



BTO Acoustic Pipeline

Een eerste blik achter de schermen van
je eigen opnames

Hans Vermeiren



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BTO Acoustic Pipeline

Een eerste blik achter de schermen van je eigen opnames

- Scheidt kaf van koren
- Automatische soortherkenning
- Gratis (100 credits/jaar)
- 1 credit per aangebroken GB
- Knipt opnames naar standaard lengte (4s)

home » [our-science](#) » [products-and-technologies](#) » BTO Acoustic Pipeline

[BTO Acoustic Pipeline](#)

How the Acoustic Pipeline works

Audible classifiers

Ultrasonic classifiers

Commercial and large-scale use

Case Studies

[LOG IN TO THE ACOUSTIC PIPELINE](#)

BTO Acoustic Pipeline



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BTO Acoustic Pipeline

<https://www.bto.org/our-science/products-and-technologies/bto-acoustic-pipeline>

The screenshot shows a web browser window with the following elements:

- Browser Tabs:** Kaleidoscope Pro Analysis Soft..., Microsoft PowerPoint - Meervl..., BTO Acoustic Pipeline | BTO - B...
- Address Bar:** bto.org/our-science/products-and-technologies/bto-acoustic-pipeline
- Navigation Menu:** The difference we make, How you can help, Our science, Understanding birds, Develop your skills
- Page Title:** BTO Acoustic Pipeline
- Breadcrumbs:** home » our-science » products-and-technologies » BTO Acoustic Pipeline
- Left Sidebar:**
 - BTO Acoustic Pipeline** (highlighted)
 - How the Acoustic Pipeline works
 - Audible classifiers
 - Ultrasonic classifiers
 - Commercial and large-scale use
 - Case Studies
- Right Side:**
 - LOG IN TO THE ACOUSTIC PIPELINE** (orange button)
 - Image of a barn owl
 - Logo with letters A, P, and a bird icon



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BTO Acoustic Pipeline

https://app.bto.org/acoustic-pipeline/public/new_account.jsp?gtl=data-home%2Fdata-home.jsp

The screenshot shows a web browser window with the URL `app.bto.org/acoustic-pipeline/public/login.jsp?gtl=data-home%2Fdata-home.jsp`. The page header includes the BTO logo (Birds Science People) and the 'Acoustic Pipeline' title. A navigation bar contains 'Home' and 'Support Hub'. The main content area is titled 'BTO Acoustic Pipeline' and describes the service as bringing cutting-edge sound identification to the desktop. It lists supported species: 20 bird species, 34 species of European bat, 14 small mammal species, 18 bush-cricket species, and 2 moth species. A 'Why use the Pipeline' section highlights improved quality and accuracy. A 'How it works' section is outlined in green and contains three steps: 1) Download the Desktop App, 2) Automatic processing of recordings, and 3) Access to results and account management. On the right, a 'Login to your account' form is visible with fields for 'Username' (filled with 'VERMEIRENHANS') and 'Password' (masked with dots), a 'Login' button, and a 'Reset password' link. Below the login form, there are links for 'Create one here' and 'Email us if you need further help.'



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BTO Acoustic Pipeline

https://app.bto.org/acoustic-pipeline/public/new_account.jsp?gtl=data-home%2Fdata-home.jsp

The screenshot shows the BTO Acoustic Pipeline web application. The browser tabs include 'Kaleidoscope Pro Analysis Soft...', 'Data Home | BTO Acoustic Pipe...', and 'Microsoft PowerPoint - Meervli...'. The address bar shows the URL 'app.bto.org/acoustic-pipeline/data-home/data-home.jsp'. The page header features the BTO logo (Birds Science People) and the Acoustic Pipeline logo (A P). The navigation menu includes 'Home', 'Desktop App', 'My Data', 'Projects', and 'Support Hub'. The user is identified as 'Dr Hans Vermeiren' with a 'Logout' option.

Data Home

Welcome to the BTO Acoustic Pipeline! From here you can download the desktop app, view the status of uploads, download the classifier results for your recordings, and take part in citizen science projects. Find out more about the Pipeline in our [help pages](#).

Get started by [downloading the desktop application](#) to manage local files and upload processes. Visit the [Take Part in Projects](#) page to contribute to various projects by uploading relevant recordings to be analysed as part of their datasets.

My Stats

Category	Value
Data Processed	136.8GB
Files Processed	78.917
Records Identified	98.251

Currently Processing: 0 Bytes (Data Processed)
Currently Processing: 0 files (Files Processed)
Number of species IDs classified in recordings * (Records Identified)

Citizen Science - shared *

Species	Records	Species	Records
Bats	0 records	Bush Crickets	0 records
Small Mammals	0 records	Birds	0 records
Other species	0 records		

Account Balance: 78 credits (Dr Hans Vermeiren)

- My Account
- Get the Desktop App
- My Data
- Take Part in Projects
- Support Hub

