

# LSST Software User Guide



This Confluence site has moved to <https://pipelines.lsst.io>. Check out that page for up-to-date documentation on how to install and use the LSST Science Pipelines.

## About this document

This guide will describe how to install the [LSST Software Stack](#), how to run pipelines and other tasks, and how to configure them to develop your own data reduction applications. It will also describe the supporting packages and their use, and various key concepts that are important for understanding LSST Data. This document is geared towards end-users (e.g., Science Collaborations), other LSST Teams, and Production operators who primarily need to either analyze data, or run the pipeline code over large sets of data. DM developers and advanced users who need to know both how to run the LSST Software and how to build on top of it will also find the [LSST DM Developer Guide](#) to be essential reading.

## Document Downloads

You may capture the content in PDF from the pull-down menu: ToolsExport to PDF, though the rendering is often less than satisfactory.

## Release History

The LSST Software Stack is released periodically. Use the **tag** to setup packages for use.

Tag	Version	Date	Notes
v11_0	v11.0	2015-October-02	Summer2015 release <ul style="list-style-type: none"><li>• <a href="#">Release Notes</a>,</li><li>• <a href="#">Characterization Measurements</a>,</li><li>• <a href="#">Known Issues</a>.</li><li>• <a href="#">ADA SS XXV poster paper describing release</a></li></ul>
v10_1	v10.1	2015-May-12	Winter2015 release <ul style="list-style-type: none"><li>• <a href="#">Release Notes</a>.</li></ul>
v10_0	v10.0	2014-Dec-11	Summer2014 release
v9_2	v9.2	2014-Aug-09	Subset of intended Summer2014 release
Winter2014	v8.0	2014-Mar-24	Stable
Summer2013	v7.3	2013-Nov-27	Stable
Winter2013	v6.2	2013-Feb	Stable
Summer2012	v5.2	2012-Aug	First public release

Revisions to this document occur for every major release of the **LSST Stack**, although releases for substantial minor updates may occur as well. Links to this page will always point to the most recent version of this document. The most recent version of that table is the latest stable release.

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## Typographical Conventions

Technical documentation is often a struggle to read. This document features some typographical conventions to help the reader understand the content, and to help distinguish explanatory text from dialog with the computer.

### Technical Terminology

The descriptions in this *User Guide* include many technical terms, spanning two professional domains, that appear in **boldface** type. The first time a technical term is used on a page it is linked with a definition in one of two glossaries: The [Astro Glossary](#) covers astronomical terms and concepts, and the [DMS Glossary](#) covers terms used in software development as well as terms used to describe the DMS system components and function.

### Software Packages

Names of software packages, including packages that were built by Data Management for the LSST Stack, appear in **boldface** type. Names of third-party packages are often linked to the web site from which they can be downloaded.

### Code Blocks and Literals

When describing a process for using software, the text that should be typed by the user appears in a code block:

#### Example code block

```
echo "Hello, world!"
```

with fixed-space font and (often) syntax highlighting that is appropriate for the context. Text describing a literal command-line, names of arguments, directory and file names, etc. are set in `fixed-space` font.

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Feb 10, 2020 • updated by Gregory Dubois-Felsmann

[LSST Software User Guide](#)

Feb 10, 2020 • commented by Gregory Dubois-Felsmann

[Tour of the Software Stack](#)

Feb 27, 2019 • updated by John Swinbank • [view change](#)

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[Using the LSST Stack](#)

[Feb 27, 2019](#) • updated by John Swinbank • view change

[Representation of a Camera](#)

[Aug 16, 2018](#) • commented by James Chiang

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[Jun 22, 2018](#) • updated by Gregory Dubois-Felsmann • view change

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[Jun 22, 2018](#) • updated by Jonathan Sick • view change

[pipe\\_base](#)

[Jan 09, 2017](#) • updated by Anonymous • view change

[LSST Stack Installation](#)

[Jun 21, 2016](#) • updated by Frossie Economou • view change

[Getting Started with the LSST Software Stack](#)

[Jun 20, 2016](#) • updated by Frossie Economou • view change

[OSes and Prerequisites](#)

[May 13, 2016](#) • commented by Tim Jenness

[Known Installation issues for 11.0](#)

[Mar 09, 2016](#) • updated by John Swinbank • view change

[Process SDSS Stripe 82 Images](#)

[Jan 22, 2016](#) • updated by Yusra AlSayyad • view change

[Retrieving SDSS Stripe 82 Data](#)

[Jan 21, 2016](#) • updated by Serge Monkewitz • view change