**Supplementary file 4**

|  |  |  |  |
| --- | --- | --- | --- |
| **Condition** | **Total # of tomograms** | **# (%) of tomograms with virtual sections 140 -170** | **Number of tomograms with > 140 virtual sections** |
| B6J Light | 15 | 10 (**~67 %**) | 2 |
| ChR2 NoLight  | 17 | 8 (**47 %**) | 9 |
| ChR2 ShortStim | 11 | 6 (**~55 %**) | 5 |
|  ChR2 LongStim | 26 | 13 (**50%**) | 9 |

**The range of virtual sections per condition**

To judge the size of the tomograms for each condition, we determined the number (and percentage) of tomograms with virtual sections in the most frequent range of 140 – 170. This range is usually around 50% for all conditions.