BrainLiner BETA
USER GUIDE

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BrainLiner

Introduction & Contact Info

This is companion software for our database site BrainLiner, which specializes in neurophysiological data: http://www.brainliner.jp

This is an open source program made by ATR (www.atr.jp) in Kyoto, Japan. Eventually, the purpose of this software will be to time-align neurophysiological and stimuli data.

You can track the current development status on Pivotal Tracker: https://www.pivotaltracker.com/projects/121385

Contact: brainliner-admin@atr.jp

Quickstart

Upon loading the application, the following screen showing a file tree, a timeline to preview data, and the workspace window are shown.
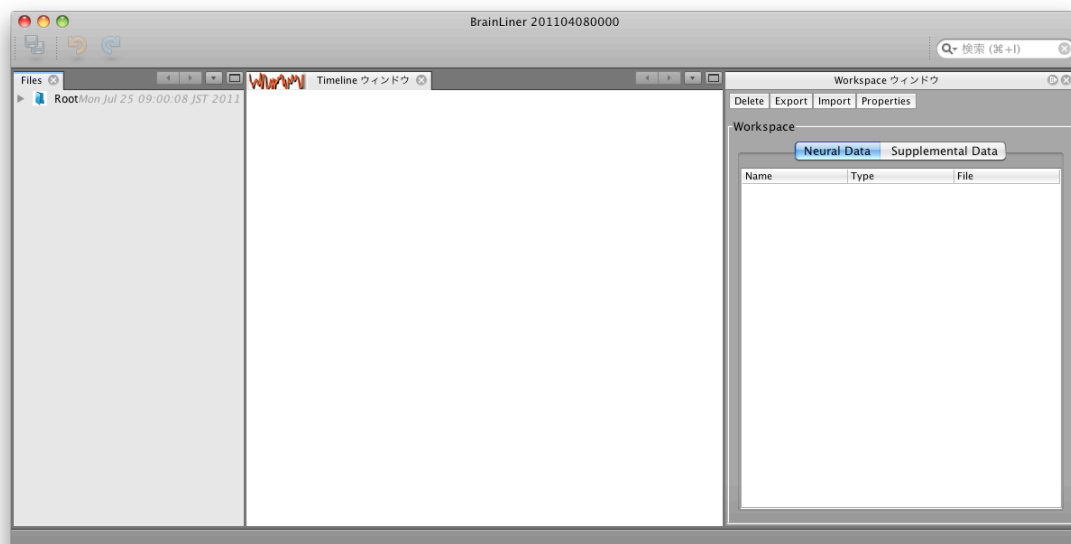

From here, there are two things you can do:

• Import data files to the workspace, preview data, and export the data to a new Neuroshare file.

• Navigate the file tree and use the property editor (opened via the Window --> Property Editor menu) to edit the header information of Neuroshare files.
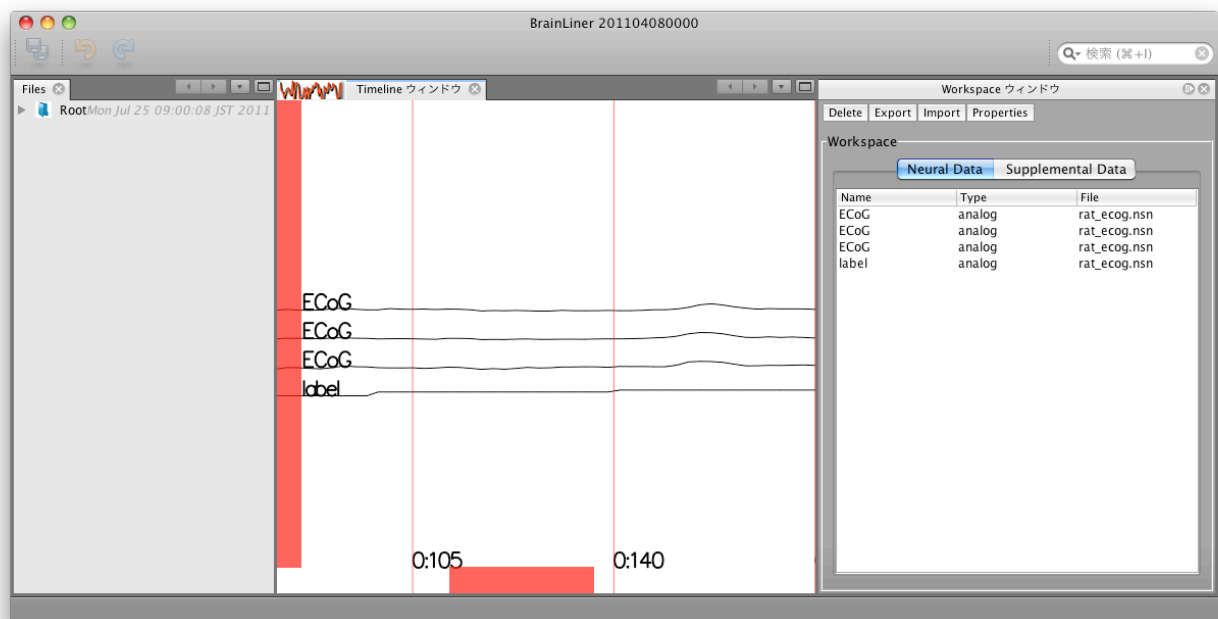
Importing Data to the Workspace

