

# Rough List of Programs

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# Introduction

I always get confused which programs are which so I'm just putting them all here

## 1 List of Programs

1. `barkbark`  
makes some plots comparing the attempts of finding a threshold for our image
2. `bordercheck`  
Makes a binary mask 1 pixel thick on the border, checks if there are any pixels that are above the mode of the image. If so, returns a 0. If okay, 1.
3. `circscancrop`  
Using the position of the center sun, scans in a circle at a specified radius until it picks up the auxiliary suns and crops appropriately.
4. `cropme`  
Crops a certain pixel length off the border
5. `edgefidcheck`  
Incomplete: Checks the bordering 6 pixels of an image for fiducials. If it finds one, it does something.
6. `fastcenter`  
Uses the sorted image to return very rough center positions of the suns. Fast.
7. `galapagos`  
Earlier version of barkbark I think
8. `getstruct`  
Makes 3 structures, 1 for each sun. Each structure holds the center position as well as the threshold used to find it
9. `histosmoothed`  
Tries looking at the histogram of the 2D image instead of the sorted array, doesn't work well.
10. `kahuna`  
Calls getstruct and is more or less a calling program that loads the parameter table
11. `last6pixels`  
Makes some plots of what the bordering 6 pixels of a fiducial look like as you crop it off the edge of the image
12. `limbfit`  
Finds the center of a sun using chords
13. `makelimbstrips`  
Makes 5 limb-only arrays from the 5 chord arrays
14. `makestrips`  
Makes 5 chord arrays centered on the specific sun
15. `morescratch`  
Messing with convol() and stuff to find the threshold, obsolete
16. `quickfidmask`  
Used to find a quick CoM of a shape below a threshold
17. `quickmask`  
Used to find a quick CoM of a shape above a threshold
18. `scratch`  
Another thing to find the threshold
19. `setpeak`  
Find the boundaries of the humps in the sorted image

- 20. `setthresh`  
Finds the thresh of the 1D array at the hump intersection point. Very barebones, actually.
- 21. `whichcropmethod`  
Decides whether or not to use quickmask or circscancrop when finding the center of the suns