

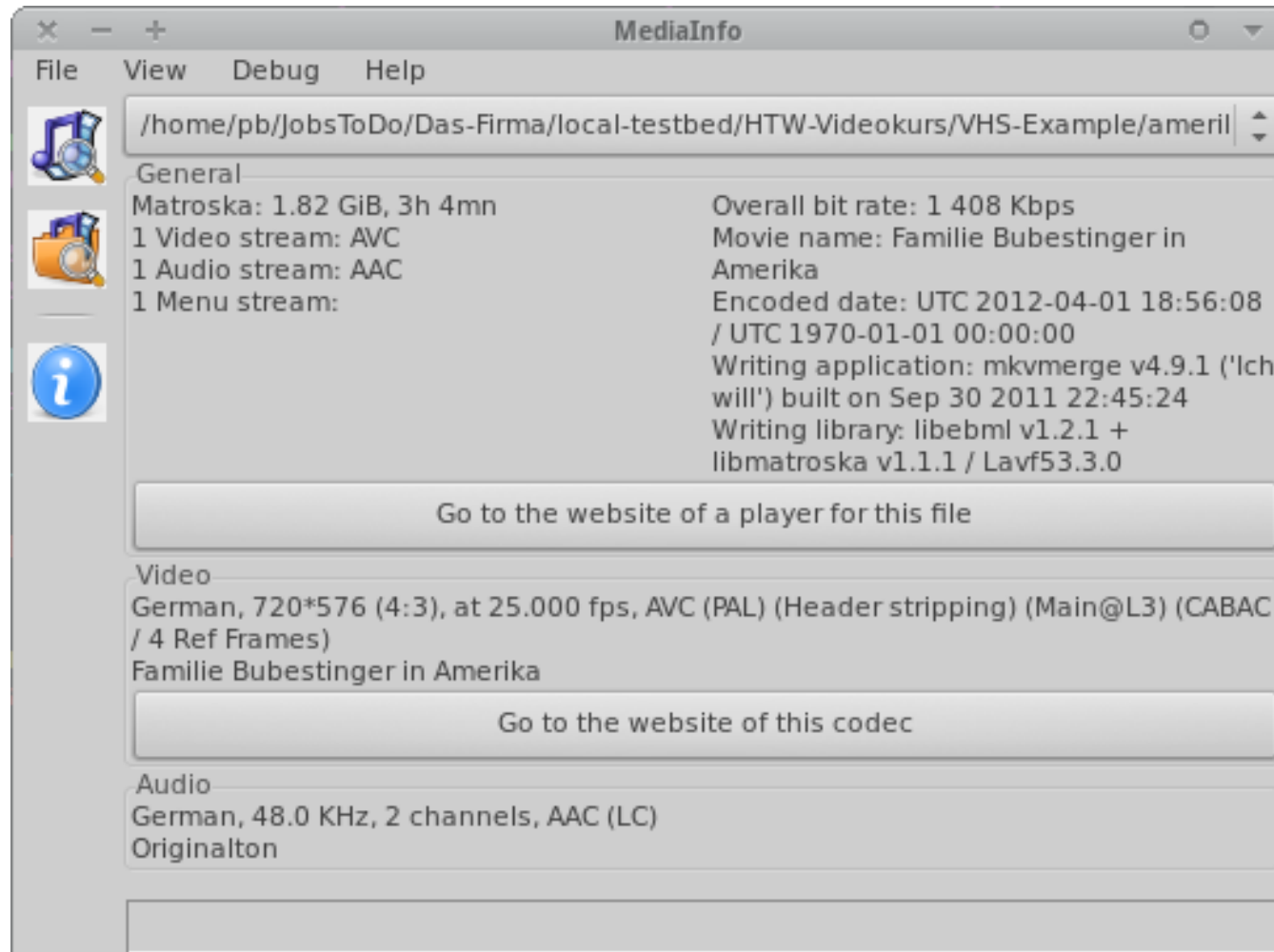
**SOFTWARETOOLS**

# MEDIAINFO

Zeigt Informationen von Medienfiles an.

- Container / Codecinformationen
- Technische Metadaten
- Eingebettete Dateien
- u.v.m.

