```
(remaining packets)', color=2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'Total run time = ' + strtrim(string(run_info.endtime/3600.), 2) + ' hours'
'Neutral Species = ' + run_info.atom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          in the initial velocity distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 __elements(*loss_info.reactions)-1 do $
' (' + strtrim(string(i),2) + ') ' + (*loss_info.reactions)[i]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  xyouts, .55, .85, /norm, 'Initial Velocity Distribution!c (all packets)'
xyouts, .55, .75, /norm, 'Initial Velocity Distribution!c (remaining pac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         print, 'Gravity was not turned on' $
for i=0,nq-1 do print, (*c.objects)[q[i]] + '''s gravity is on'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  print, 'Radiation Pressure is ' + ((run_info.radpres) ? 'on' : 'off')
pro quick_look, outfile, geomfile, image=image, x0=x0, imtype=imtype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     show_veldist, proc_info, run_info, vrange=vrange, theo=theo, /disp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            actual = histw(vv, *loc.frac, min=mm[0], max=mm[1], bin=dv)/dv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      if (run_info.fullsystem) $
then print, 'Tracking full system' $
else print, 'Only tracking packets within ' + $
strtrim(string(run_info.outeredge),2) + ' object radii.'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         vv = sqrt(*startloc.vx^2 + *startloc.vy^2 + *startloc.vz^2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;plot, vrange, theo, xr=[0,15], /ylog, yr=[10,1e6], /xst
                                                                   if (n_elements(imtype) NE 1) then imtype = 'column'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                print, 'Planet: ' + run_info.planet
print, 'Starting Point: ' + run_info.startpoint
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mm = minmax(vrange) \& dv = vrange[1]-vrange[0]
                                                                                                                                                                          if (n_elements(geomfile) NE 1) then stop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               if (run_info.lifetime EQ 0) then begin
                                                                                                                                         ;; If geofile isn't given then get it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q = where(*run_info.gravity EQ 1, nq)
                                                                                                                                                                                                                                                                                                                        SystemConstants, run_info.planet, c
                                                                                                                                                                                                                                                                                                                                                                                                                                ;; Print out some basic information
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      print, 'Loss Processes Included'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oplot, vrange, actual, color=2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   print, '*************
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;; Print out Loss Processes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for i=0,n_elements(*loss_
                                                                                                                                                                                                                                                ;; restore the outputs
                                                                                                                                                                                                                                                                                    restore, outfile
                                                                                                                                                                                                                                                                                                                                                                                                                                                               print, outfile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          $ (0 0 E0 pu) $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;;window, 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       print,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           print,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 wset,
```

```
pos=[100,100,100+geoms.xs,100+geoms.ys], /dev, tit=file_basename(outfile)
disparr, image, 3, /log, result=image2, /nodisp, low=1, high=h
tv, bytscl(image2, 1, h, top=220)+35, 100, 100, /dev
polyfill, xc, yc, color=4
plots, [100,100,100+geoms.xs,100+geoms.xs,100], [100,100+geoms.ys,100+geoms.ys,100,100], $
                                                        endif else print, strtrim(string(round(run_info.lifetime/3600)), 2) + ' hour lifetime'
                                                                                                                                                                                                                                                 case (imtype) of
   'intensity': image = model_images('intensity', outfile, geomfile, 1., line='5890')
   'density': image = model_images('density', outfile, geomfile, 1., dz=0.1, zplane=0)
                                                                                                                                                             plot, findgen(10), /nodata, xr=minmax(x0), yr=minmax(x0), /xst, /yst, $
    xtit='Distance from ' + (*c.objects)[geoms.center] + ' (RidObj!n)', $
    ytit='Distance from ' + (*c.objects)[geoms.center] + ' (RidObj!n)', $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x0 =(findgen(geoms.xs)/(geoms.xs-1)-.5)*((geoms.xr)[1]-(geoms.xr)[0])/
(*c.radius)[geoms.center]
                                                                                                                                                                                                                                                                                                                                                                                       else: image = model_images('column', outfile, geomfile, 1.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              xc = cos(findgen(361)*idtor) & yc = sin(findgen(361)*idtor)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;window, 1, xs=geoms.xs+150, ys=geoms.xs+150
print, -***************
                                                                                                                                                                                                     ;; Make a Column density image
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    destroy_constants,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         restore, geomfile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     @destroy all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          wset, 1
```