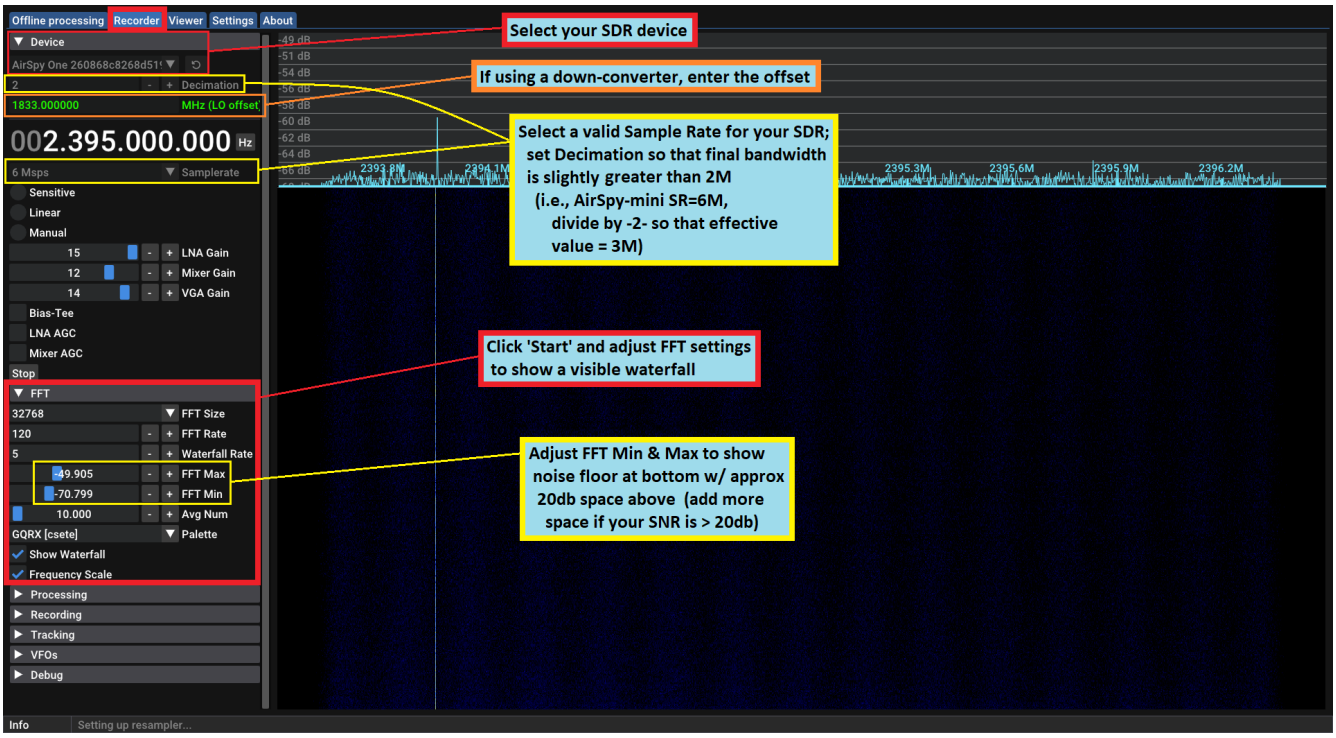
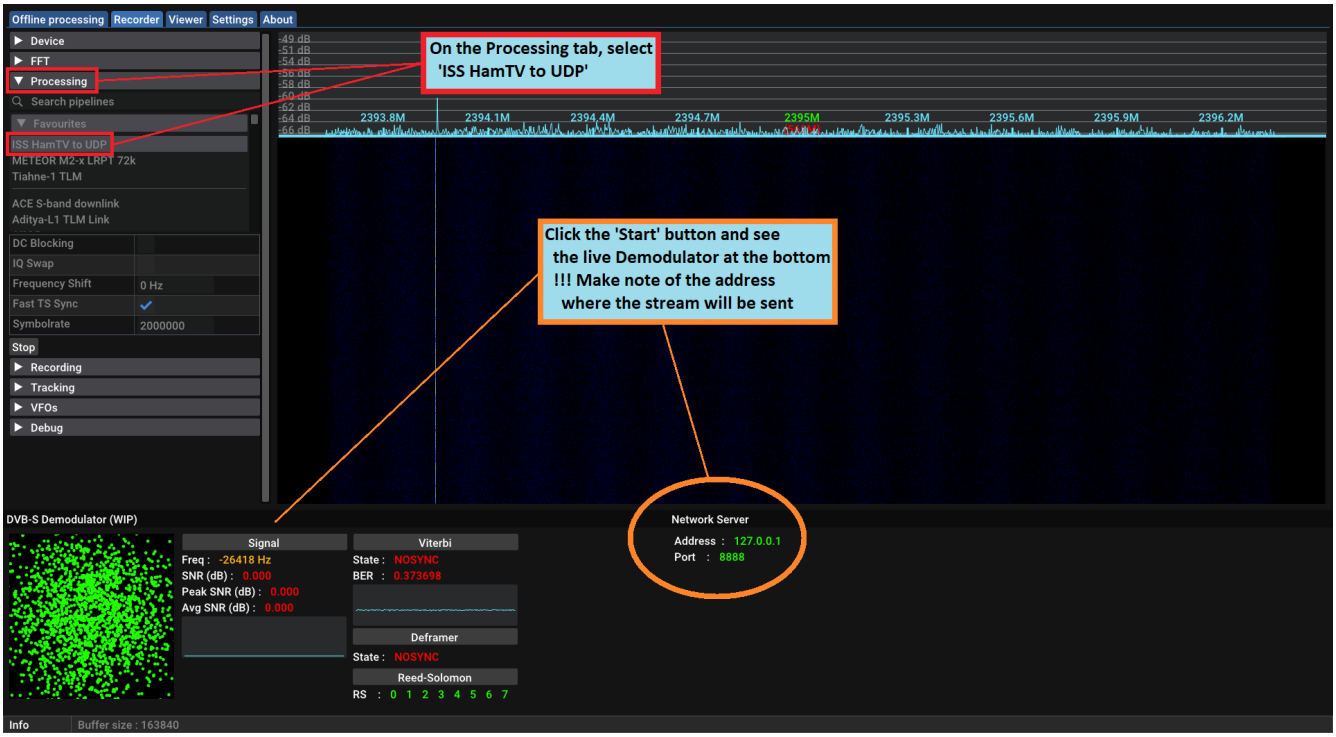
Setting up SatDump & VLC Media Player for ISS S-Band HamTV
24-Dec-2025
K4KDR

