



IQmonitor tool

• stephan94 ⌂ Jun 24th 2018



stephan94

[Moderator]

Dec 29th 2020

Hallo

auch selber probiert .

Nur mit einfache Blindscan .

Mit HR spectrum+blindscan ist es selbstverständlich länger (265 s).

Mit HR Blindscan (101 s)

Hello

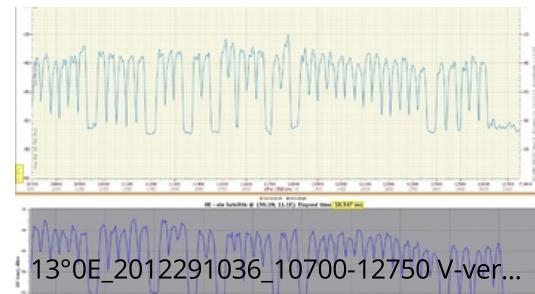
also tried it myself.

Only with a simple blind scan.

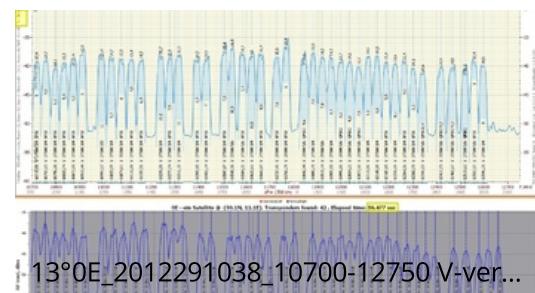
With HR spectrum + blindscan it is of course longer (265 s).

With HR blind scan (101 s)

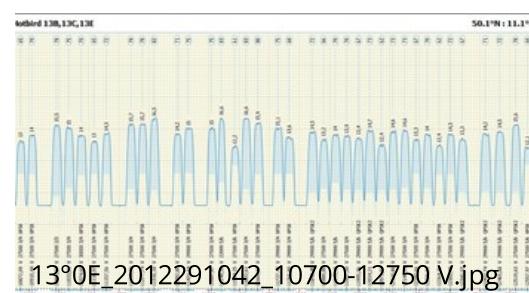
Images



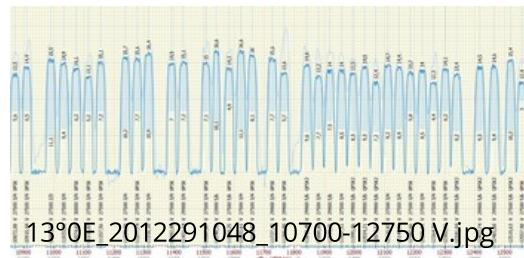
385.21 kB ↗ 1,285×954 ⚡ 63



589.27 kB ↗ 1,285×954 ⚡ 59



319.05 kB ↗ 1,285×572 ⚡ 54



329.22 kB 1,285x572 53

Franzose in Franken

1.80m Ch.Master Revolver 5 LNB

IBU twin , Bulleye 10kHz, Kaonsat 13K, Inverto KaKuband,Kaband (A)

TBS5925+6983; Openbox SX6 ; Edision MIO4K ;GTMedia V8 turbo



strannik
[Enlightened]

Reactions Received:

539

Posts:

495

Dec 30th 2020

IQmonitor Lite

The IQmonitor Lite program is designed to search, register and in-depth analysis of satellite signals of the DVB-S2 standard, as well as its extension DVB-S2x.

IQmonitor Lite is the fastest and most accurate RF analyzer in the 250-2500MHz range using PCI cards supported by StreamReader *crazycat*.

Exclusive algorithms for registering RF spectra allow obtaining high-quality, with compensation for nonlinearity of the frequency response of the entire receiving installation and standing waves in the cable for reducing the image of satellite signals with a size (along the frequency axis) up to 2500 pixels.

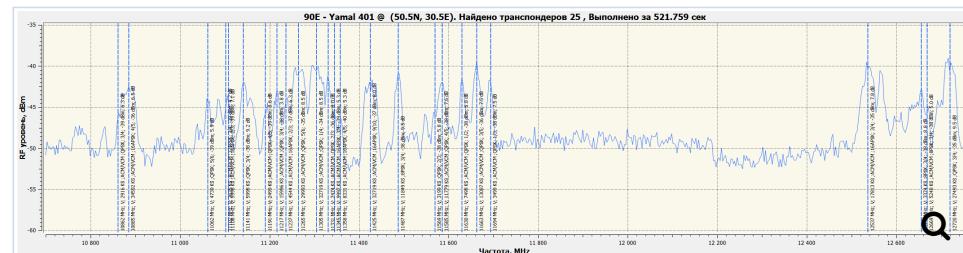
The program implements the principle of the maximum possible resolution of the spectra: SNR signal measurement for each pixel of the satellite spectrum graph.

This was made possible by measuring the SNR of the signal by its constellation even at levels below the lock threshold. A huge amount of calculations due to the use of an exclusive tunneling algorithm for the transition from the data space to the solution space was carried out within a reasonable time frame of the formation of the spectrum of DVB-S2 signals.

