Distribution of $S(\hat{\mathbf{k}}, \mathbf{U}, \mathbf{U}')$

$\hat{\mathbf{k}}_{\text{global}}$

$\mathbb{E} = 7982.55715868$
$\text{Sd} = 3320.1583098$

$\hat{\mathbf{k}}_{1.0}$

$\mathbb{E} = 8056.18832201$
$\text{Sd} = 3354.39882953$

$\hat{\mathbf{k}}_{\text{mean}}$

$\mathbb{E} = 8107.59388476$
$\text{Sd} = 3372.84194607$

$\hat{\mathbf{k}}_{\text{var}}$

$\mathbb{E} = 8547.63174555$
$\text{Sd} = 3452.43083463$