

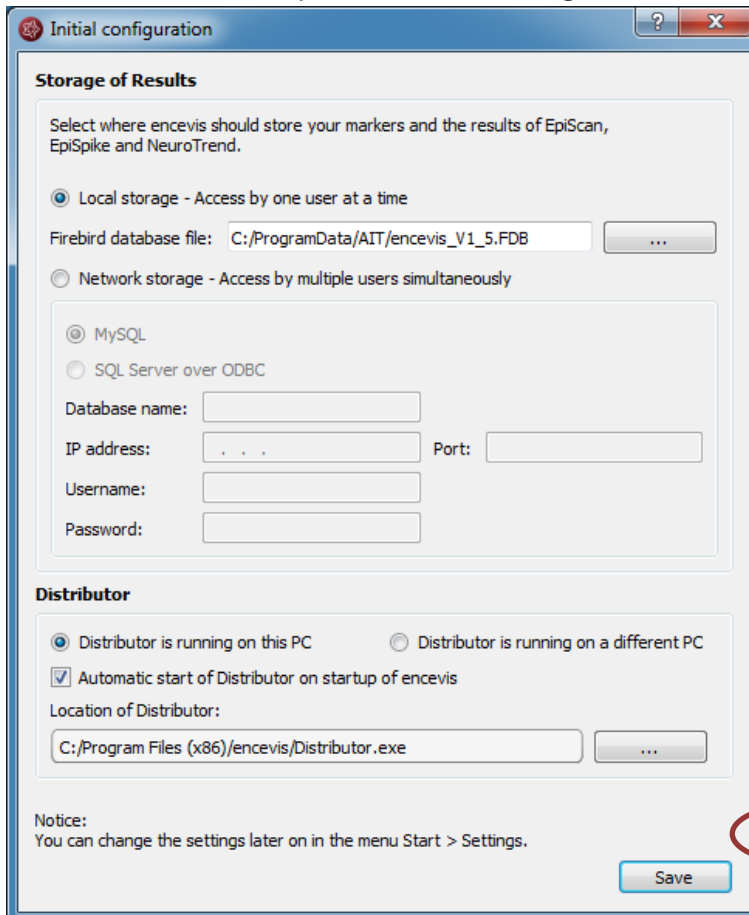
# Quick Start Guide

## encevis 1.5

## Installation

Once you have downloaded **encevis**, continue with the following steps:

1. Start the **encevisInstaller**, this will guide you through the installation process.
2. Start **encevis**.
3. The initial configuration window will pop up.
4. Press “**Save**”, to keep the default settings.



**Initial configuration**

**Storage of Results**

Select where encevis should store your markers and the results of EpiScan, EpiSpike and NeuroTrend.

Local storage - Access by one user at a time

Firebird database file: C:/ProgramData/AIT/encevis\_V1\_5.FDB

Network storage - Access by multiple users simultaneously

MySQL

SQL Server over ODBC

Database name:

IP address:  Port:

Username:

Password:

**Distributor**

Distributor is running on this PC  Distributor is running on a different PC

Automatic start of Distributor on startup of encevis

Location of Distributor:

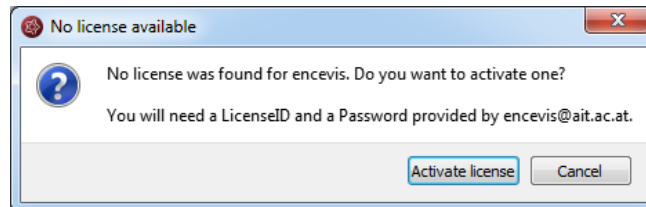
C:/Program Files (x86)/encevis/Distributor.exe

Notice:  
You can change the settings later on in the menu Start > Settings.