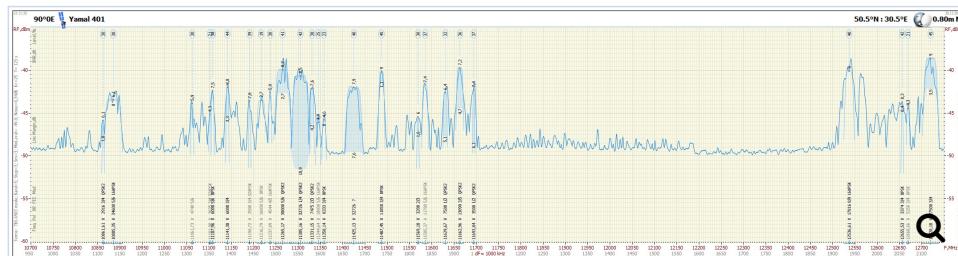
The resolution of HR (High Resolution) spectra reaches 0.2 MHz/pixel (per measurement), in contrast to the crazyscan program, in which this value is limited by the PCI card bandwidth at ~ 5 MHz, that is, 25 times worse.

IQmonitor Lite allows you to vary the parameters of the BlindScan to achieve maximum scanning speed or thoroughness. If you run another program with the same parameters (for example, crazyscan), then the scan time will still be longer, and the number of found transponders will be less.

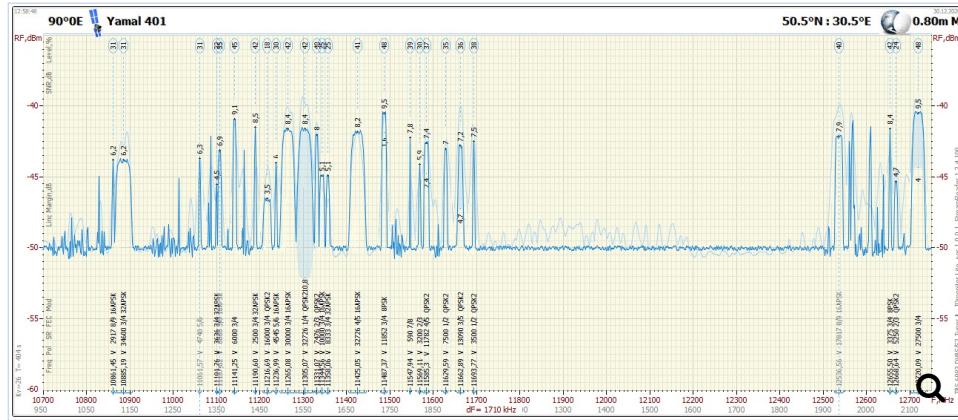
Simple spectrum step=3MHz + blindscan 27+522=549s, found 25 transponders :



Simple spectrum step=3MHz+ blindscan 21+123=144s, found 25 transponders :



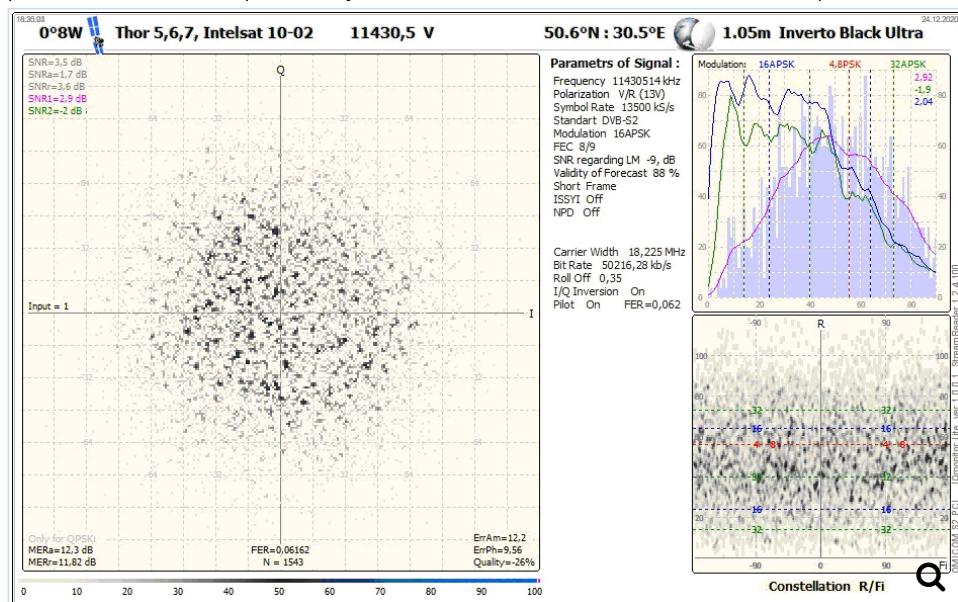
HR spectrum 404s, found 26 transponders :



IQmonitor Lite is unmatched when searching for low speed and nearby transponders. With its help, you can register and study ultra-narrowband satellite signals, up to the beacon.

