

Fraction of events

CMS

- - - $m_S = 3$ GeV
- - - $m_S = 7$ GeV
- · - · $m_S = 15$ GeV
- · · $m_S = 40$ GeV
- · - · $m_S = 55$ GeV
- Data (no RPC match)

Signal region
→ $S \rightarrow d\bar{d}$ $c\tau = 1$ m

1

10⁻¹10⁻²

50

100

150

200

250

300

350

400

450

500

 N_{hits}