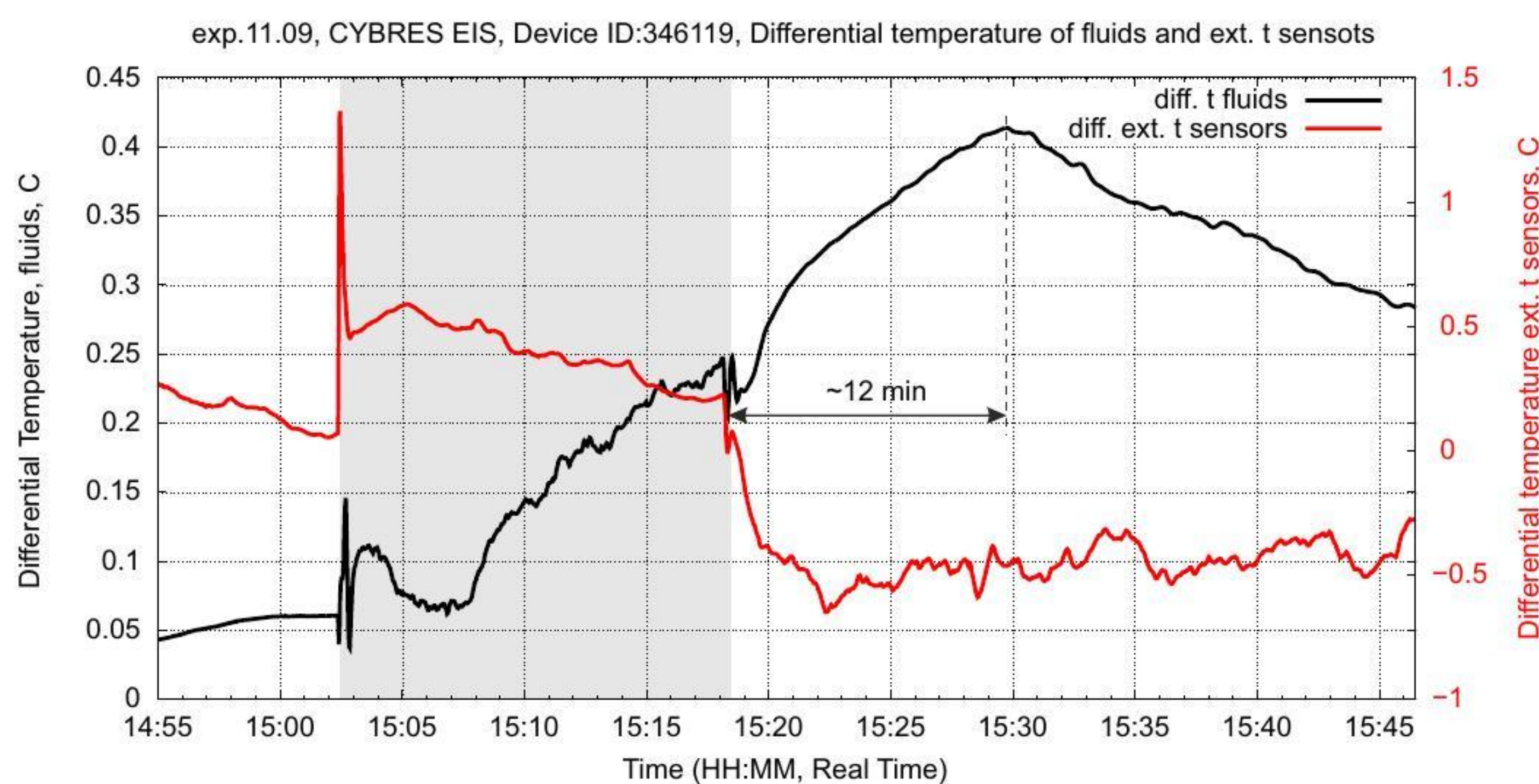


(b)



(c)

Figure 6. Calorimetric measurement (heating up 15 ml water in small containers) with focusing attention on one hand, each container has one t sensor immersed in the fluid and one t sensor measuring air temperature outside the container: (a) Setup; (b) Persistent temperature dynamics after removing the water containers from the hands lasts about 12 minutes, the gray area indicates the time the containers were held in hands.

surface temperature up to 1.5-2 °C and increase the differential temperature of water. We also observe persistent changes after the water containers are removed from hands for about 12 minutes – increasing temperature of one fluid but equal temperature of air outside, see Fig. 6. Such a dynamics is difficult to explain by heating only, and motivated a development of external differential calorimeters and methodology of experiments in the phase 2.

1c. Effects on surrounding electrochemical sensors have been investigated multiple times in different laboratories [6],

[12], [29], where cases of focused and unfocused attention are separated. Even in the unfocused case (e.g. only with specific expectations), the experimenter demonstrated evident bias in experimental data [11]; the focused attention produces more significant changes. The results of the phase 1c are similar to such studies, regardless of separating barriers.