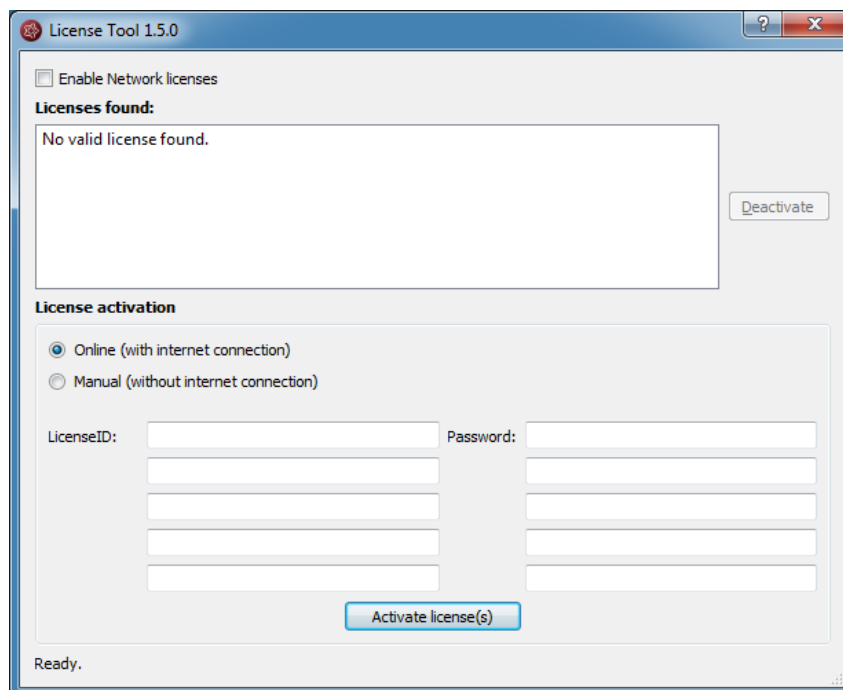
Save

## License activation

1. Start **encevis**.
2. Press the button “**Open EEG**”, the following window will pop up:

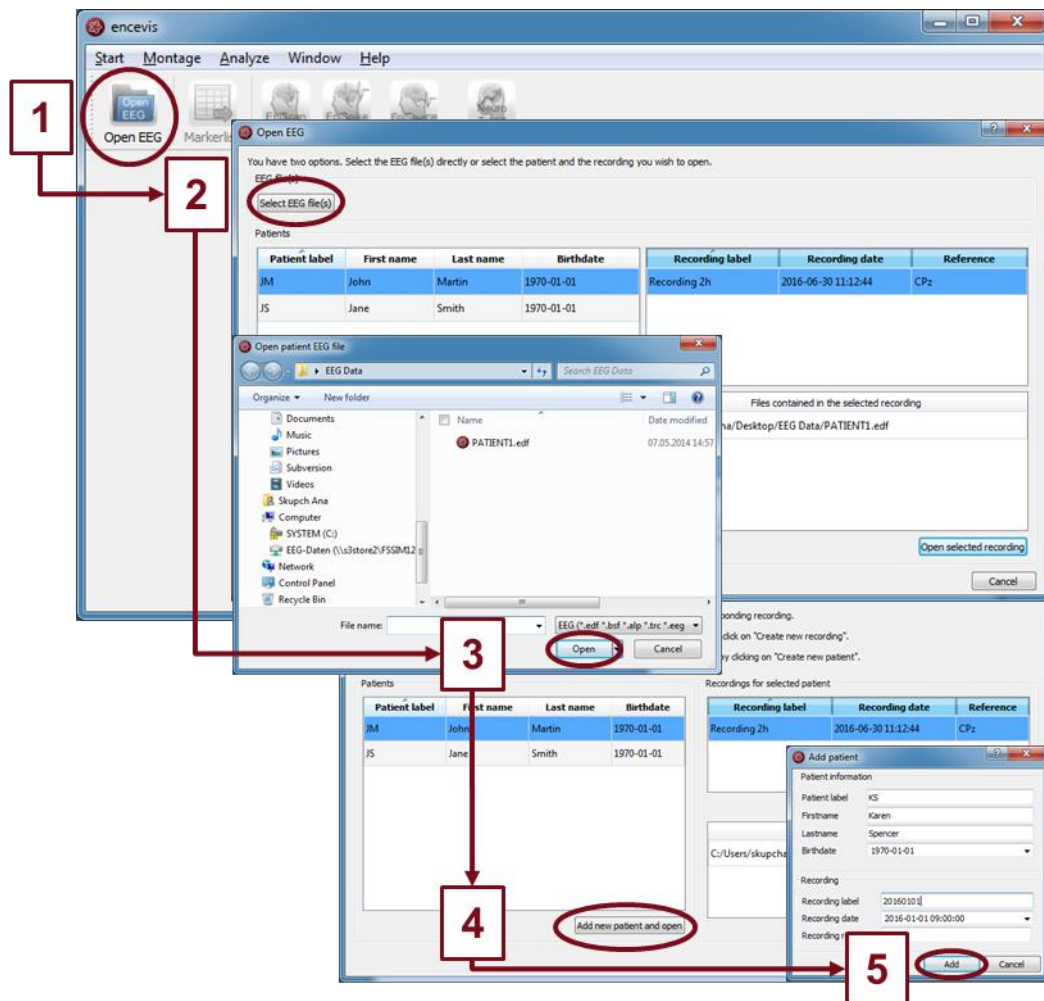


3. Press “**Activate license**”, the License Tool will pop up.



4. If you are connected to the internet, select „**Online**“ as activation mode. Otherwise, select “**Manual**” and contact your distributor in order to get the keys for the manual activation.
5. Enter the LicenseID and Password.
6. Press “**Activate license(s)**”.

