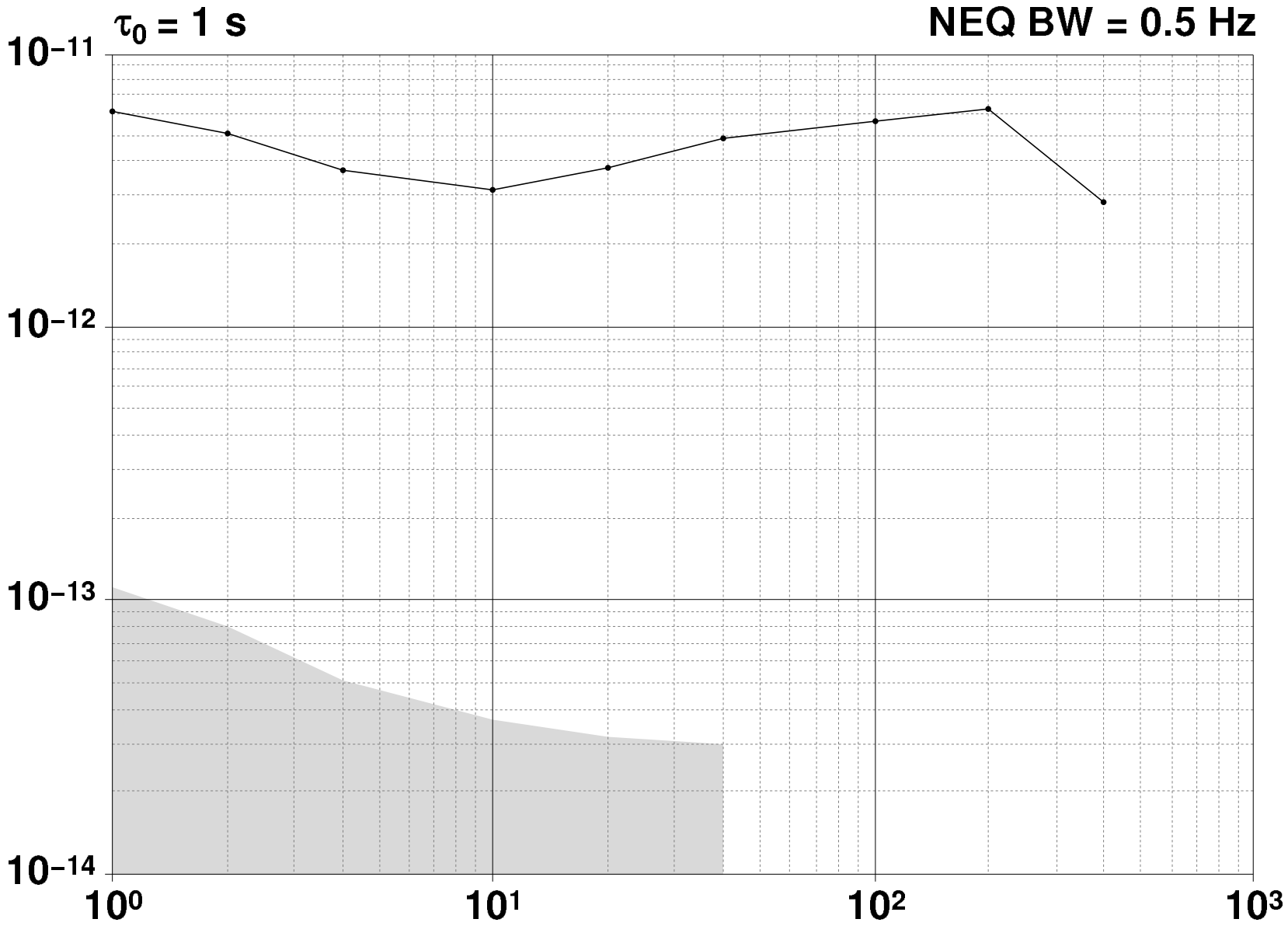
05/02/2012 17:20:25
15m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$



