%import data and separate columns

M=dlmread('Mission1\_Revised.csv',',',1,0);

Ttot = M(end,3)-M(1,3);

lat = M(1:end,1);

long = M(1:end,2);

snom = 2\*0.169164;

vlat = advec(lat);

vlong = advec(long);

vres = zeros(size(vlat));

%sum all path vectors and calculate magnitude

for ind = 1:length(lat)-1

vres(ind) = sqrt((vlat(ind)).^2+(vlong(ind)).^2);

end

%calculate total path length, divide by total time

apath = sum(vres);

atime = apath/snom;

atd = abs(atime - Ttot);

disp(atd);