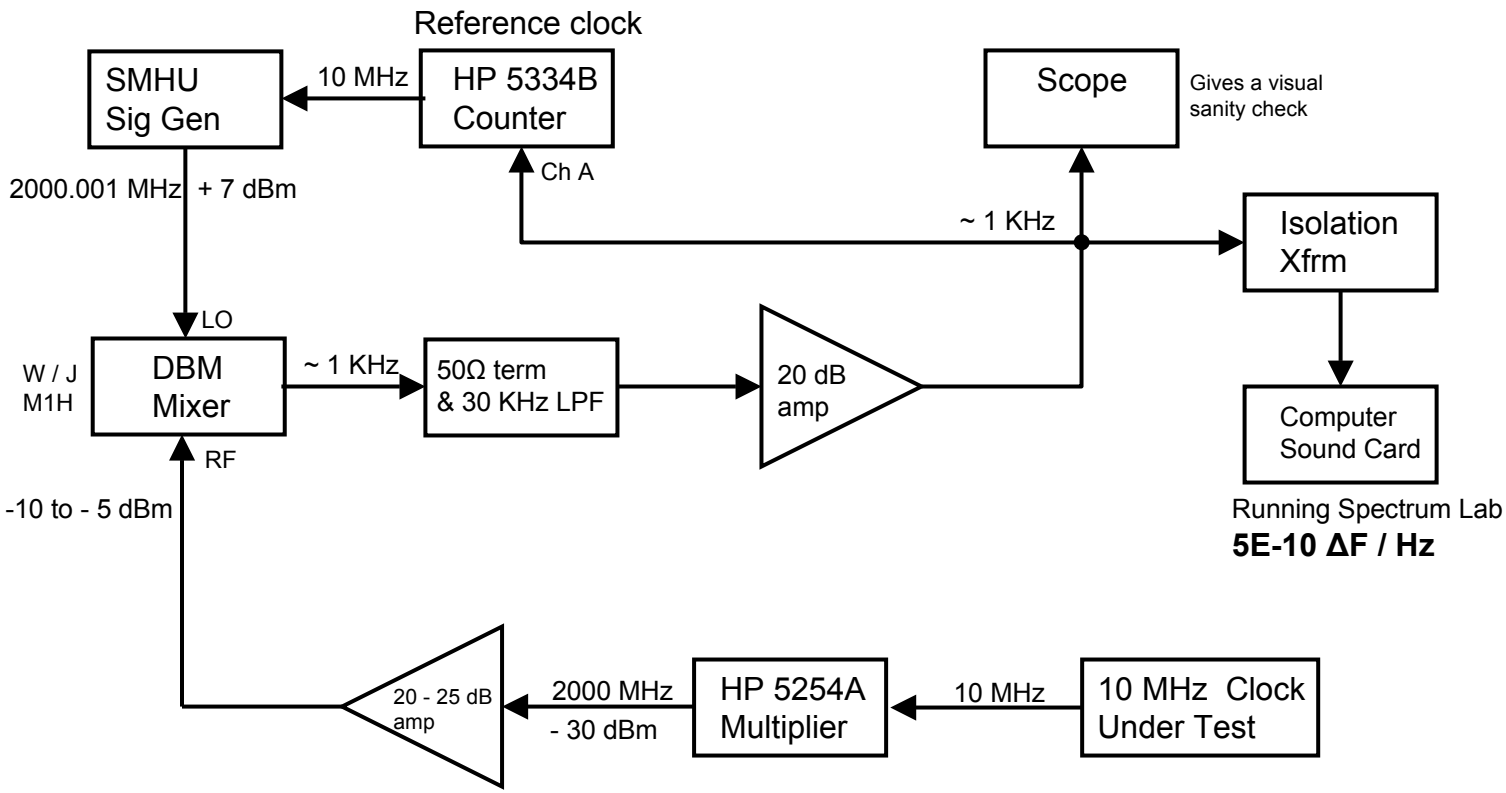
