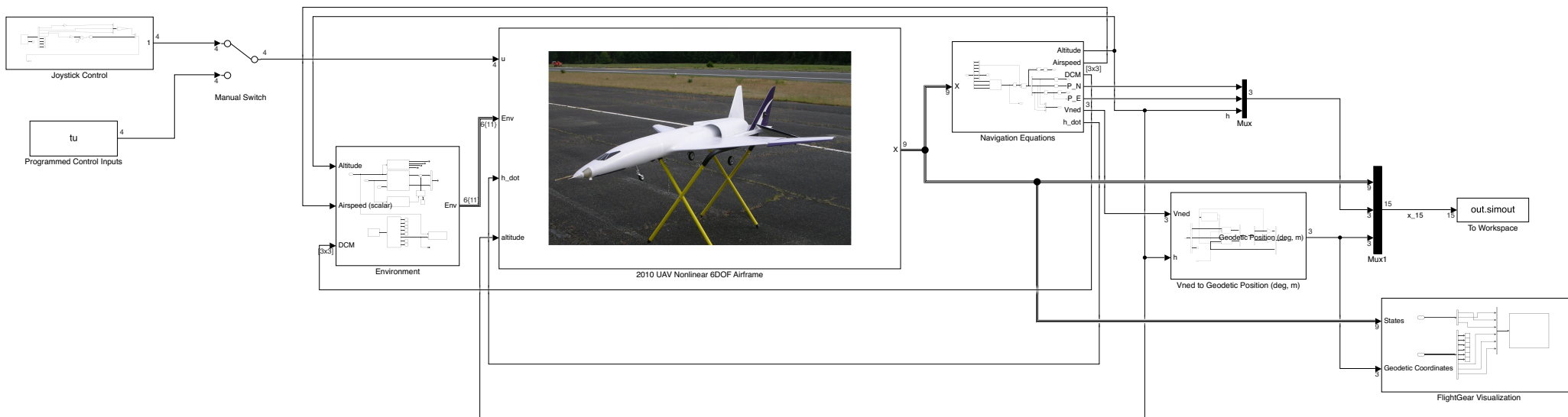
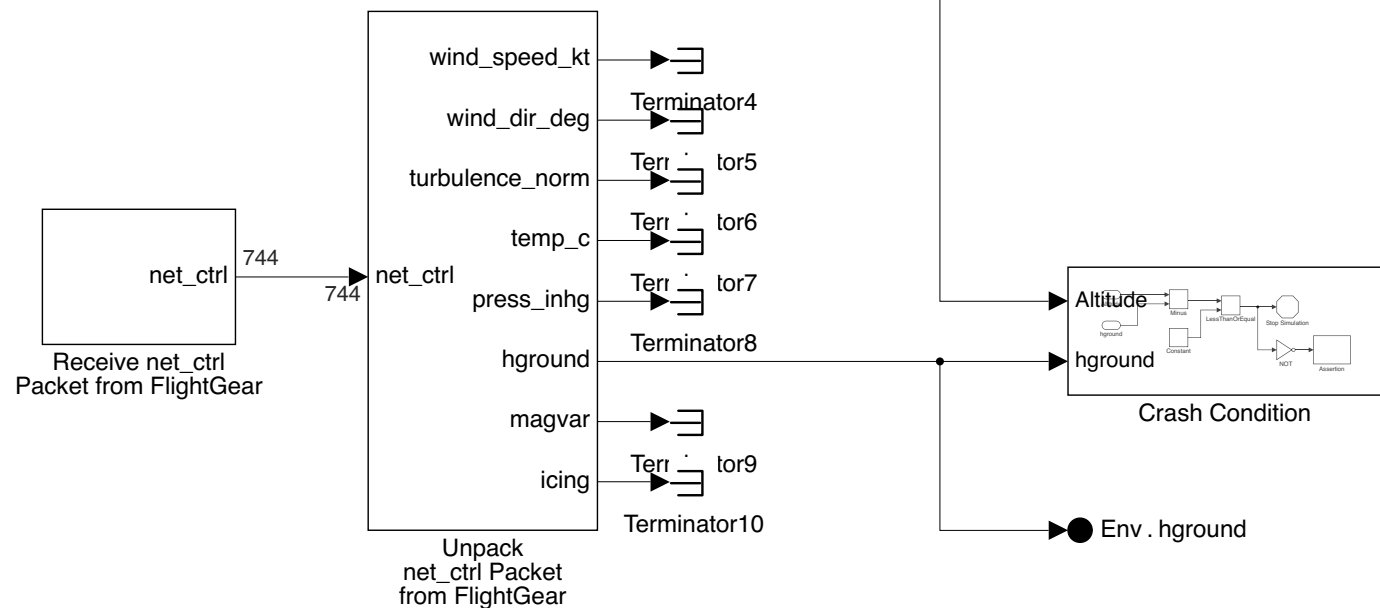
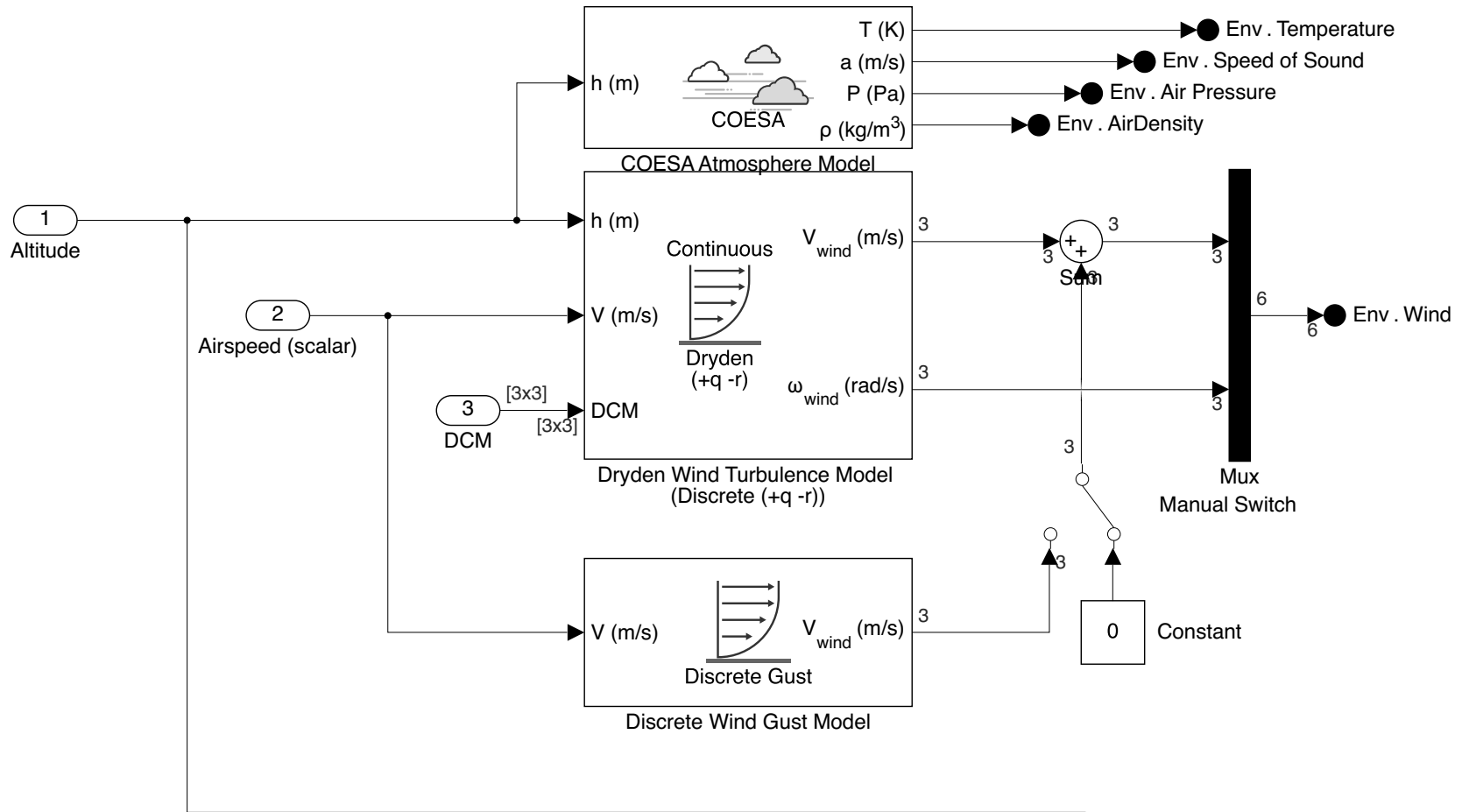
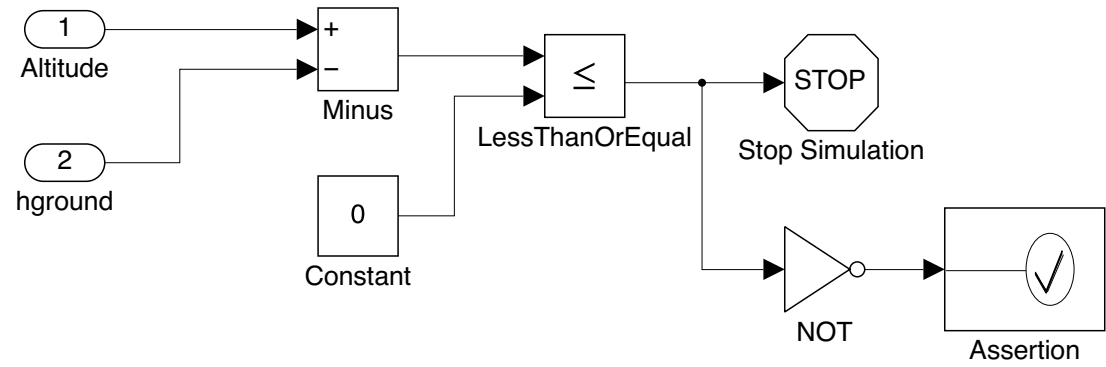
