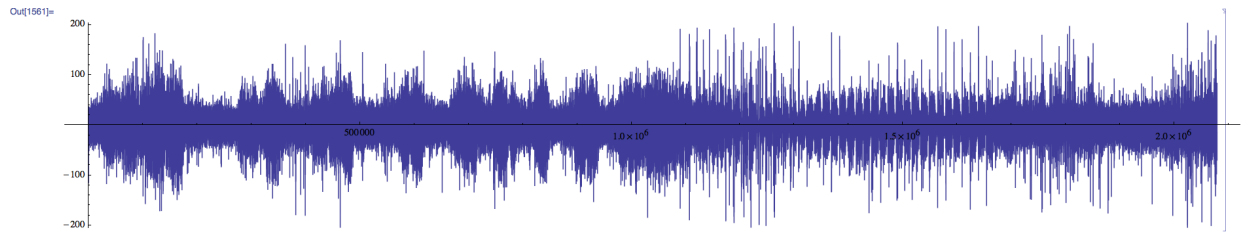
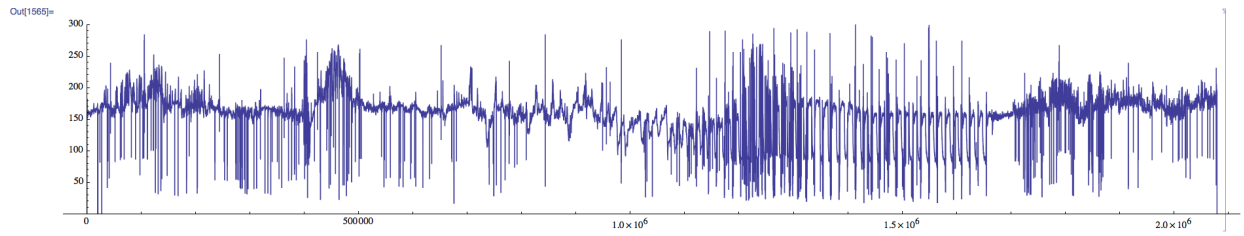


