

FIGURE 1.1

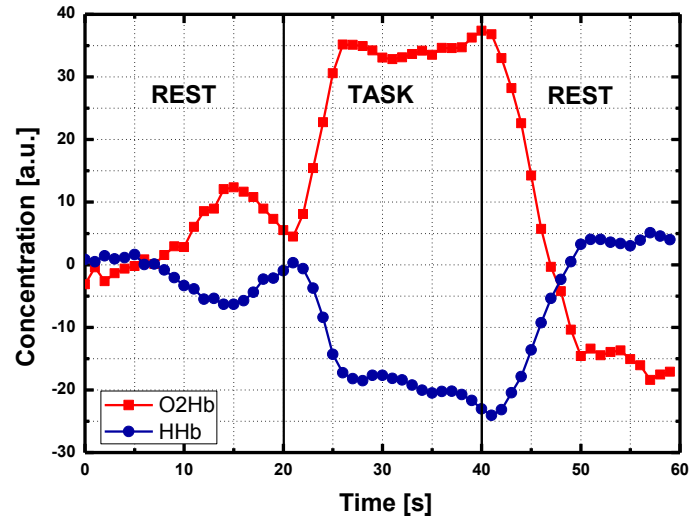


Figure 1.1: Functional activation recorded on a healthy subject following a motor task using the time-gated setup developed at PoliMi_FIS operated with a single optode probe (source-detector distance = 0.6 cm)

FIGURE 1.2

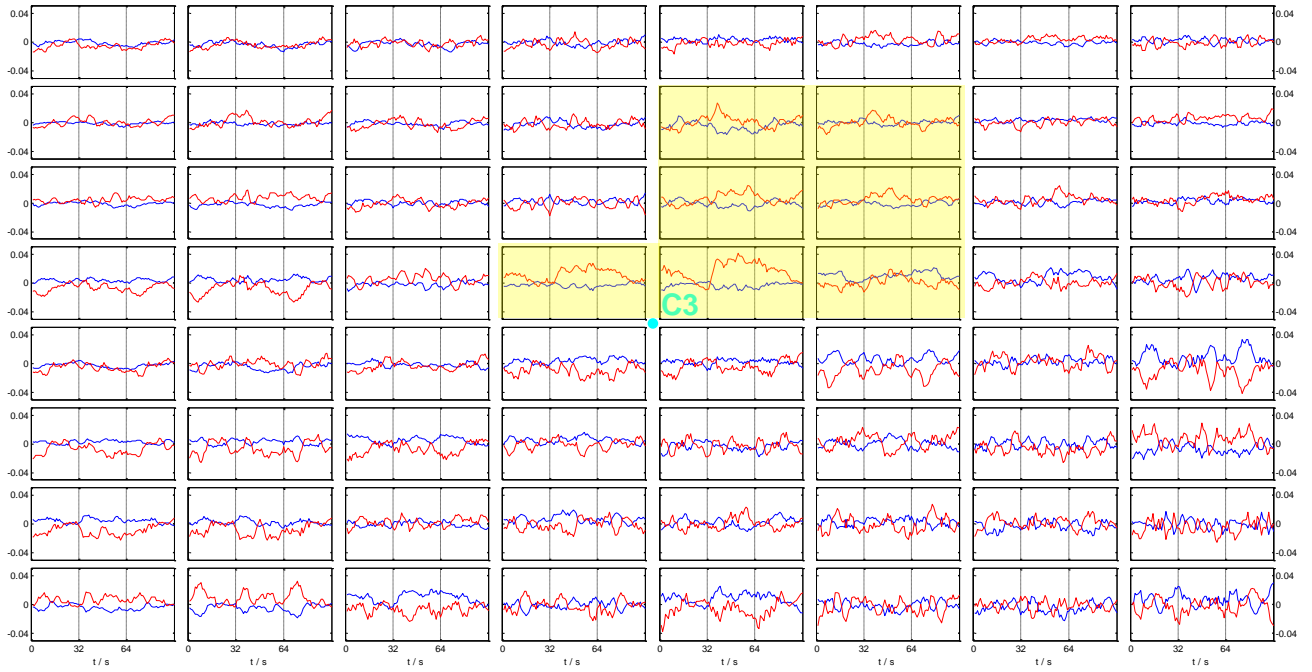


Figure 1.2: Functional map recorded on a healthy subject following a motor task using the scanning setup developed at PTB over an area of 4x4 cm. The activated area is centered around C3.