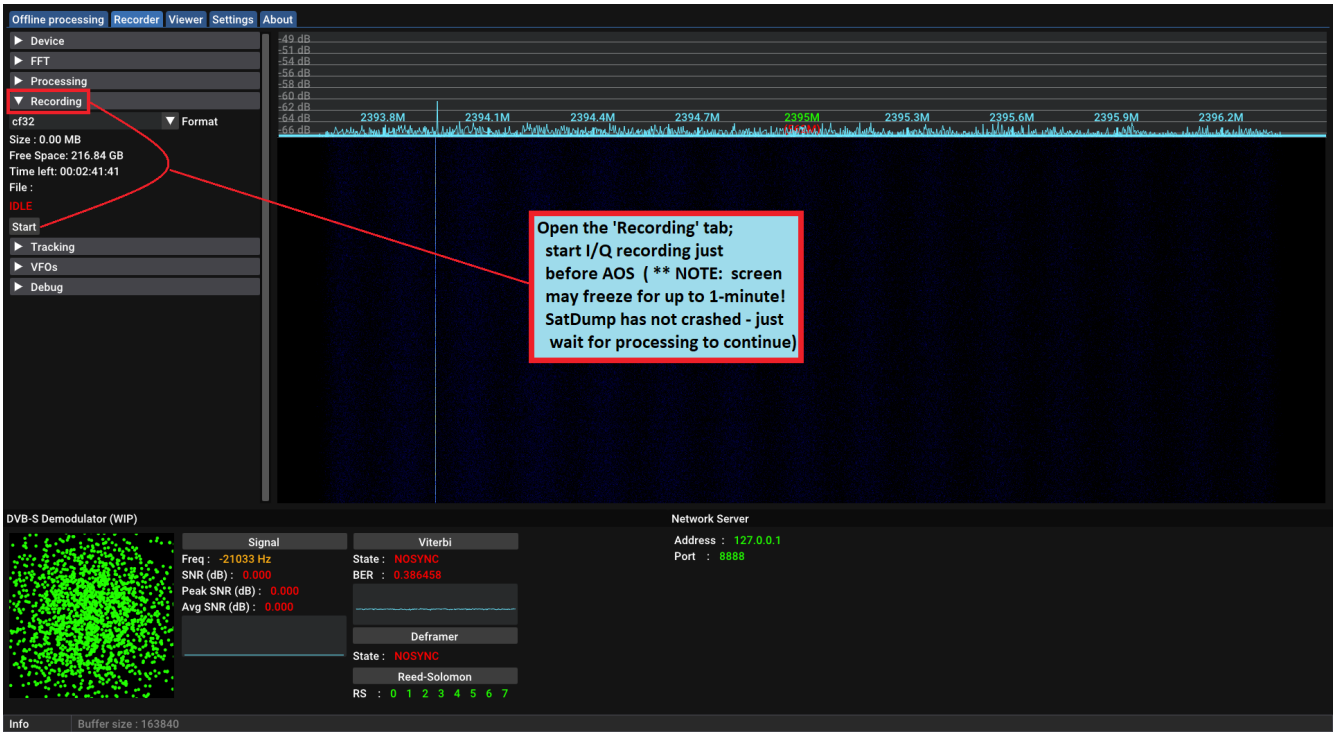
It is assumed that you have SatDump & VLC Media Player installed & know how to launch both apps.

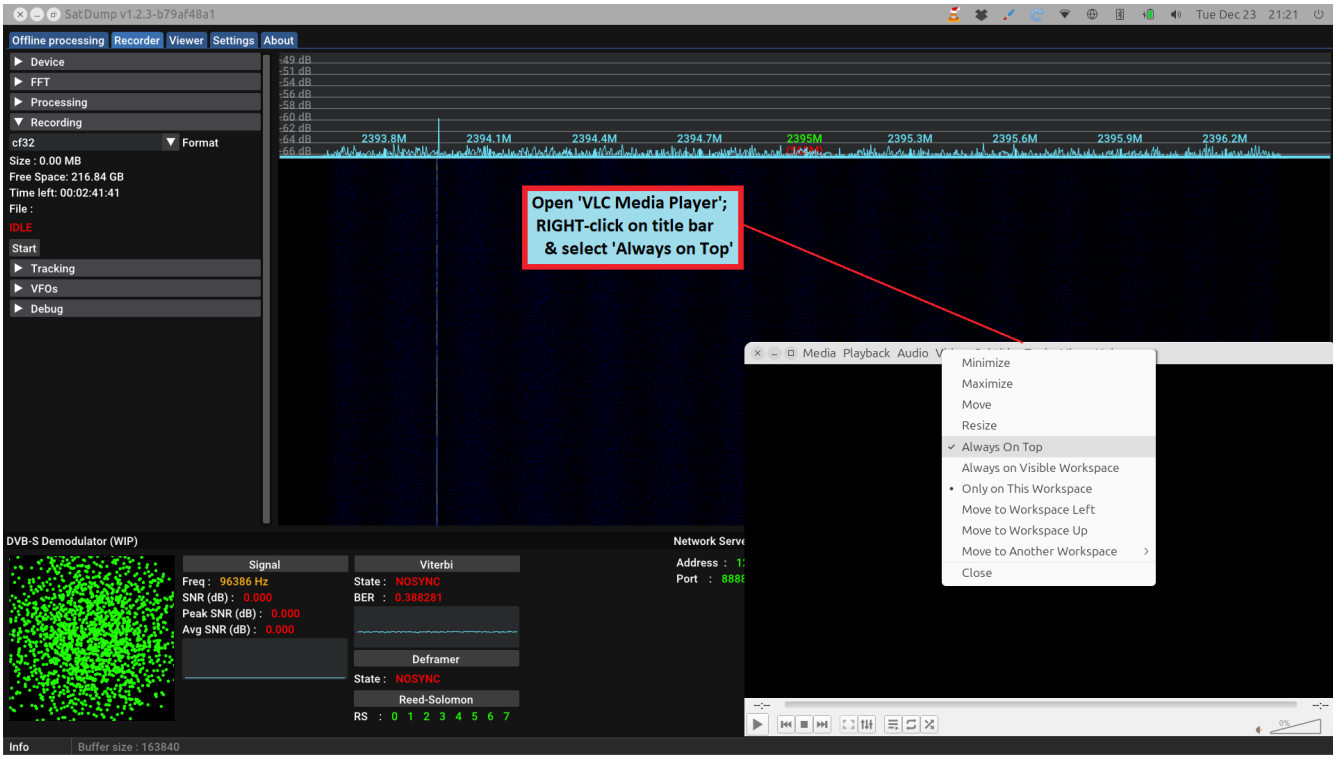
Suggestion: play a known-good video file (WITH audio) in VLC Media Player to confirm that you will hear what is played through your speakers.

