atm pdf hatm 50000 S **Entries** 700825 8.621 Mean x 45000 Mean y 6977 RMS x 4.854 40000 RMS y 2742 35000 0.1 30000 0.08 25000 0.06 20000 15000 0.04 10000 0.02 5000 0 r 0 8 12 16 18 20 10 14 S1