Figure 3: Time-frequency representation of the phase locked and non phase locked activities in the EEG channel O1. The black dashed line marks the alpha rhythm estimated for the subject (10.7 Hz), the white dashed line the stimulation frequency (11.63 Hz). The black and white solid lines are the harmonics and sub-harmonics. The offset of the stimulation happens at $t = 0$. Figure 3a shows the phase locked activity. Figure 3b shows the non phase locked activity calculated using equation (6). In figure 3c the non phase locked activity estimated using the multiple correlation method is presented. The non hatched time segment is used for the correlation analysis. In figure 3d the signal power of the oscillatory activities around the stimulation offset at the individual alpha rhythm of 10.7 Hz and at the stimulation frequency of 11.63 Hz is shown. Note the different color maps in the figures.