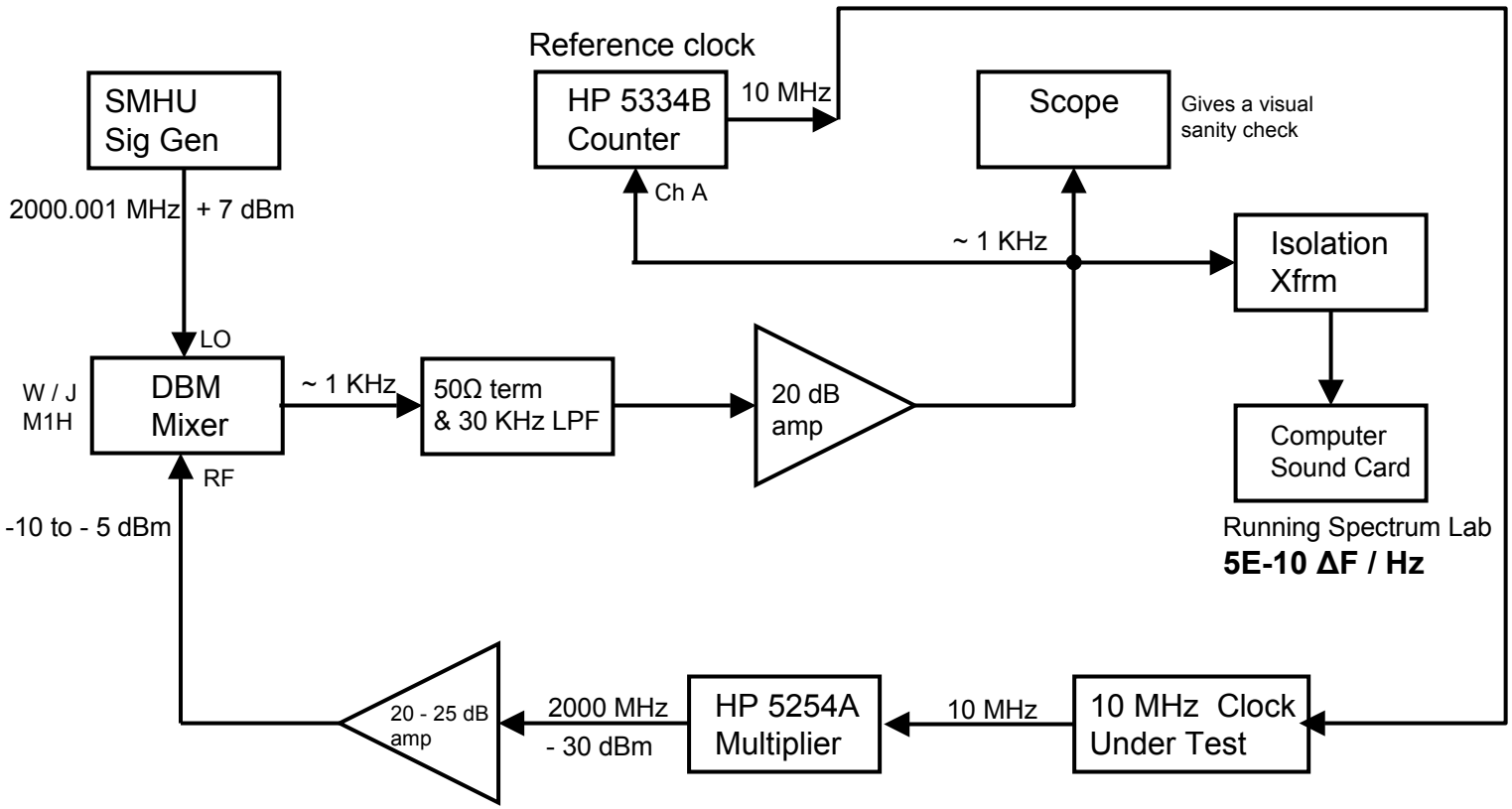
SET UP FOR FREQUENCY STABILITY TESTS