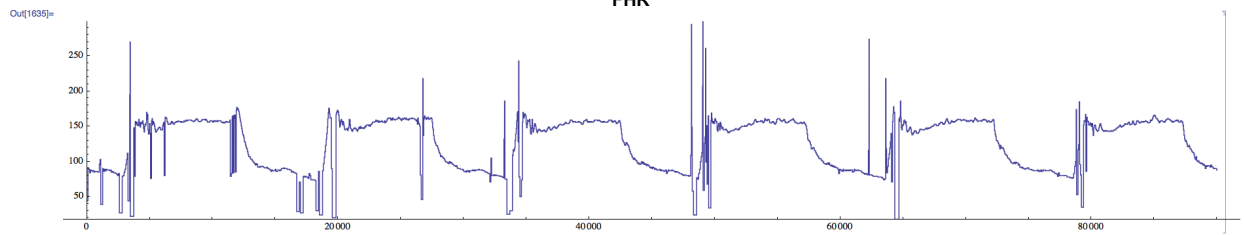
Data: Hypoxic, Apr 18, 2011



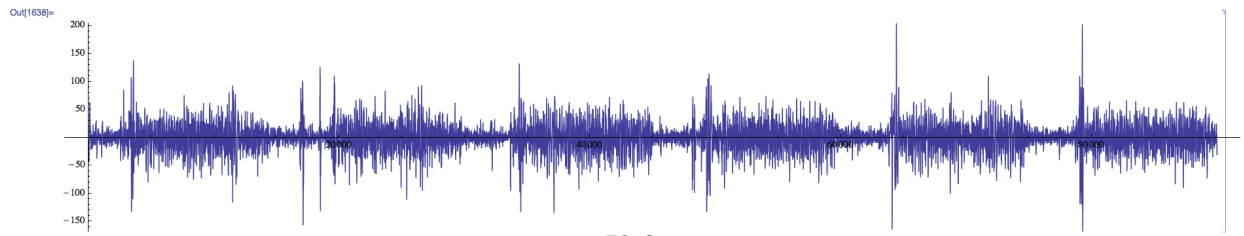
ECoG



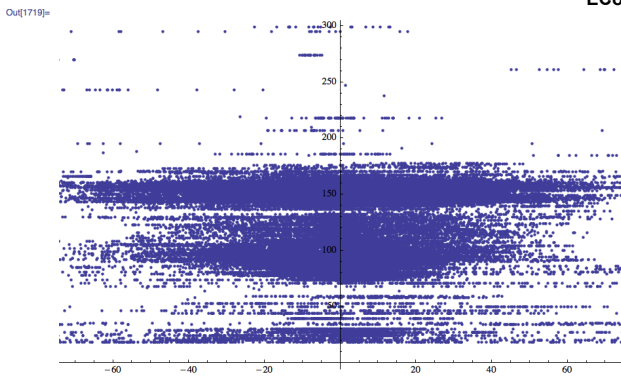
FHR



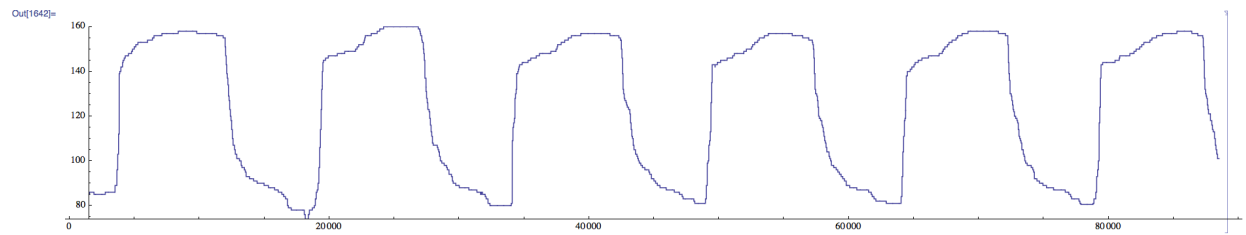
FHR. ONE CYCLE = 2.5 minutes.



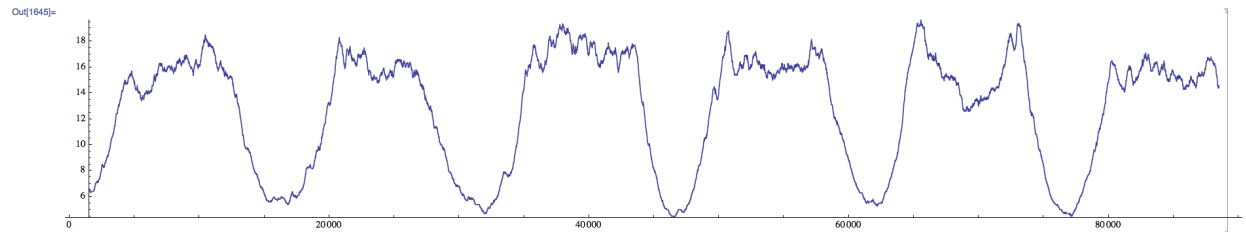
ECoG



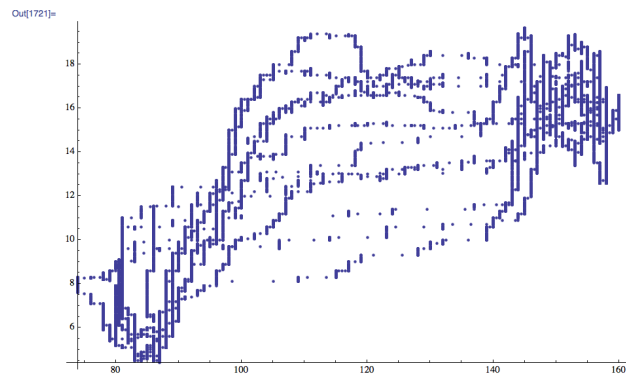
Scatter plot ECoG versus FHR: NO VISIBLE CORRELATION.