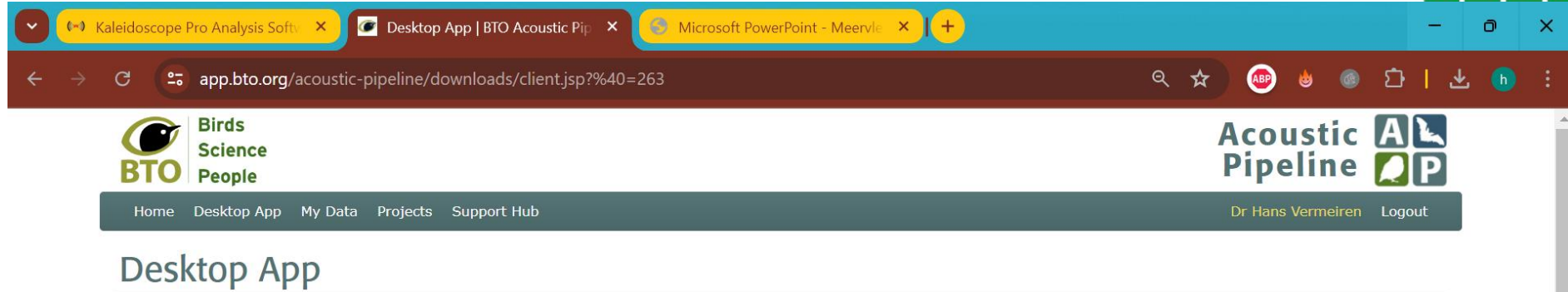


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BTO Acoustic Pipeline

<https://app.bto.org/acoustic-pipeline/downloads/client.jsp?%40=263>




Desktop App

The BTO Acoustic Pipeline Desktop App gives you access to our bird classifiers for local processing of audible sound audio files and allows you to easily upload ultrasonic recordings for analysis in the Pipeline's cloud servers.


The Desktop App is linked to your BTO Acoustic Pipeline account, so whether you're processing birds recordings locally or upload ultrasonic recordings, your results will appear in this web portal.


Use the download links below to install the correct version for your device.

 **Download for Windows**
Version: 5.605, 64-bit, requires Windows 8.1 or greater

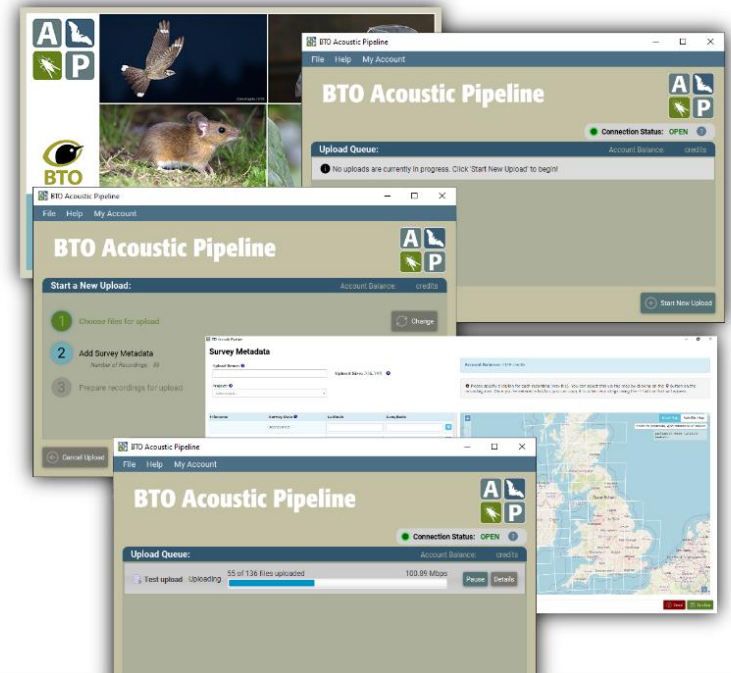
SHA256 checksum: dbe9d5ceabab2cda4a4236bbccce8cf6145db4930f5275664939d7e697cec169  Scanned by VirusTotal

 **Download for Apple Mac**
Version: 5.605, requires MacOS 10.14 Mojave or greater

SHA256 checksum: d03cd3c33ba903f215e65222a292cfcf15d18e6e78deac50cde5f783ecc441b2  Scanned by VirusTotal

 If you are using an Apple Mac device purchased from 2021 onwards that is running an Apple processor (eg: M1) rather than an Intel processor, then after installation before running the app for the first time, right click on it; select 'Get Info'; then tick the option to 'Open with Rosetta'.

For assistance with using the Desktop App, or to view answers to common questions, please see our [Support Hub](#) pages.






BTO Acoustic Pipeline

Desktop App

BTO Acoustic Pipeline

Options


 **Acoustic Pipeline**

Login to the BTO Acoustic Pipeline to use the Desktop App

Username:

Password:

[Forgotten your password?](#)

 BTO



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BTO Acoustic Pipeline

Desktop App

The screenshot shows a web browser window titled "BTO Acoustic Pipeline". The interface includes a navigation menu with "File", "Help", and "My Account". The main heading is "BTO Acoustic Pipeline" with four icons: "A" (Acoustic), a map of Europe, "P" (Passive), and a bird icon. There are two main sections:

- Detect and identify bats, small mammals and bush-crickets in ultrasonic recordings**
Process triggered recordings from full-spectrum bat detectors to detect and identify bats and other species that produce ultrasound. The main focus is European species, but see the Help section for full geographic and species coverage. This option will upload your recordings to our secure cloud processing area and alert you when results are ready.
Technical requirements: 16-bit, mono, full-spectrum wav files recorded in real time with a sample rate of at least 192kHz. The system cannot currently process recordings that are multi-channel, time expansion or 24/32-bit.
Start button
- Detect and identify birds and mammals in audible-range recordings**
Process passive acoustic recordings in the audible sound range to detect and identify key bird and mammal species. Choose among different classifiers focussing on particular suites of target species. This option will analyse recordings on your computer and then upload results to our secure online system for further interpretation and checking.
Technical requirements: wav files recorded in real time with a sample rate of at least 22 kHz. Stereo files will be mixed to mono during processing. All common bit depths currently supported.
Start button

The BTO logo is visible at the bottom center of the interface.