Setup GPS(HP 10544a) – HP 70310 – HP 8924C – MV89A vs HP 5334



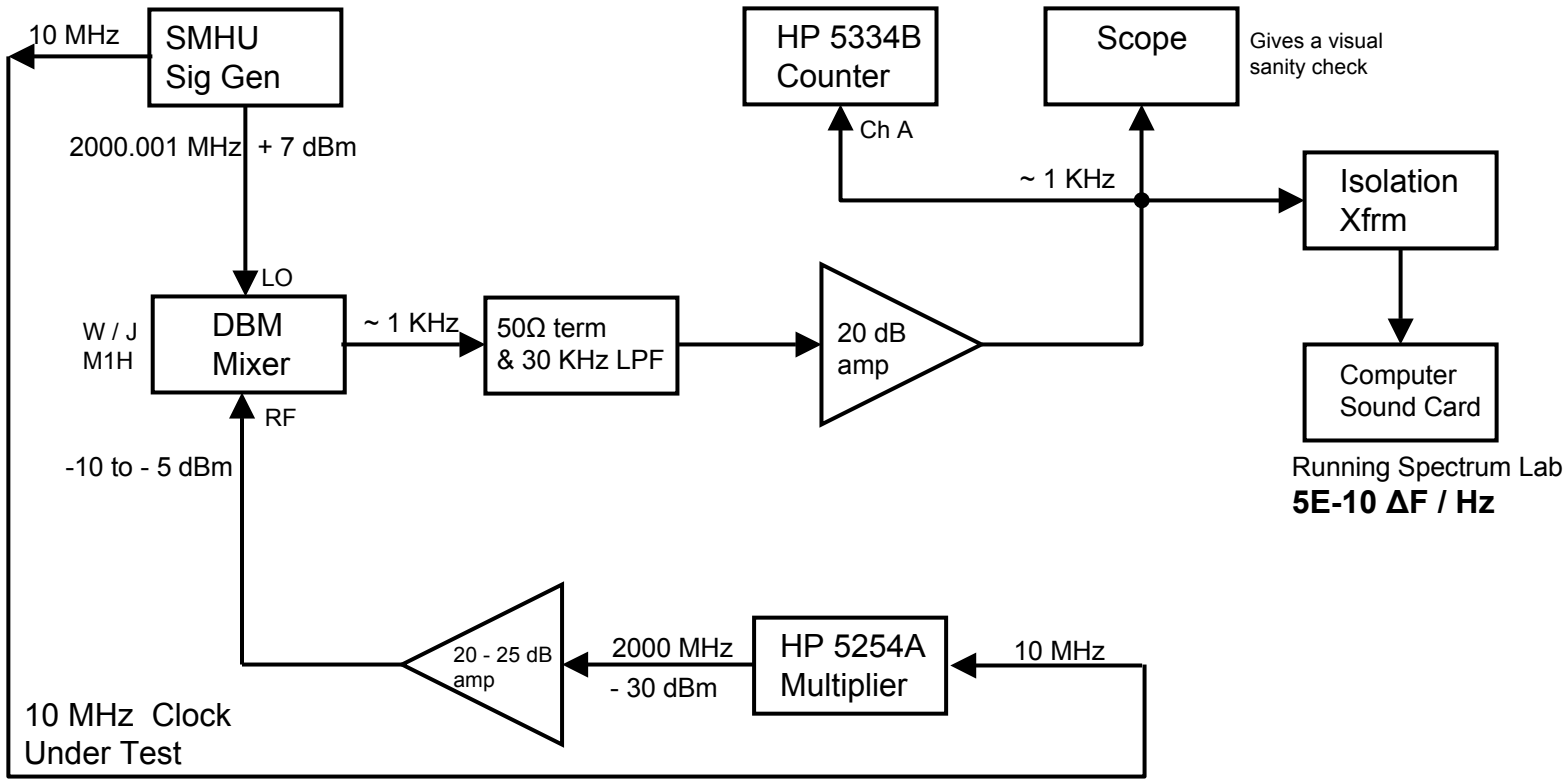
SET UP FOR FREQUENCY STABILITY TESTS

Setup SMHU VS HP 5334

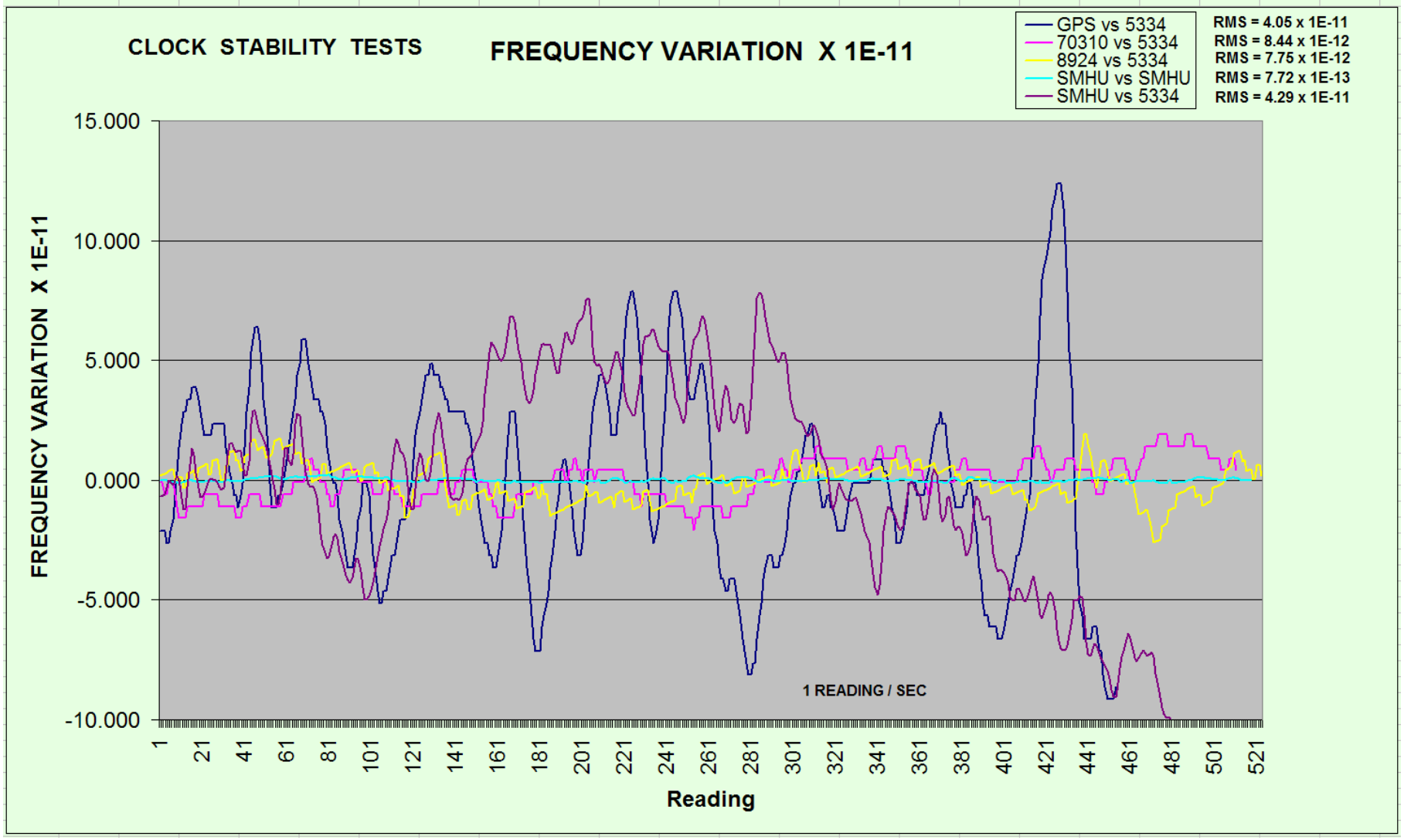