To import data to the workspace, click on the "Import" button in the "Workspace" window. A file chooser will then appear, allowing you to choose a file you would like to open. Currently Neuroshare (.nsn), Plexon (.plx), BlackRock (.nev, .ns1 ... .ns9), and ATRCSV (.csv; the format is as specified by ATR) files are supported.
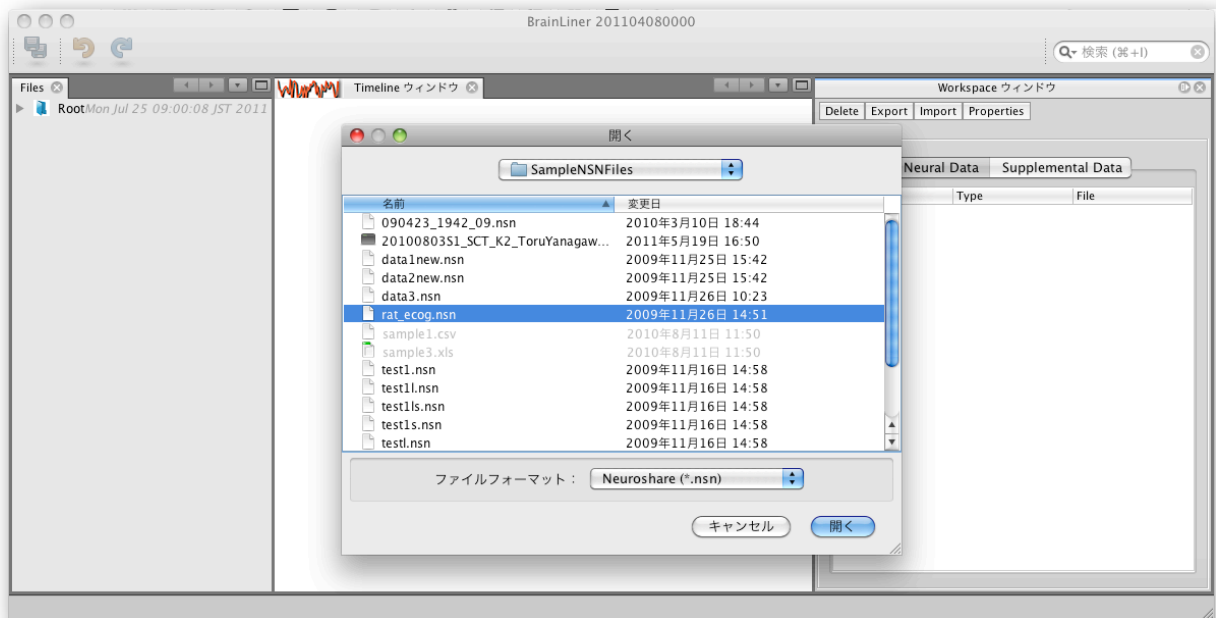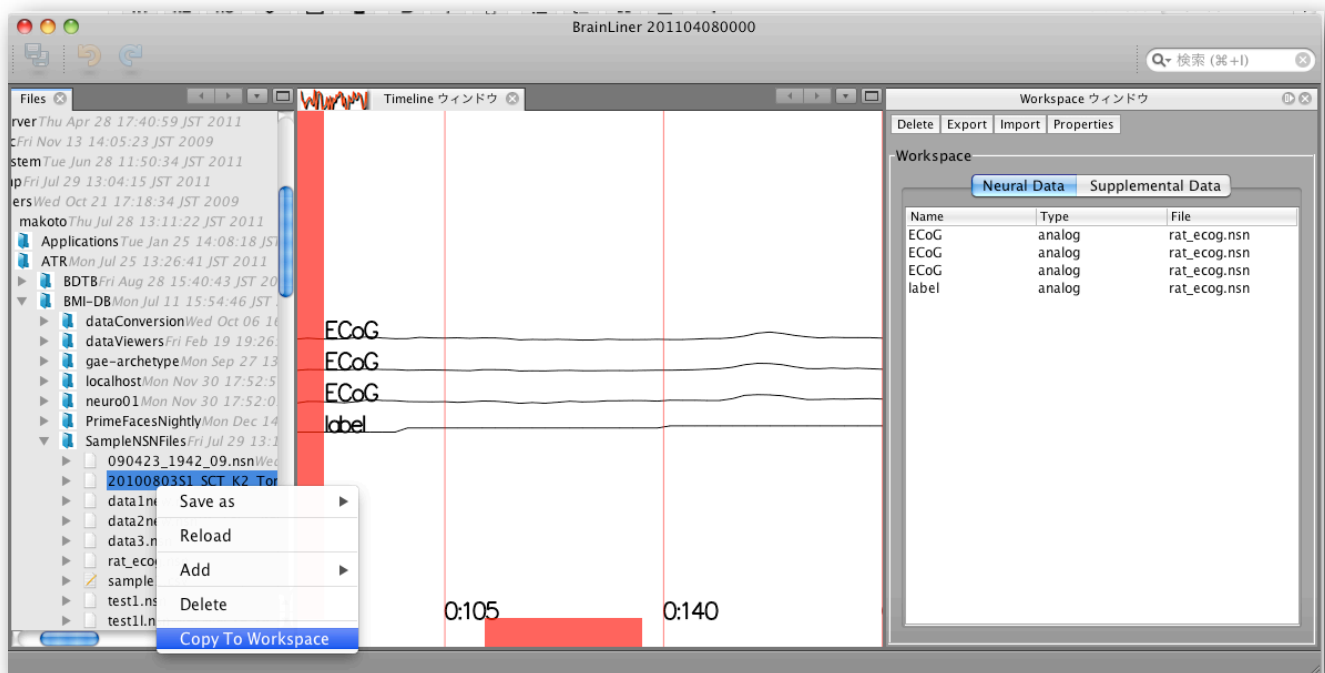