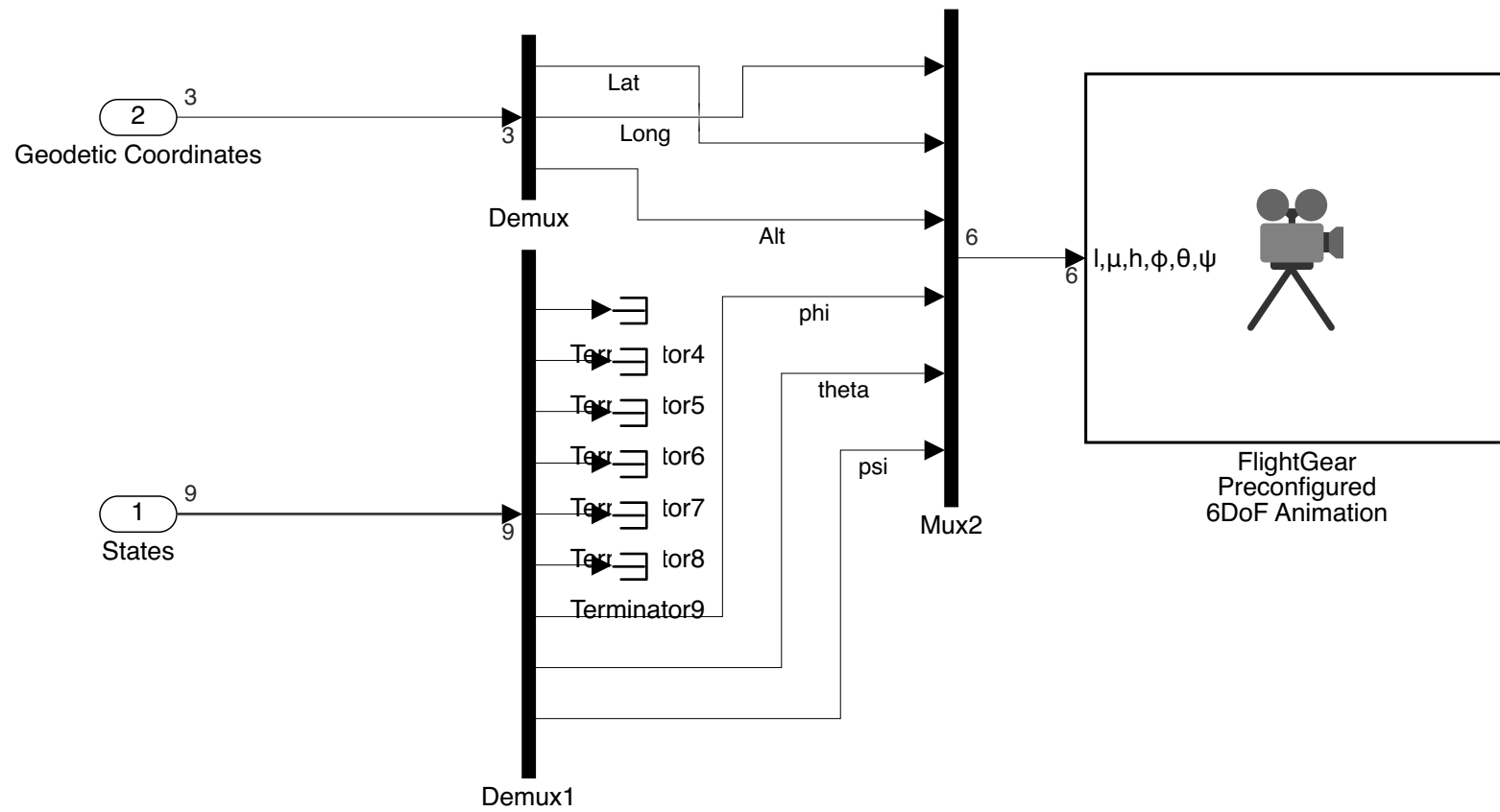


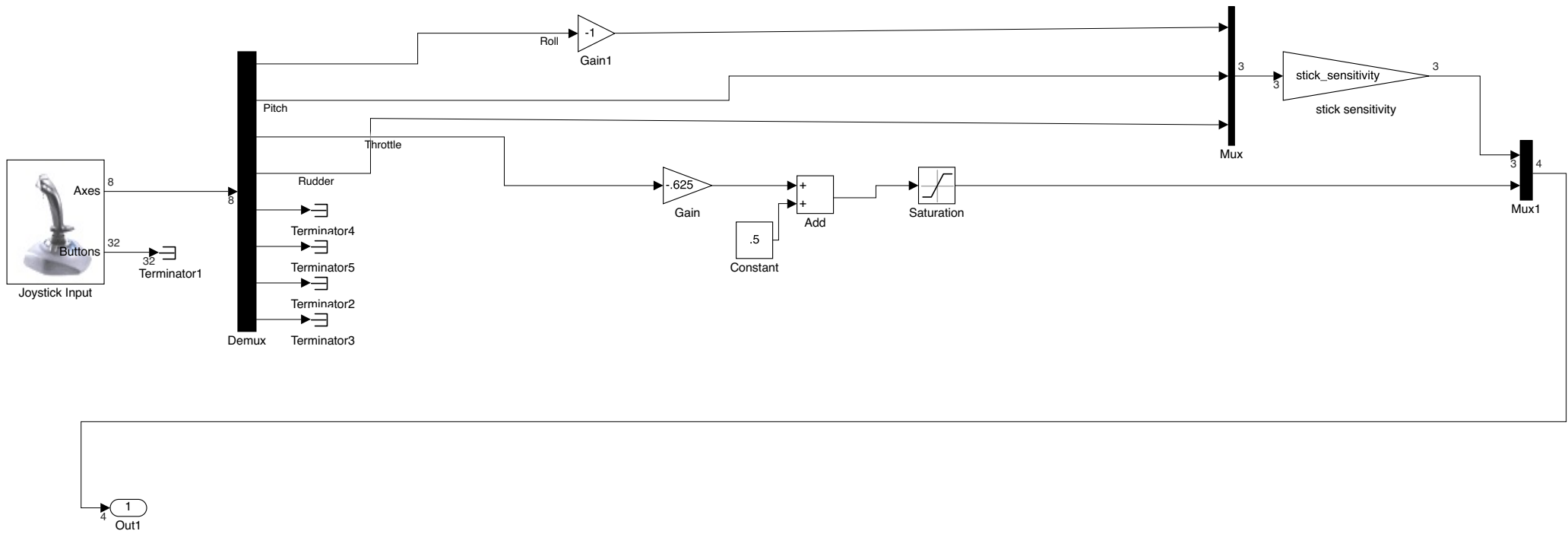
GEN
FG
RUN
Generate
Run Script

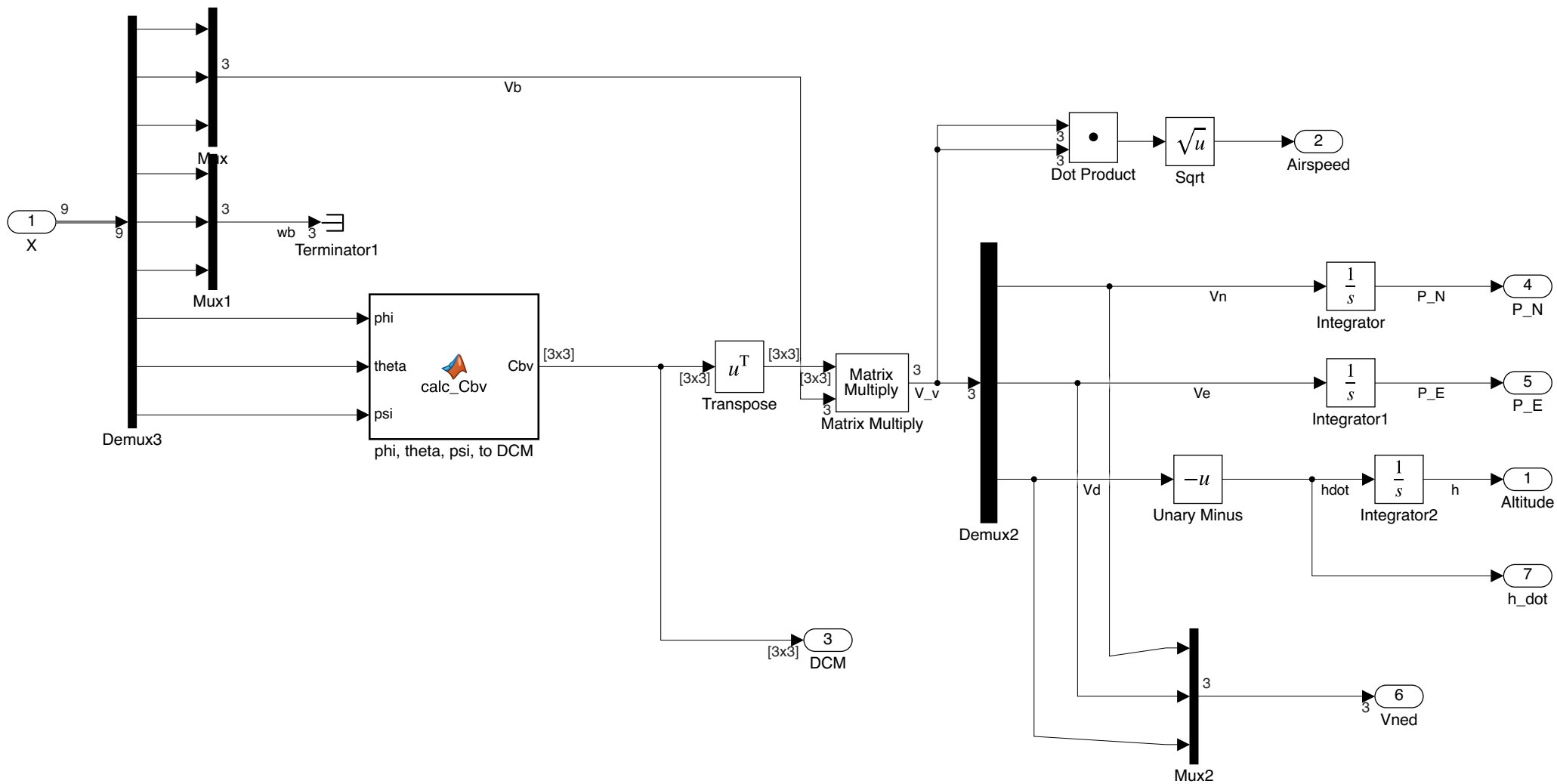












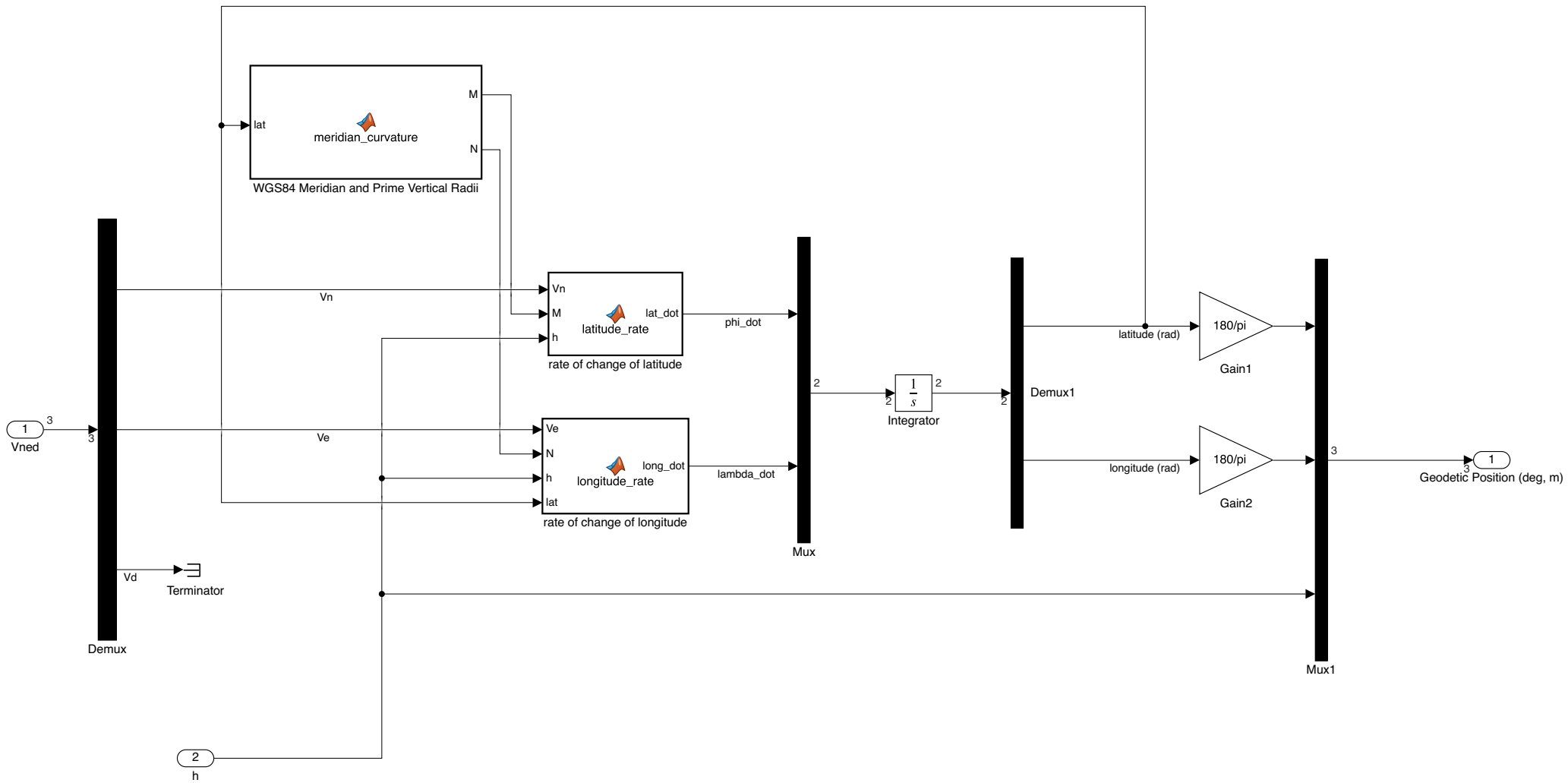
```
function Cbv = calc_Cbv(phi, theta, psi)
```

```
C1v = [ cos(psi) sin(psi) 0  
       -sin(psi) cos(psi) 0  
         0         0     1];
```

```
C21 = [cos(theta) 0 -sin(theta)  
       0         1  0  
       sin(theta) 0  cos(theta)];
```

```
Cb2 = [1 0 0  
       0 cos(phi) sin(phi)  
       0 -sin(phi) cos(phi)];
```

```
Cbv = Cb2*C21*C1v;
```




```
function [M, N] = meridian_curvature(lat)

a = 6378137.0;
e = 0.081819190842622;

M = a*(1-e^2)/(1 - e^2*sin(lat)^2)^(3/2);
N = a/(1 - e^2*sin(lat)^2)^(1/2);
```

```
function lat_dot = latitude_rate(Vn, M, h)
lat_dot = Vn/(M+h);
```

```
function long_dot = longitude_rate(Ve, N, h, lat)
long_dot = Ve/((N+h)*cos(lat));
```