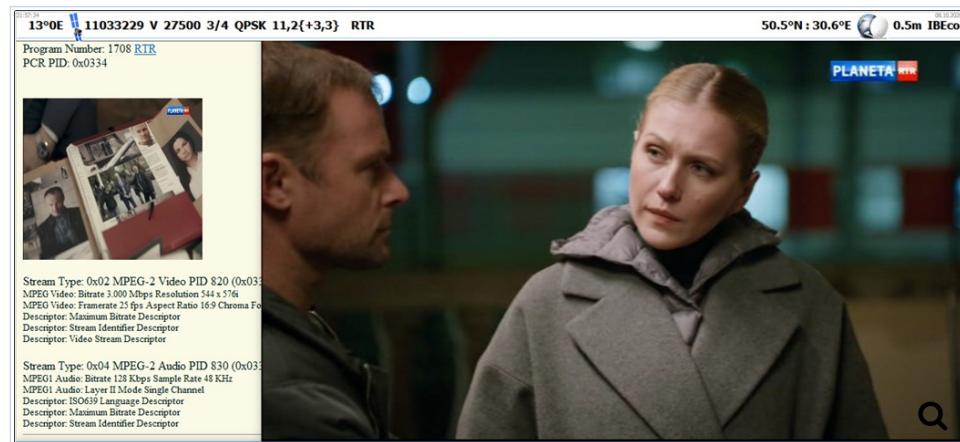
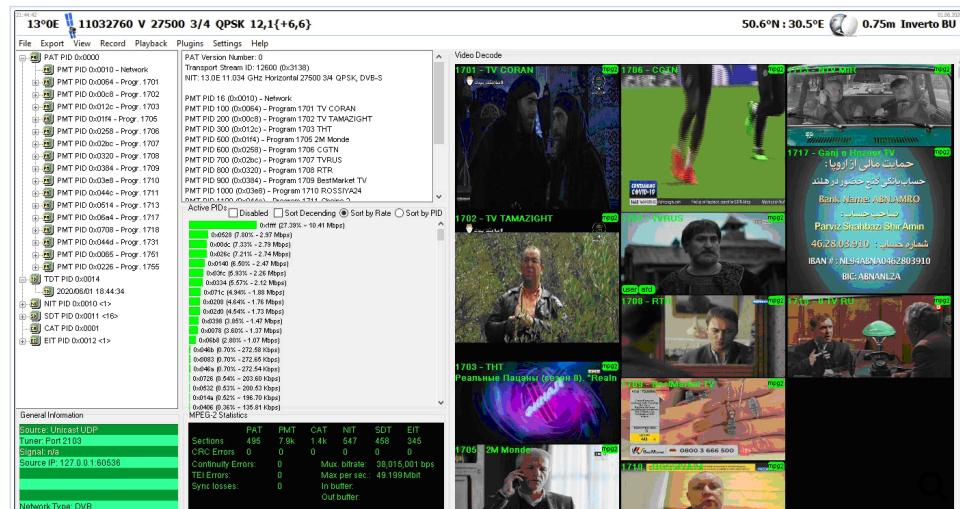
You can see how the high resolution (HR) spectrum of the satellite signal compares favorably with the normal (RF) spectrum (pale blue graph).

The IQmonitor Lite program successfully, and, most importantly, accurately determines the parameters of the transponders by IQ data in the "manual" search mode Feed Report:



Please note that the parameters of the 11430.5 V 13500kS/s FEC 8/9 16APSK transponder are determined exactly when the signal level is 9dB below the lock threshold, and the forecast reliability is 88%. This estimate was obtained using the exclusive FER (Fatal modulation Error Rate) parameter - the level of fatal modulation errors, which we have proposed and in other programs, of course, is absent.

The IQmonitor Lite program writes the transport stream of the locked transponder to disk, analyzes it using an external parser and simultaneously broadcasts it to the network using the UDP protocol. The stream can be analyzed by external programs and viewed by video players :



IQmonitor Lite is the perfect tool for DX's and feedhunters.

To install the program, it is enough to unpack the archive into the selected directory, and if it is the directory of the IQmonitor_2 program, then all your settings, including the calibration curve, will be automatically used. If the directory was empty, you need to write your coordinates, antenna aperture diameter and LNB type in the program, and write paths to parsers and viewers in the ini-file. The calibration curve will either need to be registered or loaded from an rfs file.

After closing the program, all settings will be saved in the IQmonitor_Lite.INI file.



<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)



stephan94

[Moderator]

Dec 30th 2020

Eine der Besonderheiten von IQMonitor lite ist die Möglichkeit, das Frequenzbereich 11700-12500 nicht zu scannen. Manchmal ist es mit einer kleinen Antenne schwierig, zwei Satelliten zu trennen (z. B. 10 ° Ost-9 ° Ost). so ist es einfacher geworden , und dazu ist die scandauer abgekürzt

One of the particularities of IQMonitor lite

Reactions Received:

623

Posts:

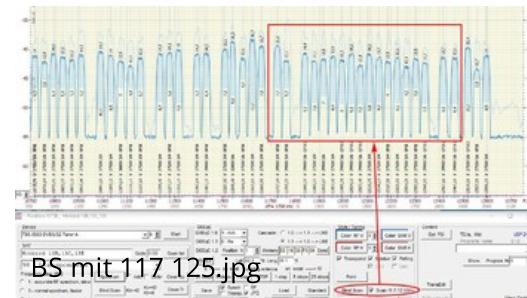
1,057

is the possibility of not scanning the frequency band 11700-12500.