# MEDIAINFO



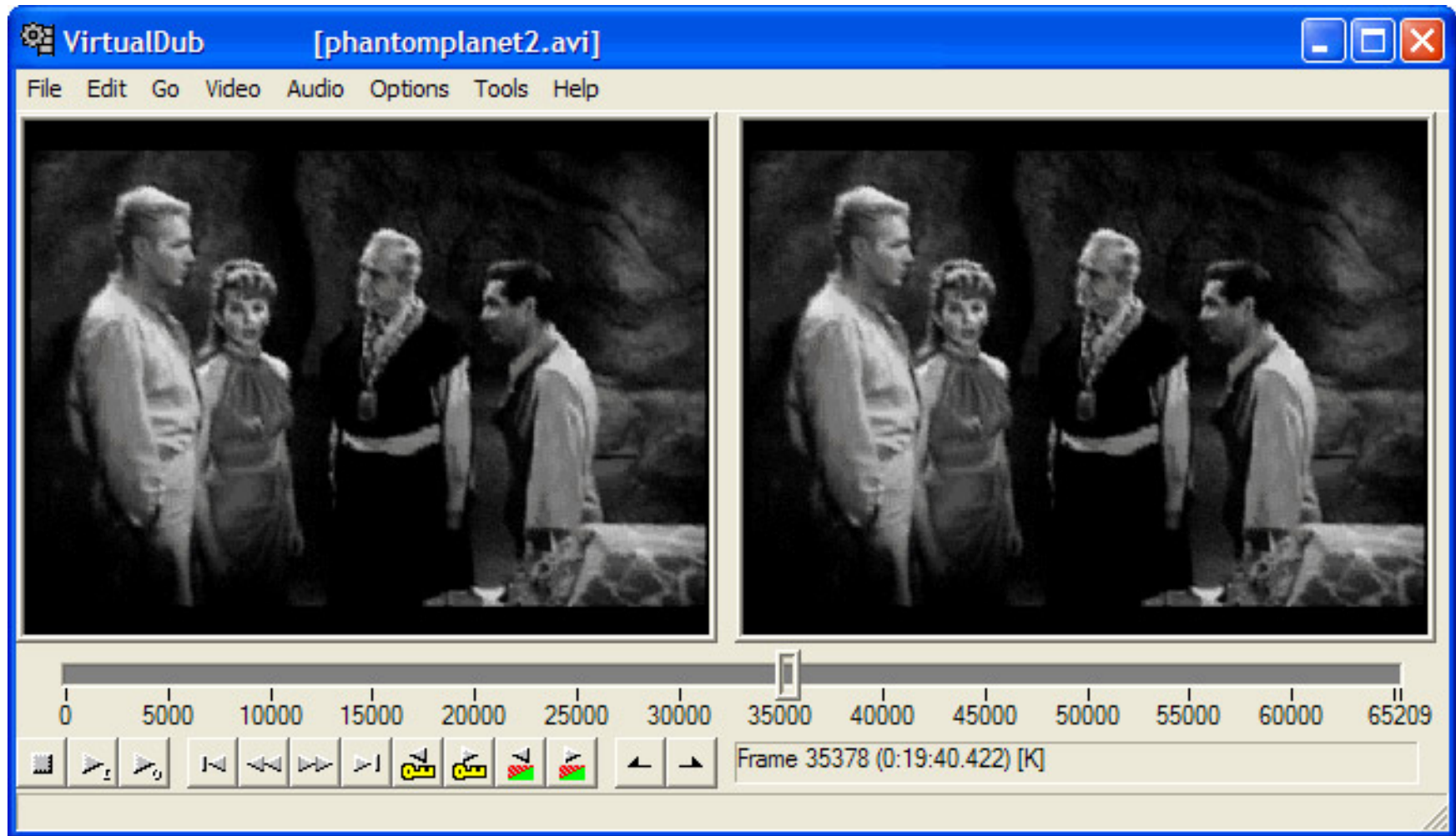
[mediaarea.net/en/MediaInfo](http://mediaarea.net/en/MediaInfo)

# VIRTUALDUB

Video Capture- und Post-processing.

- Ist kein Schnittprogramm (NLE)!
- Aufnehmen
- Bearbeiten (In/Out)
- Analysieren
- Unterstützt Systemcodecs ([VfW](#))
- Fork: [vdfiltermod](#)

# VIRTUALDUB



[www.virtualdub.org](http://www.virtualdub.org)

# MEDIACONCH

Conformance- und Policy-Checker für A/V Dateien.

- Check ob FFV1/MKV Daten spezifikationskonform
- Policy-Check für beliebige A/V Formate
- Super für Entgegennahme von "Born-Digital"
- etc.

# MEDIACONCH

The screenshot displays the MediaConch web application interface. At the top, there is a navigation bar with the MediaConch logo and a menu containing 'Checker', 'Policies', 'Display', 'Settings', and 'Help'. The 'Checker' tab is active.

The main section is titled 'Check files'. It includes three tabs: 'Check local file', 'Check online file', and 'Check local folder'. Below these tabs, there are dropdown menus for 'Policy' (set to 'No policy'), 'Display' (set to 'MediaConchHtml'), and 'Verbosity' (set to '5'). A 'Select files' button is followed by a 'Choose File' button and the text 'No file selected'. A large orange 'Check files' button is on the right.

