$25,000 • 45 teams

American Epilepsy Society Seizure Prediction Challenge

Enter/Merge by

Mon 25 Aug 2014 — Mon 17 Nov 2014 (2 months to go)

Dashboard

Home
- Data
- Make a submission

Information
- Description
- Evaluation
- Rules
- Prizes

Forum

Leaderboard

My Team

My Submissions

Leaderboard

1. Nick Stupich
2. spacemanspiff
3. Jose M.
4. QMS
5. disgon
6. UMN
7. Michael Hills
8. Vilen Jumutc
9. Alexandre
10. d00

Forum (8 topics)

number of test clips
13 minutes ago

Classification label problem
17 hours ago

Additional Data
3 days ago

Fields in Matlab file - can't find 'data' etc
4 days ago

Preictal data from Dog 4
5 days ago

Open .mat file
5 days ago

teams

players

Competition Details » Get the Data » Make a submission

Data Files

File Name	Available Formats
Dog_1.tar	.gz (3.81 gb)
Dog_2.tar	.gz (5.89 gb)
Dog_3.tar	.gz (9.46 gb)
Dog_4.tar	.gz (9.32 gb)
Dog_5.tar	.gz (2.60 gb)
Patient_1.tar	.gz (13.73 gb)
Patient_2.tar	.gz (14.83 gb)
sampleSubmission	.csv (116.64 kb)

Intracranial EEG (iEEG) data clips are organized in folders containing training and testing data for each human or canine subject. The training data is organized into ten minute EEG clips labeled "Preictal" for pre-seizure data segments, or "Interictal" for non-seizure data segments. Training data segments are numbered sequentially, while testing data are in random order. Within folders data segments are stored in .mat files as follow:

- preictal_segment_N.mat - the Nth preictal training data segment
- interictal_segment_N.mat - the Nth non-seizure training data segment
- test_segment_N.mat - the Nth testing data segment

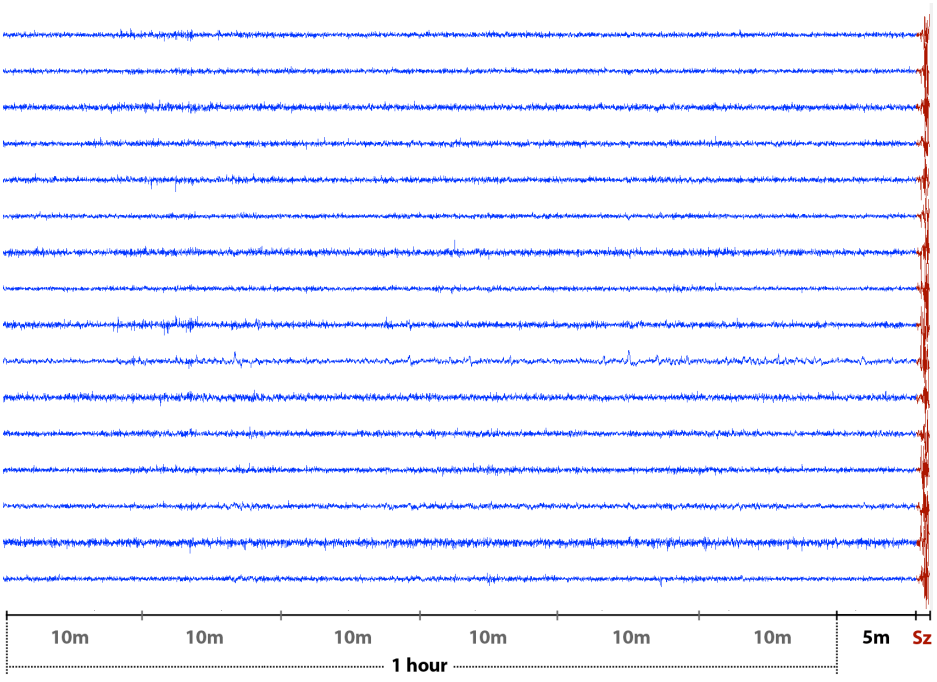
Each .mat file contains a data structure with fields as follow:

- data: a matrix of EEG sample values arranged row x column as electrode x time.
- data_length_sec: the time duration of each data row
- sampling_frequency: the number of data samples representing 1 second of EEG data.
- channels: a list of electrode names corresponding to the rows in the data field
- sequence: the index of the data segment within the one hour series of clips. For example, preictal_segment_6.mat has a sequence number of 6, and represents the iEEG data from 50 to 60 minutes into the preictal data.

Preictal training and testing data segments are provided covering one hour prior to

entries

seizure with a five minute seizure horizon. (i.e. from 1:05 to 0:05 before seizure onset.) This pre-seizure horizon ensures that 1) seizures could be predicted with enough warning to allow administration of fast-acting medications, and 2) any seizure activity before the annotated onset that may have been missed by the epileptologist will not affect the outcome of the competition.



Similarly, one hour sequences of interictal ten minute data segments are provided. The interictal data were chosen randomly from the full data record, with the restriction that interictal segments be as far from any seizure as can be practically achieved, to avoid contamination with preictal or postictal signals. In the long duration canine recordings it was possible to maintain a restriction of one week before or after a seizure. However, in the human recordings (which may be less than a week in total duration) interictal data was restricted to be more than four hours before or after any seizure.

Additional annotated intracranial EEG data is freely available at the International Epilepsy Electrophysiology Portal, jointly developed by the University of Pennsylvania and the Mayo Clinic.