

AVAILABLE SOON

CURRY 8

Why you should upgrade to CURRY 8:

FOR ALL USERS

- New, easy-to-use and customizable User Interface
- Customizable function keys (F-keys) for quick selection of montages or other actions
- No memory limits (native 64-bit application)
- Interpolate any surface EEG into 10-20 system (or other) with the click of one button
- Automatic High-Tesla MRI histogram correction
- Exported data files contain a file history, documenting previous filenames and processing steps
- Automatic creation of individual Finite Element Models (FEM)

FOR CLINICIANS

- Easy dipole clustering
- Simultaneous display of five image data sets (full support for up to ten image data sets)
- Surgical navigation systems: RGB DICOM
- Source reconstruction on depth electrodes (stereo-EEG) is now possible
- Workflows with Scope(*) support
(*) Scopes are sets of factory defaults and macros for certain application areas. Epilepsy, ERP, and CURRY 7 scopes are provided; custom scopes can be created

FOR RESEARCHERS

- Faster digitization of electrode positions
- Flexible signal processing sequences
- New statistics on source reconstruction results and channels
- New wavelet and Current Density Reconstruction (CDR) options
- Improved automation: macros with jumps, loops, branches, subroutines
- Stream live data to MATLAB or via TCP/IP (NetStreaming), dedicated to Brain-Computer-Interface (BCI) applications
- Data files compatible with MATLAB and EEGLab

NEW FEATURES

USER INTERFACE

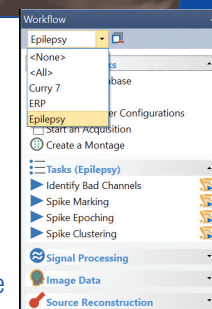
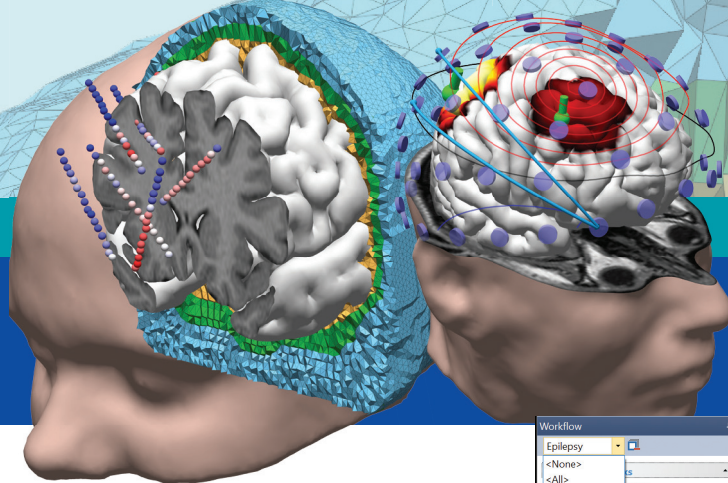
- New Layout with less visual clutter
- Scope support: Epilepsy, ERP, and CURRY 7 scopes are provided; custom scopes can be created
- High-resolution screen support

SIGNAL PROCESSING

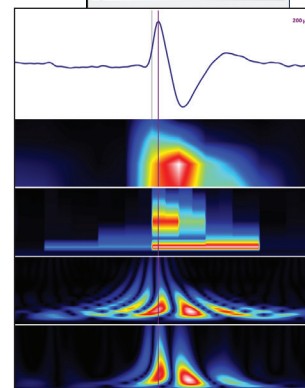
- Customizable signal processing sequence
- New time-frequency wavelet analysis: Morlet, Mexican Hat, Paul
- Interpolate any surface EEG into 10-20 system with the click of one button
- Intracranial Grid, Stereo-EEG
- Multiple video windows
- File history: Exported data files contain information about previous filenames and processing steps

SOURCE RECONSTRUCTION

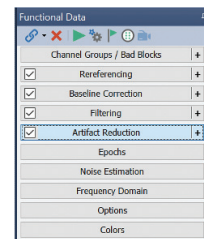
- New head models:
 - individualized FEM based on tetrahedra or cubes, with support for anisotropic skull
 - inside sphere (for depth electrode support)
 - precomputed BEM head model allowing to exclude cerebellum from source analysis
- New Current Density Reconstruction (CDR) methods: LAURA, swLORETA, FOCUSS, ssLOFO
- New CDR dipole ("virtual electrode", "probe") options: regional, mirrored, representing volume-of-interest
- Dipole clustering
- Display dipole loadings and waveforms in 3D View
- Exclude a certain volume-of-interest defined by image data markers or overlays from the allowed source space
- New default brain-to-skull conductivity ratio of 25 (instead of 80)
- Adjust scaling of standard surfaces and precomputed head models based on electrode locations
- Export CDR and Scan results in DICOM format
- Export triangle meshes (including source results) in STL format
- Export source results and lead field as EEG/MEG data file



