**Coregistration of Each Channel of The fNIRS Array**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | channels | **MNI-space** | | | | **Cortical area** |
| x | y | z | BA |  |
| LH | CH1 | -66.52 | -4.6 | -16.29 | 21 | Middle temporal gyrus |
|  | CH2 | -68.21 | -16.56 | 1.16 | 22 | Superior temporal gyrus |
|  | CH3 | -70.15 | -28.55 | -10.29 | 21 | Middle temporal gyrus |
|  | CH4 | -68.68 | -40.86 | 10.6 | 22 | Superior temporal gyrus |
|  | CH5 | -63.67 | -57.54 | -1.44 | 37 | Fusiform gyrus |
|  | CH6 | -57.39 | -62.76 | 20.83 | 39 | Angular gyrus |
|  | CH7 | -62.8 | -47.78 | 37.36 | 40 | Supramarginal gyrus |
|  | CH8 | -67.85 | -25.86 | 26.22 | 40 | Supramarginal gyrus |
|  | CH9 | -65.22 | -4.16 | 20.93 | 4 | Primary Motor Cortex |
|  | CH10 | -60.5 | 12.6 | 10.35 | 44 | Pars opercularis |
| RH | CH11 | 64.81 | -3.02 | -18.65 | 21 | Middle temporal gyrus |
|  | CH12 | 68.96 | -12.2 | -1.38 | 22 | Superior temporal gyrus |
|  | CH13 | 70.34 | -26.72 | -10.66 | 21 | Middle temporal gyrus |
|  | CH14 | 68.89 | -37.02 | 10.64 | 22 | Superior temporal gyrus |
|  | CH15 | 61.86 | -54.3 | -1.22 | 37 | Fusiform gyrus |
|  | CH16 | 56.35 | -59.15 | 23.49 | 39 | Angular gyrus |
|  | CH17 | 61.3 | -44.42 | 38.27 | 40 | Supramarginal gyrus |
|  | CH18 | 68.5 | -23.45 | 26.68 | 40 | Supramarginal gyrus |
|  | CH19 | 63.75 | -1.25 | 19.4 | 4 | Primary Motor Cortex |
|  | CH20 | 57.77 | 16.23 | 11.39 | 44 | Pars opercularis |

Notes: CH=channel, LH=left hemisphere, RH=right hemisphere, MNI= Montreal Neurological Institute, BA= Brodman Area