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BTO Acoustic Pipeline

Desktop App - Upload

The screenshot shows the BTO Acoustic Pipeline desktop application window. The title bar reads "BTO Acoustic Pipeline". The menu bar includes "File", "Help", and "My Account". The main header displays "BTO Acoustic Pipeline" in large white text on a dark blue background, with icons for "A" (Acoustic), "P" (Pipeline), and a map of the Netherlands. Below the header, a dark blue bar contains "Start a New Upload:" on the left and "Account Balance: 78 credits" on the right. The main content area features a three-step process:

- 1 Choose files for upload (with a "Select Files" button)
- 2 Add Survey Metadata
- 3 Prepare recordings for upload

At the bottom left, there is a "Cancel Upload" button. At the bottom right, the BTO logo is visible.



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BTO Acoustic Pipeline

Desktop App - Metadata

BTO Acoustic Pipeline

Survey Metadata

Batch Name:

Upload Size: 27,7MB

Project:

Account Balance: 78 credits

Please specify a lat/lon for each recording (wav file). You can select this via the map by clicking on the ... options button on the recording row. Once you've entered a lat/lon, you can copy it to other recordings using the same options button.

Select a lat/lon using the map

- Copy to next file
- Copy to subsequent files
- Copy to files on same date
- Copy to all files
- Clear all rows

File Name	Date	Lat/Lon	Gridref	Options
A0_20240604_002 045.wav	03/06/2024	<input type="text"/>	<input type="text"/>	...
A0_20240604_002 424.wav	03/06/2024	<input type="text"/>	<input type="text"/>	...
A0_20240604_003 311.wav	03/06/2024	<input type="text"/>	<input type="text"/>	...
A0_20240604_003 405.wav	03/06/2024	<input type="text"/>	<input type="text"/>	...

Map: Road Map | Satellite Map

Zoom to postcode, grid reference or lat/lon

Lat/Lon: -
Gridref: -

Cancel Save Data



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BTO Acoustic Pipeline

Resultaten bekijken

The screenshot shows the BTO Acoustic Pipeline web application. The browser address bar displays `app.bto.org/acoustic-pipeline/uploads/uploads_home.jsp?%40=263`. The page header includes the BTO logo (Birds Science People) and the Acoustic Pipeline logo. A navigation menu contains links for Home, Desktop App, My Data, Projects, and Support Hub. The user is identified as Dr Hans Vermeiren, with a Logout option.

My Data

The table below shows the status of batches of recordings processed with the BTO Acoustic Pipeline, along with links to the classifier results

Year: Month:

Processed Date	Batch Name	Project	Cost	Number of Detections	Classifier Used	Classifier Results	Options
22/06/2024 00:03:54	Bioblitz bosvanAa 202... Key: 202406220003GPSMJCTF	Natuurpunt Bat Working Group	4	1737	Ultrasonic Classifier	Download	View Visualisations
21/06/2024 17:05:33	Bioblitz BosvanAa 202... Key: 2024062117054K0CK8T5	Natuurpunt Bat Working Group	21	15437	Ultrasonic Classifier	Download	View Visualisations
21/06/2024 16:32:29	Bioblitz BosvanAa 2023 Key: 2024062116321G9PGDLD	Natuurpunt Bat Working Group	20	12492	Ultrasonic Classifier	Download	View Visualisations
13/06/2024 18:58:23	Corridor Gistel Key: 202406131858WTRMBUCV	Commercial (ultrasonic) - confidential	22	1518	Ultrasonic Classifier	Download	View Visualisations
04/06/2024 23:52:02	Kwetshage brug Key: 2024060423520TUUWKFG	Natuurpunt Bat Working Group	3	2516	Ultrasonic Classifier	Download	View Visualisations
04/06/2024 23:33:59	Stalhille sluis Key: 2024060423339MFC20BU	Natuurpunt Bat Working Group	3	1400	Ultrasonic Classifier	Download	View Visualisations
03/06/2024 12:25:55	Damme vest kerkstraat	Natuurpunt Bat Working	3	2055	Ultrasonic Classifier	Download	View Visualisations

A green 'Refresh Status' button is located in the top right corner of the table area, with two green arrows pointing to the 'Classifier Results' and 'Options' columns of the first row.