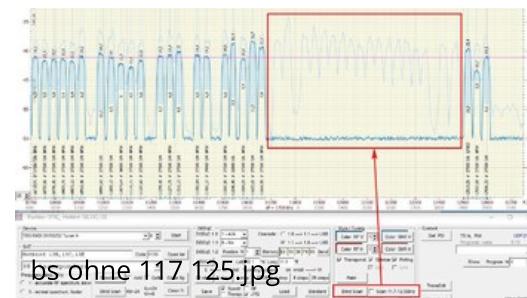
Sometimes with a small antenna it is difficult to separate two satellites (10 ° East-9 ° East for example)

this novelty makes it easier and the scanning time is also shortened

Images



412.43 kB 1,272x906 68



384.55 kB 1,273x905 69

Franzose in Franken

1.80m Ch.Master Revolver 5 LNB

IBU twin , Bulleye 10kHz, Kaonsat 13K, Invertor KaKuband,Kaband (A)

TBS5925+6983; Openbox SX6 ; Edision MIO4K ;GTMedia V8 turbo



moonbase

Reactions Received:

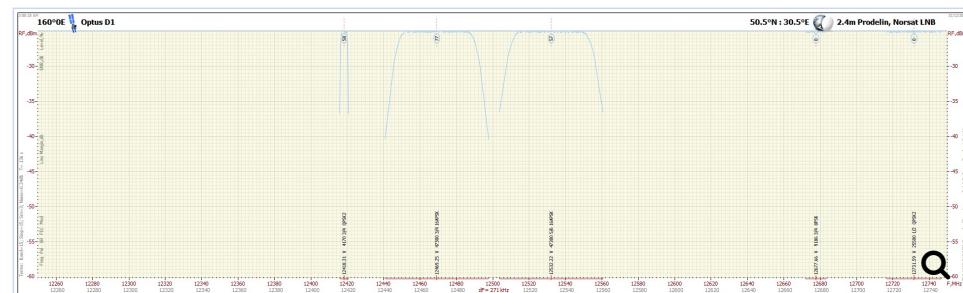
143

Posts:

102

Dec 30th 2020

Here is a screen shot from Optus D1 @ 160.0E in H polarity.



Dec 30th 2020



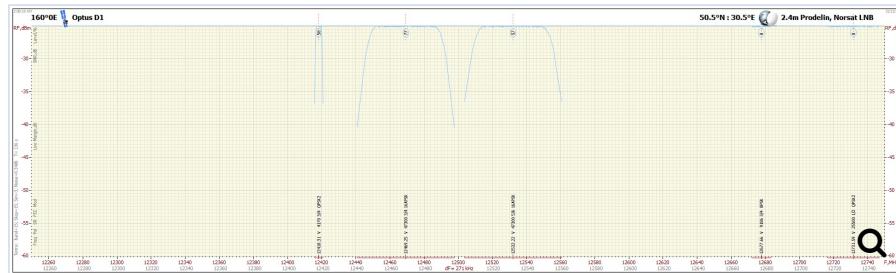
Quote from moonbase

Here is a screen shot from Optus D1 @ 160.0E in H polarity.

strannik

[Enlightened]

Reactions Received: 539
Posts: 495



This is not a spectrum, but delirium on a moonlit night ...

First, enter your coordinates, and then write down how (by the sequence of what operations and under what parameters) you managed to get such a funny picture. Your log- and INI- files will help us sort out this situation.

Success



 . Yuri Filatov (*strannik*)

<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)

The logo consists of the letters "MO" in a white, sans-serif font, centered within a solid red circular background.

Reactions Received: 143
Posts: 102

Dec 31st 2020

Quote from strannik

This is not a spectrum, but delirium on a moonlit night ...

First, enter your coordinates, and then write down how (by the sequence of what operations and under what parameters) you managed to get such a funny picture.

