

```
function [X,Y,Z] = llh2xyz(lat,long, h)
% Convert lat, long, height in WGS84 to ECEF X,Y,Z
% lat and long given in decimal degrees.
% altitude should be given in meters
lat = lat/180*pi; %converting to radians
long = long/180*pi; %converting to radians
a = 6378137.0; % earth semimajor axis in meters
f = 1/298.257223563; % reciprocal flattening
e2 = 2*f -f^2; % eccentricity squared

chi = sqrt(1-e2*(sin(lat)).^2);
X = (a./chi +h).*cos(lat).*cos(long);
Y = (a./chi +h).*cos(lat).*sin(long);
Z = (a*(1-e2)./chi + h).*sin(lat);
```