

$\text{sig} = [1, 9]$, $\text{nom} = [50, 50]$
 $\text{bkg_up} = [\text{nom} + u, \text{nom} - u]$
 $\text{bkg_down} = [\text{nom} + d, \text{nom} - d]$
 $|u|, |d| < 10$