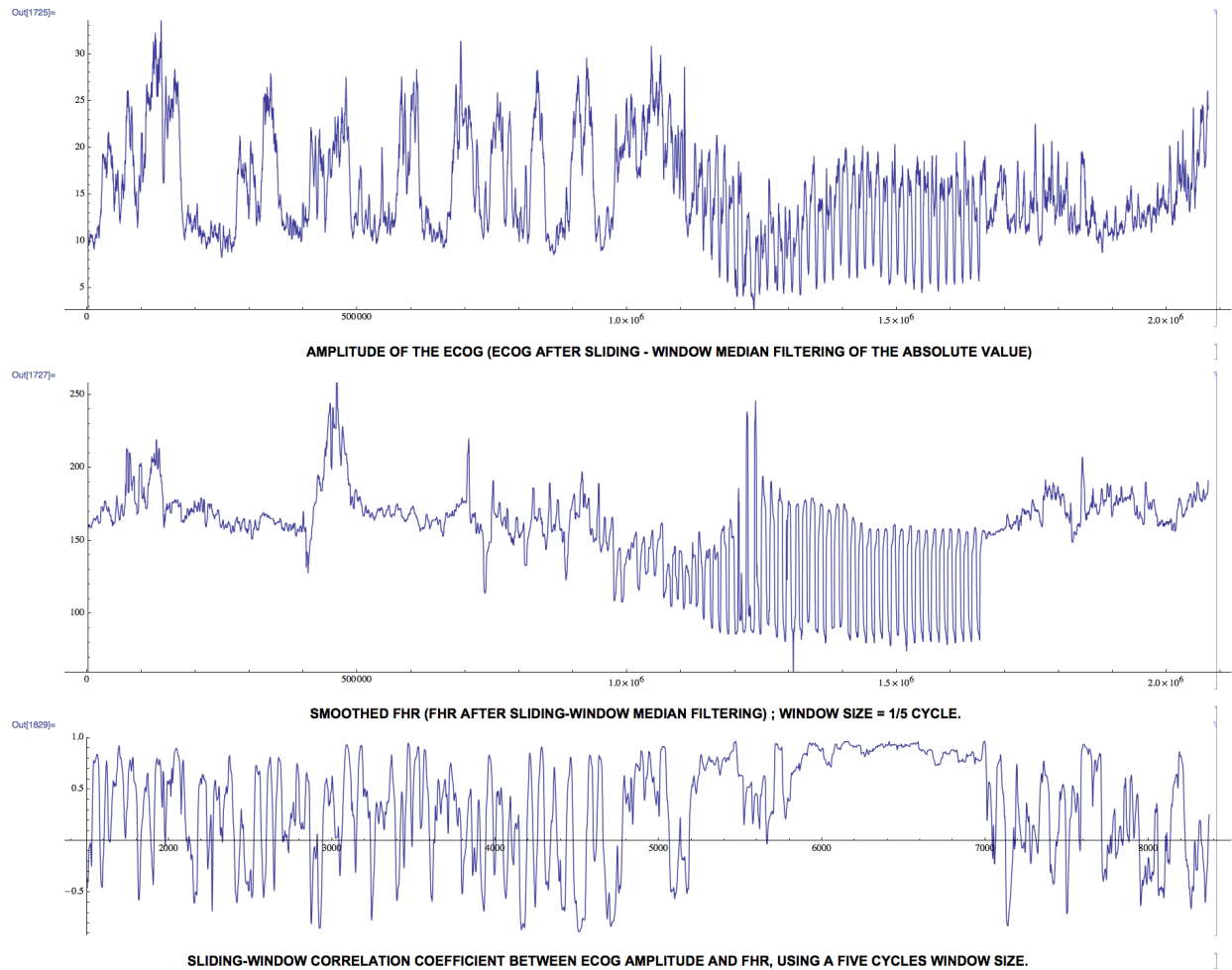
SMOOTHED FHR (FHR AFTER SLIDING-WINDOW MEDIAN FILTERING) ; WINDOW SIZE = 1/5 CYCLE = 30 s.



AMPLITUDE OF THE ECG (ECG AFTER SLIDING-WINDOW MEDIAN FILTERING OF THE ABSOLUTE VALUE)



Scatter plot ECG versus FHR: VISIBLE CORRELATION



CONCLUSIONS:

- During occlusions phase, the ECG LOCAL VARIABILITY correlates with the FHR.
- This correlation INCREASES AS OCCLUSION INTENSITY INCREASES.
- The power spectra of ECG and FHR also correlate during the occlusion phase, as seen on spectrograms.
- HYPOTHESIS: an increase of this correlation that is sustained over time may be an indicator of foetal distress.