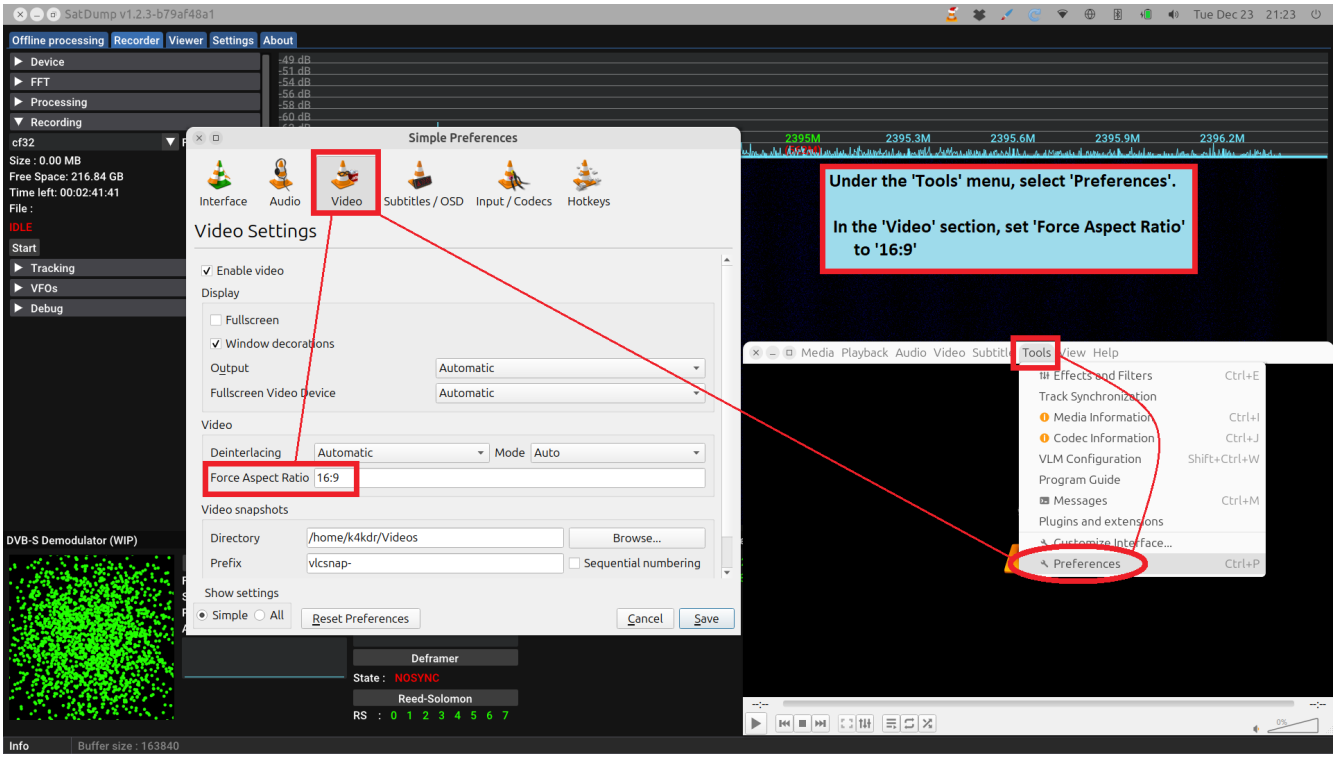
These are the settings that work for me. Please adjust to your preferences or what you find to work best on your computer!