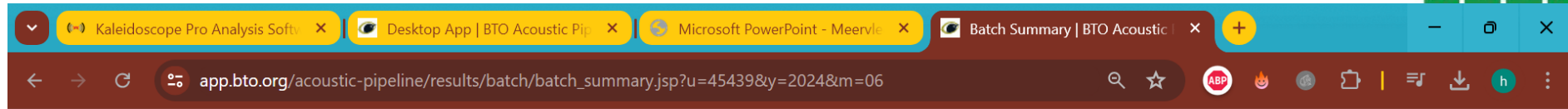


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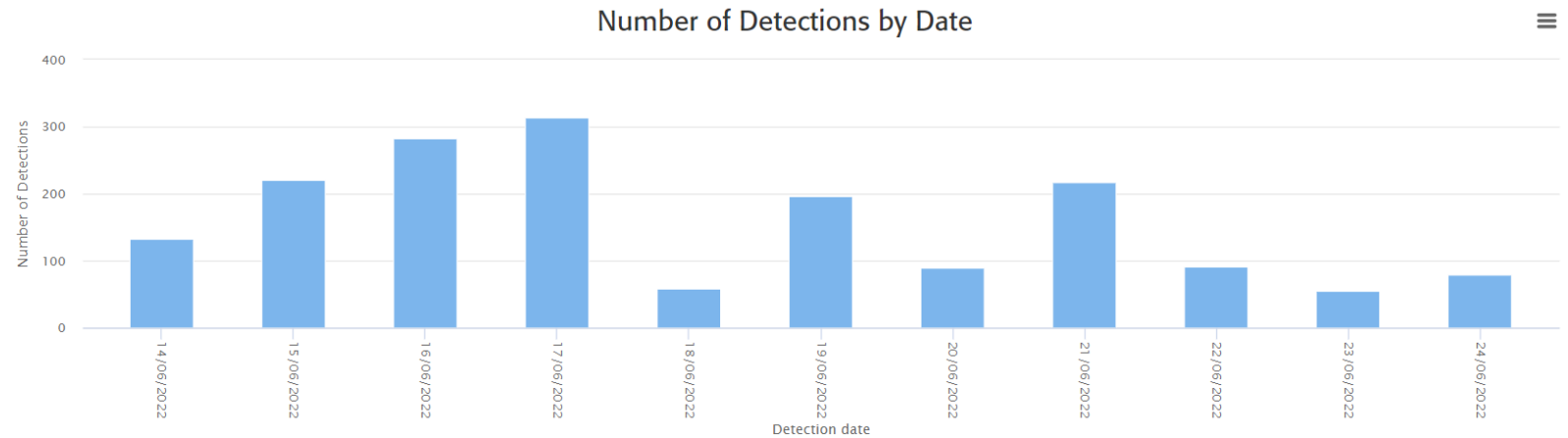
BTO Acoustic Pipeline

Resultaten bekijken



Detections by date

Dates are of the individual detections. Detections within a night may be spread over two dates. Includes all detections with a probability exceeding the selected classifier's probability threshold.



Detections by species

Includes all detections with a probability exceeding the selected classifier's probability threshold. May include false positive detections and should not be used without careful verification.

Click on a species name to see detailed results for the species. Table can be sorted and filtered.

Show species

Species Name	Call Type	Num Locations	Num Dates Detected	Total Num Detections	Maximum Probability	Num Warnings
Filter...	Filter...	Filter...	Filter...	Filter...	Filter...	Filter...
Common Pipistrelle	echolocation	1	11	1307	0.99	0
Noctule	echolocation	1	7	15	0.99	5
Common Pipistrelle	feeding buzz	1	6	16	0.98	6

