

# Störsignale im 6m Band

Aus ca. 300Grad ab Schulhausstrasse 7 treten mindestens 2 Signale auf.

1. Bei Sonnenschein fixe Träger alle 60kHz >> Vermutung PV-Anlage mit Optimizer
2. 24h Periodisch an- und abschwellendes Signal mit vielen Trägern  
Vermutung ?????

Mit einem «mobilen Peiler» habe ich versucht die Quellen zu finden.  
Die folgenden Bilder zeigen die Situation im Detail.

Wo genau konnte ich mit meiner rudimentären Einrichtung nicht ermitteln.



Control

Mode: USB

Filter Preset: 1.8K

Tuning Step:

Tuning Step Size: 100Hz

Step Snap:

AGC/Squelch

AGC:

AGC Profile: Slow

AGC Threshold: 93

Squelch:

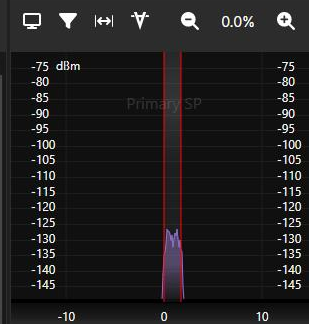
Sql. Threshold: -118

Audio

Bands/KeyPad

Broadcast Bands

LW AM	MW AM	75m AM
60m AM	49m AM	41m AM
31m AM	25m AM	22m AM
19m AM	18m AM	15m AM



Aux SP Audio SP

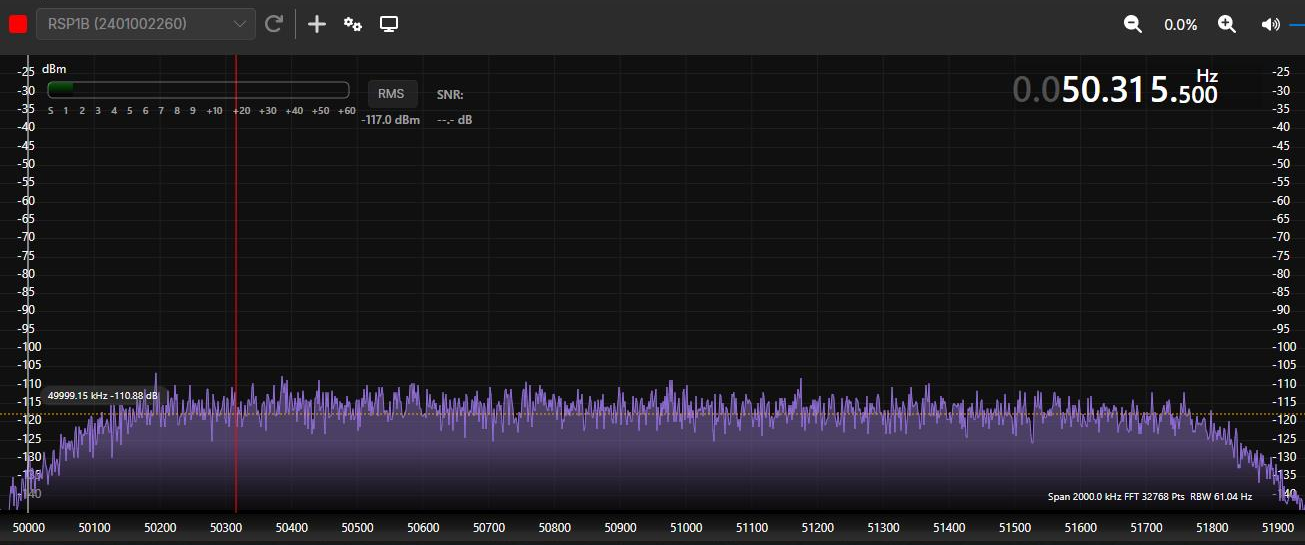
Recording

Source	Primary SP
Type	Audio
Folder	C:\Users\armin\Docume...
File	
Duration	00:00:00
Size	0.00 MB

