This web-based homework assignment deals with the apparent size of Jupiter as measured from the Earth. You can find the URL at:

http://vistools.at.northwestern.edu/vistools/ast130/

and select “Jupiter”. You need to answer the following questions:

1) Measure the angular size of Jupiter in arcseconds when viewed by Earth at opposition. Repeat the same measurement when Jupiter viewed from Earth six months after opposition. Please give the angular size of Jupiter in both measurements.

2) Draw a geometry of the Sun, Earth and Jupiter when Jupiter is in opposition.

3) Assuming that distance between Jupiter and Earth is 4 AU when Jupiter is in opposition, what is the diameter of Jupiter in km?

4) The average distance between the Earth and the Sun is 1AU. We learned from assignment 1 that the Sun subtends an angular diameter of 30 arcminutes in the sky. What is the diameter of the Sun in km?