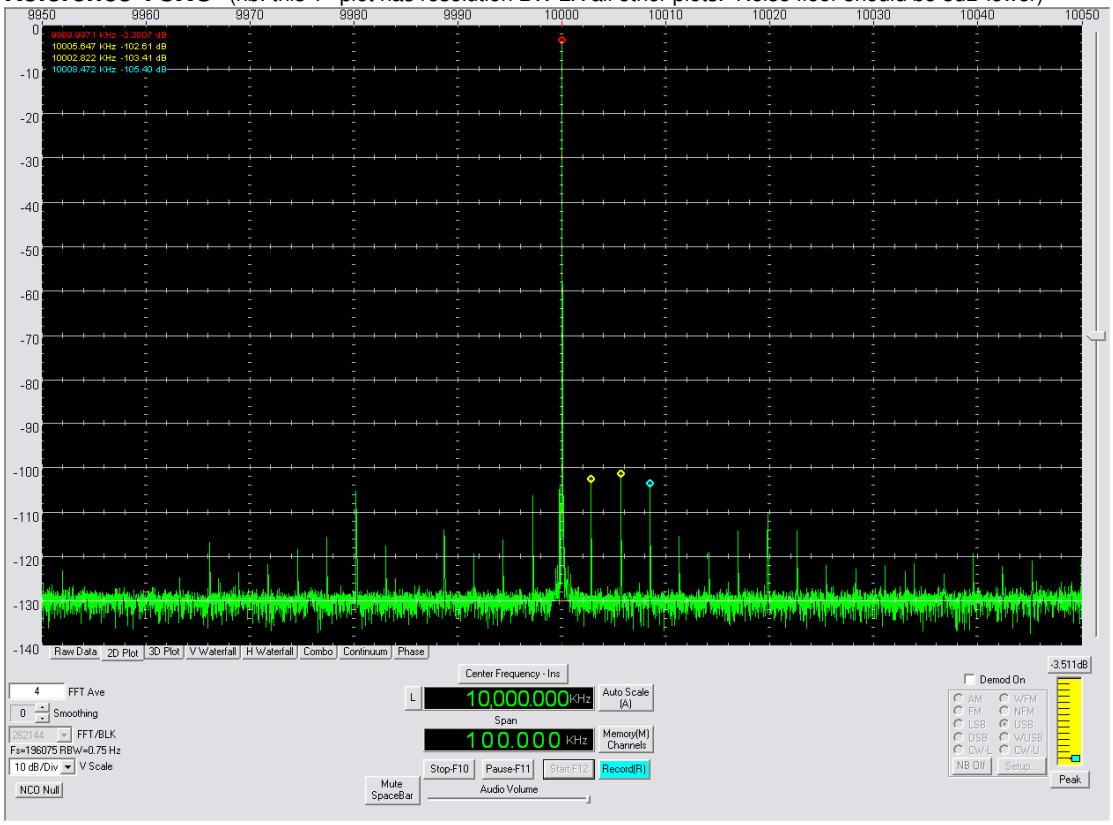
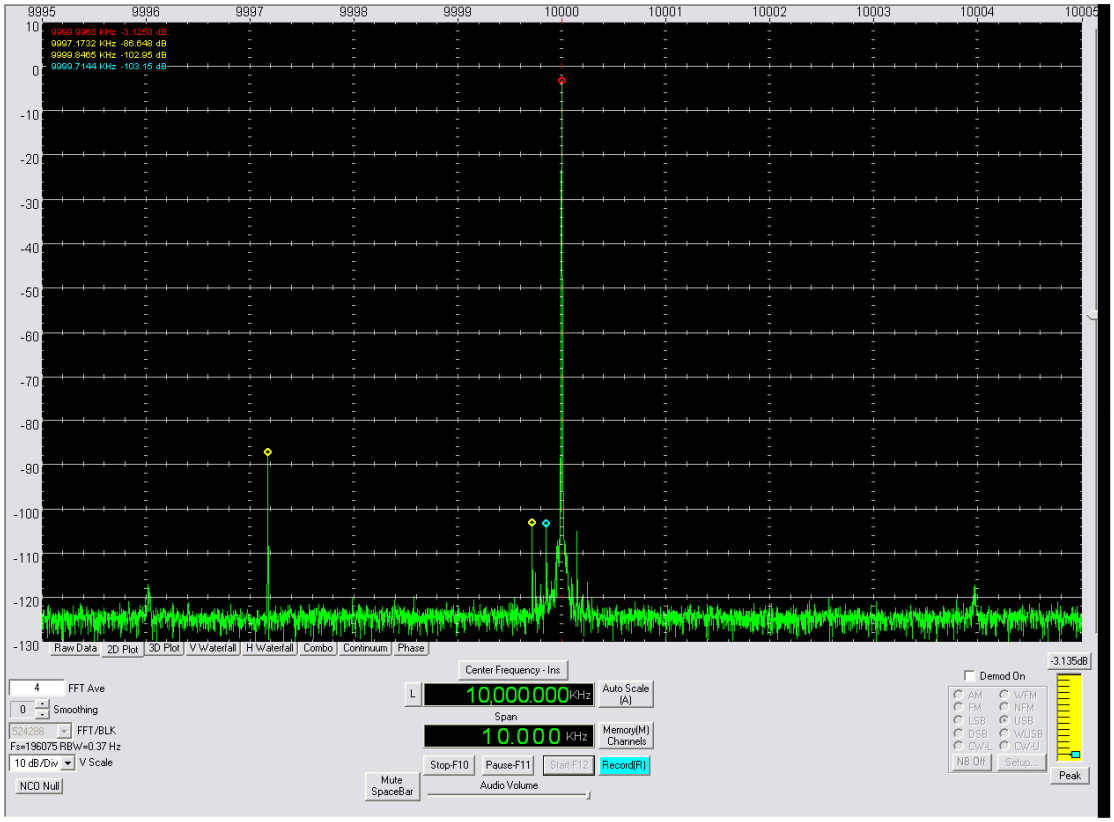
General Notes