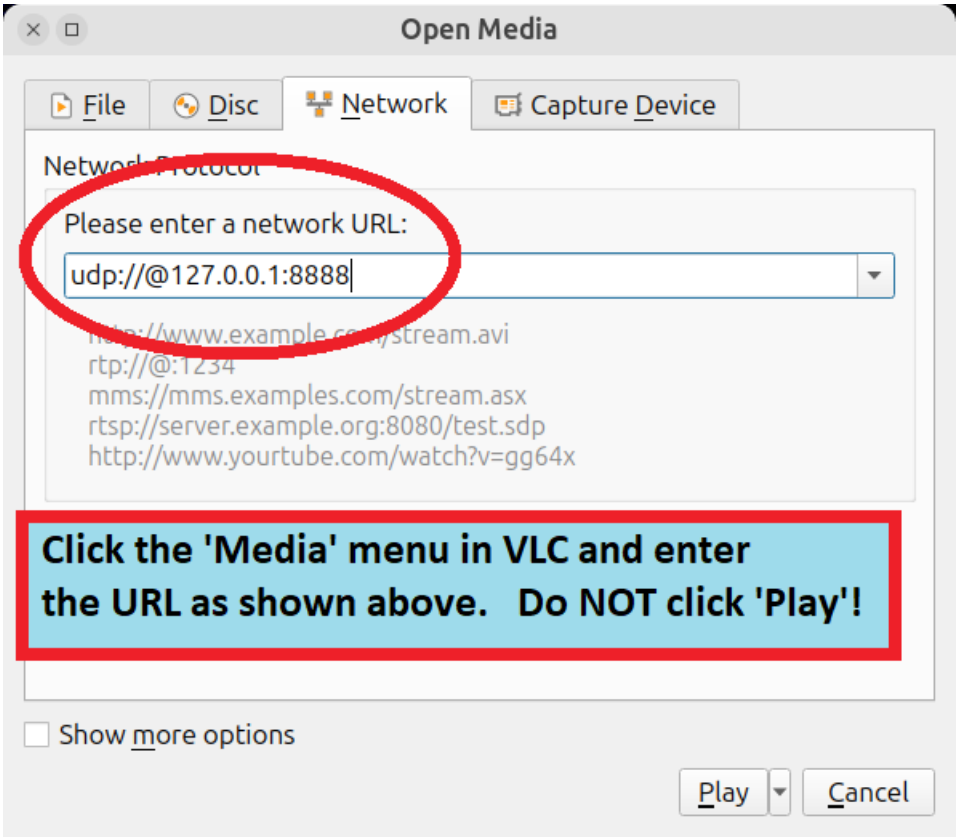


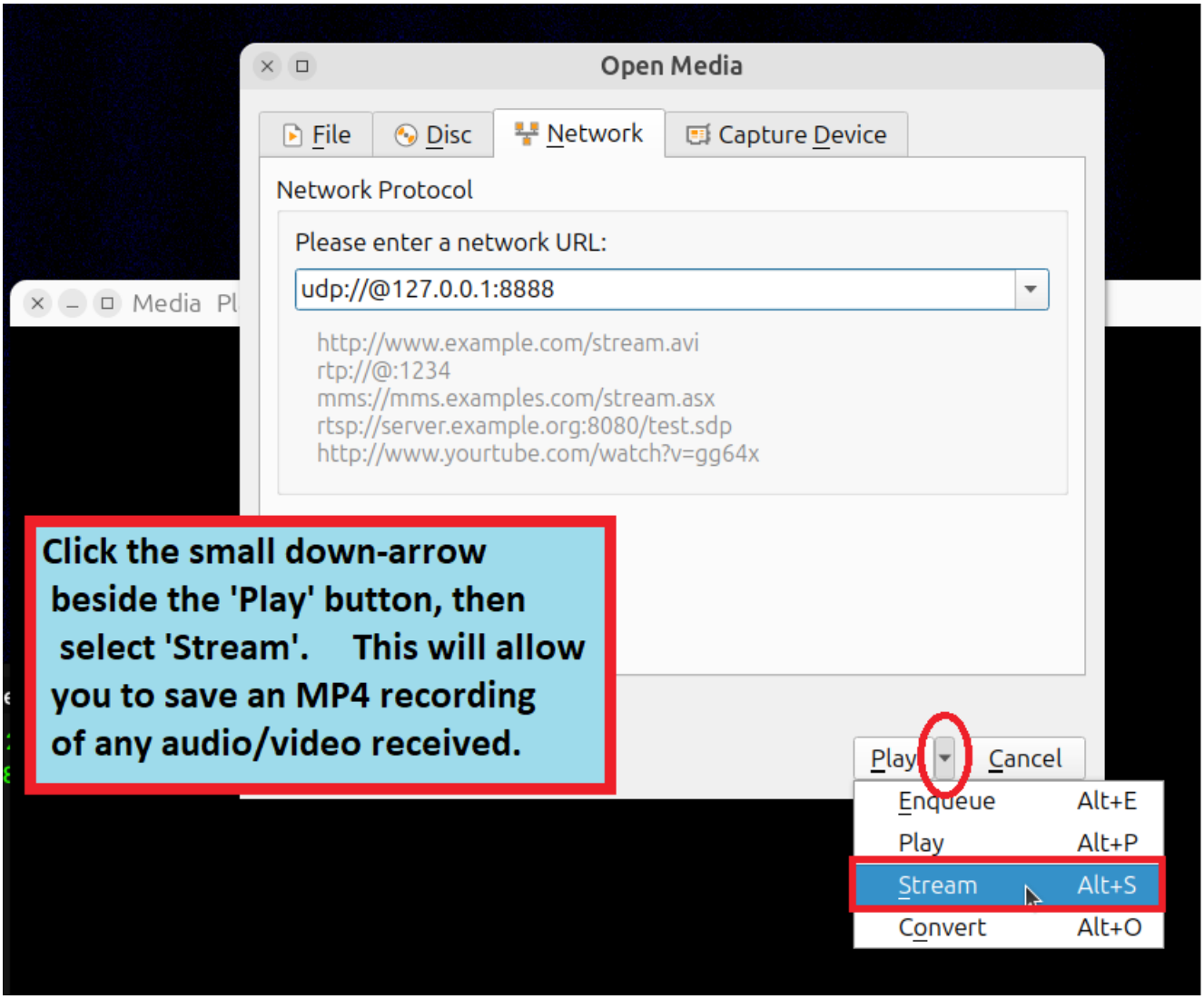

Offline processing
Recorder
Viewer
Settings
About
Device
FFT
Processing
Search pipelines
Favourites
ISS HamTV to UDP
METEOR M2-x LRPT 72k
Tiahne-1 TLM
ACE S-band downlink
Aditya-L1 TLM Link
DC Blocking
IQ Swap
Frequency Shift
0 Hz
Fast TS Sync
Symbolrate
2000000
Stop
Recording
Tracking
VFOs
Debug
On the Processing tab, select 'ISS HamTV to UDP'
Click the 'Start' button and see the live Demodulator at the bottom !!! Make note of the address where the stream will be sent
DVB-S Demodulator (WIP)
Signal
Freq : -26418 Hz
SNR (dB) : 0.000
Peak SNR (dB) : 0.000
Avg SNR (dB) : 0.000
Viterbi
State : NOSYNC
BER : 0.373698
Deframer
State : NOSYNC
Reed-Solomon
RS : 0 1 2 3 4 5 6 7
Network Server
Address : 127.0.0.1
Port : 8888
Info
Buffer size : 163840

