Supplemental Figure S1
Local changes in EEG power in the spindle frequency range during sleep after immobilization.
(a) Topographic distribution EEG power between 13 – 14 Hz after the immobilization (top) and the control (bottom) condition. Average EEG power density at 13 – 14 Hz (n = 14 subjects) for the first 20 minutes of NREM sleep. Values were normalized by total power for the recording, color coded, plotted at the corresponding position on the planar projection of the scalp surface, and interpolated (biharmonic spline) between electrodes (dots). (b) Topographic distribution of the ratio of power in the spindle frequency range between the immobilization and control condition. White dots indicate significant differences (statistical non-parametric mapping). (c) Time course of EEG power in the spindle frequency range changes after immobilization. The change in average EEG power in the 13 – 14 Hz band was calculated for three consecutive 20-min intervals during the first NREM sleep episode. Average power change across subjects for the electrode yielding the peak power decrease in the spindle frequency range for each subject in the region surrounding electrode 132. Star indicates a significant reduction of power in the spindle frequency range after the immobilization compared to the control condition (P < 0.05, two-tailed paired t-test).