Quantitative Features of EEG Recorded in the Delivery Room Immediately After Birth

EEG features from term infants recorded minutes after birth. To accompany publication:

`D Finn, JM O'Toole, EM Dempsey, GB Boylan, EEG for the Assessment of Neurological Function in Newborn Infants Immediately After Birth, Arch Dis Child Fetal Neonatal Ed, 2018` DOI:10.1136/archdischild-2018-315231

Features are generated using NEURAL (version 0.3.4; code on github); see reference [1] for more details.

This version is archived on Zenodo: 

Files

- `qEEG_term_newborns_delivery_suite_ANON.csv`: feature set as comma-separated variable file. Will open in Excel (or equivalent).
- `LICENCE.md`: terms of use.

Brief description of each feature (see [1] for more details):

column name	description
spectral_power___1_	spectral power (delta band = 0.5 to 4 Hz)
spectral_power___2_	spectral power (theta band = 4 to 7 Hz)
spectral_power___3_	spectral power (alpha band = 7 to 13 Hz)
spectral_power___4_	spectral power (beta band = 13 to 30 Hz)
spectral_relative_power___1_	relative spectral power (for each band)
spectral_relative_power___2_	
spectral_relative_power___3_	
spectral_relative_power___4_	
spectral_edge_frequency	frequency (Hz) below which 95% spectral power resides
FD	fractal dimension (using Higuchi method)
rEEG_median	median rEEG (rEEG similar to aEEG)
rEEG_lower_margin	lower margin (5th percentile) of rEEG
rEEG_upper_margin	upper margin (95th percentile) of rEEG
rEEG_asymmetry	symmetry between upper, lower, and median rEEG

References

1. JM O'Toole and GB Boylan (2017). NEURAL: quantitative features for newborn EEG using Matlab. ArXiv e-prints, arXiv:1704.05694.

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