

Name: _____

Date: _____

Indoor Laboratory: SAOImage DS9

Now that you've installed and learned a little about SAOImage DS9, follow the instructions and answer the questions below.

Open the *Pluto.fit* image.

1. Create a circular region with Pluto at the center. What are the physical (pixel xy) coordinates for the center of Pluto?

X: _____ Y: _____

Display the header for the *Pluto.fit* image and answer the following questions.

2. What was the local sidereal time (LST) when the image was taken? _____

3. What was the local time? _____

4. What are the center coordinates of the image?

RA _____ DEC _____

5. Using the SFA Star Chars or the atlas charts in the Peterson Guide, what constellation was Pluto in when the image was taken?

Clear the current image from the display frame and open the *Albireo.fit* image. Albireo is a binary star system (double star) in the constellation, Cygnus. It is centered in the frame of the image. You will need to change the the scale parameters to reveal both stars as much as possible. The brighter star is Albireo A and its companion (smaller, fainter) is Albireo B.

6. From the center of Albireo A to the center of Albireo B, what is the angular separation in arc-seconds?

_____ arc-sec