## Open EEG file(s) in 5 steps

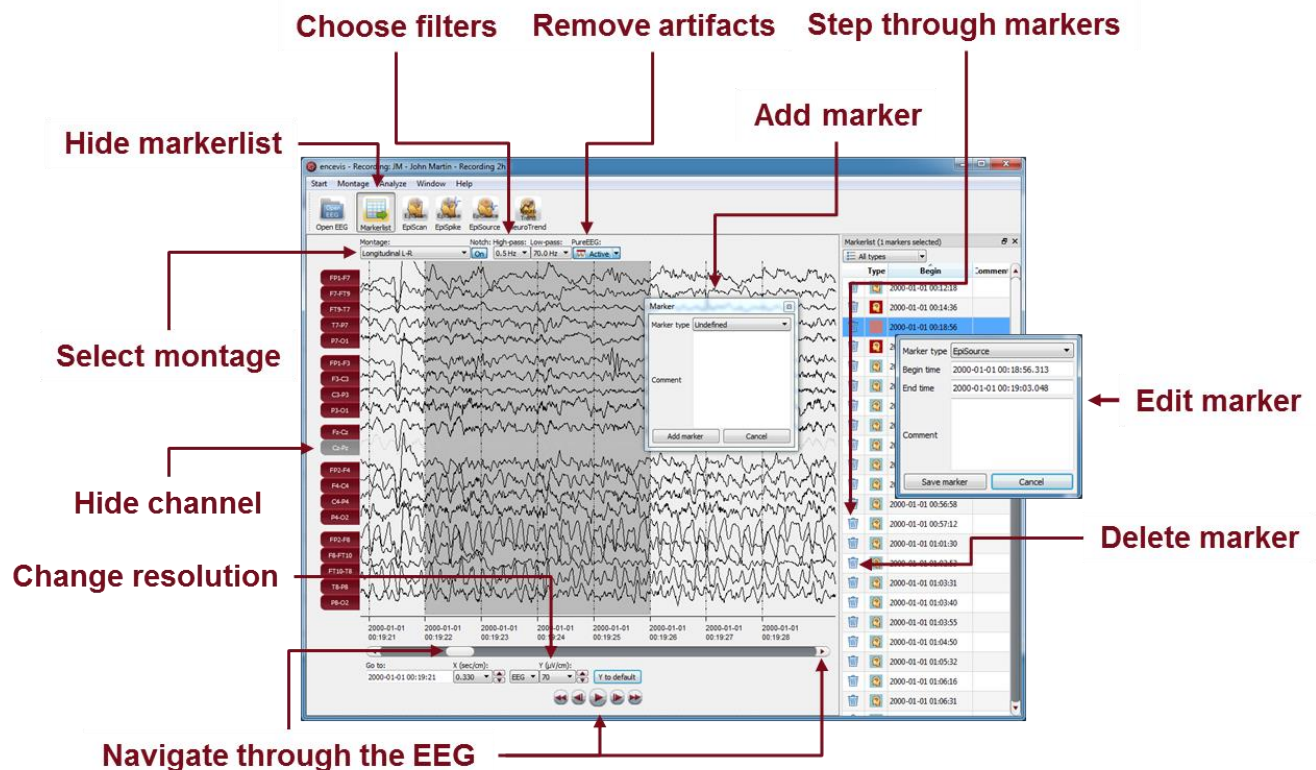


1. Press **"Open EEG"** or select the menu point **Start > Open EEG**.
2. Press **"Select EEG file(s)"**
3. Select the EEG file(s) that you would like to open.
4. If the file(s) are already registered in the EEG file management they will be opened immediately, otherwise a window will pop up. There, Press **"Add new patient and open"**, a new window will pop up.
5. Fill in the fields of the "Patient information". Fill in the recording label and the recording date and the reference used for the EEG recording. Press **"Add"**.