SET UP FOR FREQUENCY STABILITY TESTS

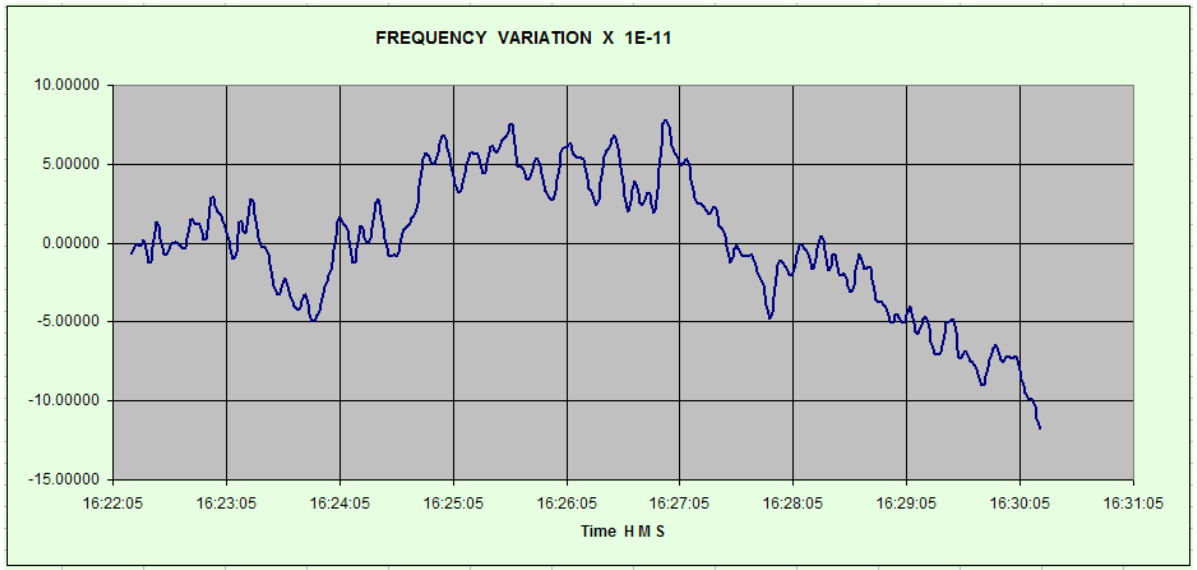
Setup SMHU vs SMHU



GPS = HP 10544A OCXO inside HP 5328A Counter



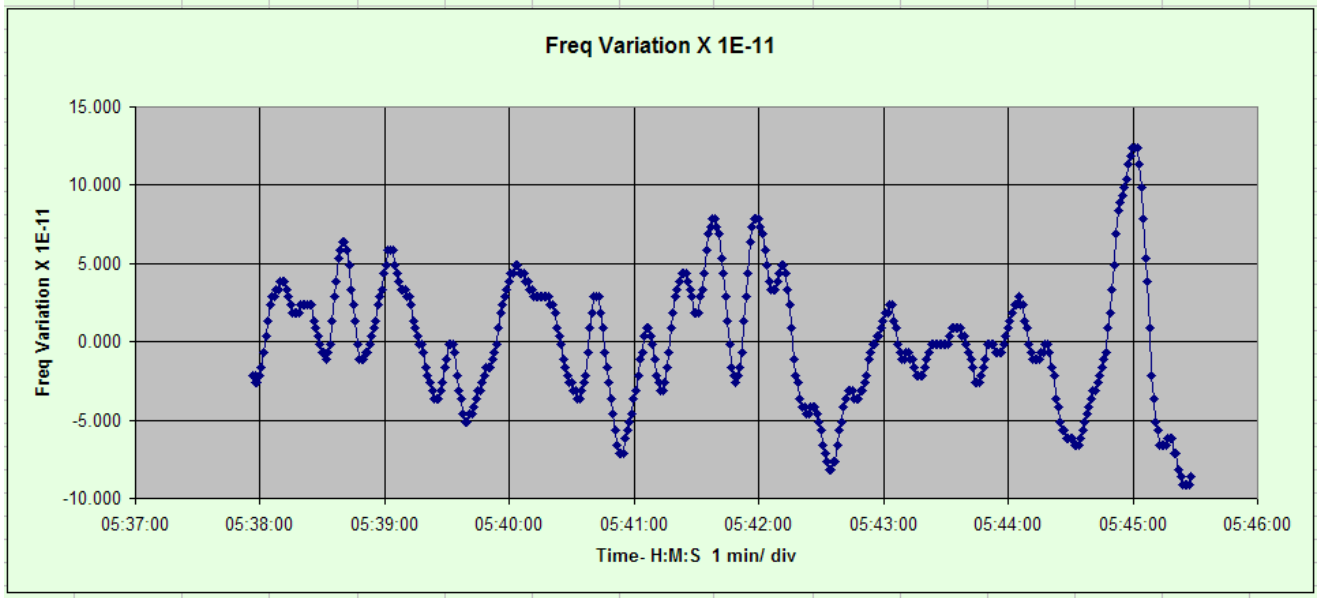