The 'Results' section is below the 'Check files' section. It features a 'Close all results' link. There is a section to 'Apply a policy to all results' with a dropdown menu. Below this, a 'Show 10 entries' dropdown and a 'Search:' input field are present.

The results are displayed in a table with the following columns: Files, Implementation, Policy, MediaInfo, MediaTrace, and Status. The table contains three entries:

Files	Implementation	Policy	MediaInfo	MediaTrace	Status
FadingFocusHig.avi	✓ Valid	✗ Is this NTSC or PAL ...			✓ Analyzed
Randy_Hunter_2013-06-25.mkv	✓ Valid	N/A			✓ Analyzed
bsp-00001-015.avi	✓ Valid	N/A			✓ Analyzed

At the bottom of the table, it says 'Showing 1 to 3 of 3 entries'. There are 'Previous', '1', and 'Next' buttons for pagination.

[mediaarea.net/MediaConch](http://mediaarea.net/MediaConch)

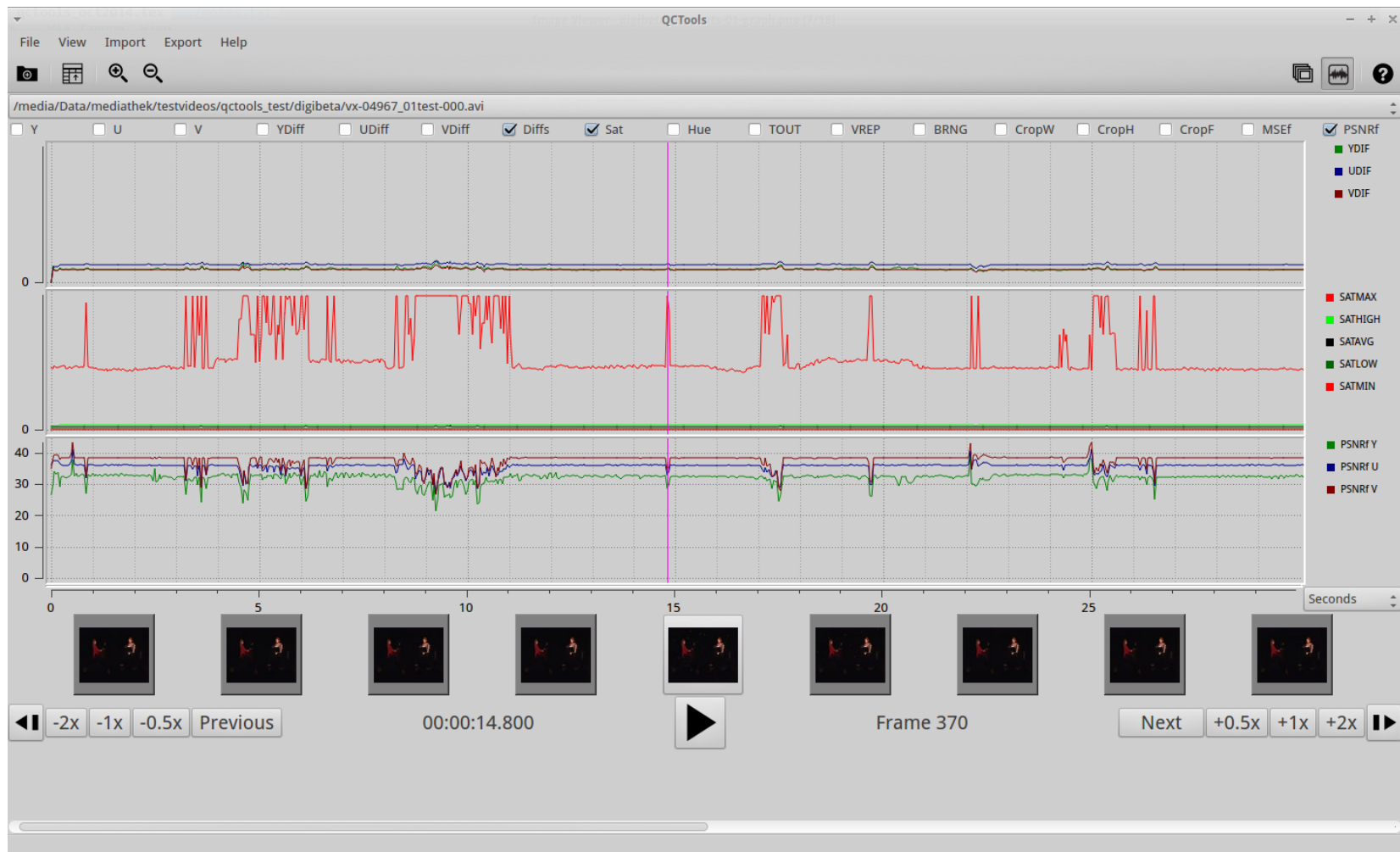
# QCTOOLS

Zur Qualitätskontrolle von digitalisierten Videos.