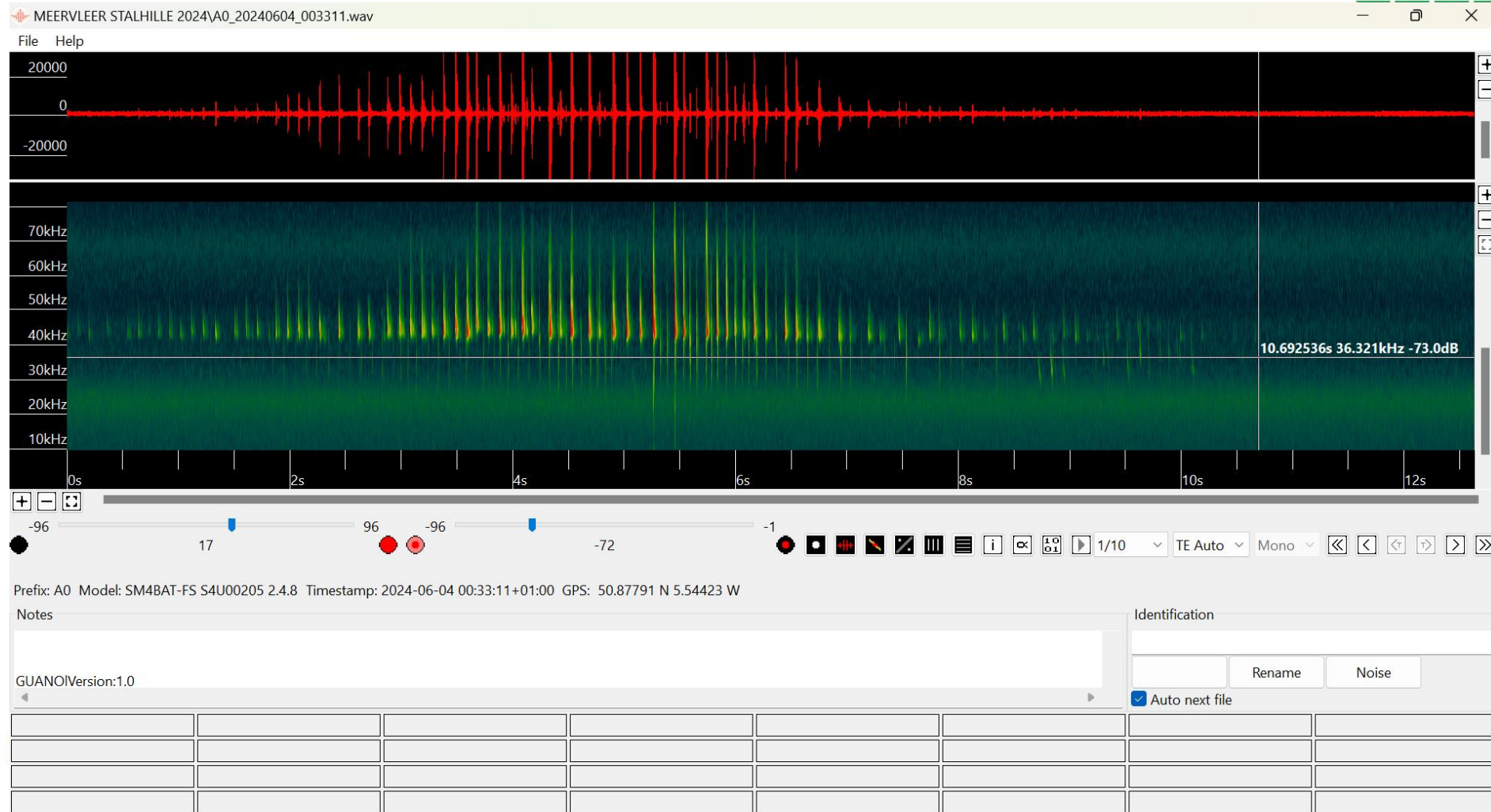


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Kaleidoscope Lite

Zelf sonogrammen
of Noise files
controleren

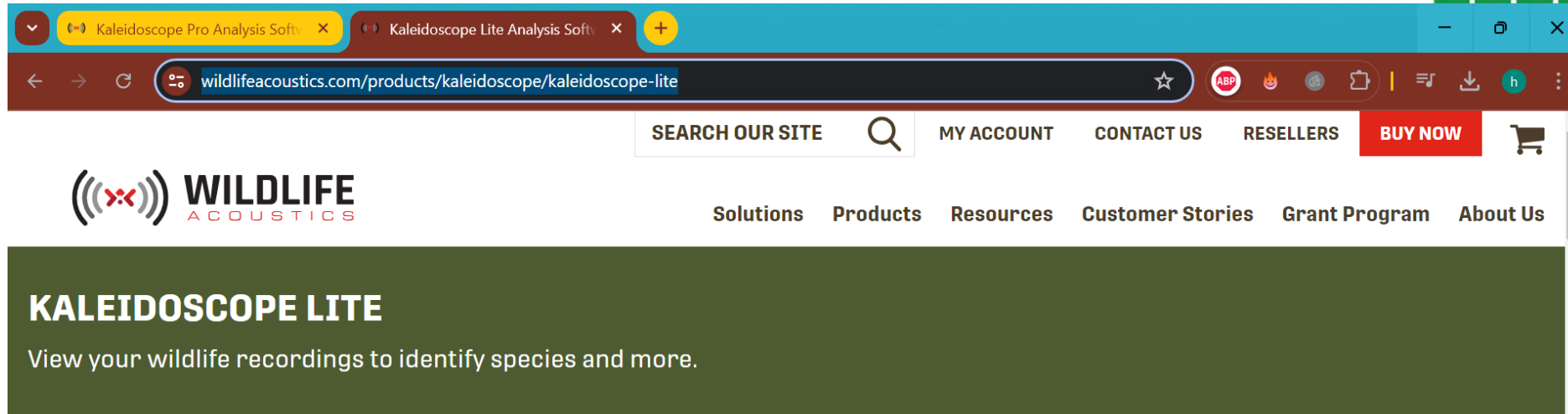


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Kaleidoscope Lite

<https://www.wildlifeacoustics.com/products/kaleidoscope/kaleidoscope-lite>



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Kaleidoscope Lite Analysis Software

Kaleidoscope Lite is a free spectrogram viewer that allows you to listen to, view and label your wildlife audio recordings and convert between various recording formats

Note: Users need to create an account on the Wildlife Acoustics site in order to download software.

[DOWNLOAD NOW](#)