SMHU with HP 5334B as Reference Time Base



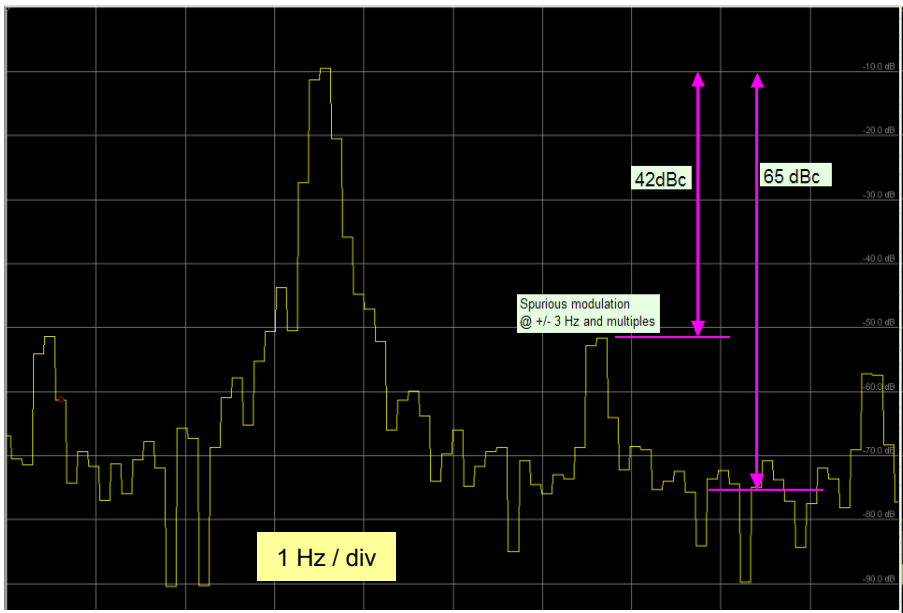
Average Peak Freq	1012.338	Peak to Peak Variation =	1.96E-10	Standard Deviat. =	4.29E-11