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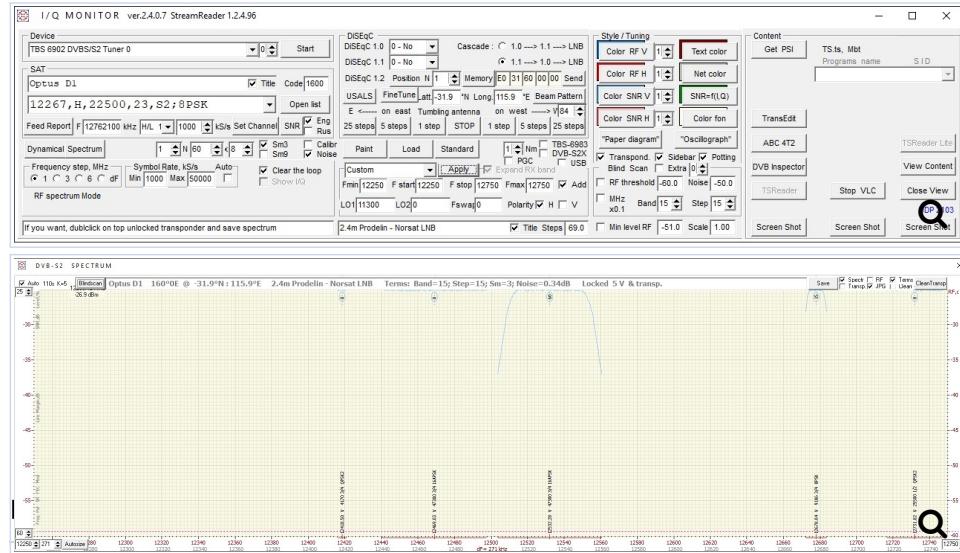
A circular portrait of a middle-aged man with short, light-colored hair, wearing glasses, a white shirt, and a dark tie. He is looking slightly to his left.

Success

More delirium, the coffee is strong today.

I have attached some pictures of todays scan and setting panel from 160E and attached some log files. The coordinates are also included.

I used the settings in the panel then pressed the blind scan button in the spectrum grid.



Log & INI.zip

(2.38 kB, downloaded 50 times, last: May 2nd 2022)



IQmonitor_2INI.zip

(1.92 kB, downloaded 52 times, last: May 2nd 2022)

Edited once, last by moonbase (Dec 31st 2020).



stephan94

[Moderator]

Reactions Received:

623

Posts:

1,057

Dec 31st 2020

Hello Moonbase 😊

Schauen Sie sich gut diese Video ,
so soll ein Blindscan ohne Spectrum funktionieren .

Sie können sehen , dass das Ergebnis viel besser ist.

Ich glaube , Sie müssen noch ein bisschen üben .



Viel Glück

Hello Moonbase 😊

Take a good look at this video,
this is how a blind scan should work without a spectrum.
You can see that the result is much better.

I think you need to practice a little more.



Good luck

Files



blindscan.zip

(1.91 MB, downloaded 69 times, last: May 2nd 2022)

Franzose in Franken

1.80m Ch.Master Revolver 5 LNB

IBU twin , Bulleye 10kHz, Kaonsat 13K, Invertor KaKuband,Kaband (A)

TBS5925+6983; Openbox SX6 ; Edision MIO4K ;GTMedia V8 turbo

Dec 31st 2020

Greetings Yuri.

Many thanks for the lite version of the IQ monitor. 🍻🍻

I found a minor error saving settings. When selecting a C band and then closing IQmonitor Lite, it does not save the C band setting. After opening IQmonitor Lite, the Ku band is selected again,



Peon

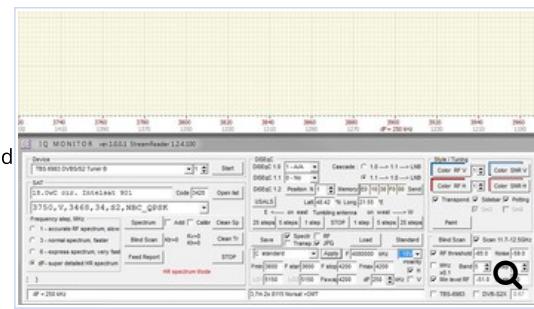
Reactions Received:

218

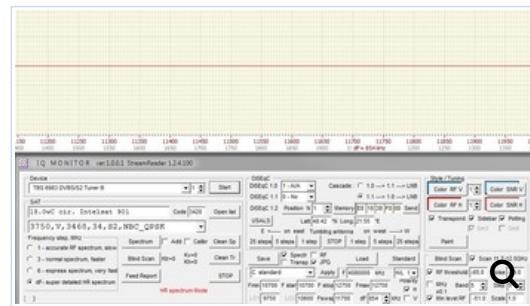
Posts:

196

Setting C band



after restart



Geoposition: 48,71N, 21,92E. Promax Ranger Neo 2, TBS5925, TBS6983, TBS6903, TBS6903x, TBS6903x V2, TBS6522, TBS5520SE, TBS5927, TBS5590, Prof7301, PF 250cm, ADE antenna 370cm. Full band LNBS: S, L, C: NJS8487S PLL ,X PLL, Ku NJR2842S PLL, full Ka band PLL, and other iron for DX reception, 53W - 98E.



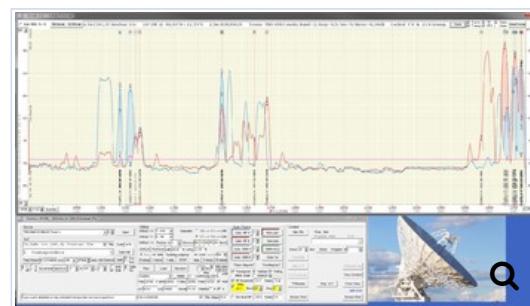
Peon

Dec 31st 2020

Greetings Yuri.

I appreciate the possibility to choose the scanning range BlinScan (11.7-12500) I would welcome such a setting option in the lower band (10.7-11.7), because some satellites do not have full use of the lower band. For example, 18.0 west. *But variable, not fixed sets.*

Thank you for your response.