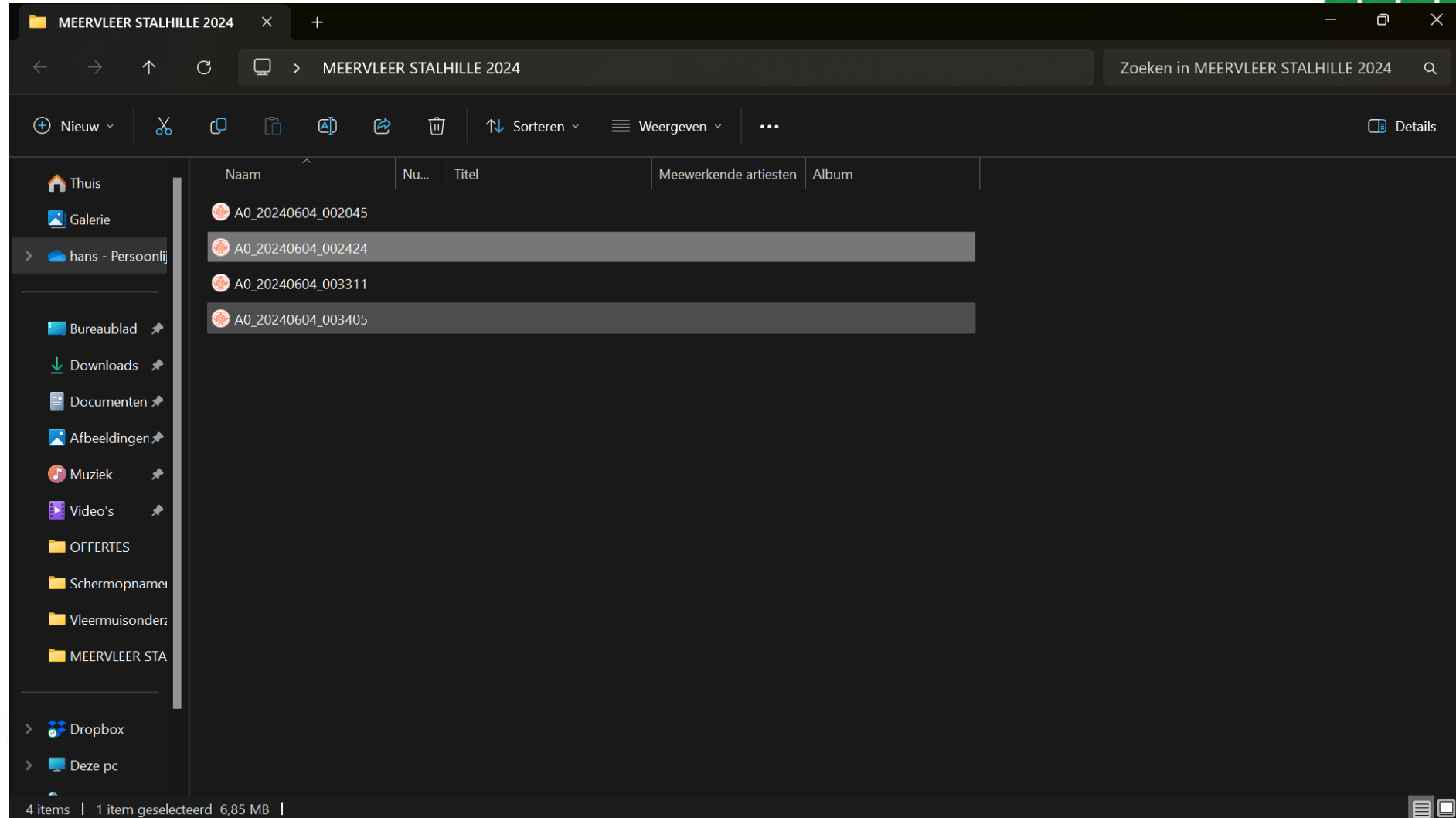




Kaleidoscope Lite

Gratis en snel
sonogrammen
weergeven

Openen met -
Kaleidoscope



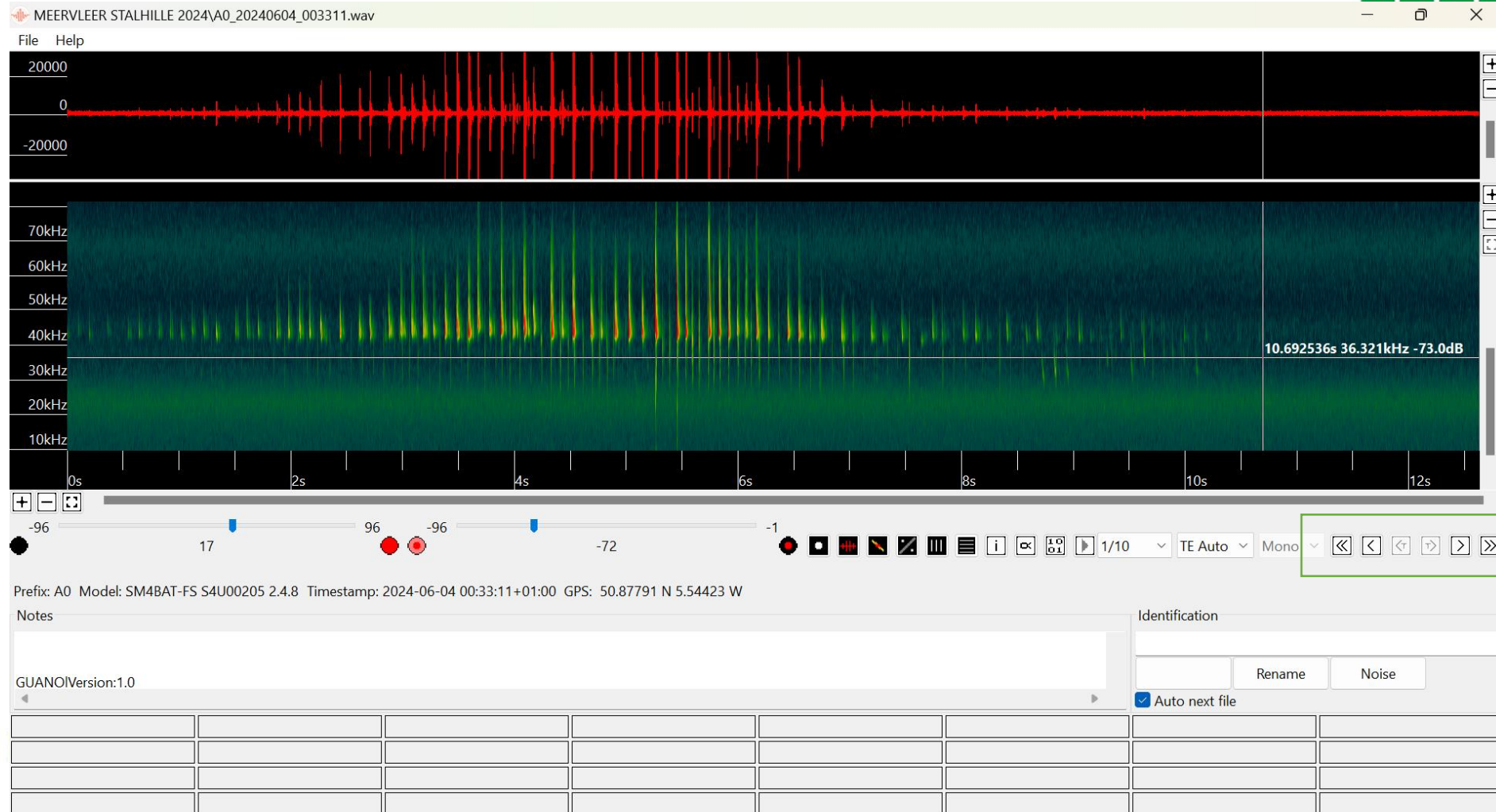
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Kaleidoscope Lite