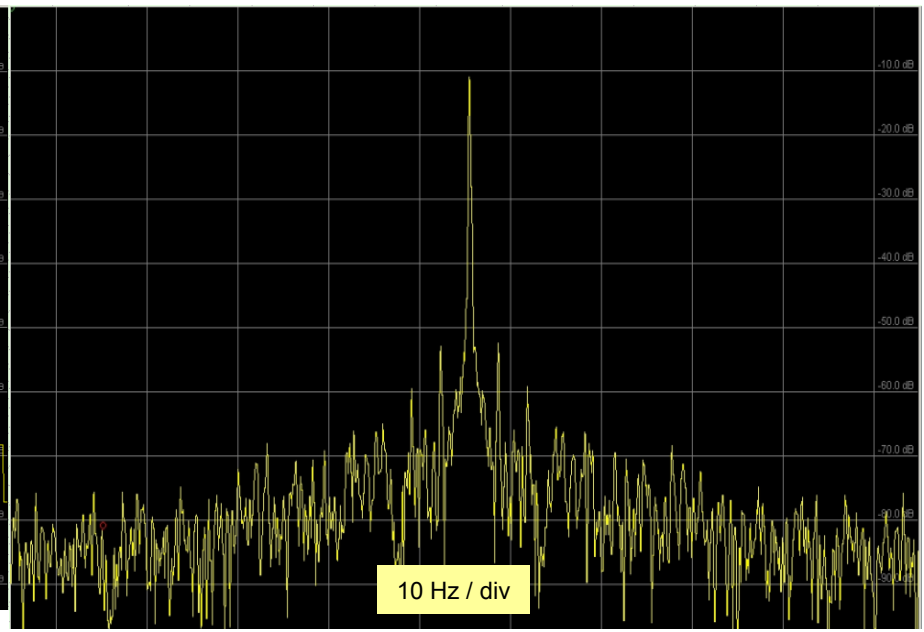
GPS Standard with HP 5334B as Reference Time Base