Recording Diversity IQ Playback

Noise floor aus 55Grad  
«Null» Referenz



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Aux SP

Primary SP

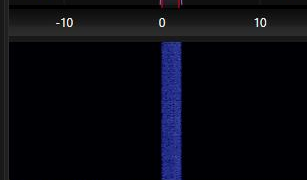
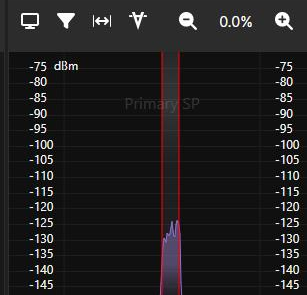
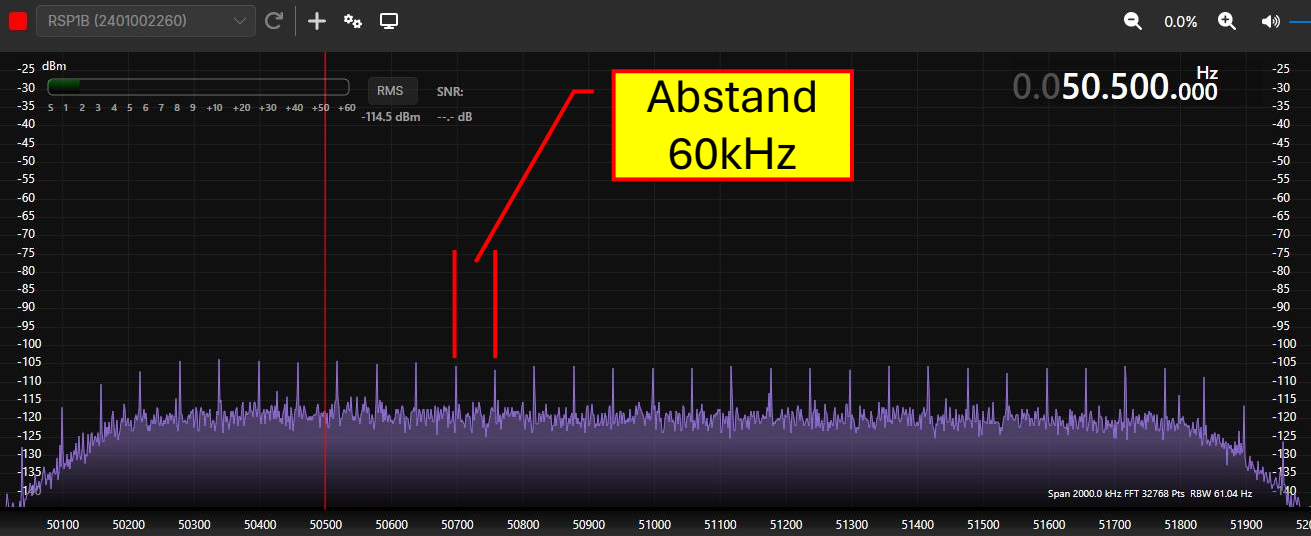
Aux SP Audio SP

Recording

Source: Primary SP  
Type: Audio  
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File:  
Duration: 00:00:00  
Size: 0.00 MB

