Take the air pollution data in Assignment 3 (attached as diffus.txt here), calculate the spreading rate of pollutants $dD/dt$ in two ways:

1. Direct differentiation of the data using one of the 3 schemes discussed in class: backward, forward or central differencing.
2. Differentiate the analytical expression $D(t)$ that you have established from the curve fitting in Assignment 3.

Plot $dD/dt$ as a function of $t$ from both methods, and comment on the results.