After selecting the file to open, you can then choose which channels of data you would like to add into the database.
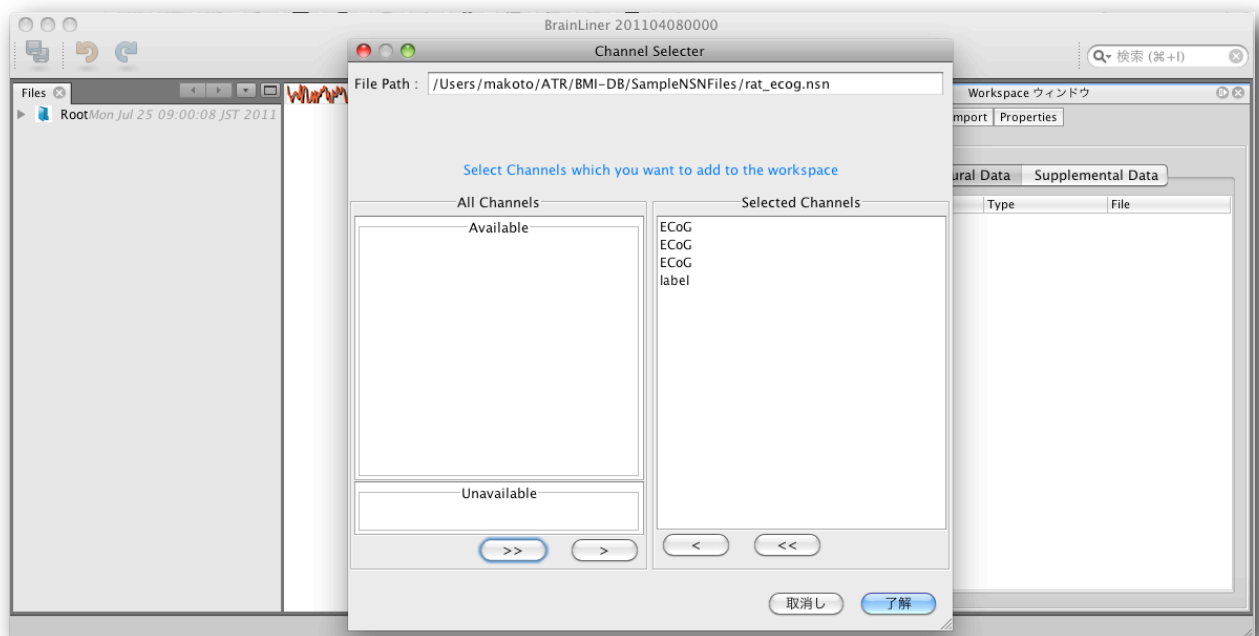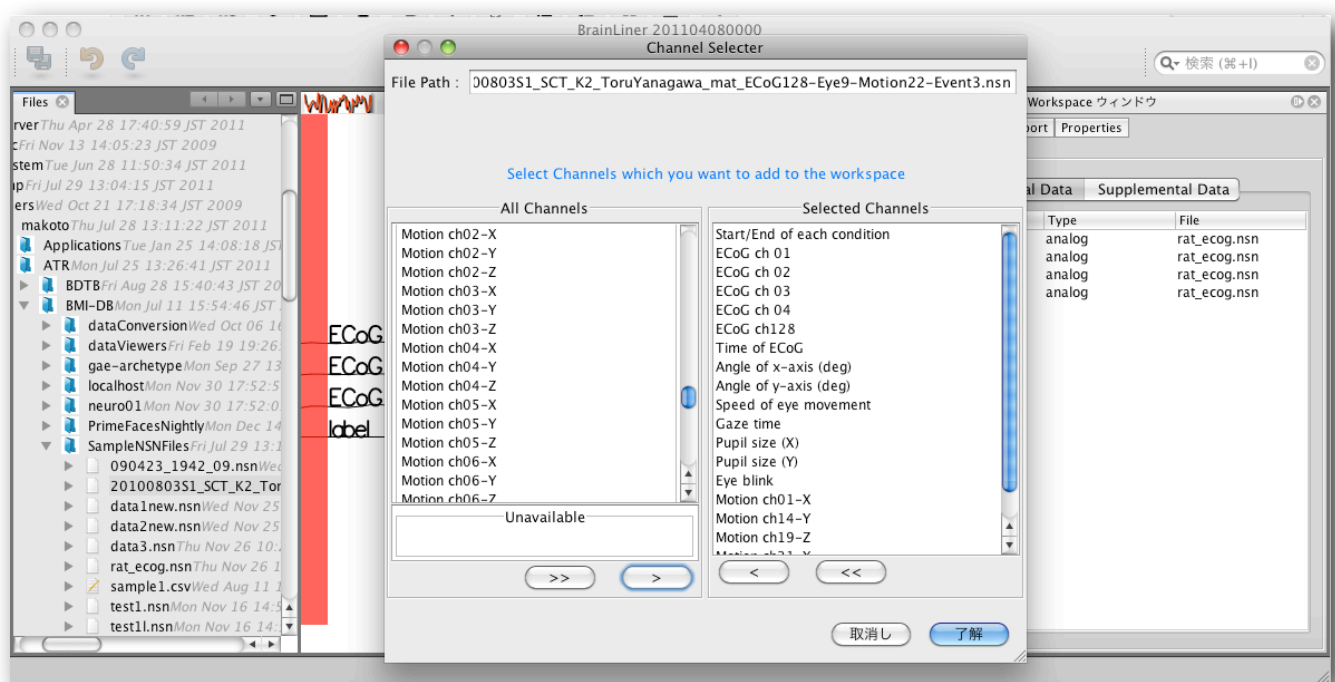