- Analysegraphen
- Vorschaubilder
- Visuelle Filter für Fehlerbestimmung
- Basiert auf FFmpeg
- u.v.m.



# QCTOOLS



[www.bavc.org/preserve-media/preservation-tools/qctools](http://www.bavc.org/preserve-media/preservation-tools/qctools)

# FFMPEG

Eierlegende Wollmilchsau für Umgang mit A/V Files.

- Kommandozeile
- Codec/Container konvertieren
- Vorschaubilder erzeugen
- Ausschnitte erzeugen
- Metadaten editieren
- Soundkanäle mappen
- u.v.m.

# FFMPEG

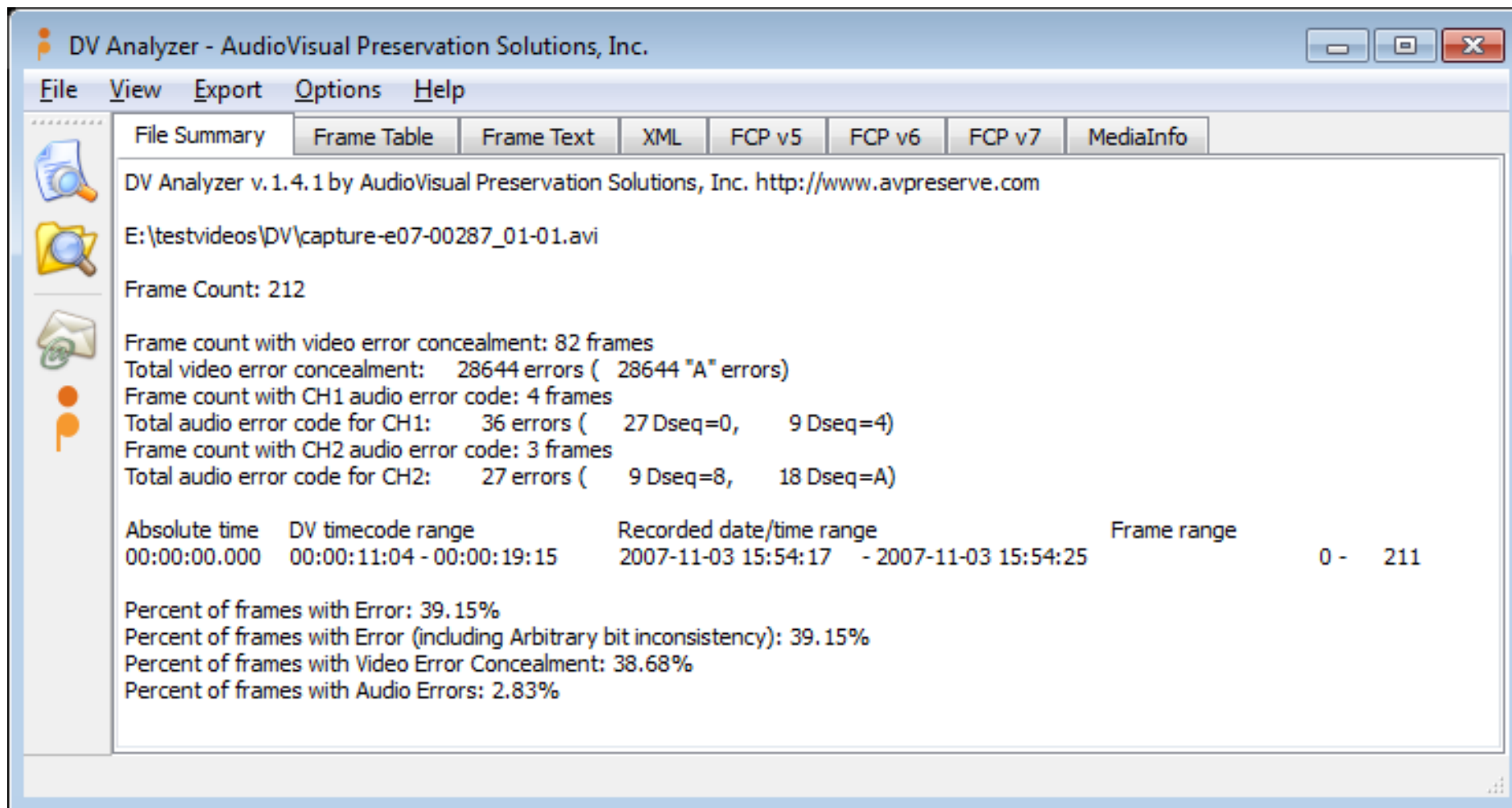
```
Terminal - pb@pb-combat: ~/JobsToDo/Das-Firma/local-testbed/HTW-Videokurs
File Edit View Terminal Go Help
tools.html (/media/storage_700/storage/F_Drive/Job...016/11-HTW_Chur/V... x pb@pb-combat: ~/JobsToDo/Das-Firma/local-testbed/HTW-Videokurs x
pb@pb-combat:~/JobsToDo/Das-Firma/local-testbed/HTW-Videokurs$ ffmpeg_git -i VHS-Example/bsp-00001-015.avi -target pal-dvd de
lme.mpg
ffmpeg version N-82144-g940b890 Copyright (c) 2000-2016 the Ffmpeg developers
built with gcc 4.6 (Ubuntu/Linaro 4.6.3-1ubuntu5)
configuration: --prefix=/usr/local --enable-gpl --enable-nonfree --enable-version3 --enable-postproc --enable-swscale --ena
ble-avfilter --enable-pthreads --enable-bzlib --enable-zlib --enable-decoder=png --enable-encoder=png --samples=../fate-suite
--enable-libfreetype --enable-libschrödinger --enable-libopenjpeg --disable-decoder=jpeg2000 --enable-libvpx --enable-libvo
rbis --enable-libx264
libavutil      55. 35.100 / 55. 35.100
libavcodec     57. 65.100 / 57. 65.100
libavformat    57. 57.100 / 57. 57.100
libavdevice    57.  2.100 / 57.  2.100
libavfilter     6. 66.100 /  6. 66.100