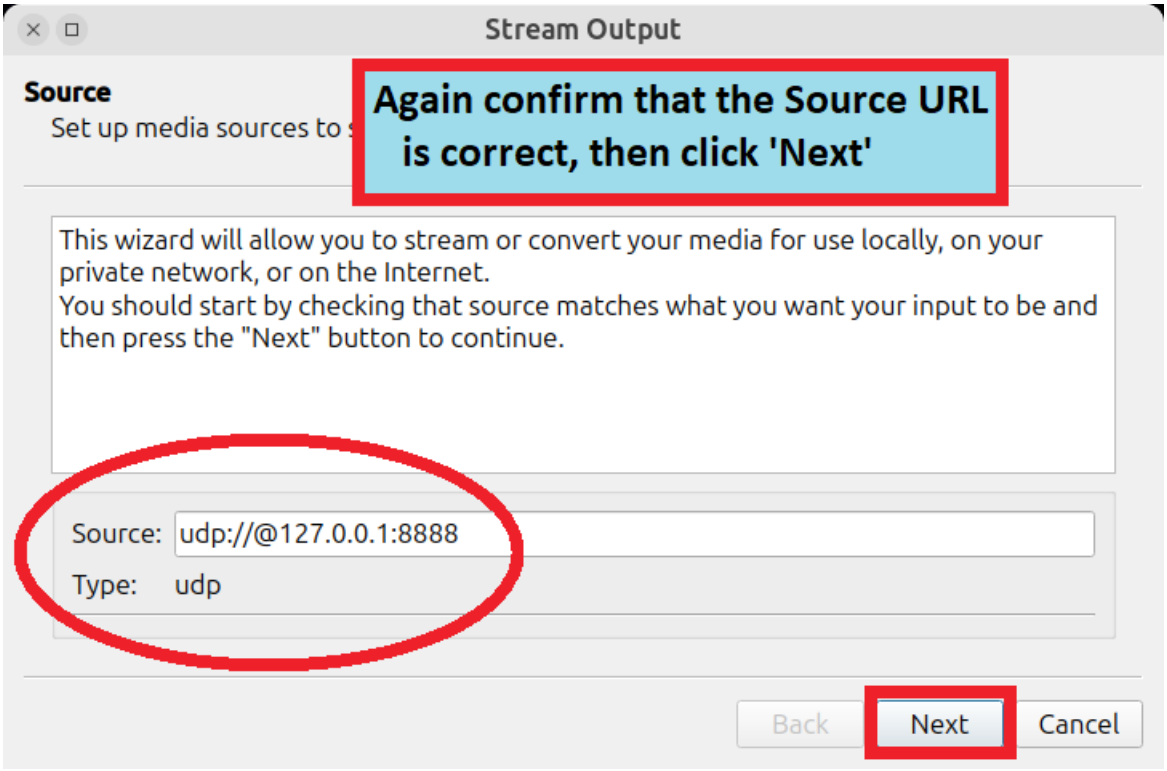

Offline processing
Recorder
Viewer
Settings
About
Device
FFT
Processing
Recording
cf32
Format
Size : 0.00 MB
Free Space: 216.84 GB
Time left: 00:02:41:41
File :
IDLE
Start
Tracking
VFOs
Debug
Open the 'Recording' tab; start I/Q recording just before AOS (** NOTE: screen may freeze for up to 1-minute! SatDump has not crashed - just wait for processing to continue)
DVB-S Demodulator (WIP)
Signal
Freq : -21033 Hz
SNR (dB) : 0.000
Peak SNR (dB) : 0.000
Avg SNR (dB) : 0.000
Viterbi
State : NOSYNC
BER : 0.386458
Deframer
State : NOSYNC
Reed-Solomon
RS : 0 1 2 3 4 5 6 7
Network Server
Address : 127.0.0.1
Port : 8888
Info
Buffer size : 163840

