Complete raw data for Graves et al., 2021 *eLife*
"Visualizing synaptic plasticity in vivo by large-scale imaging of endogenous AMPA receptors"

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All data were collected at Johns Hopkins University in Baltimore, MD

Directories in Gravesetal_2021_Complete_data:

- Data for all plots
    - .xls spreadsheets of all raw data (Figs 1-6)
    - .ims (opens in Imaris 9.5 or later) of raw data for Fig 7
    - .mat arrays of raw in vivo imaging data used for Fig 8

- Fig 1 and supp
    - Images of live slice confocal of SEP-GluA1 and WT tissue
        - Opens in FIJI, Zen, etc.
    - Raw western blot images (uncropped) from Fig 1e
        - Opens in FIJI

- Fig 2
    - Raw confocal IHC images (native SEP, c-term GluA1, PSD95, cell fill)
        - Opens in FIJI, Zen, etc.
        - Contains separate directories for each single neuron analyzed
    - SEP-A1 KI mEPSC
        - Complete raw data for all mini recordings
        - .abf files open in ClampFit (Axon)
        - .xls spreadsheet of all raw data
    - SEP-A1 KI rectification
        - Complete raw data for all rectification recordings
        - .abf files open in ClampFit (Axon)
        - .xls spreadsheet of all raw data

- Fig 3
    - Raw Western blots for 3a
        - All raw, uncropped Western blots from synapse scaling experiments
        - Open in FIJI
    - Slice LTP
        - Complete raw data for all in vitro slice LTP recordings
        - .abf files open in ClampFit (Axon)
        - .xls spreadsheet of all raw data

- Fig 4
    - Figure 4 behavior videos
        - EPM: Raw video files for elevated plus maze
        - Y maze raw video files
        - All files open in AnyMaze, created in version XXX

- Fig 5
    - Mouse A1 Kin LTP
        - Raw images and raw ephys files for uncaging LTP experiments in culture
        - Image files open in FIJI
        - Ephys files (.abf) open in Clampfit
    - Uncaging
        - Raw images and raw ephys files for uncaging experiments in culture
        - Image files open in FIJI
        - Ephys files (.abf) open in Clampfit
    - .xls spreadsheets of example images

- Fig 6
    - Raw and analyzed images from all FRAP experiments
        - .pzfx opens in Prism
        - .m and .mat opens in Matlab
        - .tif opens in FIJI, etc.

- Fig 7
    - 2p IHC
        - Raw images of Homer IHC (red) and native SEP signal (green)
        - Opens in FIJI
    - Example SEP-GluA1 movies
        - Movie files open in any video player
        - Imaris data (.ims) was created in Imaris v9.5
    - Manual ROIs
        - Manual synapse annotations by two experts
        - Opens in FIJI (image and ROIs via ROI manager)
    - Registered confocal 2p images
        - CZI files open in Zen or FIJI
        - Imaris files were created in Imaris v9.5
    - Rois
        - Data to calculate true positive, false positive, and false negative rates
        - All images and ROI files open in FIJI
    - Spine synapse overlap
        - Data for Nearest Neighbor analysis between SEP-GluA1 synapses and dendritic spines
        - Created in Imaris v9.5

- Fig 8
    - All raw 2p images from 7 different mice
    - Multiple rois for each mouse, at time points indicated
    - A subset of mice also had a sparse cell fill (red) in a random subset of neurons
    - All files open in FIJI or similar