libswscale      4.  3.100 /  4.  3.100
libswresample  2.  4.100 /  2.  4.100
libpostproc   54.  2.100 / 54.  2.100
Guessed Channel Layout for Input Stream #0.1 : stereo
Input #0, avi, from 'VHS-Example/bsp-00001-015.avi':
  Metadata:
    IARL       : bsp-00001
    date      : 2012-03-11T02:49:06+01:00
    title     : Familie Bubestinger in Amerika
    track     : 16 / 185
    encoder   : Lavf52.111.0
    encoded_by : Österreichische Mediathek Wien
  Duration: 00:01:00.00, start: 0.000000, bitrate: 62358 kb/s
    Stream #0:0: Video: ffv1 (FFV1 / 0x31564646), yuv422p, 720x576, 60847 kb/s, 25 fps, 25 tbr, 25 tbn, 25 tbc
    Stream #0:1: Audio: pcm_s16le ([1][0][0][0] / 0x0001), 48000 Hz, stereo, s16, 1536 kb/s
Output #0, dvd, to 'delme.mpg':
  Metadata:
    IARL       : bsp-00001
    date      : 2012-03-11T02:49:06+01:00
    title     : Familie Bubestinger in Amerika
    track     : 16 / 185
    encoded_by : Österreichische Mediathek Wien
    encoder   : Lavf57.57.100
  Stream #0:0: Video: mpeg2video (Main), yuv420p, 720x576, q=2-31, 6000 kb/s, 25 fps, 90k tbn, 25 tbc
  Metadata:
    encoder   : Lavc57.65.100 mpeg2video
  Side data:
    cpb: bitrate max/min/avg: 9000000/0/6000000 buffer size: 1835008 vbv_delay: -1
  Stream #0:1: Audio: ac3, 48000 Hz, stereo, fltp, 448 kb/s
  Metadata:
    encoder   : Lavc57.65.100 ac3
Stream mapping:
  Stream #0:0 -> #0:0 (ffv1 (native) -> mpeg2video (native))
  Stream #0:1 -> #0:1 (pcm_s16le (native) -> ac3 (native))
Press [q] to stop, [?] for help
frame= 577 fps=192 q=8.3 size= 18494kB time=00:00:23.32 bitrate=6495.9kbits/s speed=7.74x
```