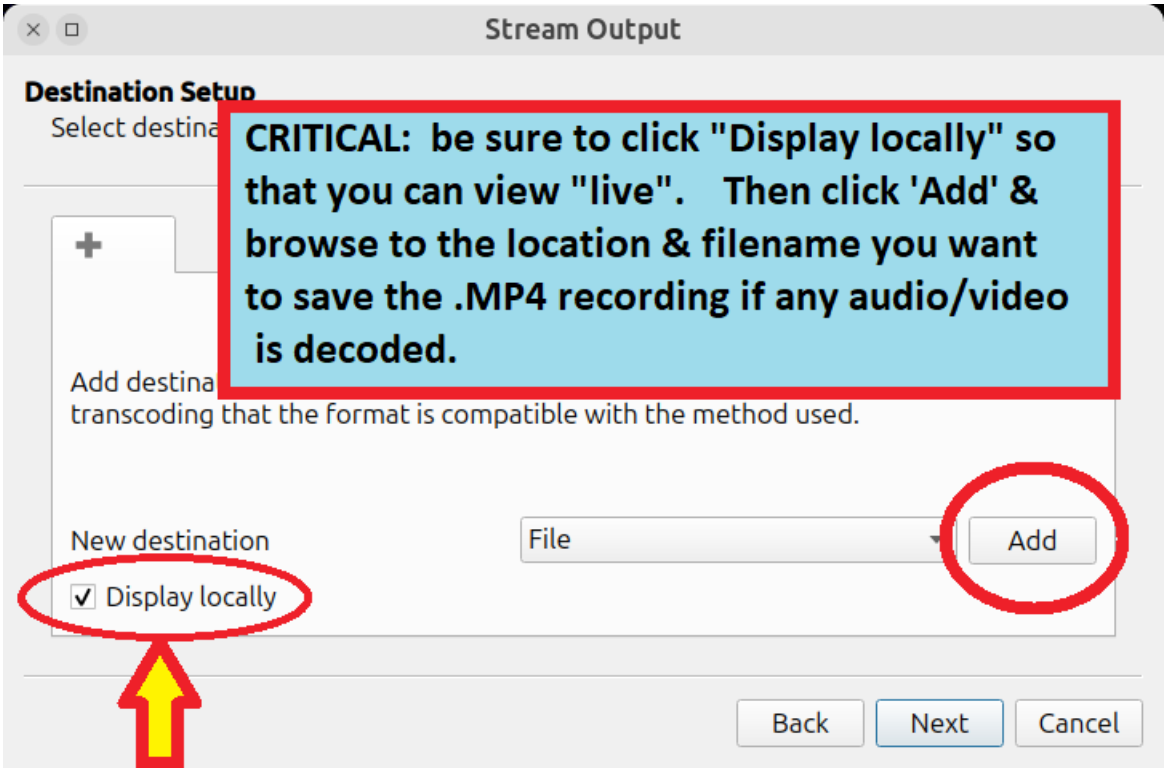

SatDump v1.2.3-b79af48a1
Tue Dec 23 21:21
Offline processing
Recorder
Viewer
Settings
About
Device
FFT
Processing
Recording
cf32
Format
Size : 0.00 MB
Free Space: 216.84 GB
Time left: 00:02:41:41
File :
IDLE
Start
Tracking
VFOs
Debug
2393.8M
2394.1M
2394.4M
2394.7M
2395M
2395.3M
2395.6M
2395.9M
2396.2M
Open 'VLC Media Player';
RIGHT-click on title bar
& select 'Always on Top'
Media Playback Audio
Minimize
Maximize
Move
Resize
Always On Top
Always on Visible Workspace
Only on This Workspace
Move to Workspace Left
Move to Workspace Up
Move to Another Workspace
Close
DVB-S Demodulator (WIP)
Signal
Freq : 96386 Hz
SNR (dB) : 0.000
Peak SNR (dB) : 0.000
Avg SNR (dB) : 0.000
Viterbi
State : NOSYNC
BER : 0.388281
Deframer
State : NOSYNC
Reed-Solomon
RS : 0 1 2 3 4 5 6 7
Network Serv
Address :
Port :
Info
Buffer size : 163840

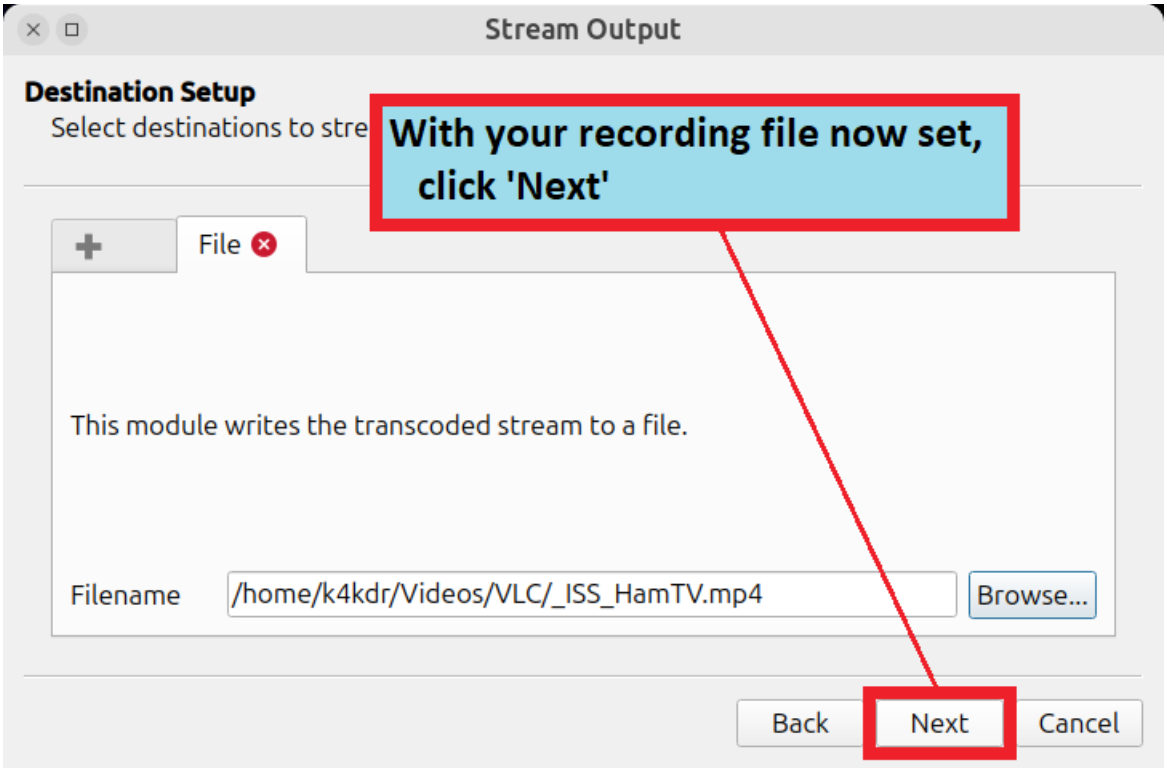

SatDump v1.2.3-b79af48a1
Tue Dec 23 21:23
Offline processing
Recorder
Viewer
Settings
About
Simple Preferences
Interface
Audio
Video
Subtitles / OSD
Input / Codecs
Hotkeys
Video Settings
Enable video
Display
Fullscreen
Window decorations
Output
Automatic
Fullscreen Video Device
Automatic
Video
Deinterlacing
Automatic
Mode
Auto
Force Aspect Ratio
16:9
Video snapshots
Directory
/home/k4kdr/Videos
Browse...
Prefix
vlcsnap-
Sequential numbering
Show settings
Simple
All
Reset Preferences
Cancel
Save
Under the 'Tools' menu, select 'Preferences'.
In the 'Video' section, set 'Force Aspect Ratio'
to '16:9'
Media Playback Audio Video Subtitle
Tools
View
Help
Effects and Filters
Ctrl+E
Track Synchronization
Media Information
Ctrl+I
Codec Information
Ctrl+J
VLM Configuration
Shift+Ctrl+W
Program Guide
Messages
Ctrl+M
Plugins and extensions
Customize Interface...
Preferences
Ctrl+P
DVB-S Demodulator (WIP)
Deframer
State : NOSYNC
Reed-Solomon
RS : 0 1 2 3 4 5 6 7
Info
Buffer size : 163840

