The AP Master Software List

Astro Art 6.0 - A complete software package for image processing, camera and telescope control, photometry, astrometry and image stacking.

AstroGuider - AstroGuider is a simple to use guiding application for your telescope mount. It can be calibrated semi-automatically or manually, you do not need to take care about camera orientation or pixel scale. (**OSX**)

AstroImager - AstroImager is a powerful, but easy to use image capture application for the astrophotography. (**OSX**)

Astro Planner - for planning/logging/visualizing astrophotography sessions

Astronomer Control Panel - Remote imaging software.

AstroTelescope - AstroTelescope is a simple planetarium and telescope control application for the astrophotography. (**OSX**)

Astrotortilla - calibrate your Goto tracking mount, Goto any target with arcsecond accuracy and measure your polar alignment error

Autostakkert! 2 - Planetary video stacking software

Backyard EOS - For camera control, easily the best $$ you'll spend on AP software.

CCD Imaging Calculators - For calculating all things related to CCD imaging (FOV/pixel size/etc)

CCD Stack - Stacking software for CCD images

CCDOPS - The software that comes with SBIG CCD cameras also available separately.

DeepSkyStacker - For stacking multiple exposures together into one image.

digiCamControl - Free camera control for those with Nikon DSLRs.

DSLR Shutter - Free sequence capture control for Mac/PC + lots of DSLRs. You need a shutter control interface, like this one in order to use this with a Nikon however.

EQMOD - a suite of open source applications that can provide an alternative to the hand controller

FireCapture - Simple image capturing software that resizes video resolution automatically & has auto align & dark frame reduction features

FITS Liberator - FIT > TIFF file converter

Gemini Controller Software - For those that use Gemini controlled mounts

GIMP - post processing/image editing software

iMerge - Used for one click image stitching with border feathering & Histogram

IrfanView - IrfanView is a very fast, small, and compact free the graphics viewer for Windows 9x, ME, NT, 2000, XP, 2003 , 2008, Vista, Windows 7, Windows 8, Windows 10.

Lin Guider - guiding for Linux

Lunar Phase Pro - An interactive Moon Atlas – this is a moon observer's software toolkit designed to help you learn about the Moon and make your lunar observing and imaging sessions more productive.

Lykeos - free planetary stacker (**OSx**)

MaximDL - Great CCD Camera control software and decent processing power too.

MicroObservatory - A piece of software that is meant to be used to process images from MicroObservatory.org, it's not really good for much else, but it does a damned good job of teaching people the basics of processing RGB FITS data.

Microsoft ICE - mosaic/composite image stitching software

Nebulosity 4 - $95 capture and processing software for Mac/PC. Supports a bunch of Canon DSLRs and astro cams.

MODAS – Modern Optical Design and Analysis Software. It is telescope design software of the most popular telescope systems used by the amateur astronomers and telescope makers,

PEMPro - periodic error correction, polar alignment and backlash using your CCD Camera or Webcam

PHD1 PHD2 - Guiding software to correct mount errors for longer exposures.

Photoshop CS2 - free from Adobe but requires you to make an Adobe ID

[PIPP](#) - Planetary imaging preprocessor, good for shaving down file sizes with cropped, stabilized planetary shots
[PixInsight](#) - postprocessing software
[Registax](#) - planetary video processing/stacking software
[sbigControl](#) - relatively cheap SBIG camera control program. can drive sbig adaptive optics devices.
[Sequence Generator Pro](#) - image capture suite for astrophotography.
[SharpCap 2](#) - Flexible image capturing software, records in raw, uncompressed files
[SkySolve](#) - Plate Solving software.
[Sofortbild](#) - Free capture control for **Mac** + Nikon.
[StarStax](#) - used for creating star trail images
[StarTools](#) - postprocessing software written by [/u/verylongtimelurker](#)
[Stellarium](#) - Free software that lets you input your coordinates and will show you when objects will be up and at what time.
[Stellar Magic](#) - a comprehensive yet easy to use program for processing astronomical images contains over 100 different image processing operations.
[Virtual Dub](#) - video converting software, requires plugin for .MOV > .AVI
[Winjupos](#) - planetary processing software for derotation/mapping/planetary moon alignment

Plugins for Photoshop:

[Annie's Action](#)
[Carboni's Action Set](#)
[Hasta La Vista Green](#)
[RGBc](#)
[WhiteCal](#)

Plugins for GIMP:

[Fix CA](#)
[GIMP Astronomy Plugins](#)
[Purple Fringe Fix](#)

Resource for Mac and UNIX software
(No guarantees the links are up to date or even active) scroll down to the Mac and UNIX sections

[Midnight Kite](#) - Astronomy Software Freeware, Shareware, and Commercial Software