Recording Diversity IQ Playback

Noise floor aus 300Grad



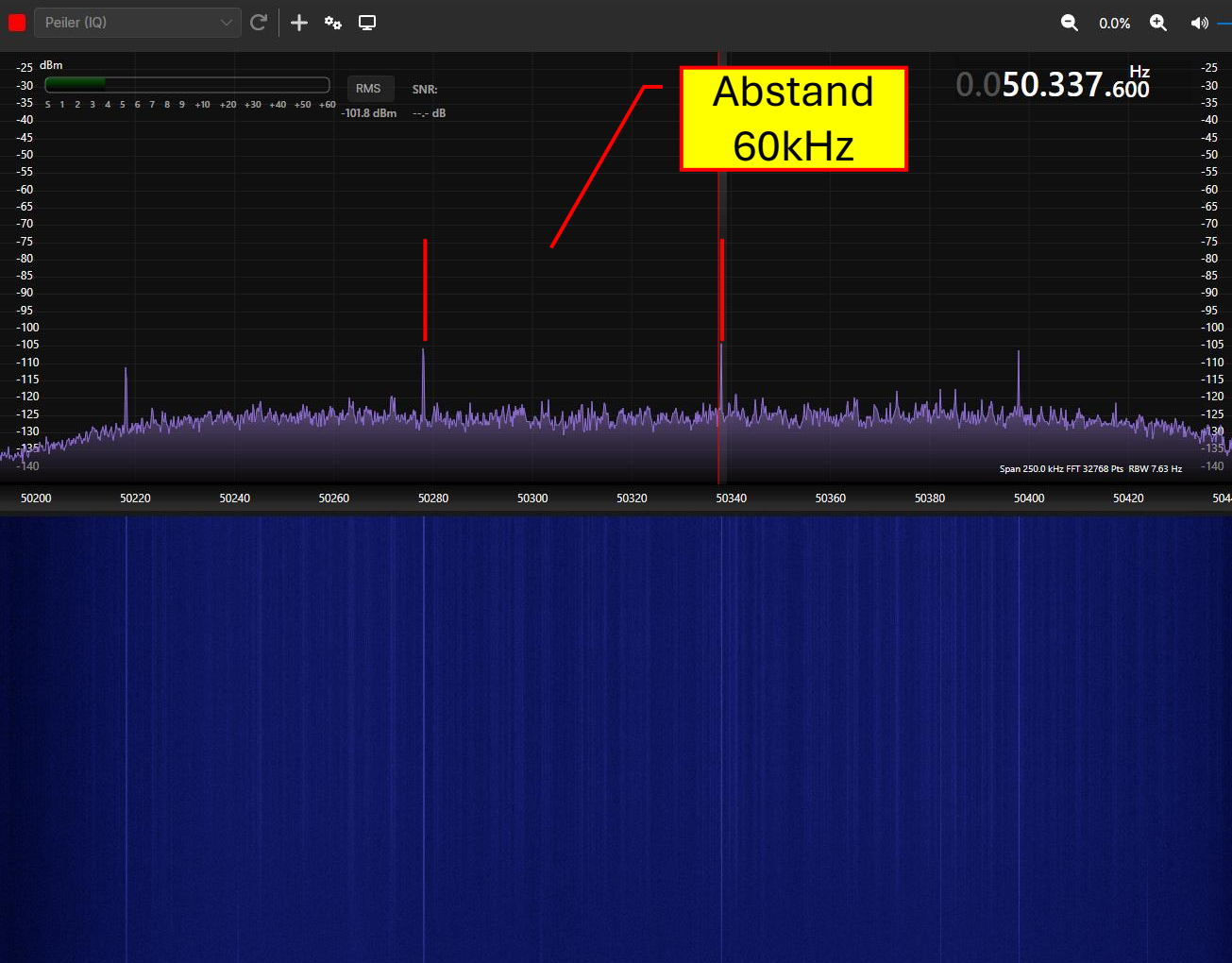
Aux SP Audio SP

Recording

Source	Primary SP
Type	Audio
Folder	C:\Users\armin\Docume...
File	
Duration	00:00:00
Size	0.00 MB

Recording Diversity IQ Playback

Sobald die Sonne deutlich scheint, treten alle 60kHz Träger auf.



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Audio

Bands/Keypad

Options

Aux SP

Primary SP

Aux SP Audio SP

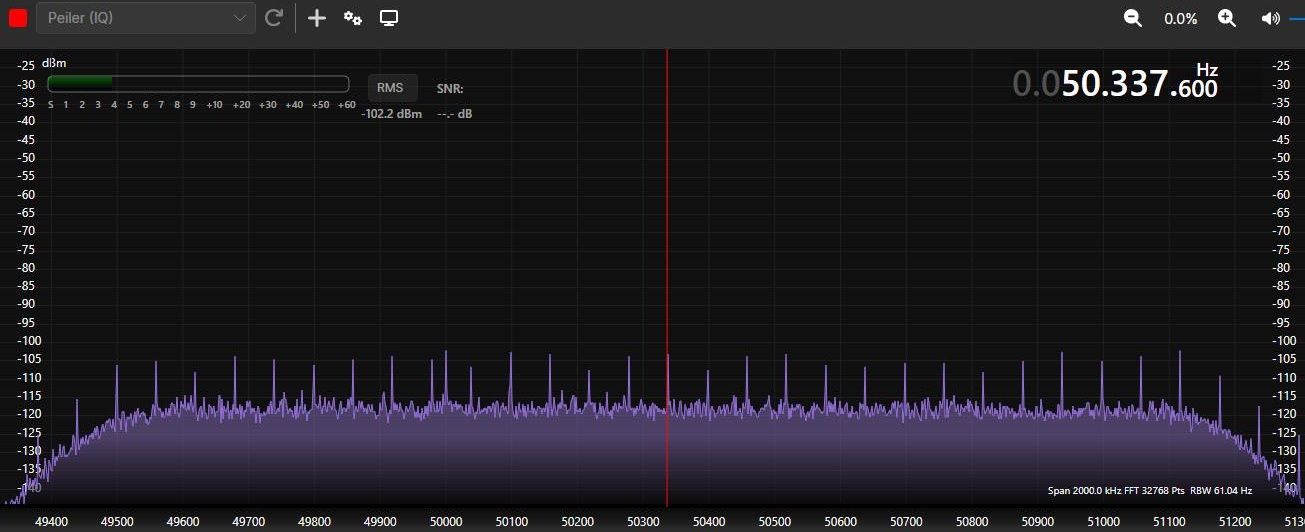
Recording

Source: Primary SP  
Type: Audio  
Folder: C:\Users\armin\Docume...  
File:  
Duration: 00:00:00  
Size: 0.00 MB

Recording Diversity IQ Playback

Diskrete Träger alle 60kHz

Primary SP



Control

Mode: USB

Filter Preset: 1.8K

Tuning Step:

Tuning Step Size: 100Hz

Step Snap:

AGC/Squelch

AGC:

AGC Profile: Slow

AGC Threshold: 100

Squelch:

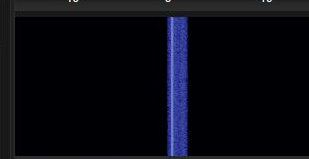
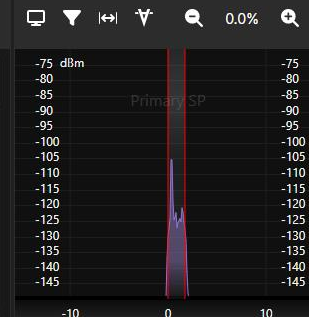
Sql. Threshold: -100