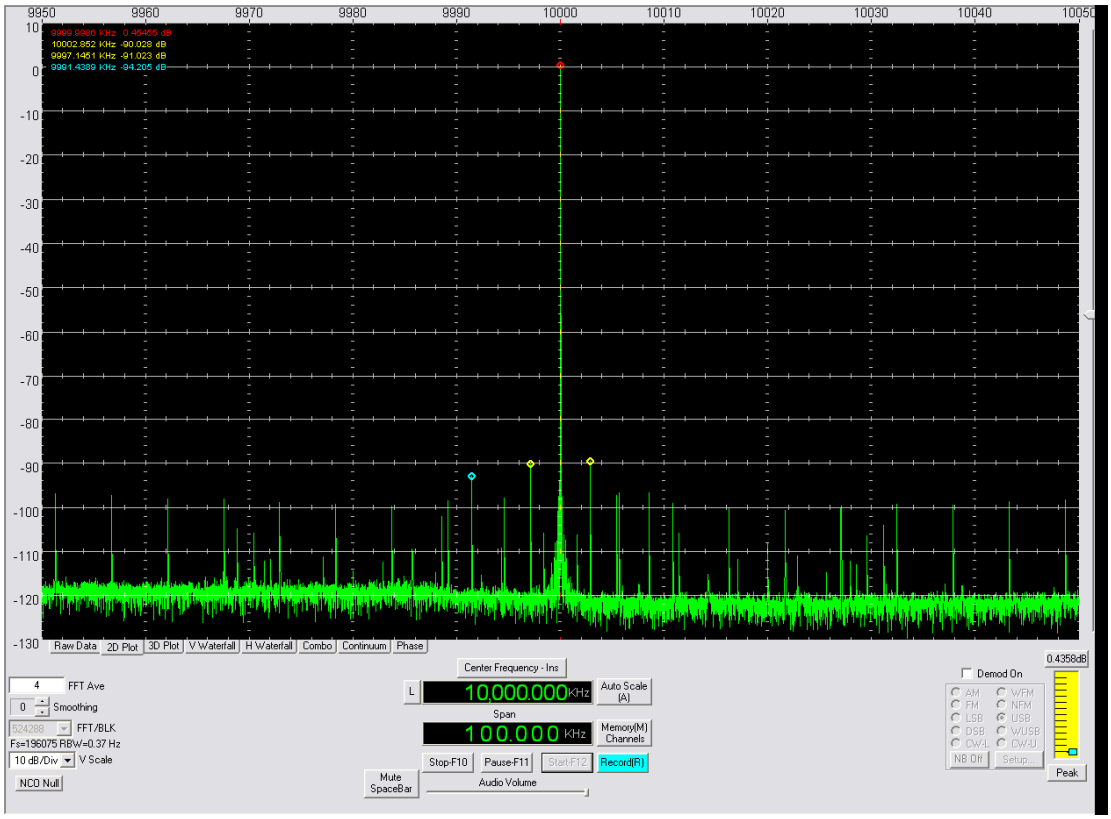
A spurious product separated by approx 2.8kHz from the main trace appears on many plots – this is locally generated.
Not all products at levels < 110dBc can be guaranteed to be coming from the oscillator under test. At this dynamic range, any locally generated leakage will be visible !

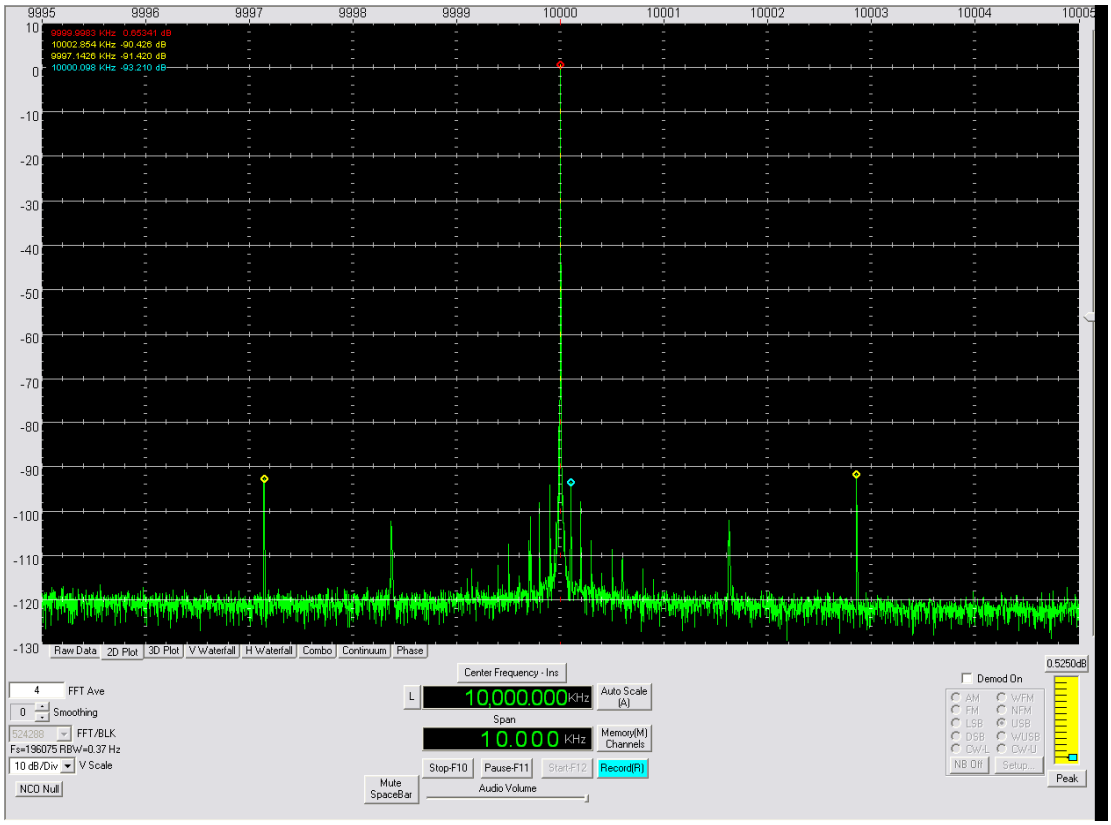
Reference TCXO (nb. this 1st plot has resolution BW 2X all other plots. Noise floor should be 3dB lower)