HP 10544A VCXO inside HP 5328A counter

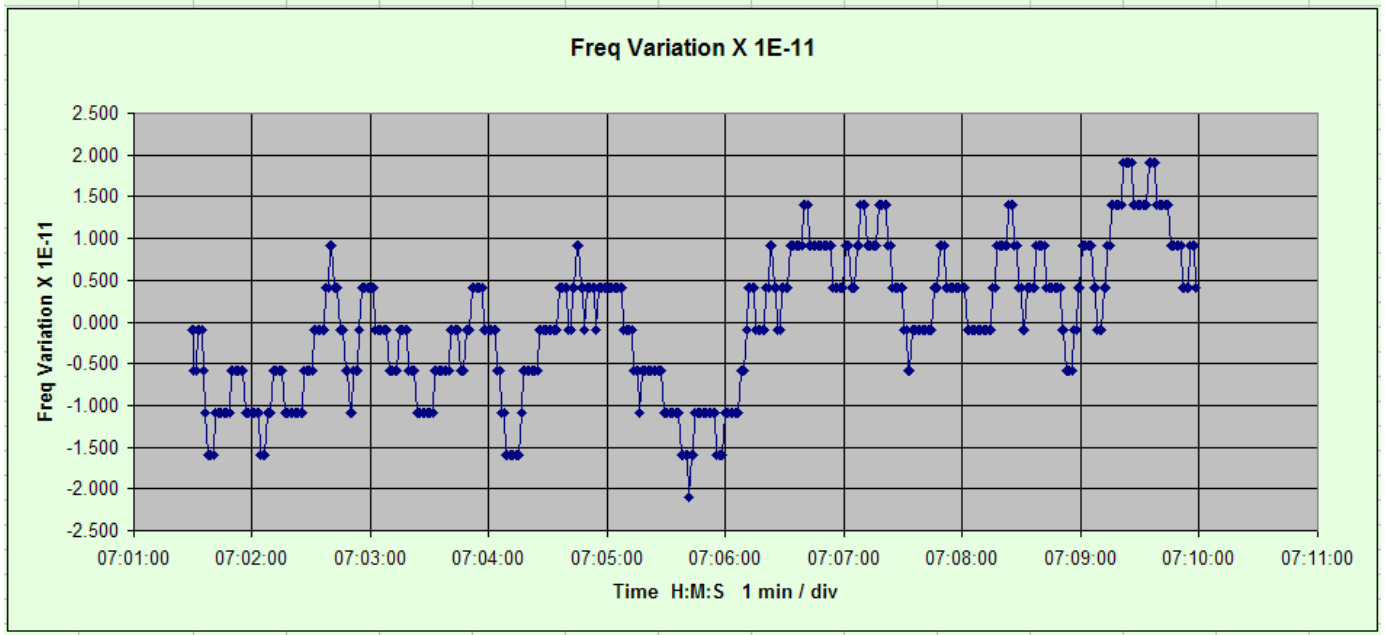


Average Peak Freq =	1004.703	Peak to Peak Variation =	2.150E-10

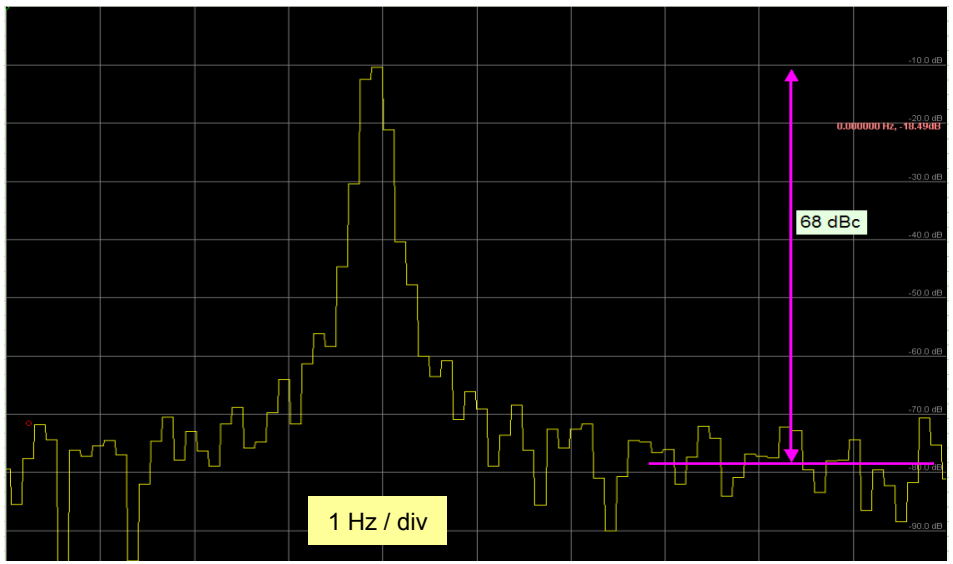




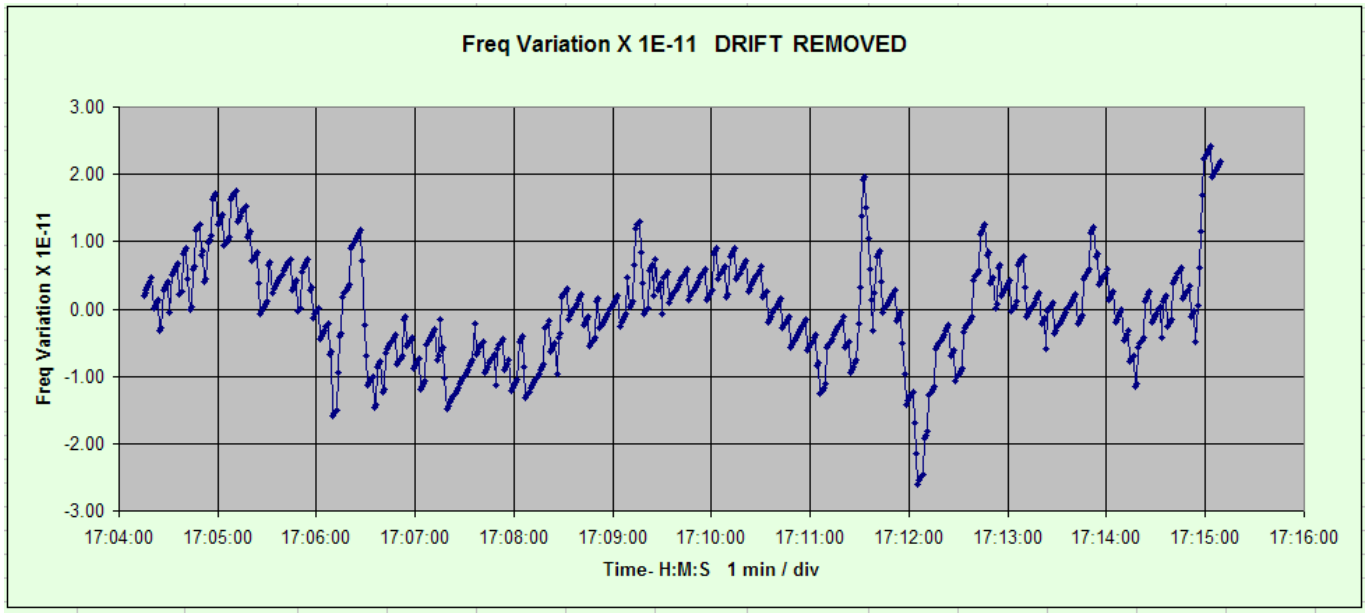
HP 70310A with HP 5334B as Reference Time Base	SA WARM



