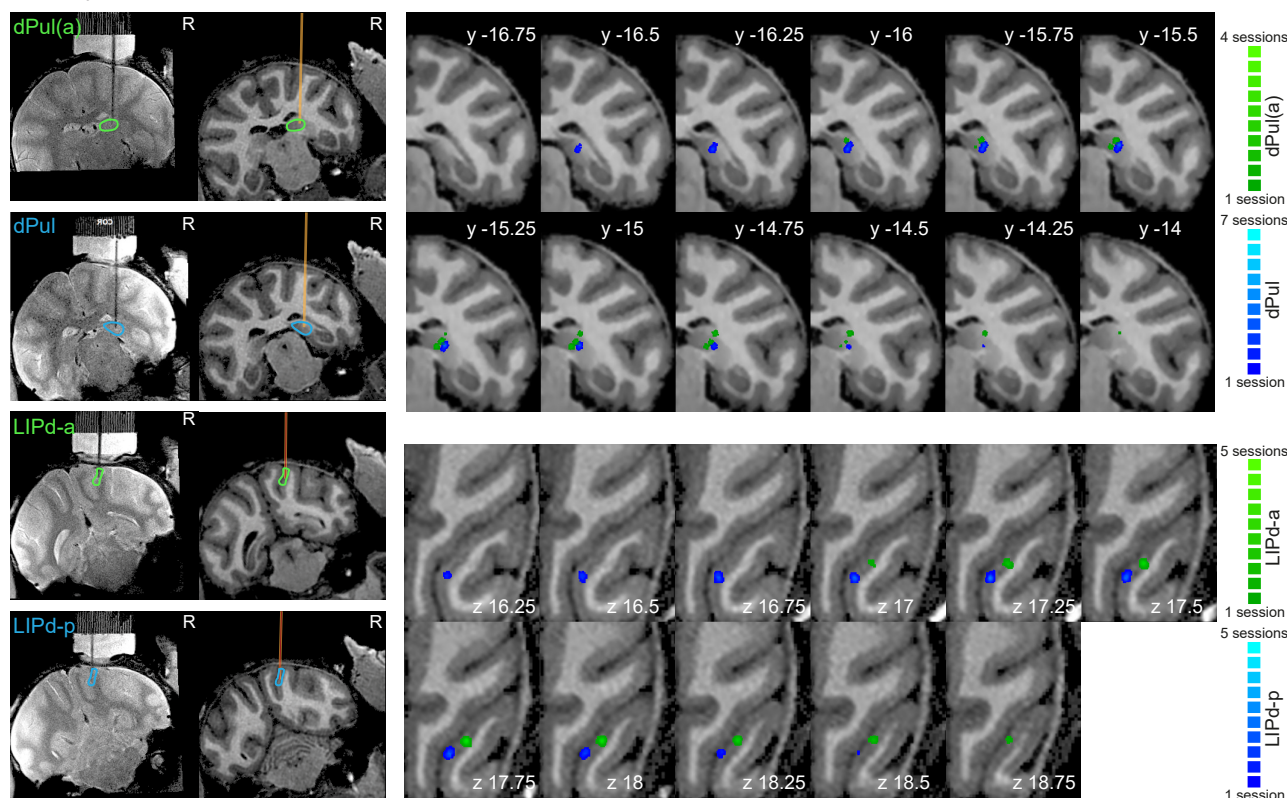
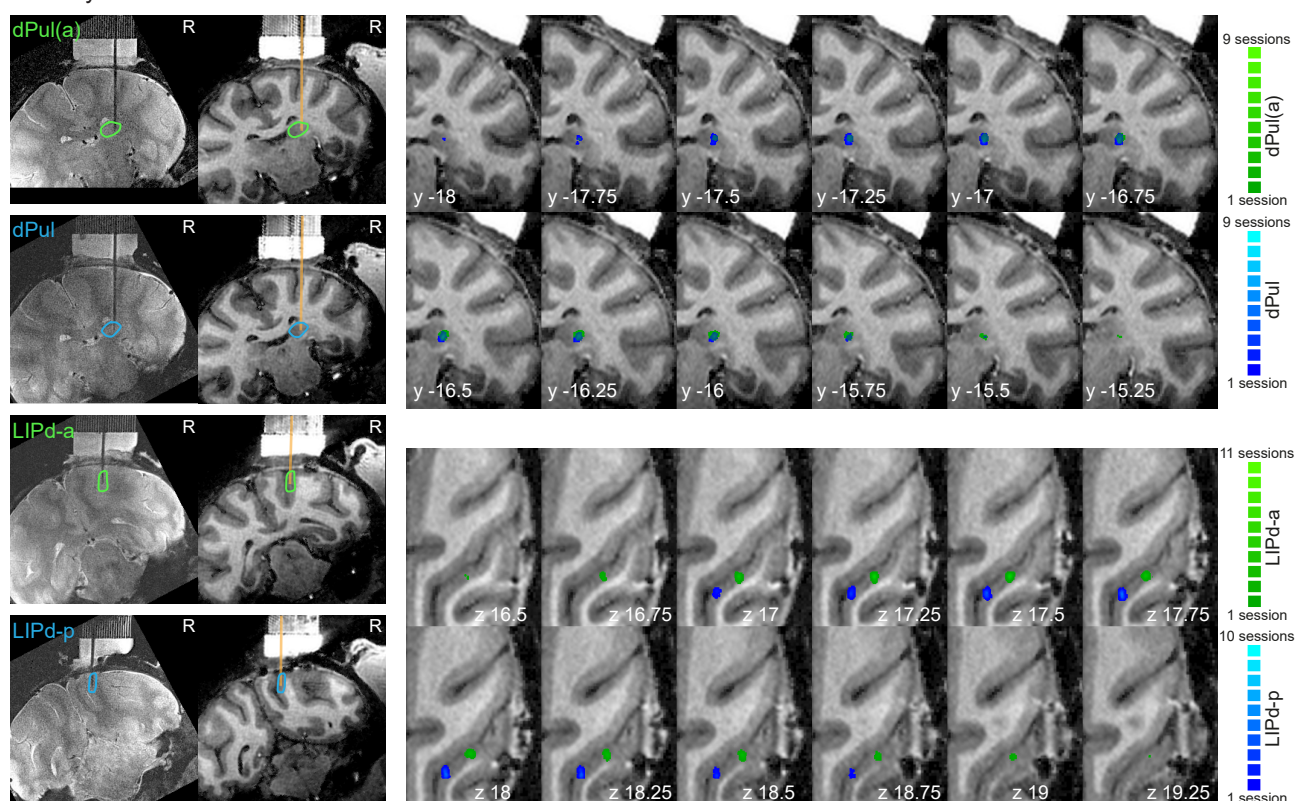


## monkey C



## monkey B



**Figure S1. (A)** Electrode localization in dPul and LIPd. Left panels: electrode positions measured in T2-weighted MR images and reconstructed in T1-weighted images, both aligned to the chamber vertical axis, in example sessions with microstimulation in dPul and vPul. Outlines mark the respective target region. Right panels: probability maps of electrode tip positions across sessions displayed on a T1-weighted MR image aligned to standard AC-PC space (dPul – coronal sections, LIP – axial sections, only a part of the right hemisphere focusing on the pulvinar or the intraparietal sulcus is shown). R - right, y - distance from AC-PC origin along the anterior/posterior plane in mm, z: distance from AC-PC plane along the dorsal-ventral dimension in mm.