

# MATLAB

This page gives references regarding the use of Matlab for scientific data acquisition in the SLAC accelerator complex.

## LCLS Matlab Support specifically

The Matlab Programmers Guide for LCLS describes use of Matlab very much oriented towards LCLS users, but includes labCA tutorial, very light on Aida support (the Aida web pages should be consulted directly), LCLS beam synchronous data acquisition (though not including "linac" - SLC control system devices), LCLS camera acquisition etc. See Sergei for more details.

A PDF is available here: [programming\\_guide\\_matlab.pdf](#)

It's possible that a more up to date version will be here: [http://lcls-dev.slac.stanford.edu/tiki-index.php?page=Matlab\\_Programmers\\_Guide](http://lcls-dev.slac.stanford.edu/tiki-index.php?page=Matlab_Programmers_Guide)

## AIDA

Aida can be accessed from Matlab directly

The main Aida web page is at: <http://www.slac.stanford.edu/grp/cd/soft/aida/>

There's a specific the Aida matlab web page: [http://www.slac.stanford.edu/grp/cd/soft/aida/aida\\_matlab.html](http://www.slac.stanford.edu/grp/cd/soft/aida/aida_matlab.html)

See the specific web pages for each kind of data (bpm, magnet, model etc) under the aida web page. These are under the main Aida web page (above).

Many of these include a link to a matlab example in their EXAMPLES section. Test examples for using Aida from matlab are in CVS and here on the web: <http://www.slac.stanford.edu/grp/cd/soft/slaonly/ref/package/aida/test/matlab/>

## labCA

The EPICS Channel Access Interface for scilab and matlab <http://www.slac.stanford.edu/comp/unix/package/epics/extensions/labca/manual/>

See also the PDF talk given by Till at the "Matlab for LCLS photon physicists workshop": [labca\\_presentation.pdf](#)

## Matlab Licenses

`/afs/slac/package/matlab/grouplic/matlabopt.opt`