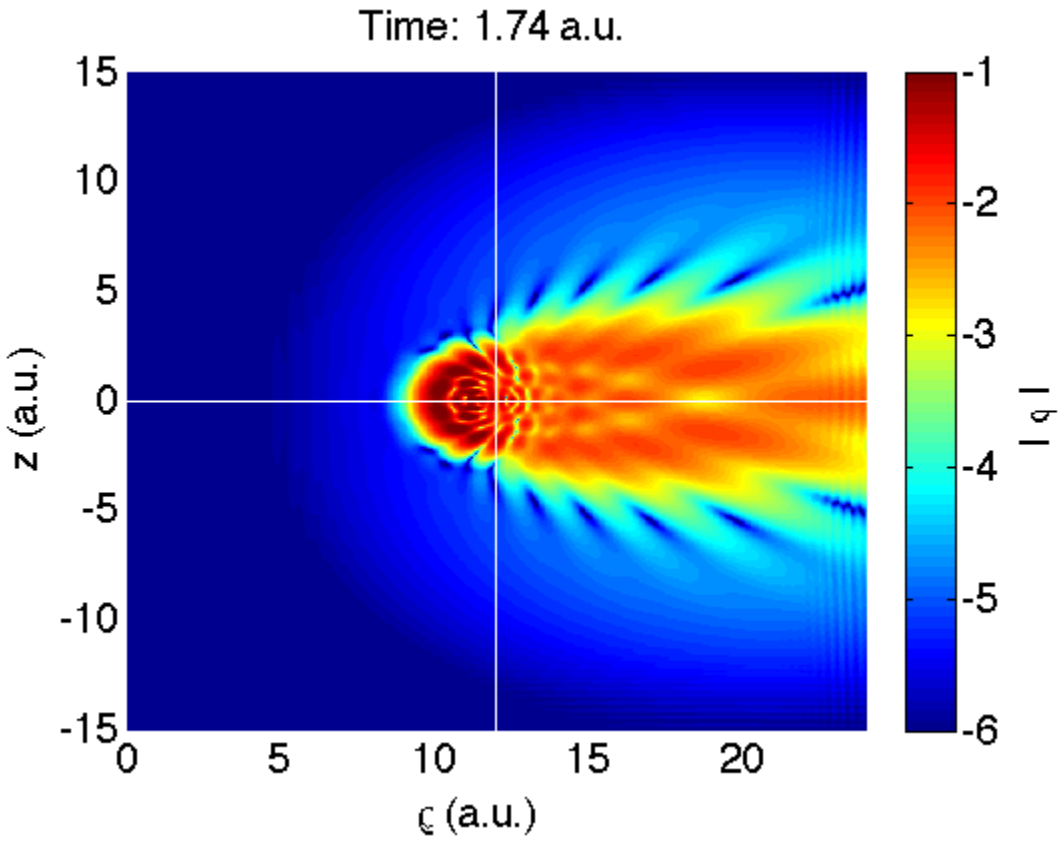
Reader cylindrical coordinate 2D

```
clear all
A0 = importdata('out0.txt');
A1 = importdata('out1.txt');
A2 = importdata('out2.txt');
A3 = importdata('out3.txt');


nr = A3(1);
nz = A3(2);

Ntime = A3(3);
snap  = A3(4);%1;%

Nsnap = snap;%floor(Ntime/snap);

r = A0(1:nr);
z = A0(nr+1:nz+nr);

[R Z] = meshgrid(r,z);

r0=12;


%aviobj = avifile('GEWP_C2D.avi');
scrsz = get(0,'ScreenSize');
%fig=figure('Position',[1 scrsz(4) scrsz(3)*0.7 scrsz(4)*0.7],...
%    'Color','w');
xmin = 0;
xmax = 24;
ymin =-15;
ymax = 15;
for j=1:Nsnap
    clf
    PHI=reshape(A1(1+nr*nz*(j-1):nr*nz*j),nz,nr);

%for jmovie=1:3
    surfc(R,Z,log10(PHI+1e-12),...
        'FaceColor','interp',...
        'EdgeColor','none')

    view(2)
    axis tight

    h=gca;
    set(h,'fontsize',16)

    ylabel('z (a.u.) ','fontsize',16)%,'fontweight','b')
    xlabel('\rho (a.u.) ','fontsize',16)%,'fontweight','b')
    hold on
    plot3([0 max(r)],[0 0],[1 1]*(1),'Color','w')
    plot3([r0 r0],[min(z) max(z)],[1 1]*(1),'Color','w')

    h = colorbar('location','EastOutside');
    set(get(h,'YLabel'),'String','| \phi |  ',...
     'fontsize',16)%,'fontweight','b');
    caxis([-12 0])
    title(['Time: ',num2str(A2(j)),' a.u.'],'fontsize',16)
    xlim([xmin xmax])
    ylim([ymin ymax])

    h=gca;
```

```
    set(h,'fontsize',16)

    caxis([-6 -1])
  %  F = getframe(fig);
  %  aviobj = addframe(aviobj,F);
%end
    pause(0.1)
 %   display(j);
end

%aviobj = close(aviobj);
```



Published with MATLAB® 7.10