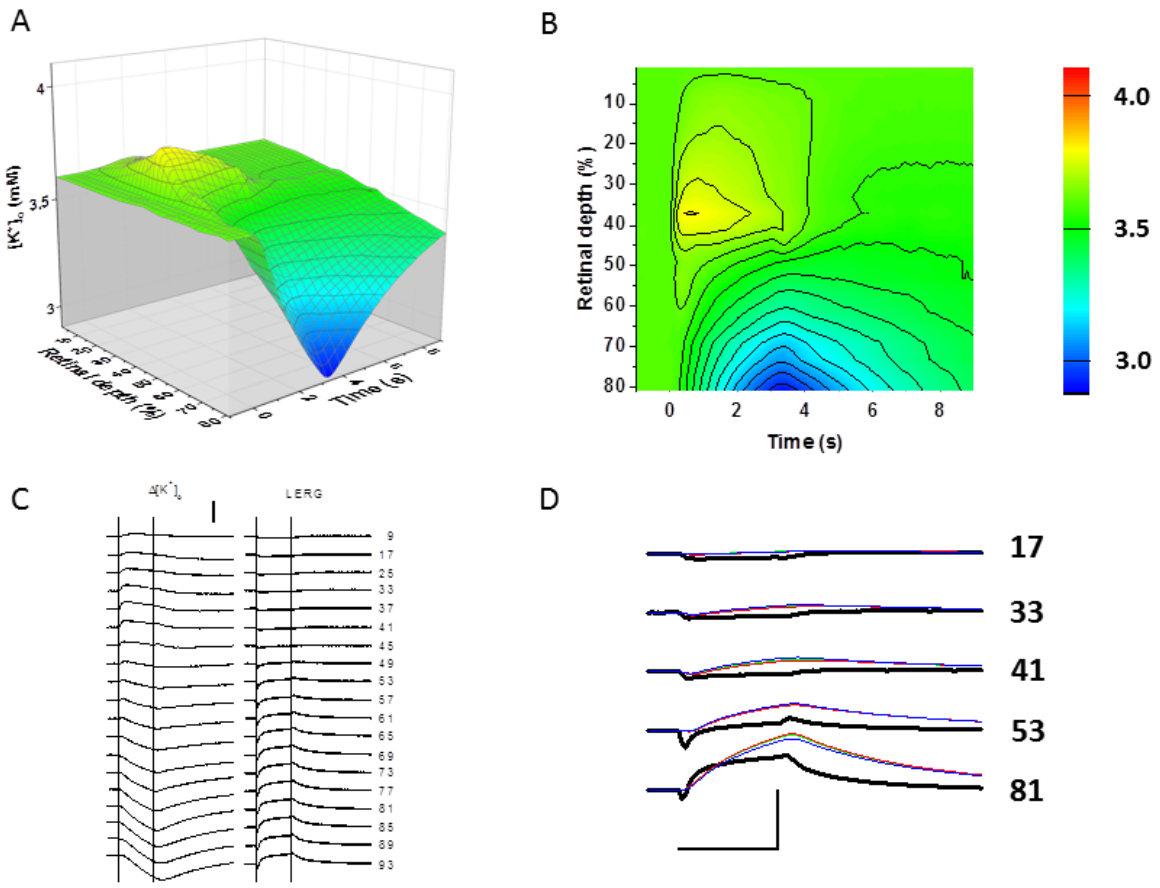

Fig. S1. Summary of the data obtained from mouse retina #2. ***A:*** Light-induced $[K^+]_o$ changes under normal conditions as a 3-D color map surface. ***B:*** Same data as a color-filled contour plot; numbers near the colored scale bar are $[K^+]_o$ (in mM). ***C:*** The depth profile of the light-induced $[K^+]_o$ changes and local ERGs; the numbers on the right of the LERG records are the retinal depths (in %); vertical scale bar: 0.5 mM for $[K^+]_o$ and 2 mV for LERGs; the beginning and the end of 3s light stimulus are marked by vertical lines across the records. ***D:*** Results of MC response simulations. The calculated responses are compared to the real LERGs (black lines) at the same retinal depth. The calculations were performed with three sets of parameters: o2-i1-m3 with R_{inp} = 22 MΩ (green lines), o2-i2-m2 with R_{inp} = 23 MΩ (blue lines), and o2-i2-m3 with R_{inp} = 17.3 MΩ (red lines). Vertical scale bar: 2 mV; horizontal scale bar: 3 s. The numbers on the right of the traces are the retinal depths (in %) at which they are recorded or calculated.