Gratis en snel
sonogrammen
weergeven

- Gewone
dwergvleermuis
- Meervleermuis

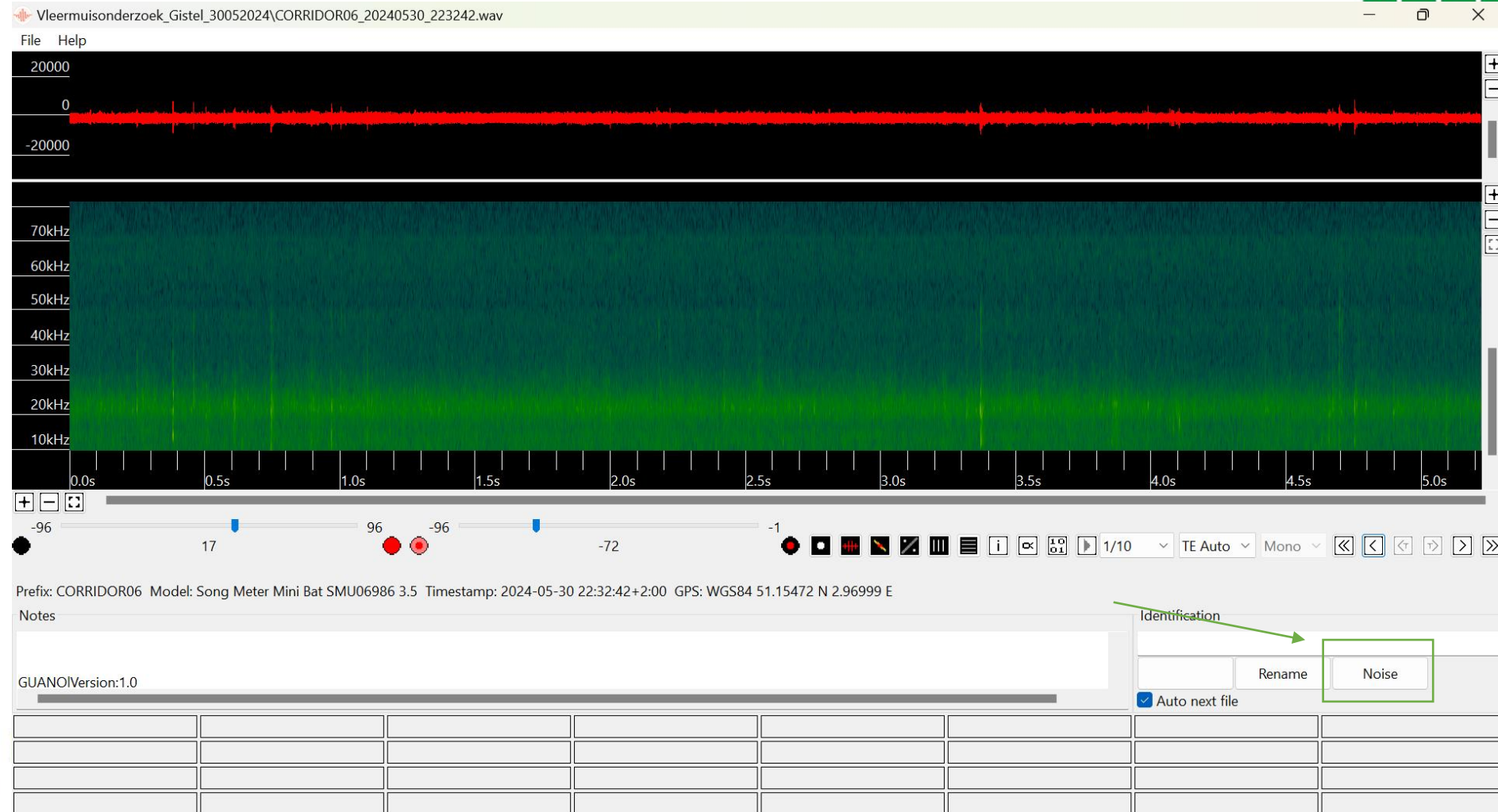




Kaleidoscope Lite

Gratis en snel
sonogrammen
weergeven

Noise file



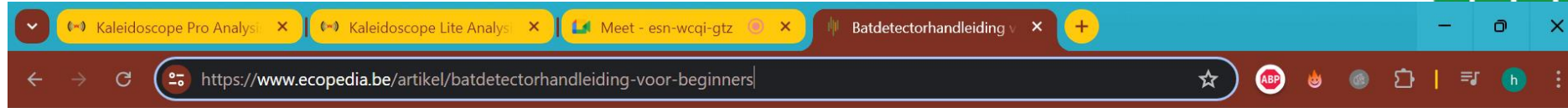
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Zelf leren determineren via sonogram

<https://www.ecopedia.be/artikel/batdetectorhandleiding-voor-beginners>

Leuke
basishandleiding
voor beginners



ecopedia

Natuurkennis

Natuur & Groen

Wet & beleid

Materiaal

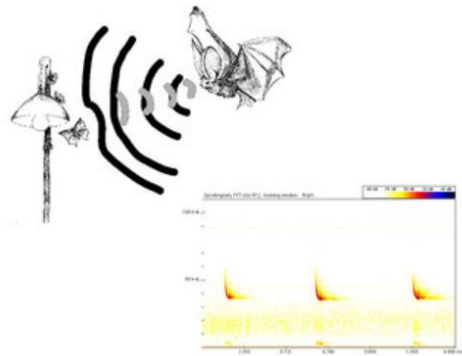
Groene economie



...vleermuis eruit ziet. Daarom begint deze handleiding met een korte, theoretische beschouwing van de algemene principes. Het tweede deel omschrijft de geluiden van de inheemse vleermuissoorten.

