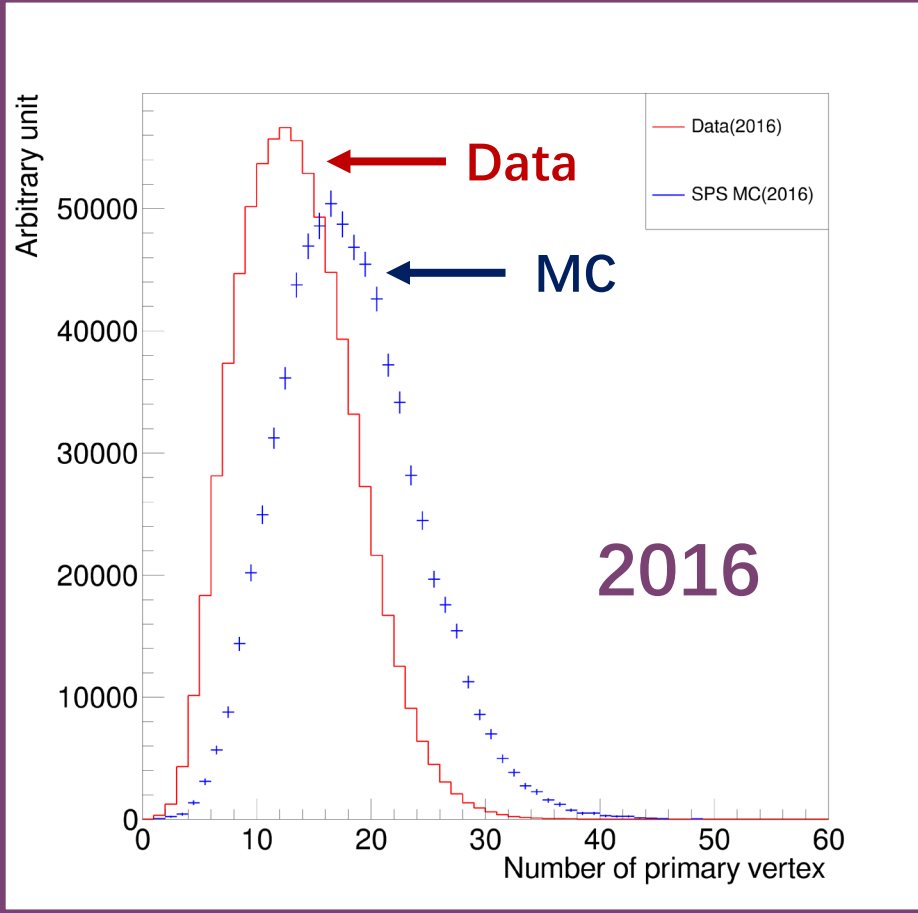




# Primary vertex

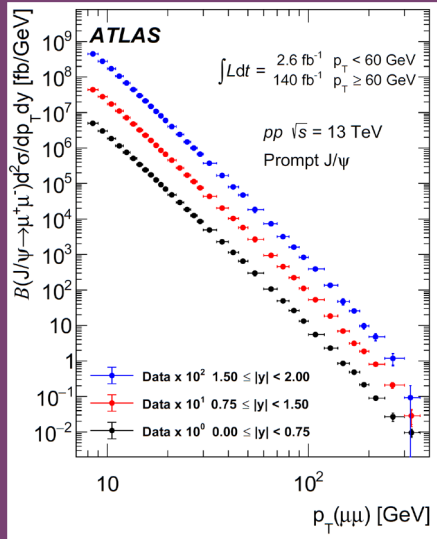
- The number of primary vertexes is checked:



Average	2016	2017
Data	13.1	23.9
MC	17.7	20.0



# Effective cross section from other groups



   : value not provided directly by papers

		$\sigma_{SPS \rightarrow J/\psi}$	$\sigma_{DPS \rightarrow J/\psi J/\psi}$	$\sigma_{eff}$
ATLAS	8TeV	429.8 nb	14.8 pb	6.3 mb
	13TeV	<span style="border: 1px dashed orange; padding: 2px;">370 nb</span>	<span style="border: 1px dashed orange; padding: 2px;">10.9 pb</span>	<span style="border: 1px dashed orange; padding: 2px;">6.3 mb</span>
LHCb	7TeV	<span style="border: 1px dashed orange; padding: 2px;">10 <math>\mu</math>b</span>	<span style="border: 1px dashed orange; padding: 2px;">8.61 nb</span>	<span style="border: 1px dashed orange; padding: 2px;">5.81 mb</span>
	13TeV	15.03 $\mu$ b	8.6 nb	13.1 mb
Our result		<span style="border: 1px dashed orange; padding: 2px;">370 nb</span>	44.1 pb	1.55 mb

$$\sigma^{J/\psi J/\psi} = 5.1 \pm 1.0 \pm 1.1 \text{ nb,}$$

$$\sigma^{J/\psi J/\psi} / \sigma^{J/\psi} = (5.1 \pm 1.0 \pm 0.6^{+1.2}_{-1.0}) \times 10^{-4},$$

Arxiv:1410.8822