```matlab
function posSun = sun(jdutc)
    jdut1 = jdutc2jdut1(jdutc, 0);

Tut1 = ((jdut1 - 2451545)/36525);

mel = 280.460 + 36000.771*Tut1;

ma = 357.52772333 + 35999.0534*Tut1;

el = mel + 1.914666471*sin(deg2rad(ma)) + 0.019994643*sin(deg2rad(2*ma));

r = 1.000140612 - 0.016708617*cos(deg2rad(ma)) - 0.000139589*cos(2*deg2rad(ma));

obe = 23.439291 - 0.0130042*Tut1;

rtod = [r*cos(deg2rad(el))  r*cos(deg2rad(obe))*sin(deg2rad(el)) r*sin(deg2rad(obe))*sin(deg2rad(el))]';

rmod = rtod;

zeta = 206.2181*Tut1 + 0.30188*(Tut1^2) + 0.017998*(Tut1^3); % in arcseconds
theta = 2004.3109*Tut1 - 0.42665*(Tut1^2) - 0.041833*(Tut1^3);
z = 2306.2181*Tut1 + 1.09468*(Tut1^2) + 0.018203*(Tut1^3);

zeta = zeta / 3600;
theta = theta / 3600;
z = z / 3600;

Qtodgcrf = R3(deg2rad(zeta))*R2(deg2rad(-theta))*R3(deg2rad(z));

rgcrf = Qtodgcrf*rmod;
posSun = rgcrf;
end
```

```
Not enough input arguments.

Error in sun (line 2)
    jdut1 = jdutc2jdut1(jdutc, 0);
```

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