Audio

Bands/Keypad

Options

Aux SP



Aux SP Audio SP

Recording

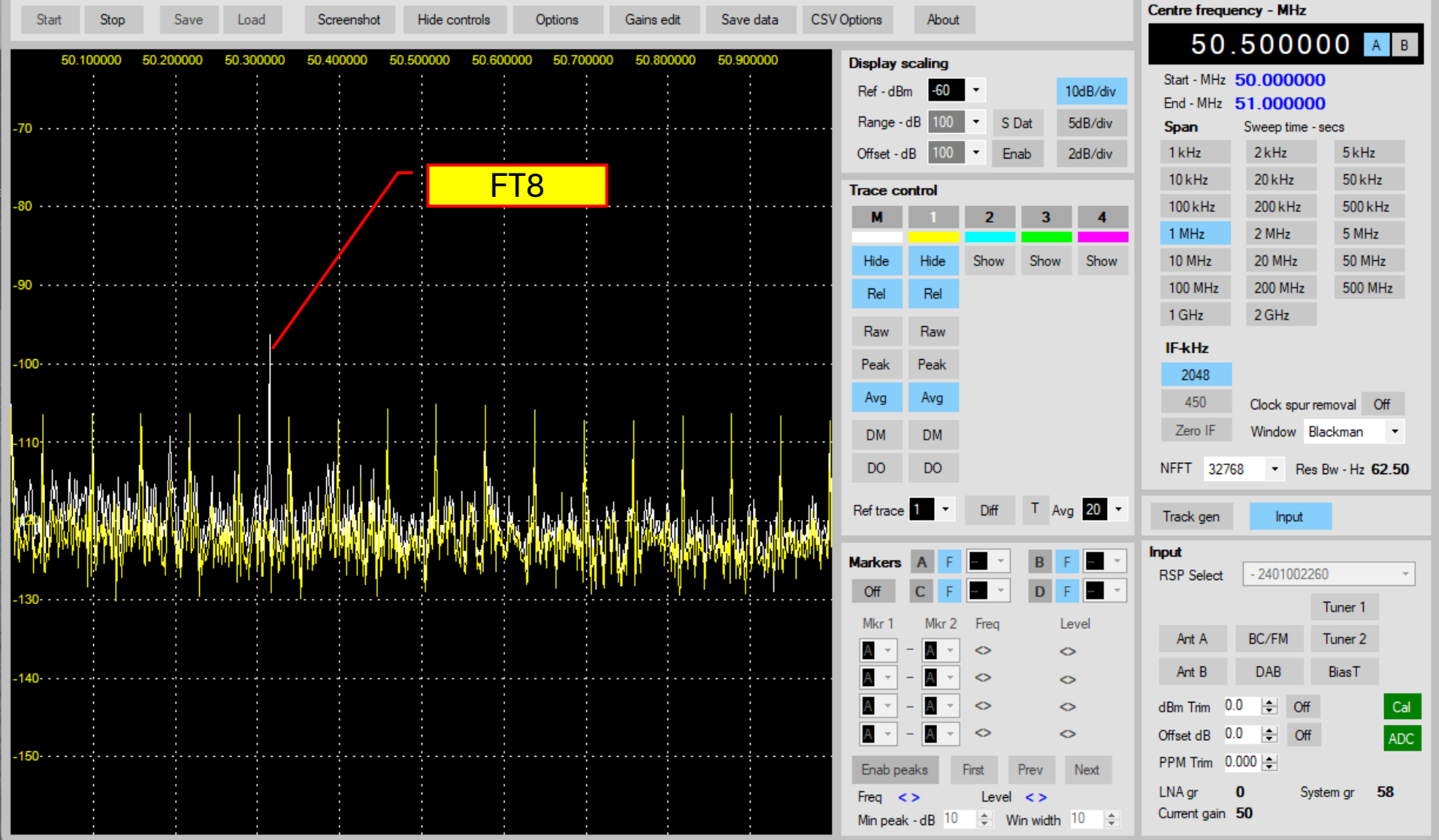
Source	Primary SP
Type	Audio
Folder	C:\Users\armin\Docume...
File	
Duration	00:00:00
Size	0.00 MB