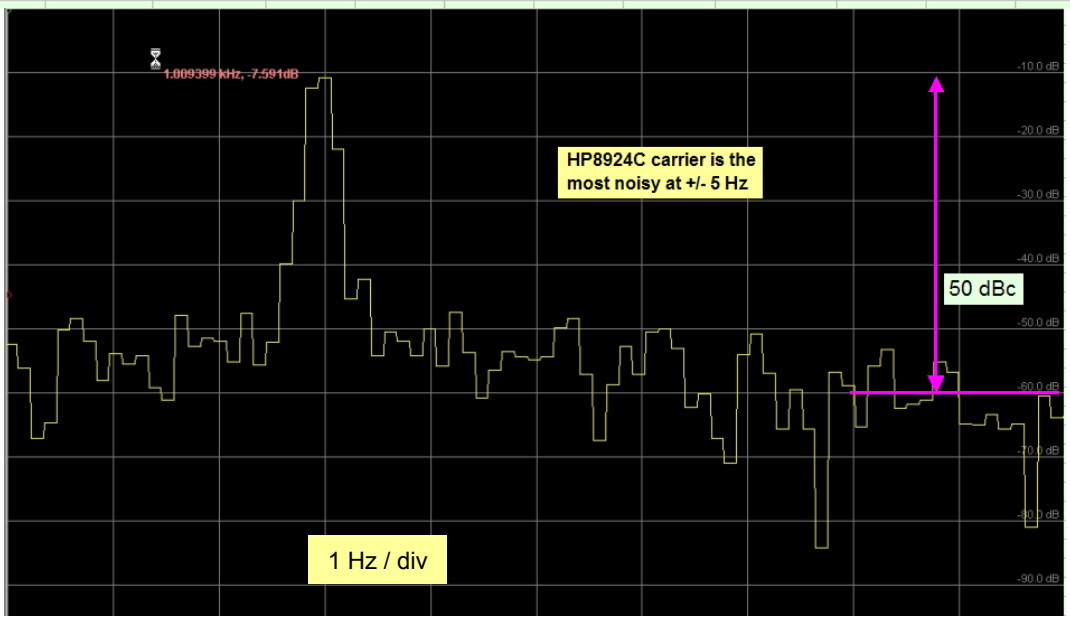
Average Peak Freq =	1004.892	Peak to Peak Variation =	4.00E-11



HP8924C with HP 5334B as Reference Time Base



Average Peak Freq =	1.48E+01	Peak to Peak Variation =	5.02E-11	Standard Deviat. =	7.75E-12



SET UP FOR SPECTRUM LAB

- Set frequency MIN / MAX around 1000 Hz as req'd with a 10 Hz span
- In OPTIONS select ***FFT*** and set size = 8192, decimate = 8, Hann filter.
  This gives FFT bin size of 122 mHz and 183 mHz noise bandwidth.
  Also set ***Complex Internal Freq Shift*** mode.
  Select Memory and set ***Max FFT Bins in File*** = 8192
- In OPTIONS select ***Audio I/O*** and set to 8 KHz.
- In FILES, select ***Text File Export***. Select: **Export of Calculated Data**
  In File Contents set the ***Peak_f***(….,….) with the proper MIN/MAX freq.
  In File ***Name and Activation***, enter file name, check ***active*** when ready to record.
  Uncheck: Use ***Write Intervals***: 1.0 sec.
  The write interval will be set in ***OPTION***S, ***Spectrum1***, ***Waterfall Scroll Interval*** = 300 mS by default.
- First try displaying the spectrum without recording. In START/STOP, set ***START Sound Thread***.
- When ready to record, set ***STOP Sound Thread*** and activate the file, as above.
  Then start recording by setting START/STOP to ***START Sound Thread***.
- The recorded file will appear in the Spectrum Lab directory.

Reference: SpecLabInfo.pdf on my web site