Geoposition: 48,71N, 21,92E. Promax Ranger Neo 2, TBS5925, TBS6983, TBS6903, TBS6903x, TBS6903x V2, TBS6522, TBS5520SE, TBS5927, TBS5590, Prof7301, PF 250cm, ADE antenna 370cm. Full band LNBS: S, L, C: NJS8487S PLL ,X PLL, Ku NJR2842S PLL, full Ka band PLL, and other iron for DX reception, 53W - 98E.

Dec 31st 2020

Quote from stephan94

Hello Moonbase😊





moonbase

*Take a good look at this video,
this is how a blind scan should work without a spectrum.
You can see that the result is much better.*

[Display More](#)

Reactions Received:

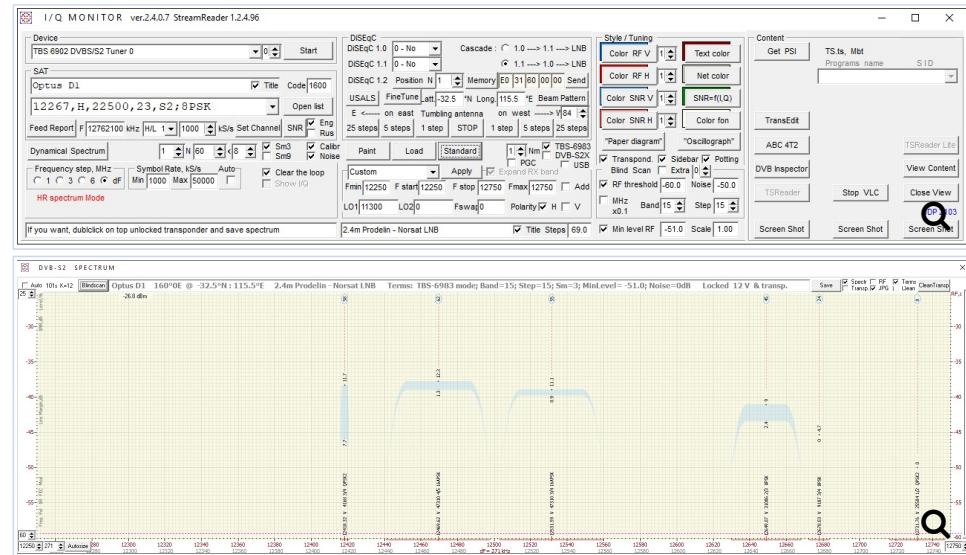
143

Posts:

102

I used the settings in the video and ran the blindscan again.

It looks like more delerium and more coffee needed, perhaps something stronger than coffee?
A couple of points, I always get a message about a floating point error 0,633 when opening the IQ Monitor Tool and it does not seem to save my settings, it always reverts back to the Astra settings with an IBU LNB?



stephan94

[Moderator]

Dec 31st 2020

Sieht Ihr IQmonitor 2407-Ordner so aus?
Sie arbeiten mit Windows10 , nehme ich an
floating point error 0.633 ,keine Ahnung , was es sein kann

Does your IQmonitor 2407 folder look like this?
You're on Windows 10, I suppose
floating point error 0.633 ,i don't see what it can be

Images

Reactions Received:

623

Posts:

1,057

	Änderungsdatum	Typ	Größe
tions	24.12.2020 09:20	Dateiordner	
llites	24.12.2020 09:20	Dateiordner	
sEdit	24.12.2020 09:20	Dateiordner	
inspector-1.10.0.jar	12.08.2018 15:18	Executable Jar File	3
onitor_2.exe	07.11.2020 12:29	Anwendung	3
onitor_2.INI	22.12.2020 13:47	Konfigurationsein...	
smReader.dll	04.07.2020 02:48	Anwendungsse...	2
smReader.jpg	01.11.2020 11:57	Konfigurationsein...	
smReader.log	22.12.2020 13:47	Textdokument	

39.99 kB 607x286 62

Französe in Franken

1.80m Ch.Master Revolver 5 LNB

IBU twin , Bulleye 10kHz, Kaonsat 13K, Inverto KaKuband,Kaband (A)

TBS5925+6983; Openbox SX6 ; Edision MIO4K ;GTMedia V8 turbo



moonbase

Reactions Received:

