clc

clear all

close all

s0 = 0.0970;

n2 = 1.48;

lambda0 = 1310;

dn = 0.002;

c = 3\*10^5; %km/s

const = 0.26; % Vd^2(Vb)/dV^2

lambda=1250:0.1:1600;

Dt=(s0.\*lambda./4).\*(1 - (lambda0./lambda).^4);

Dwg=-((n2\*dn)./(c\*lambda))\*const\*10^12;

Dm=Dt- Dwg;

zero= lambda.\*0;

figure(1)

hold all

grid on

plot(lambda,Dt)

plot(lambda, Dwg, '--')

plot(lambda, Dm, '--')

plot(lambda, zero, 'k')

legend('Dt','Dwg','Dm')

xlabel('wavelength (nm)')

ylabel('Dispersion')

figure(2)

s\_0=0.70;

lambda\_0=1550;

lambda=1250:0.1:1600;

Dt=(s\_0.\*lambda./4).\*(1 - (lambda\_0./lambda).^4);

plot(lambda,Dt)

grid on

legend('Dt')

xlabel('wavelength (nm)')

ylabel('Dispersion')