More information can be found under the menu point **Help > encevis Help**.

## Review EEG



The screenshot shows the encevis software interface with several windows and toolbars. Red arrows point to specific features with labels:

- Choose filters**: Points to the filter settings in the top toolbar.
- Remove artifacts**: Points to the PureEEG button in the top toolbar.
- Step through markers**: Points to the navigation buttons at the bottom of the EEG window.
- Add marker**: Points to the 'Add marker' button in the top toolbar.
- Hide markerlist**: Points to the 'Markerlist' button in the top toolbar.
- Select montage**: Points to the 'Montage' dropdown menu in the top toolbar.
- Hide channel**: Points to the 'Channel' dropdown menu in the top toolbar.
- Change resolution**: Points to the 'Resolution' dropdown menu in the top toolbar.
- Navigate through the EEG**: Points to the navigation buttons at the bottom of the EEG window.
- Edit marker**: Points to the 'Edit marker' button in the markerlist window.
- Delete marker**: Points to the 'Delete marker' button in the markerlist window.

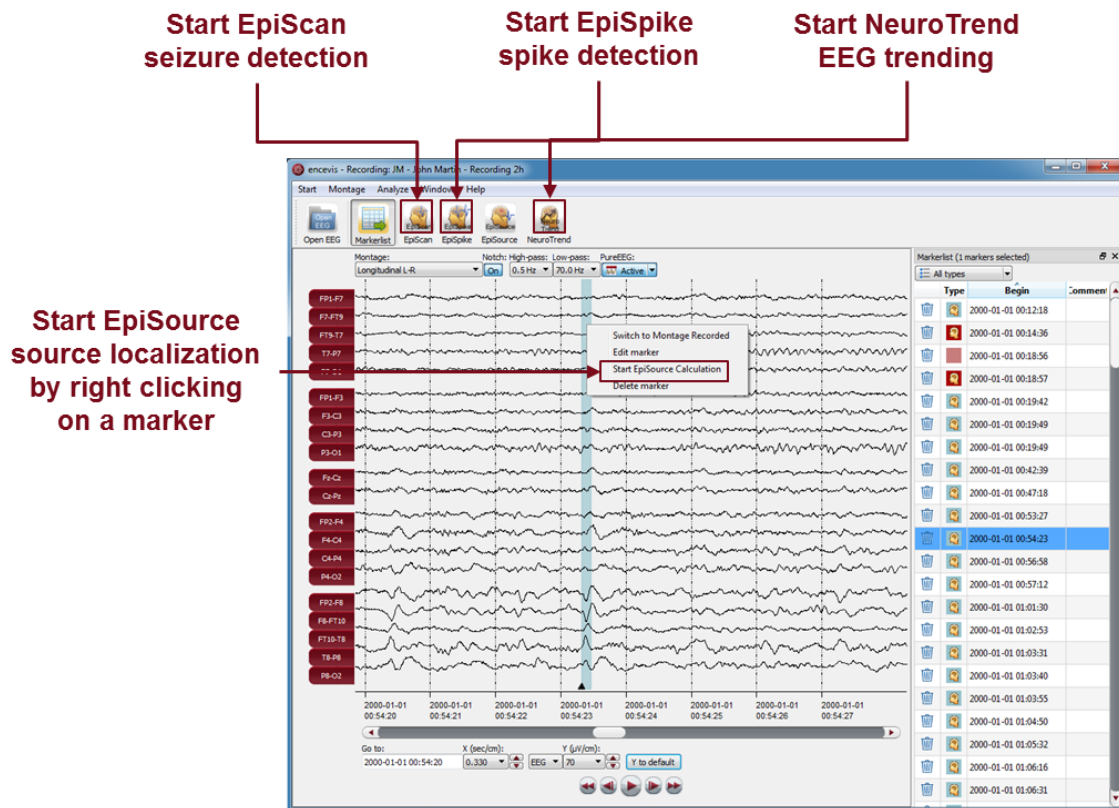
You have now the possibility to use all functionalities of encevis:

- Navigate easily through the EEG.
- Remove artefacts with PureEEG.
- Change the settings of the channels by selecting a montage and hide channels.
- Change the resolution in time and in voltage.
- Select notch, high-pass and low-pass filters.
- Watch the EEG in two windows at the same time.
- Create, review and change markers for special EEG events.
- Markers are saved with the data in the marker list and can be reviewed anytime.
- Start automatic EEG analysis.