Input 10.0 MHz 5 dBm

Reference 5.0 MHz 12 dBm

05/02/2012 17:20:25
15m

TSC 5120A

Allan Deviation $\sigma_y(\tau)$

Avg. Time (s)	Allan Deviation $\sigma_y(\tau)$	Noise Floor
1	6.12×10^{-12}	1.11026×10^{-13}
2	5.03×10^{-12}	8.02424×10^{-14}
4	3.72×10^{-12}	5.11176×10^{-14}
10	3.12×10^{-12}	3.67727×10^{-14}
20	3.8×10^{-12}	3.17818×10^{-14}
40	4.8×10^{-12}	2.97044×10^{-14}
100	5.6×10^{-12}	
200	6.2×10^{-12}	
400	2.9×10^{-12}	

$\tau_0 = 1$ s NEQ BW = 0.5 Hz

Input 10.0 MHz 5 dBm

Reference 5.0 MHz 12 dBm

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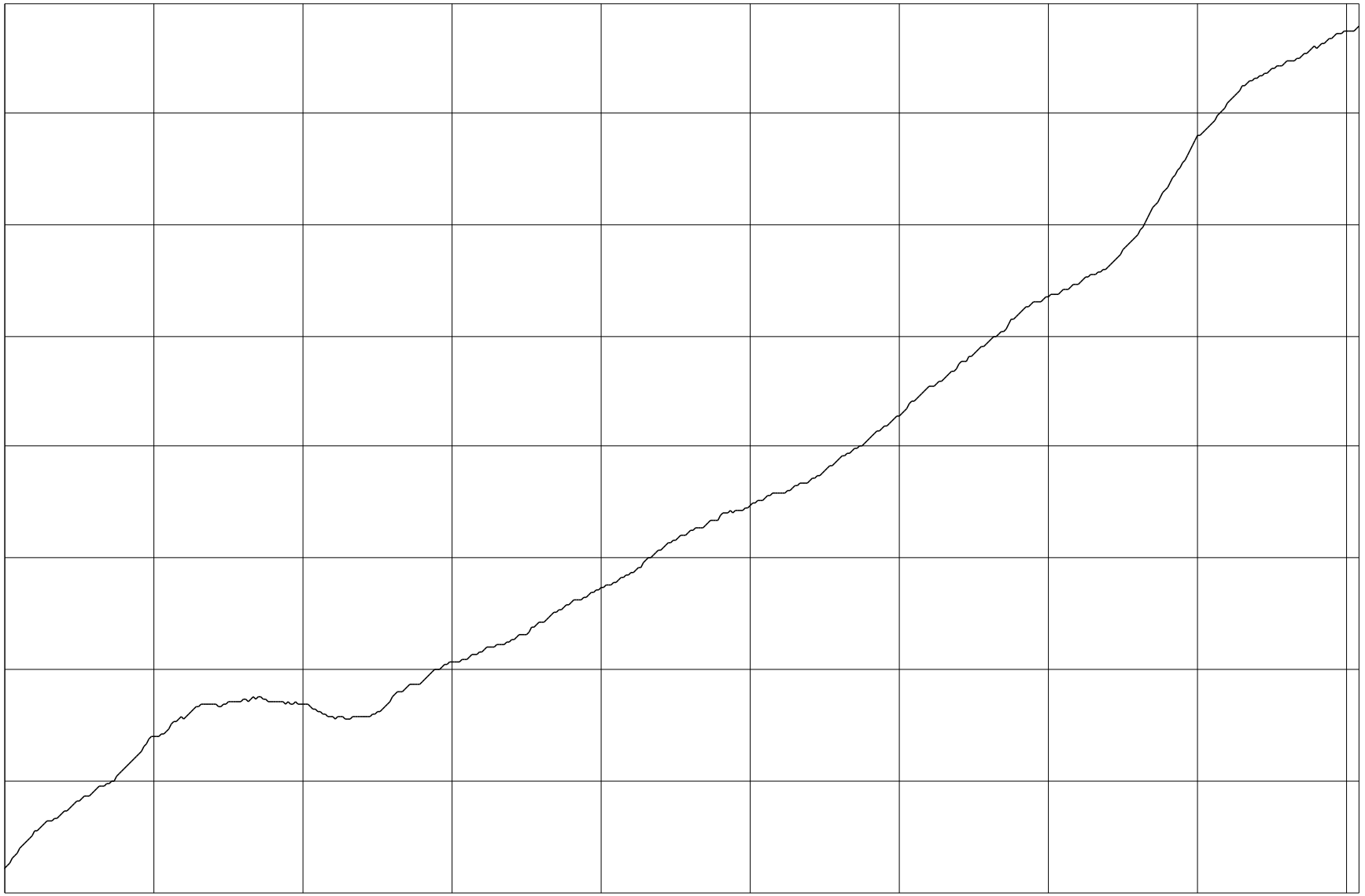
15m