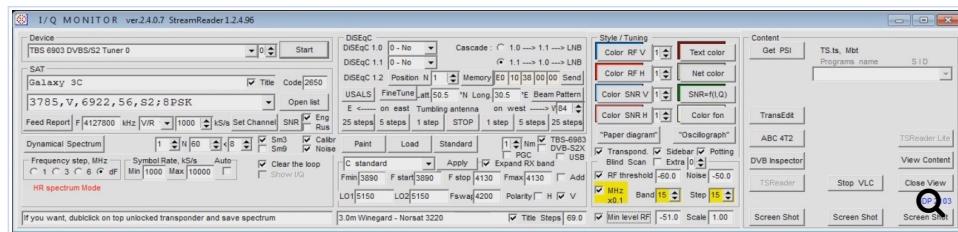
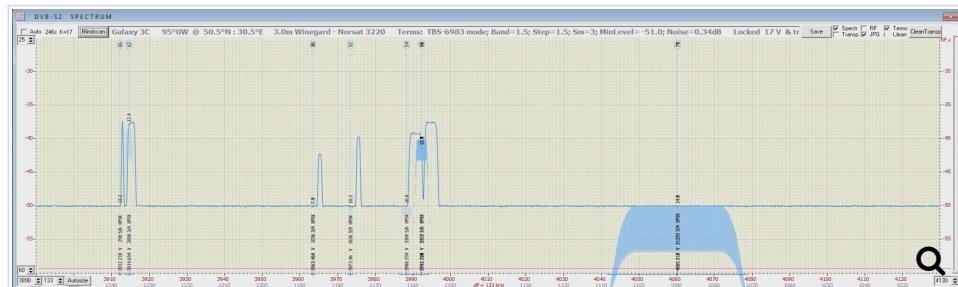
143

Posts:

102

Dec 31st 2020

More delirium from me, this time it is from 95.0 West, Galaxy 3C in C-Band.



moonbase

Reactions Received:

143

Posts:

102

Dec 31st 2020

Quote from stephan94

Sieht Ihr IQmonitor 2407-Ordner so aus?

Sie arbeiten mit Windows10, nehme ich an

floating point error 0.633 , keine Ahnung, was es sein kann



Stephan

Please find attached below a picture of my IQ Monitor folder and one of the Floating Point error message.

Name	Size	Type	Date modified
Eng		File folder	12/31/2020 6:12 AM
Positions		File folder	12/31/2020 6:13 AM
RUS		File folder	12/31/2020 6:13 AM
Satellites		File folder	12/31/2020 6:12 AM
Transponders		File folder	12/31/2020 6:18 AM
DVBinspector-1.10.0.jar	3,704 KB	JAR File	8/12/2018 4:18 PM
DVBSOURCE.ini	0 KB	Configuration settings	10/4/2016 11:05 AM
IQmonitor_2.exe	3,683 KB	Application	11/7/2020 12:29 PM
IQmonitor_2.ini	86 KB	Configuration settings	12/31/2020 7:26 AM
IQmonitor_2.ini.jpg	69 KB	JPEG image	3/24/2019 8:39 PM
StreamReader.dll	2,324 KB	Application extension	3/5/2020 1:35 AM
StreamReader.ini	3 KB	Configuration settings	11/1/2020 11:57 AM
StreamReader.log	31 KB	Text Document	12/31/2020 7:26 AM
TransEdit.chm	356 KB	Compiled HTML Help file	12/28/2014 9:12 AM
TransEdit.exe	768 KB	Application	11/17/2017 6:34 AM
TransEdit.ini	4 KB	Configuration settings	2/6/2019 2:28 PM
TransEditHelp.ini	1 KB	Configuration settings	12/5/2009 3:11 AM



strannik

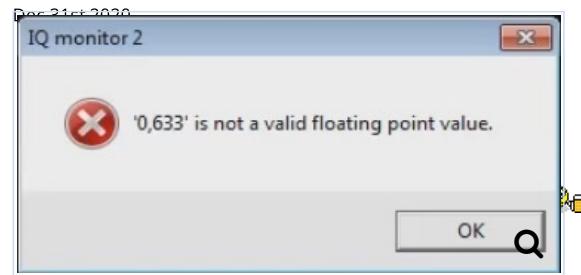
[Enlightened]

Reactions Received:

539

Posts:

495



Hi Peter

Thank you very much for the error encountered while saving the settings.

Let's figure it out after the holidays.

In the meantime, Happy New Year!

Yuri

 . Yuri Filatov (strannik)<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)

femi

Reactions Received:

337

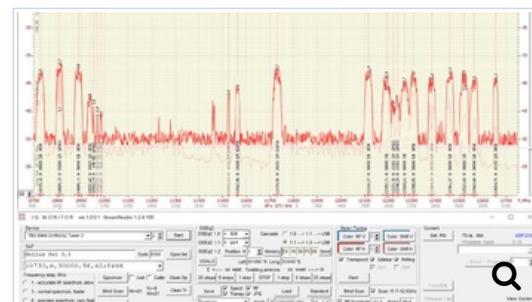
Posts:

516

Dec 31st 2020

Hier ein Testlauf mit der Light Version auf 39°E ohne jetzt speziell auf Einstellungen geachtet zu haben.

Here is a test run with the light version at 39 ° E without paying special attention to the settings.



Ku/C-Band: IRTE (2,4m, 78°E - 43°W, Corotor II plus), LNBs: SMW Multiband Typ E, Norsat DRO 8115F 15K
 Ka/Ku/C/(X)-Band: Laminas 1800 stationär (55°E - 5°W, LNB-Changer Version 2018) und Laminas 1800 mobil
 LNBs: Zinwel ZCF-D21B 20K, Norsat 9000HAF-2, 9200HBC-4F, 9000HD-3F, 9200HEF-4, XMW R1314IF-1
 Tuner: TBS 6908, TBS 6925, TBS 5927, TBS 5580, TBS6903x, TBS6281SE, TBS6904SE



strannik
[Enlightened]

Dec 31st 2020

Quote from Peon

Greetings Yuri.