# DVANALYZER

Analysiert DV Videofiles auf Korrektheit und Fehler.

- Ersetzt optische Qualitätskontrolle für DV
- Bericht über Zustand des DV Streams
- etc.

# DVANALYZER

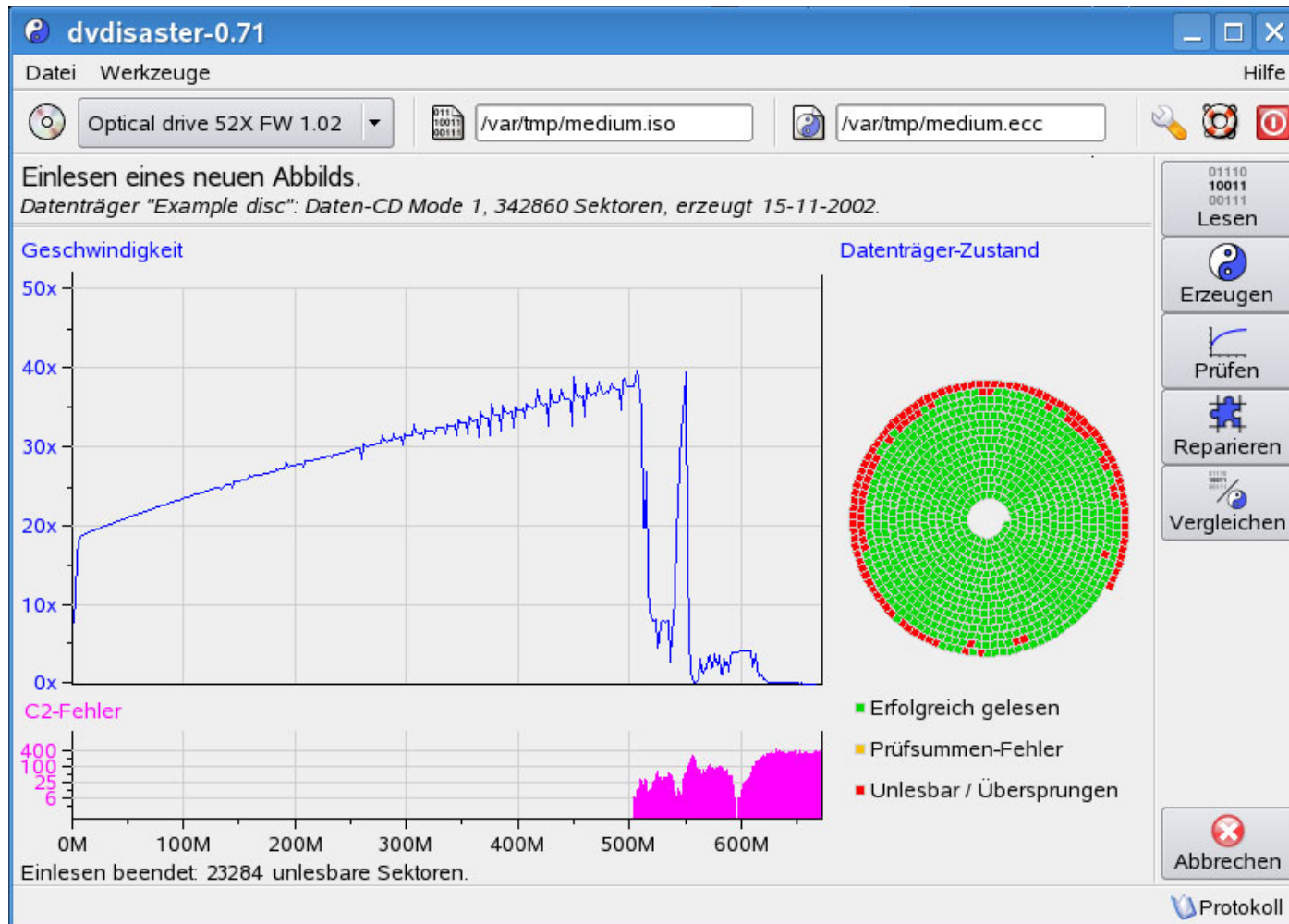


# DVDISASTER

Zuverlässiges Einlesen von optischen Datenträgern.

- Lese-Wiederholung bei Datenfehlern
- Erzeugt 1:1 Abbild des Trägers (.iso)
- u.v.m.

