

CSU Fresno 16" SCT at f/38 & Jupiter's Great Red Spot

By Greg Morgan

Be sure to observe Jupiter on Tuesday night March 25th from 9:36 to 11:53 PM PDT. This is the only evening in March that the Great Red Spot will be making a central meridian crossing along with the shadow of one of Jupiter's moons. Io will be making a transit across the face of Jupiter and will be casting its shadow in the region of the Great Red Spot. Similarly, on Tuesday evening April 1st, from 10:24 PM to 1:48 AM PDT, Io will again be in transit casting its shadow while the Great Red Spot is crossing Jupiter's central meridian.

Greg Morgan and Fred Ringwald imaged Jupiter and its Great Red Spot on 2/22/03 at 10:13 PM PST. The image below is a negative grayscale of the RGB color image: R=10x0.33seconds, G=14x0.33 seconds and B=18x0.33 seconds. It is a stack of 42 images totaling 13.9 seconds with the SBIG ST-10XME. The Great Red Spot is making a crossing of Jupiter's central meridian. With a period of approximately 10 hours, Jupiter rotates one red-spot diameter in about 30 minutes. This can create complications when trying to capture tri-color images in that it is easy to get images that do not align well. Ideally, all individual filtered images need to be captured within just a few minutes of each other to minimize the effects of rotation. This image was taken through the Fresno State Campus Observatory 16 inch SCT with eyepiece projection at f/38.