After adding channels to the workspace, you can then preview data in the "Timeline" window.
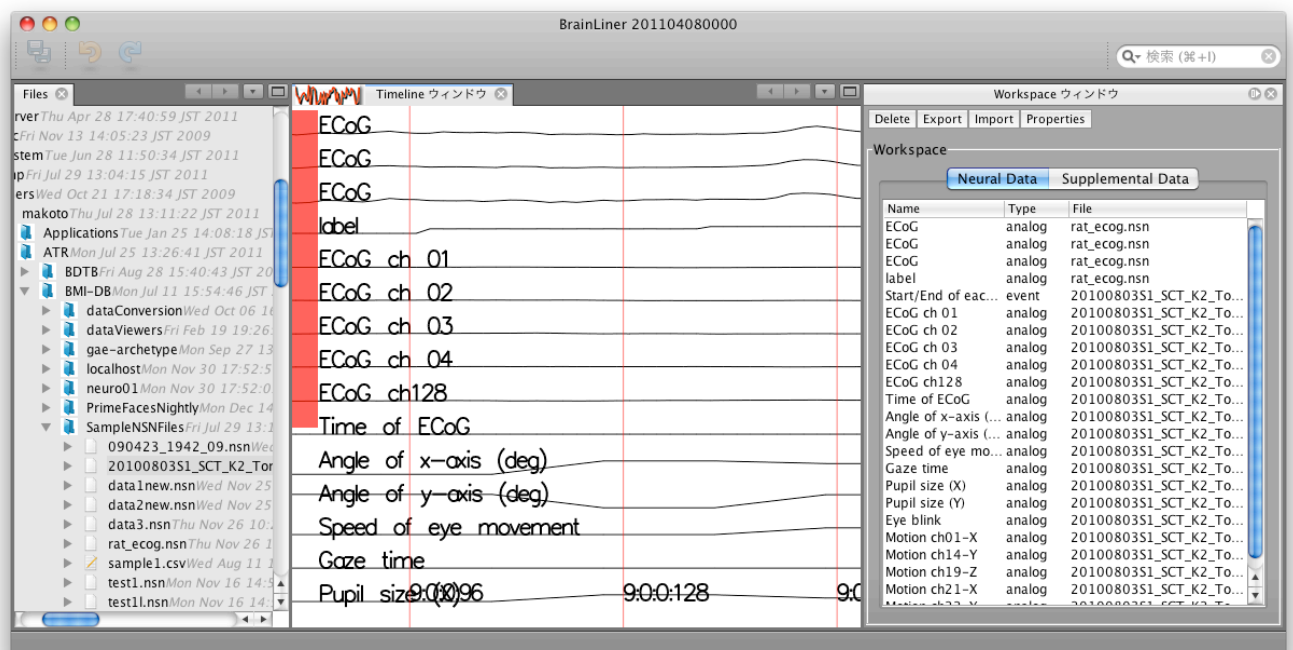
You can also load in data to the workspace through the file tree on the left, by selecting the "Copy To Workspace" option via the right-click menu.