# DVDISASTER



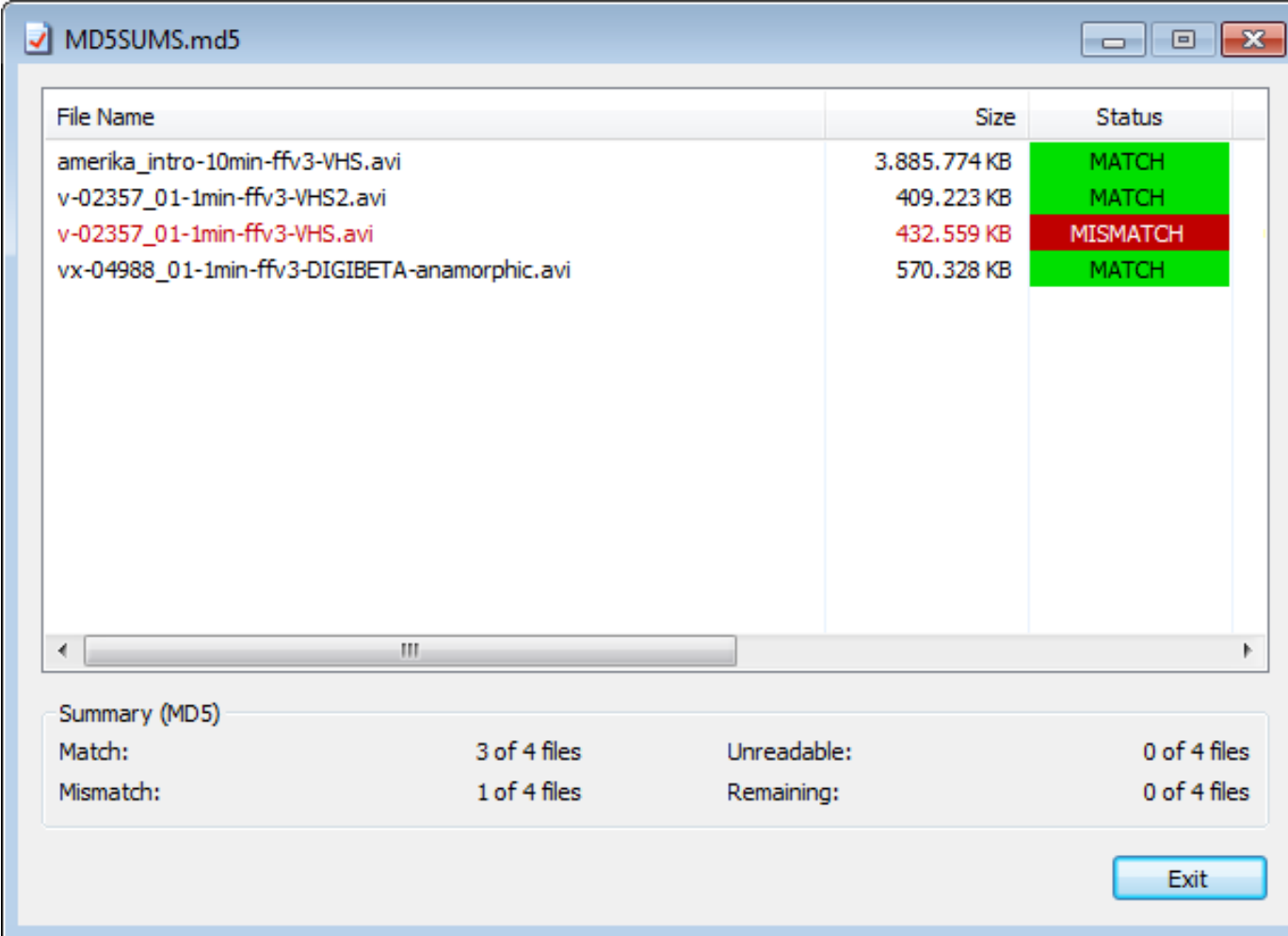
# **HASHCHECK**

Erzeugt und validiert Hashcodes zum Überprüfen von Dateiintegrität.

- Hash-Algorithmen: MD5, SHA, CRC
- Windows-Explorer Extension
- GNU "md5sum" kompatibel



# HASHCHECK



File Name	Size	Status
amerika_intro-10min-ffv3-VHS.avi	3.885.774 KB	MATCH
v-02357_01-1min-ffv3-VHS2.avi	409.223 KB	MATCH
v-02357_01-1min-ffv3-VHS.avi	432.559 KB	MISMATCH
vx-04988_01-1min-ffv3-DIGIBETA-anamorphic.avi	570.328 KB	MATCH

Summary (MD5)

Match:	3 of 4 files	Unreadable:	0 of 4 files
Mismatch:	1 of 4 files	Remaining:	0 of 4 files