*I appreciate the possibility to choose the scanning range BlinScan (11.7-12500)
 I would welcome such a setting option in the lower band (10.7-11.7), because some satellites do not have full use of the lower band...*



Reactions Received: 539
 Posts: 495

I thought about it.

This idea occurred to me, and along with other innovations it will be implemented in the **Pro** version of the program

. Yuri Filatov (*strannik*)

<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)



strannik
[Enlightened]

Dec 31st 2020

Quote from femi



Hier ein Testlauf mit der Light Version auf 39°E ohne jetzt speziell auf Einstellungen geachtet zu haben.

Here is a test run with the light version at 39 ° E without paying special attention to the settings.

Reactions Received: 539
 Posts: 495

Very good for a first try 😊

Advice:

1. Coordinates are enough to set 48.60 and 15.53
2. In **IQmonitor_Lite.INI** write in the [CALIBRATION] section line
 $LNB_NF = 0.73$

Good luck! 🎉

. Yuri Filatov (*strannik*)

<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)

Dec 31st 2020



femi

Reactions Received:

337

Posts:

516

Hello Moonbase,

Die meiste Ursache des Floting point Errors ist die Verwendung von "," statt "." oder umgekehrt, das hängt mit den Windows Systemeinstellungen zusammen.

Most of the cause of the floating point error is the use of "," instead of "." or vice versa, it has to do with the Windows system settings.

160E ist für uns Mitteleuropäer nicht gerade ein optimaler Satellit, um die ein Beispiel daraus zu basteln. Galaxy 3C in C-Band ist schon ein wenig besser.

0,1x MHz kannst du in den meisten Fällen deaktiviert lassen.

For us Central Europeans, 160E is not the ideal satellite to use as an example. Galaxy 3C in C-band is a little better.

You can leave 0.1x MHz deactivated in most cases.

All users a happy new year and stay heath



Ku/C-Band: IRTE (2,4m, 78°E - 43°W, Corotor II plus), LNBs: SMW Multiband Typ E, Norsat DRO 8115F 15K

Ka/Ku/C/(X)-Band: Laminas 1800 stationär (55°E - 5°W, LNB-Changer Version 2018) und Laminas 1800 mobil

LNBs: Zinwel ZCF-D21B 20K, Norsat 9000HAF-2, 9200HBC-4F, 9000HD-3F, 9200HEF-4, XMW R1314IF-1

Tuner: TBS 6908, TBS 6925, TBS 5927, TBS 5580, TBS6903x, TBS6281SE, TBS6904SE



strannik

[Enlightened]

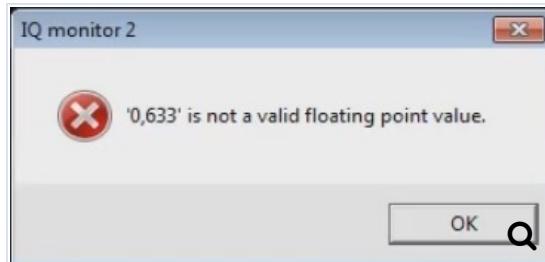
Dec 31st 2020

Quote from moonbase

Stephan,



Please find attached below a picture of my IQ Monitor folder and one of the Floating Point error message.



Good luck in the New Year!



And don't drink a lot of coffee - take care of your health



View - IQmonitor_2.INI

File Edit View Help

```
[FORM]
Top=619
Left=373
TopSpectr=1
LeftSpectr=-8
HeightSpectr=600
WidthSpectr=1940
TopFeedReport=8
LeftFeedReport=332
Caption= I / Q M O N I T O R
TopTransponder=-4
LeftTransponder=100
HeightTransponder=1000
TopTableo=240
LeftTableo=300
WidthTableo=480

[DEVICE]
Device=TBS 6902 DVBS/S2 Tuner 0
IndDevice=0
S2X_scale=0,633 Use a decimal point here, not a comma!
S2X_shift=47

[SAT]
SatCode=0049
SatName= Astra 4A & SES 5

[USALS]
Latitude=50.5
Longitude=30.5
Antenna= 0.84m Inverto Black Ultra
Steps/degree= 69.0
Apertura=84
Fill in your coordinates,
the diameter of the antenna in meters and its aperture
in centimeters
List your paths to parsers and viewers
```

Q



. Yuri Filatov (*strannik*)

<https://filatov-yuri.livejournal.com> (<https://filatov-yuri.livejournal.com>)



Dec 31st 2020

@strannik ,

Thank you for the INI corrections.

One question, what is the Apertura of the dish, is this the beamwidth angle, for the prime focus dishes this is about 140.0 degrees?

Reactions Received:

143 It is a slow process to learn from a zero start point but I am sure that I can improve, I will

Posts:

102 change from Coffee to Tea, it might reduce the delerium !

◀ 1 ... 54 55 56 ... 101 ➤

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