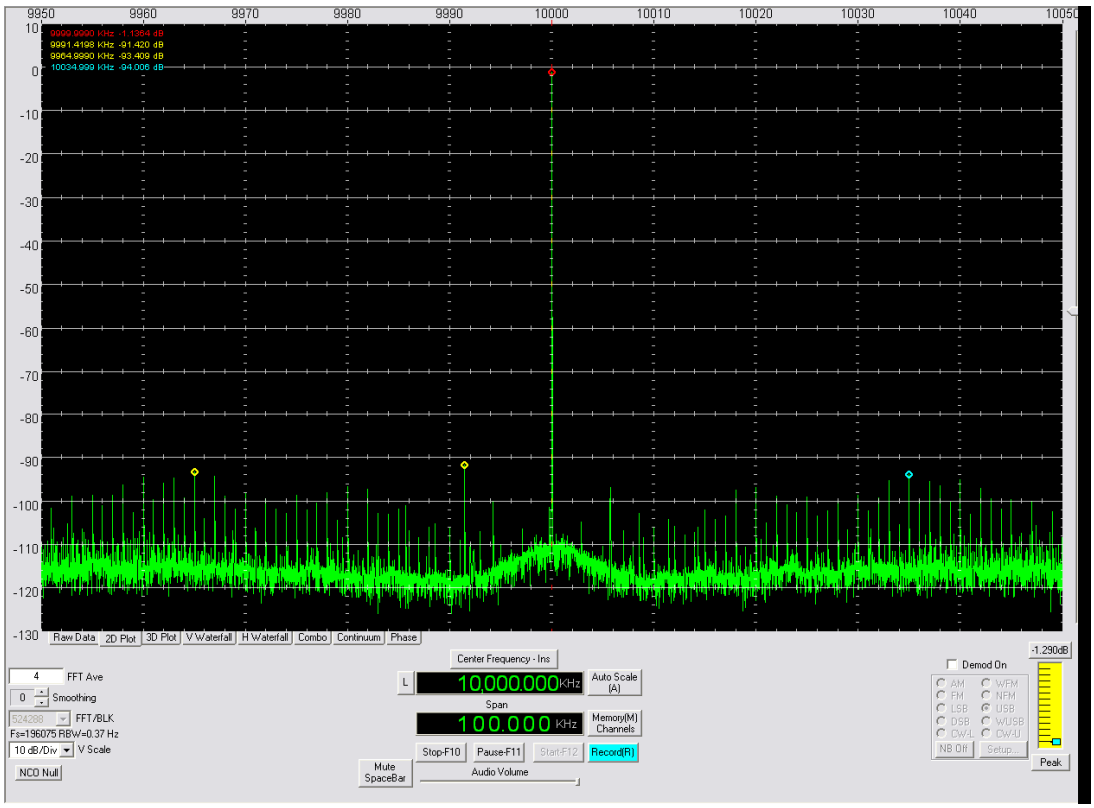


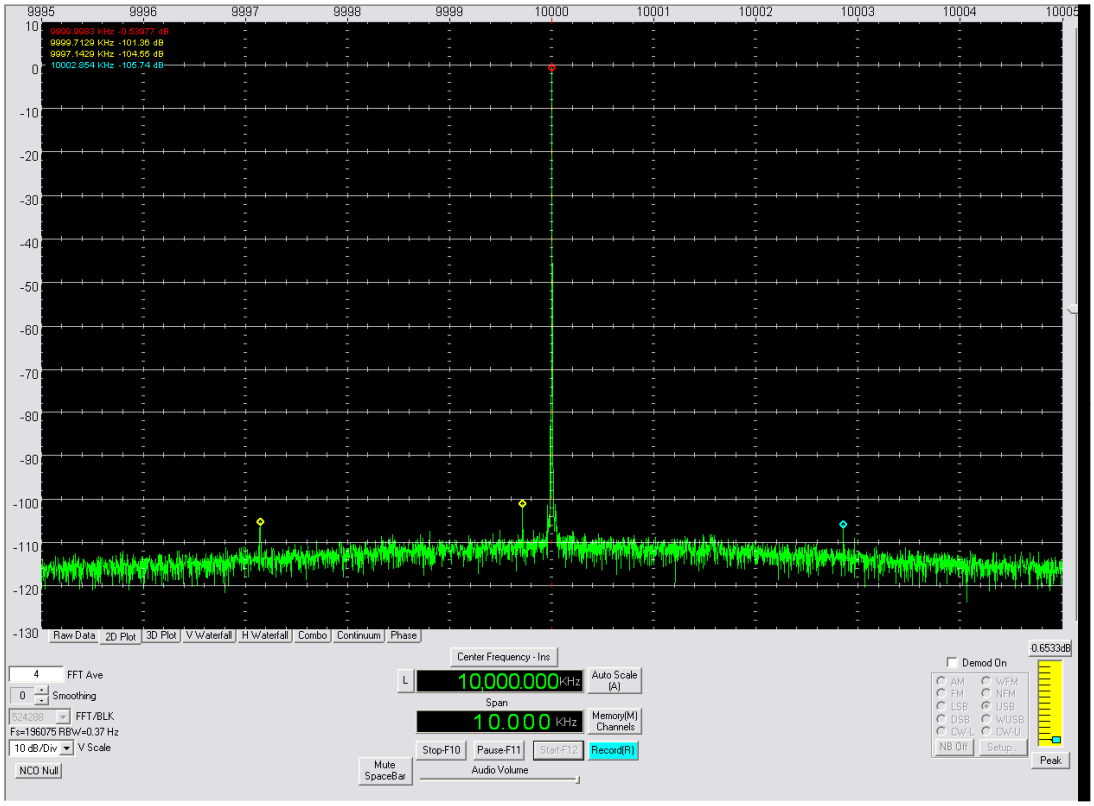
ZAZ Module Installed as Shack Reference using OCXO from Ex Deca Navigator Chain