FIGURE 1.3

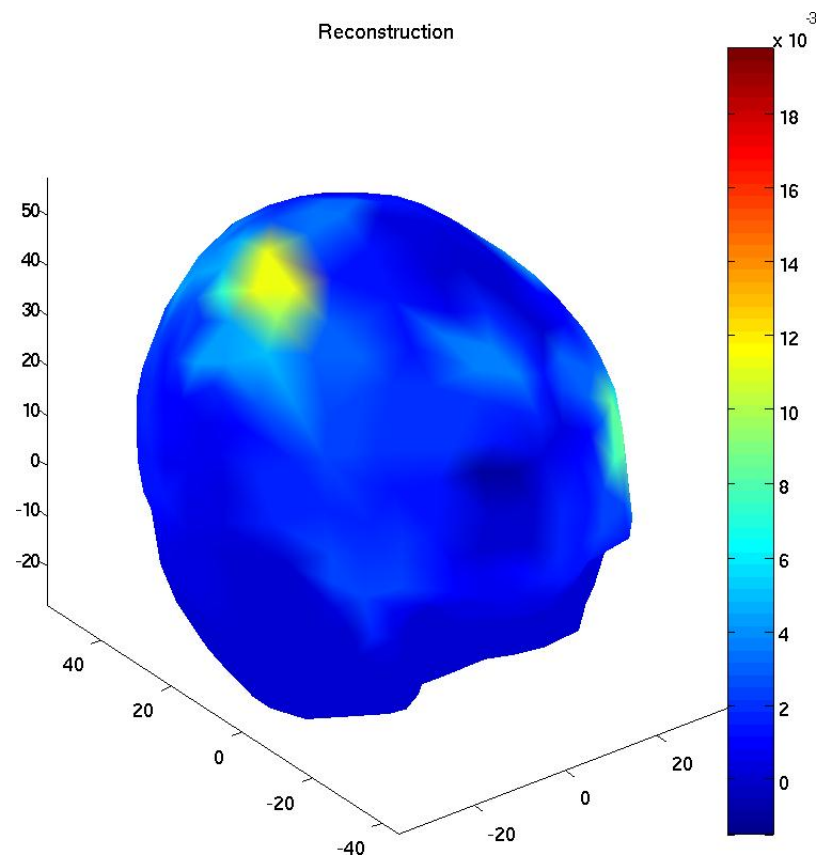


Figure 1.3: Activation in the infant brain reconstructed using cortical mapping.

FIGURE 1.4

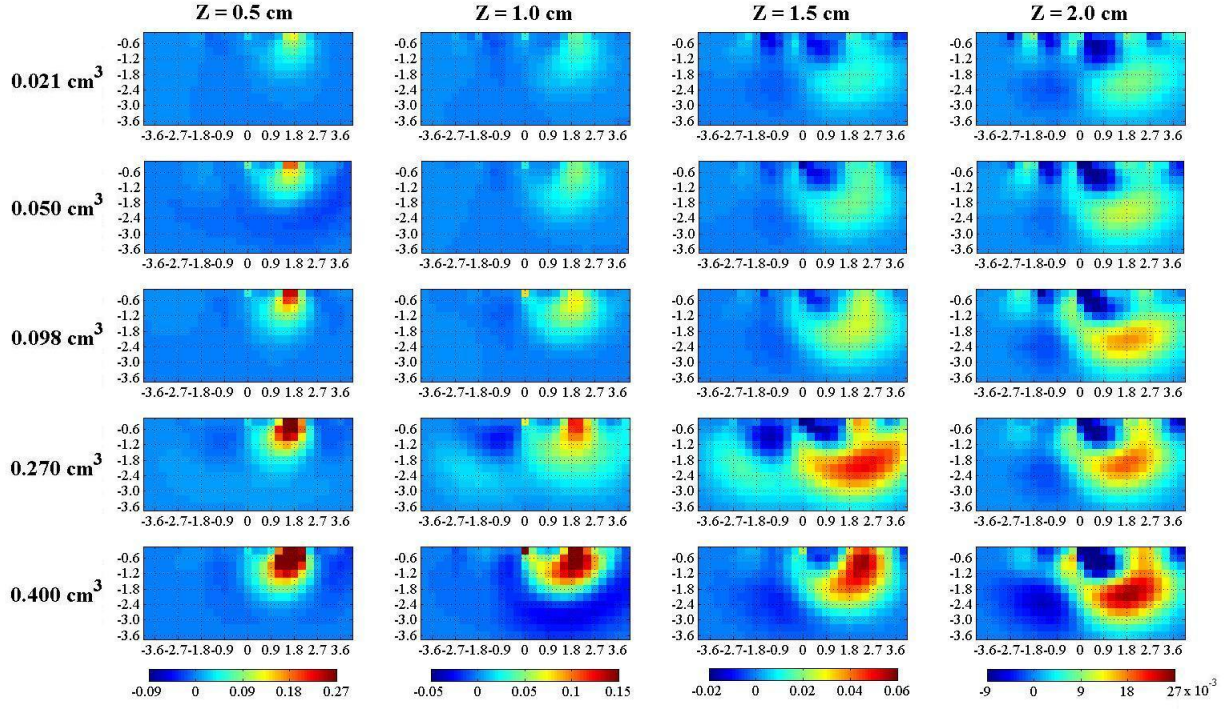


Figure 1.4: Tomographic reconstruction on phantoms using a gated ICCD. Vertical section along the fiber axis for different volumes (rows) and depths (columns) of the black PVC cylinders. Axis dimensions are in cm, while colorbar in cm^{-1} .