Recording Diversity IQ Playback



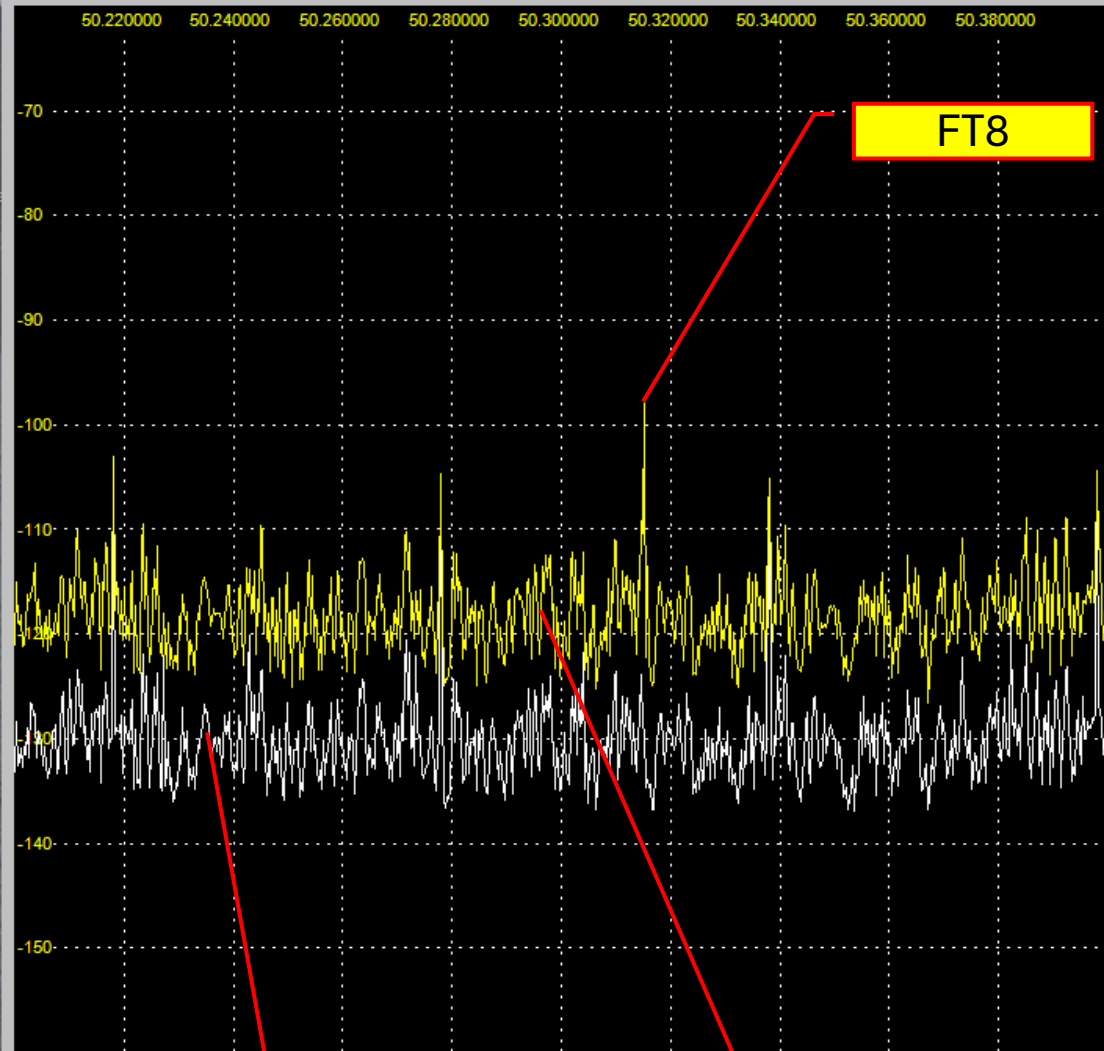
Hauptrichtung der 60kHz Träger ab Schulhausstrasse 7

-- 3dB Öffnungswinkel der Antenne



Analyse des periodischen  
Rauschanstieges

Start Stop Save Load Screenshot Hide controls Options Gains edit Save data CSV Options About



**Display scaling**

Ref - dBm: -60      10dB/div

Range - dB: 100      S Dat: 5dB/div

Offset - dB: 100      Enab: 2dB/div

**Trace control**

M	1	2	3	4
Hide	Hide	Show	Show	Show
Rel	Hold			
Raw	Raw			
Peak	Peak			
Avg	Avg			
DM	DM			
DO	DO			

Ref trace: 1      Diff      T      Avg: 30

**Markers**

A	F		B	F	
Off	C	F	D	F	
Mkr 1	Mkr 2	Freq	Level		
A	A	<>	<>		
A	A	<>	<>		
A	A	<>	<>		
A	A	<>	<>		

Enab peaks      First      Prev      Next

Freq <>      Level <>

Min peak - dB: 10      Win width: 10

**Centre frequency - MHz**

50.300000      A      B

Start - MHz: 50.200000

End - MHz: 50.400000

**Span**      Sweep time - secs

1 kHz	2 kHz	5 kHz
10 kHz	20 kHz	50 kHz
100 kHz	200 kHz	500 kHz
1 MHz	2 MHz	5 MHz
10 MHz	20 MHz	50 MHz
100 MHz	200 MHz	500 MHz
1 GHz	2 GHz	

