

Allen Brain Observatory

Allen Brain Observatory - Visual Coding

This is the online help for the **Allen Brain Observatory - Visual Coding** web application.

The Allen Brain Observatory presents the first systematic *in vivo* survey of physiological activity in the mouse visual cortex, featuring representations of visually evoked calcium responses from GCaMP6-expressing neurons in selected cortical layers, visual areas and Cre lines.

Data was collected from six transgenic mouse lines exposed to five types of rich visual stimuli. Hundreds of two-photon calcium imaging sessions were captured across multiple visual areas and depths in the visual cortex. Search features allow you to explore individual cells as well as cell population responses to various stimuli, as well as search cellular response metrics across experiments.

Fluorescence traces and analysis modules are available for download via the Allen Brain Atlas [application program interface \(API\)](#) and [Allen Software Development Kit \(SDK\)](#)

- For background and high level information on the project, see [Allen Brain Observatory - Overview](#)
- For information on transgenic lines used in this study, see [Transgenic Mouse Lines](#)
- For help on interpreting the data representations, see [Data - Visual Coding](#)
- For help on downloading the data for analysis, see [Software Development Kit \(AllenSDK\)](#)

Availability of 2-photon calcium fluorescence movies

Motion-corrected 2-photon calcium fluorescence movies are too large to download conventionally, but are available upon request. Each experiment contains three movie files of approximately 60 GB each. We ask that anyone requesting movies provide one or more hard drives with sufficient capacity to store the files and a shipping number from your organization for return. These will be returned after file transfer is complete. Data is provided under the Allen Institute [Terms of Use](#) policy.

To request movie files, please [contact us](#) to indicate:

- desired movies from specific experiments
- point of contact name and email address
- organization
- area of research
- proposed use of the data

Upon receipt of this message, arrangements will be made with the point of contact and will usually be complete within two weeks of the receipt of a storage drive.