

```
function [X, Y, Z] = enu2xyz(refLat, refLong, refH, e, n, u)
% Convert east, north, up coordinates (labeled e, n, u) to ECEF
% coordinates. The reference point (phi, lambda, h) must be given. All distances are in metres

[Xr,Yr,Zr] = llh2xyz(refLat,refLong, refH); % location of reference point

X = -sin(refLong)*e - cos(refLong)*sin(refLat)*n + cos(refLong)*cos(refLat)*u + Xr;
Y = cos(refLong)*e - sin(refLong)*sin(refLat)*n + cos(refLat)*sin(refLong)*u + Yr;
Z = cos(refLat)*n + sin(refLat)*u + Zr;
```