**IF-kHz**

2048

450      Clock spur removal: Off

Zero IF      Window: Blackman

NFFT: 32768      Res Bw - Hz: 15.26

Track gen      Input

**Input**

RSP Select: -2401002260

Tuner 1

Ant A      BC/FM      Tuner 2

Ant B      DAB      BiasT

dBm Trim: 0.0      Off      Cal

Offset dB: 0.0      Off      ADC

PPM Trim: 0.000

LNA gr: 0      System gr: 58

Current gain: 50

Min

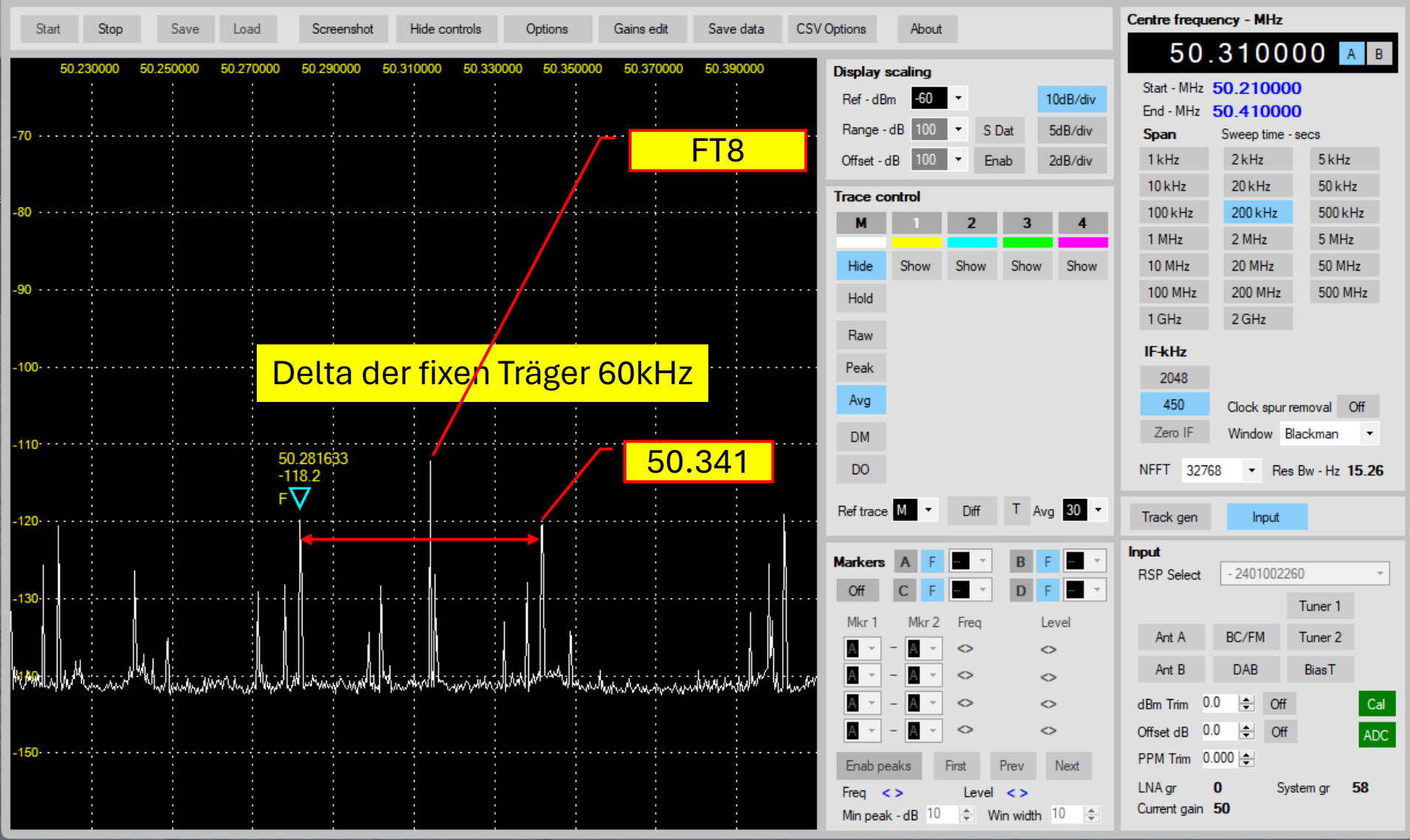
Max

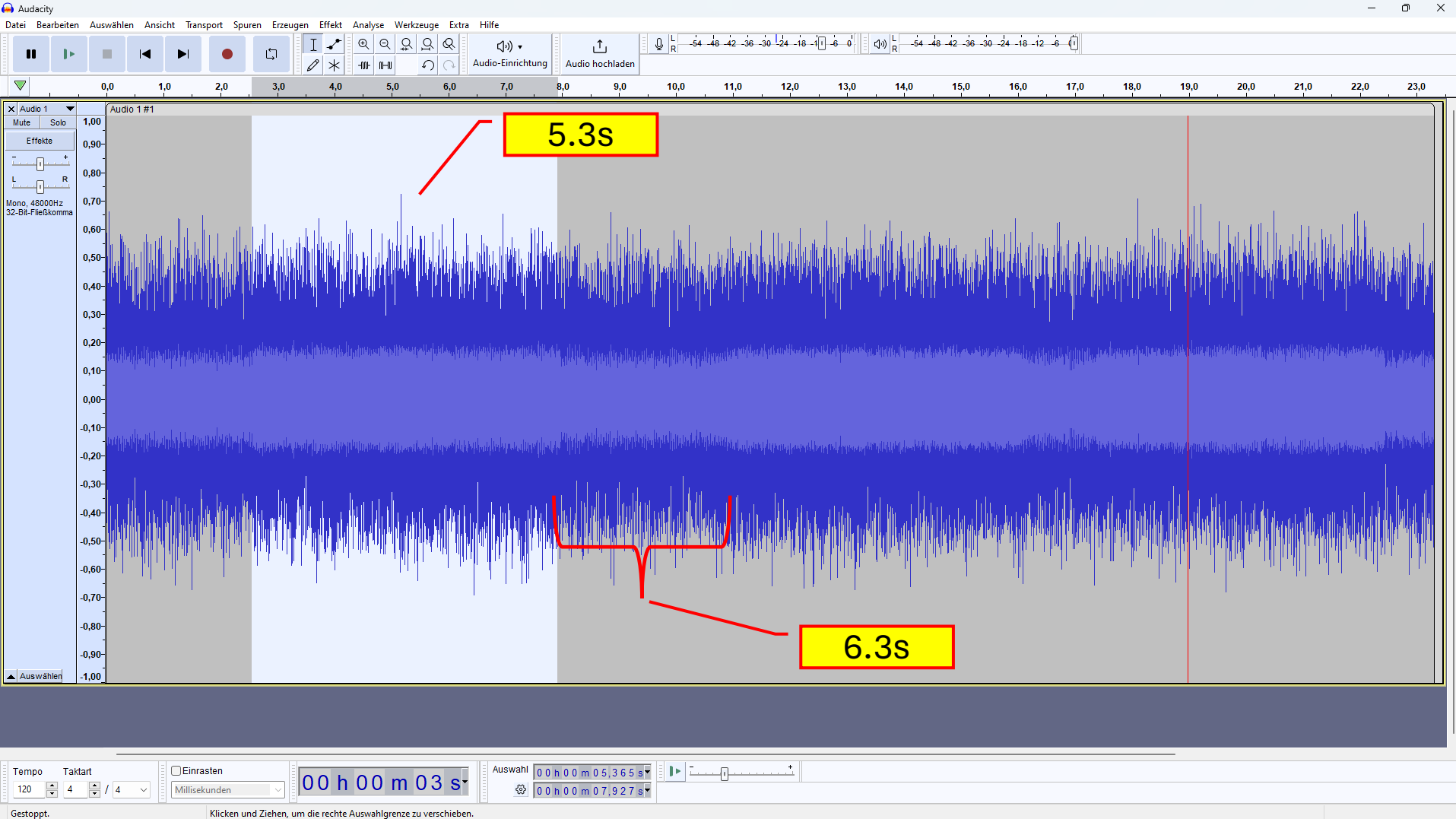


Die fixen Träger, welche alle 60kHz auftreten.

