

# Allan Deviation $\sigma_y(\tau)$

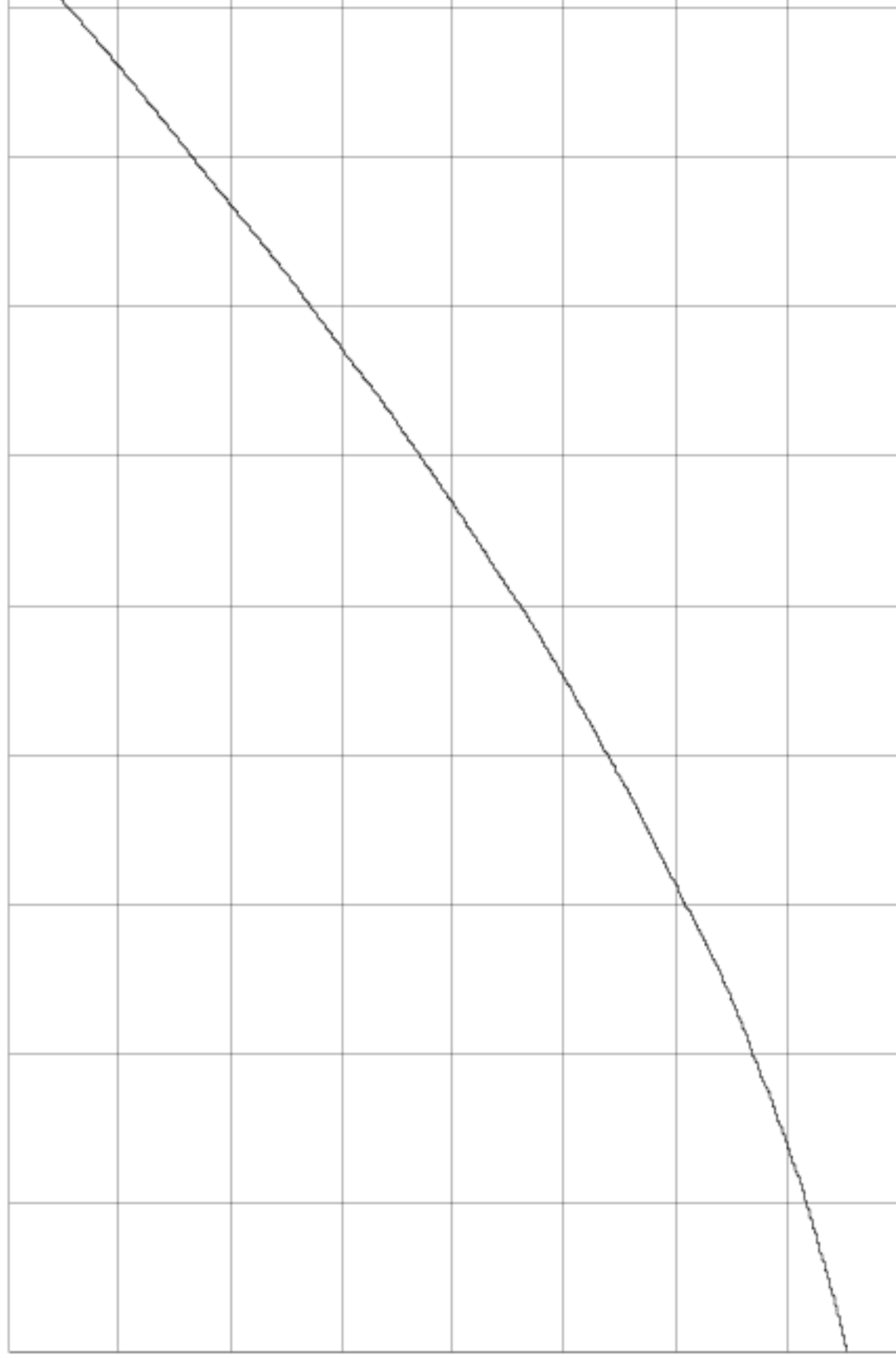
Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	$9.62 \times 10^{-12}$	$1.37086 \times 10^{-13}$
2	$7.93 \times 10^{-12}$	$9.88445 \times 10^{-14}$
4	$6.47 \times 10^{-12}$	$6.99376 \times 10^{-14}$
10	$4.60 \times 10^{-12}$	$4.43499 \times 10^{-14}$
20	$4.3 \times 10^{-12}$	$2.56690 \times 10^{-14}$
40	$6.5 \times 10^{-12}$	$2.34559 \times 10^{-14}$
100	$1.40 \times 10^{-11}$	
200	$2.5 \times 10^{-11}$	
400	$5.1 \times 10^{-11}$	