More information can be found under the menu point **Help > encevis Help**.

## Start automatic EEG analysis



Start EpiScan seizure detection

Start EpiSpike spike detection

Start NeuroTrend EEG trending

Start EpiSource source localization by right clicking on a marker

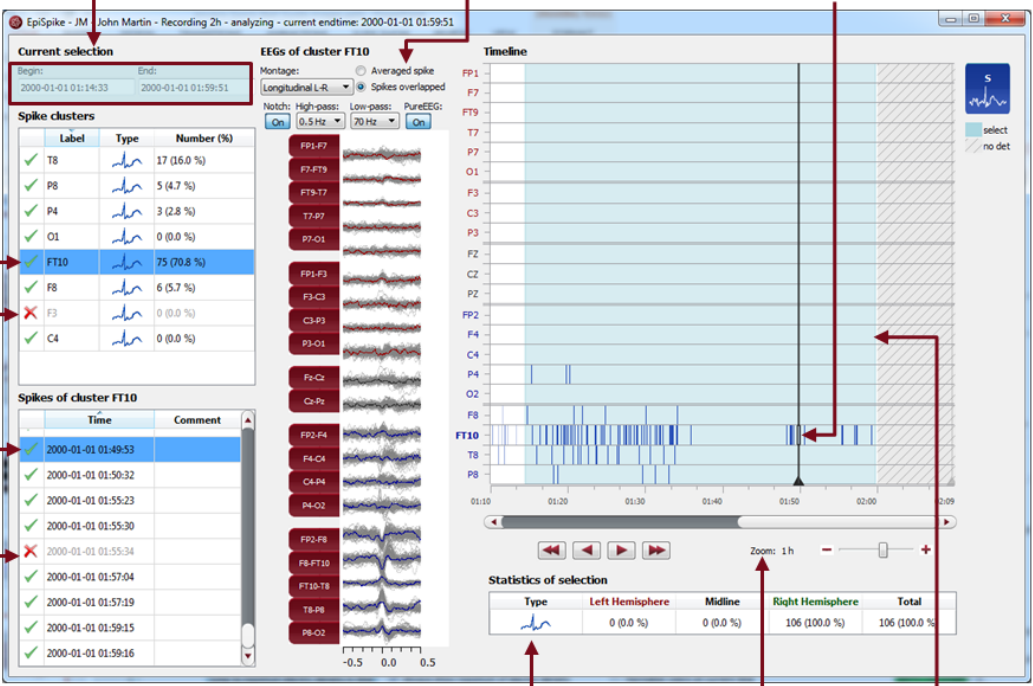
encevis offers you a series of automatic EEG analysis tools:

- EpiScan: the automatic seizure detection generates markers that you can easily review with the marker list.
- EpiSpike: the automatic spike detection detects spikes, clusters them by localization and visualizes the results for easy review.
- EpiSource: you can easily start the source localization on markers inserted manually or automatically. EpiSource has its own easy to use display.
- NeuroTrend: the advanced EEG trending calculates automatic detection of patterns, qEEG, aEEG, the heart rate based on ECG and visualizes the results on a single screen.



More information can be found under the menu point **Help > encevis Help**.

# EpiSpike



**Change selection**

**See EEG of spikes in cluster averaged or overlapped**

**Click on spike detections shown as colored bars**

**Check spike cluster**

**Delete cluster**

**Check spike**

**Delete spike**

**Read spike statistics**

**Zoom**

**Drag mouse to change selection**

Label	Type	Number (%)
T8		17 (16.0 %)
P8		5 (4.7 %)
P4		3 (2.8 %)
O1		0 (0.0 %)
<b>FT10</b>		<b>75 (70.8 %)</b>
F8		6 (5.7 %)
F3		0 (0.0 %)
C4		0 (0.0 %)