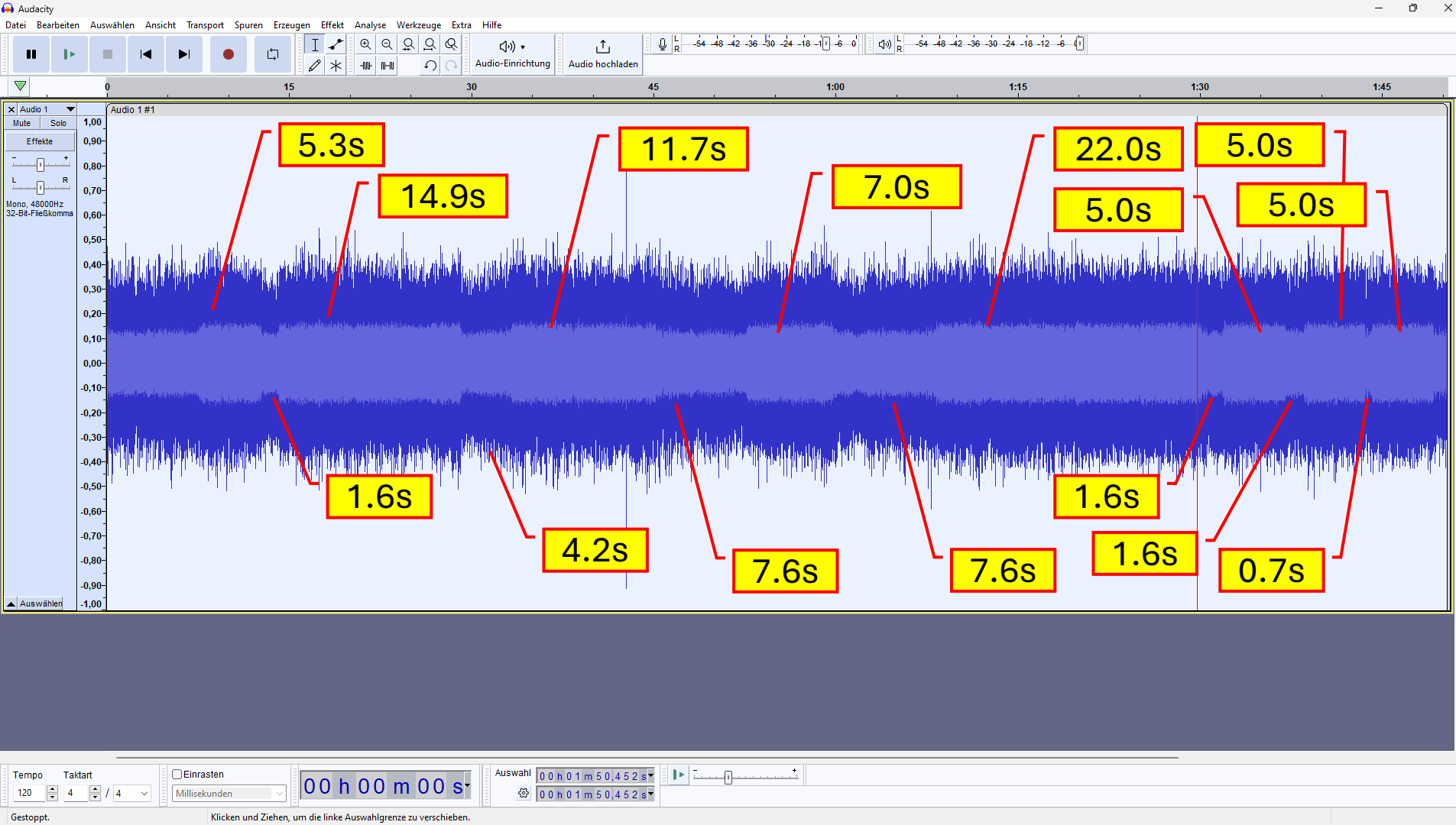
Peak mit 10kHz Versatz aufgenommen

Nebst den fixen Trägern, ändert das Grundrauschen periodisch um ca. 10dB

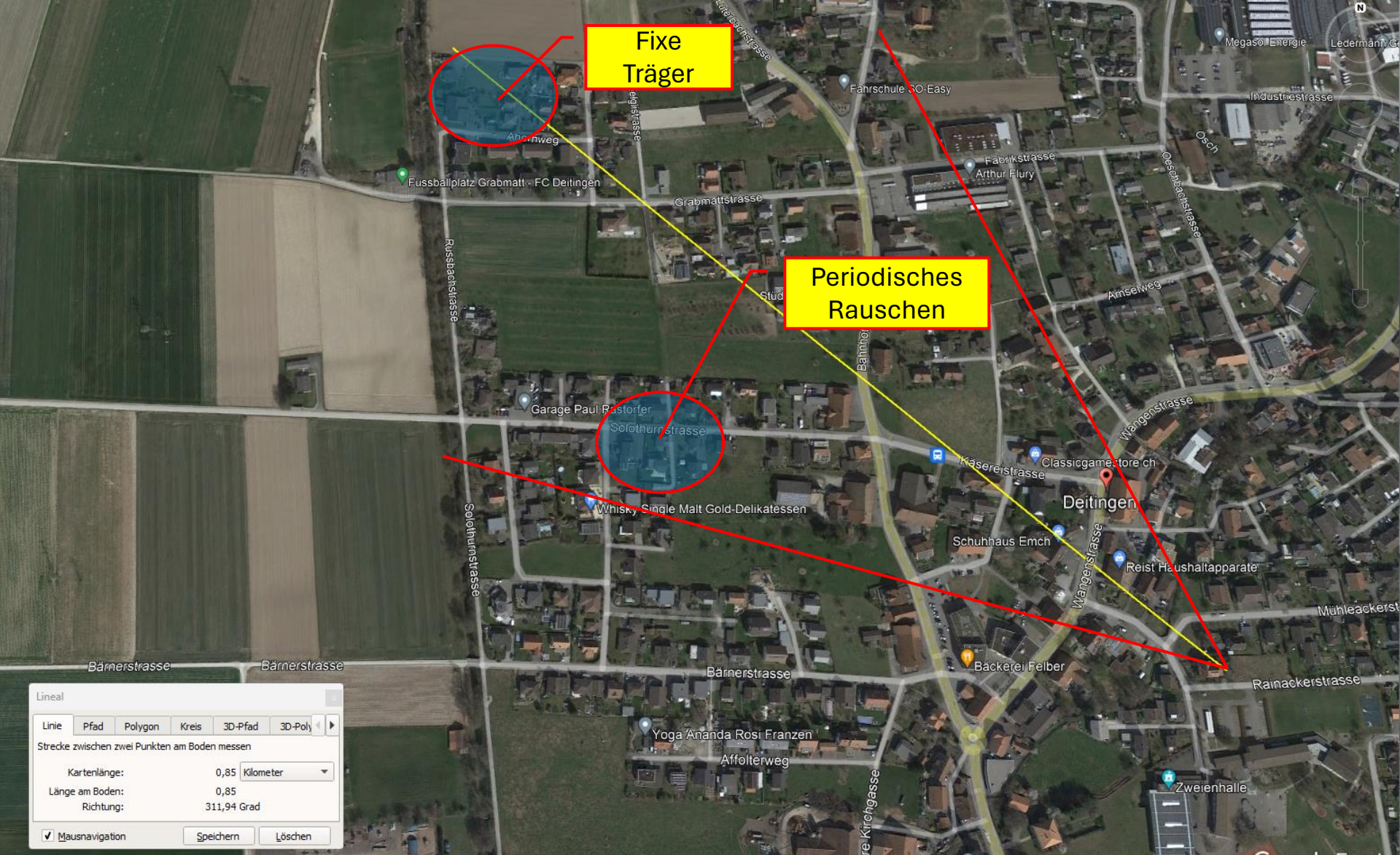




Periodisches An- Abschwellen



## Periodisches An- Abschwellen



Orte wo die Signale deutlich festgestellt werden konnten.



**Loop für 51MHz**

**KX3 als RX**

**«Mobiler Peiler»**



**Lautsprecher für Audio**