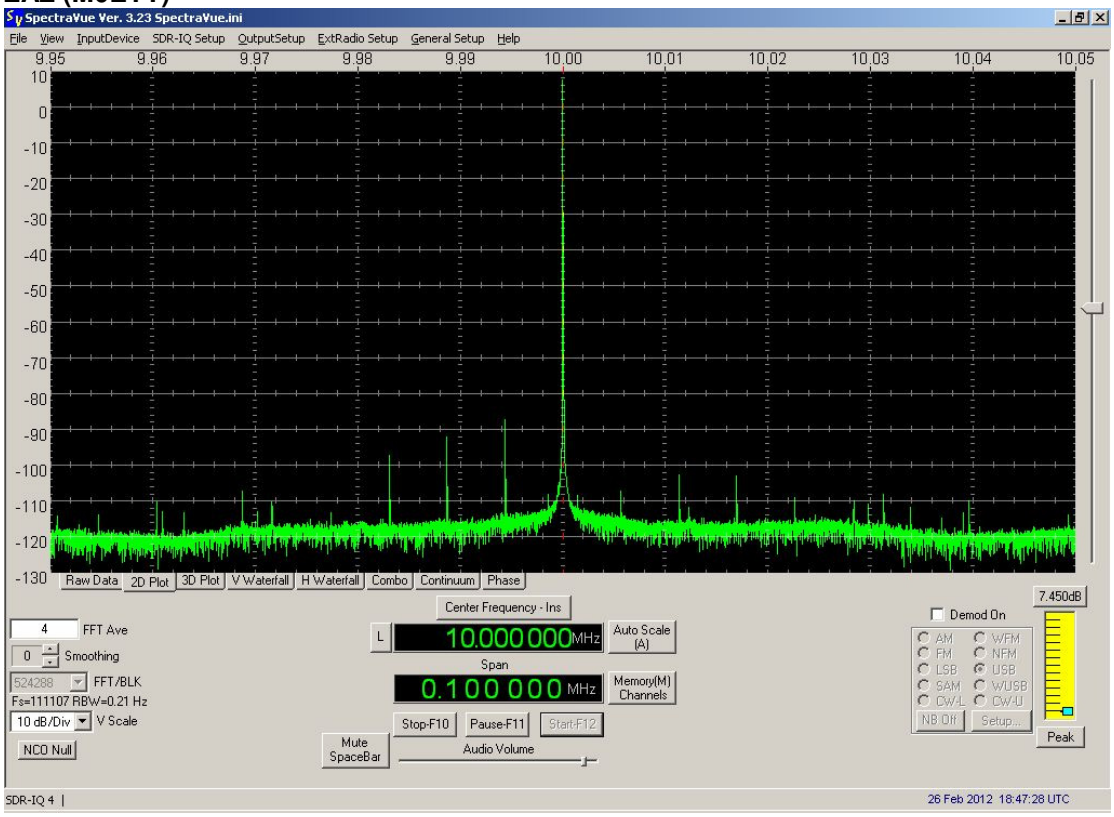


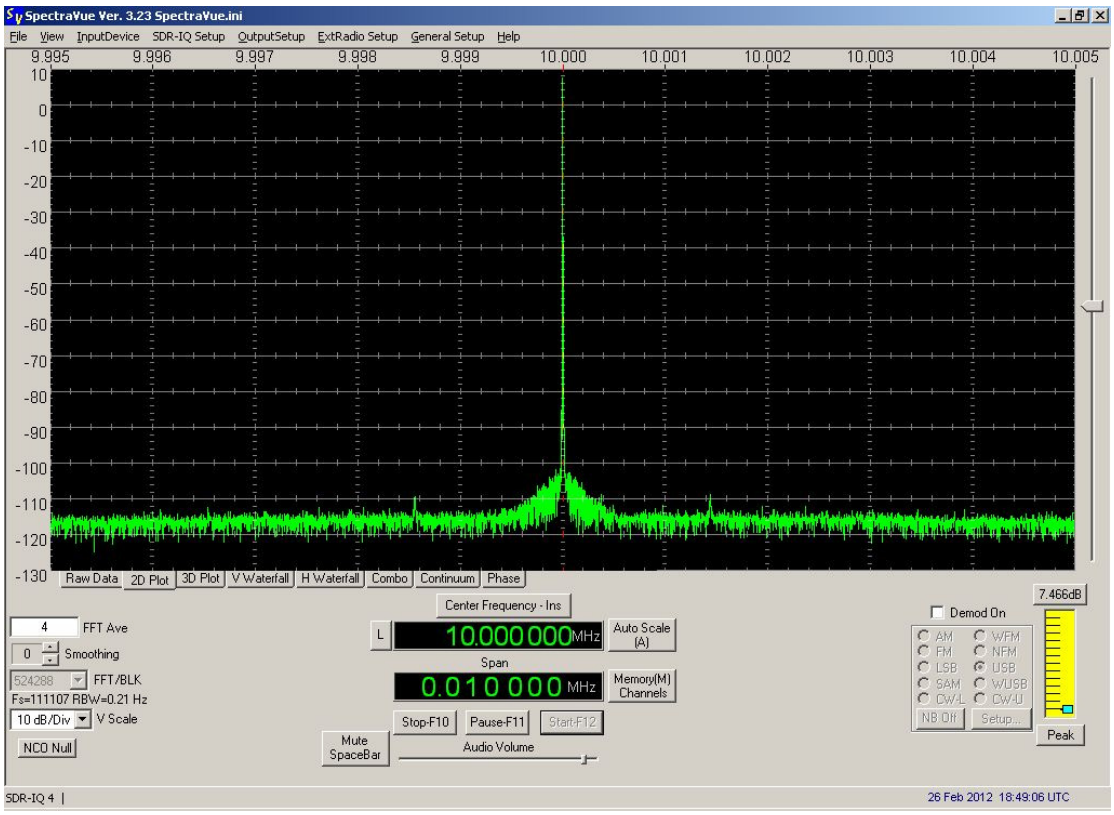
2nd ZAZ module, using, Morion OCXO



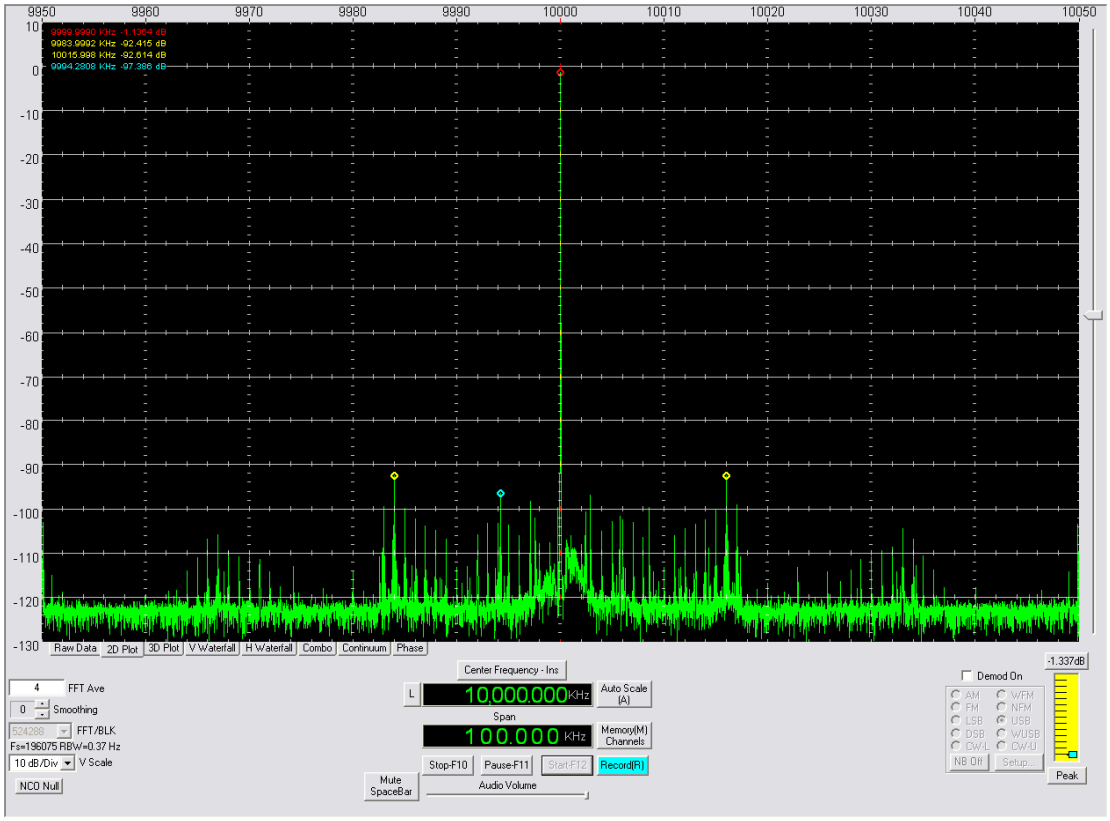


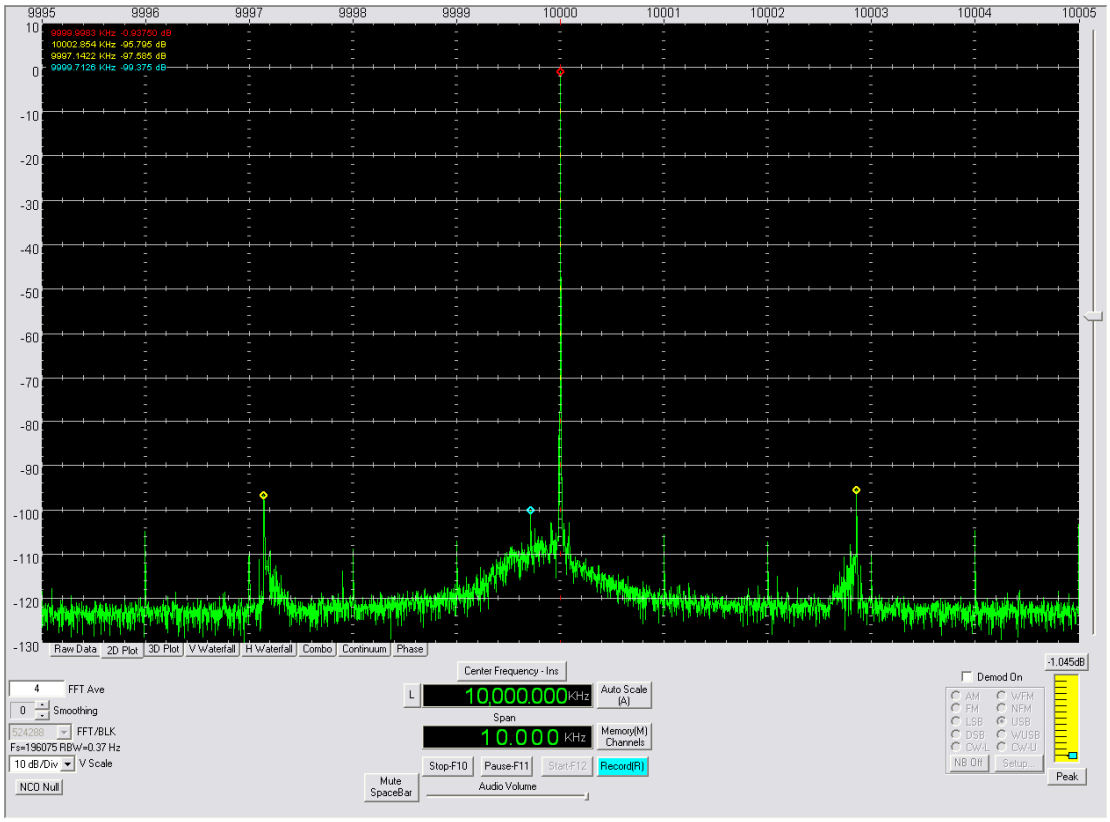
ZAZ (M0EYT)


SpectraVue Ver. 3.23 SpectraVue.ini
File View InputDevice SDR-IQ Setup OutputSetup ExtRadio Setup General Setup Help
9.95 9.96 9.97 9.98 9.99 10.00 10.01 10.02 10.03 10.04 10.05
10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130
Raw Data 2D Plot 3D Plot V Waterfall H Waterfall Combo Continuum Phase
Center Frequency - Ins
4 FFT Ave
0 Smoothing
524288 FFT/BLK
Fs=111107 RBW=0.21 Hz
10 dB/Div V Scale
NCO Null
L 10.000000 MHz
Auto Scale (A)
Span
0.100 000 MHz
Memory(M) Channels
Stop-F10 Pause-F11 Start-F12
Mute SpaceBar
Audio Volume
Demod On
AM WFM FM NFM LSB USB SAM WUSB CW-L CW-U
NB Off Setup...
7.450dB
Peak
SDR-IQ 4 |
26 Feb 2012 18:47:28 UTC