Download publicatie (2129kb)

Bat-detector handleiding voor beginners



Determinatie van de meest voorkomende vleermuizen in Vlaanderen met behulp van heterodyne bat-detectoren



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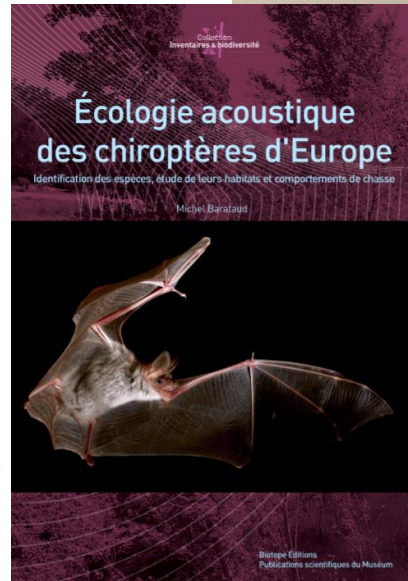
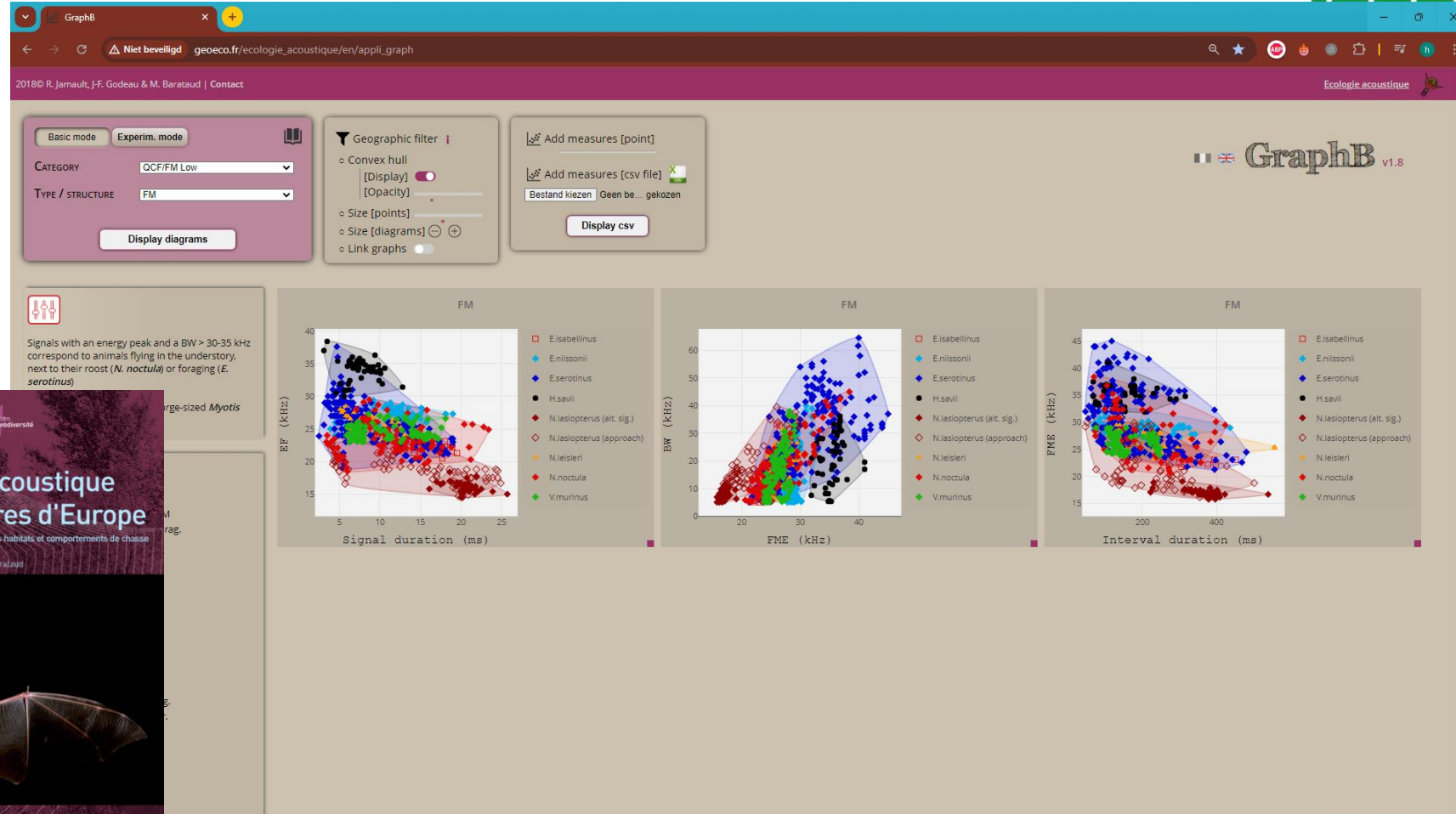


Zelf leren determineren via sonogram

http://geoeco.fr/ecologie_acoustique/en/appli_graph

Meten is weten

Statistische benadering van pulsen determineren.



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