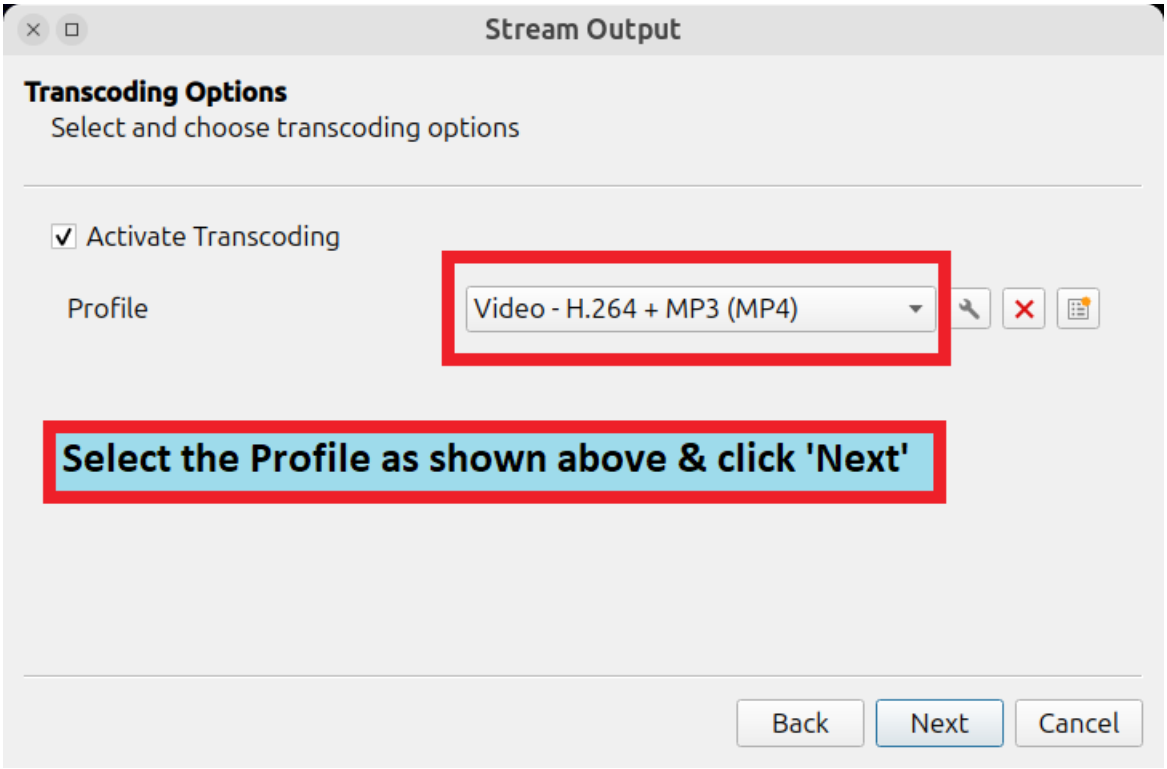

Open Media
File
Disc
Network
Capture Device
Please enter a network URL:
udp://@127.0.0.1:8888
http://www.example.com/stream.avi
rtp://@:1234
mms://mms.examples.com/stream.asx
rtsp://server.example.org:8080/test.sdp
http://www.yourtube.com/watch?v=gg64x
Click the 'Media' menu in VLC and enter the URL as shown above. Do NOT click 'Play'!
Show more options
Play
Cancel

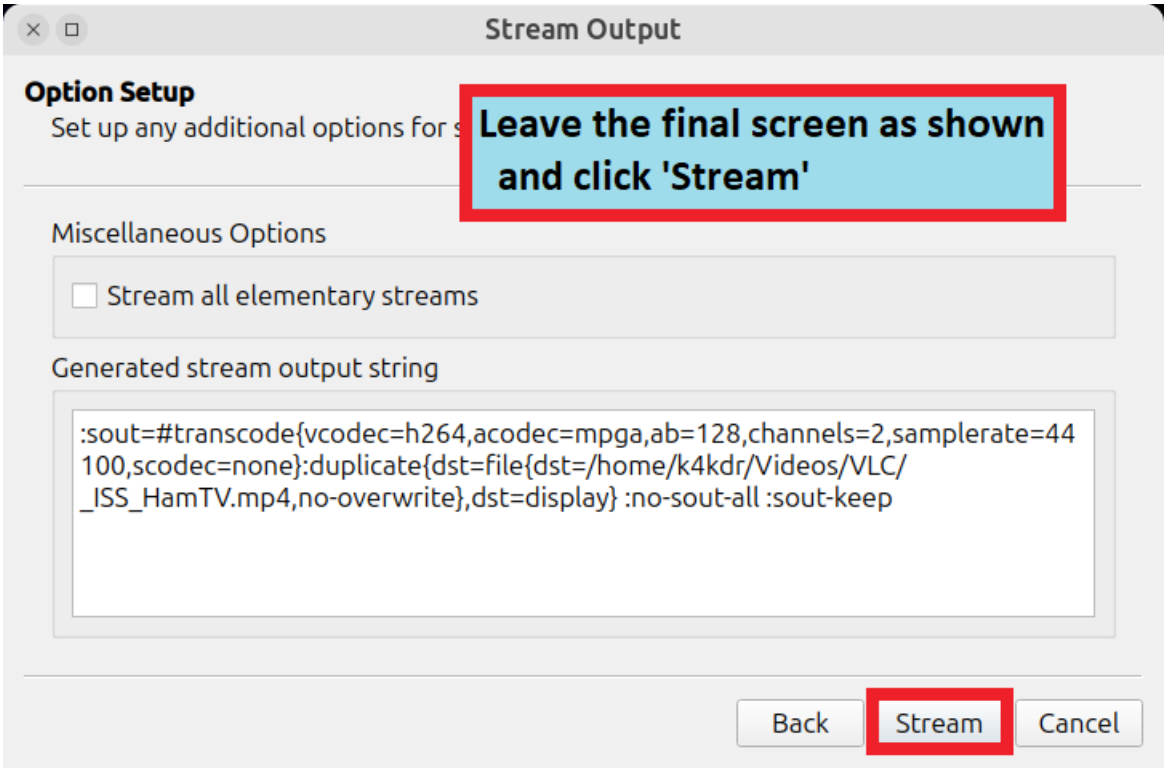

Open Media
File
Disc
Network
Capture Device
Network Protocol
Please enter a network URL:
udp://@127.0.0.1:8888
http://www.example.com/stream.avi
rtp://@:1234
mms://mms.examples.com/stream.asx
rtsp://server.example.org:8080/test.sdp
http://www.yourtube.com/watch?v=gg64x
Click the small down-arrow beside the 'Play' button, then select 'Stream'. This will allow you to save an MP4 recording of any audio/video received.
Play
Cancel
Enqueue Alt+E
Play Alt+P
Stream Alt+S
Convert Alt+O