You can then add channels to the Workspace as before.

Then the displayed data is increased.

Exporting a New Neuroshare File

Once the Workspace has been populated with the desired data, a new Neuroshare file can be created. This is especially useful for converting from other file formats to Neuroshare, since all you have to do is add the data you wish to convert to the Workspace and then create a new Neuroshare file.

To create a new Neuroshare file from the Workspace, click on the "export" button in the "Workspace" window. A window will then open. Click the "Browse" button to choose a name and location for your file and click to go to the next screen.
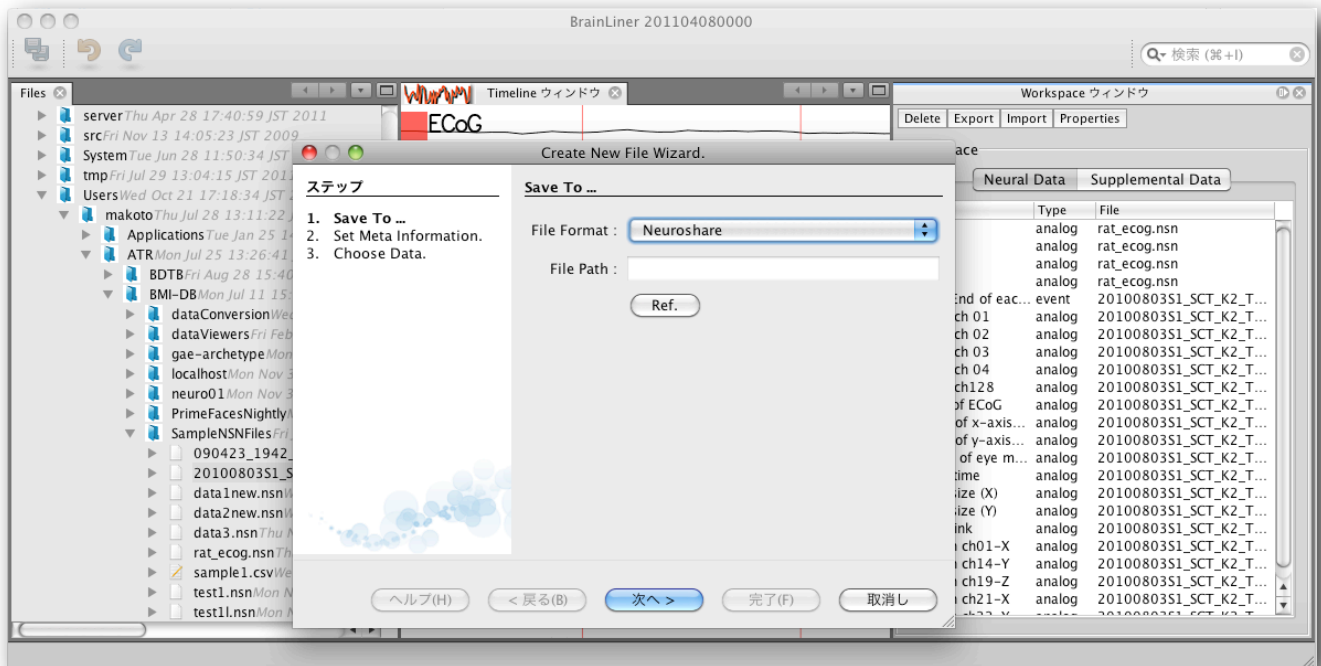
On the second screen you will be prompted to enter meta information about the Neuroshare file. The time stamp resolution and time span are required, but you may not know these values. Try to enter as accurate values as possible.
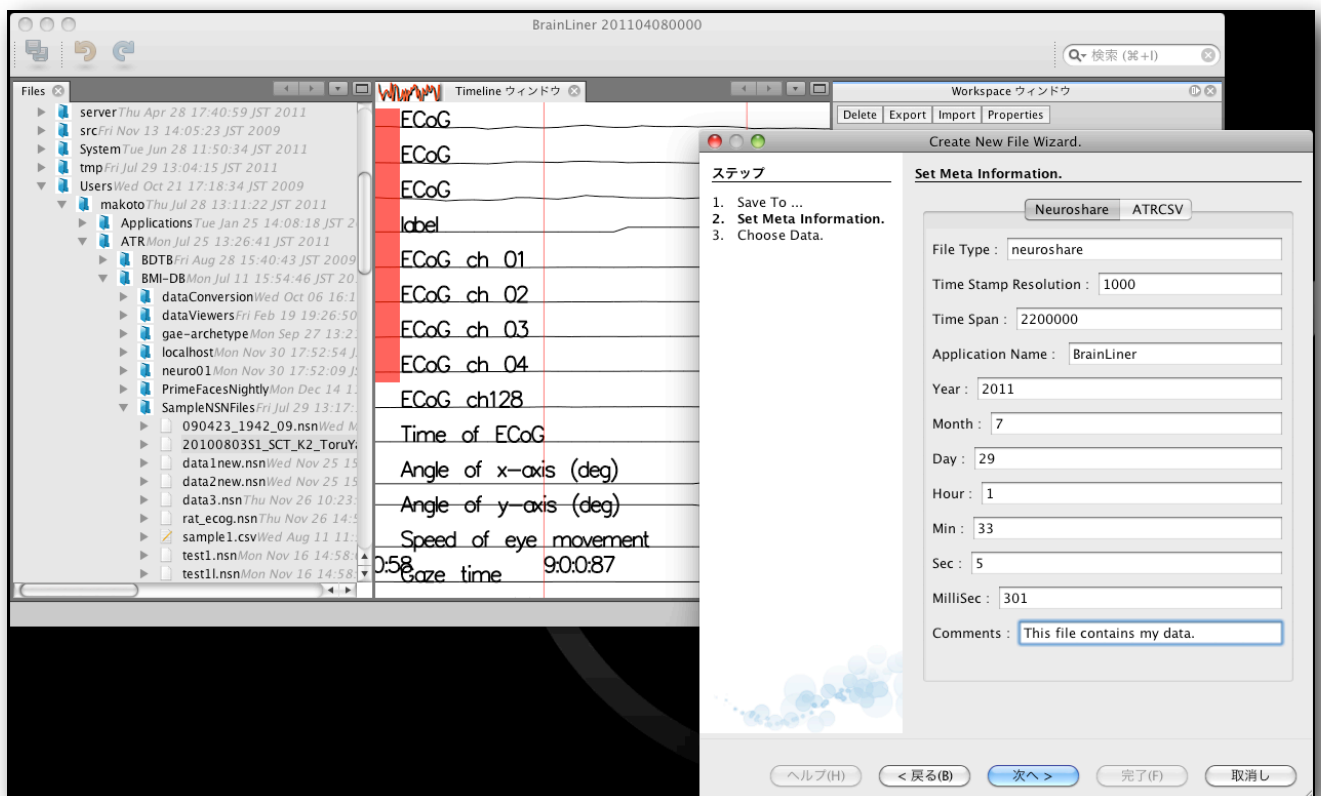
After entering the meta information, click to go to the next screen where you will be prompted to choose the data channels from the Workspace to write to the file. When ready, click the "Finish" button to save your new Neuroshare file.
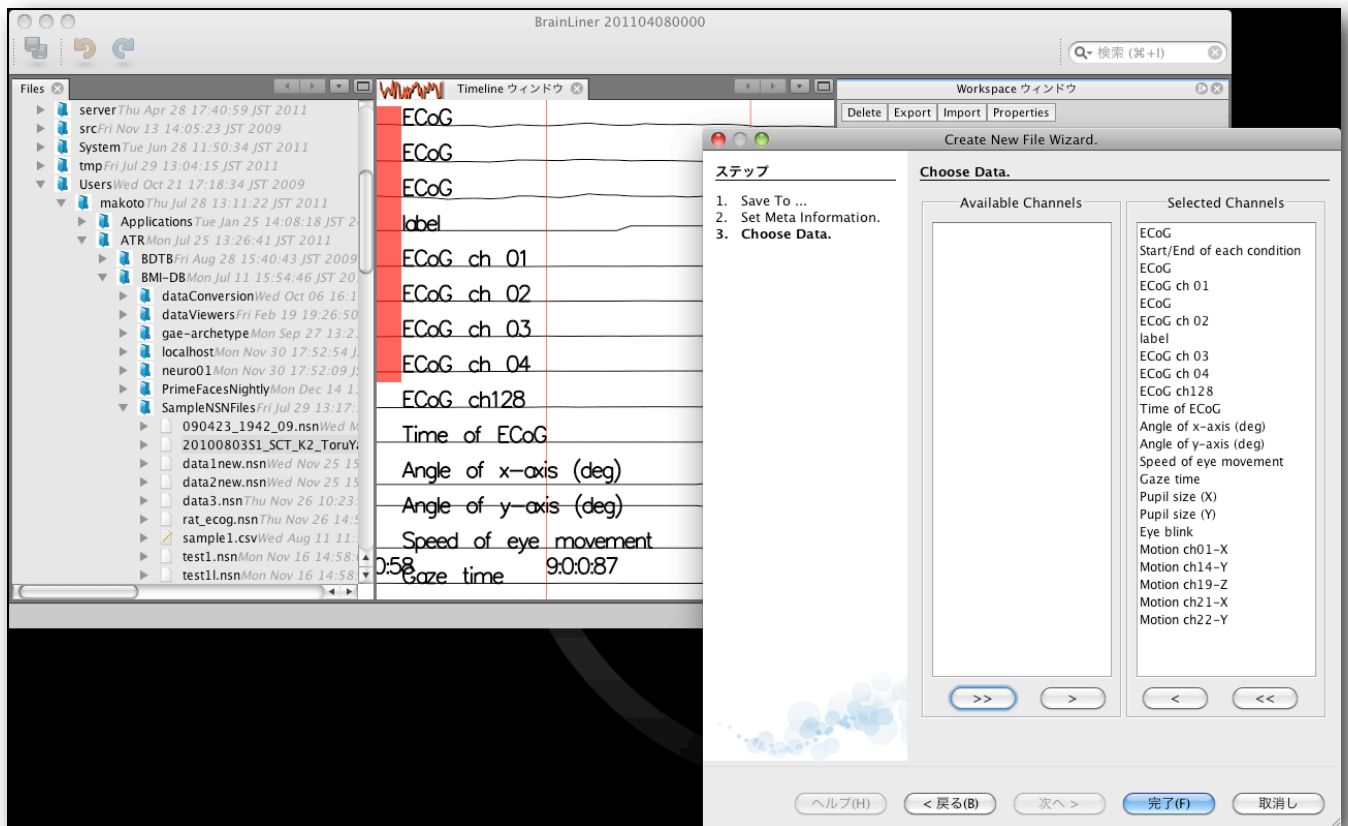