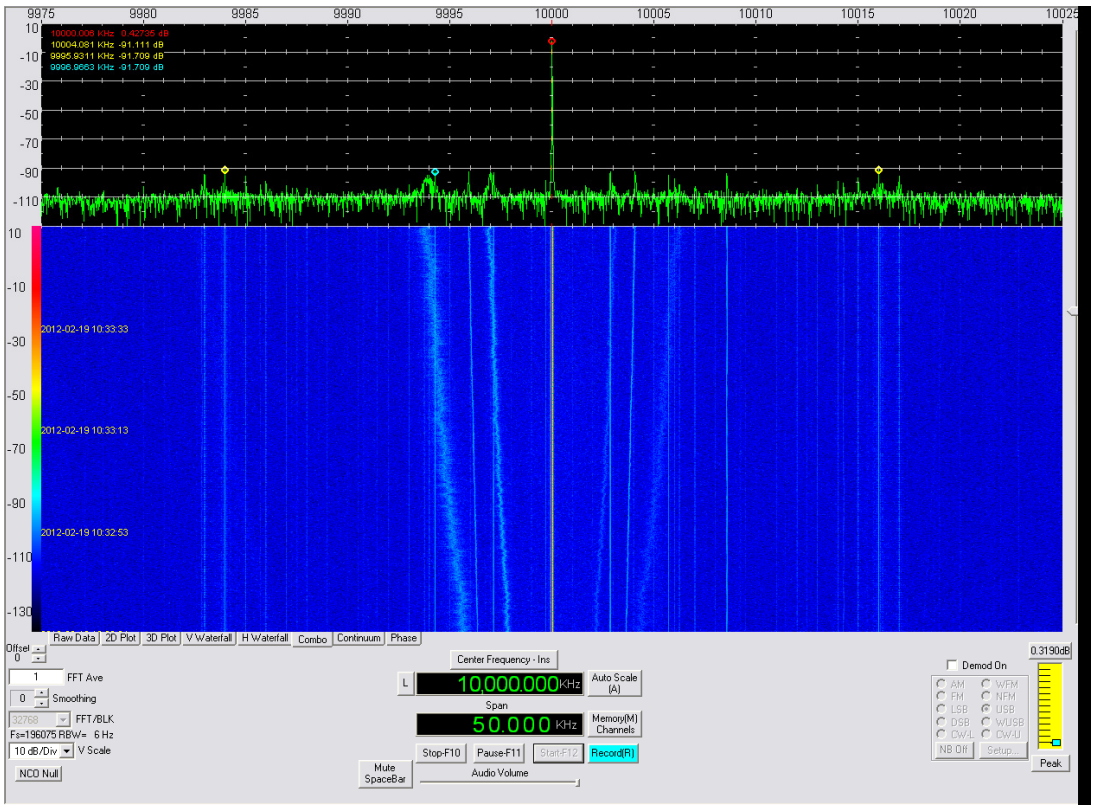

SpectraVue Ver. 3.23 SpectraVue.ini
File View InputDevice SDR-IQ Setup OutputSetup ExtRadio Setup General Setup Help
9.995 9.996 9.997 9.998 9.999 10.000 10.001 10.002 10.003 10.004 10.005
10 0 -10 -20 -30 -40 -50 -60 -70 -80 -90 -100 -110 -120 -130
Raw Data 2D Plot 3D Plot V Waterfall H Waterfall Combo Continuum Phase
Center Frequency - Ins
4 FFT Ave
0 Smoothing
524288 FFT/BLK
Fs=111107 RBW=0.21 Hz
10 dB/Div V Scale
NCO Null
L 10.000000 MHz
Auto Scale (A)
Span
0.010 000 MHz
Memory(M) Channels
Stop-F10 Pause-F11 Start-F12
Mute SpaceBar
Audio Volume
Demod On
AM WFM FM NFM LSB USB SAM WUSB CW-L CW-U
NB Off Setup...
7.466dB
Peak
SDR-IQ 4 |
26 Feb 2012 18:49:06 UTC

Connor Winfield GPSDO (TCXO source)