Exit

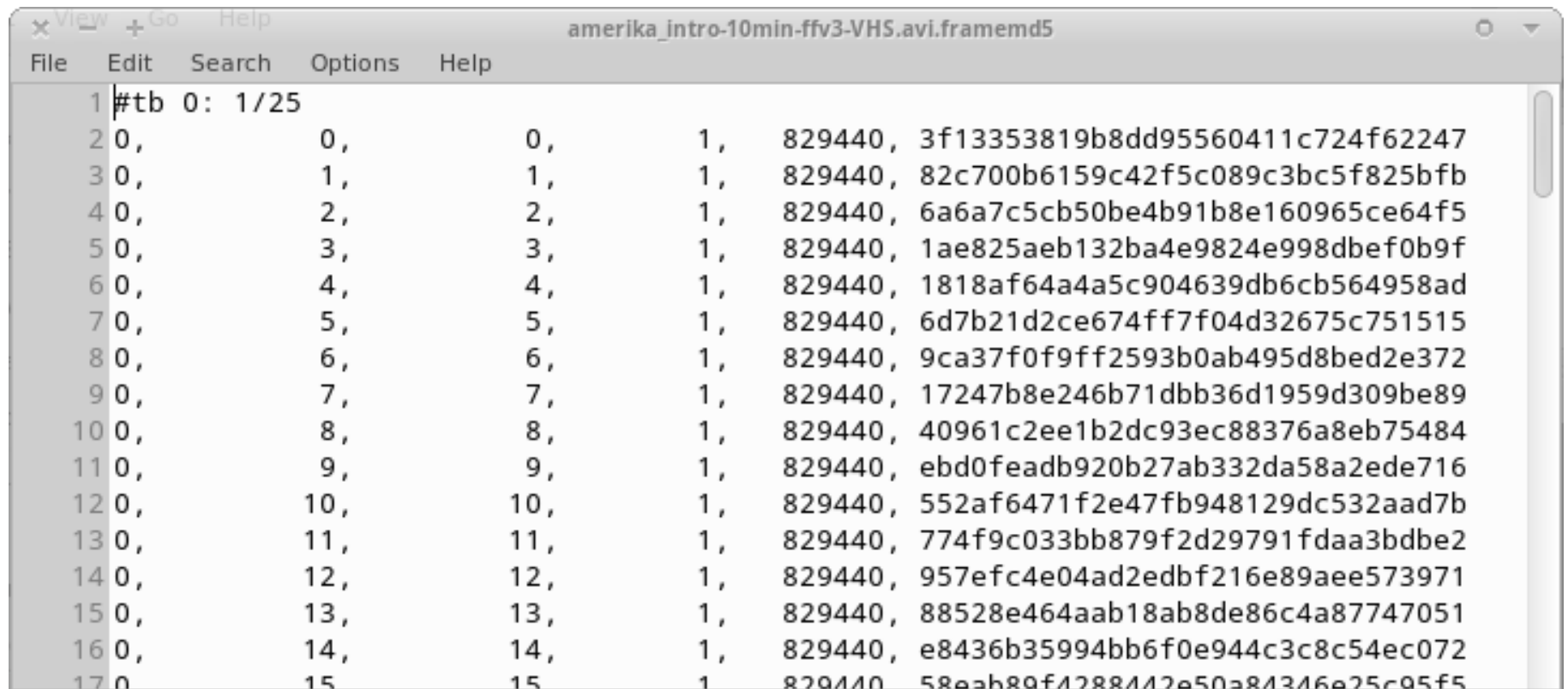
[code.kliu.org/hashcheck](http://code.kliu.org/hashcheck)

# FRAMEMD5

Erzeugt MD5-Hashcode pro (unkomprimiertem) Einzelbild

- Kontrolle ob Format-Umwandlung fehlerfrei
- Auch für Gruppe von Audio-Samples
- Vollautomatisches validieren bei Massenkonzertierung

# FRAMEMD5



The screenshot shows a text editor window titled "amerika\_intro-10min-ffv3-VHS.avi.framecmd5". The window has a menu bar with "File", "Edit", "Search", "Options", and "Help". The main text area displays a list of frame MD5 hashes, starting with a line "#tb 0: 1/25". The hashes are organized into columns, with the first column containing frame numbers (1 to 17) and the subsequent columns containing the corresponding MD5 hashes. The hashes are displayed in a monospaced font, and the text is left-aligned.

```
#tb 0: 1/25
1 0, 0, 0, 1, 829440, 3f13353819b8dd95560411c724f62247
2 0, 1, 1, 1, 829440, 82c700b6159c42f5c089c3bc5f825bfb
3 0, 2, 2, 1, 829440, 6a6a7c5cb50be4b91b8e160965ce64f5
4 0, 3, 3, 1, 829440, 1ae825aeb132ba4e9824e998dbef0b9f
5 0, 4, 4, 1, 829440, 1818af64a4a5c904639db6cb564958ad
6 0, 5, 5, 1, 829440, 6d7b21d2ce674ff7f04d32675c751515
7 0, 6, 6, 1, 829440, 9ca37f0f9ff2593b0ab495d8bed2e372
8 0, 7, 7, 1, 829440, 17247b8e246b71dbb36d1959d309be89
9 0, 8, 8, 1, 829440, 40961c2ee1b2dc93ec88376a8eb75484
10 0, 9, 9, 1, 829440, ebd0feadb920b27ab332da58a2ede716
11 0, 10, 10, 1, 829440, 552af6471f2e47fb948129dc532aad7b
12 0, 11, 11, 1, 829440, 774f9c033bb879f2d29791fdaa3bdbe2
13 0, 12, 12, 1, 829440, 957efc4e04ad2edbf216e89aee573971
14 0, 13, 13, 1, 829440, 88528e464aab18ab8de86c4a87747051
15 0, 14, 14, 1, 829440, e8436b35994bb6f0e944c3c8c54ec072
16 0, 15, 15, 1, 829440, 58eab89f1288112e50a81316e25c95f5
```

FFmpeg (built-in)

**FRAGEN?**

# LINKS

- [Reconsidering the Checksum for Audiovisual Preservation](#)
- [Video per-frame integrity check - verifying losslessness](#)
- [The archivist's video codec and container FAQ: Archiving DVDs](#)
- [PREFORMA Project: MediaConch](#)
- [DV Analyzer: What Does It Analyze?](#)

**ZURÜCK ZUM INDEX**