Then the new Neuroshare file will be created. This may take some time, depending on the file size, so please be patient. In the future we will add a progress bar to clarify the status of file creation, but that feature is currently not available in this beta.
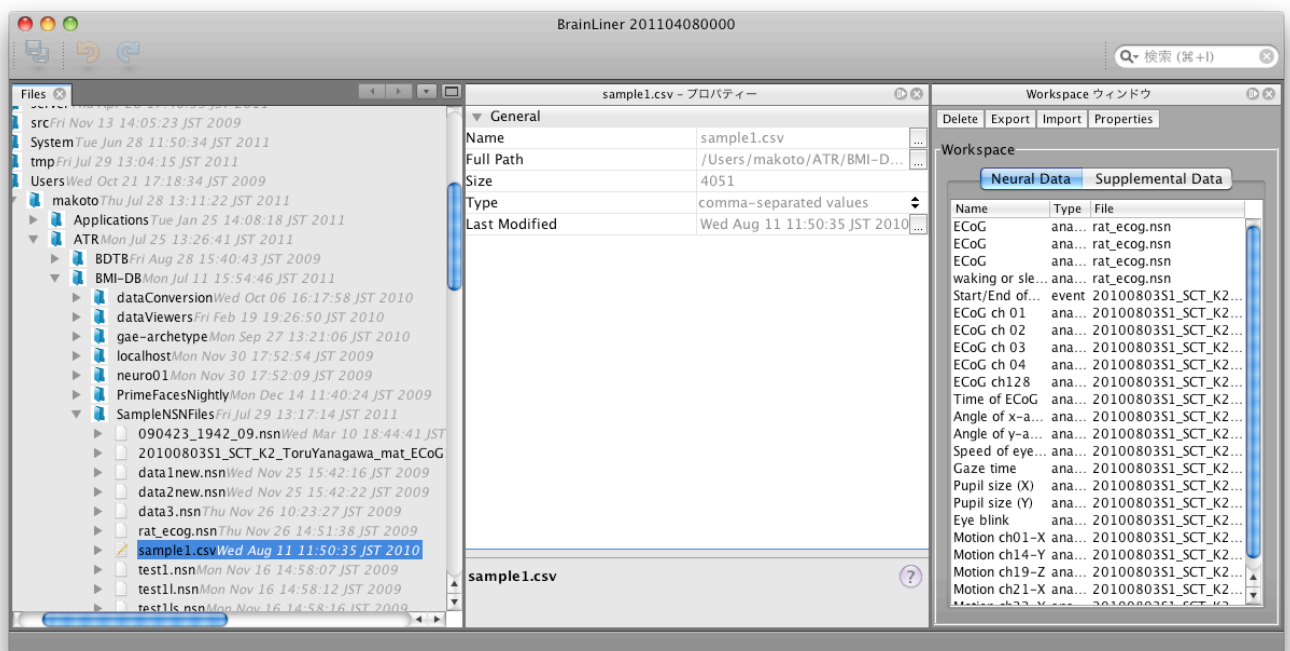
Edit Neuroshare Header Information

In addition to creating new Neuroshare files, our software also allows users to view and edit header information stored in Neuroshare files.