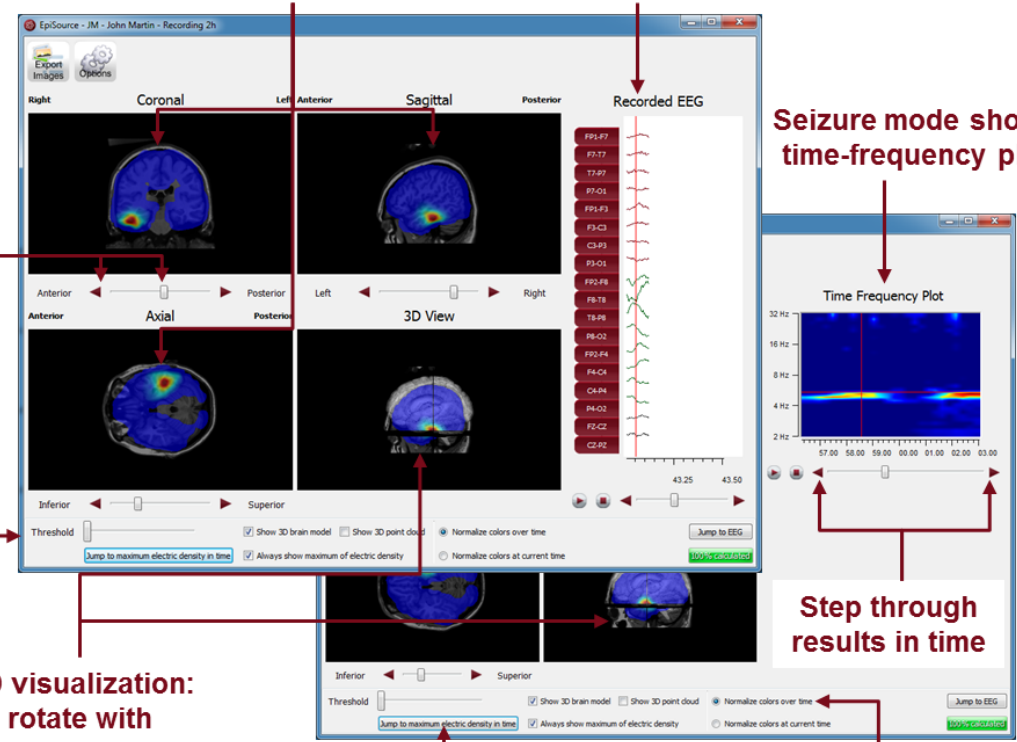
Time	Comment
2000-01-01 01:49:53	
2000-01-01 01:50:32	
2000-01-01 01:55:23	
2000-01-01 01:55:30	
2000-01-01 01:55:34	
2000-01-01 01:57:04	
2000-01-01 01:57:19	
2000-01-01 01:59:15	
2000-01-01 01:59:16	

Type	Left Hemisphere	Midline	Right Hemisphere	Total
	0 (0.0 %)	0 (0.0 %)	106 (100.0 %)	106 (100.0 %)

Start EpiSpike and use all its functionalities:

- Start the detection on the complete time range or specify a time segment you are particularly interested in.
- Find the spike detections on a timeline as blue bars clustered and arranged by their localization.
- Zoom in and zoom out of the timeline using the mouse wheel.
- Click on a detection to see its EEG and find it in the spike list.
- Choose if you want to see the average spike EEG of the cluster or all spikes overlapped.
- Go through the lists of spike clusters and their spikes and remove detections you do not want.
- Change time of selection for review and statistics.
- Synchronize with the EEG in the EEG viewer.