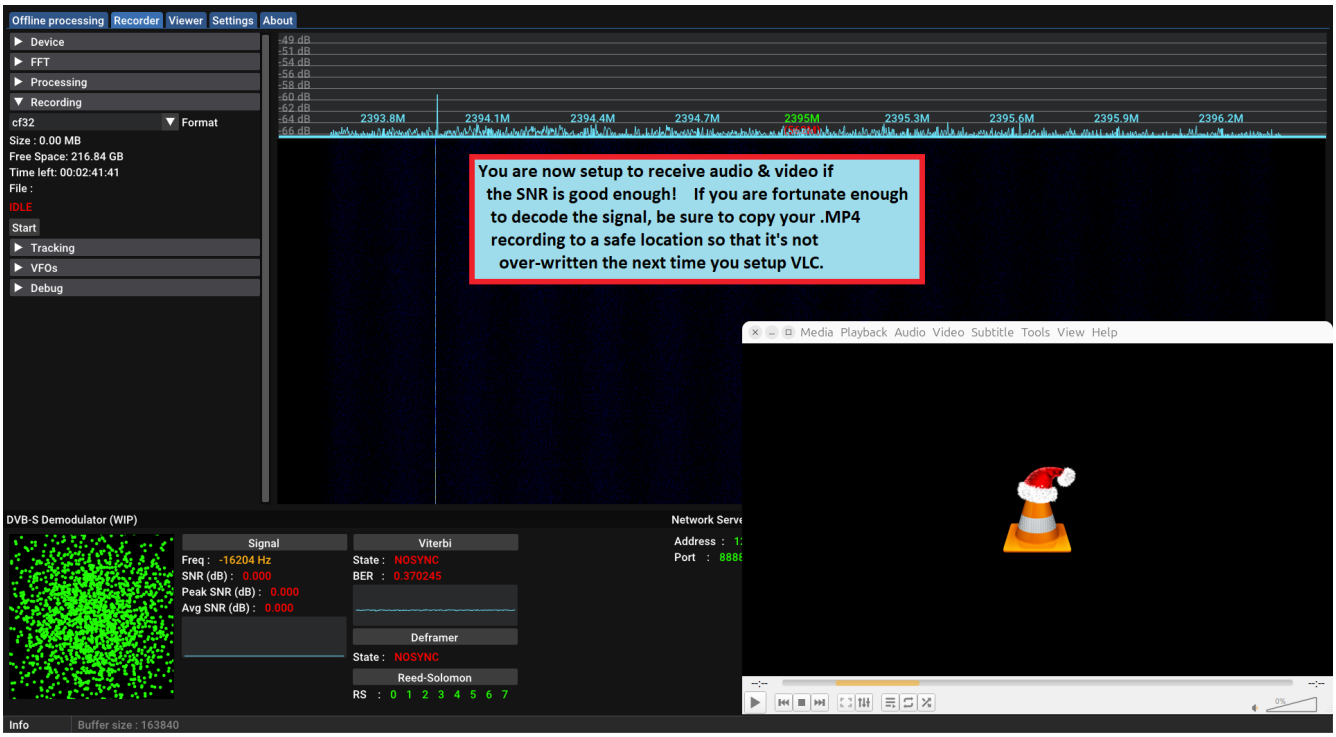

Stream Output
Source
Set up media sources to
Again confirm that the Source URL is correct, then click 'Next'
This wizard will allow you to stream or convert your media for use locally, on your private network, or on the Internet.
You should start by checking that source matches what you want your input to be and then press the "Next" button to continue.
Source: udp://@127.0.0.1:8888
Type: udp
Back
Next
Cancel


Stream Output
Destination Setup
Select destina
CRITICAL: be sure to click "Display locally" so that you can view "live". Then click 'Add' & browse to the location & filename you want to save the .MP4 recording if any audio/video is decoded.
Add destina
transcoding that the format is compatible with the method used.
New destination
File
Add
Display locally
Back
Next
Cancel


Stream Output
Destination Setup
Select destinations to stre
With your recording file now set, click 'Next'
File
This module writes the transcoded stream to a file.
Filename
/home/k4kdr/Videos/VLC/_ISS_HamTV.mp4
Browse...
Back
Next
Cancel


Stream Output
Transcoding Options
Select and choose transcoding options
Activate Transcoding
Profile
Video - H.264 + MP3 (MP4)
Select the Profile as shown above & click 'Next'
Back
Next
Cancel


Stream Output
Option Setup
Set up any additional options for s
Leave the final screen as shown and click 'Stream'
Miscellaneous Options
Stream all elementary streams
Generated stream output string
:sout=#transcode{vcodec=h264,acodec=mpga,ab=128,channels=2,samplerate=44100,scodec=none}:duplicate{dst=file{dst=/home/k4kdr/Videos/VLC/_ISS_HamTV.mp4,no-overwrite},dst=display} :no-sout-all :sout-keep
Back
Stream
Cancel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2395.3M
2395.6M
2395.9M
2396.2M
You are now setup to receive audio & video if the SNR is good enough! If you are fortunate enough to decode the signal, be sure to copy your .MP4 recording to a safe location so that it's not over-written the next time you setup VLC.
Media Playback Audio Video Subtitle Tools View Help
DVB-S Demodulator (WIP)
Signal
Freq : -16204 Hz
SNR (dB) : 0.000
Peak SNR (dB) : 0.000
Avg SNR (dB) : 0.000
Viterbi
State : NOSYNC
BER : 0.370245
Deframer
State : NOSYNC
Reed-Solomon
RS : 0 1 2 3 4 5 6 7
Network Serve
Address :
Port :
Info
Buffer size : 163840