First, make sure the "Property" window is open. If not, you can open it via the Window menu at the top of the screen:
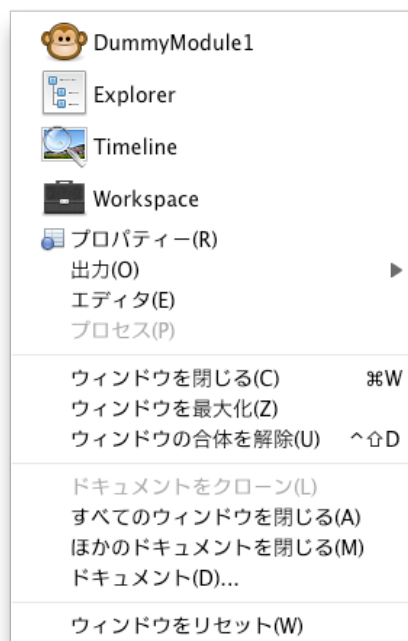
Once open, the Property menu will show properties for files that are currently selected in the File tree. For regular files, such as a CSV file, you cannot edit the header information.

If a Neuroshare file is selected, however, the header information can be viewed and edited by selecting the "Neuroshare" tab in the Property window:
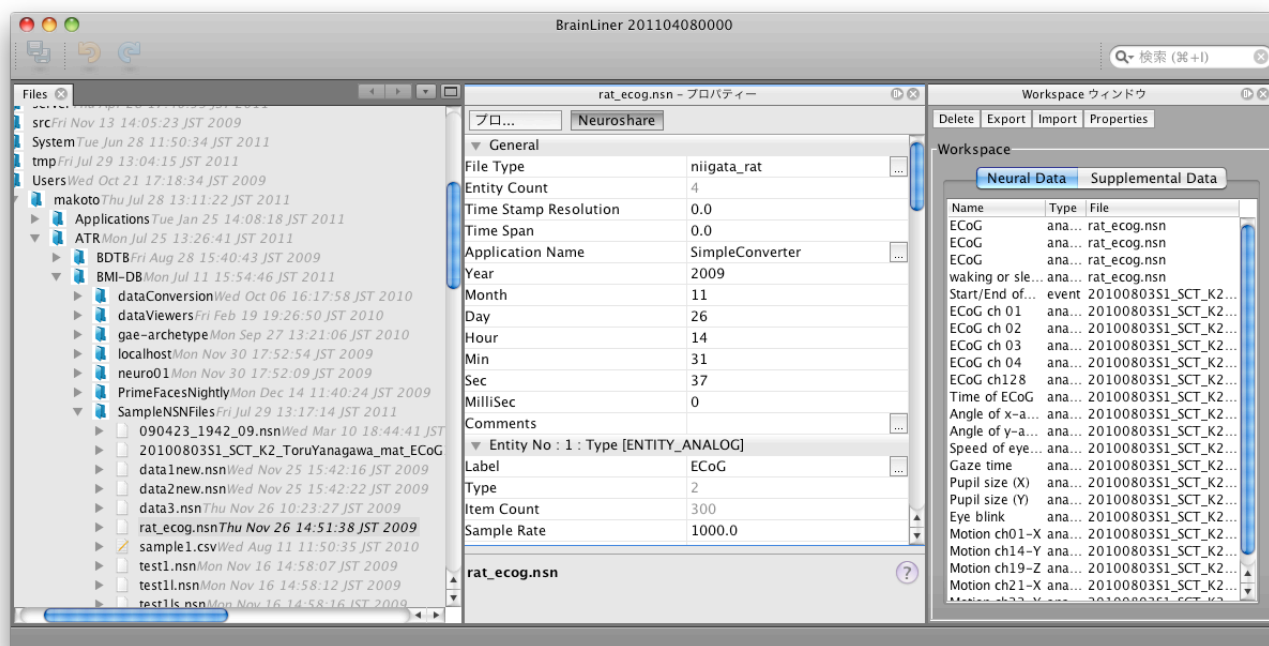
To edit header information in the Neuroshare file, simply click in the Property window and type the new values that you want. For example, to change a Neuroshare entity's label, just click in the "Label" field on the right, and type the new label that you wish, for example, "my new label name."