# EpiSource



**Results shown color coded in 2D slices**

**Spike mode shows spike EEG**

**Seizure mode shows time-frequency plot**

**Use controls or the mouse to navigate through the brain**

**Reduce the color coded overlay**

**3D visualization: rotate with left mouse button**

**Jump to the moment of maximum activity**

**Adjust visualization settings**

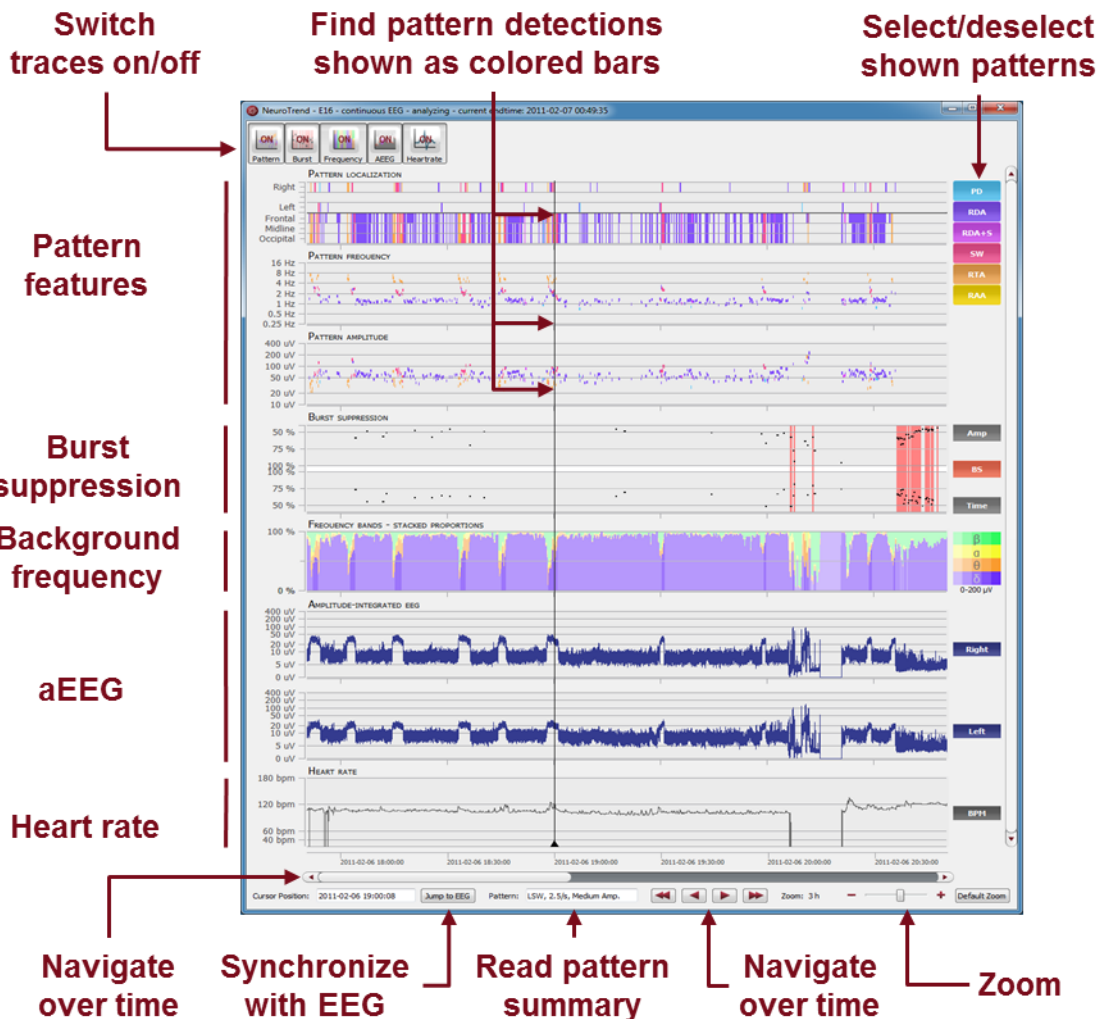
**Step through results in time**

Start EpiSource and use all its functionalities:

- Choose between seizure mode (seizure markers: 1s-5min) and spike mode (spike markers: 20-500ms).
- See the results of the source localization as color-coded overlay to the structural MRI. High activity is red. Low activity is blue.
- Review the results in the three 2D slices (Coronal, Sagittal and Axial).
- Navigate through the slices using the controls or the mouse.
- Review the results in the 3D visualization.
- Zoom in and zoom out using the mouse on the screen.
- Step through the results in time or just jump to the time point of maximum activity.
- Adjust several visualization settings.
- Export the results as images.



## NeuroTrend



Start NeuroTrend and use all its functionalities:

- Find color coded detections of six different patterns.
- Read localization, frequency and amplitude of the detected patterns.
- Find burst suppressions and attenuations.
- See the amplitude-integrated EEG and the proportion of the frequencies as continuous measures.
- Read the heart rate based on the ECG.
- Navigate in time.
- Zoom in and zoom out using the mouse wheel.
- Synchronize with the EEG shown in the encevis viewer.
- Select or deselect patterns that you want to have shown or hidden.
- Switch on/off the traces you want to have displayed.