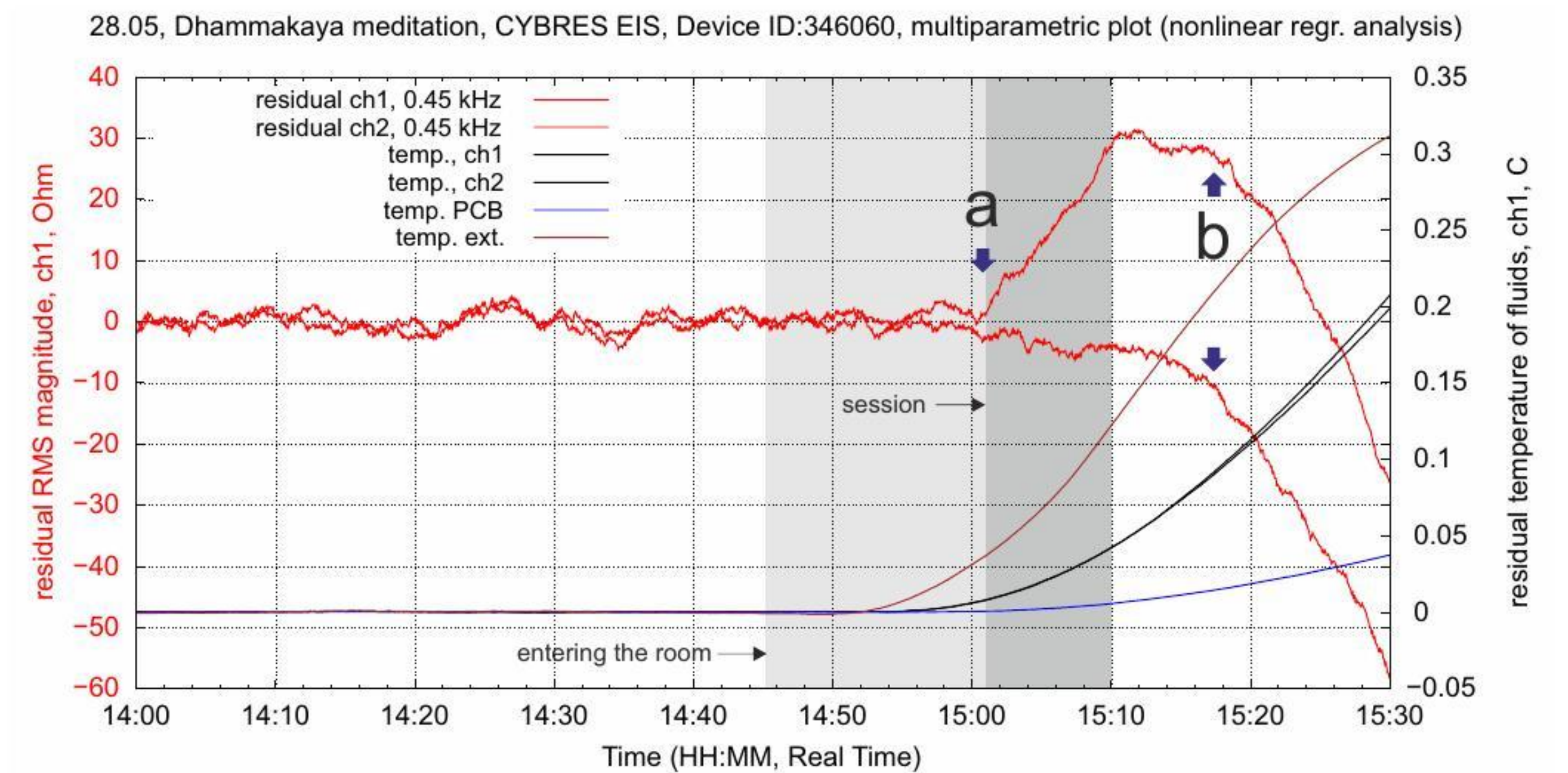


Figure 7. Effects on surrounding electrochemical sensors in the phase 1c: the point 'a' – enter in the ASC (begin and end of ASC is clearly visible), the point 'b' – thermal effects, generated by a body heat of meditator. The point 'a' is about 20 minutes before the point 'b'.

Example of electrochemical and thermal dynamics is shown in Fig. 7. Enter in ASC is indicated by a rapid increase of ionic dynamics, see the point 'a'. Electrochemical dynamics follows the begin and end of meditation. As the meditator approaches the sensors, we observe a slow increase of temperature in the container. However, it starts to affect the electrochemical dynamics about 30-40 minutes later, see point 'b' in Fig. 7. Thus, the dynamics between 'a' and 'b' points provides information about 'non-classing' effects of focused attention on the environment before 'classical' factors start affecting the sensor.

B. The phase 2 experiments

The meditative visualization in this phase is similar to 'exteriorization of self', which is a basic technique of Vajrayana and other Buddhist (e.g. from Dzogchen lineage [35]) and Taoist [36] traditions, and also explored in academic publications [37]. The meditator in the operator room attempts to visualize a predetermined channel of differential calorimeter placed in the measurement laboratory. During experiment, the meditator receives a real-time biofeedback (mostly acoustic signals based on EEG and breathing rate) to control ASC and also real-time data from temperature sensors in the remote setup.

Typical dynamics of calorimeter data is shown in Fig. 8. The targeted channel demonstrates a temperature deviation that results in symmetry breaking dynamics of fluid sensors, air sensors do not demonstrate any similar effects (i.e. this points to internal mechanisms in aqueous solutions that cause such thermal fluctuations). This dynamics is similar to the measurement in Fig. 6, but in this case a direct heat transfer from the mediator is excluded.

Fig. 9 demonstrates differential temperature of fluidic and air sensors, temperature dynamics in laboratory before, during and after the experiment (about 0.05 °C for 8 hours, convection-based fluctuations 0.001 °C), and dynamics of power supply