TSC 5120A

Phase Difference

7.0x10^{-10} s/div

Center: 4.180x10^{-09} s



60s/div

Input 10.0 MHz 5 dBm

Reference 5.0 MHz 12 dBm

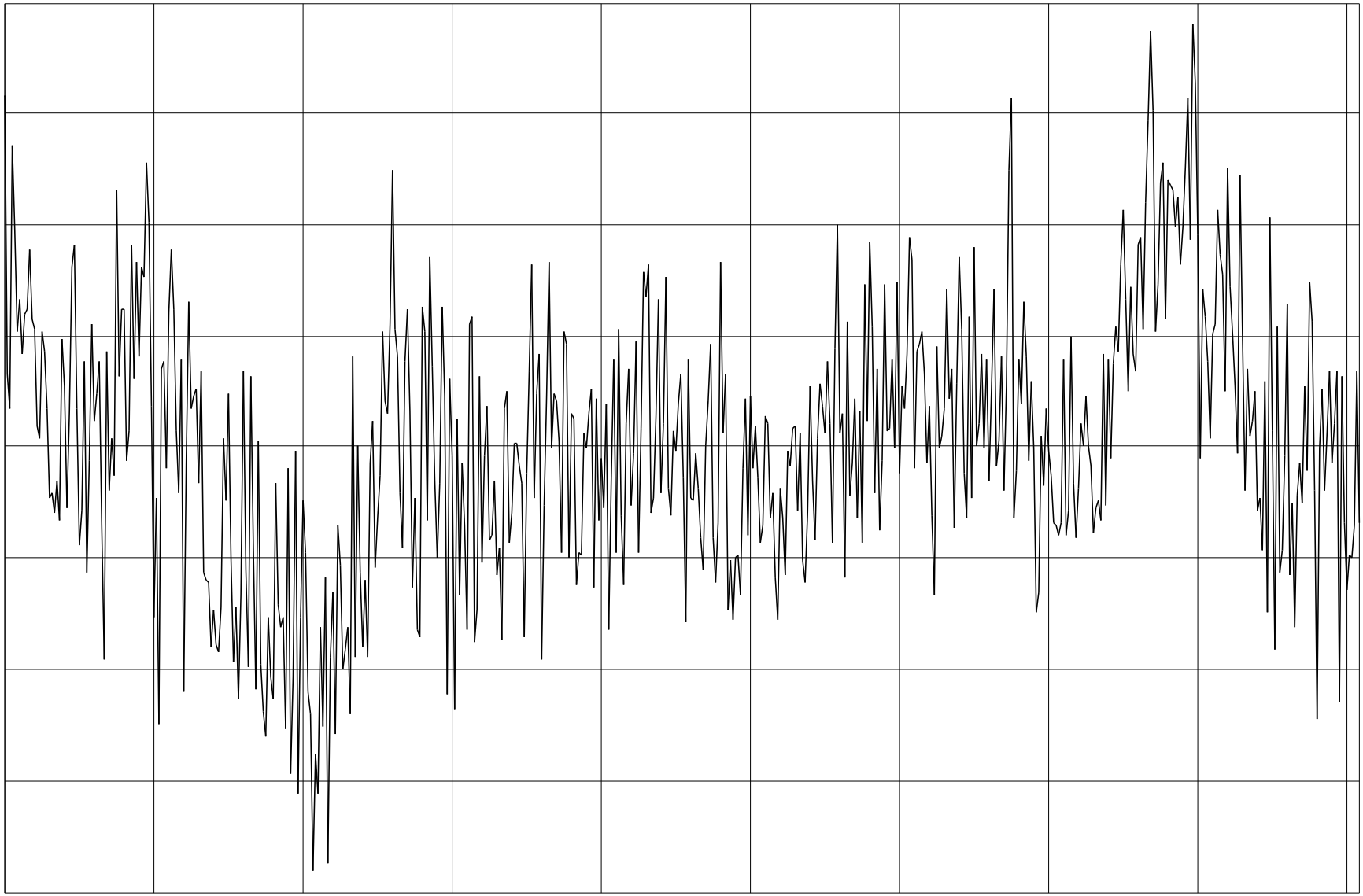
05/02/2012 17:20:25
15m

TSC 5120A

Frequency Difference

7.0x10^{-12} /div

Center: 9.449x10^{-12}