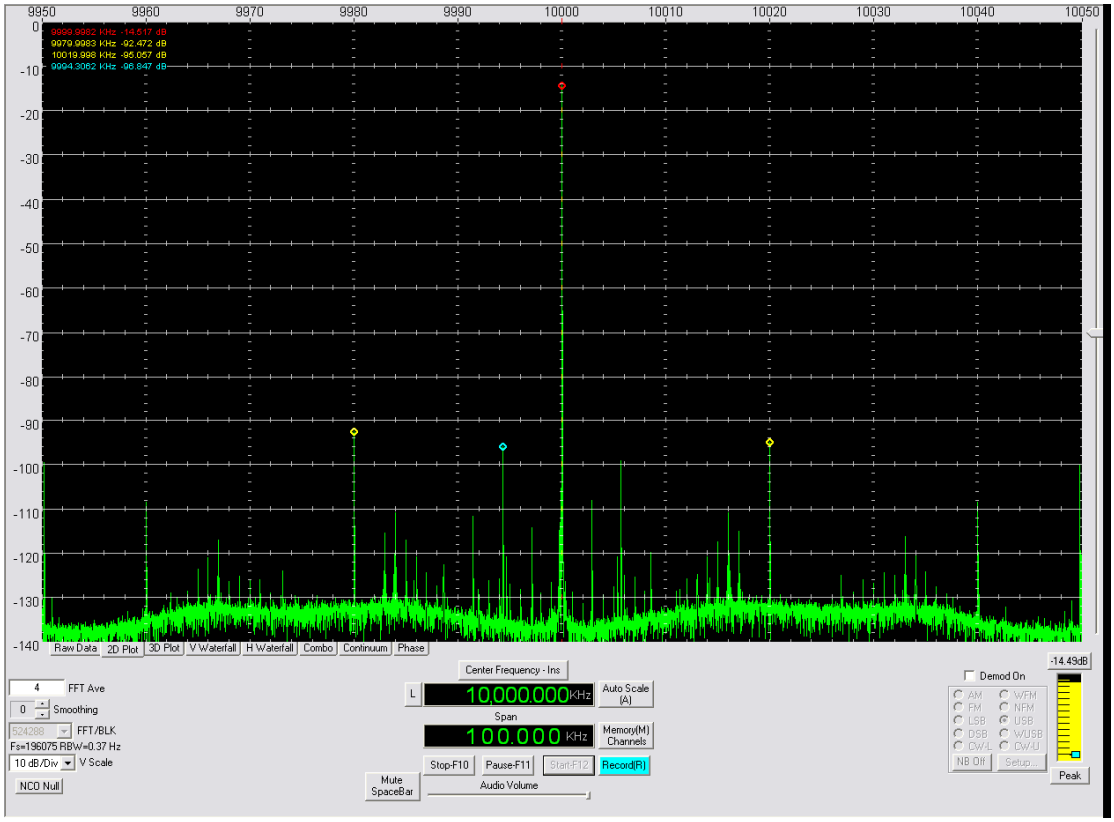


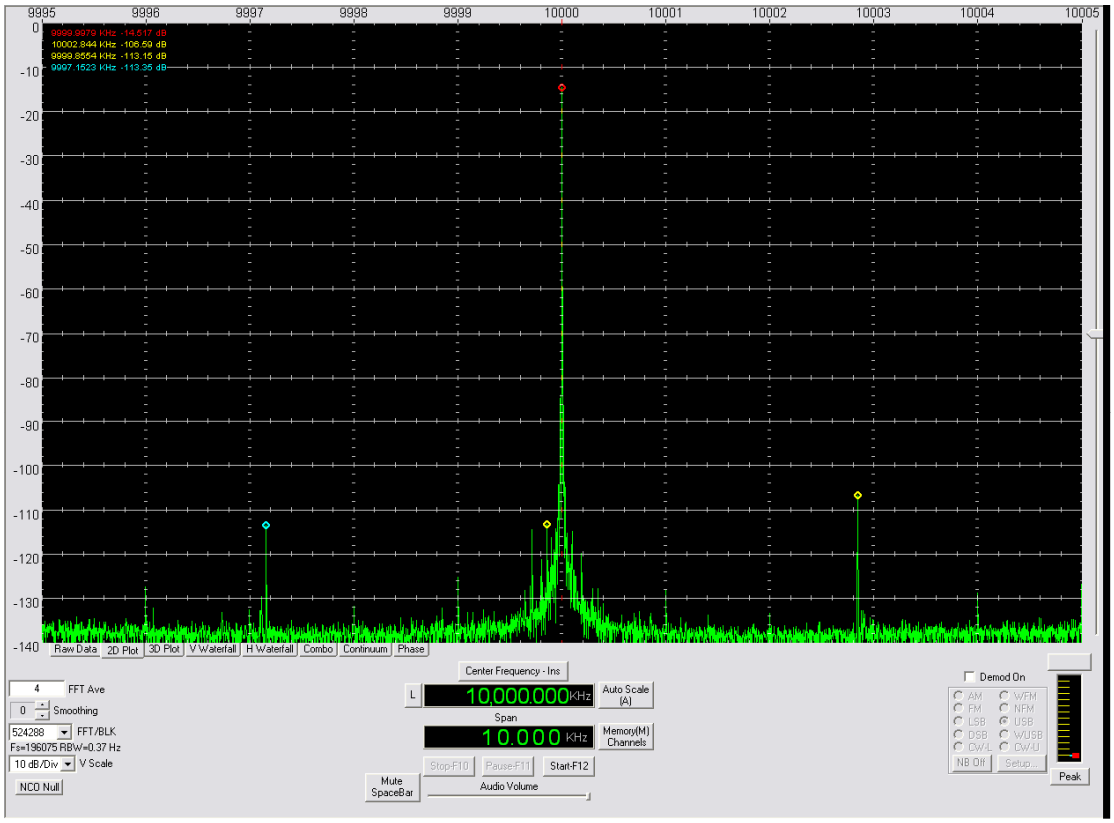


Below is a waterfall trace of this one showing an unstable drifting sideband caused most-likely by the internal DC-DC converter

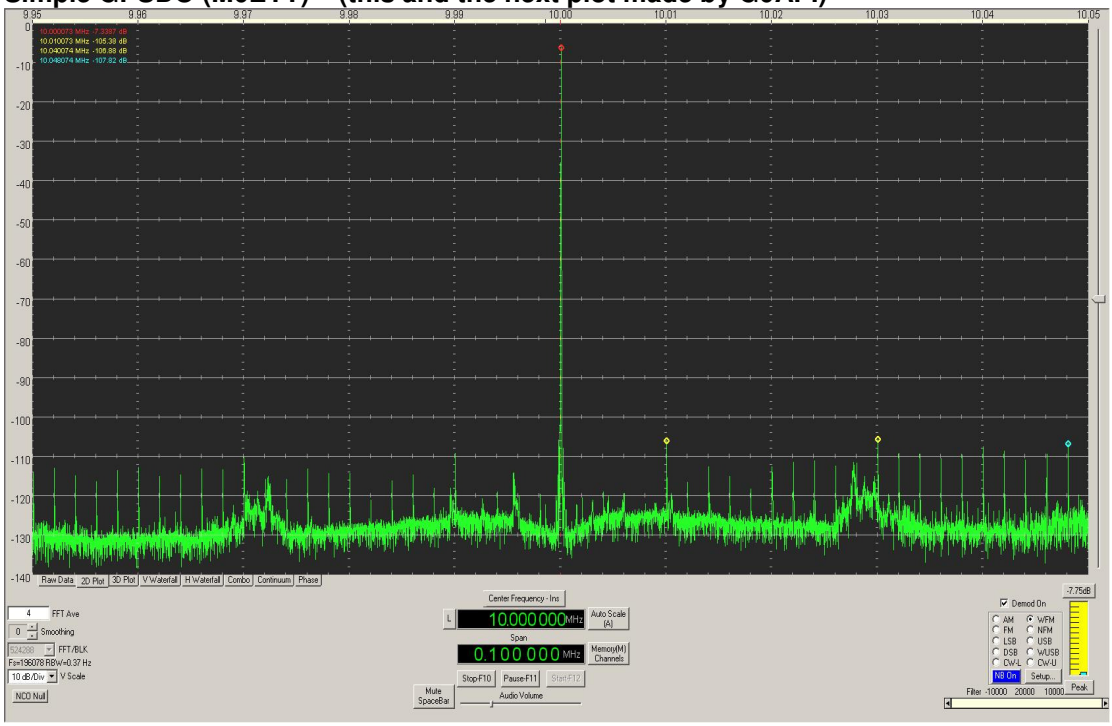

9975
9980
9985
9990
9995
10000
10005
10010
10015
10020
10025
10000.006 KHz 0.42735 dB
10004.081 KHz -91.111 dB
9995.9311 KHz -91.709 dB
9996.9663 KHz -91.709 dB
2012-02-19 10:33:33
2012-02-19 10:33:13
2012-02-19 10:32:53
Raw Data
2D Plot
3D Plot
V Waterfall
H Waterfall
Combo
Continuum
Phase
Offset
FFT Ave
Smoothing
FFT/BLK
Fs=196075 RBW= 6 Hz
V Scale
NCO Null
Center Frequency - Ins
10,000.000 KHz
Auto Scale (A)
Span
50.000 KHz
Memory(M) Channels
Stop-F10
Pause-F11
Start-F12
Record(R)
Mute SpaceBar
Audio Volume
Demod On
AM
FM
LSB
DSB
CW-L
WFM
NFM
USB
WUSB
CW-U
NB Off
Setup...
0.3190dB
Peak

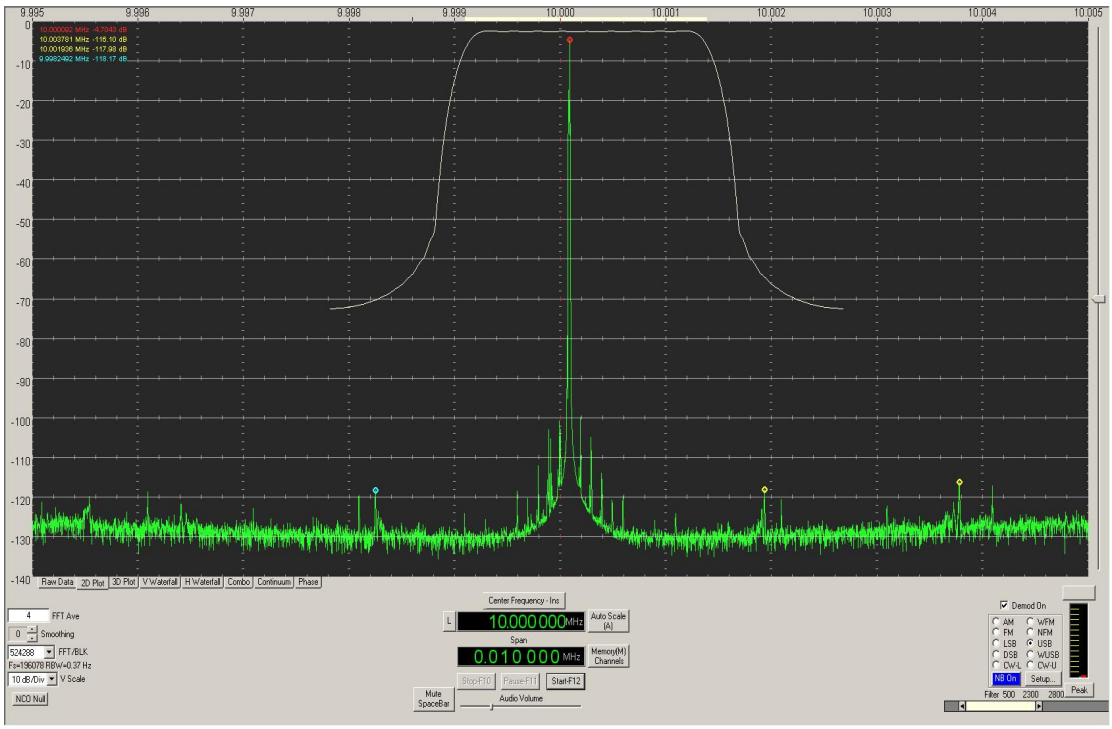
MSF Mk2 (Toyocom OCXO + Frequency Doubler)



