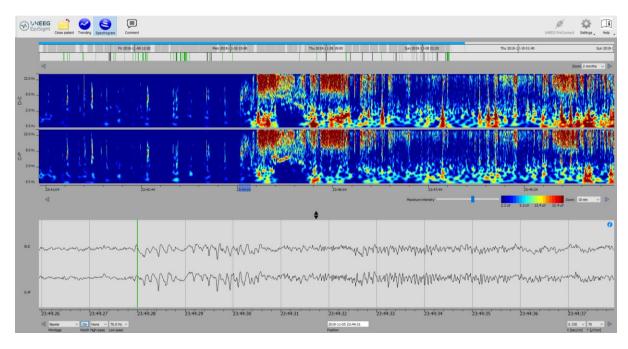
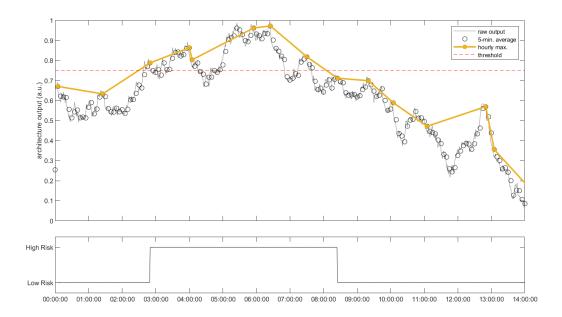
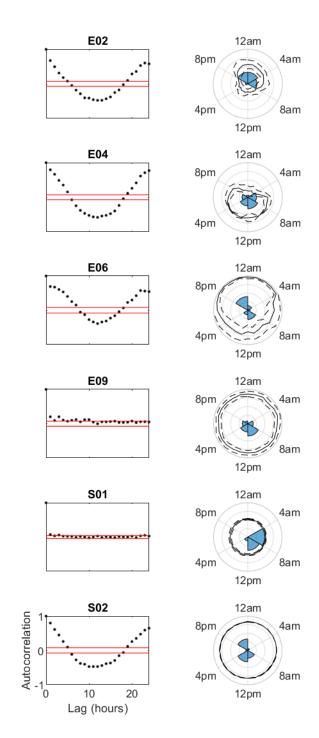
## **Supplementary Material**



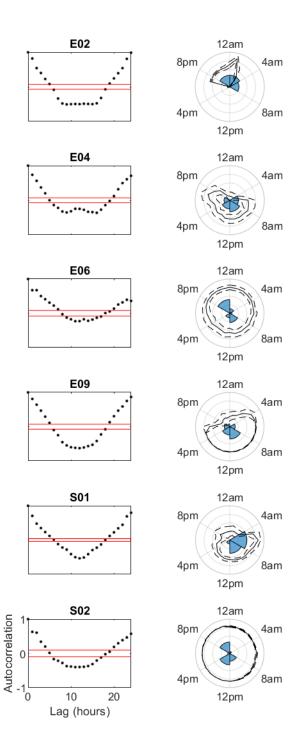
Supplementary Figure 1 – Snapshot of the EEG review software (Episight v.1.11.1) used for visual screening of the dataset at KCL. Note the spectrogram feature (top panel) with the possibility to adjust the time base (here at 10 minutes) and to adjust the intensity contrast to highlight a specific patient's seizure signature. The green line in the time domain plot (bottom panel) indicates the ictal onset of an example seizure.



Supplementary Figure 2 – Example post-processing of an architecture output into 5-minute window averages and subsequently 1-hour maximum bins (top panel), then binarizing seizure risk periods (bottom panel). a.u. - arbitrary units.



Supplementary Figure 3 - Circadian autocorrelation results for architecture 1 (3/200 LSTM). See legend of Figure 2 for full explanation.



Supplementary Figure 4 – Circadian autocorrelation results for architecture 2 (5/25 LSTM). See legend of Figure 2 for full explanation.