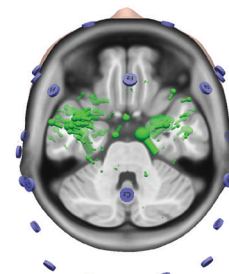
Scope



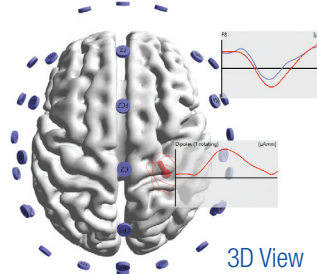
Time-Frequency



Signal Processing Pipeline



Dipole Clustering



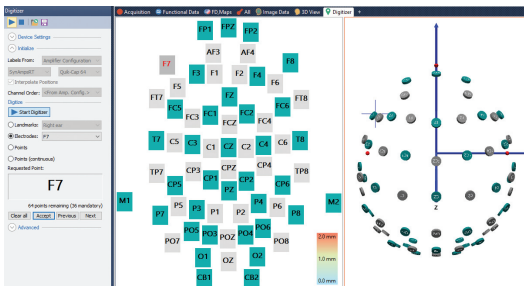
3D View

IMAGE DATA

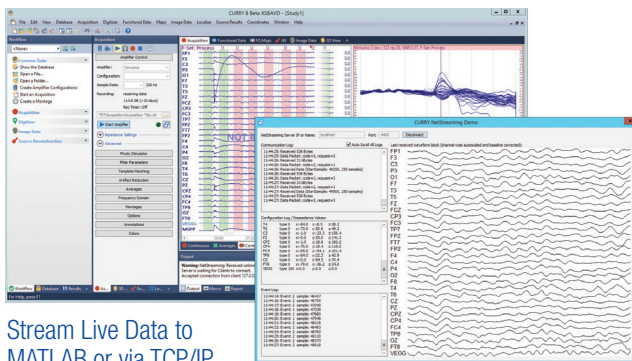
- Simultaneous display of five image data sets (full support for up to ten image data sets)
- Automatic High-Tesla MRI histogram correction for improving intensity homogeneity
- Pial surface (improved display of cortex)
- Image Data rotation support for Segmentation Preview, Segmentation Result and Maximum Intensity Projection (MIP)
- New grid view display option showing multiple axial slices simultaneously
- Improved built-in image datasets
 - higher-resolution standard dataset based on ICBM-152
 - new pediatric dataset for age range 0-5
- Support for additional image data file formats: Freesurfer, Nifti
- New option for saving image data
 - RGB DICOM file format (for surgical navigation systems)
 - DICOM tag support (name, age, birthday, etc.)
 - DICOM anonymization option
 - Save image data sets in the same coordinate space
- Superimpose more than one thresholded image data set
- Subtract left vs. right portions of image data

STATISTICS

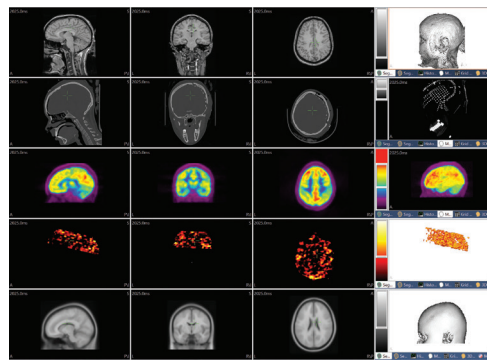
- New Statistics methods: Maps SnPM, CDR SnPM, temporal multiple comparison correction
- Source space resampling for group studies
- Single-condition testing
- Channel specific statistics



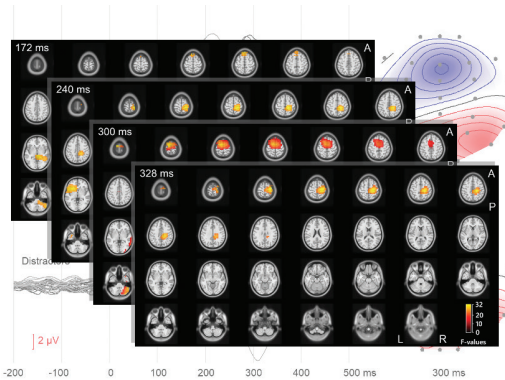
Electrode Digitizer Module



Stream Live Data to
MATLAB or via TCP/IP

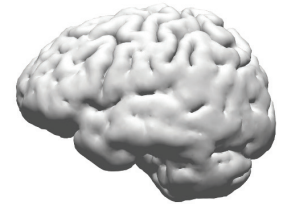


Simultaneous Display of Five Image Data Sets

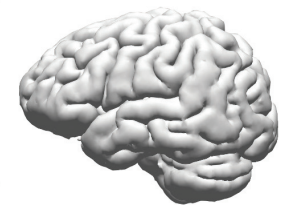


Source Statistics in a Grid View

Automatic High-Tesla MRI
Histogram Correction



Without Correction



With Correction

ELECTRODE DIGITIZER MODULE

- Fully integrated into CURRY, or usable as stand-alone software
- Faster digitization of electrode positions by estimating full cap-positions from only a subset of measured electrodes
- New supported devices: Polhemus Patriot and NDI Krios(*)
 - (*) import point-cloud files from NDI software (full NDI Krios integration planned for later CURRY 8 update)

CONNECTIVITY

- Stream live data to MATLAB or via TCP/IP (Listener: CURRY, MATLAB, custom software), dedicated to Brain-Computer-Interface (BCI) applications
- Stimulus presentation controls recording: initiate start/stop and impedance test
- CURRY data files compatible with EEGLAB
- Convert recordings into other formats (such as EDF or CNT) from within the Acquisition module

PERFORMANCE

- Native 64-bit application (no memory limits)
- New DirectX 11 3D graphics
- Faster review and processing (file caching)
- Dual acquisition (lower sampling rate for online processing)
- Output files ca. 30% smaller (lossless compression)
- Improved automation: macros with jumps, loops, branches, subroutines
- Customizable function keys (F-keys) for quick selection of montages or other actions