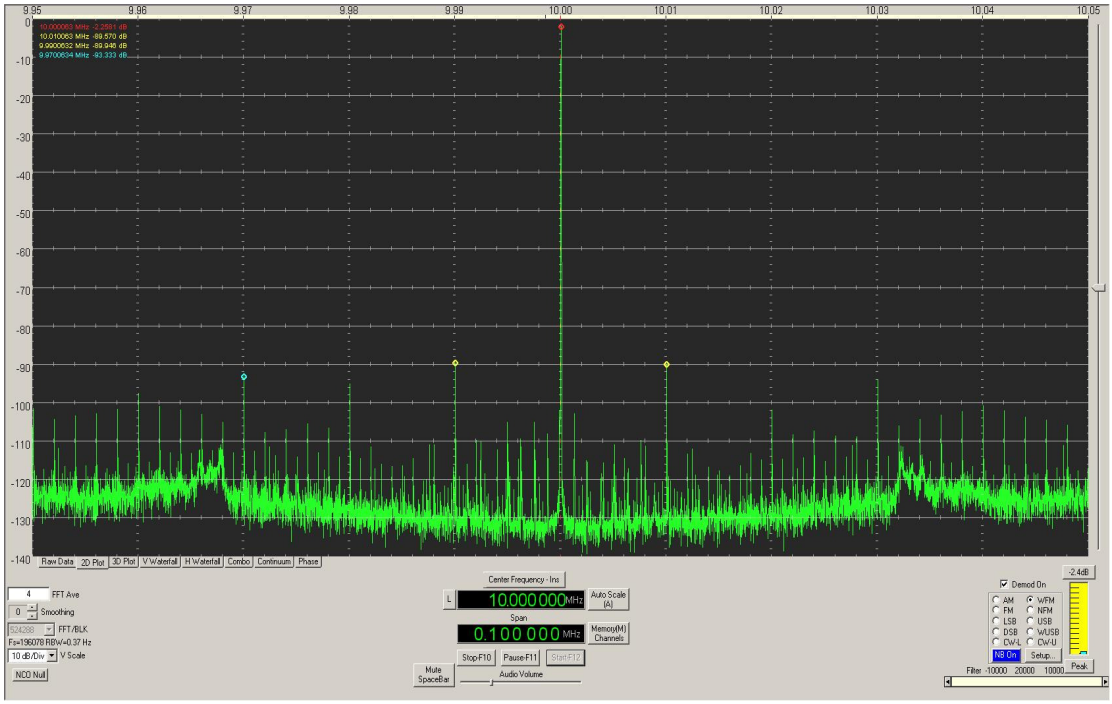


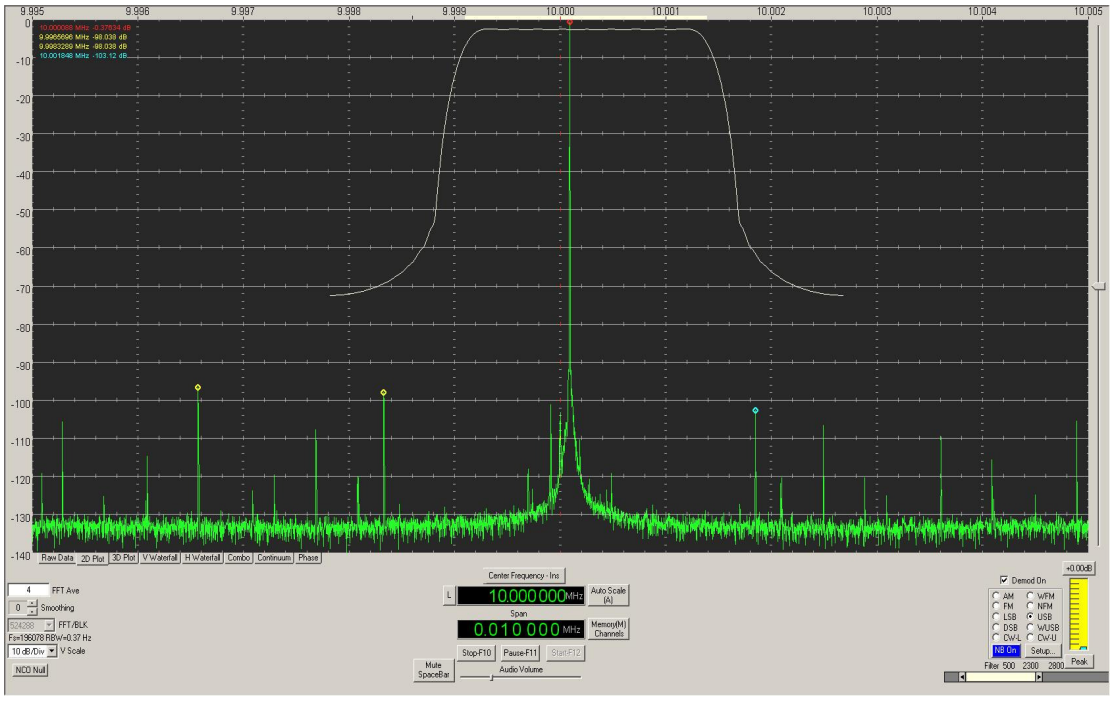
Simple GPSDO (M0EYT) (this and the next plot made by G0API)





Even Simpler Simplest GPSDO (Jupiter-T, PIC divider, 20MHz TCXO divided by 2)





Ipro 101 (M0EYT)