



```
subroutine modeling_2dtm
! circular media
jcent=nint((yi(1)+yi(8))/2.0)
kcent=nint((zi(1)+zi(8))/2.0)
radius=200.0d-3
call circular_media
```

```
subroutine circular_media
!***** fill with circular media *****
!
!
!      * * *
!    *       *
!   *         *
!  *           *
! *             *
! *      +      *
! *           *
!  *         *
!   *       *
!    * * *
!
do j=1,iy
do k=1,iz-1
radi=sqrt(((j-jcent)*dy)**2+((k-kcent)*dz)**2)
if(radi <= radius .and. radi >= radius-3.0d-3) then
id_ez(j,k)=1
end if
end do
end do
do j=1,iy-1
do k=1,iz
radi=sqrt(((j-jcent)*dy)**2+((k-kcent)*dz)**2)
if(radi <= radius .and. radi >= radius-3.0d-3) then
id_ey(j,k)=1
end if
end do
end do
end subroutine circular_media
```