

```
1 function[M_zra] = makepolar(M_xyz)
2
3 % Extract x, y, and z coordinates
4 x = M_xyz(:, 1);
5 y = M_xyz(:, 2);
6 z = M_xyz(:, 3);
7
8 % Calculate radius (r) and angle (theta)
9 r = sqrt(x.^2 + y.^2);
10 theta = pi + atan2(y, x);
11
12 % Create the polar coordinates matrix M_zra
13 M_zra = [z, r, theta];
14
```