

RMS azimuthal deviation (m)

$\log_{10} M_{\text{max}}/M_{\odot}$

-12

-13

-14

-15

-16

10^3

$N = 100$

$\sigma_M = 10^{-12.7}$

$N = 300$

$\sigma_M = 10^{-13.3}$

LSST: $\sigma_M = 10^{-13.6}$

$N = 1000$

$\sigma_M = 10^{-14.4}$

$N = 3000$

$\sigma_M = 10^{-15.4}$

$N = 10000$

$\sigma_M = 10^{-16.0}$

10^2

10^1

6

7

8

9

H_{min}

11

12

13

14

10^0

10^{-1}

10^{-2}

RMS azimuthal angular shift (mas)