60s/div

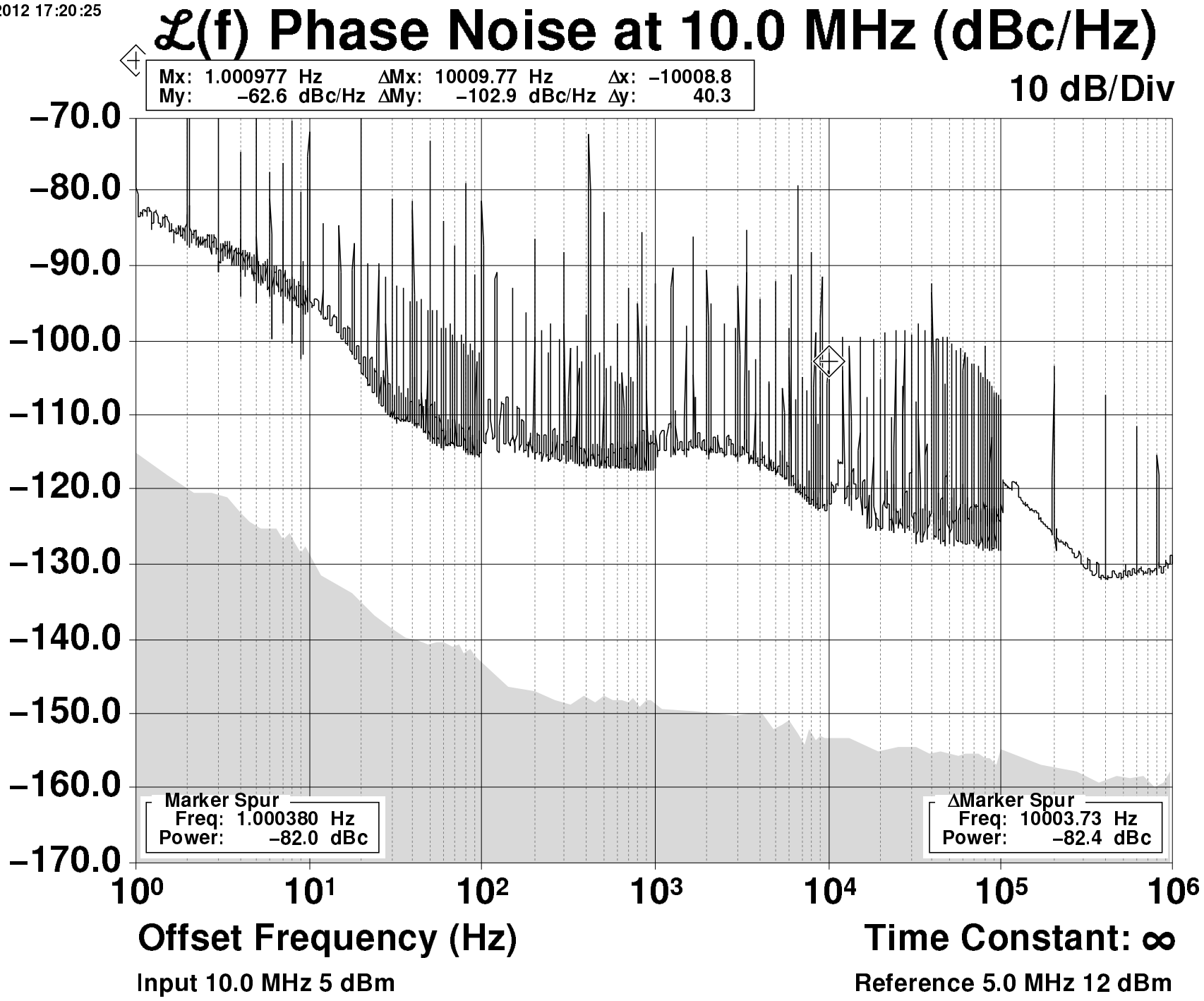
Input 10.0 MHz 5 dBm

Reference 5.0 MHz 12 dBm

Frequency Counter

Sample Time (s)	Frequency (MHz)
1	9.9999998454998
10	9.99999984538091
100	9.999999845286945

Reference Frequency: 5.0 MHz (auto)

05/02/2012 17:20:25
15m

TSC 5120A