FIGURE 1.5

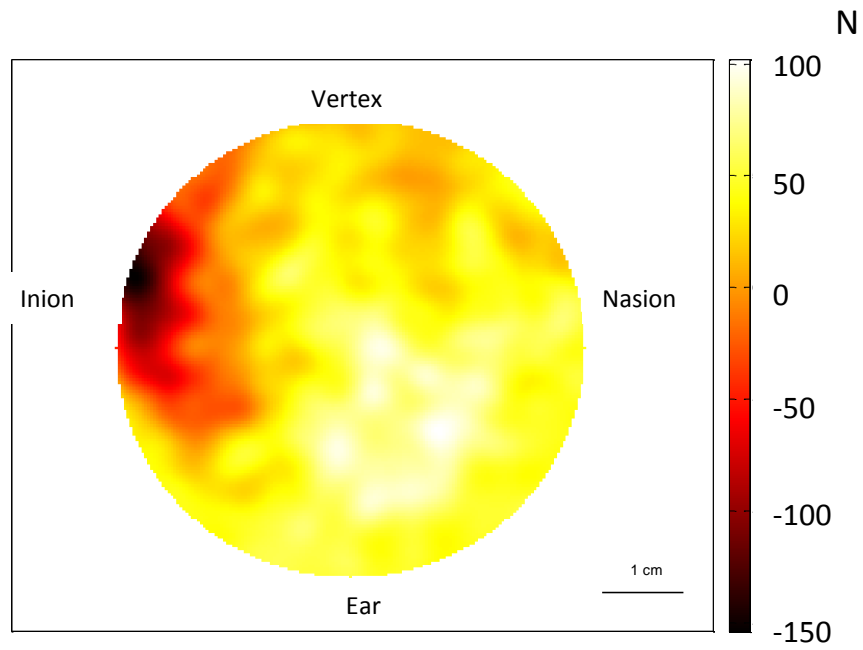


Figure 1.5: Functional activation recorded on a healthy subject following a motor task using the ICCD based system developed at IBIB.

FIGURE 1.6

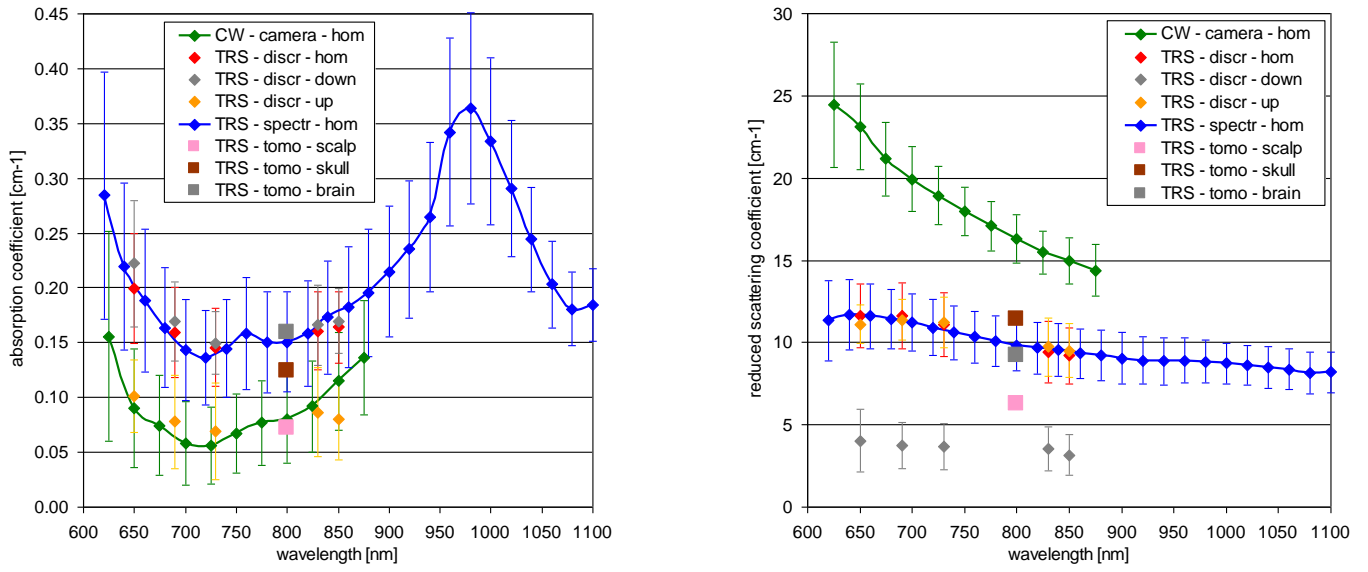


Figure 1.6: Absorption coefficient (left) and reduced scattering coefficient (right) obtained from the measurements on the forehead using different set-ups and analysis methods. The error bars refer to the standard deviations calculated among different subjects.