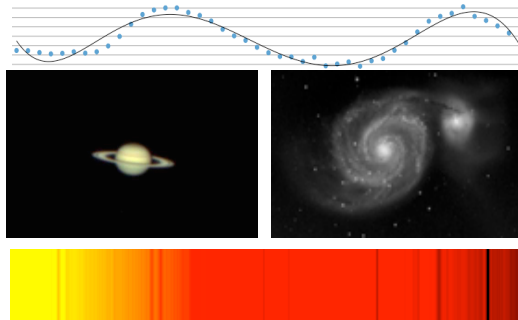


-ASTR 204 Application of Astroimaging Techniques



Section I -Astrophotography

Lab 1 Calibration Frames, DS9

Lab 2 Galaxies

Lab 3 Clusters

Lab 4 Nebulae

Section II -Photometry

Lab 5 JPL Ephemeris, Binary Maker 3

Lab 6 Eclipsing Binaries

Lab 7 Extrasolar Planets

Lab 8 Pulsating Variables

Section III -Spectroscopy

Lab 9 Applications of SGS Spectrograph

Lab 10 SGS Processing –

Radial Velocities, Planets

Lab 11 Applications of Diffraction Grating Spectra

Lab 12 Diffraction Grating Processing –

Stars, Galaxies, Comets

Section I -Astrophotography

Procedure

Refer to pages 2 thru 7 in the -ASTR 203 Astroimaging Techniques manual for review of information, glossary of terms, and list of the equipment and software used for imaging in the observatory.

Setup for imaging, including equipment power up and shutdown, and procedures for focus and autoguider calibration, remain the same.

Imaging procedures in ASTR 203 Section I, Labs 1 thru 4 also apply, including Sky6 target location, creating desktop image folders, and image acquisition.

ASTR 204 involves more in-depth study of galaxies, star clusters, nebulae, and objects of special interest.

Students will create calibration frames for image processing. These include dark frames, flat fields, and bias frames discussed in ASTR 203 page 9.

<http://www.ccdware.com/help/ccdap5/hs150.htm>

We'll also explore the DS9 program, used by many astronomers for image analysis. DS9 is a free download from Smithsonian Astrophysical Observatory <http://ds9.si.edu/site/Home.html>