$\tau_0 = 1 \text{ s}$       NEQ BW = 0.5 Hz

# Phase Difference

8.0x10<sup>-09</sup> s/div

Center: 3.760x10<sup>-08</sup> s



60s/div

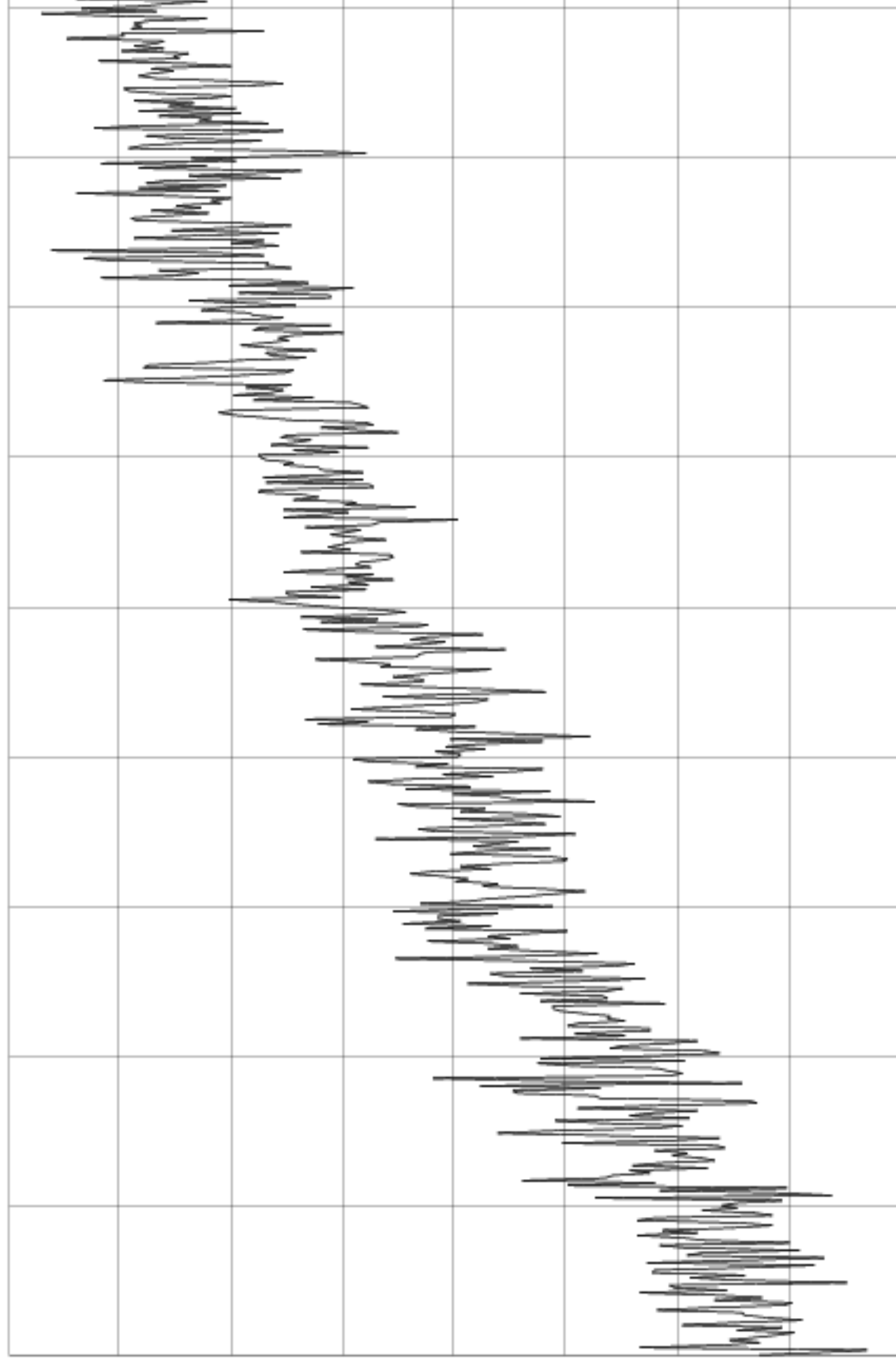
Input 10.0 MHz 15 dBm

Reference 5.0 MHz 12 dBm

# Frequency Difference

$2.0 \times 10^{-11}$  /div

Center:  $9.792 \times 10^{-11}$



60s/div

Input 10.0 MHz 15 dBm

Reference 5.0 MHz 12 dBm

# Frequency Counter

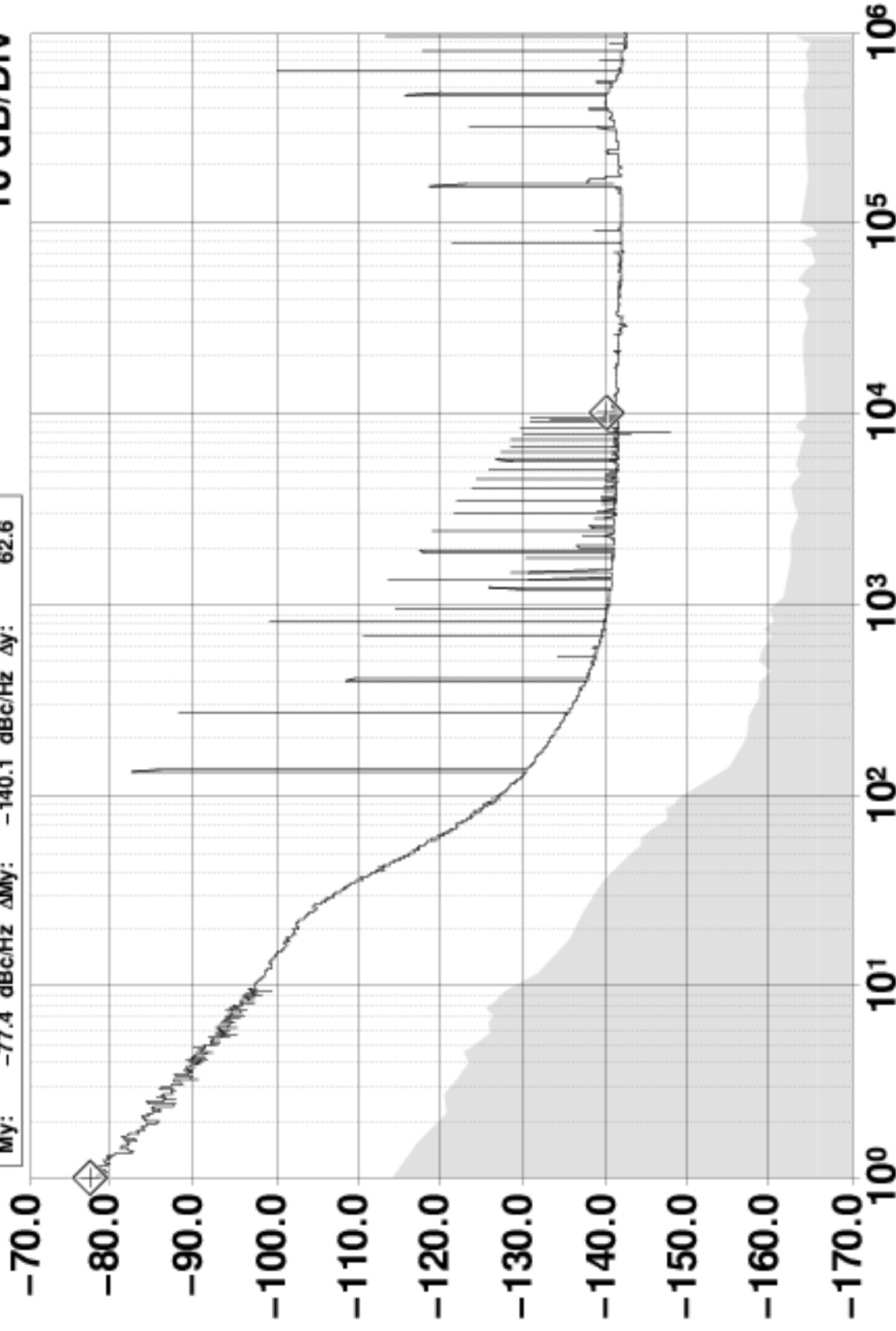
Sample Time (s)	Frequency (MHz)
1	9.9999998413041
10	9.99999984139053
100	9.999999841550058

Reference Frequency: 5.0 MHz (auto)

# $\mathcal{L}(f)$ Phase Noise at 10.0 MHz (dBc/Hz)

Mx: 1.000977 Hz  $\Delta$ Mx: 10009.77 Hz  $\Delta$ x: -10008.8  
My: -77.4 dBc/Hz  $\Delta$ My: -140.1 dBc/Hz  $\Delta$ y: 62.6

10 dB/Div



Offset Frequency (Hz)

Time Constant:  $\infty$

Input 10.0 MHz 15 dBm

Reference 5.0 MHz 12 dBm