Intrinsic Signal Imaging to compute ocular dominance

Images are acquired using the **ContImage** program that runs a Dalsa 1M30 frame transfer CCD camera under Windows. The version of ContImage used was V1.01 from March 20, 2006. Code was compiled using Microsoft Visual C++. ContImage was written by Valery Kalatsky. It depends on the PGPLOT graphics subroutine library *https://sites.astro.caltech.edu/~tjp/pgplot/*
Image acquisition is described in
Kalatsky VA, Stryker MP. New paradigm for optical imaging: temporally encoded maps of intrinsic signal. Neuron. 2003 May 22;38(4):529-45. doi: 10.1016/s0896-6273(03)00286-1. PMID: 12765606, avalable at https://www.sciencedirect.com/science/article/pii/S0896627303002861?via%3Dihub

Images were analyzed using the *Iman* suite written by Valery Kalatsky, also described above. Documents are in **ISI_ImAnManual.pdf** and **ISI_cheatsheet.pdf**

Visual stimuli for the mice were generated on an Ubuntu linux computer with duplicate screens (one for the operator and one for the mouse) using the standard Matlab Psychtoolbox libraries by the **PsychStimController** script running with the *ContStim UDP* synchronization. PsychStimController was written by Cristopher Niell and Michael Stryker.

Ocular dominance measurements were computed in Matlab using the scripts in **JC-ImanMaps** written mostly by Jianhua Cang, as described in
Cang J, Kalatsky VA, Löwel S, Stryker MP. Optical imaging of the intrinsic signal as a measure of cortical plasticity in the mouse. Vis Neurosci. 2005 Sep-Oct;22(5):685-91. doi: 10.1017/S0952523805225178. PMID: 16332279; PMCID: PMC2553096.