PHYS 1081 Name:_____

COMET Motion Lab
April 2020

Objective: Determine the angular speed of a comet from two images.

The two images you will work with are:
IM2011_C2019Y4aMark.JPG Taken 4/24/20 at 10:46:19 pm
IM2017_C2019Y4b.JPG Taken 4/24/20 at 11:48:24 pm

The first image contains the word “Mark” because I have marked two stars with yellow circles. These stars are 797 arcseconds apart.

INSTRUCTIONS:
1) Find the jpeg images in the Google Drive folder.
Link: https://drive.google.com/open?id=1YGPBK3nxiJHZkRIgEa754QMgHMIZIm2a
2) Use any graphics/art programs you have on hand to figure out the scale of the image in arcseconds/pix.
I used this(ese) program(s): _____
I found this Scale: _____ arcsec/pix.
3) Figure out how far the comet moved.
The comet moved about: _____ pixels
The comet moved about: _____ arcseconds
4) Figure out the angular speed of the comet in two units.
Angular speed = _____ arcsec/hour
Angular speed = _____ degrees/day
5) Write your answers on this sheet (showing work in the space below). Scan this sheet. Rename the file so that it is called “CometLabYourName.jpg”. Upload to the same Google Drive folder where the images were found.